Full wwPDB EM Validation Report ⓘ

Feb 13, 2024 – 02:35 PM EST

PDB ID	:	3JA1
EMDB ID	:	EMD-6316
Title	:	Activation of GTP Hydrolysis in mRNA-tRNA Translocation by Elongation Factor G
Authors	:	Li, W.; Liu, Z.; Koripella, R.K.; Langlois, R.; Sanyal, S.; Frank, J.
Deposited on	:	2015-03-30
Resolution	:	3.60 Å(reported)
Based on initial model	:	3J0U

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ①) were used in the production of this report:

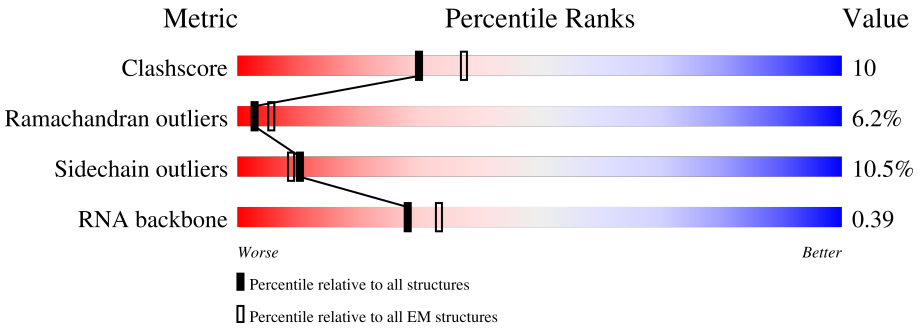
EMDB validation analysis	:	0.0.1.dev70
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.60 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	SS	91	10% 53% 30% 13% ·
2	SA	1542	15% 40% 45%
3	S1	47	47% · 26% 70%
4	S2	77	14% 40% 45%
5	ST	86	5% 67% 26% 7%
6	SU	70	27% 51% 29% 16% ·
7	SG	178	15% 63% 27% 8% ·

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Mol	Chain	Length	Quality of chain
8	SH	129	7% 60% 29% 9%
9	SI	129	7% 56% 32% 12%
10	SJ	103	14% 55% 32% 9%
11	SK	128	13% 59% 28% 11%
12	SL	123	7% 54% 32% 13%
13	SM	117	13% 53% 32% 11%
14	SN	100	62% 25% 10%
15	SO	88	67% 22% 9%
16	SP	82	7% 61% 28% 7%
17	SQ	83	12% 66% 25% 7%
18	SB	240	15% 61% 29% 9%
19	SC	232	10% 64% 26% 8%
20	SD	205	6% 53% 35% 9%
21	SE	166	14% 58% 27% 13%
22	SF	135	34% 53% 33% 12%
23	SR	74	8% 58% 24% 15%
24	S3	702	16% 61% 30% 7%
25	LB	120	18% 43% 39%
26	LA	2904	11% 41% 48%
27	LD	272	11% 57% 31% 10%
28	LU	110	7% 66% 27% 5%
29	LV	100	11% 59% 29% 11%
30	LW	103	7% 68% 22% 9%
31	LX	94	62% 31% 5%
32	LY	84	12% 56% 20% 20%

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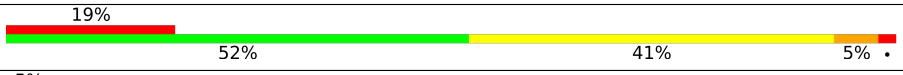
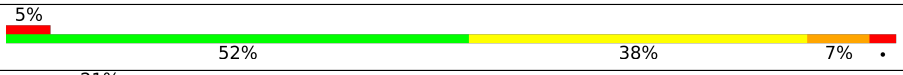
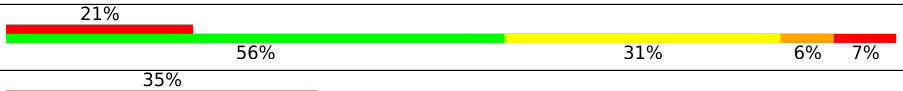
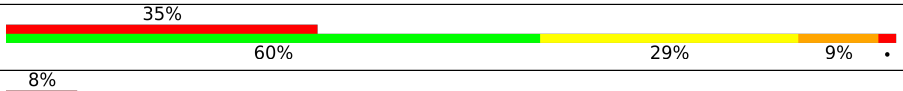
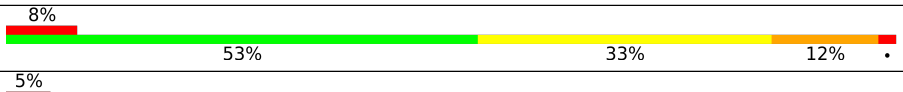
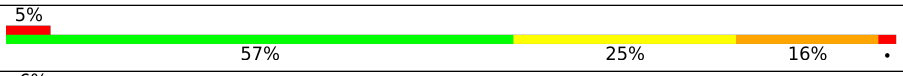
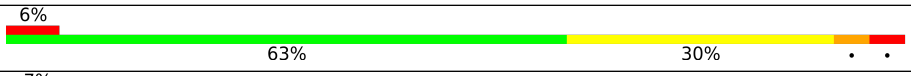
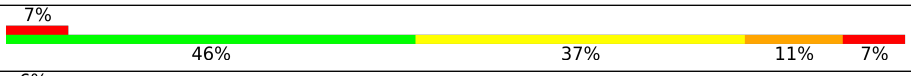
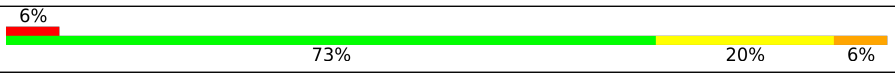
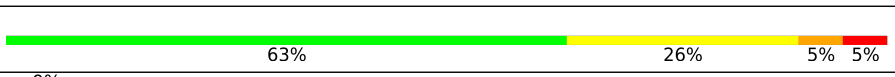
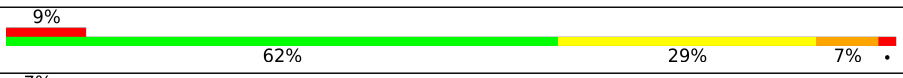
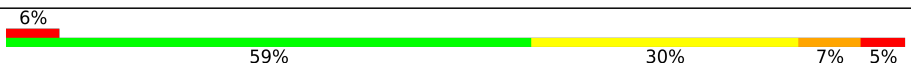
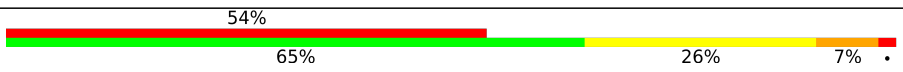
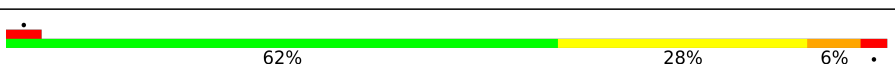
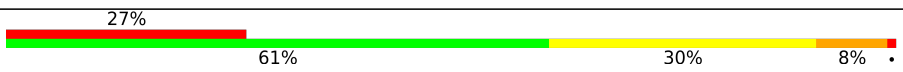
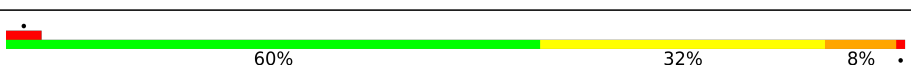
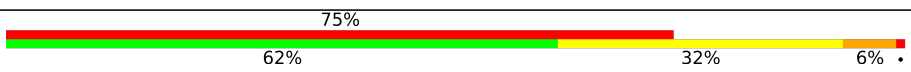
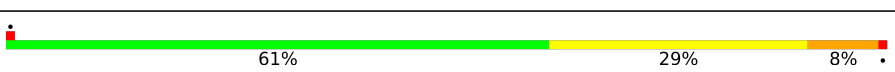
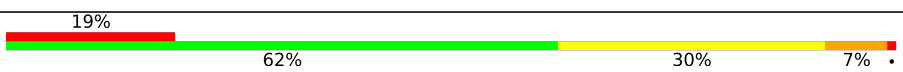
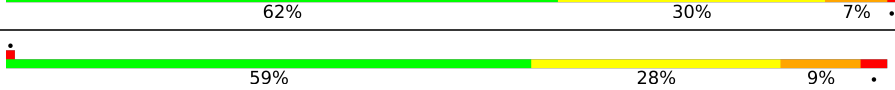
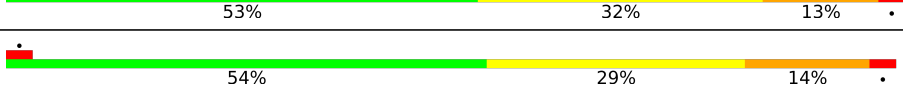
Mol	Chain	Length	Quality of chain
33	LZ	77	
34	L0	63	
35	L1	58	
36	L2	70	
37	LC	234	
38	LE	209	
39	L3	56	
40	L4	54	
41	L5	46	
42	L6	64	
43	L7	38	
44	LF	201	
45	LG	178	
46	LH	176	
47	LJ	164	
48	LN	144	
49	LK	141	
50	LL	142	
51	LI	149	
52	LO	136	
53	LP	127	
54	LM	123	
55	LQ	117	
56	LR	114	
57	LS	117	

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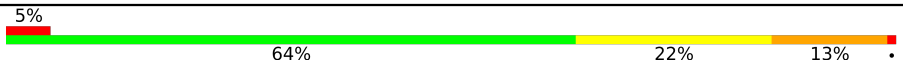
Mol	Chain	Length	Quality of chain
58	LT	103	

2 Entry composition

There are 59 unique types of molecules in this entry. The entry contains 156127 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	SS	91	727	464	139	122	2	0	0

- Molecule 2 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
2	SA	1542	33076	14754	6064	10717	1541	0	0

- Molecule 3 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
3	S1	47	993	445	167	335	46	0	0

- Molecule 4 is a RNA chain called P/E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
4	S2	77	1639	732	297	534	76	0	0

- Molecule 5 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	ST	86	670	414	138	115	3	0	0

- Molecule 6 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	SU	70	590	366	125	98	1	0	0

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	SG	178	Total	C	N	O	S	0	0
			1400	874	269	253	4		

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	SH	129	Total	C	N	O	S	0	0
			979	616	173	184	6		

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	SI	129	Total	C	N	O	S	0	0
			1036	642	208	183	3		

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	SJ	103	Total	C	N	O	S	0	0
			825	514	158	151	2		

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	SK	128	Total	C	N	O	S	0	0
			965	595	196	171	3		

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	SL	123	Total	C	N	O	S	0	0
			955	590	196	165	4		

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	SM	117	Total	C	N	O	S	0	0
			910	564	183	160	3		

- Molecule 14 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	SN	100	Total	C	N	O	S	0	0
			805	499	164	139	3		

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	SO	88	Total	C	N	O	S	0	0
			716	440	146	129	1		

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	SP	82	Total	C	N	O	S	0	0
			649	406	128	114	1		

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	SQ	83	Total	C	N	O	S	0	0
			672	425	124	120	3		

- Molecule 18 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	SB	240	Total	C	N	O	S	0	0
			1872	1180	332	352	8		

- Molecule 19 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	SC	232	Total	C	N	O	S	0	0
			1822	1149	346	323	4		

- Molecule 20 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	SD	205	Total	C	N	O	S	0	0
			1643	1026	315	298	4		

- Molecule 21 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	SE	166	Total	C	N	O	S	0	0
			1225	761	232	226	6		

- Molecule 22 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	SF	135	Total	C	N	O	S	0	0
			1101	677	198	219	7		

- Molecule 23 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	SR	74	Total	C	N	O	S	0	0
			626	395	123	107	1		

- Molecule 24 is a protein called Elongation factor G.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	S3	702	Total	C	N	O	S	0	0
			5431	3420	938	1048	25		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
S3	91	ALA	HIS	engineered mutation	UNP P0A6M8

- Molecule 25 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	LB	120	Total	C	N	O	P	0	0
			2566	1144	468	835	119		

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	LA	2904	Total	C	N	O	P	0	0
			62330	27807	11462	20158	2903		

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
LA	1618	C	A	conflict	GB 33357927

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Chain	Residue	Modelled	Actual	Comment	Reference
LA	1915	C	U	conflict	GB 33357927
LA	2030	U	A	conflict	GB 33357927
LA	2251	U	G	conflict	GB 33357927

- Molecule 27 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	LD	272	Total	C	N	O	S	0	0
			2092	1294	425	366	7		

- Molecule 28 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	LU	110	Total	C	N	O	S	0	0
			857	532	166	156	3		

- Molecule 29 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	LV	100	Total	C	N	O	S	0	0
			787	496	146	143	2		

- Molecule 30 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				AltConf	Trace
30	LW	103	Total	C	N	O	0	0
			789	498	148	143		

- Molecule 31 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	LX	94	Total	C	N	O	S	0	0
			753	479	137	134	3		

- Molecule 32 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	LY	84	Total	C	N	O	S	0	0
			634	391	129	113	1		

- Molecule 33 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	LZ	77	Total	C	N	O	S	0	0
			625	388	129	106	2		

- Molecule 34 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	L0	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 35 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	L1	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 36 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	L2	70	Total	C	N	O	S	0	0
			549	339	104	100	6		

- Molecule 37 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	LC	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 38 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	LE	209	Total	C	N	O	S	0	0
			1565	979	288	294	4		

- Molecule 39 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	L3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 40 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
40	L4	54	Total	C	N	O	0	0
			441	284	81	76		

- Molecule 41 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	L5	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

- Molecule 42 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	L6	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 43 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	L7	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 44 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	LF	201	Total	C	N	O	S	0	0
			1552	974	283	290	5		

- Molecule 45 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	LG	178	Total	C	N	O	S	0	0
			1420	905	251	258	6		

- Molecule 46 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	LH	176	Total	C	N	O	S	0	0
			1323	832	243	246	2		

- Molecule 47 is a protein called 50S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	LJ	164	Total	C	N	O	S	0	0
			1233	776	220	231	6		

- Molecule 48 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	LN	144	Total	C	N	O	S	0	0
			1053	654	207	190	2		

- Molecule 49 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	LK	141	Total	C	N	O	S	0	0
			1032	651	179	196	6		

- Molecule 50 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	LL	142	Total	C	N	O	S	0	0
			1129	714	212	199	4		

- Molecule 51 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	LI	149	Total	C	N	O	S	0	0
			1111	699	197	214	1		

- Molecule 52 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	LO	136	Total	C	N	O	S	0	0
			1074	686	205	177	6		

- Molecule 53 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	LP	127	Total	C	N	O	S	0	0
			1008	621	204	178	5		

- Molecule 54 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	LM	123	Total	C	N	O	S	0	0
			947	593	181	167	6		

- Molecule 55 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	LQ	117	Total	C	N	O	S	0	0
			900	557	179	163	1		

- Molecule 56 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	LR	114	Total	C	N	O	S	0	0
			917	574	179	163	1		

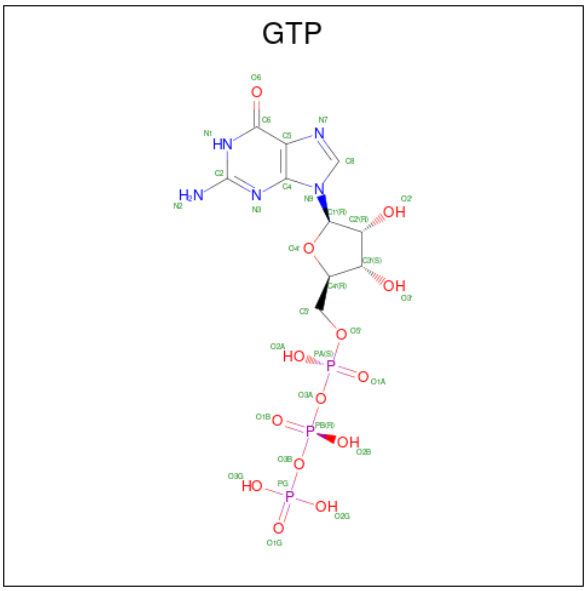
- Molecule 57 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				AltConf	Trace
57	LS	117	Total	C	N	O	0	0
			947	604	192	151		

- Molecule 58 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	LT	103	Total	C	N	O	S	0	0
			816	516	153	145	2		

- Molecule 59 is GUANOSINE-5'-TRIPHOSPHATE (three-letter code: GTP) (formula: $C_{10}H_{16}N_5O_{14}P_3$).

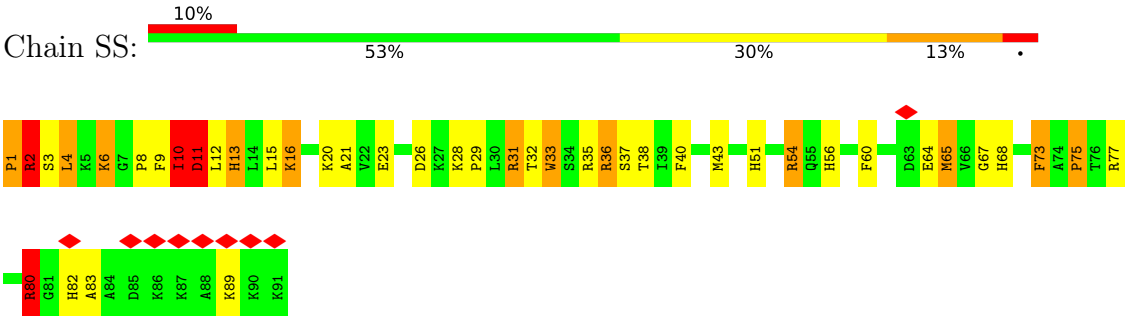


Mol	Chain	Residues	Atoms					AltConf
59	S3	1	Total	C	N	O	P	0
			32	10	5	14	3	

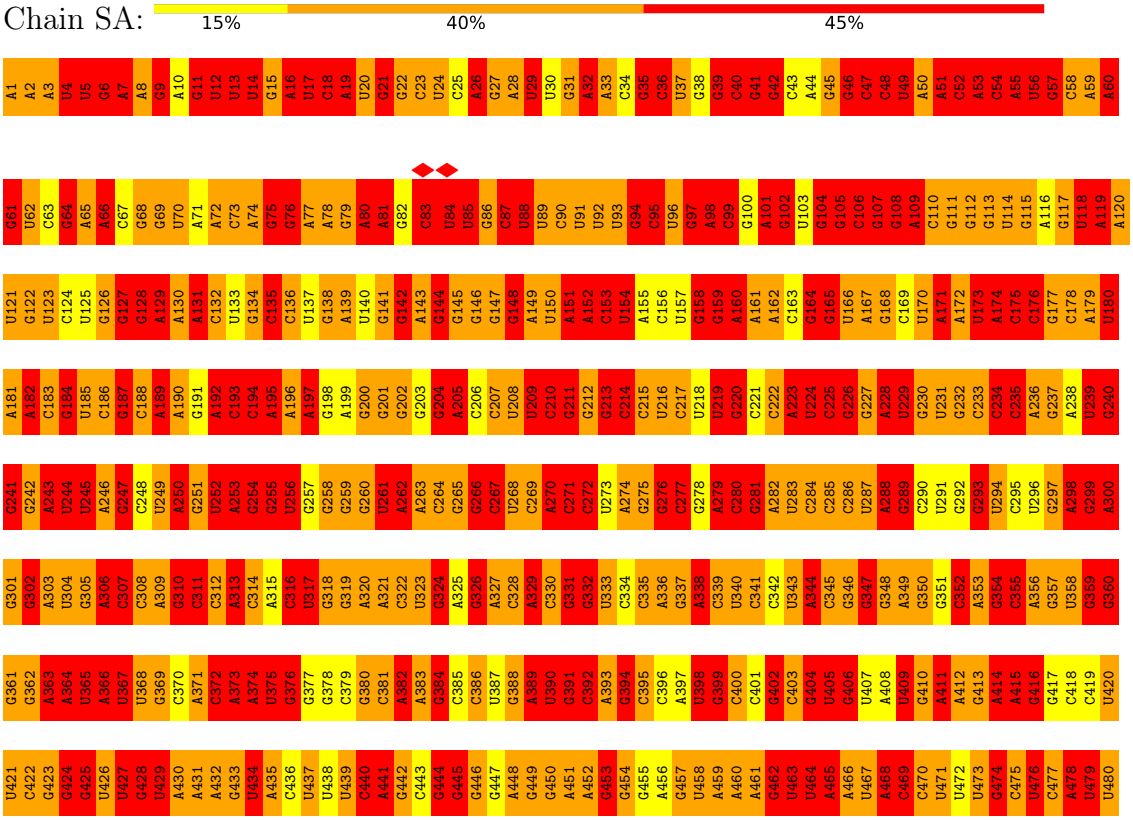
3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: 30S ribosomal protein S19

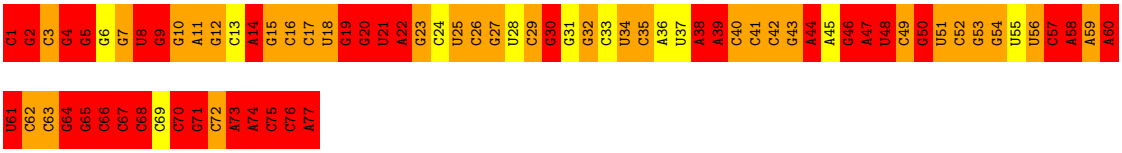


• Molecule 2: 16S ribosomal RNA

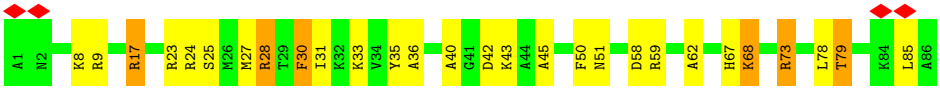


• Molecule 3: mRNA

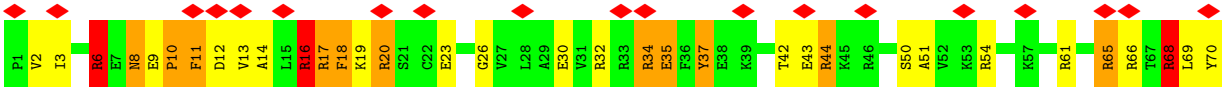
• Molecule 4: P/E-tRNA



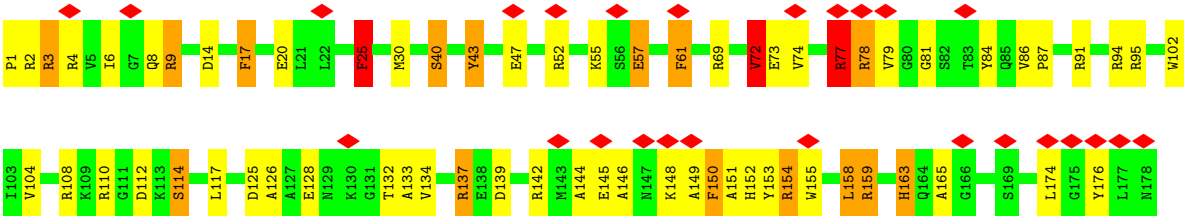
• Molecule 5: 30S ribosomal protein S20



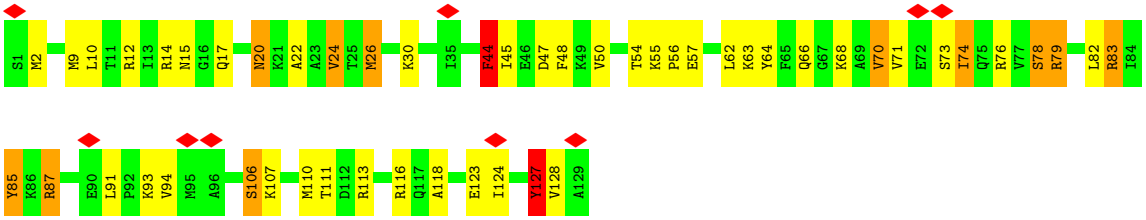
• Molecule 6: 30S ribosomal protein S21



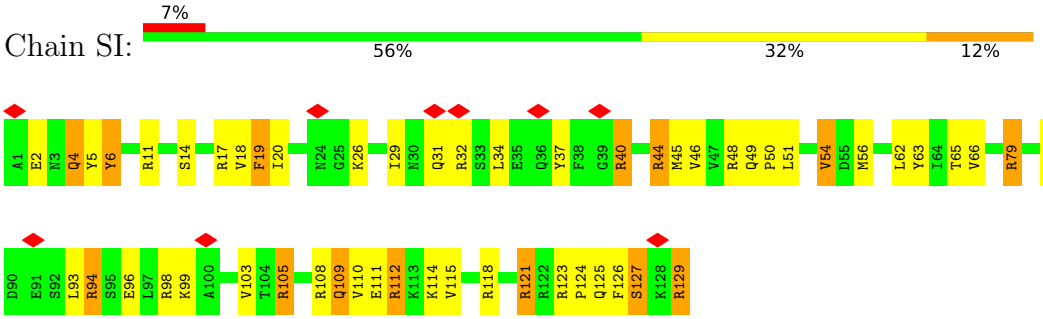
• Molecule 7: 30S ribosomal protein S7



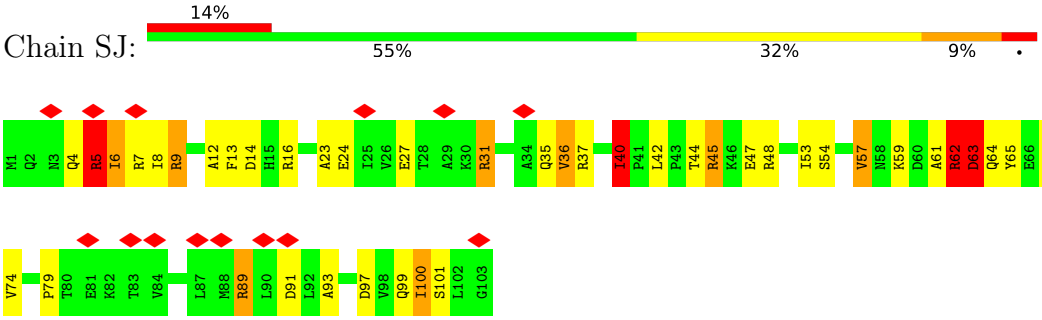
• Molecule 8: 30S ribosomal protein S8



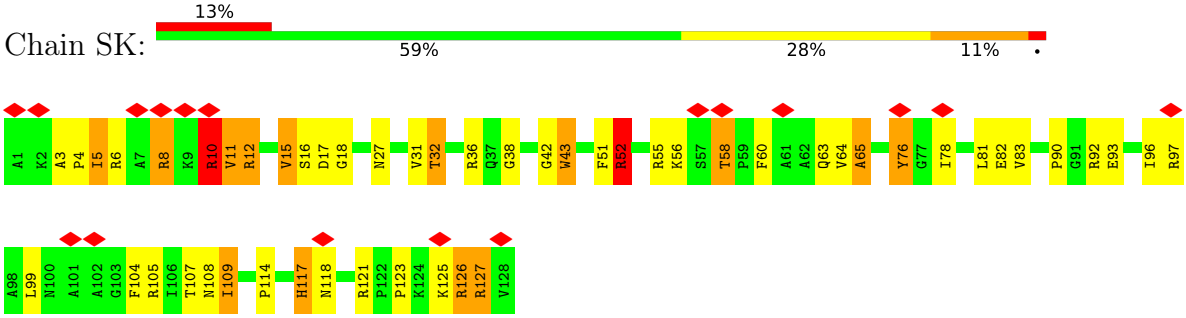
• Molecule 9: 30S ribosomal protein S9



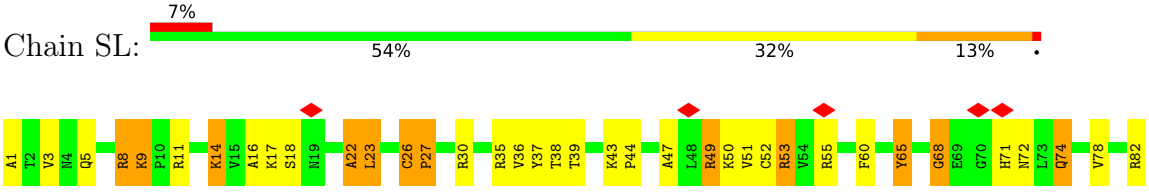
• Molecule 10: 30S ribosomal protein S10

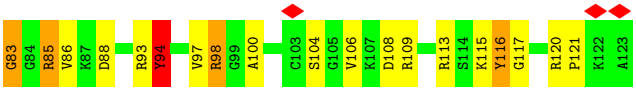


• Molecule 11: 30S ribosomal protein S11

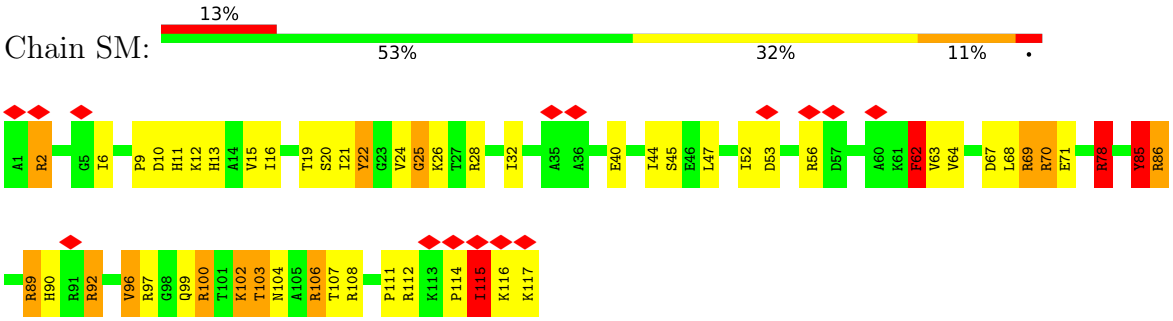


• Molecule 12: 30S ribosomal protein S12

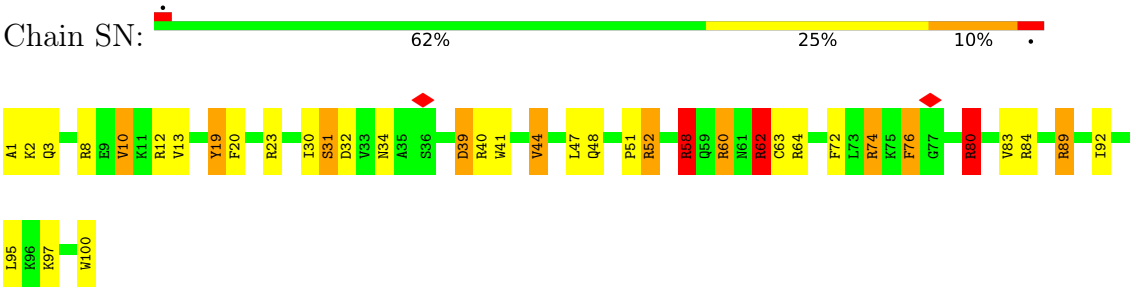




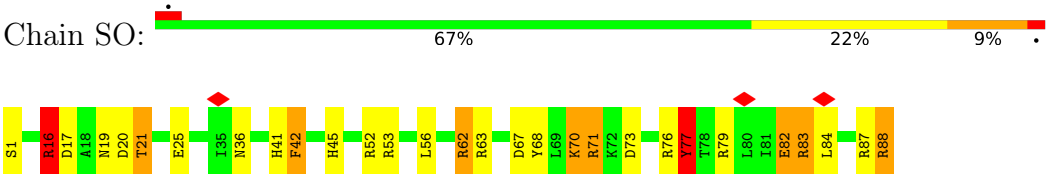
• Molecule 13: 30S ribosomal protein S13



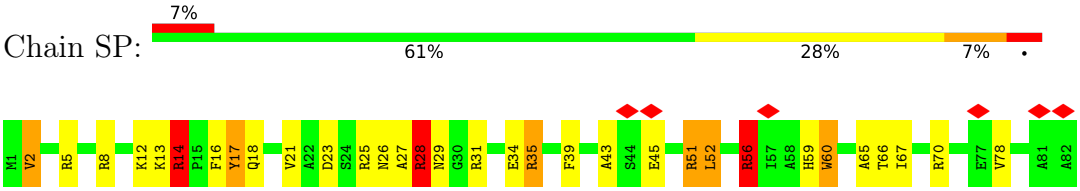
• Molecule 14: 30S ribosomal protein S14



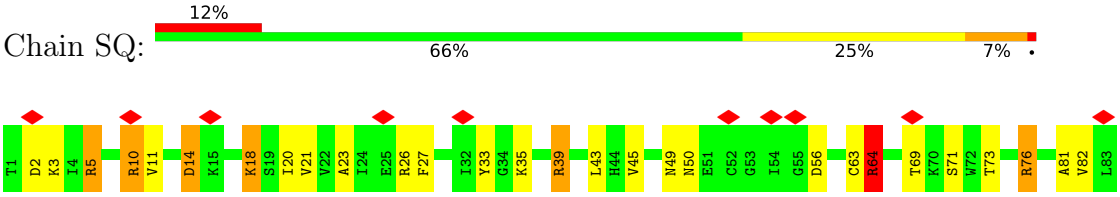
• Molecule 15: 30S ribosomal protein S15



• Molecule 16: 30S ribosomal protein S16

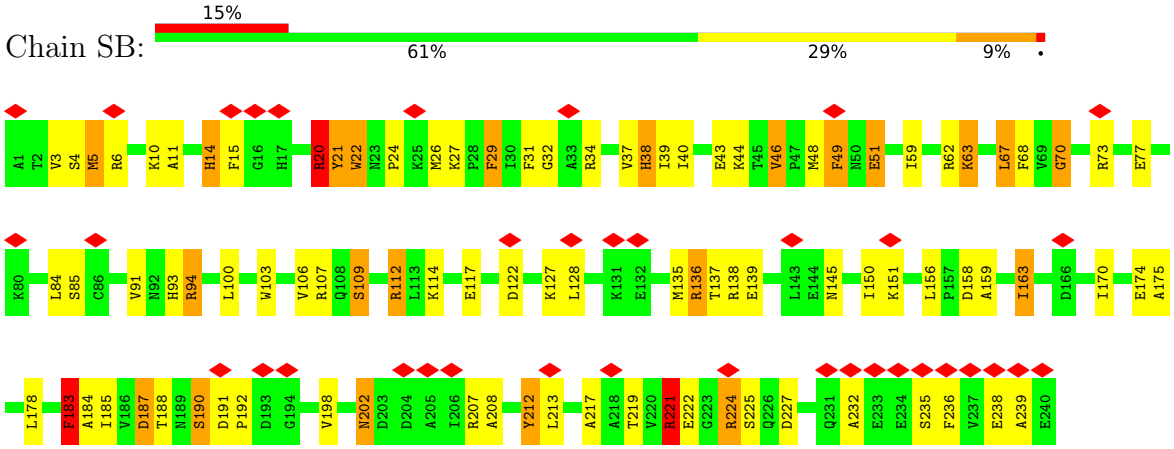


• Molecule 17: 30S ribosomal protein S17



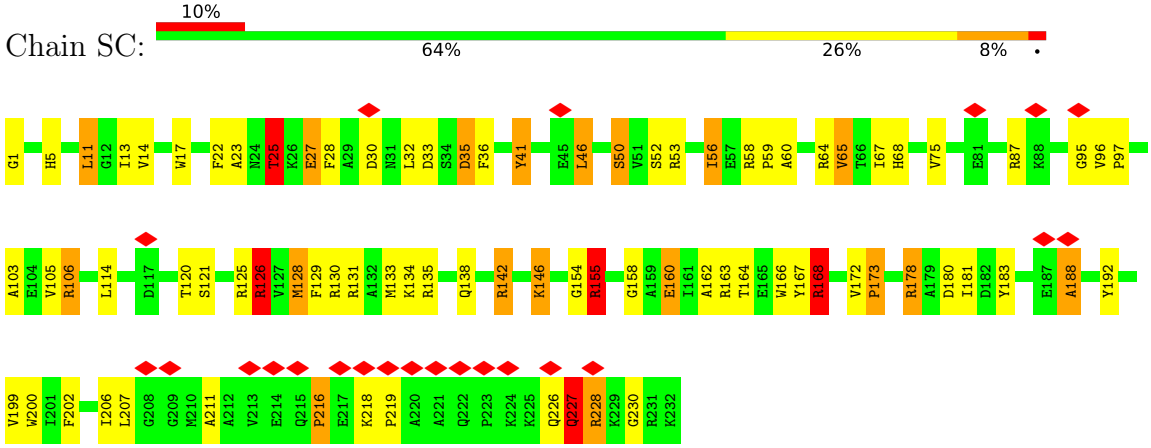
• Molecule 18: 30S ribosomal protein S2

Chain SB:



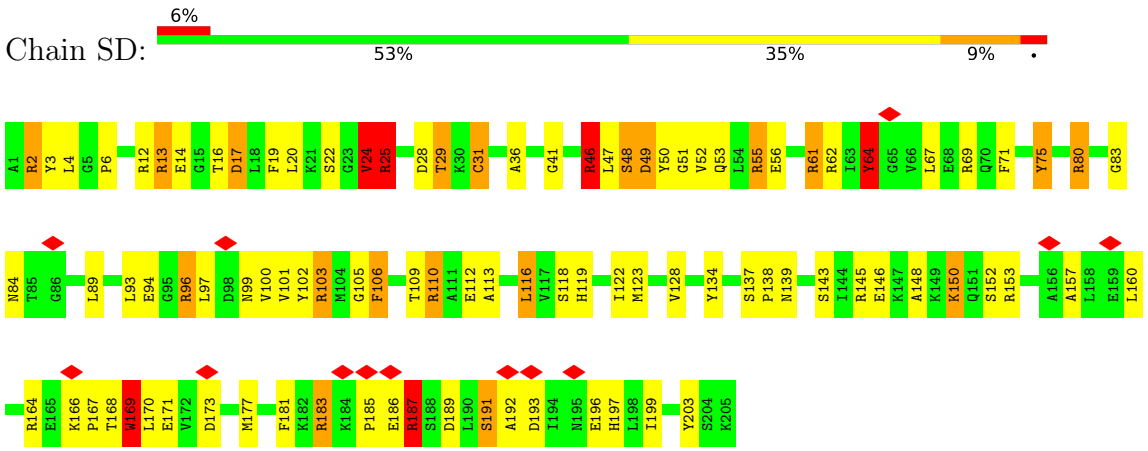
• Molecule 19: 30S ribosomal protein S3

Chain SC:



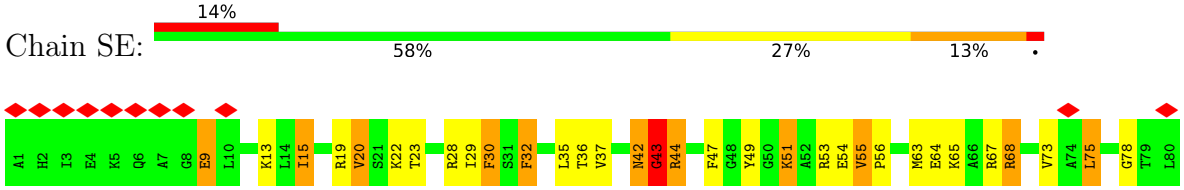
• Molecule 20: 30S ribosomal protein S4

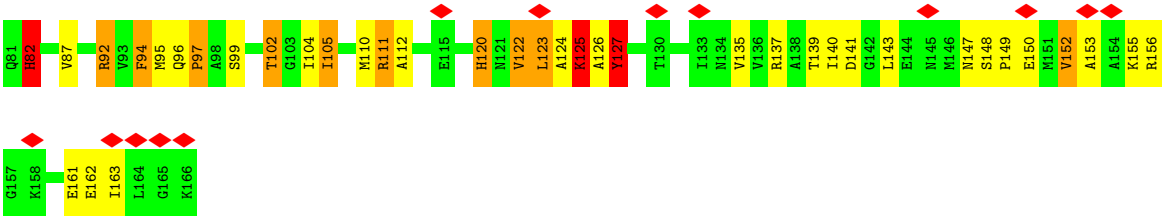
Chain SD:



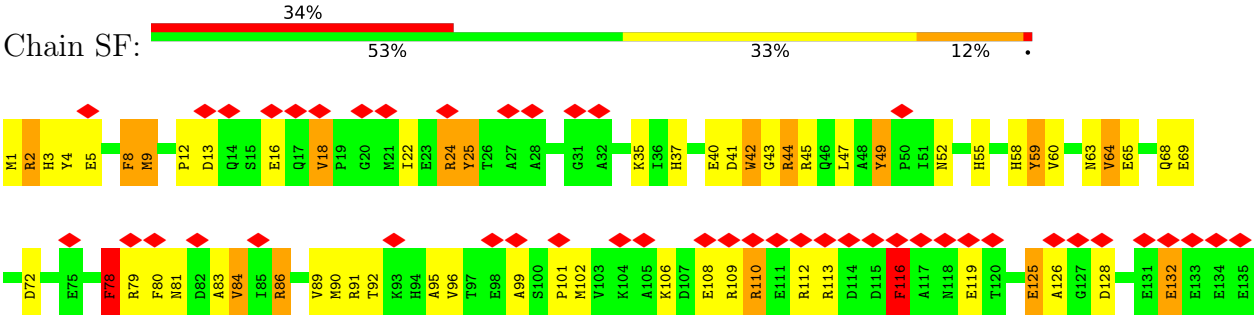
• Molecule 21: 30S ribosomal protein S5

Chain SE:

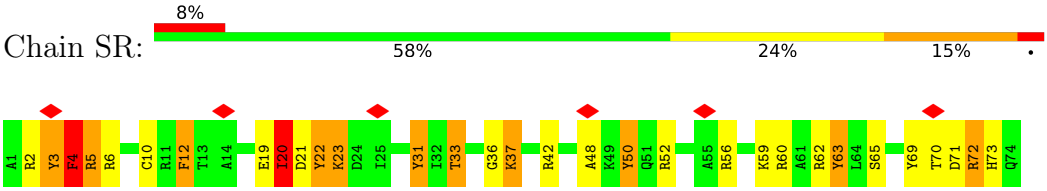




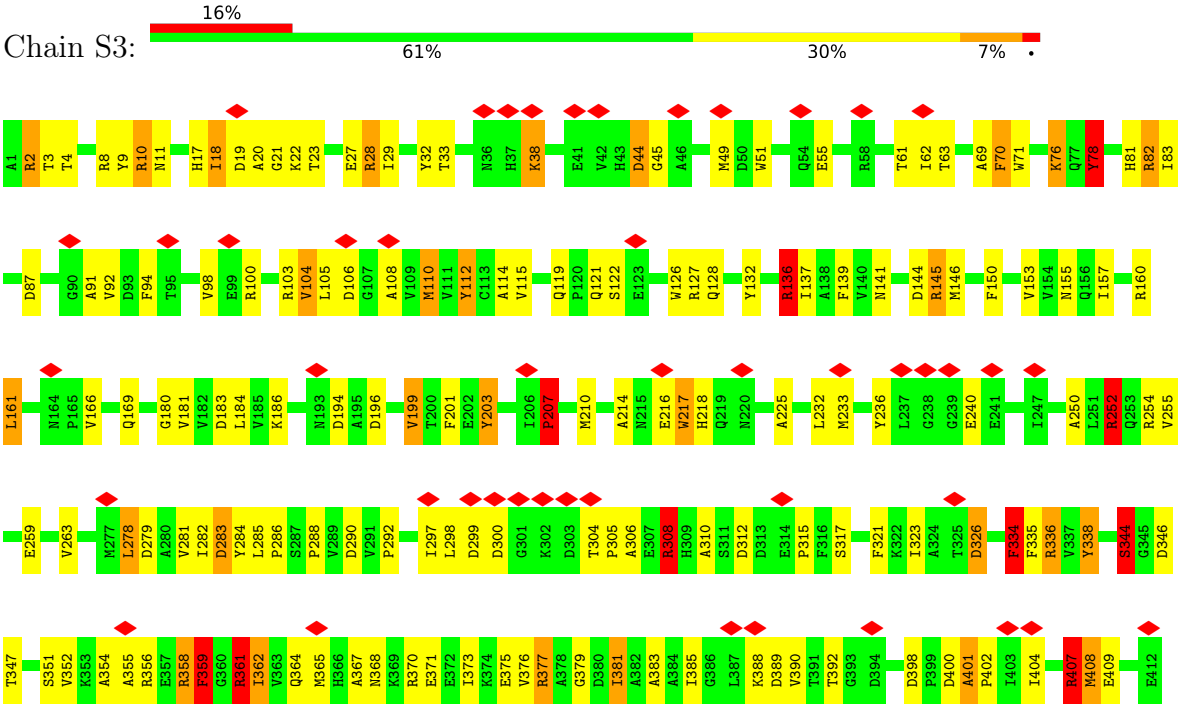
• Molecule 22: 30S ribosomal protein S6

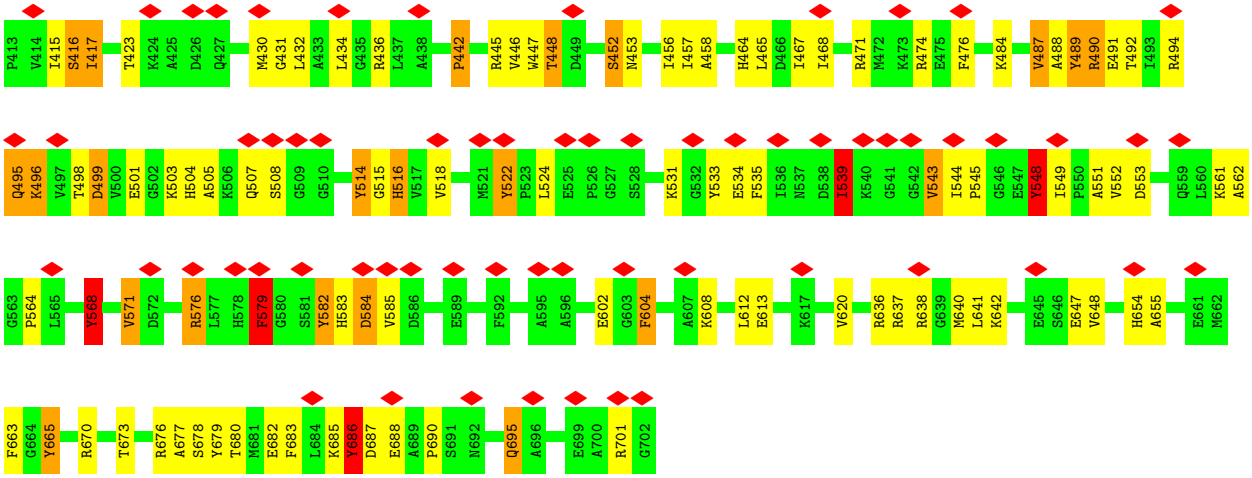


• Molecule 23: 30S ribosomal protein S18



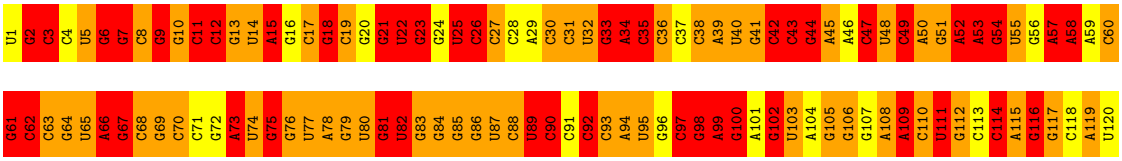
• Molecule 24: Elongation factor G





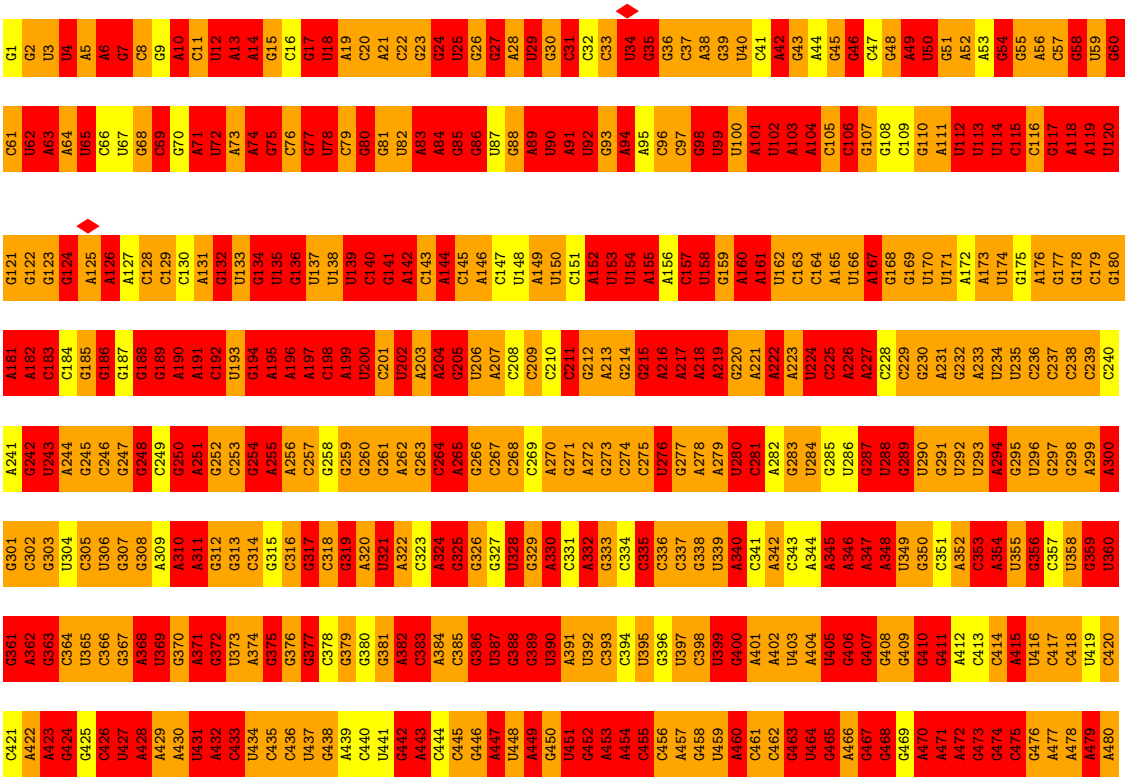
• Molecule 25: 5S ribosomal RNA

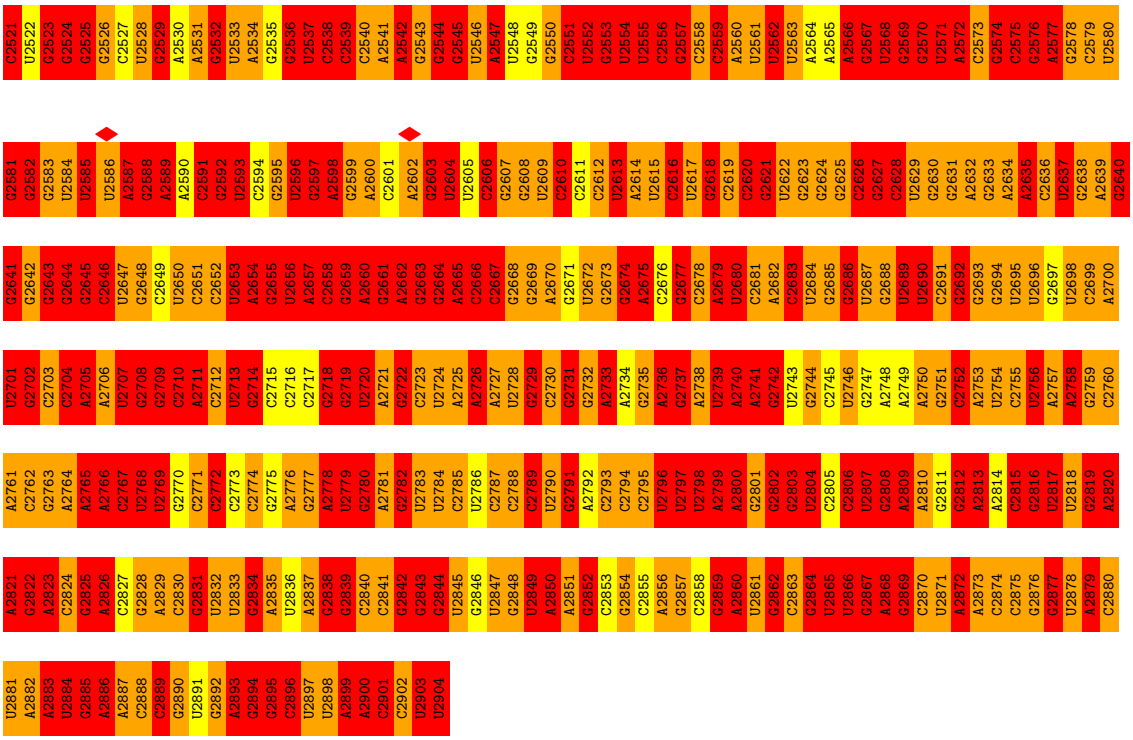
Chain LB: 18% 43% 39%



• Molecule 26: 23S ribosomal RNA

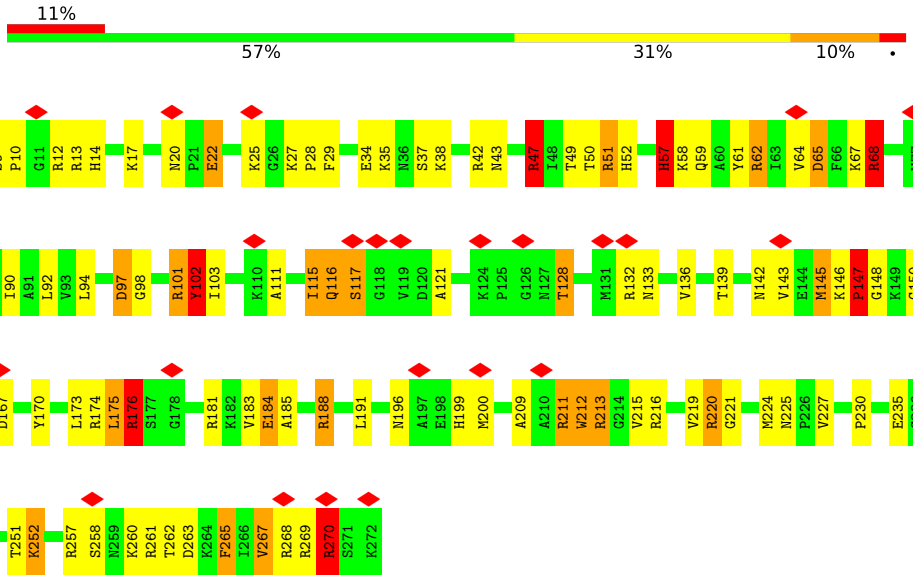
Chain LA: 11% 41% 48%





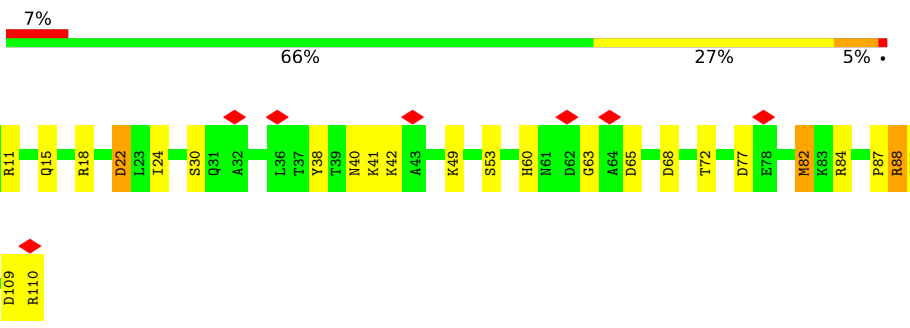
• Molecule 27: 50S ribosomal protein L2

Chain LD:



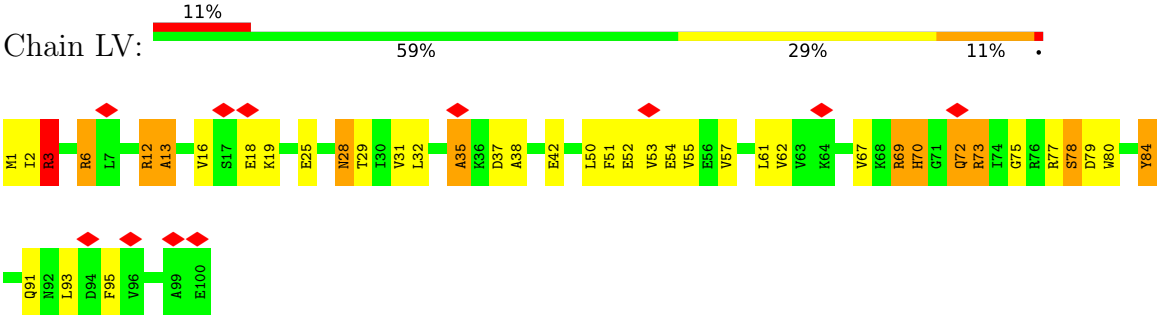
• Molecule 28: 50S ribosomal protein L22

Chain LU:



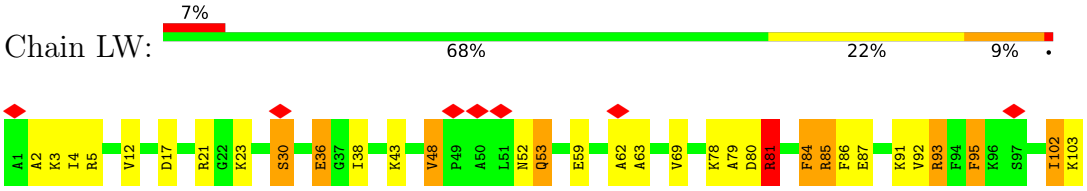
• Molecule 29: 50S ribosomal protein L23

Chain LV:



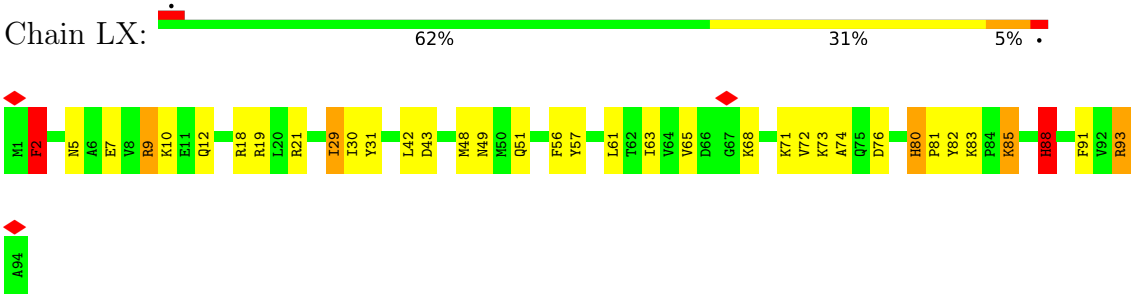
• Molecule 30: 50S ribosomal protein L24

Chain LW:



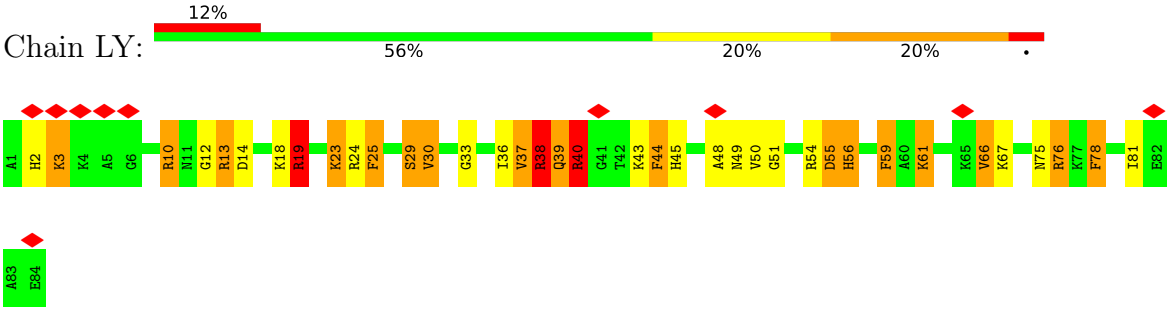
• Molecule 31: 50S ribosomal protein L25

Chain LX:



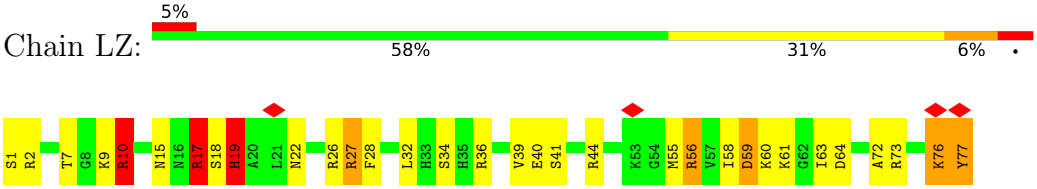
• Molecule 32: 50S ribosomal protein L27

Chain LY:



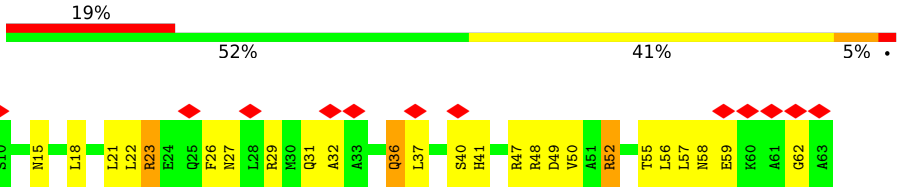
• Molecule 33: 50S ribosomal protein L28

Chain LZ:



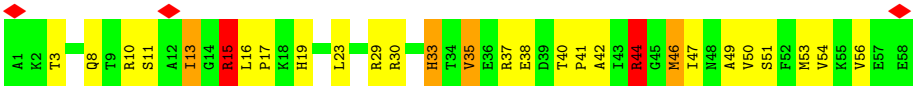
• Molecule 34: 50S ribosomal protein L29

Chain L0:



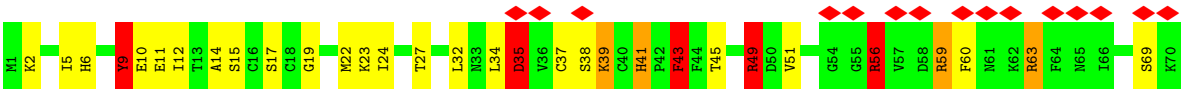
• Molecule 35: 50S ribosomal protein L30

Chain L1:



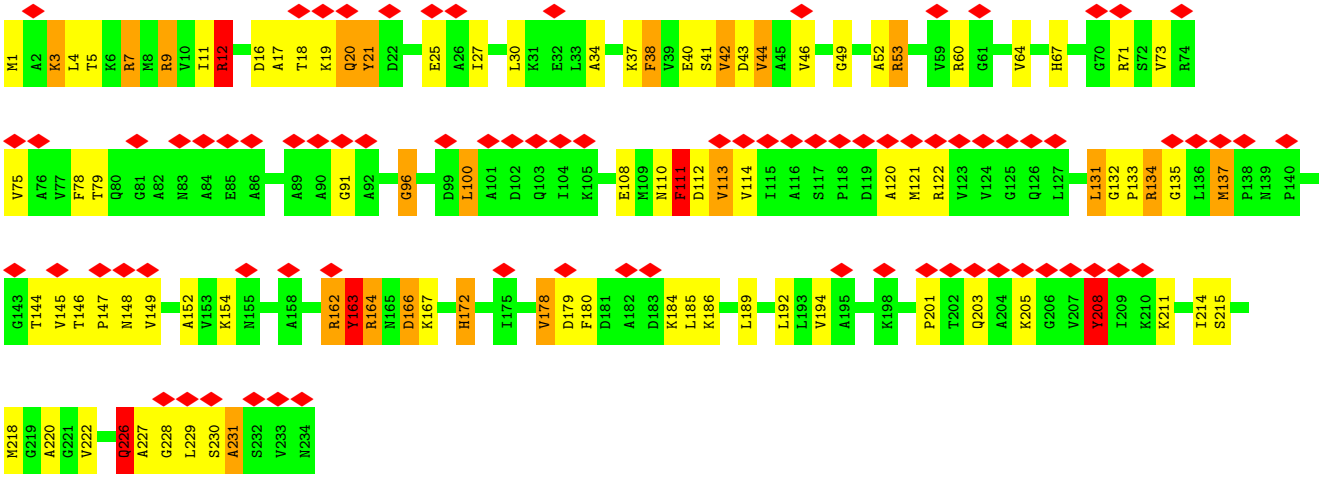
• Molecule 36: 50S ribosomal protein L31

Chain L2:



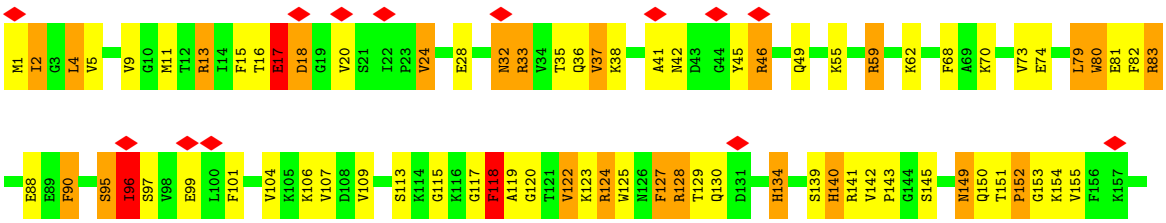
• Molecule 37: 50S ribosomal protein L1

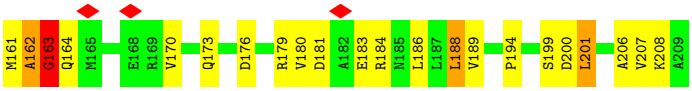
Chain LC:



• Molecule 38: 50S ribosomal protein L3

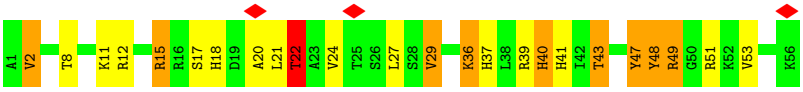
Chain LE:





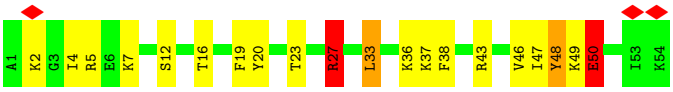
• Molecule 39: 50S ribosomal protein L32

Chain L3:



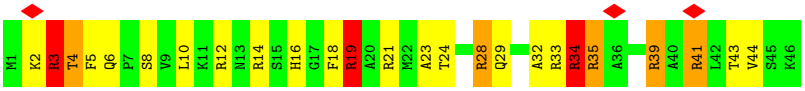
• Molecule 40: 50S ribosomal protein L33

Chain L4:



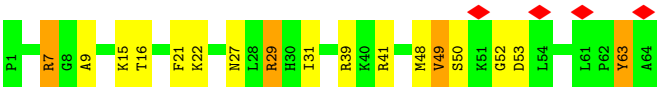
• Molecule 41: 50S ribosomal protein L34

Chain L5:



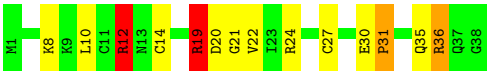
• Molecule 42: 50S ribosomal protein L35

Chain L6:



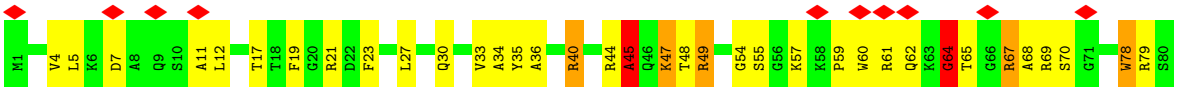
• Molecule 43: 50S ribosomal protein L36

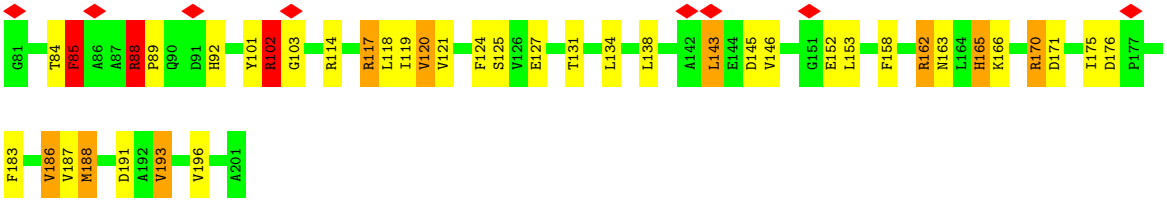
Chain L7:



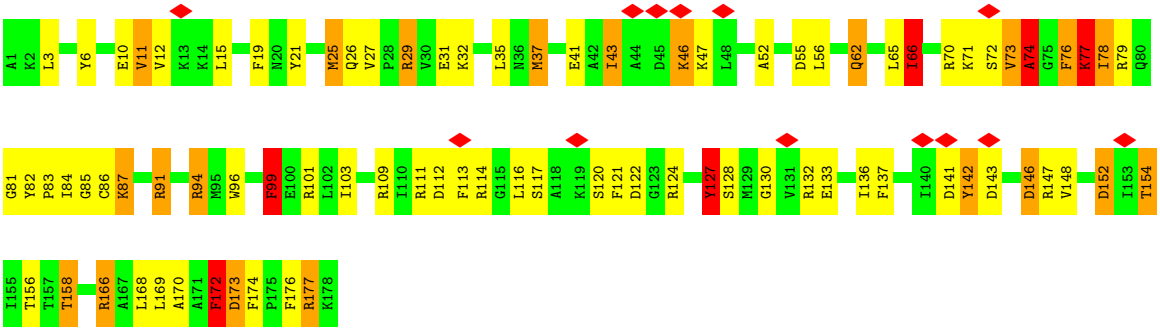
• Molecule 44: 50S ribosomal protein L4

Chain LF:

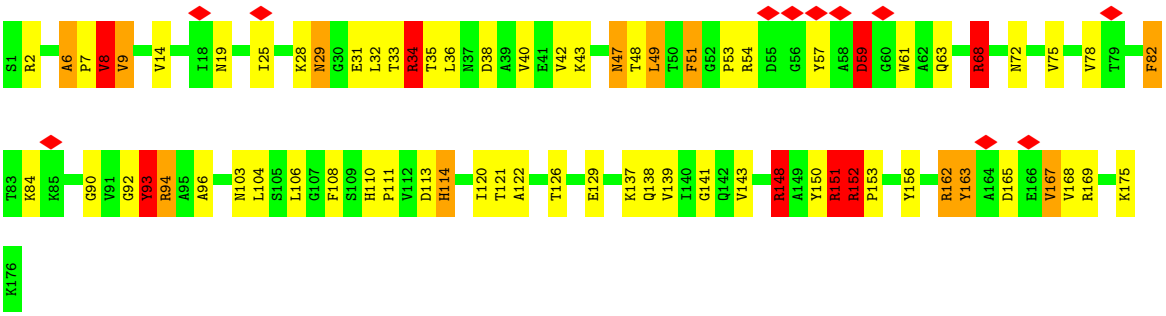




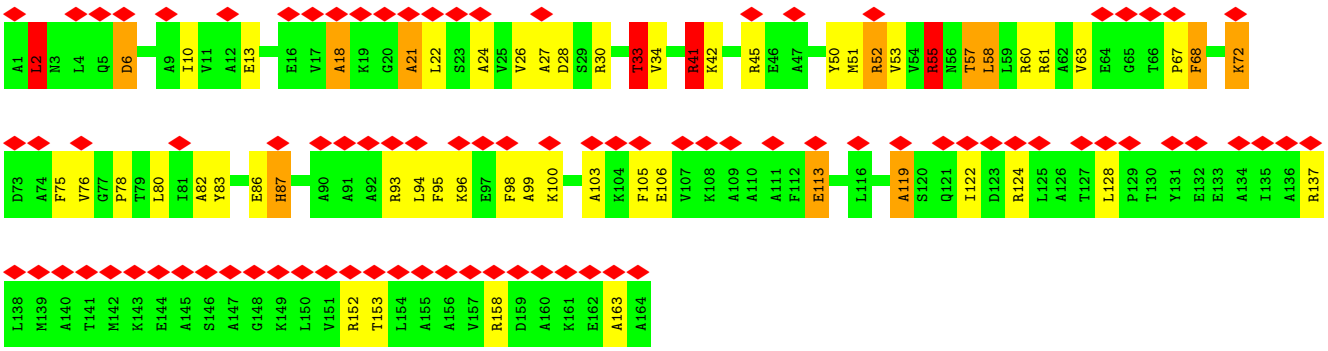
• Molecule 45: 50S ribosomal protein L5



• Molecule 46: 50S ribosomal protein L6

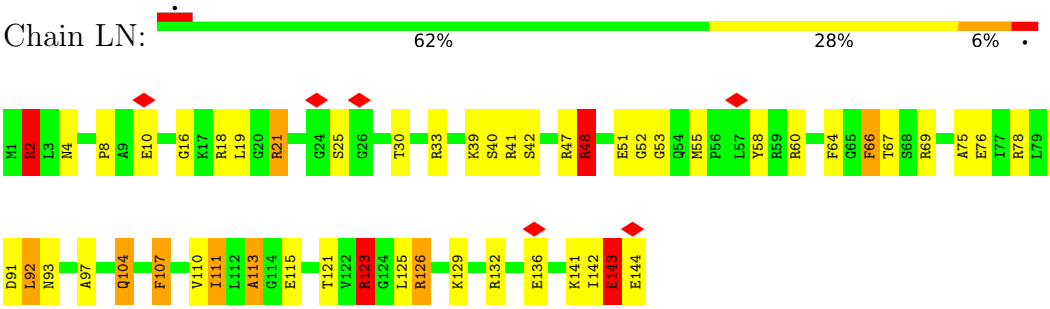


• Molecule 47: 50S ribosomal protein L10



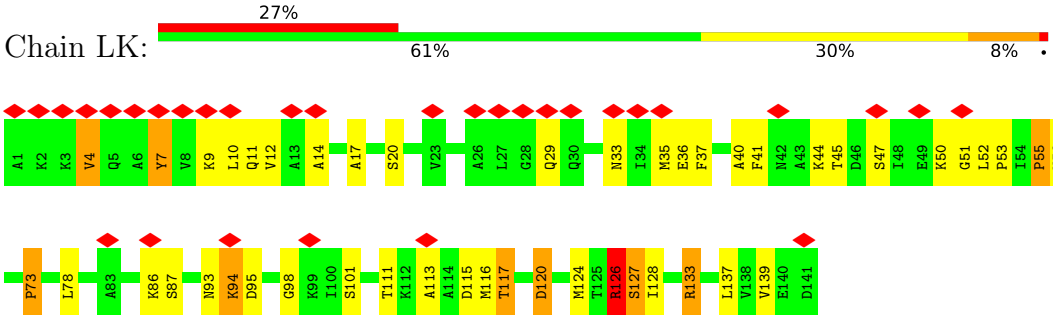
• Molecule 48: 50S ribosomal protein L15

Chain LN:



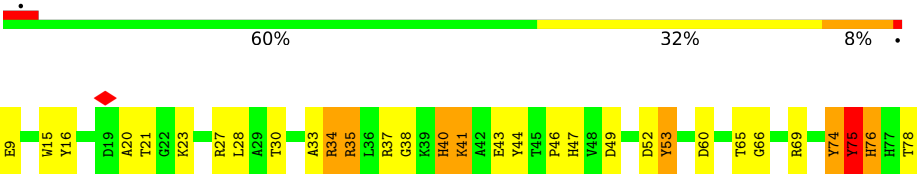
• Molecule 49: 50S ribosomal protein L11

Chain LK:



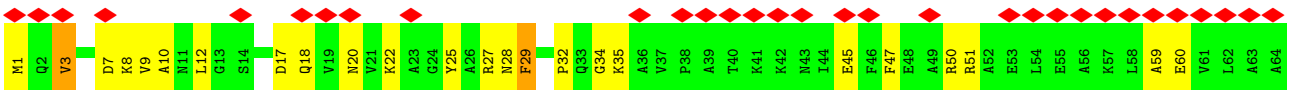
• Molecule 50: 50S ribosomal protein L13

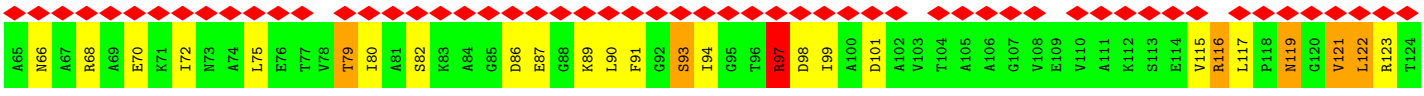
Chain LL:

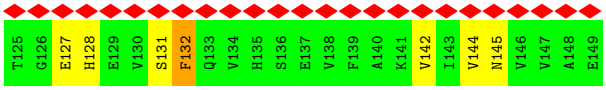


• Molecule 51: 50S ribosomal protein L9

Chain LI:

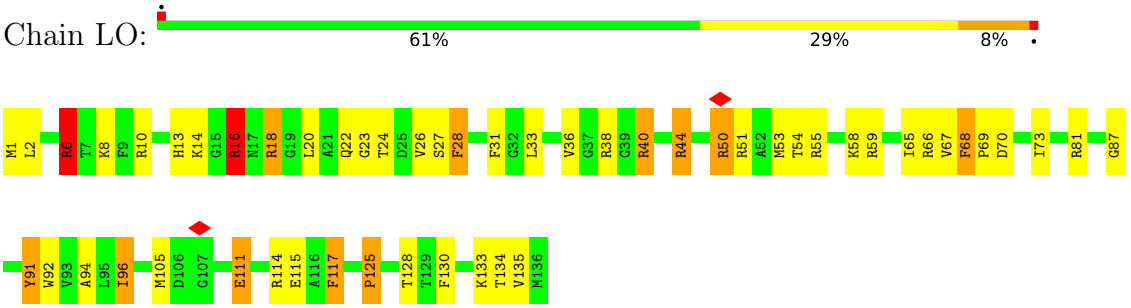






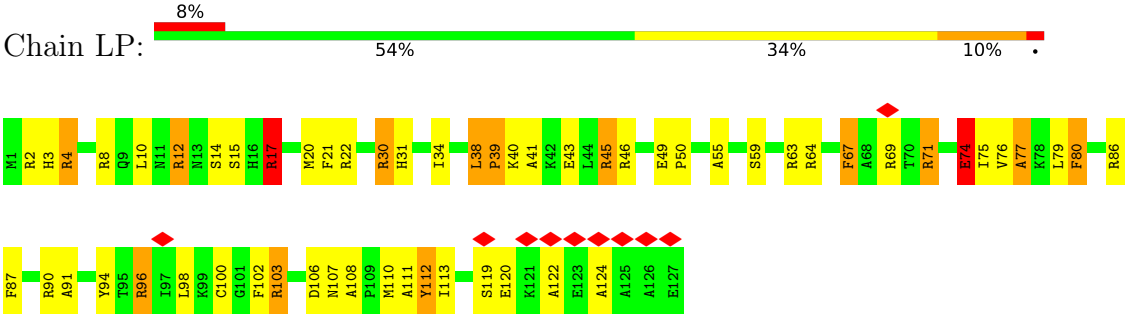
• Molecule 52: 50S ribosomal protein L16

Chain LO:



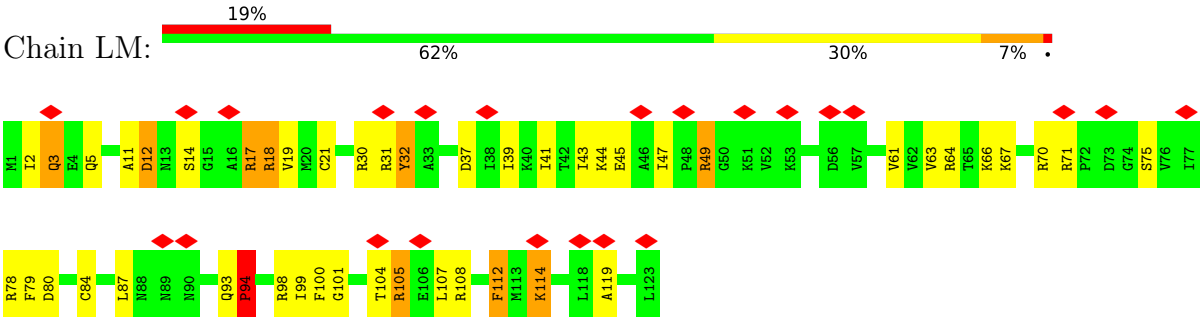
• Molecule 53: 50S ribosomal protein L17

Chain LP:



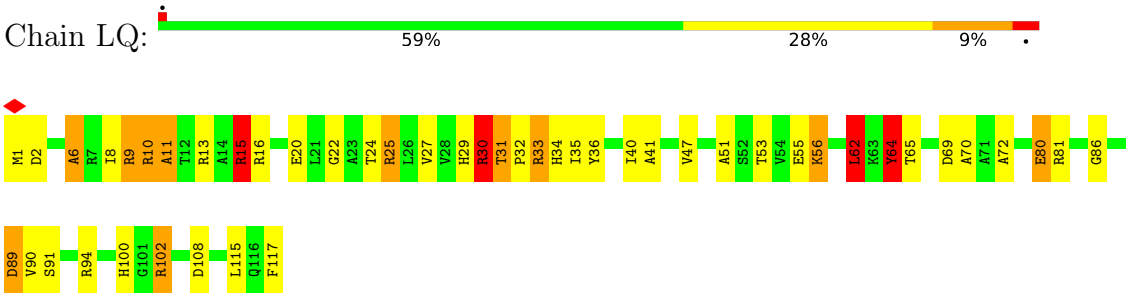
• Molecule 54: 50S ribosomal protein L14

Chain LM:



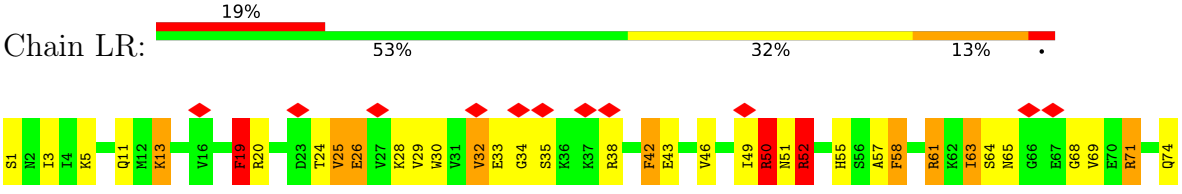
• Molecule 55: 50S ribosomal protein L18

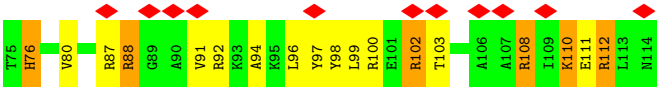
Chain LQ:



• Molecule 56: 50S ribosomal protein L19

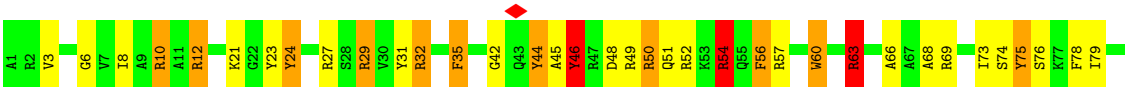
Chain LR:

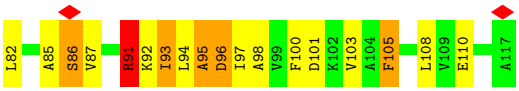




• Molecule 57: 50S ribosomal protein L20

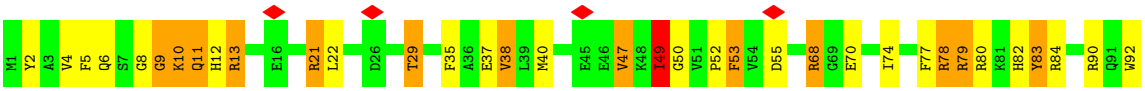
Chain LS:

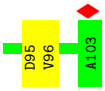




• Molecule 58: 50S ribosomal protein L21

Chain LT:





4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	50000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	CTFFIND3 and CTFIT	Depositor
Microscope	FEI TITAN	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	Not provided	
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	58000	Depositor
Image detector	DIRECT ELECTRON DE-12 (4k x 3k)	Depositor
Maximum map value	0.207	Depositor
Minimum map value	-0.084	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.015	Depositor
Recommended contour level	0.03	Depositor
Map size (Å)	377.99997, 377.99997, 377.99997	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.05, 1.05, 1.05	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: GTP

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	SS	1.56	2/744 (0.3%)	2.24	33/995 (3.3%)
2	SA	3.39	5085/37035 (13.7%)	3.51	8259/57774 (14.3%)
3	S1	3.38	150/1108 (13.5%)	3.59	243/1724 (14.1%)
4	S2	3.42	257/1831 (14.0%)	3.58	423/2853 (14.8%)
5	ST	1.63	4/676 (0.6%)	2.23	33/895 (3.7%)
6	SU	1.70	5/598 (0.8%)	2.73	30/792 (3.8%)
7	SG	1.68	10/1422 (0.7%)	2.09	48/1908 (2.5%)
8	SH	1.58	5/989 (0.5%)	2.10	33/1326 (2.5%)
9	SI	1.67	6/1048 (0.6%)	2.18	43/1394 (3.1%)
10	SJ	1.65	8/835 (1.0%)	2.13	34/1127 (3.0%)
11	SK	1.67	8/982 (0.8%)	2.23	33/1323 (2.5%)
12	SL	1.66	6/969 (0.6%)	2.28	46/1300 (3.5%)
13	SM	1.61	3/919 (0.3%)	2.36	43/1226 (3.5%)
14	SN	1.59	6/817 (0.7%)	2.23	36/1088 (3.3%)
15	SO	1.56	5/724 (0.7%)	2.20	29/966 (3.0%)
16	SP	1.56	4/659 (0.6%)	2.17	25/884 (2.8%)
17	SQ	1.66	3/681 (0.4%)	2.07	20/913 (2.2%)
18	SB	1.61	10/1904 (0.5%)	2.05	63/2565 (2.5%)
19	SC	1.60	8/1852 (0.4%)	2.10	50/2490 (2.0%)
20	SD	1.65	17/1665 (1.0%)	2.20	62/2227 (2.8%)
21	SE	1.60	8/1239 (0.6%)	2.11	38/1664 (2.3%)
22	SF	1.65	8/1121 (0.7%)	2.34	42/1509 (2.8%)
23	SR	1.71	9/637 (1.4%)	2.26	25/851 (2.9%)
24	S3	1.63	40/5532 (0.7%)	2.11	178/7485 (2.4%)
25	LB	3.37	384/2869 (13.4%)	3.42	601/4474 (13.4%)
26	LA	3.49	10162/69808 (14.6%)	3.51	15513/108905 (14.2%)
27	LD	1.64	14/2131 (0.7%)	2.20	72/2863 (2.5%)
28	LU	1.50	3/864 (0.3%)	2.05	25/1156 (2.2%)
29	LV	1.62	6/794 (0.8%)	2.08	29/1060 (2.7%)
30	LW	1.58	4/797 (0.5%)	2.12	17/1062 (1.6%)
31	LX	1.61	4/766 (0.5%)	2.09	29/1025 (2.8%)
32	LY	1.71	4/642 (0.6%)	2.27	25/848 (2.9%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
33	LZ	1.74	6/635 (0.9%)	2.24	24/848 (2.8%)
34	L0	1.56	2/510 (0.4%)	2.31	24/677 (3.5%)
35	L1	1.56	2/453 (0.4%)	2.22	19/605 (3.1%)
36	L2	1.57	1/559 (0.2%)	2.11	15/745 (2.0%)
37	LC	1.62	11/1748 (0.6%)	2.15	59/2355 (2.5%)
38	LE	1.66	10/1586 (0.6%)	2.14	61/2134 (2.9%)
39	L3	1.63	2/450 (0.4%)	1.98	9/599 (1.5%)
40	L4	1.67	4/448 (0.9%)	2.12	11/594 (1.9%)
41	L5	1.66	1/380 (0.3%)	2.65	31/498 (6.2%)
42	L6	1.53	1/513 (0.2%)	2.02	14/676 (2.1%)
43	L7	1.53	0/303	2.12	9/397 (2.3%)
44	LF	1.66	10/1571 (0.6%)	2.07	53/2113 (2.5%)
45	LG	1.60	5/1444 (0.3%)	2.28	64/1937 (3.3%)
46	LH	1.62	8/1343 (0.6%)	2.17	53/1816 (2.9%)
47	LJ	1.60	4/1247 (0.3%)	2.08	46/1679 (2.7%)
48	LN	1.56	5/1062 (0.5%)	2.24	42/1413 (3.0%)
49	LK	1.58	6/1046 (0.6%)	2.07	33/1410 (2.3%)
50	LL	1.71	10/1152 (0.9%)	2.19	45/1551 (2.9%)
51	LI	1.58	4/1122 (0.4%)	2.10	30/1515 (2.0%)
52	LO	1.63	9/1093 (0.8%)	2.27	29/1460 (2.0%)
53	LP	1.69	11/1021 (1.1%)	2.21	45/1364 (3.3%)
54	LM	1.59	2/956 (0.2%)	2.32	35/1279 (2.7%)
55	LQ	1.67	6/910 (0.7%)	2.00	28/1219 (2.3%)
56	LR	1.72	8/929 (0.9%)	2.27	32/1242 (2.6%)
57	LS	1.62	6/960 (0.6%)	2.27	39/1278 (3.1%)
58	LT	1.62	2/829 (0.2%)	2.18	32/1107 (2.9%)
All	All	2.97	16384/168928 (9.7%)	3.17	27062/251183 (10.8%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	SS	0	11
2	SA	0	979
3	S1	0	36
4	S2	0	48
5	ST	0	5
6	SU	0	11
7	SG	0	19
8	SH	0	10

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
9	SI	0	7
10	SJ	0	9
11	SK	0	7
12	SL	0	10
13	SM	0	8
14	SN	0	11
15	SO	0	7
16	SP	0	9
17	SQ	0	6
18	SB	0	13
19	SC	0	11
20	SD	0	18
21	SE	0	11
22	SF	0	12
23	SR	0	9
24	S3	0	38
25	LB	0	68
26	LA	5	1948
27	LD	0	24
28	LU	0	8
29	LV	0	5
30	LW	0	8
31	LX	0	5
32	LY	0	8
33	LZ	0	7
34	L0	0	2
35	L1	0	3
36	L2	0	9
37	LC	0	17
38	LE	0	15
39	L3	0	5
40	L4	0	4
41	L5	0	7
42	L6	0	2
43	L7	0	4
44	LF	0	10
45	LG	0	15
46	LH	0	13
47	LJ	0	10
48	LN	0	12
49	LK	0	10
50	LL	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
51	LI	0	7
52	LO	0	8
53	LP	0	10
54	LM	0	9
55	LQ	0	14
56	LR	0	11
57	LS	0	12
58	LT	0	8
All	All	5	3608

All (16384) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	199	A	N7-C5	-23.19	1.25	1.39
26	LA	727	A	N7-C5	-22.32	1.25	1.39
26	LA	1791	A	N9-C4	-20.53	1.25	1.37
2	SA	298	A	N7-C5	-20.39	1.27	1.39
26	LA	743	A	N7-C5	-19.99	1.27	1.39
2	SA	803	G	N7-C5	-19.08	1.27	1.39
26	LA	1236	G	N7-C5	-18.98	1.27	1.39
26	LA	1029	A	N9-C4	-18.65	1.26	1.37
26	LA	698	C	N1-C6	18.61	1.48	1.37
2	SA	538	G	N9-C4	-18.36	1.23	1.38
26	LA	1743	G	N7-C5	-18.35	1.28	1.39
26	LA	423	A	N9-C4	-18.26	1.26	1.37
26	LA	2358	A	N3-C4	-18.19	1.24	1.34
26	LA	2531	A	N9-C4	-18.01	1.27	1.37
26	LA	1287	A	N7-C5	-17.55	1.28	1.39
26	LA	10	A	N3-C4	-17.39	1.24	1.34
2	SA	630	A	N7-C5	-17.34	1.28	1.39
26	LA	1802	A	N9-C4	-17.18	1.27	1.37
2	SA	337	G	C8-N7	-17.18	1.20	1.30
2	SA	694	A	N9-C4	-17.12	1.27	1.37
26	LA	1628	G	N7-C5	-17.03	1.29	1.39
26	LA	743	A	N9-C4	-17.02	1.27	1.37
26	LA	1483	G	N7-C5	-17.01	1.29	1.39
26	LA	612	G	N3-C4	-16.97	1.23	1.35
26	LA	2205	A	N9-C4	-16.91	1.27	1.37
26	LA	2048	G	N7-C5	-16.84	1.29	1.39
4	S2	22	A	N9-C8	-16.80	1.24	1.37
26	LA	2757	A	N9-C4	-16.56	1.27	1.37
26	LA	788	A	N9-C4	-16.54	1.27	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1759	A	N3-C4	-16.26	1.25	1.34
26	LA	2152	G	C2-N3	16.22	1.45	1.32
26	LA	914	G	C8-N7	-16.20	1.21	1.30
2	SA	22	G	N7-C5	-16.17	1.29	1.39
2	SA	557	G	N3-C4	-16.16	1.24	1.35
26	LA	1367	A	N7-C5	-16.13	1.29	1.39
2	SA	877	G	N7-C5	-16.12	1.29	1.39
26	LA	766	U	C2-N3	-16.10	1.26	1.37
2	SA	1513	A	N7-C5	-16.07	1.29	1.39
26	LA	2287	A	N7-C5	-15.97	1.29	1.39
26	LA	320	A	N9-C4	-15.93	1.28	1.37
2	SA	1405	G	C5-C4	-15.92	1.27	1.38
2	SA	1110	A	N7-C5	-15.89	1.29	1.39
2	SA	1268	G	N7-C5	-15.87	1.29	1.39
26	LA	1241	A	N3-C4	-15.87	1.25	1.34
26	LA	1614	A	N9-C4	-15.71	1.28	1.37
26	LA	1930	G	N7-C5	-15.66	1.29	1.39
3	S1	18	A	C8-N7	-15.60	1.20	1.31
26	LA	1936	A	N9-C4	-15.50	1.28	1.37
26	LA	618	G	N7-C5	15.41	1.48	1.39
25	LB	108	A	N9-C4	-15.39	1.28	1.37
2	SA	696	A	N3-C4	-15.38	1.25	1.34
26	LA	167	A	N7-C5	-15.37	1.30	1.39
2	SA	626	G	N7-C5	-15.36	1.30	1.39
26	LA	2256	G	N7-C5	-15.25	1.30	1.39
26	LA	1827	U	C2-N3	-15.22	1.27	1.37
26	LA	984	A	N9-C4	-15.21	1.28	1.37
26	LA	1281	G	C5-C4	-15.11	1.27	1.38
26	LA	162	U	C2-N3	-15.06	1.27	1.37
26	LA	961	C	N1-C6	-14.99	1.28	1.37
26	LA	19	A	N9-C4	-14.97	1.28	1.37
26	LA	1522	A	N3-C4	-14.95	1.25	1.34
26	LA	1332	G	N7-C5	-14.93	1.30	1.39
26	LA	1265	A	N9-C4	-14.91	1.28	1.37
26	LA	2764	A	N9-C4	-14.88	1.28	1.37
2	SA	1329	A	N7-C5	-14.86	1.30	1.39
25	LB	53	A	N7-C5	-14.83	1.30	1.39
26	LA	1998	A	N3-C4	-14.80	1.25	1.34
2	SA	917	G	N7-C5	-14.75	1.30	1.39
26	LA	1785	A	C6-N1	-14.75	1.25	1.35
26	LA	2644	G	C6-N1	-14.74	1.29	1.39
2	SA	1507	A	N3-C4	-14.70	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	911	A	N9-C4	-14.70	1.29	1.37
26	LA	675	A	N9-C4	-14.68	1.29	1.37
26	LA	980	A	N7-C5	-14.64	1.30	1.39
2	SA	535	A	N7-C5	-14.62	1.30	1.39
2	SA	907	A	N7-C5	-14.52	1.30	1.39
2	SA	1021	A	N9-C4	14.49	1.46	1.37
26	LA	226	A	N7-C5	-14.46	1.30	1.39
26	LA	1839	G	N7-C5	-14.44	1.30	1.39
2	SA	1338	G	N7-C5	-14.41	1.30	1.39
2	SA	553	A	N9-C4	-14.40	1.29	1.37
2	SA	705	G	N9-C4	-14.38	1.26	1.38
2	SA	1220	G	N9-C8	-14.37	1.27	1.37
26	LA	2057	G	C5-C4	-14.37	1.28	1.38
2	SA	130	A	N9-C4	-14.37	1.29	1.37
2	SA	1299	A	N9-C4	14.35	1.46	1.37
26	LA	1256	G	N7-C5	-14.30	1.30	1.39
26	LA	2352	A	N7-C5	-14.27	1.30	1.39
2	SA	642	A	N9-C4	14.26	1.46	1.37
26	LA	1544	A	N7-C5	-14.24	1.30	1.39
2	SA	1020	G	N7-C5	14.24	1.47	1.39
26	LA	2057	G	N7-C5	-14.22	1.30	1.39
26	LA	2614	A	N9-C4	-14.21	1.29	1.37
26	LA	2799	A	N9-C4	-14.20	1.29	1.37
2	SA	447	G	N7-C5	14.18	1.47	1.39
26	LA	783	A	N9-C4	-14.17	1.29	1.37
26	LA	2532	G	N3-C4	-14.15	1.25	1.35
26	LA	1238	G	N9-C8	-14.14	1.27	1.37
26	LA	1103	A	N7-C5	-14.14	1.30	1.39
2	SA	353	A	C5-C4	-14.10	1.28	1.38
26	LA	1361	G	N9-C8	-14.08	1.27	1.37
2	SA	909	A	N9-C4	-14.06	1.29	1.37
26	LA	1324	G	N7-C5	-13.97	1.30	1.39
2	SA	1342	C	C2'-C1'	-13.96	1.38	1.53
26	LA	1125	G	N7-C5	-13.95	1.30	1.39
4	S2	4	G	N7-C5	13.91	1.47	1.39
26	LA	670	A	N7-C5	-13.86	1.30	1.39
26	LA	1449	G	N7-C5	13.86	1.47	1.39
26	LA	1888	G	N7-C5	-13.86	1.30	1.39
26	LA	1929	G	N3-C4	-13.86	1.25	1.35
2	SA	572	A	N9-C8	-13.83	1.26	1.37
26	LA	1977	A	N9-C4	-13.83	1.29	1.37
2	SA	799	G	C8-N7	-13.81	1.22	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	27	G	C8-N7	13.79	1.39	1.30
2	SA	700	G	N3-C4	-13.77	1.25	1.35
26	LA	2391	G	C2-N3	13.77	1.43	1.32
26	LA	310	A	N7-C5	-13.75	1.31	1.39
26	LA	1981	A	N9-C4	-13.75	1.29	1.37
2	SA	279	A	N7-C5	-13.74	1.31	1.39
26	LA	1288	G	N7-C5	-13.71	1.31	1.39
2	SA	859	G	C6-N1	-13.71	1.29	1.39
2	SA	538	G	N1-C2	-13.67	1.26	1.37
26	LA	2454	G	N9-C4	-13.66	1.27	1.38
26	LA	121	G	C5-C4	-13.66	1.28	1.38
26	LA	483	A	N7-C5	-13.64	1.31	1.39
2	SA	1390	U	C2-N3	-13.63	1.28	1.37
2	SA	794	A	N9-C4	-13.63	1.29	1.37
2	SA	483	C	P-O5'	-13.62	1.46	1.59
2	SA	544	G	N7-C5	-13.61	1.31	1.39
26	LA	2709	G	C2-N3	13.58	1.43	1.32
25	LB	102	G	N9-C8	-13.57	1.28	1.37
26	LA	568	U	C2-N3	-13.55	1.28	1.37
26	LA	2455	G	C6-N1	-13.54	1.30	1.39
26	LA	310	A	N9-C4	-13.53	1.29	1.37
2	SA	563	A	C6-N1	-13.52	1.26	1.35
2	SA	397	A	N9-C4	13.48	1.46	1.37
26	LA	1732	C	N1-C6	-13.45	1.29	1.37
26	LA	1456	G	N3-C4	-13.44	1.26	1.35
2	SA	1239	A	N9-C4	-13.43	1.29	1.37
26	LA	2013	A	N3-C4	-13.43	1.26	1.34
26	LA	2476	A	C5-C4	-13.43	1.29	1.38
26	LA	1710	G	N3-C4	-13.42	1.26	1.35
26	LA	2565	A	N7-C5	-13.41	1.31	1.39
2	SA	1079	G	N9-C8	-13.38	1.28	1.37
26	LA	218	A	N9-C4	-13.34	1.29	1.37
26	LA	1786	A	C2'-C1'	-13.34	1.38	1.53
26	LA	379	G	N9-C4	-13.30	1.27	1.38
26	LA	1839	G	N9-C4	-13.30	1.27	1.38
26	LA	376	G	N9-C4	-13.29	1.27	1.38
26	LA	1460	U	C2-N3	-13.29	1.28	1.37
26	LA	800	A	N9-C4	-13.28	1.29	1.37
26	LA	925	A	N7-C5	-13.27	1.31	1.39
2	SA	1304	G	N9-C4	13.22	1.48	1.38
26	LA	1969	A	P-O5'	-13.22	1.46	1.59
2	SA	1250	A	N3-C4	-13.19	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	644	A	N3-C4	-13.19	1.26	1.34
26	LA	1936	A	C5-C4	-13.17	1.29	1.38
2	SA	1077	G	N7-C5	-13.16	1.31	1.39
2	SA	410	G	C5-C4	-13.15	1.29	1.38
26	LA	1278	C	N1-C6	-13.14	1.29	1.37
26	LA	2511	U	C4-C5	-13.13	1.31	1.43
25	LB	96	G	C5'-C4'	13.12	1.67	1.51
26	LA	1645	G	N7-C5	-13.12	1.31	1.39
26	LA	2873	A	C6-N1	-13.11	1.26	1.35
26	LA	64	A	C6-N1	-13.09	1.26	1.35
26	LA	1580	A	N7-C5	-13.08	1.31	1.39
26	LA	2430	A	C6-N1	-13.08	1.26	1.35
2	SA	452	A	N3-C4	13.07	1.42	1.34
26	LA	1319	C	N1-C6	-13.07	1.29	1.37
26	LA	2322	A	N3-C4	13.07	1.42	1.34
26	LA	2821	A	N7-C5	-13.06	1.31	1.39
26	LA	2524	G	N3-C4	-13.05	1.26	1.35
26	LA	685	A	O3'-P	-13.04	1.45	1.61
26	LA	749	A	N9-C4	-13.04	1.30	1.37
26	LA	2379	G	C6-N1	13.04	1.48	1.39
2	SA	254	G	N9-C8	-13.04	1.28	1.37
2	SA	866	C	C2'-C1'	-13.03	1.39	1.53
26	LA	1983	G	N7-C5	-13.03	1.31	1.39
2	SA	885	G	C2-N2	-13.02	1.21	1.34
26	LA	2487	G	N9-C8	-13.02	1.28	1.37
25	LB	53	A	N9-C4	-12.99	1.30	1.37
26	LA	741	U	C2-N3	12.99	1.46	1.37
26	LA	1748	C	N1-C6	-12.98	1.29	1.37
26	LA	960	A	N3-C4	-12.95	1.27	1.34
26	LA	2125	G	C5'-C4'	12.95	1.66	1.51
26	LA	2391	G	C6-N1	-12.94	1.30	1.39
26	LA	941	A	N9-C4	-12.92	1.30	1.37
2	SA	851	G	N7-C5	12.92	1.47	1.39
2	SA	533	A	N7-C5	-12.91	1.31	1.39
26	LA	2044	C	N1-C6	-12.90	1.29	1.37
26	LA	1247	A	N7-C5	-12.89	1.31	1.39
26	LA	896	A	C2'-C1'	-12.89	1.39	1.53
26	LA	453	A	N3-C4	-12.88	1.27	1.34
2	SA	794	A	N7-C5	-12.87	1.31	1.39
2	SA	893	C	N3-C4	12.85	1.43	1.33
2	SA	794	A	C5-C4	-12.84	1.29	1.38
26	LA	2738	A	N9-C4	-12.82	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1828	G	N9-C8	-12.82	1.28	1.37
26	LA	2829	A	N7-C5	-12.81	1.31	1.39
2	SA	1187	G	N3-C4	-12.81	1.26	1.35
26	LA	1112	G	C2-N3	12.79	1.43	1.32
26	LA	749	A	C5-C4	-12.79	1.29	1.38
26	LA	863	A	N9-C4	-12.78	1.30	1.37
26	LA	2362	C	N1-C6	-12.78	1.29	1.37
26	LA	1981	A	N7-C5	-12.78	1.31	1.39
26	LA	2358	A	N9-C4	-12.77	1.30	1.37
2	SA	71	A	N7-C5	-12.77	1.31	1.39
26	LA	2716	C	N1-C6	-12.75	1.29	1.37
26	LA	2748	A	N9-C4	12.74	1.45	1.37
26	LA	1705	A	C6-N1	-12.73	1.26	1.35
26	LA	1642	G	C8-N7	12.72	1.38	1.30
26	LA	784	G	O4'-C1'	-12.72	1.25	1.41
26	LA	108	G	N7-C5	-12.71	1.31	1.39
26	LA	1369	G	N3-C4	-12.70	1.26	1.35
26	LA	1130	U	C2-N3	-12.69	1.28	1.37
2	SA	683	G	C6-N1	-12.69	1.30	1.39
26	LA	878	A	N3-C4	12.68	1.42	1.34
26	LA	2397	G	N3-C4	-12.67	1.26	1.35
26	LA	889	C	N1-C6	12.66	1.44	1.37
26	LA	2331	G	P-O5'	12.65	1.72	1.59
26	LA	2427	C	C2'-C1'	-12.65	1.39	1.53
26	LA	498	G	N9-C8	-12.64	1.28	1.37
26	LA	1901	A	N7-C5	-12.64	1.31	1.39
26	LA	379	G	N7-C5	-12.64	1.31	1.39
2	SA	1491	G	N7-C5	-12.64	1.31	1.39
2	SA	900	A	N9-C4	-12.63	1.30	1.37
26	LA	705	A	C5-C4	-12.63	1.29	1.38
26	LA	248	G	N7-C5	-12.61	1.31	1.39
26	LA	1269	A	N7-C5	-12.61	1.31	1.39
26	LA	2205	A	N7-C5	-12.61	1.31	1.39
2	SA	147	G	N7-C5	-12.60	1.31	1.39
26	LA	990	A	N7-C5	-12.60	1.31	1.39
26	LA	987	C	N1-C6	-12.59	1.29	1.37
26	LA	721	A	N9-C4	-12.58	1.30	1.37
26	LA	1634	A	N3-C4	-12.58	1.27	1.34
2	SA	702	A	N3-C4	-12.57	1.27	1.34
2	SA	1181	G	N9-C8	-12.57	1.29	1.37
26	LA	1146	C	N1-C6	12.57	1.44	1.37
2	SA	419	C	N1-C6	-12.56	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	261	G	C2-N3	12.55	1.42	1.32
4	S2	65	G	N9-C4	-12.54	1.27	1.38
2	SA	329	A	N9-C4	-12.53	1.30	1.37
26	LA	2543	G	N7-C5	-12.53	1.31	1.39
26	LA	2581	G	N9-C8	12.52	1.46	1.37
26	LA	2211	A	N9-C4	12.51	1.45	1.37
2	SA	663	A	C5-C4	-12.51	1.29	1.38
26	LA	669	G	N7-C5	-12.50	1.31	1.39
2	SA	298	A	C5-C4	12.50	1.47	1.38
26	LA	1280	G	N7-C5	12.50	1.46	1.39
26	LA	1960	A	N9-C4	-12.50	1.30	1.37
26	LA	1419	A	N9-C4	-12.49	1.30	1.37
26	LA	1612	C	N1-C6	-12.49	1.29	1.37
2	SA	553	A	N7-C5	-12.48	1.31	1.39
26	LA	1071	G	N3-C4	12.46	1.44	1.35
4	S2	22	A	N9-C4	-12.46	1.30	1.37
2	SA	772	U	C2-N3	-12.44	1.29	1.37
26	LA	2503	A	C8-N7	-12.43	1.22	1.31
26	LA	250	G	N3-C4	-12.42	1.26	1.35
26	LA	2058	A	C5-C4	-12.42	1.30	1.38
26	LA	1008	A	N7-C5	-12.41	1.31	1.39
2	SA	1340	A	N9-C4	-12.40	1.30	1.37
26	LA	240	C	N1-C6	-12.40	1.29	1.37
26	LA	1659	G	C6-N1	-12.40	1.30	1.39
26	LA	43	G	N3-C4	-12.40	1.26	1.35
2	SA	32	A	N3-C4	-12.39	1.27	1.34
3	S1	35	G	P-O5'	-12.39	1.47	1.59
2	SA	1392	G	N9-C8	-12.37	1.29	1.37
26	LA	2364	C	N1-C6	-12.37	1.29	1.37
26	LA	2383	G	N7-C5	-12.36	1.31	1.39
26	LA	2505	G	C2-N3	-12.36	1.22	1.32
2	SA	906	A	N9-C4	-12.36	1.30	1.37
2	SA	1367	C	N1-C6	-12.35	1.29	1.37
26	LA	1158	C	N1-C6	-12.32	1.29	1.37
26	LA	2446	G	N7-C5	-12.32	1.31	1.39
26	LA	1427	A	N9-C4	-12.31	1.30	1.37
26	LA	2005	A	N7-C5	-12.31	1.31	1.39
26	LA	2642	G	P-O5'	-12.31	1.47	1.59
26	LA	538	A	N7-C5	-12.30	1.31	1.39
2	SA	1067	A	N9-C4	-12.30	1.30	1.37
26	LA	191	A	N7-C5	-12.30	1.31	1.39
2	SA	608	A	O3'-P	-12.29	1.46	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1014	A	N3-C4	-12.28	1.27	1.34
26	LA	2500	U	O3'-P	-12.28	1.46	1.61
26	LA	1547	C	N1-C6	12.27	1.44	1.37
2	SA	878	A	N9-C4	-12.27	1.30	1.37
26	LA	1268	A	N3-C4	-12.27	1.27	1.34
26	LA	2134	A	C8-N7	-12.25	1.23	1.31
26	LA	1186	G	N7-C5	-12.25	1.31	1.39
26	LA	230	G	C6-N1	-12.25	1.30	1.39
26	LA	1823	G	N7-C5	-12.24	1.31	1.39
26	LA	1867	G	N3-C4	-12.24	1.26	1.35
26	LA	2729	G	N3-C4	-12.24	1.26	1.35
26	LA	2267	A	N9-C4	-12.23	1.30	1.37
26	LA	2387	U	P-O5'	-12.22	1.47	1.59
2	SA	267	C	N1-C6	-12.22	1.29	1.37
2	SA	743	A	N7-C5	-12.22	1.31	1.39
2	SA	569	C	N1-C6	-12.21	1.29	1.37
26	LA	1651	G	N9-C4	-12.21	1.28	1.38
26	LA	1475	G	N3-C4	12.19	1.44	1.35
26	LA	2472	G	N7-C5	-12.18	1.31	1.39
2	SA	665	A	N9-C4	-12.18	1.30	1.37
26	LA	1617	C	N1-C6	-12.18	1.29	1.37
2	SA	1151	A	N3-C4	-12.17	1.27	1.34
2	SA	439	U	C2-N3	-12.17	1.29	1.37
26	LA	2429	G	N9-C8	-12.16	1.29	1.37
26	LA	2071	A	N3-C4	-12.15	1.27	1.34
2	SA	530	G	C2-N3	12.13	1.42	1.32
26	LA	869	G	N9-C8	-12.12	1.29	1.37
26	LA	1381	G	C8-N7	-12.12	1.23	1.30
26	LA	1343	G	N3-C4	-12.11	1.26	1.35
2	SA	1468	A	C2'-C1'	-12.11	1.40	1.53
26	LA	1935	G	N3-C4	-12.11	1.26	1.35
26	LA	2017	U	N1-C6	-12.10	1.27	1.38
2	SA	892	A	N9-C4	-12.09	1.30	1.37
26	LA	2679	A	N9-C4	12.06	1.45	1.37
2	SA	454	G	N7-C5	-12.06	1.32	1.39
26	LA	12	U	N1-C6	12.06	1.48	1.38
26	LA	617	G	C6-N1	-12.06	1.31	1.39
4	S2	7	G	N3-C4	-12.03	1.27	1.35
2	SA	1442	G	N3-C4	-12.03	1.27	1.35
26	LA	2592	G	N9-C4	-12.03	1.28	1.38
26	LA	2614	A	N7-C5	-12.02	1.32	1.39
26	LA	377	G	N3-C4	-12.01	1.27	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	816	A	C2'-C1'	-12.00	1.40	1.53
2	SA	174	A	N7-C5	-12.00	1.32	1.39
26	LA	2837	A	N9-C4	-12.00	1.30	1.37
25	LB	39	A	N7-C5	-11.99	1.32	1.39
26	LA	1932	A	N7-C5	-11.99	1.32	1.39
26	LA	549	G	N3-C4	-11.98	1.27	1.35
26	LA	467	G	N9-C4	-11.97	1.28	1.38
26	LA	2655	G	C8-N7	11.97	1.38	1.30
2	SA	364	A	C5'-C4'	11.96	1.65	1.51
26	LA	1129	A	P-O5'	-11.96	1.47	1.59
26	LA	1564	C	N1-C6	-11.96	1.29	1.37
2	SA	111	G	N7-C5	-11.95	1.32	1.39
2	SA	1338	G	C8-N7	-11.95	1.23	1.30
26	LA	1323	C	P-O5'	-11.95	1.47	1.59
26	LA	579	G	N1-C2	-11.95	1.28	1.37
26	LA	1492	G	N9-C4	-11.93	1.28	1.38
26	LA	2370	G	C6-N1	-11.93	1.31	1.39
26	LA	2856	A	N7-C5	11.92	1.46	1.39
26	LA	2700	A	N3-C4	-11.92	1.27	1.34
26	LA	1821	A	N3-C4	-11.91	1.27	1.34
26	LA	271	G	C6-N1	-11.89	1.31	1.39
26	LA	1477	A	N3-C4	-11.88	1.27	1.34
26	LA	475	C	N1-C6	11.87	1.44	1.37
26	LA	2625	G	N7-C5	-11.85	1.32	1.39
4	S2	39	A	N3-C4	-11.85	1.27	1.34
25	LB	66	A	N7-C5	-11.85	1.32	1.39
26	LA	1649	G	C6-N1	-11.85	1.31	1.39
26	LA	1808	A	C5-C4	11.85	1.47	1.38
2	SA	411	A	P-O5'	-11.84	1.48	1.59
25	LB	108	A	C6-N1	11.84	1.43	1.35
2	SA	1207	G	C6-N1	-11.83	1.31	1.39
26	LA	179	C	C2-N3	11.82	1.45	1.35
26	LA	393	C	C4'-C3'	11.82	1.66	1.53
26	LA	1902	C	N1-C6	-11.82	1.30	1.37
26	LA	2048	G	C2-N2	-11.81	1.22	1.34
3	S1	41	A	C6-N6	11.81	1.43	1.33
26	LA	2333	A	C2'-C1'	-11.80	1.40	1.53
26	LA	1308	A	N7-C5	-11.80	1.32	1.39
26	LA	443	A	N7-C5	-11.79	1.32	1.39
2	SA	137	U	N1-C2	-11.79	1.27	1.38
26	LA	1783	A	N9-C4	-11.79	1.30	1.37
2	SA	1473	G	C2-N2	-11.78	1.22	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	19	A	N7-C5	-11.77	1.32	1.39
25	LB	53	A	C5'-C4'	11.76	1.65	1.51
26	LA	821	A	N3-C4	-11.76	1.27	1.34
26	LA	586	A	C6-N1	-11.76	1.27	1.35
26	LA	1004	U	P-O5'	-11.75	1.48	1.59
2	SA	378	G	N7-C5	-11.74	1.32	1.39
26	LA	1950	G	C8-N7	-11.73	1.24	1.30
26	LA	2841	C	P-O5'	-11.73	1.48	1.59
26	LA	1218	G	N3-C4	-11.72	1.27	1.35
26	LA	2053	G	N7-C5	-11.72	1.32	1.39
2	SA	566	G	N7-C5	-11.72	1.32	1.39
26	LA	2722	G	N3-C4	-11.72	1.27	1.35
2	SA	838	G	C6-N1	-11.71	1.31	1.39
26	LA	142	A	C2'-C1'	-11.71	1.40	1.53
26	LA	2027	G	C6-N1	-11.71	1.31	1.39
26	LA	251	A	N9-C4	-11.70	1.30	1.37
26	LA	1684	G	N7-C5	11.70	1.46	1.39
26	LA	2112	G	C5'-C4'	11.70	1.65	1.51
26	LA	54	G	C6-N1	-11.69	1.31	1.39
26	LA	2871	U	C5'-C4'	11.69	1.65	1.51
26	LA	2820	A	N9-C4	-11.69	1.30	1.37
26	LA	2890	G	N7-C5	-11.69	1.32	1.39
26	LA	710	U	C2-N3	11.69	1.46	1.37
26	LA	2624	G	N7-C5	-11.69	1.32	1.39
26	LA	1945	G	C5-C4	-11.68	1.30	1.38
26	LA	2427	C	N1-C6	-11.68	1.30	1.37
26	LA	1757	A	C8-N7	-11.68	1.23	1.31
26	LA	1001	A	C5-C4	-11.68	1.30	1.38
26	LA	287	G	C2-N3	11.67	1.42	1.32
2	SA	188	C	C4-C5	-11.67	1.33	1.43
26	LA	1227	G	N7-C5	-11.67	1.32	1.39
2	SA	1167	A	N9-C4	-11.67	1.30	1.37
26	LA	491	G	N9-C4	-11.66	1.28	1.38
26	LA	2204	G	O3'-P	-11.66	1.47	1.61
2	SA	255	G	C6-N1	-11.65	1.31	1.39
26	LA	751	A	N9-C4	-11.64	1.30	1.37
26	LA	192	C	C5'-C4'	11.64	1.65	1.51
26	LA	2520	C	P-O5'	-11.64	1.48	1.59
2	SA	1416	G	N9-C4	-11.64	1.28	1.38
26	LA	1972	G	N3-C4	-11.63	1.27	1.35
2	SA	1167	A	N7-C5	-11.63	1.32	1.39
26	LA	126	A	C5'-C4'	11.63	1.65	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	568	G	N7-C5	-11.62	1.32	1.39
2	SA	75	G	N7-C5	11.62	1.46	1.39
2	SA	477	C	P-O5'	-11.60	1.48	1.59
26	LA	1076	C	C2-N3	-11.60	1.26	1.35
2	SA	577	G	N7-C5	-11.60	1.32	1.39
2	SA	1131	G	N3-C4	-11.59	1.27	1.35
26	LA	606	U	C2-N3	-11.59	1.29	1.37
26	LA	1006	C	N1-C6	-11.59	1.30	1.37
26	LA	2020	A	C5-C4	-11.59	1.30	1.38
26	LA	2661	G	N7-C5	-11.58	1.32	1.39
26	LA	2163	A	N3-C4	11.57	1.41	1.34
26	LA	2589	A	N9-C4	-11.55	1.30	1.37
2	SA	1102	A	C6-N1	-11.55	1.27	1.35
26	LA	905	A	N7-C5	-11.55	1.32	1.39
26	LA	312	G	N3-C4	-11.54	1.27	1.35
2	SA	431	A	N7-C5	11.52	1.46	1.39
26	LA	794	A	N9-C8	-11.52	1.28	1.37
26	LA	980	A	N3-C4	-11.52	1.27	1.34
26	LA	2644	G	C4'-C3'	-11.52	1.40	1.53
2	SA	1251	A	O3'-P	-11.51	1.47	1.61
26	LA	2454	G	N7-C5	-11.51	1.32	1.39
2	SA	898	G	N9-C8	-11.50	1.29	1.37
26	LA	413	C	N1-C6	11.50	1.44	1.37
26	LA	186	G	C2-N2	-11.50	1.23	1.34
26	LA	36	G	N7-C5	-11.49	1.32	1.39
26	LA	1294	U	N1-C2	-11.49	1.28	1.38
26	LA	979	A	N7-C5	-11.49	1.32	1.39
26	LA	1634	A	C2'-C1'	-11.49	1.40	1.53
2	SA	765	G	N9-C4	-11.48	1.28	1.38
26	LA	1354	A	O3'-P	-11.48	1.47	1.61
26	LA	1887	C	P-O5'	-11.47	1.48	1.59
26	LA	1084	A	N7-C5	-11.46	1.32	1.39
26	LA	1132	U	C2-N3	-11.46	1.29	1.37
26	LA	68	G	N9-C8	11.46	1.45	1.37
2	SA	1207	G	N9-C8	-11.45	1.29	1.37
26	LA	1979	U	C2-N3	-11.45	1.29	1.37
2	SA	1048	G	C3'-C2'	-11.45	1.40	1.52
2	SA	304	U	N1-C6	-11.44	1.27	1.38
26	LA	928	A	C5'-C4'	11.44	1.65	1.51
2	SA	1084	G	C2-N2	-11.44	1.23	1.34
26	LA	428	A	N9-C4	-11.43	1.30	1.37
26	LA	2391	G	N7-C5	-11.43	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2544	G	P-O5'	-11.43	1.48	1.59
26	LA	2499	C	N1-C6	11.43	1.44	1.37
26	LA	2651	C	N1-C6	11.43	1.44	1.37
26	LA	2027	G	N7-C5	-11.42	1.32	1.39
26	LA	502	A	C5-C6	-11.41	1.30	1.41
26	LA	1830	C	N1-C6	-11.41	1.30	1.37
2	SA	243	A	N9-C8	-11.41	1.28	1.37
26	LA	2781	A	N7-C5	-11.41	1.32	1.39
26	LA	2009	A	O3'-P	-11.40	1.47	1.61
2	SA	1102	A	N9-C4	-11.38	1.31	1.37
26	LA	445	C	C4-C5	-11.38	1.33	1.43
26	LA	1628	G	N3-C4	-11.38	1.27	1.35
2	SA	401	C	C2'-C1'	-11.38	1.40	1.53
3	S1	16	A	N9-C4	11.38	1.44	1.37
26	LA	424	G	N7-C5	11.38	1.46	1.39
26	LA	2709	G	N7-C5	-11.37	1.32	1.39
26	LA	2120	G	N9-C4	-11.37	1.28	1.38
26	LA	299	A	N9-C4	-11.37	1.31	1.37
26	LA	1638	C	C4-C5	-11.36	1.33	1.43
26	LA	2037	A	N3-C4	-11.36	1.28	1.34
26	LA	973	A	C2'-C1'	-11.36	1.40	1.53
2	SA	1423	G	N7-C5	-11.35	1.32	1.39
26	LA	88	G	C2'-C1'	-11.35	1.40	1.53
26	LA	573	U	C3'-C2'	11.35	1.65	1.52
2	SA	1399	C	N1-C6	-11.33	1.30	1.37
26	LA	2131	U	N1-C6	-11.33	1.27	1.38
26	LA	2051	A	N7-C5	-11.31	1.32	1.39
2	SA	318	G	N7-C5	11.30	1.46	1.39
2	SA	145	G	C8-N7	11.30	1.37	1.30
2	SA	420	U	C2-N3	-11.30	1.29	1.37
26	LA	768	G	N9-C8	-11.30	1.29	1.37
2	SA	901	A	N9-C4	11.28	1.44	1.37
26	LA	2400	G	N7-C5	-11.28	1.32	1.39
2	SA	1081	A	N9-C4	11.27	1.44	1.37
2	SA	456	A	N3-C4	11.27	1.41	1.34
26	LA	608	A	N3-C4	-11.27	1.28	1.34
26	LA	1200	C	C4'-O4'	-11.26	1.30	1.45
26	LA	2385	C	C2'-C1'	-11.26	1.41	1.53
26	LA	95	A	N9-C4	-11.26	1.31	1.37
2	SA	1037	C	N3-C4	11.26	1.41	1.33
2	SA	845	A	C6-N1	11.24	1.43	1.35
2	SA	881	G	C8-N7	-11.24	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1825	U	N1-C2	-11.24	1.28	1.38
26	LA	1839	G	N3-C4	-11.24	1.27	1.35
26	LA	578	G	N7-C5	-11.23	1.32	1.39
26	LA	802	A	N9-C8	-11.23	1.28	1.37
2	SA	410	G	N7-C5	-11.22	1.32	1.39
4	S2	35	C	O3'-P	-11.22	1.47	1.61
2	SA	523	A	N7-C5	-11.22	1.32	1.39
26	LA	2666	C	N1-C6	11.21	1.43	1.37
26	LA	1864	U	P-O5'	-11.21	1.48	1.59
2	SA	1110	A	N9-C4	-11.21	1.31	1.37
4	S2	20	G	C6-N1	-11.21	1.31	1.39
2	SA	1026	G	N7-C5	11.21	1.46	1.39
26	LA	1254	A	N9-C4	-11.21	1.31	1.37
26	LA	2719	G	N9-C4	-11.21	1.28	1.38
2	SA	46	G	C2-N2	-11.20	1.23	1.34
26	LA	313	G	C2-N3	11.21	1.41	1.32
26	LA	2504	U	C3'-C2'	11.21	1.65	1.52
26	LA	662	G	C6-N1	-11.20	1.31	1.39
26	LA	1194	A	C6-N6	11.20	1.43	1.33
26	LA	1283	G	N9-C4	-11.20	1.28	1.38
26	LA	1160	G	N9-C8	-11.20	1.30	1.37
26	LA	1862	G	N1-C2	-11.19	1.28	1.37
26	LA	140	C	C5'-C4'	11.19	1.64	1.51
26	LA	1999	C	C2'-C1'	-11.19	1.41	1.53
26	LA	172	A	P-O5'	-11.18	1.48	1.59
26	LA	2750	A	N9-C4	-11.18	1.31	1.37
26	LA	2715	C	C4-C5	-11.17	1.34	1.43
2	SA	45	G	N7-C5	-11.17	1.32	1.39
2	SA	539	A	N7-C5	-11.17	1.32	1.39
2	SA	1465	A	C2'-C1'	-11.16	1.41	1.53
26	LA	2158	A	C5'-C4'	11.16	1.64	1.51
2	SA	844	G	C6-N1	11.16	1.47	1.39
26	LA	1679	A	N7-C5	-11.16	1.32	1.39
26	LA	670	A	N9-C4	-11.16	1.31	1.37
26	LA	2064	C	C3'-C2'	-11.16	1.40	1.52
25	LB	49	C	P-O5'	-11.16	1.48	1.59
2	SA	71	A	N3-C4	-11.15	1.28	1.34
2	SA	181	A	C8-N7	-11.15	1.23	1.31
2	SA	669	G	C6-N1	-11.14	1.31	1.39
26	LA	167	A	C2'-C1'	-11.14	1.41	1.53
26	LA	699	A	N9-C4	-11.14	1.31	1.37
2	SA	473	U	N1-C2	11.14	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	668	A	N3-C4	-11.14	1.28	1.34
2	SA	1253	G	O3'-P	-11.14	1.47	1.61
26	LA	185	G	C6-N1	-11.14	1.31	1.39
26	LA	1296	G	N7-C5	-11.14	1.32	1.39
2	SA	163	C	N1-C6	11.13	1.43	1.37
2	SA	837	U	N1-C2	-11.13	1.28	1.38
26	LA	195	A	N7-C5	-11.13	1.32	1.39
26	LA	538	A	C5-C4	-11.12	1.30	1.38
26	LA	1179	G	N9-C4	11.11	1.46	1.38
26	LA	792	A	N7-C5	-11.11	1.32	1.39
26	LA	773	U	N1-C2	-11.11	1.28	1.38
26	LA	818	G	N1-C2	-11.11	1.28	1.37
26	LA	1296	G	N3-C4	-11.10	1.27	1.35
26	LA	1041	G	C8-N7	11.09	1.37	1.30
2	SA	839	C	N1-C6	11.09	1.43	1.37
26	LA	495	G	C2'-C1'	-11.09	1.41	1.53
26	LA	2392	A	N7-C5	-11.09	1.32	1.39
26	LA	5	A	N9-C4	-11.09	1.31	1.37
2	SA	173	U	O3'-P	-11.08	1.47	1.61
26	LA	779	U	P-O5'	-11.07	1.48	1.59
2	SA	903	G	N7-C5	-11.07	1.32	1.39
2	SA	1012	A	N9-C4	-11.07	1.31	1.37
2	SA	1067	A	N7-C5	-11.06	1.32	1.39
26	LA	2322	A	N7-C5	-11.06	1.32	1.39
2	SA	671	G	N3-C4	-11.05	1.27	1.35
2	SA	533	A	C2'-C1'	-11.05	1.41	1.53
26	LA	1309	G	C8-N7	-11.05	1.24	1.30
26	LA	1322	A	O3'-P	-11.05	1.47	1.61
26	LA	2541	A	N9-C4	-11.05	1.31	1.37
26	LA	1422	G	N7-C5	-11.05	1.32	1.39
26	LA	493	G	C5-C4	-11.04	1.30	1.38
2	SA	1376	U	C2-N3	-11.04	1.30	1.37
26	LA	338	G	N3-C4	-11.03	1.27	1.35
2	SA	991	U	C2-N3	-11.03	1.30	1.37
26	LA	1619	G	N7-C5	-11.02	1.32	1.39
26	LA	1679	A	C5-C4	-11.02	1.31	1.38
26	LA	2252	G	C5-C4	-11.02	1.30	1.38
26	LA	962	G	N9-C4	-11.01	1.29	1.38
2	SA	655	A	N3-C4	-11.01	1.28	1.34
26	LA	830	G	N9-C8	-11.01	1.30	1.37
26	LA	1891	G	N7-C5	-11.01	1.32	1.39
26	LA	1876	A	N3-C4	-11.00	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	56	U	C2'-C1'	10.99	1.65	1.53
26	LA	1784	A	N9-C4	-10.99	1.31	1.37
26	LA	2410	G	N3-C4	-10.99	1.27	1.35
26	LA	2781	A	C2'-C1'	10.99	1.65	1.53
26	LA	1797	G	N3-C4	-10.98	1.27	1.35
26	LA	2282	G	N7-C5	10.98	1.45	1.39
26	LA	2810	A	N7-C5	-10.98	1.32	1.39
26	LA	376	G	N7-C5	-10.97	1.32	1.39
26	LA	777	G	C2'-C1'	-10.97	1.41	1.53
26	LA	2631	G	C5-C4	10.97	1.46	1.38
26	LA	2769	U	P-O5'	-10.97	1.48	1.59
26	LA	1987	A	N3-C4	10.97	1.41	1.34
26	LA	1182	G	N7-C5	10.96	1.45	1.39
2	SA	928	G	C5-C4	-10.96	1.30	1.38
26	LA	2017	U	C2-N3	-10.96	1.30	1.37
2	SA	690	G	C6-N1	-10.96	1.31	1.39
25	LB	15	A	C4'-C3'	10.95	1.65	1.53
26	LA	450	G	N9-C8	-10.94	1.30	1.37
26	LA	165	A	N3-C4	10.94	1.41	1.34
26	LA	668	A	N7-C5	-10.94	1.32	1.39
26	LA	878	A	N7-C5	-10.94	1.32	1.39
2	SA	1043	G	N9-C4	-10.94	1.29	1.38
26	LA	322	A	O3'-P	-10.93	1.48	1.61
26	LA	1077	A	C6-N1	-10.93	1.27	1.35
26	LA	2796	U	P-O5'	-10.93	1.48	1.59
26	LA	1318	U	C2-N3	-10.93	1.30	1.37
26	LA	2407	A	N3-C4	-10.93	1.28	1.34
26	LA	892	A	C5-C4	-10.92	1.31	1.38
26	LA	2345	G	C8-N7	-10.92	1.24	1.30
2	SA	814	A	N3-C4	-10.92	1.28	1.34
2	SA	1191	A	N9-C4	-10.92	1.31	1.37
26	LA	2436	G	N7-C5	-10.92	1.32	1.39
26	LA	506	G	O3'-P	-10.91	1.48	1.61
26	LA	234	U	N3-C4	-10.91	1.28	1.38
26	LA	2027	G	N9-C8	-10.91	1.30	1.37
26	LA	2312	U	N1-C6	-10.91	1.28	1.38
2	SA	842	U	P-O5'	-10.91	1.48	1.59
2	SA	524	G	O3'-P	-10.90	1.48	1.61
2	SA	752	G	N3-C4	-10.90	1.27	1.35
26	LA	555	G	P-O5'	-10.89	1.48	1.59
26	LA	1000	A	O3'-P	-10.89	1.48	1.61
26	LA	207	A	N7-C5	-10.89	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	920	U	O3'-P	-10.88	1.48	1.61
26	LA	1810	A	N3-C4	10.88	1.41	1.34
26	LA	2663	G	C8-N7	10.88	1.37	1.30
26	LA	1393	A	P-O5'	-10.87	1.48	1.59
26	LA	522	A	N7-C5	-10.87	1.32	1.39
26	LA	752	A	C6-N6	10.87	1.42	1.33
26	LA	1582	C	N1-C6	10.87	1.43	1.37
26	LA	488	G	N3-C4	-10.86	1.27	1.35
26	LA	2406	A	N7-C5	10.86	1.45	1.39
2	SA	553	A	C2'-C1'	-10.85	1.41	1.53
26	LA	1444	G	C2-N2	-10.85	1.23	1.34
25	LB	108	A	N3-C4	-10.85	1.28	1.34
2	SA	1219	A	N3-C4	-10.84	1.28	1.34
2	SA	1410	A	N9-C4	10.84	1.44	1.37
26	LA	1260	A	C2'-C1'	-10.84	1.41	1.53
26	LA	975	A	N9-C4	-10.84	1.31	1.37
26	LA	2074	U	C4'-O4'	-10.84	1.31	1.45
26	LA	1789	A	N9-C4	-10.84	1.31	1.37
26	LA	2242	G	N9-C8	-10.84	1.30	1.37
2	SA	456	A	C5-C4	-10.83	1.31	1.38
2	SA	895	G	N7-C5	-10.83	1.32	1.39
26	LA	1266	G	P-O5'	10.83	1.70	1.59
26	LA	1707	G	N9-C4	-10.83	1.29	1.38
4	S2	73	A	N7-C5	-10.83	1.32	1.39
26	LA	936	A	N3-C4	-10.82	1.28	1.34
26	LA	1430	G	N3-C4	-10.82	1.27	1.35
26	LA	1283	G	C5-C4	10.82	1.46	1.38
26	LA	2057	G	N9-C8	-10.82	1.30	1.37
2	SA	1125	U	O3'-P	-10.82	1.48	1.61
26	LA	491	G	N7-C5	-10.82	1.32	1.39
2	SA	515	G	C8-N7	-10.82	1.24	1.30
2	SA	1442	G	N9-C4	-10.82	1.29	1.38
26	LA	303	G	N7-C5	-10.81	1.32	1.39
26	LA	601	C	N1-C6	10.81	1.43	1.37
26	LA	53	A	N9-C4	-10.80	1.31	1.37
26	LA	2084	C	N3-C4	10.80	1.41	1.33
26	LA	409	G	N7-C5	-10.80	1.32	1.39
26	LA	1286	A	C6-N6	-10.80	1.25	1.33
26	LA	1607	C	N1-C6	10.79	1.43	1.37
26	LA	1948	G	C5-C4	-10.79	1.30	1.38
2	SA	64	G	N7-C5	-10.79	1.32	1.39
2	SA	857	C	P-O5'	10.79	1.70	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1103	C	N1-C6	-10.79	1.30	1.37
4	S2	77	A	N9-C4	-10.79	1.31	1.37
26	LA	443	A	C6-N6	10.78	1.42	1.33
26	LA	887	U	C5'-C4'	10.78	1.64	1.51
2	SA	184	G	C8-N7	10.77	1.37	1.30
26	LA	1361	G	N7-C5	-10.77	1.32	1.39
26	LA	350	G	C2-N3	10.77	1.41	1.32
2	SA	927	G	N3-C4	-10.76	1.27	1.35
26	LA	1607	C	C2'-C1'	-10.76	1.41	1.53
2	SA	7	A	N7-C5	10.76	1.45	1.39
26	LA	1828	G	N7-C5	-10.76	1.32	1.39
26	LA	466	A	N1-C2	-10.75	1.24	1.34
26	LA	410	G	C2'-C1'	-10.75	1.41	1.53
26	LA	705	A	N9-C8	-10.75	1.29	1.37
26	LA	1151	A	N3-C4	-10.74	1.28	1.34
2	SA	1256	A	C5-C6	-10.74	1.31	1.41
26	LA	1367	A	P-O5'	-10.74	1.49	1.59
26	LA	1511	G	C2-N3	-10.74	1.24	1.32
26	LA	2848	G	O3'-P	-10.74	1.48	1.61
26	LA	2176	A	C3'-C2'	10.73	1.64	1.52
2	SA	595	A	N9-C4	-10.73	1.31	1.37
26	LA	2297	A	N7-C5	-10.73	1.32	1.39
2	SA	536	C	C2-N3	-10.73	1.27	1.35
2	SA	405	U	N3-C4	-10.72	1.28	1.38
2	SA	999	C	C4'-C3'	10.72	1.65	1.53
26	LA	183	C	N1-C6	10.72	1.43	1.37
26	LA	2808	G	N7-C5	10.72	1.45	1.39
2	SA	475	C	C4-N4	-10.71	1.24	1.33
26	LA	362	A	N3-C4	10.71	1.41	1.34
26	LA	530	G	C6-N1	10.71	1.47	1.39
26	LA	2330	G	C5-C4	-10.71	1.30	1.38
26	LA	2225	A	N3-C4	-10.71	1.28	1.34
2	SA	977	A	N3-C4	-10.71	1.28	1.34
26	LA	1989	G	O3'-P	-10.71	1.48	1.61
26	LA	1848	A	N9-C4	-10.70	1.31	1.37
25	LB	7	G	N3-C4	-10.70	1.27	1.35
26	LA	2801	G	N9-C8	-10.70	1.30	1.37
2	SA	844	G	C8-N7	10.69	1.37	1.30
26	LA	1635	A	N7-C5	-10.69	1.32	1.39
26	LA	1471	G	C6-N1	-10.69	1.32	1.39
26	LA	1622	G	N3-C4	-10.69	1.27	1.35
2	SA	749	A	N9-C4	-10.68	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	308	G	C6-N1	-10.68	1.32	1.39
26	LA	907	G	C6-N1	-10.68	1.32	1.39
26	LA	2495	G	N7-C5	-10.68	1.32	1.39
26	LA	2624	G	C8-N7	-10.68	1.24	1.30
2	SA	160	A	N7-C5	-10.67	1.32	1.39
2	SA	891	U	C2-N3	-10.67	1.30	1.37
26	LA	536	G	N3-C4	-10.66	1.27	1.35
2	SA	373	A	C8-N7	-10.66	1.24	1.31
26	LA	2867	G	N9-C4	10.66	1.46	1.38
26	LA	1810	A	C2'-C1'	-10.66	1.41	1.53
2	SA	46	G	C6-N1	-10.65	1.32	1.39
2	SA	10	A	C2'-C1'	-10.65	1.41	1.53
2	SA	919	A	C6-N1	-10.65	1.28	1.35
26	LA	2861	U	C2-N3	10.65	1.45	1.37
2	SA	1032	G	N9-C4	10.65	1.46	1.38
26	LA	44	A	N9-C4	10.65	1.44	1.37
2	SA	1157	A	C6-N6	10.65	1.42	1.33
26	LA	2589	A	N7-C5	-10.65	1.32	1.39
26	LA	630	G	N7-C5	-10.64	1.32	1.39
26	LA	734	A	N3-C4	10.64	1.41	1.34
26	LA	760	G	C5-C4	-10.64	1.30	1.38
26	LA	2383	G	N3-C4	-10.64	1.28	1.35
26	LA	2557	G	N3-C4	-10.64	1.28	1.35
2	SA	1099	G	C8-N7	10.64	1.37	1.30
26	LA	2848	G	P-O5'	-10.64	1.49	1.59
26	LA	2009	A	C3'-C2'	-10.63	1.41	1.52
3	S1	24	A	N7-C5	10.63	1.45	1.39
26	LA	1377	G	C8-N7	10.63	1.37	1.30
26	LA	2844	G	N9-C8	-10.63	1.30	1.37
2	SA	517	G	C6-N1	-10.62	1.32	1.39
3	S1	52	U	C4'-C3'	10.62	1.64	1.53
26	LA	1266	G	C5-C4	-10.62	1.30	1.38
26	LA	505	A	N9-C8	-10.62	1.29	1.37
3	S1	30	U	C2'-C1'	-10.62	1.41	1.53
2	SA	895	G	C6-N1	-10.61	1.32	1.39
3	S1	13	A	N3-C4	10.61	1.41	1.34
3	S1	47	C	N1-C6	10.61	1.43	1.37
26	LA	1659	G	N3-C4	-10.60	1.28	1.35
26	LA	124	G	N3-C4	-10.60	1.28	1.35
26	LA	2238	G	N3-C4	-10.60	1.28	1.35
26	LA	1805	A	N7-C5	-10.59	1.32	1.39
26	LA	2198	A	N9-C4	10.59	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1182	G	C4'-C3'	10.59	1.64	1.53
2	SA	127	G	C2-N3	10.58	1.41	1.32
2	SA	420	U	N3-C4	10.58	1.48	1.38
25	LB	78	A	N7-C5	-10.58	1.32	1.39
26	LA	252	G	N9-C8	-10.58	1.30	1.37
26	LA	677	A	N3-C4	10.58	1.41	1.34
2	SA	1094	G	C6-N1	-10.57	1.32	1.39
26	LA	251	A	P-O5'	-10.57	1.49	1.59
26	LA	429	A	N9-C4	-10.57	1.31	1.37
26	LA	2020	A	N9-C4	-10.56	1.31	1.37
2	SA	364	A	N9-C4	-10.56	1.31	1.37
26	LA	1638	C	N1-C6	-10.56	1.30	1.37
26	LA	1985	C	N1-C6	10.55	1.43	1.37
26	LA	461	C	C4-C5	-10.55	1.34	1.43
26	LA	745	G	C2'-C1'	-10.55	1.41	1.53
26	LA	770	G	N7-C5	-10.55	1.32	1.39
2	SA	1091	U	P-O5'	-10.54	1.49	1.59
2	SA	66	A	N7-C5	10.54	1.45	1.39
26	LA	1862	G	N9-C8	-10.54	1.30	1.37
26	LA	1954	G	C5-C4	-10.54	1.30	1.38
26	LA	729	G	C6-N1	-10.54	1.32	1.39
26	LA	1029	A	C5-C6	-10.54	1.31	1.41
26	LA	674	G	C6-N1	-10.53	1.32	1.39
2	SA	1158	C	C4'-C3'	10.52	1.64	1.53
2	SA	1312	G	C2-N2	-10.52	1.24	1.34
26	LA	1385	A	N9-C4	10.52	1.44	1.37
26	LA	252	G	N7-C5	-10.52	1.32	1.39
26	LA	1310	G	C8-N7	10.52	1.37	1.30
26	LA	1286	A	N9-C4	-10.51	1.31	1.37
2	SA	74	A	N7-C5	-10.51	1.32	1.39
26	LA	2303	G	C6-N1	-10.50	1.32	1.39
26	LA	2496	C	N1-C6	-10.50	1.30	1.37
2	SA	1290	G	C8-N7	10.50	1.37	1.30
26	LA	2887	A	C5'-C4'	10.49	1.64	1.51
2	SA	86	G	C5-C4	10.49	1.45	1.38
2	SA	803	G	N9-C8	-10.49	1.30	1.37
26	LA	28	A	N7-C5	-10.49	1.32	1.39
2	SA	567	G	C5-C4	-10.49	1.31	1.38
26	LA	857	G	N7-C5	-10.49	1.32	1.39
26	LA	1017	G	N7-C5	-10.48	1.32	1.39
2	SA	771	G	C6-N1	-10.48	1.32	1.39
2	SA	957	U	O3'-P	-10.48	1.48	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2489	U	C2'-C1'	-10.48	1.41	1.53
2	SA	1403	C	C5-C6	-10.47	1.25	1.34
25	LB	52	A	C2'-C1'	-10.47	1.41	1.53
26	LA	1279	G	N7-C5	-10.47	1.32	1.39
26	LA	915	C	N1-C6	10.47	1.43	1.37
26	LA	1708	C	N1-C6	10.47	1.43	1.37
26	LA	2765	A	C6-N1	10.47	1.42	1.35
2	SA	246	A	N7-C5	-10.46	1.32	1.39
2	SA	703	G	N7-C5	-10.46	1.32	1.39
2	SA	941	G	N3-C4	-10.46	1.28	1.35
26	LA	2346	A	N3-C4	-10.46	1.28	1.34
2	SA	289	G	N1-C2	-10.46	1.29	1.37
2	SA	1351	U	C2'-C1'	-10.46	1.41	1.53
2	SA	1427	C	C2-N3	-10.45	1.27	1.35
2	SA	769	G	N3-C4	-10.45	1.28	1.35
4	S2	74	A	N9-C4	10.45	1.44	1.37
26	LA	1571	A	O3'-P	-10.45	1.48	1.61
26	LA	1722	A	N7-C5	-10.45	1.32	1.39
25	LB	74	U	N1-C2	-10.44	1.29	1.38
26	LA	694	U	P-O5'	-10.44	1.49	1.59
26	LA	1036	G	C6-N1	-10.43	1.32	1.39
26	LA	2243	U	N1-C2	-10.43	1.29	1.38
26	LA	54	G	C2'-C1'	-10.43	1.41	1.53
26	LA	1674	G	N3-C4	-10.43	1.28	1.35
26	LA	1376	C	N1-C6	-10.43	1.30	1.37
26	LA	2019	A	P-O5'	-10.43	1.49	1.59
26	LA	125	A	C4'-C3'	10.42	1.64	1.53
26	LA	2595	G	N3-C4	-10.42	1.28	1.35
26	LA	188	G	C5-C4	-10.41	1.31	1.38
26	LA	1834	U	N1-C2	-10.41	1.29	1.38
26	LA	350	G	C6-N1	-10.41	1.32	1.39
26	LA	1934	C	N3-C4	-10.41	1.26	1.33
26	LA	2519	U	P-O5'	-10.41	1.49	1.59
2	SA	1260	G	C2-N3	10.40	1.41	1.32
26	LA	2687	U	C2-N3	-10.40	1.30	1.37
2	SA	460	A	N3-C4	-10.40	1.28	1.34
26	LA	1705	A	N3-C4	-10.40	1.28	1.34
2	SA	711	G	C5-C4	-10.40	1.31	1.38
26	LA	971	G	C8-N7	10.40	1.37	1.30
2	SA	9	G	N9-C8	10.40	1.45	1.37
26	LA	356	G	N1-C2	-10.40	1.29	1.37
26	LA	2319	G	C6-N1	-10.40	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	978	A	C6-N1	-10.39	1.28	1.35
26	LA	2501	C	O3'-P	-10.39	1.48	1.61
2	SA	629	A	N7-C5	-10.38	1.33	1.39
26	LA	2570	G	N3-C4	-10.38	1.28	1.35
26	LA	1366	A	N7-C5	-10.38	1.33	1.39
2	SA	1222	G	N7-C5	-10.38	1.33	1.39
26	LA	611	C	C2-N3	10.38	1.44	1.35
26	LA	2222	C	N1-C6	-10.38	1.30	1.37
26	LA	2297	A	N9-C4	-10.38	1.31	1.37
2	SA	1280	A	N7-C5	-10.38	1.33	1.39
4	S2	50	G	C2-N2	-10.38	1.24	1.34
2	SA	1307	U	C2-N3	-10.37	1.30	1.37
26	LA	1347	A	N9-C4	-10.37	1.31	1.37
3	S1	25	U	C5'-C4'	10.37	1.63	1.51
26	LA	462	C	N3-C4	-10.37	1.26	1.33
26	LA	2407	A	C5'-C4'	10.37	1.63	1.51
26	LA	125	A	C2'-C1'	10.36	1.64	1.53
26	LA	132	G	N7-C5	-10.36	1.33	1.39
26	LA	988	A	N9-C4	-10.36	1.31	1.37
2	SA	635	A	N9-C4	-10.36	1.31	1.37
26	LA	1778	U	C2-N3	10.36	1.45	1.37
26	LA	2442	C	O3'-P	-10.36	1.48	1.61
26	LA	2141	G	N7-C5	10.35	1.45	1.39
2	SA	1540	U	P-O5'	-10.35	1.49	1.59
2	SA	539	A	C5-C4	10.35	1.46	1.38
26	LA	1815	A	N9-C8	-10.35	1.29	1.37
2	SA	1175	G	C2'-C1'	-10.34	1.42	1.53
26	LA	409	G	C6-N1	-10.34	1.32	1.39
26	LA	740	C	C3'-C2'	-10.34	1.41	1.52
26	LA	1954	G	C2'-C1'	-10.34	1.42	1.53
26	LA	2080	A	C5-C4	-10.34	1.31	1.38
2	SA	914	A	N7-C5	-10.33	1.33	1.39
2	SA	804	U	C2-N3	10.33	1.45	1.37
26	LA	909	A	N7-C5	-10.33	1.33	1.39
26	LA	13	A	N7-C5	-10.33	1.33	1.39
26	LA	245	G	N7-C5	-10.33	1.33	1.39
2	SA	634	C	N3-C4	10.33	1.41	1.33
26	LA	1069	A	N9-C8	-10.33	1.29	1.37
26	LA	2057	G	N9-C4	-10.33	1.29	1.38
2	SA	812	G	C2-N2	-10.32	1.24	1.34
26	LA	432	A	C5'-C4'	10.32	1.63	1.51
2	SA	1344	C	C2'-C1'	-10.32	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	809	G	C8-N7	10.32	1.37	1.30
26	LA	981	A	N9-C4	-10.32	1.31	1.37
26	LA	677	A	C5-C4	-10.32	1.31	1.38
26	LA	794	A	O3'-P	-10.32	1.48	1.61
26	LA	819	A	N9-C4	-10.32	1.31	1.37
26	LA	1210	G	C3'-C2'	10.32	1.64	1.52
26	LA	1051	G	C2-N2	-10.32	1.24	1.34
26	LA	1728	C	N1-C6	-10.32	1.30	1.37
26	LA	2821	A	N3-C4	-10.32	1.28	1.34
2	SA	1178	G	C8-N7	10.31	1.37	1.30
2	SA	1493	A	C5'-C4'	10.31	1.63	1.51
2	SA	820	U	C2-N3	-10.31	1.30	1.37
26	LA	1850	G	N9-C4	-10.31	1.29	1.38
26	LA	1549	A	N9-C4	-10.31	1.31	1.37
2	SA	939	G	C8-N7	10.31	1.37	1.30
26	LA	2281	A	O3'-P	-10.30	1.48	1.61
26	LA	756	A	N9-C8	10.30	1.46	1.37
26	LA	2313	C	C4-C5	-10.30	1.34	1.43
26	LA	606	U	O3'-P	-10.30	1.48	1.61
2	SA	346	G	C8-N7	-10.29	1.24	1.30
26	LA	510	C	N1-C6	10.29	1.43	1.37
2	SA	178	C	N1-C6	-10.29	1.30	1.37
26	LA	331	C	O3'-P	-10.29	1.48	1.61
26	LA	2641	G	C6-N1	-10.29	1.32	1.39
26	LA	1823	G	N3-C4	-10.29	1.28	1.35
2	SA	626	G	C6-N1	-10.28	1.32	1.39
26	LA	201	C	C4-N4	-10.29	1.24	1.33
2	SA	127	G	N3-C4	-10.28	1.28	1.35
26	LA	992	C	C4-C5	-10.28	1.34	1.43
26	LA	2607	G	C5-C4	-10.28	1.31	1.38
26	LA	2020	A	C6-N1	-10.28	1.28	1.35
26	LA	2386	A	N9-C4	-10.28	1.31	1.37
26	LA	959	A	P-O5'	-10.28	1.49	1.59
26	LA	1441	G	C6-N1	-10.28	1.32	1.39
26	LA	2618	G	P-O5'	-10.27	1.49	1.59
26	LA	1425	G	N9-C4	-10.27	1.29	1.38
26	LA	2708	G	C2'-C1'	-10.27	1.42	1.53
26	LA	528	A	C6-N1	-10.27	1.28	1.35
26	LA	1352	U	O3'-P	-10.27	1.48	1.61
2	SA	755	G	C6-N1	-10.26	1.32	1.39
25	LB	43	C	C4-C5	-10.26	1.34	1.43
26	LA	863	A	N7-C5	-10.26	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	724	U	C4-C5	10.26	1.52	1.43
2	SA	376	G	C5-C4	-10.26	1.31	1.38
2	SA	217	C	N1-C6	10.26	1.43	1.37
26	LA	1131	G	N9-C4	-10.25	1.29	1.38
26	LA	505	A	N7-C5	-10.25	1.33	1.39
26	LA	2024	G	N1-C2	-10.25	1.29	1.37
26	LA	1568	G	C5'-C4'	10.25	1.63	1.51
26	LA	2638	G	N9-C8	-10.25	1.30	1.37
26	LA	1397	U	N1-C2	-10.24	1.29	1.38
26	LA	1519	G	C2-N2	-10.24	1.24	1.34
2	SA	966	G	C5-C4	10.24	1.45	1.38
26	LA	1155	A	N7-C5	-10.23	1.33	1.39
26	LA	1666	G	C2-N2	-10.23	1.24	1.34
26	LA	2254	C	N1-C6	10.23	1.43	1.37
26	LA	2761	A	N7-C5	-10.23	1.33	1.39
2	SA	1122	U	P-O5'	-10.22	1.49	1.59
4	S2	42	C	O3'-P	-10.22	1.48	1.61
26	LA	24	G	N7-C5	-10.22	1.33	1.39
2	SA	548	G	N7-C5	-10.22	1.33	1.39
25	LB	10	G	C2'-C1'	-10.22	1.42	1.53
26	LA	736	C	C3'-C2'	-10.22	1.41	1.52
26	LA	1098	A	N7-C5	10.21	1.45	1.39
2	SA	596	A	N9-C4	10.21	1.44	1.37
26	LA	186	G	N1-C2	-10.21	1.29	1.37
26	LA	2706	A	N9-C4	-10.21	1.31	1.37
26	LA	194	G	N7-C5	-10.21	1.33	1.39
26	LA	2633	G	C8-N7	10.21	1.37	1.30
2	SA	601	G	O3'-P	-10.20	1.49	1.61
2	SA	927	G	C4'-C3'	10.20	1.64	1.53
26	LA	1673	G	N9-C8	-10.20	1.30	1.37
2	SA	1133	G	C6-N1	10.19	1.46	1.39
26	LA	2482	A	C5-C6	-10.19	1.31	1.41
2	SA	243	A	C5-C4	-10.19	1.31	1.38
26	LA	1224	U	C2-N3	10.19	1.44	1.37
26	LA	2860	A	N3-C4	10.18	1.41	1.34
2	SA	533	A	N9-C4	-10.18	1.31	1.37
2	SA	1058	G	C6-N1	-10.18	1.32	1.39
26	LA	2482	A	N9-C4	-10.18	1.31	1.37
2	SA	764	C	C2'-C1'	-10.17	1.42	1.53
2	SA	790	A	C6-N6	10.17	1.42	1.33
2	SA	1239	A	C2'-C1'	-10.17	1.42	1.53
26	LA	2088	A	N7-C5	10.17	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2541	A	N7-C5	-10.17	1.33	1.39
26	LA	2852	G	N7-C5	-10.17	1.33	1.39
2	SA	321	A	N1-C2	-10.17	1.25	1.34
26	LA	1123	C	C4-N4	-10.16	1.24	1.33
4	S2	43	G	N9-C8	-10.16	1.30	1.37
2	SA	1033	G	C2-N2	-10.16	1.24	1.34
2	SA	74	A	C5-C6	10.15	1.50	1.41
2	SA	1197	A	C5-C4	-10.15	1.31	1.38
26	LA	2756	U	C2'-C1'	-10.15	1.42	1.53
2	SA	254	G	C6-N1	-10.15	1.32	1.39
2	SA	564	C	O3'-P	-10.15	1.49	1.61
2	SA	951	G	N7-C5	-10.15	1.33	1.39
2	SA	1318	A	O3'-P	-10.14	1.49	1.61
26	LA	618	G	N9-C8	-10.14	1.30	1.37
26	LA	1524	G	C8-N7	10.14	1.37	1.30
26	LA	1643	G	N9-C4	-10.14	1.29	1.38
26	LA	2711	A	N9-C8	-10.14	1.29	1.37
26	LA	923	G	N9-C8	10.13	1.45	1.37
26	LA	2242	G	C6-N1	-10.13	1.32	1.39
26	LA	1282	U	N1-C6	-10.13	1.28	1.38
26	LA	2145	C	N1-C6	10.13	1.43	1.37
26	LA	150	U	C2-N3	-10.13	1.30	1.37
26	LA	1283	G	N7-C5	-10.12	1.33	1.39
26	LA	1894	C	C2'-C1'	10.12	1.64	1.53
26	LA	1953	A	N7-C5	-10.12	1.33	1.39
4	S2	59	A	C5-C4	-10.12	1.31	1.38
26	LA	2582	G	N9-C4	-10.12	1.29	1.38
26	LA	702	U	N3-C4	-10.12	1.29	1.38
26	LA	1964	G	P-O5'	-10.12	1.49	1.59
26	LA	1425	G	N7-C5	-10.11	1.33	1.39
26	LA	39	G	C2-N3	-10.11	1.24	1.32
2	SA	11	G	N9-C8	-10.10	1.30	1.37
2	SA	1166	G	O3'-P	-10.10	1.49	1.61
26	LA	463	G	C8-N7	-10.10	1.24	1.30
2	SA	97	G	C4'-C3'	-10.10	1.42	1.53
2	SA	117	G	N7-C5	-10.10	1.33	1.39
2	SA	879	C	O3'-P	-10.10	1.49	1.61
2	SA	1041	G	C8-N7	-10.10	1.24	1.30
26	LA	446	G	C5-C6	-10.10	1.32	1.42
26	LA	2019	A	O3'-P	-10.09	1.49	1.61
2	SA	1179	A	N9-C4	-10.09	1.31	1.37
26	LA	942	G	C8-N7	-10.09	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	92	C	N1-C6	-10.09	1.31	1.37
26	LA	522	A	C2'-C1'	-10.09	1.42	1.53
26	LA	1223	G	N7-C5	10.09	1.45	1.39
4	S2	2	G	C4'-C3'	10.08	1.64	1.53
26	LA	394	C	N1-C6	-10.08	1.31	1.37
26	LA	193	U	N3-C4	-10.08	1.29	1.38
2	SA	1019	A	N9-C4	10.08	1.43	1.37
2	SA	354	G	O3'-P	-10.08	1.49	1.61
26	LA	6	A	C8-N7	-10.07	1.24	1.31
26	LA	493	G	O3'-P	-10.07	1.49	1.61
26	LA	2482	A	N9-C8	-10.07	1.29	1.37
2	SA	1328	C	N3-C4	10.07	1.41	1.33
2	SA	800	G	N7-C5	-10.07	1.33	1.39
26	LA	1546	G	N7-C5	-10.07	1.33	1.39
4	S2	53	G	N3-C4	-10.06	1.28	1.35
26	LA	2332	C	P-O5'	-10.06	1.49	1.59
26	LA	582	A	N3-C4	-10.06	1.28	1.34
2	SA	186	C	C4'-C3'	10.06	1.64	1.53
26	LA	1972	G	C5-C4	-10.06	1.31	1.38
2	SA	74	A	N9-C8	-10.06	1.29	1.37
2	SA	475	C	N1-C6	-10.05	1.31	1.37
26	LA	1154	G	N3-C4	-10.05	1.28	1.35
26	LA	2199	A	C6-N6	10.05	1.42	1.33
26	LA	1240	U	C2'-C1'	-10.05	1.42	1.53
2	SA	1150	A	C2'-C1'	-10.04	1.42	1.53
26	LA	1416	G	C8-N7	10.05	1.36	1.30
26	LA	1794	A	N3-C4	-10.05	1.28	1.34
2	SA	950	U	C2-N3	-10.04	1.30	1.37
2	SA	996	A	N7-C5	-10.04	1.33	1.39
26	LA	1384	A	N7-C5	-10.04	1.33	1.39
2	SA	9	G	C2-N2	-10.04	1.24	1.34
26	LA	2440	C	C4-C5	-10.04	1.34	1.43
2	SA	810	C	C2'-C1'	-10.04	1.42	1.53
25	LB	83	G	C5-C4	-10.04	1.31	1.38
26	LA	2663	G	C5-C4	-10.03	1.31	1.38
26	LA	2299	U	P-O5'	-10.03	1.49	1.59
2	SA	21	G	N3-C4	-10.03	1.28	1.35
26	LA	778	G	O3'-P	-10.03	1.49	1.61
26	LA	1235	G	C5'-C4'	10.03	1.63	1.51
2	SA	792	A	N9-C4	-10.02	1.31	1.37
3	S1	28	U	C2-N3	10.02	1.44	1.37
26	LA	682	G	N9-C4	-10.02	1.29	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1844	C	C5-C6	-10.02	1.26	1.34
2	SA	262	A	O3'-P	-10.02	1.49	1.61
2	SA	691	G	N9-C4	-10.02	1.29	1.38
2	SA	1261	A	C2'-C1'	-10.01	1.42	1.53
4	S2	10	G	N7-C5	-10.01	1.33	1.39
26	LA	1187	G	C2-N2	-10.01	1.24	1.34
25	LB	106	G	N9-C8	-10.01	1.30	1.37
26	LA	2725	A	C5'-C4'	10.01	1.63	1.51
2	SA	469	C	C5-C6	-10.01	1.26	1.34
2	SA	1503	A	C6-N1	-10.01	1.28	1.35
2	SA	484	G	N9-C8	10.00	1.44	1.37
26	LA	2107	G	N7-C5	10.00	1.45	1.39
26	LA	2324	U	C2-N3	-10.00	1.30	1.37
26	LA	2892	G	C8-N7	10.00	1.36	1.30
26	LA	59	U	C5'-C4'	10.00	1.63	1.51
26	LA	807	U	C2-N3	-10.00	1.30	1.37
26	LA	2371	G	N3-C4	-10.00	1.28	1.35
26	LA	52	A	C6-N6	-9.99	1.25	1.33
26	LA	1368	G	C6-N1	-9.99	1.32	1.39
26	LA	1462	C	N3-C4	9.99	1.41	1.33
2	SA	101	A	N7-C5	9.99	1.45	1.39
4	S2	65	G	C8-N7	9.99	1.36	1.30
2	SA	269	C	C4'-C3'	-9.99	1.42	1.53
2	SA	642	A	C5-C4	-9.98	1.31	1.38
26	LA	2468	A	N7-C5	-9.98	1.33	1.39
2	SA	287	U	P-O5'	-9.98	1.49	1.59
26	LA	2736	A	N7-C5	9.97	1.45	1.39
2	SA	224	U	O3'-P	-9.97	1.49	1.61
26	LA	2758	A	N9-C4	-9.97	1.31	1.37
2	SA	732	C	C4-N4	-9.97	1.25	1.33
26	LA	989	G	C3'-C2'	-9.97	1.41	1.52
26	LA	2774	C	N1-C6	-9.96	1.31	1.37
2	SA	1536	C	C4-N4	-9.96	1.25	1.33
26	LA	2877	G	C8-N7	-9.96	1.25	1.30
2	SA	1285	A	C5'-C4'	9.96	1.63	1.51
2	SA	1401	G	C2-N2	-9.96	1.24	1.34
2	SA	198	G	C6-N1	-9.95	1.32	1.39
26	LA	2578	G	N7-C5	-9.95	1.33	1.39
26	LA	2046	G	N1-C2	-9.95	1.29	1.37
4	S2	53	G	N9-C8	-9.95	1.30	1.37
2	SA	1149	C	C2-N3	-9.94	1.27	1.35
26	LA	259	G	C8-N7	9.94	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1868	C	N1-C6	9.95	1.43	1.37
26	LA	1943	U	N3-C4	-9.94	1.29	1.38
26	LA	2231	U	N1-C2	-9.94	1.29	1.38
2	SA	519	C	N1-C6	-9.94	1.31	1.37
26	LA	561	G	C6-N1	-9.94	1.32	1.39
26	LA	198	C	N1-C6	-9.94	1.31	1.37
26	LA	381	G	C8-N7	9.93	1.36	1.30
26	LA	1846	G	N3-C4	-9.93	1.28	1.35
26	LA	2763	G	C6-N1	-9.93	1.32	1.39
26	LA	927	A	N9-C4	-9.93	1.31	1.37
26	LA	1570	A	N3-C4	-9.93	1.28	1.34
26	LA	873	C	N3-C4	-9.92	1.27	1.33
4	S2	20	G	O3'-P	-9.92	1.49	1.61
26	LA	2227	A	N7-C5	-9.92	1.33	1.39
26	LA	2274	A	N7-C5	-9.91	1.33	1.39
26	LA	1353	A	N7-C5	-9.91	1.33	1.39
26	LA	1535	A	N3-C4	-9.91	1.28	1.34
26	LA	1601	G	C5-C4	-9.91	1.31	1.38
2	SA	925	G	N7-C5	-9.91	1.33	1.39
26	LA	227	A	C1'-N9	-9.91	1.32	1.46
26	LA	1927	A	N9-C4	-9.91	1.31	1.37
26	LA	1987	A	C5-C4	-9.91	1.31	1.38
26	LA	2808	G	C2-N3	-9.91	1.24	1.32
26	LA	2890	G	C8-N7	-9.91	1.25	1.30
26	LA	2725	A	N3-C4	-9.90	1.28	1.34
2	SA	454	G	C5-C4	9.90	1.45	1.38
26	LA	2385	C	C4-C5	-9.90	1.35	1.43
26	LA	2225	A	N9-C8	-9.89	1.29	1.37
26	LA	2811	G	N7-C5	-9.89	1.33	1.39
26	LA	2619	C	C2'-C1'	-9.89	1.42	1.53
2	SA	100	G	C2'-C1'	-9.89	1.42	1.53
2	SA	1068	G	C2'-C1'	-9.89	1.42	1.53
26	LA	466	A	N9-C4	-9.89	1.31	1.37
2	SA	72	A	N3-C4	-9.88	1.28	1.34
26	LA	447	A	N9-C4	-9.88	1.31	1.37
26	LA	2039	U	C3'-C2'	-9.88	1.41	1.52
26	LA	1	G	C2-N3	9.88	1.40	1.32
26	LA	971	G	O3'-P	-9.88	1.49	1.61
26	LA	1787	A	N3-C4	9.88	1.40	1.34
2	SA	917	G	N1-C2	-9.87	1.29	1.37
2	SA	160	A	C4'-C3'	9.87	1.64	1.53
2	SA	912	C	O3'-P	-9.87	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2758	A	P-O5'	9.87	1.69	1.59
2	SA	431	A	N9-C4	9.87	1.43	1.37
26	LA	490	C	C5'-C4'	9.87	1.63	1.51
4	S2	68	C	N1-C6	-9.86	1.31	1.37
26	LA	1297	C	N1-C6	-9.86	1.31	1.37
26	LA	2060	A	O3'-P	-9.86	1.49	1.61
26	LA	2273	A	N9-C4	-9.86	1.31	1.37
2	SA	542	G	P-O5'	-9.86	1.49	1.59
26	LA	2569	G	C8-N7	9.86	1.36	1.30
26	LA	2843	G	O3'-P	-9.86	1.49	1.61
26	LA	283	G	N9-C4	9.85	1.45	1.38
26	LA	1127	A	C5-C4	-9.85	1.31	1.38
2	SA	813	U	O4'-C1'	-9.85	1.28	1.41
2	SA	1108	G	C1'-N9	-9.84	1.33	1.46
26	LA	1354	A	N1-C2	-9.84	1.25	1.34
26	LA	977	G	C2'-C1'	-9.84	1.42	1.53
26	LA	2608	G	N9-C4	-9.84	1.30	1.38
26	LA	2663	G	O3'-P	-9.84	1.49	1.61
2	SA	226	G	P-O5'	-9.84	1.50	1.59
26	LA	699	A	N7-C5	-9.84	1.33	1.39
2	SA	36	C	N1-C6	-9.83	1.31	1.37
2	SA	417	G	C6-N1	-9.83	1.32	1.39
26	LA	453	A	C6-N1	-9.83	1.28	1.35
2	SA	289	G	N7-C5	-9.83	1.33	1.39
2	SA	1524	C	P-O5'	-9.83	1.50	1.59
26	LA	800	A	O3'-P	-9.82	1.49	1.61
3	S1	40	G	N3-C4	-9.82	1.28	1.35
26	LA	1804	C	C2'-C1'	-9.82	1.42	1.53
26	LA	1875	G	C5-C4	9.82	1.45	1.38
26	LA	2444	G	C5-C6	-9.82	1.32	1.42
26	LA	2896	C	N3-C4	9.82	1.40	1.33
2	SA	356	A	N3-C4	-9.82	1.28	1.34
26	LA	1527	G	N7-C5	9.82	1.45	1.39
26	LA	585	G	C5-C6	-9.82	1.32	1.42
26	LA	1291	C	C4'-C3'	-9.82	1.42	1.53
26	LA	489	G	C2'-C1'	-9.81	1.42	1.53
26	LA	1929	G	C2'-C1'	-9.81	1.42	1.53
26	LA	2071	A	N9-C4	-9.81	1.31	1.37
2	SA	968	A	O3'-P	-9.81	1.49	1.61
26	LA	1310	G	N3-C4	-9.81	1.28	1.35
26	LA	1333	G	C5'-C4'	9.81	1.63	1.51
26	LA	1415	U	C2-N3	-9.81	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	990	A	C8-N7	9.80	1.38	1.31
26	LA	324	A	N9-C8	9.80	1.45	1.37
26	LA	498	G	C8-N7	9.80	1.36	1.30
26	LA	1026	G	N9-C4	-9.80	1.30	1.38
26	LA	1904	G	C3'-C2'	-9.80	1.42	1.52
26	LA	2304	G	O3'-P	-9.80	1.49	1.61
26	LA	2631	G	C2-N2	-9.80	1.24	1.34
26	LA	2611	C	N1-C6	-9.80	1.31	1.37
26	LA	297	G	N7-C5	9.79	1.45	1.39
26	LA	779	U	C2-N3	-9.79	1.30	1.37
26	LA	1543	G	C2-N2	-9.79	1.24	1.34
26	LA	2260	C	C2'-C1'	-9.79	1.42	1.53
26	LA	2350	C	N1-C6	-9.79	1.31	1.37
26	LA	2685	G	C5-C4	-9.79	1.31	1.38
4	S2	50	G	C8-N7	9.79	1.36	1.30
2	SA	485	U	N3-C4	-9.79	1.29	1.38
26	LA	862	G	N7-C5	-9.79	1.33	1.39
26	LA	1347	A	N3-C4	-9.79	1.28	1.34
26	LA	1242	U	N3-C4	-9.78	1.29	1.38
26	LA	1988	G	C2-N2	-9.78	1.24	1.34
2	SA	171	A	N7-C5	9.78	1.45	1.39
2	SA	205	A	N3-C4	9.78	1.40	1.34
2	SA	789	U	C5'-C4'	9.78	1.63	1.51
26	LA	144	A	P-O5'	-9.77	1.50	1.59
26	LA	2538	C	C4'-C3'	-9.77	1.42	1.53
2	SA	71	A	C6-N1	9.77	1.42	1.35
25	LB	7	G	P-O5'	-9.77	1.50	1.59
26	LA	2294	G	C5-C4	-9.77	1.31	1.38
2	SA	61	G	O3'-P	-9.76	1.49	1.61
26	LA	463	G	C5-C4	-9.76	1.31	1.38
2	SA	699	C	O3'-P	-9.76	1.49	1.61
26	LA	6	A	C3'-C2'	-9.76	1.42	1.52
2	SA	902	G	C2-N2	-9.76	1.24	1.34
2	SA	69	G	C2'-C1'	-9.75	1.42	1.53
2	SA	668	G	N3-C4	-9.75	1.28	1.35
2	SA	1233	G	C2-N3	-9.75	1.25	1.32
26	LA	524	G	C8-N7	9.75	1.36	1.30
26	LA	1384	A	C8-N7	9.75	1.38	1.31
26	LA	1110	G	N9-C8	-9.75	1.31	1.37
26	LA	2090	A	C6-N1	9.74	1.42	1.35
26	LA	459	U	O3'-P	-9.74	1.49	1.61
26	LA	2152	G	N3-C4	9.74	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2617	U	C2'-C1'	-9.74	1.42	1.53
2	SA	510	A	P-O5'	-9.73	1.50	1.59
26	LA	48	G	N9-C4	-9.73	1.30	1.38
26	LA	2688	G	C5-C4	-9.73	1.31	1.38
26	LA	942	G	C2-N2	-9.73	1.24	1.34
2	SA	79	G	N9-C8	-9.73	1.31	1.37
26	LA	1937	A	C2'-C1'	-9.73	1.42	1.53
26	LA	2061	G	N3-C4	-9.73	1.28	1.35
2	SA	494	G	N9-C4	-9.73	1.30	1.38
2	SA	761	G	C5-C4	-9.73	1.31	1.38
26	LA	1786	A	C8-N7	-9.72	1.24	1.31
26	LA	818	G	N3-C4	-9.72	1.28	1.35
26	LA	2475	C	C4-N4	-9.72	1.25	1.33
26	LA	900	A	C2'-C1'	-9.71	1.42	1.53
26	LA	2168	G	C8-N7	-9.71	1.25	1.30
2	SA	695	A	N9-C4	-9.71	1.32	1.37
2	SA	1114	C	C1'-N1	9.71	1.63	1.48
2	SA	175	C	N1-C6	9.71	1.43	1.37
2	SA	999	C	N1-C6	9.71	1.43	1.37
25	LB	98	G	N7-C5	-9.71	1.33	1.39
26	LA	677	A	C2'-C1'	-9.71	1.42	1.53
26	LA	1067	A	C6-N6	9.71	1.41	1.33
25	LB	61	G	N3-C4	-9.70	1.28	1.35
26	LA	108	G	C2-N2	-9.71	1.24	1.34
26	LA	342	A	N3-C4	-9.70	1.29	1.34
2	SA	360	G	C2-N2	-9.70	1.24	1.34
26	LA	1315	C	C4-N4	-9.70	1.25	1.33
2	SA	426	U	N3-C4	-9.70	1.29	1.38
2	SA	607	A	N7-C5	-9.70	1.33	1.39
2	SA	1028	C	P-O5'	-9.70	1.50	1.59
26	LA	2161	C	N3-C4	-9.70	1.27	1.33
2	SA	1476	A	C6-N1	-9.70	1.28	1.35
26	LA	1408	G	N9-C4	-9.70	1.30	1.38
26	LA	2428	G	C8-N7	9.69	1.36	1.30
2	SA	587	G	P-O5'	9.69	1.69	1.59
26	LA	845	A	N9-C4	-9.69	1.32	1.37
26	LA	1759	A	P-O5'	-9.69	1.50	1.59
2	SA	435	A	N9-C4	-9.69	1.32	1.37
26	LA	1109	C	P-O5'	-9.69	1.50	1.59
2	SA	1534	A	N3-C4	-9.69	1.29	1.34
26	LA	556	A	N9-C4	-9.68	1.32	1.37
26	LA	355	U	C2-N3	-9.68	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	374	A	C2'-C1'	-9.68	1.42	1.53
26	LA	926	G	N9-C4	-9.68	1.30	1.38
26	LA	2623	G	C2'-C1'	-9.68	1.42	1.53
26	LA	23	G	C5-C4	-9.68	1.31	1.38
26	LA	1970	A	C5-C4	9.68	1.45	1.38
2	SA	309	A	C6-N1	-9.67	1.28	1.35
26	LA	674	G	N9-C4	-9.67	1.30	1.38
2	SA	734	G	N7-C5	-9.67	1.33	1.39
26	LA	452	G	N9-C4	-9.67	1.30	1.38
26	LA	1136	G	N9-C4	-9.67	1.30	1.38
26	LA	2826	A	C5-C4	9.67	1.45	1.38
26	LA	764	A	P-O5'	9.67	1.69	1.59
2	SA	440	C	N1-C6	9.66	1.43	1.37
26	LA	1789	A	N9-C8	-9.66	1.30	1.37
2	SA	676	A	N9-C4	-9.65	1.32	1.37
2	SA	1431	A	N9-C4	-9.65	1.32	1.37
26	LA	2547	A	O3'-P	-9.65	1.49	1.61
26	LA	1686	C	P-O5'	-9.65	1.50	1.59
2	SA	453	G	N9-C8	-9.64	1.31	1.37
2	SA	749	A	N7-C5	-9.64	1.33	1.39
26	LA	1455	G	C6-N1	-9.64	1.32	1.39
26	LA	201	C	P-O5'	-9.64	1.50	1.59
26	LA	654	A	N7-C5	-9.64	1.33	1.39
26	LA	1779	U	P-O5'	-9.64	1.50	1.59
26	LA	1901	A	N1-C2	-9.64	1.25	1.34
26	LA	2569	G	N3-C4	-9.64	1.28	1.35
26	LA	1565	C	C2'-C1'	-9.64	1.42	1.53
2	SA	843	U	C5'-C4'	9.64	1.62	1.51
26	LA	1821	A	C5-C4	-9.64	1.32	1.38
26	LA	1959	G	N3-C4	-9.63	1.28	1.35
26	LA	2432	A	O3'-P	-9.63	1.49	1.61
2	SA	924	C	N1-C6	-9.63	1.31	1.37
2	SA	28	A	C2'-C1'	-9.63	1.42	1.53
26	LA	458	G	N9-C4	-9.63	1.30	1.38
26	LA	1348	C	O3'-P	-9.63	1.49	1.61
2	SA	327	A	C8-N7	-9.63	1.24	1.31
26	LA	2640	G	N7-C5	-9.63	1.33	1.39
26	LA	2728	U	C2-N3	-9.63	1.31	1.37
4	S2	38	A	C6-N1	-9.62	1.28	1.35
26	LA	295	G	N9-C8	-9.62	1.31	1.37
26	LA	495	G	P-O5'	-9.62	1.50	1.59
26	LA	1573	G	C6-N1	-9.62	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	69	G	N9-C8	9.62	1.44	1.37
2	SA	767	A	C6-N1	-9.62	1.28	1.35
2	SA	1371	G	C6-N1	-9.62	1.32	1.39
26	LA	2436	G	C5-C4	-9.62	1.31	1.38
2	SA	145	G	P-O5'	-9.62	1.50	1.59
26	LA	1901	A	C4'-C3'	-9.62	1.42	1.53
2	SA	567	G	N3-C4	-9.61	1.28	1.35
26	LA	2	G	C8-N7	9.61	1.36	1.30
26	LA	621	A	N9-C4	-9.61	1.32	1.37
26	LA	1277	G	N3-C4	-9.61	1.28	1.35
26	LA	2599	G	C1'-N9	-9.61	1.33	1.46
26	LA	2360	G	C6-N1	-9.61	1.32	1.39
26	LA	1419	A	P-O5'	-9.61	1.50	1.59
26	LA	2361	G	N7-C5	-9.61	1.33	1.39
2	SA	193	C	N1-C6	9.60	1.43	1.37
2	SA	821	G	P-O5'	-9.60	1.50	1.59
2	SA	694	A	N3-C4	-9.60	1.29	1.34
26	LA	2336	A	N7-C5	-9.60	1.33	1.39
26	LA	2522	U	N1-C2	-9.59	1.29	1.38
2	SA	1130	A	N9-C4	-9.59	1.32	1.37
2	SA	764	C	O3'-P	-9.59	1.49	1.61
26	LA	2498	C	C2'-C1'	-9.59	1.42	1.53
2	SA	836	G	N3-C4	-9.59	1.28	1.35
25	LB	60	C	C2-N3	-9.59	1.28	1.35
26	LA	91	A	C4'-C3'	9.59	1.63	1.53
26	LA	1899	A	N9-C4	-9.59	1.32	1.37
26	LA	2152	G	C2-N2	-9.59	1.25	1.34
2	SA	413	G	C5-C4	9.58	1.45	1.38
26	LA	318	C	P-O5'	-9.58	1.50	1.59
2	SA	686	U	N1-C2	-9.58	1.29	1.38
2	SA	813	U	C4-C5	-9.58	1.34	1.43
2	SA	1169	A	N9-C4	9.58	1.43	1.37
26	LA	1695	G	N3-C4	-9.58	1.28	1.35
26	LA	2106	U	N1-C2	9.58	1.47	1.38
26	LA	2455	G	N3-C4	-9.58	1.28	1.35
26	LA	2524	G	C2-N2	-9.58	1.25	1.34
26	LA	681	G	C6-N1	-9.58	1.32	1.39
26	LA	971	G	C2-N2	-9.58	1.25	1.34
26	LA	2501	C	C2'-C1'	-9.58	1.42	1.53
26	LA	2725	A	N9-C4	-9.58	1.32	1.37
26	LA	907	G	C3'-C2'	-9.57	1.42	1.52
2	SA	305	G	C5'-C4'	9.57	1.62	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	39	A	N9-C4	-9.57	1.32	1.37
26	LA	1123	C	C2'-C1'	-9.57	1.42	1.53
2	SA	1511	G	C2-N2	-9.57	1.25	1.34
26	LA	575	A	C8-N7	-9.57	1.24	1.31
26	LA	2011	U	C2'-C1'	-9.57	1.42	1.53
2	SA	223	A	P-O5'	-9.57	1.50	1.59
2	SA	900	A	N7-C5	-9.57	1.33	1.39
26	LA	1011	G	C8-N7	9.56	1.36	1.30
26	LA	933	A	C2'-C1'	-9.56	1.42	1.53
26	LA	2091	C	P-O5'	-9.56	1.50	1.59
2	SA	227	G	C6-N1	-9.56	1.32	1.39
2	SA	1465	A	C6-N1	-9.55	1.28	1.35
26	LA	1635	A	N3-C4	-9.55	1.29	1.34
26	LA	2136	G	N7-C5	-9.55	1.33	1.39
2	SA	1132	C	N1-C6	9.55	1.42	1.37
26	LA	1531	C	N3-C4	9.55	1.40	1.33
26	LA	2780	G	N7-C5	-9.55	1.33	1.39
26	LA	2219	U	N1-C2	-9.54	1.29	1.38
26	LA	2825	G	C5-C4	-9.54	1.31	1.38
2	SA	278	G	N7-C5	-9.54	1.33	1.39
25	LB	71	C	N3-C4	9.54	1.40	1.33
26	LA	1899	A	C8-N7	-9.54	1.24	1.31
26	LA	2617	U	N1-C6	-9.54	1.29	1.38
2	SA	917	G	C2-N3	9.54	1.40	1.32
25	LB	20	G	N1-C2	-9.54	1.30	1.37
26	LA	2618	G	C5-C4	-9.54	1.31	1.38
4	S2	65	G	N3-C4	-9.53	1.28	1.35
26	LA	142	A	N9-C4	9.53	1.43	1.37
26	LA	1373	A	C6-N6	-9.53	1.26	1.33
26	LA	1410	G	C5-C4	-9.53	1.31	1.38
26	LA	1743	G	C6-N1	-9.53	1.32	1.39
2	SA	332	G	N9-C8	-9.53	1.31	1.37
2	SA	270	A	N9-C4	-9.53	1.32	1.37
26	LA	1807	G	C2-N2	-9.53	1.25	1.34
26	LA	1668	A	O4'-C1'	-9.52	1.29	1.41
26	LA	2013	A	C5-C4	-9.52	1.32	1.38
26	LA	2621	G	N9-C4	-9.52	1.30	1.38
26	LA	2661	G	N9-C4	-9.52	1.30	1.38
2	SA	1492	A	C2'-C1'	9.52	1.63	1.53
26	LA	3	U	N1-C6	9.52	1.46	1.38
26	LA	2338	C	C4'-C3'	9.52	1.63	1.53
2	SA	877	G	C2-N2	-9.52	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2519	U	N1-C2	-9.52	1.29	1.38
2	SA	741	G	N7-C5	9.51	1.45	1.39
4	S2	14	A	C5-C4	-9.51	1.32	1.38
2	SA	8	A	C8-N7	-9.51	1.24	1.31
2	SA	346	G	N3-C4	-9.51	1.28	1.35
2	SA	1279	G	N9-C8	-9.51	1.31	1.37
26	LA	2134	A	N7-C5	-9.51	1.33	1.39
26	LA	1162	G	C5-C4	-9.50	1.31	1.38
2	SA	907	A	N9-C4	-9.50	1.32	1.37
26	LA	883	G	C2'-C1'	-9.50	1.42	1.53
26	LA	583	G	N3-C4	-9.50	1.28	1.35
26	LA	565	C	P-O5'	-9.50	1.50	1.59
26	LA	453	A	N7-C5	-9.50	1.33	1.39
26	LA	643	A	N9-C4	-9.50	1.32	1.37
26	LA	938	G	N9-C8	9.50	1.44	1.37
26	LA	2679	A	N3-C4	-9.49	1.29	1.34
2	SA	887	G	C2'-C1'	-9.49	1.43	1.53
2	SA	976	G	C6-N1	-9.49	1.32	1.39
26	LA	855	G	N7-C5	-9.49	1.33	1.39
26	LA	2718	G	C6-N1	-9.49	1.32	1.39
2	SA	1457	G	N1-C2	-9.49	1.30	1.37
26	LA	938	G	N3-C4	-9.49	1.28	1.35
26	LA	1455	G	N9-C8	-9.49	1.31	1.37
26	LA	2600	A	N3-C4	-9.49	1.29	1.34
26	LA	2835	A	N3-C4	-9.49	1.29	1.34
26	LA	2147	A	C5'-C4'	9.49	1.62	1.51
2	SA	450	G	N1-C2	-9.48	1.30	1.37
26	LA	1663	G	C6-N1	-9.48	1.32	1.39
26	LA	2566	A	C4'-O4'	9.48	1.57	1.45
26	LA	279	A	C6-N1	-9.48	1.28	1.35
26	LA	1148	U	O3'-P	-9.48	1.49	1.61
26	LA	2070	A	C5-C4	-9.48	1.32	1.38
26	LA	2705	A	N9-C4	-9.47	1.32	1.37
26	LA	2433	A	C6-N1	9.47	1.42	1.35
2	SA	270	A	C6-N1	-9.47	1.28	1.35
26	LA	1322	A	N9-C8	-9.47	1.30	1.37
2	SA	1255	G	C6-N1	-9.47	1.32	1.39
26	LA	118	A	N9-C4	-9.47	1.32	1.37
26	LA	177	G	P-O5'	-9.47	1.50	1.59
26	LA	818	G	C6-N1	-9.47	1.32	1.39
26	LA	1840	G	N3-C4	-9.47	1.28	1.35
26	LA	1854	A	N3-C4	-9.47	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1277	G	C2'-C1'	-9.46	1.43	1.53
26	LA	2288	A	N7-C5	-9.46	1.33	1.39
26	LA	503	A	N9-C4	-9.46	1.32	1.37
2	SA	264	C	C2'-C1'	-9.46	1.43	1.53
26	LA	2298	A	C4'-C3'	-9.46	1.42	1.53
26	LA	1799	G	N7-C5	-9.46	1.33	1.39
26	LA	773	U	C4-C5	-9.46	1.35	1.43
26	LA	2437	G	N9-C8	-9.46	1.31	1.37
2	SA	335	C	C2'-C1'	-9.46	1.43	1.53
2	SA	1117	A	N3-C4	-9.46	1.29	1.34
26	LA	2055	C	C5'-C4'	9.46	1.62	1.51
26	LA	609	A	C8-N7	-9.45	1.25	1.31
2	SA	761	G	N7-C5	-9.45	1.33	1.39
26	LA	1250	G	P-O5'	-9.45	1.50	1.59
2	SA	510	A	N9-C4	-9.45	1.32	1.37
26	LA	2701	U	N3-C4	9.45	1.47	1.38
2	SA	896	C	N1-C6	-9.45	1.31	1.37
3	S1	51	C	O3'-P	-9.45	1.49	1.61
26	LA	2566	A	C2'-C1'	-9.44	1.43	1.53
2	SA	668	G	C8-N7	9.44	1.36	1.30
26	LA	992	C	O3'-P	-9.44	1.49	1.61
26	LA	2680	U	N1-C6	-9.44	1.29	1.38
26	LA	976	G	C8-N7	9.44	1.36	1.30
26	LA	2532	G	C2-N3	9.44	1.40	1.32
2	SA	326	G	N9-C8	-9.44	1.31	1.37
26	LA	2573	C	N1-C6	9.44	1.42	1.37
2	SA	227	G	C8-N7	9.44	1.36	1.30
26	LA	1567	G	C3'-C2'	-9.43	1.42	1.52
2	SA	1518	A	N9-C4	-9.43	1.32	1.37
26	LA	1323	C	C2'-C1'	-9.43	1.43	1.53
26	LA	2289	G	C2'-C1'	-9.43	1.43	1.53
26	LA	294	A	C8-N7	-9.43	1.25	1.31
26	LA	2122	U	C1'-N1	9.43	1.62	1.48
26	LA	2566	A	N9-C4	-9.43	1.32	1.37
2	SA	1139	G	C5-C4	-9.42	1.31	1.38
26	LA	1925	C	P-O5'	-9.42	1.50	1.59
2	SA	381	C	N3-C4	9.42	1.40	1.33
2	SA	279	A	C6-N6	9.41	1.41	1.33
26	LA	1984	G	N9-C8	-9.41	1.31	1.37
26	LA	2234	G	C1'-N9	-9.41	1.33	1.46
2	SA	221	C	N1-C6	-9.41	1.31	1.37
26	LA	5	A	N7-C5	-9.41	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	579	A	P-O5'	-9.41	1.50	1.59
26	LA	1125	G	C5-C4	9.41	1.45	1.38
26	LA	1933	G	N1-C2	-9.41	1.30	1.37
26	LA	1609	A	O3'-P	-9.41	1.49	1.61
4	S2	53	G	C8-N7	-9.40	1.25	1.30
26	LA	283	G	N9-C8	-9.40	1.31	1.37
26	LA	407	G	N7-C5	-9.40	1.33	1.39
26	LA	1150	C	N1-C6	9.40	1.42	1.37
26	LA	469	G	C2-N3	-9.40	1.25	1.32
26	LA	1404	C	C5'-C4'	9.40	1.62	1.51
26	LA	1978	A	N7-C5	-9.40	1.33	1.39
26	LA	1838	C	C4-C5	-9.39	1.35	1.43
26	LA	834	G	N9-C8	9.39	1.44	1.37
26	LA	2098	U	N1-C2	-9.39	1.30	1.38
2	SA	242	G	C6-N1	-9.39	1.32	1.39
25	LB	82	U	P-O5'	-9.39	1.50	1.59
26	LA	1705	A	N7-C5	-9.39	1.33	1.39
26	LA	1771	C	N3-C4	-9.39	1.27	1.33
26	LA	1938	A	N9-C4	-9.39	1.32	1.37
2	SA	1123	U	P-O5'	-9.38	1.50	1.59
26	LA	671	C	N1-C6	9.39	1.42	1.37
26	LA	820	A	N3-C4	-9.38	1.29	1.34
26	LA	1805	A	N9-C4	-9.39	1.32	1.37
2	SA	1213	A	N3-C4	-9.38	1.29	1.34
26	LA	325	G	N3-C4	-9.38	1.28	1.35
2	SA	858	G	N9-C8	9.38	1.44	1.37
26	LA	374	A	C5-C4	-9.38	1.32	1.38
26	LA	1128	G	P-O5'	-9.38	1.50	1.59
26	LA	1256	G	C6-N1	-9.38	1.32	1.39
26	LA	1889	A	C5-C6	-9.38	1.32	1.41
26	LA	2037	A	N7-C5	-9.38	1.33	1.39
25	LB	39	A	N3-C4	-9.37	1.29	1.34
26	LA	1930	G	N9-C4	-9.38	1.30	1.38
2	SA	362	G	O3'-P	-9.37	1.50	1.61
2	SA	108	G	C5-C4	-9.37	1.31	1.38
4	S2	73	A	C6-N6	9.37	1.41	1.33
26	LA	164	C	N3-C4	-9.37	1.27	1.33
26	LA	785	G	N7-C5	-9.37	1.33	1.39
26	LA	942	G	P-O5'	-9.37	1.50	1.59
26	LA	1593	A	C2'-C1'	-9.37	1.43	1.53
26	LA	2120	G	C2-N2	-9.37	1.25	1.34
26	LA	2664	G	C5-C4	-9.37	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	595	A	N7-C5	-9.36	1.33	1.39
25	LB	11	C	N1-C6	-9.36	1.31	1.37
26	LA	891	G	C4'-C3'	9.36	1.63	1.53
26	LA	2791	G	N7-C5	-9.36	1.33	1.39
26	LA	2809	A	N9-C4	-9.36	1.32	1.37
2	SA	1041	G	O3'-P	-9.36	1.50	1.61
26	LA	1681	G	C6-N1	9.36	1.46	1.39
2	SA	318	G	C6-N1	-9.36	1.33	1.39
2	SA	1211	U	C2-N3	-9.36	1.31	1.37
2	SA	18	C	N1-C6	9.35	1.42	1.37
26	LA	804	A	N3-C4	-9.35	1.29	1.34
26	LA	2279	G	C4'-C3'	9.35	1.63	1.53
4	S2	57	C	P-O5'	-9.35	1.50	1.59
2	SA	1423	G	C8-N7	9.34	1.36	1.30
26	LA	799	G	N3-C4	-9.34	1.28	1.35
26	LA	1003	G	N7-C5	9.34	1.44	1.39
26	LA	1635	A	P-O5'	-9.34	1.50	1.59
26	LA	1870	C	C5'-C4'	9.34	1.62	1.51
26	LA	2357	G	N9-C4	-9.34	1.30	1.38
26	LA	725	G	N1-C2	-9.34	1.30	1.37
26	LA	2118	U	C3'-C2'	9.34	1.63	1.52
26	LA	2333	A	C5-C4	-9.34	1.32	1.38
26	LA	1052	C	O3'-P	-9.34	1.50	1.61
26	LA	2341	G	C2-N3	9.34	1.40	1.32
2	SA	321	A	C6-N1	-9.33	1.29	1.35
2	SA	942	G	N3-C4	-9.33	1.28	1.35
26	LA	34	U	C2-N3	-9.33	1.31	1.37
26	LA	1661	G	N3-C4	-9.33	1.28	1.35
26	LA	2469	A	C8-N7	9.33	1.38	1.31
26	LA	972	A	N9-C4	-9.33	1.32	1.37
26	LA	1393	A	N3-C4	9.33	1.40	1.34
2	SA	92	U	P-O5'	-9.32	1.50	1.59
26	LA	1209	U	N1-C2	-9.32	1.30	1.38
26	LA	2685	G	C2-N2	-9.32	1.25	1.34
26	LA	222	A	C2'-C1'	-9.32	1.43	1.53
26	LA	757	G	C6-N1	-9.32	1.33	1.39
26	LA	1544	A	C6-N1	-9.32	1.29	1.35
26	LA	1708	C	C2'-C1'	-9.32	1.43	1.53
26	LA	2549	G	N9-C4	-9.32	1.30	1.38
2	SA	1416	G	N9-C8	-9.32	1.31	1.37
26	LA	1526	C	N1-C6	-9.32	1.31	1.37
26	LA	1185	G	N9-C8	-9.31	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	254	G	N9-C4	-9.31	1.30	1.38
26	LA	389	G	C1'-N9	-9.31	1.33	1.46
26	LA	2642	G	C5'-C4'	9.31	1.62	1.51
26	LA	1942	C	N1-C6	9.31	1.42	1.37
26	LA	338	G	C5'-C4'	9.30	1.62	1.51
26	LA	505	A	P-O5'	-9.30	1.50	1.59
26	LA	1901	A	C5-C4	-9.30	1.32	1.38
26	LA	1929	G	C8-N7	-9.30	1.25	1.30
26	LA	25	U	O3'-P	-9.30	1.50	1.61
26	LA	2889	C	N1-C6	-9.30	1.31	1.37
2	SA	200	G	N7-C5	-9.29	1.33	1.39
26	LA	2582	G	C6-N1	-9.29	1.33	1.39
2	SA	247	G	C8-N7	9.29	1.36	1.30
2	SA	763	G	N7-C5	-9.29	1.33	1.39
2	SA	1142	G	N9-C8	9.29	1.44	1.37
26	LA	1268	A	N7-C5	-9.29	1.33	1.39
2	SA	712	A	C6-N1	-9.29	1.29	1.35
2	SA	456	A	N7-C5	9.29	1.44	1.39
2	SA	1033	G	N9-C8	-9.29	1.31	1.37
2	SA	1502	A	N9-C4	9.29	1.43	1.37
26	LA	2330	G	N9-C8	-9.29	1.31	1.37
26	LA	2541	A	C5'-C4'	9.28	1.62	1.51
26	LA	2127	G	P-O5'	-9.28	1.50	1.59
2	SA	154	U	P-O5'	-9.28	1.50	1.59
2	SA	981	U	N3-C4	-9.28	1.30	1.38
3	S1	33	A	P-O5'	9.28	1.69	1.59
26	LA	1785	A	N9-C8	-9.28	1.30	1.37
4	S2	10	G	C4'-C3'	9.27	1.63	1.53
26	LA	1667	G	N3-C4	-9.27	1.28	1.35
26	LA	2835	A	N1-C2	-9.27	1.26	1.34
26	LA	2582	G	C8-N7	-9.27	1.25	1.30
2	SA	587	G	C5-C4	-9.27	1.31	1.38
26	LA	227	A	N7-C5	-9.27	1.33	1.39
2	SA	1064	G	N3-C4	-9.27	1.28	1.35
26	LA	2007	U	C2-N3	-9.27	1.31	1.37
2	SA	1425	U	C2-N3	-9.26	1.31	1.37
4	S2	43	G	C5'-C4'	9.26	1.62	1.51
26	LA	574	A	C2'-C1'	-9.26	1.43	1.53
26	LA	1596	A	C5-C4	-9.26	1.32	1.38
2	SA	838	G	C5'-C4'	9.26	1.62	1.51
25	LB	99	A	N1-C2	-9.26	1.26	1.34
2	SA	82	G	C2-N2	-9.26	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2812	G	N7-C5	-9.26	1.33	1.39
2	SA	831	A	N3-C4	-9.25	1.29	1.34
2	SA	901	A	C5-C4	-9.25	1.32	1.38
25	LB	38	C	C5'-C4'	9.25	1.62	1.51
26	LA	2101	A	P-O5'	-9.25	1.50	1.59
2	SA	326	G	C6-N1	-9.25	1.33	1.39
26	LA	810	U	N1-C2	-9.25	1.30	1.38
2	SA	1149	C	N1-C6	9.25	1.42	1.37
26	LA	768	G	C8-N7	-9.25	1.25	1.30
26	LA	1199	U	C2-N3	-9.25	1.31	1.37
26	LA	1263	U	C2'-C1'	-9.25	1.43	1.53
26	LA	1704	C	C4'-C3'	9.25	1.63	1.53
26	LA	528	A	C8-N7	-9.24	1.25	1.31
26	LA	1003	G	N3-C4	-9.24	1.28	1.35
26	LA	424	G	C8-N7	-9.24	1.25	1.30
26	LA	2269	G	C6-N1	-9.24	1.33	1.39
26	LA	2681	C	C5-C6	-9.24	1.26	1.34
26	LA	2757	A	C6-N6	9.24	1.41	1.33
26	LA	1056	G	N7-C5	-9.23	1.33	1.39
26	LA	2259	U	C2-N3	-9.23	1.31	1.37
26	LA	2309	A	N7-C5	9.23	1.44	1.39
26	LA	2846	G	P-O5'	-9.23	1.50	1.59
26	LA	2531	A	N3-C4	-9.23	1.29	1.34
26	LA	494	G	C6-N1	-9.23	1.33	1.39
26	LA	1941	C	C3'-C2'	-9.23	1.42	1.52
26	LA	2447	G	N7-C5	-9.23	1.33	1.39
3	S1	13	A	N9-C4	9.23	1.43	1.37
26	LA	107	G	C5'-C4'	9.23	1.62	1.51
26	LA	662	G	C5-C4	-9.23	1.31	1.38
26	LA	1520	U	C4-C5	-9.23	1.35	1.43
2	SA	302	G	O3'-P	-9.22	1.50	1.61
26	LA	953	G	N9-C8	-9.22	1.31	1.37
26	LA	1655	A	C2'-C1'	-9.22	1.43	1.53
26	LA	2657	A	C2'-C1'	-9.22	1.43	1.53
26	LA	2812	G	N9-C4	9.22	1.45	1.38
26	LA	1815	A	N3-C4	-9.22	1.29	1.34
26	LA	2078	C	C4-C5	-9.22	1.35	1.43
2	SA	584	G	C5'-C4'	9.22	1.62	1.51
2	SA	295	C	C4-C5	-9.21	1.35	1.43
2	SA	1080	A	O3'-P	-9.21	1.50	1.61
26	LA	2221	G	C5-C4	-9.21	1.31	1.38
26	LA	2676	C	C2'-C1'	-9.21	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	399	G	C5-C4	-9.21	1.31	1.38
2	SA	1141	C	C5'-C4'	9.21	1.62	1.51
26	LA	2671	G	C5-C6	-9.21	1.33	1.42
26	LA	476	G	N3-C4	-9.21	1.29	1.35
2	SA	1306	A	N7-C5	-9.21	1.33	1.39
2	SA	1442	G	C6-N1	-9.21	1.33	1.39
26	LA	1928	A	N7-C5	-9.21	1.33	1.39
26	LA	2381	A	N9-C4	-9.21	1.32	1.37
26	LA	2614	A	C8-N7	-9.21	1.25	1.31
26	LA	2191	A	C3'-C2'	-9.20	1.42	1.52
2	SA	1405	G	N9-C8	-9.20	1.31	1.37
26	LA	373	U	N1-C2	-9.20	1.30	1.38
2	SA	581	G	C5-C6	-9.20	1.33	1.42
26	LA	1857	G	N3-C4	-9.20	1.29	1.35
26	LA	2096	C	C2'-C1'	-9.20	1.43	1.53
2	SA	187	G	C2'-C1'	9.20	1.63	1.53
26	LA	2550	G	C2'-C1'	-9.20	1.43	1.53
26	LA	350	G	N1-C2	-9.20	1.30	1.37
25	LB	101	A	N9-C8	-9.19	1.30	1.37
2	SA	17	U	P-O5'	-9.19	1.50	1.59
25	LB	19	C	N1-C6	9.19	1.42	1.37
26	LA	459	U	C2'-C1'	-9.19	1.43	1.53
26	LA	627	A	C8-N7	9.19	1.38	1.31
2	SA	627	G	N9-C8	9.19	1.44	1.37
26	LA	2504	U	C2'-C1'	9.19	1.63	1.53
2	SA	356	A	N9-C4	-9.19	1.32	1.37
2	SA	719	C	N1-C2	-9.19	1.30	1.40
26	LA	127	A	C5-C4	-9.19	1.32	1.38
26	LA	1873	G	N9-C8	-9.19	1.31	1.37
26	LA	2775	G	C2-N2	-9.19	1.25	1.34
2	SA	711	G	P-O5'	-9.18	1.50	1.59
26	LA	1899	A	N9-C8	-9.18	1.30	1.37
2	SA	949	A	N9-C4	-9.18	1.32	1.37
26	LA	624	C	N3-C4	-9.18	1.27	1.33
26	LA	1553	A	C5-C4	-9.18	1.32	1.38
26	LA	1975	G	C3'-C2'	-9.18	1.42	1.52
26	LA	2119	A	P-O5'	-9.18	1.50	1.59
26	LA	2458	G	C2'-C1'	-9.18	1.43	1.53
26	LA	2468	A	O3'-P	-9.18	1.50	1.61
26	LA	2740	A	N9-C4	-9.18	1.32	1.37
26	LA	2770	G	N7-C5	-9.18	1.33	1.39
2	SA	693	G	C8-N7	-9.18	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	916	G	C6-N1	-9.18	1.33	1.39
26	LA	16	C	C4-C5	-9.17	1.35	1.43
26	LA	2741	A	N7-C5	-9.17	1.33	1.39
26	LA	123	G	N9-C8	-9.17	1.31	1.37
26	LA	2550	G	C5-C6	-9.17	1.33	1.42
2	SA	1422	G	N7-C5	9.16	1.44	1.39
26	LA	1591	A	N9-C4	-9.16	1.32	1.37
26	LA	1316	U	O3'-P	-9.16	1.50	1.61
26	LA	2828	G	C8-N7	9.16	1.36	1.30
2	SA	588	G	C5-C4	-9.16	1.31	1.38
26	LA	1244	A	C8-N7	9.16	1.38	1.31
2	SA	1019	A	N7-C5	9.16	1.44	1.39
2	SA	1091	U	C2-N3	-9.16	1.31	1.37
26	LA	643	A	N3-C4	-9.16	1.29	1.34
26	LA	2319	G	C2-N2	-9.16	1.25	1.34
26	LA	190	A	O3'-P	-9.15	1.50	1.61
26	LA	231	A	N3-C4	-9.15	1.29	1.34
26	LA	1104	C	C4-C5	9.15	1.50	1.43
2	SA	383	A	C2'-C1'	-9.15	1.43	1.53
26	LA	399	U	C4-C5	-9.15	1.35	1.43
26	LA	525	U	N1-C2	-9.15	1.30	1.38
26	LA	737	C	C4'-C3'	-9.15	1.43	1.53
26	LA	1464	G	C6-O6	-9.15	1.16	1.24
26	LA	2243	U	O3'-P	-9.15	1.50	1.61
26	LA	917	A	C4'-O4'	-9.14	1.33	1.45
26	LA	2694	G	N7-C5	-9.14	1.33	1.39
26	LA	455	C	O3'-P	-9.13	1.50	1.61
26	LA	2331	G	O3'-P	-9.13	1.50	1.61
2	SA	572	A	N3-C4	9.13	1.40	1.34
2	SA	857	C	O3'-P	-9.13	1.50	1.61
3	S1	33	A	N7-C5	-9.13	1.33	1.39
26	LA	237	C	P-O5'	-9.13	1.50	1.59
26	LA	2127	G	N7-C5	-9.13	1.33	1.39
2	SA	182	A	N3-C4	-9.13	1.29	1.34
26	LA	398	C	C2'-C1'	-9.13	1.43	1.53
26	LA	1667	G	C6-N1	-9.12	1.33	1.39
26	LA	2154	A	C2-N3	9.13	1.41	1.33
2	SA	72	A	C6-N1	9.12	1.42	1.35
26	LA	917	A	C2-N3	9.12	1.41	1.33
2	SA	1080	A	N9-C4	-9.12	1.32	1.37
26	LA	2196	C	N1-C6	-9.12	1.31	1.37
26	LA	2407	A	C8-N7	-9.12	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2561	U	C2'-C1'	-9.12	1.43	1.53
2	SA	136	C	C4-C5	-9.12	1.35	1.43
2	SA	1508	A	C4'-O4'	-9.12	1.33	1.45
2	SA	944	G	C2-N3	9.12	1.40	1.32
26	LA	1533	C	C5'-C4'	9.12	1.62	1.51
2	SA	1174	G	C5-C4	9.12	1.44	1.38
2	SA	406	G	C2-N2	-9.11	1.25	1.34
2	SA	165	G	N9-C4	-9.11	1.30	1.38
2	SA	817	C	C5-C6	-9.11	1.27	1.34
26	LA	368	A	N9-C4	-9.11	1.32	1.37
26	LA	564	C	O3'-P	-9.11	1.50	1.61
2	SA	1173	U	P-O5'	-9.11	1.50	1.59
2	SA	1427	C	P-O5'	-9.11	1.50	1.59
26	LA	22	C	N1-C6	-9.11	1.31	1.37
26	LA	1523	U	C2-N3	-9.11	1.31	1.37
4	S2	37	U	O3'-P	-9.11	1.50	1.61
25	LB	119	A	N9-C8	9.11	1.45	1.37
26	LA	34	U	C2'-C1'	9.11	1.63	1.53
26	LA	155	A	N9-C8	-9.11	1.30	1.37
26	LA	538	A	C6-N1	-9.11	1.29	1.35
26	LA	619	G	N9-C4	-9.11	1.30	1.38
26	LA	1232	G	N3-C4	-9.11	1.29	1.35
26	LA	1933	G	N3-C4	-9.11	1.29	1.35
26	LA	2223	G	C2-N2	-9.11	1.25	1.34
26	LA	340	A	C4'-C3'	9.10	1.63	1.53
2	SA	204	G	C2-N2	-9.10	1.25	1.34
2	SA	954	G	N3-C4	-9.10	1.29	1.35
26	LA	402	A	C5-C4	-9.10	1.32	1.38
26	LA	1391	U	N3-C4	-9.10	1.30	1.38
26	LA	1698	A	C2'-C1'	-9.10	1.43	1.53
26	LA	2171	A	C3'-C2'	9.10	1.62	1.52
2	SA	1386	G	N7-C5	-9.10	1.33	1.39
26	LA	1879	C	C4-C5	-9.10	1.35	1.43
26	LA	15	G	C8-N7	9.10	1.36	1.30
26	LA	481	G	N3-C4	-9.10	1.29	1.35
2	SA	869	G	C8-N7	-9.10	1.25	1.30
26	LA	1843	C	O3'-P	-9.10	1.50	1.61
26	LA	2791	G	O4'-C1'	9.10	1.53	1.41
26	LA	1270	C	N3-C4	-9.09	1.27	1.33
26	LA	121	G	C6-N1	-9.09	1.33	1.39
26	LA	969	G	C8-N7	9.09	1.36	1.30
25	LB	86	G	C3'-C2'	9.09	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	158	U	N1-C6	9.09	1.46	1.38
26	LA	1637	A	C5'-C4'	9.09	1.62	1.51
26	LA	2698	U	N1-C6	-9.09	1.29	1.38
25	LB	84	G	N1-C2	-9.09	1.30	1.37
26	LA	1086	A	N9-C4	9.09	1.43	1.37
26	LA	2519	U	C2'-C1'	-9.09	1.43	1.53
26	LA	2362	C	P-O5'	-9.08	1.50	1.59
2	SA	279	A	N1-C2	-9.08	1.26	1.34
26	LA	950	G	N7-C5	-9.08	1.33	1.39
2	SA	351	G	C8-N7	9.08	1.36	1.30
26	LA	127	A	C2'-C1'	-9.08	1.43	1.53
2	SA	1078	U	C2-N3	-9.07	1.31	1.37
26	LA	398	C	P-O5'	-9.07	1.50	1.59
26	LA	519	U	N3-C4	-9.07	1.30	1.38
2	SA	570	G	N3-C4	-9.07	1.29	1.35
2	SA	643	C	O3'-P	-9.07	1.50	1.61
26	LA	656	G	N3-C4	-9.07	1.29	1.35
26	LA	2133	G	C3'-O3'	9.07	1.54	1.42
26	LA	1639	C	N1-C6	-9.07	1.31	1.37
26	LA	2434	A	C6-N6	9.07	1.41	1.33
26	LA	1136	G	C2'-C1'	-9.06	1.43	1.53
26	LA	2369	A	C6-N6	-9.06	1.26	1.33
26	LA	1859	U	P-O5'	-9.06	1.50	1.59
2	SA	696	A	C5'-C4'	9.06	1.62	1.51
26	LA	449	A	C2-N3	-9.06	1.25	1.33
26	LA	1613	G	N9-C4	-9.06	1.30	1.38
37	LC	164	ARG	CD-NE	9.06	1.61	1.46
2	SA	1523	G	C6-N1	-9.06	1.33	1.39
26	LA	860	U	C2-N3	-9.06	1.31	1.37
26	LA	2679	A	C4'-C3'	-9.05	1.43	1.53
26	LA	2118	U	C4-C5	9.05	1.51	1.43
26	LA	2271	G	N7-C5	-9.05	1.33	1.39
26	LA	2886	A	C2'-C1'	-9.05	1.43	1.53
26	LA	522	A	N3-C4	-9.05	1.29	1.34
26	LA	556	A	N3-C4	-9.05	1.29	1.34
26	LA	1445	G	N7-C5	-9.05	1.33	1.39
26	LA	1702	G	N9-C8	-9.05	1.31	1.37
2	SA	406	G	N7-C5	-9.05	1.33	1.39
2	SA	836	G	N9-C4	-9.05	1.30	1.38
26	LA	1965	C	C2-N3	9.04	1.43	1.35
26	LA	2627	G	C8-N7	9.04	1.36	1.30
26	LA	2691	C	P-O5'	-9.04	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1897	G	C5-C4	-9.04	1.32	1.38
26	LA	1598	A	C6-N6	-9.04	1.26	1.33
26	LA	2054	A	C8-N7	-9.04	1.25	1.31
26	LA	2657	A	C5-C4	-9.04	1.32	1.38
26	LA	1575	C	N1-C6	9.04	1.42	1.37
26	LA	2607	G	C2'-C1'	-9.04	1.43	1.53
2	SA	1220	G	N7-C5	-9.04	1.33	1.39
2	SA	563	A	C5'-C4'	9.03	1.62	1.51
26	LA	1626	A	N7-C5	-9.03	1.33	1.39
26	LA	2453	A	C5-C6	-9.03	1.32	1.41
25	LB	21	G	C2-N3	-9.03	1.25	1.32
2	SA	568	G	N3-C4	-9.03	1.29	1.35
2	SA	1219	A	O3'-P	-9.03	1.50	1.61
26	LA	148	U	N3-C4	-9.03	1.30	1.38
26	LA	1201	U	N1-C2	-9.03	1.30	1.38
26	LA	1829	A	N9-C4	-9.02	1.32	1.37
26	LA	2576	G	P-O5'	-9.02	1.50	1.59
2	SA	437	U	P-O5'	-9.02	1.50	1.59
26	LA	1803	A	N3-C4	-9.02	1.29	1.34
26	LA	1435	G	C6-N1	-9.02	1.33	1.39
26	LA	2077	A	C3'-C2'	-9.02	1.42	1.52
26	LA	277	G	N9-C8	9.01	1.44	1.37
26	LA	1304	A	N7-C5	-9.01	1.33	1.39
26	LA	1317	G	C2'-C1'	-9.01	1.43	1.53
26	LA	1620	G	C5'-C4'	9.01	1.62	1.51
26	LA	1693	U	P-O5'	-9.01	1.50	1.59
26	LA	2644	G	N3-C4	-9.01	1.29	1.35
2	SA	717	U	C2-N3	-9.01	1.31	1.37
26	LA	958	U	N3-C4	-9.01	1.30	1.38
2	SA	390	U	C2'-C1'	-9.01	1.43	1.53
2	SA	763	G	C2'-C1'	-9.01	1.43	1.53
26	LA	335	C	C4'-C3'	-9.01	1.43	1.53
2	SA	1284	C	C4-C5	9.01	1.50	1.43
26	LA	641	U	N3-C4	-9.01	1.30	1.38
2	SA	838	G	C2'-C1'	-9.00	1.43	1.53
2	SA	971	G	C5-C4	9.00	1.44	1.38
26	LA	136	G	N3-C4	-9.00	1.29	1.35
26	LA	2659	G	N1-C2	9.00	1.45	1.37
2	SA	309	A	C6-N6	9.00	1.41	1.33
2	SA	592	G	C2-N2	-9.00	1.25	1.34
2	SA	926	G	C6-N1	-9.00	1.33	1.39
26	LA	51	G	C6-N1	-9.00	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	42	A	C5'-C4'	9.00	1.62	1.51
26	LA	502	A	C6-N1	-9.00	1.29	1.35
26	LA	2670	A	C2'-C1'	-9.00	1.43	1.53
26	LA	2809	A	C5-C6	-9.00	1.32	1.41
26	LA	1956	U	P-O5'	-9.00	1.50	1.59
26	LA	555	G	O3'-P	-9.00	1.50	1.61
26	LA	1894	C	N3-C4	-8.99	1.27	1.33
26	LA	295	G	C5-C4	-8.99	1.32	1.38
2	SA	281	G	C5'-C4'	8.99	1.62	1.51
25	LB	36	C	C2'-C1'	-8.99	1.43	1.53
26	LA	794	A	C2'-C1'	-8.99	1.43	1.53
26	LA	2777	G	C2'-C1'	-8.99	1.43	1.53
26	LA	2321	U	N3-C4	-8.99	1.30	1.38
26	LA	2822	G	O3'-P	-8.99	1.50	1.61
2	SA	254	G	C8-N7	-8.98	1.25	1.30
2	SA	115	G	C5-C6	-8.98	1.33	1.42
2	SA	455	G	C3'-C2'	-8.98	1.42	1.52
2	SA	803	G	C5-C4	-8.98	1.32	1.38
2	SA	1451	U	C2-N3	8.98	1.44	1.37
26	LA	1699	G	C6-N1	8.98	1.45	1.39
26	LA	1828	G	C2'-C1'	-8.98	1.43	1.53
26	LA	2180	U	C2'-C1'	-8.98	1.43	1.53
26	LA	2495	G	C8-N7	8.98	1.36	1.30
26	LA	789	A	N9-C4	8.98	1.43	1.37
26	LA	1612	C	C4'-C3'	-8.98	1.43	1.53
26	LA	622	G	C6-N1	-8.97	1.33	1.39
26	LA	2449	U	C5'-C4'	8.97	1.62	1.51
2	SA	847	G	N9-C4	-8.97	1.30	1.38
26	LA	803	U	C4-C5	-8.97	1.35	1.43
26	LA	1500	G	C5'-C4'	8.97	1.62	1.51
26	LA	2867	G	C2-N3	8.97	1.40	1.32
2	SA	1456	A	N9-C4	-8.97	1.32	1.37
2	SA	994	A	N3-C4	-8.96	1.29	1.34
26	LA	1400	U	N1-C2	-8.96	1.30	1.38
26	LA	1743	G	N9-C4	-8.96	1.30	1.38
2	SA	1023	U	N1-C6	8.96	1.46	1.38
26	LA	2787	C	N1-C6	-8.96	1.31	1.37
2	SA	198	G	C8-N7	-8.96	1.25	1.30
26	LA	1768	C	N1-C6	-8.96	1.31	1.37
26	LA	2278	A	P-O5'	-8.96	1.50	1.59
2	SA	787	A	C4'-O4'	8.96	1.57	1.45
26	LA	742	A	N7-C5	-8.96	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2457	U	O4'-C1'	-8.96	1.30	1.41
2	SA	785	G	N7-C5	-8.95	1.33	1.39
26	LA	641	U	C5'-C4'	8.95	1.62	1.51
26	LA	1241	A	C8-N7	8.95	1.37	1.31
26	LA	2235	G	C6-N1	-8.95	1.33	1.39
26	LA	2472	G	C2-N3	8.95	1.40	1.32
26	LA	2664	G	N7-C5	-8.95	1.33	1.39
2	SA	295	C	N1-C6	-8.95	1.31	1.37
2	SA	163	C	C4'-C3'	8.95	1.62	1.53
26	LA	136	G	N9-C4	-8.95	1.30	1.38
26	LA	880	G	N7-C5	8.95	1.44	1.39
26	LA	1191	G	N9-C8	-8.95	1.31	1.37
26	LA	2241	A	C5-C6	-8.95	1.32	1.41
26	LA	2688	G	N7-C5	-8.95	1.33	1.39
2	SA	606	G	C8-N7	8.95	1.36	1.30
25	LB	83	G	P-O5'	-8.95	1.50	1.59
26	LA	2377	A	C5-C4	-8.95	1.32	1.38
26	LA	670	A	C5-C4	-8.94	1.32	1.38
26	LA	688	U	C5-C6	-8.94	1.26	1.34
26	LA	2784	U	C2-N3	-8.94	1.31	1.37
2	SA	122	G	C6-N1	-8.94	1.33	1.39
26	LA	72	U	P-O5'	-8.94	1.50	1.59
26	LA	798	G	N7-C5	-8.94	1.33	1.39
2	SA	1219	A	N9-C8	-8.94	1.30	1.37
2	SA	325	A	N9-C4	-8.94	1.32	1.37
2	SA	1500	A	N3-C4	-8.94	1.29	1.34
25	LB	47	C	O3'-P	-8.94	1.50	1.61
26	LA	21	A	N3-C4	8.94	1.40	1.34
2	SA	97	G	N3-C4	-8.94	1.29	1.35
26	LA	91	A	N7-C5	-8.94	1.33	1.39
26	LA	1976	U	O3'-P	-8.94	1.50	1.61
26	LA	2598	A	N9-C4	-8.94	1.32	1.37
26	LA	2566	A	C1'-N9	-8.93	1.34	1.46
4	S2	45	A	C2'-C1'	-8.93	1.43	1.53
26	LA	685	A	C2'-C1'	-8.93	1.43	1.53
26	LA	1155	A	N9-C8	-8.93	1.30	1.37
26	LA	2880	C	N1-C6	-8.93	1.31	1.37
2	SA	1082	A	N7-C5	-8.93	1.33	1.39
2	SA	1394	A	N9-C4	-8.93	1.32	1.37
26	LA	123	G	N7-C5	-8.93	1.33	1.39
26	LA	798	G	C4'-C3'	-8.93	1.43	1.53
26	LA	2578	G	N3-C4	-8.93	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	63	A	N9-C8	8.92	1.44	1.37
26	LA	953	G	N3-C4	-8.92	1.29	1.35
26	LA	2122	U	P-O5'	8.92	1.68	1.59
2	SA	38	G	C2'-C1'	-8.92	1.43	1.53
2	SA	381	C	C5-C6	8.92	1.41	1.34
2	SA	89	U	N1-C2	-8.92	1.30	1.38
2	SA	307	C	C5'-C4'	8.92	1.62	1.51
26	LA	1760	C	P-O5'	-8.92	1.50	1.59
2	SA	847	G	C6-N1	-8.92	1.33	1.39
26	LA	181	A	N7-C5	-8.92	1.33	1.39
26	LA	1122	G	C2-N3	-8.92	1.25	1.32
26	LA	1316	U	C2-N3	-8.92	1.31	1.37
26	LA	2663	G	C4'-C3'	8.92	1.62	1.53
26	LA	2743	U	P-O5'	-8.92	1.50	1.59
26	LA	2606	C	O3'-P	-8.92	1.50	1.61
2	SA	102	G	N1-C2	-8.91	1.30	1.37
2	SA	374	A	N7-C5	-8.91	1.33	1.39
2	SA	411	A	N7-C5	-8.91	1.33	1.39
26	LA	11	C	N1-C6	8.91	1.42	1.37
26	LA	159	G	N1-C2	-8.91	1.30	1.37
2	SA	91	U	C4-C5	8.91	1.51	1.43
2	SA	731	G	C2'-C1'	-8.91	1.43	1.53
26	LA	1016	G	O3'-P	-8.91	1.50	1.61
26	LA	275	C	C2'-C1'	-8.91	1.43	1.53
3	S1	37	G	C2-N3	8.91	1.39	1.32
26	LA	42	A	N7-C5	-8.91	1.33	1.39
26	LA	771	G	N3-C4	-8.91	1.29	1.35
2	SA	60	A	C8-N7	-8.90	1.25	1.31
2	SA	766	A	N9-C4	8.90	1.43	1.37
26	LA	1378	A	C2'-C1'	-8.90	1.43	1.53
26	LA	294	A	N9-C4	-8.90	1.32	1.37
26	LA	1311	G	C2-N2	-8.90	1.25	1.34
2	SA	120	A	C3'-C2'	8.90	1.62	1.52
26	LA	443	A	N9-C4	-8.90	1.32	1.37
2	SA	917	G	N3-C4	-8.90	1.29	1.35
2	SA	920	U	C5'-C4'	8.90	1.62	1.51
2	SA	1136	C	N1-C6	-8.90	1.31	1.37
26	LA	555	G	N9-C8	-8.90	1.31	1.37
2	SA	968	A	N1-C2	-8.89	1.26	1.34
25	LB	19	C	P-O5'	-8.89	1.50	1.59
25	LB	101	A	N1-C2	8.89	1.42	1.34
26	LA	953	G	P-O5'	-8.89	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1205	A	N9-C4	-8.89	1.32	1.37
26	LA	2333	A	O3'-P	-8.89	1.50	1.61
26	LA	2547	A	C8-N7	-8.89	1.25	1.31
26	LA	265	A	N9-C4	-8.89	1.32	1.37
26	LA	1240	U	C5'-C4'	8.89	1.62	1.51
26	LA	2138	G	C8-N7	8.89	1.36	1.30
2	SA	64	G	C2-N3	8.89	1.39	1.32
25	LB	9	G	C8-N7	8.88	1.36	1.30
26	LA	1482	G	C2'-C1'	-8.89	1.43	1.53
26	LA	1884	G	C6-N1	-8.88	1.33	1.39
26	LA	2560	A	N9-C8	-8.88	1.30	1.37
26	LA	2680	U	C4'-C3'	-8.88	1.43	1.53
26	LA	598	U	C2-N3	-8.88	1.31	1.37
2	SA	533	A	C6-N6	-8.88	1.26	1.33
26	LA	188	G	C2'-C1'	-8.88	1.43	1.53
26	LA	432	A	N9-C8	-8.88	1.30	1.37
2	SA	1063	C	C4-C5	8.88	1.50	1.43
26	LA	1291	C	O3'-P	-8.88	1.50	1.61
26	LA	1986	C	C4-C5	8.88	1.50	1.43
26	LA	2615	U	N1-C2	-8.88	1.30	1.38
2	SA	1529	G	N7-C5	-8.88	1.33	1.39
25	LB	94	A	N3-C4	-8.88	1.29	1.34
26	LA	1619	G	C4'-C3'	-8.88	1.43	1.53
26	LA	2341	G	C6-N1	-8.88	1.33	1.39
2	SA	929	G	N9-C8	8.87	1.44	1.37
2	SA	2	A	C4'-C3'	8.87	1.62	1.53
26	LA	1634	A	O3'-P	-8.87	1.50	1.61
26	LA	1888	G	N9-C8	-8.87	1.31	1.37
26	LA	2056	G	N9-C4	-8.87	1.30	1.38
26	LA	2447	G	N9-C8	-8.87	1.31	1.37
2	SA	185	U	O3'-P	-8.87	1.50	1.61
2	SA	1016	A	P-O5'	8.87	1.68	1.59
26	LA	1682	G	N3-C4	-8.87	1.29	1.35
2	SA	105	G	O3'-P	-8.87	1.50	1.61
2	SA	188	C	N3-C4	8.87	1.40	1.33
2	SA	731	G	C5-C4	-8.87	1.32	1.38
26	LA	2624	G	C6-N1	-8.87	1.33	1.39
26	LA	1842	G	O3'-P	-8.86	1.50	1.61
26	LA	2810	A	N9-C8	8.86	1.44	1.37
2	SA	785	G	N9-C8	-8.86	1.31	1.37
2	SA	1296	C	N3-C4	-8.86	1.27	1.33
26	LA	39	G	N3-C4	-8.86	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2345	G	C4'-O4'	8.86	1.57	1.45
26	LA	2875	C	C4-C5	-8.86	1.35	1.43
2	SA	331	G	C5-C6	-8.85	1.33	1.42
2	SA	438	U	P-O5'	-8.85	1.50	1.59
26	LA	364	C	N1-C6	8.85	1.42	1.37
26	LA	577	G	N7-C5	-8.85	1.33	1.39
26	LA	985	C	C4'-C3'	8.85	1.62	1.53
26	LA	1036	G	C3'-C2'	-8.85	1.43	1.52
26	LA	1646	C	C5'-C4'	8.85	1.61	1.51
2	SA	951	G	N3-C4	-8.85	1.29	1.35
26	LA	773	U	O3'-P	-8.85	1.50	1.61
26	LA	2359	C	P-O5'	-8.85	1.50	1.59
26	LA	2503	A	C5'-C4'	8.85	1.61	1.51
2	SA	1366	C	C4-C5	8.85	1.50	1.43
26	LA	311	A	N3-C4	-8.85	1.29	1.34
26	LA	1042	G	C8-N7	-8.85	1.25	1.30
26	LA	2850	A	N9-C4	-8.85	1.32	1.37
26	LA	2285	C	C2-N3	-8.85	1.28	1.35
26	LA	2746	U	C2-N3	-8.84	1.31	1.37
26	LA	870	U	C3'-C2'	-8.84	1.43	1.52
26	LA	2693	G	C2'-C1'	-8.84	1.43	1.53
2	SA	262	A	N3-C4	-8.84	1.29	1.34
2	SA	365	U	C4'-C3'	-8.84	1.43	1.53
26	LA	2817	U	N3-C4	-8.84	1.30	1.38
2	SA	1186	G	P-O5'	-8.84	1.50	1.59
4	S2	59	A	C3'-C2'	8.84	1.62	1.52
26	LA	183	C	C4-C5	-8.84	1.35	1.43
26	LA	1724	G	N9-C4	-8.84	1.30	1.38
2	SA	484	G	N7-C5	-8.83	1.33	1.39
26	LA	386	G	O3'-P	-8.83	1.50	1.61
2	SA	1102	A	C5-C4	8.83	1.45	1.38
25	LB	58	A	C8-N7	8.83	1.37	1.31
26	LA	2275	C	O3'-P	-8.83	1.50	1.61
26	LA	2407	A	C5-C4	-8.83	1.32	1.38
26	LA	163	C	N1-C6	8.83	1.42	1.37
26	LA	1286	A	C2'-C1'	-8.83	1.43	1.53
26	LA	267	C	N1-C6	8.83	1.42	1.37
26	LA	877	A	C4'-C3'	8.83	1.62	1.53
2	SA	183	C	N1-C6	8.82	1.42	1.37
26	LA	690	G	N7-C5	-8.82	1.33	1.39
26	LA	2141	G	O4'-C1'	-8.82	1.30	1.41
2	SA	1150	A	N7-C5	-8.82	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1548	A	O3'-P	-8.82	1.50	1.61
26	LA	760	G	N9-C8	-8.82	1.31	1.37
26	LA	2750	A	C2'-C1'	-8.82	1.43	1.53
26	LA	2885	G	N7-C5	-8.82	1.33	1.39
2	SA	780	A	P-O5'	-8.82	1.50	1.59
26	LA	2229	U	N3-C4	-8.82	1.30	1.38
26	LA	1122	G	C5'-C4'	8.81	1.61	1.51
2	SA	38	G	C4'-C3'	-8.81	1.43	1.53
2	SA	98	A	N9-C4	-8.81	1.32	1.37
2	SA	852	G	C5-C6	-8.81	1.33	1.42
26	LA	287	G	C2'-C1'	-8.81	1.43	1.53
2	SA	706	A	N9-C8	-8.81	1.30	1.37
26	LA	173	A	C6-N1	-8.81	1.29	1.35
2	SA	127	G	C8-N7	8.81	1.36	1.30
2	SA	1455	G	C8-N7	8.81	1.36	1.30
26	LA	1519	G	C2'-C1'	-8.81	1.43	1.53
26	LA	1842	G	C5-C4	-8.81	1.32	1.38
2	SA	419	C	O3'-P	-8.80	1.50	1.61
26	LA	186	G	N7-C5	-8.81	1.33	1.39
26	LA	215	G	P-O5'	8.81	1.68	1.59
2	SA	1315	U	O3'-P	-8.80	1.50	1.61
26	LA	1420	A	C4'-C3'	8.80	1.62	1.53
2	SA	955	U	N3-C4	-8.80	1.30	1.38
26	LA	377	G	N7-C5	-8.80	1.33	1.39
26	LA	1155	A	C5-C4	-8.80	1.32	1.38
2	SA	533	A	N3-C4	-8.80	1.29	1.34
2	SA	167	A	P-O5'	-8.80	1.50	1.59
2	SA	740	U	N1-C2	-8.80	1.30	1.38
26	LA	2191	A	C8-N7	-8.80	1.25	1.31
26	LA	2226	C	C4'-C3'	8.80	1.62	1.53
26	LA	1288	G	N9-C8	-8.80	1.31	1.37
26	LA	217	A	N7-C5	-8.79	1.33	1.39
26	LA	830	G	C1'-N9	-8.79	1.34	1.46
26	LA	997	G	N9-C4	8.79	1.45	1.38
26	LA	1546	G	C2-N3	8.79	1.39	1.32
26	LA	1427	A	N9-C8	-8.79	1.30	1.37
26	LA	934	U	N1-C2	-8.79	1.30	1.38
2	SA	876	C	C3'-C2'	8.79	1.62	1.52
26	LA	575	A	N9-C4	-8.79	1.32	1.37
26	LA	1859	U	C3'-C2'	-8.79	1.43	1.52
2	SA	1174	G	N3-C4	-8.78	1.29	1.35
25	LB	29	A	N3-C4	-8.78	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	939	G	O3'-P	-8.79	1.50	1.61
26	LA	1719	G	C2-N2	-8.78	1.25	1.34
26	LA	2883	A	O3'-P	-8.79	1.50	1.61
26	LA	422	A	O3'-P	-8.78	1.50	1.61
2	SA	1493	A	C3'-C2'	8.78	1.62	1.52
2	SA	1458	G	N9-C8	8.78	1.44	1.37
26	LA	705	A	C5'-C4'	8.78	1.61	1.51
26	LA	1211	C	C2'-C1'	-8.78	1.43	1.53
26	LA	2798	U	C4-O4	-8.78	1.16	1.23
26	LA	2667	C	P-O5'	-8.78	1.50	1.59
2	SA	1092	A	C2'-C1'	-8.78	1.43	1.53
26	LA	2401	U	C5'-C4'	8.78	1.61	1.51
26	LA	15	G	C2-N3	-8.78	1.25	1.32
26	LA	1516	G	C8-N7	8.78	1.36	1.30
26	LA	2662	A	C6-N1	8.78	1.41	1.35
25	LB	51	G	N9-C8	-8.77	1.31	1.37
26	LA	689	A	C3'-C2'	-8.77	1.43	1.52
26	LA	2348	U	C2-N3	-8.77	1.31	1.37
2	SA	861	G	C5-C4	-8.77	1.32	1.38
2	SA	953	G	C5-C4	-8.77	1.32	1.38
26	LA	406	G	N3-C4	-8.77	1.29	1.35
26	LA	1510	G	N7-C5	-8.77	1.33	1.39
26	LA	2560	A	N9-C4	-8.77	1.32	1.37
26	LA	2600	A	C5-C4	-8.77	1.32	1.38
26	LA	2719	G	P-O5'	-8.77	1.50	1.59
26	LA	2018	G	C2-N2	-8.77	1.25	1.34
26	LA	2414	G	C2'-C1'	-8.77	1.43	1.53
2	SA	1108	G	N9-C8	8.76	1.44	1.37
26	LA	361	G	C5-C4	8.76	1.44	1.38
2	SA	609	A	O3'-P	-8.76	1.50	1.61
26	LA	2090	A	N3-C4	-8.76	1.29	1.34
2	SA	1433	A	P-O5'	-8.76	1.50	1.59
26	LA	2311	A	N7-C5	-8.76	1.33	1.39
26	LA	1317	G	N3-C4	-8.76	1.29	1.35
26	LA	2246	G	N1-C2	-8.76	1.30	1.37
26	LA	1831	G	N3-C4	-8.76	1.29	1.35
26	LA	2269	G	N3-C4	8.76	1.41	1.35
2	SA	237	G	C6-N1	8.75	1.45	1.39
26	LA	393	C	C2-N3	-8.75	1.28	1.35
26	LA	1967	C	C5'-C4'	8.75	1.61	1.51
26	LA	1514	G	P-O5'	-8.75	1.50	1.59
2	SA	1006	G	N3-C4	-8.75	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1488	G	N7-C5	-8.75	1.33	1.39
26	LA	819	A	C5-C4	-8.75	1.32	1.38
26	LA	2047	C	N1-C6	-8.75	1.31	1.37
26	LA	2140	G	N7-C5	-8.75	1.33	1.39
2	SA	1079	G	C5-C4	-8.75	1.32	1.38
26	LA	146	A	C5-C4	8.75	1.44	1.38
26	LA	1803	A	N9-C8	-8.75	1.30	1.37
2	SA	74	A	P-O5'	-8.75	1.51	1.59
26	LA	2004	G	N7-C5	-8.74	1.34	1.39
26	LA	2838	G	N1-C2	-8.74	1.30	1.37
2	SA	43	C	O3'-P	-8.74	1.50	1.61
2	SA	384	G	N7-C5	-8.74	1.34	1.39
26	LA	127	A	C4'-C3'	-8.74	1.43	1.53
2	SA	85	U	C5'-C4'	8.74	1.61	1.51
2	SA	346	G	N9-C8	-8.74	1.31	1.37
2	SA	990	C	C2'-C1'	-8.74	1.43	1.53
2	SA	1188	A	N9-C4	-8.74	1.32	1.37
2	SA	1493	A	N3-C4	8.74	1.40	1.34
26	LA	1701	A	N9-C4	-8.74	1.32	1.37
2	SA	62	U	C2-N3	-8.74	1.31	1.37
2	SA	451	A	C5-C4	-8.74	1.32	1.38
2	SA	656	G	N3-C4	-8.74	1.29	1.35
26	LA	1508	A	C4'-C3'	8.74	1.62	1.53
26	LA	2181	U	C4-C5	8.74	1.51	1.43
26	LA	113	U	P-O5'	8.73	1.68	1.59
26	LA	1828	G	C6-N1	-8.73	1.33	1.39
26	LA	2456	C	C3'-C2'	-8.73	1.43	1.52
26	LA	2723	C	C3'-C2'	-8.73	1.43	1.52
3	S1	31	U	C4'-O4'	8.73	1.56	1.45
26	LA	1928	A	N9-C8	-8.73	1.30	1.37
2	SA	996	A	C6-N1	-8.73	1.29	1.35
26	LA	564	C	N1-C6	8.73	1.42	1.37
26	LA	1882	U	C5-C6	-8.73	1.26	1.34
26	LA	2279	G	N9-C4	-8.73	1.30	1.38
2	SA	433	G	P-O5'	-8.73	1.51	1.59
2	SA	568	G	C2-N2	-8.73	1.25	1.34
2	SA	622	A	C4'-C3'	-8.73	1.43	1.53
4	S2	32	G	C8-N7	8.73	1.36	1.30
26	LA	340	A	C2'-C1'	-8.73	1.43	1.53
2	SA	400	C	C5'-C4'	8.72	1.61	1.51
26	LA	70	G	N9-C4	8.72	1.45	1.38
26	LA	1735	A	N9-C4	-8.72	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2062	A	C5-C6	8.72	1.49	1.41
2	SA	1022	A	C2'-C1'	-8.72	1.43	1.53
26	LA	449	A	P-O5'	-8.72	1.51	1.59
2	SA	1448	C	N1-C6	8.72	1.42	1.37
26	LA	651	G	C2-N2	-8.72	1.25	1.34
26	LA	1627	G	C6-O6	-8.72	1.16	1.24
26	LA	1530	G	N7-C5	-8.72	1.34	1.39
3	S1	26	U	C2-N3	-8.72	1.31	1.37
26	LA	1362	C	C2-N3	-8.72	1.28	1.35
26	LA	2405	G	C3'-C2'	8.72	1.62	1.52
2	SA	1128	C	C5'-C4'	8.71	1.61	1.51
26	LA	786	C	N1-C6	-8.71	1.31	1.37
26	LA	1187	G	N3-C4	-8.72	1.29	1.35
26	LA	2634	A	N9-C8	-8.71	1.30	1.37
2	SA	1487	G	C4'-C3'	-8.71	1.43	1.53
2	SA	1504	G	N7-C5	-8.71	1.34	1.39
26	LA	1378	A	N7-C5	-8.71	1.34	1.39
26	LA	563	A	P-O5'	-8.71	1.51	1.59
26	LA	2128	G	O3'-P	-8.71	1.50	1.61
2	SA	296	U	P-O5'	-8.71	1.51	1.59
26	LA	776	G	C5-C4	-8.71	1.32	1.38
26	LA	1097	U	C3'-C2'	8.71	1.62	1.52
26	LA	2192	U	O3'-P	-8.71	1.50	1.61
4	S2	44	A	N9-C4	-8.70	1.32	1.37
2	SA	240	G	C8-N7	-8.70	1.25	1.30
2	SA	1482	G	N3-C4	-8.70	1.29	1.35
26	LA	1820	U	P-O5'	-8.70	1.51	1.59
2	SA	1343	G	C2-N3	8.70	1.39	1.32
26	LA	1838	C	C2'-C1'	-8.70	1.43	1.53
2	SA	108	G	C6-N1	-8.70	1.33	1.39
26	LA	1692	U	P-O5'	-8.70	1.51	1.59
26	LA	2021	C	C2-N3	8.70	1.42	1.35
26	LA	2107	G	C5'-C4'	8.70	1.61	1.51
26	LA	2776	A	P-O5'	-8.70	1.51	1.59
26	LA	668	A	C6-N1	8.69	1.41	1.35
26	LA	989	G	O3'-P	-8.69	1.50	1.61
26	LA	1164	C	C3'-C2'	-8.69	1.43	1.52
2	SA	17	U	N1-C2	-8.69	1.30	1.38
2	SA	1333	A	N9-C4	-8.69	1.32	1.37
26	LA	425	G	N7-C5	-8.69	1.34	1.39
26	LA	1715	G	C5'-C4'	8.69	1.61	1.51
26	LA	1717	A	C8-N7	-8.69	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2061	G	N7-C5	-8.69	1.34	1.39
26	LA	2821	A	N9-C4	-8.69	1.32	1.37
2	SA	785	G	C5'-C4'	8.69	1.61	1.51
26	LA	684	G	N7-C5	-8.69	1.34	1.39
25	LB	2	G	C4'-C3'	8.69	1.62	1.53
26	LA	784	G	P-O5'	-8.69	1.51	1.59
26	LA	795	C	O3'-P	-8.69	1.50	1.61
26	LA	1561	C	C4'-C3'	-8.69	1.43	1.53
26	LA	2587	A	C3'-C2'	-8.69	1.43	1.52
25	LB	86	G	N7-C5	-8.69	1.34	1.39
26	LA	192	C	C4-C5	-8.69	1.36	1.43
26	LA	1665	A	N7-C5	-8.69	1.34	1.39
2	SA	1019	A	N3-C4	-8.68	1.29	1.34
2	SA	675	A	C2'-C1'	-8.68	1.43	1.53
26	LA	2097	A	C2-N3	-8.68	1.25	1.33
26	LA	2815	C	C2-N3	-8.68	1.28	1.35
26	LA	2900	A	N3-C4	-8.68	1.29	1.34
26	LA	978	G	C5-C6	-8.68	1.33	1.42
2	SA	720	C	O3'-P	-8.67	1.50	1.61
26	LA	924	G	P-O5'	-8.67	1.51	1.59
26	LA	197	A	C4'-C3'	-8.67	1.43	1.53
26	LA	808	G	N9-C4	-8.67	1.31	1.38
2	SA	1312	G	C8-N7	8.67	1.36	1.30
25	LB	74	U	O3'-P	-8.67	1.50	1.61
26	LA	500	G	C8-N7	8.67	1.36	1.30
26	LA	1906	G	C6-N1	-8.67	1.33	1.39
2	SA	48	C	C4'-C3'	8.67	1.62	1.53
2	SA	368	U	O3'-P	-8.67	1.50	1.61
26	LA	664	G	O3'-P	-8.67	1.50	1.61
2	SA	938	A	C6-N6	8.67	1.40	1.33
26	LA	1186	G	C8-N7	8.67	1.36	1.30
26	LA	1839	G	C8-N7	-8.67	1.25	1.30
2	SA	1483	A	N9-C4	-8.66	1.32	1.37
26	LA	2210	U	N1-C2	-8.66	1.30	1.38
2	SA	573	A	C2'-C1'	-8.66	1.43	1.53
2	SA	1288	A	C5'-C4'	8.66	1.61	1.51
26	LA	1208	C	C2-N3	-8.66	1.28	1.35
26	LA	2614	A	C5-C4	-8.66	1.32	1.38
2	SA	227	G	N3-C4	-8.66	1.29	1.35
2	SA	1213	A	C5-C4	8.66	1.44	1.38
26	LA	275	C	N3-C4	8.66	1.40	1.33
26	LA	1970	A	N9-C4	-8.66	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	99	C	P-O5'	-8.65	1.51	1.59
26	LA	1027	A	C8-N7	8.65	1.37	1.31
26	LA	2501	C	C4-N4	-8.65	1.26	1.33
26	LA	2566	A	P-O5'	8.65	1.68	1.59
2	SA	906	A	C6-N1	8.65	1.41	1.35
2	SA	1244	G	C6-N1	-8.65	1.33	1.39
26	LA	1355	G	N7-C5	-8.65	1.34	1.39
26	LA	1109	C	N1-C6	-8.65	1.31	1.37
26	LA	521	U	C2-N3	-8.65	1.31	1.37
26	LA	1396	U	O3'-P	-8.65	1.50	1.61
26	LA	1640	A	C2'-C1'	-8.65	1.43	1.53
26	LA	2463	C	C2-N3	-8.65	1.28	1.35
2	SA	369	G	N7-C5	-8.64	1.34	1.39
26	LA	1954	G	C5'-C4'	8.64	1.61	1.51
2	SA	163	C	C5'-C4'	8.64	1.61	1.51
25	LB	56	G	C5'-C4'	8.64	1.61	1.51
26	LA	2670	A	N3-C4	-8.64	1.29	1.34
26	LA	2048	G	C3'-C2'	-8.64	1.43	1.52
2	SA	830	G	N9-C8	-8.64	1.31	1.37
2	SA	1046	A	C2'-C1'	-8.64	1.43	1.53
4	S2	31	G	C2-N2	-8.64	1.25	1.34
26	LA	593	U	P-O5'	-8.64	1.51	1.59
26	LA	1750	G	P-O5'	8.64	1.68	1.59
26	LA	1022	G	C5-C6	8.64	1.50	1.42
26	LA	1898	U	O3'-P	-8.64	1.50	1.61
26	LA	1949	G	C6-N1	-8.64	1.33	1.39
2	SA	1164	G	C5'-C4'	8.63	1.61	1.51
26	LA	912	C	N1-C6	-8.63	1.31	1.37
26	LA	2011	U	C2-N3	-8.63	1.31	1.37
2	SA	539	A	N9-C4	-8.63	1.32	1.37
26	LA	174	U	N1-C2	-8.63	1.30	1.38
26	LA	649	G	N3-C4	-8.63	1.29	1.35
26	LA	1116	G	N1-C2	-8.63	1.30	1.37
26	LA	1754	A	N3-C4	-8.63	1.29	1.34
26	LA	1776	G	N7-C5	-8.63	1.34	1.39
26	LA	2448	A	O4'-C1'	-8.63	1.30	1.41
2	SA	1030	U	P-O5'	8.63	1.68	1.59
2	SA	1247	U	N3-C4	-8.63	1.30	1.38
26	LA	731	C	C2-N3	8.63	1.42	1.35
26	LA	1227	G	C8-N7	-8.63	1.25	1.30
26	LA	1264	A	N7-C5	-8.63	1.34	1.39
26	LA	643	A	C2-N3	8.63	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1627	G	C2-N2	-8.63	1.25	1.34
26	LA	2298	A	C2'-C1'	-8.63	1.43	1.53
26	LA	2654	A	N7-C5	-8.63	1.34	1.39
2	SA	406	G	O3'-P	-8.63	1.50	1.61
26	LA	1038	G	N9-C8	-8.62	1.31	1.37
26	LA	1946	U	N1-C6	-8.62	1.30	1.38
25	LB	31	C	N1-C6	-8.62	1.31	1.37
2	SA	272	C	C2'-C1'	-8.62	1.43	1.53
2	SA	989	U	C4-C5	-8.62	1.35	1.43
26	LA	1252	G	C8-N7	-8.62	1.25	1.30
26	LA	1288	G	C2-N2	-8.62	1.25	1.34
26	LA	1831	G	C2-N2	-8.62	1.25	1.34
26	LA	2430	A	O3'-P	-8.62	1.50	1.61
2	SA	556	C	N1-C2	-8.62	1.31	1.40
2	SA	326	G	N3-C4	-8.62	1.29	1.35
2	SA	878	A	C2'-C1'	-8.62	1.43	1.53
25	LB	73	A	C4'-O4'	-8.62	1.34	1.45
2	SA	364	A	O3'-P	-8.61	1.50	1.61
26	LA	372	G	N9-C4	-8.62	1.31	1.38
26	LA	1239	G	N9-C8	-8.61	1.31	1.37
26	LA	1776	G	N1-C2	-8.61	1.30	1.37
25	LB	60	C	C5'-C4'	8.61	1.61	1.51
2	SA	22	G	C5-C4	-8.61	1.32	1.38
2	SA	1518	A	C2-N3	8.61	1.41	1.33
2	SA	218	U	C3'-C2'	-8.61	1.43	1.52
2	SA	1382	C	C3'-C2'	8.61	1.62	1.52
2	SA	1535	C	C3'-C2'	8.61	1.62	1.52
26	LA	214	G	N7-C5	-8.60	1.34	1.39
26	LA	523	C	C2-N3	-8.60	1.28	1.35
26	LA	1327	A	C6-N1	-8.60	1.29	1.35
26	LA	2331	G	N7-C5	-8.60	1.34	1.39
2	SA	880	C	P-O5'	-8.60	1.51	1.59
26	LA	429	A	O3'-P	-8.60	1.50	1.61
26	LA	2052	A	C8-N7	-8.60	1.25	1.31
26	LA	1879	C	N1-C6	-8.60	1.31	1.37
26	LA	2495	G	P-O5'	-8.60	1.51	1.59
26	LA	2523	G	O3'-P	-8.60	1.50	1.61
26	LA	2590	A	C4'-O4'	-8.60	1.34	1.45
26	LA	1410	G	C2'-C1'	8.60	1.62	1.53
26	LA	2685	G	O3'-P	-8.60	1.50	1.61
26	LA	2776	A	C5-C4	-8.60	1.32	1.38
26	LA	458	G	C2-N2	-8.59	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	777	G	N7-C5	-8.59	1.34	1.39
26	LA	1225	G	C2-N2	-8.59	1.25	1.34
26	LA	2572	A	N7-C5	-8.59	1.34	1.39
2	SA	204	G	C4'-C3'	8.59	1.62	1.53
2	SA	921	U	C3'-C2'	8.59	1.62	1.52
26	LA	976	G	N7-C5	-8.59	1.34	1.39
26	LA	1160	G	O3'-P	-8.59	1.50	1.61
26	LA	1236	G	C8-N7	8.59	1.36	1.30
26	LA	2052	A	C2'-C1'	-8.59	1.43	1.53
26	LA	2480	C	P-O5'	-8.59	1.51	1.59
26	LA	1603	A	C8-N7	8.59	1.37	1.31
3	S1	19	A	N7-C5	8.59	1.44	1.39
26	LA	263	G	P-O5'	-8.59	1.51	1.59
26	LA	936	A	N7-C5	-8.59	1.34	1.39
26	LA	1253	A	C6-N1	-8.59	1.29	1.35
26	LA	2484	G	P-O5'	-8.59	1.51	1.59
26	LA	784	G	C5'-C4'	8.59	1.61	1.51
26	LA	2854	G	C2-N2	-8.59	1.25	1.34
26	LA	1126	A	N9-C4	-8.58	1.32	1.37
26	LA	2249	U	C2'-C1'	-8.58	1.44	1.53
26	LA	60	G	C2'-C1'	-8.58	1.44	1.53
2	SA	1145	A	O3'-P	-8.58	1.50	1.61
26	LA	1937	A	N9-C4	-8.58	1.32	1.37
26	LA	2020	A	O3'-P	-8.58	1.50	1.61
2	SA	1051	C	C2'-C1'	-8.58	1.44	1.53
26	LA	500	G	N1-C2	-8.58	1.30	1.37
2	SA	538	G	C2'-C1'	-8.58	1.44	1.53
26	LA	1181	U	C5-C6	8.58	1.41	1.34
26	LA	754	U	O3'-P	-8.57	1.50	1.61
4	S2	26	C	N3-C4	-8.57	1.27	1.33
4	S2	46	G	C4'-C3'	-8.57	1.43	1.53
26	LA	1196	C	C4-N4	-8.57	1.26	1.33
26	LA	1150	C	N3-C4	-8.57	1.27	1.33
2	SA	199	A	P-O5'	-8.57	1.51	1.59
2	SA	1203	C	N1-C6	8.57	1.42	1.37
26	LA	2247	A	P-O5'	-8.57	1.51	1.59
2	SA	1347	G	C5'-C4'	8.57	1.61	1.51
2	SA	1364	U	C2'-C1'	-8.57	1.44	1.53
26	LA	2885	G	N9-C8	-8.57	1.31	1.37
26	LA	484	C	N1-C6	8.57	1.42	1.37
26	LA	1872	A	C6-N6	8.57	1.40	1.33
26	LA	2184	A	C8-N7	-8.57	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1472	U	C2'-C1'	-8.56	1.44	1.53
26	LA	2420	C	C5-C6	-8.56	1.27	1.34
2	SA	159	G	C6-N1	8.56	1.45	1.39
26	LA	625	G	C6-N1	8.56	1.45	1.39
26	LA	1984	G	N7-C5	-8.56	1.34	1.39
26	LA	1909	C	N3-C4	8.56	1.40	1.33
2	SA	191	G	N7-C5	-8.56	1.34	1.39
2	SA	820	U	C4-C5	-8.56	1.35	1.43
2	SA	964	A	C5-C4	-8.56	1.32	1.38
2	SA	1503	A	N3-C4	-8.56	1.29	1.34
26	LA	53	A	C5-C6	-8.56	1.33	1.41
26	LA	422	A	N7-C5	-8.56	1.34	1.39
26	LA	1220	G	C5-C6	-8.56	1.33	1.42
2	SA	635	A	C6-N1	-8.55	1.29	1.35
26	LA	237	C	N1-C2	-8.55	1.31	1.40
26	LA	1025	G	C6-N1	-8.55	1.33	1.39
26	LA	2837	A	O3'-P	-8.55	1.50	1.61
26	LA	1510	G	C3'-C2'	-8.55	1.43	1.52
26	LA	1647	U	C2-N3	8.55	1.43	1.37
26	LA	2717	C	C5-C6	8.55	1.41	1.34
26	LA	126	A	O4'-C1'	8.55	1.52	1.41
26	LA	2664	G	N9-C8	-8.55	1.31	1.37
2	SA	515	G	N3-C4	-8.55	1.29	1.35
26	LA	1312	U	C2-N3	-8.55	1.31	1.37
26	LA	1286	A	C4'-C3'	8.55	1.62	1.53
26	LA	1491	G	C6-N1	-8.55	1.33	1.39
26	LA	1632	A	N9-C4	-8.55	1.32	1.37
26	LA	1882	U	N1-C2	8.55	1.46	1.38
2	SA	705	G	C8-N7	-8.54	1.25	1.30
2	SA	721	G	N7-C5	-8.54	1.34	1.39
2	SA	995	C	P-O5'	-8.54	1.51	1.59
2	SA	1094	G	C5-C4	8.54	1.44	1.38
26	LA	787	C	C2-N3	8.54	1.42	1.35
26	LA	802	A	N7-C5	-8.54	1.34	1.39
26	LA	890	C	C5'-C4'	8.54	1.61	1.51
26	LA	1376	C	N3-C4	8.54	1.40	1.33
26	LA	1842	G	N9-C4	-8.54	1.31	1.38
2	SA	1332	A	N7-C5	-8.54	1.34	1.39
26	LA	2259	U	C4-C5	-8.54	1.35	1.43
2	SA	980	C	O3'-P	-8.54	1.50	1.61
2	SA	1063	C	C2'-C1'	-8.53	1.44	1.53
4	S2	47	A	C5'-C4'	8.54	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2229	U	P-O5'	-8.54	1.51	1.59
26	LA	257	C	N1-C6	8.53	1.42	1.37
26	LA	302	C	P-O5'	-8.53	1.51	1.59
26	LA	1904	G	C5-C4	-8.54	1.32	1.38
26	LA	2326	C	C4-N4	-8.54	1.26	1.33
2	SA	557	G	C2-N2	-8.53	1.26	1.34
26	LA	1496	A	C5'-C4'	8.53	1.61	1.51
26	LA	1538	G	C6-N1	-8.53	1.33	1.39
26	LA	2831	G	C2-N3	-8.53	1.25	1.32
26	LA	2499	C	C4-N4	8.53	1.41	1.33
26	LA	176	A	N9-C4	-8.53	1.32	1.37
26	LA	280	U	C5'-C4'	8.53	1.61	1.51
26	LA	2308	G	C5'-C4'	8.53	1.61	1.51
26	LA	565	C	C2-N3	-8.53	1.28	1.35
26	LA	783	A	N7-C5	-8.53	1.34	1.39
26	LA	1420	A	N9-C8	8.53	1.44	1.37
26	LA	1574	C	C2-N3	-8.53	1.28	1.35
2	SA	266	G	N3-C4	-8.53	1.29	1.35
4	S2	42	C	C2-N3	-8.53	1.28	1.35
26	LA	856	G	N9-C8	-8.53	1.31	1.37
2	SA	630	A	N9-C4	-8.52	1.32	1.37
2	SA	778	G	N9-C8	-8.52	1.31	1.37
2	SA	1251	A	C5-C4	-8.52	1.32	1.38
3	S1	31	U	N3-C4	-8.52	1.30	1.38
26	LA	56	A	O3'-P	-8.52	1.50	1.61
26	LA	579	G	C6-N1	-8.52	1.33	1.39
2	SA	31	G	C2'-C1'	-8.52	1.44	1.53
2	SA	128	G	C8-N7	8.52	1.36	1.30
2	SA	1525	G	C8-N7	8.52	1.36	1.30
26	LA	1223	G	C2-N3	-8.52	1.25	1.32
26	LA	1614	A	C5-C4	-8.52	1.32	1.38
26	LA	1397	U	C3'-C2'	-8.52	1.43	1.52
2	SA	824	G	C2-N3	-8.52	1.25	1.32
2	SA	1165	U	C5'-C4'	8.52	1.61	1.51
4	S2	9	G	C4'-C3'	8.52	1.62	1.53
26	LA	275	C	C2-N3	-8.52	1.28	1.35
26	LA	1320	C	P-O5'	-8.51	1.51	1.59
26	LA	2385	C	C4'-C3'	8.51	1.62	1.53
26	LA	2405	G	C6-N1	-8.51	1.33	1.39
2	SA	155	A	C6-N1	8.51	1.41	1.35
2	SA	862	C	C3'-C2'	8.51	1.62	1.52
26	LA	342	A	C3'-C2'	-8.51	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	354	A	C5-C4	8.51	1.44	1.38
26	LA	1561	C	C4-C5	-8.51	1.36	1.43
2	SA	406	G	C8-N7	8.51	1.36	1.30
26	LA	2516	A	C5'-C4'	8.51	1.61	1.51
26	LA	2582	G	N1-C2	-8.51	1.30	1.37
2	SA	521	G	C8-N7	8.51	1.36	1.30
26	LA	2059	A	C2-N3	-8.51	1.25	1.33
2	SA	82	G	C5'-C4'	8.50	1.61	1.51
26	LA	2101	A	N7-C5	8.50	1.44	1.39
2	SA	911	U	C4-C5	8.50	1.51	1.43
2	SA	1340	A	N3-C4	-8.50	1.29	1.34
2	SA	641	U	C3'-C2'	-8.50	1.43	1.52
26	LA	167	A	C3'-C2'	-8.50	1.43	1.52
26	LA	956	G	C6-N1	-8.50	1.33	1.39
26	LA	1362	C	N1-C6	8.50	1.42	1.37
26	LA	2173	A	C5-C4	8.50	1.44	1.38
2	SA	230	G	C2'-C1'	-8.49	1.44	1.53
2	SA	838	G	O3'-P	-8.49	1.50	1.61
2	SA	1134	G	C2'-C1'	-8.49	1.44	1.53
2	SA	1246	A	N3-C4	-8.49	1.29	1.34
26	LA	589	U	O3'-P	-8.49	1.50	1.61
26	LA	1246	A	C2'-C1'	-8.49	1.44	1.53
26	LA	1222	U	P-O5'	-8.49	1.51	1.59
2	SA	1207	G	C5-C6	8.49	1.50	1.42
26	LA	1913	A	C5-C4	8.49	1.44	1.38
2	SA	305	G	C8-N7	-8.49	1.25	1.30
2	SA	473	U	N3-C4	-8.49	1.30	1.38
26	LA	609	A	C6-N1	8.49	1.41	1.35
26	LA	805	G	N7-C5	-8.49	1.34	1.39
2	SA	1203	C	C5'-C4'	-8.48	1.41	1.51
2	SA	1422	G	N9-C4	8.48	1.44	1.38
26	LA	647	G	N9-C4	-8.48	1.31	1.38
2	SA	1418	A	N7-C5	-8.48	1.34	1.39
4	S2	5	G	P-O5'	-8.48	1.51	1.59
26	LA	1234	U	N3-C4	8.48	1.46	1.38
26	LA	1477	A	C6-N1	-8.48	1.29	1.35
2	SA	740	U	C3'-C2'	-8.48	1.43	1.52
2	SA	1519	A	C5-C4	-8.48	1.32	1.38
26	LA	196	A	C6-N6	-8.48	1.27	1.33
26	LA	496	G	N3-C4	-8.48	1.29	1.35
26	LA	1668	A	N7-C5	-8.48	1.34	1.39
26	LA	2036	C	C4-N4	-8.48	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2393	U	C2'-C1'	-8.48	1.44	1.53
25	LB	86	G	C6-N1	-8.48	1.33	1.39
26	LA	861	A	C6-N6	-8.48	1.27	1.33
26	LA	1112	G	N3-C4	-8.48	1.29	1.35
26	LA	1854	A	C6-N1	-8.48	1.29	1.35
26	LA	2256	G	N3-C4	-8.48	1.29	1.35
26	LA	1651	G	P-O5'	-8.48	1.51	1.59
26	LA	1371	G	C6-N1	-8.47	1.33	1.39
2	SA	683	G	C5-C4	-8.47	1.32	1.38
26	LA	2011	U	P-O5'	-8.47	1.51	1.59
26	LA	453	A	C2'-C1'	-8.47	1.44	1.53
26	LA	2730	C	C4-N4	-8.47	1.26	1.33
2	SA	1416	G	N3-C4	-8.47	1.29	1.35
26	LA	245	G	N9-C8	-8.47	1.31	1.37
26	LA	1363	C	C1'-N1	-8.47	1.34	1.46
26	LA	1074	G	C1'-N9	-8.47	1.34	1.46
26	LA	1690	A	N7-C5	-8.47	1.34	1.39
2	SA	939	G	N7-C5	-8.46	1.34	1.39
26	LA	9	G	P-O5'	-8.46	1.51	1.59
26	LA	844	A	O3'-P	-8.46	1.50	1.61
26	LA	2030	U	N3-C4	-8.47	1.30	1.38
26	LA	997	G	C3'-C2'	-8.46	1.43	1.52
26	LA	2355	G	C2'-C1'	-8.46	1.44	1.53
26	LA	2867	G	N7-C5	-8.46	1.34	1.39
25	LB	58	A	C6-N6	8.46	1.40	1.33
26	LA	1202	G	C6-N1	-8.46	1.33	1.39
26	LA	1244	A	N3-C4	-8.46	1.29	1.34
26	LA	1865	U	C2-N3	-8.46	1.31	1.37
2	SA	813	U	C4'-O4'	-8.46	1.34	1.45
26	LA	1057	A	C8-N7	-8.46	1.25	1.31
26	LA	1360	G	N1-C2	-8.46	1.30	1.37
26	LA	746	U	N1-C6	-8.46	1.30	1.38
2	SA	327	A	P-O5'	-8.46	1.51	1.59
26	LA	782	A	O3'-P	-8.46	1.51	1.61
26	LA	1266	G	N3-C4	-8.46	1.29	1.35
26	LA	2174	C	C2'-C1'	-8.45	1.44	1.53
26	LA	2401	U	O3'-P	-8.46	1.51	1.61
2	SA	872	A	N9-C4	8.45	1.43	1.37
4	S2	14	A	C4'-C3'	8.45	1.62	1.53
2	SA	453	G	C5'-C4'	8.45	1.61	1.51
26	LA	367	G	C3'-O3'	8.45	1.53	1.42
26	LA	1287	A	P-O5'	-8.45	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	C5'-C4'	8.45	1.61	1.51
2	SA	393	A	N9-C4	-8.45	1.32	1.37
26	LA	1872	A	N7-C5	-8.45	1.34	1.39
26	LA	2778	A	C5-C6	8.45	1.48	1.41
2	SA	1535	C	C4-N4	-8.45	1.26	1.33
26	LA	1152	C	N1-C6	-8.45	1.32	1.37
26	LA	1801	A	N9-C4	8.45	1.43	1.37
26	LA	2662	A	N9-C4	-8.45	1.32	1.37
26	LA	113	U	C1'-N1	8.45	1.61	1.48
26	LA	987	C	O3'-P	-8.45	1.51	1.61
26	LA	1429	G	C6-N1	-8.45	1.33	1.39
26	LA	1687	G	N9-C4	-8.45	1.31	1.38
2	SA	454	G	N9-C4	8.44	1.44	1.38
26	LA	1674	G	N7-C5	-8.44	1.34	1.39
2	SA	322	C	C4-C5	-8.44	1.36	1.43
2	SA	844	G	N7-C5	-8.44	1.34	1.39
26	LA	358	U	C2'-C1'	-8.44	1.44	1.53
2	SA	219	U	N3-C4	-8.44	1.30	1.38
26	LA	974	G	N7-C5	-8.44	1.34	1.39
26	LA	284	U	P-O5'	8.44	1.68	1.59
26	LA	1354	A	N9-C4	-8.44	1.32	1.37
26	LA	1670	C	P-O5'	-8.44	1.51	1.59
26	LA	2486	C	N1-C6	-8.44	1.32	1.37
26	LA	52	A	C8-N7	-8.43	1.25	1.31
26	LA	1297	C	C4-N4	-8.43	1.26	1.33
26	LA	1475	G	N7-C5	8.43	1.44	1.39
26	LA	2536	G	C8-N7	-8.43	1.25	1.30
26	LA	2609	U	C2'-C1'	-8.43	1.44	1.53
26	LA	599	A	P-O5'	-8.43	1.51	1.59
3	S1	35	G	N3-C4	-8.43	1.29	1.35
26	LA	2488	G	C2'-C1'	-8.43	1.44	1.53
26	LA	1238	G	C2-N2	-8.43	1.26	1.34
2	SA	600	A	N7-C5	-8.43	1.34	1.39
2	SA	1408	A	C8-N7	-8.43	1.25	1.31
26	LA	1603	A	N9-C8	-8.43	1.31	1.37
2	SA	16	A	N3-C4	-8.42	1.29	1.34
2	SA	1334	G	C6-N1	-8.42	1.33	1.39
26	LA	185	G	N7-C5	-8.42	1.34	1.39
26	LA	1139	G	C6-O6	8.42	1.31	1.24
26	LA	2420	C	N1-C6	-8.42	1.32	1.37
2	SA	1266	G	N7-C5	8.42	1.44	1.39
2	SA	1285	A	C8-N7	8.42	1.37	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	26	C	N3-C4	8.42	1.39	1.33
26	LA	2331	G	C5'-C4'	8.42	1.61	1.51
26	LA	513	A	C6-N1	-8.42	1.29	1.35
26	LA	535	G	N9-C8	8.42	1.43	1.37
26	LA	2011	U	N1-C6	-8.42	1.30	1.38
2	SA	281	G	N3-C4	-8.42	1.29	1.35
26	LA	313	G	N9-C4	8.42	1.44	1.38
26	LA	465	G	C2'-C1'	-8.42	1.44	1.53
26	LA	526	A	N9-C4	-8.42	1.32	1.37
26	LA	1271	G	C8-N7	-8.42	1.25	1.30
26	LA	1401	G	N7-C5	-8.42	1.34	1.39
26	LA	2225	A	O3'-P	-8.42	1.51	1.61
26	LA	2259	U	C5'-C4'	8.42	1.61	1.51
2	SA	133	U	P-O5'	-8.41	1.51	1.59
2	SA	429	U	C4-C5	-8.41	1.35	1.43
2	SA	1461	G	N7-C5	8.41	1.44	1.39
4	S2	60	A	N9-C8	-8.41	1.31	1.37
2	SA	415	A	N9-C4	8.41	1.42	1.37
26	LA	1165	A	O3'-P	-8.41	1.51	1.61
26	LA	1562	U	N3-C4	-8.41	1.30	1.38
26	LA	2447	G	C8-N7	-8.41	1.25	1.30
26	LA	2545	G	C2'-C1'	-8.41	1.44	1.53
26	LA	1789	A	C5-C6	-8.41	1.33	1.41
2	SA	37	U	N1-C2	-8.40	1.30	1.38
2	SA	955	U	C2-N3	-8.40	1.31	1.37
2	SA	1394	A	C6-N6	8.40	1.40	1.33
3	S1	58	C	C5'-C4'	8.40	1.61	1.51
26	LA	2327	A	N9-C8	8.40	1.44	1.37
2	SA	391	G	C5-C6	-8.40	1.33	1.42
2	SA	793	U	C4'-C3'	8.40	1.62	1.53
2	SA	1193	G	C2-N2	-8.40	1.26	1.34
26	LA	212	G	O4'-C1'	-8.40	1.30	1.41
26	LA	537	G	P-O5'	-8.40	1.51	1.59
26	LA	789	A	C5-C4	-8.40	1.32	1.38
26	LA	795	C	N1-C6	-8.40	1.32	1.37
2	SA	15	G	C6-N1	-8.40	1.33	1.39
2	SA	602	A	P-O5'	8.40	1.68	1.59
2	SA	812	G	P-O5'	8.40	1.68	1.59
26	LA	1791	A	N7-C5	-8.40	1.34	1.39
2	SA	117	G	C4'-C3'	8.40	1.62	1.53
2	SA	361	G	C3'-C2'	8.40	1.62	1.52
26	LA	523	C	C3'-C2'	-8.40	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1180	U	P-O5'	-8.40	1.51	1.59
26	LA	2583	G	C2'-C1'	-8.40	1.44	1.53
26	LA	1668	A	N3-C4	-8.40	1.29	1.34
2	SA	9	G	C2'-C1'	-8.39	1.44	1.53
2	SA	428	G	C5-C4	-8.39	1.32	1.38
26	LA	334	C	P-O5'	-8.39	1.51	1.59
26	LA	904	G	N7-C5	8.39	1.44	1.39
4	S2	15	G	C8-N7	8.39	1.35	1.30
26	LA	1568	G	N7-C5	-8.39	1.34	1.39
2	SA	795	C	C5'-C4'	8.39	1.61	1.51
26	LA	1706	C	N1-C6	-8.39	1.32	1.37
26	LA	2557	G	C5-C6	-8.39	1.33	1.42
2	SA	727	G	N7-C5	8.39	1.44	1.39
4	S2	27	G	C2-N3	8.38	1.39	1.32
26	LA	1239	G	C5-C6	-8.39	1.33	1.42
26	LA	74	A	C4'-C3'	8.38	1.62	1.53
26	LA	1857	G	N7-C5	-8.38	1.34	1.39
26	LA	2711	A	N3-C4	8.38	1.39	1.34
26	LA	1080	A	C6-N6	8.38	1.40	1.33
26	LA	1369	G	P-O5'	-8.38	1.51	1.59
26	LA	1378	A	C6-N1	-8.38	1.29	1.35
26	LA	2149	U	P-O5'	8.38	1.68	1.59
26	LA	2776	A	C6-N1	8.38	1.41	1.35
26	LA	1177	G	C4'-O4'	8.38	1.56	1.45
26	LA	2831	G	N9-C4	-8.38	1.31	1.38
2	SA	1087	G	N7-C5	-8.38	1.34	1.39
26	LA	1470	A	C4'-C3'	-8.38	1.44	1.53
26	LA	1701	A	C5-C4	-8.38	1.32	1.38
26	LA	352	A	C8-N7	-8.37	1.25	1.31
26	LA	1973	G	C6-N1	-8.38	1.33	1.39
2	SA	281	G	C3'-C2'	8.37	1.62	1.52
2	SA	329	A	C2'-C1'	-8.37	1.44	1.53
2	SA	600	A	N9-C4	-8.37	1.32	1.37
2	SA	615	G	N1-C2	-8.37	1.31	1.37
26	LA	382	A	N1-C2	-8.37	1.26	1.34
2	SA	1075	U	C5'-C4'	8.37	1.61	1.51
2	SA	559	A	N3-C4	-8.37	1.29	1.34
26	LA	1651	G	N7-C5	-8.37	1.34	1.39
26	LA	1846	G	N9-C4	-8.37	1.31	1.38
26	LA	2293	G	C5-C4	-8.37	1.32	1.38
26	LA	2618	G	N9-C8	-8.37	1.31	1.37
26	LA	2430	A	C1'-N9	-8.36	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	82	G	C4'-C3'	8.36	1.62	1.53
26	LA	2464	G	C2'-C1'	-8.36	1.44	1.53
4	S2	32	G	C2-N3	-8.36	1.26	1.32
26	LA	1124	G	O3'-P	-8.36	1.51	1.61
2	SA	126	G	C1'-N9	-8.36	1.35	1.46
2	SA	456	A	C6-N6	-8.36	1.27	1.33
2	SA	1106	G	P-O5'	-8.36	1.51	1.59
26	LA	808	G	N7-C5	-8.36	1.34	1.39
26	LA	1431	A	N3-C4	-8.36	1.29	1.34
26	LA	1934	C	C4-C5	-8.36	1.36	1.43
26	LA	2823	A	N9-C4	-8.36	1.32	1.37
2	SA	391	G	C2'-C1'	-8.35	1.44	1.53
25	LB	101	A	C5'-C4'	8.35	1.61	1.51
26	LA	2255	G	O3'-P	-8.35	1.51	1.61
2	SA	1386	G	N1-C2	-8.35	1.31	1.37
26	LA	829	A	N3-C4	8.35	1.39	1.34
26	LA	2080	A	O3'-P	-8.35	1.51	1.61
26	LA	2103	C	C3'-C2'	-8.35	1.43	1.52
26	LA	2867	G	C8-N7	8.35	1.35	1.30
26	LA	248	G	C8-N7	-8.35	1.25	1.30
26	LA	924	G	C5'-C4'	8.35	1.61	1.51
26	LA	1047	G	O3'-P	-8.35	1.51	1.61
2	SA	320	A	N7-C5	8.35	1.44	1.39
2	SA	899	C	N1-C6	8.35	1.42	1.37
2	SA	1142	G	C2'-C1'	-8.35	1.44	1.53
26	LA	857	G	P-O5'	-8.35	1.51	1.59
26	LA	1204	A	N9-C4	-8.35	1.32	1.37
26	LA	1678	A	C8-N7	-8.34	1.25	1.31
2	SA	1293	C	C4'-C3'	8.34	1.62	1.53
2	SA	1324	A	C4'-C3'	-8.34	1.44	1.53
26	LA	494	G	O3'-P	-8.34	1.51	1.61
26	LA	772	C	C4'-C3'	-8.34	1.44	1.53
25	LB	106	G	N7-C5	-8.34	1.34	1.39
26	LA	346	A	P-O5'	-8.34	1.51	1.59
26	LA	12	U	C2-N3	-8.34	1.31	1.37
26	LA	1247	A	N9-C4	-8.34	1.32	1.37
26	LA	1932	A	N3-C4	-8.34	1.29	1.34
26	LA	2053	G	C6-N1	-8.34	1.33	1.39
2	SA	1257	A	O3'-P	-8.34	1.51	1.61
26	LA	568	U	C4-C5	-8.34	1.36	1.43
26	LA	1246	A	C8-N7	-8.34	1.25	1.31
26	LA	2145	C	C3'-C2'	8.34	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	995	C	C2'-C1'	-8.34	1.44	1.53
26	LA	2525	G	P-O5'	-8.34	1.51	1.59
2	SA	1221	G	N7-C5	8.33	1.44	1.39
2	SA	1429	A	C5-C6	-8.33	1.33	1.41
2	SA	305	G	C2-N3	8.33	1.39	1.32
2	SA	1051	C	C3'-C2'	8.33	1.62	1.52
2	SA	1233	G	N3-C4	-8.33	1.29	1.35
26	LA	27	G	N9-C8	-8.33	1.32	1.37
26	LA	396	G	C2-N2	-8.33	1.26	1.34
26	LA	656	G	C2-N2	-8.33	1.26	1.34
2	SA	11	G	C6-N1	-8.33	1.33	1.39
26	LA	390	U	C4-C5	8.33	1.51	1.43
26	LA	608	A	N9-C4	8.33	1.42	1.37
26	LA	685	A	N9-C8	-8.33	1.31	1.37
2	SA	1479	C	C2-N3	8.33	1.42	1.35
26	LA	767	U	P-O5'	-8.33	1.51	1.59
2	SA	266	G	C1'-N9	-8.32	1.35	1.46
2	SA	468	A	N3-C4	8.32	1.39	1.34
2	SA	687	A	C6-N6	-8.32	1.27	1.33
2	SA	991	U	P-O5'	-8.32	1.51	1.59
26	LA	2512	C	C2-N3	-8.32	1.29	1.35
26	LA	622	G	N7-C5	-8.32	1.34	1.39
25	LB	113	C	N1-C6	8.32	1.42	1.37
26	LA	340	A	C5-C4	-8.32	1.32	1.38
26	LA	2361	G	P-O5'	-8.32	1.51	1.59
26	LA	1569	A	C4'-C3'	8.32	1.62	1.53
2	SA	1391	U	C2-N3	-8.32	1.31	1.37
25	LB	111	U	C5'-C4'	8.32	1.61	1.51
26	LA	382	A	N9-C4	-8.32	1.32	1.37
26	LA	703	U	C4'-C3'	-8.32	1.44	1.53
26	LA	2379	G	N3-C4	8.32	1.41	1.35
26	LA	2526	G	N1-C2	-8.32	1.31	1.37
2	SA	439	U	C4-C5	-8.31	1.36	1.43
2	SA	1263	C	C4'-C3'	8.31	1.62	1.53
26	LA	254	G	O3'-P	-8.31	1.51	1.61
2	SA	1031	C	C4-N4	-8.31	1.26	1.33
26	LA	739	A	C5'-C4'	8.31	1.61	1.51
26	LA	796	C	C4-N4	-8.31	1.26	1.33
26	LA	2837	A	C5-C6	-8.31	1.33	1.41
2	SA	584	G	N7-C5	-8.31	1.34	1.39
2	SA	546	A	N7-C5	-8.31	1.34	1.39
26	LA	761	A	N9-C4	-8.31	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1192	G	N7-C5	-8.31	1.34	1.39
2	SA	290	C	N1-C6	-8.31	1.32	1.37
2	SA	447	G	N9-C4	8.31	1.44	1.38
26	LA	1650	A	C2-N3	-8.31	1.26	1.33
26	LA	2466	C	N1-C6	-8.31	1.32	1.37
26	LA	2477	U	P-O5'	-8.31	1.51	1.59
2	SA	155	A	N7-C5	-8.31	1.34	1.39
2	SA	158	G	C5-C4	-8.30	1.32	1.38
26	LA	469	G	N9-C4	-8.30	1.31	1.38
26	LA	52	A	P-O5'	-8.30	1.51	1.59
26	LA	904	G	N1-C2	-8.30	1.31	1.37
26	LA	1783	A	N3-C4	-8.30	1.29	1.34
2	SA	1542	A	C4'-C3'	8.30	1.62	1.53
26	LA	2202	U	C2-N3	-8.30	1.31	1.37
2	SA	338	A	O3'-P	-8.29	1.51	1.61
26	LA	2536	G	N1-C2	-8.30	1.31	1.37
4	S2	68	C	C4'-O4'	8.29	1.56	1.45
25	LB	16	G	C2'-C1'	-8.29	1.44	1.53
26	LA	248	G	C5-C4	-8.29	1.32	1.38
26	LA	1736	U	C2'-O2'	8.29	1.52	1.41
2	SA	1413	A	N9-C4	-8.29	1.32	1.37
26	LA	226	A	N9-C4	-8.29	1.32	1.37
2	SA	140	U	C4'-C3'	-8.29	1.44	1.53
2	SA	1087	G	C3'-O3'	8.29	1.53	1.42
2	SA	1143	G	N3-C4	-8.29	1.29	1.35
26	LA	588	U	C4-C5	-8.29	1.36	1.43
26	LA	1038	G	N3-C4	-8.29	1.29	1.35
26	LA	1215	G	C6-N1	-8.29	1.33	1.39
26	LA	1245	G	C5'-C4'	8.29	1.61	1.51
26	LA	1390	U	P-O5'	-8.29	1.51	1.59
26	LA	1734	G	N7-C5	-8.29	1.34	1.39
2	SA	750	C	N3-C4	8.29	1.39	1.33
26	LA	258	G	N7-C5	-8.29	1.34	1.39
26	LA	1341	G	C6-N1	-8.29	1.33	1.39
26	LA	322	A	C6-N6	8.29	1.40	1.33
26	LA	484	C	C4-C5	8.28	1.49	1.43
26	LA	841	G	N7-C5	-8.29	1.34	1.39
26	LA	1106	G	C4'-C3'	-8.28	1.44	1.53
26	LA	2454	G	C6-N1	-8.28	1.33	1.39
2	SA	1101	A	C3'-O3'	8.28	1.53	1.42
26	LA	2012	G	C2'-C1'	-8.28	1.44	1.53
26	LA	2236	U	P-O5'	-8.28	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	797	G	C2'-C1'	-8.28	1.44	1.53
26	LA	97	C	C5'-C4'	8.28	1.61	1.51
26	LA	2604	U	P-O5'	-8.28	1.51	1.59
2	SA	1522	U	N1-C6	-8.28	1.30	1.38
25	LB	101	A	C6-N1	-8.28	1.29	1.35
26	LA	449	A	C6-N1	-8.28	1.29	1.35
26	LA	1132	U	O3'-P	-8.28	1.51	1.61
26	LA	204	A	N9-C4	-8.27	1.32	1.37
26	LA	974	G	C6-N1	-8.27	1.33	1.39
26	LA	1659	G	C2-N2	-8.27	1.26	1.34
26	LA	2250	G	N9-C4	-8.27	1.31	1.38
26	LA	2608	G	N7-C5	-8.27	1.34	1.39
26	LA	781	A	N3-C4	-8.27	1.29	1.34
2	SA	397	A	C2'-C1'	-8.27	1.44	1.53
2	SA	1127	G	N7-C5	-8.27	1.34	1.39
2	SA	1534	A	C5-C6	8.27	1.48	1.41
26	LA	44	A	C1'-N9	-8.27	1.35	1.46
26	LA	814	C	N1-C6	-8.27	1.32	1.37
26	LA	1098	A	P-O5'	-8.27	1.51	1.59
26	LA	1912	A	C5'-C4'	8.27	1.61	1.51
26	LA	2251	U	C2'-C1'	-8.27	1.44	1.53
26	LA	2660	A	N9-C4	-8.27	1.32	1.37
2	SA	389	A	N7-C5	8.27	1.44	1.39
2	SA	1350	A	N9-C4	-8.27	1.32	1.37
26	LA	782	A	N9-C4	-8.27	1.32	1.37
26	LA	206	U	C4-C5	-8.27	1.36	1.43
26	LA	981	A	N7-C5	-8.27	1.34	1.39
26	LA	1837	C	C2'-C1'	-8.27	1.44	1.53
2	SA	213	G	N3-C4	-8.26	1.29	1.35
2	SA	1205	U	C2-N3	-8.26	1.31	1.37
2	SA	1489	G	C5-C6	-8.26	1.34	1.42
4	S2	47	A	C6-N6	-8.26	1.27	1.33
26	LA	783	A	C2'-C1'	-8.26	1.44	1.53
26	LA	1169	A	N9-C4	8.26	1.42	1.37
26	LA	1028	A	N3-C4	-8.26	1.29	1.34
2	SA	965	U	C4'-C3'	8.26	1.62	1.53
26	LA	2703	C	O3'-P	-8.26	1.51	1.61
26	LA	2812	G	N3-C4	-8.26	1.29	1.35
26	LA	774	G	N9-C4	-8.26	1.31	1.38
26	LA	1262	A	N1-C2	-8.26	1.26	1.34
26	LA	1667	G	N7-C5	-8.26	1.34	1.39
2	SA	408	A	N9-C4	-8.26	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	52	C	C5-C6	8.26	1.41	1.34
2	SA	555	U	C2-N3	-8.25	1.31	1.37
26	LA	2677	G	C2-N3	8.25	1.39	1.32
26	LA	1572	A	C5-C6	-8.25	1.33	1.41
26	LA	2222	C	C2'-C1'	-8.25	1.44	1.53
2	SA	499	A	C6-N1	-8.25	1.29	1.35
2	SA	746	A	O3'-P	-8.25	1.51	1.61
2	SA	1116	U	C4'-C3'	-8.25	1.44	1.53
26	LA	1331	G	N7-C5	-8.25	1.34	1.39
26	LA	1260	A	N3-C4	8.25	1.39	1.34
2	SA	219	U	P-O5'	-8.24	1.51	1.59
4	S2	6	G	P-O5'	-8.24	1.51	1.59
26	LA	975	A	C5'-C4'	8.24	1.61	1.51
26	LA	2106	U	P-O5'	-8.24	1.51	1.59
26	LA	822	G	C2'-C1'	-8.24	1.44	1.53
26	LA	2479	U	C4-C5	-8.24	1.36	1.43
2	SA	1272	G	C2-N2	-8.24	1.26	1.34
26	LA	190	A	N1-C2	-8.24	1.26	1.34
26	LA	2112	G	N7-C5	-8.24	1.34	1.39
26	LA	2766	A	C6-N6	-8.24	1.27	1.33
2	SA	124	C	C4'-C3'	8.24	1.62	1.53
2	SA	303	A	N7-C5	-8.24	1.34	1.39
2	SA	964	A	N7-C5	8.24	1.44	1.39
2	SA	682	G	N7-C5	-8.24	1.34	1.39
2	SA	922	G	P-O5'	-8.24	1.51	1.59
26	LA	180	G	P-O5'	8.24	1.68	1.59
26	LA	377	G	N9-C8	-8.24	1.32	1.37
26	LA	805	G	C4'-C3'	8.24	1.62	1.53
26	LA	2885	G	C4'-C3'	8.24	1.62	1.53
2	SA	789	U	C4-C5	-8.23	1.36	1.43
26	LA	444	C	C5-C6	-8.23	1.27	1.34
26	LA	979	A	C2-N3	-8.23	1.26	1.33
4	S2	57	C	C5'-C4'	8.23	1.61	1.51
26	LA	196	A	C8-N7	-8.23	1.25	1.31
26	LA	1134	A	C5'-C4'	8.23	1.61	1.51
26	LA	929	U	O3'-P	-8.23	1.51	1.61
26	LA	954	G	N7-C5	-8.23	1.34	1.39
26	LA	965	C	N1-C6	-8.23	1.32	1.37
26	LA	1378	A	C5-C4	-8.23	1.32	1.38
2	SA	560	A	C2'-C1'	-8.23	1.44	1.53
26	LA	1012	U	N1-C6	-8.23	1.30	1.38
2	SA	1433	A	N9-C4	-8.23	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	91	C	C2'-C1'	-8.22	1.44	1.53
2	SA	587	G	C2-N2	-8.22	1.26	1.34
25	LB	33	G	C8-N7	8.22	1.35	1.30
26	LA	2125	G	C5-C4	8.22	1.44	1.38
26	LA	2722	G	N9-C4	-8.22	1.31	1.38
2	SA	275	G	C6-N1	-8.22	1.33	1.39
26	LA	675	A	N3-C4	-8.22	1.29	1.34
26	LA	2123	G	C4'-C3'	8.22	1.62	1.53
26	LA	989	G	C2-N2	-8.21	1.26	1.34
2	SA	302	G	C2-N3	-8.21	1.26	1.32
2	SA	374	A	C6-N6	8.21	1.40	1.33
2	SA	1150	A	C8-N7	8.21	1.37	1.31
26	LA	1399	C	N3-C4	8.21	1.39	1.33
26	LA	2640	G	P-O5'	-8.21	1.51	1.59
2	SA	749	A	N3-C4	-8.21	1.29	1.34
2	SA	897	C	C5'-C4'	8.21	1.61	1.51
2	SA	1189	U	P-O5'	-8.21	1.51	1.59
26	LA	684	G	N9-C8	-8.21	1.32	1.37
26	LA	1845	G	N3-C4	-8.21	1.29	1.35
26	LA	2450	A	C4'-C3'	8.21	1.62	1.53
26	LA	2862	G	N3-C4	-8.21	1.29	1.35
2	SA	760	G	C5'-C4'	8.21	1.61	1.51
2	SA	822	U	N3-C4	-8.21	1.31	1.38
26	LA	410	G	N9-C8	-8.21	1.32	1.37
26	LA	494	G	N3-C4	-8.21	1.29	1.35
26	LA	2570	G	C6-N1	-8.21	1.33	1.39
25	LB	32	U	C5'-C4'	8.21	1.61	1.51
26	LA	233	A	C1'-N9	-8.21	1.35	1.46
26	LA	322	A	N9-C4	-8.21	1.32	1.37
26	LA	954	G	C6-N1	-8.21	1.33	1.39
26	LA	729	G	N7-C5	-8.20	1.34	1.39
26	LA	981	A	O4'-C1'	-8.21	1.30	1.41
26	LA	1620	G	C1'-N9	-8.21	1.35	1.46
26	LA	1792	G	C2'-C1'	-8.21	1.44	1.53
2	SA	1020	G	C4'-O4'	8.20	1.56	1.45
2	SA	1283	U	C2-N3	8.20	1.43	1.37
26	LA	367	G	N9-C8	8.20	1.43	1.37
25	LB	15	A	N7-C5	-8.20	1.34	1.39
26	LA	436	C	C4-N4	-8.20	1.26	1.33
26	LA	2081	U	C5'-C4'	8.20	1.61	1.51
2	SA	154	U	N1-C2	8.20	1.46	1.38
26	LA	574	A	N9-C4	-8.20	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2037	A	C2'-C1'	-8.20	1.44	1.53
2	SA	47	C	N3-C4	-8.20	1.28	1.33
2	SA	347	G	C2-N2	-8.20	1.26	1.34
2	SA	1349	A	N9-C4	-8.20	1.32	1.37
26	LA	46	G	N1-C2	8.20	1.44	1.37
26	LA	503	A	C4'-C3'	8.20	1.62	1.53
26	LA	2487	G	C5-C6	-8.20	1.34	1.42
2	SA	337	G	N1-C2	-8.20	1.31	1.37
26	LA	743	A	P-O5'	-8.20	1.51	1.59
26	LA	1549	A	C3'-C2'	-8.20	1.43	1.52
26	LA	1669	A	C5'-C4'	8.20	1.61	1.51
26	LA	2368	C	C4'-C3'	-8.20	1.44	1.53
26	LA	2877	G	N7-C5	-8.20	1.34	1.39
2	SA	69	G	C5-C4	8.19	1.44	1.38
26	LA	1962	C	C4-N4	-8.19	1.26	1.33
26	LA	2525	G	N9-C4	-8.19	1.31	1.38
2	SA	196	A	N7-C5	-8.19	1.34	1.39
2	SA	1373	G	N9-C4	-8.19	1.31	1.38
4	S2	38	A	N7-C5	-8.19	1.34	1.39
26	LA	187	G	N7-C5	-8.19	1.34	1.39
26	LA	448	U	C4-O4	-8.19	1.17	1.23
26	LA	1295	C	C5-C6	-8.19	1.27	1.34
26	LA	1455	G	O3'-P	-8.19	1.51	1.61
26	LA	2631	G	C2'-C1'	-8.19	1.44	1.53
26	LA	95	A	N3-C4	8.19	1.39	1.34
26	LA	1577	C	C4-C5	-8.19	1.36	1.43
26	LA	1665	A	N3-C4	-8.19	1.29	1.34
26	LA	2657	A	P-O5'	-8.19	1.51	1.59
18	SB	21	TYR	CE1-CZ	8.18	1.49	1.38
2	SA	35	G	N7-C5	-8.18	1.34	1.39
2	SA	641	U	C4'-C3'	8.18	1.62	1.53
2	SA	782	A	N3-C4	8.18	1.39	1.34
26	LA	652	U	C2-N3	-8.18	1.32	1.37
26	LA	1537	G	C3'-O3'	8.18	1.53	1.42
2	SA	259	G	C5-C4	8.18	1.44	1.38
2	SA	1038	C	C5'-C4'	8.18	1.61	1.51
26	LA	48	G	C8-N7	-8.18	1.26	1.30
26	LA	2158	A	N3-C4	-8.18	1.29	1.34
26	LA	2696	U	C4'-O4'	-8.18	1.34	1.45
2	SA	268	U	C2'-C1'	-8.18	1.44	1.53
2	SA	714	G	C2'-C1'	-8.18	1.44	1.53
2	SA	1193	G	C5-C4	-8.18	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	635	C	N1-C6	-8.18	1.32	1.37
26	LA	2082	A	N9-C8	-8.18	1.31	1.37
26	LA	1740	G	N9-C4	8.18	1.44	1.38
2	SA	528	C	C4'-C3'	-8.18	1.44	1.53
3	S1	29	G	N1-C2	8.18	1.44	1.37
26	LA	879	G	C5-C4	8.18	1.44	1.38
26	LA	1676	A	N7-C5	-8.18	1.34	1.39
26	LA	2644	G	C2-N3	-8.18	1.26	1.32
2	SA	972	C	C2'-C1'	-8.17	1.44	1.53
26	LA	2433	A	C5-C4	-8.17	1.33	1.38
2	SA	837	U	C2-N3	8.17	1.43	1.37
26	LA	1721	G	C1'-N9	-8.17	1.35	1.46
26	LA	2708	G	N1-C2	-8.17	1.31	1.37
2	SA	509	A	C6-N1	8.17	1.41	1.35
26	LA	417	C	O3'-P	-8.17	1.51	1.61
26	LA	951	C	C4-C5	-8.17	1.36	1.43
26	LA	1129	A	C2'-C1'	-8.17	1.44	1.53
26	LA	2283	C	C4'-O4'	8.17	1.56	1.45
26	LA	2642	G	N7-C5	-8.17	1.34	1.39
26	LA	1328	A	N9-C4	-8.17	1.32	1.37
26	LA	2014	A	C6-N1	-8.17	1.29	1.35
26	LA	2497	A	N9-C8	8.17	1.44	1.37
2	SA	239	U	P-O5'	-8.17	1.51	1.59
2	SA	753	A	C5-C4	-8.17	1.33	1.38
2	SA	1228	C	C5'-C4'	8.17	1.61	1.51
26	LA	664	G	N3-C4	-8.17	1.29	1.35
26	LA	1086	A	C6-N1	-8.17	1.29	1.35
26	LA	1347	A	N7-C5	-8.17	1.34	1.39
2	SA	499	A	N9-C4	-8.16	1.32	1.37
26	LA	1859	U	C5'-C4'	8.16	1.61	1.51
26	LA	2274	A	C5-C6	-8.16	1.33	1.41
26	LA	217	A	N9-C4	-8.16	1.32	1.37
26	LA	1407	G	O3'-P	-8.16	1.51	1.61
26	LA	1948	G	C4'-O4'	-8.16	1.34	1.45
26	LA	1998	A	C3'-C2'	-8.16	1.43	1.52
2	SA	275	G	O3'-P	-8.16	1.51	1.61
2	SA	1392	G	C5-C4	-8.16	1.32	1.38
25	LB	26	C	C4'-C3'	8.16	1.62	1.53
26	LA	1670	C	N1-C6	-8.16	1.32	1.37
26	LA	402	A	C8-N7	-8.16	1.25	1.31
2	SA	63	C	C3'-O3'	8.16	1.53	1.42
2	SA	321	A	C5-C4	-8.16	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1937	A	N7-C5	-8.16	1.34	1.39
26	LA	681	G	N7-C5	-8.15	1.34	1.39
26	LA	1095	A	C3'-C2'	-8.15	1.43	1.52
26	LA	2387	U	N3-C4	-8.15	1.31	1.38
26	LA	1664	A	N3-C4	-8.15	1.29	1.34
26	LA	139	U	C2-N3	-8.15	1.32	1.37
26	LA	1681	G	C2'-C1'	-8.15	1.44	1.53
26	LA	2245	U	C2-N3	-8.15	1.32	1.37
2	SA	1493	A	C2'-C1'	-8.15	1.44	1.53
26	LA	83	A	C5-C4	8.15	1.44	1.38
25	LB	86	G	N9-C8	-8.15	1.32	1.37
26	LA	866	A	P-O5'	-8.15	1.51	1.59
26	LA	885	C	C5'-C4'	8.15	1.61	1.51
26	LA	1403	A	C5'-C4'	8.15	1.61	1.51
26	LA	1654	A	N7-C5	-8.15	1.34	1.39
2	SA	996	A	C5'-C4'	8.14	1.61	1.51
26	LA	121	G	C3'-O3'	8.14	1.53	1.42
26	LA	376	G	N1-C2	-8.14	1.31	1.37
26	LA	2665	A	N9-C8	-8.14	1.31	1.37
26	LA	250	G	N9-C4	-8.14	1.31	1.38
26	LA	266	G	O3'-P	-8.14	1.51	1.61
26	LA	1453	A	C3'-C2'	8.14	1.61	1.52
26	LA	1842	G	C3'-C2'	-8.14	1.43	1.52
2	SA	889	A	N9-C8	-8.14	1.31	1.37
2	SA	583	A	N7-C5	8.14	1.44	1.39
2	SA	770	C	C5'-C4'	8.14	1.61	1.51
2	SA	1454	G	C2'-C1'	-8.14	1.44	1.53
25	LB	104	A	N9-C4	-8.14	1.32	1.37
26	LA	1073	A	C3'-C2'	8.14	1.61	1.52
2	SA	122	G	P-O5'	8.14	1.67	1.59
2	SA	898	G	C8-N7	-8.14	1.26	1.30
2	SA	1262	C	C2-N3	-8.14	1.29	1.35
26	LA	1394	U	O3'-P	-8.14	1.51	1.61
26	LA	1998	A	N7-C5	-8.14	1.34	1.39
26	LA	2018	G	N1-C2	-8.14	1.31	1.37
26	LA	244	A	P-O5'	-8.14	1.51	1.59
26	LA	2540	C	C2-N3	-8.14	1.29	1.35
26	LA	2048	G	O3'-P	-8.14	1.51	1.61
2	SA	1363	A	N3-C4	-8.13	1.29	1.34
26	LA	386	G	C2-N2	-8.13	1.26	1.34
26	LA	1999	C	C5-C6	-8.13	1.27	1.34
2	SA	1220	G	C6-N1	-8.13	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2653	U	N3-C4	-8.13	1.31	1.38
2	SA	32	A	C6-N1	8.13	1.41	1.35
26	LA	1139	G	C5-C6	-8.13	1.34	1.42
26	LA	1298	C	C4-C5	-8.13	1.36	1.43
26	LA	2667	C	N1-C6	-8.13	1.32	1.37
26	LA	243	U	O4'-C1'	8.13	1.52	1.41
26	LA	603	A	N3-C4	-8.13	1.29	1.34
26	LA	1690	A	C6-N6	-8.13	1.27	1.33
26	LA	1803	A	N7-C5	-8.13	1.34	1.39
2	SA	349	A	C8-N7	8.13	1.37	1.31
2	SA	503	C	O3'-P	-8.13	1.51	1.61
3	S1	56	G	C4'-O4'	8.13	1.56	1.45
2	SA	1392	G	P-O5'	-8.12	1.51	1.59
26	LA	1017	G	C6-N1	-8.12	1.33	1.39
26	LA	1552	A	N7-C5	-8.13	1.34	1.39
2	SA	576	C	C4-C5	8.12	1.49	1.43
2	SA	180	U	P-O5'	-8.12	1.51	1.59
2	SA	666	G	N9-C8	8.12	1.43	1.37
2	SA	1051	C	N1-C6	8.12	1.42	1.37
26	LA	409	G	C4'-C3'	-8.12	1.44	1.53
26	LA	38	A	P-O5'	-8.12	1.51	1.59
26	LA	2619	C	C4'-O4'	-8.12	1.34	1.45
26	LA	320	A	C4'-C3'	-8.12	1.44	1.53
26	LA	471	A	C5'-C4'	8.12	1.61	1.51
26	LA	2536	G	C2-N3	8.12	1.39	1.32
26	LA	1002	G	C8-N7	8.12	1.35	1.30
26	LA	1460	U	C4'-C3'	8.12	1.62	1.53
26	LA	1919	A	C3'-O3'	8.12	1.53	1.42
2	SA	530	G	O3'-P	-8.12	1.51	1.61
2	SA	864	A	N3-C4	8.12	1.39	1.34
2	SA	197	A	C2-N3	8.11	1.40	1.33
2	SA	1076	U	P-O5'	-8.12	1.51	1.59
2	SA	1081	A	C4'-C3'	-8.12	1.44	1.53
26	LA	1356	G	N7-C5	-8.12	1.34	1.39
2	SA	457	G	N7-C5	-8.11	1.34	1.39
2	SA	1291	U	C3'-O3'	8.11	1.53	1.42
26	LA	2018	G	C2'-C1'	-8.11	1.44	1.53
2	SA	569	C	C5'-C4'	8.11	1.61	1.51
26	LA	177	G	C6-N1	-8.11	1.33	1.39
3	S1	46	C	N1-C6	8.11	1.42	1.37
26	LA	871	U	O3'-P	-8.11	1.51	1.61
2	SA	621	A	N7-C5	-8.10	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1349	A	C6-N1	8.10	1.41	1.35
26	LA	964	C	P-O5'	-8.10	1.51	1.59
26	LA	1283	G	C2'-C1'	-8.10	1.44	1.53
2	SA	774	G	O3'-P	-8.10	1.51	1.61
2	SA	1496	C	N1-C2	-8.10	1.32	1.40
3	S1	34	U	C2'-C1'	8.10	1.62	1.53
26	LA	1009	A	N3-C4	-8.10	1.29	1.34
26	LA	113	U	C5'-C4'	8.10	1.61	1.51
26	LA	2828	G	N1-C2	-8.10	1.31	1.37
2	SA	1472	U	O3'-P	-8.10	1.51	1.61
26	LA	984	A	C1'-N9	-8.10	1.35	1.46
26	LA	1277	G	N1-C2	-8.10	1.31	1.37
26	LA	1312	U	P-O5'	-8.10	1.51	1.59
26	LA	2222	C	C2-N3	-8.10	1.29	1.35
26	LA	2275	C	C2'-C1'	-8.10	1.44	1.53
26	LA	2781	A	C2-N3	-8.10	1.26	1.33
26	LA	1032	A	C2-N3	-8.10	1.26	1.33
26	LA	2445	G	N1-C2	-8.10	1.31	1.37
26	LA	1710	G	C6-N1	-8.10	1.33	1.39
2	SA	562	U	P-O5'	-8.09	1.51	1.59
2	SA	1430	A	N3-C4	-8.09	1.29	1.34
26	LA	926	G	C2-N3	8.09	1.39	1.32
26	LA	1080	A	C2'-O2'	-8.09	1.31	1.41
26	LA	1137	G	O3'-P	-8.09	1.51	1.61
26	LA	1228	G	N9-C4	8.09	1.44	1.38
26	LA	1747	U	N3-C4	-8.09	1.31	1.38
2	SA	409	U	P-O5'	-8.09	1.51	1.59
2	SA	448	A	N9-C4	-8.09	1.32	1.37
2	SA	1129	C	C4-N4	8.09	1.41	1.33
2	SA	1438	G	C6-N1	8.09	1.45	1.39
2	SA	1497	G	P-O5'	-8.09	1.51	1.59
26	LA	213	A	N3-C4	8.09	1.39	1.34
26	LA	706	A	C3'-C2'	8.09	1.61	1.52
26	LA	706	A	N3-C4	-8.09	1.29	1.34
26	LA	948	C	C4-N4	-8.09	1.26	1.33
26	LA	1356	G	C2-N2	-8.09	1.26	1.34
2	SA	145	G	N3-C4	-8.09	1.29	1.35
2	SA	838	G	N9-C4	-8.09	1.31	1.38
26	LA	1884	G	N9-C8	8.09	1.43	1.37
4	S2	3	C	N1-C6	-8.08	1.32	1.37
26	LA	395	U	C2-N3	-8.08	1.32	1.37
26	LA	1838	C	C5-C6	-8.08	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	508	U	C4-C5	-8.08	1.36	1.43
2	SA	1029	U	C2-N3	-8.08	1.32	1.37
2	SA	1465	A	N9-C8	8.08	1.44	1.37
2	SA	868	C	C4'-C3'	-8.08	1.44	1.53
26	LA	216	A	N7-C5	8.08	1.44	1.39
26	LA	391	A	C5'-C4'	8.08	1.61	1.51
26	LA	1128	G	C2'-C1'	-8.08	1.44	1.53
26	LA	1223	G	C6-N1	-8.08	1.33	1.39
26	LA	1761	C	P-O5'	-8.08	1.51	1.59
2	SA	956	U	O4'-C1'	-8.07	1.31	1.41
2	SA	1108	G	C5-C4	-8.07	1.32	1.38
2	SA	1308	U	O3'-P	-8.07	1.51	1.61
26	LA	638	G	C6-N1	-8.07	1.33	1.39
26	LA	1086	A	C8-N7	8.07	1.37	1.31
26	LA	2297	A	C5-C4	-8.07	1.33	1.38
26	LA	2801	G	C2'-C1'	-8.07	1.44	1.53
26	LA	2008	C	C2'-C1'	8.07	1.62	1.53
2	SA	258	G	O3'-P	-8.07	1.51	1.61
26	LA	1561	C	C4-N4	-8.07	1.26	1.33
26	LA	2042	A	C6-N1	8.07	1.41	1.35
26	LA	2469	A	C5-C6	-8.07	1.33	1.41
26	LA	2571	U	C4-C5	-8.07	1.36	1.43
2	SA	566	G	N3-C4	-8.07	1.29	1.35
26	LA	113	U	O4'-C1'	8.07	1.52	1.41
26	LA	2883	A	C6-N1	-8.07	1.29	1.35
26	LA	1193	G	C6-N1	-8.07	1.33	1.39
26	LA	1886	U	C4-C5	-8.07	1.36	1.43
26	LA	320	A	C5-C4	-8.07	1.33	1.38
26	LA	1447	C	C4-C5	-8.07	1.36	1.43
2	SA	155	A	C8-N7	-8.06	1.25	1.31
11	SK	38	GLY	N-CA	8.06	1.58	1.46
26	LA	425	G	N1-C2	8.06	1.44	1.37
25	LB	64	G	N7-C5	8.06	1.44	1.39
2	SA	1111	A	C8-N7	8.06	1.37	1.31
26	LA	966	G	C6-N1	-8.06	1.33	1.39
26	LA	1589	U	O3'-P	-8.06	1.51	1.61
26	LA	2281	A	N9-C8	-8.06	1.31	1.37
26	LA	158	U	C2'-C1'	-8.06	1.44	1.53
26	LA	1877	A	N9-C8	-8.06	1.31	1.37
26	LA	2204	G	C5'-C4'	8.06	1.61	1.51
2	SA	345	C	C3'-C2'	-8.05	1.43	1.52
26	LA	1056	G	N1-C2	8.06	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1935	G	C2-N2	-8.06	1.26	1.34
2	SA	981	U	C4'-C3'	-8.05	1.44	1.53
2	SA	1000	A	C5'-C4'	8.05	1.61	1.51
26	LA	1216	G	C4'-C3'	-8.05	1.44	1.53
2	SA	244	U	N1-C2	-8.05	1.31	1.38
2	SA	1351	U	C2-N3	-8.05	1.32	1.37
26	LA	1810	A	O4'-C1'	-8.05	1.31	1.41
2	SA	702	A	C8-N7	-8.05	1.25	1.31
2	SA	6	G	C3'-O3'	8.05	1.53	1.42
2	SA	1032	G	C3'-C2'	8.05	1.61	1.52
26	LA	4	U	C4-O4	-8.05	1.17	1.23
26	LA	481	G	C2'-C1'	-8.05	1.44	1.53
26	LA	530	G	C5-C4	-8.05	1.32	1.38
26	LA	737	C	C2'-C1'	-8.05	1.44	1.53
26	LA	800	A	N3-C4	-8.05	1.30	1.34
2	SA	344	A	C3'-C2'	8.05	1.61	1.52
2	SA	495	A	N7-C5	8.05	1.44	1.39
2	SA	316	C	C2-N3	8.04	1.42	1.35
26	LA	494	G	C2'-C1'	-8.04	1.44	1.53
26	LA	999	U	C2-N3	-8.05	1.32	1.37
26	LA	1481	U	C4-C5	-8.04	1.36	1.43
26	LA	1888	G	C6-N1	-8.04	1.33	1.39
26	LA	2554	U	C4-C5	-8.04	1.36	1.43
4	S2	5	G	N3-C4	-8.04	1.29	1.35
4	S2	64	G	C6-N1	8.04	1.45	1.39
25	LB	96	G	C8-N7	8.04	1.35	1.30
26	LA	1962	C	C2-N3	-8.04	1.29	1.35
2	SA	540	G	C2-N2	-8.04	1.26	1.34
26	LA	618	G	O3'-P	-8.04	1.51	1.61
26	LA	918	A	N9-C4	-8.04	1.33	1.37
26	LA	2214	C	N1-C6	-8.04	1.32	1.37
26	LA	2314	A	C3'-O3'	8.04	1.53	1.42
26	LA	1790	C	C2-N3	-8.04	1.29	1.35
2	SA	552	U	C2-N3	-8.04	1.32	1.37
25	LB	2	G	C5-C4	-8.04	1.32	1.38
26	LA	588	U	C4-O4	-8.04	1.17	1.23
26	LA	2289	G	N7-C5	-8.04	1.34	1.39
2	SA	564	C	C4-N4	-8.03	1.26	1.33
2	SA	819	A	N3-C4	8.03	1.39	1.34
25	LB	52	A	C4'-O4'	8.03	1.55	1.45
26	LA	242	G	C2'-C1'	-8.03	1.44	1.53
26	LA	1922	G	N3-C4	8.03	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	948	C	N1-C6	-8.03	1.32	1.37
26	LA	621	A	C8-N7	-8.03	1.25	1.31
2	SA	357	G	C8-N7	-8.03	1.26	1.30
2	SA	616	G	N3-C4	-8.03	1.29	1.35
2	SA	1418	A	N9-C4	8.03	1.42	1.37
26	LA	1274	A	C5-C6	-8.03	1.33	1.41
26	LA	1801	A	N3-C4	8.03	1.39	1.34
2	SA	411	A	N9-C8	-8.03	1.31	1.37
2	SA	446	G	N3-C4	-8.03	1.29	1.35
26	LA	1331	G	C5-C4	-8.03	1.32	1.38
26	LA	1421	G	C3'-C2'	-8.03	1.44	1.52
26	LA	2255	G	N1-C2	-8.03	1.31	1.37
2	SA	1316	G	C2-N2	-8.02	1.26	1.34
2	SA	1451	U	N1-C6	8.02	1.45	1.38
2	SA	1523	G	C4'-C3'	-8.02	1.44	1.53
26	LA	1031	G	N9-C4	-8.02	1.31	1.38
2	SA	513	C	O3'-P	-8.02	1.51	1.61
2	SA	1463	U	C5-C6	-8.02	1.26	1.34
26	LA	1619	G	N9-C4	-8.02	1.31	1.38
26	LA	2697	G	C2-N2	-8.02	1.26	1.34
26	LA	2110	G	N9-C4	-8.02	1.31	1.38
26	LA	1951	U	P-O5'	-8.02	1.51	1.59
26	LA	2020	A	C1'-N9	-8.02	1.35	1.46
26	LA	1983	G	C2-N2	-8.02	1.26	1.34
2	SA	1111	A	N9-C4	-8.02	1.33	1.37
2	SA	1464	U	C4'-O4'	8.02	1.55	1.45
26	LA	1563	U	C2'-C1'	-8.02	1.44	1.53
2	SA	546	A	C5'-C4'	8.01	1.60	1.51
2	SA	1412	C	C4'-C3'	8.01	1.61	1.53
25	LB	45	A	C8-N7	8.01	1.37	1.31
26	LA	447	A	N3-C4	-8.01	1.30	1.34
26	LA	1371	G	C5-C4	-8.01	1.32	1.38
26	LA	1506	U	C5'-C4'	8.01	1.60	1.51
26	LA	2877	G	C6-N1	-8.01	1.33	1.39
2	SA	363	A	O3'-P	-8.01	1.51	1.61
2	SA	943	U	N3-C4	-8.01	1.31	1.38
2	SA	994	A	C5'-C4'	8.01	1.60	1.51
2	SA	1371	G	O3'-P	-8.01	1.51	1.61
25	LB	52	A	P-O5'	-8.01	1.51	1.59
26	LA	1744	A	N3-C4	-8.01	1.30	1.34
26	LA	2412	A	N3-C4	-8.01	1.30	1.34
2	SA	711	G	N9-C8	-8.01	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1266	G	C5'-C4'	8.01	1.60	1.51
26	LA	1766	G	C2-N2	-8.01	1.26	1.34
2	SA	103	U	N1-C2	8.01	1.45	1.38
2	SA	783	C	N1-C6	8.01	1.42	1.37
26	LA	894	U	C2-N3	-8.01	1.32	1.37
26	LA	1424	G	C4'-C3'	-8.01	1.44	1.53
26	LA	2272	U	N1-C2	-8.01	1.31	1.38
26	LA	2643	G	O3'-P	-8.01	1.51	1.61
2	SA	322	C	N1-C6	-8.00	1.32	1.37
2	SA	830	G	C2'-C1'	-8.00	1.44	1.53
2	SA	1516	G	C4'-C3'	-8.00	1.44	1.53
26	LA	841	G	C2'-C1'	-8.00	1.44	1.53
26	LA	2220	U	C4-O4	-8.00	1.17	1.23
26	LA	1291	C	N1-C6	-8.00	1.32	1.37
26	LA	1303	G	C6-N1	-8.00	1.33	1.39
2	SA	1113	C	P-O5'	-8.00	1.51	1.59
26	LA	55	G	N9-C4	8.00	1.44	1.38
26	LA	858	G	P-O5'	-8.00	1.51	1.59
26	LA	2015	A	C2'-C1'	-8.00	1.44	1.53
26	LA	2839	G	C8-N7	8.00	1.35	1.30
2	SA	404	G	O3'-P	-8.00	1.51	1.61
2	SA	1085	U	C4-C5	-8.00	1.36	1.43
26	LA	2610	C	O3'-P	-8.00	1.51	1.61
2	SA	88	U	N3-C4	-8.00	1.31	1.38
3	S1	17	U	O3'-P	-7.99	1.51	1.61
26	LA	206	U	P-O5'	-7.99	1.51	1.59
26	LA	1903	G	C2-N3	-7.99	1.26	1.32
2	SA	1164	G	C6-N1	-7.99	1.33	1.39
26	LA	1665	A	C4'-O4'	7.99	1.55	1.45
26	LA	984	A	C2-N3	-7.99	1.26	1.33
26	LA	1036	G	N7-C5	-7.99	1.34	1.39
26	LA	954	G	C5'-C4'	7.99	1.60	1.51
26	LA	984	A	C5-C6	-7.99	1.33	1.41
26	LA	2631	G	C2-N3	7.99	1.39	1.32
25	LB	116	G	N3-C4	-7.99	1.29	1.35
26	LA	1342	A	C4'-C3'	-7.99	1.44	1.53
26	LA	1477	A	C5-C4	-7.99	1.33	1.38
2	SA	1160	G	N7-C5	-7.99	1.34	1.39
26	LA	2670	A	P-O5'	7.99	1.67	1.59
26	LA	2892	G	C2-N3	7.99	1.39	1.32
26	LA	111	A	C3'-C2'	7.98	1.61	1.52
26	LA	701	G	C2'-C1'	-7.98	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1457	G	O3'-P	-7.98	1.51	1.61
26	LA	818	G	C2-N2	-7.98	1.26	1.34
26	LA	1455	G	N3-C4	-7.98	1.29	1.35
2	SA	819	A	C2'-C1'	-7.98	1.44	1.53
2	SA	1323	G	C6-N1	-7.98	1.33	1.39
26	LA	454	A	C6-N6	-7.98	1.27	1.33
26	LA	1035	U	C3'-O3'	7.98	1.53	1.42
26	LA	1767	G	C5-C4	-7.98	1.32	1.38
26	LA	1891	G	C5-C6	-7.98	1.34	1.42
26	LA	2831	G	N7-C5	-7.98	1.34	1.39
26	LA	457	A	C3'-C2'	-7.98	1.44	1.52
26	LA	1117	C	N1-C6	7.98	1.42	1.37
26	LA	2542	A	P-O5'	-7.98	1.51	1.59
26	LA	908	C	C4-N4	-7.98	1.26	1.33
26	LA	2367	G	N9-C8	-7.98	1.32	1.37
26	LA	2558	C	P-O5'	-7.98	1.51	1.59
26	LA	1179	G	C4'-C3'	-7.98	1.44	1.53
26	LA	1621	U	N1-C6	7.98	1.45	1.38
2	SA	387	U	C4-C5	-7.97	1.36	1.43
2	SA	446	G	N7-C5	-7.97	1.34	1.39
2	SA	865	A	C5-C4	-7.97	1.33	1.38
2	SA	1091	U	C4'-C3'	7.97	1.61	1.53
26	LA	717	C	N3-C4	7.97	1.39	1.33
26	LA	822	G	C5-C4	-7.97	1.32	1.38
26	LA	920	A	N7-C5	-7.97	1.34	1.39
26	LA	1382	G	N9-C8	7.97	1.43	1.37
26	LA	2123	G	N7-C5	7.97	1.44	1.39
26	LA	1848	A	C6-N1	7.97	1.41	1.35
2	SA	790	A	C5-C6	-7.97	1.33	1.41
2	SA	693	G	C5'-C4'	7.97	1.60	1.51
26	LA	1056	G	C3'-C2'	-7.97	1.44	1.52
26	LA	2691	C	C4-C5	-7.97	1.36	1.43
2	SA	706	A	N9-C4	-7.97	1.33	1.37
2	SA	735	C	C4'-C3'	-7.97	1.44	1.53
2	SA	777	A	C5-C4	-7.97	1.33	1.38
26	LA	1015	U	N1-C6	-7.97	1.30	1.38
26	LA	1479	G	C5-C4	-7.97	1.32	1.38
26	LA	1135	C	N3-C4	7.96	1.39	1.33
26	LA	1963	U	O3'-P	-7.96	1.51	1.61
26	LA	2198	A	N9-C8	-7.96	1.31	1.37
26	LA	514	A	C1'-N9	-7.96	1.35	1.46
2	SA	1357	A	C6-N1	-7.96	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	304	U	C4'-C3'	7.96	1.61	1.53
2	SA	527	G	N9-C4	-7.96	1.31	1.38
26	LA	107	G	C2-N3	7.96	1.39	1.32
2	SA	545	C	P-O5'	-7.96	1.51	1.59
26	LA	812	C	P-O5'	-7.96	1.51	1.59
26	LA	1002	G	C5-C4	-7.96	1.32	1.38
2	SA	1417	G	N3-C4	-7.95	1.29	1.35
26	LA	281	C	C4-C5	-7.95	1.36	1.43
26	LA	295	G	N1-C2	-7.95	1.31	1.37
2	SA	599	C	C4-N4	-7.95	1.26	1.33
26	LA	91	A	C6-N6	7.95	1.40	1.33
26	LA	845	A	C2'-C1'	-7.95	1.44	1.53
26	LA	2278	A	C5-C4	-7.95	1.33	1.38
26	LA	2314	A	O3'-P	-7.95	1.51	1.61
2	SA	104	G	N7-C5	-7.95	1.34	1.39
2	SA	821	G	N7-C5	-7.95	1.34	1.39
26	LA	454	A	C2'-C1'	-7.95	1.44	1.53
26	LA	780	G	N9-C8	-7.95	1.32	1.37
26	LA	831	G	O3'-P	-7.95	1.51	1.61
26	LA	849	A	N9-C4	-7.95	1.33	1.37
26	LA	1418	G	N3-C4	-7.95	1.29	1.35
26	LA	1597	A	N3-C4	7.95	1.39	1.34
26	LA	850	U	O4'-C1'	-7.95	1.31	1.41
26	LA	1334	G	C5-C4	-7.95	1.32	1.38
26	LA	1697	G	C8-N7	7.95	1.35	1.30
26	LA	2121	G	N1-C2	-7.95	1.31	1.37
26	LA	2772	C	O3'-P	-7.95	1.51	1.61
26	LA	2552	U	C5'-C4'	7.95	1.60	1.51
2	SA	780	A	C5-C6	-7.95	1.33	1.41
2	SA	1260	G	C8-N7	-7.95	1.26	1.30
26	LA	1124	G	N7-C5	-7.95	1.34	1.39
2	SA	1419	G	C2'-C1'	-7.94	1.44	1.53
26	LA	2319	G	N9-C8	-7.94	1.32	1.37
26	LA	2426	A	N9-C4	-7.94	1.33	1.37
2	SA	456	A	C5'-C4'	7.94	1.60	1.51
4	S2	71	G	C3'-O3'	7.94	1.53	1.42
25	LB	45	A	N9-C4	-7.94	1.33	1.37
26	LA	416	U	C2-N3	-7.94	1.32	1.37
26	LA	1323	C	C4-N4	-7.94	1.26	1.33
2	SA	112	G	N9-C4	-7.94	1.31	1.38
2	SA	687	A	O3'-P	-7.94	1.51	1.61
26	LA	969	G	C5'-C4'	7.94	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2610	C	C2'-C1'	-7.94	1.44	1.53
26	LA	943	A	O3'-P	-7.94	1.51	1.61
26	LA	1048	A	N9-C8	-7.94	1.31	1.37
26	LA	1248	G	N9-C4	-7.94	1.31	1.38
26	LA	1293	C	C5-C6	-7.94	1.27	1.34
25	LB	83	G	O3'-P	-7.94	1.51	1.61
26	LA	465	G	N3-C4	-7.94	1.29	1.35
26	LA	726	G	N9-C8	-7.94	1.32	1.37
25	LB	42	C	N1-C6	7.93	1.42	1.37
26	LA	2253	G	N7-C5	7.93	1.44	1.39
26	LA	2872	A	N9-C4	-7.93	1.33	1.37
2	SA	1181	G	O3'-P	-7.93	1.51	1.61
26	LA	365	U	C5'-C4'	7.93	1.60	1.51
26	LA	697	G	C2'-C1'	-7.93	1.44	1.53
26	LA	2165	C	P-O5'	-7.93	1.51	1.59
25	LB	46	A	N9-C4	-7.93	1.33	1.37
26	LA	2098	U	O3'-P	-7.93	1.51	1.61
26	LA	2862	G	C5-C4	-7.93	1.32	1.38
2	SA	306	A	O3'-P	-7.93	1.51	1.61
26	LA	1147	A	C8-N7	-7.93	1.25	1.31
26	LA	1299	G	C8-N7	-7.93	1.26	1.30
26	LA	1771	C	C2'-C1'	-7.93	1.44	1.53
26	LA	2036	C	N1-C6	-7.93	1.32	1.37
26	LA	1274	A	O3'-P	-7.93	1.51	1.61
26	LA	2410	G	C8-N7	7.93	1.35	1.30
26	LA	2	G	N9-C4	7.93	1.44	1.38
26	LA	1324	G	N1-C2	-7.93	1.31	1.37
26	LA	1952	A	N9-C4	-7.93	1.33	1.37
2	SA	839	C	C5'-C4'	-7.92	1.41	1.51
2	SA	504	C	P-O5'	7.92	1.67	1.59
2	SA	617	G	N3-C4	-7.92	1.29	1.35
2	SA	1319	A	P-O5'	-7.92	1.51	1.59
26	LA	1084	A	P-O5'	-7.92	1.51	1.59
2	SA	412	A	C8-N7	-7.92	1.26	1.31
2	SA	907	A	O3'-P	-7.92	1.51	1.61
2	SA	1094	G	N9-C8	-7.92	1.32	1.37
26	LA	773	U	P-O5'	-7.92	1.51	1.59
26	LA	774	G	C8-N7	-7.92	1.26	1.30
26	LA	1224	U	O4'-C1'	-7.92	1.31	1.41
26	LA	1251	C	C3'-C2'	-7.92	1.44	1.52
26	LA	2612	C	C4-C5	-7.92	1.36	1.43
26	LA	593	U	C2-N3	-7.92	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1952	A	N9-C8	-7.92	1.31	1.37
2	SA	1064	G	N9-C4	-7.92	1.31	1.38
3	S1	45	G	C3'-C2'	-7.92	1.44	1.52
2	SA	1287	A	C5-C4	-7.92	1.33	1.38
2	SA	1349	A	P-O5'	-7.92	1.51	1.59
2	SA	1508	A	C5'-C4'	7.92	1.60	1.51
26	LA	2355	G	C5-C6	-7.92	1.34	1.42
2	SA	397	A	C5-C4	-7.92	1.33	1.38
26	LA	1182	G	N3-C4	-7.92	1.29	1.35
2	SA	1331	G	N7-C5	-7.91	1.34	1.39
26	LA	453	A	C5-C4	-7.91	1.33	1.38
26	LA	1661	G	C5'-C4'	7.91	1.60	1.51
26	LA	1856	U	C4-C5	-7.91	1.36	1.43
26	LA	2455	G	C3'-C2'	-7.91	1.44	1.52
26	LA	2597	G	N7-C5	-7.91	1.34	1.39
26	LA	2638	G	C5-C4	-7.91	1.32	1.38
2	SA	487	A	N9-C4	-7.91	1.33	1.37
26	LA	1134	A	P-O5'	-7.91	1.51	1.59
26	LA	544	C	C3'-C2'	7.91	1.61	1.52
26	LA	972	A	P-O5'	-7.91	1.51	1.59
26	LA	1547	C	C3'-O3'	7.91	1.53	1.42
26	LA	2061	G	C5-C4	-7.91	1.32	1.38
26	LA	2376	A	N9-C4	-7.91	1.33	1.37
2	SA	164	G	C2-N3	7.91	1.39	1.32
2	SA	1068	G	C2-N2	-7.91	1.26	1.34
26	LA	251	A	N7-C5	-7.91	1.34	1.39
2	SA	484	G	P-O5'	-7.90	1.51	1.59
26	LA	1160	G	C5-C4	7.90	1.43	1.38
26	LA	1996	C	N3-C4	-7.90	1.28	1.33
26	LA	1494	A	C8-N7	-7.90	1.26	1.31
26	LA	2584	U	O3'-P	-7.90	1.51	1.61
26	LA	970	U	C2'-C1'	-7.90	1.44	1.53
26	LA	2525	G	C8-N7	-7.90	1.26	1.30
26	LA	2624	G	N9-C8	7.90	1.43	1.37
2	SA	577	G	C2-N2	-7.90	1.26	1.34
26	LA	450	G	N7-C5	-7.90	1.34	1.39
26	LA	2638	G	C6-N1	-7.90	1.34	1.39
2	SA	1227	A	C3'-C2'	-7.90	1.44	1.52
2	SA	1263	C	C5'-C4'	7.90	1.60	1.51
26	LA	1616	A	C5-C4	-7.90	1.33	1.38
26	LA	2201	G	N9-C8	-7.90	1.32	1.37
2	SA	192	A	N7-C5	-7.90	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	223	A	N3-C4	-7.90	1.30	1.34
26	LA	397	U	C4'-C3'	-7.90	1.44	1.53
26	LA	614	A	C4'-C3'	7.89	1.61	1.53
26	LA	1121	C	P-O5'	7.89	1.67	1.59
26	LA	1476	U	N1-C6	-7.89	1.30	1.38
26	LA	687	C	C4'-O4'	7.89	1.55	1.45
26	LA	690	G	N3-C4	-7.89	1.29	1.35
26	LA	721	A	C5-C4	-7.89	1.33	1.38
26	LA	2732	G	P-O5'	-7.89	1.51	1.59
2	SA	356	A	C5-C4	-7.89	1.33	1.38
2	SA	1243	C	C2-N3	-7.89	1.29	1.35
26	LA	2002	G	C2'-C1'	-7.89	1.44	1.53
26	LA	2300	C	P-O5'	-7.89	1.51	1.59
26	LA	307	G	N9-C8	-7.89	1.32	1.37
26	LA	2160	C	N1-C6	-7.89	1.32	1.37
26	LA	2256	G	N1-C2	-7.89	1.31	1.37
26	LA	753	A	C5'-C4'	7.89	1.60	1.51
2	SA	70	U	C2'-C1'	-7.89	1.44	1.53
2	SA	1300	G	N9-C8	-7.89	1.32	1.37
26	LA	21	A	C4'-C3'	-7.89	1.44	1.53
26	LA	1143	A	N1-C2	-7.89	1.27	1.34
2	SA	922	G	C6-N1	-7.88	1.34	1.39
3	S1	44	U	O4'-C1'	7.88	1.51	1.41
2	SA	690	G	O4'-C1'	-7.88	1.31	1.41
4	S2	36	A	C5'-C4'	7.88	1.60	1.51
26	LA	95	A	C6-N1	-7.88	1.30	1.35
26	LA	1301	A	N7-C5	-7.88	1.34	1.39
26	LA	1813	G	O3'-P	-7.88	1.51	1.61
26	LA	1210	G	O3'-P	-7.88	1.51	1.61
26	LA	1909	C	O3'-P	-7.88	1.51	1.61
26	LA	2272	U	P-O5'	-7.88	1.51	1.59
26	LA	2796	U	N1-C6	-7.88	1.30	1.38
2	SA	195	A	N7-C5	-7.88	1.34	1.39
2	SA	859	G	N9-C8	-7.88	1.32	1.37
26	LA	63	A	N3-C4	7.88	1.39	1.34
26	LA	969	G	C5-C4	-7.88	1.32	1.38
26	LA	1064	C	N1-C2	7.88	1.48	1.40
26	LA	1388	G	C2'-C1'	-7.88	1.44	1.53
26	LA	802	A	C5-C4	-7.88	1.33	1.38
26	LA	1084	A	N9-C4	-7.88	1.33	1.37
26	LA	2199	A	N9-C4	-7.88	1.33	1.37
26	LA	83	A	P-O5'	-7.88	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	152	A	C5-C6	-7.88	1.33	1.41
26	LA	541	A	C6-N6	7.88	1.40	1.33
26	LA	2638	G	C8-N7	-7.88	1.26	1.30
26	LA	553	G	C5-C6	-7.87	1.34	1.42
26	LA	783	A	C5-C6	-7.87	1.33	1.41
2	SA	271	C	C4-C5	-7.87	1.36	1.43
2	SA	1002	G	C5'-C4'	7.87	1.60	1.51
26	LA	434	U	C2-N3	-7.87	1.32	1.37
26	LA	1124	G	C5'-C4'	7.87	1.60	1.51
26	LA	1292	G	C5-C4	-7.87	1.32	1.38
26	LA	1617	C	C2'-C1'	-7.87	1.44	1.53
3	S1	27	A	N7-C5	7.87	1.44	1.39
26	LA	293	U	C3'-C2'	7.87	1.61	1.52
26	LA	1606	C	C1'-N1	-7.87	1.35	1.46
2	SA	552	U	O4'-C1'	-7.87	1.31	1.41
2	SA	1050	G	N1-C2	-7.87	1.31	1.37
26	LA	1454	C	N1-C6	7.87	1.41	1.37
26	LA	2010	G	C8-N7	7.87	1.35	1.30
26	LA	2186	G	C6-N1	7.87	1.45	1.39
26	LA	1127	A	N9-C4	-7.87	1.33	1.37
26	LA	1256	G	C5-C4	-7.87	1.32	1.38
2	SA	800	G	C2-N2	-7.87	1.26	1.34
2	SA	951	G	C2'-C1'	-7.87	1.44	1.53
2	SA	1132	C	C3'-C2'	7.87	1.61	1.52
2	SA	1226	C	C3'-O3'	7.87	1.53	1.42
26	LA	260	G	C5-C4	-7.87	1.32	1.38
26	LA	545	U	N3-C4	-7.87	1.31	1.38
26	LA	1696	G	N7-C5	-7.87	1.34	1.39
26	LA	1850	G	N1-C2	-7.87	1.31	1.37
2	SA	59	A	N9-C4	7.86	1.42	1.37
26	LA	283	G	C6-N1	7.86	1.45	1.39
26	LA	730	A	C8-N7	7.86	1.37	1.31
26	LA	2428	G	C2'-C1'	-7.86	1.44	1.53
2	SA	46	G	N7-C5	-7.86	1.34	1.39
2	SA	255	G	C2'-C1'	-7.86	1.44	1.53
2	SA	908	A	C4'-C3'	-7.86	1.44	1.53
25	LB	31	C	C3'-O3'	7.86	1.53	1.42
26	LA	1841	U	C2-N3	-7.86	1.32	1.37
2	SA	595	A	C8-N7	-7.86	1.26	1.31
2	SA	602	A	C3'-O3'	7.86	1.53	1.42
2	SA	221	C	C4-N4	-7.86	1.26	1.33
26	LA	971	G	N7-C5	-7.86	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1945	G	N7-C5	-7.86	1.34	1.39
26	LA	2369	A	N7-C5	-7.86	1.34	1.39
26	LA	653	U	C5'-C4'	7.86	1.60	1.51
26	LA	1659	G	C4'-C3'	7.86	1.61	1.53
26	LA	2603	G	N7-C5	-7.86	1.34	1.39
26	LA	282	A	N3-C4	-7.85	1.30	1.34
26	LA	500	G	C5'-C4'	7.85	1.60	1.51
26	LA	139	U	C4'-C3'	7.85	1.61	1.53
26	LA	197	A	N9-C4	-7.85	1.33	1.37
26	LA	717	C	P-O5'	7.85	1.67	1.59
2	SA	787	A	C6-N6	-7.85	1.27	1.33
26	LA	1565	C	O3'-P	-7.85	1.51	1.61
2	SA	1421	G	C3'-O3'	7.85	1.53	1.42
26	LA	2115	G	N9-C4	-7.85	1.31	1.38
2	SA	727	G	C8-N7	7.85	1.35	1.30
2	SA	785	G	C6-N1	-7.85	1.34	1.39
25	LB	96	G	N9-C4	7.85	1.44	1.38
26	LA	476	G	O3'-P	-7.85	1.51	1.61
26	LA	1121	C	C2-N3	-7.85	1.29	1.35
26	LA	1683	U	N1-C2	-7.85	1.31	1.38
26	LA	2416	C	O3'-P	-7.85	1.51	1.61
26	LA	2486	C	C4-N4	-7.85	1.26	1.33
2	SA	1487	G	C6-N1	-7.85	1.34	1.39
2	SA	582	C	C4-N4	-7.84	1.26	1.33
2	SA	768	A	N3-C4	-7.84	1.30	1.34
2	SA	1428	A	N9-C4	-7.84	1.33	1.37
4	S2	24	C	C5'-C4'	-7.84	1.42	1.51
25	LB	56	G	C6-N1	-7.84	1.34	1.39
26	LA	956	G	N3-C4	-7.84	1.29	1.35
26	LA	1558	C	N1-C6	-7.84	1.32	1.37
26	LA	1757	A	C5-C4	-7.84	1.33	1.38
26	LA	2329	U	N3-C4	-7.84	1.31	1.38
26	LA	2471	A	N9-C4	-7.84	1.33	1.37
2	SA	996	A	C3'-C2'	-7.84	1.44	1.52
26	LA	2827	C	P-O5'	-7.84	1.51	1.59
2	SA	195	A	C5-C4	-7.84	1.33	1.38
2	SA	359	G	C5-C4	-7.84	1.32	1.38
26	LA	212	G	C2-N3	-7.84	1.26	1.32
26	LA	686	U	N1-C2	-7.84	1.31	1.38
26	LA	1957	C	O3'-P	-7.84	1.51	1.61
26	LA	2083	G	C8-N7	-7.84	1.26	1.30
26	LA	2357	G	P-O5'	-7.84	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1435	G	N7-C5	-7.84	1.34	1.39
26	LA	704	G	O3'-P	-7.84	1.51	1.61
26	LA	1365	A	C6-N1	-7.84	1.30	1.35
26	LA	1530	G	C8-N7	7.84	1.35	1.30
26	LA	1648	U	C2-N3	-7.84	1.32	1.37
26	LA	1912	A	C8-N7	-7.84	1.26	1.31
2	SA	559	A	N9-C4	7.84	1.42	1.37
2	SA	911	U	C2-N3	7.84	1.43	1.37
26	LA	752	A	C5-C4	-7.84	1.33	1.38
26	LA	1801	A	C1'-N9	-7.84	1.35	1.46
26	LA	2827	C	N1-C6	7.84	1.41	1.37
26	LA	139	U	C5'-C4'	7.84	1.60	1.51
26	LA	1720	U	P-O5'	-7.84	1.51	1.59
26	LA	2044	C	C3'-C2'	-7.84	1.44	1.52
26	LA	2184	A	N7-C5	-7.84	1.34	1.39
26	LA	267	C	C2'-C1'	7.83	1.61	1.53
2	SA	607	A	C6-N6	-7.83	1.27	1.33
2	SA	942	G	C2-N3	-7.83	1.26	1.32
2	SA	1530	G	N1-C2	-7.83	1.31	1.37
26	LA	1614	A	C6-N6	7.83	1.40	1.33
2	SA	1033	G	C8-N7	7.83	1.35	1.30
2	SA	901	A	C8-N7	7.83	1.37	1.31
26	LA	1334	G	C6-N1	-7.83	1.34	1.39
26	LA	2065	C	N1-C6	-7.83	1.32	1.37
26	LA	2572	A	O4'-C1'	-7.83	1.31	1.41
2	SA	467	U	N1-C6	7.83	1.45	1.38
26	LA	2494	G	C2-N2	-7.83	1.26	1.34
26	LA	2709	G	C8-N7	-7.83	1.26	1.30
26	LA	730	A	N7-C5	-7.83	1.34	1.39
26	LA	1596	A	C3'-C2'	-7.83	1.44	1.52
2	SA	262	A	C1'-N9	-7.82	1.35	1.46
26	LA	2555	U	N1-C6	-7.82	1.30	1.38
2	SA	365	U	N1-C6	-7.82	1.30	1.38
26	LA	407	G	N9-C4	-7.82	1.31	1.38
26	LA	735	A	C6-N1	-7.82	1.30	1.35
26	LA	881	G	C6-N1	-7.82	1.34	1.39
26	LA	940	G	C5-C4	-7.82	1.32	1.38
26	LA	1159	U	C2'-C1'	-7.82	1.44	1.53
26	LA	2087	G	N1-C2	-7.82	1.31	1.37
2	SA	714	G	C5-C4	-7.82	1.32	1.38
2	SA	920	U	C4'-C3'	-7.82	1.44	1.53
26	LA	468	G	C5-C4	-7.82	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	523	C	C4-N4	-7.82	1.26	1.33
26	LA	830	G	C8-N7	7.82	1.35	1.30
26	LA	1424	G	C2-N2	-7.82	1.26	1.34
26	LA	2246	G	C4'-O4'	-7.82	1.35	1.45
26	LA	2334	U	C4-C5	-7.82	1.36	1.43
4	S2	20	G	C5-C4	-7.82	1.32	1.38
26	LA	187	G	N9-C4	-7.82	1.31	1.38
26	LA	368	A	C6-N1	-7.82	1.30	1.35
26	LA	996	A	C2'-C1'	-7.82	1.44	1.53
26	LA	1635	A	C6-N1	-7.82	1.30	1.35
26	LA	2337	G	O4'-C1'	-7.82	1.31	1.41
2	SA	27	G	P-O5'	-7.81	1.51	1.59
2	SA	812	G	N7-C5	-7.81	1.34	1.39
26	LA	295	G	C2'-C1'	-7.81	1.44	1.53
26	LA	844	A	N3-C4	-7.81	1.30	1.34
26	LA	1246	A	N9-C4	-7.81	1.33	1.37
26	LA	2879	A	C6-N6	7.81	1.40	1.33
2	SA	1289	A	C2'-C1'	-7.81	1.44	1.53
26	LA	1136	G	C2-N2	-7.81	1.26	1.34
26	LA	2830	C	O3'-P	-7.81	1.51	1.61
26	LA	534	U	N1-C2	-7.81	1.31	1.38
26	LA	1933	G	C8-N7	-7.81	1.26	1.30
26	LA	2441	U	C2-N3	-7.81	1.32	1.37
2	SA	399	G	O3'-P	-7.81	1.51	1.61
26	LA	2851	A	N9-C8	7.81	1.44	1.37
2	SA	890	G	C2'-C1'	-7.80	1.44	1.53
26	LA	199	A	C2'-C1'	-7.80	1.44	1.53
26	LA	1827	U	N3-C4	-7.80	1.31	1.38
26	LA	2041	U	O3'-P	-7.80	1.51	1.61
26	LA	2804	U	C2-N3	-7.80	1.32	1.37
26	LA	2335	A	P-O5'	-7.80	1.51	1.59
26	LA	2488	G	P-O5'	-7.80	1.51	1.59
2	SA	430	A	N3-C4	-7.80	1.30	1.34
4	S2	55	U	C5'-C4'	7.80	1.60	1.51
26	LA	2046	G	C2-N3	-7.80	1.26	1.32
26	LA	2531	A	C1'-N9	-7.80	1.35	1.46
26	LA	2738	A	C3'-C2'	-7.80	1.44	1.52
2	SA	3	A	N9-C4	7.80	1.42	1.37
26	LA	1012	U	C4'-O4'	-7.80	1.35	1.45
26	LA	1937	A	C6-N1	-7.80	1.30	1.35
26	LA	2386	A	N7-C5	-7.80	1.34	1.39
26	LA	691	C	O3'-P	-7.80	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	150	U	C4-O4	-7.80	1.17	1.23
26	LA	305	C	C3'-C2'	-7.80	1.44	1.52
26	LA	1632	A	C3'-C2'	-7.80	1.44	1.52
26	LA	1983	G	N9-C8	-7.80	1.32	1.37
26	LA	2590	A	P-O5'	-7.80	1.51	1.59
26	LA	144	A	N3-C4	-7.79	1.30	1.34
26	LA	668	A	N9-C4	-7.79	1.33	1.37
26	LA	1407	G	N9-C4	-7.79	1.31	1.38
2	SA	774	G	N3-C4	-7.79	1.29	1.35
2	SA	1418	A	P-O5'	-7.79	1.51	1.59
26	LA	462	C	P-O5'	-7.79	1.51	1.59
26	LA	1122	G	C2-N2	-7.79	1.26	1.34
26	LA	1810	A	N9-C4	-7.79	1.33	1.37
26	LA	2176	A	C6-N1	7.79	1.41	1.35
2	SA	507	C	P-O5'	-7.79	1.51	1.59
26	LA	1246	A	C5-C4	-7.79	1.33	1.38
26	LA	2379	G	N1-C2	-7.79	1.31	1.37
26	LA	2406	A	N9-C4	7.79	1.42	1.37
2	SA	80	A	N3-C4	7.79	1.39	1.34
2	SA	89	U	P-O5'	-7.79	1.51	1.59
2	SA	1204	A	P-O5'	-7.79	1.51	1.59
26	LA	2056	G	P-O5'	7.79	1.67	1.59
26	LA	2141	G	C8-N7	7.79	1.35	1.30
2	SA	49	U	O4'-C1'	-7.79	1.31	1.41
2	SA	629	A	C2'-C1'	-7.79	1.44	1.53
26	LA	140	C	C2'-C1'	-7.79	1.44	1.53
26	LA	1980	G	C2-N3	-7.79	1.26	1.32
26	LA	2158	A	N7-C5	-7.79	1.34	1.39
26	LA	88	G	N3-C4	-7.79	1.30	1.35
26	LA	171	U	C4'-C3'	-7.79	1.44	1.53
26	LA	529	A	C5-C6	-7.79	1.34	1.41
26	LA	1287	A	N3-C4	-7.79	1.30	1.34
26	LA	1784	A	O3'-P	-7.79	1.51	1.61
2	SA	600	A	N3-C4	-7.78	1.30	1.34
26	LA	1310	G	C6-N1	-7.78	1.34	1.39
26	LA	2631	G	C5'-C4'	7.78	1.60	1.51
26	LA	2641	G	C2-N2	-7.78	1.26	1.34
26	LA	124	G	N9-C8	-7.78	1.32	1.37
26	LA	492	A	N9-C8	-7.78	1.31	1.37
26	LA	1143	A	C6-N1	-7.78	1.30	1.35
2	SA	860	A	C8-N7	-7.78	1.26	1.31
26	LA	504	A	N7-C5	7.78	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	572	A	C1'-N9	-7.78	1.35	1.46
2	SA	785	G	C5-C4	-7.78	1.32	1.38
2	SA	1290	G	N9-C4	-7.78	1.31	1.38
2	SA	1542	A	N9-C8	7.78	1.44	1.37
26	LA	2570	G	C8-N7	7.78	1.35	1.30
26	LA	1552	A	C6-N6	-7.78	1.27	1.33
2	SA	546	A	C5-C4	7.78	1.44	1.38
2	SA	866	C	N1-C6	-7.78	1.32	1.37
26	LA	2297	A	C6-N1	-7.78	1.30	1.35
2	SA	949	A	C5'-C4'	7.77	1.60	1.51
2	SA	1046	A	O3'-P	-7.77	1.51	1.61
2	SA	1379	G	C2-N2	-7.77	1.26	1.34
26	LA	77	G	C6-O6	-7.77	1.17	1.24
26	LA	1887	C	C1'-N1	-7.77	1.35	1.46
2	SA	391	G	C2-N2	-7.77	1.26	1.34
2	SA	465	A	P-O5'	-7.77	1.51	1.59
2	SA	563	A	N9-C8	-7.77	1.31	1.37
26	LA	1196	C	N1-C6	-7.77	1.32	1.37
2	SA	599	C	O3'-P	-7.77	1.51	1.61
2	SA	716	A	C6-N6	7.77	1.40	1.33
26	LA	1906	G	N9-C4	-7.77	1.31	1.38
25	LB	84	G	P-O5'	-7.77	1.51	1.59
26	LA	1026	G	N9-C8	7.77	1.43	1.37
26	LA	1429	G	N9-C8	-7.77	1.32	1.37
26	LA	2450	A	N9-C4	-7.77	1.33	1.37
2	SA	889	A	C1'-N9	-7.76	1.35	1.46
2	SA	1178	G	N3-C4	7.76	1.40	1.35
26	LA	974	G	C4'-C3'	7.76	1.61	1.53
26	LA	1112	G	N1-C2	-7.76	1.31	1.37
26	LA	1426	G	C2-N2	-7.76	1.26	1.34
2	SA	26	A	C5-C4	-7.76	1.33	1.38
2	SA	742	G	N7-C5	-7.76	1.34	1.39
26	LA	875	G	N7-C5	7.76	1.44	1.39
26	LA	2149	U	N1-C2	7.76	1.45	1.38
2	SA	291	U	C2'-C1'	-7.76	1.44	1.53
2	SA	1428	A	C4'-C3'	-7.76	1.44	1.53
26	LA	2334	U	P-O5'	-7.76	1.51	1.59
2	SA	829	G	C2-N3	7.76	1.39	1.32
25	LB	33	G	C6-N1	7.76	1.45	1.39
26	LA	883	G	N7-C5	7.76	1.44	1.39
2	SA	257	G	C5-C6	7.76	1.50	1.42
26	LA	2758	A	C2'-C1'	-7.76	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	530	G	C1'-N9	-7.76	1.35	1.46
26	LA	743	A	N9-C8	-7.75	1.31	1.37
2	SA	591	U	N3-C4	-7.75	1.31	1.38
2	SA	690	G	N1-C2	-7.75	1.31	1.37
2	SA	1330	U	P-O5'	-7.75	1.51	1.59
3	S1	47	C	C4'-C3'	7.75	1.61	1.53
26	LA	1518	C	C2'-C1'	-7.75	1.44	1.53
2	SA	475	C	O3'-P	-7.75	1.51	1.61
26	LA	719	C	C4-C5	7.75	1.49	1.43
26	LA	856	G	C5-C4	-7.75	1.32	1.38
26	LA	1936	A	C6-N1	7.75	1.41	1.35
2	SA	627	G	C8-N7	7.75	1.35	1.30
26	LA	349	U	N1-C6	-7.75	1.30	1.38
26	LA	532	A	O3'-P	-7.75	1.51	1.61
26	LA	1143	A	C5-C6	-7.75	1.34	1.41
26	LA	1205	A	O3'-P	-7.75	1.51	1.61
26	LA	1374	G	C5-C4	-7.75	1.32	1.38
26	LA	2469	A	C4'-C3'	-7.75	1.44	1.53
2	SA	354	G	N3-C4	-7.75	1.30	1.35
3	S1	18	A	C5'-C4'	7.75	1.60	1.51
26	LA	1182	G	C6-N1	7.75	1.45	1.39
26	LA	1351	C	P-O5'	-7.75	1.52	1.59
26	LA	2089	C	C4-N4	-7.75	1.26	1.33
26	LA	2425	A	C5-C4	7.75	1.44	1.38
26	LA	2573	C	N1-C2	-7.75	1.32	1.40
2	SA	639	G	C2-N2	-7.74	1.26	1.34
26	LA	1438	U	C2-N3	-7.74	1.32	1.37
26	LA	2176	A	P-O5'	-7.74	1.52	1.59
2	SA	1101	A	N3-C4	-7.74	1.30	1.34
26	LA	953	G	C2'-C1'	-7.74	1.44	1.53
26	LA	1426	G	C5-C6	-7.74	1.34	1.42
26	LA	1791	A	N3-C4	-7.74	1.30	1.34
26	LA	1262	A	N3-C4	-7.74	1.30	1.34
26	LA	1337	G	O3'-P	-7.74	1.51	1.61
26	LA	1939	U	C2'-C1'	-7.74	1.44	1.53
2	SA	19	A	C4'-C3'	-7.74	1.44	1.53
26	LA	924	G	C4'-C3'	-7.74	1.44	1.53
26	LA	1309	G	N9-C4	-7.74	1.31	1.38
26	LA	1998	A	C5-C4	-7.74	1.33	1.38
2	SA	1053	G	C6-N1	-7.74	1.34	1.39
26	LA	1490	A	O3'-P	-7.74	1.51	1.61
26	LA	2161	C	C4-N4	-7.74	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2430	A	N9-C4	7.74	1.42	1.37
2	SA	758	C	N1-C6	-7.74	1.32	1.37
2	SA	1039	G	N7-C5	-7.74	1.34	1.39
2	SA	1198	G	C6-N1	-7.74	1.34	1.39
2	SA	1250	A	N9-C4	-7.74	1.33	1.37
25	LB	68	C	C2-N3	7.74	1.42	1.35
26	LA	1062	G	C3'-C2'	-7.74	1.44	1.52
26	LA	2331	G	N9-C8	-7.74	1.32	1.37
2	SA	1127	G	C2'-C1'	-7.73	1.44	1.53
25	LB	33	G	N7-C5	7.73	1.43	1.39
26	LA	844	A	C8-N7	7.73	1.36	1.31
26	LA	2399	G	C5-C4	-7.73	1.32	1.38
2	SA	214	C	C2'-C1'	-7.73	1.44	1.53
2	SA	466	A	C5-C6	-7.73	1.34	1.41
2	SA	542	G	C5-C4	-7.73	1.32	1.38
26	LA	737	C	N1-C6	7.73	1.41	1.37
26	LA	1466	U	C5'-C4'	7.73	1.60	1.51
26	LA	2077	A	C2'-C1'	-7.73	1.44	1.53
26	LA	2181	U	C3'-O3'	7.73	1.52	1.42
26	LA	2856	A	N3-C4	-7.73	1.30	1.34
53	LP	39	PRO	N-CD	-7.73	1.37	1.47
2	SA	366	A	N3-C4	-7.73	1.30	1.34
2	SA	840	C	O3'-P	-7.73	1.51	1.61
2	SA	1419	G	P-O5'	7.73	1.67	1.59
26	LA	549	G	C4'-C3'	7.73	1.61	1.53
26	LA	1379	U	N1-C2	-7.73	1.31	1.38
26	LA	2676	C	C4-C5	-7.73	1.36	1.43
2	SA	867	G	C4'-C3'	-7.73	1.44	1.53
26	LA	1941	C	N3-C4	-7.73	1.28	1.33
2	SA	412	A	N9-C4	7.73	1.42	1.37
26	LA	254	G	N3-C4	-7.73	1.30	1.35
26	LA	822	G	N7-C5	7.73	1.43	1.39
2	SA	1097	C	C4-C5	7.73	1.49	1.43
2	SA	1339	A	C6-N6	7.73	1.40	1.33
2	SA	1512	U	C4'-C3'	-7.73	1.44	1.53
26	LA	130	C	O4'-C1'	-7.73	1.31	1.41
26	LA	2140	G	N9-C8	7.73	1.43	1.37
2	SA	384	G	P-O5'	-7.72	1.52	1.59
2	SA	840	C	C4-C5	-7.72	1.36	1.43
2	SA	1364	U	C5'-C4'	7.72	1.60	1.51
2	SA	1373	G	N7-C5	-7.72	1.34	1.39
2	SA	1492	A	N7-C5	7.72	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1094	U	C2-N3	-7.72	1.32	1.37
26	LA	2482	A	C8-N7	-7.72	1.26	1.31
26	LA	347	A	N9-C8	-7.72	1.31	1.37
26	LA	714	U	N1-C2	-7.72	1.31	1.38
26	LA	2644	G	P-O5'	-7.72	1.52	1.59
2	SA	1004	A	O3'-P	-7.72	1.51	1.61
2	SA	1008	U	P-O5'	-7.72	1.52	1.59
2	SA	769	G	N7-C5	-7.72	1.34	1.39
2	SA	1250	A	C5-C6	-7.72	1.34	1.41
4	S2	43	G	C6-N1	-7.72	1.34	1.39
26	LA	466	A	P-O5'	-7.72	1.52	1.59
26	LA	1356	G	C2-N3	-7.72	1.26	1.32
26	LA	1702	G	N1-C2	-7.72	1.31	1.37
2	SA	852	G	C2-N3	-7.72	1.26	1.32
2	SA	1540	U	C5'-C4'	7.72	1.60	1.51
2	SA	35	G	C6-N1	-7.72	1.34	1.39
2	SA	72	A	P-O5'	-7.72	1.52	1.59
2	SA	123	U	N1-C2	-7.72	1.31	1.38
2	SA	1404	C	C3'-C2'	-7.72	1.44	1.52
26	LA	55	G	N9-C8	-7.72	1.32	1.37
26	LA	1754	A	C2'-C1'	-7.72	1.44	1.53
2	SA	564	C	N3-C4	-7.71	1.28	1.33
26	LA	45	G	N3-C4	-7.71	1.30	1.35
26	LA	791	C	P-O5'	-7.71	1.52	1.59
26	LA	1334	G	N9-C8	-7.71	1.32	1.37
26	LA	2887	A	P-O5'	-7.71	1.52	1.59
2	SA	380	G	N9-C4	-7.71	1.31	1.38
2	SA	640	A	N9-C4	-7.71	1.33	1.37
2	SA	694	A	O3'-P	-7.71	1.51	1.61
2	SA	920	U	P-O5'	-7.71	1.52	1.59
26	LA	526	A	N9-C8	-7.71	1.31	1.37
26	LA	579	G	O3'-P	-7.71	1.51	1.61
26	LA	2230	G	C2-N2	-7.71	1.26	1.34
26	LA	116	C	C2'-C1'	-7.71	1.44	1.53
26	LA	356	G	C2-N2	-7.71	1.26	1.34
26	LA	2327	A	C1'-N9	-7.71	1.36	1.46
2	SA	1248	A	C5-C6	-7.71	1.34	1.41
26	LA	2612	C	N1-C6	-7.71	1.32	1.37
2	SA	1367	C	C4'-C3'	7.71	1.61	1.53
26	LA	643	A	C5-C6	-7.71	1.34	1.41
26	LA	806	C	P-O5'	-7.70	1.52	1.59
2	SA	705	G	C6-N1	-7.70	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2050	C	N1-C6	-7.70	1.32	1.37
2	SA	26	A	N7-C5	-7.70	1.34	1.39
2	SA	188	C	C2'-C1'	-7.70	1.44	1.53
2	SA	756	C	N1-C6	7.70	1.41	1.37
25	LB	9	G	N9-C8	-7.70	1.32	1.37
26	LA	875	G	C6-O6	-7.70	1.17	1.24
26	LA	2843	G	C8-N7	7.70	1.35	1.30
2	SA	717	U	P-O5'	7.70	1.67	1.59
26	LA	462	C	N1-C2	-7.70	1.32	1.40
26	LA	2801	G	N7-C5	-7.70	1.34	1.39
26	LA	1877	A	C5-C4	-7.70	1.33	1.38
26	LA	2398	U	C2'-C1'	-7.70	1.44	1.53
2	SA	1118	U	C4'-C3'	-7.70	1.44	1.53
26	LA	1723	G	C8-N7	-7.69	1.26	1.30
26	LA	2383	G	C2-N2	-7.69	1.26	1.34
2	SA	681	A	C4'-O4'	-7.69	1.35	1.45
2	SA	801	U	C4-C5	7.69	1.50	1.43
25	LB	77	U	O3'-P	-7.69	1.51	1.61
26	LA	1570	A	C6-N1	-7.69	1.30	1.35
26	LA	2257	U	C5'-C4'	7.69	1.60	1.51
26	LA	2674	G	C2'-C1'	-7.69	1.44	1.53
2	SA	1064	G	C5-C4	-7.69	1.32	1.38
26	LA	135	U	O3'-P	-7.69	1.51	1.61
26	LA	1235	G	N9-C4	-7.69	1.31	1.38
26	LA	2844	G	C4'-O4'	7.69	1.55	1.45
2	SA	186	C	N1-C6	7.69	1.41	1.37
26	LA	292	U	C2-N3	-7.69	1.32	1.37
26	LA	1710	G	C2-N3	7.69	1.39	1.32
26	LA	1354	A	N7-C5	-7.69	1.34	1.39
2	SA	174	A	N3-C4	-7.68	1.30	1.34
2	SA	181	A	C5-C4	-7.68	1.33	1.38
2	SA	1124	G	C2'-C1'	-7.68	1.44	1.53
2	SA	1264	U	C4'-C3'	-7.68	1.44	1.53
26	LA	1296	G	N9-C4	-7.68	1.31	1.38
26	LA	1305	C	C4'-C3'	-7.68	1.44	1.53
26	LA	1672	A	C1'-N9	-7.68	1.36	1.46
2	SA	1007	U	C4'-C3'	-7.68	1.44	1.53
2	SA	1206	G	N3-C4	7.68	1.40	1.35
26	LA	561	G	C2-N3	-7.68	1.26	1.32
2	SA	1478	U	C4-C5	7.68	1.50	1.43
2	SA	486	U	C3'-C2'	7.68	1.61	1.52
2	SA	533	A	C1'-N9	-7.68	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	587	G	C2-N3	7.68	1.38	1.32
26	LA	1527	G	C1'-N9	-7.68	1.36	1.46
2	SA	721	G	N9-C4	-7.68	1.31	1.38
26	LA	174	U	C4-C5	7.68	1.50	1.43
2	SA	1055	A	N9-C8	-7.68	1.31	1.37
2	SA	1100	C	O3'-P	-7.68	1.51	1.61
26	LA	1186	G	C6-N1	-7.68	1.34	1.39
26	LA	2262	U	C2-N3	7.68	1.43	1.37
26	LA	2663	G	N7-C5	-7.68	1.34	1.39
26	LA	8	C	N1-C6	-7.67	1.32	1.37
26	LA	89	A	C5-C4	-7.67	1.33	1.38
26	LA	1252	G	N7-C5	7.67	1.43	1.39
2	SA	1401	G	N7-C5	-7.67	1.34	1.39
26	LA	191	A	C2'-C1'	-7.67	1.45	1.53
26	LA	655	A	O3'-P	-7.67	1.51	1.61
2	SA	650	G	C5-C6	-7.67	1.34	1.42
2	SA	776	G	O3'-P	-7.67	1.51	1.61
26	LA	1424	G	C8-N7	7.67	1.35	1.30
2	SA	378	G	O3'-P	-7.67	1.51	1.61
2	SA	858	G	N9-C4	-7.67	1.31	1.38
26	LA	2590	A	N7-C5	-7.67	1.34	1.39
2	SA	558	G	C4'-C3'	-7.67	1.44	1.53
2	SA	704	A	C5-C4	7.67	1.44	1.38
2	SA	763	G	C8-N7	7.67	1.35	1.30
2	SA	817	C	N1-C6	-7.67	1.32	1.37
26	LA	118	A	C5-C4	-7.67	1.33	1.38
26	LA	664	G	C6-N1	-7.67	1.34	1.39
26	LA	1493	C	N3-C4	7.67	1.39	1.33
26	LA	1700	A	C5-C4	7.67	1.44	1.38
26	LA	1879	C	O3'-P	-7.67	1.51	1.61
26	LA	2345	G	C5-C4	-7.67	1.32	1.38
26	LA	2524	G	N1-C2	-7.67	1.31	1.37
2	SA	1178	G	N7-C5	-7.67	1.34	1.39
26	LA	125	A	C5-C4	7.67	1.44	1.38
26	LA	1840	G	N1-C2	-7.67	1.31	1.37
26	LA	2608	G	C5-C6	-7.67	1.34	1.42
2	SA	441	A	C8-N7	-7.67	1.26	1.31
26	LA	1774	C	C3'-C2'	7.67	1.61	1.52
25	LB	68	C	N1-C6	-7.66	1.32	1.37
26	LA	1932	A	C6-N1	-7.66	1.30	1.35
2	SA	331	G	C2-N2	-7.66	1.26	1.34
2	SA	1508	A	N9-C4	-7.66	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	708	G	N9-C8	-7.66	1.32	1.37
26	LA	891	G	N9-C4	7.66	1.44	1.38
26	LA	2176	A	N1-C2	-7.66	1.27	1.34
26	LA	2717	C	N3-C4	7.66	1.39	1.33
26	LA	141	G	C2'-C1'	-7.66	1.45	1.53
26	LA	252	G	C5'-C4'	7.66	1.60	1.51
26	LA	878	A	N9-C4	7.66	1.42	1.37
26	LA	920	A	C5-C4	-7.66	1.33	1.38
26	LA	1570	A	N9-C4	7.66	1.42	1.37
2	SA	969	A	N7-C5	-7.66	1.34	1.39
26	LA	140	C	N1-C6	7.66	1.41	1.37
26	LA	505	A	C5-C4	-7.66	1.33	1.38
26	LA	953	G	C5-C4	-7.66	1.32	1.38
26	LA	1262	A	C2'-C1'	-7.66	1.45	1.53
26	LA	2007	U	C4-C5	-7.66	1.36	1.43
26	LA	2033	A	C2'-C1'	-7.66	1.45	1.53
26	LA	2067	G	C5-C4	-7.65	1.32	1.38
2	SA	508	U	N3-C4	-7.65	1.31	1.38
2	SA	1043	G	C2-N2	-7.65	1.26	1.34
2	SA	1455	G	C2'-C1'	-7.65	1.45	1.53
2	SA	1478	U	C2-N3	-7.65	1.32	1.37
26	LA	46	G	C5'-C4'	-7.65	1.42	1.51
26	LA	92	U	N3-C4	7.65	1.45	1.38
26	LA	1918	A	C5-C4	-7.65	1.33	1.38
26	LA	2791	G	C6-N1	7.65	1.45	1.39
2	SA	49	U	C5'-C4'	7.65	1.60	1.51
2	SA	710	G	N3-C4	-7.65	1.30	1.35
2	SA	1140	C	C5'-C4'	7.65	1.60	1.51
2	SA	1459	G	C8-N7	7.65	1.35	1.30
26	LA	2000	C	C4-N4	-7.65	1.27	1.33
26	LA	2389	G	C6-N1	-7.65	1.34	1.39
26	LA	2457	U	C3'-O3'	7.65	1.52	1.42
26	LA	230	G	C2-N2	-7.65	1.26	1.34
2	SA	497	G	N3-C4	7.65	1.40	1.35
2	SA	1051	C	C2-N3	7.65	1.41	1.35
26	LA	962	G	C3'-C2'	7.65	1.61	1.52
26	LA	1895	C	C1'-N1	-7.65	1.36	1.46
2	SA	775	G	N3-C4	-7.65	1.30	1.35
2	SA	497	G	O4'-C1'	7.64	1.51	1.41
2	SA	1354	U	C2-N3	-7.64	1.32	1.37
26	LA	2335	A	C1'-N9	-7.64	1.36	1.46
26	LA	2338	C	C4-C5	-7.64	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2513	A	N3-C4	-7.64	1.30	1.34
2	SA	529	G	N9-C8	7.64	1.43	1.37
2	SA	725	G	C5-C6	-7.64	1.34	1.42
3	S1	19	A	C6-N1	7.64	1.40	1.35
26	LA	1370	C	O3'-P	-7.64	1.51	1.61
4	S2	74	A	P-O5'	-7.64	1.52	1.59
26	LA	921	C	P-O5'	7.64	1.67	1.59
26	LA	1077	A	C8-N7	7.64	1.36	1.31
26	LA	1893	C	N3-C4	-7.64	1.28	1.33
26	LA	2563	U	N1-C2	-7.64	1.31	1.38
2	SA	30	U	C2'-C1'	-7.64	1.45	1.53
26	LA	1250	G	N9-C8	-7.64	1.32	1.37
26	LA	1513	U	C3'-C2'	-7.64	1.44	1.52
26	LA	1870	C	C4'-C3'	7.64	1.61	1.53
3	S1	23	C	C4-C5	7.64	1.49	1.43
26	LA	1076	C	P-O5'	-7.64	1.52	1.59
26	LA	2050	C	N3-C4	-7.64	1.28	1.33
2	SA	1441	A	N9-C4	-7.64	1.33	1.37
26	LA	105	C	C4'-C3'	-7.64	1.44	1.53
26	LA	315	G	C5-C6	-7.64	1.34	1.42
26	LA	725	G	C2'-C1'	-7.64	1.45	1.53
26	LA	2692	G	O3'-P	-7.64	1.51	1.61
2	SA	445	G	N9-C8	7.63	1.43	1.37
26	LA	1001	A	C2'-C1'	-7.63	1.45	1.53
26	LA	1655	A	N7-C5	-7.63	1.34	1.39
26	LA	82	U	C3'-C2'	-7.63	1.44	1.52
26	LA	2186	G	C2-N3	7.63	1.38	1.32
2	SA	517	G	O3'-P	-7.63	1.51	1.61
2	SA	575	G	O3'-P	-7.63	1.51	1.61
2	SA	1448	C	P-O5'	-7.63	1.52	1.59
26	LA	671	C	N3-C4	7.63	1.39	1.33
26	LA	1527	G	N9-C8	7.63	1.43	1.37
26	LA	2014	A	C6-N6	7.63	1.40	1.33
26	LA	2541	A	O3'-P	-7.63	1.51	1.61
26	LA	1947	C	P-O5'	-7.63	1.52	1.59
2	SA	788	U	C4'-O4'	7.63	1.55	1.45
25	LB	33	G	N9-C8	7.63	1.43	1.37
26	LA	151	C	N1-C6	7.63	1.41	1.37
26	LA	1139	G	N3-C4	-7.63	1.30	1.35
26	LA	2693	G	O3'-P	-7.63	1.51	1.61
26	LA	2270	A	N7-C5	7.63	1.43	1.39
26	LA	2510	C	P-O5'	-7.63	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1844	C	N1-C6	7.62	1.41	1.37
2	SA	1172	C	C2'-C1'	-7.62	1.45	1.53
26	LA	763	G	N7-C5	7.62	1.43	1.39
26	LA	2128	G	N9-C4	-7.62	1.31	1.38
26	LA	2530	A	N9-C4	7.62	1.42	1.37
2	SA	531	U	C4-C5	7.62	1.50	1.43
2	SA	1047	G	N3-C4	-7.62	1.30	1.35
26	LA	317	G	N7-C5	-7.62	1.34	1.39
26	LA	725	G	C5-C6	-7.62	1.34	1.42
26	LA	1004	U	C4-C5	-7.62	1.36	1.43
26	LA	1267	U	C4'-O4'	-7.62	1.35	1.45
26	LA	1311	G	C2-N3	7.62	1.38	1.32
26	LA	1451	C	N1-C6	7.62	1.41	1.37
26	LA	1633	G	C6-N1	-7.62	1.34	1.39
26	LA	1807	G	C5-C4	7.62	1.43	1.38
26	LA	2290	G	C4'-C3'	7.62	1.61	1.53
25	LB	62	C	N1-C6	-7.62	1.32	1.37
26	LA	664	G	N9-C8	-7.62	1.32	1.37
26	LA	987	C	C2'-O2'	-7.62	1.31	1.41
26	LA	1683	U	N3-C4	-7.62	1.31	1.38
26	LA	1776	G	C4'-C3'	7.62	1.61	1.53
4	S2	66	C	C4-C5	7.62	1.49	1.43
26	LA	689	A	N9-C4	-7.62	1.33	1.37
26	LA	1493	C	C2-N3	-7.62	1.29	1.35
26	LA	1085	A	C1'-N9	-7.62	1.36	1.46
26	LA	1236	G	P-O5'	-7.62	1.52	1.59
26	LA	1613	G	P-O5'	-7.62	1.52	1.59
26	LA	2583	G	P-O5'	-7.62	1.52	1.59
26	LA	2718	G	C2'-C1'	-7.62	1.45	1.53
2	SA	141	G	N9-C4	7.62	1.44	1.38
25	LB	20	G	N3-C4	-7.62	1.30	1.35
26	LA	1745	A	C5'-C4'	7.61	1.60	1.51
2	SA	90	C	N3-C4	7.61	1.39	1.33
26	LA	223	A	C5-C6	-7.61	1.34	1.41
2	SA	608	A	N9-C4	-7.61	1.33	1.37
2	SA	645	G	N7-C5	7.61	1.43	1.39
2	SA	559	A	N7-C5	-7.61	1.34	1.39
26	LA	456	C	C4'-O4'	7.61	1.55	1.45
26	LA	2726	A	C2'-C1'	-7.61	1.45	1.53
26	LA	2869	G	C5'-C4'	7.61	1.60	1.51
26	LA	1073	A	C5'-C4'	7.61	1.60	1.51
26	LA	2333	A	N3-C4	-7.61	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2456	C	C4'-C3'	7.61	1.61	1.53
2	SA	1081	A	C1'-N9	-7.61	1.36	1.46
26	LA	445	C	C3'-O3'	7.61	1.52	1.42
26	LA	1731	G	N1-C2	-7.61	1.31	1.37
26	LA	2284	A	C5'-C4'	7.61	1.60	1.51
26	LA	2349	G	C2'-C1'	-7.61	1.45	1.53
26	LA	2436	G	P-O5'	-7.61	1.52	1.59
26	LA	2547	A	N9-C8	-7.61	1.31	1.37
2	SA	893	C	C5-C6	-7.60	1.28	1.34
26	LA	223	A	C5-C4	-7.60	1.33	1.38
26	LA	411	G	C8-N7	-7.60	1.26	1.30
26	LA	2826	A	N7-C5	-7.60	1.34	1.39
2	SA	718	A	N3-C4	7.60	1.39	1.34
2	SA	810	C	C2-N3	-7.60	1.29	1.35
26	LA	1828	G	C2-N3	7.60	1.38	1.32
2	SA	398	U	C3'-O3'	7.60	1.52	1.42
2	SA	716	A	N7-C5	-7.60	1.34	1.39
26	LA	58	G	C3'-C2'	-7.60	1.44	1.52
26	LA	2249	U	C2-N3	-7.60	1.32	1.37
2	SA	1377	A	C5'-C4'	7.60	1.60	1.51
4	S2	62	C	N1-C6	7.60	1.41	1.37
26	LA	205	G	C5'-C4'	7.60	1.60	1.51
26	LA	540	C	N1-C6	7.60	1.41	1.37
26	LA	851	C	C2'-C1'	-7.60	1.45	1.53
26	LA	2673	G	C2-N2	-7.60	1.26	1.34
26	LA	2836	U	N3-C4	-7.60	1.31	1.38
2	SA	197	A	C5-C6	7.60	1.47	1.41
2	SA	1487	G	N9-C8	-7.60	1.32	1.37
26	LA	17	G	N3-C4	-7.60	1.30	1.35
26	LA	507	A	C5-C4	-7.60	1.33	1.38
26	LA	701	G	N7-C5	7.60	1.43	1.39
26	LA	1256	G	C2-N2	-7.59	1.26	1.34
26	LA	1342	A	C5'-C4'	7.59	1.60	1.51
26	LA	1964	G	C8-N7	7.59	1.35	1.30
26	LA	2467	C	N1-C6	-7.59	1.32	1.37
26	LA	2516	A	C5-C6	-7.59	1.34	1.41
2	SA	95	C	C4'-C3'	7.59	1.61	1.53
2	SA	230	G	O3'-P	-7.59	1.52	1.61
2	SA	1067	A	C6-N1	-7.59	1.30	1.35
26	LA	173	A	C8-N7	-7.59	1.26	1.31
26	LA	1674	G	N1-C2	-7.59	1.31	1.37
26	LA	1690	A	C3'-O3'	7.59	1.52	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2620	C	C2-O2	-7.59	1.17	1.24
2	SA	87	C	C5'-C4'	7.59	1.60	1.51
25	LB	88	C	N1-C6	-7.59	1.32	1.37
26	LA	529	A	N9-C4	-7.59	1.33	1.37
26	LA	881	G	N9-C8	-7.59	1.32	1.37
26	LA	923	G	N9-C4	7.59	1.44	1.38
26	LA	963	U	O3'-P	-7.59	1.52	1.61
26	LA	1733	G	O3'-P	-7.59	1.52	1.61
26	LA	2680	U	C2-N3	-7.59	1.32	1.37
2	SA	97	G	P-O5'	-7.59	1.52	1.59
2	SA	165	G	C3'-C2'	-7.59	1.44	1.52
2	SA	433	G	N1-C2	7.59	1.43	1.37
2	SA	620	C	C2'-C1'	-7.59	1.45	1.53
2	SA	874	G	C5-C6	-7.59	1.34	1.42
26	LA	1814	G	N1-C2	7.59	1.43	1.37
26	LA	1819	A	N9-C4	-7.59	1.33	1.37
26	LA	2024	G	O3'-P	-7.59	1.52	1.61
2	SA	712	A	C5-C4	-7.59	1.33	1.38
2	SA	731	G	C5'-C4'	7.59	1.60	1.51
26	LA	2389	G	C5-C4	-7.59	1.33	1.38
2	SA	496	A	P-O5'	-7.59	1.52	1.59
2	SA	762	U	C3'-C2'	-7.59	1.44	1.52
2	SA	1196	A	C5-C6	7.59	1.47	1.41
26	LA	291	G	N3-C4	-7.59	1.30	1.35
26	LA	1697	G	C2-N3	-7.59	1.26	1.32
26	LA	2019	A	N7-C5	-7.59	1.34	1.39
26	LA	2336	A	O3'-P	-7.59	1.52	1.61
26	LA	2409	G	C8-N7	7.59	1.35	1.30
2	SA	382	A	N7-C5	-7.58	1.34	1.39
26	LA	2048	G	N3-C4	-7.58	1.30	1.35
2	SA	631	C	C3'-C2'	-7.58	1.44	1.52
2	SA	713	G	C3'-C2'	-7.58	1.44	1.52
26	LA	384	A	C5-C4	-7.58	1.33	1.38
26	LA	790	U	C2-N3	-7.58	1.32	1.37
26	LA	1271	G	C6-N1	-7.58	1.34	1.39
26	LA	1913	A	N3-C4	7.58	1.39	1.34
26	LA	2705	A	N3-C4	-7.58	1.30	1.34
26	LA	2831	G	N3-C4	-7.58	1.30	1.35
4	S2	64	G	C2-N3	-7.58	1.26	1.32
26	LA	1313	U	O3'-P	-7.58	1.52	1.61
26	LA	2402	U	N3-C4	-7.58	1.31	1.38
26	LA	2800	A	N9-C4	7.58	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1362	C	C2'-C1'	-7.58	1.45	1.53
26	LA	30	G	N3-C4	7.58	1.40	1.35
26	LA	303	G	N1-C2	-7.58	1.31	1.37
26	LA	1853	A	C5-C6	7.58	1.47	1.41
26	LA	2218	G	C5'-C4'	7.58	1.60	1.51
26	LA	2859	G	P-O5'	-7.58	1.52	1.59
4	S2	70	C	C2-N3	-7.58	1.29	1.35
26	LA	1419	A	N3-C4	7.58	1.39	1.34
2	SA	1325	C	N1-C6	7.58	1.41	1.37
2	SA	1340	A	C8-N7	-7.58	1.26	1.31
26	LA	867	C	C4-C5	-7.58	1.36	1.43
26	LA	1353	A	C3'-C2'	-7.58	1.44	1.52
26	LA	1541	C	C2'-C1'	-7.58	1.45	1.53
26	LA	1630	A	N9-C4	-7.57	1.33	1.37
26	LA	1879	C	N3-C4	7.57	1.39	1.33
26	LA	1492	G	C8-N7	-7.57	1.26	1.30
2	SA	311	C	P-O5'	-7.57	1.52	1.59
2	SA	1503	A	C5-C4	7.57	1.44	1.38
26	LA	7	G	C4'-C3'	-7.57	1.44	1.53
26	LA	218	A	N7-C5	-7.57	1.34	1.39
26	LA	2573	C	C2-N3	7.57	1.41	1.35
2	SA	60	A	C4'-C3'	7.57	1.61	1.53
2	SA	106	C	P-O5'	7.57	1.67	1.59
26	LA	1630	A	N7-C5	7.57	1.43	1.39
26	LA	188	G	O3'-P	-7.57	1.52	1.61
26	LA	1738	G	C8-N7	-7.57	1.26	1.30
2	SA	807	A	C5-C4	-7.56	1.33	1.38
2	SA	1408	A	C1'-N9	-7.56	1.36	1.46
26	LA	1225	G	N9-C4	-7.56	1.31	1.38
2	SA	864	A	C2-N3	7.56	1.40	1.33
26	LA	526	A	N7-C5	-7.56	1.34	1.39
26	LA	708	G	P-O5'	-7.56	1.52	1.59
26	LA	908	C	C4-C5	-7.56	1.36	1.43
26	LA	1838	C	P-O5'	-7.56	1.52	1.59
2	SA	283	U	N1-C2	-7.56	1.31	1.38
26	LA	2262	U	O3'-P	-7.56	1.52	1.61
26	LA	2709	G	O3'-P	-7.56	1.52	1.61
26	LA	2823	A	C6-N1	-7.56	1.30	1.35
4	S2	31	G	C8-N7	7.56	1.35	1.30
25	LB	40	U	C2'-C1'	-7.56	1.45	1.53
26	LA	93	G	N7-C5	-7.56	1.34	1.39
26	LA	677	A	C3'-O3'	7.56	1.52	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1950	G	C5-C4	-7.56	1.33	1.38
26	LA	2005	A	P-O5'	-7.56	1.52	1.59
26	LA	2455	G	C5-C4	-7.56	1.33	1.38
2	SA	1079	G	C6-N1	-7.56	1.34	1.39
2	SA	1138	G	C5-C4	7.56	1.43	1.38
2	SA	1346	A	N7-C5	-7.56	1.34	1.39
26	LA	228	C	C2-N3	7.56	1.41	1.35
26	LA	604	G	C6-N1	-7.56	1.34	1.39
26	LA	1717	A	C6-N1	7.56	1.40	1.35
2	SA	956	U	P-O5'	-7.55	1.52	1.59
2	SA	1324	A	N9-C4	-7.55	1.33	1.37
26	LA	39	G	C2-N2	-7.55	1.26	1.34
26	LA	107	G	C4'-C3'	7.55	1.61	1.53
26	LA	256	A	C6-N6	7.55	1.40	1.33
26	LA	1101	U	C2'-C1'	-7.55	1.45	1.53
26	LA	2172	U	O3'-P	-7.55	1.52	1.61
2	SA	1521	C	N1-C6	-7.55	1.32	1.37
26	LA	115	C	C4-C5	-7.55	1.36	1.43
26	LA	150	U	C3'-O3'	7.55	1.52	1.42
26	LA	600	G	N9-C4	-7.55	1.31	1.38
26	LA	2369	A	C2-N3	-7.55	1.26	1.33
2	SA	290	C	O3'-P	-7.55	1.52	1.61
2	SA	594	U	C3'-C2'	7.55	1.61	1.52
26	LA	1861	G	N9-C8	-7.55	1.32	1.37
2	SA	969	A	N1-C2	7.55	1.41	1.34
26	LA	2100	G	C5-C4	-7.55	1.33	1.38
26	LA	2262	U	C4-C5	-7.55	1.36	1.43
2	SA	1056	U	C2-N3	-7.55	1.32	1.37
26	LA	1054	A	C5-C4	-7.55	1.33	1.38
26	LA	2477	U	C2'-C1'	7.55	1.61	1.53
2	SA	646	G	N9-C8	7.55	1.43	1.37
2	SA	1031	C	N1-C2	7.55	1.47	1.40
2	SA	1137	C	C4-C5	-7.55	1.36	1.43
2	SA	1373	G	C1'-N9	-7.55	1.36	1.46
2	SA	1528	U	C3'-C2'	7.55	1.61	1.52
2	SA	874	G	C4'-C3'	-7.54	1.44	1.53
26	LA	152	A	N3-C4	-7.54	1.30	1.34
26	LA	518	G	N7-C5	-7.54	1.34	1.39
26	LA	1761	C	O4'-C1'	-7.54	1.31	1.41
26	LA	2434	A	N3-C4	-7.54	1.30	1.34
2	SA	78	A	N3-C4	7.54	1.39	1.34
2	SA	807	A	N9-C4	-7.54	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1175	A	C2'-C1'	-7.54	1.45	1.53
26	LA	1371	G	C1'-N9	-7.54	1.36	1.46
26	LA	1527	G	C5-C6	-7.54	1.34	1.42
26	LA	1835	G	C3'-C2'	-7.54	1.44	1.52
26	LA	2080	A	N9-C4	-7.54	1.33	1.37
2	SA	666	G	C5-C6	-7.54	1.34	1.42
26	LA	859	G	C2-N2	-7.54	1.27	1.34
26	LA	1186	G	N9-C8	-7.54	1.32	1.37
26	LA	1517	G	N9-C4	7.54	1.44	1.38
26	LA	2257	U	C2-N3	7.54	1.43	1.37
26	LA	2314	A	N1-C2	-7.54	1.27	1.34
2	SA	368	U	C3'-C2'	-7.54	1.44	1.52
26	LA	128	C	N3-C4	-7.54	1.28	1.33
26	LA	2531	A	C8-N7	-7.54	1.26	1.31
2	SA	1127	G	C3'-C2'	-7.54	1.44	1.52
26	LA	676	A	N9-C4	-7.54	1.33	1.37
26	LA	1228	G	C6-N1	-7.54	1.34	1.39
26	LA	2825	G	C2-N2	-7.54	1.27	1.34
2	SA	216	U	C3'-O3'	7.54	1.52	1.42
2	SA	664	G	C8-N7	7.54	1.35	1.30
2	SA	771	G	N3-C4	-7.54	1.30	1.35
26	LA	507	A	C4'-C3'	-7.54	1.44	1.53
26	LA	1422	G	P-O5'	-7.54	1.52	1.59
26	LA	1568	G	O3'-P	-7.54	1.52	1.61
26	LA	1677	A	C5'-C4'	7.54	1.60	1.51
26	LA	1887	C	N1-C6	-7.54	1.32	1.37
2	SA	411	A	C5'-C4'	7.53	1.60	1.51
2	SA	1514	G	C4'-O4'	-7.53	1.35	1.45
26	LA	2038	G	N3-C4	-7.53	1.30	1.35
26	LA	2856	A	N9-C4	7.53	1.42	1.37
2	SA	1363	A	C2'-C1'	-7.53	1.45	1.53
2	SA	1437	A	N7-C5	-7.53	1.34	1.39
26	LA	1394	U	N3-C4	-7.53	1.31	1.38
26	LA	1517	G	C5'-C4'	7.53	1.60	1.51
2	SA	523	A	C5-C6	-7.53	1.34	1.41
2	SA	1202	U	P-O5'	-7.53	1.52	1.59
25	LB	73	A	N9-C4	-7.53	1.33	1.37
26	LA	425	G	C6-N1	-7.53	1.34	1.39
26	LA	2401	U	C2-N3	-7.53	1.32	1.37
26	LA	2795	C	C2-N3	-7.53	1.29	1.35
26	LA	218	A	N3-C4	-7.53	1.30	1.34
26	LA	962	G	P-O5'	-7.53	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2121	G	C4'-O4'	7.53	1.55	1.45
2	SA	714	G	N3-C4	-7.53	1.30	1.35
2	SA	925	G	C5-C4	-7.53	1.33	1.38
2	SA	1174	G	C6-N1	-7.53	1.34	1.39
3	S1	20	G	C5'-C4'	7.53	1.60	1.51
26	LA	102	U	C5'-C4'	7.53	1.60	1.51
26	LA	1741	C	C2'-C1'	-7.53	1.45	1.53
26	LA	1755	A	N7-C5	-7.53	1.34	1.39
26	LA	2358	A	C4'-O4'	-7.53	1.35	1.45
2	SA	107	G	C2-N3	-7.53	1.26	1.32
25	LB	107	G	C5-C4	-7.53	1.33	1.38
26	LA	1798	U	N3-C4	-7.53	1.31	1.38
2	SA	812	G	C6-N1	-7.52	1.34	1.39
26	LA	35	G	C5-C6	-7.52	1.34	1.42
2	SA	1157	A	C1'-N9	-7.52	1.36	1.46
26	LA	408	G	C5-C6	7.52	1.49	1.42
26	LA	853	C	P-O5'	-7.52	1.52	1.59
26	LA	1189	A	N7-C5	-7.52	1.34	1.39
26	LA	1620	G	N3-C4	-7.52	1.30	1.35
26	LA	1699	G	P-O5'	7.52	1.67	1.59
2	SA	527	G	C2'-C1'	-7.52	1.45	1.53
26	LA	104	A	N9-C4	-7.52	1.33	1.37
26	LA	346	A	C5-C4	-7.52	1.33	1.38
26	LA	676	A	C3'-O3'	7.52	1.52	1.42
26	LA	2829	A	O3'-P	-7.52	1.52	1.61
26	LA	488	G	N9-C4	-7.52	1.31	1.38
26	LA	2749	A	N7-C5	-7.52	1.34	1.39
2	SA	119	A	O3'-P	-7.51	1.52	1.61
2	SA	774	G	N7-C5	-7.51	1.34	1.39
26	LA	17	G	N1-C2	-7.51	1.31	1.37
26	LA	469	G	N3-C4	7.51	1.40	1.35
26	LA	624	C	N1-C6	7.51	1.41	1.37
26	LA	1046	A	C6-N6	7.51	1.40	1.33
26	LA	1493	C	C5'-C4'	7.51	1.60	1.51
26	LA	1675	C	N1-C2	-7.51	1.32	1.40
26	LA	409	G	C6-O6	-7.51	1.17	1.24
26	LA	814	C	C2'-C1'	-7.51	1.45	1.53
2	SA	809	G	C6-N1	-7.51	1.34	1.39
26	LA	738	G	C5'-C4'	7.51	1.60	1.51
26	LA	1263	U	O3'-P	-7.51	1.52	1.61
26	LA	2873	A	C5-C4	-7.51	1.33	1.38
2	SA	1331	G	P-O5'	-7.51	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	33	C	C2'-C1'	-7.51	1.45	1.53
25	LB	120	U	N3-C4	-7.51	1.31	1.38
26	LA	583	G	O4'-C1'	-7.51	1.31	1.41
26	LA	1025	G	C1'-N9	-7.51	1.36	1.46
26	LA	1692	U	C2'-C1'	7.51	1.61	1.53
26	LA	2004	G	C3'-C2'	-7.51	1.44	1.52
2	SA	449	G	C2-N3	-7.51	1.26	1.32
26	LA	225	C	N1-C6	7.51	1.41	1.37
4	S2	46	G	C5-C6	-7.51	1.34	1.42
26	LA	684	G	C2-N2	-7.51	1.27	1.34
26	LA	1323	C	N1-C6	-7.51	1.32	1.37
26	LA	2652	C	C2'-C1'	-7.51	1.45	1.53
2	SA	115	G	C1'-N9	-7.50	1.36	1.46
2	SA	274	A	C5-C4	7.50	1.44	1.38
2	SA	715	A	C2'-C1'	-7.50	1.45	1.53
2	SA	1142	G	C2-N3	7.50	1.38	1.32
2	SA	1328	C	C2-N3	-7.50	1.29	1.35
26	LA	2813	A	N9-C8	-7.50	1.31	1.37
2	SA	1235	U	C4-O4	7.50	1.29	1.23
26	LA	283	G	O3'-P	-7.50	1.52	1.61
26	LA	338	G	N9-C8	-7.50	1.32	1.37
26	LA	1139	G	O3'-P	-7.50	1.52	1.61
2	SA	535	A	O3'-P	-7.50	1.52	1.61
25	LB	106	G	N3-C4	-7.50	1.30	1.35
26	LA	230	G	C5-C4	-7.50	1.33	1.38
2	SA	145	G	C2'-C1'	-7.50	1.45	1.53
2	SA	1464	U	C5'-C4'	7.50	1.60	1.51
26	LA	124	G	N7-C5	-7.50	1.34	1.39
26	LA	1802	A	C5-C6	-7.50	1.34	1.41
2	SA	1000	A	N3-C4	-7.50	1.30	1.34
2	SA	1187	G	C2-N3	7.50	1.38	1.32
2	SA	1499	A	N9-C4	-7.50	1.33	1.37
25	LB	7	G	C8-N7	7.50	1.35	1.30
25	LB	76	G	C4'-O4'	-7.50	1.35	1.45
26	LA	207	A	C5-C6	-7.50	1.34	1.41
26	LA	347	A	C8-N7	-7.50	1.26	1.31
2	SA	337	G	P-O5'	-7.50	1.52	1.59
2	SA	1132	C	N3-C4	-7.50	1.28	1.33
26	LA	676	A	C2-N3	7.50	1.40	1.33
26	LA	246	C	C2'-C1'	-7.49	1.45	1.53
26	LA	584	C	C4-N4	-7.49	1.27	1.33
26	LA	749	A	C8-N7	-7.49	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1169	A	O3'-P	-7.49	1.52	1.61
26	LA	2400	G	N3-C4	-7.49	1.30	1.35
2	SA	166	U	N1-C6	-7.49	1.31	1.38
2	SA	1430	A	O3'-P	-7.49	1.52	1.61
2	SA	1365	G	N3-C4	-7.49	1.30	1.35
2	SA	1533	C	C5'-C4'	7.49	1.60	1.51
26	LA	327	G	N9-C8	-7.49	1.32	1.37
26	LA	1286	A	N1-C2	-7.49	1.27	1.34
2	SA	462	G	N9-C8	7.49	1.43	1.37
26	LA	24	G	C8-N7	-7.49	1.26	1.30
26	LA	272	A	C4'-O4'	7.49	1.55	1.45
26	LA	1248	G	P-O5'	-7.49	1.52	1.59
26	LA	1266	G	C8-N7	-7.49	1.26	1.30
26	LA	2743	U	C5-C6	7.49	1.40	1.34
2	SA	1313	U	C4'-C3'	-7.49	1.45	1.53
2	SA	1482	G	C2'-C1'	-7.49	1.45	1.53
26	LA	602	A	C5-C4	-7.49	1.33	1.38
4	S2	65	G	N1-C2	-7.48	1.31	1.37
26	LA	858	G	C6-N1	7.48	1.44	1.39
26	LA	1342	A	C2-N3	-7.48	1.26	1.33
26	LA	1441	G	C2'-C1'	-7.48	1.45	1.53
26	LA	1891	G	C4'-C3'	-7.48	1.45	1.53
2	SA	721	G	C2'-C1'	-7.48	1.45	1.53
2	SA	1237	C	N1-C6	7.48	1.41	1.37
26	LA	407	G	C2-N2	-7.48	1.27	1.34
26	LA	2325	G	C8-N7	-7.48	1.26	1.30
26	LA	2685	G	C2'-C1'	-7.48	1.45	1.53
26	LA	2700	A	C2'-C1'	-7.48	1.45	1.53
2	SA	146	G	N9-C8	7.48	1.43	1.37
26	LA	1439	A	C6-N6	-7.48	1.27	1.33
26	LA	2485	G	C5-C4	-7.48	1.33	1.38
2	SA	449	G	C2'-C1'	-7.48	1.45	1.53
2	SA	568	G	O3'-P	-7.48	1.52	1.61
3	S1	34	U	C3'-C2'	7.48	1.61	1.52
26	LA	747	U	O3'-P	-7.48	1.52	1.61
26	LA	1043	C	N3-C4	7.48	1.39	1.33
26	LA	1135	C	O3'-P	-7.48	1.52	1.61
26	LA	1609	A	C2-N3	7.48	1.40	1.33
26	LA	1824	G	C2-N2	-7.48	1.27	1.34
26	LA	2232	C	C2'-C1'	-7.48	1.45	1.53
26	LA	1327	A	N9-C4	-7.48	1.33	1.37
26	LA	1706	C	C4-C5	-7.48	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	C2-N3	7.47	1.43	1.37
2	SA	319	G	C5-C4	7.47	1.43	1.38
26	LA	115	C	N1-C6	-7.47	1.32	1.37
26	LA	745	G	C5-C6	-7.47	1.34	1.42
26	LA	1773	A	N7-C5	-7.47	1.34	1.39
26	LA	2462	C	C2-N3	7.47	1.41	1.35
26	LA	2484	G	N1-C2	-7.47	1.31	1.37
26	LA	2635	A	N3-C4	-7.47	1.30	1.34
2	SA	1438	G	C2-N2	-7.47	1.27	1.34
25	LB	110	C	C2'-C1'	-7.47	1.45	1.53
26	LA	45	G	N7-C5	-7.47	1.34	1.39
26	LA	359	G	O4'-C1'	7.47	1.51	1.41
26	LA	1131	G	C5-C6	-7.47	1.34	1.42
2	SA	162	A	C3'-O3'	7.47	1.52	1.42
2	SA	502	A	N9-C8	-7.47	1.31	1.37
26	LA	1612	C	C3'-C2'	-7.47	1.44	1.52
26	LA	1677	A	C2'-C1'	-7.47	1.45	1.53
26	LA	1761	C	C2-O2	-7.47	1.17	1.24
26	LA	2354	C	C4-C5	-7.47	1.36	1.43
2	SA	53	A	C3'-O3'	7.47	1.52	1.42
2	SA	1485	U	C4-C5	-7.47	1.36	1.43
26	LA	462	C	C4'-C3'	-7.47	1.45	1.53
26	LA	771	G	N7-C5	-7.47	1.34	1.39
26	LA	820	A	N9-C4	-7.47	1.33	1.37
26	LA	1573	G	N3-C4	7.47	1.40	1.35
26	LA	1735	A	C8-N7	-7.47	1.26	1.31
26	LA	3	U	C4-C5	7.46	1.50	1.43
26	LA	286	U	C5'-C4'	7.46	1.60	1.51
26	LA	508	A	C2-N3	7.46	1.40	1.33
26	LA	693	A	C4'-C3'	-7.46	1.45	1.53
26	LA	1028	A	C6-N6	7.46	1.40	1.33
26	LA	1110	G	C5-C6	-7.46	1.34	1.42
26	LA	1124	G	C2'-C1'	-7.46	1.45	1.53
26	LA	2838	G	O3'-P	-7.46	1.52	1.61
2	SA	484	G	C2'-C1'	-7.46	1.45	1.53
2	SA	1453	G	C2-N3	7.46	1.38	1.32
26	LA	946	C	C3'-C2'	-7.46	1.44	1.52
26	LA	1111	A	O3'-P	-7.46	1.52	1.61
26	LA	1460	U	C3'-C2'	7.46	1.61	1.52
26	LA	2206	C	C4-C5	-7.46	1.36	1.43
26	LA	2376	A	N7-C5	-7.46	1.34	1.39
2	SA	928	G	N1-C2	-7.46	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	109	A	C4'-O4'	7.46	1.55	1.45
26	LA	2041	U	C4-C5	-7.46	1.36	1.43
26	LA	119	A	C2'-C1'	-7.46	1.45	1.53
26	LA	976	G	N3-C4	-7.46	1.30	1.35
26	LA	1149	G	C2-N3	-7.46	1.26	1.32
26	LA	1660	G	N9-C8	-7.46	1.32	1.37
26	LA	1999	C	C4-C5	-7.46	1.36	1.43
26	LA	2352	A	C5-C6	-7.46	1.34	1.41
26	LA	1875	G	N1-C2	-7.46	1.31	1.37
26	LA	2104	C	C4-C5	-7.46	1.36	1.43
26	LA	128	C	C4-C5	7.46	1.49	1.43
26	LA	1134	A	N7-C5	7.46	1.43	1.39
26	LA	1459	G	N3-C4	7.46	1.40	1.35
26	LA	2121	G	N3-C4	-7.46	1.30	1.35
2	SA	77	A	C4'-C3'	-7.45	1.45	1.53
2	SA	165	G	C2'-C1'	-7.45	1.45	1.53
26	LA	361	G	C6-N1	7.45	1.44	1.39
26	LA	2623	G	P-O5'	-7.45	1.52	1.59
26	LA	2172	U	N3-C4	-7.45	1.31	1.38
26	LA	2378	A	C2'-C1'	-7.45	1.45	1.53
2	SA	70	U	P-O5'	-7.45	1.52	1.59
2	SA	229	U	P-O5'	-7.45	1.52	1.59
2	SA	687	A	N1-C2	-7.45	1.27	1.34
26	LA	120	U	C5'-C4'	7.45	1.60	1.51
26	LA	1905	C	P-O5'	-7.45	1.52	1.59
2	SA	1483	A	C5-C4	7.45	1.44	1.38
26	LA	2256	G	N9-C4	-7.45	1.31	1.38
26	LA	2385	C	N1-C6	7.45	1.41	1.37
2	SA	510	A	C2-N3	-7.45	1.26	1.33
26	LA	1475	G	P-O5'	-7.45	1.52	1.59
26	LA	2475	C	C2-N3	-7.45	1.29	1.35
2	SA	176	C	N1-C6	-7.45	1.32	1.37
20	SD	51	GLY	CA-C	-7.45	1.40	1.51
26	LA	63	A	C4'-C3'	-7.45	1.45	1.53
26	LA	620	G	C2'-C1'	-7.45	1.45	1.53
26	LA	1322	A	C2-N3	7.45	1.40	1.33
26	LA	1792	G	N3-C4	-7.45	1.30	1.35
26	LA	2149	U	C4'-C3'	7.45	1.61	1.53
26	LA	278	A	N3-C4	7.44	1.39	1.34
26	LA	697	G	C2-N2	-7.44	1.27	1.34
26	LA	2759	G	C8-N7	7.44	1.35	1.30
20	SD	112	GLU	CG-CD	7.44	1.63	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	472	A	C5-C6	-7.44	1.34	1.41
26	LA	516	C	O3'-P	-7.44	1.52	1.61
26	LA	1743	G	C2-N2	-7.44	1.27	1.34
26	LA	2276	G	C2-N2	-7.44	1.27	1.34
2	SA	750	C	C5'-C4'	7.44	1.60	1.51
26	LA	1775	U	N1-C2	-7.44	1.31	1.38
26	LA	1799	G	C2-N2	-7.44	1.27	1.34
2	SA	927	G	N1-C2	-7.44	1.31	1.37
26	LA	372	G	C2'-C1'	-7.44	1.45	1.53
26	LA	2720	U	N1-C2	-7.44	1.31	1.38
2	SA	16	A	C5-C4	-7.44	1.33	1.38
2	SA	388	G	N7-C5	7.44	1.43	1.39
2	SA	417	G	C2-N3	-7.44	1.26	1.32
2	SA	856	C	C3'-O3'	7.44	1.52	1.42
2	SA	1462	C	C4'-C3'	7.44	1.61	1.53
4	S2	34	U	C4-C5	-7.44	1.36	1.43
26	LA	159	G	C2-N2	-7.44	1.27	1.34
26	LA	1024	G	N7-C5	-7.44	1.34	1.39
26	LA	2392	A	N9-C4	-7.44	1.33	1.37
26	LA	2476	A	P-O5'	-7.44	1.52	1.59
2	SA	1324	A	C6-N1	7.44	1.40	1.35
26	LA	2620	C	C4-C5	-7.44	1.37	1.43
2	SA	232	G	C2-N3	7.43	1.38	1.32
2	SA	906	A	C8-N7	-7.43	1.26	1.31
2	SA	917	G	C6-N1	-7.43	1.34	1.39
2	SA	1459	G	C2-N2	-7.43	1.27	1.34
26	LA	1193	G	N3-C4	-7.43	1.30	1.35
26	LA	1671	U	C4-O4	-7.43	1.17	1.23
26	LA	1950	G	O3'-P	-7.43	1.52	1.61
26	LA	2434	A	N7-C5	-7.43	1.34	1.39
2	SA	1371	G	C2-N3	-7.43	1.26	1.32
26	LA	842	U	N3-C4	7.43	1.45	1.38
26	LA	1688	U	C2-N3	-7.43	1.32	1.37
26	LA	2392	A	C3'-C2'	-7.43	1.44	1.52
48	LN	53	GLY	CA-C	7.43	1.63	1.51
26	LA	2358	A	N7-C5	-7.43	1.34	1.39
2	SA	907	A	N9-C8	-7.43	1.31	1.37
2	SA	1489	G	N3-C4	7.43	1.40	1.35
2	SA	505	G	O3'-P	-7.43	1.52	1.61
26	LA	1567	G	N3-C4	-7.43	1.30	1.35
26	LA	1823	G	C5-C6	-7.43	1.34	1.42
2	SA	328	C	N1-C6	7.43	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	566	G	C6-N1	-7.43	1.34	1.39
26	LA	228	C	C2'-C1'	-7.43	1.45	1.53
26	LA	335	C	C5-C6	-7.43	1.28	1.34
26	LA	1929	G	C5-C4	7.43	1.43	1.38
2	SA	524	G	C5-C4	-7.42	1.33	1.38
2	SA	1460	C	N1-C2	-7.42	1.32	1.40
26	LA	252	G	N9-C4	-7.42	1.32	1.38
26	LA	1014	A	O3'-P	-7.42	1.52	1.61
26	LA	1325	U	C3'-C2'	7.42	1.61	1.52
26	LA	1923	U	P-O5'	-7.42	1.52	1.59
26	LA	2870	C	P-O5'	-7.42	1.52	1.59
2	SA	841	C	C2'-C1'	-7.42	1.45	1.53
2	SA	893	C	C4-C5	-7.42	1.37	1.43
26	LA	219	A	C3'-O3'	-7.42	1.31	1.42
26	LA	241	A	N1-C2	-7.42	1.27	1.34
26	LA	2310	C	N3-C4	7.42	1.39	1.33
26	LA	2594	C	N1-C6	-7.42	1.32	1.37
2	SA	1222	G	C2'-C1'	-7.42	1.45	1.53
26	LA	138	U	C4'-O4'	7.42	1.55	1.45
26	LA	1500	G	N9-C4	-7.42	1.32	1.38
26	LA	1516	G	N7-C5	-7.42	1.34	1.39
26	LA	1779	U	O3'-P	-7.42	1.52	1.61
26	LA	2187	U	N3-C4	-7.42	1.31	1.38
2	SA	148	G	C5'-C4'	7.42	1.60	1.51
2	SA	1257	A	N7-C5	-7.42	1.34	1.39
2	SA	1392	G	C8-N7	7.42	1.35	1.30
26	LA	263	G	C8-N7	-7.42	1.26	1.30
26	LA	738	G	N1-C2	-7.42	1.31	1.37
26	LA	1037	G	C5-C4	-7.42	1.33	1.38
2	SA	675	A	N3-C4	-7.42	1.30	1.34
2	SA	1295	U	O3'-P	-7.42	1.52	1.61
26	LA	69	C	C5-C6	7.42	1.40	1.34
26	LA	391	A	N7-C5	-7.42	1.34	1.39
26	LA	432	A	N9-C4	-7.42	1.33	1.37
26	LA	673	C	C5-C6	-7.42	1.28	1.34
26	LA	1077	A	C5-C6	-7.42	1.34	1.41
26	LA	1561	C	N1-C6	-7.42	1.32	1.37
26	LA	243	U	N3-C4	-7.42	1.31	1.38
26	LA	1953	A	C5-C4	-7.41	1.33	1.38
26	LA	2060	A	P-O5'	-7.41	1.52	1.59
26	LA	2693	G	C8-N7	-7.41	1.26	1.30
26	LA	2708	G	N3-C4	-7.41	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	591	U	C2'-C1'	-7.41	1.45	1.53
26	LA	756	A	C2-N3	-7.41	1.26	1.33
26	LA	2773	C	P-O5'	-7.41	1.52	1.59
26	LA	1165	A	N3-C4	-7.41	1.30	1.34
26	LA	2344	U	C2-N3	-7.41	1.32	1.37
2	SA	311	C	C5-C6	-7.41	1.28	1.34
26	LA	94	A	O3'-P	-7.41	1.52	1.61
26	LA	1394	U	C5'-C4'	7.41	1.60	1.51
26	LA	1990	C	C4-N4	-7.41	1.27	1.33
26	LA	2020	A	C2'-C1'	-7.41	1.45	1.53
26	LA	2711	A	N9-C4	-7.41	1.33	1.37
2	SA	191	G	C8-N7	-7.41	1.26	1.30
2	SA	697	U	N1-C2	-7.41	1.31	1.38
2	SA	880	C	N1-C2	-7.41	1.32	1.40
2	SA	1050	G	C5'-C4'	7.41	1.60	1.51
2	SA	1376	U	O3'-P	-7.41	1.52	1.61
4	S2	73	A	N3-C4	-7.41	1.30	1.34
25	LB	85	G	N7-C5	-7.41	1.34	1.39
26	LA	702	U	C4'-O4'	7.41	1.55	1.45
26	LA	2212	A	N7-C5	-7.41	1.34	1.39
2	SA	851	G	N9-C8	-7.40	1.32	1.37
26	LA	458	G	N3-C4	-7.40	1.30	1.35
26	LA	877	A	N7-C5	-7.40	1.34	1.39
26	LA	2627	G	N1-C2	-7.40	1.31	1.37
25	LB	21	G	C3'-C2'	-7.40	1.44	1.52
26	LA	218	A	C6-N6	-7.40	1.28	1.33
26	LA	733	G	N7-C5	-7.40	1.34	1.39
26	LA	2383	G	C6-N1	-7.40	1.34	1.39
26	LA	2795	C	N3-C4	-7.40	1.28	1.33
2	SA	385	C	C3'-O3'	7.40	1.52	1.42
2	SA	1251	A	C5'-C4'	7.40	1.60	1.51
25	LB	32	U	C2-N3	-7.40	1.32	1.37
26	LA	94	A	C5'-C4'	7.40	1.60	1.51
26	LA	811	U	C2-N3	-7.40	1.32	1.37
26	LA	1682	G	C4'-O4'	7.40	1.55	1.45
26	LA	1743	G	P-O5'	-7.40	1.52	1.59
26	LA	2415	G	C6-N1	-7.40	1.34	1.39
26	LA	2649	C	C5'-C4'	7.40	1.60	1.51
26	LA	2763	G	N7-C5	-7.40	1.34	1.39
26	LA	1060	U	O3'-P	-7.40	1.52	1.61
26	LA	2846	G	N9-C8	-7.40	1.32	1.37
2	SA	326	G	C2-N2	-7.40	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	548	G	N3-C4	-7.40	1.30	1.35
4	S2	5	G	N9-C8	-7.40	1.32	1.37
26	LA	53	A	C1'-N9	-7.40	1.36	1.46
26	LA	1478	G	C5'-C4'	7.40	1.60	1.51
26	LA	2655	G	C2'-C1'	-7.40	1.45	1.53
2	SA	989	U	N1-C6	-7.40	1.31	1.38
26	LA	2655	G	N3-C4	-7.40	1.30	1.35
2	SA	591	U	C4'-C3'	-7.39	1.45	1.53
26	LA	492	A	N3-C4	-7.39	1.30	1.34
26	LA	1980	G	P-O5'	7.39	1.67	1.59
26	LA	2056	G	O4'-C1'	-7.39	1.32	1.41
26	LA	2083	G	C2-N2	-7.39	1.27	1.34
26	LA	2095	A	C1'-N9	-7.39	1.36	1.46
26	LA	2577	A	C5'-C4'	7.39	1.60	1.51
26	LA	2627	G	C5'-C4'	7.39	1.60	1.51
2	SA	375	U	O3'-P	-7.39	1.52	1.61
2	SA	1057	G	C2-N3	-7.39	1.26	1.32
2	SA	1140	C	O3'-P	-7.39	1.52	1.61
26	LA	218	A	N1-C2	7.39	1.41	1.34
26	LA	751	A	N7-C5	7.39	1.43	1.39
26	LA	980	A	C5'-C4'	7.39	1.60	1.51
26	LA	1024	G	C1'-N9	-7.39	1.36	1.46
26	LA	1088	A	C6-N6	-7.39	1.28	1.33
26	LA	1967	C	C2'-C1'	-7.39	1.45	1.53
26	LA	2766	A	N7-C5	-7.39	1.34	1.39
4	S2	67	C	P-O5'	-7.39	1.52	1.59
2	SA	303	A	N3-C4	-7.39	1.30	1.34
2	SA	1041	G	C2'-C1'	7.39	1.61	1.53
26	LA	194	G	C5'-C4'	7.39	1.60	1.51
26	LA	838	C	N1-C6	-7.39	1.32	1.37
26	LA	1654	A	C5-C6	7.39	1.47	1.41
26	LA	2645	G	C6-N1	-7.39	1.34	1.39
2	SA	39	G	C2-N2	-7.39	1.27	1.34
26	LA	753	A	C5-C4	7.39	1.44	1.38
26	LA	2874	C	C5'-C4'	7.39	1.60	1.51
26	LA	1020	A	C6-N1	7.39	1.40	1.35
26	LA	1284	A	N7-C5	7.39	1.43	1.39
26	LA	2681	C	N1-C2	-7.39	1.32	1.40
2	SA	433	G	N9-C8	-7.38	1.32	1.37
26	LA	1156	A	C5-C4	-7.38	1.33	1.38
2	SA	64	G	C3'-O3'	7.38	1.52	1.42
2	SA	792	A	C6-N6	7.38	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1039	G	N9-C8	-7.38	1.32	1.37
2	SA	1225	A	N7-C5	-7.38	1.34	1.39
26	LA	177	G	N3-C4	-7.38	1.30	1.35
26	LA	513	A	C5-C4	-7.38	1.33	1.38
26	LA	1212	G	C2-N2	-7.38	1.27	1.34
26	LA	1303	G	C2'-C1'	-7.38	1.45	1.53
26	LA	1610	A	N9-C4	7.38	1.42	1.37
26	LA	2404	U	C4-C5	-7.38	1.36	1.43
2	SA	547	A	N1-C2	-7.38	1.27	1.34
26	LA	1522	A	C5-C4	-7.38	1.33	1.38
26	LA	2641	G	O3'-P	-7.38	1.52	1.61
2	SA	391	G	C8-N7	-7.38	1.26	1.30
2	SA	1420	U	C4'-C3'	-7.38	1.45	1.53
26	LA	475	C	N3-C4	-7.38	1.28	1.33
26	LA	1348	C	N1-C2	-7.38	1.32	1.40
26	LA	576	U	N1-C2	-7.38	1.31	1.38
26	LA	837	C	C5'-C4'	7.38	1.60	1.51
26	LA	1453	A	C6-N1	-7.38	1.30	1.35
26	LA	2056	G	C4'-C3'	-7.38	1.45	1.53
26	LA	2669	G	C5'-C4'	7.38	1.60	1.51
3	S1	42	U	N1-C2	7.38	1.45	1.38
2	SA	261	U	C5'-C4'	7.37	1.60	1.51
2	SA	1031	C	N1-C6	-7.37	1.32	1.37
4	S2	54	G	N7-C5	-7.37	1.34	1.39
10	SJ	45	ARG	NE-CZ	7.37	1.42	1.33
26	LA	401	A	C5-C4	7.37	1.44	1.38
26	LA	1991	U	N3-C4	-7.37	1.31	1.38
26	LA	2099	U	C5'-C4'	7.37	1.60	1.51
26	LA	2668	G	N9-C4	-7.37	1.32	1.38
26	LA	337	C	P-O5'	-7.37	1.52	1.59
26	LA	382	A	N7-C5	-7.37	1.34	1.39
26	LA	459	U	C2-N3	-7.37	1.32	1.37
26	LA	1823	G	C1'-N9	-7.37	1.36	1.46
2	SA	90	C	C4-N4	-7.37	1.27	1.33
2	SA	978	A	C5-C4	7.37	1.44	1.38
26	LA	850	U	C2'-C1'	-7.37	1.45	1.53
26	LA	2774	C	C3'-C2'	-7.37	1.44	1.52
26	LA	2783	U	P-O5'	-7.37	1.52	1.59
2	SA	108	G	C8-N7	7.37	1.35	1.30
2	SA	309	A	N3-C4	7.37	1.39	1.34
2	SA	729	A	N3-C4	7.37	1.39	1.34
2	SA	758	C	C2-N3	-7.37	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	180	G	C2'-C1'	-7.37	1.45	1.53
26	LA	1357	C	P-O5'	-7.37	1.52	1.59
26	LA	2464	G	N1-C2	-7.37	1.31	1.37
26	LA	2735	G	C3'-C2'	-7.37	1.44	1.52
26	LA	2844	G	C8-N7	7.37	1.35	1.30
26	LA	1327	A	C3'-C2'	7.37	1.61	1.52
26	LA	2182	U	N1-C2	-7.37	1.31	1.38
3	S1	49	U	C4'-C3'	7.37	1.61	1.53
26	LA	563	A	N3-C4	-7.37	1.30	1.34
26	LA	1753	G	C2-N2	-7.37	1.27	1.34
26	LA	2705	A	N9-C8	-7.37	1.31	1.37
2	SA	1283	U	C4-C5	7.36	1.50	1.43
26	LA	134	G	C2'-C1'	-7.36	1.45	1.53
26	LA	1431	A	N7-C5	-7.36	1.34	1.39
26	LA	1457	U	C2'-C1'	-7.36	1.45	1.53
26	LA	1783	A	O3'-P	-7.36	1.52	1.61
26	LA	1810	A	C3'-C2'	-7.36	1.44	1.52
26	LA	2587	A	N7-C5	-7.36	1.34	1.39
26	LA	2819	G	C5'-C4'	7.36	1.60	1.51
2	SA	675	A	C4'-C3'	-7.36	1.45	1.53
2	SA	788	U	C4-C5	7.36	1.50	1.43
26	LA	130	C	N1-C6	7.36	1.41	1.37
26	LA	721	A	P-O5'	-7.36	1.52	1.59
26	LA	1678	A	C5'-C4'	7.36	1.60	1.51
26	LA	2390	U	N3-C4	-7.36	1.31	1.38
2	SA	57	G	C5-C4	-7.36	1.33	1.38
26	LA	2040	G	C4'-C3'	-7.36	1.45	1.53
26	LA	2663	G	N9-C8	-7.36	1.32	1.37
2	SA	375	U	C3'-C2'	-7.36	1.44	1.52
2	SA	763	G	C2-N3	-7.36	1.26	1.32
25	LB	76	G	C3'-C2'	-7.36	1.44	1.52
26	LA	35	G	O4'-C1'	7.36	1.51	1.41
26	LA	2159	G	C4'-C3'	7.36	1.61	1.53
26	LA	2502	G	C3'-C2'	-7.36	1.44	1.52
26	LA	307	G	C5-C4	-7.35	1.33	1.38
26	LA	2458	G	C5-C6	-7.35	1.34	1.42
2	SA	72	A	C8-N7	-7.35	1.26	1.31
2	SA	744	C	C2-N3	-7.35	1.29	1.35
2	SA	925	G	P-O5'	-7.35	1.52	1.59
26	LA	355	U	C4-O4	7.35	1.29	1.23
26	LA	406	G	N9-C4	7.35	1.43	1.38
2	SA	1383	C	C2-N3	-7.35	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1485	U	C2'-C1'	-7.35	1.45	1.53
26	LA	1776	G	O3'-P	-7.35	1.52	1.61
26	LA	1809	A	N9-C8	-7.35	1.31	1.37
26	LA	168	G	N9-C8	-7.35	1.32	1.37
26	LA	691	C	C2-O2	-7.35	1.17	1.24
26	LA	1570	A	C4'-C3'	7.35	1.61	1.53
26	LA	1981	A	O4'-C1'	-7.35	1.32	1.41
26	LA	438	G	C5-C4	-7.35	1.33	1.38
26	LA	601	C	P-O5'	-7.35	1.52	1.59
26	LA	613	A	C8-N7	-7.35	1.26	1.31
26	LA	1446	C	C5'-C4'	7.35	1.60	1.51
26	LA	2049	G	N9-C8	-7.35	1.32	1.37
2	SA	1015	G	C2'-C1'	-7.35	1.45	1.53
26	LA	463	G	N7-C5	-7.35	1.34	1.39
2	SA	1244	G	C5-C4	-7.34	1.33	1.38
11	SK	82	GLU	CD-OE1	7.34	1.33	1.25
26	LA	1029	A	C5-C4	7.34	1.43	1.38
26	LA	1102	C	C4-C5	7.34	1.48	1.43
26	LA	1106	G	C5-C4	-7.34	1.33	1.38
26	LA	1824	G	C6-N1	-7.34	1.34	1.39
26	LA	388	G	C4'-C3'	7.34	1.61	1.53
26	LA	2604	U	C4-C5	-7.34	1.36	1.43
26	LA	2896	C	C4-N4	-7.34	1.27	1.33
2	SA	86	G	N3-C4	-7.34	1.30	1.35
2	SA	593	U	N1-C2	-7.34	1.31	1.38
26	LA	189	G	N3-C4	-7.34	1.30	1.35
26	LA	1377	G	O4'-C1'	-7.34	1.32	1.41
26	LA	1446	C	N3-C4	7.34	1.39	1.33
2	SA	251	G	N1-C2	-7.34	1.31	1.37
2	SA	839	C	C4'-C3'	7.34	1.61	1.53
26	LA	868	U	C4'-C3'	-7.34	1.45	1.53
26	LA	1686	C	C2-N3	7.34	1.41	1.35
26	LA	2263	C	C4-N4	-7.34	1.27	1.33
2	SA	209	U	C2-N3	-7.33	1.32	1.37
2	SA	235	C	N1-C6	7.33	1.41	1.37
2	SA	253	A	C5-C6	7.33	1.47	1.41
2	SA	1531	A	P-O5'	-7.33	1.52	1.59
26	LA	1289	C	N3-C4	7.33	1.39	1.33
26	LA	608	A	O3'-P	-7.33	1.52	1.61
26	LA	1328	A	C2'-C1'	7.33	1.61	1.53
26	LA	1834	U	O3'-P	-7.33	1.52	1.61
26	LA	2211	A	C3'-C2'	7.33	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	608	A	C8-N7	-7.33	1.26	1.31
26	LA	331	C	N1-C6	-7.33	1.32	1.37
26	LA	1959	G	N1-C2	-7.33	1.31	1.37
26	LA	2788	C	C3'-C2'	-7.33	1.44	1.52
2	SA	1102	A	C5'-C4'	7.33	1.60	1.51
26	LA	1914	C	C1'-N1	7.33	1.59	1.48
2	SA	242	G	C4'-C3'	-7.33	1.45	1.53
2	SA	422	C	C5'-C4'	7.33	1.60	1.51
2	SA	1504	G	C3'-C2'	7.33	1.61	1.52
26	LA	890	C	N1-C6	7.33	1.41	1.37
26	LA	1783	A	C1'-N9	-7.33	1.36	1.46
2	SA	1233	G	C8-N7	-7.33	1.26	1.30
2	SA	645	G	C4'-C3'	-7.33	1.45	1.53
2	SA	746	A	C5-C4	-7.33	1.33	1.38
2	SA	799	G	N9-C8	7.33	1.43	1.37
2	SA	1473	G	P-O5'	-7.33	1.52	1.59
4	S2	15	G	C2-N2	-7.33	1.27	1.34
26	LA	1349	C	C4-C5	-7.33	1.37	1.43
26	LA	1868	C	C4-C5	-7.33	1.37	1.43
26	LA	2486	C	C2'-C1'	-7.33	1.45	1.53
26	LA	2626	C	N1-C6	-7.33	1.32	1.37
26	LA	2903	U	N3-C4	-7.33	1.31	1.38
2	SA	413	G	N3-C4	-7.32	1.30	1.35
2	SA	619	U	C2'-C1'	-7.32	1.45	1.53
2	SA	1262	C	N3-C4	7.32	1.39	1.33
26	LA	48	G	P-O5'	-7.32	1.52	1.59
26	LA	426	C	N1-C2	7.32	1.47	1.40
26	LA	1286	A	C1'-N9	-7.32	1.36	1.46
26	LA	2055	C	C4-N4	-7.32	1.27	1.33
26	LA	467	G	C2-N2	-7.32	1.27	1.34
26	LA	659	G	C3'-C2'	7.32	1.61	1.52
26	LA	2647	U	C2'-C1'	-7.32	1.45	1.53
38	LE	88	GLU	CB-CG	7.32	1.66	1.52
2	SA	906	A	N3-C4	-7.32	1.30	1.34
26	LA	259	G	N3-C4	-7.32	1.30	1.35
26	LA	2387	U	N1-C6	-7.32	1.31	1.38
25	LB	1	U	C4-C5	7.32	1.50	1.43
26	LA	169	G	N7-C5	7.32	1.43	1.39
26	LA	1126	A	N7-C5	-7.32	1.34	1.39
2	SA	1056	U	C3'-O3'	7.32	1.52	1.42
26	LA	149	A	N1-C2	-7.32	1.27	1.34
26	LA	1557	C	N1-C6	-7.32	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	477	A	O3'-P	-7.31	1.52	1.61
26	LA	490	C	C4'-C3'	7.31	1.61	1.53
26	LA	1137	G	C5-C4	-7.31	1.33	1.38
2	SA	1093	A	N9-C8	7.31	1.43	1.37
2	SA	1154	G	C4'-C3'	7.31	1.61	1.53
26	LA	953	G	C6-O6	7.31	1.30	1.24
26	LA	1222	U	C2-N3	-7.31	1.32	1.37
26	LA	1389	G	N7-C5	-7.31	1.34	1.39
26	LA	1910	G	C2'-C1'	-7.31	1.45	1.53
26	LA	2892	G	O3'-P	-7.31	1.52	1.61
2	SA	113	G	C3'-C2'	-7.31	1.44	1.52
26	LA	317	G	C2-N2	-7.31	1.27	1.34
2	SA	54	C	N1-C6	-7.31	1.32	1.37
2	SA	697	U	C4'-C3'	-7.31	1.45	1.53
2	SA	1092	A	N9-C4	7.31	1.42	1.37
2	SA	1320	C	C3'-O3'	7.31	1.52	1.42
2	SA	1538	C	O3'-P	-7.31	1.52	1.61
4	S2	15	G	C2-N3	7.31	1.38	1.32
25	LB	67	G	N9-C8	-7.31	1.32	1.37
26	LA	1342	A	C8-N7	-7.31	1.26	1.31
26	LA	1487	U	O3'-P	-7.31	1.52	1.61
2	SA	1361	G	N7-C5	7.31	1.43	1.39
26	LA	243	U	C4'-O4'	-7.31	1.36	1.45
26	LA	628	G	C3'-C2'	-7.31	1.44	1.52
26	LA	1237	A	C1'-N9	-7.31	1.36	1.46
26	LA	1459	G	C8-N7	7.31	1.35	1.30
26	LA	2893	A	N7-C5	-7.31	1.34	1.39
2	SA	315	A	C2-N3	7.31	1.40	1.33
26	LA	195	A	C3'-C2'	-7.31	1.44	1.52
2	SA	51	A	P-O5'	-7.30	1.52	1.59
2	SA	1179	A	C4'-O4'	-7.30	1.36	1.45
26	LA	183	C	C5'-C4'	7.30	1.60	1.51
26	LA	1029	A	C2'-C1'	-7.30	1.45	1.53
26	LA	2318	G	C5'-C4'	7.30	1.60	1.51
26	LA	95	A	C8-N7	-7.30	1.26	1.31
26	LA	1867	G	C6-N1	7.30	1.44	1.39
26	LA	2520	C	N1-C6	-7.30	1.32	1.37
2	SA	1493	A	C5-C6	-7.30	1.34	1.41
26	LA	190	A	C4'-C3'	-7.30	1.45	1.53
26	LA	960	A	C4'-C3'	-7.30	1.45	1.53
26	LA	1162	G	C6-N1	-7.30	1.34	1.39
26	LA	1805	A	N3-C4	-7.30	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1813	G	C3'-O3'	-7.30	1.31	1.42
26	LA	2835	A	N9-C4	-7.30	1.33	1.37
2	SA	1072	G	C2-N2	-7.30	1.27	1.34
26	LA	897	C	C5'-C4'	7.30	1.60	1.51
26	LA	1653	G	C8-N7	-7.30	1.26	1.30
26	LA	2192	U	C2-N3	7.30	1.42	1.37
2	SA	840	C	C5'-C4'	7.30	1.60	1.51
26	LA	66	C	C2-N3	-7.30	1.29	1.35
2	SA	285	C	O3'-P	-7.30	1.52	1.61
2	SA	475	C	C2'-C1'	-7.30	1.45	1.53
26	LA	758	C	C5'-C4'	7.30	1.60	1.51
26	LA	827	U	C2'-C1'	-7.30	1.45	1.53
26	LA	1297	C	P-O5'	-7.30	1.52	1.59
26	LA	1952	A	N7-C5	-7.30	1.34	1.39
26	LA	2078	C	P-O5'	-7.30	1.52	1.59
26	LA	1703	G	C5'-C4'	7.29	1.60	1.51
26	LA	2193	G	N9-C4	-7.29	1.32	1.38
2	SA	1135	U	N1-C6	-7.29	1.31	1.38
25	LB	40	U	C2-N3	7.29	1.42	1.37
26	LA	380	G	C5-C4	-7.29	1.33	1.38
26	LA	795	C	C4-C5	-7.29	1.37	1.43
26	LA	1615	C	C2-N3	-7.29	1.29	1.35
2	SA	257	G	C8-N7	7.29	1.35	1.30
2	SA	587	G	N9-C8	-7.29	1.32	1.37
2	SA	977	A	O4'-C1'	7.29	1.51	1.41
2	SA	1380	U	N1-C2	-7.29	1.31	1.38
4	S2	65	G	N7-C5	-7.29	1.34	1.39
25	LB	90	C	O3'-P	-7.29	1.52	1.61
26	LA	19	A	C5-C4	-7.29	1.33	1.38
26	LA	1206	G	C5'-C4'	7.29	1.60	1.51
26	LA	1995	U	C5'-C4'	7.29	1.60	1.51
26	LA	854	C	C2'-C1'	-7.29	1.45	1.53
26	LA	1612	C	C2'-C1'	-7.29	1.45	1.53
26	LA	2068	U	C2'-C1'	-7.29	1.45	1.53
26	LA	2562	U	N1-C2	-7.29	1.31	1.38
26	LA	1777	U	C4'-O4'	-7.29	1.36	1.45
26	LA	1806	C	C3'-C2'	7.29	1.60	1.52
26	LA	2108	A	N7-C5	-7.29	1.34	1.39
26	LA	2187	U	P-O5'	-7.29	1.52	1.59
26	LA	2663	G	P-O5'	-7.29	1.52	1.59
2	SA	1294	G	C5-C4	-7.29	1.33	1.38
26	LA	1137	G	N7-C5	-7.29	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1300	G	N9-C8	7.29	1.43	1.37
26	LA	2153	C	C2'-C1'	-7.29	1.45	1.53
2	SA	233	C	C5'-C4'	7.29	1.60	1.51
2	SA	238	A	N3-C4	7.29	1.39	1.34
2	SA	589	U	N1-C2	-7.29	1.31	1.38
2	SA	720	C	C4'-C3'	-7.29	1.45	1.53
26	LA	1443	U	O3'-P	-7.29	1.52	1.61
26	LA	2119	A	N7-C5	-7.29	1.34	1.39
26	LA	2486	C	O4'-C1'	-7.29	1.32	1.41
2	SA	477	C	C5'-C4'	7.28	1.60	1.51
2	SA	652	U	C3'-C2'	-7.28	1.44	1.52
2	SA	1161	C	C3'-C2'	-7.28	1.44	1.52
26	LA	820	A	C6-N6	7.28	1.39	1.33
26	LA	1535	A	O3'-P	-7.28	1.52	1.61
26	LA	1795	C	C4-N4	-7.28	1.27	1.33
26	LA	2013	A	N7-C5	-7.28	1.34	1.39
26	LA	2229	U	N1-C2	-7.28	1.31	1.38
2	SA	539	A	C8-N7	7.28	1.36	1.31
12	SL	27	PRO	N-CD	-7.28	1.37	1.47
26	LA	1190	G	N9-C4	-7.28	1.32	1.38
26	LA	1683	U	O3'-P	-7.28	1.52	1.61
26	LA	1827	U	N1-C6	-7.28	1.31	1.38
26	LA	79	C	C4-C5	7.28	1.48	1.43
26	LA	2356	U	O3'-P	-7.28	1.52	1.61
26	LA	2897	U	C3'-C2'	-7.28	1.44	1.52
2	SA	654	G	C6-O6	-7.28	1.17	1.24
2	SA	772	U	N1-C6	-7.28	1.31	1.38
2	SA	1189	U	N1-C6	-7.28	1.31	1.38
3	S1	39	U	N1-C2	7.28	1.45	1.38
26	LA	252	G	C2-N3	7.28	1.38	1.32
26	LA	741	U	N1-C2	-7.28	1.32	1.38
2	SA	72	A	N1-C2	-7.28	1.27	1.34
2	SA	1046	A	C5-C4	7.28	1.43	1.38
3	S1	13	A	C6-N1	7.28	1.40	1.35
26	LA	699	A	C1'-N9	-7.28	1.36	1.46
2	SA	232	G	C5-C4	-7.27	1.33	1.38
2	SA	688	G	C2-N3	7.27	1.38	1.32
2	SA	1501	C	C2'-C1'	-7.27	1.45	1.53
26	LA	2588	G	C2'-C1'	-7.27	1.45	1.53
2	SA	269	C	C2'-C1'	-7.27	1.45	1.53
26	LA	834	G	C5-C4	-7.27	1.33	1.38
26	LA	1970	A	C6-N6	-7.27	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	257	G	C2-N3	-7.27	1.26	1.32
2	SA	429	U	C4-O4	-7.27	1.17	1.23
25	LB	36	C	P-O5'	7.27	1.67	1.59
26	LA	531	C	P-O5'	-7.27	1.52	1.59
26	LA	1064	C	N1-C6	-7.27	1.32	1.37
26	LA	1523	U	C5'-C4'	7.27	1.60	1.51
26	LA	1947	C	N3-C4	7.27	1.39	1.33
26	LA	2266	A	C8-N7	-7.27	1.26	1.31
26	LA	2643	G	N9-C4	-7.27	1.32	1.38
2	SA	19	A	C8-N7	7.27	1.36	1.31
2	SA	914	A	P-O5'	7.27	1.67	1.59
25	LB	99	A	C3'-C2'	-7.27	1.44	1.52
26	LA	859	G	N3-C4	-7.27	1.30	1.35
26	LA	962	G	N1-C2	-7.27	1.31	1.37
26	LA	1280	G	C6-O6	-7.27	1.17	1.24
26	LA	1980	G	C5-C4	-7.27	1.33	1.38
2	SA	826	C	N1-C6	-7.27	1.32	1.37
2	SA	210	C	C4'-O4'	7.26	1.54	1.45
26	LA	350	G	N9-C4	7.26	1.43	1.38
26	LA	566	U	C4-C5	-7.26	1.37	1.43
26	LA	596	U	N1-C6	-7.26	1.31	1.38
26	LA	1079	C	C4-N4	-7.26	1.27	1.33
26	LA	2032	G	C8-N7	-7.26	1.26	1.30
26	LA	2229	U	C2-N3	-7.26	1.32	1.37
26	LA	2478	A	P-O5'	-7.26	1.52	1.59
26	LA	2893	A	N3-C4	-7.26	1.30	1.34
26	LA	2510	C	N1-C6	7.26	1.41	1.37
2	SA	669	G	N9-C8	7.26	1.43	1.37
2	SA	1407	C	C4-N4	-7.26	1.27	1.33
26	LA	271	G	C5-C4	-7.26	1.33	1.38
26	LA	1232	G	N1-C2	-7.26	1.31	1.37
26	LA	1902	C	C2-N3	7.26	1.41	1.35
2	SA	60	A	C6-N6	-7.26	1.28	1.33
2	SA	1364	U	C4'-C3'	7.26	1.61	1.53
26	LA	1071	G	O4'-C1'	-7.26	1.32	1.41
2	SA	911	U	O3'-P	-7.26	1.52	1.61
2	SA	240	G	O3'-P	-7.26	1.52	1.61
2	SA	1090	U	C2-N3	7.26	1.42	1.37
26	LA	196	A	N9-C4	7.26	1.42	1.37
26	LA	274	C	N1-C2	-7.26	1.32	1.40
26	LA	727	A	O3'-P	-7.26	1.52	1.61
26	LA	880	G	C2-N3	7.26	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1772	A	C8-N7	-7.26	1.26	1.31
26	LA	1982	U	C2-N3	-7.26	1.32	1.37
26	LA	2066	C	C4-C5	-7.26	1.37	1.43
26	LA	2418	A	C5-C4	-7.26	1.33	1.38
2	SA	195	A	N3-C4	-7.25	1.30	1.34
2	SA	537	G	P-O5'	-7.25	1.52	1.59
2	SA	1074	G	C5-C4	-7.25	1.33	1.38
2	SA	513	C	N1-C6	-7.25	1.32	1.37
2	SA	781	A	N7-C5	-7.25	1.34	1.39
2	SA	982	U	N3-C4	-7.25	1.31	1.38
2	SA	1541	U	N3-C4	7.25	1.45	1.38
4	S2	7	G	N1-C2	-7.25	1.31	1.37
4	S2	16	C	C2-N3	7.25	1.41	1.35
25	LB	96	G	C6-N1	-7.25	1.34	1.39
26	LA	554	U	P-O5'	-7.25	1.52	1.59
26	LA	1829	A	C5-C4	-7.25	1.33	1.38
26	LA	1974	C	C4-C5	-7.25	1.37	1.43
2	SA	282	A	N7-C5	-7.25	1.34	1.39
2	SA	956	U	C4'-O4'	7.25	1.54	1.45
2	SA	1180	A	N9-C4	-7.25	1.33	1.37
2	SA	1337	G	N9-C4	7.25	1.43	1.38
26	LA	483	A	N9-C4	-7.25	1.33	1.37
26	LA	1119	U	P-O5'	-7.25	1.52	1.59
26	LA	1321	A	C6-N6	7.25	1.39	1.33
26	LA	1570	A	C5-C4	-7.25	1.33	1.38
2	SA	1055	A	O4'-C1'	-7.25	1.32	1.41
2	SA	1525	G	C3'-O3'	7.25	1.52	1.42
4	S2	14	A	N9-C4	7.25	1.42	1.37
25	LB	37	C	C2-N3	-7.25	1.29	1.35
25	LB	96	G	N1-C2	-7.25	1.31	1.37
26	LA	781	A	C3'-C2'	-7.25	1.44	1.52
26	LA	1043	C	O3'-P	-7.25	1.52	1.61
2	SA	965	U	C4-C5	-7.25	1.37	1.43
26	LA	599	A	N9-C4	-7.25	1.33	1.37
2	SA	904	U	N1-C2	-7.25	1.32	1.38
26	LA	2085	U	C4-O4	-7.25	1.17	1.23
2	SA	995	C	C4'-C3'	7.24	1.61	1.53
26	LA	1529	G	N7-C5	7.24	1.43	1.39
2	SA	766	A	P-O5'	-7.24	1.52	1.59
26	LA	142	A	N9-C8	-7.24	1.31	1.37
26	LA	537	G	C5'-C4'	7.24	1.60	1.51
26	LA	705	A	C6-N1	-7.24	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1732	C	O3'-P	7.24	1.69	1.61
26	LA	2243	U	C4-O4	-7.24	1.17	1.23
23	SR	63	TYR	CB-CG	-7.24	1.40	1.51
2	SA	765	G	C5-C4	7.24	1.43	1.38
26	LA	680	C	C5'-C4'	7.24	1.60	1.51
26	LA	829	A	N9-C4	-7.24	1.33	1.37
26	LA	1137	G	C2'-C1'	-7.24	1.45	1.53
26	LA	2364	C	O5'-C5'	7.24	1.56	1.44
3	S1	47	C	C5'-C4'	7.24	1.60	1.51
26	LA	469	G	N7-C5	-7.24	1.34	1.39
26	LA	870	U	N1-C6	-7.24	1.31	1.38
26	LA	1601	G	C2-N2	-7.23	1.27	1.34
26	LA	2296	U	P-O5'	-7.23	1.52	1.59
26	LA	2630	G	C3'-O3'	7.23	1.52	1.42
2	SA	1449	C	N1-C6	-7.23	1.32	1.37
33	LZ	1	SER	CA-CB	7.23	1.63	1.52
2	SA	116	A	N3-C4	-7.23	1.30	1.34
26	LA	39	G	N7-C5	-7.23	1.34	1.39
26	LA	444	C	C5'-C4'	7.23	1.60	1.51
26	LA	461	C	N1-C6	-7.23	1.32	1.37
26	LA	1624	U	N3-C4	-7.23	1.31	1.38
26	LA	2681	C	O3'-P	-7.23	1.52	1.61
26	LA	1768	C	C4-N4	-7.23	1.27	1.33
26	LA	1793	C	N1-C6	-7.23	1.32	1.37
26	LA	2277	G	N3-C4	7.23	1.40	1.35
2	SA	722	G	C1'-N9	-7.23	1.36	1.46
2	SA	861	G	C4'-C3'	-7.23	1.45	1.53
2	SA	1514	G	O3'-P	-7.23	1.52	1.61
26	LA	1843	C	N1-C6	-7.23	1.32	1.37
26	LA	2121	G	C2'-C1'	-7.23	1.45	1.53
21	SE	43	GLY	N-CA	-7.23	1.35	1.46
26	LA	1175	A	N3-C4	7.23	1.39	1.34
26	LA	1797	G	C2-N2	-7.23	1.27	1.34
26	LA	819	A	P-O5'	-7.22	1.52	1.59
26	LA	1137	G	C2-N2	-7.22	1.27	1.34
26	LA	2652	C	C2-N3	-7.22	1.29	1.35
2	SA	556	C	N1-C6	7.22	1.41	1.37
2	SA	778	G	N3-C4	-7.22	1.30	1.35
26	LA	336	C	C2-N3	7.22	1.41	1.35
26	LA	798	G	C2'-C1'	-7.22	1.45	1.53
2	SA	800	G	N1-C2	-7.22	1.31	1.37
25	LB	87	U	C2-N3	7.22	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2779	U	C2-N3	-7.22	1.32	1.37
26	LA	90	U	C2-N3	-7.22	1.32	1.37
26	LA	1964	G	C1'-N9	-7.22	1.36	1.46
3	S1	27	A	P-O5'	-7.22	1.52	1.59
4	S2	72	C	C2'-C1'	-7.22	1.45	1.53
26	LA	20	C	C4-C5	7.22	1.48	1.43
26	LA	30	G	C2-N2	-7.22	1.27	1.34
26	LA	861	A	C6-N1	7.22	1.40	1.35
26	LA	1311	G	C8-N7	7.22	1.35	1.30
26	LA	1535	A	C5'-C4'	7.22	1.60	1.51
2	SA	1293	C	C2-N3	-7.21	1.29	1.35
26	LA	471	A	P-O5'	-7.21	1.52	1.59
26	LA	713	G	N9-C4	-7.21	1.32	1.38
26	LA	1932	A	C2-N3	-7.21	1.27	1.33
26	LA	1211	C	P-O5'	-7.21	1.52	1.59
26	LA	2142	A	C8-N7	-7.21	1.26	1.31
2	SA	317	U	C5-C6	-7.21	1.27	1.34
2	SA	1091	U	C3'-C2'	-7.21	1.44	1.52
26	LA	1092	C	C2'-C1'	-7.21	1.45	1.53
26	LA	1230	A	N3-C4	7.21	1.39	1.34
26	LA	1639	C	C4-C5	-7.21	1.37	1.43
26	LA	2093	G	C5-C4	-7.21	1.33	1.38
26	LA	2236	U	C4'-C3'	-7.21	1.45	1.53
2	SA	577	G	C2'-C1'	-7.21	1.45	1.53
2	SA	754	C	C4-C5	-7.21	1.37	1.43
2	SA	1362	A	N1-C2	7.21	1.40	1.34
26	LA	110	G	C8-N7	-7.21	1.26	1.30
26	LA	2857	G	C8-N7	-7.21	1.26	1.30
2	SA	5	U	C5'-C4'	7.21	1.60	1.51
26	LA	46	G	C1'-N9	-7.21	1.36	1.46
26	LA	1753	G	C6-N1	-7.21	1.34	1.39
26	LA	2579	C	C2'-C1'	-7.21	1.45	1.53
2	SA	1462	C	C3'-O3'	7.21	1.52	1.42
26	LA	2642	G	C8-N7	-7.21	1.26	1.30
2	SA	1081	A	C3'-C2'	-7.21	1.44	1.52
25	LB	71	C	N1-C6	7.21	1.41	1.37
25	LB	79	G	O3'-P	-7.21	1.52	1.61
26	LA	90	U	C4'-O4'	-7.21	1.36	1.45
26	LA	2028	U	P-O5'	-7.21	1.52	1.59
26	LA	2108	A	O3'-P	-7.21	1.52	1.61
2	SA	79	G	N9-C4	7.20	1.43	1.38
2	SA	1067	A	C5'-C4'	7.20	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1206	G	C2'-C1'	-7.20	1.45	1.53
25	LB	74	U	C2-N3	7.20	1.42	1.37
26	LA	864	G	N1-C2	-7.20	1.31	1.37
26	LA	1762	A	N7-C5	-7.20	1.34	1.39
26	LA	2308	G	C3'-O3'	7.20	1.52	1.42
26	LA	2530	A	C5'-C4'	7.20	1.59	1.51
26	LA	2854	G	N1-C2	-7.20	1.31	1.37
26	LA	2890	G	C2-N2	-7.20	1.27	1.34
2	SA	1091	U	C4-C5	-7.20	1.37	1.43
26	LA	338	G	N7-C5	7.20	1.43	1.39
26	LA	2150	C	N3-C4	-7.20	1.28	1.33
26	LA	2422	C	O3'-P	-7.20	1.52	1.61
2	SA	256	U	N1-C6	-7.20	1.31	1.38
2	SA	1509	C	N3-C4	-7.20	1.28	1.33
26	LA	93	G	C4'-O4'	-7.20	1.36	1.45
26	LA	640	C	P-O5'	-7.20	1.52	1.59
26	LA	1092	C	C2-N3	-7.20	1.29	1.35
26	LA	1470	A	C2'-C1'	-7.20	1.45	1.53
2	SA	1302	C	C4-C5	-7.20	1.37	1.43
2	SA	1463	U	N3-C4	7.20	1.45	1.38
26	LA	205	G	C6-N1	-7.20	1.34	1.39
26	LA	1764	C	C2-N3	-7.20	1.29	1.35
53	LP	112	TYR	CD2-CE2	7.20	1.50	1.39
2	SA	310	G	C5-C4	7.20	1.43	1.38
2	SA	332	G	C5'-C4'	7.20	1.59	1.51
2	SA	627	G	C3'-C2'	-7.20	1.44	1.52
2	SA	795	C	P-O5'	-7.20	1.52	1.59
2	SA	943	U	N1-C2	-7.20	1.32	1.38
26	LA	1212	G	C3'-O3'	7.20	1.52	1.42
26	LA	113	U	N1-C6	7.19	1.44	1.38
26	LA	1369	G	C5-C4	-7.19	1.33	1.38
26	LA	1692	U	C2-O2	-7.19	1.15	1.22
2	SA	102	G	N9-C4	-7.19	1.32	1.38
2	SA	697	U	C5'-C4'	7.19	1.59	1.51
2	SA	1457	G	C1'-N9	-7.19	1.36	1.46
2	SA	1526	G	N7-C5	-7.19	1.34	1.39
26	LA	799	G	C5-C6	-7.19	1.35	1.42
26	LA	1903	G	C5'-C4'	7.19	1.59	1.51
2	SA	921	U	C4-O4	-7.19	1.17	1.23
2	SA	1275	A	C2-N3	7.19	1.40	1.33
2	SA	1540	U	C1'-N1	7.19	1.59	1.48
26	LA	20	C	C2-N3	-7.19	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	152	A	N9-C4	-7.19	1.33	1.37
26	LA	1372	U	C2'-C1'	-7.19	1.45	1.53
26	LA	1398	C	C4-N4	-7.19	1.27	1.33
26	LA	2284	A	C2'-C1'	-7.19	1.45	1.53
26	LA	2770	G	C2-N2	-7.19	1.27	1.34
26	LA	543	G	C2-N2	-7.19	1.27	1.34
2	SA	51	A	C6-N1	-7.19	1.30	1.35
2	SA	329	A	C4'-C3'	7.19	1.61	1.53
26	LA	671	C	O4'-C1'	-7.19	1.32	1.41
26	LA	1183	U	N1-C6	7.19	1.44	1.38
26	LA	1595	C	P-O5'	7.19	1.67	1.59
26	LA	1812	U	C2-N3	-7.19	1.32	1.37
26	LA	2118	U	C5'-C4'	7.19	1.59	1.51
2	SA	321	A	N3-C4	-7.19	1.30	1.34
2	SA	1238	A	C6-N6	-7.19	1.28	1.33
26	LA	429	A	C4'-O4'	-7.19	1.36	1.45
26	LA	2341	G	N3-C4	-7.19	1.30	1.35
26	LA	2770	G	C6-N1	-7.19	1.34	1.39
2	SA	120	A	C5-C4	-7.18	1.33	1.38
2	SA	533	A	O3'-P	-7.18	1.52	1.61
2	SA	952	U	N3-C4	-7.18	1.31	1.38
26	LA	371	A	C5-C4	-7.18	1.33	1.38
26	LA	592	A	C6-N6	7.18	1.39	1.33
26	LA	1224	U	C4'-C3'	-7.18	1.45	1.53
26	LA	2147	A	C6-N6	7.18	1.39	1.33
26	LA	2886	A	N3-C4	-7.18	1.30	1.34
2	SA	152	A	N9-C8	-7.18	1.32	1.37
26	LA	1133	A	O3'-P	-7.18	1.52	1.61
2	SA	792	A	C8-N7	-7.18	1.26	1.31
2	SA	1300	G	C2'-C1'	-7.18	1.45	1.53
3	S1	40	G	C5'-C4'	7.18	1.59	1.51
26	LA	118	A	N7-C5	7.18	1.43	1.39
26	LA	1101	U	P-O5'	-7.18	1.52	1.59
2	SA	8	A	O3'-P	-7.18	1.52	1.61
2	SA	484	G	C6-N1	-7.18	1.34	1.39
2	SA	489	C	O3'-P	-7.18	1.52	1.61
2	SA	1033	G	N3-C4	-7.18	1.30	1.35
25	LB	16	G	N3-C4	-7.18	1.30	1.35
26	LA	2706	A	C5'-C4'	7.18	1.59	1.51
2	SA	34	C	C5'-C4'	-7.18	1.42	1.51
2	SA	262	A	C4'-C3'	-7.18	1.45	1.53
2	SA	1511	G	P-O5'	-7.18	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	8	C	C2-N3	-7.18	1.30	1.35
26	LA	49	A	C4'-C3'	7.18	1.61	1.53
26	LA	467	G	C5-C6	-7.18	1.35	1.42
26	LA	1204	A	N9-C8	-7.18	1.32	1.37
26	LA	1424	G	N9-C8	-7.18	1.32	1.37
2	SA	790	A	C2-N3	-7.17	1.27	1.33
26	LA	352	A	C5-C4	-7.17	1.33	1.38
26	LA	1450	G	O3'-P	-7.17	1.52	1.61
26	LA	1490	A	N3-C4	7.17	1.39	1.34
26	LA	1853	A	C8-N7	7.17	1.36	1.31
2	SA	242	G	C2-N2	-7.17	1.27	1.34
2	SA	376	G	C5-C6	7.17	1.49	1.42
2	SA	517	G	N9-C8	7.17	1.42	1.37
2	SA	859	G	N9-C4	-7.17	1.32	1.38
2	SA	1002	G	C8-N7	7.17	1.35	1.30
26	LA	157	C	P-O5'	7.17	1.67	1.59
26	LA	234	U	C2-N3	7.17	1.42	1.37
26	LA	1776	G	C2-N2	-7.17	1.27	1.34
2	SA	681	A	C3'-C2'	-7.17	1.44	1.52
2	SA	759	A	C1'-N9	-7.17	1.36	1.46
2	SA	45	G	C5-C4	-7.17	1.33	1.38
2	SA	294	U	P-O5'	-7.17	1.52	1.59
2	SA	361	G	C5-C4	-7.17	1.33	1.38
20	SD	164	ARG	CD-NE	7.17	1.58	1.46
26	LA	953	G	C8-N7	-7.17	1.26	1.30
26	LA	1281	G	O3'-P	-7.17	1.52	1.61
26	LA	1352	U	O4'-C1'	-7.17	1.32	1.41
26	LA	2356	U	C4'-O4'	-7.17	1.36	1.45
2	SA	951	G	N1-C2	-7.17	1.32	1.37
2	SA	1363	A	C4'-O4'	7.17	1.54	1.45
4	S2	5	G	C8-N7	7.17	1.35	1.30
2	SA	71	A	C4'-C3'	7.17	1.61	1.53
3	S1	41	A	N3-C4	-7.17	1.30	1.34
26	LA	77	G	P-O5'	-7.17	1.52	1.59
26	LA	1928	A	C5-C6	7.17	1.47	1.41
2	SA	1455	G	N9-C8	7.16	1.42	1.37
3	S1	32	U	C3'-C2'	7.16	1.60	1.52
26	LA	1772	A	N3-C4	-7.16	1.30	1.34
26	LA	2445	G	N3-C4	-7.16	1.30	1.35
2	SA	5	U	C4-C5	-7.16	1.37	1.43
26	LA	1865	U	C4-C5	-7.16	1.37	1.43
25	LB	29	A	C5-C4	7.16	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	404	A	C5-C4	-7.16	1.33	1.38
26	LA	1797	G	C2-N3	-7.16	1.27	1.32
2	SA	668	G	C5'-C4'	-7.16	1.42	1.51
2	SA	1463	U	C4'-C3'	-7.16	1.45	1.53
26	LA	809	G	O3'-P	-7.16	1.52	1.61
26	LA	1046	A	N3-C4	-7.16	1.30	1.34
26	LA	1856	U	C2-N3	-7.16	1.32	1.37
26	LA	2074	U	N1-C2	-7.16	1.32	1.38
26	LA	2198	A	C2'-C1'	-7.16	1.45	1.53
26	LA	2314	A	N3-C4	7.16	1.39	1.34
2	SA	1464	U	C2-N3	7.16	1.42	1.37
26	LA	455	C	P-O5'	7.16	1.67	1.59
26	LA	491	G	C5-C6	-7.16	1.35	1.42
26	LA	2568	U	O3'-P	-7.16	1.52	1.61
26	LA	2601	C	C5'-C4'	7.16	1.59	1.51
2	SA	235	C	C4-N4	-7.15	1.27	1.33
26	LA	659	G	N1-C2	-7.15	1.32	1.37
26	LA	1003	G	O3'-P	-7.15	1.52	1.61
26	LA	1095	A	N3-C4	7.15	1.39	1.34
26	LA	1465	G	N7-C5	7.15	1.43	1.39
2	SA	525	C	C2'-C1'	-7.15	1.45	1.53
2	SA	765	G	N3-C4	-7.15	1.30	1.35
2	SA	801	U	N1-C2	-7.15	1.32	1.38
2	SA	1233	G	N9-C4	7.15	1.43	1.38
25	LB	27	C	C2-N3	-7.15	1.30	1.35
26	LA	361	G	N7-C5	-7.15	1.34	1.39
26	LA	648	G	N7-C5	-7.15	1.34	1.39
26	LA	894	U	C5'-C4'	7.15	1.59	1.51
26	LA	1060	U	C5'-C4'	7.15	1.59	1.51
2	SA	1221	G	C2'-C1'	-7.15	1.45	1.53
26	LA	452	G	O4'-C1'	-7.15	1.32	1.41
26	LA	2129	C	C2'-C1'	7.15	1.61	1.53
26	LA	2748	A	N3-C4	-7.15	1.30	1.34
26	LA	2866	U	C1'-N1	-7.15	1.36	1.46
2	SA	16	A	C2'-C1'	-7.15	1.45	1.53
2	SA	635	A	N7-C5	-7.15	1.34	1.39
26	LA	746	U	P-O5'	-7.15	1.52	1.59
26	LA	1897	G	C2-N3	-7.15	1.27	1.32
2	SA	85	U	C2-N3	7.15	1.42	1.37
2	SA	1023	U	C3'-C2'	-7.15	1.44	1.52
3	S1	37	G	N1-C2	-7.15	1.32	1.37
26	LA	6	A	N9-C4	-7.15	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	195	A	C5-C4	-7.15	1.33	1.38
26	LA	2497	A	N7-C5	-7.15	1.34	1.39
26	LA	249	C	N3-C4	-7.15	1.28	1.33
26	LA	1191	G	N7-C5	-7.15	1.34	1.39
26	LA	2347	C	N1-C6	7.15	1.41	1.37
26	LA	2723	C	C2'-C1'	-7.15	1.45	1.53
2	SA	716	A	C8-N7	7.14	1.36	1.31
2	SA	1089	G	P-O5'	-7.14	1.52	1.59
26	LA	675	A	N7-C5	-7.14	1.34	1.39
26	LA	1827	U	C4'-C3'	7.14	1.61	1.53
2	SA	882	C	N1-C2	-7.14	1.33	1.40
2	SA	1066	C	C3'-C2'	7.14	1.60	1.52
2	SA	1400	C	C2'-C1'	-7.14	1.45	1.53
26	LA	360	U	P-O5'	-7.14	1.52	1.59
26	LA	866	A	C8-N7	-7.14	1.26	1.31
26	LA	1594	U	O4'-C1'	-7.14	1.32	1.41
26	LA	2717	C	C2-N3	-7.14	1.30	1.35
26	LA	2848	G	N1-C2	-7.14	1.32	1.37
3	S1	44	U	C5'-C4'	7.14	1.59	1.51
26	LA	814	C	P-O5'	-7.14	1.52	1.59
26	LA	1703	G	C2'-C1'	-7.14	1.45	1.53
2	SA	1148	U	C5'-C4'	7.14	1.59	1.51
26	LA	1552	A	C5-C4	-7.14	1.33	1.38
26	LA	1555	G	N9-C8	-7.14	1.32	1.37
26	LA	2494	G	N7-C5	-7.14	1.34	1.39
26	LA	692	C	P-O5'	-7.14	1.52	1.59
2	SA	847	G	C8-N7	-7.14	1.26	1.30
26	LA	155	A	N3-C4	-7.14	1.30	1.34
26	LA	244	A	N7-C5	-7.14	1.34	1.39
26	LA	637	A	O4'-C1'	-7.14	1.32	1.41
26	LA	700	G	C1'-N9	-7.14	1.36	1.46
26	LA	925	A	N3-C4	-7.14	1.30	1.34
26	LA	1866	A	N9-C4	7.14	1.42	1.37
26	LA	2057	G	C5'-C4'	7.14	1.59	1.51
20	SD	50	TYR	CD1-CE1	7.13	1.50	1.39
25	LB	63	C	C2'-C1'	-7.13	1.45	1.53
2	SA	222	C	N1-C6	7.13	1.41	1.37
2	SA	740	U	C5'-C4'	7.13	1.59	1.51
26	LA	1828	G	C5-C4	-7.13	1.33	1.38
26	LA	2424	C	C2-N3	7.13	1.41	1.35
26	LA	2647	U	N3-C4	-7.13	1.32	1.38
2	SA	734	G	N9-C4	-7.13	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1099	G	C2-N2	-7.13	1.27	1.34
26	LA	206	U	C2-N3	-7.13	1.32	1.37
26	LA	750	A	C5-C6	-7.13	1.34	1.41
26	LA	1517	G	C2'-C1'	-7.13	1.45	1.53
26	LA	2688	G	P-O5'	-7.13	1.52	1.59
26	LA	180	G	O3'-P	-7.13	1.52	1.61
26	LA	736	C	C4-N4	-7.13	1.27	1.33
2	SA	34	C	C4-N4	-7.13	1.27	1.33
2	SA	594	U	P-O5'	-7.13	1.52	1.59
26	LA	554	U	N1-C6	-7.13	1.31	1.38
26	LA	645	C	C4-C5	-7.13	1.37	1.43
26	LA	904	G	C2-N2	-7.13	1.27	1.34
26	LA	1192	G	C2-N3	-7.13	1.27	1.32
26	LA	1763	G	C2'-C1'	-7.13	1.45	1.53
26	LA	2039	U	C2-N3	-7.13	1.32	1.37
2	SA	28	A	N3-C4	-7.13	1.30	1.34
2	SA	332	G	C4'-C3'	7.13	1.60	1.53
2	SA	971	G	C6-N1	-7.13	1.34	1.39
25	LB	12	C	C4-N4	-7.13	1.27	1.33
26	LA	308	G	N3-C4	-7.13	1.30	1.35
26	LA	1675	C	C3'-O3'	7.13	1.52	1.42
26	LA	2525	G	O3'-P	-7.13	1.52	1.61
26	LA	2640	G	N3-C4	-7.13	1.30	1.35
2	SA	1090	U	N1-C2	-7.12	1.32	1.38
26	LA	317	G	N3-C4	-7.12	1.30	1.35
26	LA	461	C	C3'-C2'	-7.12	1.45	1.52
26	LA	2071	A	C3'-C2'	-7.12	1.45	1.52
26	LA	2564	A	N9-C4	-7.12	1.33	1.37
2	SA	545	C	N1-C6	7.12	1.41	1.37
2	SA	1138	G	P-O5'	-7.12	1.52	1.59
26	LA	1654	A	C5'-C4'	7.12	1.59	1.51
26	LA	2131	U	C4-C5	-7.12	1.37	1.43
26	LA	2598	A	N7-C5	-7.12	1.34	1.39
26	LA	2755	C	C2'-C1'	-7.12	1.45	1.53
2	SA	581	G	C8-N7	-7.12	1.26	1.30
2	SA	941	G	O3'-P	-7.12	1.52	1.61
2	SA	952	U	O3'-P	-7.12	1.52	1.61
25	LB	13	G	N3-C4	-7.12	1.30	1.35
26	LA	188	G	N7-C5	-7.12	1.34	1.39
26	LA	192	C	O3'-P	-7.12	1.52	1.61
26	LA	221	A	N9-C4	-7.12	1.33	1.37
26	LA	447	A	C6-N1	-7.12	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2659	G	C4'-C3'	-7.12	1.45	1.53
2	SA	344	A	N3-C4	-7.12	1.30	1.34
2	SA	1197	A	C4'-C3'	7.12	1.60	1.53
26	LA	527	C	O3'-P	-7.12	1.52	1.61
26	LA	1208	C	N3-C4	7.12	1.39	1.33
26	LA	2152	G	C2'-C1'	-7.12	1.45	1.53
26	LA	2869	G	C3'-C2'	-7.12	1.45	1.52
2	SA	247	G	C6-N1	7.12	1.44	1.39
2	SA	462	G	C5'-C4'	7.12	1.59	1.51
26	LA	587	C	C4-N4	-7.12	1.27	1.33
26	LA	921	C	C4-C5	-7.12	1.37	1.43
26	LA	2315	G	N1-C2	7.12	1.43	1.37
2	SA	272	C	C4-N4	-7.12	1.27	1.33
26	LA	635	C	C2'-C1'	-7.12	1.45	1.53
26	LA	2429	G	C8-N7	-7.12	1.26	1.30
26	LA	2739	U	C3'-O3'	7.12	1.52	1.42
2	SA	383	A	N3-C4	7.12	1.39	1.34
2	SA	1385	G	C2-N2	-7.12	1.27	1.34
2	SA	1522	U	O3'-P	-7.12	1.52	1.61
25	LB	109	A	N9-C8	-7.12	1.32	1.37
26	LA	781	A	N9-C4	-7.12	1.33	1.37
26	LA	900	A	O3'-P	-7.12	1.52	1.61
26	LA	1195	G	N3-C4	-7.12	1.30	1.35
26	LA	1439	A	C5-C4	-7.12	1.33	1.38
2	SA	942	G	N9-C8	-7.11	1.32	1.37
26	LA	973	A	C8-N7	-7.11	1.26	1.31
26	LA	1009	A	C5'-C4'	7.11	1.59	1.51
26	LA	1105	U	C2-N3	-7.11	1.32	1.37
26	LA	1160	G	C8-N7	7.11	1.35	1.30
26	LA	2073	C	C2-N3	7.11	1.41	1.35
26	LA	2538	C	C2'-C1'	-7.11	1.45	1.53
26	LA	2709	G	C2-N2	-7.11	1.27	1.34
2	SA	92	U	N3-C4	7.11	1.44	1.38
2	SA	1430	A	N9-C4	-7.11	1.33	1.37
26	LA	780	G	C2-N2	-7.11	1.27	1.34
26	LA	1484	U	C4-C5	7.11	1.50	1.43
2	SA	300	A	C4'-O4'	-7.11	1.36	1.45
2	SA	648	A	C2'-C1'	-7.11	1.45	1.53
2	SA	1185	G	N7-C5	-7.11	1.34	1.39
4	S2	55	U	C2-N3	-7.11	1.32	1.37
26	LA	320	A	C6-N6	7.11	1.39	1.33
26	LA	574	A	C5'-C4'	7.11	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	916	G	C8-N7	7.11	1.35	1.30
26	LA	1193	G	C5'-C4'	7.11	1.59	1.51
2	SA	819	A	O3'-P	-7.11	1.52	1.61
2	SA	346	G	C2-N3	-7.11	1.27	1.32
2	SA	879	C	C4-C5	7.11	1.48	1.43
26	LA	361	G	N9-C8	-7.11	1.32	1.37
26	LA	370	G	N9-C8	-7.11	1.32	1.37
26	LA	709	U	C4-C5	7.11	1.50	1.43
26	LA	813	U	C3'-C2'	-7.11	1.45	1.52
26	LA	1211	C	C5'-C4'	7.11	1.59	1.51
26	LA	1439	A	C6-N1	-7.11	1.30	1.35
26	LA	1871	A	C5'-C4'	7.11	1.59	1.51
26	LA	2290	G	C8-N7	-7.11	1.26	1.30
26	LA	2685	G	N7-C5	-7.11	1.34	1.39
2	SA	251	G	C3'-C2'	7.11	1.60	1.52
2	SA	266	G	N1-C2	-7.11	1.32	1.37
26	LA	242	G	O3'-P	-7.11	1.52	1.61
26	LA	936	A	C6-N1	-7.11	1.30	1.35
26	LA	1223	G	P-O5'	-7.11	1.52	1.59
26	LA	1331	G	O3'-P	-7.11	1.52	1.61
26	LA	1978	A	C5-C4	-7.11	1.33	1.38
26	LA	2658	C	C2-N3	-7.11	1.30	1.35
26	LA	1916	A	C3'-C2'	7.10	1.60	1.52
26	LA	2877	G	N3-C4	-7.10	1.30	1.35
2	SA	502	A	C6-N1	-7.10	1.30	1.35
2	SA	637	C	P-O5'	-7.10	1.52	1.59
26	LA	503	A	N9-C8	-7.10	1.32	1.37
26	LA	941	A	C6-N6	-7.10	1.28	1.33
26	LA	2606	C	N3-C4	-7.10	1.28	1.33
26	LA	2783	U	C5'-C4'	7.10	1.59	1.51
2	SA	902	G	P-O5'	-7.10	1.52	1.59
2	SA	1315	U	C3'-O3'	7.10	1.52	1.42
2	SA	1467	C	C5'-C4'	7.10	1.59	1.51
26	LA	1373	A	C2'-C1'	-7.10	1.45	1.53
26	LA	1769	U	O4'-C1'	-7.10	1.32	1.41
26	LA	487	C	N1-C6	-7.10	1.32	1.37
2	SA	18	C	C4-N4	-7.09	1.27	1.33
2	SA	431	A	C5-C4	-7.09	1.33	1.38
2	SA	1343	G	C2-N2	-7.09	1.27	1.34
25	LB	16	G	C6-N1	-7.09	1.34	1.39
25	LB	87	U	C4-C5	-7.09	1.37	1.43
26	LA	532	A	O4'-C1'	-7.09	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1232	G	N9-C8	-7.09	1.32	1.37
26	LA	2035	G	C2-N2	-7.09	1.27	1.34
26	LA	668	A	C6-N6	-7.09	1.28	1.33
26	LA	2559	C	P-O5'	-7.09	1.52	1.59
26	LA	2796	U	C3'-C2'	7.09	1.60	1.52
2	SA	1157	A	P-O5'	-7.09	1.52	1.59
2	SA	734	G	C2-N3	7.09	1.38	1.32
2	SA	1292	G	C4'-O4'	7.09	1.54	1.45
2	SA	1451	U	N1-C2	-7.09	1.32	1.38
26	LA	699	A	N1-C2	-7.09	1.27	1.34
26	LA	740	C	C4-C5	-7.09	1.37	1.43
26	LA	886	A	N3-C4	7.09	1.39	1.34
26	LA	1683	U	P-O5'	-7.09	1.52	1.59
26	LA	2390	U	O3'-P	-7.09	1.52	1.61
2	SA	1027	C	C2'-C1'	-7.09	1.45	1.53
2	SA	1382	C	P-O5'	-7.09	1.52	1.59
26	LA	27	G	C2-N2	-7.09	1.27	1.34
26	LA	1648	U	C4-O4	-7.09	1.18	1.23
2	SA	838	G	C4'-C3'	7.09	1.60	1.53
2	SA	1483	A	N3-C4	-7.09	1.30	1.34
26	LA	606	U	N1-C6	-7.09	1.31	1.38
26	LA	959	A	C2'-C1'	-7.09	1.45	1.53
26	LA	1586	A	N9-C4	7.09	1.42	1.37
2	SA	7	A	C6-N1	7.08	1.40	1.35
26	LA	2289	G	P-O5'	-7.08	1.52	1.59
26	LA	2669	G	C5-C4	-7.08	1.33	1.38
2	SA	1518	A	P-O5'	-7.08	1.52	1.59
26	LA	690	G	N9-C4	-7.08	1.32	1.38
26	LA	1065	U	C2-N3	-7.08	1.32	1.37
26	LA	1200	C	C4-N4	-7.08	1.27	1.33
26	LA	1395	A	C2'-C1'	-7.08	1.45	1.53
2	SA	892	A	N7-C5	-7.08	1.35	1.39
3	S1	31	U	P-O5'	7.08	1.66	1.59
25	LB	10	G	N3-C4	-7.08	1.30	1.35
26	LA	584	C	C2'-C1'	-7.08	1.45	1.53
26	LA	1166	G	C5'-C4'	7.08	1.59	1.51
26	LA	1459	G	O3'-P	-7.08	1.52	1.61
26	LA	2247	A	N9-C8	-7.08	1.32	1.37
26	LA	2433	A	N9-C8	-7.08	1.32	1.37
26	LA	2490	G	N3-C4	-7.08	1.30	1.35
26	LA	2700	A	N9-C4	-7.08	1.33	1.37
2	SA	413	G	C3'-O3'	7.08	1.52	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1266	G	N7-C5	7.08	1.43	1.39
26	LA	1581	G	C6-N1	-7.08	1.34	1.39
26	LA	1724	G	C5'-C4'	7.08	1.59	1.51
26	LA	2879	A	N7-C5	7.08	1.43	1.39
2	SA	246	A	C6-N1	7.08	1.40	1.35
2	SA	327	A	O5'-C5'	7.08	1.55	1.44
2	SA	490	C	C2'-C1'	-7.08	1.45	1.53
2	SA	585	G	C2-N3	-7.08	1.27	1.32
2	SA	1139	G	N1-C2	-7.08	1.32	1.37
25	LB	89	U	C5-C6	7.08	1.40	1.34
26	LA	601	C	N1-C2	-7.08	1.33	1.40
26	LA	1408	G	N9-C8	-7.08	1.32	1.37
26	LA	2204	G	N3-C4	-7.08	1.30	1.35
2	SA	1542	A	C6-N1	-7.08	1.30	1.35
26	LA	2803	G	N9-C8	-7.08	1.32	1.37
2	SA	934	C	C5'-C4'	7.08	1.59	1.51
2	SA	1163	A	P-O5'	-7.08	1.52	1.59
26	LA	32	C	N1-C6	-7.08	1.32	1.37
26	LA	694	U	C4'-O4'	-7.08	1.36	1.45
26	LA	1670	C	C2'-C1'	7.08	1.61	1.53
26	LA	1949	G	C5'-C4'	-7.08	1.42	1.51
2	SA	359	G	O3'-P	-7.07	1.52	1.61
2	SA	609	A	C6-N6	-7.07	1.28	1.33
2	SA	1511	G	O3'-P	-7.07	1.52	1.61
25	LB	120	U	N1-C2	-7.07	1.32	1.38
26	LA	1435	G	C5-C6	-7.07	1.35	1.42
26	LA	2465	C	C5'-C4'	7.07	1.59	1.51
2	SA	1204	A	O3'-P	-7.07	1.52	1.61
2	SA	1314	C	P-O5'	-7.07	1.52	1.59
26	LA	1875	G	O3'-P	-7.07	1.52	1.61
26	LA	2285	C	C4'-C3'	-7.07	1.45	1.53
2	SA	190	A	N7-C5	-7.07	1.35	1.39
2	SA	608	A	N1-C2	-7.07	1.27	1.34
26	LA	711	G	C2'-C1'	-7.07	1.45	1.53
26	LA	886	A	C5'-C4'	7.07	1.59	1.51
26	LA	1304	A	N9-C4	-7.07	1.33	1.37
26	LA	1895	C	C2'-C1'	-7.07	1.45	1.53
26	LA	1998	A	C2'-C1'	-7.07	1.45	1.53
26	LA	2551	C	C2-N3	7.07	1.41	1.35
26	LA	2851	A	C5-C6	-7.07	1.34	1.41
2	SA	689	C	P-O5'	-7.07	1.52	1.59
2	SA	1143	G	N7-C5	-7.07	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	148	U	C5-C6	-7.07	1.27	1.34
26	LA	322	A	C1'-N9	-7.07	1.36	1.46
26	LA	400	G	C2'-C1'	-7.07	1.45	1.53
26	LA	709	U	C5'-C4'	7.07	1.59	1.51
26	LA	1296	G	C5-C4	-7.07	1.33	1.38
26	LA	2541	A	O4'-C1'	-7.07	1.32	1.41
26	LA	2715	C	N1-C6	7.07	1.41	1.37
2	SA	171	A	N3-C4	7.07	1.39	1.34
4	S2	7	G	C2-N3	7.07	1.38	1.32
26	LA	98	G	C4'-O4'	7.07	1.54	1.45
26	LA	1129	A	C6-N1	-7.07	1.30	1.35
26	LA	2661	G	C5'-C4'	7.07	1.59	1.51
2	SA	963	G	N7-C5	-7.07	1.35	1.39
26	LA	58	G	O3'-P	-7.07	1.52	1.61
26	LA	573	U	C5'-C4'	7.07	1.59	1.51
26	LA	718	A	O4'-C1'	-7.07	1.32	1.41
26	LA	2577	A	C3'-C2'	-7.07	1.45	1.52
2	SA	1496	C	C4'-C3'	-7.06	1.45	1.53
26	LA	2250	G	O4'-C1'	-7.06	1.32	1.41
2	SA	211	G	C4'-C3'	7.06	1.60	1.53
2	SA	220	G	C5'-C4'	7.06	1.59	1.51
26	LA	6	A	C5'-C4'	7.06	1.59	1.51
26	LA	472	A	C6-N6	-7.06	1.28	1.33
26	LA	514	A	O4'-C1'	-7.06	1.32	1.41
26	LA	1027	A	N9-C4	7.06	1.42	1.37
26	LA	1452	G	N9-C4	-7.06	1.32	1.38
26	LA	2690	U	P-O5'	-7.06	1.52	1.59
26	LA	1470	A	O4'-C1'	-7.06	1.32	1.41
2	SA	228	A	C8-N7	-7.06	1.26	1.31
2	SA	319	G	C5-C6	7.06	1.49	1.42
2	SA	606	G	C5'-C4'	7.06	1.59	1.51
2	SA	1159	U	C4-C5	-7.06	1.37	1.43
2	SA	1429	A	C3'-O3'	7.06	1.52	1.42
2	SA	1519	A	O3'-P	-7.06	1.52	1.61
26	LA	700	G	P-O5'	-7.06	1.52	1.59
26	LA	1024	G	N9-C8	-7.06	1.32	1.37
26	LA	1245	G	C2-N3	7.06	1.38	1.32
26	LA	2020	A	O4'-C1'	-7.06	1.32	1.41
26	LA	2738	A	C5'-C4'	7.06	1.59	1.51
2	SA	382	A	C5-C4	-7.06	1.33	1.38
2	SA	983	A	C3'-C2'	-7.06	1.45	1.52
2	SA	1421	G	C8-N7	7.06	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1166	G	C2'-C1'	-7.06	1.45	1.53
26	LA	1645	G	N9-C8	-7.06	1.32	1.37
26	LA	1836	C	C2'-C1'	-7.06	1.45	1.53
26	LA	2439	A	C6-N6	7.06	1.39	1.33
2	SA	1092	A	C6-N6	7.06	1.39	1.33
2	SA	1127	G	C5-C4	7.06	1.43	1.38
2	SA	98	A	C3'-C2'	-7.05	1.45	1.52
2	SA	872	A	C6-N6	-7.05	1.28	1.33
2	SA	1154	G	C5'-C4'	7.05	1.59	1.51
2	SA	1178	G	C3'-C2'	-7.05	1.45	1.52
2	SA	1518	A	N9-C8	-7.05	1.32	1.37
26	LA	1358	G	N7-C5	-7.05	1.35	1.39
26	LA	2133	G	C5-C4	-7.05	1.33	1.38
26	LA	2178	C	C5'-C4'	7.05	1.59	1.51
26	LA	2274	A	C2'-C1'	-7.05	1.45	1.53
26	LA	2421	G	C3'-C2'	-7.05	1.45	1.52
26	LA	2629	U	C2-N3	7.05	1.42	1.37
2	SA	1329	A	N9-C4	-7.05	1.33	1.37
2	SA	1480	A	C2'-C1'	-7.05	1.45	1.53
26	LA	211	C	C5-C6	7.05	1.40	1.34
26	LA	399	U	C2-N3	-7.05	1.32	1.37
26	LA	1366	A	O3'-P	-7.05	1.52	1.61
26	LA	1464	G	C5-C4	-7.05	1.33	1.38
26	LA	2591	C	N1-C6	-7.05	1.32	1.37
2	SA	959	A	N9-C4	-7.05	1.33	1.37
2	SA	1316	G	O3'-P	-7.05	1.52	1.61
3	S1	26	U	C4-C5	-7.05	1.37	1.43
26	LA	1385	A	P-O5'	-7.05	1.52	1.59
26	LA	1602	U	C5'-C4'	7.05	1.59	1.51
26	LA	1789	A	N3-C4	-7.05	1.30	1.34
26	LA	2654	A	C5-C4	7.05	1.43	1.38
2	SA	999	C	C2-N3	-7.05	1.30	1.35
26	LA	97	C	N1-C6	-7.05	1.32	1.37
26	LA	1252	G	O4'-C1'	-7.05	1.32	1.41
26	LA	1293	C	C5'-C4'	7.05	1.59	1.51
2	SA	992	U	C4'-C3'	7.05	1.60	1.53
26	LA	205	G	P-O5'	-7.05	1.52	1.59
2	SA	574	A	C4'-C3'	-7.05	1.45	1.53
2	SA	643	C	C2-N3	-7.05	1.30	1.35
2	SA	1012	A	C4'-C3'	-7.05	1.45	1.53
4	S2	31	G	N7-C5	7.05	1.43	1.39
25	LB	83	G	C2-N2	-7.05	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1871	A	P-O5'	-7.05	1.52	1.59
26	LA	2507	C	N3-C4	-7.05	1.29	1.33
2	SA	316	C	C5'-C4'	7.04	1.59	1.51
2	SA	506	G	O3'-P	-7.04	1.52	1.61
26	LA	24	G	C6-N1	-7.04	1.34	1.39
26	LA	397	U	C5-C6	-7.04	1.27	1.34
26	LA	858	G	N1-C2	-7.04	1.32	1.37
26	LA	1727	C	N3-C4	7.04	1.38	1.33
26	LA	2082	A	N7-C5	-7.04	1.35	1.39
2	SA	432	A	N9-C4	-7.04	1.33	1.37
2	SA	1170	A	N9-C8	-7.04	1.32	1.37
2	SA	1482	G	O3'-P	-7.04	1.52	1.61
26	LA	47	C	C2'-C1'	-7.04	1.45	1.53
26	LA	790	U	N1-C2	-7.04	1.32	1.38
26	LA	809	G	C6-N1	-7.04	1.34	1.39
26	LA	2657	A	N9-C4	-7.04	1.33	1.37
2	SA	158	G	N3-C4	-7.04	1.30	1.35
2	SA	746	A	C6-N1	-7.04	1.30	1.35
2	SA	1101	A	C6-N6	-7.04	1.28	1.33
2	SA	1421	G	C2-N2	-7.04	1.27	1.34
26	LA	272	A	N9-C4	7.04	1.42	1.37
26	LA	484	C	C4-N4	-7.04	1.27	1.33
26	LA	512	G	C2-N3	7.04	1.38	1.32
26	LA	1471	G	N7-C5	-7.04	1.35	1.39
26	LA	233	A	N7-C5	-7.04	1.35	1.39
26	LA	1799	G	C2-N3	-7.04	1.27	1.32
26	LA	2540	C	N1-C6	7.04	1.41	1.37
2	SA	496	A	O4'-C1'	-7.04	1.32	1.41
2	SA	968	A	N3-C4	-7.04	1.30	1.34
2	SA	1294	G	N3-C4	-7.04	1.30	1.35
2	SA	1386	G	C6-N1	-7.04	1.34	1.39
26	LA	102	U	C2-N3	-7.04	1.32	1.37
26	LA	731	C	O3'-P	-7.04	1.52	1.61
3	S1	34	U	P-O5'	-7.04	1.52	1.59
26	LA	2459	A	N3-C4	-7.04	1.30	1.34
2	SA	140	U	C1'-N1	7.04	1.59	1.48
2	SA	1483	A	C6-N1	-7.04	1.30	1.35
26	LA	24	G	C3'-C2'	-7.04	1.45	1.52
26	LA	823	C	C2'-C1'	-7.04	1.45	1.53
26	LA	1307	A	O3'-P	-7.04	1.52	1.61
26	LA	1677	A	N3-C4	-7.04	1.30	1.34
26	LA	2546	U	N1-C6	-7.04	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	192	A	N3-C4	7.03	1.39	1.34
26	LA	138	U	C1'-N1	7.03	1.59	1.48
26	LA	1048	A	O3'-P	-7.03	1.52	1.61
26	LA	1825	U	C3'-C2'	-7.03	1.45	1.52
2	SA	756	C	C5'-C4'	-7.03	1.43	1.51
26	LA	168	G	C6-N1	-7.03	1.34	1.39
26	LA	1225	G	N1-C2	-7.03	1.32	1.37
26	LA	1407	G	C2-N2	-7.03	1.27	1.34
26	LA	2023	C	C4-C5	7.03	1.48	1.43
26	LA	1083	U	N1-C6	-7.03	1.31	1.38
26	LA	1389	G	C4'-C3'	7.03	1.60	1.53
26	LA	1814	G	C4'-O4'	7.03	1.54	1.45
26	LA	2517	C	C2'-C1'	-7.03	1.45	1.53
2	SA	269	C	N1-C6	-7.03	1.32	1.37
2	SA	857	C	C4-C5	-7.03	1.37	1.43
26	LA	192	C	C2-N3	-7.03	1.30	1.35
26	LA	1257	C	C2-N3	-7.03	1.30	1.35
26	LA	1447	C	C4'-O4'	7.03	1.54	1.45
26	LA	1764	C	C4-N4	-7.03	1.27	1.33
26	LA	2382	G	O4'-C1'	-7.03	1.32	1.41
26	LA	2621	G	C5-C6	-7.03	1.35	1.42
26	LA	2703	C	N1-C2	-7.03	1.33	1.40
2	SA	898	G	C5-C4	-7.03	1.33	1.38
26	LA	719	C	N1-C6	-7.03	1.32	1.37
26	LA	934	U	O3'-P	-7.03	1.52	1.61
26	LA	2402	U	P-O5'	7.03	1.66	1.59
26	LA	2495	G	N9-C4	-7.03	1.32	1.38
2	SA	344	A	C8-N7	7.02	1.36	1.31
2	SA	1268	G	C4'-O4'	7.02	1.54	1.45
26	LA	751	A	C6-N1	-7.02	1.30	1.35
26	LA	1425	G	C3'-C2'	-7.02	1.45	1.52
26	LA	1803	A	C1'-N9	-7.02	1.37	1.46
26	LA	2512	C	C3'-C2'	-7.02	1.45	1.52
2	SA	983	A	C5'-C4'	7.02	1.59	1.51
26	LA	176	A	C2'-C1'	-7.02	1.45	1.53
26	LA	1111	A	P-O5'	-7.02	1.52	1.59
26	LA	1247	A	C5'-C4'	7.02	1.59	1.51
26	LA	1660	G	N3-C4	7.02	1.40	1.35
2	SA	220	G	O3'-P	-7.02	1.52	1.61
2	SA	848	C	C4-N4	7.02	1.40	1.33
2	SA	1290	G	N1-C2	-7.02	1.32	1.37
2	SA	1470	U	C4-O4	-7.02	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	64	G	N1-C2	-7.02	1.32	1.37
26	LA	2339	C	O3'-P	-7.02	1.52	1.61
26	LA	285	G	O3'-P	-7.02	1.52	1.61
26	LA	866	A	C5-C4	-7.02	1.33	1.38
26	LA	1875	G	C6-N1	7.02	1.44	1.39
26	LA	2175	C	C2'-C1'	-7.02	1.45	1.53
26	LA	2367	G	C5-C4	-7.02	1.33	1.38
26	LA	2742	G	N3-C4	-7.02	1.30	1.35
2	SA	1229	A	P-O5'	-7.02	1.52	1.59
26	LA	1014	A	C5'-C4'	7.02	1.59	1.51
26	LA	2063	C	O3'-P	-7.01	1.52	1.61
26	LA	2415	G	C8-N7	-7.01	1.26	1.30
26	LA	2661	G	C5-C6	-7.01	1.35	1.42
26	LA	2830	C	C3'-O3'	7.01	1.51	1.42
2	SA	564	C	N1-C6	7.01	1.41	1.37
26	LA	1003	G	C5'-C4'	7.01	1.59	1.51
26	LA	1798	U	C4'-O4'	-7.01	1.36	1.45
26	LA	2723	C	P-O5'	-7.01	1.52	1.59
2	SA	617	G	P-O5'	-7.01	1.52	1.59
25	LB	45	A	C5'-C4'	7.01	1.59	1.51
25	LB	57	A	C6-N1	-7.01	1.30	1.35
26	LA	1696	G	C5-C4	-7.01	1.33	1.38
26	LA	2599	G	C2'-C1'	-7.01	1.45	1.53
26	LA	2748	A	C3'-C2'	-7.01	1.45	1.52
26	LA	2839	G	C5-C6	-7.01	1.35	1.42
2	SA	6	G	N9-C8	7.01	1.42	1.37
2	SA	31	G	N1-C2	7.01	1.43	1.37
2	SA	628	G	C5-C6	-7.01	1.35	1.42
2	SA	886	G	N3-C4	-7.01	1.30	1.35
2	SA	1266	G	N9-C4	-7.01	1.32	1.38
26	LA	682	G	C6-N1	-7.01	1.34	1.39
26	LA	780	G	N1-C2	-7.01	1.32	1.37
26	LA	1155	A	N3-C4	7.01	1.39	1.34
26	LA	595	C	O4'-C1'	-7.01	1.32	1.41
26	LA	750	A	C5'-C4'	7.01	1.59	1.51
26	LA	1856	U	C2'-C1'	-7.01	1.45	1.53
2	SA	640	A	C6-N6	7.01	1.39	1.33
2	SA	923	A	N7-C5	-7.01	1.35	1.39
2	SA	1099	G	N9-C8	-7.01	1.32	1.37
26	LA	865	C	C3'-C2'	-7.01	1.45	1.52
26	LA	2893	A	N9-C4	-7.01	1.33	1.37
26	LA	2012	G	N9-C4	-7.00	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	283	U	O3'-P	-7.00	1.52	1.61
2	SA	929	G	C6-N1	-7.00	1.34	1.39
26	LA	1510	G	C2-N2	-7.00	1.27	1.34
2	SA	861	G	N3-C4	7.00	1.40	1.35
2	SA	1361	G	C5'-C4'	7.00	1.59	1.51
26	LA	1037	G	C2-N2	-7.00	1.27	1.34
26	LA	1097	U	C4-C5	-7.00	1.37	1.43
26	LA	1119	U	C2-N3	-7.00	1.32	1.37
26	LA	2443	C	C1'-N1	-7.00	1.37	1.46
26	LA	2590	A	O3'-P	-7.00	1.52	1.61
2	SA	771	G	C2'-C1'	-7.00	1.45	1.53
25	LB	80	U	C2-N3	-7.00	1.32	1.37
26	LA	760	G	N9-C4	-7.00	1.32	1.38
26	LA	2744	G	C2-N3	7.00	1.38	1.32
2	SA	1515	G	C4'-O4'	-7.00	1.36	1.45
26	LA	68	G	C2'-C1'	-7.00	1.45	1.53
26	LA	79	C	N3-C4	7.00	1.38	1.33
26	LA	1437	C	C2'-C1'	-7.00	1.45	1.53
26	LA	2017	U	O3'-P	-7.00	1.52	1.61
26	LA	2106	U	N1-C6	-7.00	1.31	1.38
3	S1	29	G	C8-N7	-7.00	1.26	1.30
26	LA	192	C	N3-C4	7.00	1.38	1.33
26	LA	502	A	N7-C5	7.00	1.43	1.39
26	LA	768	G	C5-C6	-7.00	1.35	1.42
26	LA	1214	A	C5-C6	-7.00	1.34	1.41
26	LA	1479	G	N1-C2	-7.00	1.32	1.37
26	LA	2072	C	N3-C4	7.00	1.38	1.33
2	SA	791	G	N9-C8	-7.00	1.32	1.37
26	LA	867	C	N1-C6	7.00	1.41	1.37
26	LA	1508	A	N9-C4	-7.00	1.33	1.37
2	SA	125	U	N3-C4	-6.99	1.32	1.38
2	SA	615	G	C5-C4	-6.99	1.33	1.38
2	SA	951	G	C2-N2	-6.99	1.27	1.34
26	LA	821	A	P-O5'	-6.99	1.52	1.59
2	SA	1327	C	C4-C5	6.99	1.48	1.43
26	LA	375	G	P-O5'	6.99	1.66	1.59
26	LA	663	G	C5-C4	-6.99	1.33	1.38
26	LA	693	A	N9-C4	-6.99	1.33	1.37
26	LA	896	A	N3-C4	6.99	1.39	1.34
26	LA	1363	C	C2'-C1'	-6.99	1.45	1.53
26	LA	1587	G	C5'-C4'	6.99	1.59	1.51
26	LA	2321	U	N1-C2	-6.99	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	100	G	C2-N2	-6.99	1.27	1.34
2	SA	425	G	N9-C8	-6.99	1.32	1.37
2	SA	775	G	N9-C8	-6.99	1.32	1.37
3	S1	38	G	C3'-O3'	6.99	1.51	1.42
4	S2	16	C	C5'-C4'	6.99	1.59	1.51
26	LA	1034	G	C2-N3	6.99	1.38	1.32
26	LA	1219	U	C4'-O4'	-6.99	1.36	1.45
26	LA	1341	G	C2'-C1'	-6.99	1.45	1.53
26	LA	2003	A	C2'-C1'	-6.99	1.45	1.53
26	LA	2888	C	C4-C5	6.99	1.48	1.43
29	LV	84	TYR	CB-CG	-6.99	1.41	1.51
2	SA	1195	C	O3'-P	-6.99	1.52	1.61
2	SA	1333	A	N1-C2	6.99	1.40	1.34
26	LA	2797	U	C3'-O3'	6.99	1.51	1.42
2	SA	128	G	C5-C4	-6.99	1.33	1.38
2	SA	968	A	N9-C8	-6.99	1.32	1.37
2	SA	1108	G	N1-C2	-6.99	1.32	1.37
2	SA	1257	A	N1-C2	-6.99	1.28	1.34
2	SA	1529	G	C8-N7	6.99	1.35	1.30
26	LA	229	C	N1-C6	-6.99	1.32	1.37
26	LA	592	A	C2'-C1'	-6.99	1.45	1.53
26	LA	1184	U	N1-C2	-6.99	1.32	1.38
26	LA	1304	A	C8-N7	6.99	1.36	1.31
26	LA	1696	G	C6-N1	-6.99	1.34	1.39
26	LA	1835	G	C6-O6	-6.99	1.17	1.24
26	LA	511	U	O4'-C1'	-6.98	1.32	1.41
26	LA	599	A	C1'-N9	-6.98	1.37	1.46
26	LA	1353	A	N9-C4	-6.98	1.33	1.37
26	LA	2741	A	N9-C4	-6.98	1.33	1.37
2	SA	960	U	C5'-C4'	6.98	1.59	1.51
2	SA	1387	G	N7-C5	6.98	1.43	1.39
2	SA	1514	G	N7-C5	6.98	1.43	1.39
25	LB	115	A	N3-C4	-6.98	1.30	1.34
26	LA	1695	G	N7-C5	6.98	1.43	1.39
26	LA	2313	C	N1-C6	-6.98	1.32	1.37
2	SA	520	A	P-O5'	-6.98	1.52	1.59
2	SA	561	U	C2'-C1'	-6.98	1.45	1.53
26	LA	477	A	C5-C4	6.98	1.43	1.38
26	LA	653	U	C4'-C3'	6.98	1.60	1.53
26	LA	658	U	C4'-C3'	6.98	1.60	1.53
26	LA	767	U	N3-C4	-6.98	1.32	1.38
26	LA	774	G	C1'-N9	-6.98	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1055	G	C4'-O4'	6.98	1.54	1.45
26	LA	1656	C	C2'-C1'	-6.98	1.45	1.53
26	LA	2549	G	C2-N2	-6.98	1.27	1.34
2	SA	275	G	C2'-C1'	-6.98	1.45	1.53
26	LA	1473	G	P-O5'	-6.98	1.52	1.59
2	SA	75	G	P-O5'	-6.98	1.52	1.59
2	SA	990	C	P-O5'	-6.98	1.52	1.59
26	LA	216	A	N9-C4	6.98	1.42	1.37
26	LA	526	A	C6-N6	6.98	1.39	1.33
26	LA	1222	U	N1-C6	-6.98	1.31	1.38
26	LA	1717	A	C5-C4	-6.98	1.33	1.38
26	LA	2211	A	C5-C4	-6.98	1.33	1.38
2	SA	886	G	C5'-C4'	6.98	1.59	1.51
2	SA	1046	A	C6-N6	-6.98	1.28	1.33
2	SA	455	G	C2'-C1'	-6.97	1.45	1.53
4	S2	74	A	C3'-C2'	6.97	1.60	1.52
25	LB	63	C	N1-C6	6.97	1.41	1.37
26	LA	64	A	C1'-N9	-6.97	1.37	1.46
26	LA	1849	G	C5-C4	-6.97	1.33	1.38
26	LA	2279	G	C2-N2	-6.97	1.27	1.34
2	SA	613	C	N1-C6	6.97	1.41	1.37
2	SA	1077	G	C2-N2	-6.97	1.27	1.34
2	SA	1252	A	C2'-C1'	-6.97	1.45	1.53
26	LA	617	G	N9-C8	-6.97	1.32	1.37
26	LA	1789	A	C2'-C1'	-6.97	1.45	1.53
24	S3	370	ARG	CD-NE	6.97	1.58	1.46
26	LA	59	U	C2-N3	-6.97	1.32	1.37
26	LA	1831	G	C6-N1	6.97	1.44	1.39
26	LA	2112	G	N3-C4	-6.97	1.30	1.35
26	LA	2113	U	N3-C4	-6.97	1.32	1.38
2	SA	1336	C	C4'-C3'	6.97	1.60	1.53
9	SI	121	ARG	CD-NE	6.97	1.58	1.46
26	LA	319	G	C3'-C2'	-6.97	1.45	1.52
26	LA	1165	A	N9-C8	-6.97	1.32	1.37
2	SA	780	A	C1'-N9	-6.96	1.37	1.46
2	SA	1100	C	P-O5'	-6.96	1.52	1.59
26	LA	400	G	O3'-P	-6.96	1.52	1.61
26	LA	409	G	N1-C2	6.96	1.43	1.37
44	LF	125	SER	CA-CB	6.96	1.63	1.52
2	SA	1156	G	C8-N7	6.96	1.35	1.30
25	LB	16	G	C5-C6	-6.96	1.35	1.42
26	LA	1673	G	N7-C5	-6.96	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1746	A	C5-C4	-6.96	1.33	1.38
26	LA	1993	U	N3-C4	-6.96	1.32	1.38
26	LA	2295	C	N1-C6	-6.96	1.32	1.37
2	SA	24	U	N1-C6	-6.96	1.31	1.38
2	SA	849	G	C2'-C1'	-6.96	1.45	1.53
4	S2	41	C	C5'-C4'	6.96	1.59	1.51
17	SQ	26	ARG	CD-NE	6.96	1.58	1.46
26	LA	111	A	C5-C4	6.96	1.43	1.38
26	LA	370	G	C4'-O4'	-6.96	1.36	1.45
26	LA	1107	G	N3-C4	-6.96	1.30	1.35
26	LA	1359	A	C6-N1	-6.96	1.30	1.35
26	LA	1794	A	N9-C4	6.96	1.42	1.37
26	LA	2384	U	N1-C2	-6.96	1.32	1.38
26	LA	2572	A	N3-C4	-6.96	1.30	1.34
26	LA	2673	G	N1-C2	-6.96	1.32	1.37
26	LA	2702	G	N9-C4	-6.96	1.32	1.38
2	SA	696	A	C8-N7	-6.96	1.26	1.31
2	SA	883	C	O4'-C1'	-6.96	1.32	1.41
2	SA	1319	A	O4'-C1'	6.96	1.50	1.41
26	LA	642	U	C2'-C1'	6.96	1.61	1.53
2	SA	32	A	C6-N6	6.96	1.39	1.33
2	SA	1082	A	C2'-C1'	-6.96	1.45	1.53
2	SA	1208	C	N3-C4	-6.96	1.29	1.33
26	LA	764	A	N9-C4	-6.96	1.33	1.37
26	LA	861	A	P-O5'	-6.96	1.52	1.59
2	SA	462	G	O3'-P	-6.96	1.52	1.61
2	SA	1248	A	C6-N6	6.96	1.39	1.33
26	LA	418	C	N3-C4	-6.96	1.29	1.33
26	LA	835	C	N3-C4	6.96	1.38	1.33
26	LA	1408	G	N3-C4	-6.96	1.30	1.35
26	LA	1620	G	N7-C5	-6.96	1.35	1.39
26	LA	1751	U	N1-C2	-6.96	1.32	1.38
26	LA	1816	C	N1-C2	-6.96	1.33	1.40
26	LA	1923	U	C5'-C4'	6.96	1.59	1.51
2	SA	646	G	C2-N2	-6.96	1.27	1.34
26	LA	51	G	C5-C4	-6.96	1.33	1.38
26	LA	1244	A	O3'-P	-6.96	1.52	1.61
26	LA	2446	G	P-O5'	-6.96	1.52	1.59
2	SA	74	A	C2-N3	-6.95	1.27	1.33
2	SA	338	A	C3'-C2'	-6.95	1.45	1.52
3	S1	48	C	C3'-O3'	6.95	1.51	1.42
26	LA	1213	A	P-O5'	-6.95	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1225	G	C2-N3	-6.95	1.27	1.32
26	LA	1981	A	C6-N1	6.95	1.40	1.35
26	LA	2020	A	C2'-O2'	6.95	1.50	1.41
26	LA	2268	A	O4'-C1'	-6.95	1.32	1.41
2	SA	893	C	O4'-C1'	-6.95	1.32	1.41
26	LA	1660	G	C3'-C2'	-6.95	1.45	1.52
2	SA	150	U	N1-C6	-6.95	1.31	1.38
2	SA	968	A	N9-C4	-6.95	1.33	1.37
2	SA	1238	A	C5'-C4'	6.95	1.59	1.51
2	SA	1304	G	C5-C4	-6.95	1.33	1.38
25	LB	24	G	P-O5'	-6.95	1.52	1.59
26	LA	1125	G	N3-C4	-6.95	1.30	1.35
26	LA	1188	U	C3'-C2'	-6.95	1.45	1.52
26	LA	2080	A	C6-N6	6.95	1.39	1.33
26	LA	2516	A	N9-C4	-6.95	1.33	1.37
26	LA	2644	G	O3'-P	-6.95	1.52	1.61
26	LA	2807	U	C5'-C4'	6.95	1.59	1.51
2	SA	599	C	N1-C6	-6.95	1.32	1.37
2	SA	1433	A	C5-C4	-6.95	1.33	1.38
26	LA	122	G	N3-C4	-6.95	1.30	1.35
26	LA	1595	C	C4-N4	6.95	1.40	1.33
2	SA	702	A	C2'-C1'	-6.95	1.45	1.53
2	SA	791	G	C2'-C1'	-6.95	1.45	1.53
2	SA	1143	G	C3'-C2'	6.95	1.60	1.52
26	LA	69	C	C2'-C1'	-6.95	1.45	1.53
26	LA	271	G	C5'-C4'	6.95	1.59	1.51
26	LA	1618	C	N1-C6	-6.95	1.32	1.37
26	LA	1717	A	P-O5'	-6.95	1.52	1.59
26	LA	2293	G	N7-C5	-6.95	1.35	1.39
2	SA	390	U	C3'-O3'	6.95	1.51	1.42
2	SA	842	U	C4-C5	-6.95	1.37	1.43
2	SA	885	G	P-O5'	-6.95	1.52	1.59
26	LA	1267	U	O3'-P	-6.95	1.52	1.61
26	LA	1949	G	N7-C5	-6.95	1.35	1.39
26	LA	2492	U	O3'-P	-6.95	1.52	1.61
2	SA	241	G	N9-C8	-6.94	1.32	1.37
26	LA	548	G	O3'-P	-6.94	1.52	1.61
26	LA	1553	A	N9-C4	-6.94	1.33	1.37
2	SA	472	U	C2'-C1'	-6.94	1.45	1.53
2	SA	1026	G	C2-N2	-6.94	1.27	1.34
26	LA	2861	U	C3'-C2'	-6.94	1.45	1.52
26	LA	2629	U	C4-O4	6.94	1.29	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2644	G	N7-C5	-6.94	1.35	1.39
26	LA	2661	G	C4'-C3'	6.94	1.60	1.53
2	SA	1214	C	C4'-C3'	6.94	1.60	1.53
2	SA	1512	U	O3'-P	-6.94	1.52	1.61
26	LA	578	G	P-O5'	-6.94	1.52	1.59
26	LA	861	A	O3'-P	6.94	1.69	1.61
26	LA	1080	A	N3-C4	6.94	1.39	1.34
26	LA	1324	G	C2-N3	-6.94	1.27	1.32
26	LA	1676	A	N9-C4	-6.94	1.33	1.37
26	LA	2398	U	C4-C5	-6.94	1.37	1.43
55	LQ	32	PRO	N-CD	-6.94	1.38	1.47
2	SA	33	A	N9-C4	-6.94	1.33	1.37
2	SA	674	G	C2'-C1'	-6.94	1.45	1.53
2	SA	1468	A	C4'-C3'	-6.94	1.45	1.53
26	LA	1493	C	O3'-P	-6.94	1.52	1.61
26	LA	2572	A	N1-C2	-6.94	1.28	1.34
26	LA	2787	C	C2-O2	-6.94	1.18	1.24
26	LA	1707	G	N9-C8	-6.94	1.32	1.37
26	LA	2179	C	P-O5'	-6.94	1.52	1.59
2	SA	855	U	N1-C2	-6.93	1.32	1.38
2	SA	1335	U	C3'-C2'	6.93	1.60	1.52
26	LA	517	C	C2'-C1'	-6.93	1.45	1.53
26	LA	891	G	C5'-C4'	6.93	1.59	1.51
26	LA	1229	C	C4-N4	-6.93	1.27	1.33
26	LA	1451	C	C2'-C1'	-6.93	1.45	1.53
26	LA	1680	U	C3'-C2'	6.93	1.60	1.52
26	LA	2377	A	C5-C6	6.93	1.47	1.41
26	LA	2564	A	N7-C5	-6.93	1.35	1.39
2	SA	553	A	O3'-P	-6.93	1.52	1.61
2	SA	584	G	C2'-C1'	-6.93	1.45	1.53
2	SA	588	G	C5'-C4'	6.93	1.59	1.51
2	SA	1114	C	O4'-C1'	-6.93	1.32	1.41
26	LA	100	U	C2'-C1'	-6.93	1.45	1.53
26	LA	138	U	C2'-C1'	6.93	1.60	1.53
26	LA	334	C	C4'-C3'	-6.93	1.45	1.53
26	LA	634	C	C5'-C4'	6.93	1.59	1.51
26	LA	931	U	C2-N3	6.93	1.42	1.37
26	LA	969	G	N9-C4	6.93	1.43	1.38
26	LA	1417	C	N1-C6	6.93	1.41	1.37
26	LA	1613	G	N1-C2	-6.93	1.32	1.37
26	LA	2035	G	C4'-C3'	6.93	1.60	1.53
26	LA	973	A	N3-C4	-6.93	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1944	U	N1-C6	-6.93	1.31	1.38
26	LA	2572	A	O3'-P	-6.93	1.52	1.61
3	S1	20	G	C5-C4	6.93	1.43	1.38
25	LB	90	C	N3-C4	-6.93	1.29	1.33
26	LA	45	G	C5-C4	6.93	1.43	1.38
26	LA	632	A	N7-C5	-6.93	1.35	1.39
26	LA	800	A	C3'-C2'	-6.93	1.45	1.52
26	LA	870	U	C2-N3	-6.93	1.32	1.37
26	LA	1371	G	C2-N2	-6.93	1.27	1.34
26	LA	1501	G	N9-C4	6.93	1.43	1.38
2	SA	1347	G	C2'-C1'	-6.93	1.45	1.53
3	S1	22	G	N1-C2	-6.93	1.32	1.37
26	LA	401	A	N3-C4	6.93	1.39	1.34
26	LA	1015	U	C5'-C4'	-6.93	1.43	1.51
26	LA	1963	U	C4'-C3'	6.93	1.60	1.53
26	LA	118	A	N9-C8	-6.93	1.32	1.37
26	LA	1081	U	C5'-C4'	6.93	1.59	1.51
26	LA	1652	A	N9-C4	-6.93	1.33	1.37
26	LA	1940	U	N3-C4	-6.93	1.32	1.38
2	SA	1467	C	N1-C6	-6.92	1.32	1.37
26	LA	18	U	O3'-P	-6.92	1.52	1.61
26	LA	338	G	N1-C2	-6.92	1.32	1.37
26	LA	1056	G	C6-N1	-6.92	1.34	1.39
26	LA	1078	U	C2-N3	-6.92	1.32	1.37
26	LA	1124	G	C2-N2	-6.92	1.27	1.34
26	LA	1144	A	N9-C8	-6.92	1.32	1.37
26	LA	1265	A	C2'-C1'	6.92	1.60	1.53
26	LA	1299	G	C2-N3	6.92	1.38	1.32
2	SA	689	C	N1-C6	-6.92	1.32	1.37
4	S2	46	G	N9-C4	-6.92	1.32	1.38
26	LA	867	C	C4'-C3'	6.92	1.60	1.53
26	LA	1479	G	C2-N3	6.92	1.38	1.32
26	LA	1619	G	O3'-P	-6.92	1.52	1.61
26	LA	2382	G	C8-N7	-6.92	1.26	1.30
26	LA	2869	G	O3'-P	-6.92	1.52	1.61
2	SA	226	G	N7-C5	-6.92	1.35	1.39
2	SA	607	A	C8-N7	-6.92	1.26	1.31
2	SA	1359	C	N1-C6	6.92	1.41	1.37
26	LA	629	G	N9-C4	-6.92	1.32	1.38
26	LA	1289	C	C2-N3	-6.92	1.30	1.35
26	LA	2744	G	C4'-O4'	6.92	1.54	1.45
2	SA	122	G	N9-C4	-6.92	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	338	A	P-O5'	-6.92	1.52	1.59
26	LA	2443	C	N3-C4	-6.92	1.29	1.33
26	LA	2773	C	C3'-C2'	-6.92	1.45	1.52
2	SA	53	A	C2-N3	6.92	1.39	1.33
2	SA	240	G	N3-C4	-6.92	1.30	1.35
2	SA	327	A	O3'-P	-6.92	1.52	1.61
2	SA	1200	C	C4-C5	-6.92	1.37	1.43
26	LA	307	G	C4'-C3'	6.92	1.60	1.53
26	LA	529	A	N7-C5	-6.92	1.35	1.39
26	LA	889	C	C2'-C1'	-6.92	1.45	1.53
26	LA	1078	U	O3'-P	-6.92	1.52	1.61
26	LA	1418	G	C8-N7	-6.92	1.26	1.30
26	LA	1826	G	P-O5'	-6.92	1.52	1.59
26	LA	2287	A	N9-C8	-6.92	1.32	1.37
2	SA	802	A	C5'-C4'	6.92	1.59	1.51
26	LA	278	A	C2-N3	-6.92	1.27	1.33
26	LA	590	A	C8-N7	6.92	1.36	1.31
26	LA	2575	C	C3'-C2'	6.92	1.60	1.52
2	SA	1255	G	C1'-N9	-6.91	1.37	1.46
26	LA	125	A	C1'-N9	6.91	1.59	1.48
26	LA	1241	A	C5'-C4'	6.91	1.59	1.51
26	LA	2668	G	C6-N1	-6.91	1.34	1.39
26	LA	2770	G	N9-C4	-6.91	1.32	1.38
2	SA	39	G	C3'-C2'	6.91	1.60	1.52
26	LA	1	G	C5'-C4'	6.91	1.59	1.51
26	LA	744	U	N1-C2	-6.91	1.32	1.38
2	SA	1412	C	C2'-C1'	-6.91	1.45	1.53
26	LA	33	C	C2'-C1'	-6.91	1.45	1.53
26	LA	1205	A	C2'-C1'	-6.91	1.45	1.53
26	LA	1337	G	N9-C4	-6.91	1.32	1.38
2	SA	1514	G	C4'-C3'	-6.91	1.45	1.53
26	LA	273	G	N9-C4	-6.91	1.32	1.38
26	LA	536	G	N7-C5	-6.91	1.35	1.39
26	LA	1058	U	O3'-P	-6.91	1.52	1.61
26	LA	1357	C	C1'-N1	-6.91	1.37	1.46
26	LA	2058	A	N9-C4	6.91	1.42	1.37
27	LD	28	PRO	CA-C	-6.91	1.39	1.52
2	SA	819	A	C4'-C3'	6.91	1.60	1.53
2	SA	1407	C	O3'-P	-6.91	1.52	1.61
26	LA	520	G	N9-C8	-6.91	1.33	1.37
26	LA	1020	A	C5-C4	-6.91	1.33	1.38
26	LA	1783	A	N7-C5	6.91	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2053	G	C5-C4	-6.91	1.33	1.38
2	SA	1082	A	C4'-C3'	-6.91	1.45	1.53
26	LA	772	C	O3'-P	-6.91	1.52	1.61
26	LA	863	A	N3-C4	-6.91	1.30	1.34
26	LA	1128	G	C2-N2	-6.91	1.27	1.34
26	LA	2363	G	N7-C5	-6.91	1.35	1.39
26	LA	2809	A	N9-C8	-6.91	1.32	1.37
2	SA	1494	G	C8-N7	6.90	1.35	1.30
2	SA	669	G	P-O5'	-6.90	1.52	1.59
26	LA	1559	U	O3'-P	-6.90	1.52	1.61
26	LA	2365	G	C2-N2	-6.90	1.27	1.34
2	SA	867	G	C5-C6	-6.90	1.35	1.42
2	SA	1059	C	C3'-C2'	-6.90	1.45	1.52
26	LA	430	A	C3'-C2'	-6.90	1.45	1.52
26	LA	2105	U	P-O5'	-6.90	1.52	1.59
26	LA	2176	A	C5-C4	-6.90	1.33	1.38
26	LA	2854	G	C5-C4	-6.90	1.33	1.38
2	SA	64	G	N9-C8	-6.90	1.33	1.37
2	SA	411	A	C8-N7	-6.90	1.26	1.31
2	SA	683	G	C2'-C1'	-6.90	1.45	1.53
26	LA	1585	C	C4'-C3'	6.90	1.60	1.53
26	LA	1705	A	N1-C2	-6.90	1.28	1.34
26	LA	2677	G	C2-N2	-6.90	1.27	1.34
2	SA	450	G	N7-C5	-6.90	1.35	1.39
2	SA	1335	U	O4'-C1'	-6.90	1.32	1.41
26	LA	10	A	P-O5'	-6.90	1.52	1.59
26	LA	259	G	C5-C4	-6.90	1.33	1.38
26	LA	264	C	C5-C6	-6.90	1.28	1.34
26	LA	826	U	C2'-O2'	-6.90	1.32	1.41
26	LA	1013	C	C4-N4	-6.90	1.27	1.33
26	LA	1149	G	O3'-P	-6.90	1.52	1.61
26	LA	1239	G	N9-C4	6.90	1.43	1.38
26	LA	1424	G	N3-C4	-6.90	1.30	1.35
26	LA	2529	G	N7-C5	-6.90	1.35	1.39
26	LA	773	U	C5'-C4'	6.90	1.59	1.51
26	LA	946	C	N3-C4	-6.90	1.29	1.33
26	LA	1801	A	O3'-P	-6.90	1.52	1.61
26	LA	1838	C	C2-O2	-6.90	1.18	1.24
2	SA	140	U	N1-C2	-6.89	1.32	1.38
2	SA	650	G	P-O5'	-6.89	1.52	1.59
2	SA	1489	G	C5-C4	-6.89	1.33	1.38
4	S2	17	C	N3-C4	6.89	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2003	A	C3'-C2'	-6.89	1.45	1.52
26	LA	2134	A	N9-C4	-6.89	1.33	1.37
26	LA	2485	G	N3-C4	-6.89	1.30	1.35
2	SA	101	A	C2'-C1'	-6.89	1.45	1.53
26	LA	327	G	N1-C2	-6.89	1.32	1.37
26	LA	1506	U	C4-O4	-6.89	1.18	1.23
26	LA	1750	G	N7-C5	-6.89	1.35	1.39
26	LA	2410	G	N9-C4	6.89	1.43	1.38
26	LA	2648	G	C2'-C1'	-6.89	1.45	1.53
2	SA	1385	G	C5-C6	-6.89	1.35	1.42
26	LA	1439	A	P-O5'	-6.89	1.52	1.59
26	LA	30	G	P-O5'	-6.89	1.52	1.59
26	LA	477	A	P-O5'	-6.89	1.52	1.59
26	LA	963	U	N1-C6	6.89	1.44	1.38
26	LA	1353	A	O3'-P	-6.89	1.52	1.61
26	LA	1690	A	C2'-C1'	-6.89	1.45	1.53
26	LA	1991	U	C2-N3	-6.89	1.32	1.37
2	SA	969	A	C2'-C1'	-6.89	1.45	1.53
26	LA	13	A	C5'-C4'	6.89	1.59	1.51
26	LA	1486	U	C2-N3	-6.89	1.32	1.37
26	LA	1558	C	P-O5'	-6.89	1.52	1.59
38	LE	120	GLY	CA-C	-6.89	1.40	1.51
2	SA	1260	G	C1'-N9	-6.89	1.37	1.46
26	LA	40	U	C1'-N1	6.89	1.59	1.48
26	LA	1353	A	N9-C8	-6.89	1.32	1.37
26	LA	1608	A	O4'-C1'	6.89	1.50	1.41
26	LA	2193	G	P-O5'	6.89	1.66	1.59
26	LA	2317	A	C6-N1	6.89	1.40	1.35
26	LA	619	G	C6-N1	-6.88	1.34	1.39
26	LA	890	C	C2'-C1'	6.88	1.60	1.53
2	SA	292	G	N9-C4	-6.88	1.32	1.38
2	SA	1471	U	C2'-C1'	-6.88	1.45	1.53
26	LA	191	A	P-O5'	-6.88	1.52	1.59
26	LA	574	A	C4'-O4'	6.88	1.54	1.45
26	LA	1937	A	C4'-O4'	-6.88	1.36	1.45
2	SA	1105	A	N7-C5	6.88	1.43	1.39
26	LA	318	C	N1-C6	-6.88	1.33	1.37
26	LA	572	A	P-O5'	-6.88	1.52	1.59
26	LA	1100	C	C2-N3	-6.88	1.30	1.35
26	LA	1223	G	N9-C8	6.88	1.42	1.37
26	LA	1866	A	N1-C2	-6.88	1.28	1.34
26	LA	1894	C	C4-N4	-6.88	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2465	C	N3-C4	6.88	1.38	1.33
26	LA	1034	G	C8-N7	-6.88	1.26	1.30
26	LA	1262	A	C6-N6	-6.88	1.28	1.33
26	LA	756	A	C6-N1	-6.88	1.30	1.35
26	LA	763	G	N1-C2	6.88	1.43	1.37
26	LA	2153	C	O4'-C1'	-6.88	1.32	1.41
26	LA	2237	G	N7-C5	-6.88	1.35	1.39
20	SD	137	SER	CA-CB	6.88	1.63	1.52
26	LA	7	G	P-O5'	-6.88	1.52	1.59
26	LA	1384	A	N9-C4	-6.88	1.33	1.37
26	LA	1439	A	C5'-C4'	6.88	1.59	1.51
26	LA	1991	U	O3'-P	-6.88	1.52	1.61
26	LA	1163	G	C2-N2	-6.88	1.27	1.34
2	SA	295	C	C3'-O3'	6.87	1.51	1.42
2	SA	944	G	N1-C2	-6.87	1.32	1.37
2	SA	969	A	C2-N3	-6.87	1.27	1.33
2	SA	1005	A	N9-C4	-6.87	1.33	1.37
2	SA	1275	A	N7-C5	-6.87	1.35	1.39
26	LA	395	U	N3-C4	-6.87	1.32	1.38
26	LA	785	G	C1'-N9	-6.87	1.37	1.46
26	LA	1623	G	C6-N1	-6.87	1.34	1.39
26	LA	1993	U	C5-C6	-6.87	1.27	1.34
26	LA	2308	G	N3-C4	-6.87	1.30	1.35
26	LA	2851	A	O3'-P	-6.87	1.52	1.61
2	SA	372	C	C2'-C1'	-6.87	1.45	1.53
2	SA	929	G	C5'-C4'	6.87	1.59	1.51
26	LA	370	G	O3'-P	-6.87	1.52	1.61
26	LA	1235	G	C2-N3	-6.87	1.27	1.32
26	LA	1643	G	N3-C4	-6.87	1.30	1.35
26	LA	1046	A	O3'-P	-6.87	1.52	1.61
4	S2	7	G	C8-N7	6.87	1.35	1.30
26	LA	519	U	C5'-C4'	6.87	1.59	1.51
26	LA	1190	G	N7-C5	-6.87	1.35	1.39
26	LA	1534	U	P-O5'	-6.87	1.52	1.59
26	LA	2255	G	C5-C4	-6.87	1.33	1.38
2	SA	151	A	C4'-O4'	6.87	1.54	1.45
2	SA	916	U	C2'-C1'	6.87	1.60	1.53
2	SA	376	G	N7-C5	-6.87	1.35	1.39
2	SA	536	C	O5'-C5'	6.87	1.55	1.44
26	LA	1902	C	C2'-C1'	-6.87	1.45	1.53
2	SA	318	G	N1-C2	-6.86	1.32	1.37
2	SA	1196	A	N3-C4	6.86	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	847	U	P-O5'	-6.86	1.52	1.59
26	LA	1728	C	C2'-C1'	-6.86	1.45	1.53
26	LA	1928	A	O3'-P	-6.86	1.52	1.61
26	LA	2753	A	C5'-C4'	6.86	1.59	1.51
2	SA	268	U	C2-N3	-6.86	1.32	1.37
2	SA	1399	C	C5-C6	-6.86	1.28	1.34
2	SA	1415	G	N3-C4	-6.86	1.30	1.35
4	S2	5	G	O3'-P	-6.86	1.52	1.61
26	LA	1282	U	N1-C2	6.86	1.44	1.38
26	LA	1891	G	N3-C4	-6.86	1.30	1.35
26	LA	2353	G	O3'-P	-6.86	1.52	1.61
2	SA	89	U	C2-N3	6.86	1.42	1.37
3	S1	33	A	C5-C4	-6.86	1.33	1.38
26	LA	798	G	C2-N3	6.86	1.38	1.32
26	LA	920	A	P-O5'	-6.86	1.52	1.59
26	LA	1024	G	N9-C4	-6.86	1.32	1.38
2	SA	31	G	C4'-O4'	-6.86	1.36	1.45
2	SA	147	G	C3'-C2'	6.86	1.60	1.52
2	SA	543	U	N3-C4	-6.86	1.32	1.38
2	SA	1048	G	C6-N1	-6.86	1.34	1.39
2	SA	1127	G	C6-N1	-6.86	1.34	1.39
26	LA	549	G	C3'-O3'	6.86	1.51	1.42
26	LA	2538	C	N1-C6	-6.86	1.33	1.37
2	SA	292	G	O3'-P	-6.86	1.52	1.61
2	SA	1216	A	C3'-O3'	6.86	1.51	1.42
2	SA	1527	U	C2-N3	6.86	1.42	1.37
26	LA	25	U	C5-C6	6.86	1.40	1.34
26	LA	1947	C	N1-C6	-6.86	1.33	1.37
26	LA	2014	A	N7-C5	-6.86	1.35	1.39
26	LA	85	G	C6-N1	-6.85	1.34	1.39
26	LA	1535	A	N1-C2	6.85	1.40	1.34
2	SA	270	A	C2'-C1'	-6.85	1.45	1.53
2	SA	441	A	P-O5'	-6.85	1.52	1.59
2	SA	585	G	C6-N1	-6.85	1.34	1.39
2	SA	686	U	N3-C4	-6.85	1.32	1.38
25	LB	6	G	O3'-P	-6.85	1.52	1.61
26	LA	2735	G	C2'-C1'	-6.85	1.45	1.53
2	SA	957	U	C5'-C4'	6.85	1.59	1.51
26	LA	837	C	N3-C4	-6.85	1.29	1.33
2	SA	1247	U	C5'-C4'	6.85	1.59	1.51
2	SA	1396	A	N9-C4	-6.85	1.33	1.37
25	LB	101	A	C5-C4	-6.85	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	310	A	C6-N1	6.85	1.40	1.35
26	LA	858	G	N9-C4	-6.85	1.32	1.38
26	LA	1289	C	C4-N4	-6.85	1.27	1.33
26	LA	1807	G	N3-C4	-6.85	1.30	1.35
26	LA	2422	C	C4'-O4'	-6.85	1.36	1.45
2	SA	43	C	C2'-O2'	-6.85	1.32	1.41
2	SA	623	C	C3'-C2'	-6.85	1.45	1.52
2	SA	818	G	N9-C8	-6.85	1.33	1.37
4	S2	19	G	C5-C6	6.85	1.49	1.42
26	LA	327	G	C2-N3	6.85	1.38	1.32
26	LA	739	A	N9-C4	-6.85	1.33	1.37
26	LA	1450	G	C5-C4	6.85	1.43	1.38
26	LA	2047	C	C4-C5	-6.85	1.37	1.43
26	LA	2379	G	N9-C4	6.85	1.43	1.38
2	SA	733	G	N3-C4	-6.85	1.30	1.35
2	SA	846	G	N3-C4	-6.85	1.30	1.35
26	LA	492	A	N9-C4	6.85	1.42	1.37
26	LA	2220	U	C2-N3	-6.85	1.32	1.37
2	SA	53	A	N9-C4	-6.84	1.33	1.37
2	SA	1073	U	C2-N3	-6.84	1.32	1.37
26	LA	917	A	N7-C5	6.84	1.43	1.39
26	LA	991	C	O3'-P	-6.84	1.52	1.61
26	LA	1009	A	O4'-C1'	-6.84	1.32	1.41
26	LA	1414	C	C2'-C1'	-6.84	1.45	1.53
26	LA	1540	G	N9-C8	-6.84	1.33	1.37
26	LA	1909	C	N1-C6	-6.84	1.33	1.37
26	LA	2771	C	N1-C6	6.84	1.41	1.37
2	SA	1257	A	N3-C4	6.84	1.39	1.34
2	SA	1374	A	C2'-C1'	-6.84	1.45	1.53
26	LA	2117	A	C5'-C4'	6.84	1.59	1.51
2	SA	498	A	C5'-C4'	6.84	1.59	1.51
2	SA	602	A	C6-N1	6.84	1.40	1.35
2	SA	1199	U	P-O5'	-6.84	1.52	1.59
26	LA	173	A	N9-C4	-6.84	1.33	1.37
26	LA	181	A	C6-N1	6.84	1.40	1.35
26	LA	436	C	O3'-P	-6.84	1.52	1.61
26	LA	1480	C	C4-N4	-6.84	1.27	1.33
26	LA	2772	C	C4-C5	-6.84	1.37	1.43
26	LA	2801	G	N3-C4	-6.84	1.30	1.35
2	SA	57	G	O3'-P	-6.84	1.52	1.61
2	SA	326	G	C5'-C4'	6.84	1.59	1.51
25	LB	21	G	C5-C4	-6.84	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	79	G	C2-N2	-6.84	1.27	1.34
26	LA	546	U	O3'-P	-6.84	1.52	1.61
26	LA	2016	U	C2-N3	-6.84	1.32	1.37
2	SA	622	A	N3-C4	-6.84	1.30	1.34
26	LA	2144	G	C6-N1	-6.84	1.34	1.39
26	LA	540	C	C2-N3	-6.84	1.30	1.35
26	LA	1173	U	C5'-C4'	6.84	1.59	1.51
26	LA	1548	A	N1-C2	6.84	1.40	1.34
26	LA	2260	C	C3'-O3'	6.84	1.51	1.42
2	SA	361	G	O3'-P	-6.83	1.52	1.61
2	SA	1419	G	C3'-C2'	-6.83	1.45	1.52
26	LA	988	A	C4'-C3'	-6.83	1.45	1.53
26	LA	2645	G	P-O5'	-6.83	1.52	1.59
2	SA	279	A	C5'-C4'	6.83	1.59	1.51
4	S2	70	C	P-O5'	-6.83	1.52	1.59
26	LA	449	A	C8-N7	-6.83	1.26	1.31
26	LA	2617	U	N3-C4	-6.83	1.32	1.38
26	LA	2679	A	C8-N7	-6.83	1.26	1.31
2	SA	481	G	C2-N2	-6.83	1.27	1.34
26	LA	46	G	C4'-C3'	-6.83	1.45	1.53
26	LA	418	C	P-O5'	-6.83	1.52	1.59
26	LA	1259	G	C6-N1	-6.83	1.34	1.39
26	LA	2602	A	C5-C4	6.83	1.43	1.38
26	LA	2900	A	N7-C5	6.83	1.43	1.39
2	SA	997	U	O3'-P	6.83	1.69	1.61
25	LB	102	G	N3-C4	-6.83	1.30	1.35
26	LA	610	C	C2'-C1'	-6.83	1.45	1.53
2	SA	75	G	C6-N1	6.83	1.44	1.39
2	SA	144	G	C2-N2	-6.83	1.27	1.34
2	SA	1057	G	N1-C2	-6.83	1.32	1.37
26	LA	550	C	C4-C5	-6.83	1.37	1.43
26	LA	2024	G	C6-N1	-6.83	1.34	1.39
2	SA	949	A	C5-C4	-6.83	1.33	1.38
26	LA	202	U	C3'-C2'	-6.83	1.45	1.52
26	LA	924	G	N9-C8	-6.83	1.33	1.37
26	LA	1896	G	C5-C4	6.83	1.43	1.38
26	LA	2756	U	O3'-P	-6.83	1.52	1.61
2	SA	33	A	C5-C6	6.83	1.47	1.41
2	SA	378	G	N9-C4	-6.83	1.32	1.38
2	SA	859	G	O3'-P	-6.83	1.52	1.61
25	LB	93	C	P-O5'	-6.83	1.52	1.59
26	LA	471	A	N9-C4	-6.83	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2112	G	N9-C8	-6.83	1.33	1.37
26	LA	2570	G	C1'-N9	-6.83	1.37	1.46
2	SA	211	G	N7-C5	6.82	1.43	1.39
2	SA	370	C	O4'-C1'	6.82	1.50	1.41
2	SA	468	A	N9-C8	-6.82	1.32	1.37
2	SA	675	A	N9-C4	-6.82	1.33	1.37
25	LB	119	A	C4'-C3'	6.82	1.60	1.53
26	LA	2016	U	N1-C6	6.82	1.44	1.38
26	LA	2254	C	C5'-C4'	6.82	1.59	1.51
26	LA	2465	C	P-O5'	-6.82	1.52	1.59
26	LA	2518	A	C5-C4	-6.82	1.33	1.38
26	LA	2802	G	N9-C8	-6.82	1.33	1.37
26	LA	529	A	C5-C4	-6.82	1.33	1.38
26	LA	1296	G	C2'-C1'	-6.82	1.45	1.53
26	LA	1550	C	C2'-C1'	-6.82	1.45	1.53
26	LA	2548	U	C2'-C1'	-6.82	1.45	1.53
2	SA	330	C	N1-C6	6.82	1.41	1.37
2	SA	1182	G	C2-N2	-6.82	1.27	1.34
26	LA	255	A	C2'-C1'	-6.82	1.45	1.53
26	LA	291	G	C5'-C4'	6.82	1.59	1.51
26	LA	324	A	O3'-P	-6.82	1.52	1.61
26	LA	470	A	N1-C2	-6.82	1.28	1.34
26	LA	691	C	C2'-C1'	-6.82	1.45	1.53
26	LA	856	G	C4'-C3'	-6.82	1.45	1.53
26	LA	1003	G	N9-C8	6.82	1.42	1.37
26	LA	1041	G	C6-N1	-6.82	1.34	1.39
26	LA	1332	G	N1-C2	-6.82	1.32	1.37
26	LA	1625	C	C4'-C3'	6.82	1.60	1.53
26	LA	1723	G	C1'-N9	-6.82	1.37	1.46
26	LA	2472	G	C6-N1	-6.82	1.34	1.39
26	LA	2740	A	C5-C4	-6.82	1.33	1.38
2	SA	460	A	C2'-C1'	-6.82	1.45	1.53
2	SA	1408	A	C6-N1	6.82	1.40	1.35
2	SA	301	G	C1'-N9	-6.82	1.37	1.46
2	SA	1531	A	C2'-C1'	-6.82	1.45	1.53
26	LA	1975	G	N3-C4	-6.82	1.30	1.35
26	LA	2464	G	P-O5'	6.82	1.66	1.59
2	SA	1074	G	C4'-O4'	6.81	1.54	1.45
2	SA	1460	C	C4-N4	6.81	1.40	1.33
26	LA	1169	A	C5-C6	-6.81	1.34	1.41
26	LA	1761	C	C2'-C1'	-6.81	1.45	1.53
26	LA	2697	G	N7-C5	-6.81	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	76	G	C4'-C3'	6.81	1.60	1.53
2	SA	91	U	C2'-C1'	-6.81	1.45	1.53
2	SA	928	G	C2'-C1'	-6.81	1.45	1.53
2	SA	1119	C	P-O5'	-6.81	1.52	1.59
26	LA	1030	C	C2'-C1'	-6.81	1.45	1.53
26	LA	1389	G	C2-N2	-6.81	1.27	1.34
26	LA	1740	G	P-O5'	-6.81	1.52	1.59
26	LA	1929	G	N7-C5	-6.81	1.35	1.39
26	LA	2018	G	C5-C4	-6.81	1.33	1.38
26	LA	2621	G	N3-C4	-6.81	1.30	1.35
26	LA	2049	G	C5-C4	-6.81	1.33	1.38
26	LA	2480	C	C5'-C4'	6.81	1.59	1.51
26	LA	2619	C	O3'-P	-6.81	1.52	1.61
2	SA	157	U	C4'-O4'	-6.81	1.36	1.45
2	SA	263	A	C2'-C1'	-6.81	1.45	1.53
26	LA	435	C	C5-C6	6.81	1.39	1.34
26	LA	685	A	N7-C5	-6.81	1.35	1.39
26	LA	960	A	N7-C5	-6.81	1.35	1.39
26	LA	1687	G	N9-C8	-6.81	1.33	1.37
26	LA	1784	A	P-O5'	-6.81	1.52	1.59
26	LA	2639	A	N9-C8	6.81	1.43	1.37
26	LA	2743	U	N1-C2	-6.81	1.32	1.38
2	SA	966	G	O3'-P	-6.81	1.52	1.61
2	SA	1363	A	C5-C4	6.81	1.43	1.38
26	LA	713	G	P-O5'	-6.81	1.52	1.59
26	LA	1999	C	C4'-O4'	-6.81	1.36	1.45
26	LA	2453	A	N7-C5	6.81	1.43	1.39
26	LA	2560	A	C6-N1	6.81	1.40	1.35
26	LA	852	U	O3'-P	-6.81	1.52	1.61
26	LA	928	A	C2'-C1'	-6.81	1.45	1.53
26	LA	2637	U	C2-N3	-6.81	1.32	1.37
2	SA	238	A	C5-C6	6.80	1.47	1.41
2	SA	705	G	C5-C4	-6.80	1.33	1.38
2	SA	1036	A	N9-C4	6.80	1.42	1.37
2	SA	1171	A	C5-C4	6.80	1.43	1.38
25	LB	99	A	C4'-O4'	-6.80	1.36	1.45
26	LA	242	G	N9-C8	6.80	1.42	1.37
26	LA	1721	G	C5-C6	6.80	1.49	1.42
26	LA	2066	C	N3-C4	6.80	1.38	1.33
26	LA	2256	G	P-O5'	-6.80	1.52	1.59
26	LA	2388	A	O4'-C1'	-6.80	1.32	1.41
2	SA	887	G	N9-C4	-6.80	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	434	U	C2'-C1'	6.80	1.60	1.53
2	SA	1025	U	N1-C6	6.80	1.44	1.38
2	SA	1167	A	C6-N1	-6.80	1.30	1.35
4	S2	53	G	C5-C6	-6.80	1.35	1.42
26	LA	223	A	C4'-C3'	-6.80	1.45	1.53
26	LA	587	C	O3'-P	-6.80	1.52	1.61
26	LA	801	G	C6-N1	-6.80	1.34	1.39
26	LA	805	G	C6-N1	-6.80	1.34	1.39
26	LA	912	C	C2-N3	-6.80	1.30	1.35
26	LA	1297	C	C2'-C1'	-6.80	1.45	1.53
26	LA	1309	G	N9-C8	-6.80	1.33	1.37
26	LA	1696	G	C2-N3	-6.80	1.27	1.32
2	SA	110	C	C5'-C4'	6.80	1.59	1.51
2	SA	1020	G	C2'-O2'	6.80	1.50	1.41
26	LA	905	A	N9-C4	-6.80	1.33	1.37
26	LA	2369	A	N9-C4	-6.80	1.33	1.37
26	LA	2588	G	N9-C4	6.80	1.43	1.38
2	SA	354	G	C3'-C2'	-6.80	1.45	1.52
2	SA	430	A	P-O5'	-6.80	1.52	1.59
26	LA	232	G	C8-N7	6.80	1.35	1.30
26	LA	1044	C	N1-C6	6.80	1.41	1.37
26	LA	1106	G	O4'-C1'	6.80	1.50	1.41
26	LA	1154	G	N7-C5	-6.80	1.35	1.39
2	SA	655	A	C6-N1	-6.80	1.30	1.35
2	SA	1286	U	C4'-C3'	6.80	1.60	1.53
2	SA	1520	C	O3'-P	-6.80	1.52	1.61
25	LB	36	C	C3'-O3'	6.80	1.51	1.42
26	LA	187	G	N3-C4	-6.80	1.30	1.35
26	LA	815	C	N1-C6	-6.80	1.33	1.37
26	LA	1070	A	C2'-C1'	-6.80	1.45	1.53
26	LA	1587	G	P-O5'	-6.80	1.52	1.59
26	LA	1600	C	O3'-P	-6.80	1.52	1.61
24	S3	379	GLY	CA-C	-6.79	1.41	1.51
26	LA	101	A	C6-N1	-6.79	1.30	1.35
26	LA	2488	G	O3'-P	-6.79	1.52	1.61
2	SA	383	A	C5-C4	6.79	1.43	1.38
2	SA	804	U	N1-C2	-6.79	1.32	1.38
26	LA	205	G	C2'-C1'	-6.79	1.45	1.53
26	LA	1391	U	C4'-C3'	6.79	1.60	1.53
26	LA	2838	G	C3'-O3'	6.79	1.51	1.42
2	SA	619	U	O4'-C1'	6.79	1.50	1.41
2	SA	646	G	C8-N7	-6.79	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	725	G	N7-C5	-6.79	1.35	1.39
26	LA	1544	A	C2-N3	6.79	1.39	1.33
26	LA	1976	U	N1-C2	-6.79	1.32	1.38
2	SA	317	U	C2-N3	6.79	1.42	1.37
2	SA	641	U	C2'-C1'	-6.79	1.45	1.53
25	LB	6	G	C2'-C1'	-6.79	1.45	1.53
26	LA	1185	G	P-O5'	-6.79	1.52	1.59
26	LA	1493	C	N1-C6	6.79	1.41	1.37
26	LA	1633	G	C2-N3	6.79	1.38	1.32
26	LA	578	G	C5-C4	-6.79	1.33	1.38
26	LA	894	U	O3'-P	6.79	1.69	1.61
26	LA	952	G	N9-C8	-6.79	1.33	1.37
26	LA	2323	G	C2-N2	-6.79	1.27	1.34
26	LA	1871	A	N7-C5	-6.79	1.35	1.39
26	LA	2749	A	N1-C2	-6.79	1.28	1.34
26	LA	2846	G	N9-C4	6.79	1.43	1.38
42	L6	52	GLY	CA-C	-6.79	1.41	1.51
26	LA	936	A	N9-C4	6.79	1.42	1.37
26	LA	1020	A	O3'-P	-6.79	1.53	1.61
26	LA	1297	C	C5-C6	-6.79	1.28	1.34
26	LA	2012	G	C6-N1	-6.79	1.34	1.39
26	LA	2299	U	C2-N3	-6.79	1.32	1.37
26	LA	2415	G	O3'-P	-6.79	1.53	1.61
2	SA	56	U	C2-N3	-6.78	1.33	1.37
26	LA	1065	U	N3-C4	6.78	1.44	1.38
26	LA	1599	U	C2-N3	6.78	1.42	1.37
26	LA	2081	U	C2-N3	-6.78	1.33	1.37
26	LA	2161	C	C2-O2	6.78	1.30	1.24
26	LA	2803	G	C5-C4	-6.78	1.33	1.38
26	LA	2692	G	N7-C5	-6.78	1.35	1.39
2	SA	425	G	C5-C6	-6.78	1.35	1.42
2	SA	1181	G	C5'-C4'	6.78	1.59	1.51
2	SA	1513	A	C6-N1	-6.78	1.30	1.35
26	LA	636	G	C5'-C4'	6.78	1.59	1.51
26	LA	1236	G	N1-C2	-6.78	1.32	1.37
26	LA	1433	A	O3'-P	-6.78	1.53	1.61
26	LA	1897	G	C2-N2	-6.78	1.27	1.34
26	LA	2116	G	C5-C4	-6.78	1.33	1.38
26	LA	2471	A	C2'-C1'	-6.78	1.45	1.53
2	SA	824	G	P-O5'	-6.78	1.52	1.59
2	SA	386	C	N1-C6	-6.78	1.33	1.37
26	LA	787	C	N1-C6	-6.78	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1127	A	C5'-C4'	6.78	1.59	1.51
26	LA	1819	A	C6-N6	-6.78	1.28	1.33
26	LA	1913	A	O3'-P	-6.78	1.53	1.61
26	LA	2612	C	C2'-C1'	-6.78	1.45	1.53
26	LA	2707	U	C5'-C4'	6.78	1.59	1.51
2	SA	1465	A	O3'-P	-6.78	1.53	1.61
26	LA	285	G	N7-C5	6.78	1.43	1.39
26	LA	1050	A	N7-C5	6.78	1.43	1.39
26	LA	1752	C	P-O5'	-6.78	1.52	1.59
26	LA	1982	U	C5-C6	6.78	1.40	1.34
26	LA	960	A	N9-C4	-6.77	1.33	1.37
26	LA	1938	A	C2'-O2'	-6.77	1.32	1.41
26	LA	2742	G	N9-C4	-6.77	1.32	1.38
2	SA	773	G	C5-C4	-6.77	1.33	1.38
2	SA	1066	C	N1-C2	-6.77	1.33	1.40
2	SA	1152	A	N7-C5	-6.77	1.35	1.39
2	SA	1426	G	N7-C5	-6.77	1.35	1.39
2	SA	1475	G	O4'-C1'	-6.77	1.32	1.41
26	LA	578	G	N3-C4	-6.77	1.30	1.35
26	LA	841	G	N9-C8	6.77	1.42	1.37
26	LA	1387	A	C3'-C2'	-6.77	1.45	1.52
26	LA	1570	A	C8-N7	-6.77	1.26	1.31
26	LA	2353	G	N1-C2	-6.77	1.32	1.37
26	LA	2576	G	C5-C4	6.77	1.43	1.38
2	SA	39	G	C8-N7	6.77	1.35	1.30
26	LA	1789	A	C1'-N9	-6.77	1.37	1.46
25	LB	69	G	P-O5'	-6.77	1.52	1.59
26	LA	1254	A	O3'-P	-6.77	1.53	1.61
26	LA	1265	A	C8-N7	-6.77	1.26	1.31
26	LA	2340	A	N3-C4	6.77	1.39	1.34
2	SA	307	C	N1-C6	6.77	1.41	1.37
2	SA	392	C	C3'-O3'	6.77	1.51	1.42
26	LA	589	U	C5'-C4'	6.77	1.59	1.51
26	LA	928	A	P-O5'	-6.77	1.52	1.59
26	LA	940	G	C1'-N9	-6.77	1.37	1.46
26	LA	1259	G	C5-C4	-6.77	1.33	1.38
26	LA	2141	G	N3-C4	-6.77	1.30	1.35
26	LA	2285	C	O3'-P	-6.77	1.53	1.61
26	LA	2501	C	N1-C6	-6.77	1.33	1.37
26	LA	2741	A	C3'-C2'	-6.77	1.45	1.52
2	SA	198	G	C5-C4	-6.77	1.33	1.38
2	SA	781	A	P-O5'	-6.76	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1296	C	C4'-O4'	6.76	1.54	1.45
26	LA	462	C	O3'-P	-6.76	1.53	1.61
26	LA	1790	C	C2'-C1'	-6.76	1.46	1.53
26	LA	2889	C	C4-C5	6.76	1.48	1.43
26	LA	1075	C	C2-N3	-6.76	1.30	1.35
26	LA	2886	A	C4'-C3'	-6.76	1.45	1.53
2	SA	291	U	O3'-P	-6.76	1.53	1.61
2	SA	750	C	C4-N4	-6.76	1.27	1.33
4	S2	13	C	O4'-C1'	-6.76	1.32	1.41
26	LA	391	A	C8-N7	-6.76	1.26	1.31
26	LA	1893	C	O3'-P	-6.76	1.53	1.61
26	LA	2267	A	C5'-C4'	6.76	1.59	1.51
26	LA	2273	A	C5-C6	-6.76	1.34	1.41
26	LA	2536	G	N9-C4	-6.76	1.32	1.38
26	LA	2648	G	N9-C4	-6.76	1.32	1.38
2	SA	372	C	C5'-C4'	6.76	1.59	1.51
2	SA	991	U	N1-C2	-6.76	1.32	1.38
26	LA	581	C	N1-C6	-6.76	1.33	1.37
26	LA	627	A	C2'-C1'	-6.76	1.46	1.53
26	LA	775	G	O4'-C1'	-6.76	1.32	1.41
26	LA	846	U	C4-O4	-6.76	1.18	1.23
26	LA	16	C	N3-C4	-6.76	1.29	1.33
26	LA	1271	G	C3'-O3'	6.76	1.51	1.42
2	SA	576	C	O4'-C1'	-6.76	1.32	1.41
26	LA	922	C	N1-C6	6.76	1.41	1.37
26	LA	1538	G	N3-C4	-6.76	1.30	1.35
26	LA	1552	A	C2-N3	6.76	1.39	1.33
26	LA	2236	U	C2'-C1'	-6.76	1.46	1.53
26	LA	2243	U	O4'-C1'	-6.76	1.32	1.41
26	LA	2411	A	C2'-C1'	-6.76	1.46	1.53
2	SA	80	A	N1-C2	6.75	1.40	1.34
26	LA	639	U	O3'-P	-6.75	1.53	1.61
26	LA	1306	C	C4-N4	-6.75	1.27	1.33
26	LA	1400	U	P-O5'	-6.75	1.52	1.59
2	SA	532	A	N7-C5	-6.75	1.35	1.39
2	SA	1467	C	C2-O2	-6.75	1.18	1.24
26	LA	1226	A	C6-N1	-6.75	1.30	1.35
26	LA	1537	G	C4'-C3'	-6.75	1.45	1.53
26	LA	1604	C	C4-C5	-6.75	1.37	1.43
26	LA	1974	C	C2'-C1'	-6.75	1.46	1.53
2	SA	215	C	C5'-C4'	6.75	1.59	1.51
2	SA	272	C	N3-C4	-6.75	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	55	A	C8-N7	6.75	1.36	1.31
26	LA	156	A	C4'-O4'	6.75	1.54	1.45
26	LA	456	C	P-O5'	-6.75	1.52	1.59
26	LA	888	C	C5'-C4'	6.75	1.59	1.51
26	LA	1405	U	N3-C4	-6.75	1.32	1.38
26	LA	1725	U	C4-C5	6.75	1.49	1.43
26	LA	2548	U	N3-C4	-6.75	1.32	1.38
2	SA	532	A	C5'-C4'	6.75	1.59	1.51
2	SA	887	G	N9-C8	-6.75	1.33	1.37
2	SA	1238	A	C6-N1	6.75	1.40	1.35
2	SA	1517	G	N3-C4	-6.75	1.30	1.35
2	SA	1523	G	C5-C4	6.75	1.43	1.38
2	SA	1530	G	C5-C4	-6.75	1.33	1.38
26	LA	662	G	N3-C4	-6.75	1.30	1.35
26	LA	1204	A	C6-N1	-6.75	1.30	1.35
26	LA	1637	A	N3-C4	-6.75	1.30	1.34
26	LA	1728	C	C4-N4	-6.75	1.27	1.33
26	LA	1926	U	P-O5'	-6.75	1.53	1.59
26	LA	2242	G	C6-O6	-6.75	1.18	1.24
26	LA	2370	G	N7-C5	6.75	1.43	1.39
2	SA	285	C	P-O5'	-6.75	1.53	1.59
2	SA	550	G	N7-C5	6.75	1.43	1.39
2	SA	1050	G	O4'-C1'	-6.75	1.32	1.41
2	SA	1485	U	N3-C4	-6.75	1.32	1.38
25	LB	51	G	C2'-C1'	-6.75	1.46	1.53
26	LA	308	G	N9-C8	6.75	1.42	1.37
26	LA	764	A	C6-N1	-6.75	1.30	1.35
2	SA	168	G	C3'-C2'	6.75	1.60	1.52
2	SA	1087	G	N9-C8	6.75	1.42	1.37
26	LA	55	G	N7-C5	6.75	1.43	1.39
26	LA	295	G	N3-C4	-6.75	1.30	1.35
26	LA	317	G	N9-C4	-6.75	1.32	1.38
26	LA	1728	C	C2-N3	-6.75	1.30	1.35
26	LA	2560	A	C2'-C1'	-6.75	1.46	1.53
2	SA	2	A	N9-C4	-6.74	1.33	1.37
2	SA	317	U	C2'-C1'	-6.74	1.46	1.53
2	SA	791	G	C5-C4	6.74	1.43	1.38
2	SA	1177	G	O3'-P	-6.74	1.53	1.61
2	SA	1282	C	C5'-C4'	6.74	1.59	1.51
26	LA	644	A	C2'-C1'	-6.74	1.46	1.53
26	LA	648	G	N9-C8	-6.74	1.33	1.37
26	LA	1398	C	O3'-P	-6.74	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1568	G	P-O5'	-6.74	1.53	1.59
26	LA	1625	C	C2'-C1'	6.74	1.60	1.53
26	LA	1823	G	N9-C4	-6.74	1.32	1.38
26	LA	1952	A	N3-C4	-6.74	1.30	1.34
26	LA	2114	A	N7-C5	-6.74	1.35	1.39
2	SA	1181	G	N1-C2	6.74	1.43	1.37
26	LA	788	A	N3-C4	-6.74	1.30	1.34
26	LA	899	A	P-O5'	6.74	1.66	1.59
26	LA	911	A	C5-C6	-6.74	1.34	1.41
26	LA	2306	C	C5'-C4'	6.74	1.59	1.51
2	SA	518	C	N1-C6	6.74	1.41	1.37
2	SA	632	U	C3'-C2'	6.74	1.60	1.52
2	SA	750	C	C2-N3	-6.74	1.30	1.35
2	SA	921	U	C2-N3	-6.74	1.33	1.37
2	SA	1499	A	C2'-C1'	-6.74	1.46	1.53
3	S1	13	A	C8-N7	6.74	1.36	1.31
25	LB	7	G	C6-N1	-6.74	1.34	1.39
25	LB	22	U	N1-C2	6.74	1.44	1.38
25	LB	42	C	C4-N4	6.74	1.40	1.33
26	LA	520	G	N7-C5	-6.74	1.35	1.39
26	LA	817	C	N1-C6	-6.74	1.33	1.37
26	LA	1210	G	C5-C6	-6.74	1.35	1.42
26	LA	2406	A	C6-N6	6.74	1.39	1.33
26	LA	2870	C	C4'-O4'	-6.74	1.36	1.45
2	SA	843	U	C4'-O4'	6.74	1.54	1.45
2	SA	1529	G	C5-C6	6.74	1.49	1.42
26	LA	1124	G	C3'-C2'	-6.74	1.45	1.52
26	LA	1788	C	N1-C6	6.74	1.41	1.37
26	LA	2900	A	C3'-C2'	-6.74	1.45	1.52
26	LA	808	G	C5-C6	-6.74	1.35	1.42
26	LA	1312	U	N3-C4	-6.74	1.32	1.38
2	SA	240	G	C3'-C2'	6.74	1.60	1.52
2	SA	1194	U	O3'-P	-6.74	1.53	1.61
18	SB	235	SER	CA-CB	6.74	1.63	1.52
25	LB	17	C	C2-N3	-6.74	1.30	1.35
26	LA	255	A	O3'-P	-6.74	1.53	1.61
26	LA	1542	U	N1-C6	-6.74	1.31	1.38
26	LA	1904	G	C2-N2	-6.74	1.27	1.34
26	LA	2228	G	N3-C4	-6.74	1.30	1.35
26	LA	2600	A	O4'-C1'	-6.74	1.32	1.41
26	LA	2885	G	N3-C4	-6.74	1.30	1.35
2	SA	621	A	C8-N7	-6.73	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	745	G	N9-C4	-6.73	1.32	1.38
26	LA	283	G	C4'-C3'	-6.73	1.45	1.53
26	LA	327	G	C8-N7	6.73	1.34	1.30
2	SA	814	A	C1'-N9	-6.73	1.37	1.46
26	LA	698	C	N3-C4	6.73	1.38	1.33
26	LA	780	G	C5-C4	-6.73	1.33	1.38
26	LA	1965	C	O3'-P	-6.73	1.53	1.61
26	LA	2772	C	N1-C6	-6.73	1.33	1.37
2	SA	1055	A	C4'-C3'	6.73	1.60	1.53
2	SA	1169	A	C6-N6	-6.73	1.28	1.33
2	SA	1306	A	C3'-C2'	-6.73	1.45	1.52
12	SL	68	GLY	N-CA	-6.73	1.35	1.46
26	LA	296	U	O3'-P	-6.73	1.53	1.61
26	LA	1267	U	N1-C6	-6.73	1.31	1.38
26	LA	1312	U	O4'-C1'	-6.73	1.32	1.41
26	LA	1473	G	C6-O6	-6.73	1.18	1.24
2	SA	1032	G	C5'-C4'	6.73	1.59	1.51
2	SA	49	U	P-O5'	-6.73	1.53	1.59
2	SA	752	G	O3'-P	-6.73	1.53	1.61
2	SA	1360	A	C6-N1	6.73	1.40	1.35
2	SA	1495	U	O5'-C5'	6.73	1.55	1.44
3	S1	23	C	O3'-P	-6.73	1.53	1.61
26	LA	218	A	C3'-C2'	-6.73	1.45	1.52
26	LA	1627	G	N3-C4	-6.73	1.30	1.35
2	SA	391	G	O3'-P	-6.73	1.53	1.61
2	SA	538	G	C2-N3	6.73	1.38	1.32
2	SA	944	G	N3-C4	-6.73	1.30	1.35
2	SA	1486	G	C3'-O3'	6.73	1.51	1.42
26	LA	2758	A	C5-C4	-6.73	1.34	1.38
2	SA	1492	A	C6-N1	6.72	1.40	1.35
26	LA	10	A	C4'-C3'	6.72	1.60	1.53
26	LA	1184	U	N3-C4	-6.72	1.32	1.38
26	LA	1205	A	N3-C4	6.72	1.38	1.34
26	LA	1611	C	C2'-C1'	-6.72	1.46	1.53
26	LA	1792	G	N7-C5	-6.72	1.35	1.39
26	LA	1840	G	N7-C5	-6.72	1.35	1.39
26	LA	2004	G	N1-C2	6.72	1.43	1.37
26	LA	2143	C	C4-C5	-6.72	1.37	1.43
26	LA	2567	G	C3'-C2'	-6.72	1.45	1.52
2	SA	222	C	O3'-P	-6.72	1.53	1.61
2	SA	668	G	N9-C4	6.72	1.43	1.38
26	LA	1137	G	C3'-C2'	-6.72	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2300	C	C2-N3	-6.72	1.30	1.35
26	LA	2488	G	C2-N2	-6.72	1.27	1.34
2	SA	1003	G	C5-C6	6.72	1.49	1.42
2	SA	1424	U	P-O5'	-6.72	1.53	1.59
25	LB	117	G	N3-C4	6.72	1.40	1.35
26	LA	309	A	C5-C6	-6.72	1.35	1.41
26	LA	1122	G	C6-N1	-6.72	1.34	1.39
2	SA	92	U	C2-N3	6.72	1.42	1.37
2	SA	335	C	O4'-C1'	6.72	1.50	1.41
2	SA	724	G	N7-C5	-6.72	1.35	1.39
2	SA	849	G	N9-C8	-6.72	1.33	1.37
2	SA	961	U	C5'-C4'	6.72	1.59	1.51
26	LA	1049	C	N1-C6	6.72	1.41	1.37
26	LA	1893	C	C2-N3	-6.72	1.30	1.35
26	LA	2406	A	C1'-N9	-6.72	1.37	1.46
26	LA	2779	U	N1-C6	-6.72	1.31	1.38
26	LA	1194	A	C8-N7	6.72	1.36	1.31
2	SA	1231	G	C6-N1	-6.72	1.34	1.39
2	SA	1278	G	C8-N7	6.72	1.34	1.30
25	LB	41	G	C2-N2	-6.72	1.27	1.34
26	LA	403	U	C5-C6	-6.72	1.28	1.34
26	LA	1079	C	N1-C6	6.72	1.41	1.37
26	LA	2637	U	O4'-C1'	-6.72	1.32	1.41
26	LA	381	G	P-O5'	-6.71	1.53	1.59
26	LA	1572	A	C4'-O4'	-6.71	1.36	1.45
26	LA	2373	G	C2'-C1'	6.71	1.60	1.53
26	LA	2838	G	C5-C4	-6.71	1.33	1.38
26	LA	688	U	N3-C4	6.71	1.44	1.38
2	SA	626	G	C4'-C3'	-6.71	1.45	1.53
2	SA	1354	U	P-O5'	-6.71	1.53	1.59
26	LA	716	A	C2-N3	6.71	1.39	1.33
26	LA	857	G	O3'-P	-6.71	1.53	1.61
26	LA	2388	A	N9-C8	-6.71	1.32	1.37
26	LA	2431	U	N1-C6	-6.71	1.31	1.38
2	SA	120	A	N7-C5	-6.71	1.35	1.39
2	SA	552	U	C2'-C1'	-6.71	1.46	1.53
2	SA	687	A	O4'-C1'	-6.71	1.32	1.41
2	SA	841	C	C2-N3	6.71	1.41	1.35
2	SA	1390	U	N3-C4	-6.71	1.32	1.38
26	LA	474	G	N9-C8	-6.71	1.33	1.37
26	LA	798	G	N3-C4	-6.71	1.30	1.35
26	LA	884	U	C4-C5	6.71	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	943	A	C5-C4	-6.71	1.34	1.38
26	LA	2104	C	C3'-C2'	6.71	1.60	1.52
26	LA	2386	A	C2'-O2'	-6.71	1.32	1.41
26	LA	17	G	C2-N2	-6.71	1.27	1.34
26	LA	401	A	P-O5'	-6.71	1.53	1.59
26	LA	616	A	C3'-C2'	-6.71	1.45	1.52
26	LA	788	A	C8-N7	-6.71	1.26	1.31
26	LA	1302	A	N1-C2	-6.71	1.28	1.34
26	LA	1468	U	N1-C6	-6.71	1.31	1.38
26	LA	1738	G	C4'-C3'	6.71	1.60	1.53
26	LA	2382	G	C1'-N9	-6.71	1.37	1.46
2	SA	849	G	C5'-C4'	6.71	1.59	1.51
26	LA	2233	U	C4-O4	-6.71	1.18	1.23
26	LA	2886	A	C6-N6	6.71	1.39	1.33
2	SA	454	G	N9-C8	-6.70	1.33	1.37
2	SA	476	U	N1-C6	-6.70	1.31	1.38
2	SA	535	A	N9-C8	-6.70	1.32	1.37
2	SA	1408	A	N3-C4	-6.70	1.30	1.34
25	LB	56	G	C3'-C2'	-6.70	1.45	1.52
26	LA	281	C	C5-C6	6.70	1.39	1.34
26	LA	524	G	N3-C4	6.70	1.40	1.35
26	LA	777	G	P-O5'	-6.70	1.53	1.59
26	LA	1231	U	N1-C2	-6.70	1.32	1.38
26	LA	2209	G	C6-N1	-6.70	1.34	1.39
2	SA	320	A	N9-C4	-6.70	1.33	1.37
2	SA	1105	A	P-O5'	6.70	1.66	1.59
2	SA	596	A	N7-C5	-6.70	1.35	1.39
4	S2	73	A	C8-N7	-6.70	1.26	1.31
26	LA	402	A	C2'-C1'	-6.70	1.46	1.53
26	LA	2712	C	C5-C6	6.70	1.39	1.34
2	SA	1429	A	C8-N7	6.70	1.36	1.31
26	LA	411	G	C6-O6	-6.70	1.18	1.24
26	LA	912	C	C4-N4	-6.70	1.27	1.33
26	LA	1608	A	N3-C4	-6.70	1.30	1.34
26	LA	1778	U	C5'-C4'	6.70	1.59	1.51
2	SA	319	G	O3'-P	-6.70	1.53	1.61
2	SA	436	C	C2-N3	-6.70	1.30	1.35
2	SA	856	C	C4-C5	-6.70	1.37	1.43
26	LA	23	G	O3'-P	-6.70	1.53	1.61
26	LA	701	G	C4'-C3'	6.70	1.60	1.53
2	SA	1166	G	C5-C4	6.70	1.43	1.38
2	SA	1398	A	C6-N6	-6.70	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1516	G	N1-C2	-6.70	1.32	1.37
26	LA	1483	G	C5-C6	6.70	1.49	1.42
26	LA	1522	A	N1-C2	-6.70	1.28	1.34
26	LA	2333	A	N9-C8	-6.70	1.32	1.37
26	LA	2607	G	N9-C4	6.70	1.43	1.38
25	LB	96	G	C2-N2	-6.69	1.27	1.34
26	LA	1037	G	O3'-P	-6.69	1.53	1.61
2	SA	46	G	N1-C2	-6.69	1.32	1.37
2	SA	1345	U	C4'-C3'	-6.69	1.45	1.53
26	LA	23	G	C5'-C4'	6.69	1.59	1.51
26	LA	207	A	C1'-N9	-6.69	1.37	1.46
26	LA	1103	A	C2'-O2'	6.69	1.50	1.41
26	LA	2328	A	C2'-C1'	-6.69	1.46	1.53
2	SA	369	G	C2-N3	6.69	1.38	1.32
26	LA	693	A	O3'-P	-6.69	1.53	1.61
26	LA	858	G	C2-N2	-6.69	1.27	1.34
26	LA	1474	U	O4'-C1'	-6.69	1.32	1.41
26	LA	1557	C	C4-C5	-6.69	1.37	1.43
26	LA	1884	G	C8-N7	6.69	1.34	1.30
26	LA	2150	C	N1-C6	-6.69	1.33	1.37
26	LA	2498	C	C4-N4	-6.69	1.27	1.33
2	SA	403	C	O3'-P	-6.69	1.53	1.61
2	SA	1081	A	P-O5'	-6.69	1.53	1.59
2	SA	1447	A	N9-C8	-6.69	1.32	1.37
26	LA	467	G	C5-C4	-6.69	1.33	1.38
2	SA	749	A	C2-N3	-6.69	1.27	1.33
26	LA	593	U	N1-C6	-6.69	1.31	1.38
26	LA	1770	G	O4'-C1'	-6.69	1.32	1.41
26	LA	2680	U	O3'-P	-6.69	1.53	1.61
2	SA	113	G	C5-C6	-6.69	1.35	1.42
2	SA	743	A	C5'-C4'	6.69	1.59	1.51
26	LA	2363	G	N3-C4	-6.69	1.30	1.35
2	SA	608	A	C5-C6	-6.68	1.35	1.41
2	SA	729	A	C2'-C1'	-6.68	1.46	1.53
26	LA	1958	C	O3'-P	-6.68	1.53	1.61
26	LA	2051	A	C2'-C1'	-6.68	1.46	1.53
26	LA	2357	G	C4'-C3'	6.68	1.60	1.53
26	LA	2752	C	N1-C6	-6.68	1.33	1.37
2	SA	327	A	N3-C4	-6.68	1.30	1.34
2	SA	478	A	C4'-O4'	6.68	1.54	1.45
2	SA	481	G	N3-C4	-6.68	1.30	1.35
2	SA	560	A	C8-N7	-6.68	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	98	G	C2-N2	-6.68	1.27	1.34
26	LA	469	G	C6-N1	-6.68	1.34	1.39
26	LA	834	G	C6-N1	-6.68	1.34	1.39
26	LA	1115	G	O3'-P	-6.68	1.53	1.61
26	LA	2025	C	C5-C6	-6.68	1.29	1.34
26	LA	2094	A	C4'-C3'	6.68	1.60	1.53
26	LA	2118	U	C4-O4	-6.68	1.18	1.23
26	LA	2451	A	O4'-C1'	-6.68	1.32	1.41
2	SA	546	A	O3'-P	-6.68	1.53	1.61
24	S3	338	TYR	CZ-OH	6.68	1.49	1.37
26	LA	1456	G	C2-N2	-6.68	1.27	1.34
26	LA	1903	G	N7-C5	-6.68	1.35	1.39
26	LA	2645	G	C5-C4	-6.68	1.33	1.38
2	SA	1052	U	C5'-C4'	6.68	1.59	1.51
2	SA	1361	G	O4'-C1'	-6.68	1.32	1.41
26	LA	725	G	C3'-O3'	6.68	1.51	1.42
26	LA	1213	A	N9-C4	-6.68	1.33	1.37
26	LA	1698	A	C8-N7	-6.68	1.26	1.31
26	LA	2391	G	N3-C4	-6.68	1.30	1.35
2	SA	1353	G	O3'-P	-6.68	1.53	1.61
2	SA	636	U	C2'-O2'	6.68	1.50	1.41
2	SA	747	A	N9-C4	-6.68	1.33	1.37
2	SA	1071	C	C3'-C2'	-6.68	1.45	1.52
26	LA	290	U	C4-C5	-6.68	1.37	1.43
26	LA	640	C	C2'-C1'	-6.68	1.46	1.53
26	LA	1150	C	P-O5'	-6.68	1.53	1.59
26	LA	2325	G	C5-C4	-6.68	1.33	1.38
2	SA	1506	U	C2'-O2'	-6.67	1.32	1.41
4	S2	73	A	C3'-C2'	6.67	1.60	1.52
26	LA	476	G	C2-N3	6.67	1.38	1.32
26	LA	497	A	C5-C4	-6.67	1.34	1.38
26	LA	2180	U	C5'-C4'	6.67	1.59	1.51
26	LA	2388	A	C8-N7	-6.67	1.26	1.31
26	LA	2553	G	N1-C2	-6.67	1.32	1.37
2	SA	491	G	N9-C8	-6.67	1.33	1.37
2	SA	518	C	C4-N4	6.67	1.40	1.33
3	S1	35	G	C6-N1	-6.67	1.34	1.39
26	LA	1620	G	C8-N7	-6.67	1.26	1.30
2	SA	31	G	C5-C4	6.67	1.43	1.38
2	SA	358	U	C5'-C4'	6.67	1.59	1.51
2	SA	995	C	C1'-N1	-6.67	1.37	1.46
2	SA	1065	U	N1-C6	-6.67	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1242	G	C6-N1	-6.67	1.34	1.39
2	SA	1455	G	C6-N1	-6.67	1.34	1.39
4	S2	5	G	C6-N1	6.67	1.44	1.39
12	SL	9	LYS	C-N	-6.67	1.21	1.34
2	SA	673	A	C2'-C1'	-6.67	1.46	1.53
2	SA	1466	C	O3'-P	-6.67	1.53	1.61
26	LA	240	C	C4'-C3'	-6.67	1.45	1.53
26	LA	586	A	N7-C5	-6.67	1.35	1.39
2	SA	230	G	N7-C5	-6.67	1.35	1.39
2	SA	679	C	O3'-P	-6.67	1.53	1.61
25	LB	97	C	P-O5'	-6.67	1.53	1.59
26	LA	974	G	O3'-P	-6.67	1.53	1.61
26	LA	1077	A	C2'-C1'	-6.67	1.46	1.53
26	LA	2604	U	N3-C4	-6.67	1.32	1.38
2	SA	727	G	C5-C6	-6.67	1.35	1.42
26	LA	715	A	C2'-C1'	-6.67	1.46	1.53
26	LA	1501	G	N9-C8	-6.67	1.33	1.37
26	LA	2591	C	C4-N4	-6.67	1.27	1.33
26	LA	2844	G	N9-C4	-6.67	1.32	1.38
26	LA	2780	G	C3'-O3'	6.67	1.51	1.42
2	SA	458	U	C4'-O4'	6.66	1.54	1.45
2	SA	1110	A	C8-N7	-6.66	1.26	1.31
2	SA	1486	G	C5'-C4'	6.66	1.59	1.51
26	LA	256	A	O3'-P	-6.66	1.53	1.61
26	LA	320	A	C6-N1	-6.66	1.30	1.35
2	SA	535	A	C2'-C1'	-6.66	1.46	1.53
26	LA	480	A	N3-C4	-6.66	1.30	1.34
26	LA	1179	G	C5-C6	-6.66	1.35	1.42
26	LA	1883	U	C2'-C1'	6.66	1.60	1.53
26	LA	2818	U	N3-C4	-6.66	1.32	1.38
2	SA	113	G	N1-C2	-6.66	1.32	1.37
2	SA	661	G	N9-C8	-6.66	1.33	1.37
2	SA	738	C	C5-C6	6.66	1.39	1.34
2	SA	1221	G	C2-N2	-6.66	1.27	1.34
26	LA	51	G	C8-N7	6.66	1.34	1.30
26	LA	851	C	C4'-C3'	-6.66	1.45	1.53
2	SA	119	A	C5'-C4'	6.66	1.59	1.51
4	S2	71	G	C2-N3	6.66	1.38	1.32
25	LB	62	C	O3'-P	-6.66	1.53	1.61
26	LA	55	G	C2'-C1'	-6.66	1.46	1.53
26	LA	143	C	C5-C6	-6.66	1.29	1.34
26	LA	265	A	N7-C5	-6.66	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1572	A	P-O5'	-6.66	1.53	1.59
26	LA	2040	G	N3-C4	6.66	1.40	1.35
26	LA	2662	A	C5-C6	-6.66	1.35	1.41
2	SA	233	C	N3-C4	6.66	1.38	1.33
26	LA	743	A	O3'-P	-6.66	1.53	1.61
26	LA	2173	A	N3-C4	-6.66	1.30	1.34
2	SA	121	U	C5'-C4'	6.66	1.59	1.51
2	SA	1249	C	C4-C5	-6.66	1.37	1.43
2	SA	1254	A	C2-N3	6.66	1.39	1.33
26	LA	55	G	O3'-P	-6.66	1.53	1.61
26	LA	126	A	C3'-C2'	6.66	1.60	1.52
26	LA	352	A	C3'-C2'	6.66	1.60	1.52
26	LA	386	G	C4'-O4'	-6.66	1.36	1.45
26	LA	1134	A	C4'-C3'	-6.66	1.45	1.53
26	LA	1771	C	C5'-C4'	6.66	1.59	1.51
26	LA	2250	G	C2-N3	-6.66	1.27	1.32
2	SA	988	G	C2'-C1'	-6.65	1.46	1.53
26	LA	1096	A	C6-N6	6.65	1.39	1.33
26	LA	1345	C	C2-N3	-6.65	1.30	1.35
26	LA	1853	A	N7-C5	6.65	1.43	1.39
26	LA	2255	G	C8-N7	6.65	1.34	1.30
26	LA	2553	G	C3'-C2'	-6.65	1.45	1.52
26	LA	2595	G	P-O5'	-6.65	1.53	1.59
2	SA	509	A	C1'-N9	-6.65	1.37	1.46
2	SA	1311	A	C6-N1	6.65	1.40	1.35
2	SA	1333	A	C2-N3	-6.65	1.27	1.33
26	LA	565	C	N1-C6	-6.65	1.33	1.37
26	LA	1079	C	C2'-C1'	-6.65	1.46	1.53
26	LA	1856	U	O3'-P	-6.65	1.53	1.61
4	S2	61	U	P-O5'	-6.65	1.53	1.59
2	SA	437	U	C2'-C1'	-6.65	1.46	1.53
25	LB	65	U	O4'-C1'	-6.65	1.33	1.41
26	LA	2053	G	C2'-C1'	-6.65	1.46	1.53
26	LA	2124	G	C2-N3	-6.65	1.27	1.32
2	SA	971	G	C2-N3	-6.65	1.27	1.32
26	LA	925	A	C5'-C4'	6.65	1.59	1.51
26	LA	1581	G	C4'-C3'	6.65	1.60	1.53
26	LA	2651	C	C3'-O3'	6.65	1.51	1.42
2	SA	510	A	C5'-C4'	6.64	1.59	1.51
2	SA	630	A	C5'-C4'	6.64	1.59	1.51
2	SA	770	C	O3'-P	-6.64	1.53	1.61
25	LB	118	C	C4-N4	-6.64	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	718	A	C2'-C1'	6.64	1.60	1.53
26	LA	1356	G	N1-C2	-6.64	1.32	1.37
2	SA	1386	G	C8-N7	-6.64	1.26	1.30
25	LB	92	C	C3'-C2'	6.64	1.60	1.52
26	LA	347	A	P-O5'	6.64	1.66	1.59
26	LA	1172	C	O3'-P	-6.64	1.53	1.61
26	LA	1429	G	C6-O6	6.64	1.30	1.24
26	LA	2310	C	C5-C6	6.64	1.39	1.34
26	LA	2355	G	P-O5'	-6.64	1.53	1.59
26	LA	2794	C	C2'-C1'	-6.64	1.46	1.53
26	LA	848	C	C2-N3	6.64	1.41	1.35
26	LA	2650	U	C2'-C1'	-6.64	1.46	1.53
26	LA	2750	A	N9-C8	6.64	1.43	1.37
2	SA	207	C	C5-C6	-6.64	1.29	1.34
26	LA	164	C	C2'-C1'	-6.64	1.46	1.53
26	LA	577	G	C2'-C1'	-6.64	1.46	1.53
26	LA	626	A	C5-C4	-6.64	1.34	1.38
26	LA	996	A	C5'-C4'	6.64	1.59	1.51
26	LA	1602	U	C2-N3	-6.64	1.33	1.37
26	LA	1645	G	P-O5'	6.64	1.66	1.59
2	SA	606	G	C5-C6	-6.64	1.35	1.42
26	LA	1867	G	C8-N7	-6.64	1.26	1.30
26	LA	2278	A	N9-C4	-6.64	1.33	1.37
26	LA	2337	G	C6-N1	-6.64	1.34	1.39
2	SA	167	A	C5-C4	6.64	1.43	1.38
2	SA	1131	G	N9-C4	-6.64	1.32	1.38
2	SA	1426	G	P-O5'	-6.64	1.53	1.59
26	LA	509	C	C4-N4	-6.64	1.27	1.33
26	LA	708	G	C2'-C1'	6.64	1.60	1.53
26	LA	2267	A	O3'-P	-6.64	1.53	1.61
2	SA	229	U	C5-C6	-6.63	1.28	1.34
2	SA	879	C	N1-C6	-6.63	1.33	1.37
2	SA	1339	A	N7-C5	-6.63	1.35	1.39
2	SA	1534	A	N7-C5	-6.63	1.35	1.39
26	LA	72	U	C2'-C1'	-6.63	1.46	1.53
26	LA	1983	G	C5-C6	-6.63	1.35	1.42
26	LA	2600	A	P-O5'	6.63	1.66	1.59
2	SA	687	A	C6-N1	-6.63	1.30	1.35
26	LA	1956	U	C4-O4	-6.63	1.18	1.23
2	SA	184	G	C2-N2	-6.63	1.27	1.34
2	SA	327	A	C2'-C1'	-6.63	1.46	1.53
2	SA	604	G	C8-N7	6.63	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1209	C	C4'-C3'	6.63	1.60	1.53
25	LB	23	G	C3'-C2'	-6.63	1.45	1.52
26	LA	79	C	P-O5'	-6.63	1.53	1.59
26	LA	531	C	N1-C6	-6.63	1.33	1.37
26	LA	1230	A	N9-C8	-6.63	1.32	1.37
26	LA	1384	A	N9-C8	-6.63	1.32	1.37
26	LA	1646	C	N3-C4	-6.63	1.29	1.33
26	LA	2093	G	N1-C2	-6.63	1.32	1.37
4	S2	43	G	C5-C4	-6.63	1.33	1.38
26	LA	535	G	C1'-N9	-6.63	1.37	1.46
26	LA	1259	G	C5-C6	-6.63	1.35	1.42
26	LA	1270	C	P-O5'	-6.63	1.53	1.59
26	LA	2117	A	N3-C4	-6.63	1.30	1.34
2	SA	608	A	C1'-N9	-6.63	1.37	1.46
2	SA	929	G	P-O5'	-6.63	1.53	1.59
3	S1	27	A	C4'-C3'	6.63	1.60	1.53
26	LA	291	G	N1-C2	-6.63	1.32	1.37
26	LA	512	G	C2'-C1'	-6.63	1.46	1.53
26	LA	822	G	C4'-C3'	-6.63	1.45	1.53
26	LA	1973	G	N7-C5	6.63	1.43	1.39
26	LA	2464	G	N3-C4	-6.63	1.30	1.35
2	SA	752	G	C3'-C2'	-6.63	1.45	1.52
2	SA	1224	U	C2'-C1'	-6.63	1.46	1.53
4	S2	74	A	C2'-C1'	-6.63	1.46	1.53
26	LA	180	G	C5-C4	-6.63	1.33	1.38
26	LA	194	G	N1-C2	-6.63	1.32	1.37
26	LA	1533	C	C2-N3	6.63	1.41	1.35
26	LA	1783	A	C8-N7	-6.63	1.26	1.31
26	LA	1791	A	C5-C6	-6.63	1.35	1.41
26	LA	1926	U	C5'-C4'	6.63	1.59	1.51
26	LA	2589	A	N3-C4	-6.63	1.30	1.34
2	SA	826	C	O3'-P	-6.62	1.53	1.61
26	LA	261	G	N3-C4	-6.62	1.30	1.35
26	LA	1321	A	C5'-C4'	6.62	1.59	1.51
2	SA	1312	G	N9-C4	-6.62	1.32	1.38
26	LA	8	C	O3'-P	-6.62	1.53	1.61
26	LA	44	A	C5'-C4'	6.62	1.59	1.51
26	LA	294	A	C6-N1	6.62	1.40	1.35
26	LA	1093	G	N9-C8	6.62	1.42	1.37
26	LA	1371	G	N1-C2	-6.62	1.32	1.37
26	LA	1462	C	C4-C5	-6.62	1.37	1.43
26	LA	1704	C	N1-C2	-6.62	1.33	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1726	C	C3'-C2'	-6.62	1.45	1.52
26	LA	2094	A	C4'-O4'	6.62	1.54	1.45
26	LA	2776	A	N1-C2	-6.62	1.28	1.34
2	SA	1523	G	O3'-P	-6.62	1.53	1.61
26	LA	562	U	P-O5'	-6.62	1.53	1.59
26	LA	1089	A	C5-C4	6.62	1.43	1.38
26	LA	2476	A	C6-N1	-6.62	1.30	1.35
2	SA	780	A	C2-N3	6.62	1.39	1.33
2	SA	1053	G	C8-N7	6.62	1.34	1.30
26	LA	1166	G	N7-C5	-6.62	1.35	1.39
26	LA	1374	G	C8-N7	-6.62	1.26	1.30
2	SA	516	U	C2-N3	-6.62	1.33	1.37
2	SA	1497	G	N7-C5	6.62	1.43	1.39
26	LA	99	U	O3'-P	-6.62	1.53	1.61
26	LA	921	C	C5'-C4'	6.62	1.59	1.51
26	LA	971	G	P-O5'	-6.62	1.53	1.59
26	LA	1958	C	O4'-C1'	-6.62	1.33	1.41
26	LA	1991	U	C2'-C1'	-6.62	1.46	1.53
26	LA	2654	A	C8-N7	-6.62	1.26	1.31
2	SA	1535	C	C3'-O3'	6.62	1.51	1.42
4	S2	73	A	C5-C4	6.62	1.43	1.38
26	LA	695	G	O3'-P	-6.62	1.53	1.61
26	LA	1864	U	N3-C4	-6.62	1.32	1.38
2	SA	506	G	C5-C4	-6.62	1.33	1.38
2	SA	1402	C	N3-C4	-6.62	1.29	1.33
4	S2	17	C	C5-C6	6.62	1.39	1.34
26	LA	1431	A	C4'-C3'	-6.62	1.45	1.53
26	LA	2025	C	C4'-O4'	-6.62	1.36	1.45
26	LA	2829	A	C8-N7	-6.62	1.26	1.31
39	L3	48	TYR	CB-CG	-6.62	1.41	1.51
2	SA	144	G	N7-C5	-6.61	1.35	1.39
2	SA	308	C	C4'-O4'	6.61	1.54	1.45
2	SA	840	C	C4'-C3'	-6.61	1.45	1.53
25	LB	10	G	C5-C4	-6.61	1.33	1.38
26	LA	1476	U	O3'-P	-6.61	1.53	1.61
26	LA	1873	G	C4'-C3'	6.61	1.60	1.53
26	LA	1904	G	N9-C4	6.61	1.43	1.38
26	LA	1910	G	C8-N7	-6.61	1.26	1.30
26	LA	2574	G	N7-C5	-6.61	1.35	1.39
2	SA	406	G	C6-N1	-6.61	1.34	1.39
26	LA	88	G	N7-C5	-6.61	1.35	1.39
26	LA	1182	G	N1-C2	-6.61	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	337	G	C2-N2	-6.61	1.27	1.34
2	SA	987	G	N9-C4	-6.61	1.32	1.38
26	LA	984	A	P-O5'	-6.61	1.53	1.59
26	LA	2006	C	O3'-P	-6.61	1.53	1.61
26	LA	663	G	C5'-C4'	6.61	1.59	1.51
2	SA	150	U	N1-C2	-6.61	1.32	1.38
2	SA	232	G	C6-N1	-6.61	1.34	1.39
2	SA	839	C	P-O5'	-6.61	1.53	1.59
2	SA	1147	C	N3-C4	-6.61	1.29	1.33
3	S1	34	U	N1-C2	-6.61	1.32	1.38
26	LA	1065	U	C5'-C4'	6.61	1.59	1.51
26	LA	1205	A	N7-C5	-6.61	1.35	1.39
26	LA	1377	G	C5-C4	-6.61	1.33	1.38
26	LA	1382	G	C3'-O3'	6.61	1.51	1.42
26	LA	1420	A	C6-N6	-6.61	1.28	1.33
26	LA	1521	G	N1-C2	-6.61	1.32	1.37
26	LA	2201	G	C4'-C3'	6.61	1.60	1.53
2	SA	35	G	N3-C4	6.61	1.40	1.35
2	SA	945	G	N3-C4	-6.61	1.30	1.35
2	SA	1113	C	O3'-P	-6.61	1.53	1.61
2	SA	1455	G	C4'-C3'	-6.61	1.45	1.53
26	LA	533	G	P-O5'	-6.61	1.53	1.59
26	LA	1234	U	C5'-C4'	6.61	1.59	1.51
26	LA	2375	G	P-O5'	-6.61	1.53	1.59
2	SA	705	G	N7-C5	-6.60	1.35	1.39
26	LA	1830	C	C2-N3	6.60	1.41	1.35
2	SA	49	U	N1-C2	-6.60	1.32	1.38
2	SA	859	G	C8-N7	6.60	1.34	1.30
26	LA	468	G	N3-C4	6.60	1.40	1.35
26	LA	738	G	C2'-C1'	-6.60	1.46	1.53
26	LA	1885	A	N7-C5	-6.60	1.35	1.39
26	LA	2897	U	N3-C4	-6.60	1.32	1.38
2	SA	458	U	C2-N3	-6.60	1.33	1.37
2	SA	567	G	C6-N1	-6.60	1.34	1.39
26	LA	1002	G	C2-N2	-6.60	1.27	1.34
26	LA	1417	C	C1'-N1	-6.60	1.37	1.46
26	LA	2784	U	O3'-P	-6.60	1.53	1.61
2	SA	1041	G	C4'-C3'	6.60	1.60	1.53
8	SH	44	PHE	CB-CG	-6.60	1.40	1.51
26	LA	181	A	N1-C2	-6.60	1.28	1.34
26	LA	232	G	C5-C4	6.60	1.43	1.38
26	LA	1334	G	N9-C4	-6.60	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1836	C	N1-C6	-6.60	1.33	1.37
26	LA	1900	A	P-O5'	-6.60	1.53	1.59
26	LA	2457	U	N1-C6	-6.60	1.32	1.38
2	SA	577	G	C5-C4	-6.60	1.33	1.38
25	LB	65	U	C4-C5	-6.60	1.37	1.43
26	LA	1324	G	C8-N7	6.60	1.34	1.30
26	LA	2038	G	P-O5'	6.60	1.66	1.59
26	LA	2587	A	N9-C4	6.60	1.41	1.37
26	LA	1975	G	C5-C6	-6.60	1.35	1.42
2	SA	755	G	C5-C4	-6.59	1.33	1.38
2	SA	1410	A	C4'-O4'	6.59	1.54	1.45
26	LA	440	C	C3'-C2'	-6.59	1.45	1.52
26	LA	1483	G	N3-C4	-6.59	1.30	1.35
26	LA	1616	A	P-O5'	-6.59	1.53	1.59
26	LA	2713	U	C4'-C3'	-6.59	1.45	1.53
2	SA	314	C	C3'-C2'	-6.59	1.45	1.52
2	SA	780	A	C5-C4	-6.59	1.34	1.38
26	LA	127	A	N7-C5	-6.59	1.35	1.39
26	LA	577	G	C5-C6	-6.59	1.35	1.42
26	LA	1151	A	C6-N1	-6.59	1.30	1.35
26	LA	1906	G	N7-C5	-6.59	1.35	1.39
26	LA	313	G	N1-C2	-6.59	1.32	1.37
26	LA	960	A	C1'-N9	-6.59	1.37	1.46
26	LA	1087	G	C2'-C1'	6.59	1.60	1.53
26	LA	1303	G	O3'-P	-6.59	1.53	1.61
26	LA	1465	G	C5'-C4'	6.59	1.59	1.51
26	LA	2117	A	C4'-C3'	6.59	1.60	1.53
26	LA	2664	G	N9-C4	-6.59	1.32	1.38
26	LA	119	A	N9-C4	-6.59	1.33	1.37
26	LA	1259	G	P-O5'	-6.59	1.53	1.59
26	LA	2003	A	C6-N1	-6.59	1.30	1.35
26	LA	2484	G	N7-C5	6.59	1.43	1.39
26	LA	2536	G	N7-C5	-6.59	1.35	1.39
2	SA	531	U	C3'-C2'	6.59	1.60	1.52
26	LA	526	A	C3'-O3'	6.59	1.51	1.42
25	LB	110	C	N1-C6	6.59	1.41	1.37
26	LA	458	G	C2'-C1'	-6.59	1.46	1.53
26	LA	539	G	N7-C5	-6.59	1.35	1.39
26	LA	571	U	C5'-C4'	6.59	1.59	1.51
26	LA	1361	G	C6-O6	-6.59	1.18	1.24
26	LA	1429	G	N1-C2	-6.59	1.32	1.37
26	LA	2018	G	N3-C4	-6.59	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2491	U	C4'-O4'	6.59	1.54	1.45
44	LF	117	ARG	CD-NE	6.59	1.57	1.46
2	SA	387	U	C4'-C3'	6.58	1.60	1.53
26	LA	2217	G	C2'-C1'	-6.58	1.46	1.53
2	SA	6	G	N3-C4	6.58	1.40	1.35
2	SA	474	G	C2'-C1'	-6.58	1.46	1.53
2	SA	497	G	O3'-P	-6.58	1.53	1.61
2	SA	1517	G	C2-N3	6.58	1.38	1.32
26	LA	256	A	P-O5'	-6.58	1.53	1.59
26	LA	264	C	C2-N3	6.58	1.41	1.35
26	LA	543	G	N9-C8	6.58	1.42	1.37
26	LA	1512	C	C5'-C4'	6.58	1.59	1.51
26	LA	1596	A	C3'-O3'	6.58	1.51	1.42
26	LA	1876	A	C6-N6	6.58	1.39	1.33
26	LA	2135	A	O4'-C1'	-6.58	1.33	1.41
24	S3	679	TYR	CB-CG	-6.58	1.41	1.51
26	LA	171	U	C5'-C4'	6.58	1.59	1.51
26	LA	384	A	O3'-P	-6.58	1.53	1.61
26	LA	916	G	P-O5'	-6.58	1.53	1.59
26	LA	1038	G	C5-C4	-6.58	1.33	1.38
26	LA	1225	G	C6-N1	6.58	1.44	1.39
26	LA	1385	A	C2'-C1'	-6.58	1.46	1.53
26	LA	1772	A	C3'-O3'	6.58	1.51	1.42
26	LA	2220	U	C1'-N1	-6.58	1.37	1.46
26	LA	2245	U	O3'-P	-6.58	1.53	1.61
26	LA	2268	A	C3'-O3'	6.58	1.51	1.42
26	LA	2753	A	C2'-C1'	-6.58	1.46	1.53
2	SA	328	C	C4'-O4'	6.58	1.54	1.45
3	S1	56	G	C5-C4	-6.58	1.33	1.38
26	LA	1269	A	C2'-C1'	-6.58	1.46	1.53
26	LA	1908	C	C5'-C4'	6.58	1.59	1.51
26	LA	2470	G	C5-C4	-6.58	1.33	1.38
2	SA	74	A	C3'-O3'	6.58	1.51	1.42
2	SA	898	G	C2'-C1'	-6.58	1.46	1.53
26	LA	686	U	C4-O4	-6.58	1.18	1.23
26	LA	981	A	N3-C4	-6.58	1.30	1.34
26	LA	1103	A	N3-C4	-6.58	1.30	1.34
26	LA	1798	U	C2'-C1'	-6.58	1.46	1.53
26	LA	1799	G	P-O5'	-6.58	1.53	1.59
26	LA	2043	C	N3-C4	-6.58	1.29	1.33
26	LA	2560	A	C5-C4	-6.58	1.34	1.38
26	LA	2794	C	N3-C4	6.58	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	778	G	C2-N3	-6.58	1.27	1.32
2	SA	1527	U	O4'-C1'	-6.58	1.33	1.41
26	LA	1673	G	C3'-C2'	-6.58	1.45	1.52
26	LA	2443	C	C2'-O2'	-6.58	1.33	1.41
2	SA	363	A	C5-C6	6.58	1.47	1.41
24	S3	71	TRP	NE1-CE2	6.58	1.46	1.37
26	LA	449	A	C6-N6	-6.58	1.28	1.33
26	LA	607	U	C2'-C1'	-6.58	1.46	1.53
26	LA	2239	G	C8-N7	-6.58	1.27	1.30
2	SA	1047	G	C2-N2	-6.57	1.27	1.34
2	SA	1151	A	N9-C4	6.57	1.41	1.37
26	LA	1401	G	N9-C4	-6.57	1.32	1.38
26	LA	1492	G	O3'-P	-6.57	1.53	1.61
26	LA	1611	C	C5'-C4'	6.57	1.59	1.51
26	LA	2200	C	O4'-C1'	-6.57	1.33	1.41
26	LA	2473	U	N1-C2	-6.57	1.32	1.38
26	LA	2554	U	C5'-C4'	6.57	1.59	1.51
26	LA	2893	A	C5-C4	-6.57	1.34	1.38
2	SA	1258	G	C5-C6	-6.57	1.35	1.42
2	SA	1398	A	C2'-C1'	-6.57	1.46	1.53
26	LA	1089	A	C3'-C2'	-6.57	1.45	1.52
26	LA	2038	G	O3'-P	-6.57	1.53	1.61
26	LA	2521	C	C3'-C2'	-6.57	1.45	1.52
2	SA	117	G	C8-N7	-6.57	1.27	1.30
2	SA	280	C	C2-N3	-6.57	1.30	1.35
2	SA	831	A	C5-C4	-6.57	1.34	1.38
2	SA	989	U	O3'-P	-6.57	1.53	1.61
2	SA	1018	G	P-O5'	-6.57	1.53	1.59
26	LA	137	U	C2-O2	6.57	1.28	1.22
26	LA	216	A	C1'-N9	-6.57	1.37	1.46
26	LA	618	G	C8-N7	6.57	1.34	1.30
26	LA	1437	C	C2-N3	-6.57	1.30	1.35
26	LA	2225	A	C5'-C4'	6.57	1.59	1.51
26	LA	2281	A	C5'-C4'	6.57	1.59	1.51
26	LA	2440	C	C5-C6	6.57	1.39	1.34
2	SA	353	A	N3-C4	-6.57	1.30	1.34
2	SA	731	G	N9-C8	-6.57	1.33	1.37
2	SA	916	U	P-O5'	6.57	1.66	1.59
26	LA	479	A	N9-C4	6.57	1.41	1.37
26	LA	522	A	C4'-C3'	-6.57	1.46	1.53
26	LA	2623	G	C4'-O4'	-6.57	1.37	1.45
2	SA	1007	U	C4-C5	-6.57	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	37	C	P-O5'	-6.57	1.53	1.59
26	LA	15	G	N3-C4	6.57	1.40	1.35
26	LA	102	U	C4-C5	-6.57	1.37	1.43
26	LA	265	A	P-O5'	-6.57	1.53	1.59
26	LA	1013	C	C5'-C4'	6.57	1.59	1.51
26	LA	1301	A	C2-N3	6.57	1.39	1.33
26	LA	1629	U	N1-C6	-6.57	1.32	1.38
26	LA	2156	G	N7-C5	-6.57	1.35	1.39
2	SA	108	G	C3'-C2'	-6.57	1.45	1.52
2	SA	229	U	O4'-C1'	-6.57	1.33	1.41
2	SA	673	A	C6-N1	6.57	1.40	1.35
2	SA	1025	U	C4'-O4'	6.57	1.54	1.45
26	LA	224	U	N1-C2	-6.57	1.32	1.38
26	LA	1329	U	C3'-C2'	-6.57	1.45	1.52
26	LA	1663	G	C1'-N9	-6.57	1.37	1.46
26	LA	1744	A	N9-C4	-6.57	1.33	1.37
2	SA	1217	C	C5'-C4'	6.56	1.59	1.51
19	SC	183	TYR	CB-CG	-6.56	1.41	1.51
26	LA	896	A	N7-C5	6.56	1.43	1.39
26	LA	2065	C	P-O5'	-6.56	1.53	1.59
26	LA	2825	G	C4'-C3'	-6.56	1.46	1.53
2	SA	332	G	O3'-P	-6.56	1.53	1.61
26	LA	1351	C	N1-C2	-6.56	1.33	1.40
26	LA	1583	A	C6-N1	6.56	1.40	1.35
26	LA	1643	G	O3'-P	-6.56	1.53	1.61
26	LA	2399	G	C5'-C4'	6.56	1.59	1.51
26	LA	2690	U	C5-C6	6.56	1.40	1.34
26	LA	2874	C	O3'-P	-6.56	1.53	1.61
2	SA	21	G	N9-C8	-6.56	1.33	1.37
26	LA	415	A	O3'-P	-6.56	1.53	1.61
26	LA	970	U	P-OP1	-6.56	1.37	1.49
26	LA	1595	C	N1-C6	-6.56	1.33	1.37
26	LA	1610	A	C8-N7	-6.56	1.26	1.31
26	LA	1912	A	P-O5'	-6.56	1.53	1.59
26	LA	69	C	N1-C6	6.56	1.41	1.37
26	LA	1001	A	C8-N7	-6.56	1.26	1.31
26	LA	2316	G	C6-N1	6.56	1.44	1.39
2	SA	1009	U	C2-N3	6.56	1.42	1.37
2	SA	1023	U	P-O5'	-6.56	1.53	1.59
2	SA	1100	C	C4'-C3'	6.56	1.60	1.53
3	S1	43	U	C4'-C3'	6.56	1.60	1.53
26	LA	466	A	N3-C4	-6.56	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	545	U	C4-C5	6.56	1.49	1.43
26	LA	670	A	C1'-N9	-6.56	1.37	1.46
26	LA	1111	A	C1'-N9	-6.56	1.37	1.46
26	LA	1429	G	N7-C5	-6.56	1.35	1.39
26	LA	1590	A	N3-C4	6.56	1.38	1.34
26	LA	2772	C	C2-N3	-6.56	1.30	1.35
2	SA	561	U	O3'-P	-6.56	1.53	1.61
4	S2	18	U	N1-C2	6.56	1.44	1.38
26	LA	49	A	N9-C4	-6.56	1.33	1.37
26	LA	411	G	N9-C8	-6.56	1.33	1.37
26	LA	1829	A	C4'-C3'	-6.56	1.46	1.53
26	LA	1903	G	N9-C8	6.56	1.42	1.37
2	SA	469	C	N1-C6	-6.55	1.33	1.37
2	SA	1048	G	N7-C5	6.55	1.43	1.39
2	SA	1110	A	N3-C4	6.55	1.38	1.34
3	S1	36	U	C5'-C4'	6.55	1.59	1.51
26	LA	83	A	C6-N6	6.55	1.39	1.33
26	LA	239	C	C2-N3	-6.55	1.30	1.35
26	LA	889	C	C2-N3	-6.55	1.30	1.35
46	LH	141	GLY	CA-C	-6.55	1.41	1.51
53	LP	39	PRO	CA-C	-6.55	1.39	1.52
2	SA	33	A	N9-C8	-6.55	1.32	1.37
2	SA	404	G	C5-C6	-6.55	1.35	1.42
2	SA	971	G	C8-N7	-6.55	1.27	1.30
26	LA	1791	A	N9-C8	-6.55	1.32	1.37
2	SA	555	U	P-O5'	6.55	1.66	1.59
2	SA	996	A	N9-C4	-6.55	1.33	1.37
2	SA	1124	G	N7-C5	-6.55	1.35	1.39
26	LA	86	G	C2-N3	-6.55	1.27	1.32
26	LA	851	C	C3'-C2'	-6.55	1.45	1.52
26	LA	1353	A	C4'-O4'	-6.55	1.37	1.45
26	LA	1960	A	C6-N6	6.55	1.39	1.33
26	LA	2472	G	C2-N2	-6.55	1.27	1.34
2	SA	625	U	N1-C2	-6.55	1.32	1.38
2	SA	691	G	P-O5'	-6.55	1.53	1.59
25	LB	73	A	C3'-C2'	-6.55	1.45	1.52
25	LB	108	A	C6-N6	-6.55	1.28	1.33
26	LA	69	C	C3'-O3'	6.55	1.51	1.42
26	LA	120	U	C2'-C1'	-6.55	1.46	1.53
26	LA	260	G	N1-C2	-6.55	1.32	1.37
26	LA	1062	G	C2-N3	-6.55	1.27	1.32
26	LA	1610	A	C3'-O3'	6.55	1.51	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1773	A	C5'-C4'	6.55	1.59	1.51
2	SA	284	C	O4'-C1'	6.55	1.50	1.41
3	S1	49	U	N1-C6	-6.55	1.32	1.38
26	LA	222	A	C2-N3	-6.55	1.27	1.33
26	LA	2421	G	C2-N2	-6.55	1.28	1.34
2	SA	873	A	N3-C4	-6.55	1.30	1.34
2	SA	1190	G	P-O5'	-6.55	1.53	1.59
26	LA	368	A	N9-C8	-6.55	1.32	1.37
26	LA	437	U	C2'-C1'	-6.55	1.46	1.53
26	LA	549	G	C8-N7	6.55	1.34	1.30
26	LA	902	C	C2-N3	-6.55	1.30	1.35
26	LA	1238	G	N7-C5	-6.55	1.35	1.39
26	LA	1527	G	C5'-C4'	6.55	1.59	1.51
26	LA	1756	G	C6-N1	-6.55	1.34	1.39
26	LA	122	G	C4'-O4'	6.54	1.54	1.45
26	LA	1213	A	C3'-C2'	-6.54	1.45	1.52
26	LA	1238	G	C2-N3	6.54	1.38	1.32
2	SA	180	U	C4-C5	6.54	1.49	1.43
2	SA	581	G	N3-C4	-6.54	1.30	1.35
2	SA	655	A	C3'-C2'	6.54	1.60	1.52
2	SA	1392	G	C2'-C1'	-6.54	1.46	1.53
3	S1	51	C	C2-N3	-6.54	1.30	1.35
26	LA	796	C	O3'-P	-6.54	1.53	1.61
26	LA	1476	U	C4'-O4'	6.54	1.54	1.45
26	LA	2222	C	O3'-P	-6.54	1.53	1.61
37	LC	96	GLY	CA-C	6.54	1.62	1.51
2	SA	702	A	C6-N1	6.54	1.40	1.35
2	SA	771	G	N7-C5	-6.54	1.35	1.39
2	SA	1024	G	C5-C4	-6.54	1.33	1.38
2	SA	1139	G	C3'-O3'	6.54	1.51	1.42
26	LA	693	A	N3-C4	-6.54	1.30	1.34
26	LA	1226	A	N9-C8	-6.54	1.32	1.37
26	LA	1239	G	N7-C5	-6.54	1.35	1.39
26	LA	1677	A	N9-C4	-6.54	1.33	1.37
26	LA	2551	C	N3-C4	-6.54	1.29	1.33
2	SA	909	A	N7-C5	-6.54	1.35	1.39
25	LB	24	G	N9-C4	6.54	1.43	1.38
26	LA	1099	G	C6-N1	-6.54	1.34	1.39
2	SA	218	U	N3-C4	-6.54	1.32	1.38
2	SA	908	A	N3-C4	-6.54	1.30	1.34
2	SA	1087	G	C5-C4	6.54	1.43	1.38
26	LA	298	G	C4'-C3'	6.54	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	723	C	C3'-C2'	-6.54	1.45	1.52
26	LA	2273	A	N7-C5	-6.54	1.35	1.39
26	LA	2588	G	C3'-C2'	-6.54	1.45	1.52
32	LY	78	PHE	CG-CD2	6.54	1.48	1.38
26	LA	848	C	C5'-C4'	6.54	1.59	1.51
26	LA	910	A	C5-C4	-6.54	1.34	1.38
26	LA	19	A	O3'-P	-6.54	1.53	1.61
26	LA	266	G	C4'-C3'	6.54	1.60	1.53
26	LA	1349	C	O3'-P	-6.54	1.53	1.61
26	LA	2447	G	C2'-O2'	-6.54	1.33	1.41
26	LA	2701	U	C2'-C1'	-6.54	1.46	1.53
2	SA	117	G	C2'-C1'	-6.53	1.46	1.53
2	SA	523	A	N3-C4	-6.53	1.30	1.34
2	SA	597	G	C6-N1	-6.53	1.34	1.39
25	LB	11	C	C3'-C2'	-6.53	1.45	1.52
26	LA	629	G	C5-C4	-6.53	1.33	1.38
26	LA	702	U	C2'-C1'	-6.53	1.46	1.53
26	LA	1711	A	C6-N1	-6.53	1.30	1.35
26	LA	2427	C	C5'-C4'	6.53	1.59	1.51
2	SA	84	U	C5'-C4'	6.53	1.59	1.51
2	SA	995	C	C5-C6	-6.53	1.29	1.34
26	LA	633	A	N9-C4	-6.53	1.33	1.37
2	SA	266	G	N9-C8	-6.53	1.33	1.37
2	SA	291	U	C4-O4	-6.53	1.18	1.23
25	LB	76	G	O3'-P	-6.53	1.53	1.61
26	LA	38	A	C2'-C1'	-6.53	1.46	1.53
26	LA	1171	G	N9-C8	-6.53	1.33	1.37
26	LA	1812	U	C5-C6	6.53	1.40	1.34
26	LA	1901	A	N9-C8	-6.53	1.32	1.37
26	LA	2014	A	N3-C4	-6.53	1.30	1.34
26	LA	2376	A	C8-N7	-6.53	1.26	1.31
2	SA	55	A	N9-C8	-6.53	1.32	1.37
2	SA	193	C	C3'-O3'	6.53	1.51	1.42
2	SA	112	G	N7-C5	6.53	1.43	1.39
2	SA	767	A	N9-C4	-6.53	1.33	1.37
2	SA	997	U	C4-O4	-6.53	1.18	1.23
2	SA	1525	G	N3-C4	-6.53	1.30	1.35
26	LA	899	A	N3-C4	-6.53	1.30	1.34
26	LA	1047	G	C2-N3	6.53	1.38	1.32
26	LA	2134	A	O3'-P	-6.53	1.53	1.61
26	LA	2575	C	C2'-C1'	-6.53	1.46	1.53
2	SA	541	G	C2'-C1'	-6.53	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	577	G	N1-C2	-6.53	1.32	1.37
2	SA	1095	U	N1-C6	-6.53	1.32	1.38
2	SA	1497	G	C2-N3	-6.53	1.27	1.32
26	LA	508	A	C2'-C1'	6.53	1.60	1.53
26	LA	1783	A	N9-C8	6.53	1.43	1.37
26	LA	1809	A	O3'-P	-6.53	1.53	1.61
2	SA	330	C	C2'-C1'	-6.52	1.46	1.53
2	SA	608	A	C2'-C1'	-6.52	1.46	1.53
4	S2	10	G	C2-N3	6.52	1.38	1.32
26	LA	117	G	N1-C2	-6.52	1.32	1.37
26	LA	1240	U	O3'-P	-6.52	1.53	1.61
26	LA	1665	A	C8-N7	-6.52	1.26	1.31
55	LQ	20	GLU	CB-CG	6.52	1.64	1.52
2	SA	341	C	C2-N3	-6.52	1.30	1.35
2	SA	867	G	N1-C2	-6.52	1.32	1.37
2	SA	1517	G	C6-N1	-6.52	1.34	1.39
26	LA	170	U	N1-C6	-6.52	1.32	1.38
26	LA	1080	A	O3'-P	-6.52	1.53	1.61
26	LA	1416	G	C2-N2	-6.52	1.28	1.34
26	LA	1525	A	C5-C4	-6.52	1.34	1.38
2	SA	1133	G	C2-N3	-6.52	1.27	1.32
25	LB	18	G	N7-C5	6.52	1.43	1.39
26	LA	967	U	C3'-O3'	6.52	1.51	1.42
26	LA	1807	G	C8-N7	6.52	1.34	1.30
26	LA	2209	G	C2-N2	-6.52	1.28	1.34
2	SA	45	G	O3'-P	-6.52	1.53	1.61
2	SA	480	U	C1'-N1	6.52	1.58	1.48
2	SA	1230	C	C1'-N1	6.52	1.58	1.48
2	SA	1504	G	C5-C4	-6.52	1.33	1.38
25	LB	13	G	N9-C4	-6.52	1.32	1.38
26	LA	37	C	O3'-P	-6.52	1.53	1.61
26	LA	159	G	C5-C4	-6.52	1.33	1.38
26	LA	1922	G	C2-N3	-6.52	1.27	1.32
26	LA	2313	C	C2-N3	-6.52	1.30	1.35
26	LA	2567	G	C5'-C4'	6.52	1.59	1.51
26	LA	2722	G	N9-C8	-6.52	1.33	1.37
2	SA	1130	A	N9-C8	6.52	1.43	1.37
2	SA	1455	G	C2-N3	-6.52	1.27	1.32
25	LB	95	U	P-O5'	-6.52	1.53	1.59
26	LA	168	G	C8-N7	6.52	1.34	1.30
26	LA	1241	A	C5-C6	6.52	1.47	1.41
26	LA	1394	U	N1-C6	-6.52	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1624	U	C3'-C2'	-6.52	1.45	1.52
26	LA	423	A	N1-C2	-6.52	1.28	1.34
26	LA	1169	A	C2'-C1'	-6.52	1.46	1.53
26	LA	1235	G	N7-C5	-6.52	1.35	1.39
26	LA	2123	G	C3'-O3'	6.52	1.51	1.42
26	LA	2544	G	N9-C4	-6.52	1.32	1.38
2	SA	924	C	C4-C5	-6.51	1.37	1.43
2	SA	971	G	P-O5'	-6.51	1.53	1.59
2	SA	1360	A	P-O5'	-6.51	1.53	1.59
2	SA	1490	U	C3'-O3'	6.51	1.51	1.42
26	LA	389	G	O3'-P	-6.51	1.53	1.61
26	LA	2233	U	P-O5'	-6.51	1.53	1.59
26	LA	2587	A	N9-C8	-6.51	1.32	1.37
26	LA	2804	U	C3'-C2'	-6.51	1.45	1.52
26	LA	2825	G	N9-C4	6.51	1.43	1.38
2	SA	1325	C	P-O5'	-6.51	1.53	1.59
26	LA	1215	G	N9-C4	-6.51	1.32	1.38
25	LB	79	G	P-O5'	-6.51	1.53	1.59
26	LA	60	G	C5-C4	-6.51	1.33	1.38
26	LA	1147	A	N9-C8	-6.51	1.32	1.37
26	LA	1251	C	C4-C5	-6.51	1.37	1.43
26	LA	1446	C	C2'-C1'	-6.51	1.46	1.53
26	LA	1662	U	O3'-P	-6.51	1.53	1.61
26	LA	1943	U	C5'-C4'	6.51	1.59	1.51
26	LA	2238	G	C2-N3	-6.51	1.27	1.32
26	LA	2291	U	C2-N3	-6.51	1.33	1.37
2	SA	466	A	C6-N1	6.51	1.40	1.35
2	SA	836	G	C8-N7	-6.51	1.27	1.30
2	SA	1126	U	C2'-C1'	-6.51	1.46	1.53
2	SA	1379	G	C6-N1	-6.51	1.34	1.39
2	SA	1429	A	C5-C4	-6.51	1.34	1.38
26	LA	446	G	C1'-N9	-6.51	1.37	1.46
26	LA	631	A	O4'-C1'	-6.51	1.33	1.41
26	LA	1574	C	O4'-C1'	6.51	1.50	1.41
26	LA	1702	G	N7-C5	-6.51	1.35	1.39
26	LA	2307	G	N3-C4	-6.51	1.30	1.35
26	LA	2890	G	C2'-C1'	-6.51	1.46	1.53
2	SA	128	G	P-O5'	-6.51	1.53	1.59
2	SA	225	C	P-O5'	-6.51	1.53	1.59
2	SA	974	A	C6-N1	-6.51	1.30	1.35
2	SA	1154	G	N9-C8	6.51	1.42	1.37
2	SA	1334	G	C5-C4	-6.51	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2467	C	O3'-P	-6.51	1.53	1.61
2	SA	1145	A	N9-C4	-6.51	1.33	1.37
4	S2	34	U	C5'-C4'	6.51	1.59	1.51
26	LA	1586	A	C3'-C2'	-6.51	1.45	1.52
26	LA	2242	G	N7-C5	-6.51	1.35	1.39
26	LA	2288	A	N9-C4	-6.51	1.33	1.37
26	LA	2472	G	N9-C8	-6.51	1.33	1.37
2	SA	500	G	N3-C4	-6.50	1.30	1.35
2	SA	544	G	C5'-C4'	6.50	1.59	1.51
2	SA	581	G	N9-C4	-6.50	1.32	1.38
26	LA	825	A	N1-C2	-6.50	1.28	1.34
26	LA	1359	A	C2'-C1'	-6.50	1.46	1.53
26	LA	1388	G	C8-N7	-6.50	1.27	1.30
2	SA	557	G	C2-N3	-6.50	1.27	1.32
4	S2	20	G	C2'-C1'	-6.50	1.46	1.53
26	LA	89	A	N3-C4	-6.50	1.30	1.34
26	LA	152	A	C5'-C4'	6.50	1.59	1.51
26	LA	262	A	O3'-P	-6.50	1.53	1.61
26	LA	300	A	P-O5'	-6.50	1.53	1.59
26	LA	753	A	N7-C5	-6.50	1.35	1.39
2	SA	266	G	C2-N2	-6.50	1.28	1.34
2	SA	844	G	C4'-C3'	6.50	1.60	1.53
2	SA	906	A	O3'-P	-6.50	1.53	1.61
26	LA	1066	U	C4-O4	-6.50	1.18	1.23
26	LA	1076	C	C4'-C3'	-6.50	1.46	1.53
26	LA	1148	U	C2-N3	-6.50	1.33	1.37
26	LA	1619	G	C5-C4	-6.50	1.33	1.38
26	LA	2507	C	C4-N4	-6.50	1.28	1.33
26	LA	769	U	C4'-C3'	-6.50	1.46	1.53
26	LA	914	G	N9-C4	-6.50	1.32	1.38
26	LA	2451	A	N7-C5	-6.50	1.35	1.39
2	SA	1280	A	C6-N1	6.50	1.40	1.35
26	LA	13	A	C6-N6	-6.50	1.28	1.33
26	LA	301	G	O3'-P	-6.50	1.53	1.61
26	LA	1426	G	C2'-C1'	-6.50	1.46	1.53
26	LA	1556	C	N1-C2	-6.50	1.33	1.40
26	LA	2307	G	C2-N2	-6.50	1.28	1.34
26	LA	2481	G	C4'-C3'	6.50	1.60	1.53
26	LA	2747	G	O3'-P	-6.50	1.53	1.61
26	LA	566	U	N1-C6	-6.50	1.32	1.38
26	LA	956	G	N7-C5	-6.50	1.35	1.39
26	LA	1295	C	C4-N4	-6.50	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1917	U	N1-C2	-6.50	1.32	1.38
26	LA	2290	G	C5'-C4'	6.50	1.59	1.51
26	LA	2696	U	N1-C2	-6.50	1.32	1.38
2	SA	118	U	C2-N3	6.50	1.42	1.37
26	LA	101	A	N3-C4	-6.50	1.30	1.34
26	LA	212	G	P-O5'	-6.50	1.53	1.59
26	LA	1220	G	P-O5'	-6.50	1.53	1.59
26	LA	2246	G	C6-N1	6.50	1.44	1.39
26	LA	2536	G	C2-N2	-6.50	1.28	1.34
26	LA	2782	G	N1-C2	-6.50	1.32	1.37
2	SA	1013	G	C6-N1	-6.49	1.35	1.39
10	SJ	79	PRO	CA-CB	6.49	1.66	1.53
26	LA	662	G	N9-C8	-6.49	1.33	1.37
26	LA	2077	A	C6-N6	-6.49	1.28	1.33
26	LA	2080	A	C5'-C4'	6.49	1.59	1.51
26	LA	2307	G	P-O5'	6.49	1.66	1.59
2	SA	653	U	C5'-C4'	6.49	1.59	1.51
2	SA	766	A	O3'-P	-6.49	1.53	1.61
25	LB	11	C	N3-C4	6.49	1.38	1.33
26	LA	1156	A	C5'-C4'	6.49	1.59	1.51
26	LA	1813	G	N3-C4	-6.49	1.30	1.35
26	LA	2516	A	P-O5'	-6.49	1.53	1.59
26	LA	2724	U	C4'-C3'	-6.49	1.46	1.53
2	SA	4	U	C5'-C4'	6.49	1.59	1.51
2	SA	1108	G	N7-C5	-6.49	1.35	1.39
2	SA	1363	A	C8-N7	6.49	1.36	1.31
3	S1	45	G	P-O5'	-6.49	1.53	1.59
26	LA	28	A	C3'-C2'	-6.49	1.45	1.52
26	LA	198	C	C4-N4	-6.49	1.28	1.33
26	LA	582	A	C6-N6	6.49	1.39	1.33
26	LA	658	U	C4-O4	-6.49	1.18	1.23
26	LA	1059	G	C6-N1	-6.49	1.35	1.39
26	LA	2375	G	N9-C4	-6.49	1.32	1.38
3	S1	47	C	C1'-N1	6.49	1.58	1.48
26	LA	129	C	O3'-P	-6.49	1.53	1.61
26	LA	1111	A	C4'-O4'	-6.49	1.37	1.45
26	LA	2701	U	N1-C2	-6.49	1.32	1.38
2	SA	1061	G	N1-C2	6.49	1.43	1.37
4	S2	29	C	P-O5'	-6.49	1.53	1.59
25	LB	116	G	C6-N1	-6.49	1.35	1.39
26	LA	127	A	N9-C4	-6.49	1.33	1.37
26	LA	162	U	N3-C4	6.49	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1609	A	C6-N6	6.49	1.39	1.33
2	SA	277	C	C5-C6	-6.49	1.29	1.34
2	SA	1446	A	C4'-C3'	6.49	1.60	1.53
4	S2	32	G	C4'-C3'	6.49	1.60	1.53
26	LA	328	U	O4'-C1'	6.49	1.50	1.41
26	LA	655	A	N7-C5	6.49	1.43	1.39
26	LA	991	C	N1-C6	-6.49	1.33	1.37
26	LA	1426	G	N3-C4	-6.49	1.30	1.35
26	LA	1445	G	C4'-C3'	-6.49	1.46	1.53
2	SA	975	A	C5'-C4'	6.48	1.59	1.51
26	LA	210	C	C4-N4	-6.48	1.28	1.33
26	LA	1966	A	C6-N6	6.48	1.39	1.33
26	LA	1988	G	O3'-P	-6.48	1.53	1.61
26	LA	2892	G	C5-C6	-6.48	1.35	1.42
2	SA	194	C	N1-C6	6.48	1.41	1.37
2	SA	595	A	C6-N1	6.48	1.40	1.35
2	SA	881	G	O3'-P	-6.48	1.53	1.61
3	S1	41	A	C5'-C4'	6.48	1.59	1.51
26	LA	261	G	N7-C5	-6.48	1.35	1.39
26	LA	918	A	C5-C4	-6.48	1.34	1.38
26	LA	1145	C	O3'-P	-6.48	1.53	1.61
2	SA	58	C	C4-N4	-6.48	1.28	1.33
2	SA	85	U	C2'-C1'	6.48	1.60	1.53
25	LB	102	G	C5-C4	-6.48	1.33	1.38
26	LA	891	G	C2-N2	-6.48	1.28	1.34
26	LA	1272	A	O3'-P	-6.48	1.53	1.61
26	LA	1317	G	N9-C8	-6.48	1.33	1.37
26	LA	1547	C	C2-N3	-6.48	1.30	1.35
26	LA	1876	A	C4'-C3'	6.48	1.60	1.53
26	LA	2373	G	C8-N7	-6.48	1.27	1.30
24	S3	180	GLY	CA-C	-6.48	1.41	1.51
2	SA	1034	G	C5-C6	6.48	1.48	1.42
26	LA	386	G	C1'-N9	-6.48	1.37	1.46
26	LA	543	G	N7-C5	6.48	1.43	1.39
26	LA	775	G	N7-C5	-6.48	1.35	1.39
26	LA	1969	A	N3-C4	-6.48	1.30	1.34
26	LA	1990	C	N1-C6	6.48	1.41	1.37
26	LA	2471	A	C2-N3	-6.48	1.27	1.33
26	LA	2822	G	N1-C2	6.48	1.43	1.37
2	SA	111	G	C5-C6	6.48	1.48	1.42
2	SA	1196	A	C2'-C1'	-6.48	1.46	1.53
26	LA	656	G	C2-N3	6.48	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1144	A	C5-C4	-6.48	1.34	1.38
26	LA	2077	A	N9-C4	6.48	1.41	1.37
26	LA	2474	U	C4'-C3'	6.48	1.60	1.53
2	SA	1337	G	C4'-O4'	6.47	1.53	1.45
2	SA	1473	G	O4'-C1'	-6.47	1.33	1.41
25	LB	106	G	C8-N7	6.47	1.34	1.30
26	LA	384	A	N1-C2	-6.47	1.28	1.34
26	LA	508	A	C3'-C2'	-6.47	1.45	1.52
26	LA	684	G	C1'-N9	-6.47	1.37	1.46
26	LA	757	G	N3-C4	-6.47	1.30	1.35
2	SA	1148	U	O3'-P	-6.47	1.53	1.61
2	SA	1403	C	C2-N3	6.47	1.41	1.35
25	LB	119	A	C8-N7	-6.47	1.27	1.31
26	LA	348	A	C8-N7	-6.47	1.27	1.31
26	LA	760	G	C2-N2	-6.47	1.28	1.34
26	LA	993	G	N7-C5	-6.47	1.35	1.39
26	LA	1517	G	N7-C5	-6.47	1.35	1.39
26	LA	2154	A	C5'-C4'	6.47	1.59	1.51
2	SA	359	G	N9-C8	-6.47	1.33	1.37
2	SA	1028	C	N3-C4	6.47	1.38	1.33
2	SA	1033	G	N9-C4	6.47	1.43	1.38
26	LA	1421	G	C2-N3	6.47	1.38	1.32
26	LA	1654	A	C6-N6	-6.47	1.28	1.33
2	SA	297	G	C4'-C3'	-6.47	1.46	1.53
2	SA	391	G	C5-C4	-6.47	1.33	1.38
2	SA	492	C	C4-C5	6.47	1.48	1.43
2	SA	1227	A	N7-C5	-6.47	1.35	1.39
2	SA	1407	C	N3-C4	-6.47	1.29	1.33
4	S2	40	C	O3'-P	-6.47	1.53	1.61
26	LA	315	G	N9-C4	6.47	1.43	1.38
26	LA	1088	A	O3'-P	-6.47	1.53	1.61
26	LA	2499	C	C4-C5	-6.47	1.37	1.43
26	LA	2614	A	N9-C8	-6.47	1.32	1.37
26	LA	2671	G	N7-C5	-6.47	1.35	1.39
26	LA	1766	G	C6-N1	-6.47	1.35	1.39
26	LA	1922	G	O3'-P	-6.47	1.53	1.61
26	LA	2280	G	C2-N2	-6.47	1.28	1.34
26	LA	2458	G	C8-N7	6.47	1.34	1.30
2	SA	907	A	N3-C4	-6.47	1.30	1.34
2	SA	1396	A	C2'-C1'	-6.47	1.46	1.53
26	LA	185	G	N3-C4	-6.47	1.30	1.35
26	LA	475	C	C2-O2	-6.47	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1133	A	N9-C8	6.47	1.43	1.37
26	LA	1556	C	O3'-P	-6.47	1.53	1.61
2	SA	1006	G	N9-C8	-6.46	1.33	1.37
2	SA	1362	A	N7-C5	6.46	1.43	1.39
2	SA	1456	A	O3'-P	-6.46	1.53	1.61
24	S3	252	ARG	CD-NE	6.46	1.57	1.46
26	LA	48	G	N3-C4	-6.46	1.30	1.35
26	LA	465	G	C5'-C4'	6.46	1.59	1.51
26	LA	939	G	C2-N2	-6.46	1.28	1.34
26	LA	2292	U	O3'-P	-6.46	1.53	1.61
26	LA	2520	C	C2-O2	-6.46	1.18	1.24
26	LA	2524	G	C6-N1	-6.46	1.35	1.39
26	LA	2873	A	N9-C8	-6.46	1.32	1.37
2	SA	622	A	C6-N1	-6.46	1.31	1.35
2	SA	1502	A	C3'-O3'	6.46	1.51	1.42
26	LA	41	C	N1-C6	6.46	1.41	1.37
26	LA	1923	U	N1-C6	-6.46	1.32	1.38
2	SA	679	C	C2-N3	-6.46	1.30	1.35
26	LA	251	A	C5-C4	6.46	1.43	1.38
26	LA	500	G	C4'-O4'	6.46	1.53	1.45
26	LA	575	A	O4'-C1'	-6.46	1.33	1.41
26	LA	1389	G	C3'-C2'	-6.46	1.45	1.52
26	LA	2851	A	N3-C4	6.46	1.38	1.34
26	LA	2873	A	N7-C5	-6.46	1.35	1.39
26	LA	2904	U	N1-C2	-6.46	1.32	1.38
2	SA	53	A	N7-C5	-6.46	1.35	1.39
2	SA	447	G	C5'-C4'	6.46	1.59	1.51
2	SA	510	A	N9-C8	-6.46	1.32	1.37
26	LA	1493	C	C4'-C3'	6.46	1.60	1.53
26	LA	2242	G	C5-C6	-6.46	1.35	1.42
26	LA	2496	C	C4-C5	-6.46	1.37	1.43
26	LA	2782	G	N3-C4	-6.46	1.30	1.35
2	SA	38	G	C5'-C4'	6.46	1.59	1.51
2	SA	808	C	N3-C4	6.46	1.38	1.33
4	S2	30	G	N9-C8	-6.46	1.33	1.37
26	LA	317	G	N1-C2	-6.46	1.32	1.37
26	LA	599	A	C6-N6	6.46	1.39	1.33
26	LA	646	U	P-O5'	-6.46	1.53	1.59
26	LA	722	A	N9-C4	6.46	1.41	1.37
26	LA	1167	C	C4-N4	-6.46	1.28	1.33
26	LA	1356	G	N9-C4	-6.46	1.32	1.38
26	LA	1824	G	N1-C2	-6.46	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2615	U	C2'-C1'	-6.46	1.46	1.53
26	LA	2634	A	N7-C5	-6.46	1.35	1.39
2	SA	134	G	C3'-O3'	6.46	1.51	1.42
2	SA	959	A	C5-C6	-6.46	1.35	1.41
3	S1	18	A	C3'-C2'	6.46	1.60	1.52
3	S1	48	C	P-O5'	6.46	1.66	1.59
26	LA	1726	C	N1-C6	6.46	1.41	1.37
26	LA	2159	G	C5'-C4'	6.46	1.59	1.51
26	LA	2217	G	N7-C5	-6.46	1.35	1.39
2	SA	35	G	N1-C2	-6.46	1.32	1.37
2	SA	954	G	C3'-O3'	6.46	1.51	1.42
26	LA	125	A	C2-N3	6.46	1.39	1.33
26	LA	484	C	C2-N3	6.46	1.41	1.35
26	LA	2458	G	N9-C8	-6.46	1.33	1.37
2	SA	23	C	N3-C4	6.45	1.38	1.33
2	SA	127	G	C5'-C4'	6.45	1.59	1.51
2	SA	505	G	C5-C6	-6.45	1.35	1.42
4	S2	72	C	C2-N3	-6.45	1.30	1.35
25	LB	70	C	C4-C5	-6.45	1.37	1.43
26	LA	161	A	C6-N1	6.45	1.40	1.35
26	LA	495	G	O3'-P	-6.45	1.53	1.61
26	LA	1890	A	P-O5'	-6.45	1.53	1.59
26	LA	2349	G	N7-C5	-6.45	1.35	1.39
26	LA	50	U	C2'-C1'	-6.45	1.46	1.53
26	LA	1494	A	C5-C4	-6.45	1.34	1.38
26	LA	2728	U	C2'-C1'	-6.45	1.46	1.53
2	SA	108	G	C4'-C3'	6.45	1.60	1.53
2	SA	446	G	C5-C6	-6.45	1.35	1.42
2	SA	966	G	C2-N2	-6.45	1.28	1.34
2	SA	1369	C	C2'-O2'	-6.45	1.33	1.41
26	LA	1759	A	C5'-C4'	6.45	1.59	1.51
26	LA	2153	C	C4-C5	6.45	1.48	1.43
2	SA	134	G	N1-C2	-6.45	1.32	1.37
2	SA	263	A	C5'-C4'	6.45	1.59	1.51
2	SA	474	G	C2-N2	-6.45	1.28	1.34
2	SA	491	G	N9-C4	6.45	1.43	1.38
2	SA	838	G	N1-C2	-6.45	1.32	1.37
26	LA	628	G	O3'-P	-6.45	1.53	1.61
26	LA	775	G	C2-N2	-6.45	1.28	1.34
26	LA	1574	C	C2-O2	6.45	1.30	1.24
26	LA	1589	U	C3'-O3'	6.45	1.51	1.42
26	LA	2365	G	O3'-P	-6.45	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2841	C	O3'-P	-6.45	1.53	1.61
50	LL	4	PHE	CG-CD2	6.45	1.48	1.38
26	LA	471	A	C2'-C1'	-6.45	1.46	1.53
26	LA	837	C	P-O5'	-6.45	1.53	1.59
26	LA	1254	A	N7-C5	-6.45	1.35	1.39
26	LA	1698	A	O3'-P	-6.45	1.53	1.61
2	SA	807	A	N7-C5	-6.45	1.35	1.39
2	SA	833	G	C2-N3	6.45	1.38	1.32
2	SA	1201	A	N9-C4	-6.45	1.33	1.37
25	LB	109	A	N3-C4	6.45	1.38	1.34
26	LA	1594	U	C3'-O3'	6.45	1.51	1.42
26	LA	1663	G	P-O5'	-6.45	1.53	1.59
26	LA	2084	C	C5-C6	-6.45	1.29	1.34
26	LA	2712	C	N1-C6	-6.45	1.33	1.37
2	SA	66	A	C4'-C3'	-6.44	1.46	1.53
2	SA	780	A	C6-N1	6.44	1.40	1.35
2	SA	1030	U	C5'-C4'	6.44	1.59	1.51
2	SA	1095	U	C3'-O3'	6.44	1.51	1.42
26	LA	1628	G	C3'-O3'	6.44	1.51	1.42
26	LA	2429	G	P-O5'	6.44	1.66	1.59
26	LA	2718	G	N9-C8	-6.44	1.33	1.37
46	LH	82	PHE	CB-CG	6.44	1.62	1.51
2	SA	1130	A	O4'-C1'	6.44	1.50	1.41
26	LA	1597	A	C5-C4	6.44	1.43	1.38
2	SA	443	C	O4'-C1'	6.44	1.50	1.41
2	SA	748	G	N3-C4	6.44	1.40	1.35
26	LA	287	G	O3'-P	-6.44	1.53	1.61
26	LA	1168	G	O3'-P	-6.44	1.53	1.61
26	LA	1604	C	P-O5'	-6.44	1.53	1.59
26	LA	1668	A	N9-C8	6.44	1.43	1.37
26	LA	1684	G	C8-N7	6.44	1.34	1.30
26	LA	2308	G	C4'-C3'	6.44	1.60	1.53
26	LA	2714	G	O4'-C1'	-6.44	1.33	1.41
26	LA	2812	G	N9-C8	-6.44	1.33	1.37
2	SA	498	A	N3-C4	-6.44	1.30	1.34
26	LA	488	G	N7-C5	-6.44	1.35	1.39
26	LA	1165	A	C1'-N9	-6.44	1.37	1.46
26	LA	1564	C	C2-N3	-6.44	1.30	1.35
2	SA	492	C	C5-C6	6.44	1.39	1.34
2	SA	640	A	C5'-C4'	6.44	1.59	1.51
2	SA	1011	C	C3'-C2'	-6.44	1.45	1.52
4	S2	54	G	C5-C6	6.44	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	847	U	C4-C5	-6.44	1.37	1.43
26	LA	1088	A	C3'-C2'	6.44	1.60	1.52
26	LA	1127	A	O3'-P	-6.44	1.53	1.61
26	LA	1902	C	O4'-C1'	-6.44	1.33	1.41
26	LA	2211	A	C6-N6	-6.44	1.28	1.33
26	LA	2249	U	N1-C6	6.44	1.43	1.38
26	LA	2586	U	O5'-C5'	6.44	1.54	1.44
2	SA	1311	A	N9-C8	-6.44	1.32	1.37
26	LA	2279	G	P-O5'	-6.44	1.53	1.59
2	SA	174	A	C6-N6	-6.43	1.28	1.33
2	SA	602	A	C4'-O4'	-6.43	1.37	1.45
26	LA	690	G	C2'-C1'	-6.43	1.46	1.53
26	LA	881	G	C5'-C4'	6.43	1.59	1.51
26	LA	967	U	C2-N3	-6.43	1.33	1.37
26	LA	984	A	C6-N6	6.43	1.39	1.33
26	LA	1196	C	P-O5'	-6.43	1.53	1.59
2	SA	300	A	C2-N3	-6.43	1.27	1.33
2	SA	1378	C	C2-N3	6.43	1.40	1.35
26	LA	205	G	C8-N7	6.43	1.34	1.30
26	LA	474	G	C6-N1	-6.43	1.35	1.39
26	LA	744	U	O3'-P	-6.43	1.53	1.61
26	LA	873	C	N1-C6	-6.43	1.33	1.37
26	LA	1278	C	C4'-C3'	-6.43	1.46	1.53
26	LA	1438	U	C3'-C2'	6.43	1.60	1.52
26	LA	1628	G	O4'-C1'	6.43	1.50	1.41
26	LA	2598	A	P-O5'	-6.43	1.53	1.59
26	LA	2747	G	C8-N7	6.43	1.34	1.30
2	SA	148	G	C2'-C1'	-6.43	1.46	1.53
4	S2	21	U	C2'-C1'	-6.43	1.46	1.53
26	LA	319	G	C8-N7	6.43	1.34	1.30
26	LA	683	U	C4-C5	-6.43	1.37	1.43
26	LA	1347	A	C6-N1	-6.43	1.31	1.35
2	SA	168	G	N3-C4	-6.43	1.30	1.35
2	SA	1508	A	C5-C4	-6.43	1.34	1.38
26	LA	470	A	C6-N1	6.43	1.40	1.35
26	LA	1432	G	C3'-C2'	-6.43	1.45	1.52
26	LA	1465	G	N3-C4	-6.43	1.30	1.35
26	LA	1623	G	C5-C4	-6.43	1.33	1.38
26	LA	2389	G	C4'-C3'	-6.43	1.46	1.53
2	SA	575	G	C6-N1	-6.43	1.35	1.39
3	S1	32	U	C2'-C1'	-6.43	1.46	1.53
2	SA	109	A	C8-N7	-6.43	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	289	G	C8-N7	6.43	1.34	1.30
25	LB	41	G	C6-N1	6.43	1.44	1.39
26	LA	604	G	P-O5'	-6.43	1.53	1.59
26	LA	712	G	C8-N7	-6.43	1.27	1.30
26	LA	2669	G	O3'-P	-6.43	1.53	1.61
2	SA	1190	G	C8-N7	-6.42	1.27	1.30
4	S2	57	C	N1-C6	6.42	1.41	1.37
26	LA	585	G	C3'-C2'	-6.42	1.45	1.52
26	LA	1273	U	N1-C2	-6.42	1.32	1.38
26	LA	1880	U	C5'-C4'	6.42	1.59	1.51
26	LA	2078	C	O4'-C1'	-6.42	1.33	1.41
26	LA	2856	A	N9-C8	-6.42	1.32	1.37
2	SA	1322	C	C2-N3	-6.42	1.30	1.35
26	LA	2796	U	N3-C4	-6.42	1.32	1.38
2	SA	8	A	C3'-C2'	6.42	1.60	1.52
2	SA	181	A	C5-C6	6.42	1.46	1.41
2	SA	393	A	C8-N7	-6.42	1.27	1.31
2	SA	396	C	O3'-P	-6.42	1.53	1.61
26	LA	328	U	C2-N3	-6.42	1.33	1.37
26	LA	351	C	C2'-C1'	-6.42	1.46	1.53
26	LA	358	U	P-O5'	-6.42	1.53	1.59
26	LA	1118	C	N1-C6	6.42	1.41	1.37
26	LA	1297	C	C3'-C2'	-6.42	1.45	1.52
26	LA	1448	G	O4'-C1'	6.42	1.50	1.41
26	LA	1472	C	C4-N4	-6.42	1.28	1.33
2	SA	64	G	N1-C2	-6.42	1.32	1.37
2	SA	648	A	C3'-O3'	6.42	1.51	1.42
2	SA	1417	G	O3'-P	-6.42	1.53	1.61
26	LA	225	C	C5'-C4'	6.42	1.59	1.51
26	LA	806	C	N1-C6	6.42	1.41	1.37
26	LA	1277	G	C4'-C3'	-6.42	1.46	1.53
26	LA	1574	C	N1-C2	6.42	1.46	1.40
26	LA	1630	A	N9-C8	6.42	1.42	1.37
26	LA	1687	G	C3'-C2'	-6.42	1.45	1.52
26	LA	1942	C	C4-C5	-6.42	1.37	1.43
2	SA	834	U	C4-C5	-6.42	1.37	1.43
2	SA	972	C	O3'-P	-6.42	1.53	1.61
2	SA	1333	A	C5'-C4'	6.42	1.59	1.51
2	SA	1489	G	C2'-C1'	-6.42	1.46	1.53
25	LB	3	C	C2-N3	6.42	1.40	1.35
26	LA	10	A	N1-C2	-6.42	1.28	1.34
26	LA	934	U	O4'-C1'	-6.42	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1295	C	C4-C5	6.42	1.48	1.43
26	LA	1337	G	C2'-C1'	-6.42	1.46	1.53
26	LA	1441	G	N3-C4	-6.42	1.30	1.35
26	LA	1634	A	C2-N3	6.42	1.39	1.33
26	LA	2216	G	C6-N1	6.42	1.44	1.39
26	LA	2536	G	N9-C8	-6.42	1.33	1.37
26	LA	2567	G	N7-C5	-6.42	1.35	1.39
26	LA	2832	U	N1-C2	6.42	1.44	1.38
57	LS	24	TYR	CB-CG	-6.42	1.42	1.51
2	SA	65	A	C5-C6	-6.42	1.35	1.41
2	SA	271	C	O3'-P	-6.42	1.53	1.61
2	SA	414	A	C1'-N9	-6.42	1.37	1.46
2	SA	417	G	N3-C4	-6.42	1.30	1.35
2	SA	440	C	O3'-P	-6.42	1.53	1.61
2	SA	552	U	C4-C5	6.42	1.49	1.43
25	LB	44	G	N1-C2	6.42	1.42	1.37
26	LA	373	U	C4-O4	6.42	1.28	1.23
26	LA	728	G	N1-C2	-6.42	1.32	1.37
26	LA	738	G	C2-N2	-6.42	1.28	1.34
26	LA	2062	A	C2'-C1'	-6.42	1.46	1.53
26	LA	190	A	N9-C4	-6.42	1.34	1.37
26	LA	1904	G	C1'-N9	-6.42	1.37	1.46
2	SA	1271	A	N9-C4	-6.41	1.34	1.37
2	SA	1417	G	N7-C5	-6.41	1.35	1.39
25	LB	9	G	C6-N1	-6.41	1.35	1.39
26	LA	451	U	C5-C6	6.41	1.40	1.34
26	LA	684	G	N3-C4	-6.41	1.30	1.35
26	LA	715	A	O3'-P	-6.41	1.53	1.61
26	LA	860	U	O3'-P	-6.41	1.53	1.61
26	LA	997	G	N9-C8	-6.41	1.33	1.37
26	LA	1053	C	N1-C6	6.41	1.41	1.37
26	LA	1063	G	C2-N2	-6.41	1.28	1.34
26	LA	1283	G	C3'-O3'	6.41	1.51	1.42
26	LA	1806	C	C2'-C1'	-6.41	1.46	1.53
26	LA	2037	A	O4'-C1'	6.41	1.50	1.41
26	LA	451	U	P-O5'	-6.41	1.53	1.59
26	LA	502	A	N3-C4	6.41	1.38	1.34
26	LA	972	A	C5'-C4'	6.41	1.59	1.51
26	LA	1170	C	C4'-C3'	-6.41	1.46	1.53
2	SA	436	C	C4-N4	-6.41	1.28	1.33
2	SA	798	U	O3'-P	-6.41	1.53	1.61
2	SA	939	G	C5-C4	6.41	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1001	C	C4'-O4'	6.41	1.53	1.45
2	SA	1021	A	N7-C5	-6.41	1.35	1.39
2	SA	1291	U	O3'-P	-6.41	1.53	1.61
3	S1	22	G	N7-C5	6.41	1.43	1.39
4	S2	13	C	N3-C4	6.41	1.38	1.33
25	LB	80	U	C3'-C2'	-6.41	1.45	1.52
26	LA	597	G	N1-C2	-6.41	1.32	1.37
26	LA	1567	G	N9-C8	6.41	1.42	1.37
26	LA	1814	G	C6-N1	-6.41	1.35	1.39
2	SA	110	C	P-O5'	-6.41	1.53	1.59
26	LA	1546	G	C8-N7	6.41	1.34	1.30
26	LA	1793	C	C2'-C1'	-6.41	1.46	1.53
26	LA	1916	A	C8-N7	6.41	1.36	1.31
26	LA	2147	A	N9-C4	6.41	1.41	1.37
26	LA	2195	U	N3-C4	6.41	1.44	1.38
26	LA	2454	G	C5-C6	-6.41	1.35	1.42
26	LA	2676	C	P-O5'	-6.41	1.53	1.59
2	SA	206	C	C4'-C3'	6.41	1.60	1.53
26	LA	1326	U	C3'-O3'	6.41	1.51	1.42
26	LA	2677	G	N9-C4	-6.41	1.32	1.38
2	SA	264	C	C3'-C2'	6.41	1.59	1.52
25	LB	21	G	C4'-O4'	6.41	1.53	1.45
26	LA	35	G	O3'-P	-6.41	1.53	1.61
26	LA	847	U	O3'-P	-6.41	1.53	1.61
26	LA	1334	G	C2'-C1'	-6.41	1.46	1.53
26	LA	1365	A	N7-C5	-6.41	1.35	1.39
26	LA	1661	G	C4'-C3'	-6.41	1.46	1.53
26	LA	1685	C	C4'-C3'	-6.41	1.46	1.53
2	SA	221	C	N3-C4	6.40	1.38	1.33
26	LA	245	G	O3'-P	-6.40	1.53	1.61
26	LA	701	G	C2-N2	-6.40	1.28	1.34
26	LA	837	C	C2-N3	-6.40	1.30	1.35
26	LA	1902	C	O3'-P	-6.40	1.53	1.61
2	SA	117	G	C5'-C4'	6.40	1.59	1.51
2	SA	1176	A	N7-C5	-6.40	1.35	1.39
26	LA	368	A	O3'-P	-6.40	1.53	1.61
26	LA	686	U	C2'-C1'	-6.40	1.46	1.53
26	LA	1100	C	C1'-N1	-6.40	1.37	1.46
26	LA	1531	C	C2'-C1'	-6.40	1.46	1.53
26	LA	1626	A	C1'-N9	-6.40	1.37	1.46
26	LA	2778	A	C2'-C1'	-6.40	1.46	1.53
2	SA	1462	C	P-O5'	-6.40	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	247	G	N9-C4	-6.40	1.32	1.38
26	LA	452	G	C2-N2	-6.40	1.28	1.34
26	LA	1799	G	N9-C8	-6.40	1.33	1.37
26	LA	2641	G	C4'-C3'	-6.40	1.46	1.53
2	SA	456	A	O3'-P	6.40	1.68	1.61
4	S2	60	A	N9-C4	6.40	1.41	1.37
26	LA	1288	G	N9-C4	-6.40	1.32	1.38
26	LA	2363	G	C8-N7	-6.40	1.27	1.30
2	SA	551	U	O3'-P	-6.40	1.53	1.61
2	SA	698	G	N9-C4	-6.40	1.32	1.38
2	SA	867	G	C6-N1	6.40	1.44	1.39
2	SA	1429	A	C6-N1	-6.40	1.31	1.35
26	LA	798	G	C3'-C2'	6.40	1.59	1.52
26	LA	831	G	N9-C4	-6.40	1.32	1.38
26	LA	2255	G	P-O5'	-6.40	1.53	1.59
57	LS	24	TYR	CG-CD1	6.40	1.47	1.39
2	SA	525	C	C2-N3	-6.40	1.30	1.35
2	SA	1178	G	C5-C4	6.39	1.42	1.38
25	LB	60	C	C4-C5	6.39	1.48	1.43
26	LA	748	G	P-O5'	-6.39	1.53	1.59
26	LA	1171	G	C5'-C4'	6.39	1.59	1.51
26	LA	1379	U	C4-C5	-6.39	1.37	1.43
26	LA	1930	G	C2-N3	-6.39	1.27	1.32
26	LA	2156	G	N9-C4	6.39	1.43	1.38
26	LA	2685	G	C6-N1	-6.39	1.35	1.39
2	SA	30	U	C2-N3	-6.39	1.33	1.37
26	LA	258	G	C6-N1	-6.39	1.35	1.39
26	LA	739	A	C2'-C1'	-6.39	1.46	1.53
26	LA	1393	A	C5-C6	-6.39	1.35	1.41
26	LA	1962	C	C2'-O2'	-6.39	1.33	1.41
26	LA	2000	C	O3'-P	-6.39	1.53	1.61
26	LA	2357	G	N9-C8	-6.39	1.33	1.37
2	SA	871	U	N1-C6	-6.39	1.32	1.38
46	LH	156	TYR	CB-CG	-6.39	1.42	1.51
2	SA	33	A	O4'-C1'	-6.39	1.33	1.41
2	SA	68	G	C5-C6	-6.39	1.35	1.42
2	SA	355	C	N1-C2	6.39	1.46	1.40
26	LA	768	G	N9-C4	-6.39	1.32	1.38
26	LA	840	C	C4-N4	-6.39	1.28	1.33
26	LA	926	G	C2'-C1'	-6.39	1.46	1.53
26	LA	1973	G	C5-C4	-6.39	1.33	1.38
26	LA	2631	G	N3-C4	-6.39	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LD	242	HIS	C-N	-6.39	1.22	1.34
2	SA	1402	C	C2-N3	-6.39	1.30	1.35
26	LA	1195	G	N9-C8	6.39	1.42	1.37
26	LA	1329	U	C5-C6	-6.39	1.28	1.34
26	LA	1643	G	N9-C8	-6.39	1.33	1.37
26	LA	2206	C	C1'-N1	-6.39	1.38	1.46
26	LA	2663	G	C2-N2	-6.39	1.28	1.34
2	SA	501	C	N3-C4	-6.39	1.29	1.33
2	SA	981	U	C2'-C1'	-6.39	1.46	1.53
26	LA	205	G	C5-C4	-6.39	1.33	1.38
26	LA	500	G	C6-N1	-6.39	1.35	1.39
26	LA	630	G	N3-C4	-6.39	1.30	1.35
26	LA	801	G	C2-N2	-6.39	1.28	1.34
26	LA	807	U	N3-C4	-6.39	1.32	1.38
26	LA	987	C	C4'-C3'	-6.39	1.46	1.53
26	LA	1306	C	C2-O2	-6.39	1.18	1.24
26	LA	1342	A	C6-N1	-6.39	1.31	1.35
26	LA	2265	U	N1-C2	-6.39	1.32	1.38
2	SA	10	A	C5-C4	6.38	1.43	1.38
2	SA	143	A	C1'-N9	-6.38	1.38	1.46
2	SA	685	G	C4'-C3'	-6.38	1.46	1.53
26	LA	863	A	N9-C8	-6.38	1.32	1.37
26	LA	1120	G	C6-N1	-6.38	1.35	1.39
26	LA	1774	C	N1-C6	-6.38	1.33	1.37
26	LA	2273	A	C6-N6	6.38	1.39	1.33
27	LD	37	SER	CA-CB	6.38	1.62	1.52
2	SA	275	G	N1-C2	-6.38	1.32	1.37
26	LA	161	A	C6-N6	-6.38	1.28	1.33
26	LA	535	G	C4'-O4'	6.38	1.53	1.45
26	LA	1123	C	C5-C6	-6.38	1.29	1.34
2	SA	414	A	C5-C6	6.38	1.46	1.41
2	SA	430	A	C4'-C3'	6.38	1.60	1.53
2	SA	775	G	C5-C4	6.38	1.42	1.38
26	LA	86	G	C5'-C4'	6.38	1.59	1.51
26	LA	474	G	C5-C6	-6.38	1.35	1.42
26	LA	819	A	N9-C8	-6.38	1.32	1.37
26	LA	1107	G	N1-C2	-6.38	1.32	1.37
26	LA	1279	G	C4'-C3'	-6.38	1.46	1.53
26	LA	1785	A	C3'-C2'	-6.38	1.45	1.52
26	LA	2065	C	C2-O2	-6.38	1.18	1.24
26	LA	2415	G	N7-C5	-6.38	1.35	1.39
26	LA	2722	G	C2-N2	-6.38	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2735	G	C3'-O3'	6.38	1.51	1.42
26	LA	2816	G	C3'-C2'	-6.38	1.45	1.52
2	SA	773	G	N7-C5	-6.38	1.35	1.39
2	SA	826	C	C3'-O3'	6.38	1.51	1.42
26	LA	706	A	C3'-O3'	6.38	1.51	1.42
26	LA	836	G	C6-N1	-6.38	1.35	1.39
26	LA	1310	G	C5'-C4'	6.38	1.59	1.51
26	LA	1601	G	N9-C8	-6.38	1.33	1.37
2	SA	1230	C	C4-C5	6.38	1.48	1.43
26	LA	416	U	C3'-C2'	-6.38	1.45	1.52
26	LA	824	U	C2-N3	6.38	1.42	1.37
26	LA	1057	A	O3'-P	-6.38	1.53	1.61
26	LA	2768	U	C2-N3	-6.38	1.33	1.37
2	SA	570	G	O3'-P	-6.38	1.53	1.61
2	SA	1145	A	C2'-C1'	-6.38	1.46	1.53
2	SA	1310	G	C2'-C1'	-6.38	1.46	1.53
25	LB	18	G	N1-C2	-6.38	1.32	1.37
25	LB	40	U	N1-C6	-6.38	1.32	1.38
26	LA	637	A	N9-C4	-6.38	1.34	1.37
26	LA	898	C	P-O5'	6.38	1.66	1.59
26	LA	1091	G	N9-C4	-6.38	1.32	1.38
26	LA	2132	U	O4'-C1'	6.38	1.50	1.41
26	LA	2368	C	C4-C5	6.38	1.48	1.43
26	LA	2712	C	C3'-C2'	6.38	1.59	1.52
58	LT	29	THR	C-N	6.38	1.44	1.33
4	S2	23	G	C8-N7	6.38	1.34	1.30
25	LB	94	A	C5-C6	-6.38	1.35	1.41
26	LA	131	A	C3'-C2'	-6.38	1.45	1.52
26	LA	187	G	C5'-C4'	6.38	1.59	1.51
26	LA	952	G	N7-C5	6.38	1.43	1.39
26	LA	2492	U	C2-N3	-6.38	1.33	1.37
2	SA	26	A	C5-C6	6.37	1.46	1.41
2	SA	327	A	N7-C5	-6.37	1.35	1.39
2	SA	1491	G	C2'-C1'	-6.37	1.46	1.53
26	LA	175	G	C4'-C3'	6.37	1.60	1.53
26	LA	340	A	C8-N7	-6.37	1.27	1.31
26	LA	567	U	C4-C5	-6.37	1.37	1.43
26	LA	1666	G	P-O5'	-6.37	1.53	1.59
26	LA	2101	A	C2-N3	-6.37	1.27	1.33
2	SA	620	C	C5'-C4'	6.37	1.58	1.51
2	SA	698	G	P-O5'	-6.37	1.53	1.59
2	SA	1523	G	N9-C4	-6.37	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	15	G	C6-N1	-6.37	1.35	1.39
26	LA	985	C	N1-C6	-6.37	1.33	1.37
26	LA	1994	C	C2-O2	-6.37	1.18	1.24
26	LA	2647	U	C2-N3	-6.37	1.33	1.37
26	LA	2853	C	C4'-O4'	6.37	1.53	1.45
2	SA	1224	U	N1-C6	-6.37	1.32	1.38
2	SA	1428	A	N3-C4	-6.37	1.31	1.34
26	LA	1110	G	C2'-C1'	-6.37	1.46	1.53
26	LA	1870	C	C4'-O4'	-6.37	1.37	1.45
2	SA	271	C	C4-N4	-6.37	1.28	1.33
2	SA	1441	A	N3-C4	6.37	1.38	1.34
26	LA	624	C	C4-N4	6.37	1.39	1.33
26	LA	956	G	N9-C4	-6.37	1.32	1.38
26	LA	988	A	C6-N6	6.37	1.39	1.33
26	LA	1287	A	C5-C6	-6.37	1.35	1.41
26	LA	2202	U	N1-C2	-6.37	1.32	1.38
22	SF	132	GLU	CB-CG	6.37	1.64	1.52
26	LA	939	G	C6-N1	-6.37	1.35	1.39
26	LA	1838	C	C5'-C4'	6.37	1.58	1.51
26	LA	1982	U	C1'-N1	-6.37	1.38	1.46
26	LA	2882	A	N9-C4	6.37	1.41	1.37
2	SA	27	G	C6-N1	-6.37	1.35	1.39
2	SA	282	A	C3'-C2'	6.37	1.59	1.52
2	SA	943	U	C5-C6	6.37	1.39	1.34
2	SA	1254	A	C1'-N9	-6.37	1.38	1.46
2	SA	1420	U	N1-C2	-6.37	1.32	1.38
26	LA	1288	G	P-O5'	-6.37	1.53	1.59
26	LA	1564	C	C5'-C4'	6.37	1.58	1.51
38	LE	95	SER	CB-OG	6.37	1.50	1.42
2	SA	313	A	O3'-P	-6.36	1.53	1.61
2	SA	416	G	N9-C8	-6.36	1.33	1.37
2	SA	695	A	C2-N3	6.36	1.39	1.33
15	SO	68	TYR	CG-CD2	-6.36	1.30	1.39
26	LA	512	G	N7-C5	-6.36	1.35	1.39
26	LA	857	G	C4'-O4'	-6.36	1.37	1.45
26	LA	914	G	N9-C8	-6.36	1.33	1.37
26	LA	1795	C	O3'-P	-6.36	1.53	1.61
26	LA	2392	A	C5-C6	6.36	1.46	1.41
26	LA	2516	A	C5-C4	-6.36	1.34	1.38
26	LA	2642	G	N1-C2	-6.36	1.32	1.37
26	LA	2737	G	N7-C5	-6.36	1.35	1.39
2	SA	162	A	C4'-C3'	6.36	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	9	G	C2'-C1'	-6.36	1.46	1.53
4	S2	11	A	C6-N1	6.36	1.40	1.35
26	LA	696	G	P-O5'	-6.36	1.53	1.59
26	LA	1451	C	C5'-C4'	6.36	1.58	1.51
26	LA	2335	A	N3-C4	-6.36	1.31	1.34
2	SA	341	C	N1-C6	6.36	1.41	1.37
2	SA	530	G	N3-C4	-6.36	1.30	1.35
26	LA	386	G	C2'-C1'	-6.36	1.46	1.53
26	LA	590	A	C3'-O3'	6.36	1.51	1.42
26	LA	1504	A	N7-C5	-6.36	1.35	1.39
26	LA	1589	U	C2-N3	-6.36	1.33	1.37
26	LA	1936	A	C3'-O3'	6.36	1.51	1.42
26	LA	2306	C	C3'-C2'	6.36	1.59	1.52
26	LA	2420	C	C4'-O4'	-6.36	1.37	1.45
2	SA	345	C	O3'-P	-6.36	1.53	1.61
2	SA	1123	U	C4-C5	-6.36	1.37	1.43
26	LA	235	U	N1-C6	-6.36	1.32	1.38
26	LA	1948	G	N9-C8	-6.36	1.33	1.37
2	SA	954	G	N9-C8	-6.36	1.33	1.37
2	SA	1125	U	C4'-O4'	6.36	1.53	1.45
2	SA	1490	U	O3'-P	-6.36	1.53	1.61
26	LA	101	A	C5'-C4'	6.36	1.58	1.51
26	LA	116	C	O3'-P	-6.36	1.53	1.61
26	LA	539	G	C2-N2	-6.36	1.28	1.34
26	LA	686	U	O3'-P	-6.36	1.53	1.61
26	LA	2252	G	C2-N3	6.36	1.37	1.32
26	LA	2810	A	P-O5'	-6.36	1.53	1.59
2	SA	95	C	P-O5'	-6.36	1.53	1.59
26	LA	1574	C	C4-N4	-6.36	1.28	1.33
26	LA	2225	A	N9-C4	6.36	1.41	1.37
26	LA	2776	A	N9-C4	6.36	1.41	1.37
25	LB	47	C	C2'-C1'	-6.35	1.46	1.53
25	LB	111	U	C2-N3	6.35	1.42	1.37
26	LA	548	G	C5-C4	-6.35	1.33	1.38
26	LA	1034	G	C5-C6	6.35	1.48	1.42
26	LA	2795	C	C4-N4	6.35	1.39	1.33
2	SA	115	G	N3-C4	-6.35	1.31	1.35
2	SA	145	G	C2-N3	-6.35	1.27	1.32
2	SA	875	U	O3'-P	-6.35	1.53	1.61
2	SA	1239	A	C6-N1	-6.35	1.31	1.35
26	LA	50	U	C3'-O3'	6.35	1.51	1.42
26	LA	89	A	N9-C8	-6.35	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	718	A	O3'-P	-6.35	1.53	1.61
26	LA	749	A	C4'-C3'	-6.35	1.46	1.53
26	LA	857	G	C6-N1	-6.35	1.35	1.39
26	LA	1726	C	N3-C4	6.35	1.38	1.33
26	LA	1865	U	C4'-C3'	6.35	1.60	1.53
26	LA	2107	G	N9-C4	-6.35	1.32	1.38
26	LA	1491	G	C2-N3	-6.35	1.27	1.32
2	SA	468	A	C3'-C2'	-6.35	1.45	1.52
2	SA	506	G	C4'-O4'	-6.35	1.37	1.45
25	LB	48	U	C4'-O4'	-6.35	1.37	1.45
26	LA	422	A	N9-C4	-6.35	1.34	1.37
26	LA	1069	A	C5'-C4'	6.35	1.58	1.51
26	LA	1356	G	C3'-C2'	-6.35	1.45	1.52
26	LA	2070	A	N3-C4	-6.35	1.31	1.34
26	LA	2569	G	C5-C4	6.35	1.42	1.38
34	L0	23	ARG	CD-NE	6.35	1.57	1.46
26	LA	201	C	C2-N3	-6.35	1.30	1.35
26	LA	221	A	O4'-C1'	-6.35	1.33	1.41
26	LA	310	A	C2'-C1'	-6.35	1.46	1.53
26	LA	355	U	C2'-C1'	-6.35	1.46	1.53
26	LA	1177	G	N9-C8	-6.35	1.33	1.37
26	LA	1414	C	N1-C6	-6.35	1.33	1.37
26	LA	2384	U	C2-N3	-6.35	1.33	1.37
26	LA	2541	A	C5-C4	-6.35	1.34	1.38
2	SA	183	C	N3-C4	6.35	1.38	1.33
26	LA	86	G	N9-C8	6.35	1.42	1.37
26	LA	303	G	N9-C4	-6.35	1.32	1.38
26	LA	2547	A	N3-C4	-6.35	1.31	1.34
2	SA	84	U	C2'-C1'	6.34	1.60	1.53
2	SA	955	U	C4'-C3'	-6.34	1.46	1.53
2	SA	1456	A	N7-C5	-6.34	1.35	1.39
4	S2	30	G	C2-N2	-6.34	1.28	1.34
26	LA	139	U	O3'-P	-6.34	1.53	1.61
26	LA	298	G	C6-N1	-6.34	1.35	1.39
26	LA	539	G	C6-N1	-6.34	1.35	1.39
26	LA	570	G	N7-C5	-6.34	1.35	1.39
26	LA	929	U	C5'-C4'	6.34	1.58	1.51
26	LA	1610	A	C4'-C3'	-6.34	1.46	1.53
26	LA	2248	C	C2-N3	-6.34	1.30	1.35
26	LA	2382	G	C6-N1	-6.34	1.35	1.39
26	LA	2464	G	N9-C4	-6.34	1.32	1.38
2	SA	335	C	P-O5'	-6.34	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	44	G	N9-C4	6.34	1.43	1.38
26	LA	414	C	C4-C5	6.34	1.48	1.43
2	SA	238	A	P-O5'	-6.34	1.53	1.59
2	SA	1124	G	C2-N3	6.34	1.37	1.32
2	SA	1432	G	C5'-C4'	6.34	1.58	1.51
4	S2	15	G	N9-C8	-6.34	1.33	1.37
26	LA	469	G	N1-C2	6.34	1.42	1.37
26	LA	722	A	C3'-C2'	6.34	1.59	1.52
26	LA	732	C	N1-C6	-6.34	1.33	1.37
26	LA	980	A	N1-C2	-6.34	1.28	1.34
26	LA	1205	A	C6-N1	-6.34	1.31	1.35
26	LA	2193	G	C5-C4	-6.34	1.33	1.38
26	LA	2239	G	O3'-P	-6.34	1.53	1.61
26	LA	2635	A	C8-N7	-6.34	1.27	1.31
2	SA	714	G	O3'-P	-6.34	1.53	1.61
2	SA	743	A	O3'-P	-6.34	1.53	1.61
2	SA	743	A	N3-C4	-6.34	1.31	1.34
26	LA	181	A	C5'-C4'	6.34	1.58	1.51
26	LA	419	U	N1-C6	-6.34	1.32	1.38
26	LA	441	U	C5-C6	-6.34	1.28	1.34
26	LA	462	C	N1-C6	6.34	1.41	1.37
26	LA	1383	A	C5-C4	6.34	1.43	1.38
26	LA	1463	C	C5-C6	-6.34	1.29	1.34
26	LA	1702	G	C5-C4	-6.34	1.33	1.38
26	LA	2069	G	C2-N2	-6.34	1.28	1.34
26	LA	2811	G	N1-C2	-6.34	1.32	1.37
4	S2	70	C	C4-C5	6.34	1.48	1.43
26	LA	339	U	C2-N3	-6.34	1.33	1.37
26	LA	831	G	C1'-N9	-6.34	1.38	1.46
2	SA	452	A	N9-C4	-6.34	1.34	1.37
2	SA	781	A	C1'-N9	-6.34	1.38	1.46
25	LB	119	A	C5-C4	6.34	1.43	1.38
26	LA	143	C	C2'-C1'	-6.34	1.46	1.53
26	LA	193	U	P-O5'	-6.34	1.53	1.59
26	LA	475	C	C4-N4	-6.34	1.28	1.33
26	LA	705	A	C6-N6	-6.34	1.28	1.33
26	LA	984	A	C2'-C1'	-6.34	1.46	1.53
26	LA	1074	G	C4'-C3'	6.34	1.60	1.53
26	LA	1265	A	N3-C4	-6.34	1.31	1.34
26	LA	1882	U	N1-C6	-6.34	1.32	1.38
26	LA	1939	U	N1-C2	-6.34	1.32	1.38
26	LA	2146	C	N1-C6	-6.34	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2443	C	C4-N4	-6.34	1.28	1.33
26	LA	2640	G	C8-N7	-6.34	1.27	1.30
26	LA	2786	U	C2-N3	-6.34	1.33	1.37
19	SC	1	GLY	N-CA	6.33	1.55	1.46
2	SA	439	U	P-O5'	-6.33	1.53	1.59
2	SA	1304	G	N7-C5	-6.33	1.35	1.39
4	S2	14	A	C6-N6	-6.33	1.28	1.33
4	S2	19	G	C5-C4	-6.33	1.33	1.38
26	LA	29	U	C4-C5	-6.33	1.37	1.43
26	LA	383	C	O3'-P	-6.33	1.53	1.61
26	LA	481	G	P-O5'	-6.33	1.53	1.59
26	LA	526	A	C5-C6	6.33	1.46	1.41
26	LA	1832	C	C5'-C4'	6.33	1.58	1.51
26	LA	2281	A	C6-N1	-6.33	1.31	1.35
26	LA	2384	U	C1'-N1	-6.33	1.38	1.46
26	LA	2574	G	C5-C6	-6.33	1.36	1.42
26	LA	2587	A	O4'-C1'	-6.33	1.33	1.41
2	SA	585	G	C6-O6	-6.33	1.18	1.24
2	SA	915	A	N9-C4	-6.33	1.34	1.37
3	S1	15	G	C6-O6	-6.33	1.18	1.24
26	LA	1652	A	N7-C5	-6.33	1.35	1.39
26	LA	2735	G	O3'-P	-6.33	1.53	1.61
2	SA	624	C	N3-C4	6.33	1.38	1.33
2	SA	1496	C	O4'-C1'	-6.33	1.33	1.41
26	LA	213	A	C6-N1	6.33	1.40	1.35
26	LA	1552	A	C8-N7	-6.33	1.27	1.31
26	LA	1560	G	C6-N1	-6.33	1.35	1.39
21	SE	92	ARG	CD-NE	6.33	1.57	1.46
26	LA	56	A	N3-C4	6.33	1.38	1.34
26	LA	459	U	C5'-C4'	6.33	1.58	1.51
26	LA	697	G	N7-C5	6.33	1.43	1.39
26	LA	781	A	C6-N6	6.33	1.39	1.33
26	LA	843	G	O3'-P	-6.33	1.53	1.61
26	LA	1506	U	P-O5'	-6.33	1.53	1.59
26	LA	1888	G	C5-C4	-6.33	1.33	1.38
26	LA	1897	G	C2'-C1'	-6.33	1.46	1.53
2	SA	406	G	P-O5'	-6.33	1.53	1.59
3	S1	26	U	C3'-O3'	6.33	1.51	1.42
26	LA	536	G	C8-N7	-6.33	1.27	1.30
26	LA	928	A	C3'-C2'	-6.33	1.45	1.52
26	LA	1960	A	C4'-C3'	-6.33	1.46	1.53
26	LA	2318	G	N1-C2	-6.33	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2721	A	N7-C5	6.33	1.43	1.39
26	LA	2733	A	N7-C5	-6.33	1.35	1.39
2	SA	74	A	C1'-N9	-6.33	1.38	1.46
2	SA	1111	A	N1-C2	-6.33	1.28	1.34
25	LB	33	G	C4'-C3'	6.33	1.60	1.53
26	LA	82	U	C3'-O3'	6.33	1.51	1.42
26	LA	385	C	N1-C6	6.33	1.41	1.37
26	LA	735	A	C2-N3	6.33	1.39	1.33
26	LA	2282	G	C5-C6	-6.33	1.36	1.42
26	LA	2402	U	C2-N3	-6.33	1.33	1.37
26	LA	2680	U	C4'-O4'	-6.33	1.37	1.45
26	LA	2820	A	N3-C4	-6.33	1.31	1.34
2	SA	582	C	C3'-C2'	-6.32	1.45	1.52
2	SA	626	G	C2'-C1'	-6.32	1.46	1.53
2	SA	994	A	C5-C6	6.32	1.46	1.41
2	SA	1379	G	C5'-C4'	6.32	1.58	1.51
2	SA	1455	G	O3'-P	-6.32	1.53	1.61
3	S1	47	C	C3'-O3'	6.32	1.51	1.42
25	LB	1	U	C1'-N1	6.32	1.58	1.48
26	LA	269	C	C2-N3	-6.32	1.30	1.35
26	LA	761	A	C5-C4	-6.32	1.34	1.38
26	LA	2216	G	C8-N7	-6.32	1.27	1.30
26	LA	2778	A	O3'-P	-6.32	1.53	1.61
26	LA	2803	G	C8-N7	-6.32	1.27	1.30
2	SA	1026	G	O5'-C5'	6.32	1.54	1.44
6	SU	66	ARG	CD-NE	6.32	1.57	1.46
26	LA	456	C	C2'-C1'	-6.32	1.46	1.53
2	SA	28	A	N9-C8	-6.32	1.32	1.37
2	SA	37	U	C3'-O3'	6.32	1.50	1.42
2	SA	1189	U	N3-C4	-6.32	1.32	1.38
3	S1	49	U	N3-C4	-6.32	1.32	1.38
25	LB	8	C	O5'-C5'	6.32	1.54	1.44
25	LB	97	C	C4'-O4'	6.32	1.53	1.45
26	LA	457	A	C5-C4	-6.32	1.34	1.38
26	LA	826	U	N1-C6	-6.32	1.32	1.38
26	LA	955	U	C4'-C3'	-6.32	1.46	1.53
26	LA	1393	A	C1'-N9	-6.32	1.38	1.46
26	LA	1416	G	N7-C5	6.32	1.43	1.39
26	LA	2399	G	C4'-O4'	6.32	1.53	1.45
26	LA	71	A	C3'-C2'	-6.32	1.45	1.52
2	SA	826	C	C3'-C2'	-6.32	1.45	1.52
2	SA	938	A	N3-C4	-6.32	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	24	G	C2-N3	-6.32	1.27	1.32
26	LA	269	C	N1-C6	-6.32	1.33	1.37
26	LA	291	G	C6-N1	-6.32	1.35	1.39
26	LA	466	A	C1'-N9	-6.32	1.38	1.46
26	LA	535	G	N3-C4	-6.32	1.31	1.35
26	LA	617	G	C8-N7	-6.32	1.27	1.30
26	LA	1163	G	N7-C5	-6.32	1.35	1.39
26	LA	1367	A	N3-C4	-6.32	1.31	1.34
26	LA	2228	G	C5-C4	-6.32	1.33	1.38
56	LR	19	PHE	CB-CG	-6.32	1.40	1.51
2	SA	1122	U	N3-C4	-6.32	1.32	1.38
2	SA	1185	G	C3'-O3'	6.32	1.50	1.42
3	S1	43	U	O3'-P	6.32	1.68	1.61
26	LA	902	C	C4-C5	6.32	1.48	1.43
26	LA	1434	A	C1'-N9	-6.32	1.38	1.46
26	LA	1756	G	C2-N2	-6.32	1.28	1.34
2	SA	769	G	C2-N2	-6.31	1.28	1.34
2	SA	1303	C	C3'-O3'	6.31	1.50	1.42
2	SA	389	A	C3'-C2'	-6.31	1.45	1.52
2	SA	609	A	N1-C2	-6.31	1.28	1.34
3	S1	49	U	C3'-O3'	6.31	1.50	1.42
26	LA	321	U	C5-C6	6.31	1.39	1.34
26	LA	759	G	C3'-C2'	-6.31	1.45	1.52
26	LA	784	G	N9-C8	-6.31	1.33	1.37
26	LA	1669	A	N9-C4	6.31	1.41	1.37
26	LA	1935	G	N9-C8	6.31	1.42	1.37
26	LA	1949	G	C5-C6	-6.31	1.36	1.42
26	LA	2037	A	C5-C4	6.31	1.43	1.38
26	LA	2307	G	C4'-O4'	-6.31	1.37	1.45
26	LA	2433	A	C8-N7	-6.31	1.27	1.31
26	LA	2516	A	C8-N7	-6.31	1.27	1.31
2	SA	935	A	C1'-N9	-6.31	1.38	1.46
26	LA	2109	U	O3'-P	-6.31	1.53	1.61
26	LA	2724	U	C4-O4	-6.31	1.18	1.23
2	SA	276	G	C4'-C3'	6.31	1.60	1.53
2	SA	1476	A	C3'-C2'	-6.31	1.45	1.52
26	LA	565	C	C2'-C1'	-6.31	1.46	1.53
26	LA	774	G	N9-C8	6.31	1.42	1.37
26	LA	796	C	N3-C4	-6.31	1.29	1.33
26	LA	1566	A	C6-N1	6.31	1.40	1.35
26	LA	1873	G	C6-O6	-6.31	1.18	1.24
26	LA	1918	A	C6-N1	-6.31	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2282	G	N9-C4	-6.31	1.32	1.38
2	SA	995	C	C2-N3	-6.31	1.30	1.35
2	SA	1112	C	N1-C6	6.31	1.41	1.37
2	SA	1498	U	C4'-O4'	6.31	1.53	1.45
26	LA	329	G	C2-N2	-6.31	1.28	1.34
26	LA	2489	U	C5-C6	-6.31	1.28	1.34
26	LA	2592	G	C5-C4	-6.31	1.33	1.38
2	SA	1069	C	O3'-P	-6.31	1.53	1.61
2	SA	1313	U	N3-C4	-6.31	1.32	1.38
2	SA	1474	U	N1-C2	6.31	1.44	1.38
26	LA	1522	A	N9-C4	-6.31	1.34	1.37
26	LA	2172	U	C3'-C2'	6.31	1.59	1.52
26	LA	2250	G	C5-C4	-6.31	1.33	1.38
2	SA	753	A	N9-C8	-6.30	1.32	1.37
2	SA	1485	U	N1-C2	-6.30	1.32	1.38
26	LA	19	A	C4'-O4'	-6.30	1.37	1.45
26	LA	869	G	N7-C5	6.30	1.43	1.39
26	LA	1394	U	C5-C6	6.30	1.39	1.34
2	SA	776	G	C8-N7	-6.30	1.27	1.30
26	LA	2812	G	C1'-N9	-6.30	1.38	1.46
2	SA	514	C	N3-C4	6.30	1.38	1.33
2	SA	1216	A	C1'-N9	-6.30	1.38	1.46
25	LB	44	G	C6-N1	-6.30	1.35	1.39
26	LA	222	A	N3-C4	-6.30	1.31	1.34
26	LA	1152	C	C5'-C4'	6.30	1.58	1.51
26	LA	1395	A	N3-C4	-6.30	1.31	1.34
26	LA	1661	G	C8-N7	-6.30	1.27	1.30
26	LA	1676	A	C5'-C4'	6.30	1.58	1.51
26	LA	1832	C	P-O5'	-6.30	1.53	1.59
26	LA	2848	G	C2'-C1'	6.30	1.60	1.53
26	LA	2876	G	N9-C8	6.30	1.42	1.37
44	LF	70	SER	CA-CB	6.30	1.62	1.52
2	SA	128	G	N7-C5	6.30	1.43	1.39
2	SA	451	A	N9-C4	-6.30	1.34	1.37
26	LA	1422	G	C3'-O3'	6.30	1.50	1.42
26	LA	2038	G	C2-N3	6.30	1.37	1.32
26	LA	2055	C	C3'-O3'	6.30	1.50	1.42
26	LA	2510	C	N3-C4	6.30	1.38	1.33
3	S1	14	G	C8-N7	6.30	1.34	1.30
26	LA	43	G	C6-N1	-6.30	1.35	1.39
26	LA	1580	A	C2-N3	6.30	1.39	1.33
26	LA	2668	G	P-O5'	6.30	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	LK	127	SER	CA-CB	6.30	1.62	1.52
2	SA	559	A	C2'-C1'	-6.30	1.46	1.53
2	SA	734	G	C5-C6	-6.30	1.36	1.42
2	SA	1261	A	C2-N3	-6.30	1.27	1.33
20	SD	83	GLY	CA-C	-6.30	1.41	1.51
26	LA	2475	C	O3'-P	-6.30	1.53	1.61
26	LA	2726	A	P-O5'	-6.30	1.53	1.59
2	SA	951	G	C5-C4	6.29	1.42	1.38
26	LA	287	G	N9-C4	6.29	1.43	1.38
26	LA	1307	A	P-O5'	6.29	1.66	1.59
26	LA	2257	U	N1-C2	-6.29	1.32	1.38
2	SA	166	U	C4'-O4'	6.29	1.53	1.45
2	SA	903	G	C2-N3	6.29	1.37	1.32
24	S3	686	TYR	CZ-OH	6.29	1.48	1.37
26	LA	359	G	C6-N1	6.29	1.44	1.39
26	LA	1544	A	C8-N7	-6.29	1.27	1.31
26	LA	2753	A	C6-N6	6.29	1.39	1.33
2	SA	612	C	P-O5'	-6.29	1.53	1.59
2	SA	967	C	P-O5'	-6.29	1.53	1.59
26	LA	256	A	C2'-C1'	-6.29	1.46	1.53
26	LA	418	C	O3'-P	-6.29	1.53	1.61
26	LA	981	A	C1'-N9	-6.29	1.38	1.46
26	LA	1310	G	O4'-C1'	-6.29	1.33	1.41
26	LA	2633	G	C2-N3	-6.29	1.27	1.32
2	SA	612	C	O3'-P	-6.29	1.53	1.61
26	LA	801	G	N7-C5	-6.29	1.35	1.39
26	LA	863	A	N1-C2	6.29	1.40	1.34
26	LA	1871	A	C6-N6	6.29	1.39	1.33
2	SA	642	A	N9-C8	-6.29	1.32	1.37
2	SA	1432	G	C8-N7	-6.29	1.27	1.30
2	SA	1457	G	C3'-C2'	-6.29	1.45	1.52
2	SA	1524	C	C4-N4	6.29	1.39	1.33
26	LA	42	A	C1'-N9	-6.29	1.38	1.46
26	LA	678	C	O3'-P	-6.29	1.53	1.61
26	LA	784	G	C5-C4	-6.29	1.33	1.38
26	LA	797	G	N9-C4	-6.29	1.32	1.38
26	LA	1392	A	C5-C4	6.29	1.43	1.38
2	SA	401	C	O3'-P	-6.29	1.53	1.61
2	SA	1022	A	C6-N1	6.29	1.40	1.35
26	LA	2266	A	C1'-N9	-6.29	1.38	1.46
26	LA	2272	U	O3'-P	-6.29	1.53	1.61
2	SA	44	A	N9-C8	-6.29	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	881	G	N3-C4	-6.29	1.31	1.35
3	S1	31	U	C3'-O3'	6.29	1.50	1.42
4	S2	11	A	O3'-P	6.29	1.68	1.61
26	LA	677	A	O5'-C5'	6.29	1.54	1.44
26	LA	767	U	C3'-C2'	-6.29	1.45	1.52
26	LA	1196	C	C3'-O3'	6.29	1.50	1.42
26	LA	1750	G	C6-N1	-6.29	1.35	1.39
26	LA	2163	A	N9-C4	6.29	1.41	1.37
26	LA	2184	A	C6-N1	6.29	1.40	1.35
2	SA	666	G	N3-C4	-6.28	1.31	1.35
2	SA	1054	C	N1-C2	6.28	1.46	1.40
2	SA	1144	G	N9-C8	-6.28	1.33	1.37
2	SA	1336	C	N3-C4	6.28	1.38	1.33
26	LA	244	A	N9-C4	-6.28	1.34	1.37
26	LA	775	G	N9-C8	-6.28	1.33	1.37
26	LA	1936	A	N7-C5	6.28	1.43	1.39
26	LA	1944	U	N3-C4	-6.28	1.32	1.38
2	SA	436	C	C4'-C3'	-6.28	1.46	1.53
2	SA	480	U	C2-N3	-6.28	1.33	1.37
2	SA	1184	G	N7-C5	6.28	1.43	1.39
26	LA	520	G	C2-N3	-6.28	1.27	1.32
26	LA	563	A	N9-C4	-6.28	1.34	1.37
26	LA	1153	C	O3'-P	-6.28	1.53	1.61
26	LA	2201	G	O3'-P	-6.28	1.53	1.61
26	LA	2346	A	O3'-P	-6.28	1.53	1.61
26	LA	2432	A	C8-N7	6.28	1.35	1.31
2	SA	112	G	C3'-C2'	-6.28	1.45	1.52
2	SA	567	G	P-O5'	-6.28	1.53	1.59
2	SA	601	G	C2-N2	-6.28	1.28	1.34
2	SA	643	C	C2'-C1'	-6.28	1.46	1.53
2	SA	694	A	C4'-C3'	-6.28	1.46	1.53
26	LA	53	A	C4'-O4'	-6.28	1.37	1.45
26	LA	108	G	C3'-C2'	-6.28	1.45	1.52
26	LA	119	A	P-O5'	-6.28	1.53	1.59
26	LA	798	G	P-O5'	-6.28	1.53	1.59
26	LA	1199	U	C4'-O4'	6.28	1.53	1.45
26	LA	1709	U	N1-C6	-6.28	1.32	1.38
26	LA	1827	U	O3'-P	-6.28	1.53	1.61
26	LA	2026	U	P-O5'	-6.28	1.53	1.59
26	LA	2606	C	C5-C6	-6.28	1.29	1.34
26	LA	2855	C	N1-C6	6.28	1.41	1.37
2	SA	18	C	C5-C6	6.28	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	531	U	P-O5'	-6.28	1.53	1.59
2	SA	609	A	C4'-O4'	6.28	1.53	1.45
2	SA	1343	G	C1'-N9	-6.28	1.38	1.46
26	LA	1038	G	C5'-C4'	6.28	1.58	1.51
26	LA	1313	U	C1'-N1	-6.28	1.38	1.46
26	LA	1412	U	C2-N3	-6.28	1.33	1.37
26	LA	2055	C	C4'-C3'	-6.28	1.46	1.53
2	SA	71	A	C5'-C4'	6.28	1.58	1.51
2	SA	978	A	N9-C4	6.28	1.41	1.37
26	LA	596	U	P-O5'	-6.28	1.53	1.59
26	LA	993	G	N9-C4	-6.28	1.32	1.38
26	LA	1424	G	N9-C4	6.28	1.43	1.38
26	LA	2232	C	C5'-C4'	-6.28	1.43	1.51
2	SA	121	U	C5-C6	6.28	1.39	1.34
2	SA	904	U	O3'-P	-6.28	1.53	1.61
2	SA	1477	U	C1'-N1	6.28	1.58	1.48
26	LA	46	G	C6-N1	-6.28	1.35	1.39
26	LA	1583	A	N7-C5	6.28	1.43	1.39
26	LA	2279	G	N3-C4	-6.28	1.31	1.35
26	LA	2459	A	C6-N6	6.28	1.39	1.33
26	LA	2517	C	N3-C4	-6.28	1.29	1.33
26	LA	2522	U	C4'-C3'	-6.28	1.46	1.53
2	SA	1266	G	N1-C2	6.27	1.42	1.37
26	LA	640	C	N1-C6	-6.27	1.33	1.37
26	LA	1667	G	O3'-P	-6.27	1.53	1.61
26	LA	2163	A	C5-C4	6.27	1.43	1.38
2	SA	293	G	O4'-C1'	-6.27	1.33	1.41
2	SA	1073	U	C3'-C2'	6.27	1.59	1.52
2	SA	1507	A	N9-C8	-6.27	1.32	1.37
2	SA	1525	G	C2'-C1'	6.27	1.60	1.53
26	LA	10	A	N9-C4	-6.27	1.34	1.37
26	LA	696	G	O3'-P	-6.27	1.53	1.61
26	LA	1386	C	C4'-C3'	-6.27	1.46	1.53
26	LA	1510	G	N9-C8	6.27	1.42	1.37
26	LA	1676	A	C3'-C2'	-6.27	1.45	1.52
26	LA	2544	G	C2-N2	-6.27	1.28	1.34
26	LA	2659	G	O3'-P	-6.27	1.53	1.61
37	LC	122	ARG	CD-NE	6.27	1.57	1.46
2	SA	423	G	C2'-C1'	-6.27	1.46	1.53
2	SA	697	U	P-O5'	-6.27	1.53	1.59
25	LB	76	G	N3-C4	-6.27	1.31	1.35
26	LA	145	C	C2'-C1'	-6.27	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	154	U	C2-N3	6.27	1.42	1.37
26	LA	125	A	N9-C4	6.27	1.41	1.37
26	LA	281	C	C4-N4	-6.27	1.28	1.33
26	LA	1932	A	C8-N7	-6.27	1.27	1.31
26	LA	1979	U	C3'-O3'	6.27	1.50	1.42
14	SN	19	TYR	CD2-CE2	6.27	1.48	1.39
24	S3	491	GLU	CG-CD	-6.27	1.42	1.51
25	LB	101	A	C1'-N9	-6.27	1.38	1.46
26	LA	298	G	N9-C4	-6.27	1.32	1.38
26	LA	551	G	C5'-C4'	6.27	1.58	1.51
26	LA	1201	U	C3'-C2'	-6.27	1.45	1.52
26	LA	1279	G	C2-N2	-6.27	1.28	1.34
26	LA	1950	G	C1'-N9	-6.27	1.38	1.46
26	LA	2362	C	C4-C5	-6.27	1.38	1.43
26	LA	2405	G	C5-C4	-6.27	1.33	1.38
2	SA	384	G	C5-C4	6.27	1.42	1.38
2	SA	502	A	C4'-C3'	-6.27	1.46	1.53
26	LA	1659	G	N1-C2	6.27	1.42	1.37
2	SA	210	C	P-O5'	6.26	1.66	1.59
2	SA	854	U	C2-N3	6.26	1.42	1.37
2	SA	1064	G	O3'-P	-6.26	1.53	1.61
2	SA	1531	A	N9-C4	-6.26	1.34	1.37
26	LA	372	G	C2-N3	6.26	1.37	1.32
26	LA	1761	C	O3'-P	-6.26	1.53	1.61
2	SA	465	A	N3-C4	6.26	1.38	1.34
2	SA	804	U	P-O5'	-6.26	1.53	1.59
26	LA	212	G	C6-O6	-6.26	1.18	1.24
26	LA	316	C	N1-C6	-6.26	1.33	1.37
26	LA	507	A	C6-N6	6.26	1.39	1.33
26	LA	2801	G	C4'-C3'	-6.26	1.46	1.53
2	SA	390	U	N3-C4	-6.26	1.32	1.38
2	SA	466	A	P-O5'	6.26	1.66	1.59
2	SA	608	A	O4'-C1'	-6.26	1.33	1.41
2	SA	1157	A	C2'-C1'	-6.26	1.46	1.53
2	SA	1329	A	C1'-N9	-6.26	1.38	1.46
26	LA	285	G	N9-C4	6.26	1.43	1.38
26	LA	347	A	N9-C4	-6.26	1.34	1.37
26	LA	682	G	C2-N3	6.26	1.37	1.32
26	LA	1630	A	C6-N1	6.26	1.40	1.35
26	LA	2717	C	C2'-C1'	-6.26	1.46	1.53
26	LA	2892	G	N9-C8	-6.26	1.33	1.37
26	LA	2902	C	C5'-C4'	6.26	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	LM	31	ARG	N-CA	-6.26	1.33	1.46
2	SA	181	A	N9-C8	-6.26	1.32	1.37
2	SA	474	G	N7-C5	-6.26	1.35	1.39
4	S2	31	G	C2'-C1'	-6.26	1.46	1.53
26	LA	742	A	O4'-C1'	-6.26	1.33	1.41
26	LA	1321	A	N9-C8	-6.26	1.32	1.37
26	LA	1367	A	N9-C4	-6.26	1.34	1.37
26	LA	1667	G	O4'-C1'	-6.26	1.33	1.41
26	LA	1674	G	C2-N2	-6.26	1.28	1.34
26	LA	2869	G	C5-C4	6.26	1.42	1.38
2	SA	84	U	N1-C6	-6.26	1.32	1.38
26	LA	671	C	C4'-O4'	-6.26	1.37	1.45
26	LA	828	U	N3-C4	-6.26	1.32	1.38
26	LA	2539	C	C4-C5	-6.26	1.38	1.43
2	SA	711	G	N1-C2	-6.26	1.32	1.37
2	SA	856	C	C3'-C2'	-6.26	1.45	1.52
26	LA	212	G	C1'-N9	-6.26	1.38	1.46
26	LA	599	A	C2'-C1'	-6.26	1.46	1.53
26	LA	1432	G	C2-N3	6.26	1.37	1.32
26	LA	2051	A	C5-C4	-6.26	1.34	1.38
26	LA	2243	U	P-O5'	-6.26	1.53	1.59
26	LA	2798	U	N1-C6	-6.26	1.32	1.38
2	SA	653	U	C4'-C3'	-6.25	1.46	1.53
2	SA	1252	A	P-O5'	-6.25	1.53	1.59
26	LA	657	U	P-O5'	6.25	1.66	1.59
2	SA	423	G	C6-N1	6.25	1.44	1.39
2	SA	960	U	C4-C5	-6.25	1.38	1.43
26	LA	822	G	C3'-O3'	6.25	1.50	1.42
26	LA	1318	U	C3'-C2'	6.25	1.59	1.52
26	LA	1809	A	C4'-O4'	-6.25	1.37	1.45
26	LA	2057	G	C4'-C3'	-6.25	1.46	1.53
2	SA	179	A	N1-C2	-6.25	1.28	1.34
2	SA	305	G	C6-N1	-6.25	1.35	1.39
2	SA	911	U	C5-C6	-6.25	1.28	1.34
2	SA	1251	A	C3'-C2'	-6.25	1.45	1.52
26	LA	452	G	N9-C8	-6.25	1.33	1.37
26	LA	1587	G	N3-C4	-6.25	1.31	1.35
26	LA	2029	G	C2-N2	-6.25	1.28	1.34
47	LJ	30	ARG	CD-NE	6.25	1.57	1.46
2	SA	125	U	C4-C5	-6.25	1.38	1.43
2	SA	951	G	C1'-N9	-6.25	1.38	1.46
2	SA	1446	A	N7-C5	6.25	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2035	G	C6-N1	-6.25	1.35	1.39
26	LA	2214	C	C2-N3	-6.25	1.30	1.35
26	LA	2411	A	C8-N7	-6.25	1.27	1.31
2	SA	135	C	N3-C4	6.25	1.38	1.33
2	SA	857	C	N3-C4	6.25	1.38	1.33
2	SA	1469	C	C4-N4	-6.25	1.28	1.33
26	LA	229	C	C4'-C3'	6.25	1.60	1.53
26	LA	449	A	N9-C4	-6.25	1.34	1.37
26	LA	627	A	C3'-O3'	6.25	1.50	1.42
26	LA	930	G	C1'-N9	-6.25	1.38	1.46
26	LA	1352	U	C4-C5	6.25	1.49	1.43
26	LA	1551	A	P-O5'	-6.25	1.53	1.59
26	LA	2429	G	N3-C4	-6.25	1.31	1.35
2	SA	1359	C	C2'-C1'	-6.25	1.46	1.53
26	LA	121	G	C3'-C2'	-6.25	1.45	1.52
26	LA	770	G	C2'-C1'	-6.25	1.46	1.53
26	LA	1766	G	C5'-C4'	6.25	1.58	1.51
26	LA	2129	C	C5'-C4'	6.25	1.58	1.51
26	LA	2211	A	C4'-C3'	-6.25	1.46	1.53
26	LA	2670	A	N9-C4	6.25	1.41	1.37
2	SA	1375	A	O4'-C1'	6.25	1.49	1.41
2	SA	1521	C	O3'-P	-6.25	1.53	1.61
26	LA	18	U	N1-C2	-6.25	1.32	1.38
26	LA	401	A	C2'-C1'	-6.25	1.46	1.53
2	SA	1034	G	C6-N1	6.24	1.44	1.39
26	LA	30	G	O4'-C1'	-6.24	1.33	1.41
26	LA	248	G	N9-C4	-6.24	1.32	1.38
26	LA	854	C	O3'-P	-6.24	1.53	1.61
26	LA	1086	A	C2'-C1'	-6.24	1.46	1.53
26	LA	1100	C	C5-C6	6.24	1.39	1.34
26	LA	2505	G	C6-N1	-6.24	1.35	1.39
26	LA	2554	U	C3'-O3'	6.24	1.50	1.42
2	SA	71	A	N9-C8	-6.24	1.32	1.37
2	SA	618	C	C2-N3	-6.24	1.30	1.35
2	SA	917	G	C2-N2	-6.24	1.28	1.34
2	SA	1399	C	C5'-C4'	6.24	1.58	1.51
26	LA	29	U	N3-C4	-6.24	1.32	1.38
2	SA	141	G	O4'-C1'	-6.24	1.33	1.41
2	SA	445	G	C6-N1	-6.24	1.35	1.39
2	SA	1179	A	N9-C8	6.24	1.42	1.37
26	LA	232	G	C5'-C4'	6.24	1.58	1.51
26	LA	328	U	P-O5'	-6.24	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	597	G	C3'-O3'	6.24	1.50	1.42
26	LA	696	G	C5-C6	-6.24	1.36	1.42
26	LA	1182	G	C4'-C3'	-6.24	1.46	1.53
26	LA	2249	U	O3'-P	-6.24	1.53	1.61
26	LA	2585	U	C2-N3	-6.24	1.33	1.37
2	SA	107	G	C2'-C1'	-6.24	1.46	1.53
26	LA	627	A	C4'-C3'	6.24	1.60	1.53
26	LA	919	U	C2-N3	-6.24	1.33	1.37
26	LA	1475	G	O3'-P	-6.24	1.53	1.61
26	LA	2684	U	C4-C5	-6.24	1.38	1.43
2	SA	586	C	C5'-C4'	6.24	1.58	1.51
2	SA	1532	U	C4-C5	6.24	1.49	1.43
26	LA	2438	U	C3'-O3'	6.24	1.50	1.42
2	SA	529	G	C5-C4	6.24	1.42	1.38
2	SA	893	C	C3'-O3'	6.24	1.50	1.42
2	SA	1419	G	C5-C4	-6.24	1.33	1.38
26	LA	1005	C	C5-C6	-6.24	1.29	1.34
26	LA	1342	A	N3-C4	-6.24	1.31	1.34
26	LA	1418	G	O3'-P	-6.24	1.53	1.61
26	LA	1631	G	C2-N2	-6.24	1.28	1.34
26	LA	2144	G	C5-C4	-6.24	1.33	1.38
26	LA	2705	A	C5-C4	-6.24	1.34	1.38
2	SA	68	G	P-O5'	-6.23	1.53	1.59
26	LA	1663	G	C2-N2	-6.23	1.28	1.34
26	LA	1672	A	N9-C4	-6.23	1.34	1.37
2	SA	126	G	C2'-C1'	-6.23	1.46	1.53
2	SA	134	G	N9-C4	-6.23	1.32	1.38
2	SA	346	G	C3'-C2'	6.23	1.59	1.52
2	SA	365	U	C5'-C4'	6.23	1.58	1.51
2	SA	1016	A	C6-N6	6.23	1.39	1.33
2	SA	1178	G	N9-C4	-6.23	1.32	1.38
2	SA	1471	U	N1-C6	-6.23	1.32	1.38
26	LA	950	G	C4'-C3'	6.23	1.60	1.53
26	LA	1086	A	C5-C4	-6.23	1.34	1.38
26	LA	1231	U	O4'-C1'	-6.23	1.33	1.41
26	LA	1272	A	N7-C5	-6.23	1.35	1.39
26	LA	1452	G	C5-C4	-6.23	1.33	1.38
26	LA	1913	A	C3'-C2'	6.23	1.59	1.52
2	SA	538	G	N3-C4	6.23	1.39	1.35
2	SA	609	A	C4'-C3'	-6.23	1.46	1.53
2	SA	909	A	C8-N7	-6.23	1.27	1.31
2	SA	1329	A	C5-C4	6.23	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1116	G	N7-C5	6.23	1.43	1.39
26	LA	1456	G	C6-N1	-6.23	1.35	1.39
26	LA	1590	A	C4'-O4'	-6.23	1.37	1.45
26	LA	2329	U	O3'-P	6.23	1.68	1.61
26	LA	2450	A	C8-N7	-6.23	1.27	1.31
31	LX	88	HIS	CB-CG	-6.23	1.38	1.50
2	SA	1147	C	O3'-P	-6.23	1.53	1.61
26	LA	248	G	P-O5'	6.23	1.66	1.59
26	LA	1265	A	N9-C8	6.23	1.42	1.37
26	LA	1904	G	N9-C8	-6.23	1.33	1.37
2	SA	114	U	C2-N3	6.23	1.42	1.37
2	SA	606	G	C4'-C3'	6.23	1.59	1.53
2	SA	712	A	C2'-C1'	-6.23	1.46	1.53
2	SA	824	G	C6-N1	-6.23	1.35	1.39
2	SA	1060	U	N1-C2	6.23	1.44	1.38
25	LB	20	G	C2-N2	-6.23	1.28	1.34
26	LA	716	A	N3-C4	6.23	1.38	1.34
26	LA	1469	A	N7-C5	-6.23	1.35	1.39
26	LA	1896	G	N3-C4	-6.23	1.31	1.35
26	LA	1921	G	N9-C8	-6.23	1.33	1.37
26	LA	2280	G	P-O5'	6.23	1.66	1.59
26	LA	2791	G	C5-C4	6.23	1.42	1.38
26	LA	2832	U	O3'-P	-6.23	1.53	1.61
2	SA	712	A	C8-N7	-6.23	1.27	1.31
2	SA	1043	G	N1-C2	-6.23	1.32	1.37
26	LA	336	C	C5-C6	6.23	1.39	1.34
26	LA	375	G	C1'-N9	-6.23	1.38	1.46
26	LA	426	C	C5'-C4'	6.23	1.58	1.51
26	LA	1080	A	C8-N7	-6.23	1.27	1.31
26	LA	1259	G	N3-C4	-6.23	1.31	1.35
26	LA	1969	A	C1'-N9	-6.23	1.38	1.46
26	LA	2471	A	O4'-C1'	6.23	1.49	1.41
26	LA	2556	C	C2'-C1'	-6.23	1.46	1.53
2	SA	481	G	C2-N3	-6.22	1.27	1.32
2	SA	783	C	O3'-P	-6.22	1.53	1.61
26	LA	418	C	N1-C6	-6.22	1.33	1.37
26	LA	2026	U	C4-C5	-6.22	1.38	1.43
26	LA	2107	G	C2'-C1'	-6.22	1.46	1.53
26	LA	2752	C	C4'-O4'	-6.22	1.37	1.45
26	LA	2864	G	O3'-P	-6.22	1.53	1.61
2	SA	15	G	C3'-C2'	-6.22	1.46	1.52
2	SA	623	C	C4'-O4'	6.22	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1279	G	O4'-C1'	-6.22	1.33	1.41
2	SA	1410	A	P-O5'	-6.22	1.53	1.59
4	S2	65	G	C4'-C3'	6.22	1.59	1.53
25	LB	106	G	O3'-P	-6.22	1.53	1.61
26	LA	124	G	O3'-P	-6.22	1.53	1.61
26	LA	207	A	C4'-C3'	-6.22	1.46	1.53
26	LA	398	C	C4-C5	6.22	1.48	1.43
26	LA	748	G	C2-N2	-6.22	1.28	1.34
26	LA	799	G	N9-C4	-6.22	1.32	1.38
26	LA	1500	G	N3-C4	-6.22	1.31	1.35
26	LA	2512	C	C4'-C3'	-6.22	1.46	1.53
26	LA	2622	U	C2-N3	-6.22	1.33	1.37
2	SA	463	U	C4'-C3'	6.22	1.59	1.53
2	SA	677	U	C4'-C3'	-6.22	1.46	1.53
2	SA	1376	U	N1-C2	-6.22	1.32	1.38
25	LB	101	A	C3'-O3'	6.22	1.50	1.42
26	LA	502	A	N9-C4	-6.22	1.34	1.37
26	LA	612	G	O3'-P	-6.22	1.53	1.61
26	LA	1659	G	O4'-C1'	-6.22	1.33	1.41
26	LA	1800	C	C3'-C2'	6.22	1.59	1.52
26	LA	2320	U	O4'-C1'	-6.22	1.33	1.41
2	SA	565	U	C5-C6	6.22	1.39	1.34
2	SA	711	G	C4'-O4'	-6.22	1.37	1.45
2	SA	889	A	C2'-C1'	-6.22	1.46	1.53
2	SA	1245	C	C2'-C1'	-6.22	1.46	1.53
26	LA	200	U	C2'-C1'	6.22	1.60	1.53
26	LA	830	G	N9-C4	-6.22	1.32	1.38
26	LA	928	A	C8-N7	-6.22	1.27	1.31
26	LA	1151	A	P-O5'	6.22	1.66	1.59
26	LA	1251	C	C1'-N1	-6.22	1.38	1.46
26	LA	1372	U	C2-O2	-6.22	1.16	1.22
26	LA	1418	G	C2-N2	-6.22	1.28	1.34
26	LA	1470	A	N7-C5	-6.22	1.35	1.39
26	LA	2120	G	C5-C6	6.22	1.48	1.42
26	LA	2161	C	P-O5'	-6.22	1.53	1.59
26	LA	2368	C	P-O5'	-6.22	1.53	1.59
2	SA	829	G	C4'-C3'	6.22	1.59	1.53
2	SA	870	U	C5'-C4'	6.22	1.58	1.51
2	SA	1384	C	C4'-O4'	6.22	1.53	1.45
4	S2	55	U	C5-C6	-6.22	1.28	1.34
25	LB	52	A	C6-N1	6.22	1.40	1.35
26	LA	1080	A	N7-C5	6.22	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	35	G	C2'-C1'	-6.22	1.46	1.53
2	SA	448	A	C5'-C4'	6.22	1.58	1.51
2	SA	1384	C	C4-C5	6.22	1.48	1.43
26	LA	961	C	C3'-C2'	-6.22	1.46	1.52
26	LA	1201	U	C3'-O3'	6.22	1.50	1.42
26	LA	1337	G	C8-N7	-6.22	1.27	1.30
26	LA	1448	G	C6-N1	-6.22	1.35	1.39
26	LA	2882	A	O3'-P	-6.22	1.53	1.61
2	SA	560	A	C2-N3	6.21	1.39	1.33
2	SA	682	G	N3-C4	6.21	1.39	1.35
2	SA	759	A	N7-C5	-6.21	1.35	1.39
2	SA	939	G	N3-C4	-6.21	1.31	1.35
26	LA	1277	G	N9-C8	-6.21	1.33	1.37
26	LA	2282	G	C2'-C1'	-6.21	1.46	1.53
26	LA	2476	A	C4'-O4'	-6.21	1.37	1.45
26	LA	2830	C	N1-C6	6.21	1.40	1.37
2	SA	597	G	C4'-O4'	-6.21	1.37	1.45
2	SA	827	U	C4-C5	-6.21	1.38	1.43
2	SA	1093	A	C2-N3	6.21	1.39	1.33
2	SA	1132	C	C5-C6	-6.21	1.29	1.34
2	SA	1310	G	N9-C8	6.21	1.42	1.37
26	LA	174	U	C2-N3	-6.21	1.33	1.37
26	LA	178	G	C5-C4	-6.21	1.34	1.38
26	LA	1904	G	N1-C2	-6.21	1.32	1.37
26	LA	2357	G	C5-C6	-6.21	1.36	1.42
26	LA	2653	U	C5'-C4'	6.21	1.58	1.51
2	SA	775	G	O3'-P	-6.21	1.53	1.61
2	SA	1140	C	C2'-C1'	-6.21	1.46	1.53
24	S3	145	ARG	CD-NE	6.21	1.57	1.46
26	LA	300	A	N1-C2	-6.21	1.28	1.34
26	LA	378	C	N1-C6	-6.21	1.33	1.37
26	LA	643	A	N7-C5	-6.21	1.35	1.39
26	LA	945	A	C2'-C1'	6.21	1.60	1.53
26	LA	1164	C	N1-C6	-6.21	1.33	1.37
2	SA	842	U	C2'-C1'	-6.21	1.46	1.53
25	LB	56	G	N3-C4	-6.21	1.31	1.35
26	LA	973	A	P-O5'	-6.21	1.53	1.59
26	LA	2643	G	C2-N2	-6.21	1.28	1.34
26	LA	2828	G	C4'-C3'	-6.21	1.46	1.53
2	SA	233	C	C2-N3	6.21	1.40	1.35
2	SA	763	G	O3'-P	-6.21	1.53	1.61
2	SA	806	C	O3'-P	-6.21	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	819	A	C5-C6	6.21	1.46	1.41
2	SA	893	C	C5'-C4'	-6.21	1.44	1.51
2	SA	1014	A	C8-N7	-6.21	1.27	1.31
2	SA	1084	G	C6-N1	6.21	1.43	1.39
26	LA	1291	C	C4-C5	-6.21	1.38	1.43
26	LA	1899	A	N7-C5	-6.21	1.35	1.39
26	LA	2576	G	N9-C4	-6.21	1.32	1.38
26	LA	2591	C	O3'-P	-6.21	1.53	1.61
26	LA	2768	U	C2'-C1'	-6.21	1.46	1.53
2	SA	252	U	C5'-C4'	6.21	1.58	1.51
2	SA	629	A	C8-N7	6.21	1.35	1.31
2	SA	1199	U	O4'-C1'	6.21	1.49	1.41
26	LA	568	U	C5'-C4'	6.21	1.58	1.51
26	LA	570	G	C2'-C1'	-6.21	1.46	1.53
26	LA	777	G	C2-N2	-6.21	1.28	1.34
26	LA	848	C	C4'-C3'	-6.21	1.46	1.53
26	LA	1138	G	C2-N3	6.21	1.37	1.32
2	SA	191	G	C2-N2	-6.21	1.28	1.34
26	LA	75	G	C5-C4	-6.21	1.34	1.38
26	LA	473	G	N1-C2	-6.21	1.32	1.37
26	LA	1261	C	C3'-O3'	6.21	1.50	1.42
26	LA	1478	G	N1-C2	-6.21	1.32	1.37
26	LA	1564	C	O3'-P	-6.21	1.53	1.61
26	LA	2313	C	C3'-O3'	6.21	1.50	1.42
2	SA	449	G	N9-C4	-6.20	1.32	1.38
12	SL	26	CYS	CB-SG	-6.20	1.71	1.82
26	LA	481	G	C6-N1	-6.20	1.35	1.39
26	LA	2001	C	C5'-C4'	6.20	1.58	1.51
26	LA	2385	C	C5'-C4'	6.20	1.58	1.51
2	SA	315	A	C1'-N9	-6.20	1.38	1.46
2	SA	1158	C	N1-C6	-6.20	1.33	1.37
26	LA	624	C	O4'-C1'	-6.20	1.33	1.41
26	LA	1105	U	P-O5'	-6.20	1.53	1.59
26	LA	1891	G	C6-N1	-6.20	1.35	1.39
2	SA	145	G	N7-C5	-6.20	1.35	1.39
2	SA	491	G	C2-N2	-6.20	1.28	1.34
2	SA	601	G	C6-N1	6.20	1.43	1.39
2	SA	652	U	O3'-P	-6.20	1.53	1.61
2	SA	691	G	C2'-C1'	-6.20	1.46	1.53
2	SA	899	C	N3-C4	6.20	1.38	1.33
2	SA	1037	C	C5'-C4'	6.20	1.58	1.51
26	LA	691	C	P-O5'	-6.20	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1160	G	N1-C2	-6.20	1.32	1.37
26	LA	1194	A	C5'-C4'	6.20	1.58	1.51
26	LA	1643	G	C4'-O4'	-6.20	1.37	1.45
2	SA	374	A	C4'-C3'	-6.20	1.46	1.53
2	SA	968	A	N7-C5	-6.20	1.35	1.39
2	SA	1203	C	O3'-P	-6.20	1.53	1.61
2	SA	1438	G	P-O5'	-6.20	1.53	1.59
14	SN	64	ARG	CD-NE	6.20	1.56	1.46
26	LA	2432	A	C1'-N9	-6.20	1.38	1.46
2	SA	884	U	N1-C6	6.20	1.43	1.38
26	LA	1531	C	P-O5'	-6.20	1.53	1.59
2	SA	55	A	C3'-C2'	-6.20	1.46	1.52
2	SA	131	A	C4'-O4'	-6.20	1.37	1.45
2	SA	146	G	N3-C4	6.20	1.39	1.35
2	SA	311	C	O3'-P	-6.20	1.53	1.61
2	SA	980	C	C2-N3	6.20	1.40	1.35
2	SA	1284	C	C4'-C3'	-6.20	1.46	1.53
26	LA	103	A	N3-C4	-6.20	1.31	1.34
26	LA	572	A	C5'-C4'	6.20	1.58	1.51
26	LA	775	G	C5-C6	6.20	1.48	1.42
26	LA	2295	C	C2-N3	-6.20	1.30	1.35
26	LA	2899	A	C5-C6	6.20	1.46	1.41
2	SA	382	A	C5-C6	6.19	1.46	1.41
26	LA	645	C	N1-C6	6.19	1.40	1.37
26	LA	2522	U	C4'-O4'	-6.19	1.37	1.45
24	S3	654	HIS	CB-CG	6.19	1.61	1.50
26	LA	559	G	N3-C4	-6.19	1.31	1.35
26	LA	825	A	N3-C4	-6.19	1.31	1.34
26	LA	1313	U	P-O5'	-6.19	1.53	1.59
26	LA	1792	G	O4'-C1'	-6.19	1.33	1.41
26	LA	2508	G	N9-C4	6.19	1.43	1.38
2	SA	687	A	N3-C4	-6.19	1.31	1.34
2	SA	1297	G	N7-C5	-6.19	1.35	1.39
25	LB	91	C	O3'-P	-6.19	1.53	1.61
26	LA	107	G	C3'-C2'	-6.19	1.46	1.52
26	LA	1066	U	P-O5'	-6.19	1.53	1.59
26	LA	2379	G	C8-N7	-6.19	1.27	1.30
2	SA	865	A	N9-C8	-6.19	1.32	1.37
2	SA	1484	C	C2'-C1'	-6.19	1.46	1.53
3	S1	19	A	C5-C4	-6.19	1.34	1.38
26	LA	81	G	C6-N1	-6.19	1.35	1.39
26	LA	968	C	C4'-C3'	-6.19	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2234	G	N3-C4	-6.19	1.31	1.35
2	SA	437	U	C5-C6	6.19	1.39	1.34
26	LA	1284	A	N1-C2	-6.19	1.28	1.34
26	LA	1622	G	N9-C8	-6.19	1.33	1.37
2	SA	268	U	C5'-C4'	6.18	1.58	1.51
2	SA	778	G	N7-C5	-6.18	1.35	1.39
2	SA	822	U	C4-C5	-6.18	1.38	1.43
2	SA	850	U	C4-C5	-6.18	1.38	1.43
2	SA	1005	A	C6-N6	6.18	1.38	1.33
26	LA	292	U	N1-C2	-6.18	1.32	1.38
26	LA	306	U	C3'-O3'	-6.18	1.33	1.42
26	LA	960	A	C6-N1	-6.18	1.31	1.35
26	LA	1110	G	C5'-C4'	6.18	1.58	1.51
26	LA	1418	G	P-O5'	-6.18	1.53	1.59
26	LA	1919	A	C5-C4	6.18	1.43	1.38
26	LA	2843	G	C4'-O4'	6.18	1.53	1.45
26	LA	2871	U	N3-C4	-6.18	1.32	1.38
2	SA	584	G	N1-C2	-6.18	1.32	1.37
2	SA	1303	C	C5'-C4'	6.18	1.58	1.51
26	LA	850	U	N3-C4	-6.18	1.32	1.38
26	LA	1338	G	C3'-O3'	6.18	1.50	1.42
26	LA	1733	G	N3-C4	-6.18	1.31	1.35
26	LA	2017	U	C1'-N1	-6.18	1.38	1.46
26	LA	2900	A	C2'-C1'	6.18	1.60	1.53
2	SA	256	U	P-O5'	-6.18	1.53	1.59
2	SA	445	G	P-O5'	6.18	1.66	1.59
2	SA	472	U	P-O5'	-6.18	1.53	1.59
2	SA	563	A	C5-C4	-6.18	1.34	1.38
26	LA	87	U	C2-N3	-6.18	1.33	1.37
26	LA	836	G	N7-C5	6.18	1.43	1.39
2	SA	1416	G	C5-C4	-6.18	1.34	1.38
25	LB	18	G	C5-C6	-6.18	1.36	1.42
26	LA	276	U	O5'-C5'	6.18	1.54	1.44
26	LA	415	A	C5'-C4'	6.18	1.58	1.51
26	LA	483	A	C3'-C2'	-6.18	1.46	1.52
26	LA	681	G	C4'-C3'	-6.18	1.46	1.53
26	LA	705	A	O3'-P	-6.18	1.53	1.61
26	LA	892	A	N9-C8	-6.18	1.32	1.37
26	LA	2012	G	C8-N7	6.18	1.34	1.30
26	LA	2527	C	C2'-C1'	-6.18	1.46	1.53
2	SA	694	A	N7-C5	-6.18	1.35	1.39
26	LA	835	C	C5-C6	6.18	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2767	C	C2'-C1'	-6.18	1.46	1.53
2	SA	704	A	C5-C6	-6.18	1.35	1.41
26	LA	119	A	N3-C4	-6.18	1.31	1.34
26	LA	594	U	O3'-P	-6.18	1.53	1.61
26	LA	1096	A	C3'-C2'	-6.18	1.46	1.52
26	LA	1140	C	C2'-C1'	-6.18	1.46	1.53
26	LA	1441	G	O3'-P	-6.18	1.53	1.61
26	LA	1543	G	C3'-C2'	-6.18	1.46	1.52
26	LA	2477	U	C3'-O3'	6.18	1.50	1.42
2	SA	946	A	N7-C5	-6.17	1.35	1.39
2	SA	1161	C	C4-N4	-6.17	1.28	1.33
2	SA	1287	A	C4'-O4'	6.17	1.53	1.45
26	LA	177	G	C2'-C1'	-6.17	1.46	1.53
26	LA	454	A	C1'-N9	-6.17	1.38	1.46
26	LA	1336	A	N9-C4	-6.17	1.34	1.37
26	LA	2172	U	C2-O2	6.17	1.27	1.22
26	LA	2648	G	N7-C5	6.17	1.43	1.39
26	LA	2875	C	O4'-C1'	6.17	1.49	1.41
26	LA	637	A	C3'-O3'	6.17	1.50	1.42
2	SA	1300	G	O5'-C5'	6.17	1.54	1.44
26	LA	377	G	C6-N1	-6.17	1.35	1.39
26	LA	859	G	C6-N1	-6.17	1.35	1.39
26	LA	1918	A	C3'-C2'	-6.17	1.46	1.52
26	LA	2311	A	C4'-C3'	6.17	1.59	1.53
26	LA	2679	A	O4'-C1'	-6.17	1.33	1.41
2	SA	1148	U	C2-N3	-6.17	1.33	1.37
26	LA	396	G	N1-C2	-6.17	1.32	1.37
26	LA	818	G	C8-N7	-6.17	1.27	1.30
26	LA	1122	G	N9-C8	-6.17	1.33	1.37
2	SA	170	U	C2-N3	-6.17	1.33	1.37
2	SA	425	G	C4'-C3'	6.17	1.59	1.53
26	LA	14	A	C5-C4	-6.17	1.34	1.38
26	LA	560	C	C5'-C4'	6.17	1.58	1.51
26	LA	1310	G	C5-C4	-6.17	1.34	1.38
26	LA	1331	G	P-O5'	-6.17	1.53	1.59
26	LA	1411	U	P-O5'	6.17	1.66	1.59
26	LA	2720	U	C5-C6	-6.17	1.28	1.34
26	LA	2734	A	C2'-C1'	-6.17	1.46	1.53
2	SA	416	G	C4'-C3'	6.17	1.59	1.53
2	SA	532	A	O3'-P	-6.17	1.53	1.61
2	SA	934	C	N1-C6	-6.17	1.33	1.37
2	SA	1206	G	N9-C4	-6.17	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1305	G	C2-N2	-6.17	1.28	1.34
26	LA	666	A	P-O5'	-6.17	1.53	1.59
26	LA	938	G	C2-N2	-6.17	1.28	1.34
26	LA	2055	C	C3'-C2'	6.17	1.59	1.52
26	LA	2683	C	O4'-C1'	-6.17	1.33	1.41
2	SA	265	G	C3'-O3'	6.17	1.50	1.42
5	ST	24	ARG	CA-CB	6.17	1.67	1.53
26	LA	532	A	C4'-C3'	6.17	1.59	1.53
26	LA	1510	G	C6-N1	-6.17	1.35	1.39
2	SA	704	A	C6-N1	6.16	1.39	1.35
2	SA	1232	U	C3'-O3'	6.16	1.50	1.42
26	LA	492	A	C3'-O3'	6.16	1.50	1.42
26	LA	651	G	C5-C6	-6.16	1.36	1.42
26	LA	1881	C	P-O5'	-6.16	1.53	1.59
26	LA	2353	G	N9-C8	-6.16	1.33	1.37
2	SA	724	G	N3-C4	-6.16	1.31	1.35
2	SA	848	C	C5'-C4'	6.16	1.58	1.51
25	LB	64	G	N3-C4	-6.16	1.31	1.35
26	LA	1782	U	C2-N3	6.16	1.42	1.37
26	LA	1858	A	N1-C2	-6.16	1.28	1.34
2	SA	282	A	C8-N7	-6.16	1.27	1.31
2	SA	601	G	N1-C2	-6.16	1.32	1.37
2	SA	819	A	C6-N1	6.16	1.39	1.35
2	SA	867	G	N3-C4	6.16	1.39	1.35
26	LA	7	G	C3'-C2'	-6.16	1.46	1.52
26	LA	308	G	C2'-C1'	-6.16	1.46	1.53
26	LA	668	A	O4'-C1'	-6.16	1.33	1.41
26	LA	746	U	C4'-C3'	-6.16	1.46	1.53
26	LA	1537	G	N7-C5	6.16	1.43	1.39
26	LA	2102	G	C6-N1	-6.16	1.35	1.39
26	LA	2759	G	O4'-C1'	-6.16	1.33	1.41
2	SA	100	G	C8-N7	6.16	1.34	1.30
2	SA	908	A	O3'-P	-6.16	1.53	1.61
26	LA	466	A	C3'-C2'	6.16	1.59	1.52
26	LA	910	A	P-O5'	-6.16	1.53	1.59
26	LA	1149	G	N1-C2	-6.16	1.32	1.37
26	LA	1722	A	C1'-N9	-6.16	1.38	1.46
2	SA	276	G	C5-C6	-6.16	1.36	1.42
4	S2	75	C	P-O5'	6.16	1.66	1.59
26	LA	923	G	C4'-O4'	6.16	1.53	1.45
26	LA	1427	A	C5-C4	-6.16	1.34	1.38
26	LA	1957	C	C3'-O3'	6.16	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2677	G	C8-N7	6.16	1.34	1.30
26	LA	2768	U	P-O5'	-6.16	1.53	1.59
26	LA	2851	A	N7-C5	-6.16	1.35	1.39
2	SA	681	A	C5-C4	-6.16	1.34	1.38
2	SA	1228	C	N3-C4	-6.16	1.29	1.33
25	LB	102	G	C4'-C3'	6.16	1.59	1.53
26	LA	286	U	C4-C5	-6.16	1.38	1.43
26	LA	683	U	N1-C2	-6.16	1.33	1.38
26	LA	1497	U	C2'-C1'	-6.16	1.46	1.53
26	LA	1504	A	C3'-C2'	-6.16	1.46	1.52
26	LA	1747	U	C3'-O3'	6.16	1.50	1.42
26	LA	2423	U	C4'-C3'	-6.16	1.46	1.53
26	LA	2823	A	C6-N6	-6.16	1.29	1.33
2	SA	265	G	C4'-C3'	-6.15	1.46	1.53
3	S1	45	G	N7-C5	-6.15	1.35	1.39
26	LA	623	C	C2-N3	-6.15	1.30	1.35
26	LA	627	A	C1'-N9	-6.15	1.38	1.46
26	LA	736	C	C4-C5	-6.15	1.38	1.43
26	LA	1446	C	P-O5'	-6.15	1.53	1.59
26	LA	2125	G	C8-N7	-6.15	1.27	1.30
26	LA	2127	G	N9-C4	6.15	1.42	1.38
2	SA	128	G	N9-C8	-6.15	1.33	1.37
2	SA	537	G	C3'-O3'	6.15	1.50	1.42
26	LA	25	U	C2-N3	-6.15	1.33	1.37
26	LA	1085	A	C3'-C2'	6.15	1.59	1.52
26	LA	1740	G	N9-C8	-6.15	1.33	1.37
26	LA	1745	A	C2-N3	6.15	1.39	1.33
26	LA	1796	U	C3'-C2'	-6.15	1.46	1.52
26	LA	2064	C	N3-C4	-6.15	1.29	1.33
26	LA	2762	C	C4'-C3'	-6.15	1.46	1.53
2	SA	308	C	N1-C6	-6.15	1.33	1.37
2	SA	834	U	N1-C6	-6.15	1.32	1.38
2	SA	1263	C	N1-C2	-6.15	1.33	1.40
2	SA	1515	G	O4'-C1'	-6.15	1.33	1.41
26	LA	1182	G	C2-N3	-6.15	1.27	1.32
26	LA	1519	G	C4'-C3'	6.15	1.59	1.53
26	LA	1774	C	C2-N3	6.15	1.40	1.35
26	LA	1979	U	O4'-C1'	-6.15	1.33	1.41
26	LA	2233	U	O3'-P	-6.15	1.53	1.61
2	SA	408	A	C6-N6	-6.15	1.29	1.33
2	SA	812	G	C2'-C1'	-6.15	1.46	1.53
26	LA	2072	C	C4-C5	-6.15	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	609	A	C6-N1	6.15	1.39	1.35
2	SA	1092	A	C3'-C2'	-6.15	1.46	1.52
2	SA	1406	U	C3'-O3'	6.15	1.50	1.42
26	LA	1935	G	N7-C5	6.15	1.43	1.39
26	LA	2537	U	N1-C2	-6.15	1.33	1.38
26	LA	2548	U	O4'-C1'	-6.15	1.33	1.41
4	S2	16	C	P-O5'	6.15	1.65	1.59
25	LB	83	G	C1'-N9	-6.15	1.38	1.46
26	LA	1478	G	N9-C4	-6.15	1.33	1.38
26	LA	2493	U	C4-C5	6.15	1.49	1.43
26	LA	2600	A	O3'-P	-6.15	1.53	1.61
2	SA	748	G	N9-C8	6.14	1.42	1.37
2	SA	824	G	C5-C6	-6.14	1.36	1.42
2	SA	941	G	C2-N2	-6.14	1.28	1.34
26	LA	1690	A	C1'-N9	-6.14	1.38	1.46
26	LA	1819	A	P-O5'	-6.14	1.53	1.59
26	LA	1961	C	C2-N3	-6.14	1.30	1.35
26	LA	2679	A	N7-C5	6.14	1.43	1.39
2	SA	557	G	C5'-C4'	6.14	1.58	1.51
2	SA	1120	C	C4'-O4'	-6.14	1.37	1.45
2	SA	1206	G	O4'-C1'	-6.14	1.33	1.41
3	S1	39	U	C1'-N1	6.14	1.57	1.48
26	LA	468	G	N9-C8	-6.14	1.33	1.37
26	LA	584	C	C5'-C4'	6.14	1.58	1.51
26	LA	771	G	C2-N3	-6.14	1.27	1.32
26	LA	801	G	N3-C4	-6.14	1.31	1.35
26	LA	1145	C	N1-C6	6.14	1.40	1.37
26	LA	1660	G	C5-C4	-6.14	1.34	1.38
26	LA	1672	A	O4'-C1'	-6.14	1.33	1.41
26	LA	2223	G	N7-C5	-6.14	1.35	1.39
26	LA	2287	A	N9-C4	-6.14	1.34	1.37
26	LA	733	G	N9-C4	-6.14	1.33	1.38
26	LA	1158	C	O4'-C1'	-6.14	1.33	1.41
26	LA	1371	G	C3'-C2'	-6.14	1.46	1.52
26	LA	2446	G	C8-N7	-6.14	1.27	1.30
26	LA	2525	G	N3-C4	-6.14	1.31	1.35
26	LA	2765	A	N7-C5	-6.14	1.35	1.39
1	SS	23	GLU	CB-CG	6.14	1.63	1.52
2	SA	581	G	N7-C5	-6.14	1.35	1.39
2	SA	1111	A	C2'-C1'	-6.14	1.46	1.53
4	S2	65	G	C4'-O4'	6.14	1.53	1.45
26	LA	471	A	N3-C4	-6.14	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	571	U	N1-C2	6.14	1.44	1.38
26	LA	738	G	N7-C5	-6.14	1.35	1.39
26	LA	1364	G	C2-N2	-6.14	1.28	1.34
26	LA	1918	A	N9-C4	6.14	1.41	1.37
26	LA	2227	A	C6-N6	-6.14	1.29	1.33
26	LA	2441	U	P-O5'	-6.14	1.53	1.59
26	LA	2649	C	O3'-P	-6.14	1.53	1.61
26	LA	807	U	P-O5'	-6.14	1.53	1.59
26	LA	1433	A	C2'-C1'	-6.14	1.46	1.53
26	LA	1521	G	N9-C8	-6.14	1.33	1.37
26	LA	1809	A	N3-C4	6.14	1.38	1.34
26	LA	2874	C	N1-C6	6.14	1.40	1.37
2	SA	578	C	P-O5'	-6.14	1.53	1.59
2	SA	663	A	C6-N1	6.14	1.39	1.35
7	SG	102	TRP	N-CA	-6.14	1.34	1.46
25	LB	64	G	C5-C4	-6.14	1.34	1.38
26	LA	215	G	N3-C4	-6.14	1.31	1.35
26	LA	628	G	P-O5'	-6.14	1.53	1.59
26	LA	1441	G	C4'-C3'	-6.14	1.46	1.53
26	LA	1658	C	C4-C5	-6.14	1.38	1.43
26	LA	1671	U	C4-C5	-6.14	1.38	1.43
26	LA	1998	A	C8-N7	-6.14	1.27	1.31
26	LA	2424	C	C5'-C4'	6.14	1.58	1.51
26	LA	2825	G	C6-N1	-6.14	1.35	1.39
40	L4	50	GLU	CG-CD	6.14	1.61	1.51
26	LA	410	G	C2-N2	-6.13	1.28	1.34
26	LA	1322	A	N7-C5	-6.13	1.35	1.39
26	LA	2362	C	C4'-C3'	6.13	1.59	1.53
2	SA	286	C	C4-N4	-6.13	1.28	1.33
2	SA	455	G	C6-N1	6.13	1.43	1.39
26	LA	254	G	C3'-C2'	-6.13	1.46	1.52
26	LA	690	G	P-O5'	-6.13	1.53	1.59
26	LA	2600	A	C2-N3	6.13	1.39	1.33
2	SA	532	A	N9-C4	6.13	1.41	1.37
2	SA	662	U	C3'-O3'	6.13	1.50	1.42
2	SA	787	A	N7-C5	6.13	1.43	1.39
2	SA	898	G	O4'-C1'	-6.13	1.33	1.41
2	SA	1060	U	O3'-P	-6.13	1.53	1.61
4	S2	45	A	C1'-N9	-6.13	1.38	1.46
25	LB	94	A	C3'-O3'	6.13	1.50	1.42
26	LA	1218	G	C2'-C1'	-6.13	1.46	1.53
26	LA	1678	A	C2'-C1'	-6.13	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2100	G	N9-C4	6.13	1.42	1.38
26	LA	2191	A	C2-N3	6.13	1.39	1.33
2	SA	671	G	C4'-C3'	-6.13	1.46	1.53
26	LA	304	U	C2'-C1'	-6.13	1.46	1.53
2	SA	104	G	C5-C4	6.13	1.42	1.38
2	SA	343	U	O4'-C1'	-6.13	1.33	1.41
2	SA	411	A	C4'-C3'	6.13	1.59	1.53
2	SA	597	G	C5'-C4'	6.13	1.58	1.51
4	S2	48	U	C3'-C2'	6.13	1.59	1.52
25	LB	107	G	N9-C4	-6.13	1.33	1.38
26	LA	733	G	C2'-C1'	-6.13	1.46	1.53
26	LA	749	A	C1'-N9	-6.13	1.38	1.46
26	LA	1442	U	P-O5'	-6.13	1.53	1.59
26	LA	2157	G	N9-C4	6.13	1.42	1.38
26	LA	2432	A	N1-C2	-6.13	1.28	1.34
26	LA	2541	A	C8-N7	6.13	1.35	1.31
2	SA	116	A	P-O5'	-6.13	1.53	1.59
2	SA	457	G	C6-N1	-6.13	1.35	1.39
2	SA	583	A	O3'-P	-6.13	1.53	1.61
2	SA	1370	G	C4'-C3'	6.13	1.59	1.53
4	S2	40	C	N1-C2	-6.13	1.34	1.40
7	SG	145	GLU	CG-CD	6.13	1.61	1.51
26	LA	879	G	N1-C2	6.13	1.42	1.37
26	LA	1051	G	C2'-C1'	-6.13	1.46	1.53
26	LA	2571	U	C2'-C1'	-6.13	1.46	1.53
2	SA	511	C	O4'-C1'	6.12	1.49	1.41
2	SA	636	U	C4'-C3'	6.12	1.59	1.53
26	LA	1264	A	N9-C4	-6.12	1.34	1.37
26	LA	2049	G	C4'-C3'	-6.12	1.46	1.53
2	SA	379	C	C4'-C3'	-6.12	1.46	1.53
2	SA	631	C	C4-N4	6.12	1.39	1.33
2	SA	641	U	C5'-C4'	6.12	1.58	1.51
2	SA	704	A	C6-N6	6.12	1.38	1.33
2	SA	899	C	O3'-P	-6.12	1.53	1.61
25	LB	101	A	C3'-C2'	-6.12	1.46	1.52
26	LA	366	C	P-O5'	-6.12	1.53	1.59
26	LA	818	G	O3'-P	-6.12	1.53	1.61
26	LA	1319	C	C4-N4	-6.12	1.28	1.33
2	SA	53	A	C8-N7	-6.12	1.27	1.31
2	SA	351	G	C5'-C4'	6.12	1.58	1.51
2	SA	1088	G	N9-C8	-6.12	1.33	1.37
26	LA	501	A	C6-N6	6.12	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	668	A	N9-C8	-6.12	1.32	1.37
26	LA	1148	U	C4'-C3'	6.12	1.59	1.53
26	LA	1244	A	C2'-C1'	-6.12	1.46	1.53
26	LA	1246	A	P-O5'	-6.12	1.53	1.59
26	LA	1405	U	C2-N3	-6.12	1.33	1.37
26	LA	2037	A	C6-N1	-6.12	1.31	1.35
26	LA	2058	A	N9-C8	-6.12	1.32	1.37
26	LA	2291	U	O3'-P	-6.12	1.53	1.61
26	LA	2616	C	C5'-C4'	6.12	1.58	1.51
2	SA	1290	G	C2-N2	-6.12	1.28	1.34
2	SA	1294	G	C4'-C3'	6.12	1.59	1.53
2	SA	1348	U	C2-N3	-6.12	1.33	1.37
25	LB	63	C	C4-N4	6.12	1.39	1.33
26	LA	1128	G	N9-C4	6.12	1.42	1.38
26	LA	1168	G	N9-C4	-6.12	1.33	1.38
26	LA	2498	C	N1-C6	-6.12	1.33	1.37
26	LA	2578	G	C3'-C2'	-6.12	1.46	1.52
2	SA	310	G	C2-N3	6.12	1.37	1.32
2	SA	849	G	C3'-C2'	-6.12	1.46	1.52
2	SA	1233	G	C6-N1	-6.12	1.35	1.39
3	S1	20	G	N9-C4	6.12	1.42	1.38
19	SC	146	LYS	CA-CB	6.12	1.67	1.53
26	LA	346	A	C2-N3	-6.12	1.28	1.33
26	LA	1219	U	C3'-O3'	6.12	1.50	1.42
26	LA	1262	A	N9-C4	-6.12	1.34	1.37
26	LA	1476	U	C3'-O3'	6.12	1.50	1.42
26	LA	2380	C	O4'-C1'	6.12	1.49	1.41
26	LA	2470	G	C2-N2	-6.12	1.28	1.34
26	LA	2532	G	N1-C2	-6.12	1.32	1.37
26	LA	1779	U	C3'-O3'	-6.12	1.33	1.42
2	SA	119	A	C1'-N9	-6.12	1.38	1.46
2	SA	1273	C	C4-C5	-6.12	1.38	1.43
26	LA	174	U	C5'-C4'	6.12	1.58	1.51
26	LA	421	C	O4'-C1'	-6.12	1.33	1.41
26	LA	482	A	C4'-C3'	6.12	1.59	1.53
26	LA	1054	A	C8-N7	-6.12	1.27	1.31
26	LA	1639	C	N3-C4	-6.12	1.29	1.33
26	LA	2569	G	C5'-C4'	6.12	1.58	1.51
26	LA	2660	A	P-O5'	-6.12	1.53	1.59
2	SA	243	A	C2'-C1'	-6.11	1.46	1.53
2	SA	791	G	C2'-O2'	-6.11	1.33	1.41
26	LA	133	U	C3'-O3'	6.11	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	507	A	C2'-C1'	-6.11	1.46	1.53
26	LA	705	A	C8-N7	-6.11	1.27	1.31
26	LA	1039	A	C6-N6	6.11	1.38	1.33
26	LA	1041	G	O3'-P	-6.11	1.53	1.61
26	LA	1503	A	C6-N1	6.11	1.39	1.35
2	SA	1208	C	N1-C6	6.11	1.40	1.37
26	LA	25	U	N1-C2	-6.11	1.33	1.38
26	LA	768	G	N7-C5	-6.11	1.35	1.39
26	LA	2235	G	O3'-P	-6.11	1.53	1.61
2	SA	588	G	C2-N3	6.11	1.37	1.32
2	SA	602	A	N9-C8	-6.11	1.32	1.37
26	LA	1216	G	O4'-C1'	-6.11	1.33	1.41
26	LA	1248	G	N9-C8	6.11	1.42	1.37
26	LA	1320	C	N3-C4	-6.11	1.29	1.33
26	LA	2046	G	C8-N7	6.11	1.34	1.30
38	LE	179	ARG	CD-NE	6.11	1.56	1.46
2	SA	4	U	C2-O2	6.11	1.27	1.22
26	LA	445	C	C4-N4	-6.11	1.28	1.33
26	LA	705	A	C2'-C1'	-6.11	1.46	1.53
26	LA	965	C	C4-C5	-6.11	1.38	1.43
26	LA	1675	C	C4'-C3'	6.11	1.59	1.53
26	LA	1970	A	O4'-C1'	-6.11	1.33	1.41
26	LA	2130	U	C5'-C4'	6.11	1.58	1.51
26	LA	2795	C	N1-C6	-6.11	1.33	1.37
2	SA	656	G	P-O5'	-6.11	1.53	1.59
25	LB	51	G	C2-N2	-6.11	1.28	1.34
25	LB	54	G	C3'-C2'	-6.11	1.46	1.52
26	LA	478	A	C1'-N9	-6.11	1.38	1.46
26	LA	1941	C	C2-N3	-6.11	1.30	1.35
26	LA	2515	C	C5'-C4'	6.11	1.58	1.51
26	LA	2723	C	C5'-C4'	6.11	1.58	1.51
2	SA	364	A	C4'-C3'	6.11	1.59	1.53
2	SA	755	G	N7-C5	-6.11	1.35	1.39
2	SA	978	A	N7-C5	6.11	1.43	1.39
26	LA	698	C	C4-C5	-6.11	1.38	1.43
26	LA	731	C	N1-C2	-6.11	1.34	1.40
26	LA	1041	G	N7-C5	-6.11	1.35	1.39
2	SA	327	A	O4'-C1'	6.10	1.49	1.41
2	SA	728	A	P-O5'	-6.10	1.53	1.59
2	SA	1053	G	P-O5'	6.10	1.65	1.59
26	LA	910	A	C4'-C3'	-6.10	1.46	1.53
26	LA	52	A	C2'-C1'	-6.10	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	288	U	O4'-C1'	6.10	1.49	1.41
26	LA	488	G	C1'-N9	-6.10	1.38	1.46
26	LA	651	G	N9-C8	-6.10	1.33	1.37
26	LA	900	A	C5-C4	-6.10	1.34	1.38
26	LA	967	U	C5-C6	6.10	1.39	1.34
26	LA	1247	A	N3-C4	-6.10	1.31	1.34
26	LA	1747	U	C2'-C1'	-6.10	1.46	1.53
2	SA	550	G	C4'-C3'	-6.10	1.46	1.53
4	S2	64	G	C3'-O3'	6.10	1.50	1.42
26	LA	224	U	O5'-C5'	6.10	1.54	1.44
26	LA	530	G	N7-C5	-6.10	1.35	1.39
2	SA	96	U	C3'-O3'	6.10	1.50	1.42
2	SA	579	A	O3'-P	-6.10	1.53	1.61
2	SA	1333	A	O4'-C1'	6.10	1.49	1.41
26	LA	67	U	N1-C2	-6.10	1.33	1.38
26	LA	76	C	N1-C6	6.10	1.40	1.37
26	LA	310	A	C5'-C4'	6.10	1.58	1.51
26	LA	828	U	C1'-N1	-6.10	1.38	1.46
26	LA	1521	G	N3-C4	6.10	1.39	1.35
26	LA	1549	A	C5-C4	-6.10	1.34	1.38
2	SA	958	A	C6-N1	-6.10	1.31	1.35
2	SA	1207	G	O3'-P	-6.10	1.53	1.61
26	LA	1004	U	C2-N3	-6.10	1.33	1.37
26	LA	2330	G	C4'-O4'	-6.10	1.37	1.45
26	LA	2598	A	C6-N6	-6.10	1.29	1.33
2	SA	524	G	C2'-C1'	-6.10	1.46	1.53
2	SA	526	C	N1-C6	6.10	1.40	1.37
26	LA	363	G	N9-C8	-6.10	1.33	1.37
26	LA	977	G	O3'-P	-6.10	1.53	1.61
2	SA	383	A	C8-N7	-6.09	1.27	1.31
2	SA	781	A	C6-N6	6.09	1.38	1.33
25	LB	94	A	P-O5'	-6.09	1.53	1.59
26	LA	592	A	N9-C4	-6.09	1.34	1.37
26	LA	1237	A	C5'-C4'	6.09	1.58	1.51
26	LA	1600	C	C4'-C3'	-6.09	1.46	1.53
26	LA	2134	A	C6-N1	-6.09	1.31	1.35
26	LA	2592	G	C2'-C1'	-6.09	1.46	1.53
26	LA	2645	G	C2-N2	-6.09	1.28	1.34
2	SA	1493	A	P-O5'	6.09	1.65	1.59
25	LB	44	G	C1'-N9	-6.09	1.38	1.46
2	SA	141	G	C5'-C4'	-6.09	1.44	1.51
3	S1	30	U	P-O5'	6.09	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	15	G	N1-C2	-6.09	1.32	1.37
26	LA	702	U	N1-C6	-6.09	1.32	1.38
26	LA	983	A	C5-C6	-6.09	1.35	1.41
26	LA	1002	G	C6-N1	-6.09	1.35	1.39
26	LA	1214	A	C8-N7	6.09	1.35	1.31
26	LA	1255	U	P-O5'	-6.09	1.53	1.59
2	SA	1095	U	C5'-C4'	6.09	1.58	1.51
2	SA	1471	U	C4-C5	-6.09	1.38	1.43
10	SJ	72	ARG	CD-NE	6.09	1.56	1.46
26	LA	423	A	C3'-O3'	6.09	1.50	1.42
26	LA	2166	U	C5'-C4'	6.09	1.58	1.51
26	LA	2385	C	P-O5'	-6.09	1.53	1.59
2	SA	696	A	N7-C5	-6.09	1.35	1.39
26	LA	137	U	P-O5'	-6.09	1.53	1.59
26	LA	695	G	N9-C4	-6.09	1.33	1.38
26	LA	1168	G	C3'-C2'	6.09	1.59	1.52
26	LA	1240	U	C5-C6	-6.09	1.28	1.34
26	LA	1721	G	P-O5'	-6.09	1.53	1.59
2	SA	29	U	N3-C4	-6.09	1.32	1.38
2	SA	120	A	N3-C4	6.09	1.38	1.34
2	SA	198	G	N7-C5	-6.09	1.35	1.39
2	SA	339	C	O4'-C1'	6.09	1.49	1.41
3	S1	21	U	C4-C5	-6.09	1.38	1.43
26	LA	1091	G	C5-C4	-6.09	1.34	1.38
26	LA	1301	A	C5'-C4'	-6.09	1.44	1.51
26	LA	1339	G	P-O5'	-6.09	1.53	1.59
26	LA	1646	C	C2-N3	-6.09	1.30	1.35
26	LA	1682	G	N9-C8	-6.09	1.33	1.37
26	LA	1780	A	C1'-N9	-6.09	1.38	1.46
26	LA	1794	A	C2'-C1'	-6.09	1.46	1.53
26	LA	1919	A	C6-N1	-6.09	1.31	1.35
26	LA	2776	A	N7-C5	6.09	1.43	1.39
2	SA	242	G	N7-C5	-6.08	1.35	1.39
2	SA	688	G	C4'-C3'	6.08	1.59	1.53
2	SA	1318	A	C6-N1	6.08	1.39	1.35
25	LB	22	U	C1'-N1	6.08	1.57	1.48
26	LA	1087	G	N7-C5	6.08	1.43	1.39
26	LA	1663	G	C2-N3	6.08	1.37	1.32
26	LA	1953	A	C2'-C1'	-6.08	1.46	1.53
2	SA	733	G	O3'-P	-6.08	1.53	1.61
2	SA	763	G	C5'-C4'	6.08	1.58	1.51
2	SA	964	A	C3'-C2'	-6.08	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1493	A	O3'-P	-6.08	1.53	1.61
2	SA	1499	A	C5-C4	-6.08	1.34	1.38
16	SP	35	ARG	CD-NE	6.08	1.56	1.46
23	SR	42	ARG	CD-NE	6.08	1.56	1.46
26	LA	494	G	O4'-C1'	6.08	1.49	1.41
26	LA	1171	G	C1'-N9	6.08	1.57	1.48
26	LA	1202	G	C2'-C1'	-6.08	1.46	1.53
26	LA	1280	G	C5-C4	-6.08	1.34	1.38
26	LA	2029	G	C2-N3	-6.08	1.27	1.32
26	LA	2172	U	C3'-O3'	6.08	1.50	1.42
2	SA	1106	G	N7-C5	-6.08	1.35	1.39
2	SA	1123	U	C2'-C1'	-6.08	1.46	1.53
26	LA	92	U	C2-N3	6.08	1.42	1.37
26	LA	993	G	C8-N7	-6.08	1.27	1.30
26	LA	1538	G	N9-C8	-6.08	1.33	1.37
26	LA	2425	A	O4'-C1'	-6.08	1.33	1.41
26	LA	2559	C	C5-C6	-6.08	1.29	1.34
27	LD	219	VAL	CA-CB	-6.08	1.42	1.54
2	SA	13	U	N3-C4	-6.08	1.32	1.38
25	LB	37	C	C4'-C3'	6.08	1.59	1.53
25	LB	97	C	N1-C2	-6.08	1.34	1.40
26	LA	1004	U	C2'-C1'	-6.08	1.46	1.53
26	LA	1086	A	C5'-C4'	6.08	1.58	1.51
2	SA	31	G	C4'-C3'	6.08	1.59	1.53
2	SA	209	U	N1-C2	6.08	1.44	1.38
2	SA	780	A	C8-N7	-6.08	1.27	1.31
3	S1	57	C	N1-C6	6.08	1.40	1.37
25	LB	104	A	C2'-C1'	-6.08	1.46	1.53
26	LA	140	C	C5-C6	-6.08	1.29	1.34
26	LA	771	G	C8-N7	6.08	1.34	1.30
26	LA	1928	A	C5'-C4'	6.08	1.58	1.51
26	LA	2454	G	N3-C4	-6.08	1.31	1.35
26	LA	2483	C	N3-C4	-6.08	1.29	1.33
2	SA	270	A	C5-C4	-6.08	1.34	1.38
26	LA	800	A	C1'-N9	-6.08	1.38	1.46
26	LA	994	C	C2'-C1'	-6.08	1.46	1.53
26	LA	1675	C	C3'-C2'	-6.08	1.46	1.52
2	SA	266	G	C4'-O4'	-6.08	1.37	1.45
2	SA	914	A	N9-C4	-6.08	1.34	1.37
26	LA	276	U	C2'-C1'	-6.08	1.46	1.53
26	LA	373	U	P-O5'	-6.08	1.53	1.59
26	LA	401	A	C4'-C3'	6.08	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	525	U	C2'-C1'	-6.08	1.46	1.53
26	LA	707	G	C6-N1	-6.08	1.35	1.39
26	LA	796	C	C2'-C1'	-6.08	1.46	1.53
26	LA	857	G	C2-N2	-6.08	1.28	1.34
26	LA	1019	U	N3-C4	-6.08	1.32	1.38
26	LA	2311	A	C6-N6	6.08	1.38	1.33
2	SA	1473	G	C3'-O3'	6.07	1.50	1.42
26	LA	85	G	C4'-O4'	-6.07	1.37	1.45
26	LA	1039	A	N7-C5	6.07	1.42	1.39
26	LA	1165	A	C3'-C2'	-6.07	1.46	1.52
2	SA	813	U	O5'-C5'	6.07	1.54	1.44
26	LA	1194	A	C2-N3	6.07	1.39	1.33
26	LA	2899	A	C2'-C1'	-6.07	1.46	1.53
2	SA	255	G	C4'-C3'	-6.07	1.46	1.53
2	SA	293	G	N7-C5	-6.07	1.35	1.39
2	SA	349	A	C6-N1	-6.07	1.31	1.35
2	SA	656	G	C5-C4	-6.07	1.34	1.38
2	SA	697	U	N1-C6	-6.07	1.32	1.38
26	LA	243	U	P-O5'	6.07	1.65	1.59
26	LA	1313	U	C4'-C3'	6.07	1.59	1.53
26	LA	1366	A	C8-N7	6.07	1.35	1.31
26	LA	1442	U	C5'-C4'	6.07	1.58	1.51
26	LA	1616	A	N9-C4	-6.07	1.34	1.37
26	LA	1982	U	P-O5'	-6.07	1.53	1.59
26	LA	2330	G	N9-C4	-6.07	1.33	1.38
2	SA	55	A	O4'-C1'	6.07	1.49	1.41
2	SA	633	G	N9-C4	6.07	1.42	1.38
26	LA	982	C	C5'-C4'	6.07	1.58	1.51
26	LA	1907	G	C8-N7	6.07	1.34	1.30
2	SA	29	U	C5'-C4'	6.07	1.58	1.51
2	SA	621	A	C1'-N9	-6.07	1.38	1.46
2	SA	1494	G	C5-C6	-6.07	1.36	1.42
26	LA	71	A	C4'-C3'	-6.07	1.46	1.53
26	LA	282	A	N7-C5	-6.07	1.35	1.39
26	LA	451	U	N1-C6	-6.07	1.32	1.38
26	LA	522	A	P-O5'	-6.07	1.53	1.59
26	LA	655	A	C4'-C3'	6.07	1.59	1.53
26	LA	772	C	C2'-C1'	-6.07	1.46	1.53
26	LA	1325	U	P-O5'	-6.07	1.53	1.59
26	LA	1578	U	O4'-C1'	-6.07	1.33	1.41
26	LA	2017	U	C4'-O4'	-6.07	1.37	1.45
26	LA	2249	U	C1'-N1	-6.07	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2412	A	C5-C4	-6.07	1.34	1.38
26	LA	2724	U	C2-N3	-6.07	1.33	1.37
2	SA	394	G	O3'-P	-6.07	1.53	1.61
2	SA	540	G	N3-C4	-6.07	1.31	1.35
2	SA	776	G	C5'-C4'	6.07	1.58	1.51
2	SA	958	A	P-O5'	-6.07	1.53	1.59
2	SA	1190	G	C2-N2	-6.07	1.28	1.34
26	LA	207	A	C5'-C4'	6.07	1.58	1.51
26	LA	771	G	C1'-N9	-6.07	1.38	1.46
26	LA	803	U	N3-C4	6.07	1.44	1.38
26	LA	891	G	C3'-O3'	6.07	1.50	1.42
26	LA	1373	A	C5-C4	-6.07	1.34	1.38
26	LA	1387	A	N9-C8	6.07	1.42	1.37
26	LA	1417	C	N3-C4	6.07	1.38	1.33
26	LA	1670	C	C4-C5	-6.07	1.38	1.43
26	LA	1987	A	C5-C6	-6.07	1.35	1.41
26	LA	2461	A	C2'-C1'	-6.07	1.46	1.53
26	LA	2687	U	N1-C2	-6.07	1.33	1.38
26	LA	2690	U	C4'-C3'	6.07	1.59	1.53
2	SA	215	C	C3'-O3'	6.06	1.50	1.42
2	SA	1112	C	O3'-P	6.06	1.68	1.61
2	SA	1364	U	C3'-O3'	6.06	1.50	1.42
26	LA	1046	A	C5-C4	6.06	1.43	1.38
26	LA	2215	C	C4-N4	-6.06	1.28	1.33
2	SA	402	G	C5'-C4'	6.06	1.58	1.51
2	SA	542	G	C2-N2	-6.06	1.28	1.34
2	SA	706	A	P-O5'	-6.06	1.53	1.59
2	SA	1013	G	C2'-C1'	-6.06	1.46	1.53
2	SA	1187	G	N7-C5	-6.06	1.35	1.39
26	LA	423	A	N7-C5	-6.06	1.35	1.39
26	LA	848	C	O3'-P	-6.06	1.53	1.61
26	LA	1451	C	C4'-C3'	-6.06	1.46	1.53
26	LA	2813	A	C6-N6	6.06	1.38	1.33
2	SA	370	C	C5'-C4'	6.06	1.58	1.51
2	SA	576	C	O3'-P	-6.06	1.53	1.61
2	SA	676	A	C5-C4	-6.06	1.34	1.38
2	SA	1290	G	C3'-O3'	6.06	1.50	1.42
2	SA	1478	U	N3-C4	-6.06	1.32	1.38
2	SA	1541	U	C2-N3	-6.06	1.33	1.37
26	LA	780	G	C4'-C3'	-6.06	1.46	1.53
26	LA	1316	U	C5'-C4'	6.06	1.58	1.51
44	LF	158	PHE	CB-CG	-6.06	1.41	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	685	G	O4'-C1'	6.06	1.49	1.41
2	SA	847	G	C5'-C4'	6.06	1.58	1.51
2	SA	953	G	C2-N3	6.06	1.37	1.32
26	LA	1496	A	N9-C4	-6.06	1.34	1.37
26	LA	2170	A	C5'-C4'	6.06	1.58	1.51
2	SA	70	U	C5'-C4'	6.06	1.58	1.51
2	SA	314	C	C4-C5	-6.06	1.38	1.43
2	SA	473	U	O4'-C1'	6.06	1.49	1.41
2	SA	614	C	C4-N4	-6.06	1.28	1.33
18	SB	103	TRP	CB-CG	6.06	1.61	1.50
26	LA	249	C	C4'-C3'	-6.06	1.46	1.53
26	LA	349	U	C2'-C1'	-6.06	1.46	1.53
26	LA	431	U	N1-C6	6.06	1.43	1.38
26	LA	801	G	C5-C4	-6.06	1.34	1.38
26	LA	1164	C	C4'-C3'	-6.06	1.46	1.53
26	LA	338	G	C5-C4	-6.06	1.34	1.38
2	SA	16	A	C6-N1	-6.05	1.31	1.35
2	SA	76	G	C5'-C4'	6.05	1.58	1.51
2	SA	264	C	C5'-C4'	6.05	1.58	1.51
2	SA	1533	C	P-O5'	-6.05	1.53	1.59
4	S2	4	G	C6-N1	-6.05	1.35	1.39
26	LA	919	U	C4'-O4'	-6.05	1.37	1.45
26	LA	1850	G	N3-C4	-6.05	1.31	1.35
26	LA	1905	C	N3-C4	6.05	1.38	1.33
26	LA	2259	U	P-O5'	-6.05	1.53	1.59
26	LA	2291	U	C3'-O3'	6.05	1.50	1.42
26	LA	2682	A	C5'-C4'	6.05	1.58	1.51
26	LA	2713	U	N1-C6	6.05	1.43	1.38
26	LA	2786	U	N3-C4	-6.05	1.33	1.38
4	S2	32	G	O4'-C1'	-6.05	1.33	1.41
26	LA	1020	A	C3'-O3'	6.05	1.50	1.42
26	LA	1317	G	C8-N7	6.05	1.34	1.30
2	SA	135	C	C5-C6	-6.05	1.29	1.34
2	SA	449	G	C8-N7	-6.05	1.27	1.30
26	LA	270	A	C8-N7	6.05	1.35	1.31
26	LA	943	A	P-O5'	-6.05	1.53	1.59
26	LA	988	A	C2'-C1'	-6.05	1.46	1.53
26	LA	1039	A	C8-N7	-6.05	1.27	1.31
26	LA	1264	A	C4'-C3'	-6.05	1.46	1.53
26	LA	2487	G	C2'-C1'	-6.05	1.46	1.53
26	LA	2736	A	C5-C4	6.05	1.43	1.38
26	LA	2799	A	C2'-C1'	6.05	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	217	C	C3'-O3'	6.05	1.50	1.42
2	SA	660	C	C4-N4	-6.05	1.28	1.33
2	SA	817	C	C2'-C1'	-6.05	1.46	1.53
2	SA	1165	U	P-O5'	-6.05	1.53	1.59
26	LA	1073	A	C5-C4	6.05	1.43	1.38
26	LA	1627	G	N9-C8	-6.05	1.33	1.37
26	LA	1836	C	C4'-O4'	-6.05	1.37	1.45
26	LA	2389	G	C2-N2	-6.05	1.28	1.34
2	SA	450	G	C8-N7	6.05	1.34	1.30
2	SA	1342	C	C5-C6	6.05	1.39	1.34
2	SA	1488	G	C3'-C2'	-6.05	1.46	1.52
26	LA	809	G	N9-C8	6.05	1.42	1.37
26	LA	881	G	C2-N3	6.05	1.37	1.32
26	LA	1215	G	N3-C4	6.05	1.39	1.35
26	LA	2593	U	N3-C4	6.05	1.43	1.38
2	SA	700	G	C2-N2	-6.05	1.28	1.34
2	SA	1052	U	C4-C5	-6.05	1.38	1.43
2	SA	1271	A	C5-C4	6.05	1.43	1.38
2	SA	1452	C	C4-C5	6.05	1.47	1.43
26	LA	1095	A	N9-C4	-6.05	1.34	1.37
26	LA	2392	A	O3'-P	-6.05	1.53	1.61
26	LA	2699	C	C2-N3	6.05	1.40	1.35
2	SA	441	A	C2-N3	6.04	1.39	1.33
2	SA	486	U	C4'-O4'	6.04	1.53	1.45
2	SA	1075	U	N1-C6	-6.04	1.32	1.38
4	S2	47	A	C5-C4	6.04	1.43	1.38
26	LA	504	A	C6-N6	6.04	1.38	1.33
26	LA	1211	C	N1-C2	-6.04	1.34	1.40
26	LA	1428	C	C4'-O4'	-6.04	1.37	1.45
26	LA	2160	C	C4'-O4'	6.04	1.53	1.45
2	SA	117	G	C2-N2	-6.04	1.28	1.34
2	SA	158	G	C2'-C1'	-6.04	1.46	1.53
2	SA	354	G	N1-C2	-6.04	1.32	1.37
2	SA	740	U	C2'-O2'	-6.04	1.33	1.41
2	SA	1396	A	C5'-C4'	6.04	1.58	1.51
26	LA	616	A	C6-N1	6.04	1.39	1.35
26	LA	1435	G	C8-N7	6.04	1.34	1.30
26	LA	1651	G	N9-C8	-6.04	1.33	1.37
26	LA	1773	A	N9-C8	-6.04	1.32	1.37
26	LA	2162	G	N3-C4	-6.04	1.31	1.35
26	LA	2224	G	O4'-C1'	-6.04	1.33	1.41
2	SA	189	A	N9-C8	-6.04	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	423	G	O3'-P	-6.04	1.53	1.61
2	SA	782	A	O3'-P	-6.04	1.53	1.61
2	SA	1116	U	C4-C5	-6.04	1.38	1.43
26	LA	345	A	C2'-C1'	-6.04	1.46	1.53
26	LA	871	U	C4'-O4'	6.04	1.53	1.45
26	LA	1133	A	C5-C4	-6.04	1.34	1.38
26	LA	1534	U	C4'-C3'	6.04	1.59	1.53
26	LA	2101	A	N3-C4	6.04	1.38	1.34
2	SA	95	C	C4-C5	6.04	1.47	1.43
2	SA	746	A	C8-N7	-6.04	1.27	1.31
26	LA	2451	A	C6-N1	6.04	1.39	1.35
2	SA	408	A	C6-N1	6.04	1.39	1.35
2	SA	936	C	P-O5'	6.04	1.65	1.59
26	LA	132	G	C5-C4	-6.04	1.34	1.38
26	LA	248	G	O3'-P	-6.04	1.53	1.61
26	LA	755	U	C2'-C1'	-6.04	1.46	1.53
26	LA	1376	C	C5'-C4'	6.04	1.58	1.51
26	LA	1491	G	C5-C4	6.04	1.42	1.38
26	LA	1618	C	P-O5'	-6.04	1.53	1.59
26	LA	2124	G	C4'-C3'	6.04	1.59	1.53
26	LA	2207	C	C4'-C3'	6.04	1.59	1.53
2	SA	601	G	C5-C6	6.04	1.48	1.42
21	SE	99	SER	CB-OG	6.04	1.50	1.42
26	LA	1217	U	C4'-O4'	-6.04	1.37	1.45
26	LA	2509	G	C5'-C4'	6.04	1.58	1.51
26	LA	2680	U	C1'-N1	-6.04	1.38	1.46
26	LA	2837	A	N7-C5	6.04	1.42	1.39
2	SA	394	G	C8-N7	6.04	1.34	1.30
2	SA	570	G	C8-N7	-6.04	1.27	1.30
2	SA	926	G	C4'-O4'	6.04	1.53	1.45
2	SA	1243	C	C2'-C1'	6.04	1.59	1.53
26	LA	335	C	C4-C5	-6.04	1.38	1.43
26	LA	1112	G	C5-C4	6.04	1.42	1.38
26	LA	1416	G	C5-C4	6.04	1.42	1.38
26	LA	2042	A	C2'-C1'	-6.04	1.46	1.53
26	LA	2279	G	C5'-C4'	6.04	1.58	1.51
26	LA	2382	G	C5'-C4'	6.04	1.58	1.51
47	LJ	124	ARG	CZ-NH1	6.04	1.40	1.33
2	SA	814	A	C5-C4	6.03	1.43	1.38
2	SA	1404	C	C4-N4	-6.03	1.28	1.33
26	LA	33	C	C3'-C2'	-6.03	1.46	1.52
26	LA	148	U	P-O5'	-6.03	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	181	A	P-O5'	6.03	1.65	1.59
26	LA	655	A	C8-N7	-6.03	1.27	1.31
26	LA	984	A	C6-N1	-6.03	1.31	1.35
26	LA	1068	G	N1-C2	-6.03	1.32	1.37
26	LA	2865	U	C4-C5	6.03	1.49	1.43
2	SA	362	G	C2'-C1'	-6.03	1.46	1.53
2	SA	426	U	C2-N3	-6.03	1.33	1.37
2	SA	1118	U	C1'-N1	6.03	1.57	1.48
2	SA	1316	G	C4'-C3'	-6.03	1.46	1.53
26	LA	2874	C	C3'-C2'	6.03	1.59	1.52
2	SA	172	A	N7-C5	-6.03	1.35	1.39
2	SA	176	C	C5-C6	6.03	1.39	1.34
2	SA	383	A	C5'-C4'	6.03	1.58	1.51
2	SA	414	A	N9-C4	6.03	1.41	1.37
2	SA	1404	C	C4'-C3'	-6.03	1.46	1.53
26	LA	27	G	C2'-C1'	-6.03	1.46	1.53
26	LA	410	G	C6-O6	-6.03	1.18	1.24
26	LA	733	G	C3'-C2'	-6.03	1.46	1.52
26	LA	782	A	C2-N3	-6.03	1.28	1.33
26	LA	2773	C	N3-C4	-6.03	1.29	1.33
26	LA	1000	A	N9-C8	-6.03	1.32	1.37
26	LA	2826	A	N9-C4	-6.03	1.34	1.37
2	SA	381	C	N1-C2	6.03	1.46	1.40
2	SA	907	A	C1'-N9	-6.03	1.38	1.46
2	SA	1411	C	P-O5'	-6.03	1.53	1.59
26	LA	1419	A	C4'-O4'	-6.03	1.37	1.45
26	LA	1604	C	O3'-P	-6.03	1.53	1.61
26	LA	1874	C	P-O5'	-6.03	1.53	1.59
26	LA	2166	U	C4'-C3'	6.03	1.59	1.53
26	LA	2528	U	O3'-P	-6.03	1.53	1.61
2	SA	369	G	N9-C8	-6.03	1.33	1.37
25	LB	46	A	C4'-C3'	6.03	1.59	1.53
26	LA	499	U	N3-C4	-6.03	1.33	1.38
26	LA	590	A	C6-N1	-6.03	1.31	1.35
2	SA	310	G	C2'-C1'	-6.02	1.46	1.53
2	SA	772	U	C2'-C1'	-6.02	1.46	1.53
2	SA	816	A	C8-N7	-6.02	1.27	1.31
2	SA	879	C	C2-N3	-6.02	1.30	1.35
2	SA	1007	U	C5'-C4'	6.02	1.58	1.51
26	LA	2182	U	C2-N3	-6.02	1.33	1.37
26	LA	2483	C	N1-C2	-6.02	1.34	1.40
26	LA	2535	G	C5-C4	-6.02	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	37	U	C2-N3	-6.02	1.33	1.37
2	SA	65	A	C3'-O3'	6.02	1.50	1.42
2	SA	1035	A	C5'-C4'	6.02	1.58	1.51
4	S2	10	G	N9-C8	6.02	1.42	1.37
25	LB	73	A	N3-C4	-6.02	1.31	1.34
26	LA	613	A	C2'-C1'	-6.02	1.46	1.53
26	LA	1011	G	N1-C2	6.02	1.42	1.37
26	LA	1521	G	C5-C4	-6.02	1.34	1.38
26	LA	1526	C	C3'-C2'	6.02	1.59	1.52
26	LA	1675	C	C4-N4	-6.02	1.28	1.33
26	LA	1682	G	C5-C4	-6.02	1.34	1.38
26	LA	2673	G	P-O5'	-6.02	1.53	1.59
26	LA	2860	A	C5'-C4'	6.02	1.58	1.51
2	SA	1487	G	C5'-C4'	-6.02	1.44	1.51
26	LA	2264	C	N1-C6	-6.02	1.33	1.37
2	SA	671	G	C5-C4	-6.02	1.34	1.38
2	SA	802	A	N1-C2	6.02	1.39	1.34
26	LA	4	U	P-O5'	-6.02	1.53	1.59
26	LA	355	U	N3-C4	6.02	1.43	1.38
26	LA	425	G	P-O5'	-6.02	1.53	1.59
26	LA	1046	A	C5'-C4'	6.02	1.58	1.51
26	LA	1622	G	O5'-C5'	6.02	1.54	1.44
26	LA	2485	G	C6-N1	6.02	1.43	1.39
2	SA	145	G	C2-N2	-6.02	1.28	1.34
2	SA	326	G	O3'-P	-6.02	1.53	1.61
26	LA	239	C	C4-N4	-6.02	1.28	1.33
26	LA	977	G	C5-C4	-6.02	1.34	1.38
26	LA	119	A	C6-N1	-6.02	1.31	1.35
26	LA	1074	G	C2-N3	-6.02	1.27	1.32
2	SA	698	G	C5-C4	-6.01	1.34	1.38
2	SA	890	G	N7-C5	-6.01	1.35	1.39
2	SA	1113	C	C2'-C1'	-6.01	1.46	1.53
2	SA	1158	C	N1-C2	6.01	1.46	1.40
26	LA	676	A	C5-C4	-6.01	1.34	1.38
26	LA	1595	C	O3'-P	-6.01	1.53	1.61
26	LA	1834	U	C3'-C2'	-6.01	1.46	1.52
26	LA	2148	G	N9-C4	6.01	1.42	1.38
26	LA	964	C	C3'-C2'	-6.01	1.46	1.52
26	LA	2304	G	N7-C5	6.01	1.42	1.39
26	LA	2839	G	N9-C8	-6.01	1.33	1.37
2	SA	26	A	N3-C4	-6.01	1.31	1.34
2	SA	1482	G	C5'-C4'	6.01	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	48	C	C4'-O4'	6.01	1.53	1.45
26	LA	51	G	C5'-C4'	6.01	1.58	1.51
26	LA	117	G	C3'-C2'	-6.01	1.46	1.52
26	LA	247	G	C2-N2	-6.01	1.28	1.34
26	LA	336	C	C4'-O4'	6.01	1.53	1.45
26	LA	1069	A	C4'-C3'	-6.01	1.46	1.53
26	LA	1524	G	C6-N1	-6.01	1.35	1.39
26	LA	2083	G	N1-C2	-6.01	1.32	1.37
26	LA	2553	G	C4'-O4'	-6.01	1.37	1.45
2	SA	304	U	C2-N3	-6.01	1.33	1.37
2	SA	577	G	O4'-C1'	-6.01	1.33	1.41
2	SA	1072	G	C2'-O2'	-6.01	1.33	1.41
2	SA	1426	G	C3'-C2'	-6.01	1.46	1.52
4	S2	40	C	C4-C5	-6.01	1.38	1.43
26	LA	93	G	C5-C4	6.01	1.42	1.38
26	LA	1174	U	C3'-O3'	6.01	1.50	1.42
26	LA	1538	G	P-O5'	6.01	1.65	1.59
26	LA	1541	C	C2-N3	-6.01	1.30	1.35
26	LA	2881	U	C5'-C4'	6.01	1.58	1.51
2	SA	204	G	N7-C5	-6.01	1.35	1.39
2	SA	1000	A	C6-N1	-6.01	1.31	1.35
2	SA	1058	G	N1-C2	6.01	1.42	1.37
2	SA	1437	A	O3'-P	-6.01	1.53	1.61
26	LA	1218	G	C3'-C2'	6.01	1.59	1.52
26	LA	1494	A	N9-C4	6.01	1.41	1.37
26	LA	1954	G	N1-C2	-6.01	1.32	1.37
2	SA	102	G	O3'-P	-6.01	1.53	1.61
4	S2	29	C	N1-C6	-6.01	1.33	1.37
26	LA	73	A	N3-C4	-6.01	1.31	1.34
26	LA	922	C	C2'-C1'	-6.01	1.46	1.53
26	LA	1163	G	C3'-C2'	-6.01	1.46	1.52
26	LA	1570	A	N9-C8	-6.01	1.32	1.37
26	LA	1707	G	P-O5'	-6.01	1.53	1.59
26	LA	2169	A	O3'-P	-6.01	1.53	1.61
2	SA	1207	G	C2-N2	-6.00	1.28	1.34
26	LA	1148	U	C5-C6	6.00	1.39	1.34
26	LA	1401	G	C5-C4	-6.00	1.34	1.38
26	LA	2563	U	C3'-O3'	6.00	1.50	1.42
2	SA	451	A	C5'-C4'	6.00	1.58	1.51
2	SA	1163	A	C5-C4	-6.00	1.34	1.38
26	LA	141	G	N7-C5	6.00	1.42	1.39
26	LA	497	A	C1'-N9	-6.00	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	634	C	C4-C5	-6.00	1.38	1.43
26	LA	652	U	C5-C6	-6.00	1.28	1.34
26	LA	1214	A	N3-C4	-6.00	1.31	1.34
26	LA	1921	G	C5'-C4'	6.00	1.58	1.51
2	SA	253	A	C6-N6	-6.00	1.29	1.33
2	SA	760	G	N7-C5	-6.00	1.35	1.39
2	SA	765	G	N1-C2	-6.00	1.32	1.37
2	SA	786	G	C4'-C3'	-6.00	1.46	1.52
2	SA	799	G	C2-N3	-6.00	1.27	1.32
2	SA	1228	C	C4'-C3'	-6.00	1.46	1.52
4	S2	59	A	N3-C4	-6.00	1.31	1.34
13	SM	62	PHE	CB-CG	-6.00	1.41	1.51
26	LA	74	A	C5-C6	-6.00	1.35	1.41
26	LA	125	A	C8-N7	6.00	1.35	1.31
26	LA	777	G	N1-C2	-6.00	1.32	1.37
26	LA	1992	G	N3-C4	-6.00	1.31	1.35
26	LA	2620	C	N3-C4	6.00	1.38	1.33
26	LA	2784	U	P-O5'	-6.00	1.53	1.59
2	SA	868	C	C5'-C4'	6.00	1.58	1.51
2	SA	930	C	C3'-O3'	6.00	1.50	1.42
2	SA	1116	U	C5'-C4'	6.00	1.58	1.51
2	SA	1196	A	C5'-C4'	6.00	1.58	1.51
2	SA	1297	G	N3-C4	6.00	1.39	1.35
26	LA	841	G	N9-C4	-6.00	1.33	1.38
26	LA	1021	A	N9-C8	-6.00	1.32	1.37
26	LA	2866	U	P-O5'	-6.00	1.53	1.59
2	SA	905	U	C4-C5	-6.00	1.38	1.43
2	SA	924	C	C4'-O4'	6.00	1.53	1.45
26	LA	716	A	C5-C4	-6.00	1.34	1.38
26	LA	794	A	C4'-O4'	-6.00	1.37	1.45
26	LA	845	A	N1-C2	-6.00	1.28	1.34
26	LA	891	G	N3-C4	6.00	1.39	1.35
26	LA	933	A	C6-N6	6.00	1.38	1.33
26	LA	954	G	N9-C4	-6.00	1.33	1.38
26	LA	1018	U	C2'-C1'	-6.00	1.46	1.53
26	LA	1779	U	C4'-O4'	-6.00	1.37	1.45
26	LA	2643	G	N7-C5	-6.00	1.35	1.39
44	LF	49	ARG	CZ-NH2	-6.00	1.25	1.33
2	SA	68	G	C2-N2	-6.00	1.28	1.34
2	SA	293	G	O3'-P	-6.00	1.53	1.61
26	LA	204	A	C4'-C3'	6.00	1.59	1.53
26	LA	407	G	N9-C8	-6.00	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	507	A	N9-C4	-6.00	1.34	1.37
26	LA	629	G	N1-C2	-6.00	1.32	1.37
26	LA	2751	G	C4'-C3'	6.00	1.59	1.53
26	LA	719	C	P-O5'	-6.00	1.53	1.59
2	SA	844	G	C2-N2	-5.99	1.28	1.34
3	S1	50	U	C4'-C3'	5.99	1.59	1.53
4	S2	60	A	N7-C5	-5.99	1.35	1.39
25	LB	6	G	C5'-C4'	5.99	1.58	1.51
26	LA	282	A	C6-N6	-5.99	1.29	1.33
26	LA	293	U	C5-C6	-5.99	1.28	1.34
26	LA	712	G	N3-C4	5.99	1.39	1.35
26	LA	2226	C	C4'-O4'	-5.99	1.37	1.45
26	LA	2775	G	C6-N1	5.99	1.43	1.39
2	SA	938	A	C3'-C2'	-5.99	1.46	1.52
26	LA	1162	G	C8-N7	-5.99	1.27	1.30
26	LA	2846	G	C5-C6	-5.99	1.36	1.42
2	SA	755	G	C8-N7	-5.99	1.27	1.30
2	SA	1139	G	N7-C5	-5.99	1.35	1.39
2	SA	1163	A	C3'-C2'	5.99	1.59	1.52
2	SA	1498	U	C4'-C3'	-5.99	1.46	1.52
25	LB	64	G	C6-N1	5.99	1.43	1.39
26	LA	268	C	P-O5'	-5.99	1.53	1.59
26	LA	564	C	P-O5'	-5.99	1.53	1.59
26	LA	669	G	C2-N3	-5.99	1.27	1.32
26	LA	764	A	N3-C4	-5.99	1.31	1.34
26	LA	1046	A	N7-C5	5.99	1.42	1.39
26	LA	1841	U	C3'-C2'	-5.99	1.46	1.52
26	LA	2506	U	P-O5'	5.99	1.65	1.59
26	LA	2858	C	C2-N3	5.99	1.40	1.35
2	SA	326	G	C3'-O3'	5.99	1.50	1.42
26	LA	58	G	C5'-C4'	-5.99	1.44	1.51
26	LA	215	G	C5-C6	-5.99	1.36	1.42
26	LA	450	G	C5'-C4'	5.99	1.58	1.51
26	LA	628	G	N3-C4	-5.99	1.31	1.35
26	LA	1459	G	C5-C4	5.99	1.42	1.38
26	LA	1465	G	O3'-P	-5.99	1.53	1.61
26	LA	1548	A	C5'-C4'	5.99	1.58	1.51
26	LA	1597	A	N7-C5	-5.99	1.35	1.39
26	LA	1924	C	P-O5'	-5.99	1.53	1.59
56	LR	1	SER	N-CA	5.99	1.58	1.46
26	LA	334	C	C2-N3	-5.99	1.30	1.35
26	LA	909	A	N9-C4	-5.99	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	928	A	N3-C4	-5.99	1.31	1.34
2	SA	525	C	C5'-C4'	5.99	1.58	1.51
2	SA	940	C	O3'-P	-5.99	1.53	1.61
2	SA	1524	C	C4-C5	-5.99	1.38	1.43
26	LA	125	A	C6-N1	-5.99	1.31	1.35
26	LA	215	G	N9-C4	-5.99	1.33	1.38
26	LA	266	G	C5'-C4'	5.99	1.58	1.51
26	LA	1374	G	C5-C6	-5.99	1.36	1.42
26	LA	2209	G	C5-C4	5.99	1.42	1.38
2	SA	883	C	C1'-N1	-5.98	1.38	1.46
4	S2	16	C	C2'-C1'	-5.98	1.46	1.53
25	LB	107	G	C2-N3	5.98	1.37	1.32
26	LA	68	G	N7-C5	5.98	1.42	1.39
26	LA	792	A	N9-C4	-5.98	1.34	1.37
26	LA	1127	A	C6-N1	-5.98	1.31	1.35
26	LA	2825	G	N9-C8	-5.98	1.33	1.37
34	L0	59	GLU	CB-CG	5.98	1.63	1.52
2	SA	444	G	C2-N2	-5.98	1.28	1.34
2	SA	928	G	N9-C8	-5.98	1.33	1.37
2	SA	1132	C	P-O5'	-5.98	1.53	1.59
7	SG	43	TYR	CE2-CZ	-5.98	1.30	1.38
24	S3	476	PHE	CG-CD1	5.98	1.47	1.38
25	LB	78	A	C6-N1	-5.98	1.31	1.35
26	LA	36	G	C5-C6	5.98	1.48	1.42
26	LA	597	G	C6-N1	5.98	1.43	1.39
26	LA	882	G	P-O5'	5.98	1.65	1.59
26	LA	2085	U	C2-N3	-5.98	1.33	1.37
26	LA	2379	G	C2-N3	-5.98	1.27	1.32
2	SA	170	U	N1-C6	-5.98	1.32	1.38
7	SG	145	GLU	CD-OE2	5.98	1.32	1.25
26	LA	642	U	C5-C6	-5.98	1.28	1.34
26	LA	908	C	N3-C4	5.98	1.38	1.33
26	LA	1115	G	C4'-O4'	5.98	1.53	1.45
26	LA	1131	G	N7-C5	-5.98	1.35	1.39
26	LA	1479	G	N9-C8	-5.98	1.33	1.37
26	LA	1902	C	N1-C2	-5.98	1.34	1.40
26	LA	2647	U	O3'-P	-5.98	1.53	1.61
26	LA	2706	A	N3-C4	5.98	1.38	1.34
26	LA	2886	A	C5-C4	5.98	1.43	1.38
2	SA	854	U	C3'-O3'	5.98	1.50	1.42
2	SA	1415	G	C4'-C3'	5.98	1.59	1.53
26	LA	774	G	P-O5'	-5.98	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1146	C	O3'-P	-5.98	1.53	1.61
26	LA	1525	A	C6-N1	-5.98	1.31	1.35
2	SA	576	C	C2-N3	-5.98	1.30	1.35
23	SR	5	ARG	CD-NE	5.98	1.56	1.46
26	LA	358	U	O3'-P	-5.98	1.53	1.61
26	LA	1459	G	N7-C5	5.98	1.42	1.39
26	LA	1613	G	N3-C4	-5.98	1.31	1.35
26	LA	2282	G	C2-N2	-5.98	1.28	1.34
26	LA	2416	C	N1-C2	5.98	1.46	1.40
26	LA	2858	C	C5'-C4'	5.98	1.58	1.51
26	LA	2601	C	C3'-O3'	-5.98	1.33	1.42
2	SA	821	G	C5'-C4'	5.97	1.58	1.51
2	SA	1439	G	C4'-C3'	5.97	1.59	1.53
26	LA	134	G	C8-N7	-5.97	1.27	1.30
26	LA	605	G	C3'-O3'	5.97	1.50	1.42
26	LA	1241	A	C6-N6	-5.97	1.29	1.33
26	LA	1383	A	C6-N1	-5.97	1.31	1.35
26	LA	1965	C	C4-C5	-5.97	1.38	1.43
26	LA	2668	G	C2'-O2'	5.97	1.49	1.41
26	LA	2802	G	N9-C4	5.97	1.42	1.38
3	S1	37	G	C5'-C4'	5.97	1.58	1.51
4	S2	12	G	C6-N1	5.97	1.43	1.39
26	LA	1041	G	N3-C4	-5.97	1.31	1.35
26	LA	2314	A	N9-C4	-5.97	1.34	1.37
26	LA	2696	U	C5'-C4'	5.97	1.58	1.51
26	LA	2882	A	C1'-N9	-5.97	1.38	1.46
2	SA	209	U	C2'-C1'	5.97	1.59	1.53
2	SA	708	C	C2-N3	-5.97	1.30	1.35
26	LA	592	A	O3'-P	-5.97	1.53	1.61
26	LA	1333	G	C5-C4	-5.97	1.34	1.38
2	SA	3	A	N9-C8	5.97	1.42	1.37
2	SA	641	U	O3'-P	-5.97	1.53	1.61
2	SA	908	A	C3'-C2'	-5.97	1.46	1.52
2	SA	1062	U	C4-C5	5.97	1.49	1.43
2	SA	1131	G	C3'-C2'	-5.97	1.46	1.52
2	SA	1199	U	C2'-C1'	-5.97	1.46	1.53
26	LA	37	C	C5'-C4'	5.97	1.58	1.51
26	LA	54	G	C2-N2	-5.97	1.28	1.34
26	LA	460	A	N3-C4	-5.97	1.31	1.34
26	LA	2217	G	N9-C4	5.97	1.42	1.38
23	SR	4	PHE	CG-CD2	5.97	1.47	1.38
26	LA	744	U	N3-C4	-5.97	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1014	A	C2'-C1'	-5.97	1.46	1.53
26	LA	1658	C	N3-C4	5.97	1.38	1.33
26	LA	2007	U	P-O5'	-5.97	1.53	1.59
26	LA	2012	G	C5-C4	-5.97	1.34	1.38
2	SA	68	G	C6-N1	-5.97	1.35	1.39
2	SA	748	G	C2-N3	-5.97	1.27	1.32
2	SA	830	G	O4'-C1'	5.97	1.49	1.41
2	SA	1232	U	C4'-C3'	5.97	1.59	1.53
2	SA	1323	G	C3'-O3'	5.97	1.50	1.42
26	LA	124	G	N9-C4	-5.97	1.33	1.38
26	LA	702	U	N1-C2	-5.97	1.33	1.38
26	LA	1597	A	C6-N1	-5.97	1.31	1.35
26	LA	1794	A	C5'-C4'	5.97	1.58	1.51
2	SA	93	U	C2'-C1'	-5.96	1.46	1.53
2	SA	925	G	N1-C2	-5.96	1.32	1.37
2	SA	1241	G	C5-C4	5.96	1.42	1.38
2	SA	1442	G	C4'-C3'	5.96	1.59	1.53
25	LB	34	A	C2'-C1'	-5.96	1.46	1.53
26	LA	400	G	C5-C4	-5.96	1.34	1.38
26	LA	626	A	C6-N1	-5.96	1.31	1.35
26	LA	1742	U	C5'-C4'	5.96	1.58	1.51
26	LA	2270	A	C3'-C2'	-5.96	1.46	1.52
26	LA	2644	G	C8-N7	5.96	1.34	1.30
26	LA	53	A	N7-C5	-5.96	1.35	1.39
26	LA	344	A	N3-C4	-5.96	1.31	1.34
26	LA	1121	C	O3'-P	-5.96	1.53	1.61
26	LA	1177	G	C8-N7	-5.96	1.27	1.30
26	LA	1481	U	C2-N3	5.96	1.42	1.37
26	LA	1836	C	O3'-P	-5.96	1.53	1.61
26	LA	2530	A	C8-N7	-5.96	1.27	1.31
38	LE	15	PHE	CB-CG	-5.96	1.41	1.51
2	SA	74	A	N9-C4	5.96	1.41	1.37
2	SA	111	G	C6-N1	-5.96	1.35	1.39
2	SA	1509	C	C4-C5	5.96	1.47	1.43
4	S2	25	U	O3'-P	-5.96	1.53	1.61
26	LA	480	A	N7-C5	-5.96	1.35	1.39
26	LA	585	G	C2-N3	5.96	1.37	1.32
26	LA	761	A	C2'-C1'	-5.96	1.46	1.53
26	LA	958	U	C2'-C1'	-5.96	1.46	1.53
26	LA	1303	G	C5-C4	-5.96	1.34	1.38
26	LA	1445	G	C6-N1	-5.96	1.35	1.39
26	LA	1573	G	N9-C4	-5.96	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1825	U	O3'-P	-5.96	1.53	1.61
2	SA	418	C	N1-C6	5.96	1.40	1.37
26	LA	1339	G	C1'-N9	-5.96	1.38	1.46
26	LA	2165	C	N1-C6	5.96	1.40	1.37
2	SA	275	G	C2-N2	-5.96	1.28	1.34
2	SA	596	A	N3-C4	5.96	1.38	1.34
2	SA	743	A	N9-C4	-5.96	1.34	1.37
2	SA	1176	A	O3'-P	-5.96	1.54	1.61
22	SF	49	TYR	CB-CG	-5.96	1.42	1.51
26	LA	593	U	N3-C4	-5.96	1.33	1.38
26	LA	962	G	C2'-C1'	-5.96	1.46	1.53
26	LA	966	G	N9-C8	-5.96	1.33	1.37
26	LA	2363	G	C1'-N9	-5.96	1.38	1.46
26	LA	2551	C	N1-C6	-5.96	1.33	1.37
2	SA	741	G	C2'-C1'	-5.96	1.46	1.53
26	LA	780	G	O3'-P	-5.96	1.54	1.61
26	LA	879	G	N7-C5	-5.96	1.35	1.39
26	LA	1225	G	N3-C4	5.96	1.39	1.35
26	LA	1942	C	P-O5'	5.96	1.65	1.59
2	SA	794	A	C8-N7	-5.96	1.27	1.31
2	SA	1193	G	C2-N3	-5.96	1.27	1.32
2	SA	1283	U	C5'-C4'	5.96	1.58	1.51
26	LA	301	G	P-O5'	-5.96	1.53	1.59
26	LA	1331	G	N1-C2	-5.96	1.32	1.37
2	SA	201	G	C2-N2	-5.95	1.28	1.34
2	SA	1099	G	N7-C5	-5.95	1.35	1.39
2	SA	1421	G	N7-C5	-5.95	1.35	1.39
26	LA	277	G	C6-O6	-5.95	1.18	1.24
26	LA	403	U	P-O5'	5.95	1.65	1.59
26	LA	767	U	N1-C2	-5.95	1.33	1.38
26	LA	1681	G	N9-C8	-5.95	1.33	1.37
26	LA	1906	G	C4'-O4'	5.95	1.53	1.45
26	LA	2683	C	O3'-P	-5.95	1.54	1.61
2	SA	184	G	C5'-C4'	5.95	1.58	1.51
2	SA	1431	A	C4'-C3'	-5.95	1.46	1.52
26	LA	973	A	C2'-O2'	-5.95	1.33	1.41
26	LA	2676	C	C5'-C4'	5.95	1.58	1.51
2	SA	119	A	P-O5'	-5.95	1.53	1.59
2	SA	548	G	N9-C8	5.95	1.42	1.37
2	SA	633	G	C5-C6	5.95	1.48	1.42
2	SA	1244	G	N1-C2	5.95	1.42	1.37
2	SA	1325	C	C5-C6	-5.95	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1354	U	C5'-C4'	5.95	1.58	1.51
4	S2	22	A	O3'-P	-5.95	1.54	1.61
26	LA	474	G	O3'-P	-5.95	1.54	1.61
26	LA	544	C	O3'-P	-5.95	1.54	1.61
26	LA	691	C	C4-N4	5.95	1.39	1.33
26	LA	928	A	O4'-C1'	-5.95	1.33	1.41
26	LA	1012	U	N3-C4	-5.95	1.33	1.38
26	LA	1866	A	C2-N3	-5.95	1.28	1.33
26	LA	1938	A	C5-C6	-5.95	1.35	1.41
26	LA	2432	A	P-O5'	-5.95	1.53	1.59
2	SA	148	G	C4'-O4'	-5.95	1.37	1.45
2	SA	360	G	N7-C5	-5.95	1.35	1.39
2	SA	821	G	N9-C8	5.95	1.42	1.37
26	LA	9	G	C1'-N9	-5.95	1.38	1.46
26	LA	164	C	P-O5'	-5.95	1.53	1.59
26	LA	171	U	O3'-P	-5.95	1.54	1.61
26	LA	497	A	C6-N1	-5.95	1.31	1.35
26	LA	509	C	P-O5'	-5.95	1.53	1.59
26	LA	1249	U	C2-N3	-5.95	1.33	1.37
26	LA	1492	G	C4'-O4'	5.95	1.53	1.45
26	LA	1995	U	P-O5'	5.95	1.65	1.59
26	LA	2022	U	C4'-C3'	-5.95	1.46	1.52
26	LA	2579	C	P-O5'	-5.95	1.53	1.59
25	LB	28	C	C4-C5	5.95	1.47	1.43
26	LA	240	C	C1'-N1	5.95	1.57	1.48
26	LA	1395	A	C1'-N9	-5.95	1.38	1.46
26	LA	2357	G	C2-N3	5.95	1.37	1.32
26	LA	2711	A	C3'-C2'	-5.95	1.46	1.52
2	SA	313	A	C5-C4	-5.95	1.34	1.38
2	SA	454	G	N3-C4	5.95	1.39	1.35
3	S1	54	U	O4'-C1'	5.95	1.49	1.41
25	LB	118	C	C2-N3	-5.95	1.30	1.35
26	LA	1009	A	C1'-N9	-5.95	1.38	1.46
26	LA	489	G	C6-N1	5.94	1.43	1.39
26	LA	1263	U	O4'-C1'	-5.94	1.33	1.41
26	LA	2233	U	N1-C2	-5.94	1.33	1.38
2	SA	1264	U	C5'-C4'	5.94	1.58	1.51
2	SA	1420	U	O3'-P	-5.94	1.54	1.61
26	LA	388	G	C6-N1	-5.94	1.35	1.39
26	LA	2064	C	C2-N3	-5.94	1.30	1.35
26	LA	2358	A	C3'-C2'	-5.94	1.46	1.52
26	LA	2734	A	C2-N3	5.94	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	113	G	N3-C4	-5.94	1.31	1.35
2	SA	399	G	C6-N1	-5.94	1.35	1.39
2	SA	420	U	C5-C6	5.94	1.39	1.34
2	SA	598	U	P-O5'	-5.94	1.53	1.59
26	LA	633	A	N7-C5	-5.94	1.35	1.39
26	LA	728	G	C8-N7	-5.94	1.27	1.30
26	LA	1136	G	P-O5'	5.94	1.65	1.59
26	LA	1492	G	N3-C4	-5.94	1.31	1.35
26	LA	1978	A	C6-N6	-5.94	1.29	1.33
26	LA	2170	A	C5-C4	-5.94	1.34	1.38
26	LA	2221	G	C4'-O4'	-5.94	1.37	1.45
2	SA	1054	C	O3'-P	-5.94	1.54	1.61
2	SA	1463	U	P-O5'	-5.94	1.53	1.59
26	LA	156	A	C6-N1	-5.94	1.31	1.35
26	LA	689	A	C8-N7	-5.94	1.27	1.31
26	LA	1133	A	O4'-C1'	-5.94	1.33	1.41
26	LA	1959	G	C2-N3	-5.94	1.27	1.32
26	LA	1989	G	C5-C4	-5.94	1.34	1.38
2	SA	326	G	C8-N7	5.94	1.34	1.30
2	SA	529	G	C2-N3	5.94	1.37	1.32
2	SA	885	G	C6-N1	-5.94	1.35	1.39
2	SA	916	U	O3'-P	-5.94	1.54	1.61
26	LA	898	C	O3'-P	-5.94	1.54	1.61
26	LA	1350	C	C5'-C4'	5.94	1.58	1.51
26	LA	1945	G	C3'-O3'	5.94	1.50	1.42
38	LE	143	PRO	CA-C	-5.94	1.41	1.52
2	SA	18	C	C5'-C4'	-5.94	1.44	1.51
2	SA	578	C	C4'-C3'	-5.94	1.46	1.52
2	SA	668	G	O3'-P	-5.94	1.54	1.61
2	SA	1207	G	C5-C4	-5.94	1.34	1.38
26	LA	1030	C	N1-C2	-5.94	1.34	1.40
26	LA	2537	U	C5'-C4'	5.94	1.58	1.51
2	SA	165	G	C5-C6	-5.93	1.36	1.42
2	SA	329	A	O3'-P	-5.93	1.54	1.61
2	SA	497	G	N9-C4	5.93	1.42	1.38
2	SA	778	G	N9-C4	-5.93	1.33	1.38
2	SA	828	U	N1-C6	5.93	1.43	1.38
25	LB	57	A	C8-N7	-5.93	1.27	1.31
26	LA	236	C	C3'-C2'	-5.93	1.46	1.52
26	LA	553	G	P-O5'	-5.93	1.53	1.59
26	LA	1274	A	C5'-C4'	5.93	1.58	1.51
26	LA	2525	G	C2'-C1'	-5.93	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2673	G	N9-C4	-5.93	1.33	1.38
26	LA	2724	U	P-O5'	-5.93	1.53	1.59
26	LA	2729	G	C3'-O3'	5.93	1.50	1.42
2	SA	107	G	C5-C4	-5.93	1.34	1.38
2	SA	277	C	N3-C4	-5.93	1.29	1.33
2	SA	287	U	C2'-C1'	-5.93	1.46	1.53
2	SA	541	G	C5-C4	-5.93	1.34	1.38
2	SA	881	G	C2-N2	-5.93	1.28	1.34
2	SA	1284	C	C5'-C4'	5.93	1.58	1.51
26	LA	180	G	N9-C8	-5.93	1.33	1.37
26	LA	997	G	N7-C5	-5.93	1.35	1.39
26	LA	1397	U	C4-C5	5.93	1.48	1.43
26	LA	1397	U	P-O5'	-5.93	1.53	1.59
26	LA	1511	G	C1'-N9	-5.93	1.38	1.46
26	LA	1517	G	C2'-O2'	5.93	1.49	1.41
26	LA	2425	A	C3'-O3'	5.93	1.50	1.42
26	LA	2829	A	C6-N1	-5.93	1.31	1.35
2	SA	595	A	C2-N3	-5.93	1.28	1.33
3	S1	33	A	C3'-C2'	5.93	1.59	1.52
25	LB	34	A	C5'-C4'	5.93	1.58	1.51
26	LA	59	U	C2'-C1'	-5.93	1.46	1.53
26	LA	2631	G	C1'-N9	5.93	1.57	1.48
52	LO	31	PHE	CB-CG	-5.93	1.41	1.51
2	SA	356	A	C4'-O4'	5.93	1.53	1.45
2	SA	690	G	O3'-P	-5.93	1.54	1.61
2	SA	1141	C	C2-O2	5.93	1.29	1.24
2	SA	1276	G	C3'-C2'	-5.93	1.46	1.52
26	LA	186	G	N9-C8	-5.93	1.33	1.37
26	LA	583	G	C8-N7	5.93	1.34	1.30
26	LA	1628	G	C6-O6	-5.93	1.18	1.24
26	LA	1744	A	O3'-P	-5.93	1.54	1.61
26	LA	2564	A	C2'-C1'	-5.93	1.46	1.53
26	LA	2627	G	N3-C4	-5.93	1.31	1.35
26	LA	2730	C	N3-C4	-5.93	1.29	1.33
2	SA	1495	U	N1-C6	-5.93	1.32	1.38
26	LA	42	A	C6-N1	5.93	1.39	1.35
26	LA	731	C	C5'-C4'	5.93	1.58	1.51
26	LA	1879	C	C5-C6	-5.93	1.29	1.34
26	LA	2279	G	C6-O6	-5.93	1.18	1.24
2	SA	387	U	C2-N3	-5.93	1.33	1.37
26	LA	572	A	C4'-C3'	-5.93	1.46	1.52
26	LA	1192	G	O3'-P	-5.93	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1358	G	C5-C6	-5.93	1.36	1.42
26	LA	1701	A	C5'-C4'	5.93	1.58	1.51
26	LA	1729	U	C5'-C4'	5.93	1.58	1.51
26	LA	1853	A	C1'-N9	-5.93	1.38	1.46
26	LA	2018	G	C6-N1	-5.93	1.35	1.39
26	LA	2238	G	O3'-P	-5.93	1.54	1.61
26	LA	2491	U	C4-O4	-5.93	1.19	1.23
26	LA	2835	A	P-O5'	-5.93	1.53	1.59
52	LO	18	ARG	CD-NE	5.93	1.56	1.46
2	SA	54	C	C5'-C4'	5.92	1.58	1.51
2	SA	515	G	C2-N3	5.92	1.37	1.32
2	SA	833	G	C2'-C1'	-5.92	1.46	1.53
2	SA	1036	A	O3'-P	-5.92	1.54	1.61
2	SA	1261	A	N9-C8	5.92	1.42	1.37
2	SA	1431	A	O5'-C5'	5.92	1.53	1.44
26	LA	49	A	O4'-C1'	-5.92	1.33	1.41
26	LA	730	A	C2'-C1'	-5.92	1.46	1.53
26	LA	852	U	C2-N3	-5.92	1.33	1.37
26	LA	1188	U	P-O5'	-5.92	1.53	1.59
26	LA	2003	A	C8-N7	5.92	1.35	1.31
26	LA	2117	A	C6-N1	5.92	1.39	1.35
26	LA	2246	G	N9-C8	5.92	1.42	1.37
26	LA	2698	U	N3-C4	-5.92	1.33	1.38
26	LA	2772	C	C5-C6	5.92	1.39	1.34
30	LW	43	LYS	CE-NZ	-5.92	1.34	1.49
2	SA	596	A	C4'-O4'	5.92	1.53	1.45
2	SA	887	G	N3-C4	-5.92	1.31	1.35
2	SA	1502	A	C3'-C2'	-5.92	1.46	1.52
25	LB	30	C	N1-C6	-5.92	1.33	1.37
26	LA	308	G	C8-N7	-5.92	1.27	1.30
26	LA	721	A	N9-C8	-5.92	1.33	1.37
26	LA	1768	C	C4'-C3'	-5.92	1.46	1.52
26	LA	2731	G	C4'-O4'	-5.92	1.37	1.45
2	SA	1411	C	N1-C6	-5.92	1.33	1.37
26	LA	1039	A	C2'-C1'	-5.92	1.46	1.53
26	LA	1364	G	C5'-C4'	5.92	1.58	1.51
26	LA	1606	C	C4-N4	5.92	1.39	1.33
26	LA	1809	A	C8-N7	-5.92	1.27	1.31
26	LA	2432	A	N9-C4	-5.92	1.34	1.37
2	SA	575	G	N9-C4	-5.92	1.33	1.38
2	SA	986	U	C2-N3	-5.92	1.33	1.37
2	SA	1092	A	O4'-C1'	-5.92	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1198	G	C8-N7	5.92	1.34	1.30
2	SA	1427	C	C3'-C2'	5.92	1.59	1.52
26	LA	1976	U	N1-C6	-5.92	1.32	1.38
26	LA	2379	G	C4'-O4'	5.92	1.53	1.45
26	LA	2494	G	C8-N7	5.92	1.34	1.30
2	SA	206	C	C5'-C4'	5.92	1.58	1.51
2	SA	303	A	O3'-P	-5.92	1.54	1.61
2	SA	748	G	N9-C4	-5.92	1.33	1.38
2	SA	909	A	C5-C6	-5.92	1.35	1.41
2	SA	1499	A	C1'-N9	-5.92	1.38	1.46
20	SD	169	TRP	CG-CD1	-5.92	1.28	1.36
26	LA	323	C	C4-C5	-5.92	1.38	1.43
26	LA	788	A	N7-C5	-5.92	1.35	1.39
26	LA	1707	G	C8-N7	5.92	1.34	1.30
26	LA	1731	G	O3'-P	-5.92	1.54	1.61
26	LA	1835	G	C2-N3	5.92	1.37	1.32
26	LA	2038	G	C6-N1	-5.92	1.35	1.39
26	LA	2745	C	C4'-O4'	-5.92	1.37	1.45
2	SA	353	A	C5'-C4'	5.92	1.58	1.51
2	SA	515	G	N7-C5	5.92	1.42	1.39
2	SA	705	G	P-O5'	-5.92	1.53	1.59
2	SA	1269	A	C8-N7	5.92	1.35	1.31
2	SA	1416	G	O3'-P	-5.92	1.54	1.61
4	S2	30	G	N7-C5	-5.92	1.35	1.39
22	SF	125	GLU	CG-CD	5.92	1.60	1.51
26	LA	1007	C	N1-C6	5.92	1.40	1.37
26	LA	1197	G	C4'-C3'	5.92	1.59	1.53
26	LA	1653	G	C2-N3	5.92	1.37	1.32
26	LA	2273	A	C4'-C3'	-5.92	1.46	1.52
26	LA	2345	G	C2'-C1'	-5.92	1.46	1.53
2	SA	249	U	C4-C5	-5.92	1.38	1.43
2	SA	1194	U	C2'-C1'	-5.92	1.46	1.53
26	LA	898	C	C4-C5	-5.92	1.38	1.43
26	LA	2511	U	C5-C6	5.92	1.39	1.34
2	SA	1061	G	C8-N7	5.91	1.34	1.30
4	S2	68	C	C1'-N1	-5.91	1.38	1.46
26	LA	62	U	C2-N3	-5.91	1.33	1.37
26	LA	2294	G	C2-N2	-5.91	1.28	1.34
46	LH	163	TYR	CG-CD2	5.91	1.46	1.39
50	LL	44	TYR	CB-CG	-5.91	1.42	1.51
2	SA	359	G	C2-N3	5.91	1.37	1.32
2	SA	1396	A	O3'-P	-5.91	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	85	G	C2'-C1'	-5.91	1.46	1.53
26	LA	782	A	N7-C5	-5.91	1.35	1.39
26	LA	1234	U	O3'-P	-5.91	1.54	1.61
26	LA	1847	A	C5-C4	5.91	1.42	1.38
29	LV	80	TRP	CB-CG	5.91	1.60	1.50
40	L4	5	ARG	CD-NE	5.91	1.56	1.46
47	LJ	95	PHE	CB-CG	-5.91	1.41	1.51
2	SA	18	C	N3-C4	5.91	1.38	1.33
2	SA	171	A	C5'-C4'	5.91	1.58	1.51
25	LB	85	G	C3'-C2'	-5.91	1.46	1.52
26	LA	352	A	O3'-P	-5.91	1.54	1.61
26	LA	1103	A	C5'-C4'	5.91	1.58	1.51
26	LA	1136	G	N3-C4	-5.91	1.31	1.35
26	LA	1158	C	P-O5'	5.91	1.65	1.59
26	LA	1650	A	N9-C4	-5.91	1.34	1.37
2	SA	73	C	C4-N4	-5.91	1.28	1.33
2	SA	425	G	C5-C4	-5.91	1.34	1.38
2	SA	586	C	N1-C6	-5.91	1.33	1.37
2	SA	790	A	C3'-C2'	5.91	1.59	1.52
2	SA	1385	G	N1-C2	5.91	1.42	1.37
2	SA	1509	C	C5-C6	5.91	1.39	1.34
26	LA	274	C	C4'-O4'	-5.91	1.37	1.45
26	LA	368	A	N3-C4	-5.91	1.31	1.34
26	LA	1125	G	N1-C2	-5.91	1.33	1.37
26	LA	2340	A	O4'-C1'	5.91	1.49	1.41
26	LA	2455	G	C5'-C4'	5.91	1.58	1.51
26	LA	2648	G	O3'-P	-5.91	1.54	1.61
2	SA	31	G	N3-C4	-5.91	1.31	1.35
2	SA	459	A	C2-N3	-5.91	1.28	1.33
2	SA	1297	G	C8-N7	5.91	1.34	1.30
26	LA	266	G	C8-N7	-5.91	1.27	1.30
26	LA	554	U	C2'-C1'	-5.91	1.46	1.53
2	SA	139	A	N9-C4	-5.91	1.34	1.37
25	LB	36	C	N1-C2	5.91	1.46	1.40
26	LA	333	G	C3'-O3'	5.91	1.50	1.42
26	LA	634	C	C4'-C3'	-5.91	1.46	1.52
26	LA	843	G	C6-N1	-5.91	1.35	1.39
26	LA	1287	A	C6-N6	5.91	1.38	1.33
26	LA	1583	A	N9-C4	-5.91	1.34	1.37
26	LA	2179	C	N3-C4	5.91	1.38	1.33
26	LA	2252	G	C4'-C3'	5.91	1.59	1.53
26	LA	2734	A	N9-C4	5.91	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2794	C	C3'-O3'	5.91	1.50	1.42
2	SA	1257	A	C2'-C1'	-5.90	1.46	1.53
2	SA	1486	G	N3-C4	-5.90	1.31	1.35
26	LA	443	A	C3'-C2'	-5.90	1.46	1.52
26	LA	815	C	O3'-P	-5.90	1.54	1.61
26	LA	1613	G	N9-C8	-5.90	1.33	1.37
2	SA	30	U	C4-C5	-5.90	1.38	1.43
2	SA	231	U	C2-N3	-5.90	1.33	1.37
26	LA	357	C	C4'-C3'	-5.90	1.46	1.52
26	LA	1475	G	C8-N7	-5.90	1.27	1.30
26	LA	1818	U	N3-C4	-5.90	1.33	1.38
26	LA	2632	A	O3'-P	-5.90	1.54	1.61
26	LA	2634	A	N1-C2	-5.90	1.29	1.34
2	SA	319	G	P-O5'	5.90	1.65	1.59
2	SA	772	U	C3'-C2'	-5.90	1.46	1.52
2	SA	948	C	C4'-C3'	-5.90	1.46	1.52
2	SA	1425	U	C2'-O2'	5.90	1.49	1.41
2	SA	1534	A	C5'-C4'	5.90	1.58	1.51
26	LA	221	A	O5'-C5'	5.90	1.53	1.44
26	LA	247	G	O4'-C1'	-5.90	1.33	1.41
26	LA	430	A	C4'-C3'	-5.90	1.46	1.52
26	LA	1432	G	N3-C4	-5.90	1.31	1.35
26	LA	2045	C	C4-N4	-5.90	1.28	1.33
26	LA	2419	U	C5-C6	-5.90	1.28	1.34
26	LA	2492	U	O4'-C1'	-5.90	1.33	1.41
2	SA	457	G	N3-C4	5.90	1.39	1.35
2	SA	1508	A	C3'-C2'	-5.90	1.46	1.52
2	SA	111	G	N9-C4	-5.90	1.33	1.38
2	SA	477	C	N1-C6	-5.90	1.33	1.37
2	SA	762	U	C4'-C3'	5.90	1.59	1.53
2	SA	1143	G	C5-C4	-5.90	1.34	1.38
2	SA	1326	U	C4'-C3'	5.90	1.59	1.53
2	SA	1443	C	O3'-P	-5.90	1.54	1.61
4	S2	40	C	C5'-C4'	5.90	1.58	1.51
25	LB	39	A	C2-N3	5.90	1.38	1.33
26	LA	42	A	N3-C4	-5.90	1.31	1.34
26	LA	327	G	C2-N2	-5.90	1.28	1.34
26	LA	788	A	C5'-C4'	5.90	1.58	1.51
26	LA	1366	A	N9-C8	-5.90	1.33	1.37
26	LA	1381	G	C1'-N9	-5.90	1.38	1.46
26	LA	2575	C	N1-C2	5.90	1.46	1.40
2	SA	140	U	C2-N3	-5.90	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1473	G	C5'-C4'	5.90	1.58	1.51
26	LA	1571	A	C3'-C2'	-5.90	1.46	1.52
26	LA	2786	U	C4-C5	5.90	1.48	1.43
26	LA	2803	G	C4'-C3'	5.90	1.59	1.53
2	SA	822	U	C2-N3	-5.89	1.33	1.37
2	SA	1039	G	C3'-O3'	5.89	1.50	1.42
2	SA	1133	G	C5-C4	-5.89	1.34	1.38
2	SA	1272	G	C5-C4	-5.89	1.34	1.38
26	LA	907	G	C2'-C1'	-5.89	1.46	1.53
26	LA	1807	G	N9-C4	-5.89	1.33	1.38
26	LA	1906	G	O3'-P	-5.89	1.54	1.61
26	LA	2023	C	C2-N3	-5.89	1.31	1.35
2	SA	842	U	C4-O4	5.89	1.28	1.23
2	SA	977	A	N9-C8	-5.89	1.33	1.37
2	SA	1238	A	C5-C6	5.89	1.46	1.41
2	SA	1349	A	C8-N7	-5.89	1.27	1.31
26	LA	215	G	C3'-C2'	5.89	1.59	1.52
26	LA	332	A	C6-N1	-5.89	1.31	1.35
26	LA	1439	A	C2'-C1'	-5.89	1.46	1.53
26	LA	1576	U	C2-N3	-5.89	1.33	1.37
26	LA	2399	G	C8-N7	-5.89	1.27	1.30
2	SA	954	G	C2-N3	-5.89	1.28	1.32
26	LA	775	G	C2-N3	5.89	1.37	1.32
26	LA	1082	U	P-O5'	-5.89	1.53	1.59
26	LA	2683	C	C2-O2	5.89	1.29	1.24
2	SA	431	A	C6-N1	5.89	1.39	1.35
2	SA	500	G	C2'-C1'	-5.89	1.46	1.53
26	LA	209	C	C4-N4	-5.89	1.28	1.33
26	LA	1855	U	O3'-P	-5.89	1.54	1.61
26	LA	1991	U	N1-C2	-5.89	1.33	1.38
26	LA	2750	A	O3'-P	-5.89	1.54	1.61
26	LA	2865	U	N3-C4	-5.89	1.33	1.38
2	SA	279	A	C6-N1	5.89	1.39	1.35
26	LA	1637	A	C4'-C3'	-5.89	1.46	1.52
26	LA	1819	A	C5'-C4'	5.89	1.58	1.51
26	LA	2124	G	C2-N2	-5.89	1.28	1.34
2	SA	807	A	C3'-C2'	-5.89	1.46	1.52
26	LA	316	C	P-O5'	-5.89	1.53	1.59
26	LA	885	C	O3'-P	-5.89	1.54	1.61
26	LA	1573	G	C2-N2	-5.89	1.28	1.34
26	LA	1638	C	C2-O2	-5.89	1.19	1.24
26	LA	1893	C	C4'-C3'	5.89	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	234	C	C2-N3	-5.88	1.31	1.35
2	SA	383	A	N7-C5	-5.88	1.35	1.39
2	SA	425	G	C5'-C4'	5.88	1.58	1.51
2	SA	748	G	C4'-C3'	5.88	1.59	1.53
2	SA	836	G	C6-N1	-5.88	1.35	1.39
2	SA	1028	C	C5-C6	5.88	1.39	1.34
2	SA	1125	U	C4'-C3'	5.88	1.59	1.53
2	SA	1280	A	C4'-O4'	5.88	1.53	1.45
25	LB	75	G	N9-C8	-5.88	1.33	1.37
26	LA	326	G	P-O5'	-5.88	1.53	1.59
26	LA	1684	G	C2-N2	-5.88	1.28	1.34
26	LA	2011	U	N3-C4	-5.88	1.33	1.38
26	LA	2102	G	N1-C2	-5.88	1.33	1.37
26	LA	2186	G	C5'-C4'	5.88	1.58	1.51
26	LA	2374	C	C3'-C2'	-5.88	1.46	1.52
26	LA	2692	G	C2-N3	5.88	1.37	1.32
2	SA	338	A	C5-C4	-5.88	1.34	1.38
2	SA	1242	G	N9-C8	5.88	1.42	1.37
26	LA	1767	G	C3'-O3'	5.88	1.50	1.42
26	LA	1841	U	C4'-C3'	5.88	1.59	1.53
26	LA	2595	G	N1-C2	-5.88	1.33	1.37
2	SA	145	G	N9-C8	-5.88	1.33	1.37
2	SA	780	A	N7-C5	-5.88	1.35	1.39
2	SA	915	A	C2'-C1'	-5.88	1.46	1.53
26	LA	375	G	C5-C4	-5.88	1.34	1.38
26	LA	844	A	C6-N6	-5.88	1.29	1.33
26	LA	1359	A	C4'-O4'	5.88	1.53	1.45
26	LA	2271	G	C2-N2	-5.88	1.28	1.34
26	LA	2868	A	C2'-C1'	-5.88	1.46	1.53
2	SA	567	G	C2-N2	-5.88	1.28	1.34
2	SA	1222	G	N1-C2	5.88	1.42	1.37
26	LA	2069	G	C4'-C3'	5.88	1.59	1.53
26	LA	2139	U	C4-O4	5.88	1.28	1.23
26	LA	2800	A	C4'-C3'	-5.88	1.46	1.52
2	SA	297	G	N9-C8	-5.88	1.33	1.37
2	SA	664	G	P-O5'	-5.88	1.53	1.59
2	SA	1385	G	C3'-C2'	5.88	1.59	1.52
2	SA	1487	G	O3'-P	-5.88	1.54	1.61
3	S1	54	U	C5'-C4'	5.88	1.58	1.51
23	SR	19	GLU	CB-CG	5.88	1.63	1.52
25	LB	29	A	C8-N7	-5.88	1.27	1.31
26	LA	302	C	C2'-C1'	-5.88	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	778	G	N9-C8	-5.88	1.33	1.37
26	LA	1381	G	N3-C4	-5.88	1.31	1.35
26	LA	1527	G	C8-N7	-5.88	1.27	1.30
26	LA	1677	A	P-O5'	5.88	1.65	1.59
26	LA	2850	A	N3-C4	-5.88	1.31	1.34
2	SA	1190	G	N9-C4	-5.88	1.33	1.38
2	SA	1279	G	N7-C5	-5.88	1.35	1.39
26	LA	1639	C	C4'-C3'	-5.88	1.46	1.52
26	LA	2054	A	N9-C4	-5.88	1.34	1.37
26	LA	2709	G	C6-N1	-5.88	1.35	1.39
26	LA	2814	A	N7-C5	-5.88	1.35	1.39
2	SA	88	U	C3'-O3'	5.88	1.50	1.42
2	SA	1068	G	C5-C6	-5.88	1.36	1.42
26	LA	1286	A	N3-C4	-5.88	1.31	1.34
26	LA	1607	C	N3-C4	-5.88	1.29	1.33
2	SA	83	C	C2'-C1'	5.87	1.59	1.53
2	SA	509	A	P-O5'	-5.87	1.53	1.59
2	SA	515	G	C5-C6	-5.87	1.36	1.42
4	S2	39	A	N9-C4	5.87	1.41	1.37
25	LB	17	C	C4-N4	-5.87	1.28	1.33
25	LB	105	G	C3'-C2'	-5.87	1.46	1.52
26	LA	408	G	C3'-O3'	5.87	1.50	1.42
26	LA	724	U	C4'-C3'	5.87	1.59	1.53
26	LA	1224	U	N1-C6	-5.87	1.32	1.38
26	LA	1495	A	N9-C8	-5.87	1.33	1.37
2	SA	113	G	N9-C8	-5.87	1.33	1.37
2	SA	137	U	C4-C5	5.87	1.48	1.43
2	SA	238	A	C8-N7	5.87	1.35	1.31
2	SA	385	C	C4-N4	5.87	1.39	1.33
2	SA	674	G	N9-C4	-5.87	1.33	1.38
2	SA	836	G	C4'-C3'	5.87	1.59	1.53
10	SJ	47	GLU	N-CA	-5.87	1.34	1.46
26	LA	590	A	N9-C4	-5.87	1.34	1.37
26	LA	702	U	C5'-C4'	5.87	1.58	1.51
26	LA	1584	U	N1-C2	5.87	1.43	1.38
26	LA	2388	A	C1'-N9	-5.87	1.38	1.46
26	LA	2435	A	N7-C5	-5.87	1.35	1.39
2	SA	978	A	N9-C8	-5.87	1.33	1.37
2	SA	7	A	C5-C6	5.87	1.46	1.41
2	SA	457	G	N9-C4	-5.87	1.33	1.38
2	SA	842	U	C5'-C4'	5.87	1.58	1.51
2	SA	1172	C	N3-C4	-5.87	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1367	C	C4-N4	-5.87	1.28	1.33
2	SA	1446	A	C5-C4	-5.87	1.34	1.38
22	SF	59	TYR	CG-CD1	-5.87	1.31	1.39
26	LA	254	G	C5-C6	-5.87	1.36	1.42
26	LA	441	U	N1-C6	-5.87	1.32	1.38
26	LA	840	C	C2'-C1'	-5.87	1.46	1.53
26	LA	1383	A	N7-C5	-5.87	1.35	1.39
26	LA	2687	U	O3'-P	-5.87	1.54	1.61
2	SA	1143	G	P-O5'	-5.87	1.53	1.59
26	LA	1699	G	C8-N7	-5.87	1.27	1.30
26	LA	1886	U	C2-N3	-5.87	1.33	1.37
26	LA	2318	G	C4'-C3'	-5.87	1.46	1.52
26	LA	2524	G	C6-O6	-5.87	1.18	1.24
26	LA	2883	A	C5'-C4'	5.87	1.58	1.51
51	LI	91	PHE	CG-CD1	5.87	1.47	1.38
4	S2	65	G	C5-C4	-5.87	1.34	1.38
26	LA	105	C	C2-N3	-5.87	1.31	1.35
26	LA	985	C	P-O5'	-5.87	1.53	1.59
38	LE	134	HIS	N-CA	-5.87	1.34	1.46
2	SA	761	G	C2'-C1'	-5.86	1.46	1.53
2	SA	796	C	O3'-P	-5.86	1.54	1.61
2	SA	922	G	O4'-C1'	-5.86	1.34	1.41
3	S1	48	C	N1-C6	5.86	1.40	1.37
26	LA	572	A	C6-N1	-5.86	1.31	1.35
26	LA	866	A	N7-C5	-5.86	1.35	1.39
26	LA	882	G	N7-C5	-5.86	1.35	1.39
26	LA	928	A	C4'-C3'	-5.86	1.46	1.52
26	LA	1750	G	C2'-C1'	-5.86	1.47	1.53
26	LA	2493	U	C1'-N1	-5.86	1.38	1.46
2	SA	1441	A	C2-N3	5.86	1.38	1.33
26	LA	1274	A	O4'-C1'	-5.86	1.34	1.41
26	LA	1286	A	N7-C5	-5.86	1.35	1.39
26	LA	2495	G	C1'-N9	-5.86	1.38	1.46
26	LA	2725	A	N7-C5	-5.86	1.35	1.39
2	SA	67	C	C4-N4	-5.86	1.28	1.33
2	SA	559	A	C4'-C3'	5.86	1.59	1.53
2	SA	949	A	C2'-C1'	-5.86	1.47	1.53
26	LA	887	U	C3'-O3'	5.86	1.50	1.42
26	LA	1279	G	P-O5'	-5.86	1.53	1.59
26	LA	1398	C	C2-O2	-5.86	1.19	1.24
26	LA	1912	A	C2'-C1'	-5.86	1.47	1.53
26	LA	2824	C	C4-N4	5.86	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	597	G	C5-C4	-5.86	1.34	1.38
26	LA	213	A	C2'-C1'	-5.86	1.47	1.53
26	LA	679	C	N3-C4	-5.86	1.29	1.33
26	LA	1491	G	O3'-P	-5.86	1.54	1.61
26	LA	2316	G	P-O5'	-5.86	1.53	1.59
2	SA	507	C	C2'-O2'	-5.86	1.34	1.41
4	S2	21	U	N1-C2	5.86	1.43	1.38
25	LB	50	A	C2'-C1'	-5.86	1.47	1.53
26	LA	226	A	C2'-C1'	-5.86	1.47	1.53
26	LA	583	G	N7-C5	-5.86	1.35	1.39
26	LA	1204	A	N7-C5	-5.86	1.35	1.39
26	LA	1449	G	C5'-C4'	5.86	1.58	1.51
26	LA	1616	A	C2'-C1'	-5.86	1.47	1.53
26	LA	1766	G	N9-C8	5.86	1.42	1.37
26	LA	1977	A	N3-C4	-5.86	1.31	1.34
26	LA	1996	C	C2-N3	-5.86	1.31	1.35
26	LA	2342	C	C4'-C3'	5.86	1.59	1.53
2	SA	156	C	C2-N3	-5.86	1.31	1.35
2	SA	251	G	C6-N1	5.86	1.43	1.39
2	SA	327	A	N9-C4	5.86	1.41	1.37
24	S3	284	TYR	CG-CD1	5.86	1.46	1.39
24	S3	533	TYR	CG-CD1	5.86	1.46	1.39
25	LB	31	C	C3'-C2'	-5.86	1.46	1.52
26	LA	557	C	C3'-C2'	-5.86	1.46	1.52
26	LA	1554	U	C4'-C3'	5.86	1.59	1.53
26	LA	1948	G	N7-C5	-5.86	1.35	1.39
26	LA	2168	G	C6-N1	-5.86	1.35	1.39
2	SA	178	C	N3-C4	5.85	1.38	1.33
2	SA	457	G	C5'-C4'	5.85	1.58	1.51
2	SA	803	G	N1-C2	5.85	1.42	1.37
4	S2	52	C	N1-C6	-5.85	1.33	1.37
26	LA	76	C	C3'-C2'	-5.85	1.46	1.52
26	LA	1478	G	N7-C5	-5.85	1.35	1.39
26	LA	1652	A	C2'-C1'	-5.85	1.47	1.53
26	LA	2618	G	C5-C6	-5.85	1.36	1.42
2	SA	59	A	N7-C5	5.85	1.42	1.39
2	SA	89	U	C4'-O4'	5.85	1.53	1.45
2	SA	221	C	N1-C2	5.85	1.46	1.40
2	SA	1008	U	N3-C4	5.85	1.43	1.38
2	SA	1293	C	C3'-C2'	-5.85	1.46	1.52
2	SA	1361	G	C2'-C1'	-5.85	1.47	1.53
3	S1	51	C	C4'-C3'	5.85	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	SE	9	GLU	CG-CD	5.85	1.60	1.51
26	LA	9	G	N7-C5	-5.85	1.35	1.39
26	LA	430	A	N1-C2	-5.85	1.29	1.34
26	LA	558	U	C3'-O3'	5.85	1.50	1.42
26	LA	1124	G	C1'-N9	-5.85	1.38	1.46
26	LA	1336	A	P-O5'	-5.85	1.53	1.59
26	LA	1604	C	C4-N4	-5.85	1.28	1.33
26	LA	1641	A	N7-C5	-5.85	1.35	1.39
26	LA	1754	A	O3'-P	-5.85	1.54	1.61
26	LA	1795	C	C3'-C2'	-5.85	1.46	1.52
26	LA	2054	A	C2'-C1'	-5.85	1.47	1.53
26	LA	2253	G	N1-C2	5.85	1.42	1.37
26	LA	2353	G	C5-C6	-5.85	1.36	1.42
26	LA	18	U	P-O5'	-5.85	1.53	1.59
26	LA	41	C	N1-C2	-5.85	1.34	1.40
26	LA	742	A	C6-N6	-5.85	1.29	1.33
26	LA	1120	G	N3-C4	-5.85	1.31	1.35
26	LA	1770	G	C2'-C1'	-5.85	1.47	1.53
2	SA	159	G	C2-N2	-5.85	1.28	1.34
2	SA	869	G	C6-N1	5.85	1.43	1.39
2	SA	1345	U	C4'-O4'	5.85	1.53	1.45
26	LA	292	U	C2'-C1'	-5.85	1.47	1.53
26	LA	565	C	C2-O2	5.85	1.29	1.24
26	LA	1428	C	N3-C4	-5.85	1.29	1.33
26	LA	1510	G	C6-O6	-5.85	1.18	1.24
26	LA	2681	C	C4-N4	-5.85	1.28	1.33
37	LC	178	VAL	CA-CB	-5.85	1.42	1.54
55	LQ	13	ARG	CD-NE	5.85	1.56	1.46
2	SA	398	U	N3-C4	-5.85	1.33	1.38
2	SA	472	U	C2-N3	-5.85	1.33	1.37
25	LB	34	A	C4'-O4'	5.85	1.53	1.45
26	LA	1489	C	C3'-C2'	5.85	1.59	1.52
26	LA	2188	U	C5'-C4'	5.85	1.58	1.51
26	LA	2641	G	N9-C4	5.85	1.42	1.38
26	LA	2880	C	C3'-C2'	-5.85	1.46	1.52
2	SA	813	U	C2-N3	5.85	1.41	1.37
2	SA	872	A	N3-C4	-5.85	1.31	1.34
2	SA	1243	C	C3'-C2'	-5.85	1.46	1.52
26	LA	791	C	C3'-C2'	5.85	1.59	1.52
26	LA	811	U	N3-C4	-5.85	1.33	1.38
26	LA	1031	G	C8-N7	-5.85	1.27	1.30
26	LA	1645	G	C6-N1	-5.85	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1672	A	N7-C5	-5.85	1.35	1.39
26	LA	1701	A	C4'-O4'	5.85	1.53	1.45
26	LA	2292	U	N1-C6	-5.85	1.32	1.38
26	LA	2528	U	C4'-O4'	-5.85	1.38	1.45
2	SA	432	A	C2'-C1'	-5.84	1.47	1.53
2	SA	497	G	C2'-C1'	-5.84	1.47	1.53
2	SA	867	G	O4'-C1'	-5.84	1.34	1.41
2	SA	1002	G	C4'-C3'	5.84	1.59	1.53
4	S2	74	A	N9-C8	5.84	1.42	1.37
26	LA	61	C	O5'-C5'	-5.84	1.33	1.42
26	LA	1383	A	C2'-O2'	-5.84	1.34	1.41
26	LA	2522	U	N3-C4	-5.84	1.33	1.38
26	LA	2812	G	C8-N7	-5.84	1.27	1.30
2	SA	192	A	C3'-O3'	5.84	1.50	1.42
2	SA	372	C	C4-C5	5.84	1.47	1.43
2	SA	548	G	N9-C4	-5.84	1.33	1.38
26	LA	417	C	C2-N3	-5.84	1.31	1.35
26	LA	460	A	N9-C4	5.84	1.41	1.37
26	LA	1277	G	C2-N2	-5.84	1.28	1.34
26	LA	1284	A	C8-N7	-5.84	1.27	1.31
26	LA	1587	G	C5-C4	-5.84	1.34	1.38
26	LA	1665	A	C4'-C3'	5.84	1.59	1.53
26	LA	2646	C	N3-C4	5.84	1.38	1.33
2	SA	745	G	C5'-C4'	5.84	1.58	1.51
2	SA	1015	G	C3'-C2'	5.84	1.59	1.52
26	LA	81	G	C5'-C4'	5.84	1.58	1.51
26	LA	131	A	P-O5'	5.84	1.65	1.59
26	LA	704	G	C2'-C1'	-5.84	1.47	1.53
26	LA	979	A	C3'-C2'	-5.84	1.46	1.52
26	LA	1075	C	O3'-P	-5.84	1.54	1.61
26	LA	1360	G	C2-N2	-5.84	1.28	1.34
26	LA	1600	C	C2-N3	-5.84	1.31	1.35
26	LA	2045	C	C2'-C1'	5.84	1.59	1.53
26	LA	2414	G	C5'-C4'	5.84	1.58	1.51
37	LC	201	PRO	N-CD	-5.84	1.39	1.47
2	SA	950	U	C3'-C2'	-5.84	1.46	1.52
2	SA	1106	G	C4'-C3'	-5.84	1.46	1.52
2	SA	1370	G	N7-C5	5.84	1.42	1.39
26	LA	50	U	C4'-C3'	5.84	1.59	1.53
26	LA	1888	G	C8-N7	-5.84	1.27	1.30
26	LA	1997	C	N1-C6	-5.84	1.33	1.37
26	LA	2043	C	C5'-C4'	5.84	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2820	A	C8-N7	-5.84	1.27	1.31
26	LA	2863	C	C2'-C1'	-5.84	1.47	1.53
2	SA	865	A	N7-C5	-5.84	1.35	1.39
2	SA	1095	U	N3-C4	-5.84	1.33	1.38
2	SA	1115	U	N1-C6	-5.84	1.32	1.38
26	LA	1939	U	O4'-C1'	-5.84	1.34	1.41
56	LR	50	ARG	CD-NE	5.84	1.56	1.46
2	SA	412	A	C5-C6	-5.84	1.35	1.41
2	SA	1079	G	N9-C4	-5.84	1.33	1.38
4	S2	53	G	C2-N3	-5.84	1.28	1.32
26	LA	10	A	C2'-C1'	-5.84	1.47	1.53
26	LA	53	A	C2'-C1'	-5.84	1.47	1.53
26	LA	518	G	N9-C4	-5.84	1.33	1.38
26	LA	699	A	C2'-C1'	-5.84	1.47	1.53
26	LA	904	G	C6-N1	-5.84	1.35	1.39
26	LA	1212	G	C2'-C1'	-5.84	1.47	1.53
26	LA	1697	G	N9-C8	5.84	1.42	1.37
26	LA	2459	A	N7-C5	-5.84	1.35	1.39
26	LA	2811	G	C5-C4	-5.84	1.34	1.38
2	SA	210	C	C5-C6	5.83	1.39	1.34
2	SA	574	A	C5-C4	-5.83	1.34	1.38
2	SA	633	G	C4'-O4'	5.83	1.53	1.45
25	LB	86	G	C4'-C3'	5.83	1.59	1.53
26	LA	792	A	C6-N1	-5.83	1.31	1.35
26	LA	1564	C	C5-C6	5.83	1.39	1.34
2	SA	159	G	N9-C4	-5.83	1.33	1.38
2	SA	1072	G	C2'-C1'	-5.83	1.47	1.53
26	LA	125	A	C3'-C2'	5.83	1.59	1.52
26	LA	876	C	C4-N4	-5.83	1.28	1.33
26	LA	1078	U	C4-C5	-5.83	1.38	1.43
26	LA	1364	G	N3-C4	-5.83	1.31	1.35
26	LA	1673	G	C6-O6	-5.83	1.19	1.24
26	LA	1768	C	C3'-C2'	-5.83	1.46	1.52
26	LA	2116	G	N9-C4	5.83	1.42	1.38
26	LA	2278	A	C3'-O3'	5.83	1.50	1.42
26	LA	2720	U	P-O5'	-5.83	1.53	1.59
2	SA	112	G	O3'-P	-5.83	1.54	1.61
2	SA	297	G	C3'-C2'	5.83	1.59	1.52
2	SA	454	G	C8-N7	5.83	1.34	1.30
2	SA	720	C	N3-C4	5.83	1.38	1.33
2	SA	1242	G	C1'-N9	-5.83	1.38	1.46
2	SA	1513	A	C5'-C4'	-5.83	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	771	G	C2-N2	-5.83	1.28	1.34
26	LA	799	G	C2'-C1'	-5.83	1.47	1.53
26	LA	2378	A	N9-C8	5.83	1.42	1.37
2	SA	244	U	C4-O4	-5.83	1.19	1.23
2	SA	532	A	C6-N6	5.83	1.38	1.33
2	SA	874	G	O3'-P	-5.83	1.54	1.61
2	SA	1062	U	C2'-C1'	-5.83	1.47	1.53
2	SA	1330	U	C2-N3	5.83	1.41	1.37
2	SA	1504	G	O3'-P	5.83	1.68	1.61
26	LA	1107	G	N9-C8	5.83	1.42	1.37
26	LA	1328	A	C5'-C4'	5.83	1.58	1.51
26	LA	2223	G	O3'-P	-5.83	1.54	1.61
26	LA	2514	U	C2'-C1'	-5.83	1.47	1.53
26	LA	2902	C	N3-C4	5.83	1.38	1.33
2	SA	412	A	O3'-P	-5.83	1.54	1.61
2	SA	998	C	C5-C6	5.83	1.39	1.34
26	LA	1511	G	P-O5'	-5.83	1.53	1.59
2	SA	481	G	P-O5'	5.83	1.65	1.59
2	SA	520	A	O3'-P	-5.83	1.54	1.61
2	SA	627	G	C2-N2	-5.83	1.28	1.34
12	SL	14	LYS	CA-CB	5.83	1.66	1.53
25	LB	120	U	C4-C5	5.83	1.48	1.43
26	LA	865	C	C2'-C1'	-5.83	1.47	1.53
26	LA	1375	U	C4-C5	-5.83	1.38	1.43
26	LA	2224	G	P-O5'	-5.83	1.53	1.59
2	SA	300	A	N7-C5	-5.82	1.35	1.39
2	SA	477	C	C1'-N1	5.82	1.57	1.48
2	SA	729	A	C6-N1	5.82	1.39	1.35
2	SA	974	A	N7-C5	-5.82	1.35	1.39
25	LB	10	G	N9-C4	-5.82	1.33	1.38
25	LB	35	C	P-O5'	5.82	1.65	1.59
26	LA	455	C	N3-C4	5.82	1.38	1.33
26	LA	800	A	C2'-C1'	-5.82	1.47	1.53
26	LA	1462	C	C3'-O3'	5.82	1.50	1.42
26	LA	1624	U	C5'-C4'	5.82	1.58	1.51
26	LA	1685	C	O3'-P	-5.82	1.54	1.61
26	LA	2719	G	N1-C2	-5.82	1.33	1.37
26	LA	2726	A	C6-N1	-5.82	1.31	1.35
51	LI	93	SER	N-CA	5.82	1.57	1.46
2	SA	220	G	C2'-C1'	-5.82	1.47	1.53
2	SA	833	G	O3'-P	-5.82	1.54	1.61
2	SA	1238	A	C2'-C1'	5.82	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	40	G	N9-C8	-5.82	1.33	1.37
26	LA	1134	A	N9-C4	5.82	1.41	1.37
26	LA	1141	U	C4'-C3'	5.82	1.59	1.53
26	LA	1455	G	O4'-C1'	5.82	1.49	1.41
26	LA	2465	C	C2-N3	5.82	1.40	1.35
26	LA	2668	G	C4'-O4'	5.82	1.53	1.45
26	LA	2839	G	C6-N1	5.82	1.43	1.39
2	SA	508	U	N1-C2	-5.82	1.33	1.38
2	SA	934	C	C2'-C1'	-5.82	1.47	1.53
2	SA	1242	G	C5-C6	5.82	1.48	1.42
4	S2	76	C	O3'-P	-5.82	1.54	1.61
24	S3	304	THR	C-N	-5.82	1.23	1.34
25	LB	20	G	N9-C4	-5.82	1.33	1.38
26	LA	31	C	C3'-O3'	5.82	1.50	1.42
26	LA	375	G	N7-C5	5.82	1.42	1.39
26	LA	404	A	C6-N6	5.82	1.38	1.33
26	LA	501	A	O5'-C5'	5.82	1.53	1.44
26	LA	2103	C	N1-C6	-5.82	1.33	1.37
26	LA	2268	A	C5-C6	-5.82	1.35	1.41
26	LA	2360	G	N3-C4	5.82	1.39	1.35
2	SA	187	G	C2'-O2'	5.82	1.49	1.41
2	SA	1344	C	C4-N4	-5.82	1.28	1.33
26	LA	55	G	C5'-C4'	5.82	1.58	1.51
2	SA	205	A	P-O5'	5.82	1.65	1.59
2	SA	540	G	O3'-P	-5.82	1.54	1.61
2	SA	674	G	P-O5'	-5.82	1.53	1.59
2	SA	1357	A	N3-C4	5.82	1.38	1.34
25	LB	94	A	N9-C4	-5.82	1.34	1.37
26	LA	212	G	C2-N2	-5.82	1.28	1.34
26	LA	320	A	C8-N7	-5.82	1.27	1.31
26	LA	558	U	C2-N3	-5.82	1.33	1.37
26	LA	714	U	C4-O4	-5.82	1.19	1.23
26	LA	1225	G	C2'-C1'	-5.82	1.47	1.53
26	LA	1464	G	C2-N2	-5.82	1.28	1.34
26	LA	1528	A	C5'-C4'	5.82	1.58	1.51
26	LA	2662	A	C4'-O4'	-5.82	1.38	1.45
3	S1	19	A	C5'-C4'	5.82	1.58	1.51
4	S2	73	A	O3'-P	-5.82	1.54	1.61
18	SB	103	TRP	CZ3-CH2	5.82	1.49	1.40
26	LA	227	A	O4'-C1'	5.82	1.49	1.41
26	LA	1271	G	C2-N2	-5.82	1.28	1.34
26	LA	2281	A	C4'-O4'	-5.82	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2666	C	C2'-C1'	5.82	1.59	1.53
2	SA	289	G	N9-C4	5.81	1.42	1.38
26	LA	2450	A	C5-C4	-5.81	1.34	1.38
2	SA	613	C	C4-N4	-5.81	1.28	1.33
2	SA	783	C	C2-O2	5.81	1.29	1.24
2	SA	1073	U	P-O5'	-5.81	1.53	1.59
2	SA	1079	G	C8-N7	5.81	1.34	1.30
2	SA	1383	C	N1-C2	-5.81	1.34	1.40
2	SA	1513	A	N3-C4	-5.81	1.31	1.34
26	LA	1253	A	C1'-N9	-5.81	1.38	1.46
26	LA	1716	U	C4-O4	-5.81	1.19	1.23
26	LA	1949	G	N9-C8	-5.81	1.33	1.37
26	LA	2350	C	C4-C5	-5.81	1.38	1.43
26	LA	2368	C	N1-C6	-5.81	1.33	1.37
26	LA	2599	G	N9-C4	-5.81	1.33	1.38
26	LA	2612	C	P-O5'	-5.81	1.53	1.59
2	SA	191	G	C2'-C1'	-5.81	1.47	1.53
2	SA	1010	U	N3-C4	-5.81	1.33	1.38
26	LA	122	G	C1'-N9	-5.81	1.38	1.46
26	LA	149	A	C6-N1	5.81	1.39	1.35
26	LA	990	A	N9-C4	-5.81	1.34	1.37
2	SA	22	G	C5-C6	-5.81	1.36	1.42
2	SA	683	G	O3'-P	-5.81	1.54	1.61
2	SA	1206	G	C6-N1	-5.81	1.35	1.39
2	SA	1225	A	C5'-C4'	5.81	1.58	1.51
2	SA	1294	G	N9-C4	5.81	1.42	1.38
4	S2	34	U	C3'-C2'	-5.81	1.46	1.52
26	LA	354	A	N9-C4	5.81	1.41	1.37
26	LA	1120	G	O3'-P	-5.81	1.54	1.61
26	LA	1397	U	C4'-C3'	5.81	1.59	1.53
26	LA	2595	G	C6-N1	5.81	1.43	1.39
26	LA	2627	G	C6-N1	-5.81	1.35	1.39
26	LA	2865	U	C4'-C3'	-5.81	1.46	1.52
2	SA	1044	A	C4'-C3'	-5.81	1.46	1.52
2	SA	1048	G	C5'-C4'	5.81	1.58	1.51
2	SA	1060	U	C2-N3	5.81	1.41	1.37
4	S2	23	G	C6-N1	-5.81	1.35	1.39
26	LA	50	U	O3'-P	-5.81	1.54	1.61
26	LA	696	G	N3-C4	-5.81	1.31	1.35
26	LA	929	U	C4-O4	-5.81	1.19	1.23
26	LA	1143	A	C2'-C1'	-5.81	1.47	1.53
26	LA	1380	G	C3'-O3'	5.81	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2006	C	N1-C6	-5.81	1.33	1.37
26	LA	2397	G	N9-C8	5.81	1.42	1.37
2	SA	1303	C	C2-N3	5.81	1.40	1.35
4	S2	59	A	P-O5'	5.81	1.65	1.59
26	LA	382	A	C5-C4	-5.81	1.34	1.38
26	LA	1903	G	C4'-O4'	5.81	1.53	1.45
26	LA	1999	C	C4-N4	-5.81	1.28	1.33
26	LA	2524	G	C2'-C1'	-5.81	1.47	1.53
2	SA	146	G	N7-C5	5.80	1.42	1.39
2	SA	521	G	N9-C4	-5.80	1.33	1.38
2	SA	1144	G	N7-C5	-5.80	1.35	1.39
2	SA	1217	C	C2'-C1'	-5.80	1.47	1.53
13	SM	22	TYR	CB-CG	-5.80	1.43	1.51
26	LA	60	G	N9-C4	-5.80	1.33	1.38
26	LA	84	A	C2'-C1'	-5.80	1.47	1.53
26	LA	457	A	C6-N1	-5.80	1.31	1.35
26	LA	840	C	P-O5'	-5.80	1.53	1.59
26	LA	914	G	C2-N2	-5.80	1.28	1.34
26	LA	1021	A	C3'-C2'	-5.80	1.46	1.52
26	LA	2026	U	C5'-C4'	5.80	1.58	1.51
26	LA	2156	G	P-O5'	-5.80	1.53	1.59
26	LA	2285	C	C5'-C4'	5.80	1.58	1.51
26	LA	2783	U	N3-C4	-5.80	1.33	1.38
2	SA	683	G	N9-C8	-5.80	1.33	1.37
2	SA	1152	A	C2-N3	-5.80	1.28	1.33
4	S2	42	C	C2-O2	-5.80	1.19	1.24
24	S3	604	PHE	CG-CD2	5.80	1.47	1.38
25	LB	116	G	C2'-C1'	5.80	1.59	1.53
26	LA	1399	C	P-O5'	-5.80	1.53	1.59
26	LA	1598	A	C8-N7	-5.80	1.27	1.31
26	LA	2383	G	C2'-C1'	-5.80	1.47	1.53
2	SA	65	A	N1-C2	5.80	1.39	1.34
2	SA	574	A	C5-C6	-5.80	1.35	1.41
2	SA	966	G	C5-C6	-5.80	1.36	1.42
26	LA	1316	U	C2'-C1'	-5.80	1.47	1.53
26	LA	1446	C	C4-C5	-5.80	1.38	1.43
26	LA	1540	G	N1-C2	5.80	1.42	1.37
26	LA	1857	G	C5'-C4'	5.80	1.58	1.51
26	LA	2501	C	C4'-C3'	-5.80	1.46	1.52
26	LA	2730	C	C5-C6	-5.80	1.29	1.34
26	LA	2897	U	P-O5'	-5.80	1.53	1.59
29	LV	13	ALA	C-N	-5.80	1.23	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	709	U	C4-C5	-5.80	1.38	1.43
2	SA	783	C	C2'-C1'	-5.80	1.47	1.53
2	SA	1074	G	C2-N2	-5.80	1.28	1.34
2	SA	1254	A	N9-C8	-5.80	1.33	1.37
26	LA	598	U	N1-C2	5.80	1.43	1.38
26	LA	733	G	N1-C2	-5.80	1.33	1.37
26	LA	1223	G	C5'-C4'	5.80	1.58	1.51
26	LA	1528	A	C3'-O3'	5.80	1.50	1.42
26	LA	2138	G	C2-N3	5.80	1.37	1.32
26	LA	2307	G	C5-C4	-5.80	1.34	1.38
2	SA	388	G	P-O5'	5.80	1.65	1.59
2	SA	568	G	O5'-C5'	5.80	1.53	1.44
2	SA	659	U	C3'-O3'	5.80	1.50	1.42
26	LA	213	A	N1-C2	-5.80	1.29	1.34
26	LA	1016	G	N7-C5	-5.80	1.35	1.39
26	LA	1136	G	C5-C6	-5.80	1.36	1.42
26	LA	1330	C	C4'-O4'	-5.80	1.38	1.45
2	SA	974	A	P-O5'	-5.80	1.53	1.59
4	S2	13	C	C2-O2	-5.80	1.19	1.24
26	LA	462	C	C4-C5	-5.80	1.38	1.43
26	LA	601	C	C4'-O4'	5.80	1.53	1.45
26	LA	748	G	C5'-C4'	5.80	1.58	1.51
26	LA	1073	A	C3'-O3'	5.80	1.50	1.42
26	LA	1248	G	N7-C5	5.80	1.42	1.39
26	LA	1858	A	C3'-O3'	5.80	1.50	1.42
26	LA	2146	C	N3-C4	-5.80	1.29	1.33
26	LA	2291	U	P-O5'	-5.80	1.53	1.59
26	LA	2341	G	N9-C8	5.80	1.42	1.37
26	LA	2795	C	C5'-C4'	5.80	1.58	1.51
49	LK	137	LEU	N-CA	-5.80	1.34	1.46
2	SA	1229	A	N9-C4	5.79	1.41	1.37
2	SA	1401	G	C5-C4	-5.79	1.34	1.38
26	LA	1920	C	C4'-O4'	5.79	1.53	1.45
26	LA	2344	U	C5'-C4'	5.79	1.58	1.51
2	SA	348	G	C2-N2	-5.79	1.28	1.34
2	SA	628	G	C2-N2	-5.79	1.28	1.34
3	S1	44	U	N1-C6	5.79	1.43	1.38
25	LB	113	C	C3'-C2'	-5.79	1.46	1.52
26	LA	136	G	O4'-C1'	5.79	1.49	1.41
26	LA	293	U	C4-C5	5.79	1.48	1.43
26	LA	1093	G	C3'-O3'	-5.79	1.34	1.42
26	LA	1213	A	N7-C5	-5.79	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1276	A	C8-N7	5.79	1.35	1.31
26	LA	1619	G	C5'-C4'	5.79	1.58	1.51
26	LA	2208	C	C4-C5	5.79	1.47	1.43
26	LA	2579	C	N3-C4	-5.79	1.29	1.33
2	SA	1515	G	C4'-C3'	-5.79	1.46	1.52
26	LA	1584	U	P-O5'	5.79	1.65	1.59
26	LA	1850	G	C2'-C1'	-5.79	1.47	1.53
26	LA	2219	U	O3'-P	-5.79	1.54	1.61
26	LA	2336	A	N3-C4	5.79	1.38	1.34
26	LA	2732	G	C4'-C3'	5.79	1.59	1.53
2	SA	1490	U	N3-C4	5.79	1.43	1.38
26	LA	279	A	C5-C4	-5.79	1.34	1.38
26	LA	324	A	O4'-C1'	5.79	1.49	1.41
26	LA	1984	G	C6-O6	-5.79	1.19	1.24
2	SA	410	G	C6-N1	-5.79	1.35	1.39
2	SA	761	G	C5'-C4'	5.79	1.58	1.51
26	LA	521	U	C5'-C4'	5.79	1.58	1.51
26	LA	1021	A	C5'-C4'	5.79	1.58	1.51
26	LA	1826	G	C4'-C3'	-5.79	1.46	1.52
26	LA	1886	U	O3'-P	-5.79	1.54	1.61
2	SA	368	U	C2-N3	-5.79	1.33	1.37
2	SA	1184	G	N9-C8	-5.79	1.33	1.37
26	LA	1045	C	P-O5'	5.79	1.65	1.59
26	LA	2526	G	N9-C8	-5.79	1.33	1.37
26	LA	2639	A	C8-N7	-5.79	1.27	1.31
2	SA	478	A	N7-C5	-5.79	1.35	1.39
2	SA	663	A	P-O5'	-5.79	1.53	1.59
2	SA	880	C	C2'-O2'	-5.79	1.34	1.41
2	SA	1077	G	N9-C4	-5.79	1.33	1.38
2	SA	1162	C	C4-N4	-5.79	1.28	1.33
2	SA	1321	U	C4-C5	5.79	1.48	1.43
2	SA	1375	A	N9-C4	-5.79	1.34	1.37
4	S2	63	C	C5'-C4'	5.79	1.58	1.51
15	SO	77	TYR	CD1-CE1	5.79	1.48	1.39
26	LA	143	C	C2-O2	5.79	1.29	1.24
26	LA	1277	G	C5-C4	5.79	1.42	1.38
26	LA	1720	U	O3'-P	-5.79	1.54	1.61
26	LA	1771	C	C4'-O4'	-5.79	1.38	1.45
26	LA	2087	G	N9-C4	-5.79	1.33	1.38
2	SA	363	A	N7-C5	-5.78	1.35	1.39
2	SA	452	A	C2-N3	5.78	1.38	1.33
2	SA	905	U	C3'-C2'	5.78	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1416	G	N1-C2	5.78	1.42	1.37
7	SG	153	TYR	CB-CG	-5.78	1.43	1.51
26	LA	160	A	N9-C8	5.78	1.42	1.37
26	LA	684	G	C3'-C2'	-5.78	1.46	1.52
26	LA	792	A	N9-C8	-5.78	1.33	1.37
26	LA	796	C	C4'-C3'	-5.78	1.46	1.52
26	LA	995	C	N3-C4	-5.78	1.29	1.33
26	LA	1210	G	C6-N1	5.78	1.43	1.39
26	LA	1245	G	C2-N2	-5.78	1.28	1.34
26	LA	2338	C	C5-C6	-5.78	1.29	1.34
26	LA	2420	C	O3'-P	-5.78	1.54	1.61
26	LA	2462	C	C4-C5	-5.78	1.38	1.43
26	LA	2553	G	C2-N3	5.78	1.37	1.32
2	SA	537	G	C4'-O4'	5.78	1.53	1.45
2	SA	997	U	C2-N3	5.78	1.41	1.37
2	SA	1270	G	N9-C4	-5.78	1.33	1.38
25	LB	2	G	N9-C4	-5.78	1.33	1.38
26	LA	966	G	C2-N2	-5.78	1.28	1.34
26	LA	1380	G	C6-N1	5.78	1.43	1.39
26	LA	1471	G	N9-C8	5.78	1.41	1.37
26	LA	1665	A	C3'-C2'	-5.78	1.46	1.52
26	LA	2405	G	C2-N2	-5.78	1.28	1.34
29	LV	78	SER	CB-OG	5.78	1.49	1.42
2	SA	84	U	P-O5'	5.78	1.65	1.59
2	SA	423	G	N9-C4	5.78	1.42	1.38
2	SA	573	A	C4'-C3'	-5.78	1.46	1.52
2	SA	744	C	C3'-C2'	-5.78	1.46	1.52
2	SA	819	A	C5-C4	5.78	1.42	1.38
2	SA	1013	G	C5-C6	5.78	1.48	1.42
2	SA	1358	U	N1-C6	-5.78	1.32	1.38
25	LB	32	U	C4-C5	5.78	1.48	1.43
26	LA	455	C	C4'-O4'	-5.78	1.38	1.45
26	LA	477	A	N1-C2	-5.78	1.29	1.34
26	LA	1103	A	C2-N3	5.78	1.38	1.33
26	LA	1536	C	C5'-C4'	5.78	1.58	1.51
26	LA	1815	A	C2-N3	-5.78	1.28	1.33
26	LA	1846	G	N7-C5	-5.78	1.35	1.39
26	LA	2406	A	P-O5'	5.78	1.65	1.59
26	LA	2443	C	N1-C6	-5.78	1.33	1.37
26	LA	2553	G	C2-N2	-5.78	1.28	1.34
2	SA	297	G	N7-C5	-5.78	1.35	1.39
2	SA	1082	A	C5'-C4'	5.78	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	581	C	C2'-C1'	-5.78	1.47	1.53
26	LA	1798	U	C2-N3	-5.78	1.33	1.37
26	LA	2427	C	C5-C6	5.78	1.39	1.34
26	LA	2771	C	N1-C2	-5.78	1.34	1.40
2	SA	100	G	N3-C4	-5.78	1.31	1.35
2	SA	276	G	N3-C4	-5.78	1.31	1.35
2	SA	497	G	N7-C5	5.78	1.42	1.39
2	SA	552	U	C3'-C2'	-5.78	1.46	1.52
2	SA	914	A	O4'-C1'	-5.78	1.34	1.41
2	SA	1244	G	C8-N7	5.78	1.34	1.30
26	LA	287	G	N3-C4	-5.78	1.31	1.35
26	LA	610	C	C3'-C2'	5.78	1.59	1.52
26	LA	705	A	N1-C2	-5.78	1.29	1.34
26	LA	1306	C	C2-N3	5.78	1.40	1.35
26	LA	1370	C	P-O5'	-5.78	1.53	1.59
26	LA	1783	A	C5-C4	5.78	1.42	1.38
26	LA	2006	C	C4-C5	-5.78	1.38	1.43
33	LZ	76	LYS	N-CA	-5.78	1.34	1.46
2	SA	467	U	C2-N3	-5.78	1.33	1.37
2	SA	579	A	C2'-C1'	-5.78	1.47	1.53
2	SA	821	G	N3-C4	-5.78	1.31	1.35
2	SA	1143	G	N9-C4	5.78	1.42	1.38
11	SK	123	PRO	N-CA	-5.78	1.37	1.47
26	LA	674	G	C8-N7	-5.78	1.27	1.30
26	LA	1139	G	C6-N1	-5.78	1.35	1.39
26	LA	1343	G	C5-C4	5.78	1.42	1.38
26	LA	1918	A	O3'-P	5.78	1.68	1.61
26	LA	2024	G	C6-O6	-5.78	1.19	1.24
26	LA	2239	G	N3-C4	5.78	1.39	1.35
26	LA	2787	C	C2'-O2'	5.78	1.49	1.41
2	SA	514	C	C2-N3	-5.77	1.31	1.35
2	SA	1129	C	C3'-C2'	5.77	1.59	1.52
24	S3	533	TYR	CE2-CZ	5.77	1.46	1.38
26	LA	778	G	C3'-C2'	-5.77	1.46	1.52
26	LA	1660	G	C2-N2	-5.77	1.28	1.34
26	LA	1697	G	O4'-C1'	-5.77	1.34	1.41
2	SA	15	G	C8-N7	5.77	1.34	1.30
2	SA	581	G	C2-N2	-5.77	1.28	1.34
2	SA	810	C	P-O5'	-5.77	1.53	1.59
26	LA	384	A	N3-C4	-5.77	1.31	1.34
26	LA	478	A	C4'-O4'	-5.77	1.38	1.45
26	LA	489	G	C1'-N9	-5.77	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1141	U	N1-C6	-5.77	1.32	1.38
26	LA	1881	C	C4'-C3'	5.77	1.59	1.53
26	LA	1975	G	C6-N1	-5.77	1.35	1.39
26	LA	1993	U	N1-C2	-5.77	1.33	1.38
26	LA	2475	C	C5-C6	5.77	1.39	1.34
2	SA	143	A	N9-C4	5.77	1.41	1.37
2	SA	823	C	C5-C6	-5.77	1.29	1.34
2	SA	1467	C	P-O5'	-5.77	1.53	1.59
26	LA	817	C	C2-N3	-5.77	1.31	1.35
26	LA	1276	A	N7-C5	-5.77	1.35	1.39
26	LA	1517	G	N1-C2	-5.77	1.33	1.37
26	LA	2831	G	O3'-P	-5.77	1.54	1.61
2	SA	360	G	N9-C8	-5.77	1.33	1.37
2	SA	366	A	C1'-N9	-5.77	1.38	1.46
2	SA	878	A	C3'-O3'	5.77	1.50	1.42
2	SA	933	G	O4'-C1'	5.77	1.49	1.41
2	SA	1502	A	C4'-C3'	-5.77	1.46	1.52
26	LA	66	C	C4-N4	-5.77	1.28	1.33
26	LA	712	G	C5-C4	-5.77	1.34	1.38
26	LA	1196	C	C2'-C1'	-5.77	1.47	1.53
2	SA	88	U	C4-C5	-5.77	1.38	1.43
2	SA	208	U	C2-N3	-5.77	1.33	1.37
2	SA	318	G	C1'-N9	-5.77	1.38	1.46
2	SA	546	A	P-O5'	5.77	1.65	1.59
2	SA	903	G	C6-N1	-5.77	1.35	1.39
2	SA	1312	G	N3-C4	-5.77	1.31	1.35
2	SA	1530	G	C5-C6	5.77	1.48	1.42
4	S2	13	C	C4-C5	-5.77	1.38	1.43
4	S2	53	G	O3'-P	-5.77	1.54	1.61
18	SB	20	ARG	CD-NE	5.77	1.56	1.46
26	LA	49	A	P-O5'	-5.77	1.53	1.59
26	LA	787	C	C4'-C3'	-5.77	1.46	1.52
26	LA	846	U	C2-N3	5.77	1.41	1.37
26	LA	1393	A	O4'-C1'	-5.77	1.34	1.41
26	LA	2508	G	N7-C5	-5.77	1.35	1.39
2	SA	313	A	N3-C4	-5.77	1.31	1.34
26	LA	2236	U	C4-C5	-5.77	1.38	1.43
2	SA	788	U	C2-N3	-5.76	1.33	1.37
2	SA	887	G	C5-C4	-5.76	1.34	1.38
4	S2	47	A	N3-C4	-5.76	1.31	1.34
26	LA	2112	G	C8-N7	-5.76	1.27	1.30
26	LA	2117	A	P-O5'	5.76	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2217	G	C3'-O3'	5.76	1.50	1.42
26	LA	2671	G	C5'-C4'	5.76	1.58	1.51
52	LO	10	ARG	CD-NE	5.76	1.56	1.46
2	SA	734	G	O5'-C5'	5.76	1.53	1.44
26	LA	1042	G	P-O5'	-5.76	1.53	1.59
26	LA	1815	A	C5-C4	-5.76	1.34	1.38
2	SA	778	G	O3'-P	-5.76	1.54	1.61
2	SA	862	C	C2-N3	-5.76	1.31	1.35
2	SA	1483	A	C6-N6	5.76	1.38	1.33
26	LA	127	A	C8-N7	-5.76	1.27	1.31
26	LA	413	C	C4-C5	5.76	1.47	1.43
26	LA	451	U	N3-C4	-5.76	1.33	1.38
26	LA	605	G	O4'-C1'	-5.76	1.34	1.41
26	LA	689	A	C5'-C4'	5.76	1.58	1.51
26	LA	820	A	C6-N1	-5.76	1.31	1.35
26	LA	978	G	N3-C4	-5.76	1.31	1.35
26	LA	1321	A	C5-C4	-5.76	1.34	1.38
26	LA	2626	C	C3'-C2'	-5.76	1.46	1.52
26	LA	2843	G	N9-C4	-5.76	1.33	1.38
26	LA	2867	G	N1-C2	-5.76	1.33	1.37
2	SA	76	G	C8-N7	-5.76	1.27	1.30
2	SA	590	U	C3'-C2'	-5.76	1.46	1.52
2	SA	691	G	C5-C4	-5.76	1.34	1.38
2	SA	1188	A	C6-N1	-5.76	1.31	1.35
2	SA	1322	C	C5'-C4'	5.76	1.58	1.51
26	LA	109	C	O3'-P	-5.76	1.54	1.61
26	LA	222	A	C4'-C3'	-5.76	1.46	1.52
26	LA	231	A	C6-N6	5.76	1.38	1.33
26	LA	445	C	C2-N3	-5.76	1.31	1.35
26	LA	506	G	C2-N2	-5.76	1.28	1.34
26	LA	728	G	N3-C4	-5.76	1.31	1.35
26	LA	826	U	C3'-C2'	-5.76	1.46	1.52
26	LA	1638	C	C4'-O4'	-5.76	1.38	1.45
26	LA	1886	U	N3-C4	-5.76	1.33	1.38
26	LA	2074	U	C5-C6	5.76	1.39	1.34
2	SA	488	C	C5'-C4'	5.76	1.58	1.51
2	SA	1484	C	C4-C5	5.76	1.47	1.43
26	LA	1176	U	C3'-C2'	5.76	1.59	1.52
26	LA	1468	U	O3'-P	-5.76	1.54	1.61
26	LA	1732	C	C4-C5	5.76	1.47	1.43
26	LA	2148	G	C2-N3	5.76	1.37	1.32
26	LA	2157	G	N1-C2	-5.76	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	228	A	C5'-C4'	5.76	1.58	1.51
2	SA	1454	G	N9-C8	-5.76	1.33	1.37
26	LA	298	G	C2-N3	5.76	1.37	1.32
26	LA	462	C	C5-C6	5.76	1.39	1.34
26	LA	1721	G	C2'-C1'	-5.76	1.47	1.53
26	LA	1868	C	O3'-P	-5.76	1.54	1.61
26	LA	1935	G	C4'-C3'	-5.76	1.46	1.52
26	LA	2012	G	N7-C5	-5.76	1.35	1.39
26	LA	2156	G	C5-C4	5.76	1.42	1.38
26	LA	2226	C	C2-N3	-5.76	1.31	1.35
26	LA	1192	G	N9-C4	-5.75	1.33	1.38
26	LA	1479	G	C8-N7	-5.75	1.27	1.30
26	LA	2027	G	N3-C4	-5.75	1.31	1.35
26	LA	2521	C	P-O5'	-5.75	1.53	1.59
2	SA	864	A	O3'-P	-5.75	1.54	1.61
26	LA	647	G	C5-C6	-5.75	1.36	1.42
26	LA	647	G	N9-C8	5.75	1.41	1.37
26	LA	2585	U	C3'-C2'	5.75	1.59	1.52
2	SA	133	U	C2-N3	-5.75	1.33	1.37
2	SA	170	U	C5'-C4'	5.75	1.58	1.51
2	SA	946	A	C3'-O3'	5.75	1.50	1.42
2	SA	1213	A	C4'-O4'	-5.75	1.38	1.45
26	LA	475	C	C2'-C1'	-5.75	1.47	1.53
26	LA	482	A	N7-C5	-5.75	1.35	1.39
26	LA	595	C	P-O5'	-5.75	1.53	1.59
26	LA	1048	A	N9-C4	-5.75	1.34	1.37
26	LA	1131	G	C2'-C1'	-5.75	1.47	1.53
26	LA	2714	G	N3-C4	-5.75	1.31	1.35
36	L2	15	SER	CA-CB	5.75	1.61	1.52
2	SA	633	G	N9-C8	5.75	1.41	1.37
2	SA	1394	A	N9-C8	5.75	1.42	1.37
25	LB	4	C	C4-C5	-5.75	1.38	1.43
26	LA	182	A	N9-C4	-5.75	1.34	1.37
26	LA	1458	U	N1-C6	5.75	1.43	1.38
26	LA	2336	A	C1'-N9	-5.75	1.38	1.46
26	LA	2822	G	C2-N3	-5.75	1.28	1.32
2	SA	123	U	C2-N3	-5.75	1.33	1.37
13	SM	25	GLY	CA-C	-5.75	1.42	1.51
26	LA	287	G	N1-C2	-5.75	1.33	1.37
26	LA	931	U	C4-C5	-5.75	1.38	1.43
26	LA	1059	G	N7-C5	-5.75	1.35	1.39
26	LA	1064	C	O3'-P	-5.75	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1164	C	C3'-O3'	5.75	1.50	1.42
26	LA	1246	A	N9-C8	5.75	1.42	1.37
26	LA	1676	A	P-O5'	5.75	1.65	1.59
26	LA	1792	G	N9-C8	-5.75	1.33	1.37
26	LA	1801	A	C5-C4	5.75	1.42	1.38
26	LA	2672	U	C4'-O4'	-5.75	1.38	1.45
26	LA	2762	C	O4'-C1'	-5.75	1.34	1.41
26	LA	2810	A	O4'-C1'	-5.75	1.34	1.41
2	SA	888	G	O3'-P	-5.75	1.54	1.61
26	LA	858	G	N7-C5	-5.75	1.35	1.39
26	LA	1834	U	C4-O4	-5.75	1.19	1.23
26	LA	1985	C	C5'-C4'	5.75	1.58	1.51
26	LA	2257	U	C4'-C3'	-5.75	1.46	1.52
26	LA	2306	C	C3'-O3'	5.75	1.50	1.42
26	LA	2459	A	P-O5'	-5.75	1.54	1.59
26	LA	2470	G	C8-N7	5.75	1.34	1.30
48	LN	110	VAL	CA-CB	-5.75	1.42	1.54
2	SA	1383	C	O4'-C1'	5.75	1.49	1.41
26	LA	1039	A	O3'-P	-5.75	1.54	1.61
2	SA	3	A	C6-N6	5.74	1.38	1.33
2	SA	89	U	C3'-C2'	-5.74	1.46	1.52
2	SA	310	G	C4'-C3'	-5.74	1.46	1.52
2	SA	410	G	C2'-C1'	-5.74	1.47	1.53
2	SA	722	G	C5'-C4'	5.74	1.58	1.51
2	SA	812	G	C8-N7	-5.74	1.27	1.30
2	SA	960	U	N3-C4	-5.74	1.33	1.38
2	SA	1327	C	N3-C4	-5.74	1.29	1.33
3	S1	24	A	C8-N7	-5.74	1.27	1.31
3	S1	38	G	C5-C6	-5.74	1.36	1.42
4	S2	62	C	C2-N3	-5.74	1.31	1.35
25	LB	78	A	N9-C4	-5.74	1.34	1.37
26	LA	361	G	C8-N7	5.74	1.34	1.30
26	LA	1283	G	C2-N3	5.74	1.37	1.32
26	LA	1585	C	C2-N3	-5.74	1.31	1.35
26	LA	2592	G	C2-N2	-5.74	1.28	1.34
26	LA	2601	C	C2'-C1'	-5.74	1.47	1.53
26	LA	2716	C	C3'-C2'	-5.74	1.46	1.52
2	SA	68	G	C8-N7	-5.74	1.27	1.30
26	LA	1315	C	C2'-C1'	-5.74	1.47	1.53
26	LA	1387	A	C2'-C1'	-5.74	1.47	1.53
26	LA	1490	A	N9-C8	-5.74	1.33	1.37
26	LA	1973	G	C3'-C2'	-5.74	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2433	A	N7-C5	-5.74	1.35	1.39
26	LA	2752	C	C3'-C2'	5.74	1.59	1.52
2	SA	23	C	C2-N3	5.74	1.40	1.35
2	SA	336	A	N9-C4	5.74	1.41	1.37
26	LA	460	A	C2'-C1'	-5.74	1.47	1.53
26	LA	647	G	N1-C2	-5.74	1.33	1.37
26	LA	662	G	C3'-O3'	5.74	1.50	1.42
26	LA	815	C	C5'-C4'	5.74	1.58	1.51
26	LA	1569	A	P-O5'	-5.74	1.54	1.59
26	LA	1628	G	C2'-C1'	-5.74	1.47	1.53
26	LA	1768	C	N3-C4	-5.74	1.29	1.33
26	LA	1900	A	N3-C4	5.74	1.38	1.34
26	LA	1975	G	C2-N3	5.74	1.37	1.32
26	LA	2618	G	C5'-C4'	5.74	1.58	1.51
38	LE	145	SER	CA-CB	5.74	1.61	1.52
2	SA	272	C	C2-N3	-5.74	1.31	1.35
2	SA	793	U	N3-C4	5.74	1.43	1.38
26	LA	4	U	N3-C4	-5.74	1.33	1.38
26	LA	333	G	C6-N1	-5.74	1.35	1.39
26	LA	855	G	N1-C2	-5.74	1.33	1.37
26	LA	1407	G	N3-C4	5.74	1.39	1.35
26	LA	1607	C	C2-N3	-5.74	1.31	1.35
26	LA	1681	G	N1-C2	5.74	1.42	1.37
26	LA	1860	G	N9-C4	5.74	1.42	1.38
26	LA	2087	G	C6-N1	-5.74	1.35	1.39
26	LA	2367	G	C2-N3	5.74	1.37	1.32
27	LD	82	TYR	CE1-CZ	5.74	1.46	1.38
27	LD	246	PRO	N-CD	-5.74	1.39	1.47
2	SA	90	C	O3'-P	-5.74	1.54	1.61
26	LA	1230	A	N1-C2	-5.74	1.29	1.34
26	LA	1968	G	C3'-C2'	-5.74	1.46	1.52
26	LA	2856	A	C5-C4	-5.74	1.34	1.38
2	SA	313	A	C1'-N9	-5.74	1.38	1.46
2	SA	405	U	C2'-C1'	-5.74	1.47	1.53
2	SA	937	A	N1-C2	5.74	1.39	1.34
2	SA	970	C	C4-N4	-5.74	1.28	1.33
2	SA	1327	C	C5'-C4'	5.74	1.58	1.51
26	LA	784	G	C5-C6	-5.74	1.36	1.42
26	LA	1319	C	C4-C5	-5.74	1.38	1.43
26	LA	1536	C	C3'-C2'	5.74	1.59	1.52
26	LA	1568	G	C3'-O3'	5.74	1.50	1.42
26	LA	2477	U	C5-C6	-5.74	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2801	G	C2-N2	-5.74	1.28	1.34
26	LA	2881	U	C3'-C2'	-5.74	1.46	1.52
26	LA	2893	A	C8-N7	-5.74	1.27	1.31
2	SA	64	G	C5-C4	5.73	1.42	1.38
25	LB	36	C	O4'-C1'	5.73	1.49	1.41
26	LA	2306	C	C4'-O4'	5.73	1.53	1.45
26	LA	2452	C	C4'-C3'	-5.73	1.46	1.52
2	SA	790	A	C4'-O4'	5.73	1.53	1.45
2	SA	843	U	C2-O2	5.73	1.27	1.22
2	SA	978	A	C5'-C4'	5.73	1.58	1.51
2	SA	1076	U	C2'-C1'	-5.73	1.47	1.53
26	LA	361	G	O4'-C1'	-5.73	1.34	1.41
26	LA	662	G	C2'-C1'	-5.73	1.47	1.53
26	LA	866	A	N1-C2	-5.73	1.29	1.34
26	LA	944	C	C2-N3	-5.73	1.31	1.35
26	LA	973	A	N7-C5	5.73	1.42	1.39
26	LA	1308	A	N3-C4	-5.73	1.31	1.34
26	LA	1533	C	C4'-O4'	5.73	1.53	1.45
26	LA	1738	G	N1-C2	-5.73	1.33	1.37
37	LC	230	SER	CB-OG	5.73	1.49	1.42
2	SA	202	G	C5'-C4'	5.73	1.58	1.51
2	SA	984	C	C5'-C4'	5.73	1.58	1.51
2	SA	1408	A	P-O5'	-5.73	1.54	1.59
2	SA	1506	U	C5'-C4'	5.73	1.58	1.51
26	LA	667	U	C2-O2	5.73	1.27	1.22
26	LA	685	A	N9-C4	-5.73	1.34	1.37
26	LA	931	U	C3'-O3'	5.73	1.50	1.42
26	LA	2602	A	P-O5'	-5.73	1.54	1.59
2	SA	204	G	N3-C4	5.73	1.39	1.35
2	SA	1236	A	C5-C4	5.73	1.42	1.38
26	LA	149	A	N3-C4	-5.73	1.31	1.34
26	LA	2618	G	N7-C5	-5.73	1.35	1.39
2	SA	123	U	C2'-C1'	5.73	1.59	1.53
2	SA	129	A	O4'-C1'	-5.73	1.34	1.41
2	SA	199	A	C8-N7	5.73	1.35	1.31
2	SA	380	G	C2-N2	-5.73	1.28	1.34
2	SA	727	G	O5'-C5'	5.73	1.53	1.44
2	SA	1296	C	P-O5'	-5.73	1.54	1.59
5	ST	59	ARG	CD-NE	5.73	1.56	1.46
26	LA	73	A	C8-N7	-5.73	1.27	1.31
26	LA	353	C	O3'-P	-5.73	1.54	1.61
26	LA	510	C	N3-C4	5.73	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	935	C	C4-C5	-5.73	1.38	1.43
26	LA	954	G	N3-C4	-5.73	1.31	1.35
26	LA	986	C	C1'-N1	-5.73	1.38	1.46
26	LA	1415	U	O3'-P	-5.73	1.54	1.61
26	LA	1434	A	N7-C5	-5.73	1.35	1.39
26	LA	1703	G	C3'-O3'	5.73	1.50	1.42
26	LA	2325	G	N1-C2	-5.73	1.33	1.37
26	LA	2766	A	C6-N1	-5.73	1.31	1.35
30	LW	59	GLU	N-CA	-5.73	1.34	1.46
2	SA	647	C	P-O5'	5.73	1.65	1.59
2	SA	942	G	N7-C5	-5.73	1.35	1.39
2	SA	1347	G	C3'-O3'	5.73	1.50	1.42
26	LA	756	A	N9-C4	-5.73	1.34	1.37
26	LA	1176	U	C3'-O3'	5.73	1.50	1.42
26	LA	2458	G	O4'-C1'	-5.73	1.34	1.41
26	LA	2854	G	P-O5'	-5.73	1.54	1.59
2	SA	57	G	P-O5'	-5.72	1.54	1.59
2	SA	160	A	N1-C2	-5.72	1.29	1.34
2	SA	250	A	C5'-C4'	5.72	1.58	1.51
2	SA	744	C	C5-C6	-5.72	1.29	1.34
2	SA	858	G	C1'-N9	-5.72	1.38	1.46
2	SA	1012	A	N7-C5	-5.72	1.35	1.39
2	SA	1157	A	N3-C4	-5.72	1.31	1.34
2	SA	1344	C	P-O5'	-5.72	1.54	1.59
2	SA	1433	A	O3'-P	-5.72	1.54	1.61
26	LA	446	G	C6-N1	-5.72	1.35	1.39
26	LA	469	G	C8-N7	5.72	1.34	1.30
26	LA	1026	G	C6-N1	-5.72	1.35	1.39
26	LA	1311	G	N1-C2	-5.72	1.33	1.37
26	LA	1539	U	C2-N3	5.72	1.41	1.37
26	LA	1888	G	N9-C4	5.72	1.42	1.38
26	LA	2233	U	C2'-O2'	-5.72	1.34	1.41
26	LA	2455	G	C2'-C1'	-5.72	1.47	1.53
26	LA	2682	A	O4'-C1'	-5.72	1.34	1.41
2	SA	387	U	C4'-O4'	5.72	1.52	1.45
26	LA	588	U	C2-N3	-5.72	1.33	1.37
26	LA	1072	C	P-O5'	5.72	1.65	1.59
26	LA	1694	C	O3'-P	-5.72	1.54	1.61
26	LA	2255	G	C3'-C2'	-5.72	1.46	1.52
26	LA	2719	G	C2-N3	-5.72	1.28	1.32
26	LA	2738	A	N3-C4	-5.72	1.31	1.34
26	LA	2813	A	N1-C2	-5.72	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	56	U	C2'-C1'	-5.72	1.47	1.53
2	SA	1435	G	C6-N1	-5.72	1.35	1.39
26	LA	283	G	C2-N3	5.72	1.37	1.32
26	LA	674	G	N1-C2	-5.72	1.33	1.37
26	LA	993	G	C2-N2	-5.72	1.28	1.34
26	LA	1271	G	C2-N3	-5.72	1.28	1.32
26	LA	1500	G	C2'-C1'	-5.72	1.47	1.53
26	LA	1791	A	O5'-C5'	-5.72	1.33	1.42
26	LA	2827	C	C2'-C1'	-5.72	1.47	1.53
2	SA	297	G	O4'-C1'	-5.72	1.34	1.41
2	SA	322	C	C2-N3	5.72	1.40	1.35
2	SA	332	G	C3'-C2'	-5.72	1.46	1.52
2	SA	573	A	O4'-C1'	-5.72	1.34	1.41
2	SA	1265	C	O4'-C1'	5.72	1.49	1.41
2	SA	1411	C	C3'-O3'	5.72	1.50	1.42
26	LA	478	A	C3'-C2'	5.72	1.59	1.52
26	LA	631	A	N9-C4	-5.72	1.34	1.37
26	LA	1764	C	N1-C6	-5.72	1.33	1.37
26	LA	2210	U	C5-C6	-5.72	1.29	1.34
26	LA	2590	A	O4'-C1'	-5.72	1.34	1.41
26	LA	2721	A	N3-C4	-5.72	1.31	1.34
26	LA	2777	G	N3-C4	5.72	1.39	1.35
26	LA	2837	A	C1'-N9	-5.72	1.38	1.46
2	SA	8	A	O4'-C1'	-5.72	1.34	1.41
3	S1	17	U	C3'-O3'	5.72	1.50	1.42
26	LA	39	G	N9-C4	-5.72	1.33	1.38
26	LA	853	C	N1-C6	-5.72	1.33	1.37
26	LA	917	A	C8-N7	-5.72	1.27	1.31
26	LA	1126	A	N9-C8	-5.72	1.33	1.37
2	SA	208	U	C1'-N1	-5.72	1.38	1.46
2	SA	396	C	C2-O2	-5.72	1.19	1.24
2	SA	440	C	N3-C4	5.72	1.38	1.33
2	SA	929	G	O3'-P	-5.72	1.54	1.61
2	SA	1160	G	P-O5'	-5.72	1.54	1.59
2	SA	1463	U	N1-C2	-5.72	1.33	1.38
26	LA	227	A	O3'-P	-5.72	1.54	1.61
26	LA	554	U	N1-C2	5.72	1.43	1.38
26	LA	1654	A	O3'-P	-5.72	1.54	1.61
26	LA	2204	G	C2-N2	-5.72	1.28	1.34
2	SA	816	A	C4'-C3'	5.71	1.59	1.53
2	SA	834	U	O4'-C1'	-5.71	1.34	1.41
2	SA	909	A	N1-C2	-5.71	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1295	U	C3'-C2'	5.71	1.59	1.52
2	SA	1461	G	C2-N2	-5.71	1.28	1.34
4	S2	31	G	C3'-C2'	5.71	1.59	1.52
8	SH	70	VAL	CA-CB	-5.71	1.42	1.54
26	LA	120	U	C3'-C2'	5.71	1.59	1.52
26	LA	225	C	C2'-C1'	-5.71	1.47	1.53
26	LA	345	A	C5-C4	5.71	1.42	1.38
26	LA	384	A	C6-N1	-5.71	1.31	1.35
26	LA	789	A	C8-N7	-5.71	1.27	1.31
26	LA	849	A	O5'-C5'	5.71	1.53	1.44
26	LA	1177	G	C5-C4	-5.71	1.34	1.38
26	LA	1227	G	N3-C4	-5.71	1.31	1.35
26	LA	1809	A	C2'-C1'	-5.71	1.47	1.53
26	LA	2457	U	C2'-O2'	-5.71	1.34	1.41
26	LA	2539	C	C4'-O4'	5.71	1.52	1.45
2	SA	276	G	C3'-C2'	-5.71	1.46	1.52
2	SA	1534	A	N9-C4	-5.71	1.34	1.37
26	LA	196	A	N3-C4	5.71	1.38	1.34
26	LA	379	G	C3'-C2'	-5.71	1.46	1.52
26	LA	826	U	N1-C2	5.71	1.43	1.38
26	LA	889	C	C4-N4	-5.71	1.28	1.33
26	LA	2286	G	N3-C4	-5.71	1.31	1.35
2	SA	326	G	C2'-C1'	-5.71	1.47	1.53
2	SA	897	C	N1-C6	5.71	1.40	1.37
2	SA	1001	C	C5-C6	-5.71	1.29	1.34
2	SA	1088	G	N3-C4	-5.71	1.31	1.35
26	LA	61	C	C4'-C3'	-5.71	1.46	1.52
26	LA	2110	G	C2-N3	-5.71	1.28	1.32
26	LA	2252	G	N1-C2	-5.71	1.33	1.37
26	LA	2778	A	N3-C4	-5.71	1.31	1.34
2	SA	315	A	N7-C5	-5.71	1.35	1.39
2	SA	496	A	C2'-C1'	-5.71	1.47	1.53
2	SA	1242	G	C2-N2	-5.71	1.28	1.34
2	SA	1456	A	P-O5'	-5.71	1.54	1.59
24	S3	371	GLU	CG-CD	5.71	1.60	1.51
25	LB	117	G	C2'-O2'	-5.71	1.34	1.41
26	LA	16	C	C3'-O3'	5.71	1.50	1.42
26	LA	529	A	C6-N1	-5.71	1.31	1.35
26	LA	1971	U	C4-C5	-5.71	1.38	1.43
53	LP	4	ARG	CD-NE	5.71	1.56	1.46
2	SA	112	G	C2-N3	5.71	1.37	1.32
2	SA	170	U	N3-C4	-5.71	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	38	G	C4'-O4'	5.71	1.52	1.45
26	LA	397	U	N1-C2	-5.71	1.33	1.38
26	LA	524	G	C2-N3	-5.71	1.28	1.32
26	LA	842	U	C2-N3	-5.71	1.33	1.37
26	LA	912	C	C5-C6	-5.71	1.29	1.34
26	LA	1861	G	C6-N1	5.71	1.43	1.39
26	LA	1881	C	N1-C2	5.71	1.45	1.40
26	LA	2206	C	O3'-P	-5.71	1.54	1.61
26	LA	2572	A	C4'-C3'	-5.71	1.46	1.52
26	LA	2864	G	P-O5'	-5.71	1.54	1.59
2	SA	16	A	C6-N6	-5.71	1.29	1.33
2	SA	529	G	N7-C5	-5.71	1.35	1.39
2	SA	770	C	N1-C6	-5.71	1.33	1.37
2	SA	1209	C	N1-C2	5.71	1.45	1.40
26	LA	38	A	N9-C4	-5.71	1.34	1.37
26	LA	182	A	C3'-C2'	5.71	1.59	1.52
26	LA	1188	U	C4'-C3'	5.71	1.59	1.53
26	LA	1325	U	C2'-C1'	5.71	1.59	1.53
2	SA	509	A	N3-C4	-5.71	1.31	1.34
2	SA	629	A	C5-C6	-5.71	1.35	1.41
2	SA	896	C	C4'-C3'	-5.71	1.46	1.52
2	SA	1514	G	N9-C8	5.71	1.41	1.37
3	S1	42	U	O4'-C1'	5.71	1.49	1.41
26	LA	747	U	N1-C2	-5.71	1.33	1.38
26	LA	2195	U	C5'-C4'	5.71	1.58	1.51
26	LA	2309	A	N1-C2	5.71	1.39	1.34
26	LA	2511	U	C3'-O3'	5.71	1.50	1.42
2	SA	373	A	P-O5'	5.70	1.65	1.59
2	SA	949	A	N1-C2	-5.70	1.29	1.34
2	SA	1496	C	C3'-C2'	5.70	1.59	1.52
26	LA	141	G	C4'-C3'	5.70	1.59	1.53
26	LA	524	G	N1-C2	-5.70	1.33	1.37
26	LA	1977	A	N1-C2	-5.70	1.29	1.34
26	LA	2000	C	C4'-C3'	-5.70	1.46	1.52
26	LA	2014	A	C5-C6	-5.70	1.35	1.41
26	LA	2091	C	C4-C5	-5.70	1.38	1.43
26	LA	2151	U	C2'-C1'	5.70	1.59	1.53
26	LA	2454	G	C8-N7	-5.70	1.27	1.30
26	LA	2614	A	C2'-C1'	-5.70	1.47	1.53
26	LA	2683	C	C4'-C3'	-5.70	1.46	1.52
26	LA	2882	A	N9-C8	-5.70	1.33	1.37
2	SA	12	U	O4'-C1'	5.70	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	28	A	C6-N6	-5.70	1.29	1.33
2	SA	874	G	C2'-C1'	-5.70	1.47	1.53
2	SA	1249	C	C3'-C2'	5.70	1.59	1.52
26	LA	142	A	C5'-C4'	5.70	1.58	1.51
26	LA	449	A	N3-C4	-5.70	1.31	1.34
26	LA	899	A	C5'-C4'	5.70	1.58	1.51
26	LA	1672	A	C5-C4	5.70	1.42	1.38
26	LA	1981	A	N9-C8	-5.70	1.33	1.37
26	LA	2440	C	C5'-C4'	5.70	1.58	1.51
2	SA	215	C	O4'-C1'	5.70	1.49	1.41
2	SA	350	G	C6-N1	-5.70	1.35	1.39
2	SA	562	U	C3'-C2'	5.70	1.59	1.52
2	SA	688	G	N1-C2	-5.70	1.33	1.37
2	SA	702	A	C5-C4	-5.70	1.34	1.38
2	SA	952	U	C5'-C4'	5.70	1.58	1.51
26	LA	261	G	C5-C4	-5.70	1.34	1.38
26	LA	372	G	N1-C2	-5.70	1.33	1.37
26	LA	697	G	C4'-O4'	-5.70	1.38	1.45
26	LA	930	G	N1-C2	-5.70	1.33	1.37
26	LA	934	U	C3'-C2'	-5.70	1.46	1.52
26	LA	1385	A	C1'-N9	-5.70	1.38	1.46
26	LA	1924	C	O5'-C5'	5.70	1.53	1.44
26	LA	2728	U	C1'-N1	-5.70	1.38	1.46
2	SA	50	A	O3'-P	-5.70	1.54	1.61
2	SA	506	G	C6-N1	-5.70	1.35	1.39
26	LA	580	U	C4'-O4'	5.70	1.52	1.45
26	LA	1610	A	N9-C8	-5.70	1.33	1.37
26	LA	1616	A	N9-C8	-5.70	1.33	1.37
26	LA	2168	G	O3'-P	-5.70	1.54	1.61
26	LA	2668	G	O3'-P	-5.70	1.54	1.61
2	SA	332	G	O5'-C5'	5.70	1.53	1.44
26	LA	816	C	C4-C5	5.70	1.47	1.43
26	LA	1464	G	N7-C5	5.70	1.42	1.39
26	LA	1520	U	N1-C6	-5.70	1.32	1.38
26	LA	1702	G	C8-N7	-5.70	1.27	1.30
2	SA	145	G	N1-C2	5.70	1.42	1.37
2	SA	212	G	C4'-O4'	5.70	1.52	1.45
2	SA	699	C	P-O5'	5.70	1.65	1.59
2	SA	1084	G	O3'-P	-5.70	1.54	1.61
2	SA	1274	A	C2'-C1'	-5.70	1.47	1.53
26	LA	231	A	C2'-C1'	-5.70	1.47	1.53
26	LA	250	G	C2-N3	5.70	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	276	U	P-O5'	-5.70	1.54	1.59
26	LA	388	G	C2-N3	-5.70	1.28	1.32
26	LA	670	A	C4'-C3'	5.70	1.59	1.53
26	LA	1140	C	C2-N3	5.70	1.40	1.35
26	LA	1790	C	C3'-O3'	5.70	1.50	1.42
26	LA	1912	A	C4'-C3'	-5.70	1.46	1.52
26	LA	2342	C	O3'-P	-5.70	1.54	1.61
26	LA	2675	A	N9-C4	-5.70	1.34	1.37
2	SA	237	G	P-O5'	-5.69	1.54	1.59
2	SA	1008	U	C3'-C2'	-5.69	1.46	1.52
25	LB	84	G	N9-C8	-5.69	1.33	1.37
26	LA	2518	A	C3'-C2'	-5.69	1.46	1.52
2	SA	520	A	N9-C4	-5.69	1.34	1.37
19	SC	121	SER	CB-OG	5.69	1.49	1.42
26	LA	311	A	C2-N3	-5.69	1.28	1.33
26	LA	315	G	C2-N2	-5.69	1.28	1.34
26	LA	776	G	P-O5'	-5.69	1.54	1.59
26	LA	1257	C	P-O5'	-5.69	1.54	1.59
26	LA	2868	A	N1-C2	-5.69	1.29	1.34
26	LA	2870	C	N3-C4	5.69	1.38	1.33
2	SA	347	G	C8-N7	-5.69	1.27	1.30
26	LA	2252	G	N7-C5	-5.69	1.35	1.39
26	LA	2598	A	C6-N1	-5.69	1.31	1.35
26	LA	2780	G	N9-C8	5.69	1.41	1.37
2	SA	21	G	C5-C4	-5.69	1.34	1.38
2	SA	513	C	N1-C2	5.69	1.45	1.40
2	SA	813	U	N1-C6	-5.69	1.32	1.38
2	SA	832	G	C6-N1	-5.69	1.35	1.39
2	SA	1331	G	C4'-O4'	5.69	1.52	1.45
26	LA	133	U	P-O5'	-5.69	1.54	1.59
26	LA	285	G	C2-N2	-5.69	1.28	1.34
26	LA	954	G	C2'-C1'	-5.69	1.47	1.53
26	LA	1010	A	C8-N7	-5.69	1.27	1.31
26	LA	1256	G	P-O5'	-5.69	1.54	1.59
26	LA	1488	C	C4'-O4'	5.69	1.52	1.45
26	LA	1785	A	O3'-P	-5.69	1.54	1.61
26	LA	1831	G	C5'-C4'	5.69	1.58	1.51
26	LA	1987	A	N7-C5	5.69	1.42	1.39
2	SA	72	A	O3'-P	-5.69	1.54	1.61
25	LB	73	A	N7-C5	-5.69	1.35	1.39
26	LA	375	G	C4'-C3'	5.69	1.59	1.53
26	LA	433	C	C3'-C2'	5.69	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1365	A	N1-C2	-5.69	1.29	1.34
26	LA	1866	A	C6-N1	5.69	1.39	1.35
26	LA	1887	C	C2-N3	-5.69	1.31	1.35
2	SA	1093	A	C3'-O3'	5.68	1.50	1.42
2	SA	1344	C	C5-C6	5.68	1.38	1.34
25	LB	100	G	C5'-C4'	5.68	1.58	1.51
26	LA	281	C	P-O5'	-5.68	1.54	1.59
26	LA	370	G	C5'-C4'	5.68	1.58	1.51
26	LA	2127	G	C3'-C2'	5.68	1.59	1.52
26	LA	2488	G	N1-C2	-5.68	1.33	1.37
26	LA	2856	A	C4'-C3'	-5.68	1.46	1.52
2	SA	579	A	C1'-N9	-5.68	1.38	1.46
2	SA	785	G	C2-N3	-5.68	1.28	1.32
2	SA	1443	C	C3'-C2'	5.68	1.59	1.52
25	LB	69	G	N9-C4	-5.68	1.33	1.38
26	LA	1365	A	O3'-P	-5.68	1.54	1.61
26	LA	1475	G	C4'-C3'	5.68	1.59	1.53
26	LA	2153	C	N1-C6	-5.68	1.33	1.37
26	LA	2412	A	N9-C4	5.68	1.41	1.37
26	LA	2604	U	C5-C6	-5.68	1.29	1.34
26	LA	2720	U	C4'-O4'	-5.68	1.38	1.45
2	SA	174	A	N9-C4	5.68	1.41	1.37
2	SA	786	G	C3'-C2'	5.68	1.59	1.52
26	LA	411	G	N9-C4	5.68	1.42	1.38
26	LA	739	A	C5-C4	-5.68	1.34	1.38
26	LA	768	G	C2-N3	-5.68	1.28	1.32
26	LA	1692	U	O4'-C1'	-5.68	1.34	1.41
26	LA	2330	G	N3-C4	-5.68	1.31	1.35
45	LG	113	PHE	CE1-CZ	5.68	1.48	1.37
2	SA	510	A	C3'-C2'	5.68	1.59	1.52
2	SA	517	G	N1-C2	-5.68	1.33	1.37
2	SA	1297	G	C2'-C1'	5.68	1.59	1.53
24	S3	359	PHE	CB-CG	-5.68	1.41	1.51
25	LB	90	C	C4'-C3'	-5.68	1.46	1.52
26	LA	374	A	O3'-P	-5.68	1.54	1.61
26	LA	951	C	N3-C4	5.68	1.38	1.33
26	LA	1165	A	C5-C4	-5.68	1.34	1.38
26	LA	1189	A	N9-C4	-5.68	1.34	1.37
26	LA	1955	U	P-O5'	-5.68	1.54	1.59
26	LA	1980	G	C4'-C3'	-5.68	1.46	1.52
26	LA	2416	C	C4'-C3'	5.68	1.59	1.53
26	LA	2691	C	N1-C6	-5.68	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	179	A	C5-C4	5.68	1.42	1.38
2	SA	211	G	C8-N7	-5.68	1.27	1.30
26	LA	568	U	O4'-C1'	-5.68	1.34	1.41
26	LA	764	A	O3'-P	-5.68	1.54	1.61
26	LA	1002	G	N3-C4	5.68	1.39	1.35
26	LA	1824	G	C1'-N9	-5.68	1.39	1.46
26	LA	2500	U	N1-C2	-5.68	1.33	1.38
26	LA	2602	A	N9-C4	5.68	1.41	1.37
26	LA	2869	G	C8-N7	5.68	1.34	1.30
2	SA	792	A	C1'-N9	-5.68	1.39	1.46
2	SA	997	U	C5-C6	5.68	1.39	1.34
2	SA	1320	C	C4-C5	5.68	1.47	1.43
4	S2	64	G	C8-N7	-5.68	1.27	1.30
26	LA	1089	A	P-O5'	5.68	1.65	1.59
26	LA	1837	C	C5-C6	-5.68	1.29	1.34
26	LA	2143	C	C3'-C2'	-5.68	1.46	1.52
26	LA	2793	C	C2'-C1'	-5.68	1.47	1.53
2	SA	553	A	N1-C2	5.67	1.39	1.34
2	SA	1300	G	C6-N1	-5.67	1.35	1.39
4	S2	54	G	N9-C8	5.67	1.41	1.37
26	LA	74	A	N9-C8	-5.67	1.33	1.37
26	LA	162	U	O4'-C1'	5.67	1.49	1.41
26	LA	173	A	C2-N3	-5.67	1.28	1.33
26	LA	219	A	C6-N6	5.67	1.38	1.33
26	LA	669	G	C5-C4	-5.67	1.34	1.38
26	LA	1107	G	O3'-P	-5.67	1.54	1.61
26	LA	1960	A	C2'-C1'	-5.67	1.47	1.53
26	LA	2018	G	C5'-C4'	5.67	1.58	1.51
2	SA	228	A	C2'-C1'	-5.67	1.47	1.53
2	SA	514	C	C5'-C4'	5.67	1.58	1.51
2	SA	960	U	C2'-C1'	-5.67	1.47	1.53
26	LA	522	A	C5-C4	5.67	1.42	1.38
26	LA	2376	A	C3'-C2'	5.67	1.59	1.52
26	LA	2553	G	C5-C4	-5.67	1.34	1.38
2	SA	273	U	C5'-C4'	5.67	1.58	1.51
15	SO	25	GLU	CB-CG	5.67	1.62	1.52
26	LA	3	U	C5-C6	5.67	1.39	1.34
26	LA	15	G	C5-C6	-5.67	1.36	1.42
26	LA	383	C	N3-C4	5.67	1.38	1.33
26	LA	863	A	C1'-N9	-5.67	1.39	1.46
26	LA	1153	C	C2'-O2'	-5.67	1.34	1.41
26	LA	1435	G	N3-C4	-5.67	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2183	A	C2-N3	5.67	1.38	1.33
26	LA	2326	C	N1-C6	5.67	1.40	1.37
26	LA	2511	U	O3'-P	-5.67	1.54	1.61
26	LA	2758	A	C1'-N9	-5.67	1.39	1.46
26	LA	2803	G	O3'-P	-5.67	1.54	1.61
45	LG	117	SER	CA-CB	5.67	1.61	1.52
2	SA	589	U	N1-C6	-5.67	1.32	1.38
2	SA	919	A	N3-C4	-5.67	1.31	1.34
2	SA	1509	C	C4-N4	-5.67	1.28	1.33
26	LA	97	C	C2-N3	-5.67	1.31	1.35
26	LA	424	G	C3'-C2'	-5.67	1.46	1.52
26	LA	1087	G	N3-C4	-5.67	1.31	1.35
26	LA	1298	C	P-O5'	5.67	1.65	1.59
26	LA	1758	U	N1-C2	5.67	1.43	1.38
2	SA	201	G	P-O5'	-5.67	1.54	1.59
2	SA	268	U	C3'-O3'	5.67	1.50	1.42
2	SA	568	G	C5'-C4'	5.67	1.58	1.51
2	SA	1253	G	C2-N3	5.67	1.37	1.32
2	SA	1479	C	C4'-C3'	-5.67	1.46	1.52
2	SA	1505	G	C2-N3	-5.67	1.28	1.32
26	LA	263	G	N9-C8	-5.67	1.33	1.37
26	LA	289	G	C2'-C1'	-5.67	1.47	1.53
26	LA	617	G	N1-C2	-5.67	1.33	1.37
26	LA	1355	G	N9-C8	-5.67	1.33	1.37
26	LA	1372	U	N1-C2	-5.67	1.33	1.38
26	LA	2352	A	N3-C4	-5.67	1.31	1.34
26	LA	2384	U	N3-C4	-5.67	1.33	1.38
26	LA	2481	G	C1'-N9	-5.67	1.39	1.46
26	LA	2531	A	C5'-C4'	5.67	1.58	1.51
49	LK	126	ARG	CD-NE	5.67	1.56	1.46
2	SA	1045	C	C5-C6	5.67	1.38	1.34
2	SA	1050	G	C2'-C1'	5.67	1.59	1.53
2	SA	1340	A	C2'-C1'	-5.67	1.47	1.53
4	S2	38	A	P-O5'	5.67	1.65	1.59
25	LB	105	G	N1-C2	-5.67	1.33	1.37
26	LA	84	A	O3'-P	-5.67	1.54	1.61
26	LA	1364	G	N7-C5	5.67	1.42	1.39
26	LA	1545	A	N7-C5	-5.67	1.35	1.39
26	LA	1557	C	C4'-C3'	-5.67	1.46	1.52
26	LA	1652	A	C4'-C3'	-5.67	1.46	1.52
26	LA	2061	G	C2-N3	-5.67	1.28	1.32
26	LA	2352	A	C6-N1	-5.67	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2445	G	C4'-C3'	-5.67	1.46	1.52
26	LA	2662	A	N1-C2	-5.67	1.29	1.34
26	LA	2666	C	N3-C4	-5.67	1.29	1.33
26	LA	2864	G	C5'-C4'	5.67	1.58	1.51
2	SA	516	U	C4-O4	5.67	1.28	1.23
2	SA	1230	C	N1-C6	-5.67	1.33	1.37
26	LA	365	U	O4'-C1'	-5.67	1.34	1.41
26	LA	2361	G	C5-C4	-5.67	1.34	1.38
26	LA	2668	G	N3-C4	-5.67	1.31	1.35
2	SA	255	G	C4'-O4'	-5.66	1.38	1.45
2	SA	358	U	O3'-P	-5.66	1.54	1.61
2	SA	451	A	C3'-C2'	5.66	1.59	1.52
2	SA	759	A	O3'-P	-5.66	1.54	1.61
2	SA	884	U	P-O5'	-5.66	1.54	1.59
2	SA	1087	G	P-O5'	-5.66	1.54	1.59
2	SA	1312	G	C5-C4	-5.66	1.34	1.38
4	S2	67	C	C2'-C1'	-5.66	1.47	1.53
26	LA	308	G	O3'-P	-5.66	1.54	1.61
26	LA	576	U	C2'-C1'	-5.66	1.47	1.53
26	LA	757	G	N9-C8	-5.66	1.33	1.37
26	LA	1010	A	C1'-N9	-5.66	1.39	1.46
26	LA	1100	C	N1-C6	-5.66	1.33	1.37
26	LA	2333	A	C6-N6	-5.66	1.29	1.33
2	SA	559	A	C4'-O4'	5.66	1.52	1.45
2	SA	766	A	C2'-C1'	-5.66	1.47	1.53
26	LA	340	A	N9-C8	-5.66	1.33	1.37
26	LA	826	U	C5'-C4'	5.66	1.58	1.51
26	LA	1763	G	C5-C4	5.66	1.42	1.38
26	LA	1868	C	C4'-O4'	-5.66	1.38	1.45
2	SA	377	G	N9-C8	5.66	1.41	1.37
2	SA	439	U	O3'-P	-5.66	1.54	1.61
2	SA	651	C	O3'-P	-5.66	1.54	1.61
2	SA	726	C	C4-C5	-5.66	1.38	1.43
2	SA	879	C	C4'-C3'	-5.66	1.46	1.52
2	SA	986	U	C2'-C1'	5.66	1.59	1.53
2	SA	1129	C	N3-C4	-5.66	1.29	1.33
4	S2	3	C	P-O5'	-5.66	1.54	1.59
26	LA	279	A	C3'-O3'	5.66	1.50	1.42
26	LA	625	G	C5-C4	-5.66	1.34	1.38
26	LA	811	U	C3'-C2'	-5.66	1.46	1.52
26	LA	1056	G	P-O5'	5.66	1.65	1.59
26	LA	1129	A	C2-N3	5.66	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1524	G	C2-N2	-5.66	1.28	1.34
26	LA	1663	G	O3'-P	-5.66	1.54	1.61
26	LA	2603	G	C5-C4	-5.66	1.34	1.38
2	SA	79	G	C2-N2	-5.66	1.28	1.34
2	SA	350	G	C2-N2	-5.66	1.28	1.34
2	SA	483	C	C5'-C4'	5.66	1.58	1.51
2	SA	773	G	N3-C4	-5.66	1.31	1.35
2	SA	851	G	C2-N2	-5.66	1.28	1.34
4	S2	18	U	C4'-O4'	5.66	1.52	1.45
26	LA	524	G	P-O5'	-5.66	1.54	1.59
26	LA	547	A	N9-C8	-5.66	1.33	1.37
26	LA	991	C	C3'-C2'	-5.66	1.46	1.52
26	LA	1134	A	N3-C4	5.66	1.38	1.34
26	LA	1413	A	O3'-P	-5.66	1.54	1.61
26	LA	1430	G	C3'-O3'	5.66	1.50	1.42
26	LA	1455	G	C2-N2	-5.66	1.28	1.34
26	LA	1588	G	C5'-C4'	5.66	1.58	1.51
26	LA	1659	G	C2'-C1'	-5.66	1.47	1.53
2	SA	165	G	O3'-P	-5.66	1.54	1.61
2	SA	362	G	C3'-C2'	-5.66	1.46	1.52
26	LA	64	A	C5-C6	5.66	1.46	1.41
2	SA	82	G	N9-C8	5.66	1.41	1.37
2	SA	132	C	C4-N4	-5.66	1.28	1.33
2	SA	234	C	N3-C4	-5.66	1.29	1.33
2	SA	388	G	N9-C4	-5.66	1.33	1.38
2	SA	967	C	O3'-P	-5.66	1.54	1.61
2	SA	1273	C	C5'-C4'	-5.66	1.44	1.51
2	SA	1310	G	C3'-O3'	5.66	1.50	1.42
3	S1	14	G	C6-N1	-5.66	1.35	1.39
26	LA	950	G	C3'-C2'	-5.66	1.46	1.52
26	LA	1037	G	C5'-C4'	5.66	1.58	1.51
26	LA	1864	U	C4'-C3'	-5.66	1.46	1.52
26	LA	2737	G	C6-N1	-5.66	1.35	1.39
20	SD	186	GLU	CD-OE2	5.65	1.31	1.25
26	LA	116	C	O4'-C1'	-5.65	1.34	1.41
26	LA	405	U	C5'-C4'	5.65	1.58	1.51
26	LA	728	G	N7-C5	-5.65	1.35	1.39
26	LA	905	A	N1-C2	5.65	1.39	1.34
26	LA	1638	C	C2'-C1'	-5.65	1.47	1.53
26	LA	1875	G	C3'-C2'	-5.65	1.46	1.52
26	LA	2039	U	N3-C4	-5.65	1.33	1.38
26	LA	2782	G	C2-N3	5.65	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	149	A	O3'-P	-5.65	1.54	1.61
2	SA	172	A	C6-N6	5.65	1.38	1.33
2	SA	205	A	C2-N3	-5.65	1.28	1.33
2	SA	452	A	P-O5'	-5.65	1.54	1.59
2	SA	556	C	C1'-N1	5.65	1.57	1.48
2	SA	1447	A	O3'-P	-5.65	1.54	1.61
3	S1	28	U	N3-C4	-5.65	1.33	1.38
25	LB	69	G	C5-C4	-5.65	1.34	1.38
26	LA	116	C	C4-C5	-5.65	1.38	1.43
26	LA	244	A	C5-C6	-5.65	1.35	1.41
26	LA	629	G	N7-C5	-5.65	1.35	1.39
26	LA	768	G	C2'-C1'	-5.65	1.47	1.53
26	LA	1401	G	C4'-O4'	-5.65	1.38	1.45
26	LA	1931	U	C4'-O4'	-5.65	1.38	1.45
26	LA	2278	A	C8-N7	-5.65	1.27	1.31
26	LA	2502	G	C2-N3	5.65	1.37	1.32
2	SA	162	A	C5-C4	-5.65	1.34	1.38
2	SA	167	A	O4'-C1'	5.65	1.49	1.41
2	SA	200	G	C5-C4	5.65	1.42	1.38
2	SA	753	A	C2'-O2'	-5.65	1.34	1.41
2	SA	877	G	C2'-C1'	-5.65	1.47	1.53
2	SA	891	U	N3-C4	-5.65	1.33	1.38
2	SA	1361	G	N1-C2	-5.65	1.33	1.37
2	SA	1403	C	C3'-O3'	5.65	1.50	1.42
26	LA	342	A	C4'-O4'	-5.65	1.38	1.45
26	LA	1162	G	N1-C2	-5.65	1.33	1.37
26	LA	1730	C	C2-N3	5.65	1.40	1.35
26	LA	1872	A	C5'-C4'	5.65	1.58	1.51
26	LA	1900	A	N9-C4	-5.65	1.34	1.37
26	LA	2103	C	O3'-P	-5.65	1.54	1.61
26	LA	2128	G	N7-C5	-5.65	1.35	1.39
26	LA	2287	A	C8-N7	-5.65	1.27	1.31
26	LA	2498	C	O3'-P	-5.65	1.54	1.61
26	LA	2597	G	C2-N2	-5.65	1.28	1.34
26	LA	2674	G	O4'-C1'	-5.65	1.34	1.41
44	LF	30	GLN	CA-CB	5.65	1.66	1.53
2	SA	1248	A	P-O5'	5.65	1.65	1.59
26	LA	2557	G	C5'-C4'	5.65	1.58	1.51
26	LA	2628	C	C4'-C3'	5.65	1.59	1.53
2	SA	811	C	C4'-C3'	5.65	1.59	1.53
2	SA	829	G	N9-C8	-5.65	1.33	1.37
2	SA	1188	A	C4'-O4'	-5.65	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1323	G	C2'-C1'	-5.65	1.47	1.53
26	LA	64	A	N9-C4	-5.65	1.34	1.37
26	LA	145	C	C2-N3	-5.65	1.31	1.35
26	LA	230	G	N3-C4	-5.65	1.31	1.35
26	LA	1836	C	C5-C6	-5.65	1.29	1.34
26	LA	2332	C	O4'-C1'	5.65	1.49	1.41
26	LA	2546	U	C2-O2	-5.65	1.17	1.22
26	LA	2587	A	N3-C4	-5.65	1.31	1.34
26	LA	2723	C	N1-C2	5.65	1.45	1.40
2	SA	102	G	C2-N2	-5.65	1.28	1.34
2	SA	1115	U	C2-O2	5.65	1.27	1.22
2	SA	1253	G	O4'-C1'	5.65	1.49	1.41
26	LA	55	G	C3'-O3'	5.65	1.50	1.42
26	LA	1911	U	N1-C2	-5.65	1.33	1.38
26	LA	2117	A	C6-N6	5.65	1.38	1.33
26	LA	2482	A	N7-C5	-5.65	1.35	1.39
26	LA	2502	G	C8-N7	5.65	1.34	1.30
26	LA	2549	G	C5'-C4'	5.65	1.58	1.51
26	LA	2691	C	C4-N4	-5.65	1.28	1.33
2	SA	28	A	C5-C4	-5.64	1.34	1.38
2	SA	397	A	C5'-C4'	5.64	1.58	1.51
2	SA	701	U	C4'-O4'	-5.64	1.38	1.45
2	SA	887	G	O5'-C5'	5.64	1.53	1.44
2	SA	945	G	C6-N1	-5.64	1.35	1.39
2	SA	1142	G	C5-C4	5.64	1.42	1.38
2	SA	1176	A	C6-N1	5.64	1.39	1.35
2	SA	1406	U	C3'-C2'	-5.64	1.46	1.52
26	LA	7	G	N7-C5	-5.64	1.35	1.39
26	LA	1052	C	N1-C6	5.64	1.40	1.37
26	LA	1228	G	C3'-C2'	-5.64	1.46	1.52
26	LA	1274	A	C6-N6	5.64	1.38	1.33
26	LA	1373	A	C6-N1	5.64	1.39	1.35
26	LA	1449	G	N3-C4	5.64	1.39	1.35
26	LA	2111	U	C4-C5	-5.64	1.38	1.43
31	LX	2	PHE	CG-CD2	-5.64	1.30	1.38
2	SA	270	A	C8-N7	-5.64	1.27	1.31
2	SA	781	A	C5-C4	5.64	1.42	1.38
3	S1	56	G	O4'-C1'	5.64	1.49	1.41
26	LA	1262	A	C5-C6	-5.64	1.35	1.41
26	LA	2507	C	C5'-C4'	5.64	1.58	1.51
26	LA	2819	G	N9-C8	-5.64	1.33	1.37
2	SA	756	C	C4'-C3'	5.64	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	872	U	C3'-O3'	5.64	1.50	1.42
26	LA	884	U	N1-C6	5.64	1.43	1.38
26	LA	1544	A	N1-C2	-5.64	1.29	1.34
26	LA	2205	A	N3-C4	-5.64	1.31	1.34
26	LA	2281	A	C3'-O3'	5.64	1.50	1.42
26	LA	2644	G	C2-N2	5.64	1.40	1.34
2	SA	336	A	N7-C5	5.64	1.42	1.39
2	SA	1338	G	C5'-C4'	-5.64	1.44	1.51
2	SA	1513	A	O3'-P	-5.64	1.54	1.61
2	SA	1529	G	C5'-C4'	-5.64	1.44	1.51
5	ST	43	LYS	CA-CB	5.64	1.66	1.53
25	LB	3	C	C3'-O3'	5.64	1.50	1.42
26	LA	24	G	C2-N2	-5.64	1.28	1.34
26	LA	675	A	C6-N1	-5.64	1.31	1.35
26	LA	823	C	N1-C6	-5.64	1.33	1.37
26	LA	957	C	C2'-C1'	-5.64	1.47	1.53
26	LA	1522	A	P-O5'	-5.64	1.54	1.59
26	LA	1645	G	C8-N7	-5.64	1.27	1.30
26	LA	1854	A	N9-C4	-5.64	1.34	1.37
26	LA	2587	A	O3'-P	-5.64	1.54	1.61
26	LA	2605	U	C3'-C2'	-5.64	1.46	1.52
26	LA	2882	A	N1-C2	-5.64	1.29	1.34
26	LA	197	A	C8-N7	-5.64	1.27	1.31
26	LA	478	A	N1-C2	-5.64	1.29	1.34
2	SA	602	A	C2'-C1'	-5.64	1.47	1.53
2	SA	622	A	C5'-C4'	5.64	1.58	1.51
2	SA	638	U	N1-C2	-5.64	1.33	1.38
2	SA	846	G	C5'-C4'	5.64	1.58	1.51
26	LA	493	G	N1-C2	-5.64	1.33	1.37
26	LA	677	A	C8-N7	-5.64	1.27	1.31
26	LA	876	C	C2-N3	-5.64	1.31	1.35
26	LA	1676	A	N3-C4	5.64	1.38	1.34
26	LA	2495	G	C5'-C4'	5.64	1.58	1.51
26	LA	2607	G	P-O5'	-5.64	1.54	1.59
2	SA	226	G	C5'-C4'	5.63	1.58	1.51
2	SA	957	U	O4'-C1'	-5.63	1.34	1.41
2	SA	1289	A	N3-C4	-5.63	1.31	1.34
3	S1	45	G	O4'-C1'	-5.63	1.34	1.41
26	LA	89	A	O3'-P	-5.63	1.54	1.61
26	LA	790	U	N3-C4	-5.63	1.33	1.38
26	LA	883	G	C3'-C2'	5.63	1.59	1.52
26	LA	1072	C	O3'-P	-5.63	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1231	U	O3'-P	-5.63	1.54	1.61
26	LA	1331	G	N9-C4	-5.63	1.33	1.38
26	LA	2224	G	O3'-P	-5.63	1.54	1.61
26	LA	2551	C	C2'-C1'	-5.63	1.47	1.53
2	SA	954	G	N9-C4	-5.63	1.33	1.38
2	SA	1152	A	O4'-C1'	-5.63	1.34	1.41
26	LA	412	A	C5-C6	-5.63	1.35	1.41
26	LA	498	G	C6-N1	5.63	1.43	1.39
26	LA	2107	G	C5-C4	-5.63	1.34	1.38
2	SA	468	A	N9-C4	5.63	1.41	1.37
2	SA	505	G	N9-C4	5.63	1.42	1.38
4	S2	8	U	C4-C5	5.63	1.48	1.43
25	LB	1	U	C3'-C2'	-5.63	1.46	1.52
25	LB	76	G	C2-N2	-5.63	1.28	1.34
26	LA	774	G	O4'-C1'	-5.63	1.34	1.41
26	LA	951	C	C4'-C3'	5.63	1.59	1.53
26	LA	1360	G	C2'-C1'	-5.63	1.47	1.53
26	LA	1631	G	N9-C8	5.63	1.41	1.37
26	LA	2172	U	C1'-N1	5.63	1.57	1.48
26	LA	2340	A	C3'-C2'	5.63	1.59	1.52
26	LA	2359	C	N3-C4	-5.63	1.30	1.33
26	LA	2660	A	C5-C4	-5.63	1.34	1.38
26	LA	2819	G	C5-C6	-5.63	1.36	1.42
26	LA	108	G	P-O5'	-5.63	1.54	1.59
26	LA	624	C	C5'-C4'	5.63	1.58	1.51
26	LA	1191	G	N3-C4	-5.63	1.31	1.35
26	LA	2035	G	N7-C5	5.63	1.42	1.39
26	LA	2095	A	C5-C4	5.63	1.42	1.38
26	LA	2490	G	C3'-O3'	5.63	1.50	1.42
2	SA	182	A	N9-C8	5.63	1.42	1.37
2	SA	219	U	C4-O4	-5.63	1.19	1.23
2	SA	762	U	N3-C4	-5.63	1.33	1.38
2	SA	1501	C	C4-C5	-5.63	1.38	1.43
26	LA	282	A	O3'-P	-5.63	1.54	1.61
26	LA	477	A	C1'-N9	-5.63	1.39	1.46
26	LA	546	U	C5'-C4'	5.63	1.58	1.51
26	LA	573	U	C2'-O2'	-5.63	1.34	1.41
26	LA	1009	A	N7-C5	-5.63	1.35	1.39
26	LA	1679	A	N9-C4	-5.63	1.34	1.37
26	LA	2095	A	C2'-C1'	-5.63	1.47	1.53
26	LA	2346	A	C2-N3	-5.63	1.28	1.33
26	LA	2619	C	N1-C6	-5.63	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2700	A	O3'-P	-5.63	1.54	1.61
2	SA	16	A	C1'-N9	-5.63	1.39	1.46
2	SA	296	U	N3-C4	5.63	1.43	1.38
2	SA	320	A	N3-C4	-5.63	1.31	1.34
2	SA	502	A	C2'-C1'	-5.63	1.47	1.53
4	S2	51	U	N1-C2	5.63	1.43	1.38
26	LA	223	A	N9-C8	-5.63	1.33	1.37
26	LA	758	C	C4'-O4'	5.63	1.52	1.45
26	LA	918	A	O3'-P	-5.63	1.54	1.61
26	LA	1546	G	P-O5'	5.63	1.65	1.59
26	LA	1566	A	P-O5'	-5.63	1.54	1.59
26	LA	1623	G	C5-C6	-5.63	1.36	1.42
26	LA	1987	A	C6-N1	-5.63	1.31	1.35
26	LA	2181	U	C4'-C3'	5.63	1.59	1.53
26	LA	2371	G	N7-C5	5.63	1.42	1.39
2	SA	695	A	N1-C2	-5.62	1.29	1.34
2	SA	1047	G	C5'-C4'	5.62	1.58	1.51
2	SA	1324	A	C2'-C1'	-5.62	1.47	1.53
26	LA	415	A	C8-N7	-5.62	1.27	1.31
26	LA	1625	C	C4-C5	-5.62	1.38	1.43
47	LJ	55	ARG	CD-NE	5.62	1.56	1.46
2	SA	112	G	C2-N2	-5.62	1.28	1.34
2	SA	297	G	C2'-C1'	-5.62	1.47	1.53
2	SA	602	A	C5'-C4'	5.62	1.58	1.51
2	SA	773	G	C5-C6	-5.62	1.36	1.42
2	SA	904	U	C4'-C3'	-5.62	1.47	1.52
2	SA	946	A	C2-N3	5.62	1.38	1.33
4	S2	73	A	N9-C4	-5.62	1.34	1.37
26	LA	8	C	C3'-O3'	5.62	1.50	1.42
26	LA	77	G	C6-N1	-5.62	1.35	1.39
26	LA	758	C	C2'-C1'	-5.62	1.47	1.53
26	LA	1317	G	C6-N1	-5.62	1.35	1.39
26	LA	1419	A	C1'-N9	-5.62	1.39	1.46
26	LA	1503	A	C1'-N9	-5.62	1.39	1.46
26	LA	2202	U	C4-C5	-5.62	1.38	1.43
26	LA	2337	G	N1-C2	-5.62	1.33	1.37
26	LA	2697	G	N9-C4	5.62	1.42	1.38
27	LD	270	ARG	CD-NE	5.62	1.56	1.46
32	LY	40	ARG	CZ-NH1	5.62	1.40	1.33
2	SA	128	G	N1-C2	-5.62	1.33	1.37
25	LB	73	A	C2-N3	5.62	1.38	1.33
26	LA	9	G	O3'-P	-5.62	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	167	A	C5'-C4'	5.62	1.58	1.51
26	LA	527	C	C3'-C2'	-5.62	1.46	1.52
26	LA	752	A	N9-C8	-5.62	1.33	1.37
26	LA	1170	C	O3'-P	-5.62	1.54	1.61
26	LA	1490	A	C4'-C3'	5.62	1.59	1.53
26	LA	2840	C	C5'-C4'	-5.62	1.44	1.51
2	SA	939	G	C3'-O3'	5.62	1.50	1.42
2	SA	1052	U	C4'-C3'	5.62	1.59	1.53
2	SA	1113	C	C3'-C2'	-5.62	1.46	1.52
25	LB	9	G	P-O5'	-5.62	1.54	1.59
26	LA	601	C	C3'-O3'	5.62	1.50	1.42
26	LA	1148	U	C4'-O4'	-5.62	1.38	1.45
26	LA	1797	G	P-O5'	-5.62	1.54	1.59
26	LA	2745	C	N1-C2	-5.62	1.34	1.40
2	SA	582	C	P-O5'	-5.62	1.54	1.59
2	SA	606	G	P-O5'	5.62	1.65	1.59
2	SA	901	A	C5'-C4'	5.62	1.58	1.51
2	SA	919	A	N7-C5	-5.62	1.35	1.39
2	SA	1178	G	C4'-C3'	5.62	1.59	1.53
26	LA	612	G	N9-C8	-5.62	1.33	1.37
26	LA	717	C	C4'-O4'	5.62	1.52	1.45
26	LA	884	U	N1-C2	-5.62	1.33	1.38
26	LA	1381	G	C5-C4	-5.62	1.34	1.38
26	LA	1693	U	N1-C6	-5.62	1.32	1.38
26	LA	1791	A	C6-N1	-5.62	1.31	1.35
26	LA	2609	U	N1-C6	-5.62	1.32	1.38
26	LA	2744	G	N1-C2	-5.62	1.33	1.37
2	SA	1181	G	C3'-C2'	-5.62	1.46	1.52
26	LA	1153	C	N1-C6	5.62	1.40	1.37
26	LA	1862	G	C8-N7	-5.62	1.27	1.30
26	LA	2224	G	N1-C2	-5.62	1.33	1.37
26	LA	2290	G	N3-C4	-5.62	1.31	1.35
2	SA	15	G	C6-O6	-5.62	1.19	1.24
2	SA	102	G	N7-C5	5.62	1.42	1.39
2	SA	303	A	C3'-O3'	5.62	1.50	1.42
2	SA	684	U	C2-N3	-5.62	1.33	1.37
2	SA	1079	G	N7-C5	-5.62	1.35	1.39
2	SA	1128	C	C4-C5	-5.62	1.38	1.43
2	SA	1138	G	C1'-N9	5.62	1.57	1.48
26	LA	109	C	C3'-C2'	-5.62	1.46	1.52
26	LA	470	A	N7-C5	-5.62	1.35	1.39
26	LA	1283	G	C8-N7	5.62	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1616	A	C6-N6	-5.62	1.29	1.33
26	LA	1844	C	C4-C5	5.62	1.47	1.43
26	LA	2409	G	O3'-P	-5.62	1.54	1.61
26	LA	2506	U	C5'-C4'	5.62	1.58	1.51
26	LA	2673	G	C5-C6	-5.62	1.36	1.42
26	LA	2805	C	O3'-P	-5.62	1.54	1.61
2	SA	604	G	C5-C4	5.61	1.42	1.38
2	SA	873	A	C2'-C1'	-5.61	1.47	1.53
2	SA	1245	C	N1-C6	-5.61	1.33	1.37
2	SA	1344	C	N3-C4	-5.61	1.30	1.33
26	LA	184	C	C1'-N1	-5.61	1.39	1.46
26	LA	206	U	C4-O4	-5.61	1.19	1.23
26	LA	830	G	O3'-P	-5.61	1.54	1.61
26	LA	856	G	C2-N3	-5.61	1.28	1.32
26	LA	982	C	C2-N3	-5.61	1.31	1.35
26	LA	1397	U	N1-C6	5.61	1.43	1.38
26	LA	1695	G	N9-C4	5.61	1.42	1.38
26	LA	2160	C	C1'-N1	5.61	1.57	1.48
26	LA	2398	U	C3'-C2'	-5.61	1.46	1.52
26	LA	2435	A	P-O5'	-5.61	1.54	1.59
26	LA	2787	C	O3'-P	-5.61	1.54	1.61
2	SA	734	G	O3'-P	-5.61	1.54	1.61
2	SA	1130	A	C4'-O4'	5.61	1.52	1.45
2	SA	1377	A	C5-C6	-5.61	1.35	1.41
2	SA	1476	A	P-O5'	-5.61	1.54	1.59
25	LB	54	G	N3-C4	-5.61	1.31	1.35
26	LA	1368	G	C4'-O4'	5.61	1.52	1.45
26	LA	1845	G	C6-N1	-5.61	1.35	1.39
26	LA	2167	U	C3'-O3'	5.61	1.50	1.42
26	LA	2538	C	C5-C6	-5.61	1.29	1.34
2	SA	223	A	C1'-N9	-5.61	1.39	1.46
2	SA	503	C	C4-C5	-5.61	1.38	1.43
2	SA	601	G	C4'-C3'	-5.61	1.47	1.52
2	SA	810	C	N1-C6	5.61	1.40	1.37
2	SA	1014	A	C3'-C2'	5.61	1.59	1.52
2	SA	1198	G	C2-N3	5.61	1.37	1.32
2	SA	1220	G	C8-N7	5.61	1.34	1.30
26	LA	52	A	C2-N3	-5.61	1.28	1.33
26	LA	86	G	C8-N7	5.61	1.34	1.30
26	LA	155	A	C5'-C4'	5.61	1.58	1.51
26	LA	310	A	C3'-C2'	-5.61	1.46	1.52
26	LA	518	G	O3'-P	-5.61	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	792	A	O4'-C1'	-5.61	1.34	1.41
26	LA	1211	C	C3'-O3'	5.61	1.50	1.42
26	LA	1613	G	O3'-P	5.61	1.67	1.61
26	LA	1699	G	N9-C4	-5.61	1.33	1.38
26	LA	1980	G	C5'-C4'	5.61	1.58	1.51
26	LA	2288	A	C3'-C2'	-5.61	1.46	1.52
27	LD	183	VAL	CA-CB	-5.61	1.43	1.54
2	SA	409	U	C3'-C2'	-5.61	1.46	1.52
26	LA	537	G	N1-C2	-5.61	1.33	1.37
26	LA	1661	G	O3'-P	-5.61	1.54	1.61
26	LA	2365	G	C5-C4	-5.61	1.34	1.38
26	LA	2667	C	C5'-C4'	5.61	1.58	1.51
2	SA	25	C	C4-C5	-5.61	1.38	1.43
2	SA	86	G	N9-C4	-5.61	1.33	1.38
2	SA	1047	G	C5-C6	-5.61	1.36	1.42
24	S3	71	TRP	CZ2-CH2	5.61	1.48	1.37
26	LA	12	U	C4'-O4'	5.61	1.52	1.45
26	LA	301	G	N7-C5	5.61	1.42	1.39
26	LA	385	C	O4'-C1'	-5.61	1.34	1.41
26	LA	400	G	C6-N1	5.61	1.43	1.39
26	LA	453	A	P-O5'	5.61	1.65	1.59
26	LA	1258	U	C4'-O4'	-5.61	1.38	1.45
26	LA	1549	A	C2'-C1'	-5.61	1.47	1.53
26	LA	1697	G	N3-C4	-5.61	1.31	1.35
26	LA	2089	C	C2'-C1'	-5.61	1.47	1.53
26	LA	2125	G	O3'-P	-5.61	1.54	1.61
26	LA	2135	A	C2-N3	5.61	1.38	1.33
26	LA	2368	C	C2'-C1'	-5.61	1.47	1.53
26	LA	2454	G	C4'-O4'	-5.61	1.38	1.45
2	SA	957	U	C2-O2	5.61	1.27	1.22
26	LA	586	A	N9-C4	-5.61	1.34	1.37
26	LA	603	A	C4'-O4'	-5.61	1.38	1.45
26	LA	1546	G	C6-O6	-5.61	1.19	1.24
26	LA	1563	U	C3'-C2'	-5.61	1.46	1.52
26	LA	1826	G	C5'-C4'	5.61	1.58	1.51
26	LA	2896	C	C5'-C4'	5.61	1.58	1.51
2	SA	362	G	C2-N2	-5.60	1.28	1.34
26	LA	609	A	N7-C5	-5.60	1.35	1.39
26	LA	1107	G	N7-C5	5.60	1.42	1.39
26	LA	1176	U	N3-C4	-5.60	1.33	1.38
26	LA	1955	U	C3'-O3'	5.60	1.50	1.42
25	LB	99	A	N7-C5	-5.60	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	992	C	N1-C6	-5.60	1.33	1.37
26	LA	1007	C	O3'-P	-5.60	1.54	1.61
26	LA	1179	G	C2-N3	5.60	1.37	1.32
26	LA	1182	G	O3'-P	-5.60	1.54	1.61
26	LA	1617	C	N3-C4	-5.60	1.30	1.33
26	LA	2052	A	N9-C4	-5.60	1.34	1.37
26	LA	2142	A	C2-N3	-5.60	1.28	1.33
2	SA	99	C	C4'-O4'	-5.60	1.38	1.45
2	SA	695	A	N9-C8	-5.60	1.33	1.37
2	SA	1341	U	C2-N3	-5.60	1.33	1.37
26	LA	1572	A	C6-N6	5.60	1.38	1.33
26	LA	1829	A	C6-N1	-5.60	1.31	1.35
26	LA	2167	U	C4-O4	-5.60	1.19	1.23
2	SA	75	G	N9-C8	5.60	1.41	1.37
2	SA	143	A	C3'-C2'	-5.60	1.46	1.52
2	SA	274	A	N3-C4	5.60	1.38	1.34
2	SA	726	C	C5'-C4'	5.60	1.58	1.51
2	SA	768	A	C6-N1	-5.60	1.31	1.35
2	SA	1134	G	P-O5'	-5.60	1.54	1.59
2	SA	1170	A	C1'-N9	-5.60	1.39	1.46
2	SA	1279	G	N9-C4	5.60	1.42	1.38
24	S3	452	SER	CA-CB	5.60	1.61	1.52
26	LA	63	A	N1-C2	-5.60	1.29	1.34
26	LA	92	U	C3'-C2'	-5.60	1.46	1.52
26	LA	239	C	C2'-C1'	-5.60	1.47	1.53
26	LA	519	U	N1-C2	-5.60	1.33	1.38
26	LA	530	G	N1-C2	-5.60	1.33	1.37
26	LA	566	U	N3-C4	-5.60	1.33	1.38
26	LA	971	G	N1-C2	-5.60	1.33	1.37
26	LA	1455	G	C3'-C2'	-5.60	1.46	1.52
26	LA	1472	C	C5'-C4'	5.60	1.58	1.51
26	LA	1507	C	C4-C5	5.60	1.47	1.43
26	LA	1833	C	O4'-C1'	-5.60	1.34	1.41
26	LA	2049	G	C6-N1	5.60	1.43	1.39
26	LA	2190	G	O3'-P	-5.60	1.54	1.61
26	LA	2391	G	N9-C8	-5.60	1.33	1.37
26	LA	2556	C	N1-C6	5.60	1.40	1.37
26	LA	2879	A	C4'-C3'	5.60	1.59	1.53
2	SA	52	C	C4-N4	-5.60	1.28	1.33
2	SA	936	C	N1-C6	-5.60	1.33	1.37
2	SA	968	A	C5'-C4'	-5.60	1.44	1.51
2	SA	1138	G	C3'-O3'	5.60	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1199	U	C5'-C4'	5.60	1.58	1.51
26	LA	17	G	C6-N1	-5.60	1.35	1.39
26	LA	1003	G	C5-C4	5.60	1.42	1.38
26	LA	1521	G	C2'-C1'	-5.60	1.47	1.53
26	LA	2029	G	N3-C4	-5.60	1.31	1.35
26	LA	2088	A	C8-N7	-5.60	1.27	1.31
26	LA	2208	C	C3'-O3'	5.60	1.50	1.42
26	LA	2334	U	C4'-O4'	-5.60	1.38	1.45
26	LA	2391	G	C2-N2	-5.60	1.28	1.34
26	LA	2635	A	C2-N3	-5.60	1.28	1.33
25	LB	39	A	N1-C2	-5.60	1.29	1.34
25	LB	113	C	C2'-C1'	-5.60	1.47	1.53
26	LA	68	G	C5-C6	-5.60	1.36	1.42
26	LA	272	A	C3'-C2'	5.60	1.59	1.52
26	LA	1924	C	C4'-O4'	5.60	1.52	1.45
2	SA	660	C	C4-C5	-5.59	1.38	1.43
2	SA	1079	G	C2'-C1'	-5.59	1.47	1.53
26	LA	91	A	N1-C2	-5.59	1.29	1.34
26	LA	95	A	P-O5'	-5.59	1.54	1.59
26	LA	312	G	O3'-P	-5.59	1.54	1.61
26	LA	650	C	C4-C5	-5.59	1.38	1.43
26	LA	770	G	C6-N1	-5.59	1.35	1.39
26	LA	1130	U	C4-C5	5.59	1.48	1.43
26	LA	1598	A	C6-N1	-5.59	1.31	1.35
26	LA	1730	C	C5'-C4'	5.59	1.58	1.51
26	LA	1946	U	P-O5'	-5.59	1.54	1.59
26	LA	2392	A	C8-N7	-5.59	1.27	1.31
2	SA	1089	G	N3-C4	-5.59	1.31	1.35
26	LA	1096	A	C2-N3	-5.59	1.28	1.33
26	LA	1410	G	C8-N7	-5.59	1.27	1.30
26	LA	2349	G	P-O5'	-5.59	1.54	1.59
2	SA	617	G	C8-N7	5.59	1.34	1.30
2	SA	1474	U	O3'-P	-5.59	1.54	1.61
2	SA	1500	A	N7-C5	-5.59	1.35	1.39
26	LA	391	A	C5-C4	5.59	1.42	1.38
26	LA	597	G	C2'-C1'	-5.59	1.47	1.53
26	LA	1380	G	C2-N2	-5.59	1.28	1.34
26	LA	1451	C	O4'-C1'	-5.59	1.34	1.41
26	LA	1688	U	C3'-O3'	5.59	1.50	1.42
26	LA	1694	C	C2-N3	-5.59	1.31	1.35
26	LA	2449	U	C5-C6	5.59	1.39	1.34
2	SA	1186	G	N9-C8	-5.59	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	40	U	C5'-C4'	5.59	1.58	1.51
26	LA	189	G	C4'-O4'	-5.59	1.38	1.45
26	LA	886	A	C8-N7	5.59	1.35	1.31
26	LA	1832	C	C2-N3	5.59	1.40	1.35
26	LA	1918	A	C2'-C1'	-5.59	1.47	1.53
26	LA	2282	G	C6-O6	-5.59	1.19	1.24
2	SA	130	A	C5-C4	-5.59	1.34	1.38
2	SA	351	G	C5-C4	5.59	1.42	1.38
2	SA	571	U	P-O5'	-5.59	1.54	1.59
26	LA	300	A	C4'-O4'	5.59	1.52	1.45
26	LA	388	G	O3'-P	-5.59	1.54	1.61
26	LA	555	G	C4'-O4'	-5.59	1.38	1.45
26	LA	2305	U	N1-C2	-5.59	1.33	1.38
26	LA	2401	U	N1-C6	5.59	1.43	1.38
2	SA	11	G	O3'-P	-5.59	1.54	1.61
2	SA	503	C	N1-C6	-5.59	1.33	1.37
2	SA	912	C	C2-O2	-5.59	1.19	1.24
2	SA	1524	C	O3'-P	-5.59	1.54	1.61
26	LA	262	A	C2'-C1'	-5.59	1.47	1.53
26	LA	706	A	C2-N3	-5.59	1.28	1.33
26	LA	1082	U	O3'-P	-5.59	1.54	1.61
26	LA	1813	G	C2'-C1'	-5.59	1.47	1.53
26	LA	1867	G	C5'-C4'	5.59	1.58	1.51
26	LA	2114	A	N9-C8	5.59	1.42	1.37
26	LA	2234	G	C2'-C1'	5.59	1.59	1.53
26	LA	2659	G	P-O5'	-5.59	1.54	1.59
26	LA	2682	A	C6-N6	-5.59	1.29	1.33
2	SA	138	G	C8-N7	-5.58	1.27	1.30
2	SA	532	A	C5-C6	5.58	1.46	1.41
2	SA	1394	A	C2-N3	-5.58	1.28	1.33
26	LA	1847	A	N7-C5	-5.58	1.35	1.39
2	SA	138	G	C2-N3	-5.58	1.28	1.32
2	SA	373	A	N3-C4	5.58	1.38	1.34
2	SA	752	G	C2-N2	-5.58	1.28	1.34
2	SA	868	C	C2-O2	-5.58	1.19	1.24
2	SA	896	C	C4-C5	-5.58	1.38	1.43
2	SA	933	G	C5-C6	-5.58	1.36	1.42
2	SA	1210	C	C3'-O3'	5.58	1.50	1.42
2	SA	1362	A	C6-N1	-5.58	1.31	1.35
26	LA	798	G	O3'-P	-5.58	1.54	1.61
26	LA	833	A	C6-N6	-5.58	1.29	1.33
26	LA	1453	A	C6-N6	5.58	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2209	G	C5-C6	-5.58	1.36	1.42
26	LA	2352	A	N9-C4	-5.58	1.34	1.37
26	LA	2539	C	C2'-C1'	-5.58	1.47	1.53
26	LA	2778	A	N7-C5	-5.58	1.35	1.39
52	LO	23	GLY	CA-C	-5.58	1.43	1.51
2	SA	858	G	O3'-P	-5.58	1.54	1.61
2	SA	1036	A	P-O5'	-5.58	1.54	1.59
3	S1	16	A	N3-C4	5.58	1.38	1.34
25	LB	1	U	C4'-C3'	5.58	1.59	1.53
26	LA	570	G	N3-C4	-5.58	1.31	1.35
26	LA	617	G	P-O5'	-5.58	1.54	1.59
26	LA	1040	A	N3-C4	-5.58	1.31	1.34
26	LA	1507	C	O4'-C1'	-5.58	1.34	1.41
26	LA	1687	G	C2'-C1'	-5.58	1.47	1.53
26	LA	1735	A	O3'-P	-5.58	1.54	1.61
26	LA	2280	G	C1'-N9	-5.58	1.39	1.46
26	LA	2603	G	N9-C8	-5.58	1.33	1.37
2	SA	158	G	C6-N1	5.58	1.43	1.39
2	SA	501	C	N1-C6	5.58	1.40	1.37
25	LB	116	G	P-O5'	-5.58	1.54	1.59
26	LA	1959	G	N9-C8	-5.58	1.33	1.37
26	LA	2468	A	C3'-C2'	-5.58	1.46	1.52
26	LA	2812	G	C3'-C2'	-5.58	1.46	1.52
2	SA	67	C	C2'-O2'	-5.58	1.34	1.41
2	SA	121	U	C3'-O3'	5.58	1.50	1.42
2	SA	295	C	C4-N4	-5.58	1.28	1.33
2	SA	640	A	N7-C5	-5.58	1.35	1.39
2	SA	1022	A	C4'-C3'	-5.58	1.47	1.52
2	SA	1043	G	C4'-O4'	5.58	1.52	1.45
2	SA	1415	G	N7-C5	5.58	1.42	1.39
26	LA	160	A	C1'-N9	-5.58	1.39	1.46
26	LA	256	A	C5'-C4'	5.58	1.58	1.51
26	LA	359	G	N9-C8	-5.58	1.33	1.37
26	LA	735	A	O3'-P	-5.58	1.54	1.61
26	LA	1163	G	N1-C2	-5.58	1.33	1.37
26	LA	1781	U	P-O5'	-5.58	1.54	1.59
26	LA	798	G	C2-N2	-5.58	1.28	1.34
26	LA	1731	G	C3'-C2'	-5.58	1.46	1.52
2	SA	390	U	C3'-C2'	-5.58	1.46	1.52
2	SA	425	G	C3'-O3'	5.58	1.50	1.42
2	SA	963	G	P-O5'	-5.58	1.54	1.59
2	SA	1064	G	C2'-C1'	-5.58	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1422	G	C5-C6	-5.58	1.36	1.42
2	SA	1426	G	N1-C2	-5.58	1.33	1.37
2	SA	1430	A	C3'-O3'	5.58	1.50	1.42
26	LA	556	A	C2'-C1'	-5.58	1.47	1.53
26	LA	611	C	C4-N4	-5.58	1.28	1.33
26	LA	664	G	C5'-C4'	5.58	1.58	1.51
26	LA	708	G	C5-C4	-5.58	1.34	1.38
26	LA	1389	G	C4'-O4'	-5.58	1.38	1.45
26	LA	1524	G	C5-C4	5.58	1.42	1.38
26	LA	1734	G	C5'-C4'	5.58	1.58	1.51
26	LA	2354	C	C5-C6	5.58	1.38	1.34
26	LA	2389	G	N9-C4	-5.58	1.33	1.38
26	LA	2568	U	N1-C2	-5.58	1.33	1.38
26	LA	2743	U	C3'-C2'	-5.58	1.46	1.52
26	LA	2774	C	C5'-C4'	5.58	1.58	1.51
2	SA	506	G	N9-C8	-5.57	1.33	1.37
2	SA	1423	G	C2'-O2'	-5.57	1.34	1.41
2	SA	1493	A	C8-N7	-5.57	1.27	1.31
4	S2	19	G	N9-C8	-5.57	1.33	1.37
4	S2	21	U	C3'-O3'	5.57	1.50	1.42
4	S2	71	G	P-O5'	-5.57	1.54	1.59
26	LA	110	G	C3'-C2'	-5.57	1.46	1.52
26	LA	176	A	C5-C4	5.57	1.42	1.38
26	LA	357	C	N3-C4	-5.57	1.30	1.33
26	LA	432	A	C1'-N9	-5.57	1.39	1.46
26	LA	602	A	N7-C5	-5.57	1.35	1.39
26	LA	669	G	O3'-P	-5.57	1.54	1.61
26	LA	1122	G	C1'-N9	-5.57	1.39	1.46
26	LA	1301	A	C8-N7	-5.57	1.27	1.31
26	LA	1354	A	C2-N3	-5.57	1.28	1.33
26	LA	1834	U	N3-C4	-5.57	1.33	1.38
26	LA	2050	C	C3'-C2'	-5.57	1.46	1.52
26	LA	2557	G	N7-C5	-5.57	1.35	1.39
26	LA	2795	C	N1-C2	5.57	1.45	1.40
26	LA	2831	G	C6-N1	-5.57	1.35	1.39
2	SA	1499	A	C3'-C2'	-5.57	1.46	1.52
26	LA	356	G	C8-N7	5.57	1.34	1.30
26	LA	1171	G	O3'-P	-5.57	1.54	1.61
26	LA	1374	G	N7-C5	-5.57	1.35	1.39
2	SA	1339	A	O4'-C1'	-5.57	1.34	1.41
26	LA	292	U	N1-C6	5.57	1.43	1.38
26	LA	498	G	C2-N3	-5.57	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	793	A	C6-N1	5.57	1.39	1.35
26	LA	1254	A	C4'-C3'	5.57	1.59	1.53
26	LA	1594	U	C4'-C3'	-5.57	1.47	1.52
26	LA	1653	G	C5-C6	-5.57	1.36	1.42
26	LA	1805	A	C4'-C3'	5.57	1.59	1.53
26	LA	1975	G	N7-C5	-5.57	1.35	1.39
26	LA	2221	G	N7-C5	-5.57	1.35	1.39
2	SA	95	C	N3-C4	-5.57	1.30	1.33
2	SA	634	C	N1-C2	-5.57	1.34	1.40
2	SA	1032	G	C2'-C1'	-5.57	1.47	1.53
2	SA	1340	A	O3'-P	-5.57	1.54	1.61
26	LA	666	A	N3-C4	-5.57	1.31	1.34
26	LA	2454	G	O3'-P	-5.57	1.54	1.61
2	SA	345	C	C5'-C4'	5.57	1.58	1.51
2	SA	786	G	N7-C5	-5.57	1.35	1.39
2	SA	1300	G	C8-N7	5.57	1.34	1.30
2	SA	1508	A	C2-N3	-5.57	1.28	1.33
3	S1	41	A	N9-C8	5.57	1.42	1.37
25	LB	41	G	O3'-P	-5.57	1.54	1.61
26	LA	514	A	C3'-O3'	5.57	1.50	1.42
26	LA	824	U	C5-C6	-5.57	1.29	1.34
26	LA	1651	G	O3'-P	-5.57	1.54	1.61
26	LA	1921	G	N9-C4	-5.57	1.33	1.38
26	LA	1952	A	C5'-C4'	5.57	1.58	1.51
26	LA	1981	A	O3'-P	-5.57	1.54	1.61
26	LA	2039	U	C4-O4	-5.57	1.19	1.23
2	SA	208	U	N3-C4	-5.57	1.33	1.38
2	SA	423	G	C4'-C3'	5.57	1.59	1.53
2	SA	449	G	C5-C6	-5.57	1.36	1.42
2	SA	542	G	N1-C2	-5.57	1.33	1.37
2	SA	754	C	C5'-C4'	5.57	1.58	1.51
2	SA	1314	C	O3'-P	-5.57	1.54	1.61
26	LA	339	U	O3'-P	-5.57	1.54	1.61
26	LA	874	G	C4'-C3'	5.57	1.59	1.53
26	LA	1674	G	C6-N1	-5.57	1.35	1.39
26	LA	1960	A	C3'-O3'	5.57	1.50	1.42
26	LA	2082	A	N3-C4	-5.57	1.31	1.34
53	LP	96	ARG	CZ-NH2	-5.57	1.25	1.33
2	SA	1176	A	N9-C8	-5.56	1.33	1.37
23	SR	36	GLY	CA-C	-5.56	1.43	1.51
26	LA	257	C	O3'-P	-5.56	1.54	1.61
26	LA	2369	A	N3-C4	5.56	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	175	C	C3'-C2'	-5.56	1.46	1.52
2	SA	774	G	C2-N3	-5.56	1.28	1.32
2	SA	1232	U	C5'-C4'	5.56	1.58	1.51
2	SA	1383	C	C3'-C2'	5.56	1.59	1.52
2	SA	1468	A	C3'-C2'	5.56	1.59	1.52
25	LB	42	C	C4-C5	5.56	1.47	1.43
26	LA	241	A	C2'-C1'	-5.56	1.47	1.53
26	LA	348	A	N9-C4	5.56	1.41	1.37
26	LA	376	G	C5'-C4'	5.56	1.58	1.51
26	LA	804	A	C2'-C1'	-5.56	1.47	1.53
26	LA	820	A	N9-C8	-5.56	1.33	1.37
26	LA	842	U	P-O5'	-5.56	1.54	1.59
26	LA	1066	U	C5-C6	5.56	1.39	1.34
26	LA	1144	A	C5'-C4'	5.56	1.58	1.51
26	LA	1175	A	C5-C4	-5.56	1.34	1.38
26	LA	1425	G	C2'-O2'	5.56	1.48	1.41
26	LA	1544	A	C1'-N9	-5.56	1.39	1.46
26	LA	2361	G	C1'-N9	-5.56	1.39	1.46
26	LA	2410	G	C2'-C1'	-5.56	1.47	1.53
26	LA	2822	G	C2'-C1'	-5.56	1.47	1.53
45	LG	147	ARG	CD-NE	5.56	1.55	1.46
2	SA	652	U	C2-N3	-5.56	1.33	1.37
2	SA	1332	A	C5'-C4'	5.56	1.58	1.51
7	SG	128	GLU	CB-CG	5.56	1.62	1.52
26	LA	1294	U	N1-C6	5.56	1.43	1.38
26	LA	1729	U	P-O5'	5.56	1.65	1.59
26	LA	2529	G	C4'-C3'	-5.56	1.47	1.52
2	SA	350	G	C3'-O3'	5.56	1.50	1.42
2	SA	517	G	C6-O6	-5.56	1.19	1.24
2	SA	587	G	N3-C4	5.56	1.39	1.35
2	SA	842	U	O3'-P	-5.56	1.54	1.61
2	SA	916	U	C4'-C3'	-5.56	1.47	1.52
2	SA	929	G	N9-C4	5.56	1.42	1.38
2	SA	1036	A	C5'-C4'	5.56	1.58	1.51
26	LA	117	G	O3'-P	-5.56	1.54	1.61
26	LA	146	A	O4'-C1'	5.56	1.48	1.41
26	LA	516	C	C3'-O3'	-5.56	1.34	1.42
26	LA	900	A	N3-C4	-5.56	1.31	1.34
26	LA	909	A	P-O5'	-5.56	1.54	1.59
26	LA	1508	A	O3'-P	-5.56	1.54	1.61
26	LA	1695	G	C2-N3	5.56	1.37	1.32
26	LA	1829	A	N7-C5	-5.56	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2731	G	C2'-C1'	-5.56	1.47	1.53
2	SA	259	G	N7-C5	-5.56	1.35	1.39
2	SA	364	A	C2'-C1'	-5.56	1.47	1.53
2	SA	394	G	O5'-C5'	5.56	1.53	1.44
2	SA	512	U	C1'-N1	-5.56	1.39	1.46
2	SA	671	G	O3'-P	-5.56	1.54	1.61
2	SA	698	G	O3'-P	-5.56	1.54	1.61
2	SA	875	U	C2-N3	5.56	1.41	1.37
2	SA	888	G	O4'-C1'	-5.56	1.34	1.41
2	SA	1201	A	C3'-C2'	5.56	1.59	1.52
2	SA	1339	A	N9-C4	-5.56	1.34	1.37
20	SD	61	ARG	N-CA	-5.56	1.35	1.46
26	LA	760	G	C5-C6	-5.56	1.36	1.42
26	LA	818	G	C2'-C1'	-5.56	1.47	1.53
26	LA	1184	U	C2-N3	-5.56	1.33	1.37
26	LA	2055	C	C4-C5	-5.56	1.38	1.43
26	LA	2266	A	C3'-C2'	5.56	1.59	1.52
26	LA	2293	G	N3-C4	5.56	1.39	1.35
26	LA	2328	A	N3-C4	-5.56	1.31	1.34
26	LA	2505	G	P-O5'	5.56	1.65	1.59
2	SA	100	G	C1'-N9	-5.56	1.39	1.46
2	SA	647	C	N3-C4	5.56	1.37	1.33
24	S3	402	PRO	N-CD	-5.56	1.40	1.47
25	LB	69	G	C5-C6	-5.56	1.36	1.42
26	LA	479	A	C5'-C4'	5.56	1.58	1.51
26	LA	494	G	C3'-C2'	-5.56	1.46	1.52
26	LA	513	A	C3'-C2'	-5.56	1.46	1.52
26	LA	1832	C	C4'-C3'	-5.56	1.47	1.52
26	LA	2732	G	C6-N1	5.56	1.43	1.39
2	SA	544	G	C4'-C3'	-5.55	1.47	1.52
24	S3	436	ARG	CZ-NH1	-5.55	1.25	1.33
25	LB	9	G	N7-C5	5.55	1.42	1.39
26	LA	248	G	N3-C4	-5.55	1.31	1.35
26	LA	415	A	C4'-C3'	5.55	1.59	1.53
26	LA	601	C	C4'-C3'	5.55	1.59	1.53
26	LA	763	G	N9-C4	-5.55	1.33	1.38
26	LA	924	G	C2'-C1'	-5.55	1.47	1.53
26	LA	1050	A	P-O5'	-5.55	1.54	1.59
26	LA	1330	C	P-O5'	-5.55	1.54	1.59
26	LA	1375	U	N3-C4	-5.55	1.33	1.38
26	LA	1574	C	P-O5'	-5.55	1.54	1.59
26	LA	2400	G	C5-C6	-5.55	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	994	A	C8-N7	-5.55	1.27	1.31
2	SA	1066	C	N1-C6	5.55	1.40	1.37
10	SJ	65	TYR	CB-CG	-5.55	1.43	1.51
26	LA	2174	C	C3'-C2'	5.55	1.59	1.52
26	LA	2418	A	O3'-P	-5.55	1.54	1.61
26	LA	2534	A	C5-C6	-5.55	1.36	1.41
26	LA	2675	A	C5-C4	-5.55	1.34	1.38
2	SA	221	C	P-O5'	-5.55	1.54	1.59
2	SA	1214	C	C3'-O3'	5.55	1.50	1.42
4	S2	58	A	C4'-C3'	5.55	1.59	1.53
12	SL	83	GLY	CA-C	-5.55	1.43	1.51
26	LA	697	G	N1-C2	-5.55	1.33	1.37
26	LA	1224	U	O3'-P	-5.55	1.54	1.61
26	LA	1250	G	C3'-C2'	-5.55	1.46	1.52
26	LA	2327	A	C2-N3	5.55	1.38	1.33
2	SA	627	G	C4'-C3'	5.55	1.59	1.53
2	SA	794	A	C1'-N9	-5.55	1.39	1.46
2	SA	1059	C	C5'-C4'	-5.55	1.44	1.51
2	SA	1187	G	C4'-C3'	5.55	1.59	1.53
16	SP	17	TYR	N-CA	-5.55	1.35	1.46
25	LB	81	G	C2-N3	5.55	1.37	1.32
26	LA	289	G	C3'-C2'	-5.55	1.46	1.52
26	LA	575	A	C6-N6	-5.55	1.29	1.33
26	LA	590	A	P-O5'	-5.55	1.54	1.59
26	LA	1377	G	N7-C5	-5.55	1.35	1.39
26	LA	1571	A	N9-C4	-5.55	1.34	1.37
2	SA	78	A	C2'-C1'	-5.55	1.47	1.53
2	SA	392	C	C4-N4	5.55	1.39	1.33
2	SA	990	C	C2-N3	5.55	1.40	1.35
2	SA	1118	U	N1-C6	-5.55	1.32	1.38
26	LA	380	G	C6-N1	5.55	1.43	1.39
26	LA	487	C	P-O5'	-5.55	1.54	1.59
26	LA	1221	C	C5'-C4'	5.55	1.58	1.51
2	SA	94	G	N9-C4	-5.55	1.33	1.38
2	SA	486	U	P-O5'	-5.55	1.54	1.59
2	SA	776	G	N9-C4	-5.55	1.33	1.38
2	SA	860	A	C2'-C1'	-5.55	1.47	1.53
2	SA	1316	G	C5-C6	-5.55	1.36	1.42
25	LB	118	C	N1-C6	-5.55	1.33	1.37
26	LA	377	G	C4'-O4'	-5.55	1.38	1.45
26	LA	648	G	N9-C4	-5.55	1.33	1.38
26	LA	650	C	C5'-C4'	5.55	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	910	A	C3'-C2'	-5.55	1.46	1.52
26	LA	1382	G	O3'-P	-5.55	1.54	1.61
26	LA	1812	U	C2'-C1'	-5.55	1.47	1.53
26	LA	2322	A	P-O5'	-5.55	1.54	1.59
26	LA	2603	G	C6-N1	-5.55	1.35	1.39
2	SA	34	C	P-O5'	-5.54	1.54	1.59
2	SA	310	G	C6-N1	5.54	1.43	1.39
2	SA	386	C	N3-C4	-5.54	1.30	1.33
2	SA	507	C	C3'-O3'	5.54	1.50	1.42
26	LA	394	C	N1-C2	-5.54	1.34	1.40
26	LA	1154	G	C6-N1	-5.54	1.35	1.39
26	LA	1412	U	O4'-C1'	-5.54	1.34	1.41
28	LU	38	TYR	CB-CG	-5.54	1.43	1.51
2	SA	39	G	N9-C8	5.54	1.41	1.37
2	SA	761	G	C3'-C2'	5.54	1.59	1.52
25	LB	84	G	C2-N3	-5.54	1.28	1.32
26	LA	45	G	C5'-C4'	5.54	1.58	1.51
26	LA	56	A	C2-N3	5.54	1.38	1.33
26	LA	838	C	C3'-C2'	-5.54	1.46	1.52
26	LA	1771	C	C2-N3	-5.54	1.31	1.35
26	LA	2198	A	C2-N3	5.54	1.38	1.33
26	LA	2481	G	C6-O6	5.54	1.29	1.24
2	SA	1074	G	N7-C5	-5.54	1.35	1.39
26	LA	769	U	N3-C4	-5.54	1.33	1.38
26	LA	834	G	N3-C4	-5.54	1.31	1.35
26	LA	861	A	C5'-C4'	5.54	1.58	1.51
26	LA	1923	U	N1-C2	5.54	1.43	1.38
26	LA	2430	A	C2'-O2'	-5.54	1.34	1.41
2	SA	379	C	C2'-C1'	-5.54	1.47	1.53
2	SA	719	C	C2-N3	-5.54	1.31	1.35
2	SA	851	G	C5-C4	-5.54	1.34	1.38
26	LA	74	A	N9-C4	5.54	1.41	1.37
26	LA	552	U	C3'-O3'	5.54	1.50	1.42
26	LA	1937	A	C1'-N9	-5.54	1.39	1.46
26	LA	2100	G	C8-N7	-5.54	1.27	1.30
2	SA	21	G	C3'-C2'	-5.54	1.46	1.52
2	SA	390	U	C4'-O4'	5.54	1.52	1.45
2	SA	653	U	C1'-N1	5.54	1.57	1.48
2	SA	733	G	N9-C4	-5.54	1.33	1.38
2	SA	1464	U	C3'-C2'	5.54	1.59	1.52
26	LA	1308	A	C4'-O4'	5.54	1.52	1.45
26	LA	1352	U	N1-C2	-5.54	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2014	A	N9-C4	5.54	1.41	1.37
26	LA	2433	A	C2-N3	-5.54	1.28	1.33
2	SA	771	G	C5'-C4'	5.54	1.57	1.51
2	SA	1144	G	N1-C2	-5.54	1.33	1.37
2	SA	1386	G	C5-C4	-5.54	1.34	1.38
25	LB	42	C	C2-N3	5.54	1.40	1.35
26	LA	1948	G	C2-N2	-5.54	1.29	1.34
2	SA	515	G	N9-C8	-5.54	1.33	1.37
2	SA	528	C	N3-C4	5.54	1.37	1.33
2	SA	736	C	C5-C6	-5.54	1.29	1.34
2	SA	846	G	N9-C8	5.54	1.41	1.37
2	SA	1405	G	C4'-C3'	-5.54	1.47	1.52
2	SA	1507	A	N1-C2	-5.54	1.29	1.34
26	LA	252	G	C4'-C3'	-5.54	1.47	1.52
26	LA	450	G	C2'-C1'	-5.54	1.47	1.53
26	LA	1426	G	O3'-P	-5.54	1.54	1.61
26	LA	1791	A	C3'-C2'	-5.54	1.46	1.52
26	LA	1875	G	C5'-C4'	5.54	1.57	1.51
26	LA	1896	G	C3'-C2'	-5.54	1.46	1.52
26	LA	2040	G	P-O5'	-5.54	1.54	1.59
26	LA	2148	G	C5'-C4'	5.54	1.57	1.51
26	LA	2318	G	P-O5'	-5.54	1.54	1.59
26	LA	2573	C	P-O5'	-5.54	1.54	1.59
2	SA	386	C	O4'-C1'	5.53	1.48	1.41
2	SA	715	A	P-O5'	-5.53	1.54	1.59
2	SA	833	G	O4'-C1'	5.53	1.48	1.41
26	LA	4	U	N1-C2	5.53	1.43	1.38
26	LA	464	U	O3'-P	-5.53	1.54	1.61
26	LA	1230	A	C5-C4	-5.53	1.34	1.38
26	LA	1321	A	C4'-O4'	-5.53	1.38	1.45
26	LA	2124	G	C8-N7	-5.53	1.27	1.30
26	LA	2179	C	C5-C6	-5.53	1.29	1.34
26	LA	2793	C	C4'-C3'	5.53	1.59	1.53
2	SA	920	U	C4-O4	-5.53	1.19	1.23
2	SA	1083	U	C2-N3	-5.53	1.33	1.37
2	SA	1280	A	C5-C4	5.53	1.42	1.38
2	SA	1491	G	N9-C8	-5.53	1.33	1.37
24	S3	308	ARG	CD-NE	5.53	1.55	1.46
26	LA	28	A	C5'-C4'	5.53	1.57	1.51
26	LA	87	U	N1-C6	-5.53	1.32	1.38
26	LA	272	A	C5'-C4'	5.53	1.57	1.51
26	LA	2059	A	N3-C4	-5.53	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	237	G	C5-C6	-5.53	1.36	1.42
2	SA	1372	U	O3'-P	-5.53	1.54	1.61
2	SA	1395	C	C3'-O3'	5.53	1.49	1.42
3	S1	51	C	C5-C6	5.53	1.38	1.34
26	LA	138	U	C5'-C4'	5.53	1.57	1.51
26	LA	1074	G	C5-C4	-5.53	1.34	1.38
26	LA	1141	U	O4'-C1'	-5.53	1.34	1.41
26	LA	1394	U	O4'-C1'	-5.53	1.34	1.41
26	LA	2556	C	C4'-C3'	-5.53	1.47	1.52
26	LA	2757	A	C6-N1	-5.53	1.31	1.35
2	SA	70	U	C4-O4	5.53	1.28	1.23
2	SA	337	G	O3'-P	-5.53	1.54	1.61
2	SA	797	C	N3-C4	5.53	1.37	1.33
4	S2	27	G	N3-C4	-5.53	1.31	1.35
26	LA	672	C	C4-C5	-5.53	1.38	1.43
26	LA	2399	G	N9-C8	-5.53	1.33	1.37
2	SA	640	A	N1-C2	-5.53	1.29	1.34
2	SA	1088	G	C5-C4	-5.53	1.34	1.38
4	S2	24	C	C2'-C1'	-5.53	1.47	1.53
20	SD	106	PHE	CG-CD2	5.53	1.47	1.38
26	LA	433	C	C4'-O4'	5.53	1.52	1.45
26	LA	945	A	N1-C2	5.53	1.39	1.34
26	LA	1272	A	N3-C4	-5.53	1.31	1.34
26	LA	2529	G	N9-C4	-5.53	1.33	1.38
2	SA	430	A	N1-C2	5.53	1.39	1.34
2	SA	661	G	C4'-O4'	-5.53	1.38	1.45
2	SA	1003	G	C8-N7	5.53	1.34	1.30
2	SA	1444	U	N1-C6	-5.53	1.32	1.38
26	LA	56	A	P-O5'	-5.53	1.54	1.59
26	LA	203	A	C6-N6	-5.53	1.29	1.33
26	LA	224	U	N1-C6	5.53	1.43	1.38
26	LA	517	C	O3'-P	-5.53	1.54	1.61
26	LA	1923	U	C2-N3	-5.53	1.33	1.37
2	SA	177	G	N7-C5	5.52	1.42	1.39
2	SA	1035	A	N9-C8	-5.52	1.33	1.37
26	LA	7	G	C5-C6	-5.52	1.36	1.42
26	LA	268	C	C2'-C1'	-5.52	1.47	1.53
26	LA	1860	G	C6-N1	5.52	1.43	1.39
26	LA	1971	U	C2-N3	-5.52	1.33	1.37
2	SA	153	C	N1-C6	-5.52	1.33	1.37
26	LA	107	G	C1'-N9	-5.52	1.39	1.46
26	LA	145	C	C5'-C4'	5.52	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	191	A	C5-C6	-5.52	1.36	1.41
26	LA	207	A	P-O5'	-5.52	1.54	1.59
26	LA	381	G	N1-C2	-5.52	1.33	1.37
26	LA	1059	G	C5-C6	5.52	1.47	1.42
26	LA	1139	G	C3'-C2'	-5.52	1.46	1.52
26	LA	1397	U	C5-C6	5.52	1.39	1.34
26	LA	1605	C	C2'-C1'	-5.52	1.47	1.53
26	LA	2129	C	O5'-C5'	5.52	1.53	1.44
26	LA	2632	A	C6-N6	5.52	1.38	1.33
26	LA	2680	U	C5'-C4'	5.52	1.57	1.51
49	LK	61	TYR	CA-CB	5.52	1.66	1.53
2	SA	16	A	N9-C8	5.52	1.42	1.37
2	SA	824	G	N9-C8	5.52	1.41	1.37
2	SA	1055	A	N9-C4	-5.52	1.34	1.37
26	LA	115	C	C5'-C4'	5.52	1.57	1.51
26	LA	525	U	P-O5'	5.52	1.65	1.59
26	LA	566	U	O3'-P	-5.52	1.54	1.61
2	SA	274	A	N9-C4	5.52	1.41	1.37
2	SA	658	C	C5'-C4'	5.52	1.57	1.51
2	SA	972	C	C2-N3	-5.52	1.31	1.35
2	SA	1099	G	O4'-C1'	-5.52	1.34	1.41
26	LA	817	C	C5-C6	-5.52	1.29	1.34
26	LA	850	U	O3'-P	-5.52	1.54	1.61
26	LA	2405	G	N3-C4	-5.52	1.31	1.35
26	LA	2421	G	C1'-N9	-5.52	1.39	1.46
26	LA	2692	G	C6-N1	-5.52	1.35	1.39
2	SA	94	G	P-O5'	-5.52	1.54	1.59
2	SA	226	G	C6-N1	-5.52	1.35	1.39
2	SA	1229	A	N7-C5	-5.52	1.35	1.39
2	SA	1308	U	C2'-C1'	-5.52	1.47	1.53
2	SA	1322	C	C5-C6	-5.52	1.29	1.34
25	LB	29	A	C3'-C2'	-5.52	1.46	1.52
26	LA	855	G	C6-N1	-5.52	1.35	1.39
26	LA	1180	U	N1-C6	5.52	1.43	1.38
26	LA	1412	U	C4-O4	-5.52	1.19	1.23
26	LA	2162	G	O3'-P	-5.52	1.54	1.61
26	LA	2488	G	C5-C4	-5.52	1.34	1.38
26	LA	2703	C	P-O5'	5.52	1.65	1.59
28	LU	87	PRO	N-CD	-5.52	1.40	1.47
2	SA	1013	G	C5'-C4'	5.52	1.57	1.51
2	SA	1092	A	N3-C4	5.52	1.38	1.34
2	SA	1488	G	N9-C8	-5.52	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1255	U	O3'-P	-5.52	1.54	1.61
26	LA	1894	C	C2-N3	-5.52	1.31	1.35
26	LA	1945	G	C4'-C3'	-5.52	1.47	1.52
26	LA	2138	G	C2'-C1'	-5.52	1.47	1.53
26	LA	2544	G	C6-N1	-5.52	1.35	1.39
26	LA	2854	G	C4'-O4'	5.52	1.52	1.45
2	SA	55	A	C5-C4	-5.51	1.34	1.38
2	SA	454	G	C3'-O3'	5.51	1.49	1.42
2	SA	706	A	N3-C4	5.51	1.38	1.34
2	SA	1156	G	O3'-P	-5.51	1.54	1.61
2	SA	1246	A	C4'-O4'	5.51	1.52	1.45
3	S1	37	G	C5-C4	-5.51	1.34	1.38
19	SC	228	ARG	CD-NE	5.51	1.55	1.46
25	LB	2	G	C2'-O2'	-5.51	1.34	1.41
25	LB	26	C	O4'-C1'	5.51	1.48	1.41
26	LA	252	G	N3-C4	-5.51	1.31	1.35
26	LA	499	U	N1-C2	-5.51	1.33	1.38
26	LA	512	G	C4'-C3'	-5.51	1.47	1.52
26	LA	794	A	C8-N7	-5.51	1.27	1.31
26	LA	821	A	N9-C4	-5.51	1.34	1.37
26	LA	1047	G	O5'-C5'	5.51	1.53	1.44
26	LA	1157	G	C8-N7	-5.51	1.27	1.30
26	LA	1195	G	C3'-O3'	5.51	1.49	1.42
26	LA	1331	G	C2-N2	-5.51	1.29	1.34
26	LA	1452	G	C8-N7	-5.51	1.27	1.30
26	LA	1880	U	O3'-P	-5.51	1.54	1.61
26	LA	2059	A	P-O5'	-5.51	1.54	1.59
26	LA	2437	G	C5-C6	-5.51	1.36	1.42
26	LA	2645	G	C3'-C2'	-5.51	1.46	1.52
26	LA	1814	G	N9-C4	-5.51	1.33	1.38
26	LA	1916	A	C6-N1	-5.51	1.31	1.35
2	SA	204	G	C6-O6	-5.51	1.19	1.24
2	SA	284	C	C2'-C1'	-5.51	1.47	1.53
2	SA	927	G	C2-N2	-5.51	1.29	1.34
26	LA	105	C	C5-C6	-5.51	1.29	1.34
26	LA	464	U	N1-C6	-5.51	1.32	1.38
26	LA	1091	G	C1'-N9	-5.51	1.39	1.46
26	LA	1382	G	C5-C4	5.51	1.42	1.38
26	LA	1768	C	C2'-C1'	-5.51	1.47	1.53
2	SA	315	A	C2'-C1'	-5.51	1.47	1.53
2	SA	899	C	C2-N3	-5.51	1.31	1.35
2	SA	1251	A	C2'-C1'	-5.51	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	53	G	C3'-C2'	-5.51	1.46	1.52
26	LA	254	G	C6-N1	-5.51	1.35	1.39
26	LA	484	C	C5-C6	-5.51	1.29	1.34
26	LA	788	A	C6-N1	-5.51	1.31	1.35
26	LA	805	G	N1-C2	-5.51	1.33	1.37
26	LA	1011	G	P-O5'	-5.51	1.54	1.59
26	LA	1019	U	P-O5'	-5.51	1.54	1.59
26	LA	1247	A	C8-N7	-5.51	1.27	1.31
26	LA	1757	A	C5'-C4'	5.51	1.57	1.51
26	LA	1779	U	C5'-C4'	5.51	1.57	1.51
26	LA	1779	U	N3-C4	5.51	1.43	1.38
26	LA	2455	G	C5-C6	5.51	1.47	1.42
26	LA	2861	U	N3-C4	-5.51	1.33	1.38
26	LA	2898	U	C2'-O2'	5.51	1.48	1.41
2	SA	1000	A	O3'-P	-5.51	1.54	1.61
25	LB	61	G	N7-C5	-5.51	1.35	1.39
26	LA	2733	A	N9-C8	-5.51	1.33	1.37
2	SA	324	G	C1'-N9	-5.51	1.39	1.46
2	SA	367	U	C4'-C3'	-5.51	1.47	1.52
2	SA	1431	A	C8-N7	5.51	1.35	1.31
26	LA	176	A	C5-C6	-5.51	1.36	1.41
26	LA	348	A	N1-C2	5.51	1.39	1.34
26	LA	705	A	C4'-O4'	5.51	1.52	1.45
26	LA	970	U	P-O5'	-5.51	1.54	1.59
26	LA	995	C	C4'-O4'	-5.51	1.38	1.45
26	LA	1016	G	N9-C4	-5.51	1.33	1.38
26	LA	1788	C	C4'-C3'	-5.51	1.47	1.52
2	SA	60	A	O3'-P	-5.50	1.54	1.61
2	SA	949	A	C2-N3	5.50	1.38	1.33
26	LA	2389	G	N9-C8	-5.50	1.33	1.37
2	SA	311	C	C2-O2	-5.50	1.19	1.24
2	SA	639	G	C1'-N9	-5.50	1.39	1.46
2	SA	1516	G	C6-O6	-5.50	1.19	1.24
3	S1	25	U	C4-C5	-5.50	1.38	1.43
26	LA	264	C	C4-C5	-5.50	1.38	1.43
26	LA	841	G	N3-C4	5.50	1.39	1.35
26	LA	1800	C	C2'-C1'	-5.50	1.47	1.53
2	SA	132	C	C4-C5	5.50	1.47	1.43
2	SA	690	G	P-O5'	-5.50	1.54	1.59
2	SA	814	A	C8-N7	-5.50	1.27	1.31
2	SA	1497	G	N1-C2	-5.50	1.33	1.37
25	LB	94	A	C5'-C4'	5.50	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	232	G	C2-N2	-5.50	1.29	1.34
26	LA	327	G	C2'-C1'	-5.50	1.47	1.53
26	LA	429	A	C3'-O3'	5.50	1.49	1.42
26	LA	1125	G	C4'-O4'	-5.50	1.38	1.45
26	LA	1634	A	N9-C4	-5.50	1.34	1.37
26	LA	1694	C	N1-C2	-5.50	1.34	1.40
26	LA	1731	G	C5'-C4'	5.50	1.57	1.51
26	LA	1850	G	P-O5'	-5.50	1.54	1.59
26	LA	2236	U	O3'-P	-5.50	1.54	1.61
26	LA	2405	G	C6-O6	5.50	1.29	1.24
2	SA	161	A	N1-C2	-5.50	1.29	1.34
26	LA	29	U	C3'-C2'	-5.50	1.46	1.52
26	LA	2335	A	C5-C6	5.50	1.46	1.41
26	LA	2463	C	C3'-O3'	5.50	1.49	1.42
26	LA	2516	A	C2-N3	-5.50	1.28	1.33
2	SA	451	A	C6-N6	5.50	1.38	1.33
2	SA	601	G	C2'-C1'	-5.50	1.47	1.53
2	SA	811	C	N1-C6	-5.50	1.33	1.37
2	SA	1511	G	C1'-N9	-5.50	1.39	1.46
2	SA	1529	G	P-O5'	-5.50	1.54	1.59
4	S2	22	A	O4'-C1'	-5.50	1.34	1.41
26	LA	124	G	P-O5'	-5.50	1.54	1.59
26	LA	1435	G	C5-C4	-5.50	1.34	1.38
26	LA	1982	U	C3'-O3'	5.50	1.49	1.42
26	LA	2368	C	C5-C6	5.50	1.38	1.34
26	LA	2384	U	C3'-C2'	-5.50	1.46	1.52
26	LA	2568	U	N3-C4	-5.50	1.33	1.38
26	LA	2742	G	O3'-P	-5.50	1.54	1.61
2	SA	267	C	C4'-C3'	-5.50	1.47	1.52
2	SA	1174	G	N9-C8	5.50	1.41	1.37
2	SA	1339	A	C2-N3	5.50	1.38	1.33
2	SA	1419	G	C5'-C4'	5.50	1.57	1.51
26	LA	182	A	N3-C4	-5.50	1.31	1.34
26	LA	200	U	P-O5'	-5.50	1.54	1.59
26	LA	340	A	C3'-O3'	5.50	1.49	1.42
26	LA	341	C	O5'-C5'	-5.50	1.34	1.42
26	LA	432	A	C3'-C2'	-5.50	1.46	1.52
26	LA	628	G	C1'-N9	-5.50	1.39	1.46
26	LA	733	G	O3'-P	-5.50	1.54	1.61
26	LA	1255	U	C2'-C1'	5.50	1.59	1.53
26	LA	1466	U	P-O5'	-5.50	1.54	1.59
26	LA	1938	A	N9-C8	-5.50	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2119	A	C4'-O4'	-5.50	1.38	1.45
26	LA	2819	G	C2-N2	-5.50	1.29	1.34
2	SA	899	C	C1'-N1	-5.50	1.39	1.46
2	SA	1301	U	O3'-P	-5.50	1.54	1.61
4	S2	69	C	C4-N4	-5.50	1.29	1.33
26	LA	107	G	C2'-C1'	5.50	1.59	1.53
26	LA	1509	A	N3-C4	5.50	1.38	1.34
26	LA	2513	A	O3'-P	-5.50	1.54	1.61
2	SA	54	C	C5-C6	-5.49	1.29	1.34
2	SA	82	G	C3'-O3'	-5.49	1.34	1.42
2	SA	117	G	C2-N3	-5.49	1.28	1.32
2	SA	611	C	O3'-P	-5.49	1.54	1.61
4	S2	3	C	C4-C5	5.49	1.47	1.43
26	LA	148	U	C4-C5	5.49	1.48	1.43
26	LA	668	A	C3'-C2'	-5.49	1.46	1.52
26	LA	782	A	C4'-C3'	5.49	1.59	1.53
26	LA	2006	C	C4-N4	-5.49	1.29	1.33
26	LA	2055	C	P-O5'	5.49	1.65	1.59
26	LA	2199	A	C6-N1	-5.49	1.31	1.35
26	LA	2267	A	N7-C5	-5.49	1.35	1.39
26	LA	2283	C	C2'-O2'	-5.49	1.34	1.41
26	LA	2458	G	C6-O6	-5.49	1.19	1.24
26	LA	2468	A	N9-C8	-5.49	1.33	1.37
37	LC	208	TYR	CA-CB	5.49	1.66	1.53
2	SA	455	G	C5'-C4'	5.49	1.57	1.51
2	SA	555	U	C3'-C2'	-5.49	1.46	1.52
2	SA	623	C	C2'-C1'	-5.49	1.47	1.53
2	SA	1491	G	C6-N1	-5.49	1.35	1.39
26	LA	261	G	O4'-C1'	-5.49	1.34	1.41
26	LA	1061	U	C4-C5	-5.49	1.38	1.43
26	LA	1591	A	C3'-O3'	5.49	1.49	1.42
26	LA	1929	G	O4'-C1'	-5.49	1.34	1.41
26	LA	2542	A	C2'-C1'	-5.49	1.47	1.53
2	SA	18	C	P-O5'	-5.49	1.54	1.59
2	SA	501	C	N1-C2	-5.49	1.34	1.40
2	SA	549	C	C1'-N1	-5.49	1.39	1.46
2	SA	1254	A	N9-C4	-5.49	1.34	1.37
4	S2	56	U	C5'-C4'	5.49	1.57	1.51
26	LA	821	A	C6-N1	-5.49	1.31	1.35
26	LA	1598	A	C5-C4	-5.49	1.34	1.38
26	LA	1716	U	C2'-C1'	5.49	1.59	1.53
26	LA	1767	G	C2'-C1'	-5.49	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2123	G	N3-C4	-5.49	1.31	1.35
26	LA	2176	A	C3'-O3'	5.49	1.49	1.42
50	LL	79	GLY	CA-C	-5.49	1.43	1.51
2	SA	260	G	N3-C4	-5.49	1.31	1.35
2	SA	462	G	C5-C6	-5.49	1.36	1.42
2	SA	663	A	C4'-C3'	-5.49	1.47	1.52
2	SA	804	U	O3'-P	-5.49	1.54	1.61
2	SA	1022	A	N3-C4	-5.49	1.31	1.34
2	SA	1219	A	C5-C4	-5.49	1.34	1.38
2	SA	1417	G	P-O5'	-5.49	1.54	1.59
26	LA	84	A	N7-C5	5.49	1.42	1.39
26	LA	459	U	C4'-C3'	-5.49	1.47	1.52
26	LA	488	G	O3'-P	-5.49	1.54	1.61
26	LA	771	G	C4'-C3'	-5.49	1.47	1.52
26	LA	1838	C	N3-C4	5.49	1.37	1.33
26	LA	1887	C	C2'-C1'	-5.49	1.47	1.53
26	LA	2116	G	N9-C8	5.49	1.41	1.37
26	LA	2156	G	N9-C8	5.49	1.41	1.37
26	LA	2499	C	P-O5'	5.49	1.65	1.59
49	LK	52	LEU	CA-CB	5.49	1.66	1.53
2	SA	676	A	C5'-C4'	5.49	1.57	1.51
25	LB	111	U	N3-C4	-5.49	1.33	1.38
26	LA	187	G	C3'-O3'	5.49	1.49	1.42
26	LA	1029	A	C5'-C4'	5.49	1.57	1.51
26	LA	1155	A	C6-N6	-5.49	1.29	1.33
26	LA	1757	A	N7-C5	-5.49	1.35	1.39
2	SA	143	A	O3'-P	-5.49	1.54	1.61
2	SA	452	A	C5'-C4'	5.49	1.57	1.51
2	SA	656	G	C2'-O2'	5.49	1.48	1.41
2	SA	1080	A	N7-C5	5.49	1.42	1.39
2	SA	1252	A	C5-C4	-5.49	1.34	1.38
2	SA	1503	A	C2'-C1'	-5.49	1.47	1.53
26	LA	392	U	N1-C6	-5.49	1.33	1.38
26	LA	868	U	C2'-C1'	-5.49	1.47	1.53
26	LA	1329	U	C2-N3	-5.49	1.33	1.37
26	LA	1421	G	C5'-C4'	5.49	1.57	1.51
26	LA	1570	A	C2'-C1'	-5.49	1.47	1.53
26	LA	1578	U	C5'-C4'	5.49	1.57	1.51
26	LA	1650	A	O3'-P	-5.49	1.54	1.61
26	LA	2160	C	O3'-P	-5.49	1.54	1.61
26	LA	2437	G	N9-C4	-5.49	1.33	1.38
26	LA	2495	G	C2'-C1'	-5.49	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2496	C	C2-N3	-5.49	1.31	1.35
2	SA	116	A	C5'-C4'	5.48	1.57	1.51
26	LA	1165	A	C2'-C1'	-5.48	1.47	1.53
26	LA	2111	U	P-O5'	5.48	1.65	1.59
26	LA	2235	G	C2-N2	-5.48	1.29	1.34
2	SA	42	G	C5-C6	-5.48	1.36	1.42
2	SA	602	A	N3-C4	-5.48	1.31	1.34
2	SA	702	A	N7-C5	-5.48	1.35	1.39
2	SA	1155	A	C5-C6	-5.48	1.36	1.41
4	S2	4	G	C8-N7	5.48	1.34	1.30
26	LA	804	A	P-O5'	5.48	1.65	1.59
26	LA	904	G	C3'-O3'	5.48	1.49	1.42
26	LA	942	G	N9-C4	-5.48	1.33	1.38
26	LA	1071	G	C8-N7	5.48	1.34	1.30
26	LA	1224	U	C3'-C2'	-5.48	1.46	1.52
26	LA	1320	C	N1-C6	-5.48	1.33	1.37
26	LA	1543	G	P-O5'	5.48	1.65	1.59
26	LA	1592	C	C5'-C4'	5.48	1.57	1.51
26	LA	1846	G	P-O5'	-5.48	1.54	1.59
26	LA	2010	G	C2'-C1'	-5.48	1.47	1.53
26	LA	2093	G	O4'-C1'	5.48	1.48	1.41
2	SA	348	G	C5-C4	-5.48	1.34	1.38
2	SA	568	G	C2'-C1'	-5.48	1.47	1.53
2	SA	1465	A	N9-C4	5.48	1.41	1.37
26	LA	154	U	O4'-C1'	5.48	1.48	1.41
26	LA	307	G	O3'-P	-5.48	1.54	1.61
26	LA	403	U	C4'-C3'	5.48	1.59	1.53
26	LA	1553	A	C6-N6	-5.48	1.29	1.33
26	LA	1646	C	C4-C5	-5.48	1.38	1.43
26	LA	2106	U	O3'-P	-5.48	1.54	1.61
26	LA	2140	G	C3'-O3'	5.48	1.49	1.42
26	LA	2552	U	O4'-C1'	-5.48	1.34	1.41
26	LA	2772	C	C4-N4	-5.48	1.29	1.33
2	SA	168	G	C5-C6	-5.48	1.36	1.42
25	LB	66	A	C6-N6	5.48	1.38	1.33
26	LA	357	C	C4-C5	-5.48	1.38	1.43
26	LA	1008	A	C5-C4	-5.48	1.34	1.38
26	LA	1035	U	N3-C4	-5.48	1.33	1.38
26	LA	1700	A	C3'-O3'	5.48	1.49	1.42
26	LA	1812	U	C4-C5	-5.48	1.38	1.43
26	LA	2724	U	O3'-P	-5.48	1.54	1.61
2	SA	389	A	C6-N1	-5.48	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	966	G	C6-N1	-5.48	1.35	1.39
2	SA	1010	U	C2'-C1'	-5.48	1.47	1.53
3	S1	28	U	C4'-C3'	5.48	1.59	1.53
26	LA	316	C	C2'-C1'	-5.48	1.47	1.53
26	LA	948	C	C4-C5	-5.48	1.38	1.43
26	LA	1554	U	N1-C6	5.48	1.42	1.38
26	LA	2241	A	N3-C4	-5.48	1.31	1.34
26	LA	2768	U	C2'-O2'	-5.48	1.34	1.41
26	LA	2899	A	C4'-C3'	-5.48	1.47	1.52
2	SA	1272	G	C8-N7	-5.48	1.27	1.30
2	SA	1536	C	C5'-C4'	5.48	1.57	1.51
26	LA	1559	U	O4'-C1'	-5.48	1.34	1.41
26	LA	2043	C	C5-C6	-5.48	1.29	1.34
26	LA	2303	G	N9-C8	-5.48	1.34	1.37
26	LA	2358	A	P-O5'	5.48	1.65	1.59
2	SA	122	G	C2-N2	-5.47	1.29	1.34
2	SA	787	A	C5-C6	-5.47	1.36	1.41
2	SA	930	C	C2'-C1'	-5.47	1.47	1.53
2	SA	1014	A	C4'-O4'	5.47	1.52	1.45
2	SA	1352	C	N1-C6	5.47	1.40	1.37
25	LB	78	A	C5-C4	-5.47	1.34	1.38
26	LA	89	A	N7-C5	-5.47	1.35	1.39
26	LA	114	U	N3-C4	-5.47	1.33	1.38
26	LA	271	G	N7-C5	-5.47	1.35	1.39
26	LA	372	G	C1'-N9	-5.47	1.39	1.46
26	LA	1076	C	C4-N4	-5.47	1.29	1.33
26	LA	1102	C	C4'-C3'	5.47	1.59	1.53
26	LA	1285	A	C6-N6	-5.47	1.29	1.33
26	LA	1412	U	C2-O2	5.47	1.27	1.22
26	LA	1574	C	N1-C6	5.47	1.40	1.37
26	LA	1603	A	C4'-C3'	5.47	1.59	1.53
26	LA	2134	A	C2'-C1'	-5.47	1.47	1.53
26	LA	2276	G	C4'-C3'	-5.47	1.47	1.52
26	LA	2333	A	C6-N1	-5.47	1.31	1.35
2	SA	362	G	N3-C4	5.47	1.39	1.35
2	SA	514	C	C2'-C1'	-5.47	1.47	1.53
2	SA	547	A	O3'-P	-5.47	1.54	1.61
2	SA	1447	A	C8-N7	-5.47	1.27	1.31
25	LB	107	G	C5'-C4'	5.47	1.57	1.51
26	LA	121	G	C1'-N9	-5.47	1.39	1.46
26	LA	673	C	C2'-C1'	-5.47	1.47	1.53
26	LA	786	C	C5'-C4'	5.47	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1371	G	C8-N7	-5.47	1.27	1.30
26	LA	1405	U	N1-C2	-5.47	1.33	1.38
26	LA	1735	A	N3-C4	-5.47	1.31	1.34
26	LA	2482	A	N3-C4	-5.47	1.31	1.34
20	SD	102	TYR	CB-CG	-5.47	1.43	1.51
26	LA	807	U	N1-C6	-5.47	1.33	1.38
26	LA	2105	U	N1-C6	-5.47	1.33	1.38
26	LA	2317	A	N3-C4	-5.47	1.31	1.34
26	LA	2595	G	C8-N7	5.47	1.34	1.30
2	SA	704	A	P-O5'	-5.47	1.54	1.59
2	SA	1364	U	C3'-C2'	5.47	1.58	1.52
2	SA	1385	G	N3-C4	-5.47	1.31	1.35
2	SA	1453	G	C5-C6	5.47	1.47	1.42
26	LA	997	G	P-O5'	-5.47	1.54	1.59
26	LA	1106	G	N9-C4	-5.47	1.33	1.38
26	LA	1299	G	P-O5'	-5.47	1.54	1.59
26	LA	1818	U	C3'-C2'	-5.47	1.46	1.52
26	LA	2212	A	N9-C4	-5.47	1.34	1.37
26	LA	2449	U	C2-N3	5.47	1.41	1.37
26	LA	2477	U	N1-C2	-5.47	1.33	1.38
4	S2	20	G	C3'-C2'	5.47	1.58	1.52
26	LA	2200	C	N1-C2	-5.47	1.34	1.40
26	LA	2293	G	O4'-C1'	-5.47	1.34	1.41
26	LA	2407	A	N7-C5	-5.47	1.35	1.39
2	SA	314	C	C2-N3	-5.47	1.31	1.35
2	SA	784	A	P-O5'	-5.47	1.54	1.59
2	SA	1022	A	C8-N7	5.47	1.35	1.31
2	SA	1053	G	C2'-C1'	-5.47	1.47	1.53
2	SA	1197	A	N7-C5	5.47	1.42	1.39
2	SA	1519	A	C4'-O4'	-5.47	1.38	1.45
26	LA	347	A	C5-C6	5.47	1.46	1.41
26	LA	647	G	C6-N1	-5.47	1.35	1.39
26	LA	827	U	N1-C2	-5.47	1.33	1.38
26	LA	1054	A	C2'-O2'	5.47	1.48	1.41
26	LA	1079	C	C5'-C4'	5.47	1.57	1.51
26	LA	1086	A	C3'-C2'	-5.47	1.46	1.52
26	LA	1169	A	P-O5'	-5.47	1.54	1.59
26	LA	1528	A	N7-C5	-5.47	1.35	1.39
26	LA	2072	C	C2-N3	-5.47	1.31	1.35
26	LA	2125	G	N9-C4	-5.47	1.33	1.38
26	LA	2480	C	O4'-C1'	5.47	1.48	1.41
26	LA	2635	A	N7-C5	5.47	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	304	U	C4'-O4'	5.46	1.52	1.45
2	SA	615	G	C2-N2	-5.46	1.29	1.34
2	SA	1046	A	N9-C4	-5.46	1.34	1.37
26	LA	122	G	N9-C4	-5.46	1.33	1.38
26	LA	328	U	C2'-C1'	-5.46	1.47	1.53
26	LA	518	G	C5-C6	-5.46	1.36	1.42
26	LA	843	G	C4'-O4'	5.46	1.52	1.45
26	LA	908	C	C3'-C2'	-5.46	1.46	1.52
26	LA	1151	A	C6-N6	-5.46	1.29	1.33
26	LA	1342	A	C2'-C1'	-5.46	1.47	1.53
26	LA	1805	A	O4'-C1'	-5.46	1.34	1.41
26	LA	1820	U	C2-N3	-5.46	1.33	1.37
26	LA	2677	G	C2'-C1'	-5.46	1.47	1.53
26	LA	2704	C	C4'-C3'	5.46	1.59	1.53
26	LA	2724	U	C4'-O4'	-5.46	1.38	1.45
26	LA	2889	C	P-O5'	-5.46	1.54	1.59
2	SA	1229	A	C2'-C1'	-5.46	1.47	1.53
2	SA	1398	A	P-O5'	-5.46	1.54	1.59
25	LB	32	U	P-O5'	5.46	1.65	1.59
26	LA	350	G	C4'-O4'	5.46	1.52	1.45
26	LA	485	C	C2-N3	-5.46	1.31	1.35
26	LA	1858	A	C2'-C1'	5.46	1.59	1.53
2	SA	440	C	C4-C5	-5.46	1.38	1.43
2	SA	664	G	C2-N2	-5.46	1.29	1.34
2	SA	1351	U	C1'-N1	5.46	1.56	1.48
26	LA	427	U	O3'-P	-5.46	1.54	1.61
26	LA	441	U	C4-C5	-5.46	1.38	1.43
26	LA	1019	U	O3'-P	-5.46	1.54	1.61
26	LA	1147	A	C6-N6	-5.46	1.29	1.33
26	LA	1219	U	C4-O4	-5.46	1.19	1.23
26	LA	1514	G	C4'-C3'	-5.46	1.47	1.52
26	LA	1538	G	N1-C2	5.46	1.42	1.37
26	LA	2031	A	C5'-C4'	5.46	1.57	1.51
26	LA	2289	G	C2-N2	-5.46	1.29	1.34
26	LA	2325	G	O4'-C1'	-5.46	1.34	1.41
48	LN	126	ARG	CD-NE	5.46	1.55	1.46
2	SA	1434	A	C4'-C3'	5.46	1.59	1.53
3	S1	50	U	C1'-N1	5.46	1.56	1.48
4	S2	19	G	C4'-O4'	5.46	1.52	1.45
26	LA	1707	G	N3-C4	5.46	1.39	1.35
26	LA	2249	U	C4'-O4'	-5.46	1.38	1.45
26	LA	2589	A	C8-N7	-5.46	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
51	LI	119	ASN	CB-CG	5.46	1.63	1.51
2	SA	482	A	C3'-C2'	-5.46	1.46	1.52
2	SA	814	A	O4'-C1'	-5.46	1.34	1.41
26	LA	1319	C	C3'-C2'	-5.46	1.46	1.52
26	LA	1398	C	C5-C6	-5.46	1.29	1.34
26	LA	2018	G	O3'-P	-5.46	1.54	1.61
2	SA	721	G	C5'-C4'	5.46	1.57	1.51
2	SA	796	C	C2'-C1'	-5.46	1.47	1.53
2	SA	825	A	N9-C4	-5.46	1.34	1.37
2	SA	1135	U	C4-O4	-5.46	1.19	1.23
8	SH	76	ARG	CZ-NH2	-5.46	1.25	1.33
26	LA	142	A	N3-C4	-5.46	1.31	1.34
26	LA	921	C	N3-C4	5.46	1.37	1.33
26	LA	1432	G	O3'-P	-5.46	1.54	1.61
26	LA	2184	A	C1'-N9	-5.46	1.39	1.46
26	LA	2487	G	N9-C4	-5.46	1.33	1.38
2	SA	187	G	C2-N3	5.46	1.37	1.32
2	SA	1035	A	C6-N6	5.46	1.38	1.33
26	LA	986	C	N1-C6	-5.46	1.33	1.37
26	LA	1884	G	N1-C2	-5.46	1.33	1.37
2	SA	369	G	C5-C4	-5.45	1.34	1.38
2	SA	716	A	N3-C4	-5.45	1.31	1.34
26	LA	28	A	C5-C4	-5.45	1.34	1.38
26	LA	236	C	C4'-C3'	5.45	1.59	1.53
26	LA	447	A	C1'-N9	-5.45	1.39	1.46
26	LA	735	A	N9-C4	-5.45	1.34	1.37
26	LA	905	A	C6-N6	5.45	1.38	1.33
26	LA	1197	G	P-O5'	-5.45	1.54	1.59
26	LA	1727	C	C5-C6	5.45	1.38	1.34
26	LA	1967	C	O3'-P	-5.45	1.54	1.61
26	LA	2263	C	C2'-C1'	-5.45	1.47	1.53
26	LA	2756	U	N1-C2	-5.45	1.33	1.38
2	SA	223	A	C2'-C1'	-5.45	1.47	1.53
2	SA	777	A	N9-C4	-5.45	1.34	1.37
2	SA	962	C	C2-N3	-5.45	1.31	1.35
2	SA	1089	G	C3'-C2'	-5.45	1.46	1.52
2	SA	1419	G	C3'-O3'	5.45	1.49	1.42
26	LA	19	A	N3-C4	-5.45	1.31	1.34
26	LA	659	G	C2-N2	-5.45	1.29	1.34
26	LA	933	A	N9-C4	-5.45	1.34	1.37
26	LA	2026	U	C2-N3	-5.45	1.33	1.37
2	SA	15	G	C2'-C1'	-5.45	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1197	A	C2-N3	-5.45	1.28	1.33
4	S2	45	A	N9-C8	-5.45	1.33	1.37
26	LA	561	G	C1'-N9	-5.45	1.39	1.46
26	LA	1440	U	C2'-O2'	5.45	1.48	1.41
26	LA	1544	A	P-O5'	-5.45	1.54	1.59
26	LA	1652	A	C2'-O2'	-5.45	1.34	1.41
26	LA	1757	A	P-O5'	-5.45	1.54	1.59
26	LA	1765	U	N3-C4	-5.45	1.33	1.38
26	LA	1909	C	C4-N4	-5.45	1.29	1.33
26	LA	1924	C	C4-N4	5.45	1.38	1.33
26	LA	1964	G	C3'-O3'	5.45	1.49	1.42
26	LA	2109	U	C5'-C4'	5.45	1.57	1.51
26	LA	2176	A	C4'-O4'	5.45	1.52	1.45
26	LA	2250	G	C2-N2	-5.45	1.29	1.34
26	LA	2565	A	C6-N6	-5.45	1.29	1.33
26	LA	2579	C	C5'-C4'	-5.45	1.44	1.51
26	LA	2604	U	N1-C6	5.45	1.42	1.38
26	LA	2699	C	N1-C6	-5.45	1.33	1.37
2	SA	754	C	C4'-O4'	-5.45	1.38	1.45
2	SA	1396	A	N3-C4	-5.45	1.31	1.34
25	LB	107	G	C2'-O2'	-5.45	1.34	1.41
26	LA	492	A	N7-C5	-5.45	1.35	1.39
26	LA	526	A	C5'-C4'	5.45	1.57	1.51
26	LA	940	G	C6-N1	-5.45	1.35	1.39
26	LA	1720	U	C3'-O3'	5.45	1.49	1.42
26	LA	2155	U	C4'-C3'	5.45	1.59	1.53
26	LA	2164	C	C4'-O4'	5.45	1.52	1.45
26	LA	2381	A	C5-C6	5.45	1.46	1.41
26	LA	2476	A	N7-C5	5.45	1.42	1.39
2	SA	477	C	C5-C6	-5.45	1.29	1.34
2	SA	1145	A	C2-N3	-5.45	1.28	1.33
3	S1	38	G	C5'-C4'	5.45	1.57	1.51
24	S3	132	TYR	CG-CD2	5.45	1.46	1.39
26	LA	1455	G	C5-C6	-5.45	1.36	1.42
26	LA	1719	G	C6-N1	-5.45	1.35	1.39
26	LA	1805	A	C3'-C2'	-5.45	1.46	1.52
26	LA	1959	G	C3'-C2'	-5.45	1.46	1.52
26	LA	2323	G	N9-C8	5.45	1.41	1.37
26	LA	2376	A	C6-N1	-5.45	1.31	1.35
2	SA	58	C	C5-C6	-5.45	1.29	1.34
2	SA	112	G	P-O5'	-5.45	1.54	1.59
2	SA	1031	C	C4'-C3'	5.45	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1267	C	C5'-C4'	5.45	1.57	1.51
2	SA	1302	C	N3-C4	5.45	1.37	1.33
2	SA	1542	A	C5'-C4'	5.45	1.57	1.51
26	LA	328	U	C1'-N1	-5.45	1.39	1.46
26	LA	839	U	C2'-C1'	-5.45	1.47	1.53
26	LA	857	G	C5'-C4'	5.45	1.57	1.51
26	LA	982	C	N1-C6	-5.45	1.33	1.37
26	LA	1034	G	O4'-C1'	5.45	1.48	1.41
26	LA	1341	G	C3'-O3'	5.45	1.49	1.42
26	LA	1612	C	P-O5'	-5.45	1.54	1.59
26	LA	2376	A	C2'-C1'	-5.45	1.47	1.53
26	LA	2432	A	N7-C5	-5.45	1.35	1.39
26	LA	2575	C	C1'-N1	5.45	1.56	1.48
26	LA	2600	A	C3'-C2'	-5.45	1.46	1.52
2	SA	885	G	C3'-C2'	-5.44	1.46	1.52
2	SA	1051	C	C4'-O4'	5.44	1.52	1.45
9	SI	6	TYR	CB-CG	-5.44	1.43	1.51
14	SN	48	GLN	CG-CD	5.44	1.63	1.51
26	LA	441	U	N3-C4	5.44	1.43	1.38
26	LA	1063	G	O3'-P	-5.44	1.54	1.61
26	LA	1634	A	C5'-C4'	5.44	1.57	1.51
2	SA	610	U	N3-C4	-5.44	1.33	1.38
2	SA	634	C	C4'-C3'	-5.44	1.47	1.52
2	SA	1233	G	P-O5'	-5.44	1.54	1.59
2	SA	1292	G	O3'-P	-5.44	1.54	1.61
2	SA	1376	U	O4'-C1'	-5.44	1.34	1.41
3	S1	14	G	C2'-C1'	-5.44	1.47	1.53
26	LA	442	G	N1-C2	-5.44	1.33	1.37
26	LA	907	G	O3'-P	-5.44	1.54	1.61
26	LA	981	A	C6-N6	5.44	1.38	1.33
26	LA	1479	G	C5'-C4'	5.44	1.57	1.51
26	LA	2342	C	C5'-C4'	5.44	1.57	1.51
2	SA	167	A	C6-N1	5.44	1.39	1.35
2	SA	360	G	C5-C6	-5.44	1.36	1.42
2	SA	688	G	C5-C4	-5.44	1.34	1.38
4	S2	25	U	N3-C4	-5.44	1.33	1.38
26	LA	33	C	C3'-O3'	5.44	1.49	1.42
26	LA	46	G	C3'-C2'	5.44	1.58	1.52
26	LA	505	A	C6-N6	5.44	1.38	1.33
26	LA	685	A	C4'-O4'	-5.44	1.38	1.45
26	LA	1037	G	N9-C4	5.44	1.42	1.38
26	LA	1059	G	P-O5'	-5.44	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1610	A	C2'-C1'	-5.44	1.47	1.53
26	LA	1997	C	C5'-C4'	5.44	1.57	1.51
26	LA	2275	C	C4-C5	-5.44	1.38	1.43
26	LA	2732	G	N7-C5	5.44	1.42	1.39
2	SA	441	A	C5-C4	-5.44	1.34	1.38
25	LB	13	G	C3'-O3'	5.44	1.49	1.42
26	LA	555	G	C8-N7	5.44	1.34	1.30
26	LA	1226	A	C8-N7	5.44	1.35	1.31
26	LA	1703	G	N9-C4	-5.44	1.33	1.38
26	LA	1751	U	C4-C5	-5.44	1.38	1.43
26	LA	1769	U	N1-C2	-5.44	1.33	1.38
26	LA	1788	C	O4'-C1'	-5.44	1.34	1.41
26	LA	2868	A	C6-N6	5.44	1.38	1.33
2	SA	218	U	N1-C6	5.44	1.42	1.38
2	SA	759	A	C2'-O2'	-5.44	1.34	1.41
2	SA	1101	A	C5-C6	-5.44	1.36	1.41
2	SA	1305	G	C8-N7	-5.44	1.27	1.30
2	SA	1315	U	C2-N3	5.44	1.41	1.37
4	S2	71	G	N1-C2	5.44	1.42	1.37
25	LB	75	G	O3'-P	-5.44	1.54	1.61
26	LA	393	C	N3-C4	-5.44	1.30	1.33
26	LA	688	U	C3'-C2'	-5.44	1.46	1.52
26	LA	1374	G	C2'-C1'	-5.44	1.47	1.53
26	LA	1432	G	C8-N7	5.44	1.34	1.30
26	LA	1483	G	N9-C8	5.44	1.41	1.37
26	LA	1682	G	C2'-C1'	5.44	1.59	1.53
26	LA	2026	U	O3'-P	-5.44	1.54	1.61
26	LA	2205	A	P-O5'	-5.44	1.54	1.59
26	LA	2370	G	N3-C4	-5.44	1.31	1.35
26	LA	2633	G	C2-N2	-5.44	1.29	1.34
26	LA	2753	A	C5-C4	-5.44	1.34	1.38
41	L5	5	PHE	CB-CG	-5.44	1.42	1.51
2	SA	922	G	N9-C8	-5.44	1.34	1.37
2	SA	1458	G	C2-N3	-5.44	1.28	1.32
26	LA	114	U	C4-C5	5.44	1.48	1.43
26	LA	192	C	C5-C6	-5.44	1.30	1.34
26	LA	1080	A	C5-C6	-5.44	1.36	1.41
26	LA	2193	G	C2-N3	-5.44	1.28	1.32
2	SA	258	G	C3'-C2'	5.43	1.58	1.52
2	SA	528	C	C2-O2	-5.43	1.19	1.24
2	SA	1108	G	C2'-C1'	-5.43	1.47	1.53
2	SA	1478	U	C3'-C2'	5.43	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1486	G	C8-N7	-5.43	1.27	1.30
26	LA	106	C	C2-N3	5.43	1.40	1.35
26	LA	1236	G	C5-C6	-5.43	1.36	1.42
26	LA	1381	G	C2-N3	-5.43	1.28	1.32
26	LA	1501	G	P-O5'	5.43	1.65	1.59
26	LA	1703	G	P-O5'	-5.43	1.54	1.59
26	LA	2239	G	N9-C8	-5.43	1.34	1.37
2	SA	127	G	C5-C4	5.43	1.42	1.38
2	SA	663	A	N3-C4	-5.43	1.31	1.34
2	SA	936	C	O3'-P	-5.43	1.54	1.61
26	LA	1252	G	P-O5'	5.43	1.65	1.59
26	LA	1304	A	C2'-C1'	-5.43	1.47	1.53
26	LA	2877	G	C4'-C3'	5.43	1.59	1.53
53	LP	49	GLU	CG-CD	5.43	1.60	1.51
2	SA	922	G	N1-C2	-5.43	1.33	1.37
26	LA	98	G	C5-C6	-5.43	1.36	1.42
26	LA	1366	A	C4'-C3'	5.43	1.59	1.53
26	LA	1538	G	C5-C6	-5.43	1.36	1.42
26	LA	2545	G	C2-N2	-5.43	1.29	1.34
26	LA	2688	G	C8-N7	-5.43	1.27	1.30
26	LA	2722	G	N7-C5	-5.43	1.35	1.39
2	SA	37	U	P-O5'	5.43	1.65	1.59
2	SA	1502	A	N7-C5	-5.43	1.35	1.39
4	S2	36	A	C2-N3	5.43	1.38	1.33
4	S2	58	A	C6-N6	5.43	1.38	1.33
25	LB	119	A	O3'-P	-5.43	1.54	1.61
26	LA	1068	G	N9-C4	5.43	1.42	1.38
26	LA	1959	G	N7-C5	5.43	1.42	1.39
26	LA	2477	U	C4'-C3'	-5.43	1.47	1.52
55	LQ	22	GLY	CA-C	5.43	1.60	1.51
2	SA	688	G	C4'-O4'	5.43	1.52	1.45
2	SA	1538	C	C1'-N1	5.43	1.56	1.48
26	LA	721	A	C2-N3	5.43	1.38	1.33
26	LA	759	G	C6-O6	-5.43	1.19	1.24
26	LA	1249	U	C5-C6	-5.43	1.29	1.34
2	SA	915	A	C5-C4	-5.43	1.34	1.38
2	SA	922	G	C3'-C2'	-5.43	1.46	1.52
25	LB	63	C	C2-O2	5.43	1.29	1.24
26	LA	802	A	C5'-C4'	5.43	1.57	1.51
26	LA	1168	G	N3-C4	-5.43	1.31	1.35
26	LA	1436	G	N7-C5	-5.43	1.35	1.39
26	LA	1455	G	C4'-O4'	5.43	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1784	A	C3'-O3'	5.43	1.49	1.42
26	LA	2056	G	C5-C4	-5.43	1.34	1.38
26	LA	2251	U	C4'-C3'	5.43	1.59	1.53
26	LA	2498	C	C4-C5	-5.43	1.38	1.43
26	LA	2549	G	C2-N3	5.43	1.37	1.32
26	LA	2881	U	N1-C6	-5.43	1.33	1.38
2	SA	14	U	C3'-O3'	5.42	1.49	1.42
2	SA	358	U	P-O5'	-5.42	1.54	1.59
2	SA	1182	G	C6-N1	-5.42	1.35	1.39
2	SA	1209	C	C2'-O2'	5.42	1.48	1.41
2	SA	1348	U	P-O5'	-5.42	1.54	1.59
26	LA	278	A	N7-C5	-5.42	1.35	1.39
26	LA	463	G	N9-C8	5.42	1.41	1.37
26	LA	639	U	C3'-O3'	5.42	1.49	1.42
26	LA	1101	U	C1'-N1	5.42	1.56	1.48
26	LA	1496	A	O4'-C1'	5.42	1.48	1.41
26	LA	1627	G	N7-C5	-5.42	1.35	1.39
26	LA	1933	G	N9-C4	-5.42	1.33	1.38
2	SA	706	A	O3'-P	-5.42	1.54	1.61
26	LA	481	G	C3'-C2'	-5.42	1.46	1.52
26	LA	537	G	C2-N3	-5.42	1.28	1.32
26	LA	637	A	C8-N7	-5.42	1.27	1.31
26	LA	793	A	C6-N6	5.42	1.38	1.33
26	LA	1700	A	C6-N6	-5.42	1.29	1.33
26	LA	1854	A	C5'-C4'	5.42	1.57	1.51
26	LA	2695	U	C4-C5	-5.42	1.38	1.43
2	SA	687	A	C2-N3	-5.42	1.28	1.33
2	SA	1348	U	C2'-C1'	-5.42	1.47	1.53
25	LB	27	C	C5'-C4'	5.42	1.57	1.51
26	LA	1173	U	O5'-C5'	5.42	1.53	1.44
26	LA	1608	A	C6-N6	5.42	1.38	1.33
26	LA	1615	C	C2'-C1'	-5.42	1.47	1.53
26	LA	1739	A	N3-C4	-5.42	1.31	1.34
26	LA	2015	A	N9-C8	-5.42	1.33	1.37
26	LA	2335	A	N1-C2	5.42	1.39	1.34
26	LA	2579	C	N1-C6	-5.42	1.33	1.37
26	LA	2785	C	C2-N3	-5.42	1.31	1.35
26	LA	2832	U	C5'-C4'	5.42	1.57	1.51
38	LE	37	VAL	N-CA	-5.42	1.35	1.46
2	SA	55	A	C2'-C1'	-5.42	1.47	1.53
2	SA	303	A	P-O5'	-5.42	1.54	1.59
2	SA	558	G	C8-N7	-5.42	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	913	A	C5-C6	-5.42	1.36	1.41
2	SA	937	A	C5-C4	-5.42	1.34	1.38
2	SA	1280	A	C5-C6	5.42	1.46	1.41
26	LA	124	G	N1-C2	-5.42	1.33	1.37
26	LA	130	C	C4-N4	-5.42	1.29	1.33
26	LA	1479	G	P-O5'	-5.42	1.54	1.59
26	LA	1755	A	C6-N1	-5.42	1.31	1.35
26	LA	2328	A	C3'-C2'	-5.42	1.46	1.52
26	LA	2505	G	C5-C4	-5.42	1.34	1.38
26	LA	2707	U	C2-N3	-5.42	1.33	1.37
2	SA	100	G	N9-C4	-5.42	1.33	1.38
2	SA	162	A	C8-N7	-5.42	1.27	1.31
2	SA	210	C	C5'-C4'	5.42	1.57	1.51
2	SA	277	C	C3'-C2'	-5.42	1.46	1.52
2	SA	377	G	C2-N2	-5.42	1.29	1.34
2	SA	584	G	C1'-N9	-5.42	1.39	1.46
2	SA	649	A	C3'-O3'	5.42	1.49	1.42
2	SA	890	G	N9-C8	-5.42	1.34	1.37
2	SA	1072	G	N3-C4	-5.42	1.31	1.35
2	SA	1182	G	C1'-N9	-5.42	1.39	1.46
2	SA	1415	G	C2-N2	-5.42	1.29	1.34
11	SK	43	TRP	CB-CG	5.42	1.60	1.50
14	SN	62	ARG	CD-NE	5.42	1.55	1.46
26	LA	598	U	N3-C4	-5.42	1.33	1.38
26	LA	1142	A	N9-C4	-5.42	1.34	1.37
26	LA	1416	G	C3'-C2'	5.42	1.58	1.52
26	LA	1700	A	C8-N7	5.42	1.35	1.31
26	LA	1837	C	C4'-O4'	-5.42	1.38	1.45
26	LA	1999	C	C5'-C4'	5.42	1.57	1.51
26	LA	2614	A	O3'-P	-5.42	1.54	1.61
26	LA	2666	C	C3'-C2'	5.42	1.58	1.52
26	LA	2826	A	C5'-C4'	5.42	1.57	1.51
2	SA	471	U	N1-C6	-5.42	1.33	1.38
2	SA	748	G	C4'-O4'	5.42	1.52	1.45
2	SA	749	A	N9-C8	-5.42	1.33	1.37
2	SA	1347	G	O4'-C1'	-5.42	1.34	1.41
25	LB	34	A	N3-C4	-5.42	1.31	1.34
26	LA	57	C	C2-N3	5.42	1.40	1.35
26	LA	177	G	N1-C2	-5.42	1.33	1.37
26	LA	1251	C	O4'-C1'	-5.42	1.34	1.41
26	LA	1295	C	O3'-P	-5.42	1.54	1.61
26	LA	1655	A	N9-C4	-5.42	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	271	C	N1-C6	5.42	1.40	1.37
2	SA	429	U	C3'-O3'	5.42	1.49	1.42
2	SA	1001	C	C4-C5	-5.42	1.38	1.43
2	SA	1210	C	C4-C5	5.42	1.47	1.43
4	S2	20	G	C2-N3	-5.42	1.28	1.32
26	LA	158	U	C5-C6	-5.42	1.29	1.34
26	LA	1811	G	C6-O6	-5.42	1.19	1.24
26	LA	2135	A	C4'-O4'	-5.42	1.38	1.45
26	LA	2550	G	N3-C4	-5.42	1.31	1.35
2	SA	55	A	C4'-C3'	-5.41	1.47	1.52
2	SA	200	G	N3-C4	5.41	1.39	1.35
2	SA	852	G	N7-C5	-5.41	1.36	1.39
2	SA	865	A	C2'-C1'	-5.41	1.47	1.53
2	SA	977	A	C5-C4	-5.41	1.34	1.38
2	SA	1278	G	N9-C8	5.41	1.41	1.37
2	SA	1356	G	C2-N3	5.41	1.37	1.32
26	LA	146	A	O3'-P	-5.41	1.54	1.61
26	LA	1108	U	N3-C4	-5.41	1.33	1.38
26	LA	1149	G	C2'-C1'	-5.41	1.47	1.53
26	LA	1212	G	P-O5'	5.41	1.65	1.59
26	LA	1705	A	C8-N7	-5.41	1.27	1.31
26	LA	2035	G	C8-N7	5.41	1.34	1.30
26	LA	2901	C	C4-C5	5.41	1.47	1.43
2	SA	196	A	N3-C4	5.41	1.38	1.34
25	LB	114	C	C3'-O3'	5.41	1.49	1.42
26	LA	899	A	C4'-C3'	5.41	1.59	1.53
26	LA	1130	U	C3'-O3'	5.41	1.49	1.42
26	LA	1384	A	N3-C4	-5.41	1.31	1.34
26	LA	2030	U	P-O5'	-5.41	1.54	1.59
26	LA	2291	U	C4'-C3'	-5.41	1.47	1.52
44	LF	127	GLU	CD-OE1	-5.41	1.19	1.25
2	SA	160	A	C5'-C4'	5.41	1.57	1.51
2	SA	430	A	C5-C4	-5.41	1.34	1.38
2	SA	796	C	C4-C5	-5.41	1.38	1.43
2	SA	1125	U	C2-N3	5.41	1.41	1.37
26	LA	667	U	O5'-C5'	5.41	1.53	1.44
26	LA	716	A	C5'-C4'	5.41	1.57	1.51
26	LA	1178	C	C4-C5	5.41	1.47	1.43
26	LA	1340	U	C3'-O3'	5.41	1.49	1.42
26	LA	2847	U	C5'-C4'	5.41	1.57	1.51
2	SA	814	A	P-O5'	-5.41	1.54	1.59
2	SA	1098	C	C2'-C1'	-5.41	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	88	C	C2-N3	-5.41	1.31	1.35
26	LA	274	C	C3'-O3'	5.41	1.49	1.42
26	LA	366	C	C4'-O4'	5.41	1.52	1.45
26	LA	411	G	N1-C2	-5.41	1.33	1.37
26	LA	635	C	C2'-O2'	-5.41	1.34	1.41
26	LA	792	A	C8-N7	-5.41	1.27	1.31
26	LA	917	A	N9-C4	-5.41	1.34	1.37
26	LA	1100	C	C4-N4	-5.41	1.29	1.33
26	LA	2073	C	N1-C6	5.41	1.40	1.37
26	LA	2235	G	O4'-C1'	-5.41	1.34	1.41
26	LA	2829	A	C3'-C2'	-5.41	1.46	1.52
2	SA	1044	A	C3'-O3'	5.41	1.49	1.42
26	LA	1972	G	C2'-C1'	-5.41	1.47	1.53
26	LA	2050	C	C2'-O2'	-5.41	1.34	1.41
31	LX	29	ILE	N-CA	-5.41	1.35	1.46
2	SA	376	G	O3'-P	-5.41	1.54	1.61
2	SA	987	G	N9-C8	-5.41	1.34	1.37
25	LB	74	U	P-O5'	5.41	1.65	1.59
26	LA	78	U	C2-O2	5.41	1.27	1.22
26	LA	1196	C	O4'-C1'	5.41	1.48	1.41
26	LA	1252	G	N3-C4	-5.41	1.31	1.35
26	LA	1599	U	C4'-C3'	-5.41	1.47	1.52
26	LA	1781	U	C2-N3	5.41	1.41	1.37
26	LA	2206	C	C5-C6	-5.41	1.30	1.34
26	LA	2327	A	C8-N7	-5.41	1.27	1.31
26	LA	2464	G	C8-N7	5.41	1.34	1.30
26	LA	2603	G	C4'-C3'	-5.41	1.47	1.52
2	SA	29	U	C3'-O3'	5.40	1.49	1.42
2	SA	753	A	C6-N6	5.40	1.38	1.33
2	SA	1494	G	C2-N2	-5.40	1.29	1.34
26	LA	187	G	C4'-C3'	-5.40	1.47	1.52
26	LA	479	A	O3'-P	-5.40	1.54	1.61
26	LA	512	G	N9-C8	-5.40	1.34	1.37
26	LA	543	G	C1'-N9	-5.40	1.39	1.46
26	LA	803	U	C2-N3	5.40	1.41	1.37
26	LA	1687	G	O3'-P	-5.40	1.54	1.61
26	LA	2087	G	P-O5'	-5.40	1.54	1.59
2	SA	166	U	C5-C6	5.40	1.39	1.34
2	SA	348	G	C4'-C3'	5.40	1.59	1.53
2	SA	1005	A	N3-C4	5.40	1.38	1.34
2	SA	1513	A	C4'-C3'	-5.40	1.47	1.52
2	SA	1530	G	C4'-C3'	5.40	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	47	C	C4-N4	5.40	1.38	1.33
4	S2	4	G	C5-C6	-5.40	1.36	1.42
17	SQ	45	VAL	N-CA	-5.40	1.35	1.46
25	LB	99	A	C6-N6	-5.40	1.29	1.33
25	LB	108	A	O3'-P	-5.40	1.54	1.61
26	LA	260	G	N9-C8	-5.40	1.34	1.37
26	LA	340	A	C1'-N9	-5.40	1.39	1.46
26	LA	1029	A	N7-C5	-5.40	1.36	1.39
26	LA	1455	G	C2-N3	5.40	1.37	1.32
26	LA	1537	G	C2'-C1'	-5.40	1.47	1.53
26	LA	1745	A	C2'-C1'	-5.40	1.47	1.53
26	LA	2048	G	N1-C2	-5.40	1.33	1.37
26	LA	2518	A	O4'-C1'	-5.40	1.34	1.41
2	SA	232	G	N3-C4	5.40	1.39	1.35
2	SA	718	A	C8-N7	-5.40	1.27	1.31
2	SA	985	C	O3'-P	-5.40	1.54	1.61
2	SA	1035	A	O5'-C5'	5.40	1.53	1.44
24	S3	236	TYR	CZ-OH	5.40	1.47	1.37
25	LB	38	C	C2'-C1'	-5.40	1.47	1.53
25	LB	44	G	P-O5'	-5.40	1.54	1.59
26	LA	24	G	O3'-P	-5.40	1.54	1.61
26	LA	34	U	C5'-C4'	-5.40	1.44	1.51
26	LA	220	G	C6-N1	-5.40	1.35	1.39
26	LA	261	G	C2'-C1'	-5.40	1.47	1.53
26	LA	1215	G	C4'-O4'	5.40	1.52	1.45
26	LA	1440	U	P-O5'	-5.40	1.54	1.59
26	LA	1797	G	N7-C5	-5.40	1.36	1.39
26	LA	1837	C	P-O5'	-5.40	1.54	1.59
2	SA	579	A	N9-C4	-5.40	1.34	1.37
2	SA	752	G	C8-N7	-5.40	1.27	1.30
2	SA	1105	A	C2-N3	5.40	1.38	1.33
2	SA	1490	U	P-O5'	-5.40	1.54	1.59
4	S2	13	C	C3'-C2'	-5.40	1.46	1.52
26	LA	91	A	C5'-C4'	5.40	1.57	1.51
26	LA	639	U	P-O5'	-5.40	1.54	1.59
26	LA	2322	A	C6-N6	-5.40	1.29	1.33
26	LA	2401	U	N1-C2	-5.40	1.33	1.38
26	LA	2481	G	N3-C4	-5.40	1.31	1.35
2	SA	105	G	C5-C4	5.40	1.42	1.38
2	SA	191	G	C3'-O3'	5.40	1.49	1.42
2	SA	490	C	N3-C4	-5.40	1.30	1.33
2	SA	798	U	N1-C6	5.40	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	806	C	C1'-N1	-5.40	1.39	1.46
2	SA	944	G	O3'-P	-5.40	1.54	1.61
2	SA	1078	U	O4'-C1'	5.40	1.48	1.41
2	SA	1089	G	O3'-P	-5.40	1.54	1.61
2	SA	1355	G	C2-N2	-5.40	1.29	1.34
25	LB	12	C	P-O5'	5.40	1.65	1.59
26	LA	55	G	N3-C4	-5.40	1.31	1.35
26	LA	186	G	O4'-C1'	5.40	1.48	1.41
26	LA	697	G	O3'-P	-5.40	1.54	1.61
26	LA	1108	U	C2'-C1'	-5.40	1.47	1.53
26	LA	1609	A	N1-C2	-5.40	1.29	1.34
26	LA	2100	G	C5-C6	-5.40	1.36	1.42
26	LA	2573	C	O3'-P	-5.40	1.54	1.61
2	SA	359	G	C5-C6	-5.40	1.36	1.42
2	SA	723	U	C4-C5	-5.40	1.38	1.43
2	SA	728	A	O3'-P	-5.40	1.54	1.61
2	SA	1213	A	C6-N6	5.40	1.38	1.33
26	LA	424	G	C5-C6	-5.40	1.36	1.42
26	LA	899	A	N9-C4	-5.40	1.34	1.37
26	LA	986	C	N1-C2	-5.40	1.34	1.40
26	LA	1453	A	N7-C5	5.40	1.42	1.39
2	SA	8	A	N3-C4	5.39	1.38	1.34
2	SA	286	C	C2-N3	-5.39	1.31	1.35
26	LA	1118	C	C4-N4	-5.39	1.29	1.33
26	LA	1587	G	N9-C4	-5.39	1.33	1.38
26	LA	1865	U	N1-C6	-5.39	1.33	1.38
2	SA	1	A	N3-C4	-5.39	1.31	1.34
2	SA	882	C	P-O5'	-5.39	1.54	1.59
2	SA	961	U	C3'-C2'	-5.39	1.46	1.52
2	SA	1348	U	C5'-C4'	5.39	1.57	1.51
26	LA	122	G	C5-C6	-5.39	1.36	1.42
26	LA	500	G	N3-C4	5.39	1.39	1.35
26	LA	506	G	C6-N1	-5.39	1.35	1.39
26	LA	673	C	N1-C6	-5.39	1.33	1.37
26	LA	845	A	C1'-N9	-5.39	1.39	1.46
26	LA	1120	G	P-O5'	5.39	1.65	1.59
26	LA	1257	C	C3'-O3'	5.39	1.49	1.42
26	LA	1800	C	C1'-N1	-5.39	1.39	1.46
26	LA	2137	U	C4-C5	-5.39	1.38	1.43
26	LA	2206	C	C5'-C4'	5.39	1.57	1.51
26	LA	2276	G	C5-C4	-5.39	1.34	1.38
26	LA	2287	A	O3'-P	-5.39	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2630	G	N9-C8	5.39	1.41	1.37
26	LA	2666	C	C4'-O4'	5.39	1.52	1.45
26	LA	2851	A	C6-N6	-5.39	1.29	1.33
46	LH	129	GLU	CD-OE1	5.39	1.31	1.25
2	SA	664	G	N3-C4	-5.39	1.31	1.35
2	SA	784	A	C3'-O3'	5.39	1.49	1.42
2	SA	791	G	N1-C2	5.39	1.42	1.37
3	S1	41	A	P-O5'	-5.39	1.54	1.59
25	LB	75	G	C6-N1	-5.39	1.35	1.39
26	LA	297	G	C3'-O3'	5.39	1.49	1.42
26	LA	2702	G	C2-N2	-5.39	1.29	1.34
1	SS	33	TRP	CZ3-CH2	5.39	1.48	1.40
2	SA	409	U	C5'-C4'	5.39	1.57	1.51
3	S1	57	C	C5'-C4'	5.39	1.57	1.51
26	LA	110	G	C6-N1	-5.39	1.35	1.39
26	LA	262	A	C5'-C4'	5.39	1.57	1.51
26	LA	425	G	C5'-C4'	5.39	1.57	1.51
26	LA	875	G	C5'-C4'	5.39	1.57	1.51
26	LA	885	C	N3-C4	5.39	1.37	1.33
26	LA	1010	A	C5-C4	-5.39	1.34	1.38
26	LA	1344	U	C3'-O3'	5.39	1.49	1.42
26	LA	1433	A	N9-C4	-5.39	1.34	1.37
26	LA	1473	G	N9-C8	5.39	1.41	1.37
26	LA	1912	A	C3'-O3'	-5.39	1.34	1.42
26	LA	2614	A	P-O5'	-5.39	1.54	1.59
2	SA	158	G	N7-C5	5.39	1.42	1.39
2	SA	932	C	C2'-O2'	5.39	1.48	1.41
2	SA	1108	G	C2-N2	-5.39	1.29	1.34
26	LA	805	G	C2-N3	5.39	1.37	1.32
26	LA	1519	G	N3-C4	5.39	1.39	1.35
26	LA	1551	A	C5'-C4'	5.39	1.57	1.51
26	LA	2217	G	O3'-P	-5.39	1.54	1.61
26	LA	2259	U	C2'-O2'	-5.39	1.34	1.41
26	LA	2629	U	C4'-C3'	-5.39	1.47	1.52
53	LP	15	SER	CA-CB	5.39	1.61	1.52
26	LA	369	U	C3'-O3'	5.39	1.49	1.42
26	LA	442	G	C6-N1	-5.39	1.35	1.39
26	LA	454	A	N9-C8	-5.39	1.33	1.37
26	LA	758	C	C3'-C2'	-5.39	1.46	1.52
26	LA	1307	A	C2'-C1'	-5.39	1.47	1.53
26	LA	1472	C	C4'-O4'	5.39	1.52	1.45
26	LA	2070	A	C6-N6	5.39	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2097	A	N9-C4	-5.39	1.34	1.37
26	LA	2196	C	C4-N4	-5.39	1.29	1.33
26	LA	2210	U	C2'-C1'	-5.39	1.47	1.53
26	LA	2253	G	C2-N3	-5.39	1.28	1.32
26	LA	2548	U	C4-O4	-5.39	1.19	1.23
26	LA	2883	A	C4'-C3'	-5.39	1.47	1.52
2	SA	398	U	N1-C2	5.38	1.43	1.38
2	SA	1112	C	C5'-C4'	5.38	1.57	1.51
22	SF	25	TYR	CG-CD1	5.38	1.46	1.39
26	LA	933	A	N3-C4	-5.38	1.31	1.34
26	LA	1045	C	C4-N4	-5.38	1.29	1.33
26	LA	1138	G	C2'-C1'	-5.38	1.47	1.53
26	LA	1147	A	C1'-N9	-5.38	1.39	1.46
26	LA	1726	C	O4'-C1'	-5.38	1.34	1.41
26	LA	1954	G	C6-N1	-5.38	1.35	1.39
26	LA	2341	G	C6-O6	-5.38	1.19	1.24
26	LA	2423	U	C5-C6	5.38	1.39	1.34
26	LA	2600	A	N9-C8	-5.38	1.33	1.37
26	LA	2895	G	C1'-N9	-5.38	1.39	1.46
2	SA	1106	G	N9-C8	-5.38	1.34	1.37
2	SA	1279	G	N1-C2	5.38	1.42	1.37
7	SG	142	ARG	CZ-NH2	-5.38	1.26	1.33
25	LB	25	U	O3'-P	-5.38	1.54	1.61
26	LA	954	G	N9-C8	-5.38	1.34	1.37
26	LA	1265	A	C5'-C4'	5.38	1.57	1.51
26	LA	1517	G	C8-N7	-5.38	1.27	1.30
26	LA	2092	U	N1-C2	-5.38	1.33	1.38
26	LA	2320	U	N1-C6	5.38	1.42	1.38
2	SA	331	G	C5-C4	5.38	1.42	1.38
2	SA	1344	C	C4'-C3'	5.38	1.59	1.53
14	SN	31	SER	CA-CB	5.38	1.61	1.52
25	LB	56	G	O3'-P	-5.38	1.54	1.61
26	LA	238	C	C2-O2	-5.38	1.19	1.24
26	LA	670	A	C8-N7	-5.38	1.27	1.31
26	LA	738	G	C2'-O2'	-5.38	1.34	1.41
26	LA	814	C	N3-C4	-5.38	1.30	1.33
26	LA	998	C	P-O5'	-5.38	1.54	1.59
26	LA	1651	G	N1-C2	-5.38	1.33	1.37
26	LA	1664	A	N1-C2	-5.38	1.29	1.34
26	LA	1731	G	C6-N1	5.38	1.43	1.39
26	LA	1872	A	C8-N7	-5.38	1.27	1.31
26	LA	2002	G	N9-C4	-5.38	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2154	A	C5-C6	5.38	1.45	1.41
2	SA	1361	G	C4'-C3'	-5.38	1.47	1.52
4	S2	31	G	C4'-O4'	5.38	1.52	1.45
26	LA	712	G	O3'-P	-5.38	1.54	1.61
26	LA	909	A	O5'-C5'	5.38	1.53	1.44
26	LA	1333	G	N1-C2	-5.38	1.33	1.37
26	LA	2891	U	N1-C2	-5.38	1.33	1.38
2	SA	341	C	P-O5'	-5.38	1.54	1.59
2	SA	1159	U	N3-C4	5.38	1.43	1.38
2	SA	1193	G	C5'-C4'	5.38	1.57	1.51
2	SA	1396	A	C6-N6	5.38	1.38	1.33
20	SD	102	TYR	CE2-CZ	5.38	1.45	1.38
26	LA	347	A	C3'-C2'	-5.38	1.46	1.52
26	LA	457	A	C8-N7	5.38	1.35	1.31
26	LA	701	G	C5-C4	-5.38	1.34	1.38
26	LA	832	U	N1-C2	-5.38	1.33	1.38
26	LA	1637	A	C8-N7	5.38	1.35	1.31
26	LA	2078	C	C3'-O3'	5.38	1.49	1.42
26	LA	2393	U	P-O5'	-5.38	1.54	1.59
26	LA	2814	A	C6-N6	5.38	1.38	1.33
46	LH	31	GLU	N-CA	-5.38	1.35	1.46
2	SA	160	A	O4'-C1'	5.38	1.48	1.41
2	SA	188	C	C3'-O3'	5.38	1.49	1.42
2	SA	287	U	O3'-P	-5.38	1.54	1.61
2	SA	373	A	O3'-P	-5.38	1.54	1.61
2	SA	962	C	N3-C4	5.38	1.37	1.33
2	SA	998	C	C2'-C1'	-5.38	1.47	1.53
2	SA	1098	C	C3'-O3'	5.38	1.49	1.42
2	SA	1303	C	N1-C6	5.38	1.40	1.37
26	LA	53	A	P-O5'	5.38	1.65	1.59
26	LA	247	G	C8-N7	-5.38	1.27	1.30
26	LA	1096	A	N7-C5	-5.38	1.36	1.39
26	LA	1461	C	C2'-C1'	5.38	1.59	1.53
26	LA	1786	A	C4'-C3'	5.38	1.59	1.53
26	LA	2282	G	C3'-O3'	5.38	1.49	1.42
2	SA	1316	G	C3'-C2'	5.38	1.58	1.52
15	SO	68	TYR	CB-CG	-5.38	1.43	1.51
26	LA	161	A	N9-C4	-5.38	1.34	1.37
26	LA	265	A	C4'-C3'	-5.38	1.47	1.52
26	LA	368	A	C6-N6	5.38	1.38	1.33
26	LA	1170	C	C4-C5	-5.38	1.38	1.43
2	SA	253	A	C2-N3	5.37	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	279	A	N3-C4	5.37	1.38	1.34
2	SA	417	G	C8-N7	5.37	1.34	1.30
2	SA	1213	A	N9-C4	-5.37	1.34	1.37
2	SA	1302	C	C5'-C4'	5.37	1.57	1.51
2	SA	1303	C	C2-O2	-5.37	1.19	1.24
26	LA	105	C	C5'-C4'	5.37	1.57	1.51
26	LA	127	A	C2-N3	5.37	1.38	1.33
26	LA	149	A	N7-C5	-5.37	1.36	1.39
26	LA	178	G	C1'-N9	-5.37	1.39	1.46
26	LA	220	G	C3'-O3'	5.37	1.49	1.42
26	LA	299	A	N1-C2	-5.37	1.29	1.34
26	LA	1279	G	C5-C6	-5.37	1.36	1.42
26	LA	1285	A	C4'-C3'	5.37	1.59	1.53
26	LA	1439	A	N9-C4	-5.37	1.34	1.37
26	LA	1855	U	N3-C4	-5.37	1.33	1.38
26	LA	2199	A	N1-C2	5.37	1.39	1.34
26	LA	2437	G	N7-C5	-5.37	1.36	1.39
50	LL	75	TYR	CB-CG	-5.37	1.43	1.51
2	SA	1039	G	C2-N3	5.37	1.37	1.32
2	SA	1172	C	C3'-O3'	5.37	1.49	1.42
20	SD	152	SER	CA-CB	5.37	1.61	1.52
26	LA	812	C	N3-C4	5.37	1.37	1.33
26	LA	829	A	C5-C6	-5.37	1.36	1.41
26	LA	1363	C	C5-C6	-5.37	1.30	1.34
26	LA	1920	C	O3'-P	-5.37	1.54	1.61
26	LA	1998	A	P-O5'	-5.37	1.54	1.59
26	LA	2356	U	C2-O2	5.37	1.27	1.22
26	LA	2453	A	P-O5'	-5.37	1.54	1.59
26	LA	2659	G	C2-N3	-5.37	1.28	1.32
26	LA	2694	G	C2-N3	-5.37	1.28	1.32
27	LD	84	PRO	N-CD	-5.37	1.40	1.47
45	LG	146	ASP	N-CA	-5.37	1.35	1.46
2	SA	259	G	C5'-C4'	5.37	1.57	1.51
2	SA	325	A	N3-C4	-5.37	1.31	1.34
2	SA	848	C	C3'-O3'	5.37	1.49	1.42
2	SA	1032	G	C2-N3	5.37	1.37	1.32
2	SA	1468	A	N7-C5	-5.37	1.36	1.39
26	LA	2670	A	C4'-C3'	-5.37	1.47	1.52
2	SA	10	A	C1'-N9	-5.37	1.39	1.46
2	SA	110	C	C2-O2	5.37	1.29	1.24
2	SA	404	G	C8-N7	5.37	1.34	1.30
2	SA	1408	A	C5-C4	-5.37	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1507	A	C5-C6	-5.37	1.36	1.41
26	LA	46	G	C2-N2	-5.37	1.29	1.34
26	LA	215	G	C5'-C4'	5.37	1.57	1.51
26	LA	279	A	C1'-N9	-5.37	1.39	1.46
26	LA	572	A	N7-C5	5.37	1.42	1.39
26	LA	1626	A	C5-C6	5.37	1.45	1.41
26	LA	1703	G	C2-N3	5.37	1.37	1.32
26	LA	1713	A	C1'-N9	-5.37	1.39	1.46
26	LA	1913	A	N9-C4	5.37	1.41	1.37
26	LA	1947	C	C3'-O3'	5.37	1.49	1.42
26	LA	2157	G	O3'-P	-5.37	1.54	1.61
26	LA	2414	G	N9-C4	5.37	1.42	1.38
26	LA	2418	A	C6-N1	5.37	1.39	1.35
26	LA	2455	G	C4'-O4'	-5.37	1.38	1.45
26	LA	2607	G	C3'-C2'	-5.37	1.46	1.52
26	LA	2670	A	C5-C6	5.37	1.45	1.41
2	SA	81	A	N9-C4	5.37	1.41	1.37
2	SA	266	G	O4'-C1'	-5.37	1.34	1.41
2	SA	1032	G	O4'-C1'	-5.37	1.34	1.41
4	S2	52	C	C3'-O3'	5.37	1.49	1.42
25	LB	92	C	C4-C5	5.37	1.47	1.43
26	LA	1006	C	P-O5'	-5.37	1.54	1.59
26	LA	1589	U	N3-C4	5.37	1.43	1.38
26	LA	1873	G	N3-C4	-5.37	1.31	1.35
26	LA	2328	A	N9-C8	-5.37	1.33	1.37
26	LA	2397	G	C2'-C1'	5.37	1.59	1.53
2	SA	1441	A	C2'-C1'	-5.37	1.47	1.53
7	SG	40	SER	CA-CB	5.37	1.60	1.52
25	LB	70	C	O3'-P	-5.37	1.54	1.61
26	LA	10	A	C5-C6	5.37	1.45	1.41
26	LA	132	G	C2-N3	-5.37	1.28	1.32
26	LA	480	A	C2'-C1'	-5.37	1.47	1.53
26	LA	2023	C	P-O5'	-5.37	1.54	1.59
26	LA	2674	G	N7-C5	-5.37	1.36	1.39
26	LA	2692	G	O4'-C1'	5.37	1.48	1.41
26	LA	2824	C	C3'-C2'	-5.37	1.46	1.52
37	LC	78	PHE	CB-CG	5.37	1.60	1.51
53	LP	112	TYR	CB-CG	-5.37	1.43	1.51
2	SA	146	G	C6-N1	5.36	1.43	1.39
2	SA	215	C	P-O5'	-5.36	1.54	1.59
2	SA	318	G	N3-C4	5.36	1.39	1.35
2	SA	373	A	C2'-C1'	-5.36	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	443	C	C2'-C1'	-5.36	1.47	1.53
2	SA	585	G	C8-N7	-5.36	1.27	1.30
2	SA	772	U	P-O5'	-5.36	1.54	1.59
25	LB	106	G	C6-O6	5.36	1.28	1.24
26	LA	191	A	N3-C4	-5.36	1.31	1.34
26	LA	231	A	P-O5'	-5.36	1.54	1.59
26	LA	438	G	N3-C4	5.36	1.39	1.35
26	LA	610	C	C5'-C4'	5.36	1.57	1.51
26	LA	654	A	C5'-C4'	5.36	1.57	1.51
26	LA	750	A	C2-N3	5.36	1.38	1.33
26	LA	1543	G	C8-N7	5.36	1.34	1.30
2	SA	83	C	N1-C6	-5.36	1.33	1.37
2	SA	737	C	P-O5'	-5.36	1.54	1.59
2	SA	944	G	O4'-C1'	5.36	1.48	1.41
26	LA	991	C	C2-O2	-5.36	1.19	1.24
26	LA	1570	A	C3'-O3'	5.36	1.49	1.42
2	SA	413	G	P-O5'	5.36	1.65	1.59
2	SA	1144	G	C2-N2	-5.36	1.29	1.34
2	SA	1373	G	C3'-O3'	5.36	1.49	1.42
2	SA	1387	G	C2-N2	5.36	1.40	1.34
26	LA	44	A	C3'-C2'	-5.36	1.46	1.52
26	LA	99	U	C3'-O3'	5.36	1.49	1.42
26	LA	231	A	N1-C2	5.36	1.39	1.34
26	LA	302	C	O3'-P	-5.36	1.54	1.61
26	LA	558	U	O4'-C1'	-5.36	1.34	1.41
26	LA	718	A	C2-N3	5.36	1.38	1.33
26	LA	910	A	O3'-P	-5.36	1.54	1.61
26	LA	919	U	C4-C5	-5.36	1.38	1.43
26	LA	2025	C	C4-C5	-5.36	1.38	1.43
26	LA	2353	G	C6-N1	-5.36	1.35	1.39
26	LA	2570	G	C3'-C2'	-5.36	1.46	1.52
33	LZ	10	ARG	CA-C	-5.36	1.39	1.52
2	SA	244	U	O3'-P	-5.36	1.54	1.61
26	LA	227	A	C2'-C1'	-5.36	1.47	1.53
26	LA	266	G	N7-C5	-5.36	1.36	1.39
26	LA	720	U	C2-N3	-5.36	1.33	1.37
26	LA	1194	A	N9-C8	-5.36	1.33	1.37
26	LA	2878	U	C5'-C4'	5.36	1.57	1.51
2	SA	407	U	C4'-O4'	5.36	1.52	1.45
2	SA	1183	U	N1-C6	-5.36	1.33	1.38
2	SA	1422	G	C2'-O2'	-5.36	1.34	1.41
25	LB	19	C	C5-C6	5.36	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	100	U	C1'-N1	5.36	1.56	1.48
26	LA	151	C	O4'-C1'	5.36	1.48	1.41
26	LA	226	A	C5-C6	5.36	1.45	1.41
26	LA	430	A	C2'-O2'	-5.36	1.34	1.41
26	LA	1160	G	P-O5'	-5.36	1.54	1.59
26	LA	1253	A	O4'-C1'	-5.36	1.34	1.41
26	LA	1593	A	C3'-O3'	5.36	1.49	1.42
26	LA	1732	C	C2'-O2'	-5.36	1.34	1.41
26	LA	2130	U	C2-N3	5.36	1.41	1.37
26	LA	2384	U	N1-C6	-5.36	1.33	1.38
26	LA	2468	A	N9-C4	-5.36	1.34	1.37
26	LA	2560	A	C4'-C3'	-5.36	1.47	1.52
26	LA	2700	A	C3'-C2'	5.36	1.58	1.52
2	SA	1265	C	C2'-C1'	-5.36	1.47	1.53
2	SA	1433	A	C4'-O4'	5.36	1.52	1.45
2	SA	1500	A	C5-C4	-5.36	1.35	1.38
26	LA	684	G	C5-C4	-5.36	1.34	1.38
26	LA	794	A	N9-C4	-5.36	1.34	1.37
26	LA	803	U	N1-C6	5.36	1.42	1.38
26	LA	1129	A	N9-C4	-5.36	1.34	1.37
26	LA	1665	A	N9-C8	-5.36	1.33	1.37
26	LA	1849	G	C1'-N9	-5.36	1.39	1.46
51	LI	34	GLY	CA-C	-5.36	1.43	1.51
2	SA	1155	A	C6-N1	-5.35	1.31	1.35
2	SA	1244	G	C1'-N9	-5.35	1.39	1.46
2	SA	1394	A	C3'-C2'	-5.35	1.46	1.52
26	LA	703	U	C5'-C4'	5.35	1.57	1.51
26	LA	1260	A	C4'-O4'	-5.35	1.38	1.45
26	LA	1532	A	N7-C5	-5.35	1.36	1.39
26	LA	2329	U	N1-C2	-5.35	1.33	1.38
2	SA	170	U	C1'-N1	5.35	1.56	1.48
2	SA	312	C	O4'-C1'	-5.35	1.34	1.41
2	SA	523	A	N9-C8	-5.35	1.33	1.37
2	SA	799	G	N1-C2	-5.35	1.33	1.37
2	SA	912	C	C4-C5	-5.35	1.38	1.43
2	SA	968	A	C5-C4	-5.35	1.35	1.38
2	SA	994	A	C1'-N9	-5.35	1.39	1.46
2	SA	1176	A	C4'-O4'	5.35	1.52	1.45
3	S1	45	G	N1-C2	5.35	1.42	1.37
25	LB	109	A	O5'-C5'	5.35	1.53	1.44
26	LA	546	U	C2-N3	-5.35	1.34	1.37
26	LA	789	A	N9-C8	-5.35	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	869	G	C5-C4	-5.35	1.34	1.38
26	LA	1004	U	N3-C4	5.35	1.43	1.38
26	LA	1303	G	C2-N2	-5.35	1.29	1.34
26	LA	1398	C	C2-N3	-5.35	1.31	1.35
26	LA	1710	G	N9-C8	5.35	1.41	1.37
26	LA	1733	G	N7-C5	-5.35	1.36	1.39
26	LA	2129	C	C1'-N1	5.35	1.56	1.48
26	LA	2436	G	C8-N7	5.35	1.34	1.30
26	LA	2599	G	O3'-P	-5.35	1.54	1.61
46	LH	57	TYR	CB-CG	5.35	1.59	1.51
52	LO	92	TRP	NE1-CE2	-5.35	1.30	1.37
52	LO	125	PRO	N-CD	-5.35	1.40	1.47
2	SA	310	G	P-O5'	5.35	1.65	1.59
2	SA	611	C	N1-C6	5.35	1.40	1.37
2	SA	950	U	C4-O4	5.35	1.27	1.23
2	SA	1431	A	O3'-P	5.35	1.67	1.61
22	SF	108	GLU	CB-CG	5.35	1.62	1.52
26	LA	127	A	C4'-O4'	-5.35	1.38	1.45
26	LA	466	A	O3'-P	-5.35	1.54	1.61
26	LA	501	A	O3'-P	-5.35	1.54	1.61
26	LA	1830	C	C4'-C3'	-5.35	1.47	1.52
2	SA	130	A	C3'-C2'	-5.35	1.46	1.52
2	SA	671	G	C6-O6	-5.35	1.19	1.24
2	SA	771	G	N1-C2	-5.35	1.33	1.37
2	SA	915	A	O4'-C1'	-5.35	1.34	1.41
2	SA	918	A	N9-C4	-5.35	1.34	1.37
2	SA	1169	A	N7-C5	-5.35	1.36	1.39
2	SA	1363	A	C5-C6	-5.35	1.36	1.41
26	LA	157	C	C4-N4	-5.35	1.29	1.33
26	LA	1456	G	C2'-C1'	-5.35	1.47	1.53
26	LA	1585	C	N1-C2	5.35	1.45	1.40
26	LA	1619	G	C6-N1	-5.35	1.35	1.39
26	LA	2089	C	C5-C6	-5.35	1.30	1.34
26	LA	2386	A	N3-C4	-5.35	1.31	1.34
26	LA	2754	U	N3-C4	-5.35	1.33	1.38
33	LZ	10	ARG	C-N	-5.35	1.24	1.34
2	SA	331	G	P-O5'	5.35	1.65	1.59
2	SA	389	A	C2-N3	5.35	1.38	1.33
2	SA	461	A	C2'-C1'	5.35	1.59	1.53
2	SA	1399	C	P-O5'	5.35	1.65	1.59
26	LA	412	A	C1'-N9	-5.35	1.39	1.46
26	LA	776	G	C6-N1	-5.35	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	794	A	C5-C4	-5.35	1.35	1.38
26	LA	2349	G	N9-C8	-5.35	1.34	1.37
26	LA	2556	C	O3'-P	-5.35	1.54	1.61
26	LA	2639	A	N3-C4	5.35	1.38	1.34
26	LA	2759	G	N1-C2	-5.35	1.33	1.37
26	LA	2760	C	N1-C6	5.35	1.40	1.37
2	SA	712	A	C5'-C4'	5.35	1.57	1.51
26	LA	240	C	N3-C4	-5.35	1.30	1.33
26	LA	1624	U	C3'-O3'	5.35	1.49	1.42
26	LA	2088	A	P-O5'	-5.35	1.54	1.59
26	LA	2510	C	O3'-P	-5.35	1.54	1.61
26	LA	2678	C	O3'-P	-5.35	1.54	1.61
2	SA	22	G	C6-N1	-5.34	1.35	1.39
2	SA	33	A	O3'-P	-5.34	1.54	1.61
2	SA	898	G	C2-N2	-5.34	1.29	1.34
2	SA	1223	C	N1-C6	5.34	1.40	1.37
26	LA	85	G	N9-C8	-5.34	1.34	1.37
26	LA	841	G	C8-N7	5.34	1.34	1.30
26	LA	1610	A	C6-N1	5.34	1.39	1.35
26	LA	1774	C	O4'-C1'	-5.34	1.34	1.41
26	LA	1793	C	C2-O2	-5.34	1.19	1.24
26	LA	2055	C	N1-C2	-5.34	1.34	1.40
26	LA	2082	A	C2'-C1'	-5.34	1.47	1.53
26	LA	2098	U	C5'-C4'	5.34	1.57	1.51
26	LA	2490	G	C2-N3	-5.34	1.28	1.32
26	LA	2504	U	O3'-P	-5.34	1.54	1.61
26	LA	2682	A	P-O5'	-5.34	1.54	1.59
26	LA	2815	C	C4'-C3'	-5.34	1.47	1.52
29	LV	42	GLU	CA-CB	5.34	1.65	1.53
2	SA	195	A	N1-C2	-5.34	1.29	1.34
26	LA	491	G	C2-N3	5.34	1.37	1.32
26	LA	514	A	C2'-C1'	-5.34	1.47	1.53
26	LA	1421	G	N9-C8	5.34	1.41	1.37
26	LA	1687	G	N1-C2	-5.34	1.33	1.37
2	SA	132	C	O3'-P	-5.34	1.54	1.61
2	SA	175	C	C2-N3	5.34	1.40	1.35
2	SA	348	G	P-O5'	5.34	1.65	1.59
2	SA	1312	G	C5-C6	-5.34	1.37	1.42
26	LA	1485	U	C3'-O3'	5.34	1.49	1.42
26	LA	1620	G	N9-C4	-5.34	1.33	1.38
26	LA	1645	G	C3'-C2'	-5.34	1.46	1.52
26	LA	1989	G	N1-C2	5.34	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2782	G	C5'-C4'	5.34	1.57	1.51
2	SA	303	A	C5-C6	-5.34	1.36	1.41
2	SA	698	G	C5'-C4'	5.34	1.57	1.51
2	SA	1305	G	N3-C4	-5.34	1.31	1.35
26	LA	156	A	N9-C4	5.34	1.41	1.37
26	LA	594	U	N1-C6	5.34	1.42	1.38
26	LA	1153	C	N3-C4	-5.34	1.30	1.33
26	LA	1264	A	P-O5'	-5.34	1.54	1.59
26	LA	1530	G	C2'-C1'	-5.34	1.47	1.53
26	LA	1629	U	O3'-P	-5.34	1.54	1.61
26	LA	1684	G	C4'-C3'	-5.34	1.47	1.52
26	LA	1956	U	C5'-C4'	5.34	1.57	1.51
26	LA	2278	A	N7-C5	5.34	1.42	1.39
26	LA	2702	G	C8-N7	-5.34	1.27	1.30
2	SA	282	A	N9-C8	-5.34	1.33	1.37
2	SA	289	G	C2'-C1'	-5.34	1.47	1.53
2	SA	442	G	C5'-C4'	5.34	1.57	1.51
2	SA	861	G	C6-O6	-5.34	1.19	1.24
2	SA	1038	C	C3'-O3'	5.34	1.49	1.42
3	S1	54	U	C3'-C2'	-5.34	1.46	1.52
26	LA	1179	G	O3'-P	5.34	1.67	1.61
26	LA	1395	A	O3'-P	-5.34	1.54	1.61
26	LA	1447	C	N1-C6	-5.34	1.33	1.37
26	LA	2163	A	C4'-C3'	5.34	1.59	1.53
26	LA	2290	G	C2-N3	-5.34	1.28	1.32
26	LA	2844	G	N3-C4	-5.34	1.31	1.35
2	SA	43	C	C4-N4	-5.34	1.29	1.33
2	SA	1461	G	C2-N3	5.34	1.37	1.32
4	S2	43	G	N7-C5	5.34	1.42	1.39
18	SB	225	SER	CA-CB	5.34	1.60	1.52
26	LA	275	C	N1-C6	5.34	1.40	1.37
26	LA	279	A	C6-N6	5.34	1.38	1.33
26	LA	1568	G	C6-N1	-5.34	1.35	1.39
26	LA	1576	U	O3'-P	-5.34	1.54	1.61
26	LA	1584	U	O3'-P	5.34	1.67	1.61
26	LA	1613	G	C2'-C1'	-5.34	1.47	1.53
26	LA	2048	G	C6-N1	-5.34	1.35	1.39
37	LC	64	VAL	CA-CB	-5.34	1.43	1.54
2	SA	161	A	N9-C4	-5.33	1.34	1.37
3	S1	55	A	N7-C5	-5.33	1.36	1.39
26	LA	27	G	N9-C4	-5.33	1.33	1.38
26	LA	469	G	C4'-O4'	-5.33	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	584	C	O3'-P	-5.33	1.54	1.61
26	LA	1684	G	C2'-O2'	-5.33	1.34	1.41
26	LA	2654	A	C6-N6	5.33	1.38	1.33
26	LA	2814	A	O4'-C1'	-5.33	1.34	1.41
2	SA	9	G	C5-C6	-5.33	1.37	1.42
2	SA	33	A	C1'-N9	-5.33	1.39	1.46
2	SA	182	A	C5'-C4'	5.33	1.57	1.51
2	SA	433	G	C6-N1	5.33	1.43	1.39
2	SA	455	G	C8-N7	5.33	1.34	1.30
2	SA	693	G	C1'-N9	5.33	1.56	1.48
2	SA	996	A	C1'-N9	-5.33	1.39	1.46
4	S2	44	A	C5-C4	5.33	1.42	1.38
4	S2	62	C	C4-C5	-5.33	1.38	1.43
26	LA	149	A	O3'-P	-5.33	1.54	1.61
26	LA	728	G	N9-C8	-5.33	1.34	1.37
26	LA	1194	A	C3'-C2'	-5.33	1.46	1.52
26	LA	1444	G	C8-N7	5.33	1.34	1.30
26	LA	1544	A	C2'-C1'	-5.33	1.47	1.53
26	LA	1726	C	C2-O2	-5.33	1.19	1.24
26	LA	2821	A	C1'-N9	-5.33	1.39	1.46
2	SA	116	A	C2'-C1'	-5.33	1.47	1.53
2	SA	147	G	N1-C2	-5.33	1.33	1.37
2	SA	517	G	C8-N7	5.33	1.34	1.30
2	SA	700	G	C5'-C4'	5.33	1.57	1.51
2	SA	883	C	C4-C5	-5.33	1.38	1.43
2	SA	994	A	O3'-P	-5.33	1.54	1.61
2	SA	1278	G	C5-C6	5.33	1.47	1.42
23	SR	10	CYS	CB-SG	5.33	1.91	1.82
26	LA	743	A	C8-N7	-5.33	1.27	1.31
26	LA	1377	G	N9-C8	-5.33	1.34	1.37
26	LA	1449	G	P-O5'	-5.33	1.54	1.59
26	LA	1575	C	C4-N4	5.33	1.38	1.33
26	LA	1969	A	N9-C4	-5.33	1.34	1.37
26	LA	2184	A	N9-C8	-5.33	1.33	1.37
26	LA	2702	G	C6-N1	-5.33	1.35	1.39
26	LA	2840	C	C2-N3	-5.33	1.31	1.35
2	SA	1453	G	C1'-N9	5.33	1.56	1.48
4	S2	25	U	C4'-O4'	5.33	1.52	1.45
26	LA	232	G	C3'-O3'	5.33	1.49	1.42
26	LA	250	G	C5'-C4'	5.33	1.57	1.51
26	LA	1455	G	C5'-C4'	5.33	1.57	1.51
26	LA	1833	C	N1-C6	5.33	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	LH	2	ARG	CD-NE	5.33	1.55	1.46
2	SA	91	U	C4'-C3'	5.33	1.59	1.53
2	SA	719	C	C3'-C2'	5.33	1.58	1.52
2	SA	728	A	C5-C4	-5.33	1.35	1.38
2	SA	747	A	C2-N3	5.33	1.38	1.33
2	SA	922	G	C2-N2	-5.33	1.29	1.34
2	SA	1325	C	C4'-C3'	-5.33	1.47	1.52
2	SA	1396	A	C4'-C3'	-5.33	1.47	1.52
2	SA	1402	C	C3'-O3'	5.33	1.49	1.42
26	LA	483	A	C1'-N9	-5.33	1.39	1.46
26	LA	723	C	C4-C5	-5.33	1.38	1.43
26	LA	781	A	C5-C4	-5.33	1.35	1.38
26	LA	959	A	C1'-N9	-5.33	1.39	1.46
26	LA	1067	A	C4'-O4'	5.33	1.52	1.45
26	LA	1113	U	C4-C5	-5.33	1.38	1.43
26	LA	1759	A	O4'-C1'	5.33	1.48	1.41
26	LA	2186	G	C8-N7	5.33	1.34	1.30
26	LA	2381	A	C2'-C1'	5.33	1.59	1.53
2	SA	149	A	C6-N1	5.33	1.39	1.35
2	SA	547	A	C6-N1	5.33	1.39	1.35
2	SA	1035	A	P-O5'	5.33	1.65	1.59
2	SA	1064	G	C2-N2	-5.33	1.29	1.34
26	LA	442	G	C4'-C3'	5.33	1.59	1.53
26	LA	1268	A	C5-C6	-5.33	1.36	1.41
26	LA	2265	U	C4'-C3'	5.33	1.59	1.53
26	LA	2803	G	N9-C4	5.33	1.42	1.38
2	SA	7	A	N1-C2	-5.33	1.29	1.34
2	SA	153	C	P-O5'	-5.33	1.54	1.59
2	SA	410	G	O3'-P	-5.33	1.54	1.61
2	SA	699	C	C5-C6	5.33	1.38	1.34
4	S2	15	G	C2'-C1'	-5.33	1.47	1.53
26	LA	75	G	O4'-C1'	-5.33	1.34	1.41
26	LA	504	A	C2'-C1'	-5.33	1.47	1.53
26	LA	916	G	C4'-O4'	5.33	1.52	1.45
26	LA	1336	A	C1'-N9	-5.33	1.39	1.46
26	LA	1338	G	C2-N3	-5.33	1.28	1.32
26	LA	1484	U	C2'-O2'	-5.33	1.34	1.41
26	LA	1548	A	C8-N7	-5.33	1.27	1.31
26	LA	2090	A	C4'-O4'	5.33	1.52	1.45
26	LA	2312	U	C2-N3	5.33	1.41	1.37
26	LA	2775	G	N7-C5	-5.33	1.36	1.39
26	LA	2844	G	C2-N3	-5.33	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	688	G	P-O5'	-5.32	1.54	1.59
2	SA	1062	U	C5'-C4'	5.32	1.57	1.51
2	SA	1285	A	N3-C4	-5.32	1.31	1.34
2	SA	1295	U	N1-C6	-5.32	1.33	1.38
14	SN	100	TRP	CD2-CE3	-5.32	1.32	1.40
19	SC	216	PRO	N-CD	-5.32	1.40	1.47
26	LA	315	G	N1-C2	-5.32	1.33	1.37
26	LA	554	U	C4-C5	5.32	1.48	1.43
26	LA	849	A	C2'-O2'	-5.32	1.34	1.41
26	LA	855	G	C2'-C1'	-5.32	1.47	1.53
26	LA	1254	A	C6-N6	5.32	1.38	1.33
26	LA	2540	C	O4'-C1'	-5.32	1.34	1.41
26	LA	2630	G	N3-C4	-5.32	1.31	1.35
26	LA	2644	G	C5'-C4'	5.32	1.57	1.51
2	SA	294	U	C3'-C2'	5.32	1.58	1.52
2	SA	1246	A	N7-C5	-5.32	1.36	1.39
26	LA	1321	A	C4'-C3'	5.32	1.59	1.53
26	LA	1832	C	C4-C5	5.32	1.47	1.43
26	LA	1860	G	N7-C5	-5.32	1.36	1.39
2	SA	161	A	C6-N6	-5.32	1.29	1.33
2	SA	286	C	C2'-C1'	-5.32	1.47	1.53
2	SA	638	U	C5-C6	-5.32	1.29	1.34
2	SA	1106	G	O3'-P	-5.32	1.54	1.61
2	SA	1175	G	N9-C8	-5.32	1.34	1.37
19	SC	199	VAL	CA-CB	-5.32	1.43	1.54
26	LA	24	G	C5'-C4'	5.32	1.57	1.51
26	LA	244	A	O3'-P	5.32	1.67	1.61
26	LA	968	C	N1-C2	-5.32	1.34	1.40
26	LA	1029	A	N1-C2	-5.32	1.29	1.34
26	LA	1226	A	N3-C4	-5.32	1.31	1.34
26	LA	1734	G	C1'-N9	-5.32	1.39	1.46
26	LA	2310	C	O4'-C1'	5.32	1.48	1.41
26	LA	2476	A	C2'-C1'	-5.32	1.47	1.53
2	SA	29	U	O3'-P	-5.32	1.54	1.61
2	SA	189	A	C5-C4	-5.32	1.35	1.38
2	SA	324	G	C2-N2	-5.32	1.29	1.34
3	S1	21	U	C1'-N1	5.32	1.56	1.48
25	LB	34	A	C5-C6	5.32	1.45	1.41
26	LA	2054	A	O3'-P	-5.32	1.54	1.61
26	LA	2343	U	N1-C2	-5.32	1.33	1.38
26	LA	2577	A	N9-C8	5.32	1.42	1.37
26	LA	2857	G	N7-C5	5.32	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	662	U	C4-C5	-5.32	1.38	1.43
2	SA	676	A	N1-C2	5.32	1.39	1.34
2	SA	1021	A	C5-C6	5.32	1.45	1.41
2	SA	1229	A	C3'-C2'	5.32	1.58	1.52
26	LA	34	U	C3'-C2'	5.32	1.58	1.52
26	LA	344	A	C3'-O3'	5.32	1.49	1.42
26	LA	625	G	N3-C4	-5.32	1.31	1.35
26	LA	950	G	C2'-C1'	-5.32	1.47	1.53
26	LA	1087	G	P-O5'	-5.32	1.54	1.59
26	LA	1572	A	C3'-C2'	-5.32	1.47	1.52
26	LA	1604	C	C4'-C3'	-5.32	1.47	1.52
26	LA	1928	A	C6-N1	-5.32	1.31	1.35
26	LA	1991	U	C3'-O3'	5.32	1.49	1.42
26	LA	2311	A	N1-C2	-5.32	1.29	1.34
2	SA	434	U	C3'-C2'	-5.32	1.47	1.52
2	SA	655	A	C6-N6	-5.32	1.29	1.33
2	SA	1100	C	C2'-C1'	-5.32	1.47	1.53
2	SA	1491	G	C4'-C3'	-5.32	1.47	1.52
26	LA	280	U	C2'-O2'	5.32	1.48	1.41
26	LA	459	U	O4'-C1'	5.32	1.48	1.41
26	LA	527	C	P-O5'	5.32	1.65	1.59
26	LA	1478	G	C1'-N9	-5.32	1.39	1.46
26	LA	1563	U	O4'-C1'	-5.32	1.34	1.41
26	LA	1575	C	C2'-C1'	-5.32	1.47	1.53
26	LA	1625	C	N1-C6	-5.32	1.33	1.37
26	LA	1869	G	C8-N7	-5.32	1.27	1.30
26	LA	1890	A	C6-N6	-5.32	1.29	1.33
26	LA	2873	A	C2'-C1'	5.32	1.59	1.53
2	SA	131	A	N9-C8	5.31	1.42	1.37
2	SA	557	G	C8-N7	-5.31	1.27	1.30
2	SA	1166	G	C4'-C3'	-5.31	1.47	1.52
21	SE	44	ARG	CD-NE	5.31	1.55	1.46
26	LA	93	G	N9-C4	5.31	1.42	1.38
26	LA	2783	U	C4-O4	5.31	1.27	1.23
2	SA	288	A	C5-C6	-5.31	1.36	1.41
2	SA	1359	C	O3'-P	5.31	1.67	1.61
26	LA	357	C	O3'-P	5.31	1.67	1.61
26	LA	616	A	N9-C4	5.31	1.41	1.37
26	LA	807	U	C3'-C2'	-5.31	1.47	1.52
26	LA	1749	A	C5-C6	5.31	1.45	1.41
26	LA	2885	G	C2'-C1'	-5.31	1.47	1.53
2	SA	102	G	C6-N1	5.31	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	303	A	C2-N3	-5.31	1.28	1.33
2	SA	821	G	C3'-O3'	5.31	1.49	1.42
2	SA	900	A	O4'-C1'	5.31	1.48	1.41
2	SA	1342	C	N1-C6	5.31	1.40	1.37
2	SA	1370	G	O5'-C5'	5.31	1.52	1.44
2	SA	1379	G	N7-C5	-5.31	1.36	1.39
4	S2	44	A	N1-C2	5.31	1.39	1.34
26	LA	592	A	N9-C8	5.31	1.42	1.37
26	LA	904	G	N9-C4	-5.31	1.33	1.38
26	LA	1051	G	C5-C6	-5.31	1.37	1.42
26	LA	1412	U	O3'-P	-5.31	1.54	1.61
26	LA	1606	C	C2-N3	-5.31	1.31	1.35
26	LA	1660	G	C2'-C1'	-5.31	1.47	1.53
2	SA	112	G	C5-C6	-5.31	1.37	1.42
2	SA	562	U	C4-C5	-5.31	1.38	1.43
2	SA	563	A	O3'-P	-5.31	1.54	1.61
2	SA	947	G	O4'-C1'	5.31	1.48	1.41
2	SA	1360	A	C5-C6	-5.31	1.36	1.41
4	S2	12	G	N3-C4	-5.31	1.31	1.35
26	LA	160	A	C2-N3	5.31	1.38	1.33
26	LA	179	C	C2-O2	-5.31	1.19	1.24
26	LA	307	G	N3-C4	-5.31	1.31	1.35
26	LA	1014	A	C4'-O4'	-5.31	1.38	1.45
26	LA	1049	C	O4'-C1'	-5.31	1.34	1.41
26	LA	1178	C	C2'-C1'	-5.31	1.47	1.53
26	LA	1396	U	P-O5'	5.31	1.65	1.59
26	LA	1688	U	P-O5'	-5.31	1.54	1.59
26	LA	1856	U	C4'-C3'	5.31	1.58	1.53
26	LA	1910	G	O3'-P	-5.31	1.54	1.61
26	LA	2648	G	C5-C6	-5.31	1.37	1.42
26	LA	2853	C	C4-C5	-5.31	1.38	1.43
2	SA	132	C	C3'-C2'	-5.31	1.47	1.52
2	SA	294	U	C2'-C1'	-5.31	1.47	1.53
2	SA	302	G	C6-N1	5.31	1.43	1.39
2	SA	325	A	C6-N1	5.31	1.39	1.35
2	SA	848	C	C4'-O4'	5.31	1.52	1.45
2	SA	1263	C	O3'-P	-5.31	1.54	1.61
22	SF	43	GLY	N-CA	5.31	1.54	1.46
26	LA	201	C	C2-O2	-5.31	1.19	1.24
26	LA	273	G	O3'-P	-5.31	1.54	1.61
26	LA	812	C	O4'-C1'	-5.31	1.34	1.41
26	LA	1006	C	C5'-C4'	5.31	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1064	C	C4-N4	-5.31	1.29	1.33
26	LA	1461	C	C2'-O2'	5.31	1.48	1.41
26	LA	1665	A	C2'-C1'	5.31	1.59	1.53
26	LA	2594	C	C5'-C4'	5.31	1.57	1.51
26	LA	2703	C	C4'-O4'	-5.31	1.38	1.45
26	LA	2819	G	O4'-C1'	5.31	1.48	1.41
26	LA	27	G	O4'-C1'	5.31	1.48	1.41
26	LA	193	U	O5'-C5'	5.31	1.52	1.44
26	LA	806	C	O3'-P	-5.31	1.54	1.61
26	LA	2258	C	C5'-C4'	5.31	1.57	1.51
26	LA	2742	G	N1-C2	-5.31	1.33	1.37
2	SA	55	A	N7-C5	-5.30	1.36	1.39
2	SA	114	U	O4'-C1'	-5.30	1.34	1.41
2	SA	147	G	C1'-N9	5.30	1.56	1.48
2	SA	985	C	N1-C6	-5.30	1.33	1.37
2	SA	1122	U	C2-N3	-5.30	1.34	1.37
3	S1	27	A	N9-C8	5.30	1.42	1.37
16	SP	45	GLU	CB-CG	5.30	1.62	1.52
26	LA	367	G	N3-C4	-5.30	1.31	1.35
26	LA	521	U	C3'-C2'	-5.30	1.47	1.52
26	LA	570	G	C3'-O3'	5.30	1.49	1.42
26	LA	1085	A	C8-N7	5.30	1.35	1.31
26	LA	1110	G	N7-C5	-5.30	1.36	1.39
26	LA	1443	U	C4'-O4'	-5.30	1.38	1.45
26	LA	1622	G	C4'-C3'	-5.30	1.47	1.52
26	LA	2515	C	P-O5'	5.30	1.65	1.59
26	LA	2616	C	C4-N4	-5.30	1.29	1.33
2	SA	758	C	P-O5'	-5.30	1.54	1.59
3	S1	13	A	N7-C5	5.30	1.42	1.39
26	LA	1252	G	C2'-O2'	-5.30	1.34	1.41
26	LA	2434	A	C2'-C1'	-5.30	1.47	1.53
2	SA	9	G	N1-C2	-5.30	1.33	1.37
2	SA	104	G	P-O5'	-5.30	1.54	1.59
2	SA	122	G	C5'-C4'	5.30	1.57	1.51
2	SA	629	A	C6-N6	-5.30	1.29	1.33
2	SA	1281	C	O3'-P	-5.30	1.54	1.61
2	SA	1316	G	N9-C4	-5.30	1.33	1.38
2	SA	1356	G	C2-N2	-5.30	1.29	1.34
25	LB	105	G	N7-C5	-5.30	1.36	1.39
26	LA	2	G	C5-C4	-5.30	1.34	1.38
26	LA	144	A	C5'-C4'	5.30	1.57	1.51
26	LA	179	C	P-O5'	-5.30	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1040	A	C2'-C1'	-5.30	1.47	1.53
26	LA	1259	G	O3'-P	-5.30	1.54	1.61
26	LA	1361	G	C3'-O3'	5.30	1.49	1.42
26	LA	1510	G	C5-C6	5.30	1.47	1.42
26	LA	1579	A	C5-C6	5.30	1.45	1.41
26	LA	1984	G	C5-C4	-5.30	1.34	1.38
26	LA	2020	A	C4'-C3'	-5.30	1.47	1.52
26	LA	2223	G	N9-C4	-5.30	1.33	1.38
26	LA	2361	G	N9-C8	-5.30	1.34	1.37
26	LA	2687	U	C5'-C4'	-5.30	1.45	1.51
2	SA	316	C	N1-C2	-5.30	1.34	1.40
2	SA	321	A	O4'-C1'	-5.30	1.34	1.41
2	SA	490	C	C4-N4	-5.30	1.29	1.33
2	SA	1143	G	C2'-C1'	-5.30	1.47	1.53
4	S2	36	A	C4'-C3'	-5.30	1.47	1.52
26	LA	340	A	O3'-P	-5.30	1.54	1.61
26	LA	979	A	N9-C4	-5.30	1.34	1.37
26	LA	1224	U	N1-C2	-5.30	1.33	1.38
26	LA	1403	A	C8-N7	-5.30	1.27	1.31
26	LA	1634	A	C8-N7	-5.30	1.27	1.31
26	LA	2636	C	C4'-C3'	5.30	1.58	1.53
2	SA	1134	G	C2'-O2'	5.30	1.48	1.41
2	SA	1299	A	C5-C4	5.30	1.42	1.38
2	SA	1386	G	C2'-C1'	-5.30	1.47	1.53
3	S1	20	G	N9-C8	5.30	1.41	1.37
3	S1	23	C	N3-C4	5.30	1.37	1.33
26	LA	749	A	N9-C8	-5.30	1.33	1.37
26	LA	1083	U	C2-N3	-5.30	1.34	1.37
26	LA	1649	G	N3-C4	-5.30	1.31	1.35
26	LA	2540	C	C3'-C2'	-5.30	1.47	1.52
2	SA	715	A	O3'-P	-5.30	1.54	1.61
2	SA	772	U	C4-C5	-5.30	1.38	1.43
2	SA	1027	C	N3-C4	5.30	1.37	1.33
2	SA	1226	C	C5-C6	-5.30	1.30	1.34
2	SA	1238	A	N1-C2	5.30	1.39	1.34
24	S3	408	MET	CA-CB	5.30	1.65	1.53
26	LA	254	G	N1-C2	-5.30	1.33	1.37
26	LA	931	U	N1-C6	5.30	1.42	1.38
26	LA	958	U	P-O5'	-5.30	1.54	1.59
26	LA	1262	A	C5-C4	-5.30	1.35	1.38
26	LA	1613	G	C2-N3	5.30	1.36	1.32
26	LA	1721	G	N3-C4	-5.30	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1803	A	C6-N6	-5.30	1.29	1.33
26	LA	1857	G	C2-N2	-5.30	1.29	1.34
26	LA	1871	A	N9-C4	-5.30	1.34	1.37
26	LA	1875	G	N3-C4	5.30	1.39	1.35
26	LA	2478	A	C3'-O3'	5.30	1.49	1.42
26	LA	2847	U	O4'-C1'	-5.30	1.34	1.41
57	LS	75	TYR	CG-CD1	-5.30	1.32	1.39
2	SA	38	G	C6-N1	-5.29	1.35	1.39
26	LA	491	G	P-O5'	5.29	1.65	1.59
26	LA	1892	C	C4-N4	-5.29	1.29	1.33
26	LA	2061	G	C8-N7	5.29	1.34	1.30
26	LA	2236	U	N1-C2	-5.29	1.33	1.38
26	LA	2309	A	C2-N3	5.29	1.38	1.33
2	SA	258	G	C5-C6	-5.29	1.37	1.42
2	SA	615	G	P-O5'	-5.29	1.54	1.59
2	SA	718	A	O3'-P	5.29	1.67	1.61
2	SA	719	C	C2'-C1'	-5.29	1.47	1.53
2	SA	1206	G	C8-N7	-5.29	1.27	1.30
2	SA	1261	A	C6-N6	-5.29	1.29	1.33
4	S2	10	G	C2-N2	-5.29	1.29	1.34
26	LA	60	G	C8-N7	5.29	1.34	1.30
26	LA	555	G	N1-C2	-5.29	1.33	1.37
26	LA	1076	C	N3-C4	-5.29	1.30	1.33
26	LA	1168	G	N9-C8	-5.29	1.34	1.37
26	LA	1904	G	C4'-O4'	-5.29	1.38	1.45
26	LA	2491	U	C2-N3	5.29	1.41	1.37
37	LC	20	GLN	CG-CD	5.29	1.63	1.51
2	SA	353	A	C1'-N9	-5.29	1.39	1.46
2	SA	406	G	N9-C8	5.29	1.41	1.37
4	S2	1	C	N3-C4	5.29	1.37	1.33
4	S2	7	G	C5'-C4'	5.29	1.57	1.51
4	S2	74	A	C5'-C4'	5.29	1.57	1.51
26	LA	428	A	C5-C6	5.29	1.45	1.41
26	LA	470	A	N9-C4	-5.29	1.34	1.37
26	LA	1058	U	C3'-O3'	5.29	1.49	1.42
26	LA	1175	A	N7-C5	-5.29	1.36	1.39
26	LA	1484	U	C2-N3	5.29	1.41	1.37
26	LA	1586	A	C8-N7	-5.29	1.27	1.31
26	LA	2111	U	C4'-O4'	5.29	1.52	1.45
26	LA	2197	U	C2'-C1'	-5.29	1.47	1.53
26	LA	2759	G	O3'-P	-5.29	1.54	1.61
26	LA	2853	C	P-O5'	-5.29	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2866	U	C5-C6	5.29	1.39	1.34
2	SA	246	A	N9-C4	-5.29	1.34	1.37
2	SA	1160	G	C2'-C1'	-5.29	1.47	1.53
26	LA	87	U	C5'-C4'	5.29	1.57	1.51
26	LA	442	G	P-O5'	-5.29	1.54	1.59
26	LA	1195	G	C8-N7	-5.29	1.27	1.30
26	LA	2260	C	C3'-C2'	-5.29	1.47	1.52
26	LA	2445	G	C5-C6	-5.29	1.37	1.42
38	LE	152	PRO	N-CA	-5.29	1.38	1.47
2	SA	65	A	C6-N1	5.29	1.39	1.35
2	SA	570	G	C5'-C4'	5.29	1.57	1.51
2	SA	671	G	C5'-C4'	-5.29	1.45	1.51
2	SA	709	U	C4-O4	-5.29	1.19	1.23
4	S2	69	C	C3'-C2'	-5.29	1.47	1.52
26	LA	5	A	N9-C8	-5.29	1.33	1.37
26	LA	774	G	N3-C4	-5.29	1.31	1.35
26	LA	869	G	C8-N7	-5.29	1.27	1.30
26	LA	957	C	N1-C6	-5.29	1.33	1.37
26	LA	1167	C	C1'-N1	-5.29	1.39	1.46
26	LA	1359	A	C3'-O3'	5.29	1.49	1.42
26	LA	1426	G	C2-N3	5.29	1.36	1.32
26	LA	1896	G	C5-C6	-5.29	1.37	1.42
26	LA	1896	G	P-O5'	-5.29	1.54	1.59
26	LA	2223	G	N9-C8	-5.29	1.34	1.37
26	LA	2735	G	C8-N7	5.29	1.34	1.30
26	LA	620	G	C4'-C3'	-5.29	1.47	1.52
26	LA	1471	G	C2'-O2'	-5.29	1.34	1.41
26	LA	2316	G	O4'-C1'	-5.29	1.34	1.41
2	SA	883	C	O3'-P	-5.29	1.54	1.61
2	SA	883	C	N1-C2	-5.29	1.34	1.40
2	SA	1011	C	C2-O2	-5.29	1.19	1.24
2	SA	1483	A	C5'-C4'	5.29	1.57	1.51
25	LB	65	U	P-O5'	-5.29	1.54	1.59
26	LA	142	A	C6-N6	-5.29	1.29	1.33
26	LA	217	A	N3-C4	-5.29	1.31	1.34
26	LA	252	G	O4'-C1'	-5.29	1.34	1.41
26	LA	497	A	P-O5'	-5.29	1.54	1.59
26	LA	1306	C	N1-C2	-5.29	1.34	1.40
26	LA	1331	G	C1'-N9	-5.29	1.39	1.46
26	LA	1928	A	C5-C4	-5.29	1.35	1.38
26	LA	1999	C	C4'-C3'	-5.29	1.47	1.52
26	LA	2268	A	C8-N7	-5.29	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2288	A	N9-C8	-5.29	1.33	1.37
26	LA	2553	G	C8-N7	5.29	1.34	1.30
26	LA	2714	G	C2-N2	-5.29	1.29	1.34
26	LA	2844	G	C6-N1	-5.29	1.35	1.39
53	LP	77	ALA	N-CA	-5.29	1.35	1.46
2	SA	579	A	N3-C4	-5.28	1.31	1.34
2	SA	585	G	C4'-C3'	-5.28	1.47	1.52
2	SA	700	G	C1'-N9	-5.28	1.39	1.46
2	SA	1127	G	C2-N2	-5.28	1.29	1.34
2	SA	1323	G	C2-N3	5.28	1.36	1.32
26	LA	571	U	C2'-C1'	-5.28	1.47	1.53
26	LA	706	A	O3'-P	-5.28	1.54	1.61
26	LA	1000	A	C8-N7	5.28	1.35	1.31
26	LA	1427	A	C8-N7	-5.28	1.27	1.31
26	LA	1536	C	C4-C5	-5.28	1.38	1.43
2	SA	227	G	O3'-P	-5.28	1.54	1.61
2	SA	1494	G	C3'-C2'	-5.28	1.47	1.52
26	LA	2217	G	N9-C8	-5.28	1.34	1.37
26	LA	2345	G	N3-C4	-5.28	1.31	1.35
2	SA	655	A	C5-C4	-5.28	1.35	1.38
2	SA	962	C	C4'-O4'	-5.28	1.38	1.45
2	SA	1493	A	C5-C4	5.28	1.42	1.38
4	S2	28	U	O3'-P	-5.28	1.54	1.61
26	LA	250	G	C6-O6	-5.28	1.19	1.24
26	LA	326	G	C5-C4	-5.28	1.34	1.38
26	LA	780	G	C3'-O3'	5.28	1.49	1.42
26	LA	1188	U	N1-C6	-5.28	1.33	1.38
26	LA	1488	C	N3-C4	-5.28	1.30	1.33
26	LA	2031	A	C5-C4	-5.28	1.35	1.38
26	LA	2034	U	C4-C5	-5.28	1.38	1.43
26	LA	2389	G	C5'-C4'	5.28	1.57	1.51
26	LA	2888	C	O3'-P	-5.28	1.54	1.61
44	LF	186	VAL	CA-CB	-5.28	1.43	1.54
2	SA	746	A	C5'-C4'	5.28	1.57	1.51
4	S2	69	C	C2'-C1'	-5.28	1.47	1.53
26	LA	433	C	C5-C6	5.28	1.38	1.34
26	LA	468	G	N9-C4	-5.28	1.33	1.38
26	LA	670	A	C5-C6	-5.28	1.36	1.41
26	LA	1216	G	N9-C4	5.28	1.42	1.38
26	LA	1505	A	C1'-N9	-5.28	1.39	1.46
26	LA	2473	U	C3'-C2'	5.28	1.58	1.52
33	LZ	77	TYR	CD2-CE2	5.28	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	299	G	C2-N2	-5.28	1.29	1.34
2	SA	1141	C	O4'-C1'	5.28	1.48	1.41
26	LA	1376	C	C3'-C2'	-5.28	1.47	1.52
26	LA	1449	G	C2'-C1'	-5.28	1.47	1.53
26	LA	1755	A	C8-N7	5.28	1.35	1.31
26	LA	1849	G	O3'-P	-5.28	1.54	1.61
26	LA	2121	G	N9-C8	5.28	1.41	1.37
26	LA	2127	G	O3'-P	-5.28	1.54	1.61
56	LR	43	GLU	CG-CD	-5.28	1.44	1.51
2	SA	475	C	P-O5'	-5.28	1.54	1.59
2	SA	624	C	C3'-C2'	-5.28	1.47	1.52
2	SA	1458	G	C1'-N9	-5.28	1.39	1.46
4	S2	60	A	N3-C4	5.28	1.38	1.34
26	LA	21	A	N1-C2	-5.28	1.29	1.34
26	LA	1527	G	C6-N1	-5.28	1.35	1.39
26	LA	1794	A	C6-N1	5.28	1.39	1.35
26	LA	2304	G	C2'-C1'	-5.28	1.47	1.53
26	LA	2706	A	C6-N6	5.28	1.38	1.33
26	LA	2867	G	C5-C4	-5.28	1.34	1.38
26	LA	2868	A	C5-C4	-5.28	1.35	1.38
57	LS	46	TYR	CG-CD2	-5.28	1.32	1.39
2	SA	124	C	C5'-C4'	5.27	1.57	1.51
2	SA	173	U	C5'-C4'	5.27	1.57	1.51
9	SI	127	SER	CA-CB	5.27	1.60	1.52
26	LA	494	G	N7-C5	5.27	1.42	1.39
26	LA	602	A	N9-C4	-5.27	1.34	1.37
26	LA	1155	A	C1'-N9	-5.27	1.39	1.46
26	LA	1740	G	N3-C4	-5.27	1.31	1.35
2	SA	313	A	C8-N7	-5.27	1.27	1.31
2	SA	445	G	C2'-O2'	-5.27	1.34	1.41
2	SA	1282	C	C3'-O3'	5.27	1.49	1.42
4	S2	11	A	N9-C8	-5.27	1.33	1.37
25	LB	4	C	O4'-C1'	-5.27	1.34	1.41
25	LB	25	U	N1-C6	5.27	1.42	1.38
25	LB	72	G	P-O5'	5.27	1.65	1.59
26	LA	353	C	N1-C2	-5.27	1.34	1.40
26	LA	531	C	O3'-P	-5.27	1.54	1.61
26	LA	1041	G	N9-C8	-5.27	1.34	1.37
26	LA	1715	G	C2-N2	-5.27	1.29	1.34
26	LA	2593	U	C4-C5	-5.27	1.38	1.43
26	LA	2714	G	C2'-C1'	-5.27	1.47	1.53
2	SA	98	A	C4'-C3'	-5.27	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1228	C	C3'-O3'	5.27	1.49	1.42
26	LA	26	G	C4'-C3'	5.27	1.58	1.53
26	LA	465	G	N9-C8	-5.27	1.34	1.37
26	LA	1833	C	C4'-O4'	-5.27	1.38	1.45
2	SA	126	G	C2-N2	-5.27	1.29	1.34
2	SA	354	G	C4'-C3'	-5.27	1.47	1.52
2	SA	479	U	N1-C6	-5.27	1.33	1.38
2	SA	488	C	N3-C4	5.27	1.37	1.33
2	SA	639	G	O3'-P	-5.27	1.54	1.61
26	LA	701	G	C8-N7	5.27	1.34	1.30
26	LA	1558	C	N1-C2	-5.27	1.34	1.40
26	LA	1709	U	P-O5'	-5.27	1.54	1.59
26	LA	1925	C	C2'-C1'	-5.27	1.47	1.53
26	LA	2675	A	N9-C8	5.27	1.42	1.37
26	LA	2878	U	N3-C4	-5.27	1.33	1.38
52	LO	8	LYS	N-CA	-5.27	1.35	1.46
2	SA	3	A	C2'-C1'	-5.27	1.47	1.53
2	SA	192	A	N9-C4	-5.27	1.34	1.37
2	SA	282	A	N1-C2	-5.27	1.29	1.34
2	SA	1099	G	O3'-P	-5.27	1.54	1.61
11	SK	126	ARG	CZ-NH1	-5.27	1.26	1.33
26	LA	195	A	N9-C8	5.27	1.42	1.37
26	LA	567	U	C5'-C4'	5.27	1.57	1.51
26	LA	614	A	O4'-C1'	5.27	1.48	1.41
26	LA	687	C	C2'-C1'	-5.27	1.47	1.53
26	LA	1592	C	C4-N4	5.27	1.38	1.33
26	LA	1898	U	C2'-C1'	-5.27	1.47	1.53
26	LA	1930	G	C6-N1	5.27	1.43	1.39
26	LA	1959	G	P-O5'	-5.27	1.54	1.59
26	LA	2505	G	N3-C4	5.27	1.39	1.35
26	LA	2628	C	C3'-C2'	-5.27	1.47	1.52
26	LA	2761	A	C3'-O3'	5.27	1.49	1.42
26	LA	2846	G	C4'-O4'	5.27	1.52	1.45
2	SA	161	A	P-O5'	5.27	1.65	1.59
2	SA	1196	A	C3'-O3'	5.27	1.49	1.42
26	LA	1043	C	C5-C6	-5.27	1.30	1.34
26	LA	1183	U	P-O5'	5.27	1.65	1.59
26	LA	1364	G	N9-C4	-5.27	1.33	1.38
26	LA	2566	A	N9-C8	-5.27	1.33	1.37
26	LA	2659	G	C5-C4	-5.27	1.34	1.38
2	SA	923	A	N3-C4	5.26	1.38	1.34
2	SA	1033	G	C5-C6	-5.26	1.37	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1151	A	C2'-C1'	-5.26	1.47	1.53
2	SA	1260	G	C6-N1	-5.26	1.35	1.39
26	LA	610	C	C4-N4	-5.26	1.29	1.33
26	LA	1399	C	C2'-C1'	-5.26	1.47	1.53
26	LA	1591	A	C5'-C4'	5.26	1.57	1.51
26	LA	1628	G	C5-C4	-5.26	1.34	1.38
26	LA	2082	A	C4'-O4'	5.26	1.52	1.45
26	LA	2688	G	O3'-P	-5.26	1.54	1.61
26	LA	1245	G	O4'-C1'	5.26	1.48	1.41
26	LA	1560	G	N9-C4	5.26	1.42	1.38
26	LA	1645	G	C3'-O3'	5.26	1.49	1.42
2	SA	903	G	C3'-O3'	5.26	1.49	1.42
26	LA	389	G	N9-C4	-5.26	1.33	1.38
26	LA	445	C	O3'-P	-5.26	1.54	1.61
26	LA	896	A	C6-N6	-5.26	1.29	1.33
26	LA	1494	A	N7-C5	5.26	1.42	1.39
26	LA	1919	A	C6-N6	5.26	1.38	1.33
26	LA	2169	A	N7-C5	-5.26	1.36	1.39
26	LA	2742	G	C5-C6	5.26	1.47	1.42
2	SA	1344	C	N1-C6	-5.26	1.33	1.37
2	SA	1385	G	C5-C4	5.26	1.42	1.38
4	S2	32	G	N9-C4	-5.26	1.33	1.38
26	LA	199	A	O3'-P	-5.26	1.54	1.61
26	LA	406	G	P-O5'	-5.26	1.54	1.59
26	LA	1925	C	N1-C6	5.26	1.40	1.37
26	LA	2418	A	N9-C8	-5.26	1.33	1.37
26	LA	2505	G	O4'-C1'	5.26	1.48	1.41
26	LA	2734	A	N9-C8	5.26	1.42	1.37
53	LP	55	ALA	N-CA	-5.26	1.35	1.46
2	SA	186	C	O3'-P	-5.26	1.54	1.61
2	SA	1119	C	C2-N3	5.26	1.40	1.35
25	LB	59	A	C4'-C3'	5.26	1.58	1.53
25	LB	98	G	C4'-O4'	5.26	1.52	1.45
2	SA	281	G	C2-N3	-5.26	1.28	1.32
2	SA	1185	G	C5'-C4'	5.26	1.57	1.51
2	SA	1331	G	O3'-P	-5.26	1.54	1.61
18	SB	77	GLU	CD-OE2	5.26	1.31	1.25
25	LB	64	G	C2'-C1'	-5.26	1.47	1.53
26	LA	87	U	C2'-C1'	-5.26	1.47	1.53
26	LA	257	C	N1-C2	-5.26	1.34	1.40
26	LA	1090	A	C4'-C3'	5.26	1.58	1.53
26	LA	1111	A	C2'-C1'	-5.26	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1202	G	C8-N7	5.26	1.34	1.30
26	LA	1461	C	C4-C5	5.26	1.47	1.43
26	LA	1565	C	C2-N3	-5.26	1.31	1.35
26	LA	2373	G	P-O5'	-5.26	1.54	1.59
2	SA	590	U	P-O5'	-5.25	1.54	1.59
2	SA	674	G	C5-C6	-5.25	1.37	1.42
2	SA	688	G	C2-N2	-5.25	1.29	1.34
2	SA	695	A	N7-C5	-5.25	1.36	1.39
4	S2	77	A	C5'-C4'	5.25	1.57	1.51
26	LA	1672	A	N1-C2	5.25	1.39	1.34
26	LA	2004	G	C2'-C1'	-5.25	1.47	1.53
26	LA	2331	G	C4'-C3'	5.25	1.58	1.53
26	LA	2662	A	N9-C8	5.25	1.42	1.37
26	LA	2775	G	N3-C4	-5.25	1.31	1.35
2	SA	53	A	P-O5'	5.25	1.65	1.59
2	SA	325	A	C5-C4	-5.25	1.35	1.38
2	SA	1051	C	N3-C4	5.25	1.37	1.33
2	SA	1197	A	P-OP1	5.25	1.57	1.49
2	SA	1531	A	C2'-O2'	-5.25	1.34	1.41
26	LA	1073	A	N7-C5	5.25	1.42	1.39
26	LA	1258	U	C4-O4	-5.25	1.19	1.23
26	LA	1315	C	C4'-C3'	-5.25	1.47	1.52
26	LA	1477	A	C2'-O2'	5.25	1.48	1.41
26	LA	1843	C	O4'-C1'	-5.25	1.34	1.41
26	LA	2637	U	N1-C6	-5.25	1.33	1.38
2	SA	457	G	C4'-O4'	5.25	1.52	1.45
2	SA	1368	A	C2'-C1'	-5.25	1.47	1.53
2	SA	1418	A	N3-C4	-5.25	1.31	1.34
26	LA	8	C	P-O5'	-5.25	1.54	1.59
26	LA	350	G	C2'-O2'	5.25	1.48	1.41
26	LA	419	U	P-O5'	-5.25	1.54	1.59
2	SA	457	G	C5-C6	-5.25	1.37	1.42
2	SA	561	U	C3'-C2'	5.25	1.58	1.52
2	SA	847	G	C5-C4	5.25	1.42	1.38
2	SA	1318	A	O4'-C1'	5.25	1.48	1.41
2	SA	1510	C	C2'-O2'	-5.25	1.34	1.41
26	LA	1230	A	C3'-C2'	-5.25	1.47	1.52
26	LA	1546	G	N9-C8	-5.25	1.34	1.37
26	LA	1868	C	P-O5'	-5.25	1.54	1.59
26	LA	2083	G	C3'-C2'	-5.25	1.47	1.52
26	LA	2508	G	C5'-C4'	5.25	1.57	1.51
2	SA	604	G	O4'-C1'	-5.25	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1082	A	N1-C2	-5.25	1.29	1.34
2	SA	1223	C	C2-N3	5.25	1.40	1.35
4	S2	42	C	N1-C6	-5.25	1.34	1.37
24	S3	508	SER	C-N	5.25	1.42	1.33
26	LA	823	C	C4-N4	-5.25	1.29	1.33
26	LA	1219	U	P-O5'	-5.25	1.54	1.59
26	LA	1340	U	C4'-O4'	-5.25	1.38	1.45
26	LA	1843	C	P-O5'	-5.25	1.54	1.59
26	LA	2823	A	P-O5'	-5.25	1.54	1.59
56	LR	26	GLU	CD-OE1	5.25	1.31	1.25
2	SA	982	U	C4-C5	-5.25	1.38	1.43
2	SA	1001	C	C2'-C1'	-5.25	1.47	1.53
2	SA	1266	G	C6-O6	-5.25	1.19	1.24
2	SA	1508	A	N7-C5	-5.25	1.36	1.39
6	SU	30	GLU	CD-OE2	5.25	1.31	1.25
26	LA	179	C	C4'-C3'	-5.25	1.47	1.52
26	LA	529	A	N3-C4	-5.25	1.31	1.34
26	LA	880	G	C2'-C1'	-5.25	1.47	1.53
26	LA	908	C	C4'-C3'	-5.25	1.47	1.52
26	LA	977	G	C8-N7	5.25	1.34	1.30
26	LA	1048	A	N3-C4	-5.25	1.31	1.34
26	LA	1084	A	N9-C8	5.25	1.42	1.37
26	LA	1376	C	O3'-P	-5.25	1.54	1.61
26	LA	1679	A	C5-C6	-5.25	1.36	1.41
26	LA	1823	G	C3'-O3'	5.25	1.49	1.42
26	LA	1988	G	C8-N7	5.25	1.34	1.30
2	SA	309	A	C8-N7	-5.25	1.27	1.31
2	SA	1393	U	O3'-P	-5.25	1.54	1.61
26	LA	451	U	O3'-P	-5.25	1.54	1.61
26	LA	2487	G	C6-N1	5.25	1.43	1.39
26	LA	2639	A	C4'-O4'	-5.25	1.38	1.45
2	SA	120	A	C5'-C4'	5.24	1.57	1.51
2	SA	131	A	N9-C4	-5.24	1.34	1.37
2	SA	260	G	C2-N3	5.24	1.36	1.32
2	SA	404	G	N1-C2	-5.24	1.33	1.37
2	SA	615	G	C8-N7	-5.24	1.27	1.30
2	SA	1002	G	C5-C4	-5.24	1.34	1.38
2	SA	1054	C	C2-O2	-5.24	1.19	1.24
2	SA	1058	G	N9-C8	-5.24	1.34	1.37
2	SA	1222	G	C6-N1	-5.24	1.35	1.39
2	SA	1417	G	C4'-C3'	5.24	1.58	1.53
5	ST	35	TYR	CG-CD2	5.24	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	55	U	C3'-C2'	-5.24	1.47	1.52
25	LB	95	U	C4-C5	-5.24	1.38	1.43
26	LA	999	U	O3'-P	-5.24	1.54	1.61
26	LA	1550	C	C1'-N1	5.24	1.56	1.48
26	LA	2468	A	C5-C4	-5.24	1.35	1.38
26	LA	2495	G	C6-O6	-5.24	1.19	1.24
2	SA	218	U	P-O5'	-5.24	1.54	1.59
2	SA	324	G	O3'-P	-5.24	1.54	1.61
2	SA	587	G	O4'-C1'	-5.24	1.34	1.41
2	SA	878	A	N1-C2	-5.24	1.29	1.34
2	SA	1030	U	C3'-C2'	5.24	1.58	1.52
2	SA	1058	G	C4'-C3'	-5.24	1.47	1.52
2	SA	1528	U	C2'-C1'	-5.24	1.47	1.53
26	LA	811	U	C2-O2	5.24	1.27	1.22
26	LA	1236	G	C5-C4	5.24	1.42	1.38
26	LA	1430	G	N9-C8	-5.24	1.34	1.37
26	LA	1709	U	C1'-N1	-5.24	1.39	1.46
26	LA	2533	U	C2'-C1'	-5.24	1.47	1.53
26	LA	2751	G	N3-C4	-5.24	1.31	1.35
26	LA	2777	G	C5-C4	-5.24	1.34	1.38
35	L1	10	ARG	CD-NE	5.24	1.55	1.46
2	SA	149	A	C3'-O3'	5.24	1.49	1.42
2	SA	182	A	C8-N7	-5.24	1.27	1.31
2	SA	222	C	C2-N3	5.24	1.40	1.35
2	SA	535	A	C5'-C4'	5.24	1.57	1.51
2	SA	716	A	C5'-C4'	5.24	1.57	1.51
2	SA	1309	G	C8-N7	-5.24	1.27	1.30
2	SA	1476	A	N7-C5	-5.24	1.36	1.39
24	S3	385	ILE	CA-C	-5.24	1.39	1.52
26	LA	239	C	N1-C6	-5.24	1.34	1.37
26	LA	791	C	C5-C6	-5.24	1.30	1.34
26	LA	833	A	C4'-C3'	-5.24	1.47	1.52
26	LA	899	A	C2'-C1'	-5.24	1.47	1.53
26	LA	1626	A	C2'-O2'	-5.24	1.34	1.41
26	LA	1637	A	N7-C5	5.24	1.42	1.39
26	LA	1876	A	O3'-P	-5.24	1.54	1.61
26	LA	2747	G	N7-C5	-5.24	1.36	1.39
2	SA	141	G	C2'-C1'	5.24	1.59	1.53
2	SA	270	A	C3'-C2'	5.24	1.58	1.52
2	SA	773	G	C4'-C3'	5.24	1.58	1.53
2	SA	1348	U	O3'-P	-5.24	1.54	1.61
25	LB	58	A	N9-C4	-5.24	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	100	G	C2'-C1'	-5.24	1.47	1.53
26	LA	482	A	C5'-C4'	5.24	1.57	1.51
26	LA	538	A	N9-C4	-5.24	1.34	1.37
26	LA	2330	G	C2-N2	-5.24	1.29	1.34
26	LA	2472	G	C1'-N9	-5.24	1.39	1.46
2	SA	45	G	C5-C6	-5.24	1.37	1.42
4	S2	28	U	C4'-C3'	-5.24	1.47	1.52
26	LA	189	G	N9-C4	-5.24	1.33	1.38
26	LA	595	C	C5'-C4'	5.24	1.57	1.51
26	LA	878	A	C5-C4	-5.24	1.35	1.38
26	LA	1481	U	O4'-C1'	5.24	1.48	1.41
26	LA	1766	G	C2-N3	5.24	1.36	1.32
26	LA	2227	A	C4'-C3'	5.24	1.58	1.53
2	SA	554	A	P-O5'	-5.24	1.54	1.59
2	SA	844	G	N1-C2	-5.24	1.33	1.37
2	SA	1026	G	N9-C4	5.24	1.42	1.38
2	SA	1289	A	N1-C2	-5.24	1.29	1.34
3	S1	21	U	C4'-O4'	5.24	1.52	1.45
4	S2	20	G	C1'-N9	-5.24	1.39	1.46
19	SC	95	GLY	CA-C	-5.24	1.43	1.51
26	LA	126	A	N9-C8	-5.24	1.33	1.37
26	LA	390	U	C2-N3	5.24	1.41	1.37
26	LA	796	C	C4-C5	5.24	1.47	1.43
26	LA	954	G	N1-C2	-5.24	1.33	1.37
26	LA	1523	U	C4'-C3'	5.24	1.58	1.53
26	LA	1642	G	C1'-N9	-5.24	1.39	1.46
26	LA	1782	U	O3'-P	-5.24	1.54	1.61
26	LA	2362	C	C4'-O4'	-5.24	1.38	1.45
26	LA	2453	A	C5'-C4'	5.24	1.57	1.51
27	LD	216	ARG	C-N	-5.24	1.24	1.34
2	SA	424	G	C2'-C1'	-5.23	1.47	1.53
2	SA	601	G	C4'-O4'	5.23	1.52	1.45
2	SA	1099	G	N9-C4	-5.23	1.33	1.38
26	LA	666	A	C2'-C1'	-5.23	1.47	1.53
26	LA	756	A	C1'-N9	-5.23	1.39	1.46
26	LA	1175	A	C6-N1	5.23	1.39	1.35
26	LA	1617	C	C4-N4	-5.23	1.29	1.33
26	LA	2016	U	C4'-O4'	-5.23	1.38	1.45
26	LA	2040	G	N7-C5	-5.23	1.36	1.39
26	LA	2114	A	C3'-C2'	-5.23	1.47	1.52
26	LA	2236	U	C1'-N1	5.23	1.56	1.48
2	SA	970	C	C4'-C3'	5.23	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	26	C	C3'-O3'	5.23	1.49	1.42
26	LA	303	G	O4'-C1'	5.23	1.48	1.41
26	LA	1310	G	C2-N2	-5.23	1.29	1.34
26	LA	1408	G	C6-O6	-5.23	1.19	1.24
26	LA	1415	U	N1-C2	-5.23	1.33	1.38
26	LA	2074	U	C2'-C1'	-5.23	1.47	1.53
26	LA	2109	U	C2-O2	5.23	1.27	1.22
26	LA	2237	G	C4'-O4'	-5.23	1.38	1.45
54	LM	70	ARG	CZ-NH1	-5.23	1.26	1.33
2	SA	202	G	C2'-C1'	-5.23	1.47	1.53
2	SA	550	G	N1-C2	5.23	1.42	1.37
2	SA	884	U	N3-C4	-5.23	1.33	1.38
2	SA	1234	C	N1-C6	5.23	1.40	1.37
26	LA	392	U	C4'-O4'	5.23	1.52	1.45
26	LA	429	A	N7-C5	-5.23	1.36	1.39
26	LA	430	A	C2'-C1'	-5.23	1.47	1.53
26	LA	840	C	C5-C6	-5.23	1.30	1.34
26	LA	1254	A	N3-C4	5.23	1.38	1.34
26	LA	1683	U	C4-C5	5.23	1.48	1.43
26	LA	1745	A	N9-C8	5.23	1.42	1.37
26	LA	2069	G	C6-N1	5.23	1.43	1.39
2	SA	131	A	O3'-P	5.23	1.67	1.61
2	SA	862	C	C5'-C4'	5.23	1.57	1.51
2	SA	988	G	C2'-O2'	5.23	1.48	1.41
25	LB	94	A	C3'-C2'	-5.23	1.47	1.52
26	LA	12	U	N1-C2	-5.23	1.33	1.38
26	LA	313	G	C5-C4	-5.23	1.34	1.38
26	LA	997	G	C5-C4	-5.23	1.34	1.38
26	LA	2300	C	C4-N4	-5.23	1.29	1.33
26	LA	2574	G	C4'-O4'	5.23	1.52	1.45
26	LA	2759	G	N9-C8	-5.23	1.34	1.37
2	SA	1016	A	C3'-O3'	5.23	1.49	1.42
26	LA	182	A	N7-C5	5.23	1.42	1.39
26	LA	313	G	P-O5'	-5.23	1.54	1.59
26	LA	344	A	N9-C4	5.23	1.41	1.37
26	LA	865	C	C4-C5	-5.23	1.38	1.43
26	LA	1185	G	C2'-C1'	5.23	1.59	1.53
26	LA	1200	C	N3-C4	-5.23	1.30	1.33
26	LA	1636	U	O3'-P	-5.23	1.54	1.61
26	LA	1770	G	P-O5'	5.23	1.65	1.59
26	LA	1940	U	C2-N3	-5.23	1.34	1.37
26	LA	1989	G	C8-N7	5.23	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2500	U	O4'-C1'	-5.23	1.34	1.41
26	LA	2754	U	C4-C5	5.23	1.48	1.43
2	SA	798	U	P-O5'	-5.23	1.54	1.59
2	SA	817	C	C3'-O3'	5.23	1.49	1.42
2	SA	851	G	C5-C6	5.23	1.47	1.42
24	S3	431	GLY	N-CA	5.23	1.53	1.46
25	LB	116	G	C3'-C2'	5.23	1.58	1.52
26	LA	40	U	N3-C4	-5.23	1.33	1.38
26	LA	1884	G	C4'-O4'	-5.23	1.38	1.45
2	SA	367	U	N3-C4	-5.22	1.33	1.38
2	SA	437	U	C2-N3	5.22	1.41	1.37
2	SA	578	C	O5'-C5'	5.22	1.52	1.44
2	SA	1072	G	C6-O6	5.22	1.28	1.24
26	LA	184	C	C4-C5	-5.22	1.38	1.43
26	LA	243	U	C5'-C4'	5.22	1.57	1.51
26	LA	737	C	C4-C5	-5.22	1.38	1.43
26	LA	1096	A	N1-C2	5.22	1.39	1.34
26	LA	1370	C	C3'-C2'	-5.22	1.47	1.52
26	LA	2133	G	C3'-C2'	5.22	1.58	1.52
26	LA	2333	A	O4'-C1'	-5.22	1.34	1.41
26	LA	2829	A	C5'-C4'	5.22	1.57	1.51
56	LR	35	SER	CA-CB	5.22	1.60	1.52
2	SA	58	C	C2-N3	-5.22	1.31	1.35
2	SA	137	U	C3'-O3'	5.22	1.49	1.42
2	SA	549	C	P-O5'	-5.22	1.54	1.59
2	SA	573	A	C3'-C2'	5.22	1.58	1.52
2	SA	1256	A	C6-N1	5.22	1.39	1.35
2	SA	1416	G	C2-N3	-5.22	1.28	1.32
26	LA	160	A	O3'-P	-5.22	1.54	1.61
26	LA	759	G	C2-N3	-5.22	1.28	1.32
26	LA	805	G	O3'-P	-5.22	1.54	1.61
26	LA	877	A	N9-C4	5.22	1.41	1.37
26	LA	1187	G	N7-C5	-5.22	1.36	1.39
26	LA	1345	C	C3'-C2'	-5.22	1.47	1.52
26	LA	2335	A	C6-N6	5.22	1.38	1.33
26	LA	2811	G	C2-N2	-5.22	1.29	1.34
26	LA	2854	G	N9-C8	5.22	1.41	1.37
27	LD	117	SER	CA-CB	5.22	1.60	1.52
2	SA	673	A	N9-C4	-5.22	1.34	1.37
2	SA	743	A	C3'-C2'	-5.22	1.47	1.52
26	LA	1096	A	N9-C4	-5.22	1.34	1.37
2	SA	237	G	C2-N2	-5.22	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1270	G	C2'-C1'	-5.22	1.47	1.53
2	SA	1307	U	N1-C6	5.22	1.42	1.38
3	S1	59	A	C4'-C3'	-5.22	1.47	1.52
26	LA	306	U	C2-O2	5.22	1.27	1.22
26	LA	558	U	N1-C2	-5.22	1.33	1.38
26	LA	930	G	C2-N3	5.22	1.36	1.32
26	LA	979	A	C5'-C4'	-5.22	1.45	1.51
26	LA	2024	G	C2-N2	-5.22	1.29	1.34
26	LA	2444	G	C2-N3	5.22	1.36	1.32
2	SA	651	C	C5-C6	5.22	1.38	1.34
2	SA	690	G	N3-C4	-5.22	1.31	1.35
2	SA	1220	G	C2'-C1'	-5.22	1.47	1.53
2	SA	1499	A	C6-N6	-5.22	1.29	1.33
26	LA	55	G	C5-C4	-5.22	1.34	1.38
26	LA	185	G	C5-C6	-5.22	1.37	1.42
26	LA	1656	C	C3'-O3'	5.22	1.49	1.42
26	LA	1658	C	N1-C6	-5.22	1.34	1.37
26	LA	1941	C	O3'-P	-5.22	1.54	1.61
2	SA	424	G	N3-C4	-5.22	1.31	1.35
3	S1	47	C	C4-C5	-5.22	1.38	1.43
25	LB	38	C	P-O5'	-5.22	1.54	1.59
26	LA	73	A	C5-C4	5.22	1.42	1.38
26	LA	551	G	N7-C5	-5.22	1.36	1.39
26	LA	979	A	N3-C4	-5.22	1.31	1.34
26	LA	1460	U	C5-C6	-5.22	1.29	1.34
26	LA	1806	C	C4'-C3'	5.22	1.58	1.53
26	LA	2440	C	C4'-C3'	5.22	1.58	1.53
2	SA	915	A	N9-C8	5.21	1.42	1.37
2	SA	1151	A	C6-N6	5.21	1.38	1.33
20	SD	19	PHE	CE1-CZ	5.21	1.47	1.37
26	LA	435	C	N1-C6	5.21	1.40	1.37
26	LA	514	A	N1-C2	-5.21	1.29	1.34
26	LA	519	U	C4-C5	5.21	1.48	1.43
26	LA	592	A	C3'-C2'	-5.21	1.47	1.52
26	LA	619	G	C8-N7	-5.21	1.27	1.30
26	LA	673	C	C2-N3	-5.21	1.31	1.35
26	LA	734	A	C8-N7	-5.21	1.27	1.31
26	LA	1270	C	C2'-C1'	-5.21	1.47	1.53
26	LA	1410	G	N7-C5	-5.21	1.36	1.39
26	LA	1508	A	C8-N7	5.21	1.35	1.31
26	LA	1589	U	P-O5'	-5.21	1.54	1.59
26	LA	2285	C	C2'-C1'	-5.21	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2593	U	C2-N3	-5.21	1.34	1.37
2	SA	621	A	C3'-O3'	5.21	1.49	1.42
2	SA	1505	G	C1'-N9	-5.21	1.39	1.46
26	LA	42	A	P-O5'	-5.21	1.54	1.59
26	LA	577	G	C3'-C2'	-5.21	1.47	1.52
26	LA	770	G	C5'-C4'	5.21	1.57	1.51
26	LA	1097	U	C4'-C3'	5.21	1.58	1.53
26	LA	1145	C	C2-N3	-5.21	1.31	1.35
26	LA	1212	G	N7-C5	5.21	1.42	1.39
26	LA	2679	A	N1-C2	5.21	1.39	1.34
45	LG	133	GLU	CD-OE2	5.21	1.31	1.25
2	SA	325	A	C5-C6	-5.21	1.36	1.41
2	SA	508	U	C2'-O2'	-5.21	1.34	1.41
2	SA	722	G	C2-N3	-5.21	1.28	1.32
2	SA	1357	A	C6-N6	-5.21	1.29	1.33
2	SA	1442	G	O3'-P	-5.21	1.54	1.61
4	S2	72	C	N1-C6	5.21	1.40	1.37
26	LA	202	U	C4-O4	5.21	1.27	1.23
26	LA	266	G	N1-C2	5.21	1.42	1.37
26	LA	426	C	C2'-O2'	5.21	1.48	1.41
26	LA	651	G	C5-C4	-5.21	1.34	1.38
26	LA	716	A	C6-N6	5.21	1.38	1.33
26	LA	889	C	C2-O2	5.21	1.29	1.24
26	LA	1569	A	C5-C4	-5.21	1.35	1.38
26	LA	2435	A	C4'-O4'	5.21	1.52	1.45
26	LA	2487	G	C4'-C3'	-5.21	1.47	1.52
7	SG	87	PRO	N-CD	-5.21	1.40	1.47
26	LA	1020	A	C8-N7	-5.21	1.27	1.31
26	LA	1511	G	N9-C8	-5.21	1.34	1.37
26	LA	2692	G	C5-C6	-5.21	1.37	1.42
26	LA	2791	G	C2-N2	-5.21	1.29	1.34
2	SA	29	U	N1-C2	-5.21	1.33	1.38
2	SA	457	G	N9-C8	-5.21	1.34	1.37
2	SA	471	U	C2'-C1'	-5.21	1.47	1.53
2	SA	1139	G	C4'-O4'	5.21	1.52	1.45
2	SA	1228	C	N1-C6	-5.21	1.34	1.37
2	SA	1377	A	N7-C5	-5.21	1.36	1.39
2	SA	1454	G	C5-C4	-5.21	1.34	1.38
26	LA	685	A	C1'-N9	-5.21	1.39	1.46
26	LA	995	C	C5'-C4'	5.21	1.57	1.51
26	LA	1054	A	N3-C4	5.21	1.38	1.34
26	LA	1163	G	C2'-O2'	-5.21	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1951	U	O3'-P	-5.21	1.54	1.61
26	LA	2252	G	C5'-C4'	5.21	1.57	1.51
2	SA	130	A	C8-N7	-5.21	1.27	1.31
2	SA	293	G	C8-N7	5.21	1.34	1.30
2	SA	702	A	C1'-N9	-5.21	1.39	1.46
2	SA	703	G	C2'-C1'	-5.21	1.47	1.53
2	SA	1053	G	C3'-C2'	-5.21	1.47	1.52
2	SA	1101	A	O4'-C1'	-5.21	1.34	1.41
2	SA	1391	U	N1-C6	5.21	1.42	1.38
26	LA	491	G	N9-C8	-5.21	1.34	1.37
26	LA	750	A	N9-C4	-5.21	1.34	1.37
26	LA	955	U	C1'-N1	5.21	1.56	1.48
26	LA	1525	A	N9-C4	-5.21	1.34	1.37
26	LA	1712	U	C4-C5	-5.21	1.38	1.43
26	LA	2069	G	N3-C4	-5.21	1.31	1.35
26	LA	2895	G	C3'-O3'	5.21	1.49	1.42
2	SA	1028	C	C5'-C4'	5.21	1.57	1.51
2	SA	2	A	N9-C8	5.20	1.42	1.37
2	SA	3	A	C6-N1	-5.20	1.31	1.35
2	SA	89	U	N1-C6	5.20	1.42	1.38
2	SA	407	U	C4-C5	-5.20	1.38	1.43
2	SA	519	C	C4'-O4'	-5.20	1.38	1.45
2	SA	763	G	N9-C8	-5.20	1.34	1.37
2	SA	1002	G	N7-C5	-5.20	1.36	1.39
2	SA	1104	G	C8-N7	5.20	1.34	1.30
2	SA	1340	A	C5-C4	-5.20	1.35	1.38
2	SA	1374	A	O3'-P	-5.20	1.54	1.61
2	SA	1383	C	C4-N4	-5.20	1.29	1.33
2	SA	1413	A	C2'-C1'	-5.20	1.47	1.53
2	SA	1428	A	C6-N1	-5.20	1.31	1.35
26	LA	282	A	N9-C8	-5.20	1.33	1.37
26	LA	372	G	C6-N1	-5.20	1.35	1.39
26	LA	562	U	C4'-C3'	5.20	1.58	1.53
26	LA	2637	U	C4-O4	-5.20	1.19	1.23
26	LA	2718	G	C4'-C3'	-5.20	1.47	1.52
2	SA	83	C	C2-O2	5.20	1.29	1.24
2	SA	482	A	C8-N7	-5.20	1.27	1.31
2	SA	1332	A	C6-N1	-5.20	1.31	1.35
2	SA	1398	A	C5-C4	-5.20	1.35	1.38
26	LA	749	A	N1-C2	-5.20	1.29	1.34
26	LA	983	A	C5-C4	-5.20	1.35	1.38
26	LA	1296	G	C4'-C3'	-5.20	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	P-O5'	-5.20	1.54	1.59
40	L4	50	GLU	N-CA	5.20	1.56	1.46
2	SA	1263	C	P-O5'	5.20	1.65	1.59
2	SA	1321	U	C2'-C1'	-5.20	1.47	1.53
2	SA	1492	A	O5'-C5'	5.20	1.52	1.44
26	LA	168	G	N1-C2	-5.20	1.33	1.37
26	LA	1163	G	C5'-C4'	5.20	1.57	1.51
26	LA	1264	A	N9-C8	-5.20	1.33	1.37
26	LA	1403	A	O3'-P	-5.20	1.54	1.61
26	LA	1609	A	C6-N1	5.20	1.39	1.35
26	LA	1661	G	C5-C6	-5.20	1.37	1.42
26	LA	1909	C	C5-C6	5.20	1.38	1.34
26	LA	2076	U	N1-C2	-5.20	1.33	1.38
26	LA	2240	U	O3'-P	-5.20	1.54	1.61
26	LA	2749	A	C5'-C4'	5.20	1.57	1.51
2	SA	179	A	N3-C4	5.20	1.38	1.34
2	SA	791	G	N3-C4	-5.20	1.31	1.35
2	SA	937	A	C5'-C4'	5.20	1.57	1.51
2	SA	1148	U	P-O5'	-5.20	1.54	1.59
2	SA	1484	C	N1-C6	-5.20	1.34	1.37
6	SU	32	ARG	CD-NE	5.20	1.55	1.46
21	SE	150	GLU	CD-OE1	5.20	1.31	1.25
25	LB	67	G	N9-C4	-5.20	1.33	1.38
25	LB	88	C	O3'-P	-5.20	1.54	1.61
26	LA	580	U	N1-C6	-5.20	1.33	1.38
26	LA	738	G	O3'-P	-5.20	1.54	1.61
26	LA	750	A	C1'-N9	-5.20	1.39	1.46
26	LA	1150	C	C1'-N1	5.20	1.56	1.48
26	LA	1250	G	O3'-P	-5.20	1.54	1.61
26	LA	1498	C	C5-C6	-5.20	1.30	1.34
26	LA	1500	G	C3'-O3'	5.20	1.49	1.42
26	LA	2484	G	C2-N3	5.20	1.36	1.32
26	LA	2733	A	N9-C4	-5.20	1.34	1.37
26	LA	2867	G	O3'-P	-5.20	1.54	1.61
52	LO	91	TYR	CB-CG	-5.20	1.43	1.51
3	S1	41	A	C2-N3	-5.20	1.28	1.33
4	S2	46	G	C3'-C2'	5.20	1.58	1.52
4	S2	66	C	P-O5'	5.20	1.65	1.59
26	LA	1613	G	C2-N2	-5.20	1.29	1.34
26	LA	1776	G	C3'-C2'	-5.20	1.47	1.52
26	LA	2328	A	P-O5'	5.20	1.65	1.59
26	LA	2762	C	C2'-C1'	-5.20	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	190	A	C5'-C4'	5.20	1.57	1.51
2	SA	605	U	C2-N3	-5.20	1.34	1.37
2	SA	1454	G	C5'-C4'	5.20	1.57	1.51
4	S2	54	G	C6-O6	-5.20	1.19	1.24
24	S3	490	ARG	CD-NE	5.20	1.55	1.46
24	S3	582	TYR	CG-CD1	5.20	1.46	1.39
26	LA	1016	G	C2-N3	-5.20	1.28	1.32
26	LA	1442	U	C3'-O3'	5.20	1.49	1.42
26	LA	1470	A	C6-N1	-5.20	1.31	1.35
26	LA	1611	C	O3'-P	-5.20	1.54	1.61
26	LA	1746	A	C5-C6	-5.20	1.36	1.41
26	LA	2188	U	O3'-P	-5.20	1.54	1.61
26	LA	2281	A	C2'-C1'	-5.20	1.47	1.53
26	LA	2354	C	C4'-O4'	-5.20	1.38	1.45
26	LA	2436	G	O3'-P	-5.20	1.54	1.61
2	SA	901	A	C4'-O4'	5.19	1.52	1.45
2	SA	1106	G	C2-N3	-5.19	1.28	1.32
26	LA	172	A	C3'-O3'	5.19	1.49	1.42
26	LA	454	A	O4'-C1'	-5.19	1.34	1.41
26	LA	1026	G	C3'-O3'	5.19	1.49	1.42
26	LA	1339	G	C2-N2	-5.19	1.29	1.34
26	LA	1792	G	C1'-N9	-5.19	1.39	1.46
26	LA	1991	U	C2'-O2'	-5.19	1.34	1.41
26	LA	2014	A	C2'-C1'	5.19	1.59	1.53
2	SA	913	A	O4'-C1'	-5.19	1.34	1.41
2	SA	1387	G	C8-N7	5.19	1.34	1.30
26	LA	151	C	C1'-N1	-5.19	1.39	1.46
26	LA	284	U	C4-O4	-5.19	1.19	1.23
26	LA	548	G	C6-N1	-5.19	1.35	1.39
26	LA	557	C	O4'-C1'	-5.19	1.34	1.41
26	LA	655	A	C2'-C1'	-5.19	1.47	1.53
26	LA	951	C	P-O5'	-5.19	1.54	1.59
26	LA	1786	A	C5-C4	-5.19	1.35	1.38
26	LA	1910	G	N1-C2	5.19	1.42	1.37
26	LA	2298	A	C4'-O4'	-5.19	1.38	1.45
26	LA	2484	G	C5-C4	-5.19	1.34	1.38
26	LA	2682	A	N3-C4	-5.19	1.31	1.34
26	LA	2880	C	N3-C4	-5.19	1.30	1.33
2	SA	328	C	O3'-P	-5.19	1.54	1.61
2	SA	395	C	N1-C2	5.19	1.45	1.40
2	SA	1001	C	N1-C6	-5.19	1.34	1.37
26	LA	389	G	C6-N1	-5.19	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	798	G	C6-O6	-5.19	1.19	1.24
26	LA	897	C	C4-C5	5.19	1.47	1.43
26	LA	1289	C	C4-C5	-5.19	1.38	1.43
26	LA	1489	C	C2-O2	5.19	1.29	1.24
26	LA	1665	A	O3'-P	-5.19	1.54	1.61
26	LA	1897	G	N7-C5	-5.19	1.36	1.39
26	LA	2553	G	C6-O6	5.19	1.28	1.24
2	SA	542	G	C6-N1	-5.19	1.35	1.39
2	SA	595	A	C5-C4	5.19	1.42	1.38
4	S2	39	A	N7-C5	-5.19	1.36	1.39
26	LA	178	G	N9-C8	-5.19	1.34	1.37
26	LA	884	U	N3-C4	5.19	1.43	1.38
26	LA	1386	C	P-O5'	-5.19	1.54	1.59
26	LA	2690	U	C2'-C1'	-5.19	1.47	1.53
26	LA	2882	A	N3-C4	-5.19	1.31	1.34
27	LD	221	GLY	CA-C	-5.19	1.43	1.51
2	SA	158	G	C2-N2	-5.19	1.29	1.34
2	SA	253	A	N3-C4	-5.19	1.31	1.34
2	SA	847	G	C3'-C2'	-5.19	1.47	1.52
2	SA	851	G	C4'-C3'	-5.19	1.47	1.52
2	SA	968	A	C5-C6	5.19	1.45	1.41
2	SA	1371	G	C5-C4	-5.19	1.34	1.38
2	SA	1539	C	C2-O2	5.19	1.29	1.24
4	S2	75	C	C5'-C4'	5.19	1.57	1.51
25	LB	12	C	O3'-P	-5.19	1.54	1.61
25	LB	91	C	N1-C6	5.19	1.40	1.37
26	LA	414	C	C4-N4	-5.19	1.29	1.33
26	LA	577	G	C2-N3	-5.19	1.28	1.32
26	LA	658	U	C1'-N1	-5.19	1.39	1.46
26	LA	1233	C	C2-N3	-5.19	1.31	1.35
26	LA	1321	A	C3'-O3'	5.19	1.49	1.42
26	LA	1562	U	O3'-P	-5.19	1.54	1.61
26	LA	2028	U	C4'-C3'	-5.19	1.47	1.52
26	LA	2032	G	C6-N1	-5.19	1.35	1.39
26	LA	2093	G	N9-C8	-5.19	1.34	1.37
26	LA	2690	U	O3'-P	-5.19	1.54	1.61
50	LL	44	TYR	CE2-CZ	5.19	1.45	1.38
2	SA	281	G	O3'-P	-5.19	1.54	1.61
2	SA	410	G	C2-N2	-5.19	1.29	1.34
2	SA	577	G	C3'-C2'	-5.19	1.47	1.52
26	LA	1652	A	C5'-C4'	5.19	1.57	1.51
26	LA	2073	C	O3'-P	-5.19	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2777	G	N7-C5	-5.19	1.36	1.39
2	SA	201	G	C4'-O4'	5.18	1.52	1.45
2	SA	271	C	N3-C4	5.18	1.37	1.33
2	SA	371	A	N3-C4	-5.18	1.31	1.34
2	SA	380	G	N7-C5	-5.18	1.36	1.39
2	SA	784	A	C3'-C2'	-5.18	1.47	1.52
2	SA	917	G	C5'-C4'	5.18	1.57	1.51
2	SA	986	U	P-O5'	-5.18	1.54	1.59
2	SA	1179	A	C5-C6	-5.18	1.36	1.41
2	SA	1443	C	O4'-C1'	5.18	1.48	1.41
22	SF	65	GLU	CD-OE1	5.18	1.31	1.25
25	LB	33	G	C5'-C4'	5.18	1.57	1.51
26	LA	13	A	N9-C4	-5.18	1.34	1.37
26	LA	295	G	C8-N7	5.18	1.34	1.30
26	LA	791	C	N1-C6	-5.18	1.34	1.37
26	LA	819	A	C2-N3	5.18	1.38	1.33
26	LA	1093	G	C6-N1	-5.18	1.35	1.39
26	LA	1466	U	O3'-P	-5.18	1.54	1.61
26	LA	1525	A	P-O5'	-5.18	1.54	1.59
26	LA	1817	G	C5-C6	-5.18	1.37	1.42
26	LA	2086	U	N1-C2	-5.18	1.33	1.38
26	LA	2228	G	C6-N1	5.18	1.43	1.39
26	LA	2321	U	C4'-C3'	-5.18	1.47	1.52
26	LA	2440	C	C2-O2	-5.18	1.19	1.24
26	LA	2627	G	O3'-P	-5.18	1.54	1.61
2	SA	26	A	O3'-P	-5.18	1.54	1.61
2	SA	32	A	N7-C5	-5.18	1.36	1.39
2	SA	495	A	N9-C8	-5.18	1.33	1.37
26	LA	636	G	C4'-C3'	-5.18	1.47	1.52
26	LA	785	G	C5-C4	-5.18	1.34	1.38
26	LA	1021	A	N3-C4	-5.18	1.31	1.34
26	LA	1206	G	N9-C8	-5.18	1.34	1.37
26	LA	1365	A	O4'-C1'	5.18	1.48	1.41
26	LA	1705	A	N9-C4	-5.18	1.34	1.37
26	LA	2071	A	C5-C6	-5.18	1.36	1.41
26	LA	2269	G	C2-N2	-5.18	1.29	1.34
26	LA	2643	G	C2'-C1'	-5.18	1.47	1.53
2	SA	356	A	N7-C5	-5.18	1.36	1.39
2	SA	779	C	N3-C4	-5.18	1.30	1.33
2	SA	780	A	N9-C8	-5.18	1.33	1.37
2	SA	867	G	C5-C4	-5.18	1.34	1.38
26	LA	780	G	C5-C6	-5.18	1.37	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	871	U	C5'-C4'	5.18	1.57	1.51
30	LW	36	GLU	CD-OE2	5.18	1.31	1.25
2	SA	228	A	N9-C4	-5.18	1.34	1.37
2	SA	390	U	O4'-C1'	5.18	1.48	1.41
2	SA	574	A	C2'-C1'	-5.18	1.47	1.53
2	SA	683	G	C2-N2	-5.18	1.29	1.34
2	SA	819	A	C8-N7	5.18	1.35	1.31
2	SA	1030	U	C4'-C3'	5.18	1.58	1.53
2	SA	1104	G	N1-C2	-5.18	1.33	1.37
2	SA	1161	C	C5'-C4'	-5.18	1.45	1.51
26	LA	126	A	C1'-N9	5.18	1.56	1.48
26	LA	286	U	N1-C6	-5.18	1.33	1.38
26	LA	318	C	N1-C2	5.18	1.45	1.40
26	LA	1452	G	C6-N1	-5.18	1.35	1.39
26	LA	1455	G	C3'-O3'	5.18	1.49	1.42
26	LA	1735	A	C5-C6	-5.18	1.36	1.41
26	LA	1791	A	C5-C4	5.18	1.42	1.38
26	LA	1962	C	C5'-C4'	5.18	1.57	1.51
26	LA	2364	C	O3'-P	-5.18	1.54	1.61
26	LA	2412	A	C1'-N9	-5.18	1.39	1.46
26	LA	2732	G	N9-C8	-5.18	1.34	1.37
26	LA	2747	G	N9-C4	-5.18	1.33	1.38
26	LA	2755	C	C5'-C4'	5.18	1.57	1.51
26	LA	2844	G	C5-C4	-5.18	1.34	1.38
2	SA	791	G	C5'-C4'	5.18	1.57	1.51
2	SA	913	A	N7-C5	5.18	1.42	1.39
2	SA	937	A	N9-C8	-5.18	1.33	1.37
2	SA	1149	C	C4-N4	-5.18	1.29	1.33
2	SA	1410	A	N1-C2	-5.18	1.29	1.34
26	LA	1403	A	N7-C5	-5.18	1.36	1.39
2	SA	33	A	C8-N7	5.18	1.35	1.31
2	SA	153	C	C5-C6	5.18	1.38	1.34
2	SA	507	C	C3'-C2'	5.18	1.58	1.52
2	SA	560	A	C5-C4	-5.18	1.35	1.38
2	SA	776	G	C2-N3	-5.18	1.28	1.32
2	SA	1041	G	C5-C4	5.18	1.42	1.38
25	LB	54	G	C2'-C1'	-5.18	1.47	1.53
26	LA	118	A	O3'-P	-5.18	1.54	1.61
26	LA	627	A	N3-C4	5.18	1.38	1.34
26	LA	1005	C	C4-N4	-5.18	1.29	1.33
26	LA	1852	U	O4'-C1'	-5.18	1.34	1.41
26	LA	2502	G	C5-C4	5.18	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2567	G	C5-C6	-5.18	1.37	1.42
26	LA	2751	G	C2'-C1'	5.18	1.59	1.53
44	LF	40	ARG	CD-NE	5.18	1.55	1.46
2	SA	171	A	C2'-C1'	5.17	1.59	1.53
2	SA	489	C	C3'-O3'	5.17	1.49	1.42
4	S2	46	G	C5-C4	5.17	1.42	1.38
26	LA	51	G	C2-N2	-5.17	1.29	1.34
26	LA	2001	C	O3'-P	-5.17	1.54	1.61
26	LA	2086	U	O4'-C1'	-5.17	1.34	1.41
26	LA	2418	A	C4'-O4'	5.17	1.52	1.45
26	LA	2873	A	C2'-O2'	-5.17	1.34	1.41
50	LL	92	MET	CG-SD	5.17	1.94	1.81
2	SA	365	U	C2-N3	-5.17	1.34	1.37
2	SA	859	G	N3-C4	-5.17	1.31	1.35
26	LA	648	G	P-O5'	5.17	1.65	1.59
26	LA	769	U	O4'-C1'	-5.17	1.34	1.41
26	LA	962	G	C6-O6	-5.17	1.19	1.24
26	LA	1203	U	O3'-P	-5.17	1.54	1.61
26	LA	1366	A	C3'-C2'	5.17	1.58	1.52
2	SA	111	G	C2-N2	-5.17	1.29	1.34
2	SA	207	C	C2'-C1'	-5.17	1.47	1.53
2	SA	271	C	P-O5'	-5.17	1.54	1.59
2	SA	274	A	N7-C5	-5.17	1.36	1.39
2	SA	291	U	P-O5'	-5.17	1.54	1.59
2	SA	433	G	C4'-O4'	5.17	1.52	1.45
2	SA	454	G	C5-C6	-5.17	1.37	1.42
2	SA	1211	U	C2-O2	5.17	1.27	1.22
26	LA	275	C	C4-N4	-5.17	1.29	1.33
26	LA	370	G	C2'-C1'	-5.17	1.47	1.53
26	LA	531	C	C4-C5	-5.17	1.38	1.43
26	LA	760	G	N1-C2	-5.17	1.33	1.37
26	LA	1403	A	P-O5'	5.17	1.65	1.59
26	LA	1979	U	C3'-C2'	-5.17	1.47	1.52
26	LA	2853	C	C2'-C1'	-5.17	1.47	1.53
48	LN	85	VAL	CB-CG1	5.17	1.63	1.52
2	SA	1517	G	C2-N2	-5.17	1.29	1.34
26	LA	157	C	C5'-C4'	5.17	1.57	1.51
26	LA	1073	A	O3'-P	-5.17	1.54	1.61
26	LA	1244	A	N9-C4	-5.17	1.34	1.37
26	LA	1276	A	O3'-P	-5.17	1.54	1.61
26	LA	2608	G	C6-N1	-5.17	1.35	1.39
2	SA	59	A	N1-C2	-5.17	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	281	G	C2'-C1'	-5.17	1.47	1.53
2	SA	804	U	C4-C5	-5.17	1.38	1.43
2	SA	1103	C	P-O5'	-5.17	1.54	1.59
2	SA	1216	A	C4'-O4'	-5.17	1.38	1.45
3	S1	16	A	C4'-O4'	-5.17	1.38	1.45
26	LA	603	A	N9-C8	-5.17	1.33	1.37
26	LA	741	U	N3-C4	-5.17	1.33	1.38
26	LA	1269	A	N9-C4	-5.17	1.34	1.37
26	LA	1819	A	N1-C2	-5.17	1.29	1.34
26	LA	2217	G	C2'-O2'	5.17	1.48	1.41
26	LA	2431	U	C4-C5	-5.17	1.38	1.43
26	LA	2667	C	C4-N4	-5.17	1.29	1.33
26	LA	2765	A	N9-C4	-5.17	1.34	1.37
2	SA	924	C	C4-N4	-5.17	1.29	1.33
2	SA	1053	G	C5-C6	5.17	1.47	1.42
2	SA	1515	G	C5-C4	5.17	1.42	1.38
25	LB	85	G	N9-C8	-5.17	1.34	1.37
26	LA	389	G	C2'-O2'	-5.17	1.34	1.41
26	LA	812	C	C4'-O4'	-5.17	1.38	1.45
26	LA	2545	G	C5-C4	-5.17	1.34	1.38
26	LA	2698	U	C2-N3	-5.17	1.34	1.37
2	SA	1305	G	N9-C8	5.17	1.41	1.37
2	SA	1318	A	N9-C4	5.17	1.41	1.37
26	LA	249	C	P-O5'	5.17	1.65	1.59
26	LA	861	A	C5-C4	-5.17	1.35	1.38
26	LA	1873	G	N7-C5	-5.17	1.36	1.39
26	LA	2162	G	C2'-C1'	-5.17	1.47	1.53
26	LA	2309	A	C8-N7	5.17	1.35	1.31
50	LL	113	PRO	N-CD	-5.17	1.40	1.47
2	SA	37	U	O3'-P	-5.16	1.54	1.61
2	SA	306	A	N9-C8	5.16	1.41	1.37
2	SA	403	C	C3'-O3'	5.16	1.49	1.42
2	SA	786	G	N1-C2	-5.16	1.33	1.37
2	SA	820	U	C4'-C3'	-5.16	1.47	1.52
2	SA	1449	C	C4-C5	5.16	1.47	1.43
15	SO	1	SER	CA-CB	5.16	1.60	1.52
26	LA	446	G	N3-C4	-5.16	1.31	1.35
26	LA	680	C	O3'-P	-5.16	1.54	1.61
26	LA	1311	G	C5'-C4'	5.16	1.57	1.51
26	LA	1721	G	C5-C4	-5.16	1.34	1.38
26	LA	2192	U	N1-C2	5.16	1.43	1.38
26	LA	2340	A	C4'-O4'	5.16	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2439	A	N7-C5	-5.16	1.36	1.39
2	SA	15	G	N9-C4	5.16	1.42	1.38
26	LA	124	G	C4'-C3'	-5.16	1.47	1.52
26	LA	735	A	C6-N6	-5.16	1.29	1.33
26	LA	2613	U	N1-C2	5.16	1.43	1.38
26	LA	2718	G	C3'-C2'	-5.16	1.47	1.52
2	SA	587	G	C4'-C3'	5.16	1.58	1.53
2	SA	823	C	C5'-C4'	5.16	1.57	1.51
2	SA	1121	U	O5'-C5'	5.16	1.52	1.44
2	SA	1200	C	C2'-C1'	-5.16	1.47	1.53
2	SA	1278	G	C2-N3	-5.16	1.28	1.32
2	SA	1315	U	P-O5'	-5.16	1.54	1.59
2	SA	1319	A	C6-N6	5.16	1.38	1.33
2	SA	1354	U	O5'-C5'	5.16	1.52	1.44
2	SA	1516	G	C2-N2	-5.16	1.29	1.34
3	S1	13	A	N9-C8	5.16	1.41	1.37
3	S1	42	U	C5'-C4'	5.16	1.57	1.51
26	LA	106	C	C2'-C1'	-5.16	1.47	1.53
26	LA	125	A	C3'-O3'	5.16	1.49	1.42
26	LA	305	C	C4-C5	5.16	1.47	1.43
26	LA	313	G	C6-N1	-5.16	1.35	1.39
26	LA	424	G	C6-N1	-5.16	1.35	1.39
26	LA	512	G	N3-C4	-5.16	1.31	1.35
26	LA	574	A	C5-C6	-5.16	1.36	1.41
26	LA	1257	C	C4'-O4'	-5.16	1.38	1.45
26	LA	1627	G	O3'-P	-5.16	1.54	1.61
26	LA	1751	U	O3'-P	-5.16	1.54	1.61
26	LA	2049	G	O3'-P	-5.16	1.54	1.61
26	LA	2056	G	C5-C6	-5.16	1.37	1.42
26	LA	2080	A	P-O5'	-5.16	1.54	1.59
26	LA	2087	G	C3'-C2'	-5.16	1.47	1.52
26	LA	2166	U	C2'-C1'	-5.16	1.47	1.53
26	LA	2544	G	C5-C4	-5.16	1.34	1.38
26	LA	2823	A	N7-C5	-5.16	1.36	1.39
26	LA	2887	A	C6-N1	-5.16	1.31	1.35
2	SA	120	A	C2'-C1'	-5.16	1.47	1.53
2	SA	670	G	C6-N1	-5.16	1.35	1.39
2	SA	695	A	C3'-C2'	-5.16	1.47	1.52
2	SA	1474	U	C4'-C3'	-5.16	1.47	1.52
26	LA	132	G	C6-N1	5.16	1.43	1.39
26	LA	171	U	C4-O4	-5.16	1.19	1.23
26	LA	198	C	N3-C4	5.16	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	977	G	C1'-N9	-5.16	1.39	1.46
26	LA	1124	G	N3-C4	-5.16	1.31	1.35
26	LA	1140	C	N3-C4	-5.16	1.30	1.33
26	LA	1166	G	C4'-C3'	5.16	1.58	1.53
26	LA	1246	A	O4'-C1'	-5.16	1.34	1.41
26	LA	1641	A	C2-N3	5.16	1.38	1.33
26	LA	1877	A	O3'-P	-5.16	1.54	1.61
26	LA	2191	A	N7-C5	-5.16	1.36	1.39
26	LA	2376	A	C6-N6	5.16	1.38	1.33
26	LA	2383	G	N1-C2	-5.16	1.33	1.37
26	LA	2609	U	P-O5'	-5.16	1.54	1.59
26	LA	2695	U	C3'-O3'	5.16	1.49	1.42
56	LR	97	TYR	CE1-CZ	5.16	1.45	1.38
2	SA	13	U	C2'-C1'	-5.16	1.47	1.53
2	SA	437	U	N3-C4	-5.16	1.33	1.38
2	SA	461	A	C4'-O4'	-5.16	1.38	1.45
2	SA	550	G	C5-C4	-5.16	1.34	1.38
2	SA	1217	C	N1-C6	-5.16	1.34	1.37
26	LA	545	U	C5'-C4'	5.16	1.57	1.51
26	LA	630	G	C6-N1	-5.16	1.35	1.39
26	LA	759	G	C1'-N9	-5.16	1.39	1.46
26	LA	1179	G	C8-N7	-5.16	1.27	1.30
26	LA	1934	C	C2-N3	-5.16	1.31	1.35
26	LA	2067	G	C2-N2	-5.16	1.29	1.34
26	LA	2228	G	C4'-C3'	5.16	1.58	1.53
2	SA	910	C	N1-C6	-5.16	1.34	1.37
2	SA	1379	G	C4'-C3'	5.16	1.58	1.53
26	LA	518	G	C3'-O3'	5.16	1.49	1.42
26	LA	599	A	C4'-C3'	-5.16	1.47	1.52
26	LA	717	C	C5'-C4'	5.16	1.57	1.51
26	LA	1722	A	O3'-P	-5.16	1.54	1.61
26	LA	1803	A	C5-C4	-5.16	1.35	1.38
26	LA	1853	A	O3'-P	-5.16	1.54	1.61
26	LA	2141	G	C6-N1	-5.16	1.35	1.39
26	LA	2178	C	C4'-O4'	5.16	1.52	1.45
26	LA	2655	G	C2-N2	-5.16	1.29	1.34
26	LA	189	G	C3'-C2'	-5.15	1.47	1.52
26	LA	447	A	C4'-C3'	-5.15	1.47	1.52
2	SA	364	A	C5-C4	-5.15	1.35	1.38
2	SA	597	G	O3'-P	-5.15	1.54	1.61
2	SA	688	G	N9-C4	-5.15	1.33	1.38
2	SA	1124	G	C5-C6	5.15	1.47	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	631	A	N7-C5	-5.15	1.36	1.39
26	LA	652	U	C2'-C1'	5.15	1.59	1.53
26	LA	729	G	O3'-P	-5.15	1.54	1.61
26	LA	773	U	N1-C6	-5.15	1.33	1.38
26	LA	874	G	O3'-P	-5.15	1.54	1.61
26	LA	999	U	N1-C2	-5.15	1.33	1.38
26	LA	1027	A	C5'-C4'	5.15	1.57	1.51
26	LA	1602	U	C2'-O2'	-5.15	1.34	1.41
26	LA	1618	C	C4-N4	5.15	1.38	1.33
26	LA	1664	A	N9-C8	-5.15	1.33	1.37
26	LA	1948	G	C5-C6	-5.15	1.37	1.42
2	SA	10	A	N9-C4	-5.15	1.34	1.37
2	SA	190	A	C2'-O2'	-5.15	1.34	1.41
2	SA	360	G	O3'-P	-5.15	1.54	1.61
2	SA	489	C	N1-C2	-5.15	1.34	1.40
2	SA	617	G	N9-C8	-5.15	1.34	1.37
2	SA	845	A	C3'-C2'	5.15	1.58	1.52
2	SA	880	C	O4'-C1'	-5.15	1.34	1.41
2	SA	1187	G	O5'-C5'	5.15	1.52	1.44
16	SP	28	ARG	CD-NE	5.15	1.55	1.46
24	S3	456	ILE	N-CA	-5.15	1.36	1.46
26	LA	260	G	C2'-C1'	-5.15	1.47	1.53
26	LA	730	A	C4'-C3'	-5.15	1.47	1.52
26	LA	1002	G	C2'-C1'	-5.15	1.47	1.53
26	LA	1106	G	P-O5'	-5.15	1.54	1.59
26	LA	1239	G	C5'-C4'	5.15	1.57	1.51
26	LA	1319	C	N3-C4	5.15	1.37	1.33
26	LA	1323	C	C2-N3	-5.15	1.31	1.35
26	LA	1803	A	N1-C2	-5.15	1.29	1.34
26	LA	2008	C	P-O5'	-5.15	1.54	1.59
26	LA	2205	A	C6-N6	5.15	1.38	1.33
26	LA	2405	G	O3'-P	-5.15	1.54	1.61
26	LA	2846	G	C2-N2	-5.15	1.29	1.34
32	LY	61	LYS	CA-CB	5.15	1.65	1.53
2	SA	256	U	C5-C6	5.15	1.38	1.34
2	SA	767	A	N9-C8	-5.15	1.33	1.37
2	SA	861	G	C2-N2	5.15	1.39	1.34
2	SA	878	A	C3'-C2'	-5.15	1.47	1.52
26	LA	1265	A	C6-N1	-5.15	1.31	1.35
26	LA	1742	U	N3-C4	5.15	1.43	1.38
26	LA	1863	G	C8-N7	5.15	1.34	1.30
26	LA	2404	U	P-O5'	-5.15	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2462	C	O3'-P	-5.15	1.54	1.61
2	SA	370	C	C4-N4	-5.15	1.29	1.33
2	SA	936	C	C4-C5	-5.15	1.38	1.43
2	SA	1285	A	P-O5'	-5.15	1.54	1.59
2	SA	1473	G	C8-N7	5.15	1.34	1.30
2	SA	1507	A	P-O5'	-5.15	1.54	1.59
2	SA	1536	C	N1-C2	5.15	1.45	1.40
26	LA	442	G	O4'-C1'	5.15	1.48	1.41
26	LA	512	G	C4'-O4'	5.15	1.52	1.45
26	LA	736	C	O3'-P	-5.15	1.54	1.61
26	LA	973	A	C5-C4	-5.15	1.35	1.38
26	LA	1467	U	P-O5'	5.15	1.64	1.59
26	LA	1677	A	O3'-P	-5.15	1.54	1.61
26	LA	1829	A	C3'-C2'	-5.15	1.47	1.52
26	LA	2124	G	N9-C8	-5.15	1.34	1.37
2	SA	433	G	C8-N7	-5.15	1.27	1.30
3	S1	59	A	O4'-C1'	-5.15	1.34	1.41
26	LA	92	U	C4-O4	-5.15	1.19	1.23
26	LA	916	G	N9-C8	-5.15	1.34	1.37
26	LA	1194	A	P-O5'	-5.15	1.54	1.59
26	LA	1464	G	C6-N1	-5.15	1.35	1.39
26	LA	2702	G	N7-C5	-5.15	1.36	1.39
26	LA	2833	U	C3'-O3'	5.15	1.49	1.42
2	SA	59	A	C8-N7	-5.14	1.27	1.31
2	SA	156	C	N1-C6	-5.14	1.34	1.37
2	SA	620	C	C3'-O3'	5.14	1.49	1.42
2	SA	993	G	C4'-O4'	-5.14	1.38	1.45
2	SA	1348	U	C3'-O3'	5.14	1.49	1.42
2	SA	1458	G	N9-C4	5.14	1.42	1.38
2	SA	1513	A	C1'-N9	-5.14	1.39	1.46
4	S2	62	C	C2'-O2'	5.14	1.48	1.41
26	LA	1274	A	P-O5'	-5.14	1.54	1.59
26	LA	1468	U	C3'-C2'	-5.14	1.47	1.52
26	LA	1622	G	C2'-C1'	-5.14	1.47	1.53
26	LA	1699	G	N3-C4	5.14	1.39	1.35
26	LA	1797	G	C2'-C1'	-5.14	1.47	1.53
26	LA	2070	A	C1'-N9	-5.14	1.39	1.46
26	LA	2821	A	C2'-C1'	-5.14	1.47	1.53
2	SA	280	C	C3'-C2'	5.14	1.58	1.52
2	SA	455	G	N7-C5	5.14	1.42	1.39
2	SA	677	U	C4-C5	-5.14	1.39	1.43
2	SA	716	A	C4'-O4'	5.14	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	940	C	N3-C4	5.14	1.37	1.33
2	SA	1452	C	N1-C6	-5.14	1.34	1.37
4	S2	66	C	C3'-O3'	5.14	1.49	1.42
26	LA	49	A	N3-C4	-5.14	1.31	1.34
26	LA	675	A	O4'-C1'	-5.14	1.34	1.41
26	LA	987	C	C2-N3	5.14	1.39	1.35
26	LA	1217	U	C5-C6	-5.14	1.29	1.34
26	LA	1266	G	C2'-C1'	-5.14	1.47	1.53
26	LA	2129	C	C4'-C3'	-5.14	1.47	1.52
26	LA	2550	G	N9-C4	-5.14	1.33	1.38
26	LA	2695	U	C2'-C1'	5.14	1.59	1.53
26	LA	2892	G	N9-C4	-5.14	1.33	1.38
2	SA	502	A	P-O5'	-5.14	1.54	1.59
2	SA	519	C	O3'-P	-5.14	1.54	1.61
2	SA	687	A	C8-N7	-5.14	1.27	1.31
10	SJ	27	GLU	CG-CD	-5.14	1.44	1.51
26	LA	1478	G	C3'-O3'	5.14	1.49	1.42
26	LA	2570	G	O3'-P	-5.14	1.54	1.61
2	SA	205	A	C5-C6	-5.14	1.36	1.41
2	SA	376	G	P-O5'	-5.14	1.54	1.59
2	SA	574	A	N1-C2	-5.14	1.29	1.34
2	SA	1090	U	C2'-C1'	-5.14	1.47	1.53
2	SA	1123	U	N1-C6	-5.14	1.33	1.38
26	LA	287	G	C4'-C3'	5.14	1.58	1.53
26	LA	681	G	C3'-O3'	5.14	1.49	1.42
26	LA	692	C	N1-C6	-5.14	1.34	1.37
26	LA	892	A	C5'-C4'	5.14	1.57	1.51
26	LA	1152	C	C2-N3	-5.14	1.31	1.35
26	LA	1877	A	C5-C6	-5.14	1.36	1.41
2	SA	692	U	C2'-C1'	5.14	1.59	1.53
2	SA	859	G	N7-C5	-5.14	1.36	1.39
25	LB	102	G	P-O5'	-5.14	1.54	1.59
26	LA	870	U	O3'-P	-5.14	1.54	1.61
26	LA	1896	G	C2'-O2'	5.14	1.48	1.41
26	LA	2566	A	N7-C5	-5.14	1.36	1.39
26	LA	2842	G	C2-N2	-5.14	1.29	1.34
2	SA	739	C	C3'-O3'	5.14	1.49	1.42
2	SA	939	G	C2'-C1'	5.14	1.59	1.53
2	SA	1177	G	P-O5'	-5.14	1.54	1.59
2	SA	1429	A	N3-C4	-5.14	1.31	1.34
2	SA	1463	U	C2-N3	5.14	1.41	1.37
4	S2	53	G	P-O5'	5.14	1.64	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	117	G	C4'-O4'	-5.14	1.38	1.45
26	LA	241	A	C5-C4	-5.14	1.35	1.38
26	LA	2474	U	C4-C5	5.14	1.48	1.43
2	SA	608	A	C2'-O2'	-5.13	1.34	1.41
2	SA	850	U	C1'-N1	5.13	1.56	1.48
2	SA	1288	A	N9-C4	-5.13	1.34	1.37
26	LA	90	U	O3'-P	-5.13	1.54	1.61
26	LA	494	G	N9-C8	-5.13	1.34	1.37
26	LA	880	G	C4'-C3'	-5.13	1.47	1.52
26	LA	925	A	N1-C2	-5.13	1.29	1.34
26	LA	1142	A	C3'-C2'	5.13	1.58	1.52
26	LA	1164	C	O4'-C1'	-5.13	1.34	1.41
26	LA	1698	A	N3-C4	-5.13	1.31	1.34
26	LA	2768	U	N3-C4	-5.13	1.33	1.38
2	SA	826	C	O4'-C1'	5.13	1.48	1.41
2	SA	1004	A	C8-N7	-5.13	1.27	1.31
2	SA	1051	C	C5-C6	5.13	1.38	1.34
2	SA	1314	C	C2-N3	5.13	1.39	1.35
26	LA	224	U	C4-C5	5.13	1.48	1.43
26	LA	329	G	N9-C8	-5.13	1.34	1.37
26	LA	1341	G	O3'-P	-5.13	1.54	1.61
26	LA	1400	U	C2-N3	-5.13	1.34	1.37
26	LA	2287	A	O4'-C1'	5.13	1.48	1.41
2	SA	187	G	N1-C2	-5.13	1.33	1.37
2	SA	881	G	C4'-O4'	-5.13	1.38	1.45
2	SA	899	C	N1-C2	5.13	1.45	1.40
2	SA	1096	C	P-O5'	-5.13	1.54	1.59
2	SA	1149	C	C3'-O3'	5.13	1.49	1.42
2	SA	1373	G	C8-N7	-5.13	1.27	1.30
2	SA	1472	U	C4'-O4'	5.13	1.52	1.45
2	SA	1525	G	O5'-C5'	5.13	1.52	1.44
20	SD	171	GLU	CD-OE1	5.13	1.31	1.25
23	SR	72	ARG	CZ-NH2	5.13	1.39	1.33
26	LA	33	C	O3'-P	-5.13	1.54	1.61
26	LA	583	G	C5-C6	-5.13	1.37	1.42
26	LA	604	G	C6-O6	-5.13	1.19	1.24
26	LA	772	C	C2-N3	-5.13	1.31	1.35
26	LA	1067	A	O4'-C1'	5.13	1.48	1.41
26	LA	1176	U	N1-C6	5.13	1.42	1.38
26	LA	1453	A	C5-C4	5.13	1.42	1.38
26	LA	1756	G	P-O5'	-5.13	1.54	1.59
26	LA	1773	A	P-O5'	5.13	1.64	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1788	C	C4-C5	-5.13	1.38	1.43
26	LA	2030	U	C2-N3	5.13	1.41	1.37
26	LA	2162	G	C5'-C4'	5.13	1.57	1.51
26	LA	2356	U	N1-C6	5.13	1.42	1.38
26	LA	2669	G	N9-C8	-5.13	1.34	1.37
49	LK	60	VAL	N-CA	-5.13	1.36	1.46
2	SA	769	G	C2-N3	5.13	1.36	1.32
2	SA	1075	U	P-O5'	-5.13	1.54	1.59
26	LA	697	G	N3-C4	-5.13	1.31	1.35
26	LA	719	C	C4'-C3'	5.13	1.58	1.53
26	LA	793	A	N3-C4	-5.13	1.31	1.34
26	LA	1145	C	C2-O2	-5.13	1.19	1.24
26	LA	1910	G	C6-N1	-5.13	1.35	1.39
26	LA	1958	C	C2'-C1'	-5.13	1.47	1.53
26	LA	2193	G	O5'-C5'	5.13	1.52	1.44
26	LA	2216	G	C5'-C4'	5.13	1.57	1.51
26	LA	2751	G	C1'-N9	-5.13	1.39	1.46
2	SA	98	A	C2-N3	-5.13	1.28	1.33
2	SA	432	A	C8-N7	-5.13	1.27	1.31
2	SA	495	A	O4'-C1'	-5.13	1.34	1.41
2	SA	547	A	O4'-C1'	-5.13	1.34	1.41
2	SA	673	A	C8-N7	-5.13	1.27	1.31
2	SA	790	A	C4'-C3'	5.13	1.58	1.53
2	SA	927	G	P-O5'	-5.13	1.54	1.59
2	SA	949	A	C6-N1	-5.13	1.31	1.35
2	SA	1267	C	C3'-O3'	5.13	1.49	1.42
2	SA	1374	A	C5-C4	-5.13	1.35	1.38
2	SA	1397	C	C5'-C4'	5.13	1.57	1.51
4	S2	11	A	O4'-C1'	5.13	1.48	1.41
24	S3	70	PHE	CE2-CZ	5.13	1.47	1.37
25	LB	24	G	C2-N3	5.13	1.36	1.32
25	LB	26	C	C2-N3	-5.13	1.31	1.35
26	LA	324	A	C5-C4	5.13	1.42	1.38
26	LA	856	G	C8-N7	5.13	1.34	1.30
26	LA	1591	A	C2'-C1'	-5.13	1.47	1.53
26	LA	1667	G	C4'-C3'	-5.13	1.47	1.52
2	SA	354	G	C5-C4	-5.13	1.34	1.38
2	SA	465	A	O3'-P	-5.13	1.54	1.61
2	SA	1524	C	N3-C4	-5.13	1.30	1.33
25	LB	81	G	C6-N1	-5.13	1.35	1.39
26	LA	13	A	C3'-O3'	5.13	1.49	1.42
26	LA	211	C	C2'-C1'	-5.13	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	300	A	N9-C4	-5.13	1.34	1.37
26	LA	939	G	C2-N3	-5.13	1.28	1.32
26	LA	1028	A	C2'-C1'	-5.13	1.47	1.53
26	LA	1235	G	C8-N7	5.13	1.34	1.30
26	LA	1965	C	C4-N4	-5.13	1.29	1.33
26	LA	2204	G	N9-C8	-5.13	1.34	1.37
26	LA	2330	G	C6-N1	-5.13	1.35	1.39
26	LA	2647	U	C5-C6	-5.13	1.29	1.34
26	LA	2889	C	N3-C4	-5.13	1.30	1.33
44	LF	176	ASP	C-N	-5.13	1.24	1.34
2	SA	1235	U	C3'-O3'	5.12	1.49	1.42
26	LA	460	A	C4'-C3'	5.12	1.58	1.53
26	LA	1993	U	C2-N3	-5.12	1.34	1.37
26	LA	2123	G	C2-N2	-5.12	1.29	1.34
26	LA	2130	U	N3-C4	-5.12	1.33	1.38
55	LQ	29	HIS	CB-CG	-5.12	1.40	1.50
2	SA	827	U	N1-C2	-5.12	1.33	1.38
2	SA	952	U	C3'-C2'	-5.12	1.47	1.52
2	SA	1517	G	N1-C2	-5.12	1.33	1.37
3	S1	44	U	C4-C5	5.12	1.48	1.43
4	S2	10	G	C2'-C1'	5.12	1.58	1.53
25	LB	90	C	P-O5'	-5.12	1.54	1.59
26	LA	738	G	C3'-O3'	5.12	1.49	1.42
26	LA	1336	A	C6-N6	5.12	1.38	1.33
26	LA	1410	G	C3'-C2'	-5.12	1.47	1.52
26	LA	2410	G	P-O5'	-5.12	1.54	1.59
26	LA	2606	C	C3'-C2'	-5.12	1.47	1.52
37	LC	21	TYR	CG-CD2	5.12	1.45	1.39
50	LL	47	HIS	CB-CG	-5.12	1.40	1.50
2	SA	545	C	C1'-N1	-5.12	1.39	1.46
2	SA	793	U	C5'-C4'	5.12	1.57	1.51
2	SA	1112	C	P-O5'	-5.12	1.54	1.59
25	LB	87	U	C2'-C1'	-5.12	1.47	1.53
26	LA	665	U	C5'-C4'	5.12	1.57	1.51
26	LA	869	G	C5'-C4'	5.12	1.57	1.51
26	LA	978	G	C8-N7	-5.12	1.27	1.30
26	LA	1115	G	C6-N1	-5.12	1.35	1.39
26	LA	1276	A	C2-N3	5.12	1.38	1.33
26	LA	1411	U	C4-O4	-5.12	1.19	1.23
26	LA	1512	C	C3'-C2'	-5.12	1.47	1.52
26	LA	2323	G	C6-N1	-5.12	1.35	1.39
26	LA	2464	G	O3'-P	-5.12	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2603	G	C1'-N9	-5.12	1.39	1.46
26	LA	2819	G	N7-C5	5.12	1.42	1.39
2	SA	405	U	C3'-O3'	5.12	1.49	1.42
2	SA	1222	G	N3-C4	-5.12	1.31	1.35
2	SA	1523	G	C3'-O3'	5.12	1.49	1.42
4	S2	15	G	N9-C4	-5.12	1.33	1.38
26	LA	409	G	P-O5'	-5.12	1.54	1.59
26	LA	684	G	O3'-P	-5.12	1.55	1.61
26	LA	2163	A	C6-N6	5.12	1.38	1.33
26	LA	2392	A	P-OP2	-5.12	1.40	1.49
26	LA	2518	A	C1'-N9	-5.12	1.39	1.46
2	SA	272	C	C5'-C4'	5.12	1.57	1.51
2	SA	423	G	N3-C4	5.12	1.39	1.35
2	SA	643	C	C4-C5	5.12	1.47	1.43
4	S2	4	G	C2'-C1'	5.12	1.58	1.53
26	LA	359	G	C4'-O4'	5.12	1.52	1.45
26	LA	1445	G	N3-C4	-5.12	1.31	1.35
26	LA	1782	U	N3-C4	-5.12	1.33	1.38
26	LA	2182	U	C5'-C4'	5.12	1.57	1.51
26	LA	2212	A	P-O5'	-5.12	1.54	1.59
2	SA	112	G	C1'-N9	-5.12	1.39	1.46
2	SA	291	U	C4-C5	5.12	1.48	1.43
2	SA	1336	C	N1-C6	5.12	1.40	1.37
2	SA	1338	G	N3-C4	-5.12	1.31	1.35
25	LB	114	C	C1'-N1	-5.12	1.39	1.46
26	LA	110	G	C2-N3	-5.12	1.28	1.32
26	LA	683	U	C5'-C4'	5.12	1.57	1.51
26	LA	686	U	C3'-O3'	5.12	1.49	1.42
26	LA	799	G	C5'-C4'	5.12	1.57	1.51
26	LA	1071	G	C1'-N9	-5.12	1.39	1.46
26	LA	1700	A	O3'-P	-5.12	1.55	1.61
26	LA	1795	C	C3'-O3'	5.12	1.49	1.42
26	LA	2559	C	C4-C5	-5.12	1.38	1.43
2	SA	703	G	C5-C4	5.12	1.42	1.38
2	SA	1154	G	N3-C4	5.12	1.39	1.35
2	SA	1191	A	C5'-C4'	5.12	1.57	1.51
2	SA	1311	A	C5-C4	-5.12	1.35	1.38
26	LA	255	A	C4'-C3'	-5.12	1.47	1.52
26	LA	1369	G	N7-C5	-5.12	1.36	1.39
26	LA	1395	A	C3'-C2'	5.12	1.58	1.52
26	LA	1559	U	C5'-C4'	5.12	1.57	1.51
26	LA	1652	A	O3'-P	-5.12	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1657	U	N1-C6	-5.12	1.33	1.38
26	LA	2444	G	N9-C8	-5.12	1.34	1.37
26	LA	2790	U	C2'-C1'	-5.12	1.47	1.53
2	SA	20	U	C4'-C3'	-5.11	1.47	1.52
2	SA	463	U	N1-C6	-5.11	1.33	1.38
2	SA	479	U	C4-O4	-5.11	1.19	1.23
2	SA	903	G	O4'-C1'	5.11	1.48	1.41
26	LA	37	C	C4-C5	5.11	1.47	1.43
26	LA	267	C	C3'-O3'	5.11	1.49	1.42
26	LA	545	U	C4'-C3'	5.11	1.58	1.53
26	LA	644	A	N7-C5	-5.11	1.36	1.39
26	LA	726	G	C5'-C4'	5.11	1.57	1.51
26	LA	1191	G	O4'-C1'	5.11	1.48	1.41
26	LA	1279	G	N9-C8	-5.11	1.34	1.37
26	LA	1428	C	C3'-O3'	5.11	1.49	1.42
26	LA	1633	G	C5-C4	5.11	1.42	1.38
26	LA	1998	A	O4'-C1'	-5.11	1.35	1.41
26	LA	2686	G	O3'-P	-5.11	1.55	1.61
26	LA	2897	U	N1-C6	-5.11	1.33	1.38
2	SA	66	A	C6-N6	-5.11	1.29	1.33
2	SA	435	A	C4'-O4'	5.11	1.52	1.45
2	SA	1171	A	C2'-C1'	-5.11	1.47	1.53
26	LA	733	G	C1'-N9	-5.11	1.39	1.46
26	LA	1242	U	C5'-C4'	5.11	1.57	1.51
26	LA	1461	C	C5'-C4'	5.11	1.57	1.51
26	LA	2301	C	C3'-C2'	5.11	1.58	1.52
26	LA	2442	C	N1-C6	5.11	1.40	1.37
2	SA	404	G	C5'-C4'	5.11	1.57	1.51
2	SA	953	G	C5'-C4'	5.11	1.57	1.51
2	SA	988	G	C6-N1	-5.11	1.35	1.39
2	SA	1073	U	C3'-O3'	5.11	1.49	1.42
2	SA	1301	U	C2'-O2'	5.11	1.48	1.41
2	SA	1359	C	C3'-C2'	5.11	1.58	1.52
2	SA	1428	A	C8-N7	-5.11	1.27	1.31
2	SA	1516	G	N9-C8	5.11	1.41	1.37
25	LB	20	G	N9-C8	-5.11	1.34	1.37
26	LA	38	A	N7-C5	-5.11	1.36	1.39
26	LA	292	U	C4'-C3'	-5.11	1.47	1.52
26	LA	632	A	C8-N7	-5.11	1.27	1.31
26	LA	1406	U	N1-C6	-5.11	1.33	1.38
26	LA	1863	G	C6-O6	-5.11	1.19	1.24
26	LA	1870	C	C3'-O3'	5.11	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2246	G	C2-N2	-5.11	1.29	1.34
26	LA	2388	A	C5-C4	-5.11	1.35	1.38
26	LA	2421	G	C6-N1	5.11	1.43	1.39
26	LA	2457	U	C5-C6	5.11	1.38	1.34
50	LL	75	TYR	CZ-OH	5.11	1.46	1.37
2	SA	667	G	O3'-P	-5.11	1.55	1.61
2	SA	916	U	P-OP2	-5.11	1.40	1.49
26	LA	197	A	P-O5'	-5.11	1.54	1.59
26	LA	1125	G	N9-C8	-5.11	1.34	1.37
26	LA	1713	A	N7-C5	-5.11	1.36	1.39
26	LA	1713	A	N9-C8	5.11	1.41	1.37
26	LA	2821	A	C5-C4	-5.11	1.35	1.38
26	LA	2852	G	O4'-C1'	-5.11	1.35	1.41
2	SA	112	G	C8-N7	5.11	1.34	1.30
2	SA	468	A	C3'-O3'	5.11	1.49	1.42
2	SA	532	A	C4'-C3'	5.11	1.58	1.53
26	LA	30	G	N9-C8	-5.11	1.34	1.37
26	LA	153	U	C4-C5	-5.11	1.39	1.43
26	LA	260	G	C5-C6	-5.11	1.37	1.42
26	LA	338	G	P-O5'	-5.11	1.54	1.59
26	LA	339	U	N1-C6	-5.11	1.33	1.38
26	LA	890	C	C4'-O4'	5.11	1.52	1.45
26	LA	1078	U	P-O5'	5.11	1.64	1.59
26	LA	1587	G	O4'-C1'	-5.11	1.35	1.41
26	LA	2859	G	N3-C4	-5.11	1.31	1.35
2	SA	796	C	C2-N3	-5.11	1.31	1.35
2	SA	1438	G	O3'-P	-5.11	1.55	1.61
2	SA	1525	G	O3'-P	-5.11	1.55	1.61
4	S2	56	U	C1'-N1	5.11	1.56	1.48
25	LB	111	U	C3'-C2'	5.11	1.58	1.52
26	LA	20	C	N1-C2	5.11	1.45	1.40
26	LA	123	G	C2'-O2'	-5.11	1.35	1.41
26	LA	375	G	C4'-O4'	5.11	1.52	1.45
26	LA	432	A	O3'-P	-5.11	1.55	1.61
26	LA	495	G	C3'-O3'	5.11	1.49	1.42
26	LA	663	G	C5-C6	-5.11	1.37	1.42
26	LA	966	G	C2-N3	5.11	1.36	1.32
26	LA	977	G	N3-C4	5.11	1.39	1.35
26	LA	1078	U	C4-O4	-5.11	1.19	1.23
26	LA	1180	U	C4'-C3'	-5.11	1.47	1.52
26	LA	1190	G	N3-C4	-5.11	1.31	1.35
26	LA	1512	C	O4'-C1'	-5.11	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1540	G	C3'-O3'	5.11	1.49	1.42
26	LA	1577	C	N1-C2	-5.11	1.35	1.40
26	LA	2052	A	C5-C6	-5.11	1.36	1.41
26	LA	2350	C	C2-O2	-5.11	1.19	1.24
26	LA	2395	C	C4-N4	-5.11	1.29	1.33
26	LA	2397	G	N1-C2	-5.11	1.33	1.37
26	LA	2727	A	N7-C5	-5.11	1.36	1.39
26	LA	2797	U	C2-O2	-5.11	1.17	1.22
26	LA	2860	A	C3'-C2'	-5.11	1.47	1.52
27	LD	22	GLU	CD-OE2	5.11	1.31	1.25
2	SA	121	U	C4-O4	-5.10	1.19	1.23
2	SA	197	A	C5-C4	-5.10	1.35	1.38
3	S1	39	U	C4'-C3'	5.10	1.58	1.53
26	LA	1555	G	C2'-O2'	-5.10	1.35	1.41
26	LA	2353	G	C4'-C3'	5.10	1.58	1.53
26	LA	2439	A	C3'-O3'	5.10	1.49	1.42
26	LA	2777	G	O3'-P	-5.10	1.55	1.61
2	SA	577	G	C6-N1	5.10	1.43	1.39
2	SA	658	C	C2'-C1'	-5.10	1.47	1.53
2	SA	959	A	O3'-P	5.10	1.67	1.61
2	SA	1103	C	N1-C2	-5.10	1.35	1.40
2	SA	1108	G	P-O5'	5.10	1.64	1.59
26	LA	303	G	C2-N3	-5.10	1.28	1.32
26	LA	1187	G	P-O5'	-5.10	1.54	1.59
26	LA	1772	A	P-O5'	-5.10	1.54	1.59
26	LA	2120	G	C8-N7	-5.10	1.27	1.30
26	LA	2537	U	C4-O4	-5.10	1.19	1.23
2	SA	889	A	C5-C4	-5.10	1.35	1.38
2	SA	1107	C	N1-C6	-5.10	1.34	1.37
26	LA	614	A	N7-C5	5.10	1.42	1.39
26	LA	1521	G	N7-C5	5.10	1.42	1.39
26	LA	1761	C	N3-C4	5.10	1.37	1.33
26	LA	2386	A	O3'-P	-5.10	1.55	1.61
2	SA	324	G	N9-C8	5.10	1.41	1.37
2	SA	368	U	N3-C4	5.10	1.43	1.38
2	SA	824	G	N3-C4	5.10	1.39	1.35
2	SA	1248	A	C6-N1	-5.10	1.31	1.35
2	SA	1270	G	C2-N2	-5.10	1.29	1.34
2	SA	1439	G	N7-C5	5.10	1.42	1.39
4	S2	64	G	C5-C4	5.10	1.42	1.38
25	LB	34	A	O3'-P	-5.10	1.55	1.61
25	LB	98	G	C8-N7	-5.10	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	14	A	N3-C4	5.10	1.38	1.34
26	LA	141	G	N1-C2	5.10	1.41	1.37
26	LA	673	C	O3'-P	-5.10	1.55	1.61
26	LA	882	G	C2-N3	5.10	1.36	1.32
26	LA	1265	A	C6-N6	-5.10	1.29	1.33
26	LA	1548	A	N3-C4	-5.10	1.31	1.34
26	LA	1669	A	C3'-C2'	5.10	1.58	1.52
26	LA	1719	G	N9-C8	5.10	1.41	1.37
26	LA	1725	U	C5'-C4'	5.10	1.57	1.51
26	LA	1900	A	C6-N1	-5.10	1.31	1.35
26	LA	1902	C	C4-C5	-5.10	1.38	1.43
26	LA	2127	G	N9-C8	-5.10	1.34	1.37
26	LA	2314	A	N9-C8	-5.10	1.33	1.37
26	LA	2456	C	N3-C4	-5.10	1.30	1.33
26	LA	2732	G	C1'-N9	-5.10	1.39	1.46
26	LA	2867	G	C3'-C2'	5.10	1.58	1.52
2	SA	280	C	O4'-C1'	5.10	1.48	1.41
2	SA	331	G	C2-N3	5.10	1.36	1.32
2	SA	688	G	O3'-P	-5.10	1.55	1.61
2	SA	790	A	C2'-O2'	-5.10	1.35	1.41
2	SA	973	G	C3'-C2'	-5.10	1.47	1.52
2	SA	1027	C	N1-C6	5.10	1.40	1.37
2	SA	1506	U	N1-C2	-5.10	1.33	1.38
26	LA	134	G	N7-C5	-5.10	1.36	1.39
26	LA	436	C	P-O5'	-5.10	1.54	1.59
26	LA	1818	U	C2-N3	-5.10	1.34	1.37
26	LA	1847	A	C5'-C4'	5.10	1.57	1.51
26	LA	1928	A	N9-C4	5.10	1.41	1.37
26	LA	2280	G	N1-C2	-5.10	1.33	1.37
55	LQ	80	GLU	CB-CG	5.10	1.61	1.52
2	SA	874	G	P-O5'	5.10	1.64	1.59
2	SA	1375	A	P-O5'	-5.10	1.54	1.59
10	SJ	13	PHE	CG-CD2	5.10	1.46	1.38
26	LA	111	A	C8-N7	5.10	1.35	1.31
26	LA	608	A	N1-C2	-5.10	1.29	1.34
26	LA	1681	G	P-O5'	-5.10	1.54	1.59
2	SA	120	A	C8-N7	-5.09	1.27	1.31
2	SA	612	C	C4-C5	-5.09	1.38	1.43
2	SA	722	G	N9-C8	5.09	1.41	1.37
2	SA	762	U	C5'-C4'	5.09	1.57	1.51
2	SA	1145	A	P-O5'	-5.09	1.54	1.59
2	SA	1459	G	N7-C5	-5.09	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	49	C	C5-C6	-5.09	1.30	1.34
26	LA	129	C	N1-C6	-5.09	1.34	1.37
26	LA	208	C	C3'-C2'	-5.09	1.47	1.52
26	LA	250	G	P-OP2	-5.09	1.40	1.49
26	LA	1433	A	P-O5'	-5.09	1.54	1.59
26	LA	1712	U	C5'-C4'	5.09	1.57	1.51
26	LA	2152	G	N7-C5	-5.09	1.36	1.39
26	LA	2459	A	C5'-C4'	5.09	1.57	1.51
26	LA	2523	G	C5-C4	-5.09	1.34	1.38
26	LA	2817	U	O3'-P	-5.09	1.55	1.61
2	SA	22	G	C5'-C4'	5.09	1.57	1.51
2	SA	515	G	N9-C4	-5.09	1.33	1.38
2	SA	759	A	C3'-C2'	-5.09	1.47	1.52
26	LA	218	A	N9-C8	-5.09	1.33	1.37
26	LA	1465	G	C2-N2	-5.09	1.29	1.34
26	LA	1817	G	C8-N7	-5.09	1.27	1.30
26	LA	2212	A	C3'-O3'	-5.09	1.35	1.42
26	LA	2227	A	N9-C8	5.09	1.41	1.37
26	LA	2243	U	N3-C4	-5.09	1.33	1.38
26	LA	2341	G	C4'-C3'	5.09	1.58	1.53
2	SA	120	A	C2-N3	-5.09	1.28	1.33
2	SA	237	G	C4'-O4'	5.09	1.52	1.45
2	SA	526	C	C5'-C4'	5.09	1.57	1.51
2	SA	625	U	O3'-P	-5.09	1.55	1.61
2	SA	1405	G	C4'-O4'	-5.09	1.39	1.45
25	LB	105	G	C4'-O4'	-5.09	1.39	1.45
26	LA	58	G	C2-N3	-5.09	1.28	1.32
26	LA	367	G	C2-N2	-5.09	1.29	1.34
26	LA	526	A	C2'-C1'	5.09	1.58	1.53
26	LA	621	A	C6-N1	-5.09	1.31	1.35
26	LA	1301	A	C6-N1	-5.09	1.31	1.35
26	LA	1303	G	C8-N7	-5.09	1.27	1.30
26	LA	1513	U	P-O5'	-5.09	1.54	1.59
26	LA	2090	A	O4'-C1'	5.09	1.48	1.41
26	LA	2501	C	C2-N3	-5.09	1.31	1.35
26	LA	2722	G	C6-N1	-5.09	1.35	1.39
26	LA	2831	G	C5'-C4'	5.09	1.57	1.51
2	SA	94	G	C4'-C3'	5.09	1.58	1.53
2	SA	164	G	C5'-C4'	5.09	1.57	1.51
2	SA	496	A	O3'-P	-5.09	1.55	1.61
2	SA	666	G	N1-C2	-5.09	1.33	1.37
2	SA	764	C	C3'-O3'	-5.09	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	950	U	C4-C5	-5.09	1.39	1.43
26	LA	196	A	C3'-O3'	5.09	1.49	1.42
26	LA	1181	U	C4-C5	-5.09	1.39	1.43
26	LA	1401	G	O3'-P	-5.09	1.55	1.61
26	LA	1476	U	O5'-C5'	5.09	1.52	1.44
2	SA	189	A	N9-C4	-5.09	1.34	1.37
2	SA	420	U	O3'-P	-5.09	1.55	1.61
26	LA	1129	A	C6-N6	5.09	1.38	1.33
26	LA	1482	G	C3'-C2'	-5.09	1.47	1.52
26	LA	1946	U	C3'-O3'	5.09	1.49	1.42
26	LA	2711	A	N7-C5	-5.09	1.36	1.39
2	SA	355	C	C4-C5	-5.09	1.38	1.43
2	SA	1102	A	N7-C5	-5.09	1.36	1.39
2	SA	1225	A	C1'-N9	5.09	1.56	1.48
24	S3	203	TYR	CG-CD2	5.09	1.45	1.39
24	S3	620	VAL	CB-CG2	5.09	1.63	1.52
26	LA	165	A	C5'-C4'	5.09	1.57	1.51
26	LA	395	U	N1-C2	5.09	1.43	1.38
26	LA	581	C	C5-C6	-5.09	1.30	1.34
26	LA	1296	G	C2-N2	-5.09	1.29	1.34
26	LA	2131	U	C1'-N1	5.09	1.56	1.48
26	LA	2229	U	C5-C6	-5.09	1.29	1.34
26	LA	2273	A	C3'-C2'	5.09	1.58	1.52
26	LA	2727	A	N3-C4	5.09	1.38	1.34
2	SA	429	U	N3-C4	-5.08	1.33	1.38
2	SA	1084	G	C8-N7	5.08	1.34	1.30
2	SA	1097	C	C2'-C1'	-5.08	1.47	1.53
26	LA	1160	G	C2-N2	-5.08	1.29	1.34
2	SA	259	G	C4'-O4'	5.08	1.52	1.45
2	SA	573	A	N7-C5	-5.08	1.36	1.39
2	SA	973	G	C8-N7	5.08	1.33	1.30
2	SA	1233	G	C2-N2	-5.08	1.29	1.34
2	SA	1256	A	C5-C4	5.08	1.42	1.38
17	SQ	10	ARG	CD-NE	5.08	1.55	1.46
18	SB	232	ALA	N-CA	-5.08	1.36	1.46
25	LB	17	C	C2'-C1'	-5.08	1.47	1.53
26	LA	409	G	O3'-P	-5.08	1.55	1.61
26	LA	606	U	O4'-C1'	-5.08	1.35	1.41
26	LA	1152	C	C2-O2	5.08	1.29	1.24
26	LA	1278	C	O3'-P	-5.08	1.55	1.61
26	LA	2319	G	N3-C4	-5.08	1.31	1.35
26	LA	2608	G	C1'-N9	-5.08	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2690	U	N1-C2	5.08	1.43	1.38
26	LA	2723	C	N1-C6	-5.08	1.34	1.37
2	SA	269	C	C4-N4	5.08	1.38	1.33
2	SA	330	C	C5-C6	-5.08	1.30	1.34
2	SA	592	G	C3'-O3'	5.08	1.49	1.42
2	SA	1042	A	C6-N1	-5.08	1.31	1.35
2	SA	1451	U	C4'-C3'	5.08	1.58	1.53
4	S2	11	A	N9-C4	-5.08	1.34	1.37
25	LB	79	G	N9-C8	-5.08	1.34	1.37
26	LA	254	G	N9-C8	-5.08	1.34	1.37
26	LA	451	U	C4-O4	-5.08	1.19	1.23
26	LA	825	A	C5'-C4'	-5.08	1.45	1.51
26	LA	1386	C	N1-C6	-5.08	1.34	1.37
26	LA	1980	G	C4'-O4'	5.08	1.52	1.45
26	LA	2226	C	C5-C6	-5.08	1.30	1.34
26	LA	2322	A	N9-C4	-5.08	1.34	1.37
52	LO	81	ARG	CD-NE	5.08	1.55	1.46
26	LA	198	C	C4-C5	-5.08	1.38	1.43
26	LA	507	A	P-O5'	5.08	1.64	1.59
26	LA	680	C	C2'-C1'	-5.08	1.47	1.53
26	LA	770	G	C5-C4	5.08	1.42	1.38
26	LA	1876	A	C5'-C4'	5.08	1.57	1.51
26	LA	2157	G	N3-C4	-5.08	1.31	1.35
26	LA	2719	G	N3-C4	-5.08	1.31	1.35
2	SA	132	C	C5'-C4'	5.08	1.57	1.51
2	SA	472	U	C3'-O3'	5.08	1.49	1.42
2	SA	1178	G	C2-N3	-5.08	1.28	1.32
26	LA	296	U	N1-C6	5.08	1.42	1.38
26	LA	770	G	N3-C4	-5.08	1.31	1.35
26	LA	1017	G	N9-C4	-5.08	1.33	1.38
26	LA	1024	G	C3'-C2'	-5.08	1.47	1.52
26	LA	2106	U	C4'-C3'	-5.08	1.47	1.52
26	LA	2465	C	C2'-C1'	-5.08	1.47	1.53
26	LA	2597	G	C8-N7	-5.08	1.27	1.30
31	LX	91	PHE	CG-CD1	5.08	1.46	1.38
2	SA	22	G	N9-C4	-5.08	1.33	1.38
2	SA	313	A	N1-C2	-5.08	1.29	1.34
2	SA	320	A	C6-N6	5.08	1.38	1.33
2	SA	668	G	N9-C8	5.08	1.41	1.37
2	SA	676	A	N9-C8	-5.08	1.33	1.37
2	SA	1331	G	C2-N3	-5.08	1.28	1.32
25	LB	59	A	O3'-P	-5.08	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	529	A	O4'-C1'	-5.08	1.35	1.41
26	LA	923	G	C6-N1	-5.08	1.35	1.39
26	LA	1584	U	C3'-O3'	5.08	1.49	1.42
26	LA	1852	U	C2-N3	-5.08	1.34	1.37
2	SA	213	G	N7-C5	-5.08	1.36	1.39
2	SA	346	G	C4'-C3'	5.08	1.58	1.53
2	SA	510	A	C1'-N9	-5.08	1.39	1.46
9	SI	37	TYR	CE1-CZ	5.08	1.45	1.38
26	LA	114	U	C5'-C4'	5.08	1.57	1.51
26	LA	446	G	N7-C5	-5.08	1.36	1.39
26	LA	525	U	C5-C6	-5.08	1.29	1.34
26	LA	543	G	C6-N1	-5.08	1.35	1.39
26	LA	897	C	N3-C4	5.08	1.37	1.33
26	LA	1450	G	N9-C8	5.08	1.41	1.37
26	LA	1892	C	C2'-C1'	-5.08	1.47	1.53
26	LA	2019	A	O4'-C1'	-5.08	1.35	1.41
26	LA	2191	A	C3'-O3'	5.08	1.49	1.42
26	LA	2400	G	P-O5'	-5.08	1.54	1.59
26	LA	2609	U	N3-C4	-5.08	1.33	1.38
26	LA	2729	G	O4'-C1'	-5.08	1.35	1.41
48	LN	76	GLU	CB-CG	5.08	1.61	1.52
58	LT	70	GLU	CD-OE2	5.08	1.31	1.25
2	SA	150	U	C3'-C2'	-5.07	1.47	1.52
2	SA	224	U	C4-C5	-5.07	1.39	1.43
2	SA	424	G	C4'-O4'	-5.07	1.39	1.45
2	SA	466	A	C6-N6	5.07	1.38	1.33
2	SA	607	A	C2'-C1'	-5.07	1.47	1.53
2	SA	677	U	C3'-C2'	-5.07	1.47	1.52
2	SA	1267	C	N3-C4	5.07	1.37	1.33
26	LA	829	A	N1-C2	-5.07	1.29	1.34
26	LA	976	G	C2'-C1'	-5.07	1.47	1.53
26	LA	1028	A	O3'-P	-5.07	1.55	1.61
26	LA	1058	U	C4-O4	5.07	1.27	1.23
26	LA	1093	G	C5-C4	-5.07	1.34	1.38
26	LA	1369	G	N1-C2	-5.07	1.33	1.37
26	LA	1381	G	C3'-O3'	5.07	1.49	1.42
26	LA	1676	A	C4'-O4'	5.07	1.52	1.45
26	LA	2182	U	C4'-O4'	5.07	1.52	1.45
26	LA	2408	U	P-O5'	-5.07	1.54	1.59
26	LA	2478	A	C1'-N9	-5.07	1.39	1.46
26	LA	2709	G	C5'-C4'	5.07	1.57	1.51
26	LA	2724	U	N1-C2	-5.07	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	27	G	C6-O6	5.07	1.28	1.24
2	SA	1008	U	C2-O2	5.07	1.26	1.22
2	SA	1275	A	C3'-O3'	5.07	1.49	1.42
6	SU	20	ARG	CZ-NH1	-5.07	1.26	1.33
26	LA	223	A	C3'-C2'	-5.07	1.47	1.52
26	LA	2111	U	C5'-C4'	5.07	1.57	1.51
26	LA	2887	A	C6-N6	-5.07	1.29	1.33
2	SA	319	G	N7-C5	5.07	1.42	1.39
2	SA	609	A	N3-C4	5.07	1.37	1.34
2	SA	849	G	C2-N2	-5.07	1.29	1.34
2	SA	977	A	N1-C2	-5.07	1.29	1.34
2	SA	1170	A	P-O5'	-5.07	1.54	1.59
3	S1	28	U	C2'-O2'	-5.07	1.35	1.41
4	S2	12	G	C6-O6	5.07	1.28	1.24
4	S2	31	G	C2-N3	5.07	1.36	1.32
7	SG	91	ARG	CA-CB	5.07	1.65	1.53
21	SE	161	GLU	CD-OE2	5.07	1.31	1.25
26	LA	525	U	N1-C6	-5.07	1.33	1.38
26	LA	557	C	N3-C4	-5.07	1.30	1.33
26	LA	716	A	C4'-C3'	-5.07	1.47	1.52
26	LA	1307	A	N7-C5	-5.07	1.36	1.39
26	LA	1506	U	O3'-P	-5.07	1.55	1.61
26	LA	1522	A	C6-N1	-5.07	1.32	1.35
26	LA	1554	U	C2-N3	-5.07	1.34	1.37
26	LA	1756	G	C8-N7	5.07	1.33	1.30
26	LA	1839	G	C4'-C3'	5.07	1.58	1.53
26	LA	2122	U	C4-O4	5.07	1.27	1.23
26	LA	2744	G	C2-N2	-5.07	1.29	1.34
35	L1	17	PRO	CA-C	5.07	1.62	1.52
2	SA	24	U	C4-C5	5.07	1.48	1.43
2	SA	1468	A	C1'-N9	-5.07	1.39	1.46
26	LA	411	G	C4'-O4'	-5.07	1.39	1.45
26	LA	1217	U	N1-C2	-5.07	1.33	1.38
2	SA	24	U	C5-C6	-5.07	1.29	1.34
2	SA	54	C	O3'-P	-5.07	1.55	1.61
2	SA	850	U	C2'-C1'	-5.07	1.47	1.53
2	SA	910	C	C4'-C3'	-5.07	1.47	1.52
2	SA	981	U	C2-O2	-5.07	1.17	1.22
2	SA	1085	U	C4'-C3'	-5.07	1.47	1.52
2	SA	1401	G	C2-N3	-5.07	1.28	1.32
2	SA	1488	G	N9-C4	-5.07	1.33	1.38
2	SA	1539	C	C5-C6	-5.07	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	12	U	C5-C6	-5.07	1.29	1.34
26	LA	429	A	C8-N7	5.07	1.35	1.31
26	LA	526	A	P-O5'	5.07	1.64	1.59
26	LA	650	C	C2'-C1'	5.07	1.58	1.53
26	LA	678	C	C2'-C1'	-5.07	1.47	1.53
26	LA	682	G	O5'-C5'	5.07	1.52	1.44
26	LA	787	C	C4-C5	-5.07	1.38	1.43
26	LA	840	C	C3'-O3'	5.07	1.49	1.42
26	LA	960	A	C8-N7	5.07	1.35	1.31
26	LA	1115	G	N7-C5	5.07	1.42	1.39
26	LA	1802	A	O3'-P	-5.07	1.55	1.61
26	LA	1885	A	C3'-O3'	-5.07	1.35	1.42
26	LA	2707	U	N1-C6	-5.07	1.33	1.38
2	SA	16	A	C4'-C3'	-5.07	1.47	1.52
2	SA	282	A	C6-N6	-5.07	1.29	1.33
2	SA	377	G	N9-C4	5.07	1.42	1.38
2	SA	696	A	C2-N3	-5.07	1.28	1.33
2	SA	814	A	C2'-C1'	5.07	1.58	1.53
2	SA	825	A	C4'-C3'	5.07	1.58	1.53
2	SA	1077	G	C2-N3	5.07	1.36	1.32
2	SA	1107	C	P-O5'	-5.07	1.54	1.59
2	SA	1367	C	C5'-C4'	5.07	1.57	1.51
18	SB	67	LEU	N-CA	-5.07	1.36	1.46
21	SE	51	LYS	CA-CB	5.07	1.65	1.53
25	LB	73	A	C6-N1	-5.07	1.32	1.35
26	LA	171	U	P-O5'	5.07	1.64	1.59
26	LA	537	G	N7-C5	5.07	1.42	1.39
26	LA	902	C	O4'-C1'	5.07	1.48	1.41
26	LA	1194	A	C2'-C1'	-5.07	1.47	1.53
26	LA	2384	U	C5'-C4'	5.07	1.57	1.51
26	LA	2504	U	C5'-C4'	5.07	1.57	1.51
2	SA	52	C	C3'-C2'	-5.06	1.47	1.52
2	SA	320	A	O4'-C1'	-5.06	1.35	1.41
2	SA	609	A	P-O5'	5.06	1.64	1.59
2	SA	660	C	C2'-O2'	-5.06	1.35	1.41
2	SA	852	G	C5-C4	5.06	1.41	1.38
4	S2	37	U	N3-C4	-5.06	1.33	1.38
26	LA	799	G	N7-C5	-5.06	1.36	1.39
26	LA	2775	G	C8-N7	5.06	1.33	1.30
26	LA	2794	C	C2-N3	5.06	1.39	1.35
2	SA	108	G	C2-N3	-5.06	1.28	1.32
2	SA	251	G	C2-N3	5.06	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	735	C	C4-C5	-5.06	1.38	1.43
2	SA	1505	G	C3'-O3'	5.06	1.49	1.42
26	LA	868	U	C3'-C2'	5.06	1.58	1.52
26	LA	1480	C	N3-C4	5.06	1.37	1.33
26	LA	2344	U	O4'-C1'	-5.06	1.35	1.41
26	LA	2621	G	C3'-O3'	5.06	1.49	1.42
2	SA	388	G	C4'-C3'	5.06	1.58	1.53
2	SA	696	A	O3'-P	5.06	1.67	1.61
2	SA	1406	U	C5'-C4'	5.06	1.57	1.51
26	LA	201	C	C4'-C3'	-5.06	1.47	1.52
29	LV	1	MET	CA-CB	5.06	1.65	1.53
2	SA	77	A	C2'-C1'	-5.06	1.47	1.53
2	SA	266	G	N9-C4	-5.06	1.33	1.38
2	SA	596	A	C5-C6	-5.06	1.36	1.41
2	SA	973	G	N1-C2	-5.06	1.33	1.37
6	SU	54	ARG	CD-NE	5.06	1.55	1.46
9	SI	63	TYR	CD1-CE1	5.06	1.47	1.39
25	LB	9	G	C2-N3	5.06	1.36	1.32
25	LB	61	G	C5'-C4'	5.06	1.57	1.51
26	LA	154	U	O3'-P	-5.06	1.55	1.61
26	LA	428	A	C2-N3	5.06	1.38	1.33
26	LA	1420	A	C8-N7	5.06	1.35	1.31
26	LA	1529	G	C8-N7	-5.06	1.27	1.30
26	LA	1759	A	C4'-C3'	-5.06	1.47	1.52
26	LA	1944	U	O5'-C5'	5.06	1.52	1.44
26	LA	2033	A	C4'-C3'	5.06	1.58	1.53
26	LA	2337	G	N3-C4	-5.06	1.31	1.35
26	LA	2373	G	C6-O6	-5.06	1.19	1.24
26	LA	2410	G	C2-N2	-5.06	1.29	1.34
26	LA	2766	A	C5-C4	-5.06	1.35	1.38
26	LA	2817	U	N1-C6	-5.06	1.33	1.38
26	LA	2868	A	C6-N1	5.06	1.39	1.35
57	LS	86	SER	CA-CB	5.06	1.60	1.52
2	SA	80	A	N9-C8	-5.06	1.33	1.37
2	SA	599	C	C4'-O4'	-5.06	1.39	1.45
2	SA	782	A	N9-C4	-5.06	1.34	1.37
2	SA	1322	C	N3-C4	5.06	1.37	1.33
25	LB	105	G	N9-C4	-5.06	1.33	1.38
26	LA	45	G	C4'-O4'	-5.06	1.39	1.45
26	LA	332	A	C5-C4	5.06	1.42	1.38
26	LA	968	C	P-O5'	-5.06	1.54	1.59
26	LA	1440	U	O3'-P	-5.06	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1473	G	C6-N1	-5.06	1.36	1.39
26	LA	1935	G	C5-C4	-5.06	1.34	1.38
26	LA	2148	G	C8-N7	5.06	1.33	1.30
26	LA	2299	U	C5'-C4'	5.06	1.57	1.51
26	LA	2615	U	C2-N3	5.06	1.41	1.37
26	LA	2703	C	C1'-N1	5.06	1.56	1.48
2	SA	860	A	N3-C4	5.06	1.37	1.34
2	SA	1167	A	N3-C4	-5.06	1.31	1.34
26	LA	28	A	N9-C4	-5.06	1.34	1.37
26	LA	2793	C	C5'-C4'	5.06	1.57	1.51
2	SA	167	A	N7-C5	-5.05	1.36	1.39
2	SA	360	G	C3'-O3'	5.05	1.49	1.42
2	SA	847	G	C6-O6	-5.05	1.19	1.24
2	SA	873	A	C5-C6	-5.05	1.36	1.41
2	SA	926	G	N7-C5	-5.05	1.36	1.39
2	SA	1489	G	N7-C5	-5.05	1.36	1.39
2	SA	1490	U	C4-C5	-5.05	1.39	1.43
3	S1	15	G	O3'-P	-5.05	1.55	1.61
9	SI	37	TYR	CG-CD1	5.05	1.45	1.39
26	LA	316	C	C4-C5	5.05	1.47	1.43
26	LA	368	A	N7-C5	-5.05	1.36	1.39
26	LA	844	A	O4'-C1'	-5.05	1.35	1.41
26	LA	1117	C	O3'-P	-5.05	1.55	1.61
26	LA	1422	G	C8-N7	5.05	1.33	1.30
26	LA	1513	U	N1-C2	-5.05	1.34	1.38
26	LA	1609	A	O4'-C1'	-5.05	1.35	1.41
26	LA	1823	G	C8-N7	-5.05	1.27	1.30
26	LA	2086	U	C2-N3	-5.05	1.34	1.37
26	LA	2785	C	C2'-C1'	-5.05	1.47	1.53
2	SA	1413	A	C4'-O4'	-5.05	1.39	1.45
26	LA	872	U	P-O5'	-5.05	1.54	1.59
26	LA	1316	U	C5-C6	-5.05	1.29	1.34
26	LA	1320	C	O3'-P	-5.05	1.55	1.61
2	SA	115	G	N7-C5	-5.05	1.36	1.39
2	SA	744	C	C4'-C3'	5.05	1.58	1.53
2	SA	1014	A	C5-C4	5.05	1.42	1.38
2	SA	1323	G	C6-O6	-5.05	1.19	1.24
2	SA	1444	U	O3'-P	-5.05	1.55	1.61
26	LA	324	A	C8-N7	5.05	1.35	1.31
26	LA	733	G	C2-N3	-5.05	1.28	1.32
26	LA	1194	A	C6-N1	5.05	1.39	1.35
26	LA	1768	C	C5'-C4'	5.05	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1827	U	C3'-C2'	-5.05	1.47	1.52
26	LA	1962	C	P-O5'	-5.05	1.54	1.59
26	LA	2170	A	C3'-O3'	5.05	1.49	1.42
26	LA	2382	G	C2-N2	-5.05	1.29	1.34
26	LA	2590	A	C4'-C3'	-5.05	1.47	1.52
26	LA	2599	G	C5-C4	-5.05	1.34	1.38
26	LA	2636	C	C4-C5	5.05	1.47	1.43
2	SA	221	C	C4'-C3'	-5.05	1.47	1.52
2	SA	406	G	O4'-C1'	-5.05	1.35	1.41
2	SA	521	G	N1-C2	-5.05	1.33	1.37
2	SA	908	A	C2'-C1'	-5.05	1.47	1.53
2	SA	993	G	O4'-C1'	-5.05	1.35	1.41
2	SA	1024	G	C5'-C4'	5.05	1.57	1.51
2	SA	1111	A	C5-C4	5.05	1.42	1.38
20	SD	75	TYR	CG-CD2	5.05	1.45	1.39
26	LA	35	G	C4'-C3'	-5.05	1.47	1.52
26	LA	656	G	N9-C8	-5.05	1.34	1.37
26	LA	792	A	C5-C6	-5.05	1.36	1.41
26	LA	1109	C	C5'-C4'	5.05	1.57	1.51
26	LA	1321	A	C6-N1	5.05	1.39	1.35
26	LA	1472	C	C2-N3	5.05	1.39	1.35
26	LA	1864	U	C3'-O3'	5.05	1.49	1.42
26	LA	1986	C	P-O5'	-5.05	1.54	1.59
26	LA	2349	G	C8-N7	-5.05	1.27	1.30
26	LA	2823	A	N3-C4	-5.05	1.31	1.34
2	SA	200	G	N9-C8	5.05	1.41	1.37
2	SA	248	C	N1-C2	-5.05	1.35	1.40
2	SA	1061	G	C1'-N9	-5.05	1.39	1.46
25	LB	40	U	P-O5'	-5.05	1.54	1.59
26	LA	523	C	O3'-P	-5.05	1.55	1.61
26	LA	1738	G	N9-C8	-5.05	1.34	1.37
2	SA	820	U	C5-C6	-5.05	1.29	1.34
26	LA	137	U	C5-C6	-5.05	1.29	1.34
26	LA	182	A	C2'-O2'	-5.05	1.35	1.41
26	LA	961	C	C4'-O4'	-5.05	1.39	1.45
26	LA	1229	C	C4'-O4'	5.05	1.52	1.45
26	LA	1389	G	C2-N3	5.05	1.36	1.32
26	LA	1973	G	C2-N3	-5.05	1.28	1.32
26	LA	1989	G	C2-N3	-5.05	1.28	1.32
26	LA	2375	G	C5-C6	-5.05	1.37	1.42
26	LA	2533	U	C4-C5	-5.05	1.39	1.43
26	LA	2807	U	C3'-O3'	5.05	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2831	G	C1'-N9	-5.05	1.39	1.46
26	LA	2873	A	C3'-O3'	5.05	1.49	1.42
2	SA	467	U	O4'-C1'	5.04	1.48	1.41
23	SR	72	ARG	CD-NE	5.04	1.55	1.46
26	LA	790	U	C5-C6	5.04	1.38	1.34
26	LA	1965	C	C1'-N1	5.04	1.56	1.48
26	LA	2274	A	C4'-O4'	-5.04	1.39	1.45
2	SA	146	G	C8-N7	-5.04	1.27	1.30
2	SA	148	G	N7-C5	5.04	1.42	1.39
2	SA	275	G	C2-N3	5.04	1.36	1.32
2	SA	548	G	C1'-N9	-5.04	1.39	1.46
2	SA	648	A	N9-C4	-5.04	1.34	1.37
2	SA	653	U	P-O5'	5.04	1.64	1.59
2	SA	766	A	N1-C2	-5.04	1.29	1.34
26	LA	46	G	N9-C8	5.04	1.41	1.37
26	LA	52	A	C5'-C4'	5.04	1.57	1.51
26	LA	520	G	N1-C2	5.04	1.41	1.37
26	LA	757	G	N7-C5	-5.04	1.36	1.39
26	LA	1011	G	O3'-P	-5.04	1.55	1.61
26	LA	1291	C	C3'-O3'	5.04	1.49	1.42
26	LA	1391	U	C2-N3	-5.04	1.34	1.37
26	LA	1458	U	N1-C2	-5.04	1.34	1.38
26	LA	1737	G	O4'-C1'	-5.04	1.35	1.41
26	LA	2035	G	C1'-N9	-5.04	1.39	1.46
26	LA	2190	G	C5-C4	5.04	1.41	1.38
26	LA	2750	A	C6-N1	5.04	1.39	1.35
2	SA	581	G	O3'-P	-5.04	1.55	1.61
2	SA	924	C	N3-C4	5.04	1.37	1.33
2	SA	1477	U	C2'-C1'	-5.04	1.47	1.53
3	S1	34	U	C2-N3	-5.04	1.34	1.37
26	LA	622	G	C1'-N9	-5.04	1.39	1.46
26	LA	664	G	N1-C2	-5.04	1.33	1.37
26	LA	1352	U	N1-C6	-5.04	1.33	1.38
26	LA	1444	G	C4'-O4'	5.04	1.52	1.45
26	LA	1703	G	C4'-C3'	5.04	1.58	1.53
26	LA	1740	G	C3'-O3'	5.04	1.49	1.42
26	LA	1784	A	N9-C8	-5.04	1.33	1.37
26	LA	1996	C	P-O5'	-5.04	1.54	1.59
26	LA	2061	G	C3'-C2'	5.04	1.58	1.52
26	LA	2207	C	C3'-O3'	5.04	1.49	1.42
26	LA	2315	G	P-O5'	-5.04	1.54	1.59
40	L4	43	ARG	CD-NE	5.04	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	148	G	N9-C4	-5.04	1.33	1.38
2	SA	281	G	P-O5'	5.04	1.64	1.59
2	SA	690	G	C5'-C4'	5.04	1.57	1.51
2	SA	1166	G	C2-N3	5.04	1.36	1.32
26	LA	846	U	C5'-C4'	5.04	1.57	1.51
26	LA	2172	U	C4-O4	5.04	1.27	1.23
2	SA	251	G	C5-C6	-5.04	1.37	1.42
2	SA	404	G	N7-C5	-5.04	1.36	1.39
2	SA	485	U	O3'-P	-5.04	1.55	1.61
2	SA	512	U	C2-N3	-5.04	1.34	1.37
2	SA	557	G	O4'-C1'	-5.04	1.35	1.41
2	SA	922	G	C5-C6	-5.04	1.37	1.42
4	S2	41	C	N3-C4	-5.04	1.30	1.33
26	LA	107	G	N1-C2	-5.04	1.33	1.37
26	LA	291	G	N9-C8	5.04	1.41	1.37
26	LA	474	G	N3-C4	5.04	1.39	1.35
26	LA	682	G	C2-N2	-5.04	1.29	1.34
26	LA	799	G	N1-C2	-5.04	1.33	1.37
26	LA	1120	G	C2-N3	5.04	1.36	1.32
26	LA	1450	G	C2'-C1'	-5.04	1.47	1.53
26	LA	1498	C	C2-O2	-5.04	1.20	1.24
26	LA	2247	A	C2'-C1'	-5.04	1.47	1.53
26	LA	2609	U	O3'-P	-5.04	1.55	1.61
26	LA	2670	A	N7-C5	-5.04	1.36	1.39
2	SA	647	C	C5-C6	-5.04	1.30	1.34
2	SA	1145	A	N1-C2	-5.04	1.29	1.34
2	SA	1348	U	N1-C6	-5.04	1.33	1.38
2	SA	1484	C	P-O5'	-5.04	1.54	1.59
26	LA	279	A	C4'-O4'	5.04	1.52	1.45
2	SA	24	U	C2'-C1'	-5.04	1.47	1.53
2	SA	75	G	O3'-P	-5.04	1.55	1.61
2	SA	518	C	N3-C4	-5.04	1.30	1.33
2	SA	1488	G	C2'-C1'	-5.04	1.47	1.53
3	S1	35	G	C5-C6	5.04	1.47	1.42
3	S1	56	G	C3'-C2'	5.04	1.58	1.52
26	LA	590	A	C5'-C4'	5.04	1.57	1.51
26	LA	638	G	N7-C5	5.04	1.42	1.39
26	LA	1137	G	O5'-C5'	5.04	1.52	1.44
26	LA	1145	C	O4'-C1'	5.04	1.48	1.41
26	LA	1494	A	C4'-O4'	-5.04	1.39	1.45
26	LA	1519	G	C8-N7	-5.04	1.27	1.30
26	LA	2059	A	C2'-C1'	5.04	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2245	U	C5-C6	-5.04	1.29	1.34
26	LA	2286	G	O3'-P	-5.04	1.55	1.61
26	LA	2594	C	P-O5'	-5.04	1.54	1.59
2	SA	27	G	C5-C4	-5.03	1.34	1.38
2	SA	338	A	C2-N3	-5.03	1.29	1.33
2	SA	979	C	C3'-O3'	5.03	1.49	1.42
3	S1	15	G	N3-C4	5.03	1.39	1.35
4	S2	4	G	C2-N2	-5.03	1.29	1.34
24	S3	347	THR	CA-C	-5.03	1.39	1.52
26	LA	485	C	O4'-C1'	-5.03	1.35	1.41
26	LA	744	U	C4-C5	5.03	1.48	1.43
26	LA	1830	C	C2-O2	-5.03	1.20	1.24
26	LA	2088	A	C5'-C4'	5.03	1.57	1.51
26	LA	2095	A	P-O5'	-5.03	1.54	1.59
26	LA	2508	G	N9-C8	-5.03	1.34	1.37
26	LA	2738	A	C5-C4	-5.03	1.35	1.38
2	SA	680	C	C3'-C2'	5.03	1.58	1.52
2	SA	977	A	C5'-C4'	5.03	1.57	1.51
26	LA	688	U	N1-C2	-5.03	1.34	1.38
26	LA	1179	G	C2'-C1'	-5.03	1.47	1.53
26	LA	1248	G	C1'-N9	-5.03	1.39	1.46
26	LA	1992	G	C2-N2	-5.03	1.29	1.34
26	LA	2132	U	C2'-C1'	5.03	1.58	1.53
26	LA	2836	U	C3'-O3'	5.03	1.49	1.42
2	SA	1249	C	N3-C4	-5.03	1.30	1.33
2	SA	1357	A	N9-C4	-5.03	1.34	1.37
3	S1	48	C	C5-C6	5.03	1.38	1.34
26	LA	35	G	C8-N7	-5.03	1.27	1.30
26	LA	535	G	C5-C6	-5.03	1.37	1.42
26	LA	827	U	O3'-P	-5.03	1.55	1.61
26	LA	1418	G	C6-N1	-5.03	1.36	1.39
26	LA	1435	G	N9-C4	-5.03	1.33	1.38
26	LA	2769	U	N1-C6	5.03	1.42	1.38
26	LA	2837	A	O4'-C1'	-5.03	1.35	1.41
2	SA	118	U	C2'-C1'	-5.03	1.47	1.53
2	SA	528	C	O4'-C1'	-5.03	1.35	1.41
2	SA	636	U	C3'-O3'	5.03	1.49	1.42
2	SA	1374	A	C3'-O3'	5.03	1.49	1.42
2	SA	1447	A	C1'-N9	5.03	1.56	1.48
26	LA	1471	G	C3'-O3'	5.03	1.49	1.42
26	LA	2772	C	C3'-C2'	-5.03	1.47	1.52
2	SA	108	G	O3'-P	5.03	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	379	C	P-OP1	5.03	1.57	1.49
2	SA	475	C	C2-O2	5.03	1.28	1.24
2	SA	522	C	C2-N3	5.03	1.39	1.35
2	SA	738	C	C4-C5	-5.03	1.39	1.43
2	SA	1006	G	C5'-C4'	5.03	1.57	1.51
2	SA	1089	G	C1'-N9	-5.03	1.39	1.46
26	LA	550	C	N3-C4	5.03	1.37	1.33
26	LA	878	A	C2'-O2'	5.03	1.48	1.41
26	LA	965	C	C2'-C1'	-5.03	1.47	1.53
26	LA	1025	G	C8-N7	-5.03	1.27	1.30
26	LA	2209	G	C5'-C4'	5.03	1.57	1.51
26	LA	2217	G	C5-C6	-5.03	1.37	1.42
26	LA	2542	A	N9-C4	5.03	1.40	1.37
2	SA	101	A	C8-N7	-5.03	1.28	1.31
2	SA	235	C	C5'-C4'	5.03	1.57	1.51
2	SA	438	U	C3'-C2'	-5.03	1.47	1.52
2	SA	990	C	O3'-P	5.03	1.67	1.61
2	SA	1143	G	O3'-P	-5.03	1.55	1.61
2	SA	1348	U	C4'-C3'	5.03	1.58	1.53
11	SK	90	PRO	N-CD	-5.03	1.40	1.47
26	LA	94	A	N7-C5	-5.03	1.36	1.39
26	LA	157	C	C3'-C2'	5.03	1.58	1.52
26	LA	1264	A	C2'-O2'	-5.03	1.35	1.41
26	LA	1953	A	C6-N1	5.03	1.39	1.35
26	LA	2038	G	N1-C2	5.03	1.41	1.37
26	LA	2130	U	C2-O2	5.03	1.26	1.22
26	LA	2201	G	C2-N2	-5.03	1.29	1.34
26	LA	2375	G	N7-C5	5.03	1.42	1.39
26	LA	2528	U	N3-C4	-5.03	1.33	1.38
33	LZ	34	SER	CB-OG	5.03	1.48	1.42
2	SA	223	A	C5'-C4'	5.02	1.57	1.51
2	SA	561	U	N1-C6	-5.02	1.33	1.38
26	LA	205	G	C2-N2	-5.02	1.29	1.34
26	LA	545	U	C5-C6	-5.02	1.29	1.34
26	LA	953	G	C6-N1	-5.02	1.36	1.39
26	LA	1220	G	N9-C8	-5.02	1.34	1.37
26	LA	1250	G	N7-C5	-5.02	1.36	1.39
26	LA	1288	G	N1-C2	-5.02	1.33	1.37
26	LA	1434	A	C6-N1	-5.02	1.32	1.35
26	LA	2627	G	N9-C8	-5.02	1.34	1.37
26	LA	2634	A	C1'-N9	-5.02	1.39	1.46
2	SA	113	G	C2-N3	-5.02	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	583	A	C5-C4	5.02	1.42	1.38
2	SA	594	U	C4'-C3'	-5.02	1.47	1.52
2	SA	778	G	C3'-C2'	-5.02	1.47	1.52
2	SA	861	G	O3'-P	-5.02	1.55	1.61
2	SA	1011	C	N3-C4	5.02	1.37	1.33
2	SA	1290	G	C2-N3	-5.02	1.28	1.32
11	SK	18	GLY	CA-C	-5.02	1.43	1.51
24	S3	665	TYR	N-CA	-5.02	1.36	1.46
26	LA	219	A	N9-C4	-5.02	1.34	1.37
26	LA	259	G	O3'-P	-5.02	1.55	1.61
26	LA	277	G	C8-N7	5.02	1.33	1.30
26	LA	782	A	P-O5'	5.02	1.64	1.59
26	LA	805	G	C1'-N9	-5.02	1.39	1.46
26	LA	852	U	C5-C6	5.02	1.38	1.34
26	LA	1111	A	C6-N1	5.02	1.39	1.35
26	LA	1218	G	C5'-C4'	5.02	1.57	1.51
26	LA	2635	A	C2'-C1'	-5.02	1.47	1.53
26	LA	2868	A	C4'-O4'	-5.02	1.39	1.45
2	SA	792	A	O3'-P	-5.02	1.55	1.61
2	SA	1396	A	N1-C2	-5.02	1.29	1.34
26	LA	893	C	C3'-O3'	5.02	1.49	1.42
26	LA	1516	G	N9-C8	-5.02	1.34	1.37
26	LA	1587	G	C4'-C3'	-5.02	1.47	1.52
26	LA	1828	G	P-O5'	-5.02	1.54	1.59
26	LA	2606	C	C4'-C3'	-5.02	1.47	1.52
2	SA	179	A	C8-N7	5.02	1.35	1.31
2	SA	403	C	C2-N3	-5.02	1.31	1.35
2	SA	631	C	N1-C6	5.02	1.40	1.37
2	SA	1400	C	C2-O2	5.02	1.28	1.24
4	S2	40	C	C2-N3	-5.02	1.31	1.35
4	S2	69	C	N3-C4	-5.02	1.30	1.33
10	SJ	31	ARG	CD-NE	5.02	1.54	1.46
26	LA	18	U	N3-C4	-5.02	1.33	1.38
26	LA	315	G	N9-C8	-5.02	1.34	1.37
26	LA	340	A	C5-C6	5.02	1.45	1.41
26	LA	925	A	C4'-O4'	5.02	1.52	1.45
26	LA	1141	U	C3'-C2'	5.02	1.58	1.52
26	LA	2409	G	N7-C5	-5.02	1.36	1.39
26	LA	2587	A	C8-N7	-5.02	1.28	1.31
32	LY	19	ARG	CD-NE	5.02	1.54	1.46
2	SA	95	C	C3'-O3'	5.02	1.49	1.42
2	SA	156	C	C4-N4	-5.02	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	462	G	N7-C5	-5.02	1.36	1.39
2	SA	899	C	C5-C6	-5.02	1.30	1.34
2	SA	1072	G	N9-C4	5.02	1.42	1.38
2	SA	1075	U	O3'-P	-5.02	1.55	1.61
26	LA	126	A	C2'-C1'	5.02	1.58	1.53
26	LA	196	A	N9-C8	-5.02	1.33	1.37
26	LA	502	A	C2'-C1'	-5.02	1.47	1.53
26	LA	977	G	N9-C4	-5.02	1.33	1.38
26	LA	1256	G	C6-O6	-5.02	1.19	1.24
26	LA	2635	A	C6-N6	-5.02	1.29	1.33
26	LA	2820	A	C2'-O2'	-5.02	1.35	1.41
2	SA	380	G	C2-N3	-5.02	1.28	1.32
26	LA	688	U	C5'-C4'	5.02	1.57	1.51
26	LA	831	G	C2-N3	-5.02	1.28	1.32
26	LA	1500	G	N9-C8	5.02	1.41	1.37
26	LA	1976	U	N3-C4	-5.02	1.33	1.38
2	SA	17	U	C5'-C4'	5.01	1.57	1.51
2	SA	147	G	N3-C4	-5.01	1.31	1.35
2	SA	252	U	C4'-O4'	5.01	1.52	1.45
2	SA	288	A	P-O5'	-5.01	1.54	1.59
2	SA	1497	G	N3-C4	-5.01	1.31	1.35
26	LA	226	A	N9-C8	5.01	1.41	1.37
26	LA	334	C	N3-C4	-5.01	1.30	1.33
26	LA	495	G	N1-C2	-5.01	1.33	1.37
26	LA	1014	A	C4'-C3'	5.01	1.58	1.53
26	LA	1266	G	C1'-N9	-5.01	1.39	1.46
26	LA	1379	U	N1-C6	-5.01	1.33	1.38
26	LA	1838	C	C4-N4	-5.01	1.29	1.33
26	LA	2001	C	C5-C6	-5.01	1.30	1.34
26	LA	2342	C	C2'-C1'	-5.01	1.47	1.53
26	LA	2355	G	O4'-C1'	-5.01	1.35	1.41
26	LA	2434	A	P-O5'	5.01	1.64	1.59
26	LA	2490	G	C6-N1	-5.01	1.36	1.39
30	LW	62	ALA	N-CA	-5.01	1.36	1.46
2	SA	306	A	C3'-C2'	-5.01	1.47	1.52
2	SA	438	U	O3'-P	-5.01	1.55	1.61
26	LA	698	C	C1'-N1	-5.01	1.39	1.46
26	LA	1070	A	C3'-O3'	5.01	1.49	1.42
26	LA	1572	A	C5'-C4'	5.01	1.57	1.51
26	LA	1619	G	C3'-O3'	5.01	1.49	1.42
26	LA	1874	C	C5'-C4'	5.01	1.57	1.51
53	LP	94	TYR	CB-CG	-5.01	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	299	G	O3'-P	-5.01	1.55	1.61
2	SA	367	U	C2-O2	5.01	1.26	1.22
2	SA	899	C	O4'-C1'	5.01	1.48	1.41
2	SA	1196	A	N7-C5	-5.01	1.36	1.39
2	SA	1465	A	C6-N6	5.01	1.38	1.33
3	S1	37	G	C4'-C3'	-5.01	1.47	1.52
11	SK	114	PRO	N-CD	-5.01	1.40	1.47
24	S3	9	TYR	CZ-OH	5.01	1.46	1.37
26	LA	220	G	C1'-N9	-5.01	1.39	1.46
26	LA	538	A	N9-C8	-5.01	1.33	1.37
26	LA	633	A	C6-N6	-5.01	1.29	1.33
26	LA	665	U	N1-C2	-5.01	1.34	1.38
26	LA	1239	G	C2'-C1'	-5.01	1.47	1.53
26	LA	1416	G	C2'-C1'	5.01	1.58	1.53
26	LA	1671	U	C5-C6	-5.01	1.29	1.34
26	LA	1677	A	C2'-O2'	-5.01	1.35	1.41
26	LA	2103	C	C4-N4	5.01	1.38	1.33
26	LA	2311	A	O3'-P	-5.01	1.55	1.61
26	LA	2429	G	C2-N3	5.01	1.36	1.32
26	LA	2467	C	C5-C6	-5.01	1.30	1.34
26	LA	2489	U	N1-C2	-5.01	1.34	1.38
27	LD	160	TYR	CD1-CE1	5.01	1.46	1.39
56	LR	61	ARG	CD-NE	5.01	1.54	1.46
2	SA	63	C	C4-N4	5.01	1.38	1.33
2	SA	100	G	C6-O6	-5.01	1.19	1.24
2	SA	174	A	C2-N3	-5.01	1.29	1.33
2	SA	347	G	N3-C4	-5.01	1.31	1.35
2	SA	1489	G	N9-C4	-5.01	1.33	1.38
20	SD	105	GLY	CA-C	-5.01	1.43	1.51
25	LB	2	G	C2-N3	5.01	1.36	1.32
26	LA	337	C	C4-C5	-5.01	1.39	1.43
26	LA	393	C	O4'-C1'	-5.01	1.35	1.41
26	LA	433	C	C1'-N1	5.01	1.56	1.48
26	LA	1152	C	C4-C5	-5.01	1.39	1.43
26	LA	1886	U	O4'-C1'	-5.01	1.35	1.41
26	LA	2015	A	C5-C4	-5.01	1.35	1.38
26	LA	2598	A	C4'-C3'	-5.01	1.47	1.52
2	SA	1096	C	C2'-O2'	5.01	1.48	1.41
8	SH	26	MET	CG-SD	-5.01	1.68	1.81
24	S3	494	ARG	CD-NE	5.01	1.54	1.46
26	LA	399	U	C2'-C1'	-5.01	1.47	1.53
26	LA	1844	C	C2'-O2'	-5.01	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2515	C	N1-C6	5.01	1.40	1.37
26	LA	2756	U	N3-C4	5.01	1.43	1.38
2	SA	21	G	C6-N1	-5.01	1.36	1.39
2	SA	235	C	C3'-C2'	-5.01	1.47	1.52
2	SA	685	G	N7-C5	-5.01	1.36	1.39
2	SA	733	G	C6-N1	-5.01	1.36	1.39
2	SA	836	G	C2'-C1'	-5.01	1.47	1.53
2	SA	1530	G	C8-N7	5.01	1.33	1.30
3	S1	56	G	N9-C8	-5.01	1.34	1.37
8	SH	74	ILE	CA-CB	-5.01	1.43	1.54
25	LB	23	G	C4'-O4'	5.01	1.52	1.45
25	LB	61	G	C2'-C1'	-5.01	1.47	1.53
26	LA	344	A	N1-C2	5.01	1.38	1.34
26	LA	461	C	P-O5'	-5.01	1.54	1.59
26	LA	573	U	C2-N3	-5.01	1.34	1.37
26	LA	603	A	C8-N7	5.01	1.35	1.31
26	LA	819	A	C8-N7	-5.01	1.28	1.31
26	LA	1597	A	C3'-O3'	5.01	1.49	1.42
26	LA	1646	C	C2'-C1'	-5.01	1.47	1.53
26	LA	2571	U	C4-O4	-5.01	1.19	1.23
50	LL	53	TYR	CZ-OH	5.01	1.46	1.37
57	LS	95	ALA	N-CA	-5.01	1.36	1.46
2	SA	424	G	N9-C4	5.00	1.42	1.38
25	LB	50	A	C3'-O3'	5.00	1.49	1.42
26	LA	103	A	N9-C4	5.00	1.40	1.37
26	LA	1228	G	N9-C8	5.00	1.41	1.37
2	SA	80	A	N9-C4	5.00	1.40	1.37
2	SA	123	U	C2-O2	5.00	1.26	1.22
2	SA	177	G	C4'-C3'	-5.00	1.47	1.52
2	SA	243	A	C4'-O4'	-5.00	1.39	1.45
2	SA	724	G	C2-N2	-5.00	1.29	1.34
2	SA	1131	G	C4'-C3'	-5.00	1.47	1.52
2	SA	1522	U	P-O5'	-5.00	1.54	1.59
2	SA	1532	U	C4-O4	5.00	1.27	1.23
26	LA	75	G	C6-N1	5.00	1.43	1.39
26	LA	84	A	C3'-C2'	-5.00	1.47	1.52
26	LA	180	G	C3'-C2'	-5.00	1.47	1.52
26	LA	757	G	N1-C2	-5.00	1.33	1.37
26	LA	1027	A	C2'-C1'	-5.00	1.47	1.53
26	LA	1115	G	P-O5'	-5.00	1.54	1.59
26	LA	2167	U	C4'-C3'	-5.00	1.47	1.52
26	LA	2396	G	N9-C4	5.00	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2417	C	C4'-C3'	-5.00	1.47	1.52
26	LA	2740	A	P-O5'	5.00	1.64	1.59
39	L3	47	TYR	CG-CD1	5.00	1.45	1.39
2	SA	191	G	C4'-C3'	5.00	1.58	1.53
2	SA	777	A	N3-C4	5.00	1.37	1.34
2	SA	1181	G	C2'-C1'	-5.00	1.47	1.53
2	SA	1527	U	C4-C5	-5.00	1.39	1.43
18	SB	117	GLU	CD-OE2	-5.00	1.20	1.25
26	LA	271	G	P-O5'	-5.00	1.54	1.59
26	LA	371	A	O3'-P	-5.00	1.55	1.61
26	LA	725	G	N7-C5	-5.00	1.36	1.39
26	LA	994	C	C5'-C4'	5.00	1.57	1.51
26	LA	1871	A	N1-C2	-5.00	1.29	1.34
26	LA	2407	A	C6-N1	-5.00	1.32	1.35
26	LA	2435	A	O3'-P	-5.00	1.55	1.61
26	LA	2721	A	C5-C4	5.00	1.42	1.38
28	LU	49	LYS	N-CA	-5.00	1.36	1.46

All (27062) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	SF	44	ARG	NE-CZ-NH1	30.21	135.41	120.30
26	LA	826	U	P-O3'-C3'	28.10	153.42	119.70
26	LA	2451	A	O4'-C1'-N9	27.95	130.56	108.20
26	LA	1005	C	C6-N1-C2	-25.59	110.06	120.30
26	LA	2899	A	N1-C6-N6	23.91	132.94	118.60
26	LA	1568	G	P-O5'-C5'	23.71	158.84	120.90
2	SA	1316	G	P-O3'-C3'	22.89	147.17	119.70
26	LA	453	A	N1-C6-N6	-22.81	104.91	118.60
2	SA	844	G	N1-C6-O6	22.60	133.46	119.90
2	SA	147	G	N1-C6-O6	22.47	133.38	119.90
2	SA	568	G	C5-C6-O6	-21.80	115.52	128.60
26	LA	2648	G	C5-C6-O6	-21.69	115.59	128.60
2	SA	490	C	C6-N1-C2	-21.50	111.70	120.30
2	SA	511	C	C6-N1-C2	-21.29	111.78	120.30
6	SU	17	ARG	NE-CZ-NH2	-21.27	109.66	120.30
2	SA	765	G	C5-C6-O6	-21.18	115.89	128.60
2	SA	147	G	C5-C6-O6	-21.11	115.93	128.60
2	SA	765	G	N1-C6-O6	20.93	132.46	119.90
26	LA	1930	G	N1-C6-O6	20.90	132.44	119.90
24	S3	474	ARG	NE-CZ-NH1	20.86	130.73	120.30
2	SA	119	A	P-O3'-C3'	20.86	144.73	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	SU	17	ARG	NE-CZ-NH1	20.77	130.69	120.30
26	LA	1758	U	C2-N3-C4	-20.67	114.60	127.00
26	LA	2469	A	N1-C6-N6	-20.63	106.22	118.60
26	LA	974	G	P-O3'-C3'	20.53	144.33	119.70
26	LA	2500	U	P-O3'-C3'	20.49	144.28	119.70
30	LW	81	ARG	NE-CZ-NH1	20.46	130.53	120.30
52	LO	91	TYR	CB-CG-CD1	-20.04	108.98	121.00
26	LA	574	A	O4'-C1'-N9	20.04	124.23	108.20
2	SA	412	A	P-O3'-C3'	19.99	143.69	119.70
26	LA	2816	G	N9-C4-C5	-19.86	97.45	105.40
2	SA	361	G	C5-C6-O6	-19.85	116.69	128.60
2	SA	224	U	P-O3'-C3'	19.79	143.44	119.70
26	LA	776	G	P-O3'-C3'	19.68	143.32	119.70
26	LA	1649	G	C5-C6-O6	-19.65	116.81	128.60
2	SA	324	G	C5-C6-O6	-19.47	116.92	128.60
26	LA	2479	U	C2-N3-C4	-19.44	115.34	127.00
26	LA	1146	C	C6-N1-C2	-19.36	112.56	120.30
6	SU	20	ARG	NE-CZ-NH1	19.27	129.93	120.30
2	SA	337	G	N1-C6-O6	19.25	131.45	119.90
2	SA	533	A	N1-C6-N6	-19.25	107.05	118.60
26	LA	653	U	P-O3'-C3'	19.25	142.79	119.70
26	LA	1628	G	C5-C6-O6	-19.20	117.08	128.60
2	SA	674	G	N1-C6-O6	19.11	131.37	119.90
27	LD	257	ARG	NE-CZ-NH1	19.08	129.84	120.30
26	LA	537	G	C5-C6-O6	-19.05	117.17	128.60
2	SA	1488	G	N1-C6-O6	19.02	131.31	119.90
2	SA	674	G	C5-C6-O6	-19.00	117.20	128.60
26	LA	450	G	C5-C6-O6	-18.98	117.21	128.60
2	SA	841	C	P-O3'-C3'	18.94	142.43	119.70
34	L0	52	ARG	NE-CZ-NH1	-18.92	110.84	120.30
26	LA	1167	C	O4'-C1'-N1	18.88	123.31	108.20
26	LA	2708	G	C5-C6-O6	-18.64	117.42	128.60
26	LA	2648	G	N1-C6-O6	18.62	131.07	119.90
45	LG	79	ARG	NE-CZ-NH1	-18.59	111.01	120.30
13	SM	92	ARG	NE-CZ-NH1	18.59	129.59	120.30
2	SA	1012	A	N1-C2-N3	-18.51	120.05	129.30
26	LA	189	G	C5-C6-O6	-18.49	117.51	128.60
25	LB	34	A	P-O3'-C3'	18.44	141.83	119.70
2	SA	1524	C	C6-N1-C2	-18.43	112.93	120.30
2	SA	3	A	P-O3'-C3'	18.42	141.81	119.70
26	LA	1921	G	O4'-C1'-N9	18.42	122.94	108.20
2	SA	819	A	O4'-C1'-N9	18.35	122.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2516	A	P-O5'-C5'	18.34	150.25	120.90
26	LA	1080	A	N1-C6-N6	-18.32	107.61	118.60
26	LA	2517	C	C6-N1-C2	-18.29	112.99	120.30
26	LA	100	U	O4'-C1'-N1	18.26	122.81	108.20
26	LA	822	G	C5-C6-O6	-18.26	117.64	128.60
2	SA	764	C	P-O3'-C3'	18.17	141.50	119.70
2	SA	1362	A	O4'-C1'-N9	18.16	122.73	108.20
26	LA	18	U	O4'-C1'-N1	18.14	122.71	108.20
26	LA	1223	G	C5-C6-O6	-18.11	117.74	128.60
26	LA	1409	U	P-O5'-C5'	18.10	149.86	120.90
26	LA	900	A	P-O3'-C3'	18.07	141.39	119.70
26	LA	2107	G	C8-N9-C4	18.06	113.62	106.40
3	S1	23	C	P-O3'-C3'	18.02	141.33	119.70
26	LA	1731	G	P-O3'-C3'	18.02	141.32	119.70
2	SA	271	C	P-O3'-C3'	17.99	141.29	119.70
26	LA	2287	A	P-O3'-C3'	17.97	141.26	119.70
26	LA	1556	C	N3-C4-C5	-17.92	114.73	121.90
26	LA	1988	G	C5-C6-O6	-17.88	117.87	128.60
2	SA	1257	A	P-O3'-C3'	17.85	141.12	119.70
26	LA	2832	U	P-O3'-C3'	17.78	141.03	119.70
14	SN	89	ARG	NE-CZ-NH1	17.74	129.17	120.30
26	LA	2163	A	O4'-C1'-N9	17.74	122.39	108.20
26	LA	113	U	O4'-C1'-N1	17.70	122.36	108.20
26	LA	791	C	N3-C4-C5	-17.70	114.82	121.90
26	LA	1961	C	C6-N1-C2	-17.64	113.24	120.30
26	LA	184	C	C6-N1-C2	-17.64	113.24	120.30
26	LA	776	G	C5-C6-O6	-17.62	118.03	128.60
26	LA	468	G	C5-C6-O6	-17.59	118.05	128.60
58	LT	80	ARG	NE-CZ-NH1	17.54	129.07	120.30
26	LA	1761	C	P-O3'-C3'	17.46	140.65	119.70
24	S3	100	ARG	NE-CZ-NH2	-17.44	111.58	120.30
20	SD	46	ARG	NE-CZ-NH1	17.42	129.01	120.30
2	SA	1536	C	N3-C4-C5	-17.42	114.93	121.90
26	LA	1074	G	N1-C6-O6	17.42	130.35	119.90
3	S1	20	G	C5-C6-O6	-17.36	118.19	128.60
5	ST	23	ARG	NE-CZ-NH1	17.28	128.94	120.30
2	SA	844	G	C5-C6-O6	-17.26	118.24	128.60
2	SA	932	C	N3-C4-C5	17.20	128.78	121.90
2	SA	1082	A	N1-C6-N6	-17.19	108.28	118.60
24	S3	254	ARG	NE-CZ-NH2	-17.13	111.73	120.30
26	LA	1988	G	N1-C6-O6	17.12	130.17	119.90
26	LA	101	A	O4'-C1'-N9	17.08	121.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1872	A	C8-N9-C4	-17.06	98.98	105.80
26	LA	2803	G	C5-C6-O6	-17.03	118.38	128.60
24	S3	254	ARG	NE-CZ-NH1	17.03	128.81	120.30
2	SA	1207	G	P-O3'-C3'	17.02	140.13	119.70
26	LA	1042	G	N9-C4-C5	-17.02	98.59	105.40
26	LA	538	A	N1-C6-N6	-17.00	108.40	118.60
2	SA	791	G	O4'-C1'-N9	16.98	121.78	108.20
2	SA	972	C	O4'-C1'-N1	16.96	121.77	108.20
54	LM	108	ARG	NE-CZ-NH1	16.93	128.77	120.30
26	LA	2383	G	N1-C6-O6	16.93	130.06	119.90
26	LA	126	A	O4'-C1'-N9	16.91	121.73	108.20
2	SA	211	G	O4'-C1'-N9	16.90	121.72	108.20
3	S1	21	U	O4'-C1'-N1	16.89	121.71	108.20
26	LA	455	C	P-O3'-C3'	16.85	139.92	119.70
26	LA	2708	G	N1-C6-O6	16.84	130.00	119.90
26	LA	1930	G	C5-C6-O6	-16.83	118.50	128.60
2	SA	1317	C	C6-N1-C2	-16.77	113.59	120.30
26	LA	609	A	N1-C6-N6	16.69	128.62	118.60
26	LA	2891	U	O4'-C1'-N1	16.69	121.55	108.20
26	LA	2107	G	N7-C8-N9	-16.66	104.77	113.10
19	SC	155	ARG	NE-CZ-NH1	16.64	128.62	120.30
2	SA	321	A	N9-C4-C5	16.62	112.45	105.80
26	LA	1489	C	C6-N1-C2	-16.62	113.65	120.30
52	LO	91	TYR	CB-CG-CD2	16.61	130.97	121.00
26	LA	508	A	N1-C2-N3	-16.61	121.00	129.30
26	LA	2212	A	N1-C6-N6	-16.59	108.65	118.60
26	LA	2272	U	C2-N3-C4	-16.59	117.05	127.00
24	S3	436	ARG	NE-CZ-NH2	-16.58	112.01	120.30
26	LA	372	G	O4'-C1'-N9	16.58	121.46	108.20
26	LA	2899	A	C5-C6-N6	-16.58	110.44	123.70
26	LA	974	G	N1-C6-O6	16.57	129.84	119.90
2	SA	795	C	O4'-C1'-N1	16.56	121.45	108.20
26	LA	776	G	N1-C6-O6	16.55	129.83	119.90
26	LA	937	C	C6-N1-C2	-16.50	113.70	120.30
19	SC	87	ARG	NE-CZ-NH1	16.42	128.51	120.30
26	LA	140	C	O4'-C1'-N1	16.41	121.32	108.20
3	S1	22	G	P-O3'-C3'	16.39	139.37	119.70
26	LA	1890	A	C5-C6-N1	16.39	125.90	117.70
2	SA	568	G	N1-C6-O6	16.39	129.73	119.90
26	LA	1875	G	N1-C6-O6	16.38	129.73	119.90
26	LA	1507	C	N3-C2-O2	-16.35	110.45	121.90
26	LA	2290	G	C5-C6-O6	-16.35	118.79	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	209	U	P-O3'-C3'	16.35	139.31	119.70
57	LS	32	ARG	NE-CZ-NH2	16.33	128.47	120.30
26	LA	1933	G	C5-C6-O6	-16.33	118.80	128.60
4	S2	60	A	N9-C4-C5	-16.32	99.27	105.80
2	SA	1202	U	O4'-C1'-N1	16.32	121.26	108.20
26	LA	2462	C	C6-N1-C2	-16.28	113.79	120.30
26	LA	63	A	C8-N9-C4	-16.26	99.30	105.80
26	LA	1708	C	C6-N1-C2	-16.26	113.80	120.30
4	S2	32	G	N9-C4-C5	16.21	111.88	105.40
26	LA	880	G	P-O5'-C5'	16.20	146.82	120.90
26	LA	1210	G	P-O3'-C3'	16.15	139.08	119.70
2	SA	956	U	P-O3'-C3'	16.13	139.06	119.70
2	SA	667	G	C5-C6-O6	-16.13	118.92	128.60
26	LA	948	C	C6-N1-C2	-16.11	113.86	120.30
2	SA	221	C	C6-N1-C2	-16.11	113.86	120.30
26	LA	2872	A	N1-C6-N6	-16.10	108.94	118.60
26	LA	1878	G	N1-C6-O6	-16.08	110.25	119.90
26	LA	670	A	N1-C6-N6	-16.07	108.96	118.60
2	SA	1002	G	C5-C6-O6	-16.06	118.96	128.60
26	LA	370	G	P-O3'-C3'	16.06	138.97	119.70
24	S3	637	ARG	NE-CZ-NH2	-16.05	112.28	120.30
26	LA	2425	A	N1-C6-N6	-16.05	108.97	118.60
2	SA	1128	C	C6-N1-C2	-16.04	113.88	120.30
20	SD	187	ARG	NE-CZ-NH2	-16.03	112.29	120.30
26	LA	2451	A	P-O5'-C5'	16.02	146.53	120.90
13	SM	85	TYR	CB-CG-CD1	-16.01	111.39	121.00
26	LA	1540	G	C5-C6-O6	-15.99	119.00	128.60
26	LA	2587	A	N1-C6-N6	-15.98	109.01	118.60
2	SA	824	G	C5-C6-O6	-15.97	119.02	128.60
13	SM	97	ARG	NE-CZ-NH2	-15.96	112.32	120.30
26	LA	993	G	C5-C6-O6	-15.94	119.04	128.60
23	SR	2	ARG	NE-CZ-NH1	15.92	128.26	120.30
26	LA	2679	A	N9-C4-C5	-15.90	99.44	105.80
26	LA	577	G	C5-C6-O6	-15.88	119.07	128.60
2	SA	1417	G	P-O3'-C3'	15.88	138.75	119.70
26	LA	1890	A	N1-C6-N6	-15.86	109.08	118.60
2	SA	840	C	N3-C4-C5	15.84	128.24	121.90
26	LA	1062	G	N1-C6-O6	15.82	129.39	119.90
3	S1	38	G	C5-C6-O6	-15.82	119.11	128.60
26	LA	981	A	C8-N9-C4	15.81	112.12	105.80
26	LA	777	G	N1-C6-O6	15.81	129.38	119.90
2	SA	271	C	C6-N1-C2	-15.80	113.98	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1053	C	C6-N1-C2	-15.76	114.00	120.30
2	SA	184	G	N1-C6-O6	15.75	129.35	119.90
26	LA	2096	C	O4'-C1'-N1	15.74	120.79	108.20
26	LA	669	G	P-O3'-C3'	15.73	138.58	119.70
20	SD	103	ARG	NE-CZ-NH1	15.73	128.17	120.30
41	L5	19	ARG	NE-CZ-NH1	-15.72	112.44	120.30
26	LA	141	G	O4'-C1'-N9	15.71	120.77	108.20
2	SA	853	C	O4'-C1'-N1	15.71	120.77	108.20
26	LA	1223	G	N1-C6-O6	15.70	129.32	119.90
26	LA	1150	C	O4'-C1'-N1	15.70	120.76	108.20
52	LO	40	ARG	NE-CZ-NH2	15.70	128.15	120.30
26	LA	1022	G	O4'-C1'-N9	15.68	120.74	108.20
26	LA	2492	U	O4'-C1'-N1	15.65	120.72	108.20
26	LA	1586	A	N1-C6-N6	-15.63	109.22	118.60
26	LA	909	A	P-O3'-C3'	15.60	138.42	119.70
2	SA	540	G	C5-C6-O6	-15.60	119.24	128.60
26	LA	2278	A	N9-C4-C5	15.60	112.04	105.80
4	S2	20	G	P-O3'-C3'	15.59	138.41	119.70
26	LA	2132	U	C2-N3-C4	-15.59	117.65	127.00
32	LY	13	ARG	NE-CZ-NH2	-15.54	112.53	120.30
2	SA	1345	U	O4'-C1'-N1	15.53	120.62	108.20
26	LA	2129	C	C6-N1-C2	-15.53	114.09	120.30
30	LW	93	ARG	NE-CZ-NH1	15.53	128.06	120.30
2	SA	156	C	O4'-C1'-N1	15.53	120.62	108.20
26	LA	1074	G	C5-C6-O6	-15.52	119.29	128.60
2	SA	411	A	P-O3'-C3'	15.51	138.32	119.70
2	SA	945	G	C5-C6-O6	-15.51	119.29	128.60
26	LA	974	G	C5-C6-O6	-15.51	119.29	128.60
2	SA	725	G	C5-C6-O6	-15.50	119.30	128.60
26	LA	29	U	P-O3'-C3'	15.50	138.29	119.70
4	S2	54	G	N1-C6-O6	15.49	129.20	119.90
26	LA	1706	C	O4'-C1'-N1	15.49	120.59	108.20
54	LM	105	ARG	NE-CZ-NH2	-15.49	112.55	120.30
26	LA	712	G	N3-C2-N2	15.49	130.75	119.90
26	LA	2581	G	P-O3'-C3'	15.47	138.27	119.70
26	LA	1746	A	N1-C6-N6	-15.46	109.32	118.60
2	SA	811	C	C6-N1-C2	-15.46	114.12	120.30
26	LA	2803	G	N1-C6-O6	15.40	129.14	119.90
2	SA	995	C	P-O5'-C5'	15.39	145.53	120.90
10	SJ	68	ARG	NE-CZ-NH2	-15.39	112.60	120.30
26	LA	2508	G	C8-N9-C4	-15.39	100.25	106.40
26	LA	574	A	C1'-O4'-C4'	-15.37	97.60	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	717	C	O4'-C1'-N1	15.34	120.47	108.20
26	LA	2436	G	C4-C5-N7	15.33	116.93	110.80
26	LA	2753	A	C5-N7-C8	-15.32	96.24	103.90
26	LA	1929	G	N9-C4-C5	-15.31	99.28	105.40
26	LA	2498	C	C6-N1-C2	-15.31	114.18	120.30
26	LA	367	G	C5-C6-O6	-15.31	119.42	128.60
26	LA	2056	G	C5-C6-O6	-15.30	119.42	128.60
26	LA	93	G	N1-C6-O6	15.30	129.08	119.90
26	LA	2290	G	N1-C6-O6	15.30	129.08	119.90
26	LA	2694	G	C5-C6-O6	-15.29	119.43	128.60
26	LA	2508	G	N7-C8-N9	15.25	120.72	113.10
26	LA	2433	A	C8-N9-C4	-15.24	99.70	105.80
26	LA	1684	G	C5-C6-O6	-15.24	119.46	128.60
26	LA	2336	A	N1-C6-N6	15.21	127.73	118.60
26	LA	1192	G	C5-C6-O6	-15.20	119.48	128.60
2	SA	1141	C	O4'-C1'-N1	15.18	120.35	108.20
26	LA	1574	C	C6-N1-C2	-15.18	114.23	120.30
26	LA	2609	U	P-O3'-C3'	15.17	137.91	119.70
26	LA	1628	G	N1-C6-O6	15.16	129.00	119.90
26	LA	2158	A	N1-C6-N6	-15.16	109.50	118.60
26	LA	1990	C	C2-N3-C4	-15.15	112.32	119.90
6	SU	54	ARG	NE-CZ-NH2	-15.12	112.74	120.30
26	LA	991	C	C6-N1-C2	-15.12	114.25	120.30
26	LA	964	C	C2-N3-C4	-15.11	112.35	119.90
26	LA	246	C	N1-C2-O2	15.11	127.96	118.90
26	LA	2440	C	C6-N1-C2	-15.11	114.26	120.30
41	L5	14	ARG	NE-CZ-NH1	-15.09	112.75	120.30
26	LA	2400	G	C4-C5-N7	15.09	116.83	110.80
26	LA	2808	G	P-O3'-C3'	15.08	137.80	119.70
26	LA	2665	A	O4'-C1'-N9	15.07	120.26	108.20
26	LA	2256	G	O4'-C1'-N9	15.07	120.26	108.20
26	LA	2048	G	C8-N9-C4	-15.06	100.37	106.40
26	LA	2078	C	C6-N1-C2	-15.06	114.27	120.30
25	LB	81	G	C5-C6-O6	-15.06	119.56	128.60
2	SA	1304	G	C8-N9-C4	-15.05	100.38	106.40
26	LA	2642	G	C8-N9-C4	-15.04	100.38	106.40
2	SA	1362	A	N1-C6-N6	-15.03	109.58	118.60
26	LA	2808	G	O4'-C1'-N9	15.02	120.22	108.20
41	L5	3	ARG	NE-CZ-NH2	15.01	127.81	120.30
2	SA	1055	A	N1-C6-N6	-15.01	109.59	118.60
26	LA	2867	G	P-O3'-C3'	15.00	137.70	119.70
2	SA	1000	A	P-O3'-C3'	14.99	137.69	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1296	C	C6-N1-C2	-14.99	114.30	120.30
26	LA	229	C	N3-C4-C5	-14.98	115.91	121.90
26	LA	463	G	C8-N9-C4	-14.98	100.41	106.40
25	LB	68	C	O4'-C1'-N1	14.98	120.18	108.20
2	SA	1392	G	C5-C6-O6	-14.97	119.62	128.60
19	SC	135	ARG	NE-CZ-NH1	14.97	127.79	120.30
25	LB	109	A	N1-C6-N6	-14.95	109.63	118.60
26	LA	1272	A	O4'-C1'-N9	14.95	120.16	108.20
26	LA	1349	C	C6-N1-C2	-14.95	114.32	120.30
2	SA	1434	A	N1-C6-N6	14.95	127.57	118.60
26	LA	125	A	O4'-C1'-N9	14.94	120.15	108.20
8	SH	12	ARG	NE-CZ-NH2	-14.91	112.84	120.30
2	SA	668	G	C5-C6-O6	-14.90	119.66	128.60
26	LA	1378	A	N1-C6-N6	-14.90	109.66	118.60
26	LA	1080	A	C5-C6-N1	14.89	125.15	117.70
26	LA	2422	C	C2-N3-C4	-14.89	112.45	119.90
2	SA	87	C	N3-C4-C5	-14.89	115.94	121.90
26	LA	1338	G	C8-N9-C4	-14.88	100.45	106.40
26	LA	1332	G	C8-N9-C4	-14.87	100.45	106.40
26	LA	1953	A	O4'-C1'-N9	14.86	120.09	108.20
50	LL	27	ARG	NE-CZ-NH1	14.85	127.72	120.30
26	LA	1934	C	C6-N1-C2	-14.84	114.36	120.30
26	LA	114	U	P-O5'-C5'	14.84	144.63	120.90
26	LA	1176	U	P-O3'-C3'	-14.83	101.90	119.70
26	LA	2271	G	C8-N9-C4	-14.83	100.47	106.40
26	LA	1832	C	C5-C6-N1	14.82	128.41	121.00
26	LA	1275	A	C1'-O4'-C4'	-14.81	98.05	109.90
2	SA	58	C	C6-N1-C2	-14.80	114.38	120.30
26	LA	777	G	C5-C6-O6	-14.79	119.73	128.60
2	SA	1518	A	C5-N7-C8	-14.77	96.51	103.90
26	LA	798	G	N7-C8-N9	-14.76	105.72	113.10
26	LA	1322	A	N1-C2-N3	-14.76	121.92	129.30
26	LA	2572	A	P-O3'-C3'	14.76	137.41	119.70
2	SA	45	G	C5-C6-O6	-14.76	119.75	128.60
26	LA	2844	G	C5-N7-C8	-14.75	96.92	104.30
26	LA	2160	C	C6-N1-C2	-14.75	114.40	120.30
26	LA	1287	A	C5-C6-N6	14.74	135.49	123.70
2	SA	1497	G	O4'-C1'-N9	14.74	119.99	108.20
2	SA	243	A	P-O3'-C3'	14.73	137.37	119.70
26	LA	1518	C	O4'-C1'-N1	14.72	119.97	108.20
2	SA	1045	C	C5-C4-N4	-14.71	109.90	120.20
2	SA	428	G	N1-C6-O6	14.71	128.72	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	283	G	N1-C6-O6	14.70	128.72	119.90
26	LA	537	G	N1-C6-O6	14.69	128.72	119.90
2	SA	1037	C	C2-N3-C4	-14.69	112.55	119.90
2	SA	227	G	P-O3'-C3'	14.66	137.29	119.70
26	LA	1592	C	O4'-C1'-N1	14.66	119.93	108.20
26	LA	1452	G	C8-N9-C4	14.65	112.26	106.40
26	LA	1901	A	O4'-C1'-N9	14.64	119.92	108.20
2	SA	979	C	N3-C4-C5	14.63	127.75	121.90
26	LA	2133	G	P-O3'-C3'	14.63	137.26	119.70
2	SA	518	C	P-O3'-C3'	14.62	137.25	119.70
26	LA	2872	A	C5-C6-N6	14.62	135.40	123.70
26	LA	164	C	O4'-C1'-N1	14.60	119.88	108.20
26	LA	1978	A	N1-C6-N6	14.60	127.36	118.60
2	SA	42	G	O4'-C1'-N9	14.58	119.86	108.20
30	LW	21	ARG	NE-CZ-NH1	14.58	127.59	120.30
26	LA	267	C	C6-N1-C2	-14.57	114.47	120.30
2	SA	1136	C	O4'-C1'-N1	14.56	119.85	108.20
2	SA	6	G	N1-C6-O6	14.55	128.63	119.90
3	S1	24	A	N1-C6-N6	-14.55	109.87	118.60
11	SK	52	ARG	NE-CZ-NH1	14.52	127.56	120.30
26	LA	2427	C	P-O5'-C5'	14.52	144.13	120.90
2	SA	97	G	N1-C6-O6	14.52	128.61	119.90
26	LA	2058	A	O4'-C1'-N9	14.51	119.81	108.20
24	S3	284	TYR	CB-CG-CD2	14.50	129.70	121.00
2	SA	833	G	C5-C6-O6	-14.50	119.90	128.60
2	SA	459	A	N1-C6-N6	14.50	127.30	118.60
26	LA	340	A	N1-C6-N6	-14.49	109.91	118.60
2	SA	182	A	O4'-C1'-N9	14.49	119.79	108.20
26	LA	2358	A	C6-N1-C2	-14.49	109.91	118.60
26	LA	1964	G	P-O3'-C3'	-14.46	102.35	119.70
26	LA	2260	C	O4'-C1'-N1	14.46	119.77	108.20
2	SA	1344	C	O3'-P-O5'	14.46	131.47	104.00
26	LA	1616	A	N1-C6-N6	14.45	127.27	118.60
25	LB	14	U	C5-C6-N1	14.44	129.92	122.70
26	LA	885	C	C5-C6-N1	14.43	128.22	121.00
26	LA	2579	C	P-O3'-C3'	14.43	137.02	119.70
2	SA	1002	G	C4-C5-N7	14.43	116.57	110.80
26	LA	2165	C	C6-N1-C2	-14.43	114.53	120.30
19	SC	155	ARG	NE-CZ-NH2	-14.42	113.09	120.30
26	LA	2531	A	N1-C6-N6	14.41	127.25	118.60
2	SA	458	U	O4'-C1'-N1	14.40	119.72	108.20
13	SM	85	TYR	CB-CG-CD2	14.39	129.63	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	394	C	N3-C4-N4	14.39	128.07	118.00
26	LA	2581	G	O4'-C1'-N9	14.39	119.71	108.20
26	LA	1085	A	N1-C6-N6	14.38	127.23	118.60
2	SA	184	G	C5-C6-O6	-14.38	119.97	128.60
26	LA	289	G	C2-N3-C4	14.36	119.08	111.90
26	LA	280	U	C5-C4-O4	-14.36	117.28	125.90
14	SN	8	ARG	NE-CZ-NH2	-14.36	113.12	120.30
2	SA	324	G	N1-C6-O6	14.35	128.51	119.90
23	SR	72	ARG	NE-CZ-NH2	-14.35	113.12	120.30
26	LA	101	A	P-O3'-C3'	14.35	136.92	119.70
2	SA	151	A	C8-N9-C4	-14.34	100.06	105.80
26	LA	2353	G	C5-C6-O6	-14.34	120.00	128.60
26	LA	2363	G	N9-C4-C5	-14.33	99.67	105.40
2	SA	900	A	N9-C4-C5	14.33	111.53	105.80
26	LA	367	G	N1-C6-O6	14.32	128.49	119.90
56	LR	52	ARG	NE-CZ-NH2	14.32	127.46	120.30
26	LA	1966	A	O4'-C1'-N9	14.32	119.66	108.20
2	SA	899	C	P-O3'-C3'	14.30	136.86	119.70
26	LA	1901	A	N1-C6-N6	-14.29	110.03	118.60
26	LA	100	U	P-O3'-C3'	14.27	136.82	119.70
2	SA	1101	A	C2-N3-C4	14.26	117.73	110.60
2	SA	1043	G	O4'-C1'-N9	14.25	119.60	108.20
26	LA	274	C	N3-C4-C5	-14.25	116.20	121.90
2	SA	1504	G	C5-C6-O6	-14.24	120.05	128.60
26	LA	1976	U	C2-N3-C4	-14.24	118.45	127.00
52	LO	18	ARG	NE-CZ-NH2	14.24	127.42	120.30
26	LA	1912	A	P-O5'-C5'	14.24	143.68	120.90
2	SA	485	U	O4'-C1'-N1	14.23	119.59	108.20
26	LA	889	C	C6-N1-C2	-14.22	114.61	120.30
26	LA	353	C	O4'-C1'-N1	14.22	119.58	108.20
2	SA	572	A	N1-C6-N6	14.21	127.13	118.60
26	LA	877	A	N1-C6-N6	-14.21	110.07	118.60
26	LA	2185	U	O4'-C1'-N1	14.21	119.57	108.20
26	LA	2338	C	O4'-C1'-N1	14.21	119.57	108.20
25	LB	66	A	P-O3'-C3'	14.18	136.72	119.70
26	LA	298	G	P-O3'-C3'	14.18	136.72	119.70
2	SA	1110	A	N1-C6-N6	-14.18	110.09	118.60
2	SA	848	C	O4'-C1'-N1	14.18	119.54	108.20
26	LA	1453	A	O4'-C1'-N9	14.15	119.52	108.20
2	SA	852	G	C5-C6-O6	-14.14	120.12	128.60
26	LA	1547	C	C6-N1-C2	-14.14	114.64	120.30
26	LA	2889	C	P-O5'-C5'	14.14	143.52	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	475	C	C6-N1-C2	-14.12	114.65	120.30
26	LA	595	C	N3-C4-C5	-14.12	116.25	121.90
2	SA	1476	A	N1-C6-N6	-14.09	110.14	118.60
2	SA	951	G	N1-C6-O6	14.09	128.35	119.90
26	LA	19	A	O4'-C1'-N9	14.09	119.47	108.20
26	LA	75	G	N1-C6-O6	14.09	128.35	119.90
26	LA	189	G	N1-C6-O6	14.08	128.35	119.90
22	SF	25	TYR	CB-CG-CD2	-14.07	112.56	121.00
2	SA	310	G	C5-C6-O6	-14.07	120.16	128.60
2	SA	1131	G	N1-C6-O6	14.07	128.34	119.90
26	LA	2223	G	N9-C4-C5	14.07	111.03	105.40
26	LA	2105	U	P-O5'-C5'	14.06	143.40	120.90
26	LA	1420	A	C8-N9-C4	-14.05	100.18	105.80
26	LA	443	A	O4'-C1'-N9	14.05	119.44	108.20
26	LA	798	G	C5-N7-C8	14.04	111.32	104.30
26	LA	1114	C	C6-N1-C2	-14.04	114.68	120.30
26	LA	806	C	O4'-C1'-N1	14.04	119.43	108.20
2	SA	494	G	C5-C6-O6	-14.04	120.18	128.60
26	LA	115	C	C6-N1-C2	-14.02	114.69	120.30
26	LA	2377	A	N1-C6-N6	-14.01	110.19	118.60
2	SA	1440	U	P-O3'-C3'	14.01	136.51	119.70
2	SA	1101	A	N1-C2-N3	-14.00	122.30	129.30
37	LC	162	ARG	NE-CZ-NH1	13.98	127.29	120.30
26	LA	2446	G	C5-C6-O6	-13.97	120.22	128.60
2	SA	4	U	P-O3'-C3'	13.97	136.46	119.70
2	SA	975	A	C8-N9-C4	13.96	111.39	105.80
54	LM	105	ARG	NE-CZ-NH1	13.96	127.28	120.30
26	LA	2476	A	C2-N3-C4	-13.96	103.62	110.60
2	SA	308	C	O4'-C1'-N1	13.96	119.37	108.20
2	SA	1358	U	O4'-C4'-C3'	-13.96	90.04	104.00
54	LM	112	PHE	CB-CG-CD2	-13.95	111.03	120.80
26	LA	1000	A	N1-C6-N6	-13.95	110.23	118.60
26	LA	1586	A	C5-C6-N6	13.95	134.86	123.70
26	LA	359	G	N1-C6-O6	13.95	128.27	119.90
52	LO	66	ARG	NE-CZ-NH1	13.94	127.27	120.30
2	SA	1146	A	N1-C6-N6	-13.93	110.24	118.60
19	SC	87	ARG	NE-CZ-NH2	-13.93	113.33	120.30
2	SA	851	G	N1-C6-O6	13.93	128.26	119.90
26	LA	1176	U	O4'-C1'-N1	13.92	119.34	108.20
26	LA	1275	A	O4'-C1'-N9	13.92	119.33	108.20
2	SA	331	G	N1-C6-O6	13.91	128.25	119.90
4	S2	15	G	N9-C4-C5	13.91	110.96	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	211	C	C6-N1-C2	-13.91	114.74	120.30
26	LA	570	G	N1-C6-O6	13.91	128.24	119.90
3	S1	54	U	C2-N3-C4	-13.90	118.66	127.00
2	SA	1302	C	P-O3'-C3'	13.89	136.36	119.70
2	SA	1407	C	C6-N1-C2	-13.88	114.75	120.30
2	SA	1299	A	O4'-C1'-N9	13.88	119.31	108.20
2	SA	1517	G	N1-C6-O6	-13.88	111.57	119.90
26	LA	283	G	C5-C6-O6	-13.88	120.27	128.60
26	LA	1960	A	N1-C2-N3	13.87	136.24	129.30
2	SA	766	A	C8-N9-C4	-13.87	100.25	105.80
26	LA	387	U	O4'-C1'-N1	13.87	119.29	108.20
25	LB	108	A	C8-N9-C4	13.86	111.34	105.80
26	LA	81	G	N1-C6-O6	13.85	128.21	119.90
26	LA	1598	A	N1-C6-N6	-13.85	110.29	118.60
2	SA	533	A	C5-C6-N6	13.84	134.78	123.70
2	SA	321	A	N1-C6-N6	13.84	126.90	118.60
2	SA	389	A	N1-C6-N6	-13.84	110.30	118.60
26	LA	400	G	C5-C6-O6	-13.83	120.30	128.60
2	SA	699	C	C6-N1-C2	-13.83	114.77	120.30
2	SA	557	G	N1-C6-O6	13.82	128.19	119.90
2	SA	59	A	O4'-C1'-N9	13.81	119.25	108.20
26	LA	1837	C	C6-N1-C2	-13.81	114.78	120.30
2	SA	1150	A	N1-C6-N6	-13.79	110.33	118.60
26	LA	1069	A	P-O3'-C3'	13.79	136.25	119.70
26	LA	869	G	C5-C6-O6	-13.79	120.33	128.60
26	LA	1804	C	C5-C6-N1	13.78	127.89	121.00
26	LA	2409	G	N1-C6-O6	13.78	128.17	119.90
2	SA	393	A	O4'-C1'-N9	13.77	119.22	108.20
2	SA	449	G	C5-C6-O6	-13.77	120.34	128.60
26	LA	1968	G	C5-C6-O6	-13.77	120.34	128.60
26	LA	1449	G	C8-N9-C4	13.76	111.91	106.40
26	LA	2353	G	C8-N9-C4	13.76	111.91	106.40
2	SA	941	G	N3-C2-N2	-13.76	110.27	119.90
26	LA	2295	C	O4'-C1'-N1	13.75	119.20	108.20
2	SA	360	G	C5-C6-O6	-13.74	120.35	128.60
2	SA	372	C	P-O3'-C3'	13.74	136.19	119.70
2	SA	776	G	P-O3'-C3'	13.74	136.19	119.70
12	SL	8	ARG	NE-CZ-NH2	13.72	127.16	120.30
26	LA	1849	G	N1-C6-O6	13.71	128.13	119.90
26	LA	247	G	N1-C6-O6	13.71	128.13	119.90
4	S2	76	C	P-O3'-C3'	13.71	136.15	119.70
2	SA	647	C	C4-C5-C6	13.70	124.25	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	ST	35	TYR	CB-CG-CD1	-13.70	112.78	121.00
26	LA	332	A	N1-C6-N6	-13.70	110.38	118.60
26	LA	1205	A	P-O3'-C3'	13.70	136.14	119.70
26	LA	2595	G	C5-C6-O6	-13.69	120.39	128.60
2	SA	1229	A	C8-N9-C4	-13.69	100.33	105.80
26	LA	2427	C	C2-N3-C4	-13.68	113.06	119.90
26	LA	500	G	C5-C6-O6	-13.67	120.40	128.60
26	LA	1897	G	O4'-C1'-N9	13.66	119.13	108.20
2	SA	899	C	O4'-C1'-N1	13.66	119.13	108.20
13	SM	106	ARG	NE-CZ-NH2	-13.66	113.47	120.30
26	LA	450	G	N1-C6-O6	13.65	128.09	119.90
2	SA	158	G	O4'-C1'-N9	13.65	119.12	108.20
2	SA	1374	A	O4'-C1'-N9	13.64	119.11	108.20
2	SA	307	C	P-O3'-C3'	13.64	136.06	119.70
2	SA	420	U	P-O3'-C3'	13.63	136.06	119.70
26	LA	76	C	C6-N1-C2	-13.63	114.85	120.30
26	LA	1728	C	C6-N1-C2	-13.63	114.85	120.30
26	LA	2168	G	C5-C6-O6	-13.63	120.42	128.60
25	LB	98	G	C5-C6-O6	-13.62	120.43	128.60
26	LA	1386	C	O4'-C1'-N1	13.61	119.09	108.20
26	LA	1460	U	P-O3'-C3'	13.61	136.03	119.70
26	LA	1761	C	O4'-C1'-N1	13.61	119.09	108.20
26	LA	678	C	C6-N1-C2	-13.61	114.86	120.30
40	L4	43	ARG	NE-CZ-NH2	-13.60	113.50	120.30
26	LA	1875	G	C5-C6-O6	-13.60	120.44	128.60
26	LA	2134	A	O4'-C1'-N9	13.60	119.08	108.20
32	LY	13	ARG	NE-CZ-NH1	13.58	127.09	120.30
2	SA	475	C	P-O5'-C5'	13.58	142.63	120.90
26	LA	2019	A	P-O3'-C3'	13.58	136.00	119.70
2	SA	792	A	P-O5'-C5'	13.57	142.62	120.90
2	SA	1096	C	O4'-C1'-N1	13.57	119.06	108.20
2	SA	575	G	N1-C6-O6	13.56	128.04	119.90
2	SA	777	A	N1-C6-N6	13.56	126.74	118.60
26	LA	2765	A	N1-C6-N6	-13.56	110.46	118.60
26	LA	2827	C	O4'-C1'-N1	13.56	119.05	108.20
2	SA	1424	U	C5-C6-N1	-13.56	115.92	122.70
26	LA	1384	A	N1-C6-N6	13.56	126.73	118.60
26	LA	1241	A	O4'-C1'-N9	13.56	119.05	108.20
26	LA	2709	G	C8-N9-C4	-13.55	100.98	106.40
26	LA	1172	C	C6-N1-C2	-13.55	114.88	120.30
2	SA	616	G	C5-C6-O6	-13.55	120.47	128.60
25	LB	86	G	P-O3'-C3'	13.54	135.95	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	SS	36	ARG	NE-CZ-NH1	13.53	127.07	120.30
2	SA	1521	C	N3-C4-N4	13.53	127.47	118.00
4	S2	63	C	C6-N1-C2	-13.53	114.89	120.30
2	SA	977	A	N1-C6-N6	13.53	126.72	118.60
13	SM	97	ARG	NE-CZ-NH1	13.53	127.06	120.30
26	LA	517	C	C2-N3-C4	-13.53	113.14	119.90
26	LA	974	G	C8-N9-C4	-13.51	101.00	106.40
26	LA	2663	G	P-O3'-C3'	13.51	135.91	119.70
25	LB	59	A	N7-C8-N9	13.51	120.55	113.80
26	LA	1649	G	N1-C6-O6	13.50	128.00	119.90
6	SU	66	ARG	NE-CZ-NH2	13.50	127.05	120.30
26	LA	1287	A	N1-C6-N6	-13.49	110.50	118.60
45	LG	127	TYR	CB-CG-CD1	-13.49	112.90	121.00
2	SA	673	A	O4'-C1'-N9	13.49	118.99	108.20
26	LA	958	U	C5-C6-N1	-13.49	115.96	122.70
26	LA	2454	G	C5-C6-O6	-13.48	120.51	128.60
26	LA	2734	A	C5-C6-N1	13.47	124.44	117.70
2	SA	872	A	C2-N3-C4	-13.47	103.86	110.60
2	SA	433	G	N7-C8-N9	13.47	119.83	113.10
26	LA	247	G	C5-C6-O6	-13.47	120.52	128.60
26	LA	2247	A	N1-C6-N6	13.46	126.68	118.60
26	LA	1174	U	O4'-C1'-N1	13.46	118.97	108.20
2	SA	636	U	C5-C4-O4	-13.46	117.82	125.90
26	LA	2383	G	C5-C6-O6	-13.46	120.53	128.60
26	LA	804	A	N1-C6-N6	-13.46	110.53	118.60
2	SA	787	A	N1-C2-N3	-13.45	122.58	129.30
26	LA	789	A	O4'-C1'-N9	13.45	118.96	108.20
26	LA	299	A	N1-C6-N6	13.45	126.67	118.60
26	LA	1142	A	P-O3'-C3'	13.45	135.84	119.70
26	LA	2466	C	C6-N1-C2	-13.45	114.92	120.30
26	LA	2596	U	N3-C4-O4	13.44	128.81	119.40
2	SA	1213	A	P-O3'-C3'	13.44	135.83	119.70
26	LA	142	A	N9-C4-C5	-13.44	100.42	105.80
2	SA	478	A	N1-C6-N6	13.44	126.66	118.60
26	LA	1483	G	C2-N3-C4	13.43	118.62	111.90
26	LA	1788	C	C6-N1-C2	-13.43	114.93	120.30
26	LA	2782	G	C5-C6-O6	-13.43	120.54	128.60
2	SA	670	G	C5-C6-O6	13.42	136.65	128.60
4	S2	7	G	P-O3'-C3'	13.42	135.80	119.70
26	LA	2144	G	N1-C6-O6	13.42	127.95	119.90
26	LA	33	C	O4'-C1'-N1	13.39	118.92	108.20
2	SA	1208	C	P-O3'-C3'	13.39	135.77	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1916	A	P-O5'-C5'	13.38	142.31	120.90
2	SA	1299	A	N9-C4-C5	-13.38	100.45	105.80
26	LA	2829	A	N9-C4-C5	-13.38	100.45	105.80
2	SA	717	U	P-O3'-C3'	13.37	135.74	119.70
26	LA	93	G	C5-C6-O6	-13.37	120.58	128.60
38	LE	124	ARG	NE-CZ-NH1	13.36	126.98	120.30
4	S2	70	C	C6-N1-C2	-13.36	114.96	120.30
26	LA	63	A	N9-C4-C5	13.36	111.14	105.80
26	LA	1489	C	C5-C6-N1	13.36	127.68	121.00
26	LA	1990	C	N3-C4-C5	13.35	127.24	121.90
2	SA	1451	U	P-O3'-C3'	13.35	135.71	119.70
2	SA	193	C	C6-N1-C2	-13.34	114.97	120.30
26	LA	2168	G	N1-C6-O6	13.34	127.90	119.90
2	SA	97	G	C5-C6-O6	-13.33	120.60	128.60
2	SA	197	A	P-O3'-C3'	13.32	135.69	119.70
2	SA	349	A	N1-C6-N6	13.32	126.59	118.60
12	SL	85	ARG	NE-CZ-NH2	-13.32	113.64	120.30
25	LB	70	C	C6-N1-C2	-13.32	114.97	120.30
26	LA	2227	A	C8-N9-C4	-13.32	100.47	105.80
26	LA	628	G	O4'-C1'-N9	13.31	118.85	108.20
2	SA	1073	U	O4'-C1'-N1	13.31	118.84	108.20
2	SA	830	G	N1-C6-O6	13.30	127.88	119.90
26	LA	2270	A	N1-C2-N3	13.30	135.95	129.30
26	LA	1437	C	N3-C4-C5	-13.29	116.58	121.90
2	SA	251	G	N9-C4-C5	13.29	110.72	105.40
26	LA	1420	A	O4'-C1'-N9	13.29	118.83	108.20
26	LA	2822	G	C4-C5-N7	13.29	116.11	110.80
26	LA	139	U	P-O3'-C3'	13.27	135.62	119.70
26	LA	831	G	O4'-C1'-N9	13.27	118.81	108.20
26	LA	2901	C	O4'-C1'-N1	13.27	118.81	108.20
2	SA	1176	A	N1-C6-N6	-13.26	110.64	118.60
2	SA	417	G	C5-C6-O6	13.25	136.55	128.60
2	SA	654	G	C5-C6-O6	-13.25	120.65	128.60
26	LA	2293	G	C5-C6-O6	-13.25	120.65	128.60
26	LA	1849	G	C5-C6-O6	-13.24	120.65	128.60
26	LA	2458	G	O4'-C1'-N9	13.24	118.79	108.20
26	LA	131	A	O4'-C1'-N9	13.23	118.78	108.20
26	LA	1009	A	N1-C6-N6	-13.23	110.66	118.60
26	LA	1878	G	C5-C6-O6	13.23	136.54	128.60
2	SA	1486	G	C8-N9-C4	-13.22	101.11	106.40
2	SA	840	C	P-O5'-C5'	13.22	142.05	120.90
26	LA	316	C	O4'-C1'-N1	13.22	118.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	555	G	N3-C2-N2	13.21	129.15	119.90
26	LA	1430	G	C4-C5-N7	-13.21	105.52	110.80
13	SM	22	TYR	CB-CG-CD1	-13.20	113.08	121.00
26	LA	2070	A	N1-C6-N6	-13.20	110.68	118.60
26	LA	2849	U	C2-N3-C4	-13.20	119.08	127.00
26	LA	1759	A	C4-C5-C6	-13.20	110.40	117.00
26	LA	1369	G	C5-C6-O6	-13.17	120.70	128.60
26	LA	2650	U	C5-C4-O4	-13.17	118.00	125.90
16	SP	14	ARG	NE-CZ-NH1	13.17	126.88	120.30
26	LA	2519	U	C2-N3-C4	-13.16	119.10	127.00
26	LA	158	U	C5-C4-O4	13.15	133.79	125.90
26	LA	695	G	C8-N9-C4	13.15	111.66	106.40
2	SA	2	A	P-O3'-C3'	13.15	135.47	119.70
22	SF	44	ARG	NE-CZ-NH2	-13.15	113.73	120.30
2	SA	47	C	O4'-C1'-N1	13.14	118.71	108.20
26	LA	540	C	O4'-C1'-N1	13.13	118.71	108.20
2	SA	454	G	N1-C6-O6	13.13	127.78	119.90
26	LA	1726	C	C6-N1-C2	-13.13	115.05	120.30
26	LA	1122	G	C5'-C4'-C3'	13.13	137.01	116.00
26	LA	1285	A	C8-N9-C4	13.13	111.05	105.80
26	LA	473	G	N1-C6-O6	-13.12	112.03	119.90
3	S1	58	C	N3-C4-C5	-13.12	116.65	121.90
26	LA	2250	G	C4-C5-N7	13.12	116.05	110.80
26	LA	2677	G	C8-N9-C4	13.12	111.65	106.40
1	SS	2	ARG	NE-CZ-NH2	13.11	126.85	120.30
26	LA	1925	C	C5'-C4'-O4'	13.11	124.83	109.10
2	SA	639	G	C5-C6-O6	-13.10	120.74	128.60
2	SA	1342	C	N3-C4-C5	-13.10	116.66	121.90
26	LA	311	A	O4'-C1'-N9	13.10	118.68	108.20
26	LA	418	C	C4-C5-C6	-13.10	110.85	117.40
26	LA	2551	C	O4'-C1'-N1	13.09	118.67	108.20
2	SA	48	C	O4'-C1'-N1	13.09	118.67	108.20
2	SA	1457	G	C4-C5-N7	13.09	116.03	110.80
26	LA	1979	U	C2-N3-C4	-13.09	119.15	127.00
26	LA	1110	G	C8-N9-C4	13.08	111.63	106.40
26	LA	736	C	O4'-C1'-N1	13.08	118.66	108.20
4	S2	57	C	C6-N1-C2	-13.08	115.07	120.30
26	LA	1078	U	O4'-C1'-N1	13.08	118.66	108.20
26	LA	81	G	C5-C6-O6	-13.07	120.76	128.60
25	LB	6	G	O4'-C1'-N9	13.07	118.66	108.20
26	LA	570	G	C5-C6-O6	-13.07	120.76	128.60
26	LA	889	C	O4'-C1'-N1	13.07	118.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	516	C	P-O3'-C3'	13.06	135.38	119.70
26	LA	1100	C	O4'-C1'-N1	13.06	118.65	108.20
26	LA	1531	C	O4'-C1'-N1	13.06	118.65	108.20
4	S2	58	A	P-O3'-C3'	13.06	135.37	119.70
11	SK	121	ARG	NE-CZ-NH1	-13.05	113.77	120.30
27	LD	166	ARG	NE-CZ-NH1	13.05	126.83	120.30
26	LA	257	C	O4'-C1'-N1	13.05	118.64	108.20
2	SA	930	C	O4'-C1'-N1	13.04	118.63	108.20
26	LA	2873	A	O4'-C1'-N9	13.04	118.63	108.20
26	LA	985	C	O4'-C1'-N1	13.03	118.63	108.20
26	LA	1757	A	C1'-O4'-C4'	-13.03	99.47	109.90
26	LA	564	C	C6-N1-C2	-13.03	115.09	120.30
2	SA	818	G	C5-C6-O6	-13.02	120.79	128.60
26	LA	1556	C	C4-C5-C6	13.02	123.91	117.40
2	SA	1193	G	O4'-C1'-N9	13.02	118.61	108.20
26	LA	2314	A	N1-C6-N6	13.02	126.41	118.60
2	SA	1542	A	C8-N9-C4	-13.02	100.59	105.80
26	LA	595	C	C6-N1-C2	-13.01	115.09	120.30
26	LA	2439	A	N1-C2-N3	-13.01	122.79	129.30
2	SA	788	U	C5-C4-O4	13.01	133.71	125.90
26	LA	2429	G	C4-C5-N7	-13.01	105.60	110.80
26	LA	877	A	C5-C6-N6	13.00	134.10	123.70
26	LA	995	C	C6-N1-C2	-12.99	115.10	120.30
4	S2	3	C	C5-C6-N1	12.99	127.50	121.00
26	LA	184	C	C5-C6-N1	12.99	127.50	121.00
26	LA	2400	G	C5-C6-O6	-12.99	120.81	128.60
23	SR	62	ARG	NE-CZ-NH2	12.99	126.80	120.30
26	LA	187	G	C5-C6-O6	-12.99	120.81	128.60
2	SA	1034	G	O4'-C1'-N9	12.98	118.59	108.20
26	LA	1007	C	C6-N1-C2	-12.98	115.11	120.30
2	SA	1541	U	P-O5'-C5'	12.98	141.66	120.90
26	LA	710	U	C5-C6-N1	12.98	129.19	122.70
26	LA	1248	G	C5-C6-O6	-12.97	120.81	128.60
2	SA	1030	U	N1-C2-O2	12.96	131.87	122.80
26	LA	2534	A	C8-N9-C4	-12.96	100.61	105.80
52	LO	81	ARG	NE-CZ-NH2	-12.96	113.82	120.30
26	LA	1552	A	C8-N9-C4	-12.96	100.62	105.80
26	LA	2111	U	C2-N3-C4	-12.96	119.22	127.00
26	LA	2534	A	N9-C4-C5	12.96	110.98	105.80
26	LA	2171	A	P-O3'-C3'	12.95	135.24	119.70
2	SA	730	G	N3-C2-N2	12.95	128.96	119.90
26	LA	1953	A	N1-C2-N3	12.95	135.77	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	942	G	C5-C6-O6	-12.95	120.83	128.60
58	LT	13	ARG	NE-CZ-NH1	12.95	126.77	120.30
26	LA	217	A	P-O3'-C3'	12.94	135.23	119.70
2	SA	433	G	C8-N9-C4	-12.93	101.23	106.40
2	SA	559	A	C8-N9-C4	-12.93	100.63	105.80
26	LA	1019	U	N3-C2-O2	-12.93	113.15	122.20
2	SA	407	U	C5-C4-O4	-12.93	118.14	125.90
2	SA	428	G	C6-C5-N7	-12.92	122.65	130.40
31	LX	21	ARG	NE-CZ-NH1	12.92	126.76	120.30
2	SA	1021	A	C8-N9-C4	-12.92	100.63	105.80
26	LA	1192	G	N1-C6-O6	12.92	127.65	119.90
2	SA	881	G	N7-C8-N9	12.91	119.56	113.10
47	LJ	41	ARG	NE-CZ-NH1	12.91	126.75	120.30
2	SA	1468	A	N1-C6-N6	-12.91	110.86	118.60
26	LA	410	G	C4-C5-N7	-12.90	105.64	110.80
26	LA	351	C	C6-N1-C2	12.90	125.46	120.30
2	SA	271	C	C5-C4-N4	-12.89	111.17	120.20
2	SA	1497	G	C2-N3-C4	12.89	118.35	111.90
26	LA	168	G	C8-N9-C4	12.89	111.56	106.40
2	SA	811	C	O4'-C1'-N1	12.89	118.51	108.20
26	LA	163	C	O4'-C1'-N1	12.88	118.50	108.20
26	LA	1232	G	N7-C8-N9	12.88	119.54	113.10
26	LA	1382	G	O4'-C1'-N9	12.87	118.50	108.20
2	SA	650	G	P-O3'-C3'	12.87	135.14	119.70
26	LA	2072	C	O4'-C1'-N1	12.87	118.50	108.20
26	LA	1632	A	N1-C6-N6	-12.87	110.88	118.60
2	SA	393	A	N1-C2-N3	12.87	135.73	129.30
26	LA	2264	C	N3-C4-C5	-12.86	116.75	121.90
2	SA	44	A	N1-C6-N6	12.86	126.31	118.60
2	SA	923	A	N1-C6-N6	12.85	126.31	118.60
26	LA	973	A	N9-C4-C5	12.85	110.94	105.80
26	LA	155	A	N1-C2-N3	-12.85	122.88	129.30
26	LA	2800	A	P-O5'-C5'	12.85	141.45	120.90
2	SA	1206	G	P-O5'-C5'	12.84	141.45	120.90
26	LA	845	A	N1-C6-N6	-12.84	110.90	118.60
26	LA	1408	G	C5-C6-O6	12.84	136.30	128.60
26	LA	674	G	C5-C6-N1	12.83	117.92	111.50
26	LA	2223	G	N3-C4-C5	-12.83	122.18	128.60
2	SA	454	G	C5-C6-O6	-12.83	120.90	128.60
26	LA	2061	G	C4-C5-N7	12.82	115.93	110.80
4	S2	29	C	P-O5'-C5'	12.82	141.41	120.90
26	LA	1216	G	N1-C2-N3	-12.82	116.21	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1200	C	C6-N1-C2	-12.81	115.17	120.30
26	LA	139	U	O4'-C1'-N1	12.81	118.45	108.20
2	SA	1432	G	C5-C6-O6	-12.80	120.92	128.60
26	LA	2221	G	C5-C6-O6	-12.80	120.92	128.60
2	SA	212	G	N1-C6-O6	-12.80	112.22	119.90
26	LA	451	U	C1'-O4'-C4'	-12.79	99.67	109.90
26	LA	1379	U	O4'-C1'-N1	12.79	118.43	108.20
2	SA	406	G	N7-C8-N9	-12.79	106.71	113.10
47	LJ	158	ARG	NE-CZ-NH1	12.79	126.69	120.30
50	LL	37	ARG	NE-CZ-NH1	12.79	126.69	120.30
2	SA	182	A	N1-C6-N6	-12.78	110.93	118.60
2	SA	515	G	C8-N9-C4	12.79	111.51	106.40
2	SA	1391	U	N3-C2-O2	-12.79	113.25	122.20
2	SA	1293	C	C6-N1-C2	-12.78	115.19	120.30
26	LA	2012	G	O4'-C1'-N9	12.78	118.42	108.20
2	SA	418	C	N3-C4-C5	12.77	127.01	121.90
26	LA	511	U	P-O3'-C3'	12.77	135.02	119.70
26	LA	869	G	N1-C6-O6	12.76	127.56	119.90
2	SA	1323	G	C5-C6-O6	-12.76	120.94	128.60
26	LA	2226	C	C6-N1-C2	-12.76	115.20	120.30
26	LA	25	U	C5-C6-N1	-12.75	116.32	122.70
26	LA	1570	A	N1-C6-N6	-12.75	110.95	118.60
26	LA	814	C	N3-C4-C5	-12.74	116.80	121.90
26	LA	936	A	C4-C5-N7	12.74	117.07	110.70
26	LA	2738	A	C8-N9-C4	12.74	110.89	105.80
26	LA	2171	A	N9-C4-C5	12.74	110.89	105.80
26	LA	2715	C	C6-N1-C2	-12.73	115.21	120.30
2	SA	1013	G	N1-C6-O6	12.73	127.54	119.90
26	LA	467	G	N1-C6-O6	12.72	127.53	119.90
26	LA	2851	A	N1-C6-N6	-12.72	110.97	118.60
44	LF	117	ARG	NE-CZ-NH1	12.72	126.66	120.30
26	LA	1097	U	O4'-C1'-N1	12.71	118.37	108.20
26	LA	656	G	C8-N9-C4	-12.71	101.32	106.40
2	SA	1131	G	C5-N7-C8	-12.71	97.95	104.30
26	LA	2125	G	C5-C6-O6	-12.70	120.98	128.60
26	LA	2213	U	O4'-C1'-N1	12.71	118.36	108.20
4	S2	2	G	O4'-C1'-N9	12.70	118.36	108.20
2	SA	1496	C	C6-N1-C2	-12.69	115.22	120.30
26	LA	1311	G	N9-C4-C5	12.69	110.48	105.40
26	LA	879	G	C5-C6-O6	-12.69	120.99	128.60
26	LA	2000	C	C2-N3-C4	-12.68	113.56	119.90
26	LA	804	A	C2-N3-C4	12.68	116.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1264	A	C8-N9-C4	-12.68	100.73	105.80
2	SA	79	G	C5-C6-O6	-12.68	121.00	128.60
2	SA	1399	C	N3-C4-C5	-12.68	116.83	121.90
26	LA	2584	U	O4'-C1'-N1	12.67	118.34	108.20
26	LA	2877	G	C5-C6-N1	12.67	117.83	111.50
3	S1	30	U	C5-C4-O4	-12.66	118.30	125.90
26	LA	1164	C	O4'-C1'-N1	12.66	118.33	108.20
26	LA	876	C	P-O3'-C3'	12.66	134.89	119.70
2	SA	1184	G	C5-C6-O6	12.65	136.19	128.60
2	SA	1448	C	P-O5'-C5'	12.65	141.15	120.90
4	S2	22	A	C1'-O4'-C4'	-12.65	99.78	109.90
26	LA	2127	G	P-O3'-C3'	12.65	134.88	119.70
26	LA	986	C	O4'-C1'-N1	12.65	118.32	108.20
4	S2	62	C	C6-N1-C2	-12.65	115.24	120.30
27	LD	101	ARG	NE-CZ-NH1	12.64	126.62	120.30
2	SA	255	G	C5-C6-O6	-12.64	121.02	128.60
26	LA	125	A	P-O3'-C3'	12.64	134.87	119.70
25	LB	60	C	O4'-C1'-N1	12.64	118.31	108.20
2	SA	849	G	C8-N9-C4	12.64	111.45	106.40
26	LA	861	A	O4'-C1'-N9	12.63	118.30	108.20
26	LA	467	G	C5-C6-O6	-12.62	121.03	128.60
26	LA	1927	A	P-O3'-C3'	12.62	134.84	119.70
26	LA	2385	C	P-O3'-C3'	-12.62	104.56	119.70
2	SA	1088	G	C5-C6-O6	-12.62	121.03	128.60
26	LA	2190	G	C2-N3-C4	12.61	118.21	111.90
2	SA	1177	G	N1-C6-O6	12.61	127.47	119.90
25	LB	56	G	N9-C4-C5	12.61	110.44	105.40
26	LA	214	G	C8-N9-C4	-12.61	101.36	106.40
20	SD	164	ARG	NE-CZ-NH1	12.61	126.60	120.30
2	SA	811	C	P-O5'-C5'	12.61	141.07	120.90
26	LA	2018	G	O4'-C1'-N9	12.61	118.28	108.20
26	LA	1807	G	C5-C6-N1	12.60	117.80	111.50
26	LA	1197	G	C5-C6-O6	-12.60	121.04	128.60
26	LA	1031	G	C5-C6-O6	-12.59	121.05	128.60
26	LA	1492	G	C8-N9-C4	12.59	111.44	106.40
26	LA	2549	G	N9-C4-C5	12.59	110.44	105.40
26	LA	1042	G	C8-N9-C4	12.59	111.43	106.40
26	LA	2601	C	C6-N1-C2	-12.59	115.27	120.30
2	SA	1327	C	O4'-C1'-N1	12.58	118.27	108.20
26	LA	1767	G	N1-C6-O6	12.58	127.45	119.90
26	LA	2446	G	N1-C6-O6	12.58	127.45	119.90
26	LA	931	U	O4'-C1'-N1	12.58	118.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	SI	44	ARG	NE-CZ-NH2	-12.57	114.01	120.30
2	SA	706	A	N9-C4-C5	12.57	110.83	105.80
26	LA	1240	U	P-O5'-C5'	12.56	141.00	120.90
26	LA	1699	G	O4'-C1'-N9	12.56	118.25	108.20
2	SA	194	C	N3-C4-C5	12.56	126.92	121.90
26	LA	2480	C	O4'-C1'-N1	12.56	118.25	108.20
26	LA	1123	C	O4'-C1'-N1	12.56	118.25	108.20
3	S1	41	A	P-O3'-C3'	12.55	134.76	119.70
11	SK	10	ARG	NE-CZ-NH2	-12.55	114.02	120.30
26	LA	2624	G	N3-C2-N2	12.55	128.68	119.90
2	SA	711	G	N1-C6-O6	12.54	127.42	119.90
2	SA	530	G	C5-C6-O6	-12.54	121.08	128.60
2	SA	1369	C	O4'-C1'-N1	12.54	118.23	108.20
2	SA	497	G	P-O3'-C3'	12.53	134.74	119.70
26	LA	2169	A	N9-C4-C5	-12.53	100.79	105.80
26	LA	1209	U	P-O3'-C3'	-12.52	104.67	119.70
26	LA	1290	C	C5-C4-N4	-12.52	111.44	120.20
26	LA	980	A	C2-N3-C4	12.52	116.86	110.60
26	LA	2583	G	C5-C6-O6	-12.51	121.09	128.60
2	SA	538	G	C8-N9-C4	12.51	111.40	106.40
2	SA	604	G	C4-C5-N7	12.51	115.80	110.80
26	LA	664	G	C5-C6-N1	12.51	117.75	111.50
26	LA	1832	C	C6-N1-C2	-12.51	115.30	120.30
26	LA	2100	G	C5-C6-O6	-12.50	121.10	128.60
26	LA	2501	C	O4'-C1'-N1	12.50	118.20	108.20
26	LA	1903	G	O4'-C1'-N9	12.50	118.20	108.20
26	LA	2521	C	O4'-C1'-N1	12.50	118.20	108.20
2	SA	1323	G	N3-C2-N2	12.50	128.65	119.90
2	SA	348	G	C5'-C4'-C3'	12.49	135.99	116.00
26	LA	813	U	C5-C4-O4	-12.49	118.40	125.90
26	LA	1019	U	C2-N3-C4	-12.49	119.50	127.00
2	SA	391	G	C5-C6-O6	-12.49	121.11	128.60
26	LA	2623	G	C5-C6-O6	-12.49	121.11	128.60
26	LA	1918	A	N1-C6-N6	-12.48	111.11	118.60
4	S2	42	C	N3-C4-N4	12.48	126.73	118.00
2	SA	567	G	C5-C6-O6	-12.47	121.12	128.60
26	LA	1511	G	O4'-C1'-N9	12.47	118.18	108.20
48	LN	69	ARG	NE-CZ-NH1	12.47	126.53	120.30
26	LA	1493	C	O4'-C1'-N1	12.46	118.17	108.20
2	SA	1529	G	P-O3'-C3'	12.45	134.64	119.70
25	LB	63	C	C6-N1-C2	-12.46	115.32	120.30
2	SA	616	G	N7-C8-N9	-12.45	106.87	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	15	G	C4-C5-N7	-12.45	105.82	110.80
56	LR	88	ARG	NE-CZ-NH2	12.45	126.53	120.30
26	LA	917	A	N1-C6-N6	-12.45	111.13	118.60
26	LA	1461	C	O4'-C1'-N1	12.44	118.16	108.20
2	SA	467	U	O4'-C1'-N1	12.43	118.15	108.20
26	LA	688	U	C2-N3-C4	-12.43	119.54	127.00
26	LA	481	G	O4'-C1'-N9	12.43	118.14	108.20
26	LA	280	U	N3-C4-O4	12.43	128.10	119.40
26	LA	2157	G	P-O3'-C3'	12.42	134.61	119.70
2	SA	734	G	C2-N3-C4	-12.42	105.69	111.90
26	LA	699	A	N1-C2-N3	12.42	135.51	129.30
26	LA	1713	A	N1-C2-N3	12.42	135.51	129.30
26	LA	829	A	N1-C2-N3	12.41	135.51	129.30
26	LA	1886	U	C5-C4-O4	-12.41	118.45	125.90
45	LG	6	TYR	CB-CG-CD2	-12.41	113.55	121.00
2	SA	1405	G	N3-C2-N2	12.41	128.59	119.90
26	LA	1129	A	N1-C6-N6	-12.41	111.15	118.60
26	LA	2236	U	P-O3'-C3'	12.41	134.59	119.70
26	LA	1648	U	C5-C4-O4	12.41	133.34	125.90
26	LA	1690	A	C8-N9-C4	-12.41	100.84	105.80
2	SA	237	G	N1-C6-O6	12.40	127.34	119.90
2	SA	128	G	P-O3'-C3'	12.39	134.57	119.70
2	SA	329	A	C8-N9-C4	12.39	110.76	105.80
2	SA	205	A	N1-C6-N6	-12.39	111.17	118.60
28	LU	18	ARG	NE-CZ-NH1	12.39	126.49	120.30
25	LB	69	G	C5-C6-O6	-12.38	121.17	128.60
2	SA	1097	C	N3-C4-C5	-12.38	116.95	121.90
26	LA	1235	G	C5-C6-O6	-12.38	121.17	128.60
26	LA	1762	A	N1-C2-N3	-12.38	123.11	129.30
26	LA	2688	G	C6-C5-N7	-12.38	122.97	130.40
2	SA	288	A	N1-C6-N6	-12.37	111.18	118.60
26	LA	401	A	O4'-C1'-N9	12.37	118.09	108.20
2	SA	616	G	N1-C6-O6	12.36	127.32	119.90
26	LA	757	G	N1-C6-O6	-12.36	112.48	119.90
2	SA	769	G	C6-N1-C2	-12.35	117.69	125.10
26	LA	317	G	N1-C6-O6	-12.35	112.49	119.90
26	LA	825	A	N1-C2-N3	12.35	135.47	129.30
26	LA	2779	U	O4'-C1'-N1	12.34	118.07	108.20
2	SA	1289	A	N1-C6-N6	12.34	126.00	118.60
44	LF	19	PHE	CB-CG-CD1	12.34	129.44	120.80
15	SO	76	ARG	NE-CZ-NH1	12.34	126.47	120.30
26	LA	1924	C	O4'-C1'-N1	12.34	118.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	LC	60	ARG	NE-CZ-NH1	12.33	126.47	120.30
26	LA	885	C	C4-C5-C6	-12.33	111.24	117.40
26	LA	1341	G	P-O3'-C3'	-12.32	104.91	119.70
6	SU	68	ARG	NE-CZ-NH1	12.32	126.46	120.30
26	LA	2277	G	C5-C6-O6	-12.32	121.21	128.60
2	SA	769	G	C5-C6-O6	-12.31	121.21	128.60
26	LA	2693	G	C5-C6-O6	-12.31	121.21	128.60
2	SA	9	G	O4'-C1'-N9	12.31	118.05	108.20
26	LA	27	G	P-O3'-C3'	12.31	134.47	119.70
26	LA	1157	G	C8-N9-C4	-12.30	101.48	106.40
26	LA	1847	A	P-O3'-C3'	-12.30	104.94	119.70
2	SA	847	G	N3-C4-C5	-12.30	122.45	128.60
2	SA	1150	A	C4-C5-C6	-12.30	110.85	117.00
26	LA	2071	A	P-O5'-C5'	12.30	140.57	120.90
26	LA	2414	G	C5-C6-O6	-12.30	121.22	128.60
26	LA	2454	G	N1-C6-O6	12.29	127.28	119.90
3	S1	56	G	C8-N9-C4	12.29	111.32	106.40
15	SO	68	TYR	CB-CG-CD1	-12.29	113.63	121.00
26	LA	2400	G	N9-C4-C5	-12.28	100.49	105.40
7	SG	142	ARG	NE-CZ-NH2	-12.28	114.16	120.30
26	LA	2397	G	C5-C6-O6	-12.27	121.24	128.60
2	SA	1282	C	C6-N1-C2	-12.27	115.39	120.30
2	SA	1290	G	C8-N9-C4	12.27	111.31	106.40
26	LA	2264	C	C4-C5-C6	12.27	123.53	117.40
20	SD	187	ARG	NE-CZ-NH1	12.26	126.43	120.30
26	LA	2463	C	O4'-C1'-N1	12.26	118.01	108.20
26	LA	1674	G	N1-C2-N3	12.26	131.26	123.90
4	S2	60	A	C2-N3-C4	-12.26	104.47	110.60
26	LA	543	G	C5-C6-O6	-12.26	121.25	128.60
26	LA	1480	C	O4'-C1'-N1	12.26	118.01	108.20
37	LC	38	PHE	CB-CG-CD1	12.25	129.38	120.80
2	SA	1184	G	N1-C6-O6	-12.25	112.55	119.90
2	SA	691	G	N9-C4-C5	12.25	110.30	105.40
33	LZ	77	TYR	CB-CG-CD1	-12.25	113.65	121.00
2	SA	1363	A	C5-C6-N6	-12.24	113.91	123.70
26	LA	1129	A	C5-C6-N1	12.24	123.82	117.70
26	LA	1610	A	N1-C6-N6	-12.24	111.26	118.60
26	LA	282	A	C8-N9-C4	12.23	110.69	105.80
2	SA	379	C	C5-C6-N1	12.23	127.11	121.00
26	LA	2455	G	N1-C6-O6	-12.23	112.56	119.90
2	SA	1229	A	C2-N3-C4	12.23	116.71	110.60
2	SA	462	G	N7-C8-N9	-12.22	106.99	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2238	G	N1-C6-O6	12.22	127.23	119.90
26	LA	1929	G	O4'-C1'-N9	12.22	117.98	108.20
26	LA	2448	A	N1-C2-N3	-12.22	123.19	129.30
2	SA	337	G	C5-C6-O6	-12.22	121.27	128.60
26	LA	713	G	N3-C2-N2	12.22	128.45	119.90
26	LA	2024	G	N3-C4-C5	-12.22	122.49	128.60
2	SA	1397	C	P-O3'-C3'	12.21	134.36	119.70
26	LA	756	A	C5-C6-N1	12.21	123.81	117.70
26	LA	2223	G	C4-C5-N7	-12.21	105.92	110.80
2	SA	1131	G	C5-C6-O6	-12.21	121.28	128.60
26	LA	1656	C	N3-C4-C5	-12.21	117.02	121.90
2	SA	280	C	N3-C4-C5	12.20	126.78	121.90
26	LA	1704	C	O4'-C1'-N1	12.20	117.96	108.20
26	LA	474	G	C5-C6-N1	12.19	117.59	111.50
26	LA	298	G	C4-C5-N7	12.19	115.68	110.80
2	SA	547	A	N1-C6-N6	-12.19	111.29	118.60
2	SA	642	A	N1-C6-N6	12.18	125.91	118.60
2	SA	882	C	N3-C4-C5	-12.18	117.03	121.90
2	SA	1144	G	N7-C8-N9	12.18	119.19	113.10
26	LA	1616	A	C4-C5-C6	12.18	123.09	117.00
26	LA	2057	G	C5-C6-O6	-12.18	121.29	128.60
26	LA	1921	G	N1-C6-O6	-12.18	112.59	119.90
31	LX	18	ARG	NE-CZ-NH1	12.18	126.39	120.30
48	LN	78	ARG	NE-CZ-NH1	12.18	126.39	120.30
2	SA	538	G	C5-C6-O6	-12.18	121.29	128.60
26	LA	125	A	N3-C4-C5	-12.17	118.28	126.80
2	SA	1195	C	P-O3'-C3'	12.17	134.30	119.70
26	LA	1725	U	C5-C4-O4	-12.16	118.60	125.90
26	LA	2793	C	O4'-C1'-N1	12.16	117.93	108.20
27	LD	132	ARG	NE-CZ-NH1	12.16	126.38	120.30
26	LA	1287	A	C4-C5-C6	12.16	123.08	117.00
26	LA	1638	C	O4'-C1'-N1	12.16	117.93	108.20
26	LA	58	G	C2-N3-C4	12.15	117.98	111.90
3	S1	20	G	N1-C6-O6	12.15	127.19	119.90
26	LA	2362	C	C6-N1-C2	-12.15	115.44	120.30
26	LA	2132	U	N1-C2-N3	12.15	122.19	114.90
2	SA	180	U	N3-C4-O4	-12.14	110.90	119.40
2	SA	309	A	P-O3'-C3'	-12.14	105.13	119.70
26	LA	667	U	C6-N1-C2	-12.14	113.72	121.00
2	SA	971	G	N1-C6-O6	12.14	127.18	119.90
26	LA	1992	G	C5-C6-O6	-12.14	121.32	128.60
2	SA	1433	A	P-O3'-C3'	12.14	134.26	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	46	G	C5-C6-O6	-12.13	121.32	128.60
2	SA	488	C	C6-N1-C2	12.13	125.15	120.30
26	LA	522	A	N1-C6-N6	12.13	125.88	118.60
35	L1	44	ARG	NE-CZ-NH2	12.13	126.36	120.30
26	LA	2478	A	C5-C6-N1	12.13	123.77	117.70
2	SA	558	G	C8-N9-C4	12.13	111.25	106.40
26	LA	1110	G	N3-C2-N2	12.13	128.39	119.90
26	LA	1406	U	P-O5'-C5'	12.13	140.31	120.90
2	SA	833	G	N1-C6-O6	12.13	127.18	119.90
5	ST	17	ARG	NE-CZ-NH2	-12.13	114.24	120.30
26	LA	1608	A	C5-C6-N1	12.12	123.76	117.70
26	LA	2490	G	C5-C6-O6	-12.12	121.33	128.60
26	LA	1128	G	O4'-C1'-N9	12.12	117.89	108.20
26	LA	1384	A	O4'-C1'-N9	12.11	117.89	108.20
26	LA	2851	A	C8-N9-C4	-12.11	100.96	105.80
56	LR	100	ARG	NE-CZ-NH1	-12.11	114.25	120.30
2	SA	1358	U	C5'-C4'-C3'	12.11	135.37	116.00
26	LA	2711	A	N7-C8-N9	12.10	119.85	113.80
48	LN	47	ARG	NE-CZ-NH2	-12.09	114.25	120.30
26	LA	885	C	C6-N1-C2	-12.09	115.46	120.30
26	LA	498	G	C2-N3-C4	12.09	117.94	111.90
26	LA	383	C	O4'-C1'-N1	12.08	117.86	108.20
26	LA	1966	A	P-O3'-C3'	12.08	134.19	119.70
2	SA	429	U	C4'-C3'-C2'	-12.07	90.53	102.60
2	SA	1001	C	O4'-C1'-N1	12.07	117.86	108.20
2	SA	1488	G	C5-C6-O6	-12.07	121.36	128.60
2	SA	516	U	C2-N3-C4	-12.06	119.76	127.00
2	SA	361	G	C5-C6-N1	12.06	117.53	111.50
2	SA	423	G	N1-C6-O6	12.06	127.14	119.90
26	LA	2106	U	N1-C2-O2	12.06	131.24	122.80
26	LA	887	U	O4'-C1'-N1	12.05	117.84	108.20
2	SA	837	U	O4'-C1'-N1	12.05	117.84	108.20
2	SA	1144	G	C8-N9-C4	-12.05	101.58	106.40
26	LA	216	A	N1-C6-N6	-12.05	111.37	118.60
26	LA	1610	A	C8-N9-C4	-12.05	100.98	105.80
47	LJ	152	ARG	NE-CZ-NH1	12.05	126.33	120.30
26	LA	885	C	P-O5'-C5'	12.05	140.17	120.90
2	SA	78	A	C8-N9-C4	-12.04	100.99	105.80
2	SA	825	A	C8-N9-C4	-12.03	100.99	105.80
26	LA	859	G	O4'-C1'-N9	12.03	117.83	108.20
26	LA	77	G	N1-C6-O6	-12.03	112.68	119.90
26	LA	343	C	O4'-C1'-N1	12.02	117.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	366	C	C6-N1-C2	-12.02	115.49	120.30
2	SA	547	A	C5-C6-N6	12.02	133.31	123.70
2	SA	165	G	O4'-C1'-N9	12.01	117.81	108.20
2	SA	1355	G	N1-C6-O6	12.01	127.11	119.90
26	LA	2409	G	C5-C6-O6	-12.01	121.40	128.60
26	LA	1694	C	O4'-C1'-N1	12.00	117.80	108.20
26	LA	1974	C	C6-N1-C2	-12.00	115.50	120.30
26	LA	402	A	N1-C6-N6	-12.00	111.40	118.60
26	LA	989	G	O4'-C1'-N9	12.00	117.80	108.20
2	SA	496	A	N1-C6-N6	-11.99	111.40	118.60
2	SA	218	U	O4'-C1'-N1	11.99	117.79	108.20
26	LA	1246	A	N1-C6-N6	-11.99	111.41	118.60
26	LA	781	A	N1-C6-N6	11.98	125.79	118.60
3	S1	56	G	N1-C6-O6	11.98	127.09	119.90
2	SA	831	A	O4'-C1'-N9	11.98	117.78	108.20
26	LA	1312	U	C5-C6-N1	-11.98	116.71	122.70
26	LA	2421	G	N9-C4-C5	-11.97	100.61	105.40
26	LA	2644	G	C8-N9-C4	-11.97	101.61	106.40
26	LA	1659	G	N1-C6-O6	-11.97	112.72	119.90
35	L1	29	ARG	NE-CZ-NH2	11.97	126.28	120.30
2	SA	235	C	C6-N1-C2	-11.96	115.51	120.30
26	LA	1997	C	O4'-C1'-N1	11.96	117.77	108.20
26	LA	1308	A	C5-C6-N1	11.96	123.68	117.70
2	SA	1384	C	O4'-C1'-N1	11.96	117.77	108.20
26	LA	1953	A	C2-N3-C4	-11.96	104.62	110.60
2	SA	448	A	N1-C2-N3	-11.96	123.32	129.30
26	LA	2258	C	C2-N3-C4	-11.96	113.92	119.90
26	LA	2160	C	C2-N3-C4	-11.96	113.92	119.90
2	SA	1538	C	P-O3'-C3'	11.95	134.04	119.70
26	LA	216	A	O4'-C1'-N9	11.95	117.76	108.20
2	SA	322	C	C2-N3-C4	-11.95	113.92	119.90
19	SC	163	ARG	NE-CZ-NH2	-11.95	114.33	120.30
26	LA	828	U	C6-N1-C2	-11.95	113.83	121.00
2	SA	453	G	C5-C6-N1	-11.94	105.53	111.50
26	LA	359	G	C5-C6-O6	-11.94	121.44	128.60
26	LA	759	G	N1-C6-O6	11.94	127.06	119.90
26	LA	1905	C	C5'-C4'-O4'	11.94	123.43	109.10
2	SA	990	C	C6-N1-C2	-11.94	115.53	120.30
26	LA	1631	G	C2-N3-C4	-11.94	105.93	111.90
26	LA	2666	C	C6-N1-C2	-11.94	115.53	120.30
26	LA	896	A	P-O5'-C5'	11.94	140.00	120.90
26	LA	34	U	P-O3'-C3'	11.93	134.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1940	U	P-O5'-C5'	11.93	139.99	120.90
26	LA	2755	C	N3-C4-C5	-11.93	117.13	121.90
37	LC	38	PHE	CB-CG-CD2	-11.93	112.45	120.80
2	SA	1038	C	O4'-C1'-N1	11.93	117.74	108.20
2	SA	1119	C	C2-N3-C4	-11.93	113.93	119.90
53	LP	12	ARG	NE-CZ-NH1	11.93	126.27	120.30
26	LA	748	G	C1'-O4'-C4'	-11.93	100.36	109.90
26	LA	2351	G	C5-C6-O6	-11.93	121.44	128.60
26	LA	1268	A	N1-C2-N3	-11.92	123.34	129.30
37	LC	9	ARG	NE-CZ-NH2	-11.92	114.34	120.30
3	S1	42	U	P-O3'-C3'	11.92	134.00	119.70
26	LA	2215	C	C6-N1-C2	-11.92	115.53	120.30
25	LB	42	C	C5-C6-N1	-11.91	115.04	121.00
26	LA	2349	G	O4'-C1'-N9	11.91	117.73	108.20
2	SA	202	G	N1-C2-N3	11.91	131.04	123.90
2	SA	808	C	O4'-C1'-N1	11.91	117.72	108.20
12	SL	30	ARG	NE-CZ-NH2	-11.91	114.35	120.30
26	LA	389	G	C5-C6-O6	-11.90	121.46	128.60
2	SA	449	G	N3-C4-C5	-11.90	122.65	128.60
2	SA	765	G	C5-N7-C8	-11.90	98.35	104.30
2	SA	1504	G	O4'-C1'-N9	11.90	117.72	108.20
26	LA	2094	A	N1-C6-N6	11.90	125.74	118.60
26	LA	2224	G	C5-C6-N1	11.89	117.45	111.50
26	LA	1288	G	N1-C6-O6	11.89	127.03	119.90
26	LA	2863	C	N3-C2-O2	-11.89	113.58	121.90
26	LA	71	A	O4'-C1'-N9	11.89	117.71	108.20
26	LA	1430	G	N9-C4-C5	11.89	110.16	105.40
2	SA	838	G	C5-C6-O6	-11.88	121.47	128.60
2	SA	516	U	C5-C4-O4	-11.88	118.77	125.90
4	S2	66	C	O4'-C1'-N1	11.87	117.70	108.20
2	SA	668	G	N1-C6-O6	11.87	127.02	119.90
26	LA	391	A	N1-C6-N6	11.87	125.72	118.60
26	LA	1385	A	C8-N9-C4	-11.87	101.05	105.80
2	SA	810	C	O4'-C1'-N1	11.87	117.69	108.20
26	LA	317	G	C5-C6-O6	11.86	135.72	128.60
26	LA	1537	G	N3-C4-C5	-11.87	122.67	128.60
26	LA	1608	A	N1-C6-N6	-11.87	111.48	118.60
56	LR	38	ARG	NE-CZ-NH2	11.86	126.23	120.30
3	S1	26	U	O4'-C1'-N1	11.86	117.69	108.20
26	LA	2711	A	C5-N7-C8	-11.85	97.97	103.90
2	SA	527	G	C8-N9-C4	11.85	111.14	106.40
4	S2	21	U	O4'-C1'-N1	11.85	117.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1759	A	O4'-C1'-N9	11.85	117.68	108.20
2	SA	274	A	O4'-C1'-N9	11.85	117.68	108.20
2	SA	1520	C	N3-C4-N4	11.85	126.29	118.00
51	LI	123	ARG	NE-CZ-NH1	11.85	126.22	120.30
2	SA	1035	A	N9-C4-C5	-11.84	101.06	105.80
26	LA	121	G	C5-C6-O6	-11.84	121.50	128.60
26	LA	285	G	C8-N9-C4	-11.84	101.66	106.40
2	SA	634	C	C6-N1-C2	-11.84	115.56	120.30
26	LA	1168	G	C5-C6-O6	-11.84	121.50	128.60
26	LA	1895	C	O4'-C1'-N1	11.84	117.67	108.20
45	LG	91	ARG	NE-CZ-NH2	11.84	126.22	120.30
26	LA	453	A	C5-C6-N6	11.83	133.17	123.70
2	SA	873	A	C6-N1-C2	-11.83	111.50	118.60
2	SA	978	A	N9-C4-C5	-11.83	101.07	105.80
26	LA	2248	C	O4'-C1'-N1	11.83	117.66	108.20
2	SA	362	G	C2-N3-C4	-11.82	105.99	111.90
26	LA	2119	A	P-O3'-C3'	11.82	133.88	119.70
26	LA	2471	A	C5-C6-N6	-11.82	114.24	123.70
26	LA	1408	G	N1-C6-O6	-11.81	112.81	119.90
2	SA	782	A	C5-C6-N1	-11.81	111.79	117.70
2	SA	1470	U	O4'-C1'-N1	11.81	117.65	108.20
26	LA	2623	G	N1-C6-O6	11.81	126.99	119.90
4	S2	65	G	N9-C4-C5	11.81	110.12	105.40
26	LA	2255	G	C6-N1-C2	-11.81	118.01	125.10
2	SA	605	U	C5-C4-O4	-11.81	118.82	125.90
26	LA	864	G	C5-C6-O6	-11.81	121.52	128.60
2	SA	439	U	C5-C4-O4	-11.81	118.82	125.90
2	SA	1531	A	C5-C6-N1	-11.80	111.80	117.70
26	LA	234	U	O4'-C1'-N1	11.80	117.64	108.20
26	LA	1819	A	N1-C6-N6	-11.80	111.52	118.60
2	SA	202	G	C2-N3-C4	-11.80	106.00	111.90
26	LA	1640	A	N1-C6-N6	-11.80	111.52	118.60
2	SA	881	G	C8-N9-C4	-11.79	101.68	106.40
2	SA	328	C	P-O3'-C3'	11.79	133.85	119.70
26	LA	1629	U	C5-C4-O4	-11.79	118.83	125.90
26	LA	2469	A	C5-C6-N6	11.79	133.13	123.70
26	LA	978	G	N1-C6-O6	-11.79	112.83	119.90
21	SE	53	ARG	NE-CZ-NH2	-11.79	114.41	120.30
2	SA	453	G	C5-C6-O6	11.78	135.67	128.60
2	SA	654	G	N3-C2-N2	11.77	128.14	119.90
26	LA	1088	A	N1-C6-N6	11.77	125.66	118.60
2	SA	1432	G	N1-C6-O6	11.77	126.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	445	C	N3-C4-C5	11.77	126.61	121.90
2	SA	890	G	C5'-C4'-O4'	11.77	123.22	109.10
26	LA	436	C	O4'-C1'-N1	11.77	117.61	108.20
26	LA	1163	G	C4-C5-N7	11.77	115.51	110.80
2	SA	175	C	C2-N1-C1'	11.76	131.74	118.80
26	LA	781	A	N9-C4-C5	11.76	110.50	105.80
26	LA	1813	G	C5-C6-O6	-11.76	121.54	128.60
26	LA	1675	C	P-O3'-C3'	-11.76	105.59	119.70
3	S1	44	U	O4'-C1'-N1	11.76	117.61	108.20
26	LA	1643	G	P-O3'-C3'	11.75	133.81	119.70
2	SA	1490	U	C5-C6-N1	-11.75	116.82	122.70
26	LA	2719	G	N1-C6-O6	11.75	126.95	119.90
2	SA	1029	U	P-O3'-C3'	11.75	133.80	119.70
4	S2	45	A	O4'-C1'-N9	11.75	117.60	108.20
26	LA	413	C	N3-C4-C5	-11.75	117.20	121.90
26	LA	2152	G	C2-N3-C4	-11.75	106.03	111.90
26	LA	1942	C	P-O3'-C3'	11.75	133.80	119.70
50	LL	34	ARG	NE-CZ-NH1	11.75	126.17	120.30
57	LS	32	ARG	NE-CZ-NH1	-11.75	114.42	120.30
26	LA	2414	G	N1-C6-O6	11.75	126.95	119.90
2	SA	787	A	O4'-C1'-N9	11.74	117.59	108.20
26	LA	1874	C	O4'-C1'-N1	11.74	117.60	108.20
2	SA	51	A	N1-C6-N6	11.74	125.64	118.60
26	LA	205	G	N9-C4-C5	11.74	110.10	105.40
26	LA	900	A	C4-C5-N7	11.74	116.57	110.70
26	LA	1963	U	P-O3'-C3'	11.74	133.79	119.70
26	LA	62	U	O4'-C1'-N1	11.74	117.59	108.20
26	LA	2246	G	C5'-C4'-C3'	-11.74	97.22	116.00
26	LA	2351	G	N1-C6-O6	11.74	126.94	119.90
2	SA	186	C	C6-N1-C2	-11.74	115.61	120.30
26	LA	567	U	C2-N3-C4	-11.74	119.96	127.00
26	LA	2401	U	O4'-C1'-N1	11.73	117.59	108.20
2	SA	825	A	N1-C2-N3	-11.73	123.43	129.30
26	LA	1515	A	N1-C6-N6	-11.72	111.57	118.60
3	S1	56	G	C5-C6-O6	-11.72	121.57	128.60
26	LA	267	C	P-O5'-C5'	11.72	139.65	120.90
48	LN	69	ARG	NE-CZ-NH2	-11.71	114.44	120.30
26	LA	199	A	N1-C6-N6	-11.71	111.58	118.60
26	LA	1617	C	O4'-C1'-N1	11.71	117.57	108.20
26	LA	1306	C	O4'-C1'-N1	11.71	117.56	108.20
26	LA	870	U	C5'-C4'-O4'	11.70	123.14	109.10
2	SA	377	G	C5-C6-O6	-11.69	121.58	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2652	C	C6-N1-C2	-11.70	115.62	120.30
26	LA	125	A	N3-C4-N9	11.69	136.75	127.40
2	SA	1099	G	C5-C6-O6	-11.69	121.59	128.60
4	S2	30	G	N7-C8-N9	11.69	118.94	113.10
26	LA	142	A	N1-C6-N6	-11.69	111.59	118.60
26	LA	2435	A	C5-C6-N1	11.69	123.54	117.70
26	LA	2566	A	P-O3'-C3'	-11.68	105.68	119.70
26	LA	1811	G	C5-C6-O6	-11.68	121.59	128.60
26	LA	1862	G	N9-C4-C5	-11.68	100.73	105.40
2	SA	1391	U	N3-C4-O4	-11.68	111.22	119.40
26	LA	1890	A	C6-N1-C2	-11.68	111.59	118.60
26	LA	386	G	P-O3'-C3'	11.67	133.71	119.70
26	LA	2252	G	C5-C6-O6	-11.67	121.60	128.60
2	SA	1340	A	C5-C6-N1	-11.67	111.86	117.70
2	SA	1131	G	N7-C8-N9	11.67	118.94	113.10
18	SB	236	PHE	CB-CG-CD2	11.67	128.97	120.80
26	LA	2470	G	C5-C6-O6	-11.66	121.60	128.60
26	LA	1150	C	C6-N1-C2	-11.66	115.64	120.30
26	LA	1610	A	C6-N1-C2	-11.66	111.60	118.60
26	LA	1138	G	N9-C4-C5	11.66	110.06	105.40
26	LA	2056	G	C6-N1-C2	-11.66	118.11	125.10
26	LA	1319	C	O4'-C1'-N1	11.65	117.52	108.20
25	LB	114	C	C6-N1-C2	-11.65	115.64	120.30
26	LA	1097	U	C1'-O4'-C4'	-11.65	100.58	109.90
26	LA	1486	U	O4'-C1'-N1	11.65	117.52	108.20
4	S2	70	C	N3-C2-O2	-11.65	113.75	121.90
26	LA	2497	A	N1-C2-N3	11.64	135.12	129.30
2	SA	1530	G	O4'-C1'-N9	11.64	117.51	108.20
26	LA	1618	C	C2-N3-C4	-11.64	114.08	119.90
26	LA	2732	G	C5-C6-O6	-11.64	121.62	128.60
2	SA	998	C	O4'-C1'-N1	11.63	117.51	108.20
3	S1	40	G	O4'-C1'-N9	11.63	117.51	108.20
26	LA	289	G	N1-C2-N3	-11.63	116.92	123.90
26	LA	517	C	N3-C4-C5	11.63	126.55	121.90
26	LA	1149	G	C5-C6-O6	-11.63	121.62	128.60
26	LA	1314	C	N3-C4-N4	11.63	126.14	118.00
2	SA	1481	U	C5-C4-O4	11.63	132.88	125.90
26	LA	460	A	N1-C6-N6	11.63	125.58	118.60
45	LG	177	ARG	NE-CZ-NH2	-11.63	114.48	120.30
3	S1	58	C	O4'-C1'-N1	11.63	117.50	108.20
26	LA	2637	U	C2-N3-C4	-11.62	120.03	127.00
2	SA	1177	G	C5-C6-O6	-11.62	121.63	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	37	U	P-O3'-C3'	11.62	133.65	119.70
26	LA	313	G	N1-C6-O6	-11.62	112.93	119.90
3	S1	48	C	P-O3'-C3'	11.62	133.64	119.70
26	LA	125	A	C2-N3-C4	11.62	116.41	110.60
26	LA	2797	U	N3-C4-C5	-11.62	107.63	114.60
2	SA	517	G	N3-C2-N2	11.62	128.03	119.90
26	LA	2694	G	N1-C6-O6	11.61	126.87	119.90
26	LA	512	G	C5-C6-O6	-11.61	121.64	128.60
26	LA	1356	G	C5-C6-O6	-11.61	121.63	128.60
26	LA	388	G	N3-C4-C5	-11.60	122.80	128.60
26	LA	2378	A	C8-N9-C4	-11.60	101.16	105.80
26	LA	375	G	N1-C6-O6	11.60	126.86	119.90
26	LA	2433	A	N7-C8-N9	11.60	119.60	113.80
26	LA	611	C	O4'-C1'-N1	11.60	117.48	108.20
2	SA	585	G	C6-N1-C2	-11.59	118.14	125.10
26	LA	1743	G	C4-C5-N7	11.59	115.44	110.80
26	LA	1005	C	N3-C4-C5	-11.59	117.26	121.90
26	LA	1500	G	C8-N9-C4	-11.59	101.77	106.40
26	LA	2395	C	O4'-C1'-N1	11.59	117.47	108.20
26	LA	1999	C	C5-C4-N4	-11.59	112.09	120.20
26	LA	1927	A	N9-C4-C5	11.58	110.43	105.80
2	SA	951	G	C5-C6-N1	-11.58	105.71	111.50
2	SA	295	C	O4'-C1'-N1	11.57	117.46	108.20
26	LA	2682	A	C8-N9-C4	-11.57	101.17	105.80
2	SA	686	U	P-O3'-C3'	11.57	133.59	119.70
26	LA	1875	G	C5-N7-C8	-11.57	98.51	104.30
26	LA	1960	A	C8-N9-C4	11.57	110.43	105.80
4	S2	75	C	O4'-C1'-N1	11.57	117.45	108.20
26	LA	20	C	O4'-C1'-N1	11.57	117.45	108.20
3	S1	25	U	O4'-C1'-N1	11.56	117.45	108.20
26	LA	931	U	C3'-C2'-C1'	-11.56	92.25	101.50
2	SA	336	A	N1-C6-N6	11.56	125.54	118.60
2	SA	706	A	C4-C5-N7	-11.56	104.92	110.70
25	LB	10	G	C2-N3-C4	11.56	117.68	111.90
26	LA	2653	U	O4'-C1'-N1	11.56	117.45	108.20
2	SA	1176	A	C4-C5-C6	-11.56	111.22	117.00
25	LB	65	U	N3-C4-O4	11.55	127.49	119.40
26	LA	2821	A	C2-N3-C4	11.55	116.38	110.60
51	LI	132	PHE	CB-CG-CD1	11.55	128.89	120.80
26	LA	891	G	C5-C6-O6	-11.55	121.67	128.60
26	LA	1727	C	C2-N3-C4	-11.55	114.13	119.90
19	SC	106	ARG	NE-CZ-NH2	-11.54	114.53	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	LH	34	ARG	NE-CZ-NH1	11.54	126.07	120.30
26	LA	574	A	C5'-C4'-O4'	11.54	122.95	109.10
26	LA	590	A	C8-N9-C4	11.54	110.42	105.80
26	LA	1369	G	C4'-C3'-C2'	-11.54	91.06	102.60
26	LA	1055	G	C5-C6-O6	-11.54	121.68	128.60
25	LB	36	C	O4'-C1'-N1	11.54	117.43	108.20
26	LA	1278	C	O4'-C1'-N1	11.54	117.43	108.20
26	LA	981	A	N7-C8-N9	-11.54	108.03	113.80
26	LA	2024	G	C8-N9-C4	-11.53	101.79	106.40
26	LA	1203	U	N3-C4-O4	11.53	127.47	119.40
26	LA	1394	U	C5-C4-O4	-11.53	118.98	125.90
2	SA	1290	G	N1-C2-N3	11.52	130.81	123.90
2	SA	918	A	N1-C6-N6	11.52	125.51	118.60
26	LA	1042	G	N3-C4-C5	11.52	134.36	128.60
26	LA	1623	G	C2-N3-C4	-11.51	106.14	111.90
38	LE	46	ARG	NE-CZ-NH1	11.51	126.06	120.30
25	LB	102	G	P-O3'-C3'	11.51	133.51	119.70
26	LA	1314	C	C6-N1-C2	-11.51	115.70	120.30
26	LA	2538	C	C6-N1-C2	-11.51	115.70	120.30
2	SA	1361	G	N1-C6-O6	11.51	126.80	119.90
2	SA	810	C	C5-C4-N4	-11.50	112.15	120.20
57	LS	10	ARG	NE-CZ-NH1	11.50	126.05	120.30
2	SA	576	C	O4'-C1'-N1	11.50	117.40	108.20
2	SA	1514	G	N1-C6-O6	11.49	126.80	119.90
26	LA	1339	G	O4'-C1'-N9	11.49	117.40	108.20
2	SA	428	G	C5-C6-O6	-11.48	121.71	128.60
2	SA	742	G	C2-N3-C4	-11.48	106.16	111.90
2	SA	947	G	O4'-C1'-N9	11.48	117.38	108.20
26	LA	2621	G	P-O3'-C3'	11.48	133.48	119.70
2	SA	939	G	N3-C2-N2	11.48	127.94	119.90
26	LA	2880	C	C6-N1-C2	-11.48	115.71	120.30
2	SA	416	G	N1-C6-O6	11.47	126.78	119.90
2	SA	1536	C	C6-N1-C2	-11.47	115.71	120.30
2	SA	263	A	N1-C6-N6	11.47	125.48	118.60
2	SA	851	G	C4-C5-N7	-11.47	106.21	110.80
26	LA	1917	U	C2-N1-C1'	11.47	131.47	117.70
2	SA	956	U	P-O5'-C5'	11.47	139.25	120.90
2	SA	138	G	N1-C6-O6	11.46	126.78	119.90
25	LB	89	U	C6-N1-C2	-11.46	114.12	121.00
26	LA	2695	U	C2-N1-C1'	-11.46	103.95	117.70
26	LA	737	C	C6-N1-C2	-11.46	115.72	120.30
26	LA	1547	C	N3-C2-O2	-11.46	113.88	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1300	G	C5-C6-O6	-11.44	121.73	128.60
26	LA	963	U	C6-N1-C2	-11.44	114.13	121.00
26	LA	2048	G	N7-C8-N9	11.44	118.82	113.10
2	SA	670	G	N1-C6-O6	-11.44	113.04	119.90
26	LA	1560	G	C5-C6-O6	-11.44	121.74	128.60
1	SS	80	ARG	NE-CZ-NH1	11.43	126.02	120.30
10	SJ	48	ARG	NE-CZ-NH1	11.43	126.02	120.30
26	LA	2178	C	C6-N1-C2	-11.43	115.73	120.30
26	LA	426	C	C6-N1-C2	-11.43	115.73	120.30
25	LB	31	C	C2-N3-C4	-11.43	114.19	119.90
26	LA	944	C	C6-N1-C2	-11.43	115.73	120.30
26	LA	2149	U	N1-C2-O2	11.42	130.79	122.80
26	LA	700	G	O4'-C1'-N9	11.42	117.33	108.20
26	LA	838	C	C5-C4-N4	-11.42	112.21	120.20
2	SA	1317	C	C5-C6-N1	11.41	126.71	121.00
27	LD	188	ARG	NE-CZ-NH1	11.41	126.01	120.30
9	SI	6	TYR	CB-CG-CD1	11.41	127.85	121.00
26	LA	1223	G	C4-C5-N7	-11.41	106.24	110.80
26	LA	2425	A	C5-C6-N6	11.40	132.82	123.70
2	SA	869	G	N1-C6-O6	11.40	126.74	119.90
2	SA	1077	G	N3-C2-N2	11.40	127.88	119.90
26	LA	2812	G	O4'-C1'-N9	11.40	117.32	108.20
26	LA	2644	G	N9-C4-C5	11.40	109.96	105.40
2	SA	607	A	C8-N9-C4	-11.40	101.24	105.80
26	LA	818	G	C5-C6-O6	-11.39	121.77	128.60
57	LS	54	ARG	NE-CZ-NH2	-11.39	114.61	120.30
52	LO	51	ARG	NE-CZ-NH2	11.39	125.99	120.30
26	LA	816	C	C6-N1-C2	-11.38	115.75	120.30
26	LA	2543	G	N1-C6-O6	11.38	126.73	119.90
26	LA	1582	C	P-O5'-C5'	11.38	139.11	120.90
2	SA	484	G	C8-N9-C4	-11.38	101.85	106.40
2	SA	647	C	C5-C6-N1	-11.38	115.31	121.00
2	SA	752	G	N9-C4-C5	-11.38	100.85	105.40
47	LJ	75	PHE	CB-CG-CD2	11.38	128.76	120.80
26	LA	2867	G	C8-N9-C4	-11.37	101.85	106.40
2	SA	297	G	N1-C6-O6	-11.37	113.08	119.90
22	SF	79	ARG	NE-CZ-NH2	-11.37	114.61	120.30
26	LA	2030	U	O4'-C1'-N1	11.37	117.30	108.20
26	LA	69	C	C6-N1-C2	-11.37	115.75	120.30
26	LA	705	A	P-O3'-C3'	11.37	133.34	119.70
27	LD	181	ARG	NE-CZ-NH1	11.37	125.98	120.30
48	LN	18	ARG	NE-CZ-NH2	-11.37	114.61	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1753	G	N1-C6-O6	11.37	126.72	119.90
2	SA	572	A	C5-C6-N6	-11.37	114.61	123.70
2	SA	42	G	N1-C6-O6	-11.36	113.08	119.90
26	LA	300	A	P-O3'-C3'	-11.36	106.06	119.70
26	LA	380	G	N1-C6-O6	11.36	126.72	119.90
26	LA	1168	G	N1-C6-O6	11.37	126.72	119.90
2	SA	1063	C	C2-N3-C4	-11.36	114.22	119.90
23	SR	60	ARG	NE-CZ-NH1	11.36	125.98	120.30
26	LA	1425	G	C5-C6-O6	-11.36	121.78	128.60
2	SA	467	U	C5-C6-N1	-11.36	117.02	122.70
25	LB	72	G	O4'-C1'-N9	11.36	117.29	108.20
26	LA	2127	G	C5'-C4'-C3'	11.36	134.17	116.00
26	LA	2297	A	C5-C6-N1	-11.36	112.02	117.70
50	LL	34	ARG	NE-CZ-NH2	-11.36	114.62	120.30
26	LA	19	A	C5-N7-C8	-11.35	98.22	103.90
45	LG	114	ARG	NE-CZ-NH1	-11.35	114.62	120.30
2	SA	552	U	O4'-C1'-N1	11.35	117.28	108.20
2	SA	642	A	P-O5'-C5'	11.35	139.06	120.90
26	LA	846	U	O4'-C1'-N1	11.35	117.28	108.20
26	LA	2613	U	C2-N3-C4	-11.35	120.19	127.00
26	LA	1310	G	C4-C5-N7	11.35	115.34	110.80
26	LA	838	C	C2-N3-C4	-11.35	114.23	119.90
26	LA	1399	C	N3-C4-C5	-11.35	117.36	121.90
27	LD	68	ARG	NE-CZ-NH2	-11.35	114.63	120.30
24	S3	361	ARG	NE-CZ-NH1	11.34	125.97	120.30
26	LA	606	U	C2-N3-C4	-11.34	120.20	127.00
2	SA	98	A	N1-C6-N6	-11.34	111.80	118.60
2	SA	180	U	C5-C4-O4	11.34	132.70	125.90
2	SA	353	A	N7-C8-N9	-11.34	108.13	113.80
26	LA	1469	A	C2-N3-C4	11.34	116.27	110.60
26	LA	1945	G	C4-C5-N7	11.34	115.33	110.80
2	SA	74	A	N9-C4-C5	-11.33	101.27	105.80
2	SA	405	U	O4'-C1'-N1	11.33	117.27	108.20
2	SA	1128	C	O4'-C1'-N1	11.33	117.26	108.20
26	LA	548	G	P-O3'-C3'	11.33	133.30	119.70
26	LA	922	C	C6-N1-C2	-11.33	115.77	120.30
26	LA	1745	A	C8-N9-C4	-11.33	101.27	105.80
26	LA	12	U	N3-C2-O2	-11.33	114.27	122.20
26	LA	2751	G	C3'-C2'-C1'	-11.33	92.44	101.50
26	LA	1856	U	P-O5'-C5'	11.33	139.02	120.90
26	LA	1639	C	O4'-C1'-N1	11.32	117.26	108.20
2	SA	1363	A	N1-C6-N6	11.32	125.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	SI	63	TYR	CB-CG-CD2	-11.32	114.21	121.00
26	LA	957	C	C6-N1-C2	-11.32	115.77	120.30
26	LA	1515	A	N9-C4-C5	-11.32	101.27	105.80
2	SA	722	G	C6-N1-C2	-11.32	118.31	125.10
24	S3	358	ARG	NE-CZ-NH1	11.32	125.96	120.30
26	LA	1055	G	N1-C6-O6	11.32	126.69	119.90
26	LA	1507	C	C4-C5-C6	11.32	123.06	117.40
26	LA	1654	A	N1-C2-N3	11.32	134.96	129.30
26	LA	1846	G	N3-C2-N2	-11.32	111.98	119.90
26	LA	2568	U	C2-N3-C4	-11.31	120.21	127.00
26	LA	2038	G	C5-C6-O6	-11.31	121.81	128.60
26	LA	2091	C	N3-C4-N4	11.31	125.92	118.00
2	SA	424	G	O4'-C1'-N9	11.30	117.24	108.20
2	SA	715	A	N7-C8-N9	11.30	119.45	113.80
2	SA	730	G	N1-C2-N2	-11.30	106.03	116.20
26	LA	1125	G	C8-N9-C4	-11.30	101.88	106.40
26	LA	1401	G	N3-C2-N2	11.30	127.81	119.90
2	SA	296	U	C2-N3-C4	-11.30	120.22	127.00
20	SD	25	ARG	NE-CZ-NH1	-11.30	114.65	120.30
5	ST	28	ARG	NE-CZ-NH2	-11.30	114.65	120.30
26	LA	689	A	N1-C6-N6	11.30	125.38	118.60
26	LA	1947	C	C2-N3-C4	-11.30	114.25	119.90
2	SA	237	G	C5-C6-O6	-11.29	121.82	128.60
28	LU	110	ARG	NE-CZ-NH2	11.30	125.95	120.30
2	SA	214	C	O4'-C1'-N1	11.29	117.23	108.20
40	L4	19	PHE	CB-CG-CD1	11.29	128.70	120.80
26	LA	698	C	N3-C4-C5	11.29	126.42	121.90
2	SA	1232	U	C5-C6-N1	11.29	128.34	122.70
26	LA	2699	C	C2-N3-C4	-11.29	114.26	119.90
26	LA	140	C	C2-N1-C1'	11.28	131.21	118.80
37	LC	12	ARG	NE-CZ-NH2	11.28	125.94	120.30
2	SA	110	C	O4'-C1'-N1	11.28	117.22	108.20
2	SA	777	A	C5-C6-N6	-11.28	114.68	123.70
26	LA	1794	A	N1-C2-N3	-11.28	123.66	129.30
26	LA	1192	G	C5-N7-C8	-11.27	98.67	104.30
26	LA	1533	C	O4'-C1'-N1	11.27	117.22	108.20
26	LA	296	U	O4'-C1'-N1	11.27	117.21	108.20
25	LB	59	A	C5-N7-C8	-11.26	98.27	103.90
26	LA	2543	G	C5-C6-O6	-11.26	121.84	128.60
26	LA	2271	G	N1-C6-O6	11.26	126.65	119.90
26	LA	2801	G	C5-C6-O6	-11.26	121.85	128.60
26	LA	2112	G	O4'-C1'-N9	11.25	117.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	582	A	N1-C6-N6	11.25	125.35	118.60
26	LA	1184	U	C5'-C4'-O4'	11.25	122.60	109.10
26	LA	627	A	O4'-C1'-N9	11.25	117.20	108.20
26	LA	2575	C	C5'-C4'-C3'	11.25	134.00	116.00
26	LA	72	U	C5-C6-N1	-11.25	117.08	122.70
26	LA	1897	G	C5'-C4'-C3'	-11.24	98.01	116.00
2	SA	1188	A	P-O3'-C3'	11.24	133.19	119.70
2	SA	1399	C	N3-C4-N4	11.24	125.87	118.00
26	LA	1090	A	P-O3'-C3'	11.24	133.19	119.70
26	LA	2602	A	C1'-O4'-C4'	-11.24	100.91	109.90
2	SA	895	G	N1-C2-N3	-11.24	117.16	123.90
2	SA	102	G	N1-C6-O6	11.24	126.64	119.90
26	LA	1994	C	C2-N3-C4	-11.24	114.28	119.90
26	LA	490	C	N3-C4-N4	11.23	125.86	118.00
26	LA	2346	A	P-O3'-C3'	11.23	133.18	119.70
2	SA	814	A	O4'-C1'-N9	11.23	117.19	108.20
26	LA	2776	A	N1-C2-N3	11.23	134.92	129.30
26	LA	667	U	N3-C2-O2	-11.23	114.34	122.20
18	SB	183	PHE	CB-CG-CD1	-11.22	112.94	120.80
26	LA	306	U	C5-C4-O4	-11.22	119.17	125.90
26	LA	603	A	P-O3'-C3'	11.22	133.17	119.70
26	LA	1472	C	C6-N1-C2	-11.22	115.81	120.30
26	LA	2545	G	C4-C5-N7	11.22	115.29	110.80
2	SA	692	U	C5-C6-N1	-11.21	117.09	122.70
26	LA	1622	G	C5-C6-O6	-11.21	121.87	128.60
2	SA	851	G	C5-C6-N1	-11.21	105.89	111.50
24	S3	370	ARG	NE-CZ-NH2	-11.21	114.69	120.30
26	LA	141	G	C5'-C4'-C3'	-11.21	98.06	116.00
26	LA	2213	U	P-O3'-C3'	11.21	133.16	119.70
27	LD	257	ARG	NE-CZ-NH2	-11.21	114.69	120.30
27	LD	261	ARG	NE-CZ-NH1	11.21	125.91	120.30
2	SA	1047	G	C5-C6-O6	-11.21	121.88	128.60
2	SA	1447	A	O3'-P-O5'	-11.21	82.70	104.00
26	LA	1381	G	C5-C6-O6	-11.21	121.87	128.60
26	LA	1775	U	C2-N3-C4	-11.21	120.28	127.00
26	LA	1888	G	C5-C6-O6	-11.21	121.88	128.60
2	SA	890	G	C3'-C2'-C1'	-11.20	92.54	101.50
26	LA	1338	G	N1-C6-O6	11.20	126.62	119.90
2	SA	178	C	O4'-C1'-N1	11.20	117.16	108.20
26	LA	2238	G	C5-C6-O6	-11.20	121.88	128.60
26	LA	1979	U	N3-C4-C5	11.20	121.32	114.60
26	LA	154	U	O4'-C1'-N1	11.20	117.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	432	A	C1'-O4'-C4'	-11.19	100.95	109.90
26	LA	679	C	C6-N1-C2	-11.19	115.82	120.30
26	LA	1248	G	N1-C6-O6	11.19	126.61	119.90
26	LA	1406	U	O4'-C1'-N1	11.19	117.15	108.20
26	LA	2287	A	C5-C6-N1	-11.19	112.11	117.70
26	LA	987	C	N3-C4-N4	11.19	125.83	118.00
26	LA	2237	G	O4'-C1'-N9	11.19	117.15	108.20
2	SA	331	G	C5-C6-O6	-11.18	121.89	128.60
2	SA	975	A	N7-C8-N9	-11.18	108.21	113.80
2	SA	1072	G	N7-C8-N9	11.18	118.69	113.10
45	LG	109	ARG	NE-CZ-NH2	11.18	125.89	120.30
2	SA	631	C	P-O3'-C3'	11.18	133.12	119.70
24	S3	637	ARG	NE-CZ-NH1	11.18	125.89	120.30
26	LA	1723	G	C8-N9-C4	-11.18	101.93	106.40
26	LA	2017	U	P-O3'-C3'	11.18	133.12	119.70
26	LA	2843	G	O4'-C1'-N9	11.18	117.14	108.20
2	SA	1416	G	C8-N9-C4	11.18	110.87	106.40
4	S2	16	C	C6-N1-C2	-11.18	115.83	120.30
26	LA	1331	G	C5-C6-O6	-11.18	121.89	128.60
26	LA	533	G	C5-C6-O6	-11.17	121.89	128.60
26	LA	2567	G	P-O3'-C3'	11.17	133.11	119.70
2	SA	1009	U	O4'-C1'-N1	11.17	117.14	108.20
2	SA	1054	C	C4'-C3'-C2'	11.17	113.77	102.60
26	LA	1380	G	N1-C6-O6	-11.17	113.20	119.90
2	SA	19	A	N1-C6-N6	-11.17	111.90	118.60
26	LA	2456	C	N3-C4-N4	11.17	125.82	118.00
2	SA	858	G	C5-C6-O6	-11.16	121.90	128.60
26	LA	323	C	O4'-C1'-N1	11.16	117.13	108.20
26	LA	834	G	C8-N9-C4	-11.16	101.94	106.40
2	SA	116	A	N1-C6-N6	11.16	125.29	118.60
4	S2	17	C	N3-C4-C5	-11.16	117.44	121.90
26	LA	2313	C	O4'-C1'-N1	11.16	117.12	108.20
2	SA	307	C	C6-N1-C2	-11.15	115.84	120.30
2	SA	1054	C	O4'-C1'-N1	11.15	117.12	108.20
26	LA	2604	U	C2-N3-C4	-11.15	120.31	127.00
26	LA	2253	G	P-O3'-C3'	11.15	133.08	119.70
2	SA	1229	A	N9-C4-C5	11.15	110.26	105.80
2	SA	1247	U	C2-N3-C4	-11.15	120.31	127.00
2	SA	1054	C	C6-N1-C2	-11.14	115.84	120.30
3	S1	31	U	C1'-O4'-C4'	-11.14	100.99	109.90
26	LA	94	A	O4'-C1'-N9	11.14	117.11	108.20
2	SA	717	U	O4'-C1'-N1	11.14	117.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	68	C	C6-N1-C2	-11.14	115.84	120.30
25	LB	91	C	O4'-C1'-N1	11.14	117.11	108.20
26	LA	902	C	C6-N1-C2	11.14	124.75	120.30
26	LA	1241	A	C6-N1-C2	-11.13	111.92	118.60
26	LA	1801	A	N1-C6-N6	-11.13	111.92	118.60
25	LB	65	U	C5-C4-O4	-11.13	119.22	125.90
25	LB	110	C	C6-N1-C2	-11.13	115.85	120.30
25	LB	41	G	C6-N1-C2	-11.13	118.42	125.10
26	LA	2394	C	C5-C6-N1	-11.13	115.44	121.00
22	SF	45	ARG	NE-CZ-NH1	11.12	125.86	120.30
26	LA	739	A	N1-C6-N6	-11.12	111.92	118.60
2	SA	174	A	C2-N3-C4	-11.12	105.04	110.60
2	SA	254	G	N9-C4-C5	-11.12	100.95	105.40
27	LD	174	ARG	NE-CZ-NH1	11.12	125.86	120.30
2	SA	1152	A	N1-C6-N6	11.11	125.27	118.60
2	SA	1283	U	O4'-C1'-N1	11.12	117.09	108.20
48	LN	123	ARG	NE-CZ-NH2	-11.12	114.74	120.30
11	SK	127	ARG	NE-CZ-NH2	-11.11	114.74	120.30
26	LA	973	A	C8-N9-C4	-11.11	101.36	105.80
26	LA	2791	G	C8-N9-C4	-11.11	101.95	106.40
2	SA	1260	G	O4'-C1'-N9	11.11	117.09	108.20
26	LA	1901	A	C2-N3-C4	11.11	116.16	110.60
26	LA	2139	U	O4'-C1'-N1	11.11	117.08	108.20
26	LA	2421	G	C4-C5-N7	11.11	115.24	110.80
41	L5	19	ARG	NE-CZ-NH2	11.10	125.85	120.30
2	SA	238	A	C4-C5-N7	11.10	116.25	110.70
26	LA	1681	G	C6-N1-C2	-11.10	118.44	125.10
2	SA	62	U	N3-C2-O2	-11.10	114.43	122.20
26	LA	1691	C	N1-C2-O2	-11.10	112.24	118.90
26	LA	2889	C	C5-C4-N4	11.10	127.97	120.20
2	SA	772	U	C2-N3-C4	-11.10	120.34	127.00
2	SA	1402	C	C6-N1-C2	-11.10	115.86	120.30
2	SA	1536	C	C4-C5-C6	11.09	122.95	117.40
26	LA	1335	C	O4'-C1'-N1	11.09	117.07	108.20
26	LA	1559	U	C5'-C4'-O4'	11.09	122.41	109.10
26	LA	2400	G	N3-C4-C5	11.09	134.15	128.60
2	SA	393	A	C6-N1-C2	-11.09	111.95	118.60
2	SA	1468	A	C4-C5-C6	-11.09	111.45	117.00
26	LA	1534	U	N1-C2-O2	11.09	130.56	122.80
26	LA	1421	G	N1-C2-N3	-11.09	117.25	123.90
2	SA	221	C	C5-C6-N1	11.09	126.54	121.00
2	SA	1022	A	N1-C6-N6	-11.09	111.95	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	765	G	C3'-C2'-C1'	11.08	110.36	101.50
26	LA	1334	G	C5-C6-O6	-11.08	121.95	128.60
26	LA	2497	A	C4'-C3'-C2'	-11.08	91.52	102.60
26	LA	2519	U	N1-C2-O2	-11.08	115.05	122.80
57	LS	10	ARG	NE-CZ-NH2	-11.08	114.76	120.30
6	SU	20	ARG	NE-CZ-NH2	-11.07	114.76	120.30
26	LA	102	U	C6-N1-C2	-11.07	114.36	121.00
26	LA	1588	G	C8-N9-C4	-11.07	101.97	106.40
40	L4	5	ARG	NE-CZ-NH1	11.07	125.84	120.30
2	SA	945	G	N1-C6-O6	11.07	126.54	119.90
2	SA	652	U	P-O3'-C3'	11.07	132.98	119.70
2	SA	1102	A	O4'-C1'-N9	11.07	117.06	108.20
26	LA	387	U	C2-N3-C4	-11.07	120.36	127.00
26	LA	1490	A	N1-C2-N3	-11.07	123.77	129.30
26	LA	2596	U	C5-C4-O4	-11.07	119.26	125.90
2	SA	825	A	C5-N7-C8	-11.07	98.37	103.90
18	SB	68	PHE	CB-CG-CD2	-11.07	113.05	120.80
25	LB	49	C	C6-N1-C2	11.07	124.73	120.30
26	LA	393	C	C6-N1-C2	-11.07	115.87	120.30
26	LA	2844	G	C4-C5-N7	11.07	115.23	110.80
2	SA	698	G	C5-C6-O6	-11.06	121.96	128.60
26	LA	1651	G	C8-N9-C4	11.06	110.83	106.40
2	SA	423	G	O4'-C1'-N9	11.06	117.05	108.20
25	LB	88	C	P-O3'-C3'	11.06	132.97	119.70
26	LA	1595	C	C2-N3-C4	-11.06	114.37	119.90
2	SA	235	C	C1'-O4'-C4'	-11.06	101.05	109.90
2	SA	415	A	C2-N3-C4	11.06	116.13	110.60
2	SA	1473	G	P-O5'-C5'	11.05	138.59	120.90
26	LA	1148	U	N1-C2-N3	11.05	121.53	114.90
26	LA	2250	G	C5-C6-O6	-11.05	121.97	128.60
26	LA	2402	U	P-O3'-C3'	-11.05	106.44	119.70
4	S2	66	C	C5-C4-N4	-11.05	112.46	120.20
26	LA	1369	G	N1-C6-O6	11.05	126.53	119.90
26	LA	2835	A	O4'-C1'-N9	11.05	117.04	108.20
20	SD	46	ARG	NE-CZ-NH2	-11.05	114.78	120.30
26	LA	925	A	O4'-C1'-N9	11.05	117.04	108.20
26	LA	782	A	C5-C6-N1	-11.05	112.18	117.70
2	SA	354	G	N1-C6-O6	-11.04	113.28	119.90
26	LA	1253	A	C2-N3-C4	-11.04	105.08	110.60
24	S3	335	PHE	CB-CG-CD2	11.04	128.53	120.80
26	LA	168	G	N1-C6-O6	-11.04	113.28	119.90
26	LA	276	U	N3-C4-O4	11.04	127.13	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1048	A	C5-N7-C8	-11.04	98.38	103.90
26	LA	198	C	C2-N3-C4	-11.04	114.38	119.90
2	SA	1525	G	C5-C6-O6	-11.03	121.98	128.60
26	LA	1452	G	N7-C8-N9	-11.03	107.58	113.10
2	SA	194	C	C2-N3-C4	-11.03	114.39	119.90
2	SA	1253	G	C5-C6-N1	11.03	117.02	111.50
26	LA	2465	C	P-O5'-C5'	11.03	138.54	120.90
26	LA	2471	A	C5'-C4'-O4'	11.03	122.33	109.10
26	LA	2601	C	N3-C4-C5	-11.03	117.49	121.90
26	LA	1338	G	N9-C4-C5	11.02	109.81	105.40
26	LA	1811	G	C5'-C4'-C3'	11.02	133.64	116.00
26	LA	1914	C	C6-N1-C2	-11.02	115.89	120.30
26	LA	2156	G	O4'-C1'-N9	11.02	117.02	108.20
25	LB	87	U	N3-C2-O2	11.02	129.91	122.20
51	LI	68	ARG	NE-CZ-NH2	11.02	125.81	120.30
26	LA	2345	G	N3-C2-N2	11.02	127.61	119.90
26	LA	129	C	O4'-C1'-N1	11.01	117.01	108.20
26	LA	98	G	C2-N3-C4	11.01	117.41	111.90
26	LA	1993	U	C5-C4-O4	-11.01	119.29	125.90
2	SA	960	U	P-O3'-C3'	11.01	132.91	119.70
25	LB	49	C	C5-C6-N1	-11.01	115.50	121.00
26	LA	1206	G	N3-C4-C5	-11.01	123.10	128.60
26	LA	351	C	O4'-C1'-N1	11.01	117.00	108.20
26	LA	386	G	C5-C6-O6	-11.01	122.00	128.60
26	LA	992	C	O4'-C1'-N1	11.01	117.00	108.20
26	LA	1569	A	O4'-C1'-N9	11.01	117.00	108.20
26	LA	1680	U	C2-N3-C4	-11.01	120.40	127.00
26	LA	2490	G	N1-C6-O6	11.01	126.50	119.90
2	SA	1429	A	C5-C6-N1	11.00	123.20	117.70
26	LA	780	G	C5-C6-O6	-11.00	122.00	128.60
26	LA	1198	U	C2-N3-C4	-11.00	120.40	127.00
26	LA	1202	G	O4'-C1'-N9	11.00	117.00	108.20
30	LW	81	ARG	NE-CZ-NH2	-11.00	114.80	120.30
26	LA	321	U	C5-C6-N1	-11.00	117.20	122.70
26	LA	2439	A	C2-N3-C4	11.00	116.10	110.60
26	LA	251	A	N1-C2-N3	-10.99	123.80	129.30
26	LA	1048	A	N7-C8-N9	10.99	119.30	113.80
2	SA	873	A	C5-C6-N1	10.99	123.19	117.70
26	LA	1727	C	O4'-C1'-N1	10.99	116.99	108.20
26	LA	2874	C	N3-C4-N4	10.99	125.69	118.00
2	SA	965	U	P-O3'-C3'	10.98	132.88	119.70
53	LP	45	ARG	NE-CZ-NH2	-10.98	114.81	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	900	A	C8-N9-C4	-10.98	101.41	105.80
26	LA	2838	G	C4-C5-N7	10.98	115.19	110.80
3	S1	59	A	N1-C6-N6	10.98	125.19	118.60
26	LA	259	G	C4-C5-N7	10.98	115.19	110.80
3	S1	45	G	C8-N9-C1'	-10.98	112.73	127.00
26	LA	1709	U	C2-N3-C4	-10.97	120.42	127.00
26	LA	1970	A	N1-C2-N3	10.97	134.79	129.30
2	SA	626	G	C5-C6-O6	-10.97	122.02	128.60
2	SA	853	C	N3-C4-C5	-10.97	117.51	121.90
2	SA	1338	G	C5-C6-O6	10.97	135.18	128.60
26	LA	1718	G	N1-C6-O6	10.97	126.48	119.90
26	LA	2479	U	P-O5'-C5'	10.97	138.45	120.90
26	LA	122	G	C6-C5-N7	-10.97	123.82	130.40
26	LA	377	G	N1-C6-O6	10.97	126.48	119.90
2	SA	417	G	O4'-C1'-N9	10.96	116.97	108.20
26	LA	1050	A	C8-N9-C4	10.97	110.19	105.80
2	SA	715	A	C8-N9-C4	-10.96	101.42	105.80
26	LA	1505	A	N1-C6-N6	10.96	125.18	118.60
26	LA	404	A	C5-C6-N1	10.96	123.18	117.70
26	LA	1045	C	O4'-C1'-N1	10.96	116.97	108.20
26	LA	2094	A	C5-C6-N6	-10.96	114.93	123.70
2	SA	775	G	C5-C6-O6	-10.95	122.03	128.60
26	LA	1110	G	N1-C2-N2	-10.95	106.34	116.20
26	LA	141	G	N1-C6-O6	10.95	126.47	119.90
26	LA	1582	C	C6-N1-C2	-10.95	115.92	120.30
26	LA	320	A	N9-C4-C5	10.95	110.18	105.80
26	LA	1779	U	N1-C2-N3	-10.95	108.33	114.90
2	SA	539	A	C4'-C3'-C2'	-10.95	91.65	102.60
26	LA	590	A	N7-C8-N9	-10.95	108.33	113.80
26	LA	1182	G	C5-N7-C8	-10.95	98.83	104.30
2	SA	1253	G	C6-N1-C2	-10.94	118.53	125.10
2	SA	1162	C	C6-N1-C2	-10.94	115.92	120.30
26	LA	821	A	P-O3'-C3'	10.94	132.83	119.70
2	SA	900	A	N3-C4-N9	-10.94	118.65	127.40
2	SA	208	U	O4'-C1'-N1	10.94	116.95	108.20
2	SA	540	G	N1-C6-O6	10.94	126.46	119.90
26	LA	801	G	N1-C6-O6	10.94	126.46	119.90
26	LA	1740	G	O4'-C1'-N9	10.94	116.95	108.20
2	SA	274	A	N9-C4-C5	-10.94	101.43	105.80
26	LA	647	G	C5-C6-N1	10.94	116.97	111.50
2	SA	1042	A	O4'-C1'-N9	10.93	116.95	108.20
2	SA	746	A	N1-C6-N6	-10.93	112.04	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1052	U	O4'-C1'-N1	10.93	116.94	108.20
15	SO	79	ARG	NE-CZ-NH2	-10.93	114.84	120.30
26	LA	2358	A	N1-C2-N3	10.93	134.76	129.30
26	LA	2715	C	N3-C4-N4	10.93	125.65	118.00
2	SA	252	U	O4'-C1'-N1	10.93	116.94	108.20
2	SA	851	G	P-O3'-C3'	10.93	132.81	119.70
25	LB	87	U	C3'-C2'-C1'	-10.93	92.76	101.50
10	SJ	68	ARG	NE-CZ-NH1	10.92	125.76	120.30
26	LA	2385	C	O4'-C1'-N1	10.92	116.94	108.20
26	LA	269	C	O4'-C1'-N1	10.92	116.94	108.20
26	LA	689	A	C5-C6-N6	-10.92	114.97	123.70
2	SA	529	G	C8-N9-C4	-10.92	102.03	106.40
26	LA	214	G	O4'-C1'-N9	10.91	116.93	108.20
26	LA	1170	C	C5-C4-N4	-10.91	112.56	120.20
25	LB	72	G	C5-C6-O6	-10.91	122.05	128.60
26	LA	1151	A	N1-C6-N6	-10.91	112.05	118.60
26	LA	1254	A	N7-C8-N9	-10.91	108.34	113.80
2	SA	1201	A	N1-C2-N3	10.91	134.75	129.30
2	SA	35	G	N3-C4-C5	-10.91	123.15	128.60
2	SA	1189	U	C5'-C4'-O4'	10.91	122.19	109.10
26	LA	1558	C	N3-C4-C5	-10.91	117.54	121.90
26	LA	1999	C	N3-C4-N4	10.91	125.64	118.00
26	LA	1264	A	N9-C4-C5	10.90	110.16	105.80
26	LA	2654	A	C5-N7-C8	10.90	109.35	103.90
26	LA	641	U	C2-N1-C1'	10.90	130.78	117.70
26	LA	780	G	N1-C6-O6	10.90	126.44	119.90
26	LA	1268	A	C2-N3-C4	10.90	116.05	110.60
26	LA	1629	U	C2-N3-C4	-10.90	120.46	127.00
2	SA	857	C	O4'-C1'-N1	10.90	116.92	108.20
3	S1	45	G	O4'-C1'-N9	10.90	116.92	108.20
26	LA	287	G	O4'-C1'-N9	10.90	116.92	108.20
26	LA	805	G	C5-C6-N1	10.90	116.95	111.50
26	LA	2711	A	P-O3'-C3'	10.90	132.78	119.70
32	LY	40	ARG	NE-CZ-NH1	10.90	125.75	120.30
26	LA	1872	A	P-O3'-C3'	10.89	132.77	119.70
26	LA	1985	C	O4'-C1'-N1	10.89	116.92	108.20
2	SA	1442	G	C5-N7-C8	-10.89	98.85	104.30
26	LA	1490	A	P-O3'-C3'	10.89	132.77	119.70
26	LA	2645	G	P-O3'-C3'	10.89	132.77	119.70
26	LA	2421	G	O4'-C1'-N9	10.89	116.91	108.20
36	L2	59	ARG	NE-CZ-NH1	10.89	125.75	120.30
26	LA	1503	A	C2-N3-C4	10.89	116.04	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	722	G	N3-C2-N2	10.88	127.52	119.90
26	LA	2403	C	C6-N1-C2	-10.89	115.94	120.30
26	LA	2753	A	N7-C8-N9	10.89	119.24	113.80
2	SA	1221	G	C2-N3-C4	-10.88	106.46	111.90
26	LA	1528	A	C5-N7-C8	10.88	109.34	103.90
26	LA	2436	G	C6-C5-N7	-10.88	123.87	130.40
26	LA	2440	C	P-O3'-C3'	10.88	132.76	119.70
2	SA	174	A	N1-C2-N3	10.88	134.74	129.30
2	SA	380	G	P-O3'-C3'	10.88	132.75	119.70
26	LA	38	A	O4'-C1'-N9	10.88	116.90	108.20
2	SA	697	U	C2-N3-C4	-10.87	120.48	127.00
2	SA	406	G	N3-C4-C5	-10.87	123.16	128.60
2	SA	470	C	N3-C4-N4	10.87	125.61	118.00
2	SA	774	G	C4-C5-N7	10.87	115.15	110.80
2	SA	689	C	O4'-C1'-N1	10.87	116.90	108.20
26	LA	2892	G	N1-C6-O6	-10.87	113.38	119.90
3	S1	38	G	N1-C6-O6	10.87	126.42	119.90
21	SE	49	TYR	CB-CG-CD1	-10.87	114.48	121.00
26	LA	997	G	C8-N9-C4	-10.87	102.05	106.40
12	SL	37	TYR	CB-CG-CD2	-10.87	114.48	121.00
26	LA	295	G	C5'-C4'-O4'	10.86	122.13	109.10
26	LA	1280	G	C5-C6-O6	-10.86	122.08	128.60
2	SA	944	G	C5-C6-O6	-10.86	122.09	128.60
26	LA	1098	A	C8-N9-C4	10.86	110.14	105.80
26	LA	1541	C	O4'-C1'-N1	10.86	116.89	108.20
26	LA	1975	G	C2-N3-C4	-10.86	106.47	111.90
26	LA	2567	G	C8-N9-C4	-10.86	102.06	106.40
2	SA	799	G	C4-C5-N7	10.85	115.14	110.80
26	LA	1944	U	C5-C6-N1	-10.85	117.27	122.70
25	LB	9	G	C8-N9-C4	10.85	110.74	106.40
2	SA	616	G	C5-N7-C8	10.85	109.72	104.30
26	LA	2655	G	C5-C6-O6	-10.85	122.09	128.60
26	LA	1930	G	C5-C6-N1	-10.84	106.08	111.50
26	LA	958	U	O4'-C1'-N1	10.84	116.87	108.20
26	LA	1768	C	O4'-C1'-N1	10.84	116.87	108.20
26	LA	756	A	C2-N3-C4	10.84	116.02	110.60
2	SA	80	A	C2-N3-C4	10.84	116.02	110.60
26	LA	1925	C	O4'-C1'-N1	10.84	116.87	108.20
2	SA	722	G	C8-N9-C4	-10.84	102.07	106.40
2	SA	1504	G	N1-C6-O6	10.84	126.40	119.90
26	LA	880	G	C4-N9-C1'	-10.84	112.41	126.50
26	LA	1812	U	C5-C6-N1	-10.84	117.28	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	812	G	C5-C6-O6	-10.84	122.10	128.60
2	SA	1339	A	N1-C6-N6	-10.84	112.10	118.60
2	SA	1399	C	C6-N1-C2	-10.83	115.97	120.30
26	LA	1659	G	C5-C6-O6	10.83	135.10	128.60
26	LA	617	G	N1-C6-O6	-10.83	113.40	119.90
26	LA	1510	G	C8-N9-C4	-10.83	102.07	106.40
26	LA	2123	G	C5-C6-O6	-10.83	122.10	128.60
2	SA	719	C	O4'-C1'-N1	10.83	116.86	108.20
2	SA	1006	G	P-O5'-C5'	10.83	138.22	120.90
26	LA	2399	G	N1-C6-O6	10.83	126.39	119.90
26	LA	1220	G	N1-C6-O6	-10.82	113.41	119.90
2	SA	1222	G	O4'-C1'-N9	10.82	116.86	108.20
4	S2	76	C	P-O5'-C5'	10.82	138.21	120.90
26	LA	2227	A	N1-C6-N6	10.82	125.09	118.60
1	SS	35	ARG	NE-CZ-NH2	10.82	125.71	120.30
26	LA	774	G	C6-N1-C2	-10.82	118.61	125.10
2	SA	1266	G	C4-C5-N7	-10.81	106.47	110.80
2	SA	1362	A	C1'-O4'-C4'	-10.81	101.25	109.90
26	LA	702	U	O4'-C1'-N1	10.81	116.85	108.20
2	SA	1321	U	C5-C6-N1	-10.81	117.29	122.70
2	SA	764	C	O4'-C1'-N1	10.81	116.85	108.20
25	LB	37	C	O4'-C1'-N1	10.81	116.85	108.20
26	LA	186	G	O4'-C1'-N9	10.81	116.85	108.20
26	LA	1042	G	C4-C5-N7	10.81	115.12	110.80
2	SA	478	A	O4'-C1'-N9	10.81	116.85	108.20
25	LB	31	C	O4'-C1'-N1	10.81	116.85	108.20
26	LA	2294	G	C5-C6-O6	-10.81	122.11	128.60
26	LA	2823	A	C8-N9-C4	10.81	110.12	105.80
26	LA	630	G	C5-C6-O6	-10.80	122.12	128.60
26	LA	1737	G	C5-C6-O6	-10.80	122.12	128.60
2	SA	1345	U	O5'-P-OP1	-10.80	95.98	105.70
26	LA	2270	A	O4'-C1'-N9	10.80	116.84	108.20
25	LB	109	A	O4'-C1'-N9	10.80	116.84	108.20
2	SA	34	C	N3-C4-C5	10.79	126.22	121.90
2	SA	418	C	C2-N3-C4	-10.79	114.50	119.90
2	SA	462	G	C5-N7-C8	10.79	109.70	104.30
2	SA	1301	U	P-O5'-C5'	10.79	138.17	120.90
26	LA	1730	C	P-O3'-C3'	10.79	132.65	119.70
26	LA	242	G	P-O5'-C5'	10.79	138.17	120.90
26	LA	271	G	C5'-C4'-C3'	-10.79	98.74	116.00
26	LA	1782	U	N3-C2-O2	-10.79	114.65	122.20
26	LA	2435	A	C8-N9-C4	-10.79	101.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	391	G	N1-C6-O6	10.79	126.37	119.90
26	LA	2642	G	P-O3'-C3'	-10.79	106.76	119.70
38	LE	118	PHE	CB-CG-CD1	10.79	128.35	120.80
2	SA	1477	U	N3-C4-O4	10.79	126.95	119.40
26	LA	332	A	O4'-C1'-C2'	-10.78	95.02	105.80
26	LA	488	G	C4-C5-N7	10.79	115.11	110.80
26	LA	2545	G	C5-N7-C8	-10.79	98.91	104.30
25	LB	94	A	O4'-C1'-N9	10.78	116.83	108.20
26	LA	1127	A	O4'-C1'-N9	10.78	116.83	108.20
2	SA	596	A	N1-C6-N6	-10.78	112.13	118.60
26	LA	671	C	C6-N1-C2	10.78	124.61	120.30
26	LA	997	G	C5-C6-O6	-10.78	122.13	128.60
2	SA	1251	A	C6-N1-C2	-10.77	112.14	118.60
26	LA	1662	U	C5-C4-O4	-10.77	119.44	125.90
25	LB	41	G	N1-C2-N3	10.77	130.36	123.90
26	LA	2336	A	C5-C6-N6	-10.77	115.08	123.70
26	LA	489	G	N1-C6-O6	10.76	126.36	119.90
26	LA	1834	U	O4'-C1'-N1	10.76	116.81	108.20
26	LA	1363	C	O4'-C1'-N1	10.76	116.81	108.20
2	SA	660	C	O4'-C1'-N1	10.76	116.81	108.20
26	LA	2186	G	C4-C5-C6	10.76	125.26	118.80
26	LA	1576	U	N3-C4-O4	10.76	126.93	119.40
26	LA	822	G	N1-C6-O6	10.75	126.35	119.90
2	SA	454	G	C8-N9-C4	-10.75	102.10	106.40
2	SA	306	A	N1-C6-N6	-10.75	112.15	118.60
4	S2	9	G	C5-C6-O6	-10.75	122.15	128.60
26	LA	1507	C	C5-C6-N1	-10.75	115.63	121.00
4	S2	10	G	N3-C2-N2	10.74	127.42	119.90
2	SA	1063	C	N3-C2-O2	-10.74	114.38	121.90
26	LA	413	C	C2-N3-C4	10.74	125.27	119.90
25	LB	107	G	C5-N7-C8	-10.74	98.93	104.30
2	SA	129	A	C2-N3-C4	-10.74	105.23	110.60
26	LA	2718	G	O4'-C1'-N9	10.74	116.79	108.20
2	SA	441	A	C4-C5-C6	10.74	122.37	117.00
4	S2	55	U	C5-C4-O4	-10.74	119.46	125.90
26	LA	20	C	N3-C2-O2	-10.74	114.38	121.90
26	LA	1252	G	N9-C4-C5	-10.74	101.10	105.40
26	LA	2661	G	O4'-C1'-N9	10.74	116.79	108.20
2	SA	535	A	C5-C6-N1	-10.74	112.33	117.70
26	LA	1588	G	O4'-C1'-N9	10.73	116.79	108.20
2	SA	305	G	C4-C5-N7	-10.73	106.51	110.80
26	LA	1016	G	N1-C6-O6	10.73	126.34	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1440	U	O4'-C1'-N1	10.73	116.79	108.20
26	LA	1531	C	N3-C4-N4	-10.73	110.49	118.00
26	LA	1741	C	N1-C2-N3	10.73	126.71	119.20
20	SD	181	PHE	CB-CG-CD1	-10.73	113.29	120.80
26	LA	793	A	C4-C5-N7	10.73	116.06	110.70
26	LA	2197	U	C5-C4-O4	-10.73	119.46	125.90
26	LA	2695	U	N1-C2-N3	-10.72	108.47	114.90
2	SA	687	A	N1-C6-N6	10.72	125.03	118.60
26	LA	1291	C	O4'-C1'-N1	10.72	116.78	108.20
26	LA	2251	U	C2-N3-C4	-10.72	120.57	127.00
26	LA	388	G	C5'-C4'-O4'	10.72	121.97	109.10
26	LA	1662	U	N3-C4-O4	10.72	126.91	119.40
26	LA	459	U	C5-C4-O4	10.72	132.33	125.90
26	LA	940	G	C5-C6-N1	10.72	116.86	111.50
26	LA	1840	G	C6-N1-C2	-10.72	118.67	125.10
2	SA	846	G	P-O3'-C3'	-10.72	106.84	119.70
26	LA	1324	G	O4'-C1'-N9	10.72	116.77	108.20
26	LA	1923	U	C5-C4-O4	10.71	132.33	125.90
2	SA	369	G	O4'-C1'-N9	10.71	116.77	108.20
2	SA	715	A	N9-C4-C5	10.71	110.08	105.80
26	LA	2884	U	O4'-C1'-N1	10.71	116.77	108.20
2	SA	1527	U	C5-C4-O4	-10.71	119.48	125.90
26	LA	1827	U	O4'-C1'-N1	10.70	116.76	108.20
26	LA	1904	G	N9-C4-C5	-10.70	101.12	105.40
26	LA	2228	G	C5-C6-O6	-10.70	122.18	128.60
2	SA	483	C	P-O5'-C5'	10.70	138.01	120.90
24	S3	252	ARG	NE-CZ-NH1	10.70	125.65	120.30
26	LA	773	U	C2-N3-C4	-10.70	120.58	127.00
26	LA	1354	A	C4-C5-C6	-10.70	111.65	117.00
2	SA	1457	G	C5-N7-C8	-10.69	98.95	104.30
44	LF	162	ARG	NE-CZ-NH2	10.69	125.65	120.30
2	SA	543	U	O4'-C1'-N1	10.69	116.75	108.20
2	SA	322	C	O4'-C1'-N1	10.69	116.75	108.20
2	SA	1181	G	C5-C6-O6	-10.69	122.19	128.60
2	SA	1282	C	C5-C6-N1	10.69	126.34	121.00
44	LF	61	ARG	NE-CZ-NH2	10.69	125.64	120.30
2	SA	496	A	O4'-C1'-N9	10.69	116.75	108.20
25	LB	71	C	N3-C4-N4	-10.69	110.52	118.00
26	LA	312	G	C5-N7-C8	10.69	109.64	104.30
26	LA	68	G	O4'-C1'-N9	10.69	116.75	108.20
2	SA	271	C	C2-N3-C4	-10.68	114.56	119.90
26	LA	1900	A	O4'-C1'-N9	10.68	116.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2352	A	P-O3'-C3'	10.68	132.52	119.70
26	LA	2405	G	N9-C4-C5	-10.68	101.13	105.40
26	LA	1520	U	C6-N1-C2	-10.68	114.59	121.00
26	LA	331	C	C6-N1-C2	-10.68	116.03	120.30
2	SA	1495	U	C2-N3-C4	-10.68	120.59	127.00
4	S2	1	C	O4'-C1'-N1	10.67	116.74	108.20
26	LA	474	G	N3-C2-N2	10.67	127.37	119.90
26	LA	512	G	P-O3'-C3'	10.67	132.51	119.70
26	LA	2380	C	C6-N1-C2	-10.67	116.03	120.30
2	SA	961	U	N3-C4-C5	-10.67	108.20	114.60
26	LA	2512	C	C5-C6-N1	-10.67	115.67	121.00
26	LA	1951	U	O4'-C1'-N1	10.67	116.73	108.20
26	LA	900	A	C4-C5-C6	-10.67	111.67	117.00
2	SA	1213	A	O4'-C1'-N9	-10.66	99.67	108.20
26	LA	2024	G	N3-C2-N2	10.66	127.36	119.90
26	LA	1715	G	N3-C2-N2	-10.66	112.44	119.90
26	LA	2604	U	N3-C4-C5	10.66	121.00	114.60
26	LA	2452	C	C6-N1-C2	-10.66	116.04	120.30
4	S2	56	U	P-O3'-C3'	10.66	132.49	119.70
9	SI	6	TYR	CB-CG-CD2	-10.66	114.61	121.00
26	LA	2814	A	N1-C2-N3	-10.66	123.97	129.30
2	SA	513	C	O4'-C1'-N1	10.65	116.72	108.20
2	SA	683	G	C5-C6-O6	-10.65	122.21	128.60
26	LA	1583	A	C1'-O4'-C4'	-10.65	101.38	109.90
2	SA	404	G	N9-C1'-C2'	-10.65	100.16	114.00
26	LA	196	A	C1'-O4'-C4'	-10.65	101.38	109.90
26	LA	2647	U	P-O3'-C3'	10.65	132.48	119.70
26	LA	2874	C	C5-C4-N4	-10.65	112.74	120.20
4	S2	43	G	C5-C6-N1	-10.64	106.18	111.50
2	SA	866	C	P-O5'-C5'	10.64	137.93	120.90
2	SA	1045	C	N3-C4-N4	10.64	125.45	118.00
26	LA	387	U	C5'-C4'-O4'	10.64	121.87	109.10
26	LA	907	G	O4'-C1'-N9	10.64	116.71	108.20
26	LA	651	G	C5-C6-O6	-10.64	122.22	128.60
26	LA	1053	C	O4'-C1'-N1	10.63	116.71	108.20
26	LA	1920	C	C6-N1-C2	-10.63	116.05	120.30
26	LA	1333	G	C5-C6-O6	-10.63	122.22	128.60
26	LA	1540	G	C6-N1-C2	-10.63	118.72	125.10
26	LA	2307	G	N1-C6-O6	10.63	126.28	119.90
2	SA	1494	G	N1-C6-O6	10.63	126.28	119.90
2	SA	276	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	396	G	N1-C2-N3	10.62	130.28	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1107	C	N3-C4-C5	-10.62	117.65	121.90
2	SA	1454	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	1841	U	N1-C2-N3	10.62	121.27	114.90
2	SA	276	G	N3-C2-N2	10.62	127.33	119.90
2	SA	304	U	C2-N3-C4	-10.62	120.63	127.00
26	LA	493	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	2831	G	O4'-C1'-N9	10.62	116.70	108.20
2	SA	812	G	O4'-C1'-N9	10.62	116.69	108.20
26	LA	1807	G	O4'-C1'-N9	10.62	116.69	108.20
26	LA	1290	C	N3-C4-N4	10.62	125.43	118.00
26	LA	2682	A	C4'-C3'-C2'	-10.62	91.98	102.60
26	LA	1597	A	C2-N3-C4	-10.61	105.29	110.60
26	LA	2877	G	C5-C6-O6	-10.61	122.23	128.60
26	LA	560	C	O4'-C1'-N1	10.61	116.69	108.20
26	LA	2373	G	O4'-C1'-N9	10.61	116.69	108.20
26	LA	2648	G	C8-N9-C4	10.61	110.64	106.40
2	SA	305	G	O4'-C1'-N9	10.60	116.68	108.20
26	LA	1154	G	C4-C5-N7	10.60	115.04	110.80
26	LA	387	U	C5-C4-O4	-10.60	119.54	125.90
26	LA	1301	A	N1-C6-N6	-10.60	112.24	118.60
26	LA	1543	G	C5'-C4'-O4'	10.60	121.82	109.10
26	LA	1287	A	C8-N9-C4	-10.60	101.56	105.80
26	LA	66	C	O4'-C1'-N1	10.60	116.68	108.20
26	LA	1378	A	C5'-C4'-O4'	10.60	121.82	109.10
2	SA	668	G	C4-C5-N7	10.60	115.04	110.80
26	LA	2598	A	N1-C6-N6	-10.60	112.24	118.60
2	SA	1404	C	O4'-C1'-N1	10.59	116.67	108.20
25	LB	97	C	O4'-C1'-N1	10.59	116.67	108.20
26	LA	551	G	N1-C6-O6	10.59	126.26	119.90
53	LP	45	ARG	NE-CZ-NH1	10.59	125.60	120.30
4	S2	22	A	C8-N9-C4	10.59	110.04	105.80
26	LA	326	G	C5-C6-O6	-10.59	122.25	128.60
26	LA	390	U	C6-N1-C2	10.59	127.36	121.00
26	LA	619	G	C5-N7-C8	-10.59	99.00	104.30
26	LA	1999	C	O4'-C1'-N1	10.59	116.67	108.20
26	LA	1530	G	C2-N3-C4	10.59	117.19	111.90
26	LA	1764	C	O4'-C1'-N1	10.59	116.67	108.20
21	SE	53	ARG	NE-CZ-NH1	10.58	125.59	120.30
26	LA	748	G	C4-C5-N7	-10.58	106.57	110.80
26	LA	1323	C	P-O3'-C3'	10.58	132.40	119.70
26	LA	853	C	C5-C6-N1	10.58	126.29	121.00
26	LA	1416	G	O4'-C1'-N9	10.58	116.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1420	A	N9-C4-C5	10.58	110.03	105.80
2	SA	402	G	N3-C4-N9	10.58	132.35	126.00
2	SA	772	U	N1-C2-N3	10.58	121.25	114.90
26	LA	338	G	C8-N9-C4	10.58	110.63	106.40
2	SA	898	G	C4'-C3'-C2'	-10.57	92.03	102.60
26	LA	752	A	C3'-C2'-C1'	-10.57	93.04	101.50
26	LA	2061	G	C6-N1-C2	-10.57	118.75	125.10
26	LA	2298	A	O4'-C1'-N9	10.57	116.66	108.20
26	LA	525	U	P-O3'-C3'	10.57	132.39	119.70
26	LA	1462	C	C6-N1-C2	-10.57	116.07	120.30
2	SA	119	A	N1-C6-N6	-10.57	112.26	118.60
2	SA	669	G	N1-C6-O6	10.57	126.24	119.90
2	SA	1450	U	O4'-C1'-N1	10.57	116.65	108.20
26	LA	2136	G	O4'-C1'-N9	10.57	116.66	108.20
2	SA	527	G	C4-C5-C6	-10.56	112.46	118.80
2	SA	1460	C	O4'-C1'-N1	10.56	116.65	108.20
26	LA	2242	G	P-O3'-C3'	10.56	132.38	119.70
2	SA	1271	A	N1-C6-N6	10.56	124.94	118.60
2	SA	1477	U	C5-C4-O4	-10.56	119.56	125.90
26	LA	242	G	P-O3'-C3'	10.56	132.38	119.70
26	LA	1162	G	N1-C6-O6	10.56	126.24	119.90
26	LA	1565	C	C5-C4-N4	-10.56	112.81	120.20
26	LA	2753	A	C4-C5-N7	10.56	115.98	110.70
2	SA	1442	G	N1-C6-O6	-10.56	113.56	119.90
2	SA	372	C	O4'-C1'-N1	10.56	116.65	108.20
2	SA	545	C	O4'-C1'-N1	10.56	116.65	108.20
2	SA	1232	U	C6-N1-C2	-10.56	114.66	121.00
26	LA	218	A	C5-C6-N1	-10.56	112.42	117.70
26	LA	411	G	N9-C4-C5	-10.56	101.18	105.40
26	LA	2602	A	O4'-C1'-N9	10.56	116.65	108.20
26	LA	1969	A	C8-N9-C4	10.56	110.02	105.80
26	LA	886	A	O4'-C1'-N9	10.55	116.64	108.20
26	LA	1076	C	O4'-C1'-N1	10.55	116.64	108.20
26	LA	15	G	O4'-C1'-N9	10.55	116.64	108.20
26	LA	1427	A	C8-N9-C4	10.55	110.02	105.80
26	LA	2055	C	O4'-C1'-N1	10.54	116.64	108.20
2	SA	60	A	P-O3'-C3'	10.54	132.35	119.70
26	LA	2324	U	O4'-C1'-N1	10.54	116.63	108.20
2	SA	277	C	N3-C4-C5	10.54	126.12	121.90
26	LA	2451	A	N1-C6-N6	-10.54	112.28	118.60
26	LA	1816	C	O4'-C1'-N1	10.54	116.63	108.20
26	LA	2432	A	C5-C6-N1	-10.54	112.43	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	423	G	C8-N9-C4	-10.53	102.19	106.40
2	SA	1129	C	O4'-C1'-N1	10.53	116.63	108.20
26	LA	2900	A	O4'-C1'-N9	10.53	116.63	108.20
2	SA	406	G	C5-N7-C8	10.53	109.56	104.30
2	SA	621	A	O4'-C1'-N9	10.53	116.62	108.20
2	SA	818	G	P-O3'-C3'	10.53	132.34	119.70
2	SA	1253	G	C5-C6-O6	-10.53	122.28	128.60
26	LA	54	G	C5-N7-C8	-10.53	99.03	104.30
2	SA	1109	C	N3-C4-N4	10.53	125.37	118.00
26	LA	124	G	C3'-C2'-C1'	-10.53	93.08	101.50
26	LA	2279	G	N3-C4-C5	-10.53	123.33	128.60
26	LA	2676	C	N1-C2-O2	10.53	125.22	118.90
2	SA	494	G	C5-C6-N1	10.53	116.76	111.50
2	SA	1486	G	N9-C4-C5	10.53	109.61	105.40
7	SG	150	PHE	CB-CG-CD2	-10.53	113.43	120.80
26	LA	125	A	O3'-P-O5'	10.53	124.00	104.00
26	LA	1521	G	C8-N9-C4	10.53	110.61	106.40
26	LA	2471	A	N1-C6-N6	10.53	124.92	118.60
36	L2	49	ARG	NE-CZ-NH2	10.53	125.56	120.30
26	LA	224	U	C5'-C4'-C3'	-10.52	99.16	116.00
26	LA	2867	G	N1-C2-N3	-10.52	117.59	123.90
2	SA	604	G	N9-C4-C5	-10.52	101.19	105.40
2	SA	782	A	C2-N3-C4	-10.52	105.34	110.60
34	L0	52	ARG	NE-CZ-NH2	10.52	125.56	120.30
26	LA	1341	G	N1-C6-O6	-10.52	113.59	119.90
26	LA	1923	U	N1-C2-O2	10.52	130.16	122.80
26	LA	2773	C	C6-N1-C2	-10.52	116.09	120.30
26	LA	2169	A	C8-N9-C4	10.52	110.01	105.80
2	SA	667	G	N1-C6-O6	10.51	126.21	119.90
26	LA	1339	G	C5-C6-N1	10.51	116.76	111.50
26	LA	1634	A	C2-N3-C4	-10.51	105.34	110.60
26	LA	2146	C	C2-N3-C4	-10.51	114.64	119.90
26	LA	377	G	N3-C4-C5	-10.51	123.34	128.60
26	LA	1576	U	O4'-C1'-N1	10.51	116.61	108.20
2	SA	1030	U	N3-C2-O2	-10.51	114.84	122.20
26	LA	57	C	C6-N1-C2	-10.51	116.10	120.30
2	SA	226	G	C2-N3-C4	10.51	117.15	111.90
2	SA	268	U	O4'-C1'-N1	10.51	116.61	108.20
2	SA	524	G	C2-N3-C4	10.51	117.15	111.90
26	LA	2710	C	C4-C5-C6	10.51	122.65	117.40
21	SE	44	ARG	NE-CZ-NH1	10.51	125.55	120.30
26	LA	1693	U	C2-N3-C4	-10.51	120.70	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1792	G	N1-C6-O6	10.51	126.20	119.90
26	LA	2132	U	O4'-C1'-N1	10.51	116.61	108.20
3	S1	28	U	O4'-C1'-N1	10.50	116.60	108.20
26	LA	2126	A	C4'-C3'-C2'	-10.50	92.10	102.60
2	SA	318	G	C8-N9-C4	10.50	110.60	106.40
26	LA	28	A	O4'-C1'-N9	10.50	116.60	108.20
26	LA	2710	C	O4'-C1'-N1	10.50	116.60	108.20
2	SA	233	C	O4'-C1'-N1	10.50	116.60	108.20
2	SA	741	G	P-O3'-C3'	-10.50	107.11	119.70
2	SA	1131	G	P-O5'-C5'	10.50	137.69	120.90
26	LA	2340	A	C8-N9-C4	-10.50	101.60	105.80
10	SJ	62	ARG	NE-CZ-NH2	10.49	125.55	120.30
26	LA	2435	A	C6-N1-C2	-10.49	112.30	118.60
2	SA	144	G	C8-N9-C4	-10.49	102.20	106.40
2	SA	430	A	C6-N1-C2	-10.49	112.31	118.60
26	LA	1854	A	C8-N9-C4	10.49	110.00	105.80
26	LA	570	G	C3'-C2'-C1'	-10.48	93.11	101.50
26	LA	1413	A	C5-C6-N1	-10.48	112.46	117.70
26	LA	2840	C	P-O3'-C3'	-10.48	107.12	119.70
2	SA	566	G	C5-C6-O6	-10.48	122.31	128.60
26	LA	1874	C	N1-C2-O2	10.48	125.19	118.90
2	SA	676	A	O4'-C1'-N9	10.48	116.58	108.20
26	LA	572	A	P-O3'-C3'	10.48	132.27	119.70
24	S3	471	ARG	NE-CZ-NH2	-10.48	115.06	120.30
2	SA	1076	U	P-O3'-C3'	-10.47	107.13	119.70
26	LA	2399	G	O4'-C1'-N9	10.47	116.58	108.20
25	LB	107	G	C4-C5-N7	10.47	114.99	110.80
26	LA	880	G	O4'-C1'-N9	10.47	116.58	108.20
26	LA	1923	U	C2-N3-C4	10.47	133.28	127.00
2	SA	469	C	C2-N3-C4	-10.47	114.66	119.90
26	LA	541	A	P-O5'-C5'	10.47	137.66	120.90
26	LA	1514	G	P-O5'-C5'	10.47	137.66	120.90
4	S2	49	C	P-O5'-C5'	10.47	137.65	120.90
23	SR	72	ARG	NE-CZ-NH1	10.47	125.54	120.30
26	LA	1389	G	N3-C2-N2	10.47	127.23	119.90
14	SN	40	ARG	NE-CZ-NH2	-10.47	115.07	120.30
26	LA	469	G	P-O3'-C3'	-10.47	107.14	119.70
26	LA	1643	G	C5'-C4'-C3'	10.47	132.75	116.00
26	LA	2111	U	N1-C2-N3	10.47	121.18	114.90
26	LA	2151	U	N1-C2-O2	-10.47	115.47	122.80
26	LA	2100	G	N1-C6-O6	10.47	126.18	119.90
26	LA	1528	A	N7-C8-N9	-10.46	108.57	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1924	C	C6-N1-C2	-10.46	116.11	120.30
2	SA	401	C	C5-C4-N4	10.46	127.52	120.20
26	LA	2624	G	C5-C6-O6	-10.46	122.32	128.60
2	SA	1312	G	N9-C4-C5	10.46	109.58	105.40
26	LA	174	U	C4-C5-C6	-10.46	113.42	119.70
26	LA	811	U	N3-C2-O2	-10.46	114.88	122.20
2	SA	932	C	C4-C5-C6	-10.46	112.17	117.40
25	LB	117	G	O4'-C1'-N9	10.46	116.56	108.20
26	LA	437	U	C1'-O4'-C4'	-10.46	101.54	109.90
26	LA	573	U	C5-C6-N1	-10.46	117.47	122.70
26	LA	790	U	N1-C2-N3	10.46	121.17	114.90
2	SA	100	G	C5'-C4'-O4'	10.45	121.64	109.10
2	SA	802	A	O4'-C1'-N9	10.45	116.56	108.20
26	LA	1992	G	N1-C6-O6	10.45	126.17	119.90
25	LB	32	U	N1-C2-N3	10.45	121.17	114.90
2	SA	264	C	C5-C4-N4	-10.44	112.89	120.20
26	LA	1917	U	C6-N1-C1'	-10.45	106.58	121.20
26	LA	2796	U	P-O5'-C5'	10.45	137.61	120.90
2	SA	334	C	O4'-C1'-N1	10.44	116.55	108.20
2	SA	1516	G	C3'-C2'-C1'	10.44	109.85	101.50
2	SA	870	U	O5'-P-OP1	-10.44	96.30	105.70
26	LA	1585	C	C6-N1-C2	-10.44	116.12	120.30
26	LA	1702	G	C5-C6-N1	10.44	116.72	111.50
26	LA	2480	C	C6-N1-C2	-10.44	116.13	120.30
2	SA	1316	G	C5-C6-O6	-10.43	122.34	128.60
2	SA	1378	C	O4'-C1'-N1	10.43	116.55	108.20
7	SG	153	TYR	CB-CG-CD1	-10.43	114.74	121.00
20	SD	173	ASP	CB-CG-OD2	10.43	127.69	118.30
26	LA	1023	U	O4'-C1'-N1	10.43	116.55	108.20
26	LA	1332	G	C4-N9-C1'	10.43	140.06	126.50
26	LA	1600	C	O4'-C1'-N1	10.43	116.55	108.20
2	SA	34	C	O4'-C1'-N1	10.43	116.55	108.20
2	SA	336	A	C5-C6-N6	-10.43	115.36	123.70
2	SA	401	C	N3-C4-C5	-10.43	117.73	121.90
26	LA	774	G	N3-C2-N2	-10.43	112.60	119.90
26	LA	1996	C	C6-N1-C2	-10.43	116.13	120.30
26	LA	295	G	N3-C2-N2	10.43	127.20	119.90
26	LA	1741	C	C6-N1-C2	-10.43	116.13	120.30
26	LA	2309	A	C6-N1-C2	-10.43	112.34	118.60
2	SA	446	G	C4-C5-N7	10.43	114.97	110.80
2	SA	1294	G	C8-N9-C4	-10.43	102.23	106.40
26	LA	2474	U	O4'-C1'-N1	10.43	116.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1408	A	C6-N1-C2	-10.42	112.35	118.60
26	LA	209	C	O4'-C1'-N1	10.42	116.54	108.20
26	LA	1551	A	C5-C6-N6	-10.42	115.36	123.70
26	LA	1962	C	P-O5'-C5'	10.42	137.57	120.90
24	S3	474	ARG	NE-CZ-NH2	-10.42	115.09	120.30
25	LB	68	C	C2-N3-C4	-10.42	114.69	119.90
26	LA	1073	A	N1-C6-N6	10.42	124.85	118.60
26	LA	1911	U	C5'-C4'-C3'	-10.42	99.33	116.00
2	SA	131	A	C5-N7-C8	10.42	109.11	103.90
26	LA	684	G	N1-C6-O6	10.42	126.15	119.90
47	LJ	61	ARG	NE-CZ-NH2	-10.42	115.09	120.30
26	LA	798	G	C4-C5-N7	-10.41	106.63	110.80
26	LA	1893	C	O4'-C1'-N1	10.41	116.53	108.20
26	LA	695	G	C4'-C3'-C2'	-10.41	92.19	102.60
26	LA	1551	A	N1-C6-N6	10.41	124.85	118.60
42	L6	63	TYR	CB-CG-CD1	10.41	127.25	121.00
56	LR	52	ARG	NE-CZ-NH1	-10.41	115.10	120.30
26	LA	830	G	C5-C6-O6	-10.41	122.36	128.60
26	LA	2677	G	C6-N1-C2	10.40	131.34	125.10
26	LA	1603	A	C5-C6-N6	-10.40	115.38	123.70
2	SA	1328	C	O4'-C1'-N1	10.40	116.52	108.20
2	SA	8	A	C5-N7-C8	10.39	109.10	103.90
2	SA	177	G	O4'-C1'-N9	10.39	116.51	108.20
2	SA	1515	G	C5-C6-O6	-10.39	122.36	128.60
26	LA	1097	U	C3'-C2'-C1'	-10.39	93.18	101.50
26	LA	2270	A	C6-N1-C2	-10.39	112.36	118.60
2	SA	636	U	C4-C5-C6	-10.39	113.47	119.70
26	LA	1507	C	N1-C2-N3	10.39	126.47	119.20
26	LA	1819	A	C8-N9-C4	10.39	109.96	105.80
26	LA	2806	C	N3-C4-C5	-10.39	117.74	121.90
26	LA	182	A	N9-C4-C5	10.39	109.96	105.80
2	SA	799	G	N9-C4-C5	-10.39	101.25	105.40
26	LA	218	A	C5-C6-N6	10.39	132.01	123.70
27	LD	268	ARG	NE-CZ-NH2	-10.39	115.11	120.30
26	LA	113	U	O4'-C1'-C2'	-10.38	95.42	105.80
26	LA	127	A	C8-N9-C4	-10.39	101.65	105.80
26	LA	2887	A	O4'-C1'-N9	10.38	116.51	108.20
33	LZ	2	ARG	NE-CZ-NH1	-10.38	115.11	120.30
2	SA	481	G	O4'-C1'-N9	10.38	116.51	108.20
26	LA	209	C	N3-C4-C5	-10.38	117.75	121.90
2	SA	724	G	N3-C2-N2	10.38	127.17	119.90
12	SL	82	ARG	NE-CZ-NH1	10.38	125.49	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	777	G	N1-C2-N3	10.38	130.13	123.90
26	LA	291	G	C5-C6-O6	-10.38	122.37	128.60
26	LA	1484	U	C5-C4-O4	10.38	132.13	125.90
54	LM	78	ARG	NE-CZ-NH2	-10.38	115.11	120.30
26	LA	1254	A	C8-N9-C4	10.38	109.95	105.80
26	LA	2150	C	O4'-C1'-N1	10.38	116.50	108.20
26	LA	1145	C	C5-C6-N1	-10.37	115.81	121.00
2	SA	1463	U	C2-N3-C4	-10.37	120.78	127.00
26	LA	917	A	N7-C8-N9	10.37	118.99	113.80
26	LA	437	U	C5-C6-N1	10.37	127.89	122.70
2	SA	963	G	O4'-C1'-N9	10.37	116.50	108.20
26	LA	143	C	C6-N1-C2	-10.37	116.15	120.30
26	LA	1446	C	O4'-C1'-N1	10.37	116.50	108.20
2	SA	708	C	C6-N1-C2	10.37	124.45	120.30
2	SA	1511	G	P-O3'-C3'	10.37	132.14	119.70
26	LA	830	G	C5-N7-C8	-10.37	99.12	104.30
26	LA	2190	G	N1-C6-O6	10.37	126.12	119.90
25	LB	6	G	P-O5'-C5'	10.37	137.48	120.90
26	LA	2307	G	C5-C6-O6	-10.37	122.38	128.60
29	LV	73	ARG	NE-CZ-NH2	-10.37	115.12	120.30
27	LD	216	ARG	NE-CZ-NH1	10.36	125.48	120.30
2	SA	567	G	N9-C4-C5	10.36	109.54	105.40
26	LA	1530	G	N3-C4-C5	-10.36	123.42	128.60
26	LA	1728	C	N1-C2-N3	10.36	126.45	119.20
26	LA	880	G	C8-N9-C1'	10.36	140.47	127.00
26	LA	239	C	N3-C4-C5	-10.36	117.76	121.90
15	SO	62	ARG	NE-CZ-NH2	-10.35	115.12	120.30
26	LA	462	C	C2-N3-C4	10.35	125.08	119.90
26	LA	2451	A	C5-N7-C8	10.35	109.08	103.90
26	LA	1458	U	P-O3'-C3'	10.35	132.12	119.70
26	LA	2793	C	P-O5'-C5'	10.35	137.46	120.90
51	LI	97	ARG	NE-CZ-NH2	-10.35	115.12	120.30
26	LA	1663	G	C2-N3-C4	-10.35	106.73	111.90
2	SA	601	G	C2-N3-C4	10.35	117.07	111.90
26	LA	2207	C	O4'-C1'-N1	10.35	116.48	108.20
26	LA	218	A	P-O3'-C3'	10.35	132.11	119.70
26	LA	1272	A	P-O3'-C3'	10.34	132.11	119.70
2	SA	31	G	N1-C6-O6	10.34	126.10	119.90
2	SA	268	U	C5-C4-O4	10.34	132.10	125.90
2	SA	1198	G	C5-C6-O6	-10.34	122.40	128.60
2	SA	1392	G	C5-N7-C8	-10.34	99.13	104.30
25	LB	102	G	C5-C6-O6	-10.34	122.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2095	A	O4'-C1'-N9	10.34	116.47	108.20
26	LA	2403	C	O4'-C1'-N1	10.33	116.47	108.20
2	SA	221	C	C2-N3-C4	-10.33	114.73	119.90
2	SA	270	A	C2-N3-C4	-10.33	105.43	110.60
26	LA	2471	A	O4'-C1'-N9	10.33	116.47	108.20
26	LA	2850	A	C4-C5-N7	-10.33	105.53	110.70
26	LA	1055	G	C8-N9-C4	-10.33	102.27	106.40
2	SA	226	G	N1-C2-N3	-10.33	117.70	123.90
25	LB	56	G	C4-C5-N7	-10.33	106.67	110.80
4	S2	32	G	C4-C5-N7	-10.32	106.67	110.80
2	SA	322	C	N3-C4-C5	10.32	126.03	121.90
12	SL	113	ARG	NE-CZ-NH1	10.32	125.46	120.30
26	LA	1559	U	C5'-C4'-C3'	-10.32	99.49	116.00
2	SA	1331	G	N1-C6-O6	10.32	126.09	119.90
26	LA	14	A	O4'-C1'-N9	10.32	116.45	108.20
26	LA	229	C	C4'-C3'-C2'	-10.32	92.28	102.60
26	LA	2163	A	P-O3'-C3'	10.32	132.08	119.70
26	LA	1279	G	C8-N9-C4	-10.32	102.27	106.40
26	LA	1587	G	O4'-C1'-N9	10.32	116.45	108.20
26	LA	2163	A	C8-N9-C4	-10.32	101.67	105.80
2	SA	459	A	C5-C6-N6	-10.31	115.45	123.70
2	SA	776	G	C4-C5-N7	10.31	114.93	110.80
11	SK	6	ARG	NE-CZ-NH2	10.31	125.46	120.30
26	LA	1906	G	O4'-C1'-N9	10.31	116.45	108.20
26	LA	1979	U	C4-C5-C6	-10.31	113.51	119.70
2	SA	413	G	C5-C6-O6	-10.31	122.42	128.60
26	LA	1684	G	N1-C6-O6	10.31	126.08	119.90
37	LC	163	TYR	CB-CG-CD1	-10.31	114.82	121.00
48	LN	58	TYR	CB-CG-CD1	-10.30	114.82	121.00
26	LA	2266	A	N9-C4-C5	-10.30	101.68	105.80
26	LA	2445	G	N3-C4-C5	-10.30	123.45	128.60
2	SA	45	G	C6-N1-C2	-10.30	118.92	125.10
2	SA	1055	A	C5-C6-N6	10.30	131.94	123.70
38	LE	141	ARG	NE-CZ-NH1	10.30	125.45	120.30
26	LA	1538	G	C4-C5-N7	-10.30	106.68	110.80
26	LA	2066	C	C2-N3-C4	-10.30	114.75	119.90
26	LA	914	G	C5'-C4'-C3'	-10.30	99.53	116.00
2	SA	414	A	N1-C6-N6	10.30	124.78	118.60
2	SA	1419	G	C5-C6-O6	-10.30	122.42	128.60
26	LA	588	U	C2-N3-C4	-10.30	120.82	127.00
26	LA	2816	G	N1-C6-O6	10.30	126.08	119.90
2	SA	874	G	C5-C6-O6	-10.29	122.42	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1012	A	C2-N3-C4	10.29	115.75	110.60
26	LA	1197	G	C4-C5-N7	10.29	114.92	110.80
2	SA	22	G	N7-C8-N9	-10.29	107.95	113.10
2	SA	1014	A	N1-C2-N3	10.29	134.45	129.30
26	LA	656	G	N7-C8-N9	10.29	118.25	113.10
26	LA	1533	C	C6-N1-C2	-10.29	116.18	120.30
26	LA	2205	A	N9-C4-C5	10.29	109.92	105.80
2	SA	722	G	C5-C6-N1	10.29	116.64	111.50
2	SA	1244	G	N3-C2-N2	10.29	127.10	119.90
26	LA	727	A	C5-C6-N1	10.29	122.84	117.70
2	SA	1336	C	N1-C2-O2	10.29	125.07	118.90
2	SA	1521	C	C5-C4-N4	-10.29	113.00	120.20
25	LB	30	C	C2-N3-C4	-10.28	114.76	119.90
26	LA	204	A	C2-N3-C4	10.29	115.74	110.60
26	LA	264	C	C6-N1-C2	-10.29	116.19	120.30
26	LA	551	G	C5'-C4'-C3'	10.29	132.46	116.00
26	LA	861	A	C6-N1-C2	-10.29	112.43	118.60
26	LA	2465	C	C6-N1-C2	-10.29	116.19	120.30
26	LA	2382	G	N9-C4-C5	-10.28	101.29	105.40
2	SA	45	G	C5-C6-N1	10.28	116.64	111.50
2	SA	229	U	C6-N1-C2	-10.28	114.83	121.00
26	LA	2705	A	C8-N9-C4	10.28	109.91	105.80
26	LA	1448	G	C4-C5-N7	10.28	114.91	110.80
2	SA	643	C	N3-C4-C5	-10.28	117.79	121.90
26	LA	487	C	C2-N3-C4	-10.28	114.76	119.90
26	LA	500	G	N1-C6-O6	10.28	126.07	119.90
26	LA	774	G	N1-C2-N3	10.28	130.07	123.90
26	LA	2180	U	O4'-C1'-N1	10.28	116.42	108.20
53	LP	96	ARG	NE-CZ-NH2	-10.28	115.16	120.30
26	LA	1715	G	C5-C6-O6	10.28	134.77	128.60
26	LA	143	C	C5-C4-N4	-10.27	113.01	120.20
26	LA	443	A	P-O3'-C3'	-10.27	107.37	119.70
26	LA	1510	G	C4-N9-C1'	10.27	139.85	126.50
25	LB	104	A	N7-C8-N9	-10.27	108.67	113.80
26	LA	915	C	C6-N1-C2	-10.27	116.19	120.30
26	LA	1926	U	O4'-C1'-N1	10.27	116.42	108.20
26	LA	45	G	N9-C4-C5	-10.27	101.29	105.40
26	LA	2410	G	C2-N3-C4	10.27	117.03	111.90
2	SA	408	A	N1-C6-N6	-10.26	112.44	118.60
26	LA	423	A	N1-C2-N3	10.26	134.43	129.30
16	SP	23	ASP	CB-CG-OD2	10.26	127.53	118.30
26	LA	268	C	O4'-C1'-N1	10.26	116.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2731	G	P-O5'-C5'	10.26	137.32	120.90
2	SA	376	G	N1-C6-O6	10.26	126.05	119.90
4	S2	77	A	C5-C6-N1	10.26	122.83	117.70
25	LB	14	U	C4-C5-C6	-10.26	113.55	119.70
26	LA	2044	C	C2-N3-C4	-10.26	114.77	119.90
2	SA	204	G	P-O3'-C3'	10.25	132.00	119.70
26	LA	713	G	N1-C2-N2	-10.25	106.97	116.20
26	LA	266	G	N3-C2-N2	10.25	127.08	119.90
26	LA	2853	C	C4-C5-C6	10.25	122.53	117.40
4	S2	15	G	N1-C6-O6	10.25	126.05	119.90
26	LA	1438	U	P-O5'-C5'	10.25	137.30	120.90
26	LA	2317	A	C5-N7-C8	-10.25	98.77	103.90
2	SA	1227	A	C3'-C2'-C1'	-10.25	93.30	101.50
26	LA	923	G	C8-N9-C4	-10.25	102.30	106.40
46	LH	151	ARG	NE-CZ-NH1	10.25	125.42	120.30
4	S2	46	G	C5-C6-O6	-10.25	122.45	128.60
2	SA	456	A	N7-C8-N9	-10.24	108.68	113.80
26	LA	751	A	C5-N7-C8	-10.24	98.78	103.90
26	LA	2688	G	N1-C6-O6	10.24	126.05	119.90
26	LA	1117	C	C6-N1-C2	-10.24	116.20	120.30
26	LA	2841	C	C5'-C4'-C3'	-10.24	99.61	116.00
26	LA	2671	G	C5-C6-O6	10.24	134.75	128.60
2	SA	188	C	O4'-C1'-N1	10.24	116.39	108.20
2	SA	944	G	C1'-O4'-C4'	-10.24	101.71	109.90
26	LA	532	A	N1-C6-N6	10.24	124.74	118.60
26	LA	609	A	N9-C4-C5	-10.24	101.70	105.80
26	LA	1807	G	C5-N7-C8	-10.24	99.18	104.30
2	SA	769	G	O4'-C1'-N9	10.24	116.39	108.20
2	SA	1204	A	C2-N3-C4	-10.24	105.48	110.60
24	S3	582	TYR	CG-CD1-CE1	-10.24	113.11	121.30
6	SU	37	TYR	CB-CG-CD2	-10.23	114.86	121.00
2	SA	1380	U	C5-C4-O4	-10.23	119.76	125.90
26	LA	1110	G	N7-C8-N9	-10.23	107.99	113.10
2	SA	78	A	N9-C4-C5	10.23	109.89	105.80
2	SA	265	G	C4-C5-N7	10.23	114.89	110.80
2	SA	781	A	O4'-C1'-N9	10.23	116.38	108.20
26	LA	34	U	C2'-C3'-O3'	10.23	132.00	109.50
26	LA	1935	G	N3-C4-N9	-10.23	119.86	126.00
26	LA	2062	A	N9-C4-C5	-10.22	101.71	105.80
26	LA	1000	A	C5-C6-N1	10.22	122.81	117.70
2	SA	88	U	P-O3'-C3'	-10.22	107.44	119.70
2	SA	425	G	N1-C2-N3	-10.22	117.77	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	436	C	C5-C4-N4	-10.22	113.05	120.20
26	LA	350	G	C8-N9-C4	-10.22	102.31	106.40
26	LA	1674	G	C6-N1-C2	-10.22	118.97	125.10
26	LA	2218	G	C6-C5-N7	10.22	136.53	130.40
26	LA	896	A	C4-C5-C6	-10.22	111.89	117.00
26	LA	1064	C	C6-N1-C2	-10.22	116.21	120.30
2	SA	435	A	O4'-C1'-N9	10.21	116.37	108.20
26	LA	1338	G	C6-C5-N7	-10.21	124.27	130.40
26	LA	445	C	O4'-C1'-N1	10.21	116.37	108.20
26	LA	1243	C	C5-C6-N1	-10.21	115.89	121.00
26	LA	2409	G	O4'-C1'-N9	10.21	116.37	108.20
2	SA	57	G	N1-C6-O6	10.21	126.03	119.90
2	SA	634	C	O4'-C1'-N1	10.21	116.37	108.20
2	SA	841	C	N3-C2-O2	-10.21	114.75	121.90
8	SH	14	ARG	NE-CZ-NH1	10.21	125.40	120.30
26	LA	1062	G	C5-C6-N1	-10.21	106.40	111.50
26	LA	1862	G	N3-C4-N9	10.21	132.12	126.00
48	LN	21	ARG	NE-CZ-NH2	-10.21	115.20	120.30
2	SA	1128	C	C5-C6-N1	10.21	126.10	121.00
26	LA	1932	A	C5-N7-C8	10.21	109.00	103.90
2	SA	748	G	N1-C6-O6	-10.20	113.78	119.90
2	SA	1419	G	O4'-C1'-N9	10.20	116.36	108.20
26	LA	1781	U	C4'-C3'-C2'	10.20	112.80	102.60
2	SA	605	U	N3-C4-O4	10.20	126.54	119.40
26	LA	2577	A	C8-N9-C4	-10.20	101.72	105.80
2	SA	651	C	C6-N1-C2	-10.20	116.22	120.30
26	LA	179	C	O4'-C1'-N1	10.20	116.36	108.20
26	LA	451	U	N3-C4-O4	10.20	126.54	119.40
26	LA	2345	G	C4-C5-N7	-10.20	106.72	110.80
26	LA	2502	G	C6-N1-C2	10.20	131.22	125.10
26	LA	2844	G	P-O3'-C3'	10.20	131.94	119.70
26	LA	1220	G	C5-C6-N1	10.20	116.60	111.50
26	LA	1457	U	O4'-C1'-N1	10.19	116.36	108.20
26	LA	1595	C	N3-C4-C5	10.20	125.98	121.90
26	LA	2314	A	C5-C6-N6	-10.19	115.54	123.70
2	SA	182	A	C5'-C4'-C3'	-10.19	99.69	116.00
26	LA	284	U	C5-C6-N1	10.19	127.80	122.70
26	LA	1858	A	N1-C2-N3	-10.19	124.20	129.30
26	LA	2422	C	N3-C4-C5	10.19	125.98	121.90
2	SA	379	C	C6-N1-C2	-10.19	116.22	120.30
2	SA	390	U	O4'-C1'-N1	10.19	116.35	108.20
2	SA	1538	C	O4'-C1'-N1	10.19	116.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	110	G	C8-N9-C4	-10.19	102.32	106.40
26	LA	295	G	C8-N9-C4	10.19	110.48	106.40
26	LA	2663	G	C6-N1-C2	-10.19	118.99	125.10
26	LA	1045	C	P-O3'-C3'	10.19	131.93	119.70
26	LA	1092	C	O4'-C1'-N1	10.19	116.35	108.20
26	LA	2001	C	C3'-C2'-C1'	10.19	109.65	101.50
2	SA	402	G	C5-C6-O6	-10.18	122.49	128.60
26	LA	964	C	N1-C2-N3	10.18	126.33	119.20
26	LA	1914	C	P-O3'-C3'	-10.18	107.48	119.70
26	LA	1904	G	C5-C6-O6	-10.18	122.49	128.60
26	LA	2110	G	O4'-C1'-N9	10.18	116.35	108.20
26	LA	2781	A	N1-C6-N6	10.18	124.71	118.60
2	SA	525	C	C4-C5-C6	10.18	122.49	117.40
26	LA	332	A	C5-C6-N6	10.18	131.84	123.70
26	LA	2176	A	C5'-C4'-C3'	-10.18	99.71	116.00
26	LA	2761	A	N1-C6-N6	-10.18	112.49	118.60
26	LA	1025	G	P-O3'-C3'	10.18	131.91	119.70
2	SA	104	G	C6-C5-N7	-10.17	124.30	130.40
2	SA	921	U	C4'-C3'-C2'	-10.17	92.43	102.60
2	SA	942	G	N3-C2-N2	10.17	127.02	119.90
26	LA	1840	G	C4-C5-C6	-10.17	112.70	118.80
26	LA	1500	G	N9-C4-C5	10.17	109.47	105.40
26	LA	2026	U	C6-N1-C2	-10.17	114.90	121.00
2	SA	991	U	N1-C2-N3	10.17	121.00	114.90
2	SA	1342	C	C6-N1-C2	-10.17	116.23	120.30
26	LA	2568	U	N1-C2-N3	10.17	121.00	114.90
2	SA	800	G	C8-N9-C4	-10.16	102.33	106.40
2	SA	1071	C	O4'-C1'-N1	10.16	116.33	108.20
2	SA	1200	C	N3-C4-C5	10.16	125.97	121.90
25	LB	42	C	C4-C5-C6	10.16	122.48	117.40
26	LA	2143	C	P-O3'-C3'	-10.16	107.50	119.70
7	SG	77	ARG	NE-CZ-NH2	-10.16	115.22	120.30
26	LA	1937	A	C1'-O4'-C4'	-10.16	101.77	109.90
2	SA	27	G	N9-C4-C5	10.16	109.46	105.40
2	SA	318	G	N1-C6-O6	-10.16	113.80	119.90
2	SA	371	A	O4'-C1'-N9	10.16	116.33	108.20
2	SA	1466	C	O4'-C1'-N1	10.16	116.33	108.20
25	LB	71	C	C2-N3-C4	-10.16	114.82	119.90
26	LA	1905	C	N3-C4-C5	-10.16	117.84	121.90
3	S1	44	U	C1'-O4'-C4'	-10.16	101.77	109.90
9	SI	63	TYR	CB-CG-CD1	10.16	127.09	121.00
26	LA	1558	C	C5'-C4'-O4'	10.16	121.29	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1927	A	N1-C6-N6	10.16	124.69	118.60
26	LA	859	G	C3'-C2'-C1'	-10.15	93.38	101.50
26	LA	994	C	O4'-C1'-N1	10.15	116.32	108.20
26	LA	2207	C	C5'-C4'-O4'	10.15	121.29	109.10
26	LA	1315	C	N3-C4-N4	-10.15	110.89	118.00
26	LA	2765	A	O4'-C1'-N9	10.15	116.32	108.20
2	SA	830	G	C5-C6-O6	-10.15	122.51	128.60
26	LA	489	G	C8-N9-C4	10.15	110.46	106.40
26	LA	749	A	O4'-C1'-N9	10.15	116.32	108.20
2	SA	427	U	C2-N3-C4	-10.14	120.91	127.00
26	LA	498	G	N1-C6-O6	-10.14	113.81	119.90
26	LA	601	C	O4'-C1'-N1	10.14	116.32	108.20
26	LA	1005	C	C5-C6-N1	10.14	126.07	121.00
26	LA	1335	C	C5-C4-N4	-10.14	113.10	120.20
2	SA	1221	G	N1-C6-O6	10.14	125.98	119.90
26	LA	976	G	C4-C5-N7	10.14	114.86	110.80
26	LA	1919	A	O4'-C1'-N9	10.14	116.31	108.20
2	SA	446	G	N9-C4-C5	-10.14	101.34	105.40
26	LA	2418	A	C8-N9-C4	-10.14	101.75	105.80
2	SA	620	C	C6-N1-C2	-10.13	116.25	120.30
2	SA	623	C	C2-N3-C4	-10.13	114.83	119.90
2	SA	1390	U	C4-C5-C6	-10.13	113.62	119.70
26	LA	1565	C	P-O5'-C5'	10.13	137.12	120.90
26	LA	1634	A	N9-C4-C5	-10.14	101.75	105.80
54	LM	18	ARG	NE-CZ-NH2	-10.13	115.23	120.30
26	LA	2443	C	N3-C4-C5	10.13	125.95	121.90
26	LA	369	U	N1-C2-O2	-10.13	115.71	122.80
26	LA	1863	G	O4'-C1'-N9	10.13	116.30	108.20
26	LA	2666	C	C2-N1-C1'	10.13	129.94	118.80
26	LA	133	U	P-O5'-C5'	10.13	137.10	120.90
2	SA	699	C	N3-C2-O2	-10.12	114.81	121.90
26	LA	2458	G	N3-C4-C5	-10.12	123.54	128.60
2	SA	251	G	C8-N9-C4	-10.12	102.35	106.40
2	SA	826	C	N3-C4-C5	-10.12	117.85	121.90
2	SA	1477	U	O4'-C1'-N1	10.12	116.30	108.20
2	SA	372	C	C6-N1-C1'	-10.12	108.66	120.80
2	SA	52	C	O4'-C1'-N1	10.12	116.29	108.20
2	SA	522	C	O4'-C1'-N1	10.12	116.29	108.20
2	SA	74	A	C4-C5-C6	-10.11	111.94	117.00
2	SA	138	G	O4'-C1'-N9	10.11	116.29	108.20
26	LA	1008	A	N1-C2-N3	-10.11	124.24	129.30
26	LA	1200	C	N3-C2-O2	-10.11	114.82	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	169	C	C2-N3-C4	-10.11	114.84	119.90
26	LA	108	G	C5-C6-O6	-10.11	122.53	128.60
57	LS	69	ARG	NE-CZ-NH2	10.11	125.35	120.30
2	SA	606	G	C8-N9-C4	10.11	110.44	106.40
2	SA	1426	G	N3-C4-C5	-10.11	123.55	128.60
3	S1	45	G	N3-C2-N2	10.11	126.97	119.90
2	SA	810	C	P-O5'-C5'	10.10	137.07	120.90
26	LA	543	G	N9-C1'-C2'	-10.10	100.87	114.00
26	LA	1890	A	C4-C5-C6	-10.10	111.95	117.00
26	LA	2069	G	C6-N1-C2	-10.10	119.04	125.10
2	SA	107	G	N1-C6-O6	10.10	125.96	119.90
15	SO	79	ARG	NE-CZ-NH1	10.10	125.35	120.30
26	LA	1694	C	C1'-O4'-C4'	-10.10	101.82	109.90
26	LA	2178	C	N3-C4-C5	-10.10	117.86	121.90
26	LA	2892	G	P-O3'-C3'	10.10	131.82	119.70
26	LA	2394	C	C2-N3-C4	10.10	124.95	119.90
26	LA	2436	G	N9-C4-C5	-10.09	101.36	105.40
26	LA	481	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2253	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2729	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2743	U	O4'-C1'-N1	10.09	116.27	108.20
26	LA	325	G	C5-C6-O6	-10.09	122.55	128.60
4	S2	51	U	O4'-C1'-N1	10.09	116.27	108.20
26	LA	1808	A	C8-N9-C4	10.09	109.83	105.80
26	LA	2441	U	C5-C6-N1	-10.09	117.66	122.70
26	LA	2503	A	O4'-C1'-N9	10.09	116.27	108.20
2	SA	861	G	C5-C6-O6	-10.08	122.55	128.60
2	SA	1081	A	O4'-C1'-N9	10.08	116.27	108.20
26	LA	88	G	N3-C2-N2	10.08	126.96	119.90
26	LA	890	C	O4'-C1'-N1	10.08	116.27	108.20
26	LA	1812	U	O4'-C1'-N1	10.08	116.27	108.20
2	SA	74	A	C6-N1-C2	10.08	124.65	118.60
2	SA	142	G	O4'-C1'-N9	10.08	116.27	108.20
2	SA	478	A	N1-C2-N3	-10.08	124.26	129.30
26	LA	1309	G	C5-C6-O6	10.08	134.65	128.60
2	SA	615	G	N3-C2-N2	-10.08	112.84	119.90
2	SA	884	U	C5-C6-N1	10.08	127.74	122.70
26	LA	1456	G	C5-C6-O6	-10.08	122.55	128.60
2	SA	1081	A	C5-N7-C8	10.08	108.94	103.90
26	LA	2482	A	C4-C5-C6	10.08	122.04	117.00
2	SA	1220	G	C5-C6-O6	-10.08	122.56	128.60
2	SA	1348	U	O4'-C1'-N1	10.08	116.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	277	C	C6-N1-C2	-10.07	116.27	120.30
26	LA	1782	U	C6-N1-C2	-10.07	114.95	121.00
26	LA	394	C	C5-C4-N4	-10.07	113.15	120.20
26	LA	1019	U	N1-C2-N3	10.07	120.94	114.90
26	LA	1285	A	N7-C8-N9	-10.07	108.77	113.80
26	LA	2808	G	N1-C2-N3	10.07	129.94	123.90
2	SA	257	G	N1-C6-O6	10.07	125.94	119.90
5	ST	23	ARG	NE-CZ-NH2	-10.07	115.27	120.30
26	LA	535	G	N1-C6-O6	10.07	125.94	119.90
2	SA	230	G	O4'-C1'-N9	10.06	116.25	108.20
2	SA	730	G	C5-C6-O6	-10.06	122.56	128.60
26	LA	407	G	N1-C6-O6	10.06	125.94	119.90
2	SA	577	G	C5-C6-O6	-10.06	122.56	128.60
2	SA	930	C	N3-C4-C5	10.06	125.92	121.90
2	SA	1297	G	P-O3'-C3'	10.06	131.78	119.70
26	LA	813	U	N3-C4-O4	10.06	126.44	119.40
26	LA	1173	U	O4'-C1'-N1	10.06	116.25	108.20
26	LA	2247	A	C5-C6-N6	-10.06	115.65	123.70
26	LA	1983	G	N1-C2-N3	-10.06	117.87	123.90
26	LA	2713	U	P-O3'-C3'	10.06	131.77	119.70
26	LA	1665	A	C5-C6-N1	-10.05	112.67	117.70
2	SA	84	U	C5-C6-N1	10.05	127.73	122.70
2	SA	294	U	N1-C2-N3	10.05	120.93	114.90
26	LA	2121	G	N1-C6-O6	10.05	125.93	119.90
26	LA	2293	G	N1-C6-O6	10.05	125.93	119.90
2	SA	769	G	N1-C6-O6	10.05	125.93	119.90
26	LA	879	G	N7-C8-N9	10.05	118.12	113.10
26	LA	1581	G	C8-N9-C4	10.05	110.42	106.40
46	LH	162	ARG	NE-CZ-NH2	10.05	125.32	120.30
2	SA	1259	C	C5'-C4'-C3'	-10.05	99.93	116.00
2	SA	349	A	C5-C6-N6	-10.04	115.67	123.70
26	LA	751	A	N1-C2-N3	-10.04	124.28	129.30
26	LA	1848	A	C5-C6-N6	10.04	131.74	123.70
26	LA	739	A	C5-N7-C8	-10.04	98.88	103.90
2	SA	1227	A	O4'-C1'-N9	10.04	116.23	108.20
26	LA	1160	G	C5'-C4'-C3'	-10.04	99.94	116.00
2	SA	845	A	N9-C4-C5	-10.04	101.78	105.80
11	SK	92	ARG	CD-NE-CZ	10.04	137.66	123.60
26	LA	1449	G	C4-N9-C1'	-10.04	113.45	126.50
36	L2	9	TYR	CB-CG-CD1	-10.04	114.98	121.00
26	LA	397	U	C6-N1-C2	10.04	127.02	121.00
2	SA	404	G	C5-C6-O6	-10.04	122.58	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1360	A	O4'-C1'-N9	10.03	116.23	108.20
26	LA	1475	G	C2-N3-C4	-10.04	106.88	111.90
2	SA	840	C	C5-C4-N4	-10.03	113.18	120.20
4	S2	60	A	C8-N9-C4	10.03	109.81	105.80
26	LA	1063	G	C5-C6-O6	-10.03	122.58	128.60
26	LA	2456	C	N3-C4-C5	-10.03	117.89	121.90
26	LA	2644	G	O4'-C1'-N9	10.03	116.22	108.20
2	SA	353	A	O4'-C1'-N9	10.03	116.22	108.20
2	SA	384	G	C5-C6-O6	-10.03	122.58	128.60
2	SA	1435	G	C5-C6-O6	-10.03	122.58	128.60
2	SA	985	C	O4'-C1'-N1	10.03	116.22	108.20
2	SA	1143	G	C4-C5-N7	10.03	114.81	110.80
26	LA	366	C	O4'-C1'-N1	10.03	116.22	108.20
2	SA	756	C	C6-N1-C2	-10.03	116.29	120.30
2	SA	1120	C	O4'-C1'-N1	10.03	116.22	108.20
2	SA	1155	A	N1-C2-N3	-10.03	124.29	129.30
25	LB	120	U	O4'-C1'-N1	10.03	116.22	108.20
26	LA	143	C	N3-C4-N4	10.03	125.02	118.00
26	LA	1778	U	C5'-C4'-C3'	-10.03	99.96	116.00
2	SA	6	G	C5-C6-O6	-10.02	122.59	128.60
26	LA	524	G	C5-C6-O6	-10.02	122.59	128.60
26	LA	1614	A	C5-N7-C8	-10.02	98.89	103.90
26	LA	1771	C	C6-N1-C2	-10.02	116.29	120.30
26	LA	759	G	N1-C2-N2	-10.02	107.18	116.20
2	SA	132	C	N3-C4-N4	-10.02	110.99	118.00
2	SA	865	A	C5-C6-N6	-10.02	115.69	123.70
26	LA	2708	G	N3-C4-C5	-10.02	123.59	128.60
2	SA	772	U	C5'-C4'-O4'	10.02	121.12	109.10
7	SG	176	TYR	CB-CG-CD1	-10.02	114.99	121.00
22	SF	13	ASP	CB-CG-OD2	-10.02	109.28	118.30
26	LA	2671	G	C8-N9-C4	-10.02	102.39	106.40
26	LA	299	A	C5-C6-N1	-10.01	112.69	117.70
26	LA	1085	A	O4'-C1'-N9	10.01	116.21	108.20
26	LA	1695	G	N3-C2-N2	10.01	126.91	119.90
2	SA	101	A	N7-C8-N9	10.01	118.81	113.80
25	LB	92	C	C2-N3-C4	-10.01	114.89	119.90
26	LA	1747	U	O4'-C1'-N1	10.01	116.21	108.20
2	SA	1249	C	C5-C6-N1	-10.01	116.00	121.00
26	LA	2751	G	N3-C4-C5	-10.01	123.60	128.60
26	LA	1921	G	C8-N9-C4	10.01	110.40	106.40
26	LA	474	G	N3-C4-C5	-10.00	123.60	128.60
26	LA	2486	C	C1'-O4'-C4'	-10.00	101.90	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	933	G	N3-C2-N2	10.00	126.90	119.90
11	SK	104	PHE	CB-CG-CD2	-10.00	113.80	120.80
26	LA	2503	A	N7-C8-N9	10.00	118.80	113.80
26	LA	2566	A	C4'-C3'-C2'	10.00	112.60	102.60
2	SA	173	U	O4'-C1'-N1	10.00	116.20	108.20
26	LA	28	A	N1-C6-N6	-10.00	112.60	118.60
26	LA	1762	A	C5-C6-N6	-10.00	115.70	123.70
46	LH	152	ARG	NE-CZ-NH2	10.00	125.30	120.30
2	SA	222	C	N3-C4-C5	9.99	125.90	121.90
26	LA	75	G	C5-C6-O6	-9.99	122.60	128.60
26	LA	836	G	N3-C4-C5	-9.99	123.60	128.60
26	LA	219	A	P-O3'-C3'	9.99	131.69	119.70
28	LU	99	ARG	NE-CZ-NH1	9.99	125.30	120.30
4	S2	68	C	O4'-C1'-N1	9.99	116.19	108.20
26	LA	645	C	C5-C6-N1	-9.99	116.01	121.00
26	LA	1762	A	O4'-C1'-N9	9.99	116.19	108.20
25	LB	53	A	N1-C2-N3	-9.99	124.31	129.30
26	LA	1224	U	C2-N3-C4	-9.99	121.01	127.00
26	LA	1958	C	O4'-C1'-N1	9.99	116.19	108.20
2	SA	302	G	N1-C6-O6	9.98	125.89	119.90
2	SA	863	U	C5-C4-O4	-9.98	119.91	125.90
26	LA	756	A	N1-C6-N6	-9.98	112.61	118.60
26	LA	880	G	P-O3'-C3'	-9.98	107.72	119.70
26	LA	500	G	N3-C4-C5	-9.98	123.61	128.60
26	LA	1834	U	C4'-C3'-C2'	9.98	112.58	102.60
2	SA	207	C	O4'-C1'-N1	9.98	116.18	108.20
26	LA	2057	G	N1-C6-O6	9.98	125.89	119.90
2	SA	239	U	O4'-C1'-N1	9.98	116.18	108.20
2	SA	1402	C	O4'-C1'-N1	9.98	116.18	108.20
4	S2	43	G	C4-C5-C6	9.98	124.79	118.80
26	LA	472	A	N1-C6-N6	9.98	124.59	118.60
2	SA	177	G	C8-N9-C1'	-9.97	114.03	127.00
26	LA	1228	G	O4'-C1'-N9	9.97	116.18	108.20
2	SA	1366	C	C6-N1-C2	-9.97	116.31	120.30
26	LA	2017	U	C2-N3-C4	-9.97	121.02	127.00
26	LA	2513	A	N7-C8-N9	-9.97	108.81	113.80
53	LP	96	ARG	NE-CZ-NH1	9.97	125.29	120.30
2	SA	260	G	O4'-C1'-N9	9.97	116.18	108.20
26	LA	71	A	N1-C6-N6	-9.97	112.62	118.60
26	LA	1805	A	C4-C5-N7	9.97	115.69	110.70
2	SA	1289	A	C2-N3-C4	-9.97	105.61	110.60
26	LA	577	G	N1-C6-O6	9.97	125.88	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1154	G	N9-C4-C5	-9.97	101.41	105.40
2	SA	933	G	P-O5'-C5'	9.97	136.85	120.90
26	LA	1268	A	C4-C5-C6	-9.97	112.02	117.00
2	SA	532	A	N1-C6-N6	9.96	124.58	118.60
26	LA	564	C	C2-N3-C4	-9.97	114.92	119.90
4	S2	1	C	C6-N1-C2	-9.96	116.31	120.30
26	LA	1390	U	C2-N3-C4	-9.96	121.02	127.00
26	LA	1738	G	N3-C2-N2	9.96	126.88	119.90
26	LA	2385	C	C1'-O4'-C4'	-9.97	101.93	109.90
26	LA	2427	C	N1-C2-N3	9.96	126.18	119.20
29	LV	3	ARG	NE-CZ-NH1	9.96	125.28	120.30
54	LM	112	PHE	CB-CG-CD1	9.97	127.78	120.80
2	SA	521	G	N9-C4-C5	9.96	109.39	105.40
26	LA	1595	C	O4'-C1'-N1	9.96	116.17	108.20
2	SA	255	G	C4'-C3'-C2'	-9.96	92.64	102.60
2	SA	1002	G	C5-N7-C8	-9.96	99.32	104.30
26	LA	1956	U	C6-N1-C2	-9.96	115.02	121.00
2	SA	988	G	O4'-C1'-N9	9.96	116.17	108.20
26	LA	1197	G	C5-N7-C8	-9.96	99.32	104.30
2	SA	815	A	O4'-C1'-N9	9.96	116.17	108.20
2	SA	871	U	C1'-O4'-C4'	-9.96	101.93	109.90
26	LA	405	U	O4'-C1'-N1	9.96	116.17	108.20
26	LA	968	C	O4'-C1'-N1	9.96	116.17	108.20
26	LA	1321	A	N1-C6-N6	-9.96	112.62	118.60
25	LB	53	A	O4'-C1'-N9	9.96	116.16	108.20
26	LA	1767	G	C5-C6-O6	-9.96	122.63	128.60
26	LA	1626	A	N1-C6-N6	9.95	124.57	118.60
26	LA	2598	A	C4-C5-N7	9.95	115.68	110.70
26	LA	2850	A	N9-C4-C5	9.95	109.78	105.80
26	LA	1450	G	P-O3'-C3'	9.95	131.64	119.70
26	LA	545	U	O4'-C1'-N1	9.95	116.16	108.20
26	LA	865	C	C5-C4-N4	-9.95	113.24	120.20
38	LE	124	ARG	NE-CZ-NH2	-9.95	115.33	120.30
26	LA	1710	G	N9-C4-C5	9.94	109.38	105.40
26	LA	2802	G	N9-C1'-C2'	-9.94	101.06	112.00
2	SA	38	G	N1-C6-O6	9.94	125.87	119.90
2	SA	702	A	C2-N3-C4	9.94	115.57	110.60
26	LA	285	G	N7-C8-N9	9.94	118.07	113.10
26	LA	1255	U	C5'-C4'-O4'	9.94	121.03	109.10
26	LA	1610	A	N1-C2-N3	9.94	134.27	129.30
26	LA	1904	G	C4-N9-C1'	-9.94	113.58	126.50
26	LA	2287	A	C6-N1-C2	9.94	124.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	39	G	N9-C4-C5	9.94	109.38	105.40
26	LA	586	A	N7-C8-N9	-9.94	108.83	113.80
26	LA	2250	G	C5-N7-C8	-9.94	99.33	104.30
26	LA	2317	A	C4-C5-N7	9.94	115.67	110.70
2	SA	111	G	N3-C2-N2	9.94	126.86	119.90
2	SA	328	C	O5'-P-OP1	-9.94	96.76	105.70
2	SA	1243	C	C6-N1-C2	9.94	124.27	120.30
26	LA	463	G	C5-C6-N1	-9.94	106.53	111.50
26	LA	2540	C	C6-N1-C2	-9.94	116.33	120.30
2	SA	51	A	O4'-C1'-N9	9.93	116.15	108.20
26	LA	1604	C	O4'-C1'-N1	9.93	116.15	108.20
26	LA	2483	C	P-O3'-C3'	-9.93	107.78	119.70
26	LA	2646	C	N3-C2-O2	-9.93	114.95	121.90
26	LA	1763	G	N1-C6-O6	9.93	125.86	119.90
26	LA	893	C	O4'-C1'-N1	9.93	116.14	108.20
26	LA	1322	A	P-O3'-C3'	9.93	131.61	119.70
26	LA	1628	G	C8-N9-C4	-9.93	102.43	106.40
26	LA	1935	G	C4-C5-C6	-9.93	112.84	118.80
44	LF	19	PHE	CB-CG-CD2	-9.93	113.85	120.80
26	LA	1864	U	C5-C6-N1	-9.93	117.74	122.70
26	LA	1897	G	N3-C4-C5	-9.92	123.64	128.60
2	SA	1382	C	O4'-C1'-N1	9.92	116.14	108.20
2	SA	1389	C	C6-N1-C2	-9.92	116.33	120.30
26	LA	1211	C	P-O3'-C3'	9.92	131.61	119.70
26	LA	2711	A	N1-C6-N6	9.92	124.55	118.60
2	SA	807	A	N1-C6-N6	-9.92	112.65	118.60
26	LA	284	U	C2-N3-C4	9.92	132.95	127.00
26	LA	1233	C	N3-C4-C5	-9.92	117.93	121.90
2	SA	1163	A	N7-C8-N9	-9.92	108.84	113.80
26	LA	2822	G	C5-N7-C8	-9.92	99.34	104.30
2	SA	1108	G	N7-C8-N9	-9.92	108.14	113.10
26	LA	776	G	C3'-C2'-C1'	-9.92	93.57	101.50
26	LA	849	A	O4'-C1'-N9	9.92	116.13	108.20
26	LA	1814	G	N1-C6-O6	9.92	125.85	119.90
26	LA	2600	A	N1-C2-N3	-9.92	124.34	129.30
1	SS	54	ARG	NE-CZ-NH2	9.91	125.26	120.30
2	SA	1238	A	C5-C6-N6	9.91	131.63	123.70
26	LA	618	G	C6-C5-N7	9.91	136.35	130.40
26	LA	2466	C	C5-C6-N1	9.91	125.95	121.00
2	SA	19	A	C6-N1-C2	-9.91	112.66	118.60
4	S2	4	G	C5-C6-O6	-9.91	122.66	128.60
26	LA	1259	G	O4'-C1'-N9	9.91	116.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1924	C	N3-C4-N4	9.91	124.94	118.00
26	LA	1973	G	C1'-O4'-C4'	-9.91	101.97	109.90
26	LA	695	G	C4-N9-C1'	-9.90	113.62	126.50
26	LA	1794	A	C8-N9-C4	9.90	109.76	105.80
26	LA	1648	U	C5'-C4'-C3'	-9.90	100.16	116.00
26	LA	2102	G	N3-C4-C5	-9.90	123.65	128.60
36	L2	9	TYR	CB-CG-CD2	9.90	126.94	121.00
26	LA	1795	C	N3-C2-O2	-9.90	114.97	121.90
26	LA	1836	C	N3-C4-N4	9.90	124.93	118.00
26	LA	2511	U	C6-N1-C2	-9.90	115.06	121.00
2	SA	182	A	C5-C6-N6	9.90	131.62	123.70
26	LA	1437	C	C3'-C2'-C1'	9.90	109.42	101.50
26	LA	2903	U	O4'-C1'-N1	9.90	116.12	108.20
26	LA	474	G	N3-C4-N9	9.89	131.94	126.00
26	LA	2602	A	N1-C6-N6	9.89	124.54	118.60
2	SA	373	A	N1-C6-N6	9.89	124.53	118.60
2	SA	769	G	N3-C4-C5	-9.89	123.66	128.60
2	SA	1330	U	N3-C4-O4	-9.89	112.48	119.40
26	LA	1975	G	N9-C4-C5	-9.89	101.44	105.40
26	LA	2143	C	C5-C4-N4	-9.89	113.28	120.20
2	SA	446	G	N3-C4-C5	9.89	133.54	128.60
2	SA	1236	A	O4'-C1'-N9	9.89	116.11	108.20
9	SI	5	TYR	CB-CG-CD1	9.89	126.93	121.00
26	LA	1954	G	N3-C4-C5	-9.89	123.66	128.60
26	LA	126	A	C5'-C4'-O4'	9.89	120.96	109.10
26	LA	892	A	C5-C6-N1	-9.89	112.76	117.70
26	LA	306	U	C5'-C4'-C3'	-9.89	100.18	116.00
2	SA	1517	G	O4'-C1'-N9	9.88	116.11	108.20
25	LB	48	U	C5-C4-O4	-9.88	119.97	125.90
26	LA	2095	A	C6-C5-N7	9.89	139.22	132.30
2	SA	8	A	C3'-C2'-C1'	-9.88	93.59	101.50
26	LA	2349	G	C5-C6-O6	-9.88	122.67	128.60
2	SA	1515	G	N3-C4-C5	-9.88	123.66	128.60
26	LA	727	A	N1-C2-N3	9.88	134.24	129.30
26	LA	1520	U	O4'-C1'-N1	9.88	116.11	108.20
26	LA	2545	G	C6-C5-N7	-9.88	124.47	130.40
2	SA	1217	C	C6-N1-C2	-9.88	116.35	120.30
26	LA	2597	G	C4-C5-N7	9.88	114.75	110.80
26	LA	2702	G	O4'-C1'-N9	9.88	116.10	108.20
2	SA	1441	A	O4'-C1'-N9	9.88	116.10	108.20
2	SA	516	U	N1-C2-N3	9.87	120.83	114.90
4	S2	73	A	C5'-C4'-O4'	9.88	120.95	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	132	G	C4-C5-N7	9.87	114.75	110.80
46	LH	156	TYR	CB-CG-CD1	9.88	126.92	121.00
2	SA	796	C	C6-N1-C2	-9.87	116.35	120.30
2	SA	579	A	O4'-C1'-N9	9.87	116.10	108.20
26	LA	2190	G	N1-C2-N3	-9.87	117.98	123.90
26	LA	2196	C	O4'-C1'-N1	9.87	116.10	108.20
2	SA	98	A	O4'-C1'-N9	9.87	116.10	108.20
2	SA	976	G	C2-N3-C4	-9.87	106.97	111.90
26	LA	2138	G	N1-C2-N3	-9.87	117.98	123.90
2	SA	1135	U	C5-C4-O4	-9.87	119.98	125.90
2	SA	1162	C	O4'-C1'-N1	9.87	116.09	108.20
26	LA	2513	A	C5-N7-C8	9.87	108.83	103.90
26	LA	469	G	C5'-C4'-O4'	9.87	120.94	109.10
26	LA	1313	U	O4'-C1'-N1	9.87	116.09	108.20
26	LA	1914	C	C5'-C4'-C3'	-9.87	100.21	116.00
2	SA	65	A	O4'-C1'-N9	9.87	116.09	108.20
2	SA	168	G	C5-C6-O6	-9.87	122.68	128.60
2	SA	486	U	C6-N1-C2	-9.87	115.08	121.00
26	LA	16	C	N3-C4-C5	9.86	125.85	121.90
26	LA	1804	C	N3-C4-C5	-9.86	117.95	121.90
26	LA	2472	G	N3-C2-N2	9.86	126.81	119.90
26	LA	1612	C	O4'-C1'-N1	9.86	116.09	108.20
26	LA	2703	C	N3-C4-N4	9.86	124.90	118.00
26	LA	289	G	C8-N9-C4	-9.86	102.46	106.40
26	LA	612	G	N3-C4-N9	-9.86	120.08	126.00
2	SA	94	G	C5-C6-O6	-9.86	122.69	128.60
2	SA	559	A	C2-N3-C4	9.86	115.53	110.60
2	SA	832	G	N9-C1'-C2'	-9.86	101.16	112.00
2	SA	1238	A	C5-C6-N1	-9.86	112.77	117.70
26	LA	2751	G	N3-C4-N9	9.86	131.92	126.00
2	SA	772	U	P-O5'-C5'	9.86	136.67	120.90
26	LA	964	C	C2-N1-C1'	9.86	129.64	118.80
26	LA	1987	A	C4-C5-C6	9.86	121.93	117.00
26	LA	2667	C	O4'-C1'-N1	9.86	116.09	108.20
26	LA	2848	G	P-O3'-C3'	9.86	131.53	119.70
26	LA	2730	C	N3-C4-C5	-9.85	117.96	121.90
2	SA	556	C	O4'-C1'-N1	9.85	116.08	108.20
2	SA	1118	U	O4'-C1'-N1	9.85	116.08	108.20
3	S1	38	G	C3'-C2'-C1'	9.85	109.38	101.50
26	LA	61	C	C6-N1-C2	-9.85	116.36	120.30
26	LA	1051	G	C4-C5-N7	-9.85	106.86	110.80
26	LA	568	U	C5-C4-O4	9.85	131.81	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	LC	53	ARG	NE-CZ-NH1	9.85	125.23	120.30
2	SA	290	C	P-O3'-C3'	-9.85	107.88	119.70
2	SA	1328	C	C2-N3-C4	-9.85	114.98	119.90
26	LA	1794	A	N1-C6-N6	9.85	124.51	118.60
26	LA	2455	G	C5-C6-O6	9.85	134.51	128.60
24	S3	336	ARG	NE-CZ-NH2	9.85	125.22	120.30
26	LA	941	A	P-O5'-C5'	9.85	136.65	120.90
26	LA	2317	A	C6-N1-C2	-9.85	112.69	118.60
26	LA	1976	U	N1-C2-N3	9.85	120.81	114.90
26	LA	1449	G	O4'-C1'-N9	9.84	116.08	108.20
26	LA	777	G	C2-N3-C4	-9.84	106.98	111.90
2	SA	447	G	O4'-C1'-N9	9.84	116.07	108.20
26	LA	212	G	C5-C6-O6	-9.84	122.70	128.60
26	LA	2706	A	N1-C6-N6	9.84	124.50	118.60
26	LA	2809	A	C4-C5-C6	9.84	121.92	117.00
2	SA	257	G	C5-C6-O6	-9.84	122.70	128.60
2	SA	346	G	C4-C5-C6	-9.84	112.90	118.80
26	LA	1975	G	C5-C6-O6	-9.84	122.70	128.60
26	LA	2300	C	C4-C5-C6	-9.84	112.48	117.40
53	LP	63	ARG	NE-CZ-NH1	9.84	125.22	120.30
2	SA	786	G	N3-C2-N2	9.84	126.78	119.90
26	LA	963	U	O4'-C1'-N1	9.84	116.07	108.20
2	SA	423	G	N3-C2-N2	9.83	126.78	119.90
2	SA	1152	A	O4'-C1'-N9	9.83	116.07	108.20
2	SA	1257	A	C8-N9-C4	-9.83	101.87	105.80
14	SN	52	ARG	NE-CZ-NH1	9.83	125.22	120.30
26	LA	362	A	N1-C6-N6	9.83	124.50	118.60
26	LA	626	A	N1-C6-N6	-9.83	112.70	118.60
26	LA	1433	A	C5-C6-N6	-9.83	115.83	123.70
26	LA	2067	G	O4'-C1'-N9	9.83	116.07	108.20
2	SA	451	A	N7-C8-N9	-9.83	108.89	113.80
26	LA	1490	A	C6-N1-C2	9.83	124.50	118.60
26	LA	2069	G	C5-C6-O6	-9.83	122.70	128.60
26	LA	2279	G	C2-N3-C4	9.83	116.81	111.90
26	LA	2408	U	C5-C6-N1	9.83	127.61	122.70
2	SA	397	A	N1-C6-N6	-9.83	112.70	118.60
2	SA	1028	C	O4'-C1'-N1	9.83	116.06	108.20
2	SA	1429	A	C4-C5-C6	-9.83	112.09	117.00
26	LA	909	A	O3'-P-O5'	-9.83	85.33	104.00
2	SA	97	G	O4'-C1'-N9	9.82	116.06	108.20
2	SA	1417	G	N3-C2-N2	-9.82	113.02	119.90
26	LA	450	G	C6-N1-C2	-9.82	119.20	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1239	G	C5-C6-O6	-9.82	122.70	128.60
2	SA	386	C	O4'-C1'-N1	9.82	116.06	108.20
2	SA	978	A	C5-C6-N1	9.82	122.61	117.70
5	ST	9	ARG	NE-CZ-NH2	9.82	125.21	120.30
5	ST	17	ARG	NE-CZ-NH1	9.82	125.21	120.30
26	LA	1212	G	C8-N9-C4	9.82	110.33	106.40
26	LA	2501	C	N3-C4-N4	9.82	124.88	118.00
2	SA	1478	U	O4'-C1'-N1	9.82	116.06	108.20
26	LA	201	C	O4'-C1'-N1	9.82	116.06	108.20
26	LA	1233	C	C6-N1-C2	-9.82	116.37	120.30
26	LA	1372	U	C5-C6-N1	-9.82	117.79	122.70
26	LA	1739	A	C5-C6-N6	9.82	131.55	123.70
2	SA	145	G	C6-N1-C2	-9.81	119.21	125.10
26	LA	483	A	N1-C2-N3	9.81	134.21	129.30
26	LA	493	G	C5-C6-N1	9.81	116.41	111.50
2	SA	310	G	N1-C6-O6	9.81	125.79	119.90
25	LB	13	G	C8-N9-C4	9.81	110.33	106.40
26	LA	366	C	N1-C1'-C2'	-9.81	101.21	112.00
2	SA	1099	G	N1-C6-O6	9.81	125.78	119.90
2	SA	1339	A	O4'-C1'-N9	9.81	116.05	108.20
25	LB	102	G	O4'-C1'-N9	9.81	116.05	108.20
26	LA	214	G	N7-C8-N9	9.81	118.00	113.10
57	LS	56	PHE	CB-CG-CD1	9.81	127.67	120.80
2	SA	910	C	N3-C4-C5	-9.81	117.98	121.90
26	LA	1581	G	C5-C6-N1	9.81	116.40	111.50
2	SA	1062	U	O4'-C1'-N1	9.80	116.04	108.20
26	LA	550	C	C1'-O4'-C4'	-9.80	102.06	109.90
26	LA	2461	A	C4-C5-C6	-9.80	112.10	117.00
26	LA	2610	C	N3-C4-C5	-9.80	117.98	121.90
2	SA	1524	C	N1-C2-O2	-9.80	113.02	118.90
3	S1	35	G	P-O5'-C5'	9.80	136.58	120.90
4	S2	5	G	N1-C6-O6	9.80	125.78	119.90
25	LB	71	C	O4'-C1'-N1	9.80	116.04	108.20
25	LB	102	G	N1-C6-O6	9.80	125.78	119.90
26	LA	266	G	N1-C2-N3	-9.80	118.02	123.90
26	LA	1157	G	C4-N9-C1'	9.80	139.24	126.50
26	LA	361	G	O4'-C1'-N9	9.80	116.04	108.20
26	LA	993	G	N1-C6-O6	9.80	125.78	119.90
26	LA	1849	G	N9-C4-C5	-9.80	101.48	105.40
26	LA	2655	G	P-O5'-C5'	-9.80	105.22	120.90
26	LA	2857	G	N3-C2-N2	9.80	126.76	119.90
26	LA	1840	G	C5'-C4'-C3'	-9.80	100.33	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	783	A	C5-C6-N1	9.79	122.60	117.70
26	LA	2700	A	C4'-C3'-C2'	-9.79	92.81	102.60
2	SA	933	G	O4'-C1'-N9	9.79	116.03	108.20
26	LA	393	C	N3-C2-O2	-9.79	115.05	121.90
26	LA	2112	G	P-O3'-C3'	9.79	131.45	119.70
2	SA	1473	G	N9-C4-C5	9.79	109.32	105.40
26	LA	264	C	O4'-C1'-N1	9.79	116.03	108.20
26	LA	1163	G	C5-N7-C8	-9.79	99.41	104.30
2	SA	413	G	N1-C6-O6	9.79	125.77	119.90
2	SA	711	G	C5-C6-O6	-9.79	122.73	128.60
26	LA	2770	G	C4-C5-N7	9.79	114.72	110.80
20	SD	55	ARG	NE-CZ-NH1	9.78	125.19	120.30
20	SD	164	ARG	NE-CZ-NH2	-9.79	115.41	120.30
26	LA	2606	C	C6-N1-C2	-9.79	116.39	120.30
45	LG	137	PHE	CB-CG-CD2	-9.79	113.95	120.80
26	LA	912	C	N1-C2-O2	9.78	124.77	118.90
54	LM	49	ARG	NE-CZ-NH2	-9.78	115.41	120.30
2	SA	361	G	N1-C6-O6	9.78	125.77	119.90
2	SA	590	U	N3-C4-O4	9.78	126.25	119.40
20	SD	69	ARG	NE-CZ-NH1	9.78	125.19	120.30
26	LA	4	U	O4'-C1'-N1	9.78	116.02	108.20
26	LA	39	G	C8-N9-C4	-9.78	102.49	106.40
2	SA	954	G	N1-C6-O6	9.78	125.77	119.90
2	SA	1383	C	O4'-C1'-N1	9.78	116.02	108.20
3	S1	27	A	P-O3'-C3'	9.78	131.43	119.70
26	LA	1830	C	C2-N3-C4	-9.78	115.01	119.90
2	SA	1029	U	C5-C6-N1	-9.77	117.81	122.70
6	SU	16	ARG	NE-CZ-NH2	9.77	125.19	120.30
26	LA	644	A	N1-C2-N3	9.77	134.19	129.30
26	LA	581	C	N1-C2-O2	-9.77	113.04	118.90
26	LA	1123	C	P-O3'-C3'	9.77	131.43	119.70
26	LA	62	U	C6-N1-C2	-9.77	115.14	121.00
26	LA	346	A	N1-C2-N3	9.77	134.18	129.30
26	LA	1845	G	O4'-C1'-N9	9.77	116.01	108.20
26	LA	1382	G	C5-C6-O6	-9.77	122.74	128.60
26	LA	704	G	P-O3'-C3'	9.76	131.42	119.70
2	SA	555	U	O4'-C1'-N1	9.76	116.01	108.20
2	SA	1166	G	C2-N3-C4	-9.76	107.02	111.90
2	SA	1200	C	C2-N3-C4	-9.76	115.02	119.90
2	SA	1473	G	C4-C5-N7	-9.76	106.89	110.80
4	S2	10	G	C5-C6-O6	9.76	134.46	128.60
26	LA	2327	A	C8-N9-C4	-9.76	101.89	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2682	A	C5-N7-C8	-9.76	99.02	103.90
26	LA	1757	A	C5-C6-N1	9.76	122.58	117.70
26	LA	2897	U	C2-N3-C4	9.76	132.85	127.00
24	S3	445	ARG	NE-CZ-NH1	9.76	125.18	120.30
26	LA	1193	G	C5-C6-O6	-9.76	122.75	128.60
2	SA	831	A	C5'-C4'-C3'	-9.76	100.39	116.00
26	LA	1741	C	C2-N3-C4	-9.76	115.02	119.90
26	LA	2825	G	O4'-C1'-N9	9.76	116.01	108.20
2	SA	406	G	O4'-C1'-N9	9.75	116.00	108.20
26	LA	473	G	N3-C2-N2	-9.75	113.08	119.90
26	LA	1162	G	C5-C6-O6	-9.75	122.75	128.60
26	LA	1530	G	C5-C6-O6	-9.75	122.75	128.60
2	SA	135	C	C1'-O4'-C4'	-9.75	102.10	109.90
26	LA	918	A	O4'-C1'-N9	9.75	116.00	108.20
26	LA	52	A	C8-N9-C4	-9.74	101.90	105.80
26	LA	137	U	O4'-C1'-N1	9.74	116.00	108.20
26	LA	1470	A	C4-C5-N7	9.74	115.57	110.70
26	LA	2508	G	C5'-C4'-C3'	9.74	131.59	116.00
26	LA	1717	A	C5-N7-C8	-9.74	99.03	103.90
2	SA	451	A	C4-C5-C6	-9.74	112.13	117.00
26	LA	1814	G	C5-C6-O6	-9.74	122.76	128.60
26	LA	93	G	C1'-O4'-C4'	9.74	117.69	109.90
26	LA	1618	C	N1-C2-N3	9.74	126.02	119.20
2	SA	285	C	O4'-C1'-N1	9.73	115.99	108.20
2	SA	845	A	C8-N9-C4	9.73	109.69	105.80
26	LA	1574	C	N3-C2-O2	-9.73	115.09	121.90
26	LA	2551	C	N1-C2-O2	9.73	124.74	118.90
2	SA	402	G	N3-C4-C5	-9.73	123.73	128.60
2	SA	527	G	C4-C5-N7	9.73	114.69	110.80
2	SA	972	C	C6-N1-C2	-9.73	116.41	120.30
26	LA	45	G	P-O3'-C3'	9.73	131.38	119.70
26	LA	2754	U	O4'-C1'-N1	9.73	115.99	108.20
26	LA	2521	C	C2-N3-C4	-9.73	115.03	119.90
2	SA	465	A	C5-C6-N6	9.73	131.48	123.70
2	SA	1415	G	C5-C6-O6	-9.73	122.76	128.60
2	SA	1502	A	O4'-C1'-N9	9.73	115.98	108.20
26	LA	2657	A	P-O5'-C5'	9.73	136.47	120.90
26	LA	826	U	O4'-C1'-N1	9.72	115.98	108.20
7	SG	137	ARG	NE-CZ-NH1	9.72	125.16	120.30
26	LA	1539	U	C5-C4-O4	-9.72	120.07	125.90
26	LA	1815	A	C8-N9-C4	9.72	109.69	105.80
26	LA	2499	C	C6-N1-C2	-9.72	116.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	10	G	N1-C6-O6	-9.72	114.07	119.90
26	LA	2193	G	C6-N1-C2	-9.72	119.27	125.10
26	LA	2181	U	O4'-C1'-N1	9.72	115.98	108.20
1	SS	77	ARG	NE-CZ-NH1	9.72	125.16	120.30
2	SA	175	C	C6-N1-C2	-9.72	116.41	120.30
26	LA	458	G	C3'-C2'-C1'	-9.72	93.73	101.50
26	LA	575	A	N9-C4-C5	-9.72	101.91	105.80
26	LA	2094	A	C1'-O4'-C4'	-9.72	102.13	109.90
2	SA	206	C	O4'-C1'-N1	9.71	115.97	108.20
2	SA	825	A	N7-C8-N9	9.71	118.66	113.80
2	SA	983	A	C2-N3-C4	-9.71	105.74	110.60
26	LA	129	C	C2-N3-C4	-9.71	115.04	119.90
2	SA	415	A	C6-N1-C2	-9.71	112.77	118.60
2	SA	804	U	C2-N3-C4	-9.71	121.17	127.00
4	S2	74	A	P-O3'-C3'	-9.71	108.05	119.70
25	LB	114	C	N1-C2-N3	9.71	126.00	119.20
26	LA	2119	A	N1-C2-N3	-9.71	124.44	129.30
26	LA	2432	A	O4'-C1'-N9	9.71	115.97	108.20
26	LA	1277	G	N7-C8-N9	9.71	117.95	113.10
26	LA	2255	G	N1-C2-N3	9.71	129.73	123.90
41	L5	14	ARG	NE-CZ-NH2	9.71	125.16	120.30
2	SA	1542	A	N9-C4-C5	9.71	109.68	105.80
2	SA	175	C	O4'-C1'-N1	9.71	115.97	108.20
2	SA	1493	A	C5-C6-N1	9.71	122.55	117.70
26	LA	368	A	C3'-C2'-C1'	9.71	109.27	101.50
26	LA	1259	G	C5-C6-O6	-9.71	122.78	128.60
26	LA	1285	A	P-O3'-C3'	9.71	131.35	119.70
26	LA	1795	C	N1-C2-O2	9.71	124.72	118.90
26	LA	1398	C	C2-N3-C4	-9.71	115.05	119.90
25	LB	87	U	C1'-O4'-C4'	-9.71	102.14	109.90
26	LA	1793	C	C2-N3-C4	-9.71	115.05	119.90
26	LA	195	A	C3'-C2'-C1'	9.70	109.26	101.50
26	LA	995	C	P-O5'-C5'	9.71	136.43	120.90
26	LA	1141	U	C2-N3-C4	-9.70	121.18	127.00
26	LA	1618	C	N3-C2-O2	-9.70	115.11	121.90
2	SA	921	U	P-O3'-C3'	-9.70	108.06	119.70
26	LA	788	A	O4'-C1'-N9	9.70	115.96	108.20
26	LA	2397	G	C4-C5-N7	9.70	114.68	110.80
2	SA	214	C	C6-N1-C2	-9.70	116.42	120.30
26	LA	1875	G	C4-C5-N7	9.70	114.68	110.80
26	LA	2566	A	P-O5'-C5'	-9.70	105.38	120.90
2	SA	1498	U	P-O3'-C3'	9.70	131.34	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	2	G	P-O5'-C5'	9.70	136.42	120.90
26	LA	1715	G	P-O3'-C3'	9.70	131.34	119.70
26	LA	1961	C	C4-C5-C6	-9.70	112.55	117.40
42	L6	7	ARG	NE-CZ-NH2	-9.70	115.45	120.30
2	SA	945	G	N1-C2-N3	-9.70	118.08	123.90
26	LA	390	U	O4'-C1'-N1	9.70	115.96	108.20
26	LA	944	C	N3-C4-N4	9.70	124.79	118.00
26	LA	1743	G	C5-C6-O6	-9.70	122.78	128.60
26	LA	1469	A	N1-C2-N3	-9.69	124.45	129.30
26	LA	2667	C	C6-N1-C2	9.69	124.18	120.30
25	LB	12	C	P-O3'-C3'	-9.69	108.07	119.70
26	LA	54	G	C4-C5-N7	9.69	114.68	110.80
45	LG	137	PHE	CB-CG-CD1	9.69	127.58	120.80
2	SA	788	U	N3-C4-C5	-9.69	108.79	114.60
2	SA	1422	G	O4'-C1'-N9	9.69	115.95	108.20
26	LA	530	G	N7-C8-N9	-9.69	108.25	113.10
26	LA	1572	A	N1-C2-N3	-9.69	124.45	129.30
26	LA	1465	G	C5-C6-O6	-9.69	122.79	128.60
26	LA	1853	A	N9-C4-C5	9.69	109.67	105.80
2	SA	577	G	N1-C6-O6	9.69	125.71	119.90
2	SA	1113	C	O4'-C1'-N1	9.69	115.95	108.20
26	LA	126	A	C6-N1-C2	-9.69	112.79	118.60
2	SA	1197	A	O4'-C1'-N9	9.68	115.95	108.20
2	SA	1237	C	O4'-C1'-N1	9.68	115.95	108.20
26	LA	2887	A	P-O5'-C5'	9.68	136.39	120.90
2	SA	110	C	C2-N1-C1'	9.68	129.45	118.80
2	SA	505	G	O4'-C1'-N9	9.68	115.94	108.20
26	LA	1297	C	C4-C5-C6	9.68	122.24	117.40
26	LA	2126	A	O3'-P-O5'	-9.68	85.61	104.00
26	LA	2677	G	N1-C6-O6	9.68	125.71	119.90
2	SA	276	G	N1-C6-O6	9.68	125.71	119.90
2	SA	395	C	C4'-C3'-C2'	-9.68	92.92	102.60
26	LA	2689	U	O4'-C1'-C2'	9.68	116.31	107.60
2	SA	649	A	C4-C5-C6	-9.68	112.16	117.00
3	S1	15	G	O4'-C1'-C2'	-9.68	96.12	105.80
26	LA	1641	A	N1-C6-N6	9.68	124.41	118.60
2	SA	821	G	O4'-C1'-N9	9.67	115.94	108.20
26	LA	116	C	C6-N1-C2	-9.67	116.43	120.30
26	LA	671	C	C5-C6-N1	-9.67	116.16	121.00
26	LA	1127	A	P-O3'-C3'	9.67	131.31	119.70
26	LA	1260	A	C4-C5-C6	9.67	121.84	117.00
26	LA	1762	A	N1-C6-N6	9.67	124.40	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1864	U	O4'-C1'-N1	9.67	115.94	108.20
26	LA	2055	C	N3-C2-O2	9.67	128.67	121.90
26	LA	2153	C	N3-C4-N4	9.67	124.77	118.00
26	LA	2385	C	O4'-C1'-C2'	9.67	116.31	107.60
26	LA	225	C	N3-C4-N4	-9.67	111.23	118.00
26	LA	592	A	N1-C6-N6	9.67	124.40	118.60
26	LA	674	G	C5-C6-O6	-9.67	122.80	128.60
26	LA	1268	A	C5-C6-N1	9.67	122.53	117.70
2	SA	1230	C	C6-N1-C2	-9.67	116.43	120.30
26	LA	1913	A	N1-C2-N3	9.67	134.13	129.30
26	LA	2781	A	C5-C6-N6	-9.67	115.97	123.70
2	SA	1035	A	N1-C6-N6	9.66	124.40	118.60
26	LA	1499	C	O4'-C1'-N1	9.66	115.93	108.20
26	LA	2503	A	N1-C2-N3	-9.66	124.47	129.30
2	SA	585	G	C5-C6-O6	-9.66	122.80	128.60
2	SA	1524	C	O4'-C1'-N1	9.66	115.93	108.20
26	LA	2001	C	C6-N1-C2	-9.66	116.44	120.30
2	SA	1457	G	C2-N3-C4	-9.66	107.07	111.90
26	LA	1726	C	C2-N3-C4	-9.66	115.07	119.90
2	SA	1388	C	C5'-C4'-C3'	-9.66	100.55	116.00
26	LA	674	G	C4-C5-C6	-9.66	113.00	118.80
26	LA	1138	G	N3-C4-C5	-9.66	123.77	128.60
26	LA	403	U	N1-C2-N3	-9.66	109.11	114.90
2	SA	1507	A	C4-C5-N7	-9.66	105.87	110.70
2	SA	1535	C	C1'-O4'-C4'	-9.66	102.17	109.90
26	LA	1099	G	C4-C5-N7	9.66	114.66	110.80
56	LR	50	ARG	NE-CZ-NH1	-9.66	115.47	120.30
26	LA	2137	U	O4'-C1'-N1	9.66	115.92	108.20
26	LA	2277	G	N1-C6-O6	9.66	125.69	119.90
2	SA	199	A	P-O5'-C5'	9.65	136.34	120.90
2	SA	659	U	N3-C2-O2	-9.65	115.44	122.20
2	SA	1262	C	O4'-C1'-N1	9.65	115.92	108.20
2	SA	1045	C	C6-N1-C2	-9.65	116.44	120.30
26	LA	468	G	C6-N1-C2	-9.65	119.31	125.10
26	LA	771	G	C8-N9-C4	-9.65	102.54	106.40
26	LA	2326	C	C6-N1-C2	-9.65	116.44	120.30
26	LA	2695	U	O4'-C1'-N1	9.65	115.92	108.20
2	SA	445	G	N3-C4-C5	-9.65	123.77	128.60
26	LA	1757	A	C4'-C3'-C2'	-9.65	92.95	102.60
2	SA	1176	A	N9-C4-C5	-9.65	101.94	105.80
26	LA	1692	U	P-O3'-C3'	9.65	131.28	119.70
26	LA	13	A	N9-C4-C5	9.65	109.66	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	791	C	C2-N3-C4	9.65	124.72	119.90
26	LA	1653	G	C2-N3-C4	-9.65	107.08	111.90
2	SA	1053	G	N1-C6-O6	9.65	125.69	119.90
26	LA	1825	U	C2-N3-C4	-9.65	121.21	127.00
2	SA	1370	G	O4'-C1'-N9	9.65	115.92	108.20
2	SA	1401	G	C5-C6-O6	-9.65	122.81	128.60
26	LA	2822	G	C6-C5-N7	-9.65	124.61	130.40
33	LZ	26	ARG	NE-CZ-NH1	9.65	125.12	120.30
2	SA	247	G	P-O5'-C5'	9.64	136.33	120.90
26	LA	879	G	C8-N9-C4	-9.64	102.54	106.40
3	S1	57	C	O4'-C1'-N1	9.64	115.91	108.20
2	SA	1068	G	C8-N9-C4	9.64	110.25	106.40
2	SA	177	G	C4-N9-C1'	9.64	139.03	126.50
2	SA	1510	C	C2-N3-C4	-9.64	115.08	119.90
26	LA	1441	G	N1-C6-O6	-9.64	114.12	119.90
2	SA	79	G	N1-C6-O6	9.63	125.68	119.90
2	SA	502	A	N9-C4-C5	-9.63	101.95	105.80
2	SA	1482	G	C4-C5-N7	-9.63	106.95	110.80
26	LA	242	G	C4-C5-N7	9.63	114.65	110.80
26	LA	2701	U	C2-N3-C4	-9.63	121.22	127.00
26	LA	1538	G	O4'-C1'-N9	9.63	115.91	108.20
52	LO	130	PHE	CB-CG-CD1	-9.63	114.06	120.80
2	SA	87	C	N1-C2-O2	9.63	124.68	118.90
2	SA	1366	C	N3-C4-C5	-9.63	118.05	121.90
2	SA	847	G	O4'-C1'-N9	9.63	115.90	108.20
26	LA	1591	A	C8-N9-C4	9.62	109.65	105.80
26	LA	2065	C	C6-N1-C2	-9.62	116.45	120.30
2	SA	1018	G	C5'-C4'-C3'	-9.62	100.61	116.00
11	SK	105	ARG	NE-CZ-NH2	9.62	125.11	120.30
26	LA	205	G	N3-C4-N9	-9.62	120.23	126.00
26	LA	513	A	C5'-C4'-C3'	-9.62	100.60	116.00
26	LA	1122	G	C5-C6-O6	-9.62	122.83	128.60
26	LA	1377	G	N9-C4-C5	9.62	109.25	105.40
26	LA	763	G	C5'-C4'-C3'	9.62	131.39	116.00
26	LA	2840	C	C4-C5-C6	-9.62	112.59	117.40
2	SA	936	C	N3-C4-C5	-9.62	118.05	121.90
2	SA	1146	A	O4'-C1'-N9	9.62	115.90	108.20
26	LA	670	A	C5-C6-N6	9.62	131.39	123.70
26	LA	879	G	N1-C6-O6	9.62	125.67	119.90
26	LA	1790	C	C6-N1-C2	-9.62	116.45	120.30
26	LA	896	A	C8-N9-C4	9.62	109.65	105.80
26	LA	2631	G	C5-C6-N1	9.62	116.31	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	86	G	C4'-C3'-C2'	-9.62	92.98	102.60
26	LA	1527	G	C4-C5-N7	-9.62	106.95	110.80
26	LA	1739	A	C2-N3-C4	-9.61	105.79	110.60
2	SA	1172	C	N3-C4-C5	-9.61	118.06	121.90
2	SA	148	G	C4-N9-C1'	-9.61	114.00	126.50
2	SA	1392	G	C5-C6-N1	9.61	116.31	111.50
2	SA	1463	U	O4'-C1'-N1	9.61	115.89	108.20
26	LA	1057	A	O4'-C1'-N9	9.61	115.89	108.20
26	LA	1794	A	N7-C8-N9	-9.61	108.99	113.80
26	LA	2152	G	O4'-C1'-N9	9.61	115.89	108.20
6	SU	37	TYR	CB-CG-CD1	9.61	126.77	121.00
26	LA	638	G	C5-C6-N1	9.61	116.30	111.50
26	LA	917	A	C8-N9-C4	-9.61	101.96	105.80
26	LA	1335	C	N3-C4-N4	9.61	124.73	118.00
2	SA	33	A	N9-C4-C5	9.61	109.64	105.80
26	LA	2668	G	C5-C6-N1	-9.61	106.70	111.50
2	SA	645	G	C5-N7-C8	-9.61	99.50	104.30
2	SA	1346	A	O4'-C1'-C2'	-9.61	96.19	105.80
26	LA	548	G	C5-C6-O6	-9.61	122.84	128.60
26	LA	733	G	O4'-C1'-N9	9.61	115.88	108.20
26	LA	1180	U	O4'-C1'-N1	9.61	115.88	108.20
26	LA	1932	A	C4-C5-C6	-9.61	112.20	117.00
26	LA	2354	C	C6-N1-C2	-9.61	116.46	120.30
2	SA	120	A	C5'-C4'-C3'	-9.60	100.63	116.00
26	LA	2064	C	O4'-C1'-N1	9.60	115.88	108.20
2	SA	150	U	P-O5'-C5'	9.60	136.26	120.90
2	SA	1446	A	O4'-C1'-N9	9.60	115.88	108.20
26	LA	2151	U	P-O5'-C5'	9.60	136.26	120.90
26	LA	295	G	O4'-C1'-N9	9.60	115.88	108.20
26	LA	763	G	C5-N7-C8	-9.60	99.50	104.30
26	LA	1128	G	C5-C6-O6	-9.60	122.84	128.60
26	LA	256	A	N1-C6-N6	-9.60	112.84	118.60
26	LA	2538	C	C5-C6-N1	9.60	125.80	121.00
2	SA	19	A	C5-C6-N1	9.59	122.50	117.70
2	SA	755	G	N1-C2-N3	-9.59	118.14	123.90
26	LA	1933	G	N9-C4-C5	9.59	109.24	105.40
26	LA	2607	G	P-O3'-C3'	-9.59	108.19	119.70
54	LM	31	ARG	NE-CZ-NH1	9.59	125.10	120.30
2	SA	158	G	C6-N1-C2	-9.59	119.35	125.10
26	LA	236	C	C6-N1-C2	-9.59	116.46	120.30
2	SA	838	G	N1-C6-O6	9.59	125.65	119.90
26	LA	1497	U	O4'-C1'-N1	9.59	115.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	58	C	C5-C6-N1	9.59	125.79	121.00
2	SA	539	A	N1-C2-N3	9.59	134.09	129.30
26	LA	1136	G	C6-C5-N7	-9.59	124.65	130.40
26	LA	1843	C	P-O3'-C3'	9.59	131.21	119.70
2	SA	403	C	O4'-C1'-N1	9.59	115.87	108.20
11	SK	12	ARG	NE-CZ-NH1	9.59	125.09	120.30
26	LA	1272	A	C5-C6-N1	-9.59	112.91	117.70
34	L0	26	PHE	CB-CG-CD1	-9.59	114.09	120.80
2	SA	337	G	N9-C4-C5	-9.58	101.57	105.40
2	SA	991	U	N3-C2-O2	-9.58	115.49	122.20
26	LA	11	C	C6-N1-C2	-9.58	116.47	120.30
26	LA	465	G	C5-C6-O6	-9.58	122.85	128.60
26	LA	659	G	N1-C6-O6	-9.58	114.15	119.90
26	LA	1654	A	C4-C5-C6	-9.58	112.21	117.00
26	LA	2676	C	C5-C6-N1	-9.58	116.21	121.00
2	SA	1194	U	N3-C2-O2	9.58	128.91	122.20
26	LA	2006	C	C6-N1-C2	-9.58	116.47	120.30
18	SB	221	ARG	NE-CZ-NH2	-9.58	115.51	120.30
26	LA	911	A	C4-C5-C6	9.58	121.79	117.00
2	SA	931	C	N3-C4-N4	-9.58	111.30	118.00
25	LB	33	G	N1-C6-O6	9.58	125.65	119.90
26	LA	1117	C	O4'-C1'-N1	9.58	115.86	108.20
2	SA	151	A	N9-C4-C5	9.57	109.63	105.80
2	SA	304	U	C5-C6-N1	-9.57	117.91	122.70
2	SA	1343	G	N3-C2-N2	9.57	126.60	119.90
26	LA	1143	A	C5-C6-N1	9.57	122.49	117.70
26	LA	1465	G	N1-C6-O6	9.57	125.64	119.90
2	SA	399	G	C5-C6-O6	-9.57	122.86	128.60
26	LA	2131	U	C6-N1-C1'	-9.57	107.80	121.20
26	LA	667	U	N1-C2-N3	9.57	120.64	114.90
26	LA	1125	G	N7-C8-N9	9.57	117.89	113.10
2	SA	463	U	P-O3'-C3'	9.57	131.18	119.70
2	SA	725	G	N1-C6-O6	9.57	125.64	119.90
4	S2	76	C	N3-C4-C5	-9.57	118.07	121.90
26	LA	2611	C	C5-C6-N1	9.57	125.78	121.00
26	LA	2874	C	O4'-C1'-N1	9.57	115.86	108.20
26	LA	292	U	O4'-C1'-N1	9.57	115.85	108.20
26	LA	679	C	O4'-C1'-N1	9.57	115.85	108.20
2	SA	1300	G	N1-C6-O6	9.56	125.64	119.90
2	SA	527	G	N9-C4-C5	-9.56	101.58	105.40
2	SA	1204	A	O4'-C1'-N9	9.56	115.85	108.20
26	LA	846	U	P-O3'-C3'	9.56	131.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	356	G	N3-C4-C5	-9.56	123.82	128.60
2	SA	321	A	C5-C6-N6	-9.56	116.05	123.70
2	SA	265	G	C5-N7-C8	-9.56	99.52	104.30
2	SA	153	C	C5'-C4'-O4'	9.56	120.57	109.10
2	SA	810	C	C4'-C3'-C2'	-9.56	93.04	102.60
2	SA	1268	G	P-O3'-C3'	9.56	131.17	119.70
2	SA	1335	U	N3-C2-O2	-9.56	115.51	122.20
16	SP	8	ARG	NE-CZ-NH1	9.56	125.08	120.30
26	LA	1808	A	C6-N1-C2	9.56	124.33	118.60
26	LA	2286	G	C8-N9-C4	9.56	110.22	106.40
26	LA	1087	G	O4'-C1'-N9	9.55	115.84	108.20
2	SA	712	A	O4'-C1'-N9	9.55	115.84	108.20
26	LA	2262	U	C4'-C3'-C2'	-9.55	93.05	102.60
26	LA	2682	A	O4'-C1'-N9	9.55	115.84	108.20
2	SA	1198	G	N1-C6-O6	9.55	125.63	119.90
26	LA	1740	G	N7-C8-N9	9.55	117.88	113.10
26	LA	584	C	N3-C4-C5	9.55	125.72	121.90
26	LA	1854	A	N9-C4-C5	-9.55	101.98	105.80
26	LA	2712	C	O4'-C1'-N1	9.55	115.84	108.20
26	LA	215	G	O4'-C1'-N9	9.55	115.84	108.20
26	LA	1020	A	C6-N1-C2	-9.55	112.87	118.60
26	LA	1129	A	C6-N1-C2	-9.55	112.87	118.60
26	LA	1171	G	C6-N1-C2	-9.55	119.37	125.10
26	LA	1338	G	C4-C5-C6	9.55	124.53	118.80
26	LA	1341	G	C4'-C3'-C2'	-9.55	93.05	102.60
42	L6	41	ARG	NE-CZ-NH2	9.55	125.07	120.30
2	SA	197	A	P-O5'-C5'	-9.54	105.63	120.90
2	SA	1170	A	O4'-C1'-N9	9.54	115.84	108.20
26	LA	176	A	C2-N3-C4	-9.54	105.83	110.60
26	LA	2205	A	C4'-C3'-C2'	-9.55	93.05	102.60
26	LA	2369	A	O4'-C1'-N9	9.55	115.84	108.20
26	LA	223	A	C1'-O4'-C4'	-9.54	102.27	109.90
26	LA	1092	C	C5'-C4'-O4'	9.54	120.55	109.10
26	LA	1223	G	N9-C4-C5	9.54	109.22	105.40
2	SA	112	G	N1-C6-O6	-9.54	114.18	119.90
2	SA	779	C	O4'-C1'-N1	9.54	115.83	108.20
2	SA	888	G	C5-C6-O6	-9.54	122.87	128.60
2	SA	812	G	C3'-C2'-C1'	9.54	109.13	101.50
26	LA	2672	U	O4'-C1'-N1	9.54	115.83	108.20
26	LA	579	G	O4'-C1'-N9	9.54	115.83	108.20
2	SA	178	C	C6-N1-C2	9.54	124.11	120.30
26	LA	144	A	O4'-C1'-N9	9.54	115.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1416	G	O4'-C1'-N9	9.54	115.83	108.20
26	LA	1359	A	C6-N1-C2	9.54	124.32	118.60
26	LA	1389	G	P-O5'-C5'	-9.54	105.64	120.90
26	LA	1421	G	P-O3'-C3'	9.54	131.15	119.70
26	LA	2497	A	C8-N9-C4	-9.54	101.98	105.80
26	LA	2545	G	C2-N3-C4	-9.54	107.13	111.90
2	SA	688	G	N9-C4-C5	9.54	109.21	105.40
2	SA	867	G	C5-C6-O6	-9.54	122.88	128.60
2	SA	915	A	N1-C6-N6	-9.54	112.88	118.60
2	SA	922	G	N7-C8-N9	9.54	117.87	113.10
26	LA	186	G	C5-C6-O6	-9.54	122.88	128.60
2	SA	909	A	P-O5'-C5'	9.53	136.15	120.90
26	LA	829	A	C6-N1-C2	-9.53	112.88	118.60
26	LA	974	G	C3'-C2'-C1'	-9.54	93.87	101.50
26	LA	984	A	C5-N7-C8	-9.53	99.13	103.90
26	LA	1393	A	N7-C8-N9	9.53	118.57	113.80
26	LA	1692	U	C5-C6-N1	-9.53	117.93	122.70
26	LA	2046	G	C5-C6-O6	-9.54	122.88	128.60
26	LA	2319	G	C6-N1-C2	9.54	130.82	125.10
34	L0	48	ARG	NE-CZ-NH1	9.53	125.07	120.30
26	LA	1728	C	O4'-C1'-N1	9.53	115.83	108.20
26	LA	1212	G	P-O3'-C3'	-9.53	108.26	119.70
26	LA	1924	C	C5-C4-N4	-9.53	113.53	120.20
26	LA	2222	C	O4'-C1'-N1	9.53	115.83	108.20
2	SA	242	G	N1-C6-O6	9.53	125.62	119.90
2	SA	475	C	O4'-C1'-N1	9.53	115.82	108.20
25	LB	89	U	N1-C2-N3	9.53	120.62	114.90
26	LA	382	A	O4'-C1'-N9	9.53	115.82	108.20
26	LA	2451	A	C6-N1-C2	-9.53	112.88	118.60
26	LA	2452	C	C5-C6-N1	9.53	125.76	121.00
26	LA	2642	G	N7-C8-N9	9.53	117.86	113.10
2	SA	592	G	C5-C6-O6	-9.53	122.88	128.60
2	SA	1002	G	C5-C6-N1	9.53	116.26	111.50
2	SA	1089	G	O4'-C1'-N9	9.53	115.82	108.20
26	LA	1358	G	C5-C6-O6	-9.53	122.88	128.60
26	LA	374	A	N1-C6-N6	9.53	124.31	118.60
26	LA	1792	G	O4'-C1'-N9	9.53	115.82	108.20
9	SI	105	ARG	NE-CZ-NH1	9.52	125.06	120.30
25	LB	21	G	N1-C6-O6	-9.52	114.19	119.90
26	LA	122	G	C4-C5-N7	9.52	114.61	110.80
26	LA	784	G	N1-C6-O6	9.52	125.61	119.90
26	LA	1999	C	C6-N1-C2	-9.52	116.49	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	57	C	O4'-C1'-N1	9.52	115.82	108.20
26	LA	1079	C	O4'-C1'-N1	9.52	115.82	108.20
2	SA	1156	G	N1-C6-O6	9.52	125.61	119.90
2	SA	1454	G	C2-N3-C4	9.52	116.66	111.90
26	LA	1183	U	C5-C6-N1	-9.52	117.94	122.70
26	LA	2118	U	O4'-C1'-N1	9.52	115.81	108.20
26	LA	2418	A	O4'-C1'-N9	9.52	115.81	108.20
27	LD	47	ARG	NE-CZ-NH1	9.52	125.06	120.30
2	SA	1510	C	N1-C2-O2	-9.51	113.19	118.90
26	LA	1900	A	C8-N9-C4	9.51	109.61	105.80
2	SA	1267	C	C3'-C2'-C1'	9.51	109.11	101.50
2	SA	1323	G	C5-C6-N1	9.51	116.26	111.50
26	LA	1192	G	N7-C8-N9	9.51	117.86	113.10
26	LA	2371	G	C5-N7-C8	-9.51	99.55	104.30
4	S2	70	C	N1-C2-N3	9.51	125.86	119.20
25	LB	48	U	C4-C5-C6	-9.51	114.00	119.70
26	LA	306	U	N3-C2-O2	-9.51	115.54	122.20
2	SA	48	C	C1'-O4'-C4'	-9.51	102.30	109.90
26	LA	816	C	N3-C2-O2	-9.51	115.25	121.90
26	LA	1564	C	N1-C2-N3	9.51	125.86	119.20
3	S1	58	C	C1'-O4'-C4'	-9.51	102.30	109.90
26	LA	1276	A	C5-C6-N1	9.51	122.45	117.70
26	LA	1904	G	C8-N9-C4	9.51	110.20	106.40
2	SA	905	U	C5-C4-O4	-9.50	120.20	125.90
26	LA	11	C	P-O3'-C3'	9.50	131.10	119.70
26	LA	2464	G	C3'-C2'-C1'	9.50	109.10	101.50
2	SA	810	C	N3-C4-N4	9.50	124.65	118.00
26	LA	686	U	N3-C4-C5	-9.50	108.90	114.60
26	LA	1804	C	C6-N1-C2	-9.50	116.50	120.30
26	LA	2261	C	N1-C2-O2	-9.50	113.20	118.90
26	LA	2394	C	N3-C4-C5	-9.50	118.10	121.90
2	SA	1281	C	C6-N1-C2	-9.50	116.50	120.30
26	LA	106	C	C5-C4-N4	9.50	126.85	120.20
26	LA	1369	G	C2-N3-C4	9.50	116.65	111.90
41	L5	34	ARG	NE-CZ-NH2	9.50	125.05	120.30
26	LA	141	G	C5-C6-O6	-9.49	122.90	128.60
26	LA	803	U	C5-C4-O4	-9.49	120.20	125.90
26	LA	1653	G	P-O3'-C3'	-9.49	108.31	119.70
26	LA	1764	C	C6-N1-C2	-9.49	116.50	120.30
26	LA	2091	C	C4-C5-C6	9.49	122.15	117.40
2	SA	43	C	O4'-C1'-N1	9.49	115.79	108.20
2	SA	1219	A	C5-N7-C8	-9.49	99.15	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2282	G	C4-C5-N7	-9.49	107.00	110.80
2	SA	355	C	C5'-C4'-O4'	9.49	120.48	109.10
2	SA	557	G	C5-C6-O6	-9.49	122.91	128.60
26	LA	1906	G	N3-C4-C5	-9.49	123.86	128.60
26	LA	2397	G	N1-C6-O6	9.49	125.59	119.90
2	SA	268	U	N3-C4-O4	-9.48	112.76	119.40
2	SA	1064	G	N7-C8-N9	-9.48	108.36	113.10
26	LA	312	G	N7-C8-N9	-9.48	108.36	113.10
39	L3	15	ARG	NE-CZ-NH2	9.48	125.04	120.30
3	S1	52	U	P-O3'-C3'	9.48	131.08	119.70
2	SA	1510	C	O4'-C1'-N1	9.48	115.78	108.20
2	SA	404	G	C5'-C4'-O4'	9.48	120.47	109.10
2	SA	1042	A	C4-C5-C6	-9.48	112.26	117.00
26	LA	124	G	C5-N7-C8	-9.48	99.56	104.30
26	LA	2005	A	P-O3'-C3'	9.48	131.07	119.70
2	SA	644	U	N1-C2-N3	-9.48	109.21	114.90
26	LA	1739	A	N1-C6-N6	-9.48	112.92	118.60
26	LA	2283	C	O4'-C1'-N1	9.48	115.78	108.20
2	SA	343	U	P-O3'-C3'	9.47	131.07	119.70
2	SA	550	G	C8-N9-C4	9.47	110.19	106.40
3	S1	16	A	N7-C8-N9	9.47	118.54	113.80
26	LA	1894	C	N3-C2-O2	-9.47	115.27	121.90
26	LA	2730	C	N3-C4-N4	9.47	124.63	118.00
2	SA	33	A	C2-N3-C4	9.47	115.34	110.60
26	LA	2461	A	C5-C6-N6	-9.47	116.12	123.70
26	LA	924	G	N1-C6-O6	9.47	125.58	119.90
2	SA	169	C	O4'-C1'-N1	9.47	115.77	108.20
2	SA	874	G	O4'-C1'-N9	9.47	115.78	108.20
26	LA	910	A	O5'-P-OP1	9.47	122.06	110.70
26	LA	758	C	O4'-C1'-N1	9.47	115.77	108.20
2	SA	843	U	O4'-C1'-N1	9.46	115.77	108.20
2	SA	1502	A	P-O3'-C3'	-9.47	108.34	119.70
26	LA	304	U	O4'-C1'-N1	9.47	115.77	108.20
26	LA	1723	G	C4-C5-N7	-9.46	107.01	110.80
2	SA	493	A	C5-N7-C8	-9.46	99.17	103.90
26	LA	1476	U	P-O5'-C5'	-9.46	105.76	120.90
26	LA	1728	C	C2-N3-C4	-9.46	115.17	119.90
2	SA	364	A	C8-N9-C4	9.46	109.58	105.80
2	SA	908	A	N1-C6-N6	9.46	124.28	118.60
25	LB	105	G	N1-C6-O6	-9.46	114.22	119.90
2	SA	1135	U	N3-C4-O4	9.46	126.02	119.40
26	LA	808	G	N3-C2-N2	9.45	126.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	862	G	C5'-C4'-O4'	9.45	120.44	109.10
26	LA	911	A	O4'-C1'-N9	9.45	115.76	108.20
26	LA	1151	A	C5-C6-N6	9.45	131.26	123.70
26	LA	1022	G	C2-N3-C4	-9.45	107.17	111.90
26	LA	1300	G	P-O3'-C3'	-9.45	108.36	119.70
25	LB	115	A	C1'-O4'-C4'	-9.45	102.34	109.90
26	LA	136	G	N3-C4-C5	-9.45	123.88	128.60
26	LA	142	A	C5-C6-N6	9.45	131.26	123.70
26	LA	1276	A	C8-N9-C4	-9.45	102.02	105.80
26	LA	2079	U	N1-C2-N3	9.45	120.57	114.90
26	LA	2258	C	C2-N1-C1'	9.45	129.19	118.80
26	LA	1137	G	C8-N9-C4	-9.45	102.62	106.40
2	SA	536	C	N3-C4-N4	9.45	124.61	118.00
2	SA	759	A	N1-C2-N3	9.45	134.02	129.30
26	LA	575	A	C5'-C4'-C3'	9.45	131.11	116.00
26	LA	1385	A	N7-C8-N9	9.45	118.52	113.80
4	S2	3	C	C4-C5-C6	-9.44	112.68	117.40
4	S2	15	G	C8-N9-C1'	9.45	139.28	127.00
26	LA	1670	C	P-O3'-C3'	9.44	131.03	119.70
26	LA	1943	U	N3-C4-C5	9.45	120.27	114.60
4	S2	2	G	C8-N9-C4	-9.44	102.62	106.40
12	SL	108	ASP	CB-CG-OD1	9.44	126.80	118.30
26	LA	1986	C	O4'-C1'-N1	9.44	115.75	108.20
26	LA	2150	C	N3-C4-N4	9.44	124.61	118.00
26	LA	654	A	O4'-C1'-N9	9.44	115.75	108.20
26	LA	2568	U	N3-C2-O2	-9.44	115.59	122.20
26	LA	645	C	N1-C2-O2	9.44	124.56	118.90
26	LA	1625	C	C5-C4-N4	9.44	126.81	120.20
26	LA	1761	C	C6-N1-C1'	-9.44	109.47	120.80
2	SA	1140	C	O4'-C1'-N1	9.44	115.75	108.20
26	LA	350	G	C5-C6-O6	-9.44	122.94	128.60
26	LA	793	A	N9-C4-C5	-9.44	102.03	105.80
26	LA	1490	A	C5-C6-N1	-9.44	112.98	117.70
26	LA	2098	U	N1-C2-N3	9.44	120.56	114.90
26	LA	2829	A	N3-C4-N9	9.44	134.95	127.40
2	SA	1058	G	C5-C6-N1	9.43	116.22	111.50
26	LA	486	C	C6-N1-C2	-9.43	116.53	120.30
26	LA	1619	G	N1-C6-O6	9.43	125.56	119.90
26	LA	606	U	C5-C6-N1	-9.43	117.98	122.70
26	LA	1777	U	C2-N3-C4	-9.43	121.34	127.00
2	SA	941	G	C6-N1-C2	-9.43	119.44	125.10
2	SA	982	U	C5-C4-O4	-9.43	120.24	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1088	G	N1-C6-O6	9.43	125.56	119.90
26	LA	1529	G	N1-C6-O6	9.43	125.56	119.90
2	SA	636	U	O4'-C1'-N1	9.43	115.74	108.20
2	SA	1171	A	O4'-C1'-N9	9.43	115.74	108.20
26	LA	111	A	N1-C2-N3	9.43	134.01	129.30
2	SA	1136	C	C6-N1-C2	-9.42	116.53	120.30
26	LA	1853	A	C2-N3-C4	9.42	115.31	110.60
26	LA	2116	G	C6-C5-N7	-9.42	124.75	130.40
26	LA	2337	G	C3'-C2'-C1'	-9.42	93.96	101.50
38	LE	13	ARG	NE-CZ-NH1	9.42	125.01	120.30
2	SA	119	A	O4'-C1'-N9	-9.42	100.66	108.20
2	SA	410	G	C5-C6-O6	-9.42	122.95	128.60
2	SA	1183	U	O4'-C1'-N1	9.42	115.74	108.20
2	SA	1229	A	N1-C2-N3	-9.42	124.59	129.30
26	LA	36	G	C8-N9-C4	-9.42	102.63	106.40
26	LA	1374	G	C5-C6-O6	-9.42	122.95	128.60
26	LA	1113	U	P-O3'-C3'	-9.42	108.40	119.70
26	LA	1136	G	N3-C4-C5	-9.42	123.89	128.60
2	SA	530	G	N1-C6-O6	9.42	125.55	119.90
26	LA	2897	U	N1-C2-N3	-9.42	109.25	114.90
26	LA	1013	C	C4-C5-C6	-9.41	112.69	117.40
25	LB	6	G	C5-C6-N1	9.41	116.21	111.50
26	LA	832	U	O4'-C1'-N1	9.41	115.73	108.20
26	LA	2385	C	P-O5'-C5'	9.41	135.96	120.90
32	LY	10	ARG	NE-CZ-NH1	9.41	125.01	120.30
26	LA	2777	G	N1-C6-O6	9.41	125.55	119.90
2	SA	722	G	N1-C2-N2	-9.41	107.73	116.20
2	SA	941	G	N3-C4-C5	9.41	133.31	128.60
20	SD	62	ARG	NE-CZ-NH1	9.41	125.00	120.30
25	LB	6	G	C5-C6-O6	-9.41	122.95	128.60
26	LA	1961	C	O4'-C1'-N1	9.41	115.73	108.20
26	LA	2679	A	C4-C5-N7	9.41	115.41	110.70
26	LA	389	G	P-O3'-C3'	9.41	130.99	119.70
26	LA	2340	A	O4'-C1'-N9	9.41	115.73	108.20
2	SA	353	A	N1-C2-N3	-9.41	124.60	129.30
2	SA	827	U	C5-C4-O4	-9.41	120.26	125.90
26	LA	648	G	C5-C6-N1	-9.41	106.80	111.50
26	LA	1354	A	N1-C6-N6	-9.41	112.95	118.60
2	SA	998	C	N3-C4-N4	-9.40	111.42	118.00
26	LA	2102	G	C2-N3-C4	9.40	116.60	111.90
26	LA	282	A	N7-C8-N9	-9.40	109.10	113.80
26	LA	1398	C	N3-C4-C5	9.40	125.66	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1862	G	N1-C2-N3	9.40	129.54	123.90
26	LA	2592	G	N3-C4-C5	-9.40	123.90	128.60
2	SA	167	A	O4'-C1'-N9	9.40	115.72	108.20
26	LA	298	G	N3-C2-N2	9.40	126.48	119.90
2	SA	1253	G	C8-N9-C4	-9.40	102.64	106.40
2	SA	1468	A	N9-C4-C5	-9.40	102.04	105.80
26	LA	1189	A	O4'-C1'-N9	9.40	115.72	108.20
43	L7	24	ARG	NE-CZ-NH2	9.40	125.00	120.30
26	LA	71	A	C4-C5-C6	-9.39	112.30	117.00
26	LA	1236	G	P-O3'-C3'	-9.39	108.43	119.70
26	LA	2056	G	N3-C2-N2	-9.39	113.32	119.90
2	SA	254	G	N3-C4-N9	9.39	131.64	126.00
12	SL	35	ARG	NE-CZ-NH1	-9.39	115.60	120.30
21	SE	92	ARG	NE-CZ-NH2	-9.39	115.60	120.30
25	LB	106	G	C5-C6-O6	-9.39	122.96	128.60
26	LA	1403	A	N1-C6-N6	-9.39	112.96	118.60
26	LA	1647	U	C1'-O4'-C4'	-9.39	102.39	109.90
26	LA	2243	U	P-O3'-C3'	9.39	130.97	119.70
2	SA	148	G	C5-C6-O6	-9.39	122.97	128.60
2	SA	269	C	O4'-C1'-N1	9.39	115.71	108.20
2	SA	1222	G	C4-C5-C6	-9.39	113.17	118.80
2	SA	1223	C	N1-C2-O2	-9.39	113.27	118.90
26	LA	574	A	C5-N7-C8	-9.39	99.20	103.90
26	LA	1907	G	C3'-C2'-C1'	-9.39	93.99	101.50
26	LA	2528	U	O4'-C1'-N1	9.39	115.71	108.20
2	SA	979	C	C4-C5-C6	-9.39	112.70	117.40
26	LA	1239	G	N7-C8-N9	9.39	117.79	113.10
26	LA	2109	U	O4'-C1'-N1	9.39	115.71	108.20
26	LA	2650	U	N3-C4-O4	9.39	125.97	119.40
26	LA	2722	G	C5-N7-C8	-9.39	99.61	104.30
2	SA	609	A	O4'-C1'-N9	9.39	115.71	108.20
2	SA	825	A	N9-C4-C5	9.39	109.55	105.80
2	SA	907	A	N1-C2-N3	-9.39	124.61	129.30
3	S1	17	U	C3'-C2'-C1'	9.38	109.01	101.50
26	LA	392	U	C1'-O4'-C4'	-9.39	102.39	109.90
26	LA	1508	A	P-O3'-C3'	9.38	130.96	119.70
26	LA	1515	A	C5-C6-N1	9.38	122.39	117.70
26	LA	1968	G	N1-C6-O6	9.38	125.53	119.90
26	LA	2676	C	N3-C2-O2	-9.38	115.33	121.90
2	SA	275	G	C5-C6-O6	-9.38	122.97	128.60
2	SA	614	C	C6-N1-C2	-9.38	116.55	120.30
26	LA	2396	G	C6-N1-C2	-9.38	119.47	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	614	A	C2-N3-C4	-9.38	105.91	110.60
26	LA	1885	A	C2-N3-C4	-9.38	105.91	110.60
26	LA	2499	C	N3-C4-C5	-9.38	118.15	121.90
26	LA	2583	G	N1-C6-O6	9.38	125.53	119.90
25	LB	25	U	C6-N1-C2	-9.38	115.37	121.00
26	LA	1918	A	C5'-C4'-O4'	9.38	120.35	109.10
26	LA	2700	A	C3'-C2'-C1'	9.38	109.00	101.50
26	LA	2714	G	C5-C6-O6	-9.38	122.97	128.60
48	LN	64	PHE	CB-CG-CD2	-9.38	114.23	120.80
2	SA	852	G	O4'-C1'-N9	9.38	115.70	108.20
2	SA	1163	A	O4'-C1'-N9	9.38	115.70	108.20
25	LB	29	A	C2-N3-C4	9.37	115.29	110.60
26	LA	2073	C	N3-C4-C5	-9.37	118.15	121.90
4	S2	10	G	C8-N9-C4	-9.37	102.65	106.40
26	LA	450	G	O4'-C1'-N9	9.37	115.70	108.20
26	LA	1567	G	C5-C6-N1	9.37	116.19	111.50
2	SA	1338	G	P-O5'-C5'	-9.37	105.91	120.90
26	LA	2062	A	C2-N3-C4	9.37	115.29	110.60
26	LA	168	G	C5-C6-N1	9.37	116.19	111.50
26	LA	1105	U	O4'-C1'-N1	9.37	115.70	108.20
26	LA	1667	G	C5-C6-O6	-9.36	122.98	128.60
26	LA	2178	C	P-O5'-C5'	9.37	135.88	120.90
26	LA	2223	G	C4-C5-C6	9.37	124.42	118.80
26	LA	2781	A	C8-N9-C4	-9.37	102.05	105.80
2	SA	1241	G	O4'-C1'-N9	9.36	115.69	108.20
2	SA	611	C	C6-N1-C2	-9.36	116.56	120.30
26	LA	144	A	N1-C2-N3	-9.36	124.62	129.30
26	LA	227	A	O4'-C1'-N9	9.36	115.69	108.20
26	LA	765	C	O4'-C1'-N1	9.36	115.69	108.20
26	LA	1378	A	C5-C6-N1	9.36	122.38	117.70
26	LA	1587	G	P-O5'-C5'	9.36	135.88	120.90
2	SA	933	G	N7-C8-N9	-9.36	108.42	113.10
25	LB	102	G	C5-N7-C8	-9.36	99.62	104.30
26	LA	167	A	N9-C4-C5	-9.36	102.06	105.80
26	LA	483	A	C2-N3-C4	-9.36	105.92	110.60
2	SA	696	A	C3'-C2'-C1'	-9.36	94.02	101.50
2	SA	964	A	N1-C2-N3	-9.36	124.62	129.30
4	S2	48	U	P-O3'-C3'	-9.36	108.47	119.70
26	LA	505	A	N3-C4-C5	9.36	133.35	126.80
26	LA	801	G	C8-N9-C4	-9.36	102.66	106.40
26	LA	1960	A	N1-C6-N6	-9.36	112.99	118.60
26	LA	2734	A	N1-C6-N6	-9.36	112.99	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	185	U	P-O5'-C5'	9.35	135.87	120.90
2	SA	517	G	C4-C5-N7	9.35	114.54	110.80
2	SA	1391	U	C2-N3-C4	-9.35	121.39	127.00
26	LA	2270	A	P-O5'-C5'	9.35	135.86	120.90
2	SA	847	G	N3-C4-N9	9.35	131.61	126.00
26	LA	2228	G	C2-N3-C4	9.35	116.57	111.90
26	LA	2291	U	O4'-C1'-N1	9.35	115.68	108.20
2	SA	317	U	C5-C6-N1	9.35	127.37	122.70
26	LA	2215	C	N1-C2-O2	-9.35	113.29	118.90
2	SA	430	A	C5-C6-N1	9.35	122.37	117.70
26	LA	318	C	C6-N1-C2	-9.35	116.56	120.30
26	LA	777	G	C5'-C4'-C3'	9.35	130.95	116.00
26	LA	917	A	C5-N7-C8	-9.35	99.23	103.90
26	LA	2731	G	O4'-C1'-C2'	9.35	116.01	107.60
26	LA	117	G	N1-C6-O6	-9.34	114.29	119.90
26	LA	491	G	N1-C6-O6	-9.34	114.29	119.90
26	LA	937	C	O4'-C1'-N1	9.34	115.67	108.20
26	LA	2744	G	C5-C6-N1	9.34	116.17	111.50
2	SA	1168	U	N3-C4-C5	-9.34	109.00	114.60
26	LA	1717	A	N7-C8-N9	9.34	118.47	113.80
2	SA	4	U	C5-C6-N1	9.34	127.37	122.70
2	SA	798	U	C6-N1-C2	-9.34	115.40	121.00
2	SA	794	A	N9-C4-C5	9.34	109.54	105.80
2	SA	999	C	O4'-C1'-N1	9.34	115.67	108.20
26	LA	1112	G	N7-C8-N9	9.34	117.77	113.10
26	LA	1368	G	O4'-C1'-N9	9.34	115.67	108.20
26	LA	2021	C	N3-C4-N4	9.34	124.54	118.00
26	LA	2278	A	C8-N9-C4	-9.34	102.06	105.80
3	S1	47	C	N3-C4-C5	9.34	125.64	121.90
26	LA	2841	C	N3-C4-N4	-9.34	111.46	118.00
26	LA	2688	G	C5-C6-O6	-9.34	123.00	128.60
2	SA	273	U	O4'-C1'-N1	9.34	115.67	108.20
26	LA	852	U	C5-C4-O4	-9.34	120.30	125.90
26	LA	1276	A	N1-C2-N3	-9.34	124.63	129.30
26	LA	2245	U	O3'-P-O5'	-9.34	86.26	104.00
19	SC	192	TYR	CB-CG-CD2	9.34	126.60	121.00
26	LA	2307	G	O4'-C1'-N9	9.34	115.67	108.20
25	LB	109	A	C5-C6-N6	9.33	131.17	123.70
26	LA	24	G	O4'-C1'-N9	9.33	115.67	108.20
26	LA	1612	C	N3-C2-O2	-9.33	115.37	121.90
26	LA	1905	C	C5'-C4'-C3'	-9.33	101.07	116.00
26	LA	1951	U	P-O3'-C3'	9.33	130.90	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	LO	28	PHE	CB-CG-CD2	9.33	127.33	120.80
2	SA	442	G	N9-C4-C5	-9.33	101.67	105.40
2	SA	271	C	N3-C4-C5	9.33	125.63	121.90
25	LB	105	G	C5-C6-O6	9.33	134.20	128.60
26	LA	368	A	O4'-C1'-N9	9.33	115.66	108.20
26	LA	896	A	C5-C6-N1	9.33	122.36	117.70
26	LA	1722	A	N1-C6-N6	9.33	124.20	118.60
2	SA	1391	U	N1-C2-N3	9.33	120.50	114.90
2	SA	1454	G	O4'-C1'-N9	9.33	115.66	108.20
26	LA	285	G	C5-N7-C8	-9.33	99.64	104.30
26	LA	783	A	O4'-C1'-N9	9.33	115.66	108.20
26	LA	2161	C	C5-C4-N4	-9.33	113.67	120.20
26	LA	2680	U	C6-N1-C2	-9.33	115.41	121.00
2	SA	321	A	C4-C5-N7	-9.32	106.04	110.70
2	SA	749	A	N1-C6-N6	9.32	124.19	118.60
25	LB	67	G	C4-C5-N7	-9.32	107.07	110.80
26	LA	1543	G	C5-C6-N1	9.32	116.16	111.50
26	LA	277	G	C1'-O4'-C4'	-9.32	102.44	109.90
42	L6	63	TYR	CB-CG-CD2	-9.32	115.41	121.00
48	LN	66	PHE	CB-CG-CD2	9.32	127.33	120.80
2	SA	824	G	C5-C6-N1	9.32	116.16	111.50
2	SA	1194	U	C5'-C4'-O4'	9.32	120.29	109.10
2	SA	1266	G	O4'-C1'-N9	9.32	115.66	108.20
2	SA	1323	G	N1-C2-N2	-9.32	107.81	116.20
26	LA	2011	U	C5'-C4'-O4'	9.32	120.28	109.10
26	LA	2123	G	O4'-C1'-N9	9.32	115.66	108.20
2	SA	1263	C	O4'-C1'-N1	9.32	115.65	108.20
26	LA	966	G	C4-C5-N7	-9.32	107.07	110.80
26	LA	1066	U	C5-C4-O4	-9.32	120.31	125.90
2	SA	26	A	N9-C4-C5	9.32	109.53	105.80
26	LA	208	C	O4'-C1'-N1	9.31	115.65	108.20
2	SA	211	G	N3-C2-N2	9.31	126.42	119.90
2	SA	337	G	N3-C4-N9	9.31	131.59	126.00
2	SA	1057	G	O4'-C1'-N9	9.31	115.65	108.20
26	LA	427	U	C2-N3-C4	-9.31	121.41	127.00
57	LS	29	ARG	NE-CZ-NH1	9.31	124.96	120.30
26	LA	610	C	O4'-C1'-N1	9.31	115.65	108.20
26	LA	841	G	N7-C8-N9	-9.31	108.44	113.10
2	SA	559	A	O4'-C1'-N9	9.31	115.64	108.20
26	LA	379	G	N9-C4-C5	9.31	109.12	105.40
26	LA	2252	G	C5-C6-N1	9.31	116.15	111.50
26	LA	2391	G	N9-C4-C5	-9.31	101.68	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2399	G	C5-C6-O6	-9.31	123.02	128.60
26	LA	1311	G	C4-C5-N7	-9.31	107.08	110.80
2	SA	165	G	N1-C6-O6	-9.30	114.32	119.90
3	S1	17	U	P-O3'-C3'	9.30	130.86	119.70
26	LA	264	C	C4'-C3'-C2'	-9.30	93.30	102.60
26	LA	1694	C	C2-N3-C4	-9.30	115.25	119.90
26	LA	2373	G	N3-C4-C5	9.30	133.25	128.60
26	LA	2885	G	N9-C4-C5	-9.30	101.68	105.40
40	L4	43	ARG	NE-CZ-NH1	9.30	124.95	120.30
26	LA	2694	G	C8-N9-C4	-9.30	102.68	106.40
2	SA	399	G	C4-C5-N7	9.30	114.52	110.80
26	LA	1837	C	N3-C2-O2	-9.30	115.39	121.90
26	LA	2476	A	N1-C2-N3	9.30	133.95	129.30
2	SA	821	G	C8-N9-C4	-9.30	102.68	106.40
2	SA	1078	U	C1'-O4'-C4'	-9.29	102.46	109.90
26	LA	1141	U	C4-C5-C6	-9.29	114.12	119.70
26	LA	1168	G	C5-N7-C8	-9.30	99.65	104.30
26	LA	1435	G	C5-C6-O6	-9.29	123.02	128.60
26	LA	1622	G	C6-N1-C2	-9.29	119.52	125.10
26	LA	2025	C	C5-C6-N1	9.29	125.65	121.00
2	SA	1268	G	N3-C2-N2	9.29	126.41	119.90
26	LA	125	A	C5-C6-N1	9.29	122.35	117.70
26	LA	1713	A	C2-N3-C4	-9.29	105.95	110.60
26	LA	2715	C	C4-C5-C6	9.29	122.05	117.40
40	L4	48	TYR	CB-CG-CD2	-9.29	115.42	121.00
2	SA	1175	G	O4'-C1'-N9	9.29	115.63	108.20
26	LA	1889	A	N9-C4-C5	9.29	109.52	105.80
26	LA	2179	C	O4'-C1'-N1	9.29	115.63	108.20
26	LA	2310	C	P-O3'-C3'	9.29	130.85	119.70
26	LA	2643	G	N3-C4-N9	-9.29	120.43	126.00
54	LM	108	ARG	NE-CZ-NH2	-9.29	115.66	120.30
2	SA	780	A	N1-C2-N3	-9.29	124.66	129.30
26	LA	1032	A	O4'-C1'-N9	9.29	115.63	108.20
44	LF	61	ARG	NE-CZ-NH1	-9.29	115.66	120.30
2	SA	371	A	C4'-C3'-C2'	-9.29	93.31	102.60
26	LA	1157	G	N7-C8-N9	9.28	117.74	113.10
26	LA	1985	C	C6-N1-C2	-9.28	116.59	120.30
26	LA	873	C	O4'-C1'-N1	9.28	115.62	108.20
26	LA	922	C	P-O3'-C3'	9.28	130.84	119.70
26	LA	1577	C	P-O3'-C3'	9.28	130.84	119.70
26	LA	490	C	C1'-O4'-C4'	-9.28	102.48	109.90
55	LQ	94	ARG	NE-CZ-NH1	9.28	124.94	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1100	C	P-O5'-C5'	9.28	135.74	120.90
4	S2	60	A	N1-C2-N3	9.28	133.94	129.30
26	LA	194	G	P-O5'-C5'	9.28	135.74	120.90
26	LA	1844	C	N3-C4-C5	-9.28	118.19	121.90
2	SA	538	G	N1-C6-O6	9.27	125.47	119.90
2	SA	1290	G	N3-C2-N2	-9.27	113.41	119.90
4	S2	39	A	C5'-C4'-C3'	-9.27	101.16	116.00
26	LA	664	G	C6-N1-C2	-9.27	119.54	125.10
2	SA	682	G	N7-C8-N9	-9.27	108.47	113.10
4	S2	33	C	C4'-C3'-C2'	-9.27	93.33	102.60
26	LA	6	A	P-O3'-C3'	9.27	130.82	119.70
26	LA	490	C	N3-C4-C5	-9.27	118.19	121.90
26	LA	1236	G	C4-C5-N7	9.27	114.51	110.80
26	LA	1615	C	N3-C4-N4	9.27	124.49	118.00
26	LA	2373	G	N1-C6-O6	-9.27	114.34	119.90
26	LA	2652	C	C5'-C4'-C3'	9.27	130.83	116.00
2	SA	294	U	C6-N1-C2	-9.27	115.44	121.00
13	SM	70	ARG	NE-CZ-NH2	-9.27	115.67	120.30
26	LA	1763	G	C5-C6-O6	-9.27	123.04	128.60
3	S1	19	A	O4'-C1'-N9	9.27	115.61	108.20
2	SA	1438	G	C6-N1-C2	-9.26	119.54	125.10
26	LA	1241	A	C2-N3-C4	9.26	115.23	110.60
26	LA	1431	A	C2-N3-C4	-9.26	105.97	110.60
26	LA	1983	G	O4'-C1'-N9	9.26	115.61	108.20
26	LA	2622	U	C2-N3-C4	-9.26	121.44	127.00
26	LA	982	C	P-O3'-C3'	9.26	130.81	119.70
26	LA	2026	U	N1-C2-N3	9.26	120.46	114.90
2	SA	654	G	N1-C6-O6	9.26	125.45	119.90
25	LB	69	G	C4-C5-N7	9.26	114.50	110.80
26	LA	1077	A	C2-N3-C4	-9.26	105.97	110.60
2	SA	354	G	O4'-C1'-N9	9.26	115.60	108.20
2	SA	973	G	P-O3'-C3'	9.26	130.81	119.70
25	LB	97	C	C6-N1-C2	-9.26	116.60	120.30
26	LA	101	A	N1-C6-N6	9.26	124.15	118.60
26	LA	1107	G	C5'-C4'-C3'	-9.26	101.19	116.00
26	LA	2550	G	N3-C4-N9	9.26	131.55	126.00
26	LA	1154	G	N1-C6-O6	9.26	125.45	119.90
26	LA	2219	U	C5-C6-N1	-9.26	118.07	122.70
2	SA	1416	G	C6-N1-C2	-9.25	119.55	125.10
26	LA	853	C	C6-N1-C2	-9.25	116.60	120.30
26	LA	1061	U	N3-C4-C5	9.25	120.15	114.60
26	LA	1323	C	O4'-C1'-N1	9.25	115.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	851	G	N9-C4-C5	9.25	109.10	105.40
26	LA	394	C	N3-C2-O2	-9.25	115.42	121.90
26	LA	923	G	P-O3'-C3'	-9.25	108.60	119.70
26	LA	950	G	C4-C5-N7	9.25	114.50	110.80
26	LA	1687	G	N1-C2-N3	9.25	129.45	123.90
26	LA	2417	C	C2-N3-C4	-9.25	115.28	119.90
2	SA	98	A	C8-N9-C4	9.25	109.50	105.80
26	LA	306	U	C5-C6-N1	9.25	127.32	122.70
26	LA	2546	U	O4'-C1'-N1	9.25	115.60	108.20
2	SA	235	C	P-O5'-C5'	-9.24	106.11	120.90
26	LA	2550	G	C8-N9-C4	9.24	110.10	106.40
2	SA	424	G	C5-C6-O6	-9.24	123.06	128.60
2	SA	654	G	N1-C2-N2	-9.24	107.88	116.20
26	LA	1171	G	C5-C6-N1	9.24	116.12	111.50
26	LA	1575	C	O4'-C1'-N1	9.24	115.59	108.20
26	LA	1649	G	N7-C8-N9	9.24	117.72	113.10
26	LA	2654	A	C2-N3-C4	-9.24	105.98	110.60
26	LA	2682	A	N1-C2-N3	-9.24	124.68	129.30
2	SA	90	C	C3'-C2'-C1'	-9.24	94.11	101.50
2	SA	1374	A	C1'-O4'-C4'	-9.24	102.51	109.90
6	SU	16	ARG	NE-CZ-NH1	9.24	124.92	120.30
25	LB	33	G	C5-C6-N1	-9.24	106.88	111.50
26	LA	232	G	P-O3'-C3'	-9.24	108.61	119.70
26	LA	1262	A	N7-C8-N9	-9.24	109.18	113.80
26	LA	2514	U	C5-C4-O4	-9.24	120.36	125.90
26	LA	2529	G	C3'-C2'-C1'	9.24	108.89	101.50
26	LA	2601	C	C2-N1-C1'	9.24	128.96	118.80
2	SA	156	C	N3-C4-C5	-9.24	118.21	121.90
2	SA	818	G	N1-C6-O6	9.24	125.44	119.90
26	LA	805	G	C4-C5-N7	9.24	114.50	110.80
26	LA	1956	U	N1-C2-N3	9.24	120.44	114.90
26	LA	2606	C	C5-C4-N4	-9.24	113.73	120.20
26	LA	2824	C	C2-N3-C4	-9.23	115.28	119.90
2	SA	357	G	C5-C6-O6	-9.23	123.06	128.60
2	SA	367	U	N3-C2-O2	-9.23	115.74	122.20
2	SA	1230	C	N3-C4-N4	9.23	124.46	118.00
25	LB	76	G	N3-C2-N2	9.23	126.36	119.90
26	LA	1176	U	N3-C2-O2	-9.23	115.74	122.20
26	LA	1693	U	N1-C2-N3	9.23	120.44	114.90
26	LA	2068	U	O4'-C1'-N1	9.23	115.59	108.20
2	SA	136	C	O4'-C1'-N1	9.23	115.58	108.20
2	SA	784	A	O4'-C1'-N9	9.23	115.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	836	G	N9-C4-C5	9.23	109.09	105.40
26	LA	1292	G	C5-C6-O6	-9.23	123.06	128.60
38	LE	33	ARG	NE-CZ-NH1	-9.23	115.68	120.30
26	LA	2886	A	O4'-C1'-N9	9.23	115.58	108.20
19	SC	168	ARG	NE-CZ-NH2	-9.23	115.69	120.30
2	SA	388	G	N3-C4-C5	-9.23	123.99	128.60
2	SA	451	A	C8-N9-C4	9.23	109.49	105.80
2	SA	485	U	C6-N1-C2	-9.23	115.46	121.00
2	SA	944	G	N1-C6-O6	9.23	125.44	119.90
2	SA	1303	C	O4'-C1'-N1	9.23	115.58	108.20
2	SA	1454	G	C5'-C4'-C3'	9.23	130.76	116.00
3	S1	19	A	P-O5'-C5'	9.23	135.66	120.90
25	LB	115	A	N1-C2-N3	-9.23	124.69	129.30
26	LA	943	A	N1-C6-N6	-9.23	113.06	118.60
26	LA	1709	U	N1-C2-N3	9.23	120.44	114.90
26	LA	1805	A	N9-C4-C5	-9.23	102.11	105.80
26	LA	1807	G	C4-C5-N7	9.23	114.49	110.80
26	LA	2726	A	C4'-C3'-C2'	-9.23	93.37	102.60
44	LF	158	PHE	CB-CG-CD1	-9.23	114.34	120.80
2	SA	251	G	O4'-C1'-N9	9.22	115.58	108.20
2	SA	513	C	C2-N3-C4	9.22	124.51	119.90
2	SA	551	U	N1-C2-N3	-9.22	109.36	114.90
2	SA	780	A	C4-C5-C6	9.22	121.61	117.00
25	LB	25	U	N3-C2-O2	-9.22	115.74	122.20
26	LA	397	U	C5'-C4'-C3'	-9.22	101.24	116.00
26	LA	1388	G	C5-C6-O6	-9.22	123.07	128.60
2	SA	441	A	C6-C5-N7	-9.22	125.84	132.30
26	LA	2617	U	O4'-C1'-N1	9.22	115.58	108.20
2	SA	691	G	C6-C5-N7	-9.22	124.87	130.40
2	SA	841	C	N1-C2-O2	9.22	124.43	118.90
2	SA	844	G	C6-N1-C2	9.22	130.63	125.10
2	SA	1144	G	C5-N7-C8	-9.22	99.69	104.30
26	LA	984	A	O4'-C1'-N9	-9.22	100.82	108.20
26	LA	1389	G	C5-C6-O6	-9.22	123.07	128.60
26	LA	2104	C	N3-C2-O2	9.22	128.35	121.90
26	LA	1022	G	N1-C2-N3	9.22	129.43	123.90
2	SA	1053	G	P-O3'-C3'	-9.21	108.64	119.70
26	LA	352	A	O4'-C1'-N9	9.22	115.57	108.20
26	LA	1075	C	N3-C4-C5	-9.22	118.21	121.90
26	LA	1608	A	C6-N1-C2	-9.21	113.07	118.60
26	LA	2258	C	C6-N1-C1'	-9.22	109.74	120.80
29	LV	12	ARG	NE-CZ-NH2	-9.21	115.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	113	U	C4'-C3'-C2'	-9.21	93.39	102.60
2	SA	520	A	C2-N3-C4	-9.21	106.00	110.60
2	SA	159	G	N9-C1'-C2'	-9.21	101.87	112.00
26	LA	2073	C	C4-C5-C6	9.21	122.00	117.40
2	SA	336	A	N9-C4-C5	-9.21	102.12	105.80
2	SA	895	G	C2-N3-C4	9.21	116.50	111.90
26	LA	597	G	O4'-C1'-N9	9.21	115.56	108.20
26	LA	317	G	N7-C8-N9	-9.20	108.50	113.10
26	LA	1702	G	C5-C6-O6	-9.21	123.08	128.60
26	LA	1871	A	N1-C6-N6	-9.20	113.08	118.60
26	LA	2232	C	N3-C4-N4	9.20	124.44	118.00
26	LA	2638	G	N3-C4-N9	9.20	131.52	126.00
26	LA	2796	U	N3-C4-O4	9.21	125.84	119.40
2	SA	683	G	C5-N7-C8	-9.20	99.70	104.30
26	LA	322	A	P-O3'-C3'	9.20	130.74	119.70
2	SA	278	G	C8-N9-C4	-9.20	102.72	106.40
2	SA	1229	A	C4-C5-N7	-9.20	106.10	110.70
2	SA	1525	G	C8-N9-C4	9.20	110.08	106.40
26	LA	2752	C	O4'-C1'-N1	9.20	115.56	108.20
2	SA	560	A	N7-C8-N9	-9.20	109.20	113.80
2	SA	847	G	C1'-O4'-C4'	-9.20	102.54	109.90
26	LA	1494	A	C5-C6-N6	-9.20	116.34	123.70
26	LA	2708	G	C6-N1-C2	-9.20	119.58	125.10
26	LA	2863	C	N1-C2-O2	9.20	124.42	118.90
2	SA	564	C	C5-C6-N1	-9.20	116.40	121.00
2	SA	1539	C	C5-C6-N1	9.20	125.60	121.00
6	SU	66	ARG	NH1-CZ-NH2	-9.20	109.28	119.40
26	LA	1740	G	C8-N9-C4	-9.20	102.72	106.40
26	LA	729	G	C5'-C4'-C3'	-9.19	101.29	116.00
26	LA	1510	G	C8-N9-C1'	-9.19	115.05	127.00
26	LA	1694	C	C3'-C2'-C1'	-9.20	94.14	101.50
2	SA	582	C	C5'-C4'-O4'	9.19	120.13	109.10
2	SA	843	U	C2-N1-C1'	9.19	128.73	117.70
2	SA	964	A	P-O3'-C3'	9.19	130.73	119.70
2	SA	1008	U	O4'-C1'-N1	9.19	115.55	108.20
2	SA	350	G	C8-N9-C4	9.19	110.08	106.40
2	SA	62	U	N1-C2-N3	9.19	120.41	114.90
2	SA	1064	G	N3-C2-N2	9.19	126.33	119.90
26	LA	1068	G	C8-N9-C4	-9.19	102.72	106.40
26	LA	1180	U	N1-C2-O2	9.19	129.23	122.80
2	SA	1020	G	C4-C5-N7	-9.19	107.12	110.80
2	SA	393	A	C4'-C3'-C2'	-9.19	93.42	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	739	C	C5-C6-N1	-9.19	116.41	121.00
2	SA	1270	G	O4'-C1'-N9	9.19	115.55	108.20
26	LA	193	U	N1-C2-N3	9.19	120.41	114.90
26	LA	1571	A	P-O3'-C3'	9.19	130.72	119.70
26	LA	2140	G	C4'-C3'-C2'	-9.19	93.41	102.60
2	SA	191	G	C5-N7-C8	9.18	108.89	104.30
2	SA	835	U	O4'-C1'-N1	9.18	115.55	108.20
2	SA	1176	A	C5-C6-N1	9.18	122.29	117.70
25	LB	53	A	N1-C6-N6	-9.18	113.09	118.60
2	SA	745	G	O4'-C1'-N9	9.18	115.55	108.20
26	LA	470	A	O4'-C1'-N9	9.18	115.55	108.20
26	LA	522	A	C5-C6-N6	-9.18	116.35	123.70
26	LA	2498	C	C5-C6-N1	9.18	125.59	121.00
2	SA	276	G	P-O5'-C5'	9.18	135.59	120.90
2	SA	639	G	C6-N1-C2	-9.18	119.59	125.10
2	SA	1203	C	C6-N1-C2	-9.18	116.63	120.30
26	LA	1591	A	N1-C6-N6	-9.18	113.09	118.60
26	LA	2083	G	P-O3'-C3'	9.18	130.72	119.70
26	LA	2245	U	P-O5'-C5'	9.18	135.59	120.90
26	LA	2334	U	C5-C4-O4	-9.18	120.39	125.90
26	LA	2405	G	N3-C4-C5	9.18	133.19	128.60
2	SA	400	C	O4'-C1'-N1	9.18	115.54	108.20
2	SA	573	A	C8-N9-C4	-9.18	102.13	105.80
2	SA	893	C	O4'-C1'-N1	9.18	115.54	108.20
26	LA	447	A	C5-C6-N1	9.18	122.29	117.70
26	LA	451	U	C5-C4-O4	-9.18	120.39	125.90
26	LA	1248	G	C4-C5-N7	9.18	114.47	110.80
2	SA	1426	G	N1-C6-O6	9.17	125.40	119.90
26	LA	2726	A	N9-C1'-C2'	-9.17	101.91	112.00
25	LB	11	C	O4'-C1'-N1	9.17	115.54	108.20
26	LA	858	G	O4'-C1'-N9	9.17	115.54	108.20
26	LA	1107	G	C4-C5-N7	9.17	114.47	110.80
26	LA	1428	C	C4-C5-C6	9.17	121.99	117.40
26	LA	1943	U	C2-N1-C1'	9.17	128.71	117.70
26	LA	2080	A	N1-C6-N6	-9.17	113.10	118.60
26	LA	2677	G	C2-N3-C4	-9.17	107.31	111.90
2	SA	1167	A	C1'-O4'-C4'	-9.17	102.56	109.90
26	LA	98	G	N1-C2-N3	-9.17	118.40	123.90
26	LA	1351	C	N3-C4-N4	-9.17	111.58	118.00
26	LA	2719	G	N1-C2-N3	9.17	129.40	123.90
26	LA	1314	C	C5-C4-N4	-9.17	113.78	120.20
26	LA	1530	G	N1-C6-O6	9.17	125.40	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1836	C	C5-C4-N4	-9.17	113.78	120.20
26	LA	1904	G	C3'-C2'-C1'	-9.17	94.17	101.50
2	SA	198	G	C8-N9-C4	-9.17	102.73	106.40
2	SA	362	G	C5-C6-O6	-9.17	123.10	128.60
2	SA	1076	U	P-O5'-C5'	9.17	135.57	120.90
4	S2	65	G	C2-N3-C4	9.17	116.48	111.90
26	LA	865	C	O4'-C1'-N1	9.17	115.53	108.20
2	SA	959	A	O4'-C1'-N9	9.17	115.53	108.20
3	S1	44	U	C6-N1-C2	-9.17	115.50	121.00
3	S1	45	G	C4-N9-C1'	9.17	138.42	126.50
26	LA	1806	C	O4'-C1'-N1	9.17	115.53	108.20
33	LZ	17	ARG	NE-CZ-NH1	-9.17	115.72	120.30
2	SA	380	G	O4'-C1'-N9	9.16	115.53	108.20
2	SA	449	G	N3-C4-N9	9.16	131.50	126.00
2	SA	1264	U	P-O5'-C5'	9.16	135.56	120.90
26	LA	1695	G	O4'-C1'-N9	9.16	115.53	108.20
2	SA	1247	U	N3-C4-C5	9.16	120.10	114.60
4	S2	64	G	N9-C4-C5	-9.16	101.73	105.40
4	S2	67	C	O4'-C1'-N1	9.16	115.53	108.20
26	LA	373	U	N3-C4-C5	-9.16	109.10	114.60
26	LA	753	A	OP1-P-OP2	-9.16	105.86	119.60
26	LA	1170	C	O4'-C1'-N1	9.16	115.53	108.20
26	LA	1567	G	C5-C6-O6	-9.16	123.10	128.60
26	LA	2295	C	C3'-C2'-C1'	9.16	108.83	101.50
2	SA	625	U	N1-C2-N3	9.16	120.40	114.90
2	SA	176	C	P-O3'-C3'	-9.16	108.71	119.70
26	LA	125	A	C3'-C2'-C1'	9.16	108.83	101.50
26	LA	641	U	C5-C4-O4	-9.16	120.41	125.90
2	SA	696	A	N1-C6-N6	9.16	124.09	118.60
26	LA	642	U	C5-C4-O4	-9.16	120.41	125.90
26	LA	757	G	C5-N7-C8	-9.16	99.72	104.30
26	LA	1931	U	C5-C4-O4	-9.16	120.41	125.90
26	LA	2772	C	N3-C2-O2	-9.16	115.49	121.90
26	LA	2885	G	N3-C4-N9	9.16	131.49	126.00
26	LA	2888	C	N3-C4-N4	9.16	124.41	118.00
2	SA	532	A	C5-C6-N1	-9.15	113.12	117.70
2	SA	1502	A	C2-N3-C4	-9.15	106.02	110.60
13	SM	56	ARG	NE-CZ-NH1	9.15	124.88	120.30
26	LA	751	A	C5-C6-N1	9.15	122.28	117.70
26	LA	1321	A	C6-N1-C2	-9.15	113.11	118.60
26	LA	2121	G	N3-C2-N2	-9.15	113.49	119.90
4	S2	74	A	N9-C4-C5	-9.15	102.14	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	275	C	C2-N1-C1'	-9.15	108.73	118.80
26	LA	1590	A	C5-C6-N6	-9.15	116.38	123.70
26	LA	1950	G	P-O5'-C5'	9.15	135.54	120.90
31	LX	21	ARG	NE-CZ-NH2	-9.15	115.72	120.30
2	SA	38	G	N3-C4-C5	-9.15	124.03	128.60
26	LA	590	A	P-O5'-C5'	9.15	135.54	120.90
26	LA	1548	A	C8-N9-C4	-9.15	102.14	105.80
26	LA	1839	G	N1-C6-O6	9.15	125.39	119.90
26	LA	1870	C	C2-N1-C1'	9.15	128.87	118.80
26	LA	2223	G	P-O3'-C3'	9.15	130.68	119.70
2	SA	148	G	O4'-C1'-N9	9.15	115.52	108.20
2	SA	752	G	C8-N9-C4	9.15	110.06	106.40
26	LA	454	A	N1-C6-N6	-9.15	113.11	118.60
2	SA	362	G	N3-C4-C5	9.15	133.17	128.60
2	SA	1146	A	C5-C6-N6	9.15	131.02	123.70
26	LA	773	U	C5'-C4'-C3'	-9.15	101.37	116.00
26	LA	1756	G	C8-N9-C4	-9.15	102.74	106.40
26	LA	145	C	O4'-C1'-N1	9.14	115.51	108.20
26	LA	2488	G	O4'-C1'-N9	9.14	115.52	108.20
26	LA	2805	C	O4'-C1'-N1	9.14	115.52	108.20
2	SA	796	C	P-O3'-C3'	-9.14	108.73	119.70
2	SA	1325	C	C6-N1-C2	-9.14	116.64	120.30
24	S3	2	ARG	NE-CZ-NH1	9.14	124.87	120.30
26	LA	392	U	C2-N3-C4	-9.14	121.52	127.00
26	LA	2410	G	C4'-C3'-C2'	-9.14	93.46	102.60
13	SM	2	ARG	NE-CZ-NH1	9.14	124.87	120.30
37	LC	208	TYR	CB-CG-CD2	9.14	126.48	121.00
3	S1	44	U	C5-C6-N1	9.14	127.27	122.70
26	LA	883	G	C4'-C3'-C2'	-9.14	93.46	102.60
26	LA	774	G	N9-C4-C5	-9.13	101.75	105.40
25	LB	48	U	O4'-C1'-N1	9.13	115.51	108.20
26	LA	894	U	P-O3'-C3'	-9.13	108.74	119.70
26	LA	967	U	N3-C4-O4	-9.13	113.01	119.40
26	LA	1116	G	C8-N9-C4	9.13	110.05	106.40
2	SA	434	U	N3-C2-O2	-9.13	115.81	122.20
26	LA	266	G	C5'-C4'-C3'	9.13	130.61	116.00
26	LA	1034	G	P-O3'-C3'	9.13	130.66	119.70
26	LA	1431	A	N1-C2-N3	9.13	133.87	129.30
2	SA	1320	C	N3-C4-C5	-9.13	118.25	121.90
26	LA	2347	C	C6-N1-C2	-9.13	116.65	120.30
2	SA	247	G	O4'-C1'-N9	9.13	115.50	108.20
2	SA	797	C	C5-C6-N1	9.13	125.56	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2607	G	C4-N9-C1'	-9.13	114.63	126.50
26	LA	2844	G	N3-C2-N2	-9.13	113.51	119.90
2	SA	1163	A	C8-N9-C4	9.12	109.45	105.80
26	LA	108	G	N3-C2-N2	9.12	126.29	119.90
26	LA	1277	G	O4'-C1'-N9	9.13	115.50	108.20
26	LA	1591	A	N9-C4-C5	-9.13	102.15	105.80
26	LA	2324	U	C5-C4-O4	9.12	131.38	125.90
26	LA	2836	U	C6-N1-C2	-9.13	115.52	121.00
26	LA	2851	A	C5-C6-N1	9.13	122.26	117.70
26	LA	2389	G	C8-N9-C4	9.12	110.05	106.40
26	LA	664	G	N3-C4-C5	-9.12	124.04	128.60
26	LA	1308	A	C8-N9-C4	-9.12	102.15	105.80
26	LA	1560	G	N1-C6-O6	9.12	125.37	119.90
53	LP	94	TYR	CB-CG-CD1	-9.12	115.53	121.00
26	LA	808	G	O4'-C1'-N9	9.12	115.50	108.20
2	SA	846	G	O4'-C1'-N9	9.12	115.49	108.20
26	LA	475	C	C2-N3-C4	9.12	124.46	119.90
26	LA	1244	A	N9-C4-C5	9.12	109.45	105.80
26	LA	1927	A	C8-N9-C4	-9.12	102.15	105.80
26	LA	2678	C	O4'-C1'-N1	9.12	115.50	108.20
26	LA	2271	G	N7-C8-N9	9.12	117.66	113.10
2	SA	276	G	P-O3'-C3'	9.12	130.64	119.70
26	LA	2165	C	C4'-C3'-C2'	-9.12	93.48	102.60
2	SA	541	G	N1-C6-O6	-9.11	114.43	119.90
2	SA	1092	A	O4'-C1'-N9	9.11	115.49	108.20
2	SA	1270	G	N3-C2-N2	9.11	126.28	119.90
26	LA	858	G	C4-C5-N7	9.11	114.45	110.80
26	LA	1666	G	O4'-C1'-N9	9.11	115.49	108.20
26	LA	1840	G	C5-C6-N1	9.11	116.06	111.50
2	SA	1464	U	O4'-C1'-N1	9.11	115.49	108.20
25	LB	118	C	C6-N1-C2	-9.11	116.66	120.30
26	LA	297	G	C5'-C4'-C3'	-9.11	101.42	116.00
26	LA	1452	G	N9-C4-C5	-9.11	101.75	105.40
26	LA	1612	C	C5-C6-N1	9.11	125.56	121.00
37	LC	163	TYR	CB-CG-CD2	9.11	126.47	121.00
2	SA	106	C	O4'-C1'-N1	9.11	115.49	108.20
26	LA	1020	A	P-O3'-C3'	9.11	130.63	119.70
26	LA	1561	C	C2-N3-C4	-9.11	115.35	119.90
26	LA	1708	C	O4'-C1'-N1	9.11	115.49	108.20
26	LA	2086	U	C5-C4-O4	-9.11	120.44	125.90
26	LA	2829	A	C5-N7-C8	9.11	108.45	103.90
2	SA	504	C	C2-N3-C4	-9.11	115.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	708	C	C3'-C2'-C1'	9.11	108.78	101.50
26	LA	43	G	C8-N9-C4	-9.11	102.76	106.40
26	LA	725	G	C5-C6-O6	-9.11	123.14	128.60
26	LA	991	C	O4'-C1'-N1	9.11	115.48	108.20
26	LA	1168	G	P-O5'-C5'	9.11	135.47	120.90
26	LA	1341	G	C1'-O4'-C4'	-9.11	102.62	109.90
26	LA	2126	A	P-O3'-C3'	9.11	130.63	119.70
2	SA	232	G	N9-C4-C5	9.10	109.04	105.40
2	SA	931	C	C5'-C4'-C3'	9.10	130.57	116.00
26	LA	2721	A	C5'-C4'-O4'	9.10	120.03	109.10
26	LA	294	A	N1-C6-N6	9.10	124.06	118.60
26	LA	543	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	1602	U	N3-C4-O4	9.10	125.77	119.40
26	LA	2040	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	2083	G	C5-C6-O6	-9.10	123.14	128.60
2	SA	1341	U	C1'-O4'-C4'	9.10	117.18	109.90
2	SA	1375	A	P-O5'-C5'	9.10	135.46	120.90
26	LA	1011	G	N1-C6-O6	9.10	125.36	119.90
26	LA	1287	A	N9-C4-C5	9.10	109.44	105.80
8	SH	14	ARG	NE-CZ-NH2	-9.10	115.75	120.30
26	LA	2862	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	2903	U	N3-C2-O2	-9.10	115.83	122.20
26	LA	1075	C	C2-N3-C4	9.10	124.45	119.90
2	SA	664	G	N3-C2-N2	9.10	126.27	119.90
2	SA	1035	A	O4'-C1'-N9	9.10	115.48	108.20
26	LA	2550	G	O4'-C1'-N9	9.10	115.48	108.20
2	SA	440	C	O4'-C1'-N1	9.09	115.47	108.20
2	SA	1529	G	O4'-C1'-N9	9.09	115.47	108.20
2	SA	1486	G	C4'-C3'-C2'	-9.09	93.51	102.60
26	LA	1470	A	C5-N7-C8	-9.09	99.35	103.90
26	LA	2178	C	O4'-C1'-N1	9.09	115.47	108.20
27	LD	216	ARG	NE-CZ-NH2	-9.09	115.75	120.30
2	SA	1276	G	N9-C4-C5	9.09	109.04	105.40
3	S1	58	C	C2-N3-C4	9.09	124.44	119.90
26	LA	85	G	N1-C6-O6	-9.09	114.45	119.90
26	LA	577	G	C1'-O4'-C4'	-9.09	102.63	109.90
26	LA	1998	A	N1-C2-N3	-9.09	124.75	129.30
2	SA	22	G	N1-C6-O6	-9.09	114.45	119.90
2	SA	1102	A	N3-C4-C5	-9.09	120.44	126.80
2	SA	1172	C	O4'-C1'-N1	9.09	115.47	108.20
26	LA	1097	U	C5-C6-N1	-9.09	118.16	122.70
26	LA	2209	G	N9-C4-C5	-9.09	101.77	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	968	A	C5-C6-N1	-9.09	113.16	117.70
2	SA	1216	A	N1-C6-N6	-9.09	113.15	118.60
26	LA	488	G	N3-C2-N2	9.09	126.26	119.90
26	LA	1248	G	C5-N7-C8	-9.09	99.76	104.30
26	LA	1354	A	O4'-C1'-N9	9.09	115.47	108.20
26	LA	1804	C	C2-N3-C4	9.09	124.44	119.90
26	LA	2541	A	N9-C4-C5	9.09	109.43	105.80
45	LG	19	PHE	CB-CG-CD1	-9.09	114.44	120.80
2	SA	132	C	C5-C4-N4	9.08	126.56	120.20
2	SA	1051	C	O4'-C1'-N1	9.08	115.47	108.20
2	SA	1449	C	C5'-C4'-C3'	-9.08	101.47	116.00
26	LA	79	C	C4'-C3'-C2'	-9.08	93.52	102.60
26	LA	1123	C	N1-C1'-C2'	-9.08	102.01	112.00
26	LA	2610	C	C2-N1-C1'	9.08	128.79	118.80
2	SA	78	A	N3-C4-C5	-9.08	120.44	126.80
26	LA	1307	A	P-O3'-C3'	9.08	130.60	119.70
2	SA	266	G	N7-C8-N9	9.08	117.64	113.10
2	SA	397	A	O4'-C1'-N9	9.08	115.46	108.20
2	SA	775	G	N1-C6-O6	9.08	125.35	119.90
26	LA	251	A	C5-N7-C8	-9.08	99.36	103.90
26	LA	1652	A	N7-C8-N9	-9.08	109.26	113.80
26	LA	1925	C	C6-N1-C2	-9.08	116.67	120.30
26	LA	2507	C	P-O5'-C5'	9.08	135.43	120.90
25	LB	45	A	C5-N7-C8	-9.08	99.36	103.90
26	LA	2278	A	C4-C5-N7	-9.08	106.16	110.70
26	LA	2497	A	N9-C4-C5	9.08	109.43	105.80
2	SA	401	C	C6-N1-C2	9.07	123.93	120.30
2	SA	449	G	N1-C6-O6	9.07	125.34	119.90
26	LA	793	A	C5-N7-C8	-9.07	99.36	103.90
26	LA	1530	G	C8-N9-C4	-9.07	102.77	106.40
26	LA	1745	A	N7-C8-N9	9.07	118.34	113.80
2	SA	668	G	N3-C4-C5	9.07	133.14	128.60
2	SA	854	U	O4'-C1'-N1	9.07	115.46	108.20
26	LA	574	A	C3'-C2'-C1'	-9.07	94.24	101.50
26	LA	71	A	C5-C6-N1	9.07	122.23	117.70
26	LA	109	C	P-O3'-C3'	9.07	130.58	119.70
26	LA	825	A	C2-N3-C4	-9.07	106.06	110.60
26	LA	2321	U	O4'-C1'-N1	9.07	115.46	108.20
26	LA	1667	G	C4-C5-N7	9.07	114.43	110.80
26	LA	2268	A	C6-N1-C2	-9.07	113.16	118.60
2	SA	699	C	N3-C4-C5	-9.07	118.27	121.90
13	SM	106	ARG	NE-CZ-NH1	9.07	124.83	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	560	C	N3-C4-C5	9.07	125.53	121.90
26	LA	1232	G	C5-N7-C8	-9.07	99.77	104.30
26	LA	1964	G	O4'-C1'-N9	-9.07	100.95	108.20
26	LA	1404	C	C6-N1-C2	-9.07	116.67	120.30
45	LG	127	TYR	CB-CG-CD2	9.07	126.44	121.00
26	LA	165	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	885	G	C5-C6-O6	-9.06	123.16	128.60
2	SA	1392	G	C6-N1-C2	-9.06	119.66	125.10
26	LA	1843	C	C5-C4-N4	-9.06	113.86	120.20
2	SA	546	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	791	G	C8-N9-C4	9.06	110.02	106.40
22	SF	4	TYR	CB-CG-CD1	-9.06	115.56	121.00
26	LA	220	G	C4-N9-C1'	9.06	138.28	126.50
26	LA	356	G	C2-N3-C4	9.06	116.43	111.90
26	LA	1373	A	N7-C8-N9	-9.06	109.27	113.80
26	LA	1596	A	C2-N3-C4	9.06	115.13	110.60
26	LA	2381	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	529	G	C5-C6-O6	-9.06	123.16	128.60
2	SA	1055	A	C4'-C3'-C2'	-9.06	93.54	102.60
26	LA	2669	G	C5-C6-O6	-9.06	123.17	128.60
3	S1	16	A	C8-N9-C4	-9.06	102.18	105.80
26	LA	621	A	C4-C5-N7	-9.06	106.17	110.70
26	LA	2497	A	C2-N3-C4	-9.06	106.07	110.60
26	LA	2768	U	N1-C2-N3	9.06	120.33	114.90
2	SA	167	A	C8-N9-C4	-9.05	102.18	105.80
2	SA	524	G	C5-C6-O6	-9.05	123.17	128.60
2	SA	1473	G	C5-C6-O6	9.06	134.03	128.60
26	LA	10	A	N3-C4-N9	-9.06	120.16	127.40
26	LA	42	A	P-O5'-C5'	9.06	135.39	120.90
26	LA	388	G	N1-C6-O6	-9.05	114.47	119.90
26	LA	939	G	N3-C4-C5	-9.05	124.07	128.60
26	LA	954	G	N1-C2-N2	-9.05	108.05	116.20
26	LA	2165	C	P-O3'-C3'	-9.05	108.83	119.70
26	LA	2587	A	C5'-C4'-C3'	9.06	130.49	116.00
4	S2	42	C	C6-N1-C2	-9.05	116.68	120.30
26	LA	1787	A	N1-C2-N3	9.05	133.83	129.30
26	LA	2177	C	O4'-C1'-N1	9.05	115.44	108.20
26	LA	2558	C	N3-C4-N4	9.05	124.34	118.00
26	LA	2602	A	C2-N3-C4	9.05	115.13	110.60
4	S2	30	G	C5-N7-C8	-9.05	99.77	104.30
26	LA	2144	G	N3-C4-N9	-9.05	120.57	126.00
2	SA	222	C	O4'-C1'-N1	9.05	115.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1472	U	O4'-C1'-N1	9.05	115.44	108.20
9	SI	84	ARG	NE-CZ-NH2	-9.05	115.78	120.30
19	SC	130	ARG	CD-NE-CZ	9.05	136.27	123.60
26	LA	1705	A	N1-C6-N6	9.05	124.03	118.60
2	SA	72	A	N1-C2-N3	9.04	133.82	129.30
2	SA	846	G	C4-C5-N7	9.04	114.42	110.80
26	LA	1459	G	P-O3'-C3'	9.04	130.55	119.70
26	LA	2254	C	O4'-C1'-N1	9.04	115.43	108.20
26	LA	1196	C	O4'-C1'-N1	9.04	115.43	108.20
2	SA	455	G	N1-C6-O6	9.04	125.32	119.90
2	SA	1377	A	OP1-P-OP2	-9.04	106.04	119.60
26	LA	283	G	N9-C4-C5	-9.04	101.78	105.40
26	LA	664	G	C2-N3-C4	9.04	116.42	111.90
26	LA	2429	G	O4'-C1'-N9	9.04	115.43	108.20
2	SA	425	G	N3-C2-N2	9.04	126.23	119.90
2	SA	952	U	O4'-C1'-N1	9.04	115.43	108.20
4	S2	30	G	C5'-C4'-C3'	9.04	130.46	116.00
26	LA	2309	A	C8-N9-C4	9.04	109.42	105.80
26	LA	1222	U	C3'-C2'-C1'	9.04	108.73	101.50
26	LA	1967	C	P-O5'-C5'	9.04	135.36	120.90
26	LA	2123	G	C4-C5-N7	-9.03	107.19	110.80
26	LA	2887	A	N1-C2-N3	9.03	133.82	129.30
26	LA	945	A	C5-C6-N6	-9.03	116.47	123.70
26	LA	2148	G	O4'-C1'-N9	9.03	115.42	108.20
26	LA	2560	A	C5-N7-C8	-9.03	99.38	103.90
46	LH	151	ARG	NE-CZ-NH2	-9.03	115.78	120.30
2	SA	756	C	P-O3'-C3'	9.03	130.53	119.70
19	SC	53	ARG	NE-CZ-NH2	-9.03	115.78	120.30
25	LB	41	G	C3'-C2'-C1'	-9.03	94.28	101.50
26	LA	2293	G	C5'-C4'-C3'	-9.03	101.55	116.00
26	LA	1763	G	P-O3'-C3'	9.03	130.53	119.70
26	LA	2031	A	O4'-C1'-N9	9.03	115.42	108.20
2	SA	774	G	N9-C4-C5	-9.03	101.79	105.40
2	SA	958	A	C4-C5-N7	9.03	115.21	110.70
26	LA	451	U	O4'-C1'-N1	9.03	115.42	108.20
26	LA	914	G	O4'-C1'-N9	9.03	115.42	108.20
26	LA	1138	G	C4-C5-N7	-9.03	107.19	110.80
26	LA	2400	G	C5-C6-N1	9.03	116.01	111.50
26	LA	2705	A	C4-C5-C6	9.03	121.51	117.00
2	SA	171	A	O4'-C1'-N9	9.02	115.42	108.20
26	LA	463	G	N1-C6-O6	9.02	125.31	119.90
2	SA	941	G	C6-C5-N7	9.02	135.81	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2155	U	O4'-C1'-N1	9.02	115.42	108.20
26	LA	2499	C	C2-N1-C1'	9.02	128.72	118.80
26	LA	2655	G	O4'-C1'-N9	9.02	115.42	108.20
37	LC	208	TYR	CB-CG-CD1	-9.02	115.59	121.00
2	SA	1404	C	P-O5'-C5'	9.02	135.33	120.90
2	SA	92	U	C5-C6-N1	9.02	127.21	122.70
2	SA	1250	A	N7-C8-N9	9.02	118.31	113.80
4	S2	50	G	N7-C8-N9	-9.02	108.59	113.10
26	LA	668	A	O4'-C1'-N9	9.02	115.42	108.20
3	S1	26	U	C5-C6-N1	-9.02	118.19	122.70
2	SA	1348	U	C2-N3-C4	-9.02	121.59	127.00
2	SA	1487	G	C5-N7-C8	-9.02	99.79	104.30
26	LA	1674	G	C5-C6-O6	-9.02	123.19	128.60
26	LA	2258	C	C4'-C3'-C2'	-9.02	93.58	102.60
26	LA	585	G	C2-N3-C4	-9.01	107.39	111.90
26	LA	1888	G	C5-C6-N1	9.01	116.01	111.50
26	LA	1968	G	N3-C2-N2	9.01	126.21	119.90
2	SA	457	G	O4'-C1'-N9	9.01	115.41	108.20
26	LA	13	A	N1-C2-N3	-9.01	124.80	129.30
26	LA	543	G	C5-N7-C8	-9.01	99.80	104.30
26	LA	784	G	C5-C6-O6	-9.01	123.19	128.60
26	LA	2114	A	C4-C5-C6	-9.01	112.50	117.00
26	LA	2728	U	C1'-O4'-C4'	-9.01	102.69	109.90
2	SA	83	C	O4'-C1'-N1	9.01	115.41	108.20
2	SA	183	C	C6-N1-C2	9.01	123.90	120.30
2	SA	221	C	N1-C2-N3	9.01	125.50	119.20
26	LA	1007	C	C5-C6-N1	9.01	125.50	121.00
26	LA	2101	A	P-O5'-C5'	9.01	135.31	120.90
2	SA	560	A	C8-N9-C4	9.01	109.40	105.80
2	SA	1388	C	O4'-C1'-N1	9.01	115.41	108.20
16	SP	35	ARG	NE-CZ-NH1	9.00	124.80	120.30
26	LA	1126	A	C8-N9-C4	9.00	109.40	105.80
26	LA	1282	U	N3-C2-O2	-9.00	115.90	122.20
2	SA	344	A	O4'-C1'-N9	9.00	115.40	108.20
2	SA	1442	G	C5-C6-O6	9.00	134.00	128.60
14	SN	62	ARG	NE-CZ-NH1	-9.00	115.80	120.30
26	LA	306	U	N1-C2-O2	9.00	129.10	122.80
26	LA	372	G	N1-C2-N3	-9.00	118.50	123.90
26	LA	2432	A	N1-C6-N6	9.00	124.00	118.60
26	LA	2864	G	C2-N3-C4	-9.00	107.40	111.90
26	LA	118	A	C8-N9-C4	9.00	109.40	105.80
26	LA	278	A	N1-C6-N6	9.00	124.00	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1495	A	C2-N3-C4	9.00	115.10	110.60
26	LA	2131	U	N1-C2-O2	9.00	129.10	122.80
26	LA	2597	G	C6-C5-N7	-9.00	125.00	130.40
26	LA	2338	C	C4-C5-C6	9.00	121.90	117.40
26	LA	1050	A	N1-C2-N3	-8.99	124.80	129.30
26	LA	2092	U	N3-C4-C5	-8.99	109.20	114.60
26	LA	2703	C	C5-C4-N4	-8.99	113.90	120.20
2	SA	248	C	N3-C4-C5	-8.99	118.30	121.90
4	S2	66	C	C5'-C4'-C3'	-8.99	101.61	116.00
26	LA	201	C	C2-N3-C4	-8.99	115.40	119.90
26	LA	1110	G	O4'-C1'-N9	8.99	115.39	108.20
26	LA	1333	G	N1-C6-O6	8.99	125.30	119.90
26	LA	2598	A	C5-C6-N1	8.99	122.20	117.70
26	LA	2894	G	P-O3'-C3'	-8.99	108.91	119.70
2	SA	768	A	C8-N9-C4	-8.99	102.20	105.80
26	LA	2234	G	O4'-C1'-N9	8.99	115.39	108.20
26	LA	2315	G	C5-C6-O6	-8.99	123.21	128.60
26	LA	2441	U	C6-N1-C1'	-8.99	108.61	121.20
2	SA	1206	G	C8-N9-C1'	8.99	138.68	127.00
26	LA	1427	A	N9-C4-C5	-8.99	102.20	105.80
2	SA	181	A	O4'-C1'-N9	8.98	115.39	108.20
5	ST	50	PHE	CB-CG-CD1	-8.98	114.51	120.80
26	LA	212	G	C4'-C3'-C2'	-8.98	93.62	102.60
26	LA	2081	U	O4'-C1'-N1	8.98	115.39	108.20
26	LA	2489	U	C6-N1-C2	-8.98	115.61	121.00
2	SA	326	G	O4'-C1'-N9	8.98	115.39	108.20
2	SA	728	A	P-O3'-C3'	8.98	130.48	119.70
2	SA	1429	A	N1-C2-N3	-8.98	124.81	129.30
2	SA	917	G	N3-C2-N2	8.98	126.19	119.90
2	SA	1132	C	C6-N1-C2	-8.98	116.71	120.30
26	LA	1330	C	O4'-C1'-N1	8.98	115.39	108.20
2	SA	423	G	C5-C6-O6	-8.98	123.21	128.60
2	SA	704	A	N9-C4-C5	-8.98	102.21	105.80
2	SA	1314	C	O4'-C1'-N1	8.98	115.38	108.20
2	SA	1488	G	C5-C6-N1	-8.98	107.01	111.50
26	LA	1350	C	P-O3'-C3'	-8.98	108.93	119.70
26	LA	2206	C	O4'-C1'-N1	8.98	115.38	108.20
26	LA	1687	G	N1-C2-N2	-8.98	108.12	116.20
26	LA	1723	G	N9-C4-C5	8.98	108.99	105.40
2	SA	1185	G	C8-N9-C4	-8.97	102.81	106.40
26	LA	2230	G	C6-N1-C2	-8.97	119.72	125.10
2	SA	1293	C	O4'-C1'-N1	8.97	115.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1336	C	N3-C4-C5	-8.97	118.31	121.90
26	LA	42	A	C8-N9-C4	-8.97	102.21	105.80
26	LA	2391	G	O4'-C1'-N9	8.97	115.38	108.20
26	LA	2748	A	C5-N7-C8	8.97	108.39	103.90
2	SA	584	G	C8-N9-C4	-8.97	102.81	106.40
2	SA	1074	G	C5-C6-N1	8.97	115.99	111.50
2	SA	1271	A	C5-C6-N6	-8.97	116.52	123.70
25	LB	32	U	N3-C2-O2	-8.97	115.92	122.20
26	LA	678	C	N1-C2-N3	8.97	125.48	119.20
26	LA	1933	G	C8-N9-C4	-8.97	102.81	106.40
28	LU	95	ARG	NE-CZ-NH1	8.97	124.78	120.30
2	SA	36	C	O4'-C1'-N1	8.97	115.38	108.20
26	LA	379	G	C5'-C4'-O4'	-8.97	98.34	109.10
26	LA	487	C	C4-C5-C6	-8.97	112.92	117.40
26	LA	2297	A	N9-C4-C5	8.97	109.39	105.80
26	LA	53	A	N9-C4-C5	8.97	109.39	105.80
26	LA	2478	A	C6-N1-C2	-8.97	113.22	118.60
2	SA	18	C	N3-C2-O2	-8.96	115.62	121.90
2	SA	155	A	O4'-C1'-N9	8.96	115.37	108.20
2	SA	332	G	N3-C2-N2	8.96	126.17	119.90
2	SA	1267	C	O4'-C1'-N1	8.96	115.37	108.20
19	SC	228	ARG	NE-CZ-NH2	-8.96	115.82	120.30
26	LA	277	G	O4'-C1'-N9	8.96	115.37	108.20
26	LA	1548	A	N9-C4-C5	8.97	109.39	105.80
26	LA	1009	A	C5-C6-N6	8.96	130.87	123.70
26	LA	1338	G	N7-C8-N9	8.96	117.58	113.10
2	SA	38	G	C5-C6-O6	-8.96	123.22	128.60
2	SA	321	A	C5'-C4'-C3'	8.96	130.34	116.00
2	SA	516	U	N3-C4-O4	8.96	125.67	119.40
26	LA	101	A	O4'-C1'-C2'	-8.96	96.84	105.80
37	LC	180	PHE	CB-CG-CD1	8.96	127.07	120.80
2	SA	77	A	O4'-C1'-N9	8.96	115.37	108.20
2	SA	570	G	C5-C6-O6	-8.96	123.22	128.60
26	LA	994	C	N1-C2-O2	-8.96	113.52	118.90
2	SA	221	C	N3-C2-O2	-8.96	115.63	121.90
2	SA	596	A	C8-N9-C4	-8.96	102.22	105.80
26	LA	109	C	O4'-C1'-N1	8.96	115.37	108.20
26	LA	982	C	O4'-C1'-N1	8.96	115.37	108.20
26	LA	2054	A	O4'-C1'-N9	8.96	115.36	108.20
2	SA	1351	U	C4'-C3'-C2'	-8.96	93.64	102.60
26	LA	286	U	O4'-C1'-N1	8.96	115.36	108.20
26	LA	556	A	N1-C6-N6	8.96	123.97	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	581	C	N3-C4-N4	8.95	124.27	118.00
26	LA	948	C	N3-C4-N4	-8.96	111.73	118.00
26	LA	1183	U	P-O3'-C3'	8.96	130.45	119.70
26	LA	2726	A	C1'-O4'-C4'	-8.96	102.74	109.90
2	SA	196	A	C8-N9-C4	-8.95	102.22	105.80
2	SA	1001	C	N3-C4-C5	-8.95	118.32	121.90
26	LA	44	A	C5'-C4'-C3'	-8.95	101.68	116.00
26	LA	666	A	O4'-C1'-N9	8.95	115.36	108.20
26	LA	1703	G	N3-C2-N2	8.95	126.17	119.90
26	LA	2495	G	C6-N1-C2	-8.95	119.73	125.10
26	LA	2539	C	O4'-C1'-N1	8.95	115.36	108.20
2	SA	562	U	C5-C6-N1	-8.95	118.23	122.70
2	SA	1045	C	P-O5'-C5'	8.95	135.22	120.90
2	SA	1442	G	C5'-C4'-C3'	8.95	130.32	116.00
4	S2	54	G	C5'-C4'-O4'	8.95	119.84	109.10
26	LA	246	C	C6-N1-C2	8.95	123.88	120.30
26	LA	2190	G	O4'-C1'-N9	8.95	115.36	108.20
26	LA	2410	G	N7-C8-N9	-8.95	108.62	113.10
2	SA	1527	U	N3-C4-O4	8.95	125.66	119.40
26	LA	741	U	C2-N3-C4	-8.95	121.63	127.00
26	LA	822	G	C2-N3-C4	8.95	116.37	111.90
26	LA	904	G	C5-N7-C8	-8.95	99.83	104.30
26	LA	1696	G	C5'-C4'-C3'	8.95	130.31	116.00
26	LA	1953	A	C3'-C2'-C1'	8.94	108.66	101.50
26	LA	2316	G	C1'-O4'-C4'	-8.95	102.74	109.90
2	SA	558	G	N9-C4-C5	-8.94	101.82	105.40
2	SA	1189	U	O4'-C1'-N1	8.94	115.35	108.20
26	LA	1231	U	O4'-C1'-N1	8.94	115.35	108.20
4	S2	25	U	O4'-C1'-N1	8.94	115.35	108.20
26	LA	2812	G	C8-N9-C4	-8.94	102.82	106.40
2	SA	834	U	C5'-C4'-C3'	-8.94	101.70	116.00
26	LA	1686	C	P-O5'-C5'	8.94	135.20	120.90
26	LA	2281	A	O4'-C1'-N9	8.94	115.35	108.20
26	LA	2863	C	C4'-C3'-C2'	-8.94	93.66	102.60
2	SA	654	G	P-O3'-C3'	-8.94	108.97	119.70
26	LA	1359	A	N1-C2-N3	-8.94	124.83	129.30
2	SA	145	G	C5'-C4'-O4'	8.94	119.82	109.10
26	LA	1710	G	C8-N9-C4	-8.94	102.83	106.40
26	LA	2759	G	O4'-C1'-N9	8.94	115.35	108.20
2	SA	1041	G	C4-C5-C6	-8.93	113.44	118.80
26	LA	295	G	C4-C5-N7	8.93	114.37	110.80
26	LA	544	C	O4'-C1'-N1	8.93	115.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1528	A	C8-N9-C4	8.93	109.37	105.80
26	LA	1594	U	O4'-C1'-N1	8.93	115.35	108.20
47	LJ	75	PHE	CB-CG-CD1	-8.93	114.55	120.80
2	SA	879	C	O4'-C1'-N1	8.93	115.34	108.20
16	SP	16	PHE	CB-CG-CD1	8.93	127.05	120.80
26	LA	595	C	O4'-C1'-N1	8.93	115.34	108.20
26	LA	857	G	C5-C6-O6	-8.93	123.24	128.60
26	LA	1603	A	N1-C6-N6	8.93	123.96	118.60
26	LA	1649	G	O4'-C1'-N9	8.93	115.34	108.20
30	LW	30	SER	N-CA-CB	8.93	123.90	110.50
2	SA	279	A	P-O3'-C3'	8.93	130.41	119.70
2	SA	1234	C	O4'-C1'-N1	8.93	115.34	108.20
26	LA	124	G	P-O3'-C3'	-8.93	108.99	119.70
2	SA	702	A	C4-C5-C6	8.93	121.46	117.00
26	LA	95	A	C4'-C3'-C2'	-8.93	93.67	102.60
33	LZ	39	VAL	CA-CB-CG1	8.93	124.29	110.90
55	LQ	30	ARG	NE-CZ-NH2	-8.93	115.84	120.30
26	LA	630	G	O4'-C1'-N9	8.92	115.34	108.20
26	LA	1136	G	N9-C4-C5	8.92	108.97	105.40
26	LA	1611	C	C5-C4-N4	-8.92	113.95	120.20
26	LA	2002	G	C2-N3-C4	8.92	116.36	111.90
26	LA	1471	G	C5-C6-O6	-8.92	123.25	128.60
26	LA	1785	A	N1-C6-N6	-8.92	113.25	118.60
2	SA	990	C	C5-C4-N4	8.92	126.44	120.20
2	SA	998	C	C6-N1-C2	8.92	123.87	120.30
2	SA	1182	G	O4'-C1'-N9	8.92	115.34	108.20
26	LA	1740	G	P-O5'-C5'	8.92	135.17	120.90
26	LA	2135	A	C5'-C4'-C3'	-8.92	101.73	116.00
26	LA	2589	A	C4-C5-C6	8.92	121.46	117.00
26	LA	90	U	C6-N1-C2	-8.92	115.65	121.00
26	LA	523	C	C6-N1-C2	-8.92	116.73	120.30
26	LA	1558	C	C2-N3-C4	-8.92	115.44	119.90
26	LA	1320	C	P-O5'-C5'	8.92	135.17	120.90
26	LA	1728	C	N3-C2-O2	-8.92	115.66	121.90
26	LA	2153	C	O4'-C1'-N1	8.92	115.33	108.20
4	S2	7	G	C5-C6-O6	-8.91	123.25	128.60
26	LA	1510	G	N1-C2-N3	8.91	129.25	123.90
49	LK	126	ARG	NE-CZ-NH2	8.91	124.76	120.30
20	SD	25	ARG	NE-CZ-NH2	8.91	124.76	120.30
26	LA	950	G	N1-C2-N3	-8.91	118.55	123.90
26	LA	2295	C	C4'-C3'-C2'	-8.91	93.69	102.60
26	LA	2429	G	N7-C8-N9	8.91	117.56	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	902	G	N1-C2-N2	-8.91	108.18	116.20
26	LA	1040	A	N1-C6-N6	-8.91	113.25	118.60
26	LA	1052	C	C6-N1-C2	-8.91	116.74	120.30
26	LA	2221	G	C4-C5-N7	8.91	114.36	110.80
54	LM	98	ARG	NE-CZ-NH1	8.91	124.75	120.30
55	LQ	15	ARG	NE-CZ-NH1	8.91	124.76	120.30
2	SA	1462	C	C4-C5-C6	8.91	121.85	117.40
4	S2	17	C	N1-C2-O2	8.91	124.25	118.90
26	LA	2300	C	O4'-C1'-N1	8.91	115.33	108.20
2	SA	419	C	C2-N3-C4	-8.91	115.45	119.90
2	SA	724	G	N7-C8-N9	-8.91	108.65	113.10
2	SA	1489	G	C5-C6-N1	8.91	115.95	111.50
26	LA	111	A	C4-C5-N7	-8.91	106.25	110.70
7	SG	43	TYR	CB-CG-CD2	-8.91	115.66	121.00
26	LA	346	A	C6-N1-C2	-8.91	113.26	118.60
26	LA	1612	C	C2-N3-C4	-8.91	115.45	119.90
26	LA	1960	A	C6-N1-C2	-8.91	113.26	118.60
26	LA	2770	G	C2-N3-C4	-8.91	107.45	111.90
2	SA	220	G	C5'-C4'-O4'	8.90	119.78	109.10
2	SA	265	G	P-O3'-C3'	-8.90	109.01	119.70
2	SA	1002	G	O4'-C1'-N9	8.90	115.32	108.20
26	LA	205	G	C1'-O4'-C4'	-8.90	102.78	109.90
26	LA	2501	C	C4-C5-C6	8.90	121.85	117.40
2	SA	1223	C	P-O3'-C3'	8.90	130.38	119.70
2	SA	1455	G	N3-C4-C5	-8.90	124.15	128.60
26	LA	1847	A	N3-C4-C5	-8.90	120.57	126.80
26	LA	2270	A	C2-N3-C4	-8.90	106.15	110.60
2	SA	656	G	O4'-C1'-N9	8.90	115.32	108.20
2	SA	953	G	O4'-C1'-N9	8.90	115.32	108.20
2	SA	1168	U	P-O3'-C3'	8.90	130.38	119.70
26	LA	200	U	C4-C5-C6	-8.90	114.36	119.70
26	LA	2213	U	C3'-C2'-C1'	-8.90	94.38	101.50
2	SA	322	C	C5-C4-N4	-8.89	113.97	120.20
2	SA	276	G	C2-N3-C4	8.89	116.35	111.90
2	SA	1094	G	C5-C6-N1	8.89	115.95	111.50
26	LA	859	G	O4'-C1'-C2'	-8.89	96.91	105.80
26	LA	2782	G	C5'-C4'-O4'	8.89	119.77	109.10
26	LA	836	G	C5-C6-O6	-8.89	123.26	128.60
26	LA	966	G	C5-C6-O6	-8.89	123.26	128.60
4	S2	22	A	N1-C2-N3	-8.89	124.85	129.30
26	LA	26	G	C5-C6-O6	-8.89	123.27	128.60
26	LA	329	G	C5-C6-O6	-8.89	123.27	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	LQ	25	ARG	NE-CZ-NH1	8.89	124.75	120.30
2	SA	466	A	C5-C6-N1	8.89	122.14	117.70
26	LA	104	A	C5-C6-N1	-8.89	113.25	117.70
26	LA	746	U	C2-N3-C4	-8.89	121.67	127.00
26	LA	1138	G	N1-C6-O6	8.89	125.23	119.90
2	SA	282	A	C8-N9-C4	-8.89	102.25	105.80
2	SA	1517	G	C4'-C3'-C2'	-8.89	93.71	102.60
26	LA	2337	G	C4-C5-N7	8.89	114.36	110.80
2	SA	1459	G	C4-C5-N7	8.89	114.36	110.80
24	S3	579	PHE	CB-CG-CD2	-8.89	114.58	120.80
26	LA	2708	G	C6-C5-N7	-8.89	125.07	130.40
2	SA	832	G	O4'-C1'-N9	8.88	115.31	108.20
2	SA	1449	C	P-O3'-C3'	-8.88	109.04	119.70
3	S1	38	G	N1-C2-N3	-8.88	118.57	123.90
26	LA	1483	G	N9-C1'-C2'	-8.88	102.23	112.00
2	SA	846	G	N3-C4-C5	8.88	133.04	128.60
4	S2	56	U	O4'-C1'-N1	8.88	115.31	108.20
26	LA	981	A	N9-C4-C5	-8.88	102.25	105.80
26	LA	1490	A	N1-C6-N6	8.88	123.93	118.60
29	LV	73	ARG	NE-CZ-NH1	8.88	124.74	120.30
2	SA	582	C	C5'-C4'-C3'	-8.88	101.79	116.00
2	SA	1400	C	N3-C4-C5	-8.88	118.35	121.90
26	LA	2218	G	C4-C5-N7	-8.88	107.25	110.80
2	SA	533	A	C3'-C2'-C1'	-8.88	94.40	101.50
2	SA	27	G	O4'-C1'-N9	8.88	115.30	108.20
2	SA	457	G	C5-C6-O6	-8.88	123.27	128.60
2	SA	759	A	P-O3'-C3'	8.88	130.35	119.70
2	SA	1125	U	O4'-C1'-N1	8.88	115.30	108.20
2	SA	1127	G	C4-C5-N7	8.88	114.35	110.80
4	S2	22	A	O4'-C1'-N9	8.88	115.30	108.20
7	SG	142	ARG	NE-CZ-NH1	8.88	124.74	120.30
1	SS	31	ARG	NE-CZ-NH2	-8.88	115.86	120.30
2	SA	544	G	C5-C6-N1	8.88	115.94	111.50
26	LA	2853	C	O4'-C1'-N1	8.88	115.30	108.20
26	LA	173	A	O4'-C1'-N9	8.87	115.30	108.20
26	LA	341	C	O4'-C1'-N1	8.88	115.30	108.20
26	LA	1035	U	C5-C4-O4	8.87	131.22	125.90
26	LA	1052	C	C5-C6-N1	8.88	125.44	121.00
26	LA	1881	C	O4'-C1'-N1	8.87	115.30	108.20
2	SA	794	A	N3-C4-N9	-8.87	120.30	127.40
2	SA	903	G	N3-C4-N9	8.87	131.32	126.00
2	SA	973	G	C5-C6-O6	-8.87	123.28	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1383	C	C6-N1-C2	-8.87	116.75	120.30
26	LA	2506	U	C2-N3-C4	-8.87	121.68	127.00
26	LA	468	G	N9-C4-C5	8.87	108.95	105.40
2	SA	658	C	O4'-C1'-N1	8.87	115.30	108.20
2	SA	1156	G	O4'-C1'-N9	8.87	115.30	108.20
2	SA	1351	U	P-O3'-C3'	8.87	130.34	119.70
26	LA	1160	G	N1-C6-O6	8.87	125.22	119.90
2	SA	408	A	C5-C6-N6	8.87	130.79	123.70
2	SA	455	G	C6-C5-N7	-8.87	125.08	130.40
26	LA	2118	U	C2-N1-C1'	8.87	128.34	117.70
53	LP	69	ARG	NE-CZ-NH2	-8.87	115.87	120.30
2	SA	127	G	N1-C2-N3	-8.86	118.58	123.90
2	SA	962	C	C5'-C4'-C3'	-8.86	101.82	116.00
26	LA	160	A	N7-C8-N9	-8.87	109.37	113.80
26	LA	884	U	O4'-C1'-N1	8.87	115.29	108.20
26	LA	518	G	C5-C6-O6	-8.86	123.28	128.60
26	LA	2607	G	C8-N9-C1'	8.86	138.52	127.00
26	LA	1499	C	C5'-C4'-O4'	8.86	119.73	109.10
26	LA	2451	A	N9-C4-C5	8.86	109.34	105.80
26	LA	2844	G	C5'-C4'-O4'	8.86	119.73	109.10
2	SA	388	G	N3-C4-N9	8.86	131.32	126.00
2	SA	104	G	O4'-C1'-N9	8.86	115.29	108.20
2	SA	183	C	O4'-C4'-C3'	8.86	113.19	106.10
2	SA	616	G	C8-N9-C4	8.86	109.94	106.40
2	SA	1167	A	O4'-C1'-N9	8.86	115.29	108.20
26	LA	676	A	N1-C6-N6	-8.86	113.28	118.60
26	LA	1088	A	C5-C6-N1	-8.86	113.27	117.70
50	LL	116	ARG	NE-CZ-NH1	8.86	124.73	120.30
2	SA	1271	A	N9-C4-C5	8.86	109.34	105.80
2	SA	1474	U	N1-C2-N3	-8.86	109.59	114.90
26	LA	348	A	N7-C8-N9	8.86	118.23	113.80
26	LA	1571	A	N9-C4-C5	8.86	109.34	105.80
26	LA	727	A	C8-N9-C4	-8.86	102.26	105.80
26	LA	881	G	P-O3'-C3'	8.86	130.33	119.70
26	LA	1016	G	C5-C6-O6	-8.86	123.29	128.60
26	LA	2242	G	C8-N9-C4	-8.86	102.86	106.40
29	LV	6	ARG	NE-CZ-NH1	8.86	124.73	120.30
2	SA	1306	A	P-O3'-C3'	-8.85	109.08	119.70
2	SA	127	G	C8-N9-C4	-8.85	102.86	106.40
2	SA	896	C	O4'-C1'-N1	8.85	115.28	108.20
2	SA	1015	G	N3-C4-C5	-8.85	124.17	128.60
26	LA	823	C	C5-C4-N4	-8.85	114.00	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1268	A	P-O3'-C3'	-8.85	109.08	119.70
26	LA	1098	A	N1-C6-N6	8.85	123.91	118.60
26	LA	2108	A	O4'-C1'-N9	8.85	115.28	108.20
2	SA	55	A	N9-C4-C5	-8.85	102.26	105.80
2	SA	178	C	C5'-C4'-O4'	8.85	119.72	109.10
2	SA	239	U	C5'-C4'-O4'	8.85	119.72	109.10
26	LA	201	C	C5-C6-N1	-8.85	116.58	121.00
2	SA	242	G	C6-N1-C2	8.85	130.41	125.10
2	SA	1428	A	C8-N9-C4	8.85	109.34	105.80
9	SI	129	ARG	NE-CZ-NH1	8.85	124.72	120.30
26	LA	401	A	C2-N3-C4	-8.85	106.18	110.60
26	LA	2360	G	N3-C4-N9	-8.85	120.69	126.00
26	LA	2643	G	N9-C4-C5	8.85	108.94	105.40
26	LA	2631	G	N1-C2-N2	-8.85	108.24	116.20
2	SA	381	C	O4'-C1'-N1	8.85	115.28	108.20
2	SA	423	G	C2-N3-C4	8.85	116.32	111.90
2	SA	998	C	C5-C4-N4	8.85	126.39	120.20
26	LA	618	G	C4-C5-N7	-8.85	107.26	110.80
2	SA	577	G	N3-C2-N2	8.85	126.09	119.90
2	SA	151	A	N7-C8-N9	8.84	118.22	113.80
2	SA	1233	G	C2-N3-C4	8.84	116.32	111.90
26	LA	279	A	O4'-C1'-N9	8.84	115.27	108.20
26	LA	380	G	C5-C6-N1	-8.84	107.08	111.50
26	LA	463	G	N3-C2-N2	8.84	126.09	119.90
26	LA	1428	C	P-O3'-C3'	-8.84	109.09	119.70
26	LA	2171	A	C8-N9-C4	-8.84	102.26	105.80
2	SA	1306	A	N1-C6-N6	8.84	123.90	118.60
15	SO	73	ASP	CB-CG-OD2	-8.84	110.34	118.30
26	LA	595	C	N3-C4-N4	8.84	124.19	118.00
26	LA	888	C	O4'-C1'-N1	8.84	115.27	108.20
52	LO	28	PHE	CB-CG-CD1	-8.84	114.61	120.80
26	LA	744	U	C5-C4-O4	-8.84	120.60	125.90
26	LA	791	C	O4'-C1'-N1	8.84	115.27	108.20
26	LA	1651	G	N9-C4-C5	-8.84	101.86	105.40
26	LA	2043	C	C4-C5-C6	8.84	121.82	117.40
26	LA	246	C	C2-N1-C1'	-8.84	109.08	118.80
26	LA	1169	A	C2-N3-C4	8.84	115.02	110.60
26	LA	2785	C	C4-C5-C6	8.84	121.82	117.40
2	SA	195	A	C5-C6-N1	8.84	122.12	117.70
26	LA	849	A	C5'-C4'-C3'	-8.84	101.86	116.00
26	LA	2034	U	C6-N1-C2	-8.84	115.70	121.00
26	LA	2436	G	O4'-C1'-N9	8.84	115.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	455	G	C5-N7-C8	-8.83	99.88	104.30
2	SA	1031	C	N3-C4-C5	-8.83	118.37	121.90
24	S3	150	PHE	CB-CG-CD1	-8.83	114.62	120.80
26	LA	306	U	N3-C4-O4	8.83	125.58	119.40
2	SA	719	C	P-O3'-C3'	-8.83	109.10	119.70
2	SA	1493	A	N1-C6-N6	-8.83	113.30	118.60
26	LA	589	U	N3-C2-O2	8.83	128.38	122.20
2	SA	225	C	C4'-C3'-C2'	-8.83	93.77	102.60
26	LA	1797	G	C6-N1-C2	-8.83	119.80	125.10
26	LA	2334	U	C2-N3-C4	-8.83	121.70	127.00
2	SA	1142	G	N1-C6-O6	8.83	125.20	119.90
2	SA	1259	C	O4'-C1'-N1	8.83	115.26	108.20
26	LA	1531	C	C5-C4-N4	8.83	126.38	120.20
26	LA	1571	A	C6-N1-C2	-8.83	113.30	118.60
2	SA	444	G	P-O3'-C3'	-8.83	109.11	119.70
26	LA	1203	U	N3-C4-C5	-8.83	109.30	114.60
26	LA	1231	U	O5'-P-OP1	-8.83	97.75	105.70
26	LA	1510	G	C5'-C4'-C3'	-8.83	101.88	116.00
26	LA	2006	C	O4'-C1'-N1	8.83	115.26	108.20
2	SA	222	C	C4-C5-C6	-8.82	112.99	117.40
2	SA	311	C	C5-C4-N4	-8.82	114.02	120.20
26	LA	862	G	N1-C2-N2	-8.82	108.26	116.20
26	LA	2661	G	N3-C4-C5	8.82	133.01	128.60
26	LA	9	G	N1-C6-O6	8.82	125.19	119.90
2	SA	172	A	N7-C8-N9	8.82	118.21	113.80
2	SA	203	G	C5-C6-O6	8.82	133.89	128.60
2	SA	489	C	P-O5'-C5'	8.82	135.01	120.90
26	LA	362	A	N9-C4-C5	8.82	109.33	105.80
26	LA	601	C	C1'-O4'-C4'	-8.82	102.84	109.90
26	LA	1245	G	C5'-C4'-O4'	8.82	119.69	109.10
26	LA	1827	U	N1-C2-N3	8.82	120.19	114.90
26	LA	2186	G	C6-C5-N7	-8.82	125.11	130.40
2	SA	1441	A	C3'-C2'-C1'	8.82	108.56	101.50
17	SQ	56	ASP	CB-CG-OD1	8.82	126.24	118.30
26	LA	2159	G	P-O3'-C3'	8.82	130.28	119.70
2	SA	143	A	O4'-C1'-N9	8.82	115.25	108.20
2	SA	1434	A	C5-C6-N1	-8.82	113.29	117.70
24	S3	145	ARG	NE-CZ-NH2	8.82	124.71	120.30
26	LA	106	C	O4'-C1'-N1	8.82	115.25	108.20
26	LA	322	A	C5'-C4'-C3'	8.82	130.11	116.00
26	LA	542	C	O4'-C1'-N1	8.82	115.25	108.20
2	SA	716	A	C4-C5-C6	-8.81	112.59	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1647	U	C2'-C3'-O3'	8.81	128.89	109.50
2	SA	836	G	C5'-C4'-C3'	8.81	130.10	116.00
2	SA	1267	C	C6-N1-C1'	-8.81	110.22	120.80
26	LA	1813	G	C6-N1-C2	-8.81	119.81	125.10
26	LA	47	C	O4'-C1'-N1	8.81	115.25	108.20
26	LA	273	G	P-O3'-C3'	8.81	130.27	119.70
26	LA	849	A	N1-C6-N6	8.81	123.89	118.60
26	LA	1655	A	C5-C6-N6	-8.81	116.65	123.70
26	LA	201	C	N1-C2-N3	8.81	125.37	119.20
26	LA	1966	A	C3'-C2'-C1'	8.81	108.55	101.50
48	LN	66	PHE	CB-CG-CD1	-8.81	114.63	120.80
2	SA	551	U	C2-N3-C4	8.81	132.28	127.00
26	LA	172	A	O4'-C1'-N9	8.81	115.25	108.20
26	LA	808	G	N1-C2-N2	-8.81	108.27	116.20
26	LA	2729	G	N1-C6-O6	8.81	125.19	119.90
2	SA	1203	C	O4'-C1'-N1	8.81	115.25	108.20
26	LA	1932	A	N7-C8-N9	-8.81	109.40	113.80
2	SA	666	G	C5-C6-O6	-8.81	123.32	128.60
2	SA	292	G	N1-C2-N3	8.80	129.18	123.90
2	SA	602	A	C5-C6-N6	-8.80	116.66	123.70
2	SA	818	G	N9-C4-C5	-8.80	101.88	105.40
4	S2	75	C	C6-N1-C2	-8.80	116.78	120.30
26	LA	366	C	N3-C2-O2	-8.80	115.74	121.90
26	LA	552	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	1448	G	N9-C4-C5	-8.80	101.88	105.40
26	LA	1499	C	C5-C4-N4	-8.80	114.04	120.20
26	LA	2106	U	P-O3'-C3'	8.80	130.26	119.70
2	SA	753	A	P-O3'-C3'	-8.80	109.14	119.70
2	SA	1106	G	O4'-C1'-N9	8.80	115.24	108.20
2	SA	1290	G	N7-C8-N9	-8.80	108.70	113.10
2	SA	1490	U	C2-N3-C4	-8.80	121.72	127.00
2	SA	1534	A	P-O3'-C3'	8.80	130.26	119.70
26	LA	235	U	P-O3'-C3'	8.80	130.26	119.70
26	LA	1585	C	O4'-C1'-N1	8.80	115.24	108.20
2	SA	86	G	O4'-C1'-N9	8.80	115.24	108.20
2	SA	311	C	N3-C4-N4	8.80	124.16	118.00
26	LA	712	G	N1-C6-O6	8.80	125.18	119.90
26	LA	2149	U	N3-C2-O2	-8.80	116.04	122.20
2	SA	476	U	C5'-C4'-C3'	-8.80	101.92	116.00
2	SA	1365	G	C5-C6-O6	8.80	133.88	128.60
26	LA	140	C	C6-N1-C2	-8.80	116.78	120.30
26	LA	341	C	N3-C4-N4	-8.80	111.84	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1088	A	C6-C5-N7	-8.80	126.14	132.30
26	LA	1765	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	2554	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	2715	C	N3-C4-C5	-8.80	118.38	121.90
4	S2	54	G	C5-C6-O6	-8.80	123.32	128.60
26	LA	111	A	C5'-C4'-C3'	-8.80	101.93	116.00
26	LA	1148	U	C6-N1-C2	-8.80	115.72	121.00
26	LA	1681	G	P-O3'-C3'	-8.80	109.14	119.70
26	LA	2451	A	C4-C5-N7	-8.80	106.30	110.70
2	SA	451	A	N9-C4-C5	-8.79	102.28	105.80
2	SA	1035	A	C5-C6-N6	-8.79	116.67	123.70
26	LA	1056	G	C8-N9-C1'	8.79	138.43	127.00
2	SA	26	A	C8-N9-C4	-8.79	102.28	105.80
2	SA	107	G	C5-C6-O6	-8.79	123.33	128.60
2	SA	994	A	C8-N9-C4	-8.79	102.28	105.80
2	SA	1122	U	O4'-C1'-N1	8.79	115.23	108.20
26	LA	50	U	O4'-C1'-N1	8.79	115.23	108.20
2	SA	1163	A	C2-N3-C4	-8.79	106.20	110.60
2	SA	1282	C	N3-C4-C5	-8.79	118.38	121.90
26	LA	99	U	O4'-C1'-N1	8.79	115.23	108.20
26	LA	1061	U	C4-C5-C6	-8.79	114.42	119.70
26	LA	1669	A	C6-N1-C2	-8.79	113.33	118.60
26	LA	2008	C	N3-C4-C5	-8.79	118.38	121.90
2	SA	1448	C	O4'-C1'-N1	8.79	115.23	108.20
26	LA	1906	G	C1'-O4'-C4'	-8.79	102.87	109.90
26	LA	2447	G	P-O3'-C3'	8.79	130.25	119.70
2	SA	207	C	C6-N1-C2	-8.79	116.78	120.30
2	SA	1392	G	C4-C5-N7	8.79	114.31	110.80
2	SA	1466	C	N1-C2-O2	8.79	124.17	118.90
26	LA	675	A	N7-C8-N9	-8.79	109.41	113.80
26	LA	1276	A	C5-C6-N6	-8.79	116.67	123.70
2	SA	1221	G	C5-C6-O6	-8.79	123.33	128.60
2	SA	1230	C	C5-C6-N1	8.79	125.39	121.00
26	LA	972	A	C5-C6-N6	-8.78	116.67	123.70
26	LA	1086	A	N9-C4-C5	8.79	109.31	105.80
26	LA	1862	G	C8-N9-C4	8.79	109.91	106.40
26	LA	2579	C	O4'-C1'-N1	8.79	115.23	108.20
26	LA	2656	U	C6-N1-C1'	8.79	133.50	121.20
2	SA	1453	G	P-O3'-C3'	8.78	130.24	119.70
2	SA	1154	G	N3-C4-C5	-8.78	124.21	128.60
26	LA	508	A	C2-N3-C4	8.78	114.99	110.60
26	LA	774	G	C4-C5-N7	8.78	114.31	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2220	U	O4'-C1'-N1	8.78	115.22	108.20
26	LA	2802	G	C3'-C2'-C1'	-8.78	94.47	101.50
2	SA	1133	G	C6-N1-C2	-8.78	119.83	125.10
26	LA	2829	A	N7-C8-N9	-8.78	109.41	113.80
2	SA	1282	C	C5-C4-N4	8.78	126.34	120.20
26	LA	624	C	O4'-C1'-N1	8.78	115.22	108.20
26	LA	1475	G	P-O3'-C3'	-8.78	109.17	119.70
26	LA	2151	U	N1-C2-N3	8.78	120.17	114.90
26	LA	2762	C	N3-C4-N4	-8.78	111.85	118.00
46	LH	108	PHE	CB-CG-CD2	8.78	126.95	120.80
26	LA	2267	A	C8-N9-C4	8.78	109.31	105.80
2	SA	792	A	N9-C4-C5	-8.78	102.29	105.80
2	SA	1199	U	N3-C4-O4	-8.78	113.26	119.40
25	LB	68	C	C5'-C4'-C3'	-8.78	101.96	116.00
26	LA	92	U	C5-C6-N1	8.78	127.09	122.70
26	LA	98	G	C5-C6-N1	8.78	115.89	111.50
25	LB	119	A	N9-C4-C5	-8.77	102.29	105.80
26	LA	931	U	C2-N1-C1'	8.77	128.23	117.70
26	LA	1012	U	C1'-O4'-C4'	-8.77	102.88	109.90
26	LA	1886	U	C2-N3-C4	-8.77	121.73	127.00
26	LA	2156	G	C5-N7-C8	8.77	108.69	104.30
26	LA	2377	A	C5-C6-N6	8.77	130.72	123.70
38	LE	161	MET	CG-SD-CE	-8.77	86.16	100.20
2	SA	87	C	O4'-C1'-N1	8.77	115.22	108.20
26	LA	2556	C	C6-N1-C2	-8.77	116.79	120.30
2	SA	784	A	C8-N9-C4	-8.77	102.29	105.80
2	SA	1227	A	N9-C4-C5	-8.77	102.29	105.80
2	SA	1438	G	N1-C2-N3	8.77	129.16	123.90
26	LA	472	A	C3'-C2'-C1'	-8.77	94.48	101.50
2	SA	381	C	N3-C4-N4	-8.77	111.86	118.00
26	LA	19	A	N3-C4-N9	-8.77	120.39	127.40
35	L1	10	ARG	NE-CZ-NH1	8.77	124.69	120.30
50	LL	120	ARG	NE-CZ-NH2	8.77	124.68	120.30
26	LA	881	G	O4'-C1'-N9	8.77	115.21	108.20
26	LA	1604	C	N3-C2-O2	-8.77	115.76	121.90
26	LA	1664	A	O4'-C1'-N9	8.77	115.21	108.20
26	LA	2761	A	C5-C6-N6	8.77	130.71	123.70
26	LA	1925	C	C5'-C4'-C3'	-8.77	101.98	116.00
2	SA	649	A	C5-C6-N1	8.76	122.08	117.70
26	LA	1346	G	O4'-C1'-N9	8.76	115.21	108.20
26	LA	2588	G	C5-C6-O6	-8.76	123.34	128.60
2	SA	931	C	N3-C2-O2	-8.76	115.77	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	448	A	N1-C6-N6	8.76	123.86	118.60
2	SA	1249	C	C4-C5-C6	8.76	121.78	117.40
26	LA	730	A	O5'-P-OP1	-8.76	97.82	105.70
26	LA	935	C	P-O5'-C5'	8.76	134.91	120.90
2	SA	163	C	O4'-C1'-N1	8.76	115.21	108.20
2	SA	669	G	N9-C4-C5	8.76	108.90	105.40
2	SA	842	U	C6-N1-C1'	-8.76	108.94	121.20
26	LA	1114	C	O4'-C1'-N1	8.76	115.20	108.20
26	LA	1219	U	O4'-C1'-N1	8.76	115.20	108.20
26	LA	1857	G	C2-N3-C4	-8.76	107.52	111.90
26	LA	2725	A	C3'-C2'-C1'	8.76	108.50	101.50
2	SA	632	U	O4'-C1'-N1	8.75	115.20	108.20
2	SA	819	A	O4'-C1'-C2'	-8.75	97.05	105.80
26	LA	801	G	N9-C4-C5	8.75	108.90	105.40
26	LA	1693	U	N1-C2-O2	-8.75	116.67	122.80
2	SA	1466	C	C2-N3-C4	8.75	124.28	119.90
26	LA	823	C	C5'-C4'-O4'	8.75	119.60	109.10
2	SA	250	A	C1'-O4'-C4'	-8.75	102.90	109.90
26	LA	795	C	C6-N1-C2	-8.75	116.80	120.30
26	LA	1022	G	N1-C6-O6	8.75	125.15	119.90
26	LA	1420	A	C1'-O4'-C4'	-8.75	102.90	109.90
26	LA	1507	C	C2-N3-C4	-8.75	115.53	119.90
2	SA	811	C	C2-N3-C4	-8.75	115.53	119.90
2	SA	923	A	C5-C6-N6	-8.75	116.70	123.70
2	SA	971	G	P-O3'-C3'	-8.75	109.20	119.70
2	SA	1234	C	C6-N1-C2	-8.75	116.80	120.30
4	S2	31	G	C4'-C3'-C2'	-8.75	93.85	102.60
25	LB	91	C	C2-N3-C4	8.75	124.27	119.90
26	LA	185	G	N7-C8-N9	-8.75	108.73	113.10
26	LA	348	A	O4'-C1'-N9	8.75	115.20	108.20
26	LA	2643	G	C8-N9-C4	-8.75	102.90	106.40
33	LZ	59	ASP	CB-CG-OD1	8.75	126.17	118.30
2	SA	495	A	C5-N7-C8	-8.74	99.53	103.90
26	LA	1573	G	P-O5'-C5'	8.74	134.89	120.90
26	LA	2758	A	C1'-O4'-C4'	-8.74	102.90	109.90
2	SA	1531	A	C6-N1-C2	8.74	123.85	118.60
26	LA	58	G	N3-C4-C5	-8.74	124.23	128.60
26	LA	1565	C	N3-C4-N4	8.74	124.12	118.00
26	LA	1907	G	C2-N3-C4	8.74	116.27	111.90
2	SA	1012	A	P-O3'-C3'	-8.74	109.21	119.70
26	LA	1979	U	N1-C2-N3	8.74	120.14	114.90
26	LA	978	G	N9-C4-C5	-8.74	101.91	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2039	U	C5-C4-O4	-8.74	120.66	125.90
26	LA	2174	C	O4'-C4'-C3'	-8.74	95.26	104.00
26	LA	2875	C	N1-C2-O2	8.74	124.14	118.90
26	LA	2796	U	C5-C4-O4	-8.74	120.66	125.90
2	SA	148	G	N1-C6-O6	8.74	125.14	119.90
2	SA	511	C	N3-C2-O2	-8.74	115.78	121.90
2	SA	899	C	N3-C4-N4	8.74	124.11	118.00
14	SN	80	ARG	NE-CZ-NH1	8.74	124.67	120.30
26	LA	977	G	N1-C2-N2	-8.74	108.34	116.20
26	LA	1812	U	N3-C4-O4	8.74	125.52	119.40
26	LA	2536	G	C5-C6-O6	-8.74	123.36	128.60
2	SA	575	G	C5-C6-O6	-8.73	123.36	128.60
2	SA	1395	C	C5'-C4'-O4'	8.73	119.58	109.10
26	LA	27	G	C4-C5-N7	-8.73	107.31	110.80
26	LA	1923	U	N3-C4-C5	-8.73	109.36	114.60
26	LA	2060	A	N1-C2-N3	8.73	133.67	129.30
26	LA	2353	G	N7-C8-N9	-8.73	108.73	113.10
26	LA	2437	G	C5'-C4'-O4'	8.73	119.58	109.10
26	LA	2589	A	N1-C2-N3	8.73	133.67	129.30
2	SA	616	G	C4-C5-N7	-8.73	107.31	110.80
2	SA	1063	C	C5-C4-N4	-8.73	114.09	120.20
22	SF	45	ARG	NE-CZ-NH2	-8.73	115.93	120.30
26	LA	563	A	N1-C6-N6	-8.73	113.36	118.60
26	LA	911	A	C5-C6-N1	-8.73	113.33	117.70
26	LA	1944	U	P-O3'-C3'	-8.73	109.22	119.70
56	LR	42	PHE	CB-CG-CD1	-8.73	114.69	120.80
26	LA	2690	U	N3-C2-O2	-8.73	116.09	122.20
49	LK	115	ASP	CB-CG-OD2	-8.73	110.44	118.30
4	S2	37	U	N1-C2-N3	8.73	120.14	114.90
8	SH	79	ARG	NE-CZ-NH2	8.73	124.67	120.30
26	LA	2001	C	C5-C4-N4	-8.73	114.09	120.20
26	LA	2198	A	P-O3'-C3'	8.73	130.18	119.70
26	LA	1428	C	C5-C6-N1	-8.73	116.64	121.00
26	LA	1861	G	O4'-C1'-N9	8.73	115.18	108.20
26	LA	1933	G	C4-C5-N7	-8.73	107.31	110.80
26	LA	2427	C	N3-C2-O2	-8.73	115.79	121.90
2	SA	1142	G	C5-C6-N1	-8.72	107.14	111.50
2	SA	362	G	N1-C6-O6	8.72	125.13	119.90
26	LA	458	G	C8-N9-C4	8.72	109.89	106.40
26	LA	2226	C	N3-C4-C5	-8.72	118.41	121.90
26	LA	704	G	C2'-C3'-O3'	8.72	128.69	109.50
2	SA	171	A	P-O3'-C3'	8.72	130.17	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	534	U	O4'-C1'-N1	8.72	115.18	108.20
26	LA	106	C	N3-C4-N4	-8.72	111.89	118.00
26	LA	313	G	C5-C6-N1	8.72	115.86	111.50
26	LA	64	A	N9-C4-C5	8.72	109.29	105.80
26	LA	1543	G	C5'-C4'-C3'	-8.72	102.05	116.00
2	SA	381	C	C5-C4-N4	8.72	126.30	120.20
2	SA	940	C	O4'-C1'-N1	8.72	115.17	108.20
2	SA	1024	G	C5-C6-O6	-8.72	123.37	128.60
26	LA	568	U	P-O5'-C5'	-8.72	106.95	120.90
26	LA	1302	A	O4'-C1'-N9	8.72	115.17	108.20
26	LA	568	U	C6-N1-C2	-8.72	115.77	121.00
26	LA	1962	C	C5-C6-N1	-8.72	116.64	121.00
2	SA	769	G	N1-C2-N2	-8.72	108.36	116.20
26	LA	1720	U	C5-C6-N1	8.72	127.06	122.70
2	SA	90	C	C5-C6-N1	8.71	125.36	121.00
3	S1	56	G	C8-N9-C1'	-8.71	115.67	127.00
26	LA	1097	U	P-O3'-C3'	8.71	130.16	119.70
2	SA	527	G	N1-C6-O6	-8.71	114.67	119.90
2	SA	688	G	N3-C4-C5	-8.71	124.24	128.60
26	LA	1214	A	C2-N3-C4	8.71	114.96	110.60
26	LA	1869	G	C4-C5-N7	-8.71	107.31	110.80
26	LA	2114	A	N1-C2-N3	-8.71	124.94	129.30
1	SS	73	PHE	CB-CG-CD1	-8.71	114.70	120.80
2	SA	163	C	C5-C6-N1	-8.71	116.64	121.00
2	SA	928	G	N1-C6-O6	8.71	125.13	119.90
25	LB	91	C	P-O3'-C3'	8.71	130.15	119.70
26	LA	1965	C	C5'-C4'-C3'	-8.71	102.06	116.00
26	LA	2344	U	N1-C2-O2	8.71	128.90	122.80
26	LA	362	A	C5'-C4'-C3'	-8.71	102.06	116.00
2	SA	294	U	C2-N3-C4	-8.71	121.78	127.00
2	SA	1152	A	C5-C6-N1	-8.71	113.35	117.70
2	SA	1403	C	O4'-C1'-N1	8.71	115.17	108.20
2	SA	1420	U	C5'-C4'-O4'	8.71	119.55	109.10
25	LB	14	U	O4'-C1'-C2'	-8.71	97.09	105.80
26	LA	875	G	C4-C5-N7	-8.71	107.32	110.80
26	LA	2754	U	N1-C2-N3	8.71	120.12	114.90
2	SA	538	G	N3-C4-C5	-8.71	124.25	128.60
26	LA	643	A	N1-C2-N3	-8.71	124.95	129.30
2	SA	166	U	C1'-O4'-C4'	-8.70	102.94	109.90
11	SK	8	ARG	NE-CZ-NH2	-8.71	115.95	120.30
26	LA	2160	C	P-O3'-C3'	8.71	130.15	119.70
26	LA	2281	A	P-O3'-C3'	-8.71	109.25	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2310	C	N3-C2-O2	-8.70	115.81	121.90
26	LA	2328	A	C6-C5-N7	8.70	138.39	132.30
26	LA	2443	C	C3'-C2'-C1'	8.70	108.46	101.50
26	LA	2581	G	C4'-C3'-C2'	-8.70	93.90	102.60
26	LA	2727	A	C5'-C4'-O4'	8.70	119.54	109.10
2	SA	1321	U	O4'-C1'-N1	8.70	115.16	108.20
26	LA	663	G	C5-C6-O6	-8.70	123.38	128.60
24	S3	70	PHE	CB-CG-CD1	8.70	126.89	120.80
26	LA	2230	G	O4'-C1'-N9	8.70	115.16	108.20
26	LA	2574	G	O4'-C1'-N9	8.70	115.16	108.20
2	SA	415	A	N1-C6-N6	-8.70	113.38	118.60
2	SA	1057	G	P-O3'-C3'	-8.70	109.26	119.70
4	S2	39	A	N1-C6-N6	8.70	123.82	118.60
26	LA	552	U	N3-C2-O2	8.70	128.29	122.20
26	LA	892	A	C4-C5-C6	8.70	121.35	117.00
26	LA	1433	A	N1-C6-N6	8.70	123.82	118.60
2	SA	60	A	C5-N7-C8	8.70	108.25	103.90
2	SA	1112	C	C3'-C2'-C1'	8.70	108.46	101.50
2	SA	1296	C	C1'-O4'-C4'	-8.70	102.94	109.90
26	LA	603	A	C8-N9-C4	-8.70	102.32	105.80
26	LA	735	A	C5'-C4'-O4'	8.70	119.53	109.10
26	LA	972	A	N9-C4-C5	8.70	109.28	105.80
43	L7	20	ASP	CB-CG-OD2	-8.70	110.47	118.30
26	LA	942	G	N1-C6-O6	8.70	125.12	119.90
26	LA	1012	U	N1-C1'-C2'	8.70	125.30	114.00
26	LA	1564	C	C2-N3-C4	-8.70	115.55	119.90
26	LA	2355	G	O4'-C1'-N9	8.70	115.16	108.20
26	LA	2778	A	C5-C6-N1	-8.70	113.35	117.70
53	LP	112	TYR	CB-CG-CD2	8.69	126.22	121.00
55	LQ	33	ARG	NE-CZ-NH2	-8.69	115.95	120.30
2	SA	1410	A	O4'-C1'-N9	8.69	115.15	108.20
26	LA	37	C	N3-C2-O2	-8.69	115.81	121.90
26	LA	406	G	C6-N1-C2	-8.69	119.89	125.10
26	LA	679	C	N3-C2-O2	-8.69	115.81	121.90
26	LA	2371	G	N7-C8-N9	8.69	117.45	113.10
26	LA	2667	C	P-O5'-C5'	8.69	134.81	120.90
26	LA	2834	G	C6-C5-N7	-8.69	125.19	130.40
26	LA	2879	A	C5-C6-N1	-8.69	113.36	117.70
2	SA	125	U	N3-C4-C5	8.69	119.81	114.60
2	SA	565	U	C5'-C4'-C3'	8.69	129.90	116.00
26	LA	877	A	P-O3'-C3'	8.69	130.13	119.70
2	SA	668	G	C4-C5-C6	-8.69	113.59	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	732	C	O4'-C1'-N1	8.69	115.15	108.20
2	SA	841	C	N3-C4-C5	-8.69	118.42	121.90
25	LB	27	C	C1'-O4'-C4'	-8.69	102.95	109.90
26	LA	1024	G	N3-C2-N2	8.69	125.98	119.90
26	LA	1556	C	C5-C4-N4	8.69	126.28	120.20
26	LA	1667	G	N1-C6-O6	8.69	125.11	119.90
26	LA	2123	G	P-O5'-C5'	8.69	134.80	120.90
2	SA	1330	U	C2-N3-C4	-8.69	121.79	127.00
26	LA	1210	G	C6-C5-N7	-8.69	125.19	130.40
26	LA	504	A	C5-N7-C8	-8.69	99.56	103.90
26	LA	651	G	N1-C6-O6	8.69	125.11	119.90
26	LA	675	A	C5'-C4'-C3'	-8.69	102.10	116.00
26	LA	1969	A	N9-C4-C5	-8.69	102.33	105.80
34	L0	47	ARG	NE-CZ-NH1	8.69	124.64	120.30
2	SA	46	G	C5-C6-N1	8.68	115.84	111.50
2	SA	907	A	O4'-C1'-N9	8.68	115.15	108.20
2	SA	160	A	N1-C2-N3	-8.68	124.96	129.30
26	LA	1606	C	N3-C4-C5	-8.68	118.43	121.90
26	LA	1722	A	N1-C2-N3	8.68	133.64	129.30
26	LA	1929	G	N1-C6-O6	8.68	125.11	119.90
26	LA	2357	G	C4'-C3'-C2'	-8.68	93.92	102.60
26	LA	2456	C	N1-C2-O2	8.68	124.11	118.90
2	SA	134	G	N1-C6-O6	8.68	125.11	119.90
2	SA	1346	A	N1-C6-N6	8.68	123.81	118.60
26	LA	349	U	C3'-C2'-C1'	-8.68	94.56	101.50
2	SA	514	C	N3-C4-C5	-8.68	118.43	121.90
2	SA	1422	G	N3-C4-C5	-8.68	124.26	128.60
25	LB	65	U	P-O3'-C3'	8.68	130.11	119.70
26	LA	2360	G	N9-C4-C5	8.68	108.87	105.40
48	LN	78	ARG	NE-CZ-NH2	-8.68	115.96	120.30
2	SA	1447	A	N9-C4-C5	-8.68	102.33	105.80
17	SQ	10	ARG	NE-CZ-NH2	-8.68	115.96	120.30
2	SA	211	G	N1-C2-N2	-8.67	108.39	116.20
2	SA	1169	A	O4'-C1'-N9	8.67	115.14	108.20
2	SA	72	A	O4'-C1'-N9	8.67	115.14	108.20
2	SA	765	G	O4'-C1'-N9	8.67	115.14	108.20
2	SA	820	U	C5-C6-N1	-8.67	118.36	122.70
2	SA	946	A	C8-N9-C4	-8.67	102.33	105.80
2	SA	1022	A	C5-C6-N1	8.67	122.04	117.70
2	SA	1134	G	C2-N3-C4	8.67	116.24	111.90
25	LB	81	G	N3-C2-N2	8.67	125.97	119.90
26	LA	2298	A	C5'-C4'-O4'	8.67	119.51	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	645	C	N3-C2-O2	-8.67	115.83	121.90
26	LA	727	A	C6-N1-C2	-8.67	113.40	118.60
26	LA	932	U	C3'-C2'-C1'	8.67	108.44	101.50
26	LA	990	A	N9-C4-C5	8.67	109.27	105.80
26	LA	1718	G	C4-C5-N7	-8.67	107.33	110.80
26	LA	2289	G	C5-N7-C8	-8.67	99.97	104.30
26	LA	2574	G	C4-C5-N7	8.67	114.27	110.80
26	LA	2702	G	C5-C6-O6	-8.67	123.40	128.60
2	SA	437	U	O5'-P-OP2	-8.67	97.90	105.70
2	SA	1426	G	N3-C4-N9	8.67	131.20	126.00
26	LA	2269	G	N1-C6-O6	-8.67	114.70	119.90
26	LA	2456	C	C6-N1-C2	-8.67	116.83	120.30
26	LA	2602	A	C5-C6-N6	-8.67	116.77	123.70
2	SA	1468	A	C4-C5-N7	8.66	115.03	110.70
4	S2	65	G	N3-C4-C5	-8.66	124.27	128.60
25	LB	69	G	C5-C6-N1	8.66	115.83	111.50
26	LA	1801	A	C5-C6-N6	8.66	130.63	123.70
26	LA	2184	A	N9-C4-C5	-8.66	102.33	105.80
2	SA	337	G	C6-C5-N7	-8.66	125.20	130.40
26	LA	819	A	C8-N9-C4	8.66	109.27	105.80
26	LA	998	C	C6-N1-C2	-8.66	116.83	120.30
26	LA	2373	G	C4-C5-C6	-8.66	113.60	118.80
26	LA	1978	A	N9-C4-C5	8.66	109.27	105.80
26	LA	2247	A	N7-C8-N9	8.66	118.13	113.80
26	LA	2781	A	N1-C2-N3	8.66	133.63	129.30
26	LA	1186	G	O4'-C1'-N9	8.66	115.13	108.20
1	SS	77	ARG	NH1-CZ-NH2	-8.66	109.88	119.40
2	SA	441	A	C5'-C4'-O4'	8.66	119.49	109.10
26	LA	747	U	C2-N3-C4	-8.66	121.81	127.00
26	LA	2421	G	C8-N9-C4	8.66	109.86	106.40
26	LA	2631	G	C6-N1-C2	-8.66	119.90	125.10
2	SA	669	G	C8-N9-C4	-8.66	102.94	106.40
6	SU	16	ARG	NH1-CZ-NH2	-8.66	109.88	119.40
26	LA	648	G	C5-C6-O6	8.66	133.79	128.60
26	LA	1055	G	N9-C4-C5	8.66	108.86	105.40
26	LA	1448	G	C5-N7-C8	-8.66	99.97	104.30
26	LA	1493	C	C5-C6-N1	-8.66	116.67	121.00
26	LA	2352	A	C8-N9-C4	-8.66	102.34	105.80
26	LA	1101	U	O4'-C1'-N1	8.66	115.12	108.20
26	LA	2558	C	C5-C4-N4	-8.66	114.14	120.20
2	SA	124	C	C5'-C4'-O4'	8.65	119.49	109.10
2	SA	573	A	P-O3'-C3'	8.65	130.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1315	C	C5-C4-N4	8.65	126.26	120.20
26	LA	1342	A	N9-C4-C5	-8.65	102.34	105.80
2	SA	802	A	C6-N1-C2	-8.65	113.41	118.60
25	LB	108	A	N7-C8-N9	-8.65	109.47	113.80
26	LA	1266	G	C6-N1-C2	-8.65	119.91	125.10
26	LA	1879	C	N3-C4-C5	-8.65	118.44	121.90
26	LA	2254	C	C5'-C4'-O4'	8.65	119.48	109.10
2	SA	1539	C	O4'-C1'-N1	8.65	115.12	108.20
26	LA	2027	G	C5-C6-N1	8.65	115.83	111.50
26	LA	936	A	C2-N3-C4	-8.65	106.28	110.60
26	LA	2429	G	N1-C2-N3	-8.65	118.71	123.90
2	SA	423	G	N1-C2-N3	-8.65	118.71	123.90
26	LA	1141	U	C5-C6-N1	8.65	127.02	122.70
26	LA	1284	A	C8-N9-C4	8.65	109.26	105.80
2	SA	602	A	C4-C5-C6	-8.64	112.68	117.00
26	LA	1207	C	C4'-C3'-C2'	-8.64	93.95	102.60
26	LA	1246	A	C5-C6-N6	8.64	130.62	123.70
26	LA	2356	U	N3-C2-O2	8.64	128.25	122.20
2	SA	569	C	O4'-C1'-N1	8.64	115.11	108.20
2	SA	975	A	N9-C4-C5	-8.64	102.34	105.80
26	LA	839	U	O4'-C1'-N1	8.64	115.11	108.20
26	LA	894	U	O4'-C1'-N1	8.64	115.11	108.20
26	LA	1210	G	N1-C6-O6	8.64	125.09	119.90
26	LA	2306	C	N3-C2-O2	-8.64	115.85	121.90
26	LA	2633	G	C4-C5-N7	8.64	114.26	110.80
2	SA	296	U	N1-C2-N3	8.64	120.08	114.90
2	SA	1078	U	N1-C2-N3	8.64	120.08	114.90
2	SA	1268	G	C2-N3-C4	8.64	116.22	111.90
26	LA	309	A	O4'-C1'-N9	8.64	115.11	108.20
26	LA	1263	U	P-O3'-C3'	8.64	130.07	119.70
26	LA	1766	G	N3-C4-C5	8.64	132.92	128.60
26	LA	1510	G	C5-C6-O6	-8.64	123.42	128.60
2	SA	59	A	C4-C5-C6	-8.64	112.68	117.00
2	SA	1530	G	C8-N9-C1'	-8.64	115.77	127.00
26	LA	1525	A	O4'-C1'-N9	8.64	115.11	108.20
2	SA	910	C	O4'-C1'-N1	8.64	115.11	108.20
2	SA	1109	C	C6-N1-C2	-8.64	116.84	120.30
26	LA	173	A	C5-N7-C8	-8.64	99.58	103.90
26	LA	188	G	N9-C4-C5	8.64	108.86	105.40
26	LA	327	G	N1-C6-O6	8.64	125.08	119.90
26	LA	1112	G	C8-N9-C4	-8.64	102.94	106.40
26	LA	331	C	C5-C6-N1	8.64	125.32	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1848	A	C5-C6-N1	-8.64	113.38	117.70
26	LA	2337	G	N3-C2-N2	8.64	125.94	119.90
2	SA	144	G	C5-C6-O6	-8.63	123.42	128.60
2	SA	746	A	C5'-C4'-C3'	-8.63	102.18	116.00
2	SA	908	A	N1-C2-N3	-8.63	124.98	129.30
3	S1	24	A	C5-N7-C8	-8.63	99.58	103.90
26	LA	471	A	C5'-C4'-O4'	8.63	119.46	109.10
26	LA	1505	A	C5-C6-N6	-8.63	116.79	123.70
26	LA	2171	A	C4-C5-N7	-8.63	106.38	110.70
26	LA	2553	G	N9-C4-C5	8.63	108.85	105.40
2	SA	811	C	C3'-C2'-C1'	8.63	108.41	101.50
2	SA	1290	G	C5-C6-O6	-8.63	123.42	128.60
2	SA	1294	G	C6-N1-C2	-8.63	119.92	125.10
2	SA	1347	G	O4'-C1'-N9	8.63	115.11	108.20
2	SA	1393	U	O4'-C1'-N1	8.63	115.11	108.20
26	LA	1202	G	C5-C6-O6	-8.63	123.42	128.60
26	LA	1988	G	O4'-C1'-N9	8.63	115.11	108.20
33	LZ	2	ARG	NE-CZ-NH2	8.63	124.62	120.30
50	LL	96	ARG	NE-CZ-NH2	8.63	124.62	120.30
2	SA	830	G	C5'-C4'-O4'	8.63	119.45	109.10
25	LB	56	G	C8-N9-C4	-8.63	102.95	106.40
26	LA	183	C	C6-N1-C2	-8.63	116.85	120.30
26	LA	1900	A	N7-C8-N9	-8.63	109.48	113.80
26	LA	2120	G	C8-N9-C1'	-8.63	115.78	127.00
26	LA	2427	C	O4'-C1'-N1	8.63	115.10	108.20
26	LA	798	G	C5'-C4'-C3'	-8.63	102.19	116.00
2	SA	131	A	N7-C8-N9	-8.63	109.49	113.80
2	SA	1111	A	C4-C5-C6	-8.63	112.69	117.00
2	SA	1483	A	N1-C2-N3	8.63	133.61	129.30
26	LA	396	G	N1-C6-O6	8.63	125.08	119.90
26	LA	850	U	O4'-C1'-N1	8.63	115.10	108.20
26	LA	1414	C	O4'-C1'-N1	8.63	115.10	108.20
26	LA	2138	G	C2-N3-C4	8.63	116.21	111.90
26	LA	1359	A	O4'-C1'-N9	8.63	115.10	108.20
2	SA	348	G	C2-N3-C4	8.62	116.21	111.90
2	SA	376	G	C5-C6-O6	-8.62	123.42	128.60
2	SA	816	A	C4'-C3'-C2'	-8.62	93.97	102.60
8	SH	79	ARG	NE-CZ-NH1	-8.62	115.99	120.30
26	LA	987	C	C3'-C2'-C1'	8.63	108.40	101.50
26	LA	1071	G	P-O5'-C5'	8.62	134.70	120.90
2	SA	1092	A	N9-C4-C5	-8.62	102.35	105.80
2	SA	1524	C	N1-C2-N3	8.62	125.23	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	SP	60	TRP	CB-CG-CD2	-8.62	115.39	126.60
26	LA	260	G	C5-C6-N1	8.62	115.81	111.50
26	LA	351	C	N1-C2-O2	8.62	124.07	118.90
26	LA	670	A	C8-N9-C4	-8.62	102.35	105.80
26	LA	817	C	C5-C6-N1	8.62	125.31	121.00
26	LA	1138	G	C8-N9-C4	-8.62	102.95	106.40
26	LA	715	A	O4'-C1'-N9	8.62	115.10	108.20
26	LA	1455	G	C4-C5-N7	-8.62	107.35	110.80
26	LA	1733	G	O4'-C1'-N9	8.62	115.10	108.20
26	LA	1837	C	N1-C2-N3	8.62	125.23	119.20
26	LA	1932	A	N9-C4-C5	-8.62	102.35	105.80
26	LA	2656	U	C2-N1-C1'	-8.62	107.35	117.70
44	LF	21	ARG	NE-CZ-NH1	-8.62	115.99	120.30
2	SA	551	U	C6-N1-C2	8.62	126.17	121.00
26	LA	126	A	C1'-O4'-C4'	-8.62	103.00	109.90
26	LA	1860	G	C4-C5-N7	8.62	114.25	110.80
2	SA	196	A	C5'-C4'-C3'	-8.62	102.21	116.00
2	SA	372	C	C2-N1-C1'	8.62	128.28	118.80
26	LA	2404	U	N3-C2-O2	-8.62	116.17	122.20
26	LA	2405	G	C8-N9-C4	8.62	109.85	106.40
2	SA	442	G	C4-C5-N7	8.62	114.25	110.80
4	S2	19	G	P-O5'-C5'	8.62	134.69	120.90
26	LA	418	C	P-O3'-C3'	8.62	130.04	119.70
26	LA	515	A	C8-N9-C4	8.62	109.25	105.80
47	LJ	158	ARG	NE-CZ-NH2	-8.62	115.99	120.30
26	LA	745	G	O4'-C1'-N9	8.62	115.09	108.20
26	LA	774	G	C8-N9-C4	8.62	109.85	106.40
26	LA	820	A	N9-C4-C5	8.62	109.25	105.80
2	SA	473	U	C6-N1-C2	-8.62	115.83	121.00
26	LA	39	G	C6-N1-C2	-8.62	119.93	125.10
26	LA	2772	C	C2-N3-C4	-8.62	115.59	119.90
2	SA	519	C	C3'-C2'-C1'	8.61	108.39	101.50
2	SA	740	U	C5'-C4'-O4'	8.61	119.44	109.10
2	SA	943	U	C4-C5-C6	-8.62	114.53	119.70
26	LA	1650	A	C2-N3-C4	8.62	114.91	110.60
26	LA	1849	G	N3-C4-C5	8.62	132.91	128.60
26	LA	748	G	N3-C4-C5	-8.61	124.29	128.60
26	LA	1047	G	OP1-P-OP2	-8.61	106.68	119.60
26	LA	1283	G	N9-C4-C5	8.61	108.85	105.40
26	LA	1880	U	C6-N1-C2	-8.62	115.83	121.00
26	LA	2743	U	C6-N1-C2	8.61	126.17	121.00
2	SA	776	G	C6-N1-C2	-8.61	119.93	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SK	92	ARG	NE-CZ-NH2	-8.61	115.99	120.30
26	LA	213	A	N7-C8-N9	-8.61	109.49	113.80
26	LA	1843	C	O4'-C1'-N1	8.61	115.09	108.20
26	LA	2453	A	N1-C6-N6	-8.61	113.43	118.60
26	LA	2502	G	P-O3'-C3'	8.61	130.03	119.70
26	LA	2837	A	O4'-C1'-N9	8.61	115.09	108.20
26	LA	108	G	N1-C6-O6	8.61	125.07	119.90
26	LA	472	A	C5-C6-N6	-8.61	116.81	123.70
26	LA	624	C	C4'-C3'-C2'	-8.61	93.99	102.60
26	LA	698	C	C5-C4-N4	-8.61	114.17	120.20
26	LA	2282	G	P-O3'-C3'	8.61	130.03	119.70
26	LA	2364	C	C2-N3-C4	-8.61	115.60	119.90
2	SA	931	C	C6-N1-C2	-8.61	116.86	120.30
26	LA	1036	G	O4'-C1'-N9	8.61	115.08	108.20
26	LA	1126	A	N9-C4-C5	-8.61	102.36	105.80
26	LA	1654	A	C2-N3-C4	-8.61	106.30	110.60
26	LA	1959	G	N1-C2-N3	8.61	129.06	123.90
2	SA	1484	C	O4'-C4'-C3'	-8.60	95.40	104.00
22	SF	110	ARG	NE-CZ-NH1	8.60	124.60	120.30
26	LA	413	C	N3-C4-N4	8.60	124.02	118.00
26	LA	1006	C	N3-C4-C5	-8.60	118.46	121.90
26	LA	1219	U	N3-C4-C5	-8.60	109.44	114.60
26	LA	1675	C	O4'-C1'-N1	8.60	115.08	108.20
26	LA	1948	G	P-O3'-C3'	-8.60	109.38	119.70
26	LA	2099	U	C5-C4-O4	8.60	131.06	125.90
2	SA	526	C	P-O3'-C3'	8.60	130.02	119.70
2	SA	1043	G	C8-N9-C4	8.60	109.84	106.40
26	LA	1706	C	C2-N3-C4	-8.60	115.60	119.90
26	LA	1736	U	C2-N3-C4	-8.60	121.84	127.00
26	LA	1935	G	C5-C6-O6	-8.60	123.44	128.60
26	LA	789	A	N1-C6-N6	8.60	123.76	118.60
26	LA	1540	G	N1-C6-O6	8.60	125.06	119.90
26	LA	2599	G	O4'-C1'-N9	8.60	115.08	108.20
2	SA	73	C	C2-N3-C4	-8.60	115.60	119.90
2	SA	686	U	O4'-C1'-C2'	-8.60	97.20	105.80
2	SA	742	G	C5'-C4'-C3'	-8.60	102.25	116.00
2	SA	1535	C	C2-N3-C4	8.60	124.20	119.90
26	LA	695	G	N7-C8-N9	-8.60	108.80	113.10
26	LA	721	A	C4-C5-C6	8.60	121.30	117.00
26	LA	981	A	N1-C6-N6	8.60	123.76	118.60
2	SA	372	C	C4'-C3'-C2'	8.59	111.19	102.60
26	LA	962	G	C5-N7-C8	-8.59	100.00	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1198	U	N3-C4-C5	8.59	119.76	114.60
26	LA	2684	U	C5'-C4'-O4'	8.59	119.41	109.10
26	LA	216	A	C5-C6-N6	8.59	130.57	123.70
26	LA	2692	G	O4'-C1'-N9	8.59	115.07	108.20
2	SA	1280	A	C2-N3-C4	8.59	114.89	110.60
26	LA	896	A	C1'-O4'-C4'	-8.59	103.03	109.90
26	LA	1382	G	C8-N9-C4	-8.59	102.96	106.40
26	LA	1661	G	C1'-O4'-C4'	-8.59	103.03	109.90
26	LA	1748	C	O4'-C1'-N1	8.59	115.07	108.20
2	SA	69	G	C5-N7-C8	8.59	108.59	104.30
2	SA	727	G	C4-C5-N7	-8.59	107.36	110.80
3	S1	20	G	C4-N9-C1'	8.59	137.66	126.50
25	LB	55	U	C2-N1-C1'	-8.59	107.39	117.70
26	LA	1107	G	C5-N7-C8	-8.59	100.01	104.30
26	LA	1087	G	C5'-C4'-C3'	-8.59	102.26	116.00
26	LA	1112	G	C2-N3-C4	-8.59	107.61	111.90
26	LA	1235	G	C6-N1-C2	-8.59	119.95	125.10
26	LA	1246	A	O4'-C1'-N9	8.59	115.07	108.20
26	LA	1523	U	O4'-C1'-N1	8.59	115.07	108.20
26	LA	388	G	C6-N1-C2	-8.58	119.95	125.10
12	SL	30	ARG	NE-CZ-NH1	8.58	124.59	120.30
26	LA	2869	G	C2-N3-C4	-8.58	107.61	111.90
2	SA	42	G	C5-C6-N1	8.58	115.79	111.50
26	LA	84	A	P-O5'-C5'	-8.58	107.17	120.90
26	LA	708	G	N3-C4-C5	-8.58	124.31	128.60
26	LA	2209	G	N1-C2-N2	-8.58	108.48	116.20
2	SA	213	G	N1-C6-O6	8.58	125.05	119.90
2	SA	1054	C	C5'-C4'-O4'	8.58	119.39	109.10
16	SP	16	PHE	CB-CG-CD2	-8.58	114.80	120.80
43	L7	12	ARG	NE-CZ-NH2	-8.58	116.01	120.30
2	SA	485	U	C4'-C3'-C2'	-8.58	94.02	102.60
26	LA	1871	A	C4'-C3'-C2'	-8.58	94.02	102.60
2	SA	97	G	C5-N7-C8	8.58	108.59	104.30
2	SA	311	C	C6-N1-C2	-8.58	116.87	120.30
2	SA	806	C	O4'-C1'-N1	8.58	115.06	108.20
8	SH	76	ARG	NE-CZ-NH2	8.58	124.59	120.30
26	LA	274	C	C5'-C4'-C3'	-8.58	102.28	116.00
26	LA	535	G	C1'-O4'-C4'	-8.58	103.04	109.90
26	LA	592	A	C2-N3-C4	-8.58	106.31	110.60
2	SA	339	C	P-O3'-C3'	-8.57	109.41	119.70
2	SA	689	C	C5-C6-N1	8.57	125.29	121.00
26	LA	1239	G	C8-N9-C4	-8.57	102.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SK	104	PHE	CB-CG-CD1	8.57	126.80	120.80
25	LB	53	A	C2-N3-C4	8.57	114.89	110.60
26	LA	46	G	C4'-C3'-C2'	-8.57	94.03	102.60
26	LA	936	A	N3-C4-C5	8.57	132.80	126.80
26	LA	659	G	C6-C5-N7	8.57	135.54	130.40
26	LA	1290	C	C3'-C2'-C1'	8.57	108.35	101.50
2	SA	679	C	C2-N3-C4	-8.57	115.62	119.90
2	SA	1485	U	N1-C2-N3	8.57	120.04	114.90
17	SQ	27	PHE	CB-CG-CD1	-8.57	114.80	120.80
26	LA	10	A	N1-C2-N3	8.57	133.58	129.30
26	LA	2431	U	N1-C2-N3	8.57	120.04	114.90
26	LA	908	C	N3-C4-C5	8.57	125.33	121.90
26	LA	2497	A	O4'-C1'-N9	8.57	115.05	108.20
26	LA	2515	C	O4'-C1'-N1	8.57	115.05	108.20
2	SA	1111	A	N1-C6-N6	-8.56	113.46	118.60
2	SA	485	U	O4'-C1'-C2'	-8.56	97.24	105.80
2	SA	550	G	N7-C8-N9	-8.56	108.82	113.10
26	LA	396	G	C5-C6-O6	-8.56	123.46	128.60
26	LA	1131	G	C8-N9-C4	8.56	109.83	106.40
26	LA	1344	U	P-O3'-C3'	-8.56	109.42	119.70
26	LA	1757	A	C6-N1-C2	-8.56	113.46	118.60
26	LA	2552	U	C2-N3-C4	-8.56	121.86	127.00
2	SA	424	G	C2-N3-C4	8.56	116.18	111.90
26	LA	231	A	P-O3'-C3'	8.56	129.97	119.70
26	LA	397	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1287	A	O4'-C1'-N9	8.56	115.05	108.20
26	LA	2475	C	C6-N1-C2	-8.56	116.88	120.30
26	LA	2587	A	C5-C6-N6	8.56	130.55	123.70
2	SA	211	G	N7-C8-N9	8.56	117.38	113.10
2	SA	1207	G	C5-C6-N1	-8.56	107.22	111.50
2	SA	1398	A	N1-C6-N6	-8.56	113.46	118.60
26	LA	410	G	O4'-C1'-N9	8.56	115.05	108.20
26	LA	997	G	N1-C6-O6	8.56	125.03	119.90
26	LA	1559	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1846	G	N3-C4-N9	-8.56	120.86	126.00
26	LA	1934	C	P-O3'-C3'	8.56	129.97	119.70
26	LA	2904	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1343	G	C1'-O4'-C4'	-8.56	103.05	109.90
26	LA	1384	A	N9-C4-C5	8.56	109.22	105.80
5	ST	73	ARG	NE-CZ-NH1	8.56	124.58	120.30
26	LA	37	C	P-O3'-C3'	8.56	129.97	119.70
2	SA	625	U	C5-C4-O4	-8.55	120.77	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1223	C	C4-C5-C6	8.55	121.68	117.40
26	LA	2239	G	C2-N3-C4	-8.55	107.62	111.90
2	SA	1135	U	O4'-C1'-N1	8.55	115.04	108.20
2	SA	1467	C	P-O5'-C5'	8.55	134.58	120.90
22	SF	64	VAL	O-C-N	-8.55	109.01	122.70
24	S3	670	ARG	NE-CZ-NH2	8.55	124.58	120.30
26	LA	1348	C	C6-N1-C2	-8.55	116.88	120.30
26	LA	1892	C	O4'-C1'-N1	8.55	115.04	108.20
2	SA	976	G	N1-C6-O6	-8.55	114.77	119.90
2	SA	1535	C	O4'-C1'-N1	8.55	115.04	108.20
26	LA	170	U	O4'-C1'-N1	8.55	115.04	108.20
26	LA	530	G	C5-C6-N1	-8.55	107.22	111.50
26	LA	1615	C	C5-C4-N4	-8.55	114.21	120.20
26	LA	2401	U	C5-C4-O4	8.55	131.03	125.90
2	SA	858	G	C6-N1-C2	-8.55	119.97	125.10
26	LA	282	A	N9-C4-C5	-8.55	102.38	105.80
26	LA	1009	A	P-O3'-C3'	-8.55	109.44	119.70
26	LA	2074	U	N1-C2-N3	8.55	120.03	114.90
26	LA	2853	C	N3-C4-N4	8.55	123.98	118.00
2	SA	147	G	C2-N3-C4	-8.54	107.63	111.90
2	SA	379	C	C4-C5-C6	-8.54	113.13	117.40
2	SA	1347	G	C8-N9-C4	8.54	109.82	106.40
26	LA	1115	G	C5-C6-O6	-8.55	123.47	128.60
4	S2	65	G	C5-C6-O6	-8.54	123.47	128.60
26	LA	725	G	C4-C5-N7	8.54	114.22	110.80
26	LA	1148	U	N1-C2-O2	-8.54	116.82	122.80
26	LA	1725	U	C1'-O4'-C4'	-8.54	103.06	109.90
26	LA	1759	A	N9-C4-C5	-8.54	102.38	105.80
26	LA	1765	U	N3-C4-O4	8.54	125.38	119.40
26	LA	2797	U	C4-C5-C6	8.54	124.83	119.70
2	SA	185	U	N3-C2-O2	-8.54	116.22	122.20
2	SA	892	A	C5-C6-N6	-8.54	116.87	123.70
26	LA	780	G	N3-C2-N2	8.54	125.88	119.90
26	LA	812	C	N3-C2-O2	-8.54	115.92	121.90
26	LA	937	C	C5-C6-N1	8.54	125.27	121.00
26	LA	1014	A	C6-N1-C2	-8.54	113.47	118.60
26	LA	1239	G	C5'-C4'-O4'	8.54	119.35	109.10
26	LA	1931	U	O4'-C1'-N1	8.54	115.03	108.20
2	SA	52	C	N3-C4-N4	-8.54	112.02	118.00
2	SA	251	G	C4-C5-N7	-8.54	107.38	110.80
2	SA	525	C	O4'-C1'-N1	8.54	115.03	108.20
2	SA	1062	U	C2-N3-C4	-8.54	121.88	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1291	U	C3'-C2'-C1'	8.54	108.33	101.50
2	SA	1534	A	C8-N9-C4	-8.54	102.38	105.80
26	LA	79	C	N3-C4-C5	-8.54	118.48	121.90
26	LA	348	A	C6-C5-N7	-8.54	126.32	132.30
26	LA	2461	A	C5-C6-N1	8.54	121.97	117.70
26	LA	473	G	N9-C4-C5	-8.54	101.98	105.40
26	LA	747	U	C4-C5-C6	-8.54	114.58	119.70
26	LA	935	C	C5-C6-N1	8.54	125.27	121.00
26	LA	1794	A	C5-N7-C8	8.54	108.17	103.90
26	LA	2031	A	C2-N3-C4	8.54	114.87	110.60
26	LA	2364	C	O4'-C1'-N1	8.54	115.03	108.20
2	SA	463	U	C5-C4-O4	-8.54	120.78	125.90
26	LA	295	G	C2-N3-C4	8.54	116.17	111.90
26	LA	340	A	C5-C6-N6	8.54	130.53	123.70
26	LA	612	G	C5-C6-N1	-8.54	107.23	111.50
2	SA	399	G	C5-N7-C8	-8.53	100.03	104.30
2	SA	1082	A	C5-C6-N6	8.53	130.53	123.70
2	SA	1520	C	O4'-C1'-N1	8.53	115.03	108.20
25	LB	45	A	N1-C6-N6	8.53	123.72	118.60
26	LA	989	G	C5-C6-O6	8.54	133.72	128.60
26	LA	1000	A	C6-N1-C2	-8.54	113.48	118.60
26	LA	1992	G	N3-C2-N2	-8.54	113.92	119.90
33	LZ	36	ARG	NE-CZ-NH1	-8.53	116.03	120.30
2	SA	153	C	C5-C4-N4	-8.53	114.23	120.20
2	SA	669	G	C5-C6-O6	-8.53	123.48	128.60
2	SA	17	U	O4'-C1'-N1	8.53	115.03	108.20
2	SA	978	A	C4-C5-C6	-8.53	112.73	117.00
4	S2	68	C	C5'-C4'-C3'	8.53	129.65	116.00
26	LA	368	A	C8-N9-C4	8.53	109.21	105.80
26	LA	763	G	C4-C5-N7	8.53	114.21	110.80
26	LA	1624	U	C1'-O4'-C4'	-8.53	103.08	109.90
26	LA	1743	G	C4'-C3'-C2'	-8.53	94.07	102.60
26	LA	2307	G	C8-N9-C4	-8.53	102.99	106.40
26	LA	2823	A	N7-C8-N9	-8.53	109.53	113.80
2	SA	154	U	P-O5'-C5'	8.53	134.55	120.90
2	SA	164	G	C5-C6-O6	-8.53	123.48	128.60
2	SA	569	C	C2-N3-C4	-8.53	115.64	119.90
26	LA	638	G	C5-C6-O6	-8.53	123.48	128.60
26	LA	2638	G	N3-C4-C5	-8.53	124.33	128.60
2	SA	755	G	C5-C6-N1	8.53	115.76	111.50
26	LA	10	A	N1-C6-N6	-8.53	113.48	118.60
26	LA	1241	A	N1-C6-N6	8.53	123.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1899	A	N9-C4-C5	-8.53	102.39	105.80
26	LA	2363	G	C4-C5-N7	8.53	114.21	110.80
2	SA	1258	G	O4'-C1'-N9	8.53	115.02	108.20
26	LA	75	G	C5-C6-N1	-8.53	107.24	111.50
26	LA	195	A	C8-N9-C4	-8.53	102.39	105.80
26	LA	2646	C	O4'-C1'-N1	8.53	115.02	108.20
26	LA	821	A	N1-C6-N6	-8.53	113.48	118.60
26	LA	13	A	C5-C6-N6	8.52	130.52	123.70
26	LA	1321	A	C5-C6-N1	8.52	121.96	117.70
26	LA	2253	G	C5-C6-N1	8.52	115.76	111.50
25	LB	49	C	O4'-C1'-N1	8.52	115.02	108.20
26	LA	60	G	C8-N9-C4	8.52	109.81	106.40
26	LA	805	G	N1-C2-N3	-8.52	118.79	123.90
26	LA	2529	G	N3-C4-C5	-8.52	124.34	128.60
26	LA	978	G	C5-C6-O6	8.52	133.71	128.60
26	LA	1388	G	O4'-C1'-N9	8.52	115.02	108.20
26	LA	1933	G	C5-C6-N1	8.52	115.76	111.50
2	SA	235	C	O4'-C1'-C2'	8.52	115.27	107.60
2	SA	296	U	O4'-C1'-N1	8.52	115.02	108.20
2	SA	608	A	C3'-C2'-C1'	-8.52	94.69	101.50
2	SA	1266	G	N9-C4-C5	8.52	108.81	105.40
25	LB	28	C	P-O3'-C3'	-8.52	109.48	119.70
26	LA	143	C	O4'-C1'-N1	8.52	115.02	108.20
26	LA	1218	G	C6-N1-C2	-8.52	119.99	125.10
26	LA	1609	A	N1-C2-N3	-8.52	125.04	129.30
2	SA	1224	U	P-O3'-C3'	8.52	129.92	119.70
26	LA	1042	G	C5-C6-O6	-8.52	123.49	128.60
26	LA	2631	G	C1'-O4'-C4'	-8.52	103.09	109.90
2	SA	215	C	C5'-C4'-C3'	-8.52	102.38	116.00
2	SA	934	C	C6-N1-C2	-8.52	116.89	120.30
2	SA	327	A	N1-C6-N6	8.52	123.71	118.60
2	SA	722	G	N3-C4-C5	-8.52	124.34	128.60
2	SA	883	C	C6-N1-C2	-8.52	116.89	120.30
2	SA	1035	A	C8-N9-C4	8.52	109.21	105.80
25	LB	55	U	P-O3'-C3'	-8.52	109.48	119.70
26	LA	512	G	N1-C6-O6	8.52	125.01	119.90
26	LA	1555	G	C5-N7-C8	8.52	108.56	104.30
33	LZ	27	ARG	NE-CZ-NH1	8.52	124.56	120.30
2	SA	87	C	C2-N3-C4	8.51	124.16	119.90
2	SA	87	C	C5-C4-N4	8.51	126.16	120.20
2	SA	1391	U	O4'-C1'-N1	8.51	115.01	108.20
26	LA	99	U	C6-N1-C2	-8.51	115.89	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	241	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	1703	G	O5'-P-OP2	-8.51	98.04	105.70
26	LA	1911	U	C5'-C4'-O4'	8.51	119.32	109.10
26	LA	2111	U	P-O3'-C3'	-8.51	109.48	119.70
26	LA	2562	U	N3-C4-C5	-8.51	109.49	114.60
26	LA	2737	G	O4'-C1'-N9	8.51	115.01	108.20
2	SA	17	U	C5'-C4'-O4'	8.51	119.31	109.10
2	SA	1227	A	C5-C6-N1	-8.51	113.44	117.70
26	LA	538	A	C5-C6-N6	8.51	130.51	123.70
2	SA	689	C	C6-N1-C2	-8.51	116.90	120.30
26	LA	730	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	1012	U	C5'-C4'-O4'	8.51	119.31	109.10
26	LA	1808	A	C5-C6-N1	-8.51	113.45	117.70
26	LA	2117	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	2146	C	N3-C4-C5	8.51	125.30	121.90
26	LA	2366	A	C5-C6-N1	8.51	121.95	117.70
4	S2	5	G	C5-C6-N1	-8.51	107.25	111.50
26	LA	8	C	O4'-C1'-N1	8.51	115.01	108.20
26	LA	1308	A	C4-C5-C6	-8.51	112.75	117.00
26	LA	2244	U	C2-N3-C4	-8.51	121.90	127.00
2	SA	1126	U	C2-N3-C4	-8.51	121.90	127.00
2	SA	1268	G	C8-N9-C4	-8.51	103.00	106.40
14	SN	60	ARG	NE-CZ-NH1	-8.51	116.05	120.30
26	LA	1579	A	N1-C6-N6	-8.51	113.50	118.60
46	LH	148	ARG	NE-CZ-NH2	8.51	124.55	120.30
2	SA	89	U	N3-C2-O2	-8.50	116.25	122.20
2	SA	679	C	N1-C2-N3	8.50	125.15	119.20
2	SA	1223	C	O4'-C1'-N1	8.50	115.00	108.20
4	S2	2	G	C4'-C3'-C2'	-8.50	94.10	102.60
26	LA	158	U	N3-C4-O4	-8.50	113.45	119.40
26	LA	225	C	C5-C4-N4	8.50	126.15	120.20
26	LA	1590	A	N1-C6-N6	8.50	123.70	118.60
26	LA	1412	U	C1'-O4'-C4'	8.50	116.70	109.90
26	LA	1794	A	N9-C4-C5	-8.50	102.40	105.80
26	LA	2122	U	C5'-C4'-O4'	8.50	119.30	109.10
26	LA	1656	C	OP1-P-OP2	-8.50	106.85	119.60
2	SA	991	U	C5-C4-O4	-8.50	120.80	125.90
3	S1	23	C	N3-C4-C5	-8.50	118.50	121.90
26	LA	1308	A	C5'-C4'-O4'	8.50	119.30	109.10
26	LA	2436	G	N7-C8-N9	-8.50	108.85	113.10
2	SA	1097	C	C6-N1-C2	-8.50	116.90	120.30
26	LA	300	A	C2-N3-C4	-8.50	106.35	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1786	A	C6-N1-C2	-8.50	113.50	118.60
2	SA	27	G	N1-C6-O6	8.50	125.00	119.90
2	SA	606	G	P-O3'-C3'	-8.50	109.50	119.70
2	SA	708	C	C5-C6-N1	-8.50	116.75	121.00
26	LA	175	G	N3-C4-C5	-8.50	124.35	128.60
26	LA	1665	A	C1'-O4'-C4'	-8.50	103.10	109.90
26	LA	2309	A	C5-N7-C8	-8.50	99.65	103.90
26	LA	2450	A	N1-C6-N6	8.50	123.70	118.60
41	L5	21	ARG	NE-CZ-NH1	-8.50	116.05	120.30
2	SA	442	G	C5'-C4'-O4'	8.49	119.29	109.10
2	SA	477	C	C4'-C3'-C2'	-8.49	94.11	102.60
26	LA	290	U	O4'-C1'-N1	8.49	115.00	108.20
26	LA	349	U	O4'-C1'-N1	8.49	115.00	108.20
26	LA	685	A	C5-C6-N6	8.49	130.50	123.70
26	LA	1338	G	N3-C4-C5	-8.49	124.35	128.60
26	LA	1629	U	N1-C2-N3	8.49	120.00	114.90
26	LA	1754	A	N1-C6-N6	8.49	123.70	118.60
26	LA	2056	G	N1-C6-O6	8.49	125.00	119.90
26	LA	1933	G	C6-C5-N7	8.49	135.50	130.40
26	LA	2302	U	C1'-O4'-C4'	-8.49	103.11	109.90
26	LA	2559	C	P-O3'-C3'	8.49	129.89	119.70
2	SA	35	G	C8-N9-C4	-8.49	103.00	106.40
2	SA	309	A	N1-C6-N6	-8.49	113.50	118.60
2	SA	1028	C	P-O5'-C5'	8.49	134.48	120.90
2	SA	1190	G	N1-C6-O6	-8.49	114.81	119.90
26	LA	1570	A	C5'-C4'-O4'	8.49	119.29	109.10
26	LA	816	C	C5-C6-N1	8.49	125.25	121.00
26	LA	1227	G	N9-C4-C5	-8.49	102.00	105.40
26	LA	1659	G	N3-C4-C5	-8.49	124.36	128.60
26	LA	1858	A	O4'-C1'-N9	8.49	114.99	108.20
26	LA	2043	C	P-O3'-C3'	8.49	129.89	119.70
26	LA	2212	A	O4'-C1'-N9	8.49	114.99	108.20
26	LA	2410	G	C5-N7-C8	8.49	108.55	104.30
26	LA	2641	G	C2-N3-C4	-8.49	107.65	111.90
26	LA	156	A	C6-N1-C2	8.49	123.69	118.60
2	SA	416	G	C8-N9-C4	-8.49	103.01	106.40
2	SA	1205	U	C5-C4-O4	8.49	130.99	125.90
26	LA	2105	U	O4'-C1'-N1	8.49	114.99	108.20
26	LA	2606	C	O4'-C1'-N1	8.49	114.99	108.20
2	SA	433	G	C2-N3-C4	8.48	116.14	111.90
2	SA	743	A	C6-C5-N7	-8.48	126.36	132.30
26	LA	922	C	O4'-C1'-N1	8.48	114.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2024	G	N1-C2-N2	-8.48	108.56	116.20
26	LA	2211	A	N1-C6-N6	-8.48	113.51	118.60
2	SA	173	U	P-O3'-C3'	8.48	129.88	119.70
2	SA	337	G	C5-C6-N1	-8.48	107.26	111.50
26	LA	434	U	O4'-C1'-N1	8.48	114.99	108.20
26	LA	1040	A	C1'-O4'-C4'	-8.48	103.11	109.90
26	LA	2641	G	N1-C6-O6	-8.48	114.81	119.90
2	SA	499	A	C2-N3-C4	-8.48	106.36	110.60
2	SA	869	G	N3-C2-N2	8.48	125.84	119.90
26	LA	607	U	N3-C4-C5	8.48	119.69	114.60
26	LA	688	U	N1-C2-N3	8.48	119.99	114.90
26	LA	729	G	N1-C6-O6	-8.48	114.81	119.90
15	SO	87	ARG	NE-CZ-NH1	8.48	124.54	120.30
26	LA	484	C	C6-N1-C2	8.48	123.69	120.30
26	LA	2716	C	C3'-C2'-C1'	8.48	108.28	101.50
26	LA	158	U	N3-C2-O2	-8.48	116.27	122.20
26	LA	898	C	P-O3'-C3'	8.48	129.87	119.70
26	LA	964	C	O4'-C1'-N1	8.48	114.98	108.20
26	LA	974	G	C4-N9-C1'	8.48	137.52	126.50
26	LA	1552	A	N7-C8-N9	8.48	118.04	113.80
26	LA	2416	C	C4-C5-C6	8.48	121.64	117.40
57	LS	12	ARG	NE-CZ-NH2	8.48	124.54	120.30
2	SA	1201	A	C2-N3-C4	-8.47	106.36	110.60
26	LA	335	C	O4'-C1'-N1	8.47	114.98	108.20
26	LA	641	U	C6-N1-C1'	-8.47	109.33	121.20
26	LA	773	U	P-O5'-C5'	8.47	134.46	120.90
26	LA	732	C	O4'-C1'-N1	8.47	114.98	108.20
26	LA	1321	A	P-O3'-C3'	8.47	129.87	119.70
26	LA	2032	G	C5-C6-O6	-8.47	123.52	128.60
26	LA	2095	A	C4-C5-N7	-8.47	106.46	110.70
26	LA	2126	A	P-O5'-C5'	-8.47	107.34	120.90
26	LA	2186	G	C1'-O4'-C4'	-8.47	103.12	109.90
54	LM	30	ARG	NE-CZ-NH1	-8.47	116.06	120.30
2	SA	9	G	C8-N9-C4	-8.47	103.01	106.40
2	SA	170	U	C5'-C4'-C3'	-8.47	102.45	116.00
2	SA	466	A	O4'-C1'-N9	8.47	114.98	108.20
26	LA	1192	G	C4-C5-N7	8.47	114.19	110.80
2	SA	754	C	C6-N1-C2	-8.47	116.91	120.30
6	SU	54	ARG	NE-CZ-NH1	8.47	124.53	120.30
26	LA	370	G	N3-C2-N2	8.47	125.83	119.90
26	LA	454	A	P-O3'-C3'	-8.47	109.53	119.70
26	LA	717	C	C2-N3-C4	-8.47	115.67	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2431	U	C2-N3-C4	-8.47	121.92	127.00
2	SA	327	A	N9-C4-C5	-8.47	102.41	105.80
2	SA	479	U	P-O3'-C3'	-8.47	109.54	119.70
2	SA	865	A	N1-C6-N6	8.47	123.68	118.60
4	S2	59	A	C4-C5-N7	8.47	114.93	110.70
26	LA	907	G	C2-N3-C4	-8.47	107.67	111.90
26	LA	2785	C	N3-C2-O2	-8.47	115.97	121.90
26	LA	1677	A	C4-C5-C6	-8.47	112.77	117.00
2	SA	83	C	C4'-C3'-C2'	-8.46	94.14	102.60
2	SA	117	G	O4'-C1'-C2'	8.46	115.22	107.60
26	LA	727	A	C2-N3-C4	-8.47	106.37	110.60
26	LA	2402	U	O4'-C1'-N1	8.47	114.97	108.20
2	SA	1355	G	O4'-C1'-N9	8.46	114.97	108.20
26	LA	2547	A	C5'-C4'-O4'	8.46	119.26	109.10
2	SA	730	G	N1-C6-O6	8.46	124.98	119.90
2	SA	852	G	C2-N3-C4	8.46	116.13	111.90
26	LA	1059	G	C8-N9-C4	-8.46	103.02	106.40
2	SA	664	G	C5-C6-O6	-8.46	123.52	128.60
2	SA	1031	C	C2-N3-C4	8.46	124.13	119.90
2	SA	1500	A	C8-N9-C4	-8.46	102.42	105.80
25	LB	59	A	C8-N9-C4	-8.46	102.42	105.80
25	LB	116	G	C5-C6-O6	-8.46	123.52	128.60
26	LA	156	A	N1-C2-N3	-8.46	125.07	129.30
26	LA	756	A	C5'-C4'-C3'	-8.46	102.46	116.00
26	LA	2164	C	O4'-C1'-N1	8.46	114.97	108.20
26	LA	2183	A	N1-C6-N6	8.46	123.68	118.60
26	LA	48	G	C5-C6-O6	-8.46	123.52	128.60
26	LA	644	A	P-O3'-C3'	-8.46	109.55	119.70
26	LA	828	U	O4'-C1'-N1	8.46	114.97	108.20
26	LA	1072	C	N3-C4-N4	-8.46	112.08	118.00
26	LA	1365	A	C2-N3-C4	-8.46	106.37	110.60
2	SA	309	A	O4'-C1'-N9	8.46	114.97	108.20
2	SA	1201	A	C2'-C3'-O3'	8.46	128.11	109.50
26	LA	1946	U	C2-N3-C4	-8.46	121.92	127.00
26	LA	875	G	N1-C2-N2	-8.46	108.59	116.20
26	LA	1392	A	N9-C4-C5	-8.46	102.42	105.80
26	LA	1733	G	C3'-C2'-C1'	-8.46	94.73	101.50
26	LA	2100	G	C5'-C4'-C3'	8.46	129.53	116.00
26	LA	2174	C	O4'-C1'-N1	8.46	114.97	108.20
46	LH	156	TYR	CB-CG-CD2	-8.46	115.92	121.00
2	SA	554	A	N1-C6-N6	-8.46	113.53	118.60
2	SA	1133	G	N1-C2-N3	8.45	128.97	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1269	A	N9-C4-C5	-8.46	102.42	105.80
26	LA	2169	A	N7-C8-N9	-8.46	109.57	113.80
26	LA	1744	A	P-O3'-C3'	8.45	129.84	119.70
26	LA	2716	C	C5-C4-N4	8.45	126.12	120.20
2	SA	433	G	C1'-O4'-C4'	-8.45	103.14	109.90
4	S2	2	G	N1-C2-N2	-8.45	108.59	116.20
26	LA	1070	A	C2-N3-C4	-8.45	106.37	110.60
2	SA	1086	U	C5'-C4'-C3'	-8.45	102.48	116.00
2	SA	1457	G	C5-C6-O6	-8.45	123.53	128.60
18	SB	73	ARG	NE-CZ-NH2	-8.45	116.08	120.30
26	LA	1272	A	C6-C5-N7	-8.45	126.38	132.30
26	LA	1535	A	C6-N1-C2	-8.45	113.53	118.60
26	LA	2444	G	C3'-C2'-C1'	8.45	108.26	101.50
2	SA	529	G	N1-C6-O6	8.45	124.97	119.90
4	S2	73	A	C2'-C3'-O3'	8.45	128.09	109.50
26	LA	1160	G	C6-N1-C2	8.45	130.17	125.10
26	LA	1936	A	C5-C6-N1	-8.45	113.47	117.70
26	LA	2435	A	N1-C6-N6	-8.45	113.53	118.60
2	SA	631	C	P-O5'-C5'	-8.45	107.38	120.90
2	SA	665	A	O4'-C1'-N9	8.45	114.96	108.20
26	LA	63	A	P-O5'-C5'	-8.45	107.38	120.90
26	LA	554	U	C3'-C2'-C1'	8.45	108.26	101.50
26	LA	763	G	N9-C4-C5	-8.45	102.02	105.40
26	LA	1022	G	C5-C6-O6	-8.45	123.53	128.60
26	LA	1471	G	P-O3'-C3'	-8.45	109.56	119.70
26	LA	2454	G	C4-C5-N7	8.45	114.18	110.80
2	SA	1247	U	O4'-C1'-N1	8.45	114.96	108.20
4	S2	39	A	C8-N9-C4	-8.45	102.42	105.80
26	LA	1383	A	N9-C4-C5	-8.45	102.42	105.80
26	LA	1826	G	C5-C6-N1	8.45	115.72	111.50
2	SA	980	C	C1'-O4'-C4'	-8.44	103.14	109.90
4	S2	68	C	N3-C2-O2	-8.45	115.99	121.90
25	LB	14	U	C6-N1-C2	-8.45	115.93	121.00
26	LA	296	U	C5'-C4'-O4'	8.45	119.23	109.10
26	LA	1890	A	C5-N7-C8	-8.45	99.68	103.90
26	LA	2111	U	O4'-C1'-N1	8.45	114.96	108.20
26	LA	2253	G	O4'-C1'-N9	8.45	114.96	108.20
26	LA	2271	G	C5-C6-O6	-8.44	123.53	128.60
4	S2	76	C	N3-C4-N4	8.44	123.91	118.00
26	LA	72	U	C6-N1-C2	8.44	126.07	121.00
26	LA	2144	G	P-O3'-C3'	-8.44	109.57	119.70
26	LA	2196	C	N3-C4-C5	-8.44	118.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L1	44	ARG	NE-CZ-NH1	-8.44	116.08	120.30
2	SA	73	C	C6-N1-C2	-8.44	116.92	120.30
2	SA	227	G	N3-C4-C5	-8.44	124.38	128.60
2	SA	1233	G	C5-C6-O6	-8.44	123.54	128.60
2	SA	1310	G	C5-C6-O6	-8.44	123.54	128.60
3	S1	38	G	C2-N3-C4	8.44	116.12	111.90
26	LA	1024	G	C5-C6-N1	8.44	115.72	111.50
2	SA	1394	A	O4'-C1'-N9	8.44	114.95	108.20
26	LA	1228	G	C5-C6-O6	-8.44	123.54	128.60
26	LA	2067	G	N7-C8-N9	-8.44	108.88	113.10
26	LA	2755	C	C1'-O4'-C4'	-8.44	103.15	109.90
26	LA	492	A	C5-N7-C8	8.44	108.12	103.90
26	LA	1787	A	C6-N1-C2	-8.44	113.54	118.60
26	LA	1890	A	N1-C2-N3	8.44	133.52	129.30
26	LA	2623	G	C4'-C3'-C2'	-8.44	94.17	102.60
47	LJ	30	ARG	NE-CZ-NH2	8.44	124.52	120.30
2	SA	1049	U	C5-C6-N1	-8.43	118.48	122.70
2	SA	1138	G	N1-C6-O6	8.43	124.96	119.90
26	LA	1891	G	C4-C5-N7	8.43	114.17	110.80
26	LA	2758	A	N1-C6-N6	8.43	123.66	118.60
26	LA	548	G	P-O5'-C5'	8.43	134.39	120.90
2	SA	1233	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	2675	A	N1-C6-N6	8.43	123.66	118.60
2	SA	388	G	N1-C6-O6	8.43	124.96	119.90
2	SA	975	A	C5-N7-C8	8.43	108.11	103.90
2	SA	1202	U	P-O3'-C3'	-8.43	109.58	119.70
26	LA	958	U	C4-C5-C6	8.43	124.76	119.70
26	LA	1059	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	2159	G	C8-N9-C4	-8.43	103.03	106.40
2	SA	1128	C	C2-N1-C1'	8.43	128.07	118.80
26	LA	366	C	C2-N3-C4	-8.43	115.69	119.90
26	LA	1635	A	O4'-C1'-N9	8.43	114.94	108.20
26	LA	2324	U	N3-C4-O4	-8.43	113.50	119.40
2	SA	320	A	C4'-C3'-C2'	-8.43	94.17	102.60
2	SA	511	C	O4'-C1'-N1	8.43	114.94	108.20
25	LB	27	C	C2-N3-C4	8.43	124.11	119.90
26	LA	2543	G	N1-C2-N3	8.43	128.96	123.90
26	LA	2681	C	C2-N1-C1'	8.43	128.07	118.80
26	LA	2817	U	O4'-C1'-N1	8.43	114.94	108.20
2	SA	1237	C	C2-N3-C4	8.43	124.11	119.90
26	LA	612	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	2349	G	N1-C6-O6	8.43	124.95	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2360	G	O4'-C1'-N9	8.43	114.94	108.20
2	SA	560	A	C2-N3-C4	-8.42	106.39	110.60
2	SA	698	G	C1'-O4'-C4'	-8.42	103.16	109.90
2	SA	979	C	C2-N3-C4	-8.42	115.69	119.90
2	SA	1127	G	N1-C6-O6	8.42	124.95	119.90
25	LB	8	C	O4'-C1'-N1	8.42	114.94	108.20
25	LB	114	C	N3-C2-O2	-8.42	116.00	121.90
26	LA	315	G	N3-C4-C5	8.42	132.81	128.60
26	LA	1283	G	C5-C6-O6	-8.42	123.55	128.60
26	LA	2167	U	O4'-C1'-N1	8.42	114.94	108.20
2	SA	642	A	C5-C6-N6	-8.42	116.96	123.70
2	SA	684	U	N1-C2-O2	-8.42	116.91	122.80
2	SA	1199	U	C5-C4-O4	8.42	130.95	125.90
25	LB	4	C	N3-C4-N4	-8.42	112.11	118.00
26	LA	238	C	C1'-O4'-C4'	-8.42	103.17	109.90
26	LA	548	G	N1-C6-O6	8.42	124.95	119.90
26	LA	757	G	N7-C8-N9	8.42	117.31	113.10
26	LA	805	G	C4-C5-C6	-8.42	113.75	118.80
26	LA	876	C	N1-C2-O2	-8.42	113.85	118.90
26	LA	977	G	N7-C8-N9	-8.42	108.89	113.10
26	LA	2736	A	C2-N3-C4	8.42	114.81	110.60
2	SA	890	G	C1'-O4'-C4'	-8.42	103.17	109.90
2	SA	1426	G	C6-C5-N7	-8.42	125.35	130.40
4	S2	2	G	N7-C8-N9	8.42	117.31	113.10
19	SC	33	ASP	CB-CG-OD1	8.42	125.88	118.30
26	LA	2711	A	C8-N9-C4	-8.42	102.43	105.80
2	SA	336	A	O4'-C1'-N9	8.42	114.93	108.20
2	SA	919	A	O4'-C1'-N9	8.42	114.93	108.20
2	SA	932	C	N3-C4-N4	-8.42	112.11	118.00
2	SA	954	G	N7-C8-N9	8.42	117.31	113.10
26	LA	60	G	C4'-C3'-C2'	-8.42	94.18	102.60
26	LA	604	G	P-O5'-C5'	8.42	134.37	120.90
26	LA	1397	U	N1-C2-N3	8.42	119.95	114.90
26	LA	1790	C	C5-C6-N1	8.42	125.21	121.00
26	LA	2624	G	N1-C6-O6	8.42	124.95	119.90
48	LN	64	PHE	CB-CG-CD1	8.42	126.69	120.80
2	SA	194	C	C5'-C4'-C3'	-8.41	102.54	116.00
2	SA	214	C	C5-C6-N1	8.41	125.21	121.00
2	SA	812	G	P-O3'-C3'	8.41	129.80	119.70
2	SA	1427	C	C2-N3-C4	-8.41	115.69	119.90
26	LA	1118	C	N3-C4-C5	8.41	125.27	121.90
26	LA	2175	C	O4'-C1'-N1	8.41	114.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2834	G	C5-C6-O6	-8.41	123.55	128.60
25	LB	86	G	N7-C8-N9	8.41	117.31	113.10
26	LA	307	G	P-O3'-C3'	8.41	129.79	119.70
26	LA	1219	U	C2-N3-C4	8.41	132.05	127.00
26	LA	1639	C	C6-N1-C2	-8.41	116.94	120.30
2	SA	121	U	C3'-C2'-C1'	-8.41	94.77	101.50
2	SA	267	C	O4'-C1'-N1	8.41	114.93	108.20
26	LA	613	A	C4'-C3'-C2'	-8.41	94.19	102.60
26	LA	1074	G	C1'-O4'-C4'	-8.41	103.17	109.90
2	SA	168	G	C4'-C3'-C2'	-8.41	94.19	102.60
2	SA	384	G	C5-C6-N1	8.41	115.70	111.50
26	LA	811	U	C2-N1-C1'	8.41	127.79	117.70
26	LA	1308	A	C5-C6-N6	-8.41	116.97	123.70
26	LA	1365	A	C4-C5-C6	-8.41	112.79	117.00
26	LA	1648	U	C5-C6-N1	-8.41	118.50	122.70
26	LA	1737	G	C8-N9-C1'	8.41	137.93	127.00
26	LA	2833	U	C5-C4-O4	8.41	130.95	125.90
26	LA	2361	G	N1-C6-O6	8.41	124.94	119.90
2	SA	612	C	C2-N3-C4	-8.41	115.70	119.90
2	SA	1108	G	O4'-C1'-N9	8.41	114.93	108.20
2	SA	1203	C	C5-C4-N4	-8.41	114.31	120.20
2	SA	1330	U	C5-C4-O4	8.41	130.94	125.90
26	LA	2394	C	C6-N1-C2	8.41	123.66	120.30
2	SA	1336	C	P-O3'-C3'	8.41	129.79	119.70
26	LA	1500	G	C5-C6-O6	-8.41	123.56	128.60
26	LA	1865	U	C5-C6-N1	-8.41	118.50	122.70
26	LA	1983	G	C5-C6-O6	8.41	133.64	128.60
26	LA	2081	U	OP1-P-OP2	-8.41	106.99	119.60
2	SA	346	G	N7-C8-N9	8.40	117.30	113.10
25	LB	90	C	O4'-C1'-N1	8.40	114.92	108.20
4	S2	73	A	C3'-C2'-C1'	-8.40	94.78	101.50
26	LA	129	C	C5'-C4'-O4'	8.40	119.19	109.10
26	LA	1885	A	N7-C8-N9	-8.40	109.60	113.80
26	LA	2811	G	C4-C5-N7	8.40	114.16	110.80
2	SA	1500	A	P-O3'-C3'	-8.40	109.62	119.70
20	SD	110	ARG	NE-CZ-NH1	8.40	124.50	120.30
26	LA	2036	C	N3-C4-C5	-8.40	118.54	121.90
26	LA	2695	U	C6-N1-C2	8.40	126.04	121.00
26	LA	2897	U	N3-C4-C5	-8.40	109.56	114.60
26	LA	2853	C	C5-C6-N1	-8.40	116.80	121.00
2	SA	971	G	O4'-C1'-N9	8.40	114.92	108.20
2	SA	604	G	C5-N7-C8	-8.40	100.10	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1088	G	C4-C5-N7	8.40	114.16	110.80
2	SA	1132	C	O4'-C1'-N1	8.40	114.92	108.20
4	S2	3	C	O4'-C1'-N1	8.40	114.92	108.20
26	LA	1288	G	C5-C6-O6	-8.40	123.56	128.60
26	LA	648	G	O4'-C1'-N9	8.40	114.92	108.20
26	LA	1548	A	C6-N1-C2	-8.40	113.56	118.60
26	LA	2140	G	C1'-O4'-C4'	-8.40	103.18	109.90
26	LA	2624	G	OP1-P-OP2	-8.40	107.01	119.60
2	SA	829	G	N3-C4-N9	-8.39	120.96	126.00
2	SA	841	C	C1'-O4'-C4'	-8.39	103.18	109.90
4	S2	71	G	N1-C6-O6	8.39	124.94	119.90
26	LA	927	A	C5-C6-N1	8.39	121.90	117.70
26	LA	1317	G	C6-N1-C2	-8.39	120.06	125.10
2	SA	51	A	P-O3'-C3'	8.39	129.77	119.70
2	SA	852	G	C5-C6-N1	8.39	115.70	111.50
26	LA	2084	C	N3-C2-O2	8.39	127.78	121.90
26	LA	2687	U	N1-C2-N3	8.39	119.94	114.90
2	SA	327	A	N7-C8-N9	8.39	118.00	113.80
2	SA	890	G	O4'-C1'-N9	8.39	114.91	108.20
2	SA	1122	U	C6-N1-C2	-8.39	115.97	121.00
2	SA	1455	G	N3-C2-N2	8.39	125.77	119.90
26	LA	2506	U	C4'-C3'-C2'	-8.39	94.21	102.60
26	LA	561	G	P-O3'-C3'	8.39	129.77	119.70
26	LA	724	U	P-O3'-C3'	8.39	129.77	119.70
26	LA	935	C	O4'-C1'-N1	8.39	114.91	108.20
2	SA	1143	G	N9-C4-C5	-8.39	102.05	105.40
2	SA	1246	A	C5'-C4'-C3'	-8.39	102.58	116.00
2	SA	1494	G	C6-C5-N7	-8.39	125.37	130.40
9	SI	118	ARG	NE-CZ-NH1	8.39	124.49	120.30
13	SM	92	ARG	NE-CZ-NH2	-8.39	116.11	120.30
26	LA	18	U	P-O5'-C5'	8.39	134.32	120.90
26	LA	36	G	N9-C4-C5	8.39	108.75	105.40
26	LA	38	A	C3'-C2'-C1'	8.39	108.21	101.50
26	LA	546	U	P-O3'-C3'	8.39	129.76	119.70
26	LA	571	U	C6-N1-C2	-8.39	115.97	121.00
26	LA	984	A	C2-N3-C4	-8.39	106.41	110.60
26	LA	2038	G	N1-C6-O6	8.39	124.93	119.90
26	LA	2597	G	N1-C6-O6	8.39	124.93	119.90
2	SA	350	G	N9-C4-C5	-8.39	102.05	105.40
2	SA	659	U	C6-N1-C2	-8.39	115.97	121.00
26	LA	176	A	N1-C6-N6	-8.39	113.57	118.60
26	LA	543	G	N1-C6-O6	8.39	124.93	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1923	U	P-O5'-C5'	8.39	134.32	120.90
2	SA	476	U	P-O5'-C5'	8.38	134.31	120.90
26	LA	2337	G	C2-N3-C4	8.38	116.09	111.90
26	LA	1322	A	C6-N1-C2	8.38	123.63	118.60
2	SA	922	G	N3-C4-C5	-8.38	124.41	128.60
2	SA	1431	A	P-O5'-C5'	-8.38	107.49	120.90
26	LA	118	A	N1-C6-N6	8.38	123.63	118.60
26	LA	980	A	P-O3'-C3'	8.38	129.76	119.70
26	LA	1011	G	C5-C6-O6	-8.38	123.57	128.60
26	LA	2127	G	P-O5'-C5'	8.38	134.31	120.90
26	LA	1190	G	C5'-C4'-O4'	8.38	119.16	109.10
26	LA	2247	A	P-O5'-C5'	8.38	134.31	120.90
26	LA	2316	G	C3'-C2'-C1'	-8.38	94.80	101.50
2	SA	231	U	C2-N3-C4	-8.38	121.97	127.00
2	SA	542	G	C8-N9-C1'	8.38	137.89	127.00
24	S3	334	PHE	CB-CG-CD2	-8.38	114.94	120.80
26	LA	619	G	C4-C5-N7	8.38	114.15	110.80
26	LA	645	C	C4-C5-C6	8.38	121.59	117.40
26	LA	833	A	C6-N1-C2	-8.38	113.57	118.60
26	LA	1083	U	P-O3'-C3'	8.38	129.75	119.70
26	LA	1991	U	C5-C4-O4	8.38	130.93	125.90
2	SA	1056	U	C5-C6-N1	-8.38	118.51	122.70
26	LA	114	U	C5-C4-O4	8.38	130.93	125.90
2	SA	1340	A	C6-N1-C2	8.37	123.62	118.60
26	LA	1738	G	C5-C6-O6	-8.38	123.58	128.60
26	LA	2027	G	O4'-C1'-N9	8.37	114.90	108.20
26	LA	2171	A	O4'-C1'-N9	8.38	114.90	108.20
26	LA	2293	G	C4-C5-N7	8.38	114.15	110.80
26	LA	2587	A	C5-N7-C8	8.38	108.09	103.90
2	SA	190	A	N1-C2-N3	-8.37	125.11	129.30
2	SA	462	G	O4'-C1'-N9	8.37	114.90	108.20
2	SA	636	U	N3-C4-C5	8.37	119.62	114.60
2	SA	684	U	N1-C2-N3	8.37	119.92	114.90
26	LA	547	A	C2-N3-C4	8.37	114.79	110.60
26	LA	1160	G	N9-C1'-C2'	-8.37	102.79	112.00
13	SM	89	ARG	NE-CZ-NH2	8.37	124.49	120.30
22	SF	59	TYR	CB-CG-CD2	-8.37	115.98	121.00
26	LA	1455	G	C5-C6-N1	8.37	115.69	111.50
26	LA	1668	A	P-O3'-C3'	-8.37	109.65	119.70
26	LA	1933	G	N1-C6-O6	8.37	124.92	119.90
26	LA	2665	A	C4'-C3'-C2'	-8.37	94.23	102.60
26	LA	2685	G	P-O3'-C3'	8.37	129.75	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2812	G	N7-C8-N9	8.37	117.29	113.10
2	SA	720	C	O4'-C1'-N1	8.37	114.90	108.20
2	SA	766	A	N9-C4-C5	8.37	109.15	105.80
26	LA	1215	G	C4-C5-N7	8.37	114.15	110.80
2	SA	815	A	C8-N9-C4	8.37	109.15	105.80
2	SA	883	C	O4'-C1'-N1	8.37	114.89	108.20
26	LA	25	U	P-O5'-C5'	8.37	134.29	120.90
26	LA	27	G	C2'-C3'-O3'	8.37	127.91	109.50
26	LA	1784	A	C8-N9-C4	8.37	109.15	105.80
26	LA	2458	G	C4-N9-C1'	8.37	137.38	126.50
52	LO	18	ARG	NE-CZ-NH1	-8.37	116.12	120.30
54	LM	18	ARG	NE-CZ-NH1	8.37	124.48	120.30
2	SA	996	A	C8-N9-C4	-8.37	102.45	105.80
2	SA	1437	A	C8-N9-C4	-8.37	102.45	105.80
26	LA	9	G	C2-N3-C4	-8.37	107.72	111.90
26	LA	2394	C	C4-C5-C6	8.37	121.58	117.40
26	LA	2667	C	N1-C2-O2	8.37	123.92	118.90
26	LA	1983	G	C6-C5-N7	-8.36	125.38	130.40
26	LA	2564	A	P-O3'-C3'	-8.36	109.66	119.70
26	LA	2877	G	N3-C4-C5	-8.36	124.42	128.60
26	LA	2892	G	C5-C6-O6	8.36	133.62	128.60
2	SA	89	U	N3-C4-C5	-8.36	109.58	114.60
2	SA	486	U	C5'-C4'-C3'	-8.36	102.62	116.00
2	SA	608	A	P-O3'-C3'	8.36	129.74	119.70
26	LA	115	C	N1-C2-N3	8.36	125.05	119.20
26	LA	1162	G	C8-N9-C4	-8.36	103.06	106.40
10	SJ	45	ARG	NE-CZ-NH2	-8.36	116.12	120.30
26	LA	1813	G	N1-C2-N3	8.36	128.92	123.90
26	LA	2371	G	C5-C6-O6	-8.36	123.58	128.60
2	SA	928	G	C2-N3-C4	-8.36	107.72	111.90
2	SA	1139	G	C1'-O4'-C4'	-8.36	103.21	109.90
26	LA	2284	A	O4'-C1'-N9	8.36	114.89	108.20
26	LA	992	C	C5'-C4'-O4'	8.36	119.13	109.10
26	LA	2544	G	C1'-O4'-C4'	-8.36	103.21	109.90
26	LA	2607	G	C1'-O4'-C4'	-8.36	103.21	109.90
2	SA	414	A	N1-C2-N3	8.36	133.48	129.30
2	SA	750	C	O4'-C1'-N1	8.36	114.89	108.20
14	SN	8	ARG	NH1-CZ-NH2	8.36	128.59	119.40
2	SA	1153	G	C2-N3-C4	-8.36	107.72	111.90
26	LA	342	A	C2-N3-C4	8.36	114.78	110.60
26	LA	668	A	C5-C6-N6	8.36	130.38	123.70
26	LA	1456	G	C2-N3-C4	8.36	116.08	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1763	G	O4'-C1'-N9	8.36	114.88	108.20
27	LD	102	TYR	CB-CG-CD1	8.36	126.01	121.00
24	S3	490	ARG	NE-CZ-NH1	-8.35	116.12	120.30
25	LB	40	U	O4'-C1'-N1	8.35	114.88	108.20
26	LA	2179	C	N3-C4-C5	-8.35	118.56	121.90
2	SA	465	A	C2-N3-C4	-8.35	106.42	110.60
26	LA	865	C	C5'-C4'-O4'	8.35	119.12	109.10
26	LA	1069	A	N7-C8-N9	8.35	117.98	113.80
26	LA	2697	G	C8-N9-C4	-8.35	103.06	106.40
26	LA	531	C	C4'-C3'-C2'	-8.35	94.25	102.60
26	LA	970	U	C2-N3-C4	-8.35	121.99	127.00
26	LA	1136	G	C8-N9-C4	-8.35	103.06	106.40
26	LA	1680	U	N1-C2-O2	-8.35	116.95	122.80
57	LS	23	TYR	CB-CG-CD1	-8.35	115.99	121.00
26	LA	2021	C	C1'-O4'-C4'	-8.35	103.22	109.90
2	SA	257	G	C8-N9-C4	8.35	109.74	106.40
2	SA	264	C	N3-C4-N4	8.35	123.84	118.00
2	SA	709	U	O4'-C1'-N1	8.35	114.88	108.20
2	SA	1500	A	O4'-C1'-N9	8.35	114.88	108.20
2	SA	1347	G	C5-C6-N1	-8.35	107.33	111.50
26	LA	611	C	C4'-C3'-C2'	-8.35	94.25	102.60
26	LA	1112	G	N1-C6-O6	8.35	124.91	119.90
2	SA	493	A	O4'-C1'-N9	8.34	114.87	108.20
2	SA	762	U	O4'-C1'-N1	8.34	114.87	108.20
2	SA	849	G	O4'-C4'-C3'	-8.34	95.66	104.00
26	LA	1150	C	N3-C4-N4	-8.34	112.16	118.00
26	LA	757	G	O4'-C1'-N9	8.34	114.87	108.20
26	LA	784	G	C5'-C4'-O4'	8.34	119.11	109.10
2	SA	148	G	C5'-C4'-C3'	8.34	129.34	116.00
2	SA	410	G	O3'-P-O5'	8.34	119.84	104.00
2	SA	893	C	C2-N3-C4	-8.34	115.73	119.90
2	SA	1331	G	C5-C6-O6	-8.34	123.60	128.60
3	S1	39	U	C4'-C3'-C2'	-8.34	94.26	102.60
20	SD	191	SER	N-CA-CB	8.34	123.01	110.50
25	LB	98	G	N9-C4-C5	-8.34	102.06	105.40
26	LA	1163	G	O4'-C1'-N9	8.34	114.87	108.20
26	LA	2692	G	C5-C6-O6	-8.34	123.60	128.60
26	LA	1123	C	C5-C4-N4	-8.34	114.36	120.20
2	SA	517	G	N1-C2-N2	-8.34	108.70	116.20
2	SA	518	C	O4'-C1'-N1	8.34	114.87	108.20
2	SA	955	U	O4'-C1'-N1	8.34	114.87	108.20
26	LA	1033	U	C6-N1-C2	-8.34	116.00	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1735	A	C8-N9-C4	8.34	109.14	105.80
26	LA	2591	C	O4'-C1'-N1	8.34	114.87	108.20
26	LA	2595	G	N1-C6-O6	8.34	124.90	119.90
26	LA	2749	A	C2-N3-C4	-8.34	106.43	110.60
26	LA	2274	A	C1'-O4'-C4'	8.34	116.57	109.90
26	LA	2721	A	C2-N3-C4	-8.34	106.43	110.60
2	SA	3	A	C8-N9-C4	-8.33	102.47	105.80
2	SA	55	A	C5-C6-N1	8.33	121.87	117.70
2	SA	226	G	O4'-C1'-N9	8.33	114.87	108.20
26	LA	1741	C	N3-C2-O2	-8.33	116.07	121.90
2	SA	765	G	C1'-O4'-C4'	8.33	116.56	109.90
24	S3	376	VAL	CA-CB-CG1	-8.33	98.40	110.90
26	LA	2557	G	C5-C6-N1	8.33	115.67	111.50
26	LA	2902	C	C2-N3-C4	-8.33	115.73	119.90
24	S3	636	ARG	NE-CZ-NH1	8.33	124.46	120.30
25	LB	56	G	C4'-C3'-C2'	8.33	110.93	102.60
26	LA	366	C	N1-C2-N3	8.33	125.03	119.20
26	LA	324	A	C1'-O4'-C4'	-8.33	103.24	109.90
26	LA	2306	C	C6-N1-C2	-8.33	116.97	120.30
48	LN	111	ILE	CA-CB-CG1	8.33	126.83	111.00
2	SA	901	A	C5-C6-N6	-8.33	117.04	123.70
26	LA	1029	A	C2-N3-C4	-8.33	106.44	110.60
2	SA	455	G	C4-C5-N7	8.33	114.13	110.80
26	LA	132	G	N3-C4-C5	8.33	132.76	128.60
26	LA	455	C	C6-N1-C2	-8.33	116.97	120.30
26	LA	2768	U	N3-C4-O4	-8.33	113.57	119.40
27	LD	101	ARG	NE-CZ-NH2	-8.33	116.14	120.30
2	SA	7	A	O4'-C1'-N9	8.32	114.86	108.20
2	SA	331	G	C8-N9-C4	8.32	109.73	106.40
2	SA	354	G	C5-C6-N1	8.32	115.66	111.50
26	LA	2596	U	O4'-C1'-N1	8.32	114.86	108.20
2	SA	929	G	C8-N9-C4	-8.32	103.07	106.40
26	LA	2618	G	C6-N1-C2	-8.32	120.11	125.10
26	LA	2681	C	C2-N3-C4	-8.32	115.74	119.90
27	LD	239	PHE	CB-CG-CD1	-8.32	114.97	120.80
2	SA	283	U	C4-C5-C6	-8.32	114.71	119.70
2	SA	533	A	C5'-C4'-O4'	8.32	119.08	109.10
2	SA	1181	G	C4-C5-N7	-8.32	107.47	110.80
2	SA	1301	U	C5-C4-O4	-8.32	120.91	125.90
26	LA	1214	A	C5-C6-N6	-8.32	117.04	123.70
2	SA	290	C	O4'-C1'-N1	8.32	114.86	108.20
2	SA	1179	A	C4'-C3'-C2'	-8.32	94.28	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	407	ARG	NE-CZ-NH2	-8.32	116.14	120.30
26	LA	1879	C	O4'-C1'-N1	8.32	114.86	108.20
26	LA	564	C	N3-C4-N4	-8.32	112.18	118.00
26	LA	2410	G	N3-C4-C5	-8.32	124.44	128.60
2	SA	1294	G	C2-N3-C4	8.32	116.06	111.90
2	SA	853	C	C5'-C4'-O4'	8.32	119.08	109.10
26	LA	63	A	N1-C6-N6	-8.32	113.61	118.60
26	LA	181	A	O4'-C1'-N9	8.32	114.86	108.20
26	LA	728	G	P-O3'-C3'	-8.32	109.72	119.70
26	LA	1967	C	C5'-C4'-C3'	8.32	129.31	116.00
26	LA	1625	C	C6-N1-C2	-8.32	116.97	120.30
26	LA	2193	G	N3-C4-C5	-8.32	124.44	128.60
2	SA	1342	C	C2-N3-C4	8.31	124.06	119.90
26	LA	99	U	O5'-P-OP2	-8.31	98.22	105.70
26	LA	856	G	C2-N3-C4	8.31	116.06	111.90
2	SA	437	U	O4'-C1'-N1	8.31	114.85	108.20
2	SA	1381	U	C5-C4-O4	8.31	130.89	125.90
26	LA	985	C	C6-N1-C2	-8.31	116.97	120.30
26	LA	1396	U	P-O3'-C3'	-8.31	109.72	119.70
26	LA	1331	G	N1-C6-O6	8.31	124.89	119.90
26	LA	1673	G	O4'-C1'-N9	8.31	114.85	108.20
26	LA	2806	C	C4-C5-C6	8.31	121.56	117.40
2	SA	242	G	C3'-C2'-C1'	-8.31	94.85	101.50
2	SA	813	U	O4'-C4'-C3'	8.31	112.75	106.10
26	LA	863	A	P-O3'-C3'	-8.31	109.73	119.70
26	LA	1068	G	N7-C8-N9	8.31	117.26	113.10
26	LA	2267	A	C4-C5-C6	-8.31	112.84	117.00
26	LA	1483	G	N1-C2-N2	8.31	123.68	116.20
26	LA	1652	A	C8-N9-C4	8.31	109.12	105.80
26	LA	1920	C	C5-C6-N1	8.31	125.16	121.00
26	LA	2716	C	C5'-C4'-C3'	8.31	129.30	116.00
2	SA	1206	G	C5-C6-N1	8.31	115.66	111.50
2	SA	397	A	C4-C5-C6	-8.31	112.85	117.00
2	SA	430	A	N3-C4-C5	8.31	132.62	126.80
2	SA	1214	C	C5-C6-N1	8.31	125.15	121.00
2	SA	1222	G	N1-C2-N3	-8.31	118.92	123.90
2	SA	1421	G	N3-C4-C5	-8.31	124.45	128.60
26	LA	1875	G	N9-C4-C5	-8.31	102.08	105.40
26	LA	2132	U	C6-N1-C2	-8.31	116.02	121.00
26	LA	402	A	O4'-C1'-N9	8.31	114.84	108.20
26	LA	1435	G	C4-C5-N7	8.31	114.12	110.80
26	LA	2186	G	C5-C6-N1	-8.31	107.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	103	U	C5'-C4'-O4'	8.31	119.07	109.10
2	SA	1109	C	C1'-O4'-C4'	-8.30	103.26	109.90
26	LA	964	C	C5'-C4'-O4'	8.30	119.07	109.10
26	LA	1722	A	C2-N3-C4	-8.30	106.45	110.60
26	LA	2683	C	O4'-C1'-N1	8.31	114.84	108.20
2	SA	657	U	N3-C4-O4	-8.30	113.59	119.40
26	LA	1912	A	C8-N9-C4	-8.30	102.48	105.80
2	SA	1043	G	C5-C6-O6	-8.30	123.62	128.60
2	SA	1492	A	N7-C8-N9	8.30	117.95	113.80
25	LB	18	G	C2-N3-C4	8.30	116.05	111.90
26	LA	1722	A	C5-C6-N6	-8.30	117.06	123.70
26	LA	2434	A	N7-C8-N9	-8.30	109.65	113.80
2	SA	417	G	N1-C6-O6	-8.30	114.92	119.90
26	LA	1481	U	C5-C4-O4	-8.30	120.92	125.90
2	SA	1044	A	O4'-C1'-N9	8.30	114.84	108.20
26	LA	46	G	C1'-O4'-C4'	-8.30	103.26	109.90
26	LA	2383	G	C4-C5-N7	8.30	114.12	110.80
26	LA	2442	C	C6-N1-C2	-8.30	116.98	120.30
26	LA	490	C	O4'-C1'-N1	8.30	114.84	108.20
26	LA	1709	U	N3-C4-C5	8.30	119.58	114.60
2	SA	245	U	O4'-C1'-N1	8.29	114.84	108.20
2	SA	432	A	O4'-C1'-C2'	8.29	115.06	107.60
2	SA	621	A	N1-C6-N6	-8.29	113.62	118.60
2	SA	417	G	N1-C2-N2	-8.29	108.74	116.20
2	SA	1518	A	N9-C4-C5	-8.29	102.48	105.80
26	LA	1392	A	C1'-O4'-C4'	-8.29	103.27	109.90
26	LA	1455	G	C5-C6-O6	-8.29	123.62	128.60
26	LA	2894	G	N1-C6-O6	8.29	124.88	119.90
26	LA	2036	C	N3-C2-O2	-8.29	116.10	121.90
26	LA	2345	G	N1-C2-N2	-8.29	108.74	116.20
29	LV	70	HIS	N-CA-CB	8.29	125.53	110.60
2	SA	66	A	C5-C6-N6	-8.29	117.07	123.70
2	SA	347	G	C5-N7-C8	8.29	108.44	104.30
26	LA	2278	A	N3-C4-N9	-8.29	120.77	127.40
2	SA	333	U	C2-N3-C4	-8.29	122.03	127.00
2	SA	796	C	C1'-O4'-C4'	-8.29	103.27	109.90
2	SA	569	C	N1-C2-O2	-8.29	113.93	118.90
2	SA	1150	A	N7-C8-N9	-8.29	109.66	113.80
24	S3	351	SER	N-CA-CB	-8.29	98.07	110.50
25	LB	83	G	C5-C6-O6	-8.29	123.63	128.60
26	LA	2157	G	O4'-C1'-N9	8.29	114.83	108.20
2	SA	1516	G	C4-C5-N7	8.28	114.11	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1125	G	C5-C6-O6	-8.29	123.63	128.60
36	L2	43	PHE	CB-CG-CD2	-8.29	115.00	120.80
2	SA	243	A	N1-C6-N6	8.28	123.57	118.60
2	SA	973	G	C4-N9-C1'	-8.28	115.73	126.50
2	SA	1060	U	P-O3'-C3'	8.28	129.64	119.70
2	SA	1507	A	O4'-C1'-N9	8.28	114.83	108.20
4	S2	33	C	C3'-C2'-C1'	8.28	108.12	101.50
26	LA	609	A	C5-C6-N6	-8.28	117.07	123.70
26	LA	1051	G	N9-C4-C5	8.28	108.71	105.40
26	LA	2886	A	N1-C6-N6	8.28	123.57	118.60
26	LA	1136	G	C2-N3-C4	8.28	116.04	111.90
26	LA	2188	U	C5'-C4'-O4'	8.28	119.04	109.10
26	LA	2635	A	O4'-C1'-N9	8.28	114.83	108.20
26	LA	2848	G	C5-C6-O6	-8.28	123.63	128.60
2	SA	907	A	C2-N3-C4	8.28	114.74	110.60
26	LA	297	G	C8-N9-C4	8.28	109.71	106.40
26	LA	1909	C	C2-N3-C4	-8.28	115.76	119.90
52	LO	81	ARG	NE-CZ-NH1	8.28	124.44	120.30
26	LA	685	A	N1-C6-N6	-8.28	113.63	118.60
26	LA	1210	G	C5-C6-O6	-8.28	123.63	128.60
26	LA	1309	G	C5-C6-N1	-8.28	107.36	111.50
26	LA	1869	G	C5-N7-C8	8.28	108.44	104.30
26	LA	2084	C	O4'-C1'-N1	8.28	114.82	108.20
26	LA	2290	G	C5-N7-C8	8.28	108.44	104.30
2	SA	776	G	C5-N7-C8	-8.28	100.16	104.30
2	SA	1253	G	C8-N9-C1'	8.28	137.76	127.00
4	S2	9	G	C2-N3-C4	-8.28	107.76	111.90
26	LA	656	G	N1-C2-N3	-8.28	118.94	123.90
26	LA	1571	A	O4'-C1'-N9	8.28	114.82	108.20
26	LA	1926	U	N1-C1'-C2'	-8.28	102.90	112.00
26	LA	2418	A	N7-C8-N9	8.28	117.94	113.80
29	LV	84	TYR	CB-CG-CD2	8.28	125.97	121.00
2	SA	679	C	C5-C4-N4	-8.27	114.41	120.20
2	SA	1064	G	N1-C2-N2	-8.27	108.75	116.20
26	LA	274	C	N3-C4-N4	8.27	123.79	118.00
2	SA	537	G	C4-C5-N7	-8.27	107.49	110.80
2	SA	679	C	O4'-C1'-N1	8.27	114.82	108.20
2	SA	715	A	C5-N7-C8	-8.27	99.76	103.90
26	LA	1270	C	O4'-C1'-C2'	8.27	115.04	107.60
26	LA	1434	A	P-O3'-C3'	-8.27	109.77	119.70
26	LA	2371	G	N3-C4-C5	8.27	132.74	128.60
26	LA	536	G	C5-C6-O6	-8.27	123.64	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	614	A	C1'-O4'-C4'	-8.27	103.28	109.90
26	LA	2742	G	O4'-C1'-N9	8.27	114.82	108.20
2	SA	246	A	N1-C2-N3	-8.27	125.17	129.30
2	SA	1059	C	C5'-C4'-O4'	8.27	119.02	109.10
26	LA	712	G	O4'-C1'-N9	8.27	114.81	108.20
26	LA	821	A	C2-N3-C4	-8.27	106.47	110.60
58	LT	53	PHE	CB-CG-CD1	-8.27	115.01	120.80
26	LA	911	A	C6-C5-N7	-8.27	126.51	132.30
26	LA	1050	A	N9-C4-C5	-8.27	102.49	105.80
2	SA	75	G	C8-N9-C4	-8.27	103.09	106.40
2	SA	732	C	C6-N1-C2	-8.27	116.99	120.30
2	SA	859	G	C5-C6-N1	8.27	115.63	111.50
2	SA	1176	A	N3-C4-C5	8.27	132.59	126.80
26	LA	93	G	C5'-C4'-C3'	8.27	129.22	116.00
26	LA	1522	A	C5'-C4'-C3'	8.27	129.22	116.00
26	LA	2503	A	C2-N3-C4	8.27	114.73	110.60
2	SA	165	G	C5-C6-N1	8.26	115.63	111.50
2	SA	618	C	C5'-C4'-O4'	8.26	119.02	109.10
26	LA	675	A	C8-N9-C4	8.26	109.11	105.80
2	SA	473	U	N3-C4-O4	-8.26	113.62	119.40
2	SA	1490	U	P-O5'-C5'	8.26	134.12	120.90
3	S1	53	G	P-O5'-C5'	8.26	134.12	120.90
26	LA	375	G	N9-C4-C5	8.26	108.70	105.40
26	LA	1039	A	C3'-C2'-C1'	-8.26	94.89	101.50
26	LA	1042	G	C4-C5-C6	-8.26	113.84	118.80
26	LA	1225	G	C5-C6-O6	-8.26	123.64	128.60
26	LA	1188	U	O4'-C1'-N1	8.26	114.81	108.20
26	LA	1616	A	C6-C5-N7	-8.26	126.52	132.30
26	LA	2231	U	C6-N1-C2	-8.26	116.04	121.00
26	LA	2306	C	O4'-C1'-N1	8.26	114.81	108.20
37	LC	137	MET	CG-SD-CE	-8.26	86.98	100.20
2	SA	992	U	C4-C5-C6	-8.26	114.74	119.70
2	SA	1081	A	C5'-C4'-C3'	-8.26	102.78	116.00
26	LA	435	C	N3-C4-C5	-8.26	118.60	121.90
26	LA	1493	C	N1-C2-O2	8.26	123.86	118.90
26	LA	2257	U	C6-N1-C2	8.26	125.96	121.00
26	LA	2528	U	P-O3'-C3'	8.26	129.61	119.70
2	SA	1063	C	N1-C2-N3	8.26	124.98	119.20
2	SA	199	A	N1-C2-N3	-8.26	125.17	129.30
2	SA	1147	C	N3-C2-O2	-8.26	116.12	121.90
2	SA	1338	G	C8-N9-C1'	-8.26	116.27	127.00
4	S2	3	C	C6-N1-C2	-8.26	117.00	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	142	A	O4'-C1'-N9	8.26	114.80	108.20
26	LA	535	G	N3-C2-N2	8.26	125.68	119.90
26	LA	538	A	C4-C5-N7	8.26	114.83	110.70
26	LA	838	C	N3-C4-C5	8.26	125.20	121.90
26	LA	1570	A	C5'-C4'-C3'	-8.26	102.79	116.00
3	S1	24	A	C5-C6-N6	8.25	130.30	123.70
26	LA	669	G	C4-C5-N7	8.25	114.10	110.80
2	SA	57	G	O4'-C1'-N9	8.25	114.80	108.20
2	SA	1056	U	O4'-C1'-N1	8.25	114.80	108.20
26	LA	436	C	P-O5'-C5'	8.25	134.10	120.90
26	LA	998	C	C1'-O4'-C4'	-8.25	103.30	109.90
26	LA	2209	G	N1-C6-O6	-8.25	114.95	119.90
2	SA	203	G	P-O3'-C3'	8.25	129.60	119.70
2	SA	978	A	N7-C8-N9	8.25	117.92	113.80
2	SA	1220	G	N1-C6-O6	8.25	124.85	119.90
26	LA	1198	U	O4'-C1'-N1	8.25	114.80	108.20
26	LA	954	G	P-O3'-C3'	-8.25	109.80	119.70
26	LA	1350	C	N3-C4-N4	-8.25	112.23	118.00
26	LA	2636	C	C5-C6-N1	-8.25	116.88	121.00
26	LA	111	A	N9-C4-C5	8.25	109.10	105.80
2	SA	430	A	C4-C5-C6	-8.25	112.88	117.00
2	SA	698	G	C6-N1-C2	-8.25	120.15	125.10
4	S2	25	U	P-O3'-C3'	8.25	129.60	119.70
26	LA	268	C	OP1-P-OP2	-8.25	107.23	119.60
26	LA	622	G	C4-C5-N7	-8.25	107.50	110.80
26	LA	1287	A	C4-C5-N7	-8.25	106.58	110.70
26	LA	2328	A	C5'-C4'-O4'	8.25	119.00	109.10
45	LG	142	TYR	CB-CG-CD2	-8.24	116.05	121.00
2	SA	538	G	N7-C8-N9	-8.24	108.98	113.10
2	SA	973	G	N1-C6-O6	8.24	124.85	119.90
2	SA	987	G	C1'-O4'-C4'	-8.24	103.31	109.90
26	LA	141	G	C8-N9-C1'	-8.24	116.28	127.00
2	SA	1069	C	C4-C5-C6	8.24	121.52	117.40
3	S1	29	G	N9-C4-C5	-8.24	102.10	105.40
26	LA	1381	G	N1-C6-O6	8.24	124.84	119.90
2	SA	732	C	N3-C4-C5	-8.24	118.60	121.90
2	SA	976	G	N1-C2-N2	-8.24	108.78	116.20
26	LA	640	C	P-O5'-C5'	8.24	134.09	120.90
26	LA	1405	U	C5-C6-N1	-8.24	118.58	122.70
26	LA	388	G	C5-C6-N1	8.24	115.62	111.50
26	LA	943	A	C4-C5-N7	8.24	114.82	110.70
26	LA	1955	U	C1'-O4'-C4'	-8.24	103.31	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	8	A	N7-C8-N9	-8.24	109.68	113.80
2	SA	394	G	C4'-C3'-C2'	-8.24	94.36	102.60
2	SA	907	A	N1-C6-N6	-8.24	113.66	118.60
26	LA	502	A	N1-C2-N3	-8.24	125.18	129.30
26	LA	1166	G	C5-C6-O6	8.24	133.54	128.60
2	SA	407	U	C2-N3-C4	-8.24	122.06	127.00
2	SA	643	C	O4'-C1'-N1	8.24	114.79	108.20
26	LA	54	G	N9-C4-C5	-8.24	102.11	105.40
26	LA	2030	U	N1-C2-O2	-8.24	117.03	122.80
26	LA	2316	G	O4'-C1'-C2'	8.24	115.01	107.60
2	SA	41	G	N7-C8-N9	-8.23	108.98	113.10
2	SA	389	A	N7-C8-N9	8.23	117.92	113.80
2	SA	1193	G	N3-C2-N2	-8.23	114.14	119.90
2	SA	1210	C	O4'-C1'-N1	8.23	114.79	108.20
2	SA	1327	C	N3-C4-C5	-8.23	118.61	121.90
3	S1	21	U	C5'-C4'-O4'	8.23	118.98	109.10
26	LA	747	U	O4'-C1'-N1	8.23	114.79	108.20
26	LA	1656	C	C6-N1-C2	-8.23	117.01	120.30
26	LA	2256	G	C5-C6-O6	-8.23	123.66	128.60
26	LA	2649	C	N3-C4-C5	-8.23	118.61	121.90
50	LL	74	TYR	CB-CG-CD2	8.23	125.94	121.00
2	SA	1027	C	N1-C2-O2	8.23	123.84	118.90
2	SA	1197	A	N1-C6-N6	-8.23	113.66	118.60
25	LB	41	G	C2-N3-C4	-8.23	107.78	111.90
52	LO	6	ARG	NE-CZ-NH2	-8.23	116.18	120.30
26	LA	896	A	P-O3'-C3'	8.23	129.58	119.70
26	LA	151	C	C5-C6-N1	-8.23	116.89	121.00
26	LA	1290	C	O4'-C1'-N1	8.23	114.78	108.20
26	LA	1123	C	N3-C4-N4	8.23	123.76	118.00
2	SA	381	C	C2-N1-C1'	8.22	127.85	118.80
2	SA	581	G	C5-C6-O6	-8.22	123.67	128.60
2	SA	695	A	N1-C6-N6	8.22	123.53	118.60
2	SA	978	A	O4'-C1'-N9	8.22	114.78	108.20
2	SA	1124	G	N3-C4-C5	8.22	132.71	128.60
26	LA	350	G	C5'-C4'-O4'	8.22	118.97	109.10
26	LA	1293	C	C5'-C4'-O4'	8.22	118.97	109.10
26	LA	2102	G	C5-C6-O6	-8.22	123.67	128.60
26	LA	2125	G	N1-C6-O6	8.22	124.83	119.90
26	LA	2257	U	O5'-P-OP2	-8.22	98.30	105.70
26	LA	2285	C	O4'-C1'-N1	8.22	114.78	108.20
26	LA	2442	C	N1-C2-O2	-8.22	113.97	118.90
26	LA	2826	A	N1-C2-N3	8.22	133.41	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2837	A	C1'-O4'-C4'	-8.22	103.32	109.90
25	LB	72	G	N1-C6-O6	8.22	124.83	119.90
2	SA	676	A	C6-N1-C2	-8.22	113.67	118.60
2	SA	1031	C	N1-C2-O2	8.22	123.83	118.90
4	S2	1	C	N3-C4-N4	8.22	123.75	118.00
26	LA	1333	G	N3-C4-C5	-8.22	124.49	128.60
26	LA	1618	C	O4'-C1'-N1	8.22	114.78	108.20
26	LA	1440	U	C6-N1-C2	-8.22	116.07	121.00
26	LA	1562	U	P-O3'-C3'	8.22	129.56	119.70
2	SA	478	A	C5-C6-N6	-8.22	117.13	123.70
26	LA	274	C	N3-C2-O2	-8.22	116.15	121.90
26	LA	1434	A	O4'-C4'-C3'	-8.22	95.78	104.00
26	LA	2030	U	N1-C2-N3	8.22	119.83	114.90
26	LA	2110	G	C8-N9-C4	8.22	109.69	106.40
2	SA	90	C	C6-N1-C2	-8.21	117.02	120.30
2	SA	829	G	C5-C6-N1	8.21	115.61	111.50
2	SA	1099	G	N9-C1'-C2'	-8.21	102.96	112.00
25	LB	76	G	O4'-C1'-N9	8.22	114.77	108.20
26	LA	241	A	C5-C6-N6	8.21	130.27	123.70
26	LA	536	G	N3-C2-N2	8.22	125.65	119.90
26	LA	686	U	O4'-C1'-N1	8.21	114.77	108.20
26	LA	712	G	C5-C6-O6	-8.21	123.67	128.60
26	LA	1008	A	C2-N3-C4	8.21	114.71	110.60
26	LA	1825	U	O4'-C1'-N1	8.22	114.77	108.20
26	LA	1276	A	N9-C4-C5	8.21	109.09	105.80
2	SA	650	G	N1-C6-O6	-8.21	114.97	119.90
2	SA	1482	G	N3-C4-C5	-8.21	124.49	128.60
4	S2	18	U	O4'-C1'-C2'	-8.21	97.59	105.80
26	LA	534	U	C5-C6-N1	-8.21	118.59	122.70
26	LA	2497	A	P-O3'-C3'	8.21	129.56	119.70
2	SA	111	G	N7-C8-N9	-8.21	109.00	113.10
12	SL	55	ARG	NE-CZ-NH2	-8.21	116.19	120.30
26	LA	1592	C	C2-N3-C4	-8.21	115.79	119.90
15	SO	21	THR	N-CA-CB	8.21	125.90	110.30
26	LA	121	G	C5-C6-N1	8.21	115.61	111.50
2	SA	326	G	C6-N1-C2	-8.21	120.17	125.10
2	SA	1427	C	N3-C2-O2	-8.21	116.15	121.90
2	SA	566	G	C5'-C4'-O4'	8.21	118.95	109.10
2	SA	1126	U	C5-C4-O4	-8.21	120.97	125.90
26	LA	620	G	N1-C6-O6	8.21	124.83	119.90
2	SA	1432	G	N1-C2-N3	-8.21	118.98	123.90
2	SA	1457	G	N1-C2-N3	8.21	128.82	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	37	C	C2-N3-C4	-8.21	115.80	119.90
26	LA	312	G	C5-C6-O6	8.21	133.53	128.60
26	LA	945	A	N1-C2-N3	-8.21	125.20	129.30
26	LA	1177	G	C3'-C2'-C1'	8.21	108.07	101.50
2	SA	557	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	1252	A	P-O3'-C3'	-8.20	109.86	119.70
26	LA	666	A	C4-C5-C6	-8.20	112.90	117.00
26	LA	2815	C	C6-N1-C2	-8.20	117.02	120.30
2	SA	352	C	C5'-C4'-C3'	-8.20	102.88	116.00
2	SA	748	G	N7-C8-N9	-8.20	109.00	113.10
2	SA	882	C	C4-C5-C6	8.20	121.50	117.40
26	LA	1181	U	N3-C2-O2	-8.20	116.46	122.20
4	S2	13	C	N3-C4-C5	-8.20	118.62	121.90
26	LA	1293	C	O4'-C1'-N1	8.20	114.76	108.20
26	LA	1958	C	C4'-C3'-C2'	-8.20	94.40	102.60
26	LA	2562	U	O4'-C1'-N1	8.20	114.76	108.20
26	LA	2745	C	O5'-P-OP1	-8.20	98.32	105.70
26	LA	2116	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	256	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	966	G	C5-C6-O6	-8.20	123.68	128.60
2	SA	1476	A	C5-C6-N6	8.20	130.26	123.70
25	LB	3	C	C4-C5-C6	8.20	121.50	117.40
26	LA	551	G	C5-C6-O6	-8.20	123.68	128.60
26	LA	1069	A	C4-C5-C6	-8.20	112.90	117.00
26	LA	1355	G	C4-C5-N7	8.20	114.08	110.80
26	LA	1385	A	O4'-C1'-N9	8.20	114.76	108.20
26	LA	2831	G	N1-C6-O6	-8.20	114.98	119.90
26	LA	1813	G	N1-C6-O6	8.20	124.82	119.90
2	SA	204	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	219	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	991	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	1106	G	P-O5'-C5'	8.20	134.02	120.90
26	LA	172	A	C2-N3-C4	8.20	114.70	110.60
26	LA	254	G	N3-C2-N2	8.20	125.64	119.90
26	LA	2475	C	C5'-C4'-O4'	8.20	118.94	109.10
2	SA	1326	U	P-O3'-C3'	-8.20	109.87	119.70
26	LA	356	G	C8-N9-C4	-8.20	103.12	106.40
12	SL	94	TYR	CB-CG-CD2	8.19	125.92	121.00
26	LA	643	A	N1-C6-N6	-8.20	113.68	118.60
26	LA	726	G	N1-C6-O6	8.20	124.82	119.90
26	LA	893	C	C1'-O4'-C4'	-8.19	103.34	109.90
26	LA	1102	C	N3-C2-O2	-8.20	116.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1868	C	C4-C5-C6	8.20	121.50	117.40
26	LA	2001	C	N3-C4-N4	8.20	123.74	118.00
26	LA	2645	G	C5-C6-N1	8.20	115.60	111.50
26	LA	2441	U	C3'-C2'-C1'	8.19	108.06	101.50
26	LA	890	C	C4-C5-C6	8.19	121.50	117.40
26	LA	2570	G	C5-C6-N1	8.19	115.60	111.50
26	LA	2646	C	C2-N3-C4	-8.19	115.80	119.90
2	SA	27	G	C5-C6-O6	-8.19	123.69	128.60
2	SA	88	U	N3-C2-O2	8.19	127.93	122.20
2	SA	831	A	C4'-C3'-C2'	-8.19	94.41	102.60
2	SA	980	C	C4-C5-C6	8.19	121.50	117.40
26	LA	55	G	C4-C5-N7	-8.19	107.52	110.80
26	LA	898	C	C4-C5-C6	8.19	121.50	117.40
2	SA	1213	A	C5'-C4'-C3'	8.19	129.10	116.00
24	S3	568	TYR	CB-CG-CD2	-8.19	116.09	121.00
2	SA	1238	A	P-O3'-C3'	8.19	129.53	119.70
26	LA	77	G	C6-C5-N7	8.19	135.31	130.40
26	LA	140	C	C5-C6-N1	8.19	125.09	121.00
26	LA	524	G	N9-C4-C5	8.19	108.68	105.40
26	LA	1231	U	N1-C2-N3	8.19	119.81	114.90
26	LA	2655	G	C6-N1-C2	-8.19	120.19	125.10
26	LA	498	G	C6-N1-C2	-8.19	120.19	125.10
2	SA	167	A	P-O5'-C5'	8.19	134.00	120.90
2	SA	714	G	C5-C6-N1	8.19	115.59	111.50
2	SA	816	A	N1-C2-N3	8.19	133.39	129.30
25	LB	20	G	N9-C1'-C2'	-8.19	103.00	112.00
26	LA	233	A	O4'-C1'-N9	8.19	114.75	108.20
26	LA	827	U	C1'-O4'-C4'	-8.19	103.35	109.90
26	LA	849	A	C8-N9-C4	8.19	109.08	105.80
26	LA	575	A	N1-C2-N3	8.19	133.39	129.30
26	LA	878	A	C4-C5-N7	8.19	114.79	110.70
26	LA	1662	U	C2-N3-C4	-8.19	122.09	127.00
26	LA	888	C	N3-C4-C5	-8.19	118.63	121.90
26	LA	1936	A	C5-N7-C8	-8.19	99.81	103.90
4	S2	73	A	N1-C6-N6	8.18	123.51	118.60
26	LA	317	G	C5'-C4'-C3'	8.18	129.09	116.00
26	LA	1759	A	C2-N3-C4	8.18	114.69	110.60
2	SA	18	C	O4'-C1'-N1	8.18	114.75	108.20
2	SA	42	G	C6-N1-C2	-8.18	120.19	125.10
13	SM	100	ARG	NE-CZ-NH2	-8.18	116.21	120.30
26	LA	1236	G	P-O5'-C5'	8.18	133.99	120.90
26	LA	2376	A	N1-C6-N6	-8.18	113.69	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2512	C	C4-C5-C6	8.18	121.49	117.40
32	LY	59	PHE	CB-CG-CD1	-8.18	115.07	120.80
2	SA	160	A	N1-C6-N6	-8.18	113.69	118.60
26	LA	328	U	C2-N3-C4	-8.18	122.09	127.00
26	LA	1768	C	C6-N1-C2	-8.18	117.03	120.30
26	LA	404	A	C6-N1-C2	-8.18	113.69	118.60
26	LA	759	G	C5-C6-N1	-8.18	107.41	111.50
26	LA	2863	C	C3'-C2'-C1'	8.18	108.04	101.50
26	LA	1284	A	N1-C2-N3	8.18	133.39	129.30
26	LA	1861	G	C2-N3-C4	8.18	115.99	111.90
26	LA	2337	G	N1-C2-N3	-8.18	118.99	123.90
26	LA	2643	G	C6-N1-C2	-8.18	120.19	125.10
26	LA	2744	G	C8-N9-C4	-8.18	103.13	106.40
53	LP	30	ARG	NE-CZ-NH1	8.18	124.39	120.30
2	SA	482	A	N1-C6-N6	-8.18	113.69	118.60
2	SA	1267	C	C6-N1-C2	8.18	123.57	120.30
4	S2	63	C	C5-C6-N1	8.18	125.09	121.00
7	SG	30	MET	CG-SD-CE	-8.18	87.12	100.20
26	LA	2782	G	C5-C6-N1	8.18	115.59	111.50
26	LA	251	A	C4-C5-N7	8.18	114.79	110.70
26	LA	1408	G	N3-C2-N2	-8.18	114.18	119.90
26	LA	1510	G	P-O5'-C5'	8.18	133.98	120.90
26	LA	1555	G	C5'-C4'-C3'	-8.18	102.92	116.00
26	LA	1591	A	P-O3'-C3'	-8.18	109.89	119.70
2	SA	151	A	P-O3'-C3'	-8.17	109.89	119.70
2	SA	534	U	C4-C5-C6	-8.17	114.80	119.70
2	SA	1227	A	C6-C5-N7	-8.17	126.58	132.30
12	SL	98	ARG	NE-CZ-NH2	8.17	124.39	120.30
26	LA	455	C	C2-N3-C4	-8.17	115.81	119.90
26	LA	565	C	N1-C2-O2	8.17	123.80	118.90
26	LA	2619	C	O4'-C1'-N1	8.17	114.74	108.20
2	SA	447	G	N3-C4-N9	8.17	130.90	126.00
2	SA	482	A	C5-C6-N1	8.17	121.78	117.70
26	LA	414	C	C2-N3-C4	-8.17	115.81	119.90
26	LA	1588	G	N3-C4-C5	-8.17	124.51	128.60
26	LA	2022	U	C1'-O4'-C4'	-8.17	103.36	109.90
2	SA	816	A	O4'-C1'-N9	8.17	114.74	108.20
2	SA	761	G	C6-C5-N7	-8.17	125.50	130.40
26	LA	242	G	C6-C5-N7	-8.17	125.50	130.40
26	LA	1546	G	C8-N9-C4	8.17	109.67	106.40
26	LA	289	G	N9-C4-C5	8.17	108.67	105.40
26	LA	2325	G	C1'-O4'-C4'	-8.16	103.37	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	308	ARG	NE-CZ-NH2	8.16	124.38	120.30
26	LA	915	C	O4'-C1'-N1	8.16	114.73	108.20
26	LA	1720	U	C5-C4-O4	8.16	130.80	125.90
2	SA	254	G	N1-C2-N2	-8.16	108.86	116.20
2	SA	337	G	O4'-C1'-N9	8.16	114.73	108.20
26	LA	2050	C	P-O5'-C5'	8.16	133.96	120.90
26	LA	2531	A	O4'-C1'-N9	8.16	114.73	108.20
26	LA	2569	G	C3'-C2'-C1'	8.16	108.03	101.50
26	LA	2738	A	O4'-C1'-N9	8.16	114.73	108.20
2	SA	293	G	C5-C6-O6	-8.16	123.71	128.60
2	SA	1317	C	P-O3'-C3'	-8.16	109.91	119.70
3	S1	56	G	O4'-C1'-N9	8.16	114.73	108.20
25	LB	106	G	N1-C2-N3	-8.16	119.00	123.90
26	LA	559	G	C4-C5-N7	-8.16	107.54	110.80
26	LA	2021	C	P-O3'-C3'	8.16	129.49	119.70
26	LA	2444	G	C2-N3-C4	-8.16	107.82	111.90
26	LA	2881	U	N3-C2-O2	-8.16	116.49	122.20
2	SA	490	C	N1-C2-N3	8.15	124.91	119.20
2	SA	490	C	O4'-C1'-N1	8.15	114.72	108.20
21	SE	28	ARG	NE-CZ-NH2	8.15	124.38	120.30
3	S1	46	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	936	A	C5-C6-N6	-8.15	117.18	123.70
26	LA	2716	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2770	G	C5-N7-C8	-8.15	100.22	104.30
2	SA	1007	U	C5'-C4'-C3'	-8.15	102.96	116.00
2	SA	1090	U	O4'-C1'-N1	8.15	114.72	108.20
26	LA	1472	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2067	G	C5'-C4'-O4'	8.15	118.88	109.10
2	SA	470	C	N3-C4-C5	-8.15	118.64	121.90
2	SA	1000	A	N1-C6-N6	8.15	123.49	118.60
25	LB	57	A	C5'-C4'-O4'	8.15	118.88	109.10
2	SA	691	G	O4'-C1'-N9	8.15	114.72	108.20
2	SA	956	U	C5-C6-N1	-8.15	118.63	122.70
25	LB	74	U	C2-N3-C4	-8.15	122.11	127.00
26	LA	542	C	C5-C4-N4	-8.15	114.50	120.20
26	LA	2441	U	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2259	U	C6-N1-C2	-8.15	116.11	121.00
2	SA	541	G	N3-C2-N2	8.14	125.60	119.90
2	SA	903	G	O4'-C1'-N9	8.14	114.72	108.20
2	SA	1137	C	O4'-C1'-N1	8.14	114.72	108.20
2	SA	1198	G	C1'-O4'-C4'	-8.14	103.38	109.90
26	LA	2371	G	N1-C6-O6	8.14	124.79	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	275	G	O4'-C1'-N9	8.14	114.71	108.20
2	SA	470	C	O4'-C1'-N1	8.14	114.72	108.20
26	LA	1144	A	N1-C6-N6	-8.14	113.71	118.60
26	LA	1642	G	N1-C6-O6	-8.14	115.01	119.90
26	LA	1709	U	C4-C5-C6	-8.14	114.81	119.70
26	LA	2584	U	C2-N3-C4	-8.14	122.11	127.00
26	LA	2612	C	C5-C4-N4	-8.14	114.50	120.20
26	LA	2630	G	C5-C6-O6	-8.14	123.71	128.60
2	SA	153	C	C5'-C4'-C3'	-8.14	102.97	116.00
2	SA	1432	G	O4'-C1'-N9	8.14	114.71	108.20
2	SA	1247	U	C5-C6-N1	-8.14	118.63	122.70
26	LA	309	A	N1-C6-N6	8.14	123.48	118.60
26	LA	1506	U	N3-C4-O4	8.14	125.10	119.40
26	LA	1544	A	C8-N9-C4	-8.14	102.54	105.80
26	LA	1580	A	C8-N9-C4	8.14	109.06	105.80
26	LA	1843	C	C4'-C3'-C2'	-8.14	94.46	102.60
26	LA	2687	U	N3-C2-O2	-8.14	116.50	122.20
2	SA	626	G	C4-C5-N7	8.14	114.06	110.80
2	SA	41	G	C5-N7-C8	8.14	108.37	104.30
2	SA	98	A	C4-C5-C6	-8.13	112.93	117.00
2	SA	803	G	C8-N9-C4	-8.13	103.15	106.40
25	LB	73	A	N1-C6-N6	-8.13	113.72	118.60
25	LB	81	G	N1-C6-O6	8.13	124.78	119.90
26	LA	326	G	N3-C4-C5	-8.13	124.53	128.60
26	LA	356	G	O4'-C1'-N9	8.13	114.71	108.20
26	LA	667	U	P-O5'-C5'	-8.13	107.88	120.90
26	LA	717	C	N3-C4-C5	8.13	125.15	121.90
26	LA	1135	C	O4'-C1'-N1	8.13	114.71	108.20
26	LA	2536	G	N3-C4-C5	-8.14	124.53	128.60
26	LA	2317	A	N9-C4-C5	-8.13	102.55	105.80
1	SS	31	ARG	NE-CZ-NH1	8.13	124.37	120.30
2	SA	987	G	N3-C2-N2	8.13	125.59	119.90
2	SA	1044	A	N1-C6-N6	-8.13	113.72	118.60
2	SA	1250	A	C5-N7-C8	-8.13	99.83	103.90
26	LA	1699	G	C1'-O4'-C4'	-8.13	103.39	109.90
2	SA	1530	G	C4-C5-N7	8.13	114.05	110.80
4	S2	58	A	C4'-C3'-C2'	-8.13	94.47	102.60
5	ST	51	ASN	N-CA-CB	8.13	125.24	110.60
26	LA	465	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1103	A	N1-C2-N3	-8.13	125.23	129.30
26	LA	784	G	C4-N9-C1'	8.13	137.07	126.50
26	LA	1072	C	P-O3'-C3'	-8.13	109.94	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1631	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1654	A	C6-N1-C2	-8.13	113.72	118.60
26	LA	1726	C	N1-C2-N3	8.13	124.89	119.20
26	LA	1857	G	C5-C6-O6	8.13	133.48	128.60
26	LA	2593	U	P-O3'-C3'	-8.13	109.94	119.70
26	LA	2654	A	C5-C6-N1	-8.13	113.64	117.70
26	LA	777	G	O4'-C1'-N9	8.13	114.70	108.20
26	LA	1063	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1500	G	N7-C8-N9	8.13	117.16	113.10
26	LA	2501	C	C5-C4-N4	-8.13	114.51	120.20
2	SA	757	U	O4'-C1'-N1	8.13	114.70	108.20
44	LF	60	TRP	CB-CG-CD2	-8.13	116.04	126.60
2	SA	673	A	C5'-C4'-C3'	-8.12	103.00	116.00
26	LA	384	A	P-O3'-C3'	8.12	129.45	119.70
26	LA	611	C	C5'-C4'-C3'	-8.12	103.00	116.00
26	LA	2225	A	N3-C4-C5	8.12	132.49	126.80
2	SA	606	G	C2-N3-C4	8.12	115.96	111.90
2	SA	645	G	N7-C8-N9	8.12	117.16	113.10
2	SA	1163	A	P-O3'-C3'	-8.12	109.95	119.70
25	LB	42	C	O5'-P-OP1	-8.12	98.39	105.70
26	LA	375	G	C5-C6-O6	-8.12	123.73	128.60
26	LA	556	A	C5-C6-N6	-8.12	117.20	123.70
26	LA	1370	C	N1-C2-O2	8.12	123.77	118.90
26	LA	1544	A	C2-N3-C4	-8.12	106.54	110.60
26	LA	1797	G	N1-C6-O6	-8.12	115.03	119.90
26	LA	1997	C	N3-C4-C5	-8.12	118.65	121.90
2	SA	936	C	C6-N1-C2	-8.12	117.05	120.30
4	S2	42	C	C5-C4-N4	-8.12	114.52	120.20
2	SA	254	G	C8-N9-C4	8.12	109.65	106.40
2	SA	533	A	N7-C8-N9	-8.12	109.74	113.80
2	SA	584	G	N1-C6-O6	8.12	124.77	119.90
2	SA	782	A	P-O3'-C3'	8.12	129.44	119.70
2	SA	804	U	C5'-C4'-O4'	8.12	118.84	109.10
2	SA	875	U	P-O3'-C3'	8.12	129.44	119.70
26	LA	447	A	N1-C6-N6	-8.12	113.73	118.60
26	LA	493	G	O4'-C1'-N9	8.12	114.69	108.20
26	LA	1298	C	P-O3'-C3'	8.12	129.44	119.70
26	LA	1725	U	N3-C4-O4	8.12	125.08	119.40
26	LA	1596	A	C4-C5-C6	8.12	121.06	117.00
2	SA	207	C	C5-C6-N1	8.11	125.06	121.00
2	SA	936	C	O4'-C1'-N1	8.12	114.69	108.20
2	SA	1127	G	N9-C4-C5	-8.12	102.15	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2762	C	C5-C4-N4	8.12	125.88	120.20
2	SA	1490	U	C4-C5-C6	8.11	124.57	119.70
26	LA	158	U	O4'-C1'-N1	8.11	114.69	108.20
26	LA	173	A	C4-C5-N7	8.11	114.76	110.70
2	SA	1002	G	N1-C6-O6	8.11	124.77	119.90
2	SA	187	G	O4'-C1'-N9	8.11	114.69	108.20
2	SA	1217	C	C3'-C2'-C1'	8.11	107.99	101.50
26	LA	717	C	O4'-C4'-C3'	-8.11	95.89	104.00
26	LA	1094	U	O4'-C1'-N1	8.11	114.69	108.20
26	LA	1148	U	O4'-C1'-N1	8.11	114.69	108.20
2	SA	1124	G	C1'-O4'-C4'	-8.11	103.41	109.90
26	LA	1972	G	C6-N1-C2	-8.11	120.23	125.10
26	LA	2278	A	O4'-C1'-N9	8.11	114.69	108.20
2	SA	412	A	C6-N1-C2	8.11	123.47	118.60
14	SN	40	ARG	NE-CZ-NH1	8.11	124.35	120.30
26	LA	193	U	C2-N3-C4	-8.11	122.14	127.00
26	LA	968	C	N3-C4-C5	-8.11	118.66	121.90
26	LA	1921	G	N3-C4-N9	8.11	130.87	126.00
2	SA	388	G	C2-N3-C4	8.11	115.95	111.90
2	SA	515	G	N9-C4-C5	-8.11	102.16	105.40
26	LA	622	G	N9-C4-C5	8.11	108.64	105.40
2	SA	34	C	C2-N3-C4	-8.11	115.85	119.90
2	SA	802	A	C8-N9-C4	-8.11	102.56	105.80
3	S1	47	C	C5-C4-N4	-8.11	114.53	120.20
26	LA	778	G	N3-C4-C5	-8.11	124.55	128.60
26	LA	809	G	C8-N9-C4	-8.11	103.16	106.40
26	LA	815	C	O4'-C1'-N1	8.11	114.68	108.20
26	LA	983	A	C8-N9-C4	-8.11	102.56	105.80
26	LA	1769	U	C5-C4-O4	8.11	130.76	125.90
26	LA	2058	A	N9-C4-C5	-8.11	102.56	105.80
26	LA	2690	U	N1-C2-O2	8.11	128.47	122.80
26	LA	674	G	C6-C5-N7	8.10	135.26	130.40
26	LA	989	G	C5-C6-N1	-8.10	107.45	111.50
2	SA	224	U	O4'-C1'-N1	8.10	114.68	108.20
2	SA	512	U	O4'-C1'-N1	8.10	114.68	108.20
2	SA	869	G	C5-C6-N1	-8.10	107.45	111.50
26	LA	707	G	O4'-C1'-N9	8.10	114.68	108.20
26	LA	2834	G	N1-C6-O6	8.10	124.76	119.90
26	LA	1122	G	O4'-C1'-N9	8.10	114.68	108.20
26	LA	1346	G	P-O5'-C5'	-8.10	107.94	120.90
26	LA	2069	G	C4'-C3'-C2'	-8.10	94.50	102.60
26	LA	2423	U	N1-C2-O2	-8.10	117.13	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2508	G	C5-N7-C8	-8.10	100.25	104.30
26	LA	2559	C	C6-N1-C2	-8.10	117.06	120.30
2	SA	123	U	C5-C4-O4	-8.10	121.04	125.90
2	SA	99	C	N3-C2-O2	-8.10	116.23	121.90
2	SA	1344	C	C5'-C4'-C3'	8.10	128.96	116.00
4	S2	22	A	N1-C6-N6	8.10	123.46	118.60
26	LA	2544	G	C3'-C2'-C1'	-8.10	95.02	101.50
17	SQ	81	ALA	N-CA-CB	8.10	121.44	110.10
26	LA	1095	A	C4'-C3'-C2'	-8.10	94.50	102.60
2	SA	27	G	C4-C5-N7	-8.10	107.56	110.80
2	SA	262	A	O4'-C1'-N9	8.10	114.68	108.20
2	SA	660	C	P-O3'-C3'	-8.10	109.98	119.70
2	SA	660	C	C6-N1-C2	-8.10	117.06	120.30
2	SA	859	G	N1-C6-O6	-8.10	115.04	119.90
2	SA	347	G	N7-C8-N9	-8.10	109.05	113.10
26	LA	101	A	C4'-C3'-C2'	-8.10	94.50	102.60
26	LA	359	G	C5'-C4'-C3'	-8.10	103.05	116.00
26	LA	2059	A	C2-N3-C4	8.10	114.65	110.60
2	SA	485	U	N3-C2-O2	-8.09	116.53	122.20
2	SA	815	A	C5-N7-C8	8.09	107.95	103.90
2	SA	842	U	C5-C6-N1	-8.09	118.65	122.70
25	LB	10	G	O4'-C1'-N9	8.09	114.67	108.20
26	LA	826	U	C1'-O4'-C4'	-8.09	103.42	109.90
26	LA	2255	G	N3-C2-N2	-8.09	114.23	119.90
26	LA	2681	C	O4'-C1'-N1	8.09	114.67	108.20
2	SA	365	U	N3-C2-O2	-8.09	116.54	122.20
2	SA	659	U	N1-C2-N3	8.09	119.75	114.90
2	SA	1318	A	C3'-C2'-C1'	-8.09	95.03	101.50
26	LA	862	G	N3-C2-N2	8.09	125.56	119.90
26	LA	1355	G	N9-C4-C5	-8.09	102.16	105.40
26	LA	2226	C	O4'-C1'-N1	8.09	114.67	108.20
26	LA	2575	C	C5'-C4'-O4'	8.09	118.81	109.10
2	SA	362	G	N3-C4-N9	-8.09	121.14	126.00
2	SA	1116	U	N3-C2-O2	-8.09	116.54	122.20
2	SA	1416	G	C4-C5-N7	-8.09	107.56	110.80
26	LA	61	C	P-O3'-C3'	-8.09	109.99	119.70
26	LA	1874	C	N3-C2-O2	-8.09	116.24	121.90
26	LA	230	G	O4'-C1'-N9	8.09	114.67	108.20
26	LA	552	U	N1-C2-O2	-8.09	117.14	122.80
26	LA	899	A	O4'-C1'-N9	8.09	114.67	108.20
2	SA	402	G	N1-C6-O6	8.09	124.75	119.90
2	SA	804	U	N3-C4-C5	8.09	119.45	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	874	G	N1-C6-O6	8.09	124.75	119.90
2	SA	1338	G	N9-C4-C5	-8.09	102.17	105.40
8	SH	116	ARG	NE-CZ-NH1	8.09	124.34	120.30
26	LA	481	G	C8-N9-C4	8.09	109.64	106.40
26	LA	693	A	N9-C4-C5	8.09	109.03	105.80
26	LA	1417	C	C4'-C3'-C2'	-8.09	94.51	102.60
2	SA	411	A	O4'-C1'-C2'	-8.09	97.72	105.80
4	S2	72	C	N1-C2-O2	8.09	123.75	118.90
26	LA	222	A	C1'-O4'-C4'	-8.09	103.43	109.90
26	LA	393	C	N1-C2-N3	8.09	124.86	119.20
26	LA	1288	G	C4-N9-C1'	8.09	137.01	126.50
26	LA	2659	G	C2-N3-C4	8.09	115.94	111.90
2	SA	451	A	C4-C5-N7	8.08	114.74	110.70
26	LA	659	G	C2-N3-C4	-8.08	107.86	111.90
26	LA	266	G	N7-C8-N9	8.08	117.14	113.10
26	LA	911	A	C5-N7-C8	-8.08	99.86	103.90
26	LA	1433	A	N7-C8-N9	-8.08	109.76	113.80
26	LA	1945	G	C6-C5-N7	-8.08	125.55	130.40
26	LA	2064	C	C1'-O4'-C4'	-8.08	103.43	109.90
26	LA	2403	C	P-O5'-C5'	-8.08	107.97	120.90
26	LA	2487	G	C5-C6-O6	-8.08	123.75	128.60
26	LA	2841	C	C5'-C4'-O4'	8.08	118.80	109.10
2	SA	726	C	N1-C2-O2	8.08	123.75	118.90
26	LA	1906	G	P-O3'-C3'	-8.08	110.00	119.70
26	LA	1936	A	N9-C4-C5	8.08	109.03	105.80
26	LA	2566	A	O4'-C1'-N9	8.08	114.67	108.20
15	SO	76	ARG	NE-CZ-NH2	-8.08	116.26	120.30
26	LA	125	A	O4'-C4'-C3'	8.08	112.56	106.10
26	LA	492	A	C6-N1-C2	-8.08	113.75	118.60
26	LA	1792	G	C5-C6-N1	-8.08	107.46	111.50
26	LA	2153	C	C5-C4-N4	-8.08	114.54	120.20
2	SA	626	G	N1-C6-O6	8.08	124.75	119.90
2	SA	671	G	C6-C5-N7	-8.08	125.55	130.40
4	S2	28	U	C2-N3-C4	8.08	131.85	127.00
26	LA	143	C	C5'-C4'-O4'	8.08	118.79	109.10
26	LA	608	A	N1-C2-N3	-8.08	125.26	129.30
26	LA	791	C	C4-C5-C6	8.08	121.44	117.40
26	LA	2374	C	C6-N1-C2	-8.08	117.07	120.30
45	LG	76	PHE	CB-CG-CD2	-8.08	115.15	120.80
26	LA	1041	G	O4'-C1'-N9	8.08	114.66	108.20
26	LA	1047	G	O4'-C1'-N9	8.08	114.66	108.20
26	LA	1626	A	C5-N7-C8	8.08	107.94	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1659	G	C6-N1-C2	-8.08	120.25	125.10
26	LA	2568	U	P-O5'-C5'	8.08	133.82	120.90
26	LA	2679	A	O4'-C1'-N9	8.08	114.66	108.20
2	SA	280	C	P-O3'-C3'	8.07	129.39	119.70
26	LA	865	C	N3-C4-N4	8.07	123.65	118.00
2	SA	1073	U	C5'-C4'-C3'	-8.07	103.08	116.00
26	LA	119	A	C3'-C2'-C1'	8.07	107.96	101.50
26	LA	482	A	C3'-C2'-C1'	8.07	107.96	101.50
26	LA	1515	A	C8-N9-C4	8.07	109.03	105.80
2	SA	899	C	C5-C4-N4	-8.07	114.55	120.20
2	SA	924	C	O4'-C1'-N1	8.07	114.66	108.20
2	SA	1347	G	C6-N1-C2	8.07	129.94	125.10
26	LA	281	C	P-O5'-C5'	8.07	133.82	120.90
26	LA	851	C	C6-N1-C2	-8.07	117.07	120.30
26	LA	548	G	C3'-C2'-C1'	-8.07	95.04	101.50
26	LA	690	G	N9-C4-C5	8.07	108.63	105.40
26	LA	1539	U	N3-C4-O4	8.07	125.05	119.40
26	LA	170	U	C5-C6-N1	-8.07	118.67	122.70
26	LA	654	A	C8-N9-C4	-8.07	102.57	105.80
26	LA	2610	C	N1-C2-O2	8.07	123.74	118.90
7	SG	176	TYR	CB-CG-CD2	8.07	125.84	121.00
26	LA	738	G	N1-C6-O6	8.07	124.74	119.90
26	LA	2228	G	N1-C6-O6	8.07	124.74	119.90
26	LA	2316	G	C5-C6-N1	-8.07	107.47	111.50
2	SA	970	C	N3-C4-C5	-8.06	118.67	121.90
26	LA	1861	G	C5-N7-C8	-8.06	100.27	104.30
26	LA	2643	G	C5-N7-C8	-8.06	100.27	104.30
2	SA	1123	U	C5-C4-O4	8.06	130.74	125.90
3	S1	21	U	N3-C4-O4	-8.06	113.76	119.40
26	LA	20	C	C5-C6-N1	-8.06	116.97	121.00
26	LA	373	U	O4'-C1'-N1	8.06	114.65	108.20
26	LA	1447	C	C2-N3-C4	-8.06	115.87	119.90
26	LA	1530	G	C5-N7-C8	-8.06	100.27	104.30
26	LA	1958	C	C6-N1-C2	-8.06	117.08	120.30
26	LA	1998	A	N7-C8-N9	-8.06	109.77	113.80
26	LA	2813	A	C4-C5-N7	-8.06	106.67	110.70
2	SA	72	A	C5-C6-N1	-8.06	113.67	117.70
2	SA	702	A	N1-C2-N3	-8.06	125.27	129.30
2	SA	920	U	P-O3'-C3'	8.06	129.37	119.70
25	LB	25	U	O4'-C1'-N1	8.06	114.65	108.20
26	LA	679	C	C4'-C3'-C2'	-8.06	94.54	102.60
26	LA	1214	A	N1-C2-N3	-8.06	125.27	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2396	G	C5-C6-N1	8.06	115.53	111.50
51	LI	79	THR	CA-CB-CG2	-8.06	101.11	112.40
2	SA	68	G	P-O5'-C5'	8.06	133.79	120.90
2	SA	166	U	O4'-C1'-N1	8.06	114.65	108.20
2	SA	748	G	N1-C2-N3	8.06	128.74	123.90
4	S2	26	C	O4'-C1'-N1	8.06	114.65	108.20
26	LA	313	G	C5'-C4'-C3'	-8.06	103.11	116.00
26	LA	443	A	C1'-O4'-C4'	-8.06	103.45	109.90
2	SA	1235	U	C5-C6-N1	8.06	126.73	122.70
26	LA	472	A	O4'-C1'-N9	8.06	114.65	108.20
26	LA	783	A	C6-N1-C2	-8.06	113.77	118.60
26	LA	1654	A	C4'-C3'-C2'	8.06	110.66	102.60
26	LA	1689	A	C4-C5-C6	-8.06	112.97	117.00
26	LA	1955	U	C5-C4-O4	8.06	130.73	125.90
2	SA	381	C	C6-N1-C1'	-8.05	111.13	120.80
2	SA	1539	C	C6-N1-C2	-8.06	117.08	120.30
8	SH	12	ARG	NE-CZ-NH1	8.05	124.33	120.30
26	LA	1192	G	C8-N9-C4	-8.06	103.18	106.40
26	LA	2078	C	C5-C6-N1	8.06	125.03	121.00
26	LA	2176	A	N7-C8-N9	-8.06	109.77	113.80
2	SA	689	C	C4-C5-C6	-8.05	113.37	117.40
2	SA	761	G	N3-C4-C5	-8.05	124.57	128.60
26	LA	134	G	P-O3'-C3'	-8.05	110.03	119.70
25	LB	57	A	O4'-C1'-N9	8.05	114.64	108.20
26	LA	618	G	O4'-C1'-N9	8.05	114.64	108.20
26	LA	789	A	C5-C6-N1	-8.05	113.67	117.70
26	LA	1073	A	C2'-C3'-O3'	8.05	127.22	109.50
26	LA	1569	A	C6-N1-C2	-8.05	113.77	118.60
26	LA	1803	A	P-O3'-C3'	8.05	129.36	119.70
2	SA	101	A	C5-N7-C8	-8.05	99.87	103.90
2	SA	277	C	C2-N3-C4	-8.05	115.87	119.90
2	SA	757	U	C3'-C2'-C1'	8.05	107.94	101.50
2	SA	773	G	O4'-C1'-N9	8.05	114.64	108.20
2	SA	1103	C	C2-N3-C4	-8.05	115.88	119.90
2	SA	1268	G	N1-C2-N3	-8.05	119.07	123.90
2	SA	1385	G	O4'-C1'-N9	8.05	114.64	108.20
26	LA	479	A	P-O3'-C3'	8.05	129.36	119.70
26	LA	1098	A	C5-C6-N6	-8.05	117.26	123.70
26	LA	1573	G	C5-C6-O6	-8.05	123.77	128.60
26	LA	1891	G	C5-C6-N1	8.05	115.53	111.50
26	LA	2516	A	C5-C6-N1	8.05	121.72	117.70
2	SA	96	U	C4'-C3'-C2'	-8.05	94.55	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	385	C	O4'-C1'-N1	8.05	114.64	108.20
2	SA	400	C	N3-C4-N4	8.05	123.63	118.00
2	SA	1365	G	O4'-C1'-N9	8.05	114.64	108.20
2	SA	1397	C	O4'-C1'-N1	8.05	114.64	108.20
26	LA	468	G	N1-C6-O6	8.05	124.73	119.90
26	LA	1996	C	O4'-C4'-C3'	8.05	112.54	106.10
2	SA	1081	A	N7-C8-N9	-8.05	109.78	113.80
2	SA	1239	A	C8-N9-C4	8.05	109.02	105.80
20	SD	145	ARG	NE-CZ-NH1	8.05	124.32	120.30
26	LA	504	A	N7-C8-N9	8.05	117.82	113.80
26	LA	1124	G	O4'-C1'-N9	8.05	114.64	108.20
26	LA	1262	A	C8-N9-C4	8.05	109.02	105.80
2	SA	327	A	C1'-O4'-C4'	-8.04	103.46	109.90
2	SA	1104	G	C5-C6-O6	-8.05	123.77	128.60
4	S2	74	A	C4-C5-N7	8.05	114.72	110.70
2	SA	919	A	N1-C6-N6	8.04	123.43	118.60
25	LB	27	C	N3-C4-C5	-8.04	118.68	121.90
26	LA	1668	A	C8-N9-C4	-8.05	102.58	105.80
26	LA	1727	C	N1-C2-N3	8.05	124.83	119.20
26	LA	1647	U	C3'-C2'-C1'	-8.04	95.06	101.50
26	LA	2714	G	N9-C4-C5	-8.04	102.18	105.40
26	LA	2889	C	O4'-C1'-N1	8.04	114.64	108.20
45	LG	172	PHE	CB-CG-CD2	-8.04	115.17	120.80
2	SA	87	C	N3-C2-O2	-8.04	116.27	121.90
2	SA	280	C	C5-C4-N4	-8.04	114.57	120.20
2	SA	290	C	C6-N1-C2	-8.04	117.08	120.30
2	SA	573	A	N1-C6-N6	-8.04	113.78	118.60
2	SA	630	A	C8-N9-C4	-8.04	102.58	105.80
2	SA	844	G	N1-C2-N3	-8.04	119.08	123.90
26	LA	104	A	N9-C4-C5	8.04	109.02	105.80
26	LA	116	C	N3-C4-N4	-8.04	112.37	118.00
26	LA	193	U	C5-C6-N1	-8.04	118.68	122.70
26	LA	2873	A	N1-C2-N3	-8.04	125.28	129.30
26	LA	336	C	O4'-C1'-N1	8.04	114.63	108.20
26	LA	533	G	O4'-C1'-N9	8.04	114.63	108.20
26	LA	637	A	C4-C5-N7	-8.04	106.68	110.70
26	LA	965	C	C4-C5-C6	8.04	121.42	117.40
26	LA	1996	C	C1'-O4'-C4'	-8.04	103.47	109.90
26	LA	2297	A	C2-N3-C4	-8.04	106.58	110.60
2	SA	687	A	C2-N3-C4	8.04	114.62	110.60
3	S1	56	G	N9-C4-C5	-8.04	102.18	105.40
4	S2	54	G	C5-C6-N1	-8.04	107.48	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	SG	3	ARG	NE-CZ-NH1	8.04	124.32	120.30
19	SC	30	ASP	CB-CG-OD2	8.04	125.54	118.30
26	LA	500	G	N3-C2-N2	8.04	125.53	119.90
2	SA	635	A	P-O3'-C3'	8.04	129.34	119.70
2	SA	802	A	N1-C6-N6	-8.04	113.78	118.60
2	SA	848	C	C4'-C3'-C2'	-8.04	94.56	102.60
2	SA	1174	G	O4'-C1'-N9	8.04	114.63	108.20
26	LA	187	G	C6-N1-C2	-8.04	120.28	125.10
26	LA	488	G	N1-C2-N2	-8.04	108.97	116.20
26	LA	587	C	N3-C4-C5	8.04	125.11	121.90
26	LA	625	G	C4-C5-N7	8.04	114.02	110.80
26	LA	1007	C	C4-C5-C6	-8.04	113.38	117.40
26	LA	2047	C	C2-N3-C4	-8.04	115.88	119.90
26	LA	2755	C	N3-C4-N4	8.04	123.63	118.00
2	SA	1232	U	C1'-O4'-C4'	-8.04	103.47	109.90
2	SA	1348	U	C4'-C3'-C2'	-8.04	94.56	102.60
2	SA	1525	G	C5-N7-C8	-8.04	100.28	104.30
26	LA	213	A	O4'-C1'-N9	8.04	114.63	108.20
26	LA	1246	A	C6-C5-N7	-8.04	126.67	132.30
26	LA	2375	G	C5'-C4'-C3'	-8.04	103.14	116.00
26	LA	1912	A	C4-C5-N7	-8.03	106.68	110.70
26	LA	1912	A	C5-N7-C8	8.03	107.92	103.90
26	LA	1919	A	C5-C6-N6	-8.03	117.27	123.70
2	SA	665	A	C8-N9-C4	8.03	109.01	105.80
25	LB	104	A	C5'-C4'-C3'	-8.03	103.15	116.00
26	LA	932	U	P-O3'-C3'	8.03	129.34	119.70
26	LA	1029	A	N1-C6-N6	8.03	123.42	118.60
26	LA	1356	G	O4'-C1'-N9	8.03	114.62	108.20
26	LA	1752	C	P-O5'-C5'	8.03	133.75	120.90
26	LA	1921	G	C5-C6-N1	8.03	115.52	111.50
26	LA	2158	A	C5-C6-N1	8.03	121.72	117.70
2	SA	999	C	C2-N3-C4	8.03	123.92	119.90
2	SA	1182	G	N7-C8-N9	-8.03	109.08	113.10
2	SA	1429	A	N1-C6-N6	-8.03	113.78	118.60
2	SA	389	A	C5'-C4'-O4'	8.03	118.73	109.10
2	SA	682	G	C2-N3-C4	-8.03	107.89	111.90
2	SA	1255	G	P-O3'-C3'	8.03	129.34	119.70
24	S3	568	TYR	CB-CG-CD1	8.03	125.82	121.00
26	LA	1627	G	N1-C2-N3	-8.03	119.08	123.90
26	LA	1642	G	C5-C6-N1	8.03	115.51	111.50
26	LA	2411	A	C8-N9-C4	-8.03	102.59	105.80
45	LG	172	PHE	CB-CG-CD1	8.03	126.42	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	417	G	N3-C2-N2	8.03	125.52	119.90
2	SA	931	C	N3-C4-C5	8.03	125.11	121.90
26	LA	1462	C	N3-C4-C5	-8.03	118.69	121.90
26	LA	359	G	C5'-C4'-O4'	8.03	118.73	109.10
26	LA	1007	C	P-O3'-C3'	8.03	129.33	119.70
26	LA	1060	U	P-O3'-C3'	8.03	129.33	119.70
26	LA	2169	A	C6-C5-N7	-8.03	126.68	132.30
26	LA	2492	U	C5-C4-O4	8.03	130.72	125.90
26	LA	2418	A	C6-N1-C2	-8.03	113.78	118.60
2	SA	493	A	C4-C5-N7	8.02	114.71	110.70
2	SA	559	A	C5-C6-N6	-8.02	117.28	123.70
2	SA	726	C	C5-C4-N4	-8.02	114.58	120.20
26	LA	1496	A	P-O5'-C5'	8.02	133.74	120.90
26	LA	2289	G	C4-C5-C6	-8.02	113.99	118.80
2	SA	48	C	C2-N1-C1'	8.02	127.62	118.80
2	SA	406	G	N3-C4-N9	8.02	130.81	126.00
26	LA	179	C	C2-N3-C4	-8.02	115.89	119.90
26	LA	1189	A	N1-C2-N3	8.02	133.31	129.30
26	LA	2574	G	C4'-C3'-C2'	-8.02	94.58	102.60
2	SA	1150	A	C5-C6-N1	8.02	121.71	117.70
26	LA	348	A	C8-N9-C4	-8.02	102.59	105.80
26	LA	995	C	N3-C2-O2	-8.02	116.29	121.90
26	LA	2829	A	C8-N9-C4	8.02	109.01	105.80
2	SA	884	U	C6-N1-C2	-8.02	116.19	121.00
2	SA	1311	A	N1-C6-N6	8.02	123.41	118.60
3	S1	32	U	C5'-C4'-C3'	8.02	128.83	116.00
25	LB	88	C	N3-C4-C5	-8.02	118.69	121.90
26	LA	399	U	C4'-C3'-C2'	-8.02	94.58	102.60
26	LA	600	G	C4-C5-N7	8.02	114.01	110.80
26	LA	2200	C	N3-C4-C5	-8.02	118.69	121.90
26	LA	2680	U	N1-C2-N3	8.02	119.71	114.90
2	SA	722	G	C2-N3-C4	8.02	115.91	111.90
2	SA	386	C	P-O5'-C5'	8.02	133.72	120.90
2	SA	1154	G	C5-N7-C8	8.02	108.31	104.30
2	SA	1247	U	C5-C4-O4	-8.02	121.09	125.90
4	S2	13	C	O3'-P-O5'	8.02	119.23	104.00
26	LA	139	U	N1-C2-O2	8.02	128.41	122.80
26	LA	140	C	C5'-C4'-C3'	8.02	128.83	116.00
26	LA	1923	U	N1-C2-N3	-8.02	110.09	114.90
26	LA	2212	A	C5-C6-N6	8.02	130.11	123.70
2	SA	43	C	C5-C6-N1	-8.01	116.99	121.00
2	SA	216	U	P-O5'-C5'	8.01	133.72	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	814	A	C5-C6-N6	8.01	130.11	123.70
26	LA	801	G	C5-C6-N1	-8.01	107.49	111.50
26	LA	2469	A	C5'-C4'-C3'	-8.01	103.18	116.00
26	LA	2734	A	O4'-C1'-N9	8.01	114.61	108.20
2	SA	1043	G	P-O5'-C5'	8.01	133.72	120.90
26	LA	1922	G	C8-N9-C4	8.01	109.61	106.40
2	SA	345	C	O4'-C1'-N1	8.01	114.61	108.20
2	SA	576	C	N3-C4-N4	8.01	123.61	118.00
26	LA	315	G	C5-C6-O6	-8.01	123.79	128.60
26	LA	331	C	P-O3'-C3'	8.01	129.31	119.70
2	SA	399	G	N1-C6-O6	8.01	124.70	119.90
2	SA	415	A	N3-C4-C5	-8.01	121.19	126.80
2	SA	760	G	N7-C8-N9	-8.01	109.09	113.10
2	SA	864	A	C2-N3-C4	-8.01	106.60	110.60
26	LA	793	A	O4'-C1'-N9	8.01	114.61	108.20
26	LA	1400	U	N1-C2-N3	8.01	119.70	114.90
2	SA	38	G	P-O3'-C3'	-8.01	110.09	119.70
2	SA	1522	U	C5-C4-O4	-8.01	121.09	125.90
26	LA	268	C	C1'-O4'-C4'	-8.01	103.49	109.90
26	LA	1042	G	C2-N3-C4	-8.01	107.90	111.90
26	LA	1160	G	C5-C6-O6	-8.01	123.80	128.60
26	LA	1287	A	C5-C6-N1	-8.01	113.70	117.70
26	LA	1472	C	C5'-C4'-C3'	-8.01	103.19	116.00
26	LA	2000	C	N1-C2-O2	-8.01	114.10	118.90
2	SA	72	A	N1-C6-N6	8.01	123.40	118.60
2	SA	657	U	O4'-C1'-N1	8.01	114.60	108.20
26	LA	302	C	O4'-C1'-N1	8.01	114.60	108.20
26	LA	661	A	O4'-C1'-N9	8.01	114.60	108.20
26	LA	665	U	C5'-C4'-C3'	-8.01	103.19	116.00
26	LA	1170	C	C6-N1-C2	-8.01	117.10	120.30
26	LA	2436	G	C8-N9-C4	8.01	109.60	106.40
2	SA	511	C	C1'-O4'-C4'	-8.00	103.50	109.90
2	SA	1441	A	P-O5'-C5'	8.00	133.71	120.90
26	LA	134	G	C5-C6-N1	-8.00	107.50	111.50
25	LB	87	U	O4'-C1'-N1	8.00	114.60	108.20
26	LA	239	C	O4'-C1'-N1	8.00	114.60	108.20
26	LA	473	G	C5-C6-O6	8.00	133.40	128.60
26	LA	1627	G	N1-C6-O6	8.00	124.70	119.90
26	LA	2154	A	C2-N3-C4	-8.00	106.60	110.60
2	SA	542	G	C8-N9-C4	-8.00	103.20	106.40
2	SA	1006	G	C2-N3-C4	8.00	115.90	111.90
26	LA	2022	U	P-O3'-C3'	-8.00	110.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2251	U	C5-C6-N1	-8.00	118.70	122.70
26	LA	2479	U	C5-C6-N1	-8.00	118.70	122.70
2	SA	1176	A	C5'-C4'-C3'	-8.00	103.20	116.00
26	LA	524	G	C5-C6-N1	8.00	115.50	111.50
26	LA	784	G	C8-N9-C1'	-8.00	116.60	127.00
2	SA	961	U	N3-C4-O4	8.00	125.00	119.40
2	SA	1347	G	P-O3'-C3'	8.00	129.30	119.70
26	LA	117	G	C5-C6-O6	8.00	133.40	128.60
26	LA	468	G	C5-C6-N1	8.00	115.50	111.50
26	LA	708	G	N3-C4-N9	8.00	130.80	126.00
26	LA	1227	G	N3-C4-N9	8.00	130.80	126.00
26	LA	1446	C	P-O5'-C5'	8.00	133.69	120.90
26	LA	2543	G	C5'-C4'-C3'	-8.00	103.21	116.00
2	SA	72	A	C2-N3-C4	-8.00	106.60	110.60
21	SE	102	THR	N-CA-CB	8.00	125.49	110.30
26	LA	1412	U	C5-C6-N1	-8.00	118.70	122.70
2	SA	1196	A	N1-C6-N6	7.99	123.40	118.60
7	SG	77	ARG	NE-CZ-NH1	7.99	124.30	120.30
26	LA	377	G	C4-C5-C6	7.99	123.60	118.80
26	LA	555	G	C4-C5-N7	-7.99	107.60	110.80
26	LA	1182	G	C4-C5-N7	7.99	114.00	110.80
45	LG	29	ARG	NE-CZ-NH2	7.99	124.30	120.30
2	SA	33	A	C5-N7-C8	-7.99	99.90	103.90
2	SA	82	G	C5-C6-O6	-7.99	123.81	128.60
26	LA	86	G	O4'-C1'-C2'	7.99	114.79	107.60
26	LA	487	C	N3-C4-C5	7.99	125.10	121.90
26	LA	564	C	C4'-C3'-C2'	-7.99	94.61	102.60
26	LA	581	C	C1'-O4'-C4'	-7.99	103.51	109.90
26	LA	1120	G	N9-C4-C5	7.99	108.60	105.40
2	SA	838	G	N3-C4-C5	-7.99	124.60	128.60
2	SA	1359	C	N3-C2-O2	-7.99	116.31	121.90
24	S3	377	ARG	NE-CZ-NH1	7.99	124.30	120.30
26	LA	328	U	N1-C2-N3	7.99	119.69	114.90
26	LA	455	C	N1-C2-N3	7.99	124.79	119.20
26	LA	1815	A	N9-C4-C5	-7.99	102.60	105.80
26	LA	2120	G	O4'-C1'-N9	7.99	114.59	108.20
26	LA	2377	A	O4'-C1'-N9	7.99	114.59	108.20
26	LA	2816	G	C5-C6-O6	-7.99	123.81	128.60
50	LL	35	ARG	NE-CZ-NH1	7.99	124.30	120.30
2	SA	304	U	C5'-C4'-C3'	-7.99	103.22	116.00
25	LB	23	G	N1-C2-N3	-7.99	119.11	123.90
26	LA	961	C	C2-N3-C4	-7.99	115.91	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1532	A	C5'-C4'-O4'	7.99	118.69	109.10
26	LA	2287	A	C5-C6-N6	7.99	130.09	123.70
26	LA	2888	C	O4'-C1'-N1	7.99	114.59	108.20
2	SA	627	G	C4-C5-N7	7.99	114.00	110.80
4	S2	18	U	C6-N1-C2	-7.99	116.21	121.00
26	LA	1000	A	C2-N3-C4	7.99	114.59	110.60
26	LA	42	A	O4'-C1'-N9	7.99	114.59	108.20
26	LA	346	A	P-O5'-C5'	7.99	133.68	120.90
2	SA	632	U	N3-C4-O4	7.98	124.99	119.40
3	S1	27	A	N1-C6-N6	-7.98	113.81	118.60
26	LA	1546	G	N7-C8-N9	-7.98	109.11	113.10
26	LA	2604	U	C5'-C4'-O4'	7.98	118.68	109.10
2	SA	365	U	N1-C2-N3	7.98	119.69	114.90
2	SA	398	U	C6-N1-C2	-7.98	116.21	121.00
26	LA	515	A	N9-C4-C5	-7.98	102.61	105.80
26	LA	940	G	C6-N1-C2	-7.98	120.31	125.10
26	LA	1778	U	P-O3'-C3'	-7.98	110.12	119.70
2	SA	84	U	P-O5'-C5'	-7.98	108.13	120.90
2	SA	649	A	C8-N9-C4	-7.98	102.61	105.80
2	SA	929	G	C5'-C4'-C3'	-7.98	103.23	116.00
26	LA	847	U	C6-N1-C2	-7.98	116.21	121.00
26	LA	945	A	P-O3'-C3'	7.98	129.28	119.70
26	LA	2709	G	N1-C2-N3	-7.98	119.11	123.90
2	SA	513	C	C5-C6-N1	-7.98	117.01	121.00
2	SA	727	G	P-O3'-C3'	7.98	129.27	119.70
2	SA	1484	C	C1'-O4'-C4'	7.98	116.28	109.90
2	SA	560	A	C5-N7-C8	7.98	107.89	103.90
2	SA	605	U	P-O3'-C3'	7.98	129.27	119.70
26	LA	1264	A	N7-C8-N9	7.98	117.79	113.80
26	LA	1938	A	C8-N9-C4	7.98	108.99	105.80
26	LA	242	G	C5'-C4'-C3'	-7.98	103.24	116.00
26	LA	419	U	N3-C4-C5	-7.98	109.81	114.60
26	LA	1565	C	C6-N1-C2	7.98	123.49	120.30
26	LA	2105	U	C2-N3-C4	-7.98	122.22	127.00
2	SA	1056	U	O5'-P-OP1	-7.97	98.52	105.70
25	LB	54	G	P-O5'-C5'	7.97	133.66	120.90
26	LA	575	A	C6-N1-C2	-7.97	113.82	118.60
26	LA	1591	A	C4-C5-C6	-7.97	113.01	117.00
26	LA	2347	C	N3-C4-C5	-7.97	118.71	121.90
26	LA	2379	G	C8-N9-C4	-7.97	103.21	106.40
26	LA	2604	U	N1-C2-O2	-7.97	117.22	122.80
2	SA	854	U	N3-C4-O4	7.97	124.98	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	310	A	O4'-C1'-N9	7.97	114.58	108.20
26	LA	2327	A	N9-C4-C5	7.97	108.99	105.80
26	LA	2428	G	N3-C4-N9	-7.97	121.22	126.00
26	LA	2466	C	O4'-C1'-N1	7.97	114.58	108.20
26	LA	2565	A	O4'-C1'-N9	7.97	114.58	108.20
2	SA	309	A	C5-C6-N1	7.97	121.69	117.70
2	SA	903	G	N3-C4-C5	-7.97	124.61	128.60
2	SA	215	C	P-O5'-C5'	7.97	133.65	120.90
2	SA	1169	A	C4-C5-C6	-7.97	113.02	117.00
26	LA	8	C	N3-C4-C5	-7.97	118.71	121.90
26	LA	265	A	C5-N7-C8	-7.97	99.92	103.90
26	LA	600	G	C5-N7-C8	-7.97	100.31	104.30
26	LA	679	C	N1-C2-N3	7.97	124.78	119.20
26	LA	1111	A	N9-C4-C5	7.97	108.99	105.80
26	LA	1267	U	O4'-C1'-N1	7.97	114.58	108.20
26	LA	2631	G	N7-C8-N9	7.97	117.08	113.10
26	LA	2636	C	C2-N3-C4	-7.97	115.92	119.90
2	SA	481	G	C2-N3-C4	7.97	115.88	111.90
2	SA	560	A	C4-C5-C6	7.97	120.98	117.00
2	SA	941	G	N3-C4-N9	-7.97	121.22	126.00
2	SA	1470	U	C5-C6-N1	-7.97	118.72	122.70
2	SA	1514	G	C6-C5-N7	-7.97	125.62	130.40
26	LA	1737	G	N1-C6-O6	7.97	124.68	119.90
2	SA	501	C	C6-N1-C2	-7.97	117.11	120.30
26	LA	488	G	N9-C4-C5	-7.97	102.21	105.40
26	LA	811	U	N3-C4-O4	-7.97	113.82	119.40
26	LA	1308	A	C2-N3-C4	7.97	114.58	110.60
26	LA	1485	U	C1'-O4'-C4'	7.97	116.27	109.90
26	LA	2124	G	N9-C4-C5	-7.97	102.21	105.40
26	LA	2489	U	C5-C6-N1	7.97	126.68	122.70
2	SA	370	C	P-O3'-C3'	-7.96	110.14	119.70
26	LA	202	U	O4'-C1'-N1	7.96	114.57	108.20
2	SA	241	G	O4'-C1'-N9	7.96	114.57	108.20
26	LA	405	U	N1-C2-N3	-7.96	110.12	114.90
26	LA	2125	G	C4-C5-C6	-7.96	114.02	118.80
2	SA	226	G	C6-N1-C2	7.96	129.88	125.10
2	SA	973	G	C8-N9-C1'	7.96	137.35	127.00
2	SA	1362	A	C6-N1-C2	-7.96	113.82	118.60
26	LA	167	A	C4-C5-N7	7.96	114.68	110.70
26	LA	487	C	C5-C6-N1	7.96	124.98	121.00
26	LA	622	G	N3-C4-C5	-7.96	124.62	128.60
2	SA	747	A	P-O5'-C5'	7.96	133.63	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	330	A	N1-C2-N3	7.96	133.28	129.30
26	LA	801	G	C5-C6-O6	-7.96	123.82	128.60
26	LA	2269	G	C5-C6-N1	7.96	115.48	111.50
2	SA	792	A	C5'-C4'-C3'	7.96	128.73	116.00
26	LA	737	C	O4'-C1'-N1	7.96	114.57	108.20
26	LA	2565	A	P-O3'-C3'	7.96	129.25	119.70
2	SA	116	A	C5-C6-N6	-7.96	117.33	123.70
2	SA	331	G	C5'-C4'-O4'	7.96	118.65	109.10
2	SA	760	G	N3-C4-C5	7.96	132.58	128.60
26	LA	114	U	C3'-C2'-C1'	-7.96	95.13	101.50
26	LA	489	G	C2-N3-C4	-7.96	107.92	111.90
26	LA	1308	A	C6-N1-C2	-7.96	113.83	118.60
26	LA	1393	A	C5-N7-C8	-7.96	99.92	103.90
26	LA	2330	G	P-O3'-C3'	-7.96	110.15	119.70
26	LA	2519	U	P-O5'-C5'	7.96	133.63	120.90
37	LC	7	ARG	NE-CZ-NH1	7.96	124.28	120.30
2	SA	196	A	O4'-C1'-N9	7.96	114.56	108.20
2	SA	428	G	C4-C5-C6	7.96	123.57	118.80
2	SA	641	U	N1-C2-N3	7.96	119.67	114.90
2	SA	797	C	N1-C1'-C2'	-7.95	103.25	112.00
2	SA	994	A	C5-C6-N1	-7.95	113.72	117.70
24	S3	436	ARG	NE-CZ-NH1	7.95	124.28	120.30
26	LA	957	C	C2-N1-C1'	7.95	127.55	118.80
26	LA	1969	A	N1-C6-N6	-7.95	113.83	118.60
2	SA	1124	G	C8-N9-C4	7.95	109.58	106.40
24	S3	499	ASP	CB-CG-OD2	7.95	125.46	118.30
2	SA	264	C	P-O5'-C5'	7.95	133.62	120.90
26	LA	1582	C	N1-C2-N3	7.95	124.77	119.20
2	SA	232	G	C5-C6-O6	-7.95	123.83	128.60
2	SA	1185	G	C5-C6-N1	7.95	115.47	111.50
2	SA	1199	U	P-O5'-C5'	7.95	133.62	120.90
3	S1	33	A	C5'-C4'-C3'	7.95	128.72	116.00
26	LA	1252	G	C5-C6-O6	-7.95	123.83	128.60
26	LA	1419	A	C8-N9-C4	7.95	108.98	105.80
26	LA	2234	G	N9-C4-C5	7.95	108.58	105.40
26	LA	2256	G	C6-N1-C2	-7.95	120.33	125.10
26	LA	2423	U	C5-C6-N1	-7.95	118.73	122.70
41	L5	28	ARG	NE-CZ-NH1	7.95	124.27	120.30
2	SA	1474	U	N1-C2-O2	7.95	128.36	122.80
19	SC	178	ARG	NE-CZ-NH2	-7.95	116.33	120.30
26	LA	370	G	C5-C6-O6	-7.95	123.83	128.60
26	LA	2056	G	C5-C6-N1	7.95	115.47	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2087	G	N3-C2-N2	-7.95	114.34	119.90
26	LA	2838	G	C2-N3-C4	-7.95	107.93	111.90
26	LA	984	A	C5-C6-N1	7.95	121.67	117.70
26	LA	2241	A	C4'-C3'-C2'	-7.95	94.66	102.60
26	LA	2624	G	N1-C2-N2	-7.95	109.05	116.20
2	SA	587	G	O3'-P-O5'	-7.94	88.91	104.00
26	LA	1216	G	C2-N3-C4	7.94	115.87	111.90
26	LA	1322	A	N9-C4-C5	-7.94	102.62	105.80
26	LA	2638	G	N1-C6-O6	-7.94	115.13	119.90
2	SA	3	A	O4'-C1'-N9	7.94	114.55	108.20
2	SA	1377	A	C8-N9-C4	-7.94	102.62	105.80
22	SF	2	ARG	NE-CZ-NH2	-7.94	116.33	120.30
26	LA	555	G	N1-C6-O6	7.94	124.66	119.90
26	LA	1259	G	N3-C2-N2	7.94	125.46	119.90
26	LA	1579	A	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	2734	A	C4'-C3'-C2'	-7.94	94.66	102.60
26	LA	2768	U	N3-C2-O2	-7.94	116.64	122.20
26	LA	2805	C	P-O5'-C5'	7.94	133.60	120.90
2	SA	878	A	C5'-C4'-O4'	7.94	118.63	109.10
26	LA	1482	G	C8-N9-C4	-7.94	103.22	106.40
26	LA	1659	G	C4'-C3'-C2'	-7.94	94.66	102.60
26	LA	2399	G	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	400	G	N1-C6-O6	7.94	124.66	119.90
26	LA	699	A	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	923	G	O4'-C1'-N9	7.94	114.55	108.20
26	LA	1184	U	N1-C2-O2	-7.94	117.24	122.80
26	LA	2010	G	O4'-C1'-N9	7.94	114.55	108.20
26	LA	2616	C	C5-C6-N1	-7.94	117.03	121.00
26	LA	2525	G	C2-N3-C4	-7.94	107.93	111.90
2	SA	1023	U	C5'-C4'-O4'	7.93	118.62	109.10
4	S2	12	G	P-O3'-C3'	7.93	129.22	119.70
26	LA	1512	C	C6-N1-C2	-7.93	117.13	120.30
26	LA	2760	C	N3-C2-O2	-7.93	116.35	121.90
26	LA	2803	G	P-O5'-C5'	-7.93	108.20	120.90
58	LT	80	ARG	NH1-CZ-NH2	-7.93	110.67	119.40
2	SA	25	C	C6-N1-C2	-7.93	117.13	120.30
2	SA	992	U	C2-N3-C4	-7.93	122.24	127.00
4	S2	9	G	N1-C6-O6	7.93	124.66	119.90
26	LA	1021	A	P-O3'-C3'	-7.93	110.18	119.70
26	LA	1492	G	N7-C8-N9	-7.93	109.13	113.10
26	LA	2299	U	O4'-C1'-N1	7.93	114.55	108.20
26	LA	2550	G	C2-N3-C4	7.93	115.87	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	69	G	N3-C2-N2	7.93	125.45	119.90
26	LA	1861	G	C6-N1-C2	-7.93	120.34	125.10
26	LA	2270	A	N1-C6-N6	-7.93	113.84	118.60
26	LA	2360	G	C4-C5-N7	-7.93	107.63	110.80
26	LA	2677	G	N7-C8-N9	-7.93	109.14	113.10
2	SA	1269	A	C4-C5-N7	7.93	114.67	110.70
26	LA	377	G	C4-C5-N7	-7.93	107.63	110.80
26	LA	606	U	C2-N1-C1'	-7.93	108.19	117.70
26	LA	708	G	C8-N9-C4	7.93	109.57	106.40
26	LA	983	A	C5-C6-N6	7.93	130.04	123.70
26	LA	1800	C	O4'-C1'-N1	7.93	114.54	108.20
26	LA	2330	G	O4'-C1'-N9	7.93	114.54	108.20
45	LG	79	ARG	NE-CZ-NH2	7.93	124.27	120.30
2	SA	404	G	C5'-C4'-C3'	-7.93	103.32	116.00
2	SA	1008	U	P-O5'-C5'	7.93	133.59	120.90
26	LA	575	A	C8-N9-C4	7.93	108.97	105.80
26	LA	1324	G	P-O3'-C3'	-7.93	110.19	119.70
26	LA	697	G	O4'-C1'-N9	7.93	114.54	108.20
26	LA	1220	G	O4'-C1'-N9	7.93	114.54	108.20
26	LA	2725	A	C4'-C3'-C2'	-7.93	94.67	102.60
2	SA	1101	A	N1-C6-N6	-7.92	113.84	118.60
2	SA	1312	G	C6-N1-C2	-7.92	120.34	125.10
26	LA	101	A	P-O5'-C5'	7.92	133.58	120.90
26	LA	1388	G	N7-C8-N9	7.92	117.06	113.10
26	LA	1612	C	C6-N1-C2	-7.92	117.13	120.30
26	LA	2813	A	C5-C6-N6	-7.92	117.36	123.70
26	LA	2903	U	C6-N1-C2	-7.92	116.25	121.00
27	LD	65	ASP	CB-CG-OD2	7.92	125.43	118.30
53	LP	67	PHE	CB-CG-CD2	-7.92	115.25	120.80
2	SA	1234	C	N3-C2-O2	-7.92	116.35	121.90
2	SA	1247	U	N1-C2-N3	7.92	119.65	114.90
22	SF	44	ARG	NH1-CZ-NH2	-7.92	110.68	119.40
2	SA	479	U	O4'-C1'-N1	7.92	114.54	108.20
2	SA	761	G	C4-C5-C6	7.92	123.55	118.80
2	SA	1390	U	C5-C4-O4	-7.92	121.15	125.90
26	LA	618	G	C5-C6-N1	7.92	115.46	111.50
26	LA	2223	G	N1-C6-O6	7.92	124.65	119.90
26	LA	2326	C	C4-C5-C6	7.92	121.36	117.40
48	LN	81	ASP	CB-CG-OD1	7.92	125.43	118.30
2	SA	616	G	N3-C4-C5	-7.92	124.64	128.60
2	SA	1377	A	N9-C4-C5	7.92	108.97	105.80
26	LA	1528	A	C4-C5-N7	-7.92	106.74	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1318	A	O4'-C1'-N9	7.92	114.53	108.20
26	LA	464	U	C4'-C3'-C2'	-7.92	94.68	102.60
26	LA	626	A	C4-C5-N7	7.92	114.66	110.70
26	LA	1668	A	C4'-C3'-C2'	-7.92	94.68	102.60
26	LA	1750	G	C2-N3-C4	7.92	115.86	111.90
26	LA	2353	G	C5-C6-N1	7.92	115.46	111.50
26	LA	2811	G	N7-C8-N9	-7.92	109.14	113.10
2	SA	328	C	N1-C2-O2	7.92	123.65	118.90
2	SA	477	C	C4-C5-C6	7.92	121.36	117.40
2	SA	532	A	C6-N1-C2	7.92	123.35	118.60
2	SA	768	A	O4'-C1'-N9	7.92	114.53	108.20
26	LA	114	U	C1'-O4'-C4'	-7.92	103.57	109.90
26	LA	710	U	C3'-C2'-C1'	-7.92	95.17	101.50
26	LA	851	C	N3-C4-C5	-7.92	118.73	121.90
26	LA	991	C	N1-C2-N3	7.92	124.74	119.20
26	LA	1944	U	C2-N3-C4	-7.92	122.25	127.00
26	LA	2044	C	N1-C2-O2	-7.92	114.15	118.90
26	LA	2538	C	N3-C4-C5	-7.92	118.73	121.90
26	LA	2545	G	N3-C2-N2	-7.92	114.36	119.90
36	L2	59	ARG	NE-CZ-NH2	-7.92	116.34	120.30
53	LP	38	LEU	CB-CG-CD2	-7.92	97.54	111.00
26	LA	1338	G	C5-C6-N1	-7.92	107.54	111.50
2	SA	1317	C	C2-N1-C1'	7.91	127.50	118.80
25	LB	34	A	O4'-C1'-N9	7.91	114.53	108.20
26	LA	167	A	C2-N3-C4	-7.91	106.64	110.60
26	LA	712	G	N1-C2-N2	-7.91	109.08	116.20
26	LA	2302	U	N1-C2-O2	7.91	128.34	122.80
26	LA	2478	A	C8-N9-C4	-7.91	102.63	105.80
26	LA	2643	G	N1-C2-N2	-7.91	109.08	116.20
56	LR	97	TYR	CB-CG-CD1	7.91	125.75	121.00
26	LA	2572	A	C4-C5-C6	-7.91	113.04	117.00
18	SB	221	ARG	NE-CZ-NH1	7.91	124.25	120.30
26	LA	1732	C	C6-N1-C2	-7.91	117.14	120.30
2	SA	1457	G	N9-C4-C5	-7.91	102.24	105.40
26	LA	532	A	C5-C6-N6	-7.91	117.37	123.70
26	LA	986	C	C4-C5-C6	-7.91	113.45	117.40
26	LA	1021	A	N7-C8-N9	7.91	117.75	113.80
26	LA	1706	C	C4-C5-C6	7.91	121.35	117.40
26	LA	1785	A	C5-N7-C8	-7.91	99.95	103.90
26	LA	1797	G	C5-C6-O6	7.91	133.34	128.60
2	SA	471	U	O4'-C1'-N1	7.91	114.53	108.20
26	LA	213	A	C8-N9-C4	7.91	108.96	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1290	C	C6-N1-C2	-7.91	117.14	120.30
26	LA	1557	C	N3-C4-C5	-7.91	118.74	121.90
26	LA	2174	C	C5'-C4'-C3'	7.91	128.65	116.00
2	SA	1017	U	O4'-C1'-N1	7.91	114.52	108.20
2	SA	1072	G	C8-N9-C4	-7.91	103.24	106.40
4	S2	73	A	C4'-C3'-C2'	-7.91	94.69	102.60
26	LA	72	U	C2-N3-C4	-7.91	122.26	127.00
26	LA	682	G	N9-C4-C5	7.91	108.56	105.40
26	LA	953	G	P-O3'-C3'	-7.91	110.21	119.70
26	LA	2822	G	P-O3'-C3'	-7.91	110.21	119.70
2	SA	1049	U	C1'-O4'-C4'	-7.90	103.58	109.90
26	LA	241	A	C6-C5-N7	-7.90	126.77	132.30
26	LA	1197	G	C5-C6-N1	7.90	115.45	111.50
26	LA	2543	G	C2-N3-C4	-7.90	107.95	111.90
2	SA	396	C	C6-N1-C2	-7.90	117.14	120.30
26	LA	350	G	C5-C6-N1	7.90	115.45	111.50
26	LA	921	C	C3'-C2'-C1'	-7.90	95.18	101.50
26	LA	1323	C	C5'-C4'-O4'	7.90	118.58	109.10
26	LA	1423	G	C4'-C3'-C2'	-7.90	94.70	102.60
26	LA	1507	C	N3-C4-C5	-7.90	118.74	121.90
26	LA	2118	U	C5-C6-N1	7.90	126.65	122.70
26	LA	2889	C	N3-C4-N4	-7.90	112.47	118.00
26	LA	182	A	O4'-C1'-N9	7.90	114.52	108.20
26	LA	790	U	C6-N1-C2	-7.90	116.26	121.00
26	LA	1604	C	C6-N1-C2	-7.90	117.14	120.30
26	LA	1958	C	N1-C2-N3	7.90	124.73	119.20
2	SA	21	G	C5'-C4'-O4'	7.90	118.58	109.10
2	SA	689	C	O5'-P-OP2	-7.90	98.59	105.70
2	SA	790	A	C4'-C3'-C2'	-7.90	94.70	102.60
26	LA	1210	G	N3-C2-N2	7.90	125.43	119.90
26	LA	1508	A	N1-C2-N3	-7.90	125.35	129.30
26	LA	1857	G	O3'-P-O5'	-7.90	88.99	104.00
26	LA	2250	G	N9-C4-C5	-7.90	102.24	105.40
56	LR	87	ARG	NE-CZ-NH2	-7.90	116.35	120.30
2	SA	782	A	C4-C5-C6	7.90	120.95	117.00
26	LA	660	C	C5-C4-N4	-7.90	114.67	120.20
26	LA	2399	G	C8-N9-C4	-7.90	103.24	106.40
26	LA	2885	G	C6-N1-C2	-7.90	120.36	125.10
31	LX	2	PHE	CB-CG-CD2	-7.90	115.27	120.80
2	SA	764	C	C5'-C4'-C3'	-7.89	103.37	116.00
26	LA	277	G	C5-C6-O6	-7.89	123.86	128.60
26	LA	1333	G	N1-C2-N3	7.89	128.64	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2759	G	C5-C6-O6	-7.89	123.86	128.60
26	LA	2826	A	C4-C5-C6	-7.89	113.05	117.00
2	SA	882	C	C5-C6-N1	-7.89	117.05	121.00
2	SA	932	C	C5-C6-N1	7.89	124.95	121.00
2	SA	1442	G	O4'-C1'-N9	7.89	114.52	108.20
4	S2	42	C	N3-C4-C5	-7.89	118.74	121.90
19	SC	30	ASP	CB-CG-OD1	-7.89	111.20	118.30
22	SF	49	TYR	CB-CG-CD1	7.89	125.74	121.00
26	LA	125	A	C8-N9-C1'	-7.89	113.50	127.70
26	LA	1146	C	C5-C6-N1	7.89	124.95	121.00
26	LA	2386	A	C3'-C2'-C1'	7.89	107.81	101.50
2	SA	1310	G	N1-C6-O6	7.89	124.64	119.90
26	LA	705	A	P-O5'-C5'	-7.89	108.27	120.90
2	SA	1486	G	C4-C5-N7	-7.89	107.64	110.80
26	LA	176	A	P-O5'-C5'	7.89	133.52	120.90
26	LA	285	G	C6-N1-C2	-7.89	120.37	125.10
26	LA	471	A	N7-C8-N9	7.89	117.75	113.80
26	LA	1838	C	C2-N3-C4	-7.89	115.95	119.90
26	LA	2831	G	N7-C8-N9	-7.89	109.16	113.10
4	S2	11	A	C1'-O4'-C4'	-7.89	103.59	109.90
26	LA	1270	C	C1'-O4'-C4'	-7.89	103.59	109.90
2	SA	58	C	C6-N1-C1'	7.89	130.26	120.80
2	SA	1338	G	C6-C5-N7	-7.89	125.67	130.40
26	LA	262	A	C5-C6-N1	-7.89	113.76	117.70
26	LA	594	U	O4'-C1'-N1	7.89	114.51	108.20
26	LA	945	A	C8-N9-C4	-7.89	102.64	105.80
26	LA	1771	C	O4'-C1'-N1	7.89	114.51	108.20
37	LC	179	ASP	CB-CG-OD2	-7.89	111.20	118.30
2	SA	345	C	N1-C2-N3	-7.88	113.68	119.20
2	SA	370	C	O4'-C1'-N1	7.88	114.51	108.20
2	SA	983	A	P-O3'-C3'	7.88	129.16	119.70
26	LA	745	G	P-O3'-C3'	7.88	129.16	119.70
26	LA	1214	A	O4'-C1'-N9	7.88	114.51	108.20
26	LA	1516	G	C1'-O4'-C4'	-7.88	103.59	109.90
26	LA	1530	G	N7-C8-N9	7.88	117.04	113.10
26	LA	2532	G	C6-N1-C2	-7.88	120.37	125.10
26	LA	2589	A	C1'-O4'-C4'	-7.88	103.59	109.90
26	LA	2763	G	P-O3'-C3'	7.88	129.16	119.70
2	SA	1221	G	P-O3'-C3'	-7.88	110.24	119.70
26	LA	2722	G	C4-C5-N7	7.88	113.95	110.80
2	SA	566	G	N3-C4-N9	7.88	130.73	126.00
2	SA	1048	G	C5-C6-O6	-7.88	123.87	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	386	G	C5-C6-N1	7.88	115.44	111.50
26	LA	2792	A	N1-C2-N3	-7.88	125.36	129.30
2	SA	542	G	P-O3'-C3'	7.88	129.16	119.70
26	LA	707	G	C2-N3-C4	-7.88	107.96	111.90
26	LA	1529	G	C5-C6-O6	-7.88	123.87	128.60
2	SA	634	C	N1-C2-N3	7.88	124.72	119.20
26	LA	260	G	C4'-C3'-C2'	-7.88	94.72	102.60
26	LA	974	G	C6-C5-N7	-7.88	125.67	130.40
26	LA	1926	U	C5'-C4'-O4'	7.88	118.56	109.10
26	LA	2227	A	C5-C6-N6	-7.88	117.40	123.70
26	LA	2231	U	C2-N3-C4	-7.88	122.27	127.00
26	LA	2414	G	O4'-C1'-N9	7.88	114.50	108.20
2	SA	348	G	N3-C2-N2	7.88	125.41	119.90
4	S2	68	C	N3-C4-C5	-7.88	118.75	121.90
26	LA	680	C	N3-C2-O2	-7.88	116.39	121.90
26	LA	1279	G	N1-C2-N2	-7.88	109.11	116.20
26	LA	1348	C	N1-C2-N3	7.88	124.71	119.20
26	LA	1679	A	C2-N3-C4	-7.88	106.66	110.60
26	LA	2462	C	O4'-C1'-N1	7.88	114.50	108.20
26	LA	723	C	P-O3'-C3'	7.88	129.15	119.70
26	LA	2274	A	C8-N9-C4	-7.88	102.65	105.80
2	SA	527	G	C5-C6-N1	7.87	115.44	111.50
2	SA	753	A	C5'-C4'-C3'	-7.87	103.40	116.00
26	LA	689	A	P-O3'-C3'	7.87	129.15	119.70
26	LA	1212	G	C2-N3-C4	-7.87	107.96	111.90
26	LA	2134	A	N1-C2-N3	7.87	133.24	129.30
2	SA	455	G	C5-C6-O6	-7.87	123.88	128.60
2	SA	1086	U	N3-C4-C5	-7.87	109.88	114.60
26	LA	256	A	P-O3'-C3'	7.87	129.15	119.70
26	LA	394	C	N3-C4-C5	-7.87	118.75	121.90
26	LA	558	U	C5'-C4'-C3'	-7.87	103.41	116.00
26	LA	689	A	C2-N3-C4	7.87	114.54	110.60
26	LA	888	C	P-O3'-C3'	7.87	129.15	119.70
26	LA	1250	G	O4'-C1'-N9	7.87	114.50	108.20
26	LA	1954	G	N1-C2-N2	-7.87	109.11	116.20
26	LA	581	C	C4-C5-C6	7.87	121.33	117.40
26	LA	1463	C	C5'-C4'-O4'	7.87	118.55	109.10
26	LA	1759	A	C5-C6-N1	7.87	121.64	117.70
26	LA	2521	C	C6-N1-C2	-7.87	117.15	120.30
3	S1	47	C	P-O3'-C3'	7.87	129.14	119.70
3	S1	57	C	N1-C2-O2	7.87	123.62	118.90
4	S2	52	C	O4'-C1'-N1	7.87	114.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	329	G	C5-C6-N1	7.87	115.43	111.50
26	LA	533	G	N1-C6-O6	7.87	124.62	119.90
26	LA	1083	U	C2-N3-C4	-7.87	122.28	127.00
26	LA	1205	A	N9-C4-C5	-7.87	102.65	105.80
26	LA	2050	C	O4'-C1'-N1	7.87	114.50	108.20
26	LA	2636	C	O4'-C1'-N1	7.87	114.50	108.20
26	LA	1100	C	N1-C2-O2	-7.87	114.18	118.90
26	LA	1689	A	C5-C6-N1	7.87	121.63	117.70
2	SA	194	C	P-O3'-C3'	-7.87	110.26	119.70
2	SA	1143	G	N1-C6-O6	-7.87	115.18	119.90
26	LA	53	A	N1-C2-N3	-7.87	125.37	129.30
26	LA	105	C	O4'-C1'-N1	7.87	114.49	108.20
26	LA	1793	C	C1'-O4'-C4'	-7.87	103.61	109.90
26	LA	2047	C	O4'-C1'-N1	7.87	114.49	108.20
26	LA	2258	C	N3-C4-C5	7.87	125.05	121.90
26	LA	2264	C	N3-C4-N4	7.87	123.51	118.00
26	LA	2633	G	N9-C4-C5	-7.87	102.25	105.40
2	SA	513	C	C6-N1-C2	7.86	123.44	120.30
2	SA	519	C	C4'-C3'-C2'	-7.86	94.74	102.60
25	LB	6	G	C6-N1-C2	-7.86	120.38	125.10
26	LA	723	C	C6-N1-C2	-7.86	117.16	120.30
26	LA	1027	A	C5-C6-N1	7.86	121.63	117.70
26	LA	1046	A	P-O5'-C5'	7.86	133.48	120.90
26	LA	1241	A	N3-C4-C5	-7.86	121.30	126.80
26	LA	2257	U	N1-C2-N3	-7.86	110.18	114.90
26	LA	2529	G	C8-N9-C1'	-7.86	116.78	127.00
26	LA	1867	G	O4'-C1'-N9	7.86	114.49	108.20
26	LA	1890	A	P-O3'-C3'	-7.86	110.27	119.70
26	LA	424	G	C2-N3-C4	-7.86	107.97	111.90
26	LA	708	G	C2-N3-C4	7.86	115.83	111.90
26	LA	1874	C	N3-C4-N4	-7.86	112.50	118.00
53	LP	103	ARG	NE-CZ-NH2	-7.86	116.37	120.30
57	LS	56	PHE	CB-CG-CD2	-7.86	115.30	120.80
2	SA	1161	C	O4'-C1'-N1	7.86	114.49	108.20
24	S3	317	SER	N-CA-CB	7.86	122.29	110.50
26	LA	195	A	N3-C4-N9	-7.86	121.11	127.40
26	LA	946	C	C5'-C4'-C3'	-7.86	103.43	116.00
26	LA	2289	G	C4-C5-N7	7.86	113.94	110.80
26	LA	2670	A	C6-N1-C2	-7.86	113.89	118.60
2	SA	89	U	P-O5'-C5'	7.86	133.47	120.90
2	SA	307	C	N3-C4-C5	-7.86	118.76	121.90
2	SA	373	A	C1'-O4'-C4'	-7.86	103.61	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	536	C	C6-N1-C2	-7.86	117.16	120.30
26	LA	388	G	C2-N3-C4	7.86	115.83	111.90
26	LA	1234	U	C2-N3-C4	-7.86	122.28	127.00
2	SA	174	A	N9-C4-C5	-7.86	102.66	105.80
2	SA	872	A	N1-C6-N6	-7.86	113.89	118.60
2	SA	1332	A	C8-N9-C4	-7.86	102.66	105.80
18	SB	136	ARG	NE-CZ-NH1	7.86	124.23	120.30
26	LA	756	A	C4-C5-C6	-7.86	113.07	117.00
26	LA	761	A	N1-C6-N6	-7.86	113.89	118.60
26	LA	805	G	C4'-C3'-C2'	-7.86	94.74	102.60
26	LA	1307	A	O4'-C4'-C3'	-7.86	96.14	104.00
26	LA	1763	G	C5-N7-C8	7.86	108.23	104.30
26	LA	2063	C	O4'-C1'-N1	7.86	114.48	108.20
26	LA	2314	A	P-O5'-C5'	-7.86	108.33	120.90
26	LA	2507	C	C2-N3-C4	-7.86	115.97	119.90
26	LA	357	C	C6-N1-C2	-7.85	117.16	120.30
26	LA	1249	U	N3-C4-O4	7.85	124.90	119.40
2	SA	770	C	N3-C4-C5	-7.85	118.76	121.90
6	SU	61	ARG	O-C-N	-7.85	110.14	122.70
26	LA	26	G	N1-C6-O6	7.85	124.61	119.90
26	LA	64	A	O4'-C1'-N9	7.85	114.48	108.20
26	LA	172	A	C5-C6-N1	7.85	121.63	117.70
26	LA	357	C	C4'-C3'-C2'	-7.85	94.75	102.60
26	LA	1149	G	C5-C6-N1	7.85	115.43	111.50
26	LA	2251	U	O4'-C1'-C2'	7.85	114.67	107.60
26	LA	2513	A	C5-C6-N6	-7.85	117.42	123.70
26	LA	2825	G	N7-C8-N9	-7.85	109.17	113.10
2	SA	1175	G	O4'-C4'-C3'	-7.85	96.15	104.00
2	SA	1287	A	C6-N1-C2	-7.85	113.89	118.60
26	LA	2692	G	OP1-P-OP2	-7.85	107.82	119.60
26	LA	2730	C	O4'-C1'-N1	7.85	114.48	108.20
2	SA	75	G	N7-C8-N9	7.85	117.03	113.10
2	SA	823	C	C5'-C4'-O4'	7.85	118.52	109.10
4	S2	70	C	N3-C4-C5	-7.85	118.76	121.90
25	LB	86	G	C8-N9-C4	-7.85	103.26	106.40
26	LA	1598	A	C5-C6-N6	7.85	129.98	123.70
26	LA	1702	G	C1'-O4'-C4'	-7.85	103.62	109.90
2	SA	30	U	C4-C5-C6	7.85	124.41	119.70
2	SA	395	C	C5'-C4'-C3'	-7.85	103.44	116.00
2	SA	935	A	C4-C5-N7	-7.85	106.78	110.70
7	SG	14	ASP	CB-CG-OD1	7.85	125.36	118.30
15	SO	52	ARG	NE-CZ-NH2	-7.85	116.38	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	115	A	N1-C6-N6	-7.85	113.89	118.60
26	LA	271	G	O4'-C1'-C2'	-7.85	97.95	105.80
26	LA	1668	A	C4-C5-N7	7.85	114.62	110.70
26	LA	1807	G	C6-N1-C2	-7.85	120.39	125.10
26	LA	1828	G	C2-N3-C4	-7.85	107.98	111.90
26	LA	2736	A	N3-C4-C5	-7.85	121.31	126.80
26	LA	1486	U	C4'-C3'-C2'	-7.85	94.75	102.60
2	SA	987	G	N1-C2-N3	-7.84	119.19	123.90
26	LA	944	C	C5-C4-N4	-7.84	114.71	120.20
26	LA	1073	A	N9-C4-C5	-7.84	102.66	105.80
26	LA	1704	C	C5-C6-N1	7.84	124.92	121.00
26	LA	2780	G	N7-C8-N9	-7.84	109.18	113.10
2	SA	801	U	C4-C5-C6	-7.84	114.99	119.70
2	SA	1400	C	C1'-O4'-C4'	-7.84	103.63	109.90
3	S1	27	A	O4'-C1'-N9	7.84	114.47	108.20
4	S2	67	C	P-O3'-C3'	-7.84	110.29	119.70
26	LA	963	U	C5-C6-N1	7.84	126.62	122.70
26	LA	1260	A	C6-C5-N7	-7.84	126.81	132.30
26	LA	1600	C	C5-C4-N4	-7.84	114.71	120.20
26	LA	2031	A	C5-C6-N1	7.84	121.62	117.70
26	LA	2662	A	OP1-P-OP2	-7.84	107.83	119.60
2	SA	791	G	N9-C4-C5	-7.84	102.26	105.40
2	SA	970	C	P-O3'-C3'	-7.84	110.29	119.70
26	LA	387	U	N3-C2-O2	-7.84	116.71	122.20
26	LA	582	A	C5-N7-C8	-7.84	99.98	103.90
26	LA	926	G	N1-C6-O6	-7.84	115.19	119.90
26	LA	1117	C	C5'-C4'-O4'	7.84	118.51	109.10
26	LA	1807	G	C4-C5-C6	-7.84	114.09	118.80
2	SA	1039	G	C8-N9-C4	-7.84	103.26	106.40
26	LA	1084	A	C5'-C4'-C3'	-7.84	103.46	116.00
26	LA	1333	G	C6-N1-C2	-7.84	120.40	125.10
26	LA	1629	U	N3-C4-O4	7.84	124.89	119.40
26	LA	1787	A	C8-N9-C4	-7.84	102.66	105.80
26	LA	1831	G	C5-C6-O6	-7.84	123.90	128.60
32	LY	19	ARG	NE-CZ-NH2	7.84	124.22	120.30
26	LA	1440	U	C4'-C3'-C2'	-7.84	94.76	102.60
58	LT	90	ARG	NE-CZ-NH2	-7.84	116.38	120.30
2	SA	49	U	N1-C2-O2	-7.84	117.31	122.80
2	SA	444	G	N3-C4-C5	7.84	132.52	128.60
2	SA	647	C	C6-N1-C2	7.84	123.43	120.30
2	SA	788	U	O4'-C1'-N1	7.84	114.47	108.20
2	SA	1536	C	C1'-O4'-C4'	-7.84	103.63	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	764	A	O4'-C1'-N9	7.84	114.47	108.20
26	LA	964	C	C6-N1-C1'	-7.84	111.40	120.80
26	LA	1086	A	O3'-P-O5'	-7.84	89.11	104.00
26	LA	1404	C	O4'-C1'-N1	7.84	114.47	108.20
26	LA	1975	G	N3-C2-N2	-7.84	114.41	119.90
26	LA	2310	C	N3-C4-C5	-7.84	118.77	121.90
2	SA	565	U	N3-C2-O2	-7.83	116.72	122.20
2	SA	1013	G	C5-C6-N1	-7.83	107.58	111.50
25	LB	33	G	N9-C4-C5	7.83	108.53	105.40
26	LA	2167	U	C1'-O4'-C4'	-7.83	103.63	109.90
2	SA	160	A	C8-N9-C4	-7.83	102.67	105.80
2	SA	293	G	C5-C6-N1	7.83	115.42	111.50
2	SA	833	G	N3-C2-N2	7.83	125.38	119.90
2	SA	1093	A	O4'-C1'-N9	7.83	114.47	108.20
2	SA	1412	C	C5'-C4'-C3'	-7.83	103.47	116.00
26	LA	1043	C	C2-N3-C4	-7.83	115.98	119.90
26	LA	1223	G	N7-C8-N9	-7.83	109.18	113.10
26	LA	1949	G	O4'-C1'-N9	7.83	114.47	108.20
26	LA	2092	U	N3-C2-O2	-7.83	116.72	122.20
26	LA	2543	G	C4-C5-N7	7.83	113.93	110.80
26	LA	2759	G	C5-C6-N1	7.83	115.42	111.50
13	SM	107	THR	CA-CB-CG2	-7.83	101.44	112.40
26	LA	228	C	C4'-C3'-C2'	-7.83	94.77	102.60
26	LA	996	A	C6-C5-N7	-7.83	126.82	132.30
26	LA	1310	G	N7-C8-N9	-7.83	109.19	113.10
26	LA	1322	A	C2'-C3'-O3'	7.83	126.73	109.50
26	LA	1500	G	N3-C4-C5	-7.83	124.68	128.60
26	LA	1538	G	P-O5'-C5'	-7.83	108.37	120.90
26	LA	1635	A	P-O3'-C3'	7.83	129.10	119.70
26	LA	1653	G	N9-C4-C5	-7.83	102.27	105.40
37	LC	111	PHE	CB-CG-CD2	-7.83	115.32	120.80
2	SA	830	G	O4'-C4'-C3'	-7.83	96.17	104.00
26	LA	2251	U	P-O3'-C3'	-7.83	110.30	119.70
2	SA	1337	G	O4'-C1'-N9	7.83	114.46	108.20
2	SA	1381	U	O4'-C1'-N1	7.83	114.46	108.20
4	S2	16	C	O4'-C1'-N1	7.83	114.46	108.20
26	LA	244	A	C5-C6-N1	-7.83	113.79	117.70
26	LA	287	G	C6-C5-N7	-7.83	125.70	130.40
26	LA	931	U	N1-C1'-C2'	-7.83	103.39	112.00
26	LA	2113	U	N1-C2-N3	7.83	119.60	114.90
26	LA	2578	G	C6-N1-C2	-7.83	120.40	125.10
8	SH	87	ARG	NE-CZ-NH2	7.83	124.21	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	88	G	N1-C2-N2	-7.83	109.16	116.20
26	LA	1546	G	N9-C4-C5	-7.83	102.27	105.40
26	LA	1757	A	O4'-C1'-N9	7.83	114.46	108.20
2	SA	287	U	O4'-C1'-N1	7.83	114.46	108.20
2	SA	291	U	C4'-C3'-C2'	-7.83	94.77	102.60
2	SA	341	C	C5'-C4'-O4'	7.83	118.49	109.10
2	SA	471	U	C5'-C4'-C3'	-7.83	103.48	116.00
2	SA	506	G	C2-N3-C4	-7.83	107.99	111.90
25	LB	90	C	C6-N1-C2	-7.83	117.17	120.30
26	LA	471	A	C8-N9-C4	-7.83	102.67	105.80
26	LA	1537	G	C4-C5-N7	-7.83	107.67	110.80
26	LA	2165	C	N1-C1'-C2'	-7.83	103.39	112.00
26	LA	2550	G	N3-C2-N2	7.83	125.38	119.90
26	LA	2758	A	C4'-C3'-C2'	-7.83	94.78	102.60
2	SA	641	U	C6-N1-C2	-7.82	116.31	121.00
3	S1	15	G	O4'-C1'-N9	7.82	114.46	108.20
26	LA	13	A	N1-C6-N6	-7.82	113.91	118.60
26	LA	525	U	C2-N3-C4	-7.82	122.31	127.00
26	LA	824	U	C4'-C3'-C2'	-7.82	94.78	102.60
26	LA	1005	C	C2-N1-C1'	7.82	127.41	118.80
26	LA	1323	C	C3'-C2'-C1'	7.82	107.76	101.50
26	LA	1967	C	O5'-C5'-C4'	7.82	126.56	111.70
2	SA	250	A	N1-C6-N6	-7.82	113.91	118.60
25	LB	45	A	O4'-C1'-N9	7.82	114.46	108.20
26	LA	1632	A	C5-C6-N6	7.82	129.96	123.70
26	LA	1769	U	N3-C4-C5	-7.82	109.91	114.60
26	LA	2131	U	C2-N1-C1'	7.82	127.08	117.70
26	LA	2221	G	N9-C4-C5	-7.82	102.27	105.40
2	SA	1197	A	C6-N1-C2	-7.82	113.91	118.60
25	LB	102	G	C4-C5-N7	7.82	113.93	110.80
26	LA	393	C	P-O3'-C3'	7.82	129.08	119.70
26	LA	912	C	C6-N1-C2	7.82	123.43	120.30
2	SA	559	A	N7-C8-N9	7.82	117.71	113.80
4	S2	15	G	C4-N9-C1'	-7.82	116.34	126.50
26	LA	198	C	N3-C4-C5	7.82	125.03	121.90
26	LA	260	G	O4'-C1'-N9	7.82	114.45	108.20
26	LA	541	A	N7-C8-N9	-7.82	109.89	113.80
26	LA	569	U	C6-N1-C2	-7.82	116.31	121.00
26	LA	1441	G	N3-C4-C5	-7.82	124.69	128.60
26	LA	2210	U	P-O3'-C3'	-7.82	110.32	119.70
26	LA	2765	A	C6-N1-C2	-7.82	113.91	118.60
2	SA	192	A	C4-C5-C6	7.82	120.91	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	369	G	N7-C8-N9	-7.82	109.19	113.10
2	SA	473	U	C5-C4-O4	7.82	130.59	125.90
2	SA	986	U	C5'-C4'-C3'	-7.82	103.50	116.00
26	LA	1133	A	C4-C5-N7	7.82	114.61	110.70
26	LA	1543	G	C8-N9-C4	7.82	109.53	106.40
26	LA	1732	C	P-O5'-C5'	-7.82	108.39	120.90
26	LA	2363	G	N3-C4-N9	7.82	130.69	126.00
26	LA	2686	G	N7-C8-N9	7.82	117.01	113.10
26	LA	2689	U	C1'-O4'-C4'	-7.82	103.65	109.90
45	LG	158	THR	N-CA-CB	7.82	125.15	110.30
2	SA	543	U	C5-C4-O4	-7.81	121.21	125.90
2	SA	776	G	C5-C6-O6	-7.81	123.91	128.60
26	LA	2465	C	C5-C6-N1	7.81	124.91	121.00
26	LA	2797	U	C6-N1-C2	-7.81	116.31	121.00
17	SQ	14	ASP	CB-CG-OD2	-7.81	111.27	118.30
20	SD	2	ARG	NE-CZ-NH1	7.81	124.21	120.30
26	LA	210	C	O4'-C1'-N1	7.81	114.45	108.20
26	LA	389	G	N1-C6-O6	7.81	124.59	119.90
26	LA	508	A	N9-C4-C5	-7.81	102.67	105.80
26	LA	553	G	C4'-C3'-C2'	-7.81	94.79	102.60
26	LA	1010	A	C8-N9-C4	7.81	108.92	105.80
26	LA	1697	G	C6-N1-C2	-7.81	120.41	125.10
26	LA	1754	A	C5-C6-N6	-7.81	117.45	123.70
26	LA	1875	G	N7-C8-N9	7.81	117.01	113.10
2	SA	1148	U	P-O5'-C5'	7.81	133.40	120.90
26	LA	2226	C	C4-C5-C6	7.81	121.31	117.40
2	SA	778	G	N1-C2-N2	-7.81	109.17	116.20
2	SA	935	A	N9-C4-C5	7.81	108.92	105.80
26	LA	651	G	N3-C2-N2	7.81	125.37	119.90
26	LA	1002	G	N3-C2-N2	7.81	125.37	119.90
26	LA	1913	A	C4-C5-N7	-7.81	106.80	110.70
26	LA	2250	G	N1-C6-O6	7.81	124.58	119.90
26	LA	2402	U	C2-N3-C4	7.81	131.69	127.00
26	LA	2525	G	N3-C2-N2	-7.81	114.43	119.90
26	LA	2762	C	O4'-C1'-N1	7.81	114.45	108.20
2	SA	1	A	P-O3'-C3'	-7.81	110.33	119.70
26	LA	342	A	N9-C4-C5	7.81	108.92	105.80
26	LA	684	G	O4'-C1'-N9	7.81	114.45	108.20
26	LA	1177	G	O4'-C1'-N9	7.81	114.45	108.20
26	LA	1868	C	C5'-C4'-O4'	7.81	118.47	109.10
26	LA	2001	C	C2-N1-C1'	-7.81	110.21	118.80
26	LA	2031	A	N3-C4-N9	7.81	133.65	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	414	A	C5-C6-N6	-7.81	117.45	123.70
2	SA	1296	C	O4'-C1'-C2'	7.81	114.62	107.60
26	LA	1528	A	C6-C5-N7	7.81	137.76	132.30
26	LA	2091	C	C5-C4-N4	-7.81	114.73	120.20
32	LY	76	ARG	NE-CZ-NH1	7.81	124.20	120.30
2	SA	607	A	N7-C8-N9	7.80	117.70	113.80
2	SA	1232	U	N1-C2-N3	7.80	119.58	114.90
2	SA	1507	A	C2-N3-C4	7.80	114.50	110.60
26	LA	721	A	C5-C6-N1	-7.80	113.80	117.70
26	LA	834	G	N9-C4-C5	7.80	108.52	105.40
26	LA	1273	U	P-O3'-C3'	-7.80	110.33	119.70
26	LA	1394	U	P-O5'-C5'	7.80	133.39	120.90
26	LA	1420	A	C2-N3-C4	7.80	114.50	110.60
26	LA	1567	G	C2-N3-C4	7.80	115.80	111.90
26	LA	1906	G	N3-C4-N9	7.80	130.68	126.00
2	SA	1050	G	O4'-C1'-N9	7.80	114.44	108.20
26	LA	1719	G	C2-N3-C4	7.80	115.80	111.90
2	SA	391	G	C4-C5-C6	7.80	123.48	118.80
2	SA	462	G	C5-C6-O6	-7.80	123.92	128.60
2	SA	1415	G	N1-C6-O6	7.80	124.58	119.90
26	LA	470	A	C5-C6-N6	-7.80	117.46	123.70
26	LA	791	C	N1-C2-O2	7.80	123.58	118.90
26	LA	895	U	C2-N3-C4	-7.80	122.32	127.00
26	LA	1581	G	C6-C5-N7	7.80	135.08	130.40
2	SA	179	A	C6-C5-N7	7.80	137.76	132.30
22	SF	80	PHE	CB-CG-CD1	-7.80	115.34	120.80
26	LA	84	A	C5-N7-C8	-7.80	100.00	103.90
26	LA	92	U	C4-C5-C6	-7.80	115.02	119.70
26	LA	473	G	C4-C5-N7	7.80	113.92	110.80
26	LA	2642	G	C5'-C4'-C3'	-7.80	103.52	116.00
26	LA	823	C	N3-C4-N4	7.80	123.46	118.00
26	LA	1134	A	C4-C5-N7	-7.80	106.80	110.70
2	SA	641	U	C2-N3-C4	-7.80	122.32	127.00
26	LA	48	G	N3-C2-N2	7.80	125.36	119.90
26	LA	915	C	N3-C2-O2	-7.80	116.44	121.90
26	LA	1439	A	N1-C6-N6	-7.80	113.92	118.60
2	SA	238	A	C5-N7-C8	-7.79	100.00	103.90
26	LA	35	G	C5-C6-O6	-7.79	123.92	128.60
26	LA	1608	A	C1'-O4'-C4'	-7.79	103.66	109.90
26	LA	1625	C	O4'-C1'-N1	7.79	114.44	108.20
26	LA	1750	G	C5-C6-N1	7.79	115.40	111.50
26	LA	2682	A	N9-C1'-C2'	-7.79	103.42	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	454	G	N7-C8-N9	7.79	117.00	113.10
2	SA	828	U	N1-C2-N3	-7.79	110.22	114.90
2	SA	1228	C	P-O3'-C3'	7.79	129.05	119.70
12	SL	65	TYR	CB-CG-CD2	-7.79	116.32	121.00
26	LA	607	U	N1-C2-O2	-7.79	117.34	122.80
26	LA	1565	C	C5'-C4'-C3'	-7.79	103.53	116.00
26	LA	2104	C	N1-C2-O2	-7.79	114.22	118.90
26	LA	2275	C	N3-C4-C5	7.79	125.02	121.90
2	SA	1414	U	O4'-C1'-N1	7.79	114.43	108.20
26	LA	930	G	C4-N9-C1'	-7.79	116.37	126.50
26	LA	1301	A	O4'-C1'-N9	7.79	114.43	108.20
26	LA	2149	U	C5'-C4'-C3'	7.79	128.47	116.00
2	SA	71	A	P-O3'-C3'	-7.79	110.36	119.70
2	SA	263	A	P-O3'-C3'	7.79	129.05	119.70
2	SA	796	C	O4'-C1'-C2'	7.79	114.61	107.60
26	LA	315	G	N9-C4-C5	-7.79	102.28	105.40
26	LA	977	G	C3'-C2'-C1'	7.79	107.73	101.50
26	LA	2275	C	N3-C4-N4	-7.79	112.55	118.00
28	LU	38	TYR	CB-CG-CD1	-7.79	116.33	121.00
14	SN	39	ASP	CB-CG-OD1	7.79	125.31	118.30
26	LA	889	C	N1-C2-O2	-7.79	114.23	118.90
26	LA	1555	G	O4'-C1'-N9	7.79	114.43	108.20
2	SA	281	G	C6-C5-N7	-7.79	125.73	130.40
26	LA	831	G	C5-C6-O6	-7.79	123.93	128.60
26	LA	1732	C	C5-C6-N1	7.79	124.89	121.00
26	LA	2659	G	N1-C2-N3	-7.79	119.23	123.90
2	SA	235	C	C5'-C4'-O4'	7.78	118.44	109.10
2	SA	319	G	N7-C8-N9	7.78	116.99	113.10
2	SA	415	A	C5'-C4'-O4'	7.78	118.44	109.10
2	SA	615	G	N7-C8-N9	-7.78	109.21	113.10
2	SA	961	U	N1-C2-N3	-7.78	110.23	114.90
2	SA	1312	G	C5-C6-O6	-7.78	123.93	128.60
26	LA	626	A	O4'-C1'-N9	7.78	114.43	108.20
26	LA	1676	A	C6-N1-C2	7.78	123.27	118.60
26	LA	1827	U	C3'-C2'-C1'	7.78	107.73	101.50
26	LA	2821	A	P-O5'-C5'	-7.78	108.45	120.90
2	SA	212	G	O4'-C1'-N9	7.78	114.43	108.20
2	SA	568	G	N3-C2-N2	7.78	125.35	119.90
2	SA	1086	U	C4'-C3'-C2'	-7.78	94.82	102.60
2	SA	1365	G	C6-C5-N7	-7.78	125.73	130.40
26	LA	778	G	C4-C5-N7	-7.78	107.69	110.80
34	L0	29	ARG	NE-CZ-NH1	-7.78	116.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	37	U	OP1-P-OP2	-7.78	107.93	119.60
2	SA	760	G	C5-C6-O6	-7.78	123.93	128.60
2	SA	1058	G	C5'-C4'-O4'	7.78	118.43	109.10
26	LA	39	G	O4'-C1'-N9	7.78	114.42	108.20
26	LA	81	G	C4'-C3'-C2'	-7.78	94.82	102.60
26	LA	168	G	N3-C4-N9	7.78	130.67	126.00
26	LA	512	G	C5'-C4'-O4'	-7.78	99.77	109.10
26	LA	2385	C	N3-C4-C5	7.78	125.01	121.90
2	SA	873	A	N1-C2-N3	7.78	133.19	129.30
2	SA	1137	C	C3'-C2'-C1'	-7.78	95.28	101.50
2	SA	1433	A	C4'-C3'-C2'	-7.78	94.83	102.60
2	SA	1520	C	N3-C4-C5	-7.78	118.79	121.90
26	LA	75	G	C6-C5-N7	-7.78	125.73	130.40
26	LA	555	G	N1-C2-N2	-7.78	109.20	116.20
26	LA	751	A	C2-N3-C4	7.78	114.49	110.60
26	LA	2120	G	C6-C5-N7	-7.78	125.73	130.40
38	LE	83	ARG	NE-CZ-NH1	-7.78	116.41	120.30
26	LA	1241	A	N1-C2-N3	7.77	133.19	129.30
2	SA	285	C	C5'-C4'-O4'	7.77	118.43	109.10
2	SA	1450	U	C5-C4-O4	-7.77	121.24	125.90
26	LA	375	G	C4-C5-N7	-7.77	107.69	110.80
26	LA	470	A	C4'-C3'-C2'	-7.77	94.83	102.60
26	LA	864	G	C5'-C4'-O4'	7.77	118.43	109.10
26	LA	854	C	C4'-C3'-C2'	-7.77	94.83	102.60
26	LA	2272	U	C2'-C3'-O3'	7.77	126.60	109.50
26	LA	2740	A	N7-C8-N9	-7.77	109.92	113.80
2	SA	44	A	C5-C6-N6	-7.77	117.48	123.70
2	SA	801	U	C6-N1-C2	7.77	125.66	121.00
2	SA	1518	A	C4-C5-N7	7.77	114.58	110.70
3	S1	30	U	N3-C4-C5	7.77	119.26	114.60
26	LA	907	G	N3-C2-N2	-7.77	114.46	119.90
26	LA	1177	G	N3-C4-C5	-7.77	124.72	128.60
26	LA	1292	G	N3-C4-N9	-7.77	121.34	126.00
26	LA	2128	G	P-O5'-C5'	-7.77	108.47	120.90
30	LW	5	ARG	NE-CZ-NH1	7.77	124.19	120.30
2	SA	628	G	C5'-C4'-O4'	7.77	118.42	109.10
2	SA	1026	G	N7-C8-N9	7.77	116.98	113.10
26	LA	103	A	C4-C5-N7	7.77	114.58	110.70
26	LA	361	G	N1-C6-O6	7.77	124.56	119.90
26	LA	1356	G	C4-C5-C6	-7.77	114.14	118.80
26	LA	1369	G	C1'-O4'-C4'	-7.77	103.69	109.90
2	SA	496	A	C5-C6-N6	7.77	129.91	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	632	U	C5-C4-O4	-7.77	121.24	125.90
26	LA	13	A	C8-N9-C4	-7.77	102.69	105.80
26	LA	348	A	N1-C6-N6	7.77	123.26	118.60
31	LX	43	ASP	CB-CG-OD2	-7.77	111.31	118.30
2	SA	26	A	C5'-C4'-C3'	-7.76	103.58	116.00
2	SA	130	A	O4'-C1'-N9	7.76	114.41	108.20
2	SA	818	G	C1'-O4'-C4'	-7.76	103.69	109.90
26	LA	456	C	O4'-C1'-N1	7.76	114.41	108.20
26	LA	1018	U	C5-C6-N1	-7.76	118.82	122.70
26	LA	2148	G	C2-N3-C4	7.76	115.78	111.90
49	LK	7	TYR	CG-CD1-CE1	-7.76	115.09	121.30
2	SA	1224	U	O4'-C1'-N1	7.76	114.41	108.20
26	LA	1103	A	P-O3'-C3'	7.76	129.02	119.70
2	SA	305	G	C5-N7-C8	7.76	108.18	104.30
2	SA	347	G	N9-C4-C5	-7.76	102.30	105.40
2	SA	616	G	C4-N9-C1'	-7.76	116.41	126.50
2	SA	1253	G	C2'-C3'-O3'	7.76	126.58	109.50
2	SA	1386	G	C2-N3-C4	-7.76	108.02	111.90
14	SN	60	ARG	NE-CZ-NH2	7.76	124.18	120.30
26	LA	381	G	C5-N7-C8	-7.76	100.42	104.30
26	LA	1456	G	N1-C6-O6	7.76	124.56	119.90
2	SA	860	A	P-O3'-C3'	-7.76	110.39	119.70
2	SA	996	A	C5'-C4'-O4'	7.76	118.41	109.10
26	LA	2158	A	C4-C5-C6	-7.76	113.12	117.00
26	LA	2473	U	C4'-C3'-C2'	-7.76	94.84	102.60
2	SA	112	G	C4-C5-N7	-7.76	107.70	110.80
26	LA	1791	A	C1'-O4'-C4'	-7.76	103.69	109.90
2	SA	1483	A	C4-C5-N7	-7.76	106.82	110.70
26	LA	1256	G	N9-C4-C5	7.76	108.50	105.40
26	LA	1766	G	N3-C4-N9	-7.76	121.35	126.00
2	SA	696	A	C1'-O4'-C4'	-7.75	103.70	109.90
26	LA	1035	U	C6-N1-C2	-7.75	116.35	121.00
26	LA	2489	U	N1-C2-N3	7.75	119.55	114.90
2	SA	240	G	C5-N7-C8	7.75	108.18	104.30
2	SA	389	A	C2-N3-C4	-7.75	106.72	110.60
2	SA	647	C	C1'-O4'-C4'	-7.75	103.70	109.90
2	SA	748	G	C5-C6-N1	7.75	115.38	111.50
2	SA	846	G	N9-C4-C5	-7.75	102.30	105.40
2	SA	1493	A	N7-C8-N9	7.75	117.68	113.80
2	SA	1520	C	C5-C4-N4	-7.75	114.77	120.20
4	S2	2	G	N3-C2-N2	7.75	125.33	119.90
12	SL	60	PHE	CB-CG-CD2	-7.75	115.37	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	768	G	N1-C2-N2	-7.75	109.22	116.20
26	LA	1516	G	O4'-C1'-N9	7.75	114.40	108.20
26	LA	1729	U	C4'-C3'-C2'	7.75	110.35	102.60
26	LA	1745	A	N1-C2-N3	-7.75	125.42	129.30
26	LA	2620	C	C2-N3-C4	-7.75	116.02	119.90
26	LA	2884	U	P-O5'-C5'	7.75	133.31	120.90
26	LA	1054	A	P-O3'-C3'	-7.75	110.40	119.70
26	LA	1954	G	C2-N3-C4	7.75	115.78	111.90
2	SA	20	U	O4'-C1'-N1	7.75	114.40	108.20
2	SA	1351	U	C5-C4-O4	-7.75	121.25	125.90
9	SI	5	TYR	CB-CG-CD2	-7.75	116.35	121.00
26	LA	1309	G	C6-N1-C2	7.75	129.75	125.10
26	LA	2001	C	N1-C2-O2	7.75	123.55	118.90
2	SA	1345	U	C5-C4-O4	-7.75	121.25	125.90
2	SA	1542	A	N1-C6-N6	7.75	123.25	118.60
26	LA	653	U	C5-C4-O4	7.75	130.55	125.90
26	LA	1214	A	C1'-O4'-C4'	7.75	116.10	109.90
2	SA	1237	C	N3-C4-C5	-7.75	118.80	121.90
26	LA	449	A	O4'-C1'-N9	7.75	114.40	108.20
26	LA	1168	G	N7-C8-N9	7.75	116.97	113.10
26	LA	1546	G	P-O3'-C3'	-7.75	110.41	119.70
26	LA	943	A	P-O3'-C3'	-7.75	110.41	119.70
2	SA	89	U	C5-C4-O4	7.74	130.55	125.90
2	SA	1483	A	N1-C6-N6	7.74	123.25	118.60
26	LA	445	C	C5-C4-N4	-7.74	114.78	120.20
26	LA	1787	A	N7-C8-N9	7.74	117.67	113.80
26	LA	2682	A	N7-C8-N9	7.74	117.67	113.80
26	LA	2795	C	O4'-C1'-N1	7.74	114.39	108.20
2	SA	953	G	C8-N9-C4	-7.74	103.30	106.40
26	LA	1717	A	C6-C5-N7	-7.74	126.88	132.30
26	LA	2238	G	C8-N9-C4	7.74	109.50	106.40
44	LF	131	THR	CA-CB-CG2	-7.74	101.56	112.40
2	SA	411	A	P-O5'-C5'	7.74	133.28	120.90
2	SA	1040	U	O4'-C1'-N1	7.74	114.39	108.20
26	LA	1231	U	N1-C2-O2	-7.74	117.38	122.80
26	LA	1386	C	C1'-O4'-C4'	-7.74	103.71	109.90
26	LA	1640	A	P-O5'-C5'	7.74	133.28	120.90
26	LA	1864	U	N3-C4-O4	-7.74	113.98	119.40
26	LA	2303	G	C8-N9-C4	-7.74	103.30	106.40
26	LA	2402	U	C6-N1-C2	-7.74	116.36	121.00
26	LA	2895	G	C5'-C4'-O4'	7.74	118.39	109.10
2	SA	790	A	O4'-C1'-N9	7.74	114.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	25	U	C4-C5-C6	-7.74	115.06	119.70
25	LB	69	G	C5-N7-C8	-7.74	100.43	104.30
26	LA	966	G	N1-C6-O6	7.74	124.54	119.90
26	LA	1596	A	O4'-C1'-N9	7.74	114.39	108.20
26	LA	2239	G	N1-C2-N3	7.74	128.54	123.90
26	LA	2476	A	C6-N1-C2	-7.74	113.96	118.60
26	LA	1006	C	C6-N1-C2	-7.74	117.20	120.30
26	LA	1921	G	C6-N1-C2	-7.74	120.46	125.10
26	LA	2257	U	N3-C2-O2	7.74	127.62	122.20
2	SA	295	C	C6-N1-C2	7.74	123.39	120.30
2	SA	1074	G	N3-C2-N2	7.74	125.31	119.90
2	SA	1367	C	N3-C4-C5	-7.74	118.81	121.90
26	LA	662	G	N3-C2-N2	7.74	125.31	119.90
2	SA	576	C	C4'-C3'-C2'	-7.73	94.87	102.60
2	SA	785	G	C5-C6-O6	-7.73	123.96	128.60
26	LA	877	A	N1-C2-N3	7.73	133.17	129.30
26	LA	1476	U	P-O3'-C3'	-7.73	110.42	119.70
26	LA	2824	C	N1-C2-O2	-7.73	114.26	118.90
2	SA	450	G	O4'-C1'-N9	7.73	114.39	108.20
2	SA	876	C	C6-N1-C2	-7.73	117.21	120.30
2	SA	884	U	C1'-O4'-C4'	-7.73	103.71	109.90
26	LA	1317	G	C5-C6-O6	-7.73	123.96	128.60
26	LA	2610	C	C1'-O4'-C4'	-7.73	103.71	109.90
42	L6	29	ARG	NE-CZ-NH2	7.73	124.17	120.30
26	LA	1432	G	C6-C5-N7	-7.73	125.76	130.40
26	LA	1554	U	C5-C6-N1	-7.73	118.83	122.70
26	LA	2455	G	OP1-P-OP2	-7.73	108.00	119.60
26	LA	2499	C	N1-C2-O2	-7.73	114.26	118.90
26	LA	2531	A	C5-C6-N6	-7.73	117.52	123.70
2	SA	134	G	O4'-C1'-N9	7.73	114.38	108.20
2	SA	822	U	C5-C4-O4	-7.73	121.26	125.90
2	SA	1530	G	C4-N9-C1'	7.73	136.55	126.50
25	LB	96	G	C6-N1-C2	7.73	129.74	125.10
26	LA	583	G	N1-C6-O6	7.73	124.54	119.90
26	LA	1109	C	P-O3'-C3'	7.73	128.97	119.70
26	LA	1140	C	O4'-C1'-N1	7.73	114.38	108.20
2	SA	33	A	N7-C8-N9	7.73	117.66	113.80
2	SA	80	A	N7-C8-N9	7.73	117.66	113.80
26	LA	1061	U	C1'-O4'-C4'	-7.73	103.72	109.90
26	LA	2057	G	N9-C4-C5	7.73	108.49	105.40
26	LA	2566	A	O4'-C1'-C2'	7.73	114.55	107.60
45	LG	12	VAL	CA-CB-CG1	7.73	122.49	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	319	G	C1'-O4'-C4'	-7.73	103.72	109.90
26	LA	329	G	N1-C2-N3	-7.73	119.26	123.90
26	LA	2143	C	C5'-C4'-O4'	7.73	118.37	109.10
2	SA	4	U	C4-C5-C6	-7.72	115.06	119.70
2	SA	578	C	O4'-C1'-N1	7.72	114.38	108.20
26	LA	1450	G	O4'-C4'-C3'	-7.72	96.28	104.00
2	SA	199	A	C5'-C4'-O4'	7.72	118.37	109.10
25	LB	7	G	C5-C6-N1	7.72	115.36	111.50
26	LA	9	G	C5-N7-C8	-7.72	100.44	104.30
26	LA	47	C	C2-N3-C4	7.72	123.76	119.90
26	LA	212	G	N1-C6-O6	7.72	124.53	119.90
26	LA	458	G	P-O3'-C3'	7.72	128.97	119.70
26	LA	698	C	O4'-C1'-N1	7.72	114.38	108.20
26	LA	1280	G	C5-C6-N1	7.72	115.36	111.50
26	LA	2402	U	C3'-C2'-C1'	-7.72	95.32	101.50
26	LA	2609	U	C6-N1-C2	-7.72	116.37	121.00
52	LO	68	PHE	CB-CG-CD1	-7.72	115.39	120.80
26	LA	2353	G	N1-C6-O6	7.72	124.53	119.90
2	SA	1154	G	N3-C4-N9	7.72	130.63	126.00
3	S1	53	G	C2'-C3'-O3'	7.72	126.48	109.50
20	SD	24	VAL	CG1-CB-CG2	-7.72	98.55	110.90
26	LA	1008	A	N1-C6-N6	-7.72	113.97	118.60
26	LA	1344	U	C6-N1-C2	-7.72	116.37	121.00
26	LA	1433	A	P-O3'-C3'	7.72	128.96	119.70
26	LA	2481	G	P-O3'-C3'	7.72	128.96	119.70
26	LA	2756	U	P-O3'-C3'	7.72	128.96	119.70
51	LI	123	ARG	NH1-CZ-NH2	-7.72	110.91	119.40
2	SA	592	G	C5-C6-N1	7.72	115.36	111.50
26	LA	887	U	N3-C2-O2	7.72	127.60	122.20
26	LA	1517	G	C5-N7-C8	7.72	108.16	104.30
26	LA	2336	A	O4'-C1'-N9	7.72	114.37	108.20
2	SA	128	G	C8-N9-C4	7.72	109.49	106.40
16	SP	14	ARG	NE-CZ-NH2	-7.72	116.44	120.30
26	LA	987	C	C5-C4-N4	-7.72	114.80	120.20
26	LA	1223	G	C5-N7-C8	7.72	108.16	104.30
26	LA	1375	U	P-O5'-C5'	7.72	133.25	120.90
26	LA	1402	U	N3-C4-O4	7.72	124.80	119.40
2	SA	1074	G	C6-N1-C2	-7.71	120.47	125.10
2	SA	1492	A	C5-N7-C8	-7.71	100.04	103.90
10	SJ	9	ARG	NE-CZ-NH1	7.71	124.16	120.30
21	SE	28	ARG	NE-CZ-NH1	7.71	124.16	120.30
25	LB	98	G	C5-C6-N1	7.71	115.36	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	940	G	P-O3'-C3'	7.71	128.96	119.70
26	LA	1773	A	N7-C8-N9	7.71	117.66	113.80
26	LA	2106	U	N1-C2-N3	-7.71	110.27	114.90
26	LA	2386	A	C5-C6-N1	-7.71	113.84	117.70
50	LL	35	ARG	NE-CZ-NH2	-7.71	116.44	120.30
2	SA	439	U	N1-C2-O2	-7.71	117.40	122.80
2	SA	584	G	C5-C6-O6	-7.71	123.97	128.60
2	SA	272	C	C2-N3-C4	7.71	123.76	119.90
2	SA	456	A	C8-N9-C4	7.71	108.88	105.80
2	SA	746	A	O4'-C1'-N9	7.71	114.37	108.20
2	SA	811	C	N3-C2-O2	-7.71	116.50	121.90
2	SA	1003	G	C5'-C4'-C3'	7.71	128.34	116.00
3	S1	13	A	N1-C6-N6	-7.71	113.97	118.60
3	S1	38	G	C8-N9-C4	7.71	109.48	106.40
26	LA	425	G	C3'-C2'-C1'	-7.71	95.33	101.50
26	LA	1105	U	N3-C2-O2	7.71	127.60	122.20
26	LA	1642	G	N7-C8-N9	-7.71	109.24	113.10
26	LA	2774	C	P-O5'-C5'	7.71	133.24	120.90
2	SA	222	C	C5-C6-N1	7.71	124.86	121.00
2	SA	1416	G	C2-N3-C4	7.71	115.75	111.90
26	LA	22	C	O4'-C1'-N1	7.71	114.37	108.20
26	LA	2472	G	N1-C2-N2	-7.71	109.26	116.20
2	SA	460	A	C8-N9-C4	7.71	108.88	105.80
2	SA	1332	A	N7-C8-N9	7.71	117.65	113.80
26	LA	947	A	C1'-O4'-C4'	7.71	116.07	109.90
26	LA	1018	U	C5'-C4'-O4'	7.71	118.35	109.10
26	LA	2639	A	C4-C5-C6	-7.71	113.14	117.00
26	LA	2857	G	C8-N9-C4	7.71	109.48	106.40
2	SA	174	A	C1'-O4'-C4'	-7.71	103.73	109.90
2	SA	277	C	C4'-C3'-C2'	7.71	110.31	102.60
2	SA	312	C	O4'-C1'-N1	7.71	114.37	108.20
2	SA	631	C	C2-N3-C4	-7.71	116.05	119.90
2	SA	923	A	C8-N9-C4	-7.71	102.72	105.80
26	LA	12	U	N1-C2-O2	7.71	128.19	122.80
26	LA	510	C	C6-N1-C2	7.71	123.38	120.30
26	LA	589	U	O4'-C1'-N1	7.71	114.36	108.20
26	LA	1189	A	C1'-O4'-C4'	-7.71	103.73	109.90
26	LA	2478	A	C5-C6-N6	-7.71	117.53	123.70
2	SA	1036	A	N1-C6-N6	-7.71	113.98	118.60
25	LB	78	A	C4'-C3'-C2'	-7.71	94.89	102.60
26	LA	1339	G	C4-C5-C6	-7.71	114.18	118.80
2	SA	346	G	N3-C4-C5	7.70	132.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	513	C	N3-C4-C5	-7.70	118.82	121.90
2	SA	1070	U	P-O3'-C3'	7.70	128.94	119.70
2	SA	1435	G	N3-C2-N2	-7.70	114.51	119.90
2	SA	1517	G	C5-C6-N1	7.70	115.35	111.50
4	S2	43	G	C4-C5-N7	-7.70	107.72	110.80
26	LA	506	G	O4'-C1'-C2'	-7.70	98.10	105.80
26	LA	703	U	C5-C4-O4	7.70	130.52	125.90
26	LA	1260	A	C5-C6-N1	-7.70	113.85	117.70
26	LA	1730	C	C6-N1-C2	-7.70	117.22	120.30
26	LA	2140	G	C5'-C4'-C3'	-7.70	103.68	116.00
26	LA	2774	C	N3-C2-O2	-7.70	116.51	121.90
26	LA	2789	C	O4'-C1'-N1	7.70	114.36	108.20
2	SA	509	A	C5-C6-N1	-7.70	113.85	117.70
2	SA	1368	A	O4'-C1'-N9	7.70	114.36	108.20
26	LA	1207	C	O4'-C1'-N1	7.70	114.36	108.20
2	SA	1095	U	O4'-C1'-N1	7.70	114.36	108.20
26	LA	488	G	C8-N9-C4	7.70	109.48	106.40
26	LA	602	A	N1-C6-N6	7.70	123.22	118.60
26	LA	671	C	N1-C2-O2	7.70	123.52	118.90
26	LA	733	G	C5'-C4'-C3'	7.70	128.32	116.00
26	LA	1080	A	C4-C5-C6	-7.70	113.15	117.00
26	LA	2193	G	N9-C4-C5	7.70	108.48	105.40
26	LA	2233	U	O4'-C1'-N1	7.70	114.36	108.20
26	LA	2297	A	C3'-C2'-C1'	-7.70	95.34	101.50
26	LA	2562	U	C5-C6-N1	-7.70	118.85	122.70
2	SA	1309	G	C1'-O4'-C4'	-7.70	103.74	109.90
26	LA	159	G	C8-N9-C4	-7.70	103.32	106.40
26	LA	286	U	P-O3'-C3'	7.70	128.94	119.70
26	LA	402	A	C5-C6-N1	7.70	121.55	117.70
26	LA	2061	G	C4'-C3'-C2'	-7.70	94.90	102.60
26	LA	2275	C	O4'-C1'-N1	7.70	114.36	108.20
26	LA	2454	G	N9-C4-C5	-7.70	102.32	105.40
26	LA	2610	C	C6-N1-C1'	-7.70	111.56	120.80
46	LH	110	HIS	CA-CB-CG	7.70	126.69	113.60
26	LA	781	A	P-O3'-C3'	7.70	128.94	119.70
26	LA	1024	G	C6-N1-C2	-7.70	120.48	125.10
2	SA	469	C	C5-C6-N1	7.70	124.85	121.00
26	LA	15	G	C5-N7-C8	-7.70	100.45	104.30
26	LA	299	A	C6-N1-C2	7.70	123.22	118.60
26	LA	468	G	C5-N7-C8	-7.70	100.45	104.30
26	LA	885	C	N3-C4-C5	7.70	124.98	121.90
26	LA	1042	G	C5-C6-N1	7.70	115.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1093	G	O4'-C1'-N9	7.70	114.36	108.20
26	LA	1430	G	C2-N3-C4	7.70	115.75	111.90
26	LA	1980	G	C8-N9-C1'	-7.70	117.00	127.00
2	SA	554	A	C6-N1-C2	-7.69	113.98	118.60
26	LA	1805	A	C2-N3-C4	-7.69	106.75	110.60
26	LA	2394	C	N3-C4-N4	7.69	123.39	118.00
2	SA	270	A	P-O3'-C3'	-7.69	110.47	119.70
2	SA	731	G	O4'-C1'-N9	7.69	114.36	108.20
2	SA	751	U	O4'-C1'-N1	7.69	114.35	108.20
2	SA	872	A	N1-C2-N3	7.69	133.15	129.30
2	SA	1437	A	C5'-C4'-O4'	7.69	118.33	109.10
26	LA	314	C	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1746	A	C5-C6-N6	7.69	129.85	123.70
31	LX	19	ARG	NE-CZ-NH2	-7.69	116.45	120.30
41	L5	41	ARG	NE-CZ-NH2	7.69	124.15	120.30
2	SA	360	G	C6-N1-C2	-7.69	120.48	125.10
2	SA	910	C	C6-N1-C2	-7.69	117.22	120.30
26	LA	1227	G	C2-N3-C4	7.69	115.75	111.90
26	LA	1907	G	N3-C4-C5	-7.69	124.75	128.60
26	LA	2096	C	C3'-C2'-C1'	-7.69	95.35	101.50
26	LA	2325	G	C5-C6-O6	-7.69	123.99	128.60
26	LA	2803	G	C4-N9-C1'	-7.69	116.50	126.50
26	LA	696	G	P-O5'-C5'	7.69	133.20	120.90
26	LA	1140	C	N3-C4-C5	7.69	124.98	121.90
26	LA	1287	A	C5-N7-C8	7.69	107.74	103.90
26	LA	1588	G	N9-C4-C5	7.69	108.48	105.40
26	LA	1617	C	C6-N1-C2	7.69	123.38	120.30
2	SA	1181	G	N1-C6-O6	7.69	124.51	119.90
2	SA	1359	C	P-O3'-C3'	-7.69	110.47	119.70
2	SA	1445	U	C5-C4-O4	-7.69	121.29	125.90
3	S1	33	A	C4-C5-N7	7.69	114.54	110.70
25	LB	28	C	O4'-C1'-N1	7.69	114.35	108.20
25	LB	116	G	C4-C5-N7	7.69	113.88	110.80
26	LA	975	A	C6-N1-C2	-7.69	113.99	118.60
26	LA	1690	A	N7-C8-N9	7.69	117.64	113.80
26	LA	2631	G	O4'-C1'-N9	7.69	114.35	108.20
26	LA	2758	A	C5-C6-N6	-7.69	117.55	123.70
3	S1	18	A	O4'-C1'-N9	7.69	114.35	108.20
26	LA	690	G	N3-C2-N2	7.69	125.28	119.90
26	LA	1015	U	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1325	U	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1418	G	P-O3'-C3'	7.69	128.92	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1976	U	O4'-C1'-N1	7.69	114.35	108.20
2	SA	359	G	C4-C5-C6	7.68	123.41	118.80
2	SA	727	G	C4-C5-C6	7.68	123.41	118.80
2	SA	1059	C	O4'-C1'-N1	7.68	114.35	108.20
2	SA	1401	G	C4-C5-N7	7.68	113.87	110.80
26	LA	828	U	C2-N1-C1'	7.68	126.92	117.70
26	LA	844	A	O4'-C1'-N9	7.68	114.35	108.20
26	LA	1472	C	C2-N3-C4	-7.68	116.06	119.90
26	LA	1597	A	N1-C2-N3	7.68	133.14	129.30
2	SA	57	G	C5-C6-O6	-7.68	123.99	128.60
2	SA	185	U	N1-C2-O2	7.68	128.18	122.80
2	SA	343	U	C2'-C3'-O3'	7.68	126.40	109.50
2	SA	551	U	N3-C2-O2	7.68	127.58	122.20
2	SA	1006	G	N3-C4-C5	-7.68	124.76	128.60
2	SA	1028	C	N3-C2-O2	-7.68	116.52	121.90
26	LA	682	G	P-O5'-C5'	-7.68	108.61	120.90
26	LA	799	G	N3-C2-N2	7.68	125.28	119.90
2	SA	714	G	C5-C6-O6	-7.68	123.99	128.60
26	LA	1870	C	O4'-C1'-N1	7.68	114.34	108.20
2	SA	983	A	C5-C6-N6	7.68	129.84	123.70
26	LA	410	G	N9-C4-C5	7.68	108.47	105.40
26	LA	524	G	C5-N7-C8	-7.68	100.46	104.30
26	LA	1427	A	C2-N3-C4	-7.68	106.76	110.60
26	LA	2688	G	C4-C5-N7	7.68	113.87	110.80
2	SA	442	G	O4'-C1'-N9	7.68	114.34	108.20
26	LA	1416	G	N9-C4-C5	-7.68	102.33	105.40
2	SA	414	A	C1'-O4'-C4'	-7.68	103.76	109.90
2	SA	767	A	C2-N3-C4	7.68	114.44	110.60
2	SA	1497	G	N3-C4-C5	-7.68	124.76	128.60
26	LA	9	G	N7-C8-N9	7.68	116.94	113.10
26	LA	1036	G	N3-C2-N2	7.68	125.27	119.90
26	LA	1383	A	C4'-C3'-C2'	-7.68	94.92	102.60
26	LA	2184	A	N7-C8-N9	7.68	117.64	113.80
26	LA	2875	C	O4'-C1'-N1	7.68	114.34	108.20
2	SA	53	A	C5'-C4'-O4'	7.67	118.31	109.10
2	SA	727	G	N1-C2-N2	-7.67	109.29	116.20
2	SA	755	G	C4'-C3'-C2'	-7.67	94.93	102.60
2	SA	841	C	N3-C4-N4	7.67	123.37	118.00
2	SA	1054	C	O5'-P-OP2	-7.67	98.79	105.70
26	LA	234	U	C5-C6-N1	-7.67	118.86	122.70
26	LA	263	G	N1-C6-O6	7.67	124.50	119.90
26	LA	1268	A	O4'-C1'-N9	7.67	114.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1819	A	N9-C4-C5	-7.67	102.73	105.80
26	LA	2096	C	C4-C5-C6	-7.67	113.56	117.40
48	LN	115	GLU	O-C-N	-7.67	110.42	122.70
52	LO	51	ARG	NE-CZ-NH1	-7.67	116.46	120.30
26	LA	932	U	O4'-C4'-C3'	7.67	112.24	106.10
26	LA	2012	G	O5'-P-OP2	-7.67	98.79	105.70
26	LA	2535	G	P-O5'-C5'	-7.67	108.62	120.90
26	LA	2893	A	N7-C8-N9	-7.67	109.96	113.80
2	SA	811	C	N1-C2-N3	7.67	124.57	119.20
2	SA	969	A	N1-C6-N6	-7.67	114.00	118.60
26	LA	267	C	N3-C4-C5	-7.67	118.83	121.90
26	LA	640	C	C3'-C2'-C1'	7.67	107.64	101.50
26	LA	1358	G	C4-N9-C1'	7.67	136.47	126.50
26	LA	1407	G	C4-C5-N7	-7.67	107.73	110.80
26	LA	2466	C	C5'-C4'-C3'	-7.67	103.73	116.00
26	LA	2834	G	C4-C5-N7	7.67	113.87	110.80
2	SA	369	G	P-O3'-C3'	7.67	128.90	119.70
26	LA	2023	C	C2-N3-C4	-7.67	116.06	119.90
2	SA	161	A	C5-C6-N1	7.67	121.53	117.70
2	SA	895	G	N3-C4-C5	-7.67	124.77	128.60
2	SA	1470	U	C4'-C3'-C2'	-7.67	94.93	102.60
4	S2	60	A	P-O3'-C3'	7.67	128.90	119.70
26	LA	117	G	C4-C5-N7	7.67	113.87	110.80
26	LA	125	A	C4-N9-C1'	7.67	140.10	126.30
26	LA	728	G	N3-C2-N2	7.67	125.27	119.90
26	LA	1211	C	C6-N1-C2	-7.67	117.23	120.30
26	LA	1540	G	C5-C6-N1	7.67	115.33	111.50
34	L0	7	ARG	NE-CZ-NH1	7.67	124.14	120.30
26	LA	215	G	C5-C6-O6	-7.67	124.00	128.60
26	LA	356	G	P-O3'-C3'	-7.67	110.50	119.70
26	LA	424	G	N9-C4-C5	-7.67	102.33	105.40
26	LA	677	A	N7-C8-N9	-7.67	109.97	113.80
26	LA	2053	G	C5'-C4'-O4'	7.67	118.30	109.10
26	LA	1235	G	N1-C6-O6	7.67	124.50	119.90
26	LA	1482	G	C5'-C4'-O4'	7.67	118.30	109.10
26	LA	1484	U	N3-C4-C5	-7.67	110.00	114.60
26	LA	1949	G	C5-C6-N1	7.67	115.33	111.50
2	SA	69	G	N7-C8-N9	-7.66	109.27	113.10
2	SA	615	G	N1-C2-N3	7.66	128.50	123.90
23	SR	63	TYR	CB-CG-CD1	-7.66	116.40	121.00
26	LA	1416	G	C4-N9-C1'	-7.66	116.54	126.50
26	LA	1843	C	N3-C4-N4	7.66	123.36	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2257	U	N3-C4-C5	-7.66	110.00	114.60
26	LA	2765	A	P-O3'-C3'	7.66	128.90	119.70
2	SA	210	C	O4'-C1'-C2'	-7.66	98.14	105.80
26	LA	166	U	N3-C4-O4	7.66	124.76	119.40
26	LA	2536	G	N1-C6-O6	7.66	124.50	119.90
2	SA	182	A	N1-C2-N3	-7.66	125.47	129.30
2	SA	271	C	N1-C2-O2	-7.66	114.30	118.90
2	SA	696	A	C4-C5-C6	7.66	120.83	117.00
24	S3	8	ARG	NE-CZ-NH2	7.66	124.13	120.30
26	LA	386	G	C6-N1-C2	-7.66	120.50	125.10
26	LA	1544	A	N1-C2-N3	7.66	133.13	129.30
26	LA	1644	C	O4'-C1'-N1	7.66	114.33	108.20
26	LA	1943	U	C6-N1-C1'	-7.66	110.48	121.20
26	LA	2235	G	C4-C5-N7	7.66	113.86	110.80
26	LA	2582	G	O4'-C1'-N9	7.66	114.33	108.20
39	L3	51	ARG	CG-CD-NE	-7.66	95.72	111.80
2	SA	882	C	P-O3'-C3'	7.66	128.89	119.70
2	SA	1029	U	C2-N1-C1'	-7.66	108.51	117.70
2	SA	1412	C	N3-C4-N4	7.66	123.36	118.00
26	LA	1242	U	C5-C4-O4	-7.66	121.31	125.90
26	LA	1339	G	N9-C4-C5	-7.66	102.34	105.40
26	LA	2400	G	C6-N1-C2	-7.66	120.50	125.10
26	LA	2587	A	P-O3'-C3'	7.66	128.89	119.70
26	LA	2606	C	N3-C4-N4	7.66	123.36	118.00
2	SA	241	G	C2-N3-C4	7.66	115.73	111.90
2	SA	793	U	C2-N1-C1'	7.66	126.89	117.70
2	SA	38	G	C2-N3-C4	7.66	115.73	111.90
2	SA	376	G	N7-C8-N9	-7.66	109.27	113.10
2	SA	521	G	C1'-O4'-C4'	-7.66	103.78	109.90
26	LA	1196	C	N3-C4-C5	7.66	124.96	121.90
26	LA	1897	G	C2-N3-C4	7.65	115.73	111.90
26	LA	2795	C	C2-N3-C4	7.65	123.73	119.90
26	LA	2878	U	C5-C4-O4	-7.65	121.31	125.90
2	SA	1401	G	O4'-C1'-N9	7.65	114.32	108.20
21	SE	137	ARG	NE-CZ-NH1	7.65	124.13	120.30
23	SR	71	ASP	CB-CG-OD2	7.65	125.19	118.30
26	LA	2408	U	P-O3'-C3'	7.65	128.88	119.70
2	SA	440	C	C5'-C4'-O4'	7.65	118.28	109.10
2	SA	706	A	N1-C2-N3	-7.65	125.47	129.30
26	LA	786	C	OP1-P-OP2	-7.65	108.12	119.60
26	LA	1291	C	C5-C4-N4	-7.65	114.84	120.20
26	LA	1548	A	C5'-C4'-O4'	7.65	118.28	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1826	G	C6-N1-C2	-7.65	120.51	125.10
26	LA	2521	C	C5-C4-N4	-7.65	114.84	120.20
26	LA	2655	G	N7-C8-N9	-7.65	109.28	113.10
2	SA	247	G	OP1-P-OP2	-7.65	108.13	119.60
2	SA	391	G	C5'-C4'-C3'	7.65	128.24	116.00
2	SA	397	A	C5-C6-N1	7.65	121.52	117.70
2	SA	1453	G	C6-N1-C2	-7.65	120.51	125.10
2	SA	60	A	O4'-C1'-C2'	-7.65	98.15	105.80
2	SA	442	G	C4-C5-C6	-7.65	114.21	118.80
4	S2	33	C	O4'-C1'-N1	7.65	114.32	108.20
25	LB	25	U	C2-N3-C4	-7.65	122.41	127.00
26	LA	814	C	O4'-C1'-N1	7.65	114.32	108.20
26	LA	2093	G	C4-C5-N7	7.65	113.86	110.80
57	LS	35	PHE	CB-CG-CD2	-7.65	115.45	120.80
2	SA	1119	C	N3-C4-C5	7.65	124.96	121.90
25	LB	19	C	N3-C4-N4	-7.65	112.65	118.00
26	LA	204	A	N1-C6-N6	7.65	123.19	118.60
2	SA	1019	A	N1-C6-N6	7.64	123.19	118.60
2	SA	1060	U	O4'-C1'-N1	7.64	114.32	108.20
2	SA	1267	C	N1-C2-O2	7.64	123.49	118.90
26	LA	748	G	C5'-C4'-O4'	7.64	118.27	109.10
26	LA	834	G	C5-C6-O6	-7.64	124.01	128.60
26	LA	1282	U	C2-N3-C4	-7.64	122.41	127.00
26	LA	1645	G	P-O3'-C3'	-7.64	110.53	119.70
26	LA	1983	G	N3-C4-C5	-7.64	124.78	128.60
26	LA	2220	U	P-O3'-C3'	-7.64	110.53	119.70
26	LA	1945	G	N3-C2-N2	7.64	125.25	119.90
49	LK	40	ALA	N-CA-C	7.64	131.64	111.00
26	LA	609	A	C5-C6-N1	-7.64	113.88	117.70
26	LA	762	U	N3-C2-O2	-7.64	116.85	122.20
26	LA	1048	A	N1-C2-N3	-7.64	125.48	129.30
26	LA	2616	C	O4'-C1'-N1	7.64	114.31	108.20
2	SA	1518	A	N7-C8-N9	7.64	117.62	113.80
25	LB	19	C	N3-C4-C5	7.64	124.96	121.90
25	LB	117	G	N1-C6-O6	7.64	124.48	119.90
26	LA	111	A	C4'-C3'-C2'	-7.64	94.96	102.60
26	LA	2305	U	N1-C2-N3	7.64	119.48	114.90
26	LA	2584	U	C6-N1-C2	-7.64	116.42	121.00
2	SA	522	C	C6-N1-C2	-7.64	117.25	120.30
26	LA	1495	A	C4'-C3'-C2'	-7.64	94.96	102.60
2	SA	990	C	N3-C4-N4	-7.64	112.66	118.00
2	SA	1287	A	C5-C6-N1	7.64	121.52	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1468	A	C5-N7-C8	-7.64	100.08	103.90
26	LA	788	A	C8-N9-C4	7.64	108.86	105.80
26	LA	1588	G	C6-N1-C2	-7.64	120.52	125.10
26	LA	2553	G	N9-C1'-C2'	-7.64	103.60	112.00
45	LG	6	TYR	CG-CD2-CE2	-7.64	115.19	121.30
2	SA	395	C	C1'-O4'-C4'	-7.63	103.79	109.90
2	SA	416	G	P-O5'-C5'	7.63	133.12	120.90
2	SA	553	A	N9-C4-C5	7.63	108.85	105.80
2	SA	1305	G	C4'-C3'-C2'	-7.63	94.97	102.60
26	LA	182	A	C5-C6-N1	-7.63	113.88	117.70
26	LA	2169	A	C4-C5-C6	-7.63	113.18	117.00
26	LA	2809	A	C4-C5-N7	-7.63	106.88	110.70
26	LA	1159	U	O4'-C1'-C2'	7.63	114.47	107.60
26	LA	2668	G	C6-N1-C2	7.63	129.68	125.10
2	SA	853	C	C5-C4-N4	7.63	125.54	120.20
2	SA	929	G	C5-C6-O6	-7.63	124.02	128.60
4	S2	15	G	N3-C2-N2	-7.63	114.56	119.90
4	S2	45	A	C5-C6-N6	-7.63	117.59	123.70
26	LA	706	A	C2-N3-C4	7.63	114.42	110.60
26	LA	1178	C	C6-N1-C1'	7.63	129.96	120.80
26	LA	1801	A	O4'-C1'-N9	7.63	114.31	108.20
26	LA	2598	A	C4-C5-C6	-7.63	113.18	117.00
2	SA	386	C	C6-N1-C1'	7.63	129.96	120.80
26	LA	1649	G	C4'-C3'-C2'	-7.63	94.97	102.60
26	LA	2843	G	N3-C4-N9	-7.63	121.42	126.00
2	SA	87	C	P-O3'-C3'	-7.63	110.55	119.70
2	SA	195	A	N1-C6-N6	-7.63	114.02	118.60
2	SA	346	G	O4'-C1'-N9	7.63	114.30	108.20
2	SA	616	G	C2-N3-C4	7.63	115.71	111.90
2	SA	824	G	C6-N1-C2	-7.63	120.52	125.10
2	SA	1028	C	C5'-C4'-C3'	-7.63	103.80	116.00
2	SA	1419	G	P-O5'-C5'	-7.63	108.69	120.90
26	LA	1227	G	N7-C8-N9	7.63	116.91	113.10
26	LA	1259	G	C5-C6-N1	7.63	115.31	111.50
26	LA	1532	A	N7-C8-N9	7.63	117.61	113.80
26	LA	2211	A	C6-N1-C2	-7.63	114.02	118.60
2	SA	48	C	C6-N1-C1'	-7.63	111.65	120.80
2	SA	414	A	O5'-P-OP1	7.63	119.85	110.70
2	SA	1398	A	P-O3'-C3'	-7.63	110.55	119.70
2	SA	1529	G	C6-N1-C2	-7.63	120.53	125.10
25	LB	46	A	C8-N9-C4	7.63	108.85	105.80
25	LB	116	G	N1-C6-O6	7.63	124.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2198	A	N1-C2-N3	-7.63	125.49	129.30
26	LA	2271	G	C5'-C4'-C3'	7.63	128.20	116.00
2	SA	1222	G	C5-C6-N1	7.62	115.31	111.50
25	LB	10	G	C5'-C4'-C3'	-7.62	103.80	116.00
26	LA	690	G	O4'-C1'-N9	7.62	114.30	108.20
26	LA	1260	A	C8-N9-C4	-7.62	102.75	105.80
26	LA	2221	G	O4'-C1'-N9	7.62	114.30	108.20
2	SA	1335	U	C5-C6-N1	7.62	126.51	122.70
26	LA	1423	G	C3'-C2'-C1'	7.62	107.60	101.50
26	LA	1738	G	N9-C4-C5	-7.62	102.35	105.40
26	LA	1849	G	C4-C5-N7	7.62	113.85	110.80
26	LA	2252	G	C8-N9-C4	-7.62	103.35	106.40
26	LA	2767	C	N1-C2-O2	7.62	123.47	118.90
2	SA	710	G	O4'-C1'-N9	7.62	114.30	108.20
26	LA	692	C	O4'-C1'-N1	7.62	114.30	108.20
26	LA	1638	C	C6-N1-C2	-7.62	117.25	120.30
26	LA	2590	A	N1-C6-N6	7.62	123.17	118.60
2	SA	465	A	C5-C6-N1	-7.62	113.89	117.70
2	SA	1432	G	N3-C4-N9	7.62	130.57	126.00
26	LA	1189	A	C5'-C4'-O4'	7.62	118.24	109.10
26	LA	1613	G	P-O3'-C3'	-7.62	110.56	119.70
26	LA	1995	U	C6-N1-C2	-7.62	116.43	121.00
44	LF	21	ARG	NE-CZ-NH2	7.62	124.11	120.30
2	SA	74	A	N1-C2-N3	-7.62	125.49	129.30
2	SA	373	A	C5-C6-N6	-7.62	117.61	123.70
2	SA	588	G	C6-N1-C2	-7.62	120.53	125.10
2	SA	1067	A	C5-C6-N6	-7.62	117.61	123.70
26	LA	1752	C	C6-N1-C2	-7.62	117.25	120.30
26	LA	1961	C	C4'-C3'-C2'	-7.62	94.98	102.60
2	SA	922	G	C8-N9-C4	-7.62	103.35	106.40
2	SA	1366	C	C5-C4-N4	7.62	125.53	120.20
26	LA	435	C	N1-C2-O2	-7.62	114.33	118.90
26	LA	508	A	C6-N1-C2	7.62	123.17	118.60
26	LA	583	G	C8-N9-C4	-7.62	103.35	106.40
26	LA	1757	A	P-O3'-C3'	7.62	128.84	119.70
26	LA	2411	A	N7-C8-N9	7.62	117.61	113.80
26	LA	2668	G	N7-C8-N9	-7.62	109.29	113.10
2	SA	481	G	N3-C2-N2	7.61	125.23	119.90
2	SA	496	A	C5'-C4'-C3'	7.61	128.18	116.00
2	SA	971	G	N3-C4-N9	7.61	130.57	126.00
2	SA	1043	G	N7-C8-N9	-7.61	109.29	113.10
2	SA	1254	A	O4'-C1'-N9	7.61	114.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	96	G	N3-C2-N2	7.61	125.23	119.90
26	LA	622	G	C4-C5-C6	7.61	123.37	118.80
26	LA	973	A	N1-C2-N3	-7.61	125.49	129.30
26	LA	1131	G	N3-C2-N2	7.61	125.23	119.90
26	LA	2170	A	N1-C2-N3	7.61	133.11	129.30
26	LA	4	U	P-O5'-C5'	7.61	133.08	120.90
26	LA	2570	G	N1-C2-N3	-7.61	119.33	123.90
58	LT	35	PHE	CB-CG-CD2	-7.61	115.47	120.80
2	SA	1116	U	C2-N3-C4	-7.61	122.43	127.00
2	SA	1293	C	N3-C4-C5	-7.61	118.86	121.90
2	SA	1486	G	C5-C6-O6	7.61	133.17	128.60
26	LA	385	C	C6-N1-C2	7.61	123.34	120.30
26	LA	1096	A	N1-C2-N3	7.61	133.10	129.30
26	LA	1208	C	C6-N1-C2	7.61	123.34	120.30
26	LA	1311	G	N1-C6-O6	7.61	124.47	119.90
26	LA	1706	C	C5-C6-N1	-7.61	117.19	121.00
26	LA	1921	G	N3-C4-C5	-7.61	124.80	128.60
26	LA	2048	G	N3-C4-C5	-7.61	124.80	128.60
26	LA	2138	G	C5'-C4'-O4'	7.61	118.23	109.10
2	SA	878	A	C4-C5-N7	-7.61	106.89	110.70
26	LA	1515	A	N1-C2-N3	7.61	133.10	129.30
2	SA	952	U	C5-C4-O4	7.61	130.46	125.90
2	SA	992	U	C5-C6-N1	7.61	126.50	122.70
26	LA	289	G	N1-C6-O6	-7.61	115.33	119.90
26	LA	745	G	C6-N1-C2	-7.61	120.54	125.10
26	LA	1738	G	C4-C5-C6	-7.61	114.23	118.80
26	LA	1997	C	C6-N1-C2	-7.61	117.26	120.30
26	LA	2633	G	C4'-C3'-C2'	-7.61	94.99	102.60
27	LD	237	ARG	NE-CZ-NH2	-7.61	116.50	120.30
44	LF	101	TYR	CB-CG-CD2	7.61	125.56	121.00
1	SS	83	ALA	N-CA-CB	-7.61	99.45	110.10
2	SA	40	C	N3-C4-C5	-7.61	118.86	121.90
2	SA	391	G	C8-N9-C4	-7.61	103.36	106.40
2	SA	445	G	C8-N9-C4	-7.61	103.36	106.40
2	SA	567	G	C6-N1-C2	-7.61	120.54	125.10
26	LA	2226	C	C4'-C3'-C2'	-7.61	95.00	102.60
2	SA	348	G	O4'-C1'-N9	7.60	114.28	108.20
4	S2	74	A	C6-C5-N7	-7.60	126.98	132.30
26	LA	1888	G	C8-N9-C4	-7.60	103.36	106.40
43	L7	20	ASP	CB-CG-OD1	7.60	125.14	118.30
2	SA	294	U	N3-C2-O2	-7.60	116.88	122.20
2	SA	1484	C	C5-C4-N4	-7.60	114.88	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	SL	37	TYR	CG-CD1-CE1	-7.60	115.22	121.30
26	LA	341	C	P-O5'-C5'	7.60	133.07	120.90
26	LA	488	G	C1'-O4'-C4'	-7.60	103.82	109.90
26	LA	1538	G	O4'-C4'-C3'	-7.60	96.40	104.00
26	LA	1751	U	C5-C6-N1	-7.60	118.90	122.70
26	LA	1889	A	C4-C5-N7	-7.60	106.90	110.70
2	SA	900	A	C4-C5-C6	-7.60	113.20	117.00
26	LA	201	C	C1'-O4'-C4'	-7.60	103.82	109.90
26	LA	255	A	N9-C4-C5	-7.60	102.76	105.80
26	LA	1464	G	O4'-C1'-N9	7.60	114.28	108.20
26	LA	2458	G	C8-N9-C1'	-7.60	117.12	127.00
26	LA	2649	C	C4-C5-C6	7.60	121.20	117.40
2	SA	254	G	C4-N9-C1'	-7.60	116.62	126.50
2	SA	411	A	N9-C4-C5	-7.60	102.76	105.80
2	SA	457	G	N1-C6-O6	7.60	124.46	119.90
2	SA	958	A	C2-N3-C4	-7.60	106.80	110.60
2	SA	1220	G	OP1-P-OP2	-7.60	108.20	119.60
2	SA	1277	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1626	A	C4'-C3'-C2'	7.60	110.20	102.60
26	LA	2385	C	C5'-C4'-C3'	7.60	128.16	116.00
2	SA	50	A	N1-C2-N3	-7.60	125.50	129.30
2	SA	146	G	C5'-C4'-C3'	7.60	128.16	116.00
2	SA	990	C	O5'-P-OP2	-7.60	98.86	105.70
2	SA	1492	A	P-O3'-C3'	-7.60	110.58	119.70
4	S2	57	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	791	C	C3'-C2'-C1'	-7.60	95.42	101.50
26	LA	1176	U	N1-C2-O2	7.60	128.12	122.80
26	LA	1564	C	N3-C2-O2	-7.60	116.58	121.90
26	LA	2145	C	C2-N1-C1'	7.60	127.16	118.80
26	LA	598	U	P-O3'-C3'	-7.60	110.58	119.70
26	LA	1018	U	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1547	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1915	C	C5-C4-N4	-7.60	114.88	120.20
26	LA	2224	G	N1-C2-N2	-7.60	109.36	116.20
2	SA	872	A	C5-C6-N6	7.59	129.78	123.70
2	SA	887	G	N3-C4-N9	-7.59	121.44	126.00
2	SA	996	A	C2-N3-C4	7.59	114.40	110.60
26	LA	969	G	N1-C2-N3	-7.59	119.34	123.90
26	LA	1382	G	P-O3'-C3'	7.59	128.81	119.70
55	LQ	47	VAL	CA-CB-CG1	-7.59	99.51	110.90
2	SA	410	G	C5'-C4'-C3'	-7.59	103.85	116.00
2	SA	1413	A	N1-C6-N6	7.59	123.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1526	G	C5-C6-O6	-7.59	124.04	128.60
26	LA	220	G	C8-N9-C1'	-7.59	117.13	127.00
26	LA	2878	U	N3-C4-O4	7.59	124.72	119.40
2	SA	547	A	P-O5'-C5'	-7.59	108.75	120.90
2	SA	682	G	O4'-C1'-N9	7.59	114.27	108.20
2	SA	771	G	C4-C5-N7	7.59	113.84	110.80
2	SA	1465	A	O4'-C1'-N9	7.59	114.27	108.20
26	LA	393	C	O4'-C1'-N1	7.59	114.27	108.20
26	LA	733	G	N1-C2-N2	-7.59	109.37	116.20
26	LA	831	G	C8-N9-C4	-7.59	103.36	106.40
26	LA	1995	U	N1-C2-N3	7.59	119.45	114.90
26	LA	2802	G	C5'-C4'-O4'	7.59	118.21	109.10
2	SA	242	G	C5-C6-N1	-7.59	107.70	111.50
2	SA	548	G	N3-C4-C5	7.59	132.40	128.60
25	LB	81	G	N1-C2-N2	-7.59	109.37	116.20
26	LA	353	C	C6-N1-C2	-7.59	117.26	120.30
26	LA	468	G	C8-N9-C4	-7.59	103.36	106.40
26	LA	1682	G	C6-N1-C2	-7.59	120.55	125.10
26	LA	2023	C	C5-C6-N1	-7.59	117.20	121.00
26	LA	2235	G	C6-C5-N7	-7.59	125.85	130.40
2	SA	266	G	C8-N9-C4	-7.59	103.36	106.40
2	SA	944	G	C5'-C4'-O4'	7.59	118.21	109.10
26	LA	407	G	C5-C6-O6	-7.59	124.05	128.60
26	LA	2448	A	C2-N3-C4	7.59	114.39	110.60
2	SA	879	C	C2-N3-C4	-7.59	116.11	119.90
2	SA	1032	G	C5-C6-O6	-7.59	124.05	128.60
2	SA	1270	G	N3-C4-C5	-7.59	124.81	128.60
24	S3	71	TRP	CB-CG-CD2	-7.59	116.74	126.60
24	S3	338	TYR	CB-CG-CD1	-7.59	116.45	121.00
26	LA	489	G	N7-C8-N9	-7.59	109.31	113.10
26	LA	617	G	C5-C6-O6	7.59	133.15	128.60
26	LA	1212	G	N9-C4-C5	-7.59	102.36	105.40
26	LA	1445	G	N3-C2-N2	7.59	125.21	119.90
26	LA	2328	A	C4-C5-N7	-7.59	106.91	110.70
26	LA	2437	G	C5-C6-O6	-7.59	124.05	128.60
26	LA	2454	G	O4'-C4'-C3'	7.59	112.17	106.10
26	LA	2621	G	O4'-C1'-N9	7.59	114.27	108.20
27	LD	239	PHE	CB-CG-CD2	7.59	126.11	120.80
2	SA	79	G	O4'-C1'-N9	7.58	114.27	108.20
2	SA	923	A	C5'-C4'-O4'	7.58	118.20	109.10
2	SA	1450	U	C2-N3-C4	-7.58	122.45	127.00
26	LA	108	G	C5-N7-C8	7.58	108.09	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	613	A	C5-C6-N1	-7.58	113.91	117.70
26	LA	712	G	N1-C2-N3	-7.58	119.35	123.90
2	SA	1410	A	P-O5'-C5'	7.58	133.03	120.90
26	LA	381	G	N9-C4-C5	7.58	108.43	105.40
26	LA	1342	A	C4-C5-C6	-7.58	113.21	117.00
26	LA	1810	A	C5'-C4'-C3'	7.58	128.13	116.00
26	LA	2642	G	N3-C4-C5	-7.58	124.81	128.60
26	LA	2814	A	C4-C5-C6	-7.58	113.21	117.00
4	S2	13	C	C4-C5-C6	7.58	121.19	117.40
26	LA	753	A	N1-C2-N3	7.58	133.09	129.30
26	LA	1134	A	C5-N7-C8	7.58	107.69	103.90
26	LA	1150	C	C3'-C2'-C1'	-7.58	95.43	101.50
26	LA	1381	G	N9-C4-C5	-7.58	102.37	105.40
26	LA	2454	G	C1'-O4'-C4'	-7.58	103.83	109.90
26	LA	2824	C	C6-N1-C2	-7.58	117.27	120.30
53	LP	110	MET	CG-SD-CE	-7.58	88.07	100.20
26	LA	1421	G	C6-N1-C2	7.58	129.65	125.10
26	LA	1533	C	C5-C6-N1	7.58	124.79	121.00
26	LA	1878	G	N3-C4-C5	-7.58	124.81	128.60
2	SA	788	U	C2-N3-C4	7.58	131.55	127.00
2	SA	1484	C	O4'-C1'-N1	7.58	114.26	108.20
26	LA	926	G	P-O5'-C5'	7.58	133.03	120.90
26	LA	1924	C	N3-C2-O2	-7.58	116.60	121.90
26	LA	2685	G	C5'-C4'-O4'	7.58	118.19	109.10
2	SA	972	C	C5'-C4'-C3'	-7.58	103.88	116.00
2	SA	1338	G	C5-C6-N1	-7.58	107.71	111.50
26	LA	1384	A	C4-C5-C6	7.58	120.79	117.00
26	LA	1574	C	N1-C2-N3	7.58	124.50	119.20
26	LA	1835	G	C5-C6-N1	7.58	115.29	111.50
2	SA	1176	A	O4'-C1'-N9	7.58	114.26	108.20
2	SA	1311	A	N9-C1'-C2'	-7.58	103.67	112.00
26	LA	1584	U	N3-C4-O4	7.58	124.70	119.40
26	LA	2595	G	C4-C5-N7	7.58	113.83	110.80
56	LR	102	ARG	NE-CZ-NH2	-7.58	116.51	120.30
2	SA	564	C	N3-C2-O2	-7.57	116.60	121.90
2	SA	974	A	O4'-C1'-N9	7.57	114.26	108.20
2	SA	1069	C	C5-C6-N1	-7.57	117.21	121.00
4	S2	44	A	C4-C5-C6	7.57	120.79	117.00
26	LA	527	C	C1'-O4'-C4'	-7.57	103.84	109.90
26	LA	2029	G	C4-N9-C1'	7.57	136.34	126.50
26	LA	2178	C	C4-C5-C6	7.57	121.19	117.40
26	LA	2616	C	C6-N1-C2	-7.57	117.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2755	C	C2-N3-C4	7.57	123.69	119.90
25	LB	100	G	N3-C4-C5	7.57	132.39	128.60
2	SA	974	A	OP1-P-OP2	-7.57	108.24	119.60
2	SA	1066	C	N3-C2-O2	-7.57	116.60	121.90
26	LA	690	G	C8-N9-C4	-7.57	103.37	106.40
26	LA	1326	U	OP1-P-OP2	-7.57	108.24	119.60
26	LA	1470	A	C8-N9-C4	-7.57	102.77	105.80
26	LA	1821	A	N9-C4-C5	7.57	108.83	105.80
26	LA	1959	G	O4'-C1'-N9	7.57	114.26	108.20
26	LA	2022	U	C5-C6-N1	-7.57	118.92	122.70
26	LA	2824	C	N1-C2-N3	7.57	124.50	119.20
2	SA	644	U	O4'-C1'-N1	7.57	114.25	108.20
2	SA	723	U	O4'-C1'-N1	7.57	114.25	108.20
2	SA	774	G	N3-C4-C5	7.57	132.38	128.60
2	SA	1037	C	N1-C2-N3	7.57	124.50	119.20
2	SA	1489	G	C6-N1-C2	-7.57	120.56	125.10
26	LA	462	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	560	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	1987	A	N1-C2-N3	-7.57	125.52	129.30
52	LO	16	ARG	NE-CZ-NH2	-7.57	116.52	120.30
2	SA	280	C	C4-C5-C6	-7.57	113.62	117.40
2	SA	1525	G	N1-C6-O6	7.57	124.44	119.90
3	S1	19	A	C6-N1-C2	-7.57	114.06	118.60
26	LA	1103	A	C8-N9-C4	-7.57	102.77	105.80
26	LA	1272	A	C1'-O4'-C4'	-7.57	103.85	109.90
26	LA	1670	C	O4'-C4'-C3'	7.57	112.16	106.10
26	LA	1847	A	P-O5'-C5'	7.57	133.01	120.90
2	SA	510	A	N9-C4-C5	7.57	108.83	105.80
2	SA	1361	G	C5-C6-O6	-7.57	124.06	128.60
2	SA	1439	G	C2-N3-C4	7.57	115.68	111.90
26	LA	527	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	879	G	P-O5'-C5'	7.57	133.00	120.90
26	LA	1001	A	C2-N3-C4	-7.57	106.82	110.60
26	LA	1270	C	P-O5'-C5'	7.57	133.00	120.90
26	LA	2030	U	O4'-C1'-C2'	-7.57	98.23	105.80
26	LA	2879	A	C5-N7-C8	-7.57	100.12	103.90
2	SA	933	G	C8-N9-C4	7.56	109.43	106.40
2	SA	1338	G	C4-C5-C6	7.56	123.34	118.80
5	ST	35	TYR	CG-CD2-CE2	-7.56	115.25	121.30
26	LA	2677	G	C5-C6-N1	-7.56	107.72	111.50
2	SA	472	U	O4'-C1'-N1	7.56	114.25	108.20
2	SA	1087	G	O4'-C1'-N9	7.56	114.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	128	C	O4'-C1'-N1	7.56	114.25	108.20
26	LA	656	G	N9-C4-C5	7.56	108.42	105.40
26	LA	1278	C	N1-C2-O2	-7.56	114.36	118.90
26	LA	2101	A	C5'-C4'-C3'	-7.56	103.90	116.00
26	LA	2516	A	C2-N3-C4	-7.56	106.82	110.60
2	SA	253	A	C5'-C4'-O4'	7.56	118.17	109.10
2	SA	329	A	N3-C4-N9	7.56	133.45	127.40
2	SA	427	U	N3-C4-C5	7.56	119.14	114.60
2	SA	1383	C	C4-C5-C6	-7.56	113.62	117.40
18	SB	5	MET	CG-SD-CE	-7.56	88.10	100.20
26	LA	921	C	C2-N3-C4	-7.56	116.12	119.90
26	LA	2076	U	P-O3'-C3'	7.56	128.77	119.70
2	SA	377	G	N1-C6-O6	7.56	124.44	119.90
2	SA	789	U	C5-C4-O4	-7.56	121.36	125.90
26	LA	227	A	C3'-C2'-C1'	-7.56	95.45	101.50
26	LA	1203	U	C1'-O4'-C4'	-7.56	103.85	109.90
26	LA	1737	G	O4'-C1'-N9	7.56	114.25	108.20
26	LA	2506	U	O3'-P-O5'	7.56	118.36	104.00
2	SA	411	A	C4-C5-C6	-7.56	113.22	117.00
2	SA	565	U	C5-C6-N1	-7.56	118.92	122.70
2	SA	1072	G	C5-N7-C8	-7.56	100.52	104.30
25	LB	3	C	N3-C4-C5	-7.56	118.88	121.90
26	LA	346	A	C4'-C3'-C2'	-7.56	95.04	102.60
2	SA	50	A	N9-C4-C5	-7.56	102.78	105.80
2	SA	88	U	C5-C6-N1	-7.56	118.92	122.70
2	SA	1184	G	C4-C5-N7	-7.56	107.78	110.80
26	LA	1084	A	C8-N9-C4	-7.56	102.78	105.80
26	LA	2815	C	C1'-O4'-C4'	-7.56	103.86	109.90
2	SA	1099	G	C5-N7-C8	-7.55	100.52	104.30
2	SA	1338	G	C4-N9-C1'	7.55	136.32	126.50
2	SA	1456	A	O4'-C1'-N9	7.55	114.24	108.20
4	S2	57	C	N3-C4-C5	-7.55	118.88	121.90
26	LA	1160	G	C5'-C4'-O4'	7.55	118.17	109.10
26	LA	2754	U	N3-C2-O2	-7.55	116.91	122.20
2	SA	295	C	P-O3'-C3'	-7.55	110.64	119.70
2	SA	1235	U	C5-C4-O4	-7.55	121.37	125.90
4	S2	17	C	P-O3'-C3'	7.55	128.76	119.70
2	SA	842	U	C2-N1-C1'	7.55	126.76	117.70
2	SA	1362	A	P-O5'-C5'	7.55	132.98	120.90
4	S2	43	G	C5-C6-O6	7.55	133.13	128.60
26	LA	1434	A	P-O5'-C5'	7.55	132.98	120.90
26	LA	1948	G	OP1-P-OP2	-7.55	108.27	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	LF	35	TYR	CG-CD2-CE2	-7.55	115.26	121.30
2	SA	186	C	N3-C4-N4	-7.55	112.72	118.00
2	SA	1449	C	C4'-C3'-C2'	-7.55	95.05	102.60
3	S1	51	C	C4'-C3'-C2'	-7.55	95.05	102.60
25	LB	70	C	N3-C2-O2	-7.55	116.62	121.90
26	LA	52	A	N1-C6-N6	-7.55	114.07	118.60
26	LA	827	U	C5-C4-O4	7.55	130.43	125.90
26	LA	1370	C	O4'-C1'-N1	7.55	114.24	108.20
26	LA	1543	G	P-O3'-C3'	7.55	128.76	119.70
26	LA	2423	U	N3-C2-O2	7.55	127.48	122.20
26	LA	2601	C	N3-C4-N4	7.55	123.28	118.00
26	LA	2809	A	N3-C4-C5	-7.55	121.52	126.80
43	L7	19	ARG	NE-CZ-NH1	7.55	124.08	120.30
2	SA	930	C	C2-N3-C4	-7.55	116.13	119.90
2	SA	1412	C	C5-C4-N4	-7.55	114.92	120.20
26	LA	155	A	N1-C6-N6	7.55	123.13	118.60
26	LA	559	G	C3'-C2'-C1'	7.55	107.54	101.50
2	SA	23	C	O4'-C1'-N1	7.55	114.24	108.20
2	SA	779	C	C5'-C4'-O4'	7.55	118.16	109.10
2	SA	1304	G	N3-C4-N9	-7.55	121.47	126.00
2	SA	1477	U	C6-N1-C2	-7.55	116.47	121.00
3	S1	20	G	C8-N9-C1'	-7.55	117.19	127.00
26	LA	1269	A	N7-C8-N9	-7.55	110.03	113.80
26	LA	1386	C	P-O3'-C3'	-7.55	110.64	119.70
2	SA	1048	G	C3'-C2'-C1'	-7.54	95.46	101.50
26	LA	257	C	N3-C4-N4	-7.54	112.72	118.00
26	LA	498	G	N3-C4-C5	-7.54	124.83	128.60
2	SA	360	G	N1-C6-O6	7.54	124.43	119.90
26	LA	317	G	P-O5'-C5'	7.54	132.97	120.90
26	LA	748	G	N7-C8-N9	-7.54	109.33	113.10
26	LA	1003	G	C2-N3-C4	7.54	115.67	111.90
26	LA	1388	G	N1-C6-O6	7.54	124.43	119.90
26	LA	2231	U	P-O3'-C3'	-7.54	110.65	119.70
2	SA	394	G	C5'-C4'-C3'	-7.54	103.93	116.00
2	SA	890	G	N1-C6-O6	7.54	124.42	119.90
2	SA	1332	A	C5'-C4'-O4'	7.54	118.15	109.10
26	LA	1169	A	C4'-C3'-C2'	-7.54	95.06	102.60
26	LA	1551	A	N1-C2-N3	-7.54	125.53	129.30
26	LA	1689	A	N7-C8-N9	-7.54	110.03	113.80
26	LA	2160	C	O4'-C1'-N1	7.54	114.23	108.20
26	LA	677	A	P-O5'-C5'	-7.54	108.84	120.90
2	SA	19	A	C8-N9-C4	-7.54	102.78	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	119	A	C5-C6-N6	7.54	129.73	123.70
2	SA	977	A	C5-N7-C8	-7.54	100.13	103.90
2	SA	1219	A	N7-C8-N9	7.54	117.57	113.80
26	LA	252	G	C5-C6-O6	-7.54	124.08	128.60
26	LA	1439	A	N7-C8-N9	-7.54	110.03	113.80
26	LA	1672	A	C4'-C3'-C2'	-7.54	95.06	102.60
26	LA	2443	C	C2-N3-C4	-7.54	116.13	119.90
26	LA	1559	U	C2-N3-C4	-7.54	122.48	127.00
2	SA	472	U	P-O3'-C3'	-7.54	110.66	119.70
2	SA	964	A	C5-C6-N6	-7.54	117.67	123.70
2	SA	1190	G	P-O3'-C3'	7.54	128.74	119.70
3	S1	43	U	C1'-O4'-C4'	-7.54	103.87	109.90
18	SB	224	ARG	NE-CZ-NH2	-7.54	116.53	120.30
26	LA	198	C	C5-C4-N4	-7.54	114.92	120.20
26	LA	333	G	C5-C6-N1	-7.54	107.73	111.50
26	LA	1387	A	C2-N3-C4	-7.54	106.83	110.60
55	LQ	81	ARG	NE-CZ-NH1	7.54	124.07	120.30
2	SA	157	U	O4'-C1'-N1	7.53	114.23	108.20
2	SA	222	C	C6-N1-C2	-7.53	117.29	120.30
2	SA	265	G	C6-C5-N7	-7.53	125.88	130.40
2	SA	894	G	O4'-C1'-N9	7.53	114.23	108.20
11	SK	3	ALA	CB-CA-C	7.53	121.40	110.10
26	LA	68	G	C5-C6-O6	-7.53	124.08	128.60
26	LA	1138	G	C5-N7-C8	7.53	108.07	104.30
26	LA	1165	A	O4'-C1'-N9	7.53	114.23	108.20
26	LA	1228	G	P-O3'-C3'	7.53	128.74	119.70
26	LA	1408	G	N9-C4-C5	7.53	108.41	105.40
26	LA	1463	C	C5'-C4'-C3'	-7.53	103.95	116.00
26	LA	1858	A	N7-C8-N9	-7.53	110.03	113.80
26	LA	2004	G	N1-C2-N3	-7.53	119.38	123.90
2	SA	155	A	C8-N9-C4	-7.53	102.79	105.80
26	LA	1105	U	C1'-O4'-C4'	-7.53	103.88	109.90
2	SA	1068	G	N7-C8-N9	-7.53	109.33	113.10
2	SA	1234	C	P-O5'-C5'	7.53	132.95	120.90
2	SA	1267	C	C4'-C3'-C2'	-7.53	95.07	102.60
26	LA	424	G	C8-N9-C4	7.53	109.41	106.40
26	LA	1663	G	N1-C2-N2	-7.53	109.42	116.20
26	LA	2133	G	C2'-C3'-O3'	7.53	126.07	109.50
2	SA	1017	U	P-O3'-C3'	-7.53	110.67	119.70
2	SA	1458	G	C4'-C3'-C2'	-7.53	95.07	102.60
2	SA	174	A	N1-C6-N6	7.53	123.12	118.60
2	SA	815	A	N7-C8-N9	-7.53	110.04	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1213	A	C5-C6-N1	-7.53	113.94	117.70
26	LA	462	C	N3-C4-N4	7.53	123.27	118.00
26	LA	1523	U	P-O3'-C3'	7.53	128.73	119.70
26	LA	1573	G	C5-N7-C8	-7.53	100.54	104.30
26	LA	2342	C	C2-N3-C4	-7.53	116.14	119.90
26	LA	2539	C	P-O3'-C3'	-7.53	110.67	119.70
25	LB	58	A	N1-C6-N6	7.53	123.11	118.60
26	LA	140	C	C6-N1-C1'	-7.53	111.77	120.80
26	LA	1217	U	C5-C4-O4	-7.53	121.39	125.90
26	LA	1797	G	N1-C2-N3	7.53	128.41	123.90
26	LA	2343	U	O4'-C1'-N1	7.53	114.22	108.20
2	SA	793	U	P-O3'-C3'	7.52	128.73	119.70
2	SA	1225	A	C5-C6-N6	-7.52	117.68	123.70
2	SA	1248	A	C5-C6-N1	7.52	121.46	117.70
26	LA	759	G	C1'-O4'-C4'	-7.52	103.88	109.90
26	LA	836	G	C2-N3-C4	7.52	115.66	111.90
26	LA	1655	A	C4-C5-N7	7.52	114.46	110.70
2	SA	55	A	O4'-C1'-N9	7.52	114.22	108.20
2	SA	894	G	C2-N3-C4	-7.52	108.14	111.90
2	SA	1055	A	C6-C5-N7	7.52	137.56	132.30
2	SA	1088	G	C8-N9-C4	7.52	109.41	106.40
25	LB	83	G	N1-C6-O6	7.52	124.41	119.90
26	LA	1239	G	N1-C6-O6	7.52	124.41	119.90
26	LA	1343	G	N9-C4-C5	-7.52	102.39	105.40
26	LA	1537	G	P-O3'-C3'	7.52	128.73	119.70
26	LA	1627	G	C2-N3-C4	7.52	115.66	111.90
26	LA	2864	G	C4-N9-C1'	-7.52	116.72	126.50
32	LY	59	PHE	N-CA-CB	7.52	124.14	110.60
2	SA	30	U	N3-C4-C5	-7.52	110.09	114.60
20	SD	181	PHE	CB-CG-CD2	7.52	126.06	120.80
26	LA	822	G	C5-C6-N1	7.52	115.26	111.50
26	LA	1452	G	C3'-C2'-C1'	-7.52	95.48	101.50
2	SA	872	A	O4'-C1'-N9	7.52	114.22	108.20
2	SA	1292	G	C1'-O4'-C4'	-7.52	103.89	109.90
26	LA	1143	A	N7-C8-N9	7.52	117.56	113.80
26	LA	1973	G	N3-C4-C5	-7.52	124.84	128.60
7	SG	153	TYR	CB-CG-CD2	7.52	125.51	121.00
21	SE	94	PHE	CB-CG-CD1	7.52	126.06	120.80
25	LB	43	C	P-O3'-C3'	7.52	128.72	119.70
26	LA	209	C	N3-C4-N4	7.52	123.26	118.00
26	LA	1744	A	C8-N9-C4	7.52	108.81	105.80
26	LA	377	G	C4'-C3'-C2'	-7.51	95.09	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1130	U	C4-C5-C6	-7.51	115.19	119.70
26	LA	1489	C	N1-C2-O2	-7.51	114.39	118.90
26	LA	2096	C	N3-C4-C5	7.51	124.91	121.90
26	LA	2224	G	O4'-C1'-N9	7.51	114.21	108.20
2	SA	713	G	C5-C6-O6	-7.51	124.09	128.60
26	LA	1175	A	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	1241	A	C5-C6-N6	-7.51	117.69	123.70
26	LA	1552	A	C5-C6-N1	7.51	121.46	117.70
2	SA	297	G	C4-C5-C6	-7.51	114.29	118.80
2	SA	551	U	C5-C4-O4	7.51	130.41	125.90
2	SA	778	G	C4-C5-N7	-7.51	107.80	110.80
2	SA	778	G	O4'-C1'-N9	7.51	114.21	108.20
2	SA	960	U	C2'-C3'-O3'	7.51	126.02	109.50
3	S1	58	C	N3-C4-N4	7.51	123.26	118.00
26	LA	1252	G	N3-C4-C5	7.51	132.35	128.60
26	LA	2209	G	N3-C4-N9	7.51	130.51	126.00
26	LA	2831	G	C2-N3-C4	7.51	115.66	111.90
2	SA	14	U	N3-C4-C5	-7.51	110.09	114.60
2	SA	1486	G	C4-C5-C6	7.51	123.31	118.80
25	LB	52	A	C5'-C4'-C3'	7.51	128.02	116.00
26	LA	614	A	O4'-C1'-N9	7.51	114.21	108.20
26	LA	844	A	N1-C2-N3	-7.51	125.55	129.30
26	LA	1261	C	C4-C5-C6	7.51	121.16	117.40
26	LA	1742	U	C5-C6-N1	7.51	126.45	122.70
26	LA	2264	C	C5-C6-N1	-7.51	117.25	121.00
26	LA	2583	G	N7-C8-N9	-7.51	109.35	113.10
2	SA	302	G	N3-C2-N2	-7.51	114.64	119.90
2	SA	713	G	O4'-C1'-N9	7.51	114.21	108.20
4	S2	1	C	C5-C4-N4	-7.51	114.94	120.20
26	LA	2697	G	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	2705	A	O4'-C1'-N9	7.51	114.21	108.20
2	SA	1261	A	C4-C5-N7	7.51	114.45	110.70
2	SA	1344	C	O4'-C1'-N1	7.51	114.20	108.20
4	S2	72	C	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	199	A	C5-C6-N6	7.51	129.71	123.70
26	LA	466	A	C4'-C3'-C2'	-7.51	95.09	102.60
26	LA	2861	U	P-O5'-C5'	7.51	132.91	120.90
2	SA	1155	A	C4-C5-C6	-7.50	113.25	117.00
2	SA	1400	C	C4-C5-C6	7.50	121.15	117.40
4	S2	50	G	C6-N1-C2	-7.50	120.60	125.10
4	S2	77	A	C6-N1-C2	-7.50	114.10	118.60
25	LB	33	G	C6-C5-N7	-7.50	125.90	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1170	C	N3-C4-N4	7.50	123.25	118.00
26	LA	1456	G	N9-C4-C5	7.50	108.40	105.40
26	LA	1594	U	P-O3'-C3'	-7.50	110.69	119.70
26	LA	1601	G	O4'-C1'-N9	7.50	114.20	108.20
26	LA	1867	G	C2-N3-C4	7.50	115.65	111.90
2	SA	248	C	N3-C4-N4	7.50	123.25	118.00
2	SA	534	U	P-O3'-C3'	-7.50	110.70	119.70
2	SA	876	C	C5-C6-N1	7.50	124.75	121.00
2	SA	200	G	N3-C4-C5	-7.50	124.85	128.60
26	LA	139	U	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1519	G	C5'-C4'-C3'	-7.50	104.00	116.00
26	LA	1775	U	OP1-P-OP2	-7.50	108.35	119.60
26	LA	2532	G	C6-C5-N7	-7.50	125.90	130.40
26	LA	2641	G	C5'-C4'-C3'	-7.50	104.00	116.00
2	SA	1300	G	P-O5'-C5'	-7.50	108.90	120.90
4	S2	46	G	O3'-P-O5'	7.50	118.25	104.00
25	LB	43	C	C5-C6-N1	-7.50	117.25	121.00
26	LA	1634	A	C5'-C4'-O4'	7.50	118.10	109.10
26	LA	2682	A	C8-N9-C1'	-7.50	114.20	127.70
2	SA	1094	G	N7-C8-N9	7.50	116.85	113.10
26	LA	739	A	N1-C2-N3	-7.50	125.55	129.30
26	LA	1441	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1521	G	N1-C6-O6	7.50	124.40	119.90
26	LA	1753	G	C5-C6-O6	-7.50	124.10	128.60
26	LA	2519	U	N1-C2-N3	7.50	119.40	114.90
26	LA	2728	U	C5-C4-O4	-7.50	121.40	125.90
32	LY	10	ARG	NE-CZ-NH2	-7.50	116.55	120.30
2	SA	975	A	C5'-C4'-O4'	7.50	118.10	109.10
2	SA	1049	U	O4'-C1'-N1	7.50	114.20	108.20
2	SA	1171	A	N9-C4-C5	-7.50	102.80	105.80
2	SA	1487	G	C5-C6-O6	-7.50	124.10	128.60
25	LB	42	C	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	504	A	O4'-C1'-N9	7.50	114.20	108.20
26	LA	614	A	N1-C6-N6	7.50	123.10	118.60
26	LA	909	A	N1-C2-N3	-7.50	125.55	129.30
26	LA	927	A	C6-C5-N7	7.50	137.55	132.30
26	LA	1133	A	C5-C6-N1	7.50	121.45	117.70
26	LA	1979	U	C5-C4-O4	-7.50	121.40	125.90
26	LA	2354	C	P-O3'-C3'	-7.50	110.70	119.70
26	LA	2625	G	N3-C2-N2	7.50	125.15	119.90
2	SA	310	G	N9-C4-C5	-7.50	102.40	105.40
2	SA	720	C	OP1-P-OP2	-7.50	108.36	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	169	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1530	G	C6-C5-N7	-7.50	125.90	130.40
2	SA	986	U	C6-N1-C2	-7.49	116.50	121.00
4	S2	57	C	C2-N1-C1'	7.49	127.04	118.80
26	LA	1096	A	C4-C5-C6	-7.49	113.25	117.00
26	LA	1334	G	N1-C6-O6	7.49	124.40	119.90
26	LA	1503	A	C4-C5-C6	-7.49	113.25	117.00
26	LA	1608	A	C2-N3-C4	7.49	114.35	110.60
26	LA	1702	G	N3-C2-N2	7.49	125.15	119.90
26	LA	2903	U	N3-C4-C5	-7.49	110.10	114.60
2	SA	1151	A	P-O3'-C3'	7.49	128.69	119.70
25	LB	43	C	O4'-C1'-N1	7.49	114.19	108.20
26	LA	102	U	P-O3'-C3'	-7.49	110.71	119.70
26	LA	830	G	N1-C6-O6	7.49	124.39	119.90
2	SA	494	G	C6-N1-C2	-7.49	120.61	125.10
2	SA	1127	G	N7-C8-N9	7.49	116.84	113.10
2	SA	1339	A	C5-C6-N6	7.49	129.69	123.70
26	LA	1616	A	C5-C6-N6	-7.49	117.71	123.70
26	LA	1620	G	N1-C6-O6	7.49	124.39	119.90
26	LA	2013	A	O4'-C1'-N9	7.49	114.19	108.20
26	LA	2622	U	C6-N1-C2	-7.49	116.51	121.00
53	LP	22	ARG	NE-CZ-NH2	7.49	124.05	120.30
2	SA	511	C	N3-C4-C5	-7.49	118.90	121.90
2	SA	930	C	C6-N1-C2	-7.49	117.30	120.30
25	LB	10	G	N3-C4-C5	-7.49	124.86	128.60
26	LA	891	G	C5-C6-N1	7.49	115.24	111.50
26	LA	931	U	C5-C4-O4	-7.49	121.41	125.90
26	LA	1169	A	N1-C2-N3	-7.49	125.56	129.30
26	LA	1928	A	N1-C6-N6	7.49	123.09	118.60
26	LA	2777	G	C5-C6-O6	-7.49	124.11	128.60
26	LA	2887	A	C2-N3-C4	-7.49	106.86	110.60
45	LG	35	LEU	CB-CG-CD1	7.49	123.73	111.00
26	LA	3	U	O4'-C1'-N1	7.49	114.19	108.20
26	LA	624	C	N3-C4-C5	7.49	124.89	121.90
26	LA	2420	C	C2-N3-C4	-7.49	116.16	119.90
2	SA	27	G	C4-N9-C1'	7.49	136.23	126.50
2	SA	525	C	C6-N1-C2	-7.49	117.31	120.30
2	SA	681	A	N1-C6-N6	-7.49	114.11	118.60
2	SA	932	C	C2-N3-C4	-7.49	116.16	119.90
26	LA	618	G	C5-C6-O6	-7.49	124.11	128.60
26	LA	1403	A	C4'-C3'-C2'	-7.49	95.11	102.60
26	LA	1408	G	C4-C5-N7	-7.49	107.81	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1670	C	C4'-C3'-C2'	-7.49	95.11	102.60
26	LA	1871	A	P-O5'-C5'	7.49	132.88	120.90
26	LA	2208	C	N3-C2-O2	-7.49	116.66	121.90
3	S1	28	U	C4'-C3'-C2'	-7.48	95.12	102.60
25	LB	31	C	N3-C4-N4	-7.48	112.76	118.00
26	LA	413	C	O4'-C1'-N1	7.48	114.19	108.20
2	SA	454	G	C2-N3-C4	-7.48	108.16	111.90
2	SA	463	U	C2-N3-C4	-7.48	122.51	127.00
2	SA	846	G	C2-N3-C4	-7.48	108.16	111.90
26	LA	301	G	N9-C4-C5	-7.48	102.41	105.40
26	LA	728	G	N3-C4-N9	7.48	130.49	126.00
26	LA	1218	G	O4'-C1'-N9	7.48	114.19	108.20
26	LA	2008	C	C1'-O4'-C4'	-7.48	103.91	109.90
26	LA	2838	G	C6-C5-N7	-7.48	125.91	130.40
2	SA	69	G	C6-N1-C2	7.48	129.59	125.10
2	SA	159	G	C8-N9-C4	7.48	109.39	106.40
2	SA	805	C	N1-C1'-C2'	7.48	123.72	114.00
2	SA	997	U	O4'-C1'-N1	7.48	114.19	108.20
26	LA	1854	A	N1-C6-N6	-7.48	114.11	118.60
2	SA	165	G	C6-C5-N7	7.48	134.89	130.40
2	SA	340	U	C4'-C3'-C2'	-7.48	95.12	102.60
2	SA	450	G	C8-N9-C4	-7.48	103.41	106.40
2	SA	595	A	C3'-C2'-C1'	-7.48	95.52	101.50
26	LA	284	U	N3-C4-C5	-7.48	110.11	114.60
26	LA	1227	G	N1-C6-O6	-7.48	115.41	119.90
26	LA	1905	C	C3'-C2'-C1'	7.48	107.48	101.50
26	LA	2357	G	C2-N3-C4	-7.48	108.16	111.90
2	SA	1386	G	N1-C6-O6	7.48	124.39	119.90
4	S2	21	U	C5'-C4'-C3'	7.48	127.96	116.00
26	LA	210	C	C2-N3-C4	-7.48	116.16	119.90
26	LA	829	A	N1-C6-N6	-7.48	114.11	118.60
26	LA	2549	G	N1-C6-O6	-7.48	115.41	119.90
2	SA	175	C	C6-N1-C1'	-7.48	111.83	120.80
2	SA	826	C	O4'-C1'-N1	7.48	114.18	108.20
26	LA	1261	C	C4'-C3'-C2'	-7.48	95.12	102.60
26	LA	2273	A	C5-C6-N6	-7.48	117.72	123.70
26	LA	2330	G	N3-C2-N2	7.48	125.13	119.90
26	LA	2407	A	C2-N3-C4	7.48	114.34	110.60
26	LA	31	C	O4'-C1'-N1	7.47	114.18	108.20
26	LA	45	G	C8-N9-C4	7.47	109.39	106.40
26	LA	131	A	N1-C6-N6	7.47	123.08	118.60
26	LA	452	G	C5-N7-C8	-7.47	100.56	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	828	U	N1-C2-O2	-7.47	117.57	122.80
26	LA	944	C	N1-C2-O2	-7.47	114.42	118.90
26	LA	1002	G	C5-N7-C8	-7.47	100.56	104.30
26	LA	1062	G	C5-C6-O6	-7.47	124.12	128.60
26	LA	1285	A	C5-N7-C8	7.47	107.64	103.90
26	LA	2705	A	C5-C6-N1	-7.47	113.96	117.70
2	SA	431	A	N1-C6-N6	-7.47	114.12	118.60
2	SA	1048	G	N9-C4-C5	7.47	108.39	105.40
2	SA	1515	G	C1'-O4'-C4'	7.47	115.88	109.90
26	LA	126	A	N1-C6-N6	-7.47	114.12	118.60
26	LA	145	C	C6-N1-C2	-7.47	117.31	120.30
26	LA	229	C	P-O3'-C3'	-7.47	110.73	119.70
26	LA	306	U	C4-C5-C6	-7.47	115.22	119.70
47	LJ	103	ALA	N-CA-CB	7.47	120.56	110.10
2	SA	510	A	C5'-C4'-C3'	-7.47	104.05	116.00
2	SA	673	A	N1-C2-N3	-7.47	125.56	129.30
26	LA	817	C	O4'-C1'-N1	7.47	114.18	108.20
26	LA	1214	A	N1-C6-N6	7.47	123.08	118.60
26	LA	2612	C	O4'-C1'-N1	7.47	114.18	108.20
2	SA	65	A	N1-C6-N6	-7.47	114.12	118.60
2	SA	388	G	N1-C2-N3	-7.47	119.42	123.90
2	SA	1174	G	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	1222	G	C5-C6-O6	-7.47	124.12	128.60
2	SA	1428	A	N9-C4-C5	-7.47	102.81	105.80
14	SN	74	ARG	NE-CZ-NH1	7.47	124.03	120.30
26	LA	176	A	C5-N7-C8	-7.47	100.17	103.90
26	LA	204	A	N3-C4-C5	-7.47	121.57	126.80
26	LA	337	C	N3-C4-N4	-7.47	112.77	118.00
26	LA	381	G	C8-N9-C4	-7.47	103.41	106.40
26	LA	400	G	C6-N1-C2	-7.47	120.62	125.10
26	LA	948	C	C5-C6-N1	7.47	124.73	121.00
26	LA	1580	A	N7-C8-N9	-7.47	110.06	113.80
26	LA	1737	G	C4-N9-C1'	-7.47	116.79	126.50
2	SA	124	C	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	936	C	C5-C6-N1	7.47	124.73	121.00
26	LA	295	G	N9-C4-C5	-7.47	102.41	105.40
26	LA	1638	C	C2-N3-C4	-7.47	116.17	119.90
26	LA	2764	A	C5-C6-N6	7.47	129.68	123.70
2	SA	251	G	C5-C6-O6	7.47	133.08	128.60
2	SA	261	U	C3'-C2'-C1'	7.47	107.47	101.50
2	SA	547	A	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	753	A	C5-C6-N6	-7.47	117.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	965	U	C5-C4-O4	7.47	130.38	125.90
4	S2	36	A	C2-N3-C4	-7.47	106.87	110.60
26	LA	187	G	N1-C6-O6	7.47	124.38	119.90
26	LA	425	G	C6-C5-N7	-7.47	125.92	130.40
26	LA	1202	G	N3-C4-C5	-7.47	124.87	128.60
26	LA	2703	C	N1-C2-N3	7.47	124.43	119.20
2	SA	264	C	O4'-C1'-N1	7.46	114.17	108.20
2	SA	894	G	N1-C2-N3	7.46	128.38	123.90
2	SA	1034	G	C4-C5-C6	-7.46	114.32	118.80
2	SA	1261	A	C5-C6-N1	-7.46	113.97	117.70
2	SA	1427	C	C5-C4-N4	-7.46	114.97	120.20
2	SA	1432	G	C2-N3-C4	7.46	115.63	111.90
25	LB	35	C	C2-N1-C1'	7.46	127.01	118.80
25	LB	44	G	P-O5'-C5'	7.46	132.84	120.90
26	LA	324	A	N9-C4-C5	7.46	108.79	105.80
26	LA	798	G	C5'-C4'-O4'	7.46	118.06	109.10
26	LA	811	U	C1'-O4'-C4'	-7.46	103.93	109.90
26	LA	821	A	C5-C6-N6	7.46	129.67	123.70
26	LA	1021	A	C8-N9-C4	-7.46	102.81	105.80
26	LA	2172	U	P-O3'-C3'	7.46	128.66	119.70
26	LA	2209	G	C5-C6-O6	7.46	133.08	128.60
26	LA	2224	G	C6-N1-C2	-7.46	120.62	125.10
26	LA	2703	C	C2-N3-C4	-7.46	116.17	119.90
26	LA	2741	A	N9-C4-C5	7.46	108.79	105.80
2	SA	824	G	N1-C6-O6	7.46	124.38	119.90
2	SA	1027	C	O4'-C4'-C3'	-7.46	96.54	104.00
2	SA	1444	U	C5'-C4'-C3'	-7.46	104.06	116.00
9	SI	85	ALA	N-CA-CB	7.46	120.55	110.10
26	LA	308	G	C5'-C4'-O4'	7.46	118.06	109.10
26	LA	1931	U	N3-C4-O4	7.46	124.62	119.40
26	LA	2000	C	N1-C2-N3	7.46	124.42	119.20
2	SA	535	A	C6-N1-C2	7.46	123.08	118.60
26	LA	308	G	C5-N7-C8	7.46	108.03	104.30
26	LA	381	G	C5'-C4'-C3'	7.46	127.94	116.00
26	LA	1104	C	C5'-C4'-C3'	-7.46	104.06	116.00
2	SA	404	G	P-O3'-C3'	-7.46	110.75	119.70
25	LB	100	G	C2-N3-C4	-7.46	108.17	111.90
26	LA	2	G	C5-C6-O6	-7.46	124.12	128.60
26	LA	1272	A	C5-C6-N6	7.46	129.67	123.70
26	LA	1284	A	O4'-C1'-N9	7.46	114.17	108.20
26	LA	1889	A	P-O3'-C3'	7.46	128.65	119.70
26	LA	2597	G	C5-C6-O6	-7.46	124.12	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	103	U	N3-C2-O2	7.46	127.42	122.20
2	SA	369	G	C5-N7-C8	7.46	108.03	104.30
3	S1	50	U	O4'-C1'-C2'	7.46	114.31	107.60
26	LA	254	G	O4'-C1'-N9	7.46	114.17	108.20
26	LA	527	C	N3-C4-N4	7.46	123.22	118.00
26	LA	668	A	N1-C6-N6	-7.46	114.12	118.60
26	LA	1046	A	N1-C6-N6	7.46	123.08	118.60
26	LA	221	A	P-O5'-C5'	-7.46	108.97	120.90
26	LA	627	A	C4-C5-C6	-7.46	113.27	117.00
26	LA	1380	G	O4'-C1'-N9	7.46	114.17	108.20
26	LA	1555	G	N7-C8-N9	-7.46	109.37	113.10
26	LA	2309	A	C4-C5-N7	7.46	114.43	110.70
49	LK	64	ARG	NE-CZ-NH1	7.46	124.03	120.30
2	SA	1211	U	P-O3'-C3'	7.46	128.65	119.70
26	LA	299	A	C8-N9-C4	7.46	108.78	105.80
26	LA	1761	C	C6-N1-C2	7.46	123.28	120.30
26	LA	2412	A	N9-C4-C5	7.46	108.78	105.80
26	LA	2547	A	N9-C4-C5	-7.46	102.82	105.80
26	LA	2633	G	C3'-C2'-C1'	7.46	107.46	101.50
2	SA	247	G	C5-C6-O6	7.45	133.07	128.60
2	SA	468	A	OP1-P-OP2	-7.45	108.42	119.60
2	SA	634	C	C5-C6-N1	7.45	124.73	121.00
2	SA	1522	U	O4'-C1'-N1	7.45	114.16	108.20
4	S2	22	A	C3'-C2'-C1'	-7.45	95.54	101.50
26	LA	576	U	C5-C4-O4	-7.45	121.43	125.90
26	LA	900	A	C5-C6-N1	7.45	121.43	117.70
26	LA	1611	C	P-O5'-C5'	-7.45	108.97	120.90
26	LA	1713	A	C5'-C4'-O4'	7.45	118.05	109.10
26	LA	1990	C	O4'-C1'-N1	7.45	114.16	108.20
26	LA	2036	C	N1-C2-O2	7.45	123.37	118.90
26	LA	2217	G	C8-N9-C4	-7.45	103.42	106.40
2	SA	696	A	C5-C6-N1	-7.45	113.97	117.70
2	SA	1517	G	C5-C6-O6	7.45	133.07	128.60
26	LA	205	G	C4'-C3'-C2'	-7.45	95.15	102.60
26	LA	485	C	C4-C5-C6	-7.45	113.67	117.40
26	LA	1709	U	C5-C6-N1	7.45	126.43	122.70
26	LA	2119	A	C1'-O4'-C4'	7.45	115.86	109.90
26	LA	2255	G	N9-C4-C5	7.45	108.38	105.40
2	SA	439	U	N3-C4-C5	7.45	119.07	114.60
2	SA	546	A	C5-C6-N6	7.45	129.66	123.70
2	SA	615	G	C6-N1-C2	-7.45	120.63	125.10
2	SA	656	G	C8-N9-C4	-7.45	103.42	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	846	G	C4-C5-C6	-7.45	114.33	118.80
2	SA	1078	U	P-O3'-C3'	7.45	128.64	119.70
2	SA	1345	U	C2-N3-C4	-7.45	122.53	127.00
26	LA	446	G	C5-N7-C8	-7.45	100.58	104.30
26	LA	590	A	C1'-O4'-C4'	-7.45	103.94	109.90
26	LA	1705	A	C8-N9-C4	-7.45	102.82	105.80
26	LA	1758	U	C1'-O4'-C4'	-7.45	103.94	109.90
26	LA	1900	A	C4-C5-C6	7.45	120.72	117.00
2	SA	924	C	C1'-O4'-C4'	-7.45	103.94	109.90
2	SA	1122	U	C3'-C2'-C1'	-7.45	95.54	101.50
2	SA	1141	C	N3-C4-C5	-7.45	118.92	121.90
2	SA	1347	G	C1'-O4'-C4'	-7.45	103.94	109.90
24	S3	499	ASP	CB-CG-OD1	-7.45	111.60	118.30
26	LA	151	C	C4-C5-C6	7.45	121.12	117.40
26	LA	1374	G	C3'-C2'-C1'	7.45	107.46	101.50
26	LA	2088	A	O4'-C1'-N9	7.45	114.16	108.20
26	LA	2231	U	O4'-C1'-N1	7.45	114.16	108.20
2	SA	394	G	N1-C2-N3	7.45	128.37	123.90
26	LA	1932	A	C8-N9-C4	7.45	108.78	105.80
2	SA	1239	A	P-O3'-C3'	7.45	128.63	119.70
26	LA	305	C	C4-C5-C6	7.45	121.12	117.40
26	LA	1155	A	O4'-C1'-N9	7.45	114.16	108.20
26	LA	1653	G	C5-C6-O6	-7.45	124.13	128.60
26	LA	2705	A	C5'-C4'-O4'	-7.45	100.17	109.10
2	SA	1525	G	C4-C5-N7	7.44	113.78	110.80
14	SN	76	PHE	CB-CG-CD2	-7.44	115.59	120.80
26	LA	1052	C	C4-C5-C6	-7.44	113.68	117.40
26	LA	1493	C	N3-C2-O2	-7.44	116.69	121.90
26	LA	2363	G	C4-N9-C1'	-7.44	116.82	126.50
2	SA	74	A	P-O3'-C3'	-7.44	110.77	119.70
2	SA	225	C	C4-C5-C6	-7.44	113.68	117.40
2	SA	465	A	C5'-C4'-O4'	7.44	118.03	109.10
4	S2	4	G	N3-C2-N2	7.44	125.11	119.90
22	SF	25	TYR	CB-CG-CD1	7.44	125.47	121.00
26	LA	363	G	C8-N9-C4	-7.44	103.42	106.40
26	LA	570	G	C1'-O4'-C4'	-7.44	103.94	109.90
26	LA	1646	C	N3-C2-O2	-7.44	116.69	121.90
26	LA	1646	C	O4'-C1'-N1	7.44	114.15	108.20
26	LA	2234	G	C8-N9-C4	-7.44	103.42	106.40
2	SA	148	G	C8-N9-C4	7.44	109.38	106.40
2	SA	374	A	N9-C4-C5	-7.44	102.82	105.80
2	SA	883	C	C4'-C3'-C2'	-7.44	95.16	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1354	U	C5-C4-O4	-7.44	121.44	125.90
26	LA	355	U	C5-C6-N1	-7.44	118.98	122.70
26	LA	1097	U	C5'-C4'-C3'	7.44	127.90	116.00
26	LA	2113	U	C6-N1-C2	-7.44	116.53	121.00
26	LA	2555	U	O4'-C1'-N1	7.44	114.15	108.20
26	LA	2771	C	C5'-C4'-O4'	7.44	118.03	109.10
2	SA	85	U	O4'-C1'-N1	7.44	114.15	108.20
2	SA	654	G	C6-C5-N7	7.44	134.86	130.40
2	SA	767	A	N3-C4-C5	-7.44	121.59	126.80
26	LA	2389	G	N7-C8-N9	-7.44	109.38	113.10
2	SA	1289	A	C5-C6-N1	-7.44	113.98	117.70
2	SA	1537	U	C2-N3-C4	-7.44	122.54	127.00
26	LA	576	U	N3-C4-O4	7.44	124.61	119.40
26	LA	936	A	N9-C4-C5	-7.44	102.83	105.80
26	LA	1010	A	N1-C6-N6	-7.44	114.14	118.60
26	LA	1671	U	C5-C4-O4	-7.44	121.44	125.90
26	LA	2666	C	C5'-C4'-C3'	-7.44	104.10	116.00
26	LA	2716	C	N3-C4-C5	-7.44	118.92	121.90
2	SA	928	G	N1-C2-N3	7.44	128.36	123.90
2	SA	1469	C	C6-N1-C2	7.44	123.27	120.30
8	SH	127	TYR	CB-CG-CD2	-7.44	116.54	121.00
20	SD	84	ASN	N-CA-CB	-7.44	97.22	110.60
26	LA	642	U	O5'-P-OP1	-7.44	99.01	105.70
26	LA	1890	A	C8-N9-C4	-7.44	102.83	105.80
26	LA	2857	G	N9-C4-C5	-7.44	102.43	105.40
53	LP	86	ARG	NE-CZ-NH2	-7.44	116.58	120.30
2	SA	355	C	C4-C5-C6	7.43	121.12	117.40
2	SA	713	G	C4'-C3'-C2'	-7.43	95.17	102.60
2	SA	1015	G	O4'-C1'-N9	7.43	114.15	108.20
2	SA	1049	U	C3'-C2'-C1'	-7.43	95.55	101.50
11	SK	52	ARG	NE-CZ-NH2	-7.43	116.58	120.30
26	LA	492	A	C4-C5-N7	-7.43	106.98	110.70
26	LA	540	C	C6-N1-C2	-7.43	117.33	120.30
26	LA	860	U	C5-C4-O4	-7.43	121.44	125.90
26	LA	1073	A	C5-N7-C8	-7.43	100.18	103.90
26	LA	1315	C	O4'-C1'-N1	7.43	114.15	108.20
26	LA	1591	A	O4'-C1'-N9	7.43	114.15	108.20
26	LA	2649	C	C6-N1-C2	-7.43	117.33	120.30
2	SA	39	G	OP1-P-OP2	-7.43	108.45	119.60
2	SA	211	G	C5'-C4'-C3'	-7.43	104.11	116.00
2	SA	318	G	O4'-C1'-N9	7.43	114.15	108.20
4	S2	39	A	N7-C8-N9	7.43	117.52	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1332	G	N1-C6-O6	7.43	124.36	119.90
26	LA	1878	G	C4'-C3'-C2'	-7.43	95.17	102.60
26	LA	2516	A	C4-C5-C6	-7.43	113.28	117.00
26	LA	845	A	C5-N7-C8	-7.43	100.18	103.90
2	SA	469	C	O4'-C1'-N1	7.43	114.14	108.20
2	SA	958	A	C5-N7-C8	-7.43	100.19	103.90
2	SA	1278	G	N1-C6-O6	7.43	124.36	119.90
26	LA	196	A	P-O3'-C3'	7.43	128.62	119.70
26	LA	910	A	C2'-C3'-O3'	7.43	125.85	109.50
26	LA	2180	U	C4-C5-C6	7.43	124.16	119.70
2	SA	1485	U	C6-N1-C2	-7.43	116.54	121.00
3	S1	35	G	P-O3'-C3'	7.43	128.61	119.70
26	LA	799	G	C2-N3-C4	7.43	115.61	111.90
26	LA	2470	G	O4'-C1'-N9	7.43	114.14	108.20
2	SA	1020	G	N3-C2-N2	-7.43	114.70	119.90
26	LA	768	G	N3-C2-N2	7.43	125.10	119.90
26	LA	794	A	N1-C6-N6	-7.43	114.14	118.60
26	LA	2784	U	C5-C4-O4	7.43	130.36	125.90
2	SA	282	A	O4'-C1'-N9	7.42	114.14	108.20
26	LA	685	A	C4-C5-N7	-7.42	106.99	110.70
26	LA	1163	G	C8-N9-C4	-7.42	103.43	106.40
26	LA	1868	C	C5-C6-N1	-7.42	117.29	121.00
25	LB	117	G	C8-N9-C4	-7.42	103.43	106.40
26	LA	1291	C	N3-C4-N4	7.42	123.20	118.00
26	LA	1901	A	C1'-O4'-C4'	-7.42	103.96	109.90
26	LA	2214	C	C4'-C3'-C2'	-7.42	95.18	102.60
26	LA	2422	C	P-O3'-C3'	7.42	128.61	119.70
2	SA	588	G	C5'-C4'-C3'	-7.42	104.12	116.00
2	SA	706	A	N3-C4-C5	-7.42	121.61	126.80
2	SA	979	C	C5-C6-N1	7.42	124.71	121.00
26	LA	892	A	C5-N7-C8	-7.42	100.19	103.90
26	LA	1748	C	C5-C6-N1	7.42	124.71	121.00
26	LA	1991	U	C2-N3-C4	7.42	131.45	127.00
26	LA	2751	G	C8-N9-C4	7.42	109.37	106.40
2	SA	444	G	N9-C4-C5	-7.42	102.43	105.40
3	S1	44	U	C5'-C4'-C3'	7.42	127.87	116.00
25	LB	106	G	N9-C4-C5	-7.42	102.43	105.40
26	LA	587	C	N1-C2-O2	7.42	123.35	118.90
26	LA	780	G	N1-C2-N2	-7.42	109.52	116.20
26	LA	1238	G	C6-N1-C2	-7.42	120.65	125.10
26	LA	1879	C	N3-C4-N4	7.42	123.19	118.00
26	LA	1944	U	N1-C2-O2	-7.42	117.61	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	613	C	O4'-C1'-N1	7.42	114.14	108.20
2	SA	733	G	C3'-C2'-C1'	-7.42	95.56	101.50
2	SA	740	U	C5'-C4'-C3'	-7.42	104.13	116.00
26	LA	267	C	C5'-C4'-C3'	-7.42	104.13	116.00
26	LA	2563	U	N3-C2-O2	7.42	127.39	122.20
2	SA	835	U	C2-N3-C4	-7.42	122.55	127.00
4	S2	69	C	O4'-C1'-N1	7.42	114.13	108.20
26	LA	800	A	C4-C5-C6	7.42	120.71	117.00
26	LA	1073	A	C5'-C4'-O4'	7.42	118.00	109.10
26	LA	2235	G	N3-C4-N9	7.42	130.45	126.00
26	LA	2381	A	C6-N1-C2	-7.42	114.15	118.60
26	LA	2838	G	N9-C4-C5	-7.42	102.43	105.40
2	SA	533	A	N1-C2-N3	7.42	133.01	129.30
26	LA	1480	C	N1-C2-O2	7.42	123.35	118.90
2	SA	413	G	O4'-C1'-N9	7.41	114.13	108.20
2	SA	795	C	C2-N3-C4	-7.41	116.19	119.90
4	S2	31	G	C5-C6-O6	-7.41	124.15	128.60
26	LA	348	A	P-O3'-C3'	-7.41	110.80	119.70
26	LA	1966	A	C4-N9-C1'	7.41	139.65	126.30
26	LA	2065	C	C2-N3-C4	-7.41	116.19	119.90
26	LA	2354	C	C5'-C4'-O4'	7.41	118.00	109.10
37	LC	7	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
26	LA	1122	G	C2-N3-C4	7.41	115.61	111.90
26	LA	1185	G	C2-N3-C4	-7.41	108.19	111.90
26	LA	1517	G	N1-C2-N2	-7.41	109.53	116.20
26	LA	1608	A	P-O3'-C3'	7.41	128.59	119.70
26	LA	2077	A	N1-C6-N6	-7.41	114.15	118.60
26	LA	2315	G	C4-C5-N7	-7.41	107.83	110.80
26	LA	2825	G	C8-N9-C4	7.41	109.36	106.40
2	SA	1013	G	C6-N1-C2	7.41	129.55	125.10
2	SA	1352	C	N3-C4-N4	-7.41	112.81	118.00
2	SA	1421	G	C2-N3-C4	7.41	115.61	111.90
26	LA	184	C	C4-C5-C6	-7.41	113.69	117.40
26	LA	299	A	C3'-C2'-C1'	-7.41	95.57	101.50
26	LA	1543	G	C6-C5-N7	7.41	134.85	130.40
26	LA	1798	U	C5-C6-N1	-7.41	119.00	122.70
26	LA	2778	A	C5-C6-N6	7.41	129.63	123.70
58	LT	90	ARG	NE-CZ-NH1	7.41	124.00	120.30
2	SA	90	C	N3-C4-C5	-7.41	118.94	121.90
2	SA	132	C	P-O3'-C3'	7.41	128.59	119.70
2	SA	405	U	C5-C6-N1	-7.41	119.00	122.70
2	SA	792	A	N1-C6-N6	-7.41	114.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1455	G	N7-C8-N9	-7.41	109.40	113.10
2	SA	1491	G	N7-C8-N9	-7.41	109.39	113.10
26	LA	214	G	C6-C5-N7	-7.41	125.95	130.40
26	LA	966	G	N9-C4-C5	7.41	108.36	105.40
26	LA	1068	G	C4-C5-C6	-7.41	114.36	118.80
26	LA	1177	G	C5'-C4'-O4'	7.41	117.99	109.10
26	LA	1568	G	O4'-C1'-C2'	7.41	114.27	107.60
26	LA	1821	A	C8-N9-C4	-7.41	102.84	105.80
26	LA	1989	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	2312	U	C5-C6-N1	7.41	126.40	122.70
26	LA	2464	G	N7-C8-N9	-7.41	109.40	113.10
26	LA	2569	G	O4'-C1'-N9	7.41	114.13	108.20
47	LJ	55	ARG	NE-CZ-NH1	7.41	124.00	120.30
2	SA	1041	G	N9-C4-C5	-7.41	102.44	105.40
2	SA	1399	C	O4'-C1'-N1	7.41	114.13	108.20
26	LA	9	G	C5-C6-N1	-7.41	107.80	111.50
26	LA	733	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	1272	A	N9-C4-C5	-7.41	102.84	105.80
26	LA	1524	G	C5-C6-N1	-7.41	107.80	111.50
26	LA	2832	U	O4'-C1'-N1	7.41	114.13	108.20
48	LN	41	ARG	NE-CZ-NH2	-7.41	116.60	120.30
26	LA	288	U	C4'-C3'-C2'	-7.41	95.19	102.60
26	LA	489	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	2189	U	C5'-C4'-C3'	-7.41	104.15	116.00
26	LA	2535	G	N3-C4-C5	-7.41	124.90	128.60
53	LP	80	PHE	CB-CG-CD2	7.41	125.98	120.80
26	LA	2135	A	C4'-C3'-C2'	-7.40	95.20	102.60
2	SA	8	A	O4'-C4'-C3'	-7.40	96.60	104.00
2	SA	1060	U	C2-N1-C1'	-7.40	108.82	117.70
2	SA	1311	A	C1'-O4'-C4'	7.40	115.82	109.90
21	SE	28	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
26	LA	6	A	C5-C6-N1	7.40	121.40	117.70
26	LA	583	G	C5-C6-O6	-7.40	124.16	128.60
26	LA	608	A	C2-N3-C4	7.40	114.30	110.60
26	LA	893	C	C6-N1-C2	-7.40	117.34	120.30
26	LA	2080	A	C4-C5-N7	7.40	114.40	110.70
26	LA	2248	C	P-O5'-C5'	-7.40	109.06	120.90
26	LA	2297	A	P-O5'-C5'	-7.40	109.06	120.90
1	SS	36	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
2	SA	27	G	C8-N9-C4	-7.40	103.44	106.40
2	SA	242	G	P-O5'-C5'	-7.40	109.06	120.90
2	SA	1283	U	N3-C2-O2	7.40	127.38	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1386	G	O4'-C1'-N9	7.40	114.12	108.20
26	LA	564	C	N3-C4-C5	7.40	124.86	121.90
26	LA	685	A	P-O3'-C3'	7.40	128.58	119.70
26	LA	811	U	P-O3'-C3'	-7.40	110.82	119.70
26	LA	1400	U	N1-C2-O2	-7.40	117.62	122.80
25	LB	8	C	P-O5'-C5'	-7.40	109.06	120.90
26	LA	1021	A	C5'-C4'-C3'	-7.40	104.16	116.00
26	LA	1697	G	P-O5'-C5'	7.40	132.74	120.90
2	SA	201	G	N1-C2-N3	7.40	128.34	123.90
2	SA	697	U	C6-N1-C2	-7.40	116.56	121.00
2	SA	997	U	N3-C2-O2	-7.40	117.02	122.20
2	SA	1343	G	P-O3'-C3'	-7.40	110.82	119.70
26	LA	99	U	C5-C6-N1	7.40	126.40	122.70
26	LA	204	A	N1-C2-N3	-7.40	125.60	129.30
26	LA	1495	A	P-O3'-C3'	-7.40	110.82	119.70
26	LA	2455	G	C5'-C4'-C3'	-7.40	104.17	116.00
26	LA	1567	G	OP1-P-OP2	-7.40	108.51	119.60
2	SA	39	G	C4'-C3'-C2'	-7.39	95.20	102.60
2	SA	356	A	N9-C4-C5	7.39	108.76	105.80
2	SA	1034	G	C2-N3-C4	7.39	115.60	111.90
26	LA	74	A	C5-C6-N1	7.39	121.40	117.70
26	LA	1401	G	C3'-C2'-C1'	-7.39	95.58	101.50
26	LA	1659	G	N3-C2-N2	-7.39	114.72	119.90
26	LA	1676	A	O4'-C1'-N9	7.39	114.11	108.20
26	LA	2801	G	C4'-C3'-C2'	-7.39	95.21	102.60
27	LD	220	ARG	NE-CZ-NH1	-7.39	116.60	120.30
2	SA	551	U	C5-C6-N1	-7.39	119.00	122.70
2	SA	957	U	P-O3'-C3'	-7.39	110.83	119.70
2	SA	1230	C	O4'-C1'-N1	7.39	114.11	108.20
2	SA	1510	C	N1-C2-N3	7.39	124.38	119.20
26	LA	328	U	O4'-C1'-N1	7.39	114.11	108.20
26	LA	1930	G	C8-N9-C4	-7.39	103.44	106.40
26	LA	2123	G	N1-C6-O6	7.39	124.34	119.90
26	LA	2340	A	N7-C8-N9	7.39	117.50	113.80
2	SA	628	G	C5-N7-C8	-7.39	100.61	104.30
2	SA	650	G	C1'-O4'-C4'	-7.39	103.99	109.90
2	SA	843	U	C5'-C4'-C3'	-7.39	104.17	116.00
26	LA	2616	C	C5'-C4'-C3'	7.39	127.83	116.00
2	SA	639	G	C5-C6-N1	7.39	115.19	111.50
2	SA	847	G	N1-C2-N3	7.39	128.33	123.90
14	SN	48	GLN	N-CA-CB	-7.39	97.30	110.60
25	LB	6	G	C1'-O4'-C4'	-7.39	103.99	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	697	G	N1-C6-O6	7.39	124.33	119.90
26	LA	900	A	C5-N7-C8	-7.39	100.20	103.90
26	LA	1166	G	O4'-C1'-C2'	7.39	114.25	107.60
26	LA	1553	A	P-O5'-C5'	-7.39	109.08	120.90
26	LA	2187	U	N1-C2-O2	7.39	127.97	122.80
26	LA	2361	G	C5-N7-C8	7.39	108.00	104.30
26	LA	2577	A	P-O3'-C3'	-7.39	110.83	119.70
26	LA	2625	G	N3-C4-N9	7.39	130.43	126.00
26	LA	2697	G	C5-C6-O6	-7.39	124.17	128.60
26	LA	2791	G	N7-C8-N9	7.39	116.80	113.10
36	L2	56	ARG	NE-CZ-NH1	7.39	124.00	120.30
38	LE	128	ARG	NE-CZ-NH2	-7.39	116.61	120.30
2	SA	608	A	O4'-C1'-C2'	7.39	114.25	107.60
2	SA	649	A	O5'-P-OP1	-7.39	99.05	105.70
25	LB	97	C	N3-C4-C5	-7.39	118.94	121.90
26	LA	1382	G	C4-N9-C1'	7.39	136.10	126.50
26	LA	2623	G	N7-C8-N9	-7.39	109.41	113.10
26	LA	2743	U	C3'-C2'-C1'	7.39	107.41	101.50
2	SA	104	G	C5-C6-N1	-7.39	107.81	111.50
2	SA	519	C	C1'-O4'-C4'	-7.39	103.99	109.90
2	SA	1412	C	C5-C6-N1	7.39	124.69	121.00
26	LA	248	G	P-O5'-C5'	7.39	132.72	120.90
26	LA	2307	G	N9-C4-C5	7.39	108.36	105.40
26	LA	2855	C	C5-C6-N1	-7.39	117.31	121.00
47	LJ	50	TYR	CB-CG-CD1	7.39	125.43	121.00
2	SA	624	C	C1'-O4'-C4'	-7.38	103.99	109.90
2	SA	693	G	C4-N9-C1'	7.38	136.10	126.50
2	SA	748	G	C5'-C4'-C3'	7.38	127.81	116.00
2	SA	761	G	C4'-C3'-C2'	-7.38	95.22	102.60
25	LB	97	C	N3-C4-N4	7.38	123.17	118.00
26	LA	259	G	C5-N7-C8	-7.38	100.61	104.30
26	LA	318	C	O4'-C1'-N1	7.38	114.11	108.20
26	LA	927	A	C4-C5-C6	-7.38	113.31	117.00
26	LA	1334	G	C5-N7-C8	-7.38	100.61	104.30
26	LA	2530	A	N9-C4-C5	-7.38	102.85	105.80
2	SA	187	G	P-O3'-C3'	7.38	128.56	119.70
2	SA	990	C	O4'-C1'-N1	7.38	114.11	108.20
26	LA	406	G	N1-C2-N3	7.38	128.33	123.90
26	LA	2316	G	N3-C2-N2	-7.38	114.73	119.90
26	LA	2626	C	C2-N3-C4	-7.38	116.21	119.90
44	LF	79	ARG	NE-CZ-NH1	7.38	123.99	120.30
2	SA	544	G	O4'-C1'-N9	7.38	114.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	853	C	N3-C4-C5	-7.38	118.95	121.90
26	LA	1056	G	C8-N9-C4	-7.38	103.45	106.40
26	LA	2569	G	O5'-P-OP1	-7.38	99.06	105.70
26	LA	2655	G	C1'-O4'-C4'	-7.38	103.99	109.90
26	LA	2676	C	N3-C4-N4	7.38	123.17	118.00
26	LA	941	A	C5-N7-C8	-7.38	100.21	103.90
50	LL	120	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
54	LM	17	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
2	SA	266	G	N1-C2-N3	-7.38	119.47	123.90
12	SL	49	ARG	NE-CZ-NH2	7.38	123.99	120.30
26	LA	656	G	C2-N3-C4	7.38	115.59	111.90
26	LA	974	G	N7-C8-N9	7.38	116.79	113.10
26	LA	1104	C	C5'-C4'-O4'	7.38	117.95	109.10
26	LA	1129	A	C4-C5-N7	-7.38	107.01	110.70
26	LA	1631	G	C4'-C3'-C2'	-7.38	95.22	102.60
26	LA	2019	A	C6-N1-C2	-7.38	114.17	118.60
26	LA	2790	U	C5-C4-O4	-7.38	121.47	125.90
2	SA	64	G	N7-C8-N9	7.38	116.79	113.10
2	SA	332	G	P-O3'-C3'	7.38	128.55	119.70
2	SA	631	C	O4'-C1'-N1	7.38	114.10	108.20
2	SA	1526	G	N1-C6-O6	7.38	124.33	119.90
3	S1	14	G	C8-N9-C4	-7.38	103.45	106.40
4	S2	56	U	C2'-C3'-O3'	7.38	125.73	109.50
26	LA	145	C	C5'-C4'-O4'	7.38	117.95	109.10
26	LA	354	A	O4'-C1'-N9	7.38	114.10	108.20
26	LA	1090	A	C2-N3-C4	7.38	114.29	110.60
26	LA	2003	A	P-O3'-C3'	7.38	128.55	119.70
26	LA	2803	G	C4'-C3'-C2'	-7.38	95.22	102.60
2	SA	641	U	C4-C5-C6	-7.38	115.28	119.70
2	SA	1511	G	C5-C6-O6	-7.38	124.17	128.60
25	LB	64	G	N3-C4-C5	7.38	132.29	128.60
26	LA	2518	A	C5-C6-N6	-7.38	117.80	123.70
2	SA	1314	C	C4-C5-C6	7.37	121.09	117.40
26	LA	336	C	C1'-O4'-C4'	-7.37	104.00	109.90
26	LA	530	G	C4-C5-C6	7.37	123.22	118.80
26	LA	759	G	N3-C2-N2	7.37	125.06	119.90
26	LA	1879	C	C4-C5-C6	7.37	121.09	117.40
26	LA	2471	A	C4-C5-C6	-7.37	113.31	117.00
2	SA	376	G	C8-N9-C4	7.37	109.35	106.40
2	SA	439	U	O4'-C1'-N1	7.37	114.10	108.20
2	SA	1433	A	C5-N7-C8	-7.37	100.22	103.90
2	SA	1460	C	C3'-C2'-C1'	-7.37	95.60	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	9	G	N3-C2-N2	-7.37	114.74	119.90
26	LA	812	C	C2-N3-C4	-7.37	116.21	119.90
26	LA	912	C	O5'-P-OP1	-7.37	99.07	105.70
26	LA	977	G	C2-N3-C4	-7.37	108.21	111.90
26	LA	1001	A	N1-C6-N6	7.37	123.02	118.60
26	LA	2118	U	C4-C5-C6	-7.37	115.28	119.70
2	SA	1223	C	N3-C2-O2	7.37	127.06	121.90
12	SL	98	ARG	NE-CZ-NH1	7.37	123.98	120.30
26	LA	2160	C	N3-C4-C5	7.37	124.85	121.90
2	SA	171	A	N1-C6-N6	-7.37	114.18	118.60
2	SA	753	A	N1-C6-N6	7.37	123.02	118.60
26	LA	465	G	N3-C2-N2	7.37	125.06	119.90
26	LA	822	G	O4'-C1'-N9	7.37	114.09	108.20
26	LA	1114	C	C5-C6-N1	7.37	124.68	121.00
26	LA	1473	G	O4'-C1'-N9	7.37	114.10	108.20
26	LA	1649	G	C5-C6-N1	7.37	115.18	111.50
26	LA	1674	G	C2-N3-C4	-7.37	108.22	111.90
26	LA	1764	C	C5'-C4'-C3'	7.37	127.79	116.00
26	LA	1919	A	N1-C6-N6	7.37	123.02	118.60
26	LA	2279	G	O4'-C1'-N9	7.37	114.09	108.20
2	SA	1509	C	N1-C2-N3	7.37	124.36	119.20
26	LA	1351	C	P-O3'-C3'	7.37	128.54	119.70
2	SA	223	A	P-O5'-C5'	7.37	132.69	120.90
2	SA	847	G	N7-C8-N9	7.37	116.78	113.10
2	SA	935	A	O4'-C1'-N9	7.37	114.09	108.20
26	LA	516	C	C2-N3-C4	-7.37	116.22	119.90
26	LA	919	U	N3-C2-O2	7.37	127.36	122.20
26	LA	2689	U	C3'-C2'-C1'	-7.37	95.61	101.50
26	LA	2801	G	N1-C6-O6	7.37	124.32	119.90
2	SA	246	A	C2-N3-C4	7.36	114.28	110.60
2	SA	250	A	O4'-C1'-N9	7.36	114.09	108.20
2	SA	979	C	O4'-C1'-N1	7.36	114.09	108.20
2	SA	987	G	N1-C6-O6	7.36	124.32	119.90
26	LA	212	G	P-O5'-C5'	-7.36	109.12	120.90
26	LA	1705	A	C5-C6-N1	-7.36	114.02	117.70
26	LA	1731	G	O4'-C1'-N9	7.36	114.09	108.20
26	LA	2180	U	N3-C4-C5	-7.36	110.18	114.60
26	LA	2608	G	OP1-P-OP2	-7.36	108.56	119.60
26	LA	2667	C	P-O3'-C3'	-7.36	110.86	119.70
49	LK	7	TYR	CB-CG-CD2	-7.36	116.58	121.00
26	LA	1178	C	O4'-C1'-N1	7.36	114.09	108.20
2	SA	561	U	N3-C4-O4	7.36	124.55	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	567	G	N1-C6-O6	7.36	124.32	119.90
2	SA	1501	C	N3-C4-C5	7.36	124.84	121.90
26	LA	350	G	C4-C5-N7	7.36	113.74	110.80
26	LA	1854	A	OP1-P-OP2	-7.36	108.56	119.60
26	LA	1896	G	C4-C5-N7	-7.36	107.86	110.80
2	SA	136	C	C4-C5-C6	7.36	121.08	117.40
2	SA	1404	C	C5'-C4'-O4'	7.36	117.93	109.10
2	SA	1518	A	C8-N9-C4	7.36	108.74	105.80
26	LA	1648	U	N3-C4-O4	-7.36	114.25	119.40
26	LA	1936	A	N1-C2-N3	-7.36	125.62	129.30
2	SA	100	G	C5-C6-O6	-7.36	124.19	128.60
2	SA	698	G	C5-C6-N1	7.36	115.18	111.50
26	LA	1145	C	O4'-C1'-N1	7.36	114.09	108.20
26	LA	1151	A	N9-C4-C5	-7.36	102.86	105.80
26	LA	2646	C	N1-C2-O2	7.36	123.31	118.90
26	LA	2816	G	P-O3'-C3'	-7.36	110.87	119.70
2	SA	1245	C	C5'-C4'-O4'	7.36	117.93	109.10
2	SA	1444	U	O4'-C1'-N1	7.36	114.08	108.20
26	LA	1023	U	OP1-P-OP2	-7.36	108.57	119.60
26	LA	1376	C	C2-N3-C4	-7.36	116.22	119.90
26	LA	1811	G	C6-N1-C2	-7.36	120.69	125.10
26	LA	2024	G	C2-N3-C4	7.36	115.58	111.90
26	LA	2479	U	O4'-C1'-N1	7.36	114.08	108.20
26	LA	2713	U	O4'-C1'-N1	7.36	114.08	108.20
2	SA	1531	A	C4-C5-C6	7.35	120.68	117.00
26	LA	776	G	C6-C5-N7	-7.35	125.99	130.40
2	SA	810	C	C4-C5-C6	-7.35	113.72	117.40
2	SA	1104	G	C4-C5-N7	-7.35	107.86	110.80
2	SA	1292	G	C2-N3-C4	7.35	115.58	111.90
26	LA	416	U	N1-C2-O2	-7.35	117.65	122.80
26	LA	562	U	N1-C2-N3	7.35	119.31	114.90
26	LA	836	G	C8-N9-C4	-7.35	103.46	106.40
26	LA	1155	A	N1-C6-N6	-7.35	114.19	118.60
26	LA	1976	U	C5'-C4'-C3'	-7.35	104.24	116.00
26	LA	2060	A	C3'-C2'-C1'	-7.35	95.62	101.50
27	LD	269	ARG	NE-CZ-NH1	7.35	123.98	120.30
2	SA	1214	C	P-O3'-C3'	7.35	128.52	119.70
2	SA	1516	G	O4'-C1'-C2'	-7.35	98.45	105.80
26	LA	262	A	C4-C5-C6	7.35	120.67	117.00
26	LA	2162	G	C5'-C4'-C3'	7.35	127.76	116.00
2	SA	360	G	C5-C6-N1	7.35	115.17	111.50
2	SA	1170	A	N1-C6-N6	7.35	123.01	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	275	C	C5-C6-N1	-7.35	117.33	121.00
26	LA	1165	A	C1'-O4'-C4'	-7.35	104.02	109.90
26	LA	1637	A	C5-N7-C8	-7.35	100.22	103.90
26	LA	1775	U	N1-C2-N3	7.35	119.31	114.90
26	LA	1995	U	C6-N1-C1'	7.35	131.49	121.20
26	LA	2301	C	P-O3'-C3'	7.35	128.52	119.70
26	LA	2664	G	N3-C4-C5	-7.35	124.92	128.60
2	SA	145	G	O4'-C1'-N9	7.35	114.08	108.20
25	LB	11	C	C2-N3-C4	-7.35	116.23	119.90
26	LA	530	G	N3-C2-N2	-7.35	114.76	119.90
26	LA	930	G	C8-N9-C4	7.35	109.34	106.40
26	LA	2142	A	N7-C8-N9	7.35	117.47	113.80
26	LA	2158	A	C6-N1-C2	-7.35	114.19	118.60
26	LA	2444	G	C8-N9-C4	7.35	109.34	106.40
26	LA	2592	G	C6-C5-N7	-7.35	125.99	130.40
26	LA	2666	C	N3-C2-O2	-7.35	116.76	121.90
26	LA	832	U	C2-N3-C4	-7.35	122.59	127.00
26	LA	984	A	P-O3'-C3'	-7.35	110.89	119.70
2	SA	1008	U	N3-C4-C5	-7.34	110.19	114.60
2	SA	1277	C	C6-N1-C2	-7.34	117.36	120.30
18	SB	20	ARG	NE-CZ-NH1	7.34	123.97	120.30
26	LA	837	C	O4'-C1'-N1	7.34	114.08	108.20
26	LA	1139	G	C5-C6-O6	-7.34	124.19	128.60
26	LA	1187	G	O4'-C1'-C2'	7.34	114.21	107.60
26	LA	1531	C	C5'-C4'-C3'	7.34	127.75	116.00
26	LA	2053	G	O4'-C1'-N9	7.34	114.08	108.20
26	LA	2144	G	C5-C6-N1	-7.34	107.83	111.50
26	LA	2160	C	C4-C5-C6	-7.34	113.73	117.40
26	LA	2507	C	O5'-P-OP2	-7.34	99.09	105.70
2	SA	1423	G	O4'-C1'-N9	7.34	114.07	108.20
26	LA	555	G	C5-C6-O6	-7.34	124.19	128.60
26	LA	917	A	C5-C6-N6	7.34	129.57	123.70
26	LA	2472	G	N9-C4-C5	-7.34	102.46	105.40
2	SA	233	C	N3-C4-N4	7.34	123.14	118.00
2	SA	1148	U	C5'-C4'-O4'	7.34	117.91	109.10
2	SA	1406	U	C5-C4-O4	-7.34	121.50	125.90
2	SA	1434	A	C5-N7-C8	7.34	107.57	103.90
2	SA	1512	U	C2-N3-C4	-7.34	122.59	127.00
3	S1	34	U	C6-N1-C2	-7.34	116.59	121.00
26	LA	570	G	O4'-C1'-N9	7.34	114.07	108.20
26	LA	1043	C	C4-C5-C6	7.34	121.07	117.40
26	LA	2110	G	C1'-O4'-C4'	-7.34	104.03	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	342	C	C2-N1-C1'	7.34	126.87	118.80
2	SA	427	U	C5-C4-O4	-7.34	121.50	125.90
2	SA	679	C	C6-N1-C2	-7.34	117.36	120.30
2	SA	1359	C	C5'-C4'-O4'	7.34	117.91	109.10
2	SA	1448	C	C6-N1-C2	-7.34	117.36	120.30
26	LA	574	A	C8-N9-C1'	-7.34	114.49	127.70
26	LA	1071	G	O4'-C4'-C3'	7.34	111.97	106.10
26	LA	1978	A	C5-C6-N6	-7.34	117.83	123.70
26	LA	2260	C	P-O3'-C3'	-7.34	110.89	119.70
26	LA	2530	A	C5-C6-N6	-7.34	117.83	123.70
26	LA	2719	G	C5-C6-N1	-7.34	107.83	111.50
2	SA	289	G	C4-C5-N7	7.34	113.73	110.80
4	S2	22	A	C5-C6-N6	-7.34	117.83	123.70
25	LB	76	G	C2-N3-C4	7.34	115.57	111.90
26	LA	860	U	N1-C2-N3	7.34	119.30	114.90
26	LA	1413	A	C6-C5-N7	-7.34	127.16	132.30
26	LA	1761	C	C2-N1-C1'	7.34	126.87	118.80
2	SA	765	G	C5'-C4'-O4'	7.34	117.90	109.10
2	SA	1102	A	N3-C4-N9	7.34	133.27	127.40
26	LA	325	G	N1-C6-O6	7.34	124.30	119.90
26	LA	511	U	P-O5'-C5'	7.34	132.64	120.90
26	LA	1969	A	C4-C5-N7	7.34	114.37	110.70
26	LA	1971	U	N3-C2-O2	7.34	127.34	122.20
26	LA	2255	G	N7-C8-N9	-7.34	109.43	113.10
26	LA	961	C	OP1-P-OP2	-7.33	108.60	119.60
26	LA	2321	U	C6-N1-C1'	-7.33	110.93	121.20
2	SA	1122	U	N3-C4-O4	-7.33	114.27	119.40
26	LA	1643	G	C4-C5-N7	-7.33	107.87	110.80
26	LA	1746	A	N7-C8-N9	-7.33	110.13	113.80
26	LA	1772	A	C8-N9-C4	-7.33	102.87	105.80
26	LA	2320	U	N1-C2-O2	-7.33	117.67	122.80
26	LA	2571	U	P-O3'-C3'	7.33	128.50	119.70
27	LD	79	ARG	NE-CZ-NH1	7.33	123.97	120.30
54	LM	17	ARG	NE-CZ-NH1	7.33	123.97	120.30
2	SA	601	G	C4-C5-N7	7.33	113.73	110.80
2	SA	690	G	C5'-C4'-O4'	7.33	117.90	109.10
2	SA	961	U	O5'-C5'-C4'	7.33	125.63	111.70
2	SA	1100	C	N3-C4-C5	7.33	124.83	121.90
26	LA	136	G	O4'-C1'-N9	7.33	114.06	108.20
26	LA	848	C	C5-C4-N4	-7.33	115.07	120.20
26	LA	1211	C	N3-C4-C5	-7.33	118.97	121.90
26	LA	1216	G	C4-C5-N7	7.33	113.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1422	G	O4'-C1'-N9	7.33	114.07	108.20
26	LA	1717	A	C4'-C3'-C2'	-7.33	95.27	102.60
26	LA	2140	G	O4'-C4'-C3'	7.33	111.97	106.10
26	LA	2373	G	C6-C5-N7	7.33	134.80	130.40
26	LA	2665	A	C1'-O4'-C4'	-7.33	104.03	109.90
26	LA	2669	G	N1-C2-N3	-7.33	119.50	123.90
26	LA	2802	G	O4'-C1'-N9	7.33	114.07	108.20
2	SA	1107	C	P-O3'-C3'	-7.33	110.90	119.70
26	LA	387	U	N3-C4-C5	7.33	119.00	114.60
26	LA	783	A	C5-N7-C8	-7.33	100.23	103.90
26	LA	2531	A	C5'-C4'-C3'	-7.33	104.27	116.00
2	SA	711	G	C4'-C3'-C2'	-7.33	95.27	102.60
2	SA	1540	U	C2-N3-C4	-7.33	122.60	127.00
26	LA	752	A	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	783	A	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	1154	G	C5-C6-O6	-7.33	124.20	128.60
26	LA	1174	U	C3'-C2'-C1'	7.33	107.36	101.50
26	LA	1340	U	N3-C4-O4	7.33	124.53	119.40
26	LA	1807	G	N9-C4-C5	-7.33	102.47	105.40
26	LA	1839	G	C5-C6-O6	-7.33	124.20	128.60
26	LA	2050	C	C5-C4-N4	-7.33	115.07	120.20
2	SA	187	G	N9-C4-C5	-7.33	102.47	105.40
2	SA	425	G	C2-N3-C4	7.33	115.56	111.90
26	LA	107	G	OP1-P-OP2	-7.33	108.61	119.60
2	SA	505	G	C5'-C4'-O4'	7.33	117.89	109.10
4	S2	38	A	N1-C6-N6	-7.33	114.20	118.60
24	S3	582	TYR	CB-CG-CD2	-7.33	116.60	121.00
25	LB	102	G	N9-C4-C5	-7.33	102.47	105.40
26	LA	10	A	C5-C6-N6	7.33	129.56	123.70
26	LA	164	C	N1-C2-O2	7.33	123.30	118.90
26	LA	301	G	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	1295	C	C5-C6-N1	7.33	124.66	121.00
46	LH	54	ARG	NE-CZ-NH2	-7.33	116.64	120.30
2	SA	297	G	C5-C6-O6	7.32	132.99	128.60
2	SA	755	G	N1-C6-O6	-7.32	115.51	119.90
4	S2	21	U	N3-C4-O4	7.32	124.53	119.40
26	LA	304	U	P-O3'-C3'	-7.32	110.91	119.70
26	LA	1001	A	C4-C5-N7	7.32	114.36	110.70
26	LA	1699	G	C8-N9-C1'	-7.32	117.48	127.00
26	LA	2595	G	O4'-C1'-N9	7.32	114.06	108.20
2	SA	484	G	N3-C4-C5	-7.32	124.94	128.60
2	SA	1462	C	C5-C6-N1	-7.32	117.34	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	31	C	N3-C4-C5	7.32	124.83	121.90
26	LA	224	U	O4'-C1'-N1	7.32	114.06	108.20
26	LA	285	G	C4-C5-N7	7.32	113.73	110.80
26	LA	665	U	O4'-C1'-N1	7.32	114.06	108.20
26	LA	2111	U	C5'-C4'-O4'	7.32	117.89	109.10
26	LA	2415	G	C5'-C4'-O4'	7.32	117.89	109.10
2	SA	649	A	C6-N1-C2	-7.32	114.21	118.60
2	SA	1105	A	C4-C5-N7	-7.32	107.04	110.70
2	SA	1532	U	C5'-C4'-O4'	7.32	117.89	109.10
25	LB	85	G	C4'-C3'-C2'	7.32	109.92	102.60
26	LA	741	U	C5'-C4'-C3'	-7.32	104.29	116.00
26	LA	1758	U	C5'-C4'-C3'	7.32	127.71	116.00
2	SA	511	C	N3-C4-N4	7.32	123.12	118.00
2	SA	925	G	P-O5'-C5'	7.32	132.61	120.90
2	SA	1154	G	C6-N1-C2	7.32	129.49	125.10
26	LA	1111	A	C4-C5-N7	-7.32	107.04	110.70
26	LA	1507	C	P-O3'-C3'	7.32	128.48	119.70
2	SA	418	C	C5-C4-N4	-7.32	115.08	120.20
2	SA	814	A	N9-C4-C5	-7.32	102.87	105.80
2	SA	1427	C	N1-C2-N3	7.32	124.32	119.20
26	LA	1992	G	C8-N9-C4	-7.32	103.47	106.40
26	LA	2320	U	C6-N1-C2	-7.32	116.61	121.00
26	LA	2420	C	O4'-C1'-N1	7.32	114.05	108.20
38	LE	127	PHE	CB-CG-CD2	7.32	125.92	120.80
2	SA	76	G	O4'-C1'-N9	7.32	114.05	108.20
2	SA	91	U	N3-C4-O4	7.32	124.52	119.40
2	SA	147	G	N9-C4-C5	-7.32	102.47	105.40
2	SA	148	G	C8-N9-C1'	7.32	136.51	127.00
2	SA	158	G	O4'-C4'-C3'	-7.32	96.69	104.00
2	SA	316	C	O4'-C1'-N1	7.32	114.05	108.20
2	SA	1239	A	C5-C6-N6	-7.32	117.85	123.70
21	SE	94	PHE	CB-CG-CD2	-7.32	115.68	120.80
25	LB	4	C	C6-N1-C2	-7.32	117.37	120.30
25	LB	92	C	C5-C6-N1	-7.32	117.34	121.00
26	LA	1376	C	C2-N1-C1'	-7.32	110.75	118.80
26	LA	1520	U	C2-N3-C4	-7.32	122.61	127.00
26	LA	1646	C	N1-C2-O2	7.32	123.29	118.90
26	LA	2709	G	C5-C6-N1	7.32	115.16	111.50
34	L0	22	LEU	C-N-CA	7.32	139.99	121.70
2	SA	612	C	N1-C2-N3	7.31	124.32	119.20
25	LB	84	G	N3-C4-N9	7.31	130.39	126.00
26	LA	1106	G	C6-N1-C2	-7.31	120.71	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1275	A	C5'-C4'-O4'	7.31	117.88	109.10
2	SA	51	A	C6-N1-C2	7.31	122.99	118.60
2	SA	320	A	C5-N7-C8	-7.31	100.24	103.90
2	SA	463	U	N3-C4-O4	7.31	124.52	119.40
4	S2	15	G	C5-C6-O6	-7.31	124.21	128.60
4	S2	19	G	C4'-C3'-C2'	-7.31	95.29	102.60
26	LA	525	U	O4'-C1'-N1	7.31	114.05	108.20
26	LA	586	A	C5-N7-C8	7.31	107.56	103.90
26	LA	759	G	C8-N9-C4	7.31	109.33	106.40
26	LA	2002	G	N3-C2-N2	7.31	125.02	119.90
40	L4	19	PHE	CB-CG-CD2	-7.31	115.68	120.80
26	LA	248	G	C5-C6-O6	-7.31	124.21	128.60
26	LA	420	C	O4'-C1'-N1	7.31	114.05	108.20
26	LA	2144	G	C5-C6-O6	-7.31	124.21	128.60
2	SA	70	U	O4'-C1'-N1	7.31	114.05	108.20
2	SA	215	C	O4'-C1'-N1	7.31	114.05	108.20
2	SA	439	U	C2-N3-C4	-7.31	122.61	127.00
2	SA	512	U	C5-C4-O4	7.31	130.29	125.90
2	SA	732	C	C4-C5-C6	7.31	121.06	117.40
26	LA	2553	G	C1'-O4'-C4'	-7.31	104.05	109.90
26	LA	2803	G	O4'-C1'-N9	7.31	114.05	108.20
26	LA	2877	G	C2-N3-C4	7.31	115.56	111.90
2	SA	78	A	C4-C5-C6	7.31	120.65	117.00
2	SA	325	A	O4'-C1'-N9	7.31	114.05	108.20
2	SA	443	C	C5-C6-N1	7.31	124.65	121.00
2	SA	963	G	C5-C6-O6	-7.31	124.22	128.60
2	SA	1534	A	N1-C6-N6	-7.31	114.22	118.60
26	LA	1229	C	N3-C4-N4	-7.31	112.88	118.00
26	LA	1568	G	C5'-C4'-C3'	-7.31	104.31	116.00
26	LA	2067	G	C5'-C4'-C3'	-7.31	104.31	116.00
26	LA	2291	U	C2-N3-C4	-7.31	122.62	127.00
2	SA	133	U	O4'-C1'-N1	7.31	114.05	108.20
26	LA	882	G	C4'-C3'-C2'	-7.31	95.29	102.60
26	LA	1567	G	O4'-C1'-N9	7.31	114.05	108.20
26	LA	2737	G	C6-C5-N7	-7.31	126.02	130.40
26	LA	2786	U	N3-C2-O2	-7.31	117.09	122.20
2	SA	394	G	N1-C2-N2	-7.30	109.63	116.20
2	SA	412	A	N1-C2-N3	-7.30	125.65	129.30
26	LA	931	U	C5'-C4'-C3'	7.30	127.69	116.00
26	LA	1507	C	N3-C4-N4	7.30	123.11	118.00
26	LA	2522	U	N3-C4-O4	7.30	124.51	119.40
26	LA	2761	A	O4'-C1'-N9	7.30	114.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	10	G	N9-C4-C5	7.30	108.32	105.40
26	LA	350	G	C5'-C4'-C3'	-7.30	104.31	116.00
26	LA	830	G	N3-C2-N2	7.30	125.01	119.90
26	LA	910	A	P-O3'-C3'	7.30	128.46	119.70
2	SA	4	U	C6-N1-C2	-7.30	116.62	121.00
2	SA	1273	C	C1'-O4'-C4'	-7.30	104.06	109.90
4	S2	36	A	N1-C6-N6	7.30	122.98	118.60
26	LA	688	U	N1-C2-O2	-7.30	117.69	122.80
26	LA	886	A	C4'-C3'-C2'	-7.30	95.30	102.60
26	LA	960	A	C3'-C2'-C1'	7.30	107.34	101.50
2	SA	485	U	C2'-C3'-O3'	7.30	125.56	109.50
2	SA	647	C	N3-C4-C5	-7.30	118.98	121.90
2	SA	979	C	C6-N1-C2	-7.30	117.38	120.30
26	LA	121	G	O4'-C1'-N9	7.30	114.04	108.20
26	LA	505	A	N1-C2-N3	-7.30	125.65	129.30
26	LA	546	U	C4'-C3'-C2'	7.30	109.90	102.60
26	LA	1219	U	C5-C6-N1	-7.30	119.05	122.70
26	LA	1991	U	N3-C4-C5	-7.30	110.22	114.60
26	LA	2119	A	C3'-C2'-C1'	7.30	107.34	101.50
2	SA	462	G	C5-C6-N1	7.30	115.15	111.50
26	LA	80	G	O4'-C1'-N9	7.30	114.04	108.20
26	LA	543	G	C4-C5-N7	7.30	113.72	110.80
26	LA	612	G	O5'-P-OP1	7.30	119.46	110.70
26	LA	635	C	P-O5'-C5'	7.30	132.58	120.90
26	LA	2661	G	C8-N9-C4	7.30	109.32	106.40
2	SA	275	G	C4-N9-C1'	7.30	135.99	126.50
2	SA	1302	C	C5'-C4'-C3'	-7.30	104.33	116.00
2	SA	1400	C	O4'-C4'-C3'	7.30	111.94	106.10
2	SA	1484	C	N3-C4-N4	7.30	123.11	118.00
25	LB	71	C	C5-C4-N4	7.30	125.31	120.20
26	LA	763	G	C8-N9-C4	7.30	109.32	106.40
26	LA	2524	G	N3-C2-N2	7.30	125.01	119.90
2	SA	377	G	P-O3'-C3'	-7.29	110.95	119.70
2	SA	604	G	C4'-C3'-C2'	-7.29	95.31	102.60
2	SA	908	A	C2-N3-C4	7.29	114.25	110.60
26	LA	1096	A	P-O3'-C3'	-7.29	110.95	119.70
26	LA	1461	C	C2-N3-C4	-7.29	116.25	119.90
18	SB	185	ILE	N-CA-C	-7.29	91.31	111.00
26	LA	219	A	N1-C6-N6	7.29	122.98	118.60
26	LA	922	C	N3-C2-O2	-7.29	116.79	121.90
26	LA	1979	U	C4'-C3'-C2'	-7.29	95.31	102.60
26	LA	2382	G	C5'-C4'-C3'	-7.29	104.33	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	584	G	N7-C8-N9	7.29	116.75	113.10
2	SA	1510	C	C6-N1-C2	-7.29	117.38	120.30
3	S1	19	A	C5-N7-C8	-7.29	100.25	103.90
9	SI	105	ARG	NH1-CZ-NH2	-7.29	111.38	119.40
25	LB	88	C	O4'-C1'-N1	7.29	114.03	108.20
26	LA	713	G	C5-C6-N1	-7.29	107.85	111.50
26	LA	1142	A	C5-C6-N6	-7.29	117.87	123.70
26	LA	1180	U	N3-C2-O2	-7.29	117.10	122.20
26	LA	1567	G	C6-N1-C2	-7.29	120.73	125.10
26	LA	1581	G	C4-C5-C6	-7.29	114.42	118.80
26	LA	2774	C	O4'-C1'-N1	7.29	114.03	108.20
2	SA	428	G	C4-C5-N7	7.29	113.72	110.80
2	SA	1070	U	C2-N3-C4	-7.29	122.63	127.00
2	SA	1070	U	N1-C2-N3	7.29	119.27	114.90
3	S1	24	A	N7-C8-N9	7.29	117.44	113.80
25	LB	13	G	N3-C2-N2	7.29	125.00	119.90
25	LB	56	G	C6-C5-N7	7.29	134.77	130.40
26	LA	1642	G	C4-C5-C6	-7.29	114.43	118.80
43	L7	19	ARG	NE-CZ-NH2	-7.29	116.66	120.30
2	SA	85	U	N1-C2-O2	7.29	127.90	122.80
2	SA	921	U	C2-N3-C4	7.29	131.37	127.00
25	LB	49	C	C3'-C2'-C1'	7.29	107.33	101.50
26	LA	47	C	C5-C6-N1	7.29	124.64	121.00
26	LA	145	C	P-O3'-C3'	-7.29	110.95	119.70
26	LA	569	U	C4-C5-C6	-7.29	115.33	119.70
26	LA	774	G	C5'-C4'-C3'	-7.29	104.34	116.00
26	LA	2437	G	C2'-C3'-O3'	7.29	125.54	109.50
2	SA	390	U	C1'-O4'-C4'	-7.29	104.07	109.90
26	LA	889	C	C5'-C4'-C3'	-7.29	104.34	116.00
26	LA	1983	G	C4-C5-C6	7.29	123.17	118.80
26	LA	2763	G	C4-C5-N7	7.29	113.72	110.80
27	LD	237	ARG	NE-CZ-NH1	7.29	123.94	120.30
2	SA	416	G	C4-C5-N7	-7.29	107.89	110.80
2	SA	669	G	P-O3'-C3'	-7.29	110.96	119.70
2	SA	938	A	P-O3'-C3'	7.29	128.44	119.70
2	SA	1105	A	N9-C4-C5	7.29	108.71	105.80
2	SA	1155	A	C5'-C4'-O4'	7.29	117.84	109.10
3	S1	31	U	OP1-P-OP2	-7.29	108.67	119.60
26	LA	456	C	P-O5'-C5'	7.29	132.56	120.90
26	LA	715	A	OP1-P-OP2	-7.29	108.67	119.60
26	LA	1038	G	C5-C6-O6	-7.29	124.23	128.60
26	LA	1515	A	C6-N1-C2	-7.29	114.23	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1726	C	C4-C5-C6	7.29	121.04	117.40
26	LA	2103	C	C4-C5-C6	7.29	121.04	117.40
26	LA	2744	G	N9-C4-C5	7.29	108.31	105.40
2	SA	108	G	O4'-C1'-N9	7.28	114.03	108.20
2	SA	868	C	N3-C2-O2	-7.28	116.80	121.90
2	SA	1131	G	C8-N9-C4	-7.28	103.49	106.40
2	SA	1325	C	O4'-C1'-N1	7.28	114.03	108.20
26	LA	766	U	P-O3'-C3'	7.28	128.44	119.70
26	LA	805	G	N3-C2-N2	7.28	125.00	119.90
26	LA	1626	A	C5'-C4'-C3'	-7.28	104.35	116.00
26	LA	2028	U	C3'-C2'-C1'	7.28	107.33	101.50
26	LA	2304	G	O4'-C1'-N9	7.28	114.03	108.20
26	LA	2710	C	N3-C4-C5	-7.28	118.99	121.90
2	SA	201	G	N1-C6-O6	7.28	124.27	119.90
2	SA	376	G	C4-C5-N7	7.28	113.71	110.80
26	LA	2312	U	C5'-C4'-O4'	7.28	117.84	109.10
2	SA	164	G	C5'-C4'-O4'	7.28	117.84	109.10
2	SA	288	A	N1-C2-N3	-7.28	125.66	129.30
2	SA	1127	G	C5-C6-O6	-7.28	124.23	128.60
2	SA	1337	G	O5'-P-OP1	7.28	119.44	110.70
3	S1	34	U	C5'-C4'-O4'	7.28	117.84	109.10
26	LA	647	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	1559	U	N1-C2-N3	7.28	119.27	114.90
26	LA	1782	U	N1-C2-N3	7.28	119.27	114.90
26	LA	1904	G	C4-C5-N7	7.28	113.71	110.80
26	LA	1908	C	N3-C4-C5	7.28	124.81	121.90
26	LA	2330	G	N1-C6-O6	7.28	124.27	119.90
26	LA	1118	C	C5-C6-N1	-7.28	117.36	121.00
26	LA	2427	C	C6-N1-C2	-7.28	117.39	120.30
2	SA	387	U	O4'-C1'-N1	7.28	114.02	108.20
2	SA	640	A	O3'-P-O5'	7.28	117.83	104.00
2	SA	1025	U	C5-C4-O4	-7.28	121.53	125.90
2	SA	1046	A	N9-C4-C5	-7.28	102.89	105.80
2	SA	1124	G	N3-C2-N2	7.28	124.99	119.90
2	SA	1153	G	C6-C5-N7	-7.28	126.03	130.40
26	LA	2206	C	C5-C6-N1	7.28	124.64	121.00
26	LA	2279	G	N3-C4-N9	7.28	130.37	126.00
26	LA	2589	A	C5-C6-N1	-7.28	114.06	117.70
26	LA	2597	G	N9-C4-C5	-7.28	102.49	105.40
2	SA	1457	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	903	C	P-O3'-C3'	-7.28	110.97	119.70
26	LA	986	C	P-O5'-C5'	7.28	132.54	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1750	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	1914	C	O4'-C1'-C2'	-7.28	98.53	105.80
26	LA	2207	C	C5-C4-N4	-7.28	115.11	120.20
26	LA	2568	U	O4'-C1'-N1	7.28	114.02	108.20
26	LA	2648	G	P-O5'-C5'	-7.28	109.26	120.90
2	SA	443	C	C5'-C4'-O4'	7.27	117.83	109.10
26	LA	251	A	C6-N1-C2	7.27	122.97	118.60
26	LA	762	U	N1-C2-O2	7.27	127.89	122.80
26	LA	1385	A	C5'-C4'-C3'	-7.27	104.36	116.00
26	LA	2717	C	N1-C2-N3	7.27	124.29	119.20
2	SA	511	C	N1-C2-O2	7.27	123.26	118.90
26	LA	259	G	O4'-C1'-N9	7.27	114.02	108.20
26	LA	952	G	C8-N9-C4	7.27	109.31	106.40
26	LA	1483	G	N3-C4-N9	7.27	130.36	126.00
26	LA	1508	A	O4'-C1'-N9	7.27	114.02	108.20
26	LA	1631	G	N3-C2-N2	-7.27	114.81	119.90
26	LA	1726	C	O5'-P-OP1	-7.27	99.16	105.70
26	LA	2391	G	C4-C5-N7	7.27	113.71	110.80
26	LA	2475	C	O4'-C1'-C2'	7.27	114.15	107.60
26	LA	2626	C	N3-C2-O2	-7.27	116.81	121.90
2	SA	1381	U	C5-C6-N1	7.27	126.34	122.70
26	LA	261	G	N7-C8-N9	-7.27	109.47	113.10
26	LA	351	C	N1-C2-N3	-7.27	114.11	119.20
26	LA	1205	A	O4'-C1'-N9	7.27	114.02	108.20
2	SA	172	A	C8-N9-C4	-7.27	102.89	105.80
2	SA	774	G	C4-C5-C6	-7.27	114.44	118.80
2	SA	893	C	C5-C6-N1	7.27	124.63	121.00
26	LA	1609	A	P-O3'-C3'	7.27	128.42	119.70
26	LA	1696	G	OP1-P-OP2	-7.27	108.69	119.60
26	LA	2714	G	C8-N9-C4	7.27	109.31	106.40
56	LR	71	ARG	NE-CZ-NH1	7.27	123.94	120.30
2	SA	583	A	O4'-C1'-N9	7.27	114.02	108.20
2	SA	612	C	O4'-C1'-N1	7.27	114.01	108.20
2	SA	1424	U	N3-C4-C5	7.27	118.96	114.60
26	LA	405	U	C5'-C4'-C3'	7.27	127.63	116.00
26	LA	1121	C	O4'-C1'-N1	7.27	114.01	108.20
26	LA	1232	G	C8-N9-C4	-7.27	103.49	106.40
26	LA	2429	G	P-O5'-C5'	-7.27	109.27	120.90
26	LA	2663	G	C5'-C4'-O4'	7.27	117.82	109.10
2	SA	346	G	C6-N1-C2	-7.27	120.74	125.10
25	LB	104	A	C8-N9-C4	7.27	108.71	105.80
26	LA	279	A	C5'-C4'-C3'	7.27	127.62	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1350	C	C2-N3-C4	-7.27	116.27	119.90
26	LA	1960	A	C2-N3-C4	-7.27	106.97	110.60
2	SA	782	A	N7-C8-N9	-7.26	110.17	113.80
2	SA	829	G	C6-C5-N7	7.26	134.76	130.40
2	SA	1186	G	N1-C6-O6	7.26	124.26	119.90
4	S2	8	U	N3-C2-O2	7.26	127.29	122.20
26	LA	2671	G	N1-C6-O6	-7.26	115.54	119.90
26	LA	2728	U	C6-N1-C2	-7.26	116.64	121.00
2	SA	120	A	C5'-C4'-O4'	7.26	117.81	109.10
2	SA	562	U	C3'-C2'-C1'	-7.26	95.69	101.50
2	SA	1015	G	N1-C6-O6	7.26	124.26	119.90
2	SA	1398	A	C6-N1-C2	-7.26	114.24	118.60
4	S2	1	C	C2-N1-C1'	7.26	126.79	118.80
26	LA	503	A	P-O3'-C3'	7.26	128.41	119.70
26	LA	664	G	O4'-C1'-N9	7.26	114.01	108.20
2	SA	61	G	C6-C5-N7	-7.26	126.04	130.40
2	SA	110	C	C6-N1-C1'	-7.26	112.09	120.80
2	SA	365	U	C1'-O4'-C4'	-7.26	104.09	109.90
2	SA	941	G	N1-C2-N3	7.26	128.26	123.90
2	SA	1416	G	N3-C4-C5	-7.26	124.97	128.60
2	SA	1473	G	C6-C5-N7	7.26	134.76	130.40
26	LA	2456	C	N3-C2-O2	-7.26	116.82	121.90
26	LA	2835	A	N1-C2-N3	7.26	132.93	129.30
26	LA	2893	A	O4'-C1'-N9	7.26	114.01	108.20
2	SA	23	C	N3-C4-C5	-7.26	119.00	121.90
2	SA	340	U	O4'-C1'-N1	7.26	114.01	108.20
2	SA	1411	C	C4'-C3'-C2'	-7.26	95.34	102.60
25	LB	2	G	N9-C4-C5	7.26	108.30	105.40
26	LA	214	G	C5-N7-C8	-7.26	100.67	104.30
26	LA	1045	C	C6-N1-C1'	-7.26	112.09	120.80
26	LA	1158	C	P-O5'-C5'	-7.26	109.28	120.90
26	LA	1423	G	O4'-C4'-C3'	7.26	111.91	106.10
26	LA	1522	A	C8-N9-C4	7.26	108.70	105.80
26	LA	2159	G	C5'-C4'-O4'	7.26	117.81	109.10
26	LA	2657	A	O4'-C1'-N9	7.26	114.01	108.20
2	SA	99	C	O4'-C1'-N1	7.26	114.01	108.20
2	SA	699	C	N1-C2-O2	7.26	123.25	118.90
2	SA	942	G	C2-N3-C4	7.26	115.53	111.90
26	LA	1178	C	C2-N3-C4	-7.26	116.27	119.90
27	LD	86	ARG	NE-CZ-NH2	-7.26	116.67	120.30
2	SA	1141	C	P-O3'-C3'	-7.26	110.99	119.70
26	LA	752	A	C5'-C4'-C3'	7.26	127.61	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1539	U	P-O3'-C3'	-7.26	110.99	119.70
26	LA	1603	A	O4'-C1'-N9	7.26	114.00	108.20
26	LA	2405	G	C4-C5-N7	7.26	113.70	110.80
26	LA	900	A	C4'-C3'-C2'	-7.25	95.34	102.60
26	LA	1618	C	C6-N1-C2	-7.25	117.40	120.30
2	SA	265	G	N7-C8-N9	7.25	116.73	113.10
2	SA	475	C	N1-C2-O2	7.25	123.25	118.90
2	SA	519	C	C2-N3-C4	-7.25	116.27	119.90
2	SA	955	U	C5-C6-N1	-7.25	119.07	122.70
26	LA	189	G	N9-C1'-C2'	-7.25	104.02	112.00
26	LA	281	C	O4'-C1'-N1	7.25	114.00	108.20
26	LA	562	U	O4'-C1'-N1	7.25	114.00	108.20
26	LA	662	G	C8-N9-C4	7.25	109.30	106.40
26	LA	697	G	P-O3'-C3'	7.25	128.41	119.70
26	LA	1398	C	C3'-C2'-C1'	7.25	107.30	101.50
26	LA	1494	A	P-O5'-C5'	7.25	132.50	120.90
26	LA	1843	C	C2-N3-C4	-7.25	116.27	119.90
2	SA	196	A	P-O3'-C3'	-7.25	111.00	119.70
2	SA	1337	G	C5-C6-O6	-7.25	124.25	128.60
2	SA	1355	G	C5-C6-O6	-7.25	124.25	128.60
4	S2	28	U	N1-C2-N3	-7.25	110.55	114.90
26	LA	1253	A	C4-C5-C6	-7.25	113.38	117.00
26	LA	2521	C	N3-C2-O2	-7.25	116.83	121.90
26	LA	2654	A	C5-C6-N6	7.25	129.50	123.70
26	LA	2844	G	N1-C2-N2	7.25	122.73	116.20
26	LA	169	G	C6-C5-N7	7.25	134.75	130.40
26	LA	491	G	C5-N7-C8	-7.25	100.67	104.30
26	LA	2408	U	C6-N1-C2	-7.25	116.65	121.00
2	SA	1527	U	C1'-O4'-C4'	7.25	115.70	109.90
26	LA	690	G	C4-N9-C1'	7.25	135.92	126.50
26	LA	749	A	P-O3'-C3'	-7.25	111.00	119.70
26	LA	763	G	C4'-C3'-C2'	-7.25	95.35	102.60
26	LA	1641	A	C5-C6-N1	-7.25	114.08	117.70
26	LA	1992	G	N1-C2-N2	7.25	122.72	116.20
26	LA	2830	C	C5'-C4'-O4'	7.25	117.80	109.10
46	LH	42	VAL	CA-CB-CG2	-7.25	100.03	110.90
2	SA	838	G	C5-N7-C8	-7.25	100.68	104.30
2	SA	1481	U	N3-C4-O4	-7.25	114.33	119.40
6	SU	8	ASN	N-CA-CB	7.25	123.64	110.60
26	LA	655	A	C2-N3-C4	-7.25	106.98	110.60
26	LA	807	U	N3-C4-O4	-7.25	114.33	119.40
26	LA	878	A	C8-N9-C4	-7.25	102.90	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1195	G	O4'-C1'-N9	7.25	114.00	108.20
26	LA	1200	C	O3'-P-O5'	7.25	117.77	104.00
26	LA	1328	A	C5-C6-N6	7.25	129.50	123.70
26	LA	1450	G	N3-C4-C5	-7.25	124.98	128.60
26	LA	2153	C	P-O5'-C5'	-7.25	109.31	120.90
26	LA	2285	C	C1'-O4'-C4'	-7.25	104.10	109.90
26	LA	2754	U	C2-N3-C4	-7.25	122.65	127.00
2	SA	849	G	N7-C8-N9	-7.25	109.48	113.10
2	SA	1412	C	C4'-C3'-C2'	-7.25	95.36	102.60
26	LA	144	A	C2-N3-C4	7.25	114.22	110.60
26	LA	445	C	C2-N3-C4	-7.25	116.28	119.90
2	SA	131	A	C4-C5-N7	-7.24	107.08	110.70
2	SA	367	U	N1-C2-O2	7.24	127.87	122.80
2	SA	1181	G	N3-C2-N2	-7.24	114.83	119.90
2	SA	1269	A	C8-N9-C4	7.24	108.70	105.80
3	S1	22	G	O4'-C1'-N9	7.24	113.99	108.20
25	LB	35	C	C5-C4-N4	-7.24	115.13	120.20
26	LA	448	U	N3-C4-O4	7.24	124.47	119.40
26	LA	784	G	N1-C2-N3	-7.24	119.55	123.90
26	LA	1169	A	N3-C4-C5	-7.24	121.73	126.80
26	LA	1219	U	C5'-C4'-O4'	7.24	117.79	109.10
26	LA	2870	C	C2-N1-C1'	-7.24	110.83	118.80
2	SA	1405	G	C5'-C4'-C3'	7.24	127.59	116.00
22	SF	24	ARG	NE-CZ-NH2	-7.24	116.68	120.30
26	LA	334	C	N3-C4-C5	7.24	124.80	121.90
26	LA	1503	A	C5-C6-N1	7.24	121.32	117.70
2	SA	533	A	C8-N9-C4	7.24	108.70	105.80
2	SA	867	G	N1-C6-O6	7.24	124.25	119.90
26	LA	415	A	C5-N7-C8	7.24	107.52	103.90
26	LA	1567	G	C1'-O4'-C4'	-7.24	104.11	109.90
26	LA	1833	C	N3-C4-C5	-7.24	119.00	121.90
55	LQ	91	SER	N-CA-CB	7.24	121.36	110.50
2	SA	141	G	C5-C6-O6	-7.24	124.26	128.60
2	SA	1178	G	C4-C5-C6	-7.24	114.46	118.80
26	LA	180	G	O4'-C4'-C3'	-7.24	96.76	104.00
26	LA	361	G	C5-C6-O6	-7.24	124.26	128.60
26	LA	946	C	C4-C5-C6	7.24	121.02	117.40
26	LA	1946	U	N1-C2-O2	-7.24	117.73	122.80
26	LA	2234	G	N3-C4-N9	-7.24	121.66	126.00
26	LA	2337	G	N3-C4-N9	7.24	130.34	126.00
26	LA	2624	G	N7-C8-N9	-7.24	109.48	113.10
2	SA	477	C	P-O3'-C3'	-7.24	111.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	260	G	N1-C6-O6	-7.24	115.56	119.90
2	SA	148	G	O4'-C4'-C3'	-7.24	96.77	104.00
2	SA	606	G	N1-C2-N3	-7.24	119.56	123.90
26	LA	2293	G	C6-C5-N7	-7.24	126.06	130.40
26	LA	2667	C	C2-N3-C4	-7.24	116.28	119.90
26	LA	1416	G	C5-N7-C8	-7.23	100.68	104.30
26	LA	1757	A	C4-C5-C6	-7.23	113.38	117.00
2	SA	1211	U	O4'-C1'-N1	7.23	113.99	108.20
26	LA	80	G	C1'-O4'-C4'	-7.23	104.11	109.90
26	LA	1602	U	C5-C4-O4	-7.23	121.56	125.90
26	LA	2702	G	N7-C8-N9	-7.23	109.48	113.10
26	LA	2851	A	C6-N1-C2	-7.23	114.26	118.60
2	SA	753	A	C5-N7-C8	-7.23	100.28	103.90
2	SA	1178	G	C8-N9-C4	7.23	109.29	106.40
2	SA	1271	A	O4'-C1'-N9	7.23	113.98	108.20
2	SA	1274	A	P-O5'-C5'	7.23	132.47	120.90
2	SA	1280	A	N1-C6-N6	-7.23	114.26	118.60
26	LA	38	A	P-O5'-C5'	7.23	132.47	120.90
26	LA	2163	A	N7-C8-N9	7.23	117.42	113.80
26	LA	2476	A	N3-C4-C5	7.23	131.86	126.80
2	SA	944	G	C4-N9-C1'	7.23	135.90	126.50
9	SI	46	VAL	CA-CB-CG1	-7.23	100.06	110.90
20	SD	153	ARG	NE-CZ-NH1	7.23	123.91	120.30
26	LA	212	G	C8-N9-C4	-7.23	103.51	106.40
26	LA	1944	U	C5-C4-O4	-7.23	121.56	125.90
26	LA	2499	C	C4-C5-C6	7.23	121.02	117.40
2	SA	116	A	O4'-C1'-N9	7.23	113.98	108.20
2	SA	276	G	C6-C5-N7	-7.23	126.06	130.40
2	SA	311	C	C5'-C4'-O4'	7.23	117.77	109.10
2	SA	1262	C	C6-N1-C2	-7.23	117.41	120.30
7	SG	43	TYR	CB-CG-CD1	7.23	125.34	121.00
21	SE	127	TYR	CB-CG-CD2	-7.23	116.66	121.00
26	LA	396	G	C6-N1-C2	-7.23	120.76	125.10
26	LA	953	G	C4-N9-C1'	-7.23	117.10	126.50
26	LA	1299	G	C2-N3-C4	-7.23	108.29	111.90
26	LA	1483	G	C8-N9-C4	-7.23	103.51	106.40
26	LA	1928	A	C5-C6-N6	-7.23	117.92	123.70
2	SA	482	A	C6-N1-C2	-7.23	114.26	118.60
2	SA	877	G	C5'-C4'-C3'	7.23	127.56	116.00
26	LA	63	A	C5-C6-N6	7.23	129.48	123.70
26	LA	326	G	C6-N1-C2	-7.23	120.76	125.10
26	LA	1727	C	N3-C2-O2	-7.23	116.84	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1828	G	C6-C5-N7	-7.23	126.06	130.40
26	LA	2055	C	OP1-P-OP2	-7.23	108.76	119.60
2	SA	398	U	C5-C6-N1	7.22	126.31	122.70
2	SA	1166	G	N1-C2-N3	7.22	128.23	123.90
2	SA	1292	G	O4'-C1'-N9	7.22	113.98	108.20
2	SA	1399	C	P-O3'-C3'	7.22	128.37	119.70
13	SM	78	ARG	NE-CZ-NH2	7.22	123.91	120.30
17	SQ	71	SER	N-CA-CB	-7.22	99.66	110.50
26	LA	507	A	N7-C8-N9	-7.22	110.19	113.80
26	LA	720	U	C5-C6-N1	-7.22	119.09	122.70
26	LA	1075	C	O4'-C1'-N1	7.22	113.98	108.20
26	LA	1250	G	C5'-C4'-O4'	7.22	117.77	109.10
26	LA	1719	G	N1-C2-N3	-7.22	119.56	123.90
26	LA	1792	G	C4-C5-N7	-7.22	107.91	110.80
26	LA	2073	C	N3-C4-N4	7.22	123.06	118.00
26	LA	2092	U	P-O5'-C5'	-7.22	109.34	120.90
26	LA	2126	A	C1'-O4'-C4'	-7.22	104.12	109.90
26	LA	2513	A	O4'-C1'-N9	-7.22	102.42	108.20
26	LA	2537	U	C5-C6-N1	-7.22	119.09	122.70
26	LA	2877	G	C6-N1-C2	-7.22	120.77	125.10
27	LD	82	TYR	CB-CG-CD2	7.22	125.33	121.00
2	SA	598	U	C2-N1-C1'	-7.22	109.03	117.70
2	SA	924	C	C2-N3-C4	-7.22	116.29	119.90
26	LA	556	A	P-O3'-C3'	7.22	128.37	119.70
26	LA	566	U	C2-N3-C4	-7.22	122.67	127.00
26	LA	804	A	N1-C2-N3	-7.22	125.69	129.30
26	LA	898	C	O4'-C1'-N1	7.22	113.98	108.20
26	LA	972	A	N1-C6-N6	7.22	122.93	118.60
26	LA	1299	G	C5-N7-C8	7.22	107.91	104.30
26	LA	2069	G	N1-C2-N3	7.22	128.23	123.90
26	LA	2185	U	N1-C2-N3	-7.22	110.57	114.90
45	LG	70	ARG	NE-CZ-NH1	-7.22	116.69	120.30
2	SA	1375	A	C5-N7-C8	-7.22	100.29	103.90
26	LA	2094	A	P-O3'-C3'	-7.22	111.03	119.70
26	LA	2163	A	C6-N1-C2	7.22	122.93	118.60
26	LA	2876	G	N3-C4-C5	-7.22	124.99	128.60
2	SA	1014	A	C6-N1-C2	-7.22	114.27	118.60
2	SA	1468	A	C5-C6-N1	7.22	121.31	117.70
25	LB	55	U	P-O5'-C5'	7.22	132.45	120.90
25	LB	97	C	C1'-O4'-C4'	-7.22	104.12	109.90
26	LA	1677	A	N3-C4-N9	-7.22	121.62	127.40
26	LA	1826	G	C5-C6-O6	-7.22	124.27	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2065	C	N3-C4-N4	7.22	123.05	118.00
26	LA	231	A	C5'-C4'-O4'	7.22	117.76	109.10
26	LA	464	U	C3'-C2'-C1'	7.22	107.27	101.50
55	LQ	6	ALA	CB-CA-C	7.22	120.93	110.10
2	SA	179	A	C4-C5-C6	-7.22	113.39	117.00
2	SA	1171	A	C8-N9-C4	7.22	108.69	105.80
5	ST	35	TYR	CB-CG-CD2	7.22	125.33	121.00
26	LA	571	U	O4'-C1'-N1	7.22	113.97	108.20
26	LA	1430	G	C8-N9-C4	-7.22	103.51	106.40
2	SA	279	A	C6-C5-N7	-7.21	127.25	132.30
2	SA	924	C	C6-N1-C2	-7.21	117.41	120.30
2	SA	1000	A	C4-C5-C6	7.21	120.61	117.00
26	LA	539	G	O4'-C1'-N9	7.21	113.97	108.20
26	LA	738	G	C5-C6-O6	-7.21	124.27	128.60
26	LA	864	G	N1-C6-O6	7.21	124.23	119.90
26	LA	1659	G	C5'-C4'-O4'	7.21	117.76	109.10
26	LA	2342	C	C5-C6-N1	7.21	124.61	121.00
26	LA	2544	G	O4'-C1'-N9	7.21	113.97	108.20
2	SA	820	U	C4-C5-C6	7.21	124.03	119.70
2	SA	289	G	C6-C5-N7	-7.21	126.07	130.40
2	SA	702	A	C3'-C2'-C1'	-7.21	95.73	101.50
26	LA	22	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	626	A	C5-C6-N6	7.21	129.47	123.70
26	LA	728	G	C2-N3-C4	7.21	115.51	111.90
26	LA	799	G	N9-C4-C5	7.21	108.28	105.40
26	LA	1792	G	C5-C6-O6	-7.21	124.27	128.60
26	LA	1955	U	N1-C2-O2	7.21	127.85	122.80
2	SA	191	G	C1'-O4'-C4'	-7.21	104.13	109.90
2	SA	765	G	N9-C1'-C2'	-7.21	104.07	112.00
2	SA	1012	A	N9-C1'-C2'	-7.21	104.07	112.00
22	SF	13	ASP	CB-CG-OD1	7.21	124.79	118.30
26	LA	859	G	C1'-O4'-C4'	-7.21	104.13	109.90
26	LA	1936	A	N1-C6-N6	7.21	122.93	118.60
26	LA	1947	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	2539	C	C3'-C2'-C1'	7.21	107.27	101.50
2	SA	423	G	N9-C4-C5	7.21	108.28	105.40
9	SI	112	ARG	CD-NE-CZ	-7.21	113.51	123.60
26	LA	256	A	C5-C6-N1	7.21	121.30	117.70
26	LA	263	G	C5-C6-O6	-7.21	124.28	128.60
26	LA	1237	A	C1'-O4'-C4'	-7.21	104.13	109.90
26	LA	1534	U	C2-N3-C4	7.21	131.32	127.00
26	LA	2074	U	O4'-C1'-N1	7.21	113.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2570	G	P-O3'-C3'	-7.21	111.05	119.70
26	LA	2634	A	C5-C6-N1	-7.21	114.09	117.70
2	SA	313	A	N1-C6-N6	7.21	122.92	118.60
2	SA	1482	G	C4-C5-C6	7.21	123.12	118.80
4	S2	27	G	N9-C4-C5	7.21	108.28	105.40
26	LA	196	A	N1-C6-N6	7.21	122.92	118.60
26	LA	856	G	N3-C4-C5	-7.21	125.00	128.60
26	LA	973	A	O4'-C1'-N9	7.21	113.97	108.20
26	LA	1664	A	N7-C8-N9	7.21	117.40	113.80
26	LA	1953	A	P-O3'-C3'	-7.21	111.05	119.70
26	LA	2164	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	2728	U	C5-C6-N1	7.21	126.30	122.70
50	LL	74	TYR	CG-CD1-CE1	7.21	127.06	121.30
2	SA	89	U	C4-C5-C6	7.21	124.02	119.70
2	SA	662	U	O4'-C1'-N1	7.21	113.96	108.20
2	SA	1364	U	C5-C4-O4	-7.21	121.58	125.90
2	SA	1391	U	C5-C4-O4	7.21	130.22	125.90
2	SA	1059	C	C2-N3-C4	-7.20	116.30	119.90
3	S1	50	U	P-O3'-C3'	7.20	128.34	119.70
20	SD	80	ARG	NE-CZ-NH2	7.20	123.90	120.30
25	LB	13	G	C2-N3-C4	7.20	115.50	111.90
26	LA	626	A	P-O3'-C3'	7.20	128.34	119.70
26	LA	909	A	N7-C8-N9	-7.20	110.20	113.80
26	LA	2418	A	N9-C4-C5	7.20	108.68	105.80
26	LA	2426	A	C8-N9-C4	7.20	108.68	105.80
26	LA	2640	G	N1-C6-O6	7.20	124.22	119.90
26	LA	2841	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	204	G	C2-N3-C4	-7.20	108.30	111.90
2	SA	525	C	C5-C6-N1	-7.20	117.40	121.00
26	LA	142	A	O3'-P-O5'	-7.20	90.32	104.00
26	LA	573	U	N1-C2-O2	7.20	127.84	122.80
26	LA	1553	A	C5-N7-C8	-7.20	100.30	103.90
26	LA	2848	G	C5-C6-N1	7.20	115.10	111.50
2	SA	524	G	N1-C2-N3	-7.20	119.58	123.90
2	SA	563	A	O4'-C1'-N9	7.20	113.96	108.20
2	SA	1488	G	C3'-C2'-C1'	7.20	107.26	101.50
26	LA	158	U	C4'-C3'-C2'	-7.20	95.40	102.60
26	LA	990	A	N3-C4-N9	-7.20	121.64	127.40
26	LA	1725	U	C4'-C3'-C2'	-7.20	95.40	102.60
26	LA	2447	G	C5-C6-N1	-7.20	107.90	111.50
26	LA	2579	C	N3-C2-O2	-7.20	116.86	121.90
2	SA	155	A	N1-C6-N6	-7.20	114.28	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	477	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	679	C	N3-C4-N4	7.20	123.04	118.00
2	SA	681	A	C8-N9-C4	-7.20	102.92	105.80
2	SA	965	U	N3-C4-C5	-7.20	110.28	114.60
26	LA	793	A	C6-C5-N7	-7.20	127.26	132.30
26	LA	1044	C	C5'-C4'-C3'	-7.20	104.48	116.00
2	SA	138	G	C5-C6-O6	-7.20	124.28	128.60
2	SA	465	A	O4'-C1'-N9	7.20	113.96	108.20
26	LA	55	G	C5-C6-O6	7.20	132.92	128.60
26	LA	437	U	N3-C2-O2	7.20	127.24	122.20
26	LA	2353	G	C2-N3-C4	-7.20	108.30	111.90
26	LA	2536	G	N7-C8-N9	7.20	116.70	113.10
26	LA	2856	A	N7-C8-N9	7.20	117.40	113.80
2	SA	927	G	N7-C8-N9	-7.20	109.50	113.10
2	SA	1221	G	OP1-P-OP2	-7.20	108.81	119.60
26	LA	318	C	C5-C6-N1	7.20	124.60	121.00
26	LA	1043	C	N3-C2-O2	-7.20	116.86	121.90
26	LA	2594	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	727	G	N3-C2-N2	7.19	124.94	119.90
26	LA	1344	U	P-O5'-C5'	7.19	132.41	120.90
26	LA	1719	G	N3-C4-N9	7.19	130.32	126.00
2	SA	435	A	P-O3'-C3'	7.19	128.33	119.70
2	SA	549	C	C5-C4-N4	7.19	125.23	120.20
2	SA	1063	C	OP1-P-OP2	-7.19	108.81	119.60
2	SA	1323	G	N3-C4-N9	7.19	130.31	126.00
12	SL	55	ARG	NE-CZ-NH1	7.19	123.90	120.30
25	LB	77	U	O4'-C1'-N1	7.19	113.95	108.20
26	LA	428	A	N7-C8-N9	7.19	117.40	113.80
26	LA	1200	C	N1-C2-N3	7.19	124.23	119.20
26	LA	1707	G	N3-C4-C5	-7.19	125.00	128.60
26	LA	1752	C	O4'-C1'-N1	7.19	113.95	108.20
26	LA	1870	C	C6-N1-C1'	-7.19	112.17	120.80
26	LA	2192	U	C4-C5-C6	7.19	124.02	119.70
2	SA	54	C	N3-C4-N4	7.19	123.03	118.00
2	SA	769	G	N7-C8-N9	-7.19	109.50	113.10
3	S1	29	G	O4'-C1'-N9	7.19	113.95	108.20
26	LA	1698	A	C5-C6-N6	7.19	129.45	123.70
26	LA	1906	G	N9-C1'-C2'	-7.19	104.09	112.00
54	LM	80	ASP	CB-CG-OD2	-7.19	111.83	118.30
2	SA	745	G	N9-C4-C5	7.19	108.28	105.40
2	SA	1271	A	C4-C5-N7	-7.19	107.11	110.70
2	SA	1524	C	C2-N3-C4	-7.19	116.31	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1003	G	O4'-C1'-N9	7.19	113.95	108.20
26	LA	1384	A	C5-C6-N6	-7.19	117.95	123.70
26	LA	2150	C	N3-C4-C5	-7.19	119.02	121.90
26	LA	2604	U	C5-C6-N1	-7.19	119.11	122.70
49	LK	47	SER	N-CA-CB	7.19	121.28	110.50
2	SA	267	C	N3-C4-N4	7.19	123.03	118.00
2	SA	571	U	P-O5'-C5'	7.19	132.40	120.90
26	LA	600	G	N1-C6-O6	-7.19	115.59	119.90
26	LA	881	G	C5'-C4'-C3'	-7.19	104.50	116.00
26	LA	984	A	C4-C5-C6	-7.19	113.41	117.00
26	LA	1599	U	N3-C2-O2	-7.19	117.17	122.20
26	LA	2023	C	N3-C2-O2	-7.19	116.87	121.90
2	SA	1242	G	O4'-C1'-N9	7.19	113.95	108.20
2	SA	1347	G	C4-C5-N7	-7.19	107.93	110.80
25	LB	36	C	C3'-C2'-C1'	-7.19	95.75	101.50
26	LA	16	C	C5-C4-N4	-7.19	115.17	120.20
26	LA	17	G	OP1-P-OP2	-7.19	108.82	119.60
26	LA	1310	G	C5-C6-N1	7.19	115.09	111.50
26	LA	2297	A	C4-C5-C6	7.19	120.59	117.00
2	SA	325	A	C4'-C3'-C2'	-7.18	95.42	102.60
2	SA	355	C	C5-C4-N4	7.18	125.23	120.20
2	SA	1102	A	N1-C6-N6	-7.18	114.29	118.60
25	LB	98	G	N1-C6-O6	7.18	124.21	119.90
26	LA	724	U	N3-C4-O4	7.18	124.43	119.40
26	LA	958	U	N3-C4-O4	7.18	124.43	119.40
26	LA	1389	G	N3-C4-C5	-7.18	125.01	128.60
26	LA	1459	G	C5-C6-N1	-7.18	107.91	111.50
26	LA	1667	G	N9-C4-C5	-7.18	102.53	105.40
26	LA	2366	A	C4-C5-C6	-7.18	113.41	117.00
26	LA	2533	U	P-O3'-C3'	7.18	128.32	119.70
26	LA	2645	G	C8-N9-C4	7.18	109.27	106.40
2	SA	110	C	N1-C1'-C2'	-7.18	104.10	112.00
2	SA	570	G	C6-N1-C2	-7.18	120.79	125.10
2	SA	936	C	N3-C4-N4	7.18	123.03	118.00
2	SA	1145	A	C8-N9-C4	-7.18	102.93	105.80
25	LB	96	G	C8-N9-C4	-7.18	103.53	106.40
26	LA	25	U	O4'-C1'-N1	7.18	113.94	108.20
26	LA	268	C	N3-C2-O2	-7.18	116.87	121.90
26	LA	408	G	C1'-O4'-C4'	-7.18	104.16	109.90
26	LA	557	C	C6-N1-C2	-7.18	117.43	120.30
26	LA	645	C	O4'-C1'-N1	7.18	113.95	108.20
26	LA	1282	U	O4'-C1'-N1	7.18	113.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1600	C	N3-C4-N4	7.18	123.03	118.00
26	LA	1832	C	N3-C4-C5	-7.18	119.03	121.90
26	LA	2863	C	N3-C4-N4	7.18	123.03	118.00
2	SA	884	U	O4'-C4'-C3'	7.18	111.84	106.10
26	LA	231	A	N7-C8-N9	-7.18	110.21	113.80
26	LA	505	A	O4'-C1'-C2'	7.18	114.06	107.60
26	LA	1153	C	O4'-C1'-N1	7.18	113.94	108.20
26	LA	1489	C	C5'-C4'-C3'	-7.18	104.51	116.00
26	LA	1500	G	C2-N3-C4	7.18	115.49	111.90
26	LA	1668	A	C1'-O4'-C4'	-7.18	104.16	109.90
26	LA	2601	C	P-O3'-C3'	-7.18	111.08	119.70
2	SA	277	C	P-O3'-C3'	-7.18	111.08	119.70
2	SA	767	A	C5-C6-N1	7.18	121.29	117.70
2	SA	889	A	C5-C6-N1	7.18	121.29	117.70
2	SA	1514	G	C5-C6-N1	-7.18	107.91	111.50
26	LA	1002	G	N1-C6-O6	-7.18	115.59	119.90
26	LA	1110	G	C3'-C2'-C1'	-7.18	95.76	101.50
26	LA	1240	U	C5'-C4'-C3'	7.18	127.49	116.00
26	LA	1901	A	C5-C6-N6	7.18	129.44	123.70
26	LA	76	C	O4'-C1'-N1	7.18	113.94	108.20
26	LA	801	G	N3-C4-N9	-7.18	121.69	126.00
26	LA	2096	C	P-O3'-C3'	7.18	128.31	119.70
26	LA	2554	U	C5'-C4'-O4'	7.18	117.71	109.10
26	LA	2718	G	C5'-C4'-C3'	7.18	127.48	116.00
2	SA	552	U	O4'-C1'-C2'	7.18	114.06	107.60
2	SA	845	A	C5-C6-N6	7.18	129.44	123.70
20	SD	106	PHE	CB-CG-CD1	7.18	125.82	120.80
25	LB	13	G	N1-C2-N3	-7.18	119.59	123.90
26	LA	821	A	C5'-C4'-C3'	-7.18	104.52	116.00
26	LA	1164	C	N3-C2-O2	-7.18	116.88	121.90
26	LA	1378	A	P-O5'-C5'	-7.18	109.42	120.90
26	LA	1840	G	N1-C2-N3	7.18	128.21	123.90
26	LA	1854	A	C2-N3-C4	-7.18	107.01	110.60
26	LA	2469	A	N7-C8-N9	-7.18	110.21	113.80
2	SA	954	G	C5-C6-N1	-7.17	107.91	111.50
2	SA	1253	G	N7-C8-N9	7.17	116.69	113.10
18	SB	11	ALA	CB-CA-C	-7.17	99.34	110.10
26	LA	1483	G	N3-C4-C5	-7.17	125.01	128.60
26	LA	2478	A	P-O3'-C3'	-7.17	111.09	119.70
26	LA	2732	G	C2'-C3'-O3'	7.17	125.28	109.50
2	SA	211	G	C8-N9-C4	-7.17	103.53	106.40
2	SA	1357	A	N9-C4-C5	7.17	108.67	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	975	A	C5-C6-N1	7.17	121.29	117.70
26	LA	2836	U	N1-C2-N3	7.17	119.20	114.90
2	SA	153	C	C4-C5-C6	-7.17	113.81	117.40
2	SA	677	U	C2-N3-C4	7.17	131.30	127.00
2	SA	845	A	C5-C6-N1	-7.17	114.11	117.70
2	SA	1020	G	C5'-C4'-O4'	7.17	117.70	109.10
26	LA	1775	U	C5-C4-O4	-7.17	121.60	125.90
26	LA	2203	U	C5'-C4'-O4'	7.17	117.71	109.10
26	LA	2225	A	C2-N3-C4	-7.17	107.01	110.60
26	LA	2361	G	C5-C6-O6	-7.17	124.30	128.60
26	LA	2646	C	P-O5'-C5'	-7.17	109.43	120.90
26	LA	2800	A	C2-N3-C4	-7.17	107.01	110.60
2	SA	33	A	C8-N9-C4	-7.17	102.93	105.80
2	SA	463	U	C5'-C4'-O4'	7.17	117.70	109.10
2	SA	742	G	N7-C8-N9	7.17	116.69	113.10
2	SA	795	C	C6-N1-C1'	-7.17	112.19	120.80
2	SA	847	G	C5'-C4'-C3'	-7.17	104.53	116.00
2	SA	982	U	C5-C6-N1	-7.17	119.11	122.70
2	SA	1147	C	C5-C6-N1	-7.17	117.42	121.00
26	LA	818	G	N3-C4-N9	7.17	130.30	126.00
26	LA	1595	C	C4-C5-C6	-7.17	113.81	117.40
26	LA	2648	G	O4'-C1'-N9	7.17	113.94	108.20
2	SA	212	G	C8-N9-C4	7.17	109.27	106.40
2	SA	831	A	P-O3'-C3'	-7.17	111.10	119.70
25	LB	29	A	C4'-C3'-C2'	7.17	109.77	102.60
26	LA	1134	A	O4'-C1'-N9	7.17	113.93	108.20
26	LA	1491	G	N1-C6-O6	-7.17	115.60	119.90
26	LA	1766	G	C5-C6-N1	7.17	115.08	111.50
26	LA	1989	G	C4-C5-N7	7.17	113.67	110.80
26	LA	2708	G	N3-C4-N9	7.17	130.30	126.00
2	SA	17	U	C5'-C4'-C3'	-7.17	104.53	116.00
2	SA	275	G	N1-C6-O6	7.17	124.20	119.90
2	SA	734	G	C6-C5-N7	-7.17	126.10	130.40
2	SA	754	C	O4'-C4'-C3'	7.17	111.83	106.10
2	SA	838	G	N3-C4-N9	7.17	130.30	126.00
2	SA	1338	G	C5-N7-C8	7.17	107.88	104.30
25	LB	7	G	C4-C5-N7	7.17	113.67	110.80
26	LA	1135	C	P-O3'-C3'	7.17	128.30	119.70
26	LA	1242	U	C2-N3-C4	-7.17	122.70	127.00
26	LA	1249	U	N3-C4-C5	-7.17	110.30	114.60
26	LA	1849	G	C2-N3-C4	-7.17	108.32	111.90
26	LA	1965	C	O4'-C1'-N1	7.17	113.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2006	C	C5-C4-N4	-7.17	115.18	120.20
26	LA	2093	G	C6-N1-C2	-7.17	120.80	125.10
2	SA	743	A	N1-C6-N6	7.17	122.90	118.60
2	SA	1188	A	C5-C6-N1	7.17	121.28	117.70
26	LA	418	C	O4'-C1'-N1	7.17	113.93	108.20
26	LA	2727	A	N1-C6-N6	-7.17	114.30	118.60
2	SA	771	G	C4-N9-C1'	7.16	135.81	126.50
2	SA	1049	U	P-O3'-C3'	7.16	128.30	119.70
3	S1	34	U	O4'-C4'-C3'	7.16	111.83	106.10
26	LA	280	U	C5'-C4'-O4'	7.16	117.70	109.10
26	LA	690	G	C5-C6-O6	7.16	132.90	128.60
26	LA	1642	G	O4'-C1'-N9	7.16	113.93	108.20
26	LA	2759	G	C8-N9-C4	7.16	109.27	106.40
2	SA	313	A	C5-C6-N1	-7.16	114.12	117.70
26	LA	331	C	P-O5'-C5'	-7.16	109.44	120.90
26	LA	1324	G	P-O5'-C5'	-7.16	109.44	120.90
2	SA	387	U	C5-C6-N1	-7.16	119.12	122.70
2	SA	875	U	C2-N3-C4	-7.16	122.70	127.00
26	LA	960	A	O4'-C1'-N9	-7.16	102.47	108.20
26	LA	1063	G	C1'-O4'-C4'	-7.16	104.17	109.90
26	LA	1099	G	N9-C4-C5	-7.16	102.54	105.40
26	LA	2183	A	C5-C6-N6	-7.16	117.97	123.70
26	LA	2322	A	C6-N1-C2	7.16	122.90	118.60
26	LA	2581	G	C4-C5-N7	7.16	113.66	110.80
2	SA	434	U	N1-C2-N3	7.16	119.19	114.90
2	SA	807	A	C5'-C4'-O4'	7.16	117.69	109.10
2	SA	1368	A	N1-C2-N3	-7.16	125.72	129.30
3	S1	57	C	N3-C2-O2	-7.16	116.89	121.90
26	LA	231	A	C2'-C3'-O3'	7.16	125.25	109.50
26	LA	489	G	C3'-C2'-C1'	7.16	107.23	101.50
26	LA	1043	C	O4'-C1'-N1	7.16	113.93	108.20
26	LA	1366	A	N1-C6-N6	-7.16	114.31	118.60
26	LA	1420	A	N1-C2-N3	-7.16	125.72	129.30
26	LA	1674	G	N1-C6-O6	7.16	124.19	119.90
26	LA	2304	G	C5'-C4'-O4'	7.16	117.69	109.10
2	SA	795	C	N1-C2-N3	7.16	124.21	119.20
26	LA	1577	C	N3-C4-C5	7.16	124.76	121.90
26	LA	1788	C	N1-C2-N3	7.16	124.21	119.20
2	SA	116	A	P-O3'-C3'	-7.16	111.11	119.70
2	SA	226	G	OP1-P-OP2	-7.16	108.87	119.60
26	LA	129	C	N3-C4-C5	7.16	124.76	121.90
26	LA	399	U	O4'-C1'-N1	7.16	113.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1493	C	C6-N1-C2	7.16	123.16	120.30
26	LA	1579	A	O4'-C1'-N9	7.16	113.92	108.20
26	LA	2618	G	C5-C6-O6	-7.16	124.31	128.60
26	LA	2858	C	C5-C6-N1	7.16	124.58	121.00
46	LH	84	LYS	N-CA-CB	7.16	123.48	110.60
2	SA	674	G	O4'-C1'-N9	7.15	113.92	108.20
2	SA	1079	G	OP1-P-OP2	-7.15	108.87	119.60
25	LB	116	G	C5'-C4'-C3'	-7.15	104.55	116.00
26	LA	489	G	N9-C4-C5	-7.15	102.54	105.40
26	LA	580	U	N3-C2-O2	-7.15	117.19	122.20
26	LA	950	G	N3-C2-N2	7.15	124.91	119.90
26	LA	2531	A	C1'-O4'-C4'	-7.15	104.18	109.90
2	SA	529	G	C1'-O4'-C4'	-7.15	104.18	109.90
2	SA	559	A	N1-C2-N3	-7.15	125.72	129.30
2	SA	736	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	1478	U	C5-C4-O4	7.15	130.19	125.90
20	SD	69	ARG	NE-CZ-NH2	-7.15	116.72	120.30
26	LA	675	A	C2'-C3'-O3'	7.15	125.23	109.50
26	LA	908	C	P-O3'-C3'	7.15	128.28	119.70
26	LA	2399	G	N7-C8-N9	7.15	116.68	113.10
26	LA	2772	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	69	G	C5-C6-O6	7.15	132.89	128.60
2	SA	449	G	P-O5'-C5'	7.15	132.34	120.90
2	SA	703	G	C5-N7-C8	7.15	107.88	104.30
2	SA	737	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	954	G	O4'-C1'-N9	7.15	113.92	108.20
3	S1	27	A	C5-C6-N6	7.15	129.42	123.70
26	LA	1386	C	C6-N1-C2	7.15	123.16	120.30
26	LA	1430	G	C5-C6-O6	-7.15	124.31	128.60
26	LA	1677	A	C5-N7-C8	-7.15	100.33	103.90
4	S2	72	C	N3-C2-O2	-7.15	116.90	121.90
16	SP	31	ARG	NE-CZ-NH2	-7.15	116.72	120.30
26	LA	191	A	C6-C5-N7	-7.15	127.30	132.30
26	LA	1513	U	P-O5'-C5'	7.15	132.34	120.90
26	LA	2111	U	C6-N1-C2	-7.15	116.71	121.00
26	LA	2457	U	C5-C4-O4	-7.15	121.61	125.90
2	SA	897	C	C2-N1-C1'	7.15	126.66	118.80
2	SA	1021	A	N7-C8-N9	7.15	117.37	113.80
24	S3	553	ASP	CB-CG-OD2	7.15	124.73	118.30
25	LB	41	G	O4'-C1'-N9	7.15	113.92	108.20
26	LA	1204	A	C5-C6-N1	-7.15	114.13	117.70
26	LA	1786	A	C5-C6-N1	7.15	121.27	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2221	G	N1-C6-O6	7.15	124.19	119.90
26	LA	2587	A	O4'-C1'-N9	7.15	113.92	108.20
50	LL	69	ARG	NE-CZ-NH2	7.15	123.87	120.30
26	LA	848	C	C2-N3-C4	-7.15	116.33	119.90
26	LA	1137	G	C4-C5-N7	7.15	113.66	110.80
26	LA	2004	G	N7-C8-N9	-7.15	109.53	113.10
2	SA	481	G	C4-C5-N7	-7.14	107.94	110.80
2	SA	705	G	C8-N9-C4	7.14	109.26	106.40
26	LA	1277	G	C5-N7-C8	-7.14	100.73	104.30
26	LA	1450	G	C1'-O4'-C4'	-7.14	104.19	109.90
26	LA	1600	C	C5-C6-N1	-7.14	117.43	121.00
26	LA	1734	G	C6-C5-N7	-7.14	126.11	130.40
26	LA	2210	U	C6-N1-C1'	-7.14	111.20	121.20
2	SA	6	G	N9-C4-C5	7.14	108.26	105.40
2	SA	184	G	P-O3'-C3'	-7.14	111.13	119.70
2	SA	606	G	C5-C6-N1	7.14	115.07	111.50
3	S1	48	C	C6-N1-C2	-7.14	117.44	120.30
7	SG	128	GLU	O-C-N	-7.14	111.27	122.70
26	LA	143	C	N3-C2-O2	-7.14	116.90	121.90
26	LA	2115	G	C6-C5-N7	-7.14	126.11	130.40
26	LA	2441	U	N1-C2-N3	-7.14	110.61	114.90
2	SA	93	U	N3-C4-C5	-7.14	110.31	114.60
2	SA	492	C	N1-C2-N3	7.14	124.20	119.20
2	SA	782	A	C2'-C3'-O3'	7.14	125.21	109.50
26	LA	19	A	N3-C4-C5	7.14	131.80	126.80
2	SA	543	U	C4-C5-C6	-7.14	115.42	119.70
2	SA	1070	U	N1-C2-O2	-7.14	117.80	122.80
2	SA	1379	G	C1'-O4'-C4'	-7.14	104.19	109.90
4	S2	19	G	C5-N7-C8	-7.14	100.73	104.30
26	LA	595	C	C4-C5-C6	7.14	120.97	117.40
26	LA	852	U	C4-C5-C6	-7.14	115.42	119.70
26	LA	1322	A	C5-N7-C8	-7.14	100.33	103.90
26	LA	2577	A	C5-C6-N1	-7.14	114.13	117.70
26	LA	2841	C	C5-C4-N4	7.14	125.20	120.20
2	SA	423	G	C4-C5-N7	-7.14	107.94	110.80
2	SA	460	A	C4-C5-C6	-7.14	113.43	117.00
4	S2	16	C	C5-C6-N1	7.14	124.57	121.00
26	LA	2034	U	C5-C6-N1	7.14	126.27	122.70
26	LA	2633	G	C4-C5-C6	-7.14	114.52	118.80
2	SA	907	A	C5-C6-N6	7.14	129.41	123.70
2	SA	1082	A	P-O5'-C5'	7.14	132.32	120.90
26	LA	43	G	C2-N3-C4	7.14	115.47	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	460	A	C5-N7-C8	7.14	107.47	103.90
26	LA	772	C	C5-C4-N4	-7.14	115.20	120.20
26	LA	976	G	C5-C6-O6	-7.14	124.32	128.60
26	LA	1254	A	C5'-C4'-C3'	7.14	127.42	116.00
26	LA	2531	A	P-O5'-C5'	-7.14	109.48	120.90
33	LZ	55	MET	CG-SD-CE	-7.14	88.78	100.20
2	SA	79	G	C4-C5-N7	-7.13	107.95	110.80
2	SA	1031	C	C6-N1-C2	7.13	123.15	120.30
4	S2	42	C	C4-C5-C6	7.13	120.97	117.40
26	LA	9	G	N1-C2-N3	7.13	128.18	123.90
26	LA	109	C	C1'-O4'-C4'	-7.13	104.19	109.90
26	LA	147	C	P-O5'-C5'	7.13	132.32	120.90
26	LA	873	C	C1'-O4'-C4'	-7.13	104.19	109.90
26	LA	1018	U	C6-N1-C2	7.13	125.28	121.00
26	LA	1760	C	C5'-C4'-C3'	-7.13	104.59	116.00
26	LA	1777	U	C6-N1-C2	-7.13	116.72	121.00
26	LA	1971	U	C4'-C3'-C2'	-7.13	95.47	102.60
2	SA	1513	A	P-O5'-C5'	-7.13	109.49	120.90
3	S1	39	U	C5'-C4'-C3'	7.13	127.41	116.00
2	SA	50	A	C4-C5-N7	7.13	114.27	110.70
2	SA	85	U	N3-C4-O4	7.13	124.39	119.40
2	SA	134	G	C5-C6-O6	-7.13	124.32	128.60
2	SA	372	C	N3-C4-C5	-7.13	119.05	121.90
3	S1	21	U	P-O3'-C3'	-7.13	111.14	119.70
26	LA	1780	A	C5-N7-C8	-7.13	100.33	103.90
26	LA	2046	G	N1-C6-O6	7.13	124.18	119.90
26	LA	2068	U	C5'-C4'-O4'	7.13	117.66	109.10
25	LB	60	C	P-O3'-C3'	-7.13	111.14	119.70
25	LB	62	C	N3-C4-N4	-7.13	113.01	118.00
26	LA	40	U	C4-C5-C6	-7.13	115.42	119.70
26	LA	2554	U	C1'-O4'-C4'	-7.13	104.20	109.90
2	SA	399	G	C6-C5-N7	-7.13	126.12	130.40
2	SA	980	C	O4'-C1'-N1	7.13	113.90	108.20
4	S2	30	G	C8-N9-C4	-7.13	103.55	106.40
26	LA	126	A	C5-C6-N1	7.13	121.26	117.70
26	LA	799	G	C8-N9-C4	-7.13	103.55	106.40
26	LA	1842	G	C6-C5-N7	-7.13	126.12	130.40
39	L3	12	ARG	NE-CZ-NH1	7.13	123.86	120.30
57	LS	49	ARG	NE-CZ-NH1	7.13	123.86	120.30
2	SA	137	U	P-O3'-C3'	-7.13	111.15	119.70
2	SA	578	C	C5'-C4'-O4'	7.13	117.65	109.10
2	SA	588	G	N7-C8-N9	-7.13	109.54	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1226	C	C2'-C3'-O3'	7.13	125.18	109.50
26	LA	1098	A	N1-C2-N3	-7.13	125.74	129.30
26	LA	1310	G	C8-N9-C4	7.13	109.25	106.40
26	LA	1346	G	C6-C5-N7	-7.13	126.12	130.40
26	LA	2450	A	C5'-C4'-C3'	7.13	127.40	116.00
26	LA	2673	G	C5-C6-N1	7.13	115.06	111.50
2	SA	1077	G	C6-C5-N7	-7.12	126.12	130.40
26	LA	243	U	P-O3'-C3'	7.12	128.25	119.70
26	LA	329	G	C4-C5-C6	-7.12	114.53	118.80
26	LA	1497	U	C4'-C3'-C2'	-7.12	95.47	102.60
26	LA	1567	G	O3'-P-O5'	-7.12	90.46	104.00
2	SA	60	A	N7-C8-N9	-7.12	110.24	113.80
2	SA	384	G	N3-C4-C5	-7.12	125.04	128.60
2	SA	650	G	C2-N3-C4	-7.12	108.34	111.90
2	SA	1159	U	C2-N3-C4	-7.12	122.73	127.00
2	SA	1211	U	N3-C2-O2	-7.12	117.21	122.20
2	SA	1394	A	C4-C5-C6	-7.12	113.44	117.00
22	SF	4	TYR	CG-CD2-CE2	-7.12	115.60	121.30
26	LA	9	G	C8-N9-C4	-7.12	103.55	106.40
26	LA	248	G	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	1492	G	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	1713	A	C5-C6-N1	-7.12	114.14	117.70
26	LA	2020	A	C5'-C4'-C3'	7.12	127.40	116.00
26	LA	2286	G	N7-C8-N9	-7.12	109.54	113.10
26	LA	2605	U	C5-C4-O4	-7.12	121.63	125.90
26	LA	2764	A	N1-C6-N6	-7.12	114.33	118.60
2	SA	107	G	C6-C5-N7	-7.12	126.13	130.40
2	SA	880	C	N3-C4-C5	-7.12	119.05	121.90
2	SA	1083	U	N3-C2-O2	-7.12	117.22	122.20
2	SA	1447	A	C4-N9-C1'	-7.12	113.48	126.30
26	LA	156	A	O4'-C1'-N9	7.12	113.90	108.20
26	LA	410	G	C5-N7-C8	7.12	107.86	104.30
26	LA	518	G	N1-C2-N3	7.12	128.17	123.90
26	LA	1432	G	C5-N7-C8	-7.12	100.74	104.30
26	LA	1732	C	O4'-C1'-N1	7.12	113.90	108.20
26	LA	1756	G	N9-C4-C5	7.12	108.25	105.40
26	LA	1975	G	C4-C5-N7	7.12	113.65	110.80
26	LA	1991	U	C5'-C4'-C3'	7.12	127.39	116.00
26	LA	2115	G	C4-N9-C1'	-7.12	117.24	126.50
37	LC	100	LEU	CB-CG-CD2	7.12	123.11	111.00
44	LF	78	TRP	O-C-N	-7.12	111.31	122.70
2	SA	299	G	C5-C6-O6	-7.12	124.33	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1474	U	C1'-O4'-C4'	7.12	115.60	109.90
5	ST	42	ASP	CB-CG-OD1	-7.12	111.89	118.30
25	LB	22	U	C5-C6-N1	7.12	126.26	122.70
26	LA	2082	A	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	2430	A	C5'-C4'-C3'	7.12	127.39	116.00
2	SA	284	C	O4'-C1'-N1	7.12	113.89	108.20
2	SA	416	G	N7-C8-N9	7.12	116.66	113.10
2	SA	445	G	N3-C4-N9	7.12	130.27	126.00
2	SA	813	U	P-O5'-C5'	-7.12	109.51	120.90
2	SA	1513	A	C4-C5-N7	7.12	114.26	110.70
26	LA	220	G	C5-N7-C8	-7.12	100.74	104.30
26	LA	266	G	C4-C5-N7	7.12	113.65	110.80
26	LA	581	C	N3-C4-C5	-7.12	119.05	121.90
26	LA	1543	G	C4-C5-C6	-7.12	114.53	118.80
26	LA	2242	G	C3'-C2'-C1'	7.12	107.19	101.50
26	LA	2828	G	C5-N7-C8	-7.12	100.74	104.30
2	SA	973	G	N3-C4-C5	-7.12	125.04	128.60
26	LA	377	G	C5-C6-O6	-7.12	124.33	128.60
26	LA	518	G	C2-N3-C4	-7.12	108.34	111.90
26	LA	698	C	C2-N3-C4	-7.12	116.34	119.90
26	LA	883	G	P-O3'-C3'	-7.12	111.16	119.70
26	LA	1619	G	C2-N3-C4	-7.12	108.34	111.90
26	LA	1873	G	N1-C6-O6	7.12	124.17	119.90
2	SA	206	C	N1-C2-O2	7.12	123.17	118.90
2	SA	1473	G	C2-N3-C4	7.12	115.46	111.90
26	LA	27	G	N3-C4-C5	-7.12	125.04	128.60
26	LA	502	A	O4'-C1'-C2'	7.12	114.00	107.60
26	LA	875	G	N1-C6-O6	7.12	124.17	119.90
26	LA	1574	C	C1'-O4'-C4'	-7.12	104.21	109.90
26	LA	1718	G	C5-C6-O6	-7.12	124.33	128.60
26	LA	2027	G	C2-N3-C4	7.12	115.46	111.90
26	LA	2264	C	O4'-C1'-N1	7.12	113.89	108.20
26	LA	2763	G	C6-C5-N7	-7.12	126.13	130.40
2	SA	276	G	N3-C4-C5	-7.11	125.04	128.60
2	SA	1211	U	C5-C6-N1	-7.11	119.14	122.70
2	SA	1277	C	N3-C4-C5	7.11	124.75	121.90
4	S2	52	C	C5-C4-N4	-7.11	115.22	120.20
26	LA	1377	G	C6-N1-C2	-7.11	120.83	125.10
26	LA	2636	C	N3-C2-O2	-7.11	116.92	121.90
26	LA	2728	U	C4-C5-C6	-7.11	115.43	119.70
26	LA	2731	G	C1'-O4'-C4'	-7.11	104.21	109.90
36	L2	2	LYS	N-CA-CB	7.11	123.40	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	11	A	O4'-C1'-N9	7.11	113.89	108.20
24	S3	365	MET	CG-SD-CE	-7.11	88.82	100.20
26	LA	326	G	N9-C4-C5	7.11	108.25	105.40
26	LA	924	G	C5-C6-O6	-7.11	124.33	128.60
26	LA	2652	C	C5-C4-N4	7.11	125.18	120.20
2	SA	69	G	C5'-C4'-O4'	7.11	117.63	109.10
2	SA	174	A	C5-C6-N6	-7.11	118.01	123.70
2	SA	438	U	C5-C4-O4	7.11	130.17	125.90
2	SA	1241	G	P-O5'-C5'	7.11	132.28	120.90
2	SA	1270	G	C2-N3-C4	7.11	115.46	111.90
26	LA	855	G	C5-C6-N1	7.11	115.06	111.50
26	LA	919	U	N1-C2-O2	-7.11	117.82	122.80
26	LA	1576	U	C5-C4-O4	-7.11	121.63	125.90
26	LA	1736	U	C3'-C2'-C1'	7.11	107.19	101.50
26	LA	2770	G	N1-C2-N2	-7.11	109.80	116.20
26	LA	599	A	C8-N9-C4	7.11	108.64	105.80
2	SA	157	U	N3-C4-O4	7.11	124.38	119.40
2	SA	169	C	P-O5'-C5'	7.11	132.27	120.90
2	SA	876	C	N3-C2-O2	-7.11	116.92	121.90
2	SA	1102	A	C5-C6-N6	7.11	129.39	123.70
2	SA	1164	G	N3-C2-N2	-7.11	114.92	119.90
2	SA	1252	A	O5'-P-OP2	-7.11	99.30	105.70
2	SA	1478	U	N1-C2-N3	7.11	119.17	114.90
2	SA	1486	G	N3-C4-C5	-7.11	125.05	128.60
26	LA	922	C	C5-C6-N1	7.11	124.55	121.00
26	LA	1295	C	C4-C5-C6	-7.11	113.85	117.40
26	LA	1359	A	C1'-O4'-C4'	-7.11	104.21	109.90
26	LA	1709	U	C4'-C3'-C2'	-7.11	95.49	102.60
26	LA	1887	C	O4'-C1'-N1	7.11	113.89	108.20
26	LA	2429	G	C6-N1-C2	7.11	129.37	125.10
26	LA	2628	C	N3-C4-C5	-7.11	119.06	121.90
2	SA	130	A	C8-N9-C4	7.11	108.64	105.80
2	SA	432	A	C8-N9-C4	-7.11	102.96	105.80
25	LB	105	G	C2-N3-C4	7.11	115.45	111.90
26	LA	271	G	C5-C6-N1	7.11	115.05	111.50
26	LA	276	U	C6-N1-C2	-7.11	116.74	121.00
26	LA	561	G	N1-C2-N3	7.11	128.16	123.90
26	LA	1852	U	C2-N3-C4	-7.11	122.74	127.00
2	SA	364	A	N1-C2-N3	-7.10	125.75	129.30
26	LA	1491	G	C5-C6-O6	7.10	132.86	128.60
26	LA	1549	A	N9-C4-C5	7.10	108.64	105.80
26	LA	2737	G	C5-C6-O6	7.10	132.86	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	672	U	N1-C2-O2	7.10	127.77	122.80
26	LA	395	U	C2-N3-C4	7.10	131.26	127.00
26	LA	414	C	O4'-C1'-N1	7.10	113.88	108.20
26	LA	856	G	N1-C6-O6	-7.10	115.64	119.90
26	LA	2449	U	P-O3'-C3'	7.10	128.22	119.70
26	LA	2721	A	P-O3'-C3'	-7.10	111.18	119.70
48	LN	21	ARG	NE-CZ-NH1	7.10	123.85	120.30
26	LA	814	C	C2-N3-C4	7.10	123.45	119.90
26	LA	1378	A	C6-N1-C2	-7.10	114.34	118.60
2	SA	422	C	O4'-C1'-N1	7.10	113.88	108.20
2	SA	625	U	N3-C2-O2	-7.10	117.23	122.20
2	SA	840	C	C4-C5-C6	-7.10	113.85	117.40
2	SA	991	U	C2-N3-C4	-7.10	122.74	127.00
2	SA	1272	G	P-O3'-C3'	7.10	128.22	119.70
24	S3	132	TYR	CA-CB-CG	7.10	126.89	113.40
25	LB	74	U	C5-C4-O4	7.10	130.16	125.90
26	LA	89	A	N3-C4-C5	7.10	131.77	126.80
26	LA	296	U	C5-C6-N1	-7.10	119.15	122.70
26	LA	649	G	C8-N9-C4	-7.10	103.56	106.40
26	LA	714	U	O4'-C1'-N1	7.10	113.88	108.20
26	LA	1828	G	N1-C2-N2	-7.10	109.81	116.20
26	LA	2615	U	P-O3'-C3'	7.10	128.22	119.70
26	LA	2743	U	C5-C6-N1	-7.10	119.15	122.70
26	LA	2898	U	C5-C4-O4	-7.10	121.64	125.90
2	SA	130	A	C3'-C2'-C1'	7.10	107.18	101.50
2	SA	582	C	C1'-O4'-C4'	-7.10	104.22	109.90
2	SA	861	G	O4'-C1'-N9	7.10	113.88	108.20
2	SA	1152	A	C5'-C4'-C3'	-7.10	104.65	116.00
26	LA	1008	A	C5-C6-N1	7.10	121.25	117.70
26	LA	1826	G	C8-N9-C4	-7.10	103.56	106.40
26	LA	2655	G	N1-C6-O6	7.10	124.16	119.90
26	LA	2705	A	N1-C2-N3	-7.10	125.75	129.30
26	LA	2732	G	C6-N1-C2	-7.10	120.84	125.10
2	SA	385	C	P-O3'-C3'	-7.10	111.19	119.70
2	SA	1023	U	C2-N3-C4	7.10	131.26	127.00
2	SA	1379	G	N7-C8-N9	-7.10	109.55	113.10
26	LA	672	C	N1-C2-O2	7.10	123.16	118.90
26	LA	729	G	C2-N3-C4	-7.10	108.35	111.90
26	LA	857	G	C5-C6-N1	7.10	115.05	111.50
26	LA	2650	U	C5'-C4'-O4'	7.10	117.61	109.10
57	LS	44	TYR	CG-CD2-CE2	-7.10	115.62	121.30
2	SA	415	A	C5-C6-N1	7.09	121.25	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	672	U	O4'-C1'-N1	7.09	113.88	108.20
2	SA	1437	A	O4'-C1'-N9	7.09	113.88	108.20
26	LA	190	A	C1'-O4'-C4'	-7.09	104.22	109.90
26	LA	651	G	N1-C2-N3	-7.09	119.64	123.90
26	LA	1307	A	P-O5'-C5'	-7.09	109.55	120.90
26	LA	1598	A	N1-C2-N3	-7.09	125.75	129.30
26	LA	1950	G	C1'-O4'-C4'	-7.09	104.22	109.90
26	LA	2091	C	C6-N1-C2	-7.09	117.46	120.30
26	LA	2529	G	C1'-O4'-C4'	7.09	115.58	109.90
26	LA	2652	C	N1-C2-N3	7.09	124.17	119.20
26	LA	2888	C	C5-C4-N4	-7.09	115.23	120.20
26	LA	545	U	N1-C2-O2	7.09	127.77	122.80
26	LA	617	G	C4-C5-N7	-7.09	107.96	110.80
26	LA	2532	G	C5'-C4'-O4'	7.09	117.61	109.10
26	LA	2837	A	C5-N7-C8	-7.09	100.35	103.90
2	SA	791	G	C5'-C4'-C3'	7.09	127.34	116.00
2	SA	1173	U	C5'-C4'-C3'	-7.09	104.65	116.00
3	S1	44	U	N1-C2-O2	-7.09	117.84	122.80
26	LA	199	A	O4'-C1'-C2'	-7.09	98.71	105.80
26	LA	759	G	N7-C8-N9	-7.09	109.55	113.10
26	LA	2036	C	O4'-C1'-N1	7.09	113.87	108.20
2	SA	994	A	N7-C8-N9	7.09	117.34	113.80
2	SA	1126	U	N3-C4-C5	7.09	118.85	114.60
23	SR	50	TYR	CB-CG-CD2	-7.09	116.75	121.00
25	LB	75	G	P-O3'-C3'	7.09	128.21	119.70
26	LA	569	U	N3-C2-O2	7.09	127.16	122.20
26	LA	605	G	N9-C4-C5	7.09	108.24	105.40
26	LA	646	U	O4'-C1'-N1	7.09	113.87	108.20
26	LA	927	A	N9-C4-C5	7.09	108.64	105.80
26	LA	1241	A	N3-C4-N9	7.09	133.07	127.40
26	LA	2161	C	N3-C4-N4	7.09	122.96	118.00
26	LA	2205	A	C4-C5-C6	7.09	120.54	117.00
26	LA	2797	U	N1-C2-O2	-7.09	117.84	122.80
27	LD	79	ARG	NE-CZ-NH2	-7.09	116.75	120.30
35	L1	56	VAL	CG1-CB-CG2	7.09	122.24	110.90
2	SA	510	A	P-O5'-C5'	7.09	132.24	120.90
2	SA	1469	C	O4'-C1'-N1	7.09	113.87	108.20
2	SA	338	A	C6-N1-C2	-7.09	114.35	118.60
2	SA	824	G	O4'-C1'-N9	7.09	113.87	108.20
2	SA	1504	G	C2-N3-C4	7.09	115.44	111.90
17	SQ	39	ARG	NE-CZ-NH1	7.09	123.84	120.30
26	LA	137	U	C5-C6-N1	7.09	126.24	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	726	G	O4'-C1'-N9	7.09	113.87	108.20
26	LA	1704	C	C4-C5-C6	-7.09	113.86	117.40
26	LA	2129	C	C4'-C3'-C2'	-7.09	95.51	102.60
26	LA	2766	A	C8-N9-C4	-7.09	102.97	105.80
2	SA	1080	A	C2-N3-C4	7.08	114.14	110.60
26	LA	573	U	N1-C2-N3	-7.08	110.65	114.90
26	LA	815	C	C1'-O4'-C4'	-7.08	104.23	109.90
26	LA	2804	U	C5-C6-N1	-7.08	119.16	122.70
2	SA	103	U	C5-C6-N1	7.08	126.24	122.70
2	SA	547	A	N7-C8-N9	-7.08	110.26	113.80
2	SA	1281	C	P-O5'-C5'	7.08	132.23	120.90
26	LA	563	A	C6-N1-C2	-7.08	114.35	118.60
26	LA	628	G	C8-N9-C4	7.08	109.23	106.40
26	LA	769	U	C5-C6-N1	-7.08	119.16	122.70
26	LA	1522	A	N1-C2-N3	-7.08	125.76	129.30
26	LA	1915	C	N3-C4-N4	7.08	122.96	118.00
26	LA	2155	U	C1'-O4'-C4'	-7.08	104.23	109.90
26	LA	2203	U	C2-N1-C1'	7.08	126.20	117.70
26	LA	2218	G	O4'-C1'-N9	7.08	113.87	108.20
26	LA	2292	U	O4'-C1'-N1	7.08	113.87	108.20
2	SA	321	A	C4'-C3'-C2'	-7.08	95.52	102.60
2	SA	511	C	C2-N1-C1'	-7.08	111.01	118.80
2	SA	812	G	O4'-C4'-C3'	-7.08	96.92	104.00
2	SA	905	U	C2-N3-C4	-7.08	122.75	127.00
2	SA	1494	G	C4-C5-C6	7.08	123.05	118.80
26	LA	182	A	N3-C4-N9	-7.08	121.73	127.40
26	LA	1031	G	N1-C6-O6	7.08	124.15	119.90
26	LA	1596	A	N1-C6-N6	7.08	122.85	118.60
26	LA	1701	A	C8-N9-C4	7.08	108.63	105.80
26	LA	2669	G	C5'-C4'-C3'	7.08	127.33	116.00
26	LA	2738	A	N7-C8-N9	-7.08	110.26	113.80
2	SA	157	U	C5-C4-O4	-7.08	121.65	125.90
2	SA	1172	C	C4-C5-C6	7.08	120.94	117.40
2	SA	1477	U	C4'-C3'-C2'	-7.08	95.52	102.60
26	LA	1022	G	C4-C5-N7	7.08	113.63	110.80
26	LA	1990	C	N1-C2-N3	7.08	124.16	119.20
26	LA	2536	G	N3-C2-N2	7.08	124.86	119.90
2	SA	4	U	N3-C4-C5	7.08	118.85	114.60
2	SA	14	U	O4'-C1'-N1	7.08	113.86	108.20
2	SA	86	G	N7-C8-N9	7.08	116.64	113.10
2	SA	110	C	N3-C4-N4	7.08	122.96	118.00
2	SA	115	G	C5-N7-C8	7.08	107.84	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	762	U	P-O3'-C3'	7.08	128.19	119.70
26	LA	650	C	C2-N3-C4	-7.08	116.36	119.90
26	LA	817	C	C6-N1-C2	-7.08	117.47	120.30
26	LA	1029	A	N7-C8-N9	7.08	117.34	113.80
26	LA	1242	U	C5'-C4'-C3'	-7.08	104.67	116.00
26	LA	1311	G	C8-N9-C4	-7.08	103.57	106.40
26	LA	1422	G	C4-C5-N7	7.08	113.63	110.80
26	LA	1843	C	C5'-C4'-O4'	7.08	117.59	109.10
34	L0	29	ARG	NE-CZ-NH2	7.08	123.84	120.30
26	LA	1610	A	N7-C8-N9	7.08	117.34	113.80
2	SA	303	A	C5-C6-N1	-7.08	114.16	117.70
2	SA	1294	G	C5-C6-N1	7.08	115.04	111.50
26	LA	384	A	C4-C5-C6	-7.08	113.46	117.00
26	LA	517	C	C6-N1-C2	-7.08	117.47	120.30
26	LA	1176	U	C2-N1-C1'	7.08	126.19	117.70
26	LA	1425	G	N1-C6-O6	7.08	124.14	119.90
26	LA	1444	G	P-O3'-C3'	7.08	128.19	119.70
26	LA	2190	G	C5-C6-O6	-7.08	124.36	128.60
26	LA	2217	G	N1-C6-O6	-7.08	115.66	119.90
26	LA	2512	C	N1-C2-N3	7.08	124.15	119.20
2	SA	15	G	C8-N9-C4	-7.07	103.57	106.40
2	SA	1031	C	C5-C4-N4	7.07	125.15	120.20
21	SE	141	ASP	N-CA-CB	-7.07	97.87	110.60
26	LA	713	G	O4'-C1'-N9	7.07	113.86	108.20
26	LA	1680	U	C5'-C4'-O4'	-7.07	100.61	109.10
2	SA	565	U	C2-N1-C1'	-7.07	109.21	117.70
2	SA	1284	C	C5-C6-N1	7.07	124.54	121.00
26	LA	1494	A	N1-C6-N6	7.07	122.84	118.60
26	LA	2146	C	O4'-C1'-C2'	-7.07	98.73	105.80
2	SA	132	C	O4'-C1'-N1	7.07	113.86	108.20
2	SA	173	U	O4'-C1'-C2'	7.07	113.96	107.60
2	SA	1209	C	O5'-P-OP1	-7.07	99.34	105.70
2	SA	1243	C	C5-C6-N1	-7.07	117.46	121.00
4	S2	58	A	N1-C6-N6	7.07	122.84	118.60
12	SL	98	ARG	NH1-CZ-NH2	-7.07	111.62	119.40
25	LB	84	G	C8-N9-C4	7.07	109.23	106.40
26	LA	1483	G	C8-N9-C1'	7.07	136.19	127.00
26	LA	1300	G	C5'-C4'-O4'	7.07	117.58	109.10
26	LA	1950	G	C6-N1-C2	-7.07	120.86	125.10
26	LA	2213	U	C1'-O4'-C4'	-7.07	104.25	109.90
2	SA	226	G	C4-C5-C6	-7.07	114.56	118.80
2	SA	496	A	P-O5'-C5'	7.07	132.21	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	778	G	N3-C2-N2	7.07	124.85	119.90
2	SA	1489	G	C2-N3-C4	-7.07	108.37	111.90
24	S3	361	ARG	NH1-CZ-NH2	-7.07	111.63	119.40
25	LB	6	G	N3-C4-N9	7.07	130.24	126.00
26	LA	8	C	C4-C5-C6	7.07	120.93	117.40
26	LA	1171	G	C5'-C4'-O4'	7.07	117.58	109.10
26	LA	1769	U	C5-C6-N1	-7.07	119.17	122.70
26	LA	2210	U	C2-N1-C1'	7.07	126.18	117.70
26	LA	2294	G	C6-N1-C2	-7.07	120.86	125.10
2	SA	64	G	P-O3'-C3'	-7.07	111.22	119.70
2	SA	96	U	C6-N1-C1'	7.07	131.09	121.20
2	SA	662	U	C5-C4-O4	-7.07	121.66	125.90
26	LA	721	A	C6-C5-N7	-7.07	127.36	132.30
26	LA	1347	A	C5'-C4'-C3'	-7.07	104.69	116.00
26	LA	2315	G	C5-N7-C8	7.07	107.83	104.30
51	LI	7	ASP	CB-CG-OD2	7.07	124.66	118.30
2	SA	609	A	N9-C1'-C2'	-7.06	104.23	112.00
2	SA	795	C	C6-N1-C2	-7.06	117.47	120.30
26	LA	1330	C	N3-C2-O2	-7.06	116.95	121.90
26	LA	2898	U	O4'-C1'-N1	7.06	113.85	108.20
2	SA	1	A	N1-C6-N6	-7.06	114.36	118.60
2	SA	55	A	N1-C6-N6	-7.06	114.36	118.60
24	S3	356	ARG	NE-CZ-NH1	7.06	123.83	120.30
26	LA	554	U	C2-N3-C4	-7.06	122.76	127.00
26	LA	875	G	N1-C2-N3	7.06	128.14	123.90
26	LA	943	A	C5-C6-N6	7.06	129.35	123.70
26	LA	1646	C	C5-C6-N1	-7.06	117.47	121.00
26	LA	2041	U	C5-C4-O4	-7.06	121.66	125.90
26	LA	2216	G	C6-N1-C2	-7.06	120.86	125.10
26	LA	2345	G	N9-C4-C5	7.06	108.22	105.40
26	LA	2586	U	O4'-C1'-N1	7.06	113.85	108.20
2	SA	1014	A	O4'-C1'-N9	7.06	113.85	108.20
2	SA	1104	G	N3-C4-C5	-7.06	125.07	128.60
3	S1	30	U	C4'-C3'-C2'	-7.06	95.54	102.60
26	LA	2033	A	C5-N7-C8	-7.06	100.37	103.90
2	SA	778	G	N9-C4-C5	7.06	108.22	105.40
2	SA	1206	G	C4-N9-C1'	-7.06	117.32	126.50
26	LA	515	A	C2-N3-C4	-7.06	107.07	110.60
26	LA	780	G	C3'-C2'-C1'	7.06	107.15	101.50
26	LA	2158	A	C3'-C2'-C1'	-7.06	95.85	101.50
26	LA	2489	U	O4'-C1'-N1	7.06	113.85	108.20
46	LH	163	TYR	CA-CB-CG	7.06	126.81	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	998	C	N1-C2-O2	7.06	123.13	118.90
2	SA	1306	A	O4'-C1'-N9	7.06	113.85	108.20
2	SA	1531	A	N7-C8-N9	7.06	117.33	113.80
26	LA	470	A	C4-C5-C6	-7.06	113.47	117.00
26	LA	904	G	C4-C5-C6	-7.06	114.56	118.80
26	LA	1713	A	C6-C5-N7	-7.06	127.36	132.30
26	LA	2509	G	C6-C5-N7	-7.06	126.17	130.40
26	LA	2576	G	O4'-C1'-N9	7.06	113.85	108.20
26	LA	2858	C	C6-N1-C2	-7.06	117.48	120.30
26	LA	2892	G	N9-C4-C5	7.06	108.22	105.40
2	SA	50	A	C6-N1-C2	7.06	122.83	118.60
2	SA	527	G	O4'-C4'-C3'	-7.06	96.94	104.00
2	SA	559	A	N1-C6-N6	7.06	122.83	118.60
26	LA	1705	A	C6-N1-C2	7.06	122.83	118.60
26	LA	510	C	C4-C5-C6	-7.05	113.87	117.40
26	LA	568	U	N3-C4-O4	-7.05	114.46	119.40
26	LA	2472	G	C5'-C4'-O4'	7.05	117.56	109.10
26	LA	2514	U	O4'-C1'-N1	7.05	113.84	108.20
26	LA	2747	G	C4-C5-N7	7.05	113.62	110.80
40	L4	5	ARG	NE-CZ-NH2	-7.05	116.77	120.30
26	LA	330	A	C2-N3-C4	-7.05	107.07	110.60
26	LA	718	A	C2-N3-C4	-7.05	107.07	110.60
26	LA	888	C	C2-N1-C1'	7.05	126.56	118.80
26	LA	1220	G	C6-N1-C2	-7.05	120.87	125.10
26	LA	1333	G	C4-C5-C6	7.05	123.03	118.80
26	LA	1510	G	C5'-C4'-O4'	7.05	117.56	109.10
26	LA	2458	G	O3'-P-O5'	-7.05	90.60	104.00
2	SA	55	A	C4-C5-N7	7.05	114.23	110.70
2	SA	670	G	N3-C4-C5	-7.05	125.07	128.60
26	LA	151	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	229	C	N1-C2-O2	7.05	123.13	118.90
26	LA	417	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	1206	G	N9-C1'-C2'	-7.05	104.24	112.00
26	LA	1732	C	N3-C4-C5	-7.05	119.08	121.90
26	LA	2013	A	C4-C5-N7	7.05	114.23	110.70
2	SA	1434	A	C4-C5-N7	-7.05	107.17	110.70
4	S2	14	A	P-O3'-C3'	7.05	128.16	119.70
25	LB	70	C	N1-C2-N3	7.05	124.14	119.20
26	LA	15	G	C4-C5-N7	7.05	113.62	110.80
26	LA	125	A	C4'-C3'-C2'	-7.05	95.55	102.60
26	LA	858	G	C6-C5-N7	-7.05	126.17	130.40
26	LA	1135	C	N3-C2-O2	-7.05	116.97	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2190	G	C6-N1-C2	7.05	129.33	125.10
26	LA	2381	A	C8-N9-C4	-7.05	102.98	105.80
26	LA	2669	G	N9-C1'-C2'	-7.05	104.25	112.00
26	LA	2719	G	C2-N3-C4	-7.05	108.38	111.90
2	SA	84	U	C1'-O4'-C4'	-7.05	104.26	109.90
2	SA	706	A	C2-N3-C4	7.05	114.12	110.60
2	SA	1143	G	N3-C4-C5	7.05	132.12	128.60
2	SA	1168	U	C2-N3-C4	7.05	131.23	127.00
2	SA	1238	A	C6-C5-N7	-7.05	127.37	132.30
26	LA	1786	A	O4'-C1'-C2'	-7.05	98.75	105.80
26	LA	2108	A	C4-C5-C6	-7.05	113.48	117.00
26	LA	2183	A	C5-N7-C8	-7.05	100.38	103.90
26	LA	2245	U	OP1-P-O3'	7.05	120.71	105.20
2	SA	374	A	N1-C2-N3	7.05	132.82	129.30
2	SA	1477	U	C3'-C2'-C1'	7.05	107.14	101.50
26	LA	116	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	617	G	N3-C4-C5	-7.05	125.08	128.60
26	LA	781	A	C5-C6-N1	-7.05	114.18	117.70
26	LA	784	G	N3-C4-C5	-7.05	125.08	128.60
26	LA	793	A	OP1-P-OP2	-7.05	109.03	119.60
26	LA	807	U	N1-C2-N3	7.05	119.13	114.90
26	LA	822	G	C4'-C3'-C2'	7.05	109.65	102.60
26	LA	945	A	C2-N3-C4	7.05	114.12	110.60
26	LA	950	G	C8-N9-C4	-7.05	103.58	106.40
26	LA	1194	A	C8-N9-C4	7.05	108.62	105.80
26	LA	2219	U	O4'-C1'-N1	7.05	113.84	108.20
26	LA	2304	G	C2'-C3'-O3'	7.05	125.00	109.50
26	LA	2740	A	C8-N9-C4	7.05	108.62	105.80
32	LY	38	ARG	NE-CZ-NH1	7.05	123.82	120.30
2	SA	1300	G	C8-N9-C4	7.04	109.22	106.40
26	LA	641	U	N3-C4-O4	7.04	124.33	119.40
26	LA	942	G	N3-C2-N2	7.04	124.83	119.90
26	LA	1316	U	C1'-O4'-C4'	-7.04	104.26	109.90
26	LA	1567	G	C3'-C2'-C1'	-7.04	95.86	101.50
26	LA	1824	G	N9-C4-C5	7.04	108.22	105.40
2	SA	38	G	O4'-C1'-N9	7.04	113.84	108.20
2	SA	107	G	N3-C4-C5	-7.04	125.08	128.60
2	SA	355	C	C6-N1-C2	-7.04	117.48	120.30
2	SA	588	G	C4-C5-N7	7.04	113.62	110.80
2	SA	1484	C	P-O3'-C3'	7.04	128.15	119.70
3	S1	21	U	C4'-C3'-C2'	-7.04	95.56	102.60
26	LA	285	G	C5-C6-N1	7.04	115.02	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	573	U	C4'-C3'-C2'	-7.04	95.56	102.60
26	LA	606	U	P-O3'-C3'	7.04	128.15	119.70
26	LA	730	A	N9-C4-C5	7.04	108.62	105.80
26	LA	1028	A	C2-N3-C4	-7.04	107.08	110.60
26	LA	1113	U	O5'-P-OP1	7.04	119.15	110.70
26	LA	2394	C	N1-C2-O2	7.04	123.13	118.90
26	LA	2448	A	C5-C6-N1	7.04	121.22	117.70
26	LA	2577	A	C3'-C2'-C1'	-7.04	95.86	101.50
2	SA	142	G	N1-C6-O6	-7.04	115.67	119.90
2	SA	227	G	C5-N7-C8	-7.04	100.78	104.30
2	SA	703	G	OP1-P-OP2	-7.04	109.04	119.60
2	SA	787	A	C2-N3-C4	7.04	114.12	110.60
2	SA	1273	C	O4'-C1'-N1	7.04	113.83	108.20
23	SR	52	ARG	NE-CZ-NH2	7.04	123.82	120.30
26	LA	732	C	C6-N1-C2	-7.04	117.48	120.30
26	LA	1009	A	C5'-C4'-O4'	7.04	117.55	109.10
26	LA	1997	C	N3-C2-O2	-7.04	116.97	121.90
26	LA	2078	C	C5'-C4'-O4'	7.04	117.55	109.10
26	LA	2181	U	OP1-P-OP2	-7.04	109.04	119.60
26	LA	2254	C	N3-C4-N4	7.04	122.93	118.00
26	LA	2741	A	C8-N9-C4	-7.04	102.98	105.80
44	LF	35	TYR	CB-CG-CD2	-7.04	116.78	121.00
26	LA	480	A	N1-C2-N3	-7.04	125.78	129.30
26	LA	1358	G	O4'-C1'-N9	7.04	113.83	108.20
2	SA	383	A	P-O3'-C3'	7.04	128.15	119.70
2	SA	1497	G	C4-N9-C1'	-7.04	117.35	126.50
25	LB	114	C	C2-N3-C4	-7.04	116.38	119.90
26	LA	405	U	C5-C6-N1	-7.04	119.18	122.70
26	LA	616	A	C5-N7-C8	7.04	107.42	103.90
26	LA	1907	G	C4-N9-C1'	-7.04	117.35	126.50
27	LD	68	ARG	NE-CZ-NH1	7.04	123.82	120.30
2	SA	1103	C	N3-C2-O2	-7.04	116.97	121.90
26	LA	143	C	N1-C2-O2	7.04	123.12	118.90
26	LA	1285	A	N9-C4-C5	-7.04	102.98	105.80
26	LA	2769	U	N1-C2-N3	7.04	119.12	114.90
2	SA	760	G	C4'-C3'-C2'	-7.04	95.56	102.60
2	SA	833	G	P-O5'-C5'	-7.04	109.64	120.90
3	S1	30	U	C1'-O4'-C4'	-7.04	104.27	109.90
25	LB	46	A	N1-C6-N6	7.04	122.82	118.60
26	LA	35	G	C5-C6-N1	7.04	115.02	111.50
26	LA	374	A	C5-C6-N6	-7.04	118.07	123.70
26	LA	1141	U	N3-C4-C5	7.04	118.82	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1969	A	P-O3'-C3'	7.04	128.14	119.70
26	LA	2502	G	C5-C6-N1	-7.04	107.98	111.50
26	LA	2776	A	C5-C6-N1	-7.04	114.18	117.70
2	SA	1529	G	N7-C8-N9	-7.03	109.58	113.10
3	S1	27	A	C4'-C3'-C2'	-7.03	95.57	102.60
26	LA	59	U	C4-C5-C6	-7.03	115.48	119.70
26	LA	184	C	C5'-C4'-C3'	-7.03	104.75	116.00
26	LA	712	G	C6-N1-C2	7.03	129.32	125.10
26	LA	1360	G	N7-C8-N9	7.03	116.62	113.10
26	LA	2053	G	N3-C2-N2	7.03	124.82	119.90
2	SA	706	A	C4-C5-C6	7.03	120.52	117.00
2	SA	1323	G	N3-C4-C5	-7.03	125.08	128.60
26	LA	1647	U	C6-N1-C2	-7.03	116.78	121.00
26	LA	1712	U	N1-C2-N3	-7.03	110.68	114.90
26	LA	1724	G	O4'-C1'-N9	7.03	113.83	108.20
26	LA	1834	U	P-O3'-C3'	7.03	128.14	119.70
26	LA	2699	C	OP1-P-OP2	-7.03	109.05	119.60
2	SA	47	C	N3-C4-C5	-7.03	119.09	121.90
2	SA	462	G	C1'-O4'-C4'	-7.03	104.28	109.90
26	LA	85	G	N3-C4-N9	7.03	130.22	126.00
26	LA	228	C	C1'-O4'-C4'	-7.03	104.28	109.90
26	LA	1006	C	C2-N3-C4	-7.03	116.39	119.90
26	LA	1498	C	C6-N1-C2	-7.03	117.49	120.30
26	LA	1763	G	C5'-C4'-O4'	7.03	117.54	109.10
26	LA	2043	C	C5-C6-N1	-7.03	117.48	121.00
26	LA	2302	U	N3-C2-O2	-7.03	117.28	122.20
2	SA	1155	A	C5-C6-N1	7.03	121.22	117.70
2	SA	1463	U	C5-C4-O4	-7.03	121.68	125.90
26	LA	44	A	N1-C2-N3	7.03	132.81	129.30
26	LA	242	G	C2-N3-C4	-7.03	108.39	111.90
26	LA	409	G	N3-C2-N2	7.03	124.82	119.90
2	SA	292	G	N1-C2-N2	-7.03	109.88	116.20
2	SA	894	G	C4'-C3'-C2'	-7.03	95.57	102.60
2	SA	1180	A	C6-C5-N7	-7.03	127.38	132.30
2	SA	1337	G	C1'-O4'-C4'	-7.03	104.28	109.90
2	SA	1361	G	C5'-C4'-C3'	7.03	127.24	116.00
15	SO	42	PHE	CB-CG-CD1	-7.03	115.88	120.80
26	LA	450	G	N1-C2-N3	7.03	128.12	123.90
26	LA	488	G	P-O5'-C5'	7.03	132.15	120.90
26	LA	490	C	P-O3'-C3'	7.03	128.13	119.70
26	LA	994	C	C6-N1-C2	-7.03	117.49	120.30
26	LA	1577	C	C4-C5-C6	-7.03	113.89	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	677	U	N1-C2-N3	-7.03	110.68	114.90
2	SA	1048	G	C5-C6-N1	7.03	115.01	111.50
2	SA	1352	C	C2-N3-C4	-7.03	116.39	119.90
25	LB	21	G	C3'-C2'-C1'	7.03	107.12	101.50
26	LA	295	G	C5-N7-C8	-7.03	100.79	104.30
26	LA	785	G	O4'-C1'-N9	7.03	113.82	108.20
26	LA	1930	G	O5'-P-OP2	-7.03	99.38	105.70
26	LA	2197	U	O4'-C1'-N1	7.03	113.82	108.20
57	LS	54	ARG	NE-CZ-NH1	7.03	123.81	120.30
4	S2	27	G	O4'-C1'-N9	7.02	113.82	108.20
26	LA	226	A	O4'-C1'-C2'	7.02	113.92	107.60
2	SA	342	C	O4'-C1'-N1	7.02	113.82	108.20
2	SA	366	A	C1'-O4'-C4'	-7.02	104.28	109.90
2	SA	1383	C	N1-C2-N3	7.02	124.11	119.20
26	LA	1217	U	C6-N1-C2	7.02	125.21	121.00
31	LX	2	PHE	CD1-CG-CD2	7.02	127.43	118.30
38	LE	181	ASP	CB-CG-OD2	-7.02	111.98	118.30
2	SA	530	G	N3-C2-N2	7.02	124.81	119.90
26	LA	475	C	O4'-C1'-C2'	7.02	113.92	107.60
2	SA	117	G	C5-C6-N1	-7.02	107.99	111.50
2	SA	187	G	C4-C5-N7	7.02	113.61	110.80
2	SA	212	G	P-O3'-C3'	-7.02	111.28	119.70
2	SA	449	G	N7-C8-N9	7.02	116.61	113.10
25	LB	21	G	C4-C5-N7	7.02	113.61	110.80
26	LA	232	G	N1-C6-O6	7.02	124.11	119.90
26	LA	1014	A	C8-N9-C4	-7.02	102.99	105.80
26	LA	1082	U	P-O3'-C3'	7.02	128.12	119.70
26	LA	1610	A	C5-C6-N6	7.02	129.32	123.70
38	LE	200	ASP	CB-CG-OD2	7.02	124.62	118.30
2	SA	283	U	O4'-C1'-N1	7.02	113.81	108.20
2	SA	1091	U	C5-C4-O4	-7.02	121.69	125.90
2	SA	1252	A	C4-C5-N7	7.02	114.21	110.70
2	SA	1338	G	O4'-C1'-N9	7.02	113.81	108.20
2	SA	1478	U	N3-C4-O4	-7.02	114.49	119.40
4	S2	38	A	C5-C6-N6	7.02	129.31	123.70
26	LA	592	A	C6-C5-N7	-7.02	127.39	132.30
26	LA	1081	U	P-O5'-C5'	7.02	132.13	120.90
26	LA	1372	U	C2-N3-C4	-7.02	122.79	127.00
26	LA	1641	A	C2-N3-C4	-7.02	107.09	110.60
26	LA	2689	U	O4'-C1'-N1	7.02	113.81	108.20
2	SA	520	A	N1-C2-N3	7.02	132.81	129.30
26	LA	1249	U	C5'-C4'-C3'	-7.02	104.77	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1795	C	O4'-C1'-N1	7.02	113.81	108.20
26	LA	2803	G	C5'-C4'-C3'	-7.02	104.78	116.00
2	SA	460	A	N7-C8-N9	-7.01	110.29	113.80
4	S2	65	G	O4'-C4'-C3'	-7.01	96.98	104.00
4	S2	77	A	C6-C5-N7	7.01	137.21	132.30
26	LA	1809	A	N1-C2-N3	7.01	132.81	129.30
26	LA	1992	G	N3-C4-N9	-7.01	121.79	126.00
25	LB	36	C	C1'-O4'-C4'	-7.01	104.29	109.90
26	LA	805	G	N1-C6-O6	-7.01	115.69	119.90
26	LA	2557	G	C6-N1-C2	-7.01	120.89	125.10
26	LA	2841	C	P-O5'-C5'	7.01	132.12	120.90
26	LA	2897	U	N3-C4-O4	7.01	124.31	119.40
45	LG	156	THR	N-CA-CB	7.01	123.62	110.30
2	SA	40	C	O4'-C1'-N1	7.01	113.81	108.20
2	SA	1382	C	C5-C6-N1	-7.01	117.49	121.00
12	SL	109	ARG	NE-CZ-NH1	7.01	123.81	120.30
26	LA	1358	G	C6-N1-C2	-7.01	120.89	125.10
26	LA	1572	A	O4'-C1'-N9	7.01	113.81	108.20
26	LA	1904	G	O4'-C1'-C2'	7.01	113.91	107.60
26	LA	1962	C	N1-C2-O2	7.01	123.11	118.90
26	LA	2333	A	C5-N7-C8	-7.01	100.39	103.90
2	SA	47	C	C4-C5-C6	7.01	120.91	117.40
2	SA	82	G	C8-N9-C4	-7.01	103.60	106.40
2	SA	469	C	N3-C4-C5	7.01	124.70	121.90
2	SA	1262	C	C5'-C4'-O4'	7.01	117.51	109.10
2	SA	1305	G	N1-C6-O6	7.01	124.11	119.90
10	SJ	62	ARG	NH1-CZ-NH2	-7.01	111.69	119.40
20	SD	64	TYR	CB-CG-CD1	7.01	125.20	121.00
26	LA	255	A	N1-C6-N6	-7.01	114.39	118.60
26	LA	403	U	C2-N1-C1'	-7.01	109.29	117.70
26	LA	776	G	C2-N3-C4	-7.01	108.40	111.90
26	LA	2227	A	C4'-C3'-C2'	-7.01	95.59	102.60
26	LA	2282	G	C5'-C4'-C3'	-7.01	104.78	116.00
26	LA	2434	A	P-O3'-C3'	-7.01	111.29	119.70
26	LA	2696	U	C3'-C2'-C1'	-7.01	95.89	101.50
27	LD	176	ARG	NE-CZ-NH1	7.01	123.81	120.30
2	SA	800	G	N3-C2-N2	7.01	124.81	119.90
25	LB	41	G	N3-C4-C5	7.01	132.10	128.60
26	LA	1599	U	N1-C2-N3	7.01	119.11	114.90
26	LA	1794	A	C5'-C4'-O4'	7.01	117.51	109.10
26	LA	2373	G	N3-C4-N9	-7.01	121.80	126.00
2	SA	740	U	N1-C2-N3	7.01	119.10	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1276	G	P-O3'-C3'	-7.01	111.29	119.70
2	SA	1423	G	C4-C5-N7	7.01	113.60	110.80
4	S2	76	C	O4'-C1'-N1	7.01	113.80	108.20
5	ST	36	ALA	N-CA-CB	-7.01	100.29	110.10
26	LA	1266	G	C5-C6-O6	-7.01	124.40	128.60
26	LA	2373	G	C5-C6-N1	7.01	115.00	111.50
2	SA	66	A	N1-C6-N6	7.00	122.80	118.60
2	SA	626	G	C3'-C2'-C1'	7.00	107.10	101.50
25	LB	10	G	C8-N9-C4	-7.00	103.60	106.40
26	LA	651	G	C1'-O4'-C4'	-7.00	104.30	109.90
26	LA	1017	G	P-O5'-C5'	-7.00	109.69	120.90
2	SA	49	U	N3-C2-O2	7.00	127.10	122.20
2	SA	327	A	C5-C6-N1	-7.00	114.20	117.70
2	SA	465	A	P-O5'-C5'	7.00	132.10	120.90
2	SA	1340	A	C8-N9-C4	7.00	108.60	105.80
26	LA	413	C	C6-N1-C2	-7.00	117.50	120.30
26	LA	1172	C	C5-C6-N1	7.00	124.50	121.00
26	LA	1956	U	C4'-C3'-C2'	-7.00	95.60	102.60
26	LA	2827	C	C2'-C3'-O3'	7.00	124.91	109.50
2	SA	637	C	O4'-C1'-N1	7.00	113.80	108.20
2	SA	926	G	C2'-C3'-O3'	7.00	124.90	113.70
2	SA	934	C	N3-C2-O2	-7.00	117.00	121.90
2	SA	1205	U	N1-C2-N3	7.00	119.10	114.90
2	SA	1463	U	C5-C6-N1	7.00	126.20	122.70
4	S2	45	A	P-O3'-C3'	7.00	128.10	119.70
26	LA	684	G	N1-C2-N2	-7.00	109.90	116.20
26	LA	1516	G	C2-N3-C4	-7.00	108.40	111.90
26	LA	1663	G	C5'-C4'-O4'	7.00	117.50	109.10
26	LA	1841	U	N1-C2-O2	-7.00	117.90	122.80
26	LA	2615	U	C4-C5-C6	7.00	123.90	119.70
17	SQ	5	ARG	NE-CZ-NH2	-7.00	116.80	120.30
26	LA	792	A	N1-C2-N3	7.00	132.80	129.30
26	LA	1493	C	C6-N1-C1'	-7.00	112.40	120.80
26	LA	1902	C	C4'-C3'-C2'	-7.00	95.60	102.60
2	SA	31	G	C5-C6-O6	-7.00	124.40	128.60
2	SA	507	C	C6-N1-C2	7.00	123.10	120.30
2	SA	714	G	C8-N9-C4	7.00	109.20	106.40
2	SA	822	U	C5-C6-N1	-7.00	119.20	122.70
2	SA	894	G	N1-C2-N2	-7.00	109.90	116.20
2	SA	1095	U	C2-N3-C4	-7.00	122.80	127.00
26	LA	874	G	C5-C6-O6	-7.00	124.40	128.60
26	LA	911	A	C2-N3-C4	-7.00	107.10	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1676	A	N1-C2-N3	-7.00	125.80	129.30
26	LA	1737	G	P-O5'-C5'	7.00	132.10	120.90
26	LA	2430	A	C8-N9-C4	-7.00	103.00	105.80
26	LA	2527	C	N3-C4-N4	-7.00	113.10	118.00
2	SA	869	G	N1-C2-N3	-7.00	119.70	123.90
4	S2	66	C	N3-C4-N4	7.00	122.90	118.00
26	LA	708	G	P-O3'-C3'	7.00	128.10	119.70
26	LA	912	C	C1'-O4'-C4'	-7.00	104.30	109.90
2	SA	83	C	N3-C4-C5	-7.00	119.10	121.90
2	SA	897	C	N1-C2-N3	7.00	124.10	119.20
26	LA	293	U	C2-N3-C4	-7.00	122.80	127.00
2	SA	1501	C	C5-C4-N4	-6.99	115.30	120.20
19	SC	106	ARG	NE-CZ-NH1	6.99	123.80	120.30
25	LB	61	G	N3-C4-N9	-6.99	121.80	126.00
26	LA	298	G	C2-N3-C4	-6.99	108.40	111.90
26	LA	550	C	C6-N1-C2	-6.99	117.50	120.30
26	LA	672	C	N3-C2-O2	-6.99	117.00	121.90
26	LA	2663	G	N7-C8-N9	-6.99	109.60	113.10
2	SA	115	G	C5-C6-O6	-6.99	124.41	128.60
3	S1	54	U	C6-N1-C2	-6.99	116.81	121.00
26	LA	1333	G	N1-C2-N2	-6.99	109.91	116.20
26	LA	1491	G	N1-C2-N3	6.99	128.09	123.90
26	LA	2675	A	P-O3'-C3'	6.99	128.09	119.70
2	SA	56	U	C5-C6-N1	-6.99	119.20	122.70
2	SA	172	A	C5-N7-C8	-6.99	100.41	103.90
2	SA	366	A	O4'-C1'-N9	6.99	113.79	108.20
2	SA	418	C	C4'-C3'-C2'	-6.99	95.61	102.60
2	SA	590	U	C5-C4-O4	-6.99	121.70	125.90
2	SA	748	G	C6-N1-C2	-6.99	120.91	125.10
2	SA	1022	A	C6-N1-C2	-6.99	114.41	118.60
2	SA	1327	C	N3-C4-N4	6.99	122.89	118.00
26	LA	153	U	C1'-O4'-C4'	-6.99	104.31	109.90
26	LA	160	A	O4'-C1'-N9	6.99	113.79	108.20
26	LA	459	U	P-O5'-C5'	6.99	132.08	120.90
26	LA	753	A	O5'-P-OP1	6.99	119.09	110.70
26	LA	804	A	C5-C6-N6	6.99	129.29	123.70
26	LA	1156	A	C5-C6-N6	-6.99	118.11	123.70
26	LA	1654	A	C5-C6-N1	6.99	121.19	117.70
26	LA	2543	G	C6-C5-N7	-6.99	126.20	130.40
2	SA	152	A	C8-N9-C4	6.99	108.60	105.80
2	SA	682	G	C5-N7-C8	6.99	107.80	104.30
2	SA	722	G	N7-C8-N9	6.99	116.59	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	503	A	C6-N1-C2	-6.99	114.41	118.60
26	LA	936	A	N1-C6-N6	6.99	122.79	118.60
26	LA	1117	C	C2-N3-C4	-6.99	116.41	119.90
26	LA	1170	C	C5-C6-N1	6.99	124.50	121.00
26	LA	1546	G	N1-C6-O6	-6.99	115.71	119.90
26	LA	1694	C	N3-C2-O2	-6.99	117.01	121.90
26	LA	1916	A	N1-C6-N6	6.99	122.79	118.60
26	LA	2030	U	C2-N3-C4	-6.99	122.81	127.00
26	LA	2046	G	N1-C2-N2	-6.99	109.91	116.20
26	LA	2307	G	N1-C2-N2	6.99	122.49	116.20
26	LA	2887	A	C5'-C4'-O4'	6.99	117.49	109.10
44	LF	69	ARG	NE-CZ-NH1	6.99	123.79	120.30
7	SG	17	PHE	CB-CG-CD1	6.99	125.69	120.80
26	LA	76	C	N3-C4-C5	-6.99	119.11	121.90
26	LA	229	C	C2-N3-C4	6.99	123.39	119.90
26	LA	1713	A	C4-C5-C6	6.99	120.49	117.00
26	LA	2189	U	C5'-C4'-O4'	6.99	117.48	109.10
2	SA	445	G	C6-C5-N7	-6.99	126.21	130.40
2	SA	1070	U	N3-C4-O4	-6.99	114.51	119.40
2	SA	1345	U	P-O3'-C3'	6.99	128.08	119.70
16	SP	56	ARG	NE-CZ-NH2	-6.99	116.81	120.30
24	S3	334	PHE	CB-CG-CD1	6.99	125.69	120.80
26	LA	264	C	C2-N3-C4	-6.99	116.41	119.90
26	LA	1085	A	C5-C6-N6	-6.99	118.11	123.70
26	LA	2235	G	C6-N1-C2	-6.99	120.91	125.10
26	LA	2451	A	C5-C6-N1	6.99	121.19	117.70
26	LA	2501	C	C5'-C4'-C3'	6.99	127.18	116.00
2	SA	1066	C	O4'-C1'-N1	6.98	113.79	108.20
26	LA	803	U	O4'-C1'-N1	6.98	113.79	108.20
26	LA	2504	U	C4'-C3'-C2'	-6.98	95.62	102.60
2	SA	288	A	P-O3'-C3'	-6.98	111.32	119.70
2	SA	561	U	C5'-C4'-C3'	6.98	127.17	116.00
2	SA	782	A	N1-C2-N3	6.98	132.79	129.30
2	SA	1068	G	N9-C4-C5	-6.98	102.61	105.40
3	S1	50	U	C6-N1-C2	6.98	125.19	121.00
26	LA	964	C	N3-C4-C5	6.98	124.69	121.90
26	LA	1336	A	O4'-C1'-N9	6.98	113.79	108.20
26	LA	1364	G	N3-C4-C5	-6.98	125.11	128.60
26	LA	1537	G	C3'-C2'-C1'	6.98	107.08	101.50
26	LA	1628	G	C5'-C4'-C3'	-6.98	104.83	116.00
26	LA	2144	G	N3-C4-C5	6.98	132.09	128.60
26	LA	2309	A	C6-C5-N7	-6.98	127.41	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2587	A	C4-C5-N7	-6.98	107.21	110.70
27	LD	261	ARG	NH1-CZ-NH2	-6.98	111.72	119.40
2	SA	670	G	N3-C2-N2	-6.98	115.01	119.90
2	SA	1092	A	C3'-C2'-C1'	6.98	107.08	101.50
2	SA	1175	G	P-O3'-C3'	-6.98	111.32	119.70
2	SA	1270	G	C5-N7-C8	-6.98	100.81	104.30
25	LB	9	G	N7-C8-N9	-6.98	109.61	113.10
26	LA	821	A	C4'-C3'-C2'	-6.98	95.62	102.60
26	LA	2590	A	C4'-C3'-C2'	-6.98	95.62	102.60
26	LA	2734	A	C6-N1-C2	-6.98	114.41	118.60
2	SA	794	A	N1-C6-N6	6.98	122.79	118.60
26	LA	2668	G	C5-C6-O6	6.98	132.79	128.60
26	LA	2676	C	C5-C4-N4	-6.98	115.31	120.20
2	SA	416	G	C5-C6-O6	-6.98	124.41	128.60
2	SA	1047	G	C2-N3-C4	6.98	115.39	111.90
26	LA	20	C	C4-C5-C6	6.98	120.89	117.40
26	LA	305	C	C1'-O4'-C4'	-6.98	104.32	109.90
26	LA	1346	G	C5-C6-O6	6.98	132.79	128.60
26	LA	2742	G	C5-N7-C8	-6.98	100.81	104.30
26	LA	2882	A	C1'-O4'-C4'	-6.98	104.32	109.90
26	LA	2895	G	O4'-C1'-N9	6.98	113.78	108.20
2	SA	513	C	N1-C2-N3	-6.98	114.32	119.20
2	SA	597	G	N1-C6-O6	-6.97	115.72	119.90
2	SA	886	G	P-O5'-C5'	6.97	132.06	120.90
2	SA	904	U	OP1-P-OP2	-6.97	109.14	119.60
2	SA	1387	G	C1'-O4'-C4'	-6.97	104.32	109.90
24	S3	82	ARG	NE-CZ-NH2	-6.97	116.81	120.30
26	LA	57	C	C4-C5-C6	6.97	120.89	117.40
26	LA	276	U	C5-C4-O4	-6.97	121.72	125.90
26	LA	827	U	N3-C4-C5	-6.97	110.42	114.60
26	LA	2535	G	C1'-O4'-C4'	-6.97	104.32	109.90
26	LA	2612	C	N3-C4-N4	6.97	122.88	118.00
26	LA	2806	C	C4'-C3'-C2'	-6.97	95.62	102.60
2	SA	246	A	O4'-C1'-N9	6.97	113.78	108.20
2	SA	303	A	P-O3'-C3'	-6.97	111.33	119.70
2	SA	1246	A	O4'-C1'-N9	6.97	113.78	108.20
25	LB	106	G	N1-C6-O6	6.97	124.08	119.90
26	LA	113	U	O5'-C5'-C4'	6.97	124.95	111.70
26	LA	759	G	C5-C6-O6	-6.97	124.42	128.60
26	LA	1279	G	N3-C2-N2	6.97	124.78	119.90
26	LA	2819	G	C3'-C2'-C1'	6.97	107.08	101.50
26	LA	2859	G	N9-C1'-C2'	-6.97	104.33	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	275	G	P-O5'-C5'	6.97	132.05	120.90
26	LA	2443	C	OP1-P-OP2	-6.97	109.14	119.60
2	SA	441	A	C5'-C4'-C3'	-6.97	104.85	116.00
25	LB	75	G	C1'-O4'-C4'	-6.97	104.33	109.90
25	LB	98	G	O4'-C1'-N9	6.97	113.78	108.20
26	LA	462	C	O3'-P-O5'	-6.97	90.76	104.00
26	LA	1976	U	C5-C6-N1	-6.97	119.22	122.70
26	LA	2020	A	P-O5'-C5'	-6.97	109.75	120.90
2	SA	489	C	C4-C5-C6	-6.97	113.92	117.40
3	S1	57	C	N3-C4-N4	6.97	122.88	118.00
4	S2	66	C	C2-N3-C4	-6.97	116.42	119.90
2	SA	84	U	C3'-C2'-C1'	-6.97	95.93	101.50
3	S1	33	A	N1-C2-N3	-6.97	125.82	129.30
26	LA	2030	U	C6-N1-C2	-6.97	116.82	121.00
26	LA	2129	C	O4'-C4'-C3'	6.97	111.67	106.10
26	LA	2348	U	N1-C2-N3	6.97	119.08	114.90
26	LA	2418	A	N1-C6-N6	-6.97	114.42	118.60
2	SA	677	U	P-O3'-C3'	6.96	128.06	119.70
2	SA	1305	G	C3'-C2'-C1'	6.96	107.07	101.50
22	SF	78	PHE	CB-CG-CD2	-6.96	115.92	120.80
26	LA	706	A	C5'-C4'-O4'	6.96	117.46	109.10
26	LA	1922	G	C3'-C2'-C1'	-6.96	95.93	101.50
26	LA	2869	G	N1-C2-N3	6.96	128.08	123.90
2	SA	732	C	N3-C2-O2	-6.96	117.03	121.90
26	LA	2831	G	C5-C6-N1	6.96	114.98	111.50
2	SA	67	C	O4'-C1'-N1	6.96	113.77	108.20
2	SA	1159	U	O4'-C1'-N1	6.96	113.77	108.20
25	LB	89	U	C5-C6-N1	6.96	126.18	122.70
26	LA	75	G	C8-N9-C4	-6.96	103.62	106.40
26	LA	1130	U	C5-C4-O4	-6.96	121.72	125.90
26	LA	1238	G	N7-C8-N9	6.96	116.58	113.10
26	LA	2256	G	O5'-P-OP2	-6.96	99.44	105.70
26	LA	2297	A	N7-C8-N9	-6.96	110.32	113.80
2	SA	645	G	N1-C6-O6	-6.96	115.72	119.90
26	LA	666	A	C8-N9-C4	6.96	108.58	105.80
26	LA	853	C	C1'-O4'-C4'	-6.96	104.33	109.90
2	SA	134	G	C8-N9-C4	-6.96	103.62	106.40
4	S2	74	A	N1-C6-N6	-6.96	114.42	118.60
26	LA	381	G	O3'-P-O5'	6.96	117.22	104.00
26	LA	1664	A	C8-N9-C4	-6.96	103.02	105.80
26	LA	1959	G	C6-N1-C2	-6.96	120.92	125.10
26	LA	2669	G	O4'-C1'-N9	6.96	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1109	C	C5-C4-N4	-6.96	115.33	120.20
2	SA	1242	G	N9-C4-C5	6.96	108.18	105.40
2	SA	1262	C	N1-C2-O2	-6.96	114.73	118.90
3	S1	46	C	C4-C5-C6	6.96	120.88	117.40
26	LA	67	U	C5-C6-N1	6.96	126.18	122.70
26	LA	711	G	O4'-C1'-N9	6.96	113.77	108.20
26	LA	756	A	C4-C5-N7	6.96	114.18	110.70
26	LA	1027	A	C4-C5-C6	-6.96	113.52	117.00
26	LA	1053	C	N1-C2-N3	6.96	124.07	119.20
26	LA	1663	G	O5'-P-OP1	-6.96	99.44	105.70
26	LA	2431	U	C5'-C4'-C3'	-6.96	104.87	116.00
26	LA	2668	G	C4-C5-N7	-6.96	108.02	110.80
2	SA	771	G	C5-C6-N1	6.96	114.98	111.50
2	SA	875	U	O4'-C1'-N1	6.96	113.76	108.20
26	LA	664	G	C1'-O4'-C4'	-6.96	104.34	109.90
26	LA	1858	A	C2-N3-C4	6.96	114.08	110.60
26	LA	2593	U	O4'-C1'-N1	6.96	113.76	108.20
29	LV	69	ARG	NE-CZ-NH1	6.96	123.78	120.30
2	SA	897	C	N3-C2-O2	-6.95	117.03	121.90
2	SA	995	C	O4'-C1'-N1	6.95	113.76	108.20
26	LA	264	C	C5'-C4'-O4'	6.95	117.44	109.10
26	LA	509	C	C6-N1-C1'	-6.95	112.46	120.80
26	LA	549	G	C4'-C3'-C2'	-6.95	95.65	102.60
26	LA	1103	A	C5'-C4'-O4'	6.95	117.44	109.10
26	LA	2413	G	N1-C6-O6	6.95	124.07	119.90
26	LA	2561	U	P-O3'-C3'	-6.95	111.36	119.70
26	LA	2846	G	C5-N7-C8	6.95	107.78	104.30
26	LA	894	U	O4'-C4'-C3'	-6.95	97.05	104.00
26	LA	1503	A	C6-C5-N7	6.95	137.17	132.30
26	LA	1857	G	N1-C2-N2	-6.95	109.94	116.20
26	LA	2585	U	P-O3'-C3'	6.95	128.04	119.70
2	SA	1399	C	N3-C2-O2	-6.95	117.03	121.90
12	SL	94	TYR	CB-CG-CD1	-6.95	116.83	121.00
26	LA	106	C	C6-N1-C2	-6.95	117.52	120.30
26	LA	372	G	O4'-C1'-C2'	-6.95	98.85	105.80
26	LA	491	G	O4'-C1'-N9	6.95	113.76	108.20
26	LA	1156	A	N7-C8-N9	-6.95	110.33	113.80
26	LA	1482	G	N9-C4-C5	6.95	108.18	105.40
26	LA	1512	C	N3-C4-C5	-6.95	119.12	121.90
26	LA	1559	U	P-O5'-C5'	6.95	132.02	120.90
26	LA	2815	C	P-O5'-C5'	-6.95	109.78	120.90
26	LA	2894	G	C8-N9-C4	-6.95	103.62	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	183	C	C5-C4-N4	-6.95	115.34	120.20
2	SA	987	G	C5-C6-O6	-6.95	124.43	128.60
20	SD	148	ALA	N-CA-CB	-6.95	100.37	110.10
24	S3	78	TYR	CB-CG-CD1	-6.95	116.83	121.00
26	LA	71	A	C6-C5-N7	6.95	137.16	132.30
26	LA	295	G	N1-C2-N3	-6.95	119.73	123.90
26	LA	452	G	N1-C2-N3	-6.95	119.73	123.90
26	LA	851	C	N1-C2-N3	6.95	124.06	119.20
26	LA	1256	G	C5-N7-C8	6.95	107.77	104.30
26	LA	1323	C	N3-C4-C5	-6.95	119.12	121.90
2	SA	261	U	O4'-C1'-N1	6.95	113.76	108.20
2	SA	977	A	C6-C5-N7	-6.95	127.44	132.30
2	SA	1185	G	N3-C4-C5	-6.95	125.13	128.60
26	LA	252	G	O4'-C1'-N9	6.95	113.76	108.20
26	LA	768	G	C4-C5-C6	6.95	122.97	118.80
26	LA	1591	A	P-O5'-C5'	6.95	132.01	120.90
26	LA	1934	C	N3-C2-O2	-6.95	117.04	121.90
2	SA	277	C	O4'-C1'-N1	6.95	113.76	108.20
2	SA	805	C	C1'-O4'-C4'	-6.95	104.34	109.90
2	SA	1450	U	C2-N1-C1'	-6.95	109.37	117.70
2	SA	1466	C	C6-N1-C2	6.95	123.08	120.30
7	SG	94	ARG	NE-CZ-NH2	-6.95	116.83	120.30
19	SC	130	ARG	NE-CZ-NH1	-6.95	116.83	120.30
26	LA	380	G	C4-C5-C6	6.95	122.97	118.80
26	LA	823	C	C5-C6-N1	6.95	124.47	121.00
32	LY	29	SER	N-CA-CB	6.95	120.92	110.50
2	SA	785	G	C5'-C4'-C3'	-6.94	104.89	116.00
26	LA	362	A	C8-N9-C4	-6.94	103.02	105.80
26	LA	1429	G	C8-N9-C4	-6.94	103.62	106.40
2	SA	212	G	C5-C6-O6	6.94	132.76	128.60
2	SA	573	A	N9-C4-C5	6.94	108.58	105.80
2	SA	977	A	C5-C6-N6	-6.94	118.15	123.70
26	LA	639	U	O4'-C1'-N1	6.94	113.75	108.20
26	LA	1300	G	C4-C5-N7	6.94	113.58	110.80
2	SA	95	C	N3-C2-O2	-6.94	117.04	121.90
2	SA	1119	C	N1-C2-N3	6.94	124.06	119.20
26	LA	1253	A	N9-C4-C5	-6.94	103.02	105.80
26	LA	1524	G	N1-C6-O6	6.94	124.06	119.90
26	LA	2136	G	C4-C5-N7	6.94	113.58	110.80
2	SA	337	G	C4'-C3'-C2'	-6.94	95.66	102.60
4	S2	16	C	C1'-O4'-C4'	-6.94	104.35	109.90
26	LA	124	G	N7-C8-N9	6.94	116.57	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	473	G	P-O3'-C3'	-6.94	111.37	119.70
26	LA	1441	G	C8-N9-C4	-6.94	103.62	106.40
26	LA	1482	G	C2-N3-C4	6.94	115.37	111.90
26	LA	2195	U	O4'-C1'-N1	6.94	113.75	108.20
2	SA	563	A	N9-C4-C5	-6.94	103.03	105.80
2	SA	701	U	N3-C4-C5	-6.94	110.44	114.60
2	SA	1127	G	C5-N7-C8	-6.94	100.83	104.30
26	LA	387	U	N1-C2-N3	6.94	119.06	114.90
26	LA	411	G	C5-C6-N1	6.94	114.97	111.50
26	LA	1351	C	C5'-C4'-O4'	6.94	117.42	109.10
26	LA	1475	G	N1-C6-O6	6.94	124.06	119.90
26	LA	2486	C	O4'-C1'-C2'	6.94	113.84	107.60
44	LF	35	TYR	CD1-CG-CD2	6.94	125.53	117.90
2	SA	643	C	C6-N1-C2	-6.94	117.53	120.30
2	SA	1222	G	C2-N3-C4	6.94	115.37	111.90
17	SQ	76	ARG	NE-CZ-NH2	-6.93	116.83	120.30
24	S3	136	ARG	NE-CZ-NH1	6.93	123.77	120.30
26	LA	186	G	N1-C6-O6	6.93	124.06	119.90
26	LA	447	A	C2-N3-C4	6.93	114.07	110.60
26	LA	808	G	C3'-C2'-C1'	6.93	107.05	101.50
26	LA	1728	C	C6-N1-C1'	6.93	129.12	120.80
26	LA	1763	G	C4-C5-N7	-6.93	108.03	110.80
26	LA	1967	C	O4'-C1'-N1	6.93	113.75	108.20
26	LA	2199	A	C5'-C4'-O4'	6.93	117.42	109.10
26	LA	2212	A	C5-C6-N1	6.93	121.17	117.70
26	LA	2218	G	N9-C4-C5	6.93	108.17	105.40
26	LA	2591	C	C2-N3-C4	-6.93	116.43	119.90
26	LA	2631	G	N3-C2-N2	6.93	124.75	119.90
2	SA	700	G	C2-N3-C4	6.93	115.37	111.90
2	SA	818	G	C8-N9-C4	6.93	109.17	106.40
26	LA	1204	A	O4'-C1'-N9	6.93	113.75	108.20
26	LA	1515	A	C4-C5-N7	6.93	114.17	110.70
26	LA	1659	G	C8-N9-C4	-6.93	103.63	106.40
26	LA	2087	G	N3-C4-C5	-6.93	125.13	128.60
26	LA	2176	A	P-O3'-C3'	-6.93	111.38	119.70
26	LA	2781	A	C6-N1-C2	-6.93	114.44	118.60
26	LA	2832	U	C2-N1-C1'	6.93	126.02	117.70
2	SA	286	C	C6-N1-C2	-6.93	117.53	120.30
2	SA	499	A	O4'-C1'-C2'	-6.93	98.87	105.80
24	S3	522	TYR	CZ-CE2-CD2	-6.93	113.56	119.80
26	LA	887	U	N3-C4-O4	-6.93	114.55	119.40
2	SA	160	A	O4'-C1'-N9	-6.93	102.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	186	C	C4-C5-C6	6.93	120.86	117.40
2	SA	449	G	C6-C5-N7	-6.93	126.24	130.40
2	SA	1121	U	O4'-C1'-N1	6.93	113.74	108.20
2	SA	1166	G	N1-C6-O6	-6.93	115.74	119.90
9	SI	79	ARG	NE-CZ-NH1	6.93	123.76	120.30
25	LB	106	G	C4-C5-N7	6.93	113.57	110.80
26	LA	515	A	O4'-C1'-N9	6.93	113.74	108.20
26	LA	2004	G	O4'-C1'-N9	6.93	113.74	108.20
49	LK	65	SER	N-CA-CB	6.93	120.89	110.50
2	SA	605	U	O4'-C1'-N1	6.93	113.74	108.20
25	LB	59	A	C4-C5-C6	-6.93	113.54	117.00
26	LA	117	G	N9-C4-C5	-6.93	102.63	105.40
26	LA	231	A	C8-N9-C4	6.93	108.57	105.80
26	LA	238	C	O4'-C1'-C2'	6.93	113.83	107.60
26	LA	818	G	N1-C6-O6	6.93	124.06	119.90
26	LA	1205	A	C8-N9-C4	6.93	108.57	105.80
2	SA	524	G	C5-C6-N1	6.93	114.96	111.50
2	SA	579	A	C8-N9-C4	6.93	108.57	105.80
2	SA	640	A	N1-C6-N6	-6.93	114.44	118.60
2	SA	714	G	N7-C8-N9	-6.93	109.64	113.10
26	LA	733	G	N3-C4-C5	-6.93	125.14	128.60
26	LA	863	A	N1-C6-N6	6.93	122.75	118.60
26	LA	872	U	C1'-O4'-C4'	-6.93	104.36	109.90
26	LA	908	C	O4'-C1'-N1	6.93	113.74	108.20
26	LA	2062	A	N3-C4-N9	6.93	132.94	127.40
26	LA	2300	C	C5-C6-N1	6.93	124.46	121.00
26	LA	2509	G	O5'-P-OP1	6.93	119.01	110.70
2	SA	621	A	P-O5'-C5'	-6.92	109.82	120.90
2	SA	771	G	O4'-C1'-N9	6.92	113.74	108.20
2	SA	887	G	N9-C4-C5	6.92	108.17	105.40
2	SA	982	U	C2'-C3'-O3'	6.92	124.78	113.70
4	S2	63	C	N3-C4-C5	-6.92	119.13	121.90
26	LA	500	G	N7-C8-N9	-6.92	109.64	113.10
26	LA	664	G	C5-C6-O6	-6.92	124.44	128.60
26	LA	858	G	N3-C4-C5	-6.92	125.14	128.60
26	LA	1125	G	C2-N3-C4	6.92	115.36	111.90
26	LA	1443	U	O4'-C1'-N1	6.92	113.74	108.20
26	LA	1924	C	C4'-C3'-C2'	-6.92	95.68	102.60
26	LA	2117	A	P-O3'-C3'	-6.92	111.39	119.70
26	LA	2261	C	C2-N3-C4	-6.92	116.44	119.90
53	LP	12	ARG	NH1-CZ-NH2	-6.92	111.78	119.40
2	SA	199	A	O4'-C1'-N9	6.92	113.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	985	C	C5'-C4'-O4'	6.92	117.41	109.10
26	LA	124	G	C6-N1-C2	-6.92	120.95	125.10
26	LA	892	A	C6-C5-N7	-6.92	127.45	132.30
26	LA	935	C	P-O3'-C3'	-6.92	111.39	119.70
26	LA	1829	A	O4'-C1'-N9	6.92	113.74	108.20
26	LA	2103	C	C4'-C3'-C2'	6.92	109.52	102.60
26	LA	2246	G	P-O3'-C3'	6.92	128.01	119.70
26	LA	2536	G	P-O3'-C3'	6.92	128.01	119.70
2	SA	17	U	N3-C4-C5	-6.92	110.45	114.60
2	SA	78	A	C2-N3-C4	6.92	114.06	110.60
2	SA	391	G	C6-C5-N7	-6.92	126.25	130.40
2	SA	435	A	N1-C2-N3	-6.92	125.84	129.30
2	SA	530	G	C5'-C4'-C3'	6.92	127.08	116.00
2	SA	593	U	O4'-C1'-N1	6.92	113.74	108.20
2	SA	642	A	OP1-P-OP2	-6.92	109.22	119.60
25	LB	48	U	N3-C4-C5	6.92	118.75	114.60
26	LA	155	A	C2-N3-C4	6.92	114.06	110.60
26	LA	170	U	C6-N1-C2	6.92	125.15	121.00
26	LA	298	G	C5-N7-C8	-6.92	100.84	104.30
26	LA	913	U	C5-C4-O4	-6.92	121.75	125.90
26	LA	2107	G	O4'-C1'-N9	6.92	113.74	108.20
26	LA	2125	G	C6-C5-N7	-6.92	126.25	130.40
26	LA	2268	A	C4'-C3'-C2'	-6.92	95.68	102.60
2	SA	42	G	OP1-P-OP2	-6.92	109.22	119.60
2	SA	347	G	C8-N9-C4	6.92	109.17	106.40
2	SA	1231	G	O5'-P-OP1	-6.92	99.47	105.70
8	SH	111	THR	CA-CB-OG1	6.92	123.53	109.00
13	SM	108	ARG	NE-CZ-NH2	-6.92	116.84	120.30
26	LA	1148	U	C4'-C3'-C2'	-6.92	95.68	102.60
26	LA	1853	A	N3-C4-C5	-6.92	121.96	126.80
26	LA	2501	C	P-O5'-C5'	6.92	131.97	120.90
26	LA	2656	U	N1-C2-N3	6.92	119.05	114.90
2	SA	905	U	N3-C2-O2	-6.92	117.36	122.20
26	LA	415	A	P-O3'-C3'	6.92	128.00	119.70
26	LA	611	C	C2'-C3'-O3'	6.92	124.77	113.70
26	LA	645	C	C1'-O4'-C4'	-6.92	104.36	109.90
26	LA	748	G	C8-N9-C4	6.92	109.17	106.40
26	LA	1131	G	P-O5'-C5'	-6.92	109.83	120.90
26	LA	1560	G	N3-C4-C5	-6.92	125.14	128.60
26	LA	1588	G	C4-C5-N7	-6.92	108.03	110.80
26	LA	2308	G	C2-N3-C4	6.92	115.36	111.90
26	LA	2320	U	N1-C2-N3	6.92	119.05	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	50	A	O4'-C1'-N9	6.92	113.73	108.20
2	SA	490	C	P-O3'-C3'	6.92	128.00	119.70
2	SA	1118	U	C3'-C2'-C1'	6.92	107.03	101.50
2	SA	1331	G	C8-N9-C1'	6.92	135.99	127.00
4	S2	5	G	O4'-C1'-N9	6.92	113.73	108.20
25	LB	61	G	N1-C2-N3	-6.92	119.75	123.90
26	LA	732	C	C2-N3-C4	-6.92	116.44	119.90
26	LA	844	A	C2-N3-C4	6.92	114.06	110.60
26	LA	913	U	P-O3'-C3'	-6.92	111.40	119.70
26	LA	1694	C	N1-C2-N3	6.92	124.04	119.20
26	LA	1753	G	O4'-C1'-N9	6.92	113.73	108.20
26	LA	2593	U	C6-N1-C2	-6.92	116.85	121.00
26	LA	1261	C	N3-C4-C5	-6.92	119.13	121.90
44	LF	48	THR	N-CA-CB	6.92	123.44	110.30
45	LG	142	TYR	CB-CG-CD1	6.92	125.15	121.00
2	SA	424	G	C8-N9-C1'	6.91	135.99	127.00
2	SA	588	G	C5-C6-N1	6.91	114.96	111.50
2	SA	895	G	N1-C2-N2	6.91	122.42	116.20
2	SA	1061	G	C6-N1-C2	-6.91	120.95	125.10
2	SA	1366	C	C5'-C4'-C3'	-6.91	104.94	116.00
21	SE	111	ARG	NE-CZ-NH1	6.91	123.76	120.30
26	LA	462	C	C6-N1-C2	-6.91	117.53	120.30
26	LA	498	G	C5-N7-C8	-6.91	100.84	104.30
26	LA	1177	G	N3-C4-N9	6.91	130.15	126.00
26	LA	1318	U	C6-N1-C1'	6.91	130.88	121.20
26	LA	1677	A	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	1856	U	C5-C4-O4	-6.91	121.75	125.90
2	SA	775	G	N3-C2-N2	6.91	124.74	119.90
2	SA	1090	U	C5'-C4'-O4'	6.91	117.39	109.10
26	LA	1739	A	N3-C4-C5	6.91	131.64	126.80
26	LA	103	A	C5'-C4'-C3'	-6.91	104.94	116.00
26	LA	1381	G	N3-C2-N2	6.91	124.74	119.90
26	LA	1465	G	O4'-C1'-N9	6.91	113.73	108.20
26	LA	1642	G	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	2092	U	C5-C4-O4	6.91	130.05	125.90
26	LA	2494	G	C4-N9-C1'	6.91	135.48	126.50
26	LA	2647	U	O4'-C1'-N1	6.91	113.73	108.20
26	LA	2769	U	C6-N1-C2	-6.91	116.85	121.00
2	SA	465	A	N1-C6-N6	-6.91	114.45	118.60
2	SA	561	U	C5-C4-O4	-6.91	121.75	125.90
2	SA	1137	C	N3-C4-C5	6.91	124.66	121.90
2	SA	1353	G	C4'-C3'-C2'	-6.91	95.69	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1522	U	N3-C4-O4	6.91	124.24	119.40
26	LA	811	U	O4'-C1'-C2'	-6.91	98.89	105.80
26	LA	826	U	O4'-C1'-C2'	6.91	113.82	107.60
26	LA	1157	G	C6-C5-N7	-6.91	126.25	130.40
26	LA	1611	C	O4'-C1'-N1	6.91	113.73	108.20
26	LA	2195	U	N3-C4-C5	-6.91	110.45	114.60
26	LA	2358	A	C5-C6-N1	6.91	121.15	117.70
46	LH	139	VAL	CG1-CB-CG2	-6.91	99.85	110.90
2	SA	37	U	C5'-C4'-O4'	6.91	117.39	109.10
2	SA	897	C	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	1219	U	C4-C5-C6	6.91	123.84	119.70
2	SA	401	C	O4'-C1'-N1	6.91	113.72	108.20
2	SA	538	G	N1-C2-N3	-6.91	119.76	123.90
2	SA	606	G	O4'-C1'-N9	6.91	113.72	108.20
2	SA	769	G	N3-C2-N2	6.91	124.73	119.90
2	SA	844	G	O4'-C1'-N9	6.91	113.72	108.20
2	SA	1154	G	C5-C6-N1	-6.91	108.05	111.50
8	SH	123	GLU	N-CA-CB	6.91	123.03	110.60
26	LA	107	G	C1'-O4'-C4'	-6.91	104.38	109.90
26	LA	372	G	C1'-O4'-C4'	-6.91	104.38	109.90
26	LA	1625	C	N3-C4-N4	-6.91	113.17	118.00
26	LA	2036	C	C4-C5-C6	6.91	120.85	117.40
26	LA	2119	A	O3'-P-O5'	-6.91	90.88	104.00
26	LA	2889	C	N3-C2-O2	-6.91	117.07	121.90
2	SA	219	U	P-O3'-C3'	-6.90	111.42	119.70
2	SA	1509	C	O4'-C1'-N1	6.90	113.72	108.20
4	S2	59	A	C5-N7-C8	-6.90	100.45	103.90
2	SA	479	U	C5-C4-O4	6.90	130.04	125.90
2	SA	1233	G	N3-C4-N9	6.90	130.14	126.00
2	SA	1454	G	N9-C1'-C2'	-6.90	104.41	112.00
9	SI	54	VAL	CA-CB-CG2	6.90	121.25	110.90
15	SO	68	TYR	CZ-CE2-CD2	-6.90	113.59	119.80
26	LA	278	A	C5-C6-N6	-6.90	118.18	123.70
26	LA	535	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	930	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	1662	U	P-O5'-C5'	6.90	131.94	120.90
26	LA	1807	G	O4'-C4'-C3'	-6.90	97.10	104.00
26	LA	2078	C	C2-N3-C4	-6.90	116.45	119.90
26	LA	2112	G	C5'-C4'-O4'	6.90	117.38	109.10
26	LA	2705	A	P-O3'-C3'	6.90	127.98	119.70
2	SA	682	G	C2'-C3'-O3'	6.90	124.74	113.70
2	SA	968	A	N1-C6-N6	6.90	122.74	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1192	C	C4'-C3'-C2'	-6.90	95.70	102.60
2	SA	1287	A	C4-C5-C6	-6.90	113.55	117.00
7	SG	112	ASP	CB-CG-OD2	-6.90	112.09	118.30
26	LA	657	U	N3-C2-O2	-6.90	117.37	122.20
26	LA	943	A	C6-C5-N7	-6.90	127.47	132.30
26	LA	1598	A	C4'-C3'-C2'	-6.90	95.70	102.60
26	LA	1649	G	C8-N9-C4	-6.90	103.64	106.40
26	LA	2016	U	C4'-C3'-C2'	-6.90	95.70	102.60
26	LA	2601	C	N1-C2-N3	6.90	124.03	119.20
54	LM	12	ASP	CB-CG-OD1	6.90	124.51	118.30
2	SA	633	G	C8-N9-C4	-6.90	103.64	106.40
2	SA	1379	G	N1-C2-N3	-6.90	119.76	123.90
26	LA	677	A	C2-N3-C4	-6.90	107.15	110.60
26	LA	1935	G	C5-C6-N1	6.90	114.95	111.50
26	LA	1994	C	N1-C2-N3	6.90	124.03	119.20
26	LA	2314	A	O4'-C1'-N9	6.90	113.72	108.20
26	LA	2572	A	N9-C4-C5	-6.90	103.04	105.80
2	SA	100	G	C1'-O4'-C4'	-6.90	104.38	109.90
2	SA	148	G	N7-C8-N9	-6.90	109.65	113.10
2	SA	427	U	O4'-C1'-N1	6.90	113.72	108.20
2	SA	449	G	C5'-C4'-O4'	6.90	117.38	109.10
2	SA	947	G	C4-C5-N7	-6.90	108.04	110.80
2	SA	1335	U	C6-N1-C2	-6.90	116.86	121.00
2	SA	1491	G	O4'-C1'-N9	6.90	113.72	108.20
5	ST	24	ARG	NE-CZ-NH1	6.90	123.75	120.30
26	LA	48	G	C4-C5-N7	-6.90	108.04	110.80
26	LA	205	G	C3'-C2'-C1'	-6.90	95.98	101.50
26	LA	250	G	N7-C8-N9	-6.90	109.65	113.10
26	LA	1356	G	C5-C6-N1	6.90	114.95	111.50
26	LA	1707	G	N9-C4-C5	6.90	108.16	105.40
26	LA	1717	A	C4-C5-N7	6.90	114.15	110.70
26	LA	2148	G	N3-C4-C5	-6.90	125.15	128.60
26	LA	2595	G	C4-C5-C6	-6.90	114.66	118.80
26	LA	2670	A	N9-C4-C5	-6.90	103.04	105.80
2	SA	318	G	C4'-C3'-C2'	-6.90	95.70	102.60
2	SA	1459	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	301	G	C8-N9-C4	6.90	109.16	106.40
26	LA	1579	A	C4-C5-C6	-6.90	113.55	117.00
26	LA	1853	A	O4'-C1'-N9	6.90	113.72	108.20
26	LA	2023	C	C1'-O4'-C4'	-6.90	104.38	109.90
2	SA	1486	G	C5-C6-N1	-6.89	108.05	111.50
26	LA	561	G	C3'-C2'-C1'	-6.89	95.98	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2301	C	O4'-C1'-N1	6.89	113.72	108.20
26	LA	2396	G	C4-C5-C6	-6.89	114.66	118.80
26	LA	2711	A	C3'-C2'-C1'	6.89	107.02	101.50
2	SA	101	A	OP1-P-OP2	-6.89	109.26	119.60
2	SA	185	U	P-O3'-C3'	-6.89	111.43	119.70
2	SA	1124	G	C4-C5-C6	-6.89	114.66	118.80
2	SA	1396	A	O4'-C1'-N9	6.89	113.71	108.20
19	SC	180	ASP	CB-CG-OD1	-6.89	112.10	118.30
26	LA	342	A	N1-C2-N3	-6.89	125.85	129.30
26	LA	886	A	C1'-O4'-C4'	-6.89	104.39	109.90
26	LA	1710	G	N3-C4-N9	-6.89	121.86	126.00
26	LA	2513	A	C2-N3-C4	6.89	114.05	110.60
26	LA	2513	A	N1-C6-N6	6.89	122.74	118.60
26	LA	2872	A	C2'-C3'-O3'	6.89	124.73	113.70
27	LD	61	TYR	CB-CG-CD1	-6.89	116.86	121.00
2	SA	816	A	C5-C6-N1	6.89	121.14	117.70
2	SA	889	A	C5'-C4'-C3'	6.89	127.03	116.00
26	LA	275	C	C5'-C4'-C3'	6.89	127.03	116.00
26	LA	1441	G	N9-C4-C5	6.89	108.16	105.40
26	LA	2504	U	N3-C4-O4	6.89	124.22	119.40
26	LA	2701	U	N1-C2-N3	6.89	119.03	114.90
2	SA	683	G	O4'-C1'-N9	6.89	113.71	108.20
2	SA	744	C	N3-C4-N4	-6.89	113.18	118.00
26	LA	56	A	C2-N3-C4	-6.89	107.16	110.60
26	LA	687	C	C5-C4-N4	-6.89	115.38	120.20
26	LA	704	G	N3-C2-N2	6.89	124.72	119.90
26	LA	896	A	C3'-C2'-C1'	-6.89	95.99	101.50
26	LA	1228	G	N1-C6-O6	6.89	124.03	119.90
26	LA	1263	U	P-O5'-C5'	6.89	131.92	120.90
26	LA	1351	C	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	1774	C	O4'-C1'-N1	6.89	113.71	108.20
26	LA	1909	C	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	1945	G	C6-N1-C2	-6.89	120.97	125.10
26	LA	1965	C	O5'-P-OP1	6.89	118.97	110.70
26	LA	2021	C	C5-C4-N4	-6.89	115.38	120.20
26	LA	2256	G	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	2332	C	N3-C4-C5	-6.89	119.14	121.90
26	LA	2382	G	N3-C4-N9	6.89	130.13	126.00
2	SA	217	C	C6-N1-C2	-6.89	117.55	120.30
2	SA	1422	G	N9-C1'-C2'	-6.89	104.42	112.00
2	SA	1541	U	O4'-C1'-N1	6.89	113.71	108.20
26	LA	401	A	C3'-C2'-C1'	6.89	107.01	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2705	A	N7-C8-N9	-6.89	110.36	113.80
2	SA	772	U	N1-C2-O2	-6.89	117.98	122.80
2	SA	1073	U	P-O3'-C3'	-6.89	111.44	119.70
2	SA	1505	G	C8-N9-C4	-6.89	103.65	106.40
4	S2	15	G	N3-C4-C5	-6.89	125.16	128.60
26	LA	9	G	C4-C5-N7	6.89	113.56	110.80
26	LA	28	A	N7-C8-N9	-6.89	110.36	113.80
26	LA	739	A	N7-C8-N9	6.89	117.24	113.80
26	LA	1773	A	C8-N9-C4	-6.89	103.05	105.80
26	LA	2319	G	C5-C6-N1	-6.89	108.06	111.50
26	LA	2845	U	O4'-C1'-N1	6.89	113.71	108.20
46	LH	114	HIS	N-CA-CB	6.89	122.99	110.60
2	SA	320	A	O4'-C1'-N9	6.88	113.71	108.20
2	SA	495	A	N1-C2-N3	6.88	132.74	129.30
2	SA	1048	G	N3-C4-C5	-6.88	125.16	128.60
2	SA	1077	G	N7-C8-N9	-6.88	109.66	113.10
26	LA	13	A	O4'-C1'-C2'	-6.88	98.92	105.80
26	LA	1519	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1547	C	P-O3'-C3'	-6.88	111.44	119.70
26	LA	1697	G	N3-C2-N2	-6.88	115.08	119.90
26	LA	1792	G	C4'-C3'-C2'	-6.88	95.72	102.60
26	LA	1898	U	C5-C4-O4	6.88	130.03	125.90
26	LA	2113	U	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	2131	U	N3-C2-O2	-6.88	117.38	122.20
2	SA	199	A	P-O3'-C3'	-6.88	111.44	119.70
2	SA	256	U	C5'-C4'-O4'	6.88	117.36	109.10
2	SA	462	G	N1-C2-N3	-6.88	119.77	123.90
2	SA	812	G	C2'-C3'-O3'	6.88	124.71	113.70
2	SA	1252	A	N9-C4-C5	-6.88	103.05	105.80
26	LA	43	G	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	434	U	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	1234	U	C3'-C2'-C1'	6.88	107.01	101.50
26	LA	1542	U	C5'-C4'-C3'	-6.88	104.99	116.00
39	L3	39	ARG	NE-CZ-NH2	-6.88	116.86	120.30
2	SA	144	G	O4'-C1'-N9	6.88	113.70	108.20
2	SA	270	A	N1-C6-N6	6.88	122.73	118.60
2	SA	1225	A	O4'-C1'-N9	6.88	113.70	108.20
2	SA	1292	G	O4'-C1'-C2'	6.88	113.79	107.60
26	LA	355	U	C6-N1-C2	6.88	125.13	121.00
26	LA	376	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1454	C	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	1509	A	O4'-C1'-N9	6.88	113.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2058	A	N7-C8-N9	-6.88	110.36	113.80
26	LA	2750	A	N7-C8-N9	-6.88	110.36	113.80
26	LA	2069	G	N1-C6-O6	6.88	124.03	119.90
26	LA	2459	A	C5'-C4'-C3'	-6.88	104.99	116.00
2	SA	206	C	C2-N1-C1'	6.88	126.37	118.80
2	SA	703	G	N1-C6-O6	6.88	124.03	119.90
2	SA	761	G	N9-C1'-C2'	-6.88	104.43	112.00
26	LA	1037	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1376	C	O4'-C1'-N1	6.88	113.70	108.20
26	LA	1946	U	C5'-C4'-C3'	6.88	127.01	116.00
26	LA	2066	C	C6-N1-C2	-6.88	117.55	120.30
26	LA	2151	U	C2-N3-C4	-6.88	122.87	127.00
26	LA	2187	U	O4'-C1'-N1	6.88	113.70	108.20
26	LA	2337	G	O4'-C1'-C2'	6.88	113.79	107.60
2	SA	89	U	N1-C2-O2	6.88	127.61	122.80
2	SA	559	A	P-O3'-C3'	6.88	127.95	119.70
2	SA	1342	C	C3'-C2'-C1'	6.88	107.00	101.50
2	SA	1346	A	O4'-C1'-N9	6.88	113.70	108.20
26	LA	1097	U	P-O5'-C5'	-6.88	109.90	120.90
26	LA	1539	U	C5'-C4'-O4'	6.88	117.35	109.10
26	LA	2294	G	N1-C6-O6	6.88	124.03	119.90
26	LA	2846	G	C4-C5-N7	-6.88	108.05	110.80
53	LP	87	PHE	CB-CG-CD2	-6.88	115.99	120.80
57	LS	94	LEU	CB-CG-CD2	-6.88	99.31	111.00
26	LA	593	U	C6-N1-C2	-6.88	116.88	121.00
2	SA	886	G	P-O3'-C3'	-6.87	111.45	119.70
2	SA	1541	U	C1'-O4'-C4'	-6.87	104.40	109.90
26	LA	1317	G	C5-C6-N1	6.87	114.94	111.50
26	LA	1933	G	C6-N1-C2	-6.87	120.97	125.10
26	LA	2162	G	C1'-O4'-C4'	-6.87	104.40	109.90
26	LA	2691	C	P-O3'-C3'	-6.87	111.45	119.70
2	SA	117	G	P-O3'-C3'	-6.87	111.45	119.70
2	SA	714	G	C4-C5-N7	6.87	113.55	110.80
2	SA	1116	U	N1-C2-O2	6.87	127.61	122.80
26	LA	305	C	N1-C2-N3	6.87	124.01	119.20
26	LA	514	A	N1-C2-N3	-6.87	125.86	129.30
26	LA	736	C	C6-N1-C2	-6.87	117.55	120.30
26	LA	2071	A	C6-N1-C2	-6.87	114.48	118.60
26	LA	2132	U	P-O3'-C3'	-6.87	111.45	119.70
26	LA	2765	A	C3'-C2'-C1'	6.87	107.00	101.50
26	LA	2877	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	SA	410	G	N1-C6-O6	6.87	124.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1093	A	C8-N9-C4	-6.87	103.05	105.80
26	LA	130	C	C5-C4-N4	-6.87	115.39	120.20
26	LA	220	G	C5-C6-O6	6.87	132.72	128.60
2	SA	451	A	C5-C6-N1	6.87	121.14	117.70
2	SA	880	C	O4'-C1'-N1	6.87	113.69	108.20
2	SA	1001	C	C2-N3-C4	6.87	123.33	119.90
2	SA	1294	G	N9-C4-C5	6.87	108.15	105.40
4	S2	12	G	O4'-C1'-N9	6.87	113.69	108.20
26	LA	251	A	C2-N3-C4	6.87	114.03	110.60
26	LA	637	A	C5-N7-C8	6.87	107.33	103.90
26	LA	811	U	N1-C2-O2	6.87	127.61	122.80
26	LA	1145	C	N1-C2-O2	-6.87	114.78	118.90
26	LA	1668	A	N7-C8-N9	6.87	117.23	113.80
26	LA	2062	A	N1-C2-N3	-6.87	125.87	129.30
26	LA	2468	A	N1-C6-N6	-6.87	114.48	118.60
26	LA	2494	G	C5'-C4'-C3'	-6.87	105.01	116.00
2	SA	53	A	C5-C6-N1	6.87	121.13	117.70
2	SA	153	C	C6-N1-C2	-6.87	117.55	120.30
2	SA	206	C	C6-N1-C1'	-6.87	112.56	120.80
2	SA	861	G	N1-C6-O6	6.87	124.02	119.90
26	LA	89	A	C4-C5-C6	-6.87	113.57	117.00
26	LA	1260	A	O4'-C1'-N9	6.87	113.69	108.20
26	LA	1803	A	C5-C6-N1	6.87	121.13	117.70
26	LA	1838	C	C4-C5-C6	6.87	120.83	117.40
2	SA	401	C	P-O3'-C3'	-6.87	111.46	119.70
2	SA	1178	G	C5-C6-N1	6.87	114.93	111.50
2	SA	1240	U	O4'-C1'-C2'	-6.87	98.93	105.80
2	SA	1254	A	C1'-O4'-C4'	-6.87	104.41	109.90
2	SA	1484	C	P-O5'-C5'	6.87	131.89	120.90
26	LA	239	C	C6-N1-C2	-6.87	117.55	120.30
26	LA	519	U	P-O3'-C3'	-6.87	111.46	119.70
26	LA	726	G	C3'-C2'-C1'	-6.87	96.01	101.50
26	LA	1035	U	N3-C4-O4	-6.87	114.59	119.40
26	LA	1371	G	N7-C8-N9	-6.87	109.67	113.10
26	LA	1453	A	C4'-C3'-C2'	-6.87	95.73	102.60
26	LA	1537	G	C4-C5-C6	6.87	122.92	118.80
26	LA	2121	G	C4-C5-C6	6.87	122.92	118.80
26	LA	2581	G	C4-C5-C6	-6.87	114.68	118.80
2	SA	548	G	C4-C5-N7	6.86	113.55	110.80
2	SA	561	U	N1-C1'-C2'	-6.86	104.45	112.00
2	SA	1399	C	P-O5'-C5'	-6.86	109.92	120.90
25	LB	66	A	C6-N1-C2	6.86	122.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	190	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	1129	A	N9-C4-C5	6.86	108.55	105.80
26	LA	1281	G	C2-N3-C4	6.86	115.33	111.90
26	LA	1817	G	O4'-C1'-N9	6.86	113.69	108.20
26	LA	2274	A	P-O3'-C3'	6.86	127.94	119.70
2	SA	708	C	O4'-C1'-N1	6.86	113.69	108.20
8	SH	64	TYR	CZ-CE2-CD2	6.86	125.98	119.80
26	LA	52	A	C5-C6-N6	6.86	129.19	123.70
26	LA	1024	G	N1-C2-N2	-6.86	110.02	116.20
26	LA	1543	G	O4'-C1'-N9	6.86	113.69	108.20
2	SA	430	A	C5-C6-N6	-6.86	118.21	123.70
25	LB	59	A	N1-C2-N3	-6.86	125.87	129.30
26	LA	196	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	770	G	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1182	G	N3-C4-C5	6.86	132.03	128.60
26	LA	1885	A	P-O5'-C5'	-6.86	109.92	120.90
26	LA	1978	A	C5-N7-C8	6.86	107.33	103.90
26	LA	2116	G	C5'-C4'-O4'	6.86	117.33	109.10
26	LA	2539	C	C5'-C4'-O4'	6.86	117.33	109.10
26	LA	2557	G	C5-C6-O6	-6.86	124.48	128.60
25	LB	100	G	N7-C8-N9	6.86	116.53	113.10
26	LA	83	A	P-O3'-C3'	6.86	127.93	119.70
26	LA	140	C	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1152	C	O4'-C1'-N1	6.86	113.69	108.20
26	LA	1402	U	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1450	G	N7-C8-N9	-6.86	109.67	113.10
26	LA	1877	A	C4-C5-C6	6.86	120.43	117.00
2	SA	413	G	C4-C5-N7	-6.86	108.06	110.80
2	SA	1082	A	C5-C6-N1	6.86	121.13	117.70
2	SA	1153	G	O4'-C1'-N9	6.86	113.69	108.20
2	SA	1395	C	C5-C4-N4	6.86	125.00	120.20
7	SG	125	ASP	CB-CG-OD2	6.86	124.47	118.30
26	LA	638	G	C6-C5-N7	6.86	134.51	130.40
26	LA	1002	G	N1-C2-N2	-6.86	110.03	116.20
26	LA	1173	U	N3-C4-O4	6.86	124.20	119.40
26	LA	1184	U	N1-C2-N3	6.86	119.02	114.90
26	LA	1546	G	O4'-C1'-N9	6.86	113.69	108.20
26	LA	1829	A	C1'-O4'-C4'	-6.86	104.42	109.90
26	LA	2583	G	C2'-C3'-O3'	6.86	124.67	113.70
26	LA	2700	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	2733	A	N1-C2-N3	6.86	132.73	129.30
2	SA	266	G	N9-C4-C5	6.86	108.14	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	297	G	N3-C4-C5	6.86	132.03	128.60
2	SA	439	U	N1-C2-N3	6.86	119.01	114.90
26	LA	341	C	C5-C4-N4	6.86	125.00	120.20
26	LA	1038	G	N1-C6-O6	6.86	124.01	119.90
26	LA	1419	A	N1-C2-N3	6.86	132.73	129.30
26	LA	1921	G	C8-N9-C1'	-6.86	118.09	127.00
26	LA	2029	G	C8-N9-C1'	-6.86	118.09	127.00
26	LA	2309	A	N9-C4-C5	-6.86	103.06	105.80
26	LA	2585	U	C2-N3-C4	6.86	131.11	127.00
26	LA	2592	G	N9-C4-C5	6.86	108.14	105.40
26	LA	2731	G	C2-N3-C4	-6.86	108.47	111.90
26	LA	2749	A	N1-C2-N3	6.86	132.73	129.30
26	LA	2803	G	C4-C5-C6	-6.86	114.69	118.80
54	LM	37	ASP	CB-CG-OD1	6.86	124.47	118.30
2	SA	12	U	O4'-C1'-N1	6.85	113.68	108.20
2	SA	59	A	C5'-C4'-O4'	6.85	117.32	109.10
26	LA	200	U	N3-C4-C5	6.85	118.71	114.60
26	LA	2150	C	C5'-C4'-C3'	6.85	126.97	116.00
26	LA	2303	G	N7-C8-N9	6.85	116.53	113.10
26	LA	2846	G	C5-C6-O6	-6.85	124.49	128.60
2	SA	21	G	C6-C5-N7	-6.85	126.29	130.40
2	SA	341	C	C6-N1-C2	-6.85	117.56	120.30
2	SA	713	G	N1-C6-O6	6.85	124.01	119.90
2	SA	1325	C	C5-C4-N4	6.85	125.00	120.20
2	SA	1497	G	C8-N9-C1'	6.85	135.91	127.00
26	LA	26	G	N7-C8-N9	-6.85	109.67	113.10
26	LA	153	U	O4'-C1'-N1	6.85	113.68	108.20
26	LA	294	A	N3-C4-N9	-6.85	121.92	127.40
26	LA	882	G	C5'-C4'-C3'	6.85	126.96	116.00
26	LA	1315	C	N3-C2-O2	-6.85	117.10	121.90
26	LA	2152	G	N3-C2-N2	-6.85	115.10	119.90
2	SA	73	C	O4'-C1'-N1	6.85	113.68	108.20
2	SA	196	A	N9-C4-C5	6.85	108.54	105.80
2	SA	1158	C	N1-C2-O2	6.85	123.01	118.90
26	LA	876	C	O4'-C1'-N1	6.85	113.68	108.20
26	LA	1840	G	C5'-C4'-O4'	6.85	117.32	109.10
26	LA	2287	A	C4-C5-C6	6.85	120.43	117.00
26	LA	2776	A	N1-C6-N6	6.85	122.71	118.60
2	SA	794	A	C4'-C3'-C2'	-6.85	95.75	102.60
2	SA	1525	G	O4'-C1'-N9	6.85	113.68	108.20
26	LA	801	G	C1'-O4'-C4'	-6.85	104.42	109.90
26	LA	2007	U	C1'-O4'-C4'	-6.85	104.42	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2327	A	C4'-C3'-C2'	6.85	109.45	102.60
2	SA	281	G	C8-N9-C1'	-6.85	118.10	127.00
26	LA	1755	A	P-O3'-C3'	6.85	127.92	119.70
26	LA	1989	G	C5-N7-C8	-6.85	100.88	104.30
26	LA	2129	C	N3-C2-O2	-6.85	117.11	121.90
2	SA	1074	G	P-O5'-C5'	6.85	131.85	120.90
26	LA	2602	A	N1-C2-N3	-6.85	125.88	129.30
2	SA	582	C	C4-C5-C6	6.84	120.82	117.40
2	SA	670	G	O4'-C1'-N9	6.84	113.68	108.20
2	SA	829	G	C5-C6-O6	-6.84	124.49	128.60
4	S2	77	A	C4-C5-C6	-6.84	113.58	117.00
26	LA	440	C	C6-N1-C2	-6.84	117.56	120.30
26	LA	533	G	C4-C5-C6	-6.84	114.69	118.80
26	LA	837	C	C4'-C3'-C2'	-6.84	95.76	102.60
26	LA	1010	A	N7-C8-N9	-6.84	110.38	113.80
26	LA	2394	C	N1-C2-N3	-6.84	114.41	119.20
2	SA	1277	C	C2-N3-C4	-6.84	116.48	119.90
12	SL	38	THR	N-CA-CB	6.84	123.30	110.30
26	LA	1104	C	O5'-P-OP2	-6.84	99.54	105.70
26	LA	2384	U	P-O5'-C5'	6.84	131.85	120.90
26	LA	2625	G	N3-C4-C5	-6.84	125.18	128.60
2	SA	225	C	O4'-C1'-N1	6.84	113.67	108.20
2	SA	373	A	N9-C4-C5	-6.84	103.06	105.80
2	SA	760	G	C4-C5-C6	-6.84	114.69	118.80
2	SA	1404	C	C5'-C4'-C3'	-6.84	105.05	116.00
2	SA	1534	A	C5-C6-N6	6.84	129.17	123.70
26	LA	268	C	N1-C2-O2	6.84	123.00	118.90
26	LA	316	C	N3-C4-C5	-6.84	119.16	121.90
26	LA	1264	A	C5'-C4'-O4'	6.84	117.31	109.10
26	LA	1390	U	N3-C2-O2	-6.84	117.41	122.20
26	LA	1646	C	N3-C4-C5	6.84	124.64	121.90
26	LA	1753	G	P-O3'-C3'	-6.84	111.49	119.70
26	LA	2733	A	C2'-C3'-O3'	6.84	124.65	113.70
2	SA	175	C	N3-C2-O2	-6.84	117.11	121.90
2	SA	621	A	C5-C6-N1	6.84	121.12	117.70
2	SA	1349	A	P-O3'-C3'	6.84	127.91	119.70
2	SA	1512	U	C5'-C4'-O4'	6.84	117.31	109.10
25	LB	75	G	N1-C2-N3	-6.84	119.80	123.90
26	LA	285	G	C1'-O4'-C4'	-6.84	104.43	109.90
26	LA	1482	G	N3-C4-C5	-6.84	125.18	128.60
26	LA	1804	C	C4-C5-C6	-6.84	113.98	117.40
26	LA	1919	A	C4-C5-C6	-6.84	113.58	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1940	U	C5'-C4'-C3'	-6.84	105.06	116.00
26	LA	2069	G	O4'-C1'-N9	6.84	113.67	108.20
3	S1	21	U	N3-C4-C5	6.84	118.70	114.60
26	LA	1608	A	O4'-C1'-N9	6.84	113.67	108.20
26	LA	2083	G	N1-C6-O6	6.84	124.00	119.90
26	LA	2370	G	C4-C5-N7	-6.84	108.06	110.80
2	SA	32	A	C4'-C3'-C2'	-6.84	95.76	102.60
2	SA	565	U	P-O3'-C3'	6.84	127.91	119.70
2	SA	1452	C	C4-C5-C6	6.84	120.82	117.40
2	SA	1454	G	C6-C5-N7	6.84	134.50	130.40
26	LA	390	U	C4-C5-C6	-6.84	115.60	119.70
26	LA	579	G	N7-C8-N9	-6.84	109.68	113.10
26	LA	723	C	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	821	A	O3'-P-O5'	-6.84	91.01	104.00
26	LA	1243	C	C4-C5-C6	6.84	120.82	117.40
26	LA	1278	C	C2-N3-C4	-6.84	116.48	119.90
26	LA	1339	G	C8-N9-C4	6.84	109.14	106.40
26	LA	1647	U	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	1896	G	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	2370	G	O4'-C1'-N9	6.84	113.67	108.20
26	LA	2470	G	C5-C6-N1	6.84	114.92	111.50
2	SA	303	A	C4-C5-C6	6.83	120.42	117.00
3	S1	43	U	O4'-C1'-N1	6.83	113.67	108.20
26	LA	1837	C	C2-N3-C4	-6.83	116.48	119.90
26	LA	2638	G	O4'-C1'-N9	6.83	113.67	108.20
26	LA	2862	G	C8-N9-C4	-6.83	103.67	106.40
26	LA	2894	G	P-O5'-C5'	6.83	131.84	120.90
2	SA	1257	A	C6-N1-C2	6.83	122.70	118.60
2	SA	1342	C	C4-C5-C6	6.83	120.82	117.40
2	SA	1348	U	C5-C4-O4	-6.83	121.80	125.90
4	S2	47	A	P-O5'-C5'	-6.83	109.97	120.90
26	LA	24	G	C4'-C3'-C2'	6.83	109.43	102.60
26	LA	275	C	C6-N1-C1'	6.83	129.00	120.80
26	LA	2247	A	N9-C4-C5	-6.83	103.07	105.80
26	LA	2810	A	N1-C6-N6	6.83	122.70	118.60
2	SA	365	U	C5-C4-O4	-6.83	121.80	125.90
2	SA	452	A	N7-C8-N9	6.83	117.22	113.80
2	SA	793	U	C1'-O4'-C4'	-6.83	104.43	109.90
2	SA	1078	U	C6-N1-C2	-6.83	116.90	121.00
25	LB	98	G	C4-C5-N7	6.83	113.53	110.80
26	LA	64	A	N1-C6-N6	6.83	122.70	118.60
26	LA	103	A	C5'-C4'-O4'	6.83	117.30	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	231	A	N1-C2-N3	-6.83	125.88	129.30
26	LA	625	G	C3'-C2'-C1'	6.83	106.97	101.50
26	LA	740	C	O4'-C1'-N1	6.83	113.67	108.20
26	LA	998	C	O4'-C1'-N1	6.83	113.67	108.20
26	LA	2114	A	C6-N1-C2	6.83	122.70	118.60
26	LA	2191	A	C4-C5-C6	6.83	120.42	117.00
26	LA	2471	A	C2'-C3'-O3'	6.83	124.63	113.70
26	LA	2727	A	N3-C4-C5	-6.83	122.02	126.80
2	SA	767	A	P-O3'-C3'	6.83	127.89	119.70
2	SA	1107	C	C5-C4-N4	6.83	124.98	120.20
3	S1	14	G	O4'-C1'-N9	6.83	113.66	108.20
26	LA	541	A	C5-N7-C8	6.83	107.31	103.90
26	LA	1347	A	C5-C6-N1	6.83	121.11	117.70
26	LA	1433	A	C2-N3-C4	6.83	114.02	110.60
26	LA	2246	G	C3'-C2'-C1'	-6.83	96.04	101.50
26	LA	2425	A	P-O3'-C3'	-6.83	111.50	119.70
2	SA	225	C	N1-C2-N3	-6.83	114.42	119.20
2	SA	733	G	C4-C5-N7	-6.83	108.07	110.80
2	SA	756	C	C1'-O4'-C4'	-6.83	104.44	109.90
2	SA	1235	U	C4-C5-C6	-6.83	115.60	119.70
3	S1	31	U	C4-C5-C6	-6.83	115.60	119.70
23	SR	12	PHE	CB-CG-CD1	6.83	125.58	120.80
26	LA	32	C	C5'-C4'-O4'	6.83	117.29	109.10
26	LA	90	U	P-O5'-C5'	6.83	131.82	120.90
26	LA	572	A	C5-N7-C8	-6.83	100.48	103.90
26	LA	895	U	C5'-C4'-C3'	-6.83	105.07	116.00
26	LA	1014	A	O4'-C1'-N9	6.83	113.66	108.20
26	LA	1481	U	C1'-O4'-C4'	-6.83	104.44	109.90
26	LA	1780	A	P-O3'-C3'	6.83	127.89	119.70
26	LA	2107	G	C5-N7-C8	6.83	107.71	104.30
26	LA	2196	C	N3-C4-N4	6.83	122.78	118.00
26	LA	2290	G	N1-C2-N2	-6.83	110.05	116.20
8	SH	78	SER	N-CA-CB	6.83	120.74	110.50
12	SL	78	VAL	CG1-CB-CG2	-6.83	99.98	110.90
25	LB	18	G	N1-C2-N3	-6.83	119.80	123.90
26	LA	130	C	C6-N1-C2	-6.83	117.57	120.30
26	LA	1362	C	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2085	U	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2215	C	C5-C6-N1	6.83	124.41	121.00
2	SA	121	U	C1'-O4'-C4'	-6.83	104.44	109.90
2	SA	805	C	C2-N3-C4	-6.83	116.49	119.90
2	SA	1207	G	C6-C5-N7	-6.83	126.31	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	S1	37	G	O4'-C1'-N9	6.83	113.66	108.20
26	LA	163	C	C5'-C4'-O4'	-6.83	100.91	109.10
26	LA	205	G	C4-C5-N7	-6.83	108.07	110.80
26	LA	210	C	N3-C4-C5	6.83	124.63	121.90
26	LA	378	C	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2618	G	N3-C4-C5	-6.83	125.19	128.60
38	LE	181	ASP	CB-CG-OD1	6.83	124.44	118.30
25	LB	102	G	C6-C5-N7	-6.82	126.31	130.40
26	LA	131	A	C5'-C4'-C3'	6.82	126.92	116.00
26	LA	524	G	C8-N9-C4	-6.82	103.67	106.40
26	LA	819	A	O4'-C4'-C3'	6.82	111.56	106.10
26	LA	876	C	N3-C4-C5	-6.82	119.17	121.90
26	LA	1332	G	C6-C5-N7	-6.82	126.31	130.40
26	LA	1687	G	C5-C6-O6	-6.82	124.51	128.60
26	LA	1841	U	C6-N1-C2	-6.82	116.91	121.00
26	LA	1847	A	O4'-C1'-N9	6.82	113.66	108.20
26	LA	2008	C	O4'-C4'-C3'	6.82	111.56	106.10
26	LA	2095	A	C5'-C4'-O4'	-6.82	100.91	109.10
26	LA	2175	C	N3-C4-N4	6.82	122.78	118.00
26	LA	2417	C	C4-C5-C6	6.82	120.81	117.40
26	LA	2739	U	N1-C2-O2	6.82	127.58	122.80
2	SA	1067	A	C5'-C4'-C3'	-6.82	105.08	116.00
2	SA	1196	A	N1-C2-N3	6.82	132.71	129.30
26	LA	756	A	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	2611	C	C6-N1-C2	-6.82	117.57	120.30
26	LA	2758	A	P-O3'-C3'	-6.82	111.51	119.70
26	LA	2765	A	C5-C6-N6	6.82	129.16	123.70
26	LA	2807	U	N3-C2-O2	-6.82	117.42	122.20
2	SA	825	A	C6-N1-C2	6.82	122.69	118.60
2	SA	1080	A	P-O3'-C3'	6.82	127.89	119.70
26	LA	890	C	N1-C2-O2	6.82	122.99	118.90
26	LA	910	A	C6-N1-C2	-6.82	114.51	118.60
26	LA	1695	G	N7-C8-N9	6.82	116.51	113.10
26	LA	2024	G	C5'-C4'-C3'	-6.82	105.09	116.00
26	LA	2517	C	C2-N3-C4	-6.82	116.49	119.90
46	LH	163	TYR	CB-CG-CD2	-6.82	116.91	121.00
2	SA	16	A	P-O3'-C3'	-6.82	111.52	119.70
2	SA	315	A	C5-C6-N1	6.82	121.11	117.70
2	SA	769	G	C5-N7-C8	6.82	107.71	104.30
26	LA	1417	C	O4'-C1'-N1	6.82	113.66	108.20
26	LA	2391	G	N1-C2-N3	-6.82	119.81	123.90
26	LA	2701	U	N1-C2-O2	-6.82	118.03	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	622	A	N9-C4-C5	-6.82	103.07	105.80
2	SA	1055	A	C1'-O4'-C4'	-6.82	104.45	109.90
26	LA	64	A	O4'-C1'-C2'	6.82	113.73	107.60
26	LA	297	G	C5-C6-N1	6.82	114.91	111.50
26	LA	611	C	C5'-C4'-O4'	6.82	117.28	109.10
26	LA	726	G	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	1635	A	N1-C2-N3	-6.82	125.89	129.30
26	LA	1680	U	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	1834	U	C2'-C3'-O3'	6.82	124.61	113.70
26	LA	2012	G	N7-C8-N9	-6.82	109.69	113.10
26	LA	2263	C	P-O5'-C5'	-6.82	109.99	120.90
26	LA	2649	C	N1-C1'-C2'	-6.82	104.50	112.00
32	LY	78	PHE	CB-CG-CD1	-6.82	116.03	120.80
2	SA	51	A	O4'-C4'-C3'	-6.82	97.18	104.00
2	SA	119	A	N9-C4-C5	-6.82	103.07	105.80
2	SA	129	A	C3'-C2'-C1'	-6.82	96.05	101.50
2	SA	1099	G	N3-C4-N9	-6.82	121.91	126.00
2	SA	1149	C	C5-C6-N1	-6.82	117.59	121.00
25	LB	56	G	C8-N9-C1'	6.82	135.86	127.00
26	LA	1156	A	N1-C2-N3	-6.82	125.89	129.30
26	LA	1658	C	P-O3'-C3'	-6.82	111.52	119.70
26	LA	1736	U	N3-C2-O2	-6.82	117.43	122.20
26	LA	2807	U	O4'-C1'-N1	6.82	113.65	108.20
2	SA	851	G	P-O5'-C5'	-6.81	110.00	120.90
2	SA	1259	C	C4'-C3'-C2'	-6.81	95.79	102.60
2	SA	1416	G	N1-C6-O6	-6.81	115.81	119.90
26	LA	913	U	C4-C5-C6	-6.81	115.61	119.70
26	LA	973	A	C4-C5-N7	-6.81	107.29	110.70
26	LA	993	G	C5-C6-N1	6.81	114.91	111.50
26	LA	1907	G	O4'-C1'-N9	6.81	113.65	108.20
2	SA	308	C	C5-C6-N1	6.81	124.41	121.00
2	SA	957	U	P-O5'-C5'	6.81	131.80	120.90
2	SA	1057	G	N1-C2-N2	-6.81	110.07	116.20
25	LB	49	C	C2-N3-C4	-6.81	116.49	119.90
25	LB	99	A	C4'-C3'-C2'	-6.81	95.79	102.60
26	LA	244	A	O4'-C1'-N9	6.81	113.65	108.20
26	LA	305	C	C2-N3-C4	-6.81	116.49	119.90
26	LA	400	G	C5-C6-N1	6.81	114.91	111.50
26	LA	785	G	C5-C6-O6	-6.81	124.51	128.60
26	LA	792	A	C5-C6-N1	6.81	121.11	117.70
26	LA	1062	G	C6-N1-C2	6.81	129.19	125.10
26	LA	1704	C	C4'-C3'-C2'	-6.81	95.79	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1818	U	C5'-C4'-O4'	6.81	117.28	109.10
26	LA	1944	U	C3'-C2'-C1'	-6.81	96.05	101.50
56	LR	13	LYS	CB-CA-C	-6.81	96.77	110.40
26	LA	528	A	C2-N3-C4	-6.81	107.19	110.60
26	LA	904	G	N3-C2-N2	6.81	124.67	119.90
26	LA	2210	U	O4'-C1'-N1	6.81	113.65	108.20
2	SA	1532	U	P-O5'-C5'	-6.81	110.01	120.90
26	LA	401	A	N9-C4-C5	-6.81	103.08	105.80
26	LA	446	G	N7-C8-N9	6.81	116.50	113.10
26	LA	808	G	N9-C4-C5	6.81	108.12	105.40
26	LA	936	A	C4-C5-C6	-6.81	113.59	117.00
26	LA	1340	U	C5-C4-O4	-6.81	121.81	125.90
26	LA	1356	G	C5-N7-C8	-6.81	100.90	104.30
26	LA	1506	U	O4'-C1'-N1	6.81	113.65	108.20
26	LA	1973	G	O4'-C1'-N9	6.81	113.65	108.20
26	LA	2360	G	N1-C6-O6	6.81	123.99	119.90
2	SA	156	C	P-O3'-C3'	6.81	127.87	119.70
2	SA	215	C	C1'-O4'-C4'	-6.81	104.45	109.90
2	SA	510	A	C5'-C4'-O4'	6.81	117.27	109.10
2	SA	1237	C	N1-C2-O2	6.81	122.98	118.90
19	SC	199	VAL	CG1-CB-CG2	-6.81	100.01	110.90
26	LA	567	U	C5-C4-O4	-6.81	121.81	125.90
26	LA	2144	G	C2-N3-C4	-6.81	108.50	111.90
26	LA	2352	A	C5-C6-N1	6.81	121.10	117.70
27	LD	224	MET	CG-SD-CE	-6.81	89.31	100.20
2	SA	511	C	C4-C5-C6	6.81	120.80	117.40
2	SA	685	G	C5'-C4'-C3'	-6.81	105.11	116.00
2	SA	1276	G	C4-C5-N7	-6.81	108.08	110.80
26	LA	542	C	C6-N1-C2	-6.81	117.58	120.30
26	LA	1889	A	C4-C5-C6	6.81	120.40	117.00
2	SA	259	G	N9-C1'-C2'	-6.80	104.52	112.00
2	SA	703	G	C5-C6-O6	-6.80	124.52	128.60
2	SA	1327	C	C5'-C4'-C3'	-6.80	105.11	116.00
26	LA	925	A	C5'-C4'-C3'	-6.80	105.11	116.00
26	LA	1092	C	C6-N1-C2	-6.80	117.58	120.30
26	LA	1151	A	C8-N9-C4	6.80	108.52	105.80
26	LA	1777	U	N3-C4-O4	-6.80	114.64	119.40
26	LA	1955	U	P-O3'-C3'	6.80	127.87	119.70
26	LA	2637	U	O4'-C1'-N1	6.80	113.64	108.20
53	LP	102	PHE	CB-CG-CD1	-6.80	116.04	120.80
2	SA	908	A	P-O5'-C5'	6.80	131.79	120.90
2	SA	1039	G	N1-C2-N3	-6.80	119.82	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1109	C	C4-C5-C6	6.80	120.80	117.40
11	SK	10	ARG	NE-CZ-NH1	6.80	123.70	120.30
26	LA	142	A	C4'-C3'-C2'	-6.80	95.80	102.60
26	LA	864	G	C2-N3-C4	-6.80	108.50	111.90
26	LA	1033	U	O4'-C1'-N1	6.80	113.64	108.20
26	LA	2563	U	C6-N1-C2	6.80	125.08	121.00
2	SA	30	U	N3-C2-O2	6.80	126.96	122.20
2	SA	847	G	C4-C5-N7	-6.80	108.08	110.80
2	SA	997	U	N1-C2-O2	6.80	127.56	122.80
2	SA	1031	C	N1-C2-N3	-6.80	114.44	119.20
2	SA	1180	A	C5-N7-C8	-6.80	100.50	103.90
2	SA	1207	G	N1-C6-O6	6.80	123.98	119.90
2	SA	1534	A	C5'-C4'-O4'	6.80	117.26	109.10
26	LA	545	U	P-O3'-C3'	6.80	127.86	119.70
26	LA	691	C	C5'-C4'-C3'	-6.80	105.12	116.00
26	LA	1738	G	P-O5'-C5'	-6.80	110.02	120.90
26	LA	1830	C	P-O3'-C3'	-6.80	111.54	119.70
26	LA	2125	G	N1-C2-N3	6.80	127.98	123.90
26	LA	2525	G	C5-C6-N1	-6.80	108.10	111.50
26	LA	2842	G	P-O5'-C5'	6.80	131.78	120.90
26	LA	2890	G	C3'-C2'-C1'	6.80	106.94	101.50
2	SA	686	U	C4-C5-C6	-6.80	115.62	119.70
2	SA	885	G	C5-C6-N1	6.80	114.90	111.50
2	SA	986	U	P-O5'-C5'	6.80	131.78	120.90
2	SA	1238	A	C5'-C4'-O4'	6.80	117.26	109.10
12	SL	53	ARG	NE-CZ-NH1	6.80	123.70	120.30
24	S3	640	MET	N-CA-CB	6.80	122.84	110.60
26	LA	845	A	O4'-C1'-N9	6.80	113.64	108.20
26	LA	861	A	N9-C4-C5	6.80	108.52	105.80
26	LA	1897	G	C8-N9-C4	-6.80	103.68	106.40
26	LA	2222	C	C2-N3-C4	-6.80	116.50	119.90
37	LC	7	ARG	NE-CZ-NH2	6.80	123.70	120.30
44	LF	158	PHE	CB-CG-CD2	6.80	125.56	120.80
2	SA	1494	G	C5-C6-N1	-6.80	108.10	111.50
26	LA	743	A	O4'-C1'-N9	6.80	113.64	108.20
26	LA	1037	G	N1-C6-O6	6.80	123.98	119.90
26	LA	1138	G	C5-C6-O6	-6.80	124.52	128.60
26	LA	1150	C	P-O3'-C3'	-6.80	111.54	119.70
26	LA	2115	G	C3'-C2'-C1'	-6.80	96.06	101.50
2	SA	397	A	C1'-O4'-C4'	-6.80	104.46	109.90
2	SA	545	C	P-O3'-C3'	-6.80	111.55	119.70
2	SA	1152	A	C6-C5-N7	-6.80	127.54	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	584	C	C4-C5-C6	-6.80	114.00	117.40
26	LA	939	G	N3-C4-N9	6.80	130.08	126.00
26	LA	1252	G	C5-N7-C8	-6.80	100.90	104.30
26	LA	1387	A	N3-C4-N9	-6.80	121.96	127.40
26	LA	1479	G	C4-C5-N7	-6.80	108.08	110.80
26	LA	1653	G	N3-C4-C5	6.80	132.00	128.60
26	LA	2158	A	O3'-P-O5'	-6.80	91.09	104.00
26	LA	2215	C	O4'-C1'-N1	6.80	113.64	108.20
26	LA	2362	C	O4'-C1'-C2'	6.80	113.72	107.60
26	LA	2636	C	N1-C2-N3	6.80	123.96	119.20
2	SA	214	C	P-O3'-C3'	6.79	127.86	119.70
26	LA	1438	U	N1-C2-O2	-6.79	118.04	122.80
2	SA	260	G	C4'-C3'-C2'	6.79	109.39	102.60
2	SA	650	G	C6-N1-C2	-6.79	121.02	125.10
2	SA	1080	A	C8-N9-C4	6.79	108.52	105.80
4	S2	50	G	O4'-C1'-N9	6.79	113.64	108.20
26	LA	311	A	N1-C2-N3	6.79	132.70	129.30
26	LA	536	G	N1-C2-N2	-6.79	110.08	116.20
26	LA	699	A	C6-N1-C2	-6.79	114.52	118.60
26	LA	1004	U	C5'-C4'-C3'	-6.79	105.13	116.00
26	LA	1587	G	N3-C4-N9	-6.79	121.92	126.00
26	LA	1913	A	O4'-C1'-N9	6.79	113.63	108.20
26	LA	2120	G	C4-N9-C1'	6.79	135.33	126.50
26	LA	2427	C	N1-C1'-C2'	-6.79	104.53	112.00
2	SA	734	G	N3-C4-C5	6.79	132.00	128.60
2	SA	954	G	P-O3'-C3'	-6.79	111.55	119.70
2	SA	1326	U	N1-C2-N3	6.79	118.97	114.90
2	SA	1515	G	C8-N9-C4	-6.79	103.68	106.40
26	LA	723	C	C5-C6-N1	6.79	124.40	121.00
26	LA	1116	G	C4'-C3'-C2'	-6.79	95.81	102.60
26	LA	1534	U	N3-C2-O2	-6.79	117.45	122.20
26	LA	2477	U	C2-N1-C1'	6.79	125.85	117.70
26	LA	2839	G	C3'-C2'-C1'	6.79	106.93	101.50
50	LL	33	ALA	N-CA-CB	-6.79	100.59	110.10
2	SA	1110	A	C5-C6-N6	6.79	129.13	123.70
3	S1	35	G	C2'-C3'-O3'	6.79	124.56	113.70
26	LA	2030	U	P-O5'-C5'	6.79	131.76	120.90
26	LA	2054	A	N1-C6-N6	-6.79	114.53	118.60
26	LA	2162	G	C5'-C4'-O4'	-6.79	100.95	109.10
2	SA	125	U	C2-N3-C4	-6.79	122.93	127.00
2	SA	422	C	P-O3'-C3'	6.79	127.85	119.70
2	SA	728	A	N1-C6-N6	6.79	122.67	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	S1	22	G	C5-N7-C8	-6.79	100.91	104.30
26	LA	351	C	C2-N3-C4	6.79	123.29	119.90
26	LA	831	G	C5-N7-C8	-6.79	100.91	104.30
26	LA	1264	A	N3-C4-N9	-6.79	121.97	127.40
26	LA	1479	G	N3-C2-N2	6.79	124.65	119.90
26	LA	1956	U	C2-N3-C4	-6.79	122.93	127.00
26	LA	2331	G	O4'-C1'-N9	6.79	113.63	108.20
26	LA	2463	C	N3-C2-O2	-6.79	117.15	121.90
26	LA	2574	G	C5'-C4'-C3'	6.79	126.86	116.00
26	LA	2609	U	N1-C2-N3	6.79	118.97	114.90
42	L6	16	THR	CA-CB-CG2	6.79	121.90	112.40
2	SA	1395	C	C1'-O4'-C4'	-6.79	104.47	109.90
3	S1	46	C	C5-C4-N4	6.79	124.95	120.20
26	LA	463	G	C4'-C3'-C2'	-6.79	95.81	102.60
47	LJ	60	ARG	NE-CZ-NH2	-6.79	116.91	120.30
2	SA	22	G	C5-N7-C8	6.79	107.69	104.30
2	SA	148	G	C1'-O4'-C4'	6.79	115.33	109.90
2	SA	570	G	N1-C6-O6	6.79	123.97	119.90
2	SA	700	G	O4'-C1'-N9	6.79	113.63	108.20
2	SA	1538	C	P-O5'-C5'	6.79	131.76	120.90
26	LA	1073	A	C5'-C4'-C3'	-6.79	105.14	116.00
26	LA	1274	A	N1-C6-N6	-6.79	114.53	118.60
26	LA	1393	A	O4'-C1'-N9	6.79	113.63	108.20
26	LA	1941	C	OP1-P-OP2	-6.79	109.42	119.60
26	LA	2623	G	N3-C2-N2	6.79	124.65	119.90
2	SA	761	G	O4'-C1'-N9	6.78	113.63	108.20
3	S1	59	A	C5-C6-N6	-6.78	118.27	123.70
26	LA	25	U	N1-C2-N3	6.78	118.97	114.90
26	LA	607	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	830	G	C3'-C2'-C1'	-6.78	96.07	101.50
26	LA	1225	G	O4'-C1'-N9	6.78	113.63	108.20
26	LA	1640	A	C5-C6-N1	6.78	121.09	117.70
26	LA	2327	A	C4-C5-C6	6.78	120.39	117.00
50	LL	125	TYR	CB-CG-CD2	-6.78	116.93	121.00
26	LA	1106	G	P-O3'-C3'	-6.78	111.56	119.70
26	LA	1240	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	2288	A	O4'-C1'-C2'	-6.78	99.02	105.80
26	LA	2356	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	2378	A	C5'-C4'-C3'	6.78	126.85	116.00
26	LA	2737	G	N1-C6-O6	-6.78	115.83	119.90
48	LN	143	GLU	OE1-CD-OE2	-6.78	115.16	123.30
2	SA	235	C	C5'-C4'-C3'	-6.78	105.15	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	426	U	P-O3'-C3'	6.78	127.84	119.70
2	SA	599	C	C4'-C3'-C2'	-6.78	95.82	102.60
2	SA	732	C	N3-C4-N4	6.78	122.75	118.00
26	LA	729	G	N1-C2-N2	-6.78	110.10	116.20
26	LA	1064	C	N3-C4-N4	6.78	122.75	118.00
26	LA	1074	G	N9-C1'-C2'	-6.78	104.54	112.00
26	LA	1575	C	P-O3'-C3'	-6.78	111.56	119.70
26	LA	1626	A	O4'-C1'-N9	6.78	113.62	108.20
26	LA	1686	C	C6-N1-C2	-6.78	117.59	120.30
26	LA	2409	G	C5'-C4'-C3'	-6.78	105.15	116.00
26	LA	2823	A	N1-C6-N6	-6.78	114.53	118.60
2	SA	521	G	N7-C8-N9	-6.78	109.71	113.10
2	SA	548	G	C4-C5-C6	-6.78	114.73	118.80
2	SA	1489	G	N3-C2-N2	-6.78	115.16	119.90
26	LA	574	A	C4-N9-C1'	6.78	138.50	126.30
26	LA	2128	G	C5'-C4'-C3'	6.78	126.85	116.00
26	LA	2221	G	C4-C5-C6	-6.78	114.73	118.80
2	SA	507	C	C5-C6-N1	-6.78	117.61	121.00
2	SA	1143	G	C5-C6-O6	6.78	132.67	128.60
4	S2	68	C	N1-C2-O2	6.78	122.97	118.90
17	SQ	14	ASP	CB-CG-OD1	6.78	124.40	118.30
25	LB	61	G	C8-N9-C4	-6.78	103.69	106.40
25	LB	103	U	O4'-C1'-N1	6.78	113.62	108.20
26	LA	581	C	O4'-C1'-N1	6.78	113.62	108.20
26	LA	828	U	N3-C4-O4	-6.78	114.66	119.40
26	LA	1684	G	N3-C4-C5	-6.78	125.21	128.60
26	LA	2681	C	C1'-O4'-C4'	-6.78	104.48	109.90
2	SA	437	U	C5'-C4'-C3'	-6.78	105.16	116.00
26	LA	841	G	C5-C6-O6	-6.78	124.53	128.60
26	LA	1013	C	C5-C4-N4	-6.78	115.46	120.20
26	LA	1249	U	C5'-C4'-O4'	6.78	117.23	109.10
26	LA	1626	A	N7-C8-N9	-6.78	110.41	113.80
26	LA	1901	A	C5'-C4'-O4'	6.78	117.23	109.10
26	LA	1912	A	N9-C1'-C2'	-6.78	104.55	112.00
26	LA	2585	U	N3-C4-C5	-6.78	110.53	114.60
2	SA	1110	A	P-O3'-C3'	6.77	127.83	119.70
26	LA	53	A	C4-C5-C6	6.77	120.39	117.00
2	SA	802	A	P-O3'-C3'	-6.77	111.57	119.70
2	SA	1067	A	N7-C8-N9	-6.77	110.41	113.80
2	SA	1352	C	C6-N1-C2	-6.77	117.59	120.30
2	SA	1459	G	C5-N7-C8	-6.77	100.91	104.30
26	LA	333	G	O4'-C1'-N9	-6.77	102.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	453	A	C5-C6-N1	6.77	121.09	117.70
26	LA	1049	C	C6-N1-C2	-6.77	117.59	120.30
26	LA	2440	C	N3-C2-O2	-6.77	117.16	121.90
26	LA	2486	C	O4'-C1'-N1	6.77	113.62	108.20
45	LG	124	ARG	NE-CZ-NH2	-6.77	116.91	120.30
2	SA	443	C	P-O5'-C5'	-6.77	110.07	120.90
2	SA	634	C	C2-N1-C1'	6.77	126.25	118.80
26	LA	1005	C	O3'-P-O5'	-6.77	91.14	104.00
26	LA	1347	A	C6-N1-C2	-6.77	114.54	118.60
26	LA	1945	G	N1-C2-N2	-6.77	110.11	116.20
2	SA	728	A	N7-C8-N9	-6.77	110.42	113.80
2	SA	843	U	C6-N1-C2	-6.77	116.94	121.00
2	SA	1054	C	C3'-C2'-C1'	-6.77	96.08	101.50
3	S1	21	U	C3'-C2'-C1'	6.77	106.92	101.50
25	LB	75	G	C5-C6-N1	6.77	114.89	111.50
26	LA	146	A	C5'-C4'-O4'	6.77	117.22	109.10
26	LA	857	G	N1-C2-N3	6.77	127.96	123.90
26	LA	950	G	C6-N1-C2	6.77	129.16	125.10
26	LA	1164	C	C3'-C2'-C1'	6.77	106.92	101.50
26	LA	1437	C	C2-N3-C4	6.77	123.28	119.90
26	LA	2320	U	C2-N1-C1'	6.77	125.82	117.70
2	SA	123	U	C4-C5-C6	-6.77	115.64	119.70
26	LA	48	G	N1-C6-O6	6.77	123.96	119.90
26	LA	728	G	C5'-C4'-C3'	-6.77	105.17	116.00
26	LA	1189	A	C2-N3-C4	-6.77	107.22	110.60
26	LA	1283	G	P-O3'-C3'	-6.77	111.58	119.70
26	LA	2256	G	C5'-C4'-C3'	-6.77	105.17	116.00
26	LA	2502	G	N1-C2-N3	-6.77	119.84	123.90
46	LH	93	TYR	CB-CG-CD2	-6.77	116.94	121.00
2	SA	188	C	C3'-C2'-C1'	6.77	106.91	101.50
2	SA	203	G	C4-N9-C1'	-6.77	117.70	126.50
2	SA	340	U	C5-C4-O4	-6.77	121.84	125.90
26	LA	80	G	C5-N7-C8	-6.77	100.92	104.30
26	LA	110	G	O4'-C1'-N9	6.77	113.61	108.20
26	LA	298	G	N9-C4-C5	-6.77	102.69	105.40
26	LA	757	G	C5-C6-N1	6.77	114.88	111.50
26	LA	983	A	N1-C6-N6	-6.77	114.54	118.60
26	LA	2302	U	C3'-C2'-C1'	-6.77	96.09	101.50
26	LA	2630	G	O4'-C1'-N9	6.77	113.61	108.20
26	LA	2813	A	OP1-P-OP2	-6.77	109.45	119.60
37	LC	1	MET	CG-SD-CE	-6.77	89.38	100.20
2	SA	4	U	C2-N3-C4	-6.76	122.94	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	565	U	N3-C4-C5	-6.76	110.54	114.60
2	SA	590	U	O4'-C1'-N1	6.76	113.61	108.20
2	SA	1137	C	C5-C4-N4	-6.76	115.47	120.20
2	SA	1176	A	C1'-O4'-C4'	-6.76	104.49	109.90
2	SA	1179	A	P-O3'-C3'	-6.76	111.58	119.70
2	SA	1516	G	C4-C5-C6	-6.76	114.74	118.80
25	LB	13	G	C5'-C4'-O4'	6.76	117.22	109.10
26	LA	236	C	O4'-C1'-N1	6.76	113.61	108.20
26	LA	800	A	C3'-C2'-C1'	-6.76	96.09	101.50
26	LA	2171	A	N3-C4-C5	-6.76	122.06	126.80
2	SA	56	U	N1-C2-N3	6.76	118.96	114.90
2	SA	1351	U	C1'-O4'-C4'	-6.76	104.49	109.90
21	SE	49	TYR	CB-CG-CD2	6.76	125.06	121.00
26	LA	270	A	N1-C2-N3	-6.76	125.92	129.30
26	LA	540	C	C4-C5-C6	6.76	120.78	117.40
26	LA	1244	A	C2-N3-C4	6.76	113.98	110.60
26	LA	1354	A	C5-N7-C8	-6.76	100.52	103.90
26	LA	2416	C	C2-N3-C4	-6.76	116.52	119.90
2	SA	365	U	C5'-C4'-O4'	6.76	117.21	109.10
2	SA	1051	C	C6-N1-C1'	-6.76	112.69	120.80
2	SA	1396	A	C2-N3-C4	-6.76	107.22	110.60
26	LA	640	C	O4'-C1'-N1	6.76	113.61	108.20
26	LA	875	G	N9-C4-C5	6.76	108.11	105.40
26	LA	903	C	C2-N1-C1'	-6.76	111.36	118.80
26	LA	1965	C	C5'-C4'-O4'	6.76	117.21	109.10
26	LA	1968	G	N1-C2-N2	-6.76	110.11	116.20
26	LA	212	G	C3'-C2'-C1'	6.76	106.91	101.50
26	LA	810	U	P-O5'-C5'	6.76	131.71	120.90
26	LA	813	U	C1'-O4'-C4'	-6.76	104.49	109.90
26	LA	821	A	N7-C8-N9	6.76	117.18	113.80
26	LA	2321	U	C2-N1-C1'	6.76	125.81	117.70
26	LA	2567	G	C1'-O4'-C4'	-6.76	104.49	109.90
2	SA	881	G	N1-C6-O6	6.76	123.95	119.90
2	SA	1487	G	P-O3'-C3'	6.76	127.81	119.70
26	LA	1812	U	C2-N3-C4	6.76	131.06	127.00
2	SA	679	C	C5'-C4'-O4'	6.76	117.21	109.10
2	SA	871	U	P-O3'-C3'	6.76	127.81	119.70
2	SA	1069	C	N3-C4-C5	-6.76	119.20	121.90
22	SF	40	GLU	N-CA-CB	6.76	122.76	110.60
25	LB	4	C	C2-N3-C4	-6.76	116.52	119.90
25	LB	21	G	C5-C6-O6	6.76	132.65	128.60
26	LA	73	A	C5'-C4'-C3'	6.76	126.81	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	503	A	O4'-C1'-C2'	6.76	113.68	107.60
26	LA	861	A	C5'-C4'-C3'	-6.76	105.19	116.00
26	LA	1073	A	P-O5'-C5'	6.76	131.71	120.90
26	LA	2510	C	N3-C4-N4	-6.76	113.27	118.00
2	SA	35	G	N9-C4-C5	6.75	108.10	105.40
2	SA	251	G	C4-C5-C6	6.75	122.85	118.80
2	SA	844	G	C5-C6-N1	-6.75	108.12	111.50
2	SA	1241	G	N1-C6-O6	6.75	123.95	119.90
2	SA	1308	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	620	G	C5-C6-O6	-6.75	124.55	128.60
26	LA	742	A	O4'-C1'-N9	6.75	113.60	108.20
26	LA	1090	A	C5-C6-N6	-6.75	118.30	123.70
26	LA	1265	A	C4'-C3'-C2'	6.75	109.36	102.60
26	LA	1719	G	C5-C6-O6	-6.75	124.55	128.60
26	LA	2117	A	N1-C2-N3	-6.75	125.92	129.30
26	LA	2855	C	O4'-C1'-N1	6.75	113.60	108.20
2	SA	315	A	P-O5'-C5'	-6.75	110.09	120.90
2	SA	643	C	C5'-C4'-O4'	6.75	117.20	109.10
25	LB	65	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	1160	G	C6-C5-N7	6.75	134.45	130.40
26	LA	1260	A	C4'-C3'-C2'	-6.75	95.85	102.60
26	LA	1524	G	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	1786	A	N9-C4-C5	-6.75	103.10	105.80
26	LA	2145	C	C6-N1-C2	-6.75	117.60	120.30
2	SA	246	A	C1'-O4'-C4'	-6.75	104.50	109.90
2	SA	301	G	C1'-O4'-C4'	-6.75	104.50	109.90
2	SA	417	G	C5-C6-N1	-6.75	108.12	111.50
2	SA	484	G	C5-C6-N1	6.75	114.88	111.50
2	SA	1065	U	O3'-P-O5'	-6.75	91.17	104.00
2	SA	1205	U	C3'-C2'-C1'	6.75	106.90	101.50
2	SA	1250	A	N1-C6-N6	6.75	122.65	118.60
4	S2	38	A	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	540	C	N3-C2-O2	-6.75	117.17	121.90
26	LA	2159	G	N7-C8-N9	6.75	116.48	113.10
26	LA	2274	A	C5-C6-N6	-6.75	118.30	123.70
26	LA	2863	C	C5-C4-N4	-6.75	115.47	120.20
26	LA	2878	U	P-O3'-C3'	6.75	127.80	119.70
2	SA	248	C	O4'-C1'-N1	6.75	113.60	108.20
2	SA	270	A	O4'-C1'-N9	6.75	113.60	108.20
18	SB	137	THR	CA-CB-CG2	-6.75	102.95	112.40
26	LA	980	A	C3'-C2'-C1'	6.75	106.90	101.50
26	LA	2189	U	C5-C6-N1	6.75	126.08	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	128	G	C5-N7-C8	-6.75	100.93	104.30
2	SA	462	G	N3-C4-N9	-6.75	121.95	126.00
2	SA	485	U	O3'-P-O5'	6.75	116.82	104.00
2	SA	515	G	C4-N9-C1'	-6.75	117.73	126.50
2	SA	556	C	C5-C4-N4	-6.75	115.48	120.20
2	SA	807	A	C4-C5-N7	6.75	114.07	110.70
2	SA	946	A	N7-C8-N9	6.75	117.17	113.80
2	SA	1134	G	C4'-C3'-C2'	-6.75	95.85	102.60
2	SA	1343	G	N1-C6-O6	6.75	123.95	119.90
20	SD	110	ARG	NH1-CZ-NH2	-6.75	111.98	119.40
26	LA	1127	A	OP1-P-OP2	-6.75	109.48	119.60
26	LA	1218	G	N9-C1'-C2'	-6.75	104.58	112.00
26	LA	1545	A	N9-C4-C5	-6.75	103.10	105.80
26	LA	1710	G	N1-C2-N3	-6.75	119.85	123.90
26	LA	1723	G	C5-C6-N1	-6.75	108.13	111.50
26	LA	1809	A	N7-C8-N9	6.75	117.17	113.80
26	LA	2363	G	C4-C5-C6	-6.75	114.75	118.80
26	LA	2500	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	2519	U	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	2578	G	C5-C6-N1	6.75	114.87	111.50
26	LA	2614	A	C1'-O4'-C4'	-6.75	104.50	109.90
26	LA	2785	C	C2-N3-C4	-6.75	116.53	119.90
34	L0	1	MET	CG-SD-CE	-6.75	89.40	100.20
2	SA	43	C	N1-C2-O2	6.75	122.95	118.90
2	SA	151	A	P-O5'-C5'	-6.75	110.10	120.90
2	SA	520	A	C8-N9-C4	6.75	108.50	105.80
2	SA	759	A	N1-C6-N6	6.75	122.65	118.60
2	SA	1102	A	C6-C5-N7	-6.75	127.58	132.30
26	LA	139	U	C4'-C3'-C2'	-6.75	95.85	102.60
26	LA	236	C	C6-N1-C1'	6.75	128.90	120.80
26	LA	238	C	C6-N1-C2	-6.75	117.60	120.30
26	LA	595	C	O5'-P-OP2	6.75	118.80	110.70
26	LA	759	G	C2-N3-C4	-6.75	108.53	111.90
26	LA	1367	A	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	1795	C	C6-N1-C2	-6.75	117.60	120.30
26	LA	2491	U	O4'-C1'-N1	6.75	113.60	108.20
37	LC	180	PHE	CB-CG-CD2	-6.75	116.08	120.80
2	SA	1267	C	N1-C2-N3	-6.75	114.48	119.20
2	SA	1331	G	C4-N9-C1'	-6.75	117.73	126.50
26	LA	2373	G	OP1-P-OP2	-6.75	109.48	119.60
2	SA	793	U	P-O5'-C5'	6.74	131.69	120.90
2	SA	939	G	C3'-C2'-C1'	6.74	106.89	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	12	C	C5'-C4'-O4'	6.74	117.19	109.10
26	LA	139	U	N3-C2-O2	-6.74	117.48	122.20
26	LA	415	A	C6-C5-N7	6.74	137.02	132.30
26	LA	659	G	P-O5'-C5'	-6.74	110.11	120.90
26	LA	811	U	C6-N1-C1'	-6.74	111.76	121.20
26	LA	1116	G	O4'-C1'-N9	6.74	113.59	108.20
26	LA	1191	G	C6-N1-C2	-6.74	121.05	125.10
26	LA	1619	G	C4-C5-N7	6.74	113.50	110.80
26	LA	2443	C	C5'-C4'-O4'	6.74	117.19	109.10
26	LA	2550	G	N3-C4-C5	-6.74	125.23	128.60
26	LA	2800	A	C8-N9-C4	-6.74	103.10	105.80
2	SA	1154	G	N7-C8-N9	-6.74	109.73	113.10
2	SA	1328	C	N1-C2-N3	6.74	123.92	119.20
26	LA	1115	G	C5-C6-N1	6.74	114.87	111.50
46	LH	169	ARG	NE-CZ-NH2	6.74	123.67	120.30
2	SA	161	A	N9-C4-C5	6.74	108.50	105.80
2	SA	474	G	C6-N1-C2	-6.74	121.06	125.10
2	SA	816	A	C5'-C4'-C3'	6.74	126.78	116.00
2	SA	1396	A	C5-N7-C8	-6.74	100.53	103.90
2	SA	1398	A	N9-C4-C5	-6.74	103.10	105.80
2	SA	1405	G	N1-C2-N3	-6.74	119.86	123.90
26	LA	160	A	C5'-C4'-C3'	-6.74	105.22	116.00
26	LA	488	G	C5-N7-C8	-6.74	100.93	104.30
26	LA	945	A	N1-C6-N6	6.74	122.64	118.60
26	LA	1042	G	C4-N9-C1'	-6.74	117.74	126.50
26	LA	1396	U	N1-C2-N3	6.74	118.94	114.90
26	LA	2333	A	C3'-C2'-C1'	6.74	106.89	101.50
45	LG	147	ARG	NE-CZ-NH1	-6.74	116.93	120.30
2	SA	121	U	P-O3'-C3'	-6.74	111.61	119.70
2	SA	530	G	C4'-C3'-C2'	6.74	109.34	102.60
2	SA	681	A	C5'-C4'-C3'	-6.74	105.22	116.00
2	SA	1219	A	C2-N3-C4	6.74	113.97	110.60
7	SG	61	PHE	CB-CG-CD1	6.74	125.52	120.80
26	LA	259	G	C6-C5-N7	-6.74	126.36	130.40
26	LA	901	C	P-O5'-C5'	-6.74	110.12	120.90
26	LA	1019	U	C5'-C4'-C3'	-6.74	105.22	116.00
26	LA	2073	C	O4'-C4'-C3'	6.74	111.49	106.10
45	LG	166	ARG	NE-CZ-NH1	6.74	123.67	120.30
2	SA	931	C	C2-N3-C4	-6.74	116.53	119.90
2	SA	945	G	O4'-C1'-C2'	6.74	113.66	107.60
26	LA	891	G	N9-C4-C5	-6.74	102.70	105.40
26	LA	1197	G	C1'-O4'-C4'	-6.74	104.51	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1310	G	N3-C2-N2	6.74	124.62	119.90
26	LA	1467	U	C1'-O4'-C4'	-6.74	104.51	109.90
2	SA	5	U	C6-N1-C2	-6.74	116.96	121.00
2	SA	1304	G	OP2-P-O3'	6.74	120.02	105.20
2	SA	1390	U	N3-C4-C5	6.74	118.64	114.60
26	LA	164	C	C5'-C4'-C3'	6.74	126.78	116.00
26	LA	987	C	N3-C4-C5	-6.74	119.21	121.90
26	LA	1084	A	C3'-C2'-C1'	6.74	106.89	101.50
26	LA	1821	A	OP2-P-O3'	6.74	120.02	105.20
26	LA	2693	G	N1-C6-O6	6.74	123.94	119.90
26	LA	2729	G	C5'-C4'-C3'	6.74	126.78	116.00
31	LX	9	ARG	NE-CZ-NH2	6.74	123.67	120.30
2	SA	389	A	C5-C6-N1	6.73	121.07	117.70
2	SA	404	G	N1-C6-O6	6.73	123.94	119.90
2	SA	1392	G	N1-C6-O6	6.73	123.94	119.90
26	LA	538	A	C5-C6-N1	6.73	121.07	117.70
26	LA	1348	C	N3-C4-N4	6.73	122.71	118.00
4	S2	70	C	C5-C4-N4	6.73	124.91	120.20
26	LA	329	G	N3-C2-N2	6.73	124.61	119.90
26	LA	1077	A	O4'-C1'-N9	6.73	113.59	108.20
26	LA	1374	G	N3-C2-N2	6.73	124.61	119.90
26	LA	1542	U	C2-N3-C4	-6.73	122.96	127.00
2	SA	283	U	C1'-O4'-C4'	-6.73	104.52	109.90
2	SA	481	G	C4'-C3'-C2'	-6.73	95.87	102.60
2	SA	493	A	N7-C8-N9	6.73	117.17	113.80
2	SA	538	G	C6-N1-C2	6.73	129.14	125.10
2	SA	922	G	O4'-C1'-N9	6.73	113.58	108.20
2	SA	1166	G	C4'-C3'-C2'	6.73	109.33	102.60
2	SA	1336	C	C6-N1-C1'	-6.73	112.72	120.80
3	S1	54	U	C4'-C3'-C2'	6.73	109.33	102.60
26	LA	38	A	C5'-C4'-O4'	6.73	117.18	109.10
26	LA	961	C	C5-C4-N4	-6.73	115.49	120.20
26	LA	1116	G	C4-N9-C1'	-6.73	117.75	126.50
26	LA	1654	A	OP1-P-OP2	-6.73	109.50	119.60
26	LA	1766	G	O4'-C1'-N9	6.73	113.58	108.20
26	LA	2020	A	C5-C6-N1	6.73	121.07	117.70
35	L1	16	LEU	CB-CG-CD2	6.73	122.44	111.00
1	SS	26	ASP	CB-CG-OD2	-6.73	112.24	118.30
2	SA	564	C	N1-C2-O2	6.73	122.94	118.90
2	SA	667	G	C5-C6-N1	6.73	114.86	111.50
2	SA	812	G	C4-N9-C1'	6.73	135.25	126.50
2	SA	1483	A	N9-C4-C5	6.73	108.49	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2558	C	C5'-C4'-O4'	6.73	117.17	109.10
2	SA	863	U	N3-C4-O4	6.73	124.11	119.40
2	SA	1324	A	C5-N7-C8	-6.73	100.54	103.90
26	LA	810	U	C5'-C4'-O4'	6.73	117.17	109.10
26	LA	1465	G	N1-C2-N3	-6.73	119.86	123.90
26	LA	1862	G	C5-C6-O6	6.73	132.64	128.60
26	LA	1890	A	C2-N3-C4	-6.73	107.24	110.60
26	LA	2091	C	N3-C4-C5	-6.73	119.21	121.90
2	SA	266	G	C5-C6-O6	-6.73	124.56	128.60
2	SA	549	C	N3-C4-N4	-6.73	113.29	118.00
26	LA	1385	A	C5-C6-N6	-6.73	118.32	123.70
26	LA	2717	C	C4'-C3'-C2'	-6.73	95.87	102.60
57	LS	51	GLN	O-C-N	-6.73	111.94	122.70
2	SA	391	G	C6-N1-C2	-6.72	121.07	125.10
2	SA	1089	G	C4'-C3'-C2'	-6.72	95.88	102.60
2	SA	1205	U	C6-N1-C2	-6.72	116.97	121.00
25	LB	89	U	N3-C4-O4	-6.72	114.69	119.40
26	LA	611	C	C1'-O4'-C4'	-6.72	104.52	109.90
26	LA	1083	U	O4'-C1'-N1	6.72	113.58	108.20
26	LA	1932	A	C3'-C2'-C1'	-6.72	96.12	101.50
26	LA	2630	G	C5'-C4'-O4'	6.72	117.17	109.10
51	LI	132	PHE	CB-CG-CD2	-6.72	116.09	120.80
2	SA	319	G	O4'-C1'-N9	6.72	113.58	108.20
26	LA	1171	G	C5-C6-O6	-6.72	124.57	128.60
26	LA	1815	A	O4'-C1'-N9	6.72	113.58	108.20
26	LA	1964	G	N3-C4-C5	-6.72	125.24	128.60
26	LA	2242	G	C5'-C4'-C3'	-6.72	105.24	116.00
26	LA	2548	U	N1-C2-O2	6.72	127.51	122.80
26	LA	2651	C	O3'-P-O5'	-6.72	91.23	104.00
2	SA	332	G	C1'-O4'-C4'	-6.72	104.52	109.90
2	SA	514	C	P-O5'-C5'	6.72	131.65	120.90
2	SA	669	G	O4'-C1'-N9	6.72	113.58	108.20
2	SA	1141	C	N1-C2-O2	6.72	122.93	118.90
26	LA	454	A	N9-C4-C5	-6.72	103.11	105.80
26	LA	1339	G	C6-N1-C2	-6.72	121.07	125.10
26	LA	1375	U	O4'-C1'-N1	6.72	113.58	108.20
26	LA	2889	C	N1-C2-N3	6.72	123.91	119.20
2	SA	149	A	C6-N1-C2	-6.72	114.57	118.60
2	SA	311	C	C5-C6-N1	6.72	124.36	121.00
2	SA	384	G	C6-N1-C2	-6.72	121.07	125.10
2	SA	1285	A	C5-C6-N1	-6.72	114.34	117.70
26	LA	411	G	C8-N9-C4	6.72	109.09	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	459	U	N3-C2-O2	6.72	126.90	122.20
26	LA	517	C	O4'-C1'-N1	6.72	113.58	108.20
26	LA	1899	A	C8-N9-C4	6.72	108.49	105.80
26	LA	2103	C	N3-C4-C5	-6.72	119.21	121.90
26	LA	2556	C	C5-C4-N4	-6.72	115.50	120.20
2	SA	194	C	C5-C6-N1	-6.72	117.64	121.00
2	SA	449	G	C1'-O4'-C4'	-6.72	104.53	109.90
2	SA	1110	A	C4-C5-N7	6.72	114.06	110.70
2	SA	1474	U	C2'-C3'-O3'	6.72	124.45	113.70
2	SA	1523	G	O4'-C1'-N9	6.72	113.58	108.20
2	SA	1526	G	OP1-P-OP2	-6.72	109.52	119.60
26	LA	305	C	OP1-P-OP2	-6.72	109.52	119.60
26	LA	571	U	P-O5'-C5'	-6.72	110.15	120.90
26	LA	669	G	N3-C2-N2	-6.72	115.20	119.90
26	LA	914	G	N3-C4-N9	6.72	130.03	126.00
26	LA	1022	G	N1-C2-N2	-6.72	110.15	116.20
26	LA	2644	G	C4-N9-C1'	6.72	135.23	126.50
2	SA	370	C	C5-C4-N4	-6.72	115.50	120.20
2	SA	588	G	O4'-C1'-N9	6.72	113.57	108.20
2	SA	619	U	C5-C4-O4	-6.72	121.87	125.90
2	SA	703	G	C4-C5-N7	-6.72	108.11	110.80
2	SA	793	U	O4'-C1'-N1	6.72	113.57	108.20
25	LB	64	G	C1'-O4'-C4'	-6.72	104.53	109.90
26	LA	77	G	C5-C6-O6	6.72	132.63	128.60
26	LA	288	U	P-O3'-C3'	-6.72	111.64	119.70
26	LA	423	A	C8-N9-C4	6.72	108.49	105.80
26	LA	474	G	C2-N3-C4	6.72	115.26	111.90
26	LA	1266	G	N9-C4-C5	6.72	108.09	105.40
26	LA	1431	A	C4-C5-N7	6.72	114.06	110.70
26	LA	1620	G	C8-N9-C1'	6.72	135.73	127.00
26	LA	2500	U	N3-C4-C5	-6.72	110.57	114.60
26	LA	2600	A	C4'-C3'-C2'	-6.72	95.88	102.60
2	SA	44	A	N7-C8-N9	6.71	117.16	113.80
2	SA	203	G	O4'-C1'-N9	6.71	113.57	108.20
2	SA	566	G	N9-C4-C5	-6.71	102.71	105.40
2	SA	1376	U	C5-C6-N1	-6.71	119.34	122.70
26	LA	177	G	C8-N9-C1'	-6.71	118.27	127.00
26	LA	1030	C	C4-C5-C6	-6.71	114.04	117.40
26	LA	1127	A	C2-N3-C4	-6.71	107.24	110.60
26	LA	1351	C	C2-N3-C4	-6.71	116.54	119.90
26	LA	2056	G	O4'-C4'-C3'	6.71	111.47	106.10
26	LA	2131	U	P-O3'-C3'	-6.71	111.64	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2510	C	C5-C4-N4	6.71	124.90	120.20
26	LA	2566	A	C5'-C4'-C3'	6.71	126.74	116.00
2	SA	130	A	C2-N3-C4	-6.71	107.24	110.60
2	SA	469	C	C5-C4-N4	-6.71	115.50	120.20
2	SA	1354	U	P-O3'-C3'	-6.71	111.64	119.70
26	LA	44	A	C2-N3-C4	-6.71	107.24	110.60
26	LA	477	A	C5-C6-N1	-6.71	114.34	117.70
26	LA	496	G	N7-C8-N9	6.71	116.46	113.10
26	LA	876	C	C5'-C4'-O4'	6.71	117.16	109.10
26	LA	1117	C	N1-C2-N3	6.71	123.90	119.20
37	LC	60	ARG	NE-CZ-NH2	-6.71	116.94	120.30
2	SA	143	A	C8-N9-C1'	6.71	139.78	127.70
2	SA	765	G	C5'-C4'-C3'	-6.71	105.26	116.00
2	SA	855	U	O4'-C1'-N1	6.71	113.57	108.20
2	SA	915	A	O4'-C1'-C2'	6.71	113.64	107.60
2	SA	973	G	C4'-C3'-C2'	-6.71	95.89	102.60
2	SA	976	G	O4'-C1'-N9	6.71	113.57	108.20
2	SA	1239	A	N1-C6-N6	6.71	122.63	118.60
2	SA	1471	U	C4'-C3'-C2'	-6.71	95.89	102.60
26	LA	43	G	C4-C5-N7	6.71	113.48	110.80
26	LA	662	G	C5'-C4'-C3'	-6.71	105.26	116.00
26	LA	948	C	C5-C4-N4	6.71	124.90	120.20
26	LA	1033	U	C4-C5-C6	-6.71	115.67	119.70
26	LA	1036	G	C6-N1-C2	6.71	129.13	125.10
26	LA	2162	G	C4'-C3'-C2'	-6.71	95.89	102.60
26	LA	2287	A	C5-N7-C8	6.71	107.26	103.90
26	LA	2410	G	P-O3'-C3'	6.71	127.75	119.70
26	LA	897	C	P-O5'-C5'	6.71	131.64	120.90
2	SA	261	U	O5'-P-OP2	-6.71	99.66	105.70
2	SA	541	G	C2-N3-C4	6.71	115.25	111.90
2	SA	719	C	N3-C4-C5	-6.71	119.22	121.90
26	LA	1581	G	C5-C6-O6	-6.71	124.58	128.60
26	LA	2282	G	C3'-C2'-C1'	6.71	106.87	101.50
26	LA	2610	C	C2-N3-C4	6.71	123.25	119.90
26	LA	2713	U	C1'-O4'-C4'	-6.71	104.53	109.90
2	SA	309	A	C5'-C4'-O4'	6.71	117.15	109.10
2	SA	336	A	C1'-O4'-C4'	-6.71	104.54	109.90
2	SA	902	G	C2-N3-C4	-6.71	108.55	111.90
2	SA	945	G	N3-C2-N2	6.71	124.59	119.90
26	LA	407	G	N3-C2-N2	6.71	124.59	119.90
26	LA	639	U	C6-N1-C2	-6.71	116.98	121.00
26	LA	1915	C	N1-C2-O2	-6.71	114.88	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2060	A	C2-N3-C4	-6.71	107.25	110.60
26	LA	2086	U	P-O3'-C3'	6.71	127.75	119.70
26	LA	2173	A	O5'-C5'-C4'	6.71	124.44	111.70
26	LA	2561	U	O4'-C1'-N1	6.71	113.56	108.20
26	LA	2662	A	O4'-C1'-N9	-6.71	102.83	108.20
26	LA	2697	G	C5'-C4'-O4'	6.71	117.15	109.10
26	LA	2713	U	C2-N3-C4	6.71	131.02	127.00
2	SA	574	A	OP1-P-OP2	-6.71	109.54	119.60
2	SA	957	U	C4-C5-C6	-6.71	115.68	119.70
26	LA	629	G	P-O3'-C3'	-6.71	111.65	119.70
26	LA	1301	A	C5-C6-N1	6.71	121.05	117.70
26	LA	1912	A	C4'-C3'-C2'	6.71	109.31	102.60
26	LA	1991	U	C6-N1-C2	-6.71	116.98	121.00
26	LA	2073	C	O4'-C1'-N1	6.71	113.56	108.20
26	LA	2894	G	C6-C5-N7	-6.71	126.38	130.40
2	SA	240	G	C4-C5-N7	-6.70	108.12	110.80
2	SA	440	C	N3-C4-N4	6.70	122.69	118.00
2	SA	627	G	O4'-C1'-N9	6.70	113.56	108.20
25	LB	25	U	C5-C6-N1	6.70	126.05	122.70
26	LA	514	A	C5-C6-N6	-6.70	118.34	123.70
26	LA	527	C	O4'-C1'-N1	6.70	113.56	108.20
26	LA	774	G	C1'-O4'-C4'	-6.70	104.54	109.90
26	LA	1560	G	N3-C4-N9	6.70	130.02	126.00
26	LA	1652	A	N1-C6-N6	-6.70	114.58	118.60
26	LA	1853	A	C4-C5-N7	-6.70	107.35	110.70
26	LA	2073	C	P-O3'-C3'	6.70	127.75	119.70
26	LA	2289	G	C5'-C4'-O4'	6.70	117.14	109.10
26	LA	2515	C	N1-C2-O2	-6.70	114.88	118.90
2	SA	503	C	O4'-C1'-N1	6.70	113.56	108.20
2	SA	761	G	C2-N3-C4	6.70	115.25	111.90
25	LB	63	C	N1-C2-N3	6.70	123.89	119.20
26	LA	10	A	C6-N1-C2	-6.70	114.58	118.60
26	LA	135	U	P-O3'-C3'	-6.70	111.66	119.70
26	LA	870	U	O4'-C1'-N1	-6.70	102.84	108.20
26	LA	1636	U	N3-C4-C5	-6.70	110.58	114.60
26	LA	2052	A	C5-C6-N1	-6.70	114.35	117.70
26	LA	2496	C	O4'-C4'-C3'	6.70	111.46	106.10
46	LH	96	ALA	CB-CA-C	6.70	120.15	110.10
2	SA	601	G	OP1-P-OP2	-6.70	109.55	119.60
2	SA	1115	U	C5-C4-O4	-6.70	121.88	125.90
2	SA	1424	U	N3-C4-O4	-6.70	114.71	119.40
2	SA	1527	U	P-O5'-C5'	-6.70	110.18	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	32	G	C4'-C3'-C2'	-6.70	95.90	102.60
26	LA	105	C	P-O5'-C5'	6.70	131.62	120.90
26	LA	113	U	P-O3'-C3'	-6.70	111.66	119.70
26	LA	798	G	P-O3'-C3'	-6.70	111.66	119.70
26	LA	1530	G	N3-C4-N9	6.70	130.02	126.00
26	LA	1562	U	C5-C4-O4	-6.70	121.88	125.90
26	LA	1912	A	N1-C2-N3	-6.70	125.95	129.30
26	LA	2067	G	N1-C6-O6	-6.70	115.88	119.90
26	LA	2252	G	N9-C4-C5	6.70	108.08	105.40
26	LA	2316	G	N1-C6-O6	6.70	123.92	119.90
26	LA	2417	C	N1-C2-N3	6.70	123.89	119.20
26	LA	2703	C	C6-N1-C2	-6.70	117.62	120.30
29	LV	28	ASN	N-CA-CB	6.70	122.66	110.60
2	SA	1047	G	N7-C8-N9	6.70	116.45	113.10
2	SA	1067	A	C2-N3-C4	6.70	113.95	110.60
26	LA	518	G	C5'-C4'-O4'	6.70	117.14	109.10
26	LA	1154	G	C6-C5-N7	-6.70	126.38	130.40
26	LA	1194	A	C6-N1-C2	-6.70	114.58	118.60
26	LA	1427	A	C5-N7-C8	-6.70	100.55	103.90
26	LA	1435	G	C5-C6-N1	6.70	114.85	111.50
26	LA	2058	A	C2-N3-C4	-6.70	107.25	110.60
26	LA	2813	A	C5-C6-N1	6.70	121.05	117.70
2	SA	105	G	OP1-P-OP2	-6.70	109.56	119.60
2	SA	205	A	C5-C6-N1	6.70	121.05	117.70
2	SA	808	C	C6-N1-C2	6.70	122.98	120.30
2	SA	1018	G	C4'-C3'-C2'	-6.70	95.90	102.60
26	LA	906	U	O4'-C1'-N1	6.70	113.56	108.20
26	LA	2332	C	O4'-C1'-N1	6.70	113.56	108.20
26	LA	2478	A	C2-N3-C4	6.70	113.95	110.60
46	LH	163	TYR	CB-CG-CD1	6.70	125.02	121.00
2	SA	15	G	C3'-C2'-C1'	6.70	106.86	101.50
2	SA	126	G	C5-C6-O6	-6.70	124.58	128.60
2	SA	299	G	N3-C4-C5	-6.70	125.25	128.60
2	SA	431	A	N1-C2-N3	-6.70	125.95	129.30
2	SA	700	G	C8-N9-C4	-6.70	103.72	106.40
2	SA	1101	A	C5-N7-C8	6.70	107.25	103.90
3	S1	38	G	N9-C4-C5	-6.70	102.72	105.40
25	LB	26	C	N1-C2-N3	6.70	123.89	119.20
26	LA	196	A	C4-N9-C1'	6.70	138.35	126.30
26	LA	869	G	C8-N9-C4	6.70	109.08	106.40
26	LA	932	U	N3-C2-O2	-6.70	117.51	122.20
26	LA	1326	U	C3'-C2'-C1'	6.70	106.86	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2229	U	C3'-C2'-C1'	-6.70	96.14	101.50
26	LA	2692	G	N3-C2-N2	6.70	124.59	119.90
26	LA	2847	U	O4'-C1'-N1	6.70	113.56	108.20
2	SA	468	A	N1-C2-N3	-6.69	125.95	129.30
2	SA	1496	C	N3-C2-O2	-6.69	117.21	121.90
26	LA	50	U	O4'-C1'-C2'	-6.69	99.11	105.80
26	LA	512	G	O4'-C1'-N9	6.69	113.56	108.20
26	LA	572	A	N1-C2-N3	-6.69	125.95	129.30
26	LA	1545	A	C8-N9-C4	6.69	108.48	105.80
26	LA	1973	G	C4'-C3'-C2'	-6.69	95.91	102.60
2	SA	486	U	C4'-C3'-C2'	-6.69	95.91	102.60
2	SA	701	U	C2-N1-C1'	-6.69	109.67	117.70
2	SA	713	G	C8-N9-C4	-6.69	103.72	106.40
2	SA	727	G	N9-C4-C5	6.69	108.08	105.40
26	LA	157	C	C6-N1-C2	6.69	122.98	120.30
26	LA	573	U	OP1-P-OP2	-6.69	109.56	119.60
26	LA	579	G	C5-C6-O6	-6.69	124.58	128.60
26	LA	964	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1059	G	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1507	C	N1-C2-O2	6.69	122.92	118.90
26	LA	2131	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	2344	U	N3-C2-O2	-6.69	117.52	122.20
26	LA	2693	G	C5-C6-N1	6.69	114.85	111.50
2	SA	363	A	O4'-C1'-N9	6.69	113.55	108.20
2	SA	963	G	N9-C1'-C2'	-6.69	104.64	112.00
2	SA	1312	G	O4'-C1'-N9	6.69	113.55	108.20
2	SA	1470	U	C6-N1-C2	6.69	125.01	121.00
26	LA	111	A	P-O3'-C3'	-6.69	111.67	119.70
26	LA	678	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1243	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1313	U	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1465	G	C2-N3-C4	6.69	115.25	111.90
26	LA	1497	U	C2-N1-C1'	6.69	125.73	117.70
26	LA	1630	A	C1'-O4'-C4'	-6.69	104.55	109.90
26	LA	1938	A	C1'-O4'-C4'	-6.69	104.55	109.90
26	LA	2224	G	C4'-C3'-C2'	-6.69	95.91	102.60
26	LA	2648	G	C1'-O4'-C4'	-6.69	104.55	109.90
2	SA	183	C	C1'-O4'-C4'	-6.69	104.55	109.90
2	SA	214	C	C4-C5-C6	-6.69	114.06	117.40
26	LA	439	A	O4'-C1'-N9	6.69	113.55	108.20
26	LA	2154	A	O5'-C5'-C4'	6.69	124.41	111.70
26	LA	2355	G	C5-C6-N1	6.69	114.84	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	231	U	C5-C6-N1	6.69	126.04	122.70
2	SA	452	A	P-O5'-C5'	6.69	131.60	120.90
2	SA	905	U	O4'-C1'-N1	6.69	113.55	108.20
2	SA	1259	C	C3'-C2'-C1'	6.69	106.85	101.50
3	S1	36	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	220	G	N3-C2-N2	6.69	124.58	119.90
26	LA	1412	U	C4-C5-C6	6.69	123.71	119.70
26	LA	1442	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	1867	G	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1894	C	O4'-C4'-C3'	6.69	111.45	106.10
26	LA	2165	C	N3-C4-N4	6.69	122.68	118.00
26	LA	2375	G	C5-N7-C8	-6.69	100.96	104.30
26	LA	2418	A	N3-C4-N9	-6.69	122.05	127.40
26	LA	2442	C	O4'-C1'-N1	6.69	113.55	108.20
2	SA	411	A	N7-C8-N9	6.69	117.14	113.80
2	SA	1015	G	C5-C6-O6	-6.69	124.59	128.60
2	SA	1409	C	C6-N1-C2	-6.69	117.62	120.30
26	LA	855	G	O4'-C1'-N9	6.69	113.55	108.20
2	SA	1143	G	C2'-C3'-O3'	6.68	124.39	113.70
25	LB	119	A	C4-C5-N7	6.68	114.04	110.70
26	LA	443	A	C5-N7-C8	-6.68	100.56	103.90
26	LA	1015	U	C5'-C4'-C3'	-6.68	105.30	116.00
26	LA	1227	G	C5-C6-O6	6.68	132.61	128.60
26	LA	1368	G	C5-C6-O6	-6.68	124.59	128.60
26	LA	1472	C	N1-C2-N3	6.68	123.88	119.20
26	LA	1655	A	C4-C5-C6	-6.68	113.66	117.00
26	LA	2133	G	C6-C5-N7	-6.68	126.39	130.40
26	LA	2550	G	N7-C8-N9	-6.68	109.76	113.10
26	LA	2579	C	C3'-C2'-C1'	-6.68	96.15	101.50
26	LA	2658	C	N3-C2-O2	-6.68	117.22	121.90
2	SA	102	G	O4'-C1'-N9	6.68	113.55	108.20
2	SA	268	U	N3-C2-O2	6.68	126.88	122.20
2	SA	980	C	C2-N3-C4	-6.68	116.56	119.90
2	SA	1318	A	OP1-P-OP2	-6.68	109.58	119.60
2	SA	1323	G	C3'-C2'-C1'	6.68	106.85	101.50
26	LA	85	G	C3'-C2'-C1'	-6.68	96.16	101.50
26	LA	572	A	C5-C6-N6	-6.68	118.35	123.70
26	LA	582	A	C5-C6-N1	-6.68	114.36	117.70
26	LA	1108	U	C1'-O4'-C4'	-6.68	104.55	109.90
26	LA	1553	A	C4-C5-N7	6.68	114.04	110.70
26	LA	1684	G	C5-N7-C8	-6.68	100.96	104.30
26	LA	1803	A	N7-C8-N9	6.68	117.14	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1811	G	C5-C6-N1	6.68	114.84	111.50
26	LA	2531	A	C5-N7-C8	-6.68	100.56	103.90
2	SA	95	C	C6-N1-C2	-6.68	117.63	120.30
26	LA	806	C	C4'-C3'-C2'	-6.68	95.92	102.60
26	LA	1481	U	C2-N3-C4	-6.68	122.99	127.00
26	LA	1825	U	N1-C2-N3	6.68	118.91	114.90
2	SA	302	G	N1-C2-N3	6.68	127.91	123.90
2	SA	477	C	N3-C4-N4	6.68	122.68	118.00
2	SA	700	G	N7-C8-N9	6.68	116.44	113.10
2	SA	731	G	N1-C2-N3	-6.68	119.89	123.90
2	SA	984	C	O4'-C1'-N1	6.68	113.54	108.20
3	S1	33	A	C6-C5-N7	-6.68	127.62	132.30
4	S2	77	A	P-O5'-C5'	-6.68	110.21	120.90
26	LA	196	A	C3'-C2'-C1'	6.68	106.84	101.50
26	LA	1541	C	O5'-C5'-C4'	6.68	124.39	111.70
26	LA	1834	U	P-O5'-C5'	6.68	131.59	120.90
26	LA	2011	U	C5'-C4'-C3'	-6.68	105.31	116.00
26	LA	2631	G	C8-N9-C4	-6.68	103.73	106.40
2	SA	1045	C	N3-C4-C5	6.68	124.57	121.90
2	SA	1215	G	C5'-C4'-C3'	-6.68	105.32	116.00
26	LA	757	G	C5-C6-O6	6.68	132.61	128.60
26	LA	976	G	C8-N9-C1'	-6.68	118.32	127.00
26	LA	1583	A	C5-N7-C8	-6.68	100.56	103.90
26	LA	2853	C	C5-C4-N4	-6.68	115.53	120.20
2	SA	761	G	C8-N9-C4	-6.68	103.73	106.40
2	SA	1050	G	C8-N9-C4	-6.68	103.73	106.40
24	S3	679	TYR	CB-CG-CD2	-6.68	116.99	121.00
26	LA	925	A	C2-N3-C4	-6.68	107.26	110.60
26	LA	965	C	N1-C1'-C2'	-6.68	104.66	112.00
26	LA	1018	U	C5'-C4'-C3'	-6.68	105.32	116.00
26	LA	1120	G	C8-N9-C4	-6.68	103.73	106.40
26	LA	1645	G	C4-N9-C1'	6.68	135.18	126.50
26	LA	2090	A	C3'-C2'-C1'	6.68	106.84	101.50
26	LA	2508	G	C5-C6-O6	-6.68	124.59	128.60
2	SA	68	G	O4'-C1'-N9	6.67	113.54	108.20
2	SA	391	G	N9-C4-C5	6.67	108.07	105.40
2	SA	557	G	C4-C5-N7	6.67	113.47	110.80
10	SJ	7	ARG	NE-CZ-NH2	-6.67	116.96	120.30
26	LA	448	U	P-O3'-C3'	-6.67	111.69	119.70
26	LA	829	A	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	979	A	C4-C5-C6	6.67	120.34	117.00
26	LA	990	A	O4'-C1'-N9	6.67	113.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1359	A	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1389	G	O4'-C1'-N9	6.67	113.54	108.20
26	LA	1908	C	N3-C2-O2	-6.67	117.23	121.90
26	LA	2069	G	P-O3'-C3'	-6.67	111.69	119.70
26	LA	2493	U	C1'-O4'-C4'	-6.67	104.56	109.90
26	LA	2579	C	N1-C2-O2	6.67	122.91	118.90
2	SA	1317	C	O4'-C1'-N1	6.67	113.54	108.20
25	LB	84	G	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1433	A	OP1-P-OP2	-6.67	109.59	119.60
26	LA	2345	G	C1'-O4'-C4'	-6.67	104.56	109.90
2	SA	7	A	C5-N7-C8	-6.67	100.56	103.90
2	SA	442	G	C5'-C4'-C3'	-6.67	105.33	116.00
2	SA	548	G	C5-C6-O6	-6.67	124.60	128.60
2	SA	862	C	O4'-C1'-N1	6.67	113.54	108.20
26	LA	9	G	C6-C5-N7	-6.67	126.40	130.40
26	LA	605	G	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1557	C	C5-C4-N4	-6.67	115.53	120.20
26	LA	1779	U	O4'-C1'-C2'	6.67	113.61	107.60
26	LA	1831	G	C4'-C3'-C2'	-6.67	95.93	102.60
26	LA	2223	G	C4'-C3'-C2'	-6.67	95.93	102.60
2	SA	1063	C	O4'-C1'-N1	6.67	113.54	108.20
2	SA	1176	A	P-O5'-C5'	6.67	131.57	120.90
25	LB	73	A	C8-N9-C4	-6.67	103.13	105.80
26	LA	486	C	C5-C6-N1	6.67	124.33	121.00
26	LA	1194	A	C5'-C4'-O4'	6.67	117.10	109.10
26	LA	1317	G	P-O3'-C3'	6.67	127.70	119.70
26	LA	2377	A	C1'-O4'-C4'	-6.67	104.56	109.90
26	LA	2517	C	C5-C6-N1	6.67	124.33	121.00
26	LA	2811	G	C2-N3-C4	6.67	115.23	111.90
2	SA	65	A	C3'-C2'-C1'	6.67	106.83	101.50
2	SA	536	C	C5-C4-N4	-6.67	115.53	120.20
2	SA	624	C	C6-N1-C2	-6.67	117.63	120.30
2	SA	685	G	C4-C5-N7	6.67	113.47	110.80
2	SA	766	A	C5-C6-N1	6.67	121.03	117.70
2	SA	845	A	C8-N9-C1'	-6.67	115.70	127.70
2	SA	1046	A	OP1-P-OP2	-6.67	109.60	119.60
2	SA	1178	G	O4'-C1'-N9	6.67	113.53	108.20
4	S2	76	C	C2-N3-C4	6.67	123.23	119.90
18	SB	107	ARG	N-CA-CB	6.67	122.60	110.60
26	LA	266	G	N9-C4-C5	-6.67	102.73	105.40
26	LA	816	C	N1-C2-N3	6.67	123.87	119.20
26	LA	882	G	C4-C5-N7	6.67	113.47	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	999	U	N3-C4-O4	6.67	124.07	119.40
26	LA	1580	A	N9-C4-C5	-6.67	103.13	105.80
26	LA	1955	U	P-O5'-C5'	6.67	131.57	120.90
26	LA	2120	G	C5-C6-N1	-6.67	108.17	111.50
26	LA	2730	C	C5'-C4'-O4'	6.67	117.10	109.10
45	LG	27	VAL	CG1-CB-CG2	-6.67	100.23	110.90
2	SA	83	C	C3'-C2'-C1'	6.67	106.83	101.50
2	SA	406	G	C4-N9-C1'	-6.67	117.83	126.50
2	SA	787	A	P-O5'-C5'	-6.67	110.23	120.90
2	SA	933	G	C5-N7-C8	6.67	107.63	104.30
2	SA	1028	C	C2-N3-C4	-6.67	116.57	119.90
2	SA	1304	G	C4-N9-C1'	6.67	135.17	126.50
26	LA	246	C	N1-C2-N3	-6.67	114.53	119.20
26	LA	376	G	N3-C4-C5	-6.67	125.27	128.60
26	LA	1369	G	O4'-C1'-N9	6.67	113.53	108.20
26	LA	1451	C	O4'-C4'-C3'	6.67	111.43	106.10
26	LA	1577	C	C5-C6-N1	6.67	124.33	121.00
26	LA	1922	G	C1'-O4'-C4'	-6.67	104.57	109.90
26	LA	1971	U	N1-C2-O2	-6.67	118.13	122.80
26	LA	2264	C	C5'-C4'-O4'	6.67	117.10	109.10
26	LA	2279	G	C4'-C3'-C2'	-6.67	95.93	102.60
58	LT	95	ASP	CB-CG-OD1	6.67	124.30	118.30
2	SA	1194	U	N1-C2-N3	-6.67	110.90	114.90
2	SA	1531	A	C5-N7-C8	-6.67	100.57	103.90
26	LA	1913	A	C3'-C2'-C1'	-6.67	96.17	101.50
2	SA	69	G	C5-C6-N1	-6.66	108.17	111.50
2	SA	534	U	N1-C2-O2	6.66	127.46	122.80
2	SA	972	C	C4-C5-C6	6.66	120.73	117.40
2	SA	1005	A	O5'-C5'-C4'	6.66	124.36	111.70
2	SA	1343	G	C5-C6-O6	-6.66	124.60	128.60
2	SA	1521	C	N3-C4-C5	-6.66	119.23	121.90
26	LA	1066	U	C5'-C4'-O4'	6.66	117.10	109.10
26	LA	1273	U	N3-C4-O4	-6.66	114.73	119.40
26	LA	1618	C	C2-N1-C1'	6.66	126.13	118.80
26	LA	1956	U	C5-C6-N1	6.66	126.03	122.70
26	LA	2298	A	C5-C6-N6	-6.66	118.37	123.70
26	LA	2446	G	N3-C4-C5	-6.66	125.27	128.60
26	LA	2589	A	O4'-C4'-C3'	6.66	111.43	106.10
33	LZ	72	ALA	CB-CA-C	6.66	120.10	110.10
47	LJ	18	ALA	CB-CA-C	6.66	120.10	110.10
2	SA	1168	U	O4'-C1'-N1	6.66	113.53	108.20
25	LB	26	C	C5'-C4'-O4'	6.66	117.09	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	153	U	C5-C6-N1	-6.66	119.37	122.70
26	LA	1269	A	C6-C5-N7	-6.66	127.64	132.30
26	LA	1816	C	C2-N1-C1'	6.66	126.13	118.80
26	LA	2669	G	OP2-P-O3'	6.66	119.86	105.20
2	SA	84	U	C5-C4-O4	6.66	129.90	125.90
2	SA	306	A	C5'-C4'-C3'	-6.66	105.34	116.00
2	SA	509	A	C4-C5-C6	6.66	120.33	117.00
2	SA	971	G	C5-C6-N1	-6.66	108.17	111.50
2	SA	1256	A	C5'-C4'-O4'	6.66	117.09	109.10
2	SA	1282	C	C5'-C4'-C3'	-6.66	105.34	116.00
26	LA	47	C	N3-C4-C5	-6.66	119.24	121.90
26	LA	95	A	N1-C6-N6	-6.66	114.60	118.60
26	LA	142	A	P-O5'-C5'	6.66	131.56	120.90
26	LA	800	A	C1'-O4'-C4'	-6.66	104.57	109.90
26	LA	1451	C	O4'-C1'-N1	6.66	113.53	108.20
26	LA	1962	C	N3-C2-O2	-6.66	117.24	121.90
58	LT	77	PHE	CB-CG-CD2	6.66	125.46	120.80
2	SA	295	C	N1-C2-N3	-6.66	114.54	119.20
2	SA	388	G	C5-N7-C8	-6.66	100.97	104.30
2	SA	1002	G	P-O5'-C5'	6.66	131.56	120.90
2	SA	1168	U	N1-C2-N3	-6.66	110.90	114.90
26	LA	377	G	N3-C4-N9	6.66	130.00	126.00
26	LA	588	U	C1'-O4'-C4'	-6.66	104.57	109.90
26	LA	2148	G	N3-C2-N2	6.66	124.56	119.90
47	LJ	30	ARG	N-CA-CB	6.66	122.59	110.60
2	SA	678	U	O4'-C1'-N1	6.66	113.53	108.20
26	LA	903	C	C6-N1-C1'	6.66	128.79	120.80
26	LA	1114	C	C5'-C4'-C3'	-6.66	105.35	116.00
26	LA	1820	U	O5'-P-OP2	6.66	118.69	110.70
2	SA	113	G	O4'-C1'-N9	6.66	113.52	108.20
2	SA	858	G	C5'-C4'-O4'	6.66	117.09	109.10
2	SA	1049	U	C5'-C4'-C3'	-6.66	105.35	116.00
26	LA	104	A	C6-N1-C2	6.66	122.59	118.60
26	LA	161	A	C6-N1-C2	-6.66	114.61	118.60
26	LA	800	A	N9-C1'-C2'	-6.66	104.68	112.00
26	LA	1288	G	C6-C5-N7	-6.66	126.41	130.40
26	LA	1672	A	C5-C6-N1	-6.66	114.37	117.70
26	LA	1976	U	N3-C2-O2	-6.66	117.54	122.20
26	LA	2058	A	N1-C6-N6	6.66	122.59	118.60
26	LA	2060	A	P-O3'-C3'	6.66	127.69	119.70
26	LA	2732	G	N1-C6-O6	6.66	123.89	119.90
2	SA	415	A	C8-N9-C4	-6.65	103.14	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	577	G	C2-N3-C4	6.65	115.23	111.90
2	SA	1509	C	C5-C6-N1	-6.65	117.67	121.00
26	LA	40	U	C5-C4-O4	-6.65	121.91	125.90
26	LA	408	G	C2-N3-C4	6.65	115.23	111.90
26	LA	797	G	C4-C5-C6	6.65	122.79	118.80
26	LA	967	U	O4'-C1'-N1	6.65	113.52	108.20
26	LA	1450	G	C5-N7-C8	6.65	107.63	104.30
26	LA	2425	A	C4'-C3'-C2'	-6.65	95.95	102.60
2	SA	89	U	C3'-C2'-C1'	-6.65	96.18	101.50
2	SA	190	A	C4-C5-C6	-6.65	113.67	117.00
2	SA	204	G	C4-N9-C1'	6.65	135.15	126.50
2	SA	413	G	C1'-O4'-C4'	-6.65	104.58	109.90
2	SA	1011	C	O4'-C1'-N1	6.65	113.52	108.20
26	LA	2	G	N7-C8-N9	-6.65	109.77	113.10
26	LA	6	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	503	A	C1'-O4'-C4'	-6.65	104.58	109.90
26	LA	1555	G	C4-C5-N7	-6.65	108.14	110.80
26	LA	1640	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	1807	G	OP1-P-OP2	-6.65	109.62	119.60
26	LA	1953	A	C6-N1-C2	-6.65	114.61	118.60
26	LA	2407	A	P-O3'-C3'	-6.65	111.72	119.70
26	LA	2709	G	O4'-C1'-N9	6.65	113.52	108.20
26	LA	2845	U	P-O3'-C3'	-6.65	111.72	119.70
2	SA	544	G	C6-C5-N7	6.65	134.39	130.40
2	SA	1419	G	C5-C6-N1	6.65	114.83	111.50
24	S3	355	ALA	N-CA-CB	-6.65	100.79	110.10
26	LA	5	A	N9-C4-C5	6.65	108.46	105.80
26	LA	231	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	258	G	OP1-P-OP2	-6.65	109.62	119.60
26	LA	760	G	C4'-C3'-C2'	-6.65	95.95	102.60
26	LA	1208	C	O4'-C1'-C2'	6.65	113.59	107.60
26	LA	1814	G	C8-N9-C4	6.65	109.06	106.40
26	LA	1966	A	C8-N9-C1'	-6.65	115.73	127.70
2	SA	915	A	C8-N9-C4	-6.65	103.14	105.80
2	SA	1008	U	N3-C4-O4	6.65	124.06	119.40
26	LA	1105	U	C5-C6-N1	-6.65	119.38	122.70
2	SA	704	A	C8-N9-C4	6.65	108.46	105.80
2	SA	794	A	C8-N9-C4	-6.65	103.14	105.80
2	SA	1052	U	O4'-C4'-C3'	-6.65	97.35	104.00
26	LA	669	G	C5'-C4'-O4'	6.65	117.08	109.10
26	LA	742	A	N1-C6-N6	-6.65	114.61	118.60
26	LA	1212	G	O4'-C1'-N9	6.65	113.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1310	G	C6-C5-N7	-6.65	126.41	130.40
26	LA	1473	G	N3-C4-C5	-6.65	125.28	128.60
26	LA	1838	C	C5'-C4'-C3'	6.65	126.64	116.00
26	LA	2243	U	C5-C6-N1	-6.65	119.38	122.70
2	SA	971	G	C5-C6-O6	-6.64	124.61	128.60
2	SA	1333	A	N1-C6-N6	-6.64	114.61	118.60
2	SA	1442	G	C4-C5-N7	6.64	113.46	110.80
12	SL	120	ARG	NE-CZ-NH1	6.64	123.62	120.30
26	LA	291	G	C6-N1-C2	-6.64	121.11	125.10
26	LA	480	A	P-O3'-C3'	6.64	127.67	119.70
26	LA	767	U	N1-C2-O2	-6.64	118.15	122.80
26	LA	1992	G	C5'-C4'-O4'	-6.64	101.13	109.10
26	LA	2045	C	N3-C4-C5	6.64	124.56	121.90
26	LA	2156	G	C8-N9-C4	-6.64	103.74	106.40
26	LA	2201	G	C2-N3-C4	-6.64	108.58	111.90
26	LA	2223	G	C5-C6-N1	-6.64	108.18	111.50
26	LA	2225	A	O4'-C1'-N9	6.64	113.52	108.20
26	LA	2458	G	OP2-P-O3'	6.64	119.82	105.20
26	LA	2523	G	C5-C6-O6	-6.64	124.61	128.60
31	LX	80	HIS	N-CA-CB	-6.64	98.64	110.60
55	LQ	6	ALA	N-CA-CB	-6.64	100.80	110.10
2	SA	401	C	O5'-P-OP1	6.64	118.67	110.70
2	SA	504	C	N1-C2-N3	6.64	123.85	119.20
2	SA	982	U	P-O3'-C3'	6.64	127.67	119.70
5	ST	78	LEU	CB-CG-CD1	6.64	122.29	111.00
22	SF	109	ARG	NE-CZ-NH1	6.64	123.62	120.30
25	LB	45	A	P-O3'-C3'	-6.64	111.73	119.70
26	LA	251	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	644	A	N1-C6-N6	6.64	122.58	118.60
26	LA	1133	A	C6-N1-C2	-6.64	114.61	118.60
26	LA	1288	G	C8-N9-C1'	-6.64	118.36	127.00
26	LA	1368	G	C1'-O4'-C4'	-6.64	104.59	109.90
26	LA	1541	C	C4-C5-C6	6.64	120.72	117.40
26	LA	2037	A	C6-N1-C2	-6.64	114.61	118.60
26	LA	2477	U	O4'-C1'-N1	6.64	113.51	108.20
52	LO	91	TYR	CG-CD2-CE2	-6.64	115.98	121.30
2	SA	295	C	OP1-P-OP2	-6.64	109.64	119.60
26	LA	64	A	N3-C4-C5	-6.64	122.15	126.80
26	LA	644	A	C4'-C3'-C2'	-6.64	95.96	102.60
2	SA	332	G	O4'-C1'-N9	6.64	113.51	108.20
2	SA	977	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	402	A	C6-N1-C2	-6.64	114.62	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1579	A	C5-C6-N6	6.64	129.01	123.70
26	LA	1707	G	C5-C6-N1	-6.64	108.18	111.50
26	LA	2416	C	C6-N1-C2	-6.64	117.64	120.30
2	SA	128	G	C4-C5-N7	6.64	113.45	110.80
26	LA	1641	A	C6-N1-C2	6.64	122.58	118.60
26	LA	2430	A	C4'-C3'-C2'	6.64	109.24	102.60
26	LA	2821	A	OP2-P-O3'	6.64	119.80	105.20
1	SS	13	HIS	CA-CB-CG	-6.64	102.32	113.60
2	SA	29	U	N1-C2-N3	6.64	118.88	114.90
2	SA	398	U	N3-C4-C5	6.64	118.58	114.60
2	SA	425	G	C5-C6-N1	6.64	114.82	111.50
2	SA	597	G	O4'-C1'-N9	6.64	113.51	108.20
2	SA	619	U	N1-C2-N3	6.64	118.88	114.90
2	SA	1221	G	N3-C4-C5	6.64	131.92	128.60
2	SA	1422	G	N3-C4-N9	6.64	129.98	126.00
3	S1	35	G	N1-C2-N3	6.64	127.88	123.90
26	LA	312	G	P-O3'-C3'	6.64	127.66	119.70
26	LA	874	G	O4'-C1'-N9	6.64	113.51	108.20
26	LA	925	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	1691	C	O4'-C1'-N1	6.64	113.51	108.20
2	SA	581	G	N1-C6-O6	6.63	123.88	119.90
2	SA	739	C	C2-N3-C4	-6.63	116.58	119.90
2	SA	800	G	C2'-C3'-O3'	6.63	124.31	113.70
2	SA	1125	U	C1'-O4'-C4'	-6.63	104.59	109.90
2	SA	1388	C	P-O3'-C3'	-6.63	111.74	119.70
26	LA	358	U	C3'-C2'-C1'	6.63	106.81	101.50
26	LA	972	A	P-O3'-C3'	6.63	127.66	119.70
26	LA	1105	U	N1-C2-O2	-6.63	118.16	122.80
26	LA	1367	A	N1-C6-N6	-6.63	114.62	118.60
26	LA	1411	U	P-O5'-C5'	-6.63	110.28	120.90
26	LA	1682	G	O3'-P-O5'	-6.63	91.39	104.00
26	LA	1764	C	N3-C2-O2	-6.63	117.25	121.90
26	LA	1890	A	N7-C8-N9	6.63	117.12	113.80
26	LA	2010	G	C1'-O4'-C4'	-6.63	104.59	109.90
26	LA	2119	A	P-O5'-C5'	6.63	131.51	120.90
26	LA	2570	G	C2-N3-C4	6.63	115.22	111.90
26	LA	2868	A	C4-C5-N7	6.63	114.02	110.70
2	SA	263	A	C5-C6-N6	-6.63	118.39	123.70
2	SA	664	G	N1-C2-N3	-6.63	119.92	123.90
2	SA	1347	G	C4-C5-C6	6.63	122.78	118.80
25	LB	44	G	C4-C5-N7	-6.63	108.15	110.80
26	LA	239	C	N1-C2-O2	-6.63	114.92	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	885	C	O4'-C1'-N1	6.63	113.51	108.20
26	LA	2355	G	C5-C6-O6	-6.63	124.62	128.60
2	SA	1349	A	N1-C2-N3	-6.63	125.98	129.30
2	SA	1491	G	C4'-C3'-C2'	6.63	109.23	102.60
26	LA	41	C	N3-C4-C5	-6.63	119.25	121.90
26	LA	322	A	C5-C6-N6	-6.63	118.39	123.70
26	LA	1610	A	O4'-C1'-N9	6.63	113.50	108.20
26	LA	1615	C	P-O3'-C3'	6.63	127.66	119.70
26	LA	1663	G	N3-C2-N2	6.63	124.54	119.90
26	LA	1760	C	C6-N1-C2	-6.63	117.65	120.30
26	LA	1873	G	C5'-C4'-C3'	-6.63	105.39	116.00
26	LA	2774	C	C5-C6-N1	6.63	124.32	121.00
2	SA	111	G	N1-C2-N2	-6.63	110.23	116.20
3	S1	57	C	N3-C4-C5	-6.63	119.25	121.90
26	LA	2858	C	N3-C4-C5	-6.63	119.25	121.90
2	SA	423	G	C3'-C2'-C1'	6.63	106.80	101.50
2	SA	917	G	N1-C2-N2	-6.63	110.23	116.20
26	LA	176	A	O4'-C1'-N9	6.63	113.50	108.20
26	LA	354	A	N3-C4-C5	-6.63	122.16	126.80
26	LA	542	C	N3-C4-N4	6.63	122.64	118.00
26	LA	1562	U	O4'-C1'-N1	6.63	113.50	108.20
26	LA	2711	A	C5-C6-N6	-6.63	118.40	123.70
2	SA	351	G	C6-N1-C2	6.63	129.08	125.10
2	SA	688	G	C6-N1-C2	-6.63	121.12	125.10
26	LA	187	G	C5-C6-N1	6.63	114.81	111.50
26	LA	291	G	C5'-C4'-C3'	6.63	126.60	116.00
26	LA	532	A	C4'-C3'-C2'	-6.63	95.97	102.60
26	LA	601	C	C5-C6-N1	-6.63	117.69	121.00
26	LA	2322	A	C5-C6-N6	6.63	129.00	123.70
26	LA	2693	G	OP1-P-OP2	-6.63	109.66	119.60
26	LA	2696	U	C5-C6-N1	6.63	126.01	122.70
25	LB	40	U	P-O3'-C3'	6.62	127.65	119.70
26	LA	325	G	N1-C2-N3	6.62	127.88	123.90
26	LA	1011	G	O4'-C1'-N9	6.62	113.50	108.20
26	LA	1309	G	C4-C5-C6	6.62	122.78	118.80
26	LA	2013	A	C5-N7-C8	-6.62	100.59	103.90
26	LA	2327	A	P-O3'-C3'	6.62	127.65	119.70
26	LA	2480	C	C3'-C2'-C1'	6.62	106.80	101.50
26	LA	2608	G	P-O5'-C5'	-6.62	110.30	120.90
26	LA	2785	C	N3-C4-N4	6.62	122.64	118.00
53	LP	30	ARG	NH1-CZ-NH2	-6.62	112.11	119.40
2	SA	158	G	N1-C6-O6	-6.62	115.93	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	297	G	O4'-C1'-N9	6.62	113.50	108.20
26	LA	951	C	O4'-C1'-N1	6.62	113.50	108.20
26	LA	1295	C	O3'-P-O5'	6.62	116.58	104.00
26	LA	2097	A	N1-C2-N3	6.62	132.61	129.30
2	SA	178	C	N3-C4-C5	-6.62	119.25	121.90
2	SA	692	U	C4'-C3'-C2'	-6.62	95.98	102.60
2	SA	1356	G	C3'-C2'-C1'	6.62	106.80	101.50
2	SA	1487	G	N7-C8-N9	6.62	116.41	113.10
4	S2	26	C	N1-C2-O2	-6.62	114.93	118.90
25	LB	61	G	C5-C6-O6	-6.62	124.63	128.60
26	LA	1655	A	C5-N7-C8	-6.62	100.59	103.90
26	LA	2085	U	C1'-O4'-C4'	6.62	115.20	109.90
26	LA	2143	C	N1-C2-O2	6.62	122.87	118.90
26	LA	2308	G	OP1-P-OP2	-6.62	109.67	119.60
2	SA	166	U	C5-C4-O4	-6.62	121.93	125.90
2	SA	582	C	N3-C4-N4	6.62	122.63	118.00
2	SA	664	G	C2-N3-C4	6.62	115.21	111.90
2	SA	789	U	N3-C4-C5	6.62	118.57	114.60
2	SA	913	A	C4-C5-C6	6.62	120.31	117.00
2	SA	1027	C	O4'-C1'-N1	6.62	113.50	108.20
2	SA	1222	G	C5'-C4'-O4'	6.62	117.04	109.10
21	SE	125	LYS	CB-CA-C	-6.62	97.16	110.40
26	LA	267	C	C3'-C2'-C1'	-6.62	96.20	101.50
26	LA	1688	U	N3-C4-C5	-6.62	110.63	114.60
2	SA	354	G	C8-N9-C1'	-6.62	118.40	127.00
2	SA	1338	G	N3-C4-N9	6.62	129.97	126.00
26	LA	272	A	C5'-C4'-C3'	6.62	126.59	116.00
26	LA	360	U	C4'-C3'-C2'	-6.62	95.98	102.60
26	LA	473	G	C2-N3-C4	-6.62	108.59	111.90
26	LA	1929	G	P-O3'-C3'	-6.62	111.76	119.70
2	SA	1192	C	OP1-P-OP2	-6.62	109.67	119.60
26	LA	1098	A	N9-C4-C5	-6.62	103.15	105.80
26	LA	2721	A	N7-C8-N9	6.62	117.11	113.80
2	SA	76	G	N3-C4-C5	6.62	131.91	128.60
2	SA	890	G	C6-N1-C2	6.62	129.07	125.10
2	SA	1251	A	N7-C8-N9	-6.62	110.49	113.80
25	LB	109	A	O4'-C4'-C3'	-6.62	97.38	104.00
26	LA	57	C	N3-C4-C5	-6.62	119.25	121.90
26	LA	1409	U	C2-N3-C4	-6.62	123.03	127.00
26	LA	1990	C	C3'-C2'-C1'	6.62	106.79	101.50
2	SA	630	A	C6-N1-C2	-6.61	114.63	118.60
2	SA	718	A	C2-N3-C4	-6.61	107.29	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1112	C	O4'-C1'-N1	6.61	113.49	108.20
2	SA	1357	A	C5-C6-N1	6.61	121.01	117.70
3	S1	14	G	OP1-P-OP2	-6.61	109.68	119.60
4	S2	10	G	C3'-C2'-C1'	6.61	106.79	101.50
26	LA	18	U	C3'-C2'-C1'	6.61	106.79	101.50
26	LA	85	G	N3-C4-C5	-6.61	125.29	128.60
26	LA	162	U	C2-N3-C4	-6.61	123.03	127.00
26	LA	470	A	P-O5'-C5'	-6.61	110.32	120.90
26	LA	2197	U	C2-N3-C4	-6.61	123.03	127.00
26	LA	2200	C	N3-C2-O2	-6.61	117.27	121.90
26	LA	2434	A	C5-N7-C8	6.61	107.21	103.90
26	LA	2583	G	P-O5'-C5'	6.61	131.48	120.90
26	LA	2597	G	O4'-C1'-N9	6.61	113.49	108.20
26	LA	489	G	C6-C5-N7	-6.61	126.43	130.40
26	LA	1332	G	N1-C2-N2	-6.61	110.25	116.20
26	LA	1556	C	O4'-C1'-N1	6.61	113.49	108.20
26	LA	2751	G	O4'-C1'-N9	6.61	113.49	108.20
2	SA	120	A	N3-C4-C5	-6.61	122.17	126.80
2	SA	693	G	N1-C6-O6	6.61	123.87	119.90
2	SA	1232	U	O4'-C1'-N1	6.61	113.49	108.20
26	LA	1136	G	C1'-O4'-C4'	-6.61	104.61	109.90
26	LA	1419	A	C4'-C3'-C2'	6.61	109.21	102.60
26	LA	2479	U	N3-C4-C5	6.61	118.57	114.60
2	SA	1086	U	C1'-O4'-C4'	-6.61	104.61	109.90
2	SA	1529	G	N1-C2-N3	6.61	127.86	123.90
26	LA	623	C	C4-C5-C6	-6.61	114.09	117.40
26	LA	2444	G	N3-C4-C5	6.61	131.90	128.60
24	S3	344	SER	CB-CA-C	-6.61	97.55	110.10
26	LA	22	C	C6-N1-C2	6.61	122.94	120.30
26	LA	614	A	N1-C2-N3	6.61	132.60	129.30
26	LA	822	G	C6-N1-C2	-6.61	121.14	125.10
26	LA	1419	A	N7-C8-N9	-6.61	110.50	113.80
26	LA	1700	A	C4'-C3'-C2'	-6.61	95.99	102.60
26	LA	1925	C	C2-N3-C4	6.61	123.20	119.90
26	LA	2005	A	C8-N9-C4	-6.61	103.16	105.80
26	LA	2065	C	N1-C2-N3	6.61	123.83	119.20
26	LA	2467	C	N3-C4-N4	-6.61	113.38	118.00
26	LA	2526	G	OP1-P-OP2	-6.61	109.69	119.60
26	LA	2852	G	C8-N9-C4	-6.61	103.76	106.40
2	SA	108	G	C3'-C2'-C1'	6.61	106.78	101.50
2	SA	791	G	N3-C4-N9	6.61	129.96	126.00
2	SA	1221	G	C8-N9-C4	6.61	109.04	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	982	C	C5-C6-N1	-6.61	117.70	121.00
26	LA	1345	C	N3-C2-O2	-6.61	117.28	121.90
26	LA	1769	U	C3'-C2'-C1'	6.61	106.78	101.50
26	LA	1786	A	C2-N3-C4	-6.61	107.30	110.60
26	LA	2290	G	O4'-C1'-N9	6.61	113.48	108.20
26	LA	2630	G	C6-N1-C2	-6.61	121.14	125.10
26	LA	2792	A	O4'-C1'-N9	6.61	113.48	108.20
26	LA	2870	C	C6-N1-C1'	6.61	128.73	120.80
2	SA	398	U	C5-C4-O4	-6.60	121.94	125.90
26	LA	613	A	C8-N9-C1'	-6.60	115.81	127.70
26	LA	1124	G	C5-C6-O6	-6.60	124.64	128.60
2	SA	253	A	C1'-O4'-C4'	-6.60	104.62	109.90
2	SA	819	A	N7-C8-N9	6.60	117.10	113.80
2	SA	1114	C	N3-C2-O2	-6.60	117.28	121.90
2	SA	1423	G	C6-C5-N7	-6.60	126.44	130.40
26	LA	130	C	N3-C4-N4	6.60	122.62	118.00
26	LA	341	C	N3-C2-O2	-6.60	117.28	121.90
26	LA	418	C	C5-C6-N1	6.60	124.30	121.00
26	LA	514	A	C2-N3-C4	6.60	113.90	110.60
26	LA	795	C	O4'-C1'-N1	6.60	113.48	108.20
26	LA	935	C	C6-N1-C2	-6.60	117.66	120.30
26	LA	1038	G	C5'-C4'-O4'	6.60	117.02	109.10
26	LA	1112	G	C5-C6-O6	-6.60	124.64	128.60
26	LA	1235	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	1270	C	C5-C4-N4	-6.60	115.58	120.20
26	LA	2115	G	C5-C6-O6	6.60	132.56	128.60
26	LA	2434	A	C8-N9-C4	6.60	108.44	105.80
26	LA	626	A	C6-C5-N7	-6.60	127.68	132.30
26	LA	1332	G	N7-C8-N9	6.60	116.40	113.10
26	LA	1521	G	N9-C4-C5	-6.60	102.76	105.40
26	LA	2666	C	C4'-C3'-C2'	-6.60	96.00	102.60
2	SA	448	A	O4'-C4'-C3'	-6.60	97.40	104.00
2	SA	603	U	C2-N3-C4	6.60	130.96	127.00
2	SA	634	C	N3-C4-C5	-6.60	119.26	121.90
2	SA	869	G	C5'-C4'-C3'	6.60	126.56	116.00
26	LA	293	U	N1-C2-N3	6.60	118.86	114.90
26	LA	1932	A	C6-C5-N7	6.60	136.92	132.30
26	LA	2031	A	N9-C4-C5	-6.60	103.16	105.80
26	LA	2059	A	C4-C5-C6	-6.60	113.70	117.00
26	LA	2168	G	P-O3'-C3'	6.60	127.62	119.70
26	LA	2168	G	N3-C2-N2	-6.60	115.28	119.90
26	LA	2687	U	C5-C6-N1	-6.60	119.40	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	308	C	C2-N3-C4	6.60	123.20	119.90
2	SA	593	U	C2-N3-C4	-6.60	123.04	127.00
25	LB	83	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	551	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	1306	C	C5-C6-N1	6.60	124.30	121.00
26	LA	1928	A	C4-C5-C6	-6.60	113.70	117.00
26	LA	2462	C	C5'-C4'-C3'	-6.60	105.44	116.00
26	LA	2513	A	C6-N1-C2	-6.60	114.64	118.60
2	SA	495	A	C6-N1-C2	-6.60	114.64	118.60
2	SA	1034	G	C8-N9-C1'	6.60	135.57	127.00
26	LA	349	U	C1'-O4'-C4'	-6.60	104.62	109.90
26	LA	2464	G	C4'-C3'-C2'	-6.60	96.00	102.60
26	LA	2507	C	C6-N1-C1'	6.60	128.72	120.80
2	SA	488	C	N1-C2-O2	6.59	122.86	118.90
2	SA	1039	G	N3-C2-N2	6.59	124.52	119.90
2	SA	1207	G	O4'-C1'-N9	6.59	113.48	108.20
2	SA	1311	A	C5'-C4'-O4'	6.59	117.01	109.10
2	SA	1330	U	N1-C2-N3	6.59	118.86	114.90
26	LA	187	G	N1-C2-N3	6.59	127.86	123.90
26	LA	397	U	C5-C6-N1	-6.59	119.40	122.70
26	LA	534	U	N3-C2-O2	-6.59	117.58	122.20
26	LA	924	G	P-O3'-C3'	6.59	127.61	119.70
26	LA	954	G	N9-C4-C5	-6.59	102.76	105.40
26	LA	1208	C	O4'-C1'-N1	6.59	113.47	108.20
26	LA	1587	G	N3-C2-N2	6.59	124.52	119.90
26	LA	2002	G	O4'-C1'-N9	6.59	113.48	108.20
26	LA	2235	G	C5'-C4'-O4'	6.59	117.01	109.10
26	LA	2348	U	P-O3'-C3'	-6.59	111.79	119.70
26	LA	2421	G	C5-C6-N1	6.59	114.80	111.50
26	LA	2883	A	N7-C8-N9	-6.59	110.50	113.80
2	SA	661	G	C5-C6-N1	6.59	114.80	111.50
2	SA	1232	U	N3-C2-O2	-6.59	117.58	122.20
26	LA	304	U	C5'-C4'-C3'	-6.59	105.45	116.00
26	LA	2203	U	C6-N1-C1'	-6.59	111.97	121.20
2	SA	141	G	N1-C6-O6	6.59	123.86	119.90
2	SA	835	U	P-O3'-C3'	-6.59	111.79	119.70
2	SA	937	A	O4'-C1'-N9	6.59	113.47	108.20
2	SA	1118	U	N1-C2-N3	-6.59	110.94	114.90
2	SA	1153	G	C4-C5-N7	6.59	113.44	110.80
2	SA	1354	U	C5'-C4'-C3'	-6.59	105.45	116.00
2	SA	1437	A	C6-N1-C2	-6.59	114.64	118.60
3	S1	58	C	P-O3'-C3'	6.59	127.61	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	24	C	C6-N1-C2	-6.59	117.66	120.30
4	S2	57	C	C4'-C3'-C2'	6.59	109.19	102.60
25	LB	117	G	N3-C2-N2	6.59	124.51	119.90
26	LA	414	C	N1-C2-N3	6.59	123.81	119.20
26	LA	622	G	O4'-C1'-N9	6.59	113.47	108.20
26	LA	1416	G	C5-C6-O6	-6.59	124.64	128.60
26	LA	2078	C	C4'-C3'-C2'	-6.59	96.01	102.60
26	LA	2284	A	N1-C2-N3	6.59	132.60	129.30
26	LA	2549	G	N3-C4-N9	-6.59	122.05	126.00
2	SA	869	G	C6-N1-C2	6.59	129.05	125.10
2	SA	915	A	C6-N1-C2	-6.59	114.65	118.60
25	LB	26	C	C2-N3-C4	-6.59	116.61	119.90
25	LB	30	C	O4'-C1'-N1	6.59	113.47	108.20
26	LA	122	G	C5-N7-C8	-6.59	101.00	104.30
26	LA	323	C	N3-C2-O2	-6.59	117.29	121.90
26	LA	581	C	C5'-C4'-C3'	-6.59	105.46	116.00
26	LA	1054	A	C8-N9-C4	-6.59	103.16	105.80
26	LA	1188	U	C2-N3-C4	-6.59	123.05	127.00
2	SA	6	G	C5-C6-N1	-6.59	108.21	111.50
2	SA	30	U	C5-C6-N1	-6.59	119.41	122.70
2	SA	354	G	P-O3'-C3'	6.59	127.61	119.70
2	SA	714	G	O4'-C1'-N9	6.59	113.47	108.20
2	SA	929	G	O4'-C1'-N9	6.59	113.47	108.20
24	S3	390	VAL	CA-CB-CG1	-6.59	101.02	110.90
26	LA	117	G	N3-C4-N9	6.59	129.95	126.00
26	LA	889	C	C2-N1-C1'	6.59	126.05	118.80
26	LA	1185	G	OP1-P-OP2	-6.59	109.72	119.60
26	LA	2056	G	C4'-C3'-C2'	-6.59	96.01	102.60
2	SA	306	A	C4-C5-C6	-6.59	113.71	117.00
2	SA	436	C	N3-C4-N4	6.59	122.61	118.00
4	S2	9	G	C8-N9-C1'	-6.59	118.44	127.00
23	SR	3	TYR	C-N-CA	6.59	138.17	121.70
24	S3	407	ARG	NE-CZ-NH1	6.59	123.59	120.30
26	LA	103	A	N9-C4-C5	-6.59	103.17	105.80
26	LA	115	C	C2-N3-C4	-6.59	116.61	119.90
26	LA	679	C	C2-N3-C4	-6.59	116.61	119.90
26	LA	1100	C	N1-C1'-C2'	-6.59	104.75	112.00
26	LA	1223	G	C6-C5-N7	6.59	134.35	130.40
26	LA	1468	U	C5-C4-O4	-6.59	121.95	125.90
26	LA	1635	A	C8-N9-C4	-6.59	103.17	105.80
26	LA	1775	U	N3-C4-C5	6.59	118.55	114.60
26	LA	2706	A	N7-C8-N9	-6.59	110.51	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2900	A	N1-C6-N6	6.59	122.55	118.60
2	SA	851	G	O4'-C1'-N9	6.58	113.47	108.20
2	SA	1230	C	N3-C4-C5	-6.58	119.27	121.90
2	SA	1400	C	O4'-C1'-N1	6.58	113.47	108.20
20	SD	75	TYR	CB-CG-CD2	-6.58	117.05	121.00
26	LA	112	U	C5'-C4'-O4'	6.58	117.00	109.10
26	LA	2246	G	P-O5'-C5'	6.58	131.44	120.90
2	SA	655	A	OP1-P-OP2	-6.58	109.73	119.60
2	SA	1335	U	O4'-C1'-C2'	6.58	113.53	107.60
4	S2	59	A	N9-C4-C5	-6.58	103.17	105.80
26	LA	244	A	C8-N9-C4	6.58	108.43	105.80
26	LA	386	G	P-O5'-C5'	-6.58	110.37	120.90
26	LA	734	A	C5-C6-N1	-6.58	114.41	117.70
26	LA	1190	G	N1-C6-O6	6.58	123.85	119.90
26	LA	2196	C	C5'-C4'-C3'	-6.58	105.47	116.00
26	LA	2500	U	N3-C4-O4	6.58	124.01	119.40
2	SA	334	C	N3-C4-N4	6.58	122.61	118.00
2	SA	1033	G	N9-C1'-C2'	-6.58	104.76	112.00
2	SA	1163	A	N3-C4-C5	6.58	131.41	126.80
4	S2	39	A	C5-C6-N6	-6.58	118.44	123.70
26	LA	454	A	C4-C5-C6	-6.58	113.71	117.00
26	LA	536	G	C5-N7-C8	6.58	107.59	104.30
26	LA	602	A	C5-C6-N6	-6.58	118.43	123.70
26	LA	1489	C	C5'-C4'-O4'	6.58	117.00	109.10
2	SA	389	A	C5-N7-C8	-6.58	100.61	103.90
2	SA	487	A	N7-C8-N9	-6.58	110.51	113.80
25	LB	41	G	P-O3'-C3'	6.58	127.60	119.70
26	LA	957	C	C6-N1-C1'	-6.58	112.90	120.80
26	LA	1750	G	C3'-C2'-C1'	-6.58	96.24	101.50
26	LA	2054	A	C5'-C4'-O4'	6.58	117.00	109.10
34	L0	32	ALA	CB-CA-C	-6.58	100.23	110.10
2	SA	114	U	C5-C6-N1	-6.58	119.41	122.70
2	SA	1323	G	C5'-C4'-O4'	6.58	116.99	109.10
26	LA	318	C	P-O5'-C5'	6.58	131.43	120.90
26	LA	711	G	C4'-C3'-C2'	-6.58	96.02	102.60
26	LA	724	U	N3-C4-C5	-6.58	110.65	114.60
26	LA	861	A	C4-C5-C6	6.58	120.29	117.00
26	LA	1519	G	O4'-C1'-N9	6.58	113.46	108.20
26	LA	2562	U	C2-N3-C4	-6.58	123.05	127.00
2	SA	544	G	C8-N9-C4	-6.58	103.77	106.40
2	SA	1375	A	N7-C8-N9	6.58	117.09	113.80
2	SA	1454	G	N1-C6-O6	6.58	123.85	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	55	U	C6-N1-C1'	6.58	130.41	121.20
26	LA	163	C	C2-N1-C1'	6.58	126.03	118.80
26	LA	659	G	N3-C4-C5	6.58	131.89	128.60
26	LA	2535	G	N9-C4-C5	6.58	108.03	105.40
26	LA	2674	G	N7-C8-N9	-6.58	109.81	113.10
2	SA	534	U	C5-C4-O4	-6.58	121.95	125.90
2	SA	1021	A	N3-C4-C5	-6.58	122.20	126.80
2	SA	1065	U	C2-N3-C4	-6.58	123.06	127.00
2	SA	1104	G	N1-C6-O6	6.58	123.85	119.90
2	SA	1363	A	O4'-C1'-C2'	-6.58	99.22	105.80
26	LA	332	A	N9-C4-C5	-6.58	103.17	105.80
26	LA	442	G	C5'-C4'-C3'	-6.58	105.48	116.00
26	LA	1185	G	C6-N1-C2	-6.58	121.16	125.10
26	LA	1317	G	C1'-O4'-C4'	-6.58	104.64	109.90
26	LA	1619	G	C6-C5-N7	-6.58	126.45	130.40
26	LA	1689	A	C5-C6-N6	-6.58	118.44	123.70
26	LA	2024	G	N3-C4-N9	6.58	129.94	126.00
26	LA	2429	G	N3-C2-N2	6.58	124.50	119.90
26	LA	2827	C	C5-C6-N1	-6.58	117.71	121.00
2	SA	768	A	C4'-C3'-C2'	-6.57	96.03	102.60
2	SA	937	A	C4-C5-C6	6.57	120.29	117.00
2	SA	1000	A	C5-C6-N1	-6.57	114.41	117.70
2	SA	1070	U	C5'-C4'-O4'	6.57	116.99	109.10
2	SA	1331	G	OP1-P-O3'	6.57	119.66	105.20
2	SA	1401	G	N1-C6-O6	6.57	123.84	119.90
26	LA	1292	G	N1-C6-O6	6.57	123.84	119.90
26	LA	1345	C	N1-C2-N3	6.57	123.80	119.20
26	LA	1586	A	C4-C5-C6	6.57	120.29	117.00
26	LA	2383	G	O3'-P-O5'	6.57	116.49	104.00
26	LA	4	U	C5-C4-O4	-6.57	121.96	125.90
26	LA	1201	U	N3-C4-O4	6.57	124.00	119.40
26	LA	1383	A	O4'-C1'-N9	6.57	113.46	108.20
26	LA	2447	G	N9-C4-C5	-6.57	102.77	105.40
26	LA	2773	C	P-O3'-C3'	-6.57	111.81	119.70
2	SA	229	U	C2-N3-C4	-6.57	123.06	127.00
2	SA	883	C	N3-C2-O2	-6.57	117.30	121.90
14	SN	62	ARG	NE-CZ-NH2	6.57	123.58	120.30
26	LA	2341	G	C6-C5-N7	-6.57	126.46	130.40
26	LA	2782	G	N1-C6-O6	6.57	123.84	119.90
2	SA	551	U	C2-N1-C1'	-6.57	109.82	117.70
2	SA	1067	A	N1-C6-N6	6.57	122.54	118.60
25	LB	84	G	N9-C4-C5	-6.57	102.77	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	474	G	N7-C8-N9	6.57	116.38	113.10
26	LA	1139	G	N9-C1'-C2'	-6.57	104.77	112.00
26	LA	1388	G	C2-N3-C4	-6.57	108.62	111.90
26	LA	2124	G	N1-C2-N3	6.57	127.84	123.90
26	LA	2401	U	C1'-O4'-C4'	6.57	115.16	109.90
26	LA	2428	G	N1-C6-O6	6.57	123.84	119.90
26	LA	2708	G	N1-C2-N3	6.57	127.84	123.90
26	LA	2797	U	N3-C4-O4	6.57	124.00	119.40
26	LA	2860	A	N9-C4-C5	6.57	108.43	105.80
2	SA	1141	C	C5'-C4'-C3'	-6.57	105.49	116.00
26	LA	40	U	N3-C4-C5	6.57	118.54	114.60
26	LA	165	A	C5-N7-C8	-6.57	100.62	103.90
26	LA	1014	A	N1-C2-N3	6.57	132.58	129.30
26	LA	1450	G	C2-N3-C4	6.57	115.18	111.90
26	LA	1532	A	N1-C2-N3	6.57	132.58	129.30
26	LA	2622	U	N3-C2-O2	-6.57	117.60	122.20
26	LA	2780	G	P-O3'-C3'	-6.57	111.82	119.70
2	SA	296	U	N3-C2-O2	-6.57	117.60	122.20
2	SA	355	C	N1-C2-O2	-6.57	114.96	118.90
2	SA	500	G	C4'-C3'-C2'	-6.57	96.03	102.60
2	SA	575	G	C3'-C2'-C1'	-6.57	96.25	101.50
2	SA	768	A	C3'-C2'-C1'	6.57	106.75	101.50
2	SA	1220	G	O4'-C1'-N9	6.57	113.45	108.20
2	SA	1437	A	N9-C4-C5	6.57	108.43	105.80
24	S3	155	ASN	CA-CB-CG	-6.57	98.95	113.40
25	LB	18	G	N3-C4-C5	-6.57	125.32	128.60
25	LB	67	G	N9-C4-C5	6.57	108.03	105.40
26	LA	258	G	N7-C8-N9	6.57	116.38	113.10
26	LA	642	U	N1-C2-N3	-6.57	110.96	114.90
26	LA	1039	A	N1-C2-N3	-6.57	126.02	129.30
26	LA	1150	C	C2-N3-C4	-6.57	116.62	119.90
26	LA	1373	A	C8-N9-C4	6.57	108.43	105.80
26	LA	1454	C	C6-N1-C2	-6.57	117.67	120.30
26	LA	1687	G	N1-C6-O6	6.57	123.84	119.90
2	SA	14	U	C5-C6-N1	6.56	125.98	122.70
2	SA	953	G	N1-C2-N3	-6.56	119.96	123.90
2	SA	1511	G	C5-C6-N1	6.56	114.78	111.50
2	SA	1530	G	N1-C6-O6	6.56	123.84	119.90
26	LA	244	A	C6-N1-C2	6.56	122.54	118.60
26	LA	288	U	O4'-C1'-N1	6.56	113.45	108.20
26	LA	1009	A	P-O5'-C5'	6.56	131.40	120.90
26	LA	1374	G	N1-C6-O6	6.56	123.84	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2679	A	C8-N9-C4	6.56	108.43	105.80
26	LA	2840	C	C5-C4-N4	-6.56	115.61	120.20
2	SA	889	A	N9-C4-C5	6.56	108.42	105.80
2	SA	1206	G	N9-C4-C5	6.56	108.03	105.40
26	LA	1276	A	C5-N7-C8	-6.56	100.62	103.90
26	LA	1509	A	C5-C6-N1	-6.56	114.42	117.70
26	LA	1650	A	N3-C4-C5	-6.56	122.21	126.80
26	LA	2587	A	N1-C2-N3	-6.56	126.02	129.30
37	LC	218	MET	O-C-N	-6.56	112.04	123.20
2	SA	1457	G	C6-C5-N7	-6.56	126.46	130.40
26	LA	55	G	N1-C6-O6	-6.56	115.96	119.90
26	LA	2254	C	C6-N1-C2	-6.56	117.67	120.30
49	LK	14	ALA	N-CA-CB	-6.56	100.92	110.10
2	SA	542	G	N7-C8-N9	6.56	116.38	113.10
2	SA	1101	A	N3-C4-C5	-6.56	122.21	126.80
2	SA	1336	C	O4'-C1'-N1	6.56	113.45	108.20
25	LB	114	C	P-O3'-C3'	-6.56	111.83	119.70
26	LA	286	U	N1-C2-N3	-6.56	110.96	114.90
26	LA	511	U	C5-C6-N1	-6.56	119.42	122.70
26	LA	921	C	C6-N1-C2	-6.56	117.68	120.30
26	LA	1401	G	N1-C2-N2	-6.56	110.30	116.20
26	LA	1415	U	O4'-C1'-N1	6.56	113.45	108.20
26	LA	1479	G	C5-N7-C8	6.56	107.58	104.30
26	LA	1556	C	N3-C2-O2	-6.56	117.31	121.90
26	LA	1726	C	P-O5'-C5'	-6.56	110.41	120.90
26	LA	1860	G	C8-N9-C4	-6.56	103.78	106.40
26	LA	1883	U	C3'-C2'-C1'	6.56	106.75	101.50
26	LA	2397	G	O4'-C1'-N9	6.56	113.45	108.20
26	LA	2781	A	C5'-C4'-C3'	-6.56	105.50	116.00
2	SA	222	C	P-O5'-C5'	6.56	131.39	120.90
26	LA	131	A	O4'-C4'-C3'	-6.56	97.44	104.00
26	LA	564	C	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	682	G	C5'-C4'-C3'	6.56	126.49	116.00
26	LA	810	U	N3-C4-O4	6.56	123.99	119.40
26	LA	1234	U	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	1681	G	C5-C6-N1	6.56	114.78	111.50
26	LA	1698	A	C4-C5-C6	6.56	120.28	117.00
26	LA	2506	U	C1'-O4'-C4'	-6.56	104.65	109.90
26	LA	2527	C	C5'-C4'-C3'	6.56	126.49	116.00
26	LA	2529	G	P-O3'-C3'	6.56	127.57	119.70
2	SA	1168	U	C5-C4-O4	6.56	129.83	125.90
4	S2	12	G	C5-C6-O6	-6.56	124.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	77	G	C4-C5-N7	-6.56	108.18	110.80
26	LA	2350	C	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	2369	A	N9-C4-C5	6.56	108.42	105.80
2	SA	1033	G	C4'-C3'-C2'	-6.55	96.05	102.60
2	SA	1074	G	P-O3'-C3'	-6.55	111.83	119.70
2	SA	1139	G	P-O3'-C3'	-6.55	111.84	119.70
2	SA	1231	G	O3'-P-O5'	6.55	116.45	104.00
12	SL	37	TYR	CD1-CG-CD2	6.55	125.11	117.90
26	LA	673	C	O4'-C1'-N1	6.55	113.44	108.20
26	LA	714	U	P-O3'-C3'	6.55	127.56	119.70
26	LA	1021	A	O4'-C1'-N9	6.55	113.44	108.20
26	LA	2092	U	C1'-O4'-C4'	-6.55	104.66	109.90
26	LA	2175	C	N3-C2-O2	-6.55	117.31	121.90
2	SA	488	C	C5'-C4'-C3'	-6.55	105.52	116.00
2	SA	1044	A	C4'-C3'-C2'	-6.55	96.05	102.60
2	SA	1458	G	C2-N3-C4	-6.55	108.62	111.90
26	LA	2840	C	N3-C4-C5	6.55	124.52	121.90
2	SA	94	G	C6-N1-C2	-6.55	121.17	125.10
2	SA	454	G	P-O3'-C3'	-6.55	111.84	119.70
2	SA	514	C	OP1-P-OP2	-6.55	109.77	119.60
2	SA	948	C	O4'-C1'-N1	6.55	113.44	108.20
2	SA	1065	U	C1'-O4'-C4'	-6.55	104.66	109.90
2	SA	1498	U	C3'-C2'-C1'	6.55	106.74	101.50
26	LA	285	G	C5-C6-O6	-6.55	124.67	128.60
26	LA	923	G	C5'-C4'-O4'	6.55	116.96	109.10
26	LA	932	U	N1-C2-O2	6.55	127.39	122.80
26	LA	1449	G	P-O5'-C5'	6.55	131.38	120.90
26	LA	1735	A	N9-C4-C5	-6.55	103.18	105.80
26	LA	2860	A	C5-C6-N1	-6.55	114.42	117.70
2	SA	443	C	O4'-C1'-N1	6.55	113.44	108.20
2	SA	497	G	C5-C6-O6	-6.55	124.67	128.60
2	SA	1418	A	N1-C6-N6	6.55	122.53	118.60
26	LA	159	G	C1'-O4'-C4'	-6.55	104.66	109.90
26	LA	529	A	N7-C8-N9	-6.55	110.53	113.80
26	LA	838	C	N3-C4-N4	6.55	122.58	118.00
26	LA	1634	A	C3'-C2'-C1'	-6.55	96.26	101.50
26	LA	2346	A	C6-N1-C2	-6.55	114.67	118.60
2	SA	166	U	C4-C5-C6	-6.55	115.77	119.70
2	SA	422	C	O4'-C1'-C2'	-6.55	99.25	105.80
2	SA	1490	U	O5'-P-OP1	-6.55	99.81	105.70
2	SA	1501	C	C5'-C4'-O4'	6.55	116.96	109.10
26	LA	1974	C	N3-C2-O2	-6.55	117.32	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	SR	62	ARG	NH1-CZ-NH2	-6.55	112.20	119.40
26	LA	34	U	C2-N3-C4	6.55	130.93	127.00
26	LA	168	G	C5'-C4'-O4'	6.55	116.95	109.10
26	LA	965	C	C6-N1-C2	-6.55	117.68	120.30
26	LA	1415	U	N3-C2-O2	-6.55	117.62	122.20
26	LA	1497	U	C6-N1-C1'	-6.55	112.04	121.20
26	LA	1621	U	C4-C5-C6	6.55	123.63	119.70
26	LA	1775	U	C4'-C3'-C2'	-6.55	96.05	102.60
25	LB	106	G	C8-N9-C4	6.54	109.02	106.40
26	LA	2572	A	C1'-O4'-C4'	-6.54	104.66	109.90
2	SA	276	G	N3-C4-N9	6.54	129.93	126.00
2	SA	507	C	O4'-C1'-N1	6.54	113.44	108.20
2	SA	667	G	C4-C5-C6	-6.54	114.87	118.80
2	SA	803	G	N1-C2-N3	-6.54	119.97	123.90
2	SA	835	U	N3-C2-O2	-6.54	117.62	122.20
2	SA	1145	A	N7-C8-N9	6.54	117.07	113.80
6	SU	42	THR	N-CA-CB	6.54	122.73	110.30
26	LA	481	G	N1-C6-O6	6.54	123.83	119.90
26	LA	1511	G	C5-C6-O6	-6.54	124.67	128.60
26	LA	1743	G	C5-C6-N1	6.54	114.77	111.50
26	LA	2154	A	N1-C2-N3	6.54	132.57	129.30
26	LA	2628	C	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	2697	G	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	2803	G	C8-N9-C1'	6.54	135.51	127.00
26	LA	2879	A	N7-C8-N9	6.54	117.07	113.80
41	L5	23	ALA	N-CA-CB	-6.54	100.94	110.10
3	S1	44	U	P-O5'-C5'	6.54	131.37	120.90
10	SJ	24	GLU	OE1-CD-OE2	-6.54	115.45	123.30
15	SO	67	ASP	O-C-N	-6.54	112.23	122.70
20	SD	177	MET	CG-SD-CE	-6.54	89.73	100.20
24	S3	98	VAL	CB-CA-C	-6.54	98.97	111.40
25	LB	100	G	C4-C5-N7	6.54	113.42	110.80
26	LA	570	G	C5'-C4'-O4'	6.54	116.95	109.10
26	LA	1202	G	P-O3'-C3'	-6.54	111.85	119.70
26	LA	1434	A	C5-C6-N6	-6.54	118.47	123.70
26	LA	1614	A	N1-C2-N3	6.54	132.57	129.30
26	LA	2303	G	C8-N9-C1'	6.54	135.50	127.00
26	LA	2318	G	C6-N1-C2	-6.54	121.17	125.10
26	LA	2637	U	C4-C5-C6	-6.54	115.78	119.70
56	LR	20	ARG	NE-CZ-NH2	6.54	123.57	120.30
2	SA	756	C	N3-C2-O2	-6.54	117.32	121.90
2	SA	1248	A	N1-C2-N3	-6.54	126.03	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1269	A	C4-C5-C6	6.54	120.27	117.00
26	LA	1304	A	C8-N9-C4	6.54	108.42	105.80
26	LA	1834	U	C2-N3-C4	-6.54	123.08	127.00
26	LA	2549	G	C1'-O4'-C4'	-6.54	104.67	109.90
26	LA	2573	C	C1'-O4'-C4'	-6.54	104.67	109.90
35	L1	49	ALA	O-C-N	-6.54	112.23	122.70
2	SA	856	C	O4'-C1'-N1	6.54	113.43	108.20
2	SA	1104	G	N1-C2-N3	6.54	127.82	123.90
4	S2	75	C	C2-N1-C1'	6.54	125.99	118.80
26	LA	144	A	P-O5'-C5'	6.54	131.36	120.90
26	LA	2883	A	N1-C6-N6	-6.54	114.68	118.60
50	LL	53	TYR	CB-CG-CD1	-6.54	117.08	121.00
2	SA	95	C	C4'-C3'-C2'	-6.54	96.06	102.60
2	SA	563	A	O4'-C4'-C3'	-6.54	97.46	104.00
2	SA	956	U	C3'-C2'-C1'	6.54	106.73	101.50
26	LA	480	A	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	577	G	P-O5'-C5'	6.54	131.36	120.90
26	LA	963	U	C1'-O4'-C4'	-6.54	104.67	109.90
26	LA	2025	C	O4'-C1'-N1	6.54	113.43	108.20
2	SA	1209	C	O5'-C5'-C4'	-6.54	99.28	111.70
26	LA	139	U	N1-C1'-C2'	6.54	122.50	114.00
26	LA	321	U	C6-N1-C2	6.54	124.92	121.00
26	LA	1033	U	N3-C2-O2	6.54	126.78	122.20
26	LA	1125	G	N3-C4-C5	-6.54	125.33	128.60
26	LA	1137	G	O4'-C1'-N9	6.54	113.43	108.20
2	SA	772	U	C6-N1-C2	-6.53	117.08	121.00
2	SA	869	G	O4'-C1'-N9	6.53	113.43	108.20
2	SA	982	U	C2-N3-C4	-6.53	123.08	127.00
2	SA	1078	U	N3-C2-O2	-6.53	117.63	122.20
2	SA	1079	G	P-O3'-C3'	-6.53	111.86	119.70
2	SA	1134	G	N3-C4-C5	-6.53	125.33	128.60
26	LA	40	U	C5'-C4'-O4'	6.53	116.94	109.10
26	LA	115	C	C1'-O4'-C4'	-6.53	104.67	109.90
26	LA	679	C	C1'-O4'-C4'	-6.53	104.67	109.90
26	LA	857	G	C6-C5-N7	6.53	134.32	130.40
26	LA	1095	A	O4'-C1'-C2'	-6.53	99.27	105.80
26	LA	1156	A	C2-N3-C4	6.53	113.87	110.60
26	LA	1271	G	C2'-C3'-O3'	6.53	124.15	113.70
26	LA	1926	U	P-O3'-C3'	-6.53	111.86	119.70
26	LA	2446	G	C5-N7-C8	6.53	107.57	104.30
26	LA	2825	G	N9-C4-C5	-6.53	102.79	105.40
2	SA	230	G	C8-N9-C4	-6.53	103.79	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	44	A	C8-N9-C4	6.53	108.41	105.80
26	LA	731	C	C5-C4-N4	-6.53	115.63	120.20
2	SA	659	U	O4'-C1'-N1	6.53	113.42	108.20
2	SA	1107	C	C4-C5-C6	6.53	120.67	117.40
25	LB	5	U	P-O3'-C3'	-6.53	111.86	119.70
26	LA	54	G	N7-C8-N9	6.53	116.36	113.10
26	LA	1277	G	N1-C6-O6	6.53	123.82	119.90
26	LA	1650	A	C8-N9-C4	-6.53	103.19	105.80
26	LA	1679	A	N3-C4-N9	-6.53	122.17	127.40
26	LA	2115	G	O4'-C1'-N9	6.53	113.42	108.20
26	LA	2119	A	O4'-C1'-N9	6.53	113.42	108.20
26	LA	2330	G	N1-C2-N2	-6.53	110.32	116.20
27	LD	185	ALA	N-CA-CB	-6.53	100.96	110.10
2	SA	252	U	N1-C2-N3	6.53	118.82	114.90
2	SA	587	G	P-O3'-C3'	6.53	127.53	119.70
2	SA	784	A	C5-C6-N1	6.53	120.96	117.70
4	S2	73	A	C5-C6-N6	-6.53	118.48	123.70
25	LB	49	C	C2-N1-C1'	-6.53	111.62	118.80
26	LA	1189	A	C5'-C4'-C3'	-6.53	105.55	116.00
26	LA	1813	G	N9-C4-C5	6.53	108.01	105.40
26	LA	1900	A	C8-N9-C1'	-6.53	115.95	127.70
26	LA	1946	U	N1-C2-N3	6.53	118.82	114.90
26	LA	2786	U	C4'-C3'-C2'	-6.53	96.07	102.60
2	SA	692	U	C5'-C4'-C3'	-6.53	105.56	116.00
3	S1	34	U	C5'-C4'-C3'	-6.53	105.56	116.00
12	SL	53	ARG	NE-CZ-NH2	-6.53	117.04	120.30
26	LA	125	A	C6-N1-C2	-6.53	114.68	118.60
26	LA	241	A	C8-N9-C4	6.53	108.41	105.80
26	LA	548	G	C5'-C4'-O4'	6.53	116.93	109.10
26	LA	579	G	N1-C6-O6	6.53	123.82	119.90
26	LA	776	G	C4'-C3'-C2'	-6.53	96.07	102.60
26	LA	1036	G	N1-C2-N2	-6.53	110.33	116.20
26	LA	1306	C	N3-C4-C5	-6.53	119.29	121.90
26	LA	1673	G	C6-N1-C2	-6.53	121.18	125.10
26	LA	1917	U	O4'-C1'-N1	6.53	113.42	108.20
26	LA	1971	U	P-O5'-C5'	-6.53	110.46	120.90
2	SA	257	G	C4-C5-C6	-6.53	114.88	118.80
2	SA	604	G	C2-N3-C4	-6.53	108.64	111.90
2	SA	1522	U	C2-N3-C4	-6.53	123.08	127.00
17	SQ	43	LEU	CB-CA-C	-6.53	97.80	110.20
26	LA	396	G	N9-C4-C5	6.53	108.01	105.40
26	LA	913	U	C2-N3-C4	-6.53	123.08	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1373	A	O4'-C1'-N9	6.53	113.42	108.20
26	LA	1704	C	C1'-O4'-C4'	-6.53	104.68	109.90
26	LA	2010	G	C4'-C3'-C2'	-6.53	96.08	102.60
26	LA	2362	C	C5'-C4'-C3'	-6.53	105.56	116.00
26	LA	2826	A	N1-C6-N6	-6.53	114.69	118.60
27	LD	101	ARG	CD-NE-CZ	6.53	132.73	123.60
2	SA	646	G	P-O3'-C3'	6.52	127.53	119.70
26	LA	2500	U	C3'-C2'-C1'	-6.52	96.28	101.50
2	SA	85	U	N1-C2-N3	-6.52	110.99	114.90
2	SA	162	A	C5-C6-N1	-6.52	114.44	117.70
2	SA	210	C	C4'-C3'-C2'	-6.52	96.08	102.60
2	SA	705	G	O4'-C1'-N9	6.52	113.42	108.20
2	SA	964	A	N1-C6-N6	6.52	122.51	118.60
2	SA	977	A	C5'-C4'-O4'	6.52	116.93	109.10
2	SA	1007	U	C5-C6-N1	6.52	125.96	122.70
4	S2	51	U	C5'-C4'-O4'	6.52	116.93	109.10
26	LA	22	C	N3-C4-N4	6.52	122.56	118.00
26	LA	127	A	N9-C4-C5	6.52	108.41	105.80
26	LA	927	A	C6-N1-C2	-6.52	114.69	118.60
26	LA	1045	C	C2-N1-C1'	6.52	125.97	118.80
26	LA	1174	U	O4'-C1'-C2'	-6.52	99.28	105.80
26	LA	1352	U	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	1484	U	C5-C6-N1	-6.52	119.44	122.70
26	LA	1668	A	C5-N7-C8	-6.52	100.64	103.90
26	LA	1684	G	C2-N3-C4	6.52	115.16	111.90
26	LA	1913	A	C2-N3-C4	-6.52	107.34	110.60
26	LA	2195	U	OP1-P-OP2	-6.52	109.82	119.60
35	L1	35	VAL	O-C-N	-6.52	112.27	122.70
35	L1	49	ALA	N-CA-CB	-6.52	100.97	110.10
53	LP	50	PRO	N-CA-CB	6.52	111.13	103.30
2	SA	89	U	C2-N1-C1'	-6.52	109.88	117.70
2	SA	538	G	N3-C2-N2	6.52	124.47	119.90
26	LA	83	A	C5'-C4'-C3'	-6.52	105.57	116.00
26	LA	1588	G	N3-C2-N2	-6.52	115.33	119.90
26	LA	2011	U	O5'-P-OP1	-6.52	99.83	105.70
26	LA	2443	C	N1-C2-O2	-6.52	114.99	118.90
26	LA	2857	G	N1-C6-O6	6.52	123.81	119.90
38	LE	183	GLU	OE1-CD-OE2	-6.52	115.47	123.30
2	SA	34	C	C4-C5-C6	-6.52	114.14	117.40
2	SA	97	G	N1-C2-N3	6.52	127.81	123.90
2	SA	470	C	C5-C4-N4	-6.52	115.64	120.20
2	SA	741	G	N3-C4-C5	-6.52	125.34	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	746	A	C4'-C3'-C2'	-6.52	96.08	102.60
2	SA	1284	C	C4-C5-C6	-6.52	114.14	117.40
2	SA	1308	U	C5'-C4'-C3'	-6.52	105.57	116.00
2	SA	1411	C	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	422	A	N1-C6-N6	6.52	122.51	118.60
26	LA	616	A	C5'-C4'-C3'	-6.52	105.57	116.00
26	LA	980	A	N1-C2-N3	-6.52	126.04	129.30
26	LA	1164	C	C4-C5-C6	6.52	120.66	117.40
26	LA	1558	C	C4-C5-C6	6.52	120.66	117.40
26	LA	1610	A	N9-C4-C5	6.52	108.41	105.80
26	LA	2142	A	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	2595	G	N3-C4-C5	6.52	131.86	128.60
2	SA	456	A	C2-N3-C4	-6.52	107.34	110.60
2	SA	503	C	C1'-O4'-C4'	6.52	115.11	109.90
2	SA	1015	G	C5'-C4'-C3'	-6.52	105.57	116.00
2	SA	1395	C	N3-C2-O2	-6.52	117.34	121.90
26	LA	61	C	C1'-O4'-C4'	-6.52	104.69	109.90
26	LA	141	G	C4-N9-C1'	6.52	134.97	126.50
26	LA	822	G	O4'-C4'-C3'	-6.52	97.48	104.00
26	LA	831	G	N1-C6-O6	6.52	123.81	119.90
26	LA	1124	G	C6-N1-C2	-6.52	121.19	125.10
26	LA	2517	C	N3-C2-O2	-6.52	117.34	121.90
26	LA	2778	A	N7-C8-N9	6.52	117.06	113.80
51	LI	86	ASP	CB-CG-OD2	-6.52	112.43	118.30
2	SA	200	G	N3-C4-N9	6.52	129.91	126.00
2	SA	241	G	C5-C6-O6	-6.52	124.69	128.60
2	SA	1047	G	C5-C6-N1	6.52	114.76	111.50
15	SO	42	PHE	CB-CG-CD2	6.52	125.36	120.80
24	S3	494	ARG	NE-CZ-NH1	6.52	123.56	120.30
26	LA	49	A	N1-C6-N6	6.52	122.51	118.60
26	LA	2868	A	C5-N7-C8	-6.52	100.64	103.90
2	SA	66	A	C5'-C4'-O4'	6.51	116.92	109.10
2	SA	199	A	O3'-P-O5'	-6.51	91.62	104.00
2	SA	712	A	C1'-O4'-C4'	6.51	115.11	109.90
2	SA	1119	C	C1'-O4'-C4'	-6.51	104.69	109.90
2	SA	1134	G	P-O3'-C3'	6.51	127.52	119.70
2	SA	1212	U	N1-C2-O2	6.51	127.36	122.80
2	SA	1222	G	O4'-C4'-C3'	-6.51	97.48	104.00
3	S1	50	U	N1-C2-O2	6.51	127.36	122.80
9	SI	19	PHE	CB-CG-CD1	-6.51	116.24	120.80
26	LA	36	G	N3-C4-C5	-6.51	125.34	128.60
26	LA	72	U	C4'-C3'-C2'	6.51	109.11	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	670	A	N9-C4-C5	6.51	108.41	105.80
26	LA	1677	A	C4-C5-N7	6.51	113.96	110.70
26	LA	1783	A	C5-N7-C8	-6.51	100.64	103.90
26	LA	1996	C	C4'-C3'-C2'	-6.51	96.09	102.60
26	LA	2251	U	O4'-C1'-N1	6.51	113.41	108.20
26	LA	2851	A	P-O3'-C3'	6.51	127.52	119.70
26	LA	535	G	N9-C1'-C2'	-6.51	104.84	112.00
26	LA	991	C	C2-N3-C4	-6.51	116.64	119.90
26	LA	1309	G	N3-C4-C5	-6.51	125.34	128.60
26	LA	1808	A	N1-C2-N3	-6.51	126.04	129.30
2	SA	10	A	C4'-C3'-C2'	-6.51	96.09	102.60
2	SA	199	A	C5-N7-C8	6.51	107.16	103.90
2	SA	1515	G	C2'-C3'-O3'	6.51	124.12	113.70
24	S3	518	VAL	CA-CB-CG2	-6.51	101.13	110.90
26	LA	48	G	C3'-C2'-C1'	6.51	106.71	101.50
26	LA	210	C	C5'-C4'-O4'	6.51	116.92	109.10
26	LA	213	A	C5'-C4'-O4'	6.51	116.92	109.10
26	LA	361	G	P-O3'-C3'	6.51	127.51	119.70
26	LA	1144	A	C5-C6-N6	6.51	128.91	123.70
26	LA	1949	G	C8-N9-C4	-6.51	103.80	106.40
26	LA	2550	G	C5-C6-O6	-6.51	124.69	128.60
26	LA	2685	G	C8-N9-C1'	-6.51	118.54	127.00
47	LJ	124	ARG	NE-CZ-NH1	6.51	123.56	120.30
2	SA	487	A	P-O5'-C5'	6.51	131.31	120.90
2	SA	566	G	C1'-O4'-C4'	-6.51	104.69	109.90
2	SA	961	U	O4'-C1'-N1	6.51	113.41	108.20
2	SA	969	A	C5-C6-N6	6.51	128.91	123.70
2	SA	1220	G	N3-C2-N2	6.51	124.46	119.90
2	SA	1481	U	C5-C6-N1	6.51	125.95	122.70
3	S1	57	C	C4-C5-C6	6.51	120.66	117.40
4	S2	50	G	C4-N9-C1'	-6.51	118.04	126.50
24	S3	306	ALA	N-CA-CB	-6.51	100.99	110.10
26	LA	111	A	N3-C4-C5	-6.51	122.24	126.80
26	LA	173	A	C5-C6-N1	6.51	120.95	117.70
26	LA	369	U	O4'-C1'-N1	6.51	113.41	108.20
26	LA	1884	G	C1'-O4'-C4'	6.51	115.11	109.90
26	LA	2091	C	N3-C2-O2	-6.51	117.34	121.90
26	LA	2498	C	N1-C2-N3	6.51	123.76	119.20
2	SA	866	C	C5'-C4'-C3'	6.51	126.41	116.00
25	LB	107	G	P-O5'-C5'	6.51	131.31	120.90
26	LA	513	A	C4'-C3'-C2'	-6.51	96.09	102.60
26	LA	2272	U	C3'-C2'-C1'	6.51	106.71	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	116	A	C5'-C4'-O4'	6.51	116.91	109.10
2	SA	520	A	N7-C8-N9	-6.51	110.55	113.80
2	SA	582	C	P-O5'-C5'	6.51	131.31	120.90
2	SA	1109	C	N3-C4-C5	-6.51	119.30	121.90
2	SA	1315	U	P-O5'-C5'	6.51	131.31	120.90
2	SA	1352	C	N1-C2-N3	6.51	123.75	119.20
26	LA	711	G	C8-N9-C4	6.51	109.00	106.40
26	LA	850	U	P-O3'-C3'	6.51	127.51	119.70
26	LA	1119	U	C5-C6-N1	-6.51	119.45	122.70
26	LA	1678	A	O5'-C5'-C4'	6.51	124.06	111.70
26	LA	1763	G	N7-C8-N9	-6.51	109.85	113.10
26	LA	1827	U	C4'-C3'-C2'	-6.51	96.09	102.60
27	LD	262	THR	CA-CB-CG2	-6.51	103.29	112.40
47	LJ	60	ARG	CD-NE-CZ	6.51	132.71	123.60
49	LK	101	SER	N-CA-CB	6.51	120.26	110.50
2	SA	740	U	C3'-C2'-C1'	6.50	106.70	101.50
2	SA	894	G	C6-N1-C2	-6.50	121.20	125.10
7	SG	117	LEU	CB-CG-CD2	6.50	122.06	111.00
20	SD	96	ARG	NE-CZ-NH1	6.50	123.55	120.30
26	LA	162	U	N1-C2-O2	-6.50	118.25	122.80
26	LA	516	C	N3-C2-O2	-6.50	117.35	121.90
26	LA	781	A	C4-C5-C6	6.50	120.25	117.00
48	LN	107	PHE	CB-CG-CD1	6.50	125.35	120.80
21	SE	156	ARG	NE-CZ-NH1	6.50	123.55	120.30
26	LA	315	G	C2-N3-C4	-6.50	108.65	111.90
26	LA	437	U	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	527	C	C2-N1-C1'	6.50	125.95	118.80
26	LA	1054	A	C5-N7-C8	6.50	107.15	103.90
26	LA	1970	A	C8-N9-C4	-6.50	103.20	105.80
26	LA	2093	G	C5-N7-C8	-6.50	101.05	104.30
26	LA	2296	U	P-O3'-C3'	-6.50	111.89	119.70
26	LA	2633	G	C8-N9-C4	6.50	109.00	106.40
2	SA	52	C	P-O3'-C3'	-6.50	111.90	119.70
2	SA	1278	G	C5-C6-N1	-6.50	108.25	111.50
24	S3	676	ARG	NE-CZ-NH2	-6.50	117.05	120.30
26	LA	109	C	N3-C4-C5	-6.50	119.30	121.90
26	LA	1198	U	C4-C5-C6	-6.50	115.80	119.70
26	LA	2725	A	N9-C4-C5	6.50	108.40	105.80
26	LA	2727	A	N3-C4-N9	6.50	132.60	127.40
26	LA	2845	U	N3-C2-O2	-6.50	117.65	122.20
37	LC	134	ARG	NE-CZ-NH1	6.50	123.55	120.30
46	LH	8	VAL	C-N-CA	6.50	137.96	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	819	A	C1'-O4'-C4'	-6.50	104.70	109.90
2	SA	1294	G	C5'-C4'-C3'	-6.50	105.60	116.00
26	LA	273	G	O4'-C1'-N9	6.50	113.40	108.20
26	LA	858	G	C5-N7-C8	-6.50	101.05	104.30
26	LA	1336	A	C5'-C4'-O4'	6.50	116.90	109.10
26	LA	1482	G	N3-C2-N2	6.50	124.45	119.90
26	LA	1954	G	C5-C6-N1	6.50	114.75	111.50
26	LA	2397	G	C6-N1-C2	-6.50	121.20	125.10
26	LA	2477	U	C5-C4-O4	-6.50	122.00	125.90
2	SA	296	U	C5-C4-O4	-6.50	122.00	125.90
2	SA	1016	A	N9-C4-C5	6.50	108.40	105.80
4	S2	22	A	P-O5'-C5'	-6.50	110.50	120.90
4	S2	43	G	N9-C4-C5	6.50	108.00	105.40
26	LA	55	G	C5-N7-C8	6.50	107.55	104.30
26	LA	116	C	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	648	G	C4-C5-C6	6.50	122.70	118.80
26	LA	958	U	N3-C4-C5	-6.50	110.70	114.60
26	LA	1701	A	C5'-C4'-O4'	6.50	116.90	109.10
26	LA	2307	G	N3-C2-N2	-6.50	115.35	119.90
26	LA	2575	C	N3-C4-C5	6.50	124.50	121.90
26	LA	2714	G	C6-N1-C2	-6.50	121.20	125.10
2	SA	177	G	C4-C5-N7	-6.50	108.20	110.80
2	SA	894	G	C8-N9-C4	-6.50	103.80	106.40
2	SA	1150	A	O4'-C1'-C2'	6.50	113.45	107.60
2	SA	1164	G	P-O3'-C3'	-6.50	111.90	119.70
2	SA	1523	G	N3-C2-N2	6.50	124.45	119.90
4	S2	6	G	P-O3'-C3'	-6.50	111.90	119.70
5	ST	59	ARG	NE-CZ-NH2	6.50	123.55	120.30
26	LA	245	G	C3'-C2'-C1'	6.50	106.70	101.50
26	LA	727	A	C4-C5-C6	-6.50	113.75	117.00
26	LA	1541	C	O4'-C4'-C3'	-6.50	97.50	104.00
26	LA	1581	G	C3'-C2'-C1'	6.50	106.70	101.50
26	LA	1581	G	N9-C4-C5	-6.50	102.80	105.40
26	LA	1634	A	C4-C5-N7	6.50	113.95	110.70
26	LA	2002	G	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	2715	C	C5-C4-N4	-6.50	115.65	120.20
34	L0	59	GLU	OE1-CD-OE2	-6.50	115.50	123.30
2	SA	433	G	N3-C2-N2	6.50	124.45	119.90
2	SA	598	U	C6-N1-C1'	6.50	130.29	121.20
26	LA	979	A	N9-C4-C5	6.50	108.40	105.80
26	LA	1016	G	P-O5'-C5'	-6.50	110.51	120.90
26	LA	2019	A	C5-C6-N1	6.50	120.95	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2513	A	C8-N9-C4	6.50	108.40	105.80
2	SA	58	C	N3-C4-C5	-6.49	119.30	121.90
2	SA	169	C	N1-C2-O2	-6.49	115.00	118.90
2	SA	229	U	N1-C2-N3	6.49	118.80	114.90
2	SA	727	G	N3-C4-C5	-6.49	125.35	128.60
2	SA	1178	G	C4-N9-C1'	-6.49	118.06	126.50
15	SO	84	LEU	N-CA-CB	-6.49	97.41	110.40
25	LB	35	C	C6-N1-C1'	-6.49	113.01	120.80
26	LA	849	A	C5-C6-N6	-6.49	118.50	123.70
26	LA	979	A	C5-C6-N1	-6.49	114.45	117.70
26	LA	1589	U	C1'-O4'-C4'	-6.49	104.70	109.90
26	LA	1744	A	OP1-P-OP2	-6.49	109.86	119.60
26	LA	1863	G	N3-C2-N2	6.49	124.45	119.90
26	LA	2475	C	C1'-O4'-C4'	-6.49	104.70	109.90
26	LA	2760	C	N3-C4-C5	-6.49	119.30	121.90
38	LE	20	VAL	CG1-CB-CG2	-6.49	100.51	110.90
2	SA	60	A	C8-N9-C4	6.49	108.40	105.80
2	SA	644	U	N3-C2-O2	6.49	126.75	122.20
2	SA	952	U	C4-C5-C6	6.49	123.59	119.70
4	S2	9	G	OP1-P-OP2	-6.49	109.86	119.60
24	S3	356	ARG	NE-CZ-NH2	-6.49	117.05	120.30
25	LB	71	C	C5-C6-N1	-6.49	117.75	121.00
26	LA	158	U	N1-C2-O2	6.49	127.34	122.80
26	LA	374	A	C5'-C4'-C3'	6.49	126.39	116.00
26	LA	722	A	C5'-C4'-C3'	6.49	126.39	116.00
26	LA	1551	A	C4-C5-C6	-6.49	113.75	117.00
26	LA	1813	G	C4-C5-N7	-6.49	108.20	110.80
26	LA	2614	A	C8-N9-C4	6.49	108.40	105.80
2	SA	239	U	C3'-C2'-C1'	-6.49	96.31	101.50
25	LB	2	G	C1'-O4'-C4'	-6.49	104.71	109.90
26	LA	148	U	C2-N3-C4	-6.49	123.11	127.00
26	LA	395	U	N1-C2-N3	-6.49	111.01	114.90
26	LA	561	G	C5'-C4'-O4'	6.49	116.89	109.10
26	LA	1078	U	C2-N1-C1'	6.49	125.49	117.70
26	LA	1272	A	C6-N1-C2	6.49	122.49	118.60
26	LA	1483	G	N1-C2-N3	-6.49	120.01	123.90
26	LA	2214	C	O4'-C1'-N1	6.49	113.39	108.20
26	LA	2653	U	C5-C4-O4	-6.49	122.01	125.90
2	SA	10	A	C3'-C2'-C1'	6.49	106.69	101.50
2	SA	181	A	P-O3'-C3'	-6.49	111.92	119.70
2	SA	546	A	P-O5'-C5'	-6.49	110.52	120.90
2	SA	579	A	N7-C8-N9	-6.49	110.56	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	746	A	P-O3'-C3'	6.49	127.48	119.70
2	SA	795	C	C2-N1-C1'	6.49	125.94	118.80
2	SA	1046	A	O4'-C1'-N9	6.49	113.39	108.20
3	S1	19	A	C8-N9-C4	-6.49	103.20	105.80
25	LB	24	G	P-O3'-C3'	6.49	127.48	119.70
26	LA	75	G	C4-C5-N7	6.49	113.40	110.80
26	LA	289	G	P-O3'-C3'	-6.49	111.91	119.70
26	LA	831	G	N7-C8-N9	6.49	116.34	113.10
26	LA	879	G	C4-N9-C1'	6.49	134.94	126.50
26	LA	962	G	C8-N9-C4	6.49	109.00	106.40
26	LA	1189	A	C6-N1-C2	-6.49	114.71	118.60
26	LA	1595	C	C6-N1-C2	-6.49	117.70	120.30
26	LA	1832	C	C4-C5-C6	-6.49	114.16	117.40
26	LA	2249	U	C5-C4-O4	-6.49	122.01	125.90
26	LA	2535	G	C4-C5-C6	6.49	122.69	118.80
26	LA	2757	A	C5-C6-N1	6.49	120.94	117.70
47	LJ	82	ALA	N-CA-CB	6.49	119.18	110.10
26	LA	958	U	P-O5'-C5'	-6.49	110.52	120.90
26	LA	1568	G	N1-C6-O6	6.49	123.79	119.90
26	LA	2070	A	C5-C6-N6	6.49	128.89	123.70
2	SA	29	U	P-O5'-C5'	-6.49	110.52	120.90
2	SA	203	G	C6-N1-C2	6.49	128.99	125.10
2	SA	528	C	C5'-C4'-C3'	-6.49	105.62	116.00
2	SA	782	A	C8-N9-C4	6.49	108.39	105.80
26	LA	510	C	N3-C4-C5	6.49	124.49	121.90
26	LA	614	A	O4'-C1'-C2'	6.49	113.44	107.60
26	LA	1382	G	N9-C4-C5	6.49	107.99	105.40
26	LA	1604	C	P-O3'-C3'	-6.49	111.92	119.70
26	LA	2604	U	N1-C2-N3	6.49	118.79	114.90
31	LX	73	LYS	N-CA-CB	6.49	122.27	110.60
50	LL	105	VAL	CG1-CB-CG2	-6.49	100.53	110.90
2	SA	112	G	OP1-P-OP2	-6.48	109.87	119.60
2	SA	1158	C	O4'-C4'-C3'	-6.48	97.52	104.00
3	S1	53	G	N9-C4-C5	-6.48	102.81	105.40
26	LA	1245	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	2354	C	O3'-P-O5'	6.48	116.32	104.00
2	SA	249	U	P-O3'-C3'	-6.48	111.92	119.70
2	SA	309	A	P-O5'-C5'	6.48	131.27	120.90
2	SA	323	U	C4'-C3'-C2'	-6.48	96.12	102.60
2	SA	491	G	C5'-C4'-O4'	6.48	116.88	109.10
2	SA	645	G	C6-C5-N7	-6.48	126.51	130.40
2	SA	905	U	P-O5'-C5'	6.48	131.27	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	967	C	C5'-C4'-O4'	6.48	116.88	109.10
2	SA	1249	C	P-O5'-C5'	6.48	131.27	120.90
26	LA	169	G	C2-N3-C4	6.48	115.14	111.90
26	LA	452	G	C8-N9-C4	6.48	108.99	106.40
26	LA	463	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	782	A	C5-C6-N6	6.48	128.89	123.70
26	LA	1131	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	1221	C	P-O5'-C5'	-6.48	110.53	120.90
26	LA	1547	C	N1-C2-N3	6.48	123.74	119.20
26	LA	2883	A	C8-N9-C4	6.48	108.39	105.80
2	SA	334	C	N3-C2-O2	-6.48	117.36	121.90
2	SA	359	G	N9-C4-C5	6.48	107.99	105.40
2	SA	919	A	C5-C6-N6	-6.48	118.52	123.70
2	SA	935	A	N7-C8-N9	-6.48	110.56	113.80
2	SA	969	A	N1-C2-N3	-6.48	126.06	129.30
2	SA	1401	G	P-O3'-C3'	6.48	127.48	119.70
2	SA	1455	G	N1-C2-N2	-6.48	110.37	116.20
4	S2	57	C	OP1-P-OP2	-6.48	109.88	119.60
26	LA	922	C	C1'-O4'-C4'	-6.48	104.72	109.90
26	LA	1397	U	N3-C4-O4	-6.48	114.86	119.40
26	LA	2248	C	C3'-C2'-C1'	6.48	106.68	101.50
26	LA	2549	G	O4'-C1'-N9	6.48	113.39	108.20
2	SA	30	U	C2-N3-C4	6.48	130.89	127.00
26	LA	2053	G	N1-C2-N2	-6.48	110.37	116.20
2	SA	96	U	N3-C4-C5	-6.48	110.71	114.60
2	SA	190	A	O4'-C1'-N9	6.48	113.38	108.20
2	SA	626	G	C5'-C4'-C3'	-6.48	105.64	116.00
2	SA	648	A	P-O3'-C3'	-6.48	111.93	119.70
2	SA	733	G	N3-C2-N2	6.48	124.43	119.90
2	SA	878	A	N9-C4-C5	6.48	108.39	105.80
2	SA	1362	A	C5-C6-N1	6.48	120.94	117.70
23	SR	31	TYR	CG-CD2-CE2	-6.48	116.12	121.30
26	LA	241	A	C5-N7-C8	-6.48	100.66	103.90
26	LA	246	C	C2-N3-C4	6.48	123.14	119.90
26	LA	325	G	C6-N1-C2	-6.48	121.21	125.10
26	LA	476	G	C5-C6-O6	-6.48	124.71	128.60
26	LA	498	G	P-O3'-C3'	6.48	127.47	119.70
26	LA	878	A	C6-C5-N7	-6.48	127.77	132.30
26	LA	1096	A	C2-N3-C4	-6.48	107.36	110.60
26	LA	1919	A	N1-C2-N3	6.48	132.54	129.30
26	LA	1967	C	C4-C5-C6	6.48	120.64	117.40
26	LA	2163	A	O4'-C1'-C2'	-6.48	99.32	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2265	U	C2-N3-C4	-6.48	123.11	127.00
26	LA	2438	U	C2-N1-C1'	-6.48	109.93	117.70
26	LA	2441	U	C6-N1-C2	6.48	124.89	121.00
2	SA	745	G	C8-N9-C4	-6.48	103.81	106.40
26	LA	1219	U	C5'-C4'-C3'	-6.48	105.64	116.00
26	LA	1515	A	C4-C5-C6	-6.48	113.76	117.00
26	LA	2012	G	C8-N9-C4	6.48	108.99	106.40
2	SA	384	G	N3-C2-N2	-6.47	115.37	119.90
2	SA	881	G	O4'-C1'-N9	6.47	113.38	108.20
2	SA	1191	A	P-O3'-C3'	6.47	127.47	119.70
8	SH	47	ASP	CB-CG-OD1	6.47	124.13	118.30
9	SI	48	ARG	NE-CZ-NH2	6.47	123.54	120.30
26	LA	44	A	C1'-O4'-C4'	-6.47	104.72	109.90
26	LA	410	G	N1-C2-N2	6.47	122.03	116.20
26	LA	530	G	C6-C5-N7	-6.47	126.52	130.40
26	LA	1016	G	O4'-C1'-N9	6.47	113.38	108.20
26	LA	1793	C	P-O5'-C5'	-6.47	110.54	120.90
26	LA	2198	A	C4-C5-C6	6.47	120.24	117.00
26	LA	2840	C	P-O5'-C5'	-6.47	110.54	120.90
30	LW	21	ARG	NH1-CZ-NH2	-6.47	112.28	119.40
56	LR	11	GLN	O-C-N	-6.47	112.34	122.70
2	SA	529	G	N3-C2-N2	6.47	124.43	119.90
2	SA	562	U	O4'-C1'-N1	6.47	113.38	108.20
2	SA	1020	G	C4-N9-C1'	-6.47	118.09	126.50
2	SA	1023	U	C5-C4-O4	-6.47	122.02	125.90
2	SA	1034	G	C6-C5-N7	6.47	134.28	130.40
26	LA	1138	G	C4-C5-C6	6.47	122.68	118.80
26	LA	1269	A	C1'-O4'-C4'	-6.47	104.72	109.90
26	LA	1407	G	C5-C6-O6	-6.47	124.72	128.60
26	LA	1606	C	C2-N3-C4	6.47	123.14	119.90
26	LA	2074	U	C6-N1-C2	-6.47	117.12	121.00
26	LA	2140	G	O4'-C1'-N9	6.47	113.38	108.20
26	LA	2155	U	C4'-C3'-C2'	-6.47	96.13	102.60
52	LO	50	ARG	NE-CZ-NH2	6.47	123.54	120.30
2	SA	311	C	P-O5'-C5'	6.47	131.25	120.90
2	SA	612	C	C6-N1-C2	-6.47	117.71	120.30
2	SA	683	G	N1-C6-O6	6.47	123.78	119.90
2	SA	1174	G	C5-C6-N1	6.47	114.73	111.50
9	SI	123	ARG	NE-CZ-NH2	6.47	123.53	120.30
26	LA	852	U	P-O3'-C3'	-6.47	111.94	119.70
26	LA	1590	A	N7-C8-N9	-6.47	110.56	113.80
52	LO	40	ARG	NH1-CZ-NH2	-6.47	112.28	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	210	C	C5'-C4'-O4'	6.47	116.86	109.10
2	SA	1013	G	OP1-P-OP2	-6.47	109.90	119.60
4	S2	65	G	N1-C6-O6	6.47	123.78	119.90
26	LA	224	U	C5'-C4'-O4'	6.47	116.86	109.10
26	LA	795	C	N3-C4-C5	-6.47	119.31	121.90
26	LA	912	C	C5-C4-N4	6.47	124.73	120.20
26	LA	1318	U	C2-N1-C1'	-6.47	109.94	117.70
26	LA	1464	G	N1-C2-N3	-6.47	120.02	123.90
28	LU	65	ASP	CB-CA-C	6.47	123.34	110.40
2	SA	588	G	C5-C6-O6	-6.47	124.72	128.60
2	SA	655	A	C4'-C3'-C2'	-6.47	96.13	102.60
2	SA	1176	A	C4-C5-N7	6.47	113.93	110.70
26	LA	391	A	C2-N3-C4	-6.47	107.37	110.60
26	LA	402	A	C4-C5-C6	-6.47	113.77	117.00
26	LA	537	G	C6-N1-C2	-6.47	121.22	125.10
26	LA	807	U	C2-N3-C4	-6.47	123.12	127.00
26	LA	1304	A	C5-C6-N6	-6.47	118.53	123.70
26	LA	1888	G	C6-N1-C2	-6.47	121.22	125.10
2	SA	357	G	N1-C6-O6	6.47	123.78	119.90
2	SA	695	A	C5-C6-N6	-6.47	118.53	123.70
2	SA	777	A	OP2-P-O3'	6.47	119.43	105.20
2	SA	1091	U	N3-C4-O4	6.47	123.93	119.40
2	SA	1162	C	N3-C2-O2	-6.47	117.37	121.90
2	SA	1315	U	O4'-C1'-N1	6.47	113.37	108.20
2	SA	1420	U	C5'-C4'-C3'	-6.47	105.65	116.00
2	SA	1504	G	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	245	G	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	455	C	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	778	G	C4-C5-C6	6.47	122.68	118.80
26	LA	1173	U	C5-C4-O4	-6.47	122.02	125.90
26	LA	1475	G	C5-C6-O6	-6.47	124.72	128.60
26	LA	2099	U	N3-C4-O4	-6.47	114.87	119.40
26	LA	2851	A	N3-C4-C5	-6.47	122.27	126.80
45	LG	73	VAL	CA-CB-CG1	-6.47	101.20	110.90
2	SA	60	A	O4'-C1'-N9	6.46	113.37	108.20
2	SA	755	G	C5-N7-C8	6.46	107.53	104.30
2	SA	1037	C	O4'-C1'-N1	6.46	113.37	108.20
2	SA	1253	G	N1-C2-N3	6.46	127.78	123.90
2	SA	1332	A	C2-N3-C4	-6.46	107.37	110.60
2	SA	1534	A	OP1-P-OP2	-6.46	109.90	119.60
26	LA	139	U	C2-N1-C1'	6.46	125.46	117.70
26	LA	180	G	O4'-C1'-N9	6.46	113.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1974	C	N1-C2-N3	6.46	123.73	119.20
26	LA	2369	A	C4-C5-C6	-6.46	113.77	117.00
26	LA	2770	G	C6-C5-N7	-6.46	126.52	130.40
26	LA	2799	A	C1'-O4'-C4'	-6.46	104.73	109.90
48	LN	30	THR	N-CA-CB	6.46	122.58	110.30
2	SA	387	U	O4'-C4'-C3'	-6.46	97.54	104.00
2	SA	790	A	C2-N3-C4	6.46	113.83	110.60
25	LB	81	G	N3-C4-C5	-6.46	125.37	128.60
26	LA	1352	U	C4'-C3'-C2'	-6.46	96.14	102.60
26	LA	1555	G	N1-C6-O6	-6.46	116.02	119.90
26	LA	1846	G	C6-N1-C2	-6.46	121.22	125.10
26	LA	2721	A	C5'-C4'-C3'	-6.46	105.66	116.00
2	SA	102	G	N3-C4-C5	-6.46	125.37	128.60
2	SA	1300	G	N3-C4-C5	-6.46	125.37	128.60
4	S2	17	C	O4'-C1'-N1	6.46	113.37	108.20
19	SC	129	PHE	CB-CG-CD2	-6.46	116.28	120.80
26	LA	125	A	N9-C1'-C2'	6.46	122.40	114.00
26	LA	260	G	C6-N1-C2	-6.46	121.22	125.10
26	LA	310	A	C5-C6-N6	-6.46	118.53	123.70
26	LA	1365	A	P-O5'-C5'	-6.46	110.56	120.90
26	LA	1785	A	P-O5'-C5'	-6.46	110.56	120.90
26	LA	2406	A	C4'-C3'-C2'	6.46	109.06	102.60
26	LA	2651	C	O4'-C1'-N1	6.46	113.37	108.20
2	SA	1120	C	C6-N1-C2	-6.46	117.72	120.30
26	LA	915	C	C2-N3-C4	6.46	123.13	119.90
26	LA	2217	G	C5-C6-N1	6.46	114.73	111.50
26	LA	2529	G	C4-N9-C1'	6.46	134.90	126.50
26	LA	2595	G	N9-C4-C5	-6.46	102.82	105.40
2	SA	693	G	C2'-C3'-O3'	6.46	124.03	113.70
2	SA	812	G	O3'-P-O5'	-6.46	91.73	104.00
2	SA	1400	C	C6-N1-C2	-6.46	117.72	120.30
25	LB	82	U	C5'-C4'-O4'	6.46	116.85	109.10
26	LA	44	A	N9-C4-C5	-6.46	103.22	105.80
26	LA	197	A	C8-N9-C4	-6.46	103.22	105.80
26	LA	362	A	C4'-C3'-C2'	6.46	109.06	102.60
26	LA	370	G	N9-C4-C5	-6.46	102.82	105.40
26	LA	403	U	C5-C4-O4	-6.46	122.03	125.90
26	LA	462	C	C4-C5-C6	-6.46	114.17	117.40
26	LA	706	A	C6-C5-N7	6.46	136.82	132.30
26	LA	888	C	N3-C4-N4	6.46	122.52	118.00
26	LA	906	U	N1-C2-O2	-6.46	118.28	122.80
26	LA	916	G	C1'-O4'-C4'	-6.46	104.73	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1421	G	C4-C5-N7	6.46	113.38	110.80
26	LA	1476	U	C2-N3-C4	-6.46	123.12	127.00
26	LA	2236	U	C2-N3-C4	-6.46	123.12	127.00
26	LA	2587	A	C2-N3-C4	6.46	113.83	110.60
26	LA	2624	G	C5-N7-C8	6.46	107.53	104.30
2	SA	752	G	N3-C2-N2	-6.46	115.38	119.90
2	SA	1130	A	N9-C4-C5	6.46	108.38	105.80
2	SA	1482	G	C5-N7-C8	6.46	107.53	104.30
3	S1	22	G	C5-C6-O6	-6.46	124.73	128.60
26	LA	160	A	N1-C2-N3	-6.46	126.07	129.30
26	LA	1357	C	OP1-P-OP2	-6.46	109.91	119.60
26	LA	1371	G	C1'-O4'-C4'	-6.46	104.73	109.90
26	LA	1604	C	N1-C2-O2	6.46	122.77	118.90
26	LA	2727	A	C2-N3-C4	6.46	113.83	110.60
26	LA	2788	C	C6-N1-C1'	-6.46	113.05	120.80
45	LG	91	ARG	NE-CZ-NH1	-6.46	117.07	120.30
2	SA	1170	A	C5-C6-N1	-6.46	114.47	117.70
26	LA	1884	G	N1-C2-N3	6.46	127.77	123.90
26	LA	2424	C	C6-N1-C2	-6.46	117.72	120.30
26	LA	2604	U	C5-C4-O4	-6.46	122.03	125.90
2	SA	937	A	C5-N7-C8	6.45	107.13	103.90
2	SA	1235	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	84	A	N1-C2-N3	6.45	132.53	129.30
26	LA	1351	C	C5'-C4'-C3'	-6.45	105.68	116.00
26	LA	1379	U	P-O5'-C5'	6.45	131.22	120.90
26	LA	1549	A	N1-C2-N3	-6.45	126.07	129.30
26	LA	1742	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	2375	G	C4'-C3'-C2'	-6.45	96.15	102.60
26	LA	2576	G	N1-C2-N3	-6.45	120.03	123.90
42	L6	49	VAL	CG1-CB-CG2	6.45	121.23	110.90
51	LI	1	MET	CG-SD-CE	-6.45	89.87	100.20
2	SA	75	G	N1-C6-O6	6.45	123.77	119.90
2	SA	233	C	OP1-P-OP2	-6.45	109.92	119.60
2	SA	594	U	C5-C4-O4	6.45	129.77	125.90
2	SA	841	C	C6-N1-C2	-6.45	117.72	120.30
20	SD	103	ARG	NE-CZ-NH2	-6.45	117.07	120.30
55	LQ	72	ALA	N-CA-CB	-6.45	101.07	110.10
2	SA	365	U	C2-N3-C4	-6.45	123.13	127.00
2	SA	701	U	C4'-C3'-C2'	-6.45	96.15	102.60
2	SA	872	A	C8-N9-C4	-6.45	103.22	105.80
2	SA	999	C	P-O5'-C5'	6.45	131.22	120.90
2	SA	1423	G	C4'-C3'-C2'	-6.45	96.15	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1535	C	C3'-C2'-C1'	-6.45	96.34	101.50
3	S1	37	G	C5-C6-O6	-6.45	124.73	128.60
4	S2	53	G	C6-C5-N7	6.45	134.27	130.40
4	S2	54	G	C6-C5-N7	-6.45	126.53	130.40
26	LA	60	G	C4-C5-N7	6.45	113.38	110.80
26	LA	75	G	C5'-C4'-C3'	6.45	126.32	116.00
26	LA	463	G	N3-C4-N9	-6.45	122.13	126.00
26	LA	1128	G	C2-N3-C4	6.45	115.12	111.90
26	LA	1222	U	C2-N3-C4	-6.45	123.13	127.00
26	LA	1250	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	1521	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	2046	G	C4-C5-C6	-6.45	114.93	118.80
26	LA	2143	C	O4'-C1'-N1	6.45	113.36	108.20
2	SA	1391	U	N3-C4-C5	6.45	118.47	114.60
26	LA	322	A	C3'-C2'-C1'	-6.45	96.34	101.50
26	LA	422	A	C2-N3-C4	-6.45	107.38	110.60
26	LA	1056	G	C4-N9-C1'	-6.45	118.12	126.50
26	LA	1072	C	C5-C4-N4	6.45	124.71	120.20
26	LA	1148	U	C2-N3-C4	-6.45	123.13	127.00
26	LA	1266	G	C1'-O4'-C4'	-6.45	104.74	109.90
26	LA	1286	A	C5-C6-N1	-6.45	114.48	117.70
26	LA	1342	A	C5-C6-N1	6.45	120.92	117.70
26	LA	1816	C	N1-C2-N3	6.45	123.71	119.20
26	LA	1938	A	N9-C4-C5	-6.45	103.22	105.80
26	LA	2337	G	C6-C5-N7	-6.45	126.53	130.40
2	SA	316	C	C2-N3-C4	-6.45	116.68	119.90
25	LB	57	A	C2-N3-C4	-6.45	107.38	110.60
26	LA	987	C	N1-C2-O2	6.45	122.77	118.90
26	LA	2398	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	2654	A	N1-C2-N3	6.45	132.52	129.30
2	SA	112	G	N9-C4-C5	6.45	107.98	105.40
2	SA	271	C	C5-C6-N1	6.45	124.22	121.00
2	SA	372	C	N3-C4-N4	6.45	122.51	118.00
2	SA	572	A	C1'-O4'-C4'	-6.45	104.74	109.90
2	SA	861	G	C2-N3-C4	6.45	115.12	111.90
2	SA	944	G	C8-N9-C1'	-6.45	118.62	127.00
2	SA	953	G	N3-C4-N9	-6.45	122.13	126.00
26	LA	124	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	258	G	P-O3'-C3'	-6.45	111.97	119.70
26	LA	760	G	C5-C6-N1	6.45	114.72	111.50
26	LA	1342	A	O4'-C1'-N9	6.45	113.36	108.20
26	LA	2467	C	C6-N1-C2	6.45	122.88	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	74	A	P-O5'-C5'	-6.44	110.59	120.90
2	SA	354	G	O5'-P-OP2	-6.44	99.90	105.70
3	S1	38	G	N1-C2-N2	6.44	122.00	116.20
25	LB	87	U	P-O3'-C3'	6.44	127.43	119.70
26	LA	168	G	OP1-P-OP2	-6.44	109.93	119.60
26	LA	518	G	N3-C2-N2	-6.44	115.39	119.90
26	LA	1394	U	N3-C4-O4	6.44	123.91	119.40
26	LA	1981	A	C4-C5-C6	-6.44	113.78	117.00
37	LC	215	SER	N-CA-CB	6.44	120.17	110.50
2	SA	92	U	C4'-C3'-C2'	-6.44	96.16	102.60
2	SA	463	U	O4'-C1'-C2'	6.44	113.40	107.60
2	SA	764	C	C4'-C3'-C2'	-6.44	96.16	102.60
3	S1	17	U	O4'-C1'-N1	6.44	113.35	108.20
26	LA	35	G	C8-N9-C4	6.44	108.98	106.40
26	LA	614	A	C5-C6-N1	-6.44	114.48	117.70
26	LA	763	G	O4'-C1'-N9	6.44	113.35	108.20
26	LA	781	A	C8-N9-C4	-6.44	103.22	105.80
26	LA	1033	U	C2-N1-C1'	6.44	125.43	117.70
26	LA	1178	C	C2-N1-C1'	-6.44	111.71	118.80
26	LA	1212	G	C5-C6-O6	6.44	132.47	128.60
26	LA	1595	C	O4'-C1'-C2'	6.44	113.40	107.60
26	LA	1687	G	C5-N7-C8	-6.44	101.08	104.30
26	LA	1799	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	2106	U	N3-C2-O2	-6.44	117.69	122.20
26	LA	2350	C	O4'-C1'-N1	6.44	113.35	108.20
26	LA	2648	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	2801	G	O4'-C1'-N9	6.44	113.35	108.20
2	SA	1242	G	P-O3'-C3'	-6.44	111.97	119.70
26	LA	5	A	N1-C6-N6	-6.44	114.74	118.60
26	LA	251	A	C3'-C2'-C1'	6.44	106.65	101.50
26	LA	509	C	C2-N1-C1'	6.44	125.89	118.80
26	LA	729	G	C4-C5-N7	6.44	113.38	110.80
26	LA	1622	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2218	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2235	G	N9-C4-C5	-6.44	102.82	105.40
2	SA	565	U	C4'-C3'-C2'	-6.44	96.16	102.60
2	SA	648	A	C2-N3-C4	-6.44	107.38	110.60
4	S2	42	C	P-O3'-C3'	-6.44	111.97	119.70
25	LB	115	A	O4'-C1'-C2'	6.44	113.39	107.60
26	LA	607	U	C2-N3-C4	-6.44	123.14	127.00
26	LA	2061	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2507	C	C5'-C4'-C3'	6.44	126.30	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2588	G	C3'-C2'-C1'	-6.44	96.35	101.50
26	LA	2797	U	N1-C2-N3	6.44	118.76	114.90
2	SA	765	G	C4-C5-N7	6.44	113.38	110.80
2	SA	1181	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	617	G	OP1-P-OP2	-6.44	109.94	119.60
26	LA	643	A	N7-C8-N9	-6.44	110.58	113.80
26	LA	1115	G	O4'-C1'-N9	6.44	113.35	108.20
26	LA	1426	G	C5-C6-O6	-6.44	124.74	128.60
26	LA	2002	G	OP1-P-O3'	6.44	119.36	105.20
26	LA	2042	A	C5-N7-C8	6.44	107.12	103.90
2	SA	497	G	C6-C5-N7	6.44	134.26	130.40
2	SA	801	U	N1-C2-N3	-6.44	111.04	114.90
26	LA	19	A	N1-C6-N6	6.44	122.46	118.60
26	LA	1163	G	N7-C8-N9	6.44	116.32	113.10
26	LA	1379	U	C3'-C2'-C1'	6.44	106.65	101.50
26	LA	1601	G	C5-C6-O6	-6.44	124.74	128.60
26	LA	2061	G	C6-C5-N7	-6.44	126.54	130.40
2	SA	477	C	C5-C4-N4	-6.43	115.70	120.20
2	SA	757	U	C4'-C3'-C2'	-6.43	96.17	102.60
26	LA	916	G	N9-C4-C5	6.43	107.97	105.40
26	LA	1035	U	O3'-P-O5'	6.43	116.23	104.00
26	LA	1133	A	C5'-C4'-O4'	6.43	116.82	109.10
26	LA	1631	G	C5-C6-O6	-6.43	124.74	128.60
26	LA	1764	C	N1-C2-N3	6.43	123.70	119.20
26	LA	2503	A	N9-C4-C5	-6.43	103.23	105.80
2	SA	192	A	C8-N9-C4	-6.43	103.23	105.80
2	SA	1222	G	C4-C5-N7	6.43	113.37	110.80
2	SA	1466	C	P-O5'-C5'	6.43	131.19	120.90
26	LA	131	A	N7-C8-N9	6.43	117.02	113.80
26	LA	1492	G	N9-C4-C5	-6.43	102.83	105.40
26	LA	1628	G	C2-N3-C4	6.43	115.12	111.90
26	LA	1698	A	N3-C4-N9	6.43	132.55	127.40
26	LA	2217	G	C5'-C4'-O4'	6.43	116.82	109.10
26	LA	2412	A	C4-C5-N7	-6.43	107.48	110.70
26	LA	2450	A	C2-N3-C4	-6.43	107.38	110.60
26	LA	2607	G	P-O5'-C5'	6.43	131.19	120.90
31	LX	49	ASN	CA-CB-CG	-6.43	99.25	113.40
7	SG	25	PHE	CG-CD2-CE2	6.43	127.88	120.80
26	LA	1299	G	N1-C6-O6	-6.43	116.04	119.90
26	LA	2880	C	C4-C5-C6	-6.43	114.18	117.40
2	SA	252	U	C5'-C4'-C3'	-6.43	105.71	116.00
2	SA	266	G	C5-N7-C8	-6.43	101.08	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	993	G	C2-N3-C4	-6.43	108.69	111.90
2	SA	1101	A	C3'-C2'-C1'	-6.43	96.36	101.50
2	SA	1155	A	C8-N9-C4	-6.43	103.23	105.80
3	S1	56	G	N7-C8-N9	-6.43	109.89	113.10
25	LB	65	U	C4-C5-C6	6.43	123.56	119.70
26	LA	243	U	N1-C2-O2	-6.43	118.30	122.80
26	LA	884	U	N3-C4-C5	-6.43	110.74	114.60
26	LA	1548	A	P-O3'-C3'	-6.43	111.98	119.70
26	LA	2531	A	O5'-C5'-C4'	6.43	123.92	111.70
2	SA	1027	C	C5'-C4'-O4'	6.43	116.81	109.10
2	SA	1348	U	C3'-C2'-C1'	6.43	106.64	101.50
26	LA	474	G	C5-C6-O6	-6.43	124.74	128.60
26	LA	1354	A	C8-N9-C4	-6.43	103.23	105.80
26	LA	2432	A	C2-N3-C4	-6.43	107.39	110.60
2	SA	301	G	P-O5'-C5'	-6.43	110.62	120.90
2	SA	374	A	C5'-C4'-C3'	-6.43	105.72	116.00
2	SA	797	C	C4'-C3'-C2'	-6.43	96.17	102.60
25	LB	54	G	C5'-C4'-O4'	6.43	116.81	109.10
25	LB	87	U	N1-C2-O2	-6.43	118.30	122.80
26	LA	493	G	C6-N1-C2	-6.43	121.24	125.10
26	LA	852	U	N1-C2-O2	6.43	127.30	122.80
26	LA	1098	A	C2-N3-C4	6.43	113.81	110.60
26	LA	1575	C	O5'-P-OP2	6.43	118.41	110.70
26	LA	1620	G	C4-N9-C1'	-6.43	118.15	126.50
26	LA	2234	G	C3'-C2'-C1'	-6.43	96.36	101.50
28	LU	24	ILE	O-C-N	-6.43	112.42	122.70
2	SA	64	G	C3'-C2'-C1'	-6.42	96.36	101.50
2	SA	122	G	C8-N9-C4	6.42	108.97	106.40
2	SA	182	A	P-O5'-C5'	-6.42	110.62	120.90
2	SA	1076	U	C1'-O4'-C4'	-6.42	104.76	109.90
2	SA	1320	C	O4'-C1'-N1	6.42	113.34	108.20
2	SA	1343	G	C4-C5-N7	6.42	113.37	110.80
4	S2	49	C	O4'-C1'-N1	6.42	113.34	108.20
13	SM	22	TYR	CB-CG-CD2	6.42	124.85	121.00
26	LA	841	G	C5'-C4'-O4'	6.42	116.81	109.10
26	LA	1299	G	C4-N9-C1'	-6.42	118.15	126.50
26	LA	1423	G	C1'-O4'-C4'	-6.42	104.76	109.90
26	LA	2306	C	N1-C2-N3	6.42	123.70	119.20
26	LA	2345	G	C5-C6-N1	-6.42	108.29	111.50
26	LA	2878	U	C6-N1-C2	-6.42	117.14	121.00
28	LU	1	MET	CG-SD-CE	-6.42	89.92	100.20
2	SA	195	A	C4-C5-C6	-6.42	113.79	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	33	C	OP1-P-OP2	-6.42	109.97	119.60
4	S2	41	C	N1-C2-O2	-6.42	115.05	118.90
26	LA	303	G	N3-C4-C5	-6.42	125.39	128.60
26	LA	668	A	C5-N7-C8	-6.42	100.69	103.90
26	LA	1077	A	C5-C6-N1	6.42	120.91	117.70
26	LA	1537	G	N3-C4-N9	6.42	129.85	126.00
26	LA	1914	C	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	2332	C	C2-N1-C1'	6.42	125.86	118.80
26	LA	2345	G	C5'-C4'-C3'	-6.42	105.72	116.00
26	LA	2576	G	C4-N9-C1'	6.42	134.85	126.50
28	LU	95	ARG	NH1-CZ-NH2	-6.42	112.33	119.40
41	L5	33	ARG	NE-CZ-NH1	-6.42	117.09	120.30
2	SA	769	G	C2-N3-C4	6.42	115.11	111.90
4	S2	17	C	N3-C2-O2	-6.42	117.41	121.90
4	S2	61	U	C2-N1-C1'	-6.42	110.00	117.70
26	LA	696	G	C5-C6-N1	6.42	114.71	111.50
26	LA	891	G	C5'-C4'-C3'	6.42	126.27	116.00
26	LA	908	C	C6-N1-C2	6.42	122.87	120.30
26	LA	1171	G	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	1429	G	C5'-C4'-O4'	6.42	116.81	109.10
26	LA	1699	G	C4-N9-C1'	6.42	134.85	126.50
26	LA	2075	U	C5-C4-O4	-6.42	122.05	125.90
26	LA	2250	G	C2-N3-C4	6.42	115.11	111.90
26	LA	2286	G	C2-N3-C4	6.42	115.11	111.90
26	LA	2446	G	N3-C4-N9	6.42	129.85	126.00
26	LA	2569	G	O4'-C1'-C2'	-6.42	99.38	105.80
26	LA	2572	A	C4-C5-N7	6.42	113.91	110.70
26	LA	2707	U	N3-C4-C5	-6.42	110.75	114.60
2	SA	558	G	N7-C8-N9	-6.42	109.89	113.10
26	LA	2709	G	P-O5'-C5'	6.42	131.17	120.90
3	S1	20	G	O4'-C1'-N9	6.42	113.33	108.20
3	S1	26	U	C2-N1-C1'	6.42	125.40	117.70
26	LA	1838	C	C6-N1-C1'	-6.42	113.10	120.80
26	LA	2148	G	O5'-P-OP2	6.42	118.40	110.70
26	LA	2290	G	N3-C2-N2	6.42	124.39	119.90
2	SA	318	G	C4-N9-C1'	-6.42	118.16	126.50
2	SA	342	C	P-O5'-C5'	6.42	131.17	120.90
2	SA	729	A	C5-N7-C8	-6.42	100.69	103.90
2	SA	1276	G	C5-C6-O6	-6.42	124.75	128.60
2	SA	1413	A	C5-C6-N6	-6.42	118.57	123.70
26	LA	119	A	C5-C6-N6	-6.42	118.57	123.70
26	LA	204	A	N7-C8-N9	-6.42	110.59	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	369	U	N3-C2-O2	6.42	126.69	122.20
26	LA	780	G	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	865	C	C6-N1-C2	-6.42	117.73	120.30
26	LA	1031	G	N9-C4-C5	-6.42	102.83	105.40
26	LA	1110	G	C4-N9-C1'	-6.42	118.16	126.50
26	LA	1122	G	O4'-C4'-C3'	-6.42	97.58	104.00
26	LA	2525	G	N1-C2-N3	6.42	127.75	123.90
26	LA	2810	A	P-O5'-C5'	-6.42	110.64	120.90
2	SA	1321	U	C5'-C4'-O4'	-6.42	101.40	109.10
25	LB	92	C	C4-C5-C6	6.42	120.61	117.40
26	LA	390	U	N1-C2-O2	6.42	127.29	122.80
26	LA	996	A	C3'-C2'-C1'	6.42	106.63	101.50
26	LA	1245	G	C5'-C4'-C3'	-6.42	105.74	116.00
26	LA	1691	C	N1-C2-N3	6.42	123.69	119.20
26	LA	2526	G	N9-C4-C5	-6.42	102.83	105.40
26	LA	2670	A	C3'-C2'-C1'	6.42	106.63	101.50
2	SA	39	G	O4'-C1'-N9	-6.41	103.07	108.20
2	SA	117	G	O5'-P-OP1	-6.41	99.93	105.70
2	SA	239	U	C1'-O4'-C4'	-6.41	104.77	109.90
2	SA	365	U	N3-C4-O4	6.41	123.89	119.40
2	SA	563	A	C4-C5-N7	6.41	113.91	110.70
2	SA	571	U	C3'-C2'-C1'	6.41	106.63	101.50
2	SA	1365	G	N1-C2-N2	-6.41	110.43	116.20
2	SA	1389	C	N1-C2-N3	6.41	123.69	119.20
7	SG	20	GLU	OE1-CD-OE2	-6.41	115.60	123.30
24	S3	448	THR	CA-CB-CG2	-6.41	103.42	112.40
26	LA	568	U	OP2-P-O3'	6.41	119.31	105.20
26	LA	623	C	C6-N1-C2	-6.41	117.73	120.30
26	LA	816	C	N3-C4-C5	-6.41	119.33	121.90
26	LA	1005	C	C4'-C3'-C2'	6.41	109.01	102.60
26	LA	1149	G	N1-C2-N3	6.41	127.75	123.90
26	LA	2008	C	O4'-C1'-N1	6.41	113.33	108.20
26	LA	2291	U	N3-C2-O2	-6.41	117.71	122.20
26	LA	2505	G	C4'-C3'-C2'	-6.41	96.19	102.60
2	SA	827	U	OP1-P-OP2	-6.41	109.98	119.60
26	LA	159	G	N9-C4-C5	6.41	107.97	105.40
26	LA	189	G	O4'-C1'-N9	6.41	113.33	108.20
26	LA	195	A	N3-C4-C5	6.41	131.29	126.80
26	LA	396	G	C4-C5-N7	-6.41	108.23	110.80
26	LA	623	C	N3-C4-C5	6.41	124.47	121.90
26	LA	1118	C	C6-N1-C2	6.41	122.86	120.30
26	LA	2453	A	C5-C6-N6	6.41	128.83	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	11	G	N7-C8-N9	6.41	116.31	113.10
2	SA	174	A	N3-C4-C5	6.41	131.29	126.80
2	SA	750	C	P-O5'-C5'	6.41	131.16	120.90
26	LA	171	U	O4'-C1'-N1	6.41	113.33	108.20
26	LA	365	U	N3-C2-O2	-6.41	117.71	122.20
26	LA	1397	U	OP1-P-OP2	-6.41	109.98	119.60
26	LA	1401	G	N7-C8-N9	-6.41	109.89	113.10
26	LA	1685	C	C5-C6-N1	-6.41	117.80	121.00
26	LA	1834	U	N3-C2-O2	6.41	126.69	122.20
26	LA	2029	G	C5'-C4'-C3'	6.41	126.26	116.00
26	LA	2126	A	C3'-C2'-C1'	6.41	106.63	101.50
26	LA	2225	A	N3-C4-N9	-6.41	122.27	127.40
26	LA	2840	C	N3-C2-O2	-6.41	117.41	121.90
26	LA	2860	A	P-O3'-C3'	6.41	127.39	119.70
2	SA	71	A	N9-C4-C5	6.41	108.36	105.80
2	SA	542	G	N1-C2-N2	-6.41	110.43	116.20
2	SA	954	G	C5-N7-C8	-6.41	101.09	104.30
2	SA	1060	U	C2-N3-C4	-6.41	123.16	127.00
4	S2	59	A	OP1-P-O3'	6.41	119.30	105.20
14	SN	52	ARG	NE-CZ-NH2	-6.41	117.10	120.30
26	LA	215	G	C6-C5-N7	-6.41	126.56	130.40
26	LA	361	G	P-O5'-C5'	-6.41	110.65	120.90
26	LA	1226	A	O4'-C1'-N9	6.41	113.33	108.20
26	LA	1331	G	C1'-O4'-C4'	-6.41	104.77	109.90
26	LA	1646	C	N3-C4-N4	-6.41	113.51	118.00
26	LA	2027	G	N3-C4-C5	-6.41	125.39	128.60
26	LA	2148	G	C8-N9-C4	-6.41	103.84	106.40
26	LA	2402	U	C2-N1-C1'	6.41	125.39	117.70
26	LA	2682	A	C2-N3-C4	6.41	113.80	110.60
48	LN	115	GLU	OE1-CD-OE2	-6.41	115.61	123.30
53	LP	76	VAL	O-C-N	-6.41	112.45	122.70
2	SA	1132	C	C4'-C3'-C2'	-6.41	96.19	102.60
2	SA	1292	G	N3-C4-C5	-6.41	125.40	128.60
26	LA	696	G	C2-N3-C4	6.41	115.10	111.90
26	LA	2609	U	C2-N1-C1'	6.41	125.39	117.70
2	SA	203	G	N3-C4-C5	6.41	131.80	128.60
2	SA	639	G	C4-N9-C1'	-6.41	118.17	126.50
2	SA	771	G	C5'-C4'-C3'	-6.41	105.75	116.00
2	SA	931	C	P-O3'-C3'	6.41	127.39	119.70
2	SA	1497	G	P-O3'-C3'	-6.41	112.01	119.70
4	S2	41	C	P-O5'-C5'	6.41	131.15	120.90
25	LB	79	G	OP1-P-OP2	-6.41	109.99	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	202	U	C3'-C2'-C1'	6.41	106.62	101.50
26	LA	353	C	N3-C2-O2	-6.41	117.42	121.90
26	LA	425	G	N9-C4-C5	-6.41	102.84	105.40
26	LA	1720	U	C5'-C4'-O4'	6.41	116.79	109.10
26	LA	1874	C	N3-C4-C5	6.41	124.46	121.90
26	LA	2212	A	P-O5'-C5'	6.41	131.15	120.90
52	LO	44	ARG	NE-CZ-NH2	6.41	123.50	120.30
2	SA	1483	A	N7-C8-N9	6.40	117.00	113.80
26	LA	781	A	N3-C4-N9	-6.40	122.28	127.40
26	LA	1284	A	N9-C4-C5	-6.40	103.24	105.80
2	SA	268	U	P-O5'-C5'	6.40	131.15	120.90
2	SA	413	G	P-O3'-C3'	-6.40	112.02	119.70
2	SA	514	C	C6-N1-C2	-6.40	117.74	120.30
2	SA	1173	U	O4'-C4'-C3'	-6.40	97.60	104.00
25	LB	7	G	C4-C5-C6	-6.40	114.96	118.80
26	LA	109	C	C4'-C3'-C2'	-6.40	96.20	102.60
26	LA	133	U	N1-C2-N3	-6.40	111.06	114.90
26	LA	196	A	N1-C2-N3	-6.40	126.10	129.30
26	LA	437	U	P-O3'-C3'	-6.40	112.02	119.70
26	LA	504	A	C1'-O4'-C4'	-6.40	104.78	109.90
26	LA	664	G	N3-C2-N2	6.40	124.38	119.90
26	LA	953	G	O5'-P-OP2	-6.40	99.94	105.70
26	LA	1387	A	C5-C6-N6	-6.40	118.58	123.70
26	LA	1560	G	O4'-C1'-N9	6.40	113.32	108.20
26	LA	1712	U	O4'-C1'-N1	6.40	113.32	108.20
26	LA	2185	U	N1-C2-O2	6.40	127.28	122.80
26	LA	2289	G	C5-C6-N1	6.40	114.70	111.50
26	LA	2507	C	N3-C4-C5	6.40	124.46	121.90
26	LA	2748	A	C1'-O4'-C4'	-6.40	104.78	109.90
2	SA	88	U	O4'-C1'-N1	6.40	113.32	108.20
2	SA	187	G	N3-C4-C5	6.40	131.80	128.60
2	SA	361	G	OP2-P-O3'	6.40	119.28	105.20
2	SA	427	U	C3'-C2'-C1'	6.40	106.62	101.50
2	SA	601	G	C5-C6-N1	6.40	114.70	111.50
2	SA	1030	U	C2-N3-C4	6.40	130.84	127.00
2	SA	1139	G	C8-N9-C4	-6.40	103.84	106.40
2	SA	1232	U	C4-C5-C6	-6.40	115.86	119.70
26	LA	1137	G	C5-N7-C8	-6.40	101.10	104.30
26	LA	1522	A	P-O5'-C5'	-6.40	110.66	120.90
26	LA	1568	G	C5-C6-O6	-6.40	124.76	128.60
26	LA	2449	U	C4-C5-C6	-6.40	115.86	119.70
2	SA	223	A	N1-C2-N3	-6.40	126.10	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	414	A	C8-N9-C4	-6.40	103.24	105.80
26	LA	963	U	C2-N1-C1'	6.40	125.38	117.70
26	LA	1250	G	N1-C6-O6	6.40	123.74	119.90
26	LA	2560	A	C6-N1-C2	-6.40	114.76	118.60
26	LA	2815	C	P-O3'-C3'	-6.40	112.02	119.70
2	SA	697	U	N3-C2-O2	-6.40	117.72	122.20
2	SA	712	A	O4'-C4'-C3'	-6.40	97.60	104.00
4	S2	23	G	C5-N7-C8	-6.40	101.10	104.30
25	LB	70	C	O4'-C1'-N1	6.40	113.32	108.20
26	LA	967	U	C5-C4-O4	6.40	129.74	125.90
26	LA	1254	A	C5-C6-N1	6.40	120.90	117.70
26	LA	1672	A	N1-C6-N6	6.40	122.44	118.60
26	LA	2164	C	N1-C2-O2	-6.40	115.06	118.90
26	LA	2362	C	C4-C5-C6	6.40	120.60	117.40
26	LA	2697	G	C5'-C4'-C3'	-6.40	105.77	116.00
26	LA	2898	U	N1-C2-O2	-6.40	118.32	122.80
2	SA	242	G	N7-C8-N9	-6.40	109.90	113.10
2	SA	542	G	N1-C2-N3	6.40	127.74	123.90
2	SA	1278	G	O4'-C1'-N9	6.40	113.32	108.20
26	LA	559	G	N9-C4-C5	6.40	107.96	105.40
26	LA	570	G	P-O3'-C3'	-6.40	112.03	119.70
26	LA	625	G	N3-C4-C5	6.40	131.80	128.60
26	LA	987	C	O4'-C1'-N1	6.40	113.32	108.20
26	LA	2084	C	N1-C2-O2	-6.40	115.06	118.90
26	LA	2813	A	C6-C5-N7	6.40	136.78	132.30
2	SA	474	G	C5-N7-C8	6.39	107.50	104.30
2	SA	800	G	N1-C6-O6	6.39	123.74	119.90
2	SA	1217	C	C2-N3-C4	-6.39	116.70	119.90
2	SA	1330	U	N3-C2-O2	-6.39	117.72	122.20
26	LA	28	A	C5'-C4'-O4'	6.39	116.77	109.10
26	LA	1052	C	O4'-C1'-N1	6.39	113.31	108.20
26	LA	1111	A	C4-C5-C6	6.39	120.20	117.00
26	LA	1738	G	C8-N9-C4	6.39	108.96	106.40
26	LA	1903	G	OP1-P-OP2	-6.39	110.01	119.60
26	LA	1986	C	N3-C4-N4	-6.39	113.52	118.00
26	LA	2120	G	C4-C5-N7	6.39	113.36	110.80
26	LA	2396	G	C5'-C4'-C3'	-6.39	105.77	116.00
26	LA	2595	G	C5-C6-N1	6.39	114.70	111.50
26	LA	2697	G	N3-C4-C5	6.39	131.80	128.60
26	LA	2717	C	C6-N1-C2	-6.39	117.74	120.30
26	LA	2893	A	C5-C6-N6	-6.39	118.58	123.70
24	S3	32	TYR	CD1-CE1-CZ	-6.39	114.05	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	471	ARG	CG-CD-NE	-6.39	98.38	111.80
25	LB	44	G	C5'-C4'-C3'	6.39	126.23	116.00
26	LA	119	A	N7-C8-N9	-6.39	110.60	113.80
26	LA	444	C	C4'-C3'-C2'	-6.39	96.21	102.60
26	LA	1091	G	O4'-C1'-N9	6.39	113.31	108.20
26	LA	1235	G	C4-C5-C6	-6.39	114.97	118.80
26	LA	1639	C	C3'-C2'-C1'	6.39	106.61	101.50
26	LA	1703	G	N3-C4-C5	-6.39	125.40	128.60
26	LA	2489	U	C5-C4-O4	6.39	129.74	125.90
26	LA	157	C	C5-C6-N1	-6.39	117.81	121.00
26	LA	864	G	C4-C5-C6	-6.39	114.97	118.80
26	LA	1856	U	C5'-C4'-C3'	-6.39	105.77	116.00
26	LA	1971	U	C5-C6-N1	-6.39	119.50	122.70
2	SA	389	A	C6-N1-C2	-6.39	114.77	118.60
2	SA	1398	A	C5-C6-N1	6.39	120.89	117.70
2	SA	1519	A	C4-C5-N7	6.39	113.89	110.70
26	LA	1048	A	O4'-C1'-N9	6.39	113.31	108.20
26	LA	1079	C	O4'-C4'-C3'	-6.39	97.61	104.00
26	LA	1256	G	C4'-C3'-C2'	-6.39	96.21	102.60
26	LA	1563	U	P-O3'-C3'	-6.39	112.03	119.70
26	LA	1688	U	N3-C4-O4	6.39	123.87	119.40
26	LA	1863	G	N7-C8-N9	-6.39	109.91	113.10
26	LA	2003	A	C1'-O4'-C4'	-6.39	104.79	109.90
26	LA	2347	C	P-O3'-C3'	6.39	127.37	119.70
26	LA	2354	C	N3-C4-C5	-6.39	119.34	121.90
26	LA	2893	A	P-O3'-C3'	-6.39	112.03	119.70
31	LX	88	HIS	N-CA-CB	6.39	122.10	110.60
2	SA	398	U	C4-C5-C6	-6.39	115.87	119.70
2	SA	839	C	O4'-C1'-N1	6.39	113.31	108.20
26	LA	88	G	C1'-O4'-C4'	-6.39	104.79	109.90
26	LA	134	G	C4-C5-N7	-6.39	108.25	110.80
26	LA	1311	G	P-O3'-C3'	-6.39	112.03	119.70
26	LA	1536	C	P-O5'-C5'	6.39	131.12	120.90
26	LA	1802	A	N9-C4-C5	6.39	108.36	105.80
26	LA	1927	A	O4'-C1'-N9	6.39	113.31	108.20
26	LA	2285	C	N3-C4-C5	-6.39	119.34	121.90
2	SA	200	G	C4'-C3'-C2'	-6.39	96.21	102.60
2	SA	748	G	N3-C4-C5	-6.39	125.41	128.60
2	SA	790	A	C8-N9-C1'	-6.39	116.20	127.70
2	SA	891	U	C6-N1-C2	-6.39	117.17	121.00
2	SA	1241	G	N9-C4-C5	-6.39	102.85	105.40
26	LA	12	U	P-O5'-C5'	6.39	131.12	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	263	G	N7-C8-N9	6.39	116.29	113.10
26	LA	1106	G	O4'-C4'-C3'	-6.39	97.61	104.00
26	LA	1491	G	C3'-C2'-C1'	6.39	106.61	101.50
26	LA	1557	C	C4-C5-C6	6.39	120.59	117.40
26	LA	1784	A	N7-C8-N9	-6.39	110.61	113.80
26	LA	2141	G	N9-C4-C5	6.39	107.95	105.40
26	LA	2154	A	C6-C5-N7	-6.39	127.83	132.30
26	LA	2549	G	C4-C5-N7	-6.39	108.25	110.80
2	SA	543	U	C5'-C4'-O4'	6.38	116.76	109.10
2	SA	617	G	C5-N7-C8	-6.38	101.11	104.30
26	LA	83	A	O4'-C1'-N9	6.38	113.31	108.20
26	LA	425	G	N9-C1'-C2'	-6.38	104.98	112.00
26	LA	1764	C	O4'-C4'-C3'	-6.38	97.61	104.00
26	LA	2831	G	C4-C5-C6	-6.38	114.97	118.80
2	SA	201	G	C5-C6-O6	-6.38	124.77	128.60
2	SA	237	G	C8-N9-C4	6.38	108.95	106.40
26	LA	2428	G	C5-C6-N1	-6.38	108.31	111.50
26	LA	2560	A	N7-C8-N9	6.38	116.99	113.80
2	SA	176	C	O4'-C1'-N1	6.38	113.31	108.20
2	SA	308	C	N3-C4-C5	-6.38	119.35	121.90
2	SA	333	U	C5-C4-O4	-6.38	122.07	125.90
2	SA	702	A	C5-C6-N1	-6.38	114.51	117.70
2	SA	1143	G	C5'-C4'-O4'	6.38	116.76	109.10
26	LA	103	A	C6-C5-N7	-6.38	127.83	132.30
26	LA	1552	A	N1-C6-N6	-6.38	114.77	118.60
26	LA	2617	U	C5-C6-N1	-6.38	119.51	122.70
2	SA	79	G	N3-C2-N2	6.38	124.37	119.90
2	SA	1010	U	C5'-C4'-O4'	6.38	116.76	109.10
26	LA	189	G	C1'-O4'-C4'	6.38	115.00	109.90
26	LA	581	C	C4'-C3'-C2'	-6.38	96.22	102.60
26	LA	809	G	N9-C4-C5	6.38	107.95	105.40
26	LA	1510	G	N1-C6-O6	6.38	123.73	119.90
26	LA	2136	G	P-O3'-C3'	-6.38	112.04	119.70
2	SA	18	C	P-O5'-C5'	6.38	131.11	120.90
2	SA	335	C	C1'-O4'-C4'	-6.38	104.80	109.90
2	SA	536	C	C5'-C4'-C3'	-6.38	105.80	116.00
2	SA	825	A	N3-C4-N9	-6.38	122.30	127.40
2	SA	954	G	N3-C4-C5	-6.38	125.41	128.60
3	S1	18	A	C8-N9-C4	-6.38	103.25	105.80
22	SF	9	MET	CG-SD-CE	-6.38	89.99	100.20
26	LA	288	U	C1'-O4'-C4'	-6.38	104.80	109.90
26	LA	398	C	O4'-C1'-N1	6.38	113.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	909	A	C8-N9-C4	6.38	108.35	105.80
26	LA	1103	A	N1-C6-N6	-6.38	114.77	118.60
26	LA	1502	A	O4'-C1'-N9	6.38	113.30	108.20
26	LA	2451	A	O3'-P-O5'	-6.38	91.88	104.00
2	SA	149	A	C4'-C3'-C2'	-6.38	96.22	102.60
2	SA	338	A	O4'-C4'-C3'	-6.38	97.62	104.00
2	SA	548	G	N3-C2-N2	-6.38	115.44	119.90
14	SN	89	ARG	NE-CZ-NH2	-6.38	117.11	120.30
25	LB	96	G	N9-C4-C5	6.38	107.95	105.40
26	LA	853	C	C4'-C3'-C2'	-6.38	96.22	102.60
26	LA	1151	A	C5'-C4'-C3'	6.38	126.20	116.00
26	LA	1422	G	N7-C8-N9	-6.38	109.91	113.10
26	LA	1914	C	O4'-C1'-N1	6.38	113.30	108.20
26	LA	2319	G	N1-C2-N3	-6.38	120.08	123.90
26	LA	2397	G	C2'-C3'-O3'	6.38	123.90	113.70
26	LA	2657	A	P-O3'-C3'	-6.38	112.05	119.70
26	LA	2682	A	O4'-C4'-C3'	-6.38	97.62	104.00
38	LE	68	PHE	CB-CG-CD1	6.38	125.26	120.80
2	SA	195	A	C5'-C4'-O4'	6.38	116.75	109.10
2	SA	800	G	C5-C6-N1	-6.38	108.31	111.50
2	SA	969	A	P-O3'-C3'	-6.38	112.05	119.70
2	SA	1124	G	N7-C8-N9	-6.38	109.91	113.10
2	SA	1458	G	N3-C4-C5	6.38	131.79	128.60
13	SM	96	VAL	CG1-CB-CG2	-6.38	100.70	110.90
26	LA	1653	G	O4'-C1'-N9	6.38	113.30	108.20
26	LA	2146	C	C2-N1-C1'	6.38	125.81	118.80
26	LA	2589	A	P-O5'-C5'	6.38	131.10	120.90
2	SA	31	G	C3'-C2'-C1'	-6.37	96.40	101.50
2	SA	159	G	P-O5'-C5'	6.37	131.10	120.90
2	SA	553	A	N1-C6-N6	6.37	122.42	118.60
2	SA	738	C	C3'-C2'-C1'	-6.37	96.40	101.50
4	S2	22	A	C4-C5-N7	-6.37	107.51	110.70
4	S2	64	G	N1-C6-O6	6.37	123.72	119.90
20	SD	118	SER	N-CA-CB	6.37	120.06	110.50
25	LB	89	U	N3-C2-O2	-6.37	117.74	122.20
26	LA	57	C	C2-N3-C4	-6.37	116.71	119.90
26	LA	257	C	C3'-C2'-C1'	-6.37	96.40	101.50
26	LA	315	G	C5-C6-N1	6.37	114.69	111.50
26	LA	500	G	N3-C4-N9	6.37	129.82	126.00
26	LA	1093	G	O3'-P-O5'	-6.37	91.89	104.00
26	LA	1645	G	C5-C6-O6	-6.37	124.78	128.60
26	LA	1722	A	C3'-C2'-C1'	-6.37	96.40	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1856	U	C6-N1-C1'	6.37	130.12	121.20
26	LA	2569	G	C5'-C4'-C3'	6.37	126.20	116.00
26	LA	2695	U	C5-C6-N1	-6.37	119.51	122.70
26	LA	2838	G	O4'-C1'-N9	6.37	113.30	108.20
2	SA	6	G	P-O3'-C3'	-6.37	112.06	119.70
2	SA	877	G	C6-C5-N7	-6.37	126.58	130.40
2	SA	1323	G	C2'-C3'-O3'	6.37	123.89	113.70
2	SA	1403	C	C5-C6-N1	6.37	124.19	121.00
2	SA	1485	U	P-O3'-C3'	-6.37	112.06	119.70
4	S2	47	A	O4'-C1'-N9	6.37	113.30	108.20
4	S2	65	G	O4'-C1'-N9	6.37	113.30	108.20
18	SB	174	GLU	O-C-N	-6.37	112.51	122.70
24	S3	32	TYR	N-CA-CB	6.37	122.07	110.60
26	LA	700	G	N1-C6-O6	6.37	123.72	119.90
34	L0	27	ASN	CA-CB-CG	-6.37	99.38	113.40
2	SA	102	G	C5-C6-N1	-6.37	108.31	111.50
2	SA	935	A	C5-N7-C8	6.37	107.08	103.90
2	SA	952	U	C5-C6-N1	-6.37	119.52	122.70
2	SA	1505	G	OP2-P-O3'	6.37	119.21	105.20
26	LA	23	G	P-O5'-C5'	6.37	131.09	120.90
26	LA	391	A	N9-C4-C5	-6.37	103.25	105.80
26	LA	1765	U	C4-C5-C6	6.37	123.52	119.70
2	SA	865	A	O4'-C1'-N9	6.37	113.29	108.20
2	SA	1070	U	C5-C4-O4	6.37	129.72	125.90
2	SA	1148	U	C4'-C3'-C2'	-6.37	96.23	102.60
3	S1	24	A	C4'-C3'-C2'	-6.37	96.23	102.60
3	S1	30	U	C4-C5-C6	-6.37	115.88	119.70
26	LA	292	U	N3-C4-O4	6.37	123.86	119.40
26	LA	579	G	N3-C4-C5	-6.37	125.42	128.60
26	LA	779	U	P-O5'-C5'	6.37	131.09	120.90
26	LA	827	U	N3-C2-O2	6.37	126.66	122.20
26	LA	1261	C	C5'-C4'-C3'	-6.37	105.81	116.00
26	LA	1674	G	N3-C2-N2	-6.37	115.44	119.90
26	LA	2303	G	N9-C4-C5	6.37	107.95	105.40
26	LA	2822	G	N9-C4-C5	-6.37	102.85	105.40
26	LA	2828	G	C2-N3-C4	6.37	115.08	111.90
26	LA	2859	G	N3-C4-N9	-6.37	122.18	126.00
2	SA	566	G	C4-C5-N7	6.37	113.35	110.80
26	LA	1198	U	N3-C4-O4	-6.37	114.94	119.40
26	LA	1281	G	O4'-C1'-N9	6.37	113.29	108.20
26	LA	2381	A	C5'-C4'-C3'	6.37	126.19	116.00
2	SA	71	A	C4-C5-N7	-6.37	107.52	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	292	G	C5-C6-O6	-6.37	124.78	128.60
2	SA	674	G	N9-C4-C5	6.37	107.95	105.40
2	SA	887	G	O4'-C1'-N9	6.37	113.29	108.20
20	SD	71	PHE	CB-CG-CD1	-6.37	116.34	120.80
26	LA	292	U	C2-N3-C4	6.37	130.82	127.00
26	LA	639	U	C2-N3-C4	6.37	130.82	127.00
26	LA	760	G	P-O3'-C3'	6.37	127.34	119.70
26	LA	1292	G	C5-N7-C8	-6.37	101.12	104.30
26	LA	1358	G	C8-N9-C1'	-6.37	118.73	127.00
26	LA	1747	U	C5'-C4'-O4'	6.37	116.74	109.10
26	LA	2552	U	P-O3'-C3'	6.37	127.34	119.70
37	LC	120	ALA	CB-CA-C	6.37	119.65	110.10
2	SA	1058	G	C5-C6-O6	-6.36	124.78	128.60
2	SA	1215	G	P-O5'-C5'	6.36	131.08	120.90
26	LA	120	U	C5-C6-N1	6.36	125.88	122.70
26	LA	493	G	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	807	U	N3-C4-C5	6.36	118.42	114.60
26	LA	953	G	P-O5'-C5'	6.36	131.08	120.90
26	LA	1475	G	N3-C4-C5	6.36	131.78	128.60
26	LA	1904	G	C1'-O4'-C4'	-6.36	104.81	109.90
26	LA	1915	C	C4-C5-C6	6.36	120.58	117.40
26	LA	2676	C	P-O5'-C5'	-6.36	110.72	120.90
2	SA	280	C	C2-N3-C4	-6.36	116.72	119.90
2	SA	694	A	C4-C5-C6	6.36	120.18	117.00
26	LA	926	G	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	954	G	N3-C2-N2	6.36	124.35	119.90
26	LA	2778	A	C8-N9-C4	-6.36	103.25	105.80
26	LA	2888	C	C4-C5-C6	6.36	120.58	117.40
57	LS	96	ASP	CA-CB-CG	-6.36	99.40	113.40
2	SA	41	G	C4-C5-N7	-6.36	108.25	110.80
2	SA	362	G	O4'-C1'-N9	6.36	113.29	108.20
2	SA	550	G	C5-C6-N1	6.36	114.68	111.50
3	S1	38	G	O4'-C1'-N9	6.36	113.29	108.20
26	LA	614	A	N9-C1'-C2'	-6.36	105.00	112.00
26	LA	1870	C	OP1-P-OP2	-6.36	110.06	119.60
26	LA	2491	U	C5'-C4'-C3'	-6.36	105.82	116.00
30	LW	17	ASP	CB-CG-OD2	6.36	124.03	118.30
50	LL	75	TYR	CG-CD2-CE2	-6.36	116.21	121.30
23	SR	12	PHE	CB-CG-CD2	-6.36	116.35	120.80
24	S3	284	TYR	CB-CG-CD1	-6.36	117.18	121.00
26	LA	66	C	C5-C6-N1	-6.36	117.82	121.00
26	LA	94	A	C4-C5-C6	-6.36	113.82	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1655	A	C5-C6-N1	6.36	120.88	117.70
26	LA	1904	G	C4-C5-C6	-6.36	114.98	118.80
2	SA	109	A	O4'-C1'-N9	6.36	113.28	108.20
2	SA	587	G	C5'-C4'-O4'	6.36	116.73	109.10
2	SA	1114	C	N3-C4-N4	6.36	122.45	118.00
2	SA	1133	G	C4-N9-C1'	-6.36	118.23	126.50
2	SA	1472	U	O5'-P-OP1	-6.36	99.98	105.70
26	LA	124	G	C4-C5-N7	6.36	113.34	110.80
26	LA	566	U	N3-C4-C5	6.36	118.41	114.60
26	LA	1142	A	C4-C5-N7	6.36	113.88	110.70
26	LA	1337	G	C2-N3-C4	-6.36	108.72	111.90
26	LA	1804	C	N1-C1'-C2'	-6.36	105.01	112.00
26	LA	1888	G	O4'-C1'-N9	6.36	113.28	108.20
26	LA	2071	A	OP1-P-OP2	-6.36	110.06	119.60
2	SA	410	G	C4-C5-N7	6.36	113.34	110.80
2	SA	453	G	C6-N1-C2	6.36	128.91	125.10
14	SN	10	VAL	CA-CB-CG2	-6.36	101.37	110.90
26	LA	135	U	O4'-C1'-N1	6.36	113.28	108.20
26	LA	431	U	C1'-O4'-C4'	-6.36	104.81	109.90
26	LA	464	U	C2-N1-C1'	6.36	125.33	117.70
26	LA	584	C	C3'-C2'-C1'	6.36	106.58	101.50
26	LA	998	C	C2-N1-C1'	6.36	125.79	118.80
26	LA	1317	G	O4'-C1'-N9	6.36	113.28	108.20
26	LA	1337	G	N1-C2-N3	6.36	127.71	123.90
26	LA	1533	C	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	2277	G	N3-C2-N2	-6.36	115.45	119.90
26	LA	2652	C	N3-C4-C5	-6.36	119.36	121.90
26	LA	2736	A	C5-C6-N1	6.36	120.88	117.70
29	LV	3	ARG	NH1-CZ-NH2	-6.36	112.41	119.40
53	LP	124	ALA	CB-CA-C	-6.36	100.57	110.10
2	SA	852	G	N3-C4-N9	6.35	129.81	126.00
26	LA	394	C	C4-C5-C6	6.35	120.58	117.40
26	LA	895	U	C6-N1-C2	-6.35	117.19	121.00
26	LA	1006	C	N1-C2-N3	6.35	123.65	119.20
26	LA	1082	U	C5-C6-N1	-6.35	119.52	122.70
26	LA	1374	G	N3-C4-C5	-6.35	125.42	128.60
26	LA	1503	A	C8-N9-C4	6.35	108.34	105.80
26	LA	1531	C	P-O3'-C3'	6.35	127.33	119.70
26	LA	1778	U	C2-N3-C4	-6.35	123.19	127.00
2	SA	553	A	C5-C6-N1	-6.35	114.52	117.70
2	SA	689	C	C2-N3-C4	-6.35	116.72	119.90
2	SA	1179	A	N7-C8-N9	-6.35	110.62	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1304	G	N9-C4-C5	6.35	107.94	105.40
26	LA	232	G	N3-C4-C5	-6.35	125.42	128.60
26	LA	480	A	C2-N3-C4	6.35	113.78	110.60
26	LA	580	U	C4'-C3'-C2'	-6.35	96.25	102.60
26	LA	1541	C	P-O5'-C5'	6.35	131.06	120.90
26	LA	1792	G	C5-N7-C8	6.35	107.48	104.30
26	LA	2003	A	N1-C6-N6	6.35	122.41	118.60
26	LA	2747	G	C6-C5-N7	-6.35	126.59	130.40
26	LA	2808	G	P-O5'-C5'	6.35	131.06	120.90
2	SA	339	C	N1-C2-N3	6.35	123.64	119.20
2	SA	883	C	P-O3'-C3'	6.35	127.32	119.70
2	SA	1349	A	C8-N9-C4	6.35	108.34	105.80
26	LA	317	G	N9-C4-C5	6.35	107.94	105.40
26	LA	1074	G	O4'-C1'-C2'	6.35	113.31	107.60
26	LA	1492	G	C5-C6-O6	-6.35	124.79	128.60
26	LA	2506	U	O4'-C1'-N1	6.35	113.28	108.20
2	SA	18	C	C5-C6-N1	-6.35	117.83	121.00
2	SA	187	G	C2-N3-C4	-6.35	108.73	111.90
2	SA	1176	A	C8-N9-C4	6.35	108.34	105.80
6	SU	11	PHE	CG-CD1-CE1	-6.35	113.81	120.80
26	LA	305	C	C6-N1-C2	-6.35	117.76	120.30
26	LA	392	U	C6-N1-C2	6.35	124.81	121.00
26	LA	747	U	C5'-C4'-C3'	-6.35	105.84	116.00
26	LA	875	G	C5-C6-O6	-6.35	124.79	128.60
26	LA	912	C	O4'-C1'-N1	6.35	113.28	108.20
26	LA	1265	A	C5-C6-N1	6.35	120.88	117.70
26	LA	2274	A	N1-C6-N6	6.35	122.41	118.60
26	LA	2275	C	C5'-C4'-C3'	6.35	126.16	116.00
2	SA	221	C	C5'-C4'-C3'	-6.35	105.85	116.00
2	SA	596	A	C5-C6-N6	6.35	128.78	123.70
2	SA	1319	A	N9-C4-C5	-6.35	103.26	105.80
25	LB	57	A	C2'-C3'-O3'	6.35	123.86	113.70
25	LB	81	G	C6-N1-C2	-6.35	121.29	125.10
26	LA	50	U	C2-N1-C1'	6.35	125.32	117.70
26	LA	71	A	C2-N3-C4	-6.35	107.43	110.60
26	LA	261	G	N3-C2-N2	6.35	124.34	119.90
26	LA	915	C	N1-C2-O2	6.35	122.71	118.90
26	LA	938	G	C5-N7-C8	6.35	107.47	104.30
26	LA	989	G	N9-C1'-C2'	-6.35	105.02	112.00
26	LA	1745	A	C5-N7-C8	-6.35	100.73	103.90
26	LA	1978	A	C4'-C3'-C2'	-6.35	96.25	102.60
26	LA	2741	A	C1'-O4'-C4'	-6.35	104.82	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	LX	48	MET	CG-SD-CE	-6.35	90.04	100.20
2	SA	35	G	N3-C2-N2	6.35	124.34	119.90
8	SH	20	ASN	N-CA-CB	-6.35	99.18	110.60
26	LA	691	C	C5'-C4'-O4'	6.35	116.72	109.10
26	LA	711	G	N3-C4-C5	6.35	131.77	128.60
26	LA	792	A	P-O5'-C5'	6.35	131.05	120.90
26	LA	907	G	C8-N9-C4	6.35	108.94	106.40
26	LA	988	A	C5'-C4'-C3'	6.35	126.15	116.00
2	SA	223	A	C6-N1-C2	-6.34	114.79	118.60
2	SA	691	G	N3-C4-N9	-6.34	122.19	126.00
2	SA	1336	C	C4'-C3'-C2'	-6.34	96.26	102.60
2	SA	1369	C	P-O3'-C3'	6.34	127.31	119.70
2	SA	1425	U	C4'-C3'-C2'	-6.34	96.25	102.60
2	SA	1491	G	N9-C1'-C2'	-6.34	105.02	112.00
9	SI	89	TYR	N-CA-CB	-6.34	99.18	110.60
12	SL	16	ALA	N-CA-CB	-6.34	101.22	110.10
26	LA	1135	C	C2-N3-C4	-6.34	116.73	119.90
26	LA	1240	U	C2-N1-C1'	-6.34	110.09	117.70
26	LA	1860	G	C5'-C4'-C3'	-6.34	105.85	116.00
26	LA	1894	C	C6-N1-C2	-6.34	117.76	120.30
26	LA	1959	G	N3-C2-N2	-6.34	115.46	119.90
26	LA	2532	G	C5-N7-C8	-6.34	101.13	104.30
26	LA	2588	G	C5-C6-N1	6.34	114.67	111.50
26	LA	2663	G	P-O5'-C5'	6.34	131.05	120.90
2	SA	1041	G	N7-C8-N9	6.34	116.27	113.10
2	SA	1420	U	N3-C4-O4	6.34	123.84	119.40
2	SA	1477	U	N3-C2-O2	-6.34	117.76	122.20
21	SE	120	HIS	CA-CB-CG	-6.34	102.82	113.60
26	LA	599	A	O4'-C1'-N9	6.34	113.27	108.20
26	LA	2006	C	O4'-C4'-C3'	6.34	111.17	106.10
26	LA	2682	A	C4-C5-N7	6.34	113.87	110.70
26	LA	2844	G	C5-C6-O6	-6.34	124.79	128.60
2	SA	17	U	P-O3'-C3'	-6.34	112.09	119.70
2	SA	140	U	O4'-C1'-N1	6.34	113.27	108.20
2	SA	232	G	O4'-C4'-C3'	-6.34	97.66	104.00
2	SA	1524	C	N3-C4-C5	6.34	124.44	121.90
26	LA	24	G	C8-N9-C4	-6.34	103.86	106.40
26	LA	133	U	C1'-O4'-C4'	-6.34	104.83	109.90
26	LA	423	A	N1-C6-N6	6.34	122.41	118.60
26	LA	1249	U	P-O3'-C3'	-6.34	112.09	119.70
26	LA	1277	G	N3-C2-N2	6.34	124.34	119.90
26	LA	1875	G	N3-C4-N9	6.34	129.81	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2235	G	N1-C2-N3	6.34	127.70	123.90
2	SA	6	G	N3-C4-C5	-6.34	125.43	128.60
18	SB	145	ASN	N-CA-CB	6.34	122.01	110.60
25	LB	114	C	O4'-C1'-N1	6.34	113.27	108.20
26	LA	23	G	N9-C4-C5	6.34	107.94	105.40
26	LA	611	C	P-O3'-C3'	6.34	127.31	119.70
26	LA	720	U	N1-C1'-C2'	-6.34	105.03	112.00
26	LA	952	G	N3-C2-N2	6.34	124.34	119.90
26	LA	1275	A	P-O3'-C3'	-6.34	112.09	119.70
26	LA	2631	G	P-O5'-C5'	-6.34	110.76	120.90
2	SA	454	G	C8-N9-C1'	6.34	135.24	127.00
2	SA	1173	U	O4'-C1'-N1	6.34	113.27	108.20
26	LA	513	A	O4'-C1'-N9	6.34	113.27	108.20
26	LA	554	U	C4'-C3'-C2'	-6.34	96.26	102.60
26	LA	893	C	N1-C2-N3	6.34	123.64	119.20
26	LA	1020	A	O3'-P-O5'	6.34	116.04	104.00
26	LA	1490	A	C3'-C2'-C1'	6.34	106.57	101.50
2	SA	139	A	P-O3'-C3'	-6.34	112.10	119.70
2	SA	141	G	C5'-C4'-C3'	-6.34	105.86	116.00
2	SA	403	C	C4-C5-C6	-6.34	114.23	117.40
2	SA	451	A	N1-C2-N3	-6.34	126.13	129.30
2	SA	1097	C	C5-C6-N1	6.34	124.17	121.00
2	SA	1485	U	N3-C4-O4	6.34	123.84	119.40
26	LA	43	G	N3-C2-N2	6.34	124.34	119.90
26	LA	261	G	N1-C2-N3	-6.34	120.10	123.90
26	LA	799	G	O5'-P-OP1	-6.34	100.00	105.70
26	LA	1003	G	N3-C4-C5	-6.34	125.43	128.60
26	LA	1186	G	N1-C2-N3	-6.34	120.10	123.90
26	LA	1444	G	C5'-C4'-O4'	-6.34	101.50	109.10
26	LA	2130	U	C6-N1-C2	-6.34	117.20	121.00
26	LA	2250	G	P-O5'-C5'	-6.34	110.76	120.90
26	LA	2810	A	C4-C5-N7	6.34	113.87	110.70
2	SA	180	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	625	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	1496	C	C4-C5-C6	-6.33	114.23	117.40
7	SG	78	ARG	NE-CZ-NH2	6.33	123.47	120.30
16	SP	28	ARG	NE-CZ-NH1	6.33	123.47	120.30
24	S3	126	TRP	CB-CG-CD2	-6.33	118.36	126.60
26	LA	385	C	P-O5'-C5'	-6.33	110.76	120.90
26	LA	1610	A	C4-C5-N7	-6.33	107.53	110.70
26	LA	2738	A	N1-C6-N6	6.33	122.40	118.60
2	SA	115	G	P-O5'-C5'	-6.33	110.77	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	563	A	N1-C2-N3	6.33	132.47	129.30
2	SA	1006	G	O3'-P-O5'	-6.33	91.97	104.00
2	SA	1280	A	C1'-O4'-C4'	-6.33	104.83	109.90
26	LA	1096	A	C8-N9-C4	6.33	108.33	105.80
26	LA	2252	G	C6-C5-N7	-6.33	126.60	130.40
26	LA	2773	C	N3-C4-C5	-6.33	119.37	121.90
26	LA	2785	C	N1-C2-N3	6.33	123.63	119.20
31	LX	43	ASP	CB-CA-C	-6.33	97.73	110.40
2	SA	884	U	C2-N3-C4	6.33	130.80	127.00
2	SA	993	G	C4-N9-C1'	6.33	134.73	126.50
2	SA	1264	U	N3-C2-O2	6.33	126.63	122.20
26	LA	27	G	C4'-C3'-C2'	6.33	108.93	102.60
26	LA	403	U	P-O5'-C5'	6.33	131.03	120.90
26	LA	1041	G	C5'-C4'-C3'	-6.33	105.87	116.00
26	LA	1815	A	N1-C6-N6	-6.33	114.80	118.60
26	LA	1901	A	N1-C2-N3	-6.33	126.13	129.30
26	LA	1948	G	C6-N1-C2	-6.33	121.30	125.10
26	LA	2550	G	C3'-C2'-C1'	-6.33	96.43	101.50
26	LA	2846	G	N1-C6-O6	6.33	123.70	119.90
38	LE	179	ARG	NE-CZ-NH2	6.33	123.47	120.30
5	ST	27	MET	CG-SD-CE	-6.33	90.07	100.20
26	LA	113	U	C5'-C4'-C3'	6.33	126.13	116.00
26	LA	450	G	C5-C6-N1	6.33	114.67	111.50
26	LA	777	G	C6-N1-C2	-6.33	121.30	125.10
26	LA	1673	G	C5'-C4'-O4'	6.33	116.70	109.10
26	LA	1725	U	P-O3'-C3'	-6.33	112.11	119.70
1	SS	36	ARG	C-N-CA	6.33	137.52	121.70
2	SA	62	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	323	U	P-O5'-C5'	6.33	131.03	120.90
2	SA	348	G	N1-C2-N3	-6.33	120.10	123.90
2	SA	421	U	N3-C4-O4	6.33	123.83	119.40
2	SA	741	G	O4'-C1'-N9	6.33	113.26	108.20
2	SA	793	U	C6-N1-C1'	-6.33	112.34	121.20
24	S3	514	TYR	CB-CG-CD2	6.33	124.80	121.00
26	LA	503	A	N1-C6-N6	-6.33	114.80	118.60
26	LA	578	G	C6-C5-N7	-6.33	126.60	130.40
26	LA	1627	G	N3-C4-N9	6.33	129.80	126.00
26	LA	2382	G	C5-C6-N1	6.33	114.66	111.50
26	LA	2618	G	P-O5'-C5'	6.33	131.03	120.90
2	SA	1208	C	N1-C1'-C2'	-6.33	105.04	112.00
2	SA	1336	C	C2-N1-C1'	6.33	125.76	118.80
26	LA	267	C	C5'-C4'-O4'	6.33	116.69	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	482	A	P-O3'-C3'	6.33	127.29	119.70
26	LA	821	A	C8-N9-C4	-6.33	103.27	105.80
26	LA	1766	G	C5'-C4'-C3'	-6.33	105.88	116.00
26	LA	2321	U	C5-C6-N1	-6.33	119.54	122.70
26	LA	2719	G	N3-C2-N2	-6.33	115.47	119.90
2	SA	57	G	N3-C4-C5	-6.33	125.44	128.60
2	SA	689	C	N1-C2-O2	-6.33	115.11	118.90
26	LA	38	A	C4'-C3'-C2'	-6.33	96.27	102.60
26	LA	640	C	C5-C4-N4	-6.33	115.77	120.20
26	LA	643	A	C5'-C4'-O4'	6.33	116.69	109.10
26	LA	981	A	C5-C6-N6	-6.33	118.64	123.70
26	LA	1122	G	C3'-C2'-C1'	-6.33	96.44	101.50
26	LA	1532	A	C2-N3-C4	-6.33	107.44	110.60
26	LA	1595	C	N1-C2-O2	-6.33	115.11	118.90
26	LA	1649	G	C1'-O4'-C4'	-6.33	104.84	109.90
26	LA	1848	A	N1-C6-N6	-6.33	114.81	118.60
26	LA	2317	A	C5-C6-N1	6.33	120.86	117.70
26	LA	2409	G	C5-N7-C8	-6.33	101.14	104.30
48	LN	113	ALA	N-CA-CB	6.33	118.95	110.10
2	SA	112	G	C4'-C3'-C2'	-6.32	96.28	102.60
2	SA	231	U	C4-C5-C6	-6.32	115.91	119.70
2	SA	895	G	C6-N1-C2	6.32	128.89	125.10
2	SA	927	G	N1-C6-O6	-6.32	116.11	119.90
2	SA	1354	U	O4'-C1'-N1	6.32	113.26	108.20
4	S2	74	A	O4'-C1'-N9	6.32	113.26	108.20
24	S3	432	LEU	CB-CG-CD1	6.32	121.75	111.00
25	LB	66	A	C5-C6-N1	-6.32	114.54	117.70
26	LA	627	A	C5'-C4'-C3'	-6.32	105.88	116.00
26	LA	803	U	N3-C4-O4	6.32	123.83	119.40
26	LA	1524	G	O4'-C1'-N9	6.32	113.26	108.20
26	LA	1616	A	C5-C6-N1	-6.32	114.54	117.70
26	LA	2633	G	C5-N7-C8	-6.32	101.14	104.30
27	LD	139	THR	CA-CB-CG2	-6.32	103.55	112.40
37	LC	18	THR	CA-CB-OG1	6.32	122.28	109.00
41	L5	10	LEU	CB-CA-C	6.32	122.22	110.20
45	LG	154	THR	CA-CB-CG2	-6.32	103.55	112.40
2	SA	479	U	N3-C4-C5	-6.32	110.81	114.60
2	SA	1236	A	N7-C8-N9	6.32	116.96	113.80
24	S3	91	ALA	N-CA-CB	-6.32	101.25	110.10
26	LA	928	A	C8-N9-C4	-6.32	103.27	105.80
26	LA	1029	A	C5-N7-C8	-6.32	100.74	103.90
26	LA	2153	C	O4'-C1'-C2'	-6.32	99.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2218	G	N3-C4-N9	-6.32	122.21	126.00
26	LA	2258	C	C1'-O4'-C4'	-6.32	104.84	109.90
2	SA	892	A	N7-C8-N9	-6.32	110.64	113.80
25	LB	23	G	C2-N3-C4	6.32	115.06	111.90
26	LA	262	A	C3'-C2'-C1'	6.32	106.56	101.50
26	LA	497	A	OP1-P-OP2	-6.32	110.12	119.60
26	LA	505	A	N3-C4-N9	-6.32	122.34	127.40
26	LA	558	U	N3-C4-O4	-6.32	114.98	119.40
26	LA	899	A	N7-C8-N9	-6.32	110.64	113.80
26	LA	2337	G	O3'-P-O5'	6.32	116.01	104.00
26	LA	2574	G	C6-C5-N7	-6.32	126.61	130.40
26	LA	2819	G	C5-C6-N1	6.32	114.66	111.50
2	SA	251	G	N1-C2-N3	-6.32	120.11	123.90
2	SA	377	G	N3-C4-C5	-6.32	125.44	128.60
2	SA	383	A	N1-C6-N6	-6.32	114.81	118.60
26	LA	741	U	C5'-C4'-O4'	6.32	116.68	109.10
26	LA	1076	C	P-O5'-C5'	6.32	131.01	120.90
26	LA	1137	G	C4'-C3'-C2'	-6.32	96.28	102.60
26	LA	1174	U	N3-C4-O4	6.32	123.82	119.40
26	LA	1431	A	N9-C4-C5	-6.32	103.27	105.80
26	LA	2341	G	OP1-P-OP2	-6.32	110.12	119.60
26	LA	2709	G	N1-C2-N2	6.32	121.89	116.20
2	SA	251	G	O3'-P-O5'	-6.32	92.00	104.00
2	SA	275	G	C8-N9-C1'	-6.32	118.79	127.00
2	SA	797	C	O4'-C1'-N1	6.32	113.25	108.20
26	LA	147	C	C4'-C3'-C2'	-6.32	96.28	102.60
26	LA	410	G	N3-C2-N2	-6.32	115.48	119.90
26	LA	654	A	C4-N9-C1'	6.32	137.67	126.30
26	LA	680	C	N1-C2-O2	6.32	122.69	118.90
26	LA	930	G	N7-C8-N9	-6.32	109.94	113.10
26	LA	1187	G	O4'-C1'-N9	6.32	113.25	108.20
26	LA	1341	G	C5-C6-O6	6.32	132.39	128.60
26	LA	1381	G	O4'-C1'-N9	6.32	113.25	108.20
26	LA	1829	A	N1-C2-N3	-6.32	126.14	129.30
26	LA	1840	G	C5-C6-O6	-6.32	124.81	128.60
26	LA	2246	G	C5-C6-O6	-6.32	124.81	128.60
26	LA	2530	A	N1-C2-N3	6.32	132.46	129.30
26	LA	2717	C	O3'-P-O5'	6.32	116.00	104.00
58	LT	12	HIS	CB-CA-C	-6.32	97.76	110.40
2	SA	11	G	C2-N3-C4	-6.32	108.74	111.90
2	SA	818	G	C4-C5-C6	-6.32	115.01	118.80
2	SA	1051	C	C4'-C3'-C2'	-6.32	96.28	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1102	A	C4'-C3'-C2'	-6.32	96.28	102.60
18	SB	112	ARG	NE-CZ-NH1	6.32	123.46	120.30
26	LA	517	C	N1-C2-N3	6.32	123.62	119.20
26	LA	1158	C	C2-N1-C1'	-6.32	111.85	118.80
26	LA	1340	U	N1-C2-O2	6.32	127.22	122.80
26	LA	1422	G	C5'-C4'-C3'	-6.32	105.90	116.00
26	LA	2516	A	N3-C4-C5	6.32	131.22	126.80
26	LA	2669	G	O4'-C4'-C3'	-6.32	97.69	104.00
2	SA	142	G	C5-C6-O6	6.31	132.39	128.60
2	SA	577	G	N1-C2-N3	-6.31	120.11	123.90
2	SA	750	C	C5'-C4'-C3'	-6.31	105.90	116.00
2	SA	930	C	C4-C5-C6	-6.31	114.24	117.40
2	SA	1146	A	C8-N9-C4	-6.31	103.27	105.80
26	LA	568	U	C5'-C4'-C3'	6.31	126.10	116.00
26	LA	1810	A	C5-N7-C8	-6.31	100.74	103.90
26	LA	2166	U	C5'-C4'-C3'	-6.31	105.90	116.00
26	LA	2801	G	O5'-P-OP1	-6.31	100.02	105.70
26	LA	2891	U	C3'-C2'-C1'	6.31	106.55	101.50
26	LA	2901	C	O4'-C4'-C3'	6.31	111.15	106.10
2	SA	585	G	N1-C2-N3	6.31	127.69	123.90
2	SA	628	G	N7-C8-N9	6.31	116.26	113.10
2	SA	826	C	C5'-C4'-O4'	6.31	116.67	109.10
2	SA	1495	U	C5-C6-N1	6.31	125.86	122.70
26	LA	165	A	P-O5'-C5'	6.31	131.00	120.90
26	LA	655	A	N1-C2-N3	6.31	132.46	129.30
26	LA	723	C	C2-N1-C1'	6.31	125.74	118.80
26	LA	1016	G	C3'-C2'-C1'	6.31	106.55	101.50
26	LA	1607	C	C5'-C4'-O4'	6.31	116.68	109.10
26	LA	1822	C	N3-C4-C5	-6.31	119.38	121.90
26	LA	2180	U	N1-C2-N3	6.31	118.69	114.90
26	LA	2237	G	C5'-C4'-C3'	-6.31	105.90	116.00
2	SA	1026	G	P-O5'-C5'	6.31	131.00	120.90
2	SA	1522	U	P-O3'-C3'	6.31	127.27	119.70
4	S2	53	G	O4'-C1'-N9	6.31	113.25	108.20
26	LA	1382	G	N1-C6-O6	6.31	123.69	119.90
26	LA	1759	A	C5-C6-N6	-6.31	118.65	123.70
26	LA	2753	A	C4-C5-C6	-6.31	113.84	117.00
2	SA	275	G	C5'-C4'-C3'	-6.31	105.91	116.00
2	SA	295	C	N1-C2-O2	6.31	122.69	118.90
2	SA	564	C	C1'-O4'-C4'	6.31	114.95	109.90
2	SA	927	G	C2-N3-C4	6.31	115.05	111.90
2	SA	993	G	C5'-C4'-O4'	6.31	116.67	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1264	U	N1-C2-O2	-6.31	118.38	122.80
9	SI	108	ARG	NE-CZ-NH1	6.31	123.45	120.30
26	LA	1175	A	O4'-C1'-C2'	6.31	113.28	107.60
26	LA	1478	G	N3-C4-C5	-6.31	125.45	128.60
26	LA	1789	A	C5-N7-C8	-6.31	100.75	103.90
26	LA	2108	A	C5'-C4'-O4'	6.31	116.67	109.10
26	LA	2529	G	N3-C2-N2	6.31	124.32	119.90
26	LA	2675	A	O4'-C1'-N9	6.31	113.25	108.20
26	LA	2748	A	C3'-C2'-C1'	6.31	106.55	101.50
2	SA	74	A	C5-C6-N1	-6.31	114.55	117.70
2	SA	104	G	N9-C4-C5	-6.31	102.88	105.40
2	SA	237	G	C6-N1-C2	-6.31	121.31	125.10
2	SA	474	G	N1-C6-O6	-6.31	116.11	119.90
2	SA	657	U	C6-N1-C2	6.31	124.78	121.00
2	SA	1022	A	C2-N3-C4	6.31	113.75	110.60
2	SA	1468	A	C3'-C2'-C1'	-6.31	96.45	101.50
2	SA	1490	U	C5-C4-O4	-6.31	122.11	125.90
4	S2	41	C	O4'-C1'-N1	6.31	113.25	108.20
4	S2	53	G	O4'-C4'-C3'	-6.31	97.69	104.00
4	S2	71	G	C5-C6-O6	-6.31	124.81	128.60
18	SB	239	ALA	O-C-N	-6.31	112.61	122.70
26	LA	357	C	O4'-C1'-N1	6.31	113.25	108.20
26	LA	1196	C	C2-N3-C4	-6.31	116.75	119.90
26	LA	1211	C	N3-C2-O2	-6.31	117.48	121.90
26	LA	1216	G	C8-N9-C4	-6.31	103.88	106.40
26	LA	2061	G	N1-C6-O6	-6.31	116.11	119.90
26	LA	2357	G	N3-C4-N9	-6.31	122.22	126.00
26	LA	2388	A	C1'-O4'-C4'	-6.31	104.86	109.90
26	LA	2396	G	N3-C2-N2	-6.31	115.48	119.90
2	SA	89	U	O4'-C1'-N1	6.30	113.24	108.20
2	SA	530	G	N3-C4-C5	6.30	131.75	128.60
2	SA	666	G	C4'-C3'-C2'	-6.30	96.30	102.60
2	SA	873	A	C4-C5-C6	-6.30	113.85	117.00
2	SA	1167	A	N1-C6-N6	6.30	122.38	118.60
2	SA	1270	G	N3-C4-N9	6.30	129.78	126.00
26	LA	1203	U	C4-C5-C6	6.30	123.48	119.70
26	LA	1502	A	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	2058	A	C8-N9-C4	6.30	108.32	105.80
26	LA	2679	A	C4-N9-C1'	-6.30	114.95	126.30
26	LA	2701	U	C3'-C2'-C1'	6.30	106.54	101.50
2	SA	1254	A	P-O5'-C5'	6.30	130.99	120.90
26	LA	606	U	C5'-C4'-O4'	6.30	116.66	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1547	C	C1'-O4'-C4'	-6.30	104.86	109.90
26	LA	1702	G	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	1811	G	C2-N3-C4	-6.30	108.75	111.90
26	LA	2419	U	N3-C2-O2	-6.30	117.79	122.20
37	LC	145	VAL	C-N-CA	6.30	137.46	121.70
2	SA	7	A	OP2-P-O3'	6.30	119.06	105.20
2	SA	786	G	C2-N3-C4	6.30	115.05	111.90
2	SA	797	C	OP1-P-OP2	-6.30	110.15	119.60
2	SA	850	U	C5'-C4'-C3'	-6.30	105.92	116.00
2	SA	1138	G	OP1-P-OP2	-6.30	110.15	119.60
2	SA	1222	G	P-O3'-C3'	-6.30	112.14	119.70
2	SA	1542	A	C5'-C4'-O4'	6.30	116.66	109.10
25	LB	110	C	N3-C4-N4	6.30	122.41	118.00
26	LA	39	G	N1-C2-N3	6.30	127.68	123.90
26	LA	577	G	C2-N3-C4	6.30	115.05	111.90
26	LA	888	C	C6-N1-C1'	-6.30	113.24	120.80
26	LA	950	G	N1-C6-O6	6.30	123.68	119.90
26	LA	1116	G	C4-C5-C6	-6.30	115.02	118.80
26	LA	1300	G	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	1845	G	C4-C5-C6	-6.30	115.02	118.80
26	LA	2076	U	C5-C6-N1	-6.30	119.55	122.70
26	LA	2079	U	N3-C2-O2	-6.30	117.79	122.20
26	LA	2406	A	O5'-P-OP1	6.30	118.26	110.70
26	LA	2535	G	C8-N9-C4	-6.30	103.88	106.40
26	LA	2544	G	N3-C4-N9	6.30	129.78	126.00
2	SA	401	C	N3-C4-N4	-6.30	113.59	118.00
2	SA	433	G	C5'-C4'-O4'	6.30	116.66	109.10
2	SA	814	A	C5-C6-N1	-6.30	114.55	117.70
2	SA	858	G	C5-C6-N1	6.30	114.65	111.50
2	SA	935	A	N1-C6-N6	-6.30	114.82	118.60
2	SA	1020	G	C8-N9-C1'	6.30	135.19	127.00
26	LA	89	A	O5'-P-OP1	6.30	118.26	110.70
26	LA	144	A	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	246	C	N3-C2-O2	-6.30	117.49	121.90
26	LA	605	G	O4'-C1'-N9	6.30	113.24	108.20
26	LA	862	G	C8-N9-C4	-6.30	103.88	106.40
26	LA	1149	G	C6-N1-C2	-6.30	121.32	125.10
26	LA	1183	U	N3-C2-O2	-6.30	117.79	122.20
26	LA	2269	G	P-O5'-C5'	-6.30	110.82	120.90
26	LA	2325	G	N9-C1'-C2'	6.30	122.19	114.00
26	LA	2847	U	C5-C4-O4	6.30	129.68	125.90
2	SA	51	A	C5-C6-N6	-6.30	118.66	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1648	U	O4'-C1'-N1	6.30	113.24	108.20
26	LA	2275	C	C6-N1-C2	-6.30	117.78	120.30
26	LA	2786	U	C4-C5-C6	-6.30	115.92	119.70
26	LA	2902	C	O4'-C1'-N1	6.30	113.24	108.20
2	SA	60	A	C1'-O4'-C4'	-6.30	104.86	109.90
2	SA	157	U	O3'-P-O5'	-6.30	92.04	104.00
2	SA	256	U	C4-C5-C6	-6.30	115.92	119.70
2	SA	996	A	C5-C6-N1	6.30	120.85	117.70
2	SA	1274	A	N1-C2-N3	-6.30	126.15	129.30
26	LA	16	C	C3'-C2'-C1'	6.30	106.54	101.50
26	LA	212	G	P-O3'-C3'	-6.30	112.14	119.70
26	LA	250	G	C8-N9-C4	6.30	108.92	106.40
26	LA	631	A	N7-C8-N9	-6.30	110.65	113.80
26	LA	788	A	C6-N1-C2	-6.30	114.82	118.60
26	LA	1031	G	C5-C6-N1	6.30	114.65	111.50
26	LA	1240	U	O4'-C4'-C3'	-6.30	97.70	104.00
26	LA	441	U	C2-N3-C4	-6.29	123.22	127.00
26	LA	1632	A	N9-C4-C5	6.29	108.32	105.80
26	LA	2514	U	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	2757	A	C5-N7-C8	-6.29	100.75	103.90
28	LU	53	SER	N-CA-CB	6.29	119.94	110.50
2	SA	249	U	C2-N3-C4	-6.29	123.22	127.00
2	SA	250	A	C4'-C3'-C2'	-6.29	96.31	102.60
2	SA	406	G	N1-C6-O6	6.29	123.68	119.90
2	SA	467	U	C5'-C4'-C3'	6.29	126.07	116.00
2	SA	540	G	OP1-P-OP2	-6.29	110.16	119.60
2	SA	570	G	N3-C4-N9	6.29	129.78	126.00
2	SA	663	A	O4'-C1'-N9	6.29	113.23	108.20
2	SA	1005	A	N3-C4-C5	-6.29	122.39	126.80
2	SA	1402	C	C4-C5-C6	-6.29	114.25	117.40
26	LA	205	G	P-O5'-C5'	6.29	130.97	120.90
26	LA	343	C	N1-C2-O2	6.29	122.68	118.90
26	LA	460	A	C4-N9-C1'	6.29	137.63	126.30
26	LA	593	U	N1-C2-N3	6.29	118.68	114.90
26	LA	622	G	N1-C6-O6	6.29	123.68	119.90
26	LA	1036	G	C5-C6-N1	-6.29	108.35	111.50
26	LA	1349	C	C2'-C3'-O3'	6.29	123.77	113.70
26	LA	1603	A	O5'-P-OP1	6.29	118.25	110.70
26	LA	1879	C	P-O5'-C5'	-6.29	110.83	120.90
26	LA	2387	U	C2-N3-C4	-6.29	123.22	127.00
2	SA	254	G	N9-C1'-C2'	-6.29	105.08	112.00
4	S2	25	U	C5-C6-N1	6.29	125.85	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	162	U	C5'-C4'-O4'	6.29	116.65	109.10
26	LA	481	G	P-O3'-C3'	6.29	127.25	119.70
26	LA	930	G	N1-C6-O6	6.29	123.67	119.90
26	LA	983	A	C4-C5-C6	6.29	120.15	117.00
26	LA	1149	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	1570	A	N1-C2-N3	-6.29	126.16	129.30
26	LA	2055	C	N1-C2-O2	-6.29	115.12	118.90
29	LV	75	GLY	N-CA-C	6.29	128.83	113.10
44	LF	60	TRP	CB-CG-CD1	6.29	135.18	127.00
2	SA	397	A	C4-C5-N7	6.29	113.84	110.70
2	SA	424	G	N1-C6-O6	6.29	123.67	119.90
2	SA	429	U	C3'-C2'-C1'	-6.29	96.47	101.50
2	SA	897	C	C5-C6-N1	-6.29	117.86	121.00
26	LA	12	U	O4'-C1'-N1	6.29	113.23	108.20
26	LA	1482	G	C4-C5-N7	-6.29	108.28	110.80
26	LA	1611	C	N3-C4-N4	6.29	122.40	118.00
26	LA	2121	G	N3-C4-C5	-6.29	125.45	128.60
2	SA	596	A	C6-C5-N7	-6.29	127.90	132.30
2	SA	689	C	C5'-C4'-C3'	6.29	126.06	116.00
2	SA	1047	G	P-O3'-C3'	-6.29	112.16	119.70
23	SR	42	ARG	NE-CZ-NH1	6.29	123.44	120.30
24	S3	284	TYR	CG-CD2-CE2	6.29	126.33	121.30
25	LB	64	G	O4'-C1'-N9	6.29	113.23	108.20
26	LA	301	G	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	892	A	N7-C8-N9	6.29	116.94	113.80
26	LA	1095	A	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	1483	G	O4'-C1'-N9	6.29	113.23	108.20
26	LA	1750	G	N3-C2-N2	6.29	124.30	119.90
26	LA	1904	G	P-O5'-C5'	-6.29	110.84	120.90
26	LA	2017	U	O4'-C4'-C3'	6.29	111.13	106.10
26	LA	2159	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	2279	G	C5'-C4'-C3'	6.29	126.06	116.00
26	LA	2422	C	P-O5'-C5'	6.29	130.96	120.90
26	LA	2870	C	C3'-C2'-C1'	-6.29	96.47	101.50
30	LW	92	VAL	CG1-CB-CG2	-6.29	100.84	110.90
2	SA	488	C	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	256	A	O4'-C1'-N9	6.29	113.23	108.20
26	LA	490	C	C2-N3-C4	6.29	123.04	119.90
26	LA	881	G	C3'-C2'-C1'	-6.29	96.47	101.50
26	LA	1160	G	C3'-C2'-C1'	6.29	106.53	101.50
26	LA	1215	G	C2-N3-C4	-6.29	108.76	111.90
2	SA	434	U	C5'-C4'-C3'	-6.29	105.94	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	558	G	N1-C6-O6	6.29	123.67	119.90
2	SA	766	A	O4'-C1'-N9	6.29	113.23	108.20
2	SA	969	A	C2-N3-C4	6.29	113.74	110.60
2	SA	1136	C	C5-C6-N1	6.29	124.14	121.00
2	SA	1458	G	N3-C4-N9	-6.29	122.23	126.00
26	LA	494	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	678	C	O4'-C1'-N1	6.29	113.23	108.20
26	LA	1179	G	P-O3'-C3'	-6.29	112.16	119.70
26	LA	2326	C	C2-N3-C4	-6.29	116.76	119.90
26	LA	2797	U	O5'-P-OP1	-6.29	100.04	105.70
2	SA	693	G	C5'-C4'-C3'	6.28	126.06	116.00
2	SA	1054	C	O4'-C4'-C3'	-6.28	97.72	104.00
2	SA	1198	G	O4'-C1'-N9	6.28	113.23	108.20
3	S1	32	U	C4'-C3'-C2'	-6.28	96.32	102.60
5	ST	59	ARG	NE-CZ-NH1	6.28	123.44	120.30
16	SP	31	ARG	NE-CZ-NH1	6.28	123.44	120.30
26	LA	264	C	C5-C6-N1	6.28	124.14	121.00
26	LA	1430	G	N3-C4-C5	-6.28	125.46	128.60
26	LA	1951	U	N1-C2-O2	-6.28	118.40	122.80
26	LA	2031	A	C4-C5-N7	6.28	113.84	110.70
26	LA	2475	C	O4'-C4'-C3'	6.28	111.13	106.10
26	LA	2501	C	C2-N3-C4	-6.28	116.76	119.90
47	LJ	58	LEU	CB-CA-C	-6.28	98.26	110.20
2	SA	200	G	C5-C6-O6	-6.28	124.83	128.60
2	SA	342	C	C6-N1-C1'	-6.28	113.26	120.80
25	LB	80	U	C5'-C4'-O4'	6.28	116.64	109.10
26	LA	1026	G	N7-C8-N9	-6.28	109.96	113.10
26	LA	1045	C	O5'-P-OP2	-6.28	100.05	105.70
26	LA	2886	A	C8-N9-C4	-6.28	103.29	105.80
2	SA	708	C	C2'-C3'-O3'	6.28	123.75	113.70
2	SA	904	U	C3'-C2'-C1'	6.28	106.52	101.50
2	SA	1156	G	N7-C8-N9	-6.28	109.96	113.10
2	SA	1185	G	O4'-C4'-C3'	-6.28	97.72	104.00
2	SA	1414	U	C2-N3-C4	6.28	130.77	127.00
4	S2	30	G	P-O3'-C3'	6.28	127.24	119.70
26	LA	178	G	C3'-C2'-C1'	6.28	106.53	101.50
26	LA	363	G	O4'-C1'-N9	6.28	113.22	108.20
26	LA	508	A	N3-C4-N9	6.28	132.43	127.40
26	LA	2809	A	N9-C4-C5	6.28	108.31	105.80
2	SA	693	G	C3'-C2'-C1'	-6.28	96.48	101.50
26	LA	862	G	C6-N1-C2	-6.28	121.33	125.10
2	SA	471	U	C1'-O4'-C4'	-6.28	104.88	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	696	A	N1-C2-N3	6.28	132.44	129.30
2	SA	1007	U	C6-N1-C2	-6.28	117.23	121.00
2	SA	1144	G	OP1-P-OP2	-6.28	110.19	119.60
4	S2	51	U	N3-C4-C5	6.28	118.37	114.60
25	LB	19	C	N3-C2-O2	-6.28	117.50	121.90
26	LA	186	G	C3'-C2'-C1'	6.28	106.52	101.50
26	LA	1256	G	C8-N9-C4	-6.28	103.89	106.40
26	LA	1378	A	C1'-O4'-C4'	-6.28	104.88	109.90
26	LA	1387	A	N1-C6-N6	6.28	122.37	118.60
26	LA	1698	A	C5-C6-N1	-6.28	114.56	117.70
26	LA	1891	G	C6-N1-C2	-6.28	121.33	125.10
26	LA	1922	G	N1-C6-O6	6.28	123.67	119.90
26	LA	2312	U	O3'-P-O5'	6.28	115.93	104.00
2	SA	836	G	C5-C6-O6	6.28	132.37	128.60
26	LA	41	C	N3-C4-N4	6.28	122.39	118.00
26	LA	122	G	C6-N1-C2	-6.28	121.33	125.10
26	LA	400	G	C3'-C2'-C1'	6.28	106.52	101.50
26	LA	566	U	C5-C4-O4	-6.28	122.13	125.90
26	LA	866	A	OP1-P-OP2	-6.28	110.19	119.60
26	LA	2554	U	P-O3'-C3'	-6.28	112.17	119.70
2	SA	199	A	N7-C8-N9	-6.27	110.66	113.80
26	LA	20	C	C2-N3-C4	-6.27	116.76	119.90
26	LA	82	U	N3-C4-O4	6.27	123.79	119.40
26	LA	312	G	O4'-C1'-N9	6.27	113.22	108.20
26	LA	1420	A	N7-C8-N9	6.27	116.94	113.80
26	LA	1537	G	C8-N9-C1'	-6.27	118.84	127.00
27	LD	143	VAL	CB-CA-C	-6.27	99.48	111.40
2	SA	124	C	N3-C4-N4	6.27	122.39	118.00
2	SA	191	G	C4-C5-N7	-6.27	108.29	110.80
2	SA	669	G	C4'-C3'-C2'	-6.27	96.33	102.60
2	SA	776	G	O4'-C4'-C3'	-6.27	97.73	104.00
24	S3	255	VAL	CA-CB-CG2	-6.27	101.49	110.90
26	LA	108	G	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	474	G	N1-C2-N2	-6.27	110.56	116.20
26	LA	514	A	O4'-C1'-C2'	6.27	113.25	107.60
26	LA	517	C	N1-C2-O2	-6.27	115.14	118.90
26	LA	599	A	N9-C4-C5	-6.27	103.29	105.80
26	LA	733	G	N1-C6-O6	6.27	123.66	119.90
26	LA	1166	G	C1'-O4'-C4'	-6.27	104.88	109.90
26	LA	1394	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	1530	G	N1-C2-N3	-6.27	120.14	123.90
26	LA	1605	C	C2-N3-C4	-6.27	116.76	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2112	G	O4'-C1'-C2'	-6.27	99.53	105.80
46	LH	122	ALA	CB-CA-C	-6.27	100.69	110.10
48	LN	40	SER	CB-CA-C	-6.27	98.18	110.10
2	SA	290	C	C2-N1-C1'	6.27	125.70	118.80
2	SA	1336	C	N3-C2-O2	-6.27	117.51	121.90
2	SA	1448	C	N3-C4-C5	-6.27	119.39	121.90
20	SD	55	ARG	NH1-CZ-NH2	-6.27	112.50	119.40
26	LA	890	C	N3-C4-N4	6.27	122.39	118.00
26	LA	1433	A	N1-C2-N3	-6.27	126.16	129.30
26	LA	2036	C	P-O5'-C5'	-6.27	110.87	120.90
26	LA	2575	C	OP1-P-OP2	-6.27	110.19	119.60
26	LA	2611	C	O5'-P-OP2	6.27	118.22	110.70
2	SA	35	G	C4'-C3'-C2'	-6.27	96.33	102.60
2	SA	45	G	C5-N7-C8	6.27	107.44	104.30
2	SA	497	G	N7-C8-N9	6.27	116.23	113.10
2	SA	506	G	C4-C5-C6	6.27	122.56	118.80
2	SA	680	C	O4'-C1'-N1	6.27	113.22	108.20
2	SA	945	G	C8-N9-C1'	-6.27	118.85	127.00
2	SA	1112	C	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	350	G	O4'-C1'-N9	6.27	113.22	108.20
26	LA	525	U	O3'-P-O5'	-6.27	92.09	104.00
26	LA	783	A	C3'-C2'-C1'	-6.27	96.48	101.50
26	LA	816	C	N3-C4-N4	6.27	122.39	118.00
26	LA	1520	U	C5-C6-N1	6.27	125.83	122.70
26	LA	1689	A	C6-C5-N7	6.27	136.69	132.30
26	LA	1851	U	C3'-C2'-C1'	6.27	106.52	101.50
26	LA	2252	G	N3-C4-C5	-6.27	125.47	128.60
37	LC	52	ALA	CB-CA-C	6.27	119.50	110.10
37	LC	113	VAL	C-N-CA	6.27	137.37	121.70
2	SA	923	A	C5'-C4'-C3'	-6.27	105.97	116.00
2	SA	1232	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	189	G	C6-N1-C2	-6.27	121.34	125.10
26	LA	338	G	N1-C6-O6	6.27	123.66	119.90
26	LA	555	G	N9-C4-C5	6.27	107.91	105.40
26	LA	990	A	N7-C8-N9	-6.27	110.67	113.80
26	LA	1163	G	C5'-C4'-C3'	-6.27	105.97	116.00
26	LA	1249	U	C4-C5-C6	6.27	123.46	119.70
26	LA	1583	A	N3-C4-N9	-6.27	122.39	127.40
26	LA	1978	A	N7-C8-N9	-6.27	110.67	113.80
26	LA	2362	C	N3-C4-C5	-6.27	119.39	121.90
26	LA	2433	A	N9-C4-C5	6.27	108.31	105.80
26	LA	2665	A	N1-C6-N6	-6.27	114.84	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	LD	200	MET	CG-SD-CE	6.27	110.23	100.20
2	SA	37	U	C1'-O4'-C4'	-6.27	104.89	109.90
2	SA	329	A	N9-C4-C5	-6.27	103.29	105.80
2	SA	968	A	C1'-O4'-C4'	-6.27	104.89	109.90
2	SA	1192	C	C4-C5-C6	-6.27	114.27	117.40
2	SA	1437	A	C5'-C4'-C3'	-6.27	105.97	116.00
3	S1	51	C	C1'-O4'-C4'	-6.27	104.89	109.90
25	LB	84	G	N1-C2-N3	6.27	127.66	123.90
26	LA	455	C	C3'-C2'-C1'	-6.27	96.49	101.50
26	LA	582	A	N7-C8-N9	6.27	116.93	113.80
26	LA	942	G	C3'-C2'-C1'	6.27	106.51	101.50
26	LA	2740	A	C5'-C4'-O4'	6.27	116.62	109.10
2	SA	948	C	C5'-C4'-C3'	-6.26	105.98	116.00
2	SA	1004	A	N7-C8-N9	6.26	116.93	113.80
2	SA	1332	A	C6-C5-N7	-6.26	127.92	132.30
2	SA	1465	A	C8-N9-C4	-6.26	103.30	105.80
24	S3	445	ARG	NE-CZ-NH2	-6.26	117.17	120.30
26	LA	262	A	C4'-C3'-C2'	-6.26	96.33	102.60
26	LA	343	C	N3-C2-O2	-6.26	117.51	121.90
26	LA	539	G	C5'-C4'-O4'	6.26	116.62	109.10
26	LA	540	C	P-O3'-C3'	-6.26	112.18	119.70
26	LA	1748	C	N1-C2-O2	6.26	122.66	118.90
2	SA	166	U	P-O3'-C3'	-6.26	112.18	119.70
2	SA	255	G	P-O3'-C3'	-6.26	112.18	119.70
2	SA	590	U	C5'-C4'-O4'	6.26	116.62	109.10
2	SA	789	U	C5'-C4'-C3'	-6.26	105.98	116.00
2	SA	851	G	C5-C6-O6	-6.26	124.84	128.60
26	LA	603	A	O3'-P-O5'	-6.26	92.10	104.00
26	LA	785	G	C8-N9-C4	-6.26	103.89	106.40
26	LA	791	C	N3-C2-O2	-6.26	117.52	121.90
26	LA	1677	A	N1-C6-N6	6.26	122.36	118.60
2	SA	97	G	C4-C5-N7	-6.26	108.30	110.80
2	SA	210	C	C1'-O4'-C4'	-6.26	104.89	109.90
2	SA	366	A	C4'-C3'-C2'	-6.26	96.34	102.60
2	SA	654	G	O5'-P-OP1	6.26	118.21	110.70
2	SA	1352	C	C5'-C4'-O4'	6.26	116.61	109.10
2	SA	1542	A	C3'-C2'-C1'	6.26	106.51	101.50
26	LA	312	G	N1-C6-O6	-6.26	116.14	119.90
26	LA	506	G	C6-C5-N7	-6.26	126.64	130.40
26	LA	662	G	N1-C6-O6	-6.26	116.14	119.90
26	LA	1036	G	OP1-P-OP2	-6.26	110.21	119.60
26	LA	1047	G	C1'-O4'-C4'	-6.26	104.89	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1106	G	N3-C4-C5	-6.26	125.47	128.60
26	LA	1210	G	C5-N7-C8	-6.26	101.17	104.30
26	LA	1901	A	P-O5'-C5'	-6.26	110.88	120.90
26	LA	2630	G	C4-C5-N7	6.26	113.30	110.80
2	SA	319	G	N3-C2-N2	6.26	124.28	119.90
2	SA	537	G	N9-C4-C5	6.26	107.90	105.40
2	SA	1154	G	C4-C5-C6	6.26	122.56	118.80
2	SA	1249	C	P-O3'-C3'	-6.26	112.19	119.70
2	SA	1408	A	N9-C4-C5	-6.26	103.30	105.80
2	SA	1419	G	C5'-C4'-C3'	6.26	126.01	116.00
25	LB	51	G	C5'-C4'-C3'	-6.26	105.98	116.00
26	LA	616	A	C2-N3-C4	6.26	113.73	110.60
26	LA	789	A	C4-C5-C6	6.26	120.13	117.00
26	LA	878	A	C4-N9-C1'	6.26	137.57	126.30
26	LA	994	C	O5'-P-OP2	-6.26	100.07	105.70
26	LA	1005	C	N3-C4-N4	6.26	122.38	118.00
26	LA	1156	A	P-O5'-C5'	6.26	130.92	120.90
26	LA	1224	U	N1-C2-N3	6.26	118.66	114.90
26	LA	1719	G	N3-C4-C5	-6.26	125.47	128.60
26	LA	1765	U	C3'-C2'-C1'	-6.26	96.49	101.50
44	LF	27	LEU	O-C-N	-6.26	112.68	122.70
2	SA	363	A	N9-C4-C5	6.26	108.30	105.80
2	SA	937	A	C2'-C3'-O3'	6.26	123.71	113.70
2	SA	940	C	N1-C2-O2	6.26	122.66	118.90
2	SA	1230	C	P-O3'-C3'	-6.26	112.19	119.70
4	S2	50	G	C8-N9-C4	6.26	108.90	106.40
9	SI	56	MET	O-C-N	-6.26	112.69	122.70
26	LA	117	G	C5'-C4'-O4'	6.26	116.61	109.10
26	LA	390	U	C2'-C3'-O3'	6.26	123.71	113.70
26	LA	2113	U	C5'-C4'-O4'	6.26	116.61	109.10
26	LA	2518	A	N1-C6-N6	6.26	122.36	118.60
26	LA	2756	U	C6-N1-C1'	-6.26	112.44	121.20
2	SA	1302	C	C1'-O4'-C4'	-6.26	104.89	109.90
6	SU	6	ARG	NE-CZ-NH1	6.26	123.43	120.30
26	LA	148	U	N3-C4-C5	6.26	118.35	114.60
26	LA	370	G	N1-C2-N2	-6.26	110.57	116.20
26	LA	546	U	C2-N1-C1'	6.26	125.21	117.70
26	LA	635	C	C2-N3-C4	-6.26	116.77	119.90
26	LA	792	A	C2-N3-C4	-6.26	107.47	110.60
26	LA	1415	U	O5'-P-OP1	-6.26	100.07	105.70
26	LA	1549	A	C4'-C3'-C2'	6.26	108.86	102.60
26	LA	1627	G	C4'-C3'-C2'	-6.26	96.34	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1689	A	O4'-C1'-N9	6.26	113.20	108.20
2	SA	167	A	N1-C2-N3	6.25	132.43	129.30
2	SA	1267	C	C1'-O4'-C4'	-6.25	104.90	109.90
3	S1	23	C	N3-C4-N4	6.25	122.38	118.00
25	LB	50	A	N9-C4-C5	-6.25	103.30	105.80
26	LA	1358	G	C5-C6-N1	6.25	114.63	111.50
26	LA	1728	C	C5-C6-N1	6.25	124.13	121.00
2	SA	55	A	C5'-C4'-C3'	-6.25	106.00	116.00
4	S2	39	A	C2-N3-C4	-6.25	107.47	110.60
4	S2	60	A	C4'-C3'-C2'	-6.25	96.35	102.60
26	LA	124	G	O3'-P-O5'	-6.25	92.12	104.00
26	LA	815	C	P-O5'-C5'	6.25	130.91	120.90
26	LA	958	U	C6-N1-C1'	-6.25	112.44	121.20
26	LA	1175	A	C3'-C2'-C1'	-6.25	96.50	101.50
26	LA	1215	G	C4'-C3'-C2'	-6.25	96.35	102.60
26	LA	1960	A	N7-C8-N9	-6.25	110.67	113.80
26	LA	2143	C	N3-C4-N4	6.25	122.38	118.00
26	LA	2356	U	N1-C2-O2	-6.25	118.42	122.80
26	LA	2396	G	N1-C6-O6	-6.25	116.15	119.90
37	LC	172	HIS	CA-CB-CG	6.25	124.23	113.60
2	SA	334	C	C4-C5-C6	6.25	120.53	117.40
2	SA	1112	C	N3-C4-C5	6.25	124.40	121.90
25	LB	23	G	C5-C6-O6	-6.25	124.85	128.60
26	LA	381	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	802	A	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1050	A	C5-C6-N6	-6.25	118.70	123.70
26	LA	1238	G	C5-C6-N1	6.25	114.63	111.50
26	LA	1542	U	C5-C6-N1	-6.25	119.57	122.70
26	LA	2017	U	C5-C4-O4	-6.25	122.15	125.90
48	LN	42	SER	N-CA-CB	6.25	119.88	110.50
2	SA	517	G	C5'-C4'-C3'	-6.25	106.00	116.00
2	SA	1276	G	N1-C6-O6	6.25	123.65	119.90
2	SA	1391	U	O4'-C4'-C3'	6.25	111.10	106.10
2	SA	1474	U	C2-N1-C1'	-6.25	110.20	117.70
26	LA	386	G	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1099	G	C6-C5-N7	-6.25	126.65	130.40
26	LA	1174	U	O4'-C4'-C3'	-6.25	97.75	104.00
26	LA	1698	A	N3-C4-C5	-6.25	122.42	126.80
2	SA	28	A	C2-N3-C4	6.25	113.72	110.60
2	SA	514	C	C3'-C2'-C1'	6.25	106.50	101.50
2	SA	567	G	O4'-C1'-N9	6.25	113.20	108.20
2	SA	1279	G	C3'-C2'-C1'	6.25	106.50	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	845	A	C5-C6-N1	6.25	120.82	117.70
26	LA	880	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	1634	A	C1'-O4'-C4'	-6.25	104.90	109.90
26	LA	1968	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	2340	A	N9-C4-C5	6.25	108.30	105.80
2	SA	254	G	N3-C2-N2	6.25	124.27	119.90
2	SA	418	C	C5'-C4'-C3'	6.25	126.00	116.00
2	SA	1280	A	O4'-C1'-N9	6.25	113.20	108.20
2	SA	1407	C	N1-C2-N3	6.25	123.57	119.20
2	SA	1437	A	C5-N7-C8	6.25	107.02	103.90
26	LA	2	G	P-O5'-C5'	6.25	130.89	120.90
26	LA	1031	G	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1179	G	C8-N9-C4	-6.25	103.90	106.40
26	LA	1865	U	N3-C2-O2	6.25	126.57	122.20
2	SA	1	A	O4'-C1'-N9	6.25	113.20	108.20
2	SA	521	G	N1-C2-N3	-6.25	120.15	123.90
26	LA	908	C	C4'-C3'-C2'	6.25	108.84	102.60
26	LA	1783	A	N9-C4-C5	-6.25	103.30	105.80
26	LA	2289	G	P-O5'-C5'	6.25	130.89	120.90
2	SA	118	U	C5'-C4'-O4'	6.24	116.59	109.10
2	SA	829	G	C2-N3-C4	-6.24	108.78	111.90
2	SA	1057	G	C5-C6-N1	6.24	114.62	111.50
3	S1	43	U	C6-N1-C1'	-6.24	112.46	121.20
3	S1	48	C	N3-C4-C5	-6.24	119.40	121.90
26	LA	376	G	C2'-C3'-O3'	6.24	123.69	113.70
26	LA	549	G	C5-C6-N1	-6.24	108.38	111.50
26	LA	572	A	C2-N3-C4	6.24	113.72	110.60
26	LA	772	C	N1-C2-O2	-6.24	115.15	118.90
26	LA	1108	U	P-O3'-C3'	6.24	127.19	119.70
26	LA	2032	G	N7-C8-N9	6.24	116.22	113.10
26	LA	2189	U	C6-N1-C2	-6.24	117.25	121.00
26	LA	2578	G	C8-N9-C4	-6.24	103.90	106.40
2	SA	129	A	N1-C2-N3	6.24	132.42	129.30
2	SA	794	A	O4'-C1'-N9	6.24	113.19	108.20
14	SN	10	VAL	CA-CB-CG1	6.24	120.26	110.90
24	S3	139	PHE	CB-CG-CD2	6.24	125.17	120.80
26	LA	976	G	C4-N9-C1'	6.24	134.61	126.50
26	LA	1160	G	C4-C5-N7	-6.24	108.30	110.80
26	LA	1332	G	C8-N9-C1'	-6.24	118.89	127.00
26	LA	1450	G	N3-C4-N9	6.24	129.75	126.00
2	SA	193	C	N1-C2-N3	6.24	123.57	119.20
2	SA	318	G	C5-C6-N1	6.24	114.62	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	339	C	N1-C2-O2	-6.24	115.16	118.90
2	SA	476	U	O4'-C1'-N1	6.24	113.19	108.20
2	SA	1066	C	N1-C2-N3	6.24	123.57	119.20
19	SC	22	PHE	CB-CG-CD2	-6.24	116.43	120.80
24	S3	32	TYR	CB-CG-CD1	-6.24	117.26	121.00
26	LA	429	A	P-O3'-C3'	-6.24	112.21	119.70
26	LA	616	A	C5-C6-N6	-6.24	118.71	123.70
26	LA	863	A	C5-C6-N1	-6.24	114.58	117.70
26	LA	1868	C	C5'-C4'-C3'	-6.24	106.02	116.00
26	LA	2608	G	C5-N7-C8	-6.24	101.18	104.30
55	LQ	89	ASP	CB-CG-OD2	6.24	123.92	118.30
2	SA	206	C	N3-C4-C5	-6.24	119.40	121.90
2	SA	810	C	N1-C2-O2	-6.24	115.16	118.90
2	SA	1412	C	C1'-O4'-C4'	-6.24	104.91	109.90
4	S2	20	G	C5'-C4'-O4'	6.24	116.59	109.10
26	LA	684	G	C5-C6-N1	-6.24	108.38	111.50
26	LA	737	C	P-O3'-C3'	6.24	127.19	119.70
26	LA	948	C	OP1-P-OP2	-6.24	110.24	119.60
26	LA	1481	U	P-O3'-C3'	6.24	127.19	119.70
26	LA	1687	G	C2-N3-C4	-6.24	108.78	111.90
26	LA	1934	C	N1-C2-N3	6.24	123.57	119.20
26	LA	2044	C	O4'-C1'-N1	6.24	113.19	108.20
26	LA	2049	G	C6-N1-C2	-6.24	121.36	125.10
26	LA	2118	U	O5'-C5'-C4'	6.24	123.55	111.70
26	LA	2255	G	C5-C6-N1	6.24	114.62	111.50
26	LA	2508	G	C5-C6-N1	6.24	114.62	111.50
26	LA	2559	C	OP1-P-OP2	-6.24	110.24	119.60
26	LA	2568	U	P-O3'-C3'	-6.24	112.21	119.70
2	SA	407	U	N3-C4-C5	6.24	118.34	114.60
2	SA	835	U	N3-C4-C5	6.24	118.34	114.60
26	LA	67	U	C4-C5-C6	-6.24	115.96	119.70
26	LA	573	U	N3-C4-C5	-6.24	110.86	114.60
26	LA	1736	U	P-O5'-C5'	6.24	130.88	120.90
2	SA	534	U	OP2-P-O3'	6.24	118.92	105.20
2	SA	559	A	C5'-C4'-O4'	6.24	116.58	109.10
2	SA	925	G	N3-C4-N9	-6.24	122.26	126.00
2	SA	1509	C	C4-C5-C6	6.24	120.52	117.40
9	SI	40	ARG	NE-CZ-NH2	-6.24	117.18	120.30
25	LB	46	A	N7-C8-N9	-6.24	110.68	113.80
26	LA	16	C	N3-C2-O2	6.24	126.27	121.90
26	LA	248	G	C4'-C3'-C2'	-6.24	96.36	102.60
26	LA	294	A	C5-C6-N1	-6.24	114.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	616	A	N1-C6-N6	6.24	122.34	118.60
26	LA	623	C	O4'-C1'-N1	6.24	113.19	108.20
26	LA	987	C	OP1-P-OP2	-6.24	110.25	119.60
26	LA	1356	G	C4-N9-C1'	6.24	134.61	126.50
26	LA	1697	G	N3-C4-C5	-6.24	125.48	128.60
26	LA	2271	G	P-O3'-C3'	6.24	127.18	119.70
26	LA	2335	A	N1-C6-N6	-6.24	114.86	118.60
26	LA	2347	C	C4-C5-C6	6.24	120.52	117.40
26	LA	2644	G	N1-C6-O6	6.24	123.64	119.90
26	LA	2791	G	C8-N9-C1'	6.24	135.11	127.00
31	LX	91	PHE	CB-CG-CD1	-6.24	116.44	120.80
2	SA	347	G	C6-N1-C2	-6.23	121.36	125.10
26	LA	1234	U	C5-C4-O4	-6.23	122.16	125.90
26	LA	1365	A	N1-C2-N3	6.23	132.42	129.30
26	LA	1718	G	N9-C4-C5	6.23	107.89	105.40
1	SS	73	PHE	CB-CG-CD2	6.23	125.16	120.80
2	SA	496	A	C6-C5-N7	6.23	136.66	132.30
2	SA	861	G	N7-C8-N9	-6.23	109.98	113.10
2	SA	1041	G	C5-C6-O6	-6.23	124.86	128.60
25	LB	60	C	C5-C4-N4	6.23	124.56	120.20
26	LA	63	A	N3-C4-N9	-6.23	122.42	127.40
26	LA	619	G	C6-C5-N7	-6.23	126.66	130.40
26	LA	628	G	P-O3'-C3'	-6.23	112.22	119.70
26	LA	1089	A	C8-N9-C4	-6.23	103.31	105.80
32	LY	66	VAL	CA-CB-CG1	6.23	120.25	110.90
2	SA	149	A	C5-C6-N6	-6.23	118.72	123.70
2	SA	314	C	O4'-C1'-N1	6.23	113.19	108.20
2	SA	380	G	C5-C6-O6	6.23	132.34	128.60
2	SA	927	G	C8-N9-C4	6.23	108.89	106.40
12	SL	3	VAL	CA-CB-CG1	-6.23	101.55	110.90
26	LA	60	G	C1'-O4'-C4'	-6.23	104.92	109.90
26	LA	598	U	N3-C4-C5	6.23	118.34	114.60
26	LA	1155	A	C5-C6-N1	6.23	120.81	117.70
26	LA	1416	G	C5-C6-N1	6.23	114.62	111.50
26	LA	1950	G	O4'-C1'-N9	6.23	113.19	108.20
26	LA	2212	A	C4-C5-C6	-6.23	113.88	117.00
26	LA	2472	G	C8-N9-C1'	-6.23	118.90	127.00
58	LT	38	VAL	CA-CB-CG2	6.23	120.25	110.90
2	SA	724	G	N1-C2-N2	-6.23	110.59	116.20
2	SA	760	G	C6-C5-N7	6.23	134.14	130.40
2	SA	808	C	C6-N1-C1'	-6.23	113.33	120.80
2	SA	946	A	C5-C6-N1	6.23	120.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1009	U	P-O5'-C5'	-6.23	110.93	120.90
2	SA	1489	G	C5'-C4'-O4'	6.23	116.58	109.10
26	LA	259	G	C3'-C2'-C1'	6.23	106.48	101.50
26	LA	1742	U	N3-C4-C5	-6.23	110.86	114.60
26	LA	2041	U	O4'-C1'-N1	6.23	113.18	108.20
26	LA	2293	G	C1'-O4'-C4'	-6.23	104.92	109.90
2	SA	47	C	C5-C6-N1	-6.23	117.89	121.00
2	SA	104	G	C4-C5-N7	6.23	113.29	110.80
2	SA	839	C	P-O5'-C5'	6.23	130.86	120.90
2	SA	1213	A	C4-C5-N7	-6.23	107.59	110.70
26	LA	413	C	P-O5'-C5'	6.23	130.86	120.90
26	LA	415	A	OP1-P-OP2	-6.23	110.26	119.60
26	LA	595	C	N3-C2-O2	-6.23	117.54	121.90
26	LA	705	A	C5'-C4'-C3'	-6.23	106.04	116.00
26	LA	945	A	C5-C6-N1	6.23	120.81	117.70
26	LA	1088	A	C4-C5-C6	6.23	120.11	117.00
26	LA	1093	G	N7-C8-N9	-6.23	109.99	113.10
26	LA	1376	C	C6-N1-C1'	6.23	128.27	120.80
26	LA	1472	C	N1-C2-O2	-6.23	115.16	118.90
26	LA	1656	C	C4'-C3'-C2'	-6.23	96.37	102.60
26	LA	1965	C	P-O3'-C3'	6.23	127.17	119.70
26	LA	2311	A	P-O3'-C3'	6.23	127.17	119.70
26	LA	2504	U	N1-C2-N3	-6.23	111.16	114.90
26	LA	2816	G	C6-C5-N7	-6.23	126.66	130.40
42	L6	48	MET	CG-SD-CE	-6.23	90.23	100.20
2	SA	658	C	C5-C6-N1	6.23	124.11	121.00
2	SA	1315	U	P-O3'-C3'	6.23	127.17	119.70
2	SA	1358	U	N3-C4-C5	-6.23	110.86	114.60
26	LA	921	C	O4'-C1'-N1	6.23	113.18	108.20
26	LA	1217	U	N1-C2-N3	-6.23	111.16	114.90
26	LA	2050	C	P-O3'-C3'	-6.23	112.23	119.70
26	LA	2487	G	C4-C5-N7	-6.23	108.31	110.80
26	LA	2502	G	C8-N9-C1'	-6.23	118.91	127.00
26	LA	2592	G	O4'-C1'-N9	6.23	113.18	108.20
2	SA	687	A	C8-N9-C4	-6.22	103.31	105.80
2	SA	1429	A	N3-C4-C5	6.22	131.16	126.80
20	SD	53	GLN	N-CA-CB	-6.22	99.40	110.60
26	LA	64	A	P-O3'-C3'	-6.22	112.23	119.70
26	LA	250	G	N3-C4-C5	6.22	131.71	128.60
26	LA	1251	C	C5'-C4'-O4'	6.22	116.57	109.10
26	LA	1527	G	C5-N7-C8	6.22	107.41	104.30
26	LA	1645	G	N3-C4-N9	6.22	129.74	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1805	A	O4'-C1'-N9	6.22	113.18	108.20
26	LA	2057	G	C4-N9-C1'	6.22	134.59	126.50
26	LA	2658	C	C6-N1-C2	-6.22	117.81	120.30
2	SA	112	G	C3'-C2'-C1'	6.22	106.48	101.50
2	SA	357	G	C4-C5-N7	6.22	113.29	110.80
2	SA	447	G	C1'-O4'-C4'	-6.22	104.92	109.90
4	S2	22	A	C2-N3-C4	6.22	113.71	110.60
4	S2	40	C	C5'-C4'-C3'	-6.22	106.04	116.00
25	LB	31	C	P-O5'-C5'	6.22	130.86	120.90
26	LA	1265	A	N7-C8-N9	-6.22	110.69	113.80
26	LA	1416	G	C4-C5-N7	6.22	113.29	110.80
26	LA	1700	A	N1-C6-N6	-6.22	114.87	118.60
26	LA	1766	G	C2-N3-C4	-6.22	108.79	111.90
26	LA	2305	U	C3'-C2'-C1'	6.22	106.48	101.50
26	LA	2774	C	N1-C1'-C2'	-6.22	105.16	112.00
26	LA	752	A	O4'-C1'-N9	6.22	113.18	108.20
26	LA	2290	G	N3-C4-N9	6.22	129.73	126.00
2	SA	506	G	N1-C2-N2	-6.22	110.60	116.20
2	SA	612	C	C4-C5-C6	6.22	120.51	117.40
2	SA	668	G	N9-C4-C5	-6.22	102.91	105.40
2	SA	877	G	C5-C6-N1	-6.22	108.39	111.50
2	SA	1013	G	C5-C6-O6	-6.22	124.87	128.60
2	SA	1245	C	C5-C6-N1	6.22	124.11	121.00
2	SA	1375	A	N1-C6-N6	-6.22	114.87	118.60
2	SA	1406	U	N3-C4-O4	6.22	123.75	119.40
2	SA	1428	A	C5-C6-N1	6.22	120.81	117.70
2	SA	1486	G	C1'-O4'-C4'	-6.22	104.92	109.90
6	SU	44	ARG	NE-CZ-NH1	-6.22	117.19	120.30
25	LB	38	C	C5-C4-N4	-6.22	115.85	120.20
26	LA	1404	C	N1-C2-O2	-6.22	115.17	118.90
26	LA	1867	G	C8-N9-C4	-6.22	103.91	106.40
26	LA	1897	G	N3-C2-N2	-6.22	115.55	119.90
26	LA	1954	G	C5-C6-O6	-6.22	124.87	128.60
26	LA	2075	U	O4'-C1'-N1	6.22	113.18	108.20
26	LA	2209	G	N3-C2-N2	6.22	124.25	119.90
26	LA	2216	G	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	2365	G	P-O3'-C3'	6.22	127.16	119.70
26	LA	2545	G	N1-C6-O6	6.22	123.63	119.90
26	LA	2827	C	C3'-C2'-C1'	6.22	106.48	101.50
26	LA	2851	A	C5'-C4'-C3'	6.22	125.95	116.00
2	SA	1513	A	C6-C5-N7	-6.22	127.95	132.30
26	LA	1001	A	N3-C4-C5	6.22	131.15	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1019	U	C5-C4-O4	-6.22	122.17	125.90
26	LA	1392	A	N1-C2-N3	-6.22	126.19	129.30
26	LA	2391	G	C5-C6-O6	-6.22	124.87	128.60
26	LA	2511	U	C2'-C3'-O3'	6.22	123.65	113.70
26	LA	2770	G	N3-C2-N2	6.22	124.25	119.90
26	LA	2802	G	C1'-O4'-C4'	-6.22	104.93	109.90
41	L5	33	ARG	NE-CZ-NH2	6.22	123.41	120.30
2	SA	538	G	P-O5'-C5'	6.22	130.85	120.90
2	SA	639	G	C8-N9-C1'	6.22	135.08	127.00
2	SA	1022	A	C4-C5-C6	-6.22	113.89	117.00
24	S3	166	VAL	CA-CB-CG2	-6.22	101.58	110.90
26	LA	14	A	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	154	U	C5-C6-N1	6.22	125.81	122.70
26	LA	271	G	C4-C5-N7	6.22	113.29	110.80
26	LA	475	C	C6-N1-C1'	6.22	128.26	120.80
26	LA	748	G	C5-N7-C8	6.22	107.41	104.30
26	LA	975	A	C5'-C4'-C3'	-6.22	106.05	116.00
26	LA	1040	A	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	2119	A	C6-N1-C2	6.22	122.33	118.60
26	LA	2221	G	P-O3'-C3'	-6.22	112.24	119.70
26	LA	2225	A	P-O5'-C5'	6.22	130.84	120.90
52	LO	66	ARG	NE-CZ-NH2	-6.22	117.19	120.30
2	SA	486	U	OP2-P-O3'	6.21	118.87	105.20
2	SA	577	G	C3'-C2'-C1'	6.21	106.47	101.50
2	SA	658	C	C6-N1-C2	-6.21	117.81	120.30
2	SA	918	A	C5-C6-N6	-6.21	118.73	123.70
2	SA	1381	U	C4-C5-C6	-6.21	115.97	119.70
10	SJ	5	ARG	O-C-N	-6.21	112.76	122.70
11	SK	51	PHE	CB-CG-CD2	-6.21	116.45	120.80
25	LB	8	C	C2-N3-C4	-6.21	116.79	119.90
25	LB	103	U	C5-C6-N1	-6.21	119.59	122.70
26	LA	267	C	N1-C2-N3	6.21	123.55	119.20
26	LA	526	A	O4'-C1'-N9	6.21	113.17	108.20
26	LA	789	A	N1-C2-N3	6.21	132.41	129.30
26	LA	1789	A	C5'-C4'-O4'	6.21	116.56	109.10
26	LA	2057	G	C6-N1-C2	-6.21	121.37	125.10
26	LA	2829	A	N1-C6-N6	-6.21	114.87	118.60
2	SA	602	A	C5-C6-N1	6.21	120.81	117.70
2	SA	1061	G	C5-N7-C8	-6.21	101.19	104.30
26	LA	1330	C	P-O5'-C5'	6.21	130.84	120.90
26	LA	1436	G	O3'-P-O5'	6.21	115.81	104.00
26	LA	1626	A	C5-C6-N6	-6.21	118.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	691	G	N9-C1'-C2'	-6.21	105.17	112.00
2	SA	966	G	O4'-C1'-N9	6.21	113.17	108.20
2	SA	1036	A	O4'-C1'-N9	6.21	113.17	108.20
25	LB	118	C	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	37	C	O4'-C1'-N1	6.21	113.17	108.20
26	LA	192	C	C6-N1-C2	6.21	122.78	120.30
26	LA	863	A	C4-C5-C6	6.21	120.11	117.00
26	LA	1338	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1478	G	N7-C8-N9	-6.21	110.00	113.10
26	LA	1630	A	C5-N7-C8	-6.21	100.80	103.90
26	LA	1645	G	O4'-C1'-N9	6.21	113.17	108.20
26	LA	1750	G	N3-C4-C5	-6.21	125.49	128.60
26	LA	1768	C	N3-C2-O2	-6.21	117.55	121.90
26	LA	2736	A	N7-C8-N9	6.21	116.91	113.80
28	LU	22	ASP	O-C-N	-6.21	112.76	122.70
2	SA	521	G	N3-C4-N9	-6.21	122.27	126.00
2	SA	785	G	C5-C6-N1	6.21	114.61	111.50
19	SC	25	THR	CA-CB-CG2	-6.21	103.71	112.40
26	LA	291	G	N1-C2-N3	6.21	127.63	123.90
26	LA	481	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1160	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1746	A	C8-N9-C4	6.21	108.28	105.80
26	LA	2061	G	C8-N9-C4	-6.21	103.92	106.40
26	LA	2166	U	O4'-C1'-N1	6.21	113.17	108.20
2	SA	694	A	N9-C4-C5	6.21	108.28	105.80
2	SA	733	G	N3-C4-C5	-6.21	125.50	128.60
2	SA	738	C	P-O5'-C5'	6.21	130.84	120.90
2	SA	1019	A	C8-N9-C4	6.21	108.28	105.80
25	LB	66	A	C8-N9-C4	-6.21	103.32	105.80
26	LA	836	G	N7-C8-N9	6.21	116.20	113.10
26	LA	1266	G	C4'-C3'-C2'	-6.21	96.39	102.60
26	LA	1939	U	OP1-P-OP2	-6.21	110.29	119.60
26	LA	2086	U	P-O5'-C5'	6.21	130.84	120.90
26	LA	2221	G	N3-C4-C5	6.21	131.71	128.60
26	LA	2543	G	C8-N9-C4	-6.21	103.92	106.40
52	LO	27	SER	CB-CA-C	-6.21	98.30	110.10
2	SA	143	A	C4-N9-C1'	-6.21	115.13	126.30
2	SA	521	G	C5'-C4'-C3'	6.21	125.93	116.00
2	SA	977	A	O4'-C1'-N9	6.21	113.16	108.20
4	S2	38	A	C2-N3-C4	-6.21	107.50	110.60
26	LA	1097	U	OP1-P-OP2	-6.21	110.29	119.60
26	LA	1258	U	C5-C4-O4	-6.21	122.18	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1286	A	P-O3'-C3'	-6.21	112.25	119.70
26	LA	1387	A	N3-C4-C5	6.21	131.14	126.80
26	LA	1678	A	C6-N1-C2	-6.21	114.88	118.60
26	LA	1707	G	C5-C6-O6	6.21	132.32	128.60
26	LA	2679	A	P-O3'-C3'	-6.21	112.25	119.70
26	LA	2859	G	N1-C2-N2	-6.21	110.61	116.20
38	LE	17	GLU	N-CA-C	6.21	127.76	111.00
2	SA	332	G	N1-C2-N2	-6.21	110.62	116.20
2	SA	396	C	C2-N1-C1'	6.21	125.63	118.80
2	SA	991	U	C5'-C4'-O4'	6.21	116.55	109.10
2	SA	1081	A	C4'-C3'-C2'	-6.21	96.39	102.60
26	LA	892	A	C5'-C4'-C3'	6.21	125.93	116.00
27	LD	29	PHE	CG-CD1-CE1	-6.21	113.97	120.80
2	SA	119	A	C5'-C4'-O4'	6.20	116.54	109.10
2	SA	267	C	C5-C4-N4	-6.20	115.86	120.20
2	SA	274	A	C5'-C4'-C3'	6.20	125.93	116.00
2	SA	588	G	C5'-C4'-O4'	6.20	116.55	109.10
2	SA	594	U	C1'-O4'-C4'	6.20	114.86	109.90
2	SA	1388	C	C4'-C3'-C2'	-6.20	96.40	102.60
10	SJ	57	VAL	CB-CA-C	6.20	123.19	111.40
18	SB	43	GLU	OE1-CD-OE2	-6.20	115.86	123.30
24	S3	92	VAL	C-N-CA	6.20	137.21	121.70
26	LA	20	C	O4'-C4'-C3'	-6.20	97.80	104.00
26	LA	431	U	C6-N1-C2	-6.20	117.28	121.00
26	LA	448	U	C5-C4-O4	-6.20	122.18	125.90
26	LA	561	G	C6-N1-C2	-6.20	121.38	125.10
26	LA	667	U	O4'-C1'-N1	6.20	113.16	108.20
26	LA	1019	U	P-O5'-C5'	6.20	130.83	120.90
26	LA	1124	G	N3-C4-C5	-6.20	125.50	128.60
26	LA	1503	A	C6-N1-C2	-6.20	114.88	118.60
26	LA	1660	G	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	1748	C	N3-C4-N4	6.20	122.34	118.00
26	LA	2343	U	C5'-C4'-O4'	6.20	116.54	109.10
2	SA	382	A	O4'-C1'-N9	6.20	113.16	108.20
2	SA	1402	C	C5-C4-N4	-6.20	115.86	120.20
20	SD	168	THR	CA-CB-CG2	-6.20	103.72	112.40
26	LA	1746	A	C5-C6-N1	6.20	120.80	117.70
26	LA	2494	G	C8-N9-C4	-6.20	103.92	106.40
26	LA	2808	G	N1-C6-O6	6.20	123.62	119.90
2	SA	56	U	O4'-C1'-N1	6.20	113.16	108.20
2	SA	206	C	N3-C2-O2	-6.20	117.56	121.90
2	SA	567	G	N3-C2-N2	6.20	124.24	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	811	C	C2-N1-C1'	6.20	125.62	118.80
2	SA	971	G	N9-C4-C5	-6.20	102.92	105.40
2	SA	1042	A	C8-N9-C4	-6.20	103.32	105.80
5	ST	51	ASN	CB-CA-C	-6.20	98.00	110.40
25	LB	21	G	N9-C4-C5	-6.20	102.92	105.40
26	LA	1	G	N3-C2-N2	6.20	124.24	119.90
26	LA	646	U	C3'-C2'-C1'	6.20	106.46	101.50
26	LA	926	G	C5-C6-N1	6.20	114.60	111.50
26	LA	945	A	O4'-C1'-N9	-6.20	103.24	108.20
26	LA	989	G	N3-C2-N2	6.20	124.24	119.90
26	LA	1385	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	1445	G	C5-C6-N1	6.20	114.60	111.50
26	LA	1623	G	O4'-C1'-N9	6.20	113.16	108.20
26	LA	1734	G	C4'-C3'-C2'	-6.20	96.40	102.60
26	LA	1795	C	C6-N1-C1'	6.20	128.24	120.80
26	LA	1957	C	N3-C4-C5	6.20	124.38	121.90
26	LA	2053	G	C5'-C4'-C3'	-6.20	106.08	116.00
26	LA	2168	G	N9-C4-C5	-6.20	102.92	105.40
26	LA	2207	C	N3-C4-N4	6.20	122.34	118.00
2	SA	504	C	C6-N1-C2	-6.20	117.82	120.30
2	SA	721	G	C8-N9-C4	-6.20	103.92	106.40
25	LB	33	G	N3-C4-N9	-6.20	122.28	126.00
26	LA	177	G	O4'-C1'-N9	6.20	113.16	108.20
26	LA	580	U	C2-N3-C4	-6.20	123.28	127.00
26	LA	610	C	OP1-P-OP2	-6.20	110.30	119.60
26	LA	2148	G	N9-C1'-C2'	-6.20	105.18	112.00
26	LA	2226	C	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	2730	C	C6-N1-C2	-6.20	117.82	120.30
2	SA	61	G	C5'-C4'-C3'	6.20	125.92	116.00
2	SA	1377	A	O3'-P-O5'	-6.20	92.22	104.00
13	SM	97	ARG	CG-CD-NE	-6.20	98.79	111.80
26	LA	428	A	C5-N7-C8	-6.20	100.80	103.90
26	LA	823	C	O4'-C1'-N1	6.20	113.16	108.20
26	LA	2288	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	2679	A	O4'-C1'-C2'	6.20	113.18	107.60
2	SA	80	A	N1-C2-N3	-6.20	126.20	129.30
2	SA	230	G	C4-C5-N7	-6.20	108.32	110.80
2	SA	420	U	N3-C2-O2	6.20	126.54	122.20
3	S1	42	U	N1-C2-N3	-6.20	111.18	114.90
25	LB	44	G	C5'-C4'-O4'	6.20	116.53	109.10
26	LA	85	G	C5-C6-O6	6.20	132.32	128.60
26	LA	282	A	P-O5'-C5'	-6.20	110.99	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	310	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	432	A	C3'-C2'-C1'	-6.20	96.54	101.50
26	LA	517	C	C5'-C4'-C3'	-6.20	106.09	116.00
26	LA	573	U	C5'-C4'-O4'	6.20	116.53	109.10
26	LA	730	A	C2-N3-C4	6.20	113.70	110.60
26	LA	978	G	N3-C2-N2	6.20	124.24	119.90
26	LA	984	A	C6-N1-C2	-6.20	114.88	118.60
26	LA	1151	A	C4'-C3'-C2'	-6.20	96.41	102.60
26	LA	1250	G	N7-C8-N9	6.20	116.20	113.10
26	LA	1691	C	C2-N3-C4	-6.20	116.80	119.90
26	LA	1713	A	N9-C1'-C2'	-6.20	105.19	112.00
26	LA	2054	A	N7-C8-N9	6.20	116.90	113.80
57	LS	3	VAL	CG1-CB-CG2	-6.20	100.99	110.90
2	SA	62	U	C6-N1-C2	-6.19	117.28	121.00
2	SA	131	A	C4'-C3'-C2'	-6.19	96.41	102.60
2	SA	131	A	N9-C4-C5	6.19	108.28	105.80
2	SA	975	A	C2-N3-C4	-6.19	107.50	110.60
26	LA	605	G	C3'-C2'-C1'	-6.19	96.55	101.50
26	LA	659	G	C5-C6-O6	6.19	132.32	128.60
58	LT	83	TYR	CB-CG-CD2	6.19	124.72	121.00
2	SA	170	U	P-O3'-C3'	-6.19	112.27	119.70
2	SA	178	C	C4'-C3'-C2'	-6.19	96.41	102.60
2	SA	1487	G	O5'-P-OP2	6.19	118.13	110.70
3	S1	54	U	N1-C2-N3	6.19	118.62	114.90
26	LA	653	U	O4'-C1'-C2'	6.19	113.17	107.60
26	LA	703	U	O4'-C1'-N1	6.19	113.15	108.20
26	LA	748	G	C2-N3-C4	6.19	115.00	111.90
26	LA	1107	G	O5'-P-OP2	6.19	118.13	110.70
26	LA	1695	G	C6-C5-N7	-6.19	126.68	130.40
26	LA	2379	G	P-O3'-C3'	6.19	127.13	119.70
26	LA	2465	C	O4'-C1'-C2'	6.19	113.17	107.60
26	LA	2541	A	C5'-C4'-O4'	6.19	116.53	109.10
30	LW	93	ARG	NH1-CZ-NH2	-6.19	112.59	119.40
48	LN	81	ASP	C-N-CA	6.19	137.18	121.70
2	SA	110	C	C5-C4-N4	-6.19	115.87	120.20
2	SA	1101	A	N7-C8-N9	-6.19	110.70	113.80
3	S1	55	A	C8-N9-C4	-6.19	103.32	105.80
25	LB	111	U	N1-C2-N3	-6.19	111.19	114.90
26	LA	195	A	C4-C5-C6	-6.19	113.91	117.00
26	LA	444	C	P-O5'-C5'	-6.19	110.99	120.90
26	LA	910	A	C3'-C2'-C1'	6.19	106.45	101.50
26	LA	1334	G	N1-C2-N3	-6.19	120.19	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1794	A	N3-C4-C5	6.19	131.13	126.80
26	LA	1845	G	C5'-C4'-C3'	6.19	125.91	116.00
26	LA	2125	G	C2-N3-C4	-6.19	108.80	111.90
26	LA	2669	G	C5'-C4'-O4'	-6.19	101.67	109.10
26	LA	2686	G	C5-N7-C8	-6.19	101.20	104.30
26	LA	2720	U	C2-N3-C4	-6.19	123.28	127.00
2	SA	575	G	C4-C5-N7	-6.19	108.32	110.80
2	SA	829	G	C1'-O4'-C4'	-6.19	104.95	109.90
3	S1	32	U	P-O3'-C3'	6.19	127.13	119.70
26	LA	818	G	O5'-P-OP2	6.19	118.13	110.70
26	LA	1026	G	O3'-P-O5'	-6.19	92.24	104.00
26	LA	1935	G	N3-C4-C5	6.19	131.69	128.60
26	LA	2458	G	C4-C5-C6	6.19	122.51	118.80
26	LA	2662	A	C5-N7-C8	-6.19	100.81	103.90
2	SA	363	A	N1-C2-N3	6.19	132.39	129.30
2	SA	441	A	N3-C4-C5	-6.19	122.47	126.80
2	SA	517	G	C5'-C4'-O4'	6.19	116.53	109.10
2	SA	1205	U	O4'-C4'-C3'	6.19	111.05	106.10
4	S2	20	G	N3-C4-N9	6.19	129.71	126.00
4	S2	36	A	C1'-O4'-C4'	6.19	114.85	109.90
10	SJ	16	ARG	CD-NE-CZ	6.19	132.26	123.60
25	LB	44	G	C5-N7-C8	6.19	107.39	104.30
26	LA	976	G	O4'-C1'-N9	6.19	113.15	108.20
26	LA	1266	G	C2'-C3'-O3'	6.19	123.60	113.70
26	LA	1975	G	N3-C4-C5	6.19	131.69	128.60
26	LA	2114	A	O5'-P-OP2	6.19	118.12	110.70
26	LA	2598	A	N9-C4-C5	-6.19	103.33	105.80
2	SA	1047	G	O4'-C1'-N9	6.19	113.15	108.20
26	LA	227	A	C2-N3-C4	6.19	113.69	110.60
26	LA	790	U	N3-C2-O2	-6.19	117.87	122.20
26	LA	1075	C	C6-N1-C2	-6.19	117.83	120.30
26	LA	1393	A	C3'-C2'-C1'	6.19	106.45	101.50
26	LA	2834	G	C8-N9-C4	-6.19	103.92	106.40
1	SS	6	LYS	O-C-N	-6.18	112.69	123.20
2	SA	347	G	N1-C2-N2	-6.18	110.64	116.20
2	SA	929	G	C5-C6-N1	6.18	114.59	111.50
2	SA	943	U	C5-C6-N1	6.18	125.79	122.70
2	SA	1026	G	C8-N9-C4	-6.18	103.93	106.40
2	SA	1279	G	N3-C4-C5	6.18	131.69	128.60
2	SA	1452	C	N3-C4-C5	-6.18	119.43	121.90
13	SM	10	ASP	CB-CG-OD1	6.18	123.87	118.30
26	LA	463	G	N1-C2-N2	-6.18	110.63	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	854	C	P-O5'-C5'	-6.18	111.00	120.90
26	LA	1147	A	P-O3'-C3'	6.18	127.12	119.70
26	LA	1215	G	OP1-P-OP2	-6.18	110.32	119.60
26	LA	1467	U	O4'-C1'-N1	6.18	113.15	108.20
26	LA	2360	G	C2-N3-C4	-6.18	108.81	111.90
26	LA	2552	U	P-O5'-C5'	-6.18	111.00	120.90
26	LA	2717	C	N1-C2-O2	-6.18	115.19	118.90
26	LA	2836	U	N1-C1'-C2'	-6.18	105.20	112.00
29	LV	29	THR	CA-CB-CG2	6.18	121.06	112.40
1	SS	6	LYS	CA-C-O	6.18	133.08	120.10
2	SA	185	U	C5-C4-O4	6.18	129.61	125.90
2	SA	537	G	P-O5'-C5'	6.18	130.79	120.90
2	SA	1076	U	O4'-C1'-C2'	6.18	113.17	107.60
26	LA	376	G	C6-N1-C2	-6.18	121.39	125.10
26	LA	566	U	C5'-C4'-O4'	-6.18	101.68	109.10
26	LA	1264	A	C2-N3-C4	-6.18	107.51	110.60
26	LA	1494	A	C6-N1-C2	-6.18	114.89	118.60
26	LA	1634	A	N1-C2-N3	6.18	132.39	129.30
26	LA	1721	G	C5'-C4'-C3'	-6.18	106.11	116.00
26	LA	1886	U	N1-C2-N3	6.18	118.61	114.90
26	LA	2459	A	C1'-O4'-C4'	-6.18	104.95	109.90
35	L1	54	VAL	CB-CA-C	-6.18	99.65	111.40
2	SA	440	C	C5-C6-N1	-6.18	117.91	121.00
2	SA	541	G	C5'-C4'-O4'	6.18	116.52	109.10
2	SA	663	A	P-O3'-C3'	-6.18	112.28	119.70
2	SA	781	A	C8-N9-C4	-6.18	103.33	105.80
26	LA	111	A	N1-C6-N6	6.18	122.31	118.60
26	LA	2120	G	C8-N9-C4	6.18	108.87	106.40
26	LA	2376	A	O4'-C1'-N9	6.18	113.14	108.20
26	LA	2615	U	N3-C4-C5	-6.18	110.89	114.60
2	SA	187	G	C5-N7-C8	-6.18	101.21	104.30
2	SA	360	G	C4'-C3'-C2'	-6.18	96.42	102.60
2	SA	693	G	C5-C6-O6	-6.18	124.89	128.60
2	SA	828	U	C1'-O4'-C4'	-6.18	104.96	109.90
2	SA	1060	U	C6-N1-C1'	6.18	129.85	121.20
2	SA	1102	A	C6-N1-C2	6.18	122.31	118.60
2	SA	1125	U	C5'-C4'-O4'	6.18	116.52	109.10
2	SA	1156	G	C6-N1-C2	6.18	128.81	125.10
2	SA	1166	G	N9-C4-C5	-6.18	102.93	105.40
2	SA	1298	U	P-O5'-C5'	6.18	130.79	120.90
2	SA	1426	G	C5-C6-O6	-6.18	124.89	128.60
17	SQ	69	THR	N-CA-CB	6.18	122.04	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	SF	86	ARG	NE-CZ-NH1	-6.18	117.21	120.30
26	LA	98	G	P-O3'-C3'	6.18	127.12	119.70
26	LA	336	C	N3-C4-C5	6.18	124.37	121.90
26	LA	410	G	N7-C8-N9	-6.18	110.01	113.10
26	LA	630	G	C4'-C3'-C2'	-6.18	96.42	102.60
26	LA	812	C	C4'-C3'-C2'	-6.18	96.42	102.60
26	LA	977	G	N3-C2-N2	6.18	124.23	119.90
26	LA	1186	G	C6-N1-C2	6.18	128.81	125.10
26	LA	1292	G	C4-C5-N7	6.18	113.27	110.80
26	LA	1426	G	C4-C5-N7	-6.18	108.33	110.80
26	LA	1494	A	C5-C6-N1	6.18	120.79	117.70
26	LA	1530	G	C4-C5-N7	6.18	113.27	110.80
26	LA	2669	G	C2-N3-C4	6.18	114.99	111.90
26	LA	2753	A	N3-C4-C5	6.18	131.13	126.80
26	LA	2771	C	C4-C5-C6	-6.18	114.31	117.40
37	LC	179	ASP	CB-CG-OD1	6.18	123.86	118.30
2	SA	1424	U	C6-N1-C2	6.18	124.71	121.00
16	SP	2	VAL	CA-CB-CG2	-6.18	101.63	110.90
23	SR	37	LYS	N-CA-CB	6.18	121.72	110.60
26	LA	498	G	C5-C6-N1	6.18	114.59	111.50
26	LA	850	U	N3-C2-O2	6.18	126.52	122.20
26	LA	1792	G	C1'-O4'-C4'	6.18	114.84	109.90
26	LA	2235	G	C3'-C2'-C1'	-6.18	96.56	101.50
26	LA	2451	A	N3-C4-N9	-6.18	122.46	127.40
2	SA	1286	U	C2'-C3'-O3'	6.18	123.58	113.70
4	S2	21	U	C2'-C3'-O3'	6.18	123.58	113.70
25	LB	24	G	C5'-C4'-O4'	6.18	116.51	109.10
25	LB	75	G	P-O5'-C5'	6.18	130.78	120.90
26	LA	50	U	C6-N1-C1'	-6.18	112.55	121.20
26	LA	110	G	C1'-O4'-C4'	-6.18	104.96	109.90
26	LA	111	A	C5-N7-C8	6.18	106.99	103.90
26	LA	384	A	C8-N9-C4	-6.18	103.33	105.80
26	LA	1458	U	C1'-O4'-C4'	-6.18	104.96	109.90
26	LA	2063	C	C5'-C4'-O4'	6.18	116.51	109.10
26	LA	2406	A	P-O3'-C3'	6.18	127.11	119.70
26	LA	2578	G	O4'-C1'-N9	6.18	113.14	108.20
27	LD	47	ARG	NE-CZ-NH2	-6.18	117.21	120.30
2	SA	98	A	N7-C8-N9	-6.17	110.71	113.80
2	SA	566	G	N1-C6-O6	6.17	123.60	119.90
2	SA	622	A	P-O3'-C3'	6.17	127.11	119.70
2	SA	1357	A	C8-N9-C4	-6.17	103.33	105.80
25	LB	23	G	N3-C2-N2	6.17	124.22	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	219	A	C1'-O4'-C4'	-6.17	104.96	109.90
26	LA	367	G	N9-C4-C5	6.17	107.87	105.40
26	LA	533	G	C2-N3-C4	6.17	114.99	111.90
26	LA	627	A	C1'-O4'-C4'	-6.17	104.96	109.90
26	LA	660	C	O4'-C1'-N1	6.17	113.14	108.20
26	LA	912	C	N3-C4-N4	-6.17	113.68	118.00
26	LA	1405	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	1465	G	C8-N9-C4	6.17	108.87	106.40
26	LA	1659	G	N9-C4-C5	6.17	107.87	105.40
26	LA	2222	C	P-O3'-C3'	-6.17	112.29	119.70
26	LA	2287	A	N9-C4-C5	-6.17	103.33	105.80
26	LA	2438	U	C3'-C2'-C1'	6.17	106.44	101.50
2	SA	597	G	C3'-C2'-C1'	-6.17	96.56	101.50
2	SA	1162	C	C2-N3-C4	-6.17	116.81	119.90
2	SA	1254	A	P-O3'-C3'	6.17	127.11	119.70
26	LA	973	A	C5'-C4'-C3'	-6.17	106.12	116.00
26	LA	1129	A	C5'-C4'-C3'	-6.17	106.12	116.00
26	LA	1141	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	1744	A	O4'-C1'-N9	6.17	113.14	108.20
26	LA	1779	U	N3-C2-O2	6.17	126.52	122.20
28	LU	6	LYS	N-CA-CB	6.17	121.71	110.60
2	SA	423	G	C4'-C3'-C2'	-6.17	96.43	102.60
3	S1	37	G	C4'-C3'-C2'	-6.17	96.43	102.60
25	LB	97	C	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	1245	G	P-O5'-C5'	-6.17	111.03	120.90
26	LA	2043	C	O4'-C1'-N1	6.17	113.14	108.20
26	LA	2121	G	C6-C5-N7	-6.17	126.70	130.40
26	LA	2302	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	2816	G	C4-C5-N7	6.17	113.27	110.80
30	LW	84	PHE	CB-CG-CD1	-6.17	116.48	120.80
46	LH	156	TYR	CD1-CE1-CZ	-6.17	114.25	119.80
2	SA	744	C	N3-C4-C5	6.17	124.37	121.90
2	SA	922	G	C5-N7-C8	-6.17	101.22	104.30
26	LA	817	C	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	983	A	C6-C5-N7	-6.17	127.98	132.30
26	LA	1343	G	C4-C5-N7	6.17	113.27	110.80
26	LA	2038	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	2127	G	N9-C4-C5	-6.17	102.93	105.40
2	SA	255	G	N1-C6-O6	6.17	123.60	119.90
2	SA	451	A	N3-C4-C5	6.17	131.12	126.80
2	SA	937	A	C4-C5-N7	-6.17	107.62	110.70
2	SA	960	U	C5'-C4'-C3'	6.17	125.87	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	988	G	C5'-C4'-O4'	6.17	116.50	109.10
2	SA	1519	A	C2-N3-C4	-6.17	107.52	110.60
4	S2	59	A	O5'-C5'-C4'	6.17	123.42	111.70
26	LA	77	G	C5-C6-N1	6.17	114.58	111.50
26	LA	626	A	C1'-O4'-C4'	-6.17	104.97	109.90
26	LA	1087	G	N1-C6-O6	6.17	123.60	119.90
26	LA	1140	C	N3-C4-N4	-6.17	113.68	118.00
26	LA	1299	G	C8-N9-C1'	6.17	135.02	127.00
26	LA	1499	C	C5'-C4'-C3'	-6.17	106.13	116.00
26	LA	2035	G	P-O5'-C5'	-6.17	111.03	120.90
26	LA	2186	G	N3-C4-C5	-6.17	125.52	128.60
26	LA	2223	G	C8-N9-C4	-6.17	103.93	106.40
26	LA	2422	C	N1-C2-N3	6.17	123.52	119.20
26	LA	2737	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	2823	A	C5-C6-N1	6.17	120.78	117.70
2	SA	260	G	C6-N1-C2	-6.17	121.40	125.10
2	SA	990	C	N1-C2-N3	6.17	123.52	119.20
2	SA	1037	C	C6-N1-C2	-6.17	117.83	120.30
2	SA	1094	G	C5-N7-C8	-6.17	101.22	104.30
2	SA	1338	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	19	A	C5-C6-N6	-6.17	118.77	123.70
26	LA	70	G	N3-C4-C5	6.17	131.68	128.60
26	LA	589	U	C5-C4-O4	6.17	129.60	125.90
26	LA	1077	A	O4'-C4'-C3'	-6.17	97.83	104.00
26	LA	1599	U	C6-N1-C2	-6.17	117.30	121.00
26	LA	2136	G	N9-C1'-C2'	-6.17	105.22	112.00
2	SA	855	U	C6-N1-C2	6.17	124.70	121.00
3	S1	40	G	C5'-C4'-O4'	6.17	116.50	109.10
21	SE	67	ARG	NE-CZ-NH1	6.17	123.38	120.30
26	LA	1688	U	P-O5'-C5'	6.17	130.76	120.90
26	LA	2335	A	C8-N9-C4	6.17	108.27	105.80
26	LA	2360	G	C8-N9-C4	-6.17	103.93	106.40
38	LE	82	PHE	CB-CA-C	-6.17	98.07	110.40
2	SA	38	G	N9-C4-C5	6.16	107.87	105.40
2	SA	506	G	N1-C6-O6	6.16	123.60	119.90
2	SA	774	G	OP1-P-OP2	-6.16	110.36	119.60
2	SA	1004	A	C5'-C4'-C3'	-6.16	106.14	116.00
2	SA	1189	U	C3'-C2'-C1'	6.16	106.43	101.50
2	SA	1199	U	C3'-C2'-C1'	6.16	106.43	101.50
26	LA	181	A	N1-C6-N6	6.16	122.30	118.60
26	LA	545	U	N3-C2-O2	-6.16	117.89	122.20
26	LA	763	G	C6-C5-N7	-6.16	126.70	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	812	C	P-O3'-C3'	-6.16	112.30	119.70
26	LA	1561	C	N3-C4-C5	6.16	124.36	121.90
26	LA	2230	G	N9-C1'-C2'	6.16	122.01	114.00
26	LA	2546	U	N1-C2-O2	-6.16	118.49	122.80
26	LA	2867	G	O4'-C1'-N9	6.16	113.13	108.20
2	SA	389	A	C5-C6-N6	6.16	128.63	123.70
2	SA	847	G	C4-C5-C6	6.16	122.50	118.80
2	SA	1138	G	P-O3'-C3'	6.16	127.09	119.70
26	LA	295	G	C5-C6-N1	6.16	114.58	111.50
26	LA	816	C	C3'-C2'-C1'	-6.16	96.57	101.50
26	LA	827	U	N1-C1'-C2'	6.16	122.01	114.00
26	LA	1280	G	C5'-C4'-O4'	6.16	116.49	109.10
26	LA	2102	G	C4'-C3'-C2'	-6.16	96.44	102.60
58	LT	13	ARG	CD-NE-CZ	-6.16	114.97	123.60
2	SA	7	A	N7-C8-N9	6.16	116.88	113.80
2	SA	192	A	C6-C5-N7	-6.16	127.99	132.30
2	SA	747	A	C5-N7-C8	-6.16	100.82	103.90
2	SA	960	U	C4'-C3'-C2'	6.16	108.76	102.60
2	SA	1077	G	C5-N7-C8	6.16	107.38	104.30
2	SA	1221	G	C4-N9-C1'	-6.16	118.49	126.50
4	S2	49	C	N3-C4-N4	6.16	122.31	118.00
25	LB	19	C	C5-C6-N1	-6.16	117.92	121.00
25	LB	63	C	C1'-O4'-C4'	-6.16	104.97	109.90
26	LA	134	G	C5-C6-O6	6.16	132.30	128.60
26	LA	1391	U	C5-C4-O4	6.16	129.60	125.90
26	LA	1733	G	P-O3'-C3'	6.16	127.09	119.70
26	LA	2168	G	P-O5'-C5'	-6.16	111.04	120.90
26	LA	2721	A	N3-C4-C5	6.16	131.11	126.80
26	LA	2858	C	N3-C4-N4	6.16	122.31	118.00
2	SA	603	U	N3-C4-C5	-6.16	110.91	114.60
2	SA	895	G	O3'-P-O5'	-6.16	92.30	104.00
2	SA	935	A	C2-N3-C4	6.16	113.68	110.60
2	SA	1041	G	C5-C6-N1	6.16	114.58	111.50
3	S1	20	G	C5-C6-N1	6.16	114.58	111.50
26	LA	675	A	O4'-C1'-C2'	6.16	113.14	107.60
26	LA	955	U	C5-C4-O4	6.16	129.60	125.90
26	LA	1812	U	N3-C4-C5	-6.16	110.91	114.60
26	LA	2219	U	C3'-C2'-C1'	6.16	106.43	101.50
26	LA	2668	G	O4'-C1'-N9	6.16	113.13	108.20
2	SA	237	G	C4-C5-C6	6.16	122.49	118.80
2	SA	301	G	N7-C8-N9	6.16	116.18	113.10
2	SA	971	G	C3'-C2'-C1'	-6.16	96.58	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SK	104	PHE	CZ-CE2-CD2	-6.16	112.71	120.10
24	S3	139	PHE	CB-CG-CD1	-6.16	116.49	120.80
26	LA	24	G	P-O5'-C5'	-6.16	111.05	120.90
26	LA	198	C	C6-N1-C2	-6.16	117.84	120.30
26	LA	955	U	P-O3'-C3'	6.16	127.09	119.70
26	LA	1011	G	N3-C4-N9	-6.16	122.31	126.00
26	LA	1558	C	C6-N1-C1'	-6.16	113.41	120.80
26	LA	1663	G	O3'-P-O5'	-6.16	92.30	104.00
26	LA	2170	A	C2-N3-C4	-6.16	107.52	110.60
1	SS	77	ARG	NE-CZ-NH2	6.16	123.38	120.30
2	SA	73	C	N1-C2-N3	6.16	123.51	119.20
2	SA	687	A	N3-C4-C5	-6.16	122.49	126.80
2	SA	700	G	C1'-O4'-C4'	-6.16	104.98	109.90
2	SA	876	C	C5-C4-N4	-6.16	115.89	120.20
2	SA	972	C	N3-C4-C5	-6.16	119.44	121.90
2	SA	1500	A	C1'-O4'-C4'	-6.16	104.98	109.90
20	SD	110	ARG	NE-CZ-NH2	6.16	123.38	120.30
26	LA	187	G	C2-N3-C4	-6.16	108.82	111.90
26	LA	761	A	P-O3'-C3'	6.16	127.09	119.70
26	LA	836	G	C5'-C4'-O4'	6.16	116.49	109.10
26	LA	855	G	C4'-C3'-C2'	-6.16	96.44	102.60
26	LA	908	C	O4'-C1'-C2'	6.16	113.14	107.60
26	LA	1420	A	C3'-C2'-C1'	6.16	106.42	101.50
26	LA	1754	A	N3-C4-C5	-6.16	122.49	126.80
26	LA	1836	C	C2-N3-C4	-6.16	116.82	119.90
26	LA	1955	U	N3-C2-O2	-6.16	117.89	122.20
26	LA	2129	C	C5-C6-N1	6.16	124.08	121.00
26	LA	2451	A	OP2-P-O3'	6.16	118.74	105.20
26	LA	2685	G	C4-N9-C1'	6.16	134.50	126.50
2	SA	423	G	N9-C1'-C2'	-6.15	105.23	112.00
2	SA	749	A	C5-N7-C8	-6.15	100.82	103.90
3	S1	26	U	C1'-O4'-C4'	-6.15	104.98	109.90
13	SM	100	ARG	NE-CZ-NH1	6.15	123.38	120.30
2	SA	917	G	C5-N7-C8	6.15	107.38	104.30
26	LA	298	G	N1-C2-N2	-6.15	110.66	116.20
26	LA	1803	A	C5-C6-N6	-6.15	118.78	123.70
26	LA	2164	C	C6-N1-C2	-6.15	117.84	120.30
26	LA	2521	C	N3-C4-C5	6.15	124.36	121.90
2	SA	614	C	N3-C2-O2	-6.15	117.59	121.90
26	LA	26	G	C5-N7-C8	6.15	107.38	104.30
26	LA	571	U	C5-C4-O4	6.15	129.59	125.90
26	LA	1103	A	C4-N9-C1'	6.15	137.37	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1993	U	C4-C5-C6	-6.15	116.01	119.70
26	LA	2148	G	O4'-C4'-C3'	-6.15	97.85	104.00
26	LA	2230	G	N1-C2-N2	-6.15	110.67	116.20
50	LL	21	THR	OG1-CB-CG2	-6.15	95.85	110.00
53	LP	71	ARG	NE-CZ-NH2	-6.15	117.22	120.30
2	SA	987	G	C5-N7-C8	-6.15	101.22	104.30
26	LA	1143	A	N3-C4-N9	6.15	132.32	127.40
26	LA	2285	C	C2-N3-C4	6.15	122.97	119.90
26	LA	2806	C	C5-C6-N1	-6.15	117.93	121.00
2	SA	108	G	N1-C6-O6	6.15	123.59	119.90
2	SA	186	C	C5-C4-N4	6.15	124.50	120.20
2	SA	237	G	C4-N9-C1'	-6.15	118.51	126.50
2	SA	1181	G	C1'-O4'-C4'	-6.15	104.98	109.90
24	S3	514	TYR	CA-CB-CG	6.15	125.08	113.40
26	LA	718	A	O4'-C1'-N9	6.15	113.12	108.20
26	LA	1860	G	OP1-P-OP2	-6.15	110.38	119.60
26	LA	2008	C	C4-C5-C6	6.15	120.47	117.40
26	LA	2102	G	N3-C2-N2	6.15	124.20	119.90
26	LA	2379	G	O4'-C1'-N9	6.15	113.12	108.20
26	LA	2625	G	O4'-C1'-N9	6.15	113.12	108.20
45	LG	143	ASP	CB-CG-OD1	-6.15	112.77	118.30
24	S3	604	PHE	CB-CG-CD1	6.15	125.10	120.80
26	LA	323	C	P-O3'-C3'	-6.15	112.33	119.70
26	LA	541	A	O4'-C1'-N9	6.15	113.12	108.20
26	LA	1342	A	N7-C8-N9	-6.15	110.73	113.80
26	LA	1417	C	N3-C4-N4	6.15	122.30	118.00
26	LA	2135	A	N1-C2-N3	-6.15	126.23	129.30
26	LA	2772	C	C6-N1-C2	-6.15	117.84	120.30
29	LV	95	PHE	CB-CG-CD2	-6.15	116.50	120.80
50	LL	141	ASP	CB-CG-OD2	6.15	123.83	118.30
2	SA	1228	C	OP1-P-OP2	-6.14	110.38	119.60
4	S2	14	A	C8-N9-C4	-6.14	103.34	105.80
26	LA	630	G	N1-C6-O6	6.14	123.59	119.90
26	LA	938	G	N9-C4-C5	6.14	107.86	105.40
26	LA	1190	G	C4-C5-N7	-6.14	108.34	110.80
26	LA	1833	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1869	G	OP2-P-O3'	6.14	118.72	105.20
2	SA	90	C	O4'-C1'-N1	6.14	113.11	108.20
2	SA	427	U	C1'-O4'-C4'	6.14	114.81	109.90
2	SA	430	A	N3-C4-N9	-6.14	122.49	127.40
2	SA	564	C	C4'-C3'-C2'	6.14	108.74	102.60
2	SA	691	G	P-O5'-C5'	6.14	130.73	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	706	A	C5'-C4'-O4'	6.14	116.47	109.10
2	SA	721	G	C6-N1-C2	-6.14	121.41	125.10
2	SA	1131	G	N9-C4-C5	6.14	107.86	105.40
2	SA	1187	G	O4'-C1'-N9	6.14	113.11	108.20
2	SA	1364	U	N3-C4-O4	6.14	123.70	119.40
3	S1	55	A	O4'-C1'-N9	6.14	113.11	108.20
26	LA	864	G	N3-C4-C5	6.14	131.67	128.60
26	LA	865	C	C2-N1-C1'	6.14	125.56	118.80
26	LA	994	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1040	A	P-O3'-C3'	-6.14	112.33	119.70
26	LA	1086	A	N1-C6-N6	-6.14	114.92	118.60
26	LA	1096	A	C5-C6-N6	-6.14	118.79	123.70
26	LA	1349	C	C5-C4-N4	-6.14	115.90	120.20
26	LA	1412	U	O4'-C4'-C3'	-6.14	97.86	104.00
26	LA	1528	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	1694	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1898	U	O3'-P-O5'	-6.14	92.33	104.00
26	LA	2172	U	P-O5'-C5'	6.14	130.73	120.90
26	LA	2542	A	C8-N9-C4	-6.14	103.34	105.80
26	LA	2681	C	C6-N1-C1'	-6.14	113.43	120.80
2	SA	75	G	C5-C6-N1	-6.14	108.43	111.50
12	SL	22	ALA	C-N-CA	6.14	137.05	121.70
26	LA	473	G	C5-C6-N1	6.14	114.57	111.50
26	LA	1833	C	O4'-C4'-C3'	6.14	111.01	106.10
26	LA	2460	U	N3-C4-C5	-6.14	110.92	114.60
9	SI	118	ARG	CD-NE-CZ	6.14	132.19	123.60
12	SL	47	ALA	N-CA-CB	6.14	118.69	110.10
26	LA	659	G	O4'-C1'-C2'	6.14	113.12	107.60
26	LA	774	G	C2-N3-C4	-6.14	108.83	111.90
26	LA	849	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	871	U	O4'-C1'-N1	6.14	113.11	108.20
26	LA	2076	U	P-O5'-C5'	-6.14	111.08	120.90
26	LA	2755	C	C5-C6-N1	-6.14	117.93	121.00
26	LA	2837	A	C8-N9-C4	6.14	108.26	105.80
28	LU	82	MET	CB-CA-C	6.14	122.68	110.40
2	SA	2	A	C2-N3-C4	-6.14	107.53	110.60
2	SA	56	U	C6-N1-C2	-6.14	117.32	121.00
2	SA	99	C	C2'-C3'-O3'	6.14	123.52	113.70
2	SA	636	U	N1-C2-N3	-6.14	111.22	114.90
2	SA	816	A	C2-N3-C4	-6.14	107.53	110.60
2	SA	1406	U	O5'-P-OP2	-6.14	100.17	105.70
24	S3	400	ASP	CB-CG-OD1	6.14	123.82	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	488	G	C6-C5-N7	-6.14	126.72	130.40
26	LA	1117	C	C4-C5-C6	6.14	120.47	117.40
26	LA	1917	U	P-O3'-C3'	6.14	127.07	119.70
26	LA	2200	C	O4'-C1'-N1	6.14	113.11	108.20
2	SA	88	U	P-O5'-C5'	6.14	130.72	120.90
2	SA	380	G	C4'-C3'-C2'	-6.14	96.46	102.60
2	SA	1470	U	OP2-P-O3'	6.14	118.70	105.20
26	LA	203	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	874	G	N7-C8-N9	-6.14	110.03	113.10
26	LA	900	A	N9-C4-C5	-6.14	103.34	105.80
26	LA	1257	C	N3-C4-N4	6.14	122.30	118.00
26	LA	1303	G	OP1-P-OP2	-6.14	110.39	119.60
26	LA	1752	C	P-O3'-C3'	-6.14	112.34	119.70
26	LA	2265	U	N3-C4-O4	-6.14	115.11	119.40
53	LP	102	PHE	CB-CG-CD2	6.14	125.10	120.80
2	SA	271	C	N1-C2-N3	6.13	123.50	119.20
2	SA	834	U	C5'-C4'-O4'	6.13	116.46	109.10
2	SA	945	G	P-O3'-C3'	-6.13	112.34	119.70
2	SA	975	A	N1-C2-N3	6.13	132.37	129.30
2	SA	1110	A	C5-C6-N1	6.13	120.77	117.70
25	LB	98	G	C6-C5-N7	-6.13	126.72	130.40
26	LA	50	U	C4'-C3'-C2'	-6.13	96.47	102.60
26	LA	114	U	P-O3'-C3'	6.13	127.06	119.70
26	LA	424	G	C5-N7-C8	-6.13	101.23	104.30
26	LA	516	C	C4-C5-C6	-6.13	114.33	117.40
26	LA	950	G	C6-C5-N7	-6.13	126.72	130.40
26	LA	1055	G	C5'-C4'-C3'	6.13	125.81	116.00
26	LA	1253	A	N3-C4-C5	6.13	131.09	126.80
26	LA	1982	U	N3-C2-O2	-6.13	117.91	122.20
42	L6	7	ARG	NE-CZ-NH1	6.13	123.37	120.30
2	SA	186	C	O4'-C1'-N1	6.13	113.11	108.20
2	SA	785	G	C1'-O4'-C4'	-6.13	104.99	109.90
2	SA	1354	U	C1'-O4'-C4'	-6.13	104.99	109.90
26	LA	63	A	N7-C8-N9	6.13	116.87	113.80
26	LA	915	C	C1'-O4'-C4'	-6.13	104.99	109.90
26	LA	1331	G	C5'-C4'-C3'	-6.13	106.19	116.00
26	LA	2247	A	O4'-C1'-N9	6.13	113.11	108.20
26	LA	2451	A	O5'-C5'-C4'	6.13	123.35	111.70
2	SA	44	A	C8-N9-C4	-6.13	103.35	105.80
2	SA	369	G	N1-C6-O6	6.13	123.58	119.90
2	SA	484	G	C4-C5-N7	6.13	113.25	110.80
2	SA	1152	A	C4'-C3'-C2'	-6.13	96.47	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1210	C	C5'-C4'-O4'	-6.13	101.74	109.10
2	SA	1405	G	N1-C2-N2	-6.13	110.68	116.20
2	SA	1473	G	N1-C6-O6	-6.13	116.22	119.90
2	SA	1513	A	C8-N9-C4	-6.13	103.35	105.80
24	S3	169	GLN	CB-CA-C	-6.13	98.14	110.40
26	LA	57	C	N3-C4-N4	6.13	122.29	118.00
26	LA	751	A	P-O5'-C5'	-6.13	111.09	120.90
26	LA	759	G	N1-C2-N3	6.13	127.58	123.90
26	LA	962	G	C4-C5-N7	6.13	113.25	110.80
26	LA	1558	C	O4'-C1'-N1	6.13	113.11	108.20
26	LA	1904	G	N1-C2-N3	-6.13	120.22	123.90
26	LA	2183	A	N7-C8-N9	6.13	116.87	113.80
26	LA	2333	A	N1-C6-N6	-6.13	114.92	118.60
26	LA	2359	C	C2-N1-C1'	-6.13	112.06	118.80
41	L5	10	LEU	CB-CG-CD1	6.13	121.42	111.00
2	SA	922	G	N9-C4-C5	6.13	107.85	105.40
26	LA	317	G	O4'-C1'-N9	6.13	113.10	108.20
26	LA	384	A	N9-C4-C5	6.13	108.25	105.80
27	LD	13	ARG	O-C-N	-6.13	112.89	122.70
2	SA	497	G	C8-N9-C4	-6.13	103.95	106.40
2	SA	1043	G	C6-C5-N7	6.13	134.08	130.40
26	LA	16	C	C4-C5-C6	-6.13	114.34	117.40
26	LA	99	U	C1'-O4'-C4'	-6.13	105.00	109.90
26	LA	137	U	N1-C2-N3	-6.13	111.22	114.90
26	LA	215	G	N1-C6-O6	6.13	123.58	119.90
26	LA	572	A	N7-C8-N9	6.13	116.86	113.80
26	LA	1169	A	C5-C6-N1	6.13	120.77	117.70
26	LA	1182	G	O4'-C1'-N9	6.13	113.10	108.20
2	SA	536	C	N3-C4-C5	-6.13	119.45	121.90
2	SA	1139	G	C2-N3-C4	6.13	114.96	111.90
2	SA	1383	C	N3-C2-O2	-6.13	117.61	121.90
2	SA	1437	A	C4-C5-N7	-6.13	107.64	110.70
21	SE	148	SER	N-CA-C	6.13	127.54	111.00
25	LB	7	G	C4-N9-C1'	-6.13	118.54	126.50
26	LA	613	A	C4-C5-C6	6.13	120.06	117.00
26	LA	638	G	C2-N3-C4	6.13	114.96	111.90
26	LA	1266	G	C3'-C2'-C1'	-6.13	96.60	101.50
26	LA	1307	A	N9-C4-C5	-6.13	103.35	105.80
26	LA	1802	A	O3'-P-O5'	6.13	115.64	104.00
26	LA	1900	A	C5-N7-C8	6.13	106.96	103.90
26	LA	2212	A	C6-N1-C2	-6.13	114.92	118.60
26	LA	2652	C	O4'-C4'-C3'	-6.13	97.87	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	57	G	C4-C5-C6	6.12	122.47	118.80
2	SA	841	C	C4-C5-C6	6.12	120.46	117.40
2	SA	1196	A	N9-C4-C5	-6.12	103.35	105.80
26	LA	1116	G	C5-C6-N1	6.12	114.56	111.50
26	LA	2550	G	C5'-C4'-O4'	6.12	116.45	109.10
26	LA	2862	G	C2-N3-C4	6.12	114.96	111.90
2	SA	424	G	N1-C2-N3	-6.12	120.23	123.90
4	S2	26	C	C5'-C4'-C3'	-6.12	106.20	116.00
15	SO	56	LEU	N-CA-CB	6.12	122.65	110.40
20	SD	25	ARG	O-C-N	-6.12	112.90	122.70
26	LA	19	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	603	A	C5'-C4'-C3'	-6.12	106.20	116.00
26	LA	753	A	C5'-C4'-C3'	-6.12	106.20	116.00
26	LA	1279	G	C6-N1-C2	-6.12	121.43	125.10
26	LA	2266	A	O4'-C1'-N9	6.12	113.10	108.20
26	LA	2499	C	N3-C4-N4	6.12	122.29	118.00
26	LA	2517	C	N3-C4-C5	6.12	124.35	121.90
26	LA	2589	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	2625	G	C2-N3-C4	6.12	114.96	111.90
26	LA	2797	U	C5-C6-N1	-6.12	119.64	122.70
26	LA	2900	A	C3'-C2'-C1'	-6.12	96.60	101.50
45	LG	132	ARG	NE-CZ-NH2	6.12	123.36	120.30
2	SA	21	G	N3-C2-N2	-6.12	115.62	119.90
2	SA	22	G	C4'-C3'-C2'	-6.12	96.48	102.60
2	SA	502	A	C4-C5-C6	-6.12	113.94	117.00
2	SA	1015	G	N1-C2-N3	6.12	127.57	123.90
2	SA	1044	A	C4-C5-C6	-6.12	113.94	117.00
2	SA	1122	U	C5-C4-O4	6.12	129.57	125.90
2	SA	1426	G	C4-C5-C6	6.12	122.47	118.80
3	S1	19	A	N9-C4-C5	6.12	108.25	105.80
20	SD	145	ARG	NE-CZ-NH2	-6.12	117.24	120.30
24	S3	87	ASP	CB-CA-C	-6.12	98.16	110.40
25	LB	109	A	P-O5'-C5'	-6.12	111.10	120.90
26	LA	491	G	C3'-C2'-C1'	-6.12	96.60	101.50
26	LA	702	U	C1'-O4'-C4'	-6.12	105.00	109.90
26	LA	744	U	N3-C4-O4	6.12	123.69	119.40
26	LA	1016	G	N7-C8-N9	-6.12	110.04	113.10
26	LA	1146	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	1669	A	C8-N9-C4	-6.12	103.35	105.80
26	LA	1692	U	N3-C4-O4	6.12	123.69	119.40
26	LA	1897	G	C4-C5-C6	6.12	122.47	118.80
26	LA	2121	G	C5-C6-O6	-6.12	124.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2141	G	N1-C6-O6	6.12	123.57	119.90
26	LA	2902	C	C6-N1-C2	-6.12	117.85	120.30
53	LP	17	ARG	N-CA-CB	-6.12	99.58	110.60
2	SA	359	G	O4'-C1'-N9	6.12	113.10	108.20
2	SA	515	G	C4-C5-N7	-6.12	108.35	110.80
2	SA	722	G	C4-C5-N7	6.12	113.25	110.80
2	SA	1154	G	C4'-C3'-C2'	-6.12	96.48	102.60
26	LA	575	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	717	C	C4-C5-C6	-6.12	114.34	117.40
26	LA	1189	A	C5-N7-C8	-6.12	100.84	103.90
26	LA	1759	A	C4-C5-N7	6.12	113.76	110.70
26	LA	2471	A	C1'-O4'-C4'	-6.12	105.00	109.90
26	LA	2606	C	C2-N3-C4	-6.12	116.84	119.90
26	LA	2830	C	O4'-C1'-N1	6.12	113.10	108.20
2	SA	1055	A	C4-C5-N7	-6.12	107.64	110.70
2	SA	1136	C	C2-N3-C4	-6.12	116.84	119.90
4	S2	39	A	P-O5'-C5'	6.12	130.69	120.90
26	LA	23	G	N1-C2-N3	-6.12	120.23	123.90
26	LA	277	G	P-O5'-C5'	6.12	130.69	120.90
26	LA	1649	G	C5-N7-C8	-6.12	101.24	104.30
26	LA	1680	U	C5'-C4'-C3'	6.12	125.79	116.00
26	LA	2385	C	N1-C2-N3	-6.12	114.92	119.20
26	LA	2532	G	N7-C8-N9	6.12	116.16	113.10
26	LA	2746	U	C2-N3-C4	6.12	130.67	127.00
26	LA	2818	U	C2-N3-C4	6.12	130.67	127.00
26	LA	2841	C	C1'-O4'-C4'	-6.12	105.00	109.90
48	LN	47	ARG	NH1-CZ-NH2	6.12	126.13	119.40
26	LA	389	G	C2-N3-C4	-6.12	108.84	111.90
26	LA	640	C	N3-C4-N4	6.12	122.28	118.00
26	LA	998	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	1085	A	C5-C6-N1	-6.12	114.64	117.70
26	LA	1246	A	C8-N9-C4	-6.12	103.35	105.80
26	LA	2147	A	N1-C6-N6	-6.12	114.93	118.60
26	LA	2371	G	N3-C4-N9	-6.12	122.33	126.00
26	LA	2501	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	2877	G	N3-C4-N9	6.12	129.67	126.00
46	LH	68	ARG	NE-CZ-NH1	6.12	123.36	120.30
2	SA	652	U	C5-C4-O4	6.12	129.57	125.90
2	SA	775	G	N1-C2-N2	-6.12	110.70	116.20
2	SA	903	G	C5-C6-N1	6.12	114.56	111.50
2	SA	951	G	N1-C2-N3	6.12	127.57	123.90
2	SA	983	A	N1-C6-N6	-6.12	114.93	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	2	G	N3-C4-C5	-6.12	125.54	128.60
5	ST	62	ALA	N-CA-CB	-6.12	101.54	110.10
8	SH	85	TYR	CA-CB-CG	-6.12	101.78	113.40
26	LA	308	G	C4-C5-C6	-6.12	115.13	118.80
26	LA	523	C	C5-C6-N1	6.12	124.06	121.00
26	LA	1022	G	C1'-O4'-C4'	-6.12	105.01	109.90
26	LA	1345	C	OP1-P-O3'	6.12	118.65	105.20
26	LA	1483	G	C4-C5-N7	6.12	113.25	110.80
26	LA	1664	A	C5'-C4'-C3'	-6.12	106.22	116.00
26	LA	2353	G	N9-C4-C5	-6.12	102.95	105.40
26	LA	2495	G	O4'-C1'-N9	6.12	113.09	108.20
2	SA	152	A	C2-N3-C4	-6.11	107.54	110.60
2	SA	336	A	C4-C5-N7	6.11	113.76	110.70
2	SA	1021	A	C4-C5-C6	6.11	120.06	117.00
2	SA	1158	C	C6-N1-C2	-6.11	117.86	120.30
2	SA	1340	A	N1-C2-N3	-6.11	126.24	129.30
24	S3	336	ARG	NH1-CZ-NH2	-6.11	112.68	119.40
26	LA	43	G	C3'-C2'-C1'	-6.11	96.61	101.50
26	LA	468	G	N7-C8-N9	6.11	116.16	113.10
26	LA	494	G	C6-C5-N7	6.11	134.07	130.40
26	LA	532	A	C2-N3-C4	-6.11	107.54	110.60
26	LA	996	A	O4'-C1'-N9	6.11	113.09	108.20
26	LA	1111	A	N1-C6-N6	6.11	122.27	118.60
26	LA	1607	C	C5-C6-N1	-6.11	117.94	121.00
26	LA	2750	A	C2-N3-C4	6.11	113.66	110.60
31	LX	72	VAL	CA-CB-CG1	6.11	120.07	110.90
2	SA	412	A	C1'-O4'-C4'	-6.11	105.01	109.90
2	SA	847	G	P-O5'-C5'	-6.11	111.12	120.90
2	SA	1020	G	N1-C2-N2	6.11	121.70	116.20
26	LA	25	U	N1-C2-O2	-6.11	118.52	122.80
26	LA	470	A	N1-C6-N6	6.11	122.27	118.60
26	LA	619	G	N9-C4-C5	-6.11	102.95	105.40
26	LA	741	U	N3-C2-O2	-6.11	117.92	122.20
26	LA	2632	A	N1-C2-N3	6.11	132.36	129.30
1	SS	54	ARG	CD-NE-CZ	6.11	132.16	123.60
2	SA	451	A	C1'-O4'-C4'	-6.11	105.01	109.90
2	SA	700	G	C5-N7-C8	-6.11	101.25	104.30
23	SR	6	ARG	NE-CZ-NH2	-6.11	117.25	120.30
26	LA	57	C	P-O3'-C3'	6.11	127.03	119.70
26	LA	593	U	C6-N1-C1'	6.11	129.75	121.20
26	LA	768	G	N1-C6-O6	6.11	123.57	119.90
26	LA	1133	A	C5-N7-C8	-6.11	100.84	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1435	G	C5-N7-C8	-6.11	101.25	104.30
26	LA	1657	U	O4'-C1'-N1	6.11	113.09	108.20
26	LA	2454	G	C5-N7-C8	-6.11	101.25	104.30
46	LH	165	ASP	CB-CG-OD2	6.11	123.80	118.30
2	SA	935	A	C4-C5-C6	6.11	120.06	117.00
26	LA	380	G	C6-C5-N7	-6.11	126.73	130.40
26	LA	769	U	N1-C2-O2	6.11	127.08	122.80
26	LA	1445	G	O4'-C1'-N9	6.11	113.09	108.20
26	LA	1655	A	N1-C6-N6	6.11	122.27	118.60
26	LA	2613	U	C5'-C4'-C3'	6.11	125.78	116.00
2	SA	441	A	OP1-P-OP2	-6.11	110.44	119.60
3	S1	18	A	N9-C4-C5	-6.11	103.36	105.80
4	S2	44	A	N3-C4-C5	-6.11	122.53	126.80
25	LB	106	G	C5'-C4'-O4'	6.11	116.43	109.10
26	LA	443	A	C5'-C4'-C3'	-6.11	106.23	116.00
26	LA	491	G	C5-C6-N1	6.11	114.55	111.50
26	LA	787	C	C6-N1-C2	-6.11	117.86	120.30
26	LA	821	A	C3'-C2'-C1'	6.11	106.39	101.50
26	LA	954	G	C5-C6-O6	-6.11	124.94	128.60
26	LA	1358	G	N1-C2-N2	-6.11	110.70	116.20
26	LA	1718	G	C4-C5-C6	6.11	122.47	118.80
26	LA	1859	U	P-O5'-C5'	6.11	130.67	120.90
26	LA	2253	G	C6-N1-C2	-6.11	121.44	125.10
26	LA	2530	A	N1-C6-N6	6.11	122.27	118.60
26	LA	2692	G	C5-C6-N1	6.11	114.55	111.50
49	LK	10	LEU	CB-CA-C	6.11	121.80	110.20
2	SA	941	G	C4-C5-N7	-6.11	108.36	110.80
2	SA	950	U	C6-N1-C2	-6.11	117.34	121.00
2	SA	1278	G	C6-C5-N7	-6.11	126.74	130.40
3	S1	45	G	N1-C2-N2	-6.11	110.70	116.20
20	SD	49	ASP	N-CA-CB	-6.11	99.61	110.60
26	LA	164	C	C2-N3-C4	6.11	122.95	119.90
26	LA	180	G	C5'-C4'-C3'	6.11	125.77	116.00
26	LA	213	A	C6-C5-N7	6.11	136.57	132.30
26	LA	770	G	C1'-O4'-C4'	-6.11	105.02	109.90
26	LA	903	C	P-O5'-C5'	6.11	130.67	120.90
26	LA	1311	G	C1'-O4'-C4'	6.11	114.78	109.90
26	LA	1726	C	O4'-C1'-N1	6.11	113.08	108.20
26	LA	1989	G	C4-N9-C1'	-6.11	118.56	126.50
26	LA	2202	U	O4'-C1'-N1	6.11	113.08	108.20
26	LA	2531	A	C4-C5-C6	6.11	120.05	117.00
26	LA	2719	G	C5-C6-O6	-6.11	124.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2886	A	N3-C4-C5	-6.11	122.53	126.80
49	LK	124	MET	CA-CB-CG	-6.11	102.92	113.30
50	LL	37	ARG	NH1-CZ-NH2	-6.11	112.68	119.40
2	SA	458	U	C6-N1-C2	-6.10	117.34	121.00
2	SA	761	G	N1-C6-O6	6.10	123.56	119.90
4	S2	12	G	C6-N1-C2	-6.10	121.44	125.10
24	S3	91	ALA	CB-CA-C	6.10	119.26	110.10
25	LB	68	C	N1-C2-N3	6.10	123.47	119.20
25	LB	109	A	C4-C5-N7	-6.10	107.65	110.70
26	LA	336	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	384	A	C5-C6-N6	-6.10	118.82	123.70
26	LA	524	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	1204	A	P-O5'-C5'	-6.10	111.13	120.90
26	LA	1818	U	C1'-O4'-C4'	6.10	114.78	109.90
26	LA	1907	G	N7-C8-N9	-6.10	110.05	113.10
2	SA	34	C	O3'-P-O5'	-6.10	92.40	104.00
2	SA	80	A	C8-N9-C4	-6.10	103.36	105.80
2	SA	94	G	P-O3'-C3'	-6.10	112.38	119.70
2	SA	1131	G	C6-N1-C2	-6.10	121.44	125.10
2	SA	1352	C	N3-C4-C5	6.10	124.34	121.90
25	LB	59	A	C4-C5-N7	6.10	113.75	110.70
26	LA	204	A	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	223	A	N1-C6-N6	-6.10	114.94	118.60
26	LA	728	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	978	G	N7-C8-N9	-6.10	110.05	113.10
26	LA	1113	U	O4'-C1'-N1	6.10	113.08	108.20
26	LA	1261	C	C3'-C2'-C1'	6.10	106.38	101.50
26	LA	1708	C	P-O5'-C5'	6.10	130.66	120.90
26	LA	1896	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	2111	U	N3-C4-C5	6.10	118.26	114.60
26	LA	2599	G	C4-N9-C1'	-6.10	118.57	126.50
26	LA	2760	C	C4'-C3'-C2'	-6.10	96.50	102.60
26	LA	2808	G	C6-N1-C2	-6.10	121.44	125.10
45	LG	148	VAL	CB-CA-C	6.10	123.00	111.40
2	SA	163	C	C6-N1-C2	6.10	122.74	120.30
2	SA	341	C	C5'-C4'-C3'	-6.10	106.24	116.00
2	SA	761	G	P-O3'-C3'	6.10	127.02	119.70
2	SA	1389	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	1594	U	C6-N1-C2	-6.10	117.34	121.00
26	LA	1889	A	C4'-C3'-C2'	-6.10	96.50	102.60
26	LA	2336	A	C5-N7-C8	6.10	106.95	103.90
26	LA	2476	A	C6-C5-N7	-6.10	128.03	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2580	U	O4'-C1'-N1	6.10	113.08	108.20
2	SA	137	U	O5'-P-OP2	-6.10	100.21	105.70
26	LA	173	A	C4-C5-C6	-6.10	113.95	117.00
26	LA	1154	G	P-O5'-C5'	-6.10	111.14	120.90
26	LA	2310	C	N1-C2-O2	6.10	122.56	118.90
26	LA	2685	G	C5-C6-N1	6.10	114.55	111.50
26	LA	2890	G	N3-C2-N2	6.10	124.17	119.90
47	LJ	128	LEU	CB-CG-CD2	6.10	121.37	111.00
2	SA	107	G	C4'-C3'-C2'	-6.10	96.50	102.60
2	SA	131	A	O4'-C1'-N9	6.10	113.08	108.20
2	SA	182	A	C3'-C2'-C1'	-6.10	96.62	101.50
2	SA	211	G	C1'-O4'-C4'	-6.10	105.02	109.90
2	SA	551	U	P-O5'-C5'	6.10	130.66	120.90
2	SA	785	G	C3'-C2'-C1'	-6.10	96.62	101.50
2	SA	966	G	N3-C2-N2	-6.10	115.63	119.90
2	SA	1238	A	C4-C5-C6	6.10	120.05	117.00
15	SO	77	TYR	CG-CD2-CE2	6.10	126.18	121.30
26	LA	513	A	N9-C1'-C2'	6.10	121.93	114.00
26	LA	1485	U	C4-C5-C6	-6.10	116.04	119.70
26	LA	1670	C	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	1707	G	C5-N7-C8	-6.10	101.25	104.30
26	LA	1867	G	N1-C2-N3	-6.10	120.24	123.90
26	LA	1960	A	C3'-C2'-C1'	6.10	106.38	101.50
26	LA	2023	C	C2-N1-C1'	-6.10	112.09	118.80
26	LA	2196	C	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	2239	G	C4-C5-C6	6.10	122.46	118.80
26	LA	2463	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	2774	C	C4-C5-C6	-6.10	114.35	117.40
29	LV	3	ARG	CB-CA-C	6.10	122.60	110.40
45	LG	96	TRP	CE3-CZ3-CH2	6.10	127.91	121.20
53	LP	46	ARG	NE-CZ-NH2	-6.10	117.25	120.30
2	SA	218	U	C4-C5-C6	-6.10	116.04	119.70
2	SA	1419	G	N1-C2-N3	-6.10	120.24	123.90
26	LA	1412	U	P-O3'-C3'	-6.10	112.39	119.70
26	LA	1918	A	C4-C5-N7	6.10	113.75	110.70
26	LA	1972	G	N1-C6-O6	-6.10	116.24	119.90
2	SA	1130	A	N1-C6-N6	6.09	122.26	118.60
2	SA	1466	C	C6-N1-C1'	-6.09	113.49	120.80
2	SA	1533	C	N1-C2-O2	-6.09	115.24	118.90
3	S1	13	A	N7-C8-N9	-6.09	110.75	113.80
12	SL	88	ASP	CB-CG-OD1	6.09	123.78	118.30
26	LA	434	U	C5'-C4'-O4'	6.09	116.41	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	467	G	C4-N9-C1'	-6.09	118.58	126.50
26	LA	877	A	O4'-C1'-N9	6.09	113.08	108.20
26	LA	907	G	C6-C5-N7	6.09	134.06	130.40
26	LA	1380	G	C5-C6-N1	6.09	114.55	111.50
26	LA	2676	C	C1'-O4'-C4'	-6.09	105.02	109.90
39	L3	48	TYR	CB-CG-CD1	-6.09	117.34	121.00
2	SA	1174	G	C8-N9-C4	-6.09	103.96	106.40
26	LA	274	C	C6-N1-C2	-6.09	117.86	120.30
26	LA	499	U	OP1-P-OP2	-6.09	110.46	119.60
26	LA	2252	G	O4'-C1'-N9	6.09	113.07	108.20
26	LA	2418	A	C5-N7-C8	-6.09	100.85	103.90
26	LA	2640	G	C5-C6-N1	-6.09	108.45	111.50
2	SA	96	U	C2-N1-C1'	-6.09	110.39	117.70
2	SA	500	G	C8-N9-C4	-6.09	103.96	106.40
2	SA	1190	G	C5'-C4'-O4'	6.09	116.41	109.10
26	LA	137	U	C3'-C2'-C1'	-6.09	96.63	101.50
26	LA	603	A	N7-C8-N9	6.09	116.85	113.80
26	LA	604	G	O5'-P-OP2	6.09	118.01	110.70
26	LA	693	A	OP1-P-OP2	-6.09	110.46	119.60
26	LA	1095	A	O4'-C1'-N9	6.09	113.07	108.20
26	LA	1339	G	C4-C5-N7	6.09	113.24	110.80
26	LA	1755	A	N7-C8-N9	-6.09	110.75	113.80
26	LA	1846	G	N1-C6-O6	6.09	123.56	119.90
26	LA	1859	U	N1-C2-O2	6.09	127.06	122.80
26	LA	2341	G	C2-N3-C4	-6.09	108.85	111.90
26	LA	2867	G	N3-C2-N2	6.09	124.17	119.90
50	LL	6	ALA	N-CA-CB	6.09	118.63	110.10
50	LL	34	ARG	CB-CA-C	6.09	122.58	110.40
2	SA	351	G	O3'-P-O5'	-6.09	92.43	104.00
2	SA	351	G	C4-C5-N7	6.09	113.24	110.80
2	SA	1082	A	C6-N1-C2	-6.09	114.95	118.60
2	SA	1116	U	O4'-C1'-N1	6.09	113.07	108.20
2	SA	1159	U	P-O5'-C5'	6.09	130.64	120.90
2	SA	1303	C	C2-N1-C1'	6.09	125.50	118.80
2	SA	1516	G	P-O3'-C3'	-6.09	112.39	119.70
4	S2	56	U	C4'-C3'-C2'	-6.09	96.51	102.60
25	LB	110	C	O4'-C1'-N1	6.09	113.07	108.20
26	LA	136	G	C4-C5-C6	6.09	122.45	118.80
26	LA	446	G	C8-N9-C4	-6.09	103.96	106.40
26	LA	1013	C	C6-N1-C2	-6.09	117.86	120.30
26	LA	1252	G	C4-C5-N7	6.09	113.24	110.80
26	LA	1557	C	N3-C4-N4	6.09	122.26	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2007	U	O4'-C4'-C3'	6.09	110.97	106.10
26	LA	2523	G	C4-C5-N7	6.09	113.24	110.80
30	LW	95	PHE	CB-CA-C	-6.09	98.22	110.40
31	LX	91	PHE	CB-CG-CD2	6.09	125.06	120.80
2	SA	774	G	N1-C6-O6	6.09	123.55	119.90
2	SA	860	A	N1-C2-N3	6.09	132.34	129.30
24	S3	199	VAL	CA-CB-CG1	6.09	120.03	110.90
26	LA	23	G	C8-N9-C4	-6.09	103.97	106.40
26	LA	891	G	C4-C5-C6	-6.09	115.15	118.80
26	LA	1050	A	N1-C6-N6	6.09	122.25	118.60
26	LA	2232	C	C5-C4-N4	-6.09	115.94	120.20
26	LA	2247	A	C5-N7-C8	-6.09	100.86	103.90
26	LA	2379	G	C6-C5-N7	6.09	134.05	130.40
26	LA	2848	G	O4'-C1'-N9	6.09	113.07	108.20
37	LC	71	ARG	NE-CZ-NH2	-6.09	117.26	120.30
2	SA	403	C	N3-C4-N4	-6.09	113.74	118.00
2	SA	1006	G	O4'-C1'-N9	6.09	113.07	108.20
2	SA	1307	U	O4'-C1'-N1	6.09	113.07	108.20
2	SA	1433	A	O4'-C1'-N9	6.09	113.07	108.20
20	SD	145	ARG	CG-CD-NE	-6.09	99.02	111.80
25	LB	38	C	O4'-C1'-N1	6.09	113.07	108.20
26	LA	51	G	C6-N1-C2	-6.09	121.45	125.10
26	LA	421	C	N1-C2-O2	6.09	122.55	118.90
26	LA	488	G	C6-N1-C2	-6.09	121.45	125.10
26	LA	500	G	N1-C2-N2	-6.09	110.72	116.20
26	LA	945	A	N7-C8-N9	6.09	116.84	113.80
26	LA	954	G	C4-C5-N7	6.09	113.23	110.80
26	LA	1394	U	N3-C2-O2	-6.09	117.94	122.20
26	LA	1876	A	O4'-C1'-N9	6.09	113.07	108.20
26	LA	1970	A	N9-C1'-C2'	6.09	121.91	114.00
26	LA	2869	G	C8-N9-C4	-6.09	103.97	106.40
2	SA	731	G	C8-N9-C4	-6.08	103.97	106.40
26	LA	224	U	C4-C5-C6	-6.08	116.05	119.70
26	LA	704	G	C5-C6-N1	-6.08	108.46	111.50
26	LA	1634	A	N3-C4-C5	6.08	131.06	126.80
26	LA	2020	A	N1-C6-N6	-6.08	114.95	118.60
26	LA	2064	C	N3-C2-O2	-6.08	117.64	121.90
26	LA	2255	G	C5-N7-C8	6.08	107.34	104.30
26	LA	2876	G	N9-C1'-C2'	-6.08	105.31	112.00
2	SA	251	G	N3-C4-C5	-6.08	125.56	128.60
2	SA	412	A	P-O5'-C5'	6.08	130.63	120.90
2	SA	939	G	O4'-C4'-C3'	6.08	110.97	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1227	A	C8-N9-C4	6.08	108.23	105.80
26	LA	625	G	C5-C6-O6	-6.08	124.95	128.60
26	LA	856	G	C5-C6-O6	6.08	132.25	128.60
26	LA	1178	C	C6-N1-C2	-6.08	117.87	120.30
26	LA	1458	U	C2-N1-C1'	6.08	125.00	117.70
26	LA	2488	G	P-O5'-C5'	-6.08	111.17	120.90
26	LA	2659	G	C4-N9-C1'	-6.08	118.59	126.50
26	LA	2785	C	C6-N1-C2	-6.08	117.87	120.30
2	SA	34	C	P-O3'-C3'	6.08	127.00	119.70
2	SA	450	G	N9-C1'-C2'	-6.08	105.31	112.00
2	SA	520	A	N1-C6-N6	6.08	122.25	118.60
2	SA	522	C	C5-C6-N1	6.08	124.04	121.00
2	SA	1092	A	C8-N9-C4	6.08	108.23	105.80
2	SA	1324	A	N1-C6-N6	-6.08	114.95	118.60
24	S3	104	VAL	CA-CB-CG2	-6.08	101.78	110.90
25	LB	88	C	C5-C6-N1	6.08	124.04	121.00
26	LA	358	U	C5'-C4'-O4'	6.08	116.40	109.10
26	LA	398	C	N3-C4-C5	-6.08	119.47	121.90
26	LA	490	C	C5-C4-N4	-6.08	115.94	120.20
26	LA	919	U	C2'-C3'-O3'	6.08	123.43	113.70
26	LA	972	A	N3-C4-N9	-6.08	122.54	127.40
26	LA	1151	A	O4'-C1'-N9	6.08	113.06	108.20
26	LA	1202	G	N9-C4-C5	6.08	107.83	105.40
26	LA	1369	G	C4-N9-C1'	6.08	134.41	126.50
26	LA	1742	U	N3-C4-O4	6.08	123.66	119.40
26	LA	1914	C	P-O5'-C5'	-6.08	111.17	120.90
26	LA	2711	A	C2-N3-C4	-6.08	107.56	110.60
26	LA	2777	G	C1'-O4'-C4'	6.08	114.77	109.90
50	LL	74	TYR	CD1-CG-CD2	-6.08	111.21	117.90
50	LL	78	THR	CA-CB-CG2	-6.08	103.89	112.40
2	SA	361	G	C4'-C3'-C2'	-6.08	96.52	102.60
2	SA	617	G	C8-N9-C4	-6.08	103.97	106.40
2	SA	1002	G	C4-C5-C6	-6.08	115.15	118.80
2	SA	1120	C	N3-C4-N4	6.08	122.26	118.00
26	LA	538	A	C2-N3-C4	-6.08	107.56	110.60
26	LA	2803	G	C2'-C3'-O3'	6.08	123.43	113.70
57	LS	27	ARG	NE-CZ-NH1	-6.08	117.26	120.30
2	SA	102	G	C5-C6-O6	-6.08	124.95	128.60
2	SA	109	A	P-O3'-C3'	-6.08	112.41	119.70
2	SA	391	G	N3-C4-C5	-6.08	125.56	128.60
2	SA	414	A	O4'-C1'-C2'	6.08	113.07	107.60
2	SA	729	A	C5'-C4'-O4'	6.08	116.39	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	S1	40	G	C2-N3-C4	6.08	114.94	111.90
25	LB	78	A	C1'-O4'-C4'	-6.08	105.04	109.90
26	LA	174	U	C6-N1-C2	6.08	124.65	121.00
26	LA	295	G	C5'-C4'-C3'	-6.08	106.27	116.00
26	LA	356	G	P-O5'-C5'	-6.08	111.17	120.90
26	LA	771	G	N9-C4-C5	6.08	107.83	105.40
26	LA	1292	G	N3-C2-N2	-6.08	115.64	119.90
26	LA	2016	U	P-O3'-C3'	-6.08	112.41	119.70
26	LA	2064	C	OP1-P-OP2	-6.08	110.48	119.60
26	LA	2747	G	C5-N7-C8	-6.08	101.26	104.30
2	SA	152	A	C5-C6-N6	6.08	128.56	123.70
2	SA	493	A	C5-C6-N6	-6.08	118.84	123.70
2	SA	568	G	C4-C5-C6	-6.08	115.15	118.80
2	SA	978	A	C5-N7-C8	-6.08	100.86	103.90
2	SA	983	A	N3-C4-C5	6.08	131.05	126.80
2	SA	1139	G	N1-C6-O6	6.08	123.55	119.90
2	SA	1206	G	O4'-C1'-C2'	6.08	113.07	107.60
21	SE	139	THR	CA-CB-CG2	-6.08	103.89	112.40
26	LA	467	G	C5-N7-C8	-6.08	101.26	104.30
26	LA	718	A	C3'-C2'-C1'	-6.08	96.64	101.50
26	LA	1538	G	C8-N9-C4	6.08	108.83	106.40
26	LA	2095	A	C2-N3-C4	6.08	113.64	110.60
26	LA	2270	A	P-O3'-C3'	-6.08	112.41	119.70
2	SA	371	A	C1'-O4'-C4'	-6.08	105.04	109.90
2	SA	802	A	C5-C6-N1	6.08	120.74	117.70
2	SA	816	A	C6-N1-C2	-6.08	114.95	118.60
2	SA	963	G	P-O3'-C3'	6.08	126.99	119.70
5	ST	28	ARG	NE-CZ-NH1	6.08	123.34	120.30
12	SL	8	ARG	NE-CZ-NH1	-6.08	117.26	120.30
25	LB	47	C	O4'-C1'-N1	6.08	113.06	108.20
25	LB	116	G	O4'-C1'-N9	6.08	113.06	108.20
26	LA	234	U	C5-C4-O4	-6.08	122.25	125.90
26	LA	622	G	C8-N9-C4	-6.08	103.97	106.40
26	LA	678	C	C2-N3-C4	-6.08	116.86	119.90
26	LA	1633	G	N3-C2-N2	6.08	124.15	119.90
26	LA	2019	A	N1-C2-N3	6.08	132.34	129.30
26	LA	2267	A	N7-C8-N9	-6.08	110.76	113.80
26	LA	2525	G	C4-C5-N7	-6.08	108.37	110.80
32	LY	12	GLY	O-C-N	-6.08	112.98	122.70
2	SA	203	G	C4-C5-N7	6.07	113.23	110.80
2	SA	1023	U	C5'-C4'-C3'	-6.07	106.28	116.00
2	SA	1050	G	C5'-C4'-C3'	6.07	125.72	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1167	A	P-O3'-C3'	6.07	126.99	119.70
2	SA	1321	U	C5'-C4'-C3'	6.07	125.72	116.00
2	SA	1427	C	C2'-C3'-O3'	6.07	123.42	113.70
2	SA	1491	G	C5-N7-C8	6.07	107.34	104.30
26	LA	1826	G	N3-C4-C5	-6.07	125.56	128.60
26	LA	1844	C	C5'-C4'-O4'	6.07	116.39	109.10
26	LA	2149	U	OP1-P-OP2	-6.07	110.49	119.60
26	LA	2317	A	C4'-C3'-C2'	-6.07	96.53	102.60
26	LA	2679	A	N3-C4-C5	6.07	131.05	126.80
26	LA	2880	C	C5-C6-N1	6.07	124.04	121.00
26	LA	2904	U	OP1-P-OP2	-6.07	110.49	119.60
2	SA	399	G	O4'-C1'-N9	6.07	113.06	108.20
2	SA	1174	G	C6-C5-N7	6.07	134.04	130.40
26	LA	191	A	O4'-C1'-N9	6.07	113.06	108.20
26	LA	1153	C	C5'-C4'-C3'	-6.07	106.28	116.00
26	LA	2150	C	C2-N1-C1'	6.07	125.48	118.80
26	LA	2777	G	C6-C5-N7	-6.07	126.76	130.40
44	LF	145	ASP	N-CA-CB	6.07	121.53	110.60
2	SA	359	G	C6-C5-N7	-6.07	126.76	130.40
2	SA	423	G	N3-C4-C5	-6.07	125.56	128.60
2	SA	582	C	N3-C2-O2	-6.07	117.65	121.90
2	SA	743	A	C4-C5-C6	6.07	120.03	117.00
2	SA	1058	G	P-O3'-C3'	-6.07	112.41	119.70
26	LA	568	U	N1-C2-N3	6.07	118.54	114.90
26	LA	882	G	N9-C4-C5	-6.07	102.97	105.40
26	LA	1247	A	C6-N1-C2	-6.07	114.96	118.60
26	LA	2325	G	P-O3'-C3'	6.07	126.99	119.70
26	LA	2433	A	C6-N1-C2	-6.07	114.96	118.60
2	SA	856	C	C4-C5-C6	6.07	120.43	117.40
2	SA	1043	G	N1-C6-O6	6.07	123.54	119.90
2	SA	1278	G	C4-C5-N7	6.07	113.23	110.80
6	SU	37	TYR	CZ-CE2-CD2	-6.07	114.34	119.80
19	SC	168	ARG	NE-CZ-NH1	6.07	123.33	120.30
24	S3	112	TYR	CA-CB-CG	-6.07	101.87	113.40
26	LA	210	C	P-O5'-C5'	6.07	130.61	120.90
26	LA	1484	U	N1-C2-N3	6.07	118.54	114.90
26	LA	2097	A	C6-N1-C2	-6.07	114.96	118.60
2	SA	353	A	C5-N7-C8	6.07	106.93	103.90
2	SA	810	C	C6-N1-C2	-6.07	117.87	120.30
2	SA	973	G	C4-C5-N7	-6.07	108.37	110.80
2	SA	1290	G	N1-C6-O6	6.07	123.54	119.90
2	SA	1300	G	OP1-P-O3'	6.07	118.55	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	100	U	N1-C2-N3	6.07	118.54	114.90
26	LA	375	G	C8-N9-C4	-6.07	103.97	106.40
26	LA	808	G	C6-N1-C2	-6.07	121.46	125.10
26	LA	1122	G	P-O3'-C3'	6.07	126.98	119.70
26	LA	2462	C	N1-C2-N3	6.07	123.45	119.20
26	LA	2583	G	O4'-C1'-C2'	6.07	113.06	107.60
2	SA	446	G	C4-C5-C6	-6.07	115.16	118.80
2	SA	745	G	C5-C6-O6	-6.07	124.96	128.60
2	SA	1006	G	C4-C5-N7	-6.07	108.37	110.80
4	S2	32	G	N3-C4-N9	-6.07	122.36	126.00
4	S2	41	C	N3-C4-N4	6.07	122.25	118.00
10	SJ	91	ASP	C-N-CA	6.07	136.86	121.70
26	LA	461	C	O4'-C1'-N1	6.07	113.05	108.20
26	LA	639	U	N3-C4-C5	-6.07	110.96	114.60
26	LA	881	G	N3-C2-N2	6.07	124.14	119.90
26	LA	1022	G	C6-N1-C2	-6.07	121.46	125.10
26	LA	1106	G	C5'-C4'-C3'	-6.07	106.30	116.00
26	LA	1730	C	O4'-C1'-N1	6.07	113.05	108.20
26	LA	1799	G	N1-C2-N2	-6.07	110.74	116.20
26	LA	2111	U	N1-C2-O2	-6.07	118.55	122.80
26	LA	2118	U	C6-N1-C1'	-6.07	112.71	121.20
26	LA	2325	G	OP1-P-OP2	-6.07	110.50	119.60
26	LA	2501	C	O3'-P-O5'	6.07	115.52	104.00
26	LA	2507	C	C6-N1-C2	-6.07	117.87	120.30
26	LA	2553	G	O4'-C1'-N9	6.07	113.05	108.20
26	LA	2666	C	C4-C5-C6	6.07	120.43	117.40
26	LA	2710	C	C5-C6-N1	-6.07	117.97	121.00
26	LA	2889	C	N3-C4-C5	-6.07	119.47	121.90
57	LS	91	ARG	NE-CZ-NH2	-6.07	117.27	120.30
2	SA	37	U	O4'-C1'-N1	6.06	113.05	108.20
25	LB	84	G	C5-C6-O6	-6.06	124.96	128.60
26	LA	672	C	C6-N1-C2	-6.06	117.88	120.30
26	LA	1031	G	C5'-C4'-O4'	6.06	116.38	109.10
26	LA	2339	C	C5-C6-N1	-6.06	117.97	121.00
26	LA	2353	G	C4-C5-C6	-6.06	115.16	118.80
26	LA	2477	U	C6-N1-C1'	-6.06	112.71	121.20
50	LL	100	VAL	CA-CB-CG2	-6.06	101.80	110.90
2	SA	21	G	N7-C8-N9	6.06	116.13	113.10
2	SA	28	A	C4'-C3'-C2'	-6.06	96.54	102.60
2	SA	292	G	C2-N3-C4	-6.06	108.87	111.90
2	SA	450	G	C4'-C3'-C2'	-6.06	96.54	102.60
2	SA	1209	C	C5'-C4'-O4'	6.06	116.37	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1536	C	C2-N3-C4	6.06	122.93	119.90
15	SO	21	THR	CA-CB-CG2	-6.06	103.91	112.40
26	LA	102	U	C2-N1-C1'	6.06	124.98	117.70
26	LA	241	A	O3'-P-O5'	-6.06	92.48	104.00
26	LA	430	A	C2'-C3'-O3'	6.06	123.40	113.70
26	LA	782	A	O4'-C1'-C2'	6.06	113.06	107.60
26	LA	1636	U	C6-N1-C2	-6.06	117.36	121.00
26	LA	1735	A	C6-N1-C2	-6.06	114.96	118.60
26	LA	1789	A	O3'-P-O5'	-6.06	92.48	104.00
26	LA	2708	G	P-O3'-C3'	-6.06	112.42	119.70
29	LV	62	VAL	CB-CA-C	-6.06	99.88	111.40
2	SA	11	G	N9-C4-C5	-6.06	102.98	105.40
2	SA	683	G	C4-C5-N7	6.06	113.22	110.80
2	SA	739	C	O4'-C1'-N1	6.06	113.05	108.20
2	SA	845	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	1021	A	C5-C6-N1	-6.06	114.67	117.70
25	LB	90	C	N3-C4-N4	6.06	122.24	118.00
26	LA	1741	C	C5'-C4'-C3'	-6.06	106.30	116.00
26	LA	2246	G	N1-C6-O6	6.06	123.54	119.90
2	SA	78	A	P-O5'-C5'	6.06	130.60	120.90
2	SA	330	C	C6-N1-C2	-6.06	117.88	120.30
2	SA	368	U	O3'-P-O5'	-6.06	92.49	104.00
2	SA	647	C	O4'-C4'-C3'	6.06	110.95	106.10
7	SG	95	ARG	NE-CZ-NH2	6.06	123.33	120.30
23	SR	31	TYR	CB-CG-CD2	-6.06	117.36	121.00
26	LA	305	C	O4'-C1'-N1	6.06	113.05	108.20
26	LA	382	A	C4-C5-N7	6.06	113.73	110.70
26	LA	467	G	C8-N9-C4	6.06	108.82	106.40
26	LA	584	C	P-O3'-C3'	6.06	126.97	119.70
26	LA	648	G	C6-C5-N7	-6.06	126.76	130.40
26	LA	973	A	C3'-C2'-C1'	6.06	106.35	101.50
26	LA	992	C	N1-C2-O2	6.06	122.53	118.90
26	LA	2683	C	C4-C5-C6	6.06	120.43	117.40
2	SA	66	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	747	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	1057	G	C5-C6-O6	-6.06	124.97	128.60
2	SA	1057	G	N1-C2-N3	6.06	127.53	123.90
2	SA	1181	G	N1-C2-N2	6.06	121.65	116.20
3	S1	56	G	N1-C2-N2	6.06	121.65	116.20
4	S2	5	G	P-O3'-C3'	-6.06	112.43	119.70
12	SL	120	ARG	NE-CZ-NH2	-6.06	117.27	120.30
18	SB	21	TYR	CA-CB-CG	6.06	124.91	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	40	U	C2-N3-C4	-6.06	123.36	127.00
26	LA	44	A	P-O3'-C3'	-6.06	112.43	119.70
26	LA	196	A	C8-N9-C1'	-6.06	116.80	127.70
26	LA	243	U	C6-N1-C2	-6.06	117.36	121.00
26	LA	425	G	N3-C4-N9	6.06	129.63	126.00
26	LA	879	G	N1-C2-N2	-6.06	110.75	116.20
26	LA	1424	G	C4-N9-C1'	-6.06	118.62	126.50
26	LA	1449	G	N9-C4-C5	-6.06	102.98	105.40
26	LA	1550	C	N3-C4-C5	6.06	124.32	121.90
26	LA	2061	G	P-O3'-C3'	6.06	126.97	119.70
26	LA	2189	U	O4'-C1'-N1	6.06	113.05	108.20
2	SA	1088	G	N9-C4-C5	-6.06	102.98	105.40
26	LA	30	G	N3-C2-N2	6.06	124.14	119.90
26	LA	237	C	C4'-C3'-C2'	-6.06	96.54	102.60
26	LA	1211	C	O4'-C1'-N1	6.06	113.05	108.20
26	LA	1499	C	N3-C4-N4	6.06	122.24	118.00
26	LA	1640	A	C3'-C2'-C1'	6.06	106.34	101.50
26	LA	2023	C	C5-C4-N4	-6.06	115.96	120.20
26	LA	2764	A	N9-C1'-C2'	-6.06	105.34	112.00
2	SA	143	A	O3'-P-O5'	-6.05	92.50	104.00
2	SA	386	C	C2-N1-C1'	-6.05	112.14	118.80
2	SA	434	U	C6-N1-C2	-6.05	117.37	121.00
2	SA	1096	C	C5'-C4'-O4'	6.05	116.37	109.10
2	SA	1261	A	C3'-C2'-C1'	6.05	106.34	101.50
2	SA	1281	C	C6-N1-C1'	6.05	128.07	120.80
2	SA	1290	G	OP1-P-OP2	-6.05	110.52	119.60
2	SA	1424	U	C5'-C4'-O4'	-6.05	101.83	109.10
2	SA	1457	G	N1-C6-O6	6.05	123.53	119.90
25	LB	25	U	N1-C2-N3	6.05	118.53	114.90
26	LA	13	A	C6-N1-C2	6.05	122.23	118.60
26	LA	136	G	C6-C5-N7	-6.05	126.77	130.40
26	LA	175	G	O4'-C1'-N9	6.05	113.04	108.20
26	LA	198	C	P-O3'-C3'	-6.05	112.44	119.70
26	LA	713	G	C4'-C3'-C2'	-6.05	96.55	102.60
26	LA	764	A	N1-C6-N6	-6.05	114.97	118.60
26	LA	971	G	P-O5'-C5'	6.05	130.59	120.90
26	LA	1573	G	N7-C8-N9	6.05	116.13	113.10
26	LA	1666	G	O3'-P-O5'	6.05	115.50	104.00
26	LA	1858	A	C6-N1-C2	6.05	122.23	118.60
26	LA	2739	U	O5'-C5'-C4'	6.05	123.20	111.70
2	SA	232	G	O4'-C1'-N9	6.05	113.04	108.20
2	SA	712	A	C5-C6-N1	6.05	120.73	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	S1	51	C	P-O5'-C5'	6.05	130.58	120.90
4	S2	35	C	C5-C4-N4	-6.05	115.96	120.20
8	SH	76	ARG	NH1-CZ-NH2	-6.05	112.74	119.40
26	LA	1304	A	OP1-P-OP2	-6.05	110.52	119.60
26	LA	1631	G	N3-C4-N9	-6.05	122.37	126.00
26	LA	1723	G	C2'-C3'-O3'	6.05	123.39	113.70
26	LA	2600	A	C6-C5-N7	-6.05	128.06	132.30
26	LA	2773	C	N3-C4-N4	6.05	122.24	118.00
2	SA	236	A	P-O3'-C3'	-6.05	112.44	119.70
2	SA	262	A	C1'-O4'-C4'	-6.05	105.06	109.90
2	SA	355	C	N3-C4-N4	-6.05	113.76	118.00
2	SA	445	G	C2-N3-C4	6.05	114.92	111.90
2	SA	629	A	C5-C6-N6	-6.05	118.86	123.70
2	SA	678	U	C5'-C4'-C3'	6.05	125.68	116.00
2	SA	929	G	N1-C2-N3	6.05	127.53	123.90
2	SA	1406	U	C2-N3-C4	-6.05	123.37	127.00
26	LA	77	G	C8-N9-C4	6.05	108.82	106.40
26	LA	176	A	N3-C4-N9	-6.05	122.56	127.40
26	LA	1103	A	C5-C6-N6	6.05	128.54	123.70
26	LA	1177	G	C4'-C3'-C2'	-6.05	96.55	102.60
26	LA	1207	C	N1-C1'-C2'	-6.05	105.34	112.00
26	LA	1417	C	C5-C4-N4	-6.05	115.96	120.20
26	LA	1652	A	C5'-C4'-C3'	-6.05	106.32	116.00
26	LA	2531	A	N7-C8-N9	6.05	116.83	113.80
26	LA	2574	G	OP1-P-OP2	-6.05	110.52	119.60
28	LU	2	GLU	N-CA-CB	6.05	121.49	110.60
2	SA	334	C	N3-C4-C5	-6.05	119.48	121.90
2	SA	824	G	N3-C4-C5	-6.05	125.58	128.60
2	SA	886	G	N1-C6-O6	-6.05	116.27	119.90
18	SB	225	SER	N-CA-CB	6.05	119.58	110.50
26	LA	210	C	C4-C5-C6	-6.05	114.38	117.40
26	LA	250	G	C5'-C4'-O4'	6.05	116.36	109.10
26	LA	380	G	N9-C1'-C2'	-6.05	105.35	112.00
26	LA	727	A	N1-C6-N6	-6.05	114.97	118.60
26	LA	907	G	N9-C1'-C2'	-6.05	105.34	112.00
26	LA	1054	A	P-O5'-C5'	-6.05	111.22	120.90
26	LA	1146	C	O4'-C1'-N1	6.05	113.04	108.20
26	LA	1467	U	N3-C4-C5	-6.05	110.97	114.60
26	LA	1836	C	C5-C6-N1	6.05	124.03	121.00
26	LA	1987	A	N3-C4-C5	-6.05	122.56	126.80
26	LA	2232	C	N3-C4-C5	-6.05	119.48	121.90
26	LA	2560	A	O4'-C1'-N9	6.05	113.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2746	U	O4'-C1'-N1	6.05	113.04	108.20
38	LE	13	ARG	NE-CZ-NH2	-6.05	117.28	120.30
38	LE	128	ARG	NE-CZ-NH1	6.05	123.33	120.30
2	SA	124	C	O4'-C4'-C3'	6.05	110.94	106.10
2	SA	129	A	C8-N9-C4	6.05	108.22	105.80
2	SA	538	G	O4'-C1'-N9	6.05	113.04	108.20
2	SA	806	C	C3'-C2'-C1'	-6.05	96.66	101.50
2	SA	849	G	C5'-C4'-C3'	6.05	125.68	116.00
26	LA	418	C	C5'-C4'-C3'	-6.05	106.32	116.00
26	LA	643	A	N9-C1'-C2'	-6.05	105.35	112.00
26	LA	877	A	C2-N3-C4	-6.05	107.58	110.60
26	LA	1779	U	C1'-O4'-C4'	-6.05	105.06	109.90
26	LA	1912	A	N9-C4-C5	6.05	108.22	105.80
26	LA	2709	G	C5-C6-O6	-6.05	124.97	128.60
49	LK	111	THR	N-CA-CB	6.05	121.79	110.30
2	SA	122	G	C1'-O4'-C4'	-6.05	105.06	109.90
2	SA	760	G	C5-N7-C8	6.05	107.32	104.30
2	SA	1498	U	C5'-C4'-C3'	-6.05	106.32	116.00
25	LB	33	G	C4-C5-C6	6.05	122.43	118.80
25	LB	118	C	N1-C2-O2	-6.05	115.27	118.90
26	LA	881	G	C5-C6-O6	-6.05	124.97	128.60
26	LA	1024	G	N1-C6-O6	-6.05	116.27	119.90
26	LA	1088	A	P-O5'-C5'	6.05	130.58	120.90
26	LA	1110	G	C5-C6-O6	-6.05	124.97	128.60
26	LA	1144	A	C5'-C4'-O4'	-6.05	101.84	109.10
26	LA	1343	G	O4'-C4'-C3'	6.05	110.94	106.10
26	LA	1502	A	N7-C8-N9	-6.05	110.78	113.80
26	LA	2790	U	N3-C4-O4	6.05	123.63	119.40
2	SA	364	A	N1-C6-N6	6.04	122.23	118.60
2	SA	1241	G	C5-N7-C8	-6.04	101.28	104.30
26	LA	718	A	C4-N9-C1'	6.04	137.18	126.30
26	LA	897	C	C5-C6-N1	-6.04	117.98	121.00
26	LA	1107	G	N1-C6-O6	-6.04	116.27	119.90
26	LA	1433	A	C5-N7-C8	6.04	106.92	103.90
2	SA	174	A	C4'-C3'-C2'	-6.04	96.56	102.60
2	SA	410	G	N7-C8-N9	-6.04	110.08	113.10
2	SA	721	G	N3-C2-N2	6.04	124.13	119.90
2	SA	1349	A	C5'-C4'-C3'	-6.04	106.33	116.00
2	SA	1363	A	P-O3'-C3'	6.04	126.95	119.70
2	SA	1402	C	N3-C4-C5	6.04	124.32	121.90
4	S2	15	G	O4'-C1'-N9	6.04	113.03	108.20
4	S2	46	G	N1-C6-O6	6.04	123.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	74	A	C5'-C4'-C3'	-6.04	106.33	116.00
19	SC	32	LEU	O-C-N	-6.04	113.03	122.70
25	LB	107	G	C5-C6-O6	-6.04	124.97	128.60
26	LA	443	A	C4-C5-N7	6.04	113.72	110.70
26	LA	896	A	C2-N3-C4	6.04	113.62	110.60
26	LA	1428	C	P-O5'-C5'	6.04	130.57	120.90
26	LA	1995	U	N3-C4-O4	6.04	123.63	119.40
26	LA	2439	A	C6-N1-C2	6.04	122.23	118.60
26	LA	2495	G	P-O5'-C5'	6.04	130.57	120.90
38	LE	68	PHE	CB-CG-CD2	-6.04	116.57	120.80
41	L5	41	ARG	NH1-CZ-NH2	-6.04	112.75	119.40
55	LQ	34	HIS	CA-CB-CG	6.04	123.87	113.60
2	SA	905	U	N3-C4-C5	6.04	118.22	114.60
2	SA	1200	C	C5-C6-N1	-6.04	117.98	121.00
2	SA	1270	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	136	G	N3-C4-N9	6.04	129.62	126.00
26	LA	479	A	O4'-C1'-N9	-6.04	103.37	108.20
26	LA	733	G	N3-C2-N2	6.04	124.13	119.90
26	LA	843	G	N1-C6-O6	6.04	123.52	119.90
26	LA	997	G	O4'-C1'-N9	6.04	113.03	108.20
26	LA	1089	A	N7-C8-N9	6.04	116.82	113.80
26	LA	1834	U	OP1-P-OP2	-6.04	110.54	119.60
26	LA	2379	G	N7-C8-N9	6.04	116.12	113.10
26	LA	2540	C	C5'-C4'-O4'	6.04	116.35	109.10
26	LA	2576	G	C2-N3-C4	6.04	114.92	111.90
26	LA	2640	G	C6-C5-N7	-6.04	126.78	130.40
2	SA	735	C	O4'-C1'-N1	6.04	113.03	108.20
2	SA	1063	C	C6-N1-C2	-6.04	117.88	120.30
4	S2	53	G	N9-C4-C5	-6.04	102.98	105.40
25	LB	116	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	2380	C	N3-C2-O2	-6.04	117.67	121.90
54	LM	71	ARG	NE-CZ-NH1	6.04	123.32	120.30
7	SG	134	VAL	CG1-CB-CG2	-6.04	101.24	110.90
25	LB	41	G	N3-C2-N2	-6.04	115.67	119.90
26	LA	99	U	C3'-C2'-C1'	-6.04	96.67	101.50
26	LA	270	A	C6-C5-N7	-6.04	128.07	132.30
26	LA	412	A	N3-C4-C5	-6.04	122.57	126.80
26	LA	577	G	O4'-C1'-N9	6.04	113.03	108.20
26	LA	588	U	N1-C2-O2	-6.04	118.57	122.80
26	LA	1059	G	C6-N1-C2	6.04	128.72	125.10
26	LA	2626	C	P-O3'-C3'	-6.04	112.45	119.70
26	LA	2678	C	C5-C6-N1	-6.04	117.98	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2904	U	C3'-C2'-C1'	6.04	106.33	101.50
2	SA	761	G	N1-C2-N3	-6.04	120.28	123.90
2	SA	1515	G	O4'-C1'-N9	6.04	113.03	108.20
4	S2	20	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	2791	G	C1'-O4'-C4'	-6.04	105.07	109.90
2	SA	303	A	C6-C5-N7	-6.04	128.07	132.30
2	SA	674	G	C3'-C2'-C1'	6.04	106.33	101.50
2	SA	838	G	O4'-C1'-C2'	6.04	113.03	107.60
2	SA	1417	G	C2'-C3'-O3'	6.04	123.36	113.70
3	S1	29	G	N7-C8-N9	6.04	116.12	113.10
4	S2	73	A	C1'-O4'-C4'	-6.04	105.07	109.90
26	LA	786	C	C5'-C4'-O4'	6.04	116.34	109.10
26	LA	799	G	C5-C6-O6	-6.04	124.98	128.60
26	LA	1519	G	C2-N3-C4	-6.04	108.88	111.90
26	LA	1645	G	N1-C6-O6	6.04	123.52	119.90
26	LA	1677	A	C5-C6-N6	-6.04	118.87	123.70
26	LA	2066	C	P-O5'-C5'	-6.04	111.24	120.90
26	LA	2305	U	C2-N3-C4	-6.04	123.38	127.00
46	LH	151	ARG	N-CA-CB	6.04	121.46	110.60
2	SA	38	G	C8-N9-C4	-6.03	103.99	106.40
2	SA	144	G	C3'-C2'-C1'	-6.03	96.67	101.50
2	SA	213	G	C4-N9-C1'	6.03	134.34	126.50
2	SA	846	G	N1-C2-N3	6.03	127.52	123.90
2	SA	1048	G	P-O3'-C3'	-6.03	112.46	119.70
2	SA	1053	G	O5'-P-OP2	-6.03	100.27	105.70
2	SA	1150	A	C3'-C2'-C1'	6.03	106.33	101.50
2	SA	1345	U	N3-C4-O4	6.03	123.62	119.40
24	S3	489	TYR	CB-CG-CD2	-6.03	117.38	121.00
25	LB	79	G	O4'-C1'-N9	6.03	113.03	108.20
26	LA	60	G	C5-N7-C8	-6.03	101.28	104.30
26	LA	90	U	C3'-C2'-C1'	6.03	106.33	101.50
26	LA	253	C	N3-C2-O2	-6.03	117.68	121.90
26	LA	379	G	C8-N9-C4	-6.03	103.99	106.40
26	LA	391	A	C5-C6-N6	-6.03	118.87	123.70
26	LA	656	G	N1-C2-N2	6.03	121.63	116.20
26	LA	958	U	N1-C2-N3	-6.03	111.28	114.90
26	LA	1656	C	C5-C6-N1	6.03	124.02	121.00
26	LA	1909	C	O4'-C1'-N1	6.03	113.03	108.20
26	LA	2201	G	C4-N9-C1'	-6.03	118.66	126.50
26	LA	2537	U	C2-N3-C4	-6.03	123.38	127.00
26	LA	2574	G	C5-C6-O6	-6.03	124.98	128.60
26	LA	2634	A	C8-N9-C4	-6.03	103.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	764	C	C2-N3-C4	-6.03	116.88	119.90
2	SA	1053	G	O4'-C1'-N9	6.03	113.03	108.20
2	SA	1077	G	N1-C2-N2	-6.03	110.77	116.20
2	SA	1194	U	C4-C5-C6	-6.03	116.08	119.70
26	LA	729	G	N9-C4-C5	-6.03	102.99	105.40
26	LA	1441	G	C5-C6-O6	6.03	132.22	128.60
26	LA	2739	U	C2-N1-C1'	-6.03	110.46	117.70
2	SA	643	C	C5-C4-N4	6.03	124.42	120.20
2	SA	678	U	N1-C2-O2	6.03	127.02	122.80
2	SA	852	G	N3-C4-C5	-6.03	125.58	128.60
2	SA	900	A	O5'-P-OP2	6.03	117.94	110.70
2	SA	915	A	C5-C6-N1	6.03	120.72	117.70
2	SA	1206	G	C8-N9-C4	-6.03	103.99	106.40
2	SA	1470	U	P-O5'-C5'	-6.03	111.25	120.90
5	ST	45	ALA	CB-CA-C	-6.03	101.05	110.10
26	LA	631	A	P-O3'-C3'	-6.03	112.46	119.70
26	LA	931	U	C6-N1-C1'	-6.03	112.76	121.20
26	LA	945	A	N9-C4-C5	6.03	108.21	105.80
26	LA	974	G	P-O5'-C5'	-6.03	111.25	120.90
26	LA	1024	G	P-O3'-C3'	6.03	126.94	119.70
26	LA	1045	C	C2-N3-C4	-6.03	116.89	119.90
26	LA	1622	G	O4'-C1'-N9	6.03	113.03	108.20
26	LA	1654	A	O3'-P-O5'	6.03	115.46	104.00
26	LA	2131	U	C3'-C2'-C1'	-6.03	96.67	101.50
26	LA	2356	U	C4-C5-C6	-6.03	116.08	119.70
35	L1	33	HIS	N-CA-C	-6.03	94.72	111.00
38	LE	33	ARG	NH1-CZ-NH2	6.03	126.03	119.40
2	SA	1371	G	N7-C8-N9	-6.03	110.09	113.10
26	LA	1101	U	O4'-C4'-C3'	-6.03	97.97	104.00
26	LA	1283	G	P-O5'-C5'	-6.03	111.25	120.90
26	LA	2533	U	C4'-C3'-C2'	-6.03	96.57	102.60
2	SA	433	G	N1-C2-N3	-6.03	120.28	123.90
2	SA	656	G	N3-C2-N2	6.03	124.12	119.90
2	SA	843	U	N1-C1'-C2'	6.03	121.84	114.00
2	SA	1346	A	C6-N1-C2	6.03	122.22	118.60
4	S2	32	G	C2-N3-C4	6.03	114.91	111.90
26	LA	248	G	N1-C6-O6	6.03	123.52	119.90
26	LA	624	C	C2-N3-C4	-6.03	116.89	119.90
26	LA	1125	G	N1-C6-O6	6.03	123.52	119.90
26	LA	1139	G	C4-N9-C1'	-6.03	118.66	126.50
26	LA	1157	G	C8-N9-C1'	-6.03	119.16	127.00
26	LA	1221	C	N3-C4-C5	-6.03	119.49	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1250	G	P-O3'-C3'	-6.03	112.47	119.70
26	LA	1318	U	P-O5'-C5'	-6.03	111.25	120.90
26	LA	2155	U	C2'-C3'-O3'	6.03	123.34	113.70
2	SA	198	G	C5-N7-C8	6.03	107.31	104.30
2	SA	249	U	C4-C5-C6	-6.03	116.08	119.70
2	SA	392	C	O4'-C1'-N1	6.03	113.02	108.20
2	SA	460	A	C4'-C3'-C2'	-6.03	96.58	102.60
2	SA	1017	U	C4-C5-C6	-6.03	116.08	119.70
2	SA	1089	G	C4-C5-N7	-6.03	108.39	110.80
2	SA	1408	A	OP1-P-OP2	-6.03	110.56	119.60
2	SA	1441	A	N7-C8-N9	-6.03	110.79	113.80
2	SA	1519	A	OP1-P-OP2	-6.03	110.56	119.60
12	SL	82	ARG	NH1-CZ-NH2	-6.03	112.77	119.40
26	LA	388	G	O4'-C1'-C2'	6.03	113.02	107.60
26	LA	466	A	OP1-P-OP2	-6.03	110.56	119.60
26	LA	757	G	P-O5'-C5'	6.03	130.54	120.90
26	LA	1648	U	P-O5'-C5'	6.03	130.54	120.90
26	LA	1969	A	C5-C6-N1	6.03	120.71	117.70
26	LA	2084	C	C6-N1-C2	6.03	122.71	120.30
26	LA	2720	U	P-O5'-C5'	-6.03	111.26	120.90
26	LA	1372	U	C4'-C3'-C2'	-6.02	96.58	102.60
26	LA	1893	C	C1'-O4'-C4'	6.02	114.72	109.90
26	LA	2108	A	C5-C6-N1	6.02	120.71	117.70
26	LA	2543	G	N7-C8-N9	6.02	116.11	113.10
26	LA	2723	C	N3-C4-N4	6.02	122.22	118.00
2	SA	154	U	C5-C6-N1	-6.02	119.69	122.70
2	SA	843	U	C4-C5-C6	6.02	123.31	119.70
2	SA	1485	U	C4-C5-C6	6.02	123.31	119.70
4	S2	32	G	N3-C4-C5	-6.02	125.59	128.60
26	LA	142	A	C8-N9-C4	6.02	108.21	105.80
26	LA	310	A	C6-N1-C2	-6.02	114.99	118.60
26	LA	384	A	C6-C5-N7	6.02	136.52	132.30
26	LA	509	C	C2-N3-C4	-6.02	116.89	119.90
26	LA	826	U	C6-N1-C2	-6.02	117.39	121.00
26	LA	937	C	N1-C2-N3	6.02	123.42	119.20
26	LA	1465	G	C1'-O4'-C4'	-6.02	105.08	109.90
26	LA	1927	A	C2'-C3'-O3'	6.02	123.34	113.70
2	SA	591	U	C2-N3-C4	6.02	130.61	127.00
2	SA	651	C	C4-C5-C6	-6.02	114.39	117.40
26	LA	830	G	P-O3'-C3'	-6.02	112.47	119.70
26	LA	1372	U	C5'-C4'-C3'	-6.02	106.37	116.00
26	LA	1451	C	C5-C6-N1	-6.02	117.99	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2584	U	N3-C2-O2	-6.02	117.99	122.20
50	LL	44	TYR	CB-CG-CD2	-6.02	117.39	121.00
2	SA	750	C	C1'-O4'-C4'	-6.02	105.08	109.90
2	SA	1094	G	OP1-P-OP2	-6.02	110.57	119.60
12	SL	116	TYR	CA-CB-CG	6.02	124.84	113.40
25	LB	41	G	N3-C4-N9	-6.02	122.39	126.00
25	LB	107	G	C6-C5-N7	-6.02	126.79	130.40
26	LA	119	A	O4'-C1'-N9	6.02	113.02	108.20
26	LA	444	C	C2-N3-C4	-6.02	116.89	119.90
26	LA	1053	C	C5-C6-N1	6.02	124.01	121.00
26	LA	1182	G	C5-C6-N1	-6.02	108.49	111.50
26	LA	2739	U	N3-C2-O2	-6.02	117.99	122.20
26	LA	2831	G	O5'-C5'-C4'	-6.02	100.26	111.70
2	SA	688	G	C8-N9-C4	-6.02	103.99	106.40
3	S1	13	A	C5-C6-N1	6.02	120.71	117.70
23	SR	48	ALA	CB-CA-C	-6.02	101.07	110.10
26	LA	137	U	C4-C5-C6	-6.02	116.09	119.70
26	LA	557	C	C5'-C4'-C3'	6.02	125.63	116.00
26	LA	796	C	N1-C2-O2	-6.02	115.29	118.90
26	LA	848	C	P-O5'-C5'	-6.02	111.27	120.90
26	LA	861	A	OP2-P-O3'	6.02	118.44	105.20
26	LA	1707	G	O4'-C1'-N9	6.02	113.02	108.20
26	LA	1912	A	C5'-C4'-O4'	6.02	116.32	109.10
26	LA	2114	A	P-O5'-C5'	6.02	130.53	120.90
26	LA	2385	C	C4-C5-C6	-6.02	114.39	117.40
26	LA	2666	C	C6-N1-C1'	-6.02	113.58	120.80
26	LA	2822	G	N9-C1'-C2'	-6.02	105.38	112.00
26	LA	2826	A	P-O3'-C3'	6.02	126.92	119.70
26	LA	2851	A	OP1-P-OP2	-6.02	110.57	119.60
48	LN	55	MET	CG-SD-CE	6.02	109.83	100.20
2	SA	93	U	O4'-C1'-N1	6.02	113.01	108.20
2	SA	637	C	N3-C4-C5	-6.02	119.49	121.90
2	SA	1280	A	C4-C5-C6	-6.02	113.99	117.00
26	LA	1921	G	N7-C8-N9	-6.02	110.09	113.10
26	LA	2237	G	C8-N9-C4	-6.02	103.99	106.40
51	LI	89	LYS	C-N-CA	6.02	136.74	121.70
2	SA	16	A	C5-C6-N6	-6.01	118.89	123.70
2	SA	168	G	C6-N1-C2	-6.01	121.49	125.10
2	SA	386	C	C6-N1-C2	-6.01	117.89	120.30
2	SA	580	C	C5-C4-N4	-6.01	115.99	120.20
2	SA	638	U	OP1-P-OP2	-6.01	110.58	119.60
2	SA	1243	C	P-O3'-C3'	-6.01	112.48	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1366	C	O5'-P-OP2	-6.01	100.29	105.70
2	SA	1468	A	C1'-O4'-C4'	-6.01	105.09	109.90
2	SA	1509	C	N3-C4-C5	-6.01	119.49	121.90
19	SC	25	THR	N-CA-CB	6.01	121.73	110.30
26	LA	69	C	C1'-O4'-C4'	-6.01	105.09	109.90
26	LA	833	A	C8-N9-C4	-6.01	103.39	105.80
26	LA	938	G	N7-C8-N9	-6.01	110.09	113.10
26	LA	1741	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	2498	C	C2-N3-C4	-6.01	116.89	119.90
26	LA	2645	G	N3-C2-N2	6.01	124.11	119.90
38	LE	127	PHE	CB-CG-CD1	-6.01	116.59	120.80
2	SA	1056	U	C6-N1-C2	6.01	124.61	121.00
2	SA	1417	G	C5-C6-N1	-6.01	108.49	111.50
2	SA	1510	C	C5'-C4'-O4'	6.01	116.31	109.10
12	SL	74	GLN	N-CA-CB	6.01	121.42	110.60
26	LA	254	G	O4'-C4'-C3'	-6.01	97.99	104.00
26	LA	780	G	N3-C4-C5	-6.01	125.59	128.60
2	SA	159	G	C2-N3-C4	6.01	114.91	111.90
2	SA	197	A	C5'-C4'-C3'	-6.01	106.38	116.00
2	SA	1002	G	C5'-C4'-C3'	-6.01	106.38	116.00
14	SN	74	ARG	NH1-CZ-NH2	-6.01	112.79	119.40
26	LA	286	U	N3-C2-O2	6.01	126.41	122.20
26	LA	487	C	N3-C2-O2	-6.01	117.69	121.90
26	LA	773	U	N3-C4-C5	6.01	118.21	114.60
26	LA	991	C	N1-C2-O2	-6.01	115.29	118.90
26	LA	1598	A	C5'-C4'-C3'	-6.01	106.38	116.00
26	LA	1644	C	P-O3'-C3'	-6.01	112.48	119.70
26	LA	1759	A	C6-N1-C2	-6.01	114.99	118.60
26	LA	2468	A	C2-N3-C4	-6.01	107.59	110.60
58	LT	21	ARG	NE-CZ-NH1	6.01	123.31	120.30
2	SA	775	G	C4-C5-N7	-6.01	108.40	110.80
2	SA	913	A	C5'-C4'-O4'	6.01	116.31	109.10
2	SA	1142	G	C6-C5-N7	-6.01	126.80	130.40
4	S2	66	C	N3-C4-C5	6.01	124.30	121.90
25	LB	78	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	32	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	110	G	N7-C8-N9	6.01	116.11	113.10
26	LA	170	U	C5'-C4'-O4'	6.01	116.31	109.10
26	LA	364	C	C2'-C3'-O3'	6.01	123.32	113.70
26	LA	374	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	453	A	P-O3'-C3'	6.01	126.91	119.70
26	LA	598	U	O4'-C1'-N1	6.01	113.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1171	G	O4'-C1'-N9	6.01	113.01	108.20
26	LA	1709	U	N3-C2-O2	-6.01	117.99	122.20
26	LA	1733	G	N1-C2-N3	-6.01	120.29	123.90
26	LA	1826	G	O5'-P-OP2	6.01	117.91	110.70
26	LA	2388	A	C4'-C3'-C2'	-6.01	96.59	102.60
26	LA	2633	G	N1-C2-N3	6.01	127.51	123.90
2	SA	842	U	C3'-C2'-C1'	-6.01	96.69	101.50
2	SA	993	G	C8-N9-C1'	-6.01	119.19	127.00
4	S2	61	U	C1'-O4'-C4'	-6.01	105.09	109.90
26	LA	460	A	C5-C6-N6	-6.01	118.89	123.70
26	LA	782	A	P-O3'-C3'	6.01	126.91	119.70
26	LA	1723	G	N7-C8-N9	6.01	116.10	113.10
26	LA	2896	C	C5-C6-N1	6.01	124.00	121.00
55	LQ	13	ARG	NE-CZ-NH1	-6.01	117.30	120.30
2	SA	421	U	C4-C5-C6	6.01	123.30	119.70
2	SA	452	A	N9-C1'-C2'	-6.01	105.39	112.00
2	SA	636	U	N1-C2-O2	6.01	127.00	122.80
2	SA	742	G	C8-N9-C4	-6.01	104.00	106.40
2	SA	1044	A	O4'-C1'-C2'	-6.01	99.79	105.80
2	SA	1201	A	C5'-C4'-O4'	6.01	116.31	109.10
2	SA	1329	A	N9-C4-C5	-6.01	103.40	105.80
3	S1	42	U	N3-C2-O2	6.01	126.41	122.20
21	SE	163	ILE	CG1-CB-CG2	6.01	124.61	111.40
26	LA	88	G	C8-N9-C4	-6.01	104.00	106.40
26	LA	274	C	N1-C2-N3	6.01	123.41	119.20
26	LA	401	A	N1-C2-N3	6.01	132.30	129.30
26	LA	576	U	N1-C2-N3	6.01	118.50	114.90
26	LA	1104	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	1447	C	O4'-C1'-N1	6.01	113.00	108.20
26	LA	1449	G	C2-N3-C4	-6.01	108.90	111.90
26	LA	1473	G	C5-C6-O6	-6.01	125.00	128.60
26	LA	1595	C	C5-C6-N1	6.01	124.00	121.00
26	LA	1820	U	O4'-C1'-N1	6.01	113.00	108.20
26	LA	1891	G	N1-C6-O6	-6.01	116.30	119.90
26	LA	2052	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	2904	U	N1-C2-N3	6.01	118.50	114.90
43	L7	24	ARG	CD-NE-CZ	6.01	132.01	123.60
2	SA	281	G	C4-C5-N7	6.00	113.20	110.80
2	SA	327	A	N3-C4-N9	6.00	132.20	127.40
2	SA	333	U	N3-C4-C5	6.00	118.20	114.60
26	LA	131	A	N3-C4-C5	-6.00	122.60	126.80
26	LA	681	G	C3'-C2'-C1'	6.00	106.30	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1987	A	C6-C5-N7	-6.00	128.10	132.30
26	LA	2583	G	C8-N9-C4	6.00	108.80	106.40
26	LA	2724	U	O5'-P-OP1	-6.00	100.30	105.70
26	LA	2807	U	N1-C2-O2	6.00	127.00	122.80
2	SA	74	A	N1-C6-N6	6.00	122.20	118.60
2	SA	135	C	O4'-C1'-N1	6.00	113.00	108.20
2	SA	147	G	N3-C4-C5	6.00	131.60	128.60
2	SA	661	G	C5-C6-O6	-6.00	125.00	128.60
2	SA	892	A	N1-C6-N6	6.00	122.20	118.60
26	LA	253	C	OP1-P-OP2	-6.00	110.59	119.60
26	LA	558	U	O4'-C1'-N1	6.00	113.00	108.20
26	LA	1005	C	N1-C2-N3	6.00	123.40	119.20
26	LA	1197	G	N1-C6-O6	6.00	123.50	119.90
26	LA	2195	U	P-O3'-C3'	-6.00	112.50	119.70
26	LA	2353	G	C5'-C4'-C3'	6.00	125.61	116.00
26	LA	2390	U	C5'-C4'-O4'	6.00	116.30	109.10
2	SA	45	G	N1-C6-O6	6.00	123.50	119.90
2	SA	1075	U	C5'-C4'-C3'	-6.00	106.40	116.00
2	SA	1203	C	N3-C4-N4	6.00	122.20	118.00
2	SA	1225	A	N1-C6-N6	6.00	122.20	118.60
10	SJ	37	ARG	NE-CZ-NH2	6.00	123.30	120.30
25	LB	60	C	N3-C4-N4	-6.00	113.80	118.00
25	LB	87	U	C4'-C3'-C2'	6.00	108.60	102.60
25	LB	104	A	C1'-O4'-C4'	-6.00	105.10	109.90
26	LA	36	G	C5-C6-O6	6.00	132.20	128.60
26	LA	431	U	C2-N3-C4	6.00	130.60	127.00
26	LA	743	A	C4-C5-N7	6.00	113.70	110.70
26	LA	921	C	N1-C2-N3	6.00	123.40	119.20
26	LA	2178	C	N3-C4-N4	6.00	122.20	118.00
26	LA	2211	A	N9-C4-C5	-6.00	103.40	105.80
26	LA	2676	C	C4-C5-C6	6.00	120.40	117.40
26	LA	2800	A	OP1-P-OP2	-6.00	110.60	119.60
44	LF	188	MET	CG-SD-CE	6.00	109.80	100.20
2	SA	46	G	C6-N1-C2	-6.00	121.50	125.10
2	SA	674	G	P-O3'-C3'	-6.00	112.50	119.70
19	SC	36	PHE	CB-CG-CD2	6.00	125.00	120.80
26	LA	1101	U	P-O5'-C5'	6.00	130.50	120.90
26	LA	1968	G	O4'-C1'-N9	6.00	113.00	108.20
26	LA	2808	G	C5-C6-O6	-6.00	125.00	128.60
26	LA	2852	G	C5-C6-O6	-6.00	125.00	128.60
2	SA	91	U	C1'-O4'-C4'	-6.00	105.10	109.90
2	SA	279	A	N1-C2-N3	6.00	132.30	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	851	G	N3-C4-N9	-6.00	122.40	126.00
2	SA	943	U	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1023	U	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1069	C	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1221	G	C5'-C4'-O4'	6.00	116.30	109.10
2	SA	1236	A	OP1-P-OP2	-6.00	110.60	119.60
2	SA	1286	U	C5'-C4'-O4'	6.00	116.30	109.10
7	SG	151	ALA	N-CA-CB	6.00	118.50	110.10
26	LA	15	G	N1-C2-N2	-6.00	110.80	116.20
26	LA	207	A	N1-C6-N6	-6.00	115.00	118.60
26	LA	618	G	C8-N9-C4	6.00	108.80	106.40
26	LA	799	G	C4'-C3'-C2'	-6.00	96.60	102.60
26	LA	1350	C	O4'-C1'-N1	6.00	113.00	108.20
26	LA	1616	A	N3-C4-C5	-6.00	122.60	126.80
26	LA	2360	G	C5-C6-O6	-6.00	125.00	128.60
27	LD	160	TYR	CB-CG-CD1	6.00	124.60	121.00
2	SA	95	C	N3-C4-C5	-6.00	119.50	121.90
2	SA	460	A	C6-C5-N7	6.00	136.50	132.30
2	SA	494	G	OP1-P-OP2	-6.00	110.60	119.60
2	SA	846	G	C6-N1-C2	-6.00	121.50	125.10
2	SA	1455	G	C5'-C4'-C3'	-6.00	106.41	116.00
11	SK	16	SER	N-CA-CB	6.00	119.50	110.50
26	LA	37	C	N1-C2-N3	6.00	123.40	119.20
26	LA	73	A	P-O5'-C5'	6.00	130.49	120.90
26	LA	820	A	C8-N9-C4	-6.00	103.40	105.80
26	LA	843	G	N3-C4-C5	-6.00	125.60	128.60
26	LA	931	U	P-O5'-C5'	-6.00	111.31	120.90
26	LA	1119	U	N3-C2-O2	-6.00	118.00	122.20
26	LA	1434	A	O4'-C1'-N9	6.00	113.00	108.20
26	LA	1759	A	C1'-O4'-C4'	-6.00	105.10	109.90
26	LA	2132	U	O5'-P-OP2	6.00	117.89	110.70
26	LA	2389	G	C4-C5-C6	6.00	122.40	118.80
26	LA	2628	C	C2-N3-C4	6.00	122.90	119.90
26	LA	2641	G	C4-C5-N7	-6.00	108.40	110.80
26	LA	2707	U	C3'-C2'-C1'	6.00	106.30	101.50
2	SA	162	A	P-O5'-C5'	6.00	130.49	120.90
2	SA	374	A	P-O3'-C3'	-6.00	112.51	119.70
2	SA	993	G	O4'-C1'-N9	6.00	113.00	108.20
2	SA	1018	G	C1'-O4'-C4'	-6.00	105.10	109.90
2	SA	1400	C	C5'-C4'-O4'	6.00	116.29	109.10
26	LA	450	G	C2-N3-C4	-6.00	108.90	111.90
26	LA	1502	A	N1-C6-N6	-6.00	115.00	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	35	G	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	84	U	N3-C4-C5	-5.99	111.00	114.60
2	SA	219	U	C6-N1-C2	-5.99	117.40	121.00
2	SA	244	U	P-O3'-C3'	-5.99	112.51	119.70
2	SA	244	U	N3-C4-O4	-5.99	115.20	119.40
2	SA	276	G	C4-C5-N7	5.99	113.20	110.80
2	SA	290	C	N1-C2-N3	5.99	123.40	119.20
20	SD	62	ARG	NH1-CZ-NH2	-5.99	112.81	119.40
26	LA	26	G	C5'-C4'-C3'	5.99	125.59	116.00
26	LA	37	C	C5-C4-N4	-5.99	116.00	120.20
26	LA	169	G	C4-C5-N7	-5.99	108.40	110.80
26	LA	1385	A	N9-C4-C5	5.99	108.20	105.80
26	LA	1434	A	C5'-C4'-C3'	5.99	125.59	116.00
26	LA	1613	G	C4-C5-C6	5.99	122.40	118.80
26	LA	1712	U	N1-C2-O2	5.99	127.00	122.80
26	LA	1740	G	O5'-C5'-C4'	-5.99	100.31	111.70
26	LA	2095	A	P-O5'-C5'	5.99	130.49	120.90
26	LA	2249	U	C2-N3-C4	5.99	130.60	127.00
26	LA	2404	U	N1-C2-N3	5.99	118.50	114.90
50	LL	74	TYR	CG-CD2-CE2	5.99	126.09	121.30
2	SA	548	G	C5-C6-N1	5.99	114.50	111.50
2	SA	730	G	C5'-C4'-C3'	-5.99	106.41	116.00
2	SA	746	A	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	1117	A	N1-C6-N6	-5.99	115.00	118.60
4	S2	10	G	C4-C5-N7	5.99	113.20	110.80
26	LA	638	G	N3-C4-C5	-5.99	125.60	128.60
26	LA	1680	U	N1-C2-N3	5.99	118.50	114.90
2	SA	100	G	C5'-C4'-C3'	-5.99	106.41	116.00
2	SA	440	C	C5-C4-N4	-5.99	116.01	120.20
2	SA	946	A	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	1098	C	O4'-C1'-N1	5.99	112.99	108.20
2	SA	1341	U	O4'-C1'-N1	5.99	112.99	108.20
2	SA	1497	G	C4'-C3'-C2'	-5.99	96.61	102.60
17	SQ	10	ARG	NE-CZ-NH1	5.99	123.30	120.30
25	LB	101	A	N1-C2-N3	-5.99	126.31	129.30
26	LA	198	C	C4-C5-C6	-5.99	114.41	117.40
26	LA	486	C	C6-N1-C1'	5.99	127.99	120.80
26	LA	844	A	C5-C6-N6	-5.99	118.91	123.70
26	LA	1140	C	C2-N3-C4	-5.99	116.90	119.90
26	LA	1216	G	P-O3'-C3'	-5.99	112.51	119.70
26	LA	1301	A	C3'-C2'-C1'	-5.99	96.71	101.50
26	LA	2064	C	N1-C2-O2	5.99	122.50	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	L1	37	ARG	NE-CZ-NH1	5.99	123.30	120.30
45	LG	166	ARG	NE-CZ-NH2	-5.99	117.31	120.30
53	LP	41	ALA	N-CA-CB	5.99	118.49	110.10
2	SA	61	G	O4'-C1'-N9	5.99	112.99	108.20
2	SA	693	G	C8-N9-C1'	-5.99	119.22	127.00
2	SA	806	C	OP1-P-OP2	-5.99	110.62	119.60
2	SA	966	G	C5-C6-N1	5.99	114.49	111.50
26	LA	272	A	O3'-P-O5'	-5.99	92.62	104.00
26	LA	663	G	N1-C6-O6	5.99	123.49	119.90
26	LA	842	U	O5'-P-OP2	-5.99	100.31	105.70
26	LA	1020	A	N1-C2-N3	5.99	132.29	129.30
26	LA	1430	G	C4'-C3'-C2'	-5.99	96.61	102.60
26	LA	1979	U	C2-N1-C1'	-5.99	110.51	117.70
26	LA	2067	G	P-O3'-C3'	-5.99	112.51	119.70
26	LA	2167	U	OP1-P-OP2	-5.99	110.62	119.60
26	LA	2216	G	C5-C6-O6	-5.99	125.01	128.60
26	LA	2681	C	C3'-C2'-C1'	-5.99	96.71	101.50
26	LA	2695	U	C2-N3-C4	5.99	130.59	127.00
26	LA	2747	G	N9-C1'-C2'	-5.99	105.41	112.00
40	L4	27	ARG	N-CA-CB	-5.99	99.82	110.60
2	SA	1100	C	OP1-P-OP2	-5.99	110.62	119.60
2	SA	1483	A	C5-C6-N6	-5.99	118.91	123.70
18	SB	29	PHE	CB-CG-CD1	-5.99	116.61	120.80
26	LA	1805	A	C6-C5-N7	-5.99	128.11	132.30
26	LA	2775	G	N3-C4-C5	5.99	131.59	128.60
2	SA	233	C	C2-N3-C4	-5.99	116.91	119.90
2	SA	762	U	N1-C1'-C2'	-5.99	105.42	112.00
2	SA	868	C	N1-C2-O2	5.99	122.49	118.90
2	SA	947	G	N1-C6-O6	5.99	123.49	119.90
2	SA	1223	C	C5-C6-N1	-5.99	118.01	121.00
2	SA	1337	G	N3-C4-C5	5.99	131.59	128.60
25	LB	74	U	C5-C6-N1	-5.99	119.71	122.70
26	LA	107	G	C4'-C3'-C2'	-5.99	96.61	102.60
26	LA	125	A	C1'-O4'-C4'	-5.99	105.11	109.90
26	LA	665	U	C3'-C2'-C1'	5.99	106.29	101.50
26	LA	806	C	P-O3'-C3'	-5.99	112.52	119.70
26	LA	975	A	C5-N7-C8	-5.99	100.91	103.90
26	LA	1158	C	C5-C6-N1	5.99	123.99	121.00
26	LA	1359	A	C8-N9-C4	-5.99	103.41	105.80
26	LA	1380	G	C6-N1-C2	-5.99	121.51	125.10
26	LA	1431	A	C5-N7-C8	-5.99	100.91	103.90
26	LA	1502	A	C5'-C4'-C3'	-5.99	106.42	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1890	A	C8-N9-C1'	5.99	138.47	127.70
26	LA	1911	U	O3'-P-O5'	5.99	115.37	104.00
26	LA	2282	G	N3-C4-C5	-5.99	125.61	128.60
26	LA	2342	C	C4-C5-C6	-5.99	114.41	117.40
26	LA	2493	U	O4'-C1'-N1	5.99	112.99	108.20
26	LA	2575	C	C4-C5-C6	-5.99	114.41	117.40
2	SA	810	C	O3'-P-O5'	5.98	115.37	104.00
2	SA	1284	C	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	371	A	N9-C4-C5	5.98	108.19	105.80
26	LA	487	C	C6-N1-C2	-5.98	117.91	120.30
26	LA	1047	G	N7-C8-N9	5.98	116.09	113.10
26	LA	1205	A	C4-C5-N7	5.98	113.69	110.70
26	LA	1306	C	C6-N1-C2	-5.98	117.91	120.30
26	LA	1613	G	N1-C6-O6	5.98	123.49	119.90
26	LA	1652	A	O4'-C1'-N9	5.98	112.99	108.20
26	LA	1989	G	C5'-C4'-C3'	5.98	125.57	116.00
26	LA	2085	U	C5'-C4'-O4'	5.98	116.28	109.10
26	LA	2259	U	C6-N1-C1'	5.98	129.58	121.20
26	LA	2405	G	C2-N3-C4	-5.98	108.91	111.90
2	SA	174	A	C5'-C4'-O4'	5.98	116.28	109.10
2	SA	529	G	C4-N9-C1'	5.98	134.28	126.50
2	SA	612	C	N1-C2-O2	-5.98	115.31	118.90
2	SA	789	U	C3'-C2'-C1'	5.98	106.29	101.50
2	SA	939	G	C5'-C4'-C3'	-5.98	106.43	116.00
2	SA	939	G	C6-C5-N7	-5.98	126.81	130.40
2	SA	1155	A	N3-C4-N9	-5.98	122.61	127.40
2	SA	1178	G	C1'-O4'-C4'	-5.98	105.11	109.90
2	SA	1229	A	N3-C4-C5	-5.98	122.61	126.80
2	SA	1305	G	C5-C6-O6	-5.98	125.01	128.60
26	LA	359	G	C1'-O4'-C4'	-5.98	105.11	109.90
26	LA	411	G	N3-C4-N9	5.98	129.59	126.00
26	LA	704	G	C4'-C3'-C2'	5.98	108.58	102.60
26	LA	1005	C	O4'-C1'-N1	5.98	112.99	108.20
26	LA	1096	A	O4'-C1'-N9	5.98	112.99	108.20
26	LA	1324	G	N1-C2-N3	5.98	127.49	123.90
26	LA	2166	U	N1-C2-O2	5.98	126.99	122.80
26	LA	2234	G	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	2455	G	C2-N3-C4	5.98	114.89	111.90
26	LA	2472	G	C4-N9-C1'	5.98	134.28	126.50
58	LT	5	PHE	CB-CG-CD1	-5.98	116.61	120.80
2	SA	68	G	C3'-C2'-C1'	-5.98	96.72	101.50
2	SA	391	G	N1-C2-N2	-5.98	110.82	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	563	A	C5-N7-C8	-5.98	100.91	103.90
2	SA	756	C	C6-N1-C1'	5.98	127.98	120.80
2	SA	873	A	C5-C6-N6	-5.98	118.92	123.70
2	SA	886	G	C6-C5-N7	-5.98	126.81	130.40
2	SA	1353	G	O4'-C4'-C3'	-5.98	98.02	104.00
26	LA	42	A	P-O3'-C3'	5.98	126.88	119.70
26	LA	176	A	N7-C8-N9	5.98	116.79	113.80
26	LA	582	A	OP1-P-OP2	-5.98	110.63	119.60
26	LA	762	U	C5-C4-O4	-5.98	122.31	125.90
26	LA	963	U	N3-C2-O2	-5.98	118.01	122.20
26	LA	1285	A	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	1292	G	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	1596	A	N3-C4-C5	-5.98	122.61	126.80
2	SA	174	A	C5'-C4'-C3'	-5.98	106.43	116.00
2	SA	496	A	N3-C4-N9	-5.98	122.62	127.40
2	SA	1048	G	N3-C2-N2	5.98	124.08	119.90
2	SA	1318	A	C4'-C3'-C2'	5.98	108.58	102.60
2	SA	1531	A	O4'-C1'-N9	5.98	112.98	108.20
26	LA	729	G	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	1620	G	C5-C6-O6	-5.98	125.01	128.60
26	LA	2222	C	C5'-C4'-C3'	-5.98	106.43	116.00
26	LA	2676	C	O4'-C1'-C2'	5.98	112.98	107.60
2	SA	97	G	N3-C4-N9	-5.98	122.41	126.00
2	SA	324	G	C5-C6-N1	5.98	114.49	111.50
2	SA	720	C	C6-N1-C1'	-5.98	113.63	120.80
2	SA	1092	A	C5-N7-C8	5.98	106.89	103.90
2	SA	1131	G	C3'-C2'-C1'	-5.98	96.72	101.50
15	SO	83	ARG	NE-CZ-NH1	-5.98	117.31	120.30
20	SD	20	LEU	CB-CG-CD2	5.98	121.16	111.00
23	SR	33	THR	CA-CB-CG2	-5.98	104.03	112.40
26	LA	128	C	C2-N3-C4	-5.98	116.91	119.90
26	LA	1426	G	O4'-C4'-C3'	-5.98	98.02	104.00
26	LA	1462	C	P-O3'-C3'	-5.98	112.53	119.70
26	LA	1545	A	C5-C6-N1	5.98	120.69	117.70
26	LA	1970	A	N7-C8-N9	5.98	116.79	113.80
26	LA	2293	G	C4-N9-C1'	-5.98	118.73	126.50
26	LA	2365	G	C5'-C4'-C3'	-5.98	106.44	116.00
33	LZ	26	ARG	NE-CZ-NH2	-5.98	117.31	120.30
39	L3	41	HIS	CA-CB-CG	-5.98	103.44	113.60
2	SA	88	U	N1-C2-N3	-5.98	111.31	114.90
2	SA	562	U	N3-C2-O2	5.98	126.38	122.20
2	SA	831	A	C2-N3-C4	5.98	113.59	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	965	U	C3'-C2'-C1'	5.98	106.28	101.50
2	SA	1054	C	C5-C4-N4	-5.98	116.02	120.20
2	SA	1349	A	C6-N1-C2	5.98	122.19	118.60
4	S2	4	G	N1-C6-O6	5.98	123.49	119.90
25	LB	113	C	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	107	G	N9-C1'-C2'	-5.98	105.43	112.00
26	LA	115	C	N3-C2-O2	-5.98	117.72	121.90
26	LA	1262	A	C2-N3-C4	-5.98	107.61	110.60
26	LA	2313	C	P-O3'-C3'	-5.98	112.53	119.70
26	LA	2416	C	N1-C2-N3	5.98	123.38	119.20
2	SA	406	G	C5-C6-O6	-5.97	125.02	128.60
2	SA	846	G	C5-C6-O6	-5.97	125.02	128.60
13	SM	44	ILE	C-N-CA	5.97	136.64	121.70
26	LA	572	A	N1-C6-N6	5.97	122.19	118.60
26	LA	1099	G	C5'-C4'-O4'	5.97	116.27	109.10
26	LA	1192	G	OP1-P-OP2	-5.97	110.64	119.60
26	LA	1675	C	N1-C2-O2	-5.97	115.31	118.90
26	LA	1721	G	C8-N9-C4	-5.97	104.01	106.40
26	LA	2017	U	N3-C4-O4	5.97	123.58	119.40
26	LA	2193	G	O4'-C1'-N9	5.97	112.98	108.20
26	LA	2380	C	OP2-P-O3'	5.97	118.34	105.20
33	LZ	58	ILE	CA-CB-CG1	5.97	122.35	111.00
2	SA	510	A	C4-C5-N7	-5.97	107.71	110.70
2	SA	771	G	C8-N9-C1'	-5.97	119.24	127.00
2	SA	959	A	N7-C8-N9	-5.97	110.81	113.80
2	SA	1148	U	P-O3'-C3'	5.97	126.87	119.70
25	LB	7	G	OP1-P-OP2	-5.97	110.64	119.60
25	LB	54	G	C8-N9-C4	5.97	108.79	106.40
26	LA	51	G	N9-C1'-C2'	-5.97	105.43	112.00
26	LA	916	G	N3-C4-C5	-5.97	125.61	128.60
26	LA	2346	A	O4'-C1'-N9	5.97	112.98	108.20
26	LA	2460	U	O4'-C1'-N1	5.97	112.98	108.20
26	LA	2472	G	C6-C5-N7	-5.97	126.82	130.40
26	LA	2576	G	C6-C5-N7	5.97	133.98	130.40
26	LA	2724	U	C2-N3-C4	-5.97	123.42	127.00
26	LA	2893	A	C3'-C2'-C1'	-5.97	96.72	101.50
2	SA	663	A	N3-C4-N9	-5.97	122.62	127.40
2	SA	955	U	C5-C4-O4	-5.97	122.32	125.90
2	SA	1311	A	C4-N9-C1'	-5.97	115.55	126.30
19	SC	164	THR	CA-CB-CG2	5.97	120.76	112.40
26	LA	371	A	C2-N3-C4	5.97	113.59	110.60
2	SA	229	U	O4'-C1'-N1	5.97	112.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	257	G	OP2-P-O3'	5.97	118.33	105.20
2	SA	548	G	P-O5'-C5'	5.97	130.45	120.90
26	LA	2	G	C8-N9-C4	5.97	108.79	106.40
26	LA	514	A	C4-C5-C6	-5.97	114.02	117.00
26	LA	683	U	O4'-C1'-N1	5.97	112.98	108.20
26	LA	940	G	C5-C6-O6	-5.97	125.02	128.60
26	LA	964	C	C6-N1-C2	-5.97	117.91	120.30
26	LA	1358	G	N3-C2-N2	5.97	124.08	119.90
26	LA	1807	G	C5'-C4'-C3'	5.97	125.55	116.00
26	LA	2186	G	C5-C6-O6	5.97	132.18	128.60
26	LA	2607	G	C8-N9-C4	-5.97	104.01	106.40
26	LA	2886	A	C4-C5-C6	5.97	119.98	117.00
37	LC	9	ARG	NE-CZ-NH1	5.97	123.28	120.30
2	SA	555	U	N3-C2-O2	5.97	126.38	122.20
2	SA	1187	G	C6-N1-C2	-5.97	121.52	125.10
2	SA	1379	G	C4'-C3'-C2'	-5.97	96.63	102.60
26	LA	1954	G	C6-N1-C2	-5.97	121.52	125.10
26	LA	2202	U	C5-C6-N1	-5.97	119.72	122.70
26	LA	2387	U	P-O3'-C3'	5.97	126.86	119.70
2	SA	617	G	N7-C8-N9	5.97	116.08	113.10
2	SA	654	G	C4-C5-N7	-5.97	108.41	110.80
2	SA	697	U	N1-C2-N3	5.97	118.48	114.90
2	SA	786	G	C5'-C4'-C3'	-5.97	106.45	116.00
2	SA	1031	C	OP1-P-OP2	-5.97	110.65	119.60
2	SA	1328	C	C6-N1-C2	-5.97	117.91	120.30
14	SN	58	ARG	CG-CD-NE	-5.97	99.27	111.80
18	SB	239	ALA	CA-C-O	5.97	132.63	120.10
26	LA	1202	G	C6-N1-C2	-5.97	121.52	125.10
26	LA	1495	A	N7-C8-N9	5.97	116.78	113.80
26	LA	1525	A	C1'-O4'-C4'	5.97	114.67	109.90
26	LA	1690	A	C6-C5-N7	-5.97	128.12	132.30
26	LA	2366	A	N1-C6-N6	-5.97	115.02	118.60
26	LA	2578	G	C2'-C3'-O3'	5.97	123.25	113.70
26	LA	2727	A	O4'-C1'-N9	5.97	112.97	108.20
2	SA	260	G	C5-C6-N1	5.96	114.48	111.50
2	SA	1225	A	P-O5'-C5'	5.96	130.44	120.90
2	SA	1361	G	O3'-P-O5'	-5.96	92.67	104.00
3	S1	45	G	N3-C4-N9	5.96	129.58	126.00
26	LA	396	G	N1-C2-N2	-5.96	110.83	116.20
26	LA	544	C	N1-C2-O2	5.96	122.48	118.90
26	LA	561	G	O4'-C4'-C3'	-5.96	98.04	104.00
26	LA	1147	A	O4'-C1'-N9	5.96	112.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1834	U	C5'-C4'-O4'	5.96	116.26	109.10
26	LA	1969	A	C4-C5-C6	-5.96	114.02	117.00
26	LA	2044	C	C5'-C4'-O4'	-5.96	101.94	109.10
26	LA	2078	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2309	A	P-O3'-C3'	5.96	126.86	119.70
26	LA	2445	G	C6-N1-C2	-5.96	121.52	125.10
26	LA	2470	G	N3-C4-N9	-5.96	122.42	126.00
26	LA	2697	G	C2-N3-C4	-5.96	108.92	111.90
26	LA	2872	A	C5'-C4'-C3'	-5.96	106.46	116.00
2	SA	1005	A	C4-C5-C6	5.96	119.98	117.00
2	SA	1425	U	C5-C6-N1	5.96	125.68	122.70
26	LA	2118	U	O4'-C1'-C2'	-5.96	99.84	105.80
26	LA	2793	C	C5-C4-N4	-5.96	116.03	120.20
45	LG	77	LYS	C-N-CA	5.96	136.61	121.70
2	SA	176	C	N3-C2-O2	-5.96	117.73	121.90
2	SA	456	A	O4'-C1'-N9	5.96	112.97	108.20
2	SA	667	G	N9-C4-C5	-5.96	103.02	105.40
2	SA	795	C	OP1-P-OP2	-5.96	110.66	119.60
2	SA	1024	G	O4'-C1'-N9	5.96	112.97	108.20
2	SA	1162	C	N3-C4-C5	5.96	124.28	121.90
2	SA	1339	A	C8-N9-C4	5.96	108.19	105.80
2	SA	1396	A	C5-C6-N6	-5.96	118.93	123.70
7	SG	9	ARG	NE-CZ-NH1	5.96	123.28	120.30
26	LA	437	U	O4'-C1'-N1	5.96	112.97	108.20
26	LA	566	U	C4'-C3'-C2'	-5.96	96.64	102.60
26	LA	1419	A	C2-N3-C4	-5.96	107.62	110.60
26	LA	2148	G	O5'-P-OP1	-5.96	100.33	105.70
26	LA	2520	C	O4'-C1'-N1	5.96	112.97	108.20
27	LD	17	LYS	N-CA-CB	5.96	121.33	110.60
2	SA	465	A	C6-N1-C2	5.96	122.18	118.60
2	SA	673	A	P-O5'-C5'	5.96	130.44	120.90
26	LA	2239	G	C6-C5-N7	-5.96	126.82	130.40
26	LA	2524	G	C4-C5-C6	-5.96	115.22	118.80
58	LT	4	VAL	O-C-N	-5.96	113.16	122.70
2	SA	5	U	O4'-C1'-N1	5.96	112.97	108.20
2	SA	623	C	N3-C4-C5	5.96	124.28	121.90
2	SA	764	C	C1'-O4'-C4'	-5.96	105.13	109.90
2	SA	1531	A	C6-C5-N7	-5.96	128.13	132.30
26	LA	954	G	N1-C2-N3	5.96	127.47	123.90
26	LA	1161	C	C5'-C4'-O4'	5.96	116.25	109.10
26	LA	1437	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2088	A	N1-C6-N6	5.96	122.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2161	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2186	G	N9-C4-C5	5.96	107.78	105.40
26	LA	2343	U	N1-C2-O2	5.96	126.97	122.80
26	LA	2692	G	C1'-O4'-C4'	-5.96	105.13	109.90
33	LZ	77	TYR	CB-CG-CD2	5.96	124.58	121.00
2	SA	7	A	P-O5'-C5'	5.96	130.43	120.90
2	SA	46	G	C2-N3-C4	-5.96	108.92	111.90
2	SA	99	C	N1-C2-N3	5.96	123.37	119.20
2	SA	454	G	OP1-P-OP2	-5.96	110.67	119.60
2	SA	616	G	P-O3'-C3'	5.96	126.85	119.70
2	SA	1373	G	N3-C2-N2	-5.96	115.73	119.90
25	LB	118	C	N1-C1'-C2'	-5.96	105.45	112.00
26	LA	115	C	N3-C4-N4	-5.96	113.83	118.00
26	LA	2017	U	C4'-C3'-C2'	-5.96	96.64	102.60
26	LA	2115	G	C8-N9-C1'	5.96	134.74	127.00
26	LA	2609	U	N1-C1'-C2'	5.96	121.75	114.00
53	LP	64	ARG	NE-CZ-NH1	5.96	123.28	120.30
2	SA	663	A	C6-N1-C2	-5.96	115.03	118.60
2	SA	671	G	C4-C5-N7	5.96	113.18	110.80
2	SA	880	C	O5'-C5'-C4'	-5.96	100.39	111.70
2	SA	1379	G	C5'-C4'-C3'	5.96	125.53	116.00
24	S3	100	ARG	NH1-CZ-NH2	5.96	125.95	119.40
26	LA	107	G	N1-C6-O6	-5.96	116.33	119.90
26	LA	168	G	C1'-O4'-C4'	-5.96	105.14	109.90
26	LA	279	A	C8-N9-C4	-5.96	103.42	105.80
26	LA	1168	G	O3'-P-O5'	-5.96	92.69	104.00
26	LA	1849	G	O3'-P-O5'	-5.96	92.69	104.00
2	SA	466	A	C5-C6-N6	-5.95	118.94	123.70
2	SA	490	C	C1'-O4'-C4'	-5.95	105.14	109.90
2	SA	933	G	N1-C2-N3	-5.95	120.33	123.90
2	SA	946	A	C4'-C3'-C2'	-5.95	96.65	102.60
3	S1	44	U	C4-C5-C6	-5.95	116.13	119.70
25	LB	22	U	C5-C4-O4	5.95	129.47	125.90
26	LA	908	C	C1'-O4'-C4'	-5.95	105.14	109.90
26	LA	1014	A	N7-C8-N9	5.95	116.78	113.80
26	LA	1790	C	C4-C5-C6	-5.95	114.42	117.40
26	LA	1856	U	C2'-C3'-O3'	5.95	123.23	113.70
26	LA	1979	U	N1-C2-O2	-5.95	118.63	122.80
26	LA	1989	G	N3-C4-C5	5.95	131.58	128.60
26	LA	2024	G	O4'-C1'-N9	5.95	112.96	108.20
26	LA	2151	U	N3-C4-O4	5.95	123.57	119.40
26	LA	2414	G	P-O3'-C3'	-5.95	112.56	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2819	G	C5-N7-C8	-5.95	101.32	104.30
2	SA	643	C	N3-C2-O2	-5.95	117.73	121.90
26	LA	1006	C	O4'-C1'-N1	5.95	112.96	108.20
26	LA	1042	G	O4'-C1'-N9	5.95	112.96	108.20
26	LA	1111	A	C2-N3-C4	5.95	113.58	110.60
26	LA	1676	A	C5-N7-C8	5.95	106.88	103.90
26	LA	1853	A	C3'-C2'-C1'	5.95	106.26	101.50
26	LA	1919	A	C2-N3-C4	-5.95	107.62	110.60
26	LA	2317	A	C2-N3-C4	5.95	113.58	110.60
26	LA	2427	C	C5-C4-N4	-5.95	116.03	120.20
26	LA	2445	G	N9-C4-C5	5.95	107.78	105.40
26	LA	2672	U	OP1-P-OP2	-5.95	110.67	119.60
2	SA	173	U	C1'-O4'-C4'	-5.95	105.14	109.90
2	SA	374	A	O4'-C1'-N9	5.95	112.96	108.20
2	SA	382	A	C3'-C2'-C1'	5.95	106.26	101.50
2	SA	418	C	C4-C5-C6	-5.95	114.42	117.40
2	SA	764	C	N3-C4-C5	5.95	124.28	121.90
2	SA	1290	G	P-O3'-C3'	-5.95	112.56	119.70
2	SA	1424	U	C5'-C4'-C3'	5.95	125.52	116.00
24	S3	364	GLN	O-C-N	-5.95	113.18	122.70
26	LA	1351	C	N3-C4-C5	5.95	124.28	121.90
26	LA	1471	G	N1-C6-O6	5.95	123.47	119.90
26	LA	1637	A	N3-C4-N9	-5.95	122.64	127.40
26	LA	2150	C	C6-N1-C1'	-5.95	113.66	120.80
26	LA	2191	A	N1-C6-N6	5.95	122.17	118.60
26	LA	2400	G	C4-C5-C6	-5.95	115.23	118.80
26	LA	2818	U	O4'-C1'-N1	5.95	112.96	108.20
2	SA	248	C	P-O5'-C5'	-5.95	111.38	120.90
2	SA	376	G	C4-N9-C1'	-5.95	118.77	126.50
2	SA	430	A	C5-N7-C8	-5.95	100.93	103.90
2	SA	482	A	O4'-C1'-N9	5.95	112.96	108.20
2	SA	665	A	N1-C2-N3	-5.95	126.33	129.30
2	SA	714	G	C6-N1-C2	-5.95	121.53	125.10
2	SA	721	G	N9-C1'-C2'	-5.95	105.46	112.00
26	LA	471	A	O4'-C1'-N9	5.95	112.96	108.20
26	LA	1216	G	C6-N1-C2	5.95	128.67	125.10
26	LA	1312	U	C2-N3-C4	-5.95	123.43	127.00
26	LA	2341	G	C5'-C4'-O4'	5.95	116.24	109.10
26	LA	2442	C	C5'-C4'-C3'	-5.95	106.48	116.00
2	SA	1185	G	C2-N3-C4	5.95	114.87	111.90
2	SA	1477	U	OP1-P-OP2	-5.95	110.68	119.60
16	SP	43	ALA	N-CA-CB	-5.95	101.77	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	259	G	C6-N1-C2	-5.95	121.53	125.10
26	LA	1117	C	C4'-C3'-C2'	-5.95	96.65	102.60
26	LA	1824	G	C4'-C3'-C2'	-5.95	96.65	102.60
26	LA	1880	U	P-O5'-C5'	5.95	130.41	120.90
26	LA	1904	G	C5-C6-N1	5.95	114.47	111.50
41	L5	43	THR	C-N-CA	5.95	136.57	121.70
2	SA	240	G	N1-C6-O6	5.95	123.47	119.90
2	SA	304	U	O4'-C1'-N1	5.95	112.96	108.20
2	SA	720	C	C5'-C4'-O4'	5.95	116.23	109.10
2	SA	1312	G	N3-C4-C5	-5.95	125.63	128.60
2	SA	1344	C	N3-C4-N4	-5.95	113.84	118.00
2	SA	1384	C	N3-C4-N4	-5.95	113.84	118.00
2	SA	1486	G	N7-C8-N9	5.95	116.07	113.10
26	LA	687	C	N3-C4-N4	5.95	122.16	118.00
26	LA	1014	A	N1-C6-N6	-5.95	115.03	118.60
26	LA	1261	C	C5-C6-N1	-5.95	118.03	121.00
26	LA	1435	G	C8-N9-C4	5.95	108.78	106.40
26	LA	1531	C	N1-C2-O2	5.95	122.47	118.90
26	LA	2124	G	N1-C2-N2	-5.95	110.85	116.20
26	LA	2261	C	C5'-C4'-O4'	5.95	116.23	109.10
26	LA	2399	G	C4'-C3'-C2'	-5.95	96.66	102.60
26	LA	2683	C	N1-C2-O2	-5.95	115.33	118.90
26	LA	2834	G	C5'-C4'-C3'	-5.95	106.49	116.00
2	SA	251	G	C5-C6-N1	-5.94	108.53	111.50
2	SA	375	U	C6-N1-C2	-5.94	117.43	121.00
2	SA	1402	C	C2-N1-C1'	5.94	125.34	118.80
2	SA	1489	G	O4'-C1'-N9	5.94	112.95	108.20
26	LA	181	A	C5-C6-N1	-5.94	114.73	117.70
26	LA	1094	U	P-O3'-C3'	-5.94	112.57	119.70
26	LA	1097	U	O5'-C5'-C4'	5.94	122.99	111.70
26	LA	1558	C	P-O3'-C3'	-5.94	112.57	119.70
26	LA	2096	C	O4'-C4'-C3'	-5.94	98.06	104.00
26	LA	2337	G	C6-N1-C2	5.94	128.67	125.10
26	LA	2494	G	C4-C5-N7	5.94	113.18	110.80
26	LA	2783	U	C5'-C4'-O4'	5.94	116.23	109.10
2	SA	363	A	C6-C5-N7	-5.94	128.14	132.30
2	SA	844	G	N1-C2-N2	5.94	121.55	116.20
13	SM	104	ASN	CB-CA-C	-5.94	98.51	110.40
25	LB	120	U	C5-C4-O4	5.94	129.47	125.90
26	LA	339	U	O4'-C1'-N1	5.94	112.95	108.20
26	LA	473	G	O4'-C1'-N9	5.94	112.95	108.20
26	LA	621	A	N1-C6-N6	5.94	122.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	641	U	O3'-P-O5'	5.94	115.29	104.00
26	LA	974	G	N9-C4-C5	5.94	107.78	105.40
26	LA	1096	A	N1-C6-N6	5.94	122.17	118.60
26	LA	1102	C	O4'-C1'-N1	5.94	112.95	108.20
26	LA	1119	U	C5'-C4'-C3'	-5.94	106.49	116.00
26	LA	1374	G	N3-C4-N9	5.94	129.57	126.00
26	LA	1397	U	C5-C4-O4	5.94	129.47	125.90
26	LA	1571	A	C5-C6-N6	-5.94	118.95	123.70
26	LA	1819	A	C5'-C4'-C3'	-5.94	106.49	116.00
26	LA	1836	C	C4'-C3'-C2'	-5.94	96.66	102.60
26	LA	2369	A	C6-C5-N7	5.94	136.46	132.30
26	LA	2563	U	C5'-C4'-O4'	5.94	116.23	109.10
26	LA	2633	G	O4'-C1'-N9	5.94	112.95	108.20
53	LP	91	ALA	CB-CA-C	5.94	119.01	110.10
2	SA	69	G	C4-C5-N7	-5.94	108.42	110.80
2	SA	712	A	C8-N9-C4	-5.94	103.42	105.80
2	SA	789	U	C4-C5-C6	-5.94	116.14	119.70
2	SA	897	C	O4'-C1'-N1	5.94	112.95	108.20
2	SA	1281	C	N3-C2-O2	-5.94	117.74	121.90
4	S2	21	U	N3-C4-C5	-5.94	111.04	114.60
21	SE	137	ARG	CG-CD-NE	-5.94	99.33	111.80
26	LA	342	A	C5-C6-N1	-5.94	114.73	117.70
26	LA	442	G	N3-C2-N2	5.94	124.06	119.90
26	LA	768	G	N9-C4-C5	-5.94	103.02	105.40
26	LA	842	U	N3-C4-C5	-5.94	111.04	114.60
26	LA	968	C	N1-C2-O2	5.94	122.46	118.90
26	LA	1180	U	P-O5'-C5'	5.94	130.41	120.90
26	LA	1297	C	N3-C4-C5	-5.94	119.52	121.90
26	LA	2055	C	C6-N1-C2	5.94	122.68	120.30
26	LA	2704	C	C6-N1-C2	-5.94	117.92	120.30
26	LA	2714	G	C4-C5-N7	5.94	113.18	110.80
50	LL	3	THR	CA-CB-OG1	5.94	121.47	109.00
2	SA	1408	A	C5-C6-N1	5.94	120.67	117.70
25	LB	100	G	C5-N7-C8	-5.94	101.33	104.30
26	LA	236	C	N1-C2-N3	5.94	123.36	119.20
26	LA	1022	G	C5-N7-C8	-5.94	101.33	104.30
26	LA	2615	U	C6-N1-C2	-5.94	117.44	121.00
26	LA	2645	G	C4-N9-C1'	-5.94	118.78	126.50
37	LC	1	MET	O-C-N	-5.94	113.20	122.70
1	SS	54	ARG	NH1-CZ-NH2	-5.94	112.87	119.40
2	SA	1029	U	C6-N1-C2	5.94	124.56	121.00
2	SA	1509	C	C4'-C3'-C2'	-5.94	96.66	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1542	A	O4'-C1'-N9	5.94	112.95	108.20
3	S1	38	G	C5-C6-N1	5.94	114.47	111.50
19	SC	183	TYR	N-CA-CB	-5.94	99.91	110.60
26	LA	90	U	N1-C2-N3	5.94	118.46	114.90
26	LA	673	C	O4'-C1'-C2'	5.94	112.94	107.60
26	LA	697	G	OP2-P-O3'	5.94	118.26	105.20
26	LA	857	G	C6-N1-C2	-5.94	121.54	125.10
26	LA	1356	G	C4-C5-N7	5.94	113.17	110.80
26	LA	1982	U	C5-C4-O4	5.94	129.46	125.90
26	LA	2268	A	OP1-P-O3'	5.94	118.26	105.20
26	LA	2641	G	P-O5'-C5'	-5.94	111.40	120.90
26	LA	2844	G	O5'-P-OP2	5.94	117.83	110.70
26	LA	2879	A	C6-C5-N7	-5.94	128.14	132.30
2	SA	444	G	C6-C5-N7	5.94	133.96	130.40
26	LA	147	C	O4'-C1'-N1	5.94	112.95	108.20
26	LA	1984	G	C5'-C4'-O4'	5.94	116.22	109.10
26	LA	2224	G	C2'-C3'-O3'	5.94	123.20	113.70
44	LF	17	THR	CA-CB-OG1	5.94	121.47	109.00
2	SA	484	G	C2-N3-C4	5.93	114.87	111.90
2	SA	1131	G	N1-C2-N2	-5.93	110.86	116.20
2	SA	1532	U	O5'-P-OP2	-5.93	100.36	105.70
20	SD	71	PHE	CB-CG-CD2	5.93	124.95	120.80
26	LA	550	C	O4'-C1'-N1	5.93	112.95	108.20
26	LA	943	A	N1-C2-N3	-5.93	126.33	129.30
26	LA	1191	G	N1-C6-O6	-5.93	116.34	119.90
26	LA	1260	A	N1-C6-N6	5.93	122.16	118.60
26	LA	1541	C	C5-C4-N4	5.93	124.35	120.20
26	LA	2131	U	O4'-C4'-C3'	-5.93	98.06	104.00
26	LA	2221	G	N7-C8-N9	-5.93	110.13	113.10
26	LA	2319	G	C4-C5-N7	-5.93	108.43	110.80
26	LA	2711	A	OP1-P-OP2	-5.93	110.70	119.60
2	SA	127	G	C8-N9-C1'	5.93	134.71	127.00
2	SA	615	G	C5-N7-C8	5.93	107.27	104.30
2	SA	667	G	N3-C2-N2	5.93	124.05	119.90
2	SA	1139	G	N1-C2-N3	-5.93	120.34	123.90
26	LA	92	U	C5'-C4'-C3'	5.93	125.49	116.00
26	LA	132	G	O4'-C1'-N9	5.93	112.95	108.20
26	LA	200	U	C5-C4-O4	-5.93	122.34	125.90
26	LA	579	G	C1'-O4'-C4'	-5.93	105.15	109.90
26	LA	634	C	C1'-O4'-C4'	-5.93	105.16	109.90
26	LA	1195	G	N9-C1'-C2'	-5.93	105.47	112.00
26	LA	1517	G	C5'-C4'-O4'	5.93	116.22	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1634	A	C5-N7-C8	-5.93	100.93	103.90
26	LA	1715	G	N1-C6-O6	-5.93	116.34	119.90
26	LA	1993	U	N3-C4-O4	5.93	123.55	119.40
26	LA	2006	C	C1'-O4'-C4'	-5.93	105.15	109.90
26	LA	2132	U	N3-C2-O2	-5.93	118.05	122.20
26	LA	2213	U	N3-C4-C5	5.93	118.16	114.60
26	LA	2363	G	C2-N3-C4	5.93	114.87	111.90
26	LA	2413	G	C8-N9-C4	5.93	108.77	106.40
26	LA	2520	C	C2-N3-C4	-5.93	116.93	119.90
26	LA	2728	U	N3-C4-O4	5.93	123.55	119.40
26	LA	2817	U	C4'-C3'-C2'	-5.93	96.67	102.60
26	LA	2830	C	C1'-O4'-C4'	-5.93	105.16	109.90
2	SA	376	G	O3'-P-O5'	5.93	115.27	104.00
2	SA	473	U	C2-N1-C1'	5.93	124.82	117.70
2	SA	653	U	O4'-C1'-N1	5.93	112.94	108.20
2	SA	676	A	P-O3'-C3'	-5.93	112.58	119.70
2	SA	1482	G	N1-C6-O6	5.93	123.46	119.90
26	LA	1794	A	C5-C6-N1	-5.93	114.73	117.70
26	LA	2175	C	C5-C4-N4	-5.93	116.05	120.20
2	SA	969	A	P-O5'-C5'	-5.93	111.41	120.90
2	SA	1031	C	C1'-O4'-C4'	-5.93	105.16	109.90
4	S2	61	U	P-O3'-C3'	-5.93	112.59	119.70
26	LA	432	A	O4'-C1'-N9	5.93	112.94	108.20
26	LA	552	U	OP1-P-OP2	-5.93	110.71	119.60
26	LA	629	G	C2-N3-C4	5.93	114.86	111.90
26	LA	1106	G	C5-C6-N1	5.93	114.47	111.50
26	LA	1404	C	P-O5'-C5'	-5.93	111.41	120.90
26	LA	2779	U	N1-C2-N3	5.93	118.46	114.90
26	LA	2846	G	C4'-C3'-C2'	-5.93	96.67	102.60
32	LY	40	ARG	NE-CZ-NH2	-5.93	117.33	120.30
2	SA	215	C	O5'-P-OP2	-5.93	100.36	105.70
2	SA	597	G	C8-N9-C4	-5.93	104.03	106.40
2	SA	889	A	OP1-P-OP2	-5.93	110.71	119.60
3	S1	56	G	N3-C2-N2	-5.93	115.75	119.90
4	S2	31	G	N1-C6-O6	5.93	123.46	119.90
10	SJ	71	LEU	CB-CA-C	-5.93	98.94	110.20
26	LA	264	C	N3-C4-N4	5.93	122.15	118.00
26	LA	1573	G	C5-C6-N1	5.93	114.46	111.50
26	LA	2450	A	N9-C1'-C2'	5.93	121.71	114.00
2	SA	149	A	P-O5'-C5'	-5.93	111.42	120.90
2	SA	219	U	N3-C4-O4	-5.93	115.25	119.40
2	SA	687	A	O5'-P-OP2	-5.93	100.36	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1094	G	C4-C5-C6	-5.93	115.24	118.80
2	SA	1276	G	C8-N9-C4	-5.93	104.03	106.40
2	SA	1513	A	O4'-C1'-N9	5.93	112.94	108.20
3	S1	43	U	C5'-C4'-C3'	5.93	125.48	116.00
4	S2	46	G	N3-C4-C5	-5.93	125.64	128.60
5	ST	31	ILE	CA-CB-CG1	-5.93	99.74	111.00
25	LB	101	A	C5-N7-C8	-5.93	100.94	103.90
26	LA	42	A	C6-N1-C2	-5.93	115.05	118.60
26	LA	224	U	N1-C2-N3	5.93	118.46	114.90
26	LA	337	C	C2-N3-C4	-5.93	116.94	119.90
26	LA	729	G	C5-C6-N1	5.93	114.46	111.50
26	LA	749	A	C4-C5-C6	5.93	119.96	117.00
26	LA	828	U	N1-C2-N3	5.93	118.45	114.90
26	LA	935	C	N1-C2-O2	5.93	122.46	118.90
26	LA	1445	G	N1-C2-N2	-5.93	110.86	116.20
26	LA	1876	A	C5-C6-N1	-5.93	114.74	117.70
26	LA	2686	G	C8-N9-C4	-5.93	104.03	106.40
47	LJ	2	LEU	CB-CG-CD1	-5.93	100.92	111.00
2	SA	97	G	N7-C8-N9	-5.92	110.14	113.10
2	SA	99	C	C2-N3-C4	-5.92	116.94	119.90
2	SA	228	A	C8-N9-C4	-5.92	103.43	105.80
2	SA	492	C	C6-N1-C2	-5.92	117.93	120.30
2	SA	570	G	N9-C4-C5	-5.92	103.03	105.40
2	SA	1004	A	C2'-C3'-O3'	5.92	123.18	113.70
2	SA	1447	A	C8-N9-C1'	5.92	138.36	127.70
24	S3	98	VAL	CA-CB-CG2	-5.92	102.01	110.90
26	LA	95	A	C8-N9-C4	5.92	108.17	105.80
26	LA	165	A	O4'-C1'-N9	5.92	112.94	108.20
26	LA	229	C	O4'-C1'-N1	5.92	112.94	108.20
26	LA	353	C	C5-C4-N4	-5.92	116.05	120.20
26	LA	469	G	C6-C5-N7	-5.92	126.84	130.40
26	LA	642	U	N3-C4-O4	5.92	123.55	119.40
26	LA	754	U	O3'-P-O5'	5.92	115.26	104.00
26	LA	1650	A	C5-C6-N1	-5.92	114.74	117.70
26	LA	1930	G	C6-N1-C2	5.92	128.65	125.10
26	LA	2009	A	C5-C6-N1	5.92	120.66	117.70
26	LA	2262	U	P-O5'-C5'	-5.92	111.42	120.90
26	LA	2291	U	C2'-C3'-O3'	5.92	123.18	113.70
24	S3	535	PHE	CB-CG-CD2	5.92	124.95	120.80
26	LA	627	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2151	U	C6-N1-C2	-5.92	117.45	121.00
26	LA	2247	A	OP1-P-OP2	-5.92	110.72	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	LS	101	ASP	CB-CG-OD2	5.92	123.63	118.30
2	SA	100	G	O4'-C1'-N9	5.92	112.94	108.20
2	SA	523	A	C4'-C3'-C2'	5.92	108.52	102.60
2	SA	542	G	C4-N9-C1'	-5.92	118.80	126.50
2	SA	753	A	C5'-C4'-O4'	5.92	116.21	109.10
2	SA	1067	A	N3-C4-C5	-5.92	122.66	126.80
26	LA	51	G	OP1-P-O3'	5.92	118.23	105.20
26	LA	403	U	N3-C2-O2	5.92	126.34	122.20
26	LA	694	U	O4'-C1'-N1	5.92	112.94	108.20
26	LA	710	U	C2-N3-C4	-5.92	123.45	127.00
26	LA	723	C	OP1-P-OP2	-5.92	110.72	119.60
26	LA	771	G	N1-C2-N3	5.92	127.45	123.90
26	LA	1171	G	N1-C2-N2	-5.92	110.87	116.20
26	LA	1912	A	C1'-O4'-C4'	-5.92	105.16	109.90
26	LA	2412	A	C4'-C3'-C2'	-5.92	96.68	102.60
26	LA	2626	C	N1-C2-O2	5.92	122.45	118.90
26	LA	2725	A	N1-C2-N3	-5.92	126.34	129.30
26	LA	2849	U	C5-C6-N1	-5.92	119.74	122.70
42	L6	9	ALA	N-CA-CB	-5.92	101.81	110.10
2	SA	136	C	C5-C4-N4	5.92	124.34	120.20
2	SA	738	C	C4-C5-C6	-5.92	114.44	117.40
3	S1	26	U	C6-N1-C1'	-5.92	112.91	121.20
26	LA	315	G	C4-C5-C6	-5.92	115.25	118.80
26	LA	953	G	C6-N1-C2	-5.92	121.55	125.10
26	LA	1964	G	C4-N9-C1'	-5.92	118.80	126.50
26	LA	2579	C	O3'-P-O5'	-5.92	92.75	104.00
2	SA	27	G	C8-N9-C1'	-5.92	119.31	127.00
2	SA	198	G	C5-C6-N1	5.92	114.46	111.50
2	SA	321	A	C2-N3-C4	5.92	113.56	110.60
2	SA	572	A	C8-N9-C4	5.92	108.17	105.80
2	SA	885	G	C2-N3-C4	-5.92	108.94	111.90
2	SA	1242	G	N3-C4-C5	-5.92	125.64	128.60
2	SA	1251	A	N1-C2-N3	5.92	132.26	129.30
4	S2	15	G	P-O3'-C3'	5.92	126.80	119.70
26	LA	789	A	C5'-C4'-O4'	5.92	116.20	109.10
26	LA	2080	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2138	G	O3'-P-O5'	-5.92	92.75	104.00
26	LA	2286	G	N9-C4-C5	-5.92	103.03	105.40
2	SA	558	G	N3-C4-N9	5.92	129.55	126.00
2	SA	591	U	O4'-C4'-C3'	5.92	110.83	106.10
2	SA	629	A	C4'-C3'-C2'	-5.92	96.68	102.60
2	SA	1081	A	O4'-C4'-C3'	5.92	110.83	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	35	C	O4'-C1'-N1	5.92	112.93	108.20
25	LB	76	G	N1-C2-N2	-5.92	110.88	116.20
25	LB	101	A	N7-C8-N9	5.92	116.76	113.80
26	LA	421	C	C5'-C4'-O4'	5.92	116.20	109.10
26	LA	681	G	C5-C6-N1	5.92	114.46	111.50
26	LA	800	A	O4'-C1'-N9	5.92	112.93	108.20
26	LA	1136	G	N3-C2-N2	5.92	124.04	119.90
26	LA	1253	A	C3'-C2'-C1'	-5.92	96.77	101.50
26	LA	1488	C	C6-N1-C1'	5.92	127.90	120.80
26	LA	2247	A	P-O3'-C3'	5.92	126.80	119.70
26	LA	2272	U	C4-C5-C6	-5.92	116.15	119.70
26	LA	2322	A	N1-C2-N3	-5.92	126.34	129.30
26	LA	2342	C	P-O5'-C5'	5.92	130.37	120.90
26	LA	2516	A	C6-N1-C2	-5.92	115.05	118.60
37	LC	78	PHE	CB-CG-CD1	-5.92	116.66	120.80
47	LJ	119	ALA	CB-CA-C	5.92	118.97	110.10
2	SA	227	G	C4-N9-C1'	-5.92	118.81	126.50
2	SA	556	C	C3'-C2'-C1'	5.92	106.23	101.50
2	SA	699	C	O5'-P-OP2	-5.92	100.38	105.70
24	S3	417	ILE	CA-CB-CG2	-5.92	99.07	110.90
26	LA	45	G	N7-C8-N9	-5.92	110.14	113.10
26	LA	136	G	C5-C6-O6	-5.92	125.05	128.60
26	LA	2009	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2585	U	C1'-O4'-C4'	5.92	114.63	109.90
26	LA	2602	A	N3-C4-N9	5.92	132.13	127.40
26	LA	2722	G	C4-C5-C6	-5.92	115.25	118.80
2	SA	557	G	C6-C5-N7	-5.91	126.85	130.40
2	SA	1033	G	C8-N9-C1'	5.91	134.69	127.00
2	SA	1233	G	C5-N7-C8	5.91	107.26	104.30
2	SA	1280	A	C8-N9-C4	-5.91	103.44	105.80
25	LB	117	G	C5-C6-O6	-5.91	125.05	128.60
26	LA	368	A	N1-C6-N6	5.91	122.15	118.60
26	LA	698	C	C6-N1-C2	-5.91	117.93	120.30
26	LA	1272	A	C3'-C2'-C1'	5.91	106.23	101.50
26	LA	1319	C	C5-C6-N1	5.91	123.96	121.00
26	LA	2067	G	N9-C1'-C2'	-5.91	105.50	112.00
26	LA	2223	G	C2-N3-C4	5.91	114.86	111.90
26	LA	2348	U	O4'-C1'-N1	5.91	112.93	108.20
26	LA	2393	U	P-O3'-C3'	-5.91	112.60	119.70
26	LA	2635	A	C8-N9-C4	5.91	108.17	105.80
47	LJ	93	ARG	NE-CZ-NH2	5.91	123.26	120.30
53	LP	112	TYR	CZ-CE2-CD2	-5.91	114.48	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	LQ	10	ARG	CG-CD-NE	-5.91	99.38	111.80
2	SA	667	G	N3-C4-C5	5.91	131.56	128.60
2	SA	838	G	C4-N9-C1'	-5.91	118.81	126.50
2	SA	1483	A	P-O5'-C5'	5.91	130.36	120.90
24	S3	69	ALA	N-CA-CB	-5.91	101.82	110.10
26	LA	1357	C	O4'-C1'-N1	5.91	112.93	108.20
26	LA	2492	U	N3-C2-O2	-5.91	118.06	122.20
46	LH	165	ASP	N-CA-CB	5.91	121.24	110.60
2	SA	30	U	O3'-P-O5'	-5.91	92.77	104.00
2	SA	267	C	N3-C2-O2	-5.91	117.76	121.90
2	SA	493	A	C4-C5-C6	-5.91	114.05	117.00
2	SA	569	C	N1-C2-N3	5.91	123.34	119.20
2	SA	878	A	O3'-P-O5'	-5.91	92.77	104.00
2	SA	1335	U	C1'-O4'-C4'	-5.91	105.17	109.90
24	S3	44	ASP	N-CA-CB	5.91	121.24	110.60
26	LA	437	U	C4-C5-C6	-5.91	116.15	119.70
26	LA	442	G	O4'-C1'-C2'	5.91	112.92	107.60
26	LA	588	U	C5-C4-O4	-5.91	122.35	125.90
26	LA	1421	G	O5'-P-OP2	-5.91	100.38	105.70
26	LA	1630	A	N3-C4-N9	-5.91	122.67	127.40
26	LA	1662	U	O4'-C1'-N1	5.91	112.93	108.20
26	LA	1786	A	N1-C6-N6	-5.91	115.05	118.60
26	LA	1889	A	OP1-P-O3'	5.91	118.20	105.20
26	LA	2287	A	N3-C4-N9	5.91	132.13	127.40
26	LA	2353	G	C1'-O4'-C4'	-5.91	105.17	109.90
26	LA	2470	G	N1-C6-O6	5.91	123.45	119.90
26	LA	2570	G	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	2823	A	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	2859	G	O4'-C1'-N9	5.91	112.93	108.20
50	LL	120	ARG	NE-CZ-NH1	5.91	123.25	120.30
2	SA	79	G	C5-N7-C8	5.91	107.25	104.30
2	SA	317	U	C6-N1-C2	-5.91	117.45	121.00
2	SA	1507	A	C4'-C3'-C2'	-5.91	96.69	102.60
25	LB	29	A	N1-C2-N3	-5.91	126.35	129.30
26	LA	468	G	N3-C4-C5	-5.91	125.64	128.60
26	LA	700	G	C4'-C3'-C2'	-5.91	96.69	102.60
26	LA	837	C	C3'-C2'-C1'	5.91	106.23	101.50
26	LA	939	G	P-O5'-C5'	-5.91	111.45	120.90
26	LA	961	C	O4'-C1'-N1	5.91	112.93	108.20
26	LA	1496	A	C5-C6-N1	-5.91	114.75	117.70
26	LA	2065	C	C5-C4-N4	-5.91	116.06	120.20
26	LA	2374	C	N3-C2-O2	-5.91	117.76	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2456	C	C5-C4-N4	-5.91	116.06	120.20
26	LA	2539	C	C4'-C3'-C2'	-5.91	96.69	102.60
38	LE	82	PHE	N-CA-CB	5.91	121.24	110.60
2	SA	191	G	O4'-C1'-N9	5.91	112.93	108.20
26	LA	561	G	O4'-C1'-N9	5.91	112.92	108.20
26	LA	621	A	OP1-P-OP2	-5.91	110.74	119.60
26	LA	959	A	C4-C5-C6	-5.91	114.05	117.00
26	LA	1693	U	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	1963	U	P-O5'-C5'	5.91	130.35	120.90
26	LA	2761	A	C8-N9-C4	-5.91	103.44	105.80
47	LJ	137	ARG	NE-CZ-NH1	5.91	123.25	120.30
2	SA	46	G	N1-C2-N3	5.91	127.44	123.90
2	SA	1196	A	C4-C5-C6	-5.91	114.05	117.00
2	SA	1502	A	N9-C4-C5	-5.91	103.44	105.80
4	S2	21	U	P-O3'-C3'	-5.91	112.61	119.70
25	LB	39	A	C8-N9-C4	-5.91	103.44	105.80
26	LA	100	U	OP1-P-OP2	-5.91	110.74	119.60
26	LA	102	U	C5-C6-N1	5.91	125.65	122.70
26	LA	262	A	C6-C5-N7	-5.91	128.16	132.30
26	LA	389	G	C4-C5-N7	5.91	113.16	110.80
26	LA	813	U	O4'-C1'-N1	5.91	112.92	108.20
26	LA	928	A	N1-C6-N6	5.91	122.14	118.60
26	LA	1022	G	N3-C4-C5	5.91	131.55	128.60
26	LA	1041	G	C5-C6-N1	5.91	114.45	111.50
26	LA	1241	A	C4'-C3'-C2'	5.91	108.51	102.60
26	LA	1405	U	N3-C4-C5	-5.91	111.06	114.60
26	LA	2364	C	P-O3'-C3'	-5.91	112.61	119.70
26	LA	2368	C	C5-C6-N1	-5.91	118.05	121.00
28	LU	18	ARG	NE-CZ-NH2	-5.91	117.35	120.30
51	LI	35	LYS	O-C-N	-5.91	113.25	122.70
55	LQ	31	THR	CA-CB-OG1	5.91	121.40	109.00
2	SA	52	C	C4'-C3'-C2'	-5.90	96.70	102.60
2	SA	299	G	O4'-C1'-N9	5.90	112.92	108.20
2	SA	420	U	N1-C2-O2	-5.90	118.67	122.80
2	SA	624	C	C2-N3-C4	-5.90	116.95	119.90
2	SA	818	G	N3-C2-N2	-5.90	115.77	119.90
2	SA	1325	C	C4-C5-C6	5.90	120.35	117.40
26	LA	106	C	C6-N1-C1'	-5.90	113.72	120.80
26	LA	844	A	C4-C5-C6	-5.90	114.05	117.00
26	LA	947	A	C8-N9-C4	-5.90	103.44	105.80
26	LA	1028	A	N9-C4-C5	-5.90	103.44	105.80
26	LA	1190	G	C5-C6-O6	-5.90	125.06	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2217	G	C8-N9-C1'	5.90	134.68	127.00
2	SA	67	C	C5-C6-N1	5.90	123.95	121.00
2	SA	965	U	O4'-C1'-C2'	5.90	112.91	107.60
2	SA	1406	U	C1'-O4'-C4'	-5.90	105.18	109.90
2	SA	1419	G	C4-C5-N7	5.90	113.16	110.80
2	SA	1475	G	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	1501	C	O4'-C1'-N1	5.90	112.92	108.20
4	S2	61	U	O4'-C1'-N1	5.90	112.92	108.20
26	LA	712	G	P-O3'-C3'	5.90	126.78	119.70
26	LA	1129	A	O4'-C1'-N9	5.90	112.92	108.20
26	LA	1733	G	C5'-C4'-O4'	5.90	116.18	109.10
26	LA	2319	G	N1-C6-O6	5.90	123.44	119.90
26	LA	2477	U	N3-C2-O2	-5.90	118.07	122.20
2	SA	3	A	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	8	A	P-O5'-C5'	-5.90	111.46	120.90
2	SA	299	G	OP1-P-OP2	-5.90	110.75	119.60
2	SA	400	C	C5-C4-N4	-5.90	116.07	120.20
2	SA	1136	C	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	1312	G	C5-C6-N1	5.90	114.45	111.50
2	SA	1386	G	C5-C6-O6	-5.90	125.06	128.60
25	LB	62	C	C4'-C3'-C2'	5.90	108.50	102.60
26	LA	90	U	C5'-C4'-O4'	5.90	116.18	109.10
26	LA	304	U	C2-N1-C1'	-5.90	110.62	117.70
26	LA	489	G	N1-C2-N3	5.90	127.44	123.90
26	LA	745	G	C6-C5-N7	-5.90	126.86	130.40
26	LA	763	G	C6-N1-C2	-5.90	121.56	125.10
26	LA	972	A	C8-N9-C4	-5.90	103.44	105.80
26	LA	1152	C	N3-C4-C5	5.90	124.26	121.90
26	LA	1510	G	C6-N1-C2	-5.90	121.56	125.10
26	LA	1596	A	O3'-P-O5'	5.90	115.21	104.00
26	LA	1651	G	C4-C5-N7	5.90	113.16	110.80
26	LA	1791	A	C5-N7-C8	-5.90	100.95	103.90
26	LA	2413	G	P-O3'-C3'	-5.90	112.62	119.70
26	LA	2732	G	C5-C6-N1	5.90	114.45	111.50
26	LA	2894	G	N7-C8-N9	5.90	116.05	113.10
2	SA	243	A	C5'-C4'-C3'	-5.90	106.56	116.00
2	SA	506	G	C5'-C4'-C3'	-5.90	106.56	116.00
2	SA	1287	A	N3-C4-C5	5.90	130.93	126.80
26	LA	125	A	P-O5'-C5'	5.90	130.34	120.90
26	LA	1202	G	C8-N9-C4	-5.90	104.04	106.40
26	LA	1349	C	C2-N1-C1'	5.90	125.29	118.80
26	LA	1500	G	C5'-C4'-O4'	5.90	116.18	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2148	G	N7-C8-N9	5.90	116.05	113.10
45	LG	27	VAL	CA-CB-CG1	5.90	119.75	110.90
2	SA	496	A	C4-C5-C6	-5.90	114.05	117.00
2	SA	941	G	C2-N3-C4	-5.90	108.95	111.90
2	SA	997	U	N3-C4-C5	-5.90	111.06	114.60
25	LB	106	G	C2-N3-C4	5.90	114.85	111.90
26	LA	220	G	C3'-C2'-C1'	5.90	106.22	101.50
26	LA	1060	U	C2-N3-C4	-5.90	123.46	127.00
26	LA	1339	G	OP1-P-OP2	-5.90	110.75	119.60
26	LA	1341	G	O4'-C4'-C3'	5.90	110.82	106.10
26	LA	1418	G	N3-C4-N9	5.90	129.54	126.00
26	LA	1649	G	C3'-C2'-C1'	-5.90	96.78	101.50
26	LA	2291	U	O4'-C4'-C3'	5.90	110.82	106.10
26	LA	2613	U	C5'-C4'-O4'	-5.90	102.02	109.10
26	LA	2830	C	N1-C2-O2	-5.90	115.36	118.90
27	LD	82	TYR	CB-CG-CD1	-5.90	117.46	121.00
54	LM	31	ARG	NE-CZ-NH2	-5.90	117.35	120.30
2	SA	871	U	O4'-C4'-C3'	5.90	110.82	106.10
2	SA	1427	C	N3-C4-C5	5.90	124.26	121.90
26	LA	729	G	N3-C2-N2	5.90	124.03	119.90
26	LA	2056	G	C5'-C4'-O4'	5.90	116.17	109.10
2	SA	412	A	N9-C4-C5	-5.89	103.44	105.80
2	SA	420	U	C6-N1-C2	5.89	124.54	121.00
2	SA	914	A	C4'-C3'-C2'	-5.89	96.70	102.60
4	S2	19	G	C4-C5-N7	5.89	113.16	110.80
10	SJ	57	VAL	CA-CB-CG1	5.89	119.74	110.90
24	S3	492	THR	O-C-N	-5.89	113.27	122.70
26	LA	251	A	OP1-P-OP2	-5.89	110.76	119.60
26	LA	516	C	C6-N1-C2	-5.89	117.94	120.30
26	LA	1161	C	N3-C4-N4	-5.89	113.87	118.00
26	LA	1420	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	1907	G	C8-N9-C1'	5.89	134.66	127.00
26	LA	2105	U	C3'-C2'-C1'	-5.89	96.78	101.50
26	LA	2298	A	C6-N1-C2	-5.89	115.06	118.60
26	LA	2620	C	N3-C2-O2	-5.89	117.77	121.90
53	LP	94	TYR	CZ-CE2-CD2	-5.89	114.50	119.80
2	SA	46	G	C5'-C4'-O4'	5.89	116.17	109.10
2	SA	350	G	O5'-P-OP1	5.89	117.77	110.70
2	SA	361	G	P-O3'-C3'	-5.89	112.63	119.70
2	SA	567	G	C5-C6-N1	5.89	114.45	111.50
2	SA	742	G	N1-C2-N3	5.89	127.44	123.90
2	SA	968	A	N7-C8-N9	-5.89	110.85	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	73	A	N9-C4-C5	-5.89	103.44	105.80
21	SE	55	VAL	CA-CB-CG2	-5.89	102.06	110.90
22	SF	1	MET	CG-SD-CE	-5.89	90.77	100.20
26	LA	2	G	N1-C2-N3	-5.89	120.36	123.90
26	LA	22	C	C5-C6-N1	-5.89	118.05	121.00
26	LA	135	U	C1'-O4'-C4'	-5.89	105.19	109.90
26	LA	217	A	C2-N3-C4	5.89	113.55	110.60
26	LA	309	A	C4-C5-C6	5.89	119.95	117.00
26	LA	492	A	N1-C2-N3	5.89	132.25	129.30
26	LA	503	A	N1-C2-N3	5.89	132.25	129.30
26	LA	561	G	C5-C6-N1	5.89	114.45	111.50
26	LA	1690	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	1965	C	N3-C2-O2	5.89	126.03	121.90
26	LA	2106	U	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	2390	U	C2-N1-C1'	-5.89	110.63	117.70
26	LA	2726	A	O5'-P-OP1	-5.89	100.40	105.70
2	SA	614	C	C4'-C3'-C2'	-5.89	96.71	102.60
2	SA	726	C	N3-C4-C5	5.89	124.26	121.90
2	SA	887	G	C5-C6-O6	-5.89	125.06	128.60
2	SA	1290	G	C2-N3-C4	-5.89	108.95	111.90
4	S2	68	C	C4-C5-C6	5.89	120.34	117.40
26	LA	730	A	N3-C4-C5	-5.89	122.68	126.80
26	LA	2381	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	2453	A	C4-C5-C6	5.89	119.95	117.00
1	SS	75	PRO	N-CA-C	5.89	127.41	112.10
2	SA	67	C	C6-N1-C2	-5.89	117.94	120.30
2	SA	580	C	O4'-C1'-N1	5.89	112.91	108.20
2	SA	857	C	N3-C4-N4	5.89	122.12	118.00
2	SA	876	C	C2-N3-C4	-5.89	116.95	119.90
2	SA	1022	A	P-O3'-C3'	-5.89	112.63	119.70
2	SA	1234	C	N1-C2-N3	5.89	123.32	119.20
2	SA	1282	C	C2-N1-C1'	5.89	125.28	118.80
2	SA	1498	U	N3-C4-C5	-5.89	111.07	114.60
3	S1	14	G	P-O5'-C5'	5.89	130.32	120.90
26	LA	29	U	C1'-O4'-C4'	-5.89	105.19	109.90
26	LA	38	A	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	518	G	C3'-C2'-C1'	5.89	106.21	101.50
26	LA	1300	G	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	1623	G	OP1-P-OP2	-5.89	110.77	119.60
26	LA	1629	U	OP1-P-OP2	-5.89	110.77	119.60
26	LA	1674	G	C5-N7-C8	5.89	107.25	104.30
26	LA	1775	U	C3'-C2'-C1'	5.89	106.21	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1891	G	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	2451	A	N7-C8-N9	-5.89	110.86	113.80
28	LU	96	ILE	CB-CA-C	-5.89	99.82	111.60
2	SA	249	U	C5-C6-N1	5.89	125.64	122.70
26	LA	659	G	C4-C5-C6	-5.89	115.27	118.80
26	LA	1418	G	N3-C4-C5	-5.89	125.66	128.60
2	SA	350	G	C2-N3-C4	-5.89	108.96	111.90
2	SA	354	G	C6-N1-C2	-5.89	121.57	125.10
2	SA	975	A	P-O3'-C3'	5.89	126.76	119.70
2	SA	1255	G	C2-N3-C4	-5.89	108.96	111.90
2	SA	1270	G	N1-C2-N3	-5.89	120.37	123.90
2	SA	1521	C	P-O3'-C3'	-5.89	112.64	119.70
26	LA	1017	G	C2-N3-C4	-5.89	108.96	111.90
26	LA	1308	A	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	1357	C	N3-C4-C5	-5.89	119.55	121.90
26	LA	1411	U	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	1514	G	N3-C2-N2	5.89	124.02	119.90
26	LA	1859	U	N1-C2-N3	-5.89	111.37	114.90
26	LA	2054	A	OP1-P-OP2	-5.89	110.77	119.60
26	LA	2106	U	C2-N3-C4	5.89	130.53	127.00
26	LA	2332	C	P-O5'-C5'	5.89	130.32	120.90
26	LA	2354	C	O4'-C1'-N1	5.89	112.91	108.20
26	LA	2852	G	O4'-C1'-N9	5.89	112.91	108.20
38	LE	180	VAL	CA-CB-CG1	5.89	119.73	110.90
2	SA	114	U	C4-C5-C6	5.88	123.23	119.70
2	SA	782	A	C5-C6-N6	5.88	128.41	123.70
2	SA	1047	G	C5'-C4'-C3'	5.88	125.41	116.00
2	SA	1315	U	N1-C1'-C2'	-5.88	105.53	112.00
2	SA	1447	A	C8-N9-C4	5.88	108.15	105.80
4	S2	67	C	P-O5'-C5'	5.88	130.31	120.90
10	SJ	45	ARG	NH1-CZ-NH2	5.88	125.87	119.40
26	LA	699	A	N9-C1'-C2'	-5.88	105.53	112.00
26	LA	748	G	OP2-P-O3'	5.88	118.14	105.20
26	LA	1078	U	C1'-O4'-C4'	-5.88	105.19	109.90
26	LA	1396	U	OP1-P-OP2	-5.88	110.77	119.60
26	LA	1474	U	N3-C4-O4	5.88	123.52	119.40
26	LA	1653	G	OP1-P-O3'	5.88	118.14	105.20
26	LA	2103	C	O4'-C1'-N1	5.88	112.91	108.20
28	LU	63	GLY	O-C-N	-5.88	113.28	122.70
2	SA	343	U	C3'-C2'-C1'	5.88	106.21	101.50
2	SA	878	A	O4'-C1'-N9	5.88	112.91	108.20
9	SI	98	ARG	NE-CZ-NH2	5.88	123.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	102	U	C4'-C3'-C2'	5.88	108.48	102.60
26	LA	1097	U	C2-N3-C4	-5.88	123.47	127.00
26	LA	1206	G	C4-C5-N7	-5.88	108.45	110.80
26	LA	1641	A	P-O5'-C5'	-5.88	111.49	120.90
2	SA	127	G	P-O3'-C3'	-5.88	112.64	119.70
2	SA	725	G	C4-C5-C6	-5.88	115.27	118.80
2	SA	852	G	C4-C5-C6	-5.88	115.27	118.80
2	SA	1053	G	C5-C6-O6	-5.88	125.07	128.60
26	LA	71	A	N1-C2-N3	5.88	132.24	129.30
26	LA	454	A	C6-C5-N7	5.88	136.42	132.30
26	LA	505	A	C4-C5-C6	-5.88	114.06	117.00
26	LA	774	G	N7-C8-N9	-5.88	110.16	113.10
26	LA	1238	G	C5-C6-O6	-5.88	125.07	128.60
26	LA	1265	A	C6-N1-C2	-5.88	115.07	118.60
26	LA	1912	A	C4-C5-C6	5.88	119.94	117.00
26	LA	2274	A	N3-C4-C5	-5.88	122.68	126.80
26	LA	2873	A	O4'-C1'-C2'	-5.88	99.92	105.80
44	LF	183	PHE	CB-CG-CD1	-5.88	116.68	120.80
2	SA	615	G	N3-C4-C5	-5.88	125.66	128.60
2	SA	716	A	C4'-C3'-C2'	-5.88	96.72	102.60
2	SA	1067	A	C8-N9-C4	5.88	108.15	105.80
26	LA	69	C	C5'-C4'-O4'	5.88	116.16	109.10
26	LA	397	U	N1-C2-N3	-5.88	111.37	114.90
26	LA	809	G	C2-N3-C4	5.88	114.84	111.90
26	LA	915	C	N3-C4-C5	-5.88	119.55	121.90
26	LA	939	G	OP1-P-OP2	-5.88	110.78	119.60
47	LJ	61	ARG	NE-CZ-NH1	5.88	123.24	120.30
2	SA	779	C	P-O3'-C3'	-5.88	112.64	119.70
26	LA	799	G	N1-C2-N3	-5.88	120.37	123.90
26	LA	1046	A	N1-C2-N3	5.88	132.24	129.30
26	LA	1491	G	N1-C2-N2	-5.88	110.91	116.20
26	LA	1886	U	N3-C4-O4	5.88	123.52	119.40
26	LA	1983	G	C8-N9-C4	-5.88	104.05	106.40
26	LA	1989	G	N1-C2-N3	-5.88	120.37	123.90
26	LA	2311	A	C8-N9-C4	-5.88	103.45	105.80
26	LA	2902	C	N3-C4-N4	-5.88	113.89	118.00
2	SA	243	A	C5-C6-N1	-5.88	114.76	117.70
2	SA	248	C	C2-N3-C4	5.88	122.84	119.90
2	SA	781	A	N7-C8-N9	5.88	116.74	113.80
2	SA	1277	C	N3-C2-O2	-5.88	117.79	121.90
2	SA	1286	U	C5'-C4'-C3'	5.88	125.40	116.00
2	SA	1363	A	C5-C6-N1	5.88	120.64	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1494	G	C6-N1-C2	5.88	128.62	125.10
2	SA	1495	U	C4'-C3'-C2'	-5.88	96.72	102.60
4	S2	36	A	C5-C6-N6	-5.88	119.00	123.70
10	SJ	101	SER	N-CA-CB	5.88	119.32	110.50
23	SR	2	ARG	NH1-CZ-NH2	-5.88	112.94	119.40
26	LA	90	U	C5'-C4'-C3'	-5.88	106.60	116.00
26	LA	703	U	N1-C2-N3	-5.88	111.37	114.90
26	LA	968	C	C6-N1-C2	5.88	122.65	120.30
26	LA	1372	U	O4'-C1'-N1	5.88	112.90	108.20
26	LA	1568	G	C5'-C4'-O4'	5.88	116.15	109.10
26	LA	1744	A	N9-C4-C5	-5.88	103.45	105.80
26	LA	1869	G	C5'-C4'-C3'	-5.88	106.60	116.00
26	LA	2816	G	C2-N3-C4	-5.88	108.96	111.90
36	L2	14	ALA	N-CA-CB	5.88	118.33	110.10
44	LF	145	ASP	CB-CG-OD2	-5.88	113.01	118.30
49	LK	45	THR	CA-CB-CG2	-5.88	104.17	112.40
2	SA	321	A	N3-C4-C5	-5.88	122.69	126.80
2	SA	384	G	C4'-C3'-C2'	-5.88	96.72	102.60
2	SA	568	G	C5-C6-N1	5.88	114.44	111.50
2	SA	588	G	C6-C5-N7	-5.88	126.88	130.40
2	SA	937	A	N7-C8-N9	-5.88	110.86	113.80
2	SA	1227	A	C4-C5-C6	5.88	119.94	117.00
21	SE	42	ASN	CB-CA-C	-5.88	98.65	110.40
26	LA	1	G	O4'-C1'-N9	5.88	112.90	108.20
26	LA	349	U	N3-C4-C5	-5.88	111.08	114.60
26	LA	368	A	C2'-C3'-O3'	5.88	123.10	113.70
26	LA	665	U	C5-C4-O4	-5.88	122.38	125.90
26	LA	2475	C	O4'-C1'-N1	5.88	112.90	108.20
2	SA	65	A	C6-N1-C2	-5.87	115.08	118.60
2	SA	563	A	C5'-C4'-O4'	5.87	116.15	109.10
2	SA	585	G	O4'-C1'-N9	5.87	112.90	108.20
2	SA	640	A	C5'-C4'-O4'	5.87	116.15	109.10
2	SA	819	A	P-O5'-C5'	5.87	130.30	120.90
2	SA	1400	C	C2-N1-C1'	5.87	125.26	118.80
2	SA	1409	C	C5'-C4'-C3'	-5.87	106.60	116.00
2	SA	1413	A	C4'-C3'-C2'	-5.87	96.73	102.60
2	SA	1496	C	C2'-C3'-O3'	5.87	123.10	113.70
9	SI	94	ARG	CD-NE-CZ	5.87	131.82	123.60
18	SB	184	ALA	N-CA-CB	5.87	118.32	110.10
25	LB	2	G	C6-C5-N7	-5.87	126.88	130.40
25	LB	87	U	P-O5'-C5'	5.87	130.30	120.90
26	LA	183	C	C4-C5-C6	5.87	120.34	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	913	U	OP1-P-OP2	-5.87	110.79	119.60
26	LA	915	C	C5'-C4'-O4'	5.87	116.15	109.10
26	LA	1193	G	C5-C6-N1	5.87	114.44	111.50
26	LA	1310	G	C2-N3-C4	5.87	114.84	111.90
26	LA	1725	U	O4'-C1'-N1	5.87	112.90	108.20
26	LA	2048	G	C5-N7-C8	-5.87	101.36	104.30
26	LA	2072	C	N3-C4-N4	5.87	122.11	118.00
26	LA	2524	G	N7-C8-N9	5.87	116.04	113.10
2	SA	298	A	P-O3'-C3'	-5.87	112.65	119.70
2	SA	335	C	C6-N1-C2	-5.87	117.95	120.30
2	SA	450	G	N1-C6-O6	5.87	123.42	119.90
2	SA	650	G	C5'-C4'-C3'	-5.87	106.61	116.00
2	SA	878	A	C5'-C4'-C3'	-5.87	106.61	116.00
2	SA	945	G	O4'-C1'-N9	5.87	112.90	108.20
2	SA	1020	G	N9-C4-C5	5.87	107.75	105.40
24	S3	19	ASP	CB-CG-OD2	5.87	123.58	118.30
25	LB	40	U	C5'-C4'-O4'	5.87	116.14	109.10
26	LA	21	A	N1-C2-N3	5.87	132.24	129.30
26	LA	444	C	C4-C5-C6	5.87	120.34	117.40
26	LA	1017	G	N3-C2-N2	-5.87	115.79	119.90
26	LA	2485	G	C6-N1-C2	-5.87	121.58	125.10
2	SA	447	G	N3-C4-C5	-5.87	125.67	128.60
2	SA	1431	A	C3'-C2'-C1'	5.87	106.20	101.50
26	LA	734	A	C4-C5-C6	5.87	119.94	117.00
26	LA	949	G	C2-N3-C4	-5.87	108.97	111.90
26	LA	1570	A	C2-N3-C4	5.87	113.53	110.60
26	LA	1828	G	O3'-P-O5'	-5.87	92.85	104.00
26	LA	2025	C	N3-C4-N4	5.87	122.11	118.00
26	LA	2330	G	C5-C6-N1	-5.87	108.56	111.50
27	LD	265	PHE	CB-CA-C	-5.87	98.66	110.40
2	SA	4	U	N3-C2-O2	-5.87	118.09	122.20
2	SA	103	U	C2-N3-C4	5.87	130.52	127.00
2	SA	251	G	OP1-P-O3'	5.87	118.11	105.20
2	SA	484	G	OP1-P-OP2	-5.87	110.80	119.60
2	SA	703	G	P-O3'-C3'	5.87	126.74	119.70
2	SA	1076	U	C5-C4-O4	5.87	129.42	125.90
2	SA	1162	C	C5'-C4'-O4'	5.87	116.14	109.10
25	LB	39	A	C6-N1-C2	-5.87	115.08	118.60
26	LA	389	G	C6-N1-C2	-5.87	121.58	125.10
26	LA	430	A	C6-N1-C2	-5.87	115.08	118.60
26	LA	463	G	C4-C5-N7	5.87	113.15	110.80
26	LA	507	A	C6-C5-N7	-5.87	128.19	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	857	G	C8-N9-C4	-5.87	104.05	106.40
26	LA	914	G	N3-C4-C5	-5.87	125.67	128.60
26	LA	976	G	C5-N7-C8	-5.87	101.37	104.30
26	LA	1308	A	P-O5'-C5'	-5.87	111.51	120.90
26	LA	1533	C	N3-C4-N4	-5.87	113.89	118.00
26	LA	2375	G	N1-C6-O6	5.87	123.42	119.90
26	LA	2437	G	N9-C4-C5	5.87	107.75	105.40
26	LA	2467	C	OP1-P-OP2	-5.87	110.80	119.60
26	LA	2477	U	C1'-O4'-C4'	-5.87	105.20	109.90
26	LA	2830	C	P-O3'-C3'	-5.87	112.66	119.70
44	LF	36	ALA	O-C-N	-5.87	113.31	122.70
2	SA	792	A	P-O3'-C3'	5.87	126.74	119.70
26	LA	148	U	P-O5'-C5'	5.87	130.29	120.90
26	LA	997	G	C1'-O4'-C4'	-5.87	105.21	109.90
32	LY	55	ASP	C-N-CA	5.87	136.37	121.70
2	SA	266	G	N1-C6-O6	5.87	123.42	119.90
2	SA	292	G	C5-N7-C8	-5.87	101.37	104.30
2	SA	822	U	N3-C4-C5	5.87	118.12	114.60
6	SU	16	ARG	CD-NE-CZ	5.87	131.81	123.60
26	LA	627	A	N1-C2-N3	-5.87	126.37	129.30
26	LA	934	U	N1-C2-O2	-5.87	118.69	122.80
26	LA	1101	U	C5'-C4'-C3'	5.87	125.39	116.00
26	LA	1663	G	C5-C6-O6	-5.87	125.08	128.60
26	LA	1927	A	C5-C6-N6	-5.87	119.01	123.70
26	LA	2284	A	O4'-C4'-C3'	-5.87	98.13	104.00
26	LA	2345	G	C4-C5-C6	5.87	122.32	118.80
26	LA	2581	G	C5-C6-O6	-5.87	125.08	128.60
2	SA	44	A	C6-N1-C2	5.86	122.12	118.60
2	SA	168	G	P-O3'-C3'	5.86	126.74	119.70
2	SA	190	A	C6-N1-C2	5.86	122.12	118.60
2	SA	340	U	C5'-C4'-C3'	5.86	125.38	116.00
2	SA	674	G	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	1501	C	O3'-P-O5'	-5.86	92.86	104.00
4	S2	69	C	C6-N1-C2	-5.86	117.95	120.30
26	LA	164	C	N3-C2-O2	-5.86	117.80	121.90
26	LA	198	C	P-O5'-C5'	5.86	130.28	120.90
26	LA	245	G	C4-C5-N7	-5.86	108.45	110.80
26	LA	628	G	N7-C8-N9	-5.86	110.17	113.10
26	LA	651	G	OP1-P-OP2	-5.86	110.80	119.60
26	LA	654	A	N1-C2-N3	-5.86	126.37	129.30
26	LA	1281	G	C6-C5-N7	-5.86	126.88	130.40
26	LA	1718	G	C1'-O4'-C4'	-5.86	105.21	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2368	C	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	717	U	C2'-C3'-O3'	5.86	123.08	113.70
2	SA	924	C	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	933	G	C5-C6-N1	5.86	114.43	111.50
2	SA	1479	C	C6-N1-C2	-5.86	117.95	120.30
2	SA	1534	A	C5-N7-C8	-5.86	100.97	103.90
22	SF	96	VAL	CA-CB-CG2	-5.86	102.11	110.90
26	LA	482	A	O4'-C1'-N9	-5.86	103.51	108.20
26	LA	829	A	C5-C6-N1	5.86	120.63	117.70
26	LA	1831	G	C4-C5-N7	-5.86	108.45	110.80
26	LA	1889	A	C8-N9-C4	-5.86	103.45	105.80
26	LA	1911	U	P-O5'-C5'	5.86	130.28	120.90
26	LA	2038	G	O4'-C1'-N9	5.86	112.89	108.20
26	LA	2258	C	C5'-C4'-C3'	5.86	125.38	116.00
26	LA	2271	G	C5-N7-C8	-5.86	101.37	104.30
26	LA	2465	C	O4'-C1'-N1	5.86	112.89	108.20
26	LA	2762	C	C5-C6-N1	-5.86	118.07	121.00
26	LA	2877	G	N3-C2-N2	5.86	124.00	119.90
53	LP	74	GLU	O-C-N	-5.86	113.32	122.70
2	SA	36	C	C6-N1-C2	5.86	122.64	120.30
2	SA	609	A	P-O3'-C3'	5.86	126.73	119.70
2	SA	628	G	C2-N3-C4	-5.86	108.97	111.90
2	SA	1122	U	O4'-C4'-C3'	-5.86	98.14	104.00
2	SA	1156	G	C5-C6-N1	-5.86	108.57	111.50
2	SA	1415	G	O4'-C1'-N9	5.86	112.89	108.20
7	SG	137	ARG	NE-CZ-NH2	-5.86	117.37	120.30
25	LB	2	G	C4'-C3'-C2'	-5.86	96.74	102.60
25	LB	33	G	N1-C2-N3	-5.86	120.38	123.90
26	LA	347	A	N7-C8-N9	5.86	116.73	113.80
26	LA	716	A	N1-C2-N3	-5.86	126.37	129.30
26	LA	1605	C	O4'-C1'-N1	5.86	112.89	108.20
26	LA	1703	G	N1-C2-N2	-5.86	110.93	116.20
26	LA	1963	U	C6-N1-C2	5.86	124.52	121.00
26	LA	2389	G	C1'-O4'-C4'	-5.86	105.21	109.90
26	LA	2721	A	N3-C4-N9	-5.86	122.71	127.40
26	LA	2833	U	C2-N3-C4	5.86	130.52	127.00
2	SA	356	A	C8-N9-C4	-5.86	103.46	105.80
2	SA	740	U	P-O3'-C3'	-5.86	112.67	119.70
2	SA	875	U	O4'-C1'-C2'	5.86	112.87	107.60
2	SA	934	C	O5'-C5'-C4'	5.86	122.83	111.70
26	LA	982	C	C5'-C4'-C3'	5.86	125.38	116.00
26	LA	1270	C	N3-C4-C5	5.86	124.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1777	U	N3-C2-O2	-5.86	118.10	122.20
26	LA	1918	A	N7-C8-N9	-5.86	110.87	113.80
26	LA	2216	G	N7-C8-N9	5.86	116.03	113.10
26	LA	2294	G	P-O5'-C5'	-5.86	111.53	120.90
26	LA	2795	C	C5-C6-N1	-5.86	118.07	121.00
35	L1	15	ARG	NE-CZ-NH1	5.86	123.23	120.30
2	SA	244	U	C2-N3-C4	-5.86	123.49	127.00
2	SA	393	A	C2-N3-C4	-5.86	107.67	110.60
2	SA	803	G	C5'-C4'-O4'	5.86	116.13	109.10
2	SA	935	A	C5-C6-N6	5.86	128.39	123.70
26	LA	105	C	P-O3'-C3'	5.86	126.73	119.70
26	LA	783	A	C5'-C4'-O4'	-5.86	102.07	109.10
26	LA	1421	G	N3-C2-N2	5.86	124.00	119.90
26	LA	1513	U	C5'-C4'-O4'	5.86	116.13	109.10
26	LA	1698	A	OP1-P-OP2	-5.86	110.81	119.60
26	LA	1894	C	N1-C2-O2	5.86	122.41	118.90
26	LA	2354	C	C5-C6-N1	5.86	123.93	121.00
37	LC	3	LYS	N-CA-CB	5.86	121.14	110.60
47	LJ	63	VAL	CG1-CB-CG2	-5.86	101.53	110.90
2	SA	82	G	C4-C5-N7	5.86	113.14	110.80
2	SA	247	G	C5-N7-C8	-5.86	101.37	104.30
2	SA	488	C	C5'-C4'-O4'	5.86	116.13	109.10
2	SA	691	G	C4-C5-N7	-5.86	108.46	110.80
2	SA	1088	G	C2-N3-C4	5.86	114.83	111.90
2	SA	1483	A	C2-N3-C4	-5.86	107.67	110.60
26	LA	411	G	C6-N1-C2	-5.86	121.59	125.10
26	LA	527	C	C6-N1-C1'	-5.86	113.77	120.80
26	LA	976	G	C8-N9-C4	-5.86	104.06	106.40
26	LA	1218	G	C4'-C3'-C2'	-5.86	96.74	102.60
26	LA	1248	G	C6-C5-N7	-5.86	126.89	130.40
26	LA	1798	U	O4'-C1'-N1	5.86	112.88	108.20
26	LA	1851	U	P-O5'-C5'	-5.86	111.53	120.90
26	LA	2027	G	N3-C2-N2	5.86	124.00	119.90
26	LA	2416	C	C5-C6-N1	-5.86	118.07	121.00
26	LA	2564	A	C4-C5-C6	-5.86	114.07	117.00
26	LA	2773	C	C4-C5-C6	5.86	120.33	117.40
26	LA	2837	A	O4'-C1'-C2'	5.86	112.87	107.60
27	LD	9	SER	N-CA-C	-5.86	95.19	111.00
26	LA	466	A	N9-C4-C5	5.85	108.14	105.80
26	LA	584	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	825	A	N9-C4-C5	5.85	108.14	105.80
26	LA	2238	G	O4'-C1'-N9	5.85	112.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	297	G	N3-C2-N2	5.85	124.00	119.90
2	SA	724	G	C5-C6-O6	5.85	132.11	128.60
2	SA	818	G	N1-C2-N2	5.85	121.47	116.20
2	SA	1051	C	P-O3'-C3'	-5.85	112.68	119.70
2	SA	1474	U	C3'-C2'-C1'	5.85	106.18	101.50
25	LB	103	U	C4'-C3'-C2'	-5.85	96.75	102.60
26	LA	513	A	C3'-C2'-C1'	5.85	106.18	101.50
26	LA	546	U	N1-C2-O2	-5.85	118.70	122.80
26	LA	677	A	C1'-O4'-C4'	-5.85	105.22	109.90
26	LA	726	G	C8-N9-C4	5.85	108.74	106.40
26	LA	1022	G	C3'-C2'-C1'	-5.85	96.82	101.50
26	LA	1026	G	O4'-C1'-N9	5.85	112.88	108.20
26	LA	1270	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	1552	A	N1-C2-N3	-5.85	126.37	129.30
26	LA	1558	C	C2-N1-C1'	5.85	125.24	118.80
26	LA	2061	G	C2'-C3'-O3'	5.85	123.06	113.70
26	LA	2365	G	C6-C5-N7	-5.85	126.89	130.40
37	LC	42	VAL	CA-CB-CG1	-5.85	102.12	110.90
37	LC	113	VAL	CG1-CB-CG2	5.85	120.27	110.90
38	LE	79	LEU	CB-CG-CD2	5.85	120.95	111.00
56	LR	38	ARG	NE-CZ-NH1	-5.85	117.37	120.30
2	SA	227	G	C2-N3-C4	5.85	114.83	111.90
2	SA	752	G	C8-N9-C1'	-5.85	119.39	127.00
25	LB	70	C	P-O5'-C5'	-5.85	111.54	120.90
26	LA	801	G	C8-N9-C1'	5.85	134.61	127.00
26	LA	1110	G	C6-C5-N7	-5.85	126.89	130.40
26	LA	1165	A	C5-N7-C8	-5.85	100.97	103.90
26	LA	1304	A	P-O5'-C5'	-5.85	111.54	120.90
2	SA	43	C	N3-C2-O2	-5.85	117.81	121.90
2	SA	670	G	C4-N9-C1'	5.85	134.10	126.50
2	SA	831	A	N7-C8-N9	-5.85	110.88	113.80
2	SA	1104	G	C6-N1-C2	-5.85	121.59	125.10
2	SA	1266	G	N3-C2-N2	-5.85	115.81	119.90
2	SA	1347	G	N1-C2-N3	-5.85	120.39	123.90
2	SA	1531	A	N1-C6-N6	5.85	122.11	118.60
5	ST	59	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
14	SN	1	ALA	CB-CA-C	-5.85	101.33	110.10
26	LA	196	A	C5-N7-C8	5.85	106.83	103.90
26	LA	731	C	N3-C4-N4	5.85	122.09	118.00
26	LA	844	A	C5'-C4'-O4'	5.85	116.12	109.10
26	LA	1022	G	O4'-C1'-C2'	-5.85	99.95	105.80
26	LA	1458	U	C6-N1-C1'	-5.85	113.01	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2317	A	N9-C1'-C2'	-5.85	105.56	112.00
26	LA	2365	G	C2-N3-C4	-5.85	108.97	111.90
26	LA	2479	U	C6-N1-C1'	-5.85	113.01	121.20
27	LD	132	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
2	SA	46	G	C8-N9-C4	5.85	108.74	106.40
2	SA	238	A	C6-C5-N7	-5.85	128.21	132.30
2	SA	246	A	C5-C6-N6	5.85	128.38	123.70
2	SA	359	G	C8-N9-C1'	5.85	134.60	127.00
2	SA	526	C	O4'-C1'-N1	5.85	112.88	108.20
2	SA	619	U	C2-N3-C4	-5.85	123.49	127.00
2	SA	664	G	C4'-C3'-C2'	-5.85	96.75	102.60
2	SA	944	G	P-O3'-C3'	5.85	126.72	119.70
23	SR	62	ARG	O-C-N	-5.85	113.34	122.70
25	LB	98	G	O4'-C4'-C3'	-5.85	98.15	104.00
26	LA	124	G	C4'-C3'-C2'	5.85	108.45	102.60
26	LA	1110	G	C6-N1-C2	-5.85	121.59	125.10
26	LA	1697	G	O4'-C1'-N9	5.85	112.88	108.20
26	LA	1868	C	OP1-P-OP2	-5.85	110.83	119.60
26	LA	2346	A	C5-N7-C8	-5.85	100.98	103.90
26	LA	2371	G	C4-C5-N7	5.85	113.14	110.80
26	LA	2624	G	N9-C4-C5	-5.85	103.06	105.40
26	LA	2765	A	O5'-P-OP1	5.85	117.72	110.70
2	SA	878	A	N3-C4-N9	-5.85	122.72	127.40
2	SA	1449	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	254	G	C8-N9-C4	5.85	108.74	106.40
26	LA	408	G	C4-C5-C6	-5.85	115.29	118.80
26	LA	692	C	C4'-C3'-C2'	-5.85	96.75	102.60
26	LA	1685	C	N3-C2-O2	-5.85	117.81	121.90
26	LA	2048	G	C5-C6-O6	5.85	132.11	128.60
26	LA	2304	G	C5'-C4'-C3'	-5.85	106.65	116.00
2	SA	730	G	C6-N1-C2	-5.84	121.59	125.10
2	SA	828	U	C2-N3-C4	5.84	130.51	127.00
25	LB	1	U	N1-C2-N3	5.84	118.41	114.90
25	LB	79	G	O5'-P-OP1	5.84	117.72	110.70
25	LB	105	G	O4'-C1'-N9	5.84	112.88	108.20
26	LA	52	A	N9-C4-C5	5.84	108.14	105.80
26	LA	794	A	C5-N7-C8	-5.84	100.98	103.90
26	LA	831	G	N9-C4-C5	5.84	107.74	105.40
26	LA	943	A	C5-N7-C8	-5.84	100.98	103.90
26	LA	1356	G	N1-C6-O6	5.84	123.41	119.90
26	LA	1482	G	C5'-C4'-C3'	-5.84	106.65	116.00
26	LA	1808	A	N9-C4-C5	-5.84	103.46	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	LC	41	SER	CB-CA-C	-5.84	98.99	110.10
2	SA	591	U	C1'-O4'-C4'	-5.84	105.22	109.90
2	SA	1251	A	OP2-P-O3'	5.84	118.06	105.20
2	SA	1305	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	133	U	O4'-C1'-N1	5.84	112.88	108.20
26	LA	554	U	C5'-C4'-C3'	-5.84	106.65	116.00
26	LA	970	U	C5-C6-N1	5.84	125.62	122.70
2	SA	21	G	N1-C6-O6	5.84	123.40	119.90
2	SA	364	A	C3'-C2'-C1'	5.84	106.17	101.50
2	SA	405	U	C4'-C3'-C2'	5.84	108.44	102.60
2	SA	1298	U	C5-C6-N1	-5.84	119.78	122.70
4	S2	4	G	P-O3'-C3'	-5.84	112.69	119.70
26	LA	127	A	C4'-C3'-C2'	5.84	108.44	102.60
26	LA	217	A	N1-C2-N3	-5.84	126.38	129.30
26	LA	710	U	C4-C5-C6	-5.84	116.19	119.70
26	LA	1381	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	1518	C	C5'-C4'-O4'	5.84	116.11	109.10
26	LA	2119	A	C4-C5-N7	5.84	113.62	110.70
26	LA	2196	C	C2-N1-C1'	5.84	125.22	118.80
26	LA	2885	G	N7-C8-N9	5.84	116.02	113.10
2	SA	121	U	O5'-C5'-C4'	5.84	122.80	111.70
2	SA	305	G	N7-C8-N9	-5.84	110.18	113.10
2	SA	575	G	C5-C6-N1	-5.84	108.58	111.50
2	SA	759	A	C2-N3-C4	-5.84	107.68	110.60
2	SA	1039	G	N7-C8-N9	5.84	116.02	113.10
26	LA	41	C	C2-N3-C4	5.84	122.82	119.90
26	LA	468	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	830	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	1168	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	1188	U	N1-C2-N3	5.84	118.40	114.90
26	LA	1302	A	O4'-C1'-C2'	5.84	112.86	107.60
26	LA	1684	G	C5-C6-N1	5.84	114.42	111.50
26	LA	2022	U	O3'-P-O5'	5.84	115.09	104.00
26	LA	2423	U	C5-C4-O4	5.84	129.40	125.90
26	LA	2489	U	O4'-C1'-C2'	5.84	112.86	107.60
38	LE	104	VAL	CG1-CB-CG2	5.84	120.24	110.90
48	LN	60	ARG	NE-CZ-NH1	5.84	123.22	120.30
2	SA	311	C	O5'-P-OP2	5.84	117.71	110.70
2	SA	390	U	C5-C6-N1	-5.84	119.78	122.70
2	SA	754	C	N3-C4-C5	5.84	124.23	121.90
26	LA	123	G	OP1-P-OP2	-5.84	110.84	119.60
26	LA	521	U	C5-C4-O4	5.84	129.40	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	977	G	N1-C2-N3	5.84	127.40	123.90
26	LA	2345	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	2775	G	C4-C5-N7	5.84	113.14	110.80
2	SA	29	U	P-O3'-C3'	-5.84	112.69	119.70
2	SA	325	A	OP1-P-OP2	-5.84	110.85	119.60
2	SA	435	A	C6-N1-C2	5.84	122.10	118.60
2	SA	478	A	C6-N1-C2	5.84	122.10	118.60
2	SA	591	U	C4'-C3'-C2'	-5.84	96.76	102.60
2	SA	717	U	OP1-P-OP2	-5.84	110.84	119.60
2	SA	1169	A	N3-C4-C5	5.84	130.89	126.80
25	LB	32	U	C2-N3-C4	-5.84	123.50	127.00
26	LA	459	U	N3-C4-O4	-5.84	115.31	119.40
26	LA	901	C	N1-C2-O2	-5.84	115.40	118.90
26	LA	956	G	C3'-C2'-C1'	5.84	106.17	101.50
26	LA	1268	A	C4-C5-N7	5.84	113.62	110.70
26	LA	1982	U	C6-N1-C2	-5.84	117.50	121.00
26	LA	2333	A	C6-N1-C2	-5.84	115.10	118.60
26	LA	2752	C	C3'-C2'-C1'	-5.84	96.83	101.50
38	LE	28	GLU	OE1-CD-OE2	-5.84	116.30	123.30
2	SA	196	A	C2-N3-C4	-5.83	107.68	110.60
2	SA	776	G	O4'-C1'-N9	5.83	112.87	108.20
24	S3	539	ILE	CA-CB-CG1	5.83	122.09	111.00
26	LA	785	G	C4-C5-N7	5.83	113.13	110.80
26	LA	802	A	P-O3'-C3'	-5.83	112.70	119.70
26	LA	1058	U	C2'-C3'-O3'	5.83	123.04	113.70
26	LA	1636	U	C5'-C4'-C3'	-5.83	106.66	116.00
26	LA	2035	G	C5'-C4'-C3'	5.83	125.34	116.00
26	LA	2251	U	N3-C4-O4	-5.83	115.32	119.40
26	LA	2618	G	N3-C4-N9	5.83	129.50	126.00
52	LO	117	PHE	CB-CG-CD1	5.83	124.89	120.80
2	SA	238	A	C5'-C4'-C3'	5.83	125.33	116.00
2	SA	532	A	C6-C5-N7	-5.83	128.22	132.30
2	SA	543	U	N3-C4-C5	5.83	118.10	114.60
2	SA	1180	A	N1-C6-N6	-5.83	115.10	118.60
26	LA	221	A	C8-N9-C4	-5.83	103.47	105.80
26	LA	287	G	P-O3'-C3'	5.83	126.70	119.70
26	LA	1109	C	O4'-C1'-N1	5.83	112.87	108.20
26	LA	2028	U	N1-C2-O2	5.83	126.88	122.80
26	LA	2095	A	C4-C5-C6	-5.83	114.08	117.00
26	LA	2434	A	N1-C6-N6	5.83	122.10	118.60
26	LA	2879	A	C4-C5-C6	5.83	119.92	117.00
2	SA	44	A	O4'-C1'-N9	5.83	112.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	129	A	N1-C6-N6	5.83	122.10	118.60
2	SA	448	A	C2-N3-C4	5.83	113.52	110.60
2	SA	702	A	C6-C5-N7	-5.83	128.22	132.30
2	SA	839	C	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	1034	G	C4-N9-C1'	-5.83	118.92	126.50
2	SA	1320	C	N3-C2-O2	-5.83	117.82	121.90
4	S2	47	A	C5-C6-N1	5.83	120.62	117.70
26	LA	438	G	C5'-C4'-C3'	-5.83	106.67	116.00
26	LA	670	A	O4'-C1'-N9	5.83	112.86	108.20
26	LA	699	A	C4'-C3'-C2'	-5.83	96.77	102.60
26	LA	935	C	N1-C1'-C2'	-5.83	105.59	112.00
26	LA	1143	A	C5-N7-C8	-5.83	100.98	103.90
26	LA	1216	G	N1-C2-N2	5.83	121.45	116.20
26	LA	1298	C	C5'-C4'-O4'	5.83	116.10	109.10
26	LA	1338	G	C5-N7-C8	-5.83	101.39	104.30
26	LA	1650	A	C5-N7-C8	-5.83	100.98	103.90
26	LA	1771	C	N1-C2-N3	5.83	123.28	119.20
26	LA	2138	G	P-O5'-C5'	-5.83	111.57	120.90
26	LA	2297	A	C6-N1-C2	5.83	122.10	118.60
26	LA	2329	U	OP1-P-OP2	-5.83	110.85	119.60
26	LA	2495	G	C4-C5-N7	5.83	113.13	110.80
26	LA	2778	A	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	479	U	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	697	U	C5'-C4'-C3'	-5.83	106.67	116.00
2	SA	1107	C	N1-C2-O2	-5.83	115.40	118.90
26	LA	99	U	C2-N3-C4	-5.83	123.50	127.00
26	LA	768	G	C6-C5-N7	-5.83	126.90	130.40
26	LA	2382	G	C5'-C4'-O4'	5.83	116.10	109.10
39	L3	22	THR	N-CA-CB	5.83	121.38	110.30
2	SA	423	G	N7-C8-N9	5.83	116.01	113.10
2	SA	539	A	O5'-P-OP2	-5.83	100.45	105.70
2	SA	928	G	C5-C6-O6	-5.83	125.10	128.60
2	SA	1032	G	P-O5'-C5'	-5.83	111.57	120.90
2	SA	1265	C	C2-N3-C4	5.83	122.81	119.90
2	SA	1295	U	P-O5'-C5'	5.83	130.22	120.90
2	SA	1360	A	C6-N1-C2	-5.83	115.10	118.60
2	SA	1422	G	N1-C6-O6	5.83	123.40	119.90
26	LA	50	U	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	276	U	N3-C4-C5	-5.83	111.10	114.60
26	LA	906	U	C4'-C3'-C2'	-5.83	96.77	102.60
26	LA	1277	G	C6-N1-C2	5.83	128.60	125.10
26	LA	1316	U	C6-N1-C2	-5.83	117.50	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1397	U	C4-C5-C6	-5.83	116.20	119.70
26	LA	1554	U	P-O3'-C3'	5.83	126.69	119.70
26	LA	1651	G	N1-C2-N2	-5.83	110.95	116.20
26	LA	1791	A	N9-C4-C5	5.83	108.13	105.80
26	LA	2059	A	C6-C5-N7	5.83	136.38	132.30
26	LA	2087	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2767	C	N3-C2-O2	-5.83	117.82	121.90
26	LA	2865	U	C5-C4-O4	5.83	129.40	125.90
2	SA	694	A	C2-N3-C4	5.83	113.51	110.60
2	SA	1493	A	C2'-C3'-O3'	5.83	123.02	113.70
26	LA	624	C	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	632	A	OP1-P-OP2	-5.83	110.86	119.60
26	LA	721	A	C5-N7-C8	-5.83	100.99	103.90
26	LA	1096	A	N9-C4-C5	-5.83	103.47	105.80
26	LA	1141	U	N3-C2-O2	5.83	126.28	122.20
26	LA	1536	C	O5'-C5'-C4'	5.83	122.77	111.70
26	LA	1651	G	N3-C4-N9	5.83	129.50	126.00
26	LA	1873	G	C1'-O4'-C4'	-5.83	105.24	109.90
26	LA	1992	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2048	G	C4-C5-N7	5.83	113.13	110.80
38	LE	124	ARG	CG-CD-NE	-5.83	99.56	111.80
2	SA	513	C	OP1-P-OP2	-5.83	110.86	119.60
2	SA	797	C	P-O5'-C5'	-5.83	111.58	120.90
2	SA	826	C	P-O5'-C5'	-5.83	111.58	120.90
2	SA	885	G	C5'-C4'-C3'	5.83	125.32	116.00
2	SA	1077	G	C4-C5-C6	5.83	122.30	118.80
2	SA	1205	U	N3-C4-O4	-5.83	115.32	119.40
4	S2	7	G	N1-C6-O6	5.83	123.40	119.90
18	SB	94	ARG	NE-CZ-NH1	5.83	123.21	120.30
26	LA	133	U	C6-N1-C2	5.83	124.50	121.00
26	LA	745	G	C2-N3-C4	-5.83	108.99	111.90
26	LA	750	A	C3'-C2'-C1'	5.83	106.16	101.50
26	LA	1295	C	O4'-C1'-N1	5.83	112.86	108.20
26	LA	1346	G	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	2315	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2644	G	N3-C4-C5	-5.83	125.69	128.60
26	LA	2695	U	N1-C2-O2	5.83	126.88	122.80
46	LH	93	TYR	CA-CB-CG	5.83	124.47	113.40
57	LS	24	TYR	CB-CG-CD2	5.83	124.50	121.00
2	SA	39	G	N3-C2-N2	-5.82	115.82	119.90
3	S1	20	G	C6-N1-C2	-5.82	121.61	125.10
4	S2	58	A	C8-N9-C4	-5.82	103.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	58	G	P-O3'-C3'	5.82	126.69	119.70
26	LA	279	A	C4'-C3'-C2'	-5.82	96.78	102.60
26	LA	376	G	N1-C2-N3	5.82	127.39	123.90
26	LA	469	G	C5'-C4'-C3'	-5.82	106.68	116.00
26	LA	861	A	C2-N3-C4	5.82	113.51	110.60
26	LA	888	C	C3'-C2'-C1'	5.82	106.16	101.50
26	LA	1343	G	N3-C4-C5	5.82	131.51	128.60
26	LA	1796	U	O4'-C1'-N1	5.82	112.86	108.20
26	LA	1978	A	C5-C6-N1	-5.82	114.79	117.70
2	SA	619	U	O4'-C1'-N1	5.82	112.86	108.20
2	SA	938	A	C1'-O4'-C4'	-5.82	105.24	109.90
25	LB	84	G	P-O3'-C3'	5.82	126.69	119.70
26	LA	376	G	N1-C6-O6	5.82	123.39	119.90
26	LA	1139	G	N1-C2-N2	-5.82	110.96	116.20
26	LA	2439	A	C5'-C4'-O4'	5.82	116.09	109.10
45	LG	82	TYR	CB-CG-CD1	-5.82	117.51	121.00
2	SA	208	U	P-O3'-C3'	5.82	126.69	119.70
2	SA	240	G	O4'-C1'-N9	5.82	112.86	108.20
2	SA	1257	A	N1-C2-N3	-5.82	126.39	129.30
2	SA	1320	C	P-O3'-C3'	-5.82	112.71	119.70
26	LA	323	C	C4-C5-C6	5.82	120.31	117.40
26	LA	484	C	C3'-C2'-C1'	5.82	106.16	101.50
26	LA	567	U	C6-N1-C2	-5.82	117.51	121.00
26	LA	717	C	C5'-C4'-C3'	5.82	125.31	116.00
26	LA	1007	C	P-O5'-C5'	-5.82	111.59	120.90
26	LA	1609	A	C8-N9-C4	5.82	108.13	105.80
26	LA	2576	G	C4-C5-N7	-5.82	108.47	110.80
26	LA	2679	A	C4'-C3'-C2'	5.82	108.42	102.60
26	LA	2790	U	C1'-O4'-C4'	-5.82	105.24	109.90
26	LA	2798	U	P-O5'-C5'	5.82	130.21	120.90
2	SA	817	C	P-O5'-C5'	-5.82	111.59	120.90
26	LA	970	U	N1-C2-N3	5.82	118.39	114.90
26	LA	1583	A	N3-C4-C5	5.82	130.87	126.80
26	LA	2811	G	N3-C4-N9	5.82	129.49	126.00
2	SA	532	A	N9-C4-C5	-5.82	103.47	105.80
2	SA	863	U	C6-N1-C2	5.82	124.49	121.00
2	SA	1034	G	N1-C2-N3	-5.82	120.41	123.90
2	SA	1251	A	C5'-C4'-O4'	5.82	116.08	109.10
2	SA	1291	U	N1-C2-N3	5.82	118.39	114.90
4	S2	77	A	N1-C6-N6	-5.82	115.11	118.60
25	LB	81	G	C5-C6-N1	5.82	114.41	111.50
26	LA	298	G	N3-C4-C5	5.82	131.51	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	420	C	N3-C4-N4	5.82	122.07	118.00
26	LA	693	A	C5'-C4'-C3'	-5.82	106.69	116.00
26	LA	953	G	C5'-C4'-C3'	5.82	125.31	116.00
26	LA	1385	A	P-O5'-C5'	5.82	130.21	120.90
26	LA	1838	C	C5-C6-N1	-5.82	118.09	121.00
26	LA	1871	A	C5'-C4'-O4'	5.82	116.08	109.10
26	LA	1886	U	C4'-C3'-C2'	-5.82	96.78	102.60
26	LA	1893	C	C4-C5-C6	-5.82	114.49	117.40
26	LA	2401	U	N3-C2-O2	-5.82	118.13	122.20
26	LA	2444	G	N9-C4-C5	-5.82	103.07	105.40
2	SA	939	G	N1-C2-N2	-5.82	110.97	116.20
2	SA	1232	U	OP1-P-OP2	-5.82	110.88	119.60
2	SA	1326	U	N3-C2-O2	-5.82	118.13	122.20
2	SA	1414	U	C5-C4-O4	5.82	129.39	125.90
2	SA	1422	G	OP1-P-OP2	-5.82	110.88	119.60
14	SN	13	VAL	CA-CB-CG1	-5.82	102.18	110.90
26	LA	722	A	O4'-C1'-N9	5.82	112.85	108.20
26	LA	808	G	C5'-C4'-O4'	5.82	116.08	109.10
26	LA	825	A	N3-C4-N9	-5.82	122.75	127.40
26	LA	1227	G	N3-C2-N2	5.82	123.97	119.90
26	LA	2717	C	C4-C5-C6	-5.82	114.49	117.40
27	LD	51	ARG	CD-NE-CZ	5.82	131.74	123.60
37	LC	186	LYS	N-CA-C	5.82	126.70	111.00
56	LR	58	PHE	O-C-N	-5.82	113.40	122.70
2	SA	78	A	N7-C8-N9	5.81	116.71	113.80
2	SA	458	U	C1'-O4'-C4'	-5.81	105.25	109.90
2	SA	701	U	OP1-P-OP2	-5.81	110.88	119.60
2	SA	871	U	C2-N3-C4	-5.81	123.51	127.00
2	SA	901	A	N9-C4-C5	5.81	108.12	105.80
25	LB	17	C	N3-C2-O2	-5.81	117.83	121.90
26	LA	28	A	C5-C6-N1	5.81	120.61	117.70
26	LA	103	A	N1-C6-N6	5.81	122.09	118.60
26	LA	2798	U	C4'-C3'-C2'	-5.81	96.79	102.60
54	LM	17	ARG	NE-CZ-NH2	5.81	123.21	120.30
2	SA	421	U	C2-N1-C1'	5.81	124.67	117.70
2	SA	822	U	C2-N1-C1'	-5.81	110.72	117.70
2	SA	1007	U	C5'-C4'-O4'	5.81	116.08	109.10
2	SA	1434	A	C5-C6-N6	-5.81	119.05	123.70
26	LA	1177	G	C5-C6-O6	-5.81	125.11	128.60
26	LA	1484	U	P-O5'-C5'	-5.81	111.60	120.90
26	LA	1807	G	C5-C6-O6	-5.81	125.11	128.60
26	LA	2277	G	O5'-P-OP2	5.81	117.67	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2547	A	P-O3'-C3'	-5.81	112.72	119.70
26	LA	2822	G	C1'-O4'-C4'	5.81	114.55	109.90
2	SA	74	A	C2-N3-C4	5.81	113.50	110.60
2	SA	91	U	C4'-C3'-C2'	-5.81	96.79	102.60
2	SA	134	G	N7-C8-N9	5.81	116.00	113.10
2	SA	1438	G	C5-C6-N1	5.81	114.41	111.50
26	LA	979	A	N1-C2-N3	5.81	132.21	129.30
26	LA	1676	A	C5-C6-N6	5.81	128.35	123.70
26	LA	1805	A	C5-N7-C8	-5.81	100.99	103.90
26	LA	2164	C	C1'-O4'-C4'	-5.81	105.25	109.90
26	LA	2337	G	N3-C4-C5	-5.81	125.69	128.60
26	LA	2832	U	C4'-C3'-C2'	-5.81	96.79	102.60
26	LA	2843	G	N9-C4-C5	5.81	107.72	105.40
2	SA	121	U	OP1-P-OP2	-5.81	110.88	119.60
2	SA	560	A	N1-C2-N3	5.81	132.21	129.30
2	SA	847	G	C6-N1-C2	-5.81	121.61	125.10
2	SA	1303	C	C1'-O4'-C4'	-5.81	105.25	109.90
4	S2	56	U	C5'-C4'-C3'	-5.81	106.71	116.00
26	LA	663	G	C4-C5-N7	5.81	113.12	110.80
26	LA	1065	U	C3'-C2'-C1'	-5.81	96.85	101.50
26	LA	1342	A	N1-C2-N3	-5.81	126.40	129.30
26	LA	1408	G	N1-C2-N3	5.81	127.39	123.90
26	LA	1807	G	C8-N9-C4	5.81	108.72	106.40
26	LA	2112	G	C3'-C2'-C1'	-5.81	96.85	101.50
26	LA	2420	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	SA	15	G	N9-C1'-C2'	5.81	121.55	114.00
2	SA	126	G	N1-C6-O6	5.81	123.39	119.90
2	SA	433	G	N9-C4-C5	5.81	107.72	105.40
2	SA	985	C	N3-C2-O2	-5.81	117.83	121.90
2	SA	998	C	C5-C6-N1	-5.81	118.10	121.00
2	SA	1114	C	C4'-C3'-C2'	-5.81	96.79	102.60
3	S1	18	A	N1-C2-N3	-5.81	126.40	129.30
4	S2	58	A	C5-C6-N1	-5.81	114.80	117.70
4	S2	69	C	C5-C6-N1	5.81	123.90	121.00
24	S3	416	SER	CB-CA-C	-5.81	99.06	110.10
26	LA	308	G	P-O5'-C5'	-5.81	111.61	120.90
26	LA	528	A	O4'-C4'-C3'	-5.81	98.19	104.00
26	LA	549	G	C1'-O4'-C4'	-5.81	105.25	109.90
26	LA	586	A	N1-C6-N6	-5.81	115.12	118.60
26	LA	968	C	C4-C5-C6	5.81	120.30	117.40
26	LA	973	A	C5'-C4'-O4'	5.81	116.07	109.10
26	LA	2040	G	O5'-P-OP2	-5.81	100.47	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2363	G	C8-N9-C4	5.81	108.72	106.40
26	LA	2858	C	C3'-C2'-C1'	5.81	106.14	101.50
46	LH	49	LEU	CB-CG-CD2	5.81	120.87	111.00
53	LP	80	PHE	CB-CG-CD1	-5.81	116.73	120.80
2	SA	1312	G	N3-C2-N2	5.81	123.96	119.90
2	SA	1471	U	OP2-P-O3'	5.81	117.97	105.20
26	LA	333	G	C4-C5-C6	5.81	122.28	118.80
26	LA	541	A	C4-C5-N7	-5.81	107.80	110.70
26	LA	794	A	N9-C4-C5	-5.81	103.48	105.80
26	LA	1071	G	N3-C2-N2	5.81	123.96	119.90
26	LA	1349	C	N3-C4-N4	5.81	122.06	118.00
26	LA	1885	A	N1-C2-N3	5.81	132.20	129.30
26	LA	2436	G	C5-C6-N1	-5.81	108.60	111.50
26	LA	2694	G	C4-C5-C6	-5.81	115.32	118.80
2	SA	113	G	C5-C6-N1	-5.80	108.60	111.50
2	SA	993	G	O5'-P-OP1	5.80	117.67	110.70
2	SA	1330	U	C2'-C3'-O3'	5.80	122.99	113.70
3	S1	13	A	C5-N7-C8	5.80	106.80	103.90
18	SB	77	GLU	OE1-CD-OE2	-5.80	116.33	123.30
26	LA	327	G	C5-C6-N1	-5.80	108.60	111.50
26	LA	374	A	C4-C5-N7	5.80	113.60	110.70
26	LA	516	C	N3-C4-N4	-5.80	113.94	118.00
26	LA	634	C	N1-C2-N3	-5.80	115.14	119.20
26	LA	748	G	C8-N9-C1'	-5.80	119.45	127.00
26	LA	1380	G	C5-C6-O6	5.80	132.08	128.60
26	LA	1748	C	C5-C4-N4	-5.80	116.14	120.20
26	LA	2543	G	C4-N9-C1'	5.80	134.04	126.50
26	LA	2574	G	C4'-C3'-O3'	5.80	124.61	113.00
26	LA	2749	A	C4-C5-N7	5.80	113.60	110.70
48	LN	48	ARG	N-CA-CB	5.80	121.05	110.60
2	SA	253	A	N1-C6-N6	5.80	122.08	118.60
2	SA	1160	G	P-O3'-C3'	-5.80	112.74	119.70
26	LA	20	C	N1-C2-N3	5.80	123.26	119.20
26	LA	266	G	C6-N1-C2	5.80	128.58	125.10
26	LA	756	A	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	1292	G	C8-N9-C4	-5.80	104.08	106.40
26	LA	1459	G	C8-N9-C4	5.80	108.72	106.40
26	LA	1516	G	N7-C8-N9	-5.80	110.20	113.10
2	SA	2	A	O4'-C1'-N9	5.80	112.84	108.20
2	SA	282	A	N7-C8-N9	5.80	116.70	113.80
2	SA	819	A	C5'-C4'-O4'	5.80	116.06	109.10
4	S2	15	G	N1-C2-N2	5.80	121.42	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1	G	C4-N9-C1'	5.80	134.04	126.50
26	LA	56	A	C4-C5-N7	5.80	113.60	110.70
26	LA	650	C	O4'-C1'-N1	5.80	112.84	108.20
26	LA	998	C	N3-C4-C5	-5.80	119.58	121.90
26	LA	1071	G	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	1182	G	C5-C6-O6	5.80	132.08	128.60
26	LA	2283	C	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	2399	G	N1-C2-N2	-5.80	110.98	116.20
26	LA	2606	C	O5'-P-OP1	5.80	117.66	110.70
57	LS	78	PHE	CB-CG-CD1	-5.80	116.74	120.80
2	SA	155	A	C5-C6-N6	5.80	128.34	123.70
2	SA	257	G	O4'-C1'-N9	5.80	112.84	108.20
2	SA	331	G	O4'-C1'-C2'	5.80	112.82	107.60
2	SA	360	G	P-O3'-C3'	-5.80	112.74	119.70
2	SA	782	A	C4'-C3'-C2'	-5.80	96.80	102.60
2	SA	799	G	C4-C5-C6	-5.80	115.32	118.80
2	SA	818	G	C4-C5-N7	5.80	113.12	110.80
2	SA	854	U	C2-N3-C4	5.80	130.48	127.00
2	SA	926	G	C2-N3-C4	-5.80	109.00	111.90
2	SA	966	G	C6-N1-C2	-5.80	121.62	125.10
2	SA	1331	G	P-O3'-C3'	5.80	126.66	119.70
5	ST	50	PHE	CB-CG-CD2	5.80	124.86	120.80
25	LB	25	U	C4-C5-C6	-5.80	116.22	119.70
25	LB	66	A	O4'-C1'-N9	-5.80	103.56	108.20
26	LA	119	A	N1-C6-N6	5.80	122.08	118.60
26	LA	637	A	N7-C8-N9	-5.80	110.90	113.80
26	LA	1037	G	N3-C2-N2	5.80	123.96	119.90
26	LA	1321	A	C6-C5-N7	5.80	136.36	132.30
26	LA	1916	A	C4'-C3'-C2'	-5.80	96.80	102.60
26	LA	1982	U	N1-C2-O2	5.80	126.86	122.80
26	LA	2082	A	C8-N9-C4	-5.80	103.48	105.80
26	LA	2396	G	C1'-O4'-C4'	-5.80	105.26	109.90
38	LE	90	PHE	CB-CG-CD1	5.80	124.86	120.80
2	SA	975	A	C1'-O4'-C4'	-5.80	105.26	109.90
2	SA	1259	C	C5'-C4'-O4'	5.80	116.06	109.10
26	LA	436	C	C6-N1-C2	-5.80	117.98	120.30
26	LA	1230	A	N9-C4-C5	5.80	108.12	105.80
26	LA	1757	A	C4-C5-N7	5.80	113.60	110.70
26	LA	1889	A	C2-N3-C4	-5.80	107.70	110.60
26	LA	2545	G	N3-C4-C5	5.80	131.50	128.60
26	LA	2579	C	C5'-C4'-O4'	5.80	116.06	109.10
45	LG	26	GLN	N-CA-CB	5.80	121.04	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	386	C	C3'-C2'-C1'	-5.80	96.86	101.50
2	SA	441	A	P-O3'-C3'	-5.80	112.74	119.70
2	SA	659	U	C2'-C3'-O3'	5.80	122.97	113.70
2	SA	881	G	O3'-P-O5'	-5.80	92.99	104.00
2	SA	1089	G	C5-C6-N1	5.80	114.40	111.50
2	SA	1443	C	O4'-C1'-N1	5.80	112.84	108.20
26	LA	43	G	C5-N7-C8	-5.80	101.40	104.30
26	LA	212	G	N9-C4-C5	5.80	107.72	105.40
26	LA	327	G	C6-N1-C2	5.80	128.58	125.10
26	LA	994	C	C2-N1-C1'	5.80	125.17	118.80
26	LA	1632	A	O4'-C4'-C3'	-5.80	98.20	104.00
26	LA	1676	A	O3'-P-O5'	5.80	115.01	104.00
26	LA	2237	G	C5'-C4'-O4'	5.80	116.06	109.10
26	LA	2615	U	O5'-P-OP1	5.80	117.66	110.70
2	SA	687	A	C6-N1-C2	5.79	122.08	118.60
26	LA	811	U	N3-C4-C5	5.79	118.08	114.60
26	LA	1530	G	C5'-C4'-O4'	5.79	116.05	109.10
26	LA	1552	A	C4-N9-C1'	5.79	136.73	126.30
26	LA	1652	A	C5-N7-C8	5.79	106.80	103.90
2	SA	831	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	1072	G	C6-N1-C2	-5.79	121.62	125.10
2	SA	1127	G	N3-C4-N9	5.79	129.48	126.00
2	SA	1172	C	N3-C4-N4	5.79	122.06	118.00
26	LA	394	C	N1-C2-N3	5.79	123.25	119.20
26	LA	431	U	N3-C4-O4	5.79	123.46	119.40
26	LA	978	G	N3-C4-N9	5.79	129.48	126.00
26	LA	1191	G	C5-C6-N1	5.79	114.40	111.50
26	LA	1619	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1622	G	N1-C6-O6	5.79	123.38	119.90
26	LA	1880	U	OP2-P-O3'	5.79	117.95	105.20
26	LA	2221	G	C5-C6-N1	5.79	114.40	111.50
26	LA	2545	G	N9-C4-C5	-5.79	103.08	105.40
44	LF	64	GLY	N-CA-C	-5.79	98.62	113.10
2	SA	39	G	C5'-C4'-C3'	5.79	125.27	116.00
2	SA	172	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	205	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	550	G	C3'-C2'-C1'	5.79	106.13	101.50
2	SA	913	A	P-O3'-C3'	-5.79	112.75	119.70
2	SA	1145	A	O3'-P-O5'	-5.79	93.00	104.00
2	SA	1188	A	C6-N1-C2	-5.79	115.12	118.60
26	LA	320	A	P-O3'-C3'	-5.79	112.75	119.70
26	LA	363	G	N9-C4-C5	5.79	107.72	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	604	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	693	A	C2-N3-C4	5.79	113.50	110.60
26	LA	753	A	C8-N9-C4	-5.79	103.48	105.80
26	LA	882	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1163	G	N3-C2-N2	5.79	123.95	119.90
26	LA	1356	G	N7-C8-N9	5.79	116.00	113.10
26	LA	1843	C	C5'-C4'-C3'	-5.79	106.73	116.00
26	LA	2117	A	C4-C5-N7	5.79	113.60	110.70
26	LA	2125	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	2133	G	OP1-P-OP2	-5.79	110.91	119.60
26	LA	2595	G	N9-C1'-C2'	-5.79	105.63	112.00
26	LA	2601	C	C4-C5-C6	5.79	120.30	117.40
2	SA	77	A	N7-C8-N9	5.79	116.69	113.80
26	LA	1071	G	C4-N9-C1'	-5.79	118.97	126.50
26	LA	2512	C	C6-N1-C2	-5.79	117.98	120.30
26	LA	2696	U	P-O3'-C3'	5.79	126.65	119.70
26	LA	2736	A	C6-N1-C2	-5.79	115.13	118.60
2	SA	236	A	N1-C6-N6	-5.79	115.13	118.60
2	SA	409	U	C5-C6-N1	5.79	125.59	122.70
2	SA	515	G	N3-C4-N9	5.79	129.47	126.00
2	SA	524	G	N7-C8-N9	-5.79	110.20	113.10
2	SA	861	G	N3-C4-C5	-5.79	125.71	128.60
2	SA	1190	G	C5-C6-N1	5.79	114.39	111.50
2	SA	1417	G	N3-C4-C5	5.79	131.49	128.60
26	LA	39	G	N1-C6-O6	-5.79	116.43	119.90
26	LA	118	A	C3'-C2'-C1'	5.79	106.13	101.50
26	LA	227	A	P-O3'-C3'	5.79	126.65	119.70
26	LA	345	A	C8-N9-C4	5.79	108.11	105.80
26	LA	410	G	N3-C4-C5	-5.79	125.71	128.60
26	LA	701	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	863	A	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1405	U	C5'-C4'-C3'	-5.79	106.74	116.00
26	LA	1447	C	C5-C6-N1	-5.79	118.11	121.00
26	LA	1568	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	2554	U	C4-C5-C6	5.79	123.17	119.70
26	LA	2838	G	N1-C2-N2	-5.79	110.99	116.20
28	LU	22	ASP	CA-C-N	5.79	129.93	117.20
2	SA	749	A	N7-C8-N9	5.79	116.69	113.80
2	SA	756	C	N3-C4-C5	5.79	124.22	121.90
2	SA	982	U	N3-C4-C5	5.79	118.07	114.60
26	LA	813	U	C5'-C4'-O4'	5.79	116.04	109.10
26	LA	1166	G	N9-C4-C5	5.79	107.72	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2075	U	C2-N3-C4	-5.79	123.53	127.00
37	LC	149	VAL	CA-CB-CG2	-5.79	102.22	110.90
2	SA	1061	G	C4'-C3'-C2'	-5.79	96.81	102.60
2	SA	1261	A	C5-N7-C8	-5.79	101.01	103.90
4	S2	12	G	C4-C5-N7	5.79	113.11	110.80
26	LA	24	G	O4'-C4'-C3'	-5.79	98.22	104.00
26	LA	644	A	C1'-O4'-C4'	-5.79	105.27	109.90
26	LA	1374	G	C6-C5-N7	-5.79	126.93	130.40
26	LA	1423	G	C4-C5-N7	-5.79	108.49	110.80
26	LA	1520	U	N1-C2-N3	5.79	118.37	114.90
26	LA	1775	U	O4'-C1'-N1	5.79	112.83	108.20
26	LA	1863	G	C8-N9-C1'	-5.79	119.48	127.00
26	LA	1975	G	C5-C6-N1	5.79	114.39	111.50
26	LA	2333	A	C5'-C4'-O4'	5.79	116.04	109.10
26	LA	2462	C	C5-C6-N1	5.79	123.89	121.00
26	LA	2558	C	O4'-C1'-N1	5.79	112.83	108.20
56	LR	58	PHE	CB-CG-CD2	-5.79	116.75	120.80
58	LT	9	GLY	O-C-N	-5.79	113.44	122.70
2	SA	402	G	N7-C8-N9	5.78	115.99	113.10
2	SA	405	U	N1-C1'-C2'	-5.78	105.64	112.00
2	SA	477	C	C2-N3-C4	-5.78	117.01	119.90
2	SA	1362	A	C5-C6-N6	5.78	128.33	123.70
2	SA	1507	A	N9-C4-C5	5.78	108.11	105.80
26	LA	417	C	C3'-C2'-C1'	5.78	106.13	101.50
26	LA	521	U	N1-C2-O2	-5.78	118.75	122.80
26	LA	752	A	C5-N7-C8	-5.78	101.01	103.90
26	LA	1592	C	N3-C2-O2	-5.78	117.85	121.90
26	LA	1612	C	C4-C5-C6	-5.78	114.51	117.40
26	LA	2530	A	C6-N1-C2	-5.78	115.13	118.60
26	LA	2536	G	C4'-C3'-C2'	-5.78	96.82	102.60
26	LA	2563	U	C4-C5-C6	-5.78	116.23	119.70
45	LG	11	VAL	CA-CB-CG1	5.78	119.58	110.90
2	SA	212	G	C5-C6-N1	5.78	114.39	111.50
26	LA	257	C	N3-C4-C5	5.78	124.21	121.90
26	LA	529	A	C5-C6-N1	5.78	120.59	117.70
26	LA	2772	C	N3-C4-C5	5.78	124.21	121.90
2	SA	721	G	N1-C6-O6	-5.78	116.43	119.90
2	SA	1055	A	C2-N3-C4	-5.78	107.71	110.60
2	SA	1364	U	C6-N1-C1'	5.78	129.29	121.20
21	SE	30	PHE	CZ-CE2-CD2	-5.78	113.16	120.10
26	LA	95	A	C5'-C4'-C3'	-5.78	106.75	116.00
26	LA	463	G	N7-C8-N9	5.78	115.99	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	829	A	P-O5'-C5'	-5.78	111.65	120.90
26	LA	1603	A	C5-C6-N1	5.78	120.59	117.70
26	LA	1743	G	C2'-C3'-O3'	5.78	122.95	113.70
26	LA	1747	U	C5'-C4'-C3'	-5.78	106.75	116.00
26	LA	1771	C	OP1-P-OP2	-5.78	110.93	119.60
26	LA	1782	U	N3-C4-C5	-5.78	111.13	114.60
26	LA	2146	C	C1'-O4'-C4'	5.78	114.53	109.90
26	LA	2598	A	C5-N7-C8	-5.78	101.01	103.90
2	SA	602	A	N1-C6-N6	5.78	122.07	118.60
26	LA	161	A	O4'-C1'-C2'	5.78	112.80	107.60
26	LA	283	G	P-O3'-C3'	5.78	126.64	119.70
26	LA	588	U	O4'-C1'-C2'	5.78	112.80	107.60
26	LA	1767	G	C8-N9-C4	5.78	108.71	106.40
26	LA	2101	A	C4-N9-C1'	-5.78	115.90	126.30
26	LA	2116	G	C5-C6-N1	-5.78	108.61	111.50
26	LA	2259	U	C3'-C2'-C1'	5.78	106.12	101.50
26	LA	2614	A	C5-C6-N6	5.78	128.32	123.70
2	SA	542	G	C5'-C4'-C3'	-5.78	106.76	116.00
2	SA	1114	C	O4'-C1'-N1	5.78	112.82	108.20
2	SA	1322	C	C6-N1-C2	5.78	122.61	120.30
2	SA	1461	G	N9-C4-C5	5.78	107.71	105.40
3	S1	19	A	OP1-P-OP2	-5.78	110.93	119.60
26	LA	938	G	C5'-C4'-O4'	5.78	116.03	109.10
26	LA	1059	G	C4'-C3'-C2'	-5.78	96.82	102.60
26	LA	1161	C	C5-C4-N4	5.78	124.24	120.20
26	LA	1372	U	P-O5'-C5'	5.78	130.14	120.90
26	LA	2387	U	OP1-P-OP2	-5.78	110.93	119.60
26	LA	2509	G	C2-N3-C4	-5.78	109.01	111.90
26	LA	2589	A	C6-C5-N7	-5.78	128.26	132.30
26	LA	2599	G	N1-C6-O6	-5.78	116.43	119.90
58	LT	78	ARG	NE-CZ-NH2	5.78	123.19	120.30
2	SA	96	U	P-O5'-C5'	-5.78	111.66	120.90
2	SA	193	C	O4'-C1'-N1	5.78	112.82	108.20
2	SA	207	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	SA	321	A	C8-N9-C4	-5.78	103.49	105.80
2	SA	578	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	SA	595	A	C4'-C3'-C2'	5.78	108.38	102.60
4	S2	6	G	OP1-P-OP2	-5.78	110.94	119.60
26	LA	372	G	P-O3'-C3'	5.78	126.63	119.70
26	LA	385	C	O3'-P-O5'	-5.78	93.03	104.00
26	LA	482	A	C5-N7-C8	5.78	106.79	103.90
26	LA	800	A	C5-C6-N1	-5.78	114.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1852	U	P-O3'-C3'	5.78	126.63	119.70
26	LA	2000	C	N3-C4-C5	5.78	124.21	121.90
26	LA	2150	C	C5-C4-N4	-5.78	116.16	120.20
26	LA	2447	G	C8-N9-C1'	-5.78	119.49	127.00
26	LA	2529	G	O4'-C1'-C2'	-5.78	100.03	105.80
2	SA	1047	G	N1-C6-O6	5.77	123.36	119.90
2	SA	1101	A	O4'-C1'-N9	5.77	112.82	108.20
2	SA	1410	A	N3-C4-N9	5.77	132.02	127.40
4	S2	31	G	P-O5'-C5'	5.77	130.14	120.90
26	LA	58	G	C5'-C4'-O4'	-5.77	102.17	109.10
26	LA	702	U	C5-C4-O4	5.77	129.36	125.90
26	LA	2013	A	C8-N9-C4	-5.77	103.49	105.80
26	LA	2259	U	C5-C4-O4	-5.77	122.44	125.90
26	LA	2790	U	C2-N3-C4	-5.77	123.53	127.00
26	LA	2797	U	C2-N3-C4	-5.77	123.54	127.00
26	LA	2842	G	C6-C5-N7	-5.77	126.94	130.40
2	SA	73	C	N3-C4-C5	5.77	124.21	121.90
2	SA	940	C	P-O3'-C3'	-5.77	112.77	119.70
2	SA	1054	C	N3-C4-C5	5.77	124.21	121.90
2	SA	1458	G	N1-C2-N3	5.77	127.36	123.90
24	S3	28	ARG	NE-CZ-NH2	5.77	123.19	120.30
25	LB	61	G	N1-C6-O6	5.77	123.36	119.90
26	LA	18	U	C5'-C4'-O4'	5.77	116.03	109.10
26	LA	135	U	C4'-C3'-C2'	-5.77	96.83	102.60
26	LA	376	G	N9-C4-C5	5.77	107.71	105.40
26	LA	379	G	O4'-C4'-C3'	-5.77	98.23	104.00
26	LA	411	G	C5-N7-C8	5.77	107.19	104.30
26	LA	530	G	N1-C2-N3	5.77	127.36	123.90
26	LA	543	G	O4'-C1'-C2'	5.77	112.80	107.60
26	LA	665	U	N3-C4-O4	5.77	123.44	119.40
26	LA	1013	C	C5-C6-N1	5.77	123.89	121.00
26	LA	1084	A	O4'-C1'-N9	5.77	112.82	108.20
26	LA	1151	A	C5-N7-C8	-5.77	101.01	103.90
26	LA	1218	G	OP2-P-O3'	5.77	117.90	105.20
26	LA	1357	C	N1-C2-O2	5.77	122.36	118.90
26	LA	2265	U	N1-C2-N3	5.77	118.36	114.90
26	LA	2487	G	C6-N1-C2	-5.77	121.64	125.10
26	LA	2510	C	N3-C2-O2	-5.77	117.86	121.90
26	LA	2828	G	C4-C5-N7	5.77	113.11	110.80
26	LA	2876	G	P-O5'-C5'	-5.77	111.66	120.90
2	SA	16	A	N7-C8-N9	-5.77	110.92	113.80
2	SA	734	G	N1-C6-O6	5.77	123.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1205	U	N1-C2-O2	-5.77	118.76	122.80
15	SO	68	TYR	CG-CD2-CE2	5.77	125.92	121.30
26	LA	1174	U	O5'-P-OP1	5.77	117.62	110.70
26	LA	1885	A	C5-N7-C8	5.77	106.79	103.90
26	LA	2002	G	C3'-C2'-C1'	5.77	106.12	101.50
26	LA	2008	C	C5-C6-N1	-5.77	118.11	121.00
2	SA	38	G	C4-C5-N7	-5.77	108.49	110.80
2	SA	49	U	C5'-C4'-O4'	5.77	116.02	109.10
2	SA	295	C	C5'-C4'-O4'	5.77	116.02	109.10
2	SA	426	U	C2-N3-C4	5.77	130.46	127.00
2	SA	1112	C	C5-C4-N4	-5.77	116.16	120.20
2	SA	1332	A	C5'-C4'-C3'	-5.77	106.77	116.00
2	SA	1339	A	N9-C4-C5	-5.77	103.49	105.80
2	SA	1443	C	C4-C5-C6	5.77	120.28	117.40
4	S2	11	A	C3'-C2'-C1'	-5.77	96.89	101.50
26	LA	962	G	N9-C4-C5	-5.77	103.09	105.40
26	LA	1229	C	C5-C4-N4	5.77	124.24	120.20
26	LA	1300	G	O4'-C4'-C3'	5.77	110.72	106.10
26	LA	1370	C	C6-N1-C2	5.77	122.61	120.30
26	LA	1383	A	N3-C4-N9	5.77	132.01	127.40
26	LA	1934	C	C2-N1-C1'	5.77	125.15	118.80
26	LA	2577	A	C4-C5-C6	5.77	119.88	117.00
26	LA	2697	G	N3-C4-N9	-5.77	122.54	126.00
26	LA	2899	A	C8-N9-C4	5.77	108.11	105.80
45	LG	113	PHE	CB-CG-CD1	-5.77	116.76	120.80
2	SA	314	C	C6-N1-C2	-5.77	117.99	120.30
2	SA	440	C	C4-C5-C6	5.77	120.28	117.40
2	SA	444	G	O4'-C1'-N9	5.77	112.81	108.20
2	SA	597	G	C5-C6-O6	5.77	132.06	128.60
2	SA	639	G	N1-C2-N3	5.77	127.36	123.90
2	SA	675	A	O4'-C4'-C3'	-5.77	98.23	104.00
2	SA	792	A	C8-N9-C4	5.77	108.11	105.80
2	SA	816	A	O4'-C1'-C2'	-5.77	100.03	105.80
2	SA	1035	A	C2-N3-C4	-5.77	107.72	110.60
5	ST	42	ASP	CB-CG-OD2	5.77	123.49	118.30
26	LA	167	A	C6-C5-N7	-5.77	128.26	132.30
26	LA	419	U	C4-C5-C6	5.77	123.16	119.70
26	LA	676	A	C2-N3-C4	-5.77	107.72	110.60
26	LA	808	G	C5-C6-O6	-5.77	125.14	128.60
26	LA	1121	C	N1-C2-O2	5.77	122.36	118.90
26	LA	1220	G	C8-N9-C4	-5.77	104.09	106.40
26	LA	1309	G	N1-C2-N3	-5.77	120.44	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1634	A	C6-C5-N7	-5.77	128.26	132.30
26	LA	1972	G	P-O3'-C3'	-5.77	112.78	119.70
26	LA	2404	U	C6-N1-C1'	5.77	129.28	121.20
26	LA	2660	A	N7-C8-N9	-5.77	110.92	113.80
2	SA	51	A	C8-N9-C4	5.77	108.11	105.80
2	SA	510	A	P-O3'-C3'	-5.77	112.78	119.70
4	S2	1	C	P-O3'-C3'	5.77	126.62	119.70
26	LA	348	A	C1'-O4'-C4'	-5.77	105.29	109.90
2	SA	432	A	C5-N7-C8	-5.76	101.02	103.90
2	SA	611	C	P-O3'-C3'	-5.76	112.78	119.70
2	SA	622	A	P-O5'-C5'	-5.76	111.68	120.90
2	SA	630	A	N1-C2-N3	5.76	132.18	129.30
2	SA	837	U	OP1-P-OP2	-5.76	110.95	119.60
26	LA	656	G	C5-N7-C8	-5.76	101.42	104.30
26	LA	748	G	N1-C6-O6	5.76	123.36	119.90
26	LA	1034	G	N3-C2-N2	5.76	123.94	119.90
26	LA	1118	C	N1-C1'-C2'	-5.76	105.66	112.00
26	LA	1135	C	O5'-C5'-C4'	5.76	122.65	111.70
26	LA	1435	G	C4'-C3'-C2'	-5.76	96.83	102.60
26	LA	1478	G	N1-C6-O6	-5.76	116.44	119.90
26	LA	1510	G	N9-C1'-C2'	5.76	121.49	114.00
26	LA	1722	A	C6-N1-C2	-5.76	115.14	118.60
26	LA	1744	A	C2-N3-C4	5.76	113.48	110.60
26	LA	2163	A	C4-N9-C1'	5.76	136.68	126.30
26	LA	2273	A	C3'-C2'-C1'	-5.76	96.89	101.50
26	LA	2753	A	C8-N9-C4	-5.76	103.49	105.80
2	SA	454	G	N1-C2-N3	5.76	127.36	123.90
2	SA	568	G	P-O5'-C5'	-5.76	111.68	120.90
2	SA	647	C	C4'-C3'-C2'	-5.76	96.84	102.60
16	SP	18	GLN	N-CA-CB	5.76	120.97	110.60
25	LB	118	C	P-O3'-C3'	-5.76	112.78	119.70
26	LA	172	A	C5-C6-N6	-5.76	119.09	123.70
26	LA	1353	A	N9-C4-C5	-5.76	103.50	105.80
26	LA	1539	U	O5'-P-OP2	5.76	117.62	110.70
26	LA	1914	C	C5-C6-N1	5.76	123.88	121.00
26	LA	2669	G	OP1-P-OP2	-5.76	110.96	119.60
26	LA	2784	U	C5'-C4'-C3'	-5.76	106.78	116.00
2	SA	331	G	C2-N3-C4	-5.76	109.02	111.90
2	SA	709	U	C4'-C3'-C2'	-5.76	96.84	102.60
2	SA	979	C	N3-C4-N4	-5.76	113.97	118.00
2	SA	1025	U	O5'-P-OP2	-5.76	100.51	105.70
2	SA	1512	U	N3-C2-O2	-5.76	118.17	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SK	126	ARG	C-N-CA	5.76	136.10	121.70
14	SN	76	PHE	CB-CG-CD1	5.76	124.83	120.80
26	LA	496	G	C5-N7-C8	-5.76	101.42	104.30
26	LA	605	G	C4-C5-C6	5.76	122.26	118.80
26	LA	1545	A	N1-C2-N3	5.76	132.18	129.30
26	LA	2171	A	C4'-C3'-C2'	-5.76	96.84	102.60
26	LA	2463	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	2791	G	N9-C4-C5	5.76	107.70	105.40
46	LH	150	TYR	CG-CD2-CE2	-5.76	116.69	121.30
49	LK	17	ALA	N-CA-CB	5.76	118.17	110.10
53	LP	80	PHE	N-CA-CB	5.76	120.97	110.60
2	SA	8	A	O4'-C1'-N9	5.76	112.81	108.20
2	SA	1127	G	C4'-C3'-C2'	5.76	108.36	102.60
2	SA	1328	C	C1'-O4'-C4'	-5.76	105.29	109.90
3	S1	25	U	C2-N3-C4	-5.76	123.55	127.00
24	S3	663	PHE	CA-CB-CG	-5.76	100.08	113.90
26	LA	147	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	1053	C	P-O5'-C5'	5.76	130.12	120.90
26	LA	1206	G	N1-C6-O6	-5.76	116.44	119.90
26	LA	1251	C	C4-C5-C6	5.76	120.28	117.40
26	LA	2246	G	N7-C8-N9	-5.76	110.22	113.10
26	LA	2313	C	N3-C4-C5	5.76	124.20	121.90
26	LA	2348	U	C6-N1-C2	-5.76	117.54	121.00
26	LA	2490	G	N3-C2-N2	5.76	123.93	119.90
48	LN	33	ARG	NE-CZ-NH2	5.76	123.18	120.30
2	SA	1514	G	N3-C2-N2	5.76	123.93	119.90
4	S2	3	C	N3-C2-O2	-5.76	117.87	121.90
26	LA	1282	U	OP1-P-OP2	-5.76	110.96	119.60
26	LA	1609	A	OP1-P-OP2	-5.76	110.96	119.60
26	LA	2177	C	C2-N3-C4	-5.76	117.02	119.90
26	LA	2326	C	C5-C6-N1	-5.76	118.12	121.00
26	LA	2726	A	N9-C4-C5	-5.76	103.50	105.80
2	SA	225	C	C5'-C4'-C3'	-5.76	106.79	116.00
2	SA	302	G	C2-N3-C4	-5.76	109.02	111.90
25	LB	31	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	407	G	C4-C5-N7	-5.76	108.50	110.80
26	LA	1177	G	OP1-P-OP2	-5.76	110.97	119.60
26	LA	1348	C	C2-N1-C1'	5.76	125.13	118.80
26	LA	2282	G	N9-C4-C5	5.76	107.70	105.40
26	LA	2477	U	N3-C4-O4	5.76	123.43	119.40
2	SA	160	A	P-O3'-C3'	5.75	126.61	119.70
2	SA	729	A	C5-C6-N6	-5.75	119.10	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	SN	44	VAL	CA-CB-CG1	-5.75	102.27	110.90
26	LA	104	A	N1-C6-N6	5.75	122.05	118.60
26	LA	1073	A	C5-C6-N6	-5.75	119.10	123.70
26	LA	2147	A	P-O3'-C3'	5.75	126.61	119.70
26	LA	2407	A	C5'-C4'-O4'	5.75	116.01	109.10
2	SA	12	U	C5'-C4'-O4'	5.75	116.00	109.10
2	SA	151	A	N1-C6-N6	-5.75	115.15	118.60
2	SA	560	A	C4-C5-N7	-5.75	107.82	110.70
2	SA	565	U	C5'-C4'-O4'	-5.75	102.20	109.10
2	SA	672	U	N3-C2-O2	-5.75	118.17	122.20
2	SA	756	C	O4'-C1'-N1	5.75	112.80	108.20
2	SA	1120	C	C5-C4-N4	-5.75	116.17	120.20
26	LA	43	G	N9-C1'-C2'	5.75	121.48	114.00
26	LA	377	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	471	A	C3'-C2'-C1'	5.75	106.10	101.50
26	LA	592	A	N7-C8-N9	-5.75	110.92	113.80
26	LA	1191	G	N7-C8-N9	5.75	115.98	113.10
26	LA	2147	A	N9-C4-C5	-5.75	103.50	105.80
26	LA	2686	G	N1-C2-N2	-5.75	111.02	116.20
33	LZ	26	ARG	O-C-N	-5.75	113.50	122.70
46	LH	43	LYS	CB-CA-C	5.75	121.91	110.40
2	SA	128	G	N3-C4-C5	5.75	131.48	128.60
2	SA	681	A	C1'-O4'-C4'	-5.75	105.30	109.90
2	SA	888	G	N9-C4-C5	-5.75	103.10	105.40
2	SA	1193	G	C5-C6-O6	-5.75	125.15	128.60
2	SA	1230	C	C5-C4-N4	-5.75	116.17	120.20
2	SA	1322	C	O4'-C4'-C3'	5.75	110.70	106.10
26	LA	67	U	P-O3'-C3'	5.75	126.60	119.70
26	LA	555	G	P-O3'-C3'	5.75	126.60	119.70
26	LA	654	A	N1-C6-N6	-5.75	115.15	118.60
26	LA	663	G	N1-C2-N3	-5.75	120.45	123.90
26	LA	675	A	C5'-C4'-O4'	5.75	116.00	109.10
26	LA	718	A	C8-N9-C1'	-5.75	117.35	127.70
26	LA	1278	C	N3-C2-O2	5.75	125.93	121.90
26	LA	1355	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	1929	G	C5-C6-O6	-5.75	125.15	128.60
26	LA	2660	A	O5'-C5'-C4'	5.75	122.63	111.70
35	L1	49	ALA	CB-CA-C	5.75	118.73	110.10
2	SA	568	G	P-O3'-C3'	5.75	126.60	119.70
2	SA	1062	U	N1-C2-N3	5.75	118.35	114.90
2	SA	1145	A	C6-N1-C2	5.75	122.05	118.60
3	S1	30	U	O4'-C1'-N1	5.75	112.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	97	C	O5'-P-OP1	5.75	117.60	110.70
26	LA	95	A	C1'-O4'-C4'	-5.75	105.30	109.90
26	LA	1308	A	C1'-O4'-C4'	-5.75	105.30	109.90
26	LA	1650	A	N7-C8-N9	5.75	116.67	113.80
26	LA	1919	A	C6-C5-N7	5.75	136.32	132.30
26	LA	2551	C	P-O3'-C3'	-5.75	112.80	119.70
2	SA	1015	G	C4-C5-N7	-5.75	108.50	110.80
2	SA	1081	A	P-O3'-C3'	-5.75	112.80	119.70
2	SA	1337	G	N1-C6-O6	5.75	123.35	119.90
26	LA	30	G	N3-C4-C5	-5.75	125.72	128.60
26	LA	146	A	N7-C8-N9	5.75	116.67	113.80
26	LA	465	G	C4'-C3'-C2'	5.75	108.35	102.60
26	LA	1663	G	C4-C5-N7	5.75	113.10	110.80
26	LA	1783	A	C2-N3-C4	-5.75	107.73	110.60
26	LA	2354	C	C2-N3-C4	5.75	122.78	119.90
26	LA	2435	A	C5-N7-C8	-5.75	101.03	103.90
26	LA	2494	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	2618	G	C5'-C4'-O4'	5.75	116.00	109.10
26	LA	2819	G	C5'-C4'-C3'	-5.75	106.80	116.00
2	SA	18	C	N1-C2-N3	5.75	123.22	119.20
2	SA	97	G	P-O5'-C5'	5.75	130.09	120.90
2	SA	165	G	N9-C4-C5	5.75	107.70	105.40
2	SA	180	U	O4'-C1'-C2'	5.75	112.77	107.60
2	SA	585	G	C5'-C4'-O4'	5.75	116.00	109.10
2	SA	635	A	N1-C6-N6	5.75	122.05	118.60
2	SA	771	G	N9-C1'-C2'	-5.75	105.68	112.00
2	SA	965	U	C2-N1-C1'	5.75	124.60	117.70
2	SA	1024	G	N1-C6-O6	5.75	123.35	119.90
2	SA	1274	A	C6-N1-C2	5.75	122.05	118.60
2	SA	1393	U	C2-N3-C4	-5.75	123.55	127.00
4	S2	13	C	P-O5'-C5'	5.75	130.09	120.90
4	S2	58	A	C2'-C3'-O3'	5.75	122.89	113.70
25	LB	113	C	N3-C4-C5	-5.75	119.60	121.90
26	LA	681	G	C4'-C3'-C2'	-5.75	96.85	102.60
26	LA	1099	G	C5-N7-C8	-5.75	101.43	104.30
26	LA	1349	C	N1-C2-N3	5.75	123.22	119.20
26	LA	1433	A	C8-N9-C4	5.75	108.10	105.80
26	LA	1788	C	C4-C5-C6	5.75	120.27	117.40
26	LA	2178	C	P-O3'-C3'	-5.75	112.80	119.70
26	LA	2395	C	C6-N1-C2	-5.75	118.00	120.30
55	LQ	55	GLU	O-C-N	-5.75	113.51	122.70
2	SA	1262	C	C5-C6-N1	5.75	123.87	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	17	G	C4-C5-N7	5.75	113.10	110.80
26	LA	588	U	N1-C2-N3	5.75	118.35	114.90
26	LA	632	A	C6-N1-C2	-5.75	115.15	118.60
26	LA	1317	G	O4'-C1'-C2'	5.75	112.77	107.60
26	LA	2586	U	P-O5'-C5'	-5.75	111.71	120.90
26	LA	2803	G	N3-C4-C5	5.75	131.47	128.60
2	SA	741	G	C2-N3-C4	5.74	114.77	111.90
2	SA	944	G	C3'-C2'-C1'	-5.74	96.91	101.50
2	SA	1027	C	N3-C2-O2	-5.74	117.88	121.90
2	SA	1048	G	C4-C5-N7	-5.74	108.50	110.80
2	SA	1140	C	C5-C4-N4	-5.74	116.18	120.20
2	SA	1372	U	C5-C4-O4	-5.74	122.45	125.90
2	SA	1425	U	C4-C5-C6	-5.74	116.25	119.70
5	ST	78	LEU	CB-CG-CD2	-5.74	101.23	111.00
16	SP	65	ALA	O-C-N	-5.74	113.51	122.70
19	SC	35	ASP	N-CA-CB	-5.74	100.26	110.60
25	LB	100	G	C1'-O4'-C4'	-5.74	105.30	109.90
26	LA	360	U	N3-C4-O4	5.74	123.42	119.40
26	LA	365	U	OP2-P-O3'	5.74	117.84	105.20
26	LA	536	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	750	A	C5'-C4'-C3'	-5.74	106.81	116.00
26	LA	1201	U	OP1-P-OP2	-5.74	110.98	119.60
26	LA	1400	U	C5-C6-N1	-5.74	119.83	122.70
26	LA	1694	C	C2-N1-C1'	5.74	125.12	118.80
2	SA	66	A	N1-C2-N3	-5.74	126.43	129.30
2	SA	366	A	C5-N7-C8	5.74	106.77	103.90
26	LA	1031	G	C8-N9-C4	5.74	108.70	106.40
26	LA	2582	G	O5'-C5'-C4'	5.74	122.61	111.70
2	SA	251	G	N3-C2-N2	5.74	123.92	119.90
2	SA	352	C	P-O3'-C3'	5.74	126.59	119.70
2	SA	484	G	C4-N9-C1'	5.74	133.96	126.50
2	SA	604	G	C5'-C4'-C3'	-5.74	106.82	116.00
2	SA	629	A	N1-C2-N3	-5.74	126.43	129.30
2	SA	711	G	O4'-C1'-N9	5.74	112.79	108.20
2	SA	1124	G	P-O3'-C3'	-5.74	112.81	119.70
2	SA	1344	C	C5-C4-N4	5.74	124.22	120.20
25	LB	44	G	C8-N9-C4	-5.74	104.10	106.40
26	LA	159	G	C2'-C3'-O3'	5.74	122.89	113.70
26	LA	173	A	N7-C8-N9	5.74	116.67	113.80
26	LA	455	C	N1-C2-O2	-5.74	115.45	118.90
26	LA	704	G	N1-C2-N2	-5.74	111.03	116.20
26	LA	1063	G	C5'-C4'-C3'	5.74	125.19	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1526	C	O4'-C1'-N1	5.74	112.79	108.20
26	LA	1699	G	N3-C4-C5	5.74	131.47	128.60
26	LA	2216	G	C5'-C4'-C3'	-5.74	106.82	116.00
45	LG	82	TYR	CB-CG-CD2	5.74	124.44	121.00
2	SA	172	A	P-O3'-C3'	5.74	126.59	119.70
2	SA	210	C	OP1-P-O3'	5.74	117.83	105.20
2	SA	442	G	N1-C6-O6	-5.74	116.46	119.90
2	SA	904	U	C6-N1-C2	-5.74	117.56	121.00
4	S2	53	G	P-O5'-C5'	5.74	130.08	120.90
9	SI	109	GLN	N-CA-CB	5.74	120.93	110.60
26	LA	339	U	C4'-C3'-C2'	-5.74	96.86	102.60
26	LA	514	A	N9-C4-C5	5.74	108.09	105.80
26	LA	1190	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	1627	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	1744	A	N7-C8-N9	-5.74	110.93	113.80
26	LA	1789	A	P-O3'-C3'	5.74	126.59	119.70
26	LA	1828	G	N3-C2-N2	5.74	123.92	119.90
26	LA	2251	U	N3-C4-C5	5.74	118.04	114.60
26	LA	2707	U	P-O5'-C5'	5.74	130.08	120.90
26	LA	2708	G	C4'-C3'-C2'	-5.74	96.86	102.60
3	S1	53	G	N3-C2-N2	-5.74	115.88	119.90
22	SF	64	VAL	CA-CB-CG1	5.74	119.51	110.90
22	SF	116	PHE	CB-CG-CD2	-5.74	116.78	120.80
26	LA	333	G	N3-C4-C5	-5.74	125.73	128.60
26	LA	732	C	C4-C5-C6	-5.74	114.53	117.40
26	LA	1416	G	C8-N9-C1'	5.74	134.46	127.00
26	LA	1723	G	C5'-C4'-C3'	-5.74	106.82	116.00
26	LA	2568	U	C5-C6-N1	-5.74	119.83	122.70
26	LA	2580	U	O4'-C4'-C3'	5.74	110.69	106.10
26	LA	2780	G	C5-N7-C8	5.74	107.17	104.30
26	LA	2820	A	N1-C6-N6	-5.74	115.16	118.60
2	SA	1085	U	C3'-C2'-C1'	-5.74	96.91	101.50
2	SA	1193	G	N7-C8-N9	-5.74	110.23	113.10
2	SA	1314	C	O3'-P-O5'	-5.74	93.10	104.00
2	SA	1511	G	C4-C5-N7	5.74	113.09	110.80
4	S2	37	U	C6-N1-C2	-5.74	117.56	121.00
24	S3	106	ASP	CB-CG-OD2	5.74	123.46	118.30
26	LA	829	A	P-O3'-C3'	-5.74	112.82	119.70
26	LA	1072	C	O4'-C1'-N1	5.74	112.79	108.20
26	LA	1637	A	O4'-C4'-C3'	5.74	110.69	106.10
26	LA	2198	A	O5'-P-OP1	5.74	117.58	110.70
26	LA	2744	G	O3'-P-O5'	5.74	114.90	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2881	U	N1-C2-O2	5.74	126.81	122.80
2	SA	353	A	C1'-O4'-C4'	-5.73	105.31	109.90
2	SA	628	G	O4'-C1'-N9	5.73	112.79	108.20
2	SA	1359	C	N1-C2-O2	5.73	122.34	118.90
25	LB	13	G	C6-C5-N7	5.73	133.84	130.40
26	LA	1117	C	N3-C4-N4	5.73	122.01	118.00
26	LA	1587	G	C5'-C4'-O4'	5.73	115.98	109.10
26	LA	1665	A	C4-C5-C6	5.73	119.87	117.00
26	LA	1795	C	N3-C4-C5	5.73	124.19	121.90
49	LK	56	VAL	CG1-CB-CG2	-5.73	101.72	110.90
2	SA	14	U	C6-N1-C2	-5.73	117.56	121.00
2	SA	143	A	C3'-C2'-C1'	-5.73	96.91	101.50
2	SA	391	G	O4'-C1'-N9	5.73	112.79	108.20
2	SA	545	C	P-O5'-C5'	5.73	130.07	120.90
2	SA	681	A	N9-C4-C5	5.73	108.09	105.80
2	SA	1102	A	OP1-P-OP2	-5.73	111.00	119.60
2	SA	1325	C	N3-C2-O2	-5.73	117.89	121.90
26	LA	328	U	C6-N1-C2	-5.73	117.56	121.00
26	LA	581	C	C2-N3-C4	-5.73	117.03	119.90
26	LA	615	U	OP1-P-OP2	-5.73	111.00	119.60
26	LA	805	G	P-O5'-C5'	-5.73	111.73	120.90
26	LA	989	G	O5'-C5'-C4'	5.73	122.59	111.70
26	LA	1102	C	N3-C4-C5	-5.73	119.61	121.90
26	LA	1103	A	C8-N9-C1'	-5.73	117.38	127.70
26	LA	1163	G	N1-C6-O6	5.73	123.34	119.90
26	LA	1421	G	O4'-C1'-N9	5.73	112.79	108.20
26	LA	1837	C	O4'-C4'-C3'	-5.73	98.27	104.00
26	LA	2009	A	N7-C8-N9	5.73	116.67	113.80
26	LA	2286	G	N3-C2-N2	5.73	123.91	119.90
26	LA	2347	C	N3-C4-N4	5.73	122.01	118.00
30	LW	52	ASN	C-N-CA	5.73	136.03	121.70
38	LE	95	SER	N-CA-CB	5.73	119.10	110.50
46	LH	82	PHE	CB-CG-CD1	-5.73	116.79	120.80
50	LL	114	LEU	CB-CG-CD1	5.73	120.75	111.00
2	SA	54	C	N3-C4-C5	-5.73	119.61	121.90
2	SA	458	U	OP1-P-OP2	-5.73	111.00	119.60
2	SA	802	A	C4-C5-C6	5.73	119.86	117.00
2	SA	1528	U	C2-N3-C4	-5.73	123.56	127.00
26	LA	193	U	O4'-C1'-N1	5.73	112.78	108.20
26	LA	360	U	C2-N3-C4	5.73	130.44	127.00
26	LA	871	U	N3-C4-C5	-5.73	111.16	114.60
26	LA	914	G	N9-C4-C5	-5.73	103.11	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1469	A	N3-C4-C5	-5.73	122.79	126.80
26	LA	1482	G	C5-C6-O6	5.73	132.04	128.60
26	LA	1780	A	N7-C8-N9	5.73	116.67	113.80
26	LA	1821	A	N3-C4-N9	-5.73	122.82	127.40
26	LA	1974	C	C5'-C4'-C3'	5.73	125.17	116.00
26	LA	2019	A	C4'-C3'-C2'	-5.73	96.87	102.60
26	LA	2038	G	C4-C5-N7	5.73	113.09	110.80
26	LA	2326	C	N3-C2-O2	-5.73	117.89	121.90
26	LA	2469	A	OP1-P-OP2	-5.73	111.00	119.60
26	LA	2553	G	C4-C5-N7	-5.73	108.51	110.80
26	LA	2606	C	N3-C2-O2	-5.73	117.89	121.90
41	L5	14	ARG	CB-CG-CD	5.73	126.50	111.60
2	SA	198	G	N1-C6-O6	-5.73	116.46	119.90
2	SA	466	A	C5-N7-C8	5.73	106.77	103.90
11	SK	32	THR	CA-CB-CG2	-5.73	104.38	112.40
26	LA	356	G	N9-C4-C5	5.73	107.69	105.40
26	LA	562	U	C2-N3-C4	-5.73	123.56	127.00
26	LA	871	U	P-O5'-C5'	5.73	130.07	120.90
26	LA	2457	U	C4'-C3'-C2'	-5.73	96.87	102.60
26	LA	2630	G	C4'-C3'-C2'	-5.73	96.87	102.60
1	SS	4	LEU	CB-CG-CD2	-5.73	101.26	111.00
2	SA	179	A	N9-C4-C5	5.73	108.09	105.80
2	SA	366	A	C8-N9-C4	5.73	108.09	105.80
2	SA	776	G	N9-C4-C5	-5.73	103.11	105.40
2	SA	832	G	N1-C6-O6	-5.73	116.46	119.90
2	SA	891	U	C5'-C4'-O4'	5.73	115.97	109.10
2	SA	1163	A	N9-C4-C5	-5.73	103.51	105.80
2	SA	1412	C	O5'-P-OP1	5.73	117.57	110.70
25	LB	37	C	N3-C4-C5	-5.73	119.61	121.90
26	LA	895	U	N3-C2-O2	-5.73	118.19	122.20
26	LA	1150	C	C5-C4-N4	5.73	124.21	120.20
26	LA	1322	A	C4-C5-N7	5.73	113.56	110.70
26	LA	1408	G	C2-N3-C4	-5.73	109.04	111.90
44	LF	103	GLY	O-C-N	-5.73	113.53	122.70
2	SA	1159	U	N1-C2-O2	5.73	126.81	122.80
2	SA	1267	C	C5'-C4'-O4'	5.73	115.97	109.10
2	SA	1519	A	P-O3'-C3'	5.73	126.57	119.70
26	LA	136	G	C2-N3-C4	5.73	114.76	111.90
26	LA	1698	A	P-O5'-C5'	5.73	130.06	120.90
2	SA	36	C	C5'-C4'-O4'	5.72	115.97	109.10
2	SA	175	C	C4'-C3'-C2'	-5.72	96.88	102.60
2	SA	454	G	O5'-P-OP1	5.72	117.57	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	800	G	N9-C4-C5	5.72	107.69	105.40
2	SA	993	G	N1-C6-O6	5.72	123.33	119.90
2	SA	1466	C	N3-C4-C5	-5.72	119.61	121.90
26	LA	266	G	C8-N9-C4	-5.72	104.11	106.40
26	LA	458	G	N7-C8-N9	-5.72	110.24	113.10
26	LA	634	C	N3-C2-O2	5.72	125.91	121.90
26	LA	1139	G	O4'-C1'-N9	5.72	112.78	108.20
26	LA	1267	U	C5'-C4'-O4'	-5.72	102.23	109.10
26	LA	1488	C	N3-C4-C5	5.72	124.19	121.90
26	LA	1726	C	N3-C2-O2	-5.72	117.89	121.90
26	LA	1766	G	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	2325	G	C6-N1-C2	-5.72	121.67	125.10
26	LA	2417	C	C6-N1-C2	-5.72	118.01	120.30
2	SA	244	U	OP1-P-OP2	-5.72	111.02	119.60
2	SA	695	A	C1'-O4'-C4'	-5.72	105.32	109.90
2	SA	817	C	C5'-C4'-O4'	5.72	115.97	109.10
2	SA	1355	G	C5-C6-N1	-5.72	108.64	111.50
26	LA	547	A	C5-C6-N1	5.72	120.56	117.70
26	LA	845	A	C5-C6-N6	5.72	128.28	123.70
26	LA	1777	U	C5'-C4'-C3'	5.72	125.16	116.00
26	LA	1976	U	C5'-C4'-O4'	5.72	115.97	109.10
26	LA	2105	U	N1-C2-N3	5.72	118.33	114.90
26	LA	2523	G	C6-C5-N7	-5.72	126.97	130.40
26	LA	2751	G	C5-N7-C8	5.72	107.16	104.30
26	LA	2794	C	O4'-C1'-N1	5.72	112.78	108.20
35	L1	3	THR	CA-CB-CG2	-5.72	104.39	112.40
2	SA	72	A	P-O3'-C3'	5.72	126.56	119.70
2	SA	247	G	N9-C1'-C2'	-5.72	105.71	112.00
2	SA	460	A	C5-N7-C8	5.72	106.76	103.90
25	LB	120	U	C2-N1-C1'	5.72	124.56	117.70
26	LA	973	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	1437	C	N3-C2-O2	-5.72	117.89	121.90
26	LA	2102	G	C1'-O4'-C4'	-5.72	105.32	109.90
2	SA	552	U	N3-C2-O2	-5.72	118.20	122.20
2	SA	1479	C	N3-C2-O2	-5.72	117.90	121.90
18	SB	202	ASN	C-N-CA	5.72	136.00	121.70
25	LB	35	C	N3-C4-N4	5.72	122.00	118.00
26	LA	249	C	C4-C5-C6	-5.72	114.54	117.40
26	LA	468	G	N1-C2-N3	5.72	127.33	123.90
26	LA	487	C	O4'-C1'-N1	5.72	112.78	108.20
26	LA	625	G	C6-C5-N7	-5.72	126.97	130.40
26	LA	645	C	P-O5'-C5'	5.72	130.05	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1660	G	C8-N9-C4	5.72	108.69	106.40
26	LA	1840	G	C2'-C3'-O3'	5.72	122.85	113.70
26	LA	1853	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	2597	G	C2-N3-C4	-5.72	109.04	111.90
31	LX	76	ASP	CB-CG-OD2	5.72	123.45	118.30
2	SA	400	C	C5'-C4'-O4'	5.72	115.96	109.10
2	SA	1174	G	O4'-C4'-C3'	-5.72	98.28	104.00
2	SA	1208	C	O4'-C1'-N1	5.72	112.77	108.20
26	LA	102	U	N1-C2-O2	-5.72	118.80	122.80
26	LA	1144	A	O4'-C1'-N9	5.72	112.77	108.20
26	LA	1810	A	C5-C6-N1	5.72	120.56	117.70
26	LA	1937	A	C5-C6-N1	5.72	120.56	117.70
26	LA	2370	G	N9-C4-C5	5.72	107.69	105.40
2	SA	153	C	C5-C6-N1	5.72	123.86	121.00
2	SA	212	G	C4-N9-C1'	-5.72	119.07	126.50
2	SA	848	C	P-O3'-C3'	-5.72	112.84	119.70
2	SA	1007	U	OP2-P-O3'	5.72	117.78	105.20
4	S2	16	C	C4'-C3'-C2'	-5.72	96.88	102.60
25	LB	80	U	OP1-P-OP2	-5.72	111.03	119.60
26	LA	185	G	C5-N7-C8	5.72	107.16	104.30
26	LA	531	C	C5-C4-N4	5.72	124.20	120.20
26	LA	858	G	N3-C2-N2	5.72	123.90	119.90
26	LA	1586	A	P-O3'-C3'	-5.72	112.84	119.70
26	LA	1712	U	C4'-C3'-C2'	5.72	108.32	102.60
26	LA	1882	U	C5-C6-N1	5.72	125.56	122.70
26	LA	2452	C	O4'-C1'-N1	5.72	112.77	108.20
26	LA	2512	C	N1-C2-O2	-5.72	115.47	118.90
26	LA	2549	G	C8-N9-C4	-5.72	104.11	106.40
26	LA	2858	C	OP1-P-OP2	-5.72	111.03	119.60
2	SA	389	A	C5'-C4'-C3'	-5.71	106.86	116.00
2	SA	952	U	O3'-P-O5'	-5.71	93.14	104.00
2	SA	962	C	C5'-C4'-O4'	5.71	115.96	109.10
25	LB	22	U	O4'-C1'-N1	5.71	112.77	108.20
26	LA	450	G	C8-N9-C4	5.71	108.69	106.40
26	LA	541	A	N9-C1'-C2'	-5.71	105.71	112.00
26	LA	1166	G	C2-N3-C4	-5.71	109.04	111.90
26	LA	1686	C	C5-C6-N1	5.71	123.86	121.00
26	LA	1848	A	OP2-P-O3'	5.71	117.77	105.20
26	LA	1903	G	C5-N7-C8	5.71	107.16	104.30
26	LA	2142	A	C5'-C4'-C3'	-5.71	106.86	116.00
26	LA	2430	A	N3-C4-C5	-5.71	122.80	126.80
26	LA	2535	G	N1-C2-N2	-5.71	111.06	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2693	G	C2'-C3'-O3'	5.71	122.84	113.70
2	SA	844	G	P-O3'-C3'	5.71	126.56	119.70
3	S1	43	U	C6-N1-C2	5.71	124.43	121.00
26	LA	620	G	N3-C2-N2	-5.71	115.90	119.90
26	LA	1375	U	P-O3'-C3'	5.71	126.56	119.70
26	LA	1568	G	O4'-C4'-C3'	5.71	110.67	106.10
26	LA	1782	U	P-O5'-C5'	-5.71	111.76	120.90
26	LA	1924	C	C2-N1-C1'	5.71	125.08	118.80
26	LA	2280	G	C5-C6-N1	-5.71	108.64	111.50
26	LA	2363	G	P-O5'-C5'	-5.71	111.76	120.90
26	LA	2551	C	C6-N1-C2	5.71	122.58	120.30
26	LA	2628	C	N3-C2-O2	5.71	125.90	121.90
2	SA	82	G	N3-C2-N2	5.71	123.90	119.90
2	SA	142	G	N7-C8-N9	-5.71	110.24	113.10
2	SA	628	G	N1-C6-O6	5.71	123.33	119.90
2	SA	684	U	C4-C5-C6	5.71	123.13	119.70
2	SA	711	G	N9-C1'-C2'	-5.71	105.72	112.00
2	SA	764	C	C3'-C2'-C1'	-5.71	96.93	101.50
2	SA	1127	G	C1'-O4'-C4'	-5.71	105.33	109.90
2	SA	1471	U	O4'-C1'-N1	5.71	112.77	108.20
20	SD	96	ARG	NE-CZ-NH2	-5.71	117.44	120.30
25	LB	8	C	N1-C2-N3	5.71	123.20	119.20
26	LA	467	G	C4-C5-N7	5.71	113.08	110.80
26	LA	1022	G	C5'-C4'-O4'	5.71	115.95	109.10
26	LA	1739	A	O4'-C1'-N9	-5.71	103.63	108.20
26	LA	1740	G	C5'-C4'-O4'	5.71	115.95	109.10
26	LA	1795	C	C2-N3-C4	-5.71	117.04	119.90
26	LA	1953	A	OP2-P-O3'	5.71	117.76	105.20
26	LA	2102	G	C5-C6-N1	5.71	114.36	111.50
26	LA	2299	U	N1-C2-O2	5.71	126.80	122.80
26	LA	2585	U	P-O5'-C5'	-5.71	111.76	120.90
2	SA	537	G	C8-N9-C4	-5.71	104.12	106.40
2	SA	1280	A	C5-C6-N1	5.71	120.56	117.70
4	S2	37	U	O4'-C1'-N1	5.71	112.77	108.20
26	LA	526	A	C5'-C4'-C3'	-5.71	106.86	116.00
26	LA	1273	U	O4'-C1'-C2'	5.71	112.74	107.60
26	LA	1809	A	C6-N1-C2	-5.71	115.17	118.60
26	LA	2819	G	N7-C8-N9	5.71	115.95	113.10
2	SA	357	G	C5-N7-C8	-5.71	101.45	104.30
2	SA	656	G	N9-C4-C5	5.71	107.68	105.40
2	SA	974	A	N3-C4-C5	-5.71	122.80	126.80
2	SA	1141	C	N3-C2-O2	-5.71	117.90	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	SK	27	ASN	CA-CB-CG	-5.71	100.84	113.40
25	LB	41	G	C5-C6-O6	-5.71	125.17	128.60
26	LA	209	C	N1-C2-O2	5.71	122.33	118.90
26	LA	635	C	C5-C6-N1	-5.71	118.15	121.00
26	LA	1020	A	C4'-C3'-C2'	-5.71	96.89	102.60
26	LA	1050	A	C2-N3-C4	5.71	113.45	110.60
26	LA	1413	A	N3-C4-C5	5.71	130.80	126.80
26	LA	1457	U	P-O5'-C5'	5.71	130.03	120.90
26	LA	2489	U	N3-C2-O2	-5.71	118.20	122.20
26	LA	2614	A	O3'-P-O5'	-5.71	93.15	104.00
49	LK	7	TYR	CZ-CE2-CD2	-5.71	114.66	119.80
2	SA	65	A	P-O5'-C5'	-5.71	111.77	120.90
2	SA	113	G	P-O3'-C3'	5.71	126.55	119.70
2	SA	287	U	P-O5'-C5'	5.71	130.03	120.90
2	SA	656	G	C2-N3-C4	5.71	114.75	111.90
2	SA	1180	A	C2-N3-C4	-5.71	107.75	110.60
2	SA	1371	G	P-O3'-C3'	5.71	126.55	119.70
25	LB	7	G	C6-N1-C2	-5.71	121.68	125.10
26	LA	423	A	P-O5'-C5'	5.71	130.03	120.90
26	LA	443	A	N7-C8-N9	5.71	116.65	113.80
26	LA	534	U	N1-C2-O2	5.71	126.80	122.80
26	LA	995	C	C1'-O4'-C4'	5.71	114.47	109.90
26	LA	1082	U	N3-C4-O4	5.71	123.39	119.40
26	LA	1469	A	C8-N9-C4	-5.71	103.52	105.80
26	LA	2007	U	C6-N1-C2	-5.71	117.58	121.00
26	LA	2218	G	C4-C5-C6	-5.71	115.38	118.80
26	LA	2274	A	O4'-C1'-N9	5.71	112.76	108.20
36	L2	39	LYS	O-C-N	-5.71	113.57	122.70
26	LA	624	C	C2-N1-C1'	5.71	125.08	118.80
26	LA	1153	C	C6-N1-C2	5.71	122.58	120.30
26	LA	1632	A	O4'-C1'-N9	5.71	112.76	108.20
26	LA	1856	U	C2-N1-C1'	-5.71	110.85	117.70
2	SA	250	A	C6-N1-C2	-5.70	115.18	118.60
2	SA	308	C	C5-C4-N4	5.70	124.19	120.20
2	SA	550	G	P-O3'-C3'	5.70	126.55	119.70
2	SA	687	A	C5-C6-N1	-5.70	114.85	117.70
2	SA	980	C	C2-N1-C1'	-5.70	112.53	118.80
2	SA	1004	A	C1'-O4'-C4'	-5.70	105.34	109.90
2	SA	1041	G	C6-C5-N7	5.70	133.82	130.40
2	SA	1466	C	N1-C2-N3	-5.70	115.21	119.20
3	S1	29	G	C5'-C4'-O4'	5.70	115.94	109.10
4	S2	35	C	C5'-C4'-O4'	5.70	115.94	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	72	G	OP1-P-OP2	-5.70	111.05	119.60
26	LA	17	G	C2'-C3'-O3'	5.70	122.83	113.70
26	LA	38	A	N1-C6-N6	5.70	122.02	118.60
26	LA	149	A	N1-C6-N6	-5.70	115.18	118.60
26	LA	399	U	N3-C2-O2	-5.70	118.21	122.20
26	LA	1173	U	C4'-C3'-C2'	-5.70	96.90	102.60
26	LA	2219	U	N3-C4-C5	-5.70	111.18	114.60
26	LA	2500	U	C4-C5-C6	5.70	123.12	119.70
26	LA	2587	A	C6-C5-N7	5.70	136.29	132.30
31	LX	56	PHE	CB-CG-CD2	5.70	124.79	120.80
54	LM	114	LYS	CB-CA-C	-5.70	98.99	110.40
2	SA	246	A	C4'-C3'-C2'	-5.70	96.90	102.60
2	SA	742	G	O4'-C1'-N9	5.70	112.76	108.20
2	SA	851	G	C3'-C2'-C1'	-5.70	96.94	101.50
2	SA	1329	A	C4-C5-N7	5.70	113.55	110.70
2	SA	1349	A	C5-C6-N1	-5.70	114.85	117.70
26	LA	990	A	C2-N3-C4	-5.70	107.75	110.60
26	LA	1132	U	C5-C6-N1	-5.70	119.85	122.70
26	LA	1822	C	C6-N1-C2	-5.70	118.02	120.30
26	LA	1870	C	C6-N1-C2	-5.70	118.02	120.30
26	LA	2047	C	N1-C2-O2	5.70	122.32	118.90
26	LA	2257	U	C5-C6-N1	-5.70	119.85	122.70
2	SA	43	C	C6-N1-C2	5.70	122.58	120.30
2	SA	247	G	N1-C6-O6	-5.70	116.48	119.90
2	SA	504	C	N1-C2-O2	-5.70	115.48	118.90
2	SA	741	G	N7-C8-N9	5.70	115.95	113.10
2	SA	765	G	P-O5'-C5'	5.70	130.02	120.90
2	SA	1011	C	C6-N1-C2	5.70	122.58	120.30
2	SA	1327	C	OP1-P-OP2	-5.70	111.05	119.60
2	SA	1362	A	N9-C1'-C2'	-5.70	105.73	112.00
6	SU	65	ARG	NE-CZ-NH1	5.70	123.15	120.30
26	LA	113	U	C5-C4-O4	-5.70	122.48	125.90
26	LA	265	A	C5'-C4'-C3'	5.70	125.12	116.00
26	LA	508	A	C4-C5-N7	5.70	113.55	110.70
26	LA	1565	C	O4'-C1'-N1	5.70	112.76	108.20
26	LA	1612	C	N3-C4-C5	5.70	124.18	121.90
26	LA	1853	A	C6-N1-C2	-5.70	115.18	118.60
26	LA	1974	C	C2-N3-C4	-5.70	117.05	119.90
26	LA	2318	G	N3-C4-N9	-5.70	122.58	126.00
26	LA	2761	A	C6-C5-N7	-5.70	128.31	132.30
2	SA	94	G	N1-C6-O6	5.70	123.32	119.90
2	SA	358	U	C5'-C4'-C3'	5.70	125.12	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	681	A	N1-C2-N3	-5.70	126.45	129.30
2	SA	1103	C	O4'-C1'-N1	5.70	112.76	108.20
2	SA	1196	A	O4'-C1'-N9	5.70	112.76	108.20
2	SA	1336	C	O4'-C1'-C2'	-5.70	100.10	105.80
26	LA	464	U	C5-C4-O4	5.70	129.32	125.90
26	LA	472	A	C4'-C3'-C2'	-5.70	96.90	102.60
26	LA	1330	C	C2-N3-C4	-5.70	117.05	119.90
26	LA	1845	G	N3-C4-C5	5.70	131.45	128.60
26	LA	1904	G	N3-C2-N2	5.70	123.89	119.90
26	LA	2134	A	C5-N7-C8	5.70	106.75	103.90
37	LC	226	GLN	C-N-CA	5.70	135.95	121.70
2	SA	691	G	C8-N9-C4	-5.70	104.12	106.40
2	SA	898	G	C4-N9-C1'	-5.70	119.09	126.50
2	SA	1036	A	P-O3'-C3'	5.70	126.54	119.70
26	LA	1803	A	C5-N7-C8	-5.70	101.05	103.90
26	LA	2005	A	N9-C4-C5	5.70	108.08	105.80
26	LA	2145	C	O4'-C1'-N1	5.70	112.76	108.20
26	LA	2890	G	P-O3'-C3'	5.70	126.54	119.70
2	SA	614	C	OP1-P-OP2	-5.70	111.06	119.60
2	SA	1162	C	N3-C4-N4	-5.70	114.01	118.00
2	SA	1259	C	N3-C4-C5	5.70	124.18	121.90
2	SA	1464	U	C5'-C4'-C3'	5.70	125.11	116.00
26	LA	24	G	C6-N1-C2	-5.70	121.68	125.10
26	LA	45	G	O4'-C1'-N9	5.70	112.76	108.20
26	LA	510	C	C2-N1-C1'	-5.70	112.53	118.80
26	LA	516	C	O5'-P-OP1	5.70	117.53	110.70
26	LA	517	C	N3-C4-N4	-5.70	114.01	118.00
26	LA	696	G	O4'-C1'-N9	5.70	112.76	108.20
26	LA	711	G	N3-C2-N2	5.70	123.89	119.90
26	LA	887	U	C5-C4-O4	5.70	129.32	125.90
26	LA	906	U	C1'-O4'-C4'	-5.70	105.34	109.90
26	LA	970	U	N3-C4-C5	5.70	118.02	114.60
26	LA	1001	A	N9-C4-C5	-5.70	103.52	105.80
26	LA	1815	A	O5'-P-OP2	5.70	117.53	110.70
26	LA	1891	G	P-O3'-C3'	-5.70	112.87	119.70
26	LA	2224	G	C4-C5-C6	-5.70	115.38	118.80
26	LA	2248	C	N3-C4-N4	-5.70	114.01	118.00
26	LA	2363	G	C8-N9-C1'	5.70	134.40	127.00
26	LA	2892	G	C2-N3-C4	-5.70	109.05	111.90
56	LR	88	ARG	NH1-CZ-NH2	-5.70	113.14	119.40
2	SA	160	A	P-O5'-C5'	-5.69	111.79	120.90
2	SA	283	U	C5-C4-O4	-5.69	122.48	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	443	C	N3-C4-C5	5.69	124.18	121.90
2	SA	527	G	N3-C4-C5	5.69	131.45	128.60
2	SA	729	A	OP1-P-OP2	-5.69	111.06	119.60
3	S1	50	U	N1-C2-N3	-5.69	111.48	114.90
26	LA	834	G	P-O3'-C3'	-5.69	112.87	119.70
26	LA	2569	G	C8-N9-C4	5.69	108.68	106.40
26	LA	2725	A	OP1-P-O3'	5.69	117.73	105.20
50	LL	69	ARG	NE-CZ-NH1	-5.69	117.45	120.30
1	SS	68	HIS	CA-CB-CG	5.69	123.28	113.60
2	SA	338	A	C5-C6-N1	5.69	120.55	117.70
2	SA	448	A	C5-C6-N6	-5.69	119.15	123.70
2	SA	506	G	C3'-C2'-C1'	-5.69	96.94	101.50
2	SA	611	C	N3-C4-N4	5.69	121.98	118.00
2	SA	772	U	OP1-P-OP2	-5.69	111.06	119.60
2	SA	802	A	N7-C8-N9	5.69	116.65	113.80
2	SA	1077	G	O4'-C1'-N9	5.69	112.75	108.20
9	SI	89	TYR	CB-CG-CD1	5.69	124.42	121.00
26	LA	57	C	N3-C2-O2	-5.69	117.92	121.90
26	LA	734	A	C6-N1-C2	5.69	122.02	118.60
26	LA	899	A	C5'-C4'-C3'	5.69	125.11	116.00
26	LA	1407	G	N7-C8-N9	-5.69	110.25	113.10
26	LA	1553	A	C1'-O4'-C4'	-5.69	105.35	109.90
26	LA	2284	A	P-O3'-C3'	-5.69	112.87	119.70
26	LA	2432	A	N7-C8-N9	-5.69	110.95	113.80
26	LA	2445	G	O5'-P-OP1	5.69	117.53	110.70
2	SA	1098	C	O3'-P-O5'	-5.69	93.19	104.00
19	SC	192	TYR	CB-CG-CD1	-5.69	117.58	121.00
24	S3	161	LEU	CB-CA-C	5.69	121.01	110.20
25	LB	38	C	N3-C4-N4	5.69	121.98	118.00
25	LB	73	A	N7-C8-N9	5.69	116.64	113.80
26	LA	62	U	O3'-P-O5'	-5.69	93.19	104.00
26	LA	132	G	OP1-P-OP2	-5.69	111.06	119.60
26	LA	285	G	N1-C2-N3	5.69	127.31	123.90
26	LA	367	G	O4'-C1'-N9	5.69	112.75	108.20
26	LA	464	U	P-O5'-C5'	-5.69	111.79	120.90
26	LA	907	G	OP1-P-OP2	-5.69	111.06	119.60
26	LA	1644	C	N3-C4-C5	-5.69	119.62	121.90
26	LA	2013	A	C3'-C2'-C1'	-5.69	96.95	101.50
26	LA	2485	G	P-O3'-C3'	5.69	126.53	119.70
2	SA	449	G	C5-N7-C8	-5.69	101.46	104.30
2	SA	907	A	C5'-C4'-O4'	5.69	115.93	109.10
2	SA	1175	G	C4'-C3'-C2'	-5.69	96.91	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1441	G	O4'-C1'-N9	5.69	112.75	108.20
26	LA	1670	C	C5-C6-N1	5.69	123.84	121.00
26	LA	2625	G	N7-C8-N9	-5.69	110.26	113.10
26	LA	2757	A	O4'-C1'-N9	5.69	112.75	108.20
2	SA	146	G	C3'-C2'-C1'	-5.69	96.95	101.50
2	SA	368	U	OP1-P-O3'	5.69	117.71	105.20
2	SA	528	C	C5'-C4'-O4'	5.69	115.92	109.10
2	SA	1478	U	P-O5'-C5'	5.69	130.00	120.90
2	SA	1492	A	C6-C5-N7	-5.69	128.32	132.30
2	SA	1533	C	N3-C4-C5	-5.69	119.62	121.90
26	LA	210	C	C1'-O4'-C4'	-5.69	105.35	109.90
26	LA	481	G	N7-C8-N9	-5.69	110.26	113.10
26	LA	624	C	C5-C6-N1	-5.69	118.16	121.00
26	LA	772	C	O4'-C1'-N1	5.69	112.75	108.20
26	LA	878	A	C4'-C3'-C2'	-5.69	96.91	102.60
26	LA	914	G	C5'-C4'-O4'	5.69	115.93	109.10
26	LA	1142	A	C5-C6-N1	5.69	120.54	117.70
26	LA	1274	A	C4-C5-N7	-5.69	107.86	110.70
26	LA	2454	G	C6-C5-N7	-5.69	126.99	130.40
26	LA	2515	C	O3'-P-O5'	-5.69	93.19	104.00
26	LA	2558	C	C5-C6-N1	5.69	123.84	121.00
26	LA	2634	A	C3'-C2'-C1'	-5.69	96.95	101.50
43	L7	22	VAL	O-C-N	-5.69	113.60	122.70
2	SA	268	U	C6-N1-C2	5.69	124.41	121.00
2	SA	1040	U	C5'-C4'-C3'	5.69	125.10	116.00
2	SA	1399	C	C4-C5-C6	5.69	120.24	117.40
24	S3	576	ARG	NE-CZ-NH2	5.69	123.14	120.30
26	LA	313	G	N3-C4-C5	-5.69	125.76	128.60
26	LA	1051	G	C6-C5-N7	5.69	133.81	130.40
26	LA	1221	C	C6-N1-C2	-5.69	118.03	120.30
26	LA	2561	U	OP1-P-OP2	-5.69	111.07	119.60
2	SA	168	G	N1-C6-O6	5.68	123.31	119.90
2	SA	188	C	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	266	G	C4'-C3'-C2'	-5.68	96.92	102.60
2	SA	960	U	C5-C6-N1	-5.68	119.86	122.70
2	SA	1030	U	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	1350	A	C4-C5-C6	5.68	119.84	117.00
2	SA	1457	G	N3-C2-N2	-5.68	115.92	119.90
2	SA	1486	G	C4-N9-C1'	5.68	133.89	126.50
2	SA	1518	A	C6-C5-N7	-5.68	128.32	132.30
4	S2	45	A	N1-C2-N3	5.68	132.14	129.30
13	SM	69	ARG	CD-NE-CZ	5.68	131.56	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	96	C	P-O5'-C5'	-5.68	111.81	120.90
26	LA	496	G	C6-N1-C2	-5.68	121.69	125.10
26	LA	805	G	N9-C4-C5	-5.68	103.13	105.40
26	LA	904	G	C6-N1-C2	5.68	128.51	125.10
26	LA	1166	G	C4-C5-N7	-5.68	108.53	110.80
26	LA	2345	G	C5-C6-O6	5.68	132.01	128.60
26	LA	2607	G	N1-C2-N2	5.68	121.31	116.20
26	LA	2607	G	N3-C2-N2	-5.68	115.92	119.90
2	SA	27	G	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	631	C	N3-C4-C5	5.68	124.17	121.90
2	SA	972	C	C4'-C3'-C2'	-5.68	96.92	102.60
19	SC	114	LEU	CB-CG-CD2	5.68	120.66	111.00
26	LA	232	G	C5-C6-O6	-5.68	125.19	128.60
26	LA	657	U	OP1-P-OP2	-5.68	111.08	119.60
26	LA	978	G	C5-N7-C8	5.68	107.14	104.30
26	LA	1834	U	C4-C5-C6	-5.68	116.29	119.70
26	LA	2209	G	C2-N3-C4	-5.68	109.06	111.90
26	LA	2864	G	C5'-C4'-C3'	-5.68	106.91	116.00
51	LI	116	ARG	NE-CZ-NH1	5.68	123.14	120.30
2	SA	274	A	C3'-C2'-C1'	-5.68	96.95	101.50
2	SA	349	A	O5'-P-OP2	-5.68	100.59	105.70
2	SA	889	A	C6-C5-N7	5.68	136.28	132.30
2	SA	1377	A	C4-C5-N7	-5.68	107.86	110.70
6	SU	34	ARG	NE-CZ-NH2	5.68	123.14	120.30
26	LA	45	G	C1'-O4'-C4'	-5.68	105.36	109.90
26	LA	504	A	C5'-C4'-O4'	5.68	115.92	109.10
26	LA	1754	A	C2-N3-C4	5.68	113.44	110.60
26	LA	1754	A	OP1-P-OP2	-5.68	111.08	119.60
26	LA	2131	U	C4-C5-C6	5.68	123.11	119.70
2	SA	55	A	C8-N9-C4	5.68	108.07	105.80
2	SA	82	G	C5-N7-C8	-5.68	101.46	104.30
2	SA	562	U	N1-C2-O2	-5.68	118.82	122.80
2	SA	568	G	O4'-C1'-N9	5.68	112.74	108.20
2	SA	967	C	C2-N3-C4	5.68	122.74	119.90
2	SA	1447	A	O4'-C1'-N9	5.68	112.74	108.20
13	SM	68	LEU	CB-CG-CD1	5.68	120.66	111.00
18	SB	6	ARG	CG-CD-NE	-5.68	99.87	111.80
25	LB	72	G	P-O5'-C5'	-5.68	111.81	120.90
26	LA	833	A	C4-N9-C1'	5.68	136.52	126.30
26	LA	1195	G	C2-N3-C4	5.68	114.74	111.90
26	LA	1625	C	N3-C2-O2	-5.68	117.92	121.90
26	LA	1828	G	C5'-C4'-O4'	5.68	115.92	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2049	G	N3-C2-N2	-5.68	115.92	119.90
26	LA	2138	G	C4-C5-N7	5.68	113.07	110.80
26	LA	2272	U	O5'-C5'-C4'	5.68	122.49	111.70
26	LA	2407	A	N1-C6-N6	5.68	122.01	118.60
54	LM	49	ARG	NE-CZ-NH1	5.68	123.14	120.30
2	SA	659	U	C4-C5-C6	5.68	123.11	119.70
2	SA	743	A	C4-C5-N7	5.68	113.54	110.70
2	SA	1253	G	N3-C4-C5	-5.68	125.76	128.60
19	SC	58	ARG	NE-CZ-NH2	-5.68	117.46	120.30
26	LA	394	C	O4'-C1'-N1	5.68	112.74	108.20
26	LA	2034	U	N3-C2-O2	-5.68	118.22	122.20
26	LA	2134	A	C8-N9-C4	-5.68	103.53	105.80
26	LA	2703	C	C3'-C2'-C1'	-5.68	96.96	101.50
26	LA	2721	A	O4'-C1'-N9	5.68	112.74	108.20
56	LR	74	GLN	CB-CA-C	-5.68	99.05	110.40
2	SA	913	A	C5'-C4'-C3'	-5.68	106.92	116.00
2	SA	956	U	O4'-C1'-N1	5.68	112.74	108.20
2	SA	1022	A	N7-C8-N9	-5.68	110.96	113.80
7	SG	78	ARG	N-CA-C	5.68	126.33	111.00
25	LB	93	C	C3'-C2'-C1'	5.68	106.04	101.50
26	LA	224	U	C4'-C3'-C2'	-5.68	96.92	102.60
26	LA	1119	U	C2-N1-C1'	-5.68	110.89	117.70
26	LA	1806	C	N3-C2-O2	5.68	125.87	121.90
26	LA	1896	G	C4-C5-C6	5.68	122.21	118.80
26	LA	2151	U	C6-N1-C1'	5.68	129.15	121.20
26	LA	2480	C	N3-C4-N4	-5.68	114.03	118.00
26	LA	2767	C	C2-N3-C4	-5.68	117.06	119.90
41	L5	35	ARG	NE-CZ-NH2	5.68	123.14	120.30
2	SA	208	U	N3-C4-O4	5.67	123.37	119.40
2	SA	301	G	C5-N7-C8	-5.67	101.46	104.30
2	SA	747	A	C5'-C4'-O4'	5.67	115.91	109.10
2	SA	885	G	OP1-P-OP2	-5.67	111.09	119.60
2	SA	1284	C	C5-C4-N4	5.67	124.17	120.20
2	SA	1408	A	C4-C5-C6	-5.67	114.16	117.00
2	SA	1454	G	C4'-C3'-C2'	-5.67	96.93	102.60
2	SA	1526	G	N9-C4-C5	5.67	107.67	105.40
10	SJ	5	ARG	CB-CG-CD	5.67	126.35	111.60
26	LA	118	A	C1'-O4'-C4'	-5.67	105.36	109.90
26	LA	225	C	O4'-C1'-N1	5.67	112.74	108.20
26	LA	520	G	C8-N9-C1'	-5.67	119.62	127.00
26	LA	772	C	C4-C5-C6	-5.67	114.56	117.40
26	LA	1377	G	N3-C4-N9	-5.67	122.59	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1410	G	C5-C6-O6	5.67	132.00	128.60
26	LA	2303	G	N3-C4-N9	-5.67	122.60	126.00
26	LA	2644	G	C5-C6-O6	-5.67	125.19	128.60
33	LZ	15	ASN	O-C-N	-5.67	113.62	122.70
52	LO	26	VAL	CA-CB-CG2	-5.67	102.39	110.90
2	SA	46	G	N7-C8-N9	-5.67	110.26	113.10
2	SA	328	C	N1-C2-N3	-5.67	115.23	119.20
2	SA	726	C	P-O3'-C3'	-5.67	112.89	119.70
2	SA	1356	G	P-O5'-C5'	-5.67	111.82	120.90
7	SG	43	TYR	CG-CD2-CE2	-5.67	116.76	121.30
26	LA	1816	C	N3-C2-O2	-5.67	117.93	121.90
26	LA	1940	U	C2-N1-C1'	5.67	124.51	117.70
2	SA	844	G	C1'-O4'-C4'	-5.67	105.36	109.90
2	SA	1013	G	C4-C5-N7	5.67	113.07	110.80
2	SA	1376	U	P-O5'-C5'	-5.67	111.83	120.90
16	SP	8	ARG	NE-CZ-NH2	-5.67	117.46	120.30
25	LB	70	C	C4'-C3'-C2'	-5.67	96.93	102.60
26	LA	155	A	C6-N1-C2	5.67	122.00	118.60
26	LA	470	A	C4-C5-N7	5.67	113.54	110.70
26	LA	652	U	O4'-C1'-N1	5.67	112.74	108.20
26	LA	1182	G	N7-C8-N9	5.67	115.94	113.10
26	LA	1244	A	C5-N7-C8	-5.67	101.06	103.90
26	LA	1324	G	C4-C5-N7	5.67	113.07	110.80
26	LA	1410	G	C6-C5-N7	-5.67	127.00	130.40
26	LA	1713	A	O4'-C1'-N9	5.67	112.74	108.20
26	LA	1954	G	N3-C2-N2	5.67	123.87	119.90
26	LA	2275	C	C5'-C4'-O4'	-5.67	102.30	109.10
26	LA	2380	C	C2-N3-C4	-5.67	117.06	119.90
2	SA	537	G	C5-N7-C8	5.67	107.14	104.30
2	SA	684	U	O4'-C1'-N1	5.67	112.74	108.20
26	LA	446	G	N3-C2-N2	5.67	123.87	119.90
26	LA	462	C	P-O3'-C3'	5.67	126.50	119.70
26	LA	470	A	N3-C4-C5	5.67	130.77	126.80
26	LA	1301	A	C2-N3-C4	-5.67	107.77	110.60
26	LA	1415	U	P-O3'-C3'	5.67	126.50	119.70
26	LA	1782	U	C5-C6-N1	5.67	125.53	122.70
26	LA	1835	G	P-O3'-C3'	5.67	126.50	119.70
2	SA	93	U	C4-C5-C6	5.67	123.10	119.70
2	SA	288	A	C5-C6-N1	5.67	120.53	117.70
2	SA	765	G	C2'-C3'-O3'	5.67	122.77	113.70
2	SA	1105	A	O4'-C1'-N9	5.67	112.73	108.20
2	SA	1423	G	N7-C8-N9	-5.67	110.27	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	364	C	OP1-P-OP2	-5.67	111.10	119.60
26	LA	630	G	N3-C4-N9	-5.67	122.60	126.00
26	LA	725	G	C5-C6-N1	5.67	114.33	111.50
26	LA	1061	U	C5-C4-O4	-5.67	122.50	125.90
26	LA	1844	C	N3-C4-N4	5.67	121.97	118.00
26	LA	2392	A	O4'-C1'-N9	5.67	112.73	108.20
26	LA	2430	A	C1'-O4'-C4'	-5.67	105.36	109.90
26	LA	2492	U	N1-C1'-C2'	-5.67	105.77	112.00
26	LA	2511	U	C5'-C4'-O4'	5.67	115.90	109.10
26	LA	2595	G	P-O5'-C5'	5.67	129.97	120.90
2	SA	343	U	N1-C2-N3	5.67	118.30	114.90
2	SA	820	U	P-O3'-C3'	-5.67	112.90	119.70
2	SA	1343	G	N1-C2-N3	-5.67	120.50	123.90
2	SA	1492	A	N9-C4-C5	-5.67	103.53	105.80
20	SD	67	LEU	CB-CG-CD1	-5.67	101.37	111.00
25	LB	106	G	P-O3'-C3'	-5.67	112.90	119.70
26	LA	234	U	C4'-C3'-C2'	-5.67	96.93	102.60
26	LA	859	G	N1-C6-O6	-5.67	116.50	119.90
26	LA	1012	U	OP1-P-OP2	-5.67	111.10	119.60
26	LA	1029	A	P-O5'-C5'	5.67	129.97	120.90
26	LA	1106	G	O4'-C1'-N9	5.67	112.73	108.20
26	LA	1524	G	C6-N1-C2	5.67	128.50	125.10
26	LA	1671	U	P-O5'-C5'	5.67	129.97	120.90
26	LA	1948	G	C5-C6-N1	5.67	114.33	111.50
26	LA	1987	A	N9-C4-C5	5.67	108.07	105.80
26	LA	2410	G	N9-C4-C5	5.67	107.67	105.40
26	LA	2415	G	C6-N1-C2	5.67	128.50	125.10
26	LA	2836	U	C6-N1-C1'	5.67	129.13	121.20
2	SA	424	G	C4-N9-C1'	-5.67	119.14	126.50
26	LA	741	U	N1-C2-N3	5.67	118.30	114.90
26	LA	1366	A	C4-C5-C6	-5.67	114.17	117.00
26	LA	1495	A	N3-C4-C5	-5.67	122.83	126.80
26	LA	1558	C	N3-C4-N4	5.67	121.97	118.00
26	LA	2672	U	C1'-O4'-C4'	5.67	114.43	109.90
26	LA	2903	U	N3-C4-O4	5.67	123.36	119.40
32	LY	14	ASP	CB-CG-OD2	5.67	123.40	118.30
2	SA	491	G	O4'-C1'-C2'	5.66	112.70	107.60
2	SA	553	A	C4-C5-C6	5.66	119.83	117.00
2	SA	1040	U	C6-N1-C1'	-5.66	113.27	121.20
2	SA	1244	G	C5'-C4'-O4'	5.66	115.90	109.10
26	LA	958	U	C6-N1-C2	5.66	124.40	121.00
26	LA	1071	G	C5'-C4'-O4'	5.66	115.90	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1293	C	C5'-C4'-C3'	-5.66	106.94	116.00
26	LA	1298	C	C6-N1-C2	-5.66	118.03	120.30
26	LA	1595	C	N1-C2-N3	5.66	123.17	119.20
26	LA	1698	A	O5'-P-OP1	5.66	117.50	110.70
26	LA	2152	G	O5'-P-OP1	5.66	117.50	110.70
26	LA	2576	G	N9-C4-C5	5.66	107.67	105.40
47	LJ	52	ARG	CG-CD-NE	-5.66	99.91	111.80
51	LI	27	ARG	NE-CZ-NH2	5.66	123.13	120.30
2	SA	635	A	O4'-C1'-N9	5.66	112.73	108.20
2	SA	1123	U	C4-C5-C6	5.66	123.10	119.70
4	S2	59	A	P-O3'-C3'	-5.66	112.91	119.70
9	SI	18	VAL	CB-CA-C	-5.66	100.64	111.40
26	LA	279	A	N1-C6-N6	5.66	122.00	118.60
26	LA	767	U	O4'-C1'-N1	5.66	112.73	108.20
26	LA	1728	C	N3-C4-N4	-5.66	114.04	118.00
26	LA	2028	U	C5'-C4'-O4'	5.66	115.89	109.10
26	LA	2654	A	C4-C5-N7	-5.66	107.87	110.70
2	SA	158	G	C5-C6-N1	5.66	114.33	111.50
2	SA	324	G	C4-C5-C6	-5.66	115.40	118.80
2	SA	371	A	N1-C2-N3	5.66	132.13	129.30
2	SA	804	U	P-O5'-C5'	-5.66	111.84	120.90
2	SA	1102	A	C5'-C4'-O4'	5.66	115.89	109.10
2	SA	1178	G	C4-C5-N7	5.66	113.06	110.80
26	LA	1137	G	P-O5'-C5'	-5.66	111.84	120.90
26	LA	1213	A	C1'-O4'-C4'	-5.66	105.37	109.90
26	LA	1465	G	N3-C2-N2	5.66	123.86	119.90
26	LA	1810	A	O4'-C4'-C3'	-5.66	98.34	104.00
26	LA	2193	G	C2-N3-C4	5.66	114.73	111.90
26	LA	2267	A	N1-C2-N3	-5.66	126.47	129.30
44	LF	153	LEU	CB-CG-CD2	5.66	120.62	111.00
2	SA	1219	A	C6-N1-C2	-5.66	115.20	118.60
2	SA	1396	A	C3'-C2'-C1'	5.66	106.03	101.50
3	S1	16	A	O4'-C1'-N9	5.66	112.73	108.20
21	SE	75	LEU	CA-C-O	5.66	131.99	120.10
24	S3	283	ASP	N-CA-CB	-5.66	100.41	110.60
26	LA	649	G	P-O3'-C3'	5.66	126.49	119.70
26	LA	1155	A	N7-C8-N9	-5.66	110.97	113.80
26	LA	1157	G	C3'-C2'-C1'	5.66	106.03	101.50
26	LA	1531	C	N3-C2-O2	-5.66	117.94	121.90
26	LA	1733	G	C1'-O4'-C4'	-5.66	105.37	109.90
26	LA	1846	G	C8-N9-C4	-5.66	104.14	106.40
26	LA	1943	U	N1-C2-O2	5.66	126.76	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2567	G	N9-C4-C5	5.66	107.66	105.40
2	SA	331	G	C4-C5-N7	-5.66	108.54	110.80
2	SA	1494	G	O3'-P-O5'	-5.66	93.25	104.00
26	LA	60	G	C2-N3-C4	5.66	114.73	111.90
26	LA	547	A	N3-C4-N9	5.66	131.93	127.40
26	LA	1071	G	C2-N3-C4	-5.66	109.07	111.90
26	LA	1455	G	C6-N1-C2	-5.66	121.71	125.10
26	LA	1514	G	C6-N1-C2	-5.66	121.71	125.10
26	LA	1779	U	C2-N3-C4	5.66	130.39	127.00
26	LA	2208	C	N3-C4-N4	5.66	121.96	118.00
26	LA	2548	U	O3'-P-O5'	-5.66	93.25	104.00
46	LH	82	PHE	N-CA-C	5.66	126.27	111.00
57	LS	52	ARG	NE-CZ-NH2	-5.66	117.47	120.30
2	SA	651	C	C5-C6-N1	5.66	123.83	121.00
2	SA	786	G	C8-N9-C4	-5.66	104.14	106.40
2	SA	891	U	O4'-C1'-N1	5.66	112.72	108.20
2	SA	942	G	N1-C2-N2	-5.66	111.11	116.20
2	SA	1210	C	P-O5'-C5'	5.66	129.95	120.90
2	SA	1242	G	N1-C6-O6	5.66	123.29	119.90
2	SA	1435	G	C6-N1-C2	-5.66	121.71	125.10
24	S3	383	ALA	N-CA-CB	5.66	118.02	110.10
26	LA	1478	G	C4'-C3'-C2'	-5.66	96.94	102.60
26	LA	1866	A	O4'-C1'-N9	5.66	112.72	108.20
26	LA	1884	G	C8-N9-C4	-5.66	104.14	106.40
26	LA	1911	U	N1-C2-O2	5.66	126.76	122.80
26	LA	1998	A	N9-C4-C5	-5.66	103.54	105.80
26	LA	2121	G	C5-C6-N1	-5.66	108.67	111.50
26	LA	2286	G	P-O3'-C3'	5.66	126.49	119.70
26	LA	2442	C	N3-C4-C5	-5.66	119.64	121.90
26	LA	2704	C	P-O3'-C3'	-5.66	112.91	119.70
26	LA	2806	C	P-O3'-C3'	5.66	126.49	119.70
26	LA	2850	A	N7-C8-N9	-5.66	110.97	113.80
28	LU	100	THR	CA-CB-OG1	5.66	120.88	109.00
2	SA	291	U	P-O3'-C3'	-5.65	112.92	119.70
2	SA	362	G	P-O3'-C3'	5.65	126.48	119.70
2	SA	614	C	P-O3'-C3'	-5.65	112.92	119.70
9	SI	118	ARG	NH1-CZ-NH2	-5.65	113.18	119.40
26	LA	1240	U	C6-N1-C1'	5.65	129.12	121.20
26	LA	1311	G	N3-C4-N9	-5.65	122.61	126.00
49	LK	95	ASP	CB-CG-OD2	-5.65	113.21	118.30
2	SA	291	U	N1-C2-N3	5.65	118.29	114.90
2	SA	424	G	P-O3'-C3'	5.65	126.48	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	720	C	C2-N3-C4	-5.65	117.07	119.90
2	SA	909	A	N1-C6-N6	-5.65	115.21	118.60
2	SA	1201	A	P-O3'-C3'	5.65	126.48	119.70
2	SA	1214	C	C4'-C3'-C2'	5.65	108.25	102.60
2	SA	1242	G	C5'-C4'-O4'	5.65	115.88	109.10
2	SA	1255	G	C5-C6-O6	-5.65	125.21	128.60
2	SA	1367	C	N1-C2-O2	-5.65	115.51	118.90
18	SB	21	TYR	CZ-CE2-CD2	-5.65	114.71	119.80
24	S3	571	VAL	CG1-CB-CG2	-5.65	101.86	110.90
25	LB	6	G	N9-C1'-C2'	-5.65	105.78	112.00
25	LB	16	G	C8-N9-C4	-5.65	104.14	106.40
26	LA	614	A	C3'-C2'-C1'	-5.65	96.98	101.50
26	LA	1640	A	C6-C5-N7	5.65	136.26	132.30
26	LA	1911	U	C2-N3-C4	5.65	130.39	127.00
26	LA	2145	C	C2-N3-C4	5.65	122.73	119.90
2	SA	266	G	N3-C4-N9	-5.65	122.61	126.00
2	SA	346	G	P-O3'-C3'	5.65	126.48	119.70
2	SA	382	A	P-O3'-C3'	5.65	126.48	119.70
2	SA	548	G	N3-C4-N9	-5.65	122.61	126.00
2	SA	1133	G	C5-C6-O6	-5.65	125.21	128.60
2	SA	1162	C	N1-C2-N3	5.65	123.16	119.20
26	LA	161	A	C5'-C4'-C3'	-5.65	106.96	116.00
26	LA	204	A	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	294	A	P-O3'-C3'	5.65	126.48	119.70
26	LA	324	A	C8-N9-C4	-5.65	103.54	105.80
26	LA	506	G	C2-N3-C4	-5.65	109.08	111.90
26	LA	830	G	N7-C8-N9	5.65	115.92	113.10
26	LA	1547	C	N1-C2-O2	5.65	122.29	118.90
26	LA	1699	G	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	1870	C	O4'-C1'-C2'	5.65	112.69	107.60
26	LA	2238	G	O4'-C4'-C3'	5.65	110.62	106.10
58	LT	82	HIS	O-C-N	-5.65	113.66	122.70
2	SA	42	G	N3-C4-C5	-5.65	125.78	128.60
2	SA	790	A	N3-C4-N9	5.65	131.92	127.40
2	SA	817	C	OP1-P-OP2	-5.65	111.13	119.60
26	LA	1164	C	C5-C4-N4	5.65	124.15	120.20
26	LA	1300	G	P-O5'-C5'	-5.65	111.86	120.90
26	LA	1577	C	C5-C4-N4	-5.65	116.25	120.20
26	LA	2550	G	C1'-O4'-C4'	-5.65	105.38	109.90
2	SA	8	A	O5'-P-OP1	-5.65	100.62	105.70
2	SA	1023	U	C1'-O4'-C4'	-5.65	105.38	109.90
2	SA	1092	A	C5-C6-N6	-5.65	119.18	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	1	C	C5'-C4'-C3'	-5.65	106.96	116.00
26	LA	183	C	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	370	G	C1'-O4'-C4'	-5.65	105.38	109.90
26	LA	470	A	C5'-C4'-O4'	5.65	115.88	109.10
26	LA	780	G	O4'-C1'-N9	5.65	112.72	108.20
26	LA	791	C	P-O3'-C3'	-5.65	112.92	119.70
26	LA	1215	G	C5-N7-C8	-5.65	101.48	104.30
26	LA	1219	U	N1-C2-N3	-5.65	111.51	114.90
26	LA	1523	U	C4-C5-C6	-5.65	116.31	119.70
26	LA	1579	A	C2-N3-C4	-5.65	107.78	110.60
26	LA	1623	G	N1-C2-N3	5.65	127.29	123.90
26	LA	1857	G	C5-C6-N1	-5.65	108.68	111.50
26	LA	2318	G	N1-C6-O6	-5.65	116.51	119.90
26	LA	2542	A	C5'-C4'-C3'	-5.65	106.96	116.00
46	LH	29	ASN	N-CA-CB	5.65	120.77	110.60
2	SA	282	A	OP1-P-OP2	-5.65	111.13	119.60
2	SA	1358	U	N3-C4-O4	5.65	123.35	119.40
4	S2	30	G	N9-C1'-C2'	-5.65	105.79	112.00
26	LA	68	G	C3'-C2'-C1'	5.65	106.02	101.50
26	LA	520	G	O4'-C1'-N9	5.65	112.72	108.20
26	LA	823	C	C6-N1-C2	-5.65	118.04	120.30
26	LA	1431	A	N3-C4-C5	5.65	130.75	126.80
26	LA	1435	G	C1'-O4'-C4'	-5.65	105.38	109.90
26	LA	2216	G	C8-N9-C4	-5.65	104.14	106.40
26	LA	2268	A	OP1-P-OP2	-5.65	111.13	119.60
26	LA	2480	C	C5-C4-N4	5.65	124.15	120.20
26	LA	2819	G	OP1-P-OP2	-5.65	111.13	119.60
44	LF	54	GLY	C-N-CA	5.65	135.82	121.70
2	SA	335	C	N1-C2-O2	-5.64	115.51	118.90
2	SA	829	G	C4-C5-C6	-5.64	115.41	118.80
2	SA	1087	G	N1-C2-N3	-5.64	120.51	123.90
2	SA	1141	C	C1'-O4'-C4'	-5.64	105.39	109.90
2	SA	1322	C	P-O3'-C3'	5.64	126.47	119.70
4	S2	31	G	N9-C4-C5	5.64	107.66	105.40
19	SC	125	ARG	NE-CZ-NH2	-5.64	117.48	120.30
26	LA	931	U	C4'-C3'-C2'	5.64	108.24	102.60
26	LA	1026	G	N9-C4-C5	5.64	107.66	105.40
26	LA	1092	C	N3-C4-C5	5.64	124.16	121.90
26	LA	1118	C	C2-N1-C1'	-5.64	112.59	118.80
26	LA	1568	G	C8-N9-C4	-5.64	104.14	106.40
26	LA	1753	G	C5-C6-N1	-5.64	108.68	111.50
2	SA	904	U	O4'-C1'-N1	5.64	112.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1380	U	N3-C4-O4	5.64	123.35	119.40
2	SA	1496	C	N1-C2-O2	5.64	122.29	118.90
2	SA	1513	A	C3'-C2'-C1'	5.64	106.02	101.50
26	LA	591	U	C6-N1-C2	-5.64	117.61	121.00
26	LA	780	G	C4-C5-N7	-5.64	108.54	110.80
26	LA	994	C	C6-N1-C1'	-5.64	114.03	120.80
26	LA	1056	G	N1-C2-N3	-5.64	120.52	123.90
26	LA	1163	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	1362	C	C5-C6-N1	-5.64	118.18	121.00
26	LA	1748	C	N3-C4-C5	-5.64	119.64	121.90
26	LA	1789	A	C5-C6-N1	5.64	120.52	117.70
26	LA	1923	U	O4'-C1'-N1	5.64	112.71	108.20
26	LA	2014	A	N9-C4-C5	-5.64	103.54	105.80
26	LA	2219	U	C5'-C4'-C3'	-5.64	106.97	116.00
26	LA	2518	A	C8-N9-C1'	-5.64	117.54	127.70
27	LD	237	ARG	CG-CD-NE	-5.64	99.95	111.80
2	SA	40	C	C5-C6-N1	-5.64	118.18	121.00
2	SA	128	G	C2'-C3'-O3'	5.64	122.72	113.70
2	SA	278	G	N9-C4-C5	5.64	107.66	105.40
2	SA	776	G	N1-C2-N3	5.64	127.28	123.90
2	SA	812	G	C8-N9-C1'	-5.64	119.67	127.00
2	SA	1071	C	N3-C4-C5	-5.64	119.64	121.90
26	LA	1279	G	C6-C5-N7	-5.64	127.02	130.40
26	LA	2709	G	N7-C8-N9	5.64	115.92	113.10
26	LA	2845	U	C5-C6-N1	-5.64	119.88	122.70
26	LA	2857	G	N1-C2-N2	-5.64	111.12	116.20
2	SA	312	C	O4'-C1'-C2'	5.64	112.67	107.60
2	SA	518	C	N3-C4-N4	5.64	121.95	118.00
2	SA	568	G	C2-N3-C4	5.64	114.72	111.90
2	SA	783	C	C5-C6-N1	-5.64	118.18	121.00
2	SA	1051	C	C2-N1-C1'	5.64	125.00	118.80
2	SA	1124	G	C5'-C4'-C3'	-5.64	106.98	116.00
2	SA	1159	U	N3-C4-C5	5.64	117.98	114.60
2	SA	1269	A	C4-N9-C1'	-5.64	116.15	126.30
2	SA	1389	C	C3'-C2'-C1'	5.64	106.01	101.50
3	S1	53	G	C5-N7-C8	-5.64	101.48	104.30
24	S3	518	VAL	CA-CB-CG1	5.64	119.36	110.90
24	S3	548	TYR	CG-CD1-CE1	-5.64	116.79	121.30
25	LB	44	G	C4-C5-C6	5.64	122.18	118.80
26	LA	264	C	N3-C2-O2	-5.64	117.95	121.90
26	LA	493	G	C4-C5-C6	-5.64	115.42	118.80
26	LA	596	U	C2-N1-C1'	-5.64	110.93	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	736	C	P-O5'-C5'	-5.64	111.88	120.90
26	LA	1139	G	N9-C4-C5	-5.64	103.14	105.40
26	LA	1842	G	P-O3'-C3'	-5.64	112.93	119.70
26	LA	1872	A	N9-C4-C5	5.64	108.06	105.80
26	LA	1983	G	N1-C6-O6	-5.64	116.52	119.90
26	LA	2023	C	N1-C2-O2	5.64	122.28	118.90
26	LA	2079	U	O4'-C1'-N1	5.64	112.71	108.20
26	LA	2144	G	C6-N1-C2	5.64	128.48	125.10
26	LA	2242	G	C2'-C3'-O3'	5.64	122.72	113.70
26	LA	2268	A	C5'-C4'-O4'	5.64	115.87	109.10
26	LA	2579	C	O5'-P-OP2	-5.64	100.62	105.70
32	LY	44	PHE	CZ-CE2-CD2	5.64	126.87	120.10
49	LK	4	VAL	O-C-N	-5.64	113.67	122.70
3	S1	44	U	C5-C4-O4	-5.64	122.52	125.90
12	SL	120	ARG	CG-CD-NE	-5.64	99.96	111.80
26	LA	46	G	C5-C6-N1	5.64	114.32	111.50
26	LA	202	U	C4-C5-C6	5.64	123.08	119.70
26	LA	1206	G	N3-C4-N9	5.64	129.38	126.00
26	LA	1948	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	2114	A	N9-C4-C5	-5.64	103.55	105.80
26	LA	2257	U	C4-C5-C6	5.64	123.08	119.70
26	LA	2294	G	C2-N3-C4	5.64	114.72	111.90
26	LA	2394	C	C6-N1-C1'	-5.64	114.03	120.80
37	LC	64	VAL	CA-CB-CG1	5.64	119.36	110.90
2	SA	1108	G	C4-C5-N7	5.64	113.05	110.80
2	SA	1127	G	C3'-C2'-C1'	-5.64	96.99	101.50
2	SA	1149	C	O4'-C1'-N1	5.64	112.71	108.20
4	S2	46	G	O4'-C4'-C3'	5.64	110.61	106.10
24	S3	367	ALA	CB-CA-C	5.64	118.56	110.10
26	LA	435	C	O4'-C1'-N1	5.64	112.71	108.20
26	LA	597	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	724	U	O4'-C1'-C2'	5.64	112.67	107.60
26	LA	1842	G	C6-N1-C2	-5.64	121.72	125.10
26	LA	1966	A	C4-C5-C6	-5.64	114.18	117.00
26	LA	2006	C	N3-C4-N4	5.64	121.94	118.00
26	LA	2117	A	C5-N7-C8	-5.64	101.08	103.90
26	LA	2382	G	O4'-C1'-N9	5.64	112.71	108.20
2	SA	92	U	P-O5'-C5'	5.63	129.92	120.90
2	SA	103	U	N1-C2-N3	-5.63	111.52	114.90
2	SA	511	C	C2-N3-C4	-5.63	117.08	119.90
2	SA	688	G	C4'-C3'-C2'	-5.63	96.97	102.60
2	SA	1006	G	N3-C4-N9	5.63	129.38	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1158	C	O5'-P-OP2	5.63	117.46	110.70
25	LB	51	G	N3-C2-N2	5.63	123.84	119.90
25	LB	92	C	P-O5'-C5'	5.63	129.91	120.90
25	LB	113	C	O4'-C1'-N1	5.63	112.71	108.20
26	LA	385	C	C5-C6-N1	-5.63	118.18	121.00
26	LA	792	A	N7-C8-N9	5.63	116.62	113.80
26	LA	905	A	O4'-C1'-N9	5.63	112.71	108.20
26	LA	917	A	C3'-C2'-C1'	-5.63	96.99	101.50
26	LA	1529	G	C4-C5-N7	-5.63	108.55	110.80
26	LA	1854	A	C4-C5-N7	5.63	113.52	110.70
26	LA	2529	G	N1-C6-O6	-5.63	116.52	119.90
26	LA	2713	U	N1-C2-N3	-5.63	111.52	114.90
2	SA	172	A	C4-C5-N7	5.63	113.52	110.70
2	SA	319	G	N1-C2-N2	-5.63	111.13	116.20
2	SA	466	A	C2-N3-C4	5.63	113.42	110.60
4	S2	36	A	C5'-C4'-O4'	5.63	115.86	109.10
8	SH	14	ARG	O-C-N	-5.63	113.69	122.70
9	SI	34	LEU	CB-CA-C	5.63	120.90	110.20
18	SB	138	ARG	CG-CD-NE	-5.63	99.97	111.80
25	LB	46	A	O4'-C1'-C2'	5.63	112.67	107.60
26	LA	56	A	C3'-C2'-C1'	-5.63	96.99	101.50
26	LA	685	A	C4-C5-C6	5.63	119.82	117.00
26	LA	1921	G	C5'-C4'-C3'	5.63	125.01	116.00
26	LA	2079	U	C5'-C4'-O4'	5.63	115.86	109.10
2	SA	353	A	C5-C6-N1	-5.63	114.89	117.70
2	SA	492	C	N3-C2-O2	-5.63	117.96	121.90
2	SA	742	G	N1-C2-N2	-5.63	111.13	116.20
2	SA	1072	G	P-O3'-C3'	-5.63	112.94	119.70
2	SA	1526	G	C8-N9-C4	-5.63	104.15	106.40
4	S2	55	U	C3'-C2'-C1'	-5.63	97.00	101.50
26	LA	23	G	C2-N3-C4	5.63	114.72	111.90
26	LA	116	C	N3-C4-C5	5.63	124.15	121.90
26	LA	369	U	OP1-P-OP2	-5.63	111.15	119.60
26	LA	678	C	P-O3'-C3'	5.63	126.46	119.70
26	LA	1170	C	C4-C5-C6	-5.63	114.58	117.40
26	LA	1778	U	OP1-P-OP2	-5.63	111.15	119.60
26	LA	2242	G	N7-C8-N9	5.63	115.92	113.10
26	LA	2413	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	985	C	C5'-C4'-O4'	5.63	115.86	109.10
26	LA	1040	A	N1-C2-N3	5.63	132.12	129.30
26	LA	1569	A	C5'-C4'-O4'	5.63	115.86	109.10
26	LA	1688	U	O4'-C1'-N1	5.63	112.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2014	A	C3'-C2'-C1'	5.63	106.00	101.50
26	LA	2107	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	2298	A	C5-C6-N1	5.63	120.52	117.70
2	SA	260	G	C5-C6-O6	-5.63	125.22	128.60
2	SA	653	U	P-O3'-C3'	-5.63	112.95	119.70
2	SA	1036	A	C2-N3-C4	-5.63	107.79	110.60
2	SA	1384	C	C1'-O4'-C4'	-5.63	105.40	109.90
18	SB	109	SER	N-CA-CB	5.63	118.94	110.50
25	LB	17	C	OP2-P-O3'	5.63	117.58	105.20
26	LA	316	C	P-O3'-C3'	-5.63	112.95	119.70
26	LA	496	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	502	A	C5-C6-N6	-5.63	119.20	123.70
26	LA	965	C	C6-N1-C1'	5.63	127.55	120.80
26	LA	1050	A	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	1129	A	O5'-C5'-C4'	-5.63	101.00	111.70
26	LA	1867	G	N3-C2-N2	5.63	123.84	119.90
26	LA	2519	U	O4'-C1'-N1	5.63	112.70	108.20
26	LA	2640	G	N7-C8-N9	-5.63	110.28	113.10
26	LA	2674	G	C5-C6-O6	-5.63	125.22	128.60
26	LA	2879	A	C3'-C2'-C1'	-5.63	97.00	101.50
46	LH	57	TYR	CB-CG-CD2	-5.63	117.62	121.00
2	SA	131	A	C4-C5-C6	5.63	119.81	117.00
2	SA	300	A	C5-N7-C8	5.63	106.71	103.90
2	SA	978	A	C5-C6-N6	-5.63	119.20	123.70
2	SA	1082	A	N1-C2-N3	5.63	132.11	129.30
4	S2	4	G	N1-C2-N2	-5.63	111.14	116.20
26	LA	168	G	N9-C4-C5	-5.63	103.15	105.40
26	LA	428	A	O4'-C1'-N9	5.63	112.70	108.20
26	LA	775	G	O4'-C1'-N9	-5.63	103.70	108.20
26	LA	839	U	C5'-C4'-C3'	-5.63	107.00	116.00
26	LA	1725	U	OP2-P-O3'	5.63	117.58	105.20
26	LA	2004	G	C4'-C3'-C2'	5.63	108.23	102.60
2	SA	230	G	N9-C4-C5	5.62	107.65	105.40
2	SA	443	C	C5-C4-N4	-5.62	116.26	120.20
2	SA	1034	G	N3-C4-C5	5.62	131.41	128.60
4	S2	22	A	C5-N7-C8	-5.62	101.09	103.90
26	LA	64	A	C4-C5-N7	-5.62	107.89	110.70
26	LA	1174	U	C4'-C3'-C2'	-5.62	96.97	102.60
2	SA	9	G	C5-C6-O6	-5.62	125.23	128.60
2	SA	160	A	C2-N3-C4	5.62	113.41	110.60
2	SA	195	A	N1-C2-N3	-5.62	126.49	129.30
2	SA	306	A	C5-C6-N1	5.62	120.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	734	G	C4-C5-N7	5.62	113.05	110.80
2	SA	824	G	N7-C8-N9	-5.62	110.29	113.10
2	SA	935	A	C1'-O4'-C4'	-5.62	105.40	109.90
2	SA	1059	C	N3-C4-C5	5.62	124.15	121.90
2	SA	1177	G	P-O5'-C5'	5.62	129.90	120.90
26	LA	435	C	P-O3'-C3'	-5.62	112.95	119.70
26	LA	826	U	OP1-P-OP2	-5.62	111.16	119.60
26	LA	1029	A	P-O3'-C3'	5.62	126.45	119.70
26	LA	1108	U	P-O5'-C5'	-5.62	111.90	120.90
26	LA	1314	C	C2-N1-C1'	5.62	124.98	118.80
26	LA	1375	U	N3-C4-C5	5.62	117.97	114.60
26	LA	1587	G	C1'-O4'-C4'	-5.62	105.40	109.90
26	LA	2141	G	C5-C6-O6	-5.62	125.23	128.60
26	LA	2391	G	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	2782	G	O5'-P-OP2	5.62	117.45	110.70
46	LH	94	ARG	NE-CZ-NH1	5.62	123.11	120.30
2	SA	34	C	N1-C2-O2	-5.62	115.53	118.90
2	SA	394	G	O3'-P-O5'	-5.62	93.32	104.00
2	SA	1215	G	C8-N9-C4	-5.62	104.15	106.40
2	SA	1254	A	C4-C5-C6	5.62	119.81	117.00
26	LA	186	G	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	516	C	O4'-C1'-N1	5.62	112.70	108.20
26	LA	690	G	N1-C2-N2	-5.62	111.14	116.20
26	LA	941	A	N9-C1'-C2'	-5.62	105.82	112.00
26	LA	1075	C	N3-C4-N4	5.62	121.94	118.00
26	LA	1234	U	N3-C4-O4	5.62	123.34	119.40
26	LA	1528	A	N3-C4-N9	-5.62	122.90	127.40
26	LA	2529	G	C5-C6-O6	5.62	131.97	128.60
26	LA	2597	G	C5-N7-C8	-5.62	101.49	104.30
26	LA	2773	C	O4'-C1'-N1	5.62	112.70	108.20
26	LA	2851	A	N9-C4-C5	5.62	108.05	105.80
37	LC	229	LEU	CB-CG-CD1	-5.62	101.44	111.00
2	SA	155	A	C5'-C4'-O4'	-5.62	102.36	109.10
2	SA	285	C	O4'-C1'-C2'	5.62	112.66	107.60
2	SA	920	U	C5-C6-N1	-5.62	119.89	122.70
16	SP	60	TRP	CB-CG-CD1	5.62	134.31	127.00
26	LA	2008	C	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	2114	A	P-O3'-C3'	-5.62	112.95	119.70
2	SA	567	G	C3'-C2'-C1'	5.62	106.00	101.50
2	SA	897	C	C6-N1-C1'	-5.62	114.06	120.80
2	SA	1399	C	C3'-C2'-C1'	-5.62	97.01	101.50
24	S3	505	ALA	CB-CA-C	5.62	118.53	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2	G	N1-C6-O6	5.62	123.27	119.90
26	LA	268	C	P-O5'-C5'	5.62	129.89	120.90
26	LA	962	G	O3'-P-O5'	-5.62	93.32	104.00
26	LA	1390	U	N1-C2-N3	5.62	118.27	114.90
26	LA	1426	G	C4-C5-C6	5.62	122.17	118.80
26	LA	1596	A	P-O3'-C3'	-5.62	112.96	119.70
26	LA	1802	A	C2-N3-C4	-5.62	107.79	110.60
26	LA	1911	U	N1-C2-N3	-5.62	111.53	114.90
26	LA	1912	A	C2-N3-C4	5.62	113.41	110.60
26	LA	2124	G	O3'-P-O5'	5.62	114.68	104.00
26	LA	2471	A	C5'-C4'-C3'	-5.62	107.01	116.00
26	LA	2600	A	C5'-C4'-C3'	-5.62	107.01	116.00
26	LA	2711	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	2819	G	C6-N1-C2	-5.62	121.73	125.10
2	SA	69	G	P-O3'-C3'	-5.62	112.96	119.70
2	SA	628	G	C6-C5-N7	-5.62	127.03	130.40
2	SA	966	G	P-O3'-C3'	5.62	126.44	119.70
2	SA	966	G	C8-N9-C4	-5.62	104.15	106.40
18	SB	208	ALA	CB-CA-C	-5.62	101.67	110.10
26	LA	303	G	C5-C6-O6	-5.62	125.23	128.60
26	LA	1566	A	C5'-C4'-O4'	5.62	115.84	109.10
26	LA	1937	A	P-O3'-C3'	5.62	126.44	119.70
26	LA	2421	G	C5-N7-C8	-5.62	101.49	104.30
26	LA	2657	A	N1-C6-N6	-5.62	115.23	118.60
26	LA	2723	C	N3-C4-C5	-5.62	119.65	121.90
41	L5	24	THR	N-CA-CB	5.62	120.97	110.30
2	SA	17	U	N3-C4-O4	5.62	123.33	119.40
2	SA	305	G	C8-N9-C1'	-5.62	119.70	127.00
2	SA	450	G	C5-C6-N1	-5.62	108.69	111.50
11	SK	58	THR	CB-CA-C	-5.62	96.44	111.60
19	SC	227	GLN	CA-CB-CG	5.62	125.75	113.40
25	LB	101	A	OP1-P-OP2	-5.62	111.18	119.60
26	LA	223	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	422	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	785	G	C5'-C4'-O4'	5.62	115.84	109.10
26	LA	892	A	C1'-O4'-C4'	5.62	114.39	109.90
26	LA	1394	U	C2-N3-C4	-5.62	123.63	127.00
26	LA	1571	A	C3'-C2'-C1'	-5.62	97.01	101.50
26	LA	1757	A	N1-C6-N6	-5.62	115.23	118.60
26	LA	1959	G	P-O3'-C3'	5.62	126.44	119.70
26	LA	2575	C	C2'-C3'-O3'	5.62	122.69	113.70
51	LI	3	VAL	CA-CB-CG1	-5.62	102.48	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	345	C	C1'-O4'-C4'	-5.61	105.41	109.90
2	SA	516	U	O4'-C1'-N1	5.61	112.69	108.20
2	SA	531	U	N3-C2-O2	-5.61	118.27	122.20
2	SA	561	U	C2-N3-C4	-5.61	123.63	127.00
2	SA	1116	U	C5'-C4'-C3'	-5.61	107.02	116.00
2	SA	1143	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	190	A	C5'-C4'-C3'	-5.61	107.02	116.00
26	LA	987	C	P-O3'-C3'	5.61	126.44	119.70
26	LA	1187	G	C1'-O4'-C4'	-5.61	105.41	109.90
26	LA	1396	U	N1-C2-O2	-5.61	118.87	122.80
26	LA	1552	A	P-O3'-C3'	5.61	126.44	119.70
26	LA	1643	G	C1'-O4'-C4'	5.61	114.39	109.90
26	LA	1680	U	C6-N1-C2	-5.61	117.63	121.00
26	LA	2816	G	N7-C8-N9	-5.61	110.29	113.10
2	SA	694	A	N7-C8-N9	-5.61	110.99	113.80
2	SA	908	A	C6-C5-N7	-5.61	128.37	132.30
2	SA	1319	A	P-O5'-C5'	5.61	129.88	120.90
2	SA	1363	A	C4-C5-C6	-5.61	114.19	117.00
26	LA	104	A	C4-C5-C6	5.61	119.81	117.00
26	LA	483	A	N3-C4-N9	-5.61	122.91	127.40
26	LA	848	C	N1-C1'-C2'	-5.61	105.83	112.00
26	LA	954	G	C6-C5-N7	-5.61	127.03	130.40
26	LA	2598	A	C8-N9-C4	5.61	108.05	105.80
48	LN	111	ILE	CA-CB-CG2	-5.61	99.68	110.90
2	SA	53	A	C1'-O4'-C4'	-5.61	105.41	109.90
2	SA	263	A	N1-C2-N3	-5.61	126.49	129.30
2	SA	878	A	P-O5'-C5'	5.61	129.88	120.90
2	SA	998	C	C3'-C2'-C1'	5.61	105.99	101.50
2	SA	1228	C	C4'-C3'-C2'	-5.61	96.99	102.60
3	S1	40	G	C5'-C4'-C3'	-5.61	107.02	116.00
25	LB	15	A	C4-C5-N7	5.61	113.51	110.70
26	LA	285	G	C3'-C2'-C1'	-5.61	97.01	101.50
26	LA	360	U	O5'-P-OP2	-5.61	100.65	105.70
26	LA	557	C	C3'-C2'-C1'	5.61	105.99	101.50
26	LA	560	C	C6-N1-C2	5.61	122.54	120.30
26	LA	612	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	984	A	N1-C2-N3	5.61	132.10	129.30
26	LA	1193	G	C4-C5-N7	5.61	113.05	110.80
26	LA	1372	U	N3-C4-O4	5.61	123.33	119.40
26	LA	1449	G	N7-C8-N9	-5.61	110.30	113.10
26	LA	1492	G	N1-C6-O6	5.61	123.27	119.90
26	LA	1537	G	O4'-C1'-N9	5.61	112.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1675	C	C2-N3-C4	-5.61	117.09	119.90
26	LA	1746	A	C6-N1-C2	-5.61	115.23	118.60
26	LA	1848	A	C5'-C4'-C3'	5.61	124.97	116.00
26	LA	1950	G	C5-C6-O6	-5.61	125.23	128.60
26	LA	2017	U	C5-C6-N1	-5.61	119.89	122.70
26	LA	2137	U	N3-C4-C5	5.61	117.97	114.60
26	LA	2345	G	C5'-C4'-O4'	5.61	115.83	109.10
45	LG	168	LEU	CB-CG-CD2	5.61	120.54	111.00
53	LP	20	MET	CG-SD-CE	-5.61	91.22	100.20
2	SA	347	G	O4'-C1'-N9	5.61	112.69	108.20
2	SA	567	G	C4-N9-C1'	5.61	133.79	126.50
2	SA	1429	A	N3-C4-N9	-5.61	122.91	127.40
2	SA	1535	C	C5-C6-N1	5.61	123.80	121.00
26	LA	12	U	C5'-C4'-C3'	-5.61	107.03	116.00
26	LA	190	A	C5'-C4'-O4'	5.61	115.83	109.10
26	LA	875	G	C4-C5-C6	5.61	122.17	118.80
26	LA	1011	G	N9-C4-C5	5.61	107.64	105.40
26	LA	1050	A	C4-C5-C6	-5.61	114.19	117.00
26	LA	1370	C	N3-C2-O2	-5.61	117.97	121.90
26	LA	2078	C	N3-C4-C5	5.61	124.14	121.90
2	SA	39	G	N7-C8-N9	-5.61	110.30	113.10
2	SA	152	A	N9-C4-C5	-5.61	103.56	105.80
2	SA	337	G	P-O3'-C3'	-5.61	112.97	119.70
2	SA	645	G	C5-C6-O6	5.61	131.96	128.60
2	SA	901	A	C6-N1-C2	-5.61	115.24	118.60
2	SA	1088	G	C6-N1-C2	-5.61	121.74	125.10
2	SA	1179	A	C8-N9-C4	5.61	108.04	105.80
2	SA	1314	C	C5-C4-N4	5.61	124.12	120.20
4	S2	62	C	C5-C4-N4	-5.61	116.28	120.20
22	SF	2	ARG	NE-CZ-NH1	5.61	123.10	120.30
26	LA	304	U	C5-C4-O4	-5.61	122.54	125.90
26	LA	345	A	N9-C4-C5	-5.61	103.56	105.80
26	LA	471	A	O5'-C5'-C4'	-5.61	101.05	111.70
26	LA	1048	A	P-O5'-C5'	5.61	129.87	120.90
26	LA	1181	U	P-O3'-C3'	-5.61	112.97	119.70
26	LA	1628	G	OP1-P-OP2	-5.61	111.19	119.60
26	LA	1663	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	1740	G	C5-C6-N1	-5.61	108.70	111.50
26	LA	2308	G	C6-N1-C2	-5.61	121.74	125.10
26	LA	2396	G	N9-C4-C5	-5.61	103.16	105.40
26	LA	2396	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	2566	A	O4'-C4'-C3'	-5.61	98.39	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	186	C	C2-N3-C4	-5.61	117.10	119.90
2	SA	302	G	C5-C6-N1	-5.61	108.70	111.50
2	SA	356	A	N3-C4-N9	-5.61	122.92	127.40
2	SA	395	C	C5'-C4'-O4'	5.61	115.83	109.10
2	SA	625	U	N3-C4-O4	5.61	123.32	119.40
2	SA	706	A	C3'-C2'-C1'	-5.61	97.02	101.50
2	SA	718	A	C4-C5-N7	5.61	113.50	110.70
2	SA	1334	G	C5'-C4'-O4'	5.61	115.83	109.10
11	SK	31	VAL	CA-CB-CG2	-5.61	102.49	110.90
15	SO	71	ARG	NE-CZ-NH1	5.61	123.10	120.30
18	SB	222	GLU	OE1-CD-OE2	-5.61	116.57	123.30
26	LA	326	G	C5-C6-N1	5.61	114.30	111.50
26	LA	331	C	N1-C1'-C2'	5.61	121.29	114.00
26	LA	347	A	C5'-C4'-O4'	5.61	115.83	109.10
26	LA	1036	G	C6-C5-N7	-5.61	127.04	130.40
26	LA	1707	G	C6-N1-C2	5.61	128.46	125.10
26	LA	1900	A	C1'-O4'-C4'	-5.61	105.42	109.90
26	LA	1949	G	N1-C6-O6	-5.61	116.54	119.90
26	LA	2197	U	C6-N1-C2	-5.61	117.64	121.00
26	LA	2269	G	C8-N9-C4	5.61	108.64	106.40
26	LA	2673	G	N3-C4-C5	-5.61	125.80	128.60
26	LA	2756	U	C3'-C2'-C1'	-5.61	97.02	101.50
15	SO	16	ARG	CD-NE-CZ	5.60	131.45	123.60
26	LA	657	U	O4'-C1'-N1	5.60	112.68	108.20
26	LA	1059	G	N3-C2-N2	5.60	123.82	119.90
26	LA	1261	C	O4'-C1'-N1	5.60	112.68	108.20
26	LA	1452	G	O4'-C1'-C2'	5.60	112.64	107.60
26	LA	2335	A	C6-N1-C2	-5.60	115.24	118.60
2	SA	366	A	C6-N1-C2	-5.60	115.24	118.60
4	S2	17	C	C2'-C3'-O3'	5.60	122.67	113.70
16	SP	70	ARG	NE-CZ-NH1	5.60	123.10	120.30
26	LA	208	C	C5-C4-N4	-5.60	116.28	120.20
26	LA	362	A	O4'-C1'-N9	-5.60	103.72	108.20
26	LA	605	G	C8-N9-C4	-5.60	104.16	106.40
26	LA	739	A	C4-C5-N7	5.60	113.50	110.70
26	LA	1236	G	C8-N9-C4	-5.60	104.16	106.40
26	LA	1299	G	C6-N1-C2	-5.60	121.74	125.10
26	LA	1500	G	C6-N1-C2	-5.60	121.74	125.10
26	LA	1531	C	C5'-C4'-O4'	-5.60	102.38	109.10
26	LA	1617	C	OP1-P-OP2	-5.60	111.20	119.60
26	LA	1743	G	C5-N7-C8	-5.60	101.50	104.30
26	LA	1904	G	C8-N9-C1'	5.60	134.28	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1906	G	N7-C8-N9	5.60	115.90	113.10
26	LA	2031	A	C8-N9-C4	5.60	108.04	105.80
26	LA	2032	G	C2-N3-C4	-5.60	109.10	111.90
26	LA	2193	G	O5'-C5'-C4'	5.60	122.34	111.70
26	LA	2369	A	N1-C2-N3	5.60	132.10	129.30
26	LA	2751	G	C1'-O4'-C4'	-5.60	105.42	109.90
26	LA	2772	C	N1-C2-N3	5.60	123.12	119.20
41	L5	41	ARG	NE-CZ-NH1	5.60	123.10	120.30
47	LJ	94	LEU	N-CA-CB	-5.60	99.20	110.40
2	SA	213	G	C8-N9-C1'	-5.60	119.72	127.00
2	SA	937	A	C4'-C3'-C2'	-5.60	97.00	102.60
2	SA	1219	A	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	242	G	C5'-C4'-O4'	5.60	115.82	109.10
26	LA	440	C	N3-C2-O2	-5.60	117.98	121.90
26	LA	507	A	C8-N9-C4	5.60	108.04	105.80
26	LA	772	C	C6-N1-C2	-5.60	118.06	120.30
26	LA	1279	G	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	2049	G	P-O3'-C3'	5.60	126.42	119.70
26	LA	2826	A	OP1-P-OP2	-5.60	111.20	119.60
2	SA	741	G	N9-C1'-C2'	-5.60	105.84	112.00
26	LA	424	G	C4-N9-C1'	-5.60	119.22	126.50
26	LA	879	G	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	1006	C	N3-C4-N4	5.60	121.92	118.00
26	LA	1168	G	C2-N3-C4	5.60	114.70	111.90
26	LA	1654	A	O5'-C5'-C4'	5.60	122.34	111.70
26	LA	1830	C	C6-N1-C2	5.60	122.54	120.30
26	LA	2289	G	N7-C8-N9	5.60	115.90	113.10
26	LA	2476	A	O4'-C1'-C2'	5.60	112.64	107.60
26	LA	2534	A	N3-C4-N9	-5.60	122.92	127.40
26	LA	2565	A	C8-N9-C4	-5.60	103.56	105.80
37	LC	5	THR	CA-CB-CG2	-5.60	104.56	112.40
2	SA	275	G	OP1-P-OP2	-5.60	111.20	119.60
2	SA	1443	C	C5-C6-N1	-5.60	118.20	121.00
2	SA	1508	A	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	241	A	C4-C5-N7	5.60	113.50	110.70
26	LA	345	A	C5'-C4'-O4'	5.60	115.82	109.10
26	LA	356	G	N1-C2-N3	-5.60	120.54	123.90
26	LA	708	G	N3-C2-N2	5.60	123.82	119.90
26	LA	1318	U	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	1376	C	C5'-C4'-C3'	5.60	124.96	116.00
26	LA	1391	U	C6-N1-C2	-5.60	117.64	121.00
26	LA	1555	G	C2-N3-C4	5.60	114.70	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2536	G	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	2874	C	C5'-C4'-C3'	-5.60	107.04	116.00
37	LC	148	ASN	O-C-N	-5.60	113.74	122.70
38	LE	95	SER	C-N-CA	5.60	135.69	121.70
2	SA	1127	G	C6-C5-N7	-5.60	127.04	130.40
2	SA	1283	U	C5-C4-O4	5.60	129.26	125.90
26	LA	781	A	C4-C5-N7	-5.60	107.90	110.70
26	LA	1102	C	C5-C4-N4	5.60	124.12	120.20
26	LA	1104	C	N3-C4-C5	-5.60	119.66	121.90
26	LA	1174	U	OP1-P-OP2	-5.60	111.21	119.60
26	LA	1435	G	O4'-C1'-N9	5.60	112.68	108.20
26	LA	1875	G	O3'-P-O5'	-5.60	93.37	104.00
26	LA	2213	U	C2-N3-C4	-5.60	123.64	127.00
26	LA	2619	C	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	2813	A	N3-C4-C5	-5.60	122.88	126.80
2	SA	83	C	C6-N1-C1'	-5.59	114.09	120.80
2	SA	209	U	C5-C4-O4	-5.59	122.54	125.90
2	SA	670	G	N9-C4-C5	5.59	107.64	105.40
2	SA	968	A	C8-N9-C4	5.59	108.04	105.80
2	SA	1451	U	C2-N3-C4	-5.59	123.64	127.00
4	S2	71	G	C4'-C3'-C2'	-5.59	97.00	102.60
26	LA	147	C	N3-C4-C5	-5.59	119.66	121.90
26	LA	578	G	OP1-P-OP2	-5.59	111.21	119.60
26	LA	730	A	C4-C5-C6	5.59	119.80	117.00
26	LA	772	C	P-O3'-C3'	5.59	126.41	119.70
26	LA	953	G	C8-N9-C1'	5.59	134.27	127.00
26	LA	1015	U	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	1086	A	N7-C8-N9	-5.59	111.00	113.80
26	LA	1136	G	C5-N7-C8	-5.59	101.50	104.30
26	LA	1628	G	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	1658	C	O4'-C1'-N1	5.59	112.67	108.20
26	LA	1962	C	C6-N1-C2	5.59	122.54	120.30
26	LA	2276	G	C6-N1-C2	-5.59	121.74	125.10
26	LA	2881	U	C5'-C4'-O4'	5.59	115.81	109.10
45	LG	113	PHE	CB-CG-CD2	-5.59	116.88	120.80
1	SS	43	MET	CG-SD-CE	5.59	109.15	100.20
2	SA	4	U	N1-C2-N3	5.59	118.26	114.90
2	SA	50	A	C5-N7-C8	-5.59	101.10	103.90
26	LA	332	A	O3'-P-O5'	-5.59	93.37	104.00
26	LA	1037	G	C1'-O4'-C4'	-5.59	105.42	109.90
26	LA	1127	A	O5'-C5'-C4'	5.59	122.33	111.70
26	LA	2020	A	N3-C4-N9	-5.59	122.92	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2428	G	C2-N3-C4	-5.59	109.10	111.90
26	LA	2829	A	N1-C2-N3	-5.59	126.50	129.30
2	SA	261	U	O3'-P-O5'	5.59	114.62	104.00
2	SA	302	G	C5-C6-O6	-5.59	125.25	128.60
2	SA	369	G	P-O5'-C5'	-5.59	111.95	120.90
2	SA	535	A	N3-C4-N9	-5.59	122.93	127.40
2	SA	538	G	C4'-C3'-C2'	5.59	108.19	102.60
2	SA	965	U	C2'-C3'-O3'	5.59	122.65	113.70
4	S2	47	A	C6-N1-C2	-5.59	115.25	118.60
26	LA	104	A	C4-C5-N7	-5.59	107.90	110.70
26	LA	194	G	N9-C4-C5	-5.59	103.16	105.40
26	LA	314	C	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	558	U	C4'-C3'-C2'	-5.59	97.01	102.60
26	LA	1043	C	C1'-O4'-C4'	5.59	114.37	109.90
26	LA	1584	U	C1'-O4'-C4'	-5.59	105.43	109.90
26	LA	2375	G	C1'-O4'-C4'	-5.59	105.43	109.90
26	LA	2458	G	C3'-C2'-C1'	-5.59	97.03	101.50
26	LA	2614	A	C3'-C2'-C1'	-5.59	97.03	101.50
26	LA	2640	G	C5-N7-C8	5.59	107.10	104.30
26	LA	2674	G	N1-C6-O6	5.59	123.25	119.90
34	L0	3	ALA	N-CA-CB	-5.59	102.27	110.10
48	LN	97	ALA	O-C-N	-5.59	113.75	122.70
2	SA	124	C	C5'-C4'-C3'	-5.59	107.06	116.00
2	SA	424	G	C4-C5-N7	5.59	113.04	110.80
2	SA	687	A	N7-C8-N9	5.59	116.59	113.80
2	SA	1226	C	P-O5'-C5'	-5.59	111.96	120.90
2	SA	1510	C	C5'-C4'-C3'	-5.59	107.06	116.00
10	SJ	12	ALA	CB-CA-C	-5.59	101.72	110.10
16	SP	39	PHE	O-C-N	-5.59	113.76	122.70
26	LA	834	G	C4-C5-N7	5.59	113.04	110.80
26	LA	1360	G	C4'-C3'-C2'	-5.59	97.01	102.60
26	LA	1546	G	N3-C4-C5	5.59	131.40	128.60
26	LA	1632	A	N7-C8-N9	5.59	116.59	113.80
26	LA	1635	A	N7-C8-N9	5.59	116.59	113.80
26	LA	2230	G	N1-C2-N3	5.59	127.25	123.90
26	LA	2719	G	OP1-P-OP2	-5.59	111.22	119.60
2	SA	221	C	C5-C4-N4	-5.59	116.29	120.20
2	SA	425	G	N3-C4-C5	-5.59	125.81	128.60
26	LA	162	U	C2-N1-C1'	5.59	124.41	117.70
26	LA	536	G	C6-C5-N7	5.59	133.75	130.40
26	LA	612	G	N3-C4-C5	5.59	131.39	128.60
26	LA	1310	G	O4'-C1'-N9	5.59	112.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	185	U	C2-N1-C1'	-5.59	111.00	117.70
2	SA	209	U	N3-C4-O4	5.59	123.31	119.40
2	SA	388	G	N3-C2-N2	5.59	123.81	119.90
2	SA	676	A	C8-N9-C4	5.59	108.03	105.80
2	SA	765	G	P-O3'-C3'	-5.59	113.00	119.70
2	SA	853	C	P-O3'-C3'	5.59	126.40	119.70
2	SA	930	C	N1-C2-N3	5.59	123.11	119.20
2	SA	951	G	C5-C6-O6	-5.59	125.25	128.60
4	S2	19	G	C3'-C2'-C1'	5.59	105.97	101.50
17	SQ	64	ARG	NE-CZ-NH2	-5.59	117.51	120.30
24	S3	552	VAL	CB-CA-C	-5.59	100.79	111.40
26	LA	40	U	O5'-C5'-C4'	5.59	122.31	111.70
26	LA	437	U	OP2-P-O3'	5.59	117.49	105.20
26	LA	918	A	P-O3'-C3'	5.59	126.40	119.70
26	LA	1026	G	OP1-P-OP2	-5.59	111.22	119.60
26	LA	1081	U	P-O3'-C3'	-5.59	113.00	119.70
26	LA	2125	G	N9-C4-C5	-5.59	103.17	105.40
26	LA	2226	C	O4'-C4'-C3'	5.59	110.57	106.10
26	LA	2410	G	C5'-C4'-C3'	5.59	124.94	116.00
26	LA	2443	C	O5'-C5'-C4'	-5.59	101.09	111.70
26	LA	2464	G	C5'-C4'-C3'	5.59	124.94	116.00
26	LA	2550	G	N9-C4-C5	-5.59	103.17	105.40
26	LA	2667	C	N3-C2-O2	-5.59	117.99	121.90
51	LI	97	ARG	NH1-CZ-NH2	5.59	125.55	119.40
2	SA	657	U	N3-C4-C5	5.58	117.95	114.60
2	SA	896	C	C2-N3-C4	-5.58	117.11	119.90
2	SA	1028	C	N1-C2-N3	5.58	123.11	119.20
26	LA	80	G	C4-C5-N7	5.58	113.03	110.80
26	LA	729	G	P-O3'-C3'	-5.58	113.00	119.70
26	LA	1489	C	O4'-C1'-C2'	5.58	112.63	107.60
26	LA	1927	A	N7-C8-N9	5.58	116.59	113.80
2	SA	337	G	OP2-P-O3'	5.58	117.48	105.20
2	SA	449	G	C5-C6-N1	5.58	114.29	111.50
2	SA	477	C	C2'-C3'-O3'	5.58	122.63	113.70
2	SA	753	A	C4-C5-N7	5.58	113.49	110.70
7	SG	86	VAL	CG1-CB-CG2	5.58	119.83	110.90
26	LA	420	C	N3-C4-C5	-5.58	119.67	121.90
26	LA	613	A	C4-C5-N7	-5.58	107.91	110.70
26	LA	732	C	C5'-C4'-O4'	5.58	115.80	109.10
26	LA	1149	G	O4'-C1'-C2'	5.58	112.63	107.60
26	LA	1163	G	C3'-C2'-C1'	-5.58	97.03	101.50
26	LA	1619	G	C5-C6-O6	-5.58	125.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1660	G	C5-C6-N1	5.58	114.29	111.50
26	LA	2070	A	C4-C5-C6	-5.58	114.21	117.00
26	LA	2229	U	OP1-P-OP2	-5.58	111.22	119.60
26	LA	2624	G	C4'-C3'-C2'	-5.58	97.02	102.60
26	LA	2784	U	C5-C6-N1	-5.58	119.91	122.70
57	LS	63	ARG	CA-CB-CG	5.58	125.69	113.40
2	SA	1313	U	P-O5'-C5'	-5.58	111.97	120.90
2	SA	1447	A	OP2-P-O3'	5.58	117.48	105.20
25	LB	66	A	C5'-C4'-C3'	5.58	124.93	116.00
26	LA	329	G	C2-N3-C4	5.58	114.69	111.90
26	LA	531	C	OP1-P-OP2	-5.58	111.23	119.60
26	LA	2505	G	C3'-C2'-C1'	5.58	105.97	101.50
26	LA	2849	U	C5-C4-O4	5.58	129.25	125.90
26	LA	2855	C	C4'-C3'-C2'	-5.58	97.02	102.60
55	LQ	102	ARG	NE-CZ-NH2	-5.58	117.51	120.30
2	SA	129	A	N7-C8-N9	-5.58	111.01	113.80
2	SA	198	G	N9-C4-C5	5.58	107.63	105.40
2	SA	306	A	C3'-C2'-C1'	-5.58	97.04	101.50
2	SA	417	G	C5'-C4'-O4'	5.58	115.80	109.10
2	SA	503	C	C2-N3-C4	-5.58	117.11	119.90
2	SA	701	U	P-O3'-C3'	-5.58	113.00	119.70
2	SA	1023	U	C5-C6-N1	-5.58	119.91	122.70
2	SA	1076	U	N3-C2-O2	-5.58	118.29	122.20
19	SC	135	ARG	NE-CZ-NH2	-5.58	117.51	120.30
26	LA	185	G	C4'-C3'-C2'	-5.58	97.02	102.60
26	LA	352	A	O5'-P-OP1	5.58	117.40	110.70
26	LA	364	C	O4'-C1'-N1	5.58	112.66	108.20
2	SA	62	U	O4'-C1'-N1	5.58	112.66	108.20
2	SA	379	C	O5'-P-OP2	-5.58	100.68	105.70
2	SA	428	G	C4-N9-C1'	5.58	133.75	126.50
2	SA	504	C	P-O3'-C3'	-5.58	113.01	119.70
26	LA	58	G	C5'-C4'-C3'	5.58	124.92	116.00
26	LA	95	A	O4'-C4'-C3'	5.58	110.56	106.10
26	LA	119	A	N9-C4-C5	5.58	108.03	105.80
26	LA	1000	A	C5'-C4'-O4'	5.58	115.80	109.10
26	LA	1092	C	C2-N3-C4	-5.58	117.11	119.90
26	LA	1143	A	C4-N9-C1'	-5.58	116.26	126.30
26	LA	1354	A	C4-C5-N7	5.58	113.49	110.70
26	LA	1515	A	O4'-C1'-N9	5.58	112.66	108.20
26	LA	1965	C	OP1-P-OP2	-5.58	111.23	119.60
26	LA	2273	A	N1-C6-N6	5.58	121.95	118.60
57	LS	66	ALA	N-CA-CB	-5.58	102.29	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	906	A	C8-N9-C4	5.58	108.03	105.80
2	SA	990	C	O5'-P-OP1	5.58	117.39	110.70
26	LA	221	A	P-O3'-C3'	-5.58	113.01	119.70
26	LA	1975	G	C8-N9-C4	5.58	108.63	106.40
26	LA	1981	A	C2-N3-C4	-5.58	107.81	110.60
26	LA	2433	A	C5'-C4'-O4'	5.58	115.79	109.10
2	SA	54	C	C5'-C4'-C3'	-5.58	107.08	116.00
2	SA	147	G	C4-C5-N7	5.58	113.03	110.80
2	SA	233	C	C5-C4-N4	-5.58	116.30	120.20
2	SA	543	U	C6-N1-C2	-5.58	117.66	121.00
2	SA	952	U	N3-C4-C5	-5.58	111.25	114.60
2	SA	1316	G	N1-C6-O6	5.58	123.25	119.90
2	SA	1355	G	C4'-C3'-C2'	-5.58	97.02	102.60
24	S3	207	PRO	N-CA-C	5.58	126.60	112.10
26	LA	523	C	N1-C2-N3	5.58	123.10	119.20
26	LA	862	G	C5-C6-N1	5.58	114.29	111.50
26	LA	1087	G	C4'-C3'-C2'	-5.58	97.03	102.60
26	LA	1313	U	C5-C4-O4	-5.58	122.55	125.90
26	LA	1596	A	C5'-C4'-C3'	5.58	124.92	116.00
26	LA	1763	G	C2'-C3'-O3'	5.58	122.62	113.70
26	LA	2077	A	C5-C6-N6	5.58	128.16	123.70
26	LA	2389	G	C5'-C4'-O4'	5.58	115.79	109.10
26	LA	2618	G	C5-C6-N1	5.58	114.29	111.50
26	LA	2828	G	C8-N9-C4	-5.58	104.17	106.40
26	LA	2840	C	C2-N3-C4	-5.58	117.11	119.90
26	LA	2864	G	OP1-P-OP2	-5.58	111.24	119.60
2	SA	61	G	C5-C6-O6	-5.57	125.26	128.60
2	SA	268	U	C3'-C2'-C1'	5.57	105.96	101.50
2	SA	282	A	P-O3'-C3'	5.57	126.39	119.70
2	SA	447	G	P-O5'-C5'	5.57	129.82	120.90
2	SA	601	G	C5'-C4'-C3'	5.57	124.92	116.00
2	SA	892	A	C3'-C2'-C1'	5.57	105.96	101.50
2	SA	1181	G	C6-C5-N7	5.57	133.75	130.40
2	SA	1211	U	C5-C4-O4	-5.57	122.56	125.90
3	S1	34	U	C5-C6-N1	5.57	125.49	122.70
24	S3	160	ARG	CG-CD-NE	-5.57	100.10	111.80
26	LA	159	G	O4'-C4'-C3'	5.57	110.56	106.10
26	LA	271	G	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	664	G	N9-C1'-C2'	-5.57	105.87	112.00
26	LA	844	A	N1-C6-N6	5.57	121.94	118.60
26	LA	930	G	N3-C2-N2	-5.57	116.00	119.90
26	LA	996	A	C4-C5-C6	5.57	119.79	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1117	C	N3-C2-O2	-5.57	118.00	121.90
26	LA	1319	C	N3-C4-N4	-5.57	114.10	118.00
26	LA	1480	C	N3-C4-C5	5.57	124.13	121.90
26	LA	1637	A	C5'-C4'-C3'	-5.57	107.08	116.00
26	LA	1715	G	O5'-C5'-C4'	5.57	122.29	111.70
26	LA	2169	A	C3'-C2'-C1'	5.57	105.96	101.50
26	LA	2428	G	O5'-P-OP2	-5.57	100.68	105.70
26	LA	2522	U	C5-C4-O4	-5.57	122.56	125.90
26	LA	2755	C	P-O3'-C3'	-5.57	113.01	119.70
27	LD	160	TYR	CB-CG-CD2	-5.57	117.66	121.00
58	LT	68	ARG	NE-CZ-NH2	5.57	123.09	120.30
2	SA	1246	A	C5'-C4'-O4'	5.57	115.79	109.10
2	SA	1290	G	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	200	U	N1-C1'-C2'	-5.57	105.87	112.00
26	LA	811	U	C4-C5-C6	-5.57	116.36	119.70
26	LA	856	G	N9-C1'-C2'	-5.57	105.87	112.00
26	LA	1361	G	N1-C2-N3	-5.57	120.56	123.90
26	LA	1363	C	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	2078	C	N1-C2-N3	5.57	123.10	119.20
26	LA	2736	A	C3'-C2'-C1'	-5.57	97.04	101.50
27	LD	167	ASP	CB-CG-OD1	-5.57	113.28	118.30
2	SA	35	G	N1-C6-O6	-5.57	116.56	119.90
2	SA	41	G	O4'-C1'-N9	5.57	112.66	108.20
2	SA	230	G	C8-N9-C1'	5.57	134.24	127.00
2	SA	430	A	C2-N3-C4	-5.57	107.81	110.60
19	SC	126	ARG	N-CA-CB	5.57	120.62	110.60
25	LB	105	G	C8-N9-C1'	5.57	134.24	127.00
26	LA	685	A	N9-C4-C5	5.57	108.03	105.80
26	LA	1231	U	C4-C5-C6	5.57	123.04	119.70
26	LA	1944	U	P-O5'-C5'	-5.57	111.99	120.90
26	LA	1995	U	OP1-P-OP2	-5.57	111.24	119.60
26	LA	2896	C	P-O3'-C3'	-5.57	113.02	119.70
44	LF	121	VAL	CA-CB-CG2	-5.57	102.55	110.90
2	SA	475	C	C5'-C4'-O4'	5.57	115.78	109.10
2	SA	525	C	N1-C2-O2	-5.57	115.56	118.90
2	SA	1057	G	C6-C5-N7	5.57	133.74	130.40
2	SA	1325	C	C5'-C4'-C3'	-5.57	107.09	116.00
26	LA	2291	U	C5-C6-N1	-5.57	119.92	122.70
26	LA	2555	U	P-O3'-C3'	5.57	126.38	119.70
26	LA	2830	C	C5-C6-N1	-5.57	118.22	121.00
27	LD	88	ALA	CB-CA-C	-5.57	101.75	110.10
2	SA	73	C	N1-C2-O2	-5.57	115.56	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	111	G	C5-C6-N1	-5.57	108.72	111.50
2	SA	767	A	N3-C4-N9	5.57	131.85	127.40
2	SA	883	C	C2-N3-C4	-5.57	117.12	119.90
2	SA	969	A	N9-C4-C5	-5.57	103.57	105.80
2	SA	1003	G	C4-C5-C6	-5.57	115.46	118.80
2	SA	1241	G	C5'-C4'-O4'	5.57	115.78	109.10
18	SB	31	PHE	CB-CG-CD1	-5.57	116.90	120.80
24	S3	127	ARG	NE-CZ-NH1	-5.57	117.52	120.30
25	LB	97	C	OP1-P-OP2	-5.57	111.25	119.60
25	LB	112	G	N9-C4-C5	5.57	107.63	105.40
26	LA	262	A	P-O3'-C3'	5.57	126.38	119.70
26	LA	323	C	N1-C2-O2	5.57	122.24	118.90
26	LA	1046	A	N3-C4-C5	-5.57	122.90	126.80
26	LA	1065	U	C4-C5-C6	-5.57	116.36	119.70
26	LA	1067	A	C5-C6-N1	5.57	120.48	117.70
26	LA	1654	A	O4'-C1'-N9	5.57	112.65	108.20
26	LA	2375	G	N1-C2-N3	-5.57	120.56	123.90
26	LA	2382	G	O3'-P-O5'	-5.57	93.42	104.00
26	LA	2475	C	C5-C4-N4	5.57	124.10	120.20
26	LA	2599	G	C8-N9-C4	5.57	108.63	106.40
26	LA	2672	U	N1-C1'-C2'	-5.57	105.88	112.00
26	LA	2681	C	C6-N1-C2	-5.57	118.07	120.30
26	LA	2681	C	N1-C2-O2	-5.57	115.56	118.90
2	SA	357	G	C5'-C4'-O4'	5.57	115.78	109.10
2	SA	494	G	N9-C4-C5	5.57	107.63	105.40
2	SA	965	U	N3-C2-O2	-5.57	118.30	122.20
2	SA	1143	G	P-O3'-C3'	-5.57	113.02	119.70
2	SA	1208	C	N3-C4-C5	-5.57	119.67	121.90
2	SA	1281	C	C5-C6-N1	5.57	123.78	121.00
2	SA	1500	A	C5-C6-N1	-5.57	114.92	117.70
26	LA	52	A	N7-C8-N9	5.57	116.58	113.80
26	LA	159	G	C5'-C4'-O4'	5.57	115.78	109.10
26	LA	390	U	C6-N1-C1'	-5.57	113.41	121.20
26	LA	443	A	C5'-C4'-O4'	5.57	115.78	109.10
26	LA	621	A	C4'-C3'-C2'	-5.57	97.03	102.60
26	LA	1020	A	C5-C6-N6	-5.57	119.25	123.70
26	LA	1022	G	P-O5'-C5'	5.57	129.80	120.90
26	LA	1309	G	C4-C5-N7	-5.57	108.57	110.80
26	LA	1334	G	O4'-C1'-C2'	5.57	112.61	107.60
26	LA	1371	G	N9-C4-C5	-5.57	103.17	105.40
26	LA	1426	G	N9-C4-C5	5.57	107.63	105.40
26	LA	1731	G	C5'-C4'-O4'	5.57	115.78	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	69	G	C5'-C4'-C3'	-5.56	107.10	116.00
26	LA	469	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	968	C	N1-C1'-C2'	-5.56	105.88	112.00
26	LA	1038	G	C6-N1-C2	-5.56	121.76	125.10
26	LA	1170	C	N3-C4-C5	5.56	124.12	121.90
26	LA	1943	U	C5'-C4'-C3'	-5.56	107.10	116.00
26	LA	1980	G	C4-N9-C1'	5.56	133.73	126.50
26	LA	2146	C	C6-N1-C1'	-5.56	114.12	120.80
26	LA	2575	C	O4'-C1'-N1	5.56	112.65	108.20
26	LA	2837	A	C4'-C3'-C2'	-5.56	97.04	102.60
26	LA	2895	G	C5-C6-N1	5.56	114.28	111.50
47	LJ	34	VAL	CG1-CB-CG2	-5.56	102.00	110.90
2	SA	144	G	P-O5'-C5'	5.56	129.80	120.90
2	SA	1222	G	C3'-C2'-C1'	-5.56	97.05	101.50
2	SA	1260	G	O4'-C4'-C3'	-5.56	98.44	104.00
2	SA	1294	G	C5-C6-O6	-5.56	125.26	128.60
3	S1	16	A	C5-N7-C8	-5.56	101.12	103.90
4	S2	47	A	C6-C5-N7	5.56	136.19	132.30
26	LA	379	G	N3-C4-C5	-5.56	125.82	128.60
26	LA	1099	G	C6-N1-C2	5.56	128.44	125.10
26	LA	1269	A	C5-N7-C8	5.56	106.68	103.90
26	LA	1524	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	LA	1723	G	C5'-C4'-O4'	5.56	115.78	109.10
26	LA	2322	A	O4'-C1'-N9	5.56	112.65	108.20
26	LA	2461	A	C2'-C3'-O3'	5.56	122.60	113.70
26	LA	2554	U	N3-C4-O4	5.56	123.29	119.40
26	LA	2597	G	N1-C2-N2	-5.56	111.19	116.20
55	LQ	36	TYR	CB-CG-CD1	5.56	124.34	121.00
2	SA	97	G	O4'-C1'-C2'	-5.56	100.24	105.80
2	SA	98	A	C5-C6-N1	5.56	120.48	117.70
2	SA	1157	A	N9-C1'-C2'	-5.56	105.88	112.00
26	LA	43	G	C6-C5-N7	-5.56	127.06	130.40
26	LA	108	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	LA	499	U	C4-C5-C6	-5.56	116.36	119.70
26	LA	1299	G	C4-C5-N7	-5.56	108.58	110.80
26	LA	1570	A	O5'-C5'-C4'	5.56	122.27	111.70
26	LA	1685	C	N1-C2-N3	5.56	123.09	119.20
26	LA	2515	C	C6-N1-C2	-5.56	118.08	120.30
26	LA	2675	A	C5-N7-C8	-5.56	101.12	103.90
33	LZ	58	ILE	O-C-N	-5.56	113.80	122.70
46	LH	126	THR	N-CA-CB	5.56	120.87	110.30
2	SA	232	G	N1-C6-O6	5.56	123.24	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	446	G	C5-C6-N1	5.56	114.28	111.50
2	SA	1108	G	C5-N7-C8	5.56	107.08	104.30
2	SA	1317	C	C4'-C3'-C2'	-5.56	97.04	102.60
2	SA	1334	G	C5-C6-N1	5.56	114.28	111.50
26	LA	7	G	N7-C8-N9	-5.56	110.32	113.10
26	LA	60	G	P-O3'-C3'	5.56	126.37	119.70
26	LA	373	U	O4'-C4'-C3'	5.56	110.55	106.10
26	LA	664	G	N3-C4-N9	5.56	129.34	126.00
26	LA	666	A	N9-C4-C5	-5.56	103.58	105.80
26	LA	809	G	C5'-C4'-O4'	-5.56	102.43	109.10
26	LA	872	U	C4-C5-C6	5.56	123.03	119.70
26	LA	1131	G	C4-C5-N7	5.56	113.02	110.80
26	LA	1346	G	N3-C2-N2	-5.56	116.01	119.90
26	LA	1454	C	N1-C2-O2	-5.56	115.56	118.90
26	LA	1506	U	O3'-P-O5'	5.56	114.56	104.00
26	LA	1963	U	O4'-C1'-N1	5.56	112.65	108.20
26	LA	2144	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	2418	A	C5-C6-N1	5.56	120.48	117.70
26	LA	2777	G	P-O3'-C3'	5.56	126.37	119.70
26	LA	2820	A	C5-C6-N6	5.56	128.15	123.70
26	LA	2901	C	C1'-O4'-C4'	-5.56	105.45	109.90
44	LF	134	LEU	CB-CG-CD1	5.56	120.45	111.00
2	SA	143	A	P-O3'-C3'	-5.56	113.03	119.70
2	SA	338	A	N1-C6-N6	-5.56	115.27	118.60
2	SA	1152	A	N7-C8-N9	-5.56	111.02	113.80
2	SA	1313	U	P-O3'-C3'	-5.56	113.03	119.70
2	SA	1457	G	N9-C1'-C2'	-5.56	105.89	112.00
2	SA	1519	A	C6-N1-C2	-5.56	115.27	118.60
25	LB	84	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	457	A	O4'-C1'-N9	5.56	112.64	108.20
26	LA	498	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	666	A	N1-C2-N3	5.56	132.08	129.30
26	LA	979	A	O4'-C1'-N9	5.56	112.65	108.20
26	LA	1519	G	C5'-C4'-O4'	5.56	115.77	109.10
26	LA	1533	C	C5'-C4'-C3'	-5.56	107.11	116.00
26	LA	1641	A	C1'-O4'-C4'	5.56	114.35	109.90
26	LA	1702	G	N1-C2-N2	-5.56	111.20	116.20
26	LA	1747	U	C5-C4-O4	-5.56	122.57	125.90
26	LA	2604	U	P-O5'-C5'	5.56	129.79	120.90
26	LA	2641	G	N1-C2-N3	5.56	127.23	123.90
26	LA	2646	C	C6-N1-C2	-5.56	118.08	120.30
26	LA	2668	G	C5-N7-C8	5.56	107.08	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2716	C	N3-C4-N4	-5.56	114.11	118.00
2	SA	279	A	C5-C6-N1	-5.56	114.92	117.70
2	SA	753	A	O5'-P-OP1	5.56	117.37	110.70
2	SA	1099	G	C5'-C4'-C3'	-5.56	107.11	116.00
2	SA	1103	C	C6-N1-C2	-5.56	118.08	120.30
2	SA	1533	C	N3-C2-O2	5.56	125.79	121.90
26	LA	251	A	P-O3'-C3'	5.56	126.37	119.70
26	LA	510	C	N1-C1'-C2'	-5.56	105.89	112.00
26	LA	1311	G	O4'-C1'-N9	5.56	112.64	108.20
26	LA	1511	G	C5-N7-C8	5.56	107.08	104.30
26	LA	2476	A	N1-C6-N6	-5.56	115.27	118.60
2	SA	125	U	O5'-C5'-C4'	5.55	122.25	111.70
2	SA	282	A	N9-C4-C5	5.55	108.02	105.80
2	SA	518	C	C6-N1-C2	-5.55	118.08	120.30
2	SA	1150	A	C6-C5-N7	5.55	136.19	132.30
2	SA	1155	A	P-O5'-C5'	5.55	129.79	120.90
2	SA	1233	G	N3-C4-C5	-5.55	125.82	128.60
10	SJ	89	ARG	NE-CZ-NH1	5.55	123.08	120.30
12	SL	113	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
13	SM	70	ARG	NH1-CZ-NH2	5.55	125.51	119.40
26	LA	560	C	OP1-P-OP2	-5.55	111.27	119.60
26	LA	585	G	N7-C8-N9	-5.55	110.32	113.10
26	LA	703	U	P-O3'-C3'	5.55	126.37	119.70
26	LA	1231	U	N3-C4-O4	5.55	123.29	119.40
26	LA	1390	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	1400	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	1820	U	N1-C2-N3	5.55	118.23	114.90
26	LA	2227	A	N9-C4-C5	5.55	108.02	105.80
26	LA	2316	G	N1-C2-N2	5.55	121.20	116.20
26	LA	2328	A	C2-N3-C4	5.55	113.38	110.60
26	LA	2406	A	P-O5'-C5'	-5.55	112.01	120.90
26	LA	2495	G	C4'-C3'-C2'	-5.55	97.05	102.60
26	LA	2544	G	O4'-C1'-C2'	5.55	112.60	107.60
26	LA	2574	G	N9-C4-C5	-5.55	103.18	105.40
26	LA	2818	U	C1'-O4'-C4'	-5.55	105.46	109.90
26	LA	2861	U	O4'-C1'-N1	5.55	112.64	108.20
2	SA	272	C	N1-C2-N3	-5.55	115.31	119.20
2	SA	1515	G	C2-N3-C4	5.55	114.68	111.90
26	LA	135	U	C5'-C4'-O4'	5.55	115.76	109.10
2	SA	28	A	C5-N7-C8	-5.55	101.12	103.90
2	SA	42	G	P-O3'-C3'	-5.55	113.04	119.70
2	SA	961	U	N3-C2-O2	5.55	126.08	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1172	C	P-O3'-C3'	-5.55	113.04	119.70
2	SA	1270	G	P-O5'-C5'	-5.55	112.02	120.90
3	S1	35	G	N1-C2-N2	-5.55	111.20	116.20
8	SH	79	ARG	CD-NE-CZ	5.55	131.37	123.60
9	SI	65	THR	CA-CB-CG2	-5.55	104.63	112.40
26	LA	361	G	C8-N9-C4	5.55	108.62	106.40
26	LA	696	G	C4'-C3'-C2'	-5.55	97.05	102.60
26	LA	757	G	C8-N9-C4	-5.55	104.18	106.40
26	LA	1396	U	C5-C6-N1	-5.55	119.92	122.70
26	LA	1506	U	P-O5'-C5'	5.55	129.78	120.90
26	LA	1570	A	C5-C6-N6	5.55	128.14	123.70
26	LA	1730	C	N3-C4-C5	-5.55	119.68	121.90
26	LA	1779	U	P-O3'-C3'	5.55	126.36	119.70
26	LA	1882	U	C4-C5-C6	5.55	123.03	119.70
26	LA	2267	A	C4-N9-C1'	-5.55	116.31	126.30
26	LA	2659	G	C3'-C2'-C1'	-5.55	97.06	101.50
2	SA	10	A	C5'-C4'-C3'	-5.55	107.12	116.00
2	SA	354	G	N3-C2-N2	5.55	123.78	119.90
2	SA	714	G	C8-N9-C1'	-5.55	119.79	127.00
2	SA	1079	G	N3-C4-C5	-5.55	125.83	128.60
2	SA	1092	A	C2'-C3'-O3'	5.55	122.58	113.70
2	SA	1166	G	N1-C2-N2	-5.55	111.21	116.20
25	LB	61	G	P-O3'-C3'	-5.55	113.04	119.70
26	LA	203	A	N1-C2-N3	-5.55	126.53	129.30
26	LA	500	G	C1'-O4'-C4'	-5.55	105.46	109.90
26	LA	612	G	P-O3'-C3'	5.55	126.36	119.70
26	LA	761	A	N1-C2-N3	-5.55	126.53	129.30
26	LA	1042	G	C5-N7-C8	-5.55	101.53	104.30
26	LA	1141	U	P-O3'-C3'	5.55	126.36	119.70
26	LA	1734	G	C4-C5-N7	5.55	113.02	110.80
26	LA	2099	U	C2-N3-C4	-5.55	123.67	127.00
26	LA	2322	A	N1-C6-N6	-5.55	115.27	118.60
2	SA	1291	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	412	A	C4-C5-C6	5.55	119.77	117.00
26	LA	929	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	944	C	C5-C6-N1	5.55	123.77	121.00
26	LA	1038	G	N3-C2-N2	-5.55	116.02	119.90
26	LA	1517	G	N3-C2-N2	5.55	123.78	119.90
26	LA	2517	C	N1-C2-N3	5.55	123.08	119.20
2	SA	172	A	C4-C5-C6	-5.55	114.23	117.00
2	SA	587	G	C4'-C3'-C2'	-5.55	97.05	102.60
7	SG	114	SER	N-CA-C	5.55	125.98	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	98	G	C2'-C3'-O3'	5.55	122.57	113.70
26	LA	515	A	N3-C4-C5	5.55	130.68	126.80
26	LA	1031	G	N3-C2-N2	5.55	123.78	119.90
26	LA	2473	U	C6-N1-C2	-5.55	117.67	121.00
26	LA	2643	G	N1-C6-O6	-5.55	116.57	119.90
26	LA	2886	A	C6-C5-N7	-5.55	128.42	132.30
2	SA	24	U	C5-C6-N1	5.54	125.47	122.70
2	SA	109	A	N9-C4-C5	-5.54	103.58	105.80
2	SA	169	C	C1'-O4'-C4'	-5.54	105.46	109.90
2	SA	858	G	N1-C6-O6	5.54	123.23	119.90
2	SA	1226	C	P-O3'-C3'	5.54	126.35	119.70
2	SA	1396	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	70	G	N7-C8-N9	5.54	115.87	113.10
26	LA	115	C	C5-C4-N4	5.54	124.08	120.20
26	LA	1550	C	O4'-C1'-N1	5.54	112.64	108.20
26	LA	1727	C	P-O5'-C5'	-5.54	112.03	120.90
26	LA	2433	A	C4-N9-C1'	5.54	136.28	126.30
26	LA	2712	C	C3'-C2'-C1'	5.54	105.94	101.50
2	SA	16	A	C3'-C2'-C1'	5.54	105.94	101.50
2	SA	141	G	C4-N9-C1'	-5.54	119.29	126.50
2	SA	432	A	N7-C8-N9	5.54	116.57	113.80
2	SA	694	A	N3-C4-C5	-5.54	122.92	126.80
2	SA	733	G	C5-C6-N1	-5.54	108.73	111.50
2	SA	1102	A	C8-N9-C4	5.54	108.02	105.80
2	SA	1131	G	N1-C2-N3	5.54	127.23	123.90
4	S2	27	G	N1-C2-N3	-5.54	120.57	123.90
20	SD	75	TYR	CB-CG-CD1	5.54	124.33	121.00
25	LB	11	C	C5-C6-N1	5.54	123.77	121.00
26	LA	246	C	C5-C4-N4	-5.54	116.32	120.20
26	LA	629	G	N1-C2-N3	-5.54	120.57	123.90
26	LA	1185	G	N1-C2-N3	5.54	127.23	123.90
26	LA	1274	A	C4-N9-C1'	5.54	136.28	126.30
26	LA	1672	A	OP1-P-OP2	-5.54	111.28	119.60
26	LA	1773	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	2458	G	C2-N3-C4	5.54	114.67	111.90
26	LA	2497	A	OP1-P-OP2	-5.54	111.28	119.60
45	LG	166	ARG	CG-CD-NE	-5.54	100.16	111.80
46	LH	57	TYR	N-CA-CB	5.54	120.58	110.60
2	SA	145	G	C5'-C4'-C3'	-5.54	107.13	116.00
2	SA	184	G	O4'-C1'-N9	5.54	112.63	108.20
2	SA	234	C	N1-C2-N3	5.54	123.08	119.20
2	SA	273	U	O4'-C1'-C2'	5.54	112.59	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	574	A	N7-C8-N9	-5.54	111.03	113.80
2	SA	741	G	C5-N7-C8	-5.54	101.53	104.30
2	SA	902	G	N3-C2-N2	5.54	123.78	119.90
2	SA	1330	U	P-O3'-C3'	5.54	126.35	119.70
2	SA	1480	A	C5-C6-N1	-5.54	114.93	117.70
18	SB	183	PHE	CB-CG-CD2	5.54	124.68	120.80
25	LB	60	C	P-O5'-C5'	5.54	129.77	120.90
26	LA	94	A	C5-C6-N1	5.54	120.47	117.70
26	LA	214	G	C5-C6-O6	-5.54	125.28	128.60
26	LA	404	A	N1-C6-N6	-5.54	115.28	118.60
26	LA	515	A	N1-C6-N6	5.54	121.92	118.60
26	LA	648	G	C2-N3-C4	-5.54	109.13	111.90
26	LA	1398	C	N3-C4-N4	-5.54	114.12	118.00
26	LA	1918	A	C5-C6-N6	5.54	128.13	123.70
38	LE	154	LYS	N-CA-C	-5.54	96.04	111.00
54	LM	32	TYR	N-CA-CB	-5.54	100.62	110.60
2	SA	153	C	N3-C4-N4	5.54	121.88	118.00
26	LA	473	G	N1-C2-N2	5.54	121.19	116.20
26	LA	904	G	N1-C2-N3	-5.54	120.58	123.90
26	LA	982	C	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	1049	C	N1-C2-O2	5.54	122.22	118.90
26	LA	1637	A	C5-C6-N1	5.54	120.47	117.70
26	LA	1756	G	C8-N9-C1'	5.54	134.20	127.00
26	LA	2037	A	N1-C2-N3	5.54	132.07	129.30
26	LA	2587	A	C8-N9-C4	-5.54	103.58	105.80
26	LA	2588	G	C6-N1-C2	-5.54	121.78	125.10
26	LA	2674	G	N3-C2-N2	5.54	123.78	119.90
26	LA	2821	A	N1-C2-N3	-5.54	126.53	129.30
2	SA	410	G	C8-N9-C1'	5.54	134.20	127.00
2	SA	563	A	C4'-C3'-C2'	5.54	108.14	102.60
2	SA	788	U	C4'-C3'-C2'	5.54	108.14	102.60
2	SA	948	C	C6-N1-C2	-5.54	118.08	120.30
2	SA	966	G	N1-C2-N3	5.54	127.22	123.90
20	SD	157	ALA	CB-CA-C	-5.54	101.79	110.10
26	LA	140	C	O4'-C4'-C3'	-5.54	98.46	104.00
26	LA	211	C	P-O3'-C3'	5.54	126.35	119.70
26	LA	514	A	C5-C6-N1	5.54	120.47	117.70
26	LA	1027	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1139	G	N7-C8-N9	-5.54	110.33	113.10
26	LA	1896	G	P-O3'-C3'	-5.54	113.05	119.70
26	LA	1910	G	N1-C6-O6	-5.54	116.58	119.90
26	LA	2134	A	C6-N1-C2	-5.54	115.28	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2458	G	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	2560	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	2597	G	N3-C4-N9	5.54	129.32	126.00
26	LA	2902	C	C4'-C3'-C2'	5.54	108.14	102.60
49	LK	117	THR	CA-C-N	-5.54	105.12	116.20
2	SA	423	G	C6-N1-C2	5.54	128.42	125.10
2	SA	436	C	N3-C4-C5	5.54	124.11	121.90
2	SA	983	A	C5-C6-N1	-5.54	114.93	117.70
2	SA	1329	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	532	A	O4'-C1'-N9	5.54	112.63	108.20
26	LA	1404	C	N1-C2-N3	5.54	123.08	119.20
26	LA	1789	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1831	G	O4'-C1'-C2'	-5.54	100.26	105.80
26	LA	2516	A	P-O3'-C3'	-5.54	113.06	119.70
57	LS	86	SER	N-CA-CB	5.54	118.81	110.50
2	SA	166	U	O4'-C1'-C2'	5.54	112.58	107.60
2	SA	670	G	C4-C5-C6	5.54	122.12	118.80
2	SA	685	G	C1'-O4'-C4'	-5.54	105.47	109.90
2	SA	688	G	N3-C2-N2	-5.54	116.03	119.90
2	SA	1294	G	C3'-C2'-C1'	-5.54	97.07	101.50
13	SM	78	ARG	NE-CZ-NH1	-5.54	117.53	120.30
18	SB	85	SER	CA-C-O	5.54	131.72	120.10
24	S3	136	ARG	NE-CZ-NH2	-5.54	117.53	120.30
26	LA	401	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	706	A	C5'-C4'-C3'	-5.54	107.14	116.00
26	LA	1030	C	C4'-C3'-C2'	-5.54	97.06	102.60
26	LA	1080	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1226	A	C3'-C2'-C1'	5.54	105.93	101.50
26	LA	1774	C	C2-N3-C4	-5.54	117.13	119.90
26	LA	2063	C	O4'-C4'-C3'	5.54	110.53	106.10
26	LA	2085	U	N3-C4-C5	-5.54	111.28	114.60
26	LA	2336	A	C8-N9-C4	-5.54	103.59	105.80
26	LA	2440	C	C5-C6-N1	5.54	123.77	121.00
53	LP	74	GLU	N-CA-CB	5.54	120.56	110.60
2	SA	215	C	C4-C5-C6	-5.53	114.63	117.40
2	SA	744	C	OP1-P-OP2	-5.53	111.30	119.60
2	SA	939	G	C2'-C3'-O3'	5.53	122.55	113.70
2	SA	1408	A	N9-C1'-C2'	-5.53	105.91	112.00
4	S2	27	G	N9-C1'-C2'	-5.53	105.91	112.00
25	LB	66	A	C4-C5-N7	5.53	113.47	110.70
26	LA	121	G	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	224	U	P-O5'-C5'	-5.53	112.05	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	370	G	C5-C6-N1	5.53	114.27	111.50
26	LA	750	A	N1-C2-N3	-5.53	126.53	129.30
26	LA	889	C	C3'-C2'-C1'	5.53	105.93	101.50
26	LA	889	C	O5'-C5'-C4'	5.53	122.22	111.70
26	LA	1058	U	C3'-C2'-C1'	5.53	105.93	101.50
26	LA	1903	G	N7-C8-N9	-5.53	110.33	113.10
26	LA	2060	A	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	2447	G	C6-C5-N7	-5.53	127.08	130.40
44	LF	35	TYR	CB-CG-CD1	-5.53	117.68	121.00
2	SA	1408	A	N1-C2-N3	5.53	132.07	129.30
25	LB	62	C	C5-C4-N4	5.53	124.07	120.20
26	LA	2562	U	OP1-P-OP2	-5.53	111.30	119.60
2	SA	651	C	N1-C1'-C2'	5.53	121.19	114.00
2	SA	1312	G	C1'-O4'-C4'	-5.53	105.47	109.90
2	SA	1457	G	N7-C8-N9	5.53	115.86	113.10
24	S3	452	SER	N-CA-CB	5.53	118.79	110.50
24	S3	579	PHE	CB-CG-CD1	5.53	124.67	120.80
26	LA	220	G	N7-C8-N9	5.53	115.86	113.10
26	LA	291	G	C5-C6-N1	5.53	114.27	111.50
26	LA	765	C	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	869	G	N9-C1'-C2'	-5.53	105.92	112.00
26	LA	933	A	O4'-C1'-N9	5.53	112.62	108.20
26	LA	1131	G	N9-C4-C5	-5.53	103.19	105.40
26	LA	1331	G	N7-C8-N9	-5.53	110.33	113.10
26	LA	1339	G	C5-C6-O6	-5.53	125.28	128.60
26	LA	1610	A	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	1882	U	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	2828	G	N3-C4-C5	-5.53	125.83	128.60
26	LA	2843	G	N7-C8-N9	-5.53	110.33	113.10
2	SA	1227	A	N9-C1'-C2'	-5.53	105.92	112.00
2	SA	1229	A	C5-N7-C8	5.53	106.67	103.90
4	S2	45	A	C2-N3-C4	-5.53	107.84	110.60
26	LA	2256	G	N3-C4-C5	-5.53	125.83	128.60
26	LA	2326	C	C2-N1-C1'	-5.53	112.72	118.80
34	L0	48	ARG	CD-NE-CZ	-5.53	115.86	123.60
2	SA	329	A	C5-C6-N1	5.53	120.46	117.70
2	SA	630	A	O5'-C5'-C4'	-5.53	101.20	111.70
2	SA	751	U	C6-N1-C2	-5.53	117.68	121.00
2	SA	852	G	P-O3'-C3'	5.53	126.33	119.70
2	SA	967	C	N1-C2-O2	5.53	122.22	118.90
2	SA	1279	G	OP1-P-OP2	-5.53	111.31	119.60
2	SA	1514	G	C5-C6-O6	-5.53	125.28	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	389	ASP	CB-CG-OD1	5.53	123.28	118.30
25	LB	62	C	O4'-C1'-N1	5.53	112.62	108.20
26	LA	483	A	C5-C6-N1	-5.53	114.94	117.70
26	LA	702	U	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	789	A	OP1-P-OP2	-5.53	111.31	119.60
26	LA	1050	A	C4-N9-C1'	-5.53	116.35	126.30
26	LA	1087	G	O4'-C4'-C3'	5.53	110.52	106.10
26	LA	1122	G	C8-N9-C4	5.53	108.61	106.40
26	LA	1290	C	C4-C5-C6	-5.53	114.64	117.40
26	LA	1309	G	N3-C4-N9	5.53	129.32	126.00
26	LA	1511	G	C2-N3-C4	5.53	114.66	111.90
26	LA	1582	C	N3-C2-O2	-5.53	118.03	121.90
26	LA	1873	G	N3-C2-N2	5.53	123.77	119.90
26	LA	2765	A	P-O5'-C5'	-5.53	112.06	120.90
26	LA	2884	U	P-O3'-C3'	-5.53	113.07	119.70
2	SA	114	U	N3-C4-C5	-5.53	111.28	114.60
2	SA	194	C	C1'-O4'-C4'	-5.53	105.48	109.90
2	SA	474	G	O4'-C1'-N9	5.53	112.62	108.20
2	SA	635	A	N9-C1'-C2'	-5.53	105.92	112.00
2	SA	893	C	C6-N1-C2	-5.53	118.09	120.30
2	SA	1182	G	C5-N7-C8	5.53	107.06	104.30
2	SA	1235	U	N1-C1'-C2'	-5.53	105.92	112.00
2	SA	1339	A	C2-N3-C4	-5.53	107.84	110.60
2	SA	1460	C	N1-C2-O2	5.53	122.22	118.90
24	S3	356	ARG	CD-NE-CZ	5.53	131.34	123.60
25	LB	107	G	O4'-C1'-N9	5.53	112.62	108.20
26	LA	520	G	C4-N9-C1'	5.53	133.68	126.50
26	LA	523	C	O4'-C1'-N1	5.53	112.62	108.20
26	LA	594	U	OP1-P-OP2	-5.53	111.31	119.60
26	LA	836	G	N1-C6-O6	5.53	123.22	119.90
26	LA	885	C	N1-C1'-C2'	-5.53	105.92	112.00
26	LA	970	U	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	1139	G	N3-C2-N2	5.53	123.77	119.90
26	LA	1418	G	C5'-C4'-C3'	-5.53	107.16	116.00
26	LA	1429	G	N9-C4-C5	5.53	107.61	105.40
26	LA	1568	G	C1'-O4'-C4'	-5.53	105.48	109.90
26	LA	1801	A	C5-N7-C8	5.53	106.66	103.90
26	LA	1802	A	N1-C2-N3	5.53	132.06	129.30
26	LA	1904	G	P-O3'-C3'	-5.53	113.07	119.70
26	LA	1934	C	P-O5'-C5'	-5.53	112.06	120.90
26	LA	2033	A	C8-N9-C4	-5.53	103.59	105.80
26	LA	2191	A	C5-N7-C8	5.53	106.66	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2268	A	P-O3'-C3'	-5.53	113.07	119.70
26	LA	2440	C	N1-C2-N3	5.53	123.07	119.20
26	LA	2683	C	N1-C1'-C2'	-5.53	105.92	112.00
26	LA	2803	G	N9-C4-C5	-5.53	103.19	105.40
26	LA	2832	U	C5-C4-O4	-5.53	122.58	125.90
30	LW	17	ASP	CB-CG-OD1	-5.53	113.33	118.30
34	L0	49	ASP	CA-CB-CG	-5.53	101.24	113.40
2	SA	253	A	C5-C6-N1	-5.52	114.94	117.70
2	SA	397	A	N7-C8-N9	-5.52	111.04	113.80
2	SA	1090	U	C5'-C4'-C3'	-5.52	107.16	116.00
2	SA	1279	G	N3-C2-N2	5.52	123.77	119.90
2	SA	1284	C	C6-N1-C2	-5.52	118.09	120.30
2	SA	1455	G	C5-C6-O6	-5.52	125.29	128.60
26	LA	401	A	P-O3'-C3'	-5.52	113.07	119.70
26	LA	565	C	C4'-C3'-C2'	-5.52	97.08	102.60
26	LA	841	G	O4'-C1'-N9	5.52	112.62	108.20
26	LA	937	C	C4'-C3'-C2'	-5.52	97.08	102.60
26	LA	1720	U	O4'-C1'-N1	5.52	112.62	108.20
26	LA	2431	U	C5'-C4'-O4'	5.52	115.73	109.10
2	SA	178	C	C5'-C4'-C3'	-5.52	107.16	116.00
2	SA	938	A	N3-C4-N9	-5.52	122.98	127.40
2	SA	1219	A	OP1-P-OP2	-5.52	111.32	119.60
2	SA	1428	A	C5'-C4'-C3'	5.52	124.84	116.00
2	SA	1434	A	C4-C5-C6	5.52	119.76	117.00
2	SA	1452	C	C5-C4-N4	5.52	124.07	120.20
2	SA	1480	A	C1'-O4'-C4'	-5.52	105.48	109.90
4	S2	6	G	C1'-O4'-C4'	-5.52	105.48	109.90
12	SL	65	TYR	CB-CG-CD1	5.52	124.31	121.00
14	SN	100	TRP	CB-CG-CD2	-5.52	119.42	126.60
26	LA	149	A	P-O5'-C5'	-5.52	112.06	120.90
26	LA	359	G	N7-C8-N9	5.52	115.86	113.10
26	LA	386	G	C4-C5-C6	-5.52	115.49	118.80
26	LA	612	G	N3-C2-N2	-5.52	116.03	119.90
26	LA	675	A	C6-N1-C2	-5.52	115.29	118.60
26	LA	946	C	N3-C2-O2	-5.52	118.03	121.90
26	LA	1378	A	C4-C5-N7	5.52	113.46	110.70
26	LA	1878	G	N9-C4-C5	5.52	107.61	105.40
26	LA	1983	G	C5-C6-N1	-5.52	108.74	111.50
26	LA	2238	G	N7-C8-N9	-5.52	110.34	113.10
26	LA	2383	G	C5'-C4'-O4'	5.52	115.73	109.10
26	LA	2390	U	C6-N1-C1'	5.52	128.93	121.20
26	LA	2831	G	C5'-C4'-O4'	5.52	115.73	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	LU	77	ASP	CB-CA-C	-5.52	99.36	110.40
41	L5	4	THR	CB-CA-C	-5.52	96.69	111.60
2	SA	176	C	N3-C4-N4	-5.52	114.14	118.00
2	SA	552	U	C2-N3-C4	5.52	130.31	127.00
2	SA	690	G	C5'-C4'-C3'	-5.52	107.17	116.00
2	SA	799	G	C5-C6-O6	-5.52	125.29	128.60
2	SA	1030	U	C5-C4-O4	5.52	129.21	125.90
26	LA	666	A	C4-C5-N7	5.52	113.46	110.70
26	LA	1525	A	N9-C4-C5	5.52	108.01	105.80
26	LA	1842	G	C5-N7-C8	-5.52	101.54	104.30
26	LA	1972	G	O4'-C1'-N9	5.52	112.62	108.20
26	LA	2074	U	N3-C4-O4	5.52	123.26	119.40
26	LA	2634	A	C6-N1-C2	5.52	121.91	118.60
26	LA	2727	A	C6-N1-C2	-5.52	115.29	118.60
29	LV	25	GLU	CB-CA-C	5.52	121.44	110.40
31	LX	85	LYS	N-CA-C	5.52	125.91	111.00
41	L5	4	THR	OG1-CB-CG2	-5.52	97.30	110.00
2	SA	455	G	C8-N9-C4	-5.52	104.19	106.40
2	SA	602	A	C6-N1-C2	-5.52	115.29	118.60
2	SA	655	A	P-O3'-C3'	-5.52	113.08	119.70
2	SA	1430	A	O4'-C1'-N9	5.52	112.61	108.20
3	S1	14	G	C5-N7-C8	-5.52	101.54	104.30
24	S3	447	TRP	CA-CB-CG	5.52	124.19	113.70
26	LA	173	A	N9-C4-C5	-5.52	103.59	105.80
26	LA	558	U	C4-C5-C6	-5.52	116.39	119.70
26	LA	860	U	C2-N3-C4	-5.52	123.69	127.00
26	LA	1067	A	O4'-C1'-N9	5.52	112.62	108.20
26	LA	1327	A	C5-N7-C8	-5.52	101.14	103.90
26	LA	1415	U	N1-C2-N3	5.52	118.21	114.90
26	LA	2093	G	N9-C4-C5	-5.52	103.19	105.40
26	LA	2382	G	N1-C6-O6	-5.52	116.59	119.90
26	LA	2761	A	OP1-P-OP2	-5.52	111.32	119.60
1	SS	16	LYS	CA-CB-CG	5.52	125.54	113.40
2	SA	103	U	P-O3'-C3'	-5.52	113.08	119.70
2	SA	739	C	P-O3'-C3'	-5.52	113.08	119.70
2	SA	793	U	O4'-C4'-C3'	-5.52	98.48	104.00
2	SA	1260	G	C5'-C4'-O4'	5.52	115.72	109.10
3	S1	49	U	C5'-C4'-C3'	5.52	124.83	116.00
25	LB	33	G	C6-N1-C2	5.52	128.41	125.10
25	LB	73	A	N3-C4-C5	-5.52	122.94	126.80
25	LB	100	G	C8-N9-C4	-5.52	104.19	106.40
26	LA	1259	G	C6-N1-C2	-5.52	121.79	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1759	A	C5-N7-C8	-5.52	101.14	103.90
26	LA	1774	C	C6-N1-C2	5.52	122.51	120.30
26	LA	1884	G	C6-N1-C2	-5.52	121.79	125.10
26	LA	2007	U	P-O5'-C5'	5.52	129.73	120.90
26	LA	2090	A	C6-N1-C2	-5.52	115.29	118.60
26	LA	2130	U	C5-C4-O4	-5.52	122.59	125.90
26	LA	2893	A	N1-C6-N6	5.52	121.91	118.60
44	LF	79	ARG	NE-CZ-NH2	-5.52	117.54	120.30
2	SA	489	C	P-O3'-C3'	-5.52	113.08	119.70
2	SA	987	G	C4'-C3'-C2'	-5.52	97.08	102.60
2	SA	1114	C	C6-N1-C2	-5.52	118.09	120.30
2	SA	1537	U	O4'-C1'-N1	5.52	112.61	108.20
4	S2	4	G	C5-N7-C8	-5.52	101.54	104.30
4	S2	76	C	OP1-P-OP2	-5.52	111.33	119.60
26	LA	557	C	N1-C2-O2	-5.52	115.59	118.90
26	LA	1070	A	N7-C8-N9	5.52	116.56	113.80
26	LA	1348	C	O4'-C1'-N1	5.52	112.61	108.20
26	LA	1663	G	C5'-C4'-C3'	-5.52	107.17	116.00
26	LA	1749	A	C8-N9-C1'	5.52	137.63	127.70
26	LA	1965	C	N1-C1'-C2'	5.52	121.17	114.00
26	LA	2575	C	N1-C2-N3	-5.52	115.34	119.20
26	LA	2864	G	P-O5'-C5'	5.52	129.72	120.90
26	LA	2896	C	C4'-C3'-C2'	5.52	108.12	102.60
2	SA	650	G	N7-C8-N9	-5.51	110.34	113.10
2	SA	750	C	C5'-C4'-O4'	5.51	115.72	109.10
2	SA	974	A	C1'-O4'-C4'	-5.51	105.49	109.90
2	SA	1114	C	P-O3'-C3'	5.51	126.32	119.70
2	SA	1145	A	C5-N7-C8	-5.51	101.14	103.90
2	SA	1158	C	O4'-C1'-N1	5.51	112.61	108.20
2	SA	1219	A	O4'-C4'-C3'	5.51	110.51	106.10
2	SA	1248	A	O4'-C1'-N9	5.51	112.61	108.20
6	SU	12	ASP	N-CA-C	5.51	125.89	111.00
26	LA	42	A	C8-N9-C1'	5.51	137.63	127.70
26	LA	244	A	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	260	G	N3-C4-C5	-5.51	125.84	128.60
26	LA	495	G	N7-C8-N9	-5.51	110.34	113.10
26	LA	644	A	C5-C6-N1	-5.51	114.94	117.70
26	LA	1072	C	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	1121	C	N3-C4-C5	-5.51	119.69	121.90
26	LA	1169	A	N3-C4-N9	5.51	131.81	127.40
26	LA	1217	U	N3-C2-O2	5.51	126.06	122.20
26	LA	1541	C	C2-N3-C4	-5.51	117.14	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1881	C	P-O5'-C5'	5.51	129.72	120.90
26	LA	1915	C	C2-N3-C4	-5.51	117.14	119.90
26	LA	2617	U	C4-C5-C6	5.51	123.01	119.70
29	LV	80	TRP	N-CA-CB	5.51	120.53	110.60
2	SA	397	A	C6-N1-C2	-5.51	115.29	118.60
2	SA	606	G	N3-C4-C5	-5.51	125.84	128.60
2	SA	1175	G	C6-N1-C2	-5.51	121.79	125.10
2	SA	1222	G	N9-C4-C5	-5.51	103.19	105.40
26	LA	412	A	O5'-P-OP1	-5.51	100.74	105.70
26	LA	654	A	C1'-O4'-C4'	-5.51	105.49	109.90
26	LA	779	U	C2-N1-C1'	-5.51	111.08	117.70
26	LA	1027	A	P-O5'-C5'	5.51	129.72	120.90
26	LA	2104	C	O4'-C1'-N1	5.51	112.61	108.20
26	LA	2268	A	O5'-P-OP1	5.51	117.32	110.70
26	LA	2439	A	C5-N7-C8	5.51	106.66	103.90
44	LF	30	GLN	O-C-N	-5.51	113.88	122.70
2	SA	174	A	P-O3'-C3'	-5.51	113.08	119.70
2	SA	442	G	N3-C2-N2	5.51	123.76	119.90
2	SA	659	U	P-O5'-C5'	5.51	129.72	120.90
2	SA	782	A	C6-C5-N7	-5.51	128.44	132.30
2	SA	820	U	OP1-P-OP2	-5.51	111.33	119.60
2	SA	911	U	O4'-C1'-N1	5.51	112.61	108.20
2	SA	972	C	C2-N1-C1'	5.51	124.86	118.80
2	SA	991	U	N3-C4-C5	5.51	117.91	114.60
26	LA	464	U	O4'-C1'-N1	5.51	112.61	108.20
26	LA	949	G	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	1254	A	C4'-C3'-C2'	5.51	108.11	102.60
26	LA	1681	G	C8-N9-C1'	-5.51	119.83	127.00
26	LA	1814	G	P-O3'-C3'	5.51	126.31	119.70
26	LA	1875	G	P-O5'-C5'	5.51	129.72	120.90
26	LA	2140	G	C8-N9-C4	-5.51	104.20	106.40
26	LA	2425	A	O4'-C1'-N9	5.51	112.61	108.20
26	LA	2525	G	N3-C4-N9	-5.51	122.69	126.00
26	LA	2897	U	C2-N1-C1'	-5.51	111.09	117.70
2	SA	90	C	C5'-C4'-O4'	5.51	115.71	109.10
2	SA	229	U	N1-C2-O2	-5.51	118.94	122.80
2	SA	1127	G	C8-N9-C4	-5.51	104.20	106.40
2	SA	1358	U	C2-N1-C1'	-5.51	111.09	117.70
4	S2	57	C	C5-C4-N4	5.51	124.06	120.20
26	LA	400	G	C1'-O4'-C4'	-5.51	105.49	109.90
26	LA	760	G	N1-C2-N3	-5.51	120.59	123.90
26	LA	1208	C	C3'-C2'-C1'	-5.51	97.09	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1468	U	N3-C4-O4	5.51	123.26	119.40
26	LA	1752	C	N1-C2-N3	5.51	123.06	119.20
26	LA	1899	A	OP1-P-OP2	-5.51	111.33	119.60
26	LA	2007	U	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	2496	C	C3'-C2'-C1'	5.51	105.91	101.50
26	LA	2551	C	C4'-C3'-C2'	-5.51	97.09	102.60
26	LA	2594	C	P-O3'-C3'	-5.51	113.09	119.70
26	LA	2718	G	P-O3'-C3'	-5.51	113.09	119.70
26	LA	2857	G	OP1-P-OP2	-5.51	111.34	119.60
26	LA	2880	C	C5'-C4'-C3'	5.51	124.81	116.00
41	L5	4	THR	CA-CB-CG2	-5.51	104.69	112.40
2	SA	528	C	O4'-C1'-N1	5.51	112.61	108.20
2	SA	932	C	C3'-C2'-C1'	5.51	105.91	101.50
2	SA	1064	G	C6-N1-C2	-5.51	121.80	125.10
2	SA	1426	G	C2-N3-C4	5.51	114.65	111.90
26	LA	101	A	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	756	A	O4'-C1'-N9	5.51	112.61	108.20
26	LA	2127	G	O3'-P-O5'	-5.51	93.54	104.00
26	LA	2495	G	N7-C8-N9	-5.51	110.35	113.10
2	SA	204	G	C8-N9-C1'	-5.51	119.84	127.00
2	SA	730	G	O4'-C1'-N9	5.51	112.61	108.20
2	SA	1090	U	P-O3'-C3'	-5.51	113.09	119.70
2	SA	1331	G	C6-C5-N7	-5.51	127.10	130.40
2	SA	1401	G	C6-N1-C2	-5.51	121.80	125.10
3	S1	16	A	C4-C5-C6	-5.51	114.25	117.00
4	S2	43	G	C6-C5-N7	-5.51	127.10	130.40
24	S3	105	LEU	CA-CB-CG	-5.51	102.64	115.30
25	LB	81	G	N3-C4-N9	5.51	129.30	126.00
26	LA	120	U	C4-C5-C6	-5.51	116.40	119.70
26	LA	289	G	C5-C6-N1	5.51	114.25	111.50
26	LA	411	G	N1-C2-N3	5.51	127.20	123.90
26	LA	795	C	C4'-C3'-C2'	-5.51	97.09	102.60
26	LA	936	A	C5-N7-C8	-5.51	101.15	103.90
26	LA	1236	G	O4'-C1'-N9	5.51	112.61	108.20
26	LA	1595	C	C1'-O4'-C4'	-5.51	105.50	109.90
26	LA	1884	G	C4-C5-N7	5.51	113.00	110.80
26	LA	1943	U	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	2013	A	OP1-P-O3'	5.51	117.32	105.20
26	LA	2082	A	N7-C8-N9	5.51	116.55	113.80
26	LA	2205	A	C5'-C4'-O4'	5.51	115.71	109.10
44	LF	162	ARG	NE-CZ-NH1	-5.51	117.55	120.30
2	SA	185	U	C5'-C4'-O4'	5.50	115.71	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	51	TRP	CE2-CD2-CE3	5.50	125.31	118.70
26	LA	1096	A	C6-N1-C2	-5.50	115.30	118.60
26	LA	1190	G	N9-C4-C5	5.50	107.60	105.40
26	LA	1275	A	C4-N9-C1'	5.50	136.21	126.30
26	LA	1479	G	N7-C8-N9	-5.50	110.35	113.10
2	SA	95	C	C6-N1-C1'	5.50	127.41	120.80
2	SA	581	G	N1-C2-N2	5.50	121.15	116.20
2	SA	670	G	C3'-C2'-C1'	5.50	105.90	101.50
2	SA	719	C	OP1-P-OP2	-5.50	111.34	119.60
4	S2	23	G	C4'-C3'-C2'	-5.50	97.10	102.60
21	SE	135	VAL	CA-CB-CG2	-5.50	102.64	110.90
25	LB	54	G	O4'-C1'-N9	5.50	112.60	108.20
26	LA	68	G	N9-C4-C5	5.50	107.60	105.40
26	LA	86	G	C4-N9-C1'	-5.50	119.35	126.50
26	LA	1128	G	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	1444	G	C6-C5-N7	-5.50	127.10	130.40
26	LA	1546	G	C5-N7-C8	5.50	107.05	104.30
26	LA	1720	U	C6-N1-C2	-5.50	117.70	121.00
26	LA	1738	G	N1-C2-N2	-5.50	111.25	116.20
26	LA	1758	U	C6-N1-C2	-5.50	117.70	121.00
26	LA	2003	A	N7-C8-N9	-5.50	111.05	113.80
26	LA	2286	G	C5-C6-O6	-5.50	125.30	128.60
2	SA	186	C	N1-C2-N3	5.50	123.05	119.20
2	SA	282	A	C1'-O4'-C4'	5.50	114.30	109.90
2	SA	399	G	N3-C2-N2	5.50	123.75	119.90
2	SA	912	C	C5'-C4'-O4'	5.50	115.70	109.10
2	SA	1024	G	C2-N3-C4	5.50	114.65	111.90
2	SA	1062	U	C4'-C3'-C2'	-5.50	97.10	102.60
2	SA	1534	A	N1-C2-N3	5.50	132.05	129.30
24	S3	447	TRP	CD1-CG-CD2	-5.50	101.90	106.30
26	LA	97	C	C4'-C3'-C2'	5.50	108.10	102.60
26	LA	113	U	O3'-P-O5'	5.50	114.45	104.00
26	LA	226	A	N1-C2-N3	5.50	132.05	129.30
26	LA	740	C	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	1008	A	C4-C5-C6	-5.50	114.25	117.00
26	LA	1453	A	C4-C5-C6	-5.50	114.25	117.00
26	LA	2470	G	N7-C8-N9	-5.50	110.35	113.10
45	LG	170	ALA	N-CA-CB	-5.50	102.40	110.10
2	SA	537	G	C5-C6-O6	-5.50	125.30	128.60
2	SA	1523	G	N7-C8-N9	5.50	115.85	113.10
26	LA	625	G	N1-C6-O6	5.50	123.20	119.90
26	LA	1470	A	N7-C8-N9	5.50	116.55	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	LS	42	GLY	O-C-N	-5.50	113.90	122.70
2	SA	173	U	C5'-C4'-C3'	-5.50	107.20	116.00
2	SA	387	U	C5-C4-O4	-5.50	122.60	125.90
2	SA	586	C	C2-N1-C1'	-5.50	112.75	118.80
2	SA	766	A	N7-C8-N9	5.50	116.55	113.80
2	SA	941	G	C4-C5-C6	-5.50	115.50	118.80
2	SA	1018	G	O4'-C4'-C3'	5.50	110.50	106.10
19	SC	183	TYR	CB-CG-CD2	-5.50	117.70	121.00
24	S3	686	TYR	CA-CB-CG	-5.50	102.95	113.40
26	LA	566	U	P-O5'-C5'	-5.50	112.10	120.90
26	LA	747	U	C6-N1-C1'	-5.50	113.50	121.20
26	LA	856	G	C4-C5-N7	-5.50	108.60	110.80
26	LA	971	G	C6-C5-N7	-5.50	127.10	130.40
26	LA	1058	U	P-O3'-C3'	-5.50	113.10	119.70
26	LA	1212	G	N1-C6-O6	-5.50	116.60	119.90
26	LA	1530	G	N3-C2-N2	5.50	123.75	119.90
26	LA	1741	C	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	2215	C	C5-C4-N4	5.50	124.05	120.20
26	LA	2568	U	C3'-C2'-C1'	-5.50	97.10	101.50
26	LA	2869	G	C5-C6-N1	5.50	114.25	111.50
2	SA	206	C	C4'-C3'-C2'	-5.50	97.10	102.60
2	SA	375	U	C5-C6-N1	5.50	125.45	122.70
2	SA	956	U	C2-N1-C1'	-5.50	111.10	117.70
2	SA	1066	C	C2-N3-C4	-5.50	117.15	119.90
2	SA	1074	G	C4-C5-N7	5.50	113.00	110.80
2	SA	1124	G	N9-C4-C5	-5.50	103.20	105.40
7	SG	78	ARG	C-N-CA	5.50	135.44	121.70
25	LB	104	A	O4'-C1'-N9	5.50	112.60	108.20
26	LA	174	U	C2-N3-C4	-5.50	123.70	127.00
26	LA	346	A	O4'-C1'-N9	5.50	112.60	108.20
26	LA	814	C	OP1-P-OP2	-5.50	111.36	119.60
26	LA	1598	A	N9-C4-C5	-5.50	103.60	105.80
26	LA	1615	C	C5-C6-N1	5.50	123.75	121.00
26	LA	1774	C	N1-C2-O2	5.50	122.20	118.90
26	LA	1875	G	C5'-C4'-C3'	5.50	124.79	116.00
26	LA	1882	U	N3-C4-O4	5.50	123.25	119.40
26	LA	1986	C	C4-C5-C6	-5.50	114.65	117.40
26	LA	2114	A	C4-C5-N7	5.50	113.45	110.70
26	LA	2739	U	P-O3'-C3'	-5.50	113.10	119.70
26	LA	2762	C	C4-C5-C6	5.50	120.15	117.40
32	LY	54	ARG	NE-CZ-NH1	5.50	123.05	120.30
38	LE	155	VAL	CA-CB-CG2	-5.50	102.66	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	LI	12	LEU	C-N-CA	5.50	133.84	122.30
2	SA	320	A	C1'-O4'-C4'	-5.50	105.50	109.90
2	SA	375	U	C6-N1-C1'	5.50	128.89	121.20
2	SA	1350	A	N3-C4-C5	-5.50	122.95	126.80
2	SA	1468	A	N3-C4-C5	5.50	130.65	126.80
26	LA	348	A	C5-N7-C8	-5.50	101.15	103.90
26	LA	370	G	C6-N1-C2	-5.50	121.80	125.10
26	LA	447	A	C6-N1-C2	-5.50	115.30	118.60
26	LA	604	G	C5'-C4'-O4'	5.50	115.69	109.10
26	LA	1095	A	C5-N7-C8	-5.50	101.15	103.90
26	LA	1886	U	N3-C4-C5	5.50	117.90	114.60
2	SA	130	A	N3-C4-C5	5.49	130.65	126.80
2	SA	311	C	O4'-C1'-N1	5.49	112.59	108.20
2	SA	630	A	C5'-C4'-O4'	5.49	115.69	109.10
2	SA	719	C	N1-C2-O2	-5.49	115.60	118.90
2	SA	906	A	C5-C6-N6	5.49	128.09	123.70
2	SA	1241	G	N7-C8-N9	5.49	115.85	113.10
3	S1	27	A	C1'-O4'-C4'	-5.49	105.50	109.90
4	S2	20	G	N1-C2-N2	-5.49	111.25	116.20
9	SI	87	MET	CA-CB-CG	5.49	122.64	113.30
26	LA	86	G	P-O3'-C3'	-5.49	113.11	119.70
26	LA	163	C	C6-N1-C1'	-5.49	114.21	120.80
26	LA	544	C	P-O5'-C5'	5.49	129.69	120.90
26	LA	878	A	OP1-P-OP2	-5.49	111.36	119.60
26	LA	1044	C	C5'-C4'-O4'	5.49	115.69	109.10
26	LA	1669	A	C5-C6-N1	5.49	120.45	117.70
26	LA	1881	C	O5'-P-OP1	-5.49	100.75	105.70
26	LA	1942	C	C5'-C4'-C3'	-5.49	107.21	116.00
26	LA	2362	C	C1'-O4'-C4'	-5.49	105.50	109.90
26	LA	2447	G	C6-N1-C2	5.49	128.40	125.10
2	SA	514	C	C1'-O4'-C4'	5.49	114.29	109.90
2	SA	1046	A	C8-N9-C4	5.49	108.00	105.80
26	LA	213	A	C4-C5-C6	-5.49	114.25	117.00
26	LA	945	A	C5-N7-C8	-5.49	101.15	103.90
26	LA	1249	U	C3'-C2'-C1'	5.49	105.89	101.50
26	LA	2059	A	N7-C8-N9	-5.49	111.05	113.80
26	LA	2152	G	C5-C6-O6	-5.49	125.31	128.60
26	LA	2268	A	C8-N9-C4	-5.49	103.60	105.80
26	LA	2310	C	C6-N1-C2	-5.49	118.10	120.30
2	SA	193	C	C2-N3-C4	-5.49	117.16	119.90
2	SA	724	G	N1-C6-O6	-5.49	116.61	119.90
2	SA	817	C	C6-N1-C2	5.49	122.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1490	U	C6-N1-C2	5.49	124.30	121.00
4	S2	6	G	C4'-C3'-C2'	-5.49	97.11	102.60
8	SH	24	VAL	CA-CB-CG1	-5.49	102.67	110.90
26	LA	262	A	N1-C6-N6	5.49	121.89	118.60
26	LA	547	A	N9-C4-C5	-5.49	103.60	105.80
26	LA	744	U	O4'-C1'-C2'	-5.49	100.31	105.80
26	LA	769	U	C6-N1-C2	5.49	124.30	121.00
26	LA	1142	A	O5'-C5'-C4'	5.49	122.13	111.70
26	LA	1206	G	C4-C5-C6	5.49	122.09	118.80
26	LA	1274	A	C8-N9-C1'	-5.49	117.82	127.70
26	LA	1310	G	N1-C6-O6	-5.49	116.61	119.90
26	LA	1328	A	N1-C6-N6	-5.49	115.31	118.60
26	LA	1803	A	OP1-P-OP2	-5.49	111.36	119.60
26	LA	1867	G	N7-C8-N9	5.49	115.85	113.10
26	LA	2046	G	N1-C2-N3	5.49	127.19	123.90
26	LA	2187	U	C2-N3-C4	5.49	130.29	127.00
26	LA	2288	A	C5-C6-N6	5.49	128.09	123.70
26	LA	2463	C	N1-C2-N3	5.49	123.04	119.20
26	LA	2719	G	C1'-O4'-C4'	-5.49	105.51	109.90
2	SA	122	G	C8-N9-C1'	-5.49	119.86	127.00
2	SA	329	A	N3-C4-C5	-5.49	122.96	126.80
2	SA	866	C	C6-N1-C2	5.49	122.50	120.30
2	SA	932	C	O4'-C1'-N1	5.49	112.59	108.20
2	SA	994	A	C8-N9-C1'	5.49	137.58	127.70
2	SA	1086	U	P-O5'-C5'	5.49	129.68	120.90
2	SA	1290	G	C6-N1-C2	-5.49	121.81	125.10
3	S1	28	U	N1-C2-N3	-5.49	111.61	114.90
26	LA	841	G	OP2-P-O3'	5.49	117.27	105.20
26	LA	1099	G	C3'-C2'-C1'	-5.49	97.11	101.50
26	LA	1143	A	C8-N9-C1'	5.49	137.58	127.70
26	LA	1229	C	C4-C5-C6	-5.49	114.66	117.40
26	LA	1279	G	N7-C8-N9	5.49	115.84	113.10
26	LA	1383	A	C2-N3-C4	-5.49	107.86	110.60
26	LA	1447	C	C5'-C4'-O4'	5.49	115.69	109.10
26	LA	1524	G	N9-C4-C5	5.49	107.60	105.40
26	LA	1543	G	N7-C8-N9	-5.49	110.36	113.10
26	LA	1753	G	C6-N1-C2	5.49	128.39	125.10
26	LA	1943	U	N3-C2-O2	-5.49	118.36	122.20
26	LA	2004	G	N1-C6-O6	5.49	123.19	119.90
26	LA	2535	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	LA	2650	U	P-O3'-C3'	-5.49	113.11	119.70
26	LA	2772	C	C4-C5-C6	-5.49	114.66	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2890	G	N1-C2-N2	-5.49	111.26	116.20
2	SA	145	G	C4-N9-C1'	-5.49	119.37	126.50
2	SA	239	U	C2'-C3'-O3'	5.49	122.48	113.70
2	SA	790	A	C4-N9-C1'	5.49	136.18	126.30
21	SE	140	ILE	C-N-CA	5.49	135.42	121.70
26	LA	133	U	P-O3'-C3'	-5.49	113.11	119.70
26	LA	529	A	O5'-P-OP2	-5.49	100.76	105.70
26	LA	1283	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	LA	1484	U	C4-C5-C6	5.49	122.99	119.70
26	LA	1514	G	C1'-O4'-C4'	-5.49	105.51	109.90
26	LA	2421	G	N3-C4-N9	5.49	129.29	126.00
26	LA	2623	G	C5'-C4'-C3'	5.49	124.78	116.00
44	LF	45	ALA	CB-CA-C	-5.49	101.87	110.10
2	SA	86	G	C6-C5-N7	5.49	133.69	130.40
2	SA	487	A	C5'-C4'-O4'	-5.49	102.52	109.10
2	SA	729	A	C2-N3-C4	5.49	113.34	110.60
2	SA	817	C	C5-C4-N4	-5.49	116.36	120.20
2	SA	890	G	C4-C5-N7	-5.49	108.61	110.80
2	SA	1072	G	O4'-C1'-N9	5.49	112.59	108.20
2	SA	1461	G	N3-C4-N9	-5.49	122.71	126.00
3	S1	14	G	C4'-C3'-C2'	-5.49	97.11	102.60
25	LB	105	G	N1-C2-N3	-5.49	120.61	123.90
26	LA	142	A	C2-N3-C4	-5.49	107.86	110.60
26	LA	380	G	N7-C8-N9	-5.49	110.36	113.10
26	LA	607	U	N1-C2-N3	5.49	118.19	114.90
26	LA	798	G	N3-C4-N9	5.49	129.29	126.00
26	LA	1704	C	P-O5'-C5'	5.49	129.68	120.90
26	LA	1932	A	C1'-O4'-C4'	-5.49	105.51	109.90
26	LA	2776	A	C2-N3-C4	-5.49	107.86	110.60
2	SA	592	G	C6-N1-C2	-5.48	121.81	125.10
2	SA	1117	A	O4'-C1'-N9	5.48	112.59	108.20
26	LA	265	A	C6-C5-N7	-5.48	128.46	132.30
26	LA	1658	C	C6-N1-C1'	5.48	127.38	120.80
26	LA	1702	G	C5'-C4'-C3'	-5.48	107.22	116.00
26	LA	2235	G	C2-N3-C4	-5.48	109.16	111.90
26	LA	2439	A	C4-N9-C1'	5.48	136.17	126.30
26	LA	2590	A	P-O5'-C5'	-5.48	112.13	120.90
26	LA	2734	A	C5-N7-C8	5.48	106.64	103.90
32	LY	61	LYS	O-C-N	-5.48	113.93	122.70
2	SA	409	U	C1'-O4'-C4'	-5.48	105.51	109.90
2	SA	547	A	C5-C6-N1	-5.48	114.96	117.70
2	SA	618	C	P-O5'-C5'	5.48	129.67	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	679	C	N3-C2-O2	-5.48	118.06	121.90
2	SA	723	U	N3-C4-C5	5.48	117.89	114.60
2	SA	808	C	N1-C2-O2	5.48	122.19	118.90
2	SA	1370	G	OP1-P-OP2	-5.48	111.38	119.60
18	SB	22	TRP	CD2-CE2-CZ2	-5.48	115.72	122.30
18	SB	227	ASP	CB-CG-OD1	5.48	123.23	118.30
24	S3	115	VAL	CA-CB-CG1	-5.48	102.67	110.90
24	S3	367	ALA	O-C-N	-5.48	113.93	122.70
25	LB	40	U	C5-C6-N1	5.48	125.44	122.70
26	LA	263	G	O4'-C4'-C3'	-5.48	98.52	104.00
26	LA	722	A	C4-C5-N7	5.48	113.44	110.70
26	LA	1165	A	C8-N9-C4	5.48	107.99	105.80
26	LA	1622	G	N1-C2-N2	-5.48	111.27	116.20
26	LA	1846	G	N1-C2-N2	5.48	121.13	116.20
26	LA	1898	U	OP2-P-O3'	5.48	117.26	105.20
26	LA	2702	G	C5-N7-C8	5.48	107.04	104.30
26	LA	2765	A	C2'-C3'-O3'	5.48	122.47	113.70
52	LO	73	ILE	O-C-N	5.48	131.47	122.70
2	SA	406	G	OP1-P-OP2	-5.48	111.38	119.60
2	SA	544	G	C4-C5-C6	-5.48	115.51	118.80
2	SA	766	A	P-O3'-C3'	5.48	126.28	119.70
2	SA	833	G	P-O3'-C3'	5.48	126.28	119.70
2	SA	977	A	C4-C5-N7	5.48	113.44	110.70
2	SA	1253	G	N3-C2-N2	-5.48	116.06	119.90
2	SA	1271	A	C8-N9-C4	-5.48	103.61	105.80
2	SA	1325	C	N3-C4-C5	-5.48	119.71	121.90
2	SA	1458	G	C6-N1-C2	-5.48	121.81	125.10
13	SM	21	ILE	C-N-CA	5.48	135.40	121.70
25	LB	18	G	N3-C4-N9	5.48	129.29	126.00
25	LB	67	G	OP2-P-O3'	5.48	117.26	105.20
26	LA	176	A	N3-C4-C5	5.48	130.64	126.80
26	LA	1715	G	C1'-O4'-C4'	-5.48	105.52	109.90
26	LA	1790	C	C5'-C4'-C3'	-5.48	107.23	116.00
26	LA	1948	G	N7-C8-N9	-5.48	110.36	113.10
26	LA	2016	U	N1-C2-O2	5.48	126.64	122.80
26	LA	2407	A	C8-N9-C4	-5.48	103.61	105.80
26	LA	2541	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2615	U	C2-N3-C4	-5.48	123.71	127.00
26	LA	2668	G	N9-C4-C5	5.48	107.59	105.40
29	LV	67	VAL	CG1-CB-CG2	-5.48	102.13	110.90
53	LP	67	PHE	CB-CG-CD1	5.48	124.64	120.80
2	SA	1357	A	C2-N3-C4	-5.48	107.86	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1458	G	N1-C2-N2	-5.48	111.27	116.20
25	LB	108	A	C4-C5-C6	-5.48	114.26	117.00
26	LA	435	C	N3-C4-N4	5.48	121.83	118.00
26	LA	876	C	C6-N1-C2	-5.48	118.11	120.30
26	LA	904	G	N7-C8-N9	5.48	115.84	113.10
26	LA	987	C	C2-N1-C1'	-5.48	112.77	118.80
26	LA	1053	C	OP1-P-OP2	-5.48	111.38	119.60
26	LA	1206	G	OP1-P-OP2	-5.48	111.38	119.60
26	LA	1407	G	C2'-C3'-O3'	5.48	122.47	113.70
26	LA	1943	U	C5-C4-O4	-5.48	122.61	125.90
26	LA	2309	A	C5-C6-N1	5.48	120.44	117.70
2	SA	719	C	C4-C5-C6	-5.48	114.66	117.40
2	SA	1062	U	P-O5'-C5'	5.48	129.66	120.90
2	SA	1427	C	C4-C5-C6	-5.48	114.66	117.40
4	S2	57	C	C5-C6-N1	5.48	123.74	121.00
15	SO	36	ASN	O-C-N	-5.48	113.94	122.70
20	SD	106	PHE	CD1-CE1-CZ	5.48	126.67	120.10
24	S3	680	THR	N-CA-CB	5.48	120.71	110.30
26	LA	181	A	C4'-C3'-C2'	-5.48	97.12	102.60
26	LA	229	C	C4-C5-C6	5.48	120.14	117.40
26	LA	379	G	N1-C2-N3	-5.48	120.61	123.90
26	LA	716	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	891	G	N3-C4-N9	5.48	129.29	126.00
26	LA	922	C	C4-C5-C6	-5.48	114.66	117.40
26	LA	1032	A	C5-C6-N1	-5.48	114.96	117.70
26	LA	1655	A	C5'-C4'-O4'	5.48	115.67	109.10
26	LA	1655	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2114	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2298	A	N9-C4-C5	-5.48	103.61	105.80
26	LA	2472	G	N3-C4-N9	5.48	129.29	126.00
26	LA	2634	A	N7-C8-N9	5.48	116.54	113.80
26	LA	2884	U	C1'-O4'-C4'	-5.48	105.52	109.90
26	LA	2885	G	N1-C2-N3	5.48	127.19	123.90
47	LJ	153	THR	N-CA-CB	5.48	120.71	110.30
4	S2	29	C	O4'-C1'-N1	5.48	112.58	108.20
14	SN	8	ARG	CG-CD-NE	-5.48	100.30	111.80
25	LB	20	G	C8-N9-C4	5.48	108.59	106.40
26	LA	958	U	C2-N3-C4	5.48	130.28	127.00
26	LA	1423	G	N3-C4-C5	-5.48	125.86	128.60
26	LA	1753	G	P-O5'-C5'	-5.48	112.14	120.90
26	LA	1964	G	C6-C5-N7	-5.48	127.11	130.40
26	LA	2338	C	C3'-C2'-C1'	-5.48	97.12	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2583	G	C4'-C3'-C2'	5.48	108.08	102.60
54	LM	11	ALA	O-C-N	-5.48	113.94	122.70
2	SA	108	G	N3-C2-N2	5.47	123.73	119.90
2	SA	194	C	O4'-C1'-N1	5.47	112.58	108.20
2	SA	344	A	C3'-C2'-C1'	5.47	105.88	101.50
2	SA	503	C	C5-C4-N4	-5.47	116.37	120.20
2	SA	950	U	C1'-O4'-C4'	-5.47	105.52	109.90
2	SA	1398	A	C5'-C4'-O4'	5.47	115.67	109.10
4	S2	58	A	N9-C4-C5	5.47	107.99	105.80
26	LA	116	C	C5-C6-N1	5.47	123.74	121.00
26	LA	539	G	C5-N7-C8	-5.47	101.56	104.30
26	LA	665	U	OP1-P-OP2	-5.47	111.39	119.60
26	LA	1220	G	N9-C4-C5	5.47	107.59	105.40
26	LA	1611	C	C4-C5-C6	-5.47	114.66	117.40
26	LA	2158	A	C5-C6-N6	5.47	128.08	123.70
54	LM	63	VAL	CB-CA-C	-5.47	101.00	111.40
2	SA	106	C	C2-N3-C4	-5.47	117.16	119.90
2	SA	484	G	C5-C6-O6	-5.47	125.32	128.60
2	SA	573	A	O3'-P-O5'	-5.47	93.60	104.00
2	SA	770	C	C5-C6-N1	5.47	123.74	121.00
2	SA	1216	A	C5-C6-N6	5.47	128.08	123.70
2	SA	1282	C	O4'-C1'-N1	5.47	112.58	108.20
18	SB	135	MET	O-C-N	-5.47	113.94	122.70
21	SE	110	MET	C-N-CA	5.47	135.38	121.70
25	LB	95	U	O4'-C1'-N1	5.47	112.58	108.20
26	LA	71	A	C6-N1-C2	-5.47	115.32	118.60
26	LA	281	C	C6-N1-C2	-5.47	118.11	120.30
26	LA	368	A	C5'-C4'-O4'	5.47	115.67	109.10
26	LA	907	G	O5'-C5'-C4'	5.47	122.10	111.70
26	LA	1094	U	C6-N1-C2	-5.47	117.72	121.00
26	LA	1505	A	P-O3'-C3'	5.47	126.27	119.70
44	LF	101	TYR	CB-CG-CD1	-5.47	117.72	121.00
54	LM	105	ARG	O-C-N	-5.47	113.94	122.70
2	SA	128	G	C5'-C4'-O4'	5.47	115.67	109.10
2	SA	548	G	C6-N1-C2	-5.47	121.82	125.10
26	LA	1384	A	C5-C6-N1	-5.47	114.97	117.70
26	LA	1448	G	N7-C8-N9	5.47	115.84	113.10
26	LA	2872	A	N1-C2-N3	-5.47	126.56	129.30
2	SA	2	A	N1-C6-N6	-5.47	115.32	118.60
2	SA	169	C	N1-C2-N3	5.47	123.03	119.20
2	SA	291	U	N3-C2-O2	-5.47	118.37	122.20
2	SA	700	G	C5'-C4'-O4'	5.47	115.66	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1094	G	C4'-C3'-C2'	-5.47	97.13	102.60
2	SA	1358	U	N1-C2-N3	-5.47	111.62	114.90
2	SA	1405	G	C5'-C4'-O4'	-5.47	102.54	109.10
4	S2	65	G	N7-C8-N9	-5.47	110.36	113.10
24	S3	687	ASP	CB-CG-OD2	5.47	123.22	118.30
26	LA	48	G	N1-C2-N3	-5.47	120.62	123.90
26	LA	210	C	P-O3'-C3'	5.47	126.26	119.70
26	LA	621	A	C5-C6-N1	-5.47	114.97	117.70
26	LA	833	A	N1-C6-N6	-5.47	115.32	118.60
26	LA	837	C	C2'-C3'-O3'	5.47	122.45	113.70
26	LA	1288	G	OP1-P-OP2	-5.47	111.39	119.60
26	LA	1303	G	C2-N3-C4	-5.47	109.17	111.90
26	LA	1311	G	N3-C2-N2	5.47	123.73	119.90
26	LA	1709	U	O4'-C1'-N1	5.47	112.58	108.20
26	LA	1730	C	C3'-C2'-C1'	5.47	105.88	101.50
26	LA	1950	G	O4'-C1'-C2'	5.47	112.52	107.60
26	LA	2509	G	C5-C6-N1	-5.47	108.77	111.50
2	SA	289	G	C8-N9-C1'	5.47	134.11	127.00
2	SA	1071	C	C1'-O4'-C4'	-5.47	105.53	109.90
4	S2	70	C	O4'-C1'-N1	5.47	112.57	108.20
26	LA	320	A	N1-C2-N3	5.47	132.03	129.30
26	LA	2782	G	C6-N1-C2	-5.47	121.82	125.10
2	SA	249	U	C1'-O4'-C4'	-5.47	105.53	109.90
2	SA	732	C	N1-C2-N3	5.47	123.03	119.20
2	SA	1232	U	O3'-P-O5'	5.47	114.39	104.00
2	SA	1534	A	N9-C4-C5	5.47	107.99	105.80
3	S1	28	U	N1-C2-O2	5.47	126.63	122.80
4	S2	44	A	N9-C1'-C2'	-5.47	105.99	112.00
26	LA	599	A	C5'-C4'-O4'	5.47	115.66	109.10
26	LA	617	G	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	905	A	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	1064	C	C6-N1-C1'	5.47	127.36	120.80
26	LA	1144	A	C4-C5-N7	-5.47	107.97	110.70
26	LA	1160	G	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	1480	C	N3-C2-O2	-5.47	118.07	121.90
26	LA	2065	C	N1-C2-O2	-5.47	115.62	118.90
26	LA	2199	A	C5-N7-C8	-5.47	101.17	103.90
26	LA	2472	G	C2-N3-C4	-5.47	109.17	111.90
26	LA	2864	G	C8-N9-C1'	5.47	134.11	127.00
55	LQ	117	PHE	CB-CG-CD1	5.47	124.63	120.80
2	SA	222	C	N3-C4-N4	-5.46	114.17	118.00
2	SA	259	G	O4'-C1'-N9	5.46	112.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	700	G	P-O5'-C5'	5.46	129.64	120.90
2	SA	1134	G	C5-C6-N1	5.46	114.23	111.50
2	SA	1454	G	N7-C8-N9	-5.46	110.37	113.10
2	SA	1485	U	C2-N3-C4	-5.46	123.72	127.00
2	SA	1496	C	C2-N3-C4	-5.46	117.17	119.90
26	LA	131	A	OP2-P-O3'	5.46	117.22	105.20
26	LA	391	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	633	A	N7-C8-N9	-5.46	111.07	113.80
26	LA	667	U	P-O3'-C3'	-5.46	113.14	119.70
26	LA	793	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	795	C	P-O3'-C3'	5.46	126.26	119.70
26	LA	2101	A	C8-N9-C1'	5.46	137.54	127.70
26	LA	2128	G	O4'-C4'-C3'	5.46	110.47	106.10
26	LA	2130	U	C2-N1-C1'	5.46	124.26	117.70
26	LA	2331	G	C5-C6-O6	-5.46	125.32	128.60
26	LA	2777	G	P-O5'-C5'	5.46	129.64	120.90
47	LJ	57	THR	CA-CB-CG2	-5.46	104.75	112.40
56	LR	99	LEU	CB-CG-CD2	5.46	120.29	111.00
2	SA	15	G	N3-C4-C5	-5.46	125.87	128.60
2	SA	400	C	C2-N3-C4	5.46	122.63	119.90
2	SA	716	A	P-O3'-C3'	-5.46	113.14	119.70
19	SC	41	TYR	CB-CG-CD1	5.46	124.28	121.00
26	LA	221	A	C5-C6-N6	-5.46	119.33	123.70
26	LA	348	A	C5-C6-N6	-5.46	119.33	123.70
26	LA	662	G	O4'-C1'-N9	5.46	112.57	108.20
26	LA	899	A	C5-C6-N1	5.46	120.43	117.70
47	LJ	137	ARG	CG-CD-NE	-5.46	100.33	111.80
2	SA	464	U	C6-N1-C2	-5.46	117.72	121.00
2	SA	1009	U	N1-C1'-C2'	-5.46	105.99	112.00
2	SA	1277	C	P-O3'-C3'	-5.46	113.15	119.70
4	S2	45	A	C4-C5-C6	-5.46	114.27	117.00
4	S2	49	C	C5-C4-N4	-5.46	116.38	120.20
7	SG	73	GLU	O-C-N	-5.46	113.96	122.70
8	SH	48	PHE	CB-CG-CD2	-5.46	116.98	120.80
26	LA	84	A	N7-C8-N9	5.46	116.53	113.80
26	LA	100	U	C3'-C2'-C1'	-5.46	97.13	101.50
26	LA	204	A	C8-N9-C4	5.46	107.98	105.80
26	LA	985	C	N3-C4-C5	-5.46	119.72	121.90
26	LA	1021	A	C8-N9-C1'	5.46	137.53	127.70
26	LA	1233	C	N1-C2-O2	-5.46	115.62	118.90
26	LA	1275	A	C8-N9-C1'	-5.46	117.87	127.70
26	LA	1388	G	N1-C2-N3	5.46	127.18	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1599	U	C5'-C4'-C3'	5.46	124.74	116.00
26	LA	2033	A	N7-C8-N9	5.46	116.53	113.80
26	LA	2042	A	C5-C6-N1	-5.46	114.97	117.70
2	SA	100	G	N1-C6-O6	5.46	123.18	119.90
2	SA	729	A	C5-C6-N1	5.46	120.43	117.70
26	LA	398	C	N3-C4-N4	5.46	121.82	118.00
26	LA	1239	G	C1'-O4'-C4'	-5.46	105.53	109.90
26	LA	1565	C	C4-C5-C6	-5.46	114.67	117.40
26	LA	2374	C	N1-C2-N3	5.46	123.02	119.20
26	LA	2725	A	N1-C6-N6	5.46	121.88	118.60
2	SA	97	G	C6-N1-C2	-5.46	121.83	125.10
2	SA	734	G	C3'-C2'-C1'	5.46	105.87	101.50
2	SA	845	A	C6-N1-C2	5.46	121.88	118.60
2	SA	953	G	N9-C4-C5	5.46	107.58	105.40
2	SA	1118	U	N3-C4-C5	-5.46	111.33	114.60
2	SA	1279	G	C5-C6-N1	5.46	114.23	111.50
2	SA	1377	A	C5'-C4'-O4'	5.46	115.65	109.10
2	SA	1513	A	N1-C2-N3	5.46	132.03	129.30
4	S2	23	G	C5-C6-O6	-5.46	125.33	128.60
4	S2	48	U	N1-C2-N3	5.46	118.17	114.90
25	LB	25	U	C1'-O4'-C4'	-5.46	105.53	109.90
26	LA	9	G	OP2-P-O3'	5.46	117.21	105.20
26	LA	230	G	C2-N3-C4	-5.46	109.17	111.90
26	LA	588	U	C3'-C2'-C1'	-5.46	97.13	101.50
26	LA	629	G	N7-C8-N9	-5.46	110.37	113.10
26	LA	788	A	C5-C6-N1	5.46	120.43	117.70
26	LA	857	G	C2-N3-C4	-5.46	109.17	111.90
26	LA	1055	G	C4-C5-N7	-5.46	108.62	110.80
26	LA	1084	A	N9-C4-C5	5.46	107.98	105.80
26	LA	1118	C	O5'-C5'-C4'	-5.46	101.33	111.70
26	LA	1872	A	N7-C8-N9	5.46	116.53	113.80
26	LA	1900	A	P-O3'-C3'	-5.46	113.15	119.70
26	LA	2184	A	P-O3'-C3'	-5.46	113.15	119.70
26	LA	2189	U	C3'-C2'-C1'	5.46	105.87	101.50
28	LU	88	ARG	NE-CZ-NH1	-5.46	117.57	120.30
2	SA	100	G	N9-C4-C5	5.46	107.58	105.40
2	SA	475	C	C5'-C4'-C3'	-5.46	107.27	116.00
2	SA	492	C	N3-C4-C5	-5.46	119.72	121.90
2	SA	642	A	C4-C5-C6	5.46	119.73	117.00
2	SA	1147	C	O4'-C4'-C3'	-5.46	98.54	104.00
2	SA	1205	U	C2-N3-C4	-5.46	123.73	127.00
26	LA	621	A	N9-C4-C5	5.46	107.98	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1073	A	N7-C8-N9	5.46	116.53	113.80
26	LA	1108	U	OP2-P-O3'	5.46	117.20	105.20
26	LA	1850	G	P-O5'-C5'	5.46	129.63	120.90
26	LA	2120	G	C5-N7-C8	-5.46	101.57	104.30
26	LA	2141	G	C4-C5-N7	-5.46	108.62	110.80
26	LA	2313	C	N1-C2-N3	-5.46	115.38	119.20
26	LA	2791	G	C5-C6-N1	-5.46	108.77	111.50
34	L0	36	GLN	N-CA-CB	5.46	120.42	110.60
2	SA	82	G	N1-C6-O6	5.46	123.17	119.90
2	SA	246	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	1330	C	C3'-C2'-C1'	-5.46	97.14	101.50
26	LA	1520	U	C5'-C4'-O4'	5.46	115.65	109.10
26	LA	1677	A	N1-C2-N3	-5.46	126.57	129.30
26	LA	1858	A	C8-N9-C4	5.46	107.98	105.80
26	LA	2561	U	C4'-C3'-C2'	-5.46	97.14	102.60
26	LA	2723	C	OP2-P-O3'	5.46	117.20	105.20
2	SA	629	A	N1-C6-N6	5.45	121.87	118.60
2	SA	744	C	N3-C2-O2	5.45	125.72	121.90
2	SA	788	U	C1'-O4'-C4'	-5.45	105.54	109.90
2	SA	789	U	O4'-C1'-N1	5.45	112.56	108.20
2	SA	1513	A	C4'-C3'-C2'	-5.45	97.15	102.60
16	SP	51	ARG	NH1-CZ-NH2	-5.45	113.40	119.40
25	LB	71	C	N3-C4-C5	5.45	124.08	121.90
25	LB	96	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	LA	72	U	C6-N1-C1'	-5.45	113.56	121.20
26	LA	1105	U	C5'-C4'-C3'	-5.45	107.27	116.00
26	LA	1729	U	C1'-O4'-C4'	-5.45	105.54	109.90
26	LA	1755	A	N1-C6-N6	5.45	121.87	118.60
26	LA	2183	A	C2-N3-C4	-5.45	107.87	110.60
26	LA	2234	G	C5'-C4'-O4'	5.45	115.64	109.10
26	LA	2417	C	O4'-C1'-N1	5.45	112.56	108.20
2	SA	1294	G	O4'-C1'-C2'	5.45	112.51	107.60
7	SG	139	ASP	O-C-N	-5.45	113.98	122.70
25	LB	57	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	509	C	O4'-C1'-N1	5.45	112.56	108.20
26	LA	1801	A	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	1838	C	O4'-C1'-N1	5.45	112.56	108.20
26	LA	2048	G	OP1-P-OP2	-5.45	111.42	119.60
26	LA	2431	U	O5'-P-OP1	5.45	117.24	110.70
2	SA	699	C	C6-N1-C1'	5.45	127.34	120.80
2	SA	724	G	P-O5'-C5'	5.45	129.62	120.90
2	SA	1000	A	N3-C4-C5	-5.45	122.98	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1139	G	O5'-C5'-C4'	5.45	122.06	111.70
2	SA	1253	G	C3'-C2'-C1'	-5.45	97.14	101.50
2	SA	1329	A	N1-C2-N3	-5.45	126.57	129.30
4	S2	40	C	N3-C4-C5	-5.45	119.72	121.90
26	LA	42	A	N1-C2-N3	5.45	132.03	129.30
26	LA	411	G	O4'-C1'-N9	5.45	112.56	108.20
26	LA	583	G	N3-C2-N2	5.45	123.72	119.90
26	LA	1339	G	O4'-C4'-C3'	-5.45	98.55	104.00
26	LA	1420	A	P-O5'-C5'	5.45	129.62	120.90
26	LA	1777	U	O4'-C1'-C2'	5.45	112.50	107.60
26	LA	1839	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	LA	2583	G	O4'-C1'-N9	5.45	112.56	108.20
26	LA	2673	G	P-O3'-C3'	5.45	126.24	119.70
2	SA	472	U	C5'-C4'-C3'	-5.45	107.28	116.00
2	SA	685	G	P-O3'-C3'	-5.45	113.16	119.70
2	SA	885	G	C6-N1-C2	-5.45	121.83	125.10
2	SA	886	G	C3'-C2'-C1'	5.45	105.86	101.50
2	SA	1157	A	C6-N1-C2	-5.45	115.33	118.60
2	SA	1346	A	C4'-C3'-C2'	-5.45	97.15	102.60
20	SD	183	ARG	NE-CZ-NH2	5.45	123.03	120.30
25	LB	89	U	C4-C5-C6	-5.45	116.43	119.70
26	LA	32	C	C1'-O4'-C4'	5.45	114.26	109.90
26	LA	290	U	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	294	A	N3-C4-C5	5.45	130.61	126.80
26	LA	466	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	769	U	OP1-P-OP2	-5.45	111.43	119.60
26	LA	872	U	N3-C4-C5	-5.45	111.33	114.60
26	LA	1121	C	O3'-P-O5'	5.45	114.35	104.00
26	LA	1330	C	P-O3'-C3'	-5.45	113.16	119.70
26	LA	1369	G	C8-N9-C4	-5.45	104.22	106.40
26	LA	1452	G	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	1460	U	C5-C6-N1	-5.45	119.98	122.70
26	LA	1543	G	C5-C6-O6	-5.45	125.33	128.60
26	LA	1834	U	N1-C2-O2	-5.45	118.99	122.80
26	LA	2002	G	N3-C4-C5	-5.45	125.88	128.60
26	LA	2121	G	C8-N9-C4	-5.45	104.22	106.40
26	LA	2184	A	C4-C5-N7	5.45	113.42	110.70
26	LA	2229	U	C4-C5-C6	-5.45	116.43	119.70
26	LA	2326	C	N1-C2-O2	5.45	122.17	118.90
26	LA	2431	U	N1-C2-O2	-5.45	118.99	122.80
31	LX	57	TYR	CZ-CE2-CD2	-5.45	114.90	119.80
2	SA	262	A	O4'-C4'-C3'	5.45	110.46	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	326	G	C4'-C3'-C2'	5.45	108.05	102.60
2	SA	1225	A	N9-C4-C5	-5.45	103.62	105.80
2	SA	1518	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	182	A	C4-C5-N7	-5.45	107.98	110.70
26	LA	1165	A	C4-C5-C6	-5.45	114.28	117.00
26	LA	2004	G	C5-C6-O6	-5.45	125.33	128.60
26	LA	2197	U	C1'-O4'-C4'	-5.45	105.54	109.90
26	LA	2376	A	C4-C5-C6	-5.45	114.28	117.00
26	LA	2391	G	C6-N1-C2	5.45	128.37	125.10
33	LZ	22	ASN	N-CA-CB	5.45	120.41	110.60
43	L7	8	LYS	N-CA-CB	5.45	120.41	110.60
2	SA	355	C	P-O3'-C3'	-5.45	113.17	119.70
2	SA	625	U	C6-N1-C1'	5.45	128.82	121.20
2	SA	1042	A	N3-C4-C5	5.45	130.61	126.80
2	SA	1133	G	N1-C2-N2	-5.45	111.30	116.20
2	SA	1465	A	N9-C4-C5	5.45	107.98	105.80
26	LA	708	G	C4-C5-C6	5.45	122.07	118.80
26	LA	1068	G	C5-N7-C8	-5.45	101.58	104.30
26	LA	1602	U	C5'-C4'-O4'	5.45	115.64	109.10
26	LA	1658	C	C6-N1-C2	-5.45	118.12	120.30
26	LA	1661	G	C5-N7-C8	5.45	107.02	104.30
26	LA	1791	A	O4'-C1'-C2'	5.45	112.50	107.60
26	LA	1973	G	N9-C4-C5	5.45	107.58	105.40
26	LA	2093	G	C3'-C2'-C1'	-5.45	97.14	101.50
26	LA	2167	U	O5'-C5'-C4'	5.45	122.05	111.70
26	LA	2219	U	C6-N1-C2	5.45	124.27	121.00
54	LM	71	ARG	NE-CZ-NH2	-5.45	117.58	120.30
2	SA	1352	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	302	C	C5'-C4'-C3'	-5.44	107.29	116.00
26	LA	930	G	N3-C4-N9	5.44	129.27	126.00
26	LA	1456	G	N3-C4-C5	-5.44	125.88	128.60
26	LA	2631	G	C4'-C3'-C2'	-5.44	97.16	102.60
26	LA	2755	C	C6-N1-C2	5.44	122.48	120.30
2	SA	102	G	C3'-C2'-C1'	-5.44	97.14	101.50
2	SA	164	G	N9-C4-C5	5.44	107.58	105.40
2	SA	229	U	C4-C5-C6	5.44	122.97	119.70
2	SA	353	A	C8-N9-C4	5.44	107.98	105.80
2	SA	362	G	N1-C2-N3	5.44	127.17	123.90
2	SA	362	G	N7-C8-N9	-5.44	110.38	113.10
2	SA	448	A	O4'-C1'-N9	5.44	112.56	108.20
2	SA	592	G	C4-C5-C6	-5.44	115.53	118.80
2	SA	814	A	N1-C6-N6	-5.44	115.33	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1513	A	O4'-C1'-C2'	-5.44	100.36	105.80
2	SA	1517	G	P-O3'-C3'	5.44	126.23	119.70
25	LB	73	A	N9-C4-C5	5.44	107.98	105.80
26	LA	921	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	1368	G	N9-C1'-C2'	-5.44	106.01	112.00
26	LA	1416	G	O5'-C5'-C4'	-5.44	101.36	111.70
26	LA	1765	U	N3-C4-C5	-5.44	111.33	114.60
26	LA	2675	A	N9-C1'-C2'	-5.44	106.01	112.00
26	LA	2875	C	C5'-C4'-C3'	-5.44	107.29	116.00
49	LK	120	ASP	N-CA-CB	5.44	120.39	110.60
2	SA	665	A	N9-C1'-C2'	-5.44	106.02	112.00
2	SA	1041	G	C4'-C3'-C2'	-5.44	97.16	102.60
2	SA	1444	U	C2-N3-C4	-5.44	123.73	127.00
26	LA	52	A	C4'-C3'-C2'	5.44	108.04	102.60
26	LA	244	A	N9-C4-C5	-5.44	103.62	105.80
26	LA	506	G	N1-C2-N3	5.44	127.16	123.90
26	LA	1088	A	C1'-O4'-C4'	-5.44	105.55	109.90
26	LA	1132	U	C5-C4-O4	5.44	129.16	125.90
26	LA	1244	A	N1-C6-N6	5.44	121.86	118.60
26	LA	1712	U	C2-N3-C4	5.44	130.26	127.00
26	LA	2078	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	2343	U	N3-C4-O4	5.44	123.21	119.40
26	LA	2394	C	O4'-C1'-N1	-5.44	103.85	108.20
26	LA	2698	U	P-O3'-C3'	-5.44	113.17	119.70
26	LA	2726	A	C5-N7-C8	5.44	106.62	103.90
26	LA	2762	C	P-O3'-C3'	-5.44	113.17	119.70
2	SA	416	G	C5-C6-N1	-5.44	108.78	111.50
2	SA	688	G	O5'-P-OP1	5.44	117.23	110.70
2	SA	1064	G	C5-C6-O6	-5.44	125.34	128.60
2	SA	1166	G	C5-C6-O6	5.44	131.86	128.60
26	LA	411	G	P-O3'-C3'	5.44	126.23	119.70
26	LA	754	U	O4'-C4'-C3'	-5.44	98.56	104.00
26	LA	1344	U	C5-C4-O4	-5.44	122.64	125.90
26	LA	1645	G	C8-N9-C1'	-5.44	119.93	127.00
26	LA	2031	A	N1-C2-N3	-5.44	126.58	129.30
41	L5	12	ARG	NE-CZ-NH1	-5.44	117.58	120.30
2	SA	453	G	P-O5'-C5'	-5.44	112.20	120.90
2	SA	844	G	C2-N3-C4	5.44	114.62	111.90
2	SA	884	U	C4-C5-C6	-5.44	116.44	119.70
2	SA	928	G	O5'-C5'-C4'	5.44	122.03	111.70
2	SA	1017	U	C1'-O4'-C4'	-5.44	105.55	109.90
2	SA	1300	G	P-O3'-C3'	-5.44	113.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1530	G	OP1-P-OP2	-5.44	111.44	119.60
25	LB	50	A	N1-C2-N3	-5.44	126.58	129.30
26	LA	175	G	N3-C4-N9	5.44	129.26	126.00
26	LA	227	A	N1-C6-N6	-5.44	115.34	118.60
26	LA	488	G	C5-C6-O6	-5.44	125.34	128.60
26	LA	689	A	N9-C1'-C2'	-5.44	106.02	112.00
26	LA	929	U	OP1-P-OP2	-5.44	111.44	119.60
26	LA	1350	C	C5-C4-N4	5.44	124.01	120.20
26	LA	1625	C	OP1-P-OP2	-5.44	111.44	119.60
26	LA	2258	C	C6-N1-C2	-5.44	118.12	120.30
26	LA	2268	A	N1-C6-N6	-5.44	115.34	118.60
26	LA	2332	C	C3'-C2'-C1'	5.44	105.85	101.50
26	LA	2385	C	C5'-C4'-O4'	5.44	115.63	109.10
26	LA	2428	G	N9-C4-C5	5.44	107.58	105.40
26	LA	2569	G	C4-C5-C6	-5.44	115.54	118.80
26	LA	2665	A	N1-C2-N3	-5.44	126.58	129.30
26	LA	2671	G	C4'-C3'-C2'	5.44	108.04	102.60
26	LA	2800	A	P-O3'-C3'	-5.44	113.17	119.70
2	SA	353	A	N3-C4-C5	5.44	130.61	126.80
13	SM	52	ILE	N-CA-C	5.44	125.68	111.00
19	SC	14	VAL	CB-CA-C	5.44	121.73	111.40
25	LB	86	G	C6-N1-C2	5.44	128.36	125.10
26	LA	977	G	C4-N9-C1'	-5.44	119.43	126.50
26	LA	1125	G	P-O5'-C5'	-5.44	112.20	120.90
26	LA	1363	C	C4-C5-C6	5.44	120.12	117.40
26	LA	1709	U	C6-N1-C2	-5.44	117.74	121.00
26	LA	2440	C	C1'-O4'-C4'	-5.44	105.55	109.90
26	LA	2622	U	P-O5'-C5'	-5.44	112.20	120.90
52	LO	6	ARG	N-CA-CB	5.44	120.39	110.60
57	LS	21	LYS	O-C-N	-5.44	113.96	123.20
2	SA	452	A	C5-N7-C8	-5.43	101.18	103.90
2	SA	842	U	C5-C4-O4	5.43	129.16	125.90
2	SA	1224	U	C2-N1-C1'	5.43	124.22	117.70
2	SA	1358	U	C2-N3-C4	5.43	130.26	127.00
2	SA	1391	U	C6-N1-C1'	5.43	128.81	121.20
2	SA	1393	U	P-O3'-C3'	-5.43	113.18	119.70
7	SG	3	ARG	NE-CZ-NH2	-5.43	117.58	120.30
11	SK	31	VAL	CA-CB-CG1	5.43	119.05	110.90
14	SN	100	TRP	N-CA-CB	5.43	120.38	110.60
26	LA	67	U	N3-C2-O2	5.43	126.00	122.20
26	LA	131	A	C4-C5-C6	5.43	119.72	117.00
26	LA	169	G	N1-C2-N3	-5.43	120.64	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	266	G	C4-C5-C6	-5.43	115.54	118.80
26	LA	385	C	P-O3'-C3'	5.43	126.22	119.70
26	LA	551	G	C5'-C4'-O4'	-5.43	102.58	109.10
26	LA	759	G	C5-N7-C8	5.43	107.02	104.30
26	LA	822	G	C4-C5-N7	5.43	112.97	110.80
26	LA	889	C	N1-C2-N3	5.43	123.00	119.20
26	LA	963	U	C5-C4-O4	-5.43	122.64	125.90
26	LA	1247	A	C5'-C4'-C3'	5.43	124.70	116.00
26	LA	2057	G	C8-N9-C1'	-5.43	119.93	127.00
26	LA	2103	C	C2-N1-C1'	-5.43	112.82	118.80
2	SA	94	G	C6-C5-N7	-5.43	127.14	130.40
2	SA	167	A	N1-C6-N6	5.43	121.86	118.60
2	SA	191	G	C6-C5-N7	5.43	133.66	130.40
2	SA	378	G	C5'-C4'-C3'	-5.43	107.31	116.00
2	SA	496	A	P-O3'-C3'	5.43	126.22	119.70
2	SA	606	G	N3-C4-N9	5.43	129.26	126.00
2	SA	626	G	C8-N9-C4	-5.43	104.23	106.40
2	SA	774	G	C5-N7-C8	-5.43	101.58	104.30
2	SA	1212	U	OP1-P-OP2	-5.43	111.45	119.60
2	SA	1312	G	C8-N9-C4	-5.43	104.23	106.40
25	LB	56	G	N3-C4-N9	-5.43	122.74	126.00
26	LA	23	G	OP1-P-OP2	-5.43	111.45	119.60
26	LA	367	G	C6-N1-C2	-5.43	121.84	125.10
26	LA	535	G	N9-C4-C5	5.43	107.57	105.40
26	LA	577	G	OP1-P-OP2	-5.43	111.45	119.60
26	LA	1016	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	1122	G	N1-C6-O6	5.43	123.16	119.90
26	LA	1474	U	C5'-C4'-O4'	5.43	115.62	109.10
26	LA	1555	G	N3-C4-C5	-5.43	125.88	128.60
26	LA	1652	A	C3'-C2'-C1'	5.43	105.84	101.50
26	LA	1801	A	C6-N1-C2	5.43	121.86	118.60
26	LA	1841	U	C6-N1-C1'	5.43	128.81	121.20
26	LA	1950	G	C5-C6-N1	5.43	114.22	111.50
26	LA	2048	G	C6-C5-N7	-5.43	127.14	130.40
26	LA	2165	C	O4'-C1'-N1	5.43	112.55	108.20
26	LA	2191	A	C6-N1-C2	-5.43	115.34	118.60
26	LA	2224	G	N3-C2-N2	5.43	123.70	119.90
26	LA	2397	G	C1'-O4'-C4'	-5.43	105.55	109.90
26	LA	2679	A	C6-C5-N7	-5.43	128.50	132.30
32	LY	44	PHE	CG-CD2-CE2	-5.43	114.82	120.80
49	LK	126	ARG	NH1-CZ-NH2	-5.43	113.42	119.40
2	SA	399	G	N7-C8-N9	5.43	115.81	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	859	G	P-O3'-C3'	5.43	126.22	119.70
2	SA	1349	A	O4'-C1'-N9	5.43	112.55	108.20
3	S1	45	G	C8-N9-C4	5.43	108.57	106.40
18	SB	62	ARG	NE-CZ-NH2	-5.43	117.58	120.30
18	SB	159	ALA	N-CA-CB	5.43	117.70	110.10
26	LA	443	A	C6-C5-N7	-5.43	128.50	132.30
26	LA	942	G	N1-C2-N2	-5.43	111.31	116.20
26	LA	1381	G	O5'-P-OP1	5.43	117.22	110.70
26	LA	1623	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	1697	G	C5-C6-N1	5.43	114.22	111.50
26	LA	1734	G	C5'-C4'-O4'	5.43	115.62	109.10
26	LA	2250	G	C4-N9-C1'	-5.43	119.44	126.50
26	LA	2502	G	P-O5'-C5'	5.43	129.59	120.90
26	LA	2661	G	N3-C4-N9	-5.43	122.74	126.00
26	LA	2713	U	C5'-C4'-C3'	-5.43	107.31	116.00
26	LA	2904	U	C4'-C3'-C2'	-5.43	97.17	102.60
48	LN	47	ARG	N-CA-CB	-5.43	100.82	110.60
2	SA	222	C	P-O3'-C3'	-5.43	113.19	119.70
2	SA	283	U	N3-C2-O2	5.43	126.00	122.20
2	SA	356	A	C4-C5-C6	-5.43	114.29	117.00
2	SA	359	G	C8-N9-C4	-5.43	104.23	106.40
2	SA	506	G	N3-C2-N2	5.43	123.70	119.90
2	SA	625	U	C6-N1-C2	-5.43	117.74	121.00
2	SA	817	C	N3-C4-N4	5.43	121.80	118.00
2	SA	1053	G	C6-N1-C2	5.43	128.36	125.10
2	SA	1365	G	N1-C2-N3	5.43	127.16	123.90
2	SA	1416	G	N3-C2-N2	5.43	123.70	119.90
2	SA	1471	U	C2-N3-C4	-5.43	123.74	127.00
2	SA	1523	G	C1'-O4'-C4'	-5.43	105.56	109.90
6	SU	51	ALA	CB-CA-C	-5.43	101.95	110.10
13	SM	47	LEU	CB-CA-C	5.43	120.52	110.20
26	LA	104	A	N1-C2-N3	-5.43	126.58	129.30
26	LA	463	G	C5'-C4'-C3'	-5.43	107.31	116.00
26	LA	1015	U	OP1-P-OP2	-5.43	111.46	119.60
26	LA	1484	U	O4'-C1'-N1	5.43	112.54	108.20
26	LA	1500	G	C5-N7-C8	-5.43	101.58	104.30
26	LA	2014	A	O4'-C4'-C3'	5.43	110.44	106.10
26	LA	2020	A	O4'-C4'-C3'	-5.43	98.57	104.00
26	LA	2278	A	C6-N1-C2	-5.43	115.34	118.60
26	LA	2323	G	O4'-C1'-N9	5.43	112.54	108.20
26	LA	2328	A	C4-C5-C6	-5.43	114.29	117.00
26	LA	2699	C	O4'-C1'-N1	5.43	112.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	233	C	C5'-C4'-O4'	5.43	115.61	109.10
26	LA	446	G	C5-C6-O6	-5.43	125.34	128.60
26	LA	1399	C	C4-C5-C6	5.43	120.11	117.40
26	LA	2293	G	C4'-C3'-C2'	-5.43	97.17	102.60
42	L6	22	LYS	CA-CB-CG	5.43	125.34	113.40
45	LG	122	ASP	CB-CG-OD1	5.43	123.19	118.30
2	SA	151	A	C1'-O4'-C4'	-5.43	105.56	109.90
2	SA	604	G	C6-C5-N7	-5.43	127.14	130.40
2	SA	877	G	N1-C6-O6	5.43	123.16	119.90
2	SA	1018	G	C4-C5-N7	-5.43	108.63	110.80
2	SA	1243	C	OP1-P-OP2	-5.43	111.46	119.60
2	SA	1411	C	C4-C5-C6	-5.43	114.69	117.40
2	SA	1437	A	N3-C4-N9	-5.43	123.06	127.40
2	SA	1541	U	C5-C4-O4	5.43	129.16	125.90
25	LB	6	G	N9-C4-C5	-5.43	103.23	105.40
25	LB	93	C	O4'-C1'-N1	5.43	112.54	108.20
26	LA	30	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	82	U	N3-C2-O2	5.43	126.00	122.20
26	LA	289	G	N3-C2-N2	5.43	123.70	119.90
26	LA	432	A	C1'-O4'-C4'	-5.43	105.56	109.90
26	LA	1767	G	O4'-C1'-N9	5.43	112.54	108.20
26	LA	2019	A	C2'-C3'-O3'	5.43	122.38	113.70
26	LA	2719	G	C8-N9-C4	5.43	108.57	106.40
26	LA	2766	A	N1-C2-N3	-5.43	126.59	129.30
2	SA	199	A	C6-N1-C2	5.42	121.86	118.60
2	SA	290	C	C2-N3-C4	-5.42	117.19	119.90
2	SA	415	A	N3-C4-N9	5.42	131.74	127.40
2	SA	566	G	O4'-C1'-C2'	5.42	112.48	107.60
2	SA	1169	A	C5-C6-N1	5.42	120.41	117.70
2	SA	1216	A	O4'-C4'-C3'	5.42	110.44	106.10
2	SA	1240	U	O4'-C1'-N1	5.42	112.54	108.20
2	SA	1374	A	C4'-C3'-C2'	-5.42	97.17	102.60
4	S2	48	U	C4'-C3'-C2'	-5.42	97.17	102.60
18	SB	191	ASP	CB-CG-OD1	-5.42	113.42	118.30
26	LA	34	U	C1'-O4'-C4'	-5.42	105.56	109.90
26	LA	166	U	C5-C4-O4	-5.42	122.65	125.90
26	LA	225	C	O4'-C4'-C3'	-5.42	98.58	104.00
26	LA	284	U	P-O3'-C3'	-5.42	113.19	119.70
26	LA	823	C	OP1-P-O3'	5.42	117.13	105.20
26	LA	1246	A	C4-C5-N7	5.42	113.41	110.70
26	LA	1380	G	C3'-C2'-C1'	-5.42	97.16	101.50
26	LA	1675	C	C5-C6-N1	-5.42	118.29	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2169	A	C5-N7-C8	5.42	106.61	103.90
26	LA	2204	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	2318	G	C5-C6-N1	5.42	114.21	111.50
26	LA	2556	C	C4-C5-C6	5.42	120.11	117.40
26	LA	2825	G	C6-C5-N7	-5.42	127.14	130.40
26	LA	2839	G	C4'-C3'-C2'	-5.42	97.17	102.60
2	SA	565	U	C3'-C2'-C1'	5.42	105.84	101.50
2	SA	582	C	C6-N1-C2	-5.42	118.13	120.30
2	SA	1165	U	C5-C4-O4	5.42	129.15	125.90
20	SD	22	SER	CB-CA-C	-5.42	99.80	110.10
26	LA	368	A	N9-C4-C5	-5.42	103.63	105.80
26	LA	762	U	N3-C4-O4	5.42	123.20	119.40
26	LA	2087	G	OP1-P-OP2	-5.42	111.47	119.60
2	SA	185	U	C2'-C3'-O3'	5.42	122.37	113.70
2	SA	458	U	C5'-C4'-O4'	5.42	115.61	109.10
2	SA	501	C	N3-C4-C5	-5.42	119.73	121.90
2	SA	624	C	N1-C2-N3	5.42	123.00	119.20
2	SA	651	C	N3-C4-N4	-5.42	114.20	118.00
2	SA	1299	A	N3-C4-N9	5.42	131.74	127.40
2	SA	1484	C	N1-C2-O2	-5.42	115.65	118.90
7	SG	159	ARG	NE-CZ-NH2	5.42	123.01	120.30
25	LB	16	G	C4-N9-C1'	5.42	133.55	126.50
26	LA	921	C	C5-C4-N4	-5.42	116.41	120.20
26	LA	1349	C	P-O5'-C5'	-5.42	112.22	120.90
26	LA	1645	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	1671	U	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2225	A	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2394	C	P-O5'-C5'	5.42	129.57	120.90
26	LA	2429	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	2446	G	C4-N9-C1'	5.42	133.55	126.50
26	LA	2504	U	N3-C4-C5	-5.42	111.35	114.60
26	LA	2632	A	C6-N1-C2	-5.42	115.35	118.60
44	LF	175	ILE	O-C-N	-5.42	114.03	122.70
54	LM	61	VAL	CB-CA-C	-5.42	101.10	111.40
2	SA	330	C	C5-C4-N4	5.42	123.99	120.20
2	SA	1383	C	C5-C6-N1	5.42	123.71	121.00
3	S1	48	C	C2-N3-C4	5.42	122.61	119.90
4	S2	64	G	N7-C8-N9	5.42	115.81	113.10
9	SI	123	ARG	NH1-CZ-NH2	-5.42	113.44	119.40
26	LA	595	C	O4'-C1'-C2'	5.42	112.48	107.60
26	LA	1978	A	N3-C4-N9	-5.42	123.06	127.40
2	SA	560	A	C5-C6-N1	-5.42	114.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	596	A	C4-C5-C6	5.42	119.71	117.00
2	SA	795	C	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	888	G	C5-C6-N1	5.42	114.21	111.50
2	SA	1093	A	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	1249	C	O4'-C1'-N1	5.42	112.53	108.20
2	SA	1252	A	C6-C5-N7	-5.42	128.51	132.30
2	SA	1518	A	C6-N1-C2	5.42	121.85	118.60
2	SA	1526	G	C1'-O4'-C4'	-5.42	105.57	109.90
3	S1	22	G	C4-C5-N7	5.42	112.97	110.80
9	SI	17	ARG	NE-CZ-NH2	-5.42	117.59	120.30
10	SJ	63	ASP	C-N-CA	5.42	135.25	121.70
26	LA	74	A	OP1-P-OP2	-5.42	111.47	119.60
26	LA	390	U	N1-C2-N3	-5.42	111.65	114.90
26	LA	1527	G	C2-N3-C4	-5.42	109.19	111.90
26	LA	2319	G	O4'-C1'-N9	5.42	112.53	108.20
26	LA	2764	A	O4'-C1'-N9	5.42	112.53	108.20
2	SA	163	C	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	444	G	C4-C5-C6	-5.42	115.55	118.80
2	SA	716	A	N1-C2-N3	-5.42	126.59	129.30
2	SA	1055	A	C4-C5-C6	-5.42	114.29	117.00
2	SA	1244	G	N1-C2-N3	-5.42	120.65	123.90
24	S3	32	TYR	CB-CA-C	-5.42	99.57	110.40
24	S3	487	VAL	CA-CB-CG1	-5.42	102.77	110.90
26	LA	302	C	OP1-P-OP2	-5.42	111.47	119.60
26	LA	406	G	N3-C4-C5	5.42	131.31	128.60
26	LA	428	A	N1-C2-N3	-5.42	126.59	129.30
26	LA	657	U	C5'-C4'-C3'	5.42	124.67	116.00
26	LA	727	A	C4-C5-N7	5.42	113.41	110.70
26	LA	857	G	C4-C5-N7	-5.42	108.63	110.80
26	LA	1283	G	C8-N9-C4	-5.42	104.23	106.40
26	LA	1327	A	N1-C2-N3	5.42	132.01	129.30
26	LA	1348	C	N3-C4-C5	-5.42	119.73	121.90
26	LA	1587	G	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2481	G	C5-C6-O6	-5.42	125.35	128.60
26	LA	2895	G	N3-C4-C5	-5.42	125.89	128.60
49	LK	137	LEU	CB-CG-CD1	5.42	120.21	111.00
1	SS	11	ASP	N-CA-C	5.42	125.62	111.00
2	SA	665	A	N1-C6-N6	-5.42	115.35	118.60
2	SA	1533	C	N3-C4-N4	5.42	121.79	118.00
21	SE	13	LYS	N-CA-CB	-5.42	100.85	110.60
26	LA	20	C	N1-C2-O2	5.42	122.15	118.90
26	LA	157	C	C2-N3-C4	-5.42	117.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	233	A	C2-N3-C4	5.42	113.31	110.60
26	LA	660	C	N3-C4-N4	5.42	121.79	118.00
26	LA	1427	A	C5'-C4'-C3'	-5.42	107.34	116.00
26	LA	1590	A	C8-N9-C4	5.42	107.97	105.80
26	LA	1783	A	C1'-O4'-C4'	5.42	114.23	109.90
26	LA	1878	G	C6-N1-C2	-5.42	121.85	125.10
26	LA	2694	G	P-O3'-C3'	-5.42	113.20	119.70
2	SA	385	C	O4'-C4'-C3'	5.41	110.43	106.10
2	SA	533	A	N9-C1'-C2'	-5.41	106.05	112.00
2	SA	748	G	N9-C1'-C2'	-5.41	106.05	112.00
2	SA	1336	C	C3'-C2'-C1'	-5.41	97.17	101.50
4	S2	38	A	C6-N1-C2	5.41	121.85	118.60
18	SB	49	PHE	CB-CG-CD2	5.41	124.59	120.80
26	LA	126	A	O5'-P-OP2	-5.41	100.83	105.70
26	LA	251	A	OP2-P-O3'	5.41	117.11	105.20
26	LA	293	U	N3-C2-O2	-5.41	118.41	122.20
26	LA	570	G	O5'-C5'-C4'	5.41	121.98	111.70
26	LA	807	U	C5'-C4'-C3'	5.41	124.66	116.00
26	LA	989	G	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1017	G	C4-N9-C1'	-5.41	119.46	126.50
26	LA	1202	G	P-O5'-C5'	-5.41	112.24	120.90
26	LA	2012	G	C6-C5-N7	-5.41	127.15	130.40
26	LA	2021	C	N3-C4-C5	-5.41	119.73	121.90
26	LA	2094	A	O5'-P-OP2	-5.41	100.83	105.70
26	LA	2333	A	C4-C5-N7	5.41	113.41	110.70
26	LA	2376	A	C5-C6-N1	5.41	120.41	117.70
26	LA	2422	C	C5-C4-N4	-5.41	116.41	120.20
26	LA	2445	G	C8-N9-C4	-5.41	104.23	106.40
26	LA	2726	A	O4'-C4'-C3'	5.41	110.43	106.10
26	LA	2892	G	N3-C2-N2	5.41	123.69	119.90
2	SA	89	U	O4'-C4'-C3'	-5.41	98.59	104.00
2	SA	791	G	P-O3'-C3'	5.41	126.19	119.70
2	SA	803	G	O4'-C1'-N9	5.41	112.53	108.20
2	SA	1507	A	C5-N7-C8	5.41	106.61	103.90
26	LA	51	G	O3'-P-O5'	-5.41	93.72	104.00
26	LA	422	A	N3-C4-N9	-5.41	123.07	127.40
26	LA	974	G	C4-C5-C6	5.41	122.05	118.80
26	LA	1027	A	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1416	G	C8-N9-C4	5.41	108.56	106.40
26	LA	1867	G	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1980	G	P-O3'-C3'	-5.41	113.21	119.70
26	LA	2802	G	C6-C5-N7	5.41	133.65	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2866	U	C6-N1-C2	-5.41	117.75	121.00
2	SA	159	G	C4-N9-C1'	-5.41	119.47	126.50
2	SA	230	G	C3'-C2'-C1'	5.41	105.83	101.50
2	SA	451	A	C5-C6-N6	-5.41	119.37	123.70
2	SA	537	G	N3-C4-C5	-5.41	125.89	128.60
2	SA	696	A	N3-C4-C5	-5.41	123.01	126.80
2	SA	944	G	C5'-C4'-C3'	-5.41	107.34	116.00
2	SA	1024	G	N1-C2-N3	-5.41	120.65	123.90
2	SA	1328	C	C5'-C4'-C3'	-5.41	107.34	116.00
14	SN	89	ARG	NH1-CZ-NH2	-5.41	113.45	119.40
26	LA	31	C	OP1-P-OP2	-5.41	111.49	119.60
26	LA	354	A	C6-N1-C2	-5.41	115.35	118.60
26	LA	669	G	O4'-C4'-C3'	-5.41	98.59	104.00
26	LA	968	C	C5-C6-N1	-5.41	118.30	121.00
26	LA	1135	C	C2'-C3'-O3'	5.41	122.36	113.70
26	LA	1200	C	N3-C4-N4	5.41	121.79	118.00
26	LA	1788	C	C3'-C2'-C1'	-5.41	97.17	101.50
26	LA	2495	G	N1-C6-O6	-5.41	116.65	119.90
26	LA	2629	U	C4'-C3'-C2'	5.41	108.01	102.60
26	LA	2630	G	C8-N9-C1'	-5.41	119.97	127.00
29	LV	1	MET	CG-SD-CE	-5.41	91.54	100.20
2	SA	195	A	N7-C8-N9	-5.41	111.10	113.80
2	SA	273	U	N1-C1'-C2'	-5.41	106.05	112.00
2	SA	1193	G	C4-N9-C1'	-5.41	119.47	126.50
2	SA	1314	C	C6-N1-C2	-5.41	118.14	120.30
2	SA	1433	A	C2'-C3'-O3'	5.41	122.35	113.70
2	SA	1467	C	C6-N1-C2	-5.41	118.14	120.30
4	S2	45	A	P-O5'-C5'	5.41	129.55	120.90
13	SM	20	SER	N-CA-CB	5.41	118.61	110.50
25	LB	57	A	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1002	G	C5-C6-O6	5.41	131.84	128.60
26	LA	1337	G	N1-C2-N2	-5.41	111.33	116.20
26	LA	1383	A	N1-C2-N3	5.41	132.00	129.30
26	LA	1979	U	OP1-P-OP2	-5.41	111.49	119.60
26	LA	2178	C	N1-C1'-C2'	-5.41	106.05	112.00
26	LA	2231	U	N3-C4-C5	-5.41	111.36	114.60
26	LA	2361	G	N3-C2-N2	5.41	123.69	119.90
26	LA	2630	G	N1-C6-O6	5.41	123.14	119.90
26	LA	2801	G	C6-N1-C2	-5.41	121.85	125.10
26	LA	2874	C	C2-N3-C4	-5.41	117.19	119.90
26	LA	2888	C	C5-C6-N1	-5.41	118.30	121.00
33	LZ	22	ASN	CB-CA-C	-5.41	99.58	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	176	C	C5-C4-N4	5.41	123.98	120.20
2	SA	196	A	C5-C6-N6	5.41	128.03	123.70
2	SA	822	U	N3-C2-O2	-5.41	118.42	122.20
25	LB	87	U	C5-C4-O4	-5.41	122.66	125.90
26	LA	754	U	C5'-C4'-C3'	5.41	124.65	116.00
26	LA	863	A	C6-C5-N7	-5.41	128.51	132.30
26	LA	1146	C	N3-C4-C5	5.41	124.06	121.90
26	LA	1884	G	P-O5'-C5'	-5.41	112.25	120.90
26	LA	2800	A	C5'-C4'-O4'	5.41	115.59	109.10
2	SA	224	U	C5-C4-O4	-5.41	122.66	125.90
2	SA	304	U	C4'-C3'-C2'	5.41	108.01	102.60
2	SA	682	G	N1-C2-N3	5.41	127.14	123.90
2	SA	929	G	P-O3'-C3'	-5.41	113.21	119.70
4	S2	53	G	N1-C6-O6	-5.41	116.66	119.90
24	S3	602	GLU	OE1-CD-OE2	-5.41	116.81	123.30
26	LA	101	A	C2'-C3'-O3'	5.41	122.35	113.70
26	LA	1125	G	C4-C5-N7	-5.41	108.64	110.80
26	LA	1169	A	C5-C6-N6	-5.41	119.38	123.70
26	LA	1500	G	C1'-O4'-C4'	-5.41	105.58	109.90
26	LA	1721	G	OP1-P-OP2	-5.41	111.49	119.60
26	LA	1760	C	OP1-P-OP2	-5.41	111.49	119.60
26	LA	2278	A	N1-C2-N3	5.41	132.00	129.30
26	LA	2492	U	C5-C6-N1	-5.41	120.00	122.70
26	LA	2892	G	N3-C4-N9	-5.41	122.76	126.00
56	LR	24	THR	N-CA-CB	5.41	120.57	110.30
26	LA	878	A	N9-C4-C5	-5.40	103.64	105.80
26	LA	1084	A	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1416	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1483	G	N3-C2-N2	-5.40	116.12	119.90
26	LA	1737	G	C4-C5-N7	5.40	112.96	110.80
26	LA	2306	C	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	2379	G	C4-C5-C6	-5.40	115.56	118.80
26	LA	2655	G	OP1-P-OP2	-5.40	111.49	119.60
2	SA	496	A	N1-C2-N3	-5.40	126.60	129.30
2	SA	744	C	C5'-C4'-O4'	5.40	115.58	109.10
2	SA	976	G	N3-C2-N2	5.40	123.68	119.90
2	SA	1005	A	C2-N3-C4	5.40	113.30	110.60
2	SA	1295	U	O4'-C1'-C2'	5.40	112.46	107.60
2	SA	1300	G	N3-C2-N2	-5.40	116.12	119.90
26	LA	1118	C	O4'-C1'-N1	5.40	112.52	108.20
26	LA	1125	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	1330	C	OP1-P-OP2	-5.40	111.50	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1920	C	OP2-P-O3'	5.40	117.08	105.20
26	LA	2054	A	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	2401	U	C6-N1-C2	-5.40	117.76	121.00
26	LA	2531	A	N9-C4-C5	5.40	107.96	105.80
26	LA	2549	G	C5-C6-O6	5.40	131.84	128.60
26	LA	2551	C	N3-C2-O2	-5.40	118.12	121.90
26	LA	2575	C	C6-N1-C1'	-5.40	114.32	120.80
26	LA	2576	G	C8-N9-C1'	-5.40	119.98	127.00
48	LN	143	GLU	N-CA-CB	-5.40	100.87	110.60
2	SA	83	C	N3-C4-N4	5.40	121.78	118.00
2	SA	136	C	C5-C6-N1	-5.40	118.30	121.00
2	SA	578	C	C2-N3-C4	-5.40	117.20	119.90
2	SA	958	A	O4'-C1'-N9	-5.40	103.88	108.20
2	SA	1000	A	C8-N9-C4	-5.40	103.64	105.80
2	SA	1186	G	C5'-C4'-C3'	-5.40	107.36	116.00
2	SA	1479	C	O4'-C1'-N1	5.40	112.52	108.20
2	SA	1518	A	N1-C2-N3	-5.40	126.60	129.30
19	SC	11	LEU	O-C-N	-5.40	114.02	123.20
20	SD	31	CYS	CB-CA-C	-5.40	99.60	110.40
25	LB	83	G	C6-C5-N7	-5.40	127.16	130.40
26	LA	83	A	N9-C4-C5	-5.40	103.64	105.80
26	LA	654	A	N9-C4-C5	5.40	107.96	105.80
26	LA	961	C	N3-C4-N4	5.40	121.78	118.00
26	LA	1104	C	C6-N1-C2	5.40	122.46	120.30
26	LA	1162	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1470	A	C6-C5-N7	-5.40	128.52	132.30
26	LA	1906	G	C5'-C4'-C3'	-5.40	107.36	116.00
26	LA	2006	C	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	2040	G	N1-C2-N3	-5.40	120.66	123.90
26	LA	2066	C	N3-C4-C5	5.40	124.06	121.90
26	LA	2229	U	O4'-C1'-N1	5.40	112.52	108.20
26	LA	2331	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	2898	U	C4-C5-C6	-5.40	116.46	119.70
38	LE	123	LYS	CB-CA-C	-5.40	99.60	110.40
2	SA	768	A	C6-N1-C2	-5.40	115.36	118.60
2	SA	816	A	C5-N7-C8	5.40	106.60	103.90
7	SG	17	PHE	CB-CG-CD2	-5.40	117.02	120.80
26	LA	1086	A	C5-N7-C8	5.40	106.60	103.90
26	LA	2473	U	O4'-C1'-N1	5.40	112.52	108.20
29	LV	62	VAL	CG1-CB-CG2	5.40	119.54	110.90
50	LL	16	TYR	CB-CG-CD2	-5.40	117.76	121.00
2	SA	180	U	O4'-C1'-N1	5.40	112.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	582	C	N3-C4-C5	-5.40	119.74	121.90
2	SA	794	A	OP1-P-OP2	-5.40	111.50	119.60
2	SA	865	A	C5-C6-N1	5.40	120.40	117.70
2	SA	929	G	C6-N1-C2	-5.40	121.86	125.10
2	SA	1108	G	N1-C6-O6	5.40	123.14	119.90
2	SA	1272	G	N3-C2-N2	-5.40	116.12	119.90
2	SA	1365	G	C8-N9-C4	-5.40	104.24	106.40
25	LB	100	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	824	U	OP1-P-OP2	-5.40	111.50	119.60
26	LA	952	G	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	1645	G	C6-C5-N7	-5.40	127.16	130.40
26	LA	1924	C	C2-N3-C4	-5.40	117.20	119.90
26	LA	1997	C	N1-C2-O2	5.40	122.14	118.90
26	LA	2194	U	O4'-C1'-N1	5.40	112.52	108.20
26	LA	2317	A	N3-C4-N9	5.40	131.72	127.40
26	LA	2467	C	C2-N3-C4	-5.40	117.20	119.90
26	LA	2656	U	C5-C4-O4	-5.40	122.66	125.90
26	LA	2782	G	N3-C4-C5	-5.40	125.90	128.60
2	SA	658	C	N3-C4-C5	-5.40	119.74	121.90
16	SP	35	ARG	NH1-CZ-NH2	-5.40	113.46	119.40
22	SF	99	ALA	O-C-N	-5.40	114.07	122.70
26	LA	415	A	C5-C6-N6	-5.40	119.38	123.70
26	LA	1578	U	O5'-C5'-C4'	5.40	121.95	111.70
2	SA	64	G	C8-N9-C4	-5.39	104.24	106.40
2	SA	65	A	OP1-P-OP2	-5.39	111.51	119.60
2	SA	1020	G	O3'-P-O5'	5.39	114.25	104.00
4	S2	21	U	C6-N1-C2	-5.39	117.76	121.00
26	LA	70	G	N1-C6-O6	5.39	123.14	119.90
26	LA	341	C	C5'-C4'-O4'	5.39	115.58	109.10
26	LA	451	U	O3'-P-O5'	-5.39	93.75	104.00
26	LA	453	A	C4-C5-C6	-5.39	114.30	117.00
26	LA	571	U	C5'-C4'-C3'	-5.39	107.37	116.00
26	LA	584	C	O5'-P-OP2	-5.39	100.84	105.70
26	LA	613	A	C4-N9-C1'	5.39	136.01	126.30
26	LA	1070	A	OP2-P-O3'	5.39	117.07	105.20
26	LA	1078	U	C6-N1-C2	-5.39	117.76	121.00
26	LA	1357	C	N3-C2-O2	-5.39	118.12	121.90
26	LA	1622	G	P-O5'-C5'	-5.39	112.27	120.90
26	LA	1748	C	C2-N3-C4	5.39	122.60	119.90
26	LA	1866	A	N1-C2-N3	5.39	132.00	129.30
26	LA	1922	G	O4'-C1'-C2'	5.39	112.45	107.60
26	LA	1998	A	C4-C5-N7	5.39	113.40	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	67	C	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	835	U	C4'-C3'-C2'	-5.39	97.21	102.60
2	SA	845	A	N1-C6-N6	-5.39	115.36	118.60
2	SA	953	G	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	995	C	C5'-C4'-C3'	5.39	124.63	116.00
2	SA	1142	G	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	1531	A	C3'-C2'-C1'	5.39	105.81	101.50
24	S3	194	ASP	CB-CG-OD1	5.39	123.15	118.30
24	S3	548	TYR	CD1-CE1-CZ	5.39	124.65	119.80
25	LB	24	G	C5-N7-C8	5.39	107.00	104.30
26	LA	24	G	C5'-C4'-C3'	5.39	124.63	116.00
26	LA	320	A	C1'-O4'-C4'	5.39	114.21	109.90
26	LA	359	G	C4-C5-N7	-5.39	108.64	110.80
26	LA	390	U	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	522	A	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	1017	G	N9-C4-C5	-5.39	103.24	105.40
26	LA	1090	A	N1-C2-N3	-5.39	126.60	129.30
26	LA	1205	A	C2-N3-C4	-5.39	107.90	110.60
26	LA	1591	A	O4'-C1'-C2'	5.39	112.45	107.60
26	LA	1894	C	O4'-C1'-N1	5.39	112.51	108.20
26	LA	2187	U	N1-C2-N3	-5.39	111.66	114.90
26	LA	2783	U	N1-C2-O2	-5.39	119.03	122.80
26	LA	2849	U	N3-C4-C5	-5.39	111.36	114.60
46	LH	150	TYR	CB-CG-CD1	-5.39	117.76	121.00
2	SA	969	A	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	1278	G	C5'-C4'-O4'	5.39	115.57	109.10
26	LA	797	G	C4'-C3'-C2'	-5.39	97.21	102.60
26	LA	827	U	C6-N1-C1'	-5.39	113.65	121.20
26	LA	940	G	C4-C5-C6	-5.39	115.57	118.80
26	LA	2321	U	N3-C4-C5	-5.39	111.37	114.60
2	SA	48	C	N3-C4-C5	-5.39	119.74	121.90
2	SA	208	U	C3'-C2'-C1'	-5.39	97.19	101.50
2	SA	567	G	N3-C4-N9	-5.39	122.77	126.00
2	SA	574	A	P-O3'-C3'	-5.39	113.23	119.70
2	SA	721	G	N7-C8-N9	5.39	115.79	113.10
2	SA	816	A	O5'-P-OP1	5.39	117.17	110.70
2	SA	1115	U	N3-C4-O4	5.39	123.17	119.40
2	SA	1539	C	C3'-C2'-C1'	-5.39	97.19	101.50
3	S1	25	U	P-O3'-C3'	-5.39	113.23	119.70
26	LA	64	A	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	489	G	N1-C2-N2	-5.39	111.35	116.20
26	LA	573	U	C2'-C3'-O3'	5.39	122.32	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	822	G	N3-C4-N9	5.39	129.23	126.00
26	LA	1369	G	C8-N9-C1'	-5.39	119.99	127.00
26	LA	1586	A	C6-C5-N7	-5.39	128.53	132.30
26	LA	1624	U	C6-N1-C1'	5.39	128.75	121.20
26	LA	1878	G	C2-N3-C4	5.39	114.59	111.90
26	LA	1950	G	N3-C2-N2	-5.39	116.13	119.90
26	LA	2197	U	O4'-C1'-C2'	5.39	112.45	107.60
27	LD	211	ARG	NE-CZ-NH1	-5.39	117.61	120.30
2	SA	789	U	C5-C6-N1	5.39	125.39	122.70
2	SA	842	U	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	988	G	C2-N3-C4	-5.39	109.21	111.90
2	SA	1092	A	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	1174	G	C5'-C4'-C3'	5.39	124.62	116.00
2	SA	1406	U	O4'-C1'-N1	5.39	112.51	108.20
2	SA	1525	G	N9-C4-C5	-5.39	103.25	105.40
26	LA	43	G	N7-C8-N9	5.39	115.79	113.10
26	LA	372	G	C6-N1-C2	5.39	128.33	125.10
26	LA	1974	C	C3'-C2'-C1'	-5.39	97.19	101.50
26	LA	2461	A	N1-C6-N6	5.39	121.83	118.60
26	LA	2577	A	C2-N3-C4	-5.39	107.91	110.60
26	LA	2747	G	C5'-C4'-O4'	5.39	115.56	109.10
26	LA	2899	A	O4'-C1'-N9	5.39	112.51	108.20
47	LJ	99	ALA	CB-CA-C	5.39	118.18	110.10
2	SA	281	G	N9-C1'-C2'	-5.39	106.08	112.00
2	SA	520	A	C6-C5-N7	-5.39	128.53	132.30
2	SA	554	A	O4'-C1'-N9	5.39	112.51	108.20
2	SA	560	A	N1-C6-N6	5.39	121.83	118.60
2	SA	715	A	P-O3'-C3'	5.39	126.16	119.70
2	SA	775	G	C8-N9-C4	5.39	108.56	106.40
2	SA	968	A	C6-N1-C2	5.39	121.83	118.60
2	SA	1325	C	C6-N1-C1'	5.39	127.26	120.80
2	SA	1365	G	C5-C6-N1	-5.39	108.81	111.50
2	SA	1480	A	OP1-P-OP2	-5.39	111.52	119.60
2	SA	1502	A	N1-C6-N6	-5.39	115.37	118.60
4	S2	45	A	N7-C8-N9	5.39	116.49	113.80
15	SO	83	ARG	NE-CZ-NH2	-5.39	117.61	120.30
26	LA	443	A	O4'-C1'-C2'	-5.39	100.41	105.80
26	LA	2087	G	C6-N1-C2	-5.39	121.87	125.10
2	SA	132	C	C4-C5-C6	-5.38	114.71	117.40
2	SA	722	G	C4-N9-C1'	5.38	133.50	126.50
2	SA	1042	A	P-O5'-C5'	5.38	129.51	120.90
2	SA	1166	G	P-O3'-C3'	5.38	126.16	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1500	A	P-O5'-C5'	5.38	129.52	120.90
4	S2	9	G	O4'-C1'-N9	5.38	112.51	108.20
22	SF	25	TYR	CD1-CE1-CZ	-5.38	114.95	119.80
26	LA	162	U	C5-C6-N1	-5.38	120.01	122.70
26	LA	362	A	P-O5'-C5'	5.38	129.51	120.90
26	LA	392	U	C5-C4-O4	-5.38	122.67	125.90
26	LA	618	G	C1'-O4'-C4'	-5.38	105.59	109.90
26	LA	1096	A	OP2-P-O3'	5.38	117.05	105.20
26	LA	1117	C	C5'-C4'-C3'	-5.38	107.38	116.00
26	LA	1329	U	C1'-O4'-C4'	-5.38	105.59	109.90
26	LA	1996	C	C3'-C2'-C1'	5.38	105.81	101.50
45	LG	113	PHE	CD1-CG-CD2	5.38	125.30	118.30
2	SA	464	U	N1-C2-N3	5.38	118.13	114.90
2	SA	519	C	O4'-C1'-N1	5.38	112.51	108.20
2	SA	1211	U	N1-C2-N3	5.38	118.13	114.90
26	LA	541	A	O4'-C4'-C3'	-5.38	98.62	104.00
26	LA	1137	G	N7-C8-N9	5.38	115.79	113.10
26	LA	1565	C	N1-C2-N3	-5.38	115.43	119.20
26	LA	1585	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2064	C	C6-N1-C2	-5.38	118.15	120.30
26	LA	2507	C	N1-C2-N3	5.38	122.97	119.20
26	LA	2805	C	C5-C4-N4	-5.38	116.43	120.20
2	SA	91	U	N1-C2-O2	-5.38	119.03	122.80
2	SA	131	A	N1-C6-N6	5.38	121.83	118.60
2	SA	314	C	N3-C2-O2	-5.38	118.13	121.90
2	SA	354	G	P-O5'-C5'	5.38	129.51	120.90
2	SA	437	U	O4'-C1'-C2'	5.38	112.44	107.60
2	SA	472	U	C3'-C2'-C1'	5.38	105.81	101.50
2	SA	880	C	O4'-C1'-C2'	5.38	112.44	107.60
3	S1	38	G	N3-C4-N9	5.38	129.23	126.00
4	S2	9	G	C8-N9-C4	5.38	108.55	106.40
4	S2	10	G	C4'-C3'-C2'	-5.38	97.22	102.60
10	SJ	23	ALA	N-CA-CB	-5.38	102.57	110.10
24	S3	144	ASP	CB-CG-OD2	5.38	123.14	118.30
25	LB	14	U	C1'-O4'-C4'	-5.38	105.59	109.90
25	LB	50	A	O4'-C1'-N9	5.38	112.50	108.20
25	LB	59	A	C2-N3-C4	5.38	113.29	110.60
25	LB	83	G	C6-N1-C2	-5.38	121.87	125.10
26	LA	377	G	C5-N7-C8	5.38	106.99	104.30
26	LA	1029	A	C5-C6-N6	-5.38	119.39	123.70
26	LA	1390	U	P-O3'-C3'	5.38	126.16	119.70
26	LA	1736	U	N1-C2-N3	5.38	118.13	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1797	G	N1-C2-N2	-5.38	111.36	116.20
26	LA	2290	G	N7-C8-N9	-5.38	110.41	113.10
26	LA	2655	G	P-O3'-C3'	-5.38	113.24	119.70
26	LA	2868	A	C6-C5-N7	-5.38	128.53	132.30
56	LR	64	SER	CB-CA-C	5.38	120.33	110.10
58	LT	74	ILE	CB-CA-C	-5.38	100.84	111.60
2	SA	420	U	C5-C6-N1	-5.38	120.01	122.70
2	SA	724	G	O4'-C1'-N9	5.38	112.50	108.20
2	SA	1023	U	N3-C4-O4	5.38	123.17	119.40
2	SA	1393	U	C4'-C3'-C2'	-5.38	97.22	102.60
2	SA	1512	U	N1-C2-N3	5.38	118.13	114.90
8	SH	127	TYR	CZ-CE2-CD2	-5.38	114.96	119.80
26	LA	98	G	P-O5'-C5'	-5.38	112.29	120.90
26	LA	131	A	C5-C6-N6	-5.38	119.40	123.70
26	LA	1437	C	OP1-P-OP2	-5.38	111.53	119.60
26	LA	1572	A	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	1622	G	N1-C2-N3	5.38	127.13	123.90
26	LA	1715	G	N1-C2-N2	5.38	121.04	116.20
26	LA	2193	G	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2833	U	C4'-C3'-C2'	-5.38	97.22	102.60
2	SA	331	G	N7-C8-N9	-5.38	110.41	113.10
2	SA	371	A	C8-N9-C4	-5.38	103.65	105.80
2	SA	763	G	OP1-P-OP2	-5.38	111.53	119.60
2	SA	865	A	C2-N3-C4	-5.38	107.91	110.60
2	SA	1233	G	O4'-C1'-N9	5.38	112.50	108.20
2	SA	1270	G	C4-C5-N7	5.38	112.95	110.80
2	SA	1296	C	N3-C2-O2	-5.38	118.14	121.90
2	SA	1446	A	N9-C1'-C2'	-5.38	106.08	112.00
4	S2	33	C	P-O3'-C3'	5.38	126.15	119.70
4	S2	48	U	C2-N3-C4	-5.38	123.77	127.00
21	SE	37	VAL	CA-CB-CG1	-5.38	102.83	110.90
26	LA	328	U	N3-C2-O2	-5.38	118.44	122.20
26	LA	908	C	C4-C5-C6	-5.38	114.71	117.40
26	LA	1228	G	C2-N3-C4	-5.38	109.21	111.90
26	LA	1250	G	C8-N9-C4	-5.38	104.25	106.40
26	LA	1699	G	O4'-C4'-C3'	5.38	110.40	106.10
26	LA	1708	C	O3'-P-O5'	5.38	114.22	104.00
26	LA	1752	C	OP1-P-OP2	-5.38	111.53	119.60
26	LA	1903	G	C5-C6-O6	-5.38	125.37	128.60
26	LA	2186	G	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2201	G	N3-C4-C5	5.38	131.29	128.60
26	LA	2687	U	C5'-C4'-O4'	5.38	115.55	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2883	A	C1'-O4'-C4'	5.38	114.20	109.90
51	LI	29	PHE	CB-CG-CD2	-5.38	117.04	120.80
2	SA	3	A	N9-C4-C5	5.38	107.95	105.80
2	SA	294	U	C5'-C4'-O4'	5.38	115.55	109.10
2	SA	546	A	N7-C8-N9	5.38	116.49	113.80
2	SA	780	A	C6-C5-N7	-5.38	128.54	132.30
9	SI	123	ARG	NE-CZ-NH1	5.38	122.99	120.30
18	SB	73	ARG	NE-CZ-NH1	5.38	122.99	120.30
25	LB	49	C	N3-C2-O2	-5.38	118.14	121.90
25	LB	107	G	N3-C4-N9	-5.38	122.77	126.00
26	LA	954	G	OP1-P-OP2	-5.38	111.54	119.60
26	LA	1174	U	P-O5'-C5'	-5.38	112.30	120.90
26	LA	1286	A	C1'-O4'-C4'	-5.38	105.60	109.90
26	LA	1538	G	C5-N7-C8	5.38	106.99	104.30
26	LA	1653	G	N3-C2-N2	5.38	123.66	119.90
26	LA	1671	U	O4'-C1'-N1	5.38	112.50	108.20
26	LA	1859	U	N3-C4-C5	5.38	117.83	114.60
26	LA	1907	G	C1'-O4'-C4'	-5.38	105.60	109.90
26	LA	2809	A	N1-C6-N6	5.38	121.83	118.60
2	SA	74	A	C5'-C4'-O4'	5.38	115.55	109.10
25	LB	11	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	141	G	C4-C5-N7	-5.38	108.65	110.80
26	LA	260	G	P-O5'-C5'	-5.38	112.30	120.90
26	LA	406	G	P-O5'-C5'	5.38	129.50	120.90
26	LA	950	G	O4'-C1'-N9	5.38	112.50	108.20
26	LA	1393	A	C8-N9-C4	-5.38	103.65	105.80
26	LA	2248	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2430	A	N7-C8-N9	5.38	116.49	113.80
26	LA	2671	G	P-O5'-C5'	5.38	129.50	120.90
2	SA	378	G	P-O5'-C5'	-5.37	112.30	120.90
2	SA	549	C	P-O3'-C3'	5.37	126.15	119.70
2	SA	726	C	N3-C2-O2	-5.37	118.14	121.90
2	SA	787	A	O3'-P-O5'	5.37	114.21	104.00
2	SA	1102	A	C2-N3-C4	5.37	113.29	110.60
2	SA	1326	U	N3-C4-C5	-5.37	111.38	114.60
2	SA	1358	U	C6-N1-C2	5.37	124.22	121.00
4	S2	27	G	N3-C4-C5	-5.37	125.91	128.60
26	LA	98	G	C8-N9-C4	-5.37	104.25	106.40
26	LA	452	G	P-O3'-C3'	5.37	126.15	119.70
26	LA	797	G	OP1-P-OP2	-5.37	111.54	119.60
26	LA	1121	C	C2-N3-C4	5.37	122.59	119.90
26	LA	1581	G	N1-C2-N2	-5.37	111.36	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1606	C	P-O3'-C3'	5.37	126.15	119.70
26	LA	2139	U	N3-C2-O2	-5.37	118.44	122.20
26	LA	2204	G	N3-C4-N9	5.37	129.22	126.00
26	LA	2236	U	N3-C2-O2	-5.37	118.44	122.20
26	LA	2544	G	N3-C4-C5	-5.37	125.91	128.60
26	LA	2615	U	N3-C4-O4	5.37	123.16	119.40
26	LA	2749	A	O4'-C1'-N9	5.37	112.50	108.20
44	LF	138	LEU	CB-CG-CD2	5.37	120.14	111.00
2	SA	1259	C	N1-C2-O2	5.37	122.12	118.90
2	SA	1421	G	O4'-C1'-N9	5.37	112.50	108.20
4	S2	15	G	N9-C1'-C2'	5.37	120.98	114.00
4	S2	17	C	C2-N3-C4	5.37	122.59	119.90
24	S3	385	ILE	CA-CB-CG1	5.37	121.21	111.00
26	LA	32	C	C5'-C4'-C3'	-5.37	107.41	116.00
26	LA	755	U	C2-N3-C4	-5.37	123.78	127.00
26	LA	1133	A	N1-C6-N6	-5.37	115.38	118.60
26	LA	1416	G	O4'-C4'-C3'	5.37	110.40	106.10
26	LA	1708	C	N1-C2-N3	5.37	122.96	119.20
26	LA	1751	U	C5'-C4'-O4'	5.37	115.55	109.10
26	LA	2125	G	C5-C6-N1	5.37	114.19	111.50
26	LA	2723	C	C4-C5-C6	5.37	120.09	117.40
26	LA	2828	G	C1'-O4'-C4'	-5.37	105.60	109.90
57	LS	103	VAL	O-C-N	-5.37	114.10	122.70
2	SA	161	A	C6-N1-C2	-5.37	115.38	118.60
2	SA	204	G	N1-C2-N3	5.37	127.12	123.90
2	SA	225	C	O5'-P-OP2	-5.37	100.87	105.70
2	SA	783	C	O4'-C1'-N1	5.37	112.50	108.20
2	SA	1003	G	C5-C6-O6	-5.37	125.38	128.60
26	LA	818	G	C4-C5-N7	5.37	112.95	110.80
26	LA	966	G	O4'-C1'-N9	5.37	112.50	108.20
26	LA	1059	G	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	1381	G	P-O3'-C3'	-5.37	113.26	119.70
26	LA	2814	A	N3-C4-C5	5.37	130.56	126.80
55	LQ	25	ARG	NE-CZ-NH2	-5.37	117.61	120.30
2	SA	178	C	P-O5'-C5'	-5.37	112.31	120.90
2	SA	535	A	C4-C5-C6	5.37	119.68	117.00
2	SA	551	U	P-O3'-C3'	-5.37	113.26	119.70
2	SA	866	C	C3'-C2'-C1'	5.37	105.80	101.50
2	SA	1035	A	N3-C4-C5	5.37	130.56	126.80
2	SA	1125	U	C2-N3-C4	-5.37	123.78	127.00
2	SA	1152	A	O5'-C5'-C4'	5.37	121.90	111.70
2	SA	1520	C	C3'-C2'-C1'	-5.37	97.20	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	S1	45	G	C6-N1-C2	-5.37	121.88	125.10
5	ST	9	ARG	NH1-CZ-NH2	-5.37	113.49	119.40
25	LB	67	G	C1'-O4'-C4'	-5.37	105.61	109.90
26	LA	239	C	N1-C2-N3	5.37	122.96	119.20
26	LA	369	U	C2-N3-C4	-5.37	123.78	127.00
26	LA	370	G	C3'-C2'-C1'	-5.37	97.20	101.50
26	LA	480	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	507	A	O4'-C1'-N9	5.37	112.49	108.20
26	LA	980	A	OP1-P-OP2	-5.37	111.55	119.60
26	LA	1018	U	C2-N1-C1'	-5.37	111.26	117.70
26	LA	1027	A	C4-C5-N7	5.37	113.38	110.70
26	LA	1104	C	C2-N3-C4	5.37	122.58	119.90
26	LA	1180	U	N3-C4-O4	5.37	123.16	119.40
26	LA	1384	A	C2-N3-C4	-5.37	107.92	110.60
26	LA	1848	A	N9-C1'-C2'	-5.37	106.09	112.00
26	LA	1972	G	C4-C5-N7	5.37	112.95	110.80
26	LA	2034	U	N3-C4-O4	5.37	123.16	119.40
26	LA	2059	A	C6-N1-C2	-5.37	115.38	118.60
26	LA	2209	G	C6-C5-N7	-5.37	127.18	130.40
26	LA	2467	C	C3'-C2'-C1'	5.37	105.80	101.50
2	SA	52	C	C5-C6-N1	-5.37	118.32	121.00
2	SA	327	A	C4'-C3'-C2'	-5.37	97.23	102.60
2	SA	950	U	P-O3'-C3'	5.37	126.14	119.70
2	SA	1147	C	C2-N3-C4	-5.37	117.22	119.90
2	SA	1159	U	O5'-C5'-C4'	-5.37	101.50	111.70
3	S1	53	G	C4-C5-N7	5.37	112.95	110.80
26	LA	1513	U	C6-N1-C2	-5.37	117.78	121.00
26	LA	1568	G	C4-N9-C1'	5.37	133.48	126.50
26	LA	2358	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	2575	C	C2-N1-C1'	5.37	124.70	118.80
57	LS	31	TYR	CG-CD1-CE1	-5.37	117.01	121.30
2	SA	51	A	N7-C8-N9	-5.37	111.12	113.80
2	SA	915	A	N9-C4-C5	5.37	107.95	105.80
2	SA	1288	A	C4'-C3'-C2'	-5.37	97.23	102.60
11	SK	109	ILE	O-C-N	-5.37	114.12	122.70
25	LB	85	G	O4'-C1'-C2'	5.37	112.43	107.60
26	LA	228	C	OP1-P-OP2	-5.37	111.55	119.60
26	LA	407	G	N9-C4-C5	5.37	107.55	105.40
26	LA	571	U	C4-C5-C6	5.37	122.92	119.70
26	LA	716	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	917	A	O4'-C1'-N9	5.37	112.49	108.20
26	LA	1444	G	C5-C6-N1	-5.37	108.82	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1449	G	C8-N9-C1'	5.37	133.97	127.00
26	LA	1604	C	N3-C4-N4	5.37	121.76	118.00
26	LA	1606	C	N3-C2-O2	-5.37	118.14	121.90
26	LA	1667	G	O5'-P-OP2	-5.37	100.87	105.70
26	LA	1878	G	C8-N9-C1'	5.37	133.97	127.00
26	LA	1998	A	N1-C6-N6	5.37	121.82	118.60
26	LA	2160	C	O4'-C4'-C3'	-5.37	98.63	104.00
26	LA	2376	A	C4-N9-C1'	5.37	135.96	126.30
26	LA	2680	U	C5-C6-N1	5.37	125.38	122.70
37	LC	205	LYS	CB-CA-C	5.37	121.13	110.40
2	SA	12	U	N1-C2-N3	-5.36	111.68	114.90
2	SA	27	G	C1'-O4'-C4'	-5.36	105.61	109.90
2	SA	128	G	N9-C1'-C2'	-5.36	106.10	112.00
2	SA	348	G	C4'-C3'-C2'	-5.36	97.24	102.60
2	SA	754	C	C2-N1-C1'	5.36	124.70	118.80
2	SA	816	A	N1-C6-N6	-5.36	115.38	118.60
2	SA	1012	A	C6-N1-C2	5.36	121.82	118.60
2	SA	1067	A	C5-N7-C8	5.36	106.58	103.90
2	SA	1332	A	C1'-O4'-C4'	-5.36	105.61	109.90
2	SA	1445	U	N3-C4-O4	5.36	123.16	119.40
22	SF	78	PHE	CB-CA-C	-5.36	99.67	110.40
25	LB	23	G	C5-C6-N1	5.36	114.18	111.50
26	LA	32	C	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	33	C	N3-C4-N4	5.36	121.75	118.00
26	LA	381	G	C5-C6-N1	5.36	114.18	111.50
26	LA	957	C	N3-C4-N4	5.36	121.75	118.00
26	LA	1128	G	C5-C6-N1	5.36	114.18	111.50
26	LA	1378	A	C8-N9-C4	-5.36	103.66	105.80
26	LA	1723	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	2024	G	N9-C4-C5	5.36	107.55	105.40
26	LA	2243	U	P-O5'-C5'	5.36	129.48	120.90
26	LA	2329	U	P-O3'-C3'	5.36	126.14	119.70
26	LA	2355	G	P-O5'-C5'	5.36	129.48	120.90
26	LA	2397	G	C2-N3-C4	5.36	114.58	111.90
26	LA	2450	A	O4'-C4'-C3'	-5.36	98.64	104.00
26	LA	2588	G	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	2639	A	N9-C4-C5	-5.36	103.66	105.80
26	LA	2805	C	C3'-C2'-C1'	-5.36	97.21	101.50
2	SA	753	A	OP1-P-O3'	5.36	117.00	105.20
26	LA	252	G	C5-N7-C8	-5.36	101.62	104.30
26	LA	907	G	N1-C6-O6	-5.36	116.68	119.90
26	LA	1361	G	C4-C5-N7	-5.36	108.66	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1372	U	N1-C2-N3	5.36	118.12	114.90
26	LA	1440	U	N1-C2-N3	5.36	118.12	114.90
26	LA	1976	U	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	2257	U	C2-N3-C4	5.36	130.22	127.00
26	LA	2748	A	C4'-C3'-C2'	-5.36	97.24	102.60
2	SA	396	C	OP1-P-OP2	-5.36	111.56	119.60
2	SA	490	C	N3-C2-O2	-5.36	118.15	121.90
2	SA	576	C	C5-C4-N4	-5.36	116.45	120.20
2	SA	1015	G	C4-C5-C6	5.36	122.02	118.80
2	SA	1428	A	N1-C6-N6	-5.36	115.38	118.60
2	SA	1449	C	C5'-C4'-O4'	5.36	115.53	109.10
16	SP	34	GLU	N-CA-CB	5.36	120.25	110.60
18	SB	4	SER	CB-CA-C	-5.36	99.92	110.10
19	SC	142	ARG	NE-CZ-NH1	-5.36	117.62	120.30
22	SF	42	TRP	CE2-CD2-CE3	5.36	125.13	118.70
26	LA	459	U	C2-N3-C4	5.36	130.22	127.00
26	LA	764	A	C4'-C3'-C2'	5.36	107.96	102.60
26	LA	1202	G	N1-C6-O6	5.36	123.12	119.90
26	LA	1314	C	OP1-P-O3'	5.36	116.99	105.20
26	LA	1486	U	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	1860	G	O4'-C4'-C3'	5.36	110.39	106.10
26	LA	2055	C	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	2118	U	N3-C2-O2	-5.36	118.45	122.20
26	LA	2201	G	C8-N9-C1'	5.36	133.97	127.00
26	LA	2327	A	C6-C5-N7	-5.36	128.55	132.30
26	LA	2412	A	C4-C5-C6	5.36	119.68	117.00
37	LC	44	VAL	CG1-CB-CG2	-5.36	102.32	110.90
40	L4	38	PHE	CB-CG-CD2	-5.36	117.05	120.80
2	SA	857	C	C5-C4-N4	-5.36	116.45	120.20
2	SA	909	A	C5-C6-N1	5.36	120.38	117.70
2	SA	1141	C	OP1-P-OP2	-5.36	111.56	119.60
2	SA	1481	U	OP1-P-OP2	-5.36	111.56	119.60
5	ST	35	TYR	CZ-CE2-CD2	5.36	124.62	119.80
26	LA	131	A	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	1347	A	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	1904	G	N3-C4-N9	5.36	129.22	126.00
26	LA	2112	G	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	2866	U	C2-N3-C4	5.36	130.22	127.00
2	SA	452	A	C5-C6-N1	5.36	120.38	117.70
2	SA	528	C	C6-N1-C2	-5.36	118.16	120.30
2	SA	937	A	C5'-C4'-O4'	5.36	115.53	109.10
2	SA	1213	A	C5-C6-N6	5.36	127.99	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1487	G	C2-N3-C4	-5.36	109.22	111.90
3	S1	31	U	N3-C4-O4	-5.36	115.65	119.40
25	LB	45	A	C5-C6-N6	-5.36	119.41	123.70
26	LA	105	C	N1-C1'-C2'	-5.36	106.11	112.00
26	LA	278	A	C5'-C4'-O4'	5.36	115.53	109.10
26	LA	326	G	N1-C6-O6	5.36	123.11	119.90
26	LA	748	G	P-O3'-C3'	5.36	126.13	119.70
26	LA	1000	A	P-O3'-C3'	5.36	126.13	119.70
26	LA	1051	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	1066	U	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	1181	U	C2-N1-C1'	-5.36	111.27	117.70
26	LA	1369	G	N9-C4-C5	5.36	107.54	105.40
26	LA	1681	G	C4-N9-C1'	5.36	133.46	126.50
26	LA	1857	G	N3-C4-C5	5.36	131.28	128.60
26	LA	1913	A	N3-C4-C5	-5.36	123.05	126.80
26	LA	2619	C	C5'-C4'-C3'	5.36	124.57	116.00
26	LA	2831	G	N9-C1'-C2'	-5.36	106.11	112.00
2	SA	495	A	N7-C8-N9	5.36	116.48	113.80
2	SA	636	U	C6-N1-C2	5.36	124.21	121.00
2	SA	787	A	C1'-O4'-C4'	-5.36	105.62	109.90
2	SA	895	G	C5-N7-C8	5.36	106.98	104.30
2	SA	901	A	N7-C8-N9	-5.36	111.12	113.80
2	SA	1401	G	OP1-P-OP2	-5.36	111.57	119.60
2	SA	1541	U	P-O3'-C3'	5.36	126.13	119.70
26	LA	768	G	N3-C4-N9	5.36	129.21	126.00
26	LA	841	G	C4-N9-C1'	-5.36	119.54	126.50
26	LA	1139	G	C8-N9-C1'	5.36	133.96	127.00
26	LA	1634	A	C2'-C3'-O3'	5.36	122.27	113.70
26	LA	2290	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	2332	C	P-O3'-C3'	5.36	126.13	119.70
26	LA	2656	U	C5'-C4'-O4'	5.36	115.53	109.10
26	LA	2661	G	N7-C8-N9	-5.36	110.42	113.10
26	LA	2702	G	N3-C4-N9	5.36	129.21	126.00
27	LD	174	ARG	NH1-CZ-NH2	-5.36	113.51	119.40
44	LF	92	HIS	CA-CB-CG	-5.36	104.50	113.60
55	LQ	1	MET	CA-CB-CG	5.36	122.40	113.30
2	SA	651	C	P-O5'-C5'	-5.35	112.33	120.90
26	LA	595	C	OP1-P-OP2	-5.35	111.57	119.60
26	LA	779	U	OP1-P-OP2	-5.35	111.57	119.60
26	LA	999	U	P-O3'-C3'	5.35	126.12	119.70
26	LA	1175	A	C4-C5-N7	5.35	113.38	110.70
26	LA	1280	G	C5-N7-C8	-5.35	101.62	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1694	C	C6-N1-C2	-5.35	118.16	120.30
26	LA	1823	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	2121	G	C5'-C4'-C3'	5.35	124.57	116.00
26	LA	2524	G	C2-N3-C4	5.35	114.58	111.90
2	SA	174	A	C6-N1-C2	-5.35	115.39	118.60
2	SA	338	A	O5'-P-OP2	-5.35	100.88	105.70
2	SA	616	G	N3-C4-N9	5.35	129.21	126.00
2	SA	803	G	C2-N3-C4	5.35	114.58	111.90
2	SA	1269	A	N7-C8-N9	-5.35	111.12	113.80
2	SA	1280	A	N7-C8-N9	5.35	116.48	113.80
26	LA	484	C	C4-C5-C6	-5.35	114.72	117.40
26	LA	677	A	C5-N7-C8	5.35	106.58	103.90
26	LA	1099	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	1369	G	O4'-C4'-C3'	5.35	110.38	106.10
26	LA	1580	A	N1-C6-N6	5.35	121.81	118.60
26	LA	1767	G	C6-C5-N7	-5.35	127.19	130.40
26	LA	2146	C	N1-C2-N3	5.35	122.95	119.20
26	LA	2181	U	P-O5'-C5'	-5.35	112.33	120.90
26	LA	2316	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2669	G	C5-N7-C8	-5.35	101.62	104.30
26	LA	2708	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2711	A	OP1-P-O3'	5.35	116.97	105.20
26	LA	2779	U	C4'-C3'-C2'	-5.35	97.25	102.60
47	LJ	95	PHE	N-CA-C	5.35	125.45	111.00
56	LR	57	ALA	C-N-CA	5.35	135.08	121.70
2	SA	146	G	N3-C2-N2	-5.35	116.15	119.90
2	SA	404	G	C1'-O4'-C4'	5.35	114.18	109.90
2	SA	971	G	C6-N1-C2	5.35	128.31	125.10
2	SA	1048	G	O4'-C4'-C3'	-5.35	98.65	104.00
26	LA	414	C	N1-C2-O2	-5.35	115.69	118.90
26	LA	669	G	C2'-C3'-O3'	5.35	122.26	113.70
26	LA	1242	U	N3-C4-C5	5.35	117.81	114.60
26	LA	1303	G	C5-C6-O6	-5.35	125.39	128.60
26	LA	2146	C	N3-C4-N4	-5.35	114.25	118.00
26	LA	2217	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2643	G	N1-C2-N3	5.35	127.11	123.90
2	SA	21	G	C8-N9-C1'	5.35	133.96	127.00
2	SA	292	G	C6-N1-C2	-5.35	121.89	125.10
2	SA	761	G	C5-N7-C8	5.35	106.97	104.30
2	SA	945	G	C4-N9-C1'	5.35	133.45	126.50
2	SA	1023	U	C2-N1-C1'	-5.35	111.28	117.70
26	LA	97	C	C2'-C3'-O3'	5.35	122.26	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	367	G	C5'-C4'-C3'	-5.35	107.44	116.00
26	LA	617	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	627	A	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	682	G	N3-C2-N2	5.35	123.64	119.90
26	LA	821	A	C5-N7-C8	-5.35	101.22	103.90
26	LA	1017	G	P-O3'-C3'	-5.35	113.28	119.70
26	LA	1036	G	P-O5'-C5'	5.35	129.46	120.90
26	LA	1139	G	C5'-C4'-C3'	5.35	124.56	116.00
26	LA	1538	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	1832	C	C2-N3-C4	5.35	122.58	119.90
26	LA	2364	C	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	2590	A	N3-C4-C5	-5.35	123.06	126.80
26	LA	2626	C	N3-C4-C5	5.35	124.04	121.90
1	SS	68	HIS	CB-CA-C	-5.35	99.71	110.40
2	SA	350	G	N7-C8-N9	-5.35	110.43	113.10
2	SA	567	G	C2-N3-C4	5.35	114.57	111.90
2	SA	1178	G	N7-C8-N9	-5.35	110.43	113.10
2	SA	1364	U	C1'-O4'-C4'	5.35	114.18	109.90
14	SN	39	ASP	CB-CG-OD2	-5.35	113.49	118.30
26	LA	235	U	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	271	G	O3'-P-O5'	-5.35	93.84	104.00
26	LA	370	G	O3'-P-O5'	5.35	114.16	104.00
26	LA	411	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	452	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	650	C	C6-N1-C2	-5.35	118.16	120.30
26	LA	848	C	N3-C4-N4	5.35	121.74	118.00
26	LA	1616	A	C2-N3-C4	5.35	113.27	110.60
26	LA	2165	C	C5-C6-N1	-5.35	118.33	121.00
26	LA	2271	G	C8-N9-C1'	5.35	133.95	127.00
26	LA	2369	A	N3-C4-N9	-5.35	123.12	127.40
26	LA	2519	U	O3'-P-O5'	-5.35	93.84	104.00
26	LA	2618	G	N7-C8-N9	-5.35	110.43	113.10
26	LA	2886	A	C5-C6-N6	-5.35	119.42	123.70
50	LL	116	ARG	NH1-CZ-NH2	-5.35	113.52	119.40
56	LR	80	VAL	CA-CB-CG2	-5.35	102.88	110.90
2	SA	52	C	C5-C4-N4	5.35	123.94	120.20
2	SA	276	G	N1-C2-N3	-5.35	120.69	123.90
2	SA	755	G	C2-N3-C4	5.35	114.57	111.90
2	SA	938	A	N3-C4-C5	5.35	130.54	126.80
22	SF	16	GLU	OE1-CD-OE2	5.35	129.72	123.30
25	LB	100	G	C5'-C4'-O4'	5.35	115.52	109.10
26	LA	301	G	C4-C5-N7	5.35	112.94	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1060	U	O4'-C1'-N1	5.35	112.48	108.20
26	LA	1813	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	2803	G	C6-C5-N7	5.35	133.61	130.40
27	LD	62	ARG	NE-CZ-NH1	5.35	122.97	120.30
2	SA	24	U	C2-N3-C4	-5.34	123.79	127.00
2	SA	411	A	O4'-C4'-C3'	-5.34	98.66	104.00
2	SA	1130	A	P-O3'-C3'	-5.34	113.29	119.70
2	SA	1251	A	C5-C6-N1	5.34	120.37	117.70
2	SA	1280	A	C5'-C4'-C3'	-5.34	107.45	116.00
2	SA	1432	G	N3-C4-C5	-5.34	125.93	128.60
3	S1	23	C	C2'-C3'-O3'	5.34	122.25	113.70
3	S1	23	C	O4'-C1'-N1	5.34	112.47	108.20
24	S3	407	ARG	CG-CD-NE	-5.34	100.58	111.80
25	LB	45	A	C4-C5-N7	5.34	113.37	110.70
26	LA	121	G	C6-N1-C2	-5.34	121.89	125.10
26	LA	200	U	C2-N1-C1'	-5.34	111.29	117.70
26	LA	287	G	C2-N3-C4	-5.34	109.23	111.90
26	LA	289	G	C1'-O4'-C4'	-5.34	105.62	109.90
26	LA	420	C	C5'-C4'-C3'	-5.34	107.45	116.00
26	LA	490	C	C4-C5-C6	5.34	120.07	117.40
26	LA	636	G	C1'-O4'-C4'	-5.34	105.62	109.90
26	LA	643	A	C4-C5-N7	-5.34	108.03	110.70
26	LA	737	C	N1-C2-N3	5.34	122.94	119.20
26	LA	1369	G	N3-C4-C5	-5.34	125.93	128.60
26	LA	1482	G	P-O3'-C3'	-5.34	113.29	119.70
26	LA	1708	C	N3-C2-O2	-5.34	118.16	121.90
26	LA	1720	U	N3-C4-O4	-5.34	115.66	119.40
26	LA	1982	U	C2-N3-C4	5.34	130.21	127.00
26	LA	2024	G	C5'-C4'-O4'	5.34	115.51	109.10
26	LA	2063	C	C4'-C3'-C2'	-5.34	97.25	102.60
37	LC	222	VAL	C-N-CA	5.34	135.06	121.70
56	LR	13	LYS	N-CA-CB	5.34	120.22	110.60
2	SA	18	C	C6-N1-C2	-5.34	118.16	120.30
2	SA	1519	A	O4'-C1'-N9	5.34	112.47	108.20
4	S2	44	A	O4'-C1'-C2'	5.34	112.41	107.60
26	LA	56	A	O4'-C1'-N9	5.34	112.47	108.20
26	LA	875	G	N3-C4-C5	-5.34	125.93	128.60
26	LA	1788	C	P-O5'-C5'	-5.34	112.35	120.90
26	LA	2018	G	C5-N7-C8	-5.34	101.63	104.30
26	LA	2205	A	N7-C8-N9	-5.34	111.13	113.80
26	LA	2224	G	N1-C6-O6	-5.34	116.69	119.90
26	LA	2274	A	O3'-P-O5'	-5.34	93.85	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2752	C	N1-C2-O2	-5.34	115.69	118.90
2	SA	146	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	202	G	C5-N7-C8	-5.34	101.63	104.30
2	SA	209	U	N1-C2-N3	-5.34	111.69	114.90
2	SA	237	G	N7-C8-N9	-5.34	110.43	113.10
2	SA	546	A	C8-N9-C4	-5.34	103.66	105.80
2	SA	853	C	C4-C5-C6	5.34	120.07	117.40
2	SA	912	C	O4'-C1'-N1	5.34	112.47	108.20
2	SA	1467	C	N1-C2-O2	-5.34	115.69	118.90
2	SA	1508	A	C3'-C2'-C1'	-5.34	97.23	101.50
17	SQ	11	VAL	CA-CB-CG2	-5.34	102.89	110.90
25	LB	58	A	C5-C6-N1	-5.34	115.03	117.70
26	LA	203	A	C5-N7-C8	-5.34	101.23	103.90
26	LA	422	A	C5-N7-C8	5.34	106.57	103.90
26	LA	497	A	C5-N7-C8	-5.34	101.23	103.90
26	LA	968	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	994	C	C3'-C2'-C1'	5.34	105.77	101.50
26	LA	1220	G	C3'-C2'-C1'	5.34	105.77	101.50
26	LA	1393	A	C5-C6-N6	-5.34	119.43	123.70
26	LA	1949	G	O3'-P-O5'	5.34	114.15	104.00
26	LA	2028	U	N3-C2-O2	-5.34	118.46	122.20
26	LA	2301	C	C2'-C3'-O3'	5.34	122.25	113.70
26	LA	2593	U	OP1-P-OP2	-5.34	111.59	119.60
38	LE	170	VAL	CA-CB-CG1	5.34	118.91	110.90
38	LE	188	LEU	CB-CG-CD2	-5.34	101.92	111.00
2	SA	11	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	98	A	C4-N9-C1'	-5.34	116.69	126.30
2	SA	786	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	1363	A	OP2-P-O3'	5.34	116.94	105.20
26	LA	153	U	C2-N3-C4	-5.34	123.80	127.00
26	LA	178	G	P-O5'-C5'	-5.34	112.36	120.90
26	LA	455	C	C5-C4-N4	5.34	123.94	120.20
26	LA	869	G	P-O5'-C5'	5.34	129.44	120.90
26	LA	912	C	N3-C2-O2	-5.34	118.16	121.90
26	LA	1081	U	C4-C5-C6	-5.34	116.50	119.70
26	LA	1136	G	C6-N1-C2	-5.34	121.90	125.10
26	LA	1794	A	C6-N1-C2	5.34	121.80	118.60
26	LA	2318	G	OP1-P-OP2	-5.34	111.59	119.60
26	LA	2321	U	C1'-O4'-C4'	5.34	114.17	109.90
26	LA	2573	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	2788	C	C2-N1-C1'	5.34	124.67	118.80
46	LH	121	THR	CA-CB-CG2	5.34	119.87	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	264	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	263	G	P-O5'-C5'	5.34	129.44	120.90
26	LA	656	G	C4-N9-C1'	5.34	133.44	126.50
26	LA	985	C	C6-N1-C1'	-5.34	114.39	120.80
26	LA	1410	G	N3-C4-N9	5.34	129.20	126.00
26	LA	1439	A	C8-N9-C4	5.34	107.94	105.80
26	LA	1547	C	P-O5'-C5'	5.34	129.44	120.90
26	LA	1768	C	C4-C5-C6	5.34	120.07	117.40
26	LA	2025	C	O5'-C5'-C4'	5.34	121.84	111.70
2	SA	722	G	N1-C6-O6	-5.34	116.70	119.90
2	SA	751	U	N1-C2-O2	-5.34	119.06	122.80
2	SA	836	G	N1-C6-O6	-5.34	116.70	119.90
3	S1	45	G	N3-C4-C5	-5.34	125.93	128.60
25	LB	20	G	C4-N9-C1'	-5.34	119.56	126.50
25	LB	48	U	C5'-C4'-C3'	5.34	124.54	116.00
26	LA	39	G	C5-C6-O6	5.34	131.80	128.60
26	LA	256	A	C2-N3-C4	-5.34	107.93	110.60
26	LA	418	C	C2-N3-C4	5.34	122.57	119.90
26	LA	1471	G	N7-C8-N9	-5.34	110.43	113.10
26	LA	2033	A	C2'-C3'-O3'	5.34	122.24	113.70
26	LA	2429	G	C3'-C2'-C1'	5.34	105.77	101.50
2	SA	577	G	C8-N9-C4	-5.33	104.27	106.40
2	SA	1353	G	O4'-C1'-N9	5.33	112.47	108.20
2	SA	1407	C	N1-C2-O2	-5.33	115.70	118.90
26	LA	124	G	N1-C2-N3	5.33	127.10	123.90
26	LA	230	G	N3-C4-C5	5.33	131.27	128.60
26	LA	1120	G	P-O3'-C3'	-5.33	113.30	119.70
26	LA	1224	U	N1-C2-O2	-5.33	119.07	122.80
26	LA	1397	U	N1-C2-O2	-5.33	119.06	122.80
26	LA	1556	C	P-O5'-C5'	5.33	129.44	120.90
26	LA	1772	A	P-O3'-C3'	-5.33	113.30	119.70
26	LA	2610	C	O3'-P-O5'	-5.33	93.86	104.00
26	LA	2844	G	N7-C8-N9	5.33	115.77	113.10
38	LE	80	TRP	CH2-CZ2-CE2	5.33	122.73	117.40
2	SA	39	G	C6-N1-C2	-5.33	121.90	125.10
2	SA	173	U	C2-N3-C4	5.33	130.20	127.00
2	SA	231	U	C4'-C3'-C2'	-5.33	97.27	102.60
2	SA	378	G	C3'-C2'-C1'	-5.33	97.23	101.50
2	SA	898	G	C8-N9-C1'	5.33	133.94	127.00
2	SA	913	A	O4'-C1'-C2'	-5.33	100.47	105.80
2	SA	1280	A	O4'-C1'-C2'	5.33	112.40	107.60
2	SA	1284	C	N1-C2-O2	5.33	122.10	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1338	G	N1-C6-O6	-5.33	116.70	119.90
3	S1	21	U	C5'-C4'-C3'	5.33	124.53	116.00
4	S2	5	G	N3-C4-C5	5.33	131.27	128.60
4	S2	18	U	O3'-P-O5'	-5.33	93.87	104.00
11	SK	65	ALA	O-C-N	-5.33	114.17	122.70
26	LA	924	G	C4-C5-N7	-5.33	108.67	110.80
26	LA	1044	C	P-O5'-C5'	-5.33	112.36	120.90
26	LA	1073	A	O5'-P-OP1	-5.33	100.90	105.70
26	LA	1453	A	P-O5'-C5'	5.33	129.43	120.90
26	LA	1627	G	N3-C2-N2	5.33	123.63	119.90
26	LA	1628	G	P-O3'-C3'	-5.33	113.30	119.70
26	LA	1647	U	C5-C6-N1	5.33	125.37	122.70
26	LA	1711	A	N3-C4-N9	5.33	131.67	127.40
26	LA	1855	U	C6-N1-C2	-5.33	117.80	121.00
26	LA	2011	U	C4-C5-C6	-5.33	116.50	119.70
26	LA	2752	C	O3'-P-O5'	5.33	114.13	104.00
2	SA	397	A	N3-C4-C5	5.33	130.53	126.80
2	SA	430	A	C4-C5-N7	5.33	113.36	110.70
2	SA	674	G	N3-C4-C5	-5.33	125.93	128.60
2	SA	1185	G	C5-C6-O6	-5.33	125.40	128.60
2	SA	1226	C	C6-N1-C1'	-5.33	114.40	120.80
2	SA	1356	G	O4'-C1'-N9	5.33	112.47	108.20
2	SA	1366	C	O4'-C1'-N1	5.33	112.46	108.20
3	S1	20	G	C4-C5-C6	-5.33	115.60	118.80
14	SN	13	VAL	CG1-CB-CG2	5.33	119.43	110.90
15	SO	88	ARG	NE-CZ-NH2	5.33	122.97	120.30
26	LA	602	A	OP1-P-OP2	-5.33	111.60	119.60
26	LA	655	A	C6-N1-C2	-5.33	115.40	118.60
26	LA	767	U	OP2-P-O3'	5.33	116.93	105.20
26	LA	892	A	C5-C6-N6	5.33	127.97	123.70
26	LA	1545	A	N1-C6-N6	-5.33	115.40	118.60
26	LA	1893	C	P-O3'-C3'	5.33	126.10	119.70
26	LA	1968	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	2271	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	2381	A	N9-C4-C5	5.33	107.93	105.80
26	LA	2448	A	C5'-C4'-C3'	5.33	124.53	116.00
30	LW	38	ILE	O-C-N	-5.33	114.17	122.70
2	SA	194	C	C4-C5-C6	-5.33	114.73	117.40
2	SA	811	C	C5'-C4'-C3'	5.33	124.53	116.00
2	SA	1394	A	C8-N9-C1'	-5.33	118.11	127.70
24	S3	584	ASP	CB-CG-OD1	-5.33	113.50	118.30
25	LB	93	C	C4'-C3'-C2'	-5.33	97.27	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	458	G	N3-C2-N2	5.33	123.63	119.90
26	LA	748	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	1015	U	C2-N1-C1'	-5.33	111.30	117.70
26	LA	1256	G	N7-C8-N9	-5.33	110.44	113.10
26	LA	1776	G	P-O3'-C3'	5.33	126.10	119.70
26	LA	1916	A	C6-N1-C2	5.33	121.80	118.60
26	LA	2163	A	C3'-C2'-C1'	-5.33	97.24	101.50
26	LA	2174	C	C5-C6-N1	-5.33	118.33	121.00
26	LA	2308	G	C6-C5-N7	-5.33	127.20	130.40
26	LA	2391	G	C5'-C4'-O4'	5.33	115.50	109.10
2	SA	166	U	C5'-C4'-O4'	5.33	115.49	109.10
2	SA	473	U	C5'-C4'-O4'	5.33	115.49	109.10
2	SA	765	G	OP1-P-O3'	5.33	116.92	105.20
2	SA	958	A	C6-C5-N7	-5.33	128.57	132.30
3	S1	38	G	P-O3'-C3'	5.33	126.09	119.70
26	LA	204	A	OP1-P-OP2	-5.33	111.61	119.60
26	LA	500	G	C2-N3-C4	5.33	114.56	111.90
26	LA	510	C	O4'-C1'-N1	5.33	112.46	108.20
26	LA	1397	U	C1'-O4'-C4'	-5.33	105.64	109.90
26	LA	1515	A	N3-C4-N9	5.33	131.66	127.40
26	LA	1553	A	N9-C1'-C2'	-5.33	106.14	112.00
26	LA	1653	G	P-O5'-C5'	5.33	129.43	120.90
26	LA	1826	G	C4'-C3'-C2'	-5.33	97.27	102.60
26	LA	2249	U	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	2457	U	O4'-C1'-C2'	5.33	112.39	107.60
32	LY	76	ARG	NH1-CZ-NH2	-5.33	113.54	119.40
38	LE	163	GLY	C-N-CA	5.33	135.02	121.70
44	LF	102	ARG	CG-CD-NE	-5.33	100.61	111.80
54	LM	61	VAL	O-C-N	-5.33	114.18	122.70
2	SA	49	U	N3-C4-O4	5.33	123.13	119.40
2	SA	124	C	N3-C4-C5	-5.33	119.77	121.90
2	SA	324	G	C6-N1-C2	-5.33	121.90	125.10
2	SA	1207	G	C6-N1-C2	5.33	128.30	125.10
4	S2	64	G	C4-C5-N7	5.33	112.93	110.80
26	LA	27	G	N9-C4-C5	5.33	107.53	105.40
26	LA	759	G	C5'-C4'-O4'	5.33	115.49	109.10
26	LA	797	G	C4-C5-N7	-5.33	108.67	110.80
26	LA	809	G	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	876	C	O5'-P-OP2	5.33	117.09	110.70
26	LA	1870	C	C2-N3-C4	-5.33	117.24	119.90
26	LA	2360	G	OP1-P-OP2	-5.33	111.61	119.60
26	LA	2401	U	O4'-C1'-C2'	-5.33	100.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	L0	50	VAL	CG1-CB-CG2	-5.33	102.38	110.90
2	SA	45	G	C1'-O4'-C4'	-5.33	105.64	109.90
2	SA	208	U	N1-C2-O2	-5.33	119.07	122.80
2	SA	209	U	OP2-P-O3'	5.33	116.92	105.20
2	SA	743	A	C2-N3-C4	5.33	113.26	110.60
2	SA	822	U	C6-N1-C1'	5.33	128.66	121.20
2	SA	1358	U	C1'-O4'-C4'	5.33	114.16	109.90
4	S2	10	G	N1-C2-N3	-5.33	120.70	123.90
26	LA	100	U	C2-N3-C4	-5.33	123.80	127.00
26	LA	414	C	P-O5'-C5'	-5.33	112.38	120.90
26	LA	752	A	N1-C2-N3	-5.33	126.64	129.30
26	LA	890	C	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	970	U	N3-C4-O4	-5.33	115.67	119.40
26	LA	1107	G	C5-C6-N1	5.33	114.16	111.50
26	LA	1136	G	C5-C6-N1	5.33	114.16	111.50
26	LA	1142	A	C5-N7-C8	-5.33	101.24	103.90
26	LA	1272	A	N1-C2-N3	-5.33	126.64	129.30
26	LA	1340	U	N3-C2-O2	-5.33	118.47	122.20
26	LA	1470	A	C2-N3-C4	-5.33	107.94	110.60
26	LA	1844	C	C2-N3-C4	5.33	122.56	119.90
26	LA	2376	A	C8-N9-C1'	-5.33	118.11	127.70
46	LH	167	VAL	CA-CB-CG1	5.33	118.89	110.90
54	LM	107	LEU	C-N-CA	5.33	135.01	121.70
2	SA	344	A	C4-C5-C6	5.32	119.66	117.00
2	SA	385	C	C4'-C3'-C2'	-5.32	97.28	102.60
2	SA	442	G	C8-N9-C4	5.32	108.53	106.40
2	SA	586	C	O4'-C1'-N1	5.32	112.46	108.20
2	SA	725	G	N3-C4-N9	-5.32	122.81	126.00
2	SA	950	U	O4'-C1'-N1	5.32	112.46	108.20
7	SG	150	PHE	CB-CG-CD1	5.32	124.53	120.80
26	LA	18	U	C4-C5-C6	-5.32	116.51	119.70
26	LA	269	C	P-O5'-C5'	5.32	129.42	120.90
26	LA	503	A	O4'-C1'-N9	5.32	112.46	108.20
26	LA	579	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	695	G	C3'-C2'-C1'	5.32	105.76	101.50
26	LA	813	U	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	1112	G	C5-N7-C8	-5.32	101.64	104.30
26	LA	1271	G	C4-N9-C1'	-5.32	119.58	126.50
26	LA	1378	A	C5-C6-N6	5.32	127.96	123.70
26	LA	1445	G	P-O5'-C5'	5.32	129.42	120.90
26	LA	1702	G	C6-N1-C2	-5.32	121.91	125.10
26	LA	1833	C	C4-C5-C6	5.32	120.06	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2059	A	N1-C6-N6	-5.32	115.41	118.60
26	LA	2389	G	O4'-C1'-C2'	5.32	112.39	107.60
26	LA	2400	G	C4-N9-C1'	-5.32	119.58	126.50
26	LA	2542	A	N7-C8-N9	5.32	116.46	113.80
26	LA	2839	G	N3-C2-N2	5.32	123.63	119.90
54	LM	94	PRO	N-CA-C	5.32	125.94	112.10
2	SA	117	G	C6-C5-N7	-5.32	127.21	130.40
2	SA	131	A	C5'-C4'-C3'	-5.32	107.49	116.00
2	SA	358	U	O4'-C1'-N1	5.32	112.46	108.20
2	SA	438	U	N1-C2-O2	5.32	126.53	122.80
2	SA	466	A	C1'-O4'-C4'	5.32	114.16	109.90
2	SA	724	G	O4'-C4'-C3'	5.32	110.36	106.10
26	LA	768	G	OP1-P-OP2	-5.32	111.62	119.60
26	LA	1040	A	C4-C5-C6	-5.32	114.34	117.00
26	LA	1459	G	N3-C4-C5	-5.32	125.94	128.60
26	LA	1829	A	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	1948	G	N9-C4-C5	5.32	107.53	105.40
26	LA	1962	C	C5'-C4'-O4'	5.32	115.49	109.10
26	LA	2011	U	O4'-C1'-N1	5.32	112.46	108.20
26	LA	2281	A	C4-C5-N7	-5.32	108.04	110.70
2	SA	115	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	202	G	C3'-C2'-C1'	5.32	105.76	101.50
2	SA	248	C	N1-C1'-C2'	-5.32	106.15	112.00
2	SA	351	G	N9-C4-C5	-5.32	103.27	105.40
2	SA	462	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	835	U	N3-C4-O4	-5.32	115.67	119.40
2	SA	881	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	949	A	O3'-P-O5'	5.32	114.11	104.00
2	SA	1507	A	N1-C2-N3	-5.32	126.64	129.30
13	SM	67	ASP	CB-CG-OD2	-5.32	113.51	118.30
24	S3	368	ASN	N-CA-CB	5.32	120.18	110.60
25	LB	13	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	48	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	87	U	P-O5'-C5'	5.32	129.41	120.90
26	LA	307	G	O4'-C1'-N9	5.32	112.46	108.20
26	LA	540	C	C5-C6-N1	-5.32	118.34	121.00
26	LA	585	G	OP1-P-OP2	-5.32	111.62	119.60
26	LA	701	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	812	C	C6-N1-C2	-5.32	118.17	120.30
26	LA	835	C	N1-C1'-C2'	-5.32	106.15	112.00
26	LA	1030	C	O4'-C1'-N1	5.32	112.46	108.20
26	LA	2338	C	C5-C4-N4	5.32	123.92	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2429	G	P-O3'-C3'	-5.32	113.32	119.70
26	LA	2613	U	O4'-C1'-N1	5.32	112.46	108.20
49	LK	7	TYR	CG-CD2-CE2	5.32	125.56	121.30
50	LL	122	LEU	O-C-N	-5.32	114.19	122.70
2	SA	127	G	C4-N9-C1'	-5.32	119.59	126.50
26	LA	2381	A	O4'-C1'-N9	5.32	112.45	108.20
26	LA	2505	G	C6-N1-C2	5.32	128.29	125.10
27	LD	245	THR	N-CA-CB	5.32	120.41	110.30
48	LN	76	GLU	OE1-CD-OE2	-5.32	116.92	123.30
2	SA	195	A	OP2-P-O3'	5.32	116.90	105.20
2	SA	744	C	C6-N1-C2	5.32	122.43	120.30
2	SA	815	A	C1'-O4'-C4'	-5.32	105.65	109.90
2	SA	861	G	N1-C2-N3	-5.32	120.71	123.90
2	SA	1266	G	C5'-C4'-O4'	5.32	115.48	109.10
15	SO	62	ARG	CG-CD-NE	-5.32	100.63	111.80
25	LB	109	A	C3'-C2'-C1'	5.32	105.75	101.50
26	LA	310	A	C5-C6-N1	5.32	120.36	117.70
26	LA	370	G	O4'-C1'-C2'	5.32	112.39	107.60
26	LA	760	G	N9-C4-C5	5.32	107.53	105.40
26	LA	1197	G	O4'-C1'-N9	5.32	112.45	108.20
26	LA	1625	C	N3-C4-C5	-5.32	119.77	121.90
26	LA	2232	C	N3-C2-O2	-5.32	118.18	121.90
26	LA	2253	G	C6-C5-N7	5.32	133.59	130.40
26	LA	2645	G	C5-N7-C8	-5.32	101.64	104.30
27	LD	136	VAL	CA-CB-CG1	5.32	118.88	110.90
2	SA	370	C	C6-N1-C2	-5.32	118.17	120.30
2	SA	477	C	C6-N1-C2	5.32	122.43	120.30
2	SA	593	U	C1'-O4'-C4'	5.32	114.15	109.90
2	SA	1101	A	C5'-C4'-C3'	5.32	124.50	116.00
2	SA	1133	G	O4'-C1'-N9	5.32	112.45	108.20
10	SJ	61	ALA	N-CA-CB	-5.32	102.66	110.10
26	LA	58	G	O4'-C1'-N9	-5.32	103.95	108.20
26	LA	245	G	N3-C4-C5	-5.32	125.94	128.60
26	LA	837	C	C5-C6-N1	-5.32	118.34	121.00
26	LA	851	C	O4'-C1'-N1	5.32	112.45	108.20
26	LA	980	A	N3-C4-C5	-5.32	123.08	126.80
26	LA	1097	U	O4'-C1'-C2'	-5.32	100.48	105.80
26	LA	1558	C	N1-C2-O2	-5.32	115.71	118.90
26	LA	1595	C	C3'-C2'-C1'	-5.32	97.25	101.50
26	LA	2183	A	C8-N9-C4	-5.32	103.67	105.80
26	LA	2189	U	P-O3'-C3'	-5.32	113.32	119.70
26	LA	2535	G	C6-C5-N7	-5.32	127.21	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	LT	5	PHE	CB-CG-CD2	5.32	124.52	120.80
2	SA	171	A	C5'-C4'-O4'	5.31	115.48	109.10
2	SA	359	G	C5-C6-O6	5.31	131.79	128.60
2	SA	478	A	N7-C8-N9	-5.31	111.14	113.80
2	SA	595	A	N9-C4-C5	-5.31	103.67	105.80
2	SA	819	A	C5-N7-C8	-5.31	101.24	103.90
2	SA	928	G	N1-C2-N2	-5.31	111.42	116.20
2	SA	1198	G	C4-N9-C1'	-5.31	119.59	126.50
25	LB	16	G	C6-C5-N7	-5.31	127.21	130.40
26	LA	148	U	C5-C4-O4	-5.31	122.71	125.90
26	LA	631	A	C8-N9-C4	5.31	107.93	105.80
26	LA	976	G	N9-C4-C5	-5.31	103.28	105.40
26	LA	1041	G	C6-N1-C2	-5.31	121.91	125.10
26	LA	1686	C	O4'-C1'-N1	5.31	112.45	108.20
26	LA	2084	C	N3-C4-C5	-5.31	119.77	121.90
26	LA	2241	A	P-O3'-C3'	-5.31	113.32	119.70
26	LA	2431	U	C4-C5-C6	5.31	122.89	119.70
32	LY	44	PHE	CD1-CE1-CZ	-5.31	113.72	120.10
45	LG	143	ASP	CB-CG-OD2	5.31	123.08	118.30
46	LH	2	ARG	N-CA-C	5.31	125.35	111.00
50	LL	60	ASP	CB-CG-OD2	5.31	123.08	118.30
2	SA	360	G	O4'-C1'-N9	5.31	112.45	108.20
2	SA	482	A	P-O3'-C3'	5.31	126.08	119.70
2	SA	602	A	P-O5'-C5'	-5.31	112.40	120.90
2	SA	1133	G	C4'-C3'-C2'	-5.31	97.29	102.60
12	SL	60	PHE	CB-CG-CD1	5.31	124.52	120.80
26	LA	73	A	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	296	U	C5'-C4'-C3'	-5.31	107.50	116.00
26	LA	777	G	N3-C2-N2	-5.31	116.18	119.90
26	LA	906	U	N3-C4-O4	-5.31	115.68	119.40
26	LA	1107	G	N3-C2-N2	5.31	123.62	119.90
26	LA	1427	A	P-O5'-C5'	5.31	129.40	120.90
26	LA	1738	G	C6-C5-N7	5.31	133.59	130.40
26	LA	1804	C	C6-N1-C1'	5.31	127.17	120.80
26	LA	1831	G	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2741	A	C4'-C3'-C2'	-5.31	97.29	102.60
44	LF	170	ARG	NE-CZ-NH2	5.31	122.96	120.30
47	LJ	26	VAL	CA-CB-CG1	-5.31	102.93	110.90
2	SA	159	G	N7-C8-N9	-5.31	110.44	113.10
2	SA	1391	U	C2-N1-C1'	-5.31	111.33	117.70
3	S1	59	A	O4'-C1'-N9	5.31	112.45	108.20
24	S3	495	GLN	C-N-CA	5.31	134.98	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	107	G	OP1-P-OP2	-5.31	111.63	119.60
26	LA	847	U	C6-N1-C1'	5.31	128.64	121.20
26	LA	1093	G	C8-N9-C1'	-5.31	120.10	127.00
26	LA	1542	U	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2595	G	C6-N1-C2	-5.31	121.91	125.10
26	LA	2820	A	O4'-C1'-N9	5.31	112.45	108.20
2	SA	332	G	N3-C4-N9	5.31	129.19	126.00
2	SA	408	A	P-O5'-C5'	-5.31	112.41	120.90
2	SA	978	A	C2'-C3'-O3'	5.31	122.19	113.70
2	SA	996	A	N7-C8-N9	5.31	116.45	113.80
2	SA	1146	A	P-O3'-C3'	5.31	126.07	119.70
2	SA	1285	A	N9-C4-C5	5.31	107.92	105.80
2	SA	1485	U	N3-C2-O2	-5.31	118.48	122.20
10	SJ	9	ARG	NE-CZ-NH2	-5.31	117.64	120.30
26	LA	506	G	P-O3'-C3'	5.31	126.07	119.70
26	LA	536	G	N1-C6-O6	5.31	123.09	119.90
26	LA	537	G	C8-N9-C4	5.31	108.52	106.40
26	LA	647	G	P-O5'-C5'	-5.31	112.41	120.90
26	LA	1434	A	C5-C6-N1	5.31	120.36	117.70
26	LA	1910	G	O4'-C4'-C3'	-5.31	98.69	104.00
26	LA	1921	G	C5-C6-O6	5.31	131.78	128.60
26	LA	2055	C	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2079	U	C2-N3-C4	-5.31	123.81	127.00
26	LA	2132	U	OP1-P-OP2	-5.31	111.64	119.60
26	LA	2266	A	C5'-C4'-C3'	-5.31	107.50	116.00
26	LA	2560	A	C5'-C4'-O4'	5.31	115.47	109.10
27	LD	175	LEU	CB-CG-CD1	-5.31	101.97	111.00
2	SA	141	G	C2'-C3'-O3'	5.31	122.19	113.70
2	SA	381	C	P-O3'-C3'	-5.31	113.33	119.70
2	SA	916	U	N3-C4-C5	-5.31	111.42	114.60
2	SA	1253	G	C4-N9-C1'	-5.31	119.60	126.50
2	SA	1361	G	N3-C4-N9	5.31	129.18	126.00
25	LB	45	A	C4'-C3'-C2'	-5.31	97.29	102.60
25	LB	68	C	C5-C6-N1	5.31	123.65	121.00
26	LA	60	G	N7-C8-N9	-5.31	110.45	113.10
26	LA	96	C	OP1-P-OP2	-5.31	111.64	119.60
26	LA	143	C	C3'-C2'-C1'	-5.31	97.25	101.50
26	LA	328	U	C1'-O4'-C4'	-5.31	105.65	109.90
26	LA	578	G	C4-C5-N7	5.31	112.92	110.80
26	LA	621	A	C5-N7-C8	5.31	106.55	103.90
26	LA	891	G	N1-C6-O6	5.31	123.08	119.90
26	LA	972	A	C5-C6-N1	5.31	120.35	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1100	C	N1-C2-N3	5.31	122.92	119.20
26	LA	1233	C	C2-N3-C4	5.31	122.55	119.90
26	LA	1235	G	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	1382	G	C1'-O4'-C4'	-5.31	105.65	109.90
26	LA	1593	A	N9-C4-C5	5.31	107.92	105.80
26	LA	2022	U	O4'-C1'-N1	5.31	112.45	108.20
26	LA	2026	U	C2-N3-C4	-5.31	123.81	127.00
26	LA	2050	C	O4'-C1'-C2'	5.31	112.38	107.60
26	LA	2184	A	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2412	A	N1-C2-N3	-5.31	126.65	129.30
26	LA	2502	G	C4-N9-C1'	5.31	133.40	126.50
45	LG	86	CYS	CB-CA-C	-5.31	99.78	110.40
50	LL	5	THR	O-C-N	-5.31	114.21	122.70
2	SA	119	A	C4-C5-N7	5.31	113.35	110.70
2	SA	1139	G	C3'-C2'-C1'	-5.31	97.25	101.50
2	SA	1223	C	O5'-C5'-C4'	5.31	121.78	111.70
2	SA	1465	A	O4'-C4'-C3'	-5.31	98.69	104.00
2	SA	1533	C	O5'-P-OP1	5.31	117.07	110.70
3	S1	53	G	N1-C2-N2	5.31	120.97	116.20
24	S3	352	VAL	CA-CB-CG2	-5.31	102.94	110.90
26	LA	29	U	N1-C2-N3	-5.31	111.72	114.90
26	LA	833	A	C8-N9-C1'	-5.31	118.15	127.70
26	LA	1103	A	C6-N1-C2	5.31	121.78	118.60
26	LA	2239	G	C4-C5-N7	-5.31	108.68	110.80
26	LA	2474	U	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	2620	C	C3'-C2'-C1'	5.31	105.75	101.50
2	SA	55	A	P-O3'-C3'	-5.30	113.33	119.70
2	SA	525	C	N1-C2-N3	5.30	122.91	119.20
2	SA	637	C	C2-N1-C1'	5.30	124.64	118.80
2	SA	843	U	C3'-C2'-C1'	5.30	105.74	101.50
2	SA	1079	G	N7-C8-N9	-5.30	110.45	113.10
18	SB	103	TRP	CE3-CZ3-CH2	-5.30	115.36	121.20
20	SD	193	ASP	CB-CG-OD1	5.30	123.07	118.30
25	LB	86	G	OP1-P-OP2	-5.30	111.64	119.60
26	LA	65	U	N1-C2-O2	-5.30	119.09	122.80
26	LA	126	A	P-O5'-C5'	5.30	129.39	120.90
26	LA	352	A	N9-C4-C5	-5.30	103.68	105.80
26	LA	668	A	O4'-C1'-C2'	5.30	112.37	107.60
26	LA	1243	C	C2-N3-C4	-5.30	117.25	119.90
26	LA	1243	C	C5'-C4'-O4'	5.30	115.47	109.10
26	LA	1252	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1449	G	O4'-C1'-C2'	5.30	112.37	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1685	C	N3-C4-C5	-5.30	119.78	121.90
26	LA	1688	U	C5-C6-N1	-5.30	120.05	122.70
26	LA	1745	A	P-O5'-C5'	5.30	129.39	120.90
26	LA	1873	G	N1-C2-N2	-5.30	111.43	116.20
26	LA	2050	C	C2-N3-C4	-5.30	117.25	119.90
2	SA	303	A	C8-N9-C4	-5.30	103.68	105.80
2	SA	828	U	C4'-C3'-C2'	-5.30	97.30	102.60
2	SA	1509	C	N3-C2-O2	-5.30	118.19	121.90
12	SL	30	ARG	CA-C-N	5.30	126.81	116.20
20	SD	97	LEU	CB-CA-C	-5.30	100.12	110.20
26	LA	106	C	C4'-C3'-C2'	5.30	107.90	102.60
26	LA	152	A	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	949	G	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2132	U	C5'-C4'-O4'	5.30	115.46	109.10
2	SA	90	C	C2-N3-C4	5.30	122.55	119.90
2	SA	158	G	N9-C4-C5	5.30	107.52	105.40
2	SA	704	A	C2-N3-C4	-5.30	107.95	110.60
2	SA	1216	A	C1'-O4'-C4'	-5.30	105.66	109.90
7	SG	126	ALA	N-CA-CB	-5.30	102.68	110.10
25	LB	79	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	86	G	C8-N9-C1'	5.30	133.89	127.00
26	LA	814	C	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1494	A	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1555	G	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1639	C	C5-C6-N1	5.30	123.65	121.00
26	LA	1770	G	N1-C6-O6	5.30	123.08	119.90
26	LA	1816	C	C6-N1-C1'	-5.30	114.44	120.80
26	LA	1818	U	C5-C6-N1	-5.30	120.05	122.70
26	LA	1956	U	N3-C2-O2	-5.30	118.49	122.20
26	LA	2255	G	C8-N9-C1'	5.30	133.89	127.00
26	LA	2651	C	OP1-P-OP2	-5.30	111.65	119.60
26	LA	2677	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	2741	A	C6-N1-C2	-5.30	115.42	118.60
31	LX	65	VAL	CA-CB-CG2	-5.30	102.95	110.90
2	SA	624	C	O4'-C1'-C2'	5.30	112.37	107.60
2	SA	1033	G	C6-N1-C2	-5.30	121.92	125.10
25	LB	53	A	C5-C6-N6	5.30	127.94	123.70
26	LA	126	A	O5'-C5'-C4'	5.30	121.77	111.70
26	LA	180	G	C6-N1-C2	-5.30	121.92	125.10
26	LA	241	A	C4-C5-C6	5.30	119.65	117.00
26	LA	830	G	P-O5'-C5'	5.30	129.38	120.90
26	LA	1034	G	P-O5'-C5'	-5.30	112.42	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1127	A	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	1194	A	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	1296	G	C4-C5-N7	5.30	112.92	110.80
26	LA	1301	A	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1545	A	C6-N1-C2	-5.30	115.42	118.60
26	LA	1714	U	O4'-C1'-N1	5.30	112.44	108.20
26	LA	1865	U	O4'-C1'-N1	5.30	112.44	108.20
26	LA	2073	C	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2234	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	2452	C	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2572	A	C8-N9-C1'	-5.30	118.16	127.70
26	LA	2781	A	O4'-C4'-C3'	5.30	110.34	106.10
29	LV	54	GLU	O-C-N	-5.30	114.22	122.70
38	LE	163	GLY	N-CA-C	5.30	126.35	113.10
48	LN	75	ALA	N-CA-CB	5.30	117.52	110.10
2	SA	45	G	N7-C8-N9	-5.30	110.45	113.10
2	SA	425	G	C5'-C4'-O4'	5.30	115.46	109.10
2	SA	449	G	C8-N9-C1'	5.30	133.89	127.00
2	SA	939	G	C5'-C4'-O4'	5.30	115.46	109.10
24	S3	474	ARG	CB-CA-C	-5.30	99.80	110.40
26	LA	898	C	C5-C6-N1	-5.30	118.35	121.00
26	LA	2702	G	N3-C2-N2	5.30	123.61	119.90
2	SA	120	A	C2-N3-C4	5.30	113.25	110.60
2	SA	277	C	N3-C4-N4	-5.30	114.29	118.00
2	SA	373	A	C4'-C3'-C2'	-5.30	97.30	102.60
2	SA	555	U	C4-C5-C6	-5.30	116.52	119.70
2	SA	1037	C	N3-C2-O2	-5.30	118.19	121.90
2	SA	1500	A	O4'-C1'-C2'	5.30	112.37	107.60
2	SA	1533	C	C4'-C3'-C2'	5.30	107.90	102.60
3	S1	41	A	C5'-C4'-C3'	-5.30	107.53	116.00
17	SQ	50	ASN	N-CA-CB	5.30	120.14	110.60
26	LA	197	A	C4-C5-N7	-5.30	108.05	110.70
26	LA	217	A	N1-C6-N6	-5.30	115.42	118.60
26	LA	518	G	C6-N1-C2	-5.30	121.92	125.10
26	LA	1059	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1097	U	N3-C4-O4	-5.30	115.69	119.40
26	LA	1152	C	C2-N3-C4	-5.30	117.25	119.90
26	LA	1356	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	1432	G	C3'-C2'-C1'	5.30	105.74	101.50
26	LA	1586	A	P-O5'-C5'	5.30	129.37	120.90
26	LA	1694	C	C6-N1-C1'	-5.30	114.44	120.80
26	LA	1831	G	C8-N9-C1'	-5.30	120.11	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1960	A	O4'-C1'-N9	5.30	112.44	108.20
26	LA	2454	G	C8-N9-C4	5.30	108.52	106.40
53	LP	31	HIS	CA-CB-CG	-5.30	104.60	113.60
2	SA	575	G	N3-C2-N2	-5.29	116.19	119.90
2	SA	743	A	C1'-O4'-C4'	-5.29	105.66	109.90
25	LB	107	G	N3-C4-C5	5.29	131.25	128.60
26	LA	19	A	C4-C5-N7	5.29	113.35	110.70
26	LA	193	U	N1-C2-O2	-5.29	119.09	122.80
26	LA	389	G	N1-C2-N2	-5.29	111.44	116.20
26	LA	1289	C	N3-C4-C5	-5.29	119.78	121.90
26	LA	2577	A	C6-C5-N7	-5.29	128.59	132.30
26	LA	2584	U	P-O3'-C3'	-5.29	113.35	119.70
2	SA	1	A	N9-C4-C5	-5.29	103.68	105.80
2	SA	138	G	C5-C6-N1	-5.29	108.85	111.50
2	SA	152	A	C5-C6-N1	-5.29	115.05	117.70
2	SA	179	A	C5-C6-N1	5.29	120.35	117.70
2	SA	327	A	C8-N9-C1'	5.29	137.23	127.70
2	SA	604	G	O4'-C1'-N9	5.29	112.44	108.20
2	SA	852	G	N1-C6-O6	5.29	123.08	119.90
2	SA	1082	A	C8-N9-C4	-5.29	103.68	105.80
4	S2	23	G	C3'-C2'-C1'	5.29	105.73	101.50
18	SB	49	PHE	CG-CD2-CE2	5.29	126.62	120.80
26	LA	184	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	204	A	N3-C4-N9	5.29	131.63	127.40
26	LA	259	G	C5-C6-O6	-5.29	125.42	128.60
26	LA	361	G	N3-C4-N9	5.29	129.18	126.00
26	LA	521	U	N3-C4-O4	-5.29	115.69	119.40
26	LA	789	A	C2-N3-C4	-5.29	107.95	110.60
26	LA	1229	C	C5-C6-N1	5.29	123.65	121.00
26	LA	1862	G	N3-C2-N2	-5.29	116.19	119.90
26	LA	2089	C	O4'-C1'-N1	5.29	112.44	108.20
26	LA	2134	A	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	2316	G	C2'-C3'-O3'	5.29	122.17	113.70
26	LA	2362	C	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	2405	G	C1'-O4'-C4'	5.29	114.14	109.90
26	LA	2431	U	C6-N1-C2	-5.29	117.82	121.00
2	SA	127	G	N3-C2-N2	5.29	123.60	119.90
2	SA	193	C	O4'-C1'-C2'	5.29	112.36	107.60
2	SA	314	C	C2-N3-C4	-5.29	117.25	119.90
2	SA	823	C	C4-C5-C6	5.29	120.05	117.40
2	SA	1231	G	P-O5'-C5'	5.29	129.37	120.90
2	SA	1502	A	C4-C5-C6	-5.29	114.35	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	3	C	P-O5'-C5'	5.29	129.37	120.90
11	SK	11	VAL	CB-CA-C	-5.29	101.34	111.40
18	SB	190	SER	O-C-N	-5.29	114.23	122.70
21	SE	87	VAL	CG1-CB-CG2	-5.29	102.43	110.90
25	LB	51	G	O5'-C5'-C4'	5.29	121.75	111.70
26	LA	201	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	226	A	C8-N9-C4	-5.29	103.68	105.80
26	LA	452	G	N3-C4-N9	5.29	129.18	126.00
26	LA	796	C	N3-C4-N4	5.29	121.70	118.00
26	LA	1386	C	C2'-C3'-O3'	5.29	122.17	113.70
26	LA	1538	G	C5'-C4'-C3'	5.29	124.47	116.00
26	LA	1570	A	C3'-C2'-C1'	5.29	105.73	101.50
26	LA	1892	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	2085	U	P-O3'-C3'	-5.29	113.35	119.70
26	LA	2430	A	C4-N9-C1'	5.29	135.82	126.30
26	LA	2498	C	N3-C2-O2	-5.29	118.20	121.90
26	LA	2508	G	C6-N1-C2	-5.29	121.92	125.10
26	LA	2668	G	C5'-C4'-C3'	5.29	124.47	116.00
26	LA	2778	A	C5-N7-C8	-5.29	101.25	103.90
27	LD	102	TYR	N-CA-CB	-5.29	101.08	110.60
2	SA	1027	C	C5'-C4'-C3'	-5.29	107.54	116.00
2	SA	1178	G	C4'-C3'-C2'	-5.29	97.31	102.60
25	LB	119	A	P-O5'-C5'	-5.29	112.44	120.90
26	LA	22	C	C5-C4-N4	-5.29	116.50	120.20
26	LA	43	G	N3-C4-C5	-5.29	125.95	128.60
26	LA	1098	A	O4'-C1'-N9	5.29	112.43	108.20
26	LA	1318	U	C5-C6-N1	5.29	125.34	122.70
26	LA	1427	A	C4-C5-N7	5.29	113.34	110.70
26	LA	1520	U	OP1-P-OP2	-5.29	111.67	119.60
26	LA	2535	G	C8-N9-C1'	5.29	133.88	127.00
2	SA	11	G	C5-N7-C8	-5.29	101.66	104.30
2	SA	116	A	N1-C2-N3	-5.29	126.66	129.30
2	SA	150	U	O4'-C1'-N1	5.29	112.43	108.20
2	SA	742	G	C5'-C4'-O4'	5.29	115.45	109.10
2	SA	787	A	C4'-C3'-C2'	-5.29	97.31	102.60
2	SA	855	U	C5-C6-N1	-5.29	120.06	122.70
2	SA	1206	G	C5-C6-O6	-5.29	125.43	128.60
2	SA	1251	A	N9-C4-C5	5.29	107.92	105.80
2	SA	1266	G	C4-C5-C6	5.29	121.97	118.80
9	SI	99	LYS	O-C-N	-5.29	114.24	122.70
12	SL	109	ARG	N-CA-CB	5.29	120.12	110.60
13	SM	40	GLU	O-C-N	-5.29	114.24	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	21	G	C5'-C4'-O4'	5.29	115.45	109.10
26	LA	108	G	N1-C2-N2	-5.29	111.44	116.20
26	LA	112	U	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	339	U	C2-N3-C4	-5.29	123.83	127.00
26	LA	562	U	C3'-C2'-C1'	-5.29	97.27	101.50
26	LA	579	G	OP1-P-OP2	-5.29	111.67	119.60
26	LA	641	U	C5'-C4'-O4'	5.29	115.45	109.10
26	LA	750	A	C4-C5-N7	-5.29	108.06	110.70
26	LA	825	A	C5-C6-N1	-5.29	115.06	117.70
26	LA	946	C	C1'-O4'-C4'	-5.29	105.67	109.90
26	LA	1209	U	O4'-C1'-N1	5.29	112.43	108.20
26	LA	1446	C	OP2-P-O3'	5.29	116.84	105.20
26	LA	1576	U	N3-C4-C5	-5.29	111.43	114.60
26	LA	1650	A	OP1-P-OP2	-5.29	111.67	119.60
26	LA	2157	G	C3'-C2'-C1'	-5.29	97.27	101.50
26	LA	2246	G	C5-N7-C8	5.29	106.94	104.30
26	LA	2475	C	C5'-C4'-C3'	-5.29	107.54	116.00
26	LA	2549	G	P-O3'-C3'	-5.29	113.35	119.70
26	LA	2713	U	C5'-C4'-O4'	5.29	115.45	109.10
47	LJ	100	LYS	N-CA-CB	-5.29	101.08	110.60
2	SA	392	C	C2-N3-C4	5.29	122.54	119.90
2	SA	620	C	C5-C6-N1	5.29	123.64	121.00
2	SA	804	U	C4'-C3'-C2'	-5.29	97.31	102.60
2	SA	1039	G	N9-C4-C5	5.29	107.52	105.40
2	SA	1319	A	C4-C5-N7	5.29	113.34	110.70
26	LA	74	A	C6-N1-C2	-5.29	115.43	118.60
26	LA	191	A	C6-N1-C2	-5.29	115.43	118.60
26	LA	955	U	C5-C6-N1	-5.29	120.06	122.70
26	LA	997	G	C2-N3-C4	5.29	114.54	111.90
26	LA	1319	C	OP1-P-O3'	5.29	116.83	105.20
26	LA	1319	C	C2-N3-C4	-5.29	117.26	119.90
26	LA	1409	U	C4-C5-C6	-5.29	116.53	119.70
26	LA	2261	C	C5'-C4'-C3'	-5.29	107.54	116.00
2	SA	203	G	C5-C6-N1	-5.29	108.86	111.50
2	SA	231	U	C1'-O4'-C4'	-5.29	105.67	109.90
2	SA	336	A	P-O5'-C5'	-5.29	112.44	120.90
2	SA	471	U	N3-C4-C5	-5.29	111.43	114.60
2	SA	650	G	N3-C2-N2	-5.29	116.20	119.90
2	SA	826	C	C5-C4-N4	5.29	123.90	120.20
2	SA	1075	U	C5-C6-N1	5.29	125.34	122.70
2	SA	1472	U	C5'-C4'-O4'	5.29	115.44	109.10
8	SH	127	TYR	N-CA-CB	5.29	120.11	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	SJ	5	ARG	NE-CZ-NH2	5.29	122.94	120.30
25	LB	28	C	C4-C5-C6	-5.29	114.76	117.40
26	LA	396	G	C8-N9-C4	-5.29	104.29	106.40
26	LA	624	C	C6-N1-C1'	-5.29	114.46	120.80
26	LA	989	G	C6-N1-C2	5.29	128.27	125.10
26	LA	1087	G	C5-C6-O6	-5.29	125.43	128.60
26	LA	1237	A	C5'-C4'-C3'	-5.29	107.54	116.00
26	LA	1320	C	C5-C4-N4	-5.29	116.50	120.20
26	LA	1430	G	C5-N7-C8	5.29	106.94	104.30
26	LA	2502	G	O4'-C1'-N9	5.29	112.43	108.20
31	LX	2	PHE	CB-CG-CD1	-5.29	117.10	120.80
33	LZ	56	ARG	O-C-N	-5.29	114.24	122.70
36	L2	49	ARG	NE-CZ-NH1	-5.29	117.66	120.30
53	LP	120	GLU	N-CA-C	5.29	125.27	111.00
2	SA	120	A	C1'-O4'-C4'	5.28	114.13	109.90
2	SA	122	G	C6-C5-N7	-5.28	127.23	130.40
2	SA	584	G	C5'-C4'-C3'	-5.28	107.55	116.00
2	SA	707	U	C5'-C4'-C3'	-5.28	107.55	116.00
2	SA	1003	G	O4'-C1'-N9	5.28	112.43	108.20
2	SA	1167	A	P-O5'-C5'	-5.28	112.45	120.90
2	SA	1347	G	N7-C8-N9	-5.28	110.46	113.10
2	SA	1476	A	P-O3'-C3'	5.28	126.04	119.70
25	LB	113	C	N3-C2-O2	-5.28	118.20	121.90
26	LA	461	C	C3'-C2'-C1'	5.28	105.73	101.50
26	LA	777	G	OP1-P-OP2	-5.28	111.67	119.60
26	LA	790	U	P-O5'-C5'	5.28	129.35	120.90
26	LA	875	G	C6-N1-C2	-5.28	121.93	125.10
26	LA	1084	A	N3-C4-C5	-5.28	123.10	126.80
26	LA	1636	U	N1-C2-O2	-5.28	119.10	122.80
26	LA	2061	G	P-O5'-C5'	5.28	129.35	120.90
26	LA	2280	G	O3'-P-O5'	5.28	114.04	104.00
26	LA	2462	C	P-O3'-C3'	5.28	126.04	119.70
26	LA	2492	U	C4-C5-C6	5.28	122.87	119.70
26	LA	2779	U	N1-C2-O2	-5.28	119.10	122.80
51	LI	17	ASP	CB-CG-OD1	-5.28	113.55	118.30
2	SA	424	G	C3'-C2'-C1'	-5.28	97.27	101.50
2	SA	752	G	N7-C8-N9	-5.28	110.46	113.10
3	S1	46	C	N3-C4-C5	-5.28	119.79	121.90
25	LB	77	U	OP2-P-O3'	5.28	116.82	105.20
26	LA	532	A	N9-C1'-C2'	-5.28	106.19	112.00
26	LA	810	U	C5-C4-O4	-5.28	122.73	125.90
26	LA	818	G	C4-N9-C1'	5.28	133.37	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	999	U	N3-C4-C5	-5.28	111.43	114.60
26	LA	1012	U	P-O3'-C3'	5.28	126.04	119.70
26	LA	1254	A	N1-C6-N6	-5.28	115.43	118.60
26	LA	1339	G	N7-C8-N9	-5.28	110.46	113.10
27	LD	47	ARG	O-C-N	-5.28	114.25	122.70
47	LJ	30	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
2	SA	82	G	N9-C1'-C2'	-5.28	106.19	112.00
2	SA	141	G	N1-C2-N3	5.28	127.07	123.90
2	SA	203	G	C8-N9-C1'	5.28	133.87	127.00
2	SA	667	G	N1-C2-N2	-5.28	111.45	116.20
2	SA	697	U	C4'-C3'-C2'	5.28	107.88	102.60
2	SA	892	A	C1'-O4'-C4'	-5.28	105.67	109.90
2	SA	1531	A	OP1-P-OP2	-5.28	111.68	119.60
4	S2	53	G	N1-C2-N3	-5.28	120.73	123.90
13	SM	69	ARG	NE-CZ-NH1	5.28	122.94	120.30
24	S3	467	ILE	CB-CA-C	5.28	122.16	111.60
25	LB	14	U	N3-C4-C5	5.28	117.77	114.60
25	LB	64	G	N3-C4-N9	-5.28	122.83	126.00
26	LA	159	G	OP1-P-O3'	5.28	116.82	105.20
26	LA	512	G	C4-C5-N7	-5.28	108.69	110.80
26	LA	689	A	C3'-C2'-C1'	5.28	105.72	101.50
26	LA	689	A	O4'-C1'-N9	5.28	112.42	108.20
26	LA	705	A	C3'-C2'-C1'	5.28	105.72	101.50
26	LA	757	G	C4-C5-C6	-5.28	115.63	118.80
26	LA	1661	G	C4-C5-C6	5.28	121.97	118.80
26	LA	2147	A	O4'-C1'-N9	5.28	112.42	108.20
26	LA	2334	U	C5-C6-N1	-5.28	120.06	122.70
26	LA	2688	G	C2-N3-C4	-5.28	109.26	111.90
2	SA	528	C	P-O3'-C3'	5.28	126.03	119.70
2	SA	907	A	C6-N1-C2	5.28	121.77	118.60
2	SA	1003	G	C5-C6-N1	5.28	114.14	111.50
2	SA	1104	G	C4-N9-C1'	-5.28	119.64	126.50
2	SA	1274	A	C5-C6-N1	-5.28	115.06	117.70
26	LA	1266	G	C2-N3-C4	5.28	114.54	111.90
26	LA	1585	C	C5-C6-N1	5.28	123.64	121.00
26	LA	2263	C	N3-C4-N4	5.28	121.69	118.00
2	SA	300	A	C6-N1-C2	-5.28	115.43	118.60
2	SA	1333	A	O4'-C1'-N9	5.28	112.42	108.20
2	SA	1405	G	C2-N3-C4	5.28	114.54	111.90
2	SA	1506	U	N3-C4-O4	5.28	123.09	119.40
2	SA	1510	C	N3-C4-C5	5.28	124.01	121.90
12	SL	109	ARG	NE-CZ-NH2	-5.28	117.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	SB	21	TYR	CB-CG-CD2	-5.28	117.83	121.00
26	LA	555	G	O5'-C5'-C4'	-5.28	101.67	111.70
26	LA	606	U	N3-C4-C5	5.28	117.77	114.60
26	LA	691	C	C6-N1-C2	-5.28	118.19	120.30
26	LA	780	G	O4'-C1'-C2'	-5.28	100.52	105.80
26	LA	1206	G	C5-C6-O6	5.28	131.77	128.60
26	LA	2094	A	P-O5'-C5'	5.28	129.34	120.90
26	LA	2400	G	OP2-P-O3'	5.28	116.81	105.20
26	LA	2416	C	N3-C2-O2	-5.28	118.21	121.90
26	LA	2425	A	C2-N3-C4	-5.28	107.96	110.60
26	LA	2481	G	O3'-P-O5'	-5.28	93.97	104.00
26	LA	2641	G	C5-C6-O6	5.28	131.77	128.60
26	LA	2651	C	C6-N1-C2	-5.28	118.19	120.30
38	LE	15	PHE	CG-CD2-CE2	5.28	126.60	120.80
2	SA	430	A	C3'-C2'-C1'	-5.28	97.28	101.50
2	SA	464	U	C3'-C2'-C1'	5.28	105.72	101.50
2	SA	803	G	C5-C6-O6	-5.28	125.44	128.60
2	SA	1074	G	N7-C8-N9	-5.28	110.46	113.10
2	SA	1129	C	P-O5'-C5'	-5.28	112.46	120.90
2	SA	1376	U	P-O3'-C3'	5.28	126.03	119.70
2	SA	1480	A	C5'-C4'-C3'	5.28	124.44	116.00
4	S2	55	U	N3-C4-O4	5.28	123.09	119.40
26	LA	42	A	N9-C4-C5	5.28	107.91	105.80
26	LA	818	G	C5-C6-N1	5.28	114.14	111.50
26	LA	912	C	C5-C6-N1	-5.28	118.36	121.00
26	LA	1180	U	C2-N3-C4	5.28	130.16	127.00
26	LA	2520	C	OP1-P-OP2	-5.28	111.69	119.60
26	LA	2674	G	C8-N9-C4	5.28	108.51	106.40
38	LE	90	PHE	CA-CB-CG	-5.28	101.24	113.90
2	SA	247	G	C4'-C3'-C2'	-5.27	97.33	102.60
26	LA	141	G	N1-C2-N3	-5.27	120.74	123.90
26	LA	291	G	N1-C6-O6	5.27	123.06	119.90
26	LA	525	U	C3'-C2'-C1'	5.27	105.72	101.50
26	LA	618	G	C5-N7-C8	-5.27	101.66	104.30
26	LA	684	G	C5-C6-O6	-5.27	125.44	128.60
26	LA	783	A	P-O3'-C3'	-5.27	113.37	119.70
26	LA	1197	G	O4'-C1'-C2'	5.27	112.35	107.60
26	LA	1266	G	N3-C4-C5	-5.27	125.96	128.60
26	LA	1704	C	N3-C4-N4	5.27	121.69	118.00
26	LA	2388	A	C2-N3-C4	5.27	113.24	110.60
33	LZ	18	SER	C-N-CA	5.27	134.88	121.70
2	SA	493	A	C4-N9-C1'	5.27	135.79	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	639	G	N1-C6-O6	5.27	123.06	119.90
2	SA	921	U	C3'-C2'-C1'	5.27	105.72	101.50
4	S2	17	C	OP1-P-OP2	-5.27	111.69	119.60
4	S2	72	C	C4'-C3'-C2'	-5.27	97.33	102.60
18	SB	27	LYS	N-CA-C	5.27	125.24	111.00
19	SC	23	ALA	N-CA-CB	5.27	117.48	110.10
24	S3	225	ALA	N-CA-CB	5.27	117.48	110.10
25	LB	115	A	C4-C5-C6	-5.27	114.36	117.00
26	LA	194	G	N3-C2-N2	5.27	123.59	119.90
26	LA	201	C	N3-C4-C5	5.27	124.01	121.90
26	LA	399	U	N1-C2-O2	5.27	126.49	122.80
26	LA	419	U	C3'-C2'-C1'	5.27	105.72	101.50
26	LA	813	U	O3'-P-O5'	5.27	114.02	104.00
26	LA	1083	U	C5'-C4'-C3'	-5.27	107.56	116.00
26	LA	1128	G	C8-N9-C4	-5.27	104.29	106.40
26	LA	1467	U	N1-C1'-C2'	-5.27	106.20	112.00
26	LA	1524	G	N3-C4-N9	-5.27	122.84	126.00
26	LA	2666	C	P-O3'-C3'	-5.27	113.37	119.70
31	LX	42	LEU	CB-CG-CD1	-5.27	102.04	111.00
2	SA	675	A	C5'-C4'-O4'	5.27	115.43	109.10
2	SA	1110	A	C4-C5-C6	-5.27	114.36	117.00
2	SA	1465	A	C5-N7-C8	5.27	106.53	103.90
25	LB	20	G	O4'-C1'-N9	5.27	112.42	108.20
26	LA	262	A	C6-N1-C2	5.27	121.76	118.60
26	LA	2679	A	C6-N1-C2	-5.27	115.44	118.60
2	SA	241	G	P-O3'-C3'	5.27	126.02	119.70
2	SA	258	G	N3-C4-N9	-5.27	122.84	126.00
2	SA	342	C	N3-C2-O2	-5.27	118.21	121.90
2	SA	409	U	N3-C4-O4	-5.27	115.71	119.40
2	SA	534	U	N3-C2-O2	-5.27	118.51	122.20
2	SA	580	C	C6-N1-C2	-5.27	118.19	120.30
2	SA	771	G	C6-N1-C2	-5.27	121.94	125.10
2	SA	841	C	P-O5'-C5'	5.27	129.33	120.90
2	SA	1001	C	N1-C2-N3	-5.27	115.51	119.20
2	SA	1100	C	C5'-C4'-C3'	5.27	124.43	116.00
2	SA	1122	U	P-O5'-C5'	5.27	129.33	120.90
2	SA	1427	C	C4'-C3'-C2'	-5.27	97.33	102.60
2	SA	1445	U	C6-N1-C2	-5.27	117.84	121.00
2	SA	1504	G	C3'-C2'-C1'	-5.27	97.28	101.50
4	S2	24	C	C5'-C4'-O4'	5.27	115.42	109.10
26	LA	446	G	N1-C6-O6	5.27	123.06	119.90
26	LA	523	C	OP1-P-OP2	-5.27	111.69	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	701	G	C8-N9-C4	5.27	108.51	106.40
26	LA	801	G	P-O5'-C5'	5.27	129.33	120.90
26	LA	1136	G	N7-C8-N9	5.27	115.73	113.10
26	LA	1159	U	O4'-C1'-N1	5.27	112.42	108.20
26	LA	1444	G	C2-N3-C4	-5.27	109.27	111.90
26	LA	1732	C	C5'-C4'-C3'	-5.27	107.57	116.00
26	LA	2383	G	N9-C4-C5	-5.27	103.29	105.40
26	LA	2392	A	C4-C5-C6	-5.27	114.37	117.00
26	LA	2612	C	C2-N3-C4	-5.27	117.27	119.90
37	LC	16	ASP	CB-CG-OD2	-5.27	113.56	118.30
47	LJ	21	ALA	N-CA-CB	-5.27	102.72	110.10
53	LP	69	ARG	NE-CZ-NH1	5.27	122.93	120.30
53	LP	122	ALA	N-CA-C	5.27	125.23	111.00
2	SA	254	G	C2'-C3'-O3'	5.27	122.13	113.70
2	SA	491	G	O4'-C1'-N9	5.27	112.41	108.20
2	SA	667	G	C6-N1-C2	-5.27	121.94	125.10
2	SA	804	U	O4'-C4'-C3'	5.27	110.31	106.10
2	SA	954	G	N3-C4-N9	5.27	129.16	126.00
4	S2	43	G	O5'-P-OP2	-5.27	100.96	105.70
25	LB	7	G	N1-C6-O6	-5.27	116.74	119.90
26	LA	21	A	C2-N3-C4	-5.27	107.97	110.60
26	LA	174	U	C5'-C4'-O4'	5.27	115.42	109.10
26	LA	310	A	C2-N3-C4	5.27	113.23	110.60
26	LA	559	G	C2-N3-C4	5.27	114.53	111.90
26	LA	964	C	C5-C6-N1	-5.27	118.37	121.00
26	LA	1054	A	C4-C5-C6	5.27	119.63	117.00
26	LA	1096	A	N3-C4-C5	5.27	130.49	126.80
26	LA	1209	U	O3'-P-O5'	5.27	114.01	104.00
26	LA	1642	G	C6-N1-C2	-5.27	121.94	125.10
26	LA	1773	A	C4-N9-C1'	5.27	135.78	126.30
26	LA	1891	G	C6-C5-N7	-5.27	127.24	130.40
26	LA	2771	C	N3-C4-N4	-5.27	114.31	118.00
38	LE	33	ARG	CD-NE-CZ	5.27	130.97	123.60
2	SA	2	A	C3'-C2'-C1'	5.27	105.71	101.50
2	SA	282	A	N1-C6-N6	5.27	121.76	118.60
2	SA	440	C	P-O5'-C5'	-5.27	112.47	120.90
2	SA	790	A	N1-C6-N6	5.27	121.76	118.60
2	SA	886	G	C8-N9-C4	5.27	108.51	106.40
2	SA	1133	G	C8-N9-C1'	5.27	133.85	127.00
26	LA	377	G	C2-N3-C4	5.27	114.53	111.90
26	LA	585	G	C8-N9-C4	5.27	108.51	106.40
26	LA	1047	G	C5'-C4'-O4'	5.27	115.42	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1599	U	C6-N1-C1'	5.27	128.57	121.20
26	LA	1766	G	C4-C5-C6	-5.27	115.64	118.80
26	LA	2776	A	C4'-C3'-C2'	-5.27	97.33	102.60
2	SA	146	G	N3-C4-N9	5.26	129.16	126.00
2	SA	158	G	N1-C2-N2	-5.26	111.46	116.20
2	SA	339	C	O4'-C1'-N1	5.26	112.41	108.20
2	SA	581	G	N1-C2-N3	-5.26	120.74	123.90
2	SA	931	C	N1-C2-N3	5.26	122.89	119.20
2	SA	1144	G	O4'-C1'-N9	5.26	112.41	108.20
3	S1	15	G	C2-N3-C4	5.26	114.53	111.90
17	SQ	23	ALA	N-CA-CB	-5.26	102.73	110.10
26	LA	308	G	C8-N9-C4	-5.26	104.29	106.40
26	LA	384	A	N3-C4-N9	-5.26	123.19	127.40
26	LA	612	G	C5-C6-O6	5.26	131.76	128.60
26	LA	787	C	N3-C4-C5	-5.26	119.79	121.90
26	LA	794	A	C2-N3-C4	5.26	113.23	110.60
26	LA	848	C	OP1-P-OP2	-5.26	111.70	119.60
26	LA	1128	G	O3'-P-O5'	-5.26	94.00	104.00
26	LA	1193	G	OP1-P-OP2	-5.26	111.70	119.60
26	LA	1310	G	C1'-O4'-C4'	5.26	114.11	109.90
26	LA	1806	C	C6-N1-C2	5.26	122.41	120.30
26	LA	1880	U	C5-C6-N1	5.26	125.33	122.70
26	LA	2751	G	N7-C8-N9	-5.26	110.47	113.10
28	LU	68	ASP	CB-CG-OD1	5.26	123.04	118.30
40	L4	33	LEU	CB-CG-CD1	-5.26	102.05	111.00
2	SA	59	A	C4'-C3'-C2'	-5.26	97.34	102.60
2	SA	1111	A	P-O5'-C5'	-5.26	112.48	120.90
2	SA	1117	A	OP2-P-O3'	5.26	116.78	105.20
2	SA	1438	G	C4-C5-C6	-5.26	115.64	118.80
2	SA	1511	G	N1-C2-N2	-5.26	111.46	116.20
5	ST	79	THR	CA-CB-CG2	5.26	119.77	112.40
25	LB	51	G	O4'-C1'-N9	5.26	112.41	108.20
26	LA	168	G	C4-C5-C6	-5.26	115.64	118.80
26	LA	396	G	N3-C4-C5	-5.26	125.97	128.60
26	LA	858	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	1035	U	O4'-C1'-N1	5.26	112.41	108.20
26	LA	1202	G	O5'-P-OP2	5.26	117.02	110.70
26	LA	1304	A	C5-C6-N1	5.26	120.33	117.70
26	LA	1343	G	N1-C2-N2	-5.26	111.46	116.20
26	LA	1345	C	O4'-C1'-N1	5.26	112.41	108.20
26	LA	1448	G	P-O5'-C5'	-5.26	112.48	120.90
26	LA	1931	U	C6-N1-C2	-5.26	117.84	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2090	A	C4-C5-C6	-5.26	114.37	117.00
26	LA	2222	C	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	2446	G	N3-C2-N2	5.26	123.58	119.90
26	LA	2596	U	N3-C4-C5	-5.26	111.44	114.60
27	LD	128	THR	CA-CB-OG1	5.26	120.05	109.00
2	SA	86	G	N3-C2-N2	-5.26	116.22	119.90
2	SA	266	G	C8-N9-C1'	5.26	133.84	127.00
2	SA	771	G	OP1-P-OP2	-5.26	111.71	119.60
2	SA	1416	G	N7-C8-N9	-5.26	110.47	113.10
2	SA	1479	C	C5-C6-N1	5.26	123.63	121.00
24	S3	283	ASP	CB-CA-C	5.26	120.92	110.40
25	LB	21	G	N3-C4-N9	5.26	129.16	126.00
25	LB	47	C	C5'-C4'-C3'	5.26	124.42	116.00
26	LA	519	U	N1-C2-N3	5.26	118.06	114.90
26	LA	674	G	O4'-C1'-N9	5.26	112.41	108.20
26	LA	913	U	O4'-C1'-N1	5.26	112.41	108.20
26	LA	942	G	C6-N1-C2	-5.26	121.94	125.10
26	LA	2059	A	C5-C6-N1	5.26	120.33	117.70
26	LA	2146	C	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	2375	G	C5'-C4'-O4'	5.26	115.41	109.10
45	LG	173	ASP	O-C-N	-5.26	114.28	122.70
2	SA	59	A	P-O3'-C3'	-5.26	113.39	119.70
2	SA	403	C	C5'-C4'-C3'	-5.26	107.58	116.00
2	SA	425	G	N1-C6-O6	-5.26	116.74	119.90
2	SA	640	A	C5-C6-N6	5.26	127.91	123.70
2	SA	686	U	OP2-P-O3'	5.26	116.77	105.20
2	SA	749	A	C8-N9-C4	-5.26	103.70	105.80
2	SA	892	A	C5'-C4'-O4'	5.26	115.41	109.10
2	SA	1303	C	O3'-P-O5'	-5.26	94.00	104.00
4	S2	19	G	C5-C6-N1	-5.26	108.87	111.50
4	S2	20	G	C4-C5-N7	5.26	112.90	110.80
7	SG	55	LYS	N-CA-CB	-5.26	101.13	110.60
25	LB	79	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	200	U	OP1-P-OP2	-5.26	111.71	119.60
26	LA	273	G	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	310	A	N1-C2-N3	-5.26	126.67	129.30
26	LA	798	G	C4-C5-C6	5.26	121.96	118.80
26	LA	855	G	C5'-C4'-C3'	-5.26	107.58	116.00
26	LA	895	U	N1-C2-N3	5.26	118.06	114.90
26	LA	1383	A	C1'-O4'-C4'	-5.26	105.69	109.90
26	LA	1399	C	C6-N1-C1'	-5.26	114.49	120.80
26	LA	2491	U	P-O3'-C3'	-5.26	113.39	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2511	U	N3-C4-O4	5.26	123.08	119.40
38	LE	129	THR	CA-CB-CG2	-5.26	105.04	112.40
2	SA	156	C	C4-C5-C6	5.26	120.03	117.40
2	SA	1009	U	C1'-O4'-C4'	-5.26	105.69	109.90
2	SA	1068	G	N1-C6-O6	-5.26	116.75	119.90
2	SA	1102	A	C4-C5-C6	5.26	119.63	117.00
2	SA	1520	C	C4-C5-C6	5.26	120.03	117.40
4	S2	39	A	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	334	C	C6-N1-C1'	5.26	127.11	120.80
26	LA	1835	G	C5-C6-O6	-5.26	125.44	128.60
26	LA	2764	A	OP1-P-OP2	-5.26	111.71	119.60
26	LA	2792	A	C6-N1-C2	5.26	121.75	118.60
26	LA	2878	U	C2-N3-C4	5.26	130.16	127.00
56	LR	97	TYR	N-CA-C	5.26	125.20	111.00
2	SA	34	C	P-O5'-C5'	-5.26	112.49	120.90
2	SA	414	A	O4'-C4'-C3'	5.26	110.31	106.10
2	SA	432	A	N1-C2-N3	-5.26	126.67	129.30
2	SA	460	A	O4'-C1'-N9	5.26	112.41	108.20
2	SA	838	G	C1'-O4'-C4'	-5.26	105.69	109.90
2	SA	1248	A	OP2-P-O3'	5.26	116.77	105.20
2	SA	1423	G	N3-C4-N9	5.26	129.15	126.00
25	LB	2	G	C4-C5-C6	5.26	121.95	118.80
26	LA	169	G	OP1-P-OP2	-5.26	111.71	119.60
26	LA	244	A	N1-C6-N6	5.26	121.75	118.60
26	LA	560	C	C6-N1-C1'	-5.26	114.49	120.80
26	LA	804	A	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	1314	C	C5-C6-N1	5.26	123.63	121.00
26	LA	1501	G	C2-N3-C4	-5.26	109.27	111.90
26	LA	1810	A	C4-C5-C6	-5.26	114.37	117.00
26	LA	2451	A	O4'-C1'-C2'	5.26	112.33	107.60
26	LA	2524	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	2529	G	N1-C2-N2	-5.26	111.47	116.20
26	LA	2590	A	N1-C2-N3	-5.26	126.67	129.30
26	LA	2800	A	N9-C4-C5	5.26	107.90	105.80
41	L5	23	ALA	N-CA-C	5.26	125.19	111.00
49	LK	113	ALA	N-CA-CB	5.26	117.46	110.10
55	LQ	51	ALA	N-CA-CB	-5.26	102.74	110.10
2	SA	1162	C	C5'-C4'-C3'	-5.25	107.59	116.00
2	SA	1251	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	333	G	C8-N9-C4	-5.25	104.30	106.40
26	LA	412	A	OP1-P-OP2	-5.25	111.72	119.60
26	LA	433	C	O4'-C1'-C2'	5.25	112.33	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	762	U	OP1-P-OP2	-5.25	111.72	119.60
26	LA	788	A	C4-C5-C6	-5.25	114.37	117.00
26	LA	1086	A	N3-C4-C5	-5.25	123.12	126.80
26	LA	1137	G	C3'-C2'-C1'	5.25	105.70	101.50
26	LA	1246	A	C5-N7-C8	-5.25	101.27	103.90
26	LA	1448	G	OP1-P-O3'	5.25	116.76	105.20
26	LA	1820	U	OP1-P-OP2	-5.25	111.72	119.60
51	LI	121	VAL	C-N-CA	5.25	134.84	121.70
2	SA	86	G	C5-N7-C8	-5.25	101.67	104.30
2	SA	258	G	C4'-C3'-C2'	-5.25	97.35	102.60
2	SA	749	A	C5-C6-N6	-5.25	119.50	123.70
2	SA	1196	A	P-O3'-C3'	-5.25	113.39	119.70
2	SA	1499	A	N7-C8-N9	-5.25	111.17	113.80
25	LB	85	G	C5'-C4'-C3'	5.25	124.41	116.00
26	LA	44	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	631	A	C5'-C4'-C3'	-5.25	107.59	116.00
26	LA	987	C	N3-C2-O2	-5.25	118.22	121.90
26	LA	1581	G	C4-N9-C1'	-5.25	119.67	126.50
26	LA	1931	U	C5-C6-N1	5.25	125.33	122.70
26	LA	2263	C	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	2659	G	C8-N9-C1'	5.25	133.83	127.00
27	LD	12	ARG	NE-CZ-NH1	-5.25	117.67	120.30
47	LJ	41	ARG	NH1-CZ-NH2	-5.25	113.62	119.40
2	SA	312	C	OP1-P-OP2	-5.25	111.72	119.60
2	SA	364	A	C6-N1-C2	5.25	121.75	118.60
2	SA	508	U	P-O3'-C3'	-5.25	113.40	119.70
2	SA	690	G	C8-N9-C4	-5.25	104.30	106.40
9	SI	32	ARG	N-CA-C	-5.25	96.82	111.00
13	SM	53	ASP	CB-CG-OD2	5.25	123.03	118.30
22	SF	116	PHE	CB-CG-CD1	5.25	124.48	120.80
26	LA	912	C	C6-N1-C1'	-5.25	114.50	120.80
26	LA	1112	G	OP1-P-OP2	-5.25	111.72	119.60
26	LA	1338	G	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	1780	A	C4-C5-N7	5.25	113.33	110.70
26	LA	2092	U	N1-C2-N3	5.25	118.05	114.90
26	LA	2124	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	2178	C	OP1-P-OP2	-5.25	111.72	119.60
26	LA	2213	U	C6-N1-C1'	-5.25	113.85	121.20
26	LA	2451	A	C1'-O4'-C4'	-5.25	105.70	109.90
26	LA	2496	C	OP1-P-OP2	-5.25	111.72	119.60
26	LA	2587	A	C5-C6-N1	5.25	120.33	117.70
26	LA	2592	G	C4-C5-C6	5.25	121.95	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2666	C	C5'-C4'-O4'	5.25	115.40	109.10
37	LC	164	ARG	NE-CZ-NH2	5.25	122.93	120.30
2	SA	269	C	C5'-C4'-O4'	5.25	115.40	109.10
2	SA	342	C	C5'-C4'-C3'	5.25	124.40	116.00
2	SA	567	G	C4-C5-N7	-5.25	108.70	110.80
2	SA	889	A	C4-C5-N7	-5.25	108.08	110.70
2	SA	954	G	C5-C6-O6	-5.25	125.45	128.60
2	SA	977	A	C8-N9-C4	5.25	107.90	105.80
2	SA	1074	G	O4'-C1'-N9	5.25	112.40	108.20
2	SA	1355	G	N7-C8-N9	-5.25	110.47	113.10
26	LA	1005	C	OP2-P-O3'	5.25	116.75	105.20
26	LA	1381	G	C4-C5-N7	5.25	112.90	110.80
26	LA	1954	G	N3-C4-N9	5.25	129.15	126.00
2	SA	29	U	C2'-C3'-O3'	5.25	122.10	113.70
2	SA	538	G	O4'-C1'-C2'	5.25	112.32	107.60
2	SA	602	A	C8-N9-C4	5.25	107.90	105.80
2	SA	1074	G	C4'-C3'-C2'	-5.25	97.35	102.60
2	SA	1376	U	C6-N1-C2	5.25	124.15	121.00
18	SB	38	HIS	C-N-CA	5.25	134.82	121.70
26	LA	54	G	C2-N3-C4	-5.25	109.28	111.90
26	LA	569	U	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	722	A	N1-C6-N6	5.25	121.75	118.60
26	LA	926	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	1258	U	C2-N3-C4	-5.25	123.85	127.00
26	LA	1815	A	P-O3'-C3'	-5.25	113.40	119.70
26	LA	1843	C	O5'-C5'-C4'	-5.25	101.73	111.70
26	LA	2163	A	O5'-C5'-C4'	5.25	121.67	111.70
26	LA	2352	A	C5'-C4'-C3'	-5.25	107.60	116.00
26	LA	2772	C	P-O3'-C3'	5.25	126.00	119.70
2	SA	12	U	O3'-P-O5'	-5.25	94.03	104.00
2	SA	561	U	C4-C5-C6	-5.25	116.55	119.70
2	SA	1245	C	C4-C5-C6	-5.25	114.78	117.40
2	SA	1274	A	C8-N9-C4	-5.25	103.70	105.80
4	S2	34	U	C3'-C2'-C1'	5.25	105.70	101.50
26	LA	754	U	OP1-P-OP2	-5.25	111.73	119.60
26	LA	1047	G	C5-C6-O6	-5.25	125.45	128.60
26	LA	1321	A	C4-C5-C6	-5.25	114.38	117.00
26	LA	1446	C	N3-C4-C5	-5.25	119.80	121.90
26	LA	1461	C	N3-C4-N4	-5.25	114.33	118.00
26	LA	1617	C	P-O3'-C3'	-5.25	113.41	119.70
26	LA	1835	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	1870	C	O4'-C4'-C3'	5.25	110.30	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1899	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	2085	U	C5-C4-O4	5.25	129.05	125.90
26	LA	2094	A	C4'-C3'-C2'	-5.25	97.35	102.60
26	LA	2171	A	C5'-C4'-C3'	-5.25	107.61	116.00
26	LA	2254	C	N3-C4-C5	-5.25	119.80	121.90
26	LA	2293	G	C8-N9-C1'	5.25	133.82	127.00
26	LA	2391	G	O4'-C1'-C2'	-5.25	100.55	105.80
26	LA	2700	A	C6-N1-C2	-5.25	115.45	118.60
41	L5	12	ARG	NE-CZ-NH2	5.25	122.92	120.30
45	LG	94	ARG	CG-CD-NE	-5.25	100.78	111.80
45	LG	177	ARG	NE-CZ-NH1	5.25	122.92	120.30
47	LJ	33	THR	O-C-N	-5.25	114.31	122.70
2	SA	1244	G	C4-C5-N7	5.25	112.90	110.80
25	LB	20	G	C5'-C4'-C3'	-5.25	107.61	116.00
26	LA	410	G	C5-C6-N1	-5.25	108.88	111.50
26	LA	983	A	N9-C4-C5	5.25	107.90	105.80
26	LA	1426	G	N1-C6-O6	5.25	123.05	119.90
26	LA	2518	A	C4-N9-C1'	5.25	135.74	126.30
44	LF	114	ARG	NE-CZ-NH2	-5.25	117.68	120.30
2	SA	120	A	C8-N9-C4	-5.24	103.70	105.80
2	SA	903	G	C2-N3-C4	5.24	114.52	111.90
2	SA	1142	G	C8-N9-C4	-5.24	104.30	106.40
2	SA	1310	G	C4'-C3'-C2'	-5.24	97.36	102.60
2	SA	1509	C	C6-N1-C2	-5.24	118.20	120.30
25	LB	68	C	OP1-P-OP2	-5.24	111.73	119.60
25	LB	120	U	C2-N3-C4	5.24	130.15	127.00
26	LA	51	G	C5-C6-O6	-5.24	125.45	128.60
26	LA	360	U	N3-C2-O2	5.24	125.87	122.20
26	LA	1035	U	C3'-C2'-C1'	-5.24	97.30	101.50
26	LA	1076	C	C6-N1-C2	-5.24	118.20	120.30
26	LA	1191	G	OP1-P-OP2	-5.24	111.73	119.60
26	LA	1218	G	C5-C6-N1	5.24	114.12	111.50
26	LA	1567	G	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	1754	A	C8-N9-C4	-5.24	103.70	105.80
26	LA	1781	U	OP1-P-O3'	5.24	116.74	105.20
26	LA	2421	G	OP2-P-O3'	5.24	116.73	105.20
26	LA	2426	A	C5'-C4'-C3'	5.24	124.39	116.00
26	LA	2645	G	C4-C5-N7	5.24	112.90	110.80
26	LA	2702	G	N1-C6-O6	5.24	123.05	119.90
46	LH	103	ASN	CA-CB-CG	-5.24	101.86	113.40
4	S2	56	U	O4'-C4'-C3'	5.24	110.29	106.10
24	S3	27	GLU	O-C-N	-5.24	114.31	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	304	THR	N-CA-CB	5.24	120.26	110.30
26	LA	652	U	O5'-C5'-C4'	5.24	121.66	111.70
26	LA	749	A	C6-C5-N7	-5.24	128.63	132.30
26	LA	776	G	O4'-C4'-C3'	-5.24	98.76	104.00
26	LA	1387	A	C4-C5-C6	-5.24	114.38	117.00
26	LA	1486	U	OP1-P-OP2	-5.24	111.74	119.60
26	LA	1958	C	C2-N3-C4	-5.24	117.28	119.90
26	LA	2212	A	O5'-C5'-C4'	-5.24	101.74	111.70
41	L5	34	ARG	NH1-CZ-NH2	-5.24	113.63	119.40
2	SA	59	A	N9-C4-C5	-5.24	103.70	105.80
2	SA	203	G	N9-C1'-C2'	-5.24	106.23	112.00
2	SA	362	G	C4-N9-C1'	-5.24	119.69	126.50
2	SA	438	U	N1-C2-N3	-5.24	111.76	114.90
2	SA	712	A	C4-C5-C6	-5.24	114.38	117.00
2	SA	933	G	C2-N3-C4	5.24	114.52	111.90
2	SA	1125	U	C5-C4-O4	-5.24	122.76	125.90
3	S1	36	U	P-O5'-C5'	5.24	129.29	120.90
26	LA	77	G	C2-N3-C4	-5.24	109.28	111.90
26	LA	125	A	C5'-C4'-C3'	-5.24	107.61	116.00
26	LA	171	U	N1-C2-N3	-5.24	111.75	114.90
26	LA	527	C	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	769	U	N1-C2-N3	-5.24	111.76	114.90
26	LA	1288	G	C8-N9-C4	-5.24	104.30	106.40
26	LA	1399	C	C1'-O4'-C4'	-5.24	105.71	109.90
26	LA	1874	C	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	1922	G	N9-C4-C5	-5.24	103.30	105.40
26	LA	1929	G	OP1-P-OP2	-5.24	111.74	119.60
26	LA	2153	C	P-O3'-C3'	-5.24	113.41	119.70
26	LA	2765	A	C5'-C4'-C3'	5.24	124.39	116.00
41	L5	41	ARG	CG-CD-NE	-5.24	100.80	111.80
49	LK	120	ASP	CB-CG-OD1	5.24	123.02	118.30
2	SA	783	C	C5'-C4'-O4'	5.24	115.39	109.10
2	SA	878	A	C5-N7-C8	5.24	106.52	103.90
2	SA	973	G	O3'-P-O5'	5.24	113.95	104.00
2	SA	1204	A	C1'-O4'-C4'	-5.24	105.71	109.90
2	SA	1513	A	C6-N1-C2	-5.24	115.46	118.60
26	LA	56	A	N1-C6-N6	-5.24	115.46	118.60
26	LA	367	G	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	859	G	C8-N9-C4	-5.24	104.31	106.40
26	LA	964	C	C5-C4-N4	-5.24	116.53	120.20
26	LA	1383	A	C6-C5-N7	-5.24	128.63	132.30
26	LA	1640	A	O4'-C4'-C3'	-5.24	98.76	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1778	U	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	1849	G	O4'-C1'-N9	5.24	112.39	108.20
26	LA	1882	U	C6-N1-C2	-5.24	117.86	121.00
26	LA	1979	U	C6-N1-C2	-5.24	117.86	121.00
26	LA	2329	U	C5-C4-O4	-5.24	122.76	125.90
26	LA	2837	A	O5'-P-OP2	-5.24	100.98	105.70
45	LG	21	TYR	CZ-CE2-CD2	5.24	124.52	119.80
46	LH	31	GLU	CA-CB-CG	5.24	124.93	113.40
2	SA	866	C	O4'-C1'-N1	5.24	112.39	108.20
2	SA	1324	A	C6-N1-C2	-5.24	115.46	118.60
2	SA	1337	G	P-O5'-C5'	-5.24	112.52	120.90
14	SN	83	VAL	CG1-CB-CG2	-5.24	102.52	110.90
26	LA	304	U	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	847	U	O4'-C1'-N1	5.24	112.39	108.20
26	LA	1289	C	O4'-C1'-N1	5.24	112.39	108.20
26	LA	2295	C	C5-C6-N1	5.24	123.62	121.00
26	LA	2602	A	N3-C4-C5	-5.24	123.13	126.80
2	SA	16	A	N1-C6-N6	5.24	121.74	118.60
2	SA	522	C	C4'-C3'-C2'	-5.24	97.36	102.60
2	SA	535	A	C4'-C3'-C2'	5.24	107.84	102.60
2	SA	545	C	C6-N1-C2	5.24	122.39	120.30
2	SA	767	A	OP1-P-OP2	-5.24	111.75	119.60
2	SA	900	A	C2-N3-C4	-5.24	107.98	110.60
2	SA	1041	G	N3-C4-C5	5.24	131.22	128.60
24	S3	127	ARG	NE-CZ-NH2	5.24	122.92	120.30
26	LA	132	G	C4-C5-C6	-5.24	115.66	118.80
26	LA	246	C	C1'-O4'-C4'	-5.24	105.71	109.90
26	LA	619	G	C3'-C2'-C1'	5.24	105.69	101.50
26	LA	921	C	C5'-C4'-C3'	5.24	124.38	116.00
26	LA	976	G	O4'-C4'-C3'	5.24	110.29	106.10
26	LA	1120	G	C4-C5-N7	-5.24	108.70	110.80
26	LA	1227	G	O5'-C5'-C4'	5.24	121.65	111.70
26	LA	1437	C	C5-C4-N4	5.24	123.86	120.20
26	LA	1632	A	C2-N3-C4	-5.24	107.98	110.60
26	LA	2165	C	C2-N1-C1'	5.24	124.56	118.80
26	LA	2242	G	N3-C4-C5	-5.24	125.98	128.60
26	LA	2559	C	C2'-C3'-O3'	5.24	122.08	113.70
26	LA	2730	C	C5'-C4'-C3'	-5.24	107.62	116.00
2	SA	129	A	C5-C6-N6	-5.23	119.51	123.70
2	SA	138	G	C2-N3-C4	-5.23	109.28	111.90
2	SA	416	G	N3-C4-C5	-5.23	125.98	128.60
2	SA	1001	C	C4-C5-C6	5.23	120.02	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	SE	112	ALA	O-C-N	-5.23	114.33	122.70
25	LB	49	C	C5-C4-N4	-5.23	116.54	120.20
26	LA	55	G	O4'-C1'-N9	5.23	112.39	108.20
26	LA	1030	C	C3'-C2'-C1'	5.23	105.69	101.50
26	LA	1110	G	C5-N7-C8	5.23	106.92	104.30
26	LA	1576	U	C2-N3-C4	5.23	130.14	127.00
26	LA	1750	G	N1-C2-N3	-5.23	120.76	123.90
26	LA	2375	G	C6-C5-N7	-5.23	127.26	130.40
2	SA	68	G	C8-N9-C1'	5.23	133.80	127.00
2	SA	263	A	C4-C5-N7	5.23	113.32	110.70
2	SA	623	C	C1'-O4'-C4'	-5.23	105.71	109.90
2	SA	940	C	N3-C2-O2	-5.23	118.24	121.90
24	S3	279	ASP	N-CA-CB	-5.23	101.18	110.60
26	LA	114	U	C2-N3-C4	5.23	130.14	127.00
26	LA	162	U	C1'-O4'-C4'	-5.23	105.71	109.90
26	LA	194	G	N3-C4-N9	5.23	129.14	126.00
26	LA	262	A	O4'-C1'-N9	5.23	112.39	108.20
26	LA	308	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	458	G	C4-C5-C6	-5.23	115.66	118.80
26	LA	647	G	C6-N1-C2	-5.23	121.96	125.10
26	LA	1012	U	P-O5'-C5'	-5.23	112.53	120.90
26	LA	1531	C	C5-C6-N1	5.23	123.62	121.00
26	LA	1670	C	OP2-P-O3'	5.23	116.71	105.20
26	LA	1873	G	C5-C6-O6	-5.23	125.46	128.60
26	LA	1947	C	C5-C4-N4	-5.23	116.54	120.20
26	LA	2165	C	N3-C4-C5	-5.23	119.81	121.90
26	LA	2247	A	N3-C4-C5	5.23	130.46	126.80
2	SA	251	G	P-O3'-C3'	5.23	125.98	119.70
2	SA	506	G	C5-C6-N1	-5.23	108.89	111.50
2	SA	1006	G	P-O3'-C3'	-5.23	113.42	119.70
2	SA	1302	C	OP1-P-OP2	-5.23	111.75	119.60
2	SA	1511	G	C1'-O4'-C4'	-5.23	105.72	109.90
3	S1	40	G	C4-N9-C1'	5.23	133.30	126.50
10	SJ	36	VAL	CB-CA-C	-5.23	101.46	111.40
24	S3	263	VAL	O-C-N	-5.23	114.33	122.70
26	LA	502	A	C1'-O4'-C4'	-5.23	105.72	109.90
26	LA	520	G	C2-N3-C4	5.23	114.52	111.90
26	LA	589	U	N1-C2-N3	-5.23	111.76	114.90
26	LA	822	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	1116	G	C6-C5-N7	5.23	133.54	130.40
26	LA	1189	A	O4'-C4'-C3'	5.23	110.28	106.10
26	LA	1264	A	N1-C6-N6	5.23	121.74	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1720	U	OP1-P-O3'	5.23	116.71	105.20
26	LA	1888	G	C4-N9-C1'	5.23	133.30	126.50
26	LA	2059	A	C5'-C4'-C3'	5.23	124.37	116.00
26	LA	2139	U	C2'-C3'-O3'	5.23	122.07	113.70
26	LA	2336	A	N1-C2-N3	-5.23	126.69	129.30
26	LA	2396	G	N7-C8-N9	-5.23	110.48	113.10
26	LA	2743	U	P-O5'-C5'	5.23	129.27	120.90
47	LJ	68	PHE	CG-CD2-CE2	5.23	126.55	120.80
2	SA	541	G	C5-C6-O6	5.23	131.74	128.60
2	SA	569	C	O4'-C4'-C3'	5.23	110.28	106.10
2	SA	882	C	N1-C2-N3	5.23	122.86	119.20
7	SG	78	ARG	CD-NE-CZ	5.23	130.92	123.60
18	SB	63	LYS	N-CA-CB	5.23	120.01	110.60
26	LA	9	G	C3'-C2'-C1'	5.23	105.68	101.50
26	LA	95	A	OP1-P-OP2	-5.23	111.76	119.60
26	LA	379	G	C3'-C2'-C1'	-5.23	97.32	101.50
26	LA	669	G	C6-N1-C2	-5.23	121.96	125.10
26	LA	1128	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	1709	U	C3'-C2'-C1'	5.23	105.68	101.50
26	LA	1819	A	C5-C6-N6	5.23	127.88	123.70
26	LA	1949	G	C5'-C4'-O4'	5.23	115.38	109.10
38	LE	122	VAL	N-CA-CB	5.23	123.00	111.50
2	SA	244	U	C3'-C2'-C1'	-5.23	97.32	101.50
2	SA	606	G	N3-C2-N2	5.23	123.56	119.90
2	SA	742	G	N9-C1'-C2'	-5.23	106.25	112.00
2	SA	1284	C	N3-C4-C5	-5.23	119.81	121.90
3	S1	22	G	N3-C4-C5	-5.23	125.99	128.60
22	SF	72	ASP	CB-CG-OD2	-5.23	113.59	118.30
24	S3	137	ILE	O-C-N	-5.23	114.34	122.70
26	LA	46	G	O4'-C4'-C3'	5.23	110.28	106.10
26	LA	470	A	C2-N3-C4	-5.23	107.99	110.60
26	LA	743	A	P-O3'-C3'	5.23	125.97	119.70
26	LA	743	A	P-O5'-C5'	5.23	129.26	120.90
26	LA	1145	C	C5'-C4'-C3'	-5.23	107.64	116.00
26	LA	1252	G	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	1552	A	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	1629	U	N3-C2-O2	-5.23	118.54	122.20
26	LA	1686	C	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	2673	G	N3-C4-N9	5.23	129.14	126.00
26	LA	2689	U	N1-C2-O2	-5.23	119.14	122.80
26	LA	2817	U	C4-C5-C6	-5.23	116.56	119.70
2	SA	899	C	C4-C5-C6	5.23	120.01	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	248	G	OP1-P-OP2	-5.23	111.76	119.60
26	LA	250	G	N9-C4-C5	-5.23	103.31	105.40
26	LA	1050	A	C5'-C4'-C3'	-5.23	107.64	116.00
26	LA	1904	G	N1-C6-O6	5.23	123.03	119.90
26	LA	1924	C	O4'-C1'-C2'	-5.23	100.57	105.80
26	LA	2375	G	C5-C6-O6	-5.23	125.47	128.60
45	LG	121	PHE	CB-CG-CD2	-5.23	117.14	120.80
2	SA	5	U	C2'-C3'-O3'	5.22	122.06	113.70
2	SA	192	A	N3-C4-C5	-5.22	123.14	126.80
2	SA	283	U	N1-C2-O2	-5.22	119.14	122.80
2	SA	1095	U	C1'-O4'-C4'	-5.22	105.72	109.90
2	SA	1340	A	C5-C6-N6	5.22	127.88	123.70
3	S1	18	A	N7-C8-N9	5.22	116.41	113.80
26	LA	127	A	C5-C6-N1	5.22	120.31	117.70
26	LA	217	A	C4-C5-N7	5.22	113.31	110.70
26	LA	479	A	C2-N3-C4	-5.22	107.99	110.60
26	LA	481	G	C6-N1-C2	-5.22	121.97	125.10
26	LA	505	A	O4'-C1'-N9	5.22	112.38	108.20
26	LA	537	G	C5-C6-N1	5.22	114.11	111.50
26	LA	670	A	O5'-P-OP1	5.22	116.97	110.70
26	LA	765	C	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	828	U	OP1-P-OP2	-5.22	111.76	119.60
26	LA	1046	A	N7-C8-N9	5.22	116.41	113.80
26	LA	1264	A	O4'-C1'-N9	-5.22	104.02	108.20
26	LA	1598	A	N7-C8-N9	-5.22	111.19	113.80
26	LA	1693	U	C5'-C4'-C3'	-5.22	107.64	116.00
26	LA	1717	A	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	1956	U	C5'-C4'-O4'	5.22	115.37	109.10
26	LA	1975	G	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	2362	C	N3-C4-N4	5.22	121.66	118.00
26	LA	2573	C	C5'-C4'-O4'	5.22	115.37	109.10
26	LA	2589	A	OP2-P-O3'	5.22	116.69	105.20
26	LA	2617	U	N3-C4-C5	-5.22	111.47	114.60
26	LA	2626	C	C2-N1-C1'	-5.22	113.05	118.80
42	L6	21	PHE	CB-CG-CD1	5.22	124.46	120.80
2	SA	722	G	C5-N7-C8	-5.22	101.69	104.30
2	SA	848	C	C1'-O4'-C4'	-5.22	105.72	109.90
2	SA	1087	G	C4-N9-C1'	5.22	133.29	126.50
2	SA	1177	G	C3'-C2'-C1'	5.22	105.68	101.50
2	SA	1218	C	C2-N3-C4	-5.22	117.29	119.90
2	SA	1293	C	C2-N1-C1'	5.22	124.55	118.80
2	SA	1515	G	O3'-P-O5'	-5.22	94.08	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	SM	52	ILE	CA-CB-CG2	-5.22	100.45	110.90
26	LA	284	U	C6-N1-C2	-5.22	117.87	121.00
26	LA	414	C	C6-N1-C2	-5.22	118.21	120.30
26	LA	518	G	C5-C6-N1	5.22	114.11	111.50
26	LA	772	C	N3-C4-N4	5.22	121.66	118.00
26	LA	782	A	C4-C5-C6	5.22	119.61	117.00
26	LA	970	U	C5'-C4'-C3'	5.22	124.36	116.00
26	LA	1198	U	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	1715	G	C5-C6-N1	-5.22	108.89	111.50
26	LA	2199	A	C5'-C4'-C3'	-5.22	107.64	116.00
2	SA	1097	C	C5'-C4'-C3'	5.22	124.35	116.00
2	SA	1366	C	N3-C2-O2	-5.22	118.25	121.90
3	S1	15	G	C1'-O4'-C4'	-5.22	105.72	109.90
3	S1	55	A	C6-N1-C2	5.22	121.73	118.60
18	SB	106	VAL	CA-CB-CG2	-5.22	103.07	110.90
26	LA	460	A	C5-C6-N1	-5.22	115.09	117.70
26	LA	1677	A	C3'-C2'-C1'	5.22	105.68	101.50
26	LA	2515	C	OP1-P-OP2	-5.22	111.77	119.60
2	SA	114	U	O5'-C5'-C4'	-5.22	101.78	111.70
2	SA	401	C	OP1-P-OP2	-5.22	111.77	119.60
2	SA	421	U	N1-C2-O2	-5.22	119.15	122.80
2	SA	598	U	O4'-C1'-N1	5.22	112.38	108.20
2	SA	713	G	N7-C8-N9	5.22	115.71	113.10
2	SA	1147	C	O5'-P-OP1	5.22	116.96	110.70
2	SA	1488	G	C1'-O4'-C4'	-5.22	105.72	109.90
4	S2	13	C	C6-N1-C1'	5.22	127.06	120.80
26	LA	433	C	C5-C4-N4	-5.22	116.55	120.20
26	LA	473	G	N3-C4-C5	5.22	131.21	128.60
26	LA	600	G	P-O5'-C5'	-5.22	112.55	120.90
26	LA	1173	U	N1-C2-O2	5.22	126.45	122.80
26	LA	1244	A	N1-C2-N3	-5.22	126.69	129.30
26	LA	1331	G	C6-C5-N7	-5.22	127.27	130.40
26	LA	1572	A	O5'-P-OP2	-5.22	101.00	105.70
26	LA	1965	C	O4'-C1'-C2'	-5.22	100.58	105.80
26	LA	2505	G	N9-C4-C5	5.22	107.49	105.40
26	LA	2808	G	N9-C4-C5	5.22	107.49	105.40
2	SA	262	A	O5'-P-OP1	-5.22	101.00	105.70
2	SA	1377	A	C4'-C3'-C2'	-5.22	97.38	102.60
25	LB	46	A	C5-C6-N1	-5.22	115.09	117.70
25	LB	60	C	C6-N1-C1'	-5.22	114.54	120.80
26	LA	362	A	C5-C6-N6	-5.22	119.53	123.70
26	LA	464	U	N3-C2-O2	-5.22	118.55	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	939	G	N1-C2-N2	-5.22	111.50	116.20
26	LA	971	G	N1-C6-O6	5.22	123.03	119.90
26	LA	1117	C	P-O3'-C3'	5.22	125.96	119.70
26	LA	1958	C	N3-C2-O2	-5.22	118.25	121.90
26	LA	2603	G	C6-C5-N7	-5.22	127.27	130.40
2	SA	565	U	N1-C2-N3	5.22	118.03	114.90
2	SA	652	U	OP1-P-OP2	-5.22	111.78	119.60
2	SA	1243	C	C2-N1-C1'	-5.22	113.06	118.80
4	S2	32	G	OP2-P-O3'	5.22	116.68	105.20
25	LB	21	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	151	C	C5'-C4'-C3'	-5.22	107.65	116.00
26	LA	197	A	O4'-C4'-C3'	5.22	110.27	106.10
26	LA	1385	A	C4'-C3'-C2'	-5.22	97.38	102.60
26	LA	1392	A	O4'-C1'-C2'	5.22	112.30	107.60
26	LA	2047	C	C5-C4-N4	-5.22	116.55	120.20
26	LA	2090	A	C2-N3-C4	5.22	113.21	110.60
26	LA	2108	A	C5-C6-N6	-5.22	119.53	123.70
26	LA	2138	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	2247	A	C5'-C4'-C3'	-5.22	107.65	116.00
26	LA	2367	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	2429	G	N9-C4-C5	5.22	107.49	105.40
26	LA	2752	C	C4'-C3'-C2'	-5.22	97.38	102.60
27	LD	225	ASN	O-C-N	-5.22	111.19	121.10
38	LE	9	VAL	CA-C-N	5.22	126.63	116.20
45	LG	21	TYR	CG-CD2-CE2	-5.22	117.13	121.30
46	LH	9	VAL	CA-CB-CG2	5.22	118.72	110.90
56	LR	46	VAL	CG1-CB-CG2	-5.22	102.56	110.90
2	SA	47	C	C4'-C3'-C2'	-5.21	97.39	102.60
2	SA	75	G	C5-N7-C8	-5.21	101.69	104.30
2	SA	333	U	C5-C6-N1	5.21	125.31	122.70
2	SA	647	C	OP2-P-O3'	5.21	116.67	105.20
2	SA	668	G	O4'-C1'-N9	5.21	112.37	108.20
2	SA	688	G	P-O5'-C5'	5.21	129.24	120.90
2	SA	1178	G	N1-C2-N2	-5.21	111.51	116.20
2	SA	1183	U	N3-C4-C5	5.21	117.73	114.60
4	S2	10	G	C5'-C4'-O4'	5.21	115.36	109.10
24	S3	110	MET	CG-SD-CE	-5.21	91.86	100.20
26	LA	206	U	C1'-O4'-C4'	5.21	114.07	109.90
26	LA	481	G	O5'-P-OP1	5.21	116.96	110.70
26	LA	534	U	C6-N1-C1'	-5.21	113.90	121.20
26	LA	620	G	N1-C2-N2	5.21	120.89	116.20
26	LA	879	G	C6-N1-C2	-5.21	121.97	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2369	A	C5-C6-N6	-5.21	119.53	123.70
26	LA	2751	G	O3'-P-O5'	-5.21	94.09	104.00
46	LH	137	LYS	O-C-N	-5.21	114.36	122.70
46	LH	148	ARG	CG-CD-NE	-5.21	100.85	111.80
50	LL	16	TYR	CB-CA-C	-5.21	99.97	110.40
2	SA	236	A	P-O5'-C5'	5.21	129.24	120.90
2	SA	267	C	O5'-C5'-C4'	5.21	121.61	111.70
2	SA	474	G	C5-C6-N1	5.21	114.11	111.50
2	SA	1109	C	O4'-C4'-C3'	5.21	110.27	106.10
2	SA	1233	G	C4'-C3'-C2'	-5.21	97.39	102.60
10	SJ	48	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
25	LB	112	G	C4-C5-N7	-5.21	108.72	110.80
26	LA	514	A	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1119	U	O4'-C1'-N1	5.21	112.37	108.20
26	LA	1702	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	2026	U	C1'-O4'-C4'	5.21	114.07	109.90
26	LA	2190	G	P-O3'-C3'	-5.21	113.44	119.70
34	L0	8	GLU	O-C-N	-5.21	114.36	122.70
2	SA	57	G	N3-C2-N2	5.21	123.55	119.90
2	SA	185	U	C5'-C4'-C3'	-5.21	107.66	116.00
2	SA	344	A	N3-C4-C5	-5.21	123.15	126.80
2	SA	378	G	N3-C4-C5	-5.21	126.00	128.60
2	SA	403	C	P-O5'-C5'	-5.21	112.56	120.90
2	SA	506	G	C4-C5-N7	-5.21	108.72	110.80
2	SA	1366	C	C5'-C4'-O4'	5.21	115.36	109.10
3	S1	58	C	C5'-C4'-O4'	5.21	115.35	109.10
4	S2	32	G	O5'-P-OP2	-5.21	101.01	105.70
25	LB	70	C	OP1-P-OP2	-5.21	111.78	119.60
26	LA	221	A	N9-C4-C5	5.21	107.89	105.80
26	LA	1167	C	C5'-C4'-O4'	5.21	115.36	109.10
26	LA	1411	U	C3'-C2'-C1'	5.21	105.67	101.50
26	LA	1685	C	O4'-C1'-N1	5.21	112.37	108.20
33	LZ	27	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
34	L0	58	ASN	CB-CG-OD1	5.21	132.02	121.60
54	LM	75	SER	N-CA-C	-5.21	96.93	111.00
2	SA	183	C	C5-C6-N1	-5.21	118.39	121.00
2	SA	1324	A	C4-C5-N7	5.21	113.31	110.70
4	S2	67	C	C2-N1-C1'	-5.21	113.07	118.80
26	LA	126	A	O4'-C1'-C2'	-5.21	100.59	105.80
26	LA	589	U	C5'-C4'-O4'	5.21	115.35	109.10
26	LA	914	G	C6-C5-N7	-5.21	127.27	130.40
26	LA	1019	U	C3'-C2'-C1'	5.21	105.67	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1362	C	C1'-O4'-C4'	-5.21	105.73	109.90
26	LA	1577	C	O4'-C1'-N1	5.21	112.37	108.20
26	LA	2332	C	C6-N1-C1'	-5.21	114.55	120.80
26	LA	2369	A	P-O5'-C5'	-5.21	112.56	120.90
37	LC	71	ARG	NE-CZ-NH1	5.21	122.91	120.30
2	SA	81	A	P-O5'-C5'	5.21	129.23	120.90
2	SA	557	G	C5-C6-N1	-5.21	108.90	111.50
2	SA	712	A	OP1-P-OP2	-5.21	111.79	119.60
2	SA	944	G	N7-C8-N9	5.21	115.70	113.10
2	SA	1025	U	C5'-C4'-C3'	-5.21	107.67	116.00
2	SA	1149	C	P-O5'-C5'	-5.21	112.57	120.90
8	SH	124	ILE	O-C-N	-5.21	114.37	122.70
26	LA	391	A	N7-C8-N9	5.21	116.40	113.80
26	LA	473	G	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	536	G	P-O3'-C3'	-5.21	113.45	119.70
26	LA	893	C	C4'-C3'-C2'	-5.21	97.39	102.60
26	LA	1034	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1065	U	C2-N3-C4	5.21	130.12	127.00
26	LA	1102	C	C2-N1-C1'	-5.21	113.07	118.80
26	LA	1107	G	C4-N9-C1'	-5.21	119.73	126.50
26	LA	1145	C	C1'-O4'-C4'	-5.21	105.73	109.90
26	LA	1441	G	OP1-P-OP2	-5.21	111.79	119.60
26	LA	1511	G	N9-C1'-C2'	-5.21	106.27	112.00
26	LA	1521	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1646	C	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	1721	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	2239	G	C5-N7-C8	5.21	106.91	104.30
26	LA	2788	C	C1'-O4'-C4'	-5.21	105.73	109.90
56	LR	20	ARG	O-C-N	-5.21	111.20	121.10
2	SA	1380	U	C4-C5-C6	-5.21	116.58	119.70
2	SA	1485	U	C5-C6-N1	-5.21	120.10	122.70
4	S2	60	A	C4-C5-N7	5.21	113.30	110.70
25	LB	87	U	N1-C2-N3	-5.21	111.78	114.90
25	LB	105	G	N9-C4-C5	5.21	107.48	105.40
26	LA	442	G	N3-C4-C5	-5.21	126.00	128.60
26	LA	489	G	C6-N1-C2	-5.21	121.98	125.10
26	LA	749	A	C1'-O4'-C4'	5.21	114.06	109.90
26	LA	931	U	O5'-P-OP2	5.21	116.95	110.70
26	LA	1032	A	C5-C6-N6	5.21	127.86	123.70
26	LA	1118	C	C2-N3-C4	-5.21	117.30	119.90
26	LA	1518	C	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	1787	A	C5-N7-C8	-5.21	101.30	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1837	C	N3-C4-N4	5.21	121.64	118.00
26	LA	2345	G	N3-C4-C5	-5.21	126.00	128.60
26	LA	2549	G	P-O5'-C5'	5.21	129.23	120.90
26	LA	2555	U	C2-N1-C1'	5.21	123.95	117.70
2	SA	174	A	C4-C5-C6	-5.21	114.40	117.00
3	S1	41	A	N1-C6-N6	5.21	121.72	118.60
22	SF	42	TRP	CE2-CD2-CG	-5.21	103.14	107.30
26	LA	353	C	C4-C5-C6	-5.21	114.80	117.40
26	LA	735	A	C5-C6-N1	5.21	120.30	117.70
26	LA	1242	U	C5'-C4'-O4'	5.21	115.34	109.10
26	LA	1635	A	N3-C4-N9	-5.21	123.24	127.40
26	LA	1730	C	N3-C2-O2	-5.21	118.26	121.90
26	LA	2499	C	C6-N1-C1'	-5.21	114.55	120.80
26	LA	2750	A	N3-C4-C5	-5.21	123.16	126.80
30	LW	102	ILE	CA-CB-CG1	5.21	120.89	111.00
2	SA	509	A	P-O3'-C3'	-5.20	113.46	119.70
2	SA	600	A	C6-N1-C2	-5.20	115.48	118.60
2	SA	941	G	C5-N7-C8	5.20	106.90	104.30
2	SA	1418	A	C8-N9-C4	-5.20	103.72	105.80
10	SJ	31	ARG	NE-CZ-NH1	-5.20	117.70	120.30
19	SC	188	ALA	O-C-N	-5.20	114.38	122.70
25	LB	106	G	N1-C2-N2	5.20	120.88	116.20
26	LA	332	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	449	A	C5'-C4'-C3'	-5.20	107.67	116.00
26	LA	614	A	C8-N9-C4	5.20	107.88	105.80
26	LA	733	G	C6-N1-C2	-5.20	121.98	125.10
26	LA	845	A	OP2-P-O3'	5.20	116.65	105.20
26	LA	1166	G	C6-N1-C2	5.20	128.22	125.10
26	LA	1475	G	C5'-C4'-C3'	-5.20	107.68	116.00
26	LA	1676	A	C4-C5-N7	-5.20	108.10	110.70
26	LA	2193	G	N1-C2-N2	-5.20	111.52	116.20
26	LA	2228	G	N1-C2-N3	-5.20	120.78	123.90
26	LA	2345	G	C4-N9-C1'	5.20	133.26	126.50
26	LA	2436	G	N3-C4-C5	5.20	131.20	128.60
26	LA	2588	G	C8-N9-C4	-5.20	104.32	106.40
26	LA	2661	G	C5-C6-O6	-5.20	125.48	128.60
26	LA	2699	C	N3-C4-C5	5.20	123.98	121.90
26	LA	2881	U	P-O3'-C3'	5.20	125.94	119.70
42	L6	53	ASP	CA-CB-CG	-5.20	101.95	113.40
45	LG	99	PHE	CB-CG-CD1	-5.20	117.16	120.80
58	LT	37	GLU	O-C-N	-5.20	114.37	122.70
2	SA	240	G	C6-N1-C2	-5.20	121.98	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	269	C	N3-C2-O2	-5.20	118.26	121.90
26	LA	782	A	N9-C4-C5	5.20	107.88	105.80
26	LA	1852	U	O4'-C1'-N1	-5.20	104.04	108.20
26	LA	1966	A	O3'-P-O5'	5.20	113.88	104.00
26	LA	2811	G	O4'-C1'-N9	5.20	112.36	108.20
2	SA	79	G	N1-C2-N2	-5.20	111.52	116.20
2	SA	83	C	C2-N1-C1'	5.20	124.52	118.80
2	SA	114	U	C5'-C4'-C3'	5.20	124.32	116.00
2	SA	362	G	C5'-C4'-O4'	5.20	115.34	109.10
2	SA	465	A	N1-C2-N3	5.20	131.90	129.30
2	SA	498	A	C4-C5-N7	5.20	113.30	110.70
2	SA	542	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	679	C	C2-N1-C1'	5.20	124.52	118.80
2	SA	753	A	N9-C4-C5	-5.20	103.72	105.80
2	SA	1033	G	C4-N9-C1'	-5.20	119.74	126.50
2	SA	1057	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	1197	A	P-O3'-C3'	5.20	125.94	119.70
3	S1	24	A	C4-C5-N7	5.20	113.30	110.70
26	LA	93	G	C8-N9-C4	-5.20	104.32	106.40
26	LA	767	U	N3-C2-O2	5.20	125.84	122.20
26	LA	959	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1349	C	C5-C6-N1	5.20	123.60	121.00
26	LA	1571	A	N1-C2-N3	5.20	131.90	129.30
26	LA	2194	U	C5-C6-N1	5.20	125.30	122.70
26	LA	2412	A	C5-C6-N6	5.20	127.86	123.70
26	LA	2610	C	O4'-C1'-N1	5.20	112.36	108.20
36	L2	9	TYR	CZ-CE2-CD2	-5.20	115.12	119.80
51	LI	27	ARG	NE-CZ-NH1	-5.20	117.70	120.30
2	SA	216	U	C5-C4-O4	-5.20	122.78	125.90
2	SA	412	A	C2-N3-C4	-5.20	108.00	110.60
2	SA	505	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	848	C	P-O5'-C5'	5.20	129.22	120.90
2	SA	1148	U	C3'-C2'-C1'	5.20	105.66	101.50
2	SA	1420	U	N3-C2-O2	-5.20	118.56	122.20
2	SA	1428	A	C4-C5-C6	-5.20	114.40	117.00
2	SA	1536	C	N3-C4-N4	5.20	121.64	118.00
3	S1	35	G	C6-N1-C2	-5.20	121.98	125.10
25	LB	97	C	N1-C1'-C2'	-5.20	106.28	112.00
25	LB	106	G	C4-N9-C1'	-5.20	119.74	126.50
26	LA	385	C	O4'-C1'-C2'	5.20	112.28	107.60
26	LA	733	G	C1'-O4'-C4'	-5.20	105.74	109.90
26	LA	835	C	O4'-C1'-N1	5.20	112.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1570	A	C8-N9-C4	-5.20	103.72	105.80
26	LA	1774	C	P-O5'-C5'	5.20	129.22	120.90
26	LA	2131	U	N3-C4-O4	5.20	123.04	119.40
26	LA	2380	C	C1'-O4'-C4'	-5.20	105.74	109.90
45	LG	31	GLU	OE1-CD-OE2	-5.20	117.06	123.30
51	LI	101	ASP	CB-CG-OD2	5.20	122.98	118.30
57	LS	52	ARG	O-C-N	-5.20	114.38	122.70
2	SA	166	U	N3-C2-O2	-5.20	118.56	122.20
2	SA	632	U	C4'-C3'-C2'	-5.20	97.40	102.60
2	SA	1273	C	N3-C4-C5	5.20	123.98	121.90
2	SA	1439	G	N3-C4-C5	-5.20	126.00	128.60
26	LA	389	G	C5'-C4'-C3'	5.20	124.31	116.00
26	LA	460	A	C4'-C3'-C2'	-5.20	97.40	102.60
26	LA	882	G	C5'-C4'-O4'	-5.20	102.86	109.10
26	LA	889	C	C4'-C3'-C2'	-5.20	97.40	102.60
26	LA	1421	G	C6-C5-N7	-5.20	127.28	130.40
26	LA	1653	G	C8-N9-C4	5.20	108.48	106.40
26	LA	1802	A	C4-C5-N7	-5.20	108.10	110.70
26	LA	2640	G	C4-C5-C6	5.20	121.92	118.80
2	SA	629	A	P-O3'-C3'	5.20	125.93	119.70
2	SA	1534	A	N7-C8-N9	5.20	116.40	113.80
26	LA	86	G	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1532	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1719	G	N3-C2-N2	5.20	123.54	119.90
26	LA	1947	C	C3'-C2'-C1'	5.20	105.66	101.50
26	LA	2153	C	C6-N1-C2	-5.20	118.22	120.30
26	LA	2179	C	N1-C2-N3	-5.20	115.56	119.20
26	LA	2318	G	N9-C4-C5	5.20	107.48	105.40
26	LA	2785	C	OP2-P-O3'	5.20	116.63	105.20
57	LS	105	PHE	CA-CB-CG	-5.20	101.43	113.90
2	SA	137	U	C5'-C4'-C3'	-5.19	107.69	116.00
4	S2	62	C	N1-C2-O2	-5.19	115.78	118.90
26	LA	463	G	N9-C4-C5	5.19	107.48	105.40
26	LA	1588	G	C2'-C3'-O3'	5.19	122.01	113.70
26	LA	2297	A	C5-C6-N6	5.19	127.86	123.70
26	LA	2471	A	C5-N7-C8	-5.19	101.30	103.90
26	LA	2783	U	N3-C4-O4	5.19	123.04	119.40
26	LA	2869	G	C8-N9-C1'	5.19	133.75	127.00
26	LA	2893	A	O5'-P-OP2	-5.19	101.03	105.70
2	SA	187	G	C5'-C4'-O4'	5.19	115.33	109.10
2	SA	229	U	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	246	A	C6-N1-C2	5.19	121.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	786	G	C5-C6-O6	-5.19	125.48	128.60
2	SA	804	U	C5'-C4'-C3'	-5.19	107.69	116.00
2	SA	986	U	N1-C2-O2	-5.19	119.17	122.80
2	SA	1278	G	P-O3'-C3'	-5.19	113.47	119.70
2	SA	1475	G	C1'-O4'-C4'	5.19	114.05	109.90
2	SA	1542	A	C5-N7-C8	5.19	106.50	103.90
4	S2	36	A	N3-C4-C5	5.19	130.43	126.80
8	SH	55	LYS	N-CA-CB	5.19	119.95	110.60
19	SC	65	VAL	CB-CA-C	-5.19	101.53	111.40
26	LA	335	C	C2-N3-C4	-5.19	117.30	119.90
26	LA	354	A	C4'-C3'-C2'	-5.19	97.41	102.60
26	LA	694	U	OP1-P-OP2	-5.19	111.81	119.60
26	LA	791	C	N3-C4-N4	5.19	121.64	118.00
26	LA	1210	G	N7-C8-N9	5.19	115.70	113.10
26	LA	1626	A	N3-C4-N9	-5.19	123.25	127.40
26	LA	1827	U	C6-N1-C2	-5.19	117.89	121.00
26	LA	1942	C	P-O5'-C5'	-5.19	112.59	120.90
26	LA	2142	A	C5'-C4'-O4'	5.19	115.33	109.10
26	LA	2156	G	C6-C5-N7	5.19	133.51	130.40
50	LL	46	PRO	N-CA-CB	-5.19	96.89	102.60
2	SA	344	A	N9-C4-C5	5.19	107.88	105.80
2	SA	529	G	N7-C8-N9	5.19	115.69	113.10
2	SA	539	A	C2-N3-C4	-5.19	108.00	110.60
2	SA	778	G	C8-N9-C4	-5.19	104.32	106.40
2	SA	780	A	N9-C1'-C2'	-5.19	106.29	112.00
10	SJ	65	TYR	CG-CD2-CE2	-5.19	117.15	121.30
17	SQ	21	VAL	CA-CB-CG2	-5.19	103.11	110.90
19	SC	64	ARG	NE-CZ-NH1	5.19	122.89	120.30
22	SF	110	ARG	N-CA-CB	-5.19	101.26	110.60
26	LA	339	U	P-O5'-C5'	5.19	129.21	120.90
26	LA	343	C	N3-C4-N4	5.19	121.63	118.00
26	LA	502	A	C4'-C3'-C2'	5.19	107.79	102.60
26	LA	668	A	C4-C5-N7	5.19	113.30	110.70
26	LA	1851	U	C5'-C4'-C3'	-5.19	107.69	116.00
26	LA	1860	G	C6-N1-C2	-5.19	121.99	125.10
26	LA	2432	A	C6-N1-C2	5.19	121.72	118.60
49	LK	36	GLU	N-CA-CB	5.19	119.94	110.60
51	LI	45	GLU	N-CA-CB	-5.19	101.26	110.60
2	SA	1143	G	N7-C8-N9	-5.19	110.51	113.10
2	SA	1271	A	P-O5'-C5'	-5.19	112.60	120.90
26	LA	289	G	N7-C8-N9	5.19	115.69	113.10
26	LA	515	A	C4-C5-C6	-5.19	114.41	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	845	A	P-O5'-C5'	5.19	129.20	120.90
26	LA	1034	G	N9-C4-C5	-5.19	103.33	105.40
26	LA	1537	G	N9-C4-C5	5.19	107.48	105.40
26	LA	1727	C	P-O3'-C3'	5.19	125.93	119.70
26	LA	1764	C	P-O5'-C5'	-5.19	112.60	120.90
26	LA	1821	A	C6-N1-C2	-5.19	115.49	118.60
26	LA	1888	G	C2-N3-C4	-5.19	109.31	111.90
26	LA	1983	G	C2-N3-C4	5.19	114.49	111.90
26	LA	2292	U	P-O3'-C3'	-5.19	113.47	119.70
26	LA	2594	C	C5'-C4'-C3'	-5.19	107.70	116.00
2	SA	201	G	C2-N3-C4	-5.19	109.31	111.90
2	SA	382	A	C6-C5-N7	-5.19	128.67	132.30
2	SA	660	C	C5'-C4'-C3'	-5.19	107.70	116.00
2	SA	862	C	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1153	G	C4-N9-C1'	-5.19	119.76	126.50
2	SA	1163	A	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1277	C	N1-C2-N3	5.19	122.83	119.20
2	SA	1446	A	P-O5'-C5'	-5.19	112.60	120.90
3	S1	19	A	N7-C8-N9	5.19	116.39	113.80
4	S2	48	U	O3'-P-O5'	-5.19	94.14	104.00
17	SQ	33	TYR	CB-CG-CD2	-5.19	117.89	121.00
23	SR	60	ARG	N-CA-CB	5.19	119.94	110.60
26	LA	621	A	C6-N1-C2	5.19	121.71	118.60
26	LA	637	A	C8-N9-C4	5.19	107.88	105.80
26	LA	1070	A	O4'-C1'-N9	5.19	112.35	108.20
26	LA	1217	U	P-O3'-C3'	5.19	125.92	119.70
26	LA	1541	C	N3-C2-O2	-5.19	118.27	121.90
26	LA	1840	G	OP1-P-OP2	-5.19	111.82	119.60
26	LA	1908	C	C5'-C4'-C3'	-5.19	107.70	116.00
26	LA	2531	A	C5-C6-N1	-5.19	115.11	117.70
27	LD	147	PRO	N-CA-C	5.19	125.59	112.10
2	SA	2	A	C8-N9-C4	5.19	107.88	105.80
2	SA	215	C	N1-C2-O2	-5.19	115.79	118.90
2	SA	248	C	C6-N1-C2	-5.19	118.23	120.30
2	SA	354	G	C3'-C2'-C1'	-5.19	97.35	101.50
2	SA	1073	U	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1217	C	N3-C2-O2	-5.19	118.27	121.90
6	SU	18	PHE	C-N-CA	5.19	134.67	121.70
22	SF	84	VAL	CG1-CB-CG2	-5.19	102.60	110.90
25	LB	73	A	C4-C5-C6	5.19	119.59	117.00
26	LA	450	G	P-O5'-C5'	5.19	129.20	120.90
26	LA	1192	G	O4'-C1'-N9	5.19	112.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1755	A	C8-N9-C4	5.19	107.88	105.80
26	LA	1938	A	O4'-C1'-N9	5.19	112.35	108.20
58	LT	37	GLU	OE1-CD-OE2	-5.19	117.08	123.30
2	SA	149	A	O4'-C1'-N9	5.18	112.35	108.20
2	SA	358	U	C5'-C4'-O4'	5.18	115.32	109.10
2	SA	1081	A	C4-C5-N7	-5.18	108.11	110.70
2	SA	1197	A	C5'-C4'-C3'	-5.18	107.70	116.00
2	SA	1330	U	O4'-C1'-N1	5.18	112.35	108.20
2	SA	1458	G	C5-C6-N1	5.18	114.09	111.50
25	LB	26	C	P-O3'-C3'	-5.18	113.48	119.70
26	LA	177	G	C4-N9-C1'	5.18	133.24	126.50
26	LA	219	A	C5-C6-N1	-5.18	115.11	117.70
26	LA	546	U	O4'-C4'-C3'	-5.18	98.81	104.00
26	LA	617	G	N9-C4-C5	5.18	107.47	105.40
26	LA	742	A	C8-N9-C4	-5.18	103.73	105.80
26	LA	819	A	C5-N7-C8	-5.18	101.31	103.90
26	LA	1007	C	N3-C4-N4	-5.18	114.37	118.00
26	LA	1247	A	P-O3'-C3'	5.18	125.92	119.70
26	LA	1674	G	C1'-O4'-C4'	5.18	114.05	109.90
26	LA	1681	G	N1-C2-N3	5.18	127.01	123.90
26	LA	1738	G	C5-C6-N1	5.18	114.09	111.50
26	LA	1787	A	N3-C4-C5	-5.18	123.17	126.80
26	LA	2037	A	C5'-C4'-C3'	-5.18	107.71	116.00
26	LA	2389	G	P-O5'-C5'	-5.18	112.60	120.90
26	LA	2489	U	C2-N1-C1'	5.18	123.92	117.70
26	LA	2801	G	C3'-C2'-C1'	5.18	105.65	101.50
45	LG	174	PHE	N-CA-CB	-5.18	101.27	110.60
2	SA	25	C	N3-C2-O2	-5.18	118.27	121.90
2	SA	554	A	N7-C8-N9	-5.18	111.21	113.80
2	SA	1207	G	P-O5'-C5'	-5.18	112.61	120.90
2	SA	1260	G	N7-C8-N9	5.18	115.69	113.10
2	SA	1332	A	N1-C2-N3	5.18	131.89	129.30
2	SA	1435	G	P-O3'-C3'	5.18	125.92	119.70
4	S2	26	C	C6-N1-C2	-5.18	118.23	120.30
24	S3	38	LYS	N-CA-CB	5.18	119.93	110.60
24	S3	186	LYS	O-C-N	-5.18	114.41	122.70
25	LB	27	C	O4'-C1'-N1	5.18	112.35	108.20
26	LA	184	C	C6-N1-C1'	5.18	127.02	120.80
26	LA	192	C	OP1-P-OP2	-5.18	111.83	119.60
26	LA	203	A	C2-N3-C4	5.18	113.19	110.60
26	LA	325	G	C8-N9-C4	-5.18	104.33	106.40
26	LA	1092	C	C3'-C2'-C1'	-5.18	97.35	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1308	A	O5'-P-OP2	5.18	116.92	110.70
26	LA	1816	C	O3'-P-O5'	5.18	113.84	104.00
26	LA	2198	A	C4-C5-N7	-5.18	108.11	110.70
26	LA	2313	C	C1'-O4'-C4'	-5.18	105.75	109.90
26	LA	2336	A	OP1-P-OP2	-5.18	111.83	119.60
26	LA	2465	C	C5-C4-N4	-5.18	116.57	120.20
26	LA	2495	G	C1'-O4'-C4'	-5.18	105.75	109.90
26	LA	2764	A	N1-C2-N3	-5.18	126.71	129.30
26	LA	2785	C	C5-C4-N4	-5.18	116.57	120.20
26	LA	2857	G	N3-C4-C5	5.18	131.19	128.60
27	LD	65	ASP	CB-CG-OD1	-5.18	113.64	118.30
31	LX	18	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
32	LY	67	LYS	O-C-N	-5.18	114.41	122.70
38	LE	189	VAL	CA-C-O	5.18	130.99	120.10
51	LI	99	ILE	CG1-CB-CG2	-5.18	100.00	111.40
2	SA	1423	G	C5-C6-O6	-5.18	125.49	128.60
24	S3	4	THR	N-CA-C	-5.18	97.01	111.00
26	LA	865	C	P-O3'-C3'	-5.18	113.48	119.70
26	LA	1079	C	N3-C4-C5	-5.18	119.83	121.90
26	LA	1150	C	N1-C2-N3	5.18	122.83	119.20
26	LA	1718	G	C5-N7-C8	5.18	106.89	104.30
26	LA	2558	C	P-O5'-C5'	5.18	129.19	120.90
26	LA	2709	G	OP1-P-O3'	5.18	116.60	105.20
2	SA	618	C	C6-N1-C2	-5.18	118.23	120.30
2	SA	738	C	O4'-C1'-N1	5.18	112.34	108.20
2	SA	914	A	C6-N1-C2	5.18	121.71	118.60
11	SK	4	PRO	C-N-CA	5.18	134.65	121.70
25	LB	75	G	O4'-C1'-C2'	5.18	112.26	107.60
26	LA	196	A	OP1-P-OP2	-5.18	111.83	119.60
26	LA	205	G	O4'-C1'-N9	5.18	112.34	108.20
26	LA	989	G	N1-C2-N2	-5.18	111.54	116.20
26	LA	1238	G	O5'-C5'-C4'	5.18	121.54	111.70
26	LA	2017	U	C5'-C4'-O4'	5.18	115.31	109.10
26	LA	2219	U	C6-N1-C1'	-5.18	113.95	121.20
26	LA	2367	G	N3-C2-N2	5.18	123.53	119.90
26	LA	2409	G	C4-C5-N7	5.18	112.87	110.80
26	LA	2528	U	OP1-P-OP2	-5.18	111.83	119.60
26	LA	2805	C	C4-C5-C6	-5.18	114.81	117.40
34	L0	3	ALA	CB-CA-C	-5.18	102.33	110.10
2	SA	89	U	C5-C6-N1	-5.18	120.11	122.70
2	SA	173	U	N1-C2-N3	-5.18	111.79	114.90
2	SA	382	A	C4-C5-N7	5.18	113.29	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	730	G	C8-N9-C4	-5.18	104.33	106.40
2	SA	1237	C	C2'-C3'-O3'	5.18	121.98	113.70
25	LB	90	C	C5-C4-N4	-5.18	116.58	120.20
26	LA	950	G	C5-C6-O6	-5.18	125.49	128.60
26	LA	1840	G	N1-C2-N2	-5.18	111.54	116.20
26	LA	2398	U	P-O3'-C3'	-5.18	113.49	119.70
26	LA	2624	G	C4-C5-N7	5.18	112.87	110.80
2	SA	57	G	N1-C2-N3	-5.18	120.79	123.90
2	SA	71	A	C5-C6-N6	5.18	127.84	123.70
2	SA	1096	C	N3-C2-O2	-5.18	118.28	121.90
2	SA	1140	C	N3-C4-N4	5.18	121.62	118.00
2	SA	1274	A	C5-C6-N6	5.18	127.84	123.70
20	SD	116	LEU	CB-CA-C	5.18	120.04	110.20
26	LA	215	G	C6-N1-C2	-5.18	121.99	125.10
26	LA	284	U	O5'-P-OP1	5.18	116.91	110.70
26	LA	613	A	C5-N7-C8	5.18	106.49	103.90
26	LA	757	G	C5'-C4'-C3'	5.18	124.28	116.00
26	LA	937	C	C2-N3-C4	-5.18	117.31	119.90
26	LA	1017	G	C8-N9-C4	5.18	108.47	106.40
26	LA	1200	C	N3-C4-C5	-5.18	119.83	121.90
26	LA	1410	G	N1-C6-O6	-5.18	116.79	119.90
26	LA	1633	G	C8-N9-C4	-5.18	104.33	106.40
26	LA	1637	A	C3'-C2'-C1'	5.18	105.64	101.50
26	LA	1853	A	N1-C6-N6	5.18	121.71	118.60
26	LA	1902	C	C2-N1-C1'	-5.18	113.11	118.80
26	LA	1970	A	N1-C6-N6	5.18	121.70	118.60
26	LA	2069	G	C2'-C3'-O3'	5.18	121.98	113.70
26	LA	2089	C	C3'-C2'-C1'	5.18	105.64	101.50
26	LA	2226	C	N3-C4-N4	5.18	121.62	118.00
26	LA	2543	G	C5-N7-C8	-5.18	101.71	104.30
2	SA	521	G	O4'-C1'-C2'	5.17	112.26	107.60
2	SA	522	C	C2-N1-C1'	5.17	124.49	118.80
2	SA	661	G	O4'-C1'-N9	5.17	112.34	108.20
2	SA	1186	G	N9-C1'-C2'	-5.17	106.31	112.00
2	SA	1519	A	C5-C6-N1	5.17	120.29	117.70
4	S2	36	A	OP2-P-O3'	5.17	116.58	105.20
20	SD	50	TYR	CG-CD2-CE2	5.17	125.44	121.30
25	LB	65	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	286	U	C5'-C4'-C3'	5.17	124.28	116.00
26	LA	539	G	N3-C2-N2	5.17	123.52	119.90
26	LA	556	A	O5'-C5'-C4'	5.17	121.53	111.70
26	LA	884	U	C1'-O4'-C4'	-5.17	105.76	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	989	G	C2-N3-C4	-5.17	109.31	111.90
26	LA	1150	C	C4-C5-C6	5.17	119.99	117.40
26	LA	1594	U	C5-C4-O4	5.17	129.00	125.90
26	LA	1853	A	O5'-C5'-C4'	5.17	121.53	111.70
26	LA	2318	G	N1-C2-N2	-5.17	111.54	116.20
26	LA	2357	G	C2'-C3'-O3'	5.17	121.98	113.70
26	LA	2524	G	OP1-P-OP2	-5.17	111.84	119.60
26	LA	2891	U	C6-N1-C1'	-5.17	113.95	121.20
30	LW	78	LYS	C-N-CA	5.17	134.64	121.70
34	L0	7	ARG	NE-CZ-NH2	-5.17	117.71	120.30
36	L2	17	SER	O-C-N	-5.17	114.42	122.70
2	SA	173	U	C5-C4-O4	5.17	129.00	125.90
2	SA	298	A	N3-C4-C5	-5.17	123.18	126.80
2	SA	494	G	P-O5'-C5'	-5.17	112.62	120.90
2	SA	518	C	C6-N1-C1'	-5.17	114.59	120.80
2	SA	604	G	P-O5'-C5'	-5.17	112.62	120.90
2	SA	713	G	O4'-C4'-C3'	-5.17	98.83	104.00
2	SA	976	G	C5-C6-N1	5.17	114.09	111.50
26	LA	334	C	C2-N1-C1'	-5.17	113.11	118.80
26	LA	974	G	O5'-P-OP1	-5.17	101.04	105.70
26	LA	1019	U	N3-C4-C5	5.17	117.70	114.60
26	LA	1704	C	C5'-C4'-O4'	5.17	115.31	109.10
26	LA	1905	C	O4'-C1'-N1	5.17	112.34	108.20
26	LA	2687	U	O4'-C1'-C2'	5.17	112.26	107.60
2	SA	60	A	N9-C4-C5	-5.17	103.73	105.80
2	SA	240	G	C4'-C3'-C2'	-5.17	97.43	102.60
2	SA	666	G	C8-N9-C1'	5.17	133.72	127.00
2	SA	1063	C	N3-C4-N4	5.17	121.62	118.00
2	SA	1203	C	C1'-O4'-C4'	-5.17	105.76	109.90
19	SC	46	LEU	CB-CG-CD2	-5.17	102.21	111.00
24	S3	233	MET	CG-SD-CE	-5.17	91.93	100.20
24	S3	300	ASP	CB-CG-OD1	5.17	122.95	118.30
26	LA	812	C	O4'-C1'-N1	5.17	112.34	108.20
26	LA	814	C	OP2-P-O3'	5.17	116.58	105.20
26	LA	979	A	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	1355	G	C6-C5-N7	-5.17	127.30	130.40
26	LA	1549	A	C1'-O4'-C4'	-5.17	105.76	109.90
26	LA	2237	G	C3'-C2'-C1'	5.17	105.64	101.50
26	LA	2323	G	C1'-O4'-C4'	5.17	114.04	109.90
26	LA	2432	A	P-O5'-C5'	-5.17	112.62	120.90
26	LA	2492	U	N3-C4-C5	-5.17	111.50	114.60
26	LA	2493	U	P-O3'-C3'	-5.17	113.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	LG	46	LYS	O-C-N	-5.17	114.43	122.70
2	SA	1026	G	C5-N7-C8	-5.17	101.72	104.30
3	S1	18	A	C1'-O4'-C4'	-5.17	105.76	109.90
13	SM	19	THR	N-CA-CB	5.17	120.12	110.30
26	LA	163	C	N1-C2-N3	5.17	122.82	119.20
26	LA	607	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	792	A	C6-N1-C2	-5.17	115.50	118.60
26	LA	841	G	N1-C6-O6	5.17	123.00	119.90
26	LA	2144	G	O5'-P-OP1	-5.17	101.05	105.70
26	LA	2539	C	N1-C1'-C2'	-5.17	106.31	112.00
26	LA	2828	G	P-O3'-C3'	-5.17	113.50	119.70
41	L5	3	ARG	NE-CZ-NH1	-5.17	117.72	120.30
2	SA	296	U	N3-C4-C5	5.17	117.70	114.60
2	SA	587	G	N7-C8-N9	-5.17	110.52	113.10
2	SA	1010	U	C5'-C4'-C3'	-5.17	107.73	116.00
2	SA	1045	C	C2-N3-C4	-5.17	117.31	119.90
2	SA	1067	A	P-O3'-C3'	5.17	125.90	119.70
2	SA	1180	A	C5-C6-N6	5.17	127.83	123.70
2	SA	1412	C	C3'-C2'-C1'	5.17	105.64	101.50
26	LA	10	A	C4-C5-C6	-5.17	114.42	117.00
26	LA	528	A	N1-C2-N3	-5.17	126.72	129.30
26	LA	820	A	N3-C4-N9	-5.17	123.27	127.40
26	LA	989	G	N3-C4-N9	-5.17	122.90	126.00
26	LA	1545	A	OP2-P-O3'	5.17	116.57	105.20
26	LA	1603	A	C6-C5-N7	5.17	135.92	132.30
26	LA	1604	C	P-O5'-C5'	-5.17	112.63	120.90
26	LA	1831	G	C4-N9-C1'	5.17	133.22	126.50
26	LA	2167	U	N3-C4-O4	-5.17	115.78	119.40
26	LA	2209	G	N1-C2-N3	5.17	127.00	123.90
26	LA	2326	C	C5-C4-N4	5.17	123.82	120.20
26	LA	2338	C	C5'-C4'-O4'	5.17	115.30	109.10
26	LA	2550	G	O4'-C1'-C2'	5.17	112.25	107.60
28	LU	109	ASP	CB-CG-OD1	-5.17	113.65	118.30
48	LN	81	ASP	CB-CG-OD2	-5.17	113.65	118.30
2	SA	109	A	C5-C6-N6	-5.17	119.57	123.70
2	SA	346	G	N1-C6-O6	-5.17	116.80	119.90
2	SA	518	C	C3'-C2'-C1'	5.17	105.63	101.50
2	SA	663	A	P-O5'-C5'	5.17	129.17	120.90
2	SA	720	C	C2-N1-C1'	5.17	124.48	118.80
2	SA	739	C	N1-C2-O2	-5.17	115.80	118.90
2	SA	743	A	C5'-C4'-C3'	-5.17	107.73	116.00
2	SA	786	G	N1-C2-N2	-5.17	111.55	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	842	U	O4'-C1'-N1	5.17	112.33	108.20
2	SA	878	A	C5-C6-N6	-5.17	119.57	123.70
2	SA	963	G	N1-C6-O6	5.17	123.00	119.90
2	SA	1153	G	N9-C4-C5	-5.17	103.33	105.40
2	SA	1344	C	C2'-C3'-O3'	5.17	121.97	113.70
2	SA	1424	U	C2-N3-C4	-5.17	123.90	127.00
2	SA	1455	G	C4'-C3'-C2'	-5.17	97.43	102.60
22	SF	89	VAL	CG1-CB-CG2	-5.17	102.63	110.90
25	LB	2	G	C5-C6-O6	5.17	131.70	128.60
25	LB	60	C	C2-N1-C1'	5.17	124.48	118.80
26	LA	35	G	N9-C4-C5	-5.17	103.33	105.40
26	LA	168	G	N7-C8-N9	-5.17	110.52	113.10
26	LA	449	A	N1-C2-N3	5.17	131.88	129.30
26	LA	551	G	C4-C5-N7	-5.17	108.73	110.80
26	LA	671	C	C1'-O4'-C4'	5.17	114.03	109.90
26	LA	821	A	C5'-C4'-O4'	5.17	115.30	109.10
26	LA	832	U	OP2-P-O3'	5.17	116.56	105.20
26	LA	1007	C	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	1395	A	N1-C6-N6	-5.17	115.50	118.60
26	LA	1591	A	C5-N7-C8	-5.17	101.32	103.90
26	LA	1657	U	O3'-P-O5'	-5.17	94.18	104.00
26	LA	2020	A	O4'-C1'-N9	5.17	112.33	108.20
26	LA	2258	C	N1-C2-N3	5.17	122.82	119.20
26	LA	2882	A	O4'-C1'-C2'	5.17	112.25	107.60
27	LD	251	THR	N-CA-CB	5.17	120.12	110.30
37	LC	25	GLU	OE1-CD-OE2	-5.17	117.10	123.30
38	LE	141	ARG	CG-CD-NE	-5.17	100.95	111.80
2	SA	226	G	N3-C4-N9	5.17	129.10	126.00
25	LB	44	G	P-O3'-C3'	5.17	125.90	119.70
26	LA	43	G	O4'-C1'-C2'	5.17	112.25	107.60
26	LA	201	C	N1-C2-O2	-5.17	115.80	118.90
26	LA	531	C	O4'-C1'-C2'	-5.17	100.64	105.80
26	LA	803	U	P-O3'-C3'	5.17	125.90	119.70
26	LA	1241	A	C5'-C4'-C3'	-5.17	107.74	116.00
26	LA	2171	A	C2-N3-C4	5.17	113.18	110.60
26	LA	2682	A	C4-N9-C1'	5.17	135.60	126.30
2	SA	176	C	C4'-C3'-C2'	-5.16	97.44	102.60
2	SA	209	U	C5'-C4'-O4'	5.16	115.30	109.10
2	SA	403	C	C5'-C4'-O4'	5.16	115.30	109.10
2	SA	439	U	C6-N1-C2	-5.16	117.90	121.00
2	SA	1012	A	C8-N9-C1'	5.16	137.00	127.70
2	SA	1111	A	C5-C6-N1	5.16	120.28	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1526	G	C2-N3-C4	-5.16	109.32	111.90
4	S2	2	G	C4-C5-N7	-5.16	108.73	110.80
24	S3	108	ALA	CB-CA-C	5.16	117.85	110.10
26	LA	171	U	P-O3'-C3'	-5.16	113.50	119.70
26	LA	990	A	O3'-P-O5'	-5.16	94.19	104.00
26	LA	1210	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	1453	A	C5-C6-N1	5.16	120.28	117.70
26	LA	1673	G	OP1-P-OP2	-5.16	111.85	119.60
26	LA	2804	U	O4'-C1'-N1	5.16	112.33	108.20
26	LA	2867	G	O3'-P-O5'	5.16	113.81	104.00
2	SA	444	G	N1-C6-O6	5.16	123.00	119.90
2	SA	765	G	C8-N9-C4	5.16	108.47	106.40
2	SA	977	A	C5-C6-N1	-5.16	115.12	117.70
2	SA	1063	C	N3-C4-C5	5.16	123.97	121.90
2	SA	1376	U	C3'-C2'-C1'	5.16	105.63	101.50
26	LA	610	C	C4-C5-C6	-5.16	114.82	117.40
26	LA	1803	A	C6-N1-C2	-5.16	115.50	118.60
26	LA	1847	A	C8-N9-C1'	-5.16	118.41	127.70
26	LA	2061	G	C1'-O4'-C4'	-5.16	105.77	109.90
26	LA	2212	A	P-O3'-C3'	5.16	125.89	119.70
26	LA	2775	G	N9-C1'-C2'	-5.16	106.32	112.00
51	LI	97	ARG	CG-CD-NE	-5.16	100.96	111.80
1	SS	2	ARG	NE-CZ-NH1	-5.16	117.72	120.30
2	SA	368	U	C1'-O4'-C4'	-5.16	105.77	109.90
2	SA	449	G	C2-N3-C4	5.16	114.48	111.90
2	SA	866	C	C5-C6-N1	-5.16	118.42	121.00
2	SA	1031	C	C4-C5-C6	5.16	119.98	117.40
4	S2	4	G	N9-C4-C5	5.16	107.46	105.40
4	S2	61	U	C6-N1-C1'	5.16	128.42	121.20
26	LA	108	G	N7-C8-N9	-5.16	110.52	113.10
26	LA	367	G	N3-C2-N2	-5.16	116.29	119.90
26	LA	755	U	C5'-C4'-O4'	5.16	115.29	109.10
26	LA	756	A	C6-N1-C2	-5.16	115.50	118.60
26	LA	775	G	O3'-P-O5'	5.16	113.81	104.00
26	LA	946	C	C6-N1-C2	-5.16	118.24	120.30
26	LA	1028	A	N1-C2-N3	5.16	131.88	129.30
26	LA	1327	A	C8-N9-C4	5.16	107.86	105.80
26	LA	1363	C	N3-C2-O2	-5.16	118.29	121.90
26	LA	1664	A	N1-C2-N3	-5.16	126.72	129.30
26	LA	1758	U	N3-C2-O2	-5.16	118.59	122.20
26	LA	1999	C	C5'-C4'-C3'	-5.16	107.74	116.00
26	LA	2124	G	C5-C6-O6	-5.16	125.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2530	A	C1'-O4'-C4'	-5.16	105.77	109.90
26	LA	2675	A	C6-C5-N7	-5.16	128.69	132.30
27	LD	155	ARG	NE-CZ-NH1	5.16	122.88	120.30
29	LV	55	VAL	CA-C-O	5.16	130.94	120.10
38	LE	96	ILE	N-CA-CB	5.16	122.67	110.80
2	SA	141	G	C8-N9-C1'	5.16	133.71	127.00
2	SA	1395	C	N3-C4-N4	-5.16	114.39	118.00
2	SA	1515	G	N7-C8-N9	5.16	115.68	113.10
26	LA	212	G	O4'-C1'-N9	5.16	112.33	108.20
26	LA	833	A	P-O5'-C5'	-5.16	112.65	120.90
26	LA	862	G	N7-C8-N9	5.16	115.68	113.10
26	LA	1007	C	N3-C2-O2	-5.16	118.29	121.90
26	LA	1281	G	N1-C2-N3	-5.16	120.81	123.90
26	LA	1347	A	N1-C2-N3	5.16	131.88	129.30
26	LA	1537	G	N9-C1'-C2'	-5.16	106.33	112.00
26	LA	1757	A	C3'-C2'-C1'	-5.16	97.37	101.50
26	LA	1929	G	P-O5'-C5'	-5.16	112.65	120.90
26	LA	2398	U	C5-C4-O4	-5.16	122.80	125.90
26	LA	2576	G	P-O3'-C3'	-5.16	113.51	119.70
26	LA	2623	G	C1'-O4'-C4'	-5.16	105.77	109.90
58	LT	78	ARG	NE-CZ-NH1	-5.16	117.72	120.30
2	SA	174	A	O4'-C1'-N9	5.16	112.33	108.20
2	SA	265	G	P-O5'-C5'	5.16	129.15	120.90
2	SA	597	G	C2-N3-C4	-5.16	109.32	111.90
2	SA	997	U	C5'-C4'-O4'	5.16	115.29	109.10
2	SA	1028	C	OP2-P-O3'	5.16	116.55	105.20
2	SA	1320	C	O3'-P-O5'	5.16	113.80	104.00
18	SB	10	LYS	CA-CB-CG	5.16	124.75	113.40
25	LB	105	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	86	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	750	A	C2'-C3'-O3'	5.16	121.95	113.70
26	LA	1460	U	O5'-C5'-C4'	5.16	121.50	111.70
26	LA	2031	A	N3-C4-C5	-5.16	123.19	126.80
2	SA	182	A	N9-C4-C5	-5.16	103.74	105.80
2	SA	332	G	O3'-P-O5'	-5.16	94.20	104.00
2	SA	642	A	C8-N9-C4	-5.16	103.74	105.80
2	SA	712	A	C4-C5-N7	5.16	113.28	110.70
2	SA	770	C	O4'-C1'-N1	5.16	112.32	108.20
2	SA	868	C	C2-N3-C4	-5.16	117.32	119.90
2	SA	1035	A	C4-C5-N7	5.16	113.28	110.70
2	SA	1133	G	N3-C4-C5	5.16	131.18	128.60
4	S2	4	G	C3'-C2'-C1'	5.16	105.62	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	65	G	C6-N1-C2	-5.16	122.01	125.10
26	LA	322	A	C5-C6-N1	5.16	120.28	117.70
26	LA	677	A	N1-C6-N6	5.16	121.69	118.60
26	LA	737	C	N1-C2-O2	-5.16	115.81	118.90
26	LA	1162	G	C2'-C3'-O3'	5.16	121.95	113.70
26	LA	1524	G	C5-N7-C8	-5.16	101.72	104.30
26	LA	2223	G	C5'-C4'-C3'	5.16	124.25	116.00
38	LE	74	GLU	CB-CA-C	-5.16	100.09	110.40
44	LF	186	VAL	CA-CB-CG1	5.16	118.63	110.90
49	LK	37	PHE	CB-CA-C	-5.16	100.09	110.40
2	SA	332	G	N3-C4-C5	-5.15	126.02	128.60
2	SA	1174	G	C4-C5-C6	-5.15	115.71	118.80
2	SA	1450	U	N3-C4-O4	5.15	123.01	119.40
2	SA	1524	C	C5-C4-N4	-5.15	116.59	120.20
26	LA	472	A	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	692	C	O3'-P-O5'	-5.15	94.21	104.00
26	LA	2414	G	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	2426	A	N1-C2-N3	5.15	131.88	129.30
50	LL	53	TYR	N-CA-CB	5.15	119.88	110.60
2	SA	599	C	C2-N3-C4	-5.15	117.32	119.90
2	SA	1175	G	C5-C6-N1	5.15	114.08	111.50
2	SA	1202	U	O5'-P-OP1	-5.15	101.06	105.70
2	SA	1310	G	C8-N9-C4	-5.15	104.34	106.40
2	SA	1400	C	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	575	A	C4-N9-C1'	-5.15	117.03	126.30
26	LA	659	G	O4'-C1'-N9	5.15	112.32	108.20
26	LA	667	U	C4'-C3'-C2'	5.15	107.75	102.60
26	LA	954	G	P-O5'-C5'	-5.15	112.66	120.90
26	LA	1070	A	O3'-P-O5'	-5.15	94.21	104.00
26	LA	1092	C	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	1215	G	C1'-O4'-C4'	-5.15	105.78	109.90
26	LA	1402	U	O3'-P-O5'	5.15	113.79	104.00
26	LA	1402	U	N3-C4-C5	-5.15	111.51	114.60
26	LA	1435	G	N1-C2-N3	-5.15	120.81	123.90
26	LA	1485	U	P-O5'-C5'	5.15	129.14	120.90
26	LA	1506	U	C5-C4-O4	-5.15	122.81	125.90
26	LA	1616	A	N1-C2-N3	-5.15	126.72	129.30
26	LA	2156	G	C8-N9-C1'	5.15	133.70	127.00
26	LA	2476	A	C4-C5-N7	5.15	113.28	110.70
26	LA	2497	A	N1-C6-N6	5.15	121.69	118.60
26	LA	2579	C	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	2630	G	N9-C4-C5	-5.15	103.34	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2640	G	C8-N9-C1'	5.15	133.70	127.00
37	LC	111	PHE	C-N-CA	5.15	134.58	121.70
49	LK	117	THR	CA-CB-CG2	-5.15	105.19	112.40
54	LM	98	ARG	NE-CZ-NH2	-5.15	117.72	120.30
2	SA	122	G	C5-C6-O6	-5.15	125.51	128.60
2	SA	203	G	C2-N3-C4	-5.15	109.33	111.90
2	SA	461	A	C5-N7-C8	-5.15	101.33	103.90
2	SA	500	G	C2'-C3'-O3'	5.15	121.94	113.70
2	SA	651	C	N3-C4-C5	5.15	123.96	121.90
2	SA	651	C	O4'-C1'-N1	5.15	112.32	108.20
2	SA	1033	G	O4'-C1'-N9	5.15	112.32	108.20
2	SA	1057	G	N7-C8-N9	5.15	115.68	113.10
2	SA	1127	G	C6-N1-C2	5.15	128.19	125.10
2	SA	1167	A	C5-C6-N6	-5.15	119.58	123.70
2	SA	1245	C	N1-C2-O2	5.15	121.99	118.90
2	SA	1325	C	C5'-C4'-O4'	5.15	115.28	109.10
4	S2	3	C	C5-C4-N4	-5.15	116.59	120.20
18	SB	114	LYS	N-CA-CB	5.15	119.87	110.60
24	S3	183	ASP	CA-CB-CG	-5.15	102.07	113.40
26	LA	278	A	OP1-P-OP2	-5.15	111.87	119.60
26	LA	1024	G	O4'-C1'-N9	5.15	112.32	108.20
26	LA	1455	G	C8-N9-C1'	-5.15	120.31	127.00
26	LA	1782	U	C5-C4-O4	5.15	128.99	125.90
26	LA	1906	G	C5-N7-C8	-5.15	101.72	104.30
26	LA	2010	G	N3-C2-N2	5.15	123.51	119.90
26	LA	2471	A	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	2757	A	C5'-C4'-O4'	5.15	115.28	109.10
37	LC	166	ASP	CB-CA-C	5.15	120.70	110.40
37	LC	203	GLN	CB-CA-C	-5.15	100.10	110.40
2	SA	64	G	C6-N1-C2	5.15	128.19	125.10
2	SA	124	C	N1-C2-O2	5.15	121.99	118.90
2	SA	677	U	N1-C2-O2	5.15	126.40	122.80
26	LA	944	C	P-O5'-C5'	-5.15	112.66	120.90
26	LA	1356	G	C5'-C4'-C3'	-5.15	107.76	116.00
26	LA	1543	G	C1'-O4'-C4'	-5.15	105.78	109.90
26	LA	2631	G	N1-C2-N3	5.15	126.99	123.90
26	LA	2814	A	C6-C5-N7	5.15	135.90	132.30
2	SA	1	A	C6-C5-N7	-5.15	128.70	132.30
2	SA	278	G	N3-C4-N9	-5.15	122.91	126.00
2	SA	1014	A	C5-N7-C8	5.15	106.47	103.90
2	SA	1153	G	N1-C2-N3	5.15	126.99	123.90
2	SA	1190	G	C4-C5-N7	-5.15	108.74	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1260	G	N9-C1'-C2'	-5.15	106.34	112.00
2	SA	1279	G	C4-C5-C6	-5.15	115.71	118.80
2	SA	1499	A	C2-N3-C4	5.15	113.17	110.60
12	SL	49	ARG	NE-CZ-NH1	-5.15	117.73	120.30
15	SO	56	LEU	CB-CG-CD1	5.15	119.75	111.00
24	S3	582	TYR	CD1-CE1-CZ	5.15	124.43	119.80
25	LB	83	G	P-O3'-C3'	-5.15	113.52	119.70
25	LB	92	C	C2'-C3'-O3'	5.15	121.94	113.70
26	LA	162	U	C6-N1-C1'	-5.15	113.99	121.20
26	LA	204	A	O4'-C1'-N9	5.15	112.32	108.20
26	LA	849	A	O5'-P-OP1	-5.15	101.07	105.70
26	LA	862	G	C5'-C4'-C3'	-5.15	107.76	116.00
26	LA	925	A	N7-C8-N9	-5.15	111.23	113.80
26	LA	1084	A	C2-N3-C4	5.15	113.17	110.60
26	LA	1086	A	C5'-C4'-C3'	5.15	124.24	116.00
26	LA	1131	G	N3-C4-C5	5.15	131.17	128.60
26	LA	1265	A	C8-N9-C4	5.15	107.86	105.80
26	LA	1490	A	O4'-C1'-N9	-5.15	104.08	108.20
26	LA	1528	A	C4-C5-C6	-5.15	114.43	117.00
26	LA	2754	U	C3'-C2'-C1'	-5.15	97.38	101.50
2	SA	794	A	C2-N3-C4	-5.15	108.03	110.60
2	SA	805	C	O4'-C1'-N1	5.15	112.32	108.20
10	SJ	6	ILE	CA-CB-CG2	5.15	121.19	110.90
25	LB	96	G	OP1-P-OP2	-5.15	111.88	119.60
26	LA	187	G	C5'-C4'-C3'	-5.15	107.77	116.00
26	LA	287	G	C5'-C4'-C3'	5.15	124.23	116.00
26	LA	1300	G	N1-C2-N3	-5.15	120.81	123.90
26	LA	2590	A	C5-C6-N6	-5.15	119.58	123.70
2	SA	15	G	P-O5'-C5'	-5.14	112.67	120.90
2	SA	777	A	P-O5'-C5'	-5.14	112.67	120.90
2	SA	1068	G	C5-C6-O6	5.14	131.69	128.60
2	SA	1291	U	C2'-C3'-O3'	5.14	121.93	113.70
2	SA	1315	U	C5'-C4'-O4'	5.14	115.27	109.10
26	LA	605	G	N7-C8-N9	5.14	115.67	113.10
26	LA	618	G	P-O3'-C3'	5.14	125.87	119.70
26	LA	685	A	C3'-C2'-C1'	-5.14	97.38	101.50
26	LA	718	A	N1-C2-N3	5.14	131.87	129.30
26	LA	847	U	C2-N3-C4	-5.14	123.91	127.00
26	LA	928	A	C5-C6-N6	-5.14	119.58	123.70
26	LA	1054	A	N9-C4-C5	5.14	107.86	105.80
26	LA	1679	A	C8-N9-C4	-5.14	103.74	105.80
26	LA	2204	G	O4'-C1'-N9	5.14	112.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2261	C	O4'-C4'-C3'	-5.14	98.86	104.00
26	LA	2550	G	C5'-C4'-C3'	-5.14	107.77	116.00
26	LA	2783	U	C5-C4-O4	-5.14	122.81	125.90
26	LA	2856	A	C3'-C2'-C1'	-5.14	97.38	101.50
2	SA	63	C	C5'-C4'-O4'	5.14	115.27	109.10
2	SA	281	G	OP1-P-O3'	5.14	116.51	105.20
2	SA	305	G	P-O5'-C5'	5.14	129.13	120.90
2	SA	760	G	C2-N3-C4	-5.14	109.33	111.90
2	SA	768	A	N7-C8-N9	5.14	116.37	113.80
2	SA	993	G	C5-C6-O6	-5.14	125.51	128.60
2	SA	1020	G	N1-C6-O6	-5.14	116.81	119.90
2	SA	1088	G	C5-N7-C8	-5.14	101.73	104.30
2	SA	1182	G	C4-C5-C6	-5.14	115.72	118.80
2	SA	1293	C	C2-N3-C4	5.14	122.47	119.90
2	SA	1488	G	C6-N1-C2	5.14	128.19	125.10
8	SH	113	ARG	NE-CZ-NH1	5.14	122.87	120.30
13	SM	86	ARG	NE-CZ-NH2	5.14	122.87	120.30
24	S3	392	THR	OG1-CB-CG2	-5.14	98.17	110.00
25	LB	82	U	N1-C2-O2	-5.14	119.20	122.80
26	LA	683	U	C5-C4-O4	-5.14	122.81	125.90
26	LA	845	A	O5'-P-OP2	-5.14	101.07	105.70
26	LA	1292	G	C3'-C2'-C1'	-5.14	97.39	101.50
26	LA	1768	C	C2-N3-C4	-5.14	117.33	119.90
26	LA	2127	G	O4'-C4'-C3'	-5.14	98.86	104.00
26	LA	2859	G	N1-C2-N3	5.14	126.98	123.90
46	LH	168	VAL	CA-CB-CG1	-5.14	103.19	110.90
49	LK	63	ASP	CB-CG-OD2	5.14	122.93	118.30
57	LS	45	ALA	CB-CA-C	5.14	117.81	110.10
2	SA	307	C	O3'-P-O5'	-5.14	94.23	104.00
2	SA	1077	G	OP2-P-O3'	5.14	116.51	105.20
2	SA	1437	A	C2-N3-C4	5.14	113.17	110.60
26	LA	669	G	C8-N9-C4	-5.14	104.34	106.40
26	LA	692	C	OP2-P-O3'	5.14	116.51	105.20
26	LA	1112	G	C4'-C3'-C2'	-5.14	97.46	102.60
26	LA	1623	G	N1-C6-O6	5.14	122.98	119.90
2	SA	108	G	N9-C4-C5	5.14	107.46	105.40
2	SA	508	U	C5'-C4'-C3'	-5.14	107.78	116.00
2	SA	518	C	C2-N1-C1'	5.14	124.45	118.80
2	SA	527	G	N7-C8-N9	-5.14	110.53	113.10
2	SA	838	G	O4'-C1'-N9	5.14	112.31	108.20
2	SA	846	G	C5-C6-N1	5.14	114.07	111.50
2	SA	907	A	C4'-C3'-C2'	-5.14	97.46	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	913	A	C8-N9-C4	5.14	107.86	105.80
2	SA	1070	U	N1-C1'-C2'	-5.14	106.35	112.00
2	SA	1396	A	N1-C2-N3	5.14	131.87	129.30
2	SA	1505	G	N9-C4-C5	5.14	107.46	105.40
25	LB	26	C	C6-N1-C2	-5.14	118.24	120.30
26	LA	334	C	C4-C5-C6	-5.14	114.83	117.40
26	LA	517	C	C4-C5-C6	-5.14	114.83	117.40
26	LA	832	U	P-O5'-C5'	-5.14	112.68	120.90
26	LA	1396	U	C2-N3-C4	-5.14	123.92	127.00
26	LA	1414	C	C4'-C3'-C2'	-5.14	97.46	102.60
26	LA	1574	C	O3'-P-O5'	-5.14	94.23	104.00
26	LA	1871	A	C4-C5-C6	-5.14	114.43	117.00
26	LA	1998	A	N3-C4-C5	5.14	130.40	126.80
26	LA	2058	A	N3-C4-C5	5.14	130.40	126.80
26	LA	2180	U	C3'-C2'-C1'	-5.14	97.39	101.50
26	LA	2316	G	P-O3'-C3'	-5.14	113.53	119.70
26	LA	2735	G	N1-C6-O6	-5.14	116.82	119.90
27	LD	267	VAL	O-C-N	-5.14	114.48	122.70
2	SA	333	U	P-O3'-C3'	5.14	125.87	119.70
2	SA	801	U	C2-N1-C1'	-5.14	111.53	117.70
2	SA	986	U	O4'-C1'-N1	5.14	112.31	108.20
2	SA	1260	G	N1-C2-N3	-5.14	120.82	123.90
24	S3	678	SER	CB-CA-C	5.14	119.86	110.10
26	LA	533	G	C6-C5-N7	5.14	133.48	130.40
26	LA	740	C	P-O5'-C5'	-5.14	112.68	120.90
26	LA	1042	G	C6-N1-C2	-5.14	122.02	125.10
26	LA	1347	A	N1-C6-N6	-5.14	115.52	118.60
26	LA	1834	U	N3-C4-O4	-5.14	115.80	119.40
26	LA	2129	C	P-O5'-C5'	-5.14	112.68	120.90
26	LA	2176	A	C4'-C3'-C2'	-5.14	97.46	102.60
2	SA	219	U	P-O5'-C5'	5.14	129.12	120.90
2	SA	429	U	O4'-C1'-C2'	-5.14	100.66	105.80
2	SA	476	U	C4'-C3'-C2'	-5.14	97.46	102.60
2	SA	496	A	O4'-C4'-C3'	-5.14	98.86	104.00
2	SA	602	A	N9-C4-C5	-5.14	103.75	105.80
2	SA	887	G	N9-C1'-C2'	-5.14	106.35	112.00
2	SA	1158	C	N3-C2-O2	-5.14	118.31	121.90
4	S2	43	G	C6-N1-C2	5.14	128.18	125.10
26	LA	127	A	C6-N1-C2	-5.14	115.52	118.60
26	LA	460	A	C8-N9-C1'	-5.14	118.45	127.70
26	LA	601	C	C5'-C4'-O4'	5.14	115.26	109.10
26	LA	664	G	N7-C8-N9	-5.14	110.53	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	835	C	C2-N3-C4	5.14	122.47	119.90
26	LA	1072	C	OP1-P-O3'	5.14	116.50	105.20
26	LA	1081	U	N3-C2-O2	5.14	125.80	122.20
26	LA	1403	A	N9-C1'-C2'	-5.14	106.35	112.00
26	LA	1743	G	N9-C4-C5	-5.14	103.34	105.40
26	LA	1981	A	C1'-O4'-C4'	5.14	114.01	109.90
26	LA	2136	G	C2-N3-C4	-5.14	109.33	111.90
26	LA	2200	C	N1-C2-O2	5.14	121.98	118.90
26	LA	2522	U	P-O5'-C5'	5.14	129.12	120.90
26	LA	2552	U	N1-C2-N3	5.14	117.98	114.90
26	LA	2766	A	N1-C6-N6	5.14	121.68	118.60
26	LA	2796	U	O4'-C1'-N1	5.14	112.31	108.20
31	LX	7	GLU	CB-CG-CD	-5.14	100.33	114.20
46	LH	93	TYR	CD1-CE1-CZ	5.14	124.42	119.80
49	LK	35	MET	CG-SD-CE	-5.14	91.98	100.20
2	SA	55	A	C4-C5-C6	-5.13	114.43	117.00
2	SA	124	C	C1'-O4'-C4'	-5.13	105.79	109.90
2	SA	1081	A	O5'-C5'-C4'	-5.13	101.94	111.70
2	SA	1121	U	C5'-C4'-O4'	5.13	115.26	109.10
10	SJ	65	TYR	CB-CG-CD2	-5.13	117.92	121.00
15	SO	68	TYR	CG-CD1-CE1	-5.13	117.19	121.30
26	LA	167	A	C1'-O4'-C4'	-5.13	105.79	109.90
26	LA	220	G	C6-N1-C2	5.13	128.18	125.10
26	LA	457	A	OP1-P-OP2	-5.13	111.90	119.60
26	LA	649	G	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	788	A	C2-N3-C4	-5.13	108.03	110.60
26	LA	1555	G	C5-C6-O6	5.13	131.68	128.60
26	LA	1567	G	N9-C4-C5	5.13	107.45	105.40
26	LA	1650	A	C5'-C4'-C3'	-5.13	107.79	116.00
26	LA	1857	G	N3-C4-N9	-5.13	122.92	126.00
26	LA	1967	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	2221	G	C1'-O4'-C4'	-5.13	105.79	109.90
26	LA	2235	G	C5-C6-N1	5.13	114.07	111.50
26	LA	2331	G	C6-N1-C2	-5.13	122.02	125.10
26	LA	2540	C	O4'-C1'-N1	5.13	112.31	108.20
26	LA	2640	G	P-O3'-C3'	-5.13	113.54	119.70
26	LA	2673	G	C5-C6-O6	-5.13	125.52	128.60
2	SA	147	G	C4-C5-C6	-5.13	115.72	118.80
2	SA	322	C	N1-C1'-C2'	-5.13	106.35	112.00
2	SA	1093	A	N1-C2-N3	-5.13	126.73	129.30
2	SA	1095	U	C4'-C3'-C2'	-5.13	97.47	102.60
2	SA	1456	A	P-O3'-C3'	-5.13	113.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1475	G	C5-C6-O6	-5.13	125.52	128.60
4	S2	43	G	N3-C4-C5	-5.13	126.03	128.60
26	LA	733	G	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	772	C	N1-C2-N3	5.13	122.79	119.20
26	LA	981	A	C4-C5-C6	-5.13	114.43	117.00
26	LA	1190	G	O3'-P-O5'	5.13	113.75	104.00
26	LA	1281	G	N7-C8-N9	-5.13	110.53	113.10
26	LA	1668	A	O5'-P-OP1	5.13	116.86	110.70
26	LA	1702	G	C2-N3-C4	5.13	114.47	111.90
26	LA	2043	C	O3'-P-O5'	-5.13	94.25	104.00
26	LA	2766	A	O5'-P-OP1	5.13	116.86	110.70
2	SA	402	G	C2-N3-C4	5.13	114.47	111.90
2	SA	490	C	C2-N1-C1'	5.13	124.45	118.80
2	SA	746	A	N1-C2-N3	-5.13	126.73	129.30
2	SA	876	C	N3-C4-N4	5.13	121.59	118.00
2	SA	971	G	C5'-C4'-O4'	5.13	115.26	109.10
2	SA	1026	G	C8-N9-C1'	5.13	133.67	127.00
2	SA	1189	U	P-O3'-C3'	-5.13	113.54	119.70
2	SA	1199	U	N1-C2-O2	5.13	126.39	122.80
2	SA	1214	C	N1-C1'-C2'	-5.13	106.36	112.00
2	SA	1392	G	N7-C8-N9	5.13	115.67	113.10
4	S2	41	C	N3-C4-C5	-5.13	119.85	121.90
4	S2	55	U	C4-C5-C6	-5.13	116.62	119.70
6	SU	30	GLU	OE1-CD-OE2	-5.13	117.14	123.30
26	LA	167	A	OP1-P-OP2	-5.13	111.90	119.60
26	LA	905	A	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	1093	G	C5'-C4'-C3'	-5.13	107.79	116.00
26	LA	1444	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	1711	A	C5-C6-N1	5.13	120.27	117.70
26	LA	2368	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	2463	C	O3'-P-O5'	5.13	113.75	104.00
26	LA	2512	C	C3'-C2'-C1'	-5.13	97.39	101.50
27	LD	164	VAL	CG1-CB-CG2	-5.13	102.69	110.90
35	L1	29	ARG	NH1-CZ-NH2	-5.13	113.75	119.40
38	LE	150	GLN	CB-CA-C	-5.13	100.14	110.40
2	SA	1180	A	C5'-C4'-C3'	-5.13	107.79	116.00
2	SA	1266	G	N3-C4-N9	-5.13	122.92	126.00
2	SA	1459	G	C2-N3-C4	-5.13	109.33	111.90
4	S2	69	C	C2-N3-C4	5.13	122.47	119.90
26	LA	580	U	N1-C2-O2	5.13	126.39	122.80
26	LA	893	C	C4-C5-C6	5.13	119.97	117.40
26	LA	1052	C	N1-C1'-C2'	-5.13	106.36	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1569	A	O4'-C4'-C3'	-5.13	98.87	104.00
29	LV	51	PHE	CB-CG-CD2	-5.13	117.21	120.80
58	LT	8	GLY	N-CA-C	-5.13	100.27	113.10
2	SA	200	G	C8-N9-C4	-5.13	104.35	106.40
2	SA	712	A	C5'-C4'-C3'	5.13	124.21	116.00
2	SA	890	G	C5-C6-O6	-5.13	125.52	128.60
2	SA	954	G	O5'-C5'-C4'	5.13	121.44	111.70
2	SA	958	A	C5'-C4'-C3'	-5.13	107.79	116.00
2	SA	1213	A	C5-N7-C8	5.13	106.46	103.90
16	SP	51	ARG	CB-CA-C	-5.13	100.14	110.40
26	LA	121	G	C4-C5-N7	5.13	112.85	110.80
26	LA	379	G	C4-C5-N7	-5.13	108.75	110.80
26	LA	536	G	N9-C1'-C2'	-5.13	106.36	112.00
26	LA	625	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	643	A	OP1-P-OP2	-5.13	111.91	119.60
26	LA	852	U	P-O5'-C5'	-5.13	112.69	120.90
26	LA	899	A	C4-C5-C6	-5.13	114.44	117.00
26	LA	1090	A	N1-C6-N6	5.13	121.68	118.60
26	LA	1091	G	C5-C6-O6	-5.13	125.52	128.60
26	LA	1110	G	N9-C4-C5	-5.13	103.35	105.40
26	LA	1136	G	O4'-C1'-N9	5.13	112.30	108.20
26	LA	1149	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	1164	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	1223	G	C4-N9-C1'	-5.13	119.83	126.50
26	LA	1562	U	N3-C2-O2	-5.13	118.61	122.20
26	LA	1767	G	OP1-P-OP2	-5.13	111.91	119.60
26	LA	1897	G	N3-C4-N9	5.13	129.08	126.00
26	LA	2029	G	N1-C2-N3	5.13	126.98	123.90
26	LA	2042	A	C6-N1-C2	5.13	121.68	118.60
26	LA	2475	C	O3'-P-O5'	5.13	113.74	104.00
26	LA	2774	C	N1-C2-O2	5.13	121.98	118.90
26	LA	2836	U	C5-C6-N1	5.13	125.27	122.70
47	LJ	6	ASP	N-CA-CB	5.13	119.83	110.60
56	LR	25	VAL	O-C-N	-5.13	114.49	122.70
58	LT	47	VAL	O-C-N	-5.13	114.49	122.70
2	SA	406	G	C8-N9-C4	5.13	108.45	106.40
2	SA	481	G	N1-C2-N3	-5.13	120.83	123.90
2	SA	768	A	C5-N7-C8	-5.13	101.34	103.90
2	SA	1133	G	O3'-P-O5'	-5.13	94.26	104.00
2	SA	1530	G	C5-N7-C8	-5.13	101.74	104.30
22	SF	79	ARG	CB-CG-CD	5.13	124.93	111.60
26	LA	149	A	N1-C2-N3	5.13	131.86	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	722	A	C6-C5-N7	-5.13	128.71	132.30
26	LA	822	G	C5-N7-C8	-5.13	101.74	104.30
26	LA	1023	U	O5'-P-OP2	5.13	116.85	110.70
26	LA	1206	G	O4'-C1'-N9	5.13	112.30	108.20
26	LA	1623	G	C5-C6-O6	-5.13	125.52	128.60
26	LA	2279	G	N1-C6-O6	5.13	122.97	119.90
26	LA	2403	C	N3-C4-C5	-5.13	119.85	121.90
48	LN	2	ARG	N-CA-CB	5.13	119.83	110.60
55	LQ	108	ASP	CB-CG-OD1	-5.13	113.69	118.30
2	SA	493	A	C8-N9-C1'	-5.12	118.47	127.70
2	SA	817	C	C4'-C3'-C2'	-5.12	97.47	102.60
2	SA	872	A	N9-C1'-C2'	-5.12	106.36	112.00
2	SA	1073	U	N1-C2-N3	5.12	117.97	114.90
2	SA	1191	A	C4'-C3'-C2'	5.12	107.72	102.60
2	SA	1318	A	N1-C6-N6	5.12	121.67	118.60
6	SU	68	ARG	NE-CZ-NH2	-5.12	117.74	120.30
25	LB	25	U	P-O3'-C3'	5.12	125.85	119.70
26	LA	570	G	C5'-C4'-C3'	-5.12	107.80	116.00
26	LA	695	G	N9-C4-C5	-5.12	103.35	105.40
26	LA	1012	U	N3-C2-O2	5.12	125.79	122.20
26	LA	1327	A	O4'-C1'-N9	5.12	112.30	108.20
26	LA	2032	G	N3-C2-N2	5.12	123.49	119.90
26	LA	2185	U	C5'-C4'-O4'	5.12	115.25	109.10
26	LA	2543	G	C6-N1-C2	-5.12	122.03	125.10
31	LX	93	ARG	NE-CZ-NH2	-5.12	117.74	120.30
2	SA	643	C	C2-N3-C4	5.12	122.46	119.90
2	SA	920	U	C5'-C4'-C3'	-5.12	107.80	116.00
2	SA	924	C	C5-C6-N1	5.12	123.56	121.00
2	SA	978	A	C8-N9-C4	5.12	107.85	105.80
2	SA	1384	C	C2-N3-C4	-5.12	117.34	119.90
2	SA	1400	C	C6-N1-C1'	-5.12	114.65	120.80
2	SA	1533	C	C5'-C4'-O4'	5.12	115.25	109.10
7	SG	47	GLU	O-C-N	-5.12	114.50	122.70
20	SD	17	ASP	N-CA-C	5.12	124.83	111.00
26	LA	161	A	C5-C6-N1	5.12	120.26	117.70
26	LA	195	A	P-O5'-C5'	5.12	129.10	120.90
26	LA	243	U	N1-C2-N3	5.12	117.97	114.90
26	LA	425	G	C4-N9-C1'	-5.12	119.84	126.50
26	LA	581	C	C5-C4-N4	-5.12	116.61	120.20
26	LA	1029	A	C1'-O4'-C4'	-5.12	105.80	109.90
26	LA	1969	A	N3-C4-C5	5.12	130.39	126.80
26	LA	2039	U	O4'-C1'-N1	5.12	112.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2245	U	N1-C2-N3	5.12	117.97	114.90
26	LA	2381	A	C4'-C3'-C2'	-5.12	97.48	102.60
26	LA	2498	C	P-O3'-C3'	-5.12	113.55	119.70
26	LA	2579	C	N3-C4-N4	5.12	121.59	118.00
26	LA	2741	A	O4'-C1'-N9	-5.12	104.10	108.20
48	LN	58	TYR	CB-CG-CD2	5.12	124.07	121.00
2	SA	109	A	C4-C5-C6	-5.12	114.44	117.00
2	SA	535	A	C8-N9-C4	-5.12	103.75	105.80
2	SA	603	U	C4'-C3'-C2'	-5.12	97.48	102.60
2	SA	781	A	C3'-C2'-C1'	5.12	105.60	101.50
2	SA	807	A	C5-C6-N6	5.12	127.80	123.70
2	SA	972	C	N1-C2-N3	5.12	122.78	119.20
2	SA	1520	C	C5'-C4'-O4'	5.12	115.25	109.10
8	SH	10	LEU	CB-CA-C	-5.12	100.47	110.20
26	LA	248	G	O5'-P-OP1	5.12	116.85	110.70
26	LA	285	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	1511	G	C6-C5-N7	5.12	133.47	130.40
26	LA	1573	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	1857	G	C5'-C4'-C3'	-5.12	107.81	116.00
26	LA	1916	A	OP2-P-O3'	5.12	116.47	105.20
26	LA	2274	A	C4-C5-C6	5.12	119.56	117.00
26	LA	2280	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	2296	U	P-O5'-C5'	5.12	129.09	120.90
26	LA	2445	G	C6-C5-N7	-5.12	127.33	130.40
26	LA	2756	U	C2'-C3'-O3'	5.12	121.89	113.70
33	LZ	77	TYR	CG-CD2-CE2	-5.12	117.20	121.30
55	LQ	90	VAL	CB-CA-C	-5.12	101.67	111.40
2	SA	92	U	N3-C2-O2	-5.12	118.62	122.20
2	SA	192	A	C8-N9-C1'	5.12	136.92	127.70
2	SA	282	A	N1-C2-N3	5.12	131.86	129.30
26	LA	29	U	C2'-C3'-O3'	5.12	121.89	113.70
26	LA	114	U	OP1-P-OP2	-5.12	111.92	119.60
26	LA	354	A	N7-C8-N9	5.12	116.36	113.80
26	LA	629	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	806	C	C3'-C2'-C1'	5.12	105.60	101.50
26	LA	1221	C	C5-C6-N1	5.12	123.56	121.00
26	LA	1676	A	N1-C6-N6	-5.12	115.53	118.60
26	LA	1687	G	C6-N1-C2	-5.12	122.03	125.10
2	SA	118	U	C3'-C2'-C1'	5.12	105.59	101.50
2	SA	412	A	O4'-C4'-C3'	-5.12	98.88	104.00
2	SA	560	A	O4'-C1'-N9	-5.12	104.11	108.20
2	SA	830	G	OP1-P-OP2	-5.12	111.92	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	993	G	N3-C4-N9	-5.12	122.93	126.00
2	SA	1280	A	C6-N1-C2	-5.12	115.53	118.60
2	SA	1330	U	C6-N1-C2	-5.12	117.93	121.00
13	SM	28	ARG	NE-CZ-NH1	5.12	122.86	120.30
21	SE	32	PHE	CB-CG-CD1	-5.12	117.22	120.80
26	LA	89	A	C5'-C4'-C3'	-5.12	107.81	116.00
26	LA	117	G	C6-C5-N7	-5.12	127.33	130.40
26	LA	288	U	C3'-C2'-C1'	5.12	105.59	101.50
26	LA	828	U	C5-C6-N1	5.12	125.26	122.70
26	LA	1128	G	N1-C6-O6	5.12	122.97	119.90
26	LA	1302	A	P-O5'-C5'	-5.12	112.71	120.90
26	LA	1416	G	C4-C5-C6	-5.12	115.73	118.80
26	LA	1598	A	C1'-O4'-C4'	-5.12	105.81	109.90
26	LA	1757	A	O4'-C4'-C3'	5.12	110.20	106.10
26	LA	1770	G	C5'-C4'-C3'	5.12	124.19	116.00
26	LA	1959	G	C5-C6-O6	-5.12	125.53	128.60
26	LA	2205	A	P-O3'-C3'	-5.12	113.56	119.70
26	LA	2250	G	C4'-C3'-C2'	-5.12	97.48	102.60
26	LA	2635	A	N9-C4-C5	-5.12	103.75	105.80
58	LT	77	PHE	CG-CD1-CE1	5.12	126.43	120.80
2	SA	3	A	C5-N7-C8	5.12	106.46	103.90
2	SA	268	U	C5-C6-N1	-5.12	120.14	122.70
2	SA	365	U	C6-N1-C2	-5.12	117.93	121.00
26	LA	768	G	C5-C6-N1	-5.12	108.94	111.50
26	LA	972	A	O4'-C1'-N9	5.12	112.29	108.20
26	LA	1030	C	OP2-P-O3'	5.12	116.46	105.20
26	LA	1969	A	O4'-C1'-C2'	5.12	112.20	107.60
26	LA	2243	U	OP1-P-OP2	-5.12	111.92	119.60
26	LA	2255	G	C8-N9-C4	-5.12	104.35	106.40
26	LA	2427	C	O5'-C5'-C4'	5.12	121.42	111.70
26	LA	2572	A	C3'-C2'-C1'	-5.12	97.41	101.50
2	SA	157	U	C2-N1-C1'	-5.12	111.56	117.70
2	SA	258	G	C4-N9-C1'	-5.12	119.85	126.50
2	SA	398	U	C2-N3-C4	-5.12	123.93	127.00
2	SA	1515	G	C5-C6-N1	5.12	114.06	111.50
2	SA	1524	C	C5-C6-N1	5.12	123.56	121.00
2	SA	1536	C	N3-C2-O2	-5.12	118.32	121.90
3	S1	38	G	C4'-C3'-C2'	-5.12	97.48	102.60
8	SH	118	ALA	N-CA-CB	-5.12	102.94	110.10
24	S3	78	TYR	CB-CA-C	5.12	120.63	110.40
24	S3	564	PRO	N-CA-C	5.12	125.40	112.10
25	LB	111	U	O5'-P-OP2	-5.12	101.10	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	13	A	C2-N3-C4	5.12	113.16	110.60
26	LA	751	A	C3'-C2'-C1'	5.12	105.59	101.50
26	LA	986	C	N3-C4-C5	5.12	123.95	121.90
26	LA	1178	C	N1-C1'-C2'	-5.12	106.37	112.00
26	LA	1664	A	N9-C1'-C2'	5.12	120.65	114.00
26	LA	1963	U	C3'-C2'-C1'	-5.12	97.41	101.50
26	LA	2008	C	C6-N1-C2	5.12	122.35	120.30
26	LA	2576	G	OP1-P-O3'	5.12	116.45	105.20
26	LA	2768	U	C6-N1-C1'	5.12	128.36	121.20
26	LA	2841	C	O4'-C1'-C2'	5.12	112.20	107.60
1	SS	29	PRO	C-N-CA	-5.11	108.92	121.70
2	SA	136	C	P-O5'-C5'	5.11	129.08	120.90
2	SA	1045	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1377	A	N3-C4-C5	-5.11	123.22	126.80
2	SA	1389	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1396	A	N1-C6-N6	5.11	121.67	118.60
2	SA	1481	U	O4'-C1'-C2'	5.11	112.20	107.60
23	SR	71	ASP	CB-CG-OD1	-5.11	113.70	118.30
24	S3	71	TRP	CE3-CZ3-CH2	5.11	126.83	121.20
26	LA	121	G	P-O3'-C3'	-5.11	113.56	119.70
26	LA	349	U	C5'-C4'-C3'	-5.11	107.82	116.00
26	LA	571	U	C6-N1-C1'	5.11	128.36	121.20
26	LA	575	A	C6-C5-N7	-5.11	128.72	132.30
26	LA	784	G	N3-C4-N9	5.11	129.07	126.00
26	LA	900	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1161	C	C4-C5-C6	-5.11	114.84	117.40
26	LA	1267	U	C5-C4-O4	-5.11	122.83	125.90
26	LA	1387	A	C1'-O4'-C4'	-5.11	105.81	109.90
26	LA	1444	G	C4-N9-C1'	-5.11	119.85	126.50
26	LA	1591	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1885	A	C4-C5-C6	5.11	119.56	117.00
26	LA	2165	C	O4'-C1'-C2'	-5.11	100.69	105.80
26	LA	2494	G	C5'-C4'-O4'	5.11	115.24	109.10
26	LA	2631	G	C5-C6-O6	-5.11	125.53	128.60
26	LA	2661	G	P-O5'-C5'	5.11	129.08	120.90
26	LA	2779	U	C5-C4-O4	5.11	128.97	125.90
2	SA	1358	U	C5-C6-N1	-5.11	120.14	122.70
25	LB	12	C	N3-C2-O2	-5.11	118.32	121.90
25	LB	26	C	C5-C6-N1	5.11	123.56	121.00
26	LA	578	G	O4'-C1'-N9	5.11	112.29	108.20
26	LA	587	C	C2-N3-C4	-5.11	117.34	119.90
26	LA	742	A	N9-C4-C5	5.11	107.84	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1328	A	C5-C6-N1	-5.11	115.14	117.70
26	LA	1637	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1898	U	C6-N1-C2	-5.11	117.93	121.00
26	LA	2129	C	N1-C2-O2	5.11	121.97	118.90
2	SA	241	G	C8-N9-C4	-5.11	104.36	106.40
2	SA	314	C	C2-N1-C1'	5.11	124.42	118.80
2	SA	484	G	P-O5'-C5'	5.11	129.08	120.90
2	SA	1056	U	C5'-C4'-O4'	5.11	115.23	109.10
2	SA	1083	U	C2-N1-C1'	-5.11	111.57	117.70
2	SA	1107	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1339	A	C5'-C4'-O4'	-5.11	102.97	109.10
4	S2	15	G	C8-N9-C4	-5.11	104.36	106.40
4	S2	37	U	C2-N3-C4	-5.11	123.93	127.00
26	LA	252	G	OP1-P-OP2	-5.11	111.93	119.60
26	LA	295	G	C1'-O4'-C4'	-5.11	105.81	109.90
26	LA	400	G	C4-C5-N7	5.11	112.84	110.80
26	LA	704	G	P-O5'-C5'	5.11	129.08	120.90
26	LA	1066	U	N3-C4-C5	5.11	117.67	114.60
26	LA	1668	A	OP1-P-OP2	-5.11	111.93	119.60
26	LA	1980	G	P-O5'-C5'	-5.11	112.72	120.90
26	LA	2213	U	C5'-C4'-O4'	5.11	115.23	109.10
26	LA	2400	G	P-O3'-C3'	5.11	125.83	119.70
47	LJ	53	VAL	CB-CA-C	-5.11	101.69	111.40
2	SA	1152	A	O5'-P-OP1	5.11	116.83	110.70
2	SA	1188	A	C4-C5-N7	-5.11	108.15	110.70
20	SD	110	ARG	CG-CD-NE	-5.11	101.07	111.80
26	LA	54	G	O4'-C1'-N9	5.11	112.29	108.20
26	LA	428	A	C6-N1-C2	5.11	121.67	118.60
26	LA	776	G	P-O5'-C5'	5.11	129.07	120.90
26	LA	938	G	C4-C5-N7	-5.11	108.76	110.80
26	LA	971	G	C8-N9-C1'	5.11	133.64	127.00
26	LA	1156	A	C5'-C4'-O4'	5.11	115.23	109.10
26	LA	1315	C	N1-C2-O2	5.11	121.97	118.90
26	LA	1440	U	C1'-O4'-C4'	-5.11	105.81	109.90
57	LS	110	GLU	O-C-N	-5.11	114.53	122.70
2	SA	386	C	C5-C6-N1	5.11	123.55	121.00
2	SA	517	G	C8-N9-C4	-5.11	104.36	106.40
2	SA	682	G	OP1-P-OP2	-5.11	111.94	119.60
2	SA	759	A	C5-C6-N1	-5.11	115.15	117.70
2	SA	763	G	C4-C5-C6	-5.11	115.74	118.80
2	SA	1295	U	C4'-C3'-C2'	5.11	107.71	102.60
2	SA	1348	U	C5-C6-N1	-5.11	120.15	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1495	U	N1-C2-N3	5.11	117.97	114.90
2	SA	1538	C	C2-N1-C1'	5.11	124.42	118.80
6	SU	11	PHE	CB-CG-CD1	-5.11	117.22	120.80
21	SE	82	HIS	N-CA-CB	5.11	119.79	110.60
26	LA	50	U	C5-C6-N1	5.11	125.25	122.70
26	LA	317	G	C2-N3-C4	5.11	114.45	111.90
26	LA	321	U	OP2-P-O3'	5.11	116.44	105.20
26	LA	384	A	N1-C6-N6	5.11	121.67	118.60
26	LA	463	G	C5-N7-C8	-5.11	101.75	104.30
26	LA	815	C	C2-N3-C4	-5.11	117.35	119.90
26	LA	926	G	N1-C2-N3	-5.11	120.84	123.90
26	LA	984	A	C4-C5-N7	5.11	113.25	110.70
26	LA	990	A	N1-C6-N6	-5.11	115.54	118.60
26	LA	1316	U	C4'-C3'-C2'	-5.11	97.49	102.60
26	LA	1660	G	OP1-P-OP2	-5.11	111.94	119.60
26	LA	1672	A	C6-N1-C2	5.11	121.67	118.60
26	LA	1864	U	C6-N1-C2	5.11	124.06	121.00
26	LA	1899	A	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	2133	G	C4-C5-N7	5.11	112.84	110.80
26	LA	2245	U	C6-N1-C2	-5.11	117.94	121.00
26	LA	2561	U	C3'-C2'-C1'	5.11	105.59	101.50
26	LA	2664	G	P-O3'-C3'	-5.11	113.57	119.70
37	LC	162	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
2	SA	42	G	O4'-C4'-C3'	-5.11	98.89	104.00
2	SA	139	A	N7-C8-N9	-5.11	111.25	113.80
2	SA	407	U	C1'-O4'-C4'	-5.11	105.81	109.90
2	SA	429	U	N1-C1'-C2'	5.11	120.64	114.00
2	SA	492	C	C1'-O4'-C4'	-5.11	105.81	109.90
2	SA	1003	G	C3'-C2'-C1'	5.11	105.58	101.50
2	SA	1450	U	C6-N1-C2	5.11	124.06	121.00
2	SA	1471	U	N3-C2-O2	-5.11	118.63	122.20
2	SA	1514	G	C4'-C3'-C2'	-5.11	97.49	102.60
3	S1	21	U	O4'-C4'-C3'	-5.11	98.89	104.00
25	LB	35	C	C4'-C3'-C2'	5.11	107.71	102.60
26	LA	42	A	N7-C8-N9	5.11	116.35	113.80
26	LA	195	A	P-O3'-C3'	5.11	125.83	119.70
26	LA	301	G	O4'-C4'-C3'	5.11	110.18	106.10
26	LA	390	U	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	468	G	C3'-C2'-C1'	5.11	105.58	101.50
26	LA	939	G	N1-C6-O6	5.11	122.96	119.90
26	LA	944	C	N1-C2-N3	5.11	122.77	119.20
26	LA	1012	U	O5'-C5'-C4'	5.11	121.40	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1157	G	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	1271	G	O5'-P-OP1	5.11	116.83	110.70
26	LA	1410	G	P-O3'-C3'	-5.11	113.57	119.70
26	LA	1865	U	C6-N1-C2	5.11	124.06	121.00
26	LA	2127	G	N3-C4-N9	5.11	129.06	126.00
26	LA	2192	U	O4'-C1'-N1	5.11	112.28	108.20
26	LA	2413	G	C5-C6-O6	-5.11	125.54	128.60
26	LA	2592	G	OP1-P-OP2	-5.11	111.94	119.60
26	LA	2776	A	C6-N1-C2	-5.11	115.54	118.60
26	LA	2844	G	C6-C5-N7	-5.11	127.34	130.40
38	LE	46	ARG	NE-CZ-NH2	-5.11	117.75	120.30
39	L3	47	TYR	CD1-CE1-CZ	-5.11	115.21	119.80
53	LP	22	ARG	CD-NE-CZ	5.11	130.75	123.60
1	SS	40	PHE	CB-CA-C	5.10	120.61	110.40
2	SA	568	G	N1-C2-N3	-5.10	120.84	123.90
2	SA	755	G	OP1-P-OP2	-5.10	111.94	119.60
2	SA	846	G	O4'-C1'-C2'	5.10	112.19	107.60
2	SA	955	U	C5'-C4'-O4'	5.10	115.22	109.10
9	SI	125	GLN	N-CA-CB	5.10	119.79	110.60
11	SK	55	ARG	NE-CZ-NH2	-5.10	117.75	120.30
14	SN	84	ARG	CG-CD-NE	-5.10	101.08	111.80
26	LA	267	C	N3-C2-O2	-5.10	118.33	121.90
26	LA	730	A	P-O3'-C3'	-5.10	113.58	119.70
26	LA	1366	A	C6-C5-N7	5.10	135.87	132.30
26	LA	1468	U	C2-N3-C4	-5.10	123.94	127.00
26	LA	2086	U	N3-C2-O2	-5.10	118.63	122.20
26	LA	2092	U	C6-N1-C2	-5.10	117.94	121.00
2	SA	190	A	N1-C6-N6	5.10	121.66	118.60
2	SA	275	G	N3-C4-C5	-5.10	126.05	128.60
2	SA	699	C	O4'-C1'-N1	5.10	112.28	108.20
2	SA	903	G	C3'-C2'-C1'	5.10	105.58	101.50
2	SA	1335	U	C2-N3-C4	-5.10	123.94	127.00
13	SM	103	THR	N-CA-CB	5.10	120.00	110.30
14	SN	72	PHE	CG-CD2-CE2	5.10	126.41	120.80
26	LA	111	A	C5-C6-N6	-5.10	119.62	123.70
26	LA	294	A	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	587	C	N1-C1'-C2'	-5.10	106.39	112.00
26	LA	607	U	C6-N1-C2	-5.10	117.94	121.00
26	LA	688	U	O4'-C1'-C2'	5.10	112.19	107.60
26	LA	824	U	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	982	C	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1151	A	P-O5'-C5'	-5.10	112.74	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1161	C	O4'-C1'-C2'	-5.10	100.70	105.80
26	LA	1252	G	C5-C6-N1	5.10	114.05	111.50
26	LA	1562	U	N1-C2-N3	5.10	117.96	114.90
26	LA	1588	G	N1-C2-N3	5.10	126.96	123.90
26	LA	1851	U	N3-C4-O4	5.10	122.97	119.40
26	LA	1855	U	N1-C2-N3	5.10	117.96	114.90
26	LA	1890	A	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1912	A	C6-N1-C2	5.10	121.66	118.60
26	LA	2151	U	C5-C4-O4	-5.10	122.84	125.90
26	LA	2242	G	O3'-P-O5'	-5.10	94.31	104.00
26	LA	2257	U	O4'-C1'-N1	5.10	112.28	108.20
26	LA	2485	G	O4'-C1'-N9	5.10	112.28	108.20
26	LA	2496	C	C2-N3-C4	5.10	122.45	119.90
2	SA	923	A	C2-N3-C4	5.10	113.15	110.60
2	SA	1088	G	O4'-C1'-N9	5.10	112.28	108.20
26	LA	260	G	OP1-P-OP2	-5.10	111.95	119.60
26	LA	423	A	C2-N3-C4	-5.10	108.05	110.60
26	LA	1089	A	C2-N3-C4	5.10	113.15	110.60
26	LA	1413	A	C2-N3-C4	-5.10	108.05	110.60
26	LA	1469	A	C6-N1-C2	5.10	121.66	118.60
26	LA	1788	C	C2-N3-C4	-5.10	117.35	119.90
26	LA	1811	G	N1-C6-O6	5.10	122.96	119.90
26	LA	1993	U	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	2817	U	C1'-O4'-C4'	-5.10	105.82	109.90
29	LV	31	VAL	CG1-CB-CG2	-5.10	102.74	110.90
38	LE	9	VAL	O-C-N	-5.10	114.53	123.20
42	L6	21	PHE	CB-CG-CD2	-5.10	117.23	120.80
46	LH	59	ASP	C-N-CA	5.10	133.01	122.30
52	LO	54	THR	N-CA-CB	5.10	119.99	110.30
2	SA	11	G	C3'-C2'-C1'	5.10	105.58	101.50
2	SA	108	G	O4'-C4'-C3'	5.10	110.18	106.10
2	SA	536	C	OP2-P-O3'	5.10	116.42	105.20
2	SA	987	G	C3'-C2'-C1'	-5.10	97.42	101.50
2	SA	1364	U	O3'-P-O5'	5.10	113.69	104.00
2	SA	1387	G	C5'-C4'-O4'	5.10	115.22	109.10
2	SA	1417	G	C1'-O4'-C4'	-5.10	105.82	109.90
2	SA	1461	G	N1-C2-N3	-5.10	120.84	123.90
4	S2	58	A	N7-C8-N9	5.10	116.35	113.80
11	SK	121	ARG	NE-CZ-NH2	5.10	122.85	120.30
26	LA	134	G	OP1-P-OP2	-5.10	111.95	119.60
26	LA	229	C	N3-C2-O2	-5.10	118.33	121.90
26	LA	581	C	N3-C2-O2	5.10	125.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	629	G	C6-N1-C2	5.10	128.16	125.10
26	LA	1027	A	N1-C6-N6	-5.10	115.54	118.60
26	LA	1233	C	O4'-C1'-N1	5.10	112.28	108.20
26	LA	1785	A	N9-C4-C5	-5.10	103.76	105.80
26	LA	2075	U	N3-C2-O2	-5.10	118.63	122.20
26	LA	2095	A	C5-N7-C8	5.10	106.45	103.90
26	LA	2357	G	N9-C1'-C2'	-5.10	106.39	112.00
26	LA	2397	G	C5-N7-C8	-5.10	101.75	104.30
26	LA	2409	G	C6-C5-N7	-5.10	127.34	130.40
26	LA	2476	A	C8-N9-C4	5.10	107.84	105.80
26	LA	2571	U	C4'-C3'-C2'	-5.10	97.50	102.60
26	LA	2873	A	C6-N1-C2	5.10	121.66	118.60
51	LI	32	PRO	O-C-N	5.10	130.86	122.70
56	LR	28	LYS	CB-CA-C	-5.10	100.20	110.40
2	SA	185	U	N3-C4-O4	-5.10	115.83	119.40
2	SA	363	A	C8-N9-C4	-5.10	103.76	105.80
2	SA	1412	C	P-O5'-C5'	5.10	129.06	120.90
26	LA	26	G	O4'-C1'-C2'	5.10	112.19	107.60
26	LA	117	G	C8-N9-C4	5.10	108.44	106.40
26	LA	134	G	C8-N9-C1'	5.10	133.63	127.00
26	LA	137	U	C5'-C4'-O4'	5.10	115.22	109.10
26	LA	191	A	C4-C5-C6	5.10	119.55	117.00
26	LA	547	A	C4-C5-C6	-5.10	114.45	117.00
26	LA	594	U	C5-C6-N1	-5.10	120.15	122.70
26	LA	622	G	N3-C2-N2	5.10	123.47	119.90
26	LA	678	C	OP1-P-OP2	-5.10	111.95	119.60
26	LA	971	G	C5'-C4'-C3'	5.10	124.16	116.00
26	LA	1090	A	C5-N7-C8	-5.10	101.35	103.90
26	LA	1258	U	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1809	A	P-O5'-C5'	-5.10	112.75	120.90
26	LA	1815	A	OP2-P-O3'	5.10	116.42	105.20
26	LA	2372	U	OP2-P-O3'	5.10	116.42	105.20
26	LA	2501	C	C6-N1-C1'	5.10	126.92	120.80
26	LA	2861	U	OP1-P-OP2	-5.10	111.95	119.60
34	L0	55	THR	N-CA-C	5.10	124.77	111.00
2	SA	671	G	C2'-C3'-O3'	5.10	121.85	113.70
2	SA	920	U	C4'-C3'-C2'	5.10	107.70	102.60
2	SA	1225	A	C5-N7-C8	5.10	106.45	103.90
26	LA	467	G	C6-C5-N7	-5.10	127.34	130.40
26	LA	882	G	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	1583	A	N1-C6-N6	5.10	121.66	118.60
26	LA	1651	G	C2-N3-C4	-5.10	109.35	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1869	G	N1-C2-N3	-5.10	120.84	123.90
26	LA	2606	C	OP1-P-OP2	-5.10	111.96	119.60
35	L1	46	MET	O-C-N	-5.10	114.55	122.70
38	LE	55	LYS	N-CA-CB	5.10	119.77	110.60
55	LQ	11	ALA	O-C-N	-5.10	114.55	122.70
2	SA	433	G	C5-N7-C8	-5.09	101.75	104.30
2	SA	556	C	N3-C2-O2	-5.09	118.33	121.90
2	SA	587	G	C2-N3-C4	-5.09	109.35	111.90
2	SA	665	A	N7-C8-N9	-5.09	111.25	113.80
2	SA	1183	U	C4-C5-C6	-5.09	116.64	119.70
2	SA	1298	U	P-O3'-C3'	-5.09	113.59	119.70
2	SA	1316	G	C4-N9-C1'	-5.09	119.88	126.50
8	SH	106	SER	N-CA-CB	5.09	118.14	110.50
26	LA	177	G	C5'-C4'-C3'	-5.09	107.85	116.00
26	LA	631	A	OP2-P-O3'	5.09	116.41	105.20
26	LA	794	A	C5-C6-N1	5.09	120.25	117.70
26	LA	817	C	N3-C4-C5	-5.09	119.86	121.90
26	LA	1142	A	O4'-C1'-N9	5.09	112.28	108.20
26	LA	1182	G	N3-C4-N9	-5.09	122.94	126.00
26	LA	1214	A	O4'-C4'-C3'	-5.09	98.91	104.00
26	LA	1304	A	P-O3'-C3'	5.09	125.81	119.70
26	LA	1358	G	C2'-C3'-O3'	5.09	121.85	113.70
26	LA	1470	A	P-O3'-C3'	-5.09	113.59	119.70
26	LA	1679	A	C4'-C3'-C2'	-5.09	97.50	102.60
26	LA	1679	A	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	1692	U	N3-C4-C5	-5.09	111.54	114.60
26	LA	1704	C	C5'-C4'-C3'	-5.09	107.85	116.00
26	LA	1851	U	N3-C4-C5	-5.09	111.54	114.60
26	LA	2191	A	N1-C2-N3	5.09	131.85	129.30
26	LA	2684	U	N1-C1'-C2'	-5.09	106.40	112.00
26	LA	2706	A	C5-C6-N1	-5.09	115.15	117.70
29	LV	77	ARG	N-CA-CB	5.09	119.77	110.60
2	SA	60	A	C5-C6-N1	-5.09	115.15	117.70
2	SA	127	G	O4'-C1'-N9	5.09	112.27	108.20
2	SA	514	C	O4'-C1'-N1	5.09	112.28	108.20
2	SA	1042	A	N7-C8-N9	5.09	116.35	113.80
2	SA	1436	U	N1-C2-O2	5.09	126.36	122.80
22	SF	4	TYR	N-CA-CB	-5.09	101.43	110.60
26	LA	1603	A	C4-C5-C6	-5.09	114.45	117.00
26	LA	1756	G	C2-N3-C4	5.09	114.45	111.90
26	LA	1985	C	C2-N1-C1'	5.09	124.40	118.80
26	LA	2748	A	O4'-C4'-C3'	5.09	110.17	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	144	G	C5-C6-N1	5.09	114.05	111.50
2	SA	378	G	C5-C6-O6	5.09	131.66	128.60
2	SA	383	A	C5'-C4'-O4'	5.09	115.21	109.10
2	SA	755	G	N7-C8-N9	-5.09	110.55	113.10
2	SA	1403	C	P-O5'-C5'	5.09	129.05	120.90
4	S2	44	A	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	114	U	C2-N1-C1'	-5.09	111.59	117.70
26	LA	116	C	C2-N3-C4	-5.09	117.35	119.90
26	LA	526	A	O5'-P-OP1	5.09	116.81	110.70
26	LA	907	G	C4-C5-N7	-5.09	108.76	110.80
26	LA	1006	C	N3-C2-O2	-5.09	118.34	121.90
26	LA	1102	C	N1-C2-O2	5.09	121.95	118.90
26	LA	1783	A	OP2-P-O3'	5.09	116.40	105.20
26	LA	2040	G	N1-C2-N2	5.09	120.78	116.20
26	LA	2377	A	P-O3'-C3'	-5.09	113.59	119.70
26	LA	2398	U	C1'-O4'-C4'	-5.09	105.83	109.90
26	LA	2534	A	C3'-C2'-C1'	-5.09	97.43	101.50
26	LA	2575	C	C4'-C3'-C2'	-5.09	97.51	102.60
26	LA	2894	G	C5-N7-C8	-5.09	101.75	104.30
47	LJ	24	ALA	CB-CA-C	-5.09	102.46	110.10
2	SA	140	U	O4'-C1'-C2'	-5.09	100.71	105.80
2	SA	256	U	C5-C6-N1	5.09	125.25	122.70
2	SA	404	G	O5'-P-OP1	5.09	116.81	110.70
2	SA	498	A	C6-N1-C2	-5.09	115.55	118.60
2	SA	778	G	C1'-O4'-C4'	-5.09	105.83	109.90
2	SA	868	C	N3-C4-C5	5.09	123.94	121.90
2	SA	920	U	P-O5'-C5'	5.09	129.04	120.90
2	SA	946	A	P-O5'-C5'	5.09	129.04	120.90
2	SA	1011	C	P-O3'-C3'	-5.09	113.59	119.70
2	SA	1024	G	N7-C8-N9	-5.09	110.56	113.10
2	SA	1229	A	C4'-C3'-C2'	-5.09	97.51	102.60
2	SA	1280	A	C4-C5-N7	5.09	113.25	110.70
2	SA	1328	C	N3-C2-O2	-5.09	118.34	121.90
26	LA	440	C	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	460	A	OP1-P-OP2	-5.09	111.97	119.60
26	LA	559	G	C5-N7-C8	5.09	106.84	104.30
26	LA	1630	A	C6-N1-C2	-5.09	115.55	118.60
26	LA	1848	A	N1-C2-N3	-5.09	126.75	129.30
26	LA	1908	C	C2-N3-C4	-5.09	117.36	119.90
26	LA	2304	G	C5-C6-O6	5.09	131.65	128.60
26	LA	2435	A	C4-C5-N7	5.09	113.25	110.70
26	LA	2778	A	C6-C5-N7	-5.09	128.74	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	LR	57	ALA	N-CA-CB	5.09	117.23	110.10
2	SA	489	C	C5'-C4'-O4'	5.09	115.21	109.10
2	SA	1085	U	C5-C6-N1	-5.09	120.16	122.70
2	SA	1394	A	P-O3'-C3'	5.09	125.81	119.70
25	LB	33	G	C5-N7-C8	-5.09	101.76	104.30
26	LA	616	A	C4-C5-N7	-5.09	108.16	110.70
26	LA	1825	U	C5-C4-O4	-5.09	122.85	125.90
26	LA	1980	G	C1'-O4'-C4'	-5.09	105.83	109.90
26	LA	2680	U	O4'-C4'-C3'	5.09	110.17	106.10
26	LA	2823	A	N3-C4-N9	5.09	131.47	127.40
2	SA	284	C	P-O3'-C3'	5.09	125.80	119.70
2	SA	301	G	C3'-C2'-C1'	-5.09	97.43	101.50
2	SA	422	C	C3'-C2'-C1'	-5.09	97.43	101.50
2	SA	492	C	O4'-C1'-N1	5.09	112.27	108.20
2	SA	913	A	C3'-C2'-C1'	5.09	105.57	101.50
2	SA	1177	G	N3-C4-N9	-5.09	122.95	126.00
2	SA	1355	G	P-O5'-C5'	5.09	129.04	120.90
26	LA	405	U	C6-N1-C1'	-5.09	114.08	121.20
26	LA	666	A	N7-C8-N9	-5.09	111.26	113.80
26	LA	780	G	C6-C5-N7	-5.09	127.35	130.40
26	LA	786	C	O4'-C1'-N1	5.09	112.27	108.20
26	LA	1185	G	N3-C4-C5	5.09	131.14	128.60
26	LA	1305	C	C2-N1-C1'	-5.09	113.20	118.80
26	LA	1685	C	C4-C5-C6	5.09	119.94	117.40
26	LA	1811	G	N7-C8-N9	-5.09	110.56	113.10
26	LA	1903	G	N1-C6-O6	5.09	122.95	119.90
26	LA	2148	G	C3'-C2'-C1'	5.09	105.57	101.50
26	LA	2718	G	O5'-P-OP2	-5.09	101.12	105.70
26	LA	2759	G	P-O5'-C5'	-5.09	112.76	120.90
26	LA	2859	G	P-O3'-C3'	-5.09	113.60	119.70
58	LT	68	ARG	NE-CZ-NH1	5.09	122.84	120.30
2	SA	78	A	C4-C5-N7	-5.08	108.16	110.70
2	SA	755	G	C2'-C3'-O3'	5.08	121.84	113.70
26	LA	902	C	C5-C6-N1	-5.08	118.46	121.00
26	LA	1151	A	N1-C2-N3	-5.08	126.76	129.30
26	LA	2280	G	N1-C6-O6	5.08	122.95	119.90
26	LA	2804	U	C1'-O4'-C4'	-5.08	105.83	109.90
35	L1	38	GLU	OE1-CD-OE2	-5.08	117.20	123.30
41	L5	29	GLN	O-C-N	-5.08	114.56	122.70
47	LJ	163	ALA	CB-CA-C	-5.08	102.47	110.10
53	LP	8	ARG	N-CA-CB	-5.08	101.45	110.60
2	SA	290	C	C4'-C3'-C2'	-5.08	97.52	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	326	G	O3'-P-O5'	-5.08	94.34	104.00
2	SA	377	G	N9-C1'-C2'	-5.08	106.41	112.00
2	SA	687	A	C4-C5-N7	-5.08	108.16	110.70
2	SA	836	G	N3-C4-N9	-5.08	122.95	126.00
2	SA	931	C	O4'-C1'-N1	5.08	112.27	108.20
2	SA	995	C	C1'-O4'-C4'	-5.08	105.83	109.90
2	SA	1009	U	C5-C4-O4	-5.08	122.85	125.90
2	SA	1019	A	N3-C4-N9	5.08	131.47	127.40
2	SA	1082	A	C4-C5-N7	5.08	113.24	110.70
2	SA	1228	C	C1'-O4'-C4'	-5.08	105.83	109.90
25	LB	1	U	N3-C2-O2	-5.08	118.64	122.20
26	LA	77	G	C6-N1-C2	-5.08	122.05	125.10
26	LA	374	A	C5-N7-C8	-5.08	101.36	103.90
26	LA	818	G	N9-C4-C5	-5.08	103.37	105.40
26	LA	1071	G	N1-C2-N2	-5.08	111.62	116.20
26	LA	1208	C	C1'-O4'-C4'	-5.08	105.83	109.90
26	LA	1439	A	C4-C5-C6	5.08	119.54	117.00
26	LA	1699	G	C2-N3-C4	-5.08	109.36	111.90
26	LA	2067	G	N3-C2-N2	5.08	123.46	119.90
26	LA	2353	G	P-O3'-C3'	5.08	125.80	119.70
26	LA	2726	A	N7-C8-N9	-5.08	111.26	113.80
26	LA	2860	A	C5-C6-N6	5.08	127.77	123.70
27	LD	215	VAL	CG1-CB-CG2	-5.08	102.77	110.90
46	LH	48	THR	CA-CB-CG2	-5.08	105.28	112.40
50	LL	91	GLU	N-CA-CB	5.08	119.75	110.60
2	SA	61	G	N1-C6-O6	5.08	122.95	119.90
2	SA	234	C	C2-N3-C4	-5.08	117.36	119.90
2	SA	399	G	N3-C4-C5	-5.08	126.06	128.60
2	SA	576	C	N3-C4-C5	-5.08	119.87	121.90
2	SA	908	A	C1'-O4'-C4'	-5.08	105.83	109.90
2	SA	1285	A	C6-N1-C2	5.08	121.65	118.60
2	SA	1334	G	N9-C4-C5	5.08	107.43	105.40
4	S2	10	G	C6-N1-C2	5.08	128.15	125.10
26	LA	965	C	N3-C4-N4	5.08	121.56	118.00
26	LA	1206	G	C3'-C2'-C1'	-5.08	97.43	101.50
26	LA	1389	G	C5-C6-N1	5.08	114.04	111.50
26	LA	1776	G	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1780	A	C1'-O4'-C4'	-5.08	105.83	109.90
26	LA	1841	U	C5-C6-N1	-5.08	120.16	122.70
26	LA	2098	U	C6-N1-C2	-5.08	117.95	121.00
26	LA	2098	U	N1-C2-O2	-5.08	119.24	122.80
26	LA	2139	U	N1-C2-N3	5.08	117.95	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2215	C	N3-C4-N4	-5.08	114.44	118.00
26	LA	2315	G	C5-C6-N1	5.08	114.04	111.50
26	LA	2329	U	C5'-C4'-C3'	-5.08	107.87	116.00
26	LA	2496	C	P-O3'-C3'	5.08	125.80	119.70
26	LA	2628	C	N1-C2-N3	-5.08	115.64	119.20
26	LA	2629	U	C5'-C4'-O4'	5.08	115.20	109.10
26	LA	2717	C	C3'-C2'-C1'	5.08	105.57	101.50
26	LA	2771	C	C5'-C4'-C3'	-5.08	107.87	116.00
2	SA	164	G	C5-C6-N1	5.08	114.04	111.50
2	SA	488	C	C5-C6-N1	-5.08	118.46	121.00
2	SA	690	G	N3-C4-C5	-5.08	126.06	128.60
25	LB	53	A	C6-N1-C2	5.08	121.65	118.60
26	LA	649	G	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1602	U	C5'-C4'-C3'	-5.08	107.87	116.00
26	LA	1621	U	C2-N1-C1'	5.08	123.80	117.70
26	LA	1824	G	C8-N9-C4	-5.08	104.37	106.40
26	LA	2307	G	C3'-C2'-C1'	5.08	105.56	101.50
26	LA	2705	A	N1-C6-N6	5.08	121.65	118.60
2	SA	30	U	C5-C4-O4	5.08	128.95	125.90
2	SA	51	A	OP1-P-OP2	-5.08	111.98	119.60
2	SA	302	G	C6-C5-N7	5.08	133.45	130.40
2	SA	320	A	N1-C2-N3	-5.08	126.76	129.30
2	SA	332	G	OP1-P-OP2	-5.08	111.98	119.60
2	SA	625	U	O4'-C1'-N1	5.08	112.26	108.20
2	SA	643	C	N1-C2-N3	5.08	122.75	119.20
2	SA	731	G	C5'-C4'-C3'	5.08	124.12	116.00
2	SA	847	G	OP1-P-OP2	-5.08	111.98	119.60
2	SA	888	G	O4'-C1'-N9	5.08	112.26	108.20
2	SA	1093	A	N9-C4-C5	5.08	107.83	105.80
2	SA	1530	G	C2-N3-C4	5.08	114.44	111.90
12	SL	106	VAL	CA-CB-CG2	-5.08	103.28	110.90
25	LB	42	C	N3-C2-O2	-5.08	118.34	121.90
26	LA	165	A	C4-C5-N7	5.08	113.24	110.70
26	LA	277	G	C4-C5-N7	5.08	112.83	110.80
26	LA	395	U	N1-C2-O2	5.08	126.36	122.80
26	LA	400	G	C2'-C3'-O3'	5.08	121.83	113.70
26	LA	433	C	N3-C4-N4	5.08	121.56	118.00
26	LA	447	A	C8-N9-C4	5.08	107.83	105.80
26	LA	792	A	C5-C6-N6	-5.08	119.64	123.70
26	LA	1237	A	OP1-P-O3'	5.08	116.37	105.20
26	LA	1306	C	C5-C4-N4	5.08	123.75	120.20
26	LA	1482	G	C5-N7-C8	5.08	106.84	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1684	G	O4'-C1'-N9	5.08	112.26	108.20
26	LA	1886	U	C5-C6-N1	-5.08	120.16	122.70
26	LA	2174	C	P-O5'-C5'	-5.08	112.78	120.90
26	LA	2250	G	C4-C5-C6	-5.08	115.75	118.80
26	LA	2272	U	N1-C2-O2	-5.08	119.25	122.80
26	LA	2387	U	N3-C2-O2	-5.08	118.64	122.20
26	LA	2477	U	C5'-C4'-O4'	5.08	115.19	109.10
26	LA	2853	C	C2-N3-C4	-5.08	117.36	119.90
2	SA	447	G	N9-C4-C5	-5.08	103.37	105.40
2	SA	596	A	N1-C2-N3	5.08	131.84	129.30
2	SA	1409	C	P-O3'-C3'	-5.08	113.61	119.70
2	SA	1529	G	C5-N7-C8	5.08	106.84	104.30
26	LA	61	C	C5-C4-N4	-5.08	116.65	120.20
26	LA	1156	A	N1-C6-N6	5.08	121.65	118.60
2	SA	384	G	C2-N3-C4	5.08	114.44	111.90
2	SA	453	G	C8-N9-C4	5.08	108.43	106.40
2	SA	594	U	O4'-C1'-N1	5.08	112.26	108.20
2	SA	642	A	C2-N3-C4	5.08	113.14	110.60
2	SA	774	G	O4'-C1'-N9	5.08	112.26	108.20
2	SA	1054	C	C2'-C3'-O3'	5.08	121.82	113.70
11	SK	108	ASN	CA-CB-CG	-5.08	102.23	113.40
13	SM	71	GLU	OE1-CD-OE2	-5.08	117.21	123.30
19	SC	128	MET	N-CA-C	5.08	124.70	111.00
26	LA	35	G	P-O3'-C3'	-5.08	113.61	119.70
26	LA	87	U	OP1-P-OP2	-5.08	111.99	119.60
26	LA	636	G	C5-C6-O6	5.08	131.65	128.60
26	LA	977	G	C8-N9-C4	5.08	108.43	106.40
26	LA	1534	U	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1613	G	C5-N7-C8	-5.08	101.76	104.30
26	LA	1658	C	C5'-C4'-O4'	5.08	115.19	109.10
26	LA	1854	A	C6-N1-C2	-5.08	115.55	118.60
26	LA	1862	G	C4-N9-C1'	-5.08	119.90	126.50
26	LA	2268	A	P-O5'-C5'	-5.08	112.78	120.90
26	LA	2391	G	N1-C2-N2	5.08	120.77	116.20
26	LA	2445	G	OP1-P-OP2	-5.08	111.99	119.60
2	SA	292	G	N1-C6-O6	5.07	122.94	119.90
2	SA	440	C	C3'-C2'-C1'	5.07	105.56	101.50
2	SA	497	G	C4-C5-C6	-5.07	115.76	118.80
2	SA	724	G	C8-N9-C4	5.07	108.43	106.40
2	SA	1339	A	C5'-C4'-C3'	5.07	124.12	116.00
8	SH	15	ASN	O-C-N	-5.07	114.58	123.20
21	SE	47	PHE	CB-CG-CD1	-5.07	117.25	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	432	LEU	CB-CG-CD2	-5.07	102.37	111.00
25	LB	100	G	C5-C6-O6	5.07	131.64	128.60
26	LA	110	G	N1-C6-O6	-5.07	116.86	119.90
26	LA	138	U	O3'-P-O5'	-5.07	94.36	104.00
26	LA	252	G	P-O3'-C3'	-5.07	113.61	119.70
26	LA	294	A	O4'-C1'-N9	5.07	112.26	108.20
26	LA	496	G	O4'-C1'-N9	5.07	112.26	108.20
26	LA	631	A	O4'-C1'-N9	5.07	112.26	108.20
26	LA	707	G	N1-C2-N3	5.07	126.94	123.90
26	LA	1283	G	C4-C5-N7	-5.07	108.77	110.80
26	LA	1294	U	N3-C2-O2	-5.07	118.65	122.20
26	LA	1493	C	C3'-C2'-C1'	-5.07	97.44	101.50
26	LA	1624	U	C6-N1-C2	-5.07	117.95	121.00
26	LA	2366	A	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	2614	A	C5-C6-N1	-5.07	115.16	117.70
26	LA	2751	G	C2-N3-C4	5.07	114.44	111.90
27	LD	146	LYS	CA-C-N	5.07	131.31	117.10
2	SA	319	G	C6-C5-N7	5.07	133.44	130.40
2	SA	380	G	N3-C2-N2	5.07	123.45	119.90
2	SA	795	C	N1-C1'-C2'	-5.07	106.42	112.00
2	SA	858	G	C4-C5-C6	-5.07	115.76	118.80
24	S3	76	LYS	C-N-CA	5.07	134.38	121.70
26	LA	308	G	C5-C6-N1	5.07	114.04	111.50
26	LA	376	G	OP1-P-OP2	-5.07	111.99	119.60
26	LA	421	C	C6-N1-C2	5.07	122.33	120.30
26	LA	761	A	C2-N3-C4	5.07	113.14	110.60
26	LA	953	G	O4'-C4'-C3'	-5.07	98.93	104.00
26	LA	1733	G	O3'-P-O5'	5.07	113.64	104.00
26	LA	2253	G	C4-N9-C1'	-5.07	119.91	126.50
26	LA	2764	A	O3'-P-O5'	-5.07	94.36	104.00
1	SS	20	LYS	CB-CA-C	-5.07	100.26	110.40
2	SA	633	G	C5'-C4'-O4'	5.07	115.19	109.10
2	SA	1142	G	C4-C5-C6	5.07	121.84	118.80
2	SA	1350	A	C6-N1-C2	-5.07	115.56	118.60
7	SG	40	SER	N-CA-CB	5.07	118.11	110.50
18	SB	219	THR	CA-CB-CG2	-5.07	105.30	112.40
24	S3	94	PHE	O-C-N	-5.07	114.59	122.70
26	LA	130	C	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	335	C	C6-N1-C2	-5.07	118.27	120.30
26	LA	607	U	C4-C5-C6	-5.07	116.66	119.70
26	LA	674	G	C5-N7-C8	-5.07	101.77	104.30
26	LA	855	G	P-O5'-C5'	-5.07	112.79	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1232	G	C8-N9-C1'	5.07	133.59	127.00
26	LA	1378	A	OP1-P-OP2	-5.07	112.00	119.60
26	LA	1380	G	O5'-P-OP2	5.07	116.78	110.70
26	LA	1462	C	N1-C2-N3	5.07	122.75	119.20
26	LA	1497	U	N3-C2-O2	-5.07	118.65	122.20
26	LA	1692	U	N1-C2-O2	-5.07	119.25	122.80
26	LA	1708	C	C5'-C4'-C3'	5.07	124.11	116.00
26	LA	1818	U	C4'-C3'-C2'	5.07	107.67	102.60
26	LA	2478	A	N7-C8-N9	5.07	116.33	113.80
50	LL	105	VAL	CA-CB-CG1	5.07	118.51	110.90
2	SA	319	G	N1-C6-O6	5.07	122.94	119.90
2	SA	541	G	P-O3'-C3'	-5.07	113.62	119.70
26	LA	226	A	N9-C4-C5	5.07	107.83	105.80
26	LA	277	G	C4-N9-C1'	5.07	133.09	126.50
26	LA	562	U	N1-C2-O2	-5.07	119.25	122.80
26	LA	600	G	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	682	G	N1-C2-N2	-5.07	111.64	116.20
26	LA	1656	C	C1'-O4'-C4'	-5.07	105.84	109.90
2	SA	199	A	OP1-P-O3'	5.07	116.35	105.20
2	SA	217	C	C2-N3-C4	5.07	122.43	119.90
2	SA	533	A	C6-N1-C2	-5.07	115.56	118.60
2	SA	829	G	C3'-C2'-C1'	-5.07	97.45	101.50
2	SA	1145	A	N1-C6-N6	5.07	121.64	118.60
2	SA	1216	A	OP1-P-OP2	-5.07	112.00	119.60
2	SA	1427	C	C2-N1-C1'	-5.07	113.23	118.80
25	LB	60	C	C5'-C4'-O4'	5.07	115.18	109.10
26	LA	28	A	P-O5'-C5'	-5.07	112.79	120.90
26	LA	130	C	C5'-C4'-C3'	-5.07	107.89	116.00
26	LA	577	G	C5-C6-N1	5.07	114.03	111.50
26	LA	640	C	C1'-O4'-C4'	5.07	113.95	109.90
26	LA	1012	U	C6-N1-C2	-5.07	117.96	121.00
26	LA	1701	A	P-O3'-C3'	-5.07	113.62	119.70
26	LA	1784	A	C2-N3-C4	-5.07	108.07	110.60
26	LA	2016	U	O4'-C4'-C3'	5.07	110.15	106.10
26	LA	2317	A	C6-C5-N7	-5.07	128.75	132.30
26	LA	2411	A	N1-C6-N6	5.07	121.64	118.60
26	LA	2669	G	C4-C5-N7	5.07	112.83	110.80
52	LO	91	TYR	CB-CA-C	5.07	120.53	110.40
2	SA	52	C	C2-N3-C4	-5.07	117.37	119.90
2	SA	135	C	C4'-C3'-C2'	-5.07	97.53	102.60
2	SA	410	G	O4'-C1'-N9	5.07	112.25	108.20
2	SA	820	U	N1-C2-O2	-5.07	119.25	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	S2	41	C	C6-N1-C2	-5.07	118.27	120.30
18	SB	22	TRP	CE2-CD2-CE3	5.07	124.78	118.70
18	SB	178	LEU	O-C-N	-5.07	114.59	123.20
26	LA	17	G	C5'-C4'-C3'	-5.07	107.90	116.00
26	LA	456	C	OP1-P-O3'	5.07	116.34	105.20
26	LA	698	C	OP1-P-OP2	-5.07	112.00	119.60
26	LA	794	A	N7-C8-N9	5.07	116.33	113.80
26	LA	1034	G	C5-C6-O6	-5.07	125.56	128.60
26	LA	1178	C	P-O5'-C5'	5.07	129.00	120.90
26	LA	1532	A	C8-N9-C4	-5.07	103.77	105.80
26	LA	1846	G	C5'-C4'-O4'	5.07	115.18	109.10
26	LA	1967	C	O4'-C4'-C3'	-5.07	98.94	104.00
26	LA	2051	A	N1-C2-N3	-5.07	126.77	129.30
58	LT	95	ASP	CB-CG-OD2	-5.07	113.74	118.30
2	SA	105	G	C5'-C4'-C3'	5.06	124.10	116.00
2	SA	352	C	O5'-C5'-C4'	5.06	121.32	111.70
2	SA	627	G	N1-C2-N3	-5.06	120.86	123.90
2	SA	1115	U	P-O5'-C5'	5.06	129.00	120.90
2	SA	1383	C	C5'-C4'-O4'	5.06	115.18	109.10
18	SB	46	VAL	O-C-N	-5.06	111.48	121.10
25	LB	49	C	C4-C5-C6	5.06	119.93	117.40
26	LA	53	A	C2-N3-C4	5.06	113.13	110.60
26	LA	1194	A	P-O3'-C3'	-5.06	113.62	119.70
26	LA	1724	G	N1-C6-O6	-5.06	116.86	119.90
26	LA	1805	A	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	2439	A	C8-N9-C1'	-5.06	118.58	127.70
26	LA	2623	G	C8-N9-C4	5.06	108.42	106.40
31	LX	74	ALA	CB-CA-C	-5.06	102.50	110.10
38	LE	199	SER	CB-CA-C	-5.06	100.48	110.10
2	SA	60	A	C3'-C2'-C1'	-5.06	97.45	101.50
2	SA	122	G	N7-C8-N9	-5.06	110.57	113.10
2	SA	486	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	563	A	C6-C5-N7	-5.06	128.76	132.30
2	SA	622	A	C5'-C4'-O4'	5.06	115.18	109.10
2	SA	946	A	P-O3'-C3'	-5.06	113.63	119.70
2	SA	1028	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	SA	1143	G	C4-C5-C6	-5.06	115.76	118.80
2	SA	1224	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	1327	C	C5-C6-N1	-5.06	118.47	121.00
2	SA	1358	U	C4-C5-C6	5.06	122.74	119.70
3	S1	40	G	C8-N9-C1'	-5.06	120.42	127.00
18	SB	187	ASP	N-CA-CB	-5.06	101.49	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	S3	533	TYR	N-CA-C	-5.06	97.33	111.00
26	LA	27	G	C4-N9-C1'	5.06	133.08	126.50
26	LA	78	U	O5'-P-OP2	-5.06	101.14	105.70
26	LA	222	A	N7-C8-N9	-5.06	111.27	113.80
26	LA	573	U	O4'-C1'-C2'	-5.06	100.74	105.80
26	LA	876	C	O3'-P-O5'	-5.06	94.38	104.00
26	LA	918	A	N9-C4-C5	5.06	107.83	105.80
26	LA	1110	G	C4-C5-C6	5.06	121.84	118.80
26	LA	1372	U	N1-C2-O2	-5.06	119.26	122.80
26	LA	1612	C	N1-C2-N3	5.06	122.74	119.20
26	LA	1646	C	OP1-P-O3'	5.06	116.34	105.20
26	LA	1869	G	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	1884	G	C2-N3-C4	-5.06	109.37	111.90
26	LA	1954	G	OP1-P-OP2	-5.06	112.01	119.60
26	LA	2345	G	C5-N7-C8	5.06	106.83	104.30
26	LA	2606	C	P-O5'-C5'	5.06	129.00	120.90
26	LA	2830	C	C6-N1-C2	-5.06	118.28	120.30
26	LA	2865	U	N1-C2-O2	-5.06	119.26	122.80
40	L4	7	LYS	CB-CA-C	-5.06	100.27	110.40
51	LI	116	ARG	CG-CD-NE	-5.06	101.17	111.80
2	SA	842	U	C4-C5-C6	5.06	122.74	119.70
2	SA	1183	U	N3-C4-O4	-5.06	115.86	119.40
2	SA	1453	G	N1-C2-N2	-5.06	111.64	116.20
3	S1	32	U	O5'-C5'-C4'	5.06	121.32	111.70
26	LA	118	A	N1-C2-N3	-5.06	126.77	129.30
26	LA	905	A	P-O3'-C3'	5.06	125.77	119.70
26	LA	2012	G	N1-C2-N3	-5.06	120.86	123.90
26	LA	2031	A	C5-C6-N6	-5.06	119.65	123.70
26	LA	2050	C	N3-C4-C5	5.06	123.92	121.90
26	LA	2175	C	O4'-C4'-C3'	-5.06	98.94	104.00
41	L5	32	ALA	CB-CA-C	-5.06	102.51	110.10
2	SA	66	A	C4'-C3'-C2'	5.06	107.66	102.60
2	SA	96	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	196	A	N1-C6-N6	-5.06	115.56	118.60
2	SA	375	U	C2-N3-C4	-5.06	123.96	127.00
2	SA	401	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	SA	701	U	C2-N3-C4	-5.06	123.96	127.00
2	SA	827	U	N3-C4-C5	5.06	117.64	114.60
2	SA	1071	C	N3-C4-N4	5.06	121.54	118.00
2	SA	1094	G	N1-C6-O6	-5.06	116.86	119.90
2	SA	1412	C	C5'-C4'-O4'	5.06	115.17	109.10
2	SA	1523	G	C6-N1-C2	5.06	128.14	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	26	G	C2-N3-C4	-5.06	109.37	111.90
26	LA	177	G	C5'-C4'-O4'	5.06	115.17	109.10
26	LA	218	A	N1-C6-N6	-5.06	115.56	118.60
26	LA	233	A	N3-C4-C5	-5.06	123.26	126.80
26	LA	368	A	C6-N1-C2	5.06	121.64	118.60
26	LA	576	U	C2-N3-C4	-5.06	123.96	127.00
26	LA	1085	A	N3-C4-N9	-5.06	123.35	127.40
26	LA	1595	C	C5'-C4'-C3'	5.06	124.10	116.00
26	LA	2175	C	C2-N3-C4	-5.06	117.37	119.90
26	LA	2195	U	C5'-C4'-O4'	5.06	115.17	109.10
26	LA	2204	G	C4-C5-N7	-5.06	108.78	110.80
26	LA	2234	G	C6-N1-C2	-5.06	122.06	125.10
26	LA	2578	G	OP2-P-O3'	5.06	116.33	105.20
26	LA	2868	A	C6-N1-C2	-5.06	115.56	118.60
2	SA	233	C	C6-N1-C2	5.06	122.32	120.30
2	SA	826	C	C6-N1-C2	-5.06	118.28	120.30
2	SA	1158	C	C5-C6-N1	5.06	123.53	121.00
26	LA	245	G	N3-C2-N2	5.06	123.44	119.90
26	LA	646	U	N3-C4-O4	5.06	122.94	119.40
26	LA	675	A	C4-C5-N7	-5.06	108.17	110.70
26	LA	858	G	N3-C4-N9	5.06	129.03	126.00
26	LA	935	C	C2-N1-C1'	-5.06	113.24	118.80
26	LA	1632	A	C8-N9-C4	-5.06	103.78	105.80
26	LA	1993	U	P-O3'-C3'	5.06	125.77	119.70
26	LA	2024	G	C5-C6-N1	5.06	114.03	111.50
26	LA	2168	G	C8-N9-C4	5.06	108.42	106.40
26	LA	2218	G	P-O5'-C5'	-5.06	112.81	120.90
26	LA	2512	C	C2-N3-C4	-5.06	117.37	119.90
26	LA	2632	A	C5'-C4'-C3'	-5.06	107.91	116.00
26	LA	2724	U	C1'-O4'-C4'	5.06	113.95	109.90
29	LV	16	VAL	O-C-N	-5.06	114.61	122.70
57	LS	60	TRP	O-C-N	-5.06	114.61	122.70
2	SA	1027	C	C5-C4-N4	-5.06	116.66	120.20
25	LB	84	G	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	759	G	N9-C1'-C2'	-5.06	106.44	112.00
26	LA	1183	U	N1-C2-O2	5.06	126.34	122.80
26	LA	1283	G	N3-C4-C5	-5.06	126.07	128.60
26	LA	1330	C	N1-C2-N3	5.06	122.74	119.20
26	LA	2113	U	C2'-C3'-O3'	5.06	121.79	113.70
26	LA	2475	C	N3-C4-C5	-5.06	119.88	121.90
26	LA	2547	A	N3-C4-N9	5.06	131.44	127.40
26	LA	2661	G	O4'-C4'-C3'	5.06	110.14	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2829	A	P-O5'-C5'	5.06	128.99	120.90
28	LU	95	ARG	NE-CZ-NH2	5.06	122.83	120.30
49	LK	86	LYS	C-N-CA	5.06	134.34	121.70
52	LO	94	ALA	O-C-N	-5.06	114.61	122.70
2	SA	410	G	C4-N9-C1'	-5.05	119.93	126.50
2	SA	657	U	C2-N3-C4	-5.05	123.97	127.00
2	SA	1157	A	C2-N3-C4	5.05	113.13	110.60
2	SA	1253	G	C1'-O4'-C4'	-5.05	105.86	109.90
7	SG	74	VAL	CA-CB-CG1	-5.05	103.32	110.90
26	LA	83	A	N7-C8-N9	5.05	116.33	113.80
26	LA	411	G	O5'-P-OP2	-5.05	101.15	105.70
26	LA	423	A	C6-N1-C2	-5.05	115.57	118.60
26	LA	818	G	P-O5'-C5'	5.05	128.99	120.90
26	LA	998	C	P-O3'-C3'	5.05	125.77	119.70
26	LA	1437	C	C6-N1-C2	-5.05	118.28	120.30
26	LA	1627	G	P-O5'-C5'	-5.05	112.81	120.90
26	LA	1819	A	C5'-C4'-O4'	5.05	115.17	109.10
26	LA	1955	U	C5-C6-N1	5.05	125.23	122.70
26	LA	2427	C	P-O3'-C3'	5.05	125.77	119.70
26	LA	2682	A	C3'-C2'-C1'	5.05	105.54	101.50
2	SA	589	U	N3-C4-O4	5.05	122.94	119.40
2	SA	829	G	C6-N1-C2	-5.05	122.07	125.10
2	SA	854	U	N1-C2-N3	-5.05	111.87	114.90
2	SA	1063	C	P-O3'-C3'	5.05	125.76	119.70
26	LA	58	G	C3'-C2'-C1'	5.05	105.54	101.50
26	LA	411	G	OP1-P-O3'	5.05	116.32	105.20
26	LA	525	U	N3-C2-O2	-5.05	118.66	122.20
26	LA	602	A	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	1043	C	N1-C2-O2	5.05	121.93	118.90
26	LA	1175	A	C5'-C4'-O4'	-5.05	103.04	109.10
26	LA	1242	U	N1-C2-N3	5.05	117.93	114.90
26	LA	2117	A	C5'-C4'-O4'	-5.05	103.04	109.10
35	L1	42	ALA	N-CA-CB	5.05	117.17	110.10
2	SA	111	G	C5-N7-C8	5.05	106.83	104.30
2	SA	145	G	C5-C6-N1	5.05	114.03	111.50
2	SA	251	G	C6-N1-C2	5.05	128.13	125.10
2	SA	345	C	C5-C6-N1	-5.05	118.47	121.00
2	SA	601	G	C6-N1-C2	-5.05	122.07	125.10
2	SA	1363	A	C2-N3-C4	-5.05	108.07	110.60
13	SM	6	ILE	O-C-N	-5.05	114.62	122.70
15	SO	82	GLU	CA-CB-CG	5.05	124.51	113.40
24	S3	503	LYS	N-CA-CB	5.05	119.69	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	LB	29	A	O4'-C1'-N9	5.05	112.24	108.20
25	LB	82	U	C6-N1-C2	-5.05	117.97	121.00
26	LA	44	A	C5'-C4'-O4'	5.05	115.16	109.10
26	LA	135	U	N3-C4-O4	-5.05	115.86	119.40
26	LA	333	G	C6-C5-N7	-5.05	127.37	130.40
26	LA	561	G	C1'-O4'-C4'	-5.05	105.86	109.90
26	LA	1025	G	OP1-P-O3'	5.05	116.31	105.20
26	LA	1257	C	C5-C6-N1	-5.05	118.47	121.00
26	LA	1580	A	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	2015	A	O4'-C1'-N9	5.05	112.24	108.20
26	LA	2273	A	C5-C6-N1	5.05	120.23	117.70
26	LA	2321	U	P-O3'-C3'	5.05	125.76	119.70
26	LA	2486	C	N1-C2-O2	5.05	121.93	118.90
26	LA	2779	U	C5'-C4'-O4'	5.05	115.16	109.10
28	LU	63	GLY	CA-C-O	5.05	129.69	120.60
36	L2	63	ARG	NE-CZ-NH1	5.05	122.83	120.30
44	LF	36	ALA	N-CA-CB	5.05	117.17	110.10
2	SA	406	G	C8-N9-C1'	5.05	133.56	127.00
2	SA	508	U	OP1-P-O3'	5.05	116.31	105.20
2	SA	628	G	C8-N9-C4	-5.05	104.38	106.40
2	SA	661	G	P-O5'-C5'	-5.05	112.82	120.90
2	SA	811	C	C5-C6-N1	5.05	123.52	121.00
2	SA	1003	G	C2-N3-C4	5.05	114.42	111.90
2	SA	1078	U	C4'-C3'-C2'	-5.05	97.55	102.60
2	SA	1459	G	N3-C4-C5	5.05	131.12	128.60
25	LB	31	C	C5-C6-N1	5.05	123.53	121.00
25	LB	45	A	N9-C4-C5	5.05	107.82	105.80
25	LB	104	A	C4-C5-C6	5.05	119.53	117.00
26	LA	253	C	N1-C2-O2	5.05	121.93	118.90
26	LA	368	A	C5-C6-N1	-5.05	115.17	117.70
26	LA	521	U	C6-N1-C2	-5.05	117.97	121.00
26	LA	603	A	N9-C4-C5	5.05	107.82	105.80
26	LA	862	G	C6-C5-N7	-5.05	127.37	130.40
26	LA	907	G	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	1330	C	O4'-C4'-C3'	-5.05	98.95	104.00
26	LA	1404	C	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	1684	G	C6-C5-N7	5.05	133.43	130.40
26	LA	2166	U	C5-C4-O4	-5.05	122.87	125.90
26	LA	2210	U	C4-C5-C6	-5.05	116.67	119.70
26	LA	2302	U	OP1-P-OP2	-5.05	112.03	119.60
26	LA	2437	G	N3-C4-N9	-5.05	122.97	126.00
26	LA	2661	G	C3'-C2'-C1'	5.05	105.54	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2720	U	P-O3'-C3'	-5.05	113.64	119.70
26	LA	2770	G	C8-N9-C4	-5.05	104.38	106.40
26	LA	2806	C	C2'-C3'-O3'	5.05	121.78	113.70
47	LJ	34	VAL	O-C-N	-5.05	114.62	122.70
55	LQ	69	ASP	CA-CB-CG	-5.05	102.29	113.40
2	SA	333	U	C4-C5-C6	-5.05	116.67	119.70
2	SA	1181	G	O4'-C1'-C2'	-5.05	100.75	105.80
5	ST	30	PHE	CB-CA-C	5.05	120.50	110.40
26	LA	93	G	O4'-C1'-C2'	-5.05	100.75	105.80
26	LA	236	C	C2-N3-C4	-5.05	117.38	119.90
26	LA	400	G	C4-N9-C1'	5.05	133.06	126.50
26	LA	465	G	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	480	A	C5-C6-N1	5.05	120.22	117.70
26	LA	676	A	C6-N1-C2	-5.05	115.57	118.60
26	LA	1038	G	O4'-C1'-N9	5.05	112.24	108.20
26	LA	2561	U	P-O5'-C5'	5.05	128.98	120.90
2	SA	483	C	C5-C6-N1	-5.05	118.48	121.00
2	SA	558	G	O4'-C1'-N9	5.05	112.24	108.20
2	SA	854	U	N3-C4-C5	-5.05	111.57	114.60
2	SA	1188	A	C5-C6-N6	-5.05	119.66	123.70
2	SA	1333	A	N7-C8-N9	-5.05	111.28	113.80
2	SA	1344	C	C5'-C4'-O4'	-5.05	103.04	109.10
18	SB	139	GLU	OE1-CD-OE2	-5.05	117.25	123.30
26	LA	70	G	C8-N9-C4	-5.05	104.38	106.40
26	LA	120	U	P-O3'-C3'	5.05	125.75	119.70
26	LA	269	C	C3'-C2'-C1'	-5.05	97.46	101.50
26	LA	671	C	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	752	A	C4-N9-C1'	5.05	135.38	126.30
26	LA	850	U	OP2-P-O3'	5.05	116.30	105.20
26	LA	1373	A	C5-N7-C8	5.05	106.42	103.90
26	LA	1403	A	P-O5'-C5'	-5.05	112.82	120.90
26	LA	1435	G	O3'-P-O5'	5.05	113.59	104.00
26	LA	1455	G	O4'-C1'-N9	5.05	112.24	108.20
26	LA	1518	C	C4-C5-C6	5.05	119.92	117.40
26	LA	1721	G	C5-N7-C8	-5.05	101.78	104.30
26	LA	1938	A	C2'-C3'-O3'	5.05	121.78	113.70
26	LA	2125	G	OP1-P-OP2	-5.05	112.03	119.60
26	LA	2881	U	C5'-C4'-C3'	-5.05	107.93	116.00
33	LZ	61	LYS	O-C-N	-5.05	114.62	123.20
2	SA	223	A	P-O3'-C3'	-5.04	113.65	119.70
2	SA	821	G	N3-C4-N9	-5.04	122.97	126.00
2	SA	863	U	P-O5'-C5'	5.04	128.97	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	1215	G	O4'-C1'-N9	5.04	112.24	108.20
2	SA	1265	C	OP1-P-OP2	-5.04	112.03	119.60
2	SA	1449	C	C1'-O4'-C4'	-5.04	105.86	109.90
11	SK	55	ARG	CG-CD-NE	-5.04	101.21	111.80
26	LA	1148	U	P-O3'-C3'	5.04	125.75	119.70
26	LA	1581	G	C6-N1-C2	-5.04	122.07	125.10
26	LA	2404	U	C6-N1-C2	-5.04	117.97	121.00
2	SA	40	C	OP1-P-OP2	-5.04	112.03	119.60
2	SA	208	U	OP2-P-O3'	5.04	116.30	105.20
2	SA	728	A	C5-N7-C8	5.04	106.42	103.90
2	SA	747	A	C4'-C3'-C2'	-5.04	97.56	102.60
2	SA	770	C	N3-C4-N4	5.04	121.53	118.00
2	SA	1014	A	O3'-P-O5'	-5.04	94.42	104.00
2	SA	1099	G	P-O5'-C5'	-5.04	112.83	120.90
2	SA	1295	U	O4'-C1'-N1	5.04	112.23	108.20
2	SA	1394	A	P-O5'-C5'	5.04	128.97	120.90
2	SA	1527	U	C2'-C3'-O3'	5.04	121.77	113.70
20	SD	48	SER	N-CA-C	-5.04	97.38	111.00
25	LB	111	U	C4'-C3'-C2'	-5.04	97.56	102.60
26	LA	55	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	374	A	O4'-C4'-C3'	-5.04	98.96	104.00
26	LA	392	U	C5-C6-N1	-5.04	120.18	122.70
26	LA	429	A	O5'-C5'-C4'	5.04	121.28	111.70
26	LA	482	A	N1-C6-N6	-5.04	115.57	118.60
26	LA	899	A	P-O3'-C3'	-5.04	113.65	119.70
26	LA	929	U	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	962	G	C5-C6-N1	5.04	114.02	111.50
26	LA	976	G	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	1127	A	N1-C6-N6	5.04	121.63	118.60
26	LA	1296	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	1341	G	C5-C6-N1	5.04	114.02	111.50
26	LA	1409	U	N1-C2-N3	5.04	117.93	114.90
26	LA	1661	G	P-O5'-C5'	-5.04	112.83	120.90
26	LA	1753	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	1791	A	N7-C8-N9	5.04	116.32	113.80
26	LA	2084	C	P-O3'-C3'	5.04	125.75	119.70
26	LA	2192	U	C5'-C4'-O4'	5.04	115.15	109.10
58	LT	50	GLY	O-C-N	-5.04	114.63	122.70
2	SA	301	G	OP1-P-OP2	-5.04	112.04	119.60
2	SA	532	A	C4-C5-N7	5.04	113.22	110.70
2	SA	609	A	C5-N7-C8	-5.04	101.38	103.90
2	SA	648	A	C4-C5-C6	-5.04	114.48	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	815	A	O5'-C5'-C4'	-5.04	102.12	111.70
2	SA	906	A	N1-C6-N6	-5.04	115.58	118.60
2	SA	1306	A	C8-N9-C4	-5.04	103.78	105.80
25	LB	15	A	C5-C6-N1	5.04	120.22	117.70
25	LB	46	A	O4'-C1'-N9	5.04	112.23	108.20
26	LA	348	A	C4-C5-N7	5.04	113.22	110.70
26	LA	1088	A	N9-C4-C5	-5.04	103.78	105.80
26	LA	1147	A	N7-C8-N9	5.04	116.32	113.80
26	LA	1219	U	C5-C4-O4	5.04	128.93	125.90
26	LA	2191	A	O4'-C1'-N9	5.04	112.23	108.20
26	LA	2376	A	P-O5'-C5'	-5.04	112.83	120.90
26	LA	2391	G	C6-C5-N7	-5.04	127.38	130.40
26	LA	2501	C	N1-C2-N3	5.04	122.73	119.20
29	LV	54	GLU	OE1-CD-OE2	-5.04	117.25	123.30
2	SA	230	G	P-O5'-C5'	-5.04	112.84	120.90
2	SA	419	C	N3-C2-O2	-5.04	118.37	121.90
2	SA	725	G	C8-N9-C4	-5.04	104.38	106.40
2	SA	1184	G	N9-C4-C5	5.04	107.42	105.40
9	SI	111	GLU	OE1-CD-OE2	-5.04	117.25	123.30
25	LB	36	C	C5-C4-N4	-5.04	116.67	120.20
26	LA	1574	C	P-O3'-C3'	5.04	125.75	119.70
26	LA	1798	U	N1-C2-N3	5.04	117.92	114.90
26	LA	2021	C	C2'-C3'-O3'	5.04	121.76	113.70
26	LA	2038	G	C5'-C4'-C3'	-5.04	107.94	116.00
26	LA	2356	U	N1-C1'-C2'	-5.04	106.46	112.00
26	LA	2563	U	P-O3'-C3'	-5.04	113.65	119.70
26	LA	2850	A	C6-C5-N7	5.04	135.83	132.30
50	LL	119	PHE	CB-CG-CD1	5.04	124.33	120.80
2	SA	63	C	P-O3'-C3'	5.04	125.75	119.70
2	SA	263	A	C5-C6-N1	-5.04	115.18	117.70
2	SA	586	C	N1-C2-O2	5.04	121.92	118.90
4	S2	45	A	C5-C6-N1	5.04	120.22	117.70
17	SQ	39	ARG	NH1-CZ-NH2	-5.04	113.86	119.40
20	SD	17	ASP	CB-CG-OD1	5.04	122.83	118.30
25	LB	1	U	C5-C4-O4	5.04	128.92	125.90
25	LB	2	G	N3-C4-N9	-5.04	122.98	126.00
26	LA	362	A	C2-N3-C4	-5.04	108.08	110.60
26	LA	426	C	C1'-O4'-C4'	-5.04	105.87	109.90
26	LA	528	A	C4-C5-C6	-5.04	114.48	117.00
26	LA	741	U	O4'-C1'-N1	5.04	112.23	108.20
26	LA	824	U	C5'-C4'-C3'	-5.04	107.94	116.00
26	LA	893	C	C2-N3-C4	-5.04	117.38	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1003	G	C5'-C4'-C3'	5.04	124.06	116.00
26	LA	1125	G	OP1-P-OP2	-5.04	112.04	119.60
26	LA	1155	A	OP2-P-O3'	5.04	116.28	105.20
26	LA	1628	G	C4-N9-C1'	5.04	133.05	126.50
26	LA	1751	U	O4'-C1'-N1	5.04	112.23	108.20
26	LA	2468	A	P-O3'-C3'	5.04	125.75	119.70
26	LA	2474	U	OP1-P-OP2	-5.04	112.04	119.60
26	LA	2640	G	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	2819	G	N3-C2-N2	5.04	123.43	119.90
45	LG	170	ALA	CB-CA-C	5.04	117.66	110.10
50	LL	88	THR	N-CA-CB	5.04	119.87	110.30
51	LI	34	GLY	N-CA-C	5.04	125.70	113.10
51	LI	59	ALA	CB-CA-C	-5.04	102.54	110.10
2	SA	563	A	N3-C4-N9	5.04	131.43	127.40
2	SA	724	G	C2-N3-C4	5.04	114.42	111.90
4	S2	32	G	N7-C8-N9	-5.04	110.58	113.10
25	LB	29	A	N1-C6-N6	-5.04	115.58	118.60
26	LA	232	G	OP1-P-OP2	-5.04	112.05	119.60
26	LA	323	C	C2-N1-C1'	5.04	124.34	118.80
26	LA	592	A	C5-C6-N6	-5.04	119.67	123.70
26	LA	636	G	C4-C5-C6	5.04	121.82	118.80
26	LA	695	G	C8-N9-C1'	5.04	133.55	127.00
26	LA	1393	A	N1-C2-N3	-5.04	126.78	129.30
26	LA	2102	G	N1-C2-N3	-5.04	120.88	123.90
26	LA	2490	G	C5'-C4'-O4'	5.04	115.14	109.10
57	LS	87	VAL	CB-CA-C	5.04	120.97	111.40
1	SS	80	ARG	CD-NE-CZ	-5.04	116.55	123.60
2	SA	298	A	C5-C6-N6	-5.04	119.67	123.70
2	SA	327	A	C6-N1-C2	5.04	121.62	118.60
2	SA	407	U	N1-C1'-C2'	-5.04	106.46	112.00
2	SA	921	U	N1-C2-N3	-5.04	111.88	114.90
2	SA	1023	U	C6-N1-C1'	5.04	128.25	121.20
2	SA	1108	G	C5-C6-O6	-5.04	125.58	128.60
2	SA	1185	G	C6-N1-C2	-5.04	122.08	125.10
2	SA	1323	G	C6-N1-C2	-5.04	122.08	125.10
2	SA	1399	C	N1-C2-N3	5.04	122.72	119.20
2	SA	1405	G	O4'-C1'-N9	5.04	112.23	108.20
2	SA	1526	G	C4-C5-C6	5.04	121.82	118.80
2	SA	1542	A	C4-C5-C6	5.04	119.52	117.00
9	SI	19	PHE	CG-CD1-CE1	-5.04	115.26	120.80
10	SJ	67	ILE	CA-CB-CG1	5.04	120.57	111.00
26	LA	266	G	C4'-C3'-C2'	-5.04	97.56	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	948	C	C5'-C4'-C3'	5.04	124.06	116.00
26	LA	1060	U	C5-C6-N1	-5.04	120.18	122.70
26	LA	1389	G	N1-C2-N3	-5.04	120.88	123.90
26	LA	1422	G	P-O5'-C5'	-5.04	112.84	120.90
26	LA	1448	G	N3-C4-N9	5.04	129.02	126.00
26	LA	1743	G	C1'-O4'-C4'	-5.04	105.87	109.90
26	LA	2145	C	N3-C4-N4	-5.04	114.47	118.00
26	LA	2196	C	P-O3'-C3'	5.04	125.74	119.70
26	LA	2388	A	N3-C4-N9	5.04	131.43	127.40
26	LA	2733	A	P-O3'-C3'	5.04	125.74	119.70
26	LA	2733	A	C3'-C2'-C1'	-5.04	97.47	101.50
38	LE	59	ARG	NE-CZ-NH2	5.04	122.82	120.30
2	SA	147	G	P-O5'-C5'	5.03	128.95	120.90
2	SA	202	G	N3-C2-N2	-5.03	116.38	119.90
2	SA	901	A	N1-C6-N6	5.03	121.62	118.60
2	SA	924	C	C4'-C3'-C2'	-5.03	97.57	102.60
2	SA	1082	A	O4'-C1'-N9	5.03	112.23	108.20
2	SA	1384	C	C5'-C4'-O4'	5.03	115.14	109.10
2	SA	1407	C	C2-N3-C4	-5.03	117.38	119.90
2	SA	1410	A	N3-C4-C5	-5.03	123.28	126.80
25	LB	31	C	N3-C2-O2	-5.03	118.38	121.90
25	LB	113	C	C5-C6-N1	-5.03	118.48	121.00
26	LA	42	A	C1'-O4'-C4'	5.03	113.93	109.90
26	LA	86	G	C2-N3-C4	5.03	114.42	111.90
26	LA	210	C	C5'-C4'-C3'	-5.03	107.95	116.00
26	LA	282	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	431	U	N3-C4-C5	-5.03	111.58	114.60
26	LA	581	C	C6-N1-C2	-5.03	118.29	120.30
26	LA	791	C	C5'-C4'-O4'	5.03	115.14	109.10
26	LA	909	A	C4-C5-C6	-5.03	114.48	117.00
26	LA	1016	G	C6-N1-C2	5.03	128.12	125.10
26	LA	1133	A	C6-C5-N7	-5.03	128.78	132.30
26	LA	1203	U	C5'-C4'-C3'	-5.03	107.95	116.00
26	LA	1565	C	OP1-P-OP2	-5.03	112.05	119.60
26	LA	1842	G	C5-C6-O6	-5.03	125.58	128.60
26	LA	1861	G	N1-C6-O6	-5.03	116.88	119.90
26	LA	2171	A	C6-N1-C2	-5.03	115.58	118.60
26	LA	2216	G	C2-N3-C4	5.03	114.42	111.90
26	LA	2262	U	O4'-C4'-C3'	5.03	110.13	106.10
26	LA	2737	G	N7-C8-N9	5.03	115.62	113.10
26	LA	2815	C	C2-N1-C1'	5.03	124.34	118.80
44	LF	47	LYS	N-CA-CB	5.03	119.66	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	LN	93	ASN	O-C-N	-5.03	114.65	122.70
2	SA	350	G	O4'-C1'-N9	5.03	112.23	108.20
2	SA	439	U	C2-N1-C1'	5.03	123.74	117.70
2	SA	626	G	P-O5'-C5'	5.03	128.95	120.90
2	SA	1436	U	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	172	A	C6-N1-C2	-5.03	115.58	118.60
26	LA	843	G	O4'-C1'-N9	5.03	112.22	108.20
26	LA	1199	U	C6-N1-C2	-5.03	117.98	121.00
26	LA	1290	C	C2-N1-C1'	5.03	124.33	118.80
26	LA	1318	U	C4-C5-C6	-5.03	116.68	119.70
26	LA	1662	U	C6-N1-C2	-5.03	117.98	121.00
26	LA	1901	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	2685	G	O3'-P-O5'	-5.03	94.44	104.00
2	SA	113	G	C4-C5-C6	5.03	121.82	118.80
2	SA	426	U	N1-C2-O2	5.03	126.32	122.80
2	SA	617	G	N9-C4-C5	5.03	107.41	105.40
2	SA	827	U	P-O5'-C5'	5.03	128.95	120.90
2	SA	828	U	C6-N1-C2	5.03	124.02	121.00
2	SA	1420	U	N1-C2-O2	5.03	126.32	122.80
4	S2	14	A	C6-N1-C2	-5.03	115.58	118.60
11	SK	117	HIS	O-C-N	-5.03	114.65	122.70
25	LB	16	G	C4-C5-C6	5.03	121.82	118.80
26	LA	450	G	N9-C4-C5	-5.03	103.39	105.40
26	LA	478	A	N1-C2-N3	-5.03	126.78	129.30
26	LA	529	A	P-O5'-C5'	5.03	128.95	120.90
26	LA	594	U	P-O5'-C5'	5.03	128.95	120.90
26	LA	818	G	N7-C8-N9	5.03	115.61	113.10
26	LA	1406	U	P-O3'-C3'	-5.03	113.66	119.70
26	LA	1447	C	C6-N1-C2	5.03	122.31	120.30
26	LA	1519	G	C5-C6-N1	5.03	114.02	111.50
26	LA	1656	C	C2-N3-C4	5.03	122.42	119.90
26	LA	1872	A	C5-C6-N1	5.03	120.22	117.70
26	LA	1965	C	O5'-C5'-C4'	-5.03	102.14	111.70
26	LA	2063	C	C6-N1-C2	-5.03	118.29	120.30
26	LA	2339	C	O4'-C1'-N1	5.03	112.22	108.20
26	LA	2524	G	C8-N9-C4	-5.03	104.39	106.40
26	LA	2546	U	C3'-C2'-C1'	5.03	105.52	101.50
26	LA	2740	A	O4'-C1'-N9	5.03	112.22	108.20
26	LA	2748	A	C4-C5-N7	-5.03	108.18	110.70
29	LV	91	GLN	CG-CD-OE1	5.03	131.66	121.60
2	SA	798	U	OP2-P-O3'	5.03	116.27	105.20
2	SA	1398	A	C5-N7-C8	-5.03	101.39	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	SP	66	THR	CA-CB-CG2	-5.03	105.36	112.40
26	LA	611	C	OP1-P-OP2	-5.03	112.06	119.60
26	LA	2733	A	C5-C6-N1	-5.03	115.19	117.70
2	SA	264	C	C4-C5-C6	-5.03	114.89	117.40
2	SA	623	C	O4'-C1'-N1	5.03	112.22	108.20
2	SA	991	U	C4-C5-C6	-5.03	116.68	119.70
2	SA	1166	G	C2'-C3'-O3'	5.03	121.75	113.70
2	SA	1315	U	C5-C6-N1	-5.03	120.19	122.70
2	SA	1368	A	C5-C6-N1	5.03	120.21	117.70
2	SA	1499	A	O4'-C1'-N9	5.03	112.22	108.20
4	S2	75	C	N1-C2-O2	5.03	121.92	118.90
18	SB	170	ILE	O-C-N	-5.03	114.66	122.70
25	LB	87	U	O4'-C4'-C3'	-5.03	98.97	104.00
26	LA	13	A	C5-N7-C8	5.03	106.41	103.90
26	LA	35	G	C4-C5-C6	-5.03	115.78	118.80
26	LA	301	G	C4-C5-C6	-5.03	115.78	118.80
26	LA	409	G	N9-C4-C5	-5.03	103.39	105.40
26	LA	427	U	N1-C2-O2	5.03	126.32	122.80
26	LA	1075	C	C5'-C4'-C3'	5.03	124.04	116.00
26	LA	1122	G	C5-C6-N1	5.03	114.01	111.50
26	LA	1271	G	OP1-P-OP2	-5.03	112.06	119.60
26	LA	1631	G	O4'-C1'-N9	5.03	112.22	108.20
26	LA	1761	C	P-O5'-C5'	5.03	128.94	120.90
26	LA	1804	C	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	2197	U	N3-C4-O4	5.03	122.92	119.40
26	LA	2209	G	C8-N9-C4	5.03	108.41	106.40
26	LA	2607	G	C5'-C4'-C3'	-5.03	107.96	116.00
27	LD	196	ASN	O-C-N	-5.03	114.66	122.70
36	L2	32	LEU	CB-CA-C	5.03	119.75	110.20
44	LF	193	VAL	CB-CA-C	-5.03	101.85	111.40
2	SA	93	U	P-O3'-C3'	5.03	125.73	119.70
2	SA	134	G	OP1-P-OP2	-5.03	112.06	119.60
2	SA	257	G	C4-N9-C1'	-5.03	119.97	126.50
2	SA	519	C	C5-C4-N4	-5.03	116.68	120.20
2	SA	565	U	C4-C5-C6	5.03	122.72	119.70
2	SA	782	A	OP1-P-OP2	-5.03	112.06	119.60
2	SA	804	U	C6-N1-C2	5.03	124.02	121.00
2	SA	853	C	P-O5'-C5'	5.03	128.94	120.90
2	SA	1235	U	O4'-C1'-N1	5.03	112.22	108.20
2	SA	1499	A	O5'-C5'-C4'	-5.03	102.15	111.70
19	SC	131	ARG	NH1-CZ-NH2	-5.03	113.87	119.40
25	LB	115	A	C2'-C3'-O3'	5.03	121.74	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	45	G	C4-C5-N7	5.03	112.81	110.80
26	LA	272	A	N7-C8-N9	-5.03	111.29	113.80
26	LA	300	A	C8-N9-C4	5.03	107.81	105.80
26	LA	487	C	N1-C2-N3	5.03	122.72	119.20
26	LA	794	A	N1-C2-N3	-5.03	126.79	129.30
26	LA	1416	G	N1-C2-N3	5.03	126.92	123.90
26	LA	1548	A	C8-N9-C1'	5.03	136.75	127.70
26	LA	1869	G	N9-C4-C5	5.03	107.41	105.40
26	LA	1933	G	N3-C4-C5	-5.03	126.09	128.60
26	LA	2428	G	N3-C4-C5	5.03	131.11	128.60
26	LA	2503	A	C5-N7-C8	-5.03	101.39	103.90
26	LA	2630	G	C4-N9-C1'	5.03	133.03	126.50
26	LA	2857	G	C6-N1-C2	5.03	128.12	125.10
26	LA	2879	A	C6-N1-C2	5.03	121.62	118.60
2	SA	113	G	C1'-O4'-C4'	-5.02	105.88	109.90
2	SA	696	A	C8-N9-C4	-5.02	103.79	105.80
2	SA	980	C	C6-N1-C1'	5.02	126.83	120.80
2	SA	1015	G	C5-N7-C8	5.02	106.81	104.30
2	SA	1144	G	C4-C5-N7	5.02	112.81	110.80
2	SA	1216	A	C5'-C4'-C3'	-5.02	107.96	116.00
26	LA	265	A	N3-C4-C5	-5.02	123.28	126.80
26	LA	604	G	C5-C6-N1	5.02	114.01	111.50
26	LA	759	G	N3-C4-N9	5.02	129.01	126.00
26	LA	949	G	C8-N9-C4	-5.02	104.39	106.40
26	LA	955	U	O4'-C1'-N1	5.02	112.22	108.20
26	LA	1624	U	C5'-C4'-C3'	-5.02	107.96	116.00
26	LA	1847	A	C4'-C3'-C2'	-5.02	97.58	102.60
26	LA	2343	U	C5-C4-O4	-5.02	122.89	125.90
26	LA	2455	G	C4-C5-N7	5.02	112.81	110.80
26	LA	2524	G	O4'-C1'-N9	5.02	112.22	108.20
26	LA	2546	U	C5-C4-O4	5.02	128.91	125.90
48	LN	69	ARG	N-CA-CB	5.02	119.64	110.60
2	SA	234	C	O4'-C1'-N1	5.02	112.22	108.20
2	SA	336	A	C8-N9-C4	5.02	107.81	105.80
2	SA	801	U	C2-N3-C4	5.02	130.01	127.00
2	SA	827	U	C1'-O4'-C4'	-5.02	105.88	109.90
2	SA	886	G	O4'-C1'-N9	5.02	112.22	108.20
23	SR	19	GLU	OE1-CD-OE2	-5.02	117.27	123.30
26	LA	27	G	C6-N1-C2	-5.02	122.09	125.10
26	LA	206	U	C5-C4-O4	-5.02	122.89	125.90
26	LA	743	A	N9-C4-C5	-5.02	103.79	105.80
26	LA	833	A	OP1-P-OP2	-5.02	112.07	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1114	C	N3-C4-C5	-5.02	119.89	121.90
26	LA	1385	A	C5-C6-N1	5.02	120.21	117.70
26	LA	1541	C	C4'-C3'-C2'	-5.02	97.58	102.60
26	LA	1944	U	C6-N1-C2	5.02	124.01	121.00
26	LA	2249	U	N3-C4-O4	5.02	122.92	119.40
26	LA	2535	G	N1-C6-O6	-5.02	116.89	119.90
26	LA	2785	C	C5'-C4'-C3'	5.02	124.04	116.00
46	LH	2	ARG	O-C-N	-5.02	114.66	122.70
2	SA	272	C	N1-C2-O2	5.02	121.91	118.90
2	SA	777	A	C8-N9-C4	5.02	107.81	105.80
2	SA	1029	U	C5-C4-O4	-5.02	122.89	125.90
2	SA	1167	A	C2'-C3'-O3'	5.02	121.73	113.70
26	LA	663	G	C5-N7-C8	-5.02	101.79	104.30
26	LA	728	G	N9-C4-C5	-5.02	103.39	105.40
26	LA	793	A	N1-C2-N3	5.02	131.81	129.30
26	LA	1315	C	C2-N3-C4	-5.02	117.39	119.90
47	LJ	113	GLU	CB-CA-C	5.02	120.44	110.40
2	SA	22	G	N9-C4-C5	5.02	107.41	105.40
2	SA	198	G	P-O5'-C5'	5.02	128.93	120.90
2	SA	318	G	N7-C8-N9	-5.02	110.59	113.10
2	SA	764	C	C4-C5-C6	-5.02	114.89	117.40
2	SA	1013	G	C2'-C3'-O3'	5.02	121.73	113.70
2	SA	1074	G	N1-C2-N2	-5.02	111.68	116.20
2	SA	1209	C	O4'-C1'-C2'	5.02	112.12	107.60
3	S1	30	U	O4'-C1'-C2'	5.02	112.12	107.60
4	S2	11	A	C5'-C4'-C3'	-5.02	107.97	116.00
4	S2	44	A	OP2-P-O3'	5.02	116.24	105.20
25	LB	120	U	C6-N1-C1'	-5.02	114.17	121.20
26	LA	3	U	C5-C4-O4	5.02	128.91	125.90
26	LA	13	A	OP1-P-OP2	-5.02	112.07	119.60
26	LA	344	A	N1-C6-N6	-5.02	115.59	118.60
26	LA	405	U	C5-C4-O4	5.02	128.91	125.90
26	LA	647	G	C5-C6-O6	-5.02	125.59	128.60
26	LA	651	G	C8-N9-C1'	-5.02	120.47	127.00
26	LA	807	U	N1-C2-O2	-5.02	119.29	122.80
26	LA	834	G	C4-N9-C1'	5.02	133.02	126.50
26	LA	1263	U	O4'-C1'-C2'	5.02	112.12	107.60
26	LA	1649	G	C5'-C4'-C3'	5.02	124.03	116.00
26	LA	1941	C	O5'-C5'-C4'	5.02	121.24	111.70
26	LA	1988	G	OP2-P-O3'	5.02	116.24	105.20
26	LA	2041	U	P-O3'-C3'	5.02	125.72	119.70
26	LA	2318	G	N1-C2-N3	5.02	126.91	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	LG	29	ARG	NE-CZ-NH1	-5.02	117.79	120.30
2	SA	122	G	N3-C2-N2	-5.02	116.39	119.90
2	SA	382	A	N7-C8-N9	-5.02	111.29	113.80
2	SA	1048	G	N1-C2-N2	-5.02	111.68	116.20
2	SA	1238	A	N1-C6-N6	-5.02	115.59	118.60
3	S1	49	U	OP1-P-OP2	-5.02	112.07	119.60
7	SG	153	TYR	N-CA-CB	-5.02	101.57	110.60
26	LA	312	G	C2'-C3'-O3'	5.02	121.73	113.70
26	LA	716	A	C5-N7-C8	-5.02	101.39	103.90
26	LA	845	A	C4-C5-C6	-5.02	114.49	117.00
26	LA	1407	G	C5-N7-C8	5.02	106.81	104.30
26	LA	1450	G	C5-C6-O6	-5.02	125.59	128.60
26	LA	1860	G	C5'-C4'-O4'	5.02	115.12	109.10
26	LA	1951	U	C2-N3-C4	-5.02	123.99	127.00
26	LA	2061	G	OP1-P-O3'	5.02	116.24	105.20
26	LA	2090	A	C5-N7-C8	-5.02	101.39	103.90
26	LA	2116	G	C8-N9-C4	-5.02	104.39	106.40
26	LA	2902	C	P-O5'-C5'	5.02	128.93	120.90
39	L3	29	VAL	CA-CB-CG2	5.02	118.43	110.90
57	LS	97	ILE	O-C-N	-5.02	114.67	122.70
2	SA	339	C	C2-N3-C4	-5.02	117.39	119.90
2	SA	346	G	C5-C6-N1	5.02	114.01	111.50
2	SA	564	C	P-O5'-C5'	5.02	128.93	120.90
2	SA	840	C	C1'-O4'-C4'	-5.02	105.89	109.90
2	SA	1193	G	C8-N9-C4	5.02	108.41	106.40
2	SA	1202	U	C5-C4-O4	-5.02	122.89	125.90
25	LB	112	G	P-O5'-C5'	5.02	128.93	120.90
26	LA	207	A	P-O5'-C5'	5.02	128.93	120.90
26	LA	737	C	C3'-C2'-C1'	5.02	105.51	101.50
26	LA	1247	A	O4'-C1'-N9	5.02	112.21	108.20
26	LA	1297	C	C2-N3-C4	-5.02	117.39	119.90
26	LA	1407	G	N9-C4-C5	5.02	107.41	105.40
26	LA	1487	U	P-O5'-C5'	5.02	128.93	120.90
26	LA	1574	C	O4'-C4'-C3'	5.02	110.11	106.10
26	LA	1972	G	OP1-P-OP2	-5.02	112.08	119.60
26	LA	2056	G	N9-C4-C5	5.02	107.41	105.40
26	LA	2299	U	C2-N3-C4	5.02	130.01	127.00
26	LA	2724	U	OP1-P-OP2	-5.02	112.08	119.60
26	LA	2739	U	C5-C6-N1	-5.02	120.19	122.70
2	SA	4	U	O4'-C1'-N1	5.01	112.21	108.20
2	SA	221	C	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	243	A	N9-C1'-C2'	5.01	120.52	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	SA	302	G	C4-C5-N7	-5.01	108.79	110.80
2	SA	710	G	N7-C8-N9	-5.01	110.59	113.10
2	SA	888	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	1036	A	C5-C6-N6	5.01	127.71	123.70
2	SA	1256	A	C4-C5-C6	5.01	119.51	117.00
20	SD	46	ARG	CD-NE-CZ	5.01	130.62	123.60
25	LB	88	C	N1-C2-O2	-5.01	115.89	118.90
26	LA	79	C	O4'-C1'-N1	5.01	112.21	108.20
26	LA	101	A	C2-N3-C4	-5.01	108.09	110.60
26	LA	385	C	N1-C2-O2	5.01	121.91	118.90
26	LA	516	C	O3'-P-O5'	-5.01	94.47	104.00
26	LA	596	U	C4'-C3'-C2'	-5.01	97.59	102.60
26	LA	597	G	P-O5'-C5'	-5.01	112.88	120.90
26	LA	763	G	O5'-P-OP1	5.01	116.72	110.70
26	LA	771	G	P-O3'-C3'	5.01	125.72	119.70
26	LA	1292	G	OP2-P-O3'	5.01	116.23	105.20
26	LA	1369	G	P-O3'-C3'	-5.01	113.68	119.70
26	LA	1764	C	O5'-P-OP1	5.01	116.72	110.70
26	LA	1854	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	1911	U	C4'-C3'-C2'	5.01	107.61	102.60
26	LA	2042	A	C8-N9-C4	5.01	107.81	105.80
26	LA	2553	G	N3-C4-C5	-5.01	126.09	128.60
38	LE	4	LEU	CB-CG-CD2	5.01	119.52	111.00
38	LE	125	TRP	O-C-N	-5.01	114.68	122.70
2	SA	279	A	C2-N3-C4	-5.01	108.09	110.60
2	SA	500	G	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	779	C	N3-C4-C5	5.01	123.91	121.90
2	SA	884	U	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	1042	A	C2-N3-C4	-5.01	108.09	110.60
3	S1	59	A	N7-C8-N9	5.01	116.31	113.80
8	SH	48	PHE	CB-CG-CD1	5.01	124.31	120.80
26	LA	389	G	C5'-C4'-O4'	5.01	115.11	109.10
26	LA	543	G	P-O5'-C5'	5.01	128.92	120.90
26	LA	835	C	N3-C4-N4	5.01	121.51	118.00
26	LA	932	U	C4'-C3'-C2'	-5.01	97.59	102.60
26	LA	1133	A	OP1-P-OP2	-5.01	112.08	119.60
26	LA	1288	G	C4-C5-N7	-5.01	108.80	110.80
26	LA	1481	U	N3-C4-C5	5.01	117.61	114.60
26	LA	1627	G	C5-C6-O6	-5.01	125.59	128.60
26	LA	2110	G	C4-N9-C1'	-5.01	119.98	126.50
26	LA	2128	G	C4-N9-C1'	-5.01	119.98	126.50
31	LX	63	ILE	CB-CA-C	-5.01	101.57	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	LK	55	PRO	N-CD-CG	5.01	110.72	103.20
2	SA	507	C	N3-C4-N4	5.01	121.51	118.00
2	SA	973	G	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1515	G	N3-C2-N2	5.01	123.41	119.90
19	SC	180	ASP	CB-CG-OD2	5.01	122.81	118.30
25	LB	76	G	C5-C6-O6	-5.01	125.59	128.60
25	LB	91	C	C2-N1-C1'	-5.01	113.29	118.80
26	LA	265	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	376	G	C4-C5-N7	-5.01	108.80	110.80
26	LA	940	G	C8-N9-C4	-5.01	104.39	106.40
26	LA	1021	A	C6-C5-N7	5.01	135.81	132.30
26	LA	1232	G	C6-C5-N7	5.01	133.41	130.40
26	LA	1380	G	C1'-O4'-C4'	-5.01	105.89	109.90
26	LA	1494	A	C5-N7-C8	5.01	106.41	103.90
26	LA	1635	A	C5-N7-C8	-5.01	101.39	103.90
26	LA	1824	G	P-O3'-C3'	5.01	125.71	119.70
26	LA	1846	G	C2-N3-C4	-5.01	109.39	111.90
26	LA	1905	C	C2-N3-C4	5.01	122.41	119.90
26	LA	2198	A	P-O5'-C5'	5.01	128.92	120.90
26	LA	2372	U	P-O3'-C3'	-5.01	113.69	119.70
26	LA	2414	G	N3-C2-N2	-5.01	116.39	119.90
26	LA	2431	U	P-O5'-C5'	5.01	128.92	120.90
26	LA	2435	A	N1-C2-N3	5.01	131.81	129.30
26	LA	2526	G	C5'-C4'-O4'	5.01	115.11	109.10
26	LA	2564	A	C6-C5-N7	5.01	135.81	132.30
26	LA	2822	G	OP1-P-OP2	-5.01	112.08	119.60
2	SA	67	C	N1-C1'-C2'	-5.01	106.49	112.00
2	SA	184	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	426	U	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	477	C	C5-C6-N1	-5.01	118.50	121.00
2	SA	620	C	C1'-O4'-C4'	-5.01	105.89	109.90
2	SA	819	A	C8-N9-C4	-5.01	103.80	105.80
2	SA	953	G	C5'-C4'-O4'	5.01	115.11	109.10
2	SA	1368	A	C4-C5-C6	-5.01	114.50	117.00
2	SA	1369	C	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1436	U	N3-C4-C5	-5.01	111.59	114.60
2	SA	1522	U	C1'-O4'-C4'	-5.01	105.89	109.90
14	SN	74	ARG	NE-CZ-NH2	5.01	122.80	120.30
26	LA	585	G	N3-C4-N9	5.01	129.01	126.00
26	LA	820	A	C5-N7-C8	-5.01	101.39	103.90
26	LA	878	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	1452	G	C5'-C4'-O4'	5.01	115.11	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1529	G	OP1-P-OP2	-5.01	112.08	119.60
26	LA	1534	U	N1-C2-N3	-5.01	111.89	114.90
26	LA	1697	G	N9-C4-C5	5.01	107.40	105.40
26	LA	1872	A	C5'-C4'-C3'	-5.01	107.99	116.00
26	LA	2567	G	N7-C8-N9	5.01	115.61	113.10
26	LA	2677	G	N9-C4-C5	-5.01	103.40	105.40
34	L0	23	ARG	CA-C-N	-5.01	106.18	117.20
37	LC	78	PHE	CB-CG-CD2	5.01	124.31	120.80
38	LE	207	VAL	C-N-CA	5.01	134.22	121.70
45	LG	52	ALA	N-CA-CB	-5.01	103.09	110.10
56	LR	58	PHE	CA-C-N	5.01	128.22	117.20
2	SA	995	C	C6-N1-C2	-5.01	118.30	120.30
8	SH	10	LEU	O-C-N	-5.01	114.69	122.70
14	SN	12	ARG	O-C-N	-5.01	114.69	122.70
24	S3	32	TYR	CG-CD2-CE2	-5.01	117.29	121.30
26	LA	299	A	C4-N9-C1'	-5.01	117.29	126.30
26	LA	1829	A	C6-C5-N7	-5.01	128.79	132.30
26	LA	2014	A	O4'-C1'-N9	5.01	112.21	108.20
29	LV	6	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
44	LF	114	ARG	NE-CZ-NH1	5.01	122.80	120.30
44	LF	196	VAL	CA-CB-CG2	-5.01	103.39	110.90
51	LI	128	HIS	N-CA-CB	5.01	119.61	110.60
2	SA	143	A	C5-C6-N1	5.01	120.20	117.70
2	SA	423	G	O5'-P-OP2	5.01	116.71	110.70
2	SA	888	G	N1-C6-O6	5.01	122.90	119.90
2	SA	917	G	C4'-C3'-C2'	5.01	107.61	102.60
2	SA	943	U	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1099	G	N9-C4-C5	5.01	107.40	105.40
3	S1	22	G	OP1-P-OP2	-5.01	112.09	119.60
3	S1	31	U	N1-C2-O2	5.01	126.30	122.80
9	SI	79	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
18	SB	198	VAL	CA-CB-CG2	5.01	118.41	110.90
26	LA	59	U	O4'-C1'-N1	5.01	112.21	108.20
26	LA	363	G	N1-C2-N3	-5.01	120.90	123.90
26	LA	391	A	P-O5'-C5'	5.01	128.91	120.90
26	LA	565	C	N3-C2-O2	-5.01	118.39	121.90
26	LA	1126	A	C6-N1-C2	-5.01	115.60	118.60
26	LA	1581	G	P-O3'-C3'	5.01	125.71	119.70
26	LA	1668	A	O4'-C4'-C3'	5.01	110.11	106.10
26	LA	1743	G	C6-C5-N7	-5.01	127.40	130.40
26	LA	2310	C	C1'-O4'-C4'	-5.01	105.89	109.90
26	LA	2567	G	C5-N7-C8	-5.01	101.80	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	2599	G	N7-C8-N9	-5.01	110.60	113.10
54	LM	30	ARG	CB-CA-C	-5.01	100.39	110.40
2	SA	48	C	P-O3'-C3'	5.00	125.71	119.70
2	SA	205	A	C2'-C3'-O3'	5.00	121.71	113.70
2	SA	232	G	C4-C5-N7	-5.00	108.80	110.80
2	SA	749	A	C2-N3-C4	5.00	113.10	110.60
2	SA	812	G	C5'-C4'-C3'	-5.00	107.99	116.00
2	SA	812	G	N1-C6-O6	5.00	122.90	119.90
2	SA	1083	U	N1-C2-O2	5.00	126.30	122.80
2	SA	1116	U	C5'-C4'-O4'	5.00	115.11	109.10
3	S1	35	G	C5-C6-O6	-5.00	125.60	128.60
4	S2	34	U	OP1-P-OP2	-5.00	112.09	119.60
24	S3	484	LYS	N-CA-CB	5.00	119.61	110.60
26	LA	8	C	C5'-C4'-O4'	5.00	115.11	109.10
26	LA	18	U	O4'-C1'-C2'	-5.00	100.80	105.80
26	LA	775	G	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	856	G	N7-C8-N9	-5.00	110.60	113.10
26	LA	1315	C	C6-N1-C2	-5.00	118.30	120.30
26	LA	1609	A	N7-C8-N9	-5.00	111.30	113.80
26	LA	2000	C	C5-C6-N1	-5.00	118.50	121.00
26	LA	2074	U	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	2377	A	OP1-P-OP2	-5.00	112.09	119.60
26	LA	2673	G	N9-C1'-C2'	-5.00	106.49	112.00
26	LA	2812	G	C5-C6-N1	5.00	114.00	111.50
2	SA	201	G	O4'-C1'-N9	5.00	112.20	108.20
2	SA	261	U	C4'-C3'-C2'	-5.00	97.60	102.60
2	SA	275	G	N1-C2-N3	-5.00	120.90	123.90
2	SA	894	G	C5'-C4'-C3'	-5.00	107.99	116.00
2	SA	913	A	N1-C6-N6	-5.00	115.60	118.60
2	SA	1351	U	C5'-C4'-C3'	5.00	124.00	116.00
2	SA	1408	A	N3-C4-C5	5.00	130.30	126.80
5	ST	68	LYS	N-CA-CB	-5.00	101.59	110.60
10	SJ	72	ARG	O-C-N	-5.00	114.69	122.70
24	S3	323	ILE	N-CA-C	-5.00	97.49	111.00
25	LB	103	U	OP2-P-O3'	5.00	116.21	105.20
25	LB	105	G	N3-C2-N2	5.00	123.40	119.90
26	LA	87	U	C5'-C4'-O4'	5.00	115.11	109.10
26	LA	739	A	C4-C5-C6	-5.00	114.50	117.00
26	LA	884	U	OP1-P-OP2	-5.00	112.10	119.60
26	LA	951	C	N3-C4-N4	5.00	121.50	118.00
26	LA	1156	A	C5-C6-N1	5.00	120.20	117.70
26	LA	1214	A	C5-N7-C8	-5.00	101.40	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	LA	1361	G	P-O3'-C3'	-5.00	113.70	119.70
26	LA	1510	G	N7-C8-N9	5.00	115.60	113.10
26	LA	1908	C	O4'-C1'-N1	5.00	112.20	108.20
26	LA	1929	G	N3-C2-N2	-5.00	116.40	119.90
26	LA	2266	A	C4-C5-N7	5.00	113.20	110.70
26	LA	2339	C	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	2483	C	C5'-C4'-O4'	5.00	115.10	109.10
26	LA	2840	C	C5-C6-N1	5.00	123.50	121.00
26	LA	2872	A	C2-N3-C4	5.00	113.10	110.60
32	LY	44	PHE	CB-CA-C	-5.00	100.39	110.40
50	LL	119	PHE	CB-CA-C	5.00	120.41	110.40
2	SA	813	U	C5-C6-N1	5.00	125.20	122.70
2	SA	954	G	N1-C2-N2	-5.00	111.70	116.20
3	S1	33	A	OP1-P-O3'	5.00	116.20	105.20
4	S2	9	G	C4-N9-C1'	5.00	133.00	126.50
25	LB	13	G	C6-N1-C2	5.00	128.10	125.10
25	LB	109	A	O3'-P-O5'	-5.00	94.50	104.00
26	LA	47	C	C4-C5-C6	-5.00	114.90	117.40
26	LA	133	U	O5'-C5'-C4'	-5.00	102.20	111.70
26	LA	317	G	C5-N7-C8	5.00	106.80	104.30
26	LA	442	G	O5'-P-OP1	-5.00	101.20	105.70
26	LA	471	A	C2'-C3'-O3'	5.00	121.70	113.70
26	LA	675	A	C5-N7-C8	5.00	106.40	103.90
26	LA	753	A	N7-C8-N9	5.00	116.30	113.80
26	LA	886	A	P-O5'-C5'	5.00	128.90	120.90
26	LA	1527	G	OP1-P-OP2	-5.00	112.10	119.60
26	LA	1625	C	C5'-C4'-C3'	-5.00	108.00	116.00
26	LA	1876	A	C1'-O4'-C4'	-5.00	105.90	109.90
26	LA	1990	C	N3-C2-O2	-5.00	118.40	121.90
26	LA	2769	U	C5'-C4'-O4'	5.00	115.10	109.10
26	LA	2795	C	C2-N1-C1'	-5.00	113.30	118.80
26	LA	2903	U	N1-C2-N3	5.00	117.90	114.90
44	LF	40	ARG	NE-CZ-NH1	5.00	122.80	120.30
55	LQ	9	ARG	NE-CZ-NH1	5.00	122.80	120.30
58	LT	37	GLU	CA-C-O	5.00	130.60	120.10

All (5) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
26	LA	2451	A	C1'
26	LA	2503	A	C2'
26	LA	2504	U	C3',C2'

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Mol	Chain	Res	Type	Atom
26	LA	2575	C	C4'

All (3608) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
34	L0	52	ARG	Sidechain
34	L0	7	ARG	Sidechain
35	L1	15	ARG	Sidechain
35	L1	33	HIS	Sidechain
35	L1	44	ARG	Sidechain
36	L2	19	GLY	Peptide
36	L2	24	ILE	Peptide
36	L2	41	HIS	Sidechain
36	L2	43	PHE	Peptide
36	L2	49	ARG	Sidechain
36	L2	51	VAL	Peptide
36	L2	56	ARG	Sidechain
36	L2	63	ARG	Sidechain
36	L2	9	TYR	Sidechain
39	L3	15	ARG	Sidechain
39	L3	36	LYS	Mainchain
39	L3	40	HIS	Sidechain
39	L3	47	TYR	Sidechain
39	L3	49	ARG	Sidechain
40	L4	20	TYR	Sidechain
40	L4	27	ARG	Sidechain
40	L4	49	LYS	Peptide
40	L4	50	GLU	Peptide
41	L5	19	ARG	Sidechain
41	L5	28	ARG	Sidechain
41	L5	3	ARG	Sidechain
41	L5	34	ARG	Sidechain
41	L5	35	ARG	Sidechain
41	L5	39	ARG	Sidechain
41	L5	6	GLN	Peptide
42	L6	31	ILE	Peptide
42	L6	7	ARG	Sidechain
43	L7	12	ARG	Sidechain
43	L7	19	ARG	Sidechain
43	L7	31	PRO	Peptide
43	L7	36	ARG	Sidechain
26	LA	10	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1000	A	Sidechain
26	LA	1001	A	Sidechain
26	LA	1002	G	Sidechain
26	LA	1003	G	Sidechain
26	LA	1004	U	Sidechain
26	LA	1005	C	Sidechain
26	LA	1006	C	Sidechain
26	LA	1007	C	Sidechain
26	LA	1008	A	Sidechain
26	LA	1009	A	Sidechain
26	LA	101	A	Sidechain
26	LA	1010	A	Sidechain
26	LA	1011	G	Sidechain
26	LA	1012	U	Sidechain
26	LA	1013	C	Sidechain
26	LA	1016	G	Sidechain
26	LA	1017	G	Sidechain
26	LA	1019	U	Sidechain
26	LA	1021	A	Sidechain
26	LA	1022	G	Sidechain
26	LA	1023	U	Sidechain
26	LA	1024	G	Sidechain
26	LA	1025	G	Sidechain
26	LA	1026	G	Sidechain
26	LA	1027	A	Sidechain
26	LA	1028	A	Sidechain
26	LA	1029	A	Sidechain
26	LA	1030	C	Sidechain
26	LA	1031	G	Sidechain
26	LA	1032	A	Sidechain
26	LA	1033	U	Sidechain
26	LA	1034	G	Sidechain
26	LA	1035	U	Sidechain
26	LA	1036	G	Sidechain
26	LA	1037	G	Sidechain
26	LA	104	A	Sidechain
26	LA	1044	C	Sidechain
26	LA	1045	C	Sidechain
26	LA	1046	A	Sidechain
26	LA	1047	G	Sidechain
26	LA	1048	A	Sidechain
26	LA	1049	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1051	G	Sidechain
26	LA	1052	C	Sidechain
26	LA	1054	A	Sidechain
26	LA	1055	G	Sidechain
26	LA	1056	G	Sidechain
26	LA	1057	A	Sidechain
26	LA	1058	U	Sidechain
26	LA	1059	G	Sidechain
26	LA	106	C	Sidechain
26	LA	1060	U	Sidechain
26	LA	1061	U	Sidechain
26	LA	1063	G	Sidechain
26	LA	1065	U	Sidechain
26	LA	1066	U	Sidechain
26	LA	1068	G	Sidechain
26	LA	1072	C	Sidechain
26	LA	1074	G	Sidechain
26	LA	1076	C	Sidechain
26	LA	1077	A	Sidechain
26	LA	1080	A	Sidechain
26	LA	1082	U	Sidechain
26	LA	1083	U	Sidechain
26	LA	1084	A	Sidechain
26	LA	1085	A	Sidechain
26	LA	1086	A	Sidechain
26	LA	1087	G	Sidechain
26	LA	1090	A	Sidechain
26	LA	1091	G	Sidechain
26	LA	1094	U	Sidechain
26	LA	1095	A	Sidechain
26	LA	1096	A	Sidechain
26	LA	1097	U	Sidechain
26	LA	1099	G	Sidechain
26	LA	11	C	Sidechain
26	LA	110	G	Sidechain
26	LA	1101	U	Sidechain
26	LA	1104	C	Sidechain
26	LA	1105	U	Sidechain
26	LA	1107	G	Sidechain
26	LA	1109	C	Sidechain
26	LA	1110	G	Sidechain
26	LA	1112	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1114	C	Sidechain
26	LA	1116	G	Sidechain
26	LA	1117	C	Sidechain
26	LA	1118	C	Sidechain
26	LA	112	U	Sidechain
26	LA	1123	C	Sidechain
26	LA	1125	G	Sidechain
26	LA	1126	A	Sidechain
26	LA	1128	G	Sidechain
26	LA	113	U	Sidechain
26	LA	1131	G	Sidechain
26	LA	1132	U	Sidechain
26	LA	1134	A	Sidechain
26	LA	1135	C	Sidechain
26	LA	1136	G	Sidechain
26	LA	1137	G	Sidechain
26	LA	1138	G	Sidechain
26	LA	1139	G	Sidechain
26	LA	114	U	Sidechain
26	LA	1140	C	Sidechain
26	LA	1141	U	Sidechain
26	LA	1143	A	Sidechain
26	LA	1144	A	Sidechain
26	LA	1147	A	Sidechain
26	LA	1148	U	Sidechain
26	LA	115	C	Sidechain
26	LA	1150	C	Sidechain
26	LA	1152	C	Sidechain
26	LA	1154	G	Sidechain
26	LA	1155	A	Sidechain
26	LA	1158	C	Sidechain
26	LA	1159	U	Sidechain
26	LA	1162	G	Sidechain
26	LA	1163	G	Sidechain
26	LA	1164	C	Sidechain
26	LA	1165	A	Sidechain
26	LA	1166	G	Sidechain
26	LA	1169	A	Sidechain
26	LA	117	G	Sidechain
26	LA	1171	G	Sidechain
26	LA	1172	C	Sidechain
26	LA	1173	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1174	U	Sidechain
26	LA	1177	G	Sidechain
26	LA	118	A	Sidechain
26	LA	1180	U	Sidechain
26	LA	1182	G	Sidechain
26	LA	1183	U	Sidechain
26	LA	1184	U	Sidechain
26	LA	1186	G	Sidechain
26	LA	1188	U	Sidechain
26	LA	1189	A	Sidechain
26	LA	1191	G	Sidechain
26	LA	1192	G	Sidechain
26	LA	1193	G	Sidechain
26	LA	1194	A	Sidechain
26	LA	1195	G	Sidechain
26	LA	1197	G	Sidechain
26	LA	1198	U	Sidechain
26	LA	1199	U	Sidechain
26	LA	12	U	Sidechain
26	LA	120	U	Sidechain
26	LA	1201	U	Sidechain
26	LA	1202	G	Sidechain
26	LA	1203	U	Sidechain
26	LA	1204	A	Sidechain
26	LA	1206	G	Sidechain
26	LA	1207	C	Sidechain
26	LA	1209	U	Sidechain
26	LA	121	G	Sidechain
26	LA	1210	G	Sidechain
26	LA	1211	C	Sidechain
26	LA	1212	G	Sidechain
26	LA	1213	A	Sidechain
26	LA	1214	A	Sidechain
26	LA	1215	G	Sidechain
26	LA	1216	G	Sidechain
26	LA	1217	U	Sidechain
26	LA	122	G	Sidechain
26	LA	1222	U	Sidechain
26	LA	1223	G	Sidechain
26	LA	1224	U	Sidechain
26	LA	1225	G	Sidechain
26	LA	1227	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1229	C	Sidechain
26	LA	1231	U	Sidechain
26	LA	1232	G	Sidechain
26	LA	1233	C	Sidechain
26	LA	1234	U	Sidechain
26	LA	1235	G	Sidechain
26	LA	124	G	Sidechain
26	LA	1240	U	Sidechain
26	LA	1241	A	Sidechain
26	LA	1242	U	Sidechain
26	LA	1243	C	Sidechain
26	LA	1245	G	Sidechain
26	LA	1247	A	Sidechain
26	LA	1249	U	Sidechain
26	LA	125	A	Sidechain
26	LA	1250	G	Sidechain
26	LA	1251	C	Sidechain
26	LA	1252	G	Sidechain
26	LA	1253	A	Sidechain
26	LA	1257	C	Sidechain
26	LA	1258	U	Sidechain
26	LA	1259	G	Sidechain
26	LA	126	A	Sidechain
26	LA	1260	A	Sidechain
26	LA	1261	C	Sidechain
26	LA	1262	A	Sidechain
26	LA	1265	A	Sidechain
26	LA	1267	U	Sidechain
26	LA	1268	A	Sidechain
26	LA	1269	A	Sidechain
26	LA	1270	C	Sidechain
26	LA	1271	G	Sidechain
26	LA	1273	U	Sidechain
26	LA	1274	A	Sidechain
26	LA	1275	A	Sidechain
26	LA	1276	A	Sidechain
26	LA	1277	G	Sidechain
26	LA	1278	C	Sidechain
26	LA	1280	G	Sidechain
26	LA	1281	G	Sidechain
26	LA	1282	U	Sidechain
26	LA	1284	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1285	A	Sidechain
26	LA	1286	A	Sidechain
26	LA	1288	G	Sidechain
26	LA	1289	C	Sidechain
26	LA	129	C	Sidechain
26	LA	1291	C	Sidechain
26	LA	1292	G	Sidechain
26	LA	1293	C	Sidechain
26	LA	1294	U	Sidechain
26	LA	1295	C	Sidechain
26	LA	1296	G	Sidechain
26	LA	1298	C	Sidechain
26	LA	1299	G	Sidechain
26	LA	13	A	Sidechain
26	LA	1302	A	Sidechain
26	LA	1304	A	Sidechain
26	LA	1307	A	Sidechain
26	LA	1310	G	Sidechain
26	LA	1311	G	Sidechain
26	LA	1312	U	Sidechain
26	LA	1315	C	Sidechain
26	LA	132	G	Sidechain
26	LA	1322	A	Sidechain
26	LA	1323	C	Sidechain
26	LA	1324	G	Sidechain
26	LA	1325	U	Sidechain
26	LA	1326	U	Sidechain
26	LA	1327	A	Sidechain
26	LA	1329	U	Sidechain
26	LA	133	U	Sidechain
26	LA	1330	C	Sidechain
26	LA	1331	G	Sidechain
26	LA	1332	G	Sidechain
26	LA	1335	C	Sidechain
26	LA	1337	G	Sidechain
26	LA	1339	G	Sidechain
26	LA	134	G	Sidechain
26	LA	1342	A	Sidechain
26	LA	1343	G	Sidechain
26	LA	1344	U	Sidechain
26	LA	1346	G	Sidechain
26	LA	1349	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	135	U	Sidechain
26	LA	1350	C	Sidechain
26	LA	1351	C	Sidechain
26	LA	1352	U	Sidechain
26	LA	1353	A	Sidechain
26	LA	1354	A	Sidechain
26	LA	1355	G	Sidechain
26	LA	1357	C	Sidechain
26	LA	1358	G	Sidechain
26	LA	136	G	Sidechain
26	LA	1360	G	Sidechain
26	LA	1361	G	Sidechain
26	LA	1362	C	Sidechain
26	LA	1363	C	Sidechain
26	LA	1364	G	Sidechain
26	LA	1366	A	Sidechain
26	LA	1368	G	Sidechain
26	LA	1371	G	Sidechain
26	LA	1372	U	Sidechain
26	LA	1373	A	Sidechain
26	LA	1374	G	Sidechain
26	LA	1376	C	Sidechain
26	LA	1377	G	Sidechain
26	LA	1378	A	Sidechain
26	LA	1379	U	Sidechain
26	LA	138	U	Sidechain
26	LA	1380	G	Sidechain
26	LA	1381	G	Sidechain
26	LA	1383	A	Sidechain
26	LA	1384	A	Sidechain
26	LA	1385	A	Sidechain
26	LA	1387	A	Sidechain
26	LA	1388	G	Sidechain
26	LA	1389	G	Sidechain
26	LA	139	U	Sidechain
26	LA	1390	U	Sidechain
26	LA	1393	A	Sidechain
26	LA	1394	U	Sidechain
26	LA	1399	C	Sidechain
26	LA	14	A	Sidechain
26	LA	140	C	Sidechain
26	LA	1402	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1405	U	Sidechain
26	LA	1406	U	Sidechain
26	LA	1407	G	Sidechain
26	LA	1408	G	Sidechain
26	LA	1409	U	Sidechain
26	LA	141	G	Sidechain
26	LA	1410	G	Sidechain
26	LA	1411	U	Sidechain
26	LA	1413	A	Sidechain
26	LA	1415	U	Sidechain
26	LA	1418	G	Sidechain
26	LA	1419	A	Sidechain
26	LA	142	A	Sidechain
26	LA	1421	G	Sidechain
26	LA	1422	G	Sidechain
26	LA	1423	G	Sidechain
26	LA	1424	G	Sidechain
26	LA	1425	G	Sidechain
26	LA	1426	G	Sidechain
26	LA	1427	A	Sidechain
26	LA	1429	G	Sidechain
26	LA	1432	G	Sidechain
26	LA	1433	A	Sidechain
26	LA	1434	A	Sidechain
26	LA	1435	G	Sidechain
26	LA	1436	G	Sidechain
26	LA	1438	U	Sidechain
26	LA	1439	A	Sidechain
26	LA	144	A	Sidechain
26	LA	1440	U	Sidechain
26	LA	1441	G	Sidechain
26	LA	1442	U	Sidechain
26	LA	1443	U	Sidechain
26	LA	1445	G	Sidechain
26	LA	1447	C	Sidechain
26	LA	1448	G	Sidechain
26	LA	1450	G	Sidechain
26	LA	1452	G	Sidechain
26	LA	1453	A	Sidechain
26	LA	1454	C	Sidechain
26	LA	1455	G	Sidechain
26	LA	1456	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1457	U	Sidechain
26	LA	1458	U	Sidechain
26	LA	1459	G	Sidechain
26	LA	146	A	Sidechain
26	LA	1461	C	Sidechain
26	LA	1463	C	Sidechain
26	LA	1464	G	Sidechain
26	LA	1465	G	Sidechain
26	LA	1467	U	Sidechain
26	LA	1469	A	Sidechain
26	LA	1471	G	Sidechain
26	LA	1473	G	Sidechain
26	LA	1474	U	Sidechain
26	LA	1475	G	Sidechain
26	LA	1476	U	Sidechain
26	LA	1477	A	Sidechain
26	LA	1483	G	Sidechain
26	LA	1484	U	Sidechain
26	LA	1485	U	Sidechain
26	LA	1487	U	Sidechain
26	LA	1489	C	Sidechain
26	LA	1490	A	Sidechain
26	LA	1491	G	Sidechain
26	LA	1495	A	Sidechain
26	LA	1498	C	Sidechain
26	LA	15	G	Sidechain
26	LA	1500	G	Sidechain
26	LA	1502	A	Sidechain
26	LA	1503	A	Sidechain
26	LA	1505	A	Sidechain
26	LA	1509	A	Sidechain
26	LA	1510	G	Sidechain
26	LA	1511	G	Sidechain
26	LA	1513	U	Sidechain
26	LA	1514	G	Sidechain
26	LA	1515	A	Sidechain
26	LA	1516	G	Sidechain
26	LA	152	A	Sidechain
26	LA	1520	U	Sidechain
26	LA	1521	G	Sidechain
26	LA	1522	A	Sidechain
26	LA	1528	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	153	U	Sidechain
26	LA	1530	G	Sidechain
26	LA	1531	C	Sidechain
26	LA	1532	A	Sidechain
26	LA	1534	U	Sidechain
26	LA	1535	A	Sidechain
26	LA	1537	G	Sidechain
26	LA	1538	G	Sidechain
26	LA	1539	U	Sidechain
26	LA	154	U	Sidechain
26	LA	1540	G	Sidechain
26	LA	1541	C	Sidechain
26	LA	1542	U	Sidechain
26	LA	1544	A	Sidechain
26	LA	1545	A	Sidechain
26	LA	1546	G	Sidechain
26	LA	1548	A	Sidechain
26	LA	155	A	Sidechain
26	LA	1550	C	Sidechain
26	LA	1552	A	Sidechain
26	LA	1554	U	Sidechain
26	LA	1555	G	Sidechain
26	LA	1557	C	Sidechain
26	LA	1558	C	Sidechain
26	LA	1559	U	Sidechain
26	LA	1560	G	Sidechain
26	LA	1562	U	Sidechain
26	LA	1564	C	Sidechain
26	LA	1565	C	Sidechain
26	LA	1567	G	Sidechain
26	LA	1568	G	Sidechain
26	LA	1569	A	Sidechain
26	LA	157	C	Sidechain
26	LA	1571	A	Sidechain
26	LA	1573	G	Sidechain
26	LA	1574	C	Sidechain
26	LA	1576	U	Sidechain
26	LA	1577	C	Sidechain
26	LA	158	U	Sidechain
26	LA	1580	A	Sidechain
26	LA	1582	C	Sidechain
26	LA	1587	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1588	G	Sidechain
26	LA	159	G	Sidechain
26	LA	1590	A	Sidechain
26	LA	1594	U	Sidechain
26	LA	1595	C	Sidechain
26	LA	1597	A	Sidechain
26	LA	160	A	Sidechain
26	LA	1603	A	Sidechain
26	LA	1607	C	Sidechain
26	LA	1608	A	Sidechain
26	LA	161	A	Sidechain
26	LA	1610	A	Sidechain
26	LA	1612	C	Sidechain
26	LA	1613	G	Sidechain
26	LA	1618	C	Sidechain
26	LA	162	U	Sidechain
26	LA	1620	G	Sidechain
26	LA	1623	G	Sidechain
26	LA	1627	G	Sidechain
26	LA	1628	G	Sidechain
26	LA	1629	U	Sidechain
26	LA	1630	A	Sidechain
26	LA	1631	G	Sidechain
26	LA	1632	A	Sidechain
26	LA	1633	G	Sidechain
26	LA	1634	A	Sidechain
26	LA	1636	U	Sidechain
26	LA	1638	C	Sidechain
26	LA	1639	C	Sidechain
26	LA	1641	A	Sidechain
26	LA	1642	G	Sidechain
26	LA	1643	G	Sidechain
26	LA	1644	C	Sidechain
26	LA	1646	C	Sidechain
26	LA	1647	U	Sidechain
26	LA	1648	U	Sidechain
26	LA	1649	G	Sidechain
26	LA	1651	G	Sidechain
26	LA	1653	G	Sidechain
26	LA	1654	A	Sidechain
26	LA	1655	A	Sidechain
26	LA	1656	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1658	C	Sidechain
26	LA	1659	G	Sidechain
26	LA	166	U	Sidechain
26	LA	1660	G	Sidechain
26	LA	1661	G	Sidechain
26	LA	1662	U	Sidechain
26	LA	1663	G	Sidechain
26	LA	1664	A	Sidechain
26	LA	1666	G	Sidechain
26	LA	1667	G	Sidechain
26	LA	1668	A	Sidechain
26	LA	167	A	Sidechain
26	LA	1671	U	Sidechain
26	LA	1674	G	Sidechain
26	LA	1675	C	Sidechain
26	LA	1676	A	Sidechain
26	LA	1677	A	Sidechain
26	LA	1678	A	Sidechain
26	LA	1680	U	Sidechain
26	LA	1681	G	Sidechain
26	LA	1683	U	Sidechain
26	LA	1685	C	Sidechain
26	LA	1686	C	Sidechain
26	LA	1687	G	Sidechain
26	LA	1688	U	Sidechain
26	LA	1689	A	Sidechain
26	LA	1692	U	Sidechain
26	LA	1694	C	Sidechain
26	LA	1695	G	Sidechain
26	LA	1696	G	Sidechain
26	LA	1697	G	Sidechain
26	LA	1698	A	Sidechain
26	LA	1699	G	Sidechain
26	LA	17	G	Sidechain
26	LA	170	U	Sidechain
26	LA	1701	A	Sidechain
26	LA	1702	G	Sidechain
26	LA	1703	G	Sidechain
26	LA	1705	A	Sidechain
26	LA	1706	C	Sidechain
26	LA	1707	G	Sidechain
26	LA	1708	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1709	U	Sidechain
26	LA	171	U	Sidechain
26	LA	1710	G	Sidechain
26	LA	1711	A	Sidechain
26	LA	1713	A	Sidechain
26	LA	1714	U	Sidechain
26	LA	1715	G	Sidechain
26	LA	1717	A	Sidechain
26	LA	1718	G	Sidechain
26	LA	1719	G	Sidechain
26	LA	1720	U	Sidechain
26	LA	1723	G	Sidechain
26	LA	1724	G	Sidechain
26	LA	1726	C	Sidechain
26	LA	1727	C	Sidechain
26	LA	173	A	Sidechain
26	LA	1730	C	Sidechain
26	LA	1731	G	Sidechain
26	LA	1732	C	Sidechain
26	LA	1736	U	Sidechain
26	LA	1737	G	Sidechain
26	LA	1738	G	Sidechain
26	LA	174	U	Sidechain
26	LA	1741	C	Sidechain
26	LA	1742	U	Sidechain
26	LA	1743	G	Sidechain
26	LA	1744	A	Sidechain
26	LA	1745	A	Sidechain
26	LA	1746	A	Sidechain
26	LA	1747	U	Sidechain
26	LA	1748	C	Sidechain
26	LA	1751	U	Sidechain
26	LA	1752	C	Sidechain
26	LA	1753	G	Sidechain
26	LA	1754	A	Sidechain
26	LA	1755	A	Sidechain
26	LA	1758	U	Sidechain
26	LA	1759	A	Sidechain
26	LA	176	A	Sidechain
26	LA	1760	C	Sidechain
26	LA	1762	A	Sidechain
26	LA	1763	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1765	U	Sidechain
26	LA	1766	G	Sidechain
26	LA	1768	C	Sidechain
26	LA	1769	U	Sidechain
26	LA	1770	G	Sidechain
26	LA	1771	C	Sidechain
26	LA	1775	U	Sidechain
26	LA	1776	G	Sidechain
26	LA	1777	U	Sidechain
26	LA	1779	U	Sidechain
26	LA	178	G	Sidechain
26	LA	1781	U	Sidechain
26	LA	1782	U	Sidechain
26	LA	1783	A	Sidechain
26	LA	1784	A	Sidechain
26	LA	1785	A	Sidechain
26	LA	1786	A	Sidechain
26	LA	1787	A	Sidechain
26	LA	179	C	Sidechain
26	LA	1790	C	Sidechain
26	LA	1791	A	Sidechain
26	LA	1792	G	Sidechain
26	LA	1794	A	Sidechain
26	LA	1796	U	Sidechain
26	LA	1798	U	Sidechain
26	LA	1799	G	Sidechain
26	LA	180	G	Sidechain
26	LA	1800	C	Sidechain
26	LA	1802	A	Sidechain
26	LA	1804	C	Sidechain
26	LA	1805	A	Sidechain
26	LA	1807	G	Sidechain
26	LA	1808	A	Sidechain
26	LA	1809	A	Sidechain
26	LA	181	A	Sidechain
26	LA	1810	A	Sidechain
26	LA	1811	G	Sidechain
26	LA	1812	U	Sidechain
26	LA	1813	G	Sidechain
26	LA	1814	G	Sidechain
26	LA	1816	C	Sidechain
26	LA	1817	G	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	1818	U	Sidechain
26	LA	1819	A	Sidechain
26	LA	182	A	Sidechain
26	LA	1821	A	Sidechain
26	LA	1822	C	Sidechain
26	LA	1824	G	Sidechain
26	LA	1825	U	Sidechain
26	LA	1826	G	Sidechain
26	LA	1827	U	Sidechain
26	LA	1828	G	Sidechain
26	LA	1829	A	Sidechain
26	LA	183	C	Sidechain
26	LA	1830	C	Sidechain
26	LA	1831	G	Sidechain
26	LA	1833	C	Sidechain
26	LA	1834	U	Sidechain
26	LA	1835	G	Sidechain
26	LA	1836	C	Sidechain
26	LA	1837	C	Sidechain
26	LA	1838	C	Sidechain
26	LA	1839	G	Sidechain
26	LA	1840	G	Sidechain
26	LA	1841	U	Sidechain
26	LA	1845	G	Sidechain
26	LA	1846	G	Sidechain
26	LA	1847	A	Sidechain
26	LA	1848	A	Sidechain
26	LA	1849	G	Sidechain
26	LA	185	G	Sidechain
26	LA	1850	G	Sidechain
26	LA	1851	U	Sidechain
26	LA	1852	U	Sidechain
26	LA	1853	A	Sidechain
26	LA	1854	A	Sidechain
26	LA	1855	U	Sidechain
26	LA	1856	U	Sidechain
26	LA	1857	G	Sidechain
26	LA	1859	U	Sidechain
26	LA	186	G	Sidechain
26	LA	1861	G	Sidechain
26	LA	1863	G	Sidechain
26	LA	1864	U	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	1865	U	Sidechain
26	LA	1866	A	Sidechain
26	LA	1867	G	Sidechain
26	LA	1869	G	Sidechain
26	LA	1872	A	Sidechain
26	LA	1873	G	Sidechain
26	LA	1875	G	Sidechain
26	LA	1876	A	Sidechain
26	LA	1878	G	Sidechain
26	LA	188	G	Sidechain
26	LA	1881	C	Sidechain
26	LA	1882	U	Sidechain
26	LA	1883	U	Sidechain
26	LA	1884	G	Sidechain
26	LA	1885	A	Sidechain
26	LA	1886	U	Sidechain
26	LA	1888	G	Sidechain
26	LA	1889	A	Sidechain
26	LA	189	G	Sidechain
26	LA	1890	A	Sidechain
26	LA	1891	G	Sidechain
26	LA	1893	C	Sidechain
26	LA	1894	C	Sidechain
26	LA	1896	G	Sidechain
26	LA	1897	G	Sidechain
26	LA	1898	U	Sidechain
26	LA	1899	A	Sidechain
26	LA	19	A	Sidechain
26	LA	190	A	Sidechain
26	LA	1900	A	Sidechain
26	LA	1902	C	Sidechain
26	LA	1904	G	Sidechain
26	LA	1906	G	Sidechain
26	LA	1907	G	Sidechain
26	LA	1909	C	Sidechain
26	LA	191	A	Sidechain
26	LA	1910	G	Sidechain
26	LA	1914	C	Sidechain
26	LA	1915	C	Sidechain
26	LA	1916	A	Sidechain
26	LA	1917	U	Sidechain
26	LA	1919	A	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	192	C	Sidechain
26	LA	1921	G	Sidechain
26	LA	1922	G	Sidechain
26	LA	1923	U	Sidechain
26	LA	1924	C	Sidechain
26	LA	1926	U	Sidechain
26	LA	1927	A	Sidechain
26	LA	1928	A	Sidechain
26	LA	1929	G	Sidechain
26	LA	193	U	Sidechain
26	LA	1930	G	Sidechain
26	LA	1931	U	Sidechain
26	LA	1932	A	Sidechain
26	LA	1933	G	Sidechain
26	LA	1935	G	Sidechain
26	LA	1936	A	Sidechain
26	LA	1939	U	Sidechain
26	LA	194	G	Sidechain
26	LA	1941	C	Sidechain
26	LA	1945	G	Sidechain
26	LA	1946	U	Sidechain
26	LA	1947	C	Sidechain
26	LA	1948	G	Sidechain
26	LA	1949	G	Sidechain
26	LA	195	A	Sidechain
26	LA	1950	G	Sidechain
26	LA	1951	U	Sidechain
26	LA	1952	A	Sidechain
26	LA	1953	A	Sidechain
26	LA	1954	G	Sidechain
26	LA	1955	U	Sidechain
26	LA	1956	U	Sidechain
26	LA	1957	C	Sidechain
26	LA	196	A	Sidechain
26	LA	1960	A	Sidechain
26	LA	1961	C	Sidechain
26	LA	1962	C	Sidechain
26	LA	1963	U	Sidechain
26	LA	1964	G	Sidechain
26	LA	1966	A	Sidechain
26	LA	1968	G	Sidechain
26	LA	197	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	1971	U	Sidechain
26	LA	1972	G	Sidechain
26	LA	1973	G	Sidechain
26	LA	1975	G	Sidechain
26	LA	1976	U	Sidechain
26	LA	1977	A	Sidechain
26	LA	1978	A	Sidechain
26	LA	1979	U	Sidechain
26	LA	198	C	Sidechain
26	LA	1981	A	Sidechain
26	LA	1982	U	Sidechain
26	LA	1983	G	Sidechain
26	LA	1984	G	Sidechain
26	LA	1985	C	Sidechain
26	LA	1988	G	Sidechain
26	LA	1990	C	Sidechain
26	LA	1992	G	Sidechain
26	LA	1993	U	Sidechain
26	LA	1996	C	Sidechain
26	LA	1997	C	Sidechain
26	LA	1998	A	Sidechain
26	LA	1999	C	Sidechain
26	LA	2	G	Sidechain
26	LA	200	U	Sidechain
26	LA	2000	C	Sidechain
26	LA	2001	C	Sidechain
26	LA	2004	G	Sidechain
26	LA	2005	A	Sidechain
26	LA	2006	C	Sidechain
26	LA	2008	C	Sidechain
26	LA	2010	G	Sidechain
26	LA	2011	U	Sidechain
26	LA	2014	A	Sidechain
26	LA	2015	A	Sidechain
26	LA	2016	U	Sidechain
26	LA	2017	U	Sidechain
26	LA	2018	G	Sidechain
26	LA	2019	A	Sidechain
26	LA	202	U	Sidechain
26	LA	2022	U	Sidechain
26	LA	2023	C	Sidechain
26	LA	2024	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2025	C	Sidechain
26	LA	2030	U	Sidechain
26	LA	2031	A	Sidechain
26	LA	2032	G	Sidechain
26	LA	2033	A	Sidechain
26	LA	2034	U	Sidechain
26	LA	2035	G	Sidechain
26	LA	2036	C	Sidechain
26	LA	2037	A	Sidechain
26	LA	2038	G	Sidechain
26	LA	2039	U	Sidechain
26	LA	204	A	Sidechain
26	LA	2041	U	Sidechain
26	LA	2042	A	Sidechain
26	LA	2044	C	Sidechain
26	LA	2045	C	Sidechain
26	LA	2046	G	Sidechain
26	LA	2047	C	Sidechain
26	LA	2048	G	Sidechain
26	LA	2049	G	Sidechain
26	LA	205	G	Sidechain
26	LA	2050	C	Sidechain
26	LA	2053	G	Sidechain
26	LA	2055	C	Sidechain
26	LA	2056	G	Sidechain
26	LA	2057	G	Sidechain
26	LA	2059	A	Sidechain
26	LA	206	U	Sidechain
26	LA	2060	A	Sidechain
26	LA	2061	G	Sidechain
26	LA	2062	A	Sidechain
26	LA	2064	C	Sidechain
26	LA	2065	C	Sidechain
26	LA	2066	C	Sidechain
26	LA	2068	U	Sidechain
26	LA	2070	A	Sidechain
26	LA	2071	A	Sidechain
26	LA	2072	C	Sidechain
26	LA	2074	U	Sidechain
26	LA	2077	A	Sidechain
26	LA	2079	U	Sidechain
26	LA	2083	G	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	2084	C	Sidechain
26	LA	2085	U	Sidechain
26	LA	2086	U	Sidechain
26	LA	2087	G	Sidechain
26	LA	2088	A	Sidechain
26	LA	2089	C	Sidechain
26	LA	209	C	Sidechain
26	LA	2090	A	Sidechain
26	LA	2091	C	Sidechain
26	LA	2093	G	Sidechain
26	LA	2094	A	Sidechain
26	LA	2096	C	Sidechain
26	LA	2097	A	Sidechain
26	LA	2098	U	Sidechain
26	LA	2099	U	Sidechain
26	LA	2100	G	Sidechain
26	LA	2107	G	Sidechain
26	LA	2108	A	Sidechain
26	LA	211	C	Sidechain
26	LA	2110	G	Sidechain
26	LA	2111	U	Sidechain
26	LA	2112	G	Sidechain
26	LA	2115	G	Sidechain
26	LA	2116	G	Sidechain
26	LA	2117	A	Sidechain
26	LA	2118	U	Sidechain
26	LA	2119	A	Sidechain
26	LA	212	G	Sidechain
26	LA	2120	G	Sidechain
26	LA	2122	U	Sidechain
26	LA	2123	G	Sidechain
26	LA	2124	G	Sidechain
26	LA	2125	G	Sidechain
26	LA	2127	G	Sidechain
26	LA	2128	G	Sidechain
26	LA	2129	C	Sidechain
26	LA	213	A	Sidechain
26	LA	2130	U	Sidechain
26	LA	2131	U	Sidechain
26	LA	2132	U	Sidechain
26	LA	2133	G	Sidechain
26	LA	2135	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2136	G	Sidechain
26	LA	2138	G	Sidechain
26	LA	2139	U	Sidechain
26	LA	214	G	Sidechain
26	LA	2140	G	Sidechain
26	LA	2141	G	Sidechain
26	LA	2142	A	Sidechain
26	LA	2143	C	Sidechain
26	LA	2144	G	Sidechain
26	LA	2145	C	Sidechain
26	LA	2146	C	Sidechain
26	LA	2147	A	Sidechain
26	LA	2148	G	Sidechain
26	LA	2149	U	Sidechain
26	LA	215	G	Sidechain
26	LA	2151	U	Sidechain
26	LA	2152	G	Sidechain
26	LA	2154	A	Sidechain
26	LA	2156	G	Sidechain
26	LA	2159	G	Sidechain
26	LA	216	A	Sidechain
26	LA	2160	C	Sidechain
26	LA	2161	C	Sidechain
26	LA	2164	C	Sidechain
26	LA	2165	C	Sidechain
26	LA	2168	G	Sidechain
26	LA	2169	A	Sidechain
26	LA	2171	A	Sidechain
26	LA	2172	U	Sidechain
26	LA	2173	A	Sidechain
26	LA	2174	C	Sidechain
26	LA	2175	C	Sidechain
26	LA	2179	C	Sidechain
26	LA	218	A	Sidechain
26	LA	2182	U	Sidechain
26	LA	2183	A	Sidechain
26	LA	2184	A	Sidechain
26	LA	2185	U	Sidechain
26	LA	2186	G	Sidechain
26	LA	2187	U	Sidechain
26	LA	2188	U	Sidechain
26	LA	219	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2190	G	Sidechain
26	LA	2192	U	Sidechain
26	LA	2193	G	Sidechain
26	LA	2194	U	Sidechain
26	LA	2195	U	Sidechain
26	LA	2197	U	Sidechain
26	LA	2198	A	Sidechain
26	LA	2199	A	Sidechain
26	LA	22	C	Sidechain
26	LA	220	G	Sidechain
26	LA	2200	C	Sidechain
26	LA	2201	G	Sidechain
26	LA	2202	U	Sidechain
26	LA	2204	G	Sidechain
26	LA	2208	C	Sidechain
26	LA	2210	U	Sidechain
26	LA	2211	A	Sidechain
26	LA	2212	A	Sidechain
26	LA	2213	U	Sidechain
26	LA	2219	U	Sidechain
26	LA	222	A	Sidechain
26	LA	2220	U	Sidechain
26	LA	2221	G	Sidechain
26	LA	2222	C	Sidechain
26	LA	2223	G	Sidechain
26	LA	2224	G	Sidechain
26	LA	2226	C	Sidechain
26	LA	2227	A	Sidechain
26	LA	2228	G	Sidechain
26	LA	2229	U	Sidechain
26	LA	2230	G	Sidechain
26	LA	2231	U	Sidechain
26	LA	2233	U	Sidechain
26	LA	2234	G	Sidechain
26	LA	2235	G	Sidechain
26	LA	2236	U	Sidechain
26	LA	2238	G	Sidechain
26	LA	2239	G	Sidechain
26	LA	224	U	Sidechain
26	LA	2241	A	Sidechain
26	LA	2242	G	Sidechain
26	LA	2244	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2245	U	Sidechain
26	LA	2247	A	Sidechain
26	LA	225	C	Sidechain
26	LA	2250	G	Sidechain
26	LA	2251	U	Sidechain
26	LA	2252	G	Sidechain
26	LA	2253	G	Sidechain
26	LA	2254	C	Sidechain
26	LA	2255	G	Sidechain
26	LA	2256	G	Sidechain
26	LA	2259	U	Sidechain
26	LA	226	A	Sidechain
26	LA	2262	U	Sidechain
26	LA	2264	C	Sidechain
26	LA	2266	A	Sidechain
26	LA	2267	A	Sidechain
26	LA	2269	G	Sidechain
26	LA	227	A	Sidechain
26	LA	2270	A	Sidechain
26	LA	2271	G	Sidechain
26	LA	2272	U	Sidechain
26	LA	2273	A	Sidechain
26	LA	2274	A	Sidechain
26	LA	2275	C	Sidechain
26	LA	2277	G	Sidechain
26	LA	2278	A	Sidechain
26	LA	2280	G	Sidechain
26	LA	2281	A	Sidechain
26	LA	2282	G	Sidechain
26	LA	2283	C	Sidechain
26	LA	2287	A	Sidechain
26	LA	2288	A	Sidechain
26	LA	2289	G	Sidechain
26	LA	229	C	Sidechain
26	LA	2290	G	Sidechain
26	LA	2291	U	Sidechain
26	LA	2292	U	Sidechain
26	LA	2293	G	Sidechain
26	LA	2294	G	Sidechain
26	LA	2295	C	Sidechain
26	LA	2296	U	Sidechain
26	LA	2297	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	230	G	Sidechain
26	LA	2300	C	Sidechain
26	LA	2301	C	Sidechain
26	LA	2302	U	Sidechain
26	LA	2303	G	Sidechain
26	LA	2304	G	Sidechain
26	LA	2305	U	Sidechain
26	LA	2306	C	Sidechain
26	LA	2307	G	Sidechain
26	LA	2308	G	Sidechain
26	LA	2309	A	Sidechain
26	LA	2311	A	Sidechain
26	LA	2312	U	Sidechain
26	LA	2314	A	Sidechain
26	LA	2315	G	Sidechain
26	LA	2316	G	Sidechain
26	LA	2318	G	Sidechain
26	LA	2319	G	Sidechain
26	LA	2321	U	Sidechain
26	LA	2322	A	Sidechain
26	LA	2325	G	Sidechain
26	LA	2326	C	Sidechain
26	LA	2327	A	Sidechain
26	LA	2328	A	Sidechain
26	LA	2329	U	Sidechain
26	LA	2331	G	Sidechain
26	LA	2332	C	Sidechain
26	LA	2333	A	Sidechain
26	LA	2335	A	Sidechain
26	LA	2336	A	Sidechain
26	LA	2337	G	Sidechain
26	LA	234	U	Sidechain
26	LA	2340	A	Sidechain
26	LA	2343	U	Sidechain
26	LA	2344	U	Sidechain
26	LA	2345	G	Sidechain
26	LA	2346	A	Sidechain
26	LA	2349	G	Sidechain
26	LA	235	U	Sidechain
26	LA	2353	G	Sidechain
26	LA	2355	G	Sidechain
26	LA	2356	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2357	G	Sidechain
26	LA	2358	A	Sidechain
26	LA	236	C	Sidechain
26	LA	2360	G	Sidechain
26	LA	2361	G	Sidechain
26	LA	2362	C	Sidechain
26	LA	2363	G	Sidechain
26	LA	2364	C	Sidechain
26	LA	2365	G	Sidechain
26	LA	2367	G	Sidechain
26	LA	2368	C	Sidechain
26	LA	2369	A	Sidechain
26	LA	237	C	Sidechain
26	LA	2370	G	Sidechain
26	LA	2371	G	Sidechain
26	LA	2375	G	Sidechain
26	LA	2377	A	Sidechain
26	LA	2378	A	Sidechain
26	LA	2379	G	Sidechain
26	LA	238	C	Sidechain
26	LA	2380	C	Sidechain
26	LA	2381	A	Sidechain
26	LA	2382	G	Sidechain
26	LA	2383	G	Sidechain
26	LA	2385	C	Sidechain
26	LA	2386	A	Sidechain
26	LA	2387	U	Sidechain
26	LA	2389	G	Sidechain
26	LA	239	C	Sidechain
26	LA	2390	U	Sidechain
26	LA	2391	G	Sidechain
26	LA	2392	A	Sidechain
26	LA	2393	U	Sidechain
26	LA	2395	C	Sidechain
26	LA	2396	G	Sidechain
26	LA	2398	U	Sidechain
26	LA	24	G	Sidechain
26	LA	2401	U	Sidechain
26	LA	2404	U	Sidechain
26	LA	2405	G	Sidechain
26	LA	2407	A	Sidechain
26	LA	2410	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2411	A	Sidechain
26	LA	2412	A	Sidechain
26	LA	2415	G	Sidechain
26	LA	2417	C	Sidechain
26	LA	2419	U	Sidechain
26	LA	242	G	Sidechain
26	LA	2420	C	Sidechain
26	LA	2421	G	Sidechain
26	LA	2422	C	Sidechain
26	LA	2423	U	Sidechain
26	LA	2424	C	Sidechain
26	LA	2425	A	Sidechain
26	LA	2426	A	Sidechain
26	LA	2427	C	Sidechain
26	LA	2429	G	Sidechain
26	LA	243	U	Sidechain
26	LA	2430	A	Sidechain
26	LA	2433	A	Sidechain
26	LA	2435	A	Sidechain
26	LA	2436	G	Sidechain
26	LA	2437	G	Sidechain
26	LA	2438	U	Sidechain
26	LA	2441	U	Sidechain
26	LA	2443	C	Sidechain
26	LA	2444	G	Sidechain
26	LA	2445	G	Sidechain
26	LA	2446	G	Sidechain
26	LA	2447	G	Sidechain
26	LA	2448	A	Sidechain
26	LA	2449	U	Sidechain
26	LA	245	G	Sidechain
26	LA	2450	A	Sidechain
26	LA	2451	A	Sidechain
26	LA	2453	A	Sidechain
26	LA	2454	G	Sidechain
26	LA	2455	G	Sidechain
26	LA	2456	C	Sidechain
26	LA	2457	U	Sidechain
26	LA	246	C	Sidechain
26	LA	2460	U	Sidechain
26	LA	2461	A	Sidechain
26	LA	2464	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2465	C	Sidechain
26	LA	2466	C	Sidechain
26	LA	2469	A	Sidechain
26	LA	247	G	Sidechain
26	LA	2470	G	Sidechain
26	LA	2471	A	Sidechain
26	LA	2472	G	Sidechain
26	LA	2473	U	Sidechain
26	LA	2474	U	Sidechain
26	LA	2477	U	Sidechain
26	LA	2478	A	Sidechain
26	LA	2479	U	Sidechain
26	LA	248	G	Sidechain
26	LA	2480	C	Sidechain
26	LA	2481	G	Sidechain
26	LA	2482	A	Sidechain
26	LA	2483	C	Sidechain
26	LA	2486	C	Sidechain
26	LA	2487	G	Sidechain
26	LA	2489	U	Sidechain
26	LA	2490	G	Sidechain
26	LA	2494	G	Sidechain
26	LA	2495	G	Sidechain
26	LA	2499	C	Sidechain
26	LA	25	U	Sidechain
26	LA	250	G	Sidechain
26	LA	2502	G	Sidechain
26	LA	2503	A	Sidechain
26	LA	2504	U	Sidechain
26	LA	2505	G	Sidechain
26	LA	2506	U	Sidechain
26	LA	2508	G	Sidechain
26	LA	2509	G	Sidechain
26	LA	251	A	Sidechain
26	LA	2512	C	Sidechain
26	LA	2513	A	Sidechain
26	LA	2517	C	Sidechain
26	LA	2518	A	Sidechain
26	LA	2519	U	Sidechain
26	LA	252	G	Sidechain
26	LA	2520	C	Sidechain
26	LA	2521	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2523	G	Sidechain
26	LA	2524	G	Sidechain
26	LA	2525	G	Sidechain
26	LA	2526	G	Sidechain
26	LA	2528	U	Sidechain
26	LA	2529	G	Sidechain
26	LA	2531	A	Sidechain
26	LA	2532	G	Sidechain
26	LA	2536	G	Sidechain
26	LA	2537	U	Sidechain
26	LA	2538	C	Sidechain
26	LA	2539	C	Sidechain
26	LA	254	G	Sidechain
26	LA	2542	A	Sidechain
26	LA	2544	G	Sidechain
26	LA	2545	G	Sidechain
26	LA	2546	U	Sidechain
26	LA	2547	A	Sidechain
26	LA	2551	C	Sidechain
26	LA	2552	U	Sidechain
26	LA	2553	G	Sidechain
26	LA	2554	U	Sidechain
26	LA	2555	U	Sidechain
26	LA	2556	C	Sidechain
26	LA	2557	G	Sidechain
26	LA	2559	C	Sidechain
26	LA	2561	U	Sidechain
26	LA	2562	U	Sidechain
26	LA	2563	U	Sidechain
26	LA	2567	G	Sidechain
26	LA	2568	U	Sidechain
26	LA	2569	G	Sidechain
26	LA	257	C	Sidechain
26	LA	2570	G	Sidechain
26	LA	2571	U	Sidechain
26	LA	2572	A	Sidechain
26	LA	2574	G	Sidechain
26	LA	2575	C	Sidechain
26	LA	2577	A	Sidechain
26	LA	2578	G	Sidechain
26	LA	2579	C	Sidechain
26	LA	2580	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2581	G	Sidechain
26	LA	2582	G	Sidechain
26	LA	2583	G	Sidechain
26	LA	2584	U	Sidechain
26	LA	2585	U	Sidechain
26	LA	2587	A	Sidechain
26	LA	2588	G	Sidechain
26	LA	2589	A	Sidechain
26	LA	259	G	Sidechain
26	LA	2591	C	Sidechain
26	LA	2592	G	Sidechain
26	LA	2593	U	Sidechain
26	LA	2595	G	Sidechain
26	LA	2596	U	Sidechain
26	LA	2597	G	Sidechain
26	LA	2598	A	Sidechain
26	LA	260	G	Sidechain
26	LA	2600	A	Sidechain
26	LA	2603	G	Sidechain
26	LA	2604	U	Sidechain
26	LA	2606	C	Sidechain
26	LA	2607	G	Sidechain
26	LA	2608	G	Sidechain
26	LA	261	G	Sidechain
26	LA	2610	C	Sidechain
26	LA	2612	C	Sidechain
26	LA	2613	U	Sidechain
26	LA	2615	U	Sidechain
26	LA	2616	C	Sidechain
26	LA	2617	U	Sidechain
26	LA	2618	G	Sidechain
26	LA	262	A	Sidechain
26	LA	2620	C	Sidechain
26	LA	2621	G	Sidechain
26	LA	2622	U	Sidechain
26	LA	2623	G	Sidechain
26	LA	2624	G	Sidechain
26	LA	2626	C	Sidechain
26	LA	2627	G	Sidechain
26	LA	2628	C	Sidechain
26	LA	2633	G	Sidechain
26	LA	2635	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2637	U	Sidechain
26	LA	2638	G	Sidechain
26	LA	2639	A	Sidechain
26	LA	264	C	Sidechain
26	LA	2640	G	Sidechain
26	LA	2641	G	Sidechain
26	LA	2642	G	Sidechain
26	LA	2643	G	Sidechain
26	LA	2644	G	Sidechain
26	LA	2645	G	Sidechain
26	LA	2646	C	Sidechain
26	LA	2647	U	Sidechain
26	LA	2648	G	Sidechain
26	LA	265	A	Sidechain
26	LA	2650	U	Sidechain
26	LA	2651	C	Sidechain
26	LA	2652	C	Sidechain
26	LA	2653	U	Sidechain
26	LA	2654	A	Sidechain
26	LA	2655	G	Sidechain
26	LA	2656	U	Sidechain
26	LA	2657	A	Sidechain
26	LA	2658	C	Sidechain
26	LA	2659	G	Sidechain
26	LA	2660	A	Sidechain
26	LA	2661	G	Sidechain
26	LA	2662	A	Sidechain
26	LA	2663	G	Sidechain
26	LA	2664	G	Sidechain
26	LA	2665	A	Sidechain
26	LA	2666	C	Sidechain
26	LA	2667	C	Sidechain
26	LA	2668	G	Sidechain
26	LA	2669	G	Sidechain
26	LA	267	C	Sidechain
26	LA	2670	A	Sidechain
26	LA	2672	U	Sidechain
26	LA	2673	G	Sidechain
26	LA	2674	G	Sidechain
26	LA	2675	A	Sidechain
26	LA	2677	G	Sidechain
26	LA	2679	A	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	268	C	Sidechain
26	LA	2680	U	Sidechain
26	LA	2681	C	Sidechain
26	LA	2682	A	Sidechain
26	LA	2683	C	Sidechain
26	LA	2686	G	Sidechain
26	LA	2688	G	Sidechain
26	LA	2689	U	Sidechain
26	LA	2690	U	Sidechain
26	LA	2691	C	Sidechain
26	LA	2692	G	Sidechain
26	LA	2694	G	Sidechain
26	LA	2695	U	Sidechain
26	LA	2696	U	Sidechain
26	LA	2698	U	Sidechain
26	LA	2699	C	Sidechain
26	LA	27	G	Sidechain
26	LA	270	A	Sidechain
26	LA	2701	U	Sidechain
26	LA	2702	G	Sidechain
26	LA	2704	C	Sidechain
26	LA	2705	A	Sidechain
26	LA	2707	U	Sidechain
26	LA	2708	G	Sidechain
26	LA	2709	G	Sidechain
26	LA	2710	C	Sidechain
26	LA	2711	A	Sidechain
26	LA	2712	C	Sidechain
26	LA	2713	U	Sidechain
26	LA	2714	G	Sidechain
26	LA	2718	G	Sidechain
26	LA	2719	G	Sidechain
26	LA	2720	U	Sidechain
26	LA	2722	G	Sidechain
26	LA	2724	U	Sidechain
26	LA	2725	A	Sidechain
26	LA	2726	A	Sidechain
26	LA	2727	A	Sidechain
26	LA	2728	U	Sidechain
26	LA	2729	G	Sidechain
26	LA	2731	G	Sidechain
26	LA	2733	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2736	A	Sidechain
26	LA	2737	G	Sidechain
26	LA	2738	A	Sidechain
26	LA	2739	U	Sidechain
26	LA	2740	A	Sidechain
26	LA	2741	A	Sidechain
26	LA	2742	G	Sidechain
26	LA	2746	U	Sidechain
26	LA	275	C	Sidechain
26	LA	2750	A	Sidechain
26	LA	2751	G	Sidechain
26	LA	2752	C	Sidechain
26	LA	2754	U	Sidechain
26	LA	2755	C	Sidechain
26	LA	2756	U	Sidechain
26	LA	2758	A	Sidechain
26	LA	276	U	Sidechain
26	LA	2760	C	Sidechain
26	LA	2763	G	Sidechain
26	LA	2764	A	Sidechain
26	LA	2765	A	Sidechain
26	LA	2766	A	Sidechain
26	LA	2767	C	Sidechain
26	LA	2768	U	Sidechain
26	LA	2769	U	Sidechain
26	LA	2772	C	Sidechain
26	LA	2778	A	Sidechain
26	LA	2779	U	Sidechain
26	LA	278	A	Sidechain
26	LA	2780	G	Sidechain
26	LA	2781	A	Sidechain
26	LA	2782	G	Sidechain
26	LA	2783	U	Sidechain
26	LA	2784	U	Sidechain
26	LA	2785	C	Sidechain
26	LA	2787	C	Sidechain
26	LA	2789	C	Sidechain
26	LA	279	A	Sidechain
26	LA	2790	U	Sidechain
26	LA	2791	G	Sidechain
26	LA	2793	C	Sidechain
26	LA	2794	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2796	U	Sidechain
26	LA	2797	U	Sidechain
26	LA	2798	U	Sidechain
26	LA	2799	A	Sidechain
26	LA	280	U	Sidechain
26	LA	2800	A	Sidechain
26	LA	2802	G	Sidechain
26	LA	2803	G	Sidechain
26	LA	2804	U	Sidechain
26	LA	2806	C	Sidechain
26	LA	2807	U	Sidechain
26	LA	2808	G	Sidechain
26	LA	2809	A	Sidechain
26	LA	281	C	Sidechain
26	LA	2812	G	Sidechain
26	LA	2813	A	Sidechain
26	LA	2815	C	Sidechain
26	LA	2816	G	Sidechain
26	LA	2817	U	Sidechain
26	LA	2819	G	Sidechain
26	LA	2820	A	Sidechain
26	LA	2822	G	Sidechain
26	LA	2823	A	Sidechain
26	LA	2826	A	Sidechain
26	LA	2831	G	Sidechain
26	LA	2832	U	Sidechain
26	LA	2833	U	Sidechain
26	LA	2834	G	Sidechain
26	LA	2838	G	Sidechain
26	LA	2839	G	Sidechain
26	LA	2843	G	Sidechain
26	LA	2844	G	Sidechain
26	LA	2845	U	Sidechain
26	LA	2847	U	Sidechain
26	LA	2848	G	Sidechain
26	LA	2849	U	Sidechain
26	LA	2850	A	Sidechain
26	LA	2852	G	Sidechain
26	LA	2854	G	Sidechain
26	LA	2859	G	Sidechain
26	LA	2860	A	Sidechain
26	LA	2861	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	2862	G	Sidechain
26	LA	2864	G	Sidechain
26	LA	2865	U	Sidechain
26	LA	2866	U	Sidechain
26	LA	2867	G	Sidechain
26	LA	2868	A	Sidechain
26	LA	2869	G	Sidechain
26	LA	287	G	Sidechain
26	LA	2871	U	Sidechain
26	LA	2872	A	Sidechain
26	LA	2874	C	Sidechain
26	LA	2875	C	Sidechain
26	LA	2876	G	Sidechain
26	LA	2877	G	Sidechain
26	LA	2878	U	Sidechain
26	LA	2879	A	Sidechain
26	LA	288	U	Sidechain
26	LA	2880	C	Sidechain
26	LA	2881	U	Sidechain
26	LA	2882	A	Sidechain
26	LA	2884	U	Sidechain
26	LA	2885	G	Sidechain
26	LA	2886	A	Sidechain
26	LA	289	G	Sidechain
26	LA	2892	G	Sidechain
26	LA	2893	A	Sidechain
26	LA	2894	G	Sidechain
26	LA	2895	G	Sidechain
26	LA	2896	C	Sidechain
26	LA	2897	U	Sidechain
26	LA	2899	A	Sidechain
26	LA	29	U	Sidechain
26	LA	290	U	Sidechain
26	LA	2900	A	Sidechain
26	LA	2901	C	Sidechain
26	LA	2902	C	Sidechain
26	LA	2903	U	Sidechain
26	LA	291	G	Sidechain
26	LA	292	U	Sidechain
26	LA	293	U	Sidechain
26	LA	294	A	Sidechain
26	LA	296	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	298	G	Sidechain
26	LA	299	A	Sidechain
26	LA	300	A	Sidechain
26	LA	303	G	Sidechain
26	LA	305	C	Sidechain
26	LA	306	U	Sidechain
26	LA	307	G	Sidechain
26	LA	308	G	Sidechain
26	LA	31	C	Sidechain
26	LA	310	A	Sidechain
26	LA	311	A	Sidechain
26	LA	312	G	Sidechain
26	LA	317	G	Sidechain
26	LA	319	G	Sidechain
26	LA	321	U	Sidechain
26	LA	325	G	Sidechain
26	LA	326	G	Sidechain
26	LA	328	U	Sidechain
26	LA	329	G	Sidechain
26	LA	33	C	Sidechain
26	LA	330	A	Sidechain
26	LA	333	G	Sidechain
26	LA	335	C	Sidechain
26	LA	336	C	Sidechain
26	LA	337	C	Sidechain
26	LA	339	U	Sidechain
26	LA	34	U	Sidechain
26	LA	340	A	Sidechain
26	LA	345	A	Sidechain
26	LA	347	A	Sidechain
26	LA	348	A	Sidechain
26	LA	349	U	Sidechain
26	LA	35	G	Sidechain
26	LA	350	G	Sidechain
26	LA	352	A	Sidechain
26	LA	353	C	Sidechain
26	LA	354	A	Sidechain
26	LA	356	G	Sidechain
26	LA	359	G	Sidechain
26	LA	36	G	Sidechain
26	LA	360	U	Sidechain
26	LA	361	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	362	A	Sidechain
26	LA	363	G	Sidechain
26	LA	364	C	Sidechain
26	LA	365	U	Sidechain
26	LA	366	C	Sidechain
26	LA	368	A	Sidechain
26	LA	369	U	Sidechain
26	LA	37	C	Sidechain
26	LA	370	G	Sidechain
26	LA	371	A	Sidechain
26	LA	372	G	Sidechain
26	LA	373	U	Sidechain
26	LA	375	G	Sidechain
26	LA	377	G	Sidechain
26	LA	379	G	Sidechain
26	LA	382	A	Sidechain
26	LA	383	C	Sidechain
26	LA	386	G	Sidechain
26	LA	388	G	Sidechain
26	LA	389	G	Sidechain
26	LA	39	G	Sidechain
26	LA	390	U	Sidechain
26	LA	392	U	Sidechain
26	LA	393	C	Sidechain
26	LA	395	U	Sidechain
26	LA	397	U	Sidechain
26	LA	398	C	Sidechain
26	LA	399	U	Sidechain
26	LA	4	U	Sidechain
26	LA	40	U	Sidechain
26	LA	400	G	Sidechain
26	LA	403	U	Sidechain
26	LA	404	A	Sidechain
26	LA	405	U	Sidechain
26	LA	407	G	Sidechain
26	LA	410	G	Sidechain
26	LA	411	G	Sidechain
26	LA	414	C	Sidechain
26	LA	415	A	Sidechain
26	LA	417	C	Sidechain
26	LA	418	C	Sidechain
26	LA	420	C	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	423	A	Sidechain
26	LA	424	G	Sidechain
26	LA	426	C	Sidechain
26	LA	427	U	Sidechain
26	LA	430	A	Sidechain
26	LA	431	U	Sidechain
26	LA	432	A	Sidechain
26	LA	433	C	Sidechain
26	LA	434	U	Sidechain
26	LA	435	C	Sidechain
26	LA	437	U	Sidechain
26	LA	442	G	Sidechain
26	LA	443	A	Sidechain
26	LA	445	C	Sidechain
26	LA	446	G	Sidechain
26	LA	447	A	Sidechain
26	LA	448	U	Sidechain
26	LA	449	A	Sidechain
26	LA	451	U	Sidechain
26	LA	452	G	Sidechain
26	LA	453	A	Sidechain
26	LA	454	A	Sidechain
26	LA	455	C	Sidechain
26	LA	458	G	Sidechain
26	LA	459	U	Sidechain
26	LA	46	G	Sidechain
26	LA	460	A	Sidechain
26	LA	461	C	Sidechain
26	LA	463	G	Sidechain
26	LA	464	U	Sidechain
26	LA	465	G	Sidechain
26	LA	467	G	Sidechain
26	LA	468	G	Sidechain
26	LA	471	A	Sidechain
26	LA	472	A	Sidechain
26	LA	473	G	Sidechain
26	LA	474	G	Sidechain
26	LA	475	C	Sidechain
26	LA	476	G	Sidechain
26	LA	479	A	Sidechain
26	LA	48	G	Sidechain
26	LA	481	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	482	A	Sidechain
26	LA	483	A	Sidechain
26	LA	485	C	Sidechain
26	LA	487	C	Sidechain
26	LA	488	G	Sidechain
26	LA	489	G	Sidechain
26	LA	49	A	Sidechain
26	LA	491	G	Sidechain
26	LA	492	A	Sidechain
26	LA	493	G	Sidechain
26	LA	495	G	Sidechain
26	LA	496	G	Sidechain
26	LA	497	A	Sidechain
26	LA	499	U	Sidechain
26	LA	50	U	Sidechain
26	LA	500	G	Sidechain
26	LA	501	A	Sidechain
26	LA	504	A	Sidechain
26	LA	506	G	Sidechain
26	LA	507	A	Sidechain
26	LA	508	A	Sidechain
26	LA	509	C	Sidechain
26	LA	51	G	Sidechain
26	LA	510	C	Sidechain
26	LA	511	U	Sidechain
26	LA	512	G	Sidechain
26	LA	513	A	Sidechain
26	LA	514	A	Sidechain
26	LA	516	C	Sidechain
26	LA	517	C	Sidechain
26	LA	518	G	Sidechain
26	LA	52	A	Sidechain
26	LA	521	U	Sidechain
26	LA	525	U	Sidechain
26	LA	528	A	Sidechain
26	LA	530	G	Sidechain
26	LA	533	G	Sidechain
26	LA	536	G	Sidechain
26	LA	538	A	Sidechain
26	LA	539	G	Sidechain
26	LA	54	G	Sidechain
26	LA	541	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	543	G	Sidechain
26	LA	546	U	Sidechain
26	LA	547	A	Sidechain
26	LA	548	G	Sidechain
26	LA	549	G	Sidechain
26	LA	550	C	Sidechain
26	LA	551	G	Sidechain
26	LA	552	U	Sidechain
26	LA	555	G	Sidechain
26	LA	556	A	Sidechain
26	LA	561	G	Sidechain
26	LA	562	U	Sidechain
26	LA	563	A	Sidechain
26	LA	564	C	Sidechain
26	LA	565	C	Sidechain
26	LA	566	U	Sidechain
26	LA	567	U	Sidechain
26	LA	568	U	Sidechain
26	LA	569	U	Sidechain
26	LA	57	C	Sidechain
26	LA	570	G	Sidechain
26	LA	571	U	Sidechain
26	LA	572	A	Sidechain
26	LA	573	U	Sidechain
26	LA	574	A	Sidechain
26	LA	575	A	Sidechain
26	LA	576	U	Sidechain
26	LA	577	G	Sidechain
26	LA	578	G	Sidechain
26	LA	579	G	Sidechain
26	LA	58	G	Sidechain
26	LA	580	U	Sidechain
26	LA	581	C	Sidechain
26	LA	582	A	Sidechain
26	LA	584	C	Sidechain
26	LA	585	G	Sidechain
26	LA	587	C	Sidechain
26	LA	588	U	Sidechain
26	LA	591	U	Sidechain
26	LA	592	A	Sidechain
26	LA	593	U	Sidechain
26	LA	594	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	595	C	Sidechain
26	LA	596	U	Sidechain
26	LA	597	G	Sidechain
26	LA	598	U	Sidechain
26	LA	599	A	Sidechain
26	LA	6	A	Sidechain
26	LA	60	G	Sidechain
26	LA	600	G	Sidechain
26	LA	602	A	Sidechain
26	LA	603	A	Sidechain
26	LA	605	G	Sidechain
26	LA	606	U	Sidechain
26	LA	608	A	Sidechain
26	LA	609	A	Sidechain
26	LA	611	C	Sidechain
26	LA	612	G	Sidechain
26	LA	613	A	Sidechain
26	LA	614	A	Sidechain
26	LA	615	U	Sidechain
26	LA	616	A	Sidechain
26	LA	617	G	Sidechain
26	LA	618	G	Sidechain
26	LA	619	G	Sidechain
26	LA	62	U	Sidechain
26	LA	621	A	Sidechain
26	LA	623	C	Sidechain
26	LA	624	C	Sidechain
26	LA	625	G	Sidechain
26	LA	627	A	Sidechain
26	LA	63	A	Sidechain
26	LA	630	G	Sidechain
26	LA	633	A	Sidechain
26	LA	634	C	Sidechain
26	LA	635	C	Sidechain
26	LA	636	G	Sidechain
26	LA	640	C	Sidechain
26	LA	642	U	Sidechain
26	LA	644	A	Sidechain
26	LA	646	U	Sidechain
26	LA	648	G	Sidechain
26	LA	649	G	Sidechain
26	LA	65	U	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	651	G	Sidechain
26	LA	652	U	Sidechain
26	LA	654	A	Sidechain
26	LA	655	A	Sidechain
26	LA	656	G	Sidechain
26	LA	662	G	Sidechain
26	LA	664	G	Sidechain
26	LA	665	U	Sidechain
26	LA	667	U	Sidechain
26	LA	668	A	Sidechain
26	LA	669	G	Sidechain
26	LA	670	A	Sidechain
26	LA	675	A	Sidechain
26	LA	676	A	Sidechain
26	LA	679	C	Sidechain
26	LA	680	C	Sidechain
26	LA	681	G	Sidechain
26	LA	682	G	Sidechain
26	LA	686	U	Sidechain
26	LA	687	C	Sidechain
26	LA	688	U	Sidechain
26	LA	69	C	Sidechain
26	LA	690	G	Sidechain
26	LA	692	C	Sidechain
26	LA	695	G	Sidechain
26	LA	698	C	Sidechain
26	LA	699	A	Sidechain
26	LA	7	G	Sidechain
26	LA	700	G	Sidechain
26	LA	701	G	Sidechain
26	LA	703	U	Sidechain
26	LA	704	G	Sidechain
26	LA	705	A	Sidechain
26	LA	706	A	Sidechain
26	LA	707	G	Sidechain
26	LA	709	U	Sidechain
26	LA	71	A	Sidechain
26	LA	710	U	Sidechain
26	LA	711	G	Sidechain
26	LA	712	G	Sidechain
26	LA	713	G	Sidechain
26	LA	715	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	717	C	Sidechain
26	LA	718	A	Sidechain
26	LA	719	C	Sidechain
26	LA	72	U	Sidechain
26	LA	721	A	Sidechain
26	LA	723	C	Sidechain
26	LA	724	U	Sidechain
26	LA	725	G	Sidechain
26	LA	726	G	Sidechain
26	LA	727	A	Sidechain
26	LA	728	G	Sidechain
26	LA	729	G	Sidechain
26	LA	730	A	Sidechain
26	LA	732	C	Sidechain
26	LA	733	G	Sidechain
26	LA	734	A	Sidechain
26	LA	736	C	Sidechain
26	LA	738	G	Sidechain
26	LA	739	A	Sidechain
26	LA	74	A	Sidechain
26	LA	741	U	Sidechain
26	LA	742	A	Sidechain
26	LA	745	G	Sidechain
26	LA	746	U	Sidechain
26	LA	747	U	Sidechain
26	LA	748	G	Sidechain
26	LA	749	A	Sidechain
26	LA	75	G	Sidechain
26	LA	750	A	Sidechain
26	LA	751	A	Sidechain
26	LA	753	A	Sidechain
26	LA	754	U	Sidechain
26	LA	755	U	Sidechain
26	LA	756	A	Sidechain
26	LA	757	G	Sidechain
26	LA	758	C	Sidechain
26	LA	759	G	Sidechain
26	LA	76	C	Sidechain
26	LA	761	A	Sidechain
26	LA	762	U	Sidechain
26	LA	763	G	Sidechain
26	LA	764	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	765	C	Sidechain
26	LA	766	U	Sidechain
26	LA	768	G	Sidechain
26	LA	77	G	Sidechain
26	LA	771	G	Sidechain
26	LA	772	C	Sidechain
26	LA	773	U	Sidechain
26	LA	774	G	Sidechain
26	LA	776	G	Sidechain
26	LA	777	G	Sidechain
26	LA	778	G	Sidechain
26	LA	779	U	Sidechain
26	LA	78	U	Sidechain
26	LA	780	G	Sidechain
26	LA	781	A	Sidechain
26	LA	783	A	Sidechain
26	LA	784	G	Sidechain
26	LA	785	G	Sidechain
26	LA	787	C	Sidechain
26	LA	788	A	Sidechain
26	LA	789	A	Sidechain
26	LA	79	C	Sidechain
26	LA	790	U	Sidechain
26	LA	792	A	Sidechain
26	LA	793	A	Sidechain
26	LA	795	C	Sidechain
26	LA	797	G	Sidechain
26	LA	798	G	Sidechain
26	LA	799	G	Sidechain
26	LA	80	G	Sidechain
26	LA	800	A	Sidechain
26	LA	801	G	Sidechain
26	LA	802	A	Sidechain
26	LA	803	U	Sidechain
26	LA	804	A	Sidechain
26	LA	805	G	Sidechain
26	LA	808	G	Sidechain
26	LA	810	U	Sidechain
26	LA	813	U	Sidechain
26	LA	814	C	Sidechain
26	LA	816	C	Sidechain
26	LA	818	G	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	819	A	Sidechain
26	LA	820	A	Sidechain
26	LA	824	U	Sidechain
26	LA	826	U	Sidechain
26	LA	827	U	Sidechain
26	LA	828	U	Sidechain
26	LA	829	A	Sidechain
26	LA	83	A	Sidechain
26	LA	831	G	Sidechain
26	LA	832	U	Sidechain
26	LA	833	A	Sidechain
26	LA	834	G	Sidechain
26	LA	835	C	Sidechain
26	LA	837	C	Sidechain
26	LA	838	C	Sidechain
26	LA	839	U	Sidechain
26	LA	84	A	Sidechain
26	LA	840	C	Sidechain
26	LA	841	G	Sidechain
26	LA	842	U	Sidechain
26	LA	844	A	Sidechain
26	LA	847	U	Sidechain
26	LA	849	A	Sidechain
26	LA	85	G	Sidechain
26	LA	850	U	Sidechain
26	LA	851	C	Sidechain
26	LA	853	C	Sidechain
26	LA	856	G	Sidechain
26	LA	858	G	Sidechain
26	LA	859	G	Sidechain
26	LA	86	G	Sidechain
26	LA	860	U	Sidechain
26	LA	861	A	Sidechain
26	LA	862	G	Sidechain
26	LA	864	G	Sidechain
26	LA	866	A	Sidechain
26	LA	868	U	Sidechain
26	LA	869	G	Sidechain
26	LA	870	U	Sidechain
26	LA	872	U	Sidechain
26	LA	874	G	Sidechain
26	LA	875	G	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	877	A	Sidechain
26	LA	88	G	Sidechain
26	LA	880	G	Sidechain
26	LA	881	G	Sidechain
26	LA	882	G	Sidechain
26	LA	884	U	Sidechain
26	LA	885	C	Sidechain
26	LA	89	A	Sidechain
26	LA	891	G	Sidechain
26	LA	892	A	Sidechain
26	LA	893	C	Sidechain
26	LA	894	U	Sidechain
26	LA	895	U	Sidechain
26	LA	896	A	Sidechain
26	LA	899	A	Sidechain
26	LA	90	U	Sidechain
26	LA	900	A	Sidechain
26	LA	901	C	Sidechain
26	LA	902	C	Sidechain
26	LA	904	G	Sidechain
26	LA	906	U	Sidechain
26	LA	907	G	Sidechain
26	LA	908	C	Sidechain
26	LA	909	A	Sidechain
26	LA	91	A	Sidechain
26	LA	911	A	Sidechain
26	LA	912	C	Sidechain
26	LA	913	U	Sidechain
26	LA	914	G	Sidechain
26	LA	915	C	Sidechain
26	LA	916	G	Sidechain
26	LA	917	A	Sidechain
26	LA	919	U	Sidechain
26	LA	92	U	Sidechain
26	LA	920	A	Sidechain
26	LA	922	C	Sidechain
26	LA	923	G	Sidechain
26	LA	924	G	Sidechain
26	LA	925	A	Sidechain
26	LA	926	G	Sidechain
26	LA	927	A	Sidechain
26	LA	929	U	Sidechain

Continued on next page...

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Mol	Chain	Res	Type	Group
26	LA	930	G	Sidechain
26	LA	932	U	Sidechain
26	LA	933	A	Sidechain
26	LA	934	U	Sidechain
26	LA	935	C	Sidechain
26	LA	936	A	Sidechain
26	LA	938	G	Sidechain
26	LA	939	G	Sidechain
26	LA	94	A	Sidechain
26	LA	940	G	Sidechain
26	LA	941	A	Sidechain
26	LA	942	G	Sidechain
26	LA	944	C	Sidechain
26	LA	945	A	Sidechain
26	LA	946	C	Sidechain
26	LA	947	A	Sidechain
26	LA	948	C	Sidechain
26	LA	949	G	Sidechain
26	LA	950	G	Sidechain
26	LA	951	C	Sidechain
26	LA	952	G	Sidechain
26	LA	953	G	Sidechain
26	LA	954	G	Sidechain
26	LA	955	U	Sidechain
26	LA	956	G	Sidechain
26	LA	957	C	Sidechain
26	LA	958	U	Sidechain
26	LA	959	A	Sidechain
26	LA	960	A	Sidechain
26	LA	962	G	Sidechain
26	LA	963	U	Sidechain
26	LA	966	G	Sidechain
26	LA	967	U	Sidechain
26	LA	968	C	Sidechain
26	LA	969	G	Sidechain
26	LA	970	U	Sidechain
26	LA	973	A	Sidechain
26	LA	975	A	Sidechain
26	LA	976	G	Sidechain
26	LA	977	G	Sidechain
26	LA	98	G	Sidechain
26	LA	980	A	Sidechain

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Mol	Chain	Res	Type	Group
26	LA	982	C	Sidechain
26	LA	983	A	Sidechain
26	LA	984	A	Sidechain
26	LA	985	C	Sidechain
26	LA	988	A	Sidechain
26	LA	989	G	Sidechain
26	LA	99	U	Sidechain
26	LA	991	C	Sidechain
26	LA	992	C	Sidechain
26	LA	993	G	Sidechain
26	LA	994	C	Sidechain
26	LA	995	C	Sidechain
26	LA	997	G	Sidechain
26	LA	998	C	Sidechain
26	LA	999	U	Sidechain
25	LB	10	G	Sidechain
25	LB	100	G	Sidechain
25	LB	102	G	Sidechain
25	LB	105	G	Sidechain
25	LB	106	G	Sidechain
25	LB	108	A	Sidechain
25	LB	109	A	Sidechain
25	LB	11	C	Sidechain
25	LB	111	U	Sidechain
25	LB	114	C	Sidechain
25	LB	116	G	Sidechain
25	LB	117	G	Sidechain
25	LB	119	A	Sidechain
25	LB	15	A	Sidechain
25	LB	17	C	Sidechain
25	LB	18	G	Sidechain
25	LB	19	C	Sidechain
25	LB	2	G	Sidechain
25	LB	21	G	Sidechain
25	LB	22	U	Sidechain
25	LB	23	G	Sidechain
25	LB	25	U	Sidechain
25	LB	26	C	Sidechain
25	LB	27	C	Sidechain
25	LB	3	C	Sidechain
25	LB	32	U	Sidechain
25	LB	33	G	Sidechain

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Mol	Chain	Res	Type	Group
25	LB	34	A	Sidechain
25	LB	38	C	Sidechain
25	LB	42	C	Sidechain
25	LB	43	C	Sidechain
25	LB	45	A	Sidechain
25	LB	47	C	Sidechain
25	LB	49	C	Sidechain
25	LB	50	A	Sidechain
25	LB	52	A	Sidechain
25	LB	53	A	Sidechain
25	LB	54	G	Sidechain
25	LB	58	A	Sidechain
25	LB	6	G	Sidechain
25	LB	60	C	Sidechain
25	LB	61	G	Sidechain
25	LB	62	C	Sidechain
25	LB	64	G	Sidechain
25	LB	65	U	Sidechain
25	LB	66	A	Sidechain
25	LB	67	G	Sidechain
25	LB	7	G	Sidechain
25	LB	73	A	Sidechain
25	LB	74	U	Sidechain
25	LB	75	G	Sidechain
25	LB	77	U	Sidechain
25	LB	79	G	Sidechain
25	LB	80	U	Sidechain
25	LB	81	G	Sidechain
25	LB	82	U	Sidechain
25	LB	83	G	Sidechain
25	LB	84	G	Sidechain
25	LB	85	G	Sidechain
25	LB	89	U	Sidechain
25	LB	9	G	Sidechain
25	LB	90	C	Sidechain
25	LB	92	C	Sidechain
25	LB	94	A	Sidechain
25	LB	95	U	Sidechain
25	LB	97	C	Sidechain
25	LB	98	G	Sidechain
25	LB	99	A	Sidechain
37	LC	12	ARG	Sidechain

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Mol	Chain	Res	Type	Group
37	LC	131	LEU	Peptide
37	LC	132	GLY	Peptide
37	LC	134	ARG	Sidechain
37	LC	162	ARG	Sidechain
37	LC	163	TYR	Sidechain
37	LC	172	HIS	Sidechain
37	LC	208	TYR	Sidechain
37	LC	21	TYR	Sidechain
37	LC	228	GLY	Peptide
37	LC	231	ALA	Peptide
37	LC	37	LYS	Peptide
37	LC	49	GLY	Peptide
37	LC	53	ARG	Sidechain
37	LC	7	ARG	Sidechain
37	LC	73	VAL	Peptide
37	LC	75	VAL	Peptide
27	LD	10	PRO	Peptide
27	LD	111	ALA	Peptide
27	LD	14	HIS	Sidechain
27	LD	160	TYR	Sidechain
27	LD	170	TYR	Sidechain
27	LD	176	ARG	Sidechain
27	LD	184	GLU	Peptide
27	LD	188	ARG	Sidechain
27	LD	199	HIS	Sidechain
27	LD	20	ASN	Peptide
27	LD	211	ARG	Sidechain
27	LD	213	ARG	Sidechain
27	LD	237	ARG	Sidechain
27	LD	252	LYS	Peptide
27	LD	258	SER	Peptide
27	LD	27	LYS	Peptide
27	LD	270	ARG	Sidechain
27	LD	47	ARG	Sidechain
27	LD	50	THR	Peptide
27	LD	6	LYS	Peptide
27	LD	62	ARG	Sidechain
27	LD	68	ARG	Sidechain
27	LD	86	ARG	Sidechain
27	LD	92	LEU	Peptide
38	LE	118	PHE	Sidechain
38	LE	128	ARG	Sidechain

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Mol	Chain	Res	Type	Group
38	LE	13	ARG	Sidechain
38	LE	140	HIS	Sidechain
38	LE	151	THR	Peptide
38	LE	163	GLY	Peptide
38	LE	173	GLN	Peptide
38	LE	184	ARG	Sidechain
38	LE	38	LYS	Peptide
38	LE	41	ALA	Peptide
38	LE	45	TYR	Sidechain
38	LE	46	ARG	Sidechain
38	LE	59	ARG	Peptide
38	LE	83	ARG	Sidechain
38	LE	90	PHE	Sidechain
44	LF	102	ARG	Sidechain
44	LF	117	ARG	Sidechain
44	LF	162	ARG	Sidechain
44	LF	166	LYS	Peptide
44	LF	23	PHE	Sidechain
44	LF	40	ARG	Sidechain
44	LF	44	ARG	Sidechain
44	LF	45	ALA	Peptide
44	LF	67	ARG	Sidechain
44	LF	88	ARG	Sidechain
45	LG	101	ARG	Sidechain
45	LG	103	ILE	Peptide
45	LG	111	ARG	Sidechain
45	LG	120	SER	Peptide
45	LG	127	TYR	Sidechain
45	LG	142	TYR	Sidechain
45	LG	166	ARG	Sidechain
45	LG	25	MET	Peptide
45	LG	29	ARG	Sidechain
45	LG	71	LYS	Peptide
45	LG	74	ALA	Peptide
45	LG	85	GLY	Peptide
45	LG	91	ARG	Sidechain
45	LG	94	ARG	Sidechain
45	LG	99	PHE	Sidechain
46	LH	113	ASP	Peptide
46	LH	148	ARG	Sidechain
46	LH	151	ARG	Sidechain
46	LH	152	ARG	Sidechain

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Mol	Chain	Res	Type	Group
46	LH	162	ARG	Sidechain
46	LH	19	ASN	Peptide
46	LH	28	LYS	Peptide
46	LH	34	ARG	Sidechain
46	LH	6	ALA	Peptide
46	LH	68	ARG	Sidechain
46	LH	92	GLY	Peptide
46	LH	93	TYR	Sidechain
46	LH	94	ARG	Sidechain
51	LI	22	LYS	Peptide
51	LI	29	PHE	Sidechain
51	LI	47	PHE	Sidechain
51	LI	50	ARG	Sidechain
51	LI	51	ARG	Sidechain
51	LI	70	GLU	Peptide
51	LI	97	ARG	Sidechain
47	LJ	105	PHE	Peptide
47	LJ	106	GLU	Peptide
47	LJ	22	LEU	Peptide
47	LJ	41	ARG	Sidechain
47	LJ	45	ARG	Sidechain
47	LJ	52	ARG	Sidechain
47	LJ	55	ARG	Sidechain
47	LJ	72	LYS	Peptide
47	LJ	87	HIS	Peptide
47	LJ	98	PHE	Sidechain
49	LK	11	GLN	Peptide
49	LK	126	ARG	Sidechain
49	LK	128	ILE	Mainchain
49	LK	133	ARG	Sidechain
49	LK	139	VAL	Peptide
49	LK	20	SER	Peptide
49	LK	53	PRO	Peptide
49	LK	62	ALA	Peptide
49	LK	66	PHE	Peptide
49	LK	7	TYR	Sidechain
50	LL	20	ALA	Peptide
50	LL	34	ARG	Sidechain
50	LL	7	LYS	Peptide
50	LL	74	TYR	Sidechain
50	LL	75	TYR	Sidechain
54	LM	100	PHE	Sidechain

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Mol	Chain	Res	Type	Group
54	LM	105	ARG	Sidechain
54	LM	112	PHE	Sidechain
54	LM	18	ARG	Sidechain
54	LM	2	ILE	Peptide
54	LM	32	TYR	Sidechain
54	LM	47	ILE	Peptide
54	LM	49	ARG	Sidechain
54	LM	64	ARG	Sidechain
48	LN	104	GLN	Peptide
48	LN	107	PHE	Sidechain
48	LN	123	ARG	Sidechain
48	LN	125	LEU	Peptide
48	LN	132	ARG	Sidechain
48	LN	2	ARG	Peptide,Sidechain
48	LN	4	ASN	Peptide
48	LN	51	GLU	Peptide
48	LN	52	GLY	Peptide
48	LN	67	THR	Peptide
48	LN	8	PRO	Peptide
52	LO	114	ARG	Sidechain
52	LO	16	ARG	Sidechain
52	LO	24	THR	Peptide
52	LO	40	ARG	Sidechain
52	LO	44	ARG	Sidechain
52	LO	55	ARG	Sidechain
52	LO	6	ARG	Sidechain
52	LO	70	ASP	Peptide
53	LP	103	ARG	Sidechain
53	LP	112	TYR	Sidechain
53	LP	17	ARG	Sidechain
53	LP	2	ARG	Sidechain
53	LP	30	ARG	Sidechain
53	LP	45	ARG	Sidechain
53	LP	67	PHE	Sidechain
53	LP	71	ARG	Sidechain
53	LP	80	PHE	Sidechain
53	LP	96	ARG	Sidechain
55	LQ	100	HIS	Sidechain
55	LQ	102	ARG	Sidechain
55	LQ	115	LEU	Peptide
55	LQ	15	ARG	Sidechain
55	LQ	16	ARG	Sidechain

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Mol	Chain	Res	Type	Group
55	LQ	2	ASP	Peptide
55	LQ	25	ARG	Sidechain
55	LQ	30	ARG	Sidechain
55	LQ	33	ARG	Sidechain
55	LQ	41	ALA	Peptide
55	LQ	64	TYR	Peptide
55	LQ	70	ALA	Mainchain
55	LQ	86	GLY	Peptide
55	LQ	9	ARG	Sidechain
56	LR	102	ARG	Sidechain
56	LR	108	ARG	Peptide
56	LR	110	LYS	Peptide
56	LR	112	ARG	Peptide,Sidechain
56	LR	19	PHE	Sidechain
56	LR	50	ARG	Peptide
56	LR	52	ARG	Sidechain
56	LR	61	ARG	Sidechain
56	LR	71	ARG	Sidechain
56	LR	98	TYR	Sidechain
57	LS	10	ARG	Sidechain
57	LS	100	PHE	Sidechain
57	LS	24	TYR	Sidechain
57	LS	29	ARG	Sidechain
57	LS	35	PHE	Sidechain
57	LS	44	TYR	Sidechain
57	LS	46	TYR	Sidechain
57	LS	54	ARG	Sidechain
57	LS	56	PHE	Sidechain
57	LS	57	ARG	Sidechain
57	LS	75	TYR	Sidechain
57	LS	91	ARG	Sidechain
58	LT	13	ARG	Sidechain
58	LT	2	TYR	Peptide,Sidechain
58	LT	21	ARG	Sidechain
58	LT	49	ILE	Peptide
58	LT	78	ARG	Sidechain
58	LT	79	ARG	Sidechain
58	LT	84	ARG	Sidechain
28	LU	102	HIS	Sidechain
28	LU	60	HIS	Peptide,Sidechain
28	LU	8	ARG	Sidechain
28	LU	88	ARG	Sidechain

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Mol	Chain	Res	Type	Group
28	LU	9	HIS	Sidechain
28	LU	92	ARG	Sidechain
28	LU	95	ARG	Sidechain
29	LV	13	ALA	Peptide
29	LV	3	ARG	Sidechain
29	LV	6	ARG	Sidechain
29	LV	69	ARG	Sidechain
29	LV	84	TYR	Sidechain
30	LW	2	ALA	Peptide
30	LW	48	VAL	Peptide
30	LW	63	ALA	Peptide
30	LW	80	ASP	Peptide
30	LW	81	ARG	Peptide
30	LW	84	PHE	Sidechain
30	LW	85	ARG	Sidechain
30	LW	93	ARG	Sidechain
31	LX	31	TYR	Sidechain
31	LX	80	HIS	Peptide
31	LX	83	LYS	Peptide
31	LX	9	ARG	Sidechain
31	LX	93	ARG	Peptide
32	LY	13	ARG	Sidechain
32	LY	23	LYS	Peptide
32	LY	25	PHE	Sidechain
32	LY	38	ARG	Sidechain
32	LY	39	GLN	Peptide
32	LY	44	PHE	Sidechain
32	LY	76	ARG	Sidechain
32	LY	78	PHE	Sidechain
33	LZ	10	ARG	Sidechain
33	LZ	17	ARG	Peptide
33	LZ	19	HIS	Sidechain
33	LZ	27	ARG	Sidechain
33	LZ	28	PHE	Sidechain
33	LZ	44	ARG	Sidechain
33	LZ	77	TYR	Sidechain
3	S1	14	G	Sidechain
3	S1	16	A	Sidechain
3	S1	17	U	Sidechain
3	S1	18	A	Sidechain
3	S1	19	A	Sidechain
3	S1	20	G	Sidechain

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Mol	Chain	Res	Type	Group
3	S1	23	C	Sidechain
3	S1	25	U	Sidechain
3	S1	27	A	Sidechain
3	S1	28	U	Sidechain
3	S1	29	G	Sidechain
3	S1	30	U	Sidechain
3	S1	31	U	Sidechain
3	S1	32	U	Sidechain
3	S1	34	U	Sidechain
3	S1	35	G	Sidechain
3	S1	36	U	Sidechain
3	S1	37	G	Sidechain
3	S1	38	G	Sidechain
3	S1	39	U	Sidechain
3	S1	40	G	Sidechain
3	S1	41	A	Sidechain
3	S1	42	U	Sidechain
3	S1	44	U	Sidechain
3	S1	45	G	Sidechain
3	S1	46	C	Sidechain
3	S1	47	C	Sidechain
3	S1	49	U	Sidechain
3	S1	50	U	Sidechain
3	S1	52	U	Sidechain
3	S1	53	G	Sidechain
3	S1	54	U	Sidechain
3	S1	55	A	Sidechain
3	S1	56	G	Sidechain
3	S1	58	C	Sidechain
3	S1	59	A	Sidechain
4	S2	10	G	Sidechain
4	S2	11	A	Sidechain
4	S2	12	G	Sidechain
4	S2	14	A	Sidechain
4	S2	15	G	Sidechain
4	S2	2	G	Sidechain
4	S2	20	G	Sidechain
4	S2	21	U	Sidechain
4	S2	25	U	Sidechain
4	S2	3	C	Sidechain
4	S2	30	G	Sidechain
4	S2	32	G	Sidechain

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Mol	Chain	Res	Type	Group
4	S2	34	U	Sidechain
4	S2	35	C	Sidechain
4	S2	38	A	Sidechain
4	S2	39	A	Sidechain
4	S2	4	G	Sidechain
4	S2	40	C	Sidechain
4	S2	41	C	Sidechain
4	S2	42	C	Sidechain
4	S2	44	A	Sidechain
4	S2	46	G	Sidechain
4	S2	47	A	Sidechain
4	S2	48	U	Sidechain
4	S2	5	G	Sidechain
4	S2	50	G	Sidechain
4	S2	51	U	Sidechain
4	S2	52	C	Sidechain
4	S2	53	G	Sidechain
4	S2	54	G	Sidechain
4	S2	57	C	Sidechain
4	S2	58	A	Sidechain
4	S2	60	A	Sidechain
4	S2	61	U	Sidechain
4	S2	64	G	Sidechain
4	S2	65	G	Sidechain
4	S2	66	C	Sidechain
4	S2	67	C	Sidechain
4	S2	68	C	Sidechain
4	S2	70	C	Sidechain
4	S2	71	G	Sidechain
4	S2	73	A	Sidechain
4	S2	74	A	Sidechain
4	S2	75	C	Sidechain
4	S2	76	C	Sidechain
4	S2	77	A	Sidechain
4	S2	8	U	Sidechain
4	S2	9	G	Sidechain
24	S3	10	ARG	Sidechain
24	S3	103	ARG	Sidechain
24	S3	136	ARG	Sidechain
24	S3	145	ARG	Sidechain
24	S3	18	ILE	Peptide
24	S3	199	VAL	Peptide

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Mol	Chain	Res	Type	Group
24	S3	2	ARG	Peptide
24	S3	201	PHE	Sidechain
24	S3	252	ARG	Sidechain
24	S3	28	ARG	Sidechain
24	S3	283	ASP	Peptide
24	S3	290	ASP	Peptide
24	S3	3	THR	Peptide
24	S3	308	ARG	Peptide
24	S3	326	ASP	Peptide
24	S3	33	THR	Peptide
24	S3	334	PHE	Sidechain
24	S3	338	TYR	Sidechain
24	S3	346	ASP	Peptide
24	S3	358	ARG	Sidechain
24	S3	359	PHE	Sidechain
24	S3	361	ARG	Mainchain
24	S3	401	ALA	Peptide
24	S3	407	ARG	Sidechain
24	S3	448	THR	Peptide
24	S3	490	ARG	Sidechain
24	S3	496	LYS	Peptide
24	S3	499	ASP	Peptide
24	S3	524	LEU	Peptide
24	S3	543	VAL	Peptide
24	S3	548	TYR	Sidechain
24	S3	568	TYR	Sidechain
24	S3	576	ARG	Sidechain
24	S3	604	PHE	Sidechain
24	S3	665	TYR	Sidechain
24	S3	683	PHE	Sidechain
24	S3	686	TYR	Sidechain
24	S3	78	TYR	Sidechain
2	SA	1	A	Sidechain
2	SA	1000	A	Sidechain
2	SA	1002	G	Sidechain
2	SA	1004	A	Sidechain
2	SA	1007	U	Sidechain
2	SA	1009	U	Sidechain
2	SA	101	A	Sidechain
2	SA	1010	U	Sidechain
2	SA	1012	A	Sidechain
2	SA	1013	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1017	U	Sidechain
2	SA	1018	G	Sidechain
2	SA	102	G	Sidechain
2	SA	1020	G	Sidechain
2	SA	1021	A	Sidechain
2	SA	1022	A	Sidechain
2	SA	1023	U	Sidechain
2	SA	1024	G	Sidechain
2	SA	1027	C	Sidechain
2	SA	1028	C	Sidechain
2	SA	1029	U	Sidechain
2	SA	1030	U	Sidechain
2	SA	1033	G	Sidechain
2	SA	1034	G	Sidechain
2	SA	1035	A	Sidechain
2	SA	1036	A	Sidechain
2	SA	1037	C	Sidechain
2	SA	1039	G	Sidechain
2	SA	104	G	Sidechain
2	SA	1040	U	Sidechain
2	SA	1042	A	Sidechain
2	SA	1044	A	Sidechain
2	SA	1045	C	Sidechain
2	SA	1047	G	Sidechain
2	SA	105	G	Sidechain
2	SA	1050	G	Sidechain
2	SA	1051	C	Sidechain
2	SA	1052	U	Sidechain
2	SA	1057	G	Sidechain
2	SA	1058	G	Sidechain
2	SA	106	C	Sidechain
2	SA	1060	U	Sidechain
2	SA	1062	U	Sidechain
2	SA	1064	G	Sidechain
2	SA	1065	U	Sidechain
2	SA	1066	C	Sidechain
2	SA	107	G	Sidechain
2	SA	1071	C	Sidechain
2	SA	1072	G	Sidechain
2	SA	1073	U	Sidechain
2	SA	1076	U	Sidechain
2	SA	1077	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	108	G	Sidechain
2	SA	1080	A	Sidechain
2	SA	1081	A	Sidechain
2	SA	1082	A	Sidechain
2	SA	1084	G	Sidechain
2	SA	1085	U	Sidechain
2	SA	1086	U	Sidechain
2	SA	1089	G	Sidechain
2	SA	109	A	Sidechain
2	SA	1090	U	Sidechain
2	SA	1091	U	Sidechain
2	SA	1092	A	Sidechain
2	SA	1094	G	Sidechain
2	SA	1095	U	Sidechain
2	SA	1097	C	Sidechain
2	SA	1098	C	Sidechain
2	SA	1099	G	Sidechain
2	SA	11	G	Sidechain
2	SA	110	C	Sidechain
2	SA	1101	A	Sidechain
2	SA	1102	A	Sidechain
2	SA	1103	C	Sidechain
2	SA	1104	G	Sidechain
2	SA	1106	G	Sidechain
2	SA	1108	G	Sidechain
2	SA	111	G	Sidechain
2	SA	1111	A	Sidechain
2	SA	1112	C	Sidechain
2	SA	1113	C	Sidechain
2	SA	1115	U	Sidechain
2	SA	1116	U	Sidechain
2	SA	1117	A	Sidechain
2	SA	1118	U	Sidechain
2	SA	1119	C	Sidechain
2	SA	1120	C	Sidechain
2	SA	1122	U	Sidechain
2	SA	1123	U	Sidechain
2	SA	1124	G	Sidechain
2	SA	1126	U	Sidechain
2	SA	1131	G	Sidechain
2	SA	1132	C	Sidechain
2	SA	1133	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1134	G	Sidechain
2	SA	1137	C	Sidechain
2	SA	1138	G	Sidechain
2	SA	1140	C	Sidechain
2	SA	1141	C	Sidechain
2	SA	1142	G	Sidechain
2	SA	1143	G	Sidechain
2	SA	1144	G	Sidechain
2	SA	1148	U	Sidechain
2	SA	115	G	Sidechain
2	SA	1152	A	Sidechain
2	SA	1153	G	Sidechain
2	SA	1154	G	Sidechain
2	SA	1155	A	Sidechain
2	SA	1156	G	Sidechain
2	SA	1157	A	Sidechain
2	SA	1158	C	Sidechain
2	SA	1161	C	Sidechain
2	SA	1162	C	Sidechain
2	SA	1163	A	Sidechain
2	SA	1168	U	Sidechain
2	SA	1169	A	Sidechain
2	SA	117	G	Sidechain
2	SA	1170	A	Sidechain
2	SA	1174	G	Sidechain
2	SA	1175	G	Sidechain
2	SA	1177	G	Sidechain
2	SA	1178	G	Sidechain
2	SA	118	U	Sidechain
2	SA	1180	A	Sidechain
2	SA	1181	G	Sidechain
2	SA	1182	G	Sidechain
2	SA	1184	G	Sidechain
2	SA	1185	G	Sidechain
2	SA	1186	G	Sidechain
2	SA	1187	G	Sidechain
2	SA	1188	A	Sidechain
2	SA	119	A	Sidechain
2	SA	1190	G	Sidechain
2	SA	1191	A	Sidechain
2	SA	1192	C	Sidechain
2	SA	1193	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1194	U	Sidechain
2	SA	1195	C	Sidechain
2	SA	1196	A	Sidechain
2	SA	12	U	Sidechain
2	SA	120	A	Sidechain
2	SA	1200	C	Sidechain
2	SA	1201	A	Sidechain
2	SA	1203	C	Sidechain
2	SA	1204	A	Sidechain
2	SA	1205	U	Sidechain
2	SA	1207	G	Sidechain
2	SA	1208	C	Sidechain
2	SA	1209	C	Sidechain
2	SA	1210	C	Sidechain
2	SA	1211	U	Sidechain
2	SA	1212	U	Sidechain
2	SA	1213	A	Sidechain
2	SA	1216	A	Sidechain
2	SA	1217	C	Sidechain
2	SA	1218	C	Sidechain
2	SA	1220	G	Sidechain
2	SA	1221	G	Sidechain
2	SA	1222	G	Sidechain
2	SA	1223	C	Sidechain
2	SA	1225	A	Sidechain
2	SA	1227	A	Sidechain
2	SA	1230	C	Sidechain
2	SA	1231	G	Sidechain
2	SA	1234	C	Sidechain
2	SA	1236	A	Sidechain
2	SA	1238	A	Sidechain
2	SA	1240	U	Sidechain
2	SA	1241	G	Sidechain
2	SA	1242	G	Sidechain
2	SA	1244	G	Sidechain
2	SA	1246	A	Sidechain
2	SA	1248	A	Sidechain
2	SA	1249	C	Sidechain
2	SA	1250	A	Sidechain
2	SA	1251	A	Sidechain
2	SA	1253	G	Sidechain
2	SA	1255	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1256	A	Sidechain
2	SA	1258	G	Sidechain
2	SA	1260	G	Sidechain
2	SA	1261	A	Sidechain
2	SA	1262	C	Sidechain
2	SA	1263	C	Sidechain
2	SA	1264	U	Sidechain
2	SA	1266	G	Sidechain
2	SA	1267	C	Sidechain
2	SA	1268	G	Sidechain
2	SA	1269	A	Sidechain
2	SA	127	G	Sidechain
2	SA	1271	A	Sidechain
2	SA	1272	G	Sidechain
2	SA	1273	C	Sidechain
2	SA	1274	A	Sidechain
2	SA	1275	A	Sidechain
2	SA	1277	C	Sidechain
2	SA	1278	G	Sidechain
2	SA	1279	G	Sidechain
2	SA	1280	A	Sidechain
2	SA	1282	C	Sidechain
2	SA	1283	U	Sidechain
2	SA	1284	C	Sidechain
2	SA	1285	A	Sidechain
2	SA	1287	A	Sidechain
2	SA	1289	A	Sidechain
2	SA	129	A	Sidechain
2	SA	1293	C	Sidechain
2	SA	1294	G	Sidechain
2	SA	1297	G	Sidechain
2	SA	1298	U	Sidechain
2	SA	1299	A	Sidechain
2	SA	13	U	Sidechain
2	SA	130	A	Sidechain
2	SA	1300	G	Sidechain
2	SA	1302	C	Sidechain
2	SA	1303	C	Sidechain
2	SA	1304	G	Sidechain
2	SA	1305	G	Sidechain
2	SA	1306	A	Sidechain
2	SA	1307	U	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1308	U	Sidechain
2	SA	1310	G	Sidechain
2	SA	1311	A	Sidechain
2	SA	1312	G	Sidechain
2	SA	1313	U	Sidechain
2	SA	1315	U	Sidechain
2	SA	1316	G	Sidechain
2	SA	1317	C	Sidechain
2	SA	1318	A	Sidechain
2	SA	1320	C	Sidechain
2	SA	1321	U	Sidechain
2	SA	1322	C	Sidechain
2	SA	1323	G	Sidechain
2	SA	1326	U	Sidechain
2	SA	1327	C	Sidechain
2	SA	1328	C	Sidechain
2	SA	1329	A	Sidechain
2	SA	1332	A	Sidechain
2	SA	1334	G	Sidechain
2	SA	1335	U	Sidechain
2	SA	1336	C	Sidechain
2	SA	1337	G	Sidechain
2	SA	1338	G	Sidechain
2	SA	1339	A	Sidechain
2	SA	134	G	Sidechain
2	SA	1340	A	Sidechain
2	SA	1343	G	Sidechain
2	SA	1344	C	Sidechain
2	SA	1345	U	Sidechain
2	SA	1346	A	Sidechain
2	SA	1348	U	Sidechain
2	SA	1349	A	Sidechain
2	SA	135	C	Sidechain
2	SA	1350	A	Sidechain
2	SA	1351	U	Sidechain
2	SA	1352	C	Sidechain
2	SA	1353	G	Sidechain
2	SA	1357	A	Sidechain
2	SA	1358	U	Sidechain
2	SA	1359	C	Sidechain
2	SA	1360	A	Sidechain
2	SA	1362	A	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1363	A	Sidechain
2	SA	1365	G	Sidechain
2	SA	1366	C	Sidechain
2	SA	1367	C	Sidechain
2	SA	1368	A	Sidechain
2	SA	1370	G	Sidechain
2	SA	1371	G	Sidechain
2	SA	1372	U	Sidechain
2	SA	1374	A	Sidechain
2	SA	1375	A	Sidechain
2	SA	1378	C	Sidechain
2	SA	1379	G	Sidechain
2	SA	1380	U	Sidechain
2	SA	1381	U	Sidechain
2	SA	1382	C	Sidechain
2	SA	1384	C	Sidechain
2	SA	1385	G	Sidechain
2	SA	1386	G	Sidechain
2	SA	1387	G	Sidechain
2	SA	1388	C	Sidechain
2	SA	139	A	Sidechain
2	SA	1390	U	Sidechain
2	SA	1393	U	Sidechain
2	SA	1395	C	Sidechain
2	SA	1396	A	Sidechain
2	SA	1399	C	Sidechain
2	SA	14	U	Sidechain
2	SA	1400	C	Sidechain
2	SA	1401	G	Sidechain
2	SA	1403	C	Sidechain
2	SA	1405	G	Sidechain
2	SA	1406	U	Sidechain
2	SA	1407	C	Sidechain
2	SA	141	G	Sidechain
2	SA	1411	C	Sidechain
2	SA	1412	C	Sidechain
2	SA	1413	A	Sidechain
2	SA	1416	G	Sidechain
2	SA	1417	G	Sidechain
2	SA	1418	A	Sidechain
2	SA	142	G	Sidechain
2	SA	1420	U	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1422	G	Sidechain
2	SA	1423	G	Sidechain
2	SA	1424	U	Sidechain
2	SA	1425	U	Sidechain
2	SA	1429	A	Sidechain
2	SA	1430	A	Sidechain
2	SA	1431	A	Sidechain
2	SA	1432	G	Sidechain
2	SA	1433	A	Sidechain
2	SA	1434	A	Sidechain
2	SA	1435	G	Sidechain
2	SA	1436	U	Sidechain
2	SA	1437	A	Sidechain
2	SA	1439	G	Sidechain
2	SA	144	G	Sidechain
2	SA	1440	U	Sidechain
2	SA	1441	A	Sidechain
2	SA	1442	G	Sidechain
2	SA	1444	U	Sidechain
2	SA	1445	U	Sidechain
2	SA	1447	A	Sidechain
2	SA	1448	C	Sidechain
2	SA	1449	C	Sidechain
2	SA	145	G	Sidechain
2	SA	1450	U	Sidechain
2	SA	1451	U	Sidechain
2	SA	1453	G	Sidechain
2	SA	1454	G	Sidechain
2	SA	1455	G	Sidechain
2	SA	1456	A	Sidechain
2	SA	1459	G	Sidechain
2	SA	1463	U	Sidechain
2	SA	1464	U	Sidechain
2	SA	1465	A	Sidechain
2	SA	1467	C	Sidechain
2	SA	1469	C	Sidechain
2	SA	147	G	Sidechain
2	SA	1471	U	Sidechain
2	SA	1472	U	Sidechain
2	SA	1473	G	Sidechain
2	SA	1474	U	Sidechain
2	SA	1476	A	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1477	U	Sidechain
2	SA	148	G	Sidechain
2	SA	1480	A	Sidechain
2	SA	1482	G	Sidechain
2	SA	1485	U	Sidechain
2	SA	1486	G	Sidechain
2	SA	1487	G	Sidechain
2	SA	1488	G	Sidechain
2	SA	1489	G	Sidechain
2	SA	1491	G	Sidechain
2	SA	1492	A	Sidechain
2	SA	1493	A	Sidechain
2	SA	1494	G	Sidechain
2	SA	1495	U	Sidechain
2	SA	1496	C	Sidechain
2	SA	1497	G	Sidechain
2	SA	1498	U	Sidechain
2	SA	1500	A	Sidechain
2	SA	1501	C	Sidechain
2	SA	1502	A	Sidechain
2	SA	1504	G	Sidechain
2	SA	1505	G	Sidechain
2	SA	1508	A	Sidechain
2	SA	151	A	Sidechain
2	SA	1511	G	Sidechain
2	SA	1512	U	Sidechain
2	SA	1513	A	Sidechain
2	SA	1514	G	Sidechain
2	SA	1515	G	Sidechain
2	SA	1516	G	Sidechain
2	SA	1518	A	Sidechain
2	SA	1519	A	Sidechain
2	SA	152	A	Sidechain
2	SA	1521	C	Sidechain
2	SA	1522	U	Sidechain
2	SA	1524	C	Sidechain
2	SA	1525	G	Sidechain
2	SA	1528	U	Sidechain
2	SA	1529	G	Sidechain
2	SA	153	C	Sidechain
2	SA	1531	A	Sidechain
2	SA	1532	U	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	1533	C	Sidechain
2	SA	1537	U	Sidechain
2	SA	154	U	Sidechain
2	SA	1540	U	Sidechain
2	SA	158	G	Sidechain
2	SA	159	G	Sidechain
2	SA	16	A	Sidechain
2	SA	160	A	Sidechain
2	SA	162	A	Sidechain
2	SA	164	G	Sidechain
2	SA	165	G	Sidechain
2	SA	167	A	Sidechain
2	SA	168	G	Sidechain
2	SA	17	U	Sidechain
2	SA	170	U	Sidechain
2	SA	171	A	Sidechain
2	SA	175	C	Sidechain
2	SA	176	C	Sidechain
2	SA	177	G	Sidechain
2	SA	178	C	Sidechain
2	SA	18	C	Sidechain
2	SA	180	U	Sidechain
2	SA	181	A	Sidechain
2	SA	182	A	Sidechain
2	SA	184	G	Sidechain
2	SA	186	C	Sidechain
2	SA	187	G	Sidechain
2	SA	189	A	Sidechain
2	SA	19	A	Sidechain
2	SA	192	A	Sidechain
2	SA	193	C	Sidechain
2	SA	194	C	Sidechain
2	SA	195	A	Sidechain
2	SA	196	A	Sidechain
2	SA	197	A	Sidechain
2	SA	200	G	Sidechain
2	SA	205	A	Sidechain
2	SA	207	C	Sidechain
2	SA	208	U	Sidechain
2	SA	209	U	Sidechain
2	SA	21	G	Sidechain
2	SA	211	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	213	G	Sidechain
2	SA	214	C	Sidechain
2	SA	217	C	Sidechain
2	SA	219	U	Sidechain
2	SA	220	G	Sidechain
2	SA	222	C	Sidechain
2	SA	223	A	Sidechain
2	SA	224	U	Sidechain
2	SA	225	C	Sidechain
2	SA	226	G	Sidechain
2	SA	227	G	Sidechain
2	SA	229	U	Sidechain
2	SA	230	G	Sidechain
2	SA	231	U	Sidechain
2	SA	234	C	Sidechain
2	SA	235	C	Sidechain
2	SA	239	U	Sidechain
2	SA	24	U	Sidechain
2	SA	240	G	Sidechain
2	SA	241	G	Sidechain
2	SA	243	A	Sidechain
2	SA	244	U	Sidechain
2	SA	247	G	Sidechain
2	SA	249	U	Sidechain
2	SA	250	A	Sidechain
2	SA	253	A	Sidechain
2	SA	254	G	Sidechain
2	SA	255	G	Sidechain
2	SA	256	U	Sidechain
2	SA	258	G	Sidechain
2	SA	26	A	Sidechain
2	SA	261	U	Sidechain
2	SA	262	A	Sidechain
2	SA	264	C	Sidechain
2	SA	266	G	Sidechain
2	SA	267	C	Sidechain
2	SA	268	U	Sidechain
2	SA	270	A	Sidechain
2	SA	271	C	Sidechain
2	SA	274	A	Sidechain
2	SA	276	G	Sidechain
2	SA	277	C	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	279	A	Sidechain
2	SA	280	C	Sidechain
2	SA	281	G	Sidechain
2	SA	288	A	Sidechain
2	SA	289	G	Sidechain
2	SA	29	U	Sidechain
2	SA	293	G	Sidechain
2	SA	297	G	Sidechain
2	SA	299	G	Sidechain
2	SA	300	A	Sidechain
2	SA	302	G	Sidechain
2	SA	304	U	Sidechain
2	SA	305	G	Sidechain
2	SA	306	A	Sidechain
2	SA	307	C	Sidechain
2	SA	310	G	Sidechain
2	SA	311	C	Sidechain
2	SA	313	A	Sidechain
2	SA	317	U	Sidechain
2	SA	318	G	Sidechain
2	SA	32	A	Sidechain
2	SA	320	A	Sidechain
2	SA	321	A	Sidechain
2	SA	322	C	Sidechain
2	SA	324	G	Sidechain
2	SA	326	G	Sidechain
2	SA	327	A	Sidechain
2	SA	33	A	Sidechain
2	SA	331	G	Sidechain
2	SA	332	G	Sidechain
2	SA	335	C	Sidechain
2	SA	336	A	Sidechain
2	SA	337	G	Sidechain
2	SA	338	A	Sidechain
2	SA	339	C	Sidechain
2	SA	340	U	Sidechain
2	SA	341	C	Sidechain
2	SA	343	U	Sidechain
2	SA	344	A	Sidechain
2	SA	345	C	Sidechain
2	SA	346	G	Sidechain
2	SA	347	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	348	G	Sidechain
2	SA	349	A	Sidechain
2	SA	35	G	Sidechain
2	SA	350	G	Sidechain
2	SA	352	C	Sidechain
2	SA	353	A	Sidechain
2	SA	354	G	Sidechain
2	SA	355	C	Sidechain
2	SA	356	A	Sidechain
2	SA	357	G	Sidechain
2	SA	358	U	Sidechain
2	SA	359	G	Sidechain
2	SA	360	G	Sidechain
2	SA	361	G	Sidechain
2	SA	362	G	Sidechain
2	SA	363	A	Sidechain
2	SA	364	A	Sidechain
2	SA	365	U	Sidechain
2	SA	366	A	Sidechain
2	SA	367	U	Sidechain
2	SA	368	U	Sidechain
2	SA	37	U	Sidechain
2	SA	371	A	Sidechain
2	SA	372	C	Sidechain
2	SA	373	A	Sidechain
2	SA	374	A	Sidechain
2	SA	375	U	Sidechain
2	SA	376	G	Sidechain
2	SA	380	G	Sidechain
2	SA	382	A	Sidechain
2	SA	384	G	Sidechain
2	SA	386	C	Sidechain
2	SA	388	G	Sidechain
2	SA	389	A	Sidechain
2	SA	39	G	Sidechain
2	SA	390	U	Sidechain
2	SA	391	G	Sidechain
2	SA	394	G	Sidechain
2	SA	398	U	Sidechain
2	SA	399	G	Sidechain
2	SA	4	U	Sidechain
2	SA	40	C	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	402	G	Sidechain
2	SA	405	U	Sidechain
2	SA	406	G	Sidechain
2	SA	409	U	Sidechain
2	SA	41	G	Sidechain
2	SA	411	A	Sidechain
2	SA	414	A	Sidechain
2	SA	416	G	Sidechain
2	SA	42	G	Sidechain
2	SA	420	U	Sidechain
2	SA	421	U	Sidechain
2	SA	423	G	Sidechain
2	SA	424	G	Sidechain
2	SA	425	G	Sidechain
2	SA	426	U	Sidechain
2	SA	427	U	Sidechain
2	SA	428	G	Sidechain
2	SA	429	U	Sidechain
2	SA	430	A	Sidechain
2	SA	432	A	Sidechain
2	SA	433	G	Sidechain
2	SA	434	U	Sidechain
2	SA	437	U	Sidechain
2	SA	440	C	Sidechain
2	SA	441	A	Sidechain
2	SA	442	G	Sidechain
2	SA	444	G	Sidechain
2	SA	445	G	Sidechain
2	SA	446	G	Sidechain
2	SA	448	A	Sidechain
2	SA	449	G	Sidechain
2	SA	45	G	Sidechain
2	SA	450	G	Sidechain
2	SA	451	A	Sidechain
2	SA	452	A	Sidechain
2	SA	453	G	Sidechain
2	SA	454	G	Sidechain
2	SA	458	U	Sidechain
2	SA	459	A	Sidechain
2	SA	46	G	Sidechain
2	SA	460	A	Sidechain
2	SA	461	A	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	462	G	Sidechain
2	SA	463	U	Sidechain
2	SA	464	U	Sidechain
2	SA	465	A	Sidechain
2	SA	466	A	Sidechain
2	SA	468	A	Sidechain
2	SA	469	C	Sidechain
2	SA	47	C	Sidechain
2	SA	471	U	Sidechain
2	SA	473	U	Sidechain
2	SA	474	G	Sidechain
2	SA	476	U	Sidechain
2	SA	478	A	Sidechain
2	SA	479	U	Sidechain
2	SA	48	C	Sidechain
2	SA	480	U	Sidechain
2	SA	481	G	Sidechain
2	SA	483	C	Sidechain
2	SA	484	G	Sidechain
2	SA	485	U	Sidechain
2	SA	486	U	Sidechain
2	SA	487	A	Sidechain
2	SA	488	C	Sidechain
2	SA	489	C	Sidechain
2	SA	49	U	Sidechain
2	SA	490	C	Sidechain
2	SA	491	G	Sidechain
2	SA	493	A	Sidechain
2	SA	494	G	Sidechain
2	SA	495	A	Sidechain
2	SA	497	G	Sidechain
2	SA	499	A	Sidechain
2	SA	5	U	Sidechain
2	SA	501	C	Sidechain
2	SA	502	A	Sidechain
2	SA	503	C	Sidechain
2	SA	504	C	Sidechain
2	SA	505	G	Sidechain
2	SA	506	G	Sidechain
2	SA	51	A	Sidechain
2	SA	510	A	Sidechain
2	SA	511	C	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	513	C	Sidechain
2	SA	515	G	Sidechain
2	SA	516	U	Sidechain
2	SA	517	G	Sidechain
2	SA	518	C	Sidechain
2	SA	519	C	Sidechain
2	SA	52	C	Sidechain
2	SA	521	G	Sidechain
2	SA	522	C	Sidechain
2	SA	523	A	Sidechain
2	SA	524	G	Sidechain
2	SA	527	G	Sidechain
2	SA	528	C	Sidechain
2	SA	53	A	Sidechain
2	SA	531	U	Sidechain
2	SA	532	A	Sidechain
2	SA	533	A	Sidechain
2	SA	534	U	Sidechain
2	SA	54	C	Sidechain
2	SA	541	G	Sidechain
2	SA	544	G	Sidechain
2	SA	546	A	Sidechain
2	SA	549	C	Sidechain
2	SA	55	A	Sidechain
2	SA	550	G	Sidechain
2	SA	551	U	Sidechain
2	SA	552	U	Sidechain
2	SA	553	A	Sidechain
2	SA	556	C	Sidechain
2	SA	557	G	Sidechain
2	SA	558	G	Sidechain
2	SA	559	A	Sidechain
2	SA	56	U	Sidechain
2	SA	560	A	Sidechain
2	SA	561	U	Sidechain
2	SA	562	U	Sidechain
2	SA	563	A	Sidechain
2	SA	564	C	Sidechain
2	SA	565	U	Sidechain
2	SA	566	G	Sidechain
2	SA	568	G	Sidechain
2	SA	57	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	570	G	Sidechain
2	SA	571	U	Sidechain
2	SA	572	A	Sidechain
2	SA	573	A	Sidechain
2	SA	575	G	Sidechain
2	SA	577	G	Sidechain
2	SA	578	C	Sidechain
2	SA	579	A	Sidechain
2	SA	58	C	Sidechain
2	SA	581	G	Sidechain
2	SA	583	A	Sidechain
2	SA	585	G	Sidechain
2	SA	593	U	Sidechain
2	SA	594	U	Sidechain
2	SA	596	A	Sidechain
2	SA	597	G	Sidechain
2	SA	6	G	Sidechain
2	SA	60	A	Sidechain
2	SA	602	A	Sidechain
2	SA	605	U	Sidechain
2	SA	606	G	Sidechain
2	SA	609	A	Sidechain
2	SA	61	G	Sidechain
2	SA	610	U	Sidechain
2	SA	611	C	Sidechain
2	SA	616	G	Sidechain
2	SA	617	G	Sidechain
2	SA	619	U	Sidechain
2	SA	62	U	Sidechain
2	SA	623	C	Sidechain
2	SA	624	C	Sidechain
2	SA	625	U	Sidechain
2	SA	626	G	Sidechain
2	SA	630	A	Sidechain
2	SA	632	U	Sidechain
2	SA	635	A	Sidechain
2	SA	636	U	Sidechain
2	SA	638	U	Sidechain
2	SA	64	G	Sidechain
2	SA	640	A	Sidechain
2	SA	641	U	Sidechain
2	SA	642	A	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	644	U	Sidechain
2	SA	645	G	Sidechain
2	SA	646	G	Sidechain
2	SA	649	A	Sidechain
2	SA	65	A	Sidechain
2	SA	650	G	Sidechain
2	SA	651	C	Sidechain
2	SA	652	U	Sidechain
2	SA	653	U	Sidechain
2	SA	654	G	Sidechain
2	SA	655	A	Sidechain
2	SA	659	U	Sidechain
2	SA	66	A	Sidechain
2	SA	660	C	Sidechain
2	SA	661	G	Sidechain
2	SA	663	A	Sidechain
2	SA	665	A	Sidechain
2	SA	666	G	Sidechain
2	SA	670	G	Sidechain
2	SA	671	G	Sidechain
2	SA	672	U	Sidechain
2	SA	673	A	Sidechain
2	SA	674	G	Sidechain
2	SA	676	A	Sidechain
2	SA	678	U	Sidechain
2	SA	68	G	Sidechain
2	SA	680	C	Sidechain
2	SA	682	G	Sidechain
2	SA	683	G	Sidechain
2	SA	685	G	Sidechain
2	SA	686	U	Sidechain
2	SA	687	A	Sidechain
2	SA	688	G	Sidechain
2	SA	689	C	Sidechain
2	SA	690	G	Sidechain
2	SA	691	G	Sidechain
2	SA	692	U	Sidechain
2	SA	693	G	Sidechain
2	SA	694	A	Sidechain
2	SA	695	A	Sidechain
2	SA	696	A	Sidechain
2	SA	697	U	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	699	C	Sidechain
2	SA	7	A	Sidechain
2	SA	701	U	Sidechain
2	SA	703	G	Sidechain
2	SA	704	A	Sidechain
2	SA	705	G	Sidechain
2	SA	707	U	Sidechain
2	SA	711	G	Sidechain
2	SA	712	A	Sidechain
2	SA	714	G	Sidechain
2	SA	715	A	Sidechain
2	SA	716	A	Sidechain
2	SA	717	U	Sidechain
2	SA	719	C	Sidechain
2	SA	72	A	Sidechain
2	SA	721	G	Sidechain
2	SA	722	G	Sidechain
2	SA	723	U	Sidechain
2	SA	725	G	Sidechain
2	SA	727	G	Sidechain
2	SA	729	A	Sidechain
2	SA	73	C	Sidechain
2	SA	730	G	Sidechain
2	SA	731	G	Sidechain
2	SA	733	G	Sidechain
2	SA	734	G	Sidechain
2	SA	735	C	Sidechain
2	SA	740	U	Sidechain
2	SA	742	G	Sidechain
2	SA	743	A	Sidechain
2	SA	745	G	Sidechain
2	SA	746	A	Sidechain
2	SA	747	A	Sidechain
2	SA	749	A	Sidechain
2	SA	75	G	Sidechain
2	SA	750	C	Sidechain
2	SA	751	U	Sidechain
2	SA	752	G	Sidechain
2	SA	754	C	Sidechain
2	SA	755	G	Sidechain
2	SA	757	U	Sidechain
2	SA	76	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	761	G	Sidechain
2	SA	762	U	Sidechain
2	SA	763	G	Sidechain
2	SA	764	C	Sidechain
2	SA	765	G	Sidechain
2	SA	766	A	Sidechain
2	SA	768	A	Sidechain
2	SA	769	G	Sidechain
2	SA	771	G	Sidechain
2	SA	772	U	Sidechain
2	SA	773	G	Sidechain
2	SA	778	G	Sidechain
2	SA	780	A	Sidechain
2	SA	782	A	Sidechain
2	SA	785	G	Sidechain
2	SA	786	G	Sidechain
2	SA	787	A	Sidechain
2	SA	79	G	Sidechain
2	SA	791	G	Sidechain
2	SA	792	A	Sidechain
2	SA	793	U	Sidechain
2	SA	794	A	Sidechain
2	SA	795	C	Sidechain
2	SA	798	U	Sidechain
2	SA	799	G	Sidechain
2	SA	80	A	Sidechain
2	SA	800	G	Sidechain
2	SA	803	G	Sidechain
2	SA	806	C	Sidechain
2	SA	808	C	Sidechain
2	SA	81	A	Sidechain
2	SA	810	C	Sidechain
2	SA	811	C	Sidechain
2	SA	812	G	Sidechain
2	SA	813	U	Sidechain
2	SA	814	A	Sidechain
2	SA	815	A	Sidechain
2	SA	816	A	Sidechain
2	SA	818	G	Sidechain
2	SA	819	A	Sidechain
2	SA	820	U	Sidechain
2	SA	821	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	822	U	Sidechain
2	SA	823	C	Sidechain
2	SA	824	G	Sidechain
2	SA	825	A	Sidechain
2	SA	826	C	Sidechain
2	SA	827	U	Sidechain
2	SA	830	G	Sidechain
2	SA	832	G	Sidechain
2	SA	833	G	Sidechain
2	SA	834	U	Sidechain
2	SA	835	U	Sidechain
2	SA	837	U	Sidechain
2	SA	838	G	Sidechain
2	SA	84	U	Sidechain
2	SA	841	C	Sidechain
2	SA	843	U	Sidechain
2	SA	844	G	Sidechain
2	SA	845	A	Sidechain
2	SA	846	G	Sidechain
2	SA	847	G	Sidechain
2	SA	848	C	Sidechain
2	SA	849	G	Sidechain
2	SA	85	U	Sidechain
2	SA	850	U	Sidechain
2	SA	851	G	Sidechain
2	SA	852	G	Sidechain
2	SA	855	U	Sidechain
2	SA	856	C	Sidechain
2	SA	857	C	Sidechain
2	SA	858	G	Sidechain
2	SA	859	G	Sidechain
2	SA	86	G	Sidechain
2	SA	861	G	Sidechain
2	SA	862	C	Sidechain
2	SA	864	A	Sidechain
2	SA	865	A	Sidechain
2	SA	867	G	Sidechain
2	SA	87	C	Sidechain
2	SA	873	A	Sidechain
2	SA	877	G	Sidechain
2	SA	878	A	Sidechain
2	SA	879	C	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	88	U	Sidechain
2	SA	880	C	Sidechain
2	SA	883	C	Sidechain
2	SA	884	U	Sidechain
2	SA	885	G	Sidechain
2	SA	888	G	Sidechain
2	SA	890	G	Sidechain
2	SA	891	U	Sidechain
2	SA	892	A	Sidechain
2	SA	894	G	Sidechain
2	SA	898	G	Sidechain
2	SA	899	C	Sidechain
2	SA	90	C	Sidechain
2	SA	900	A	Sidechain
2	SA	901	A	Sidechain
2	SA	902	G	Sidechain
2	SA	904	U	Sidechain
2	SA	908	A	Sidechain
2	SA	909	A	Sidechain
2	SA	91	U	Sidechain
2	SA	910	C	Sidechain
2	SA	911	U	Sidechain
2	SA	912	C	Sidechain
2	SA	913	A	Sidechain
2	SA	914	A	Sidechain
2	SA	917	G	Sidechain
2	SA	918	A	Sidechain
2	SA	920	U	Sidechain
2	SA	921	U	Sidechain
2	SA	922	G	Sidechain
2	SA	924	C	Sidechain
2	SA	925	G	Sidechain
2	SA	926	G	Sidechain
2	SA	927	G	Sidechain
2	SA	928	G	Sidechain
2	SA	930	C	Sidechain
2	SA	933	G	Sidechain
2	SA	935	A	Sidechain
2	SA	939	G	Sidechain
2	SA	94	G	Sidechain
2	SA	941	G	Sidechain
2	SA	942	G	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	943	U	Sidechain
2	SA	944	G	Sidechain
2	SA	945	G	Sidechain
2	SA	946	A	Sidechain
2	SA	947	G	Sidechain
2	SA	95	C	Sidechain
2	SA	950	U	Sidechain
2	SA	951	G	Sidechain
2	SA	952	U	Sidechain
2	SA	953	G	Sidechain
2	SA	954	G	Sidechain
2	SA	956	U	Sidechain
2	SA	958	A	Sidechain
2	SA	959	A	Sidechain
2	SA	96	U	Sidechain
2	SA	960	U	Sidechain
2	SA	961	U	Sidechain
2	SA	962	C	Sidechain
2	SA	963	G	Sidechain
2	SA	964	A	Sidechain
2	SA	965	U	Sidechain
2	SA	966	G	Sidechain
2	SA	967	C	Sidechain
2	SA	969	A	Sidechain
2	SA	97	G	Sidechain
2	SA	970	C	Sidechain
2	SA	971	G	Sidechain
2	SA	973	G	Sidechain
2	SA	975	A	Sidechain
2	SA	976	G	Sidechain
2	SA	977	A	Sidechain
2	SA	978	A	Sidechain
2	SA	98	A	Sidechain
2	SA	983	A	Sidechain
2	SA	984	C	Sidechain
2	SA	986	U	Sidechain
2	SA	987	G	Sidechain
2	SA	988	G	Sidechain
2	SA	99	C	Sidechain
2	SA	992	U	Sidechain
2	SA	993	G	Sidechain
2	SA	994	A	Sidechain

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Mol	Chain	Res	Type	Group
2	SA	995	C	Sidechain
2	SA	996	A	Sidechain
2	SA	999	C	Sidechain
18	SB	136	ARG	Sidechain
18	SB	14	HIS	Sidechain
18	SB	158	ASP	Peptide
18	SB	183	PHE	Sidechain
18	SB	207	ARG	Sidechain
18	SB	21	TYR	Sidechain
18	SB	212	TYR	Sidechain
18	SB	221	ARG	Sidechain
18	SB	224	ARG	Sidechain
18	SB	29	PHE	Peptide
18	SB	3	VAL	Peptide
18	SB	44	LYS	Peptide
18	SB	94	ARG	Sidechain
19	SC	126	ARG	Peptide
19	SC	142	ARG	Sidechain
19	SC	155	ARG	Sidechain
19	SC	158	GLY	Peptide
19	SC	160	GLU	Peptide
19	SC	168	ARG	Sidechain
19	SC	206	ILE	Peptide
19	SC	228	ARG	Sidechain
19	SC	41	TYR	Peptide
19	SC	5	HIS	Peptide
19	SC	96	VAL	Peptide
20	SD	106	PHE	Peptide
20	SD	110	ARG	Sidechain
20	SD	12	ARG	Sidechain
20	SD	13	ARG	Sidechain
20	SD	134	TYR	Sidechain
20	SD	14	GLU	Peptide
20	SD	169	TRP	Peptide
20	SD	185	PRO	Peptide
20	SD	187	ARG	Sidechain
20	SD	2	ARG	Peptide
20	SD	24	VAL	Peptide
20	SD	31	CYS	Peptide
20	SD	46	ARG	Sidechain
20	SD	55	ARG	Sidechain
20	SD	61	ARG	Sidechain

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Mol	Chain	Res	Type	Group
20	SD	64	TYR	Sidechain
20	SD	75	TYR	Sidechain
20	SD	80	ARG	Sidechain
21	SE	120	HIS	Sidechain
21	SE	122	VAL	Peptide
21	SE	127	TYR	Sidechain
21	SE	147	ASN	Peptide
21	SE	162	GLU	Peptide
21	SE	20	VAL	Peptide
21	SE	30	PHE	Sidechain
21	SE	43	GLY	Peptide
21	SE	78	GLY	Peptide
21	SE	92	ARG	Peptide,Sidechain
22	SF	101	PRO	Peptide
22	SF	116	PHE	Sidechain
22	SF	119	GLU	Peptide
22	SF	24	ARG	Sidechain
22	SF	25	TYR	Sidechain
22	SF	44	ARG	Sidechain
22	SF	49	TYR	Sidechain
22	SF	58	HIS	Peptide
22	SF	59	TYR	Sidechain
22	SF	64	VAL	Peptide
22	SF	78	PHE	Sidechain
22	SF	8	PHE	Sidechain
7	SG	1	PRO	Peptide
7	SG	108	ARG	Sidechain
7	SG	110	ARG	Sidechain
7	SG	133	ALA	Peptide
7	SG	137	ARG	Sidechain
7	SG	146	ALA	Peptide
7	SG	150	PHE	Sidechain
7	SG	154	ARG	Sidechain
7	SG	163	HIS	Sidechain
7	SG	2	ARG	Sidechain
7	SG	25	PHE	Sidechain
7	SG	3	ARG	Sidechain
7	SG	4	ARG	Sidechain
7	SG	69	ARG	Sidechain
7	SG	72	VAL	Peptide
7	SG	77	ARG	Peptide,Sidechain
7	SG	84	TYR	Sidechain

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Mol	Chain	Res	Type	Group
7	SG	9	ARG	Sidechain
8	SH	127	TYR	Sidechain
8	SH	44	PHE	Sidechain
8	SH	50	VAL	Peptide
8	SH	54	THR	Peptide
8	SH	71	VAL	Peptide
8	SH	73	SER	Peptide
8	SH	78	SER	Peptide
8	SH	83	ARG	Sidechain
8	SH	87	ARG	Sidechain
8	SH	91	LEU	Peptide
9	SI	112	ARG	Sidechain
9	SI	121	ARG	Sidechain
9	SI	44	ARG	Sidechain
9	SI	6	TYR	Sidechain
9	SI	89	TYR	Peptide,Sidechain
9	SI	93	LEU	Mainchain
10	SJ	31	ARG	Sidechain
10	SJ	45	ARG	Sidechain
10	SJ	5	ARG	Sidechain
10	SJ	62	ARG	Sidechain
10	SJ	63	ASP	Peptide
10	SJ	72	ARG	Sidechain
10	SJ	74	VAL	Peptide
10	SJ	9	ARG	Sidechain
10	SJ	93	ALA	Peptide
11	SK	10	ARG	Sidechain
11	SK	12	ARG	Sidechain
11	SK	126	ARG	Sidechain
11	SK	52	ARG	Sidechain
11	SK	58	THR	Peptide
11	SK	76	TYR	Sidechain
11	SK	97	ARG	Sidechain
12	SL	11	ARG	Sidechain
12	SL	121	PRO	Peptide
12	SL	49	ARG	Sidechain
12	SL	53	ARG	Sidechain
12	SL	65	TYR	Sidechain
12	SL	8	ARG	Sidechain
12	SL	85	ARG	Peptide
12	SL	9	LYS	Peptide
12	SL	94	TYR	Sidechain

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Mol	Chain	Res	Type	Group
12	SL	98	ARG	Sidechain
13	SM	106	ARG	Sidechain
13	SM	111	PRO	Peptide
13	SM	2	ARG	Sidechain
13	SM	70	ARG	Sidechain
13	SM	78	ARG	Sidechain
13	SM	85	TYR	Sidechain
13	SM	89	ARG	Sidechain
13	SM	90	HIS	Sidechain
14	SN	19	TYR	Sidechain
14	SN	23	ARG	Sidechain
14	SN	52	ARG	Sidechain
14	SN	58	ARG	Sidechain
14	SN	60	ARG	Sidechain
14	SN	62	ARG	Sidechain
14	SN	74	ARG	Sidechain
14	SN	76	PHE	Sidechain
14	SN	80	ARG	Sidechain
14	SN	89	ARG	Sidechain
14	SN	97	LYS	Peptide
15	SO	16	ARG	Sidechain
15	SO	45	HIS	Peptide
15	SO	62	ARG	Sidechain
15	SO	63	ARG	Sidechain
15	SO	77	TYR	Sidechain
15	SO	83	ARG	Sidechain
15	SO	88	ARG	Sidechain
16	SP	13	LYS	Peptide
16	SP	14	ARG	Sidechain
16	SP	17	TYR	Sidechain
16	SP	28	ARG	Sidechain
16	SP	29	ASN	Peptide
16	SP	35	ARG	Sidechain
16	SP	5	ARG	Sidechain
16	SP	56	ARG	Sidechain
16	SP	59	HIS	Sidechain
17	SQ	10	ARG	Sidechain
17	SQ	18	LYS	Peptide
17	SQ	39	ARG	Sidechain
17	SQ	5	ARG	Sidechain
17	SQ	64	ARG	Sidechain
17	SQ	76	ARG	Sidechain

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Mol	Chain	Res	Type	Group
23	SR	22	TYR	Sidechain
23	SR	3	TYR	Sidechain
23	SR	31	TYR	Sidechain
23	SR	5	ARG	Sidechain
23	SR	50	TYR	Sidechain
23	SR	56	ARG	Sidechain
23	SR	63	TYR	Sidechain
23	SR	69	TYR	Sidechain
23	SR	72	ARG	Sidechain
1	SS	1	PRO	Peptide
1	SS	10	ILE	Peptide
1	SS	13	HIS	Sidechain
1	SS	2	ARG	Sidechain
1	SS	21	ALA	Peptide
1	SS	28	LYS	Peptide
1	SS	3	SER	Peptide
1	SS	36	ARG	Sidechain
1	SS	56	HIS	Sidechain
1	SS	67	GLY	Peptide
1	SS	8	PRO	Peptide
5	ST	28	ARG	Sidechain
5	ST	30	PHE	Sidechain
5	ST	40	ALA	Peptide
5	ST	73	ARG	Sidechain
5	ST	85	LEU	Peptide
6	SU	11	PHE	Peptide
6	SU	17	ARG	Sidechain
6	SU	26	GLY	Peptide
6	SU	34	ARG	Sidechain
6	SU	35	GLU	Peptide
6	SU	44	ARG	Sidechain
6	SU	6	ARG	Sidechain
6	SU	65	ARG	Sidechain
6	SU	68	ARG	Sidechain
6	SU	69	LEU	Peptide
6	SU	70	TYR	Sidechain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within

the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	SS	727	0	769	10	0
2	SA	33076	0	16190	637	0
3	S1	993	0	496	16	0
4	S2	1639	0	816	32	0
5	ST	670	0	722	2	0
6	SU	590	0	631	6	0
7	SG	1400	0	1449	13	0
8	SH	979	0	1034	5	0
9	SI	1036	0	1084	9	0
10	SJ	825	0	865	9	0
11	SK	965	0	997	13	0
12	SL	955	0	1019	10	0
13	SM	910	0	981	9	0
14	SN	805	0	847	5	0
15	SO	716	0	742	4	0
16	SP	649	0	666	3	0
17	SQ	672	0	716	2	0
18	SB	1872	0	1885	15	0
19	SC	1822	0	1913	13	0
20	SD	1643	0	1710	21	0
21	SE	1225	0	1273	18	0
22	SF	1101	0	1050	11	0
23	SR	626	0	651	6	0
24	S3	5431	0	5403	46	0
25	LB	2566	0	1269	48	0
26	LA	62330	0	30424	1516	0
27	LD	2092	0	2170	21	0
28	LU	857	0	922	5	0
29	LV	787	0	846	5	0
30	LW	789	0	847	9	0
31	LX	753	0	780	4	0
32	LY	634	0	655	16	0
33	LZ	625	0	655	2	0
34	L0	509	0	543	5	0
35	L1	449	0	491	3	0
36	L2	549	0	552	5	0
37	LC	1733	0	1824	19	0
38	LE	1565	0	1616	21	0
39	L3	444	0	461	8	0
40	L4	441	0	485	4	0
41	L5	377	0	418	7	0
42	L6	504	0	574	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	L7	302	0	343	3	0
44	LF	1552	0	1619	18	0
45	LG	1420	0	1460	16	0
46	LH	1323	0	1374	6	0
47	LJ	1233	0	1283	6	0
48	LN	1053	0	1129	7	0
49	LK	1032	0	1088	3	0
50	LL	1129	0	1162	9	0
51	LI	1111	0	1148	6	0
52	LO	1074	0	1157	17	0
53	LP	1008	0	1045	10	0
54	LM	947	0	1023	6	0
55	LQ	900	0	935	9	0
56	LR	917	0	965	5	0
57	LS	947	0	1022	15	0
58	LT	816	0	839	7	0
59	S3	32	0	12	0	0
All	All	156127	0	107045	2623	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 10.

All (2623) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:SE:123:LEU:HD13	21:SE:124:ALA:H	1.44	0.83
2:SA:1381:U:H1'	7:SG:152:HIS:CE1	2.16	0.80
26:LA:1853:A:H61	26:LA:2087:G:H1'	1.47	0.80
26:LA:1965:C:C2	26:LA:1966:A:H2'	2.18	0.78
2:SA:803:G:C5	2:SA:804:U:C4	2.72	0.78
10:SJ:8:ILE:HG12	10:SJ:100:ILE:HG22	1.67	0.76
26:LA:877:A:H62	26:LA:900:A:H61	1.33	0.76
24:S3:583:HIS:CD2	24:S3:585:VAL:H	2.04	0.76
2:SA:900:A:C2	2:SA:901:A:C2	2.76	0.74
26:LA:1570:A:H2'	26:LA:1571:A:C8	2.25	0.72
50:LL:35:ARG:HA	50:LL:40:HIS:CE1	2.25	0.72
26:LA:190:A:C4	26:LA:207:A:C2	2.78	0.71
26:LA:250:G:C6	26:LA:251:A:C2	2.77	0.71
25:LB:78:A:C2	25:LB:99:A:C4	2.78	0.71
24:S3:362:ILE:HD13	24:S3:362:ILE:H	1.55	0.71
2:SA:998:C:H42	2:SA:1043:G:H1	1.39	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1226:C:H5'	13:SM:92:ARG:HH22	1.55	0.71
26:LA:2809:A:C2	26:LA:2810:A:C4	2.78	0.71
26:LA:45:G:H4'	26:LA:46:G:H5'	1.73	0.70
26:LA:513:A:C6	26:LA:514:A:C6	2.80	0.69
26:LA:948:C:C2	26:LA:984:A:C2	2.80	0.69
26:LA:1689:A:C6	26:LA:1700:A:C2	2.80	0.69
18:SB:14:HIS:CD2	18:SB:202:ASN:HD22	2.11	0.69
26:LA:2210:U:C6	26:LA:2212:A:C2	2.80	0.68
26:LA:1707:G:C5	26:LA:1756:G:C6	2.81	0.68
26:LA:2816:G:C4	26:LA:2817:U:C5	2.81	0.68
4:S2:1:C:C2	4:S2:75:C:C6	2.82	0.68
26:LA:910:A:C5	52:LO:13:HIS:CD2	2.82	0.68
26:LA:2210:U:C5	26:LA:2212:A:C2	2.82	0.68
26:LA:2502:G:H3'	26:LA:2503:A:H5'	1.76	0.67
27:LD:115:ILE:HD13	27:LD:116:GLN:H	1.60	0.67
26:LA:2657:A:C8	26:LA:2658:C:C6	2.81	0.67
45:LG:130:GLY:HA2	45:LG:152:ASP:HA	1.75	0.67
26:LA:2233:U:H2'	26:LA:2234:G:C8	2.30	0.67
26:LA:1544:A:C5	26:LA:1545:A:C5	2.83	0.67
26:LA:196:A:C6	26:LA:805:G:C6	2.83	0.67
2:SA:726:C:H2'	2:SA:727:G:C8	2.30	0.67
26:LA:544:C:H3'	26:LA:545:U:H5"	1.76	0.67
26:LA:1770:G:C6	26:LA:1983:G:C6	2.83	0.67
26:LA:1378:A:C5	26:LA:1380:G:C5	2.83	0.66
26:LA:2214:C:C5	26:LA:2215:C:C5	2.82	0.66
26:LA:1851:U:C5	26:LA:1852:U:C4	2.83	0.66
26:LA:2249:U:H3'	26:LA:2250:G:C5'	2.24	0.66
26:LA:747:U:C5	26:LA:2613:U:C5	2.84	0.66
26:LA:2437:G:C5	26:LA:2438:U:C5	2.84	0.66
26:LA:455:C:C4	26:LA:472:A:C5	2.83	0.66
26:LA:1977:A:C6	26:LA:1978:A:C5	2.83	0.66
26:LA:1825:U:H2'	26:LA:1826:G:C8	2.31	0.66
48:LN:123:ARG:NH1	48:LN:144:GLU:H	1.94	0.66
26:LA:1276:A:C2	26:LA:1277:G:C5	2.84	0.66
2:SA:718:A:C8	2:SA:719:C:C5	2.84	0.65
26:LA:1550:C:H2'	26:LA:1551:A:C8	2.31	0.65
2:SA:842:U:C4	2:SA:846:G:C4	2.84	0.65
26:LA:123:G:C6	26:LA:124:G:C5	2.85	0.65
26:LA:81:G:C6	26:LA:82:U:C2	2.84	0.65
26:LA:2468:A:C2	26:LA:2481:G:C2	2.85	0.65
26:LA:811:U:C5	26:LA:1251:C:C5	2.85	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:990:C:H2'	2:SA:991:U:C6	2.31	0.64
4:S2:2:G:C5	4:S2:73:A:C2	2.86	0.64
30:LW:85:ARG:HE	30:LW:86:PHE:H	1.45	0.64
26:LA:1916:A:C5	26:LA:1917:U:H6	2.15	0.64
26:LA:774:G:H5"	27:LD:47:ARG:HH22	1.62	0.64
26:LA:1022:G:C6	26:LA:1141:U:C5	2.86	0.64
26:LA:2869:G:C5	26:LA:2870:C:C4	2.85	0.64
32:LY:45:HIS:CE1	32:LY:49:ASN:HB3	2.32	0.64
2:SA:500:G:C6	2:SA:501:C:C4	2.86	0.64
26:LA:85:G:C6	26:LA:86:G:C5	2.86	0.63
26:LA:2551:C:C5	26:LA:2552:U:C4	2.85	0.63
2:SA:730:G:N2	2:SA:765:G:H5"	2.12	0.63
2:SA:367:U:H5"	2:SA:394:G:H21	1.63	0.63
26:LA:136:G:C6	26:LA:137:U:C4	2.87	0.63
26:LA:1312:U:C2	26:LA:1603:A:C2	2.86	0.63
2:SA:704:A:C4	2:SA:705:G:C8	2.87	0.63
26:LA:199:A:C4	26:LA:2433:A:N1	2.66	0.63
26:LA:1144:A:C5	26:LA:1145:C:C5	2.87	0.63
26:LA:2063:C:C5	26:LA:2064:C:C5	2.87	0.63
26:LA:457:A:H61	26:LA:470:A:H3'	1.64	0.62
26:LA:1965:C:H6	26:LA:1965:C:H5"	1.64	0.62
2:SA:826:C:C2	2:SA:827:U:C5	2.87	0.62
2:SA:1225:A:H2'	2:SA:1226:C:C5	2.34	0.62
5:ST:67:HIS:CG	5:ST:68:LYS:H	2.15	0.62
26:LA:2004:G:C6	26:LA:2005:A:C4	2.87	0.62
2:SA:690:G:C5	2:SA:691:G:C5	2.86	0.62
26:LA:2273:A:C2	26:LA:2274:A:C6	2.87	0.62
2:SA:1219:A:H2'	2:SA:1220:G:C8	2.33	0.62
56:LR:63:ILE:HG22	56:LR:68:GLY:H	1.65	0.62
26:LA:83:A:C5	26:LA:101:A:C5	2.87	0.62
26:LA:647:G:C6	26:LA:648:G:C5	2.88	0.62
26:LA:659:G:H2'	26:LA:660:C:C6	2.35	0.62
26:LA:1213:A:C2	26:LA:1214:A:C4	2.87	0.62
26:LA:2251:U:C5	26:LA:2252:G:C5	2.88	0.62
26:LA:792:A:H1'	26:LA:793:A:C2	2.35	0.62
26:LA:2339:C:H2'	26:LA:2340:A:C8	2.35	0.62
26:LA:2249:U:H3'	26:LA:2250:G:H5"	1.82	0.62
2:SA:11:G:C5	2:SA:12:U:C5	2.87	0.62
57:LS:60:TRP:CE2	57:LS:93:ILE:HD13	2.35	0.62
2:SA:1518:A:H2'	2:SA:1519:A:C8	2.35	0.61
10:SJ:42:LEU:HD12	10:SJ:73:LEU:HD11	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2209:G:C5	26:LA:2210:U:C4	2.88	0.61
2:SA:892:A:C6	2:SA:907:A:C8	2.88	0.61
19:SC:173:PRO:HD2	19:SC:202:PHE:CE1	2.35	0.61
26:LA:72:U:C4	26:LA:112:U:H4'	2.36	0.61
26:LA:1773:A:C2	26:LA:1829:A:C2	2.88	0.61
2:SA:1391:U:H2'	2:SA:1392:G:C8	2.35	0.61
26:LA:1507:C:H2'	26:LA:1508:A:H5"	1.81	0.61
26:LA:2674:G:C6	26:LA:2675:A:C5	2.89	0.61
26:LA:1365:A:C2	26:LA:1366:A:C4	2.89	0.61
2:SA:76:G:C2	2:SA:77:A:H1'	2.36	0.61
2:SA:642:A:C5	2:SA:643:C:C5	2.89	0.61
26:LA:604:G:C6	26:LA:605:G:C6	2.88	0.61
26:LA:2868:A:C4	26:LA:2869:G:C8	2.89	0.61
26:LA:28:A:C5	26:LA:29:U:C5	2.88	0.61
26:LA:1978:A:C8	26:LA:1979:U:C5	2.89	0.61
26:LA:2532:G:C5	26:LA:2533:U:C2	2.89	0.61
2:SA:439:U:C5	2:SA:440:C:C5	2.89	0.61
26:LA:1924:C:C5	26:LA:1925:C:C5	2.88	0.61
53:LP:38:LEU:HB3	53:LP:39:PRO:HD3	1.83	0.61
24:S3:647:GLU:HG2	24:S3:648:VAL:H	1.66	0.60
26:LA:1453:A:H1'	53:LP:77:ALA:HB2	1.82	0.60
26:LA:2516:A:H2'	26:LA:2517:C:C6	2.35	0.60
26:LA:470:A:H2'	26:LA:471:A:C8	2.36	0.60
26:LA:563:A:C5	26:LA:564:C:C5	2.89	0.60
26:LA:1274:A:C6	26:LA:1302:A:C2	2.90	0.60
38:LE:24:VAL:HG11	38:LE:188:LEU:HD23	1.81	0.60
44:LF:84:THR:HG23	44:LF:85:PHE:CD2	2.35	0.60
2:SA:359:G:C6	2:SA:360:G:C5	2.90	0.60
2:SA:629:A:C2	2:SA:630:A:C4	2.90	0.60
4:S2:2:G:C6	4:S2:73:A:C2	2.90	0.60
4:S2:59:A:C2	4:S2:62:C:C6	2.89	0.60
18:SB:67:LEU:HD11	18:SB:91:VAL:HG23	1.84	0.60
26:LA:1684:G:C2	26:LA:1705:A:C2	2.89	0.60
2:SA:406:G:C8	2:SA:495:A:C4	2.89	0.60
26:LA:2443:C:H2'	26:LA:2444:G:C8	2.36	0.60
27:LD:209:ALA:HA	27:LD:212:TRP:CE2	2.36	0.60
4:S2:19:G:H1	4:S2:56:U:H3	1.48	0.60
9:SI:29:ILE:HD11	9:SI:66:VAL:HG11	1.84	0.60
2:SA:1371:G:C5	2:SA:1372:U:C4	2.89	0.60
26:LA:2235:G:C6	26:LA:2236:U:C4	2.89	0.60
2:SA:22:G:C5	2:SA:23:C:C5	2.89	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2829:A:C5	26:LA:2830:C:C5	2.90	0.60
38:LE:4:LEU:HD12	38:LE:101:PHE:CE1	2.37	0.60
2:SA:781:A:C5	2:SA:802:A:C2	2.90	0.60
26:LA:2488:G:C4	26:LA:2489:U:C5	2.90	0.60
26:LA:355:U:H2'	26:LA:356:G:C8	2.37	0.60
26:LA:470:A:H2'	26:LA:471:A:H8	1.67	0.60
26:LA:717:C:H3'	26:LA:718:A:H5"	1.82	0.60
26:LA:1028:A:C2	26:LA:1029:A:C5	2.90	0.60
26:LA:1915:C:H2'	26:LA:1916:A:C8	2.37	0.60
26:LA:2080:A:H2'	26:LA:2081:U:H6	1.67	0.60
26:LA:719:C:C5	26:LA:720:U:C5	2.90	0.59
26:LA:2683:C:C5	26:LA:2684:U:C5	2.90	0.59
25:LB:30:C:C6	25:LB:31:C:C6	2.90	0.59
26:LA:796:C:H2'	26:LA:797:G:C8	2.38	0.59
2:SA:1517:G:C6	2:SA:1518:A:C5	2.90	0.59
26:LA:2100:G:C5	26:LA:2190:G:C2	2.90	0.59
26:LA:2120:G:H2'	26:LA:2121:G:C8	2.36	0.59
26:LA:2493:U:C5	26:LA:2494:G:C8	2.90	0.59
2:SA:1394:A:C2	2:SA:1501:C:H4'	2.38	0.59
12:SL:97:VAL:HG23	12:SL:100:ALA:HB3	1.85	0.59
2:SA:17:U:H2'	2:SA:18:C:C6	2.37	0.59
26:LA:1779:U:C4	26:LA:1783:A:C8	2.90	0.59
25:LB:30:C:C6	25:LB:31:C:C5	2.90	0.59
26:LA:1783:A:C2	26:LA:2587:A:N7	2.71	0.59
4:S2:57:C:C5	26:LA:2169:A:C8	2.90	0.59
26:LA:10:A:C2	26:LA:2800:A:H5'	2.37	0.59
26:LA:470:A:C2	26:LA:471:A:C4	2.91	0.59
26:LA:1689:A:C5	26:LA:1700:A:C2	2.90	0.59
26:LA:2209:G:C5	26:LA:2210:U:C5	2.91	0.59
2:SA:730:G:H21	2:SA:765:G:H5"	1.67	0.59
25:LB:39:A:C2	25:LB:44:G:C2	2.90	0.59
26:LA:2450:A:C6	26:LA:2451:A:C2	2.90	0.59
26:LA:2519:U:C4	26:LA:2542:A:C5	2.91	0.59
55:LQ:62:LEU:HD22	55:LQ:62:LEU:H	1.67	0.59
2:SA:5:U:H4'	2:SA:7:A:H61	1.67	0.59
26:LA:1055:G:H4'	47:LJ:33:THR:HA	1.85	0.59
57:LS:60:TRP:CZ3	57:LS:93:ILE:HB	2.38	0.59
2:SA:718:A:C5	11:SK:117:HIS:CD2	2.91	0.58
2:SA:1117:A:C2	2:SA:1184:G:C6	2.91	0.58
26:LA:948:C:O2	26:LA:984:A:C4	2.55	0.58
26:LA:1107:G:C6	26:LA:1108:U:C4	2.91	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:255:G:C5	2:SA:256:U:C5	2.92	0.58
2:SA:399:G:C6	2:SA:400:C:C4	2.90	0.58
2:SA:611:C:C5	2:SA:612:C:C5	2.91	0.58
26:LA:2126:A:C6	26:LA:2173:A:C6	2.91	0.58
26:LA:2575:C:H2'	38:LE:149:ASN:OD1	2.03	0.58
26:LA:753:A:C2	26:LA:754:U:C2	2.91	0.58
26:LA:1055:G:C6	26:LA:1056:G:C4	2.91	0.58
45:LG:77:LYS:HB3	45:LG:78:ILE:HG23	1.84	0.58
2:SA:573:A:C6	2:SA:574:A:N1	2.71	0.58
26:LA:188:G:C6	26:LA:189:G:C4	2.92	0.58
26:LA:1431:A:C2	26:LA:1432:G:C4	2.91	0.58
26:LA:1242:U:C4	26:LA:1243:C:C4	2.91	0.58
3:S1:43:U:H3'	3:S1:45:G:H1	1.68	0.58
26:LA:1797:G:C6	26:LA:1798:U:C4	2.91	0.58
26:LA:2197:U:C6	26:LA:2224:G:C6	2.91	0.58
2:SA:1153:G:H1'	19:SC:218:LYS:HE2	1.84	0.58
26:LA:346:A:C6	26:LA:347:A:C4	2.92	0.58
26:LA:877:A:N6	26:LA:900:A:H61	1.99	0.58
26:LA:878:A:C2	26:LA:879:G:C4	2.92	0.58
26:LA:1505:A:H2'	26:LA:1506:U:C6	2.38	0.58
25:LB:78:A:C2	25:LB:99:A:C5	2.92	0.58
26:LA:1871:A:H2'	26:LA:1872:A:C8	2.39	0.58
18:SB:37:VAL:HG12	18:SB:38:HIS:H	1.68	0.58
26:LA:825:A:C2	26:LA:833:A:C2	2.92	0.58
2:SA:474:G:C5	2:SA:475:C:C4	2.90	0.58
8:SH:63:LYS:HE2	8:SH:70:VAL:HG11	1.86	0.58
26:LA:878:A:C2	26:LA:900:A:C6	2.92	0.58
45:LG:73:VAL:HG23	45:LG:74:ALA:H	1.68	0.58
2:SA:1004:A:C2	2:SA:1005:A:C4	2.91	0.57
26:LA:182:A:C2	26:LA:183:C:C2	2.92	0.57
2:SA:160:A:C6	2:SA:344:A:H1'	2.39	0.57
2:SA:213:G:C2	2:SA:214:C:H1'	2.39	0.57
26:LA:2568:U:C2	26:LA:2569:G:C8	2.92	0.57
2:SA:608:A:C6	2:SA:609:A:C5	2.91	0.57
25:LB:39:A:C2	25:LB:40:U:O4	2.57	0.57
26:LA:544:C:H3'	26:LA:545:U:C5'	2.34	0.57
26:LA:1928:A:C5	26:LA:1929:G:C5	2.91	0.57
2:SA:666:G:C5	2:SA:741:G:C6	2.91	0.57
26:LA:532:A:H2'	26:LA:532:A:N3	2.18	0.57
26:LA:1338:G:C4	26:LA:1339:G:C8	2.92	0.57
26:LA:2124:G:C5	26:LA:2125:G:H1'	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1005:A:C5	2:SA:1006:G:H1'	2.39	0.57
2:SA:1313:U:C4	2:SA:1314:C:C5	2.92	0.57
26:LA:322:A:H5'	26:LA:340:A:H1'	1.84	0.57
26:LA:2097:A:H2'	26:LA:2098:U:C6	2.40	0.57
37:LC:40:GLU:O	37:LC:178:VAL:HG13	2.03	0.57
2:SA:389:A:C6	2:SA:390:U:H1'	2.39	0.57
2:SA:1417:G:C5	2:SA:1482:G:C6	2.93	0.57
26:LA:819:A:C6	26:LA:820:A:C5	2.91	0.57
26:LA:1284:A:C6	26:LA:1285:A:C6	2.92	0.57
26:LA:1973:G:C6	26:LA:1974:C:C4	2.93	0.57
26:LA:2415:G:C6	26:LA:2416:C:C4	2.92	0.57
27:LD:209:ALA:HA	27:LD:212:TRP:CD2	2.40	0.57
2:SA:550:G:C6	2:SA:551:U:C4	2.93	0.57
2:SA:587:G:C6	2:SA:755:G:C6	2.92	0.57
26:LA:1202:G:C5	26:LA:1203:U:C5	2.93	0.57
26:LA:2702:G:C5	26:LA:2703:C:C5	2.92	0.57
2:SA:513:C:C4	2:SA:514:C:C4	2.93	0.57
2:SA:1501:C:C5	2:SA:1504:G:C5	2.93	0.57
26:LA:58:G:C6	26:LA:59:U:C4	2.92	0.57
26:LA:447:A:C5	26:LA:473:G:C5	2.93	0.57
26:LA:1933:G:C6	26:LA:1934:C:C4	2.92	0.57
26:LA:1654:A:H4'	38:LE:118:PHE:CZ	2.40	0.57
26:LA:1866:A:C4	26:LA:1876:A:C5	2.93	0.57
26:LA:2248:C:H2'	26:LA:2249:U:H5'	1.85	0.57
26:LA:2721:A:C2	26:LA:2873:A:C6	2.92	0.57
44:LF:5:LEU:HD11	44:LF:12:LEU:HD22	1.86	0.57
2:SA:46:G:C5	2:SA:366:A:C2	2.92	0.57
2:SA:49:U:C4	2:SA:364:A:C6	2.92	0.57
2:SA:690:G:C6	2:SA:691:G:C6	2.93	0.57
26:LA:877:A:H62	26:LA:900:A:N6	2.01	0.57
26:LA:2004:G:C6	26:LA:2005:A:C5	2.93	0.57
2:SA:46:G:C6	2:SA:366:A:H2	2.22	0.56
2:SA:552:U:H4'	12:SL:83:GLY:O	2.04	0.56
2:SA:803:G:C5	2:SA:804:U:C5	2.93	0.56
26:LA:627:A:C2	26:LA:637:A:C4	2.92	0.56
26:LA:2104:C:C2	26:LA:2186:G:C2	2.93	0.56
26:LA:2415:G:C5	26:LA:2416:C:C5	2.93	0.56
52:LO:111:GLU:CD	52:LO:111:GLU:H	2.09	0.56
26:LA:1027:A:C5	26:LA:1126:A:C2	2.93	0.56
26:LA:1242:U:C5	26:LA:1243:C:C5	2.93	0.56
26:LA:1897:G:C2	26:LA:1898:U:C2	2.92	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:L2:11:GLU:CD	36:L2:11:GLU:H	2.08	0.56
25:LB:7:G:C5	25:LB:8:C:C5	2.93	0.56
26:LA:322:A:C5	26:LA:340:A:C2	2.93	0.56
57:LS:91:ARG:NH2	58:LT:11:GLN:H	2.03	0.56
2:SA:693:G:C5	2:SA:694:A:C8	2.93	0.56
2:SA:706:A:C6	2:SA:707:U:C4	2.94	0.56
2:SA:815:A:C2	2:SA:1529:G:C8	2.94	0.56
7:SG:17:PHE:CZ	7:SG:57:GLU:HB2	2.40	0.56
26:LA:1763:G:H3'	26:LA:1764:C:H5"	1.86	0.56
26:LA:2133:G:H3'	26:LA:2134:A:H4'	1.87	0.56
26:LA:2209:G:C6	26:LA:2210:U:C4	2.93	0.56
26:LA:2718:G:C6	26:LA:2719:G:C4	2.93	0.56
26:LA:780:G:C5	26:LA:782:A:C6	2.93	0.56
26:LA:1378:A:C6	26:LA:1380:G:C4	2.93	0.56
26:LA:2644:G:C6	26:LA:2645:G:C2	2.94	0.56
26:LA:2788:C:H2'	26:LA:2789:C:C6	2.40	0.56
26:LA:989:G:C8	35:L1:13:ILE:HD11	2.40	0.56
26:LA:1911:U:C5	26:LA:1918:A:C6	2.93	0.56
2:SA:622:A:C6	2:SA:623:C:H1'	2.40	0.56
2:SA:803:G:C6	2:SA:804:U:C4	2.93	0.56
2:SA:1004:A:C6	2:SA:1026:G:H1'	2.41	0.56
26:LA:573:U:O2'	26:LA:574:A:H3'	2.06	0.56
26:LA:1268:A:C2	26:LA:2013:A:C5	2.94	0.56
26:LA:2469:A:C2	26:LA:2482:A:H1'	2.40	0.56
26:LA:2631:G:C2	26:LA:2632:A:C4	2.94	0.56
26:LA:2657:A:H8	26:LA:2658:C:C6	2.19	0.56
39:L3:48:TYR:HB3	39:L3:53:VAL:HG21	1.88	0.56
26:LA:572:A:C6	26:LA:573:U:C5	2.94	0.56
26:LA:651:G:H2'	26:LA:652:U:C5	2.41	0.56
26:LA:2478:A:C2	26:LA:2529:G:H2'	2.41	0.56
26:LA:2710:C:H2'	26:LA:2711:A:C8	2.41	0.56
26:LA:123:G:C6	26:LA:124:G:C6	2.94	0.56
26:LA:2520:C:C5	26:LA:2567:G:C5	2.94	0.56
2:SA:704:A:C6	2:SA:705:G:C4	2.94	0.56
26:LA:311:A:C5	26:LA:328:U:O4	2.59	0.56
26:LA:567:U:C5	26:LA:568:U:C2	2.94	0.56
26:LA:1430:G:C2	26:LA:1431:A:C4	2.94	0.56
36:L2:34:LEU:HG	36:L2:35:ASP:N	2.21	0.56
2:SA:171:A:H2'	2:SA:172:A:C8	2.41	0.55
13:SM:13:HIS:CD2	13:SM:15:VAL:HG12	2.42	0.55
26:LA:362:A:C4	26:LA:363:G:C8	2.94	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2180:U:C4	26:LA:2181:U:C4	2.94	0.55
2:SA:64:G:C5	2:SA:99:C:C4	2.94	0.55
2:SA:1142:G:C6	2:SA:1143:G:H1'	2.41	0.55
2:SA:1251:A:H2'	2:SA:1252:A:C8	2.42	0.55
25:LB:34:A:C2	25:LB:49:C:C2	2.94	0.55
26:LA:17:G:C5	26:LA:18:U:C4	2.94	0.55
26:LA:55:G:H2'	26:LA:56:A:C8	2.41	0.55
26:LA:705:A:C2	26:LA:706:A:C4	2.94	0.55
26:LA:152:A:H2'	26:LA:153:U:C6	2.41	0.55
2:SA:542:G:C2	2:SA:543:U:C5	2.94	0.55
2:SA:1514:G:C6	2:SA:1515:G:C5	2.93	0.55
26:LA:485:C:H2'	26:LA:486:C:C6	2.42	0.55
26:LA:1191:G:C6	26:LA:1192:G:C5	2.93	0.55
26:LA:1486:U:H2'	26:LA:1487:U:C6	2.41	0.55
27:LD:64:VAL:HG21	27:LD:90:ILE:HD12	1.87	0.55
2:SA:505:G:H2'	2:SA:506:G:C8	2.40	0.55
26:LA:77:G:C6	26:LA:78:U:C4	2.94	0.55
26:LA:666:A:C5	26:LA:667:U:C4	2.94	0.55
37:LC:27:ILE:HD13	37:LC:185:LEU:HD12	1.88	0.55
26:LA:1879:C:C4	26:LA:1880:U:C4	2.94	0.55
26:LA:2721:A:C2	26:LA:2873:A:C5	2.95	0.55
26:LA:2903:U:H3'	26:LA:2904:U:H5"	1.89	0.55
2:SA:35:G:C6	2:SA:36:C:C4	2.94	0.55
2:SA:184:G:C5	2:SA:185:U:C5	2.95	0.55
26:LA:464:U:O2	26:LA:788:A:C4	2.59	0.55
26:LA:1392:A:N7	26:LA:1393:A:C6	2.75	0.55
26:LA:1654:A:H1'	38:LE:118:PHE:CD2	2.41	0.55
26:LA:1908:C:H2'	26:LA:1909:C:C6	2.42	0.55
26:LA:2186:G:C6	26:LA:2187:U:C4	2.95	0.55
26:LA:2251:U:C5	26:LA:2252:G:C6	2.95	0.55
26:LA:2630:G:C5	26:LA:2894:G:C6	2.95	0.55
2:SA:354:G:C2	2:SA:355:C:C6	2.94	0.55
26:LA:1171:G:H2'	26:LA:1172:C:C6	2.42	0.55
26:LA:1741:C:H2'	26:LA:1742:U:C6	2.42	0.55
26:LA:1770:G:C5	26:LA:1983:G:C6	2.95	0.55
26:LA:1911:U:C6	26:LA:1918:A:C6	2.94	0.55
26:LA:2394:C:C5	26:LA:2395:C:C4	2.95	0.55
38:LE:5:VAL:HG21	38:LE:80:TRP:CE3	2.42	0.55
2:SA:174:A:C5	2:SA:175:C:C5	2.94	0.55
2:SA:1226:C:C5'	13:SM:92:ARG:HH22	2.20	0.55
22:SF:18:VAL:CG1	22:SF:126:ALA:HB2	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:LB:6:G:H2'	25:LB:7:G:C8	2.42	0.55
26:LA:221:A:C2	26:LA:233:A:C5	2.95	0.55
26:LA:729:G:C4	26:LA:1775:U:O2	2.60	0.55
26:LA:1777:U:C2	26:LA:1778:U:C5	2.95	0.55
26:LA:2377:A:H2'	26:LA:2378:A:C8	2.42	0.55
38:LE:2:ILE:H	38:LE:2:ILE:HD12	1.72	0.55
26:LA:1241:A:C2	26:LA:1242:U:C4	2.95	0.54
26:LA:1365:A:C6	26:LA:1366:A:C5	2.94	0.54
26:LA:2069:G:C2	26:LA:2070:A:C8	2.95	0.54
26:LA:582:A:C6	26:LA:583:G:C6	2.95	0.54
26:LA:662:G:H2'	26:LA:663:G:C8	2.43	0.54
26:LA:1202:G:C4	26:LA:1203:U:C5	2.96	0.54
26:LA:1952:A:C6	26:LA:1953:A:N1	2.75	0.54
2:SA:299:G:C6	2:SA:300:A:C6	2.96	0.54
2:SA:690:G:C6	2:SA:691:G:C5	2.96	0.54
11:SK:32:THR:HG23	11:SK:43:TRP:HB3	1.90	0.54
26:LA:49:A:C5	26:LA:177:G:C6	2.95	0.54
26:LA:827:U:C5	26:LA:2430:A:C5	2.95	0.54
26:LA:1786:A:C5	26:LA:1938:A:C2	2.95	0.54
26:LA:1853:A:H61	26:LA:2087:G:C1'	2.16	0.54
26:LA:2047:C:H2'	26:LA:2048:G:C8	2.43	0.54
27:LD:34:GLU:HG2	27:LD:35:LYS:H	1.72	0.54
6:SU:6:ARG:HD2	11:SK:96:ILE:HD11	1.90	0.54
24:S3:516:HIS:CE1	24:S3:579:PHE:CZ	2.95	0.54
26:LA:10:A:N3	26:LA:2800:A:H5'	2.23	0.54
26:LA:105:C:H2'	26:LA:106:C:C5	2.43	0.54
26:LA:954:G:C5	26:LA:955:U:C4	2.96	0.54
26:LA:2352:A:C2	32:LY:30:VAL:HG11	2.43	0.54
26:LA:2519:U:C5	26:LA:2542:A:C5	2.96	0.54
2:SA:299:G:C5	2:SA:300:A:C5	2.96	0.54
2:SA:310:G:C6	2:SA:311:C:C5	2.96	0.54
2:SA:344:A:H62	2:SA:347:G:N2	2.05	0.54
2:SA:434:U:H2'	2:SA:435:A:C8	2.43	0.54
2:SA:523:A:C6	12:SL:86:VAL:CG2	2.91	0.54
2:SA:1028:C:C4	2:SA:1029:U:C4	2.96	0.54
2:SA:1154:G:N2	2:SA:1155:A:H1'	2.23	0.54
18:SB:14:HIS:CE1	18:SB:202:ASN:HB2	2.43	0.54
24:S3:464:HIS:CE1	24:S3:468:ILE:HG13	2.43	0.54
2:SA:519:C:H2'	2:SA:520:A:C8	2.43	0.54
2:SA:696:A:C6	2:SA:697:U:O4	2.60	0.54
2:SA:1143:G:C2	2:SA:1144:G:C5	2.96	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:54:U:H3'	3:S1:55:A:H5"	1.89	0.54
19:SC:11:LEU:HD22	19:SC:17:TRP:CD1	2.42	0.54
26:LA:910:A:C5	52:LO:13:HIS:NE2	2.76	0.54
26:LA:1658:C:OP1	38:LE:140:HIS:CE1	2.61	0.54
26:LA:2028:U:H2'	26:LA:2029:G:C8	2.43	0.54
2:SA:56:U:H2'	2:SA:57:G:C8	2.43	0.54
2:SA:373:A:C6	2:SA:482:A:C4	2.96	0.54
26:LA:242:G:H3'	42:L6:63:TYR:CD2	2.43	0.54
26:LA:1286:A:C5	26:LA:1329:U:C4	2.95	0.54
26:LA:1830:C:H2'	26:LA:1831:G:H8	1.73	0.54
26:LA:2570:G:C5	26:LA:2571:U:C5	2.95	0.54
26:LA:2796:U:C2'	26:LA:2798:U:H3	2.20	0.54
2:SA:259:G:C6	2:SA:260:G:C5	2.96	0.54
11:SK:42:GLY:HA3	11:SK:76:TYR:CZ	2.43	0.54
20:SD:49:ASP:HA	20:SD:52:VAL:HG12	1.90	0.54
26:LA:1638:C:C4	26:LA:1639:C:C5	2.96	0.54
26:LA:1689:A:C8	26:LA:1700:A:C6	2.95	0.54
26:LA:1851:U:C5	26:LA:1852:U:C5	2.96	0.54
26:LA:2513:A:C6	26:LA:2514:U:C4	2.96	0.54
32:LY:33:GLY:H	32:LY:59:PHE:HA	1.73	0.54
2:SA:693:G:C6	2:SA:694:A:C5	2.96	0.54
2:SA:1312:G:C2	2:SA:1326:U:C4	2.96	0.54
20:SD:89:LEU:HD13	20:SD:199:ILE:HD11	1.90	0.54
26:LA:632:A:C2	26:LA:633:A:C4	2.96	0.54
26:LA:1486:U:H2'	26:LA:1487:U:H6	1.72	0.54
26:LA:1550:C:H2'	26:LA:1551:A:H8	1.73	0.54
26:LA:2214:C:C5	26:LA:2215:C:C4	2.96	0.54
7:SG:148:LYS:HB3	11:SK:60:PHE:CD2	2.43	0.53
23:SR:70:THR:H	23:SR:73:HIS:CE1	2.25	0.53
26:LA:1343:G:C4	26:LA:1344:U:C5	2.95	0.53
26:LA:1570:A:H2'	26:LA:1571:A:H8	1.73	0.53
26:LA:1838:C:C5	26:LA:1899:A:N7	2.75	0.53
26:LA:1879:C:C6	26:LA:1880:U:C5	2.95	0.53
26:LA:2544:G:C6	26:LA:2545:G:C5	2.95	0.53
26:LA:2720:U:C2	26:LA:2872:A:C5	2.96	0.53
45:LG:43:ILE:HG22	45:LG:47:LYS:H	1.72	0.53
26:LA:2864:G:C5	26:LA:2865:U:C4	2.96	0.53
2:SA:46:G:C6	2:SA:366:A:C2	2.96	0.53
2:SA:88:U:C4	2:SA:89:U:C4	2.97	0.53
2:SA:1535:C:C5	6:SU:50:SER:HA	2.42	0.53
26:LA:528:A:N7	26:LA:2042:A:C6	2.76	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:604:G:C6	26:LA:605:G:C5	2.96	0.53
26:LA:657:U:H2'	26:LA:658:U:C6	2.43	0.53
26:LA:1000:A:H2'	26:LA:1001:A:C8	2.44	0.53
26:LA:1355:G:C2	26:LA:1356:G:C5	2.97	0.53
26:LA:1725:U:C5	26:LA:1726:C:H5	2.26	0.53
26:LA:1965:C:HO2'	26:LA:1966:A:H2	1.55	0.53
26:LA:639:U:H2'	26:LA:640:C:C6	2.43	0.53
2:SA:714:G:H2'	2:SA:715:A:C8	2.44	0.53
2:SA:822:U:C4	2:SA:823:C:C5	2.96	0.53
26:LA:675:A:C5	26:LA:804:A:C2	2.96	0.53
26:LA:1057:A:C6	26:LA:1086:A:C2	2.96	0.53
26:LA:1725:U:C4	26:LA:1726:C:C5	2.97	0.53
26:LA:2839:G:C5	26:LA:2840:C:C5	2.96	0.53
2:SA:131:A:H2'	2:SA:132:C:C6	2.44	0.53
2:SA:210:C:C4'	2:SA:211:G:H21	2.22	0.53
2:SA:519:C:C4	2:SA:520:A:C6	2.96	0.53
2:SA:1433:A:C4	2:SA:1468:A:C2	2.97	0.53
24:S3:516:HIS:HE1	24:S3:579:PHE:CZ	2.26	0.53
24:S3:583:HIS:CG	24:S3:584:ASP:N	2.77	0.53
26:LA:1057:A:C5	26:LA:1058:U:C5	2.97	0.53
26:LA:2337:G:C6	26:LA:2338:C:C4	2.96	0.53
2:SA:149:A:C2	2:SA:174:A:C2	2.97	0.53
2:SA:153:C:C4	2:SA:154:U:C4	2.97	0.53
2:SA:236:A:H2'	2:SA:237:G:C8	2.43	0.53
2:SA:1255:G:C6	2:SA:1279:G:C8	2.97	0.53
25:LB:97:C:H2'	25:LB:98:G:H5'	1.91	0.53
26:LA:809:G:C6	26:LA:810:U:C4	2.97	0.53
26:LA:939:G:C6	26:LA:940:G:C5	2.97	0.53
26:LA:2024:G:C5	26:LA:2040:G:C2	2.97	0.53
26:LA:2214:C:C6	26:LA:2215:C:C5	2.97	0.53
2:SA:309:A:C2	2:SA:310:G:C5	2.96	0.53
2:SA:476:U:H2'	2:SA:477:C:C6	2.44	0.53
2:SA:1501:C:C4	2:SA:1504:G:C5	2.97	0.53
24:S3:157:ILE:HA	24:S3:161:LEU:HD13	1.90	0.53
26:LA:199:A:C4	26:LA:2433:A:C2	2.97	0.53
26:LA:1166:G:C6	26:LA:1167:C:C4	2.96	0.53
26:LA:1821:A:C6	26:LA:1822:C:C4	2.97	0.53
27:LD:90:ILE:HG21	27:LD:102:TYR:CD2	2.44	0.53
55:LQ:56:LYS:H	55:LQ:56:LYS:HD3	1.73	0.53
2:SA:1501:C:C5	2:SA:1504:G:C4	2.97	0.53
26:LA:96:C:H2'	26:LA:97:C:C6	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:970:U:C2	26:LA:971:G:C8	2.97	0.53
46:LH:120:ILE:HD11	46:LH:143:VAL:HG21	1.91	0.53
2:SA:1472:U:H2'	2:SA:1473:G:C8	2.43	0.53
2:SA:1508:A:C6	2:SA:1509:C:C4	2.97	0.53
4:S2:1:C:C6	4:S2:75:C:C5	2.97	0.53
26:LA:14:A:C5	26:LA:526:A:N1	2.77	0.53
26:LA:447:A:C4	26:LA:473:G:C8	2.96	0.53
26:LA:464:U:C4	26:LA:465:G:C5	2.97	0.53
26:LA:491:G:C6	26:LA:492:A:C5	2.97	0.53
26:LA:1048:A:C8	26:LA:1111:A:C6	2.97	0.53
26:LA:1879:C:C5	26:LA:1880:U:C4	2.96	0.53
26:LA:2097:A:C4	26:LA:2098:U:C5	2.96	0.53
55:LQ:35:ILE:H	55:LQ:53:THR:HG22	1.74	0.53
10:SJ:100:ILE:HD13	10:SJ:100:ILE:H	1.74	0.52
22:SF:8:PHE:CE1	22:SF:60:VAL:HG11	2.44	0.52
25:LB:102:G:C6	25:LB:103:U:C4	2.97	0.52
26:LA:709:U:H2'	26:LA:710:U:C6	2.44	0.52
26:LA:961:C:H4'	26:LA:962:G:OP2	2.09	0.52
26:LA:2142:A:C8	26:LA:2143:C:C6	2.98	0.52
26:LA:2495:G:C5	26:LA:2496:C:C5	2.97	0.52
2:SA:113:G:C6	2:SA:114:U:C4	2.98	0.52
26:LA:819:A:C2	26:LA:820:A:C4	2.98	0.52
26:LA:1268:A:C2	26:LA:2013:A:C4	2.97	0.52
26:LA:2034:U:C5	26:LA:2035:G:N7	2.78	0.52
26:LA:2900:A:C5	26:LA:2901:C:C5	2.97	0.52
45:LG:116:LEU:HD23	45:LG:177:ARG:HG3	1.92	0.52
2:SA:302:G:C6	2:SA:303:A:C5	2.97	0.52
2:SA:1149:C:H2'	2:SA:1150:A:C8	2.44	0.52
2:SA:1293:C:H2'	2:SA:1294:G:C8	2.44	0.52
26:LA:68:G:H2'	26:LA:69:C:H6	1.73	0.52
26:LA:1247:A:C6	26:LA:1249:U:C4	2.97	0.52
26:LA:1467:U:C4	26:LA:1546:G:C2	2.98	0.52
26:LA:2051:A:C6	26:LA:2614:A:C5	2.98	0.52
26:LA:2051:A:C4	26:LA:2614:A:C6	2.97	0.52
26:LA:2588:G:C6	26:LA:2589:A:C5	2.98	0.52
2:SA:105:G:C6	2:SA:106:C:C4	2.98	0.52
3:S1:54:U:C1'	20:SD:103:ARG:HH11	2.22	0.52
26:LA:77:G:C5	26:LA:78:U:C4	2.97	0.52
26:LA:415:A:C4	26:LA:416:U:C5	2.98	0.52
26:LA:1680:U:C4	26:LA:1681:G:C4	2.98	0.52
26:LA:1821:A:H2'	26:LA:1822:C:C6	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1910:G:C5	26:LA:1921:G:C2	2.97	0.52
26:LA:2824:C:C4	26:LA:2825:G:C4	2.97	0.52
34:L0:21:LEU:C	34:L0:23:ARG:HA	2.29	0.52
2:SA:260:G:H2'	2:SA:261:U:C6	2.45	0.52
2:SA:269:C:H2'	2:SA:270:A:C8	2.44	0.52
26:LA:2358:A:H8	26:LA:2358:A:OP1	1.92	0.52
40:L4:12:SER:HA	40:L4:48:TYR:HA	1.91	0.52
26:LA:45:G:C4'	26:LA:46:G:H5'	2.40	0.52
26:LA:870:U:C4	26:LA:871:U:C4	2.98	0.52
26:LA:1028:A:C2	26:LA:1029:A:C4	2.98	0.52
26:LA:1570:A:C2	26:LA:1571:A:C4	2.98	0.52
26:LA:1866:A:C6	26:LA:1876:A:C8	2.98	0.52
26:LA:2448:A:H3'	26:LA:2449:U:H2'	1.91	0.52
2:SA:104:G:C2	2:SA:105:G:C8	2.98	0.52
2:SA:796:C:H4'	3:S1:30:U:H2'	1.92	0.52
2:SA:1005:A:C6	2:SA:1006:G:H1'	2.45	0.52
24:S3:489:TYR:HB2	24:S3:568:TYR:CE1	2.45	0.52
26:LA:126:A:C5	41:L5:18:PHE:CE2	2.97	0.52
26:LA:242:G:H3'	42:L6:63:TYR:CE2	2.45	0.52
26:LA:319:G:C5	26:LA:320:A:C5	2.97	0.52
26:LA:401:A:C2	26:LA:402:A:C4	2.98	0.52
26:LA:646:U:C6	26:LA:647:G:C8	2.98	0.52
26:LA:1998:A:C4	26:LA:1999:C:C5	2.98	0.52
26:LA:2014:A:C2	26:LA:2015:A:N1	2.78	0.52
26:LA:2027:G:C6	26:LA:2028:U:C4	2.98	0.52
26:LA:2414:G:C2	26:LA:2415:G:C8	2.98	0.52
26:LA:2709:G:C5	26:LA:2710:C:C5	2.98	0.52
50:LL:76:HIS:CE1	50:LL:85:LYS:HB2	2.44	0.52
2:SA:81:A:C2	2:SA:89:U:O2	2.63	0.52
2:SA:767:A:C2	2:SA:768:A:C4	2.98	0.52
3:S1:24:A:H4'	6:SU:16:ARG:CZ	2.39	0.52
9:SI:51:LEU:HA	9:SI:54:VAL:HG22	1.92	0.52
26:LA:1787:A:C2	26:LA:1788:C:C6	2.98	0.52
26:LA:1906:G:C8	26:LA:1929:G:C5	2.98	0.52
26:LA:1916:A:C5	26:LA:1917:U:C6	2.97	0.52
26:LA:2051:A:C5	26:LA:2614:A:C6	2.98	0.52
26:LA:2219:U:C4	26:LA:2220:U:C4	2.97	0.52
50:LL:41:LYS:HZ3	50:LL:52:ASP:CG	2.14	0.52
2:SA:1144:G:N2	2:SA:1146:A:H62	2.07	0.52
4:S2:71:G:C5	4:S2:72:C:C5	2.98	0.52
11:SK:15:VAL:HG13	11:SK:17:ASP:H	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:S3:214:ALA:O	24:S3:218:HIS:HB2	2.10	0.52
26:LA:927:A:H2'	26:LA:928:A:C8	2.45	0.52
26:LA:2524:G:C6	26:LA:2525:G:C5	2.98	0.52
26:LA:2766:A:C5	26:LA:2767:C:C5	2.98	0.52
32:LY:2:HIS:HB2	32:LY:3:LYS:HB3	1.92	0.52
2:SA:581:G:H1'	2:SA:761:G:H22	1.75	0.52
2:SA:803:G:C4	2:SA:804:U:C5	2.98	0.52
2:SA:1163:A:C2	2:SA:1174:G:C2	2.97	0.52
2:SA:1518:A:C2	2:SA:1519:A:C5	2.98	0.52
24:S3:642:LYS:HE2	24:S3:642:LYS:HA	1.92	0.52
26:LA:464:U:C5	26:LA:465:G:C4	2.97	0.52
26:LA:699:A:C6	26:LA:734:A:C8	2.98	0.52
26:LA:1410:G:C2	26:LA:1593:A:C4	2.98	0.52
26:LA:1697:G:C6	26:LA:1698:A:C6	2.98	0.52
26:LA:2051:A:C5	26:LA:2614:A:C5	2.98	0.52
26:LA:2158:A:O2'	26:LA:2159:G:H5'	2.10	0.52
26:LA:2495:G:C4	26:LA:2496:C:C5	2.98	0.52
26:LA:2499:C:C5	26:LA:2500:U:C4	2.98	0.52
26:LA:2556:C:C4	26:LA:2557:G:C4	2.98	0.52
37:LC:43:ASP:O	37:LC:214:ILE:HA	2.10	0.52
2:SA:502:A:C6	2:SA:544:G:C6	2.98	0.51
22:SF:42:TRP:HE1	22:SF:106:LYS:HB2	1.75	0.51
26:LA:792:A:C6	26:LA:2440:C:C6	2.98	0.51
26:LA:1364:G:C2	26:LA:1368:G:C5	2.98	0.51
26:LA:1467:U:C5	26:LA:1468:U:C4	2.99	0.51
26:LA:1936:A:C5	26:LA:1945:G:C2	2.99	0.51
26:LA:2124:G:C4	26:LA:2125:G:H1'	2.45	0.51
26:LA:2277:G:C6	26:LA:2278:A:N7	2.78	0.51
26:LA:2731:G:C5	26:LA:2732:G:C6	2.98	0.51
39:L3:17:SER:OG	39:L3:18:HIS:CE1	2.63	0.51
2:SA:59:A:C4	2:SA:331:G:N2	2.78	0.51
2:SA:192:A:C6	2:SA:193:C:C4	2.98	0.51
2:SA:538:G:H2'	2:SA:539:A:C8	2.45	0.51
2:SA:754:C:C5'	15:SO:71:ARG:HH22	2.23	0.51
2:SA:785:G:C2	2:SA:786:G:C8	2.98	0.51
2:SA:872:A:C2	2:SA:874:G:C6	2.99	0.51
2:SA:1368:A:C5	2:SA:1369:C:C5	2.98	0.51
26:LA:160:A:C8	26:LA:167:A:C2	2.98	0.51
26:LA:255:A:C6	26:LA:256:A:C5	2.98	0.51
2:SA:61:G:C5	2:SA:107:G:C2	2.97	0.51
2:SA:1476:A:C6	2:SA:1477:U:C4	2.98	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:139:U:C6	26:LA:141:G:C8	2.98	0.51
26:LA:188:G:C6	26:LA:189:G:C5	2.98	0.51
26:LA:288:U:C4	26:LA:289:G:N7	2.78	0.51
26:LA:1879:C:C5	26:LA:1880:U:C5	2.99	0.51
26:LA:1891:G:C5	26:LA:1892:C:C5	2.98	0.51
26:LA:2007:U:H4'	26:LA:2824:C:H4'	1.93	0.51
26:LA:2126:A:C2	26:LA:2173:A:C4	2.99	0.51
26:LA:2136:G:H2'	26:LA:2137:U:C6	2.44	0.51
51:LI:80:ILE:HG21	51:LI:94:ILE:HG12	1.92	0.51
2:SA:1442:G:H1	2:SA:1460:C:N4	2.07	0.51
9:SI:20:ILE:HG22	9:SI:62:LEU:CD2	2.41	0.51
25:LB:54:G:C5	25:LB:55:U:C5	2.99	0.51
26:LA:465:G:C2	26:LA:466:A:C6	2.99	0.51
26:LA:947:A:C2	26:LA:971:G:C2	2.98	0.51
26:LA:1205:A:C6	44:LF:165:HIS:CE1	2.98	0.51
26:LA:2100:G:C4	26:LA:2190:G:C2	2.98	0.51
26:LA:2328:A:H2'	26:LA:2329:U:C6	2.46	0.51
2:SA:19:A:C2	2:SA:917:G:C6	2.98	0.51
2:SA:32:A:C2	2:SA:553:A:C2	2.99	0.51
2:SA:59:A:C6	2:SA:354:G:C6	2.99	0.51
2:SA:372:C:H42	2:SA:389:A:H62	1.57	0.51
26:LA:92:U:C4	26:LA:93:G:C6	2.98	0.51
26:LA:347:A:H2'	26:LA:348:A:C8	2.45	0.51
26:LA:2547:A:C2	26:LA:2562:U:C2	2.97	0.51
26:LA:2735:G:C6	26:LA:2736:A:C5	2.99	0.51
50:LL:3:THR:HG22	57:LS:60:TRP:HE1	1.76	0.51
1:SS:80:ARG:NE	1:SS:80:ARG:H	2.09	0.51
2:SA:228:A:C2	2:SA:229:U:C2	2.99	0.51
2:SA:1442:G:H1	2:SA:1460:C:H42	1.59	0.51
6:SU:6:ARG:HA	6:SU:14:ALA:HB2	1.92	0.51
16:SP:60:TRP:CE3	16:SP:60:TRP:HA	2.46	0.51
24:S3:10:ARG:HG3	24:S3:282:ILE:HA	1.92	0.51
24:S3:17:HIS:CD2	24:S3:122:SER:HA	2.46	0.51
26:LA:123:G:C5	26:LA:124:G:C5	2.99	0.51
26:LA:847:U:C5	26:LA:848:C:C5	2.99	0.51
26:LA:969:G:C6	26:LA:970:U:C4	2.98	0.51
26:LA:1897:G:C5	26:LA:1898:U:C4	2.99	0.51
26:LA:1965:C:C6	26:LA:1965:C:OP1	2.63	0.51
29:LV:72:GLN:HG2	29:LV:73:ARG:H	1.76	0.51
2:SA:967:C:C4	2:SA:968:A:C5	2.99	0.51
26:LA:26:G:C2	26:LA:27:G:N2	2.79	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:809:G:C5	26:LA:810:U:C4	2.98	0.51
26:LA:1274:A:C8	26:LA:1297:C:H1'	2.45	0.51
26:LA:1866:A:C4	26:LA:1876:A:C6	2.98	0.51
26:LA:1866:A:C2	26:LA:1876:A:C4	2.99	0.51
26:LA:1906:G:C6	26:LA:1907:G:N7	2.79	0.51
26:LA:2248:C:C2'	26:LA:2249:U:H5'	2.40	0.51
26:LA:2868:A:C6	26:LA:2869:G:C6	2.99	0.51
2:SA:174:A:C6	2:SA:175:C:C5	2.99	0.51
2:SA:718:A:C8	2:SA:719:C:C6	2.99	0.51
2:SA:1223:C:C5	2:SA:1224:U:C5	2.99	0.51
2:SA:1228:C:H2'	2:SA:1229:A:C8	2.45	0.51
26:LA:28:A:C4	26:LA:29:U:C6	2.99	0.51
26:LA:157:C:H2'	26:LA:158:U:O4'	2.10	0.51
26:LA:863:A:C2	26:LA:864:G:C4	2.99	0.51
26:LA:1048:A:C5	26:LA:1049:C:C5	2.99	0.51
26:LA:1165:A:C2	26:LA:1185:G:C4	2.98	0.51
26:LA:1327:A:N6	26:LA:1328:A:C2	2.78	0.51
26:LA:1821:A:C5	26:LA:1822:C:C4	2.98	0.51
26:LA:2570:G:C5	26:LA:2571:U:C4	2.99	0.51
50:LL:28:LEU:HD23	50:LL:28:LEU:C	2.31	0.51
2:SA:219:U:H2'	2:SA:220:G:C8	2.46	0.51
2:SA:242:G:C2	2:SA:245:U:C5	2.99	0.51
2:SA:332:G:C5	2:SA:333:U:C5	2.98	0.51
2:SA:966:G:C2	2:SA:967:C:C2	2.98	0.51
26:LA:68:G:N2	26:LA:74:A:C4	2.79	0.51
26:LA:136:G:C5	26:LA:137:U:C5	2.98	0.51
26:LA:463:G:C2	26:LA:467:G:C6	2.99	0.51
26:LA:778:G:C2	26:LA:787:C:C2	2.99	0.51
26:LA:959:A:C2	26:LA:960:A:C2	2.99	0.51
26:LA:959:A:C2	26:LA:960:A:N3	2.79	0.51
26:LA:1169:A:C6	26:LA:1170:C:C4	2.99	0.51
26:LA:1190:G:C2	26:LA:1191:G:C5	2.99	0.51
26:LA:2100:G:C6	26:LA:2101:A:C4	2.99	0.51
26:LA:2100:G:C6	26:LA:2190:G:C4	2.98	0.51
26:LA:2113:U:O4	26:LA:2169:A:C5	2.64	0.51
26:LA:2618:G:C6	26:LA:2619:C:C4	2.99	0.51
26:LA:2796:U:H2'	26:LA:2798:U:H3	1.74	0.51
26:LA:2851:A:C4	26:LA:2852:G:C8	2.98	0.51
2:SA:670:G:C2	2:SA:671:G:C5	2.99	0.51
2:SA:950:U:H2'	2:SA:951:G:C8	2.46	0.51
26:LA:980:A:N6	26:LA:981:A:C2	2.79	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1077:A:H5"	49:LK:94:LYS:HD3	1.92	0.51
26:LA:1809:A:N7	26:LA:1810:A:C5	2.79	0.51
26:LA:1833:C:C4	26:LA:1834:U:C4	2.99	0.51
26:LA:1899:A:C2	26:LA:1903:G:C5	2.99	0.51
26:LA:2080:A:H2'	26:LA:2081:U:C6	2.45	0.51
26:LA:2331:G:C5	26:LA:2332:C:C4	2.99	0.51
2:SA:74:A:C2	2:SA:75:G:C4	2.98	0.50
2:SA:523:A:C6	12:SL:86:VAL:HG21	2.46	0.50
2:SA:782:A:C8	2:SA:783:C:C5	2.99	0.50
2:SA:926:G:C8	2:SA:1505:G:C2	2.98	0.50
2:SA:952:U:H2'	2:SA:953:G:C8	2.46	0.50
7:SG:72:VAL:HG11	7:SG:144:ALA:HB2	1.92	0.50
26:LA:131:A:H2'	26:LA:132:G:C8	2.46	0.50
26:LA:226:A:C6	26:LA:227:A:C6	3.00	0.50
26:LA:548:G:H4'	26:LA:549:G:H4'	1.94	0.50
26:LA:1867:G:H2'	26:LA:1868:C:C6	2.46	0.50
26:LA:2291:U:H2'	26:LA:2292:U:C6	2.46	0.50
26:LA:2556:C:C5	26:LA:2557:G:C5	2.99	0.50
26:LA:2812:G:C6	26:LA:2813:A:C6	3.00	0.50
27:LD:65:ASP:CG	27:LD:101:ARG:HE	2.14	0.50
32:LY:37:VAL:HG13	32:LY:38:ARG:HG3	1.92	0.50
24:S3:55:GLU:HG3	24:S3:61:THR:HA	1.93	0.50
26:LA:14:A:C6	26:LA:526:A:C2	3.00	0.50
26:LA:1684:G:H2'	26:LA:1685:C:C6	2.46	0.50
26:LA:2233:U:H2'	26:LA:2234:G:H8	1.76	0.50
26:LA:2442:C:H2'	26:LA:2443:C:C6	2.46	0.50
26:LA:2705:A:C6	26:LA:2706:A:C5	2.99	0.50
3:S1:23:C:H1'	3:S1:24:A:C5'	2.41	0.50
3:S1:45:G:H1'	21:SE:55:VAL:HG11	1.92	0.50
26:LA:2064:C:H2'	26:LA:2065:C:C6	2.47	0.50
26:LA:2453:A:H2'	26:LA:2454:G:C8	2.47	0.50
26:LA:2850:A:H2'	26:LA:2851:A:C8	2.46	0.50
56:LR:33:GLU:HG2	56:LR:34:GLY:H	1.76	0.50
2:SA:74:A:C2	2:SA:75:G:C5	2.99	0.50
2:SA:215:C:C4	2:SA:216:U:C5	2.99	0.50
2:SA:830:G:C6	2:SA:831:A:C5	3.00	0.50
2:SA:1014:A:H2'	2:SA:1015:G:C8	2.46	0.50
2:SA:1138:G:H2'	2:SA:1140:C:C6	2.46	0.50
26:LA:382:A:C6	26:LA:383:C:C5	3.00	0.50
26:LA:687:C:C5	26:LA:688:U:C5	2.99	0.50
26:LA:1171:G:C2	26:LA:1179:G:C4	2.99	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1430:G:C4	26:LA:1431:A:C8	3.00	0.50
26:LA:2070:A:H2'	26:LA:2071:A:H8	1.76	0.50
26:LA:2230:G:C4	26:LA:2231:U:C5	3.00	0.50
44:LF:143:LEU:HD13	44:LF:146:VAL:HG11	1.93	0.50
2:SA:113:G:H2'	2:SA:114:U:C6	2.47	0.50
2:SA:474:G:C6	2:SA:475:C:N3	2.80	0.50
2:SA:722:G:C8	2:SA:724:G:H1'	2.47	0.50
3:S1:47:C:C2	20:SD:49:ASP:HB2	2.46	0.50
24:S3:539:ILE:HD11	24:S3:549:ILE:HD11	1.93	0.50
26:LA:1540:G:C5	26:LA:1541:C:C5	3.00	0.50
26:LA:2209:G:C4	26:LA:2210:U:C5	2.99	0.50
42:L6:49:VAL:HG22	42:L6:50:SER:H	1.75	0.50
45:LG:11:VAL:HG13	45:LG:15:LEU:HD13	1.94	0.50
2:SA:1083:U:C5	2:SA:1084:G:C5	3.00	0.50
2:SA:1288:A:C2	2:SA:1289:A:C4	3.00	0.50
23:SR:70:THR:HG22	23:SR:73:HIS:CE1	2.46	0.50
26:LA:111:A:C2	26:LA:112:U:H1'	2.46	0.50
26:LA:1172:C:C4	26:LA:1173:U:C2	2.99	0.50
26:LA:1247:A:C5	26:LA:1249:U:C4	3.00	0.50
27:LD:43:ASN:H	27:LD:49:THR:CG2	2.25	0.50
2:SA:628:G:C6	2:SA:629:A:C6	3.00	0.50
2:SA:639:G:H2'	2:SA:640:A:C8	2.47	0.50
4:S2:21:U:H2'	4:S2:22:A:C5'	2.42	0.50
26:LA:533:G:C6	26:LA:561:G:C2	2.99	0.50
26:LA:783:A:N6	26:LA:785:G:C5	2.79	0.50
26:LA:1159:U:H2'	26:LA:1160:G:H8	1.77	0.50
26:LA:1407:G:H2'	26:LA:1408:G:C8	2.46	0.50
26:LA:1544:A:C6	26:LA:1545:A:C5	3.00	0.50
26:LA:2119:A:C5	26:LA:2171:A:C2	2.99	0.50
26:LA:2292:U:H2'	26:LA:2293:G:C8	2.47	0.50
26:LA:2610:C:H2'	26:LA:2610:C:O2	2.11	0.50
26:LA:2824:C:C5	26:LA:2825:G:C4	3.00	0.50
2:SA:271:C:H3'	2:SA:272:C:H5"	1.93	0.50
2:SA:934:C:C5	2:SA:1344:C:H3'	2.47	0.50
2:SA:942:G:C6	2:SA:943:U:C4	3.00	0.50
26:LA:646:U:H6	26:LA:647:G:C8	2.29	0.50
26:LA:784:G:C2	26:LA:792:A:C6	3.00	0.50
26:LA:1395:A:H4'	26:LA:1397:U:C5	2.47	0.50
26:LA:1573:G:C8	26:LA:1574:C:C5	2.99	0.50
26:LA:1786:A:C6	26:LA:1938:A:C2	2.99	0.50
26:LA:1936:A:H8	26:LA:1961:C:H42	1.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2041:U:H2'	26:LA:2042:A:C8	2.46	0.50
26:LA:2337:G:C5	26:LA:2338:C:C5	3.00	0.50
50:LL:15:TRP:CZ2	50:LL:53:TYR:CD2	2.99	0.50
2:SA:777:A:C6	2:SA:778:G:C5	3.00	0.50
2:SA:880:C:H2'	2:SA:881:G:H8	1.75	0.50
4:S2:72:C:C2	4:S2:73:A:C8	3.00	0.50
20:SD:94:GLU:CD	20:SD:103:ARG:HE	2.15	0.50
26:LA:415:A:C6	26:LA:416:U:C4	3.00	0.50
26:LA:1322:A:H2'	26:LA:1322:A:N3	2.27	0.50
26:LA:1623:G:O6	26:LA:1624:U:C4	2.65	0.50
26:LA:1697:G:H4'	26:LA:1978:A:H5"	1.94	0.50
26:LA:2796:U:C4	26:LA:2798:U:C4	3.00	0.50
37:LC:113:VAL:HG22	37:LC:114:VAL:H	1.77	0.50
1:SS:32:THR:HG22	1:SS:51:HIS:H	1.77	0.49
2:SA:59:A:C5	2:SA:331:G:C2	3.00	0.49
2:SA:149:A:H2'	2:SA:150:U:C6	2.47	0.49
2:SA:792:A:C6	2:SA:794:A:C2	3.00	0.49
26:LA:920:A:C6	26:LA:921:C:C4	2.99	0.49
26:LA:975:A:C2	26:LA:990:A:C8	3.00	0.49
26:LA:1532:A:C2	26:LA:1540:G:C2	2.99	0.49
26:LA:2186:G:C5	26:LA:2187:U:C5	3.00	0.49
26:LA:2543:G:C2	26:LA:2544:G:C4	2.99	0.49
2:SA:765:G:N3	2:SA:812:G:C6	2.80	0.49
21:SE:73:VAL:HG21	21:SE:143:LEU:HD13	1.94	0.49
26:LA:318:C:H2'	26:LA:319:G:H8	1.77	0.49
26:LA:415:A:C5	26:LA:416:U:C5	3.00	0.49
26:LA:452:G:C6	26:LA:453:A:C5	3.00	0.49
26:LA:538:A:C6	26:LA:539:G:C5	3.00	0.49
26:LA:640:C:H2'	26:LA:641:U:C5	2.48	0.49
26:LA:871:U:H4'	52:LO:68:PHE:CD1	2.46	0.49
26:LA:1441:G:C4	26:LA:1442:U:C5	3.00	0.49
26:LA:1535:A:H3'	26:LA:1536:C:C6	2.47	0.49
26:LA:1776:G:N2	26:LA:1789:A:H1'	2.26	0.49
26:LA:1830:C:H2'	26:LA:1831:G:C8	2.46	0.49
26:LA:2271:G:N7	26:LA:2272:U:C2	2.80	0.49
30:LW:12:VAL:HA	30:LW:69:VAL:HG12	1.93	0.49
47:LJ:18:ALA:HB1	47:LJ:68:PHE:CG	2.47	0.49
48:LN:92:LEU:HD23	48:LN:92:LEU:H	1.77	0.49
24:S3:21:GLY:HA3	24:S3:141:ASN:HD22	1.77	0.49
26:LA:10:A:C2	26:LA:2799:A:H3'	2.47	0.49
26:LA:536:G:C6	26:LA:537:G:C4	3.00	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:557:C:H2'	26:LA:558:U:C6	2.47	0.49
26:LA:774:G:C5'	27:LD:47:ARG:HH22	2.23	0.49
26:LA:1159:U:H2'	26:LA:1160:G:C8	2.48	0.49
26:LA:1274:A:C5	26:LA:1302:A:C2	3.01	0.49
26:LA:2884:U:O4	26:LA:2886:A:C4	2.65	0.49
58:LT:47:VAL:HG13	58:LT:49:ILE:H	1.75	0.49
2:SA:286:C:H2'	2:SA:287:U:C6	2.48	0.49
2:SA:391:G:C5	2:SA:392:C:C5	3.01	0.49
2:SA:468:A:H3'	2:SA:469:C:C6	2.48	0.49
2:SA:474:G:C6	2:SA:475:C:C4	3.00	0.49
4:S2:29:C:H2'	4:S2:30:G:C8	2.48	0.49
12:SL:36:VAL:HG22	12:SL:52:CYS:HB3	1.95	0.49
26:LA:85:G:C5	26:LA:98:G:C6	3.00	0.49
26:LA:160:A:C5	26:LA:167:A:C2	3.01	0.49
26:LA:460:A:C2	26:LA:470:A:C5	3.00	0.49
26:LA:747:U:C5	26:LA:2613:U:C4	2.99	0.49
26:LA:952:G:C6	26:LA:953:G:C5	3.01	0.49
26:LA:1605:C:C5	26:LA:1606:C:C4	3.00	0.49
26:LA:1776:G:C4	26:LA:1777:U:C5	3.00	0.49
44:LF:119:ILE:HD12	44:LF:187:VAL:HA	1.94	0.49
2:SA:1051:C:C2	2:SA:1052:U:C5	3.00	0.49
2:SA:1148:U:C5	2:SA:1149:C:C4	3.00	0.49
2:SA:1309:G:C2	2:SA:1310:G:C4	3.01	0.49
25:LB:5:U:O2'	25:LB:6:G:H5'	2.13	0.49
26:LA:118:A:C8	26:LA:119:A:C8	3.01	0.49
26:LA:120:U:C5	26:LA:149:A:C2	3.00	0.49
26:LA:186:G:C2	26:LA:211:C:C2	3.01	0.49
26:LA:1524:G:C6	26:LA:1525:A:C5	3.00	0.49
26:LA:2254:C:H5	26:LA:2255:G:C4	2.30	0.49
43:L7:14:CYS:HG	43:L7:27:CYS:HG	1.60	0.49
53:LP:21:PHE:CZ	53:LP:43:GLU:HB3	2.47	0.49
57:LS:98:ALA:HA	57:LS:105:PHE:HB2	1.93	0.49
2:SA:1527:U:C4	2:SA:1528:U:C4	3.01	0.49
10:SJ:53:ILE:HG21	10:SJ:63:ASP:HB3	1.94	0.49
26:LA:126:A:C8	41:L5:18:PHE:CZ	3.00	0.49
26:LA:384:A:C5	26:LA:385:C:C5	3.01	0.49
26:LA:491:G:C6	26:LA:492:A:C4	3.01	0.49
26:LA:1893:C:C5	26:LA:1894:C:C5	3.00	0.49
26:LA:2841:C:H2'	26:LA:2842:G:C8	2.47	0.49
2:SA:329:A:C5	2:SA:332:G:C6	3.01	0.49
7:SG:159:ARG:O	7:SG:163:HIS:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:LB:75:G:H21	31:LX:88:HIS:CE1	2.30	0.49
26:LA:223:A:C6	26:LA:422:A:C5	3.01	0.49
26:LA:297:G:C2	26:LA:342:A:C2	3.01	0.49
26:LA:371:A:H5'	26:LA:423:A:C2	2.48	0.49
26:LA:577:G:C2	26:LA:578:G:C5	3.00	0.49
26:LA:2722:G:C6	26:LA:2723:C:C4	3.01	0.49
2:SA:27:G:C5	2:SA:557:G:N2	2.81	0.49
2:SA:402:G:C5	2:SA:403:C:C5	3.01	0.49
2:SA:1319:A:C2	2:SA:1323:G:H1'	2.48	0.49
4:S2:2:G:C6	4:S2:73:A:C4	3.01	0.49
26:LA:622:G:C5	26:LA:623:C:C5	3.00	0.49
26:LA:2133:G:H3'	26:LA:2134:A:C4'	2.42	0.49
46:LH:51:PHE:HB2	46:LH:61:TRP:CD2	2.48	0.49
2:SA:148:G:C2	2:SA:149:A:C4	3.01	0.49
2:SA:540:G:C6	2:SA:541:G:C5	3.01	0.49
2:SA:1125:U:C5	2:SA:1127:G:C5	3.01	0.49
3:S1:47:C:C5	20:SD:49:ASP:O	2.66	0.49
4:S2:63:C:H2'	4:S2:64:G:C8	2.48	0.49
9:SI:4:GLN:HE21	9:SI:4:GLN:HA	1.78	0.49
26:LA:300:A:P	30:LW:81:ARG:HH12	2.35	0.49
26:LA:536:G:O6	26:LA:537:G:C4	2.66	0.49
26:LA:738:G:N2	26:LA:759:G:C4	2.81	0.49
26:LA:910:A:C4	52:LO:13:HIS:CE1	3.01	0.49
26:LA:1370:C:H2'	26:LA:1371:G:C8	2.48	0.49
26:LA:2289:G:C6	26:LA:2290:G:C5	3.00	0.49
26:LA:2889:C:C4	26:LA:2890:G:C6	3.01	0.49
37:LC:44:VAL:HG21	37:LC:189:LEU:HD22	1.95	0.49
57:LS:46:TYR:CE1	57:LS:50:ARG:HD3	2.47	0.49
2:SA:582:C:C2	2:SA:760:G:N1	2.81	0.49
2:SA:907:A:C2	2:SA:908:A:C4	3.01	0.49
2:SA:939:G:H2'	2:SA:940:C:C6	2.48	0.49
2:SA:1028:C:C5	2:SA:1029:U:C4	3.01	0.49
26:LA:757:G:H2'	26:LA:758:C:H5'	1.94	0.49
26:LA:1156:A:C8	57:LS:50:ARG:HB3	2.48	0.49
26:LA:1445:G:C6	26:LA:1446:C:C4	3.01	0.49
26:LA:2686:G:C5	26:LA:2687:U:C4	3.01	0.49
26:LA:2821:A:H5"	38:LE:115:GLY:HA3	1.94	0.49
2:SA:1501:C:C4	2:SA:1504:G:C6	3.02	0.48
20:SD:16:THR:HG23	20:SD:17:ASP:H	1.77	0.48
25:LB:39:A:H2'	25:LB:40:U:C6	2.48	0.48
26:LA:64:A:H2'	26:LA:65:U:C6	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:799:G:C6	26:LA:800:A:C6	3.01	0.48
26:LA:1186:G:C6	26:LA:1187:G:C4	3.00	0.48
26:LA:1444:G:H2'	26:LA:1445:G:C8	2.47	0.48
26:LA:2538:C:H2'	26:LA:2539:C:C6	2.48	0.48
26:LA:2822:G:P	38:LE:117:GLY:H	2.36	0.48
2:SA:59:A:C5	2:SA:354:G:C6	3.00	0.48
24:S3:545:PRO:HD3	24:S3:582:TYR:HB3	1.94	0.48
26:LA:792:A:C6	26:LA:2440:C:C5	3.01	0.48
26:LA:1989:G:C8	26:LA:1990:C:C5	3.01	0.48
26:LA:2499:C:C5	26:LA:2500:U:C5	3.01	0.48
26:LA:2677:G:C2	26:LA:2678:C:C2	3.01	0.48
50:LL:15:TRP:CE2	50:LL:53:TYR:CD2	3.02	0.48
2:SA:373:A:C2	2:SA:482:A:C6	3.02	0.48
2:SA:399:G:C5	2:SA:400:C:C4	3.01	0.48
26:LA:529:A:C8	26:LA:2023:C:C4	3.01	0.48
26:LA:608:A:C6	26:LA:609:A:C6	3.01	0.48
26:LA:1862:G:C2	26:LA:1863:G:C5	3.01	0.48
2:SA:665:A:H2'	2:SA:732:C:O2	2.14	0.48
2:SA:1270:G:C6	2:SA:1271:A:C5	3.02	0.48
13:SM:32:ILE:HD13	13:SM:62:PHE:CE1	2.48	0.48
26:LA:101:A:H1'	26:LA:102:U:H5'	1.94	0.48
26:LA:311:A:C6	26:LA:328:U:C4	3.01	0.48
26:LA:778:G:C6	26:LA:779:U:N3	2.81	0.48
26:LA:1281:G:C6	26:LA:1282:U:O4	2.66	0.48
26:LA:1570:A:C2	26:LA:1571:A:C5	3.02	0.48
26:LA:1632:A:N7	26:LA:1633:G:C4	2.81	0.48
26:LA:1906:G:C8	26:LA:1929:G:C6	3.01	0.48
26:LA:1924:C:C4	26:LA:1925:C:C4	3.01	0.48
26:LA:2318:G:C6	26:LA:2319:G:C6	3.01	0.48
26:LA:2488:G:C5	26:LA:2489:U:C5	3.02	0.48
34:L0:7:ARG:NH2	34:L0:56:LEU:H	2.11	0.48
2:SA:747:A:C5	2:SA:748:G:N7	2.81	0.48
2:SA:898:G:N2	2:SA:902:G:C5	2.82	0.48
2:SA:978:A:C6	2:SA:1318:A:C5	3.02	0.48
4:S2:75:C:C4	4:S2:76:C:N3	2.81	0.48
21:SE:65:LYS:HA	21:SE:68:ARG:HE	1.79	0.48
25:LB:30:C:H3'	25:LB:31:C:C6	2.48	0.48
26:LA:124:G:C6	41:L5:19:ARG:NH1	2.81	0.48
26:LA:410:G:H5"	26:LA:411:G:H5'	1.94	0.48
26:LA:623:C:C2	26:LA:624:C:C5	3.01	0.48
26:LA:785:G:C4	26:LA:786:C:C5	3.02	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:846:U:C2	26:LA:847:U:C5	3.02	0.48
26:LA:945:A:H1'	26:LA:2448:A:H2	1.78	0.48
26:LA:1589:U:H2'	26:LA:1590:A:C8	2.49	0.48
26:LA:1815:A:C5	26:LA:1817:G:C6	3.01	0.48
26:LA:1899:A:C2	26:LA:1903:G:C6	3.02	0.48
26:LA:2293:G:C2	26:LA:2340:A:C2	3.01	0.48
44:LF:88:ARG:CB	44:LF:89:PRO:CD	2.92	0.48
57:LS:60:TRP:CH2	57:LS:93:ILE:HB	2.48	0.48
2:SA:78:A:C8	2:SA:78:A:O5'	2.66	0.48
4:S2:43:G:H2'	4:S2:44:A:C8	2.48	0.48
18:SB:26:MET:SD	18:SB:188:THR:HA	2.54	0.48
25:LB:53:A:C2	25:LB:54:G:H1'	2.49	0.48
26:LA:42:A:C2	26:LA:438:G:C2	3.02	0.48
26:LA:85:G:O6	26:LA:86:G:C6	2.66	0.48
26:LA:222:A:C6	26:LA:224:U:C2	3.02	0.48
26:LA:301:G:C6	26:LA:317:G:C5	3.02	0.48
26:LA:322:A:OP2	44:LF:163:ASN:HB2	2.13	0.48
26:LA:1177:G:C5	26:LA:1178:C:C2	3.01	0.48
26:LA:1378:A:C2	26:LA:1380:G:C8	3.02	0.48
26:LA:2502:G:H3'	26:LA:2503:A:C5'	2.43	0.48
26:LA:2828:G:H2'	26:LA:2829:A:H8	1.78	0.48
2:SA:232:G:C5	2:SA:233:C:C5	3.02	0.48
2:SA:363:A:C5	2:SA:364:A:C5	3.02	0.48
2:SA:469:C:C4	2:SA:470:C:C4	3.01	0.48
2:SA:754:C:H5'	15:SO:71:ARG:HH22	1.79	0.48
2:SA:1014:A:C6	2:SA:1015:G:C6	3.01	0.48
20:SD:64:TYR:CE2	20:SD:93:LEU:HB3	2.49	0.48
24:S3:11:ASN:HD21	24:S3:381:ILE:CD1	2.27	0.48
26:LA:98:G:N7	26:LA:99:U:C5	2.81	0.48
26:LA:948:C:H1'	26:LA:984:A:C6	2.48	0.48
26:LA:1927:A:N1	26:LA:1928:A:C2	2.82	0.48
26:LA:2134:A:C6	26:LA:2135:A:C5	3.02	0.48
26:LA:2661:G:H2'	26:LA:2662:A:C8	2.49	0.48
26:LA:2820:A:C5	53:LP:4:ARG:HD3	2.49	0.48
2:SA:89:U:C6	2:SA:89:U:H3'	2.48	0.48
2:SA:255:G:C6	2:SA:256:U:C4	3.02	0.48
2:SA:754:C:P	15:SO:71:ARG:HH12	2.36	0.48
2:SA:989:U:H2'	2:SA:990:C:C6	2.49	0.48
9:SI:20:ILE:HG22	9:SI:62:LEU:HG	1.96	0.48
11:SK:78:ILE:CD1	11:SK:81:LEU:HD21	2.44	0.48
25:LB:21:G:C5	25:LB:22:U:C5	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:142:A:C6	26:LA:143:C:C4	3.02	0.48
26:LA:763:G:N3	26:LA:765:C:C2	2.82	0.48
26:LA:764:A:C2	26:LA:781:A:C2	3.02	0.48
26:LA:856:G:H2'	26:LA:857:G:C8	2.49	0.48
26:LA:917:A:C6	26:LA:918:A:C5	3.02	0.48
26:LA:2101:A:H2'	26:LA:2102:G:C8	2.49	0.48
26:LA:2107:G:C6	26:LA:2108:A:C6	3.02	0.48
26:LA:2450:A:C5	26:LA:2451:A:C2	3.02	0.48
26:LA:2795:C:C2	26:LA:2802:G:C2	3.01	0.48
31:LX:2:PHE:HB2	31:LX:61:LEU:CD1	2.44	0.48
57:LS:60:TRP:CZ2	57:LS:93:ILE:HD13	2.48	0.48
2:SA:652:U:C5	2:SA:752:G:C4	3.02	0.48
2:SA:1058:G:C5	2:SA:1059:C:C5	3.01	0.48
2:SA:1283:U:H2'	2:SA:1284:C:C6	2.48	0.48
25:LB:42:C:C5	25:LB:43:C:C6	3.02	0.48
26:LA:408:G:C2	26:LA:409:G:C4	3.01	0.48
26:LA:1494:A:C6	26:LA:1495:A:C5	3.01	0.48
26:LA:1505:A:H2'	26:LA:1506:U:H6	1.79	0.48
26:LA:2391:G:N2	26:LA:2424:C:C2	2.81	0.48
2:SA:414:A:C5	2:SA:431:A:C2	3.02	0.48
2:SA:887:G:H2'	2:SA:888:G:H5'	1.96	0.48
2:SA:1218:C:H2'	2:SA:1219:A:C8	2.48	0.48
2:SA:1382:C:H2'	2:SA:1383:C:C6	2.49	0.48
3:S1:30:U:H4'	3:S1:31:U:OP2	2.13	0.48
25:LB:110:C:C4	25:LB:111:U:C4	3.02	0.48
26:LA:103:A:C5	26:LA:104:A:C8	3.01	0.48
26:LA:492:A:C6	26:LA:493:G:C4	3.01	0.48
26:LA:577:G:N1	26:LA:578:G:C6	2.81	0.48
26:LA:756:A:C2	26:LA:757:G:C4	3.02	0.48
26:LA:782:A:H5'	26:LA:783:A:C2	2.49	0.48
26:LA:1422:G:C2	26:LA:1423:G:C4	3.02	0.48
26:LA:1676:A:H2'	26:LA:1677:A:H4'	1.94	0.48
26:LA:1787:A:C2	26:LA:1788:C:C2	3.02	0.48
26:LA:2055:C:H5"	26:LA:2056:G:H5'	1.96	0.48
26:LA:2373:G:C2	26:LA:2381:A:C2	3.01	0.48
2:SA:312:C:H2'	2:SA:313:A:C8	2.49	0.47
4:S2:38:A:C2	4:S2:39:A:C4	3.02	0.47
18:SB:100:LEU:CD2	18:SB:175:ALA:HA	2.44	0.47
24:S3:184:LEU:HD21	24:S3:217:TRP:HB3	1.95	0.47
26:LA:838:C:H2'	26:LA:839:U:C6	2.49	0.47
26:LA:1654:A:H4'	38:LE:118:PHE:CE2	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1770:G:C6	26:LA:1983:G:C5	3.02	0.47
26:LA:1965:C:C6	26:LA:1966:A:H3'	2.49	0.47
26:LA:2060:A:OP1	44:LF:64:GLY:HA2	2.14	0.47
26:LA:2119:A:C6	26:LA:2171:A:C6	3.02	0.47
26:LA:2271:G:C8	26:LA:2272:U:C2	3.02	0.47
26:LA:2290:G:C4	26:LA:2291:U:C5	3.01	0.47
26:LA:2544:G:H2'	26:LA:2545:G:O4'	2.14	0.47
26:LA:2899:A:H2'	26:LA:2900:A:C8	2.49	0.47
39:L3:37:HIS:CD2	39:L3:43:THR:HG22	2.48	0.47
51:LI:119:ASN:HB3	51:LI:131:SER:H	1.79	0.47
2:SA:404:G:C6	2:SA:405:U:C4	3.02	0.47
2:SA:679:C:C2	2:SA:680:C:C5	3.01	0.47
2:SA:771:G:C5	2:SA:772:U:C4	3.02	0.47
2:SA:778:G:C2	2:SA:779:C:C2	3.02	0.47
20:SD:167:PRO:HG2	20:SD:170:LEU:HG	1.96	0.47
25:LB:18:G:C2	25:LB:67:G:C6	3.02	0.47
26:LA:190:A:C5	26:LA:207:A:C2	3.02	0.47
26:LA:1668:A:C5	26:LA:1674:G:C6	3.01	0.47
26:LA:1900:A:C8	26:LA:1970:A:H2'	2.49	0.47
26:LA:2465:C:H2'	26:LA:2466:C:H6	1.78	0.47
32:LY:45:HIS:CE1	32:LY:49:ASN:CB	2.97	0.47
37:LC:11:ILE:CG2	37:LC:220:ALA:HB2	2.45	0.47
10:SJ:100:ILE:H	10:SJ:100:ILE:CD1	2.27	0.47
26:LA:6:A:H2'	26:LA:7:G:C8	2.49	0.47
26:LA:54:G:H2'	26:LA:55:G:O4'	2.15	0.47
26:LA:168:G:C6	26:LA:169:G:C5	3.03	0.47
26:LA:197:A:C5	26:LA:198:C:C6	3.02	0.47
26:LA:866:A:C6	26:LA:914:G:C8	3.03	0.47
26:LA:1139:G:C6	26:LA:1140:C:C5	3.01	0.47
26:LA:1216:G:C2	26:LA:1234:U:O2	2.66	0.47
26:LA:1343:G:H2'	26:LA:1343:G:N3	2.30	0.47
26:LA:1441:G:C6	26:LA:1442:U:C4	3.02	0.47
26:LA:1675:C:H1'	26:LA:1676:A:N6	2.28	0.47
26:LA:2413:G:C6	26:LA:2414:G:C5	3.03	0.47
26:LA:2663:G:C6	26:LA:2664:G:C5	3.02	0.47
26:LA:2704:C:C5	26:LA:2705:A:N7	2.82	0.47
54:LM:21:CYS:SG	54:LM:39:ILE:HG23	2.53	0.47
2:SA:118:U:C4	2:SA:288:A:C2	3.02	0.47
2:SA:642:A:C4	2:SA:643:C:C6	3.03	0.47
2:SA:765:G:O4'	2:SA:812:G:C2	2.68	0.47
2:SA:872:A:C6	2:SA:874:G:C4	3.02	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:SQ:14:ASP:HA	17:SQ:20:ILE:HD12	1.96	0.47
23:SR:70:THR:N	23:SR:73:HIS:CE1	2.82	0.47
25:LB:109:A:C2	25:LB:110:C:N3	2.82	0.47
26:LA:265:A:C8	26:LA:428:A:C6	3.03	0.47
26:LA:643:A:N7	26:LA:644:A:C5	2.82	0.47
26:LA:877:A:H3'	26:LA:878:A:C8	2.49	0.47
26:LA:1783:A:H2	26:LA:2587:A:N7	2.11	0.47
26:LA:2119:A:C2	26:LA:2170:A:C5	3.02	0.47
26:LA:2816:G:O4'	39:L3:40:HIS:CE1	2.67	0.47
2:SA:46:G:C5	2:SA:366:A:H2	2.32	0.47
2:SA:153:C:C5	2:SA:154:U:C4	3.02	0.47
2:SA:153:C:C5	2:SA:154:U:C5	3.02	0.47
2:SA:521:G:N1	2:SA:522:C:C4	2.83	0.47
2:SA:1063:C:H3'	2:SA:1064:G:C8	2.49	0.47
12:SL:93:ARG:HB2	12:SL:94:TYR:CE1	2.49	0.47
26:LA:14:A:C6	26:LA:526:A:N1	2.82	0.47
26:LA:662:G:H5"	48:LN:16:GLY:HA2	1.96	0.47
26:LA:757:G:H2'	26:LA:758:C:C5'	2.44	0.47
26:LA:952:G:C6	26:LA:966:G:C6	3.02	0.47
26:LA:1091:G:H1'	43:L7:12:ARG:HE	1.80	0.47
26:LA:1305:C:C4	26:LA:1306:C:C5	3.03	0.47
26:LA:1495:A:C6	26:LA:1496:A:C5	3.02	0.47
26:LA:1677:A:H2'	26:LA:1678:A:C5	2.49	0.47
26:LA:1723:G:H3'	26:LA:1724:G:H8	1.80	0.47
26:LA:2064:C:H1'	26:LA:2450:A:C6	2.49	0.47
26:LA:2488:G:C6	26:LA:2489:U:C4	3.02	0.47
26:LA:2544:G:C2	26:LA:2545:G:C4	3.02	0.47
26:LA:2761:A:C6	26:LA:2762:C:C5	3.02	0.47
2:SA:53:A:C2	2:SA:54:C:H1'	2.50	0.47
2:SA:59:A:C5	2:SA:354:G:C5	3.02	0.47
2:SA:152:A:C8	2:SA:153:C:C5	3.03	0.47
2:SA:621:A:C6	2:SA:622:A:C5	3.02	0.47
2:SA:713:G:H3'	2:SA:713:G:C8	2.50	0.47
2:SA:1108:G:H2'	2:SA:1109:C:C6	2.50	0.47
2:SA:1439:G:C2	2:SA:1463:U:O2	2.67	0.47
24:S3:119:GLN:OE1	24:S3:121:GLN:HB3	2.14	0.47
26:LA:541:A:C2	26:LA:553:G:C2	3.02	0.47
26:LA:1024:G:C6	26:LA:1025:G:C6	3.03	0.47
26:LA:1456:G:C5	26:LA:1457:U:C4	3.02	0.47
26:LA:1965:C:N3	26:LA:1966:A:H2'	2.29	0.47
26:LA:2283:C:C2	26:LA:2389:G:C2	3.03	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2519:U:O4	26:LA:2542:A:C4	2.68	0.47
26:LA:2630:G:C4	26:LA:2894:G:C6	3.02	0.47
26:LA:2815:C:O2	39:L3:40:HIS:HE1	1.97	0.47
2:SA:126:G:C2	2:SA:236:A:C2	3.03	0.47
2:SA:241:G:C2	2:SA:242:G:C5	3.03	0.47
2:SA:769:G:C5	2:SA:770:C:C5	3.03	0.47
2:SA:858:G:O6	2:SA:869:G:C8	2.68	0.47
2:SA:886:G:C6	2:SA:887:G:C4	3.03	0.47
2:SA:892:A:C4	2:SA:907:A:C5	3.03	0.47
2:SA:907:A:C6	2:SA:908:A:C6	3.03	0.47
4:S2:19:G:C5	4:S2:58:A:C2	3.03	0.47
13:SM:115:ILE:HG23	13:SM:117:LYS:H	1.78	0.47
14:SN:30:ILE:HD12	14:SN:30:ILE:HA	1.86	0.47
20:SD:101:VAL:HG23	20:SD:113:ALA:HB1	1.97	0.47
26:LA:126:A:C8	41:L5:18:PHE:CE1	3.03	0.47
26:LA:324:A:C6	26:LA:325:G:C4	3.03	0.47
26:LA:524:G:H2'	26:LA:525:U:H6	1.80	0.47
26:LA:604:G:O6	26:LA:605:G:C6	2.67	0.47
26:LA:675:A:H2'	26:LA:676:A:C8	2.49	0.47
26:LA:831:G:C5	26:LA:832:U:C5	3.02	0.47
26:LA:900:A:N6	26:LA:901:C:C4	2.82	0.47
26:LA:969:G:C5	26:LA:970:U:C5	3.03	0.47
26:LA:1036:G:C6	26:LA:1120:G:C6	3.02	0.47
26:LA:1208:C:C2	26:LA:1239:G:C2	3.03	0.47
26:LA:1361:G:C6	26:LA:1371:G:C2	3.03	0.47
26:LA:1469:A:H2'	26:LA:1470:A:C8	2.50	0.47
26:LA:1850:G:N7	26:LA:1851:U:C4	2.82	0.47
26:LA:2092:U:H4'	26:LA:2093:G:H5'	1.96	0.47
26:LA:2121:G:C5	26:LA:2122:U:C5	3.02	0.47
26:LA:2123:G:C2	26:LA:2176:A:H1'	2.50	0.47
26:LA:2142:A:C8	26:LA:2143:C:C5	3.03	0.47
26:LA:2282:G:H3'	40:L4:2:LYS:HZ3	1.79	0.47
26:LA:2453:A:C2	26:LA:2454:G:C5	3.03	0.47
26:LA:2510:C:C4	26:LA:2511:U:C4	3.02	0.47
26:LA:2823:A:OP2	38:LE:118:PHE:CD2	2.68	0.47
30:LW:85:ARG:HE	30:LW:86:PHE:N	2.10	0.47
38:LE:186:LEU:HD21	56:LR:3:ILE:HG21	1.96	0.47
2:SA:507:C:C2	2:SA:508:U:H5	2.33	0.47
3:S1:54:U:H3'	3:S1:55:A:C5'	2.44	0.47
18:SB:59:ILE:HD12	18:SB:183:PHE:CZ	2.49	0.47
25:LB:47:C:C5	25:LB:48:U:C5	3.03	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:10:A:C4	26:LA:2799:A:C8	3.03	0.47
26:LA:45:G:H5'	26:LA:46:G:C5'	2.44	0.47
26:LA:1040:A:C2	26:LA:1116:G:C2	3.03	0.47
26:LA:1107:G:H4'	47:LJ:78:PRO:HA	1.96	0.47
26:LA:1419:A:N6	26:LA:1494:A:H62	2.13	0.47
26:LA:1530:G:C2	26:LA:1542:U:O2	2.67	0.47
26:LA:1620:G:C5	26:LA:1621:U:C5	3.03	0.47
26:LA:1628:G:C5	26:LA:1629:U:C4	3.02	0.47
26:LA:1789:A:H2'	26:LA:1790:C:C6	2.50	0.47
26:LA:1952:A:C5	26:LA:1953:A:N1	2.82	0.47
26:LA:2903:U:C3'	26:LA:2904:U:H5"	2.44	0.47
2:SA:1382:C:H2'	2:SA:1383:C:H6	1.80	0.47
2:SA:1449:C:C2	2:SA:1455:G:C2	3.03	0.47
21:SE:73:VAL:CG2	21:SE:143:LEU:HD13	2.45	0.47
25:LB:6:G:H1	25:LB:114:C:H42	1.62	0.47
26:LA:406:G:C2	26:LA:407:G:C4	3.03	0.47
26:LA:715:A:H2'	26:LA:716:A:O4'	2.14	0.47
26:LA:846:U:C2	26:LA:847:U:C6	3.03	0.47
26:LA:857:G:C6	26:LA:858:G:C6	3.03	0.47
26:LA:1270:C:H5"	26:LA:1271:G:H5'	1.96	0.47
26:LA:1331:G:C6	26:LA:1333:G:C5	3.02	0.47
26:LA:1906:G:N1	26:LA:1907:G:C5	2.83	0.47
26:LA:2536:G:C6	26:LA:2537:U:C4	3.03	0.47
29:LV:12:ARG:HE	29:LV:35:ALA:HB2	1.80	0.47
48:LN:48:ARG:HD3	48:LN:48:ARG:H	1.80	0.47
2:SA:253:A:N6	2:SA:254:G:C6	2.83	0.47
2:SA:313:A:C5	2:SA:314:C:C5	3.03	0.47
2:SA:363:A:C4	12:SL:26:CYS:SG	3.07	0.47
2:SA:556:C:H2'	2:SA:557:G:O4'	2.15	0.47
2:SA:777:A:C6	2:SA:778:G:C4	3.03	0.47
2:SA:1063:C:C4	2:SA:1064:G:C5	3.03	0.47
26:LA:123:G:N1	26:LA:124:G:C4	2.83	0.47
26:LA:244:A:C2	26:LA:255:A:C4	3.03	0.47
26:LA:593:U:H2'	26:LA:594:U:C6	2.49	0.47
26:LA:1433:A:H2'	26:LA:1434:A:H1'	1.97	0.47
26:LA:2239:G:C6	26:LA:2240:U:C5	3.03	0.47
26:LA:2314:A:C6	26:LA:2315:G:C5	3.03	0.47
26:LA:2336:A:H3'	26:LA:2337:G:H8	1.81	0.47
26:LA:2540:C:C4	26:LA:2541:A:C5	3.03	0.47
2:SA:1012:A:N6	2:SA:1013:G:C6	2.83	0.46
2:SA:1288:A:H2'	2:SA:1289:A:C8	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:SI:20:ILE:HG22	9:SI:62:LEU:CG	2.45	0.46
23:SR:70:THR:HG22	23:SR:73:HIS:HE1	1.81	0.46
26:LA:627:A:C4	26:LA:637:A:C5	3.03	0.46
26:LA:765:C:C4	26:LA:766:U:C5	3.03	0.46
26:LA:868:U:C4	26:LA:869:G:N7	2.84	0.46
26:LA:1247:A:C4	26:LA:1249:U:C5	3.02	0.46
26:LA:2838:G:C6	26:LA:2839:G:C5	3.03	0.46
56:LR:30:TRP:CE2	56:LR:32:VAL:HA	2.49	0.46
2:SA:18:C:H2'	2:SA:19:A:O4'	2.15	0.46
2:SA:158:G:C4	2:SA:159:G:C8	3.02	0.46
2:SA:374:A:C5	2:SA:375:U:C5	3.03	0.46
2:SA:382:A:H2'	2:SA:383:A:C8	2.49	0.46
2:SA:1142:G:C5	2:SA:1143:G:H1'	2.50	0.46
3:S1:59:A:C2	20:SD:24:VAL:HA	2.50	0.46
26:LA:346:A:N1	26:LA:347:A:C5	2.83	0.46
26:LA:639:U:C4	26:LA:640:C:N4	2.83	0.46
26:LA:684:G:N1	26:LA:774:G:C2	2.83	0.46
26:LA:875:G:C5	26:LA:876:C:C4	3.04	0.46
26:LA:1916:A:C6	26:LA:1917:U:C6	3.03	0.46
26:LA:2007:U:H2'	26:LA:2008:C:C6	2.50	0.46
26:LA:2024:G:C6	26:LA:2025:C:C4	3.03	0.46
26:LA:2071:A:C2	26:LA:2072:C:C2	3.03	0.46
26:LA:2133:G:OP1	26:LA:2134:A:H1'	2.15	0.46
26:LA:2824:C:C4	26:LA:2825:G:C5	3.03	0.46
2:SA:76:G:C6	2:SA:77:A:C4	3.04	0.46
2:SA:537:G:C2	2:SA:538:G:C5	3.04	0.46
2:SA:715:A:H2'	2:SA:716:A:C8	2.50	0.46
2:SA:1077:G:N2	2:SA:1081:A:C4	2.83	0.46
2:SA:1157:A:C4	2:SA:1181:G:C6	3.03	0.46
26:LA:316:C:O5'	26:LA:316:C:H6	1.98	0.46
26:LA:432:A:C5	26:LA:433:C:C5	3.04	0.46
26:LA:569:U:O4	26:LA:570:G:C5	2.68	0.46
26:LA:974:G:C4	26:LA:1186:G:C2	3.03	0.46
26:LA:1036:G:C2	26:LA:1120:G:C4	3.03	0.46
26:LA:1179:G:C6	26:LA:1180:U:C4	3.03	0.46
26:LA:1268:A:N1	26:LA:2013:A:C8	2.84	0.46
26:LA:1383:A:C8	26:LA:1384:A:C4	3.03	0.46
26:LA:1635:A:C6	26:LA:1636:U:C2	3.04	0.46
26:LA:2273:A:C2	26:LA:2274:A:C5	3.03	0.46
26:LA:2665:A:H2'	26:LA:2666:C:H5'	1.98	0.46
26:LA:2835:A:C6	26:LA:2879:A:C4	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:538:G:H2'	2:SA:539:A:H8	1.80	0.46
2:SA:842:U:C2	2:SA:846:G:C2	3.04	0.46
2:SA:1147:C:H2'	2:SA:1148:U:C6	2.51	0.46
2:SA:1422:G:N2	2:SA:1423:G:C4	2.83	0.46
3:S1:52:U:H3'	3:S1:53:G:H5"	1.98	0.46
24:S3:114:ALA:HA	24:S3:153:VAL:HG21	1.97	0.46
26:LA:38:A:C2	26:LA:442:G:C2	3.04	0.46
26:LA:217:A:H2'	26:LA:218:A:C8	2.51	0.46
26:LA:384:A:C6	26:LA:385:C:C4	3.03	0.46
26:LA:945:A:H1'	26:LA:2448:A:C2	2.49	0.46
26:LA:1284:A:H2'	26:LA:1285:A:C8	2.50	0.46
26:LA:1599:U:C4	26:LA:1600:C:C4	3.04	0.46
26:LA:1827:U:P	27:LD:220:ARG:HH21	2.37	0.46
26:LA:2571:U:C4	26:LA:2574:G:C8	3.03	0.46
26:LA:2803:G:C5	26:LA:2804:U:C5	3.03	0.46
2:SA:790:A:O3'	2:SA:791:G:H4'	2.15	0.46
2:SA:885:G:C2	2:SA:913:A:N1	2.84	0.46
2:SA:1130:A:H5'	9:SI:19:PHE:CD1	2.50	0.46
2:SA:1133:G:N2	2:SA:1142:G:C4	2.83	0.46
2:SA:1513:A:C5	2:SA:1523:G:O6	2.69	0.46
4:S2:48:U:H3'	4:S2:48:U:H6	1.80	0.46
14:SN:31:SER:OG	14:SN:44:VAL:HG11	2.15	0.46
24:S3:647:GLU:HG2	24:S3:648:VAL:N	2.30	0.46
26:LA:311:A:C5	26:LA:328:U:C4	3.03	0.46
26:LA:374:A:C2	26:LA:401:A:C2	3.04	0.46
26:LA:422:A:C6	26:LA:423:A:C6	3.04	0.46
26:LA:819:A:N1	26:LA:820:A:C4	2.83	0.46
26:LA:1082:U:H2'	26:LA:1083:U:H5'	1.96	0.46
26:LA:1204:A:N1	26:LA:1241:A:C2	2.83	0.46
26:LA:1369:G:C5	26:LA:1370:C:C5	3.03	0.46
26:LA:1467:U:C4	26:LA:1468:U:C4	3.04	0.46
26:LA:1676:A:N6	26:LA:1677:A:C2	2.83	0.46
26:LA:2171:A:O2'	26:LA:2172:U:C5	2.62	0.46
52:LO:96:ILE:C	52:LO:96:ILE:HD12	2.36	0.46
2:SA:66:A:H4'	2:SA:173:U:C5	2.51	0.46
2:SA:253:A:C6	2:SA:254:G:C5	3.04	0.46
2:SA:507:C:C2	2:SA:508:U:C5	3.04	0.46
2:SA:584:G:C2	2:SA:585:G:C4	3.03	0.46
2:SA:704:A:C5	2:SA:705:G:C8	3.03	0.46
2:SA:993:G:C2	2:SA:1046:A:C2	3.04	0.46
24:S3:104:VAL:HG21	24:S3:321:PHE:CG	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:930:G:H2'	26:LA:933:A:C2	2.50	0.46
26:LA:954:G:C6	26:LA:955:U:N3	2.84	0.46
26:LA:964:C:O2'	26:LA:2273:A:H1'	2.15	0.46
26:LA:1429:G:H1'	26:LA:1568:G:H1'	1.97	0.46
26:LA:1688:U:N3	26:LA:1698:A:C2	2.84	0.46
26:LA:2323:G:C8	26:LA:2324:U:C5	3.04	0.46
26:LA:2333:A:C2	26:LA:2335:A:C6	3.04	0.46
26:LA:2789:C:C2	26:LA:2893:A:C8	3.03	0.46
26:LA:2889:C:H2'	26:LA:2890:G:C8	2.51	0.46
37:LC:67:HIS:CD2	37:LC:184:LYS:HG2	2.50	0.46
2:SA:580:C:C5	2:SA:581:G:C5	3.03	0.46
2:SA:1254:A:C2	2:SA:1255:G:C4	3.04	0.46
26:LA:503:A:C6	26:LA:506:G:C6	3.04	0.46
26:LA:1157:G:N3	26:LA:1158:C:C6	2.84	0.46
26:LA:1681:G:C4	26:LA:1762:A:C8	3.04	0.46
26:LA:1826:G:C6	26:LA:1827:U:C4	3.04	0.46
26:LA:2178:C:O2	26:LA:2179:C:C5	2.69	0.46
26:LA:2235:G:C6	26:LA:2236:U:C5	3.04	0.46
26:LA:2592:G:C5	26:LA:2593:U:C5	3.04	0.46
2:SA:714:G:C6	2:SA:715:A:C6	3.04	0.46
26:LA:399:U:O4	26:LA:400:G:C6	2.69	0.46
26:LA:836:G:C8	26:LA:837:C:C5	3.04	0.46
26:LA:1483:G:C6	26:LA:1484:U:C4	3.04	0.46
26:LA:1815:A:C6	26:LA:1817:G:O6	2.68	0.46
26:LA:1966:A:H1'	26:LA:2593:U:H5'	1.97	0.46
26:LA:2080:A:C2	26:LA:2241:A:C2	3.04	0.46
26:LA:2373:G:C6	26:LA:2374:C:C4	3.03	0.46
26:LA:2394:C:H5	26:LA:2395:C:C4	2.34	0.46
26:LA:2868:A:C6	26:LA:2869:G:C5	3.04	0.46
2:SA:13:U:C4	2:SA:916:U:O4	2.68	0.46
2:SA:250:A:H1'	2:SA:252:U:C2	2.51	0.46
2:SA:763:G:C4	2:SA:764:C:C5	3.03	0.46
2:SA:866:C:H2'	2:SA:867:G:O4'	2.16	0.46
25:LB:33:G:C6	25:LB:34:A:C5	3.04	0.46
26:LA:301:G:C6	26:LA:317:G:C6	3.04	0.46
26:LA:822:G:C4	26:LA:823:C:C5	3.03	0.46
26:LA:879:G:C6	26:LA:880:G:C4	3.03	0.46
26:LA:910:A:N7	52:LO:13:HIS:CD2	2.84	0.46
26:LA:1501:G:C2	26:LA:1502:A:C8	3.04	0.46
26:LA:1900:A:N7	26:LA:1970:A:C4	2.83	0.46
26:LA:2042:A:H4'	26:LA:2043:C:OP1	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2077:A:C8	26:LA:2435:A:C4	3.03	0.46
26:LA:2150:C:H4'	37:LC:3:LYS:HA	1.98	0.46
26:LA:2499:C:C4	26:LA:2500:U:C4	3.04	0.46
26:LA:2513:A:C5	26:LA:2574:G:C6	3.04	0.46
37:LC:34:ALA:HB1	37:LC:178:VAL:HG11	1.97	0.46
2:SA:97:G:C6	2:SA:98:A:H1'	2.50	0.46
2:SA:255:G:C5	2:SA:256:U:C4	3.04	0.46
2:SA:621:A:C6	2:SA:622:A:C6	3.04	0.46
2:SA:1350:A:C2	2:SA:1351:U:C2	3.04	0.46
2:SA:1431:A:C2	2:SA:1432:G:N2	2.84	0.46
19:SC:25:THR:HA	19:SC:28:PHE:HB2	1.98	0.46
24:S3:362:ILE:H	24:S3:362:ILE:CD1	2.25	0.46
24:S3:612:LEU:HD13	24:S3:686:TYR:HB3	1.97	0.46
26:LA:23:G:H2'	26:LA:24:G:C8	2.51	0.46
26:LA:828:U:H2'	26:LA:829:A:C8	2.51	0.46
26:LA:1301:A:H2'	26:LA:1301:A:N3	2.31	0.46
26:LA:1588:G:C5	26:LA:1589:U:C5	3.04	0.46
26:LA:1854:A:N6	26:LA:1888:G:C8	2.84	0.46
26:LA:1966:A:H1'	26:LA:2593:U:C5'	2.46	0.46
26:LA:2352:A:N1	32:LY:30:VAL:HG11	2.31	0.46
26:LA:2702:G:C5	26:LA:2703:C:C4	3.03	0.46
26:LA:2903:U:H3'	26:LA:2904:U:C5'	2.45	0.46
35:L1:46:MET:O	35:L1:50:VAL:HG22	2.15	0.46
36:L2:6:HIS:CD2	45:LG:62:GLN:HG3	2.51	0.46
2:SA:131:A:H2'	2:SA:132:C:H6	1.82	0.45
2:SA:477:C:H2'	2:SA:478:A:C8	2.50	0.45
2:SA:615:G:C6	2:SA:616:G:C5	3.04	0.45
22:SF:8:PHE:HB2	22:SF:86:ARG:O	2.16	0.45
24:S3:297:ILE:HB	24:S3:404:ILE:HG23	1.98	0.45
26:LA:98:G:N7	26:LA:99:U:C6	2.84	0.45
26:LA:452:G:C5	26:LA:453:A:N7	2.84	0.45
26:LA:545:U:C5	26:LA:550:C:C2	3.03	0.45
26:LA:572:A:N6	26:LA:2033:A:C6	2.85	0.45
26:LA:1392:A:C5	29:LV:19:LYS:HD2	2.52	0.45
26:LA:1727:C:C4	26:LA:1728:C:C4	3.03	0.45
26:LA:1924:C:C6	26:LA:1925:C:C5	3.03	0.45
26:LA:2123:G:N1	26:LA:2176:A:H1'	2.31	0.45
26:LA:2468:A:C2	26:LA:2481:G:N3	2.84	0.45
26:LA:2766:A:C6	26:LA:2767:C:C5	3.04	0.45
35:L1:19:HIS:CD2	35:L1:19:HIS:N	2.83	0.45
38:LE:106:LYS:HB2	38:LE:206:ALA:HB2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:9:G:C2	2:SA:26:A:C2	3.04	0.45
2:SA:55:A:C5	2:SA:56:U:C6	3.04	0.45
2:SA:798:U:C4	2:SA:799:G:N7	2.85	0.45
2:SA:1004:A:C2	2:SA:1026:G:N3	2.84	0.45
2:SA:1227:A:O2'	2:SA:1228:C:C6	2.69	0.45
2:SA:1322:C:H4'	2:SA:1323:G:OP1	2.17	0.45
4:S2:77:A:H1'	26:LA:2432:A:N3	2.31	0.45
26:LA:89:A:C6	26:LA:90:U:O4	2.69	0.45
26:LA:415:A:C5	26:LA:416:U:C4	3.04	0.45
26:LA:716:A:H2'	26:LA:717:C:H5'	1.98	0.45
26:LA:785:G:C2	26:LA:786:C:C2	3.04	0.45
26:LA:852:U:C4	26:LA:853:C:C4	3.04	0.45
26:LA:1057:A:H2'	26:LA:1057:A:N3	2.31	0.45
26:LA:1494:A:C6	26:LA:1495:A:C6	3.04	0.45
26:LA:1791:A:C8	26:LA:1792:G:C8	3.05	0.45
26:LA:1855:U:H2'	26:LA:1856:U:C6	2.51	0.45
26:LA:2016:U:C5	26:LA:2017:U:C4	3.03	0.45
26:LA:2543:G:C2	26:LA:2765:A:N7	2.84	0.45
26:LA:2640:G:C2	26:LA:2641:G:C8	3.04	0.45
26:LA:2644:G:N2	26:LA:2733:A:H62	2.13	0.45
26:LA:2711:A:C4	26:LA:2714:G:H1'	2.51	0.45
44:LF:84:THR:HG23	44:LF:85:PHE:CG	2.50	0.45
45:LG:11:VAL:CG1	45:LG:15:LEU:HD13	2.46	0.45
55:LQ:6:ALA:HB1	55:LQ:10:ARG:HH12	1.81	0.45
2:SA:151:A:C2	2:SA:152:A:H1'	2.51	0.45
2:SA:602:A:C5	2:SA:603:U:C4	3.05	0.45
2:SA:717:U:H4'	11:SK:118:ASN:HD22	1.81	0.45
2:SA:725:G:C2	2:SA:726:C:C6	3.04	0.45
2:SA:934:C:C4	2:SA:1345:U:C5	3.04	0.45
2:SA:949:A:C2	2:SA:1233:G:C2	3.05	0.45
2:SA:1022:A:C5	2:SA:1023:U:C5	3.05	0.45
2:SA:1261:A:C5	2:SA:1262:C:C5	3.04	0.45
2:SA:1379:G:C6	2:SA:1380:U:C4	3.05	0.45
12:SL:97:VAL:CG2	12:SL:100:ALA:HB3	2.46	0.45
26:LA:201:C:C4	26:LA:202:U:C5	3.04	0.45
26:LA:360:U:H2'	26:LA:361:G:O4'	2.17	0.45
26:LA:539:G:C6	26:LA:540:C:C4	3.04	0.45
26:LA:822:G:C6	26:LA:823:C:C4	3.04	0.45
26:LA:1169:A:C5	26:LA:1170:C:C4	3.05	0.45
26:LA:2150:C:C5	26:LA:2151:U:C4	3.04	0.45
26:LA:2162:G:H2'	26:LA:2163:A:H5'	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2194:U:C2	26:LA:2195:U:C6	3.04	0.45
26:LA:2869:G:C6	26:LA:2870:C:C4	3.04	0.45
47:LJ:27:ALA:HB3	47:LJ:80:LEU:HD22	1.97	0.45
2:SA:164:G:H3'	2:SA:165:G:H8	1.81	0.45
2:SA:550:G:C5	2:SA:551:U:C5	3.05	0.45
2:SA:1344:C:C2'	2:SA:1345:U:OP1	2.64	0.45
2:SA:1476:A:C5	2:SA:1477:U:C5	3.04	0.45
24:S3:695:GLN:NE2	24:S3:695:GLN:H	2.14	0.45
25:LB:35:C:H2'	25:LB:36:C:C6	2.51	0.45
26:LA:28:A:C4	26:LA:29:U:C5	3.04	0.45
26:LA:584:C:H2'	26:LA:585:G:C8	2.52	0.45
26:LA:1048:A:C5	26:LA:1111:A:C4	3.04	0.45
26:LA:1557:C:H2'	26:LA:1558:C:C5	2.52	0.45
26:LA:2107:G:N1	26:LA:2108:A:C6	2.84	0.45
26:LA:2239:G:O6	26:LA:2240:U:C4	2.70	0.45
26:LA:2461:A:C2	26:LA:2462:C:C2	3.05	0.45
26:LA:2523:G:N3	26:LA:2765:A:C2	2.85	0.45
26:LA:2705:A:C6	26:LA:2706:A:C6	3.05	0.45
26:LA:2886:A:C4	26:LA:2887:A:C8	3.04	0.45
26:LA:2886:A:C6	26:LA:2887:A:C5	3.04	0.45
32:LY:30:VAL:HG22	32:LY:61:LYS:O	2.17	0.45
2:SA:109:A:C5	2:SA:326:G:C5	3.04	0.45
2:SA:128:G:H2'	2:SA:129:A:C8	2.52	0.45
25:LB:9:G:C2	25:LB:112:G:C5	3.04	0.45
26:LA:149:A:C2	26:LA:150:U:C2	3.04	0.45
26:LA:253:C:N4	26:LA:254:G:C5	2.85	0.45
26:LA:465:G:C2	26:LA:466:A:N1	2.85	0.45
26:LA:871:U:H4'	52:LO:68:PHE:CE1	2.52	0.45
26:LA:1262:A:C2	26:LA:1263:U:C2	3.04	0.45
26:LA:1532:A:N3	26:LA:1540:G:C2	2.84	0.45
26:LA:1680:U:C5	26:LA:1681:G:C5	3.04	0.45
26:LA:1839:G:C6	26:LA:1927:A:C5	3.04	0.45
2:SA:118:U:H2'	2:SA:119:A:H5"	1.98	0.45
2:SA:175:C:C2	2:SA:176:C:C6	3.05	0.45
2:SA:298:A:H2'	2:SA:299:G:O4'	2.16	0.45
2:SA:570:G:C6	2:SA:873:A:N1	2.85	0.45
2:SA:1083:U:C5	2:SA:1084:G:C6	3.05	0.45
2:SA:1134:G:H2'	2:SA:1135:U:H5'	1.98	0.45
2:SA:1153:G:C2	2:SA:1154:G:H1'	2.52	0.45
2:SA:1175:G:O6	2:SA:1176:A:C5	2.70	0.45
2:SA:1442:G:C6	2:SA:1443:C:C4	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:4:G:C2	4:S2:5:G:C4	3.05	0.45
8:SH:85:TYR:N	8:SH:85:TYR:CD1	2.83	0.45
25:LB:75:G:H2'	25:LB:76:G:C8	2.52	0.45
26:LA:63:A:H2'	26:LA:64:A:C8	2.51	0.45
26:LA:513:A:C6	26:LA:514:A:C5	3.04	0.45
26:LA:1042:G:C6	26:LA:1043:C:C2	3.05	0.45
26:LA:1436:G:C6	26:LA:1437:C:C4	3.05	0.45
26:LA:1899:A:C2	26:LA:1902:C:N4	2.84	0.45
26:LA:2394:C:H2'	26:LA:2395:C:C6	2.51	0.45
26:LA:2663:G:H2'	26:LA:2664:G:H8	1.82	0.45
46:LH:152:ARG:HB3	46:LH:153:PRO:HD2	1.98	0.45
2:SA:101:A:C6	2:SA:102:G:C5	3.04	0.45
2:SA:781:A:C6	2:SA:802:A:N3	2.84	0.45
2:SA:992:U:H1'	2:SA:993:G:C2	2.51	0.45
2:SA:1148:U:C4	2:SA:1149:C:C2	3.05	0.45
2:SA:1267:C:H41	2:SA:1327:C:C1'	2.30	0.45
3:S1:57:C:H42	20:SD:160:LEU:CD2	2.30	0.45
19:SC:27:GLU:H	19:SC:27:GLU:CD	2.20	0.45
20:SD:64:TYR:CZ	20:SD:93:LEU:HB3	2.51	0.45
26:LA:661:A:C6	26:LA:662:G:C5	3.05	0.45
26:LA:1206:G:C6	26:LA:1207:C:C4	3.04	0.45
26:LA:1374:G:C6	26:LA:1375:U:C4	3.05	0.45
32:LY:40:ARG:NH1	32:LY:56:HIS:CE1	2.84	0.45
2:SA:272:C:H4'	2:SA:272:C:OP1	2.17	0.45
2:SA:1213:A:C5	2:SA:1215:G:C4	3.05	0.45
2:SA:1244:G:H2'	2:SA:1245:C:C6	2.52	0.45
26:LA:7:G:H2'	26:LA:8:C:C6	2.52	0.45
26:LA:362:A:H5"	26:LA:362:A:C8	2.51	0.45
26:LA:721:A:C5	26:LA:722:A:N7	2.85	0.45
26:LA:875:G:C6	26:LA:876:C:C4	3.04	0.45
26:LA:910:A:C8	52:LO:13:HIS:CG	3.05	0.45
26:LA:1022:G:C5	26:LA:1140:C:C4	3.05	0.45
26:LA:1307:A:C6	26:LA:1308:A:C5	3.05	0.45
26:LA:1770:G:C2	26:LA:1983:G:C4	3.05	0.45
26:LA:1930:G:HO2'	26:LA:1931:U:H6	1.63	0.45
26:LA:2040:G:C5	26:LA:2041:U:C4	3.04	0.45
26:LA:2194:U:C2	26:LA:2195:U:C5	3.05	0.45
26:LA:2372:U:H3	26:LA:2381:A:H61	1.64	0.45
26:LA:2399:G:C4	26:LA:2418:A:C2	3.05	0.45
57:LS:50:ARG:N	57:LS:50:ARG:HH11	2.15	0.45
2:SA:293:G:C6	2:SA:294:U:C4	3.05	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:363:A:C6	2:SA:364:A:C6	3.05	0.45
2:SA:541:G:C6	2:SA:542:G:C5	3.04	0.45
2:SA:1255:G:C6	2:SA:1279:G:N7	2.85	0.45
18:SB:70:GLY:CA	18:SB:163:ILE:HG22	2.47	0.45
21:SE:94:PHE:O	21:SE:124:ALA:HB3	2.17	0.45
26:LA:954:G:C6	26:LA:955:U:C4	3.05	0.45
26:LA:1028:A:C2	26:LA:1029:A:C6	3.05	0.45
26:LA:1165:A:H2'	26:LA:1166:G:C8	2.52	0.45
26:LA:1186:G:C6	26:LA:1187:G:C5	3.05	0.45
26:LA:1713:A:H1'	26:LA:1715:G:H4'	1.99	0.45
26:LA:2020:A:C6	26:LA:2022:U:C2	3.04	0.45
26:LA:2090:A:C6	26:LA:2091:C:C4	3.05	0.45
26:LA:2236:U:C4	26:LA:2237:G:C5	3.05	0.45
26:LA:2513:A:C6	26:LA:2574:G:C6	3.05	0.45
26:LA:2834:G:H21	26:LA:2883:A:H62	1.64	0.45
38:LE:115:GLY:O	53:LP:3:HIS:CE1	2.70	0.45
50:LL:38:GLY:O	50:LL:40:HIS:N	2.50	0.45
1:SS:65:MET:HA	1:SS:73:PHE:CZ	2.52	0.45
2:SA:64:G:C8	2:SA:99:C:C5	3.05	0.45
2:SA:201:G:C6	2:SA:202:G:C4	3.05	0.45
2:SA:767:A:C6	2:SA:768:A:C5	3.05	0.45
18:SB:37:VAL:HG12	18:SB:38:HIS:N	2.30	0.45
21:SE:19:ARG:HB3	21:SE:32:PHE:CE2	2.52	0.45
26:LA:716:A:H2'	26:LA:717:C:C5'	2.47	0.45
26:LA:1107:G:C5	26:LA:1108:U:C4	3.04	0.45
26:LA:1115:G:C2	26:LA:1116:G:C4	3.05	0.45
26:LA:1318:U:H2'	26:LA:1319:C:C6	2.52	0.45
26:LA:1761:C:C2	26:LA:1762:A:C2	3.05	0.45
26:LA:2589:A:C2	26:LA:2606:C:N4	2.84	0.45
26:LA:2625:G:H2'	26:LA:2626:C:C6	2.52	0.45
26:LA:2657:A:C5	26:LA:2665:A:C2	3.05	0.45
26:LA:2702:G:C6	26:LA:2703:C:C4	3.05	0.45
32:LY:18:LYS:O	32:LY:19:ARG:HB2	2.16	0.45
32:LY:49:ASN:HD21	32:LY:81:ILE:N	2.15	0.45
51:LI:117:LEU:HD23	51:LI:131:SER:HB3	1.99	0.45
52:LO:14:LYS:HE2	52:LO:14:LYS:HA	1.98	0.45
2:SA:509:A:H3'	20:SD:46:ARG:HH21	1.82	0.44
2:SA:610:U:O2	2:SA:611:C:C5	2.70	0.44
2:SA:620:C:C2	2:SA:621:A:C8	3.05	0.44
2:SA:721:G:C5	2:SA:733:G:C2	3.05	0.44
2:SA:1313:U:C5	2:SA:1314:C:C5	3.04	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1416:G:C2	2:SA:1485:U:O2	2.70	0.44
19:SC:178:ARG:HH21	19:SC:207:LEU:HG	1.82	0.44
25:LB:69:G:C5	25:LB:70:C:C6	3.04	0.44
26:LA:973:A:C4	26:LA:1188:U:O4	2.70	0.44
26:LA:1218:G:C6	26:LA:1219:U:C4	3.05	0.44
26:LA:2040:G:H2'	26:LA:2041:U:C6	2.52	0.44
26:LA:2170:A:H2'	26:LA:2171:A:H5'	1.99	0.44
26:LA:2412:A:C6	26:LA:2413:G:C4	3.05	0.44
26:LA:2631:G:N1	26:LA:2632:A:C5	2.85	0.44
26:LA:2819:G:C6	26:LA:2821:A:C2	3.04	0.44
38:LE:115:GLY:O	53:LP:3:HIS:HE1	2.00	0.44
1:SS:64:GLU:HA	36:L2:37:CYS:SG	2.57	0.44
1:SS:89:LYS:HD3	2:SA:958:A:OP2	2.17	0.44
2:SA:232:G:C5	2:SA:233:C:C6	3.06	0.44
2:SA:1256:A:H4'	2:SA:1258:G:C8	2.52	0.44
2:SA:1288:A:C2	2:SA:1289:A:C5	3.06	0.44
26:LA:792:A:H1'	26:LA:793:A:H2	1.80	0.44
26:LA:812:C:H1'	26:LA:1250:G:C2	2.52	0.44
26:LA:873:C:N3	26:LA:905:A:C2	2.85	0.44
26:LA:1283:G:N2	26:LA:1286:A:C8	2.86	0.44
26:LA:1532:A:N1	26:LA:1533:C:C2	2.85	0.44
26:LA:1744:A:H2'	26:LA:1745:A:O4'	2.17	0.44
26:LA:1776:G:C2	26:LA:1777:U:C4	3.05	0.44
26:LA:1842:G:C4	26:LA:1901:A:C2	3.06	0.44
26:LA:2077:A:C4	26:LA:2435:A:C8	3.05	0.44
26:LA:2332:C:H1'	26:LA:2336:A:N7	2.32	0.44
26:LA:2653:U:H5	26:LA:2654:A:HO2'	1.62	0.44
26:LA:2657:A:C4	26:LA:2665:A:C6	3.05	0.44
2:SA:262:A:H2'	2:SA:263:A:C8	2.53	0.44
2:SA:947:G:H2'	2:SA:948:C:O4'	2.17	0.44
2:SA:1125:U:C2	10:SJ:42:LEU:HD21	2.53	0.44
2:SA:1434:A:C6	2:SA:1435:G:C6	3.06	0.44
24:S3:344:SER:HB3	24:S3:361:ARG:HE	1.83	0.44
25:LB:2:G:C6	25:LB:3:C:C4	3.05	0.44
26:LA:253:C:C4	26:LA:254:G:C5	3.06	0.44
26:LA:649:G:C6	26:LA:650:C:N3	2.85	0.44
26:LA:684:G:H5"	41:L5:16:HIS:HE1	1.82	0.44
26:LA:796:C:H2'	26:LA:797:G:H8	1.82	0.44
26:LA:1367:A:H2'	26:LA:1368:G:H5'	2.00	0.44
26:LA:1436:G:C6	26:LA:1437:C:C5	3.05	0.44
26:LA:1445:G:C5	26:LA:1446:C:C5	3.06	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1532:A:C2	26:LA:1533:C:C2	3.05	0.44
26:LA:1628:G:C6	26:LA:1629:U:C4	3.06	0.44
26:LA:2037:A:H2'	26:LA:2038:G:C8	2.53	0.44
26:LA:2331:G:H4'	32:LY:40:ARG:H	1.82	0.44
26:LA:2415:G:C4	26:LA:2416:C:C6	3.05	0.44
26:LA:2603:G:C5	26:LA:2604:U:C6	3.05	0.44
26:LA:2796:U:C2	26:LA:2798:U:N3	2.85	0.44
26:LA:2849:U:H4'	26:LA:2850:A:H5'	1.98	0.44
1:SS:33:TRP:CE2	2:SA:1014:A:C5	3.06	0.44
2:SA:260:G:C2	2:SA:261:U:C4	3.06	0.44
2:SA:265:G:C8	2:SA:267:C:C5	3.05	0.44
2:SA:359:G:C6	2:SA:360:G:C4	3.06	0.44
2:SA:658:C:H2'	2:SA:659:U:C6	2.53	0.44
2:SA:880:C:H2'	2:SA:881:G:C8	2.52	0.44
2:SA:881:G:C6	2:SA:882:C:C4	3.06	0.44
2:SA:1374:A:H2'	2:SA:1375:A:C8	2.52	0.44
16:SP:21:VAL:HG21	16:SP:60:TRP:CD1	2.52	0.44
20:SD:187:ARG:HA	20:SD:187:ARG:HE	1.83	0.44
21:SE:123:LEU:HD13	21:SE:124:ALA:N	2.23	0.44
25:LB:30:C:H1'	25:LB:57:A:H61	1.82	0.44
26:LA:61:C:C2	26:LA:94:A:C2	3.06	0.44
26:LA:222:A:C5	26:LA:224:U:C2	3.06	0.44
26:LA:432:A:C6	26:LA:433:C:C4	3.06	0.44
26:LA:495:G:C4	26:LA:496:G:C8	3.06	0.44
26:LA:559:G:H2'	26:LA:560:C:C6	2.53	0.44
26:LA:756:A:C6	26:LA:757:G:C5	3.06	0.44
26:LA:1057:A:C4	26:LA:1058:U:C5	3.05	0.44
26:LA:1087:G:C5	26:LA:1089:A:C4	3.05	0.44
26:LA:1166:G:C5	26:LA:1167:C:C5	3.05	0.44
26:LA:1277:G:C5	26:LA:1278:C:C5	3.06	0.44
26:LA:1469:A:C2	26:LA:1470:A:C4	3.05	0.44
26:LA:1955:U:C5	26:LA:2552:U:H1'	2.52	0.44
26:LA:2052:A:C4	26:LA:2053:G:C8	3.05	0.44
26:LA:2092:U:H4'	26:LA:2093:G:C5'	2.47	0.44
26:LA:2138:G:C6	26:LA:2154:A:N6	2.85	0.44
26:LA:2370:G:H2'	26:LA:2371:G:C8	2.52	0.44
26:LA:2437:G:C4	26:LA:2438:U:C5	3.06	0.44
26:LA:2700:A:C2	26:LA:2708:G:C2	3.05	0.44
26:LA:2829:A:C4	26:LA:2830:C:C6	3.06	0.44
37:LC:226:GLN:CD	37:LC:226:GLN:H	2.19	0.44
55:LQ:64:TYR:CG	55:LQ:65:THR:N	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:131:A:C2	2:SA:232:G:C4	3.06	0.44
2:SA:138:G:C5	2:SA:226:G:C2	3.06	0.44
2:SA:216:U:H1'	2:SA:465:A:C6	2.52	0.44
2:SA:579:A:C2	2:SA:580:C:C2	3.05	0.44
2:SA:683:G:C5	2:SA:684:U:C5	3.06	0.44
2:SA:931:C:H2'	2:SA:932:C:C6	2.53	0.44
7:SG:158:LEU:O	7:SG:158:LEU:HG	2.16	0.44
10:SJ:6:ILE:HG23	10:SJ:8:ILE:H	1.83	0.44
18:SB:20:ARG:HB2	18:SB:22:TRP:CZ3	2.52	0.44
18:SB:48:MET:O	18:SB:51:GLU:HB3	2.17	0.44
19:SC:46:LEU:HD12	19:SC:46:LEU:O	2.18	0.44
19:SC:68:HIS:HB2	19:SC:103:ALA:HB3	1.99	0.44
20:SD:36:ALA:HB3	20:SD:41:GLY:HA2	2.00	0.44
22:SF:90:MET:SD	23:SR:22:TYR:CE1	3.11	0.44
26:LA:477:A:C2	26:LA:478:A:C4	3.06	0.44
26:LA:974:G:C6	26:LA:1186:G:C5	3.06	0.44
26:LA:991:C:H1'	26:LA:1185:G:C2	2.53	0.44
26:LA:1069:A:C5	26:LA:1073:A:C2	3.05	0.44
26:LA:1414:C:C4	26:LA:1415:U:C5	3.06	0.44
26:LA:1513:U:H2'	26:LA:1514:G:C8	2.53	0.44
26:LA:1805:A:C2	26:LA:1806:C:C2	3.05	0.44
26:LA:1910:G:C6	26:LA:1911:U:N3	2.85	0.44
26:LA:2121:G:C5	26:LA:2122:U:C4	3.05	0.44
26:LA:2343:U:H2'	26:LA:2344:U:C6	2.53	0.44
26:LA:2588:G:C2	26:LA:2589:A:C8	3.06	0.44
26:LA:2591:C:H2'	26:LA:2592:G:H8	1.82	0.44
57:LS:63:ARG:HH21	57:LS:96:ASP:CG	2.21	0.44
2:SA:27:G:C4	2:SA:557:G:N2	2.85	0.44
2:SA:573:A:C5	2:SA:574:A:N1	2.85	0.44
2:SA:767:A:H2'	2:SA:768:A:O4'	2.18	0.44
2:SA:934:C:C5	2:SA:1345:U:C5	3.06	0.44
2:SA:1181:G:C2	2:SA:1182:G:C2	3.06	0.44
2:SA:1236:A:H4'	2:SA:1304:G:H4'	1.99	0.44
2:SA:1371:G:C5	2:SA:1372:U:C5	3.05	0.44
2:SA:1381:U:H1'	7:SG:152:HIS:NE2	2.33	0.44
26:LA:3:U:C4	26:LA:4:U:C4	3.05	0.44
26:LA:743:A:H2'	26:LA:744:U:C6	2.53	0.44
26:LA:851:C:H2'	26:LA:852:U:C6	2.53	0.44
26:LA:855:G:O6	26:LA:856:G:C6	2.71	0.44
26:LA:2038:G:C6	26:LA:2039:U:C4	3.06	0.44
30:LW:95:PHE:CZ	30:LW:102:ILE:HB	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:LC:96:GLY:O	37:LC:100:LEU:HD23	2.18	0.44
38:LE:124:ARG:HD3	38:LE:162:ALA:O	2.16	0.44
2:SA:6:G:H2'	2:SA:298:A:H5'	2.00	0.44
2:SA:1160:G:C6	2:SA:1181:G:C6	3.05	0.44
26:LA:61:C:C4	26:LA:62:U:C4	3.05	0.44
26:LA:72:U:O4	26:LA:112:U:H4'	2.17	0.44
26:LA:85:G:C6	26:LA:98:G:O6	2.71	0.44
26:LA:197:A:C4	26:LA:198:C:C6	3.05	0.44
26:LA:495:G:C5	26:LA:496:G:C8	3.05	0.44
26:LA:572:A:C5	26:LA:573:U:C5	3.06	0.44
26:LA:622:G:C6	26:LA:623:C:C4	3.05	0.44
26:LA:1057:A:C6	26:LA:1058:U:C4	3.06	0.44
26:LA:1252:G:C5	26:LA:1253:A:C6	3.06	0.44
26:LA:1265:A:C5	26:LA:1267:U:O4	2.70	0.44
26:LA:1350:C:C4	26:LA:1351:C:C5	3.06	0.44
26:LA:1383:A:N7	26:LA:1384:A:C6	2.86	0.44
26:LA:1444:G:C6	26:LA:1445:G:C6	3.06	0.44
26:LA:1910:G:C4	26:LA:1921:G:C2	3.06	0.44
26:LA:2040:G:C2	26:LA:2041:U:C2	3.05	0.44
26:LA:2122:U:C4	37:LC:133:PRO:HG3	2.52	0.44
26:LA:2339:C:H2'	26:LA:2340:A:H8	1.82	0.44
39:L3:53:VAL:HG11	53:LP:98:LEU:HG	1.99	0.44
2:SA:49:U:C4	2:SA:364:A:C5	3.05	0.44
2:SA:282:A:N7	2:SA:283:U:C5	2.86	0.44
2:SA:444:G:C5	2:SA:491:G:C2	3.06	0.44
2:SA:514:C:H2'	2:SA:515:G:C8	2.53	0.44
2:SA:542:G:C4	2:SA:543:U:C5	3.06	0.44
2:SA:1327:C:H2'	2:SA:1328:C:C6	2.53	0.44
22:SF:78:PHE:HA	22:SF:81:ASN:HD22	1.83	0.44
24:S3:673:THR:HG21	24:S3:677:ALA:HB2	1.99	0.44
26:LA:45:G:H5'	26:LA:46:G:H5'	2.00	0.44
26:LA:134:G:H2'	26:LA:135:U:C6	2.53	0.44
26:LA:372:G:C8	33:LZ:56:ARG:HB3	2.53	0.44
26:LA:785:G:C6	26:LA:786:C:C4	3.06	0.44
26:LA:878:A:C6	26:LA:879:G:C6	3.06	0.44
26:LA:1019:U:H2'	26:LA:1020:A:H5'	2.00	0.44
26:LA:1406:U:H2'	26:LA:1407:G:C8	2.53	0.44
26:LA:1410:G:N3	26:LA:1593:A:C2	2.86	0.44
26:LA:1444:G:C2	26:LA:1548:A:C2	3.06	0.44
26:LA:1663:G:N1	26:LA:1998:A:C6	2.86	0.44
26:LA:2049:G:N2	26:LA:2620:C:C2	2.86	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2140:G:C2	26:LA:2152:G:C8	3.06	0.44
26:LA:2336:A:H61	32:LY:40:ARG:HG2	1.83	0.44
26:LA:2397:G:C2	26:LA:2420:C:C2	3.05	0.44
26:LA:2403:C:H2'	26:LA:2404:U:C6	2.53	0.44
26:LA:2557:G:C5	26:LA:2558:C:C4	3.05	0.44
26:LA:2567:G:H2'	26:LA:2568:U:C6	2.53	0.44
26:LA:2692:G:C5	26:LA:2718:G:C2	3.06	0.44
30:LW:85:ARG:NE	30:LW:86:PHE:H	2.14	0.44
2:SA:234:C:H2'	2:SA:235:C:C6	2.53	0.44
2:SA:369:G:C2	2:SA:393:A:C2	3.06	0.44
2:SA:670:G:C2	2:SA:671:G:C4	3.06	0.44
2:SA:898:G:C2	2:SA:902:G:C6	3.06	0.44
25:LB:99:A:C4	25:LB:100:G:C8	3.05	0.44
26:LA:407:G:C6	26:LA:408:G:N7	2.86	0.44
26:LA:560:C:H2'	26:LA:561:G:O4'	2.17	0.44
26:LA:783:A:C8	26:LA:783:A:H3'	2.52	0.44
26:LA:811:U:H5	26:LA:1251:C:C5	2.32	0.44
26:LA:1439:A:N6	26:LA:1552:A:C8	2.86	0.44
26:LA:1451:C:N4	26:LA:1459:G:C8	2.86	0.44
26:LA:1598:A:C6	26:LA:1599:U:C2	3.05	0.44
26:LA:2077:A:C2	26:LA:2078:C:C4	3.05	0.44
26:LA:2809:A:H2'	26:LA:2810:A:C8	2.53	0.44
55:LQ:27:VAL:HG21	55:LQ:40:ILE:HD11	1.98	0.44
2:SA:483:C:H2'	2:SA:484:G:C8	2.52	0.43
2:SA:1013:G:C2	2:SA:1015:G:C8	3.06	0.43
10:SJ:40:ILE:HB	10:SJ:73:LEU:HD22	2.00	0.43
24:S3:232:LEU:HD13	24:S3:250:ALA:HB2	1.99	0.43
25:LB:109:A:C2	25:LB:110:C:C4	3.06	0.43
26:LA:20:C:H2'	26:LA:21:A:C8	2.53	0.43
26:LA:83:A:C6	26:LA:101:A:C4	3.06	0.43
26:LA:160:A:C6	26:LA:161:A:C6	3.06	0.43
26:LA:358:U:H2'	26:LA:359:G:C8	2.53	0.43
26:LA:527:C:O4'	26:LA:528:A:C2	2.71	0.43
26:LA:947:A:C2	26:LA:971:G:N2	2.86	0.43
26:LA:950:G:C6	26:LA:951:C:C4	3.06	0.43
26:LA:1067:A:N7	26:LA:1068:G:C6	2.86	0.43
26:LA:1332:G:O6	26:LA:1616:A:C2	2.70	0.43
26:LA:1923:U:H2'	26:LA:1924:C:C6	2.53	0.43
26:LA:2162:G:H2'	26:LA:2163:A:C5'	2.47	0.43
26:LA:2393:U:C5	26:LA:2394:C:C4	3.06	0.43
26:LA:2631:G:C6	26:LA:2632:A:C5	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2654:A:H4'	26:LA:2655:G:H5'	2.00	0.43
26:LA:2837:A:H2'	26:LA:2838:G:C8	2.54	0.43
33:LZ:19:HIS:O	33:LZ:19:HIS:CG	2.71	0.43
45:LG:66:ILE:HD12	45:LG:83:PRO:HB3	2.00	0.43
50:LL:15:TRP:CD2	50:LL:135:GLN:HB3	2.53	0.43
2:SA:948:C:H2'	2:SA:949:A:C8	2.53	0.43
11:SK:56:LYS:HA	11:SK:65:ALA:HB2	2.00	0.43
22:SF:18:VAL:HG11	22:SF:126:ALA:HB2	1.99	0.43
26:LA:123:G:H2'	26:LA:124:G:C8	2.53	0.43
26:LA:310:A:C2	26:LA:330:A:C5	3.06	0.43
26:LA:447:A:C4	26:LA:473:G:N7	2.87	0.43
26:LA:860:U:C4	26:LA:2268:A:C4	3.05	0.43
26:LA:927:A:C6	26:LA:928:A:C6	3.06	0.43
26:LA:939:G:C6	26:LA:940:G:N7	2.86	0.43
26:LA:1336:A:C4	26:LA:1337:G:C8	3.06	0.43
26:LA:1697:G:C6	26:LA:1698:A:C5	3.06	0.43
26:LA:1731:G:C6	26:LA:1733:G:C6	3.06	0.43
26:LA:1907:G:C5	26:LA:1908:C:C5	3.06	0.43
26:LA:1937:A:H2'	26:LA:1938:A:H5'	2.00	0.43
26:LA:2134:A:C2	26:LA:2156:G:C2	3.06	0.43
26:LA:2331:G:H2'	26:LA:2332:C:C6	2.53	0.43
26:LA:2795:C:H2'	26:LA:2796:U:C6	2.53	0.43
2:SA:98:A:C2	2:SA:99:C:C2	3.06	0.43
2:SA:194:C:O2'	2:SA:195:A:H5'	2.18	0.43
2:SA:527:G:C5	2:SA:528:C:C5	3.07	0.43
2:SA:646:G:C5	2:SA:647:C:C5	3.06	0.43
2:SA:650:G:C5	2:SA:651:C:C5	3.06	0.43
2:SA:767:A:C2	2:SA:768:A:N3	2.86	0.43
2:SA:892:A:C5	2:SA:907:A:N7	2.86	0.43
2:SA:1035:A:C6	2:SA:1036:A:C5	3.06	0.43
2:SA:1144:G:N2	2:SA:1147:C:H42	2.16	0.43
4:S2:77:A:C8	4:S2:77:A:H3'	2.53	0.43
12:SL:1:ALA:HB1	12:SL:5:GLN:OE1	2.18	0.43
24:S3:70:PHE:CE1	24:S3:82:ARG:HB2	2.53	0.43
26:LA:821:A:C8	26:LA:946:C:C5	3.07	0.43
26:LA:943:A:C2	26:LA:944:C:C2	3.06	0.43
26:LA:980:A:N7	26:LA:981:A:C5	2.87	0.43
26:LA:1165:A:C2	26:LA:1185:G:C5	3.06	0.43
26:LA:1205:A:C5	44:LF:165:HIS:CE1	3.05	0.43
26:LA:1429:G:C2	26:LA:1430:G:C8	3.06	0.43
26:LA:1620:G:C5	26:LA:1621:U:C4	3.07	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1711:A:C6	26:LA:1712:U:C4	3.06	0.43
26:LA:1793:C:H2'	26:LA:1794:A:C8	2.54	0.43
26:LA:1935:G:H2'	26:LA:1935:G:N3	2.33	0.43
26:LA:1937:A:C2'	26:LA:1938:A:H5'	2.48	0.43
26:LA:1966:A:H8	26:LA:2592:G:HO2'	1.66	0.43
26:LA:2327:A:C2	26:LA:2328:A:C4	3.06	0.43
26:LA:2865:U:H3'	26:LA:2866:U:H2'	2.01	0.43
27:LD:57:HIS:CD2	27:LD:58:LYS:H	2.35	0.43
44:LF:88:ARG:HB2	44:LF:89:PRO:HD2	2.00	0.43
2:SA:144:G:C2	2:SA:179:A:C4	3.05	0.43
2:SA:376:G:C2	2:SA:389:A:C2	3.07	0.43
2:SA:411:A:C5	2:SA:429:U:C5	3.06	0.43
2:SA:830:G:C5	2:SA:831:A:C8	3.06	0.43
2:SA:1152:A:H2'	2:SA:1153:G:H8	1.83	0.43
2:SA:1260:G:HO2'	2:SA:1261:A:H8	1.62	0.43
2:SA:1379:G:C5	2:SA:1380:U:C5	3.07	0.43
2:SA:1412:C:H2'	2:SA:1413:A:C8	2.53	0.43
25:LB:15:A:C2	25:LB:109:A:C2	3.06	0.43
26:LA:96:C:H5'	34:L0:41:HIS:CD2	2.53	0.43
26:LA:98:G:H3'	26:LA:99:U:H5"	2.00	0.43
26:LA:131:A:C2	26:LA:132:G:C5	3.07	0.43
26:LA:627:A:C6	48:LN:111:ILE:HD12	2.52	0.43
26:LA:847:U:C5	26:LA:848:C:C6	3.07	0.43
26:LA:899:A:C2	26:LA:900:A:N7	2.86	0.43
26:LA:1419:A:C2	26:LA:1421:G:H1'	2.54	0.43
26:LA:1553:A:C5	26:LA:1555:G:C5	3.06	0.43
26:LA:1636:U:H2'	26:LA:1637:A:H8	1.83	0.43
26:LA:1797:G:C5	26:LA:1798:U:C5	3.05	0.43
26:LA:2537:U:H2'	26:LA:2538:C:C6	2.53	0.43
26:LA:2841:C:C2	26:LA:2877:G:N2	2.87	0.43
26:LA:2851:A:C5	26:LA:2852:G:C5	3.07	0.43
40:L4:4:ILE:CG2	40:L4:27:ARG:HG2	2.47	0.43
2:SA:142:G:C2	2:SA:143:A:C4	3.07	0.43
2:SA:153:C:C6	2:SA:154:U:C5	3.06	0.43
2:SA:679:C:N3	2:SA:680:C:C5	2.87	0.43
2:SA:1480:A:C8	2:SA:1481:U:C5	3.06	0.43
4:S2:9:G:C8	4:S2:46:G:C4	3.06	0.43
14:SN:92:ILE:HG21	14:SN:95:LEU:HD22	2.00	0.43
20:SD:183:ARG:HH12	20:SD:189:ASP:CG	2.21	0.43
26:LA:570:G:H1	26:LA:2499:C:H5'	1.82	0.43
26:LA:1166:G:C5	26:LA:1167:C:C4	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1220:G:C6	26:LA:1230:A:C6	3.07	0.43
26:LA:1571:A:H2'	26:LA:1572:A:C8	2.54	0.43
26:LA:1845:G:C2	26:LA:1896:G:C6	3.06	0.43
26:LA:1941:C:H41	26:LA:1965:C:C1'	2.31	0.43
26:LA:2040:G:C6	26:LA:2041:U:C4	3.06	0.43
26:LA:2051:A:C6	26:LA:2614:A:C4	3.06	0.43
26:LA:2666:C:O2	26:LA:2667:C:C5	2.71	0.43
1:SS:10:ILE:H	1:SS:10:ILE:HD13	1.84	0.43
2:SA:687:A:C2	2:SA:704:A:C4	3.07	0.43
2:SA:975:A:H8	2:SA:1358:U:HO2'	1.65	0.43
2:SA:1437:A:H2'	2:SA:1438:G:C8	2.53	0.43
8:SH:45:ILE:H	8:SH:45:ILE:HG23	1.54	0.43
26:LA:85:G:C5	26:LA:98:G:O6	2.71	0.43
26:LA:190:A:C6	26:LA:207:A:N3	2.86	0.43
26:LA:197:A:C2	26:LA:198:C:H1'	2.54	0.43
26:LA:460:A:C2	26:LA:470:A:C6	3.07	0.43
26:LA:845:A:C2	26:LA:847:U:C2	3.06	0.43
26:LA:868:U:C5	26:LA:869:G:N7	2.86	0.43
26:LA:1194:A:C2	26:LA:1195:G:C4	3.06	0.43
26:LA:1651:G:H2'	26:LA:1652:A:C8	2.53	0.43
26:LA:1809:A:N6	26:LA:1810:A:N1	2.65	0.43
26:LA:2597:G:N7	26:LA:2598:A:C6	2.86	0.43
36:L2:56:ARG:H	36:L2:56:ARG:NH1	2.17	0.43
54:LM:21:CYS:HA	54:LM:41:ILE:HD12	2.00	0.43
2:SA:41:G:C2	2:SA:42:G:C4	3.07	0.43
2:SA:1039:G:H2'	2:SA:1040:U:C6	2.53	0.43
2:SA:1057:G:H5'	19:SC:154:GLY:HA3	2.00	0.43
2:SA:1209:C:H2'	2:SA:1210:C:C6	2.53	0.43
2:SA:1465:A:C2	2:SA:1466:C:C2	3.07	0.43
4:S2:57:C:H5	26:LA:2169:A:C8	2.36	0.43
18:SB:202:ASN:H	18:SB:212:TYR:HE2	1.60	0.43
25:LB:23:G:N1	25:LB:61:G:C6	2.87	0.43
26:LA:35:G:C4	26:LA:454:A:C2	3.07	0.43
26:LA:216:A:C4	26:LA:432:A:C2	3.06	0.43
26:LA:255:A:C4	26:LA:256:A:C8	3.06	0.43
26:LA:422:A:C2	26:LA:423:A:C4	3.06	0.43
26:LA:497:A:C6	26:LA:498:G:C5	3.06	0.43
26:LA:957:C:C4	26:LA:959:A:C5	3.07	0.43
26:LA:1169:A:C2	26:LA:1170:C:C2	3.07	0.43
26:LA:1245:G:H4'	44:LF:33:VAL:HG23	2.00	0.43
26:LA:1361:G:H2'	26:LA:1362:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1430:G:H2'	26:LA:1431:A:H8	1.84	0.43
26:LA:1445:G:H2'	26:LA:1446:C:H6	1.84	0.43
26:LA:1468:U:HO2'	26:LA:1469:A:H8	1.67	0.43
26:LA:1473:G:C5	26:LA:1519:G:C2	3.06	0.43
26:LA:1587:G:C6	26:LA:1588:G:C5	3.06	0.43
26:LA:1959:G:C2	26:LA:1960:A:C4	3.07	0.43
26:LA:2107:G:C2	26:LA:2108:A:C4	3.06	0.43
26:LA:2627:G:C5	26:LA:2628:C:C5	3.07	0.43
26:LA:2828:G:C2	26:LA:2829:A:C8	3.06	0.43
39:L3:29:VAL:HA	39:L3:36:LYS:HA	2.00	0.43
44:LF:102:ARG:HB3	44:LF:102:ARG:CZ	2.48	0.43
47:LJ:119:ALA:HA	47:LJ:122:ILE:HB	2.01	0.43
2:SA:41:G:C6	2:SA:402:G:C6	3.07	0.43
2:SA:364:A:C2	2:SA:365:U:O4	2.72	0.43
2:SA:415:A:H3'	2:SA:416:G:C8	2.54	0.43
2:SA:500:G:H2'	2:SA:501:C:C6	2.54	0.43
2:SA:645:G:C6	2:SA:646:G:N7	2.87	0.43
2:SA:720:C:N4	2:SA:721:G:C6	2.87	0.43
2:SA:1287:A:C6	2:SA:1288:A:C6	3.06	0.43
2:SA:1521:C:C4	2:SA:1522:U:C4	3.06	0.43
7:SG:77:ARG:HB3	7:SG:152:HIS:CE1	2.54	0.43
18:SB:5:MET:SD	18:SB:46:VAL:HG21	2.58	0.43
21:SE:15:ILE:HG22	21:SE:35:LEU:O	2.18	0.43
26:LA:106:C:H2'	26:LA:107:G:C8	2.54	0.43
26:LA:854:C:O2	26:LA:924:G:C2	2.71	0.43
26:LA:1152:C:H2'	26:LA:1153:C:C6	2.53	0.43
26:LA:1224:U:C5	26:LA:1225:G:O6	2.72	0.43
26:LA:1536:C:H4'	26:LA:1537:G:H5"	2.01	0.43
26:LA:2055:C:H5"	26:LA:2056:G:C5'	2.49	0.43
26:LA:2217:G:C6	26:LA:2218:G:N7	2.87	0.43
26:LA:2422:C:O2	26:LA:2424:C:C5	2.72	0.43
26:LA:2423:U:O2	26:LA:2425:A:C5	2.71	0.43
26:LA:2742:G:OP1	43:L7:36:ARG:NH1	2.51	0.43
26:LA:2816:G:C4	26:LA:2817:U:C4	3.06	0.43
26:LA:2862:G:H2'	26:LA:2863:C:C6	2.54	0.43
38:LE:109:VAL:CG1	38:LE:201:LEU:HD22	2.49	0.43
2:SA:22:G:C6	2:SA:23:C:C4	3.06	0.43
2:SA:126:G:C6	2:SA:127:G:C5	3.07	0.43
2:SA:704:A:C5	2:SA:705:G:C5	3.06	0.43
2:SA:900:A:N3	2:SA:901:A:C2	2.87	0.43
2:SA:1455:G:C5	2:SA:1456:A:C5	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:LB:52:A:C6	25:LB:53:A:C4	3.07	0.43
26:LA:77:G:C5	26:LA:78:U:C5	3.07	0.43
26:LA:649:G:C5	26:LA:650:C:C4	3.07	0.43
26:LA:1085:A:C4'	26:LA:1105:U:H4'	2.48	0.43
26:LA:1205:A:C5	44:LF:165:HIS:NE2	2.87	0.43
26:LA:1218:G:C5	26:LA:1219:U:C5	3.07	0.43
26:LA:1878:G:C6	26:LA:1879:C:C4	3.07	0.43
26:LA:2014:A:OP1	28:LU:95:ARG:NH2	2.48	0.43
26:LA:2256:G:C2	26:LA:2257:U:H1'	2.53	0.43
26:LA:2371:G:C6	26:LA:2372:U:C5	3.07	0.43
26:LA:2829:A:C6	26:LA:2830:C:C4	3.07	0.43
26:LA:2856:A:N6	26:LA:2857:G:C6	2.87	0.43
44:LF:118:LEU:HD13	44:LF:186:VAL:HG13	1.99	0.43
2:SA:15:G:H2'	2:SA:16:A:C8	2.54	0.43
2:SA:372:C:N4	2:SA:389:A:H62	2.16	0.43
2:SA:424:G:H2'	2:SA:425:G:C8	2.54	0.43
2:SA:1097:C:C5	2:SA:1098:C:C5	3.07	0.43
2:SA:1267:C:C5	2:SA:1327:C:H4'	2.54	0.43
2:SA:1340:A:C2	2:SA:1341:U:H1'	2.54	0.43
2:SA:1488:G:H2'	2:SA:1489:G:H8	1.84	0.43
3:S1:25:U:C6	7:SG:158:LEU:HD22	2.54	0.43
3:S1:57:C:H42	20:SD:160:LEU:HD23	1.83	0.43
7:SG:72:VAL:CG1	7:SG:144:ALA:HB2	2.49	0.43
10:SJ:53:ILE:HG21	10:SJ:63:ASP:CB	2.48	0.43
11:SK:83:VAL:HG13	11:SK:109:ILE:HA	2.00	0.43
24:S3:416:SER:HA	24:S3:458:ALA:HA	2.00	0.43
24:S3:430:MET:SD	24:S3:434:LEU:HD12	2.58	0.43
25:LB:8:C:H5'	55:LQ:27:VAL:HG11	2.00	0.43
25:LB:97:C:C2'	25:LB:98:G:H5'	2.49	0.43
26:LA:3:U:H2'	26:LA:4:U:C6	2.53	0.43
26:LA:68:G:C6	26:LA:69:C:C4	3.07	0.43
26:LA:287:G:C2	26:LA:288:U:N3	2.87	0.43
26:LA:449:A:C6	26:LA:450:G:C4	3.07	0.43
26:LA:470:A:C4	26:LA:471:A:C8	3.07	0.43
26:LA:647:G:N1	26:LA:648:G:C4	2.87	0.43
26:LA:784:G:C2	26:LA:792:A:C5	3.06	0.43
26:LA:812:C:H4'	57:LS:12:ARG:NH2	2.33	0.43
26:LA:869:G:C5	26:LA:870:U:C6	3.06	0.43
26:LA:1171:G:C6	26:LA:1179:G:C6	3.07	0.43
26:LA:1188:U:C2	26:LA:1189:A:C8	3.07	0.43
26:LA:1299:G:H4'	26:LA:1300:G:H5'	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1439:A:C2	26:LA:1553:A:C5	3.07	0.43
26:LA:1711:A:C5	26:LA:1712:U:C5	3.07	0.43
26:LA:1831:G:C4	26:LA:1832:C:C5	3.07	0.43
26:LA:1973:G:C5	26:LA:1974:C:C4	3.06	0.43
26:LA:2124:G:N7	26:LA:2125:G:C4	2.86	0.43
26:LA:2407:A:C6	26:LA:2408:U:C4	3.07	0.43
26:LA:2459:A:N6	26:LA:2494:G:C2	2.87	0.43
26:LA:2643:G:C2	26:LA:2772:C:C2	3.06	0.43
26:LA:2706:A:C2	26:LA:2707:U:C6	3.07	0.43
26:LA:2803:G:C6	26:LA:2804:U:C4	3.07	0.43
37:LC:46:VAL:HA	37:LC:211:LYS:O	2.19	0.43
49:LK:78:LEU:HD13	49:LK:78:LEU:HA	1.94	0.43
51:LI:122:LEU:HD12	51:LI:122:LEU:H	1.84	0.43
54:LM:19:VAL:HG12	54:LM:43:ILE:HA	2.01	0.43
2:SA:19:A:C6	2:SA:20:U:C4	3.07	0.42
2:SA:32:A:C2	2:SA:553:A:N1	2.86	0.42
2:SA:260:G:C6	2:SA:261:U:O4	2.72	0.42
2:SA:265:G:H3'	2:SA:267:C:H5	1.84	0.42
2:SA:575:G:C6	2:SA:881:G:C6	3.07	0.42
2:SA:613:C:H2'	2:SA:614:C:C6	2.53	0.42
2:SA:640:A:C6	2:SA:641:U:C4	3.06	0.42
2:SA:722:G:C5	2:SA:724:G:C4	3.07	0.42
2:SA:1207:G:H3'	2:SA:1208:C:C6	2.55	0.42
13:SM:102:LYS:HG2	13:SM:103:THR:H	1.84	0.42
26:LA:160:A:C4	26:LA:167:A:C2	3.07	0.42
26:LA:528:A:C8	26:LA:2042:A:N1	2.87	0.42
26:LA:1085:A:C4	26:LA:1086:A:N7	2.87	0.42
26:LA:1707:G:C2	26:LA:1708:C:H1'	2.54	0.42
26:LA:1998:A:H2'	26:LA:1999:C:C6	2.54	0.42
26:LA:2033:A:C6	26:LA:2036:C:C2	3.07	0.42
26:LA:2048:G:C4	26:LA:2621:G:N2	2.87	0.42
26:LA:2126:A:H2'	37:LC:111:PHE:CE1	2.54	0.42
26:LA:2128:G:H2'	26:LA:2129:C:C5	2.54	0.42
26:LA:2308:G:H2'	26:LA:2308:G:N3	2.34	0.42
26:LA:2547:A:C2	26:LA:2562:U:O2	2.72	0.42
26:LA:2895:G:C2	26:LA:2896:C:C2	3.07	0.42
52:LO:33:LEU:HG	52:LO:128:THR:HB	2.01	0.42
2:SA:764:C:C6	2:SA:812:G:O6	2.71	0.42
2:SA:854:U:H2'	2:SA:855:U:C6	2.55	0.42
2:SA:1321:U:H6	2:SA:1322:C:H2'	1.84	0.42
21:SE:96:GLN:HA	21:SE:97:PRO:HD3	1.89	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:S3:281:VAL:CG2	24:S3:285:LEU:HD12	2.49	0.42
26:LA:426:C:N3	26:LA:427:U:C5	2.88	0.42
26:LA:1779:U:C2	26:LA:1783:A:C5	3.07	0.42
26:LA:1854:A:H2	26:LA:2087:G:HO2'	1.66	0.42
26:LA:2013:A:N6	26:LA:2014:A:C6	2.88	0.42
26:LA:2631:G:C4	26:LA:2632:A:C8	3.07	0.42
26:LA:2659:G:N2	26:LA:2663:G:C6	2.87	0.42
26:LA:2700:A:C4	26:LA:2701:U:C5	3.07	0.42
26:LA:2740:A:C2	26:LA:2741:A:C4	3.07	0.42
28:LU:95:ARG:HH21	28:LU:95:ARG:HG3	1.83	0.42
37:LC:19:LYS:HG2	37:LC:20:GLN:H	1.84	0.42
46:LH:51:PHE:HB2	46:LH:61:TRP:CE3	2.54	0.42
53:LP:74:GLU:O	53:LP:77:ALA:HB3	2.19	0.42
57:LS:79:ILE:HA	57:LS:82:LEU:HG	2.01	0.42
2:SA:399:G:C5	2:SA:400:C:C5	3.08	0.42
2:SA:620:C:C4	2:SA:621:A:C5	3.07	0.42
2:SA:642:A:N7	2:SA:643:C:C5	2.87	0.42
2:SA:777:A:C4	2:SA:778:G:C8	3.07	0.42
2:SA:1370:G:O2'	2:SA:1371:G:H5'	2.19	0.42
26:LA:153:U:C5	26:LA:154:U:C5	3.06	0.42
26:LA:376:G:H2'	26:LA:377:G:H8	1.84	0.42
26:LA:1087:G:C6	26:LA:1089:A:C2	3.08	0.42
26:LA:1410:G:C6	26:LA:1411:U:O4	2.72	0.42
26:LA:1468:U:O2	26:LA:1525:A:C2	2.72	0.42
26:LA:1540:G:C5	26:LA:1541:C:C6	3.07	0.42
26:LA:1631:G:N2	26:LA:1633:G:C8	2.87	0.42
26:LA:1676:A:H3'	26:LA:1676:A:C8	2.55	0.42
26:LA:1779:U:N3	26:LA:1783:A:C8	2.87	0.42
26:LA:2048:G:C6	26:LA:2621:G:C2	3.07	0.42
26:LA:2080:A:C6	26:LA:2081:U:C4	3.06	0.42
26:LA:2423:U:O2	26:LA:2425:A:C4	2.72	0.42
26:LA:2513:A:C6	26:LA:2574:G:C5	3.07	0.42
26:LA:2520:C:C5	26:LA:2567:G:C4	3.07	0.42
26:LA:2634:A:H2'	26:LA:2635:A:C8	2.54	0.42
26:LA:2730:C:H2'	26:LA:2731:G:C8	2.54	0.42
26:LA:2758:A:C5	26:LA:2759:G:C8	3.08	0.42
37:LC:131:LEU:O	37:LC:135:GLY:HA2	2.20	0.42
44:LF:4:VAL:HG13	44:LF:4:VAL:O	2.19	0.42
2:SA:300:A:H2'	2:SA:301:G:H5'	2.02	0.42
2:SA:1057:G:C4	2:SA:1204:A:C2	3.07	0.42
2:SA:1163:A:C2	2:SA:1174:G:N3	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1430:A:C5	2:SA:1431:A:N7	2.87	0.42
2:SA:1441:A:H61	2:SA:1461:G:C2'	2.32	0.42
18:SB:213:LEU:O	18:SB:217:ALA:HB3	2.19	0.42
25:LB:92:C:H2'	25:LB:93:C:C6	2.55	0.42
26:LA:60:G:C4	26:LA:74:A:C2	3.08	0.42
26:LA:202:U:H2'	26:LA:203:A:C8	2.55	0.42
26:LA:627:A:C2	26:LA:637:A:C5	3.08	0.42
26:LA:747:U:C4	26:LA:2613:U:C4	3.07	0.42
26:LA:777:G:N2	26:LA:778:G:C4	2.87	0.42
26:LA:876:C:HO2'	26:LA:877:A:H8	1.62	0.42
26:LA:1242:U:C4	26:LA:1243:C:C5	3.08	0.42
26:LA:1488:C:C2	26:LA:1502:A:C2	3.07	0.42
26:LA:1697:G:C5	26:LA:1698:A:C5	3.07	0.42
26:LA:2046:G:C5	26:LA:2047:C:C5	3.07	0.42
26:LA:2067:G:C2	26:LA:2069:G:C4	3.07	0.42
26:LA:2081:U:C4	26:LA:2237:G:C2	3.08	0.42
26:LA:2100:G:C6	26:LA:2190:G:C2	3.07	0.42
26:LA:2452:C:H2'	26:LA:2453:A:H8	1.85	0.42
26:LA:2550:G:C2	26:LA:2559:C:O2	2.73	0.42
26:LA:2657:A:C2	26:LA:2665:A:C5	3.06	0.42
41:L5:34:ARG:HE	41:L5:39:ARG:HD2	1.84	0.42
52:LO:65:ILE:HG22	52:LO:67:VAL:H	1.85	0.42
2:SA:92:U:H2'	2:SA:93:U:H6	1.84	0.42
2:SA:565:U:O4	2:SA:566:G:C2	2.72	0.42
2:SA:877:G:H2'	2:SA:878:A:C8	2.54	0.42
26:LA:5:A:N1	26:LA:6:A:C5	2.88	0.42
26:LA:24:G:C6	26:LA:25:U:C4	3.08	0.42
26:LA:226:A:C5	26:LA:227:A:C5	3.07	0.42
26:LA:280:U:C4	26:LA:281:C:C4	3.07	0.42
26:LA:528:A:C8	26:LA:2042:A:C6	3.07	0.42
26:LA:954:G:N1	26:LA:964:C:C2	2.87	0.42
26:LA:1851:U:C4	26:LA:1852:U:C4	3.07	0.42
26:LA:1873:G:C5	26:LA:1874:C:C5	3.07	0.42
26:LA:1914:C:H1'	26:LA:1915:C:N4	2.35	0.42
26:LA:1921:G:C6	26:LA:1922:G:C5	3.07	0.42
26:LA:2311:A:C8	45:LG:76:PHE:CE2	3.07	0.42
26:LA:2455:G:H2'	26:LA:2456:C:C6	2.55	0.42
2:SA:98:A:H2'	2:SA:99:C:C6	2.55	0.42
2:SA:223:A:C5	2:SA:224:U:C5	3.07	0.42
2:SA:246:A:C2	2:SA:282:A:C6	3.08	0.42
2:SA:942:G:H2'	2:SA:943:U:H6	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1286:U:H3'	2:SA:1286:U:H6	1.85	0.42
4:S2:2:G:C6	4:S2:73:A:N3	2.88	0.42
8:SH:44:PHE:CZ	8:SH:128:VAL:HG12	2.54	0.42
16:SP:51:ARG:C	16:SP:52:LEU:HG	2.39	0.42
21:SE:36:THR:HG21	21:SE:63:MET:HG2	2.01	0.42
24:S3:62:ILE:HD12	24:S3:63:THR:HB	2.02	0.42
25:LB:109:A:H2'	25:LB:110:C:C6	2.55	0.42
25:LB:115:A:H2'	25:LB:116:G:C8	2.54	0.42
26:LA:721:A:C4	26:LA:722:A:C8	3.07	0.42
26:LA:725:G:C5	26:LA:726:G:N1	2.88	0.42
26:LA:822:G:C6	26:LA:836:G:C2	3.08	0.42
26:LA:875:G:C5	26:LA:876:C:C5	3.08	0.42
26:LA:1061:U:C2	26:LA:1097:U:N3	2.87	0.42
26:LA:1252:G:C2	26:LA:1253:A:C2	3.07	0.42
26:LA:1310:G:N2	26:LA:1313:U:C5	2.88	0.42
26:LA:1507:C:C2'	26:LA:1508:A:H5"	2.47	0.42
26:LA:1620:G:C6	26:LA:1621:U:C4	3.07	0.42
26:LA:1661:G:C5	26:LA:1662:U:C5	3.08	0.42
26:LA:1838:C:C5	26:LA:1899:A:C5	3.08	0.42
26:LA:2413:G:O6	26:LA:2414:G:C6	2.72	0.42
26:LA:2776:A:C6	26:LA:2782:G:H1'	2.54	0.42
52:LO:33:LEU:HD12	52:LO:33:LEU:HA	1.77	0.42
54:LM:12:ASP:CG	54:LM:14:SER:H	2.22	0.42
54:LM:87:LEU:CD1	54:LM:94:PRO:HD3	2.49	0.42
2:SA:83:C:HO2'	2:SA:84:U:H6	1.67	0.42
2:SA:560:A:N7	21:SE:127:TYR:CE1	2.88	0.42
2:SA:616:G:H2'	2:SA:617:G:C8	2.54	0.42
2:SA:994:A:C8	2:SA:1216:A:H4'	2.54	0.42
11:SK:5:ILE:HG22	26:LA:2143:C:C6	2.54	0.42
25:LB:30:C:H3'	25:LB:31:C:H6	1.84	0.42
26:LA:96:C:H4'	34:L0:41:HIS:CG	2.54	0.42
26:LA:195:A:C4	26:LA:198:C:N4	2.88	0.42
26:LA:533:G:C4	26:LA:561:G:N2	2.88	0.42
26:LA:1012:U:N3	26:LA:1143:A:N7	2.67	0.42
26:LA:1187:G:H5"	58:LT:83:TYR:CZ	2.54	0.42
26:LA:1668:A:C4	26:LA:1674:G:O6	2.73	0.42
26:LA:1727:C:C2	26:LA:1734:G:C2	3.07	0.42
26:LA:1744:A:H3'	26:LA:1745:A:C8	2.54	0.42
26:LA:1885:A:C8	26:LA:1886:U:C6	3.07	0.42
26:LA:2058:A:C6	26:LA:2059:A:N1	2.87	0.42
26:LA:2147:A:H4'	26:LA:2148:G:C8	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2197:U:C5	26:LA:2224:G:C6	3.07	0.42
26:LA:2249:U:H3'	26:LA:2250:G:H5'	1.97	0.42
26:LA:2311:A:C8	45:LG:76:PHE:CD2	3.08	0.42
26:LA:2825:G:C5	26:LA:2826:A:C4	3.08	0.42
51:LI:144:VAL:HG12	51:LI:145:ASN:N	2.34	0.42
2:SA:28:A:C5	2:SA:29:U:C5	3.08	0.42
2:SA:80:A:C2	2:SA:81:A:C4	3.08	0.42
2:SA:324:G:C2	2:SA:326:G:C8	3.08	0.42
2:SA:540:G:C2	2:SA:541:G:C4	3.08	0.42
2:SA:584:G:N2	2:SA:585:G:C4	2.87	0.42
2:SA:777:A:C5	2:SA:778:G:C5	3.08	0.42
2:SA:922:G:C2	2:SA:923:A:C4	3.07	0.42
2:SA:1004:A:C2	2:SA:1005:A:C5	3.08	0.42
2:SA:1300:G:C6	2:SA:1334:G:C5	3.08	0.42
2:SA:1421:G:C4	2:SA:1480:A:C2	3.07	0.42
2:SA:1480:A:N7	2:SA:1481:U:C5	2.88	0.42
2:SA:1514:G:N1	2:SA:1515:G:C4	2.87	0.42
21:SE:20:VAL:HG21	21:SE:51:LYS:HE2	2.02	0.42
21:SE:152:VAL:HG22	21:SE:153:ALA:H	1.85	0.42
24:S3:465:LEU:HD23	24:S3:465:LEU:HA	1.93	0.42
24:S3:504:HIS:HB3	24:S3:515:GLY:H	1.84	0.42
26:LA:21:A:C2	26:LA:520:G:C2	3.08	0.42
26:LA:539:G:C5	26:LA:540:C:C5	3.07	0.42
26:LA:643:A:N7	26:LA:644:A:C4	2.88	0.42
26:LA:768:G:C6	26:LA:769:U:C4	3.08	0.42
26:LA:777:G:H2'	26:LA:778:G:H8	1.85	0.42
26:LA:980:A:N7	26:LA:981:A:C6	2.87	0.42
26:LA:1050:A:H2'	26:LA:1051:G:H8	1.85	0.42
26:LA:1277:G:C6	26:LA:1278:C:C4	3.07	0.42
26:LA:1332:G:C5	26:LA:1609:A:C8	3.08	0.42
26:LA:1336:A:N3	26:LA:1337:G:C8	2.88	0.42
26:LA:1356:G:C5	26:LA:1357:C:C5	3.08	0.42
26:LA:1477:A:C2	26:LA:1515:A:C2	3.08	0.42
26:LA:2002:G:N1	26:LA:2003:A:C5	2.88	0.42
26:LA:2013:A:C6	26:LA:2014:A:C5	3.08	0.42
26:LA:2286:G:H4'	26:LA:2287:A:C4	2.54	0.42
26:LA:2407:A:C4	26:LA:2408:U:C5	3.08	0.42
26:LA:2643:G:C6	26:LA:2644:G:N7	2.88	0.42
31:LX:82:TYR:CD2	52:LO:36:VAL:HG13	2.55	0.42
2:SA:59:A:C4	2:SA:354:G:C2	3.08	0.42
2:SA:441:A:H61	2:SA:493:A:N6	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:642:A:C5	8:SH:106:SER:HA	2.55	0.42
2:SA:901:A:C8	2:SA:902:G:H1'	2.55	0.42
2:SA:927:G:C2	2:SA:928:G:C8	3.08	0.42
2:SA:1306:A:C2	2:SA:1332:A:C4	3.07	0.42
4:S2:1:C:C5	4:S2:73:A:N1	2.88	0.42
13:SM:12:LYS:HD3	13:SM:16:ILE:HD11	2.01	0.42
22:SF:22:ILE:HG21	22:SF:125:GLU:O	2.20	0.42
24:S3:516:HIS:CE1	24:S3:579:PHE:CE1	3.07	0.42
26:LA:202:U:N3	26:LA:203:A:C5	2.88	0.42
26:LA:263:G:H2'	26:LA:264:C:O4'	2.20	0.42
26:LA:273:G:C6	26:LA:274:C:C4	3.07	0.42
26:LA:381:G:C2	26:LA:382:A:C8	3.08	0.42
26:LA:846:U:N3	26:LA:847:U:C5	2.88	0.42
26:LA:966:G:C6	26:LA:967:U:C4	3.07	0.42
26:LA:1002:G:C6	26:LA:1003:G:C5	3.08	0.42
26:LA:1067:A:C2'	26:LA:1068:G:OP1	2.67	0.42
26:LA:1356:G:C2	26:LA:1376:C:O2	2.73	0.42
26:LA:1471:G:C5	26:LA:1472:C:C4	3.08	0.42
26:LA:1570:A:N1	26:LA:1571:A:C6	2.87	0.42
26:LA:1710:G:N1	26:LA:1749:A:C2	2.88	0.42
26:LA:1820:U:OP1	27:LD:176:ARG:NE	2.53	0.42
26:LA:2290:G:C5	26:LA:2291:U:C5	3.07	0.42
26:LA:2509:G:C6	26:LA:2510:C:C5	3.07	0.42
26:LA:2643:G:C4	26:LA:2644:G:C8	3.08	0.42
26:LA:2645:G:H4'	26:LA:2646:C:OP2	2.20	0.42
32:LY:55:ASP:O	32:LY:56:HIS:CG	2.73	0.42
37:LC:42:VAL:HG22	37:LC:178:VAL:HG12	2.01	0.42
52:LO:111:GLU:CD	52:LO:111:GLU:N	2.73	0.42
2:SA:323:U:C4	2:SA:324:G:C5	3.08	0.42
2:SA:770:C:H4'	2:SA:900:A:H2	1.84	0.42
2:SA:887:G:C2'	2:SA:888:G:H5'	2.50	0.42
17:SQ:63:CYS:HB2	17:SQ:73:THR:HG22	2.02	0.42
26:LA:6:A:C2	26:LA:2898:U:O2	2.73	0.42
26:LA:25:U:C5	26:LA:26:G:C6	3.07	0.42
26:LA:31:C:H42	26:LA:474:G:H1	1.68	0.42
26:LA:116:C:H2'	26:LA:117:G:C5'	2.50	0.42
26:LA:149:A:C6	26:LA:150:U:C4	3.08	0.42
26:LA:374:A:C8	26:LA:375:G:C8	3.08	0.42
26:LA:590:A:H2'	26:LA:591:U:C6	2.54	0.42
26:LA:1392:A:N7	26:LA:1393:A:C5	2.88	0.42
26:LA:1549:A:H2'	26:LA:1550:C:O4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1797:G:C5	26:LA:1798:U:C4	3.07	0.42
26:LA:1955:U:H5'	26:LA:1956:U:C5	2.54	0.42
26:LA:2087:G:C2	26:LA:2088:A:C5	3.08	0.42
26:LA:2377:A:C6	26:LA:2378:A:C6	3.08	0.42
26:LA:2554:U:H2'	26:LA:2555:U:C2	2.55	0.42
26:LA:2801:G:C6	26:LA:2802:G:N7	2.88	0.42
30:LW:4:ILE:H	30:LW:4:ILE:HG22	1.47	0.42
34:L0:31:GLN:HG3	34:L0:37:LEU:HB2	2.02	0.42
57:LS:68:ALA:HB1	57:LS:73:ILE:HG23	2.02	0.42
2:SA:112:G:C6	2:SA:330:C:C4	3.08	0.41
2:SA:189:A:C6	2:SA:190:A:C6	3.08	0.41
2:SA:575:G:C5	2:SA:881:G:C2	3.08	0.41
2:SA:1074:G:C2	2:SA:1102:A:C2	3.07	0.41
2:SA:1079:G:C6	2:SA:1080:A:C6	3.07	0.41
2:SA:1285:A:N6	2:SA:1355:G:H4'	2.35	0.41
21:SE:29:ILE:HG23	21:SE:29:ILE:O	2.20	0.41
22:SF:2:ARG:HD2	22:SF:92:THR:HG21	2.02	0.41
26:LA:283:G:C5	26:LA:284:U:C2	3.08	0.41
26:LA:518:G:H2'	26:LA:519:U:C6	2.55	0.41
26:LA:617:G:N1	26:LA:618:G:C5	2.87	0.41
26:LA:838:C:C2	26:LA:839:U:C5	3.07	0.41
26:LA:1019:U:H4'	26:LA:1121:C:O2'	2.20	0.41
26:LA:1087:G:C5	26:LA:1089:A:C5	3.08	0.41
26:LA:1168:G:N2	26:LA:1182:G:H1'	2.35	0.41
26:LA:1233:C:C4	26:LA:1234:U:C4	3.08	0.41
26:LA:1323:C:OP2	28:LU:84:ARG:NH2	2.52	0.41
26:LA:1391:U:C6	26:LA:1391:U:H3'	2.55	0.41
26:LA:1460:U:C6	26:LA:1460:U:H5"	2.55	0.41
26:LA:1531:C:C2	26:LA:1532:A:C8	3.08	0.41
26:LA:1797:G:C4	26:LA:1798:U:C5	3.08	0.41
26:LA:1813:G:O6	26:LA:1814:G:C2	2.73	0.41
26:LA:2574:G:N3	26:LA:2574:G:H2'	2.34	0.41
26:LA:2887:A:C5	26:LA:2888:C:C5	3.08	0.41
30:LW:48:VAL:H	30:LW:53:GLN:HG3	1.85	0.41
46:LH:25:ILE:HG21	46:LH:75:VAL:HA	2.02	0.41
58:LT:68:ARG:HD2	58:LT:92:TRP:CZ2	2.55	0.41
2:SA:61:G:C4	2:SA:107:G:N2	2.88	0.41
2:SA:204:G:O6	2:SA:468:A:C5	2.73	0.41
2:SA:696:A:C5	2:SA:697:U:O4	2.74	0.41
2:SA:773:G:C6	2:SA:774:G:C5	3.08	0.41
2:SA:1267:C:H41	2:SA:1327:C:H1'	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1319:A:H5”	2:SA:1319:A:C8	2.56	0.41
19:SC:155:ARG:HH21	19:SC:160:GLU:CD	2.23	0.41
23:SR:20:ILE:HG13	23:SR:21:ASP:H	1.85	0.41
24:S3:110:MET:HB3	24:S3:112:TYR:CE2	2.55	0.41
26:LA:144:A:C6	26:LA:145:C:C4	3.08	0.41
26:LA:855:G:C6	26:LA:856:G:C5	3.07	0.41
26:LA:860:U:O4	26:LA:2268:A:C4	2.73	0.41
26:LA:1324:G:OP2	28:LU:84:ARG:NH1	2.53	0.41
26:LA:1413:A:C2	26:LA:1590:A:C2	3.08	0.41
26:LA:1558:C:C5	26:LA:1560:G:C4	3.09	0.41
26:LA:1572:A:C2	26:LA:1573:G:C4	3.08	0.41
26:LA:1727:C:C5	26:LA:1728:C:C4	3.08	0.41
26:LA:1848:A:C8	26:LA:1848:A:H3’	2.55	0.41
26:LA:1914:C:H1’	26:LA:1915:C:C4	2.55	0.41
26:LA:1936:A:C6	26:LA:1945:G:N2	2.88	0.41
26:LA:2532:G:C6	26:LA:2533:U:O2	2.73	0.41
46:LH:35:THR:C	46:LH:36:LEU:HD12	2.40	0.41
2:SA:55:A:C4	2:SA:56:U:C6	3.08	0.41
2:SA:158:G:C6	2:SA:159:G:C5	3.08	0.41
2:SA:741:G:C6	2:SA:742:G:C5	3.08	0.41
2:SA:847:G:C6	2:SA:848:C:C4	3.08	0.41
2:SA:919:A:C6	2:SA:920:U:C4	3.08	0.41
2:SA:1088:G:C6	2:SA:1089:G:C5	3.09	0.41
2:SA:1145:A:N7	19:SC:230:GLY:HA2	2.35	0.41
2:SA:1295:U:H2’	2:SA:1296:C:C6	2.54	0.41
2:SA:1417:G:C6	2:SA:1482:G:C6	3.08	0.41
15:SO:70:LYS:HB3	15:SO:77:TYR:CG	2.54	0.41
18:SB:14:HIS:CE1	18:SB:40:ILE:HG12	2.55	0.41
24:S3:29:ILE:HG23	24:S3:278:LEU:HD11	2.03	0.41
24:S3:49:MET:HG2	24:S3:55:GLU:HG2	2.03	0.41
25:LB:11:C:C6	25:LB:12:C:C5	3.08	0.41
26:LA:684:G:H5”	41:L5:16:HIS:CE1	2.54	0.41
26:LA:858:G:C6	26:LA:2268:A:C2	3.09	0.41
26:LA:1017:G:C6	26:LA:1018:U:C4	3.09	0.41
26:LA:1410:G:C5	26:LA:1411:U:C5	3.08	0.41
26:LA:1678:A:C6	26:LA:1679:A:C2	3.08	0.41
26:LA:2024:G:C6	26:LA:2040:G:N1	2.88	0.41
26:LA:2126:A:C5	26:LA:2173:A:C6	3.08	0.41
26:LA:2145:C:H3’	26:LA:2146:C:H4’	2.01	0.41
26:LA:2395:C:H2’	26:LA:2396:G:C8	2.54	0.41
26:LA:2502:G:H8	26:LA:2502:G:H2’	1.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2504:U:H3'	26:LA:2505:G:H5"	2.01	0.41
26:LA:2559:C:H2'	26:LA:2560:A:C8	2.55	0.41
26:LA:2656:U:C5	26:LA:2664:G:N1	2.89	0.41
26:LA:2812:G:H2'	26:LA:2813:A:C8	2.55	0.41
27:LD:103:ILE:HG23	27:LD:103:ILE:O	2.20	0.41
37:LC:146:THR:HG23	37:LC:152:ALA:HA	2.02	0.41
38:LE:96:ILE:HA	38:LE:99:GLU:OE1	2.20	0.41
55:LQ:11:ALA:HB1	55:LQ:15:ARG:HD2	2.02	0.41
1:SS:2:ARG:NH1	2:SA:1323:G:C8	2.89	0.41
2:SA:236:A:C5	2:SA:237:G:N7	2.88	0.41
2:SA:457:G:O6	2:SA:475:C:N4	2.53	0.41
2:SA:572:A:H4'	2:SA:917:G:H5'	2.02	0.41
2:SA:910:C:C2	2:SA:911:U:C5	3.08	0.41
2:SA:1146:A:C6	2:SA:1147:C:C2	3.08	0.41
19:SC:56:ILE:HD11	19:SC:65:VAL:HG13	2.02	0.41
26:LA:160:A:N9	26:LA:167:A:C2	2.89	0.41
26:LA:196:A:C5	26:LA:805:G:C6	3.09	0.41
26:LA:199:A:C2	26:LA:2434:A:C2	3.09	0.41
26:LA:221:A:N1	26:LA:233:A:C5	2.88	0.41
26:LA:774:G:H5"	27:LD:47:ARG:NH2	2.31	0.41
26:LA:847:U:H5	26:LA:848:C:C5	2.38	0.41
26:LA:1024:G:H21	26:LA:1144:A:C4'	2.34	0.41
26:LA:1042:G:N1	26:LA:1114:C:C2	2.89	0.41
26:LA:1172:C:O5'	26:LA:1172:C:H6	2.03	0.41
26:LA:1279:G:C4	26:LA:1280:G:C8	3.09	0.41
26:LA:1452:G:H8	26:LA:1452:G:H2'	1.74	0.41
26:LA:1933:G:C5	26:LA:1934:C:C5	3.08	0.41
26:LA:1978:A:N7	26:LA:1979:U:C5	2.88	0.41
26:LA:1989:G:C8	26:LA:1990:C:C6	3.09	0.41
26:LA:2265:U:C5	26:LA:2266:A:C5	3.09	0.41
26:LA:2351:G:HO2'	26:LA:2352:A:H8	1.66	0.41
26:LA:2415:G:C6	26:LA:2416:C:C5	3.09	0.41
26:LA:2443:C:H2'	26:LA:2444:G:H8	1.81	0.41
26:LA:2476:A:C2	26:LA:2477:U:C2	3.08	0.41
26:LA:2752:C:C4	26:LA:2753:A:C5	3.07	0.41
31:LX:2:PHE:HB2	31:LX:61:LEU:HD12	2.01	0.41
44:LF:33:VAL:HG13	44:LF:34:ALA:N	2.36	0.41
45:LG:128:SER:HB3	45:LG:154:THR:HG22	2.02	0.41
52:LO:105:MET:SD	52:LO:117:PHE:CZ	3.14	0.41
58:LT:9:GLY:O	58:LT:10:LYS:HG3	2.20	0.41
2:SA:160:A:C2	2:SA:161:A:C4	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:276:G:C6	2:SA:277:C:C4	3.09	0.41
2:SA:502:A:N1	2:SA:544:G:C6	2.89	0.41
2:SA:571:U:H3'	2:SA:572:A:H5"	2.02	0.41
2:SA:1329:A:H5"	13:SM:25:GLY:H	1.84	0.41
2:SA:1443:C:C5	2:SA:1444:U:C5	3.08	0.41
25:LB:57:A:C2	45:LG:25:MET:HB3	2.54	0.41
26:LA:84:A:C2	26:LA:98:G:N3	2.88	0.41
26:LA:123:G:C2	26:LA:124:G:C4	3.08	0.41
26:LA:131:A:H2'	26:LA:132:G:H8	1.85	0.41
26:LA:554:U:C4	26:LA:555:G:C6	3.08	0.41
26:LA:930:G:C2	26:LA:933:A:C6	3.09	0.41
26:LA:975:A:C4	26:LA:990:A:C5	3.08	0.41
26:LA:1263:U:C5	26:LA:1264:A:N6	2.88	0.41
26:LA:1455:G:C6	26:LA:1456:G:C5	3.08	0.41
26:LA:1907:G:C5	26:LA:1908:C:C6	3.09	0.41
26:LA:1939:U:H4'	26:LA:2603:G:H22	1.85	0.41
26:LA:2516:A:C5	26:LA:2517:C:C4	3.09	0.41
26:LA:2585:U:C6	26:LA:2585:U:OP1	2.74	0.41
39:L3:48:TYR:CG	39:L3:49:ARG:N	2.89	0.41
2:SA:279:A:H5"	2:SA:280:C:H3'	2.02	0.41
2:SA:282:A:C6	2:SA:283:U:C2	3.07	0.41
2:SA:787:A:N6	2:SA:788:U:C2	2.89	0.41
2:SA:815:A:N1	2:SA:1529:G:C8	2.89	0.41
2:SA:1306:A:C6	2:SA:1307:U:C2	3.09	0.41
2:SA:1426:G:C6	2:SA:1427:C:C4	3.08	0.41
4:S2:67:C:N3	4:S2:68:C:C5	2.89	0.41
25:LB:67:G:N2	25:LB:68:C:H1'	2.36	0.41
26:LA:164:C:C5	26:LA:165:A:C8	3.09	0.41
26:LA:374:A:C6	26:LA:401:A:C8	3.09	0.41
26:LA:422:A:C6	26:LA:423:A:C5	3.09	0.41
26:LA:524:G:C6	26:LA:525:U:C4	3.08	0.41
26:LA:1395:A:C6	26:LA:1398:C:C2	3.08	0.41
26:LA:1504:A:C2	26:LA:1505:A:C4	3.08	0.41
26:LA:1900:A:H1'	26:LA:1970:A:H2'	2.01	0.41
26:LA:1901:A:C6	26:LA:1902:C:N4	2.88	0.41
26:LA:2024:G:C6	26:LA:2040:G:C6	3.09	0.41
26:LA:2349:G:C6	26:LA:2369:A:C6	3.09	0.41
26:LA:2520:C:N3	26:LA:2521:C:C5	2.88	0.41
26:LA:2547:A:N7	26:LA:2566:A:C8	2.89	0.41
26:LA:2627:G:C8	26:LA:2628:C:C5	3.08	0.41
26:LA:2722:G:C6	26:LA:2723:C:N3	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2789:C:C5	26:LA:2893:A:C6	3.08	0.41
29:LV:50:LEU:HD12	29:LV:50:LEU:HA	1.99	0.41
45:LG:76:PHE:CD2	45:LG:76:PHE:N	2.89	0.41
58:LT:52:PRO:O	58:LT:53:PHE:CD1	2.74	0.41
2:SA:184:G:C5	2:SA:185:U:C4	3.09	0.41
2:SA:550:G:H2'	2:SA:551:U:C6	2.56	0.41
2:SA:1261:A:C4	2:SA:1275:A:C2	3.08	0.41
2:SA:1530:G:O2'	2:SA:1531:A:H5'	2.20	0.41
19:SC:120:THR:CG2	19:SC:188:ALA:HB2	2.51	0.41
20:SD:96:ARG:O	20:SD:100:VAL:HG23	2.21	0.41
24:S3:516:HIS:O	24:S3:516:HIS:CD2	2.74	0.41
26:LA:93:G:H2'	26:LA:94:A:O4'	2.21	0.41
26:LA:190:A:C6	26:LA:191:A:C6	3.09	0.41
26:LA:191:A:C2	26:LA:192:C:N3	2.89	0.41
26:LA:843:G:H2'	26:LA:844:A:C8	2.56	0.41
26:LA:1054:A:C2	26:LA:1106:G:C5	3.08	0.41
26:LA:1369:G:C6	26:LA:1370:C:C4	3.08	0.41
26:LA:2058:A:C5	26:LA:2059:A:N1	2.88	0.41
26:LA:2121:G:C6	26:LA:2122:U:C4	3.09	0.41
26:LA:2187:U:H2'	26:LA:2188:U:C6	2.56	0.41
26:LA:2416:C:N3	26:LA:2417:C:C5	2.89	0.41
26:LA:2718:G:C6	26:LA:2719:G:C5	3.09	0.41
48:LN:121:THR:HA	48:LN:141:LYS:O	2.20	0.41
52:LO:115:GLU:OE2	52:LO:115:GLU:HA	2.21	0.41
53:LP:100:CYS:H	53:LP:111:ALA:HA	1.85	0.41
2:SA:179:A:C5	2:SA:180:U:C4	3.09	0.41
2:SA:391:G:C6	2:SA:392:C:C4	3.09	0.41
2:SA:500:G:C2	2:SA:501:C:C2	3.09	0.41
2:SA:787:A:H3'	2:SA:788:U:H5"	2.03	0.41
2:SA:834:U:H2'	2:SA:835:U:C6	2.55	0.41
2:SA:945:G:H5'	2:SA:1338:G:H22	1.84	0.41
2:SA:1063:C:C4	2:SA:1064:G:C6	3.09	0.41
2:SA:1124:G:C4	2:SA:1145:A:H2	2.39	0.41
2:SA:1239:A:C5	2:SA:1298:U:C4	3.09	0.41
2:SA:1339:A:C8	2:SA:1340:A:C8	3.09	0.41
2:SA:1422:G:C2	2:SA:1423:G:C5	3.08	0.41
2:SA:1528:U:H4'	2:SA:1529:G:H5"	2.03	0.41
4:S2:38:A:H3'	4:S2:39:A:C8	2.56	0.41
21:SE:123:LEU:CD1	21:SE:124:ALA:H	2.24	0.41
26:LA:253:C:C4	26:LA:254:G:C8	3.08	0.41
26:LA:387:U:C2	26:LA:388:G:C6	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:561:G:HO2'	26:LA:562:U:P	2.44	0.41
26:LA:570:G:C6	26:LA:2030:U:N3	2.89	0.41
26:LA:597:G:C2	26:LA:661:A:C2	3.08	0.41
26:LA:930:G:H2'	26:LA:933:A:H2	1.84	0.41
26:LA:1085:A:H4'	26:LA:1105:U:H4'	2.02	0.41
26:LA:1173:U:O2	26:LA:1173:U:H2'	2.20	0.41
26:LA:1276:A:C2	26:LA:1277:G:C4	3.08	0.41
26:LA:1561:C:C2	26:LA:1562:U:C5	3.08	0.41
26:LA:1631:G:C2	26:LA:1633:G:C8	3.09	0.41
26:LA:1770:G:N1	26:LA:1983:G:C5	2.89	0.41
26:LA:1773:A:C4	26:LA:1829:A:C4	3.08	0.41
26:LA:1933:G:C5	26:LA:1934:C:C4	3.08	0.41
26:LA:2183:A:H2'	26:LA:2184:A:C8	2.55	0.41
26:LA:2665:A:C8	26:LA:2666:C:O4'	2.74	0.41
26:LA:2776:A:C5	26:LA:2782:G:C4	3.08	0.41
26:LA:2840:C:H2'	26:LA:2841:C:C6	2.56	0.41
27:LD:260:LYS:HA	27:LD:263:ASP:HB2	2.02	0.41
40:L4:36:LYS:HA	40:L4:47:ILE:HA	2.02	0.41
45:LG:43:ILE:HD13	45:LG:43:ILE:HG21	1.80	0.41
53:LP:14:SER:HA	53:LP:17:ARG:NH1	2.36	0.41
1:SS:51:HIS:CE1	2:SA:1220:G:H1'	2.56	0.41
2:SA:53:A:C5	2:SA:54:C:C6	3.09	0.41
2:SA:192:A:C5	2:SA:193:C:C5	3.09	0.41
2:SA:316:C:O2	2:SA:338:A:C2	2.74	0.41
2:SA:363:A:C5	2:SA:364:A:C6	3.08	0.41
2:SA:410:G:OP2	20:SD:25:ARG:NH2	2.53	0.41
2:SA:415:A:H3'	2:SA:416:G:H8	1.85	0.41
2:SA:499:A:C6	2:SA:547:A:C8	3.09	0.41
2:SA:669:G:C2	2:SA:670:G:C8	3.09	0.41
2:SA:693:G:C4	2:SA:694:A:C8	3.08	0.41
2:SA:1131:G:O6	2:SA:1132:C:C4	2.74	0.41
2:SA:1231:G:C6	2:SA:1232:U:C4	3.09	0.41
2:SA:1501:C:C4	2:SA:1504:G:C4	3.09	0.41
11:SK:78:ILE:C	11:SK:78:ILE:HD12	2.41	0.41
22:SF:47:LEU:HD12	22:SF:55:HIS:O	2.20	0.41
24:S3:641:LEU:HD23	24:S3:655:ALA:HB2	2.03	0.41
25:LB:69:G:N7	25:LB:70:C:C5	2.89	0.41
26:LA:17:G:C6	26:LA:18:U:C4	3.09	0.41
26:LA:23:G:C6	26:LA:518:G:C6	3.08	0.41
26:LA:83:A:N7	26:LA:101:A:C6	2.89	0.41
26:LA:227:A:C4	26:LA:2407:A:H1'	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:244:A:C6	26:LA:255:A:C8	3.09	0.41
26:LA:301:G:C2	26:LA:302:C:C2	3.09	0.41
26:LA:332:A:C5	26:LA:335:C:C4	3.08	0.41
26:LA:462:C:C2	26:LA:468:G:N2	2.89	0.41
26:LA:524:G:C6	26:LA:525:U:O4	2.74	0.41
26:LA:689:A:C6	26:LA:690:G:C5	3.08	0.41
26:LA:721:A:C5	26:LA:722:A:C8	3.09	0.41
26:LA:734:A:C2	26:LA:735:A:N9	2.89	0.41
26:LA:774:G:C5'	27:LD:47:ARG:NH2	2.83	0.41
26:LA:780:G:C4	26:LA:782:A:C6	3.09	0.41
26:LA:961:C:C2	26:LA:2031:A:C6	3.09	0.41
26:LA:972:A:H3'	26:LA:973:A:H2'	2.02	0.41
26:LA:1057:A:N3	26:LA:1058:U:C6	2.89	0.41
26:LA:1128:G:C4	26:LA:2518:A:C2	3.09	0.41
26:LA:1195:G:C2	26:LA:1196:C:C6	3.09	0.41
26:LA:1255:U:H3'	26:LA:1256:G:H5"	2.03	0.41
26:LA:1331:G:C2	26:LA:1333:G:C8	3.08	0.41
26:LA:1437:C:H2'	26:LA:1438:U:C6	2.56	0.41
26:LA:1471:G:H2'	26:LA:1472:C:C6	2.56	0.41
26:LA:1488:C:C2	26:LA:1502:A:N1	2.89	0.41
26:LA:1569:A:C2	26:LA:1570:A:C4	3.09	0.41
26:LA:1638:C:C4	26:LA:1639:C:C4	3.09	0.41
26:LA:1764:C:H2'	26:LA:1765:U:C6	2.55	0.41
26:LA:1959:G:C6	26:LA:1960:A:C5	3.09	0.41
26:LA:2077:A:N7	26:LA:2435:A:C5	2.89	0.41
26:LA:2135:A:H61	26:LA:2156:G:H1'	1.86	0.41
26:LA:2165:C:H2'	26:LA:2166:U:OP2	2.20	0.41
26:LA:2519:U:C4	26:LA:2542:A:C4	3.09	0.41
26:LA:2592:G:H2'	26:LA:2593:U:H6	1.85	0.41
26:LA:2679:A:C2	26:LA:2729:G:C2	3.08	0.41
26:LA:2692:G:C2	26:LA:2693:G:C4	3.08	0.41
26:LA:2767:C:C2	26:LA:2768:U:C5	3.09	0.41
26:LA:2789:C:C5	26:LA:2893:A:C5	3.09	0.41
26:LA:2796:U:C5	26:LA:2798:U:C4	3.09	0.41
26:LA:2816:G:C2	26:LA:2831:G:C2	3.08	0.41
26:LA:2842:G:C2	26:LA:2843:G:C4	3.09	0.41
27:LD:51:ARG:O	27:LD:52:HIS:CD2	2.74	0.41
27:LD:115:ILE:CD1	27:LD:116:GLN:H	2.29	0.41
38:LE:49:GLN:HA	38:LE:81:GLU:HA	2.03	0.41
55:LQ:80:GLU:HA	55:LQ:80:GLU:OE2	2.21	0.41
58:LT:22:LEU:HD23	58:LT:96:VAL:HG22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:69:G:C6	2:SA:70:U:C4	3.09	0.41
2:SA:158:G:C6	2:SA:159:G:C4	3.09	0.41
2:SA:286:C:C4	2:SA:287:U:C4	3.09	0.41
2:SA:621:A:N6	2:SA:622:A:C6	2.89	0.41
2:SA:636:U:H2'	2:SA:637:C:C6	2.56	0.41
2:SA:716:A:C6	2:SA:717:U:C4	3.08	0.41
2:SA:749:A:C2	2:SA:750:C:C2	3.09	0.41
2:SA:860:A:H2'	2:SA:861:G:O4'	2.21	0.41
2:SA:887:G:N2	2:SA:911:U:C2	2.89	0.41
2:SA:928:G:C2	2:SA:1390:U:O2	2.74	0.41
2:SA:958:A:C6	2:SA:959:A:C2	3.09	0.41
2:SA:1078:U:O4	2:SA:1079:G:C2	2.75	0.41
4:S2:26:C:C4	4:S2:27:G:C5	3.09	0.41
22:SF:35:LYS:CB	22:SF:37:HIS:CE1	3.04	0.41
26:LA:83:A:C4	26:LA:101:A:C2	3.09	0.41
26:LA:283:G:C6	26:LA:284:U:C2	3.08	0.41
26:LA:778:G:C2	26:LA:787:C:O2	2.74	0.41
26:LA:993:G:O6	26:LA:1161:C:N4	2.53	0.41
26:LA:1405:U:H2'	26:LA:1406:U:C6	2.56	0.41
26:LA:1419:A:H2'	26:LA:1421:G:N7	2.35	0.41
26:LA:1450:G:C6	26:LA:1451:C:N4	2.89	0.41
26:LA:1651:G:C2	26:LA:1652:A:C4	3.09	0.41
26:LA:1878:G:H2'	26:LA:1879:C:C6	2.56	0.41
26:LA:2056:G:N1	26:LA:2577:A:H1'	2.36	0.41
26:LA:2440:C:H5"	26:LA:2587:A:H4'	2.03	0.41
26:LA:2494:G:C4	26:LA:2495:G:C8	3.09	0.41
26:LA:2636:C:H2'	26:LA:2637:U:C6	2.56	0.41
26:LA:2809:A:C6	26:LA:2810:A:C6	3.09	0.41
27:LD:145:MET:SD	27:LD:153:LEU:HD11	2.60	0.41
48:LN:123:ARG:HH12	48:LN:144:GLU:H	1.65	0.41
2:SA:21:G:H2'	2:SA:22:G:C8	2.56	0.40
2:SA:27:G:C6	2:SA:557:G:C2	3.09	0.40
2:SA:675:A:N1	2:SA:676:A:C2	2.89	0.40
2:SA:763:G:C5	2:SA:764:C:C5	3.08	0.40
2:SA:777:A:C2	2:SA:778:G:H1'	2.56	0.40
2:SA:782:A:C6	2:SA:801:U:C2	3.09	0.40
2:SA:1269:A:C2	2:SA:1313:U:O4'	2.74	0.40
6:SU:3:ILE:HG22	6:SU:23:GLU:HB2	2.02	0.40
9:SI:49:GLN:HB3	9:SI:50:PRO:HD3	2.03	0.40
13:SM:11:HIS:CG	13:SM:12:LYS:H	2.39	0.40
14:SN:41:TRP:CZ2	14:SN:47:LEU:HD11	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:S3:20:ALA:HB3	24:S3:22:LYS:H	1.86	0.40
26:LA:134:G:C6	26:LA:135:U:O4	2.74	0.40
26:LA:135:U:C2	26:LA:136:G:C8	3.10	0.40
26:LA:313:G:H2'	26:LA:314:C:O4'	2.22	0.40
26:LA:535:G:C5	26:LA:536:G:C8	3.09	0.40
26:LA:585:G:C5	26:LA:1251:C:C4	3.09	0.40
26:LA:607:U:C4	26:LA:608:A:N7	2.90	0.40
26:LA:1061:U:C2	49:LK:9:LYS:HD2	2.56	0.40
26:LA:1412:U:H2'	26:LA:1413:A:C8	2.57	0.40
26:LA:1439:A:C8	26:LA:1440:U:C6	3.09	0.40
26:LA:1725:U:C5	26:LA:1726:C:C5	3.07	0.40
26:LA:1842:G:C2	26:LA:1843:C:C2	3.09	0.40
26:LA:2024:G:O2'	26:LA:2025:C:H5'	2.21	0.40
26:LA:2190:G:H2'	26:LA:2191:A:C8	2.56	0.40
26:LA:2246:G:H2'	26:LA:2247:A:H8	1.86	0.40
26:LA:2265:U:C6	26:LA:2266:A:C8	3.09	0.40
26:LA:2322:A:C6	26:LA:2323:G:C5	3.10	0.40
26:LA:2478:A:C5	26:LA:2529:G:C8	3.10	0.40
26:LA:2532:G:C6	26:LA:2533:U:C2	3.08	0.40
26:LA:2678:C:C4	26:LA:2679:A:N7	2.89	0.40
30:LW:86:PHE:CG	30:LW:87:GLU:N	2.88	0.40
47:LJ:6:ASP:O	47:LJ:10:ILE:HB	2.22	0.40
2:SA:61:G:C4	2:SA:107:G:C2	3.09	0.40
2:SA:105:G:C5	2:SA:106:C:C5	3.08	0.40
2:SA:284:C:H2'	2:SA:285:C:C6	2.56	0.40
2:SA:602:A:C6	2:SA:603:U:C4	3.09	0.40
2:SA:800:G:H2'	2:SA:801:U:C6	2.57	0.40
2:SA:824:G:C2	2:SA:825:A:C5	3.09	0.40
2:SA:923:A:C2	2:SA:1395:C:O2	2.74	0.40
2:SA:942:G:H2'	2:SA:943:U:C6	2.56	0.40
2:SA:1022:A:C6	2:SA:1023:U:C5	3.09	0.40
2:SA:1323:G:H2'	2:SA:1324:A:C8	2.56	0.40
2:SA:1376:U:H3'	7:SG:8:GLN:HE22	1.86	0.40
21:SE:105:ILE:H	21:SE:105:ILE:HG12	1.65	0.40
26:LA:7:G:C6	26:LA:8:C:C4	3.09	0.40
26:LA:83:A:C5	26:LA:101:A:C4	3.09	0.40
26:LA:91:A:H4'	26:LA:92:U:H5'	2.03	0.40
26:LA:783:A:C8	26:LA:783:A:C3'	3.04	0.40
26:LA:1057:A:H1'	26:LA:1086:A:C5	2.57	0.40
26:LA:1071:G:H2'	26:LA:1071:G:N3	2.36	0.40
26:LA:1286:A:C2	26:LA:1289:C:C5	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1340:U:H3'	29:LV:61:LEU:CD1	2.52	0.40
26:LA:1491:G:C6	26:LA:1500:G:C2	3.09	0.40
26:LA:1723:G:H3'	26:LA:1724:G:C8	2.56	0.40
26:LA:1794:A:N1	26:LA:1795:C:C4	2.90	0.40
26:LA:1916:A:C6	26:LA:1917:U:H6	2.39	0.40
26:LA:1970:A:C8	26:LA:1972:G:C4	3.09	0.40
26:LA:2358:A:OP1	26:LA:2358:A:C8	2.71	0.40
26:LA:2711:A:C8	26:LA:2714:G:O4'	2.74	0.40
26:LA:2859:G:C6	26:LA:2860:A:N6	2.88	0.40
37:LC:19:LYS:HG2	37:LC:20:GLN:N	2.36	0.40
44:LF:120:VAL:HG11	44:LF:193:VAL:HG21	2.01	0.40
54:LM:12:ASP:HB3	54:LM:99:ILE:HG22	2.02	0.40
1:SS:54:ARG:HH21	2:SA:958:A:N6	2.19	0.40
2:SA:40:C:H2'	2:SA:41:G:C8	2.55	0.40
2:SA:409:U:C4	2:SA:410:G:C5	3.10	0.40
2:SA:427:U:H2'	2:SA:428:G:N7	2.35	0.40
2:SA:463:U:C4	2:SA:464:U:O2	2.74	0.40
2:SA:533:A:C2	2:SA:536:C:C5	3.10	0.40
2:SA:550:G:H2'	2:SA:551:U:H6	1.87	0.40
2:SA:729:A:H2'	2:SA:730:G:C8	2.56	0.40
2:SA:1271:A:H3'	2:SA:1272:G:H8	1.86	0.40
2:SA:1421:G:C6	2:SA:1480:A:C6	3.10	0.40
4:S2:14:A:C4	4:S2:23:G:C4	3.10	0.40
4:S2:14:A:C5	4:S2:23:G:C5	3.10	0.40
12:SL:115:LYS:O	12:SL:116:TYR:CD1	2.75	0.40
14:SN:20:PHE:CD1	14:SN:51:PRO:HB3	2.56	0.40
21:SE:95:MET:SD	21:SE:123:LEU:HD21	2.62	0.40
25:LB:62:C:H2'	25:LB:63:C:C6	2.57	0.40
26:LA:68:G:C5	26:LA:69:C:C5	3.09	0.40
26:LA:729:G:C4	26:LA:1775:U:C2	3.09	0.40
26:LA:734:A:C2	26:LA:735:A:C4	3.09	0.40
26:LA:762:U:C6	26:LA:763:G:C6	3.09	0.40
26:LA:812:C:H4'	57:LS:12:ARG:HH22	1.86	0.40
26:LA:1025:G:H1'	26:LA:1135:C:H5'	2.03	0.40
26:LA:1301:A:C2	26:LA:1303:G:C6	3.09	0.40
26:LA:1331:G:C5	26:LA:1333:G:N7	2.89	0.40
26:LA:1510:G:N2	26:LA:1511:G:C4	2.89	0.40
26:LA:1745:A:C2	26:LA:1746:A:C4	3.09	0.40
26:LA:1946:U:C4	26:LA:1947:C:C4	3.09	0.40
26:LA:2068:U:H4'	26:LA:2069:G:OP2	2.20	0.40
26:LA:2082:A:C2	26:LA:2239:G:N3	2.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2094:A:H5"	51:LI:25:TYR:CE1	2.57	0.40
26:LA:2330:G:C2	26:LA:2386:A:C2	3.09	0.40
26:LA:2365:G:H4'	32:LY:59:PHE:CE1	2.56	0.40
26:LA:2575:C:H1'	26:LA:2576:G:OP2	2.21	0.40
26:LA:2809:A:C2	26:LA:2810:A:N3	2.88	0.40
27:LD:263:ASP:C	27:LD:265:PHE:H	2.24	0.40
28:LU:6:LYS:HE3	28:LU:8:ARG:HD2	2.03	0.40
2:SA:14:U:O2	2:SA:16:A:C8	2.74	0.40
2:SA:15:G:C6	2:SA:16:A:C6	3.10	0.40
2:SA:241:G:H2'	2:SA:242:G:C8	2.56	0.40
2:SA:445:G:C2	2:SA:490:C:C2	3.09	0.40
2:SA:560:A:N6	2:SA:566:G:C8	2.89	0.40
2:SA:647:C:H2'	2:SA:648:A:C8	2.57	0.40
2:SA:909:A:C8	2:SA:910:C:C5	3.09	0.40
2:SA:1458:G:H5"	5:ST:25:SER:HB3	2.04	0.40
2:SA:1480:A:C5	2:SA:1481:U:C5	3.10	0.40
2:SA:1517:G:C6	2:SA:1518:A:C4	3.09	0.40
4:S2:70:C:H2'	4:S2:71:G:C8	2.57	0.40
7:SG:148:LYS:HB3	11:SK:60:PHE:CG	2.56	0.40
20:SD:25:ARG:O	20:SD:29:THR:HB	2.21	0.40
24:S3:544:ILE:HB	24:S3:548:TYR:HB2	2.04	0.40
26:LA:5:A:C2	26:LA:2899:A:C2	3.09	0.40
26:LA:12:U:O4	26:LA:13:A:C5	2.74	0.40
26:LA:80:G:H5'	26:LA:346:A:H1'	2.03	0.40
26:LA:80:G:C2	26:LA:107:G:C2	3.10	0.40
26:LA:85:G:C6	26:LA:98:G:C6	3.09	0.40
26:LA:362:A:C5	26:LA:363:G:N7	2.89	0.40
26:LA:671:C:H2'	26:LA:672:C:C6	2.56	0.40
26:LA:860:U:N3	26:LA:2268:A:C8	2.89	0.40
26:LA:925:A:C2	26:LA:926:G:C4	3.10	0.40
26:LA:1268:A:C6	26:LA:2013:A:C8	3.09	0.40
26:LA:1269:A:C8	26:LA:1270:C:H5	2.39	0.40
26:LA:1733:G:C2	26:LA:1734:G:C8	3.09	0.40
26:LA:2437:G:H2'	26:LA:2438:U:H6	1.87	0.40
26:LA:2706:A:H4'	26:LA:2851:A:H5"	2.03	0.40
26:LA:2765:A:H2'	26:LA:2766:A:H5'	2.04	0.40
26:LA:2788:C:H2'	26:LA:2789:C:H6	1.84	0.40
45:LG:169:LEU:N	45:LG:172:PHE:CE1	2.90	0.40
56:LR:13:LYS:H	56:LR:76:HIS:CD2	2.39	0.40
2:SA:236:A:H2'	2:SA:237:G:H8	1.85	0.40
2:SA:522:C:H2'	2:SA:523:A:C8	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:720:C:C2	2:SA:721:G:H2'	2.56	0.40
2:SA:730:G:H21	2:SA:765:G:C5'	2.33	0.40
2:SA:878:A:H2'	2:SA:879:C:C6	2.57	0.40
2:SA:937:A:H2	2:SA:1377:A:HO2'	1.68	0.40
2:SA:1376:U:H3'	7:SG:8:GLN:NE2	2.37	0.40
4:S2:65:G:C5	4:S2:66:C:C5	3.10	0.40
6:SU:9:GLU:HB3	6:SU:10:PRO:HD3	2.02	0.40
9:SI:40:ARG:HD2	9:SI:40:ARG:H	1.86	0.40
24:S3:548:TYR:O	24:S3:551:ALA:HB3	2.21	0.40
25:LB:81:G:H2'	25:LB:82:U:O4'	2.22	0.40
26:LA:199:A:C6	26:LA:2434:A:C5	3.09	0.40
26:LA:199:A:C6	26:LA:2434:A:C6	3.09	0.40
26:LA:253:C:N4	26:LA:254:G:C6	2.90	0.40
26:LA:353:C:H2'	26:LA:354:A:C8	2.57	0.40
26:LA:644:A:H2	26:LA:2369:A:HO2'	1.66	0.40
26:LA:1202:G:C6	26:LA:1203:U:C4	3.10	0.40
26:LA:1623:G:C6	26:LA:1624:U:C4	3.09	0.40
26:LA:1684:G:C6	26:LA:1685:C:C4	3.09	0.40
26:LA:2254:C:C6	26:LA:2255:G:C8	3.10	0.40
26:LA:2536:G:C5	26:LA:2537:U:C5	3.09	0.40
26:LA:2678:C:H2'	26:LA:2679:A:C8	2.57	0.40
26:LA:2680:U:H5'	38:LE:194:PRO:HA	2.04	0.40
26:LA:2850:A:H2'	26:LA:2851:A:H8	1.87	0.40
32:LY:45:HIS:CE1	32:LY:51:GLY:N	2.90	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	SS	89/91 (98%)	71 (80%)	13 (15%)	5 (6%)	2 19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	ST	84/86 (98%)	77 (92%)	7 (8%)	0	100	100
6	SU	68/70 (97%)	46 (68%)	14 (21%)	8 (12%)	0	5
7	SG	176/178 (99%)	154 (88%)	14 (8%)	8 (4%)	2	23
8	SH	127/129 (98%)	103 (81%)	16 (13%)	8 (6%)	1	17
9	SI	127/129 (98%)	99 (78%)	22 (17%)	6 (5%)	2	22
10	SJ	101/103 (98%)	83 (82%)	11 (11%)	7 (7%)	1	14
11	SK	126/128 (98%)	102 (81%)	18 (14%)	6 (5%)	2	22
12	SL	121/123 (98%)	95 (78%)	14 (12%)	12 (10%)	0	8
13	SM	115/117 (98%)	97 (84%)	11 (10%)	7 (6%)	1	17
14	SN	98/100 (98%)	81 (83%)	12 (12%)	5 (5%)	2	20
15	SO	86/88 (98%)	76 (88%)	7 (8%)	3 (4%)	3	30
16	SP	80/82 (98%)	72 (90%)	4 (5%)	4 (5%)	2	21
17	SQ	81/83 (98%)	67 (83%)	9 (11%)	5 (6%)	1	17
18	SB	238/240 (99%)	212 (89%)	14 (6%)	12 (5%)	2	21
19	SC	230/232 (99%)	196 (85%)	18 (8%)	16 (7%)	1	14
20	SD	203/205 (99%)	166 (82%)	26 (13%)	11 (5%)	2	19
21	SE	164/166 (99%)	127 (77%)	24 (15%)	13 (8%)	1	11
22	SF	133/135 (98%)	114 (86%)	11 (8%)	8 (6%)	1	17
23	SR	72/74 (97%)	57 (79%)	10 (14%)	5 (7%)	1	14
24	S3	700/702 (100%)	611 (87%)	61 (9%)	28 (4%)	3	26
27	LD	270/272 (99%)	215 (80%)	42 (16%)	13 (5%)	2	22
28	LU	108/110 (98%)	95 (88%)	11 (10%)	2 (2%)	8	42
29	LV	98/100 (98%)	75 (76%)	13 (13%)	10 (10%)	0	7
30	LW	101/103 (98%)	84 (83%)	12 (12%)	5 (5%)	2	21
31	LX	92/94 (98%)	83 (90%)	5 (5%)	4 (4%)	2	24
32	LY	82/84 (98%)	57 (70%)	15 (18%)	10 (12%)	0	5
33	LZ	75/77 (97%)	63 (84%)	10 (13%)	2 (3%)	5	35
34	L0	61/63 (97%)	51 (84%)	8 (13%)	2 (3%)	4	31
35	L1	56/58 (97%)	45 (80%)	7 (12%)	4 (7%)	1	14
36	L2	68/70 (97%)	44 (65%)	15 (22%)	9 (13%)	0	4
37	LC	232/234 (99%)	192 (83%)	29 (12%)	11 (5%)	2	22

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
38	LE	207/209 (99%)	151 (73%)	34 (16%)	22 (11%)	0 7
39	L3	54/56 (96%)	40 (74%)	7 (13%)	7 (13%)	0 5
40	L4	52/54 (96%)	45 (86%)	5 (10%)	2 (4%)	3 27
41	L5	44/46 (96%)	34 (77%)	7 (16%)	3 (7%)	1 15
42	L6	62/64 (97%)	53 (86%)	8 (13%)	1 (2%)	9 46
43	L7	36/38 (95%)	26 (72%)	5 (14%)	5 (14%)	0 4
44	LF	199/201 (99%)	163 (82%)	21 (11%)	15 (8%)	1 12
45	LG	176/178 (99%)	133 (76%)	26 (15%)	17 (10%)	0 8
46	LH	174/176 (99%)	127 (73%)	29 (17%)	18 (10%)	0 7
47	LJ	162/164 (99%)	143 (88%)	11 (7%)	8 (5%)	2 21
48	LN	142/144 (99%)	116 (82%)	22 (16%)	4 (3%)	5 34
49	LK	139/141 (99%)	114 (82%)	17 (12%)	8 (6%)	1 18
50	LL	140/142 (99%)	116 (83%)	14 (10%)	10 (7%)	1 14
51	LI	147/149 (99%)	121 (82%)	16 (11%)	10 (7%)	1 15
52	LO	134/136 (98%)	111 (83%)	14 (10%)	9 (7%)	1 15
53	LP	125/127 (98%)	109 (87%)	10 (8%)	6 (5%)	2 22
54	LM	121/123 (98%)	91 (75%)	18 (15%)	12 (10%)	0 8
55	LQ	115/117 (98%)	108 (94%)	5 (4%)	2 (2%)	9 45
56	LR	112/114 (98%)	79 (70%)	17 (15%)	16 (14%)	0 4
57	LS	115/117 (98%)	104 (90%)	5 (4%)	6 (5%)	2 20
58	LT	101/103 (98%)	87 (86%)	11 (11%)	3 (3%)	4 33
All	All	7019/7125 (98%)	5781 (82%)	805 (12%)	433 (6%)	3 17

All (433) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	SS	11	ASP
1	SS	37	SER
1	SS	75	PRO
6	SU	10	PRO
6	SU	18	PHE
7	SG	78	ARG
7	SG	79	VAL
7	SG	114	SER
8	SH	74	ILE

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Mol	Chain	Res	Type
8	SH	94	VAL
9	SI	14	SER
9	SI	110	VAL
10	SJ	4	GLN
10	SJ	59	LYS
10	SJ	62	ARG
11	SK	5	ILE
11	SK	52	ARG
11	SK	125	LYS
11	SK	127	ARG
12	SL	14	LYS
12	SL	74	GLN
12	SL	104	SER
13	SM	9	PRO
13	SM	22	TYR
13	SM	63	VAL
13	SM	115	ILE
15	SO	21	THR
16	SP	2	VAL
16	SP	12	LYS
17	SQ	82	VAL
18	SB	20	ARG
18	SB	39	ILE
18	SB	151	LYS
18	SB	190	SER
19	SC	50	SER
19	SC	126	ARG
20	SD	6	PRO
20	SD	191	SER
20	SD	192	ALA
21	SE	23	THR
21	SE	102	THR
21	SE	152	VAL
22	SF	84	VAL
22	SF	132	GLU
24	S3	76	LYS
24	S3	207	PRO
24	S3	401	ALA
24	S3	562	ALA
27	LD	38	LYS
27	LD	59	GLN
27	LD	94	LEU

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Mol	Chain	Res	Type
29	LV	28	ASN
29	LV	37	ASP
30	LW	3	LYS
31	LX	2	PHE
31	LX	85	LYS
32	LY	19	ARG
32	LY	29	SER
32	LY	30	VAL
32	LY	37	VAL
32	LY	50	VAL
32	LY	56	HIS
33	LZ	19	HIS
36	L2	35	ASP
37	LC	112	ASP
37	LC	147	PRO
37	LC	166	ASP
38	LE	16	THR
38	LE	17	GLU
38	LE	97	SER
38	LE	119	ALA
38	LE	130	GLN
38	LE	152	PRO
38	LE	162	ALA
39	L3	27	LEU
39	L3	43	THR
40	L4	50	GLU
41	L5	41	ARG
41	L5	44	VAL
43	L7	30	GLU
44	LF	45	ALA
44	LF	88	ARG
45	LG	41	GLU
45	LG	43	ILE
45	LG	78	ILE
46	LH	8	VAL
46	LH	53	PRO
46	LH	175	LYS
47	LJ	86	GLU
49	LK	33	ASN
49	LK	120	ASP
50	LL	40	HIS
51	LI	20	ASN

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Mol	Chain	Res	Type
51	LI	75	LEU
51	LI	121	VAL
52	LO	6	ARG
52	LO	58	LYS
52	LO	133	LYS
54	LM	3	GLN
54	LM	5	GLN
54	LM	79	PHE
54	LM	119	ALA
56	LR	5	LYS
56	LR	25	VAL
56	LR	69	VAL
56	LR	91	VAL
58	LT	79	ARG
1	SS	82	HIS
6	SU	8	ASN
6	SU	13	VAL
6	SU	20	ARG
7	SG	81	GLY
7	SG	149	ALA
7	SG	165	ALA
9	SI	115	VAL
10	SJ	57	VAL
11	SK	15	VAL
12	SL	22	ALA
12	SL	43	LYS
12	SL	117	GLY
14	SN	2	LYS
16	SP	25	ARG
17	SQ	35	LYS
18	SB	15	PHE
18	SB	128	LEU
19	SC	128	MET
19	SC	146	LYS
19	SC	227	GLN
20	SD	24	VAL
20	SD	28	ASP
20	SD	29	THR
20	SD	166	LYS
21	SE	9	GLU
21	SE	123	LEU
21	SE	126	ALA

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Mol	Chain	Res	Type
23	SR	12	PHE
23	SR	20	ILE
24	S3	38	LYS
24	S3	45	GLY
24	S3	354	ALA
24	S3	409	GLU
24	S3	488	ALA
24	S3	496	LYS
24	S3	571	VAL
24	S3	690	PRO
28	LU	89	ALA
29	LV	2	ILE
29	LV	38	ALA
29	LV	52	GLU
29	LV	70	HIS
29	LV	78	SER
30	LW	36	GLU
30	LW	79	ALA
31	LX	71	LYS
32	LY	10	ARG
35	L1	30	ARG
36	L2	22	MET
36	L2	39	LYS
37	LC	121	MET
37	LC	226	GLN
37	LC	227	ALA
38	LE	32	ASN
38	LE	96	ILE
38	LE	118	PHE
38	LE	122	VAL
38	LE	127	PHE
38	LE	139	SER
38	LE	163	GLY
38	LE	208	LYS
39	L3	8	THR
39	L3	20	ALA
40	L4	16	THR
44	LF	65	THR
44	LF	68	ALA
45	LG	32	LYS
45	LG	62	GLN
45	LG	81	GLY

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Mol	Chain	Res	Type
45	LG	87	LYS
45	LG	99	PHE
45	LG	176	PHE
46	LH	59	ASP
46	LH	151	ARG
47	LJ	21	ALA
47	LJ	55	ARG
47	LJ	72	LYS
48	LN	2	ARG
48	LN	113	ALA
48	LN	143	GLU
49	LK	87	SER
50	LL	65	THR
50	LL	120	ARG
51	LI	90	LEU
51	LI	122	LEU
52	LO	18	ARG
52	LO	87	GLY
52	LO	134	THR
53	LP	12	ARG
53	LP	59	SER
54	LM	44	LYS
56	LR	63	ILE
56	LR	96	LEU
56	LR	110	LYS
56	LR	111	GLU
57	LS	6	GLY
57	LS	85	ALA
57	LS	91	ARG
58	LT	29	THR
58	LT	49	ILE
6	SU	6	ARG
6	SU	68	ARG
7	SG	174	LEU
8	SH	22	ALA
8	SH	62	LEU
8	SH	82	LEU
9	SI	2	GLU
9	SI	114	LYS
10	SJ	14	ASP
12	SL	18	SER
12	SL	44	PRO

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Mol	Chain	Res	Type
12	SL	71	HIS
14	SN	39	ASP
14	SN	62	ARG
15	SO	19	ASN
18	SB	70	GLY
18	SB	84	LEU
18	SB	127	LYS
18	SB	192	PRO
19	SC	25	THR
19	SC	60	ALA
19	SC	106	ARG
19	SC	162	ALA
19	SC	211	ALA
19	SC	216	PRO
20	SD	138	PRO
21	SE	22	LYS
21	SE	125	LYS
22	SF	116	PHE
23	SR	23	LYS
24	S3	44	ASP
24	S3	146	MET
24	S3	305	PRO
24	S3	310	ALA
24	S3	344	SER
24	S3	407	ARG
24	S3	452	SER
27	LD	7	PRO
27	LD	121	ALA
27	LD	270	ARG
29	LV	3	ARG
30	LW	30	SER
30	LW	53	GLN
32	LY	36	ILE
32	LY	75	ASN
33	LZ	76	LYS
35	L1	40	THR
36	L2	9	TYR
37	LC	38	PHE
37	LC	110	ASN
38	LE	113	SER
43	L7	31	PRO
44	LF	57	LYS

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Mol	Chain	Res	Type
44	LF	62	GLN
45	LG	72	SER
45	LG	74	ALA
45	LG	112	ASP
45	LG	136	ILE
46	LH	6	ALA
46	LH	29	ASN
46	LH	47	ASN
46	LH	90	GLY
46	LH	111	PRO
46	LH	114	HIS
50	LL	79	GLY
50	LL	132	HIS
51	LI	93	SER
53	LP	10	LEU
53	LP	106	ASP
54	LM	45	GLU
54	LM	94	PRO
54	LM	104	THR
56	LR	51	ASN
57	LS	86	SER
8	SH	56	PRO
8	SH	83	ARG
8	SH	93	LYS
12	SL	23	LEU
14	SN	80	ARG
17	SQ	3	LYS
17	SQ	49	ASN
18	SB	156	LEU
19	SC	97	PRO
19	SC	226	GLN
20	SD	48	SER
21	SE	82	HIS
21	SE	105	ILE
22	SF	83	ALA
22	SF	95	ALA
22	SF	128	ASP
23	SR	33	THR
24	S3	543	VAL
27	LD	57	HIS
27	LD	97	ASP
27	LD	98	GLY

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Mol	Chain	Res	Type
27	LD	148	GLY
28	LU	41	LYS
32	LY	48	ALA
35	L1	11	SER
35	L1	15	ARG
36	L2	10	GLU
36	L2	23	LYS
36	L2	41	HIS
36	L2	69	SER
37	LC	231	ALA
38	LE	18	ASP
43	L7	21	GLY
44	LF	55	SER
44	LF	120	VAL
44	LF	165	HIS
44	LF	171	ASP
45	LG	173	ASP
46	LH	7	PRO
46	LH	32	LEU
46	LH	38	ASP
47	LJ	2	LEU
47	LJ	113	GLU
49	LK	51	GLY
49	LK	93	ASN
50	LL	43	GLU
50	LL	66	GLY
51	LI	3	VAL
51	LI	10	ALA
51	LI	18	GLN
51	LI	115	VAL
52	LO	20	LEU
52	LO	135	VAL
53	LP	107	ASN
53	LP	108	ALA
54	LM	17	ARG
54	LM	67	LYS
54	LM	93	GLN
54	LM	101	GLY
55	LQ	24	THR
56	LR	65	ASN
56	LR	76	HIS
56	LR	92	ARG

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Mol	Chain	Res	Type
1	SS	65	MET
7	SG	154	ARG
9	SI	127	SER
13	SM	112	ARG
14	SN	32	ASP
15	SO	17	ASP
17	SQ	2	ASP
20	SD	150	LYS
22	SF	91	ARG
23	SR	4	PHE
24	S3	78	TYR
24	S3	299	ASP
24	S3	408	MET
24	S3	442	PRO
24	S3	685	LYS
27	LD	150	GLY
27	LD	252	LYS
29	LV	35	ALA
34	L0	57	LEU
38	LE	36	GLN
38	LE	37	VAL
38	LE	95	SER
38	LE	153	GLY
39	L3	2	VAL
39	L3	22	THR
41	L5	8	SER
42	L6	27	ASN
43	L7	10	LEU
44	LF	188	MET
45	LG	37	MET
47	LJ	33	THR
47	LJ	76	VAL
48	LN	19	LEU
49	LK	65	SER
49	LK	73	PRO
56	LR	50	ARG
56	LR	94	ALA
57	LS	95	ALA
10	SJ	36	VAL
11	SK	10	ARG
12	SL	68	GLY
16	SP	27	ALA

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Mol	Chain	Res	Type
18	SB	32	GLY
19	SC	13	ILE
19	SC	59	PRO
20	SD	3	TYR
21	SE	97	PRO
22	SF	52	ASN
24	S3	18	ILE
24	S3	608	LYS
34	L0	62	GLY
36	L2	27	THR
37	LC	17	ALA
43	L7	35	GLN
44	LF	11	ALA
44	LF	64	GLY
44	LF	85	PHE
45	LG	66	ILE
46	LH	14	VAL
46	LH	40	VAL
50	LL	23	LYS
55	LQ	62	LEU
56	LR	32	VAL
13	SM	96	VAL
19	SC	173	PRO
21	SE	43	GLY
44	LF	59	PRO
46	LH	9	VAL
57	LS	93	ILE
12	SL	27	PRO
24	S3	398	ASP
31	LX	81	PRO
38	LE	142	VAL
45	LG	84	ILE
50	LL	8	PRO
50	LL	127	GLY
56	LR	49	ILE
13	SM	114	PRO
29	LV	53	VAL
37	LC	91	GLY
49	LK	98	GLY
6	SU	2	VAL
10	SJ	40	ILE
27	LD	147	PRO

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Mol	Chain	Res	Type
52	LO	69	PRO
39	L3	24	VAL
46	LH	167	VAL
21	SE	149	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	SS	78/78 (100%)	65 (83%)	13 (17%)	2 14
5	ST	65/65 (100%)	60 (92%)	5 (8%)	13 45
6	SU	60/60 (100%)	54 (90%)	6 (10%)	7 35
7	SG	146/146 (100%)	134 (92%)	12 (8%)	11 42
8	SH	104/104 (100%)	90 (86%)	14 (14%)	4 23
9	SI	106/106 (100%)	91 (86%)	15 (14%)	3 21
10	SJ	90/90 (100%)	80 (89%)	10 (11%)	6 31
11	SK	98/98 (100%)	90 (92%)	8 (8%)	11 42
12	SL	103/103 (100%)	97 (94%)	6 (6%)	20 55
13	SM	95/95 (100%)	81 (85%)	14 (15%)	3 20
14	SN	83/83 (100%)	78 (94%)	5 (6%)	19 54
15	SO	76/76 (100%)	69 (91%)	7 (9%)	9 39
16	SP	65/65 (100%)	58 (89%)	7 (11%)	6 32
17	SQ	77/77 (100%)	75 (97%)	2 (3%)	46 74
18	SB	198/198 (100%)	183 (92%)	15 (8%)	13 45
19	SC	189/189 (100%)	170 (90%)	19 (10%)	7 34
20	SD	172/172 (100%)	152 (88%)	20 (12%)	5 29
21	SE	125/125 (100%)	111 (89%)	14 (11%)	6 30
22	SF	116/116 (100%)	103 (89%)	13 (11%)	6 30
23	SR	64/64 (100%)	58 (91%)	6 (9%)	8 38

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
24	S3	575/575 (100%)	514 (89%)	61 (11%)	6 32
27	LD	217/217 (100%)	188 (87%)	29 (13%)	4 23
28	LU	93/93 (100%)	82 (88%)	11 (12%)	5 28
29	LV	84/84 (100%)	77 (92%)	7 (8%)	11 42
30	LW	84/84 (100%)	80 (95%)	4 (5%)	25 60
31	LX	78/78 (100%)	70 (90%)	8 (10%)	7 34
32	LY	62/62 (100%)	54 (87%)	8 (13%)	4 24
33	LZ	67/67 (100%)	55 (82%)	12 (18%)	2 11
34	L0	55/55 (100%)	49 (89%)	6 (11%)	6 32
35	L1	48/48 (100%)	39 (81%)	9 (19%)	1 9
36	L2	62/62 (100%)	52 (84%)	10 (16%)	2 16
37	LC	181/181 (100%)	164 (91%)	17 (9%)	8 38
38	LE	164/164 (100%)	143 (87%)	21 (13%)	4 24
39	L3	47/47 (100%)	43 (92%)	4 (8%)	10 41
40	L4	48/48 (100%)	44 (92%)	4 (8%)	11 42
41	L5	38/38 (100%)	35 (92%)	3 (8%)	12 44
42	L6	51/51 (100%)	48 (94%)	3 (6%)	19 55
43	L7	34/34 (100%)	32 (94%)	2 (6%)	19 55
44	LF	165/165 (100%)	153 (93%)	12 (7%)	14 46
45	LG	149/149 (100%)	133 (89%)	16 (11%)	6 32
46	LH	137/137 (100%)	119 (87%)	18 (13%)	4 23
47	LJ	122/122 (100%)	109 (89%)	13 (11%)	6 32
48	LN	103/103 (100%)	87 (84%)	16 (16%)	2 18
49	LK	109/109 (100%)	93 (85%)	16 (15%)	3 20
50	LL	116/116 (100%)	108 (93%)	8 (7%)	15 49
51	LI	114/114 (100%)	99 (87%)	15 (13%)	4 23
52	LO	109/109 (100%)	96 (88%)	13 (12%)	5 27
53	LP	103/103 (100%)	95 (92%)	8 (8%)	12 44
54	LM	104/104 (100%)	99 (95%)	5 (5%)	25 60
55	LQ	87/87 (100%)	80 (92%)	7 (8%)	12 43
56	LR	99/99 (100%)	87 (88%)	12 (12%)	5 26

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
57	LS	89/89 (100%)	78 (88%)	11 (12%)	4 26
58	LT	84/84 (100%)	78 (93%)	6 (7%)	14 48
All	All	5788/5788 (100%)	5182 (90%)	606 (10%)	10 33

All (606) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	SS	1	PRO
1	SS	4	LEU
1	SS	6	LYS
1	SS	9	PHE
1	SS	10	ILE
1	SS	11	ASP
1	SS	12	LEU
1	SS	15	LEU
1	SS	16	LYS
1	SS	31	ARG
1	SS	38	THR
1	SS	60	PHE
1	SS	80	ARG
5	ST	8	LYS
5	ST	17	ARG
5	ST	33	LYS
5	ST	58	ASP
5	ST	79	THR
6	SU	6	ARG
6	SU	16	ARG
6	SU	19	LYS
6	SU	35	GLU
6	SU	37	TYR
6	SU	43	GLU
7	SG	6	ILE
7	SG	25	PHE
7	SG	40	SER
7	SG	43	TYR
7	SG	52	ARG
7	SG	57	GLU
7	SG	61	PHE
7	SG	72	VAL
7	SG	104	VAL
7	SG	132	THR

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Mol	Chain	Res	Type
7	SG	155	TRP
7	SG	158	LEU
8	SH	2	MET
8	SH	9	MET
8	SH	17	GLN
8	SH	20	ASN
8	SH	24	VAL
8	SH	26	MET
8	SH	30	LYS
8	SH	57	GLU
8	SH	66	GLN
8	SH	68	LYS
8	SH	79	ARG
8	SH	107	LYS
8	SH	110	MET
8	SH	127	TYR
9	SI	4	GLN
9	SI	11	ARG
9	SI	26	LYS
9	SI	31	GLN
9	SI	45	MET
9	SI	79	ARG
9	SI	87	MET
9	SI	94	ARG
9	SI	96	GLU
9	SI	103	VAL
9	SI	105	ARG
9	SI	109	GLN
9	SI	124	PRO
9	SI	126	PHE
9	SI	129	ARG
10	SJ	5	ARG
10	SJ	35	GLN
10	SJ	40	ILE
10	SJ	44	THR
10	SJ	54	SER
10	SJ	64	GLN
10	SJ	89	ARG
10	SJ	97	ASP
10	SJ	99	GLN
10	SJ	100	ILE
11	SK	8	ARG

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Mol	Chain	Res	Type
11	SK	11	VAL
11	SK	36	ARG
11	SK	63	GLN
11	SK	64	VAL
11	SK	93	GLU
11	SK	99	LEU
11	SK	107	THR
12	SL	17	LYS
12	SL	23	LEU
12	SL	39	THR
12	SL	50	LYS
12	SL	51	VAL
12	SL	72	ASN
13	SM	24	VAL
13	SM	26	LYS
13	SM	45	SER
13	SM	62	PHE
13	SM	64	VAL
13	SM	69	ARG
13	SM	78	ARG
13	SM	85	TYR
13	SM	86	ARG
13	SM	99	GLN
13	SM	100	ARG
13	SM	102	LYS
13	SM	115	ILE
13	SM	116	LYS
14	SN	3	GLN
14	SN	10	VAL
14	SN	34	ASN
14	SN	58	ARG
14	SN	63	CYS
15	SO	16	ARG
15	SO	20	ASP
15	SO	41	HIS
15	SO	42	PHE
15	SO	53	ARG
15	SO	70	LYS
15	SO	82	GLU
16	SP	14	ARG
16	SP	26	ASN
16	SP	28	ARG

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Mol	Chain	Res	Type
16	SP	52	LEU
16	SP	56	ARG
16	SP	67	ILE
16	SP	78	VAL
17	SQ	18	LYS
17	SQ	64	ARG
18	SB	20	ARG
18	SB	24	PRO
18	SB	34	ARG
18	SB	49	PHE
18	SB	51	GLU
18	SB	63	LYS
18	SB	93	HIS
18	SB	109	SER
18	SB	112	ARG
18	SB	122	ASP
18	SB	150	ILE
18	SB	163	ILE
18	SB	187	ASP
18	SB	221	ARG
18	SB	238	GLU
19	SC	27	GLU
19	SC	35	ASP
19	SC	50	SER
19	SC	52	SER
19	SC	56	ILE
19	SC	67	ILE
19	SC	75	VAL
19	SC	105	VAL
19	SC	133	MET
19	SC	134	LYS
19	SC	138	GLN
19	SC	166	TRP
19	SC	167	TYR
19	SC	168	ARG
19	SC	172	VAL
19	SC	181	ILE
19	SC	200	TRP
19	SC	219	PRO
19	SC	227	GLN
20	SD	4	LEU
20	SD	13	ARG

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Mol	Chain	Res	Type
20	SD	25	ARG
20	SD	47	LEU
20	SD	56	GLU
20	SD	99	ASN
20	SD	109	THR
20	SD	116	LEU
20	SD	119	HIS
20	SD	122	ILE
20	SD	123	MET
20	SD	128	VAL
20	SD	139	ASN
20	SD	143	SER
20	SD	146	GLU
20	SD	150	LYS
20	SD	169	TRP
20	SD	196	GLU
20	SD	197	HIS
20	SD	203	TYR
21	SE	15	ILE
21	SE	42	ASN
21	SE	44	ARG
21	SE	54	GLU
21	SE	56	PRO
21	SE	64	GLU
21	SE	68	ARG
21	SE	75	LEU
21	SE	82	HIS
21	SE	104	ILE
21	SE	111	ARG
21	SE	122	VAL
21	SE	125	LYS
21	SE	155	LYS
22	SF	3	HIS
22	SF	5	GLU
22	SF	9	MET
22	SF	12	PRO
22	SF	18	VAL
22	SF	41	ASP
22	SF	63	ASN
22	SF	68	GLN
22	SF	69	GLU
22	SF	102	MET

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Mol	Chain	Res	Type
22	SF	110	ARG
22	SF	112	ARG
22	SF	113	ARG
23	SR	4	PHE
23	SR	20	ILE
23	SR	23	LYS
23	SR	37	LYS
23	SR	59	LYS
23	SR	65	SER
24	S3	23	THR
24	S3	81	HIS
24	S3	83	ILE
24	S3	128	GLN
24	S3	136	ARG
24	S3	181	VAL
24	S3	196	ASP
24	S3	203	TYR
24	S3	207	PRO
24	S3	210	MET
24	S3	216	GLU
24	S3	217	TRP
24	S3	240	GLU
24	S3	252	ARG
24	S3	259	GLU
24	S3	278	LEU
24	S3	286	PRO
24	S3	288	PRO
24	S3	292	PRO
24	S3	298	LEU
24	S3	308	ARG
24	S3	312	ASP
24	S3	315	PRO
24	S3	326	ASP
24	S3	334	PHE
24	S3	336	ARG
24	S3	359	PHE
24	S3	361	ARG
24	S3	362	ILE
24	S3	373	ILE
24	S3	375	GLU
24	S3	377	ARG
24	S3	381	ILE

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Mol	Chain	Res	Type
24	S3	388	LYS
24	S3	407	ARG
24	S3	415	ILE
24	S3	417	ILE
24	S3	423	THR
24	S3	442	PRO
24	S3	446	VAL
24	S3	453	ASN
24	S3	457	ILE
24	S3	487	VAL
24	S3	495	GLN
24	S3	498	THR
24	S3	501	GLU
24	S3	507	GLN
24	S3	514	TYR
24	S3	516	HIS
24	S3	522	TYR
24	S3	531	LYS
24	S3	534	GLU
24	S3	539	ILE
24	S3	561	LYS
24	S3	579	PHE
24	S3	613	GLU
24	S3	638	ARG
24	S3	682	GLU
24	S3	688	GLU
24	S3	695	GLN
24	S3	701	ARG
27	LD	22	GLU
27	LD	25	LYS
27	LD	42	ARG
27	LD	57	HIS
27	LD	67	LYS
27	LD	68	ARG
27	LD	79	ARG
27	LD	97	ASP
27	LD	102	TYR
27	LD	115	ILE
27	LD	116	GLN
27	LD	117	SER
27	LD	128	THR
27	LD	133	ASN

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Mol	Chain	Res	Type
27	LD	142	ASN
27	LD	145	MET
27	LD	147	PRO
27	LD	173	LEU
27	LD	175	LEU
27	LD	184	GLU
27	LD	191	LEU
27	LD	212	TRP
27	LD	213	ARG
27	LD	227	VAL
27	LD	230	PRO
27	LD	235	GLU
27	LD	239	PHE
27	LD	241	LYS
27	LD	267	VAL
28	LU	11	ARG
28	LU	15	GLN
28	LU	22	ASP
28	LU	30	SER
28	LU	40	ASN
28	LU	42	LYS
28	LU	72	THR
28	LU	82	MET
28	LU	94	ASP
28	LU	95	ARG
28	LU	102	HIS
29	LV	3	ARG
29	LV	18	GLU
29	LV	32	LEU
29	LV	57	VAL
29	LV	72	GLN
29	LV	79	ASP
29	LV	93	LEU
30	LW	23	LYS
30	LW	81	ARG
30	LW	91	LYS
30	LW	103	LYS
31	LX	5	ASN
31	LX	10	LYS
31	LX	12	GLN
31	LX	29	ILE
31	LX	30	ILE

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Mol	Chain	Res	Type
31	LX	51	GLN
31	LX	68	LYS
31	LX	88	HIS
32	LY	3	LYS
32	LY	23	LYS
32	LY	24	ARG
32	LY	25	PHE
32	LY	39	GLN
32	LY	40	ARG
32	LY	43	LYS
32	LY	66	VAL
33	LZ	7	THR
33	LZ	9	LYS
33	LZ	10	ARG
33	LZ	17	ARG
33	LZ	32	LEU
33	LZ	40	GLU
33	LZ	41	SER
33	LZ	59	ASP
33	LZ	60	LYS
33	LZ	63	ILE
33	LZ	64	ASP
33	LZ	73	ARG
34	L0	7	ARG
34	L0	9	LYS
34	L0	15	ASN
34	L0	18	LEU
34	L0	36	GLN
34	L0	40	SER
35	L1	8	GLN
35	L1	13	ILE
35	L1	23	LEU
35	L1	35	VAL
35	L1	41	PRO
35	L1	44	ARG
35	L1	47	ILE
35	L1	51	SER
35	L1	53	MET
36	L2	5	ILE
36	L2	12	ILE
36	L2	35	ASP
36	L2	38	SER

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Mol	Chain	Res	Type
36	L2	43	PHE
36	L2	45	THR
36	L2	49	ARG
36	L2	56	ARG
36	L2	59	ARG
36	L2	60	PHE
37	LC	4	LEU
37	LC	9	ARG
37	LC	12	ARG
37	LC	30	LEU
37	LC	79	THR
37	LC	108	GLU
37	LC	111	PHE
37	LC	137	MET
37	LC	144	THR
37	LC	154	LYS
37	LC	163	TYR
37	LC	164	ARG
37	LC	167	LYS
37	LC	192	LEU
37	LC	194	VAL
37	LC	208	TYR
37	LC	226	GLN
38	LE	1	MET
38	LE	2	ILE
38	LE	11	MET
38	LE	17	GLU
38	LE	18	ASP
38	LE	24	VAL
38	LE	32	ASN
38	LE	33	ARG
38	LE	35	THR
38	LE	42	ASN
38	LE	62	LYS
38	LE	70	LYS
38	LE	73	VAL
38	LE	79	LEU
38	LE	107	VAL
38	LE	118	PHE
38	LE	134	HIS
38	LE	149	ASN
38	LE	164	GLN

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Mol	Chain	Res	Type
38	LE	176	ASP
38	LE	201	LEU
39	L3	2	VAL
39	L3	11	LYS
39	L3	21	LEU
39	L3	22	THR
40	L4	23	THR
40	L4	33	LEU
40	L4	37	LYS
40	L4	46	VAL
41	L5	2	LYS
41	L5	3	ARG
41	L5	4	THR
42	L6	15	LYS
42	L6	29	ARG
42	L6	39	ARG
43	L7	12	ARG
43	L7	19	ARG
44	LF	7	ASP
44	LF	47	LYS
44	LF	49	ARG
44	LF	67	ARG
44	LF	78	TRP
44	LF	85	PHE
44	LF	88	ARG
44	LF	124	PHE
44	LF	143	LEU
44	LF	152	GLU
44	LF	170	ARG
44	LF	191	ASP
45	LG	3	LEU
45	LG	10	GLU
45	LG	37	MET
45	LG	46	LYS
45	LG	55	ASP
45	LG	56	LEU
45	LG	65	LEU
45	LG	66	ILE
45	LG	77	LYS
45	LG	87	LYS
45	LG	127	TYR
45	LG	141	ASP

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Mol	Chain	Res	Type
45	LG	146	ASP
45	LG	152	ASP
45	LG	158	THR
45	LG	172	PHE
46	LH	8	VAL
46	LH	33	THR
46	LH	34	ARG
46	LH	47	ASN
46	LH	49	LEU
46	LH	51	PHE
46	LH	59	ASP
46	LH	63	GLN
46	LH	68	ARG
46	LH	72	ASN
46	LH	78	VAL
46	LH	82	PHE
46	LH	93	TYR
46	LH	104	LEU
46	LH	106	LEU
46	LH	138	GLN
46	LH	148	ARG
46	LH	163	TYR
47	LJ	2	LEU
47	LJ	13	GLU
47	LJ	28	ASP
47	LJ	33	THR
47	LJ	41	ARG
47	LJ	42	LYS
47	LJ	51	MET
47	LJ	57	THR
47	LJ	58	LEU
47	LJ	67	PRO
47	LJ	83	TYR
47	LJ	87	HIS
47	LJ	96	LYS
48	LN	10	GLU
48	LN	21	ARG
48	LN	25	SER
48	LN	39	LYS
48	LN	48	ARG
48	LN	66	PHE
48	LN	80	SER

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Mol	Chain	Res	Type
48	LN	81	ASP
48	LN	91	ASP
48	LN	92	LEU
48	LN	104	GLN
48	LN	126	ARG
48	LN	129	LYS
48	LN	136	GLU
48	LN	142	ILE
48	LN	143	GLU
49	LK	4	VAL
49	LK	12	VAL
49	LK	29	GLN
49	LK	41	PHE
49	LK	44	LYS
49	LK	50	LYS
49	LK	55	PRO
49	LK	58	ILE
49	LK	61	TYR
49	LK	73	PRO
49	LK	94	LYS
49	LK	116	MET
49	LK	117	THR
49	LK	126	ARG
49	LK	127	SER
49	LK	133	ARG
50	LL	5	THR
50	LL	9	GLU
50	LL	30	THR
50	LL	41	LYS
50	LL	49	ASP
50	LL	75	TYR
50	LL	76	HIS
50	LL	99	ARG
51	LI	8	LYS
51	LI	9	VAL
51	LI	28	ASN
51	LI	60	GLU
51	LI	66	ASN
51	LI	72	ILE
51	LI	79	THR
51	LI	82	SER
51	LI	87	GLU

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Mol	Chain	Res	Type
51	LI	97	ARG
51	LI	98	ASP
51	LI	116	ARG
51	LI	127	GLU
51	LI	132	PHE
51	LI	142	VAL
52	LO	1	MET
52	LO	2	LEU
52	LO	16	ARG
52	LO	22	GLN
52	LO	28	PHE
52	LO	38	ARG
52	LO	50	ARG
52	LO	53	MET
52	LO	59	ARG
52	LO	91	TYR
52	LO	96	ILE
52	LO	111	GLU
52	LO	125	PRO
53	LP	34	ILE
53	LP	40	LYS
53	LP	74	GLU
53	LP	75	ILE
53	LP	79	LEU
53	LP	90	ARG
53	LP	113	ILE
53	LP	119	SER
54	LM	3	GLN
54	LM	66	LYS
54	LM	84	CYS
54	LM	94	PRO
54	LM	114	LYS
55	LQ	8	ILE
55	LQ	30	ARG
55	LQ	31	THR
55	LQ	56	LYS
55	LQ	62	LEU
55	LQ	64	TYR
55	LQ	89	ASP
56	LR	19	PHE
56	LR	26	GLU
56	LR	29	VAL

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Mol	Chain	Res	Type
56	LR	42	PHE
56	LR	50	ARG
56	LR	52	ARG
56	LR	55	HIS
56	LR	58	PHE
56	LR	88	ARG
56	LR	103	THR
56	LR	108	ARG
56	LR	112	ARG
57	LS	8	ILE
57	LS	32	ARG
57	LS	48	ASP
57	LS	50	ARG
57	LS	54	ARG
57	LS	63	ARG
57	LS	74	SER
57	LS	76	SER
57	LS	91	ARG
57	LS	92	LYS
57	LS	108	LEU
58	LT	6	GLN
58	LT	10	LYS
58	LT	11	GLN
58	LT	38	VAL
58	LT	40	MET
58	LT	55	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (41) such sidechains are listed below:

Mol	Chain	Res	Type
1	SS	56	HIS
5	ST	19	HIS
7	SG	8	GLN
7	SG	85	GLN
9	SI	4	GLN
12	SL	72	ASN
13	SM	13	HIS
19	SC	175	HIS
20	SD	35	GLN
20	SD	39	GLN
20	SD	119	HIS
22	SF	37	HIS

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Mol	Chain	Res	Type
24	S3	54	GLN
24	S3	516	HIS
28	LU	7	HIS
31	LX	51	GLN
31	LX	75	GLN
31	LX	78	GLN
31	LX	87	GLN
31	LX	88	HIS
33	LZ	19	HIS
34	L0	31	GLN
36	L2	20	ASN
37	LC	67	HIS
37	LC	80	GLN
38	LE	32	ASN
38	LE	42	ASN
39	L3	18	HIS
44	LF	41	GLN
45	LG	20	ASN
45	LG	126	ASN
48	LN	38	GLN
50	LL	47	HIS
50	LL	77	HIS
51	LI	28	ASN
53	LP	3	HIS
53	LP	16	HIS
53	LP	107	ASN
54	LM	5	GLN
54	LM	29	HIS
57	LS	58	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	SA	1541/1542 (99%)	362 (23%)	122 (7%)
25	LB	119/120 (99%)	21 (17%)	9 (7%)
26	LA	2903/2904 (99%)	645 (22%)	221 (7%)
3	S1	46/47 (97%)	36 (78%)	12 (26%)
4	S2	77/77 (100%)	20 (25%)	10 (12%)
All	All	4686/4690 (99%)	1084 (23%)	374 (7%)

All (1084) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
2	SA	3	A
2	SA	4	U
2	SA	5	U
2	SA	8	A
2	SA	9	G
2	SA	31	G
2	SA	32	A
2	SA	36	C
2	SA	47	C
2	SA	48	C
2	SA	50	A
2	SA	51	A
2	SA	52	C
2	SA	54	C
2	SA	60	A
2	SA	61	G
2	SA	66	A
2	SA	83	C
2	SA	84	U
2	SA	85	U
2	SA	87	C
2	SA	95	C
2	SA	98	A
2	SA	108	G
2	SA	121	U
2	SA	122	G
2	SA	123	U
2	SA	129	A
2	SA	131	A
2	SA	135	C
2	SA	136	C
2	SA	153	C
2	SA	164	G
2	SA	166	U
2	SA	171	A
2	SA	174	A
2	SA	182	A
2	SA	184	G
2	SA	188	C
2	SA	197	A
2	SA	204	G
2	SA	205	A
2	SA	210	C

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Mol	Chain	Res	Type
2	SA	212	G
2	SA	225	C
2	SA	228	A
2	SA	239	U
2	SA	240	G
2	SA	244	U
2	SA	245	U
2	SA	247	G
2	SA	250	A
2	SA	251	G
2	SA	252	U
2	SA	261	U
2	SA	262	A
2	SA	266	G
2	SA	267	C
2	SA	272	C
2	SA	275	G
2	SA	280	C
2	SA	281	G
2	SA	289	G
2	SA	293	G
2	SA	298	A
2	SA	306	A
2	SA	307	C
2	SA	308	C
2	SA	316	C
2	SA	317	U
2	SA	319	G
2	SA	328	C
2	SA	329	A
2	SA	352	C
2	SA	354	G
2	SA	366	A
2	SA	372	C
2	SA	373	A
2	SA	374	A
2	SA	381	C
2	SA	382	A
2	SA	384	G
2	SA	389	A
2	SA	390	U
2	SA	392	C

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Mol	Chain	Res	Type
2	SA	395	C
2	SA	398	U
2	SA	404	G
2	SA	406	G
2	SA	411	A
2	SA	412	A
2	SA	413	G
2	SA	415	A
2	SA	422	C
2	SA	428	G
2	SA	429	U
2	SA	444	G
2	SA	453	G
2	SA	463	U
2	SA	464	U
2	SA	465	A
2	SA	467	U
2	SA	468	A
2	SA	479	U
2	SA	481	G
2	SA	485	U
2	SA	496	A
2	SA	498	A
2	SA	505	G
2	SA	508	U
2	SA	509	A
2	SA	518	C
2	SA	519	C
2	SA	524	G
2	SA	527	G
2	SA	528	C
2	SA	531	U
2	SA	532	A
2	SA	533	A
2	SA	547	A
2	SA	560	A
2	SA	561	U
2	SA	562	U
2	SA	566	G
2	SA	572	A
2	SA	573	A
2	SA	575	G

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Mol	Chain	Res	Type
2	SA	576	C
2	SA	577	G
2	SA	583	A
2	SA	609	A
2	SA	610	U
2	SA	615	G
2	SA	620	C
2	SA	631	C
2	SA	632	U
2	SA	633	G
2	SA	636	U
2	SA	641	U
2	SA	642	A
2	SA	650	G
2	SA	653	U
2	SA	676	A
2	SA	687	A
2	SA	688	G
2	SA	693	G
2	SA	694	A
2	SA	695	A
2	SA	701	U
2	SA	703	G
2	SA	718	A
2	SA	719	C
2	SA	720	C
2	SA	721	G
2	SA	723	U
2	SA	724	G
2	SA	729	A
2	SA	755	G
2	SA	760	G
2	SA	765	G
2	SA	766	A
2	SA	776	G
2	SA	777	A
2	SA	783	C
2	SA	788	U
2	SA	789	U
2	SA	790	A
2	SA	791	G
2	SA	792	A

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Mol	Chain	Res	Type
2	SA	793	U
2	SA	794	A
2	SA	805	C
2	SA	810	C
2	SA	811	C
2	SA	812	G
2	SA	816	A
2	SA	817	C
2	SA	819	A
2	SA	820	U
2	SA	821	G
2	SA	828	U
2	SA	829	G
2	SA	841	C
2	SA	842	U
2	SA	843	U
2	SA	844	G
2	SA	845	A
2	SA	870	U
2	SA	873	A
2	SA	874	G
2	SA	876	C
2	SA	885	G
2	SA	889	A
2	SA	890	G
2	SA	899	C
2	SA	900	A
2	SA	910	C
2	SA	913	A
2	SA	914	A
2	SA	926	G
2	SA	927	G
2	SA	933	G
2	SA	935	A
2	SA	938	A
2	SA	939	G
2	SA	945	G
2	SA	959	A
2	SA	960	U
2	SA	961	U
2	SA	962	C
2	SA	965	U

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Mol	Chain	Res	Type
2	SA	966	G
2	SA	967	C
2	SA	968	A
2	SA	969	A
2	SA	970	C
2	SA	973	G
2	SA	974	A
2	SA	975	A
2	SA	977	A
2	SA	978	A
2	SA	980	C
2	SA	981	U
2	SA	982	U
2	SA	983	A
2	SA	984	C
2	SA	993	G
2	SA	994	A
2	SA	995	C
2	SA	996	A
2	SA	1004	A
2	SA	1006	G
2	SA	1014	A
2	SA	1015	G
2	SA	1026	G
2	SA	1028	C
2	SA	1030	U
2	SA	1031	C
2	SA	1032	G
2	SA	1045	C
2	SA	1049	U
2	SA	1050	G
2	SA	1054	C
2	SA	1064	G
2	SA	1065	U
2	SA	1079	G
2	SA	1081	A
2	SA	1094	G
2	SA	1095	U
2	SA	1101	A
2	SA	1109	C
2	SA	1111	A
2	SA	1118	U

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Mol	Chain	Res	Type
2	SA	1130	A
2	SA	1136	C
2	SA	1137	C
2	SA	1139	G
2	SA	1148	U
2	SA	1149	C
2	SA	1152	A
2	SA	1154	G
2	SA	1159	U
2	SA	1167	A
2	SA	1168	U
2	SA	1181	G
2	SA	1182	G
2	SA	1189	U
2	SA	1190	G
2	SA	1191	A
2	SA	1196	A
2	SA	1197	A
2	SA	1198	G
2	SA	1200	C
2	SA	1201	A
2	SA	1202	U
2	SA	1208	C
2	SA	1212	U
2	SA	1213	A
2	SA	1214	C
2	SA	1215	G
2	SA	1223	C
2	SA	1224	U
2	SA	1226	C
2	SA	1227	A
2	SA	1228	C
2	SA	1238	A
2	SA	1240	U
2	SA	1241	G
2	SA	1250	A
2	SA	1253	G
2	SA	1254	A
2	SA	1256	A
2	SA	1258	G
2	SA	1264	U
2	SA	1270	G

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Mol	Chain	Res	Type
2	SA	1278	G
2	SA	1279	G
2	SA	1280	A
2	SA	1286	U
2	SA	1287	A
2	SA	1290	G
2	SA	1300	G
2	SA	1301	U
2	SA	1303	C
2	SA	1305	G
2	SA	1315	U
2	SA	1317	C
2	SA	1318	A
2	SA	1319	A
2	SA	1322	C
2	SA	1323	G
2	SA	1336	C
2	SA	1337	G
2	SA	1338	G
2	SA	1340	A
2	SA	1345	U
2	SA	1346	A
2	SA	1347	G
2	SA	1348	U
2	SA	1359	C
2	SA	1364	U
2	SA	1365	G
2	SA	1368	A
2	SA	1377	A
2	SA	1378	C
2	SA	1394	A
2	SA	1395	C
2	SA	1397	C
2	SA	1398	A
2	SA	1401	G
2	SA	1418	A
2	SA	1419	G
2	SA	1431	A
2	SA	1432	G
2	SA	1437	A
2	SA	1446	A
2	SA	1448	C

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Mol	Chain	Res	Type
2	SA	1451	U
2	SA	1452	C
2	SA	1453	G
2	SA	1454	G
2	SA	1466	C
2	SA	1490	U
2	SA	1492	A
2	SA	1493	A
2	SA	1494	G
2	SA	1502	A
2	SA	1503	A
2	SA	1506	U
2	SA	1517	G
2	SA	1520	C
2	SA	1529	G
2	SA	1530	G
2	SA	1533	C
2	SA	1534	A
2	SA	1535	C
2	SA	1536	C
2	SA	1537	U
2	SA	1539	C
2	SA	1540	U
2	SA	1541	U
2	SA	1542	A
3	S1	14	G
3	S1	15	G
3	S1	16	A
3	S1	18	A
3	S1	21	U
3	S1	22	G
3	S1	23	C
3	S1	24	A
3	S1	25	U
3	S1	26	U
3	S1	27	A
3	S1	28	U
3	S1	29	G
3	S1	30	U
3	S1	31	U
3	S1	34	U
3	S1	36	U

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Mol	Chain	Res	Type
3	S1	37	G
3	S1	39	U
3	S1	40	G
3	S1	41	A
3	S1	42	U
3	S1	43	U
3	S1	44	U
3	S1	45	G
3	S1	46	C
3	S1	47	C
3	S1	48	C
3	S1	49	U
3	S1	50	U
3	S1	51	C
3	S1	53	G
3	S1	54	U
3	S1	55	A
3	S1	56	G
3	S1	57	C
4	S2	8	U
4	S2	9	G
4	S2	16	C
4	S2	17	C
4	S2	18	U
4	S2	19	G
4	S2	20	G
4	S2	21	U
4	S2	22	A
4	S2	38	A
4	S2	47	A
4	S2	48	U
4	S2	49	C
4	S2	50	G
4	S2	57	C
4	S2	58	A
4	S2	61	U
4	S2	73	A
4	S2	74	A
4	S2	77	A
25	LB	6	G
25	LB	9	G
25	LB	13	G

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Mol	Chain	Res	Type
25	LB	14	U
25	LB	25	U
25	LB	26	C
25	LB	35	C
25	LB	41	G
25	LB	42	C
25	LB	43	C
25	LB	44	G
25	LB	51	G
25	LB	57	A
25	LB	58	A
25	LB	66	A
25	LB	67	G
25	LB	73	A
25	LB	87	U
25	LB	88	C
25	LB	89	U
25	LB	99	A
26	LA	13	A
26	LA	14	A
26	LA	18	U
26	LA	30	G
26	LA	34	U
26	LA	35	G
26	LA	42	A
26	LA	43	G
26	LA	46	G
26	LA	49	A
26	LA	50	U
26	LA	71	A
26	LA	72	U
26	LA	73	A
26	LA	74	A
26	LA	75	G
26	LA	92	U
26	LA	99	U
26	LA	100	U
26	LA	101	A
26	LA	102	U
26	LA	103	A
26	LA	113	U
26	LA	115	C

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Mol	Chain	Res	Type
26	LA	119	A
26	LA	120	U
26	LA	128	C
26	LA	139	U
26	LA	140	C
26	LA	155	A
26	LA	163	C
26	LA	181	A
26	LA	194	G
26	LA	195	A
26	LA	196	A
26	LA	199	A
26	LA	200	U
26	LA	204	A
26	LA	205	G
26	LA	215	G
26	LA	216	A
26	LA	218	A
26	LA	219	A
26	LA	222	A
26	LA	224	U
26	LA	225	C
26	LA	232	G
26	LA	242	G
26	LA	243	U
26	LA	248	G
26	LA	250	G
26	LA	255	A
26	LA	264	C
26	LA	265	A
26	LA	266	G
26	LA	271	G
26	LA	272	A
26	LA	277	G
26	LA	294	A
26	LA	295	G
26	LA	300	A
26	LA	324	A
26	LA	330	A
26	LA	338	G
26	LA	345	A
26	LA	346	A

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Mol	Chain	Res	Type
26	LA	367	G
26	LA	368	A
26	LA	369	U
26	LA	371	A
26	LA	372	G
26	LA	386	G
26	LA	387	U
26	LA	389	G
26	LA	390	U
26	LA	391	A
26	LA	405	U
26	LA	406	G
26	LA	411	G
26	LA	424	G
26	LA	428	A
26	LA	429	A
26	LA	431	U
26	LA	436	C
26	LA	443	A
26	LA	452	G
26	LA	454	A
26	LA	456	C
26	LA	470	A
26	LA	475	C
26	LA	479	A
26	LA	480	A
26	LA	481	G
26	LA	484	C
26	LA	489	G
26	LA	490	C
26	LA	491	G
26	LA	504	A
26	LA	505	A
26	LA	508	A
26	LA	513	A
26	LA	527	C
26	LA	529	A
26	LA	530	G
26	LA	531	C
26	LA	532	A
26	LA	545	U
26	LA	546	U

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Mol	Chain	Res	Type
26	LA	548	G
26	LA	549	G
26	LA	562	U
26	LA	563	A
26	LA	571	U
26	LA	572	A
26	LA	573	U
26	LA	574	A
26	LA	575	A
26	LA	603	A
26	LA	604	G
26	LA	612	G
26	LA	613	A
26	LA	614	A
26	LA	615	U
26	LA	621	A
26	LA	627	A
26	LA	637	A
26	LA	643	A
26	LA	644	A
26	LA	645	C
26	LA	646	U
26	LA	651	G
26	LA	654	A
26	LA	655	A
26	LA	670	A
26	LA	675	A
26	LA	677	A
26	LA	686	U
26	LA	696	G
26	LA	715	A
26	LA	717	C
26	LA	718	A
26	LA	719	C
26	LA	726	G
26	LA	728	G
26	LA	730	A
26	LA	732	C
26	LA	736	C
26	LA	747	U
26	LA	748	G
26	LA	751	A

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Mol	Chain	Res	Type
26	LA	762	U
26	LA	763	G
26	LA	764	A
26	LA	765	C
26	LA	775	G
26	LA	776	G
26	LA	777	G
26	LA	782	A
26	LA	784	G
26	LA	786	C
26	LA	789	A
26	LA	792	A
26	LA	793	A
26	LA	794	A
26	LA	802	A
26	LA	805	G
26	LA	812	C
26	LA	846	U
26	LA	847	U
26	LA	848	C
26	LA	857	G
26	LA	859	G
26	LA	870	U
26	LA	887	U
26	LA	888	C
26	LA	889	C
26	LA	890	C
26	LA	894	U
26	LA	896	A
26	LA	897	C
26	LA	901	C
26	LA	910	A
26	LA	911	A
26	LA	915	C
26	LA	925	A
26	LA	932	U
26	LA	938	G
26	LA	941	A
26	LA	945	A
26	LA	946	C
26	LA	961	C
26	LA	973	A

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Mol	Chain	Res	Type
26	LA	974	G
26	LA	985	C
26	LA	986	C
26	LA	995	C
26	LA	996	A
26	LA	1002	G
26	LA	1003	G
26	LA	1005	C
26	LA	1008	A
26	LA	1009	A
26	LA	1013	C
26	LA	1020	A
26	LA	1021	A
26	LA	1022	G
26	LA	1025	G
26	LA	1027	A
26	LA	1033	U
26	LA	1044	C
26	LA	1045	C
26	LA	1046	A
26	LA	1048	A
26	LA	1052	C
26	LA	1060	U
26	LA	1061	U
26	LA	1062	G
26	LA	1066	U
26	LA	1067	A
26	LA	1069	A
26	LA	1070	A
26	LA	1071	G
26	LA	1073	A
26	LA	1078	U
26	LA	1081	U
26	LA	1084	A
26	LA	1087	G
26	LA	1094	U
26	LA	1095	A
26	LA	1096	A
26	LA	1098	A
26	LA	1104	C
26	LA	1109	C
26	LA	1110	G

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Mol	Chain	Res	Type
26	LA	1112	G
26	LA	1123	C
26	LA	1127	A
26	LA	1128	G
26	LA	1129	A
26	LA	1130	U
26	LA	1132	U
26	LA	1133	A
26	LA	1134	A
26	LA	1143	A
26	LA	1155	A
26	LA	1173	U
26	LA	1175	A
26	LA	1177	G
26	LA	1178	C
26	LA	1184	U
26	LA	1204	A
26	LA	1205	A
26	LA	1206	G
26	LA	1211	C
26	LA	1212	G
26	LA	1225	G
26	LA	1227	G
26	LA	1236	G
26	LA	1237	A
26	LA	1238	G
26	LA	1241	A
26	LA	1242	U
26	LA	1253	A
26	LA	1255	U
26	LA	1256	G
26	LA	1266	G
26	LA	1272	A
26	LA	1273	U
26	LA	1274	A
26	LA	1275	A
26	LA	1283	G
26	LA	1286	A
26	LA	1287	A
26	LA	1300	G
26	LA	1301	A
26	LA	1302	A

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Mol	Chain	Res	Type
26	LA	1303	G
26	LA	1308	A
26	LA	1318	U
26	LA	1321	A
26	LA	1322	A
26	LA	1323	C
26	LA	1324	G
26	LA	1325	U
26	LA	1340	U
26	LA	1341	G
26	LA	1349	C
26	LA	1354	A
26	LA	1359	A
26	LA	1362	C
26	LA	1363	C
26	LA	1366	A
26	LA	1367	A
26	LA	1368	G
26	LA	1377	G
26	LA	1379	U
26	LA	1383	A
26	LA	1384	A
26	LA	1385	A
26	LA	1386	C
26	LA	1392	A
26	LA	1393	A
26	LA	1395	A
26	LA	1396	U
26	LA	1416	G
26	LA	1417	C
26	LA	1420	A
26	LA	1421	G
26	LA	1451	C
26	LA	1452	G
26	LA	1453	A
26	LA	1454	C
26	LA	1458	U
26	LA	1459	G
26	LA	1460	U
26	LA	1461	C
26	LA	1482	G
26	LA	1490	A

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Mol	Chain	Res	Type
26	LA	1491	G
26	LA	1493	C
26	LA	1494	A
26	LA	1495	A
26	LA	1508	A
26	LA	1509	A
26	LA	1514	G
26	LA	1522	A
26	LA	1523	U
26	LA	1524	G
26	LA	1535	A
26	LA	1536	C
26	LA	1552	A
26	LA	1558	C
26	LA	1559	U
26	LA	1565	C
26	LA	1566	A
26	LA	1567	G
26	LA	1568	G
26	LA	1569	A
26	LA	1578	U
26	LA	1579	A
26	LA	1583	A
26	LA	1584	U
26	LA	1608	A
26	LA	1609	A
26	LA	1612	C
26	LA	1616	A
26	LA	1618	C
26	LA	1633	G
26	LA	1634	A
26	LA	1635	A
26	LA	1648	U
26	LA	1649	G
26	LA	1653	G
26	LA	1669	A
26	LA	1673	G
26	LA	1674	G
26	LA	1675	C
26	LA	1676	A
26	LA	1677	A
26	LA	1678	A

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Mol	Chain	Res	Type
26	LA	1679	A
26	LA	1713	A
26	LA	1714	U
26	LA	1715	G
26	LA	1724	G
26	LA	1730	C
26	LA	1731	G
26	LA	1737	G
26	LA	1757	A
26	LA	1758	U
26	LA	1759	A
26	LA	1762	A
26	LA	1763	G
26	LA	1764	C
26	LA	1773	A
26	LA	1778	U
26	LA	1779	U
26	LA	1780	A
26	LA	1781	U
26	LA	1782	U
26	LA	1783	A
26	LA	1801	A
26	LA	1808	A
26	LA	1815	A
26	LA	1816	C
26	LA	1817	G
26	LA	1825	U
26	LA	1829	A
26	LA	1830	C
26	LA	1831	G
26	LA	1833	C
26	LA	1839	G
26	LA	1851	U
26	LA	1871	A
26	LA	1873	G
26	LA	1901	A
26	LA	1912	A
26	LA	1913	A
26	LA	1914	C
26	LA	1915	C
26	LA	1918	A
26	LA	1928	A

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Mol	Chain	Res	Type
26	LA	1930	G
26	LA	1938	A
26	LA	1940	U
26	LA	1943	U
26	LA	1952	A
26	LA	1953	A
26	LA	1954	G
26	LA	1955	U
26	LA	1956	U
26	LA	1963	U
26	LA	1964	G
26	LA	1965	C
26	LA	1966	A
26	LA	1967	C
26	LA	1968	G
26	LA	1970	A
26	LA	1971	U
26	LA	1972	G
26	LA	1982	U
26	LA	1993	U
26	LA	1996	C
26	LA	1997	C
26	LA	2004	G
26	LA	2012	G
26	LA	2015	A
26	LA	2020	A
26	LA	2021	C
26	LA	2022	U
26	LA	2023	C
26	LA	2028	U
26	LA	2030	U
26	LA	2031	A
26	LA	2032	G
26	LA	2034	U
26	LA	2040	G
26	LA	2043	C
26	LA	2056	G
26	LA	2059	A
26	LA	2061	G
26	LA	2062	A
26	LA	2069	G
26	LA	2077	A

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Mol	Chain	Res	Type
26	LA	2092	U
26	LA	2095	A
26	LA	2107	G
26	LA	2111	U
26	LA	2112	G
26	LA	2113	U
26	LA	2114	A
26	LA	2116	G
26	LA	2118	U
26	LA	2119	A
26	LA	2126	A
26	LA	2127	G
26	LA	2128	G
26	LA	2130	U
26	LA	2131	U
26	LA	2132	U
26	LA	2133	G
26	LA	2134	A
26	LA	2137	U
26	LA	2138	G
26	LA	2143	C
26	LA	2146	C
26	LA	2147	A
26	LA	2148	G
26	LA	2154	A
26	LA	2157	G
26	LA	2158	A
26	LA	2163	A
26	LA	2164	C
26	LA	2165	C
26	LA	2166	U
26	LA	2167	U
26	LA	2170	A
26	LA	2178	C
26	LA	2198	A
26	LA	2199	A
26	LA	2203	U
26	LA	2204	G
26	LA	2210	U
26	LA	2211	A
26	LA	2212	A
26	LA	2214	C

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Mol	Chain	Res	Type
26	LA	2215	C
26	LA	2224	G
26	LA	2225	A
26	LA	2237	G
26	LA	2238	G
26	LA	2239	G
26	LA	2246	G
26	LA	2250	G
26	LA	2253	G
26	LA	2254	C
26	LA	2266	A
26	LA	2272	U
26	LA	2283	C
26	LA	2287	A
26	LA	2288	A
26	LA	2298	A
26	LA	2305	U
26	LA	2306	C
26	LA	2307	G
26	LA	2308	G
26	LA	2309	A
26	LA	2310	C
26	LA	2311	A
26	LA	2312	U
26	LA	2322	A
26	LA	2325	G
26	LA	2327	A
26	LA	2328	A
26	LA	2333	A
26	LA	2334	U
26	LA	2335	A
26	LA	2337	G
26	LA	2340	A
26	LA	2345	G
26	LA	2346	A
26	LA	2347	C
26	LA	2350	C
26	LA	2354	C
26	LA	2358	A
26	LA	2381	A
26	LA	2383	G
26	LA	2385	C

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Mol	Chain	Res	Type
26	LA	2388	A
26	LA	2389	G
26	LA	2394	C
26	LA	2402	U
26	LA	2406	A
26	LA	2407	A
26	LA	2411	A
26	LA	2425	A
26	LA	2427	C
26	LA	2428	G
26	LA	2429	G
26	LA	2430	A
26	LA	2433	A
26	LA	2439	A
26	LA	2441	U
26	LA	2448	A
26	LA	2449	U
26	LA	2451	A
26	LA	2472	G
26	LA	2473	U
26	LA	2475	C
26	LA	2476	A
26	LA	2478	A
26	LA	2486	C
26	LA	2491	U
26	LA	2492	U
26	LA	2493	U
26	LA	2494	G
26	LA	2501	C
26	LA	2502	G
26	LA	2503	A
26	LA	2504	U
26	LA	2505	G
26	LA	2515	C
26	LA	2516	A
26	LA	2518	A
26	LA	2519	U
26	LA	2534	A
26	LA	2542	A
26	LA	2547	A
26	LA	2553	G
26	LA	2554	U

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Mol	Chain	Res	Type
26	LA	2556	C
26	LA	2566	A
26	LA	2567	G
26	LA	2572	A
26	LA	2573	C
26	LA	2574	G
26	LA	2575	C
26	LA	2576	G
26	LA	2582	G
26	LA	2585	U
26	LA	2586	U
26	LA	2587	A
26	LA	2596	U
26	LA	2597	G
26	LA	2599	G
26	LA	2602	A
26	LA	2609	U
26	LA	2610	C
26	LA	2613	U
26	LA	2616	C
26	LA	2627	G
26	LA	2629	U
26	LA	2646	C
26	LA	2654	A
26	LA	2655	G
26	LA	2656	U
26	LA	2660	A
26	LA	2664	G
26	LA	2665	A
26	LA	2685	G
26	LA	2689	U
26	LA	2690	U
26	LA	2713	U
26	LA	2714	G
26	LA	2726	A
26	LA	2737	G
26	LA	2739	U
26	LA	2742	G
26	LA	2744	G
26	LA	2756	U
26	LA	2757	A
26	LA	2765	A

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Mol	Chain	Res	Type
26	LA	2766	A
26	LA	2769	U
26	LA	2771	C
26	LA	2774	C
26	LA	2777	G
26	LA	2778	A
26	LA	2779	U
26	LA	2780	G
26	LA	2782	G
26	LA	2797	U
26	LA	2798	U
26	LA	2799	A
26	LA	2807	U
26	LA	2808	G
26	LA	2809	A
26	LA	2821	A
26	LA	2825	G
26	LA	2842	G
26	LA	2844	G
26	LA	2849	U
26	LA	2864	G
26	LA	2867	G
26	LA	2868	A
26	LA	2879	A
26	LA	2883	A
26	LA	2884	U
26	LA	2885	G
26	LA	2886	A
26	LA	2889	C
26	LA	2893	A
26	LA	2895	G
26	LA	2903	U
26	LA	2904	U

All (374) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
2	SA	2	A
2	SA	3	A
2	SA	4	U
2	SA	7	A
2	SA	8	A

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Mol	Chain	Res	Type
2	SA	39	G
2	SA	51	A
2	SA	52	C
2	SA	60	A
2	SA	94	G
2	SA	97	G
2	SA	121	U
2	SA	128	G
2	SA	135	C
2	SA	146	G
2	SA	173	U
2	SA	182	A
2	SA	183	C
2	SA	187	G
2	SA	204	G
2	SA	209	U
2	SA	224	U
2	SA	239	U
2	SA	243	A
2	SA	250	A
2	SA	251	G
2	SA	253	A
2	SA	275	G
2	SA	279	A
2	SA	280	C
2	SA	307	C
2	SA	328	C
2	SA	344	A
2	SA	372	C
2	SA	412	A
2	SA	462	G
2	SA	464	U
2	SA	497	G
2	SA	533	A
2	SA	560	A
2	SA	582	C
2	SA	622	A
2	SA	631	C
2	SA	682	G
2	SA	693	G
2	SA	700	G
2	SA	717	U

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Mol	Chain	Res	Type
2	SA	719	C
2	SA	727	G
2	SA	761	G
2	SA	764	C
2	SA	765	G
2	SA	776	G
2	SA	782	A
2	SA	788	U
2	SA	789	U
2	SA	793	U
2	SA	819	A
2	SA	841	C
2	SA	843	U
2	SA	870	U
2	SA	872	A
2	SA	890	G
2	SA	899	C
2	SA	907	A
2	SA	913	A
2	SA	926	G
2	SA	937	A
2	SA	944	G
2	SA	960	U
2	SA	975	A
2	SA	982	U
2	SA	987	G
2	SA	993	G
2	SA	1013	G
2	SA	1014	A
2	SA	1029	U
2	SA	1031	C
2	SA	1054	C
2	SA	1067	A
2	SA	1094	G
2	SA	1136	C
2	SA	1167	A
2	SA	1190	G
2	SA	1201	A
2	SA	1207	G
2	SA	1212	U
2	SA	1213	A
2	SA	1214	C

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Mol	Chain	Res	Type
2	SA	1224	U
2	SA	1226	C
2	SA	1239	A
2	SA	1240	U
2	SA	1253	G
2	SA	1257	A
2	SA	1278	G
2	SA	1279	G
2	SA	1286	U
2	SA	1302	C
2	SA	1322	C
2	SA	1323	G
2	SA	1335	U
2	SA	1338	G
2	SA	1344	C
2	SA	1346	A
2	SA	1347	G
2	SA	1359	C
2	SA	1362	A
2	SA	1364	U
2	SA	1377	A
2	SA	1397	C
2	SA	1430	A
2	SA	1433	A
2	SA	1451	U
2	SA	1491	G
2	SA	1502	A
2	SA	1529	G
2	SA	1531	A
2	SA	1533	C
2	SA	1534	A
2	SA	1535	C
2	SA	1536	C
3	S1	15	G
3	S1	21	U
3	S1	22	G
3	S1	23	C
3	S1	29	G
3	S1	30	U
3	S1	39	U
3	S1	41	A
3	S1	44	U

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Mol	Chain	Res	Type
3	S1	52	U
3	S1	53	G
3	S1	58	C
4	S2	1	C
4	S2	7	G
4	S2	9	G
4	S2	17	C
4	S2	20	G
4	S2	22	A
4	S2	57	C
4	S2	60	A
4	S2	73	A
4	S2	76	C
25	LB	12	C
25	LB	25	U
25	LB	34	A
25	LB	44	G
25	LB	57	A
25	LB	66	A
25	LB	86	G
25	LB	88	C
25	LB	90	C
26	LA	13	A
26	LA	27	G
26	LA	29	U
26	LA	34	U
26	LA	49	A
26	LA	71	A
26	LA	72	U
26	LA	73	A
26	LA	91	A
26	LA	98	G
26	LA	100	U
26	LA	101	A
26	LA	102	U
26	LA	112	U
26	LA	114	U
26	LA	139	U
26	LA	140	C
26	LA	196	A
26	LA	199	A
26	LA	217	A

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Mol	Chain	Res	Type
26	LA	218	A
26	LA	231	A
26	LA	242	G
26	LA	264	C
26	LA	265	A
26	LA	276	U
26	LA	321	U
26	LA	332	A
26	LA	345	A
26	LA	386	G
26	LA	389	G
26	LA	390	U
26	LA	428	A
26	LA	443	A
26	LA	451	U
26	LA	453	A
26	LA	455	C
26	LA	470	A
26	LA	479	A
26	LA	480	A
26	LA	490	C
26	LA	503	A
26	LA	512	G
26	LA	527	C
26	LA	546	U
26	LA	561	G
26	LA	567	U
26	LA	571	U
26	LA	574	A
26	LA	603	A
26	LA	611	C
26	LA	620	G
26	LA	626	A
26	LA	649	G
26	LA	653	U
26	LA	654	A
26	LA	669	G
26	LA	704	G
26	LA	748	G
26	LA	762	U
26	LA	775	G
26	LA	776	G

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Mol	Chain	Res	Type
26	LA	792	A
26	LA	805	G
26	LA	807	U
26	LA	827	U
26	LA	846	U
26	LA	847	U
26	LA	876	C
26	LA	893	C
26	LA	900	A
26	LA	910	A
26	LA	945	A
26	LA	958	U
26	LA	1012	U
26	LA	1020	A
26	LA	1043	C
26	LA	1045	C
26	LA	1061	U
26	LA	1066	U
26	LA	1069	A
26	LA	1070	A
26	LA	1127	A
26	LA	1128	G
26	LA	1129	A
26	LA	1133	A
26	LA	1142	A
26	LA	1176	U
26	LA	1204	A
26	LA	1205	A
26	LA	1210	G
26	LA	1211	C
26	LA	1275	A
26	LA	1282	U
26	LA	1285	A
26	LA	1286	A
26	LA	1288	G
26	LA	1307	A
26	LA	1321	A
26	LA	1322	A
26	LA	1323	C
26	LA	1329	U
26	LA	1339	G
26	LA	1348	C

Continued on next page...

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Mol	Chain	Res	Type
26	LA	1358	G
26	LA	1365	A
26	LA	1383	A
26	LA	1392	A
26	LA	1395	A
26	LA	1451	C
26	LA	1458	U
26	LA	1459	G
26	LA	1460	U
26	LA	1508	A
26	LA	1566	A
26	LA	1579	A
26	LA	1583	A
26	LA	1608	A
26	LA	1634	A
26	LA	1647	U
26	LA	1673	G
26	LA	1679	A
26	LA	1715	G
26	LA	1723	G
26	LA	1729	U
26	LA	1730	C
26	LA	1757	A
26	LA	1761	C
26	LA	1763	G
26	LA	1778	U
26	LA	1781	U
26	LA	1786	A
26	LA	1800	C
26	LA	1818	U
26	LA	1828	G
26	LA	1870	C
26	LA	1901	A
26	LA	1903	G
26	LA	1913	A
26	LA	1927	A
26	LA	1938	A
26	LA	1954	G
26	LA	1955	U
26	LA	1963	U
26	LA	2019	A
26	LA	2021	C

Continued on next page...

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Mol	Chain	Res	Type
26	LA	2022	U
26	LA	2042	A
26	LA	2068	U
26	LA	2069	G
26	LA	2076	U
26	LA	2079	U
26	LA	2106	U
26	LA	2111	U
26	LA	2113	U
26	LA	2116	G
26	LA	2118	U
26	LA	2126	A
26	LA	2127	G
26	LA	2130	U
26	LA	2132	U
26	LA	2136	G
26	LA	2143	C
26	LA	2163	A
26	LA	2165	C
26	LA	2223	G
26	LA	2225	A
26	LA	2236	U
26	LA	2238	G
26	LA	2249	U
26	LA	2282	G
26	LA	2287	A
26	LA	2304	G
26	LA	2310	C
26	LA	2311	A
26	LA	2327	A
26	LA	2333	A
26	LA	2358	A
26	LA	2381	A
26	LA	2385	C
26	LA	2402	U
26	LA	2406	A
26	LA	2422	C
26	LA	2429	G
26	LA	2432	A
26	LA	2439	A
26	LA	2440	C
26	LA	2447	G

Continued on next page...

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Mol	Chain	Res	Type
26	LA	2448	A
26	LA	2451	A
26	LA	2504	U
26	LA	2515	C
26	LA	2547	A
26	LA	2553	G
26	LA	2554	U
26	LA	2571	U
26	LA	2572	A
26	LA	2573	C
26	LA	2574	G
26	LA	2575	C
26	LA	2581	G
26	LA	2596	U
26	LA	2602	A
26	LA	2609	U
26	LA	2616	C
26	LA	2628	C
26	LA	2645	G
26	LA	2655	G
26	LA	2663	G
26	LA	2690	U
26	LA	2713	U
26	LA	2756	U
26	LA	2765	A
26	LA	2791	G
26	LA	2798	U
26	LA	2802	G
26	LA	2806	C
26	LA	2808	G
26	LA	2818	U
26	LA	2867	G
26	LA	2879	A

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
59	GTP	S3	801	-	26,34,34	1.72	6 (23%)	32,54,54	2.46	6 (18%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	GTP	S3	801	-	-	0/18/38/38	0/3/3/3

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	S3	801	GTP	C8-N7	-5.15	1.26	1.35
59	S3	801	GTP	C5-C4	-2.51	1.36	1.43
59	S3	801	GTP	O4'-C4'	2.33	1.50	1.45
59	S3	801	GTP	C6-N1	2.31	1.41	1.37
59	S3	801	GTP	PG-O2G	-2.17	1.46	1.54
59	S3	801	GTP	C2-N2	-2.09	1.29	1.34

All (6) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	S3	801	GTP	PA-O3A-PB	-8.72	102.91	132.83
59	S3	801	GTP	PB-O3B-PG	-7.87	105.81	132.83
59	S3	801	GTP	O5'-PA-O1A	-3.25	96.38	109.07
59	S3	801	GTP	O4'-C1'-C2'	-3.21	102.24	106.93
59	S3	801	GTP	O4'-C4'-C3'	-2.78	99.61	105.11
59	S3	801	GTP	C2'-C3'-C4'	2.30	107.12	102.64

There are no chirality outliers.

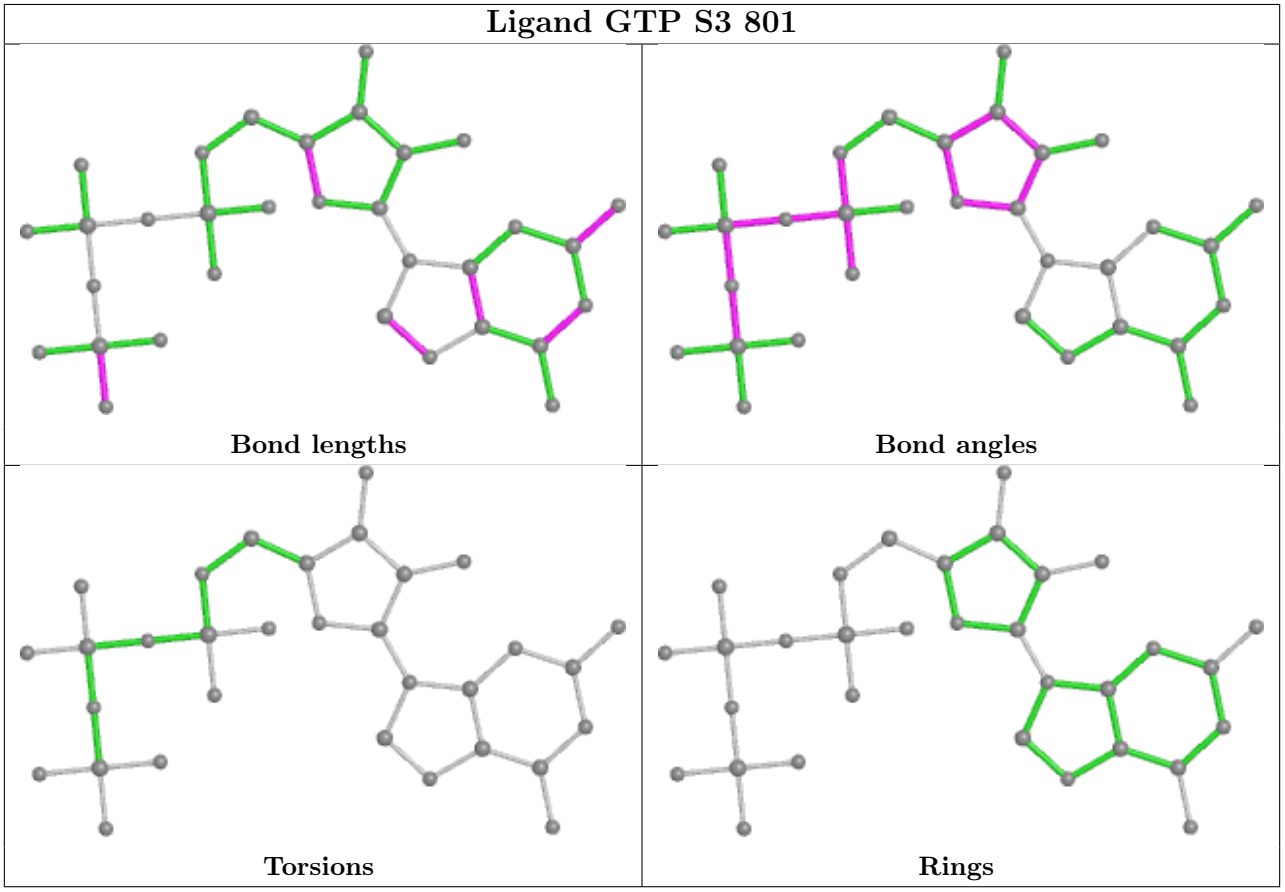
There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand GTP S3 801



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

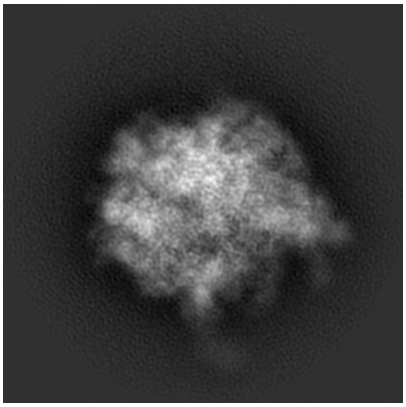
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-6316. These allow visual inspection of the internal detail of the map and identification of artifacts.

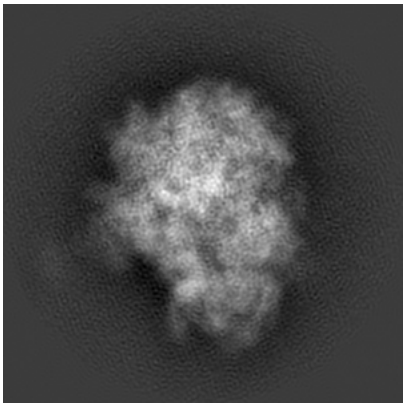
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

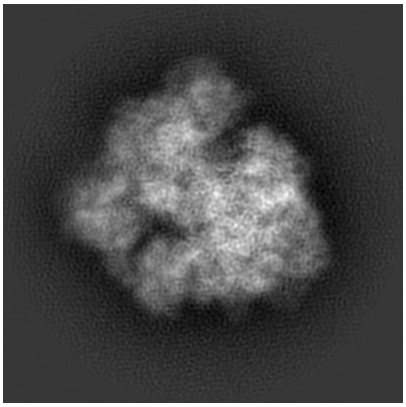
6.1.1 Primary map



X



Y

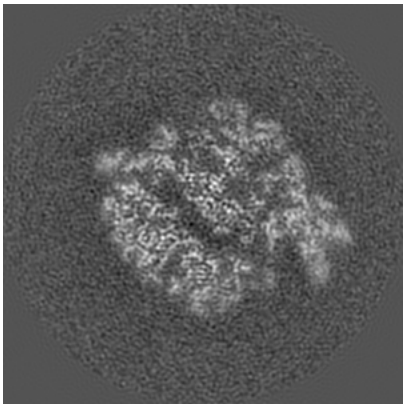


Z

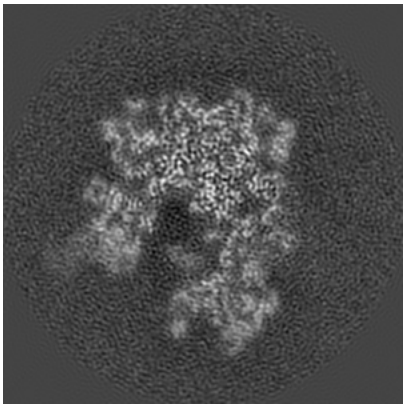
The images above show the map projected in three orthogonal directions.

6.2 Central slices

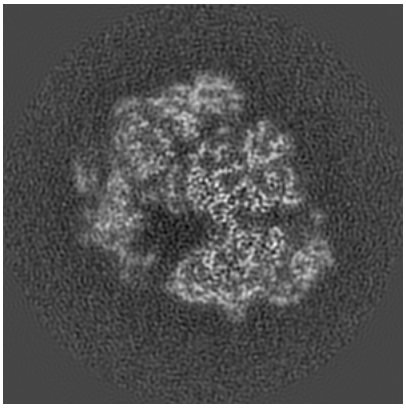
6.2.1 Primary map



X Index: 180



Y Index: 180

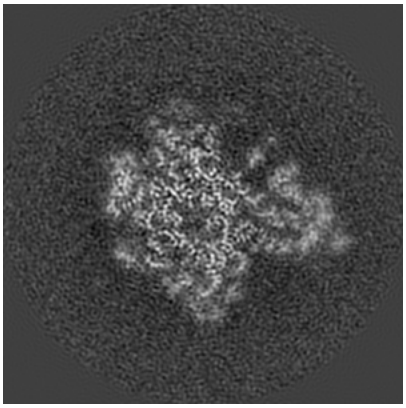


Z Index: 180

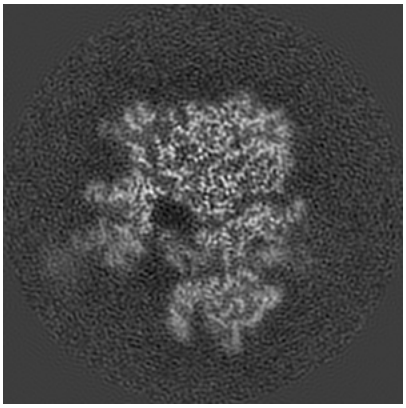
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

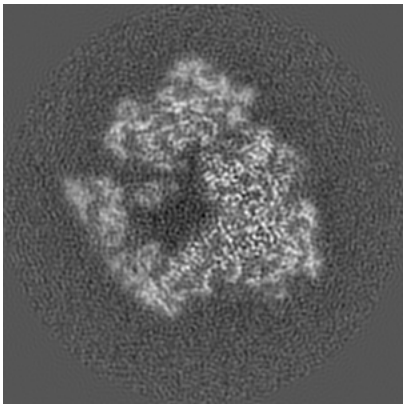
6.3.1 Primary map



X Index: 191



Y Index: 188

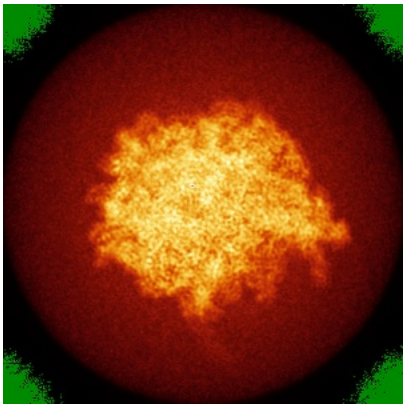


Z Index: 161

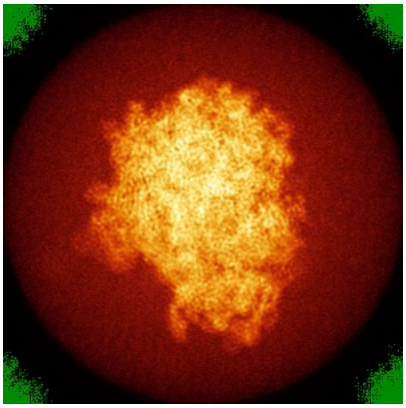
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

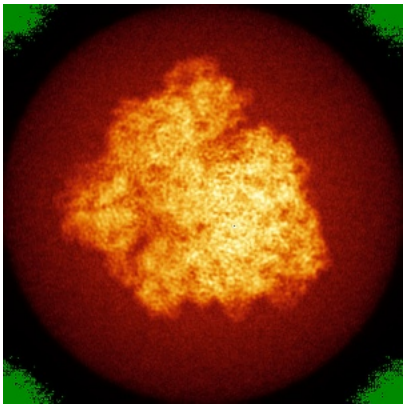
6.4.1 Primary map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

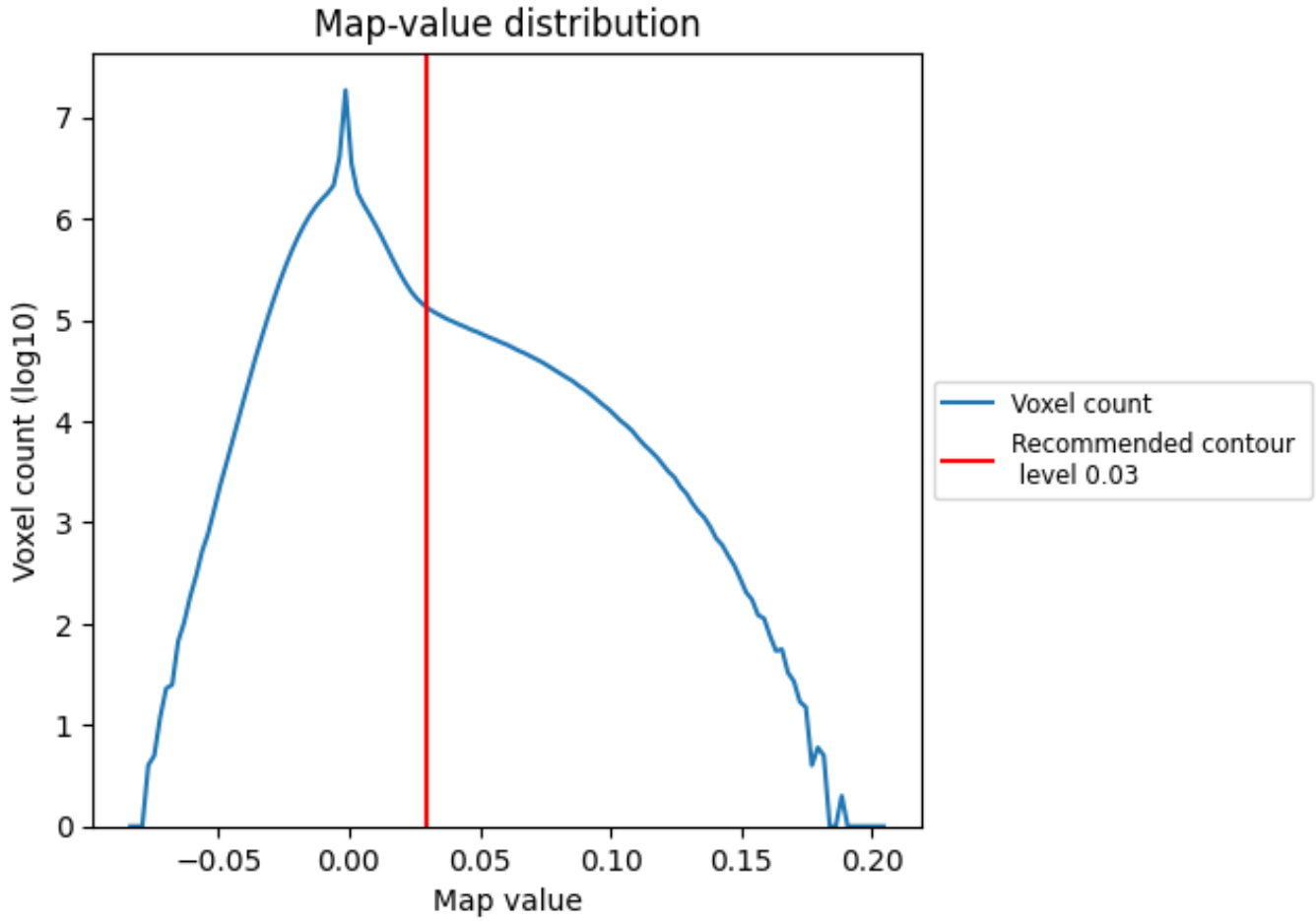
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

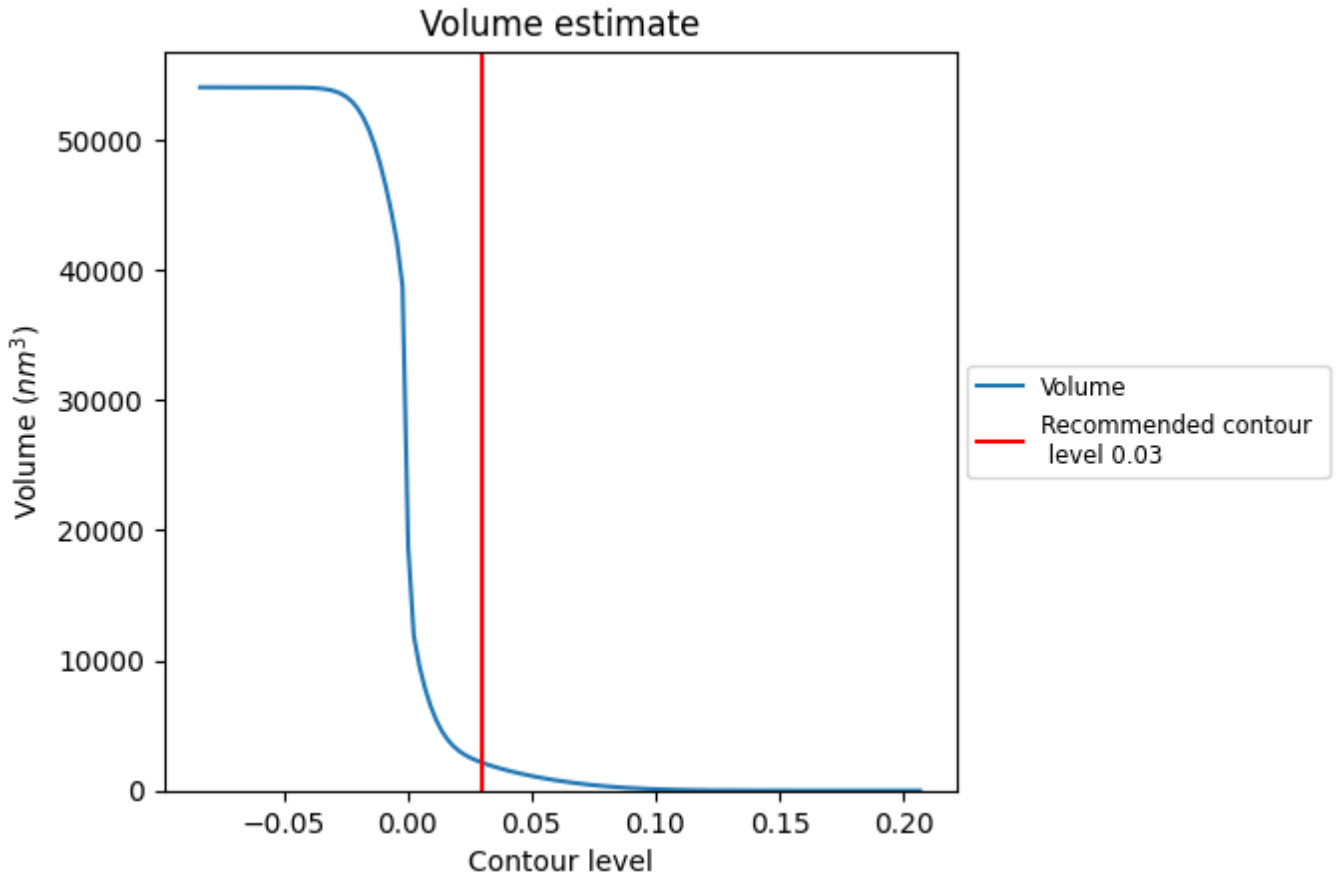
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

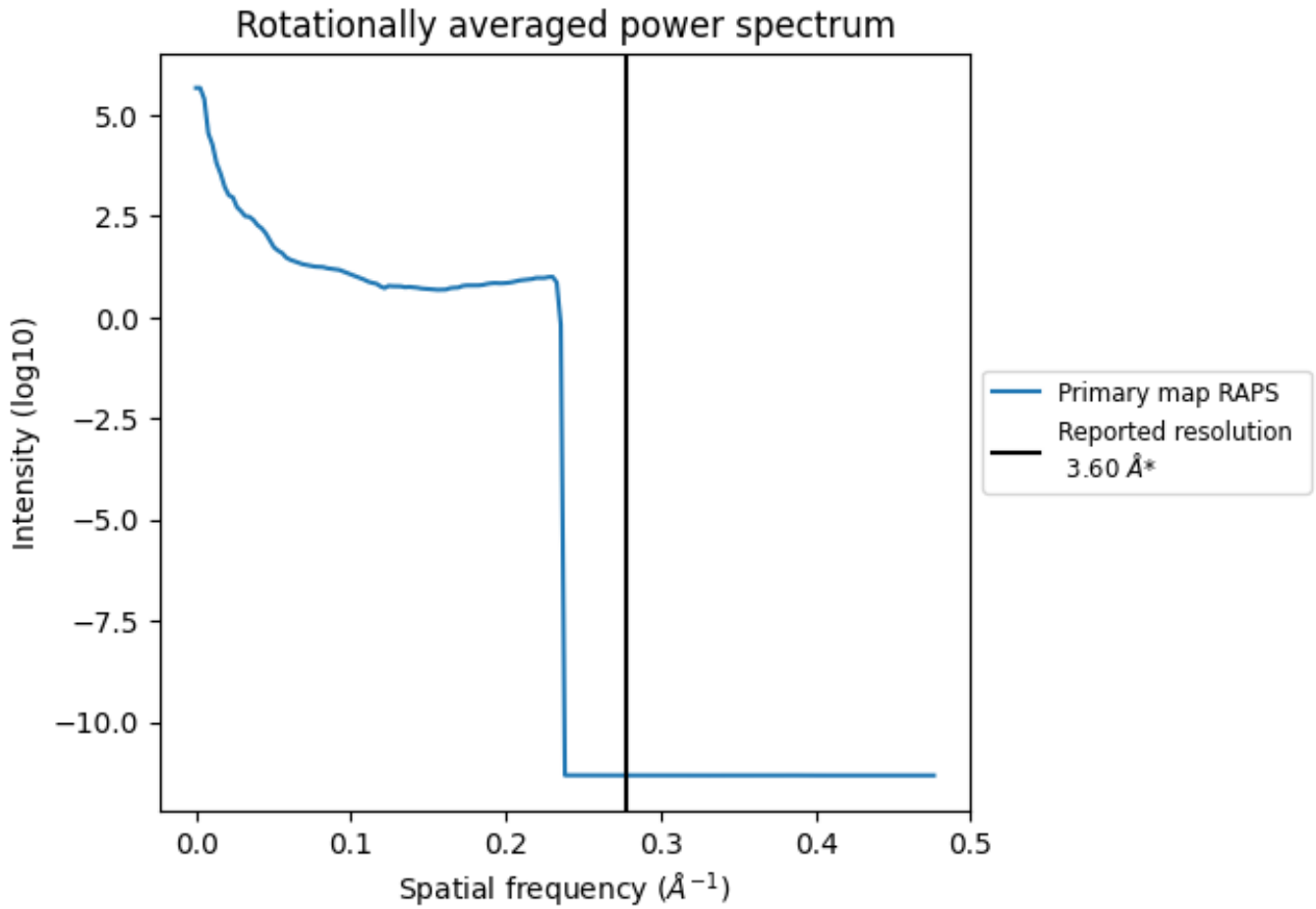
7.2 Volume estimate



The volume at the recommended contour level is 2151 nm^3; this corresponds to an approximate mass of 1943 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.278 $Å^{-1}$

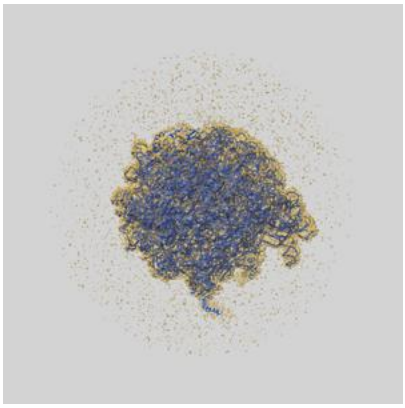
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

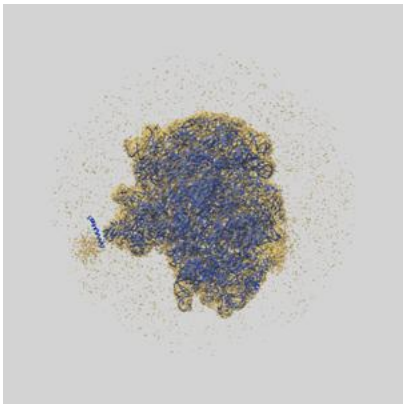
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-6316 and PDB model 3JA1. Per-residue inclusion information can be found in section 3 on page 16.

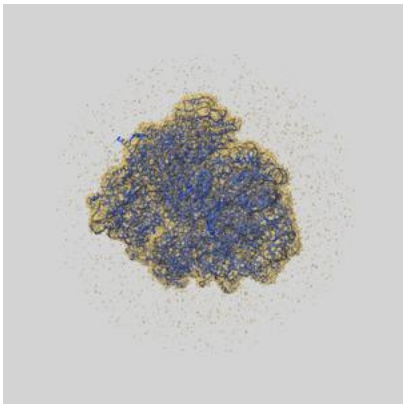
9.1 Map-model overlay



X



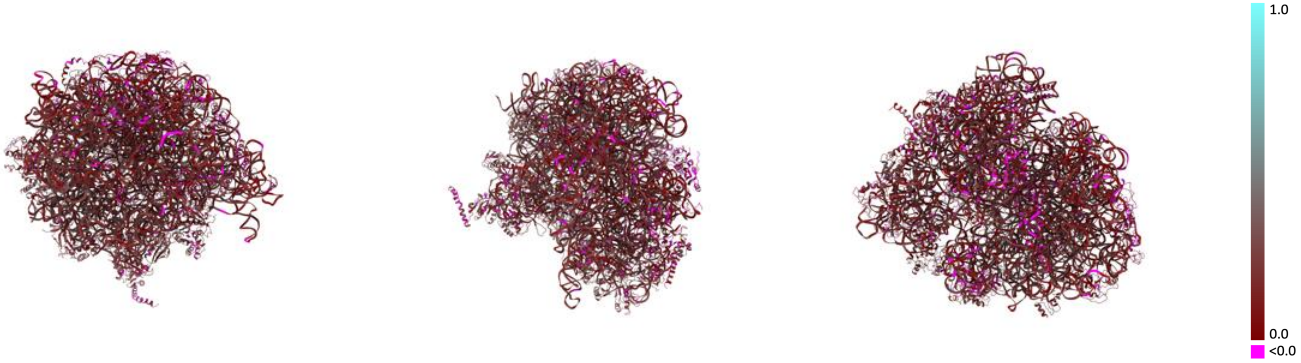
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

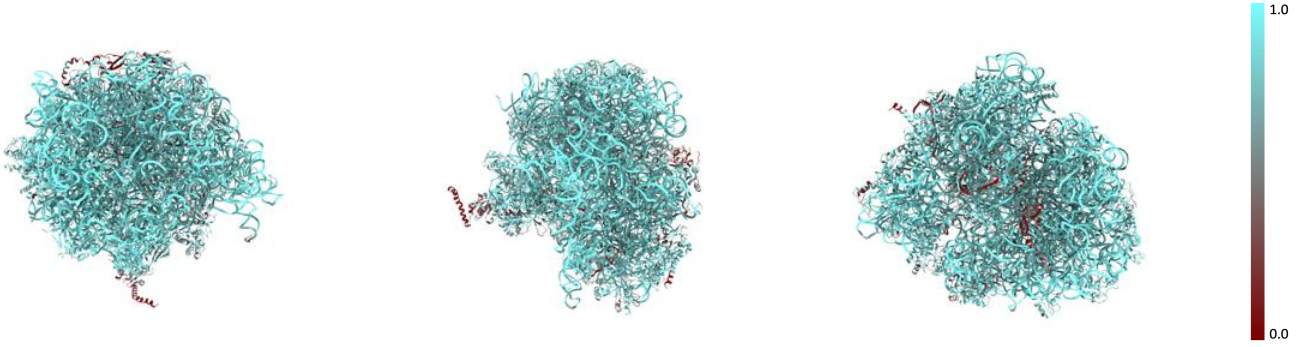
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

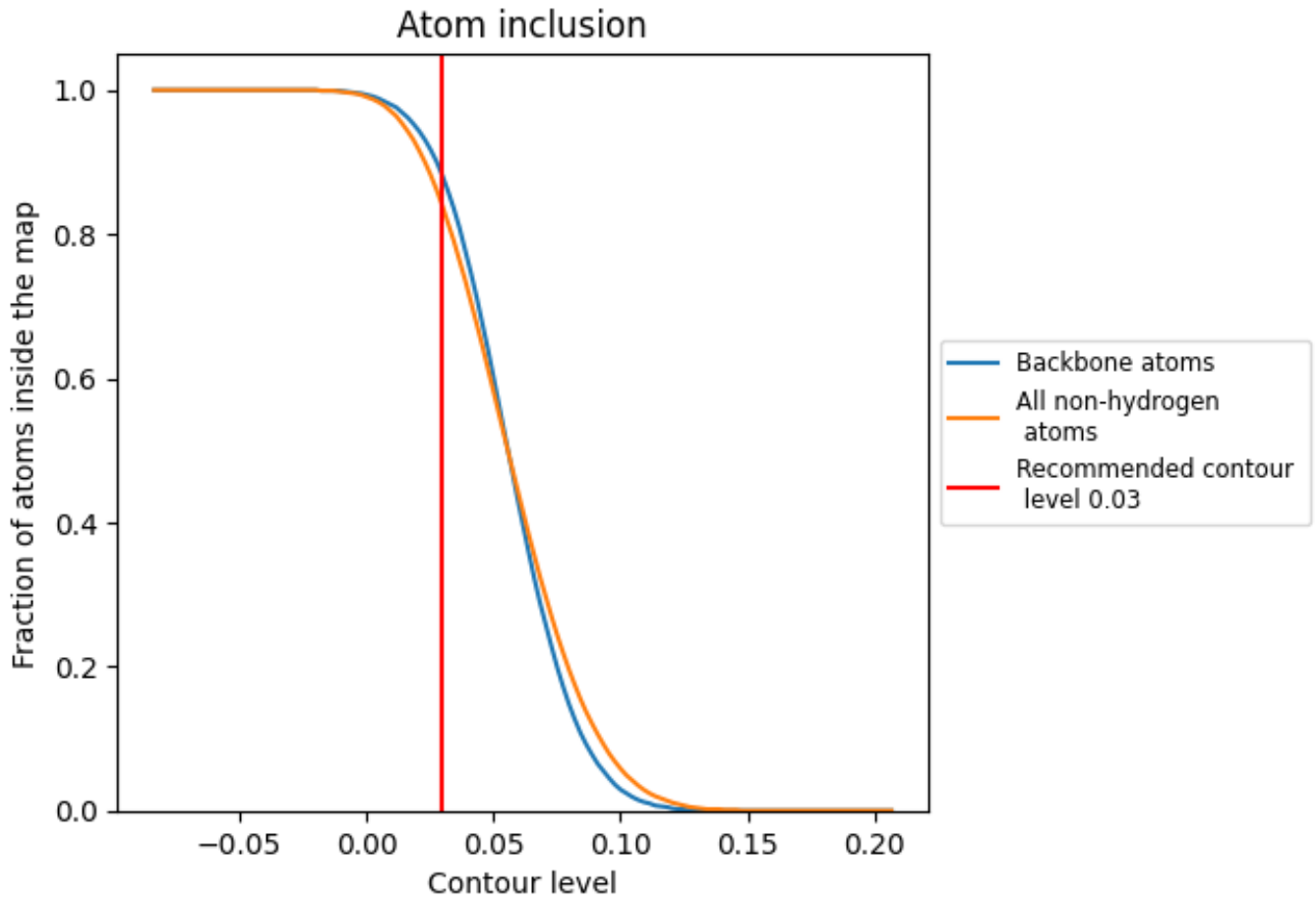
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.03).

9.4 Atom inclusion (i)



At the recommended contour level, 88% of all backbone atoms, 84% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8380	0.1980
L0	0.6980	0.0780
L1	0.7940	0.2550
L2	0.7100	0.2320
L3	0.8130	0.2120
L4	0.8010	0.2200
L5	0.7130	0.1580
L6	0.8310	0.2520
L7	0.8390	0.2520
LA	0.9060	0.2080
LB	0.9630	0.2520
LC	0.5670	0.1420
LD	0.7030	0.1620
LE	0.7480	0.2040
LF	0.7470	0.1930
LG	0.7990	0.2160
LH	0.7970	0.2420
LI	0.2460	0.0930
LJ	0.3820	0.1930
LK	0.6220	0.1940
LL	0.8150	0.2350
LM	0.6190	0.1840
LN	0.8070	0.2280
LO	0.8130	0.2710
LP	0.7750	0.1480
LQ	0.8970	0.2430
LR	0.6620	0.1500
LS	0.8280	0.2360
LT	0.8120	0.2220
LU	0.7360	0.1850
LV	0.6940	0.1090
LW	0.8190	0.1440
LX	0.8420	0.2880
LY	0.7770	0.2540
LZ	0.7590	0.1900

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Chain	Atom inclusion	Q-score
S1	0.4400	0.1220
S2	0.8660	0.1970
S3	0.6700	0.2040
SA	0.9160	0.1960
SB	0.6690	0.1540
SC	0.7290	0.2070
SD	0.7940	0.1780
SE	0.7070	0.1600
SF	0.5420	0.0470
SG	0.6780	0.1610
SH	0.7280	0.1580
SI	0.8110	0.1870
SJ	0.7180	0.1920
SK	0.6980	0.1770
SL	0.7100	0.2180
SM	0.7300	0.2250
SN	0.8280	0.2130
SO	0.7480	0.1270
SP	0.8020	0.1580
SQ	0.7300	0.1010
SR	0.7280	0.1310
SS	0.7450	0.2230
ST	0.7890	0.1410
SU	0.6040	0.1850