Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 02:01 pm GMT

PDB ID	:	4V5M
EMDB ID	:	EMD-1798
Title	:	tRNA tranlocation on the 70S ribosome: the pre-translocational translocation intermediate TI(PRE)
Authors	:	Ratje, A.H.; Loerke, J.; Mikolajka, A.; Bruenner, M.; Hildebrand, P.W.; Starosta, A.L.; Doenhoefer, A.; Connell, S.R.; Fucini, P.; Mielke, T.; Whitford, P.C.; Onuchic, J.N.; Yu, Y.; Sanbonmatsu, K.Y.; Hartmann, R.K.; Penczek, P.A.; Wilson, D.N.; Spahn, C.M.T.
Deposited on	:	2010-10-01
Resolution	:	7.80 Å(reported)
Based on initial models	:	2WRJ, 2WRI

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 ⓘ) were used in the production of this report:

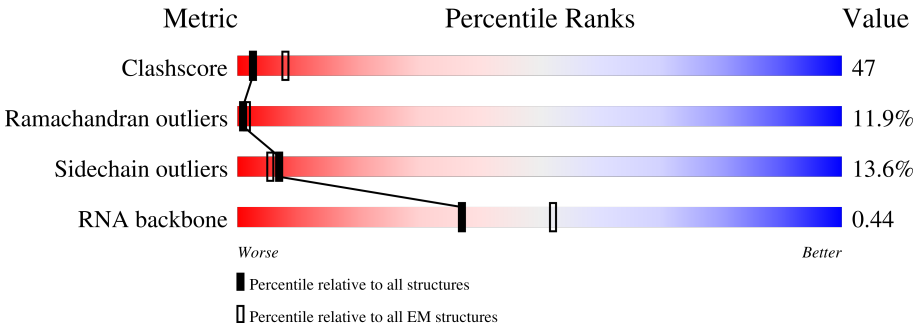
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)

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 7.80 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	AA	1522	24% 57% 17%
2	AB	256	37% 23% 48% 16% 9%
3	AC	239	26% 22% 46% 14% 14%
4	AD	209	26% 29% 49% 17%
5	AE	162	21% 27% 52% 13% 7%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
6	AF	101	25% 24% 52% 16% 8%
7	AG	156	35% 29% 53% 12% 6%
8	AH	138	23% 29% 58% 10%
9	AI	128	30% 23% 53% 19% 5%
10	AJ	105	42% 12% 56% 20% 5% 7%
11	AK	129	32% 37% 43% 12% 8%
12	AL	132	38% 23% 52% 16% 6%
13	AM	126	51% 20% 54% 19% 6%
14	AN	61	21% 23% 49% 23%
15	AO	89	22% 34% 40% 19% 6%
16	AP	88	19% 22% 60% 8% 5% 6%
17	AQ	105	22% 34% 46% 13% 6%
18	AR	88	25% 17% 47% 15% 20%
19	AS	93	31% 12% 45% 23% 16%
20	AT	106	23% 25% 42% 25% 7%
21	AU	27	33% 26% 37% 22% 11%
22	AV	77	10% 14% 64% 22%
23	AX	11	64% 9% 55% 36%
24	AY	691	42% 20% 54% 19%
25	B0	85	32% 33% 51% 12%
26	B1	98	20% 22% 47% 24% 5%
27	B2	72	7% 17% 51% 26%
28	B3	60	15% 22% 62% 13%
29	B4	71	44% 8% 38% 20% 14% 20%
30	B5	60	22% 25% 52% 12% 10%

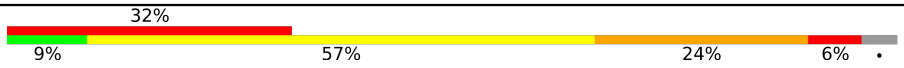
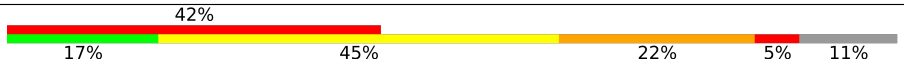
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
31	B6	54	22% 43% 33% 15% 7%
32	B7	49	12% 20% 51% 24%
33	B8	65	26% 18% 52% 18% 8%
34	B9	37	73% 32% 41% 19% 8%
35	BA	2915	21% 57% 21%
36	BB	122	15% 62% 20%
37	BC	229	72% 35% 53% 9%
38	BD	276	34% 25% 51% 20%
39	BE	206	33% 22% 52% 21%
40	BF	210	21% 17% 59% 20%
41	BG	182	32% 14% 59% 20% 7%
42	BH	180	22% 19% 44% 18% 10% 8%
43	BK	147	56% 24% 52% 16% 5%
44	BL	121	53% 38% 17% 45%
45	BN	140	18% 19% 51% 26%
46	BO	122	52% 32% 53% 11%
47	BP	150	26% 15% 49% 26% 7%
48	BQ	141	69% 22% 62% 10% 6%
49	BR	118	19% 19% 61% 16%
50	BS	112	18% 12% 44% 22% 9% 12%
51	BT	146	39% 16% 44% 23% 11% 6%
52	BU	118	13% 24% 57% 15%
53	BV	101	29% 19% 52% 26%
54	BW	113	20% 27% 49% 20%
55	BX	96	20% 27% 54% 11%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
56	BY	110	
57	BZ	206	

2 Entry composition (i)

There are 59 unique types of molecules in this entry. The entry contains 152777 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 RNA chain called 16S RRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
1	AA	1504	32329	14390	5992	10444	1503	0	0

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	AB	234	1900	1213	341	341	5	0	0

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AC	206	1612	1016	314	281	1	0	0

- Molecule 4 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AD	208	1703	1066	339	291	7	0	0

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AE	150	1146	724	217	201	4	0	0

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AF	101	843	531	155	154	3	0	0

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0
			1257	781	252	218	6		

- Molecule 8 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0
			1116	705	215	193	3		

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	AI	127	Total	C	N	O	0	0
			1010	639	197	174		

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0
			794	499	156	138	1		

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0
			885	549	168	165	3		

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	124	Total	C	N	O	S	0	0
			970	611	195	163	1		

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AM	124	Total	C	N	O	S	0	0
			987	611	205	169	2		

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14 TYPE Z.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AN	60	Total 492	C 312	N 104	O 72	S 4	0	0

- Molecule 15 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AO	88	Total 734	C 459	N 147	O 126	S 2	0	0

- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AP	83	Total 700	C 443	N 139	O 117	S 1	0	0

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AQ	99	Total 823	C 528	N 151	O 142	S 2	0	0

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	AR	70	Total 574	C 367	N 112	O 95	0	0

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	AS	78	Total 629	C 403	N 114	O 110	S 2	0	0

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AT	99	Total 763	C 470	N 162	O 129	S 2	0	0

- Molecule 21 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				AltConf	Trace
21	AU	24	Total 208	C 128	N 50	O 30	0	0

- Molecule 22 is a RNA chain called TRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AV	77	Total 1640	C 732	N 297	O 535	P 76	0	0

- Molecule 23 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AX	11	Total 230	C 105	N 41	O 74	P 10	0	0

- Molecule 24 is a protein called ELONGATION FACTOR G.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AY	666	Total 5214	C 3316	N 892	O 988	S 18	0	0

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	B0	84	Total 662	C 410	N 140	O 111	S 1	0	0

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	B1	93	Total 731	C 460	N 145	O 125	S 1	0	0

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	B2	71	Total 598	C 370	N 121	O 106	S 1	0	0

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	B3	59	Total	C	N	O	S	0	0
			467	298	90	78	1		

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	B4	57	Total	C	N	O	S	0	0
			450	285	77	83	5		

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	B5	59	Total	C	N	O	S	0	0
			459	288	90	76	5		

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	B6	50	Total	C	N	O	S	0	0
			433	270	88	71	4		

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	B7	48	Total	C	N	O	S	0	0
			418	257	104	55	2		

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	B8	63	Total	C	N	O	S	0	0
			507	326	101	78	2		

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	B9	37	Total	C	N	O	S	0	0
			307	188	68	47	4		

- Molecule 35 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	BA	2901	Total	C	N	O	P	0	0
			62474	27806	11681	20087	2900		

- Molecule 36 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	BB	119	Total	C	N	O	P	0	0
			2551	1136	471	826	118		

- Molecule 37 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	BC	228	Total	C	N	O	S	0	0
			1742	1101	319	319	3		

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	BD	275	Total	C	N	O	S	0	0
			2145	1353	428	361	3		

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	BE	204	Total	C	N	O	S	0	0
			1563	988	299	270	6		

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	BF	207	Total	C	N	O	S	0	0
			1623	1035	303	282	3		

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	BG	181	Total	C	N	O	S	0	0
			1474	942	268	260	4		

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	BH	166	Total	C	N	O	S	0	0
			1268	803	237	227	1		

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	BK	139	Total	C	N	O	S	0	0
			1025	653	181	186	5		

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L7/L12.

Mol	Chain	Residues	Atoms				AltConf	Trace
44	BL	67	Total	C	N	O	0	0
			477	301	81	95		

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	BN	138	Total	C	N	O	S	0	0
			1104	712	206	182	4		

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	BO	122	Total	C	N	O	S	0	0
			933	588	171	170	4		

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	BP	146	Total	C	N	O	S	0	0
			1114	692	227	193	2		

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	BQ	141	Total	C	N	O	S	0	0
			1122	715	212	188	7		

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms				AltConf	Trace
49	BR	117	Total 960	C 599	N 202	O 159	0	0

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				AltConf	Trace
50	BS	98	Total 770	C 486	N 154	O 130	0	0

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	BT	137	Total 1141	C 710	N 234	O 196	S 1	0	0

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	BU	117	Total 958	C 604	N 202	O 151	S 1	0	0

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	BV	101	Total 779	C 501	N 142	O 135	S 1	0	0

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	BW	113	Total 896	C 563	N 176	O 155	S 2	0	0

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms				AltConf	Trace
55	BX	92	Total 725	C 471	N 131	O 123	0	0

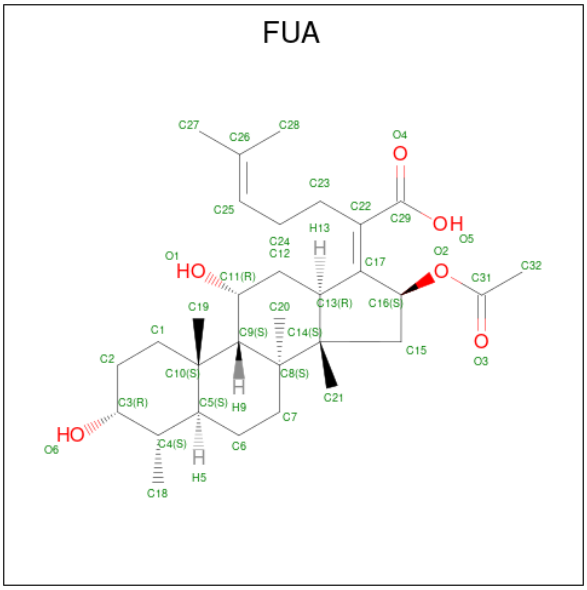
- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	BY	106	Total	C	N	O	S	0	0
			810	520	154	131	5		

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L25.

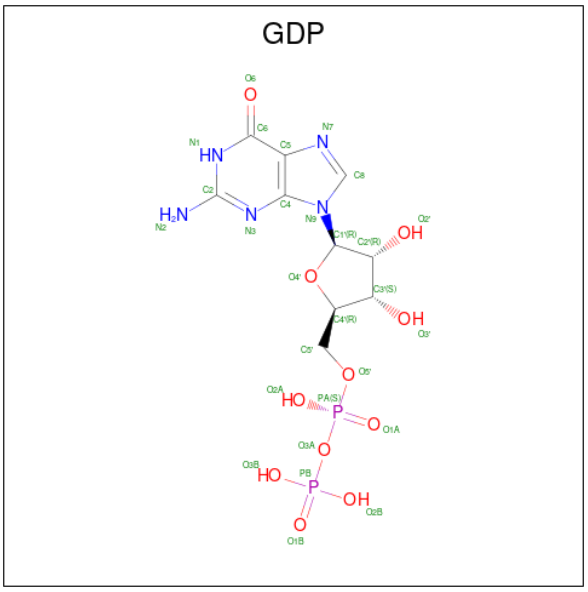
Mol	Chain	Residues	Atoms					AltConf	Trace
57	BZ	184	Total	C	N	O	S	0	0
			1467	936	261	268	2		

- Molecule 58 is FUSIDIC ACID (three-letter code: FUA) (formula: $C_{31}H_{48}O_6$).



Mol	Chain	Residues	Atoms			AltConf
58	AY	1	Total	C	O	0
			37	31	6	

- Molecule 59 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).



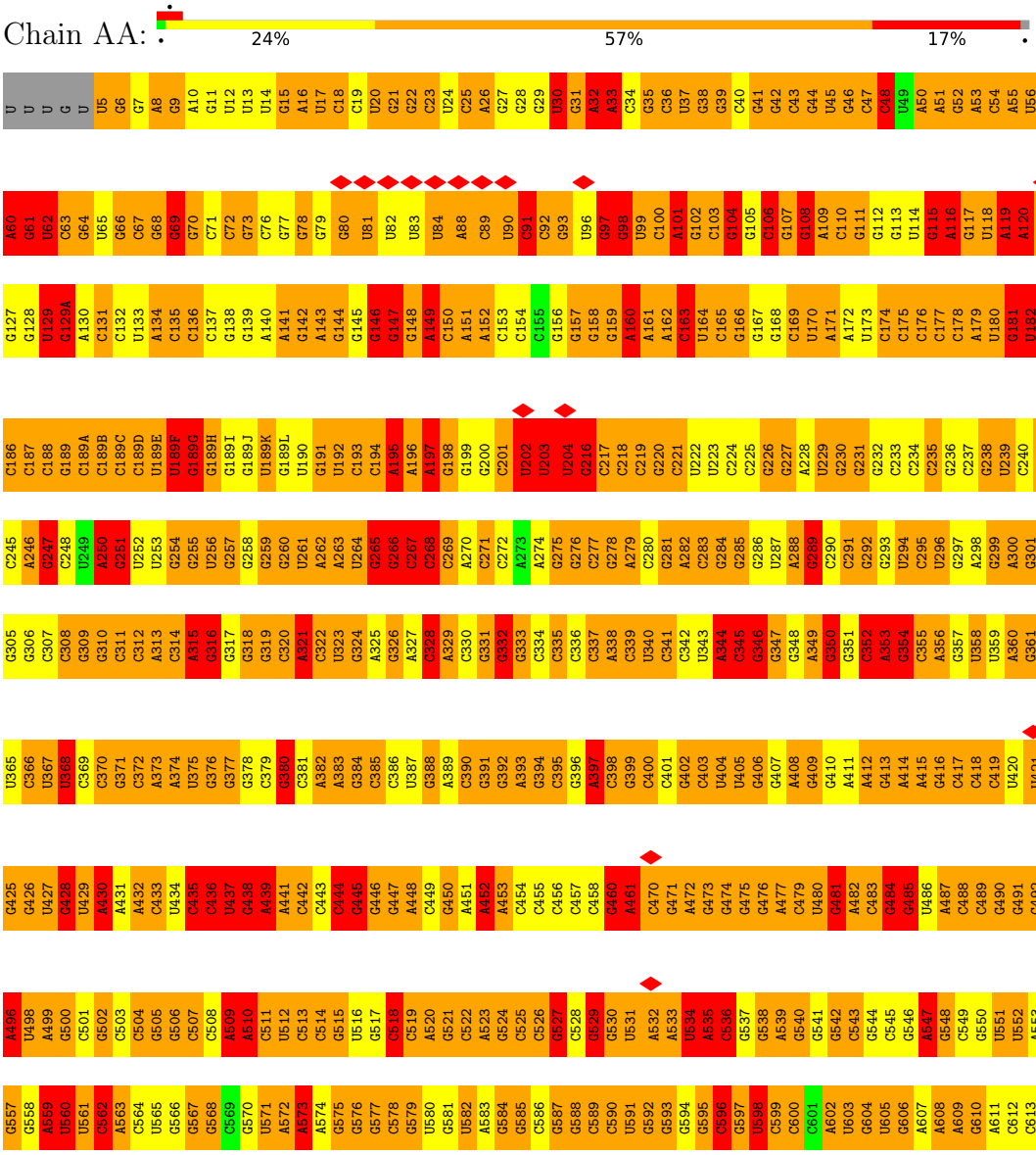
Mol	Chain	Residues	Atoms					AltConf
59	AY	1	Total	C	N	O	P	0
			28	10	5	11	2	

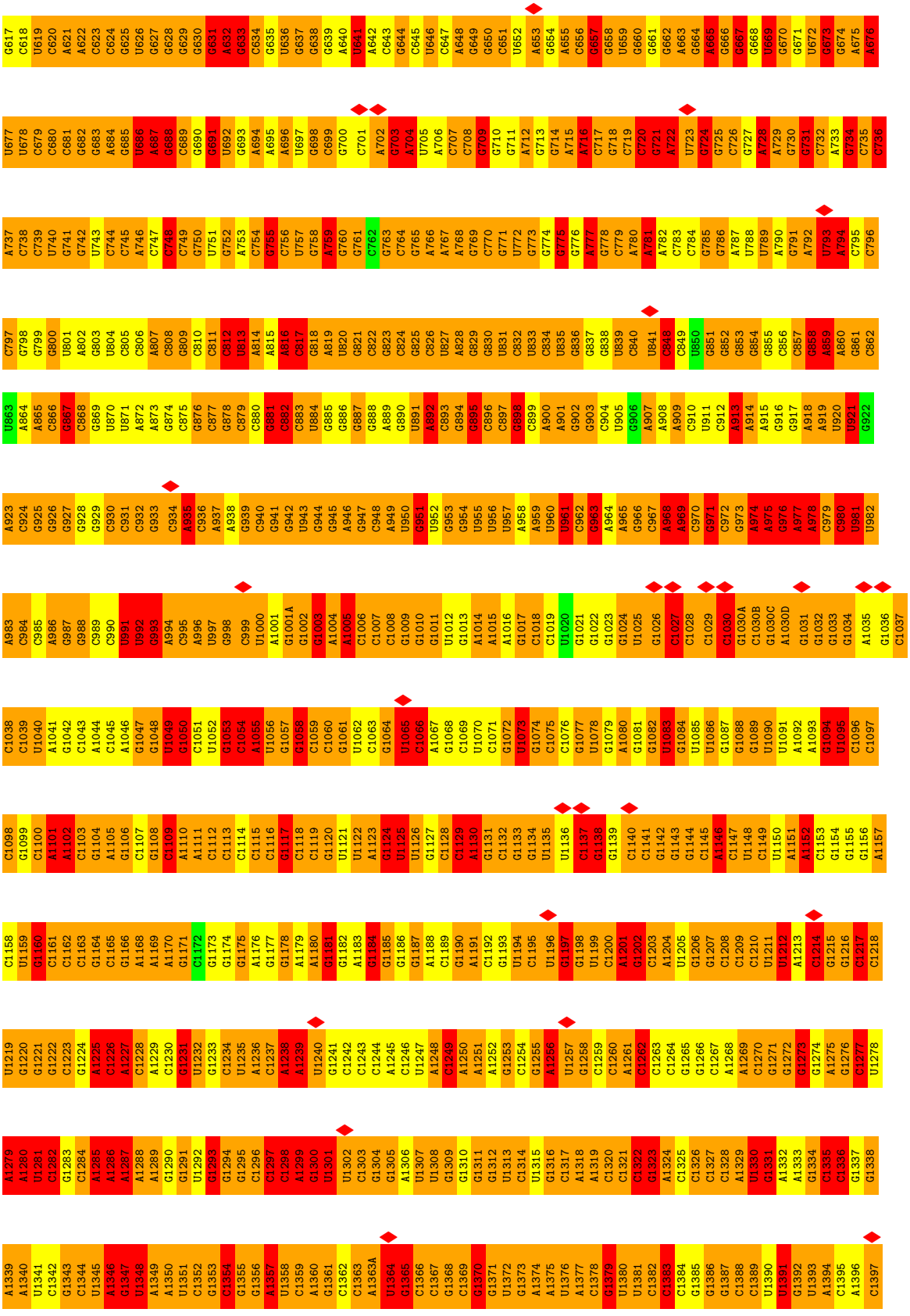
3 Residue-property plots (i)

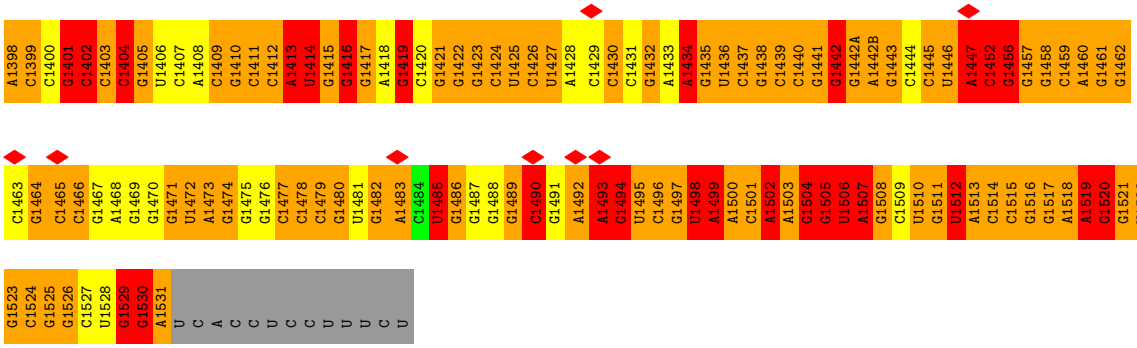
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: 16S RRNA

Chain AA:

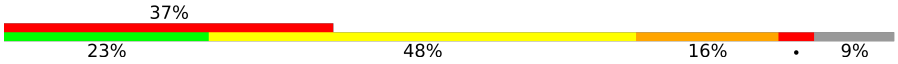


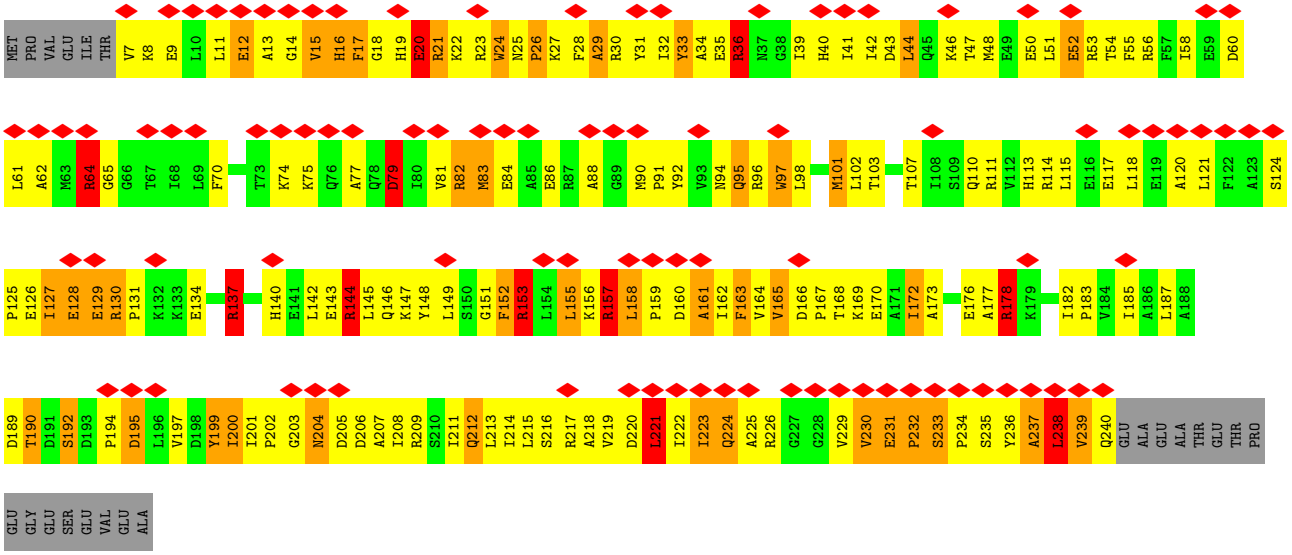




• Molecule 2: 30S RIBOSOMAL PROTEIN S2

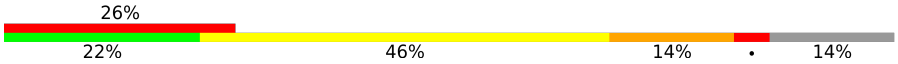
Chain AB:

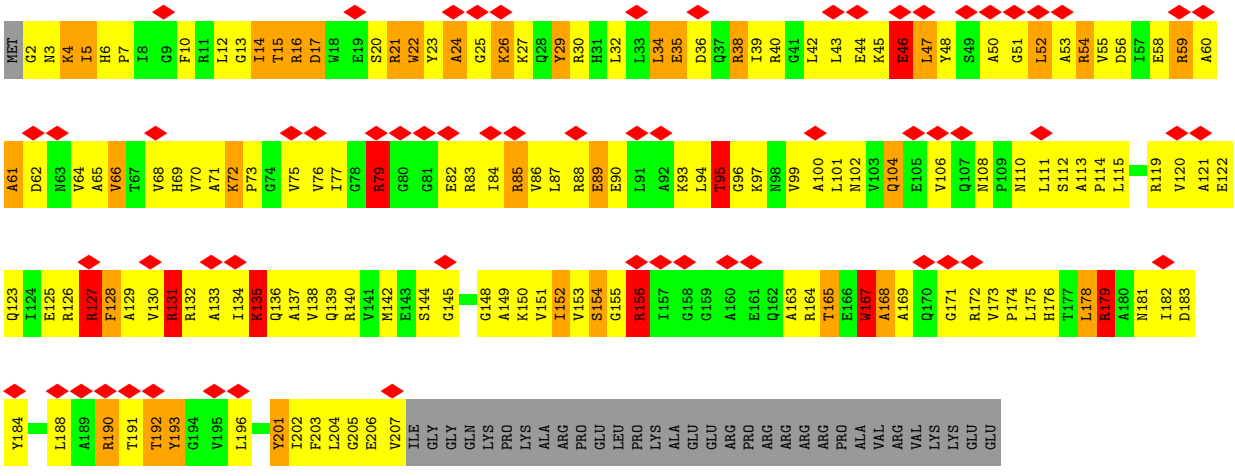




• Molecule 3: 30S RIBOSOMAL PROTEIN S3

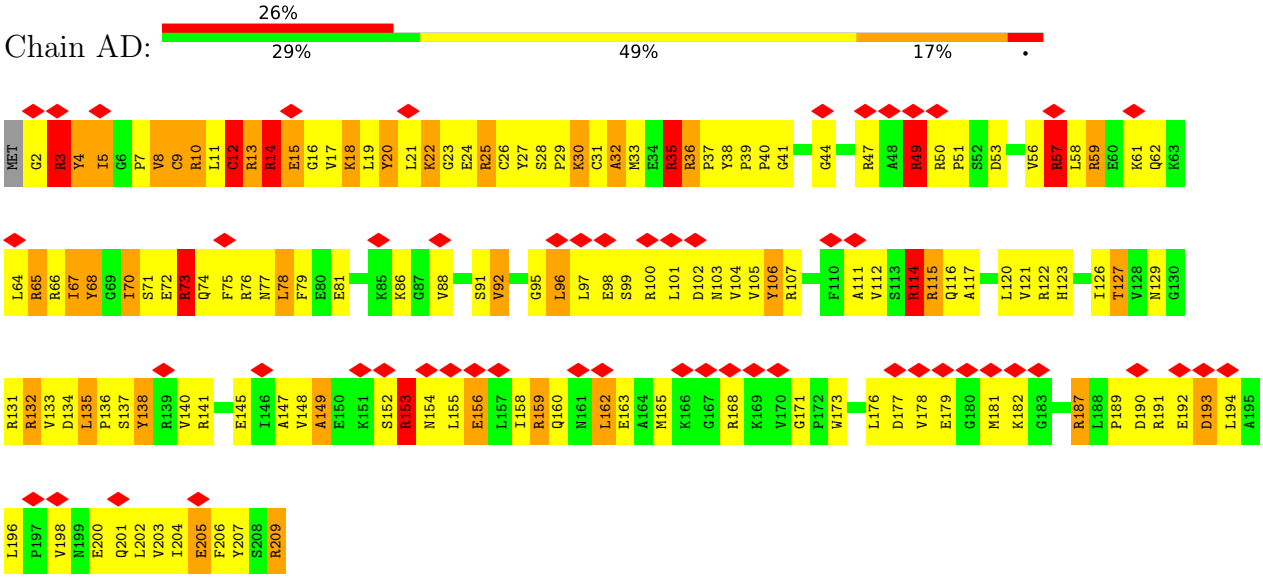
Chain AC:





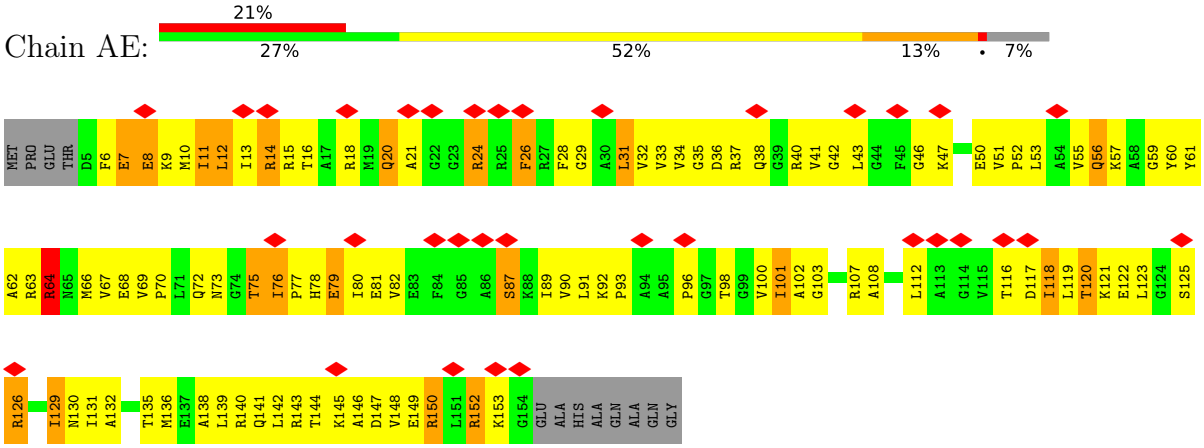
• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD:



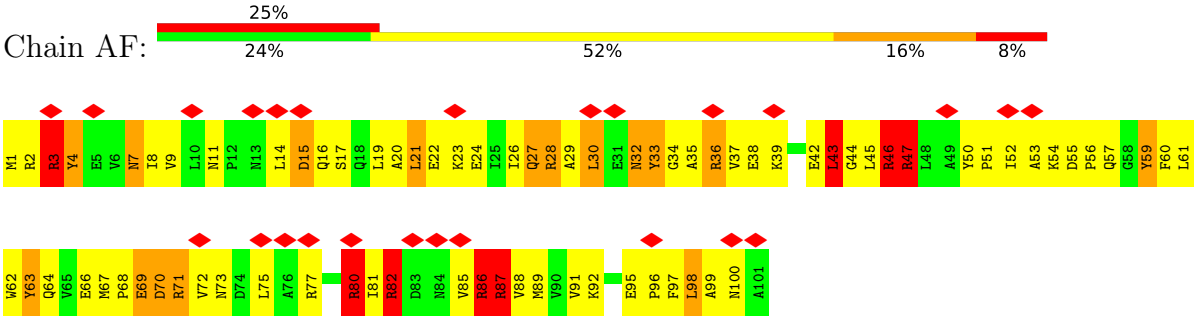
• Molecule 5: 30S RIBOSOMAL PROTEIN S5

Chain AE:



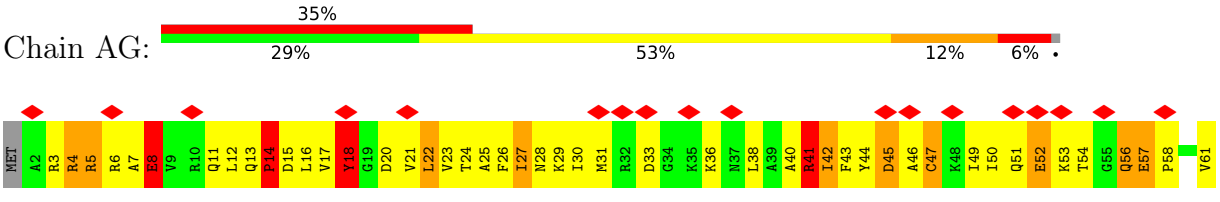
• Molecule 6: 30S RIBOSOMAL PROTEIN S6

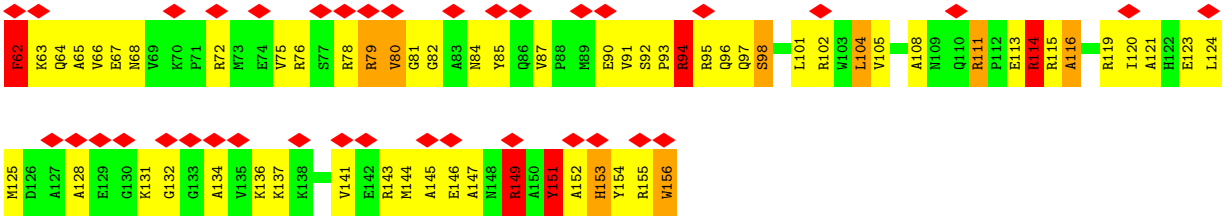
Chain AF:



• Molecule 7: 30S RIBOSOMAL PROTEIN S7

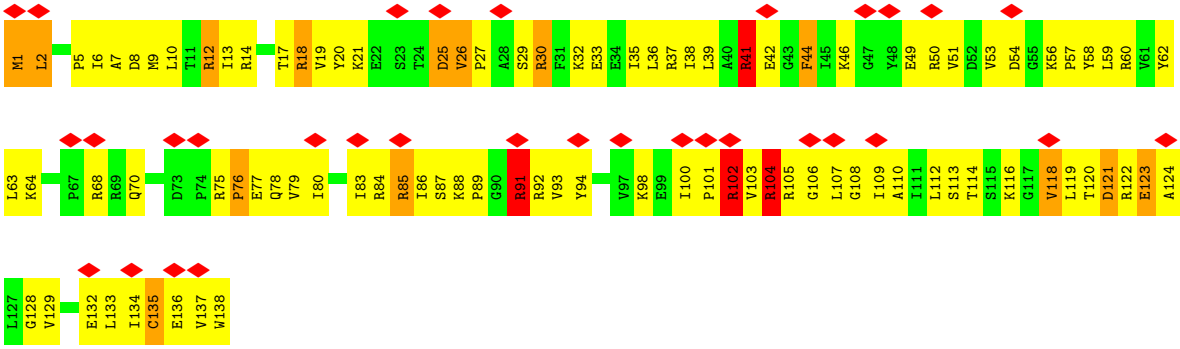
Chain AG:





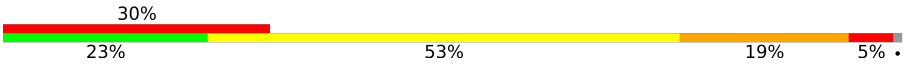
• Molecule 8: 30S RIBOSOMAL PROTEIN S8

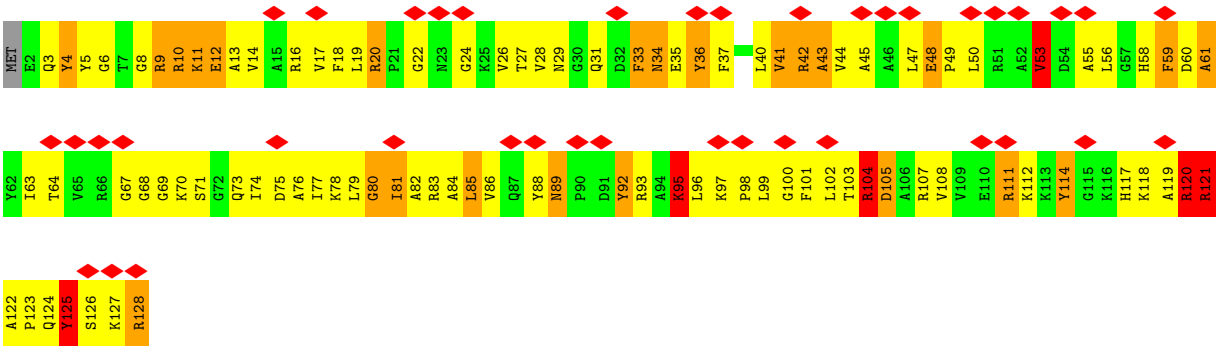
Chain AH:



• Molecule 9: 30S RIBOSOMAL PROTEIN S9

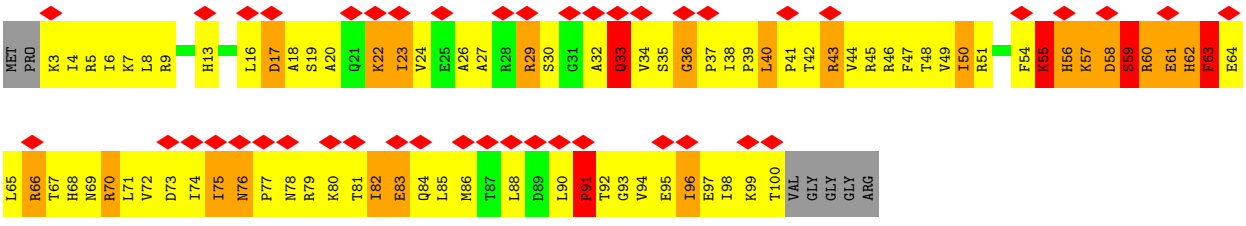
Chain AI:





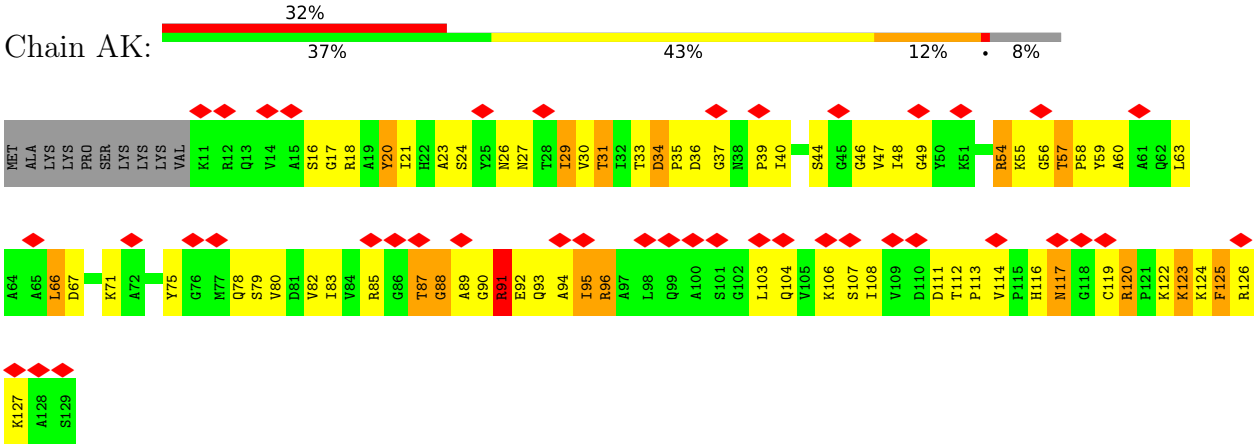
• Molecule 10: 30S RIBOSOMAL PROTEIN S10

Chain AJ:



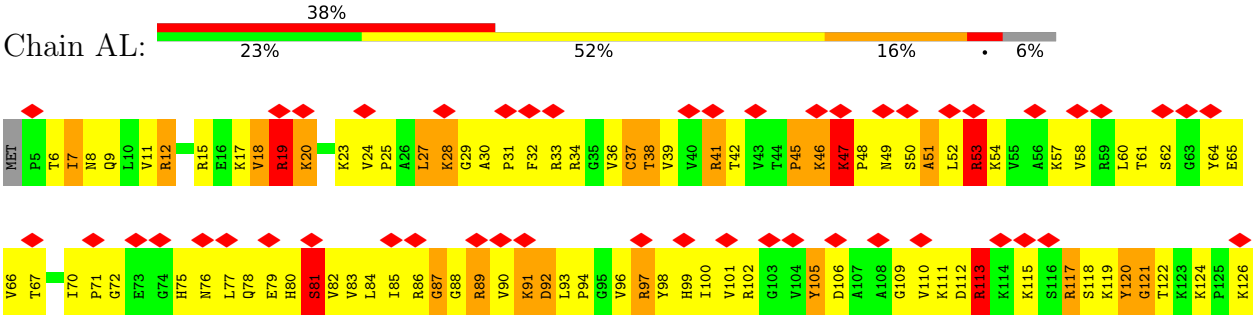
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain AK:



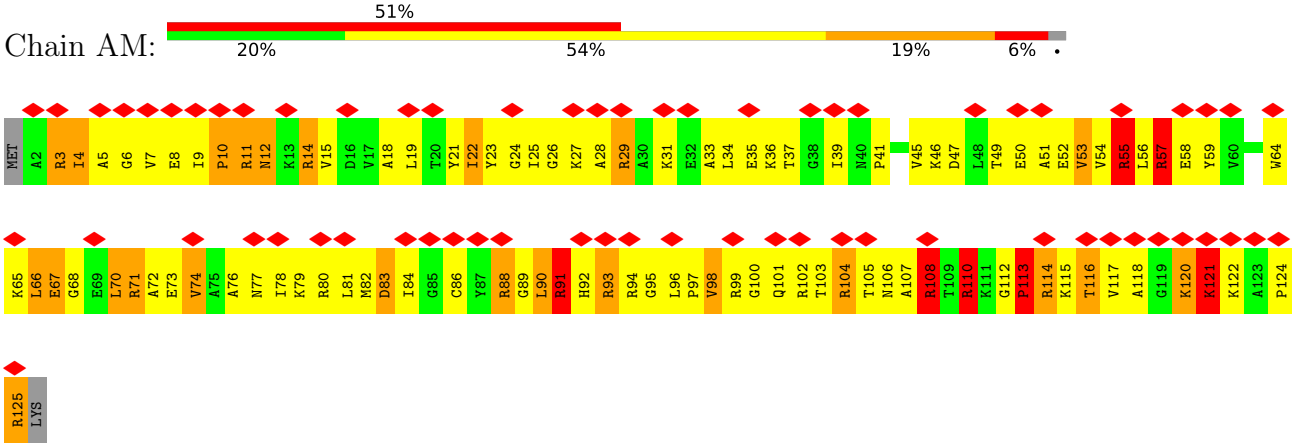
• Molecule 12: 30S RIBOSOMAL PROTEIN S12

Chain AL:



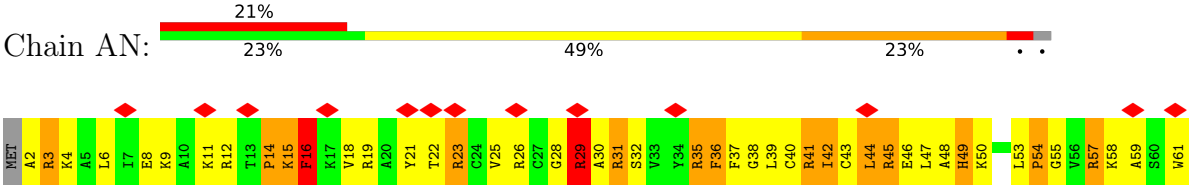
• Molecule 13: 30S RIBOSOMAL PROTEIN S13

Chain AM:



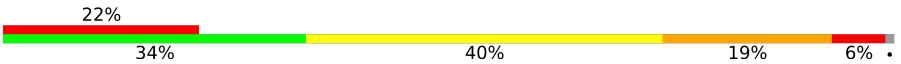
• Molecule 14: 30S RIBOSOMAL PROTEIN S14 TYPE Z

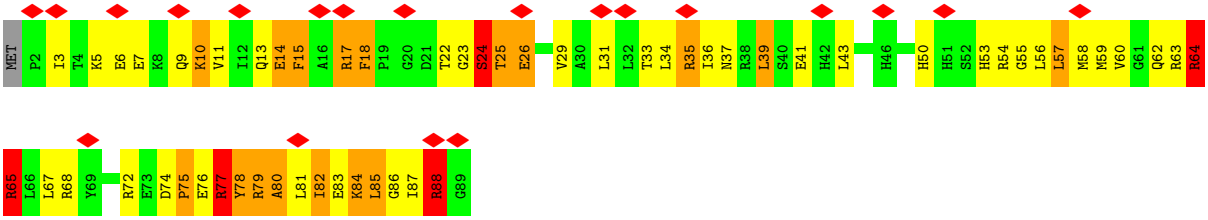
Chain AN:



• Molecule 15: 30S RIBOSOMAL PROTEIN S15

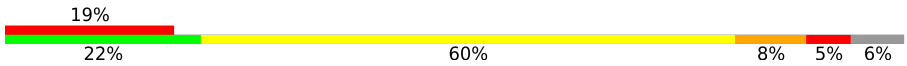
Chain AO:

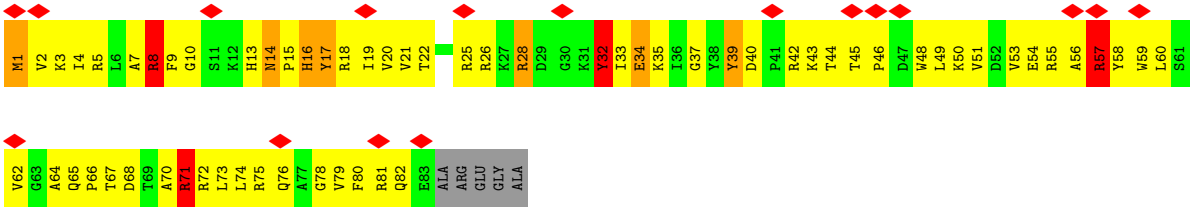




• Molecule 16: 30S RIBOSOMAL PROTEIN S16

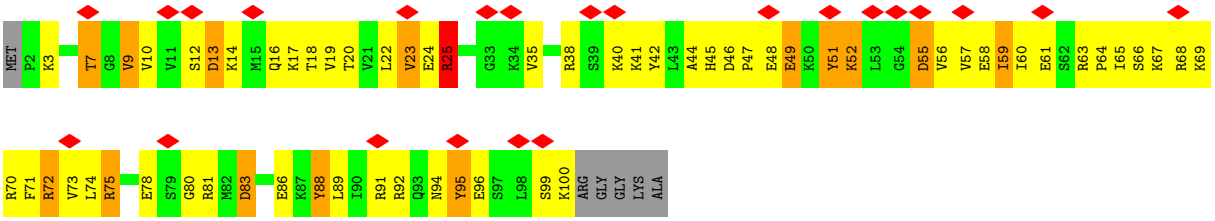
Chain AP:





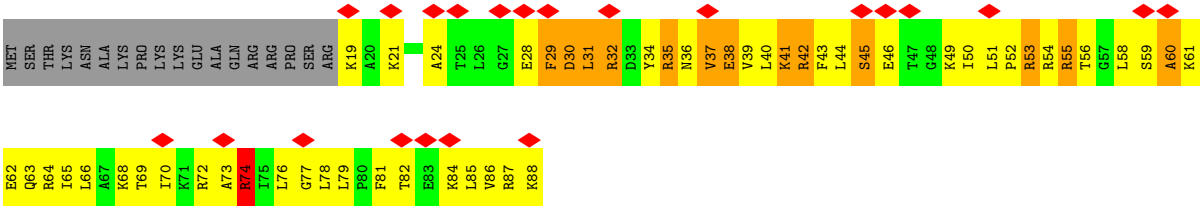
• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain AQ:



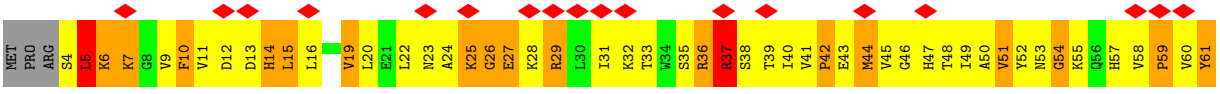
• Molecule 18: 30S RIBOSOMAL PROTEIN S18

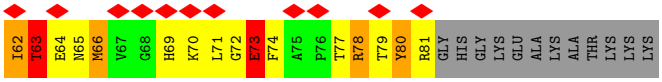
Chain AR:



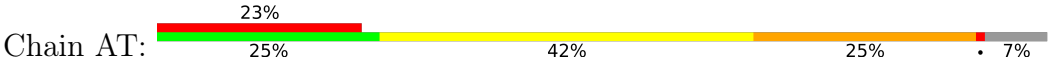
• Molecule 19: 30S RIBOSOMAL PROTEIN S19

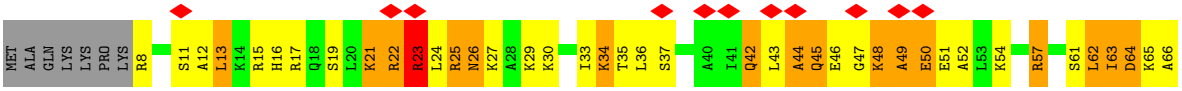
Chain AS:

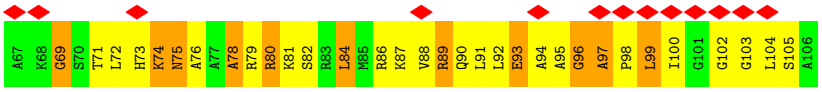




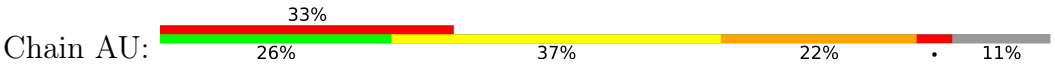
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



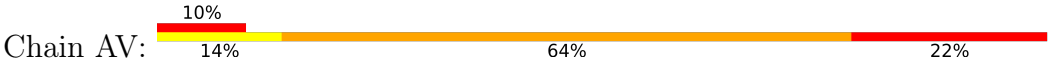


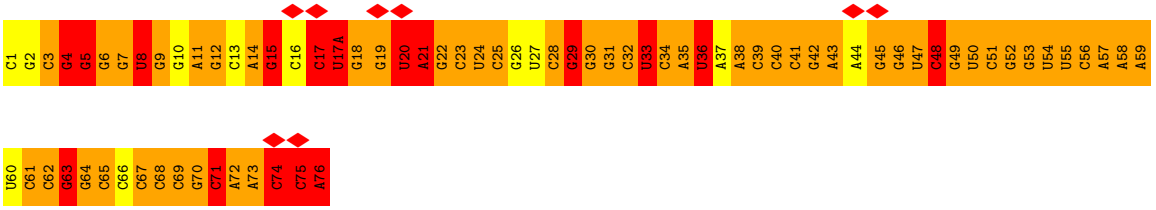


• Molecule 21: 30S RIBOSOMAL PROTEIN THX

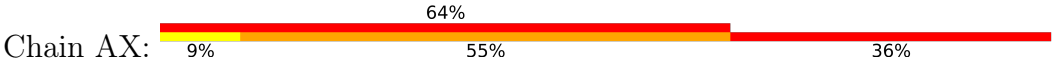


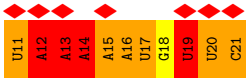
• Molecule 22: TRNA



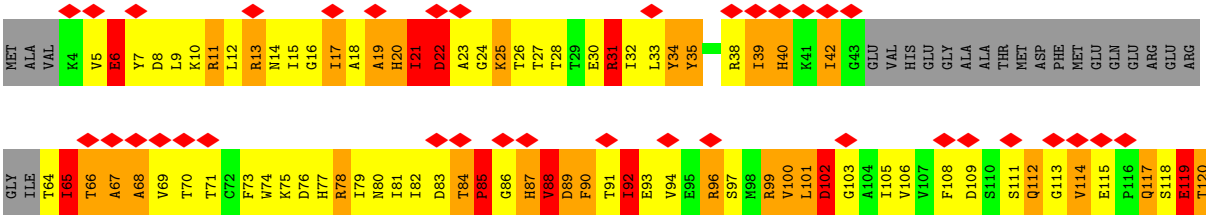


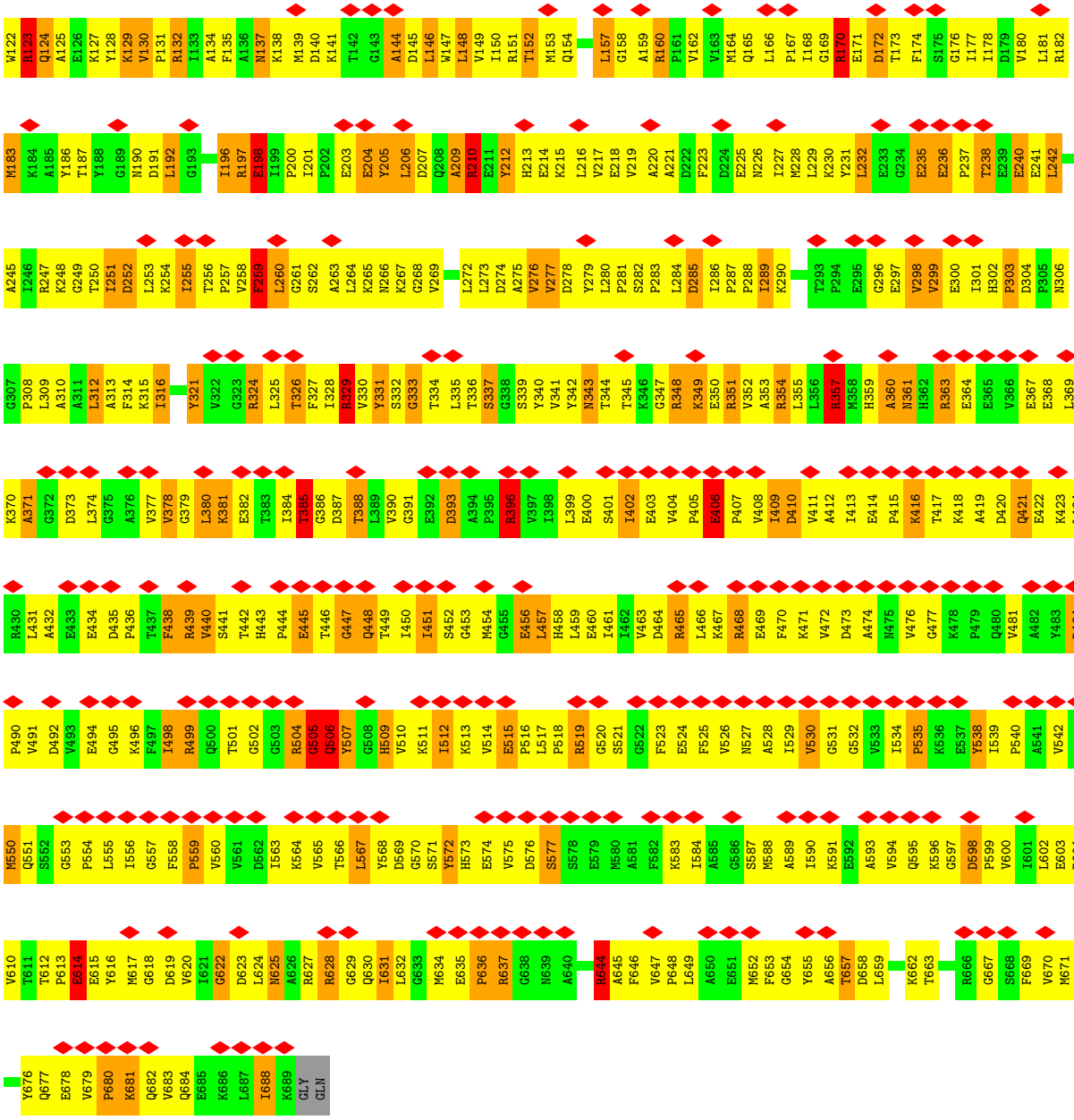
• Molecule 23: MRNA





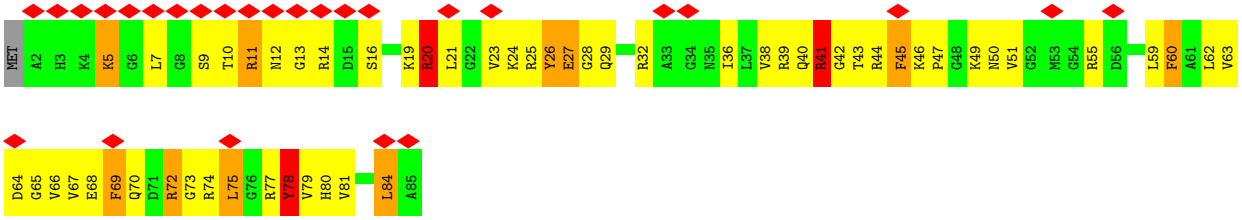
• Molecule 24: ELONGATION FACTOR G





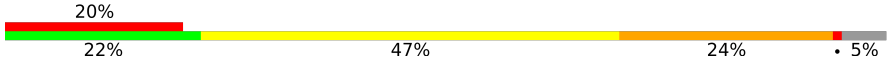
• Molecule 25: 50S RIBOSOMAL PROTEIN L27

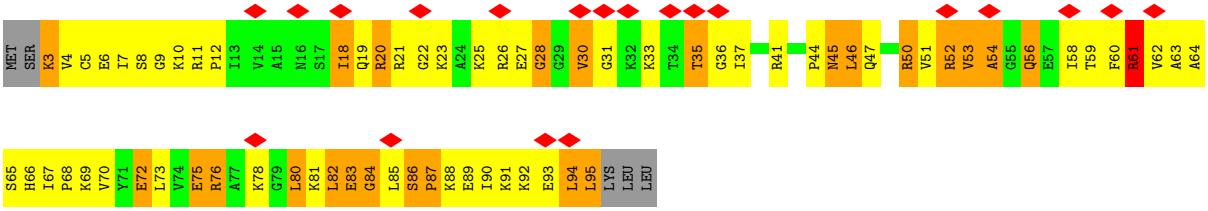
Chain B0:



• Molecule 26: 50S RIBOSOMAL PROTEIN L28

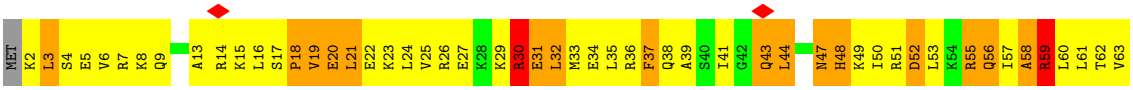
Chain B1:

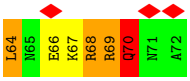




• Molecule 27: 50S RIBOSOMAL PROTEIN L29

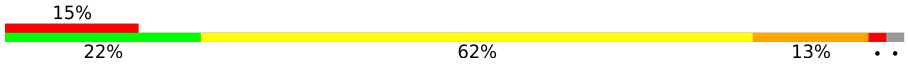
Chain B2:

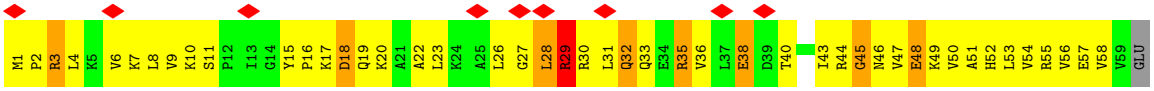




• Molecule 28: 50S RIBOSOMAL PROTEIN L30

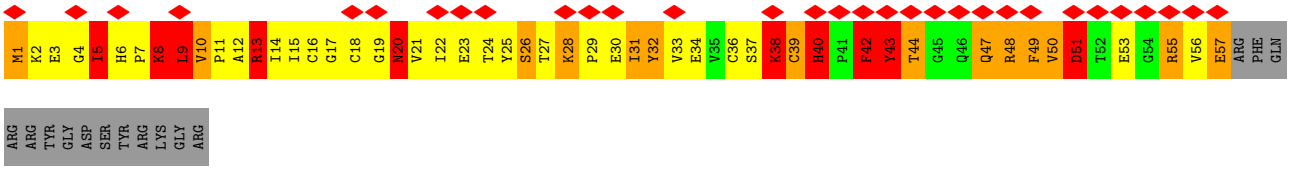
Chain B3:





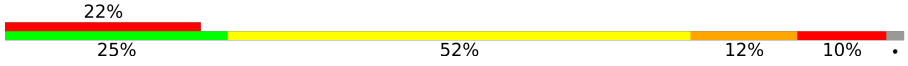
• Molecule 29: 50S RIBOSOMAL PROTEIN L31

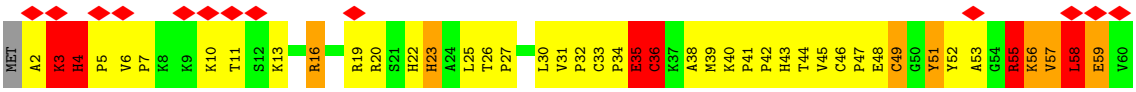
Chain B4:



• Molecule 30: 50S RIBOSOMAL PROTEIN L32

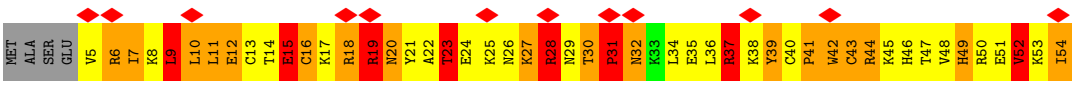
Chain B5:





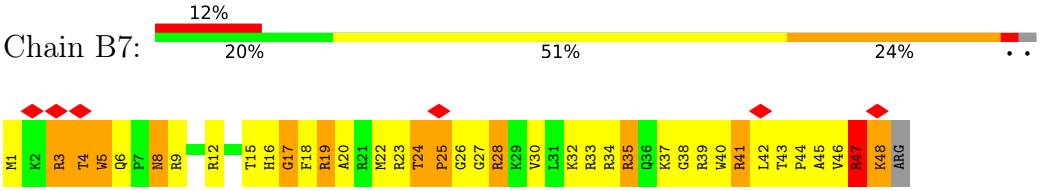
• Molecule 31: 50S RIBOSOMAL PROTEIN L33

Chain B6:



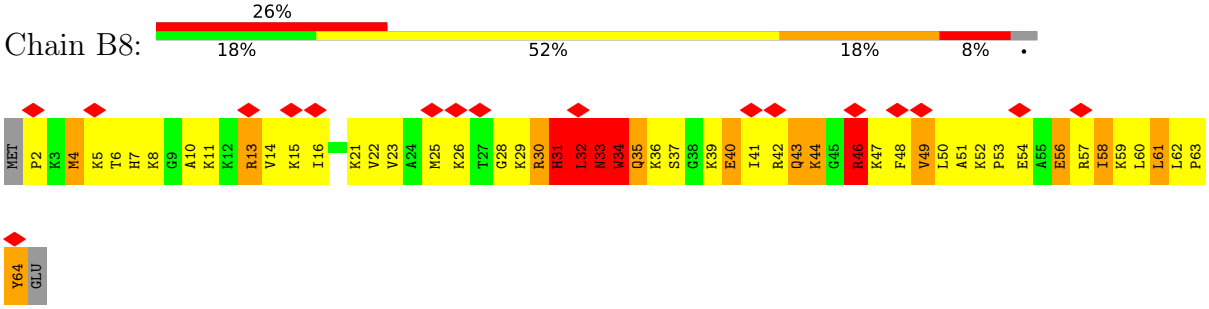
• Molecule 32: 50S RIBOSOMAL PROTEIN L34

Chain B7:



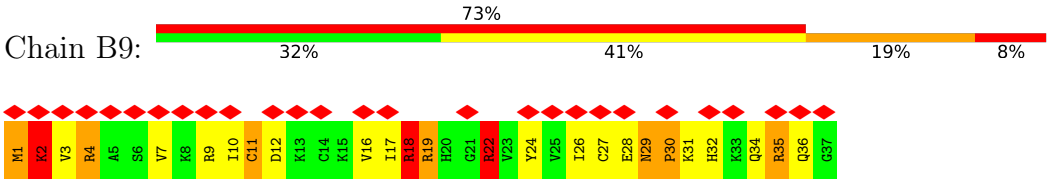
• Molecule 33: 50S RIBOSOMAL PROTEIN L35

Chain B8:



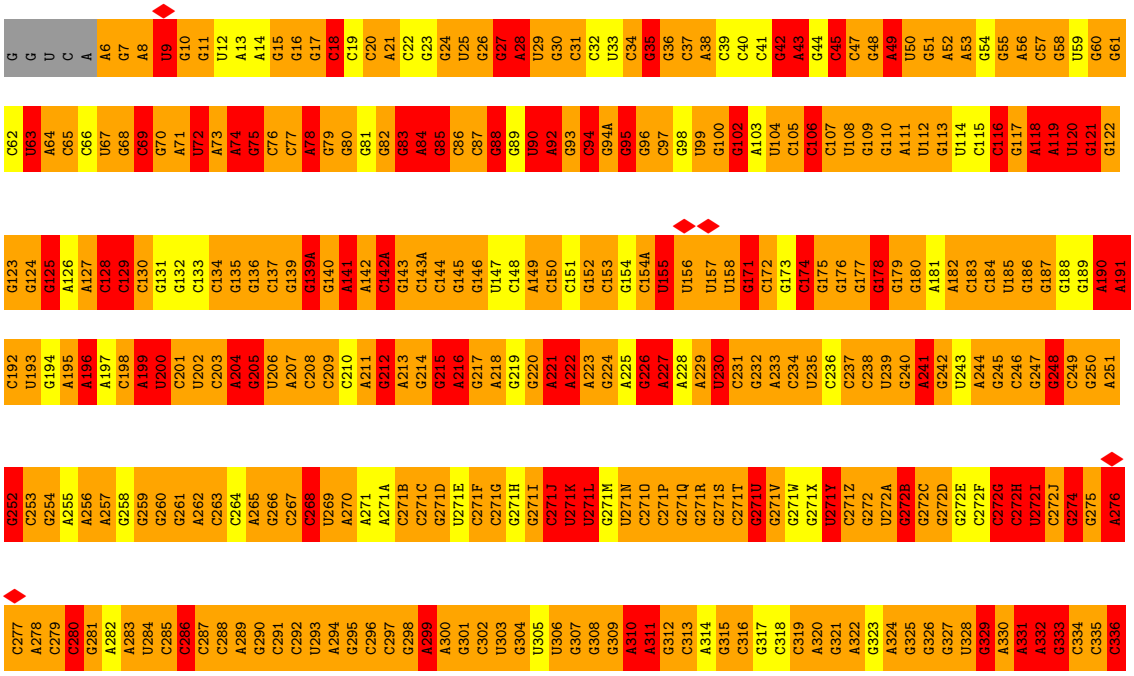
• Molecule 34: 50S RIBOSOMAL PROTEIN L36

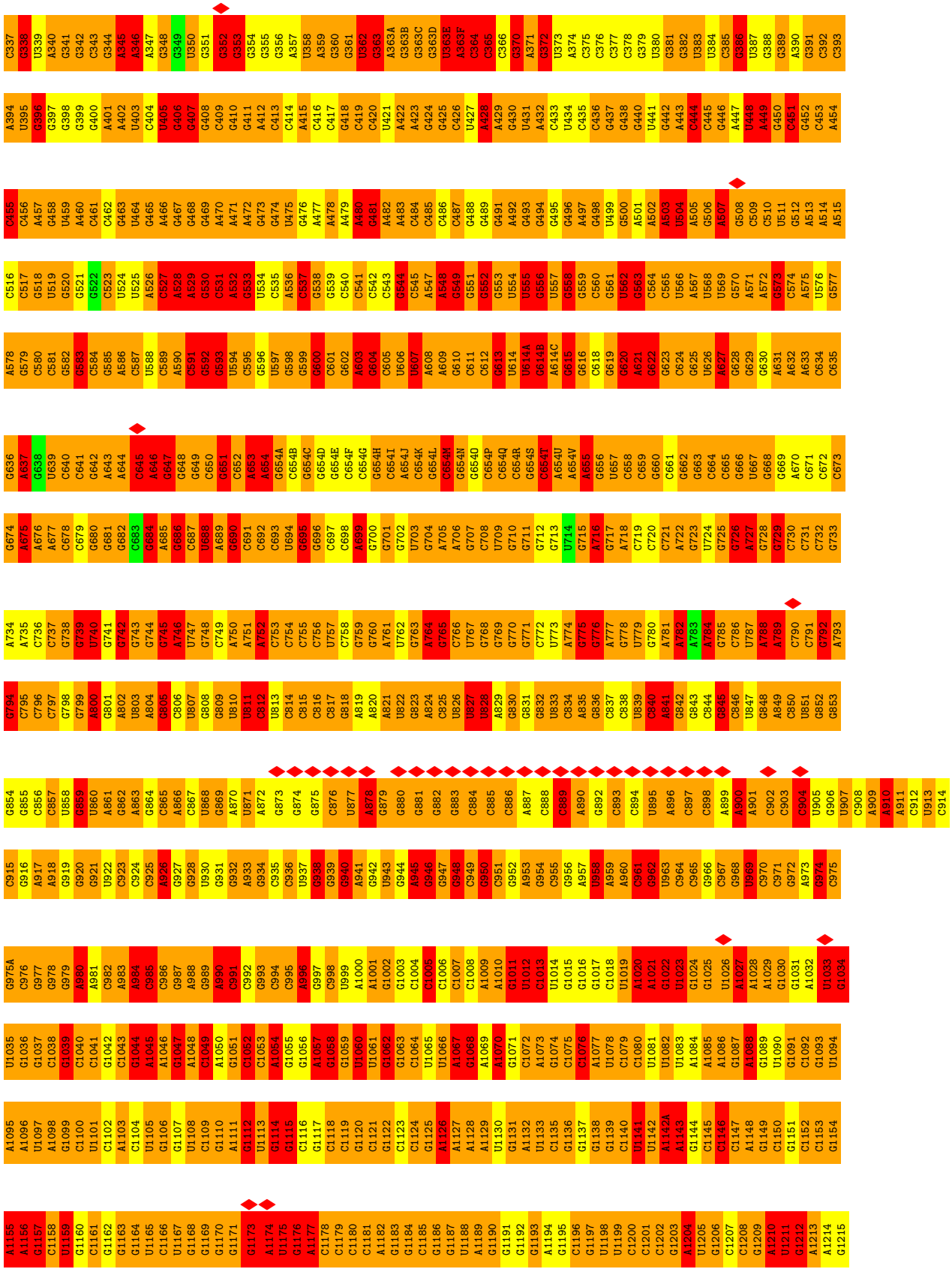
Chain B9:

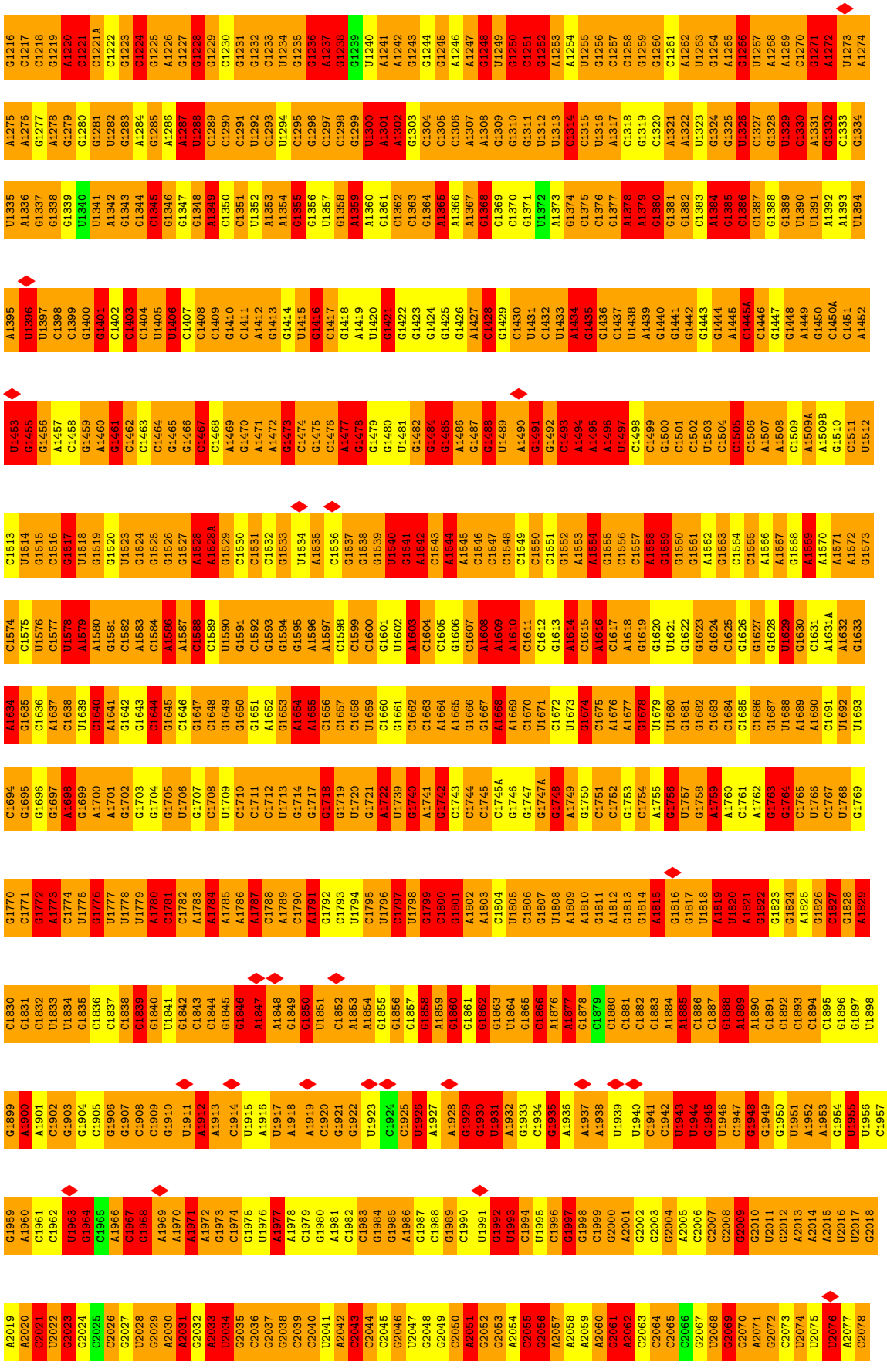


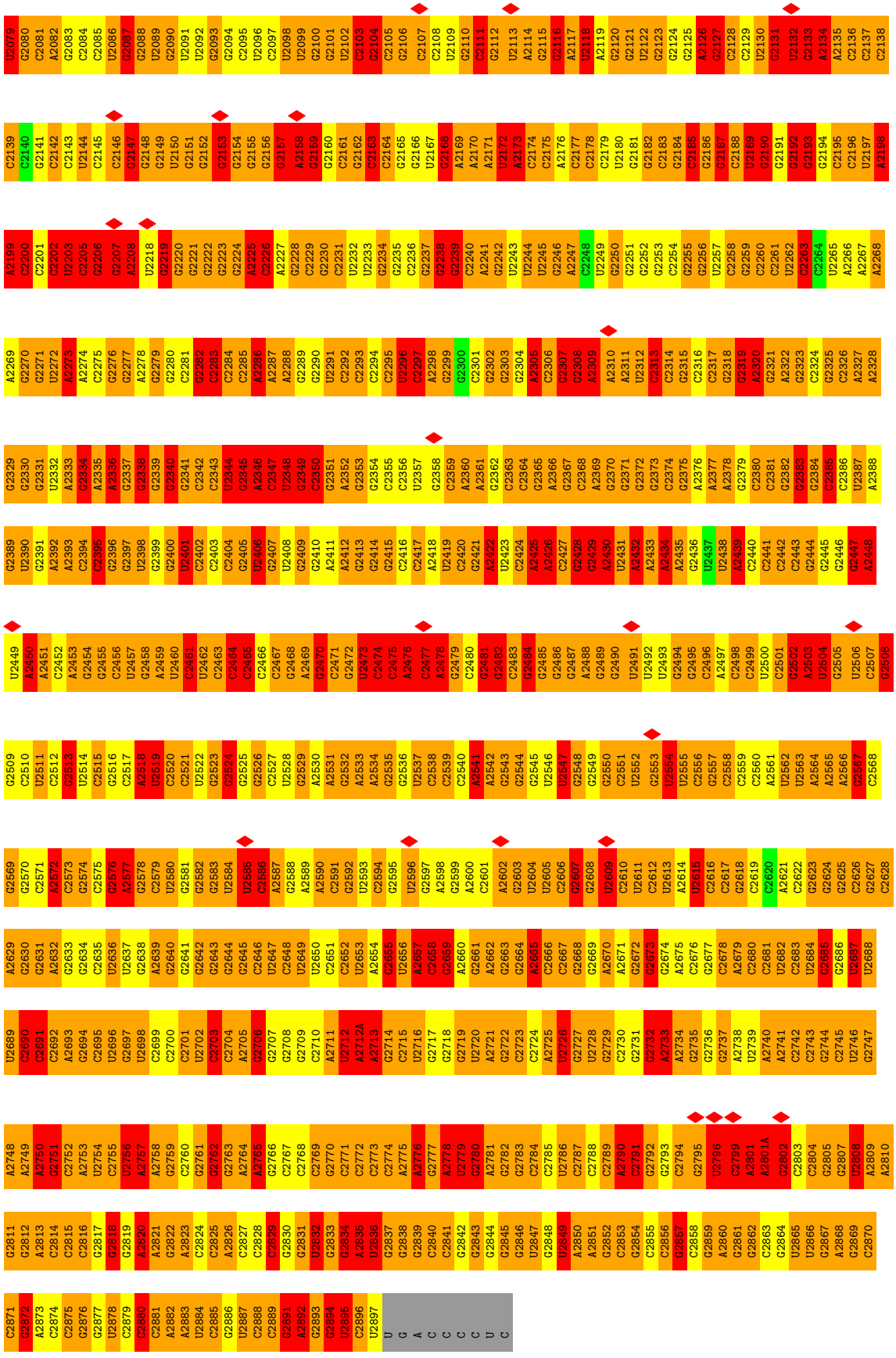
• Molecule 35: 23S RIBOSOMAL RNA

Chain BA:



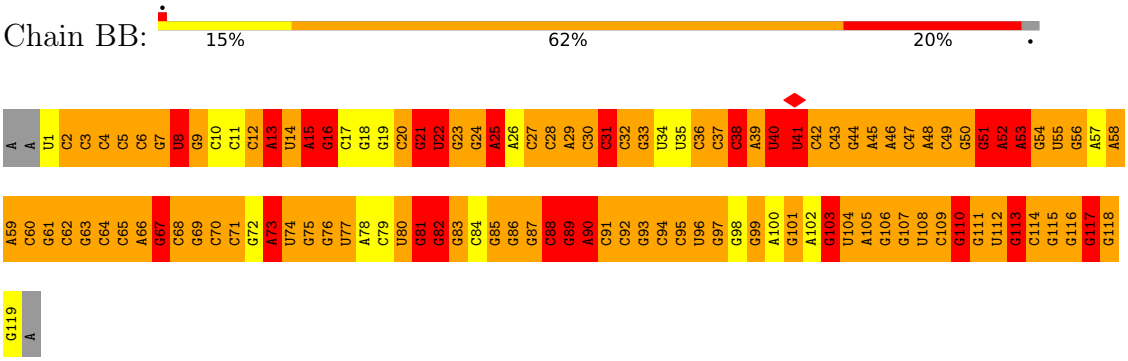






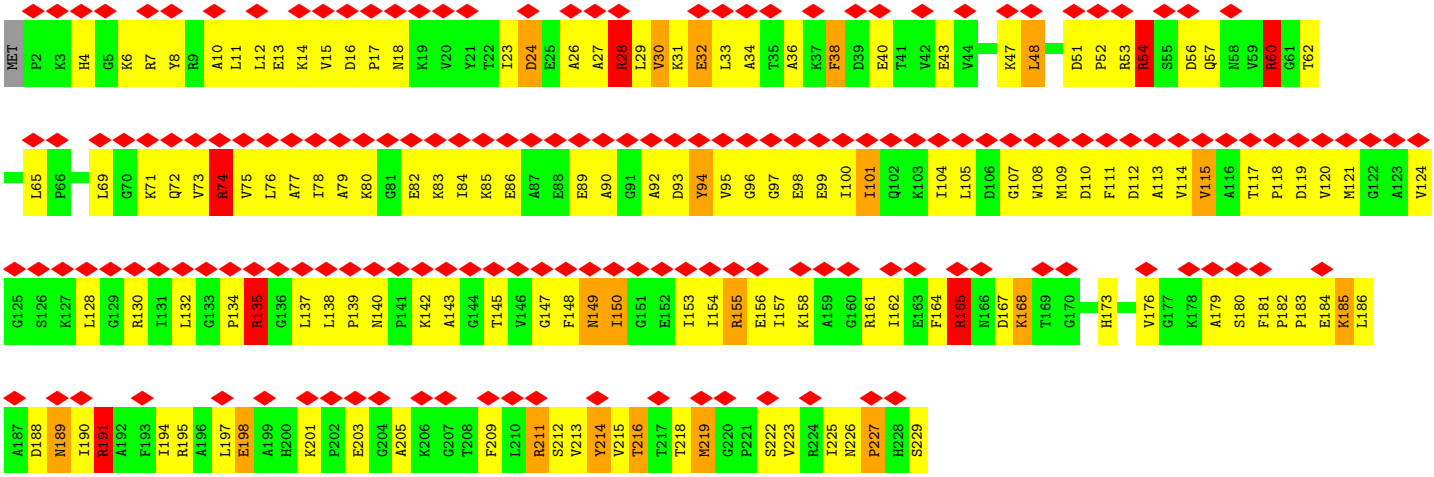
• Molecule 36: 5S RIBOSOMAL RNA

Chain BB:



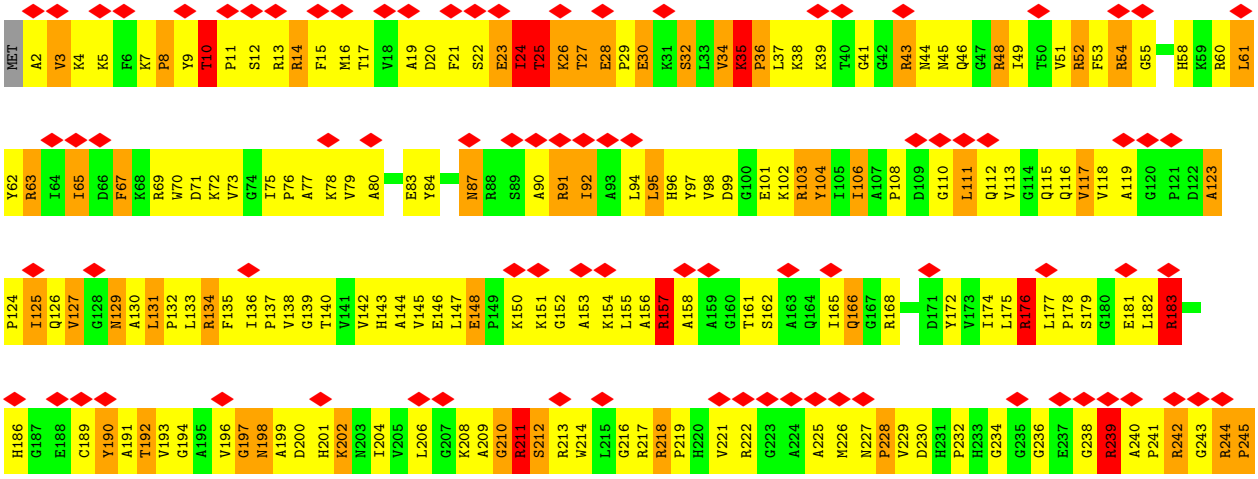
• Molecule 37: 50S RIBOSOMAL PROTEIN L1

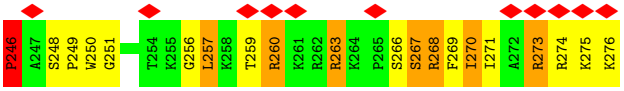
Chain BC:



• Molecule 38: 50S RIBOSOMAL PROTEIN L2

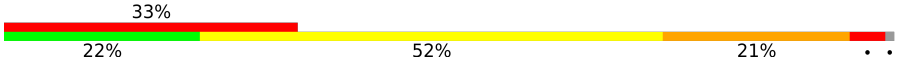
Chain BD:

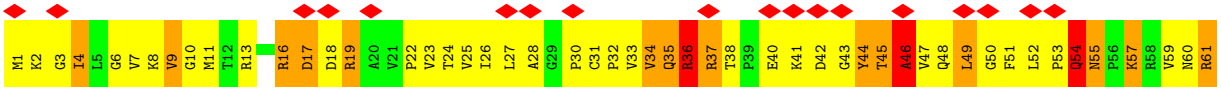


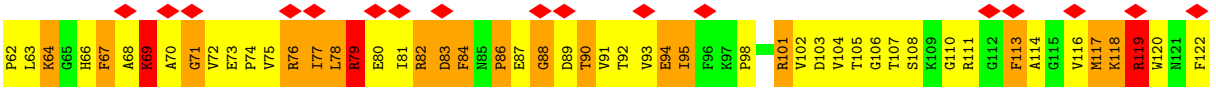


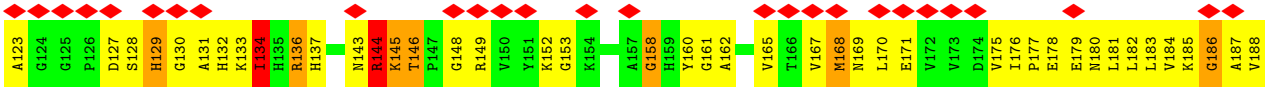
• Molecule 39: 50S RIBOSOMAL PROTEIN L3

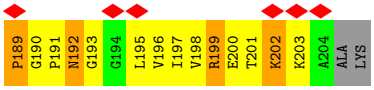
Chain BE:





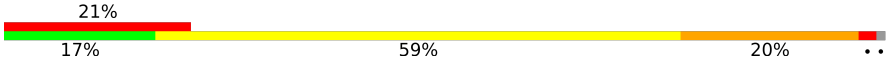


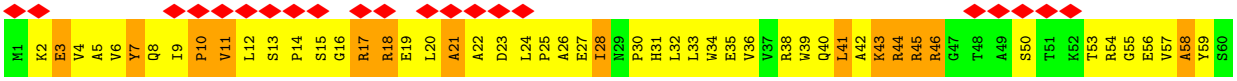


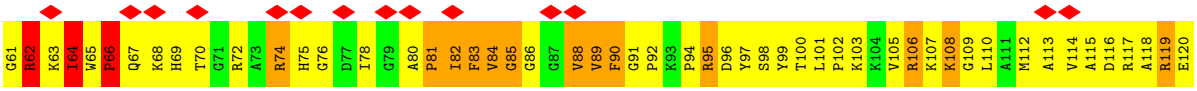


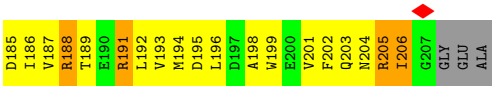
• Molecule 40: 50S RIBOSOMAL PROTEIN L4

Chain BF:



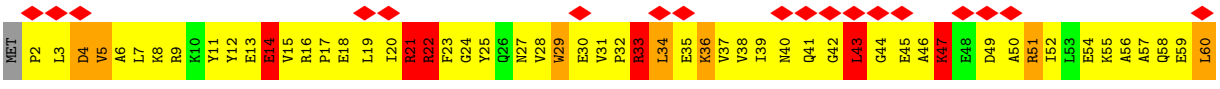


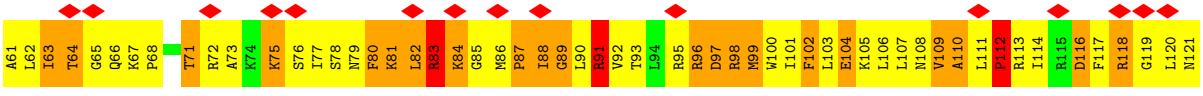


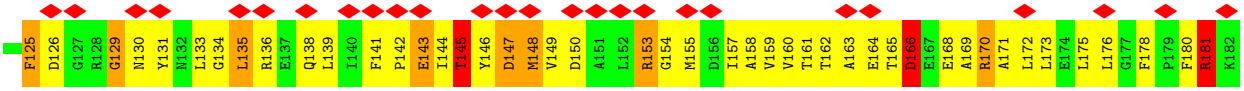


• Molecule 41: 50S RIBOSOMAL PROTEIN L5

Chain BG:

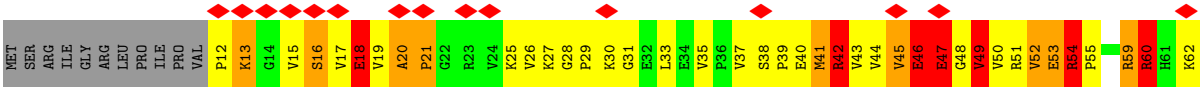


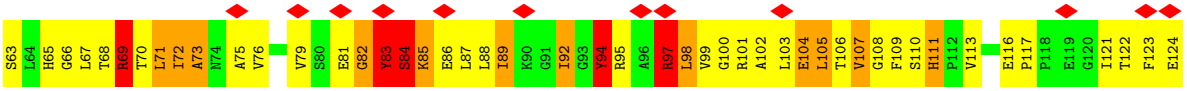




• Molecule 42: 50S RIBOSOMAL PROTEIN L6

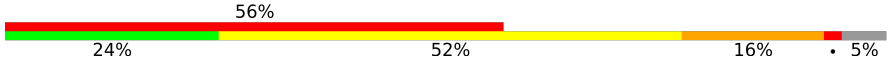
Chain BH:

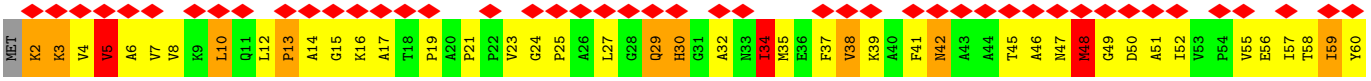


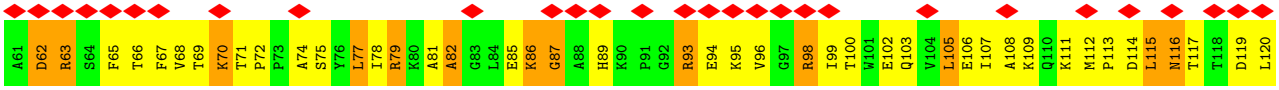


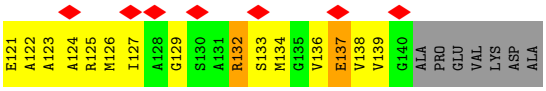
• Molecule 43: 50S RIBOSOMAL PROTEIN L11

Chain BK:



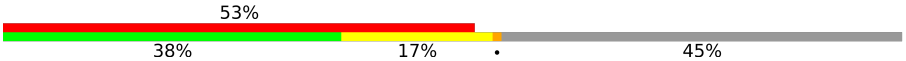


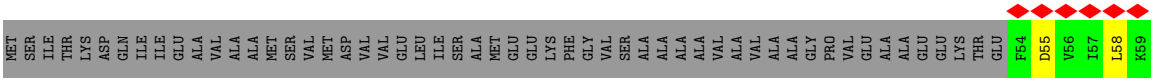


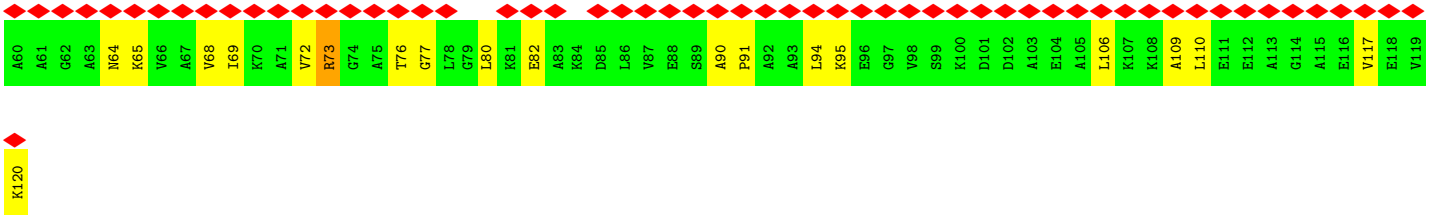


• Molecule 44: 50S RIBOSOMAL PROTEIN L7/L12

Chain BL:

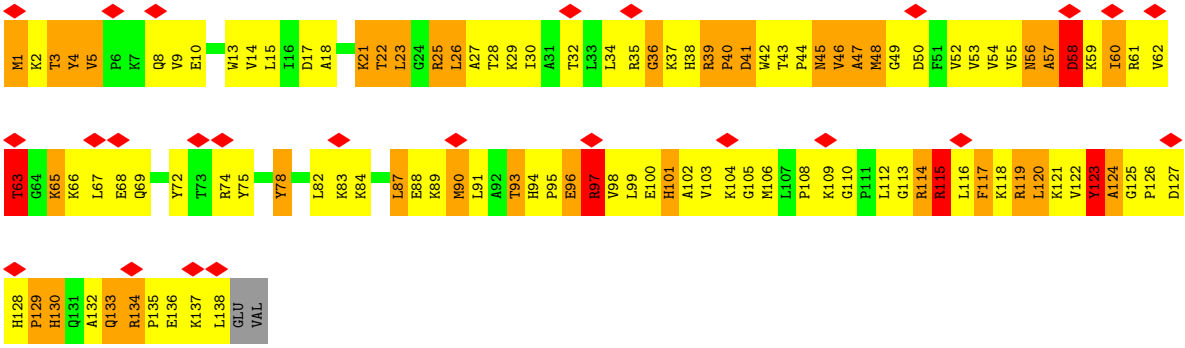






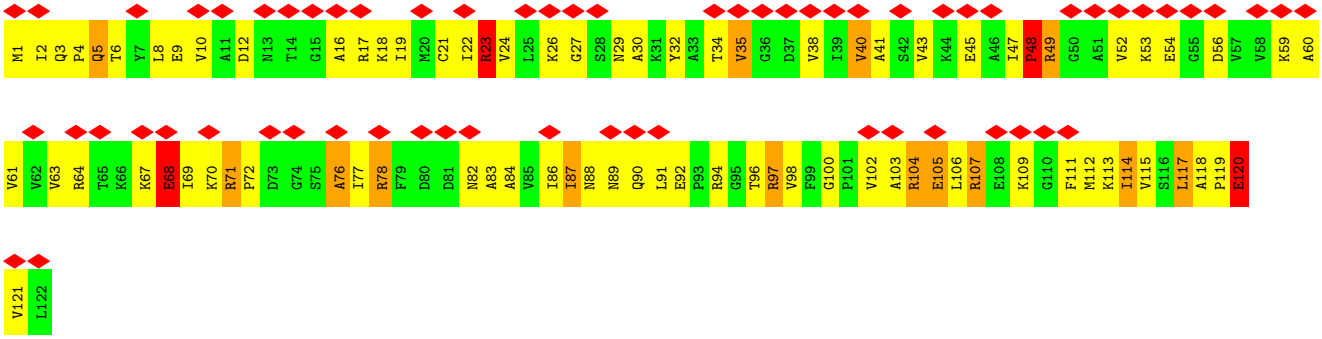
• Molecule 45: 50S RIBOSOMAL PROTEIN L13

Chain BN:



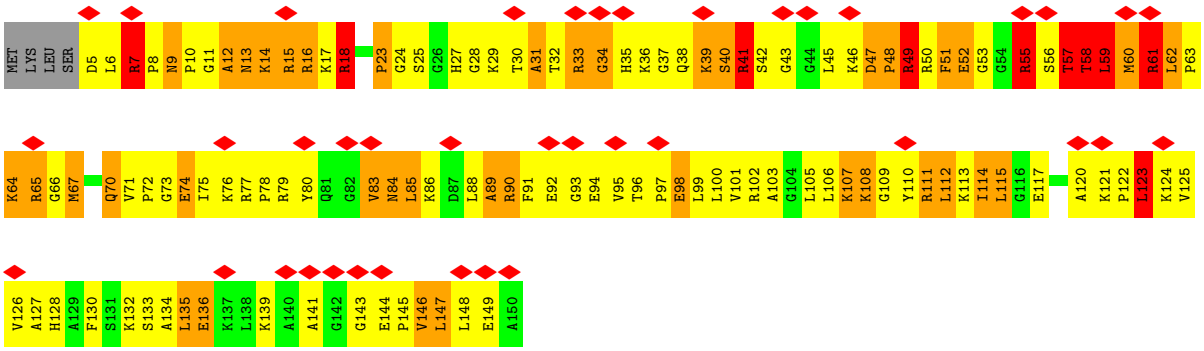
• Molecule 46: 50S RIBOSOMAL PROTEIN L14

Chain BO:



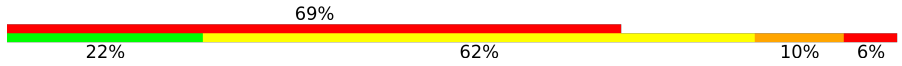
• Molecule 47: 50S RIBOSOMAL PROTEIN L15

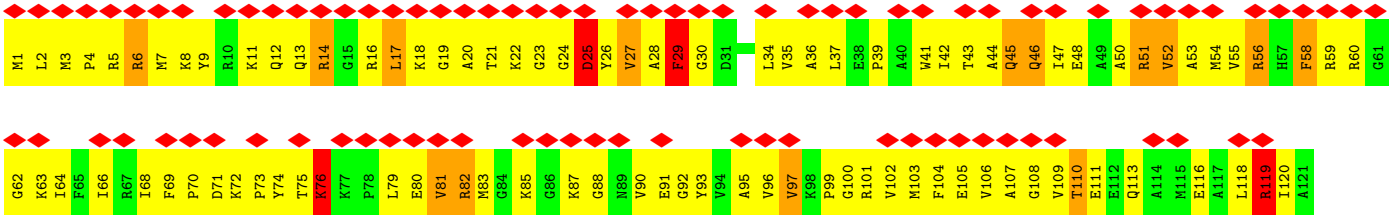
Chain BP:

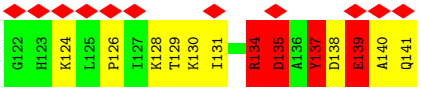


• Molecule 48: 50S RIBOSOMAL PROTEIN L16

Chain BQ:

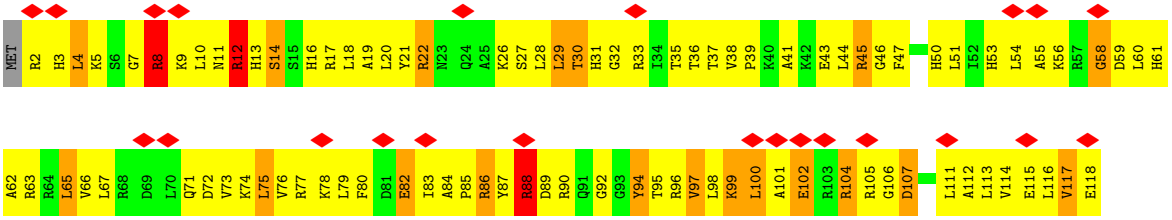






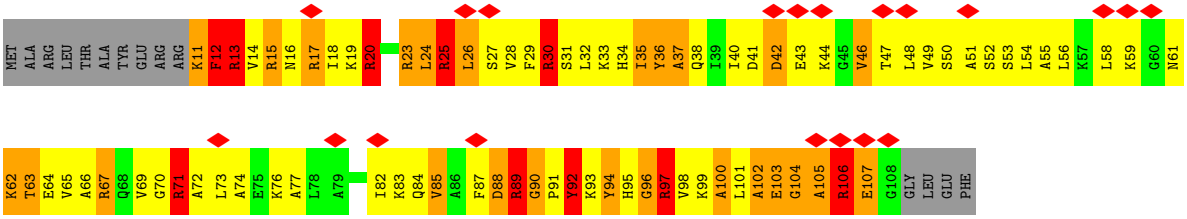
• Molecule 49: 50S RIBOSOMAL PROTEIN L17

Chain BR:



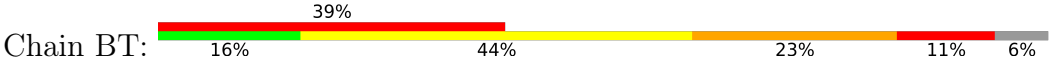
• Molecule 50: 50S RIBOSOMAL PROTEIN L18

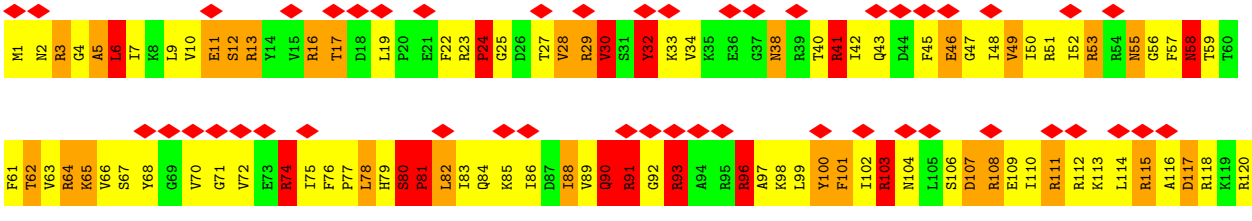
Chain BS:

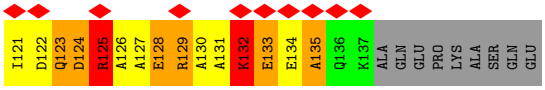


• Molecule 51: 50S RIBOSOMAL PROTEIN L19

Chain BT:

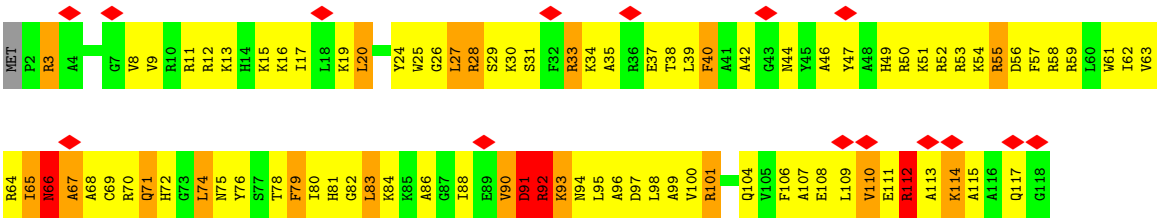






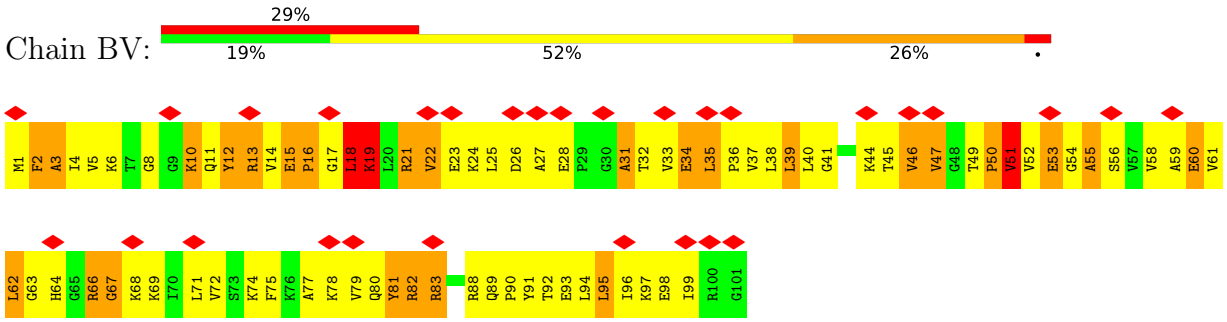
• Molecule 52: 50S RIBOSOMAL PROTEIN L20

Chain BU:



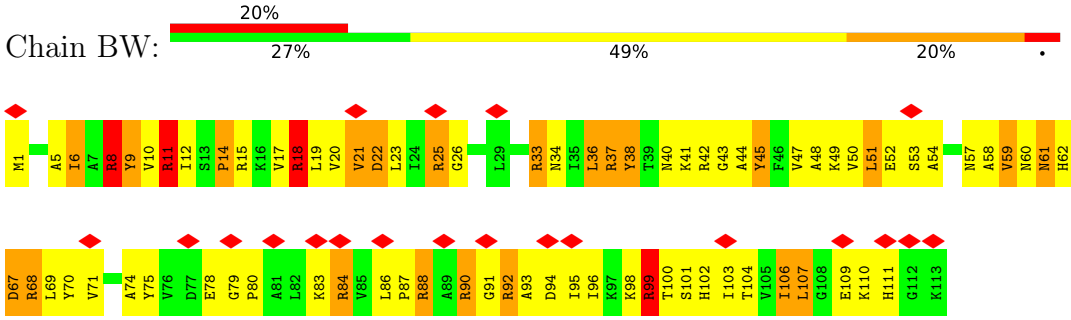
• Molecule 53: 50S RIBOSOMAL PROTEIN L21

Chain BV:



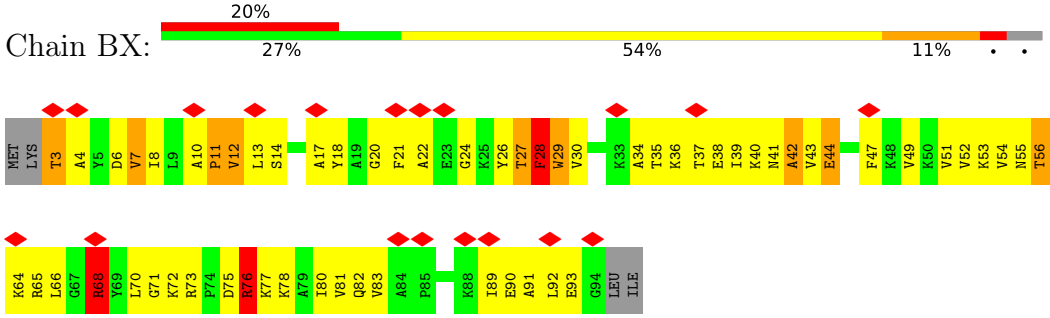
• Molecule 54: 50S RIBOSOMAL PROTEIN L22

Chain BW:



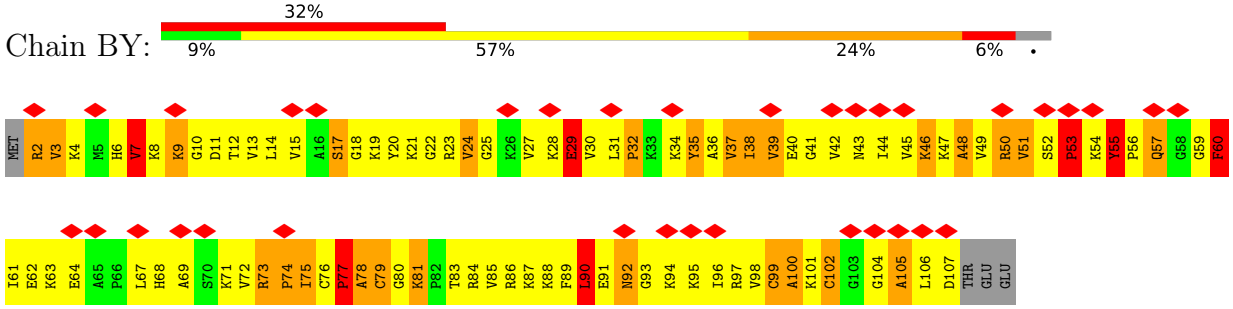
• Molecule 55: 50S RIBOSOMAL PROTEIN L23

Chain BX:



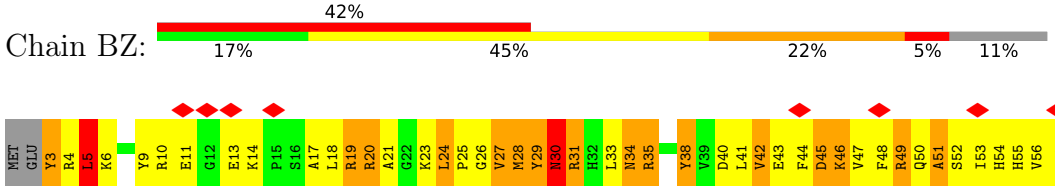
• Molecule 56: 50S RIBOSOMAL PROTEIN L24

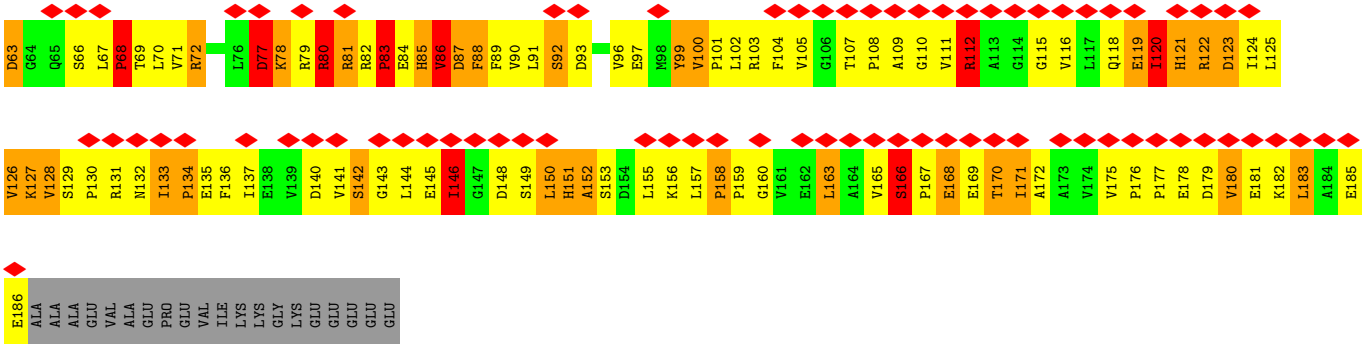
Chain BY:



• Molecule 57: 50S RIBOSOMAL PROTEIN L25

Chain BZ:




D63 G64 Q65 S66 L67 P68 T69 L70 V71 R72 L76 D77 K78 R79 R80 R81 R82 P83 E84 H85 V86 D87 F88 F89 V90 L91 S92 D93 V96 E97 M98 Y99 V100 P101 L102 R103 F104 V105 G106 T107 P108 A109 G110 V111 R112 A113 G114 G115 V116 L117 Q118 E119 I120 H121 R122 D123 I124 L125
V126 K127 V128 S129 P130 R131 N132 I133 P134 E135 F136 I137 E138 V139 D140 V141 S142 G143 L144 E145 I146 G147 D148 S149 L150 H151 A152 S153 D154 L155 K156 L157 P158 P159 G160 V161 E162 L163 A164 V165 S166 P167 E168 E169 T170 I171 A172 A173 V174 V175 P176 P177 E178 D179 V180 E181 K182 L183 A184 E185
E186 ALA ALA ALA GLU VAL ALA GLU PRO GLU VAL ILE LYS LYS GLY LYS GLU GLU GLU GLU GLU

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	Not provided	
Resolution determination method	Not provided	
CTF correction method	DEFOCUS GROUPS	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	2000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	65520	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	13410.900	Depositor
Minimum map value	-6356.590	Depositor
Average map value	213.063	Depositor
Map value standard deviation	916.721	Depositor
Recommended contour level	3000.0	Depositor
Map size (Å)	378, 378, 378	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90, 90, 90	wwPDB
Pixel spacing (Å)	1.26, 1.26, 1.26	Depositor

5 Model quality

5.1 Standard geometry

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

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	AA	2.74	2653/36190 (7.3%)	2.42	3123/56486 (5.5%)
2	AB	1.43	2/1935 (0.1%)	1.55	20/2609 (0.8%)
3	AC	1.49	3/1636 (0.2%)	1.59	25/2205 (1.1%)
4	AD	1.40	1/1733 (0.1%)	1.59	25/2318 (1.1%)
5	AE	1.48	1/1162 (0.1%)	1.54	9/1564 (0.6%)
6	AF	1.39	3/856 (0.4%)	1.69	15/1154 (1.3%)
7	AG	1.39	1/1276 (0.1%)	1.51	15/1709 (0.9%)
8	AH	1.48	2/1136 (0.2%)	1.67	20/1527 (1.3%)
9	AI	1.47	2/1029 (0.2%)	2.08	19/1379 (1.4%)
10	AJ	1.35	0/807	1.50	6/1085 (0.6%)
11	AK	1.40	1/900 (0.1%)	1.48	9/1213 (0.7%)
12	AL	1.45	0/986	1.56	9/1320 (0.7%)
13	AM	1.39	1/998 (0.1%)	1.64	17/1336 (1.3%)
14	AN	1.49	2/501 (0.4%)	1.71	9/664 (1.4%)
15	AO	1.35	0/745	1.59	13/992 (1.3%)
16	AP	1.34	1/716 (0.1%)	1.62	11/963 (1.1%)
17	AQ	1.45	2/836 (0.2%)	1.57	11/1117 (1.0%)
18	AR	1.40	0/579	1.59	7/768 (0.9%)
19	AS	1.28	0/642	1.48	5/865 (0.6%)
20	AT	1.31	0/765	1.52	12/1007 (1.2%)
21	AU	1.33	0/212	1.76	6/277 (2.2%)
22	AV	2.74	134/1832 (7.3%)	2.54	182/2855 (6.4%)
23	AX	2.60	15/257 (5.8%)	2.50	24/398 (6.0%)
24	AY	1.31	7/5312 (0.1%)	1.51	49/7193 (0.7%)
25	B0	1.27	0/671	1.52	11/892 (1.2%)
26	B1	1.37	2/738 (0.3%)	1.59	6/981 (0.6%)
27	B2	1.25	0/600	1.51	4/793 (0.5%)
28	B3	1.35	0/472	1.46	4/634 (0.6%)
29	B4	1.32	0/460	1.78	10/621 (1.6%)
30	B5	1.35	1/473 (0.2%)	1.48	3/639 (0.5%)
31	B6	1.49	3/440 (0.7%)	1.68	7/586 (1.2%)
32	B7	1.38	0/426	1.66	9/561 (1.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
33	B8	1.33	1/515 (0.2%)	1.56	6/679 (0.9%)
34	B9	1.37	0/310	1.59	6/407 (1.5%)
35	BA	2.69	4866/69972 (7.0%)	2.42	6058/109237 (5.5%)
36	BB	2.71	196/2853 (6.9%)	2.45	289/4451 (6.5%)
37	BC	1.35	0/1774	1.44	16/2391 (0.7%)
38	BD	1.38	3/2195 (0.1%)	1.59	25/2955 (0.8%)
39	BE	1.37	1/1596 (0.1%)	1.58	19/2153 (0.9%)
40	BF	1.40	2/1658 (0.1%)	1.63	27/2244 (1.2%)
41	BG	1.35	1/1499 (0.1%)	1.93	24/2016 (1.2%)
42	BH	1.35	4/1292 (0.3%)	1.51	12/1744 (0.7%)
43	BK	1.29	2/1044 (0.2%)	1.38	4/1416 (0.3%)
44	BL	1.10	0/478	1.50	2/640 (0.3%)
45	BN	1.33	2/1131 (0.2%)	1.57	13/1525 (0.9%)
46	BO	1.43	1/943 (0.1%)	1.50	11/1269 (0.9%)
47	BP	1.34	0/1131	1.64	13/1504 (0.9%)
48	BQ	1.38	2/1143 (0.2%)	1.52	11/1527 (0.7%)
49	BR	1.28	0/974	1.52	12/1302 (0.9%)
50	BS	1.31	1/778 (0.1%)	1.74	23/1036 (2.2%)
51	BT	1.37	1/1155 (0.1%)	1.78	25/1542 (1.6%)
52	BU	1.38	0/975	1.51	8/1297 (0.6%)
53	BV	1.34	2/790 (0.3%)	1.49	7/1057 (0.7%)
54	BW	1.31	1/907 (0.1%)	1.59	14/1216 (1.2%)
55	BX	1.39	0/739	1.46	5/993 (0.5%)
56	BY	1.24	1/823 (0.1%)	1.55	9/1098 (0.8%)
57	BZ	1.34	0/1499	1.53	18/2035 (0.9%)
All	All	2.36	7924/165495 (4.8%)	2.21	10352/246445 (4.2%)

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	AA	0	107
2	AB	0	5
3	AC	0	3
4	AD	0	3
5	AE	0	4
6	AF	0	6
7	AG	0	6
8	AH	0	4
9	AI	0	5

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
10	AJ	0	2
11	AK	0	2
12	AL	0	3
13	AM	0	3
14	AN	0	2
15	AO	0	3
16	AP	0	6
17	AQ	0	3
18	AR	0	3
19	AS	0	3
20	AT	0	2
21	AU	0	3
22	AV	0	5
23	AX	0	1
24	AY	0	13
25	B0	0	1
26	B1	0	3
27	B2	0	6
28	B3	0	2
29	B4	0	3
30	B5	0	2
31	B6	0	3
32	B7	0	1
33	B8	0	2
34	B9	0	2
35	BA	1	152
36	BB	0	6
37	BC	0	6
38	BD	0	2
39	BE	0	3
40	BF	0	3
41	BG	0	5
42	BH	0	8
43	BK	0	3
45	BN	0	3
46	BO	0	3
47	BP	0	5
48	BQ	0	3
49	BR	0	2
50	BS	0	6
51	BT	0	6
52	BU	0	4

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
53	BV	0	2
54	BW	0	4
55	BX	0	2
56	BY	0	3
57	BZ	0	4
All	All	1	457

All (7924) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	473	G	N7-C5	-17.52	1.28	1.39
1	AA	710	G	C8-N7	-15.43	1.21	1.30
1	AA	809	G	C8-N7	-15.17	1.21	1.30
1	AA	188	C	N1-C6	-15.00	1.28	1.37
1	AA	1311	G	C8-N7	-14.67	1.22	1.30
1	AA	135	C	N1-C6	-14.32	1.28	1.37
35	BA	2507	C	N1-C6	-14.18	1.28	1.37
35	BA	2171	A	N7-C5	-14.01	1.30	1.39
35	BA	1519	G	N7-C5	-13.59	1.31	1.39
35	BA	493	G	C6-N1	-13.36	1.30	1.39
22	AV	59	A	N9-C4	-13.25	1.29	1.37
22	AV	2	G	C8-N7	-13.23	1.23	1.30
1	AA	1177	G	C8-N7	-13.15	1.23	1.30
35	BA	917	A	N9-C4	-13.15	1.29	1.37
35	BA	80	G	C8-N7	-13.06	1.23	1.30
1	AA	1494	G	N7-C5	-12.90	1.31	1.39
35	BA	181	A	N7-C5	-12.80	1.31	1.39
35	BA	2430	A	N9-C4	-12.73	1.30	1.37
35	BA	2456	C	N1-C6	-12.54	1.29	1.37
35	BA	2131	G	C8-N7	-12.54	1.23	1.30
35	BA	2708	G	C2-N3	-12.51	1.22	1.32
1	AA	1504	G	N9-C4	-12.51	1.27	1.38
1	AA	181	G	C8-N7	-12.49	1.23	1.30
35	BA	1223	G	C8-N7	-12.47	1.23	1.30
35	BA	2579	C	N1-C6	-12.42	1.29	1.37
35	BA	1718	G	C8-N7	-12.38	1.23	1.30
35	BA	2835	A	N3-C4	-12.39	1.27	1.34
35	BA	946	G	N9-C4	-12.38	1.28	1.38
35	BA	121	G	C8-N7	-12.32	1.23	1.30
35	BA	248	G	N7-C5	-12.19	1.31	1.39
35	BA	1821	A	C5-C4	-12.04	1.30	1.38
35	BA	1938	A	N7-C5	-12.04	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	86	G	N7-C5	-12.01	1.32	1.39
35	BA	1825	A	N7-C5	-11.98	1.32	1.39
35	BA	1779	U	C2-N3	-11.97	1.29	1.37
1	AA	1323	G	C8-N7	-11.96	1.23	1.30
22	AV	40	C	N1-C6	-11.95	1.29	1.37
1	AA	728	A	N3-C4	-11.91	1.27	1.34
1	AA	635	G	C6-N1	-11.91	1.31	1.39
35	BA	855	G	C8-N7	-11.88	1.23	1.30
35	BA	1913	A	C6-N1	-11.87	1.27	1.35
35	BA	786	C	N1-C6	-11.80	1.30	1.37
1	AA	1319	A	C8-N7	-11.73	1.23	1.31
35	BA	2633	G	N7-C5	-11.73	1.32	1.39
35	BA	1786	A	N9-C4	-11.72	1.30	1.37
35	BA	2644	G	C8-N7	-11.71	1.24	1.30
35	BA	228	A	N7-C5	-11.70	1.32	1.39
1	AA	1191	A	N7-C5	-11.68	1.32	1.39
35	BA	1505	C	N1-C6	-11.62	1.30	1.37
35	BA	2270	G	C6-N1	-11.62	1.31	1.39
35	BA	391	G	C8-N7	-11.60	1.24	1.30
1	AA	1406	U	C2-N3	-11.57	1.29	1.37
1	AA	611	A	N3-C4	-11.54	1.27	1.34
35	BA	244	A	N7-C5	-11.52	1.32	1.39
1	AA	855	G	N7-C5	-11.48	1.32	1.39
1	AA	746	A	N9-C4	-11.41	1.31	1.37
35	BA	2690	C	C5-C6	-11.39	1.25	1.34
1	AA	526	C	N1-C6	-11.38	1.30	1.37
35	BA	715	G	C6-N1	-11.39	1.31	1.39
35	BA	1824	G	N7-C5	-11.38	1.32	1.39
1	AA	1487	G	N7-C5	-11.37	1.32	1.39
1	AA	1261	A	N3-C4	-11.34	1.28	1.34
35	BA	1068	G	N9-C8	-11.31	1.29	1.37
35	BA	1237	A	N7-C5	-11.30	1.32	1.39
35	BA	1969	A	C5-C4	-11.28	1.30	1.38
1	AA	1516	G	C8-N7	-11.24	1.24	1.30
1	AA	1118	C	N1-C6	-11.23	1.30	1.37
35	BA	1022	G	N9-C8	-11.20	1.30	1.37
35	BA	767	U	C2-N3	-11.19	1.29	1.37
35	BA	1590	U	C2-N3	-11.19	1.29	1.37
35	BA	1077	A	N3-C4	-11.18	1.28	1.34
1	AA	985	C	N3-C4	-11.16	1.26	1.33
35	BA	1990	C	C4-C5	-11.14	1.34	1.43
35	BA	2037	G	C6-N1	-11.14	1.31	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	272(G)	C	N1-C6	-11.11	1.30	1.37
1	AA	766	A	N9-C4	-11.10	1.31	1.37
35	BA	428	A	N9-C4	-11.10	1.31	1.37
35	BA	1848	A	N9-C4	-11.10	1.31	1.37
35	BA	26	G	N7-C5	-11.08	1.32	1.39
35	BA	470	A	N7-C5	-11.07	1.32	1.39
35	BA	472	A	N7-C5	-11.05	1.32	1.39
1	AA	1190	G	N7-C5	-11.02	1.32	1.39
35	BA	500	G	N7-C5	-11.02	1.32	1.39
35	BA	1413	G	N7-C5	-11.02	1.32	1.39
1	AA	353	A	N9-C4	-11.02	1.31	1.37
1	AA	680	C	N3-C4	-10.98	1.26	1.33
1	AA	1137	C	N1-C6	-10.97	1.30	1.37
1	AA	1268	A	N3-C4	-10.95	1.28	1.34
35	BA	1137	G	N7-C5	-10.94	1.32	1.39
35	BA	2683	C	N1-C6	-10.94	1.30	1.37
35	BA	1641	A	N9-C4	-10.92	1.31	1.37
35	BA	859	G	N7-C5	-10.90	1.32	1.39
1	AA	969	A	N9-C4	-10.89	1.31	1.37
35	BA	2676	C	N1-C6	-10.87	1.30	1.37
35	BA	1661	G	N7-C5	-10.87	1.32	1.39
35	BA	2275	C	N3-C4	-10.86	1.26	1.33
35	BA	1641	A	C6-N1	-10.82	1.27	1.35
35	BA	660	G	C2-N3	-10.82	1.24	1.32
1	AA	288	A	N3-C4	-10.81	1.28	1.34
35	BA	528	A	N9-C4	-10.79	1.31	1.37
35	BA	1770	G	C6-N1	-10.77	1.32	1.39
35	BA	1233	C	C2-N3	-10.71	1.27	1.35
1	AA	1444	C	N1-C6	-10.69	1.30	1.37
1	AA	1231	G	N7-C5	-10.68	1.32	1.39
35	BA	203	C	N1-C6	-10.66	1.30	1.37
36	BB	102	A	N7-C5	-10.64	1.32	1.39
35	BA	1024	G	C5-C4	-10.63	1.30	1.38
35	BA	2288	A	C6-N1	-10.62	1.28	1.35
1	AA	1513	A	N7-C5	-10.62	1.32	1.39
35	BA	878	A	N3-C4	-10.60	1.28	1.34
35	BA	298	G	C8-N7	-10.60	1.24	1.30
35	BA	1829	A	N7-C5	-10.60	1.32	1.39
1	AA	1229	A	N3-C4	-10.58	1.28	1.34
22	AV	22	G	N7-C5	-10.58	1.32	1.39
1	AA	1239	A	N3-C4	-10.56	1.28	1.34
1	AA	576	G	N7-C5	-10.56	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	633	A	N3-C4	-10.56	1.28	1.34
35	BA	1764	G	C8-N7	-10.52	1.24	1.30
35	BA	1849	G	C6-N1	-10.52	1.32	1.39
1	AA	262	A	N3-C4	-10.50	1.28	1.34
35	BA	2570	G	C6-N1	-10.50	1.32	1.39
35	BA	1648	C	C4-N4	-10.50	1.24	1.33
35	BA	331	A	N3-C4	-10.49	1.28	1.34
36	BB	65	C	N1-C6	-10.44	1.30	1.37
35	BA	1649	G	C6-N1	-10.44	1.32	1.39
1	AA	864	A	C6-N1	-10.42	1.28	1.35
35	BA	843	G	N7-C5	-10.42	1.32	1.39
35	BA	2174	C	N1-C6	-10.40	1.30	1.37
1	AA	432	A	N9-C4	-10.38	1.31	1.37
35	BA	625	G	C8-N7	-10.38	1.24	1.30
1	AA	189(G)	G	N9-C8	-10.37	1.30	1.37
1	AA	556	C	N3-C4	-10.37	1.26	1.33
35	BA	2711	A	N7-C5	-10.37	1.33	1.39
35	BA	1079	C	N1-C6	-10.37	1.30	1.37
35	BA	1755	A	N7-C5	10.35	1.45	1.39
35	BA	300	A	N7-C5	-10.34	1.33	1.39
35	BA	602	G	C8-N7	-10.34	1.24	1.30
36	BB	109	C	N1-C6	-10.32	1.30	1.37
1	AA	55	A	N7-C5	-10.29	1.33	1.39
1	AA	768	A	N7-C5	-10.29	1.33	1.39
1	AA	861	G	N7-C5	-10.29	1.33	1.39
35	BA	761	A	N9-C4	-10.28	1.31	1.37
35	BA	798	G	C8-N7	-10.26	1.24	1.30
35	BA	1678	G	N7-C5	-10.24	1.33	1.39
1	AA	848	C	N1-C6	-10.24	1.31	1.37
35	BA	2250	G	N3-C4	-10.23	1.28	1.35
35	BA	614(B)	G	C8-N7	-10.23	1.24	1.30
35	BA	1155	A	N9-C8	-10.22	1.29	1.37
1	AA	810	C	N1-C6	-10.21	1.31	1.37
1	AA	538	G	C6-N1	-10.20	1.32	1.39
1	AA	1299	A	C6-N1	-10.19	1.28	1.35
35	BA	1932	A	C8-N7	-10.18	1.24	1.31
35	BA	1395	A	N3-C4	-10.18	1.28	1.34
35	BA	981	A	N7-C5	10.17	1.45	1.39
1	AA	1497	G	C5-C4	-10.16	1.31	1.38
35	BA	521	G	N3-C4	-10.16	1.28	1.35
35	BA	1989	G	N7-C5	-10.16	1.33	1.39
35	BA	1189	A	N3-C4	-10.16	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1386	G	C5-C4	-10.16	1.31	1.38
35	BA	1904	G	C5-C4	-10.16	1.31	1.38
35	BA	1373	A	C8-N7	-10.15	1.24	1.31
35	BA	2521	C	C4-C5	-10.15	1.34	1.43
35	BA	198	C	C4-C5	-10.14	1.34	1.43
22	AV	72	A	N9-C4	-10.13	1.31	1.37
1	AA	139	G	C8-N7	-10.12	1.24	1.30
1	AA	937	A	N7-C5	-10.11	1.33	1.39
1	AA	1202	G	N7-C5	-10.11	1.33	1.39
35	BA	1669	A	N7-C5	-10.11	1.33	1.39
35	BA	453	C	C5-C6	-10.10	1.26	1.34
35	BA	1802	A	N3-C4	-10.10	1.28	1.34
1	AA	1001(A)	G	C8-N7	-10.07	1.25	1.30
35	BA	52	A	N7-C5	-10.07	1.33	1.39
35	BA	582	G	C6-N1	-10.07	1.32	1.39
35	BA	823	G	N3-C4	-10.06	1.28	1.35
35	BA	544	G	C8-N7	-10.05	1.25	1.30
35	BA	277	C	N1-C6	-10.04	1.31	1.37
36	BB	19	G	C5-C6	-10.02	1.32	1.42
35	BA	624	C	N1-C6	-10.01	1.31	1.37
35	BA	631	A	N3-C4	-10.01	1.28	1.34
35	BA	635	C	N1-C6	-10.01	1.31	1.37
35	BA	1748	G	C6-N1	-10.00	1.32	1.39
36	BB	67	G	N3-C4	-9.99	1.28	1.35
35	BA	615	G	N7-C5	-9.97	1.33	1.39
35	BA	1510	G	N3-C4	-9.97	1.28	1.35
35	BA	998	C	N3-C4	-9.96	1.26	1.33
1	AA	476	G	C6-N1	-9.95	1.32	1.39
35	BA	266	G	N7-C5	-9.94	1.33	1.39
35	BA	1491	G	N7-C5	-9.94	1.33	1.39
1	AA	761	G	N7-C5	-9.94	1.33	1.39
1	AA	1251	A	N9-C4	-9.93	1.31	1.37
1	AA	547	A	C5-C4	-9.93	1.31	1.38
1	AA	142	G	N7-C5	9.92	1.45	1.39
1	AA	887	G	N7-C5	-9.92	1.33	1.39
1	AA	1420	C	N1-C6	-9.91	1.31	1.37
35	BA	38	A	C6-N6	-9.90	1.26	1.33
1	AA	1379	G	N3-C4	-9.89	1.28	1.35
35	BA	2223	G	C2-N3	-9.89	1.24	1.32
1	AA	196	A	N9-C4	-9.88	1.31	1.37
35	BA	563	G	C5-C4	-9.87	1.31	1.38
35	BA	614(A)	U	C2-N3	-9.87	1.30	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2289	G	N7-C5	-9.87	1.33	1.39
35	BA	1215	G	N1-C2	-9.86	1.29	1.37
1	AA	329	A	N9-C4	-9.86	1.31	1.37
1	AA	1401	G	N7-C5	-9.84	1.33	1.39
35	BA	1010	A	C6-N6	-9.83	1.26	1.33
35	BA	1021	A	N9-C4	-9.82	1.31	1.37
1	AA	474	G	C6-N1	-9.82	1.32	1.39
1	AA	520	A	N7-C5	-9.81	1.33	1.39
35	BA	1998	G	C5-C4	-9.81	1.31	1.38
1	AA	1385	G	N3-C4	-9.80	1.28	1.35
1	AA	482	A	C6-N1	-9.80	1.28	1.35
1	AA	1350	A	C6-N1	-9.80	1.28	1.35
35	BA	425	G	C2-N3	-9.80	1.25	1.32
35	BA	820	A	C5-C4	-9.79	1.31	1.38
1	AA	616	G	C6-N1	-9.79	1.32	1.39
35	BA	476	G	C8-N7	-9.77	1.25	1.30
35	BA	828	U	N3-C4	-9.77	1.29	1.38
36	BB	29	A	N7-C5	-9.77	1.33	1.39
35	BA	1098	A	N3-C4	-9.77	1.28	1.34
35	BA	1223	G	N7-C5	-9.76	1.33	1.39
35	BA	1860	G	N7-C5	-9.76	1.33	1.39
35	BA	1668	A	N7-C5	-9.75	1.33	1.39
1	AA	1088	G	C5-C4	-9.75	1.31	1.38
35	BA	78	A	N9-C4	-9.75	1.32	1.37
35	BA	1562	A	N3-C4	-9.74	1.29	1.34
35	BA	1901	A	N3-C4	-9.74	1.29	1.34
35	BA	2744	G	N7-C5	-9.74	1.33	1.39
35	BA	1674	G	N1-C2	-9.73	1.29	1.37
35	BA	2883	A	N7-C5	-9.71	1.33	1.39
35	BA	2566	A	N3-C4	-9.71	1.29	1.34
35	BA	533	G	C8-N7	-9.70	1.25	1.30
1	AA	674	G	N7-C5	-9.70	1.33	1.39
35	BA	1964	G	C5-C4	-9.70	1.31	1.38
1	AA	759	A	C6-N1	-9.70	1.28	1.35
35	BA	2576	G	C8-N7	-9.69	1.25	1.30
35	BA	1282	U	N3-C4	-9.67	1.29	1.38
35	BA	2084	C	N1-C6	-9.67	1.31	1.37
35	BA	2231	C	N3-C4	-9.67	1.27	1.33
35	BA	272	G	N7-C5	-9.67	1.33	1.39
1	AA	1057	G	N3-C4	-9.66	1.28	1.35
35	BA	1763	G	C6-N1	-9.66	1.32	1.39
35	BA	150	C	C4-C5	-9.65	1.35	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	941	G	N7-C5	-9.64	1.33	1.39
35	BA	663	G	C8-N7	-9.64	1.25	1.30
35	BA	2844	G	C8-N7	-9.63	1.25	1.30
35	BA	270	A	N9-C4	-9.63	1.32	1.37
1	AA	507	C	N1-C6	-9.62	1.31	1.37
35	BA	1955	U	C2-N3	9.62	1.44	1.37
1	AA	599	C	N1-C6	-9.61	1.31	1.37
35	BA	1687	G	C8-N7	-9.59	1.25	1.30
35	BA	2015	A	N9-C4	-9.59	1.32	1.37
1	AA	978	A	C6-N1	-9.59	1.28	1.35
35	BA	2286	A	N7-C5	-9.59	1.33	1.39
36	BB	41	U	C2-N3	-9.59	1.31	1.37
1	AA	890	G	N3-C4	-9.59	1.28	1.35
35	BA	1182	A	C8-N7	-9.58	1.24	1.31
1	AA	734	G	C8-N7	-9.57	1.25	1.30
22	AV	49	G	N9-C8	-9.57	1.31	1.37
35	BA	2122	U	C4-C5	-9.57	1.34	1.43
35	BA	1555	G	C8-N7	-9.56	1.25	1.30
35	BA	2345	G	N3-C4	-9.54	1.28	1.35
1	AA	992	U	C2-N3	-9.54	1.31	1.37
35	BA	1466	G	C5-C4	-9.54	1.31	1.38
1	AA	930	C	N1-C6	-9.53	1.31	1.37
1	AA	851	G	N3-C4	-9.53	1.28	1.35
35	BA	2030	A	C8-N7	-9.52	1.24	1.31
1	AA	1225	A	N3-C4	-9.51	1.29	1.34
1	AA	681	C	N1-C6	-9.51	1.31	1.37
35	BA	2642	G	C6-N1	-9.51	1.32	1.39
1	AA	882	C	C2-O2	-9.50	1.16	1.24
1	AA	1524	C	N1-C6	-9.50	1.31	1.37
35	BA	2853	C	N3-C4	-9.50	1.27	1.33
1	AA	1071	C	N1-C6	-9.49	1.31	1.37
35	BA	124	G	N9-C8	-9.49	1.31	1.37
35	BA	960	A	N9-C4	-9.49	1.32	1.37
35	BA	1298	C	N1-C6	-9.49	1.31	1.37
35	BA	271(M)	G	N7-C5	-9.48	1.33	1.39
35	BA	818	G	C6-N1	-9.48	1.32	1.39
35	BA	1687	G	N7-C5	-9.48	1.33	1.39
35	BA	2633	G	N9-C4	-9.48	1.30	1.38
35	BA	1616	A	N9-C4	-9.47	1.32	1.37
1	AA	22	G	N1-C2	-9.47	1.30	1.37
35	BA	2081	C	N1-C6	-9.47	1.31	1.37
1	AA	233	C	N3-C4	-9.47	1.27	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1149	G	N7-C5	-9.46	1.33	1.39
1	AA	1092	A	C6-N1	-9.45	1.28	1.35
35	BA	315	G	C6-N1	-9.45	1.32	1.39
35	BA	2083	G	N1-C2	-9.45	1.30	1.37
35	BA	1653	G	N1-C2	-9.44	1.30	1.37
35	BA	695	G	C6-N1	-9.44	1.32	1.39
35	BA	988	A	N9-C4	-9.44	1.32	1.37
35	BA	2239	G	C6-N1	-9.44	1.32	1.39
35	BA	251	A	N3-C4	-9.43	1.29	1.34
1	AA	69	G	C8-N7	-9.43	1.25	1.30
1	AA	189(G)	G	C5-C4	-9.43	1.31	1.38
35	BA	2104	G	C8-N7	-9.43	1.25	1.30
1	AA	15	G	N1-C2	-9.42	1.30	1.37
1	AA	673	G	N7-C5	-9.42	1.33	1.39
35	BA	482	A	N7-C5	-9.42	1.33	1.39
35	BA	2181	G	N7-C5	-9.42	1.33	1.39
35	BA	2704	C	N1-C6	-9.42	1.31	1.37
35	BA	916	G	N3-C4	-9.41	1.28	1.35
35	BA	746	A	N7-C5	-9.40	1.33	1.39
1	AA	253	U	C4-C5	-9.40	1.35	1.43
35	BA	959	A	C8-N7	-9.40	1.25	1.31
35	BA	2494	G	C5-C4	-9.39	1.31	1.38
1	AA	969	A	P-O5'	-9.39	1.50	1.59
35	BA	1683	C	C2-O2	-9.39	1.16	1.24
1	AA	668	G	N1-C2	-9.38	1.30	1.37
1	AA	742	G	N7-C5	-9.37	1.33	1.39
1	AA	262	A	C6-N1	-9.37	1.28	1.35
1	AA	1291	G	C8-N7	-9.37	1.25	1.30
1	AA	755	G	C8-N7	-9.36	1.25	1.30
35	BA	1267	U	N3-C4	-9.36	1.30	1.38
35	BA	1366	A	C6-N1	-9.36	1.28	1.35
1	AA	296	U	C2'-C1'	-9.35	1.43	1.53
1	AA	856	C	N3-C4	-9.35	1.27	1.33
35	BA	1783	A	C6-N1	-9.35	1.29	1.35
35	BA	2334	G	N3-C4	-9.35	1.28	1.35
35	BA	1964	G	N7-C5	-9.34	1.33	1.39
35	BA	2146	C	N1-C6	-9.34	1.31	1.37
35	BA	2662	A	N7-C5	-9.34	1.33	1.39
1	AA	792	A	C5-C4	-9.34	1.32	1.38
35	BA	337	C	N1-C6	-9.34	1.31	1.37
1	AA	992	U	C4-O4	-9.33	1.16	1.23
1	AA	1052	U	C2-N3	-9.32	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2415	G	C8-N7	-9.32	1.25	1.30
1	AA	247	G	N9-C8	-9.32	1.31	1.37
1	AA	791	G	C6-N1	-9.32	1.33	1.39
1	AA	897	C	N1-C6	-9.32	1.31	1.37
35	BA	361	G	N9-C8	-9.32	1.31	1.37
35	BA	1939	U	C2-N3	-9.30	1.31	1.37
35	BA	2001	A	N7-C5	-9.30	1.33	1.39
35	BA	2725	A	N9-C4	-9.30	1.32	1.37
1	AA	491	G	C8-N7	-9.29	1.25	1.30
35	BA	1587	A	N9-C4	-9.29	1.32	1.37
1	AA	107	G	C6-N1	-9.29	1.33	1.39
35	BA	710	G	C5-C6	-9.29	1.33	1.42
35	BA	699	A	N7-C5	-9.29	1.33	1.39
23	AX	14	A	C8-N7	-9.28	1.25	1.31
1	AA	438	G	C5-C4	-9.28	1.31	1.38
35	BA	1628	G	C8-N7	-9.28	1.25	1.30
35	BA	1284	A	N9-C4	-9.28	1.32	1.37
1	AA	1253	G	N1-C2	-9.27	1.30	1.37
1	AA	148	G	N9-C8	-9.27	1.31	1.37
35	BA	710	G	C5-C4	-9.25	1.31	1.38
35	BA	870	A	C5-C6	-9.25	1.32	1.41
35	BA	2878	U	C4-O4	-9.25	1.16	1.23
22	AV	24	U	C4-O4	-9.25	1.16	1.23
1	AA	501	C	N1-C6	-9.25	1.31	1.37
35	BA	1994	C	N3-C4	-9.25	1.27	1.33
35	BA	748	G	P-O5'	-9.24	1.50	1.59
35	BA	2409	G	C8-N7	-9.24	1.25	1.30
35	BA	1194	A	N3-C4	-9.23	1.29	1.34
35	BA	1818	U	P-O5'	-9.23	1.50	1.59
35	BA	1998	G	C6-N1	-9.22	1.33	1.39
35	BA	2235	G	C6-N1	-9.22	1.33	1.39
1	AA	1375	A	C8-N7	-9.22	1.25	1.31
35	BA	1210	A	C5-C4	-9.22	1.32	1.38
35	BA	1143	A	C5-C4	-9.21	1.32	1.38
35	BA	465	G	N3-C4	-9.21	1.29	1.35
35	BA	2478	A	C6-N6	-9.21	1.26	1.33
1	AA	1423	G	C5-C4	-9.20	1.31	1.38
35	BA	1690	A	N3-C4	-9.20	1.29	1.34
1	AA	1440	C	N3-C4	-9.20	1.27	1.33
35	BA	1531	C	N3-C4	-9.20	1.27	1.33
36	BB	21	G	N9-C4	-9.19	1.30	1.38
35	BA	1754	C	N1-C6	-9.19	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1802	A	N7-C5	-9.19	1.33	1.39
35	BA	918	A	C6-N1	-9.18	1.29	1.35
1	AA	484	G	C8-N7	-9.17	1.25	1.30
35	BA	590	A	C5-C6	-9.16	1.32	1.41
35	BA	345	A	N7-C5	-9.15	1.33	1.39
1	AA	1394	A	N9-C4	-9.15	1.32	1.37
35	BA	972	G	C5-C4	-9.15	1.31	1.38
1	AA	630	G	C8-N7	-9.15	1.25	1.30
35	BA	2042	A	N9-C4	-9.14	1.32	1.37
1	AA	1174	G	N3-C4	-9.14	1.29	1.35
1	AA	1430	C	N1-C6	9.14	1.42	1.37
35	BA	2569	G	C6-N1	-9.14	1.33	1.39
1	AA	1204	A	N7-C5	-9.14	1.33	1.39
35	BA	1896	G	C8-N7	-9.14	1.25	1.30
35	BA	573	G	C6-N1	-9.13	1.33	1.39
1	AA	1268	A	C6-N1	-9.13	1.29	1.35
35	BA	207	A	C6-N6	-9.13	1.26	1.33
35	BA	111	A	N9-C4	-9.12	1.32	1.37
35	BA	437	G	N9-C4	-9.12	1.30	1.38
35	BA	703	U	C2-N3	-9.12	1.31	1.37
35	BA	570	G	N7-C5	-9.12	1.33	1.39
35	BA	1284	A	N7-C5	-9.12	1.33	1.39
35	BA	2842	G	N9-C4	-9.12	1.30	1.38
1	AA	91	C	N1-C6	-9.11	1.31	1.37
1	AA	149	A	C6-N6	-9.11	1.26	1.33
35	BA	199	A	C6-N1	-9.11	1.29	1.35
35	BA	2368	C	N3-C4	-9.11	1.27	1.33
35	BA	2782	G	C5-C4	-9.11	1.31	1.38
35	BA	2862	G	N7-C5	-9.11	1.33	1.39
35	BA	1184	G	N9-C8	-9.10	1.31	1.37
1	AA	426	G	N7-C5	-9.10	1.33	1.39
1	AA	1138	G	P-O5'	-9.10	1.50	1.59
35	BA	1384	A	N7-C5	-9.10	1.33	1.39
35	BA	1283	G	C3'-C2'	-9.10	1.42	1.52
35	BA	2698	U	C4'-C3'	-9.10	1.43	1.53
36	BB	12	C	C2-O2	-9.09	1.16	1.24
22	AV	16	C	N1-C6	-9.09	1.31	1.37
1	AA	731	G	C6-N1	-9.08	1.33	1.39
1	AA	508	C	N3-C4	-9.08	1.27	1.33
35	BA	1537	G	N9-C8	-9.07	1.31	1.37
35	BA	2662	A	C6-N1	-9.07	1.29	1.35
1	AA	714	G	C8-N7	-9.06	1.25	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AV	49	G	N7-C5	-9.06	1.33	1.39
35	BA	1593	G	C8-N7	-9.06	1.25	1.30
1	AA	711	G	N3-C4	-9.06	1.29	1.35
35	BA	1334	G	C6-N1	-9.06	1.33	1.39
35	BA	1831	G	C8-N7	-9.05	1.25	1.30
35	BA	2152	G	C5-C4	-9.05	1.32	1.38
1	AA	574	A	N7-C5	-9.04	1.33	1.39
1	AA	194	C	N1-C6	-9.04	1.31	1.37
1	AA	1365	G	N9-C8	-9.03	1.31	1.37
1	AA	319	G	C5-C4	-9.03	1.32	1.38
1	AA	736	C	N1-C6	-9.02	1.31	1.37
35	BA	959	A	N9-C4	-9.02	1.32	1.37
35	BA	1596	A	C5-C4	9.02	1.45	1.38
35	BA	1696	G	N3-C4	-9.02	1.29	1.35
35	BA	831	G	C5-C4	-9.01	1.32	1.38
1	AA	579	G	N7-C5	-9.01	1.33	1.39
35	BA	2250	G	C6-O6	-9.01	1.16	1.24
35	BA	2436	G	N3-C4	-9.01	1.29	1.35
1	AA	519	C	C4-C5	-9.01	1.35	1.43
1	AA	279	A	C2-N3	-9.00	1.25	1.33
35	BA	479	A	N9-C8	-9.00	1.30	1.37
35	BA	2120	G	C6-N1	-8.99	1.33	1.39
1	AA	279	A	N9-C4	-8.99	1.32	1.37
1	AA	873	A	N7-C5	-8.98	1.33	1.39
35	BA	8	A	N7-C5	-8.98	1.33	1.39
35	BA	1774	C	C4-C5	-8.98	1.35	1.43
35	BA	2266	A	N9-C4	-8.98	1.32	1.37
35	BA	1228	G	C5-C6	-8.98	1.33	1.42
35	BA	2242	G	N3-C4	-8.96	1.29	1.35
1	AA	1287	A	N9-C4	-8.96	1.32	1.37
1	AA	399	G	C2-N3	-8.96	1.25	1.32
35	BA	1741	A	C5-C4	-8.95	1.32	1.38
35	BA	1978	A	C5-C4	-8.95	1.32	1.38
35	BA	1435	G	C8-N7	-8.95	1.25	1.30
1	AA	928	G	C8-N7	-8.94	1.25	1.30
1	AA	32	A	C6-N1	-8.94	1.29	1.35
1	AA	1384	C	N1-C6	-8.94	1.31	1.37
1	AA	632	A	C5-C6	-8.93	1.33	1.41
35	BA	2759	G	C8-N7	-8.93	1.25	1.30
35	BA	187	G	C5-C4	-8.92	1.32	1.38
35	BA	1630	G	C8-N7	-8.92	1.25	1.30
35	BA	1968	G	C2-N3	-8.92	1.25	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1103	C	C5-C6	-8.92	1.27	1.34
1	AA	563	A	N9-C4	-8.91	1.32	1.37
35	BA	421	U	C2-N3	-8.91	1.31	1.37
35	BA	1698	A	N9-C4	-8.91	1.32	1.37
35	BA	24	G	C2-N2	-8.90	1.25	1.34
35	BA	608	A	C5-C4	-8.90	1.32	1.38
35	BA	934	G	N7-C5	-8.90	1.33	1.39
35	BA	2279	G	N1-C2	-8.90	1.30	1.37
1	AA	1189	C	N1-C6	-8.90	1.31	1.37
35	BA	1747(A)	G	N9-C8	-8.90	1.31	1.37
35	BA	923	C	C4-C5	-8.89	1.35	1.43
1	AA	577	G	N7-C5	-8.89	1.33	1.39
35	BA	2206	G	C6-N1	-8.89	1.33	1.39
1	AA	579	G	N9-C4	-8.89	1.30	1.38
35	BA	191	A	N3-C4	-8.89	1.29	1.34
35	BA	2577	A	N7-C5	-8.89	1.33	1.39
1	AA	179	A	N9-C4	-8.89	1.32	1.37
1	AA	801	U	N3-C4	-8.88	1.30	1.38
35	BA	412	A	C6-N1	-8.89	1.29	1.35
1	AA	1140	C	N1-C6	-8.88	1.31	1.37
22	AV	57	A	N7-C5	-8.88	1.33	1.39
1	AA	266	G	C5-C6	-8.88	1.33	1.42
35	BA	1572	A	C5-C6	-8.88	1.33	1.41
35	BA	2231	C	C5-C6	-8.88	1.27	1.34
1	AA	1421	G	C5-C4	-8.88	1.32	1.38
35	BA	1647	G	C8-N7	-8.87	1.25	1.30
1	AA	1100	C	C2-N3	-8.87	1.28	1.35
1	AA	1180	A	N9-C4	-8.87	1.32	1.37
1	AA	1294	G	N7-C5	-8.87	1.33	1.39
35	BA	107	C	N1-C6	-8.87	1.31	1.37
35	BA	1347	G	C2-N3	-8.87	1.25	1.32
36	BB	24	G	N9-C4	-8.87	1.30	1.38
1	AA	312	C	C5-C6	-8.84	1.27	1.34
35	BA	1774	C	C2-N3	-8.84	1.28	1.35
35	BA	2117	A	C5-C6	-8.84	1.33	1.41
1	AA	285	G	C5-C4	-8.84	1.32	1.38
35	BA	1376	C	N1-C6	-8.84	1.31	1.37
35	BA	2490	G	C5-C4	8.84	1.44	1.38
1	AA	376	G	N7-C5	8.83	1.44	1.39
1	AA	1166	G	C6-N1	-8.83	1.33	1.39
35	BA	655	A	N3-C4	-8.83	1.29	1.34
1	AA	327	A	C5-C4	-8.82	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	596	G	C6-N1	-8.82	1.33	1.39
35	BA	881	G	C5-C4	-8.82	1.32	1.38
35	BA	1549	C	N1-C6	-8.82	1.31	1.37
35	BA	1992	G	C8-N7	-8.82	1.25	1.30
1	AA	579	G	N3-C4	-8.81	1.29	1.35
1	AA	115	G	N9-C8	-8.81	1.31	1.37
35	BA	456	C	C4-C5	-8.81	1.35	1.43
35	BA	1900	A	N7-C5	-8.81	1.33	1.39
36	BB	39	A	N7-C5	-8.81	1.33	1.39
1	AA	1116	C	N3-C4	-8.81	1.27	1.33
35	BA	2078	C	N1-C6	-8.81	1.31	1.37
1	AA	610	G	C2-N3	-8.80	1.25	1.32
35	BA	561	G	C6-N1	-8.80	1.33	1.39
35	BA	2173	A	C6-N1	-8.80	1.29	1.35
35	BA	1332	G	N9-C8	-8.79	1.31	1.37
35	BA	957	A	N3-C4	-8.79	1.29	1.34
35	BA	1432	C	N3-C4	-8.79	1.27	1.33
35	BA	2819	G	C5-C4	-8.79	1.32	1.38
35	BA	1468	C	C2-N3	-8.78	1.28	1.35
36	BB	112	U	C4-O4	-8.79	1.16	1.23
35	BA	2170	A	N1-C2	-8.78	1.26	1.34
1	AA	735	C	N3-C4	-8.78	1.27	1.33
1	AA	1467	G	C8-N7	-8.78	1.25	1.30
35	BA	2359	C	C5-C6	-8.78	1.27	1.34
35	BA	1496	A	N3-C4	-8.77	1.29	1.34
1	AA	614	A	N7-C5	-8.77	1.33	1.39
1	AA	993	G	N3-C4	-8.77	1.29	1.35
35	BA	1943	U	C4-C5	-8.77	1.35	1.43
1	AA	527	G	C8-N7	-8.77	1.25	1.30
35	BA	2757	A	N7-C5	-8.77	1.33	1.39
35	BA	2051	A	C6-N1	-8.76	1.29	1.35
35	BA	2871	C	N1-C6	-8.76	1.31	1.37
1	AA	521	G	N7-C5	-8.76	1.33	1.39
1	AA	1350	A	N9-C4	-8.76	1.32	1.37
35	BA	135	G	C8-N7	-8.76	1.25	1.30
35	BA	1500	G	N7-C5	-8.76	1.33	1.39
1	AA	1201	A	C5-C4	-8.76	1.32	1.38
1	AA	1231	G	N9-C8	-8.76	1.31	1.37
1	AA	1022	G	N7-C5	-8.75	1.33	1.39
35	BA	371	A	N7-C5	-8.75	1.33	1.39
35	BA	2170	A	C6-N6	-8.75	1.26	1.33
35	BA	1139	G	N9-C8	-8.74	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	791	G	C5-C4	-8.74	1.32	1.38
35	BA	768	G	N3-C4	-8.74	1.29	1.35
1	AA	313	A	N7-C5	-8.74	1.34	1.39
35	BA	1260	G	C2-N3	-8.74	1.25	1.32
1	AA	26	A	N9-C4	-8.73	1.32	1.37
1	AA	1363	C	C4-N4	-8.73	1.26	1.33
36	BB	118	G	C8-N7	-8.73	1.25	1.30
1	AA	524	G	N9-C4	-8.73	1.30	1.38
35	BA	876	C	N1-C6	-8.73	1.31	1.37
35	BA	2699	C	N1-C6	-8.73	1.31	1.37
1	AA	1500	A	C5-C6	-8.73	1.33	1.41
35	BA	372	G	C5-C4	-8.73	1.32	1.38
35	BA	711	G	N9-C8	-8.72	1.31	1.37
1	AA	1204	A	C8-N7	-8.72	1.25	1.31
35	BA	1828	G	N3-C4	-8.72	1.29	1.35
1	AA	671	G	C3'-O3'	-8.72	1.29	1.42
35	BA	2795	G	N7-C5	-8.72	1.34	1.39
35	BA	567	A	C5-C4	-8.71	1.32	1.38
1	AA	71	C	C2-N3	-8.71	1.28	1.35
35	BA	1229	G	N3-C4	-8.71	1.29	1.35
1	AA	818	G	C6-N1	-8.71	1.33	1.39
35	BA	294	A	N3-C4	-8.71	1.29	1.34
1	AA	690	G	C8-N7	-8.71	1.25	1.30
1	AA	92	C	C2-N3	-8.71	1.28	1.35
22	AV	10	G	C5-C6	-8.71	1.33	1.42
1	AA	1059	C	N3-C4	8.70	1.40	1.33
35	BA	397	G	N7-C5	-8.70	1.34	1.39
35	BA	1378	A	N1-C2	-8.70	1.26	1.34
35	BA	1427	A	C6-N6	-8.70	1.26	1.33
35	BA	1741	A	C6-N6	-8.70	1.26	1.33
1	AA	677	U	N3-C4	-8.69	1.30	1.38
35	BA	1500	G	N3-C4	-8.69	1.29	1.35
35	BA	1668	A	C8-N7	-8.69	1.25	1.31
1	AA	907	A	N3-C4	-8.69	1.29	1.34
35	BA	2207	G	C5-C4	-8.69	1.32	1.38
35	BA	2354	G	C2-N3	-8.69	1.25	1.32
35	BA	1305	C	C5-C6	-8.68	1.27	1.34
1	AA	727	G	N3-C4	-8.68	1.29	1.35
35	BA	593	G	C5-C4	-8.68	1.32	1.38
1	AA	217	C	N1-C6	8.68	1.42	1.37
1	AA	1409	C	N1-C6	-8.68	1.31	1.37
35	BA	2705	A	C5-C4	-8.67	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	172	A	N7-C5	-8.67	1.34	1.39
1	AA	450	G	N7-C5	-8.67	1.34	1.39
35	BA	2869	G	N7-C5	-8.67	1.34	1.39
1	AA	195	A	C5-C4	-8.66	1.32	1.38
35	BA	1009	A	N9-C8	-8.66	1.30	1.37
35	BA	1845	G	C8-N7	-8.66	1.25	1.30
35	BA	2004	G	C6-N1	-8.66	1.33	1.39
1	AA	439	A	N3-C4	-8.66	1.29	1.34
35	BA	2199	A	C5-C6	-8.66	1.33	1.41
22	AV	30	G	C2'-C1'	-8.65	1.43	1.53
1	AA	282	A	C5-C4	-8.65	1.32	1.38
35	BA	1380	G	N7-C5	-8.64	1.34	1.39
35	BA	1642	G	N7-C5	-8.64	1.34	1.39
1	AA	1274	G	C8-N7	-8.63	1.25	1.30
35	BA	2822	G	N7-C5	-8.63	1.34	1.39
1	AA	282	A	N3-C4	-8.63	1.29	1.34
35	BA	313	C	N1-C6	-8.63	1.31	1.37
35	BA	1814	G	N9-C8	-8.63	1.31	1.37
1	AA	386	C	C5-C6	-8.62	1.27	1.34
35	BA	749	C	C5-C6	-8.62	1.27	1.34
1	AA	1214	C	N1-C6	-8.62	1.31	1.37
35	BA	2762	G	C2-N2	-8.62	1.25	1.34
35	BA	716	A	N7-C5	-8.61	1.34	1.39
35	BA	1170	G	N3-C4	-8.61	1.29	1.35
35	BA	1290	C	C2-N3	-8.61	1.28	1.35
1	AA	420	U	C4-O4	-8.61	1.16	1.23
35	BA	2516	G	C6-N1	-8.61	1.33	1.39
1	AA	1114	C	N1-C6	-8.61	1.31	1.37
35	BA	1234	U	C4-C5	-8.61	1.35	1.43
35	BA	1265	A	P-O5'	-8.61	1.51	1.59
35	BA	1772	G	N9-C4	-8.60	1.31	1.38
35	BA	2063	C	N3-C4	-8.60	1.27	1.33
1	AA	1102	A	N7-C5	-8.60	1.34	1.39
35	BA	55	G	C5-C4	-8.60	1.32	1.38
1	AA	218	C	N1-C6	8.59	1.42	1.37
22	AV	48	C	C2-N3	-8.59	1.28	1.35
1	AA	318	G	N1-C2	-8.59	1.30	1.37
1	AA	1400	C	N1-C6	-8.59	1.31	1.37
35	BA	613	G	N9-C8	-8.59	1.31	1.37
35	BA	689	A	N7-C5	-8.59	1.34	1.39
35	BA	1763	G	C5-C4	-8.59	1.32	1.38
35	BA	2273	A	N9-C4	-8.59	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1059	G	N7-C5	-8.59	1.34	1.39
35	BA	1331	A	N9-C4	-8.58	1.32	1.37
1	AA	79	G	C6-N1	-8.58	1.33	1.39
1	AA	826	C	N1-C6	-8.58	1.32	1.37
1	AA	1338	G	N9-C8	-8.58	1.31	1.37
1	AA	854	G	N7-C5	-8.57	1.34	1.39
35	BA	1129	A	N7-C5	-8.57	1.34	1.39
1	AA	561	U	P-O5'	-8.56	1.51	1.59
1	AA	648	A	C5-C4	-8.56	1.32	1.38
35	BA	186	G	C8-N7	-8.56	1.25	1.30
35	BA	1508	A	N3-C4	-8.56	1.29	1.34
35	BA	1819	A	C5-C6	-8.56	1.33	1.41
35	BA	2261	C	N1-C6	-8.56	1.32	1.37
35	BA	1313	U	C2-N3	-8.56	1.31	1.37
35	BA	1783	A	C5-C4	-8.56	1.32	1.38
22	AV	9	G	N7-C5	-8.55	1.34	1.39
35	BA	1241	A	C8-N7	-8.55	1.25	1.31
35	BA	2439	A	N3-C4	-8.55	1.29	1.34
35	BA	2222	G	N7-C5	-8.55	1.34	1.39
1	AA	361	G	C2-N3	-8.55	1.25	1.32
1	AA	855	G	C6-N1	-8.54	1.33	1.39
35	BA	957	A	C8-N7	-8.54	1.25	1.31
1	AA	288	A	N7-C5	-8.54	1.34	1.39
1	AA	691	G	N7-C5	8.53	1.44	1.39
35	BA	1975	G	N7-C5	-8.54	1.34	1.39
1	AA	411	A	C8-N7	-8.53	1.25	1.31
1	AA	1355	G	C6-N1	-8.53	1.33	1.39
1	AA	1521	G	C2-N3	-8.53	1.25	1.32
35	BA	304	G	N3-C4	-8.53	1.29	1.35
35	BA	982	C	N1-C6	-8.52	1.32	1.37
1	AA	1156	G	C6-N1	-8.52	1.33	1.39
36	BB	13	A	C6-N6	-8.52	1.27	1.33
35	BA	1555	G	N3-C4	-8.52	1.29	1.35
35	BA	2121	G	C6-N1	-8.52	1.33	1.39
35	BA	2716	U	C2-N3	-8.52	1.31	1.37
1	AA	364	A	N9-C4	-8.51	1.32	1.37
1	AA	658	G	N9-C4	-8.51	1.31	1.38
1	AA	39	G	C5-C4	-8.50	1.32	1.38
1	AA	1133	G	C6-N1	-8.49	1.33	1.39
1	AA	1397	C	C2-N3	-8.49	1.28	1.35
36	BB	78	A	C5-C6	-8.49	1.33	1.41
1	AA	595	G	N7-C5	-8.49	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	812	C	N1-C6	-8.48	1.32	1.37
35	BA	2509	G	N9-C4	-8.48	1.31	1.38
1	AA	887	G	C5-C6	-8.48	1.33	1.42
36	BB	100	A	C8-N7	-8.48	1.25	1.31
1	AA	1072	G	N9-C8	-8.48	1.31	1.37
1	AA	437	U	C4-O4	-8.47	1.16	1.23
35	BA	2146	C	N3-C4	-8.47	1.28	1.33
1	AA	189	G	C8-N7	-8.47	1.25	1.30
35	BA	1970	A	N7-C5	-8.47	1.34	1.39
35	BA	2110	G	N7-C5	-8.47	1.34	1.39
35	BA	681	G	C2-N3	-8.46	1.25	1.32
35	BA	913	U	C2-O2	-8.46	1.14	1.22
35	BA	2508	G	N3-C4	-8.46	1.29	1.35
36	BB	116	G	N7-C5	-8.46	1.34	1.39
35	BA	896	A	C5-C6	-8.46	1.33	1.41
1	AA	224	C	N3-C4	-8.46	1.28	1.33
1	AA	1235	U	P-O5'	-8.46	1.51	1.59
1	AA	1388	C	N3-C4	-8.46	1.28	1.33
35	BA	2074	U	C2-N3	-8.46	1.31	1.37
35	BA	1695	G	N7-C5	-8.45	1.34	1.39
1	AA	227	G	N1-C2	-8.45	1.30	1.37
35	BA	1857	G	N3-C4	-8.44	1.29	1.35
1	AA	593	G	C8-N7	-8.44	1.25	1.30
1	AA	791	G	N9-C8	-8.44	1.31	1.37
35	BA	583	G	C8-N7	-8.44	1.25	1.30
35	BA	2186	G	C2-N3	-8.44	1.25	1.32
35	BA	2234	G	C8-N7	-8.44	1.25	1.30
35	BA	1363	C	C4'-C3'	-8.44	1.43	1.53
1	AA	663	A	N7-C5	-8.44	1.34	1.39
1	AA	1056	U	C4-C5	-8.44	1.35	1.43
1	AA	1375	A	P-O5'	-8.43	1.51	1.59
35	BA	1121	C	N3-C4	-8.43	1.28	1.33
35	BA	2003	G	P-O5'	-8.43	1.51	1.59
35	BA	2243	U	C2-N3	-8.43	1.31	1.37
35	BA	538	G	C8-N7	-8.42	1.25	1.30
35	BA	1533	G	N9-C8	-8.42	1.31	1.37
35	BA	2876	G	N9-C8	-8.42	1.31	1.37
1	AA	1083	U	C2-O2	-8.42	1.14	1.22
35	BA	996	A	N7-C5	-8.42	1.34	1.39
35	BA	1652	A	N7-C5	-8.42	1.34	1.39
35	BA	82	G	C8-N7	-8.41	1.25	1.30
35	BA	949	C	N1-C6	-8.41	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	118	G	N3-C4	8.41	1.41	1.35
35	BA	449	A	N9-C4	8.41	1.42	1.37
1	AA	1287	A	N9-C8	-8.40	1.31	1.37
35	BA	707	G	N7-C5	-8.40	1.34	1.39
35	BA	885	C	N3-C4	-8.40	1.28	1.33
35	BA	681	G	N9-C8	-8.40	1.31	1.37
35	BA	2639	A	C6-N1	-8.40	1.29	1.35
35	BA	1251	C	N1-C6	-8.40	1.32	1.37
35	BA	1586	A	N3-C4	-8.40	1.29	1.34
35	BA	2251	G	C5-C4	-8.40	1.32	1.38
1	AA	200	G	C8-N7	-8.39	1.25	1.30
35	BA	1960	A	C8-N7	-8.39	1.25	1.31
35	BA	1983	C	N1-C6	-8.39	1.32	1.37
35	BA	681	G	C6-N1	-8.39	1.33	1.39
35	BA	271(U)	G	N9-C8	-8.39	1.31	1.37
35	BA	750	A	N7-C5	-8.39	1.34	1.39
1	AA	500	G	C4'-C3'	-8.38	1.44	1.53
35	BA	381	G	C2-N3	-8.38	1.26	1.32
35	BA	880	G	N3-C4	-8.38	1.29	1.35
35	BA	1038	C	C4-C5	-8.38	1.36	1.43
35	BA	1689	A	C4'-C3'	-8.38	1.44	1.53
35	BA	2252	G	C5-C4	-8.38	1.32	1.38
35	BA	1252	G	N3-C4	-8.38	1.29	1.35
1	AA	334	C	P-O5'	-8.38	1.51	1.59
35	BA	750	A	N9-C4	-8.38	1.32	1.37
35	BA	2200	C	C2-N3	-8.38	1.29	1.35
35	BA	1667	G	N7-C5	-8.37	1.34	1.39
35	BA	1114	G	C6-N1	-8.37	1.33	1.39
35	BA	457	A	N9-C8	-8.37	1.31	1.37
35	BA	2124	G	N9-C8	-8.37	1.31	1.37
1	AA	1520	G	N1-C2	-8.36	1.31	1.37
35	BA	604	G	C2-N3	-8.36	1.26	1.32
35	BA	2783	G	N1-C2	-8.36	1.31	1.37
35	BA	2259	G	C2-N3	-8.36	1.26	1.32
1	AA	928	G	C6-O6	-8.36	1.16	1.24
1	AA	994	A	C6-N1	-8.36	1.29	1.35
35	BA	981	A	C5-C4	-8.35	1.32	1.38
35	BA	2314	C	N1-C6	-8.35	1.32	1.37
1	AA	1279	A	N3-C4	-8.35	1.29	1.34
35	BA	176	G	C2-N3	-8.35	1.26	1.32
35	BA	1336	A	N9-C4	-8.34	1.32	1.37
1	AA	323	U	C2-N3	-8.34	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2082	A	N9-C8	-8.33	1.31	1.37
35	BA	133	C	N3-C4	-8.33	1.28	1.33
35	BA	917	A	N3-C4	-8.33	1.29	1.34
41	BG	112	PRO	C-N	8.33	1.53	1.34
36	BB	29	A	N3-C4	-8.32	1.29	1.34
1	AA	1496	C	N3-C4	-8.32	1.28	1.33
35	BA	352	G	N3-C4	-8.32	1.29	1.35
35	BA	1881	C	N3-C4	-8.32	1.28	1.33
35	BA	532	A	C5-C4	-8.32	1.32	1.38
35	BA	2072	G	C8-N7	8.32	1.35	1.30
1	AA	1387	G	C8-N7	-8.31	1.25	1.30
1	AA	1514	C	N1-C6	-8.31	1.32	1.37
35	BA	710	G	C8-N7	-8.31	1.25	1.30
35	BA	920	G	C8-N7	-8.31	1.25	1.30
1	AA	73	G	N1-C2	-8.31	1.31	1.37
35	BA	1448	G	N7-C5	-8.31	1.34	1.39
35	BA	1452	A	C5-C4	-8.31	1.32	1.38
1	AA	1387	G	C6-N1	-8.31	1.33	1.39
1	AA	535	A	C6-N1	-8.30	1.29	1.35
35	BA	689	A	C6-N6	-8.30	1.27	1.33
35	BA	732	C	N1-C6	-8.30	1.32	1.37
35	BA	684	G	C6-O6	-8.30	1.16	1.24
1	AA	1200	C	C4-C5	-8.29	1.36	1.43
35	BA	1236	G	N1-C2	-8.29	1.31	1.37
1	AA	733	A	N1-C2	-8.29	1.26	1.34
35	BA	1627	G	C5-C4	-8.29	1.32	1.38
1	AA	567	G	C6-N1	-8.29	1.33	1.39
1	AA	584	G	N7-C5	-8.29	1.34	1.39
35	BA	1548	C	C4-C5	-8.29	1.36	1.43
35	BA	1839	G	N7-C5	-8.29	1.34	1.39
35	BA	919	G	C5-C4	-8.28	1.32	1.38
1	AA	1363(A)	A	C8-N7	-8.28	1.25	1.31
35	BA	1252	G	N9-C8	-8.28	1.32	1.37
1	AA	1269	A	C5-C4	-8.28	1.32	1.38
35	BA	434	U	C2-N3	-8.28	1.31	1.37
35	BA	2046	G	C5-C4	-8.27	1.32	1.38
35	BA	1192	G	N7-C5	-8.27	1.34	1.39
1	AA	275	G	N9-C8	-8.27	1.32	1.37
1	AA	944	G	C8-N7	-8.26	1.25	1.30
35	BA	513	A	N9-C4	-8.26	1.32	1.37
35	BA	195	A	N1-C2	-8.26	1.26	1.34
35	BA	2531	A	N9-C8	-8.26	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	70	C	N1-C6	8.26	1.42	1.37
1	AA	1287	A	N7-C5	-8.26	1.34	1.39
35	BA	725	G	N3-C4	-8.26	1.29	1.35
36	BB	75	G	N3-C4	-8.26	1.29	1.35
1	AA	835	U	C2'-C1'	-8.25	1.44	1.53
35	BA	2353	G	N9-C8	-8.25	1.32	1.37
35	BA	2433	A	C5-C4	-8.25	1.32	1.38
22	AV	51	C	C2-N3	-8.25	1.29	1.35
35	BA	2827	C	N3-C4	-8.25	1.28	1.33
35	BA	1173	G	C5-C4	-8.24	1.32	1.38
1	AA	1338	G	N7-C5	-8.24	1.34	1.39
35	BA	1176	G	C8-N7	-8.24	1.26	1.30
1	AA	53	A	C5-C6	-8.24	1.33	1.41
35	BA	1128	A	N1-C2	-8.24	1.26	1.34
1	AA	1386	G	N7-C5	-8.24	1.34	1.39
35	BA	2277	G	N7-C5	-8.24	1.34	1.39
35	BA	654	A	N9-C4	8.23	1.42	1.37
35	BA	141	A	C6-N6	-8.23	1.27	1.33
35	BA	259	G	C5-C6	-8.23	1.34	1.42
36	BB	69	G	C5-C4	-8.23	1.32	1.38
1	AA	306	G	C6-N1	-8.23	1.33	1.39
1	AA	1332	A	N3-C4	-8.23	1.29	1.34
1	AA	1438	G	N7-C5	8.23	1.44	1.39
35	BA	1127	A	C2'-C1'	-8.23	1.44	1.53
35	BA	1381	G	N9-C8	-8.22	1.32	1.37
35	BA	2604	U	C4-C5	-8.22	1.36	1.43
35	BA	2266	A	C6-N1	-8.22	1.29	1.35
1	AA	42	G	N7-C5	-8.22	1.34	1.39
1	AA	51	A	C5-C4	-8.22	1.32	1.38
1	AA	260	G	N9-C8	-8.22	1.32	1.37
35	BA	1594	G	N7-C5	-8.22	1.34	1.39
35	BA	2108	C	C4-C5	-8.22	1.36	1.43
35	BA	2088	G	C8-N7	-8.22	1.26	1.30
1	AA	1518	A	N3-C4	-8.21	1.29	1.34
35	BA	1276	A	C8-N7	-8.21	1.25	1.31
36	BB	115	G	N9-C8	-8.21	1.32	1.37
35	BA	1942	C	N1-C6	8.21	1.42	1.37
35	BA	2023	G	C6-O6	-8.21	1.16	1.24
35	BA	2707	G	C6-N1	-8.21	1.33	1.39
35	BA	117	G	C8-N7	-8.20	1.26	1.30
35	BA	1011	G	C6-N1	-8.19	1.33	1.39
35	BA	1741	A	N9-C8	-8.20	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2047	U	P-O5'	-8.19	1.51	1.59
35	BA	2181	G	C6-N1	-8.19	1.33	1.39
35	BA	2259	G	C6-N1	-8.19	1.33	1.39
35	BA	2314	C	C5-C6	-8.19	1.27	1.34
35	BA	1546	C	C4-N4	-8.19	1.26	1.33
35	BA	653	A	N9-C4	-8.19	1.32	1.37
1	AA	1387	G	C2-N3	-8.18	1.26	1.32
35	BA	271(J)	C	N3-C4	-8.18	1.28	1.33
1	AA	607	A	N3-C4	-8.18	1.29	1.34
22	AV	21	A	N9-C4	-8.18	1.32	1.37
35	BA	340	A	N3-C4	-8.18	1.29	1.34
35	BA	861	A	N3-C4	-8.18	1.29	1.34
35	BA	2741	A	C5-C4	-8.17	1.33	1.38
36	BB	90	A	C5-C6	-8.17	1.33	1.41
35	BA	900	A	N3-C4	-8.17	1.29	1.34
35	BA	2383	G	N1-C2	-8.17	1.31	1.37
1	AA	545	C	N3-C4	-8.16	1.28	1.33
35	BA	1120	G	C2-N3	-8.16	1.26	1.32
1	AA	461	A	C5-C4	8.16	1.44	1.38
35	BA	1055	G	N7-C5	-8.16	1.34	1.39
35	BA	52	A	N3-C4	-8.15	1.29	1.34
35	BA	2386	C	C5-C6	-8.15	1.27	1.34
1	AA	836	G	C5-C6	-8.15	1.34	1.42
35	BA	353	G	N7-C5	-8.15	1.34	1.39
35	BA	1696	G	N7-C5	-8.15	1.34	1.39
35	BA	2255	G	C8-N7	8.15	1.35	1.30
1	AA	975	A	N7-C5	-8.14	1.34	1.39
35	BA	513	A	C5-C6	-8.14	1.33	1.41
35	BA	1373	A	N3-C4	-8.14	1.29	1.34
35	BA	1689	A	N9-C4	-8.14	1.32	1.37
35	BA	2438	U	N3-C4	-8.14	1.31	1.38
35	BA	2590	A	N7-C5	-8.14	1.34	1.39
35	BA	226	G	C5-C4	-8.14	1.32	1.38
35	BA	2558	C	C2-N3	-8.14	1.29	1.35
1	AA	575	G	N1-C2	-8.14	1.31	1.37
1	AA	690	G	N1-C2	-8.14	1.31	1.37
1	AA	811	C	C4-C5	-8.14	1.36	1.43
1	AA	1030(D)	A	N9-C4	-8.14	1.32	1.37
1	AA	1174	G	C2-N2	-8.14	1.26	1.34
35	BA	1317	A	P-O5'	-8.13	1.51	1.59
35	BA	2520	C	C5-C6	-8.13	1.27	1.34
22	AV	27	U	C2-N3	-8.13	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2849	U	C4-C5	-8.13	1.36	1.43
1	AA	888	G	C8-N7	-8.13	1.26	1.30
1	AA	1057	G	N1-C2	-8.13	1.31	1.37
35	BA	1866	C	N3-C4	-8.12	1.28	1.33
1	AA	1079	G	C8-N7	-8.12	1.26	1.30
35	BA	1853	A	C6-N1	-8.12	1.29	1.35
35	BA	2346	A	N1-C2	-8.12	1.27	1.34
1	AA	934	C	N3-C4	-8.12	1.28	1.33
35	BA	644	A	C6-N6	-8.12	1.27	1.33
1	AA	1014	A	N3-C4	-8.12	1.29	1.34
1	AA	1468	A	C6-N1	-8.12	1.29	1.35
35	BA	1472	A	N3-C4	-8.12	1.29	1.34
1	AA	629	G	P-O5'	-8.12	1.51	1.59
35	BA	2425	A	C8-N7	-8.12	1.25	1.31
35	BA	2594	C	N3-C4	8.11	1.39	1.33
1	AA	885	G	N3-C4	-8.11	1.29	1.35
35	BA	2128	C	P-O5'	-8.11	1.51	1.59
1	AA	1370	G	C2-N3	-8.11	1.26	1.32
35	BA	1484	G	C6-N1	-8.11	1.33	1.39
35	BA	186	G	N7-C5	-8.11	1.34	1.39
35	BA	1087	G	C5-C4	-8.10	1.32	1.38
35	BA	1307	A	N3-C4	-8.10	1.29	1.34
1	AA	488	C	N1-C6	-8.10	1.32	1.37
35	BA	926	A	C2-N3	-8.10	1.26	1.33
35	BA	1953	A	N9-C8	-8.10	1.31	1.37
35	BA	2228	G	C8-N7	-8.10	1.26	1.30
35	BA	774	A	C8-N7	-8.09	1.25	1.31
1	AA	472	A	C6-N1	-8.09	1.29	1.35
1	AA	72	C	N1-C6	-8.09	1.32	1.37
35	BA	1187	G	N9-C4	-8.09	1.31	1.38
1	AA	1480	G	C2'-C1'	-8.09	1.44	1.53
1	AA	788	U	N1-C2	-8.08	1.31	1.38
35	BA	1594	G	C5-C4	8.08	1.44	1.38
1	AA	1197	G	N1-C2	-8.08	1.31	1.37
1	AA	355	C	C2-O2	-8.08	1.17	1.24
35	BA	775	G	C2-N2	-8.08	1.26	1.34
35	BA	2354	G	C5-C4	-8.08	1.32	1.38
35	BA	2861	G	N7-C5	-8.07	1.34	1.39
35	BA	1891	G	C5-C4	-8.07	1.32	1.38
1	AA	127	G	N3-C4	8.07	1.41	1.35
35	BA	1548	C	C4'-C3'	-8.07	1.44	1.53
35	BA	1862	G	N7-C5	-8.07	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2356	C	N1-C6	-8.07	1.32	1.37
36	BB	100	A	C5-C4	-8.07	1.33	1.38
1	AA	14	U	N1-C2	-8.06	1.31	1.38
1	AA	1416	G	N9-C4	-8.06	1.31	1.38
1	AA	973	G	N7-C5	-8.06	1.34	1.39
35	BA	1132	A	C6-N6	-8.06	1.27	1.33
35	BA	1952	A	N7-C5	-8.06	1.34	1.39
35	BA	2707	G	N7-C5	-8.06	1.34	1.39
1	AA	1054	C	P-O5'	-8.06	1.51	1.59
35	BA	2132	U	C2-N3	-8.06	1.32	1.37
35	BA	1935	G	N3-C4	-8.06	1.29	1.35
1	AA	128	G	N1-C2	-8.06	1.31	1.37
1	AA	310	G	N9-C8	-8.06	1.32	1.37
1	AA	1424	C	C5-C6	-8.05	1.27	1.34
35	BA	1719	G	N7-C5	-8.06	1.34	1.39
35	BA	2494	G	N7-C5	-8.06	1.34	1.39
1	AA	1105	A	C8-N7	-8.05	1.25	1.31
1	AA	1286	A	C8-N7	-8.05	1.25	1.31
35	BA	1052	C	N3-C4	-8.05	1.28	1.33
35	BA	2740	A	C8-N7	-8.05	1.25	1.31
35	BA	2284	C	C2-N3	-8.05	1.29	1.35
35	BA	47	C	N3-C4	-8.05	1.28	1.33
1	AA	996	A	C5-C4	-8.04	1.33	1.38
35	BA	2697	G	N9-C4	-8.04	1.31	1.38
35	BA	2663	G	C8-N7	-8.04	1.26	1.30
35	BA	1302	A	N3-C4	-8.04	1.30	1.34
35	BA	16	G	N7-C5	-8.04	1.34	1.39
35	BA	2087	G	N7-C5	-8.04	1.34	1.39
35	BA	887	A	C5-C6	-8.04	1.33	1.41
35	BA	2557	G	C8-N7	-8.04	1.26	1.30
1	AA	1491	G	N9-C8	-8.03	1.32	1.37
35	BA	690	G	N9-C8	-8.03	1.32	1.37
1	AA	177	C	C4-C5	-8.03	1.36	1.43
35	BA	1061	U	C2-N3	-8.03	1.32	1.37
35	BA	1076	C	C4-C5	-8.03	1.36	1.43
36	BB	62	C	N3-C4	-8.03	1.28	1.33
35	BA	690	G	N1-C2	-8.03	1.31	1.37
35	BA	823	G	C2-N3	-8.03	1.26	1.32
35	BA	1099	G	C6-N1	-8.03	1.33	1.39
35	BA	1797	C	P-O5'	-8.03	1.51	1.59
1	AA	1114	C	C2-N3	-8.03	1.29	1.35
1	AA	1175	G	C8-N7	-8.02	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1468	A	C8-N7	-8.02	1.25	1.31
35	BA	705	A	C5-C6	-8.02	1.33	1.41
35	BA	2070	G	N3-C4	-8.02	1.29	1.35
35	BA	2766	G	C8-N7	-8.02	1.26	1.30
1	AA	244	U	C5-C6	-8.02	1.26	1.34
1	AA	377	G	C6-O6	-8.02	1.17	1.24
1	AA	897	C	C4-N4	-8.01	1.26	1.33
35	BA	788	A	N7-C5	-8.01	1.34	1.39
35	BA	1154	G	N7-C5	-8.01	1.34	1.39
1	AA	131	C	C4-C5	-8.01	1.36	1.43
35	BA	1766	U	C4-C5	-8.01	1.36	1.43
35	BA	2044	C	N1-C6	-8.01	1.32	1.37
35	BA	1086	A	N7-C5	-8.01	1.34	1.39
35	BA	2330	G	C4'-C3'	-8.01	1.44	1.53
35	BA	2675	A	C6-N1	-8.01	1.29	1.35
36	BB	77	U	C4-C5	-8.01	1.36	1.43
35	BA	1216	G	C8-N7	-8.00	1.26	1.30
35	BA	523	C	N1-C6	-8.00	1.32	1.37
35	BA	1434	A	C6-N1	-8.00	1.29	1.35
35	BA	1683	C	C5-C6	-8.00	1.27	1.34
36	BB	101	G	C8-N7	-8.00	1.26	1.30
35	BA	782	A	N3-C4	-8.00	1.30	1.34
35	BA	2246	G	N7-C5	-7.99	1.34	1.39
35	BA	1706	U	N1-C6	-7.99	1.30	1.38
35	BA	784	A	N7-C5	-7.99	1.34	1.39
35	BA	946	G	N7-C5	-7.99	1.34	1.39
35	BA	1896	G	N7-C5	-7.99	1.34	1.39
35	BA	746	A	C3'-C2'	-7.99	1.44	1.52
35	BA	1767	C	N3-C4	-7.99	1.28	1.33
35	BA	1399	C	C2-O2	-7.98	1.17	1.24
1	AA	44	G	C6-N1	-7.98	1.33	1.39
35	BA	570	G	C6-N1	-7.98	1.33	1.39
1	AA	913	A	N3-C4	7.98	1.39	1.34
35	BA	67	U	N3-C4	-7.98	1.31	1.38
35	BA	2059	A	C5-C4	-7.97	1.33	1.38
22	AV	61	C	C5-C6	-7.97	1.27	1.34
35	BA	948	G	N3-C4	-7.97	1.29	1.35
35	BA	1278	A	N3-C4	-7.97	1.30	1.34
1	AA	1198	G	C2-N3	-7.96	1.26	1.32
1	AA	144	G	C8-N7	-7.96	1.26	1.30
35	BA	2384	G	N7-C5	-7.96	1.34	1.39
35	BA	449	A	N3-C4	-7.96	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2562	U	N1-C2	-7.96	1.31	1.38
1	AA	398	C	N3-C4	-7.96	1.28	1.33
35	BA	179	G	N9-C4	-7.96	1.31	1.38
1	AA	1151	A	C8-N7	-7.96	1.25	1.31
35	BA	492	A	C6-N1	-7.96	1.29	1.35
35	BA	748	G	N7-C5	-7.96	1.34	1.39
35	BA	2446	G	N1-C2	-7.96	1.31	1.37
1	AA	282	A	C6-N1	-7.95	1.29	1.35
1	AA	899	C	C4'-C3'	-7.95	1.44	1.53
35	BA	687	C	N1-C6	-7.95	1.32	1.37
35	BA	832	G	N9-C8	-7.95	1.32	1.37
35	BA	1922	G	N1-C2	-7.95	1.31	1.37
35	BA	1307	A	C5-C4	-7.94	1.33	1.38
1	AA	46	G	C5-C6	-7.94	1.34	1.42
1	AA	149	A	N7-C5	-7.94	1.34	1.39
35	BA	398	G	N9-C4	-7.93	1.31	1.38
1	AA	743	U	N1-C6	-7.93	1.30	1.38
1	AA	299	G	C2-N3	-7.93	1.26	1.32
1	AA	342	C	N3-C4	-7.93	1.28	1.33
36	BB	47	C	N1-C6	-7.93	1.32	1.37
1	AA	362	G	P-O5'	-7.93	1.51	1.59
35	BA	713	G	N3-C4	-7.92	1.29	1.35
35	BA	1835	G	N9-C8	-7.92	1.32	1.37
35	BA	1964	G	C8-N7	-7.92	1.26	1.30
1	AA	611	A	C6-N6	-7.92	1.27	1.33
35	BA	1907	G	C6-O6	-7.92	1.17	1.24
1	AA	119	A	C6-N1	-7.92	1.30	1.35
1	AA	1180	A	N7-C5	-7.92	1.34	1.39
22	AV	3	C	N3-C4	-7.92	1.28	1.33
35	BA	2393	A	C6-N1	-7.92	1.30	1.35
35	BA	2596	U	C2-N3	-7.92	1.32	1.37
35	BA	2246	G	C8-N7	-7.92	1.26	1.30
35	BA	1691	C	N1-C6	-7.92	1.32	1.37
36	BB	61	G	N9-C8	-7.92	1.32	1.37
35	BA	654(V)	A	N7-C5	-7.91	1.34	1.39
1	AA	1386	G	C2-N3	-7.91	1.26	1.32
1	AA	1392	G	C2-N3	-7.91	1.26	1.32
36	BB	63	G	C2-N3	-7.91	1.26	1.32
35	BA	2109	U	N3-C4	-7.91	1.31	1.38
1	AA	820	U	C2-N3	-7.90	1.32	1.37
35	BA	731	C	N3-C4	-7.90	1.28	1.33
1	AA	1476	G	C5-C4	-7.90	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2302	G	N1-C2	-7.90	1.31	1.37
35	BA	752	A	N3-C4	-7.90	1.30	1.34
35	BA	2116	G	N9-C8	-7.90	1.32	1.37
1	AA	883	C	N1-C6	-7.90	1.32	1.37
35	BA	2467	C	N1-C6	-7.90	1.32	1.37
1	AA	1152	A	C5-C4	-7.89	1.33	1.38
35	BA	1811	G	N1-C2	-7.89	1.31	1.37
1	AA	815	A	N3-C4	-7.89	1.30	1.34
1	AA	51	A	C6-N1	-7.89	1.30	1.35
1	AA	1371	G	C8-N7	-7.89	1.26	1.30
35	BA	2274	A	C5-C4	-7.89	1.33	1.38
1	AA	39	G	C6-N1	-7.88	1.34	1.39
35	BA	1365	A	N3-C4	-7.88	1.30	1.34
35	BA	2026	C	C4'-C3'	-7.88	1.44	1.53
35	BA	2749	A	N3-C4	-7.88	1.30	1.34
35	BA	38	A	C3'-O3'	-7.88	1.31	1.42
35	BA	85	G	N9-C8	-7.88	1.32	1.37
35	BA	2499	C	C4-C5	-7.88	1.36	1.43
35	BA	2882	A	C6-N1	-7.88	1.30	1.35
35	BA	1287	A	C5-C6	-7.88	1.33	1.41
35	BA	1174	A	N9-C4	-7.87	1.33	1.37
35	BA	1836	C	C4-N4	-7.87	1.26	1.33
35	BA	1247	A	N9-C8	-7.87	1.31	1.37
35	BA	1930	G	N1-C2	-7.87	1.31	1.37
35	BA	2525	G	N3-C4	-7.87	1.29	1.35
35	BA	512	G	N7-C5	-7.87	1.34	1.39
35	BA	2121	G	N7-C5	-7.87	1.34	1.39
35	BA	2038	G	N7-C5	-7.86	1.34	1.39
35	BA	2330	G	C8-N7	-7.86	1.26	1.30
1	AA	1428	A	C5-C4	-7.86	1.33	1.38
1	AA	1169	A	N3-C4	-7.86	1.30	1.34
35	BA	619	G	N9-C8	-7.86	1.32	1.37
1	AA	943	U	C4-O4	-7.86	1.17	1.23
35	BA	348	G	C8-N7	-7.86	1.26	1.30
35	BA	272(G)	C	C4'-C3'	-7.86	1.44	1.53
35	BA	734	A	C8-N7	7.85	1.37	1.31
36	BB	86	G	C5-C4	-7.85	1.32	1.38
1	AA	679	C	N3-C4	-7.85	1.28	1.33
35	BA	1272	A	N7-C5	-7.84	1.34	1.39
35	BA	2198	A	N7-C5	-7.84	1.34	1.39
35	BA	2054	A	C3'-C2'	-7.84	1.44	1.52
35	BA	78	A	N3-C4	7.84	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	706	A	N7-C5	-7.84	1.34	1.39
35	BA	481	G	C8-N7	-7.84	1.26	1.30
35	BA	2193	G	N7-C5	-7.84	1.34	1.39
35	BA	2533	A	N7-C5	-7.84	1.34	1.39
1	AA	823	G	C8-N7	-7.83	1.26	1.30
35	BA	1190	G	N1-C2	-7.83	1.31	1.37
1	AA	80	G	C6-N1	-7.83	1.34	1.39
1	AA	1191	A	N9-C4	-7.83	1.33	1.37
1	AA	1250	A	C5-C6	-7.83	1.34	1.41
35	BA	2235	G	N9-C4	-7.83	1.31	1.38
1	AA	701	C	C2-N3	-7.82	1.29	1.35
1	AA	631	G	N3-C4	-7.82	1.29	1.35
1	AA	1442(A)	G	C6-O6	-7.82	1.17	1.24
35	BA	1973	G	N9-C4	-7.82	1.31	1.38
1	AA	1298	C	C2-N3	-7.82	1.29	1.35
35	BA	2548	G	N9-C8	-7.82	1.32	1.37
35	BA	1777	U	C2-N3	-7.82	1.32	1.37
1	AA	1256	A	C6-N1	-7.81	1.30	1.35
35	BA	391	G	N3-C4	-7.81	1.29	1.35
35	BA	2322	A	N7-C5	-7.81	1.34	1.39
1	AA	316	G	N9-C8	-7.81	1.32	1.37
35	BA	77	C	C2-N3	-7.81	1.29	1.35
35	BA	1294	U	C4-O4	-7.81	1.17	1.23
35	BA	2176	A	N9-C4	-7.81	1.33	1.37
1	AA	642	A	N3-C4	-7.81	1.30	1.34
35	BA	742	G	C5-C4	-7.81	1.32	1.38
35	BA	16	G	C4'-C3'	-7.80	1.44	1.53
35	BA	262	A	N9-C4	-7.80	1.33	1.37
35	BA	345	A	C6-N1	-7.80	1.30	1.35
35	BA	2270	G	N1-C2	-7.80	1.31	1.37
35	BA	1928	A	C8-N7	-7.80	1.26	1.31
35	BA	2722	G	N9-C4	-7.80	1.31	1.38
1	AA	271	C	N1-C6	-7.79	1.32	1.37
1	AA	659	U	N3-C4	-7.79	1.31	1.38
1	AA	1456	G	N9-C8	-7.79	1.32	1.37
35	BA	333	G	N7-C5	-7.79	1.34	1.39
35	BA	2337	G	N7-C5	-7.79	1.34	1.39
35	BA	556	G	C8-N7	-7.79	1.26	1.30
35	BA	844	C	C4-C5	-7.79	1.36	1.43
35	BA	1560	G	N9-C8	-7.79	1.32	1.37
35	BA	2007	C	N3-C4	-7.79	1.28	1.33
36	BB	58	A	C6-N1	-7.79	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1300	U	N1-C2	-7.78	1.31	1.38
1	AA	250	A	N9-C4	-7.78	1.33	1.37
35	BA	887	A	N9-C4	-7.78	1.33	1.37
1	AA	512	U	C2-N3	-7.78	1.32	1.37
35	BA	1675	C	N1-C6	-7.78	1.32	1.37
1	AA	146	G	C8-N7	-7.77	1.26	1.30
35	BA	1619	G	C8-N7	-7.77	1.26	1.30
1	AA	34	C	N1-C6	-7.77	1.32	1.37
35	BA	197	A	N7-C5	-7.77	1.34	1.39
35	BA	2761	G	N7-C5	-7.77	1.34	1.39
1	AA	1500	A	N3-C4	7.76	1.39	1.34
1	AA	588	G	C2-N3	-7.76	1.26	1.32
1	AA	916	G	C2-N3	-7.76	1.26	1.32
35	BA	2296	U	C2-N3	-7.76	1.32	1.37
35	BA	2587	A	C5-C4	-7.76	1.33	1.38
36	BB	45	A	N9-C4	-7.76	1.33	1.37
35	BA	2712	U	N3-C4	-7.76	1.31	1.38
1	AA	1404	C	C4'-C3'	-7.75	1.44	1.53
1	AA	713	G	C5-C4	-7.75	1.32	1.38
1	AA	1064	G	N3-C4	-7.75	1.30	1.35
35	BA	1314	C	C4-C5	-7.75	1.36	1.43
35	BA	2169	A	N9-C4	-7.75	1.33	1.37
1	AA	197	A	N7-C5	-7.75	1.34	1.39
1	AA	1179	A	C2-N3	-7.75	1.26	1.33
1	AA	1236	A	C6-N6	-7.75	1.27	1.33
35	BA	2766	G	N7-C5	-7.75	1.34	1.39
1	AA	900	A	N1-C2	-7.75	1.27	1.34
22	AV	15	G	C6-N1	-7.75	1.34	1.39
1	AA	333	G	C5-C4	-7.75	1.32	1.38
1	AA	1189	C	C2-N3	-7.75	1.29	1.35
35	BA	410	G	C6-O6	-7.75	1.17	1.24
35	BA	1034	G	C5-C4	-7.75	1.32	1.38
35	BA	2592	G	C5-C4	-7.75	1.32	1.38
35	BA	457	A	C8-N7	-7.75	1.26	1.31
36	BB	60	C	N1-C6	-7.75	1.32	1.37
35	BA	2049	G	N9-C4	-7.74	1.31	1.38
36	BB	90	A	N9-C4	-7.74	1.33	1.37
1	AA	244	U	C2-N3	-7.74	1.32	1.37
35	BA	763	G	C6-N1	7.74	1.45	1.39
35	BA	1132	A	N3-C4	-7.74	1.30	1.34
1	AA	64	G	C5-C4	-7.74	1.32	1.38
1	AA	780	A	C5-C6	-7.74	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2568	C	C4-C5	-7.74	1.36	1.43
35	BA	2667	C	C4-C5	-7.74	1.36	1.43
35	BA	1775	U	C4-C5	-7.73	1.36	1.43
35	BA	1562	A	C6-N6	-7.73	1.27	1.33
35	BA	835	A	N3-C4	-7.73	1.30	1.34
35	BA	2549	G	N9-C8	-7.73	1.32	1.37
1	AA	1204	A	P-O5'	-7.73	1.52	1.59
35	BA	215	G	N7-C5	-7.73	1.34	1.39
1	AA	1067	A	C6-N1	-7.73	1.30	1.35
35	BA	1217	C	N1-C6	-7.73	1.32	1.37
35	BA	1546	C	N1-C6	-7.73	1.32	1.37
35	BA	2026	C	N1-C6	-7.73	1.32	1.37
1	AA	729	A	C5-C4	-7.72	1.33	1.38
1	AA	1055	A	C6-N1	-7.72	1.30	1.35
35	BA	1337	G	C6-N1	-7.72	1.34	1.39
35	BA	255	A	C6-N6	-7.72	1.27	1.33
35	BA	523	C	C4-C5	-7.72	1.36	1.43
35	BA	989	G	N7-C5	-7.71	1.34	1.39
35	BA	1913	A	N7-C5	-7.71	1.34	1.39
35	BA	729	G	C8-N7	-7.71	1.26	1.30
1	AA	152	A	N9-C4	-7.70	1.33	1.37
1	AA	695	A	C8-N7	7.70	1.36	1.31
35	BA	1127	A	C6-N1	-7.70	1.30	1.35
35	BA	1317	A	C6-N1	-7.70	1.30	1.35
35	BA	1455	G	N9-C8	-7.70	1.32	1.37
1	AA	409	G	C6-N1	-7.70	1.34	1.39
1	AA	504	C	N1-C2	-7.70	1.32	1.40
1	AA	787	A	N7-C5	-7.70	1.34	1.39
35	BA	1191	G	N7-C5	-7.70	1.34	1.39
1	AA	406	G	C5-C4	-7.69	1.32	1.38
35	BA	225	A	N7-C5	-7.69	1.34	1.39
35	BA	604	G	N9-C8	-7.69	1.32	1.37
35	BA	1899	G	N3-C4	-7.69	1.30	1.35
1	AA	1357	A	N3-C4	-7.69	1.30	1.34
35	BA	479	A	N3-C4	-7.69	1.30	1.34
35	BA	793	A	C5'-C4'	-7.68	1.42	1.51
35	BA	2741	A	N1-C2	-7.68	1.27	1.34
1	AA	227	G	N3-C4	-7.68	1.30	1.35
35	BA	1342	A	C6-N6	-7.68	1.27	1.33
35	BA	1711	C	N1-C6	-7.68	1.32	1.37
1	AA	1187	G	C6-N1	-7.68	1.34	1.39
36	BB	37	C	C2-N3	-7.68	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2105	C	C5-C6	-7.68	1.28	1.34
1	AA	424	G	N3-C4	-7.68	1.30	1.35
1	AA	852	G	C6-N1	-7.67	1.34	1.39
35	BA	2534	A	C5-C6	-7.67	1.34	1.41
35	BA	61	G	C6-O6	-7.67	1.17	1.24
1	AA	574	A	C6-N1	-7.67	1.30	1.35
35	BA	1120	G	N7-C5	-7.67	1.34	1.39
35	BA	1287	A	C6-N1	-7.67	1.30	1.35
36	BB	16	G	N7-C5	-7.67	1.34	1.39
35	BA	1273	U	C2-N3	-7.67	1.32	1.37
35	BA	1684	C	N3-C4	-7.67	1.28	1.33
1	AA	666	G	N3-C4	-7.67	1.30	1.35
1	AA	447	G	C8-N7	-7.67	1.26	1.30
1	AA	902	G	C5-C4	-7.66	1.32	1.38
1	AA	1394	A	P-O5'	-7.66	1.52	1.59
1	AA	279	A	C5-C6	-7.66	1.34	1.41
35	BA	1445	A	N9-C8	-7.66	1.31	1.37
1	AA	969	A	C6-N6	-7.66	1.27	1.33
35	BA	415	A	N9-C4	-7.66	1.33	1.37
35	BA	1891	G	N7-C5	-7.66	1.34	1.39
35	BA	319	C	N1-C6	-7.66	1.32	1.37
35	BA	2693	A	C5-C4	-7.66	1.33	1.38
1	AA	1468	A	N9-C4	7.66	1.42	1.37
35	BA	918	A	N3-C4	-7.65	1.30	1.34
35	BA	1032	A	N3-C4	-7.65	1.30	1.34
35	BA	2762	G	C5-C6	-7.65	1.34	1.42
1	AA	55	A	C5-C4	-7.65	1.33	1.38
1	AA	157	G	C8-N7	-7.65	1.26	1.30
35	BA	888	C	N1-C6	-7.65	1.32	1.37
35	BA	1977	A	N3-C4	-7.65	1.30	1.34
1	AA	1224	G	C8-N7	-7.65	1.26	1.30
22	AV	31	G	C8-N7	-7.65	1.26	1.30
36	BB	99	G	N7-C5	-7.65	1.34	1.39
1	AA	1131	G	N3-C4	-7.64	1.30	1.35
35	BA	905	U	C2-N3	-7.64	1.32	1.37
1	AA	413	G	N1-C2	-7.64	1.31	1.37
35	BA	2647	U	C5-C6	-7.64	1.27	1.34
1	AA	1343	G	N9-C8	-7.64	1.32	1.37
35	BA	1343	G	C5-C4	-7.64	1.33	1.38
35	BA	2151	G	C5-C6	-7.64	1.34	1.42
35	BA	2838	G	C5-C4	-7.64	1.33	1.38
1	AA	986	A	C6-N1	-7.64	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	287	U	C2-N3	-7.64	1.32	1.37
1	AA	1471	G	C2-N3	-7.64	1.26	1.32
35	BA	2339	G	C2-N3	-7.64	1.26	1.32
35	BA	496	G	C6-N1	-7.63	1.34	1.39
35	BA	610	G	C6-N1	-7.63	1.34	1.39
35	BA	1088	A	P-O5'	-7.63	1.52	1.59
35	BA	1975	G	N9-C4	-7.63	1.31	1.38
1	AA	143	A	N9-C4	-7.63	1.33	1.37
1	AA	1399	C	N3-C4	-7.63	1.28	1.33
35	BA	1505	C	N3-C4	-7.63	1.28	1.33
1	AA	1343	G	N7-C5	-7.63	1.34	1.39
35	BA	307	G	N7-C5	-7.63	1.34	1.39
35	BA	842	G	C2-N3	-7.63	1.26	1.32
35	BA	1699	G	C8-N7	-7.63	1.26	1.30
1	AA	530	G	N9-C4	-7.62	1.31	1.38
1	AA	1348	U	N3-C4	-7.62	1.31	1.38
35	BA	1076	C	N1-C6	-7.62	1.32	1.37
35	BA	920	G	C5-C4	-7.62	1.33	1.38
1	AA	41	G	N7-C5	-7.62	1.34	1.39
1	AA	113	G	N7-C5	-7.62	1.34	1.39
22	AV	39	C	C4-N4	-7.62	1.27	1.33
35	BA	782	A	N7-C5	-7.62	1.34	1.39
35	BA	2578	G	N7-C5	-7.62	1.34	1.39
35	BA	2663	G	N9-C4	-7.62	1.31	1.38
36	BB	22	U	C5-C6	-7.62	1.27	1.34
35	BA	2443	C	C5-C6	-7.62	1.28	1.34
35	BA	1740	G	C6-N1	-7.62	1.34	1.39
35	BA	1998	G	N7-C5	-7.62	1.34	1.39
35	BA	1559	G	C8-N7	-7.61	1.26	1.30
1	AA	821	G	N9-C8	-7.61	1.32	1.37
1	AA	965	A	C6-N1	-7.61	1.30	1.35
35	BA	106	C	N1-C6	7.61	1.41	1.37
35	BA	1655	A	C8-N7	-7.61	1.26	1.31
35	BA	679	C	N3-C4	-7.61	1.28	1.33
35	BA	1538	G	C8-N7	-7.61	1.26	1.30
35	BA	1701	A	C6-N1	-7.61	1.30	1.35
35	BA	2487	G	C8-N7	-7.61	1.26	1.30
35	BA	2787	C	N3-C4	-7.61	1.28	1.33
1	AA	687	A	C8-N7	-7.60	1.26	1.31
1	AA	1061	G	N7-C5	-7.60	1.34	1.39
36	BB	106	G	N3-C4	-7.60	1.30	1.35
1	AA	267	C	C4-C5	-7.60	1.36	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1788	C	C4'-C3'	-7.60	1.44	1.53
1	AA	925	G	N7-C5	-7.60	1.34	1.39
35	BA	70	G	C8-N7	-7.59	1.26	1.30
35	BA	2492	U	C2-N3	-7.59	1.32	1.37
35	BA	921	G	C5-C4	-7.59	1.33	1.38
35	BA	1777	U	C4'-C3'	-7.59	1.44	1.53
35	BA	2131	G	N9-C4	-7.59	1.31	1.38
35	BA	646	A	C2-N3	-7.59	1.26	1.33
35	BA	1129	A	N3-C4	-7.58	1.30	1.34
35	BA	1449	A	N3-C4	-7.58	1.30	1.34
1	AA	332	G	C2-N3	7.58	1.38	1.32
35	BA	1223	G	N9-C8	-7.58	1.32	1.37
1	AA	276	G	C6-O6	-7.58	1.17	1.24
22	AV	58	A	N3-C4	-7.58	1.30	1.34
35	BA	191	A	C3'-C2'	-7.58	1.44	1.52
35	BA	765	G	N3-C4	-7.58	1.30	1.35
1	AA	742	G	C5-C4	-7.58	1.33	1.38
35	BA	785	G	C5-C6	-7.58	1.34	1.42
35	BA	1531	C	N1-C6	-7.58	1.32	1.37
35	BA	1806	C	N1-C6	-7.58	1.32	1.37
22	AV	62	C	C4-C5	-7.57	1.36	1.43
1	AA	748	C	C4-C5	-7.57	1.36	1.43
1	AA	1403	C	C5-C6	-7.57	1.28	1.34
1	AA	119	A	N9-C8	-7.57	1.31	1.37
35	BA	298	G	N7-C5	-7.57	1.34	1.39
35	BA	429	A	C5-C6	-7.56	1.34	1.41
35	BA	1487	G	C8-N7	7.56	1.35	1.30
1	AA	957	U	C2-N3	-7.56	1.32	1.37
1	AA	1101	A	C6-N1	-7.56	1.30	1.35
22	AV	33	U	C2-N3	-7.56	1.32	1.37
35	BA	1174	A	C6-N1	-7.56	1.30	1.35
1	AA	1171	G	C8-N7	-7.56	1.26	1.30
35	BA	2415	G	N9-C8	-7.56	1.32	1.37
35	BA	1339	G	C8-N7	7.56	1.35	1.30
35	BA	2034	U	P-O5'	-7.55	1.52	1.59
1	AA	1338	G	N9-C4	-7.55	1.31	1.38
35	BA	398	G	N7-C5	-7.55	1.34	1.39
35	BA	1259	G	N9-C4	-7.55	1.31	1.38
35	BA	2781	A	N9-C4	-7.55	1.33	1.37
35	BA	990	A	C8-N7	-7.55	1.26	1.31
35	BA	1698	A	N3-C4	-7.55	1.30	1.34
36	BB	16	G	N9-C8	-7.55	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	98	G	C8-N7	-7.55	1.26	1.30
1	AA	187	C	C4-C5	-7.55	1.36	1.43
1	AA	829	G	N1-C2	-7.55	1.31	1.37
35	BA	2367	G	N7-C5	-7.55	1.34	1.39
35	BA	2795	G	C8-N7	-7.55	1.26	1.30
1	AA	811	C	C2-O2	-7.54	1.17	1.24
35	BA	276	A	N3-C4	-7.54	1.30	1.34
35	BA	217	G	C4'-C3'	-7.54	1.44	1.53
35	BA	1845	G	N3-C4	-7.54	1.30	1.35
35	BA	2021	C	P-O5'	-7.54	1.52	1.59
35	BA	2854	G	C5-C4	-7.54	1.33	1.38
35	BA	1670	C	C5-C6	-7.54	1.28	1.34
35	BA	1902	C	C2-N3	-7.54	1.29	1.35
1	AA	1010	G	C8-N7	-7.54	1.26	1.30
35	BA	1933	G	C8-N7	-7.54	1.26	1.30
1	AA	1248	A	C6-N1	-7.54	1.30	1.35
35	BA	213	A	C6-N1	-7.54	1.30	1.35
35	BA	581	C	C4-C5	7.54	1.49	1.43
1	AA	354	G	C5-C6	-7.54	1.34	1.42
35	BA	961	C	C2-O2	-7.54	1.17	1.24
35	BA	1248	G	N9-C8	-7.54	1.32	1.37
35	BA	2312	U	C3'-C2'	-7.53	1.44	1.52
35	BA	1529	G	C8-N7	7.53	1.35	1.30
35	BA	1863	G	C4'-C3'	-7.53	1.44	1.53
35	BA	2660	A	N9-C8	-7.53	1.31	1.37
1	AA	353	A	C6-N6	-7.53	1.27	1.33
1	AA	1145	C	C5-C6	-7.53	1.28	1.34
1	AA	243	A	N7-C5	7.52	1.43	1.39
1	AA	264	U	C2-N3	-7.52	1.32	1.37
35	BA	271(C)	C	N1-C6	7.52	1.41	1.37
1	AA	37	U	C2-N3	-7.52	1.32	1.37
1	AA	812	C	N3-C4	-7.52	1.28	1.33
35	BA	745	G	C6-O6	-7.52	1.17	1.24
35	BA	1615	C	N1-C6	7.51	1.41	1.37
35	BA	1635	G	N9-C4	-7.51	1.31	1.38
35	BA	2625	G	N9-C8	-7.51	1.32	1.37
35	BA	2694	G	N9-C4	-7.51	1.31	1.38
35	BA	500	G	C8-N7	-7.51	1.26	1.30
35	BA	2549	G	O3'-P	-7.51	1.52	1.61
35	BA	805	G	N3-C4	-7.51	1.30	1.35
35	BA	1309	G	C5-C4	-7.51	1.33	1.38
35	BA	2107	C	N1-C6	-7.51	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AV	57	A	N9-C4	-7.51	1.33	1.37
35	BA	466	A	N9-C4	-7.51	1.33	1.37
35	BA	1132	A	N7-C5	-7.51	1.34	1.39
1	AA	1087	G	C8-N7	-7.51	1.26	1.30
35	BA	654(S)	G	C5-C4	-7.51	1.33	1.38
35	BA	1747	G	C8-N7	-7.51	1.26	1.30
35	BA	2396	G	N3-C4	-7.51	1.30	1.35
1	AA	1200	C	N1-C6	-7.50	1.32	1.37
35	BA	2373	G	C6-N1	7.50	1.44	1.39
35	BA	1332	G	N7-C5	-7.50	1.34	1.39
1	AA	877	C	N1-C6	-7.50	1.32	1.37
1	AA	189(C)	C	C4-C5	-7.50	1.36	1.43
24	AY	235	GLU	CD-OE1	-7.50	1.17	1.25
35	BA	2253	G	N7-C5	-7.50	1.34	1.39
35	BA	2629	A	C6-N6	-7.50	1.27	1.33
35	BA	109	G	C5-C4	-7.50	1.33	1.38
1	AA	413	G	N9-C8	-7.49	1.32	1.37
35	BA	2149	G	C2-N3	-7.49	1.26	1.32
1	AA	1203	C	C4-C5	-7.49	1.36	1.43
35	BA	363(A)	A	N7-C5	-7.49	1.34	1.39
35	BA	2049	G	N7-C5	-7.49	1.34	1.39
35	BA	2093	G	N3-C4	7.49	1.40	1.35
35	BA	2193	G	C2-N3	-7.49	1.26	1.32
35	BA	2531	A	C5-C4	-7.49	1.33	1.38
1	AA	416	G	N3-C4	-7.48	1.30	1.35
1	AA	929	G	P-O5'	-7.48	1.52	1.59
35	BA	1330	C	N1-C6	-7.48	1.32	1.37
1	AA	321	A	C5-C6	-7.48	1.34	1.41
35	BA	2352	A	N9-C4	-7.48	1.33	1.37
1	AA	1333	A	N3-C4	-7.47	1.30	1.34
35	BA	1164	G	C5-C4	-7.47	1.33	1.38
35	BA	2321	G	C6-N1	-7.47	1.34	1.39
35	BA	2812	G	C5-C4	-7.47	1.33	1.38
35	BA	610	G	N3-C4	-7.47	1.30	1.35
35	BA	1417	C	N3-C4	-7.47	1.28	1.33
35	BA	2493	U	C2-N3	7.47	1.43	1.37
1	AA	532	A	N9-C4	-7.46	1.33	1.37
1	AA	1216	G	C8-N7	-7.46	1.26	1.30
1	AA	1338	G	C8-N7	-7.46	1.26	1.30
1	AA	1365	G	N7-C5	-7.46	1.34	1.39
1	AA	1527	C	P-O5'	-7.46	1.52	1.59
1	AA	307	C	N1-C6	7.46	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	271(A)	A	N9-C8	-7.46	1.31	1.37
35	BA	684	G	C6-N1	-7.46	1.34	1.39
36	BB	57	A	C6-N1	-7.46	1.30	1.35
35	BA	20	C	C4-C5	-7.46	1.36	1.43
35	BA	2630	G	C4'-C3'	-7.45	1.45	1.53
35	BA	1545	A	N7-C5	-7.45	1.34	1.39
35	BA	1302	A	C8-N7	-7.45	1.26	1.31
35	BA	2831	G	N1-C2	7.44	1.43	1.37
1	AA	132	C	N1-C6	-7.44	1.32	1.37
35	BA	1971	A	N3-C4	-7.44	1.30	1.34
1	AA	525	C	C2-N3	-7.44	1.29	1.35
35	BA	518	G	N3-C4	-7.44	1.30	1.35
35	BA	972	G	N7-C5	-7.44	1.34	1.39
35	BA	1304	C	C5-C6	-7.44	1.28	1.34
1	AA	1072	G	C4'-C3'	-7.44	1.45	1.53
1	AA	609	A	N9-C4	-7.43	1.33	1.37
1	AA	196	A	C5-C4	-7.43	1.33	1.38
1	AA	894	G	N1-C2	-7.43	1.31	1.37
35	BA	2412	A	C8-N7	-7.43	1.26	1.31
1	AA	113	G	N3-C4	-7.43	1.30	1.35
1	AA	577	G	N3-C4	-7.43	1.30	1.35
1	AA	1393	U	C4-C5	-7.43	1.36	1.43
1	AA	1411	C	N3-C4	-7.43	1.28	1.33
35	BA	193	U	C4-C5	-7.43	1.36	1.43
35	BA	1708	C	N3-C4	-7.43	1.28	1.33
1	AA	966	G	C2-N2	-7.43	1.27	1.34
35	BA	1032	A	N9-C4	-7.43	1.33	1.37
1	AA	825	G	C5-C4	-7.42	1.33	1.38
1	AA	851	G	C4'-C3'	-7.42	1.45	1.53
35	BA	1356	G	C6-N1	-7.42	1.34	1.39
35	BA	2456	C	C5-C6	-7.42	1.28	1.34
35	BA	2661	G	C5-C4	-7.42	1.33	1.38
35	BA	767	U	N3-C4	-7.42	1.31	1.38
35	BA	950	G	N7-C5	-7.42	1.34	1.39
35	BA	2237	G	N7-C5	-7.42	1.34	1.39
1	AA	380	G	N3-C4	-7.42	1.30	1.35
35	BA	1713	U	N3-C4	-7.42	1.31	1.38
1	AA	695	A	C5-C6	-7.42	1.34	1.41
22	AV	36	U	C3'-C2'	-7.42	1.44	1.52
35	BA	1052	C	C4-N4	-7.42	1.27	1.33
35	BA	2111	C	P-O5'	-7.42	1.52	1.59
35	BA	23	G	C5-C4	-7.41	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	139(A)	G	N1-C2	-7.41	1.31	1.37
35	BA	2192	G	C8-N7	-7.41	1.26	1.30
1	AA	1316	G	C6-N1	-7.41	1.34	1.39
1	AA	166	G	C8-N7	-7.41	1.26	1.30
35	BA	248	G	N9-C8	-7.41	1.32	1.37
35	BA	271(D)	G	C2'-C1'	-7.41	1.45	1.53
35	BA	2648	C	N1-C6	-7.40	1.32	1.37
1	AA	53	A	N9-C4	-7.40	1.33	1.37
1	AA	446	G	C6-N1	-7.40	1.34	1.39
35	BA	1527	G	C5-C4	-7.40	1.33	1.38
1	AA	326	G	N9-C8	-7.40	1.32	1.37
1	AA	567	G	C5-C6	-7.40	1.34	1.42
1	AA	1006	C	N3-C4	-7.40	1.28	1.33
35	BA	218	A	C5-C4	-7.40	1.33	1.38
1	AA	1134	G	N1-C2	-7.40	1.31	1.37
1	AA	640	A	N7-C5	-7.40	1.34	1.39
35	BA	2573	C	N1-C6	-7.40	1.32	1.37
35	BA	2657	A	N7-C5	-7.40	1.34	1.39
1	AA	510	A	C5-C4	-7.39	1.33	1.38
1	AA	620	C	N1-C6	-7.39	1.32	1.37
1	AA	102	G	N7-C5	-7.39	1.34	1.39
1	AA	1361	G	N7-C5	-7.39	1.34	1.39
35	BA	577	G	N7-C5	-7.39	1.34	1.39
35	BA	1948	G	N7-C5	-7.39	1.34	1.39
35	BA	2425	A	N7-C5	-7.39	1.34	1.39
1	AA	9	G	C2-N3	-7.39	1.26	1.32
1	AA	432	A	C5-C4	-7.39	1.33	1.38
35	BA	2730	C	C4'-C3'	-7.39	1.45	1.53
1	AA	1089	G	C8-N7	-7.39	1.26	1.30
35	BA	2529	G	C8-N7	-7.39	1.26	1.30
1	AA	939	G	N9-C4	-7.39	1.32	1.38
35	BA	1697	G	N3-C4	-7.38	1.30	1.35
35	BA	1800	C	N1-C6	7.38	1.41	1.37
1	AA	43	C	N3-C4	-7.38	1.28	1.33
35	BA	2333	A	N9-C4	-7.38	1.33	1.37
35	BA	2530	A	N9-C4	-7.38	1.33	1.37
1	AA	660	G	C8-N7	-7.38	1.26	1.30
1	AA	1095	U	C2-O2	-7.38	1.15	1.22
22	AV	65	C	C4-C5	-7.38	1.37	1.43
35	BA	1250	G	C8-N7	-7.38	1.26	1.30
35	BA	1807	G	C8-N7	-7.38	1.26	1.30
1	AA	993	G	N1-C2	-7.38	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1823	G	N1-C2	-7.38	1.31	1.37
35	BA	1195	G	C3'-C2'	-7.38	1.44	1.52
35	BA	2371	G	N3-C4	-7.38	1.30	1.35
35	BA	1461	G	C6-N1	-7.38	1.34	1.39
35	BA	2554	U	C2-O2	-7.38	1.15	1.22
35	BA	363(B)	G	C5-C6	-7.38	1.34	1.42
1	AA	923	A	N9-C4	7.37	1.42	1.37
1	AA	1105	A	C6-N1	-7.37	1.30	1.35
35	BA	1664	A	C5-C4	-7.37	1.33	1.38
1	AA	778	G	C6-N1	-7.37	1.34	1.39
1	AA	1368	G	P-O5'	-7.37	1.52	1.59
1	AA	1492	A	C8-N7	-7.37	1.26	1.31
35	BA	1559	G	C6-N1	-7.37	1.34	1.39
1	AA	828	A	N9-C8	-7.37	1.31	1.37
35	BA	727	A	C2-N3	-7.37	1.26	1.33
35	BA	2235	G	C2-N3	-7.37	1.26	1.32
35	BA	318	C	P-O5'	-7.37	1.52	1.59
35	BA	831	G	N3-C4	-7.37	1.30	1.35
35	BA	2655	G	C8-N7	-7.37	1.26	1.30
35	BA	461	C	N1-C6	-7.37	1.32	1.37
35	BA	1009	A	C8-N7	-7.37	1.26	1.31
35	BA	1054	A	C8-N7	-7.37	1.26	1.31
35	BA	1653	G	C5-C4	-7.37	1.33	1.38
35	BA	2674	G	C5-C4	-7.37	1.33	1.38
1	AA	1110	A	C6-N1	-7.36	1.30	1.35
1	AA	1377	A	C5-C6	-7.36	1.34	1.41
1	AA	1178	G	N7-C5	-7.36	1.34	1.39
1	AA	1206	G	C8-N7	-7.36	1.26	1.30
1	AA	1507	A	N7-C5	-7.36	1.34	1.39
35	BA	393	C	N1-C6	-7.36	1.32	1.37
35	BA	1686	C	N1-C6	-7.36	1.32	1.37
35	BA	1990	C	N3-C4	-7.36	1.28	1.33
1	AA	1357	A	C5-C4	-7.36	1.33	1.38
22	AV	73	A	C5-C4	-7.36	1.33	1.38
35	BA	2496	C	C4-N4	-7.36	1.27	1.33
1	AA	25	C	N3-C4	-7.36	1.28	1.33
1	AA	718	G	C2-N3	-7.36	1.26	1.32
35	BA	428	A	C2-N3	-7.35	1.26	1.33
35	BA	654(N)	G	N3-C4	-7.35	1.30	1.35
35	BA	1037	G	N9-C8	-7.35	1.32	1.37
35	BA	1777	U	C5-C6	-7.35	1.27	1.34
36	BB	101	G	N9-C8	-7.35	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	250	A	C8-N7	-7.35	1.26	1.31
1	AA	583	A	C6-N1	7.35	1.40	1.35
22	AV	69	C	C2-N3	-7.35	1.29	1.35
35	BA	1428	C	N1-C6	-7.35	1.32	1.37
35	BA	674	G	C5-C4	-7.34	1.33	1.38
35	BA	2154	G	C5-C4	-7.34	1.33	1.38
1	AA	865	A	P-O5'	-7.34	1.52	1.59
36	BB	13	A	C6-N1	-7.34	1.30	1.35
1	AA	667	G	C5-C4	-7.33	1.33	1.38
35	BA	2809	A	N9-C4	-7.33	1.33	1.37
35	BA	665	C	C4-C5	-7.33	1.37	1.43
1	AA	1458	G	C2-N3	-7.33	1.26	1.32
1	AA	1528	U	C4-C5	-7.33	1.36	1.43
1	AA	1530	G	N3-C4	-7.33	1.30	1.35
35	BA	808	G	C5-C6	-7.33	1.35	1.42
1	AA	1072	G	N7-C5	-7.33	1.34	1.39
35	BA	594	U	C2-N3	-7.33	1.32	1.37
35	BA	28	A	N3-C4	-7.33	1.30	1.34
35	BA	1678	G	C5-C6	-7.33	1.35	1.42
35	BA	741	G	C5'-C4'	-7.33	1.42	1.51
35	BA	1958	C	C4'-C3'	-7.33	1.45	1.53
1	AA	937	A	C6-N1	-7.32	1.30	1.35
35	BA	2355	C	N1-C6	-7.32	1.32	1.37
35	BA	2762	G	C5-C4	-7.32	1.33	1.38
35	BA	662	G	O3'-P	-7.32	1.52	1.61
35	BA	804	A	N3-C4	-7.32	1.30	1.34
1	AA	1288	A	C5-C4	-7.32	1.33	1.38
35	BA	1414	G	N3-C4	-7.32	1.30	1.35
22	AV	35	A	N7-C5	-7.32	1.34	1.39
35	BA	2357	U	C4-O4	-7.32	1.17	1.23
35	BA	2711	A	N1-C2	-7.32	1.27	1.34
35	BA	419	C	N1-C6	-7.32	1.32	1.37
35	BA	942	G	N3-C4	-7.31	1.30	1.35
36	BB	101	G	N3-C4	-7.31	1.30	1.35
35	BA	472	A	N9-C4	-7.31	1.33	1.37
1	AA	359	U	C2-N3	-7.30	1.32	1.37
35	BA	179	G	C8-N7	-7.30	1.26	1.30
35	BA	241	A	N3-C4	-7.30	1.30	1.34
35	BA	1602	U	N1-C2	7.30	1.45	1.38
35	BA	1818	U	C4-O4	-7.30	1.17	1.23
35	BA	1927	A	N3-C4	-7.30	1.30	1.34
1	AA	135	C	N3-C4	-7.30	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	696	G	O3'-P	-7.30	1.52	1.61
35	BA	2790	A	N9-C8	-7.30	1.31	1.37
35	BA	875	G	C4'-C3'	-7.30	1.45	1.53
35	BA	1981	A	N7-C5	-7.30	1.34	1.39
35	BA	598	G	C6-N1	-7.30	1.34	1.39
35	BA	916	G	C5-C4	-7.30	1.33	1.38
35	BA	1910	G	C6-N1	-7.30	1.34	1.39
35	BA	2119	A	C6-N1	-7.30	1.30	1.35
35	BA	2161	C	C2'-O2'	-7.30	1.32	1.41
35	BA	1288	U	N1-C6	-7.29	1.31	1.38
35	BA	2207	G	C6-O6	-7.29	1.17	1.24
35	BA	2726	U	N1-C6	-7.29	1.31	1.38
1	AA	438	G	C6-N1	-7.29	1.34	1.39
35	BA	1928	A	C5-C4	-7.29	1.33	1.38
35	BA	1312	U	C2-N3	-7.29	1.32	1.37
1	AA	909	A	N3-C4	-7.29	1.30	1.34
35	BA	2453	A	N3-C4	-7.29	1.30	1.34
35	BA	2496	C	N3-C4	-7.29	1.28	1.33
1	AA	765	G	C6-N1	-7.29	1.34	1.39
1	AA	1193	G	C5-C6	-7.29	1.35	1.42
1	AA	1470	G	C6-N1	-7.29	1.34	1.39
35	BA	654(D)	G	N3-C4	-7.29	1.30	1.35
24	AY	6	GLU	CD-OE2	-7.28	1.17	1.25
35	BA	737	C	C4-N4	-7.28	1.27	1.33
35	BA	1471	A	N3-C4	-7.28	1.30	1.34
1	AA	1164	G	C6-N1	-7.28	1.34	1.39
1	AA	1503	A	C5-C6	-7.28	1.34	1.41
35	BA	2222	G	C5-C4	-7.28	1.33	1.38
1	AA	293	G	C8-N7	-7.28	1.26	1.30
35	BA	119	A	C6-N1	-7.28	1.30	1.35
35	BA	1098	A	C6-N6	-7.28	1.28	1.33
35	BA	1722	A	N3-C4	-7.28	1.30	1.34
35	BA	2002	G	N3-C4	-7.28	1.30	1.35
35	BA	973	A	N7-C5	-7.27	1.34	1.39
1	AA	113	G	N9-C8	-7.27	1.32	1.37
35	BA	2551	C	C2-O2	-7.27	1.18	1.24
35	BA	2671	A	C5-C4	-7.27	1.33	1.38
1	AA	559	A	O3'-P	-7.27	1.52	1.61
35	BA	343	C	C4-N4	-7.27	1.27	1.33
35	BA	1757	U	C4-O4	-7.27	1.17	1.23
1	AA	879	C	C5-C6	-7.27	1.28	1.34
1	AA	189(J)	G	C3'-C2'	-7.26	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	855	G	N3-C4	-7.26	1.30	1.35
35	BA	1138	G	N1-C2	-7.26	1.31	1.37
35	BA	1410	G	N1-C2	-7.26	1.31	1.37
35	BA	1666	G	N1-C2	-7.26	1.31	1.37
35	BA	1366	A	N9-C8	-7.26	1.31	1.37
1	AA	1481	U	C4-O4	7.26	1.29	1.23
35	BA	1357	U	C4-O4	-7.26	1.17	1.23
35	BA	2230	G	C6-N1	-7.26	1.34	1.39
35	BA	600	G	C5-C4	-7.26	1.33	1.38
35	BA	1789	A	N9-C4	-7.26	1.33	1.37
35	BA	641	C	C4-N4	-7.26	1.27	1.33
1	AA	854	G	N9-C8	-7.25	1.32	1.37
1	AA	481	G	C6-N1	-7.25	1.34	1.39
35	BA	1354	A	C6-N1	-7.25	1.30	1.35
35	BA	727	A	N9-C4	-7.25	1.33	1.37
35	BA	1675	C	C2-N3	-7.25	1.29	1.35
1	AA	1422	G	C8-N7	-7.25	1.26	1.30
35	BA	125	G	N7-C5	-7.25	1.34	1.39
35	BA	560	C	C5-C6	-7.25	1.28	1.34
35	BA	577	G	N9-C4	-7.25	1.32	1.38
35	BA	1191	G	N9-C8	-7.25	1.32	1.37
35	BA	2352	A	C5-C4	-7.25	1.33	1.38
35	BA	2410	G	N9-C8	-7.25	1.32	1.37
1	AA	510	A	C6-N6	-7.25	1.28	1.33
35	BA	308	G	N9-C4	-7.25	1.32	1.38
35	BA	351	G	N3-C4	7.25	1.40	1.35
35	BA	222	A	N3-C4	-7.24	1.30	1.34
35	BA	443	A	C5-C4	-7.24	1.33	1.38
35	BA	2391	G	N1-C2	-7.24	1.31	1.37
35	BA	534	U	N1-C2	7.24	1.45	1.38
35	BA	1083	U	N1-C2	-7.24	1.32	1.38
1	AA	351	G	C8-N7	-7.24	1.26	1.30
1	AA	724	G	C5-C4	-7.24	1.33	1.38
1	AA	737	A	C6-N1	-7.24	1.30	1.35
22	AV	67	C	P-O5'	-7.23	1.52	1.59
35	BA	2269	A	C5-C4	-7.23	1.33	1.38
1	AA	760	G	N9-C4	-7.23	1.32	1.38
35	BA	79	G	C5-C4	-7.23	1.33	1.38
35	BA	654(D)	G	C6-O6	-7.23	1.17	1.24
35	BA	1979	C	P-O5'	-7.23	1.52	1.59
1	AA	1228	C	C5-C6	-7.23	1.28	1.34
1	AA	15	G	N9-C8	-7.23	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	388	G	N9-C8	-7.23	1.32	1.37
1	AA	815	A	C5-C4	-7.23	1.33	1.38
22	AV	71	C	N1-C2	-7.23	1.32	1.40
35	BA	2435	A	N9-C4	-7.23	1.33	1.37
1	AA	165	C	O3'-P	-7.22	1.52	1.61
35	BA	379	G	N7-C5	-7.22	1.34	1.39
35	BA	1243	G	N7-C5	-7.22	1.34	1.39
35	BA	2168	G	N7-C5	-7.22	1.34	1.39
35	BA	288	C	N1-C6	-7.22	1.32	1.37
35	BA	884	C	N1-C6	-7.22	1.32	1.37
35	BA	1079	C	C2-O2	-7.22	1.18	1.24
1	AA	18	C	C4-N4	-7.22	1.27	1.33
35	BA	1067	A	N7-C5	-7.22	1.34	1.39
35	BA	1305	C	N1-C6	-7.22	1.32	1.37
1	AA	1335	C	C5-C6	-7.21	1.28	1.34
35	BA	1414	G	C2-N2	-7.21	1.27	1.34
35	BA	1591	G	C5-C4	-7.21	1.33	1.38
35	BA	1793	C	C2-N3	-7.21	1.29	1.35
35	BA	209	C	N3-C4	-7.21	1.28	1.33
35	BA	1630	G	C6-N1	-7.21	1.34	1.39
1	AA	1104	G	C5-C4	-7.21	1.33	1.38
35	BA	516	C	N1-C6	7.21	1.41	1.37
1	AA	1331	G	N7-C5	-7.21	1.34	1.39
35	BA	1718	G	N7-C5	-7.21	1.34	1.39
35	BA	179	G	N7-C5	7.20	1.43	1.39
35	BA	1850	G	C8-N7	-7.20	1.26	1.30
35	BA	2029	G	C4'-C3'	-7.20	1.45	1.53
35	BA	2279	G	N3-C4	-7.20	1.30	1.35
35	BA	2415	G	C5-C4	-7.20	1.33	1.38
35	BA	2737	G	C6-O6	-7.20	1.17	1.24
1	AA	896	C	N3-C4	-7.20	1.28	1.33
35	BA	940	G	C5-C6	-7.20	1.35	1.42
35	BA	2562	U	C5-C6	-7.20	1.27	1.34
35	BA	1210	A	N7-C5	-7.20	1.34	1.39
35	BA	1677	A	C2-N3	-7.20	1.27	1.33
1	AA	1444	C	C2-O2	-7.20	1.18	1.24
35	BA	55	G	C8-N7	-7.20	1.26	1.30
35	BA	1495	A	P-O5'	7.20	1.67	1.59
35	BA	2105	C	N1-C6	7.20	1.41	1.37
35	BA	2183	C	C4-C5	-7.20	1.37	1.43
35	BA	272	G	N3-C4	-7.19	1.30	1.35
1	AA	732	C	N1-C6	-7.19	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1321	C	C4-C5	-7.19	1.37	1.43
35	BA	1396	U	C4-O4	-7.19	1.17	1.23
35	BA	2499	C	N1-C6	-7.19	1.32	1.37
1	AA	734	G	C5-C4	-7.19	1.33	1.38
35	BA	1195	G	C5-C4	-7.19	1.33	1.38
35	BA	74	A	N3-C4	-7.19	1.30	1.34
35	BA	172	C	C2-O2	-7.19	1.18	1.24
35	BA	2060	A	N3-C4	-7.19	1.30	1.34
1	AA	1376	U	C2-O2	-7.18	1.15	1.22
35	BA	2094	G	P-O5'	-7.18	1.52	1.59
35	BA	2751	G	N9-C8	-7.18	1.32	1.37
35	BA	2133	G	C8-N7	-7.18	1.26	1.30
35	BA	2481	G	C5-C6	-7.18	1.35	1.42
35	BA	1371	G	N7-C5	-7.18	1.34	1.39
35	BA	760	G	C6-N1	-7.18	1.34	1.39
35	BA	2503	A	C5-C4	-7.18	1.33	1.38
1	AA	454	C	N3-C4	-7.18	1.28	1.33
35	BA	116	C	C4-N4	-7.18	1.27	1.33
1	AA	1090	U	C3'-C2'	-7.18	1.44	1.52
35	BA	317	G	N3-C4	-7.18	1.30	1.35
35	BA	508	G	C8-N7	-7.18	1.26	1.30
35	BA	1280	G	C8-N7	-7.18	1.26	1.30
1	AA	1030(A)	G	C6-N1	7.17	1.44	1.39
1	AA	1461	G	C6-O6	-7.17	1.17	1.24
35	BA	2351	G	C6-N1	-7.17	1.34	1.39
1	AA	242	C	N1-C6	-7.17	1.32	1.37
35	BA	2683	C	C2-O2	-7.17	1.18	1.24
1	AA	663	A	N9-C8	-7.17	1.32	1.37
35	BA	2112	G	C8-N7	-7.17	1.26	1.30
1	AA	1127	G	C6-N1	-7.17	1.34	1.39
35	BA	1427	A	N7-C5	-7.17	1.34	1.39
35	BA	1941	C	C2-N3	-7.17	1.30	1.35
35	BA	2282	G	N7-C5	-7.17	1.34	1.39
36	BB	98	G	N7-C5	-7.17	1.34	1.39
1	AA	1510	U	C2-N3	-7.17	1.32	1.37
9	AI	53	VAL	C-N	7.17	1.50	1.34
35	BA	1006	C	C2-O2	-7.17	1.18	1.24
35	BA	1633	G	C2-N3	-7.17	1.27	1.32
36	BB	95	C	C5-C6	-7.17	1.28	1.34
1	AA	730	G	N9-C8	-7.16	1.32	1.37
35	BA	830	G	C6-N1	-7.16	1.34	1.39
35	BA	1578	U	N3-C4	-7.16	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2185	C	C4-C5	-7.16	1.37	1.43
35	BA	2787	C	C4-C5	-7.16	1.37	1.43
1	AA	717	C	N3-C4	-7.16	1.28	1.33
35	BA	512	G	C8-N7	7.16	1.35	1.30
35	BA	1929	G	C6-O6	-7.16	1.17	1.24
1	AA	881	G	N3-C4	-7.16	1.30	1.35
35	BA	379	G	N3-C4	-7.16	1.30	1.35
35	BA	2876	G	C2-N2	-7.16	1.27	1.34
35	BA	695	G	N7-C5	-7.16	1.34	1.39
35	BA	1251	C	C4-C5	-7.15	1.37	1.43
1	AA	1452	C	C2-O2	-7.15	1.18	1.24
35	BA	1846	G	C6-N1	-7.15	1.34	1.39
35	BA	1933	G	C6-N1	-7.15	1.34	1.39
35	BA	2583	G	C5-C6	-7.15	1.35	1.42
1	AA	189(I)	G	N7-C5	-7.15	1.34	1.39
1	AA	622	A	C2-N3	-7.15	1.27	1.33
1	AA	657	G	C3'-C2'	-7.15	1.44	1.52
35	BA	765	G	C8-N7	-7.15	1.26	1.30
36	BB	76	G	C5-C4	-7.15	1.33	1.38
1	AA	38	G	C2-N2	-7.15	1.27	1.34
1	AA	1318	A	N3-C4	-7.15	1.30	1.34
35	BA	1095	A	N1-C2	-7.15	1.27	1.34
35	BA	1388	G	C6-N1	-7.15	1.34	1.39
35	BA	2810	A	N3-C4	-7.15	1.30	1.34
35	BA	77	C	N1-C6	-7.15	1.32	1.37
1	AA	510	A	C4'-C3'	-7.14	1.45	1.53
1	AA	550	G	C4'-C3'	-7.14	1.45	1.53
35	BA	2077	A	C6-N6	-7.14	1.28	1.33
1	AA	197	A	N1-C2	-7.14	1.27	1.34
35	BA	122	G	N7-C5	-7.14	1.34	1.39
35	BA	382	G	N1-C2	-7.14	1.32	1.37
35	BA	2482	G	N7-C5	-7.14	1.34	1.39
35	BA	2813	A	C5-C4	-7.14	1.33	1.38
35	BA	1941	C	N3-C4	-7.14	1.28	1.33
1	AA	1504	G	C2-N3	-7.14	1.27	1.32
22	AV	38	A	C8-N7	-7.14	1.26	1.31
35	BA	1360	A	C5-C4	-7.14	1.33	1.38
35	BA	2224	G	N3-C4	-7.14	1.30	1.35
35	BA	2611	U	N1-C6	-7.14	1.31	1.38
35	BA	2625	G	N9-C4	-7.14	1.32	1.38
35	BA	817	C	C4-N4	-7.13	1.27	1.33
1	AA	35	G	N7-C5	-7.13	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	303	A	N7-C5	-7.13	1.34	1.39
35	BA	716	A	C5-C4	-7.13	1.33	1.38
35	BA	1451	C	O3'-P	-7.13	1.52	1.61
35	BA	1982	C	N3-C4	-7.13	1.28	1.33
35	BA	130	C	C4-C5	-7.13	1.37	1.43
35	BA	804	A	N9-C4	-7.13	1.33	1.37
35	BA	1815	A	C4'-C3'	-7.12	1.45	1.53
35	BA	1833	U	C5-C6	-7.12	1.27	1.34
1	AA	1074	G	C2-N2	-7.12	1.27	1.34
1	AA	1081	G	C8-N7	-7.12	1.26	1.30
35	BA	1238	G	C8-N7	-7.12	1.26	1.30
35	BA	436	C	C5-C6	-7.12	1.28	1.34
1	AA	258	G	N9-C8	-7.12	1.32	1.37
35	BA	945	A	N9-C4	-7.12	1.33	1.37
1	AA	1251	A	N7-C5	-7.12	1.34	1.39
1	AA	1363(A)	A	C2-N3	-7.12	1.27	1.33
1	AA	1371	G	C2-N3	-7.12	1.27	1.32
35	BA	124	G	C2-N3	-7.12	1.27	1.32
35	BA	357	A	C2'-C1'	-7.12	1.45	1.53
36	BB	117	G	C2-N3	-7.12	1.27	1.32
1	AA	196	A	C8-N7	-7.12	1.26	1.31
1	AA	235	C	N3-C4	-7.12	1.28	1.33
1	AA	673	G	C2-N3	-7.11	1.27	1.32
31	B6	12	GLU	CG-CD	-7.11	1.41	1.51
35	BA	395	U	N3-C4	-7.11	1.32	1.38
35	BA	1451	C	C4-N4	-7.11	1.27	1.33
35	BA	1674	G	C5-C4	-7.11	1.33	1.38
35	BA	2234	G	C2-N3	-7.11	1.27	1.32
1	AA	729	A	N7-C5	-7.11	1.34	1.39
35	BA	1482	G	N7-C5	-7.11	1.34	1.39
1	AA	142	G	C6-N1	-7.11	1.34	1.39
35	BA	704	G	C6-N1	-7.11	1.34	1.39
1	AA	1219	U	C5'-C4'	-7.11	1.42	1.51
1	AA	518	C	N1-C6	-7.10	1.32	1.37
23	AX	13	A	N9-C4	7.10	1.42	1.37
1	AA	105	G	C2-N2	-7.10	1.27	1.34
1	AA	1221	G	C4'-C3'	-7.10	1.45	1.53
1	AA	1360	A	N7-C5	-7.10	1.34	1.39
1	AA	1512	U	C4'-C3'	-7.10	1.45	1.53
35	BA	191	A	C5-C4	-7.10	1.33	1.38
35	BA	222	A	N7-C5	-7.10	1.34	1.39
35	BA	2182	G	N7-C5	-7.10	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	AI	104	ARG	C-N	7.10	1.50	1.34
35	BA	2558	C	C5-C6	-7.10	1.28	1.34
1	AA	622	A	N3-C4	-7.10	1.30	1.34
22	AV	39	C	N1-C6	-7.10	1.32	1.37
35	BA	210	C	N1-C6	-7.10	1.32	1.37
35	BA	591	C	P-O5'	-7.10	1.52	1.59
35	BA	1610	A	N3-C4	-7.10	1.30	1.34
35	BA	452	G	N7-C5	-7.09	1.34	1.39
35	BA	2302	G	N7-C5	7.09	1.43	1.39
35	BA	450	G	C5-C4	-7.09	1.33	1.38
35	BA	1803	A	N9-C4	7.09	1.42	1.37
35	BA	630	G	C3'-C2'	-7.09	1.45	1.52
35	BA	977	G	C8-N7	-7.09	1.26	1.30
35	BA	1884	A	N3-C4	-7.09	1.30	1.34
35	BA	2582	G	C6-N1	-7.09	1.34	1.39
35	BA	1635	G	N9-C8	-7.09	1.32	1.37
35	BA	2350	C	C5-C6	-7.09	1.28	1.34
1	AA	1344	C	C4'-C3'	-7.08	1.45	1.53
1	AA	641	U	N3-C4	-7.08	1.32	1.38
1	AA	660	G	C6-N1	-7.08	1.34	1.39
1	AA	676	A	N3-C4	-7.08	1.30	1.34
1	AA	106	C	C2-N3	-7.08	1.30	1.35
35	BA	2271	G	N1-C2	-7.08	1.32	1.37
1	AA	494	U	C2-O2	-7.08	1.16	1.22
35	BA	1070	A	C8-N7	-7.08	1.26	1.31
36	BB	44	G	C5-C4	-7.08	1.33	1.38
35	BA	15	G	C6-N1	-7.07	1.34	1.39
1	AA	390	C	N3-C4	-7.07	1.28	1.33
1	AA	490	G	C8-N7	-7.07	1.26	1.30
1	AA	1401	G	C5-C4	-7.07	1.33	1.38
1	AA	1460	A	C6-N6	-7.07	1.28	1.33
35	BA	243	U	N1-C6	-7.07	1.31	1.38
35	BA	619	G	C8-N7	-7.07	1.26	1.30
35	BA	677	A	N3-C4	-7.07	1.30	1.34
35	BA	1412	A	P-O5'	-7.07	1.52	1.59
22	AV	53	G	N7-C5	-7.07	1.35	1.39
35	BA	1265	A	N7-C5	-7.07	1.35	1.39
35	BA	1807	G	C6-N1	-7.07	1.34	1.39
35	BA	2142	C	C2-N3	-7.07	1.30	1.35
1	AA	874	G	N9-C8	-7.07	1.32	1.37
35	BA	1355	G	N1-C2	-7.07	1.32	1.37
35	BA	1612	C	N3-C4	-7.07	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2093	G	N1-C2	-7.07	1.32	1.37
1	AA	311	C	N1-C6	-7.06	1.32	1.37
35	BA	1093	G	C8-N7	-7.06	1.26	1.30
35	BA	1445	A	N3-C4	-7.06	1.30	1.34
3	AC	35	GLU	CD-OE1	-7.06	1.17	1.25
35	BA	1681	G	N7-C5	-7.06	1.35	1.39
35	BA	1603	A	N9-C4	7.06	1.42	1.37
1	AA	232	G	C2-N3	-7.06	1.27	1.32
1	AA	742	G	C2-N3	-7.06	1.27	1.32
35	BA	2495	G	C5-C4	-7.06	1.33	1.38
35	BA	637	A	O3'-P	-7.06	1.52	1.61
35	BA	1338	G	N7-C5	7.06	1.43	1.39
1	AA	879	C	C2'-C1'	-7.06	1.45	1.53
35	BA	1189	A	C3'-O3'	-7.05	1.32	1.42
1	AA	858	G	N7-C5	-7.05	1.35	1.39
35	BA	1413	G	C8-N7	-7.05	1.26	1.30
35	BA	1507	A	N9-C4	-7.05	1.33	1.37
35	BA	2094	G	C6-N1	-7.05	1.34	1.39
36	BB	107	G	C8-N7	-7.05	1.26	1.30
1	AA	745	C	C4'-C3'	-7.05	1.45	1.53
1	AA	1524	C	N3-C4	-7.05	1.29	1.33
35	BA	1192	G	C6-N1	7.05	1.44	1.39
1	AA	769	G	C5-C4	-7.05	1.33	1.38
1	AA	1463	C	C4-C5	-7.05	1.37	1.43
35	BA	1640	C	C5-C6	-7.05	1.28	1.34
36	BB	49	C	C4-C5	-7.05	1.37	1.43
35	BA	316	C	N1-C6	-7.05	1.32	1.37
35	BA	1701	A	C4'-C3'	-7.05	1.45	1.53
35	BA	2148	G	C4'-C3'	-7.05	1.45	1.53
35	BA	2603	G	C6-N1	-7.05	1.34	1.39
1	AA	289	G	C5-C6	-7.04	1.35	1.42
1	AA	1142	G	C5-C4	-7.04	1.33	1.38
35	BA	1334	G	C8-N7	-7.04	1.26	1.30
35	BA	1968	G	C5-C4	-7.04	1.33	1.38
1	AA	916	G	C6-N1	-7.04	1.34	1.39
35	BA	403	U	C2-N3	-7.04	1.32	1.37
35	BA	966	G	N9-C4	-7.04	1.32	1.38
17	AQ	86	GLU	CD-OE2	-7.04	1.18	1.25
1	AA	977	A	N3-C4	-7.04	1.30	1.34
36	BB	52	A	N3-C4	-7.04	1.30	1.34
35	BA	760	G	C2-N2	-7.04	1.27	1.34
1	AA	486	U	C2-N3	-7.04	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	800	G	C5-C6	-7.03	1.35	1.42
35	BA	1845	G	C2-N2	-7.03	1.27	1.34
35	BA	1942	C	C5-C6	-7.03	1.28	1.34
35	BA	768	G	C5-C4	-7.03	1.33	1.38
1	AA	1481	U	N3-C4	-7.03	1.32	1.38
1	AA	673	G	C5-C4	-7.03	1.33	1.38
1	AA	907	A	C6-N1	-7.03	1.30	1.35
1	AA	1272	G	C5-C4	7.03	1.43	1.38
35	BA	2842	G	C6-N1	-7.03	1.34	1.39
1	AA	126	G	N3-C4	-7.02	1.30	1.35
1	AA	1101	A	N1-C2	-7.02	1.28	1.34
1	AA	1280	A	P-O5'	-7.02	1.52	1.59
1	AA	520	A	N9-C4	-7.02	1.33	1.37
1	AA	662	G	C6-N1	-7.02	1.34	1.39
1	AA	665	A	N7-C5	-7.02	1.35	1.39
35	BA	768	G	C6-N1	-7.02	1.34	1.39
35	BA	1780	A	N3-C4	-7.02	1.30	1.34
35	BA	1835	G	N7-C5	-7.02	1.35	1.39
35	BA	2229	C	N1-C6	-7.02	1.32	1.37
1	AA	117	G	N9-C4	-7.02	1.32	1.38
22	AV	69	C	N3-C4	7.02	1.38	1.33
35	BA	81	G	N9-C4	-7.02	1.32	1.38
35	BA	622	G	C8-N7	-7.02	1.26	1.30
35	BA	1573	G	C8-N7	-7.02	1.26	1.30
35	BA	2603	G	C8-N7	-7.02	1.26	1.30
36	BB	93	G	N1-C2	-7.01	1.32	1.37
1	AA	1419	G	C8-N7	-7.01	1.26	1.30
35	BA	733	G	C5-C6	-7.01	1.35	1.42
35	BA	2642	G	N7-C5	7.01	1.43	1.39
35	BA	2773	C	C4-N4	-7.01	1.27	1.33
35	BA	2162	G	C2-N3	-7.01	1.27	1.32
35	BA	2221	G	C4'-C3'	-7.01	1.45	1.53
1	AA	489	C	N1-C6	-7.01	1.32	1.37
1	AA	1069	C	C4-N4	-7.01	1.27	1.33
1	AA	787	A	C5-C6	-7.01	1.34	1.41
35	BA	2864	G	N3-C4	-7.01	1.30	1.35
35	BA	1197	G	C6-N1	7.00	1.44	1.39
1	AA	1011	G	C2-N3	-7.00	1.27	1.32
1	AA	1322	C	C2'-C1'	-7.00	1.45	1.53
35	BA	826	U	C2-N3	-7.00	1.32	1.37
35	BA	1534	U	C2-N3	-7.00	1.32	1.37
1	AA	235	C	N1-C6	-7.00	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	617	G	N9-C8	-7.00	1.32	1.37
1	AA	763	G	N7-C5	-7.00	1.35	1.39
35	BA	1203	G	P-O5'	7.00	1.66	1.59
35	BA	2839	G	N3-C4	-7.00	1.30	1.35
35	BA	987	G	C6-N1	-7.00	1.34	1.39
35	BA	1459	G	C2-N3	-7.00	1.27	1.32
35	BA	2775	A	N9-C8	-7.00	1.32	1.37
35	BA	496	G	N7-C5	-7.00	1.35	1.39
35	BA	1418	G	N7-C5	-7.00	1.35	1.39
35	BA	1838	C	C5-C6	-7.00	1.28	1.34
33	B8	56	GLU	CD-OE1	-6.99	1.18	1.25
35	BA	553	G	N9-C4	-6.99	1.32	1.38
22	AV	22	G	C4'-C3'	-6.99	1.45	1.53
35	BA	621	A	C6-N6	-6.99	1.28	1.33
35	BA	2307	G	N1-C2	-6.99	1.32	1.37
35	BA	2487	G	C2-N3	-6.99	1.27	1.32
35	BA	1186	G	C4'-C3'	-6.98	1.45	1.53
35	BA	2839	G	N9-C4	-6.98	1.32	1.38
1	AA	1279	A	C6-N6	-6.98	1.28	1.33
35	BA	1355	G	N7-C5	-6.98	1.35	1.39
35	BA	1370	C	C4-C5	-6.98	1.37	1.43
35	BA	2274	A	P-O5'	-6.98	1.52	1.59
1	AA	284	G	N9-C4	-6.98	1.32	1.38
35	BA	843	G	C6-N1	-6.98	1.34	1.39
1	AA	254	G	N9-C8	-6.97	1.32	1.37
35	BA	327	G	N9-C4	-6.97	1.32	1.38
35	BA	1763	G	N9-C8	-6.97	1.32	1.37
1	AA	1464	G	N3-C4	-6.97	1.30	1.35
35	BA	575	A	N9-C4	6.97	1.42	1.37
1	AA	1221	G	P-O5'	-6.97	1.52	1.59
1	AA	217	C	C4-N4	-6.97	1.27	1.33
1	AA	1421	G	C5-C6	-6.97	1.35	1.42
35	BA	903	C	C5-C6	-6.97	1.28	1.34
35	BA	28	A	C6-N1	-6.97	1.30	1.35
35	BA	896	A	C4'-C3'	-6.97	1.45	1.53
35	BA	1542	A	C6-N1	-6.97	1.30	1.35
35	BA	127	A	N9-C4	-6.96	1.33	1.37
35	BA	2484	G	C8-N7	-6.96	1.26	1.30
35	BA	2554	U	N1-C6	-6.96	1.31	1.38
1	AA	101	A	N9-C8	-6.96	1.32	1.37
1	AA	905	U	N3-C4	-6.96	1.32	1.38
35	BA	154	G	C6-N1	-6.96	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1331	A	C5-C6	-6.96	1.34	1.41
35	BA	2662	A	N3-C4	-6.96	1.30	1.34
1	AA	200	G	N9-C4	-6.96	1.32	1.38
1	AA	546	G	C2-N3	-6.96	1.27	1.32
36	BB	68	C	C5-C6	-6.96	1.28	1.34
1	AA	790	A	N9-C4	-6.96	1.33	1.37
1	AA	911	U	N3-C4	-6.96	1.32	1.38
35	BA	2080	G	N3-C4	-6.96	1.30	1.35
35	BA	2152	G	N3-C4	-6.96	1.30	1.35
36	BB	34	U	C2-N3	-6.96	1.32	1.37
35	BA	1766	U	C2-O2	-6.95	1.16	1.22
1	AA	729	A	N9-C8	-6.95	1.32	1.37
1	AA	1170	A	N7-C5	-6.95	1.35	1.39
35	BA	26	G	C6-N1	-6.95	1.34	1.39
35	BA	851	U	C2-N3	-6.95	1.32	1.37
35	BA	1189	A	N7-C5	-6.95	1.35	1.39
35	BA	2548	G	N7-C5	-6.95	1.35	1.39
35	BA	2877	G	N7-C5	-6.95	1.35	1.39
1	AA	397	A	C5-C6	-6.95	1.34	1.41
35	BA	1852	C	C4-C5	-6.95	1.37	1.43
1	AA	1221	G	N9-C8	-6.95	1.32	1.37
22	AV	30	G	C6-O6	-6.95	1.17	1.24
1	AA	1215	G	N7-C5	-6.95	1.35	1.39
1	AA	1323	G	C5-C4	-6.95	1.33	1.38
1	AA	1402	C	N1-C6	-6.95	1.32	1.37
35	BA	614(B)	G	N9-C4	-6.95	1.32	1.38
35	BA	634	C	C5-C6	-6.95	1.28	1.34
35	BA	2046	G	N9-C4	-6.95	1.32	1.38
35	BA	2247	A	N7-C5	-6.95	1.35	1.39
35	BA	2280	G	C2'-C1'	-6.94	1.45	1.53
1	AA	68	G	N1-C2	-6.94	1.32	1.37
1	AA	1523	G	N1-C2	-6.94	1.32	1.37
22	AV	43	A	N3-C4	-6.94	1.30	1.34
35	BA	2220	G	P-O5'	-6.94	1.52	1.59
1	AA	189(I)	G	C6-N1	-6.94	1.34	1.39
35	BA	745	G	N3-C4	-6.94	1.30	1.35
35	BA	973	A	C5-C6	-6.94	1.34	1.41
1	AA	61	G	C8-N7	-6.94	1.26	1.30
35	BA	1892	C	N1-C6	-6.94	1.32	1.37
1	AA	356	A	C4'-O4'	-6.94	1.36	1.45
1	AA	941	G	N9-C8	-6.94	1.32	1.37
1	AA	1080	A	C6-N6	-6.94	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	383	A	C3'-C2'	-6.93	1.45	1.52
1	AA	1353	G	C6-N1	-6.93	1.34	1.39
35	BA	1779	U	C5-C6	-6.93	1.27	1.34
1	AA	28	G	C8-N7	-6.93	1.26	1.30
1	AA	103	C	N3-C4	-6.93	1.29	1.33
1	AA	263	A	N9-C4	-6.93	1.33	1.37
1	AA	839	U	N1-C2	6.93	1.44	1.38
35	BA	870	A	N9-C4	-6.93	1.33	1.37
35	BA	748	G	N9-C8	-6.93	1.32	1.37
35	BA	750	A	C6-N6	-6.93	1.28	1.33
35	BA	1593	G	C5-C4	-6.93	1.33	1.38
35	BA	2159	G	C5-C4	-6.93	1.33	1.38
35	BA	322	A	C5-C4	-6.93	1.33	1.38
35	BA	1471	A	C5-C6	-6.93	1.34	1.41
1	AA	35	G	C2-N2	-6.93	1.27	1.34
1	AA	1011	G	N7-C5	-6.93	1.35	1.39
35	BA	642	G	C5-C6	-6.93	1.35	1.42
35	BA	798	G	C2-N2	-6.93	1.27	1.34
35	BA	1535	A	N9-C4	-6.93	1.33	1.37
35	BA	402	A	N3-C4	-6.92	1.30	1.34
1	AA	724	G	N7-C5	-6.92	1.35	1.39
22	AV	19	G	C2-N3	-6.92	1.27	1.32
35	BA	1070	A	N7-C5	-6.92	1.35	1.39
35	BA	2772	C	C4'-C3'	-6.92	1.45	1.53
1	AA	176	C	N1-C6	-6.92	1.32	1.37
1	AA	1277	C	N1-C6	-6.92	1.32	1.37
35	BA	371	A	C4'-C3'	-6.92	1.45	1.53
35	BA	1259	G	P-O5'	-6.92	1.52	1.59
35	BA	1397	U	O3'-P	-6.92	1.52	1.61
1	AA	780	A	C5-C4	-6.92	1.33	1.38
22	AV	10	G	P-O5'	-6.92	1.52	1.59
35	BA	1085	A	N3-C4	-6.92	1.30	1.34
35	BA	1246	A	N3-C4	-6.92	1.30	1.34
35	BA	1805	U	C2'-C1'	-6.92	1.45	1.53
1	AA	142	G	C5-C6	-6.92	1.35	1.42
35	BA	2049	G	C5-C6	-6.92	1.35	1.42
35	BA	810	U	N1-C6	-6.91	1.31	1.38
35	BA	1525	G	N7-C5	-6.91	1.35	1.39
35	BA	1828	G	C6-N1	-6.91	1.34	1.39
35	BA	1966	A	N7-C5	-6.91	1.35	1.39
35	BA	2324	C	N1-C6	-6.91	1.33	1.37
36	BB	107	G	C6-O6	-6.91	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	147	G	C8-N7	-6.91	1.26	1.30
35	BA	1565	C	C4-C5	-6.91	1.37	1.43
35	BA	2501	C	C4-C5	-6.91	1.37	1.43
1	AA	317	G	N9-C8	-6.91	1.33	1.37
1	AA	1373	G	N9-C8	-6.91	1.33	1.37
35	BA	574	C	N3-C4	-6.91	1.29	1.33
35	BA	1910	G	N9-C8	-6.91	1.33	1.37
35	BA	2688	U	N3-C4	-6.91	1.32	1.38
35	BA	423	A	N9-C4	-6.91	1.33	1.37
35	BA	814	C	C2-N3	-6.91	1.30	1.35
35	BA	1609	A	N9-C4	-6.91	1.33	1.37
35	BA	2268	A	N7-C5	-6.91	1.35	1.39
35	BA	586	A	C6-N1	-6.91	1.30	1.35
1	AA	184	G	C8-N7	-6.91	1.26	1.30
35	BA	1309	G	P-O5'	-6.91	1.52	1.59
35	BA	1414	G	C8-N7	-6.91	1.26	1.30
35	BA	1984	G	C8-N7	-6.91	1.26	1.30
1	AA	1368	G	N9-C8	-6.90	1.33	1.37
35	BA	2447	G	N9-C8	-6.90	1.33	1.37
1	AA	1115	C	C5-C6	-6.90	1.28	1.34
35	BA	54	G	C6-N1	-6.90	1.34	1.39
35	BA	1161	C	C5-C6	-6.90	1.28	1.34
1	AA	1388	C	P-O5'	-6.90	1.52	1.59
35	BA	849	A	N1-C2	-6.90	1.28	1.34
1	AA	837	G	N3-C4	-6.90	1.30	1.35
35	BA	1203	G	C2-N3	-6.90	1.27	1.32
35	BA	1822	G	N7-C5	-6.90	1.35	1.39
35	BA	2718	G	C5-C6	-6.90	1.35	1.42
1	AA	581	G	N9-C8	-6.89	1.33	1.37
35	BA	334	C	N1-C6	-6.89	1.33	1.37
35	BA	2045	C	N1-C6	-6.89	1.33	1.37
35	BA	930	U	C4-O4	-6.89	1.18	1.23
35	BA	2027	G	C5-C6	-6.89	1.35	1.42
35	BA	2572	A	N3-C4	-6.89	1.30	1.34
1	AA	1266	G	N3-C4	-6.89	1.30	1.35
35	BA	154	G	N9-C4	-6.89	1.32	1.38
35	BA	842	G	N3-C4	-6.89	1.30	1.35
35	BA	880	G	N9-C8	-6.89	1.33	1.37
1	AA	148	G	C8-N7	-6.89	1.26	1.30
36	BB	87	G	C5-C4	-6.89	1.33	1.38
1	AA	247	G	N3-C4	-6.88	1.30	1.35
1	AA	399	G	C4'-C3'	-6.88	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2098	U	C2'-C1'	-6.88	1.45	1.53
35	BA	2411	A	N3-C4	-6.88	1.30	1.34
1	AA	144	G	N7-C5	-6.88	1.35	1.39
1	AA	610	G	N7-C5	-6.88	1.35	1.39
35	BA	432	A	N9-C4	-6.88	1.33	1.37
35	BA	2396	G	O3'-P	-6.88	1.52	1.61
36	BB	67	G	N7-C5	-6.88	1.35	1.39
35	BA	1517	G	C2-N3	-6.88	1.27	1.32
35	BA	2562	U	C2-O2	-6.88	1.16	1.22
35	BA	2570	G	C2-N3	-6.88	1.27	1.32
1	AA	162	A	C6-N1	-6.88	1.30	1.35
35	BA	2418	A	C6-N1	-6.88	1.30	1.35
1	AA	172	A	N3-C4	-6.88	1.30	1.34
1	AA	408	A	N3-C4	-6.88	1.30	1.34
35	BA	2769	C	N3-C4	-6.88	1.29	1.33
1	AA	371	G	C2-N2	-6.88	1.27	1.34
1	AA	425	G	C6-N1	-6.88	1.34	1.39
35	BA	1347	G	C6-O6	-6.88	1.18	1.24
35	BA	2565	A	N7-C5	-6.88	1.35	1.39
35	BA	2883	A	N9-C4	-6.88	1.33	1.37
1	AA	1490	C	C4'-C3'	-6.88	1.45	1.53
1	AA	1504	G	C5'-C4'	-6.88	1.43	1.51
35	BA	406	G	C8-N7	-6.87	1.26	1.30
35	BA	1539	G	N3-C4	-6.87	1.30	1.35
35	BA	1862	G	N3-C4	-6.87	1.30	1.35
35	BA	2299	G	C6-N1	-6.87	1.34	1.39
35	BA	72	U	C2-N3	-6.87	1.32	1.37
35	BA	524	U	C2-N3	-6.87	1.32	1.37
35	BA	1103	A	C8-N7	-6.87	1.26	1.31
1	AA	298	A	C6-N6	-6.87	1.28	1.33
1	AA	412	A	N7-C5	-6.87	1.35	1.39
1	AA	1109	C	C4'-C3'	-6.87	1.45	1.53
35	BA	596	G	C6-O6	-6.87	1.18	1.24
35	BA	1024	G	C6-N1	-6.87	1.34	1.39
1	AA	869	G	N9-C8	6.86	1.42	1.37
35	BA	574	C	N1-C6	-6.86	1.33	1.37
35	BA	1847	A	N1-C2	-6.86	1.28	1.34
35	BA	2000	G	C2-N2	-6.86	1.27	1.34
35	BA	2258	C	N1-C6	-6.86	1.33	1.37
1	AA	739	C	C4'-C3'	-6.86	1.45	1.53
35	BA	1950	G	N1-C2	-6.86	1.32	1.37
35	BA	396	G	P-O5'	-6.86	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	694	U	N3-C4	-6.86	1.32	1.38
35	BA	864	G	N9-C4	-6.86	1.32	1.38
35	BA	933	A	C6-N6	-6.86	1.28	1.33
36	BB	75	G	C8-N7	-6.86	1.26	1.30
1	AA	1249	C	N1-C6	-6.86	1.33	1.37
35	BA	545	C	C4-C5	-6.86	1.37	1.43
35	BA	1749	A	C6-N1	-6.86	1.30	1.35
1	AA	1401	G	C2-N3	-6.86	1.27	1.32
35	BA	1250	G	C2-N3	-6.86	1.27	1.32
35	BA	1455	G	C2-N3	-6.86	1.27	1.32
35	BA	2094	G	N9-C4	-6.86	1.32	1.38
35	BA	2658	C	N3-C4	-6.86	1.29	1.33
1	AA	60	A	C6-N1	-6.85	1.30	1.35
1	AA	170	U	O3'-P	-6.85	1.52	1.61
1	AA	834	C	C4-C5	-6.85	1.37	1.43
35	BA	196	A	N7-C5	-6.85	1.35	1.39
35	BA	1222	C	C5-C6	-6.85	1.28	1.34
35	BA	2451	A	N7-C5	-6.85	1.35	1.39
35	BA	2170	A	N9-C4	-6.85	1.33	1.37
35	BA	2826	A	C6-N6	-6.85	1.28	1.33
1	AA	719	C	N3-C4	-6.85	1.29	1.33
35	BA	693	C	N3-C4	-6.85	1.29	1.33
35	BA	563	G	C3'-C2'	-6.85	1.45	1.52
1	AA	1177	G	N3-C4	-6.85	1.30	1.35
1	AA	932	C	N1-C6	-6.84	1.33	1.37
35	BA	535	C	N1-C6	-6.84	1.33	1.37
36	BB	7	G	C5-C4	-6.84	1.33	1.38
36	BB	13	A	C8-N7	-6.84	1.26	1.31
35	BA	827	U	N1-C2	6.84	1.44	1.38
35	BA	2267	A	N9-C4	-6.84	1.33	1.37
35	BA	2320	A	N3-C4	-6.84	1.30	1.34
35	BA	2550	G	N9-C8	-6.84	1.33	1.37
1	AA	970	C	N1-C6	-6.84	1.33	1.37
36	BB	29	A	N9-C8	-6.84	1.32	1.37
35	BA	1017	G	C5-C6	-6.84	1.35	1.42
35	BA	315	G	C4'-C3'	-6.83	1.45	1.53
35	BA	741	G	C6-N1	-6.83	1.34	1.39
35	BA	2685	G	P-O5'	-6.83	1.52	1.59
22	AV	45	G	N9-C4	-6.83	1.32	1.38
35	BA	1190	G	C6-N1	6.83	1.44	1.39
36	BB	10	C	N1-C2	-6.83	1.33	1.40
1	AA	174	C	C4-C5	-6.83	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	865	A	N3-C4	-6.83	1.30	1.34
35	BA	126	A	N3-C4	-6.83	1.30	1.34
35	BA	939	G	N7-C5	-6.83	1.35	1.39
35	BA	1854	A	N7-C5	-6.83	1.35	1.39
35	BA	2745	C	C4-C5	-6.83	1.37	1.43
1	AA	540	G	C8-N7	-6.83	1.26	1.30
35	BA	824	A	N3-C4	6.83	1.39	1.34
35	BA	2130	U	C4-C5	-6.83	1.37	1.43
1	AA	1077	G	N3-C4	-6.82	1.30	1.35
1	AA	1295	G	N9-C8	-6.82	1.33	1.37
35	BA	642	G	N3-C4	-6.82	1.30	1.35
35	BA	2502	G	N3-C4	-6.82	1.30	1.35
1	AA	394	G	N7-C5	-6.82	1.35	1.39
35	BA	319	C	N3-C4	-6.82	1.29	1.33
35	BA	956	G	N7-C5	-6.82	1.35	1.39
1	AA	832	C	C3'-C2'	-6.82	1.45	1.52
35	BA	56	A	N1-C2	-6.82	1.28	1.34
1	AA	806	C	N1-C6	-6.82	1.33	1.37
35	BA	758	C	C5-C6	-6.82	1.28	1.34
35	BA	1189	A	C6-N1	-6.82	1.30	1.35
35	BA	729	G	C5-C4	-6.82	1.33	1.38
35	BA	1792	G	C5-C4	-6.82	1.33	1.38
35	BA	1127	A	N3-C4	-6.82	1.30	1.34
35	BA	1208	C	C4-C5	-6.82	1.37	1.43
35	BA	1604	C	C4-N4	-6.82	1.27	1.33
35	BA	2713	A	N3-C4	-6.82	1.30	1.34
1	AA	18	C	C2-N3	-6.81	1.30	1.35
1	AA	801	U	C5-C6	-6.81	1.28	1.34
1	AA	1048	G	C8-N7	-6.81	1.26	1.30
35	BA	220	G	N9-C4	-6.81	1.32	1.38
35	BA	1446	C	C2-N3	-6.81	1.30	1.35
35	BA	1884	A	C4'-C3'	-6.81	1.45	1.53
1	AA	427	U	N3-C4	-6.81	1.32	1.38
35	BA	765	G	N1-C2	-6.81	1.32	1.37
35	BA	1567	A	C8-N7	-6.81	1.26	1.31
35	BA	1757	U	C4-C5	-6.81	1.37	1.43
35	BA	2123	G	N9-C4	-6.81	1.32	1.38
35	BA	2251	G	N1-C2	-6.81	1.32	1.37
1	AA	80	G	C8-N7	-6.81	1.26	1.30
1	AA	93	G	N3-C4	-6.81	1.30	1.35
1	AA	116	A	N3-C4	-6.81	1.30	1.34
1	AA	305	G	N9-C8	-6.81	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	281	G	N3-C4	-6.81	1.30	1.35
35	BA	1710	C	C4-C5	-6.81	1.37	1.43
35	BA	1978	A	N9-C4	-6.81	1.33	1.37
35	BA	2241	A	N3-C4	-6.81	1.30	1.34
35	BA	2334	G	C8-N7	-6.81	1.26	1.30
35	BA	2765	A	N3-C4	-6.81	1.30	1.34
35	BA	1141	U	C4-C5	-6.81	1.37	1.43
1	AA	913	A	C4'-O4'	-6.80	1.36	1.45
35	BA	2683	C	C5-C6	-6.80	1.28	1.34
35	BA	656	G	N7-C5	-6.80	1.35	1.39
35	BA	1307	A	N7-C5	-6.80	1.35	1.39
35	BA	1034	G	C2-N3	-6.80	1.27	1.32
1	AA	1142	G	C8-N7	-6.80	1.26	1.30
35	BA	665	C	C4'-C3'	-6.80	1.45	1.53
35	BA	2230	G	C4'-C3'	-6.80	1.45	1.53
1	AA	728	A	C6-N1	-6.80	1.30	1.35
1	AA	1435	G	C2-N2	-6.80	1.27	1.34
35	BA	307	G	N3-C4	-6.80	1.30	1.35
35	BA	2886	G	C6-O6	-6.80	1.18	1.24
36	BB	9	G	N7-C5	-6.80	1.35	1.39
1	AA	837	G	C5-C6	-6.79	1.35	1.42
35	BA	1444	G	P-O5'	-6.79	1.52	1.59
35	BA	2235	G	C5-C6	-6.79	1.35	1.42
1	AA	189(B)	C	C2-O2	6.79	1.30	1.24
35	BA	916	G	C6-N1	-6.79	1.34	1.39
35	BA	2000	G	C6-N1	-6.79	1.34	1.39
36	BB	72	G	N3-C4	-6.79	1.30	1.35
35	BA	688	U	N1-C2	-6.79	1.32	1.38
35	BA	2658	C	C2-N3	-6.79	1.30	1.35
1	AA	1072	G	C3'-C2'	-6.79	1.45	1.52
1	AA	154	C	C5-C6	-6.79	1.28	1.34
1	AA	371	G	N3-C4	-6.79	1.30	1.35
1	AA	392	G	C5-C4	-6.79	1.33	1.38
1	AA	562	C	N1-C2	-6.79	1.33	1.40
1	AA	1084	G	C2-N2	-6.79	1.27	1.34
1	AA	1439	C	C5-C6	-6.79	1.28	1.34
35	BA	1193	G	C6-N1	-6.79	1.34	1.39
35	BA	1412	A	N9-C8	-6.79	1.32	1.37
35	BA	2677	G	C6-N1	-6.79	1.34	1.39
35	BA	2819	G	C6-N1	-6.79	1.34	1.39
1	AA	717	C	C4-C5	-6.78	1.37	1.43
1	AA	946	A	N7-C5	-6.78	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1279	G	C8-N7	6.78	1.35	1.30
35	BA	2297	C	C2-O2	-6.78	1.18	1.24
1	AA	1164	G	C5-C6	-6.78	1.35	1.42
1	AA	763	G	N3-C4	-6.78	1.30	1.35
1	AA	954	G	C5-C4	-6.78	1.33	1.38
35	BA	1423	G	C6-N1	-6.78	1.34	1.39
35	BA	2560	C	C5-C6	-6.78	1.28	1.34
35	BA	2766	G	N9-C8	-6.78	1.33	1.37
1	AA	794	A	C5-C4	-6.78	1.34	1.38
35	BA	371	A	C2-N3	-6.78	1.27	1.33
35	BA	468	G	N9-C8	6.78	1.42	1.37
1	AA	385	C	C2-O2	-6.78	1.18	1.24
1	AA	628	G	N9-C8	-6.78	1.33	1.37
1	AA	778	G	N9-C8	-6.78	1.33	1.37
35	BA	21	A	N3-C4	-6.78	1.30	1.34
35	BA	190	A	C5-C6	-6.78	1.34	1.41
35	BA	1142(A)	A	C8-N7	-6.78	1.26	1.31
35	BA	1203	G	C6-N1	-6.78	1.34	1.39
35	BA	2131	G	N1-C2	6.78	1.43	1.37
1	AA	544	G	C2-N2	-6.77	1.27	1.34
1	AA	643	C	N3-C4	-6.77	1.29	1.33
22	AV	18	G	N9-C4	-6.77	1.32	1.38
1	AA	1424	C	C2-N3	-6.77	1.30	1.35
35	BA	244	A	C2-N3	-6.77	1.27	1.33
35	BA	1373	A	C6-N1	-6.77	1.30	1.35
35	BA	2607	G	C5-C4	-6.77	1.33	1.38
35	BA	1538	G	P-O5'	-6.77	1.52	1.59
35	BA	1611	C	P-O5'	-6.77	1.52	1.59
1	AA	444	C	C4-C5	-6.77	1.37	1.43
1	AA	1347	G	N7-C5	-6.77	1.35	1.39
35	BA	350	U	C2-O2	-6.77	1.16	1.22
1	AA	927	G	N3-C4	-6.76	1.30	1.35
1	AA	1322	C	C3'-C2'	-6.76	1.45	1.52
35	BA	1297	C	C4-N4	-6.76	1.27	1.33
1	AA	404	U	O3'-P	-6.76	1.53	1.61
1	AA	596	C	C3'-C2'	-6.76	1.45	1.52
1	AA	875	C	N3-C4	-6.76	1.29	1.33
35	BA	1368	G	C6-O6	-6.76	1.18	1.24
1	AA	320	C	N1-C6	6.76	1.41	1.37
35	BA	2031	A	P-O5'	-6.76	1.52	1.59
1	AA	759	A	N3-C4	-6.76	1.30	1.34
35	BA	448	U	N1-C2	-6.76	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1474	C	N3-C4	-6.76	1.29	1.33
35	BA	1698	A	C2-N3	-6.76	1.27	1.33
35	BA	2501	C	N3-C4	-6.76	1.29	1.33
35	BA	2712	U	C2'-C1'	-6.76	1.46	1.53
35	BA	2008	C	C4-N4	-6.75	1.27	1.33
1	AA	229	U	C2'-C1'	-6.75	1.46	1.53
22	AV	30	G	N3-C4	-6.75	1.30	1.35
35	BA	502	A	N7-C5	-6.75	1.35	1.39
35	BA	852	G	N9-C8	-6.75	1.33	1.37
35	BA	1519	G	C8-N7	-6.75	1.26	1.30
35	BA	2114	A	N7-C5	-6.75	1.35	1.39
35	BA	2846	G	C8-N7	-6.75	1.26	1.30
1	AA	134	A	C5-C4	-6.75	1.34	1.38
1	AA	386	C	C4'-C3'	-6.75	1.45	1.53
1	AA	1404	C	P-O5'	-6.75	1.53	1.59
35	BA	2382	G	N1-C2	-6.75	1.32	1.37
1	AA	1408	A	N7-C5	-6.75	1.35	1.39
35	BA	271(J)	C	N1-C6	6.75	1.41	1.37
35	BA	2334	G	N7-C5	-6.75	1.35	1.39
35	BA	2389	G	C8-N7	-6.75	1.26	1.30
1	AA	268	C	P-O5'	-6.75	1.53	1.59
1	AA	1245	A	O4'-C1'	-6.75	1.32	1.41
35	BA	181	A	C6-N1	6.75	1.40	1.35
35	BA	837	C	C4-C5	-6.74	1.37	1.43
35	BA	1743	C	C5'-C4'	-6.74	1.43	1.51
1	AA	1265	G	N3-C4	-6.74	1.30	1.35
1	AA	230	G	C5'-C4'	-6.74	1.43	1.51
35	BA	1269	A	N9-C4	-6.74	1.33	1.37
35	BA	326	G	N9-C8	-6.74	1.33	1.37
35	BA	1276	A	C6-N1	-6.74	1.30	1.35
36	BB	75	G	C6-N1	-6.74	1.34	1.39
1	AA	1217	C	C2-N3	-6.74	1.30	1.35
35	BA	949	C	C5'-C4'	-6.74	1.43	1.51
35	BA	2378	A	C5-C4	-6.74	1.34	1.38
1	AA	292	G	N1-C2	-6.73	1.32	1.37
35	BA	1027	A	N9-C8	-6.73	1.32	1.37
35	BA	2548	G	N1-C2	-6.73	1.32	1.37
1	AA	331	G	N9-C8	-6.73	1.33	1.37
1	AA	1101	A	N3-C4	-6.73	1.30	1.34
1	AA	1168	A	N3-C4	-6.73	1.30	1.34
1	AA	1343	G	C8-N7	6.73	1.34	1.30
35	BA	614(C)	A	N3-C4	-6.73	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	708	C	N3-C4	-6.73	1.29	1.33
35	BA	1903	G	O3'-P	-6.73	1.53	1.61
35	BA	2542	A	C6-N6	-6.73	1.28	1.33
35	BA	447	A	C5-C4	-6.73	1.34	1.38
1	AA	671	G	N7-C5	-6.73	1.35	1.39
35	BA	463	G	N7-C5	-6.73	1.35	1.39
35	BA	552	G	N7-C5	-6.73	1.35	1.39
35	BA	918	A	N7-C5	-6.73	1.35	1.39
35	BA	1477	A	N7-C5	-6.73	1.35	1.39
35	BA	2523	G	N7-C5	-6.73	1.35	1.39
1	AA	963	G	C6-N1	-6.73	1.34	1.39
35	BA	499	U	C4-O4	-6.73	1.18	1.23
35	BA	1704	G	C8-N7	-6.73	1.26	1.30
1	AA	1418	A	N9-C4	-6.73	1.33	1.37
35	BA	2827	C	C4-N4	-6.72	1.27	1.33
36	BB	57	A	N9-C8	-6.72	1.32	1.37
1	AA	1024	G	C2-N3	-6.72	1.27	1.32
35	BA	772	C	C5-C6	-6.72	1.28	1.34
35	BA	1817	G	N7-C5	-6.72	1.35	1.39
1	AA	79	G	C5-C4	-6.72	1.33	1.38
35	BA	700	G	C8-N7	-6.72	1.26	1.30
35	BA	985	C	C4'-C3'	-6.72	1.45	1.53
35	BA	1203	G	C8-N7	-6.72	1.26	1.30
35	BA	2472	G	C5-C4	-6.72	1.33	1.38
22	AV	63	G	C5-C6	-6.72	1.35	1.42
35	BA	987	G	N9-C4	-6.72	1.32	1.38
35	BA	1307	A	C6-N6	-6.72	1.28	1.33
35	BA	1682	G	N9-C4	-6.72	1.32	1.38
36	BB	43	C	C4-C5	-6.72	1.37	1.43
35	BA	2537	U	C2-O2	-6.72	1.16	1.22
1	AA	1478	C	N3-C4	-6.72	1.29	1.33
35	BA	1905	C	N3-C4	-6.72	1.29	1.33
35	BA	1908	C	N3-C4	-6.72	1.29	1.33
1	AA	436	C	N1-C2	-6.71	1.33	1.40
1	AA	819	A	C8-N7	-6.71	1.26	1.31
35	BA	660	G	N3-C4	-6.71	1.30	1.35
35	BA	1506	C	C2-O2	-6.71	1.18	1.24
35	BA	1714	G	N9-C4	-6.71	1.32	1.38
35	BA	1771	C	C2-O2	-6.71	1.18	1.24
35	BA	2246	G	N1-C2	-6.71	1.32	1.37
35	BA	2603	G	N3-C4	-6.71	1.30	1.35
1	AA	1346	A	C5-C6	-6.71	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	128	C	N3-C4	-6.71	1.29	1.33
35	BA	1549	C	C2-N3	-6.71	1.30	1.35
35	BA	1960	A	N3-C4	-6.71	1.30	1.34
1	AA	284	G	N7-C5	-6.71	1.35	1.39
1	AA	327	A	C6-N1	-6.71	1.30	1.35
1	AA	602	A	N9-C8	-6.71	1.32	1.37
1	AA	1099	G	N7-C5	-6.71	1.35	1.39
35	BA	141	A	N7-C5	-6.71	1.35	1.39
35	BA	771	G	N7-C5	-6.71	1.35	1.39
1	AA	1213	A	N9-C4	-6.71	1.33	1.37
35	BA	13	A	C5-C6	-6.71	1.35	1.41
35	BA	990	A	N9-C4	-6.71	1.33	1.37
35	BA	1275	A	C5-C6	-6.71	1.35	1.41
35	BA	2802	G	N3-C4	-6.71	1.30	1.35
1	AA	184	G	C6-N1	-6.71	1.34	1.39
1	AA	366	C	P-O5'	-6.71	1.53	1.59
1	AA	398	C	C2-N3	-6.71	1.30	1.35
1	AA	1013	G	C6-N1	-6.71	1.34	1.39
35	BA	299	A	N3-C4	6.71	1.38	1.34
1	AA	1229	A	C8-N7	-6.70	1.26	1.31
23	AX	17	U	C5'-C4'	-6.70	1.43	1.51
35	BA	1307	A	C6-N1	-6.70	1.30	1.35
1	AA	139	G	C6-N1	-6.70	1.34	1.39
1	AA	1120	G	C6-N1	-6.70	1.34	1.39
35	BA	2060	A	N9-C4	-6.70	1.33	1.37
35	BA	2632	A	C2'-C1'	-6.70	1.46	1.53
1	AA	854	G	N3-C4	-6.70	1.30	1.35
1	AA	1148	U	C2-O2	-6.70	1.16	1.22
1	AA	358	U	C2-N3	-6.70	1.33	1.37
35	BA	2013	A	C8-N7	-6.70	1.26	1.31
1	AA	428	G	N1-C2	-6.70	1.32	1.37
1	AA	627	G	C8-N7	-6.70	1.26	1.30
35	BA	606	U	N3-C4	-6.70	1.32	1.38
35	BA	1515	G	N1-C2	-6.70	1.32	1.37
1	AA	768	A	C6-N6	-6.69	1.28	1.33
35	BA	1921	G	N9-C8	-6.69	1.33	1.37
1	AA	1108	G	N3-C4	-6.69	1.30	1.35
35	BA	377	C	C4-C5	-6.69	1.37	1.43
1	AA	1025	U	C2-N3	-6.69	1.33	1.37
35	BA	1401	G	C8-N7	6.69	1.34	1.30
35	BA	700	G	C5-C4	-6.69	1.33	1.38
1	AA	499	A	N3-C4	-6.69	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	826	C	C5-C6	-6.69	1.28	1.34
1	AA	1375	A	C4'-C3'	-6.69	1.45	1.53
35	BA	1982	C	C5-C6	-6.69	1.28	1.34
35	BA	2851	A	C2-N3	-6.69	1.27	1.33
1	AA	818	G	N7-C5	-6.68	1.35	1.39
1	AA	1105	A	C5-C6	-6.68	1.35	1.41
35	BA	364	C	N3-C4	-6.68	1.29	1.33
35	BA	603	A	N9-C8	-6.68	1.32	1.37
35	BA	1176	G	C5-C4	-6.68	1.33	1.38
35	BA	1883	G	C3'-C2'	-6.68	1.45	1.52
35	BA	1958	C	C5-C6	-6.68	1.29	1.34
35	BA	2868	A	C6-N1	-6.68	1.30	1.35
1	AA	164	U	C2-N3	-6.68	1.33	1.37
1	AA	616	G	N9-C4	-6.68	1.32	1.38
35	BA	738	G	C2-N3	-6.68	1.27	1.32
35	BA	1821	A	C5-C6	-6.68	1.35	1.41
35	BA	2278	A	C3'-C2'	-6.68	1.45	1.52
35	BA	2389	G	C2-N3	-6.68	1.27	1.32
1	AA	940	C	N3-C4	-6.68	1.29	1.33
1	AA	1491	G	O3'-P	-6.68	1.53	1.61
35	BA	208	C	C2-N3	-6.68	1.30	1.35
35	BA	823	G	C5-C4	-6.68	1.33	1.38
35	BA	1581	G	C5-C6	-6.68	1.35	1.42
1	AA	140	A	N9-C4	-6.68	1.33	1.37
1	AA	161	A	N9-C4	-6.68	1.33	1.37
1	AA	858	G	N9-C4	-6.68	1.32	1.38
1	AA	11	G	C4'-C3'	-6.67	1.45	1.53
35	BA	2383	G	C8-N7	-6.67	1.26	1.30
1	AA	703	G	N7-C5	-6.67	1.35	1.39
1	AA	1081	G	C5-C4	-6.67	1.33	1.38
35	BA	1865	G	C5-C4	-6.67	1.33	1.38
35	BA	1921	G	C5-C4	-6.67	1.33	1.38
35	BA	17	G	N9-C4	-6.67	1.32	1.38
35	BA	1561	G	N3-C4	-6.67	1.30	1.35
35	BA	1925	C	O3'-P	-6.67	1.53	1.61
1	AA	46	G	C6-O6	-6.67	1.18	1.24
1	AA	821	G	C6-O6	-6.67	1.18	1.24
1	AA	939	G	C8-N7	-6.67	1.26	1.30
35	BA	1350	C	N1-C6	-6.67	1.33	1.37
36	BB	31	C	C5-C6	-6.67	1.29	1.34
1	AA	243	A	C5-C4	-6.67	1.34	1.38
36	BB	52	A	N7-C5	-6.67	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	75	G	N7-C5	-6.67	1.35	1.39
1	AA	1286	A	C6-N6	-6.67	1.28	1.33
1	AA	231	G	C2-N3	-6.66	1.27	1.32
1	AA	374	A	N9-C4	-6.66	1.33	1.37
1	AA	1282	C	N1-C2	6.66	1.46	1.40
35	BA	818	G	C2-N3	-6.66	1.27	1.32
36	BB	75	G	C2-N3	-6.66	1.27	1.32
35	BA	2495	G	N9-C8	-6.66	1.33	1.37
35	BA	2619	C	C2-O2	-6.66	1.18	1.24
53	BV	98	GLU	CD-OE2	-6.66	1.18	1.25
35	BA	2061	G	C5-C6	-6.66	1.35	1.42
36	BB	16	G	C6-N1	-6.66	1.34	1.39
1	AA	132	C	C4-C5	-6.66	1.37	1.43
1	AA	153	C	N1-C6	-6.66	1.33	1.37
35	BA	7	G	C5-C6	-6.66	1.35	1.42
35	BA	497	A	N7-C5	-6.66	1.35	1.39
35	BA	739	G	N7-C5	-6.66	1.35	1.39
35	BA	1397	U	C2-N3	-6.65	1.33	1.37
35	BA	1703	G	O3'-P	-6.65	1.53	1.61
35	BA	455	C	C4-C5	-6.65	1.37	1.43
35	BA	1628	G	C4'-C3'	-6.65	1.45	1.53
1	AA	1146	A	C5-C4	-6.65	1.34	1.38
22	AV	32	C	N3-C4	-6.65	1.29	1.33
35	BA	715	G	C5-C4	-6.65	1.33	1.38
35	BA	1378	A	N9-C4	-6.65	1.33	1.37
1	AA	587	G	N1-C2	-6.65	1.32	1.37
35	BA	145	G	C6-O6	-6.65	1.18	1.24
35	BA	189	G	N3-C4	-6.65	1.30	1.35
35	BA	2303	G	N7-C5	-6.65	1.35	1.39
1	AA	836	G	C3'-C2'	-6.65	1.45	1.52
1	AA	1256	A	C8-N7	-6.65	1.26	1.31
35	BA	2083	G	C5-C4	-6.65	1.33	1.38
1	AA	363	A	N9-C8	-6.64	1.32	1.37
22	AV	58	A	P-O5'	-6.64	1.53	1.59
35	BA	631	A	C5-C4	-6.64	1.34	1.38
35	BA	2001	A	C5-C4	-6.64	1.34	1.38
35	BA	2260	C	N3-C4	-6.64	1.29	1.33
35	BA	105	C	N1-C6	-6.64	1.33	1.37
35	BA	503	A	C4'-C3'	-6.64	1.45	1.53
35	BA	1279	G	C6-N1	-6.64	1.34	1.39
35	BA	1614	A	C4'-C3'	-6.64	1.45	1.53
35	BA	382	G	C6-O6	-6.64	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	454	A	C6-N1	-6.64	1.30	1.35
35	BA	2054	A	C6-N1	-6.64	1.30	1.35
35	BA	2491	U	C2-N3	-6.64	1.33	1.37
22	AV	7	G	P-O5'	-6.64	1.53	1.59
35	BA	1885	A	N3-C4	-6.64	1.30	1.34
1	AA	77	G	N9-C8	-6.63	1.33	1.37
1	AA	1255	G	C5-C4	-6.63	1.33	1.38
35	BA	953	A	O3'-P	-6.63	1.53	1.61
35	BA	2488	A	N1-C2	-6.63	1.28	1.34
1	AA	856	C	C4-C5	-6.63	1.37	1.43
1	AA	1406	U	N1-C2	6.63	1.44	1.38
1	AA	1015	A	C6-N6	-6.63	1.28	1.33
22	AV	17	C	C2'-C1'	-6.63	1.46	1.53
1	AA	694	A	C5-C6	-6.63	1.35	1.41
35	BA	615	G	N9-C8	-6.63	1.33	1.37
35	BA	1337	G	N7-C5	-6.63	1.35	1.39
1	AA	806	C	P-O5'	-6.63	1.53	1.59
1	AA	1085	U	P-O5'	-6.63	1.53	1.59
1	AA	1415	G	N3-C4	-6.63	1.30	1.35
35	BA	704	G	N3-C4	-6.63	1.30	1.35
35	BA	2192	G	N3-C4	-6.63	1.30	1.35
35	BA	2404	C	C5-C6	-6.62	1.29	1.34
1	AA	1422	G	N7-C5	-6.62	1.35	1.39
35	BA	104	U	C2-O2	-6.62	1.16	1.22
35	BA	1829	A	C8-N7	-6.62	1.26	1.31
1	AA	450	G	C6-N1	-6.62	1.34	1.39
1	AA	855	G	N9-C8	6.62	1.42	1.37
35	BA	231	C	C3'-C2'	-6.62	1.45	1.52
35	BA	976	C	N3-C4	-6.62	1.29	1.33
35	BA	1836	C	C4'-C3'	-6.62	1.45	1.53
35	BA	2435	A	C6-N1	-6.62	1.30	1.35
1	AA	100	C	C2-N3	-6.62	1.30	1.35
1	AA	596	C	C5-C6	-6.62	1.29	1.34
35	BA	1837	C	C4-N4	-6.62	1.27	1.33
35	BA	1950	G	N9-C4	-6.62	1.32	1.38
1	AA	885	G	C5-C6	-6.62	1.35	1.42
1	AA	557	G	N7-C5	-6.62	1.35	1.39
1	AA	1442	G	N7-C5	-6.62	1.35	1.39
35	BA	1054	A	C6-N1	-6.62	1.30	1.35
35	BA	2151	G	N7-C5	-6.62	1.35	1.39
1	AA	15	G	C6-N1	-6.62	1.34	1.39
1	AA	1251	A	C5'-C4'	-6.62	1.43	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1300	G	N1-C2	-6.62	1.32	1.37
1	AA	1503	A	C4'-O4'	-6.62	1.36	1.45
35	BA	128	C	C4-C5	-6.62	1.37	1.43
35	BA	1019	U	C2-N3	-6.62	1.33	1.37
35	BA	2280	G	C2-N3	-6.62	1.27	1.32
1	AA	797	C	C5-C6	-6.61	1.29	1.34
35	BA	2321	G	N7-C5	-6.61	1.35	1.39
35	BA	1541	G	N1-C2	6.61	1.43	1.37
1	AA	333	G	N9-C8	-6.61	1.33	1.37
1	AA	377	G	N9-C8	-6.61	1.33	1.37
1	AA	1354	C	O3'-P	-6.61	1.53	1.61
35	BA	1977	A	N9-C4	-6.61	1.33	1.37
35	BA	1989	G	N9-C8	-6.61	1.33	1.37
1	AA	857	C	C2-N3	-6.61	1.30	1.35
35	BA	1364	G	N3-C4	-6.61	1.30	1.35
35	BA	1500	G	C3'-C2'	-6.61	1.45	1.52
35	BA	1802	A	C3'-C2'	-6.61	1.45	1.52
35	BA	2399	G	N9-C4	-6.61	1.32	1.38
35	BA	1778	U	C4-C5	6.60	1.49	1.43
1	AA	993	G	N9-C8	-6.60	1.33	1.37
35	BA	229	A	C6-N6	-6.60	1.28	1.33
35	BA	2082	A	C2-N3	-6.60	1.27	1.33
1	AA	1411	C	C4-C5	-6.60	1.37	1.43
35	BA	2021	C	C4-C5	-6.60	1.37	1.43
35	BA	2323	G	C5'-C4'	-6.60	1.43	1.51
1	AA	248	C	N3-C4	-6.60	1.29	1.33
1	AA	1090	U	C4'-O4'	-6.60	1.36	1.45
35	BA	58	G	N7-C5	-6.60	1.35	1.39
35	BA	2709	G	N7-C5	-6.60	1.35	1.39
35	BA	400	G	C5-C6	-6.60	1.35	1.42
35	BA	733	G	N9-C8	6.60	1.42	1.37
1	AA	1321	C	C2-N3	-6.60	1.30	1.35
1	AA	124	G	C6-N1	-6.59	1.34	1.39
1	AA	1001	A	C8-N7	-6.59	1.26	1.31
35	BA	356	G	C6-N1	-6.59	1.34	1.39
35	BA	647	G	C6-N1	-6.59	1.34	1.39
35	BA	1088	A	C8-N7	-6.59	1.26	1.31
35	BA	1436	G	N3-C4	-6.59	1.30	1.35
35	BA	1072	C	N1-C6	6.59	1.41	1.37
35	BA	400	G	N7-C5	6.59	1.43	1.39
35	BA	905	U	C4'-O4'	-6.59	1.36	1.45
1	AA	27	G	C8-N7	-6.59	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	78	G	C5-C6	-6.59	1.35	1.42
1	AA	181	G	N3-C4	-6.59	1.30	1.35
1	AA	371	G	C8-N7	-6.59	1.26	1.30
35	BA	1997	G	C5'-C4'	6.59	1.59	1.51
35	BA	2737	G	N3-C4	-6.59	1.30	1.35
1	AA	319	G	N7-C5	-6.59	1.35	1.39
1	AA	890	G	N9-C4	-6.59	1.32	1.38
35	BA	584	C	N1-C6	-6.59	1.33	1.37
35	BA	2338	G	C2-N3	-6.59	1.27	1.32
35	BA	2535	G	N9-C4	-6.59	1.32	1.38
35	BA	2557	G	N1-C2	-6.59	1.32	1.37
35	BA	2869	G	N9-C8	-6.59	1.33	1.37
36	BB	61	G	C2-N3	-6.59	1.27	1.32
35	BA	447	A	C8-N7	6.58	1.36	1.31
35	BA	1407	C	P-O5'	-6.58	1.53	1.59
36	BB	25	A	N3-C4	6.58	1.38	1.34
35	BA	319	C	C3'-C2'	-6.58	1.45	1.52
1	AA	566	G	N9-C4	-6.58	1.32	1.38
35	BA	549	G	N1-C2	-6.58	1.32	1.37
35	BA	1964	G	P-O5'	-6.58	1.53	1.59
35	BA	2827	C	C2-O2	-6.58	1.18	1.24
1	AA	1183	A	C8-N7	-6.58	1.26	1.31
1	AA	1237	C	N3-C4	-6.58	1.29	1.33
35	BA	229	A	C8-N7	-6.58	1.26	1.31
35	BA	1419	A	N1-C2	-6.58	1.28	1.34
35	BA	1458	C	C2-N3	-6.58	1.30	1.35
35	BA	1907	G	C2-N3	-6.58	1.27	1.32
35	BA	2191	G	C5-C4	-6.58	1.33	1.38
1	AA	865	A	C8-N7	-6.57	1.26	1.31
35	BA	1526	G	N7-C5	-6.57	1.35	1.39
1	AA	483	C	C5'-C4'	-6.57	1.43	1.51
35	BA	627	A	N9-C4	-6.57	1.33	1.37
35	BA	2740	A	N9-C4	-6.57	1.33	1.37
1	AA	266	G	C6-O6	-6.57	1.18	1.24
1	AA	1469	G	C2'-C1'	-6.57	1.46	1.53
1	AA	327	A	C8-N7	-6.57	1.26	1.31
1	AA	888	G	C5-C6	-6.57	1.35	1.42
35	BA	543	C	N1-C6	-6.57	1.33	1.37
35	BA	664	C	N1-C6	-6.57	1.33	1.37
35	BA	662	G	C2-N2	-6.57	1.27	1.34
35	BA	1211	U	P-O5'	-6.57	1.53	1.59
35	BA	1407	C	C4-C5	-6.57	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	817	C	C2-N3	-6.56	1.30	1.35
35	BA	987	G	N7-C5	-6.56	1.35	1.39
35	BA	1337	G	C8-N7	-6.56	1.27	1.30
35	BA	2842	G	C8-N7	-6.56	1.27	1.30
1	AA	191	G	C2-N3	-6.56	1.27	1.32
35	BA	1661	G	N3-C4	-6.56	1.30	1.35
1	AA	936	C	C4-N4	-6.56	1.28	1.33
35	BA	111	A	N3-C4	-6.56	1.30	1.34
35	BA	491	G	C5-C4	-6.56	1.33	1.38
35	BA	2516	G	C5-C4	-6.56	1.33	1.38
36	BB	42	C	C4-N4	-6.56	1.28	1.33
1	AA	630	G	C4'-O4'	-6.56	1.37	1.45
1	AA	1088	G	C2-N2	-6.56	1.27	1.34
1	AA	1375	A	C6-N1	-6.56	1.30	1.35
35	BA	217	G	C8-N7	-6.56	1.27	1.30
35	BA	1301	A	N7-C5	-6.56	1.35	1.39
35	BA	2202	C	N3-C4	-6.56	1.29	1.33
35	BA	2508	G	N7-C5	-6.56	1.35	1.39
35	BA	2564	A	C8-N7	-6.56	1.26	1.31
1	AA	744	C	P-O5'	-6.55	1.53	1.59
35	BA	234	C	N1-C6	-6.55	1.33	1.37
1	AA	1420	C	C4-C5	-6.55	1.37	1.43
35	BA	414	C	C5-C6	-6.55	1.29	1.34
35	BA	705	A	C6-N1	-6.55	1.30	1.35
35	BA	1194	A	C6-N1	-6.55	1.30	1.35
35	BA	2240	C	C5-C6	-6.55	1.29	1.34
1	AA	189(I)	G	N9-C8	-6.55	1.33	1.37
1	AA	620	C	N3-C4	-6.55	1.29	1.33
1	AA	1274	G	C5-C4	-6.55	1.33	1.38
22	AV	25	C	C2-O2	-6.55	1.18	1.24
35	BA	680	G	C8-N7	-6.55	1.27	1.30
35	BA	977	G	N7-C5	-6.55	1.35	1.39
35	BA	1936	A	N7-C5	-6.55	1.35	1.39
35	BA	2529	G	P-O5'	-6.55	1.53	1.59
1	AA	356	A	C5-C6	-6.55	1.35	1.41
35	BA	2158	A	C5-C4	-6.55	1.34	1.38
35	BA	382	G	C4'-C3'	-6.55	1.46	1.53
35	BA	660	G	C4'-C3'	-6.55	1.46	1.53
1	AA	255	G	N3-C4	-6.54	1.30	1.35
1	AA	726	C	P-O5'	-6.54	1.53	1.59
1	AA	1082	G	N1-C2	-6.54	1.32	1.37
35	BA	836	G	C5-C6	-6.54	1.35	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	271(O)	C	C2-O2	-6.54	1.18	1.24
35	BA	563	G	C8-N7	-6.54	1.27	1.30
35	BA	865	C	N1-C6	-6.54	1.33	1.37
35	BA	2452	C	C2-O2	-6.54	1.18	1.24
1	AA	524	G	C6-O6	-6.54	1.18	1.24
1	AA	800	G	C2-N3	-6.54	1.27	1.32
1	AA	457	C	C2-N3	6.54	1.41	1.35
1	AA	527	G	N3-C4	-6.54	1.30	1.35
1	AA	603	U	C4-C5	-6.54	1.37	1.43
1	AA	656	C	C2-N3	-6.54	1.30	1.35
1	AA	1300	G	N9-C8	-6.54	1.33	1.37
35	BA	271(S)	G	N9-C8	-6.54	1.33	1.37
35	BA	2846	G	N9-C8	-6.54	1.33	1.37
22	AV	34	C	N1-C6	-6.54	1.33	1.37
1	AA	787	A	N3-C4	-6.53	1.30	1.34
1	AA	1238	A	C6-N6	-6.53	1.28	1.33
1	AA	1398	A	C5'-C4'	-6.53	1.43	1.51
35	BA	92	A	C4'-C3'	-6.53	1.46	1.53
35	BA	865	C	C4'-C3'	-6.53	1.46	1.53
35	BA	1183	G	N9-C8	-6.53	1.33	1.37
35	BA	1902	C	O3'-P	-6.53	1.53	1.61
35	BA	2336	A	N1-C2	-6.53	1.28	1.34
1	AA	1271	G	N1-C2	-6.53	1.32	1.37
35	BA	2529	G	C6-N1	-6.53	1.34	1.39
1	AA	1201	A	C6-N1	-6.53	1.30	1.35
35	BA	412	A	C2-N3	-6.53	1.27	1.33
35	BA	2118	U	C4-C5	6.53	1.49	1.43
35	BA	2827	C	P-O5'	-6.53	1.53	1.59
1	AA	1341	U	N1-C6	-6.53	1.32	1.38
1	AA	1173	G	N7-C5	-6.53	1.35	1.39
35	BA	990	A	N7-C5	-6.53	1.35	1.39
35	BA	1692	U	C2-N3	-6.53	1.33	1.37
35	BA	2255	G	C2-N2	-6.53	1.28	1.34
1	AA	291	C	C4-N4	-6.52	1.28	1.33
1	AA	426	G	N9-C8	-6.52	1.33	1.37
1	AA	926	G	N9-C8	-6.52	1.33	1.37
35	BA	96	G	C2-N3	-6.52	1.27	1.32
35	BA	251	A	C5-C4	-6.52	1.34	1.38
35	BA	947	G	C5-C4	-6.52	1.33	1.38
35	BA	1127	A	C5-C4	-6.52	1.34	1.38
1	AA	147	G	N1-C2	-6.52	1.32	1.37
35	BA	981	A	N3-C4	-6.52	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	24	U	C2-N3	-6.52	1.33	1.37
1	AA	1461	G	C6-N1	-6.52	1.34	1.39
35	BA	1304	C	C4-N4	-6.52	1.28	1.33
35	BA	1555	G	N9-C4	-6.52	1.32	1.38
35	BA	2577	A	N9-C4	-6.52	1.33	1.37
1	AA	364	A	C4'-C3'	-6.52	1.46	1.53
1	AA	1107	C	N1-C6	-6.52	1.33	1.37
1	AA	1164	G	C8-N7	-6.52	1.27	1.30
35	BA	387	U	C2-O2	-6.52	1.16	1.22
35	BA	600	G	C6-O6	-6.52	1.18	1.24
35	BA	1672	C	N3-C4	-6.52	1.29	1.33
35	BA	401	A	N7-C5	6.52	1.43	1.39
35	BA	2430	A	C8-N7	-6.52	1.26	1.31
35	BA	953	A	C5-C6	-6.51	1.35	1.41
35	BA	2238	G	C6-N1	-6.51	1.34	1.39
1	AA	384	G	C6-O6	-6.51	1.18	1.24
1	AA	690	G	N9-C4	-6.51	1.32	1.38
1	AA	886	G	N9-C4	-6.51	1.32	1.38
35	BA	13	A	C8-N7	-6.51	1.26	1.31
35	BA	518	G	N1-C2	-6.51	1.32	1.37
35	BA	1375	C	C3'-C2'	-6.51	1.45	1.52
35	BA	2817	G	C5'-C4'	-6.51	1.43	1.51
1	AA	604	G	C8-N7	-6.51	1.27	1.30
1	AA	688	G	C8-N7	-6.51	1.27	1.30
1	AA	1133	G	C4'-C3'	-6.51	1.46	1.53
35	BA	363(E)	U	C2'-O2'	-6.51	1.33	1.41
35	BA	2356	C	C4-C5	-6.51	1.37	1.43
35	BA	2861	G	C8-N7	-6.51	1.27	1.30
1	AA	924	C	C5-C6	-6.51	1.29	1.34
1	AA	1110	A	N3-C4	-6.51	1.30	1.34
35	BA	590	A	N9-C4	-6.51	1.33	1.37
1	AA	99	U	N1-C6	-6.51	1.32	1.38
1	AA	189	G	N1-C2	-6.51	1.32	1.37
35	BA	707	G	N3-C4	-6.51	1.30	1.35
35	BA	2040	C	C4-C5	-6.51	1.37	1.43
22	AV	59	A	C8-N7	-6.50	1.26	1.31
35	BA	1029	A	C8-N7	-6.50	1.26	1.31
36	BB	15	A	C8-N7	-6.50	1.26	1.31
35	BA	395	U	C5-C6	-6.50	1.28	1.34
35	BA	1633	G	C8-N7	-6.50	1.27	1.30
1	AA	482	A	N3-C4	-6.50	1.30	1.34
1	AA	939	G	N9-C8	-6.50	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1079	G	N3-C4	-6.50	1.30	1.35
1	AA	1326	C	C5-C6	6.50	1.39	1.34
35	BA	507	A	N3-C4	-6.50	1.30	1.34
35	BA	1552	G	C5-C4	-6.50	1.33	1.38
35	BA	2483	C	C4-C5	-6.50	1.37	1.43
1	AA	432	A	N1-C2	-6.50	1.28	1.34
1	AA	758	G	C2-N2	-6.50	1.28	1.34
35	BA	675	A	N1-C2	-6.50	1.28	1.34
35	BA	1917	U	C4'-C3'	-6.50	1.46	1.53
35	BA	271(T)	C	C4'-C3'	-6.50	1.46	1.53
35	BA	1562	A	P-O5'	-6.50	1.53	1.59
1	AA	991	U	C4-O4	-6.50	1.18	1.23
1	AA	193	C	C2-O2	-6.49	1.18	1.24
1	AA	295	C	C4-N4	-6.49	1.28	1.33
1	AA	1359	C	N1-C6	-6.49	1.33	1.37
35	BA	86	C	C5-C6	-6.49	1.29	1.34
35	BA	1463	C	P-O5'	-6.49	1.53	1.59
35	BA	333	G	C8-N7	6.49	1.34	1.30
1	AA	654	G	N9-C8	-6.49	1.33	1.37
35	BA	57	C	C4'-C3'	-6.49	1.46	1.53
35	BA	763	G	C5-C6	-6.49	1.35	1.42
35	BA	923	C	N1-C2	-6.49	1.33	1.40
35	BA	938	G	C5-C4	-6.49	1.33	1.38
35	BA	1154	G	C8-N7	-6.49	1.27	1.30
35	BA	2449	U	N1-C6	-6.49	1.32	1.38
1	AA	129(A)	G	C6-N1	-6.49	1.35	1.39
35	BA	2280	G	C4'-C3'	-6.49	1.46	1.53
1	AA	1225	A	C5-C6	-6.49	1.35	1.41
35	BA	196	A	C5-C6	-6.49	1.35	1.41
35	BA	872	A	C5-C6	-6.49	1.35	1.41
1	AA	111	G	C8-N7	-6.48	1.27	1.30
35	BA	2567	G	C4'-C3'	-6.48	1.46	1.53
1	AA	1277	C	C3'-C2'	-6.48	1.45	1.52
22	AV	16	C	C4-C5	6.48	1.48	1.43
35	BA	718	A	N9-C8	-6.48	1.32	1.37
35	BA	1206	G	N7-C5	-6.48	1.35	1.39
35	BA	1527	G	P-O5'	-6.48	1.53	1.59
35	BA	2160	G	N7-C5	-6.48	1.35	1.39
35	BA	2308	G	C6-N1	-6.48	1.35	1.39
35	BA	2753	A	N9-C4	-6.48	1.33	1.37
1	AA	98	G	C5-C4	-6.48	1.33	1.38
35	BA	495	G	C5-C4	-6.48	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	797	C	C4-N4	-6.48	1.28	1.33
46	BO	68	GLU	CD-OE1	-6.48	1.18	1.25
1	AA	521	G	N3-C4	-6.48	1.30	1.35
35	BA	2279	G	N9-C8	-6.48	1.33	1.37
35	BA	264	C	C2-O2	-6.48	1.18	1.24
35	BA	2268	A	C8-N7	-6.48	1.27	1.31
22	AV	17(A)	U	C2-N3	-6.48	1.33	1.37
35	BA	837	C	C5'-C4'	-6.48	1.43	1.51
35	BA	2572	A	O5'-C5'	-6.48	1.32	1.42
1	AA	635	G	N1-C2	-6.47	1.32	1.37
1	AA	1297	C	N1-C6	-6.47	1.33	1.37
35	BA	19	C	C4-C5	-6.47	1.37	1.43
35	BA	247	G	N7-C5	-6.47	1.35	1.39
35	BA	271(T)	C	C2-O2	-6.47	1.18	1.24
35	BA	419	C	C5-C6	-6.47	1.29	1.34
35	BA	1232	G	C6-N1	6.47	1.44	1.39
35	BA	1631	C	N1-C2	-6.47	1.33	1.40
35	BA	1975	G	N9-C8	-6.47	1.33	1.37
35	BA	1995	U	C4-O4	-6.47	1.18	1.23
35	BA	2577	A	C5-C4	6.47	1.43	1.38
35	BA	570	G	N9-C4	-6.47	1.32	1.38
35	BA	243	U	C4'-C3'	-6.47	1.46	1.53
35	BA	2012	G	C8-N7	-6.47	1.27	1.30
35	BA	2111	C	N1-C2	-6.47	1.33	1.40
1	AA	933	G	N7-C5	-6.47	1.35	1.39
1	AA	1377	A	N7-C5	-6.47	1.35	1.39
35	BA	885	C	P-O5'	-6.47	1.53	1.59
35	BA	1608	A	N3-C4	-6.47	1.30	1.34
35	BA	2537	U	C3'-O3'	-6.47	1.33	1.42
35	BA	2787	C	P-O5'	-6.47	1.53	1.59
1	AA	61	G	N9-C4	-6.47	1.32	1.38
35	BA	272(A)	U	C4'-C3'	-6.47	1.46	1.53
1	AA	1077	G	C6-N1	-6.47	1.35	1.39
1	AA	1295	G	C6-N1	-6.47	1.35	1.39
1	AA	1465	C	N3-C4	-6.47	1.29	1.33
35	BA	856	C	P-O5'	-6.47	1.53	1.59
35	BA	2219	G	C8-N7	6.47	1.34	1.30
35	BA	2420	C	N3-C4	-6.47	1.29	1.33
1	AA	1124	G	C8-N7	-6.46	1.27	1.30
1	AA	1506	U	C5-C6	-6.46	1.28	1.34
35	BA	213	A	N3-C4	6.46	1.38	1.34
35	BA	2135	A	N1-C2	-6.46	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	282	A	N3-C4	-6.46	1.30	1.34
35	BA	828	U	C4-O4	-6.46	1.18	1.23
35	BA	2488	A	C2-N3	-6.46	1.27	1.33
1	AA	1163	C	N1-C6	-6.46	1.33	1.37
35	BA	746	A	C8-N7	-6.46	1.27	1.31
35	BA	2079	U	C2-N3	-6.46	1.33	1.37
36	BB	74	U	C2-N3	-6.46	1.33	1.37
35	BA	2198	A	C5-C4	-6.46	1.34	1.38
35	BA	2485	G	C8-N7	-6.46	1.27	1.30
35	BA	2525	G	C4'-C3'	-6.46	1.46	1.53
35	BA	2001	A	N3-C4	-6.46	1.30	1.34
35	BA	2170	A	P-O5'	-6.46	1.53	1.59
35	BA	2691	C	N1-C6	6.46	1.41	1.37
1	AA	511	C	N1-C6	-6.46	1.33	1.37
1	AA	431	A	C5-C6	-6.45	1.35	1.41
1	AA	667	G	C5-C6	-6.45	1.35	1.42
1	AA	974	A	C5-C6	-6.45	1.35	1.41
35	BA	191	A	N9-C4	-6.45	1.33	1.37
1	AA	22	G	C8-N7	-6.45	1.27	1.30
1	AA	687	A	N7-C5	-6.45	1.35	1.39
22	AV	12	G	N7-C5	-6.45	1.35	1.39
35	BA	45	C	C2-O2	-6.45	1.18	1.24
35	BA	61	G	N7-C5	-6.45	1.35	1.39
35	BA	275	G	P-O5'	-6.45	1.53	1.59
35	BA	471	A	N7-C5	-6.45	1.35	1.39
35	BA	1422	G	C6-N1	-6.45	1.35	1.39
35	BA	2208	A	N7-C5	-6.45	1.35	1.39
36	BB	28	C	C5-C6	-6.45	1.29	1.34
1	AA	1052	U	C4-O4	-6.45	1.18	1.23
35	BA	601	C	C2-N3	-6.45	1.30	1.35
35	BA	2261	C	C2-N3	-6.45	1.30	1.35
35	BA	307	G	C6-O6	-6.45	1.18	1.24
35	BA	1001	A	C5-C6	-6.45	1.35	1.41
35	BA	1060	U	C2-N3	-6.44	1.33	1.37
1	AA	1123	A	C8-N7	-6.44	1.27	1.31
35	BA	2747	G	C6-O6	-6.44	1.18	1.24
35	BA	968	G	N3-C4	-6.44	1.30	1.35
1	AA	453	A	C6-N6	6.44	1.39	1.33
1	AA	661	G	C8-N7	-6.44	1.27	1.30
1	AA	1457	G	C8-N7	-6.44	1.27	1.30
35	BA	96	G	C8-N7	-6.44	1.27	1.30
35	BA	1294	U	C2-N3	-6.44	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1354	A	C8-N7	-6.44	1.27	1.31
35	BA	1541	G	C5-C6	-6.44	1.35	1.42
35	BA	1642	G	C5-C4	-6.44	1.33	1.38
35	BA	1773	A	C8-N7	-6.44	1.27	1.31
1	AA	535	A	C5-C4	-6.44	1.34	1.38
35	BA	285	C	N1-C6	-6.44	1.33	1.37
35	BA	1174	A	C5-C4	-6.44	1.34	1.38
35	BA	1802	A	C6-N6	-6.44	1.28	1.33
1	AA	887	G	N9-C4	-6.43	1.32	1.38
1	AA	1175	G	C4'-C3'	-6.43	1.46	1.53
1	AA	324	G	N7-C5	-6.43	1.35	1.39
1	AA	897	C	C2-N3	-6.43	1.30	1.35
1	AA	1246	C	C4-C5	-6.43	1.37	1.43
1	AA	1290	G	C2-N2	-6.43	1.28	1.34
35	BA	1108	U	C2'-O2'	-6.43	1.33	1.41
35	BA	1428	C	C2-N3	-6.43	1.30	1.35
35	BA	1745(A)	C	C4-C5	-6.43	1.37	1.43
35	BA	1959	G	N7-C5	-6.43	1.35	1.39
35	BA	2614	A	N7-C5	-6.43	1.35	1.39
1	AA	59	A	N9-C8	-6.43	1.32	1.37
1	AA	958	A	N3-C4	-6.43	1.30	1.34
1	AA	977	A	C6-N6	-6.43	1.28	1.33
35	BA	1610	A	C6-N6	-6.43	1.28	1.33
35	BA	2179	C	C5-C6	-6.43	1.29	1.34
35	BA	2509	G	C8-N7	-6.43	1.27	1.30
1	AA	257	G	N3-C4	-6.43	1.30	1.35
1	AA	423	G	N3-C4	-6.43	1.30	1.35
35	BA	567	A	N9-C8	6.43	1.42	1.37
35	BA	879	G	N3-C4	-6.43	1.30	1.35
35	BA	2354	G	N3-C4	-6.43	1.30	1.35
1	AA	1208	C	C2-N3	-6.43	1.30	1.35
35	BA	71	A	C2-N3	-6.43	1.27	1.33
1	AA	101	A	N9-C4	-6.43	1.33	1.37
1	AA	976	G	C6-O6	6.43	1.29	1.24
35	BA	940	G	N1-C2	-6.43	1.32	1.37
35	BA	1009	A	N7-C5	-6.43	1.35	1.39
35	BA	1671	U	N3-C4	6.43	1.44	1.38
35	BA	2588	G	N1-C2	-6.43	1.32	1.37
35	BA	2651	C	C5-C6	-6.43	1.29	1.34
35	BA	2758	A	N9-C4	-6.43	1.33	1.37
1	AA	250	A	P-O5'	-6.42	1.53	1.59
1	AA	1044	A	N1-C2	-6.42	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1180	A	N3-C4	-6.42	1.30	1.34
1	AA	911	U	N1-C6	-6.42	1.32	1.38
35	BA	1575	C	N3-C4	-6.42	1.29	1.33
1	AA	577	G	C4'-O4'	-6.42	1.37	1.45
1	AA	1243	C	C4-N4	-6.42	1.28	1.33
35	BA	482	A	C1'-N9	-6.42	1.37	1.46
35	BA	1143	A	C6-N1	-6.42	1.31	1.35
35	BA	1535	A	C8-N7	-6.42	1.27	1.31
1	AA	721	G	C8-N7	-6.42	1.27	1.30
1	AA	1401	G	C8-N7	-6.42	1.27	1.30
35	BA	45	C	O4'-C1'	-6.42	1.33	1.41
35	BA	1004	C	C2'-C1'	-6.42	1.46	1.53
35	BA	1346	G	C2'-C1'	-6.42	1.46	1.53
35	BA	1768	U	P-O5'	-6.42	1.53	1.59
35	BA	2670	A	N3-C4	-6.42	1.30	1.34
1	AA	1178	G	C5-C4	-6.42	1.33	1.38
35	BA	1920	C	N1-C6	-6.42	1.33	1.37
1	AA	955	U	C4-O4	-6.42	1.18	1.23
35	BA	860	U	C4-O4	-6.42	1.18	1.23
35	BA	1784	A	P-O5'	-6.41	1.53	1.59
22	AV	5	G	C8-N7	-6.41	1.27	1.30
35	BA	90	U	C4'-C3'	-6.41	1.46	1.53
1	AA	311	C	C4-N4	-6.41	1.28	1.33
35	BA	288	C	C4-N4	-6.41	1.28	1.33
35	BA	318	C	N1-C6	-6.41	1.33	1.37
35	BA	428	A	C5-C4	-6.41	1.34	1.38
35	BA	1514	U	N3-C4	-6.41	1.32	1.38
35	BA	2827	C	N1-C6	-6.41	1.33	1.37
1	AA	624	C	N1-C6	6.41	1.41	1.37
1	AA	971	G	N3-C4	-6.41	1.30	1.35
1	AA	1392	G	C2-N2	-6.41	1.28	1.34
35	BA	1283	G	N9-C8	-6.41	1.33	1.37
1	AA	379	C	C2'-C1'	-6.41	1.46	1.53
36	BB	56	G	N7-C5	-6.41	1.35	1.39
1	AA	1076	C	N1-C6	-6.41	1.33	1.37
35	BA	110	G	C5-C4	-6.41	1.33	1.38
35	BA	284	U	N1-C2	6.41	1.44	1.38
35	BA	803	U	C4-C5	-6.41	1.37	1.43
35	BA	1013	C	N1-C6	-6.41	1.33	1.37
35	BA	1067	A	N3-C4	-6.41	1.31	1.34
35	BA	2635	C	N1-C6	-6.41	1.33	1.37
35	BA	651	G	C6-O6	-6.40	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	42	C	C2-N3	-6.40	1.30	1.35
1	AA	55	A	C6-N1	-6.40	1.31	1.35
1	AA	786	G	C6-N1	-6.40	1.35	1.39
35	BA	88	G	C6-N1	-6.40	1.35	1.39
35	BA	412	A	C6-N6	-6.40	1.28	1.33
35	BA	531	C	C4-N4	-6.40	1.28	1.33
1	AA	1014	A	N7-C5	-6.40	1.35	1.39
1	AA	1071	C	C4-C5	-6.40	1.37	1.43
35	BA	271(Y)	U	P-O5'	-6.40	1.53	1.59
35	BA	410	G	C3'-C2'	-6.40	1.45	1.52
35	BA	1850	G	P-O5'	-6.40	1.53	1.59
1	AA	1251	A	N1-C2	-6.40	1.28	1.34
35	BA	471	A	N3-C4	-6.40	1.31	1.34
35	BA	1762	A	N3-C4	-6.40	1.31	1.34
35	BA	2461	C	C4'-C3'	-6.40	1.46	1.53
1	AA	487	A	C6-N6	-6.40	1.28	1.33
1	AA	529	G	N3-C4	6.40	1.40	1.35
22	AV	72	A	N9-C8	-6.40	1.32	1.37
35	BA	654(O)	G	N9-C4	-6.40	1.32	1.38
35	BA	701	G	N3-C4	-6.40	1.30	1.35
35	BA	2102	U	N1-C6	6.40	1.43	1.38
35	BA	2349	G	C2-N2	-6.40	1.28	1.34
35	BA	2666	C	C3'-C2'	-6.40	1.45	1.52
1	AA	263	A	C5-C4	-6.39	1.34	1.38
35	BA	190	A	C5-C4	-6.39	1.34	1.38
1	AA	573	A	C8-N7	-6.39	1.27	1.31
35	BA	311	A	C8-N7	-6.39	1.27	1.31
35	BA	794	G	N9-C8	-6.39	1.33	1.37
35	BA	2388	A	N7-C5	6.39	1.43	1.39
35	BA	2498	C	C4-C5	-6.39	1.37	1.43
1	AA	608	A	N1-C2	-6.39	1.28	1.34
35	BA	1248	G	C5'-C4'	-6.39	1.43	1.51
1	AA	474	G	C5-C4	-6.39	1.33	1.38
1	AA	869	G	N7-C5	-6.39	1.35	1.39
1	AA	1409	C	C2-N3	-6.39	1.30	1.35
1	AA	1495	U	C5-C6	-6.39	1.28	1.34
22	AV	8	U	C4-C5	-6.39	1.37	1.43
35	BA	182	A	N7-C5	-6.39	1.35	1.39
35	BA	893	C	C2-N3	-6.39	1.30	1.35
1	AA	280	C	P-O5'	-6.39	1.53	1.59
1	AA	665	A	N3-C4	-6.39	1.31	1.34
1	AA	715	A	C4'-C3'	-6.39	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	143	G	C8-N7	6.39	1.34	1.30
35	BA	718	A	N3-C4	-6.39	1.31	1.34
35	BA	1791	A	C4'-C3'	-6.39	1.46	1.53
35	BA	2483	C	N1-C6	-6.39	1.33	1.37
36	BB	59	A	N3-C4	-6.39	1.31	1.34
22	AV	12	G	C8-N7	-6.38	1.27	1.30
35	BA	32	C	C2-N3	-6.38	1.30	1.35
35	BA	271(F)	C	N3-C4	-6.38	1.29	1.33
35	BA	923	C	C4'-C3'	-6.38	1.46	1.53
35	BA	1430	C	C2-N3	-6.38	1.30	1.35
35	BA	2492	U	O3'-P	-6.38	1.53	1.61
35	BA	2730	C	O3'-P	-6.38	1.53	1.61
23	AX	16	A	C6-N6	-6.38	1.28	1.33
35	BA	883	G	N7-C5	-6.38	1.35	1.39
35	BA	796	C	C2'-C1'	-6.38	1.46	1.53
35	BA	1693	U	N1-C6	-6.38	1.32	1.38
35	BA	2056	G	C2'-C1'	-6.38	1.46	1.53
35	BA	2155	G	C2-N2	-6.38	1.28	1.34
35	BA	2307	G	C2-N2	-6.38	1.28	1.34
35	BA	2691	C	N1-C2	-6.38	1.33	1.40
1	AA	446	G	C6-O6	-6.38	1.18	1.24
1	AA	658	G	C6-O6	-6.38	1.18	1.24
1	AA	749	C	C2-O2	-6.38	1.18	1.24
22	AV	41	C	C2-O2	-6.38	1.18	1.24
35	BA	2294	C	C4-N4	-6.38	1.28	1.33
35	BA	370	G	C8-N7	-6.38	1.27	1.30
35	BA	438	G	C8-N7	-6.38	1.27	1.30
35	BA	650	C	C4-C5	-6.38	1.37	1.43
35	BA	1384	A	C5-C4	6.38	1.43	1.38
35	BA	2061	G	C8-N7	-6.38	1.27	1.30
35	BA	2224	G	C8-N7	-6.38	1.27	1.30
35	BA	2391	G	C8-N7	-6.38	1.27	1.30
35	BA	1994	C	C5-C6	-6.38	1.29	1.34
35	BA	839	U	P-O5'	-6.38	1.53	1.59
1	AA	973	G	C2-N3	-6.37	1.27	1.32
1	AA	1063	C	C3'-C2'	-6.37	1.45	1.52
35	BA	274	G	N1-C2	-6.37	1.32	1.37
35	BA	1214	A	C5-C4	6.37	1.43	1.38
1	AA	952	U	P-O5'	-6.37	1.53	1.59
22	AV	56	C	C4'-C3'	-6.37	1.46	1.53
35	BA	514	A	C5-C4	-6.37	1.34	1.38
35	BA	1893	C	C4-N4	-6.37	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AV	18	G	C3'-C2'	-6.37	1.45	1.52
35	BA	1354	A	C5-C6	-6.37	1.35	1.41
35	BA	1784	A	N9-C8	-6.37	1.32	1.37
1	AA	1213	A	C6-N6	-6.37	1.28	1.33
1	AA	1395	C	C4'-C3'	-6.37	1.46	1.53
2	AB	170	GLU	CD-OE2	-6.37	1.18	1.25
35	BA	2026	C	C5'-C4'	-6.37	1.43	1.51
35	BA	2298	A	N3-C4	-6.37	1.31	1.34
35	BA	2320	A	C5-C4	-6.37	1.34	1.38
1	AA	350	G	C6-N1	-6.37	1.35	1.39
35	BA	1980	G	C6-N1	-6.37	1.35	1.39
22	AV	8	U	C2-O2	-6.36	1.16	1.22
35	BA	1784	A	C6-N6	-6.36	1.28	1.33
35	BA	1503	U	C4-O4	-6.36	1.18	1.23
35	BA	1783	A	P-O5'	-6.36	1.53	1.59
1	AA	245	C	N1-C6	-6.36	1.33	1.37
35	BA	1468	C	C2-O2	-6.36	1.18	1.24
1	AA	584	G	C8-N7	-6.36	1.27	1.30
35	BA	131	G	N3-C4	-6.36	1.30	1.35
35	BA	1348	G	C8-N7	-6.36	1.27	1.30
35	BA	2529	G	C4'-C3'	-6.36	1.46	1.53
36	BB	50	G	C8-N7	-6.36	1.27	1.30
1	AA	559	A	N7-C5	-6.36	1.35	1.39
1	AA	659	U	N1-C2	-6.36	1.32	1.38
1	AA	694	A	N7-C5	-6.36	1.35	1.39
1	AA	814	A	N7-C5	-6.36	1.35	1.39
1	AA	928	G	C5-C4	-6.36	1.33	1.38
1	AA	949	A	C6-N6	-6.36	1.28	1.33
35	BA	1370	C	N3-C4	-6.36	1.29	1.33
35	BA	2692	C	C5-C6	-6.36	1.29	1.34
1	AA	296	U	N3-C4	-6.36	1.32	1.38
1	AA	929	G	C6-N1	-6.36	1.35	1.39
1	AA	1155	G	C6-N1	-6.36	1.35	1.39
35	BA	495	G	N9-C4	-6.36	1.32	1.38
35	BA	587	C	N1-C6	-6.36	1.33	1.37
35	BA	2301	C	N1-C6	-6.36	1.33	1.37
35	BA	1722	A	C2'-C1'	-6.35	1.46	1.53
35	BA	2692	C	C4-N4	-6.35	1.28	1.33
1	AA	66	G	N7-C5	-6.35	1.35	1.39
1	AA	383	A	C6-N6	-6.35	1.28	1.33
1	AA	387	U	C2-N3	-6.35	1.33	1.37
35	BA	2349	G	C5-C6	-6.35	1.35	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2414	G	C8-N7	-6.35	1.27	1.30
1	AA	566	G	C5-C4	-6.35	1.33	1.38
1	AA	944	G	N9-C8	-6.35	1.33	1.37
22	AV	64	G	C6-N1	-6.35	1.35	1.39
35	BA	1834	U	P-O5'	-6.35	1.53	1.59
35	BA	2880	C	C4-N4	-6.35	1.28	1.33
23	AX	14	A	C6-N6	6.35	1.39	1.33
35	BA	1330	C	C4-C5	-6.35	1.37	1.43
35	BA	1823	G	C6-O6	-6.35	1.18	1.24
35	BA	1923	U	C2-N3	-6.35	1.33	1.37
35	BA	2434	A	N3-C4	-6.35	1.31	1.34
1	AA	361	G	N1-C2	-6.35	1.32	1.37
35	BA	508	G	C5-C4	-6.35	1.33	1.38
35	BA	654(S)	G	C8-N7	-6.35	1.27	1.30
35	BA	692	C	C2-N3	-6.35	1.30	1.35
35	BA	1309	G	C8-N7	-6.35	1.27	1.30
35	BA	2774	C	N1-C6	6.34	1.41	1.37
35	BA	2822	G	C6-O6	-6.34	1.18	1.24
35	BA	2848	G	C8-N7	6.34	1.34	1.30
1	AA	446	G	N3-C4	-6.34	1.31	1.35
1	AA	494	U	C4-O4	-6.34	1.18	1.23
1	AA	678	U	C2-N3	-6.34	1.33	1.37
35	BA	299	A	C2-N3	-6.34	1.27	1.33
35	BA	400	G	N1-C2	-6.34	1.32	1.37
35	BA	1149	G	C5'-C4'	-6.34	1.43	1.51
35	BA	2154	G	N3-C4	-6.34	1.31	1.35
1	AA	836	G	N7-C5	-6.34	1.35	1.39
1	AA	1529	G	C6-N1	-6.34	1.35	1.39
35	BA	240	G	C6-N1	-6.34	1.35	1.39
35	BA	2892	A	N7-C5	-6.34	1.35	1.39
1	AA	116	A	C6-N1	-6.34	1.31	1.35
1	AA	969	A	C6-N1	-6.34	1.31	1.35
1	AA	1078	U	C4-O4	-6.34	1.18	1.23
1	AA	1135	U	C4'-C3'	-6.34	1.46	1.53
23	AX	13	A	C8-N7	-6.34	1.27	1.31
35	BA	1209	G	C8-N7	6.34	1.34	1.30
1	AA	939	G	C5-C4	-6.33	1.33	1.38
1	AA	537	G	N7-C5	-6.33	1.35	1.39
1	AA	607	A	C5-C6	-6.33	1.35	1.41
1	AA	868	C	N3-C4	-6.33	1.29	1.33
2	AB	52	GLU	CD-OE1	-6.33	1.18	1.25
35	BA	536	A	N7-C5	-6.33	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	400	G	N3-C4	-6.33	1.31	1.35
35	BA	1421	G	C2'-C1'	-6.33	1.46	1.53
35	BA	1949	G	N1-C2	-6.33	1.32	1.37
35	BA	2751	G	N9-C4	6.33	1.43	1.38
35	BA	2878	U	C2-N3	-6.33	1.33	1.37
1	AA	1072	G	C8-N7	6.33	1.34	1.30
35	BA	1401	G	C2-N3	-6.33	1.27	1.32
35	BA	1426	G	C5-C4	-6.33	1.33	1.38
1	AA	798	G	N9-C8	-6.33	1.33	1.37
1	AA	1368	G	C4'-C3'	-6.33	1.46	1.53
35	BA	778	G	N9-C8	-6.33	1.33	1.37
35	BA	1140	C	P-O5'	-6.33	1.53	1.59
35	BA	1558	A	N3-C4	-6.33	1.31	1.34
35	BA	2791	C	N3-C4	-6.33	1.29	1.33
36	BB	47	C	C2-O2	-6.33	1.18	1.24
35	BA	983	A	C6-N1	-6.33	1.31	1.35
35	BA	2810	A	N7-C5	-6.33	1.35	1.39
1	AA	861	G	C2-N3	-6.33	1.27	1.32
1	AA	976	G	N3-C4	-6.33	1.31	1.35
1	AA	1268	A	C8-N7	-6.33	1.27	1.31
35	BA	925	C	P-O5'	-6.33	1.53	1.59
35	BA	2305	A	C8-N7	-6.33	1.27	1.31
1	AA	186	C	C3'-C2'	-6.32	1.45	1.52
1	AA	542	G	P-O5'	-6.32	1.53	1.59
1	AA	629	G	C6-N1	-6.32	1.35	1.39
35	BA	239	U	P-O5'	-6.32	1.53	1.59
35	BA	2013	A	P-O5'	-6.32	1.53	1.59
35	BA	2523	G	C5-C6	-6.32	1.36	1.42
1	AA	340	U	C2-N3	6.32	1.42	1.37
1	AA	755	G	N9-C4	-6.32	1.32	1.38
35	BA	858	U	O4'-C1'	-6.32	1.33	1.41
1	AA	161	A	N7-C5	-6.32	1.35	1.39
1	AA	1228	C	N1-C2	-6.32	1.33	1.40
35	BA	871	U	C4'-C3'	-6.32	1.46	1.53
35	BA	1274	A	N9-C4	-6.32	1.34	1.37
35	BA	2308	G	N3-C4	-6.32	1.31	1.35
35	BA	2351	G	N3-C4	-6.32	1.31	1.35
35	BA	2426	A	C6-N1	6.32	1.40	1.35
35	BA	1450(A)	C	C5-C6	-6.32	1.29	1.34
35	BA	1582	C	C5-C6	-6.32	1.29	1.34
35	BA	1765	C	C2-N3	-6.32	1.30	1.35
35	BA	2861	G	C6-N1	-6.32	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	544	G	N3-C4	-6.32	1.31	1.35
35	BA	1630	G	N3-C4	-6.32	1.31	1.35
35	BA	2272	U	C2-N3	-6.32	1.33	1.37
1	AA	189(A)	C	C5-C6	-6.31	1.29	1.34
1	AA	1219	U	C4-C5	-6.31	1.37	1.43
35	BA	1104	C	C2-N3	-6.31	1.30	1.35
1	AA	325	A	N3-C4	-6.31	1.31	1.34
1	AA	441	A	C2-N3	-6.31	1.27	1.33
35	BA	489	G	N7-C5	-6.31	1.35	1.39
35	BA	1105	U	C2-N3	-6.31	1.33	1.37
35	BA	2154	G	C4'-C3'	-6.31	1.46	1.53
35	BA	2739	U	N1-C6	-6.31	1.32	1.38
1	AA	321	A	C5-C4	-6.31	1.34	1.38
1	AA	727	G	C2'-C1'	-6.31	1.46	1.53
35	BA	246	C	C2-N3	-6.31	1.30	1.35
35	BA	2433	A	C8-N7	-6.31	1.27	1.31
1	AA	317	G	C8-N7	-6.31	1.27	1.30
1	AA	791	G	C8-N7	-6.31	1.27	1.30
35	BA	309	G	C8-N7	-6.31	1.27	1.30
1	AA	181	G	C5-C6	-6.30	1.36	1.42
1	AA	1055	A	C6-N6	-6.30	1.28	1.33
35	BA	1001	A	N3-C4	-6.30	1.31	1.34
35	BA	1993	U	C4-O4	-6.30	1.18	1.23
1	AA	639	G	C5-C4	-6.30	1.33	1.38
35	BA	632	A	N9-C8	-6.30	1.32	1.37
35	BA	1740	G	C5-C4	-6.30	1.33	1.38
35	BA	1960	A	C3'-C2'	-6.30	1.45	1.52
35	BA	2033	A	C8-N7	-6.30	1.27	1.31
35	BA	2131	G	C6-N1	-6.30	1.35	1.39
35	BA	2223	G	C6-N1	-6.30	1.35	1.39
35	BA	2247	A	C8-N7	-6.30	1.27	1.31
35	BA	2752	C	N3-C4	-6.30	1.29	1.33
35	BA	2790	A	N7-C5	-6.30	1.35	1.39
35	BA	477	A	C4'-C3'	-6.30	1.46	1.53
35	BA	977	G	N3-C4	-6.30	1.31	1.35
35	BA	1035	U	C5-C6	-6.30	1.28	1.34
35	BA	2526	G	C8-N7	-6.30	1.27	1.30
22	AV	41	C	C4-N4	-6.30	1.28	1.33
1	AA	488	C	N3-C4	-6.30	1.29	1.33
1	AA	546	G	C6-N1	-6.30	1.35	1.39
35	BA	1076	C	N3-C4	-6.30	1.29	1.33
35	BA	2577	A	N3-C4	-6.30	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2878	U	P-O5'	-6.30	1.53	1.59
35	BA	678	C	C2'-C1'	-6.29	1.46	1.53
35	BA	1031	G	C8-N7	-6.29	1.27	1.30
35	BA	2694	G	C4'-C3'	-6.29	1.46	1.53
1	AA	404	U	N1-C6	-6.29	1.32	1.38
1	AA	1189	C	C5'-C4'	-6.29	1.43	1.51
35	BA	964	C	C4-C5	-6.29	1.38	1.43
35	BA	1929	G	C2-N3	-6.29	1.27	1.32
1	AA	525	C	C5'-C4'	-6.29	1.43	1.51
35	BA	2241	A	C6-N1	-6.29	1.31	1.35
35	BA	1797	C	N3-C4	-6.29	1.29	1.33
35	BA	1798	U	N1-C2	6.29	1.44	1.38
35	BA	2276	G	N9-C8	-6.29	1.33	1.37
35	BA	2807	G	N9-C8	-6.29	1.33	1.37
1	AA	1210	C	P-O5'	-6.28	1.53	1.59
1	AA	1319	A	C6-N1	-6.28	1.31	1.35
1	AA	1346	A	C6-N1	-6.28	1.31	1.35
35	BA	204	A	N7-C5	-6.28	1.35	1.39
35	BA	1577	C	C4-C5	-6.28	1.38	1.43
35	BA	1857	G	C5-C4	6.28	1.42	1.38
35	BA	2076	U	C4'-C3'	-6.28	1.46	1.53
35	BA	2243	U	C4-O4	-6.28	1.18	1.23
36	BB	110	G	P-O5'	-6.28	1.53	1.59
1	AA	200	G	N3-C4	-6.28	1.31	1.35
35	BA	219	G	N3-C4	-6.28	1.31	1.35
35	BA	1385	G	N3-C4	-6.28	1.31	1.35
1	AA	691	G	C8-N7	-6.28	1.27	1.30
35	BA	365	C	C2-O2	-6.28	1.18	1.24
1	AA	38	G	N9-C4	-6.28	1.32	1.38
1	AA	112	G	N9-C4	-6.28	1.32	1.38
1	AA	421	U	C2'-C1'	-6.28	1.46	1.53
35	BA	84	A	C8-N7	-6.28	1.27	1.31
35	BA	1165	U	C2'-O2'	-6.28	1.33	1.41
1	AA	19	C	C2-O2	6.28	1.30	1.24
1	AA	487	A	N7-C5	-6.28	1.35	1.39
1	AA	1268	A	N7-C5	-6.28	1.35	1.39
35	BA	2018	G	N7-C5	-6.28	1.35	1.39
35	BA	2051	A	P-OP2	-6.28	1.38	1.49
1	AA	359	U	N3-C4	-6.28	1.32	1.38
1	AA	969	A	C5-C4	-6.28	1.34	1.38
35	BA	895	U	C4-C5	-6.28	1.38	1.43
35	BA	1809	A	C6-N6	-6.28	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2362	G	P-O5'	-6.27	1.53	1.59
1	AA	267	C	N1-C2	-6.27	1.33	1.40
35	BA	156	U	C2-O2	6.27	1.27	1.22
35	BA	1244	G	N7-C5	-6.27	1.35	1.39
35	BA	1622	G	C8-N7	-6.27	1.27	1.30
35	BA	2020	A	N3-C4	-6.27	1.31	1.34
35	BA	2162	G	C4'-C3'	-6.27	1.46	1.53
1	AA	328	C	P-O5'	-6.27	1.53	1.59
35	BA	1425	G	C5-C4	-6.27	1.33	1.38
35	BA	2407	G	C5-C4	-6.27	1.33	1.38
1	AA	301	G	C6-N1	-6.27	1.35	1.39
1	AA	1048	G	C6-N1	-6.27	1.35	1.39
35	BA	2451	A	C6-N1	6.27	1.40	1.35
35	BA	2827	C	C5-C6	-6.27	1.29	1.34
1	AA	308	C	N1-C6	-6.27	1.33	1.37
1	AA	989	C	N3-C4	-6.27	1.29	1.33
1	AA	1485	U	N1-C6	-6.27	1.32	1.38
22	AV	12	G	N3-C4	-6.27	1.31	1.35
35	BA	2429	G	N3-C4	-6.27	1.31	1.35
1	AA	287	U	C2-O2	-6.26	1.16	1.22
1	AA	1035	A	N3-C4	-6.26	1.31	1.34
35	BA	870	A	N7-C5	6.26	1.43	1.39
1	AA	257	G	C5-C6	-6.26	1.36	1.42
35	BA	2508	G	P-O5'	-6.26	1.53	1.59
1	AA	33	A	C4'-C3'	-6.26	1.46	1.53
1	AA	623	C	C4-N4	-6.26	1.28	1.33
1	AA	907	A	N7-C5	-6.26	1.35	1.39
1	AA	951	G	C5-C4	-6.26	1.33	1.38
1	AA	1357	A	N9-C4	6.26	1.41	1.37
1	AA	1527	C	O3'-P	-6.26	1.53	1.61
35	BA	301	G	N9-C8	-6.26	1.33	1.37
35	BA	539	G	N9-C8	-6.26	1.33	1.37
35	BA	1450	G	N9-C8	-6.26	1.33	1.37
35	BA	2127	G	C5-C4	-6.26	1.33	1.38
35	BA	2412	A	N7-C5	-6.26	1.35	1.39
35	BA	2468	G	C2'-C1'	-6.26	1.46	1.53
35	BA	2549	G	C6-N1	-6.26	1.35	1.39
36	BB	18	G	N3-C4	-6.26	1.31	1.35
1	AA	431	A	N9-C4	-6.26	1.34	1.37
22	AV	32	C	C3'-C2'	-6.26	1.45	1.52
35	BA	2418	A	N9-C4	-6.26	1.34	1.37
1	AA	189(C)	C	C5-C6	-6.26	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	40	U	C4-O4	-6.26	1.18	1.23
1	AA	538	G	N3-C4	-6.25	1.31	1.35
35	BA	2737	G	C5-C4	-6.25	1.33	1.38
35	BA	548	A	N3-C4	-6.25	1.31	1.34
35	BA	871	U	N1-C6	-6.25	1.32	1.38
35	BA	1756	G	N7-C5	6.25	1.43	1.39
35	BA	2311	A	N7-C5	-6.25	1.35	1.39
35	BA	2589	A	N3-C4	-6.25	1.31	1.34
35	BA	2809	A	N7-C5	6.25	1.43	1.39
35	BA	2893	G	C8-N7	-6.25	1.27	1.30
1	AA	455	C	N3-C4	-6.25	1.29	1.33
1	AA	1369	C	C4-C5	-6.25	1.38	1.43
1	AA	953	G	C5-C6	-6.25	1.36	1.42
35	BA	681	G	C5-C6	-6.25	1.36	1.42
35	BA	1156	A	C6-N1	-6.25	1.31	1.35
35	BA	996	A	C5-C4	-6.25	1.34	1.38
35	BA	1751	C	C5'-C4'	-6.25	1.43	1.51
1	AA	311	C	C2-N3	-6.25	1.30	1.35
1	AA	555	C	O4'-C1'	-6.25	1.33	1.41
35	BA	1009	A	N3-C4	-6.25	1.31	1.34
35	BA	1994	C	C2-N3	-6.25	1.30	1.35
35	BA	2566	A	C6-N1	-6.25	1.31	1.35
1	AA	1196	U	C5'-C4'	-6.24	1.43	1.51
35	BA	1455	G	P-O5'	-6.24	1.53	1.59
1	AA	149	A	C8-N7	-6.24	1.27	1.31
1	AA	889	A	N9-C4	-6.24	1.34	1.37
35	BA	2285	C	P-O5'	-6.24	1.53	1.59
35	BA	1098	A	C6-N1	-6.24	1.31	1.35
35	BA	1211	U	N1-C2	6.24	1.44	1.38
35	BA	2286	A	N1-C2	-6.24	1.28	1.34
35	BA	86	C	C4-N4	-6.24	1.28	1.33
35	BA	226	G	C2-N3	-6.24	1.27	1.32
35	BA	407	G	C4'-C3'	-6.24	1.46	1.53
35	BA	1456	G	C4'-C3'	-6.24	1.46	1.53
35	BA	1998	G	C8-N7	6.24	1.34	1.30
35	BA	2068	U	C4'-C3'	-6.24	1.46	1.53
35	BA	2223	G	C4'-C3'	-6.24	1.46	1.53
1	AA	339	C	C2-N3	-6.24	1.30	1.35
1	AA	355	C	N1-C6	-6.24	1.33	1.37
1	AA	522	C	N1-C2	-6.24	1.33	1.40
1	AA	622	A	N1-C2	-6.24	1.28	1.34
35	BA	1684	C	C5-C6	-6.24	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1897	G	C5-C6	-6.24	1.36	1.42
22	AV	18	G	C5-C4	-6.23	1.33	1.38
35	BA	532	A	N3-C4	-6.23	1.31	1.34
1	AA	301	G	C2-N2	-6.23	1.28	1.34
1	AA	415	A	C3'-C2'	-6.23	1.45	1.52
1	AA	682	G	N1-C2	-6.23	1.32	1.37
1	AA	1015	A	N9-C4	-6.23	1.34	1.37
35	BA	222	A	N9-C4	-6.23	1.34	1.37
35	BA	538	G	N3-C4	-6.23	1.31	1.35
35	BA	1400	G	C2-N3	-6.23	1.27	1.32
35	BA	1580	A	C2'-C1'	-6.23	1.46	1.53
35	BA	2334	G	N1-C2	-6.23	1.32	1.37
35	BA	2415	G	C2'-C1'	-6.23	1.46	1.53
35	BA	1771	C	P-O5'	-6.23	1.53	1.59
35	BA	2146	C	P-O5'	-6.23	1.53	1.59
35	BA	2242	G	C6-O6	-6.23	1.18	1.24
35	BA	2285	C	C2-N3	-6.23	1.30	1.35
35	BA	2314	C	C2-N3	-6.23	1.30	1.35
35	BA	2539	C	C2-N3	-6.23	1.30	1.35
23	AX	21	C	N3-C4	-6.23	1.29	1.33
1	AA	1131	G	C5-C4	-6.23	1.33	1.38
1	AA	1169	A	N7-C5	-6.23	1.35	1.39
35	BA	862	G	C8-N7	-6.23	1.27	1.30
35	BA	1369	G	N7-C5	-6.23	1.35	1.39
35	BA	2310	A	N9-C4	-6.23	1.34	1.37
35	BA	2664	G	C6-N1	-6.23	1.35	1.39
35	BA	489	G	C2-N3	6.23	1.37	1.32
1	AA	223	U	C3'-O3'	-6.22	1.33	1.42
35	BA	1072	C	C2-O2	-6.22	1.18	1.24
1	AA	476	G	N7-C5	-6.22	1.35	1.39
1	AA	772	U	C4-C5	-6.22	1.38	1.43
1	AA	789	U	C2-N3	-6.22	1.33	1.37
1	AA	905	U	C2-N3	-6.22	1.33	1.37
1	AA	1280	A	N9-C8	-6.22	1.32	1.37
22	AV	44	A	C5-C4	-6.22	1.34	1.38
35	BA	1398	C	C2-N3	-6.22	1.30	1.35
35	BA	2238	G	C5-C4	-6.22	1.33	1.38
35	BA	2545	G	C5'-C4'	-6.22	1.43	1.51
35	BA	2689	U	C2-N3	-6.22	1.33	1.37
35	BA	2872	G	N7-C5	-6.22	1.35	1.39
1	AA	1417	G	C8-N7	-6.22	1.27	1.30
35	BA	1714	G	N9-C8	-6.22	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2315	G	C8-N7	-6.22	1.27	1.30
35	BA	1115	G	C5-C6	-6.22	1.36	1.42
35	BA	2430	A	C2-N3	-6.22	1.27	1.33
1	AA	597	G	N1-C2	-6.22	1.32	1.37
35	BA	64	A	P-O5'	-6.22	1.53	1.59
35	BA	491	G	N1-C2	-6.22	1.32	1.37
35	BA	2708	G	C5-C4	-6.22	1.33	1.38
1	AA	189(H)	G	C2-N2	-6.22	1.28	1.34
1	AA	1088	G	C2-N3	-6.22	1.27	1.32
1	AA	1374	A	C8-N7	-6.22	1.27	1.31
35	BA	301	G	N3-C4	-6.22	1.31	1.35
35	BA	482	A	N3-C4	6.22	1.38	1.34
35	BA	684	G	N9-C8	-6.22	1.33	1.37
35	BA	1084	A	C5-C4	-6.22	1.34	1.38
35	BA	1647	G	C6-N1	-6.22	1.35	1.39
35	BA	2641	G	N3-C4	-6.22	1.31	1.35
35	BA	2893	G	N9-C8	-6.22	1.33	1.37
35	BA	38	A	C5-C6	-6.21	1.35	1.41
35	BA	2438	U	C4-O4	-6.21	1.18	1.23
1	AA	929	G	C2-N2	-6.21	1.28	1.34
35	BA	2869	G	C5-C6	-6.21	1.36	1.42
1	AA	35	G	C6-N1	-6.21	1.35	1.39
1	AA	979	C	P-O5'	-6.21	1.53	1.59
35	BA	1860	G	C6-N1	-6.21	1.35	1.39
35	BA	2190	G	C6-N1	-6.21	1.35	1.39
35	BA	2329	G	C6-O6	-6.21	1.18	1.24
1	AA	416	G	N7-C5	-6.21	1.35	1.39
35	BA	1787	A	C2'-C1'	-6.21	1.46	1.53
1	AA	137	C	P-O5'	-6.21	1.53	1.59
1	AA	417	C	C4'-C3'	-6.21	1.46	1.53
35	BA	1311	G	N9-C4	-6.21	1.32	1.38
1	AA	785	G	N7-C5	6.21	1.43	1.39
1	AA	923	A	C2'-C1'	-6.21	1.46	1.53
1	AA	1426	C	C4-N4	-6.21	1.28	1.33
35	BA	759	G	C5-C4	-6.21	1.34	1.38
35	BA	1248	G	C5-C4	-6.21	1.34	1.38
35	BA	1859	A	C8-N7	-6.21	1.27	1.31
35	BA	2421	G	C2-N3	-6.21	1.27	1.32
35	BA	2727	G	C2-N3	-6.21	1.27	1.32
1	AA	760	G	C3'-C2'	-6.20	1.46	1.52
1	AA	1365	G	N9-C4	-6.20	1.32	1.38
35	BA	272(C)	G	N7-C5	-6.20	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	460	A	N1-C2	-6.20	1.28	1.34
35	BA	1703	G	N7-C5	-6.20	1.35	1.39
36	BB	33	G	N7-C5	-6.20	1.35	1.39
1	AA	684	A	N9-C4	-6.20	1.34	1.37
35	BA	74	A	C5-C6	-6.20	1.35	1.41
35	BA	197	A	N9-C4	-6.20	1.34	1.37
35	BA	405	U	C2-O2	-6.20	1.16	1.22
35	BA	1220	A	C5-C6	-6.20	1.35	1.41
35	BA	2177	C	N3-C4	-6.20	1.29	1.33
1	AA	1271	G	C8-N7	-6.20	1.27	1.30
35	BA	24	G	C8-N7	-6.20	1.27	1.30
35	BA	214	G	C5-C4	-6.20	1.34	1.38
35	BA	326	G	C8-N7	-6.20	1.27	1.30
35	BA	669	G	C8-N7	-6.20	1.27	1.30
35	BA	2026	C	C4-C5	-6.20	1.38	1.43
35	BA	2112	G	C5-C4	-6.20	1.34	1.38
35	BA	2329	G	C8-N7	-6.20	1.27	1.30
35	BA	2643	G	C8-N7	-6.20	1.27	1.30
35	BA	2859	G	N9-C8	-6.20	1.33	1.37
36	BB	28	C	C2'-C1'	-6.20	1.46	1.53
1	AA	784	C	N1-C6	-6.20	1.33	1.37
1	AA	896	C	C4-N4	-6.20	1.28	1.33
1	AA	1431	C	C3'-C2'	-6.20	1.46	1.52
35	BA	763	G	N1-C2	-6.20	1.32	1.37
35	BA	1785	A	C6-N6	-6.20	1.28	1.33
22	AV	3	C	C4-C5	-6.20	1.38	1.43
35	BA	766	C	C2-O2	6.20	1.30	1.24
35	BA	1395	A	N9-C8	6.20	1.42	1.37
35	BA	1764	G	O3'-P	-6.20	1.53	1.61
35	BA	1968	G	C2'-C1'	-6.20	1.46	1.53
35	BA	93	G	N9-C8	-6.19	1.33	1.37
35	BA	2230	G	N9-C8	-6.19	1.33	1.37
35	BA	2640	G	C8-N7	6.19	1.34	1.30
35	BA	706	A	C6-N6	-6.19	1.28	1.33
35	BA	1181	C	N1-C6	-6.19	1.33	1.37
35	BA	1446	C	C2-O2	-6.19	1.18	1.24
35	BA	2474	C	C2-O2	-6.19	1.18	1.24
1	AA	1346	A	C5-C4	-6.19	1.34	1.38
35	BA	1510	G	N1-C2	-6.19	1.32	1.37
35	BA	2732	G	C6-N1	-6.19	1.35	1.39
36	BB	116	G	N9-C4	-6.19	1.32	1.38
35	BA	230	U	N3-C4	-6.19	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	909	A	N1-C2	-6.19	1.28	1.34
38	BD	148	GLU	CD-OE2	-6.19	1.18	1.25
35	BA	829	A	C2'-C1'	-6.19	1.46	1.53
35	BA	1930	G	O4'-C1'	-6.19	1.33	1.41
35	BA	2457	U	C2-N3	-6.19	1.33	1.37
1	AA	259	G	N9-C4	-6.18	1.33	1.38
1	AA	873	A	N9-C8	-6.18	1.32	1.37
35	BA	424	G	C5'-C4'	-6.18	1.44	1.51
35	BA	1656	C	N1-C6	-6.18	1.33	1.37
35	BA	1799	G	N3-C4	-6.18	1.31	1.35
35	BA	1835	G	C6-N1	-6.18	1.35	1.39
35	BA	2056	G	N9-C8	-6.18	1.33	1.37
35	BA	2187	G	N3-C4	-6.18	1.31	1.35
35	BA	2749	A	N7-C5	-6.18	1.35	1.39
1	AA	1274	G	C6-O6	-6.18	1.18	1.24
1	AA	1331	G	P-O5'	-6.18	1.53	1.59
35	BA	1787	A	C6-N6	-6.18	1.29	1.33
35	BA	2001	A	C6-N6	-6.18	1.29	1.33
35	BA	2049	G	C6-O6	-6.18	1.18	1.24
35	BA	2288	A	N1-C2	-6.18	1.28	1.34
35	BA	2426	A	C2-N3	-6.18	1.27	1.33
1	AA	662	G	N9-C8	-6.18	1.33	1.37
1	AA	1461	G	N3-C4	-6.18	1.31	1.35
35	BA	601	C	C4'-C3'	-6.18	1.46	1.53
35	BA	2579	C	C4-C5	-6.18	1.38	1.43
1	AA	16	A	N3-C4	-6.18	1.31	1.34
35	BA	412	A	N3-C4	-6.18	1.31	1.34
35	BA	829	A	N3-C4	-6.18	1.31	1.34
35	BA	2014	A	N3-C4	-6.18	1.31	1.34
35	BA	2765	A	N9-C4	-6.18	1.34	1.37
35	BA	389	G	C6-N1	-6.17	1.35	1.39
35	BA	1138	G	C5-C4	-6.17	1.34	1.38
35	BA	1248	G	C5-C6	6.17	1.48	1.42
35	BA	2554	U	N3-C4	-6.17	1.32	1.38
35	BA	521	G	N7-C5	-6.17	1.35	1.39
35	BA	1106	G	N7-C5	-6.17	1.35	1.39
35	BA	1769	G	N9-C8	-6.17	1.33	1.37
35	BA	2614	A	C5-C6	-6.17	1.35	1.41
1	AA	439	A	C8-N7	-6.17	1.27	1.31
1	AA	1000	U	C4'-C3'	-6.17	1.46	1.53
22	AV	33	U	C4'-C3'	-6.17	1.46	1.53
35	BA	247	G	C4'-C3'	-6.17	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	533	G	N9-C4	-6.17	1.33	1.38
35	BA	890	A	C8-N7	-6.17	1.27	1.31
1	AA	671	G	C2'-C1'	-6.17	1.46	1.53
1	AA	996	A	N3-C4	-6.17	1.31	1.34
23	AX	14	A	N3-C4	-6.17	1.31	1.34
35	BA	827	U	N1-C6	-6.17	1.32	1.38
35	BA	2369	A	N1-C2	-6.17	1.28	1.34
1	AA	189(B)	C	C4-N4	-6.17	1.28	1.33
35	BA	29	U	C2-O2	6.17	1.27	1.22
1	AA	658	G	N3-C4	-6.17	1.31	1.35
1	AA	779	C	N1-C6	-6.17	1.33	1.37
1	AA	894	G	N3-C4	-6.17	1.31	1.35
1	AA	948	C	C2'-O2'	-6.17	1.33	1.41
1	AA	997	U	C4-C5	-6.17	1.38	1.43
1	AA	1019	C	N1-C6	-6.17	1.33	1.37
1	AA	1144	G	N7-C5	-6.17	1.35	1.39
1	AA	1465	C	N1-C6	-6.17	1.33	1.37
35	BA	922	U	C4'-C3'	-6.17	1.46	1.53
35	BA	1999	C	N1-C6	-6.17	1.33	1.37
35	BA	2223	G	P-O5'	-6.17	1.53	1.59
1	AA	546	G	N7-C5	6.17	1.43	1.39
35	BA	2378	A	N9-C4	-6.17	1.34	1.37
35	BA	470	A	C4'-C3'	-6.16	1.46	1.53
35	BA	1295	C	N3-C4	-6.16	1.29	1.33
35	BA	1549	C	C4'-C3'	-6.16	1.46	1.53
35	BA	1829	A	N3-C4	-6.16	1.31	1.34
35	BA	2496	C	C3'-C2'	-6.16	1.46	1.52
1	AA	677	U	C5-C6	-6.16	1.28	1.34
1	AA	1115	C	C4-C5	-6.16	1.38	1.43
35	BA	1661	G	C2'-C1'	-6.16	1.46	1.53
35	BA	2770	G	C5-C6	-6.16	1.36	1.42
1	AA	961	U	N3-C4	-6.16	1.32	1.38
1	AA	1095	U	C4'-C3'	-6.16	1.46	1.53
35	BA	44	G	C2-N2	-6.16	1.28	1.34
35	BA	212	G	C6-O6	-6.16	1.18	1.24
35	BA	327	G	C5-C4	-6.16	1.34	1.38
35	BA	1350	C	C2-N3	-6.16	1.30	1.35
1	AA	481	G	N9-C8	-6.16	1.33	1.37
1	AA	1401	G	N9-C4	-6.16	1.33	1.38
35	BA	266	G	N9-C4	-6.16	1.33	1.38
35	BA	1226	A	N9-C8	-6.16	1.32	1.37
35	BA	1355	G	N9-C4	-6.16	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2038	G	N1-C2	-6.16	1.32	1.37
1	AA	144	G	C2-N2	-6.16	1.28	1.34
1	AA	1407	C	C2-N3	-6.16	1.30	1.35
35	BA	2641	G	C5'-C4'	-6.16	1.44	1.51
35	BA	2732	G	C2-N2	-6.16	1.28	1.34
1	AA	326	G	N7-C5	-6.15	1.35	1.39
1	AA	935	A	C5-C4	-6.15	1.34	1.38
1	AA	1071	C	C2-O2	-6.15	1.19	1.24
35	BA	643	A	C5-C4	-6.15	1.34	1.38
35	BA	2544	G	N7-C5	-6.15	1.35	1.39
36	BB	65	C	C2-O2	-6.15	1.19	1.24
1	AA	572	A	C6-N1	-6.15	1.31	1.35
35	BA	2304	G	P-O5'	-6.15	1.53	1.59
1	AA	1222	G	N9-C8	-6.15	1.33	1.37
35	BA	504	U	C4-O4	-6.15	1.18	1.23
35	BA	2110	G	N1-C2	-6.15	1.32	1.37
35	BA	2278	A	C5-C6	-6.15	1.35	1.41
35	BA	1865	G	N3-C4	-6.15	1.31	1.35
35	BA	276	A	C2-N3	-6.14	1.28	1.33
1	AA	668	G	C8-N7	-6.14	1.27	1.30
1	AA	882	C	C4-C5	-6.14	1.38	1.43
1	AA	1034	G	C8-N7	-6.14	1.27	1.30
1	AA	1173	G	C6-N1	-6.14	1.35	1.39
1	AA	1488	G	C5-C4	-6.14	1.34	1.38
35	BA	1616	A	N7-C5	-6.14	1.35	1.39
35	BA	2260	C	N1-C6	-6.14	1.33	1.37
35	BA	2405	G	C2-N3	-6.14	1.27	1.32
35	BA	2710	C	N1-C6	-6.14	1.33	1.37
35	BA	2761	G	C8-N7	-6.14	1.27	1.30
35	BA	2805	G	N7-C5	-6.14	1.35	1.39
1	AA	433	C	C2-N3	-6.14	1.30	1.35
35	BA	654(C)	G	C6-O6	-6.14	1.18	1.24
35	BA	2227	A	C4'-C3'	-6.14	1.46	1.53
1	AA	1160	G	P-O5'	-6.14	1.53	1.59
35	BA	654(U)	A	N7-C5	-6.14	1.35	1.39
35	BA	1414	G	N7-C5	-6.14	1.35	1.39
35	BA	2703	C	C2-O2	-6.14	1.19	1.24
1	AA	549	C	N1-C6	-6.13	1.33	1.37
1	AA	750	G	N9-C8	-6.13	1.33	1.37
1	AA	1183	A	C6-N1	-6.13	1.31	1.35
1	AA	1416	G	C8-N7	-6.13	1.27	1.30
35	BA	654(R)	C	N3-C4	-6.13	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2222	G	C4'-C3'	-6.13	1.46	1.53
35	BA	2448	A	C6-N1	-6.13	1.31	1.35
35	BA	2511	U	C5'-C4'	-6.13	1.44	1.51
1	AA	1214	C	C4-N4	-6.13	1.28	1.33
35	BA	559	G	C5-C6	-6.13	1.36	1.42
35	BA	841	A	C2-N3	-6.13	1.28	1.33
1	AA	189(F)	U	C4-C5	-6.13	1.38	1.43
1	AA	726	C	N1-C6	6.13	1.40	1.37
1	AA	765	G	N9-C8	-6.13	1.33	1.37
35	BA	1288	U	C4-O4	-6.13	1.18	1.23
1	AA	1224	G	N1-C2	-6.13	1.32	1.37
35	BA	874	G	C8-N7	-6.13	1.27	1.30
35	BA	1624	G	C5-C6	-6.13	1.36	1.42
35	BA	2686	G	N1-C2	-6.13	1.32	1.37
1	AA	574	A	N9-C4	-6.13	1.34	1.37
1	AA	1159	U	P-O5'	-6.13	1.53	1.59
35	BA	606	U	C5'-C4'	-6.13	1.44	1.51
35	BA	792	G	C6-N1	-6.13	1.35	1.39
35	BA	1190	G	C2'-C1'	-6.13	1.46	1.53
35	BA	2586	C	P-O5'	-6.13	1.53	1.59
1	AA	900	A	N3-C4	-6.12	1.31	1.34
35	BA	1650	G	C8-N7	6.12	1.34	1.30
35	BA	2328	A	N3-C4	-6.12	1.31	1.34
1	AA	1128	C	N3-C4	-6.12	1.29	1.33
35	BA	40	C	N1-C6	-6.12	1.33	1.37
35	BA	440	G	N7-C5	-6.12	1.35	1.39
35	BA	1509(A)	A	C5-C6	-6.12	1.35	1.41
35	BA	2172	U	C3'-C2'	-6.12	1.46	1.52
35	BA	996	A	O3'-P	-6.12	1.53	1.61
1	AA	318	G	C8-N7	6.12	1.34	1.30
1	AA	927	G	N9-C8	-6.12	1.33	1.37
35	BA	24	G	N9-C4	-6.12	1.33	1.38
35	BA	412	A	N7-C5	6.12	1.43	1.39
35	BA	1010	A	C2-N3	-6.12	1.28	1.33
35	BA	1881	C	C4'-C3'	-6.12	1.46	1.53
35	BA	2052	G	C2-N3	-6.12	1.27	1.32
1	AA	980	C	N1-C6	-6.12	1.33	1.37
1	AA	1369	C	N1-C6	-6.12	1.33	1.37
35	BA	877	U	P-O5'	-6.12	1.53	1.59
35	BA	1443	G	P-O5'	-6.12	1.53	1.59
35	BA	1509(B)	A	C2'-C1'	-6.12	1.46	1.53
1	AA	706	A	C5-C4	-6.12	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1161	C	C2-N3	-6.12	1.30	1.35
1	AA	1263	C	C2-N3	-6.12	1.30	1.35
35	BA	325	G	C5-C4	-6.12	1.34	1.38
35	BA	1057	A	C5-C4	-6.12	1.34	1.38
35	BA	1080	C	C2-N3	-6.12	1.30	1.35
35	BA	1626	G	C8-N7	-6.12	1.27	1.30
35	BA	2623	G	C8-N7	-6.12	1.27	1.30
1	AA	187	C	C4'-C3'	-6.11	1.46	1.53
1	AA	927	G	P-O5'	-6.11	1.53	1.59
35	BA	492	A	N1-C2	-6.11	1.28	1.34
35	BA	577	G	N9-C8	-6.11	1.33	1.37
35	BA	935	C	N3-C4	-6.11	1.29	1.33
35	BA	1044	G	C4'-C3'	-6.11	1.46	1.53
35	BA	51	G	C2-N3	6.11	1.37	1.32
35	BA	204	A	N3-C4	-6.11	1.31	1.34
1	AA	82	U	C4-C5	-6.11	1.38	1.43
1	AA	171	A	N7-C5	-6.11	1.35	1.39
1	AA	1144	G	C3'-C2'	-6.11	1.46	1.52
1	AA	1164	G	N7-C5	-6.11	1.35	1.39
35	BA	10	G	N7-C5	-6.11	1.35	1.39
35	BA	1133	U	C2-O2	-6.11	1.16	1.22
35	BA	1562	A	N7-C5	-6.11	1.35	1.39
35	BA	2127	G	N7-C5	-6.11	1.35	1.39
35	BA	2643	G	C6-N1	-6.11	1.35	1.39
35	BA	204	A	N9-C4	-6.11	1.34	1.37
35	BA	2848	G	C3'-C2'	-6.11	1.46	1.52
1	AA	128	G	C3'-C2'	-6.11	1.46	1.52
1	AA	292	G	N7-C5	-6.11	1.35	1.39
1	AA	509	A	C6-N6	-6.11	1.29	1.33
1	AA	790	A	N7-C5	-6.11	1.35	1.39
35	BA	1022	G	N7-C5	-6.11	1.35	1.39
35	BA	1435	G	C6-N1	-6.11	1.35	1.39
35	BA	1448	G	C5-C6	-6.11	1.36	1.42
35	BA	2267	A	N9-C8	-6.11	1.32	1.37
36	BB	9	G	N1-C2	-6.11	1.32	1.37
1	AA	1175	G	C2-N3	-6.10	1.27	1.32
35	BA	52	A	P-O5'	-6.10	1.53	1.59
35	BA	382	G	C2-N3	-6.10	1.27	1.32
35	BA	1138	G	C2-N3	-6.10	1.27	1.32
35	BA	2178	C	N1-C6	-6.10	1.33	1.37
1	AA	1356	G	C6-O6	-6.10	1.18	1.24
35	BA	852	G	C2'-C1'	-6.10	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1071	G	N3-C4	-6.10	1.31	1.35
35	BA	1479	G	N3-C4	-6.10	1.31	1.35
35	BA	2137	C	C2-N3	-6.10	1.30	1.35
35	BA	2618	G	N3-C4	-6.10	1.31	1.35
1	AA	255	G	C6-N1	-6.10	1.35	1.39
35	BA	81	G	C6-N1	-6.10	1.35	1.39
1	AA	18	C	C2-O2	-6.10	1.19	1.24
1	AA	262	A	C5'-C4'	-6.10	1.44	1.51
35	BA	329	G	C4'-C3'	-6.10	1.46	1.53
35	BA	1662	C	C2-N3	-6.10	1.30	1.35
35	BA	1769	G	C2-N3	6.10	1.37	1.32
1	AA	818	G	C8-N7	-6.10	1.27	1.30
24	AY	445	GLU	CD-OE1	-6.10	1.19	1.25
35	BA	960	A	C6-N6	-6.10	1.29	1.33
1	AA	331	G	C5-C4	-6.09	1.34	1.38
1	AA	472	A	C5-C4	-6.09	1.34	1.38
1	AA	1031	G	C2'-C1'	-6.09	1.46	1.53
35	BA	1804	C	N1-C6	6.09	1.40	1.37
35	BA	2307	G	N7-C5	6.09	1.43	1.39
35	BA	1496	A	C2-N3	-6.09	1.28	1.33
35	BA	2604	U	C4-O4	-6.09	1.18	1.23
1	AA	802	A	N1-C2	-6.09	1.28	1.34
35	BA	1913	A	C5-C6	-6.09	1.35	1.41
35	BA	2279	G	N9-C4	6.09	1.42	1.38
36	BB	119	G	N9-C8	-6.09	1.33	1.37
35	BA	1352	U	C2-N3	-6.09	1.33	1.37
35	BA	2190	G	C8-N7	-6.09	1.27	1.30
35	BA	2626	C	C5'-C4'	-6.09	1.44	1.51
35	BA	2770	G	C6-N1	-6.09	1.35	1.39
1	AA	1218	C	P-O5'	-6.09	1.53	1.59
1	AA	140	A	C5-C6	-6.09	1.35	1.41
1	AA	934	C	C5-C6	-6.09	1.29	1.34
1	AA	1513	A	N9-C8	-6.09	1.32	1.37
35	BA	69	C	C5-C6	-6.09	1.29	1.34
35	BA	1571	A	C6-N6	6.09	1.38	1.33
1	AA	480	U	N1-C2	-6.08	1.33	1.38
1	AA	667	G	N3-C4	-6.08	1.31	1.35
1	AA	912	C	N1-C2	-6.08	1.34	1.40
35	BA	269	U	N1-C2	-6.08	1.33	1.38
35	BA	2100	G	N3-C4	-6.08	1.31	1.35
5	AE	87	SER	CA-CB	-6.08	1.43	1.52
35	BA	1137	G	P-O5'	-6.08	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	498	U	C4-O4	-6.08	1.18	1.23
1	AA	578	C	C5-C6	-6.08	1.29	1.34
1	AA	1418	A	C6-N6	-6.08	1.29	1.33
35	BA	817	C	C5-C6	-6.08	1.29	1.34
35	BA	992	C	C5-C6	-6.08	1.29	1.34
1	AA	105	G	N3-C4	-6.08	1.31	1.35
1	AA	809	G	C2-N2	-6.08	1.28	1.34
1	AA	1108	G	N7-C5	-6.08	1.35	1.39
35	BA	1520	G	N7-C5	-6.08	1.35	1.39
35	BA	1747(A)	G	N3-C4	-6.08	1.31	1.35
35	BA	2186	G	N3-C4	-6.08	1.31	1.35
1	AA	15	G	C5-C4	-6.08	1.34	1.38
1	AA	1184	G	C5-C4	-6.08	1.34	1.38
35	BA	406	G	C6-O6	-6.08	1.18	1.24
35	BA	2801	A	C4'-C3'	-6.08	1.46	1.53
35	BA	429	A	N9-C8	-6.08	1.32	1.37
35	BA	735	A	N9-C4	-6.08	1.34	1.37
1	AA	574	A	C4'-C3'	-6.08	1.46	1.53
35	BA	1029	A	C3'-C2'	-6.08	1.46	1.52
35	BA	1528	A	C6-N1	-6.08	1.31	1.35
22	AV	34	C	C4-C5	-6.07	1.38	1.43
35	BA	142	A	N7-C5	-6.07	1.35	1.39
35	BA	206	U	C2-N3	-6.07	1.33	1.37
35	BA	507	A	N7-C5	-6.07	1.35	1.39
35	BA	1317	A	C5-C6	-6.07	1.35	1.41
35	BA	1784	A	C5-C4	-6.07	1.34	1.38
35	BA	1916	A	N3-C4	-6.07	1.31	1.34
1	AA	142	G	N1-C2	-6.07	1.32	1.37
1	AA	1061	G	N9-C4	-6.07	1.33	1.38
35	BA	103	A	N9-C8	-6.07	1.32	1.37
35	BA	2570	G	N1-C2	-6.07	1.32	1.37
35	BA	2872	G	N1-C2	-6.07	1.32	1.37
1	AA	610	G	N9-C8	-6.07	1.33	1.37
35	BA	458	G	C3'-C2'	-6.07	1.46	1.52
35	BA	742	G	N9-C8	-6.07	1.33	1.37
35	BA	1412	A	N9-C4	-6.07	1.34	1.37
35	BA	2478	A	C2'-C1'	-6.07	1.46	1.53
35	BA	2603	G	N9-C8	-6.07	1.33	1.37
1	AA	932	C	C4-C5	-6.07	1.38	1.43
1	AA	1307	U	C4'-C3'	-6.07	1.46	1.53
1	AA	1456	G	N3-C4	-6.07	1.31	1.35
35	BA	1988	C	C4'-C3'	-6.07	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2254	C	C4'-C3'	-6.07	1.46	1.53
1	AA	63	C	C5-C6	-6.07	1.29	1.34
35	BA	130	C	C4-N4	-6.07	1.28	1.33
35	BA	1787	A	N3-C4	-6.07	1.31	1.34
35	BA	128	C	N1-C6	-6.07	1.33	1.37
35	BA	707	G	N9-C8	-6.07	1.33	1.37
35	BA	1753	G	P-O5'	-6.07	1.53	1.59
35	BA	1978	A	C6-N6	-6.07	1.29	1.33
35	BA	2232	U	C4-O4	-6.07	1.18	1.23
36	BB	98	G	N9-C8	-6.07	1.33	1.37
40	BF	35	GLU	CD-OE2	-6.07	1.19	1.25
1	AA	558	G	C6-N1	-6.06	1.35	1.39
35	BA	883	G	C6-N1	-6.06	1.35	1.39
35	BA	1878	G	C6-N1	-6.06	1.35	1.39
35	BA	2750	A	C6-N1	-6.06	1.31	1.35
1	AA	1080	A	N7-C5	-6.06	1.35	1.39
35	BA	270	A	N7-C5	-6.06	1.35	1.39
35	BA	517	C	C5-C6	-6.06	1.29	1.34
35	BA	632	A	C4'-C3'	-6.06	1.46	1.53
35	BA	1364	G	N7-C5	-6.06	1.35	1.39
35	BA	1908	C	N1-C2	-6.06	1.34	1.40
35	BA	2443	C	C4'-C3'	-6.06	1.46	1.53
35	BA	2852	G	C2'-O2'	-6.06	1.33	1.41
35	BA	1191	G	C3'-C2'	-6.06	1.46	1.52
35	BA	2155	G	C6-O6	-6.06	1.18	1.24
35	BA	2387	U	C3'-C2'	-6.06	1.46	1.52
1	AA	1284	C	N1-C6	-6.06	1.33	1.37
1	AA	1500	A	N9-C4	-6.06	1.34	1.37
35	BA	1230	C	C4'-C3'	-6.06	1.46	1.53
35	BA	1759	A	C6-N1	-6.06	1.31	1.35
35	BA	2584	U	N1-C2	-6.06	1.33	1.38
35	BA	2612	C	N1-C6	-6.06	1.33	1.37
35	BA	2616	C	C4'-C3'	-6.06	1.46	1.53
1	AA	285	G	C6-O6	6.06	1.29	1.24
1	AA	424	G	C5-C4	-6.06	1.34	1.38
1	AA	1434	A	N1-C2	-6.06	1.28	1.34
35	BA	1622	G	C5-C4	-6.06	1.34	1.38
1	AA	1530	G	N7-C5	-6.06	1.35	1.39
1	AA	696	A	N3-C4	-6.05	1.31	1.34
1	AA	1067	A	C5-C6	-6.05	1.35	1.41
1	AA	1320	C	C4-N4	-6.05	1.28	1.33
1	AA	1518	A	C5-C6	-6.05	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1403	C	N1-C6	-6.05	1.33	1.37
35	BA	1579	A	C5-C6	-6.05	1.35	1.41
1	AA	642	A	N9-C4	-6.05	1.34	1.37
1	AA	782	A	N9-C4	-6.05	1.34	1.37
35	BA	1302	A	N9-C4	-6.05	1.34	1.37
35	BA	2526	G	N3-C4	-6.05	1.31	1.35
1	AA	761	G	C5-C4	-6.05	1.34	1.38
35	BA	172	C	P-O5'	-6.05	1.53	1.59
35	BA	890	A	C5-C4	-6.05	1.34	1.38
35	BA	902	C	C5-C6	6.05	1.39	1.34
35	BA	2164	C	C4-C5	-6.05	1.38	1.43
35	BA	2302	G	P-O5'	-6.05	1.53	1.59
1	AA	1204	A	C5-C6	-6.05	1.35	1.41
35	BA	775	G	C2'-C1'	-6.05	1.46	1.53
35	BA	2537	U	P-O5'	-6.05	1.53	1.59
35	BA	2786	U	P-O5'	-6.05	1.53	1.59
36	BB	83	G	C4'-C3'	-6.05	1.46	1.53
1	AA	321	A	C6-N1	-6.05	1.31	1.35
1	AA	448	A	N9-C8	-6.05	1.32	1.37
1	AA	1276	G	C6-N1	-6.05	1.35	1.39
35	BA	49	A	C6-N1	-6.05	1.31	1.35
35	BA	864	G	C3'-C2'	-6.05	1.46	1.52
1	AA	13	U	C5'-C4'	-6.05	1.44	1.51
1	AA	1141	C	N1-C2	6.05	1.46	1.40
35	BA	1670	C	C5'-C4'	-6.05	1.44	1.51
35	BA	518	G	C2-N2	-6.04	1.28	1.34
1	AA	47	C	C2'-C1'	-6.04	1.46	1.53
1	AA	1010	G	N1-C2	-6.04	1.32	1.37
35	BA	223	A	C2'-C1'	-6.04	1.46	1.53
35	BA	993	G	C5-C6	-6.04	1.36	1.42
35	BA	1777	U	C4'-O4'	-6.04	1.37	1.45
35	BA	1897	G	C5-C4	6.04	1.42	1.38
45	BN	119	ARG	CZ-NH2	-6.04	1.25	1.33
1	AA	553	A	C6-N6	-6.04	1.29	1.33
1	AA	780	A	N9-C8	6.04	1.42	1.37
1	AA	1382	C	C2'-O2'	-6.04	1.33	1.41
35	BA	271(D)	G	N3-C4	-6.04	1.31	1.35
35	BA	1988	C	N1-C6	-6.04	1.33	1.37
35	BA	2714	G	N3-C4	-6.04	1.31	1.35
36	BB	16	G	C5-C4	-6.04	1.34	1.38
1	AA	1124	G	C3'-O3'	-6.04	1.33	1.42
35	BA	1701	A	N9-C4	-6.04	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2838	G	C2-N3	-6.04	1.27	1.32
1	AA	707	C	P-O5'	-6.04	1.53	1.59
1	AA	709	G	N9-C4	-6.04	1.33	1.38
35	BA	1130	U	C2-N3	6.04	1.42	1.37
35	BA	1213	A	C5'-C4'	6.04	1.58	1.51
35	BA	1655	A	P-O5'	-6.04	1.53	1.59
1	AA	452	A	N7-C5	-6.04	1.35	1.39
1	AA	633	G	C8-N7	-6.04	1.27	1.30
1	AA	743	U	N3-C4	-6.04	1.33	1.38
35	BA	520	G	C8-N7	-6.04	1.27	1.30
35	BA	614	U	N3-C4	-6.04	1.33	1.38
35	BA	988	A	C8-N7	-6.04	1.27	1.31
35	BA	1031	G	N7-C5	-6.04	1.35	1.39
35	BA	1513	C	C4-N4	-6.04	1.28	1.33
35	BA	1945	G	N7-C5	-6.04	1.35	1.39
35	BA	2363	C	C2-O2	-6.04	1.19	1.24
35	BA	2666	C	C4-N4	-6.04	1.28	1.33
35	BA	111	A	C2'-C1'	-6.04	1.46	1.53
35	BA	722	A	C3'-C2'	-6.04	1.46	1.52
35	BA	731	C	C3'-C2'	-6.04	1.46	1.52
35	BA	994	C	N3-C4	-6.04	1.29	1.33
1	AA	638	G	N1-C2	-6.03	1.32	1.37
1	AA	1326	C	C4-C5	-6.03	1.38	1.43
1	AA	1395	C	C4-C5	-6.03	1.38	1.43
1	AA	1440	C	C2'-C1'	-6.03	1.46	1.53
35	BA	139	G	C2-N2	-6.03	1.28	1.34
35	BA	234	C	C4-C5	-6.03	1.38	1.43
35	BA	461	C	C4-C5	-6.03	1.38	1.43
35	BA	581	C	C4-N4	-6.03	1.28	1.33
35	BA	2086	U	C3'-C2'	-6.03	1.46	1.52
35	BA	2754	U	C4-C5	-6.03	1.38	1.43
1	AA	329	A	N3-C4	-6.03	1.31	1.34
35	BA	271(S)	G	C8-N7	-6.03	1.27	1.30
35	BA	353	G	C2-N3	-6.03	1.27	1.32
35	BA	1475	G	N7-C5	-6.03	1.35	1.39
35	BA	1954	G	C8-N7	-6.03	1.27	1.30
35	BA	1132	A	N9-C4	-6.03	1.34	1.37
1	AA	693	G	P-O5'	-6.03	1.53	1.59
35	BA	139(A)	G	C5-C6	-6.03	1.36	1.42
35	BA	1781	C	C2-N3	-6.03	1.30	1.35
35	BA	2060	A	C3'-C2'	-6.03	1.46	1.52
35	BA	2398	U	C4-O4	-6.02	1.18	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	43	C	C5'-C4'	-6.02	1.44	1.51
1	AA	200	G	N9-C8	-6.02	1.33	1.37
35	BA	2513	G	C4'-C3'	-6.02	1.46	1.53
35	BA	1760	A	C6-N1	-6.02	1.31	1.35
36	BB	24	G	C6-N1	-6.02	1.35	1.39
35	BA	377	C	N3-C4	-6.02	1.29	1.33
35	BA	551	G	O3'-P	-6.02	1.53	1.61
36	BB	91	C	C2-N3	-6.02	1.30	1.35
1	AA	133	U	C5-C6	-6.02	1.28	1.34
1	AA	1386	G	C8-N7	-6.02	1.27	1.30
1	AA	1523	G	C8-N7	-6.02	1.27	1.30
1	AA	1530	G	C8-N7	-6.02	1.27	1.30
35	BA	952	G	N9-C8	6.02	1.42	1.37
35	BA	1063	G	C8-N7	-6.02	1.27	1.30
35	BA	1624	G	N9-C8	-6.02	1.33	1.37
35	BA	1856	G	N9-C8	-6.02	1.33	1.37
1	AA	1073	U	N3-C4	-6.02	1.33	1.38
35	BA	708	C	C4-N4	-6.02	1.28	1.33
35	BA	1419	A	P-O5'	-6.02	1.53	1.59
35	BA	2065	C	N1-C6	-6.02	1.33	1.37
35	BA	2065	C	P-O5'	-6.02	1.53	1.59
35	BA	2313	C	N1-C6	-6.02	1.33	1.37
35	BA	2391	G	P-O5'	-6.02	1.53	1.59
35	BA	2454	G	N9-C4	6.02	1.42	1.38
1	AA	835	U	O3'-P	-6.01	1.53	1.61
35	BA	102	G	C5-C4	-6.01	1.34	1.38
35	BA	233	A	N9-C4	-6.01	1.34	1.37
35	BA	382	G	N9-C4	-6.01	1.33	1.38
35	BA	1173	G	N9-C4	-6.01	1.33	1.38
1	AA	8	A	N7-C5	-6.01	1.35	1.39
35	BA	30	G	N7-C5	-6.01	1.35	1.39
35	BA	256	A	N7-C5	6.01	1.42	1.39
35	BA	2239	G	N7-C5	-6.01	1.35	1.39
35	BA	2742	C	C4'-C3'	-6.01	1.46	1.53
35	BA	410	G	C8-N7	-6.01	1.27	1.30
35	BA	2318	G	C5'-C4'	-6.01	1.44	1.51
35	BA	2805	G	C8-N7	-6.01	1.27	1.30
1	AA	1068	G	C5-C6	-6.01	1.36	1.42
1	AA	1092	A	P-O5'	-6.01	1.53	1.59
1	AA	1519	A	C8-N7	-6.01	1.27	1.31
35	BA	215	G	C5-C4	-6.01	1.34	1.38
35	BA	996	A	C8-N7	-6.01	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1008	C	C4'-C3'	-6.01	1.46	1.53
35	BA	1177	A	N9-C4	-6.01	1.34	1.37
35	BA	1528	A	N9-C4	-6.01	1.34	1.37
35	BA	1663	C	C5-C6	-6.01	1.29	1.34
35	BA	1787	A	C8-N7	-6.01	1.27	1.31
35	BA	2000	G	C6-O6	-6.01	1.18	1.24
1	AA	50	A	C2'-C1'	-6.01	1.46	1.53
35	BA	722	A	C3'-O3'	-6.01	1.33	1.42
35	BA	2657	A	C6-N6	-6.01	1.29	1.33
1	AA	700	G	N7-C5	-6.01	1.35	1.39
1	AA	1030(C)	G	N9-C8	-6.01	1.33	1.37
1	AA	1446	U	C4'-O4'	-6.01	1.37	1.45
35	BA	596	G	N7-C5	-6.01	1.35	1.39
35	BA	1434	A	N7-C5	-6.01	1.35	1.39
35	BA	2055	C	P-O5'	-6.01	1.53	1.59
35	BA	2296	U	N1-C6	-6.01	1.32	1.38
35	BA	2638	G	N7-C5	-6.01	1.35	1.39
1	AA	862	C	C4-N4	-6.00	1.28	1.33
1	AA	1228	C	N3-C4	-6.00	1.29	1.33
35	BA	2656	U	N1-C2	6.00	1.44	1.38
35	BA	294	A	C4'-C3'	-6.00	1.46	1.52
35	BA	525	U	C2'-O2'	-6.00	1.33	1.41
35	BA	1225	G	C2-N2	-6.00	1.28	1.34
35	BA	2689	U	C4-C5	-6.00	1.38	1.43
1	AA	303	A	N9-C4	6.00	1.41	1.37
35	BA	2293	C	P-O5'	-6.00	1.53	1.59
1	AA	43	C	C3'-C2'	-6.00	1.46	1.52
1	AA	73	G	C5-C4	-6.00	1.34	1.38
1	AA	412	A	C5-C4	6.00	1.43	1.38
1	AA	528	C	C5-C6	-6.00	1.29	1.34
22	AV	73	A	C8-N7	-6.00	1.27	1.31
35	BA	338	G	N3-C4	-6.00	1.31	1.35
35	BA	480	A	C8-N7	-6.00	1.27	1.31
35	BA	1617	C	C5-C6	-6.00	1.29	1.34
35	BA	2553	G	C2-N3	6.00	1.37	1.32
35	BA	271(I)	G	C8-N7	-6.00	1.27	1.30
35	BA	968	G	N9-C4	-6.00	1.33	1.38
35	BA	2327	A	N7-C5	6.00	1.42	1.39
35	BA	1942	C	O3'-P	-6.00	1.53	1.61
1	AA	522	C	C2'-C1'	-5.99	1.46	1.53
1	AA	1391	U	C4'-C3'	-5.99	1.46	1.52
22	AV	72	A	N7-C5	-5.99	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	597	U	C4-C5	-5.99	1.38	1.43
35	BA	1593	G	N3-C4	-5.99	1.31	1.35
35	BA	824	A	C5-C6	-5.99	1.35	1.41
35	BA	1847	A	C8-N7	-5.99	1.27	1.31
1	AA	823	G	N9-C8	-5.99	1.33	1.37
35	BA	260	G	C6-O6	-5.99	1.18	1.24
35	BA	2152	G	C8-N7	-5.99	1.27	1.30
1	AA	786	G	C5-C4	-5.99	1.34	1.38
1	AA	867	G	N7-C5	-5.99	1.35	1.39
35	BA	171	G	N7-C5	-5.99	1.35	1.39
35	BA	306	U	N1-C2	-5.99	1.33	1.38
35	BA	549	G	C5-C4	-5.99	1.34	1.38
35	BA	1245	G	N7-C5	-5.99	1.35	1.39
35	BA	1347	G	C6-N1	-5.99	1.35	1.39
35	BA	2100	G	C2-N3	5.99	1.37	1.32
35	BA	2765	A	C6-N1	-5.99	1.31	1.35
35	BA	259	G	C2-N3	-5.99	1.27	1.32
35	BA	1309	G	C2-N3	-5.99	1.27	1.32
35	BA	1972	A	C8-N7	-5.99	1.27	1.31
35	BA	2113	U	C4-O4	-5.99	1.18	1.23
35	BA	2413	G	P-O5'	-5.99	1.53	1.59
1	AA	1007	C	N3-C4	-5.99	1.29	1.33
1	AA	1353	G	N9-C8	-5.99	1.33	1.37
35	BA	834	C	C5-C6	-5.99	1.29	1.34
35	BA	1910	G	C5-C6	-5.99	1.36	1.42
35	BA	2591	C	C5-C6	-5.99	1.29	1.34
35	BA	2594	C	C2-O2	-5.99	1.19	1.24
35	BA	2856	C	N3-C4	-5.99	1.29	1.33
36	BB	42	C	N1-C6	-5.99	1.33	1.37
35	BA	577	G	C4'-C3'	-5.98	1.46	1.52
35	BA	972	G	C6-N1	-5.98	1.35	1.39
35	BA	1541	G	C6-N1	-5.98	1.35	1.39
35	BA	1626	G	C6-N1	-5.98	1.35	1.39
35	BA	1740	G	C8-N7	-5.98	1.27	1.30
35	BA	2308	G	C8-N7	-5.98	1.27	1.30
35	BA	2479	G	C8-N7	-5.98	1.27	1.30
35	BA	2632	A	C4'-C3'	-5.98	1.46	1.52
1	AA	1127	G	N7-C5	-5.98	1.35	1.39
35	BA	2744	G	N3-C4	-5.98	1.31	1.35
1	AA	285	G	N9-C8	-5.98	1.33	1.37
1	AA	972	C	C4-N4	-5.98	1.28	1.33
35	BA	289	A	P-O5'	-5.98	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	987	G	N9-C8	-5.98	1.33	1.37
35	BA	1431	U	C4-C5	-5.98	1.38	1.43
35	BA	271(N)	U	C2-N3	5.98	1.42	1.37
35	BA	1320	C	C5'-C4'	-5.98	1.44	1.51
1	AA	189(H)	G	P-O5'	-5.98	1.53	1.59
1	AA	801	U	C2'-C1'	-5.98	1.46	1.53
35	BA	271(M)	G	C8-N7	-5.98	1.27	1.30
35	BA	410	G	N1-C2	-5.98	1.32	1.37
35	BA	919	G	N1-C2	-5.98	1.32	1.37
35	BA	1248	G	N1-C2	-5.98	1.32	1.37
35	BA	1419	A	N7-C5	5.98	1.42	1.39
35	BA	1665	A	N9-C8	-5.98	1.32	1.37
35	BA	1903	G	N9-C4	-5.98	1.33	1.38
35	BA	1918	A	C2'-C1'	-5.98	1.46	1.53
35	BA	2176	A	C6-N1	-5.98	1.31	1.35
35	BA	2379	G	N1-C2	-5.98	1.32	1.37
36	BB	103	G	N1-C2	-5.98	1.32	1.37
1	AA	1416	G	N3-C4	-5.98	1.31	1.35
35	BA	100	G	C5'-C4'	-5.98	1.44	1.51
36	BB	74	U	C3'-O3'	-5.98	1.33	1.42
35	BA	2577	A	C6-N6	-5.97	1.29	1.33
35	BA	1613	G	C4'-C3'	-5.97	1.46	1.52
35	BA	1773	A	C5-C4	-5.97	1.34	1.38
35	BA	1857	G	N1-C2	-5.97	1.32	1.37
35	BA	2117	A	C3'-C2'	-5.97	1.46	1.52
35	BA	2424	C	N1-C6	-5.97	1.33	1.37
35	BA	978	G	C8-N7	-5.97	1.27	1.30
1	AA	816	A	N7-C5	-5.97	1.35	1.39
22	AV	44	A	C8-N7	-5.97	1.27	1.31
35	BA	497	A	C8-N7	-5.97	1.27	1.31
35	BA	664	C	C5-C6	-5.97	1.29	1.34
1	AA	342	C	C2'-C1'	-5.97	1.46	1.53
1	AA	930	C	C4-N4	-5.97	1.28	1.33
35	BA	2429	G	N1-C2	-5.97	1.32	1.37
1	AA	344	A	C4'-C3'	-5.97	1.46	1.52
1	AA	907	A	C2-N3	-5.97	1.28	1.33
35	BA	118	A	N1-C2	-5.97	1.28	1.34
35	BA	309	G	C5-C4	-5.97	1.34	1.38
35	BA	735	A	N7-C5	5.97	1.42	1.39
35	BA	1302	A	C6-N1	-5.97	1.31	1.35
35	BA	1423	G	N7-C5	5.97	1.42	1.39
35	BA	1798	U	C4-O4	-5.97	1.18	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2362	G	C6-O6	-5.97	1.18	1.24
35	BA	2482	G	C5-C4	-5.97	1.34	1.38
1	AA	535	A	C8-N7	-5.96	1.27	1.31
3	AC	46	GLU	CD-OE1	-5.96	1.19	1.25
35	BA	747	U	C5-C6	-5.96	1.28	1.34
35	BA	1885	A	P-O5'	-5.96	1.53	1.59
35	BA	2561	A	N9-C4	-5.96	1.34	1.37
1	AA	942	G	C2-N2	-5.96	1.28	1.34
1	AA	1494	G	C4'-C3'	-5.96	1.46	1.52
1	AA	930	C	P-O5'	-5.96	1.53	1.59
35	BA	1245	G	C5-C4	-5.96	1.34	1.38
35	BA	1427	A	N1-C2	-5.96	1.28	1.34
1	AA	405	U	C2-N3	-5.96	1.33	1.37
35	BA	961	C	C4-C5	-5.96	1.38	1.43
35	BA	1827	C	C4-C5	-5.96	1.38	1.43
35	BA	2559	C	C4-C5	-5.96	1.38	1.43
35	BA	2824	C	C5-C6	-5.96	1.29	1.34
1	AA	701	C	N3-C4	-5.96	1.29	1.33
35	BA	399	G	C8-N7	-5.96	1.27	1.30
35	BA	498	G	N1-C2	-5.96	1.32	1.37
35	BA	654(S)	G	C6-N1	-5.96	1.35	1.39
35	BA	1087	G	C8-N7	-5.96	1.27	1.30
35	BA	1449	A	C5-C6	-5.96	1.35	1.41
35	BA	2184	G	C8-N7	-5.96	1.27	1.30
35	BA	2384	G	C8-N7	-5.96	1.27	1.30
35	BA	2488	A	N9-C4	-5.96	1.34	1.37
35	BA	2762	G	C6-N1	-5.96	1.35	1.39
35	BA	2851	A	N9-C4	5.96	1.41	1.37
22	AV	63	G	P-O5'	-5.96	1.53	1.59
35	BA	953	A	N7-C5	-5.96	1.35	1.39
35	BA	1131	G	C2-N3	-5.96	1.27	1.32
35	BA	1141	U	O3'-P	-5.96	1.54	1.61
35	BA	1526	G	C6-O6	-5.96	1.18	1.24
35	BA	1624	G	N7-C5	-5.96	1.35	1.39
35	BA	2165	G	C2-N3	-5.96	1.27	1.32
36	BB	117	G	C4'-C3'	-5.96	1.46	1.52
1	AA	952	U	C4-O4	-5.96	1.18	1.23
35	BA	2269	A	C5-C6	-5.96	1.35	1.41
35	BA	621	A	C2-N3	-5.95	1.28	1.33
35	BA	798	G	N1-C2	-5.95	1.32	1.37
35	BA	1760	A	N9-C4	-5.95	1.34	1.37
35	BA	1767	C	P-O5'	-5.95	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	965	A	C2'-C1'	-5.95	1.46	1.53
1	AA	261	U	C4-O4	5.95	1.28	1.23
35	BA	1812	A	C5-C4	-5.95	1.34	1.38
1	AA	69	G	C6-O6	-5.95	1.18	1.24
35	BA	100	G	N3-C4	-5.95	1.31	1.35
35	BA	950	G	N3-C4	-5.95	1.31	1.35
35	BA	2387	U	C4-C5	-5.95	1.38	1.43
35	BA	1152	C	P-O5'	-5.95	1.53	1.59
36	BB	33	G	C6-N1	-5.95	1.35	1.39
1	AA	189(H)	G	N9-C4	-5.95	1.33	1.38
1	AA	937	A	C3'-C2'	-5.95	1.46	1.52
1	AA	989	C	C4-N4	-5.95	1.28	1.33
1	AA	1383	C	C4'-C3'	-5.95	1.46	1.52
35	BA	633	A	C6-N6	5.95	1.38	1.33
35	BA	1373	A	C5-C4	-5.95	1.34	1.38
35	BA	1408	C	C5-C6	-5.95	1.29	1.34
35	BA	1501	C	C2'-C1'	-5.95	1.46	1.53
35	BA	1943	U	C4-O4	-5.95	1.18	1.23
1	AA	325	A	C6-N1	-5.94	1.31	1.35
1	AA	556	C	C2-O2	-5.94	1.19	1.24
35	BA	1142	U	C2-N3	-5.94	1.33	1.37
35	BA	1614	A	C6-N1	-5.94	1.31	1.35
35	BA	2096	U	P-O5'	-5.94	1.53	1.59
1	AA	199	G	C6-N1	-5.94	1.35	1.39
1	AA	903	G	C6-N1	-5.94	1.35	1.39
35	BA	225	A	C5-C6	-5.94	1.35	1.41
35	BA	264	C	N3-C4	-5.94	1.29	1.33
35	BA	2444	G	N9-C8	-5.94	1.33	1.37
35	BA	2845	G	C6-N1	-5.94	1.35	1.39
36	BB	111	G	C6-N1	-5.94	1.35	1.39
1	AA	106	C	C5'-C4'	-5.94	1.44	1.51
1	AA	807	A	N1-C2	-5.94	1.29	1.34
1	AA	1092	A	N9-C4	-5.94	1.34	1.37
35	BA	513	A	C2-N3	-5.94	1.28	1.33
35	BA	909	A	N9-C8	-5.94	1.32	1.37
35	BA	1566	A	C6-N1	5.94	1.39	1.35
35	BA	1676	A	N1-C2	-5.94	1.29	1.34
22	AV	14	A	C6-N1	-5.94	1.31	1.35
1	AA	636	U	C5-C6	5.94	1.39	1.34
35	BA	245	G	N9-C8	-5.94	1.33	1.37
35	BA	272	G	C5-C6	-5.94	1.36	1.42
35	BA	2886	G	N9-C8	-5.94	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1949	G	C6-N1	5.94	1.43	1.39
36	BB	78	A	C8-N7	-5.94	1.27	1.31
1	AA	330	C	N1-C6	-5.93	1.33	1.37
35	BA	442	G	N1-C2	-5.93	1.33	1.37
35	BA	879	G	N1-C2	-5.93	1.33	1.37
35	BA	2177	C	C2'-C1'	-5.93	1.46	1.53
35	BA	2459	A	C6-N6	-5.93	1.29	1.33
35	BA	2754	U	N1-C2	-5.93	1.33	1.38
1	AA	691	G	C4'-C3'	-5.93	1.46	1.52
1	AA	1112	C	C4-C5	-5.93	1.38	1.43
1	AA	1371	G	C4'-C3'	-5.93	1.46	1.52
35	BA	124	G	N3-C4	-5.93	1.31	1.35
35	BA	831	G	C8-N7	-5.93	1.27	1.30
35	BA	2126	A	N7-C5	-5.93	1.35	1.39
35	BA	2458	G	N9-C8	-5.93	1.33	1.37
31	B6	15	GLU	CD-OE1	-5.93	1.19	1.25
35	BA	1970	A	P-O5'	-5.93	1.53	1.59
1	AA	655	A	C5-C6	-5.93	1.35	1.41
1	AA	1368	G	C5-C4	-5.93	1.34	1.38
35	BA	37	C	C4-C5	-5.93	1.38	1.43
1	AA	296	U	C2-N3	-5.93	1.33	1.37
1	AA	941	G	C6-O6	5.93	1.29	1.24
1	AA	438	G	N3-C4	-5.93	1.31	1.35
1	AA	746	A	C6-N6	-5.93	1.29	1.33
1	AA	809	G	C6-N1	-5.93	1.35	1.39
1	AA	1145	C	C5'-C4'	5.93	1.58	1.51
35	BA	220	G	C6-N1	-5.93	1.35	1.39
1	AA	78	G	N7-C5	5.92	1.42	1.39
1	AA	491	G	C5-C4	-5.92	1.34	1.38
35	BA	271(Q)	G	P-O5'	-5.92	1.53	1.59
35	BA	860	U	N3-C4	-5.92	1.33	1.38
35	BA	1393	A	C5-C4	-5.92	1.34	1.38
35	BA	2005	A	C8-N7	-5.92	1.27	1.31
35	BA	2203	U	N3-C4	-5.92	1.33	1.38
35	BA	839	U	C2-N3	-5.92	1.33	1.37
35	BA	1587	A	N1-C2	-5.92	1.29	1.34
1	AA	447	G	N3-C4	-5.92	1.31	1.35
1	AA	547	A	N9-C8	-5.92	1.33	1.37
1	AA	814	A	N9-C4	-5.92	1.34	1.37
35	BA	520	G	C6-N1	-5.92	1.35	1.39
35	BA	531	C	P-O5'	-5.92	1.53	1.59
35	BA	2219	G	C4'-C3'	-5.92	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2513	G	C6-N1	-5.92	1.35	1.39
35	BA	570	G	C3'-C2'	-5.92	1.46	1.52
35	BA	893	C	N3-C4	-5.92	1.29	1.33
35	BA	1925	C	N3-C4	-5.92	1.29	1.33
1	AA	329	A	P-O5'	-5.92	1.53	1.59
1	AA	472	A	P-O5'	-5.92	1.53	1.59
1	AA	619	U	N1-C2	-5.92	1.33	1.38
1	AA	621	A	P-O5'	-5.92	1.53	1.59
1	AA	792	A	N1-C2	-5.92	1.29	1.34
35	BA	90	U	P-O5'	5.92	1.65	1.59
35	BA	351	G	P-O5'	-5.92	1.53	1.59
35	BA	1835	G	P-O5'	-5.92	1.53	1.59
1	AA	93	G	N9-C8	-5.92	1.33	1.37
1	AA	1073	U	C2-N3	-5.92	1.33	1.37
35	BA	1851	U	C4-C5	-5.92	1.38	1.43
35	BA	2142	C	N1-C6	-5.92	1.33	1.37
35	BA	2353	G	N3-C4	-5.92	1.31	1.35
1	AA	295	C	C4-C5	-5.92	1.38	1.43
35	BA	739	G	C6-O6	-5.92	1.18	1.24
35	BA	2743	C	C4'-C3'	-5.92	1.46	1.52
1	AA	1124	G	N7-C5	-5.91	1.35	1.39
35	BA	642	G	C5-C4	-5.91	1.34	1.38
35	BA	869	G	C8-N7	5.91	1.34	1.30
35	BA	1885	A	C5-C4	5.91	1.42	1.38
35	BA	2549	G	C2-N3	-5.91	1.28	1.32
1	AA	505	G	C8-N7	-5.91	1.27	1.30
1	AA	953	G	C8-N7	-5.91	1.27	1.30
35	BA	654(K)	C	C4-C5	-5.91	1.38	1.43
35	BA	1560	G	C6-O6	-5.91	1.18	1.24
35	BA	1611	C	N1-C6	-5.91	1.33	1.37
35	BA	1770	G	C5-C6	-5.91	1.36	1.42
35	BA	2830	G	N3-C4	-5.91	1.31	1.35
1	AA	412	A	N9-C4	-5.91	1.34	1.37
1	AA	887	G	C5-C4	-5.91	1.34	1.38
35	BA	89	G	C2'-O2'	-5.91	1.33	1.41
35	BA	684	G	C2-N3	-5.91	1.28	1.32
35	BA	1696	G	P-O5'	-5.91	1.53	1.59
35	BA	1771	C	C5'-C4'	-5.91	1.44	1.51
35	BA	2674	G	N7-C5	-5.91	1.35	1.39
35	BA	1396	U	C2-N3	-5.91	1.33	1.37
35	BA	2134	A	C2'-C1'	-5.91	1.46	1.53
1	AA	571	U	C4-C5	-5.90	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	625	G	C2-N2	5.90	1.40	1.34
1	AA	901	A	C5-C4	-5.90	1.34	1.38
1	AA	1220	G	C2-N3	-5.90	1.28	1.32
22	AV	76	A	C8-N7	-5.90	1.27	1.31
35	BA	2014	A	N9-C4	-5.90	1.34	1.37
35	BA	2052	G	P-O5'	-5.90	1.53	1.59
35	BA	2809	A	C8-N7	-5.90	1.27	1.31
1	AA	375	U	N1-C6	-5.90	1.32	1.38
1	AA	603	U	C2-N3	-5.90	1.33	1.37
35	BA	1822	G	C6-N1	-5.90	1.35	1.39
35	BA	2590	A	C3'-C2'	-5.90	1.46	1.52
1	AA	759	A	C5-C4	-5.90	1.34	1.38
1	AA	816	A	C5-C4	-5.90	1.34	1.38
1	AA	1113	C	C4-C5	-5.90	1.38	1.43
23	AX	12	A	C6-N6	-5.90	1.29	1.33
35	BA	298	G	C2-N3	-5.90	1.28	1.32
35	BA	925	C	C4-C5	-5.90	1.38	1.43
35	BA	940	G	C2-N3	5.90	1.37	1.32
35	BA	1166	C	N3-C4	-5.90	1.29	1.33
35	BA	1834	U	C4-O4	-5.90	1.19	1.23
35	BA	1985	G	C2-N2	-5.90	1.28	1.34
35	BA	2860	A	C6-N6	-5.90	1.29	1.33
36	BB	13	A	C5-C4	-5.90	1.34	1.38
35	BA	275	G	C6-O6	-5.90	1.18	1.24
35	BA	558	G	C6-O6	-5.90	1.18	1.24
1	AA	299	G	C6-N1	-5.89	1.35	1.39
1	AA	700	G	N9-C8	-5.89	1.33	1.37
1	AA	809	G	P-O5'	-5.89	1.53	1.59
1	AA	858	G	N9-C8	-5.89	1.33	1.37
1	AA	1024	G	N7-C5	-5.89	1.35	1.39
22	AV	3	C	C3'-C2'	-5.89	1.46	1.52
35	BA	374	A	N7-C5	-5.89	1.35	1.39
35	BA	910	A	C5'-C4'	-5.89	1.44	1.51
35	BA	1785	A	C6-N1	-5.89	1.31	1.35
35	BA	2125	G	N7-C5	-5.89	1.35	1.39
1	AA	648	A	C5-C6	-5.89	1.35	1.41
1	AA	1090	U	C2-O2	-5.89	1.17	1.22
1	AA	1425	U	P-O5'	-5.89	1.53	1.59
22	AV	36	U	C2-O2	-5.89	1.17	1.22
35	BA	79	G	N1-C2	5.89	1.42	1.37
35	BA	2023	G	N1-C2	-5.89	1.33	1.37
35	BA	2171	A	P-O5'	-5.89	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2635	C	C5-C6	-5.89	1.29	1.34
1	AA	1526	G	C4'-C3'	-5.89	1.46	1.52
35	BA	986	C	N1-C6	-5.89	1.33	1.37
1	AA	816	A	N3-C4	-5.89	1.31	1.34
35	BA	213	A	N7-C5	-5.89	1.35	1.39
35	BA	311	A	C6-N1	-5.89	1.31	1.35
35	BA	317	G	C6-N1	-5.89	1.35	1.39
36	BB	19	G	C6-N1	-5.89	1.35	1.39
1	AA	525	C	C4-C5	-5.89	1.38	1.43
35	BA	1187	G	C4'-C3'	-5.89	1.46	1.52
35	BA	2785	C	C5-C6	-5.89	1.29	1.34
1	AA	418	C	C2-N3	-5.89	1.31	1.35
35	BA	128	C	C2-N3	-5.89	1.31	1.35
35	BA	2163	C	C4-N4	-5.89	1.28	1.33
36	BB	20	C	C2-N3	-5.89	1.31	1.35
35	BA	702	G	C2-N3	-5.88	1.28	1.32
35	BA	1770	G	C2-N3	-5.88	1.28	1.32
35	BA	2483	C	C5-C6	-5.88	1.29	1.34
1	AA	197	A	P-O5'	-5.88	1.53	1.59
1	AA	782	A	C6-N6	-5.88	1.29	1.33
35	BA	654(T)	C	P-O5'	5.88	1.65	1.59
35	BA	801	G	C5-C6	-5.88	1.36	1.42
35	BA	1615	C	C4-N4	-5.88	1.28	1.33
35	BA	2137	C	N3-C4	-5.88	1.29	1.33
1	AA	28	G	N3-C4	-5.88	1.31	1.35
1	AA	261	U	C4'-C3'	-5.88	1.46	1.52
1	AA	741	G	C2-N3	-5.88	1.28	1.32
1	AA	1097	C	C5-C6	-5.88	1.29	1.34
35	BA	271(Y)	U	C4-C5	5.88	1.48	1.43
35	BA	1303	G	C8-N7	-5.88	1.27	1.30
35	BA	1620	G	N9-C8	-5.88	1.33	1.37
35	BA	2187	G	C8-N7	-5.88	1.27	1.30
35	BA	2190	G	C5-C6	-5.88	1.36	1.42
35	BA	2852	G	N3-C4	-5.88	1.31	1.35
1	AA	1160	G	C6-O6	-5.88	1.18	1.24
22	AV	14	A	P-O5'	-5.88	1.53	1.59
35	BA	637	A	C5-C4	-5.88	1.34	1.38
35	BA	1755	A	C6-N6	-5.88	1.29	1.33
35	BA	2558	C	N3-C4	-5.88	1.29	1.33
1	AA	198	G	N9-C8	-5.87	1.33	1.37
1	AA	755	G	C2-N3	-5.87	1.28	1.32
1	AA	1100	C	C4-C5	-5.87	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1175	G	O3'-P	-5.87	1.54	1.61
35	BA	882	G	N9-C8	-5.87	1.33	1.37
35	BA	1273	U	O3'-P	-5.87	1.54	1.61
35	BA	2622	C	C4-C5	-5.87	1.38	1.43
36	BB	64	C	C4-C5	-5.87	1.38	1.43
1	AA	430	A	N3-C4	-5.87	1.31	1.34
1	AA	829	G	C5-C4	-5.87	1.34	1.38
35	BA	13	A	O3'-P	-5.87	1.54	1.61
35	BA	461	C	N3-C4	-5.87	1.29	1.33
35	BA	1214	A	N3-C4	-5.87	1.31	1.34
35	BA	1983	C	C4-C5	-5.87	1.38	1.43
1	AA	1008	C	C5-C6	-5.87	1.29	1.34
35	BA	1080	C	C2-O2	-5.87	1.19	1.24
35	BA	1290	C	C4-N4	-5.87	1.28	1.33
35	BA	1574	C	N1-C6	5.87	1.40	1.37
35	BA	2362	G	C2'-C1'	-5.87	1.46	1.53
35	BA	2659	G	N3-C4	-5.87	1.31	1.35
1	AA	176	C	P-O5'	-5.87	1.53	1.59
1	AA	689	C	C5-C6	5.87	1.39	1.34
35	BA	17	G	N7-C5	-5.87	1.35	1.39
35	BA	1259	G	C5-C4	-5.87	1.34	1.38
1	AA	905	U	C2-O2	-5.86	1.17	1.22
1	AA	967	C	C3'-C2'	-5.86	1.46	1.52
35	BA	395	U	C4-C5	-5.86	1.38	1.43
35	BA	2063	C	N1-C6	5.86	1.40	1.37
35	BA	2432	A	N9-C8	-5.86	1.33	1.37
36	BB	48	A	C6-N1	-5.86	1.31	1.35
1	AA	592	G	C2-N2	-5.86	1.28	1.34
35	BA	1445	A	C2-N3	-5.86	1.28	1.33
1	AA	286	G	C5-C6	-5.86	1.36	1.42
35	BA	705	A	N3-C4	5.86	1.38	1.34
35	BA	1359	A	C5-C6	-5.86	1.35	1.41
35	BA	1378	A	C5-C4	-5.86	1.34	1.38
35	BA	1558	A	N9-C8	-5.86	1.33	1.37
1	AA	902	G	C2-N3	-5.86	1.28	1.32
1	AA	1424	C	C2'-C1'	-5.86	1.47	1.53
22	AV	11	A	P-O5'	-5.86	1.53	1.59
35	BA	1221(A)	C	C2'-C1'	-5.86	1.47	1.53
35	BA	1524	G	N7-C5	-5.86	1.35	1.39
35	BA	1699	G	C2-N3	-5.86	1.28	1.32
1	AA	1153	C	C3'-O3'	-5.86	1.33	1.42
1	AA	1360	A	C6-N1	-5.86	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1778	U	C2'-C1'	5.86	1.59	1.53
35	BA	2341	G	C6-N1	-5.86	1.35	1.39
1	AA	455	C	C4-C5	-5.86	1.38	1.43
1	AA	535	A	C5-C6	-5.86	1.35	1.41
1	AA	1030(A)	G	N9-C8	5.86	1.42	1.37
1	AA	1328	C	C2-O2	-5.86	1.19	1.24
1	AA	1372	U	C4-O4	-5.86	1.19	1.23
35	BA	1637	A	C3'-C2'	-5.86	1.46	1.52
35	BA	97	C	N1-C6	-5.85	1.33	1.37
35	BA	132	G	P-O5'	-5.85	1.53	1.59
35	BA	1331	A	C2-N3	-5.85	1.28	1.33
35	BA	2355	C	C4-C5	-5.85	1.38	1.43
35	BA	2429	G	C5-C6	-5.85	1.36	1.42
35	BA	2693	A	C6-N1	-5.85	1.31	1.35
35	BA	2830	G	C6-N1	-5.85	1.35	1.39
36	BB	47	C	P-O5'	-5.85	1.53	1.59
36	BB	89	G	P-O5'	-5.85	1.53	1.59
35	BA	283	A	C5-C4	-5.85	1.34	1.38
35	BA	1191	G	C4'-C3'	-5.85	1.46	1.52
35	BA	1344	G	P-O5'	-5.85	1.53	1.59
35	BA	1367	A	C4'-C3'	-5.85	1.46	1.52
35	BA	2388	A	C5-C4	-5.85	1.34	1.38
35	BA	2413	G	C4'-C3'	-5.85	1.46	1.52
35	BA	1403	C	N3-C4	-5.85	1.29	1.33
35	BA	1677	A	C6-N6	-5.85	1.29	1.33
35	BA	1908	C	C4-C5	-5.85	1.38	1.43
35	BA	2141	G	C2'-C1'	-5.85	1.47	1.53
1	AA	792	A	C6-N1	-5.85	1.31	1.35
35	BA	271(V)	G	N9-C8	-5.85	1.33	1.37
35	BA	363(A)	A	C6-N1	-5.85	1.31	1.35
35	BA	1642	G	C2-N2	-5.85	1.28	1.34
35	BA	1146	C	N1-C6	5.84	1.40	1.37
1	AA	158	G	C5-C4	-5.84	1.34	1.38
1	AA	189(G)	G	P-O5'	-5.84	1.53	1.59
1	AA	622	A	C6-N6	-5.84	1.29	1.33
22	AV	71	C	C4-C5	-5.84	1.38	1.43
35	BA	502	A	P-O5'	-5.84	1.53	1.59
35	BA	723	G	C5-C4	-5.84	1.34	1.38
35	BA	1933	G	N7-C5	5.84	1.42	1.39
1	AA	438	G	N1-C2	-5.84	1.33	1.37
1	AA	775	G	C2-N2	-5.84	1.28	1.34
1	AA	899	C	N1-C2	-5.84	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1059	C	N1-C6	-5.84	1.33	1.37
35	BA	420	C	N1-C6	-5.84	1.33	1.37
35	BA	1834	U	O3'-P	-5.84	1.54	1.61
35	BA	2478	A	N1-C2	-5.84	1.29	1.34
36	BB	115	G	C6-N1	-5.84	1.35	1.39
1	AA	104	G	N7-C5	-5.84	1.35	1.39
1	AA	257	G	N7-C5	-5.84	1.35	1.39
1	AA	834	C	C4'-C3'	-5.84	1.46	1.52
1	AA	1425	U	C4-O4	-5.84	1.19	1.23
35	BA	568	U	C2-O2	-5.84	1.17	1.22
35	BA	608	A	C5'-C4'	-5.84	1.44	1.51
35	BA	831	G	N9-C8	-5.84	1.33	1.37
35	BA	1242	A	C2-N3	-5.84	1.28	1.33
35	BA	1618	A	C8-N7	-5.84	1.27	1.31
35	BA	1842	G	N3-C4	-5.84	1.31	1.35
35	BA	2020	A	N7-C5	-5.84	1.35	1.39
35	BA	2104	G	C2-N3	-5.84	1.28	1.32
35	BA	2886	G	N7-C5	-5.84	1.35	1.39
1	AA	131	C	C2-N3	-5.84	1.31	1.35
1	AA	789	U	N1-C6	-5.84	1.32	1.38
35	BA	873	G	C5-C4	-5.84	1.34	1.38
35	BA	1014	U	N1-C6	-5.84	1.32	1.38
1	AA	293	G	N9-C8	5.84	1.42	1.37
35	BA	802	A	C4'-C3'	-5.84	1.46	1.52
35	BA	1109	C	C4'-C3'	-5.84	1.46	1.52
35	BA	1695	G	C6-N1	-5.84	1.35	1.39
36	BB	15	A	N7-C5	5.84	1.42	1.39
1	AA	1029	C	C5-C6	5.83	1.39	1.34
1	AA	1440	C	N1-C6	-5.83	1.33	1.37
35	BA	938	G	C6-O6	-5.83	1.18	1.24
35	BA	2284	C	C5-C6	-5.83	1.29	1.34
1	AA	808	C	C4-C5	-5.83	1.38	1.43
35	BA	207	A	N7-C5	-5.83	1.35	1.39
35	BA	360	G	N7-C5	-5.83	1.35	1.39
35	BA	1565	C	C4'-C3'	-5.83	1.46	1.52
35	BA	1610	A	C5-C4	-5.83	1.34	1.38
35	BA	1842	G	N7-C5	-5.83	1.35	1.39
1	AA	183	G	N9-C4	-5.83	1.33	1.38
1	AA	385	C	N3-C4	-5.83	1.29	1.33
35	BA	335	C	N3-C4	-5.83	1.29	1.33
1	AA	598	U	C3'-C2'	-5.83	1.46	1.52
1	AA	1091	U	C4'-C3'	-5.83	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	133	C	C5-C6	-5.83	1.29	1.34
35	BA	1338	G	C5-C6	-5.83	1.36	1.42
35	BA	1605	C	P-O5'	-5.83	1.53	1.59
35	BA	1659	U	N1-C2	-5.83	1.33	1.38
35	BA	2734	A	C6-N1	-5.83	1.31	1.35
1	AA	263	A	C5-C6	-5.83	1.35	1.41
1	AA	735	C	C5'-C4'	-5.83	1.44	1.51
35	BA	62	C	C4-N4	-5.83	1.28	1.33
35	BA	1259	G	N7-C5	-5.83	1.35	1.39
1	AA	102	G	N9-C4	-5.83	1.33	1.38
1	AA	700	G	C5-C4	-5.83	1.34	1.38
1	AA	1525	G	C2-N2	-5.83	1.28	1.34
35	BA	30	G	N9-C4	-5.83	1.33	1.38
35	BA	1332	G	C8-N7	-5.83	1.27	1.30
35	BA	1763	G	C8-N7	-5.83	1.27	1.30
35	BA	1973	G	C8-N7	-5.83	1.27	1.30
35	BA	2865	U	C5'-C4'	5.83	1.58	1.51
1	AA	1065	U	C2-N3	-5.83	1.33	1.37
1	AA	1194	U	C4'-C3'	-5.83	1.46	1.52
35	BA	654(V)	A	C4'-C3'	-5.83	1.46	1.52
35	BA	1259	G	C2-N3	-5.83	1.28	1.32
35	BA	1838	C	C5'-C4'	-5.83	1.44	1.51
1	AA	1070	U	C4-O4	-5.82	1.19	1.23
22	AV	11	A	N1-C2	-5.82	1.29	1.34
35	BA	712	G	C4'-C3'	-5.82	1.46	1.52
35	BA	1296	G	C5-C6	-5.82	1.36	1.42
1	AA	14	U	C5-C6	-5.82	1.28	1.34
1	AA	168	G	N7-C5	-5.82	1.35	1.39
1	AA	714	G	C5-C4	-5.82	1.34	1.38
35	BA	92	A	N7-C5	-5.82	1.35	1.39
35	BA	620	G	N7-C5	-5.82	1.35	1.39
36	BB	49	C	N1-C6	-5.82	1.33	1.37
36	BB	117	G	N1-C2	-5.82	1.33	1.37
1	AA	481	G	C8-N7	-5.82	1.27	1.30
1	AA	870	U	C2-N3	-5.82	1.33	1.37
1	AA	933	G	C6-O6	-5.82	1.19	1.24
22	AV	42	G	C8-N7	-5.82	1.27	1.30
35	BA	1997	G	C8-N7	-5.82	1.27	1.30
35	BA	2257	U	N1-C6	-5.82	1.32	1.38
1	AA	262	A	C6-N6	-5.82	1.29	1.33
1	AA	309	G	C5-C6	-5.82	1.36	1.42
1	AA	1044	A	C4'-C3'	-5.82	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	105	C	C4'-C3'	-5.82	1.46	1.52
1	AA	7	G	N3-C4	-5.82	1.31	1.35
1	AA	19	C	P-O5'	-5.82	1.53	1.59
1	AA	685	G	N3-C4	-5.82	1.31	1.35
1	AA	1061	G	N3-C4	-5.82	1.31	1.35
1	AA	1078	U	N1-C6	-5.82	1.32	1.38
35	BA	1353	A	N9-C8	-5.82	1.33	1.37
35	BA	2072	G	N3-C4	-5.82	1.31	1.35
1	AA	817	C	N1-C2	-5.82	1.34	1.40
1	AA	1070	U	C2-N3	-5.82	1.33	1.37
35	BA	146	G	C2-N3	-5.82	1.28	1.32
35	BA	527	C	C2-N3	-5.82	1.31	1.35
35	BA	1179	C	N1-C6	-5.82	1.33	1.37
35	BA	1623	G	C2-N2	-5.82	1.28	1.34
1	AA	767	A	C6-N1	-5.81	1.31	1.35
1	AA	913	A	C6-N6	-5.81	1.29	1.33
1	AA	1030(D)	A	C2-N3	-5.81	1.28	1.33
35	BA	119	A	C2-N3	-5.81	1.28	1.33
35	BA	1810	A	C6-N1	-5.81	1.31	1.35
35	BA	2114	A	C6-N1	-5.81	1.31	1.35
35	BA	2600	A	C6-N1	-5.81	1.31	1.35
1	AA	1067	A	C8-N7	-5.81	1.27	1.31
1	AA	1305	G	N9-C4	-5.81	1.33	1.38
35	BA	898	C	C2-N3	5.81	1.40	1.35
35	BA	1154	G	C6-O6	-5.81	1.19	1.24
35	BA	1669	A	C8-N7	-5.81	1.27	1.31
36	BB	118	G	N9-C4	-5.81	1.33	1.38
35	BA	112	U	O3'-P	-5.81	1.54	1.61
1	AA	233	C	C4'-C3'	-5.81	1.46	1.52
1	AA	505	G	N7-C5	-5.81	1.35	1.39
1	AA	1129	C	N1-C6	-5.81	1.33	1.37
1	AA	1161	C	N3-C4	-5.81	1.29	1.33
1	AA	1410	G	N7-C5	-5.81	1.35	1.39
35	BA	503	A	N9-C4	-5.81	1.34	1.37
35	BA	529	A	C6-N6	-5.81	1.29	1.33
35	BA	1044	G	N7-C5	-5.81	1.35	1.39
35	BA	1444	G	C6-N1	-5.81	1.35	1.39
35	BA	2070	G	N7-C5	-5.81	1.35	1.39
35	BA	2799	C	C4'-C3'	-5.81	1.46	1.52
35	BA	2874	C	C5-C6	-5.81	1.29	1.34
1	AA	338	A	N9-C8	-5.81	1.33	1.37
1	AA	391	G	C5-C6	-5.81	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	461	A	C6-N1	-5.81	1.31	1.35
1	AA	676	A	C8-N7	-5.81	1.27	1.31
1	AA	773	G	N3-C4	-5.81	1.31	1.35
1	AA	1521	G	N9-C8	-5.81	1.33	1.37
22	AV	9	G	C8-N7	-5.81	1.27	1.30
35	BA	9	U	C4-C5	-5.81	1.38	1.43
35	BA	1889	A	N3-C4	-5.81	1.31	1.34
35	BA	2443	C	C4-N4	-5.81	1.28	1.33
35	BA	2529	G	N3-C4	-5.81	1.31	1.35
36	BB	24	G	C3'-C2'	-5.81	1.46	1.52
1	AA	1373	G	C4'-C3'	-5.81	1.46	1.52
35	BA	696	G	C5-C4	-5.81	1.34	1.38
35	BA	887	A	C4'-C3'	-5.81	1.46	1.52
1	AA	545	C	N1-C6	-5.80	1.33	1.37
1	AA	839	U	C2-N3	-5.80	1.33	1.37
35	BA	271(S)	G	N9-C4	-5.80	1.33	1.38
35	BA	2101	G	C6-N1	-5.80	1.35	1.39
35	BA	2312	U	C2-N3	-5.80	1.33	1.37
35	BA	2777	G	N9-C4	-5.80	1.33	1.38
1	AA	360	A	C6-N1	-5.80	1.31	1.35
1	AA	809	G	N1-C2	-5.80	1.33	1.37
1	AA	492	G	N3-C4	-5.80	1.31	1.35
1	AA	765	G	C6-O6	-5.80	1.19	1.24
35	BA	950	G	C8-N7	-5.80	1.27	1.30
35	BA	1789	A	C8-N7	-5.80	1.27	1.31
35	BA	1842	G	P-O5'	-5.80	1.53	1.59
35	BA	123	G	C2-N3	-5.80	1.28	1.32
35	BA	147	U	C5-C6	-5.80	1.28	1.34
35	BA	1563	G	C2-N2	-5.80	1.28	1.34
35	BA	2381	C	C4'-O4'	-5.80	1.38	1.45
35	BA	2846	G	C2-N3	-5.80	1.28	1.32
35	BA	1790	C	N3-C4	-5.80	1.29	1.33
35	BA	2789	C	N3-C4	-5.80	1.29	1.33
1	AA	929	G	N3-C4	-5.80	1.31	1.35
35	BA	953	A	C3'-O3'	-5.80	1.34	1.42
35	BA	955	C	C5-C6	-5.80	1.29	1.34
35	BA	1073	A	N9-C8	5.80	1.42	1.37
35	BA	1282	U	C4'-C3'	-5.80	1.46	1.52
35	BA	1322	A	C6-N1	-5.80	1.31	1.35
35	BA	1567	A	C6-N1	5.80	1.39	1.35
35	BA	2268	A	C5-C4	-5.80	1.34	1.38
1	AA	577	G	C5-C4	-5.79	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1439	A	C6-N6	-5.79	1.29	1.33
35	BA	1575	C	C2-N3	-5.79	1.31	1.35
35	BA	1910	G	C5-C4	-5.79	1.34	1.38
35	BA	1986	A	C5-C6	-5.79	1.35	1.41
1	AA	882	C	N1-C2	-5.79	1.34	1.40
1	AA	919	A	N3-C4	-5.79	1.31	1.34
35	BA	917	A	C1'-N9	-5.79	1.38	1.46
35	BA	1326	U	C2-N3	-5.79	1.33	1.37
35	BA	1981	A	C5'-C4'	-5.79	1.44	1.51
35	BA	2389	G	C5'-C4'	-5.79	1.44	1.51
35	BA	2410	G	C6-N1	-5.79	1.35	1.39
35	BA	2503	A	N3-C4	-5.79	1.31	1.34
35	BA	2718	G	N9-C4	-5.79	1.33	1.38
1	AA	1160	G	N7-C5	-5.79	1.35	1.39
1	AA	1238	A	N7-C5	-5.79	1.35	1.39
1	AA	1401	G	N3-C4	-5.79	1.31	1.35
1	AA	1419	G	N9-C8	-5.79	1.33	1.37
35	BA	126	A	C4'-C3'	-5.79	1.46	1.52
35	BA	1212	G	C2-N3	-5.79	1.28	1.32
35	BA	2385	C	C4'-C3'	-5.79	1.46	1.52
35	BA	2643	G	C4'-O4'	-5.79	1.38	1.45
35	BA	2648	C	P-O5'	-5.79	1.53	1.59
35	BA	2867	G	C2-N3	-5.79	1.28	1.32
1	AA	1058	G	C5-C6	-5.79	1.36	1.42
35	BA	363(D)	G	N9-C4	-5.79	1.33	1.38
35	BA	1332	G	N9-C4	-5.79	1.33	1.38
35	BA	2341	G	N9-C4	-5.79	1.33	1.38
1	AA	491	G	N1-C2	-5.79	1.33	1.37
1	AA	865	A	N1-C2	-5.79	1.29	1.34
35	BA	1572	A	N3-C4	-5.79	1.31	1.34
35	BA	1783	A	N3-C4	-5.79	1.31	1.34
35	BA	1928	A	N9-C8	-5.79	1.33	1.37
35	BA	1100	C	N3-C4	-5.79	1.29	1.33
35	BA	1613	G	C8-N7	-5.79	1.27	1.30
1	AA	345	C	N1-C6	-5.79	1.33	1.37
1	AA	539	A	N7-C5	-5.79	1.35	1.39
1	AA	852	G	N7-C5	-5.79	1.35	1.39
1	AA	1009	G	N7-C5	-5.79	1.35	1.39
22	AV	43	A	N7-C5	-5.79	1.35	1.39
35	BA	84	A	N7-C5	5.79	1.42	1.39
35	BA	682	G	C2-N3	-5.79	1.28	1.32
35	BA	751	A	N7-C5	-5.79	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1693	U	N3-C4	-5.79	1.33	1.38
1	AA	1346	A	C8-N7	-5.78	1.27	1.31
22	AV	58	A	N9-C8	-5.78	1.33	1.37
35	BA	619	G	C4'-C3'	-5.78	1.46	1.52
35	BA	1838	C	N3-C4	-5.78	1.29	1.33
36	BB	50	G	C4'-C3'	-5.78	1.46	1.52
1	AA	824	C	C2-N3	-5.78	1.31	1.35
1	AA	854	G	N1-C2	-5.78	1.33	1.37
35	BA	1047	G	C2-N3	-5.78	1.28	1.32
35	BA	1169	G	N1-C2	-5.78	1.33	1.37
35	BA	2556	C	C2-N3	-5.78	1.31	1.35
35	BA	66	C	C4-C5	-5.78	1.38	1.43
35	BA	120	U	C5'-C4'	-5.78	1.44	1.51
35	BA	1270	C	C4-C5	-5.78	1.38	1.43
35	BA	2847	U	C5-C6	-5.78	1.28	1.34
1	AA	174	C	C4-N4	-5.78	1.28	1.33
1	AA	552	U	C2-O2	-5.78	1.17	1.22
1	AA	622	A	N9-C8	5.78	1.42	1.37
1	AA	1221	G	P-OP2	-5.78	1.39	1.49
35	BA	127	A	N7-C5	-5.78	1.35	1.39
35	BA	704	G	N7-C5	-5.78	1.35	1.39
35	BA	1031	G	C3'-C2'	-5.78	1.46	1.52
35	BA	1714	G	N7-C5	-5.78	1.35	1.39
35	BA	1785	A	C5-C6	-5.78	1.35	1.41
1	AA	473	G	C2-N3	-5.78	1.28	1.32
1	AA	949	A	N3-C4	-5.78	1.31	1.34
1	AA	1087	G	C4'-C3'	-5.78	1.46	1.52
1	AA	1422	G	N9-C4	-5.78	1.33	1.38
1	AA	1513	A	C3'-O3'	-5.78	1.34	1.42
35	BA	38	A	N3-C4	-5.78	1.31	1.34
35	BA	67	U	C4-O4	-5.78	1.19	1.23
35	BA	72	U	C4-O4	-5.78	1.19	1.23
35	BA	227	A	N9-C8	-5.78	1.33	1.37
35	BA	455	C	P-O5'	-5.78	1.53	1.59
35	BA	1280	G	P-O5'	-5.78	1.53	1.59
35	BA	1635	G	C2-N3	-5.78	1.28	1.32
35	BA	2245	U	P-O5'	-5.78	1.53	1.59
35	BA	2259	G	N9-C8	5.78	1.41	1.37
35	BA	2294	C	C4'-C3'	-5.78	1.46	1.52
35	BA	2376	A	C6-N6	-5.78	1.29	1.33
35	BA	2771	C	C2-O2	-5.78	1.19	1.24
22	AV	11	A	O4'-C1'	-5.77	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	60	G	C5-C4	-5.77	1.34	1.38
1	AA	1400	C	C4-N4	-5.77	1.28	1.33
1	AA	172	A	C2-N3	-5.77	1.28	1.33
1	AA	1034	G	C5-C6	-5.77	1.36	1.42
1	AA	1312	G	N9-C4	-5.77	1.33	1.38
35	BA	1530	C	C3'-C2'	-5.77	1.46	1.52
35	BA	2195	C	N3-C4	-5.77	1.29	1.33
35	BA	2231	C	C2-N3	-5.77	1.31	1.35
35	BA	2237	G	N9-C8	-5.77	1.33	1.37
35	BA	2661	G	N9-C8	-5.77	1.33	1.37
1	AA	338	A	C6-N1	-5.77	1.31	1.35
35	BA	1452	A	N9-C8	-5.77	1.33	1.37
35	BA	2132	U	C4-O4	5.77	1.28	1.23
1	AA	21	G	C6-N1	-5.77	1.35	1.39
1	AA	129(A)	G	C8-N7	-5.77	1.27	1.30
1	AA	373	A	C8-N7	-5.77	1.27	1.31
1	AA	625	G	C8-N7	-5.77	1.27	1.30
1	AA	633	G	P-O5'	-5.77	1.53	1.59
1	AA	662	G	C8-N7	-5.77	1.27	1.30
1	AA	1064	G	C2-N2	-5.77	1.28	1.34
35	BA	514	A	N1-C2	-5.77	1.29	1.34
35	BA	599	G	P-O5'	-5.77	1.53	1.59
35	BA	1055	G	C4'-C3'	-5.77	1.46	1.52
35	BA	1103	A	C4'-C3'	-5.77	1.46	1.52
35	BA	1510	G	C6-N1	-5.77	1.35	1.39
35	BA	1525	G	P-O5'	-5.77	1.53	1.59
35	BA	1891	G	C2-N2	-5.77	1.28	1.34
35	BA	2426	A	C8-N7	-5.77	1.27	1.31
1	AA	413	G	N7-C5	-5.77	1.35	1.39
1	AA	1397	C	N1-C6	-5.77	1.33	1.37
35	BA	1928	A	N7-C5	-5.77	1.35	1.39
35	BA	2336	A	N7-C5	-5.77	1.35	1.39
1	AA	230	G	C6-O6	-5.76	1.19	1.24
1	AA	617	G	N1-C2	-5.76	1.33	1.37
1	AA	1129	C	N3-C4	-5.76	1.29	1.33
23	AX	21	C	C2'-O2'	-5.76	1.34	1.41
35	BA	176	G	N9-C8	-5.76	1.33	1.37
35	BA	982	C	N3-C4	-5.76	1.29	1.33
35	BA	1371	G	N1-C2	-5.76	1.33	1.37
35	BA	1451	C	N3-C4	-5.76	1.29	1.33
35	BA	1812	A	C6-N1	-5.76	1.31	1.35
36	BB	67	G	N1-C2	-5.76	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	498	U	C2-O2	-5.76	1.17	1.22
1	AA	1358	U	C4-C5	-5.76	1.38	1.43
1	AA	1381	U	N1-C2	-5.76	1.33	1.38
1	AA	147	G	C2-N3	-5.76	1.28	1.32
1	AA	1285	A	P-O5'	-5.76	1.53	1.59
35	BA	1302	A	C6-N6	-5.76	1.29	1.33
35	BA	1523	U	O3'-P	-5.76	1.54	1.61
35	BA	1541	G	C2-N3	-5.76	1.28	1.32
35	BA	1603	A	N7-C5	5.76	1.42	1.39
35	BA	1690	A	C6-N6	-5.76	1.29	1.33
35	BA	1971	A	C8-N7	-5.76	1.27	1.31
1	AA	268	C	N1-C6	-5.76	1.33	1.37
1	AA	554	C	C5'-C4'	-5.76	1.44	1.51
35	BA	1287	A	N9-C4	-5.76	1.34	1.37
35	BA	1799	G	N7-C5	-5.76	1.35	1.39
35	BA	1843	C	N1-C6	-5.76	1.33	1.37
1	AA	839	U	N1-C6	-5.76	1.32	1.38
35	BA	224	G	C4'-C3'	-5.76	1.46	1.52
35	BA	262	A	C5-C6	-5.76	1.35	1.41
35	BA	1227	G	C5-C4	-5.76	1.34	1.38
1	AA	110	C	C2-O2	-5.76	1.19	1.24
1	AA	965	A	N9-C8	-5.76	1.33	1.37
1	AA	1105	A	C6-N6	-5.76	1.29	1.33
35	BA	97	C	C4'-O4'	-5.76	1.38	1.45
35	BA	196	A	N9-C8	-5.76	1.33	1.37
35	BA	1137	G	N1-C2	-5.76	1.33	1.37
35	BA	1318	C	N1-C6	5.76	1.40	1.37
35	BA	1564	C	C2'-C1'	-5.76	1.47	1.53
35	BA	1662	C	C2-O2	-5.76	1.19	1.24
35	BA	2324	C	C2-N3	-5.76	1.31	1.35
1	AA	516	U	C4-C5	-5.75	1.38	1.43
1	AA	758	G	C4'-C3'	-5.75	1.46	1.52
35	BA	543	C	C4'-O4'	-5.75	1.38	1.45
35	BA	1026	U	P-O5'	-5.75	1.53	1.59
35	BA	2891	G	C8-N7	-5.75	1.27	1.30
1	AA	1030	C	N3-C4	-5.75	1.29	1.33
1	AA	1204	A	C5-C4	-5.75	1.34	1.38
1	AA	1218	C	N3-C4	-5.75	1.29	1.33
1	AA	1230	C	N3-C4	-5.75	1.29	1.33
35	BA	34	C	N3-C4	-5.75	1.29	1.33
35	BA	1005	C	C2'-C1'	-5.75	1.47	1.53
35	BA	1926	U	C2'-C1'	-5.75	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	41	G	N1-C2	-5.75	1.33	1.37
1	AA	939	G	C2-N3	-5.75	1.28	1.32
1	AA	1334	G	C6-N1	5.75	1.43	1.39
1	AA	921	U	C4-O4	-5.75	1.19	1.23
35	BA	2534	A	C8-N7	-5.75	1.27	1.31
1	AA	712	A	C2-N3	-5.75	1.28	1.33
1	AA	835	U	N3-C4	-5.75	1.33	1.38
35	BA	406	G	C4'-C3'	-5.75	1.46	1.52
35	BA	761	A	C6-N1	-5.75	1.31	1.35
35	BA	1154	G	N9-C8	-5.75	1.33	1.37
35	BA	1416	G	C4'-O4'	-5.75	1.38	1.45
35	BA	2383	G	C4'-C3'	-5.75	1.46	1.52
35	BA	2472	G	N9-C8	-5.75	1.33	1.37
1	AA	11	G	C6-O6	-5.75	1.19	1.24
1	AA	281	G	N1-C2	-5.75	1.33	1.37
1	AA	874	G	C8-N7	5.75	1.34	1.30
1	AA	1080	A	C8-N7	5.75	1.35	1.31
35	BA	27	G	N1-C2	-5.75	1.33	1.37
35	BA	592	G	C8-N7	5.75	1.34	1.30
35	BA	1630	G	C5-C4	-5.75	1.34	1.38
35	BA	2619	C	C4-N4	-5.75	1.28	1.33
35	BA	2842	G	C5-C6	-5.75	1.36	1.42
1	AA	1237	C	C2-O2	5.75	1.29	1.24
35	BA	1114	G	P-O5'	-5.75	1.54	1.59
1	AA	225	C	C4-N4	-5.74	1.28	1.33
1	AA	586	C	C4-C5	-5.74	1.38	1.43
24	AY	391	GLY	N-CA	-5.74	1.37	1.46
35	BA	1158	C	O3'-P	-5.74	1.54	1.61
35	BA	2340	G	N7-C5	5.74	1.42	1.39
1	AA	115	G	N3-C4	-5.74	1.31	1.35
1	AA	733	A	N7-C5	-5.74	1.35	1.39
1	AA	1474	G	N3-C4	-5.74	1.31	1.35
35	BA	543	C	C2'-O2'	-5.74	1.34	1.41
35	BA	604	G	C5-C4	-5.74	1.34	1.38
35	BA	1977	A	N9-C8	-5.74	1.33	1.37
1	AA	931	C	N1-C6	-5.74	1.33	1.37
1	AA	981	U	C2-N3	-5.74	1.33	1.37
1	AA	1213	A	C8-N7	5.74	1.35	1.31
35	BA	2876	G	C6-O6	-5.74	1.19	1.24
1	AA	194	C	N3-C4	-5.74	1.29	1.33
1	AA	245	C	N3-C4	-5.74	1.29	1.33
1	AA	1339	A	C8-N7	-5.74	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	595	C	N3-C4	-5.74	1.29	1.33
35	BA	964	C	N3-C4	-5.74	1.29	1.33
35	BA	1430	C	C5-C6	-5.74	1.29	1.34
35	BA	2257	U	P-O5'	-5.74	1.54	1.59
35	BA	2715	C	C4-N4	-5.74	1.28	1.33
35	BA	2870	C	N3-C4	-5.74	1.29	1.33
36	BB	11	C	O3'-P	-5.74	1.54	1.61
36	BB	69	G	N7-C5	5.74	1.42	1.39
1	AA	278	G	C5-C4	-5.74	1.34	1.38
1	AA	799	G	N1-C2	-5.74	1.33	1.37
1	AA	1046	A	N9-C8	-5.74	1.33	1.37
3	AC	167	TRP	CB-CG	-5.74	1.40	1.50
35	BA	1721	G	C2-N3	-5.74	1.28	1.32
35	BA	2227	A	C3'-C2'	-5.74	1.46	1.52
35	BA	2770	G	C5-C4	-5.74	1.34	1.38
1	AA	166	G	P-O5'	-5.74	1.54	1.59
35	BA	785	G	C8-N7	-5.74	1.27	1.30
35	BA	2509	G	N7-C5	-5.74	1.35	1.39
1	AA	408	A	N9-C8	-5.73	1.33	1.37
1	AA	1003	G	N1-C2	-5.73	1.33	1.37
22	AV	46	G	N1-C2	-5.73	1.33	1.37
35	BA	861	A	C6-N1	-5.73	1.31	1.35
35	BA	1028	A	N1-C2	-5.73	1.29	1.34
35	BA	1208	C	C5-C6	-5.73	1.29	1.34
35	BA	1664	A	N1-C2	-5.73	1.29	1.34
35	BA	1992	G	N9-C4	-5.73	1.33	1.38
35	BA	2840	C	C2-O2	-5.73	1.19	1.24
42	BH	18	GLU	CD-OE1	-5.73	1.19	1.25
1	AA	1053	G	C6-N1	-5.73	1.35	1.39
1	AA	1138	G	C5-C4	-5.73	1.34	1.38
35	BA	386	G	O4'-C1'	-5.73	1.34	1.41
35	BA	956	G	C6-N1	5.73	1.43	1.39
35	BA	966	G	N3-C4	-5.73	1.31	1.35
35	BA	1209	G	N3-C4	-5.73	1.31	1.35
35	BA	2046	G	C6-N1	-5.73	1.35	1.39
1	AA	305	G	N7-C5	-5.73	1.35	1.39
35	BA	428	A	N7-C5	-5.73	1.35	1.39
1	AA	631	G	C8-N7	-5.73	1.27	1.30
1	AA	725	G	C8-N7	-5.73	1.27	1.30
22	AV	21	A	C2-N3	-5.73	1.28	1.33
35	BA	210	C	C4'-C3'	-5.73	1.46	1.52
35	BA	1163	G	C4'-C3'	-5.73	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1185	C	C5-C6	-5.73	1.29	1.34
35	BA	1826	G	N9-C8	-5.73	1.33	1.37
35	BA	1930	G	C8-N7	-5.73	1.27	1.30
1	AA	530	G	P-O5'	-5.73	1.54	1.59
1	AA	784	C	C5-C6	5.73	1.39	1.34
1	AA	538	G	C5'-C4'	-5.72	1.44	1.51
35	BA	2595	G	C4'-O4'	-5.72	1.38	1.45
42	BH	116	GLU	CD-OE2	-5.72	1.19	1.25
1	AA	1050	G	N7-C5	-5.72	1.35	1.39
1	AA	1233	G	C6-O6	-5.72	1.19	1.24
35	BA	1045	A	C2-N3	-5.72	1.28	1.33
35	BA	1143	A	N7-C5	-5.72	1.35	1.39
35	BA	1266	G	N9-C8	-5.72	1.33	1.37
35	BA	1422	G	C8-N7	-5.72	1.27	1.30
35	BA	1620	G	N7-C5	-5.72	1.35	1.39
35	BA	1643	G	N7-C5	-5.72	1.35	1.39
35	BA	2051	A	C5-C4	-5.72	1.34	1.38
35	BA	2166	G	N9-C8	-5.72	1.33	1.37
35	BA	2727	G	N9-C8	-5.72	1.33	1.37
35	BA	2782	G	N9-C8	-5.72	1.33	1.37
36	BB	38	C	O4'-C1'	-5.72	1.34	1.41
1	AA	1074	G	C6-O6	5.72	1.29	1.24
1	AA	446	G	C4'-C3'	-5.72	1.46	1.52
24	AY	364	GLU	CD-OE1	-5.72	1.19	1.25
35	BA	741	G	N3-C4	-5.72	1.31	1.35
35	BA	1753	G	N9-C4	-5.72	1.33	1.38
35	BA	1950	G	N7-C5	5.72	1.42	1.39
35	BA	2588	G	C6-N1	-5.72	1.35	1.39
36	BB	103	G	C6-N1	-5.72	1.35	1.39
42	BH	16	SER	CB-OG	-5.72	1.34	1.42
1	AA	1497	G	N1-C2	-5.72	1.33	1.37
35	BA	1452	A	N3-C4	-5.72	1.31	1.34
1	AA	790	A	C8-N7	-5.72	1.27	1.31
1	AA	802	A	C8-N7	-5.72	1.27	1.31
35	BA	553	G	O3'-P	-5.72	1.54	1.61
35	BA	819	A	C6-N6	-5.72	1.29	1.33
35	BA	949	C	N3-C4	-5.72	1.29	1.33
35	BA	1544	A	C5-C4	-5.72	1.34	1.38
35	BA	2072	G	C2-N3	-5.72	1.28	1.32
35	BA	2292	C	N1-C6	-5.72	1.33	1.37
1	AA	289	G	N1-C2	-5.71	1.33	1.37
1	AA	1431	C	C2-N3	-5.71	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2585	U	C2-N3	-5.71	1.33	1.37
54	BW	45	TYR	CG-CD2	-5.71	1.31	1.39
35	BA	2267	A	P-O5'	-5.71	1.54	1.59
1	AA	442	C	C4-C5	-5.71	1.38	1.43
1	AA	1010	G	C3'-C2'	-5.71	1.46	1.52
35	BA	49	A	N7-C5	-5.71	1.35	1.39
35	BA	64	A	N3-C4	-5.71	1.31	1.34
35	BA	808	G	N7-C5	-5.71	1.35	1.39
35	BA	777	A	N3-C4	5.71	1.38	1.34
35	BA	1431	U	N3-C4	-5.71	1.33	1.38
35	BA	1712	C	N1-C6	-5.71	1.33	1.37
36	BB	96	U	N3-C4	-5.71	1.33	1.38
1	AA	359	U	C4-O4	-5.71	1.19	1.23
1	AA	703	G	N3-C4	-5.71	1.31	1.35
1	AA	975	A	C5-C6	-5.71	1.35	1.41
1	AA	1090	U	C2-N3	-5.71	1.33	1.37
1	AA	1341	U	C3'-C2'	-5.71	1.46	1.52
1	AA	1364	U	O4'-C1'	-5.71	1.34	1.41
35	BA	1092	C	N3-C4	5.71	1.38	1.33
35	BA	2590	A	C5-C6	-5.71	1.35	1.41
35	BA	2631	G	N3-C4	-5.71	1.31	1.35
1	AA	348	G	N9-C8	-5.71	1.33	1.37
35	BA	542	C	N1-C2	-5.71	1.34	1.40
35	BA	1006	C	C4-C5	-5.71	1.38	1.43
35	BA	1788	C	C4-C5	-5.71	1.38	1.43
35	BA	2442	C	C4-C5	-5.71	1.38	1.43
35	BA	2632	A	N1-C2	-5.71	1.29	1.34
1	AA	1378	C	C2-O2	-5.71	1.19	1.24
35	BA	411	G	C5-C4	-5.71	1.34	1.38
35	BA	476	G	C5-C4	-5.71	1.34	1.38
35	BA	2505	G	C5-C4	-5.71	1.34	1.38
1	AA	261	U	C2-N3	-5.70	1.33	1.37
1	AA	1497	G	N3-C4	-5.70	1.31	1.35
35	BA	7	G	N3-C4	-5.70	1.31	1.35
35	BA	473	G	C2-N2	5.70	1.40	1.34
35	BA	887	A	C2'-C1'	-5.70	1.47	1.53
35	BA	1123	C	N1-C6	-5.70	1.33	1.37
35	BA	1864	U	C2-N3	-5.70	1.33	1.37
1	AA	550	G	C8-N7	-5.70	1.27	1.30
22	AV	63	G	C8-N7	-5.70	1.27	1.30
35	BA	489	G	C8-N7	-5.70	1.27	1.30
35	BA	616	G	C8-N7	-5.70	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	667	U	N3-C4	-5.70	1.33	1.38
35	BA	1622	G	C2-N3	-5.70	1.28	1.32
35	BA	1998	G	C2-N3	-5.70	1.28	1.32
35	BA	2244	U	C4-O4	-5.70	1.19	1.23
35	BA	495	G	N9-C8	-5.70	1.33	1.37
35	BA	2689	U	C2-O2	-5.70	1.17	1.22
1	AA	191	G	C5'-C4'	-5.70	1.44	1.51
35	BA	1596	A	N7-C5	-5.70	1.35	1.39
35	BA	2305	A	C6-N1	-5.70	1.31	1.35
1	AA	46	G	P-O5'	-5.70	1.54	1.59
22	AV	36	U	P-O5'	-5.70	1.54	1.59
35	BA	2158	A	O3'-P	-5.70	1.54	1.61
1	AA	290	C	O4'-C1'	-5.70	1.34	1.41
1	AA	782	A	N9-C8	-5.70	1.33	1.37
1	AA	800	G	N1-C2	-5.70	1.33	1.37
1	AA	1407	C	C4'-C3'	-5.70	1.46	1.52
35	BA	150	C	C2-O2	-5.70	1.19	1.24
35	BA	1040	C	C2'-C1'	-5.70	1.47	1.53
35	BA	1106	G	C8-N7	5.70	1.34	1.30
35	BA	2090	G	C8-N7	5.70	1.34	1.30
35	BA	2172	U	N1-C6	-5.70	1.32	1.38
1	AA	1162	C	N3-C4	-5.69	1.29	1.33
35	BA	295	G	C5-C4	-5.69	1.34	1.38
35	BA	1290	C	C5-C6	-5.69	1.29	1.34
35	BA	1996	C	O4'-C1'	-5.69	1.34	1.41
35	BA	2571	C	C5-C6	-5.69	1.29	1.34
35	BA	398	G	C4'-C3'	-5.69	1.46	1.52
35	BA	824	A	N9-C4	-5.69	1.34	1.37
35	BA	828	U	C2-O2	-5.69	1.17	1.22
35	BA	1552	G	N7-C5	-5.69	1.35	1.39
35	BA	1668	A	N3-C4	-5.69	1.31	1.34
35	BA	2141	G	N3-C4	-5.69	1.31	1.35
35	BA	2160	G	N3-C4	-5.69	1.31	1.35
1	AA	649	G	C8-N7	5.69	1.34	1.30
35	BA	540	C	N1-C6	-5.69	1.33	1.37
35	BA	1107	G	N9-C4	-5.69	1.33	1.38
35	BA	2424	C	C4-N4	-5.69	1.28	1.33
1	AA	1388	C	O3'-P	-5.69	1.54	1.61
1	AA	674	G	N3-C4	-5.69	1.31	1.35
35	BA	323	G	C5-C6	-5.69	1.36	1.42
35	BA	859	G	C6-N1	-5.69	1.35	1.39
35	BA	2492	U	C3'-C2'	-5.69	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	310	A	N3-C4	-5.69	1.31	1.34
35	BA	324	A	N3-C4	-5.69	1.31	1.34
35	BA	1485	G	N7-C5	-5.69	1.35	1.39
35	BA	1758	G	N9-C4	-5.69	1.33	1.38
35	BA	2382	G	N7-C5	-5.69	1.35	1.39
35	BA	2533	A	N1-C2	-5.69	1.29	1.34
35	BA	2553	G	N9-C8	-5.68	1.33	1.37
35	BA	2815	C	N1-C6	-5.68	1.33	1.37
1	AA	741	G	C8-N7	-5.68	1.27	1.30
1	AA	831	U	N1-C6	-5.68	1.32	1.38
1	AA	1382	C	C4'-C3'	-5.68	1.46	1.52
35	BA	772	C	N3-C4	-5.68	1.29	1.33
35	BA	2265	U	C2'-C1'	-5.68	1.47	1.53
35	BA	2294	C	N3-C4	-5.68	1.29	1.33
35	BA	2833	G	C8-N7	-5.68	1.27	1.30
1	AA	1495	U	N1-C2	-5.68	1.33	1.38
35	BA	478	A	C2'-C1'	-5.68	1.47	1.53
35	BA	1208	C	C4'-O4'	-5.68	1.38	1.45
35	BA	1325	G	N7-C5	-5.68	1.35	1.39
35	BA	2135	A	N7-C5	-5.68	1.35	1.39
35	BA	2329	G	N9-C8	-5.68	1.33	1.37
35	BA	2657	A	N9-C4	-5.68	1.34	1.37
1	AA	1042	G	C2-N3	-5.68	1.28	1.32
1	AA	1207	G	O3'-P	-5.68	1.54	1.61
35	BA	844	C	N1-C2	-5.68	1.34	1.40
35	BA	1055	G	O3'-P	-5.68	1.54	1.61
1	AA	585	G	C6-N1	-5.68	1.35	1.39
1	AA	988	G	C3'-C2'	-5.68	1.46	1.52
35	BA	2048	G	C6-N1	-5.68	1.35	1.39
35	BA	2373	G	N9-C4	-5.68	1.33	1.38
1	AA	390	C	C5-C6	-5.67	1.29	1.34
1	AA	583	A	C3'-C2'	-5.67	1.46	1.52
35	BA	582	G	O3'-P	-5.67	1.54	1.61
35	BA	1138	G	N9-C8	-5.67	1.33	1.37
35	BA	1545	A	P-O5'	-5.67	1.54	1.59
35	BA	1612	C	P-O5'	-5.67	1.54	1.59
35	BA	44	G	C5-C4	-5.67	1.34	1.38
35	BA	108	U	C2'-C1'	-5.67	1.47	1.53
35	BA	298	G	C4'-C3'	-5.67	1.46	1.52
35	BA	1216	G	C4'-C3'	-5.67	1.46	1.52
35	BA	1320	C	C4-N4	-5.67	1.28	1.33
35	BA	2077	A	N9-C4	-5.67	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2674	G	N3-C4	5.67	1.39	1.35
1	AA	118	U	C4-O4	-5.67	1.19	1.23
1	AA	1115	C	N3-C4	-5.67	1.29	1.33
35	BA	158	U	C3'-C2'	-5.67	1.46	1.52
35	BA	2346	A	P-O5'	-5.67	1.54	1.59
35	BA	2853	C	C2-O2	-5.67	1.19	1.24
35	BA	2875	C	C4'-O4'	-5.67	1.38	1.45
1	AA	26	A	N1-C2	-5.67	1.29	1.34
1	AA	869	G	C8-N7	-5.67	1.27	1.30
1	AA	1300	G	C2-N3	-5.67	1.28	1.32
35	BA	221	A	N7-C5	-5.67	1.35	1.39
35	BA	363	G	C8-N7	-5.67	1.27	1.30
35	BA	423	A	N1-C2	-5.67	1.29	1.34
35	BA	466	A	C5-C4	-5.67	1.34	1.38
35	BA	705	A	C5-C4	-5.67	1.34	1.38
35	BA	1633	G	N7-C5	-5.67	1.35	1.39
35	BA	2123	G	C8-N7	-5.67	1.27	1.30
35	BA	2450	A	C5-C4	-5.67	1.34	1.38
35	BA	2561	A	N1-C2	-5.67	1.29	1.34
1	AA	426	G	C6-N1	-5.67	1.35	1.39
1	AA	1394	A	N9-C8	-5.67	1.33	1.37
35	BA	199	A	N3-C4	-5.67	1.31	1.34
35	BA	737	C	O3'-P	-5.67	1.54	1.61
35	BA	1607	C	C2-N3	-5.67	1.31	1.35
35	BA	2732	G	C6-O6	-5.67	1.19	1.24
36	BB	101	G	C6-N1	-5.67	1.35	1.39
1	AA	637	G	C3'-C2'	-5.67	1.46	1.52
1	AA	399	G	N9-C4	-5.66	1.33	1.38
1	AA	576	G	C8-N7	-5.66	1.27	1.30
1	AA	1283	G	C8-N7	-5.66	1.27	1.30
35	BA	485	C	C5'-C4'	-5.66	1.44	1.51
1	AA	189(H)	G	C5-C4	-5.66	1.34	1.38
1	AA	1295	G	C5-C4	-5.66	1.34	1.38
35	BA	1945	G	C6-O6	-5.66	1.19	1.24
1	AA	45	U	N1-C6	-5.66	1.32	1.38
35	BA	467	G	C6-N1	-5.66	1.35	1.39
35	BA	2332	U	C2-N3	-5.66	1.33	1.37
35	BA	2644	G	P-O5'	-5.66	1.54	1.59
1	AA	159	G	C2-N2	-5.66	1.28	1.34
1	AA	642	A	C5-C6	-5.66	1.35	1.41
1	AA	865	A	C6-N6	-5.66	1.29	1.33
1	AA	1122	U	C4-C5	-5.66	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	348	G	C2-N2	-5.66	1.28	1.34
35	BA	861	A	C2'-O2'	-5.66	1.34	1.41
35	BA	1015	G	N3-C4	5.66	1.39	1.35
35	BA	2451	A	P-O5'	-5.66	1.54	1.59
35	BA	2751	G	C2-N2	-5.66	1.28	1.34
35	BA	720	C	C4-C5	-5.66	1.38	1.43
35	BA	2835	A	C4'-O4'	-5.66	1.38	1.45
1	AA	111	G	C6-N1	5.66	1.43	1.39
1	AA	385	C	C5-C6	-5.66	1.29	1.34
1	AA	476	G	C4'-C3'	-5.66	1.46	1.52
1	AA	1066	C	C4'-C3'	-5.66	1.46	1.52
1	AA	1249	C	N3-C4	-5.66	1.29	1.33
35	BA	270	A	C6-N1	-5.66	1.31	1.35
35	BA	795	C	C2'-O2'	-5.66	1.34	1.41
35	BA	841	A	C6-N1	-5.66	1.31	1.35
35	BA	951	C	N3-C4	-5.66	1.29	1.33
35	BA	1808	U	C2'-O2'	-5.66	1.34	1.41
1	AA	742	G	O3'-P	-5.65	1.54	1.61
1	AA	1369	C	O3'-P	-5.65	1.54	1.61
35	BA	271(A)	A	N3-C4	-5.65	1.31	1.34
35	BA	2238	G	N3-C4	-5.65	1.31	1.35
35	BA	2712(A)	A	N9-C4	-5.65	1.34	1.37
1	AA	619	U	N1-C6	-5.65	1.32	1.38
35	BA	307	G	C2-N2	-5.65	1.28	1.34
35	BA	392	C	N1-C6	-5.65	1.33	1.37
35	BA	1092	C	C4-C5	-5.65	1.38	1.43
35	BA	1224	C	C4-C5	-5.65	1.38	1.43
35	BA	1594	G	C5'-C4'	-5.65	1.44	1.51
35	BA	2848	G	N1-C2	-5.65	1.33	1.37
35	BA	2484	G	C5-C4	-5.65	1.34	1.38
36	BB	69	G	C6-N1	-5.65	1.35	1.39
1	AA	781	A	N7-C5	-5.65	1.35	1.39
35	BA	505	A	C8-N7	-5.65	1.27	1.31
35	BA	2315	G	C2-N3	-5.65	1.28	1.32
35	BA	2465	C	N3-C4	-5.65	1.29	1.33
1	AA	10	A	N1-C2	-5.65	1.29	1.34
1	AA	514	C	C4-N4	-5.65	1.28	1.33
1	AA	558	G	N9-C4	-5.65	1.33	1.38
1	AA	918	A	N1-C2	5.65	1.39	1.34
35	BA	908	C	C4-N4	-5.65	1.28	1.33
35	BA	1700	A	C5-C6	-5.65	1.35	1.41
35	BA	1781	C	O4'-C1'	-5.65	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	35	G	C4'-C3'	-5.64	1.47	1.52
35	BA	380	U	C4'-C3'	-5.64	1.47	1.52
1	AA	521	G	C8-N7	-5.64	1.27	1.30
1	AA	1160	G	N3-C4	-5.64	1.31	1.35
22	AV	58	A	N1-C2	-5.64	1.29	1.34
35	BA	8	A	C5-C4	-5.64	1.34	1.38
35	BA	506	G	O3'-P	-5.64	1.54	1.61
35	BA	1412	A	C5-C6	-5.64	1.35	1.41
35	BA	1773	A	N3-C4	5.64	1.38	1.34
35	BA	2479	G	C5-C6	-5.64	1.36	1.42
35	BA	2721	A	C5-C4	-5.64	1.34	1.38
1	AA	923	A	N3-C4	-5.64	1.31	1.34
35	BA	92	A	C6-N1	-5.64	1.31	1.35
35	BA	453	C	C4-C5	-5.64	1.38	1.43
35	BA	458	G	C2-N3	-5.64	1.28	1.32
35	BA	1085	A	C6-N1	-5.64	1.31	1.35
35	BA	2659	G	N9-C4	-5.64	1.33	1.38
35	BA	2789	C	C4-C5	-5.64	1.38	1.43
1	AA	1497	G	C2-N3	5.64	1.37	1.32
35	BA	505	A	N1-C2	-5.64	1.29	1.34
35	BA	706	A	N1-C2	-5.64	1.29	1.34
35	BA	1005	C	C4'-C3'	-5.64	1.47	1.52
35	BA	1390	U	C4-C5	-5.64	1.38	1.43
1	AA	92	C	O3'-P	-5.64	1.54	1.61
35	BA	58	G	N9-C8	-5.64	1.33	1.37
35	BA	654(M)	C	C5-C6	-5.64	1.29	1.34
35	BA	1231	G	N7-C5	-5.64	1.35	1.39
35	BA	1741	A	N9-C4	-5.64	1.34	1.37
1	AA	285	G	N1-C2	-5.63	1.33	1.37
1	AA	503	C	N1-C2	5.63	1.45	1.40
1	AA	942	G	C2-N3	-5.63	1.28	1.32
1	AA	1421	G	C2-N3	-5.63	1.28	1.32
35	BA	1113	U	C2-O2	-5.63	1.17	1.22
35	BA	1559	G	N9-C4	5.63	1.42	1.38
35	BA	2304	G	C2-N3	-5.63	1.28	1.32
35	BA	2680	C	C4-C5	-5.63	1.38	1.43
35	BA	2868	A	P-O5'	-5.63	1.54	1.59
1	AA	571	U	C2-N3	-5.63	1.33	1.37
1	AA	1452	C	C2-N3	-5.63	1.31	1.35
35	BA	15	G	N3-C4	-5.63	1.31	1.35
35	BA	125	G	N3-C4	-5.63	1.31	1.35
35	BA	607	U	C2'-C1'	-5.63	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1518	U	C2-N3	-5.63	1.33	1.37
35	BA	2579	C	N3-C4	-5.63	1.30	1.33
1	AA	6	G	N9-C8	-5.63	1.33	1.37
1	AA	611	A	C8-N7	-5.63	1.27	1.31
1	AA	1071	C	C4'-C3'	-5.63	1.47	1.52
1	AA	1182	G	N9-C8	-5.63	1.33	1.37
1	AA	1469	G	N7-C5	-5.63	1.35	1.39
23	AX	14	A	C5-C6	-5.63	1.35	1.41
35	BA	137	C	C4'-C3'	-5.63	1.47	1.52
35	BA	317	G	N7-C5	-5.63	1.35	1.39
35	BA	355	G	N7-C5	-5.63	1.35	1.39
35	BA	389	G	N9-C8	-5.63	1.33	1.37
35	BA	589	C	C3'-C2'	-5.63	1.46	1.52
35	BA	764	A	C5-C6	-5.63	1.35	1.41
35	BA	1786	A	N7-C5	-5.63	1.35	1.39
35	BA	2361	A	C5-C6	-5.63	1.35	1.41
35	BA	2396	G	C2-N2	-5.63	1.28	1.34
1	AA	526	C	C4-C5	-5.63	1.38	1.43
35	BA	10	G	C5-C4	-5.63	1.34	1.38
1	AA	167	G	C6-O6	-5.63	1.19	1.24
35	BA	44	G	C6-O6	-5.63	1.19	1.24
35	BA	259	G	N1-C2	-5.63	1.33	1.37
35	BA	423	A	C2-N3	-5.63	1.28	1.33
35	BA	612	C	C2-O2	5.63	1.29	1.24
35	BA	2821	A	C5'-C4'	-5.63	1.44	1.51
38	BD	246	PRO	N-CD	-5.63	1.40	1.47
1	AA	8	A	C5-C4	-5.63	1.34	1.38
1	AA	470	C	N3-C4	-5.63	1.30	1.33
35	BA	372	G	N7-C5	5.63	1.42	1.39
35	BA	897	C	C5-C6	-5.63	1.29	1.34
35	BA	2677	G	N3-C4	-5.63	1.31	1.35
36	BB	48	A	C2'-C1'	-5.63	1.47	1.53
1	AA	318	G	C5-C4	-5.62	1.34	1.38
1	AA	664	G	C5-C4	-5.62	1.34	1.38
1	AA	951	G	C3'-C2'	-5.62	1.46	1.52
35	BA	1430	C	N1-C6	5.62	1.40	1.37
35	BA	2120	G	P-O5'	-5.62	1.54	1.59
1	AA	77	G	C6-N1	-5.62	1.35	1.39
1	AA	620	C	C2-N3	-5.62	1.31	1.35
1	AA	755	G	C6-N1	-5.62	1.35	1.39
1	AA	1011	G	C6-N1	-5.62	1.35	1.39
35	BA	371	A	C6-N1	-5.62	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1472	A	N9-C8	-5.62	1.33	1.37
35	BA	1482	G	C6-N1	-5.62	1.35	1.39
35	BA	2182	G	C2-N2	-5.62	1.28	1.34
35	BA	2418	A	C2'-C1'	-5.62	1.47	1.53
36	BB	76	G	C2-N3	-5.62	1.28	1.32
1	AA	277	C	C4-N4	-5.62	1.28	1.33
1	AA	377	G	N3-C4	-5.62	1.31	1.35
1	AA	503	C	C4-C5	5.62	1.47	1.43
1	AA	573	A	C5-C4	-5.62	1.34	1.38
1	AA	1171	G	N9-C8	-5.62	1.33	1.37
1	AA	1233	G	N9-C8	-5.62	1.33	1.37
1	AA	1256	A	C5-C4	-5.62	1.34	1.38
1	AA	1267	C	C5-C6	-5.62	1.29	1.34
1	AA	1275	A	C5-C4	-5.62	1.34	1.38
35	BA	603	A	N3-C4	-5.62	1.31	1.34
35	BA	704	G	O3'-P	-5.62	1.54	1.61
35	BA	1244	G	N9-C8	-5.62	1.33	1.37
35	BA	2386	C	O3'-P	-5.62	1.54	1.61
35	BA	623	G	C5'-C4'	-5.62	1.44	1.51
35	BA	953	A	C5'-C4'	-5.62	1.44	1.51
35	BA	1702	G	N9-C4	-5.62	1.33	1.38
35	BA	2171	A	C6-N6	-5.62	1.29	1.33
1	AA	660	G	N7-C5	-5.62	1.35	1.39
1	AA	727	G	C2-N3	-5.62	1.28	1.32
35	BA	1438	U	C5-C6	-5.62	1.29	1.34
35	BA	1718	G	C5-C4	-5.62	1.34	1.38
35	BA	2418	A	N7-C5	-5.62	1.35	1.39
36	BB	70	C	P-O5'	-5.62	1.54	1.59
35	BA	441	U	N1-C2	-5.62	1.33	1.38
35	BA	741	G	C8-N7	-5.62	1.27	1.30
35	BA	939	G	C8-N7	-5.62	1.27	1.30
1	AA	189(A)	C	C4-C5	-5.62	1.38	1.43
1	AA	1257	U	C5-C6	-5.62	1.29	1.34
35	BA	322	A	O3'-P	-5.62	1.54	1.61
35	BA	668	G	C8-N7	5.62	1.34	1.30
35	BA	759	G	C8-N7	5.62	1.34	1.30
35	BA	1256	G	N9-C8	-5.62	1.33	1.37
35	BA	1333	C	C4-C5	-5.62	1.38	1.43
35	BA	1584	C	N1-C6	-5.62	1.33	1.37
35	BA	1631	C	N3-C4	-5.62	1.30	1.33
35	BA	2260	C	C4-C5	-5.62	1.38	1.43
35	BA	2366	A	N3-C4	-5.62	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2567	G	P-O5'	-5.62	1.54	1.59
35	BA	2701	C	C2-O2	-5.62	1.19	1.24
36	BB	4	C	N3-C4	-5.62	1.30	1.33
1	AA	536	C	N1-C2	-5.61	1.34	1.40
35	BA	764	A	N1-C2	-5.61	1.29	1.34
35	BA	1055	G	C2-N2	-5.61	1.28	1.34
1	AA	147	G	N7-C5	-5.61	1.35	1.39
1	AA	1170	A	C6-N1	-5.61	1.31	1.35
35	BA	1564	C	C4'-O4'	-5.61	1.38	1.45
35	BA	2473	U	N1-C2	-5.61	1.33	1.38
35	BA	402	A	C5-C4	-5.61	1.34	1.38
35	BA	533	G	C6-O6	-5.61	1.19	1.24
35	BA	654(D)	G	C8-N7	-5.61	1.27	1.30
35	BA	1000	A	C2-N3	-5.61	1.28	1.33
35	BA	1242	A	C4'-C3'	-5.61	1.47	1.52
35	BA	1558	A	C8-N7	-5.61	1.27	1.31
35	BA	2016	U	C2-O2	-5.61	1.17	1.22
35	BA	2030	A	N9-C4	-5.61	1.34	1.37
35	BA	2239	G	C8-N7	-5.61	1.27	1.30
35	BA	2629	A	N9-C4	-5.61	1.34	1.37
1	AA	349	A	C3'-C2'	5.61	1.59	1.52
1	AA	1393	U	P-O5'	-5.61	1.54	1.59
35	BA	1711	C	P-O5'	-5.61	1.54	1.59
1	AA	1218	C	C2'-C1'	-5.61	1.47	1.53
35	BA	815	C	C2'-C1'	-5.61	1.47	1.53
35	BA	1363	C	C4-C5	-5.61	1.38	1.43
35	BA	1544	A	O3'-P	-5.61	1.54	1.61
1	AA	800	G	N3-C4	-5.61	1.31	1.35
35	BA	58	G	N3-C4	-5.61	1.31	1.35
35	BA	70	G	C6-N1	5.61	1.43	1.39
35	BA	1245	G	P-O5'	-5.61	1.54	1.59
35	BA	1500	G	P-O5'	-5.61	1.54	1.59
35	BA	1825	A	C2'-C1'	-5.61	1.47	1.53
35	BA	2332	U	C4-C5	-5.61	1.38	1.43
35	BA	2535	G	N3-C4	-5.61	1.31	1.35
1	AA	136	C	C2-N3	-5.60	1.31	1.35
1	AA	454	C	C2-N3	-5.60	1.31	1.35
1	AA	1438	G	C8-N7	-5.60	1.27	1.30
22	AV	25	C	C4'-C3'	-5.60	1.47	1.52
35	BA	262	A	C8-N7	-5.60	1.27	1.31
35	BA	1274	A	C4'-C3'	-5.60	1.47	1.52
35	BA	1914	C	C4-N4	-5.60	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2396	G	C8-N7	-5.60	1.27	1.30
35	BA	2590	A	C8-N7	-5.60	1.27	1.31
1	AA	540	G	C6-N1	-5.60	1.35	1.39
1	AA	563	A	N3-C4	-5.60	1.31	1.34
35	BA	450	G	N9-C4	-5.60	1.33	1.38
35	BA	754	C	C4-C5	-5.60	1.38	1.43
35	BA	1241	A	N3-C4	-5.60	1.31	1.34
35	BA	1498	C	C4-C5	-5.60	1.38	1.43
35	BA	1975	G	C5-C6	-5.60	1.36	1.42
35	BA	2359	C	N1-C6	-5.60	1.33	1.37
35	BA	2642	G	O4'-C1'	-5.60	1.34	1.41
35	BA	1833	U	C2-N3	-5.60	1.33	1.37
1	AA	165	C	C2-N3	-5.60	1.31	1.35
1	AA	707	C	C5'-C4'	-5.60	1.44	1.51
1	AA	853	G	N9-C8	-5.60	1.33	1.37
1	AA	904	C	C4-N4	-5.60	1.28	1.33
35	BA	241	A	C5-C4	-5.60	1.34	1.38
35	BA	666	G	N7-C5	-5.60	1.35	1.39
35	BA	722	A	P-O5'	-5.60	1.54	1.59
35	BA	768	G	N9-C8	-5.60	1.33	1.37
35	BA	920	G	N3-C4	-5.60	1.31	1.35
35	BA	2722	G	N9-C8	-5.60	1.33	1.37
35	BA	2814	C	C2-N3	-5.60	1.31	1.35
1	AA	163	C	C4-C5	-5.60	1.38	1.43
35	BA	379	G	C8-N7	-5.60	1.27	1.30
35	BA	2837	G	C8-N7	5.60	1.34	1.30
1	AA	48	C	P-O5'	-5.60	1.54	1.59
1	AA	284	G	N3-C4	5.60	1.39	1.35
1	AA	755	G	P-O5'	-5.60	1.54	1.59
1	AA	1301	U	N1-C2	-5.60	1.33	1.38
1	AA	1360	A	N9-C8	-5.60	1.33	1.37
1	AA	1491	G	C6-O6	-5.60	1.19	1.24
35	BA	784	A	C6-N1	-5.60	1.31	1.35
35	BA	1325	G	C6-O6	-5.60	1.19	1.24
35	BA	2094	G	N1-C2	-5.60	1.33	1.37
35	BA	2319	G	P-O5'	-5.60	1.54	1.59
1	AA	168	G	C4'-C3'	-5.59	1.47	1.52
1	AA	1385	G	N9-C8	-5.59	1.33	1.37
1	AA	1403	C	N1-C6	5.59	1.40	1.37
35	BA	216	A	N7-C5	-5.59	1.35	1.39
35	BA	602	G	C2-N3	-5.59	1.28	1.32
35	BA	1958	C	C5'-C4'	-5.59	1.44	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1291	C	C4-C5	-5.59	1.38	1.43
1	AA	108	G	C8-N7	-5.59	1.27	1.30
1	AA	649	G	C4'-C3'	-5.59	1.47	1.52
35	BA	278	A	C4'-C3'	-5.59	1.47	1.52
35	BA	421	U	C4'-C3'	-5.59	1.47	1.52
35	BA	1017	G	C8-N7	-5.59	1.27	1.30
35	BA	1383	C	C4-N4	-5.59	1.28	1.33
35	BA	1473	G	C4'-C3'	-5.59	1.47	1.52
35	BA	1525	G	C6-O6	-5.59	1.19	1.24
35	BA	1666	G	C5-C6	-5.59	1.36	1.42
35	BA	1918	A	N9-C4	-5.59	1.34	1.37
35	BA	2195	C	N1-C6	-5.59	1.33	1.37
35	BA	2242	G	C8-N7	-5.59	1.27	1.30
35	BA	2323	G	C8-N7	-5.59	1.27	1.30
35	BA	2894	G	C8-N7	-5.59	1.27	1.30
1	AA	1334	G	C2-N3	-5.59	1.28	1.32
35	BA	515	A	O3'-P	-5.59	1.54	1.61
35	BA	518	G	C1'-N9	-5.59	1.39	1.46
35	BA	599	G	C2-N3	-5.59	1.28	1.32
35	BA	1452	A	C6-N1	-5.59	1.31	1.35
35	BA	1756	G	N1-C2	5.59	1.42	1.37
35	BA	2728	U	N3-C4	-5.59	1.33	1.38
36	BB	34	U	N3-C4	-5.59	1.33	1.38
1	AA	1042	G	N7-C5	-5.59	1.35	1.39
35	BA	2238	G	N7-C5	-5.59	1.35	1.39
35	BA	2354	G	C5-C6	-5.59	1.36	1.42
1	AA	167	G	C4'-C3'	-5.59	1.47	1.52
1	AA	404	U	C2-O2	-5.59	1.17	1.22
1	AA	571	U	C4-O4	-5.59	1.19	1.23
1	AA	895	G	C5-C4	-5.59	1.34	1.38
1	AA	1031	G	C6-N1	-5.59	1.35	1.39
1	AA	1438	G	C6-N1	-5.59	1.35	1.39
22	AV	45	G	C6-N1	-5.59	1.35	1.39
35	BA	619	G	C2'-C1'	-5.59	1.47	1.53
35	BA	863	A	C6-N6	-5.59	1.29	1.33
35	BA	2733	A	C8-N7	-5.59	1.27	1.31
1	AA	456	C	C2-N3	-5.58	1.31	1.35
35	BA	104	U	N3-C4	-5.58	1.33	1.38
35	BA	494	G	C2-N2	-5.58	1.28	1.34
35	BA	1145	C	C5'-C4'	-5.58	1.44	1.51
35	BA	1696	G	C5'-C4'	-5.58	1.44	1.51
22	AV	30	G	C4'-C3'	-5.58	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1465	G	N3-C4	-5.58	1.31	1.35
35	BA	1478	G	C6-O6	5.58	1.29	1.24
35	BA	2026	C	P-O5'	-5.58	1.54	1.59
35	BA	2723	C	C2'-O2'	-5.58	1.34	1.41
1	AA	247	G	C5-C4	-5.58	1.34	1.38
1	AA	959	A	C1'-N9	-5.58	1.39	1.46
1	AA	1201	A	N9-C8	-5.58	1.33	1.37
1	AA	1482	G	N7-C5	-5.58	1.35	1.39
35	BA	289	A	N7-C5	-5.58	1.35	1.39
35	BA	447	A	C6-N6	-5.58	1.29	1.33
35	BA	710	G	N7-C5	-5.58	1.35	1.39
35	BA	1628	G	N7-C5	-5.58	1.35	1.39
35	BA	1854	A	C5-C6	-5.58	1.36	1.41
35	BA	2533	A	C6-N6	-5.58	1.29	1.33
35	BA	2711	A	N9-C8	-5.58	1.33	1.37
35	BA	2764	A	C5-C6	-5.58	1.36	1.41
35	BA	2792	G	C5-C4	-5.58	1.34	1.38
35	BA	1406	U	C3'-O3'	-5.58	1.34	1.42
1	AA	15	G	C6-O6	-5.58	1.19	1.24
1	AA	489	C	C5-C6	-5.58	1.29	1.34
1	AA	943	U	O3'-P	-5.58	1.54	1.61
1	AA	1396	A	C5-C6	-5.58	1.36	1.41
1	AA	1412	C	C5'-C4'	-5.58	1.44	1.51
22	AV	21	A	C5-C6	-5.58	1.36	1.41
35	BA	376	C	P-O5'	-5.58	1.54	1.59
35	BA	2509	G	P-O5'	-5.58	1.54	1.59
35	BA	1468	C	N1-C6	5.58	1.40	1.37
35	BA	2825	C	C2'-C1'	-5.58	1.47	1.53
35	BA	1440	G	N7-C5	-5.58	1.35	1.39
1	AA	399	G	C5-C6	-5.57	1.36	1.42
1	AA	428	G	N7-C5	5.57	1.42	1.39
35	BA	257	A	C4'-C3'	-5.57	1.47	1.52
35	BA	428	A	C6-N1	-5.57	1.31	1.35
35	BA	872	A	N7-C5	5.57	1.42	1.39
35	BA	2197	U	C2-N3	-5.57	1.33	1.37
35	BA	2706	G	N3-C4	-5.57	1.31	1.35
35	BA	1995	U	N3-C4	-5.57	1.33	1.38
1	AA	223	U	O3'-P	-5.57	1.54	1.61
1	AA	1012	U	P-O5'	-5.57	1.54	1.59
1	AA	1033	G	C5-C4	-5.57	1.34	1.38
35	BA	149	A	N3-C4	-5.57	1.31	1.34
35	BA	508	G	N3-C4	5.57	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1836	C	C2'-C1'	-5.57	1.47	1.53
35	BA	2251	G	C8-N7	-5.57	1.27	1.30
35	BA	2454	G	C8-N7	-5.57	1.27	1.30
35	BA	2542	A	O3'-P	-5.57	1.54	1.61
35	BA	2580	U	O3'-P	-5.57	1.54	1.61
36	BB	72	G	C2-N3	-5.57	1.28	1.32
35	BA	2599	G	N9-C4	-5.57	1.33	1.38
1	AA	500	G	N7-C5	5.57	1.42	1.39
1	AA	574	A	C6-N6	-5.57	1.29	1.33
35	BA	215	G	N3-C4	-5.57	1.31	1.35
1	AA	322	C	C2-N3	-5.57	1.31	1.35
1	AA	366	C	C4-C5	-5.57	1.38	1.43
1	AA	563	A	P-O5'	-5.57	1.54	1.59
1	AA	597	G	C5-C4	-5.57	1.34	1.38
1	AA	1480	G	C2-N3	-5.57	1.28	1.32
35	BA	17	G	C2-N3	-5.57	1.28	1.32
35	BA	619	G	C6-N1	-5.57	1.35	1.39
35	BA	709	U	N1-C6	-5.57	1.32	1.38
35	BA	854	G	C5-C4	-5.57	1.34	1.38
35	BA	1413	G	P-O5'	-5.57	1.54	1.59
35	BA	2005	A	N3-C4	-5.57	1.31	1.34
35	BA	2298	A	C5-C6	-5.57	1.36	1.41
35	BA	2725	A	C8-N7	-5.57	1.27	1.31
35	BA	2856	C	P-O5'	-5.57	1.54	1.59
1	AA	255	G	C4'-C3'	-5.56	1.47	1.52
1	AA	313	A	C5-C4	-5.56	1.34	1.38
1	AA	420	U	C5-C6	-5.56	1.29	1.34
1	AA	1182	G	N7-C5	-5.56	1.35	1.39
1	AA	1216	G	N3-C4	-5.56	1.31	1.35
1	AA	1334	G	N9-C8	-5.56	1.33	1.37
1	AA	1346	A	N7-C5	-5.56	1.35	1.39
1	AA	1499	A	N7-C5	-5.56	1.35	1.39
35	BA	144	C	C4'-C3'	-5.56	1.47	1.52
35	BA	607	U	N1-C2	-5.56	1.33	1.38
35	BA	744	G	C2'-C1'	-5.56	1.47	1.53
35	BA	1262	A	N7-C5	-5.56	1.35	1.39
35	BA	1358	G	P-O5'	-5.56	1.54	1.59
35	BA	2335	A	C2-N3	-5.56	1.28	1.33
35	BA	2776	A	C3'-C2'	-5.56	1.46	1.52
1	AA	160	A	C5-C6	-5.56	1.36	1.41
1	AA	579	G	C2-N3	-5.56	1.28	1.32
1	AA	728	A	C5-C6	-5.56	1.36	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1268	A	N9-C4	-5.56	1.34	1.37
35	BA	141	A	N1-C2	-5.56	1.29	1.34
35	BA	359	A	N9-C4	-5.56	1.34	1.37
35	BA	1759	A	N9-C4	-5.56	1.34	1.37
35	BA	2308	G	C5-C4	-5.56	1.34	1.38
35	BA	2433	A	C5-C6	-5.56	1.36	1.41
1	AA	19	C	C4'-C3'	-5.56	1.47	1.52
1	AA	43	C	N1-C6	5.56	1.40	1.37
1	AA	177	C	C4'-C3'	-5.56	1.47	1.52
1	AA	250	A	N3-C4	-5.56	1.31	1.34
1	AA	431	A	N3-C4	-5.56	1.31	1.34
1	AA	589	C	O3'-P	-5.56	1.54	1.61
35	BA	531	C	N1-C6	-5.56	1.33	1.37
35	BA	1442	G	C6-O6	-5.56	1.19	1.24
35	BA	1455	G	C4'-C3'	-5.56	1.47	1.52
35	BA	1760	A	C2'-C1'	-5.56	1.47	1.53
35	BA	1912	A	N3-C4	-5.56	1.31	1.34
35	BA	2320	A	C2'-C1'	-5.56	1.47	1.53
35	BA	2343	C	C3'-C2'	-5.56	1.46	1.52
35	BA	2380	C	C4'-C3'	-5.56	1.47	1.52
35	BA	2428	G	P-O5'	-5.56	1.54	1.59
35	BA	2813	A	C4'-C3'	-5.56	1.47	1.52
1	AA	65	U	C2-N3	-5.56	1.33	1.37
1	AA	356	A	N9-C8	-5.56	1.33	1.37
1	AA	591	U	C2-N3	-5.56	1.33	1.37
1	AA	795	C	C4-C5	-5.56	1.38	1.43
1	AA	1410	G	N9-C8	-5.56	1.33	1.37
35	BA	206	U	C2-O2	-5.56	1.17	1.22
35	BA	2845	G	N1-C2	-5.56	1.33	1.37
1	AA	351	G	N3-C4	-5.56	1.31	1.35
1	AA	413	G	N3-C4	-5.56	1.31	1.35
1	AA	1265	G	C3'-C2'	-5.56	1.46	1.52
35	BA	1058	G	N3-C4	-5.56	1.31	1.35
35	BA	2053	G	N3-C4	-5.56	1.31	1.35
1	AA	393	A	N9-C4	-5.55	1.34	1.37
35	BA	248	G	C5-C6	-5.55	1.36	1.42
35	BA	1450	G	C6-O6	-5.55	1.19	1.24
35	BA	1762	A	N9-C4	-5.55	1.34	1.37
35	BA	2147	G	C5-C6	-5.55	1.36	1.42
1	AA	83	U	C4'-C3'	-5.55	1.47	1.52
35	BA	249	C	N1-C6	-5.55	1.33	1.37
35	BA	446	G	C4'-C3'	-5.55	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1017	G	P-O5'	-5.55	1.54	1.59
35	BA	1180	C	C5'-C4'	-5.55	1.44	1.51
35	BA	1819	A	C4'-C3'	-5.55	1.47	1.52
35	BA	2769	C	P-O5'	-5.55	1.54	1.59
1	AA	102	G	C8-N7	-5.55	1.27	1.30
1	AA	638	G	N9-C8	-5.55	1.33	1.37
1	AA	199	G	C5-C4	-5.55	1.34	1.38
1	AA	670	G	N1-C2	-5.55	1.33	1.37
1	AA	696	A	C2'-C1'	-5.55	1.47	1.53
35	BA	104	U	C2-N3	5.55	1.41	1.37
35	BA	346	A	N9-C8	-5.55	1.33	1.37
35	BA	1048	A	C8-N7	5.55	1.35	1.31
35	BA	1435	G	C4'-C3'	-5.55	1.47	1.52
35	BA	2192	G	N7-C5	5.55	1.42	1.39
35	BA	2341	G	N7-C5	5.55	1.42	1.39
35	BA	2801(A)	A	C5-C6	-5.55	1.36	1.41
1	AA	401	C	C4-N4	-5.55	1.28	1.33
35	BA	2044	C	C4-C5	-5.55	1.38	1.43
35	BA	2135	A	C8-N7	-5.55	1.27	1.31
1	AA	239	U	C5-C6	-5.55	1.29	1.34
1	AA	349	A	C6-N1	-5.55	1.31	1.35
1	AA	1152	A	C6-N1	-5.55	1.31	1.35
1	AA	1185	G	C4'-C3'	-5.55	1.47	1.52
35	BA	651	G	C2-N2	-5.55	1.29	1.34
35	BA	1801	G	C4'-C3'	-5.55	1.47	1.52
35	BA	1926	U	N3-C4	-5.55	1.33	1.38
35	BA	2291	U	C4'-C3'	-5.55	1.47	1.52
1	AA	1081	G	O3'-P	-5.54	1.54	1.61
35	BA	61	G	C5-C4	5.54	1.42	1.38
35	BA	179	G	N1-C2	5.54	1.42	1.37
35	BA	271(S)	G	N7-C5	-5.54	1.35	1.39
35	BA	808	G	C8-N7	-5.54	1.27	1.30
35	BA	989	G	C5-C4	-5.54	1.34	1.38
35	BA	1137	G	N9-C4	-5.54	1.33	1.38
35	BA	1619	G	C6-N1	-5.54	1.35	1.39
1	AA	1119	C	C4-C5	-5.54	1.38	1.43
1	AA	1460	A	N1-C2	-5.54	1.29	1.34
35	BA	135	G	C1'-N9	-5.54	1.39	1.46
35	BA	1815	A	P-O5'	-5.54	1.54	1.59
1	AA	63	C	C2-N3	-5.54	1.31	1.35
1	AA	1008	C	N1-C6	-5.54	1.33	1.37
35	BA	791	C	C2-N3	-5.54	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	866	A	C6-N1	5.54	1.39	1.35
1	AA	1505	G	C6-N1	-5.54	1.35	1.39
22	AV	45	G	C1'-N9	-5.54	1.39	1.46
35	BA	476	G	N3-C4	-5.54	1.31	1.35
35	BA	2234	G	C6-O6	-5.54	1.19	1.24
35	BA	2697	G	N1-C2	-5.54	1.33	1.37
1	AA	666	G	C5-C4	-5.54	1.34	1.38
1	AA	771	G	C4'-C3'	-5.54	1.47	1.52
35	BA	363(E)	U	C4-C5	-5.54	1.38	1.43
35	BA	870	A	N3-C4	-5.54	1.31	1.34
35	BA	1705	G	N7-C5	-5.54	1.35	1.39
35	BA	2253	G	C8-N7	-5.54	1.27	1.30
1	AA	859	A	C5-C4	5.54	1.42	1.38
35	BA	1916	A	P-O5'	-5.54	1.54	1.59
1	AA	232	G	N9-C4	-5.54	1.33	1.38
1	AA	253	U	C2-O2	-5.54	1.17	1.22
1	AA	595	G	C6-O6	-5.54	1.19	1.24
1	AA	1202	G	N9-C8	-5.54	1.33	1.37
35	BA	563	G	N9-C8	-5.54	1.33	1.37
35	BA	1056	G	C2-N2	-5.54	1.29	1.34
35	BA	1071	G	C6-N1	-5.54	1.35	1.39
35	BA	1333	C	C5-C6	-5.54	1.29	1.34
35	BA	1787	A	C5-C4	-5.54	1.34	1.38
35	BA	1945	G	C4'-C3'	-5.54	1.47	1.52
35	BA	1968	G	C2'-O2'	-5.54	1.34	1.41
35	BA	2317	C	N1-C6	5.54	1.40	1.37
35	BA	2462	U	C2-O2	-5.54	1.17	1.22
35	BA	2645	G	C6-O6	-5.54	1.19	1.24
1	AA	198	G	C4'-C3'	-5.53	1.47	1.52
1	AA	761	G	C4'-C3'	-5.53	1.47	1.52
35	BA	1232	G	C5-C6	-5.53	1.36	1.42
35	BA	2147	G	C5-C4	-5.53	1.34	1.38
35	BA	2871	C	N3-C4	-5.53	1.30	1.33
1	AA	830	G	N7-C5	-5.53	1.35	1.39
1	AA	649	G	C3'-C2'	-5.53	1.46	1.52
35	BA	353	G	C5-C4	5.53	1.42	1.38
35	BA	2757	A	C6-N1	-5.53	1.31	1.35
1	AA	275	G	N3-C4	-5.53	1.31	1.35
35	BA	278	A	N3-C4	5.53	1.38	1.34
1	AA	855	G	C1'-N9	-5.53	1.39	1.46
35	BA	2499	C	P-O5'	-5.53	1.54	1.59
35	BA	149	A	C6-N1	-5.53	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	442	G	N7-C5	-5.53	1.35	1.39
35	BA	1110	G	C2-N3	-5.53	1.28	1.32
35	BA	1765	C	C2'-C1'	-5.53	1.47	1.53
35	BA	2840	C	C5-C6	-5.53	1.29	1.34
36	BB	87	G	C5-C6	5.53	1.47	1.42
35	BA	193	U	C5-C6	-5.52	1.29	1.34
1	AA	193	C	N3-C4	-5.52	1.30	1.33
1	AA	931	C	C4'-C3'	-5.52	1.47	1.52
1	AA	945	G	C8-N7	5.52	1.34	1.30
35	BA	69	C	N3-C4	-5.52	1.30	1.33
35	BA	395	U	C4-O4	-5.52	1.19	1.23
35	BA	855	G	C2-N3	-5.52	1.28	1.32
35	BA	1417	C	C4'-C3'	-5.52	1.47	1.52
35	BA	1832	C	N3-C4	-5.52	1.30	1.33
35	BA	1961	C	N3-C4	-5.52	1.30	1.33
1	AA	40	C	C5-C6	-5.52	1.29	1.34
1	AA	1212	U	C2-N3	-5.52	1.33	1.37
1	AA	1392	G	N1-C2	-5.52	1.33	1.37
35	BA	980	A	N9-C8	-5.52	1.33	1.37
35	BA	1198	U	C2'-C1'	-5.52	1.47	1.53
35	BA	1509(A)	A	C2'-C1'	-5.52	1.47	1.53
35	BA	1961	C	C5-C6	-5.52	1.29	1.34
35	BA	2628	C	N1-C2	5.52	1.45	1.40
24	AY	321	TYR	CD1-CE1	-5.52	1.31	1.39
35	BA	1606	G	C8-N7	-5.52	1.27	1.30
35	BA	2557	G	C6-N1	-5.52	1.35	1.39
35	BA	11	G	P-O5'	-5.52	1.54	1.59
35	BA	224	G	C2-N3	-5.52	1.28	1.32
35	BA	530	G	C2-N3	-5.52	1.28	1.32
35	BA	905	U	C4-C5	-5.52	1.38	1.43
35	BA	1482	G	N3-C4	-5.52	1.31	1.35
35	BA	1754	C	N3-C4	-5.52	1.30	1.33
35	BA	2029	G	C6-O6	-5.52	1.19	1.24
35	BA	2087	G	N9-C4	-5.52	1.33	1.38
35	BA	2125	G	N3-C4	-5.52	1.31	1.35
1	AA	757	U	C2-N3	-5.52	1.33	1.37
1	AA	1076	C	C5'-C4'	-5.52	1.44	1.51
1	AA	1126	U	C5'-C4'	-5.52	1.44	1.51
35	BA	271(P)	C	N1-C6	-5.52	1.33	1.37
35	BA	492	A	O3'-P	-5.52	1.54	1.61
35	BA	595	C	N1-C6	-5.52	1.33	1.37
35	BA	908	C	N1-C6	-5.52	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2072	G	C5'-C4'	-5.52	1.44	1.51
35	BA	2470	G	N1-C2	-5.52	1.33	1.37
35	BA	2658	C	N1-C6	-5.52	1.33	1.37
1	AA	29	G	C6-N1	-5.51	1.35	1.39
1	AA	606	G	N7-C5	-5.51	1.35	1.39
1	AA	1499	A	C8-N7	-5.51	1.27	1.31
35	BA	346	A	P-O5'	-5.51	1.54	1.59
35	BA	1027	A	N7-C5	-5.51	1.35	1.39
35	BA	1117	G	C6-N1	-5.51	1.35	1.39
35	BA	1436	G	N7-C5	-5.51	1.35	1.39
35	BA	1932	A	C5-C4	-5.51	1.34	1.38
35	BA	2112	G	P-O5'	-5.51	1.54	1.59
35	BA	2694	G	N7-C5	-5.51	1.35	1.39
1	AA	1024	G	C2'-O2'	-5.51	1.34	1.41
35	BA	381	G	N3-C4	-5.51	1.31	1.35
35	BA	1167	U	N3-C4	5.51	1.43	1.38
36	BB	13	A	C3'-C2'	-5.51	1.46	1.52
1	AA	261	U	P-O5'	-5.51	1.54	1.59
1	AA	338	A	N9-C4	-5.51	1.34	1.37
1	AA	1119	C	P-O5'	-5.51	1.54	1.59
22	AV	70	G	C8-N7	-5.51	1.27	1.30
35	BA	2456	C	P-O5'	-5.51	1.54	1.59
1	AA	375	U	C2'-C1'	-5.51	1.47	1.53
1	AA	530	G	N3-C4	5.51	1.39	1.35
1	AA	898	G	N9-C8	-5.51	1.33	1.37
35	BA	835	A	C6-N1	-5.51	1.31	1.35
35	BA	990	A	C6-N1	-5.51	1.31	1.35
35	BA	1309	G	N9-C8	-5.51	1.33	1.37
35	BA	2078	C	C2-N3	-5.51	1.31	1.35
35	BA	2390	U	N1-C2	5.51	1.43	1.38
35	BA	1303	G	C6-N1	-5.51	1.35	1.39
35	BA	1596	A	N3-C4	-5.51	1.31	1.34
35	BA	2455	G	N9-C4	-5.51	1.33	1.38
35	BA	2565	A	N3-C4	-5.51	1.31	1.34
1	AA	162	A	C2-N3	-5.51	1.28	1.33
1	AA	1250	A	N9-C8	-5.51	1.33	1.37
35	BA	228	A	N9-C8	-5.51	1.33	1.37
35	BA	674	G	C2-N3	-5.51	1.28	1.32
35	BA	2177	C	C5-C6	-5.51	1.29	1.34
35	BA	2317	C	C4-C5	-5.51	1.38	1.43
36	BB	51	G	N1-C2	-5.51	1.33	1.37
35	BA	429	A	N9-C4	-5.50	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	430	G	O3'-P	-5.50	1.54	1.61
35	BA	1210	A	N9-C4	-5.50	1.34	1.37
35	BA	1255	U	N3-C4	-5.50	1.33	1.38
35	BA	1876	A	N9-C4	-5.50	1.34	1.37
35	BA	2429	G	C4'-C3'	-5.50	1.47	1.52
1	AA	1421	G	C2-N2	-5.50	1.29	1.34
35	BA	298	G	N9-C4	-5.50	1.33	1.38
35	BA	1319	G	C6-N1	-5.50	1.35	1.39
35	BA	2813	A	C6-N6	-5.50	1.29	1.33
1	AA	41	G	C5-C4	-5.50	1.34	1.38
1	AA	1382	C	O3'-P	-5.50	1.54	1.61
35	BA	246	C	C5-C6	-5.50	1.29	1.34
35	BA	380	U	C2-O2	-5.50	1.17	1.22
35	BA	409	C	C5-C6	-5.50	1.29	1.34
35	BA	586	A	N3-C4	-5.50	1.31	1.34
35	BA	768	G	P-O5'	-5.50	1.54	1.59
35	BA	1475	G	N1-C2	-5.50	1.33	1.37
35	BA	2574	G	N1-C2	-5.50	1.33	1.37
35	BA	2720	U	O4'-C1'	-5.50	1.34	1.41
35	BA	1082	U	N1-C2	-5.50	1.33	1.38
35	BA	1190	G	C3'-C2'	-5.50	1.46	1.52
35	BA	1850	G	C5-C6	-5.50	1.36	1.42
35	BA	2747	G	C5-C6	-5.50	1.36	1.42
1	AA	238	G	N9-C4	-5.50	1.33	1.38
1	AA	506	G	C6-N1	-5.50	1.35	1.39
1	AA	892	A	C4'-C3'	-5.50	1.47	1.52
1	AA	1012	U	C4'-C3'	-5.50	1.47	1.52
1	AA	1105	A	O3'-P	-5.50	1.54	1.61
35	BA	136	G	C6-N1	-5.50	1.35	1.39
35	BA	425	G	C6-O6	-5.50	1.19	1.24
35	BA	768	G	C4'-C3'	-5.50	1.47	1.52
35	BA	794	G	C6-O6	-5.50	1.19	1.24
1	AA	368	U	C4-O4	-5.50	1.19	1.23
1	AA	588	G	C2'-C1'	-5.50	1.47	1.53
35	BA	1380	G	N3-C4	-5.50	1.31	1.35
35	BA	2479	G	N3-C4	-5.50	1.31	1.35
35	BA	2414	G	C4'-O4'	-5.50	1.38	1.45
1	AA	58	C	C4-C5	-5.49	1.38	1.43
1	AA	1364	U	C2-N3	-5.49	1.33	1.37
35	BA	882	G	C2'-O2'	-5.49	1.34	1.41
35	BA	2433	A	C6-N1	5.49	1.39	1.35
48	BQ	139	GLU	N-CA	-5.49	1.35	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	319	G	C8-N7	-5.49	1.27	1.30
1	AA	733	A	C8-N7	-5.49	1.27	1.31
35	BA	2732	G	C8-N7	-5.49	1.27	1.30
35	BA	2883	A	C8-N7	-5.49	1.27	1.31
1	AA	189(J)	G	N3-C4	-5.49	1.31	1.35
1	AA	900	A	O3'-P	-5.49	1.54	1.61
35	BA	560	C	C2-O2	5.49	1.29	1.24
35	BA	1643	G	N3-C4	-5.49	1.31	1.35
35	BA	2728	U	C3'-O3'	5.49	1.49	1.42
40	BF	62	ARG	CZ-NH1	-5.49	1.25	1.33
1	AA	705	U	C5-C6	-5.49	1.29	1.34
35	BA	676	A	N7-C5	-5.49	1.35	1.39
35	BA	762	U	P-O5'	-5.49	1.54	1.59
35	BA	927	G	N7-C5	-5.49	1.35	1.39
35	BA	1839	G	N9-C4	-5.49	1.33	1.38
1	AA	189(B)	C	C5-C6	-5.49	1.29	1.34
1	AA	760	G	C2-N3	-5.49	1.28	1.32
35	BA	478	A	C6-N1	-5.49	1.31	1.35
35	BA	498	G	C2-N3	-5.49	1.28	1.32
35	BA	1964	G	N9-C8	-5.49	1.34	1.37
35	BA	2112	G	C2-N3	-5.49	1.28	1.32
36	BB	8	U	N1-C2	5.49	1.43	1.38
1	AA	70	G	N7-C5	5.49	1.42	1.39
1	AA	107	G	C5-C4	-5.49	1.34	1.38
1	AA	571	U	N3-C4	-5.49	1.33	1.38
35	BA	176	G	C8-N7	-5.49	1.27	1.30
35	BA	1453	U	C4-C5	-5.49	1.38	1.43
35	BA	1832	C	N1-C6	-5.49	1.33	1.37
35	BA	1857	G	C8-N7	-5.49	1.27	1.30
1	AA	993	G	C6-O6	-5.48	1.19	1.24
6	AF	95	GLU	CD-OE1	-5.48	1.19	1.25
35	BA	597	U	C2'-C1'	-5.48	1.47	1.53
35	BA	927	G	C2-N2	-5.48	1.29	1.34
35	BA	1442	G	C2-N2	-5.48	1.29	1.34
1	AA	505	G	N1-C2	-5.48	1.33	1.37
1	AA	764	C	P-OP1	-5.48	1.39	1.49
1	AA	1028	C	C2-N3	5.48	1.40	1.35
1	AA	1237	C	C4-N4	-5.48	1.29	1.33
1	AA	1408	A	N3-C4	-5.48	1.31	1.34
35	BA	598	G	C3'-C2'	-5.48	1.46	1.52
35	BA	1017	G	C3'-C2'	-5.48	1.46	1.52
35	BA	1298	C	C4-N4	-5.48	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1349	A	C5-C6	-5.48	1.36	1.41
35	BA	1633	G	C6-N1	-5.48	1.35	1.39
35	BA	1936	A	C5-C6	-5.48	1.36	1.41
35	BA	2162	G	N1-C2	-5.48	1.33	1.37
35	BA	2206	G	C2-N3	-5.48	1.28	1.32
35	BA	2836	U	C2-N3	-5.48	1.33	1.37
1	AA	54	C	C2-O2	-5.48	1.19	1.24
1	AA	410	G	C5'-C4'	-5.48	1.44	1.51
1	AA	539	A	C4'-C3'	-5.48	1.47	1.52
1	AA	815	A	C6-N1	-5.48	1.31	1.35
1	AA	1073	U	C4'-C3'	-5.48	1.47	1.52
1	AA	1352	C	C2-N3	-5.48	1.31	1.35
35	BA	1174	A	N7-C5	5.48	1.42	1.39
35	BA	1351	C	C2-N3	-5.48	1.31	1.35
35	BA	1691	C	C2-O2	-5.48	1.19	1.24
35	BA	1698	A	C8-N7	-5.48	1.27	1.31
35	BA	1721	G	C5-C4	-5.48	1.34	1.38
35	BA	2187	G	C5-C4	-5.48	1.34	1.38
1	AA	97	G	C3'-O3'	-5.48	1.34	1.42
35	BA	334	C	P-O5'	-5.48	1.54	1.59
1	AA	540	G	N9-C8	5.48	1.41	1.37
1	AA	760	G	C6-N1	-5.48	1.35	1.39
1	AA	1136	U	C4-C5	-5.48	1.38	1.43
35	BA	742	G	C4'-C3'	-5.48	1.47	1.52
35	BA	980	A	C4'-C3'	-5.48	1.47	1.52
35	BA	1087	G	C2-N3	-5.48	1.28	1.32
35	BA	2291	U	N3-C4	5.48	1.43	1.38
1	AA	625	G	C6-O6	-5.47	1.19	1.24
1	AA	815	A	N9-C4	-5.47	1.34	1.37
1	AA	999	C	C4-N4	-5.47	1.29	1.33
1	AA	1071	C	C4-N4	-5.47	1.29	1.33
1	AA	1193	G	N9-C4	-5.47	1.33	1.38
1	AA	1529	G	N3-C4	-5.47	1.31	1.35
35	BA	221	A	N3-C4	5.47	1.38	1.34
35	BA	890	A	N9-C4	-5.47	1.34	1.37
1	AA	376	G	C3'-C2'	-5.47	1.46	1.52
1	AA	1437	C	O4'-C1'	-5.47	1.34	1.41
35	BA	334	C	N3-C4	-5.47	1.30	1.33
35	BA	418	G	C2-N3	5.47	1.37	1.32
35	BA	1620	G	C6-N1	5.47	1.43	1.39
35	BA	1633	G	C4'-O4'	-5.47	1.38	1.45
35	BA	1833	U	N3-C4	-5.47	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AV	9	G	N9-C8	-5.47	1.34	1.37
35	BA	586	A	N7-C5	-5.47	1.35	1.39
35	BA	1185	C	C4-C5	-5.47	1.38	1.43
35	BA	1641	A	N1-C2	5.47	1.39	1.34
35	BA	2176	A	N7-C5	-5.47	1.35	1.39
35	BA	2187	G	C6-N1	-5.47	1.35	1.39
35	BA	2349	G	N9-C8	-5.47	1.34	1.37
1	AA	644	G	N3-C4	-5.47	1.31	1.35
35	BA	357	A	C6-N6	-5.47	1.29	1.33
35	BA	394	A	C6-N6	-5.47	1.29	1.33
35	BA	1054	A	N9-C8	-5.47	1.33	1.37
1	AA	146	G	C2-N3	-5.47	1.28	1.32
1	AA	804	U	C5-C6	-5.47	1.29	1.34
1	AA	1081	G	C2-N3	-5.47	1.28	1.32
35	BA	1720	U	C2-N3	5.47	1.41	1.37
36	BB	28	C	C4'-C3'	-5.47	1.47	1.52
1	AA	548	G	C6-N1	-5.47	1.35	1.39
1	AA	568	G	C6-N1	-5.47	1.35	1.39
1	AA	1298	C	O4'-C1'	-5.47	1.34	1.41
1	AA	1474	G	C6-N1	-5.47	1.35	1.39
35	BA	519	U	N1-C2	-5.47	1.33	1.38
35	BA	686	G	O4'-C1'	-5.47	1.34	1.41
35	BA	1450	G	C6-N1	-5.47	1.35	1.39
35	BA	1501	C	N1-C6	-5.47	1.33	1.37
35	BA	1790	C	N1-C6	-5.47	1.33	1.37
35	BA	1862	G	C8-N7	-5.47	1.27	1.30
36	BB	9	G	N9-C8	-5.47	1.34	1.37
1	AA	547	A	C6-N6	-5.46	1.29	1.33
1	AA	825	G	N9-C4	-5.46	1.33	1.38
1	AA	987	G	N9-C4	-5.46	1.33	1.38
1	AA	1338	G	N1-C2	-5.46	1.33	1.37
35	BA	68	G	N7-C5	-5.46	1.35	1.39
35	BA	103	A	C2-N3	5.46	1.38	1.33
35	BA	792	G	C6-O6	-5.46	1.19	1.24
35	BA	1021	A	C4'-C3'	-5.46	1.47	1.52
35	BA	1910	G	N7-C5	-5.46	1.35	1.39
35	BA	2581	G	C6-O6	-5.46	1.19	1.24
36	BB	63	G	N7-C5	-5.46	1.35	1.39
1	AA	773	G	C2-N3	-5.46	1.28	1.32
1	AA	1386	G	C2'-C1'	-5.46	1.47	1.53
35	BA	1080	C	C5-C6	-5.46	1.29	1.34
35	BA	1161	C	N3-C4	5.46	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2480	C	C5-C6	-5.46	1.29	1.34
35	BA	2816	C	N3-C4	5.46	1.37	1.33
1	AA	168	G	P-O5'	-5.46	1.54	1.59
1	AA	560	U	N1-C2	-5.46	1.33	1.38
1	AA	1038	C	C2-O2	-5.46	1.19	1.24
1	AA	1249	C	C4-N4	-5.46	1.29	1.33
1	AA	1391	U	P-O5'	-5.46	1.54	1.59
35	BA	1356	G	C6-O6	-5.46	1.19	1.24
35	BA	1460	A	N3-C4	5.46	1.38	1.34
1	AA	1234	C	N1-C6	-5.46	1.33	1.37
35	BA	721	C	C3'-C2'	-5.46	1.46	1.52
35	BA	1175	U	C4-O4	-5.46	1.19	1.23
35	BA	1276	A	C3'-C2'	-5.46	1.46	1.52
35	BA	1320	C	N1-C6	-5.46	1.33	1.37
35	BA	1442	G	N9-C8	-5.46	1.34	1.37
35	BA	1575	C	C3'-C2'	-5.46	1.46	1.52
35	BA	2482	G	C8-N7	-5.46	1.27	1.30
1	AA	140	A	C8-N7	-5.46	1.27	1.31
8	AH	113	SER	CA-CB	-5.46	1.44	1.52
35	BA	547	A	C8-N7	-5.46	1.27	1.31
35	BA	2791	C	C5-C6	-5.46	1.29	1.34
1	AA	184	G	C5-C6	-5.46	1.36	1.42
1	AA	1458	G	C4'-O4'	-5.46	1.38	1.45
35	BA	216	A	C5-C4	-5.46	1.34	1.38
35	BA	1555	G	C5-C6	-5.46	1.36	1.42
35	BA	2840	C	O3'-P	-5.46	1.54	1.61
1	AA	285	G	C6-N1	-5.46	1.35	1.39
1	AA	384	G	C6-N1	-5.46	1.35	1.39
1	AA	1080	A	N9-C4	-5.46	1.34	1.37
35	BA	2328	A	N9-C8	-5.46	1.33	1.37
1	AA	625	G	C4'-C3'	-5.45	1.47	1.52
1	AA	953	G	C2-N2	-5.45	1.29	1.34
1	AA	1472	U	P-OP1	-5.45	1.39	1.49
7	AG	8	GLU	CD-OE1	-5.45	1.19	1.25
35	BA	53	A	O3'-P	-5.45	1.54	1.61
35	BA	1182	A	C4'-C3'	-5.45	1.47	1.52
35	BA	2220	G	N3-C4	-5.45	1.31	1.35
35	BA	2240	C	P-O5'	-5.45	1.54	1.59
35	BA	2270	G	P-O5'	-5.45	1.54	1.59
35	BA	2699	C	C4-C5	-5.45	1.38	1.43
1	AA	44	G	C2'-O2'	-5.45	1.34	1.41
1	AA	451	A	O4'-C1'	-5.45	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	412	A	C4'-C3'	-5.45	1.47	1.52
1	AA	517	G	N9-C8	-5.45	1.34	1.37
1	AA	712	A	N9-C8	-5.45	1.33	1.37
1	AA	779	C	C2-N3	-5.45	1.31	1.35
1	AA	1102	A	C2-N3	-5.45	1.28	1.33
1	AA	1146	A	C2-N3	-5.45	1.28	1.33
1	AA	1343	G	N1-C2	-5.45	1.33	1.37
22	AV	55	U	C5-C6	-5.45	1.29	1.34
35	BA	130	C	C4'-C3'	-5.45	1.47	1.52
35	BA	142	A	N9-C8	-5.45	1.33	1.37
35	BA	1273	U	C4-O4	-5.45	1.19	1.23
35	BA	1322	A	C6-N6	-5.45	1.29	1.33
35	BA	2590	A	O3'-P	-5.45	1.54	1.61
35	BA	2794	C	C2-N3	-5.45	1.31	1.35
35	BA	2826	A	C5-C4	-5.45	1.34	1.38
1	AA	402	G	C5-C4	-5.45	1.34	1.38
1	AA	1276	G	P-O5'	-5.45	1.54	1.59
1	AA	1403	C	O3'-P	-5.45	1.54	1.61
35	BA	420	C	C5-C6	-5.45	1.29	1.34
35	BA	1330	C	P-O5'	-5.45	1.54	1.59
35	BA	1745(A)	C	C5-C6	-5.45	1.29	1.34
1	AA	1182	G	N3-C4	-5.45	1.31	1.35
1	AA	1501	C	C2'-C1'	-5.45	1.47	1.53
35	BA	276	A	C8-N7	-5.45	1.27	1.31
35	BA	868	U	C4'-C3'	-5.45	1.47	1.52
1	AA	333	G	N7-C5	-5.45	1.35	1.39
1	AA	1048	G	N7-C5	-5.45	1.35	1.39
1	AA	1298	C	N3-C4	-5.45	1.30	1.33
35	BA	1810	A	C6-N6	-5.45	1.29	1.33
35	BA	2116	G	N1-C2	-5.45	1.33	1.37
35	BA	406	G	O4'-C1'	-5.44	1.34	1.41
35	BA	648	G	N9-C8	-5.44	1.34	1.37
35	BA	678	C	C2-O2	-5.44	1.19	1.24
35	BA	1000	A	N3-C4	-5.44	1.31	1.34
35	BA	1969	A	C5'-C4'	-5.44	1.44	1.51
35	BA	2331	G	C2'-O2'	-5.44	1.34	1.41
1	AA	929	G	C2-N3	-5.44	1.28	1.32
1	AA	986	A	P-O5'	-5.44	1.54	1.59
1	AA	1050	G	C2-N3	-5.44	1.28	1.32
1	AA	1401	G	C6-O6	-5.44	1.19	1.24
35	BA	449	A	P-O5'	-5.44	1.54	1.59
35	BA	596	G	N3-C4	-5.44	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	665	C	C5-C6	-5.44	1.29	1.34
35	BA	723	G	N3-C4	5.44	1.39	1.35
35	BA	868	U	C5-C6	-5.44	1.29	1.34
35	BA	1511	C	C5-C6	-5.44	1.29	1.34
35	BA	2258	C	N1-C2	-5.44	1.34	1.40
35	BA	2536	G	C2-N2	-5.44	1.29	1.34
1	AA	325	A	C8-N7	-5.44	1.27	1.31
1	AA	794	A	N9-C8	-5.44	1.33	1.37
1	AA	866	C	P-O5'	-5.44	1.54	1.59
1	AA	1332	A	N9-C8	-5.44	1.33	1.37
35	BA	92	A	C8-N7	-5.44	1.27	1.31
35	BA	341	G	N1-C2	-5.44	1.33	1.37
35	BA	544	G	C4'-C3'	-5.44	1.47	1.52
35	BA	1464	C	O3'-P	-5.44	1.54	1.61
35	BA	1493	C	N3-C4	-5.44	1.30	1.33
35	BA	1894	C	N1-C6	-5.44	1.33	1.37
1	AA	271	C	C4-C5	-5.44	1.38	1.43
1	AA	936	C	N1-C2	-5.44	1.34	1.40
35	BA	77	C	C2-O2	-5.44	1.19	1.24
35	BA	271(T)	C	C4-C5	-5.44	1.38	1.43
35	BA	1041	C	C2-O2	-5.44	1.19	1.24
35	BA	1923	U	C4'-O4'	-5.44	1.38	1.45
1	AA	1520	G	C2-N3	-5.44	1.28	1.32
14	AN	21	TYR	CE1-CZ	-5.44	1.31	1.38
35	BA	386	G	C4'-C3'	-5.44	1.47	1.52
35	BA	970	C	C2'-C1'	-5.44	1.47	1.53
35	BA	1592	C	C3'-C2'	-5.44	1.46	1.52
35	BA	2497	A	C2-N3	-5.44	1.28	1.33
35	BA	2557	G	C4'-C3'	-5.44	1.47	1.52
35	BA	1338	G	P-O5'	-5.44	1.54	1.59
1	AA	305	G	C6-N1	-5.43	1.35	1.39
1	AA	487	A	C3'-C2'	-5.43	1.46	1.52
1	AA	819	A	N7-C5	-5.43	1.35	1.39
1	AA	898	G	N7-C5	-5.43	1.35	1.39
1	AA	1499	A	C5-C6	-5.43	1.36	1.41
22	AV	56	C	N3-C4	-5.43	1.30	1.33
35	BA	473	G	C2'-C1'	-5.43	1.47	1.53
35	BA	476	G	C6-N1	-5.43	1.35	1.39
35	BA	650	C	O3'-P	-5.43	1.54	1.61
35	BA	1153	C	N1-C2	-5.43	1.34	1.40
35	BA	1688	U	C4'-O4'	-5.43	1.38	1.45
35	BA	1754	C	O3'-P	-5.43	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1864	U	N1-C6	-5.43	1.33	1.38
35	BA	2397	G	C6-N1	-5.43	1.35	1.39
35	BA	2871	C	C4-C5	-5.43	1.38	1.43
36	BB	59	A	C5-C4	-5.43	1.34	1.38
1	AA	1525	G	C8-N7	-5.43	1.27	1.30
22	AV	64	G	C8-N7	-5.43	1.27	1.30
35	BA	117	G	C5'-C4'	-5.43	1.44	1.51
35	BA	1847	A	C3'-C2'	-5.43	1.46	1.52
1	AA	1099	G	N9-C4	5.43	1.42	1.38
35	BA	269	U	N1-C6	-5.43	1.33	1.38
35	BA	2399	G	N3-C4	-5.43	1.31	1.35
35	BA	51	G	C8-N7	5.43	1.34	1.30
35	BA	658	C	C5-C6	-5.43	1.30	1.34
35	BA	805	G	C2-N3	-5.43	1.28	1.32
35	BA	1828	G	C2-N3	-5.43	1.28	1.32
35	BA	1991	U	C2-N3	-5.43	1.33	1.37
36	BB	29	A	C8-N7	-5.43	1.27	1.31
1	AA	886	G	C6-O6	-5.43	1.19	1.24
35	BA	342	G	N9-C8	-5.43	1.34	1.37
35	BA	616	G	N7-C5	-5.43	1.35	1.39
35	BA	1553	A	N7-C5	-5.43	1.35	1.39
35	BA	1591	G	N9-C8	-5.43	1.34	1.37
35	BA	2802	G	N7-C5	-5.43	1.35	1.39
1	AA	103	C	C2-N3	-5.43	1.31	1.35
1	AA	798	G	N3-C4	-5.43	1.31	1.35
35	BA	1154	G	N1-C2	-5.43	1.33	1.37
35	BA	1783	A	C6-N6	-5.43	1.29	1.33
35	BA	2672	G	N1-C2	-5.43	1.33	1.37
35	BA	2675	A	N9-C4	5.43	1.41	1.37
1	AA	158	G	C6-N1	-5.42	1.35	1.39
35	BA	262	A	C2-N3	-5.42	1.28	1.33
35	BA	913	U	C5-C6	-5.42	1.29	1.34
35	BA	1489	U	C4-C5	-5.42	1.38	1.43
35	BA	1688	U	N1-C2	-5.42	1.33	1.38
35	BA	1964	G	C2'-C1'	-5.42	1.47	1.53
1	AA	346	G	C5-C6	-5.42	1.36	1.42
1	AA	1177	G	C5-C6	-5.42	1.36	1.42
1	AA	1508	G	N9-C8	-5.42	1.34	1.37
1	AA	1525	G	C3'-C2'	-5.42	1.46	1.52
35	BA	1225	G	C2'-O2'	5.42	1.48	1.41
1	AA	1037	C	C4-C5	-5.42	1.38	1.43
1	AA	1077	G	N7-C5	-5.42	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1216	G	C5'-C4'	-5.42	1.44	1.51
22	AV	17(A)	U	C2-O2	-5.42	1.17	1.22
35	BA	713	G	N7-C5	-5.42	1.35	1.39
35	BA	2387	U	N3-C4	-5.42	1.33	1.38
35	BA	1158	C	C2-O2	-5.42	1.19	1.24
35	BA	2690	C	C2-O2	-5.42	1.19	1.24
1	AA	141	A	N9-C4	-5.42	1.34	1.37
1	AA	391	G	N9-C4	-5.42	1.33	1.38
1	AA	988	G	O3'-P	-5.42	1.54	1.61
35	BA	401	A	N9-C4	-5.42	1.34	1.37
35	BA	2818	G	N9-C8	-5.42	1.34	1.37
1	AA	333	G	C4'-C3'	-5.42	1.47	1.52
1	AA	990	C	N1-C6	-5.42	1.33	1.37
1	AA	1525	G	C5-C4	-5.42	1.34	1.38
35	BA	1033	U	O3'-P	-5.42	1.54	1.61
35	BA	1347	G	C5-C4	-5.42	1.34	1.38
36	BB	6	C	C4-C5	-5.42	1.38	1.43
1	AA	348	G	N7-C5	-5.42	1.36	1.39
1	AA	349	A	N7-C5	-5.42	1.36	1.39
1	AA	496	A	C2-N3	-5.42	1.28	1.33
1	AA	570	G	N7-C5	-5.42	1.36	1.39
1	AA	1239	A	C2-N3	-5.42	1.28	1.33
35	BA	1183	G	N7-C5	-5.42	1.36	1.39
1	AA	836	G	C8-N7	-5.41	1.27	1.30
1	AA	909	A	N9-C8	-5.41	1.33	1.37
1	AA	1224	G	N9-C4	-5.41	1.33	1.38
35	BA	363(E)	U	C2-N3	-5.41	1.33	1.37
35	BA	476	G	N1-C2	-5.41	1.33	1.37
35	BA	770	G	N1-C2	-5.41	1.33	1.37
35	BA	1336	A	N3-C4	5.41	1.38	1.34
35	BA	1820	U	C2-N3	-5.41	1.33	1.37
35	BA	1852	C	C2'-C1'	-5.41	1.47	1.53
35	BA	1863	G	C8-N7	-5.41	1.27	1.30
35	BA	2082	A	C5-C6	-5.41	1.36	1.41
35	BA	2272	U	C4-C5	-5.41	1.38	1.43
35	BA	2345	G	C8-N7	-5.41	1.27	1.30
35	BA	2418	A	C5-C4	-5.41	1.34	1.38
36	BB	83	G	C2-N3	-5.41	1.28	1.32
1	AA	606	G	C5'-C4'	-5.41	1.44	1.51
1	AA	967	C	C2'-O2'	-5.41	1.34	1.41
1	AA	1306	A	N3-C4	-5.41	1.31	1.34
35	BA	774	A	N3-C4	-5.41	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	950	G	C5-C6	-5.41	1.36	1.42
35	BA	2194	G	C5-C6	-5.41	1.36	1.42
35	BA	2198	A	C5'-C4'	-5.41	1.44	1.51
35	BA	2315	G	C5-C4	-5.41	1.34	1.38
1	AA	35	G	C4'-O4'	-5.41	1.38	1.45
1	AA	282	A	C4'-C3'	-5.41	1.47	1.52
1	AA	1282	C	N1-C6	-5.41	1.33	1.37
35	BA	625	G	P-O5'	-5.41	1.54	1.59
35	BA	1218	C	C5-C6	-5.41	1.30	1.34
35	BA	1960	A	N1-C2	-5.41	1.29	1.34
35	BA	2071	A	N1-C2	-5.41	1.29	1.34
35	BA	2115	G	C2'-C1'	-5.41	1.47	1.53
35	BA	2375	G	C2-N2	-5.41	1.29	1.34
1	AA	740	U	C4-O4	-5.41	1.19	1.23
1	AA	814	A	C8-N7	-5.41	1.27	1.31
1	AA	1007	C	C2-N3	-5.41	1.31	1.35
35	BA	502	A	O3'-P	-5.41	1.54	1.61
35	BA	798	G	C6-O6	-5.41	1.19	1.24
35	BA	1748	G	C6-O6	-5.41	1.19	1.24
35	BA	2344	U	C5-C6	-5.41	1.29	1.34
35	BA	2706	G	C2'-O2'	-5.41	1.34	1.41
1	AA	92	C	N3-C4	-5.41	1.30	1.33
1	AA	1018	C	N3-C4	-5.41	1.30	1.33
35	BA	250	G	N9-C8	-5.41	1.34	1.37
35	BA	2576	G	O4'-C1'	-5.41	1.34	1.41
36	BB	111	G	C1'-N9	-5.41	1.39	1.46
1	AA	1503	A	N9-C4	-5.41	1.34	1.37
35	BA	172	C	C5-C6	-5.41	1.30	1.34
35	BA	1511	C	O3'-P	-5.41	1.54	1.61
35	BA	2732	G	C5-C4	-5.41	1.34	1.38
1	AA	739	C	C2-N3	-5.40	1.31	1.35
35	BA	2477	C	C4-C5	5.40	1.47	1.43
35	BA	2755	C	C2-N3	-5.40	1.31	1.35
1	AA	166	G	N1-C2	-5.40	1.33	1.37
1	AA	335	C	N3-C4	-5.40	1.30	1.33
1	AA	611	A	N9-C8	-5.40	1.33	1.37
1	AA	1051	C	N3-C4	-5.40	1.30	1.33
1	AA	1394	A	N7-C5	-5.40	1.36	1.39
1	AA	1531	A	C8-N7	-5.40	1.27	1.31
35	BA	802	A	C8-N7	-5.40	1.27	1.31
35	BA	1720	U	C2-O2	-5.40	1.17	1.22
35	BA	2828	C	N1-C2	-5.40	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	BN	72	TYR	CE1-CZ	-5.40	1.31	1.38
35	BA	355	G	C5-C4	-5.40	1.34	1.38
35	BA	573	G	P-O5'	-5.40	1.54	1.59
35	BA	1255	U	N1-C2	-5.40	1.33	1.38
35	BA	1917	U	C4-C5	-5.40	1.38	1.43
35	BA	2794	C	N3-C4	5.40	1.37	1.33
1	AA	643	C	C2-N3	-5.40	1.31	1.35
1	AA	1303	C	C4-C5	-5.40	1.38	1.43
35	BA	375	C	C4-C5	-5.40	1.38	1.43
35	BA	1422	G	C2-N3	-5.40	1.28	1.32
1	AA	773	G	C6-N1	-5.40	1.35	1.39
1	AA	1191	A	N9-C8	-5.40	1.33	1.37
13	AM	104	ARG	CZ-NH2	5.40	1.40	1.33
35	BA	183	C	P-O5'	-5.40	1.54	1.59
35	BA	272(I)	U	O4'-C1'	-5.40	1.34	1.41
35	BA	457	A	C2-N3	-5.40	1.28	1.33
35	BA	552	G	C6-N1	5.40	1.43	1.39
35	BA	624	C	C3'-C2'	-5.40	1.46	1.52
35	BA	1075	C	C5'-C4'	-5.40	1.44	1.51
35	BA	1424	G	C8-N7	5.40	1.34	1.30
35	BA	1504	C	C5'-C4'	-5.40	1.44	1.51
35	BA	2003	G	C5-C6	-5.40	1.36	1.42
35	BA	2308	G	N7-C5	-5.40	1.36	1.39
36	BB	53	A	C6-N6	-5.40	1.29	1.33
22	AV	28	C	C4'-C3'	-5.40	1.47	1.52
35	BA	704	G	C5-C4	-5.40	1.34	1.38
35	BA	2358	G	C4'-C3'	-5.40	1.47	1.52
1	AA	568	G	C8-N7	-5.39	1.27	1.30
35	BA	1820	U	C5-C6	-5.39	1.29	1.34
35	BA	1847	A	C6-N1	-5.39	1.31	1.35
35	BA	2194	G	C3'-C2'	5.39	1.58	1.52
1	AA	717	C	C2-O2	-5.39	1.19	1.24
1	AA	1091	U	C2-N3	-5.39	1.33	1.37
1	AA	1261	A	C5-C6	-5.39	1.36	1.41
1	AA	1488	G	C6-O6	5.39	1.29	1.24
35	BA	1690	A	C5-C4	-5.39	1.34	1.38
35	BA	1857	G	N7-C5	5.39	1.42	1.39
1	AA	46	G	N7-C5	-5.39	1.36	1.39
1	AA	457	C	N3-C4	-5.39	1.30	1.33
1	AA	797	C	N3-C4	-5.39	1.30	1.33
35	BA	294	A	N7-C5	-5.39	1.36	1.39
35	BA	795	C	N3-C4	-5.39	1.30	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	970	C	C3'-C2'	-5.39	1.46	1.52
35	BA	1890	A	N7-C5	-5.39	1.36	1.39
35	BA	1949	G	N7-C5	-5.39	1.36	1.39
1	AA	911	U	C4'-C3'	-5.39	1.47	1.52
1	AA	1039	C	C4-C5	-5.39	1.38	1.43
35	BA	736	C	C5-C6	-5.39	1.30	1.34
35	BA	1678	G	C6-O6	-5.39	1.19	1.24
35	BA	2558	C	C4'-C3'	-5.39	1.47	1.52
35	BA	2655	G	C2-N3	-5.39	1.28	1.32
35	BA	2668	G	N1-C2	5.39	1.42	1.37
35	BA	2869	G	C6-O6	-5.39	1.19	1.24
36	BB	110	G	N9-C4	-5.39	1.33	1.38
35	BA	2689	U	C3'-C2'	-5.39	1.46	1.52
35	BA	2704	C	P-O5'	-5.39	1.54	1.59
35	BA	2729	G	C8-N7	-5.39	1.27	1.30
1	AA	172	A	O4'-C1'	-5.39	1.34	1.41
1	AA	942	G	O3'-P	-5.39	1.54	1.61
1	AA	1170	A	C5-C4	-5.39	1.34	1.38
35	BA	2087	G	N3-C4	-5.39	1.31	1.35
35	BA	2820	A	N3-C4	-5.39	1.31	1.34
1	AA	587	G	C2-N3	-5.38	1.28	1.32
31	B6	21	TYR	CE2-CZ	5.38	1.45	1.38
35	BA	325	G	N7-C5	-5.38	1.36	1.39
35	BA	366	C	N1-C6	-5.38	1.33	1.37
35	BA	697	C	C4-C5	-5.38	1.38	1.43
35	BA	761	A	C8-N7	-5.38	1.27	1.31
35	BA	2006	C	N1-C6	-5.38	1.33	1.37
35	BA	2776	A	N7-C5	-5.38	1.36	1.39
35	BA	1602	U	C2-O2	-5.38	1.17	1.22
35	BA	2397	G	C2-N2	-5.38	1.29	1.34
1	AA	228	A	N9-C4	-5.38	1.34	1.37
1	AA	292	G	N3-C4	-5.38	1.31	1.35
1	AA	669	U	C4-C5	-5.38	1.38	1.43
1	AA	1088	G	N9-C4	-5.38	1.33	1.38
35	BA	514	A	N9-C4	-5.38	1.34	1.37
35	BA	543	C	C4-C5	-5.38	1.38	1.43
35	BA	630	G	C8-N7	-5.38	1.27	1.30
35	BA	691	C	C5-C6	-5.38	1.30	1.34
35	BA	1226	A	C4'-O4'	-5.38	1.38	1.45
35	BA	1612	C	C3'-C2'	-5.38	1.46	1.52
35	BA	2344	U	O3'-P	5.38	1.67	1.61
35	BA	2707	G	C8-N7	-5.38	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	119	G	C6-N1	-5.38	1.35	1.39
1	AA	809	G	C5-C4	-5.38	1.34	1.38
35	BA	632	A	C8-N7	-5.38	1.27	1.31
35	BA	672	C	C2-N3	-5.38	1.31	1.35
35	BA	1528	A	C6-N6	5.38	1.38	1.33
35	BA	2467	C	C2-N3	-5.38	1.31	1.35
35	BA	694	U	C4-O4	-5.38	1.19	1.23
35	BA	2180	U	C2-N3	-5.38	1.33	1.37
35	BA	2226	C	C3'-C2'	-5.38	1.46	1.52
35	BA	2725	A	C2-N3	-5.38	1.28	1.33
1	AA	7	G	N9-C8	-5.38	1.34	1.37
1	AA	253	U	O3'-P	-5.38	1.54	1.61
1	AA	397	A	N9-C4	-5.38	1.34	1.37
35	BA	544	G	C4'-O4'	-5.38	1.38	1.45
35	BA	727	A	P-O5'	-5.38	1.54	1.59
35	BA	1780	A	N9-C8	-5.38	1.33	1.37
1	AA	1405	G	C5'-C4'	-5.37	1.45	1.51
1	AA	160	A	O3'-P	-5.37	1.54	1.61
1	AA	573	A	N7-C5	-5.37	1.36	1.39
1	AA	776	G	P-O5'	-5.37	1.54	1.59
1	AA	1147	C	N1-C6	-5.37	1.33	1.37
22	AV	27	U	C4'-C3'	5.37	1.59	1.53
22	AV	56	C	C5-C6	-5.37	1.30	1.34
35	BA	213	A	C2-N3	-5.37	1.28	1.33
35	BA	254	G	N7-C5	-5.37	1.36	1.39
35	BA	874	G	N7-C5	-5.37	1.36	1.39
35	BA	1011	G	N7-C5	-5.37	1.36	1.39
35	BA	1274	A	C5-C4	-5.37	1.34	1.38
35	BA	1533	G	C5-C6	-5.37	1.36	1.42
35	BA	1937	A	N7-C5	-5.37	1.36	1.39
35	BA	2148	G	C6-O6	-5.37	1.19	1.24
35	BA	2535	G	C6-N1	-5.37	1.35	1.39
35	BA	2592	G	C6-O6	5.37	1.28	1.24
36	BB	61	G	O3'-P	-5.37	1.54	1.61
35	BA	804	A	N9-C8	-5.37	1.33	1.37
35	BA	1409	C	C2-N3	-5.37	1.31	1.35
1	AA	10	A	C5-C6	-5.37	1.36	1.41
1	AA	259	G	C5-C4	-5.37	1.34	1.38
1	AA	345	C	N3-C4	-5.37	1.30	1.33
1	AA	396	G	C8-N7	-5.37	1.27	1.30
1	AA	1398	A	C1'-N9	-5.37	1.39	1.46
35	BA	1068	G	C5-C6	-5.37	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2277	G	C5-C6	-5.37	1.36	1.42
1	AA	536	C	C4-C5	-5.37	1.38	1.43
1	AA	1260	C	C4-C5	-5.37	1.38	1.43
35	BA	1214	A	C3'-C2'	-5.37	1.46	1.52
35	BA	1221	C	C4-C5	-5.37	1.38	1.43
35	BA	1234	U	O3'-P	-5.37	1.54	1.61
35	BA	1497	U	O3'-P	-5.37	1.54	1.61
35	BA	2560	C	C4-C5	-5.37	1.38	1.43
36	BB	45	A	C6-N1	-5.37	1.31	1.35
1	AA	1389	C	C4'-C3'	-5.37	1.47	1.52
22	AV	45	G	N3-C4	-5.37	1.31	1.35
35	BA	76	C	C4'-C3'	-5.37	1.47	1.52
35	BA	130	C	N1-C2	-5.37	1.34	1.40
35	BA	776	G	C8-N7	5.37	1.34	1.30
35	BA	2013	A	C4'-C3'	-5.37	1.47	1.52
35	BA	2061	G	N3-C4	-5.37	1.31	1.35
35	BA	2130	U	N1-C2	-5.37	1.33	1.38
1	AA	460	G	N7-C5	5.36	1.42	1.39
35	BA	135	G	C5-C4	-5.36	1.34	1.38
35	BA	327	G	C2'-C1'	-5.36	1.47	1.53
35	BA	406	G	C5-C4	-5.36	1.34	1.38
35	BA	1398	C	C5'-C4'	5.36	1.57	1.51
35	BA	2154	G	N9-C8	-5.36	1.34	1.37
1	AA	671	G	N9-C4	-5.36	1.33	1.38
35	BA	281	G	N9-C4	-5.36	1.33	1.38
35	BA	301	G	N9-C4	-5.36	1.33	1.38
35	BA	1040	C	P-O5'	-5.36	1.54	1.59
35	BA	1417	C	O3'-P	-5.36	1.54	1.61
35	BA	2606	C	O3'-P	-5.36	1.54	1.61
1	AA	253	U	C5-C6	-5.36	1.29	1.34
1	AA	433	C	C3'-C2'	-5.36	1.46	1.52
1	AA	582	U	C5-C6	-5.36	1.29	1.34
1	AA	604	G	N3-C4	-5.36	1.31	1.35
35	BA	782	A	C8-N7	5.36	1.35	1.31
35	BA	1140	C	C3'-C2'	-5.36	1.46	1.52
35	BA	1813	G	C2'-O2'	-5.36	1.34	1.41
35	BA	2127	G	N3-C4	-5.36	1.31	1.35
35	BA	2654	A	C8-N7	5.36	1.35	1.31
1	AA	147	G	C5-C4	-5.36	1.34	1.38
35	BA	512	G	N9-C4	-5.36	1.33	1.38
35	BA	1148	A	C3'-C2'	-5.36	1.46	1.52
35	BA	1403	C	P-O5'	-5.36	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	532	A	C6-N1	-5.36	1.31	1.35
1	AA	621	A	N9-C4	-5.36	1.34	1.37
1	AA	1290	G	C6-N1	-5.36	1.35	1.39
1	AA	1363(A)	A	O3'-P	-5.36	1.54	1.61
22	AV	62	C	C4'-C3'	-5.36	1.47	1.52
35	BA	79	G	C8-N7	-5.36	1.27	1.30
35	BA	338	G	N1-C2	-5.36	1.33	1.37
35	BA	573	G	C8-N7	-5.36	1.27	1.30
35	BA	773	U	C4'-C3'	-5.36	1.47	1.52
35	BA	1822	G	C8-N7	-5.36	1.27	1.30
35	BA	1842	G	C8-N7	-5.36	1.27	1.30
35	BA	2555	U	C5-C6	-5.36	1.29	1.34
35	BA	2604	U	N1-C6	-5.36	1.33	1.38
1	AA	193	C	N1-C6	-5.35	1.33	1.37
35	BA	296	C	N3-C4	5.35	1.37	1.33
35	BA	654(M)	C	N1-C6	-5.35	1.33	1.37
35	BA	969	U	O3'-P	-5.35	1.54	1.61
35	BA	1311	G	N3-C4	5.35	1.39	1.35
35	BA	1971	A	N1-C2	-5.35	1.29	1.34
1	AA	222	U	C2-N3	5.35	1.41	1.37
1	AA	972	C	C2'-O2'	-5.35	1.34	1.41
1	AA	1437	C	N1-C2	-5.35	1.34	1.40
35	BA	141	A	C5-C6	-5.35	1.36	1.41
35	BA	623	G	N9-C4	-5.35	1.33	1.38
35	BA	2361	A	C2'-O2'	-5.35	1.34	1.41
35	BA	1482	G	C2-N3	-5.35	1.28	1.32
35	BA	2459	A	N1-C2	5.35	1.39	1.34
35	BA	2679	A	C6-N1	-5.35	1.31	1.35
1	AA	725	G	C6-N1	-5.35	1.35	1.39
1	AA	1257	U	C2-O2	-5.35	1.17	1.22
1	AA	1513	A	C6-N6	-5.35	1.29	1.33
35	BA	8	A	C2-N3	-5.35	1.28	1.33
35	BA	788	A	N3-C4	-5.35	1.31	1.34
35	BA	1903	G	P-O5'	-5.35	1.54	1.59
35	BA	2633	G	N3-C4	5.35	1.39	1.35
1	AA	145	G	C8-N7	-5.35	1.27	1.30
1	AA	231	G	N9-C8	-5.35	1.34	1.37
1	AA	700	G	C8-N7	-5.35	1.27	1.30
1	AA	988	G	N7-C5	-5.35	1.36	1.39
35	BA	142(A)	C	C5-C6	-5.35	1.30	1.34
35	BA	654(N)	G	C4'-O4'	-5.35	1.38	1.45
35	BA	1253	A	N7-C5	-5.35	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2135	A	C3'-C2'	-5.35	1.46	1.52
35	BA	2754	U	N3-C4	-5.35	1.33	1.38
35	BA	962	G	C2-N3	-5.35	1.28	1.32
1	AA	24	U	N1-C2	-5.34	1.33	1.38
1	AA	92	C	C4'-C3'	-5.34	1.47	1.52
1	AA	1283	G	C4'-C3'	-5.34	1.47	1.52
1	AA	1469	G	P-O5'	-5.34	1.54	1.59
35	BA	557	U	C2-N3	-5.34	1.34	1.37
35	BA	1333	C	C4-N4	-5.34	1.29	1.33
35	BA	1358	G	N3-C4	-5.34	1.31	1.35
35	BA	1648	C	C4-C5	-5.34	1.38	1.43
35	BA	1667	G	C6-N1	-5.34	1.35	1.39
35	BA	2126	A	C5-C4	-5.34	1.35	1.38
35	BA	2132	U	C4'-C3'	-5.34	1.47	1.52
35	BA	2864	G	C2-N2	-5.34	1.29	1.34
1	AA	138	G	N9-C8	-5.34	1.34	1.37
1	AA	635	G	N9-C4	-5.34	1.33	1.38
35	BA	17	G	N9-C8	-5.34	1.34	1.37
35	BA	433	C	O3'-P	-5.34	1.54	1.61
35	BA	1271	G	N9-C8	-5.34	1.34	1.37
43	BK	132	ARG	CZ-NH2	-5.34	1.26	1.33
1	AA	629	G	C2-N2	-5.34	1.29	1.34
1	AA	821	G	N7-C5	-5.34	1.36	1.39
1	AA	883	C	N3-C4	-5.34	1.30	1.33
1	AA	979	C	C4'-C3'	-5.34	1.47	1.52
35	BA	83	G	C8-N7	-5.34	1.27	1.30
35	BA	425	G	N7-C5	-5.34	1.36	1.39
35	BA	1034	G	C2-N2	-5.34	1.29	1.34
35	BA	1660	C	N1-C6	-5.34	1.33	1.37
35	BA	1935	G	N7-C5	-5.34	1.36	1.39
36	BB	57	A	C2'-O2'	-5.34	1.34	1.41
1	AA	420	U	C3'-C2'	-5.34	1.46	1.52
1	AA	512	U	C5-C6	-5.34	1.29	1.34
1	AA	1510	U	C5-C6	-5.34	1.29	1.34
35	BA	525	U	N1-C6	-5.34	1.33	1.38
35	BA	1927	A	C5-C6	-5.34	1.36	1.41
35	BA	2004	G	C5-C6	-5.34	1.37	1.42
35	BA	2421	G	C2'-C1'	-5.34	1.47	1.53
35	BA	2655	G	N9-C4	-5.34	1.33	1.38
1	AA	540	G	N1-C2	-5.34	1.33	1.37
1	AA	823	G	N1-C2	-5.34	1.33	1.37
1	AA	1042	G	C3'-C2'	-5.34	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1319	A	N9-C8	-5.34	1.33	1.37
1	AA	1517	G	C1'-N9	-5.34	1.39	1.46
1	AA	1522	U	P-O5'	-5.34	1.54	1.59
1	AA	1527	C	C2'-C1'	-5.34	1.47	1.53
35	BA	47	C	C2-N3	-5.34	1.31	1.35
35	BA	560	C	C2-N3	-5.34	1.31	1.35
35	BA	677	A	N7-C5	-5.34	1.36	1.39
35	BA	701	G	N7-C5	-5.34	1.36	1.39
35	BA	1356	G	C5-C4	-5.34	1.34	1.38
35	BA	1528	A	N3-C4	-5.34	1.31	1.34
35	BA	2861	G	N9-C8	-5.34	1.34	1.37
1	AA	423	G	C4'-C3'	-5.33	1.47	1.52
1	AA	765	G	C5-C6	-5.33	1.37	1.42
1	AA	1098	C	N1-C6	-5.33	1.33	1.37
35	BA	385	C	N1-C6	-5.33	1.33	1.37
35	BA	699	A	C8-N7	-5.33	1.27	1.31
35	BA	2712	U	C4-O4	-5.33	1.19	1.23
35	BA	2721	A	C6-N1	-5.33	1.31	1.35
1	AA	117	G	N9-C8	-5.33	1.34	1.37
1	AA	195	A	C3'-C2'	-5.33	1.46	1.52
1	AA	305	G	C5-C4	-5.33	1.34	1.38
1	AA	542	G	C3'-C2'	-5.33	1.46	1.52
35	BA	1311	G	P-O5'	-5.33	1.54	1.59
35	BA	2766	G	C5-C6	-5.33	1.37	1.42
36	BB	89	G	C5-C4	-5.33	1.34	1.38
1	AA	1183	A	N3-C4	-5.33	1.31	1.34
1	AA	1389	C	N3-C4	-5.33	1.30	1.33
1	AA	169	C	C4'-C3'	-5.33	1.47	1.52
1	AA	223	U	C2-N3	-5.33	1.34	1.37
1	AA	275	G	N7-C5	-5.33	1.36	1.39
1	AA	473	G	C3'-C2'	-5.33	1.46	1.52
1	AA	1368	G	N7-C5	-5.33	1.36	1.39
1	AA	1518	A	C4'-C3'	-5.33	1.47	1.52
35	BA	257	A	C5-C4	-5.33	1.35	1.38
35	BA	288	C	P-O5'	-5.33	1.54	1.59
35	BA	850	C	C4-N4	-5.33	1.29	1.33
35	BA	879	G	C3'-C2'	-5.33	1.46	1.52
35	BA	1586	A	C5-C4	-5.33	1.35	1.38
35	BA	2057	A	N9-C8	-5.33	1.33	1.37
35	BA	2182	G	N1-C2	-5.33	1.33	1.37
35	BA	2460	U	C2-N3	-5.33	1.34	1.37
35	BA	2860	A	N7-C5	-5.33	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	703	G	C1'-N9	-5.33	1.39	1.46
35	BA	279	C	C2-O2	-5.33	1.19	1.24
35	BA	1258	C	C2'-C1'	-5.33	1.47	1.53
35	BA	1997	G	O4'-C1'	5.33	1.48	1.41
1	AA	593	G	C5-C4	-5.33	1.34	1.38
1	AA	718	G	C5-C4	-5.33	1.34	1.38
1	AA	1105	A	N9-C4	-5.33	1.34	1.37
35	BA	874	G	C5-C4	-5.33	1.34	1.38
35	BA	1294	U	C3'-C2'	-5.33	1.46	1.52
1	AA	324	G	C8-N7	5.32	1.34	1.30
22	AV	43	A	C5-C6	-5.32	1.36	1.41
22	AV	46	G	C3'-C2'	-5.32	1.46	1.52
35	BA	54	G	C5-C6	-5.32	1.37	1.42
35	BA	189	G	C5-C6	-5.32	1.37	1.42
35	BA	271(X)	G	C5-C4	5.32	1.42	1.38
35	BA	432	A	N1-C2	-5.32	1.29	1.34
35	BA	654(U)	A	C3'-C2'	-5.32	1.46	1.52
35	BA	1751	C	C4-N4	-5.32	1.29	1.33
35	BA	2081	C	C4-N4	-5.32	1.29	1.33
35	BA	2106	G	O3'-P	-5.32	1.54	1.61
35	BA	2675	A	C5-C4	-5.32	1.35	1.38
35	BA	2837	G	C3'-C2'	-5.32	1.46	1.52
1	AA	460	G	N3-C4	-5.32	1.31	1.35
35	BA	59	U	N3-C4	-5.32	1.33	1.38
36	BB	69	G	N3-C4	-5.32	1.31	1.35
1	AA	189(K)	U	C4-O4	5.32	1.27	1.23
1	AA	539	A	O3'-P	-5.32	1.54	1.61
1	AA	1194	U	C5'-C4'	-5.32	1.45	1.51
1	AA	1224	G	N9-C8	-5.32	1.34	1.37
1	AA	1419	G	C5-C6	-5.32	1.37	1.42
35	BA	1062	G	C4'-C3'	-5.32	1.47	1.52
35	BA	1849	G	C5'-C4'	-5.32	1.45	1.51
35	BA	2607	G	N9-C4	-5.32	1.33	1.38
1	AA	674	G	C3'-O3'	-5.32	1.34	1.42
1	AA	1216	G	N1-C2	-5.32	1.33	1.37
1	AA	1500	A	N9-C8	-5.32	1.33	1.37
1	AA	537	G	C8-N7	5.32	1.34	1.30
1	AA	1269	A	C8-N7	-5.32	1.27	1.31
35	BA	323	G	C2-N2	-5.32	1.29	1.34
35	BA	411	G	N3-C4	-5.32	1.31	1.35
35	BA	687	C	C2'-O2'	-5.32	1.34	1.41
35	BA	913	U	N1-C6	-5.32	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1077	A	N7-C5	-5.32	1.36	1.39
35	BA	1112	G	N7-C5	-5.32	1.36	1.39
35	BA	2093	G	C5-C4	5.32	1.42	1.38
35	BA	2449	U	O3'-P	-5.32	1.54	1.61
35	BA	2462	U	C4-O4	-5.32	1.19	1.23
35	BA	2638	G	N3-C4	-5.32	1.31	1.35
1	AA	216	G	N9-C4	-5.32	1.33	1.38
1	AA	265	G	C6-O6	-5.32	1.19	1.24
1	AA	289	G	P-O5'	5.32	1.65	1.59
1	AA	500	G	N9-C8	5.32	1.41	1.37
1	AA	683	G	C6-O6	-5.32	1.19	1.24
1	AA	690	G	N9-C8	-5.32	1.34	1.37
1	AA	1029	C	N1-C6	5.32	1.40	1.37
35	BA	641	C	N1-C6	-5.32	1.33	1.37
35	BA	1440	G	C6-O6	-5.32	1.19	1.24
35	BA	1484	G	N9-C8	-5.32	1.34	1.37
35	BA	1646	C	N1-C6	-5.32	1.33	1.37
35	BA	2196	C	C4-N4	-5.32	1.29	1.33
35	BA	2556	C	N1-C6	-5.32	1.33	1.37
1	AA	258	G	C4'-C3'	-5.31	1.47	1.52
1	AA	427	U	C3'-C2'	-5.31	1.47	1.52
1	AA	758	G	C1'-N9	-5.31	1.39	1.46
1	AA	1017	G	C4'-O4'	-5.31	1.38	1.45
1	AA	1108	G	C5-C6	5.31	1.47	1.42
1	AA	1176	A	N9-C8	-5.31	1.33	1.37
1	AA	1204	A	C4'-C3'	-5.31	1.47	1.52
35	BA	609	A	C2'-C1'	-5.31	1.47	1.53
35	BA	1023	U	C4'-C3'	-5.31	1.47	1.52
35	BA	1597	A	C2'-C1'	-5.31	1.47	1.53
35	BA	2767	C	C3'-C2'	-5.31	1.47	1.52
35	BA	105	C	C2-N3	-5.31	1.31	1.35
35	BA	183	C	C5-C6	-5.31	1.30	1.34
35	BA	547	A	C6-N1	-5.31	1.31	1.35
35	BA	708	C	C2-N3	-5.31	1.31	1.35
35	BA	1345	C	C2-N3	-5.31	1.31	1.35
35	BA	2389	G	C2-N2	-5.31	1.29	1.34
35	BA	2442	C	C5-C6	-5.31	1.30	1.34
36	BB	44	G	C2-N3	-5.31	1.28	1.32
1	AA	284	G	C5'-C4'	-5.31	1.45	1.51
1	AA	1265	G	C6-O6	-5.31	1.19	1.24
1	AA	1502	A	N3-C4	5.31	1.38	1.34
35	BA	619	G	N3-C4	-5.31	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	498	U	N3-C4	-5.31	1.33	1.38
1	AA	754	C	N1-C6	-5.31	1.33	1.37
35	BA	250	G	C5-C6	-5.31	1.37	1.42
35	BA	309	G	O3'-P	-5.31	1.54	1.61
35	BA	1356	G	C8-N7	-5.31	1.27	1.30
35	BA	2307	G	C8-N7	-5.31	1.27	1.30
1	AA	204	U	C5'-C4'	-5.31	1.45	1.51
1	AA	436	C	C5-C6	-5.31	1.30	1.34
1	AA	728	A	N1-C2	-5.31	1.29	1.34
1	AA	1517	G	C6-N1	-5.31	1.35	1.39
35	BA	644	A	C6-N1	-5.31	1.31	1.35
35	BA	959	A	C3'-C2'	-5.31	1.47	1.52
35	BA	1687	G	C4'-C3'	-5.31	1.47	1.52
35	BA	2279	G	C6-N1	-5.31	1.35	1.39
35	BA	2286	A	C5-C6	-5.31	1.36	1.41
35	BA	2526	G	C4'-C3'	-5.31	1.47	1.52
36	BB	9	G	C2-N3	-5.31	1.28	1.32
35	BA	1362	C	P-O5'	-5.31	1.54	1.59
35	BA	1419	A	N9-C4	-5.31	1.34	1.37
35	BA	1609	A	P-O5'	-5.31	1.54	1.59
1	AA	251	G	C1'-N9	-5.30	1.39	1.46
1	AA	976	G	N7-C5	-5.30	1.36	1.39
35	BA	1422	G	C5-C4	-5.30	1.34	1.38
35	BA	2488	A	N7-C5	-5.30	1.36	1.39
1	AA	268	C	C2-N3	-5.30	1.31	1.35
1	AA	617	G	C8-N7	-5.30	1.27	1.30
1	AA	829	G	P-O5'	-5.30	1.54	1.59
35	BA	2381	C	C2-N3	-5.30	1.31	1.35
1	AA	109	A	C8-N7	-5.30	1.27	1.31
1	AA	272	C	N3-C4	-5.30	1.30	1.33
1	AA	287	U	C2'-C1'	-5.30	1.47	1.53
1	AA	788	U	C2-N3	5.30	1.41	1.37
1	AA	861	G	C2-N2	-5.30	1.29	1.34
22	AV	61	C	C4'-C3'	-5.30	1.47	1.52
35	BA	459	U	C2-N3	-5.30	1.34	1.37
35	BA	517	C	C3'-C2'	-5.30	1.47	1.52
35	BA	1107	G	C6-N1	-5.30	1.35	1.39
35	BA	1394	U	C2-N3	-5.30	1.34	1.37
1	AA	547	A	C5-C6	-5.30	1.36	1.41
1	AA	1227	A	O3'-P	-5.30	1.54	1.61
1	AA	1260	C	C2-N3	-5.30	1.31	1.35
35	BA	670	A	O3'-P	-5.30	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	799	G	N1-C2	-5.30	1.33	1.37
35	BA	860	U	O3'-P	-5.30	1.54	1.61
35	BA	993	G	C2'-C1'	-5.30	1.47	1.53
35	BA	1096	A	C6-N1	5.30	1.39	1.35
35	BA	1272	A	N9-C8	-5.30	1.33	1.37
35	BA	1626	G	N9-C8	-5.30	1.34	1.37
35	BA	1953	A	N7-C5	-5.30	1.36	1.39
1	AA	146	G	N7-C5	5.30	1.42	1.39
1	AA	1236	A	N3-C4	-5.30	1.31	1.34
1	AA	1439	C	N1-C6	5.30	1.40	1.37
35	BA	43	A	N3-C4	-5.30	1.31	1.34
35	BA	560	C	N1-C6	5.30	1.40	1.37
35	BA	731	C	N1-C6	5.30	1.40	1.37
1	AA	116	A	C8-N7	-5.30	1.27	1.31
1	AA	1298	C	N1-C6	-5.30	1.33	1.37
35	BA	224	G	C8-N7	-5.30	1.27	1.30
35	BA	654(I)	C	N3-C4	-5.30	1.30	1.33
35	BA	788	A	C5-C4	-5.30	1.35	1.38
35	BA	788	A	P-O5'	-5.30	1.54	1.59
35	BA	801	G	C6-N1	-5.30	1.35	1.39
35	BA	1210	A	C6-N6	-5.30	1.29	1.33
35	BA	1237	A	C8-N7	-5.30	1.27	1.31
35	BA	1338	G	C8-N7	-5.30	1.27	1.30
35	BA	1622	G	C6-N1	-5.30	1.35	1.39
35	BA	1830	C	N3-C4	-5.30	1.30	1.33
35	BA	2353	G	C8-N7	-5.30	1.27	1.30
35	BA	2619	C	N1-C6	-5.30	1.33	1.37
1	AA	703	G	N9-C8	-5.29	1.34	1.37
1	AA	1492	A	C5-C6	-5.29	1.36	1.41
35	BA	109	G	N1-C2	-5.29	1.33	1.37
35	BA	1055	G	N9-C8	-5.29	1.34	1.37
35	BA	1168	G	C2'-O2'	-5.29	1.34	1.41
35	BA	1209	G	N1-C2	-5.29	1.33	1.37
35	BA	1275	A	N9-C8	-5.29	1.33	1.37
35	BA	2364	C	C4-C5	-5.29	1.38	1.43
35	BA	2621	A	C5-C6	-5.29	1.36	1.41
1	AA	826	C	C2-N3	-5.29	1.31	1.35
1	AA	892	A	N7-C5	-5.29	1.36	1.39
1	AA	1499	A	C2-N3	-5.29	1.28	1.33
35	BA	271(N)	U	C5'-C4'	-5.29	1.45	1.51
35	BA	565	C	C4-N4	-5.29	1.29	1.33
35	BA	785	G	N7-C5	-5.29	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1272	A	N1-C2	-5.29	1.29	1.34
35	BA	1758	G	C5'-C4'	-5.29	1.45	1.51
1	AA	120	A	C6-N1	-5.29	1.31	1.35
1	AA	763	G	O3'-P	-5.29	1.54	1.61
1	AA	1006	C	N1-C6	-5.29	1.33	1.37
1	AA	1232	U	N3-C4	5.29	1.43	1.38
35	BA	849	A	C6-N1	-5.29	1.31	1.35
35	BA	2366	A	C6-N6	-5.29	1.29	1.33
1	AA	860	A	N9-C8	-5.29	1.33	1.37
1	AA	1437	C	C4-C5	-5.29	1.38	1.43
1	AA	127	G	C5-C4	-5.29	1.34	1.38
1	AA	523	A	O3'-P	-5.29	1.54	1.61
1	AA	866	C	C2'-C1'	-5.29	1.47	1.53
1	AA	1387	G	C5-C4	-5.29	1.34	1.38
1	AA	1466	C	C5-C6	-5.29	1.30	1.34
35	BA	236	C	C5-C6	-5.29	1.30	1.34
35	BA	574	C	C4-N4	-5.29	1.29	1.33
35	BA	1393	A	N1-C2	-5.29	1.29	1.34
35	BA	1494	A	N1-C2	-5.29	1.29	1.34
35	BA	2154	G	C2'-C1'	-5.29	1.47	1.53
1	AA	870	U	N1-C2	-5.29	1.33	1.38
1	AA	1155	G	C2-N3	-5.29	1.28	1.32
35	BA	728	G	C6-N1	-5.29	1.35	1.39
35	BA	1259	G	C4'-C3'	-5.29	1.47	1.52
35	BA	2370	G	C4'-C3'	-5.29	1.47	1.52
35	BA	2445	G	P-O5'	-5.29	1.54	1.59
1	AA	360	A	N7-C5	-5.29	1.36	1.39
1	AA	1075	C	C4'-O4'	-5.29	1.38	1.45
1	AA	1375	A	N3-C4	-5.29	1.31	1.34
1	AA	1420	C	N3-C4	-5.29	1.30	1.33
23	AX	11	U	C2-N3	5.29	1.41	1.37
35	BA	98	G	N1-C2	-5.29	1.33	1.37
35	BA	949	C	O3'-P	-5.29	1.54	1.61
35	BA	1218	C	N1-C6	-5.29	1.33	1.37
35	BA	2450	A	N3-C4	-5.29	1.31	1.34
35	BA	2457	U	N1-C6	5.29	1.42	1.38
1	AA	124	G	N1-C2	5.28	1.42	1.37
1	AA	609	A	C4'-O4'	-5.28	1.38	1.45
1	AA	761	G	N9-C8	-5.28	1.34	1.37
35	BA	355	G	C8-N7	-5.28	1.27	1.30
35	BA	830	G	C8-N7	-5.28	1.27	1.30
35	BA	1756	G	P-O5'	-5.28	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2241	A	C5-C6	-5.28	1.36	1.41
35	BA	2481	G	N9-C8	-5.28	1.34	1.37
35	BA	2555	U	C4'-C3'	-5.28	1.47	1.52
35	BA	2686	G	N9-C8	-5.28	1.34	1.37
35	BA	2834	G	P-O5'	-5.28	1.54	1.59
35	BA	1960	A	C3'-O3'	-5.28	1.34	1.42
1	AA	531	U	C4-C5	-5.28	1.38	1.43
1	AA	574	A	N9-C8	-5.28	1.33	1.37
1	AA	597	G	C2'-O2'	-5.28	1.34	1.41
1	AA	913	A	N9-C8	5.28	1.42	1.37
35	BA	396	G	N1-C2	-5.28	1.33	1.37
35	BA	1379	A	C5-C4	-5.28	1.35	1.38
35	BA	1381	G	N1-C2	-5.28	1.33	1.37
35	BA	1439	A	N9-C4	-5.28	1.34	1.37
35	BA	1451	C	C4'-O4'	-5.28	1.38	1.45
35	BA	1689	A	N9-C8	-5.28	1.33	1.37
35	BA	2068	U	C2-N3	-5.28	1.34	1.37
35	BA	2149	G	O4'-C1'	-5.28	1.34	1.41
35	BA	2369	A	N9-C8	-5.28	1.33	1.37
35	BA	2550	G	N1-C2	-5.28	1.33	1.37
35	BA	2553	G	C5-C6	-5.28	1.37	1.42
1	AA	649	G	N3-C4	-5.28	1.31	1.35
35	BA	186	G	C2-N3	-5.28	1.28	1.32
35	BA	2106	G	C4'-C3'	-5.28	1.47	1.52
35	BA	2241	A	C6-N6	-5.28	1.29	1.33
35	BA	2287	A	P-O5'	-5.28	1.54	1.59
1	AA	91	C	C5-C6	-5.28	1.30	1.34
1	AA	146	G	C5-C6	-5.28	1.37	1.42
1	AA	1109	C	N3-C4	-5.28	1.30	1.33
1	AA	1329	A	N9-C4	-5.28	1.34	1.37
35	BA	15	G	N1-C2	-5.28	1.33	1.37
35	BA	995	C	C2-N3	5.28	1.40	1.35
35	BA	1122	G	C1'-N9	-5.28	1.39	1.46
35	BA	1297	C	C2-N3	-5.28	1.31	1.35
35	BA	1704	G	N9-C8	5.28	1.41	1.37
35	BA	1983	C	C5-C6	-5.28	1.30	1.34
35	BA	2374	C	N3-C4	-5.28	1.30	1.33
35	BA	72	U	C2-O2	-5.27	1.17	1.22
35	BA	448	U	C5-C6	-5.27	1.29	1.34
35	BA	777	A	N7-C5	-5.27	1.36	1.39
35	BA	1105	U	C2-O2	-5.27	1.17	1.22
35	BA	1411	C	C4'-C3'	-5.27	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1641	A	C2'-C1'	-5.27	1.47	1.53
35	BA	2138	C	C4'-C3'	-5.27	1.47	1.52
36	BB	81	G	C6-O6	-5.27	1.19	1.24
1	AA	158	G	N3-C4	-5.27	1.31	1.35
1	AA	1521	G	N3-C4	-5.27	1.31	1.35
35	BA	2058	A	C4'-O4'	-5.27	1.38	1.45
35	BA	2073	C	C4-N4	-5.27	1.29	1.33
1	AA	513	C	C5'-C4'	-5.27	1.45	1.51
1	AA	1343	G	C2-N2	-5.27	1.29	1.34
35	BA	385	C	C2-O2	-5.27	1.19	1.24
35	BA	614(B)	G	C6-N1	-5.27	1.35	1.39
35	BA	1637	A	P-O5'	-5.27	1.54	1.59
1	AA	780	A	C6-N1	-5.27	1.31	1.35
35	BA	207	A	C8-N7	5.27	1.35	1.31
35	BA	1095	A	C6-N1	-5.27	1.31	1.35
35	BA	2032	G	C5-C6	-5.27	1.37	1.42
35	BA	2081	C	N3-C4	-5.27	1.30	1.33
35	BA	2377	A	C4'-O4'	-5.27	1.38	1.45
35	BA	2639	A	C4'-O4'	-5.27	1.38	1.45
36	BB	114	C	C5-C6	-5.27	1.30	1.34
1	AA	665	A	O3'-P	-5.27	1.54	1.61
1	AA	1081	G	N9-C4	-5.27	1.33	1.38
35	BA	182	A	C6-N6	-5.27	1.29	1.33
35	BA	332	A	C6-N6	-5.27	1.29	1.33
35	BA	751	A	P-O5'	-5.27	1.54	1.59
35	BA	1249	U	P-O5'	-5.27	1.54	1.59
35	BA	1763	G	N9-C4	-5.27	1.33	1.38
35	BA	2049	G	C2-N3	-5.27	1.28	1.32
35	BA	2354	G	P-O5'	-5.27	1.54	1.59
35	BA	2634	G	N3-C4	-5.27	1.31	1.35
1	AA	313	A	N3-C4	-5.27	1.31	1.34
1	AA	813	U	N1-C2	-5.27	1.33	1.38
1	AA	70	G	C6-N1	-5.26	1.35	1.39
1	AA	891	U	C2-N3	-5.26	1.34	1.37
1	AA	1175	G	C5-C6	-5.26	1.37	1.42
1	AA	1202	G	N9-C4	5.26	1.42	1.38
35	BA	185	U	O3'-P	-5.26	1.54	1.61
35	BA	1347	G	C5-C6	-5.26	1.37	1.42
35	BA	1756	G	C5-C6	-5.26	1.37	1.42
35	BA	2782	G	O3'-P	-5.26	1.54	1.61
35	BA	2834	G	C6-O6	-5.26	1.19	1.24
36	BB	6	C	N1-C2	-5.26	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	558	G	C5-C4	-5.26	1.34	1.38
1	AA	682	G	C4'-C3'	-5.26	1.47	1.52
1	AA	1186	G	C5-C4	-5.26	1.34	1.38
35	BA	781	A	C4'-C3'	-5.26	1.47	1.52
1	AA	66	G	C2'-C1'	-5.26	1.47	1.53
1	AA	574	A	C3'-C2'	-5.26	1.47	1.52
1	AA	1316	G	C5'-C4'	-5.26	1.45	1.51
35	BA	451	C	C4-N4	5.26	1.38	1.33
35	BA	2036	C	C2-N3	-5.26	1.31	1.35
1	AA	189(E)	U	C2-N3	5.26	1.41	1.37
1	AA	349	A	C5-C4	-5.26	1.35	1.38
1	AA	700	G	C6-O6	-5.26	1.19	1.24
1	AA	1337	G	C2'-O2'	-5.26	1.34	1.41
35	BA	397	G	C6-O6	-5.26	1.19	1.24
35	BA	1557	C	N1-C6	-5.26	1.33	1.37
35	BA	1784	A	C4'-C3'	-5.26	1.47	1.52
35	BA	1847	A	C5-C4	-5.26	1.35	1.38
35	BA	2067	G	C6-N1	-5.26	1.35	1.39
36	BB	45	A	C2-N3	-5.26	1.28	1.33
1	AA	217	C	P-O5'	-5.26	1.54	1.59
1	AA	284	G	P-O5'	-5.26	1.54	1.59
1	AA	598	U	P-O5'	-5.26	1.54	1.59
1	AA	738	C	P-O5'	-5.26	1.54	1.59
35	BA	1610	A	N9-C8	5.26	1.42	1.37
35	BA	1629	U	N1-C2	-5.26	1.33	1.38
35	BA	2044	C	P-O5'	-5.26	1.54	1.59
1	AA	509	A	N7-C5	-5.26	1.36	1.39
1	AA	1057	G	N9-C8	-5.26	1.34	1.37
1	AA	1098	C	C2-N3	-5.26	1.31	1.35
1	AA	1238	A	C8-N7	-5.26	1.27	1.31
22	AV	11	A	C8-N7	-5.26	1.27	1.31
35	BA	583	G	N9-C8	-5.26	1.34	1.37
35	BA	2354	G	C8-N7	-5.26	1.27	1.30
35	BA	2543	G	C8-N7	-5.26	1.27	1.30
35	BA	2666	C	C2-N3	-5.26	1.31	1.35
1	AA	309	G	C2-N2	-5.25	1.29	1.34
1	AA	544	G	C4'-O4'	-5.25	1.38	1.45
35	BA	1353	A	C5-C4	-5.25	1.35	1.38
35	BA	2774	C	C5-C6	-5.25	1.30	1.34
1	AA	810	C	N3-C4	-5.25	1.30	1.33
22	AV	57	A	N9-C8	-5.25	1.33	1.37
35	BA	834	C	N1-C6	-5.25	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	973	A	N3-C4	-5.25	1.31	1.34
35	BA	1104	C	N3-C4	-5.25	1.30	1.33
35	BA	2000	G	C2-N3	-5.25	1.28	1.32
35	BA	2125	G	C2-N3	-5.25	1.28	1.32
35	BA	2153	G	C2-N3	-5.25	1.28	1.32
35	BA	2297	C	N1-C6	-5.25	1.33	1.37
35	BA	2350	C	N1-C6	-5.25	1.33	1.37
35	BA	2672	G	C2-N3	-5.25	1.28	1.32
1	AA	861	G	N3-C4	-5.25	1.31	1.35
1	AA	1011	G	N9-C8	-5.25	1.34	1.37
35	BA	230	U	C5-C6	-5.25	1.29	1.34
35	BA	1423	G	N9-C8	-5.25	1.34	1.37
35	BA	2485	G	C2'-C1'	-5.25	1.47	1.53
1	AA	57	G	N7-C5	-5.25	1.36	1.39
1	AA	527	G	C6-O6	-5.25	1.19	1.24
1	AA	959	A	C5'-C4'	-5.25	1.45	1.51
35	BA	674	G	N7-C5	-5.25	1.36	1.39
35	BA	697	C	C4'-C3'	-5.25	1.47	1.52
35	BA	1216	G	N7-C5	-5.25	1.36	1.39
35	BA	2428	G	C4'-C3'	-5.25	1.47	1.52
48	BQ	111	GLU	CG-CD	-5.25	1.44	1.51
1	AA	649	G	N9-C4	-5.25	1.33	1.38
1	AA	1280	A	C3'-C2'	-5.25	1.47	1.52
35	BA	356	G	C2-N3	-5.25	1.28	1.32
35	BA	468	G	O4'-C1'	-5.25	1.34	1.41
35	BA	946	G	C2-N3	-5.25	1.28	1.32
35	BA	1397	U	C5'-C4'	-5.25	1.45	1.51
36	BB	44	G	C8-N7	5.25	1.34	1.30
1	AA	129(A)	G	C5-C4	-5.25	1.34	1.38
1	AA	894	G	C6-O6	-5.25	1.19	1.24
1	AA	1057	G	C6-O6	-5.25	1.19	1.24
1	AA	1225	A	C6-N1	-5.25	1.31	1.35
1	AA	1380	U	N1-C6	-5.25	1.33	1.38
35	BA	660	G	C3'-O3'	-5.25	1.34	1.42
35	BA	750	A	C6-N1	5.25	1.39	1.35
35	BA	902	C	C4'-C3'	-5.25	1.47	1.52
35	BA	1069	A	O4'-C1'	-5.25	1.34	1.41
35	BA	1324	G	C5-C6	-5.25	1.37	1.42
35	BA	2770	G	P-OP2	-5.25	1.40	1.49
35	BA	2821	A	N3-C4	-5.25	1.31	1.34
1	AA	312	C	P-O5'	-5.25	1.54	1.59
1	AA	975	A	C8-N7	-5.25	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1299	A	C8-N7	-5.25	1.27	1.31
35	BA	99	U	P-O5'	-5.25	1.54	1.59
35	BA	888	C	P-O5'	-5.25	1.54	1.59
35	BA	1384	A	P-O5'	-5.25	1.54	1.59
1	AA	145	G	N7-C5	-5.24	1.36	1.39
1	AA	1339	A	N7-C5	-5.24	1.36	1.39
35	BA	261	G	C5-C6	-5.24	1.37	1.42
35	BA	469	G	N1-C2	-5.24	1.33	1.37
35	BA	649	G	C2-N3	-5.24	1.28	1.32
35	BA	826	U	N3-C4	-5.24	1.33	1.38
35	BA	861	A	N7-C5	-5.24	1.36	1.39
35	BA	979	G	N7-C5	-5.24	1.36	1.39
35	BA	1046	A	N7-C5	-5.24	1.36	1.39
35	BA	1259	G	C6-N1	-5.24	1.35	1.39
35	BA	1555	G	C6-N1	-5.24	1.35	1.39
35	BA	1851	U	C2-N3	-5.24	1.34	1.37
35	BA	2379	G	C5-C6	-5.24	1.37	1.42
35	BA	2383	G	C6-N1	-5.24	1.35	1.39
35	BA	2531	A	N7-C5	-5.24	1.36	1.39
36	BB	21	G	O4'-C1'	-5.24	1.34	1.41
35	BA	271(Z)	C	C3'-O3'	-5.24	1.34	1.42
35	BA	2175	C	C3'-O3'	-5.24	1.34	1.42
35	BA	2582	G	P-O5'	-5.24	1.54	1.59
36	BB	97	G	P-O5'	-5.24	1.54	1.59
1	AA	1474	G	C2-N2	-5.24	1.29	1.34
6	AF	66	GLU	CD-OE1	-5.24	1.19	1.25
35	BA	19	C	C4-N4	-5.24	1.29	1.33
35	BA	261	G	N9-C4	-5.24	1.33	1.38
35	BA	614(B)	G	C6-O6	-5.24	1.19	1.24
35	BA	875	G	C2'-C1'	-5.24	1.47	1.53
35	BA	1308	A	N3-C4	-5.24	1.31	1.34
35	BA	1416	G	N3-C4	-5.24	1.31	1.35
35	BA	1617	C	N1-C6	-5.24	1.34	1.37
35	BA	1979	C	N1-C6	-5.24	1.34	1.37
35	BA	1994	C	O3'-P	-5.24	1.54	1.61
35	BA	2611	U	C4-C5	-5.24	1.38	1.43
1	AA	820	U	N3-C4	-5.24	1.33	1.38
1	AA	897	C	C3'-O3'	-5.24	1.34	1.42
1	AA	1501	C	C2-O2	-5.24	1.19	1.24
35	BA	789	A	C5-C4	-5.24	1.35	1.38
35	BA	918	A	C5-C4	-5.24	1.35	1.38
35	BA	1562	A	C5-C6	-5.24	1.36	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1796	U	C4-O4	-5.24	1.19	1.23
35	BA	2706	G	C6-N1	-5.24	1.35	1.39
35	BA	2782	G	N1-C2	-5.24	1.33	1.37
36	BB	97	G	C3'-C2'	-5.24	1.47	1.52
1	AA	157	G	C5-C6	-5.24	1.37	1.42
1	AA	560	U	C5-C6	-5.24	1.29	1.34
1	AA	732	C	C4'-C3'	-5.24	1.47	1.52
1	AA	978	A	C2'-O2'	-5.24	1.34	1.41
1	AA	1154	G	N9-C8	-5.24	1.34	1.37
22	AV	74	C	C4'-O4'	-5.24	1.38	1.45
35	BA	70	G	N9-C8	-5.24	1.34	1.37
35	BA	363	G	N3-C4	-5.24	1.31	1.35
35	BA	641	C	C4-C5	-5.24	1.38	1.43
35	BA	1292	U	C4'-C3'	-5.24	1.47	1.52
35	BA	1649	G	C3'-C2'	-5.24	1.47	1.52
35	BA	2341	G	C3'-C2'	-5.24	1.47	1.52
35	BA	2867	G	N9-C8	-5.24	1.34	1.37
36	BB	83	G	N3-C4	-5.24	1.31	1.35
22	AV	50	U	N3-C4	-5.23	1.33	1.38
35	BA	1297	C	C2-O2	-5.23	1.19	1.24
35	BA	2665	A	C5-C6	-5.23	1.36	1.41
1	AA	629	G	C2-N3	-5.23	1.28	1.32
1	AA	743	U	O3'-P	-5.23	1.54	1.61
35	BA	44	G	C3'-C2'	-5.23	1.47	1.52
35	BA	580	C	O3'-P	-5.23	1.54	1.61
1	AA	143	A	C3'-C2'	-5.23	1.47	1.52
1	AA	693	G	N7-C5	-5.23	1.36	1.39
35	BA	39	C	N3-C4	-5.23	1.30	1.33
35	BA	1091	G	C5'-C4'	-5.23	1.45	1.51
35	BA	1479	G	N7-C5	-5.23	1.36	1.39
35	BA	2315	G	N7-C5	-5.23	1.36	1.39
35	BA	2673	G	C5-C4	-5.23	1.34	1.38
1	AA	985	C	C4'-C3'	-5.23	1.47	1.52
35	BA	176	G	N1-C2	-5.23	1.33	1.37
35	BA	1845	G	C6-N1	-5.23	1.35	1.39
35	BA	729	G	C3'-C2'	-5.23	1.47	1.52
35	BA	1693	U	C2'-C1'	-5.23	1.47	1.53
35	BA	1899	G	N1-C2	5.23	1.42	1.37
35	BA	2455	G	C3'-C2'	-5.23	1.47	1.52
1	AA	15	G	C2'-O2'	-5.23	1.34	1.41
1	AA	547	A	C6-N1	-5.23	1.31	1.35
1	AA	773	G	N9-C4	-5.23	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1410	G	C4'-C3'	-5.23	1.47	1.52
35	BA	375	C	N1-C6	5.23	1.40	1.37
35	BA	944	G	N9-C4	-5.23	1.33	1.38
35	BA	2424	C	C5-C6	-5.23	1.30	1.34
1	AA	499	A	N9-C4	5.22	1.41	1.37
35	BA	521	G	N1-C2	-5.22	1.33	1.37
35	BA	614(C)	A	N9-C4	5.22	1.41	1.37
35	BA	743	G	C3'-C2'	-5.22	1.47	1.52
35	BA	936	C	N3-C4	-5.22	1.30	1.33
35	BA	1191	G	C5-C6	-5.22	1.37	1.42
35	BA	1432	C	C5'-C4'	-5.22	1.45	1.51
35	BA	2545	G	C8-N7	-5.22	1.27	1.30
35	BA	2617	C	C4-N4	-5.22	1.29	1.33
35	BA	2734	A	N7-C5	-5.22	1.36	1.39
1	AA	22	G	C5-C6	-5.22	1.37	1.42
1	AA	189	G	C6-N1	-5.22	1.35	1.39
1	AA	1032	G	C6-O6	-5.22	1.19	1.24
1	AA	1168	A	C8-N7	-5.22	1.27	1.31
1	AA	1220	G	C4'-C3'	-5.22	1.47	1.52
1	AA	1338	G	C6-O6	-5.22	1.19	1.24
1	AA	1344	C	C4-C5	-5.22	1.38	1.43
35	BA	703	U	C4'-C3'	-5.22	1.47	1.52
35	BA	823	G	C8-N7	5.22	1.34	1.30
35	BA	1331	A	C8-N7	-5.22	1.27	1.31
35	BA	2244	U	N1-C6	-5.22	1.33	1.38
35	BA	2292	C	C2-N3	-5.22	1.31	1.35
1	AA	676	A	C5-C6	-5.22	1.36	1.41
35	BA	50	U	C2-O2	-5.22	1.17	1.22
35	BA	79	G	O3'-P	-5.22	1.54	1.61
35	BA	2333	A	C5-C6	-5.22	1.36	1.41
35	BA	2563	U	C2-N3	-5.22	1.34	1.37
1	AA	293	G	C2-N3	-5.22	1.28	1.32
1	AA	667	G	N7-C5	-5.22	1.36	1.39
1	AA	761	G	C2-N2	-5.22	1.29	1.34
1	AA	879	C	P-O5'	-5.22	1.54	1.59
1	AA	987	G	O3'-P	-5.22	1.54	1.61
1	AA	1316	G	N3-C4	-5.22	1.31	1.35
1	AA	1411	C	C4'-C3'	-5.22	1.47	1.52
1	AA	1419	G	O3'-P	-5.22	1.54	1.61
22	AV	23	C	C4'-C3'	-5.22	1.47	1.52
35	BA	176	G	P-O5'	-5.22	1.54	1.59
35	BA	329	G	C6-O6	5.22	1.28	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	921	G	C2-N2	-5.22	1.29	1.34
35	BA	1257	C	C5'-C4'	-5.22	1.45	1.51
35	BA	1422	G	P-OP2	-5.22	1.40	1.49
1	AA	619	U	C2'-C1'	-5.22	1.47	1.53
1	AA	1041	A	C3'-C2'	-5.22	1.47	1.52
35	BA	1300	U	C5-C6	-5.22	1.29	1.34
35	BA	2861	G	C2'-C1'	-5.22	1.47	1.53
1	AA	647	C	C5-C6	-5.22	1.30	1.34
1	AA	1123	A	C1'-N9	-5.22	1.39	1.46
35	BA	1542	A	C8-N7	5.22	1.35	1.31
35	BA	1786	A	C8-N7	-5.22	1.27	1.31
35	BA	2681	C	C5-C6	-5.22	1.30	1.34
36	BB	54	G	P-O5'	-5.22	1.54	1.59
1	AA	116	A	N9-C8	-5.21	1.33	1.37
1	AA	227	G	N9-C8	-5.21	1.34	1.37
1	AA	875	C	C2-O2	-5.21	1.19	1.24
1	AA	1049	U	O4'-C1'	-5.21	1.34	1.41
1	AA	1395	C	C2-O2	-5.21	1.19	1.24
35	BA	654(O)	G	C2-N3	-5.21	1.28	1.32
35	BA	1812	A	N3-C4	-5.21	1.31	1.34
35	BA	2194	G	N3-C4	5.21	1.39	1.35
35	BA	2203	U	C5-C6	-5.21	1.29	1.34
1	AA	300	A	N9-C4	-5.21	1.34	1.37
1	AA	425	G	N3-C4	-5.21	1.31	1.35
1	AA	994	A	N9-C4	-5.21	1.34	1.37
35	BA	24	G	N3-C4	-5.21	1.31	1.35
35	BA	1901	A	N9-C4	-5.21	1.34	1.37
35	BA	2361	A	N9-C4	-5.21	1.34	1.37
1	AA	350	G	C8-N7	-5.21	1.27	1.30
1	AA	1369	C	C4'-C3'	-5.21	1.47	1.52
22	AV	14	A	C1'-N9	-5.21	1.39	1.46
35	BA	654(Q)	C	C2-O2	-5.21	1.19	1.24
35	BA	2010	G	C3'-C2'	-5.21	1.47	1.52
35	BA	2334	G	O4'-C1'	-5.21	1.34	1.41
35	BA	2442	C	C4'-C3'	-5.21	1.47	1.52
1	AA	663	A	N1-C2	-5.21	1.29	1.34
1	AA	711	G	N9-C8	5.21	1.41	1.37
1	AA	799	G	N9-C8	-5.21	1.34	1.37
1	AA	1091	U	C3'-C2'	-5.21	1.47	1.52
35	BA	17	G	C4'-C3'	-5.21	1.47	1.52
35	BA	106	C	N3-C4	-5.21	1.30	1.33
35	BA	232	G	C4'-C3'	-5.21	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	653	A	N1-C2	-5.21	1.29	1.34
35	BA	690	G	N3-C4	-5.21	1.31	1.35
35	BA	1605	C	N3-C4	-5.21	1.30	1.33
35	BA	2362	G	C2-N2	-5.21	1.29	1.34
1	AA	66	G	C6-N1	-5.21	1.35	1.39
1	AA	969	A	C8-N7	-5.21	1.27	1.31
35	BA	33	U	P-O5'	-5.21	1.54	1.59
35	BA	508	G	C6-N1	-5.21	1.35	1.39
35	BA	2738	A	N9-C4	-5.21	1.34	1.37
1	AA	546	G	C2-N2	-5.21	1.29	1.34
1	AA	1110	A	N9-C8	5.21	1.42	1.37
35	BA	1227	G	C2-N2	-5.21	1.29	1.34
1	AA	50	A	N3-C4	-5.20	1.31	1.34
1	AA	100	C	C2'-C1'	-5.20	1.47	1.53
1	AA	127	G	C8-N7	-5.20	1.27	1.30
1	AA	253	U	C5'-C4'	-5.20	1.45	1.51
1	AA	520	A	N3-C4	-5.20	1.31	1.34
1	AA	860	A	C6-N1	-5.20	1.31	1.35
1	AA	1120	G	C8-N7	-5.20	1.27	1.30
1	AA	1160	G	C8-N7	-5.20	1.27	1.30
1	AA	1316	G	C6-O6	-5.20	1.19	1.24
35	BA	78	A	C6-N6	-5.20	1.29	1.33
35	BA	100	G	C5-C4	-5.20	1.34	1.38
35	BA	495	G	P-O5'	-5.20	1.54	1.59
35	BA	497	A	N1-C2	-5.20	1.29	1.34
35	BA	1197	G	N9-C8	-5.20	1.34	1.37
35	BA	1343	G	C6-O6	-5.20	1.19	1.24
35	BA	1889	A	C2-N3	-5.20	1.28	1.33
35	BA	2193	G	P-O5'	-5.20	1.54	1.59
36	BB	90	A	N3-C4	-5.20	1.31	1.34
36	BB	99	G	N9-C4	-5.20	1.33	1.38
1	AA	744	C	C3'-C2'	-5.20	1.47	1.52
1	AA	941	G	C5-C4	5.20	1.42	1.38
35	BA	136	G	C3'-C2'	-5.20	1.47	1.52
35	BA	1486	A	C5-C4	-5.20	1.35	1.38
35	BA	2637	U	C4-O4	5.20	1.27	1.23
1	AA	793	U	C2-N3	-5.20	1.34	1.37
1	AA	923	A	C5-C6	-5.20	1.36	1.41
1	AA	1030(B)	C	N1-C2	5.20	1.45	1.40
35	BA	1009	A	N9-C4	5.20	1.41	1.37
35	BA	1302	A	N9-C8	-5.20	1.33	1.37
35	BA	1880	C	N1-C2	-5.20	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2206	G	N7-C5	-5.20	1.36	1.39
35	BA	2368	C	C2-O2	-5.20	1.19	1.24
35	BA	2539	C	N1-C2	5.20	1.45	1.40
1	AA	567	G	N9-C8	-5.20	1.34	1.37
1	AA	592	G	C6-O6	-5.20	1.19	1.24
1	AA	877	C	C4-N4	-5.20	1.29	1.33
1	AA	1151	A	C6-N1	-5.20	1.31	1.35
1	AA	1179	A	C4'-C3'	-5.20	1.47	1.52
1	AA	1355	G	C5-C4	-5.20	1.34	1.38
1	AA	1368	G	C6-O6	-5.20	1.19	1.24
22	AV	22	G	C3'-C2'	-5.20	1.47	1.52
35	BA	20	C	C4-N4	-5.20	1.29	1.33
35	BA	329	G	C8-N7	-5.20	1.27	1.30
35	BA	1353	A	C3'-C2'	-5.20	1.47	1.52
35	BA	1443	G	C8-N7	-5.20	1.27	1.30
35	BA	1670	C	C3'-C2'	-5.20	1.47	1.52
35	BA	1678	G	N9-C8	5.20	1.41	1.37
35	BA	2535	G	C2-N3	-5.20	1.28	1.32
35	BA	2802	G	C8-N7	-5.20	1.27	1.30
35	BA	2844	G	C6-O6	-5.20	1.19	1.24
1	AA	664	G	C6-N1	-5.20	1.35	1.39
1	AA	1228	C	O3'-P	-5.20	1.54	1.61
35	BA	593	G	C6-N1	-5.20	1.35	1.39
35	BA	706	A	C5-C6	-5.20	1.36	1.41
35	BA	2162	G	O3'-P	-5.20	1.54	1.61
35	BA	2445	G	C4'-O4'	-5.20	1.38	1.45
35	BA	2524	G	C6-N1	-5.20	1.35	1.39
1	AA	553	A	N3-C4	-5.20	1.31	1.34
35	BA	313	C	C4-C5	-5.20	1.38	1.43
35	BA	1833	U	N1-C6	-5.20	1.33	1.38
17	AQ	51	TYR	CB-CG	-5.19	1.43	1.51
35	BA	774	A	C6-N6	-5.19	1.29	1.33
35	BA	1787	A	N7-C5	-5.19	1.36	1.39
35	BA	1815	A	C6-N6	-5.19	1.29	1.33
35	BA	2331	G	N7-C5	-5.19	1.36	1.39
1	AA	613	C	P-O5'	-5.19	1.54	1.59
35	BA	38	A	O3'-P	-5.19	1.54	1.61
35	BA	42	G	C2'-O2'	-5.19	1.34	1.41
35	BA	117	G	N9-C4	-5.19	1.33	1.38
35	BA	523	C	N3-C4	-5.19	1.30	1.33
35	BA	676	A	P-O5'	-5.19	1.54	1.59
35	BA	838	C	C5'-C4'	-5.19	1.45	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	942	G	C5'-C4'	-5.19	1.45	1.51
35	BA	2109	U	N1-C6	-5.19	1.33	1.38
35	BA	2395	C	N3-C4	-5.19	1.30	1.33
35	BA	2574	G	C5-C4	-5.19	1.34	1.38
1	AA	349	A	P-O5'	-5.19	1.54	1.59
1	AA	1093	A	C6-N6	-5.19	1.29	1.33
35	BA	379	G	C5'-C4'	-5.19	1.45	1.51
35	BA	428	A	C6-N6	-5.19	1.29	1.33
35	BA	965	C	P-O5'	-5.19	1.54	1.59
35	BA	1047	G	P-O5'	-5.19	1.54	1.59
35	BA	1481	U	C3'-C2'	-5.19	1.47	1.52
35	BA	2015	A	C6-N6	5.19	1.38	1.33
35	BA	2305	A	N3-C4	-5.19	1.31	1.34
35	BA	2395	C	C3'-C2'	-5.19	1.47	1.52
1	AA	1006	C	C2-N3	-5.19	1.31	1.35
1	AA	1057	G	C5-C6	-5.19	1.37	1.42
35	BA	2801	A	C8-N7	-5.19	1.27	1.31
1	AA	646	U	N3-C4	-5.19	1.33	1.38
1	AA	686	U	C3'-C2'	-5.19	1.47	1.52
1	AA	1173	G	C2'-C1'	-5.19	1.47	1.53
1	AA	1393	U	C5-C6	-5.19	1.29	1.34
35	BA	256	A	N9-C8	-5.19	1.33	1.37
35	BA	1361	G	N1-C2	-5.19	1.33	1.37
35	BA	1377	G	N7-C5	-5.19	1.36	1.39
35	BA	1776	G	N9-C8	-5.19	1.34	1.37
35	BA	1946	U	C5-C6	-5.19	1.29	1.34
35	BA	2719	G	N1-C2	-5.19	1.33	1.37
35	BA	2765	A	C2'-C1'	-5.19	1.47	1.53
1	AA	970	C	C4-C5	-5.19	1.38	1.43
22	AV	32	C	N1-C2	-5.19	1.34	1.40
36	BB	57	A	N1-C2	-5.19	1.29	1.34
1	AA	859	A	N3-C4	-5.18	1.31	1.34
35	BA	289	A	N3-C4	-5.18	1.31	1.34
35	BA	321	G	C2-N2	-5.18	1.29	1.34
35	BA	1951	U	C4'-C3'	-5.18	1.47	1.52
35	BA	2342	C	N1-C6	-5.18	1.34	1.37
35	BA	2778	A	N3-C4	-5.18	1.31	1.34
1	AA	683	G	N1-C2	-5.18	1.33	1.37
1	AA	1219	U	P-O5'	-5.18	1.54	1.59
35	BA	610	G	C4'-C3'	-5.18	1.47	1.52
35	BA	729	G	N1-C2	-5.18	1.33	1.37
35	BA	2590	A	C6-N1	-5.18	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2615	U	C4-O4	-5.18	1.19	1.23
35	BA	2775	A	C8-N7	-5.18	1.27	1.31
36	BB	42	C	C2-O2	-5.18	1.19	1.24
36	BB	63	G	N1-C2	-5.18	1.33	1.37
35	BA	778	G	N3-C4	-5.18	1.31	1.35
35	BA	805	G	C6-N1	-5.18	1.35	1.39
1	AA	554	C	C2-N3	-5.18	1.31	1.35
1	AA	669	U	N1-C6	-5.18	1.33	1.38
1	AA	1000	U	N1-C2	5.18	1.43	1.38
1	AA	1356	G	C2'-O2'	-5.18	1.34	1.41
1	AA	1399	C	P-O5'	-5.18	1.54	1.59
35	BA	470	A	C2'-O2'	-5.18	1.34	1.41
35	BA	474	G	N9-C4	-5.18	1.33	1.38
35	BA	860	U	C2-O2	-5.18	1.17	1.22
35	BA	1337	G	N9-C4	-5.18	1.33	1.38
35	BA	1756	G	C3'-C2'	-5.18	1.47	1.52
35	BA	2172	U	C2-O2	-5.18	1.17	1.22
35	BA	2525	G	C8-N7	5.18	1.34	1.30
35	BA	2826	A	C4'-O4'	-5.18	1.38	1.45
1	AA	331	G	C8-N7	-5.18	1.27	1.30
1	AA	730	G	C2-N2	-5.18	1.29	1.34
1	AA	876	G	C2'-C1'	-5.18	1.47	1.53
1	AA	1503	A	C4'-C3'	-5.18	1.47	1.52
35	BA	564	C	C5-C6	-5.18	1.30	1.34
35	BA	1260	G	C4'-C3'	-5.18	1.47	1.52
35	BA	1838	C	C4'-O4'	-5.18	1.38	1.45
1	AA	134	A	C6-N1	-5.18	1.31	1.35
1	AA	199	G	N9-C8	-5.18	1.34	1.37
35	BA	476	G	N9-C8	-5.18	1.34	1.37
35	BA	1309	G	N7-C5	-5.18	1.36	1.39
35	BA	2267	A	N3-C4	-5.18	1.31	1.34
35	BA	2282	G	C5-C4	-5.18	1.34	1.38
35	BA	2639	A	N3-C4	-5.18	1.31	1.34
36	BB	95	C	C4-N4	-5.18	1.29	1.33
1	AA	668	G	C2-N3	-5.17	1.28	1.32
1	AA	1223	C	C3'-C2'	-5.17	1.47	1.52
22	AV	53	G	C2-N3	-5.17	1.28	1.32
35	BA	296	C	C4'-C3'	-5.17	1.47	1.52
35	BA	909	A	C5-C4	-5.17	1.35	1.38
35	BA	1132	A	C5-C4	5.17	1.42	1.38
35	BA	1390	U	C2-N3	5.17	1.41	1.37
35	BA	2045	C	C4'-C3'	-5.17	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2472	G	C2-N3	-5.17	1.28	1.32
1	AA	1414	U	C5'-C4'	-5.17	1.45	1.51
22	AV	73	A	N1-C2	-5.17	1.29	1.34
35	BA	757	U	C5'-C4'	-5.17	1.45	1.51
35	BA	2511	U	C2-N3	-5.17	1.34	1.37
35	BA	2802	G	C5'-C4'	-5.17	1.45	1.51
1	AA	1379	G	C6-N1	-5.17	1.35	1.39
1	AA	330	C	C5'-C4'	-5.17	1.45	1.51
1	AA	1289	A	N7-C5	-5.17	1.36	1.39
35	BA	36	G	N3-C4	-5.17	1.31	1.35
35	BA	187	G	N7-C5	-5.17	1.36	1.39
35	BA	353	G	N9-C4	-5.17	1.33	1.38
35	BA	1502	C	C2-N3	-5.17	1.31	1.35
35	BA	1804	C	N3-C4	-5.17	1.30	1.33
35	BA	1860	G	N3-C4	-5.17	1.31	1.35
35	BA	2046	G	N3-C4	-5.17	1.31	1.35
1	AA	781	A	C2-N3	-5.17	1.28	1.33
35	BA	1211	U	C4-O4	5.17	1.27	1.23
35	BA	1364	G	N1-C2	-5.17	1.33	1.37
35	BA	1495	A	C2'-O2'	-5.17	1.34	1.41
35	BA	2123	G	C3'-C2'	-5.17	1.47	1.52
35	BA	2718	G	C4'-C3'	-5.17	1.47	1.52
1	AA	119	A	C3'-O3'	5.17	1.49	1.42
1	AA	1336	C	N1-C6	-5.17	1.34	1.37
35	BA	453	C	O4'-C1'	-5.17	1.34	1.41
35	BA	721	C	N1-C6	-5.17	1.34	1.37
35	BA	1260	G	C6-O6	-5.17	1.19	1.24
35	BA	1681	G	C8-N7	5.17	1.34	1.30
35	BA	1698	A	C6-N1	-5.17	1.31	1.35
35	BA	16	G	N9-C4	-5.17	1.33	1.38
35	BA	471	A	C1'-N9	-5.17	1.39	1.46
35	BA	2169	A	N3-C4	5.17	1.38	1.34
35	BA	2719	G	C6-N1	-5.17	1.35	1.39
36	BB	37	C	N3-C4	-5.17	1.30	1.33
36	BB	74	U	C4'-C3'	-5.17	1.47	1.52
1	AA	436	C	C4-C5	-5.16	1.38	1.43
1	AA	1171	G	N3-C4	-5.16	1.31	1.35
35	BA	117	G	N3-C4	5.16	1.39	1.35
35	BA	118	A	C2-N3	-5.16	1.28	1.33
35	BA	478	A	C8-N7	5.16	1.35	1.31
35	BA	487	C	C4-C5	-5.16	1.38	1.43
35	BA	520	G	N1-C2	-5.16	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	654(N)	G	N1-C2	-5.16	1.33	1.37
35	BA	878	A	C2-N3	-5.16	1.28	1.33
35	BA	1747	G	N3-C4	-5.16	1.31	1.35
35	BA	2472	G	C5'-C4'	-5.16	1.45	1.51
35	BA	2712(A)	A	C5-C6	-5.16	1.36	1.41
35	BA	2724	C	P-O5'	-5.16	1.54	1.59
1	AA	1115	C	C3'-O3'	-5.16	1.34	1.42
35	BA	1328	G	C2-N2	-5.16	1.29	1.34
35	BA	1397	U	N1-C2	-5.16	1.33	1.38
35	BA	2280	G	C6-O6	-5.16	1.19	1.24
35	BA	2407	G	C2-N2	-5.16	1.29	1.34
1	AA	816	A	N1-C2	-5.16	1.29	1.34
1	AA	978	A	O3'-P	5.16	1.67	1.61
1	AA	1340	A	C6-N1	5.16	1.39	1.35
35	BA	80	G	C6-N1	-5.16	1.35	1.39
35	BA	415	A	C8-N7	-5.16	1.27	1.31
35	BA	677	A	C6-N1	-5.16	1.31	1.35
35	BA	1253	A	C6-N1	-5.16	1.31	1.35
35	BA	1555	G	C2-N3	-5.16	1.28	1.32
35	BA	1761	C	N1-C2	-5.16	1.34	1.40
35	BA	1811	G	C1'-N9	-5.16	1.39	1.46
35	BA	1902	C	N1-C6	-5.16	1.34	1.37
35	BA	2126	A	C6-N1	-5.16	1.31	1.35
35	BA	2827	C	C2-N3	-5.16	1.31	1.35
1	AA	271	C	C2-O2	-5.16	1.19	1.24
1	AA	1205	U	C5-C6	-5.16	1.29	1.34
1	AA	1317	C	P-OP2	-5.16	1.40	1.49
1	AA	1377	A	O3'-P	-5.16	1.54	1.61
35	BA	142(A)	C	O3'-P	-5.16	1.54	1.61
35	BA	218	A	N9-C4	5.16	1.41	1.37
35	BA	1315	C	C5-C6	-5.16	1.30	1.34
35	BA	2241	A	C5-C4	-5.16	1.35	1.38
35	BA	2709	G	C5-C6	-5.16	1.37	1.42
1	AA	104	G	P-O5'	-5.16	1.54	1.59
35	BA	2426	A	N9-C4	-5.16	1.34	1.37
1	AA	580	U	N1-C6	5.16	1.42	1.38
1	AA	606	G	C6-N1	-5.16	1.35	1.39
1	AA	1436	U	C5'-C4'	-5.16	1.45	1.51
35	BA	6	A	C8-N7	-5.16	1.27	1.31
35	BA	481	G	C5-C4	-5.16	1.34	1.38
35	BA	674	G	N9-C8	-5.16	1.34	1.37
35	BA	993	G	N9-C8	-5.16	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1018	C	C4-C5	-5.16	1.38	1.43
35	BA	1037	G	C2-N3	-5.16	1.28	1.32
35	BA	1649	G	C4'-O4'	-5.16	1.38	1.45
35	BA	1974	C	C4-C5	-5.16	1.38	1.43
35	BA	2295	C	C4-C5	-5.16	1.38	1.43
35	BA	2340	G	N9-C4	-5.16	1.33	1.38
35	BA	2476	A	C2'-O2'	-5.16	1.34	1.41
35	BA	2550	G	O4'-C1'	-5.16	1.34	1.41
35	BA	2770	G	C2-N3	-5.16	1.28	1.32
36	BB	32	C	N1-C6	5.16	1.40	1.37
1	AA	1214	C	P-O5'	-5.15	1.54	1.59
35	BA	1844	C	C3'-O3'	-5.15	1.34	1.42
1	AA	1381	U	C4-C5	-5.15	1.39	1.43
35	BA	722	A	N1-C2	-5.15	1.29	1.34
35	BA	2366	A	N9-C4	5.15	1.41	1.37
1	AA	182	U	N1-C2	-5.15	1.33	1.38
1	AA	243	A	C4'-C3'	-5.15	1.47	1.52
1	AA	394	G	C2-N3	-5.15	1.28	1.32
1	AA	924	C	C2-O2	-5.15	1.19	1.24
1	AA	1080	A	C6-N1	-5.15	1.31	1.35
1	AA	1132	C	C4-C5	-5.15	1.38	1.43
1	AA	1329	A	C6-N6	-5.15	1.29	1.33
35	BA	179	G	C4'-C3'	-5.15	1.47	1.52
35	BA	321	G	N9-C8	-5.15	1.34	1.37
35	BA	396	G	N7-C5	-5.15	1.36	1.39
35	BA	565	C	C2'-C1'	-5.15	1.47	1.53
35	BA	947	G	N1-C2	-5.15	1.33	1.37
35	BA	1020	A	C6-N6	-5.15	1.29	1.33
35	BA	1282	U	N1-C6	-5.15	1.33	1.38
35	BA	1368	G	C5-C4	-5.15	1.34	1.38
35	BA	1492	G	P-O5'	-5.15	1.54	1.59
35	BA	1649	G	N9-C4	-5.15	1.33	1.38
35	BA	1910	G	N9-C4	-5.15	1.33	1.38
35	BA	2030	A	C6-N6	-5.15	1.29	1.33
35	BA	2169	A	C6-N1	-5.15	1.31	1.35
35	BA	2505	G	C2-N3	-5.15	1.28	1.32
1	AA	605	U	O3'-P	-5.15	1.54	1.61
1	AA	698	G	C5-C6	-5.15	1.37	1.42
1	AA	1032	G	C2-N2	-5.15	1.29	1.34
1	AA	1492	A	N1-C2	-5.15	1.29	1.34
4	AD	131	ARG	NE-CZ	5.15	1.39	1.33
6	AF	77	ARG	CZ-NH2	-5.15	1.26	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	529	A	C4'-C3'	-5.15	1.47	1.52
35	BA	533	G	N3-C4	-5.15	1.31	1.35
35	BA	2101	G	N3-C4	-5.15	1.31	1.35
36	BB	5	C	N3-C4	-5.15	1.30	1.33
1	AA	627	G	C2'-O2'	-5.15	1.34	1.41
1	AA	1266	G	O3'-P	-5.15	1.54	1.61
22	AV	59	A	C6-N6	-5.15	1.29	1.33
23	AX	21	C	C4-C5	-5.15	1.38	1.43
35	BA	223	A	C6-N6	-5.15	1.29	1.33
35	BA	336	C	C4-C5	-5.15	1.38	1.43
1	AA	61	G	N9-C8	-5.14	1.34	1.37
1	AA	293	G	C6-N1	-5.14	1.35	1.39
1	AA	771	G	C6-N1	-5.14	1.35	1.39
1	AA	1371	G	N9-C8	-5.14	1.34	1.37
1	AA	1490	C	C4'-O4'	-5.14	1.38	1.45
35	BA	56	A	N9-C8	-5.14	1.33	1.37
35	BA	345	A	N9-C4	-5.14	1.34	1.37
35	BA	1287	A	P-O5'	-5.14	1.54	1.59
35	BA	1311	G	C2'-C1'	-5.14	1.47	1.53
35	BA	1434	A	C3'-O3'	-5.14	1.34	1.42
35	BA	2072	G	C2'-C1'	-5.14	1.47	1.53
1	AA	578	C	C4-N4	-5.14	1.29	1.33
1	AA	1407	C	C4-N4	-5.14	1.29	1.33
35	BA	1852	C	N3-C4	-5.14	1.30	1.33
35	BA	2037	G	C6-O6	-5.14	1.19	1.24
35	BA	1232	G	C2'-C1'	-5.14	1.47	1.53
35	BA	1464	C	P-O5'	-5.14	1.54	1.59
1	AA	1324	A	N7-C5	-5.14	1.36	1.39
35	BA	54	G	N7-C5	-5.14	1.36	1.39
35	BA	261	G	C8-N7	-5.14	1.27	1.30
35	BA	1163	G	C5-C4	-5.14	1.34	1.38
35	BA	2328	A	C5-C6	-5.14	1.36	1.41
35	BA	2561	A	C5-C6	-5.14	1.36	1.41
35	BA	2675	A	N7-C5	-5.14	1.36	1.39
1	AA	412	A	C2'-C1'	-5.14	1.47	1.53
1	AA	672	U	C2'-C1'	-5.14	1.47	1.53
1	AA	1183	A	C2-N3	-5.14	1.28	1.33
16	AP	80	PHE	CB-CG	-5.14	1.42	1.51
35	BA	518	G	P-O5'	-5.14	1.54	1.59
35	BA	677	A	C3'-O3'	-5.14	1.34	1.42
35	BA	1037	G	C5'-C4'	-5.14	1.45	1.51
35	BA	2348	U	C2'-C1'	-5.14	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2721	A	C2-N3	-5.14	1.28	1.33
1	AA	136	C	N1-C6	5.14	1.40	1.37
1	AA	894	G	N9-C4	-5.14	1.33	1.38
1	AA	1409	C	C4'-O4'	-5.14	1.38	1.45
35	BA	309	G	C4'-C3'	-5.14	1.47	1.52
35	BA	401	A	N9-C8	-5.14	1.33	1.37
35	BA	1362	C	C2-O2	-5.14	1.19	1.24
35	BA	2106	G	C2-N3	-5.14	1.28	1.32
35	BA	2610	C	N3-C4	-5.14	1.30	1.33
35	BA	2686	G	N9-C4	5.14	1.42	1.38
35	BA	2763	G	N3-C4	-5.14	1.31	1.35
36	BB	113	G	N9-C4	-5.14	1.33	1.38
1	AA	431	A	N7-C5	5.13	1.42	1.39
1	AA	919	A	C2'-C1'	-5.13	1.47	1.53
1	AA	1057	G	C5-C4	-5.13	1.34	1.38
1	AA	1363(A)	A	N1-C2	-5.13	1.29	1.34
1	AA	1470	G	C5'-C4'	-5.13	1.45	1.51
35	BA	258	G	C6-O6	-5.13	1.19	1.24
35	BA	619	G	O3'-P	-5.13	1.54	1.61
35	BA	797	C	C5'-C4'	-5.13	1.45	1.51
35	BA	907	U	O3'-P	-5.13	1.54	1.61
35	BA	994	C	C4-N4	-5.13	1.29	1.33
35	BA	1043	C	N1-C6	-5.13	1.34	1.37
35	BA	1367	A	C3'-C2'	-5.13	1.47	1.52
35	BA	1695	G	C5-C4	-5.13	1.34	1.38
35	BA	1948	G	C6-O6	-5.13	1.19	1.24
35	BA	2677	G	C5'-C4'	-5.13	1.45	1.51
1	AA	722	A	C5-C4	-5.13	1.35	1.38
1	AA	1191	A	C6-N1	-5.13	1.31	1.35
35	BA	1247	A	C5-C4	-5.13	1.35	1.38
1	AA	201	C	C4-C5	-5.13	1.38	1.43
1	AA	741	G	N1-C2	-5.13	1.33	1.37
1	AA	1047	G	C8-N7	-5.13	1.27	1.30
35	BA	509	C	C2'-O2'	-5.13	1.34	1.41
35	BA	605	C	C4-C5	-5.13	1.38	1.43
35	BA	1686	C	C4'-C3'	-5.13	1.47	1.52
35	BA	1125	G	C4'-O4'	-5.13	1.38	1.45
35	BA	1202	C	N1-C2	-5.13	1.35	1.40
35	BA	1548	C	C4'-O4'	-5.13	1.38	1.45
1	AA	346	G	C1'-N9	-5.13	1.39	1.46
1	AA	1374	A	C3'-O3'	-5.13	1.34	1.42
22	AV	46	G	N9-C4	-5.13	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	271(J)	C	C3'-C2'	-5.13	1.47	1.52
35	BA	1433	U	P-O5'	-5.13	1.54	1.59
35	BA	2115	G	C8-N7	5.13	1.34	1.30
36	BB	76	G	C6-N1	-5.13	1.35	1.39
1	AA	246	A	C8-N7	-5.13	1.27	1.31
1	AA	428	G	N3-C4	-5.13	1.31	1.35
1	AA	439	A	N7-C5	-5.13	1.36	1.39
1	AA	442	C	N3-C4	-5.13	1.30	1.33
1	AA	484	G	N3-C4	-5.13	1.31	1.35
1	AA	657	G	N1-C2	-5.13	1.33	1.37
1	AA	748	C	N3-C4	-5.13	1.30	1.33
1	AA	852	G	C2'-C1'	-5.13	1.47	1.53
1	AA	984	C	C2-N3	-5.13	1.31	1.35
1	AA	1503	A	N3-C4	-5.13	1.31	1.34
35	BA	20	C	C2-N3	-5.13	1.31	1.35
35	BA	140	G	C2'-C1'	-5.13	1.47	1.53
35	BA	517	C	C4'-C3'	-5.13	1.47	1.52
35	BA	721	C	N3-C4	-5.13	1.30	1.33
35	BA	920	G	C2-N2	-5.13	1.29	1.34
35	BA	996	A	C4'-C3'	-5.13	1.47	1.52
35	BA	1274	A	N1-C2	-5.13	1.29	1.34
35	BA	1899	G	N7-C5	-5.13	1.36	1.39
35	BA	2119	A	N7-C5	-5.13	1.36	1.39
35	BA	2632	A	N3-C4	-5.13	1.31	1.34
36	BB	53	A	C5-C4	-5.13	1.35	1.38
1	AA	885	G	P-O5'	-5.12	1.54	1.59
35	BA	271(S)	G	C3'-C2'	-5.12	1.47	1.52
1	AA	560	U	C4'-C3'	-5.12	1.47	1.52
1	AA	838	G	C8-N7	5.12	1.34	1.30
1	AA	1322	C	C2-O2	5.12	1.29	1.24
35	BA	1492	G	C6-O6	-5.12	1.19	1.24
35	BA	2253	G	C5-C6	-5.12	1.37	1.42
35	BA	2287	A	N9-C4	5.12	1.41	1.37
1	AA	767	A	C4'-O4'	-5.12	1.38	1.45
1	AA	880	C	C2-N3	-5.12	1.31	1.35
1	AA	1500	A	C6-N6	5.12	1.38	1.33
35	BA	266	G	N3-C4	5.12	1.39	1.35
35	BA	310	A	C6-N6	-5.12	1.29	1.33
35	BA	438	G	N3-C4	-5.12	1.31	1.35
35	BA	1017	G	C2-N3	-5.12	1.28	1.32
35	BA	1113	U	C4'-O4'	-5.12	1.38	1.45
35	BA	1784	A	C4'-O4'	-5.12	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1795	C	C2-O2	-5.12	1.19	1.24
35	BA	2544	G	N1-C2	5.12	1.41	1.37
36	BB	23	G	N3-C4	-5.12	1.31	1.35
36	BB	44	G	C4'-O4'	-5.12	1.38	1.45
36	BB	97	G	N3-C4	-5.12	1.31	1.35
1	AA	815	A	C5-C6	-5.12	1.36	1.41
1	AA	854	G	C5-C4	-5.12	1.34	1.38
1	AA	963	G	N9-C4	-5.12	1.33	1.38
1	AA	1198	G	C5-C4	-5.12	1.34	1.38
26	B1	72	GLU	CD-OE1	-5.12	1.20	1.25
35	BA	110	G	N9-C4	-5.12	1.33	1.38
35	BA	308	G	C8-N7	-5.12	1.27	1.30
35	BA	363(F)	A	N9-C4	5.12	1.41	1.37
35	BA	699	A	C5-C6	-5.12	1.36	1.41
35	BA	1384	A	C2-N3	5.12	1.38	1.33
35	BA	1955	U	N3-C4	-5.12	1.33	1.38
35	BA	2254	C	C3'-C2'	-5.12	1.47	1.52
35	BA	2481	G	C8-N7	-5.12	1.27	1.30
1	AA	141	A	C5-C4	-5.12	1.35	1.38
1	AA	189(G)	G	N3-C4	5.12	1.39	1.35
1	AA	975	A	C6-N6	-5.12	1.29	1.33
35	BA	1912	A	C6-N1	-5.12	1.31	1.35
1	AA	148	G	C3'-C2'	-5.12	1.47	1.52
1	AA	533	A	C8-N7	-5.12	1.27	1.31
1	AA	585	G	C5-C6	-5.12	1.37	1.42
1	AA	755	G	C6-O6	-5.12	1.19	1.24
1	AA	834	C	C4-N4	-5.12	1.29	1.33
35	BA	1754	C	C4-N4	-5.12	1.29	1.33
35	BA	1811	G	P-O5'	-5.12	1.54	1.59
35	BA	2171	A	C2'-C1'	-5.12	1.47	1.53
35	BA	2598	A	C8-N7	-5.12	1.27	1.31
35	BA	2694	G	C3'-C2'	-5.12	1.47	1.52
1	AA	632	A	C3'-O3'	-5.11	1.34	1.42
1	AA	986	A	N9-C4	-5.11	1.34	1.37
1	AA	1296	C	O3'-P	-5.11	1.55	1.61
35	BA	18	C	C4-C5	-5.11	1.38	1.43
35	BA	73	A	N9-C4	-5.11	1.34	1.37
35	BA	173	G	C6-N1	-5.11	1.35	1.39
35	BA	1944	U	N3-C4	-5.11	1.33	1.38
35	BA	2441	C	C4'-C3'	-5.11	1.47	1.52
1	AA	233	C	N1-C2	-5.11	1.35	1.40
1	AA	716	A	C6-N1	-5.11	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	959	A	C5-C4	-5.11	1.35	1.38
1	AA	1475	G	N1-C2	-5.11	1.33	1.37
35	BA	1048	A	C6-N1	-5.11	1.31	1.35
35	BA	1758	G	N1-C2	-5.11	1.33	1.37
35	BA	1826	G	C2-N2	-5.11	1.29	1.34
35	BA	2072	G	C6-O6	5.11	1.28	1.24
35	BA	2561	A	N9-C8	-5.11	1.33	1.37
35	BA	2846	G	P-O5'	-5.11	1.54	1.59
1	AA	84	U	C2'-C1'	-5.11	1.47	1.53
1	AA	316	G	C6-O6	-5.11	1.19	1.24
1	AA	685	G	O3'-P	-5.11	1.55	1.61
1	AA	699	C	N1-C6	-5.11	1.34	1.37
22	AV	19	G	C6-O6	-5.11	1.19	1.24
26	B1	22	GLY	N-CA	-5.11	1.38	1.46
35	BA	581	C	N1-C6	-5.11	1.34	1.37
35	BA	603	A	C8-N7	-5.11	1.27	1.31
35	BA	726	G	O3'-P	-5.11	1.55	1.61
35	BA	1369	G	C4'-C3'	-5.11	1.47	1.52
35	BA	2619	C	C5-C6	-5.11	1.30	1.34
56	BY	55	TYR	CG-CD1	5.11	1.45	1.39
35	BA	645	C	N3-C4	5.11	1.37	1.33
35	BA	1222	C	C4-C5	-5.11	1.38	1.43
1	AA	706	A	N9-C4	-5.11	1.34	1.37
35	BA	143	G	N7-C5	-5.11	1.36	1.39
35	BA	481	G	N7-C5	-5.11	1.36	1.39
35	BA	792	G	N7-C5	-5.11	1.36	1.39
35	BA	1427	A	N9-C4	-5.11	1.34	1.37
35	BA	1541	G	N9-C8	5.11	1.41	1.37
35	BA	1654	A	N7-C5	-5.11	1.36	1.39
35	BA	2876	G	N7-C5	-5.11	1.36	1.39
35	BA	489	G	C5-C6	-5.11	1.37	1.42
35	BA	1564	C	C2'-O2'	-5.11	1.35	1.41
35	BA	2817	G	C6-O6	-5.11	1.19	1.24
1	AA	242	C	N3-C4	-5.10	1.30	1.33
1	AA	710	G	C2-N2	-5.10	1.29	1.34
35	BA	109	G	C2'-C1'	-5.10	1.47	1.53
35	BA	286	C	N1-C6	-5.10	1.34	1.37
35	BA	1530	C	N3-C4	-5.10	1.30	1.33
35	BA	1600	C	N3-C4	-5.10	1.30	1.33
1	AA	62	U	P-O5'	-5.10	1.54	1.59
1	AA	184	G	N7-C5	-5.10	1.36	1.39
1	AA	328	C	C2-O2	-5.10	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	803	G	C4'-C3'	-5.10	1.47	1.52
1	AA	1308	U	C5-C6	-5.10	1.29	1.34
22	AV	40	C	P-O5'	-5.10	1.54	1.59
35	BA	58	G	P-O5'	-5.10	1.54	1.59
35	BA	172	C	C4-N4	-5.10	1.29	1.33
35	BA	1128	A	N9-C8	-5.10	1.33	1.37
35	BA	1826	G	P-O5'	-5.10	1.54	1.59
35	BA	1900	A	C6-N6	-5.10	1.29	1.33
35	BA	2598	A	C5-C6	-5.10	1.36	1.41
35	BA	2722	G	P-O5'	-5.10	1.54	1.59
35	BA	2732	G	N9-C8	-5.10	1.34	1.37
1	AA	1100	C	C5-C6	-5.10	1.30	1.34
35	BA	394	A	N3-C4	-5.10	1.31	1.34
1	AA	237	C	C2-O2	-5.10	1.19	1.24
1	AA	510	A	C4'-O4'	-5.10	1.39	1.45
1	AA	694	A	C8-N7	-5.10	1.27	1.31
35	BA	11	G	C8-N7	-5.10	1.27	1.30
35	BA	54	G	C8-N7	-5.10	1.27	1.30
35	BA	197	A	C8-N7	-5.10	1.27	1.31
35	BA	271(B)	C	N3-C4	-5.10	1.30	1.33
35	BA	377	C	C2-O2	-5.10	1.19	1.24
35	BA	720	C	N3-C4	-5.10	1.30	1.33
35	BA	740	U	P-O5'	-5.10	1.54	1.59
35	BA	857	C	C4'-C3'	-5.10	1.47	1.52
35	BA	2009	G	C4'-C3'	-5.10	1.47	1.52
35	BA	2176	A	P-O5'	-5.10	1.54	1.59
35	BA	2588	G	N3-C4	-5.10	1.31	1.35
35	BA	2887	U	C3'-C2'	-5.10	1.47	1.52
36	BB	60	C	C4'-C3'	-5.10	1.47	1.52
42	BH	82	GLY	N-CA	-5.10	1.38	1.46
1	AA	1132	C	N1-C6	-5.10	1.34	1.37
24	AY	151	ARG	CZ-NH1	-5.10	1.26	1.33
35	BA	175	G	C2-N3	-5.10	1.28	1.32
35	BA	281	G	C6-N1	-5.10	1.35	1.39
35	BA	393	C	O3'-P	-5.10	1.55	1.61
35	BA	549	G	C6-N1	-5.10	1.35	1.39
35	BA	1995	U	C4'-C3'	-5.10	1.47	1.52
35	BA	2219	G	C6-N1	-5.10	1.35	1.39
35	BA	2239	G	C5-C4	-5.10	1.34	1.38
35	BA	2464	C	C4'-C3'	-5.10	1.47	1.52
1	AA	579	G	C6-N1	5.10	1.43	1.39
35	BA	271(U)	G	C6-N1	5.10	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	392	C	C4-C5	-5.10	1.38	1.43
35	BA	1221(A)	C	C4-C5	-5.10	1.38	1.43
35	BA	1322	A	P-O5'	-5.10	1.54	1.59
35	BA	1907	G	P-O5'	-5.10	1.54	1.59
35	BA	2368	C	C5-C6	-5.10	1.30	1.34
35	BA	2687	U	P-O5'	-5.10	1.54	1.59
35	BA	689	A	O3'-P	-5.09	1.55	1.61
35	BA	1262	A	C6-N1	-5.09	1.31	1.35
35	BA	2151	G	N9-C4	-5.09	1.33	1.38
35	BA	2413	G	C6-O6	5.09	1.28	1.24
35	BA	2319	G	C8-N7	-5.09	1.27	1.30
35	BA	2450	A	N9-C8	-5.09	1.33	1.37
35	BA	2472	G	N1-C2	-5.09	1.33	1.37
36	BB	89	G	C4'-C3'	-5.09	1.47	1.52
35	BA	590	A	N1-C2	-5.09	1.29	1.34
35	BA	878	A	C5-C6	-5.09	1.36	1.41
35	BA	1183	G	C5-C4	-5.09	1.34	1.38
35	BA	1414	G	C6-O6	-5.09	1.19	1.24
35	BA	1801	G	C2-N2	-5.09	1.29	1.34
35	BA	2158	A	C3'-C2'	5.09	1.58	1.52
35	BA	2329	G	P-O5'	-5.09	1.54	1.59
35	BA	2697	G	C5-C4	-5.09	1.34	1.38
1	AA	605	U	C2-O2	-5.09	1.17	1.22
1	AA	856	C	C2-O2	-5.09	1.19	1.24
35	BA	459	U	C4'-O4'	-5.09	1.39	1.45
35	BA	853	G	C4'-C3'	-5.09	1.47	1.52
35	BA	2520	C	O3'-P	-5.09	1.55	1.61
35	BA	1022	G	C2-N2	-5.09	1.29	1.34
35	BA	2421	G	C2-N2	-5.09	1.29	1.34
35	BA	2432	A	C8-N7	-5.09	1.27	1.31
53	BV	34	GLU	CD-OE2	-5.09	1.20	1.25
1	AA	417	C	N1-C2	-5.09	1.35	1.40
1	AA	604	G	C4'-C3'	-5.09	1.47	1.52
1	AA	931	C	C4-C5	-5.09	1.38	1.43
1	AA	1022	G	N9-C8	-5.09	1.34	1.37
35	BA	61	G	C2-N2	5.09	1.39	1.34
35	BA	528	A	C2'-C1'	-5.09	1.47	1.53
35	BA	707	G	C5-C4	5.09	1.42	1.38
35	BA	798	G	P-O5'	-5.09	1.54	1.59
35	BA	955	C	C4-N4	-5.09	1.29	1.33
35	BA	1080	C	C3'-C2'	-5.09	1.47	1.52
35	BA	1720	U	C2'-O2'	-5.09	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1899	G	C5'-C4'	-5.09	1.45	1.51
35	BA	2563	U	C2'-C1'	-5.09	1.47	1.53
35	BA	2723	C	N1-C2	-5.09	1.35	1.40
1	AA	253	U	N3-C4	-5.08	1.33	1.38
1	AA	780	A	C4'-C3'	-5.08	1.47	1.52
1	AA	1504	G	C4'-C3'	-5.08	1.47	1.52
35	BA	674	G	C2-N2	-5.08	1.29	1.34
35	BA	1470	G	N3-C4	-5.08	1.31	1.35
35	BA	1494	A	N9-C4	-5.08	1.34	1.37
35	BA	1576	U	C4-C5	-5.08	1.39	1.43
35	BA	1673	U	O3'-P	-5.08	1.55	1.61
35	BA	2119	A	N1-C2	-5.08	1.29	1.34
35	BA	2802	G	C4'-C3'	-5.08	1.47	1.52
35	BA	2885	C	C4'-C3'	-5.08	1.47	1.52
36	BB	73	A	C8-N7	-5.08	1.27	1.31
1	AA	1308	U	C4-O4	-5.08	1.19	1.23
22	AV	22	G	N9-C8	-5.08	1.34	1.37
35	BA	642	G	C2-N2	-5.08	1.29	1.34
35	BA	652	C	N3-C4	-5.08	1.30	1.33
35	BA	700	G	O3'-P	-5.08	1.55	1.61
35	BA	2098	U	C4-O4	-5.08	1.19	1.23
35	BA	2377	A	N3-C4	-5.08	1.31	1.34
50	BS	96	GLY	C-O	-5.08	1.15	1.23
1	AA	530	G	C4'-O4'	-5.08	1.39	1.45
35	BA	1904	G	C8-N7	-5.08	1.27	1.30
1	AA	1147	C	C2-N3	5.08	1.39	1.35
35	BA	575	A	C6-N1	-5.08	1.31	1.35
35	BA	1446	C	C2'-C1'	-5.08	1.47	1.53
35	BA	2126	A	N1-C2	-5.08	1.29	1.34
35	BA	2665	A	C6-N6	-5.08	1.29	1.33
1	AA	979	C	N3-C4	-5.08	1.30	1.33
35	BA	925	C	N1-C6	5.08	1.40	1.37
35	BA	1208	C	N1-C6	5.08	1.40	1.37
35	BA	1883	G	C2-N3	-5.08	1.28	1.32
1	AA	730	G	C5-C6	-5.08	1.37	1.42
1	AA	773	G	N9-C8	-5.08	1.34	1.37
35	BA	2260	C	P-O5'	-5.08	1.54	1.59
35	BA	2468	G	C5'-C4'	-5.08	1.45	1.51
38	BD	250	TRP	CG-CD1	-5.08	1.29	1.36
1	AA	71	C	N1-C6	-5.07	1.34	1.37
1	AA	191	G	C8-N7	-5.07	1.27	1.30
1	AA	1222	G	C8-N7	-5.07	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1293	G	C8-N7	-5.07	1.27	1.30
30	B5	35	GLU	CD-OE1	-5.07	1.20	1.25
35	BA	140	G	C8-N7	5.07	1.33	1.30
35	BA	502	A	C6-N1	-5.07	1.31	1.35
35	BA	596	G	C2-N3	-5.07	1.28	1.32
35	BA	966	G	C8-N7	5.07	1.33	1.30
35	BA	1126	A	C6-N1	-5.07	1.31	1.35
35	BA	1277	G	C4'-C3'	-5.07	1.47	1.52
35	BA	1327	C	C4-C5	-5.07	1.38	1.43
35	BA	1329	U	P-O5'	-5.07	1.54	1.59
35	BA	1813	G	C8-N7	-5.07	1.27	1.30
35	BA	2804	C	C4-C5	-5.07	1.38	1.43
35	BA	2864	G	C6-O6	-5.07	1.19	1.24
1	AA	287	U	C5-C6	-5.07	1.29	1.34
35	BA	52	A	N9-C8	5.07	1.41	1.37
35	BA	2584	U	N3-C4	-5.07	1.33	1.38
35	BA	2680	C	C5-C6	-5.07	1.30	1.34
1	AA	474	G	P-O5'	-5.07	1.54	1.59
1	AA	594	G	C5-C4	-5.07	1.34	1.38
1	AA	1245	A	C5-C6	-5.07	1.36	1.41
35	BA	363(D)	G	C6-N1	5.07	1.43	1.39
35	BA	854	G	N7-C5	-5.07	1.36	1.39
35	BA	858	U	C4-O4	5.07	1.27	1.23
35	BA	1342	A	N7-C5	-5.07	1.36	1.39
35	BA	1512	U	N1-C6	-5.07	1.33	1.38
35	BA	1701	A	N9-C8	-5.07	1.33	1.37
35	BA	1803	A	C8-N7	-5.07	1.27	1.31
35	BA	2064	C	N1-C2	-5.07	1.35	1.40
35	BA	2301	C	C2-N3	-5.07	1.31	1.35
35	BA	2327	A	N1-C2	-5.07	1.29	1.34
35	BA	2335	A	C5-C6	-5.07	1.36	1.41
35	BA	2630	G	N7-C5	-5.07	1.36	1.39
35	BA	2661	G	N7-C5	-5.07	1.36	1.39
35	BA	2761	G	C6-N1	-5.07	1.36	1.39
1	AA	1110	A	P-OP2	5.07	1.57	1.49
35	BA	728	G	C2-N2	-5.07	1.29	1.34
35	BA	2117	A	C6-N6	-5.07	1.29	1.33
35	BA	2490	G	C4'-C3'	-5.07	1.47	1.52
35	BA	198	C	C2'-C1'	-5.07	1.47	1.53
35	BA	398	G	C6-O6	5.07	1.28	1.24
35	BA	672	C	C4'-O4'	-5.07	1.39	1.45
35	BA	1805	U	C4-C5	-5.07	1.39	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	2208	A	C6-N1	-5.07	1.32	1.35
35	BA	2769	C	N1-C2	-5.07	1.35	1.40
1	AA	36	C	C2-N3	-5.07	1.31	1.35
1	AA	1279	A	C5'-C4'	-5.07	1.45	1.51
35	BA	810	U	C2-O2	-5.07	1.17	1.22
35	BA	1444	G	C5-C4	-5.07	1.34	1.38
35	BA	1967	C	C4'-C3'	-5.07	1.47	1.52
35	BA	2357	U	C2-N3	-5.07	1.34	1.37
35	BA	2452	C	N3-C4	-5.07	1.30	1.33
51	BT	41	ARG	CZ-NH1	-5.07	1.26	1.33
35	BA	211	A	N9-C4	-5.06	1.34	1.37
35	BA	563	G	C6-O6	-5.06	1.19	1.24
35	BA	1301	A	C6-N6	-5.06	1.29	1.33
1	AA	21	G	C3'-C2'	-5.06	1.47	1.52
1	AA	193	C	C5-C6	-5.06	1.30	1.34
1	AA	663	A	P-O5'	-5.06	1.54	1.59
1	AA	740	U	N1-C2	-5.06	1.33	1.38
1	AA	1175	G	N9-C4	-5.06	1.33	1.38
22	AV	15	G	N1-C2	5.06	1.41	1.37
35	BA	81	G	O3'-P	-5.06	1.55	1.61
35	BA	654(O)	G	N9-C8	5.06	1.41	1.37
35	BA	2266	A	N1-C2	-5.06	1.29	1.34
35	BA	2365	G	C2'-O2'	-5.06	1.35	1.41
35	BA	2485	G	P-O5'	-5.06	1.54	1.59
35	BA	2639	A	C4'-C3'	-5.06	1.47	1.52
35	BA	2732	G	C3'-C2'	-5.06	1.47	1.52
36	BB	33	G	C2'-O2'	-5.06	1.35	1.41
1	AA	1427	U	C4-O4	-5.06	1.19	1.23
35	BA	848	G	C5-C6	-5.06	1.37	1.42
35	BA	1488	G	N3-C4	-5.06	1.31	1.35
35	BA	2489	G	C2-N2	-5.06	1.29	1.34
1	AA	241	C	N1-C6	-5.06	1.34	1.37
1	AA	400	C	C4-C5	-5.06	1.39	1.43
1	AA	437	U	C3'-C2'	-5.06	1.47	1.52
1	AA	925	G	N9-C8	-5.06	1.34	1.37
1	AA	1131	G	N9-C8	-5.06	1.34	1.37
1	AA	1464	G	C6-N1	-5.06	1.36	1.39
35	BA	579	G	C5-C4	-5.06	1.34	1.38
35	BA	698	C	C4'-C3'	-5.06	1.47	1.52
35	BA	1304	C	N1-C6	-5.06	1.34	1.37
35	BA	1478	G	P-O5'	-5.06	1.54	1.59
35	BA	1679	U	C2-O2	-5.06	1.17	1.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1749	A	N9-C8	5.06	1.41	1.37
35	BA	2189	U	P-O5'	-5.06	1.54	1.59
35	BA	2258	C	N3-C4	-5.06	1.30	1.33
35	BA	2414	G	C5-C4	-5.06	1.34	1.38
35	BA	2694	G	N9-C8	-5.06	1.34	1.37
1	AA	10	A	N3-C4	-5.06	1.31	1.34
1	AA	254	G	C1'-N9	-5.06	1.39	1.46
1	AA	1048	G	C2-N3	-5.06	1.28	1.32
35	BA	1163	G	C2-N3	-5.06	1.28	1.32
35	BA	1677	A	C5-C6	-5.06	1.36	1.41
35	BA	2330	G	C2-N3	-5.06	1.28	1.32
35	BA	2860	A	N3-C4	-5.06	1.31	1.34
39	BE	158	GLY	CA-C	-5.06	1.43	1.51
1	AA	241	C	C4'-C3'	-5.06	1.47	1.52
1	AA	317	G	N1-C2	-5.06	1.33	1.37
1	AA	637	G	N1-C2	-5.06	1.33	1.37
1	AA	1155	G	N3-C4	-5.06	1.31	1.35
1	AA	1375	A	N9-C8	-5.06	1.33	1.37
35	BA	152	G	N1-C2	-5.06	1.33	1.37
35	BA	2247	A	N9-C8	-5.06	1.33	1.37
1	AA	50	A	C8-N7	-5.05	1.28	1.31
1	AA	1097	C	C4'-O4'	-5.05	1.39	1.45
35	BA	676	A	C5-C6	-5.05	1.36	1.41
35	BA	698	C	N1-C6	-5.05	1.34	1.37
35	BA	951	C	C5'-C4'	-5.05	1.45	1.51
35	BA	1413	G	C6-N1	-5.05	1.36	1.39
35	BA	1948	G	C8-N7	-5.05	1.27	1.30
35	BA	2155	G	C2'-C1'	-5.05	1.47	1.53
35	BA	2841	C	C4-C5	-5.05	1.39	1.43
1	AA	93	G	N7-C5	-5.05	1.36	1.39
1	AA	635	G	C2-N3	-5.05	1.28	1.32
1	AA	1394	A	C5-C4	-5.05	1.35	1.38
35	BA	752	A	C5-C4	-5.05	1.35	1.38
35	BA	1117	G	N7-C5	-5.05	1.36	1.39
35	BA	1666	G	N9-C4	-5.05	1.33	1.38
35	BA	1722	A	N7-C5	-5.05	1.36	1.39
35	BA	2298	A	N7-C5	-5.05	1.36	1.39
35	BA	2502	G	N9-C4	-5.05	1.33	1.38
1	AA	745	C	C2-N3	-5.05	1.31	1.35
1	AA	1489	G	C2'-C1'	-5.05	1.47	1.53
35	BA	53	A	C5'-C4'	-5.05	1.45	1.51
35	BA	259	G	C1'-N9	-5.05	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	364	C	C4-C5	-5.05	1.39	1.43
35	BA	444	C	C4-N4	-5.05	1.29	1.33
35	BA	602	G	N1-C2	-5.05	1.33	1.37
35	BA	2067	G	N1-C2	-5.05	1.33	1.37
35	BA	2835	A	C6-N1	-5.05	1.32	1.35
36	BB	71	C	C4-N4	-5.05	1.29	1.33
1	AA	350	G	C5-C4	-5.05	1.34	1.38
1	AA	550	G	C5-C4	-5.05	1.34	1.38
1	AA	614	A	P-O5'	-5.05	1.54	1.59
1	AA	966	G	C5-C4	-5.05	1.34	1.38
1	AA	1030(A)	G	C2-N2	-5.05	1.29	1.34
1	AA	1321	C	P-O5'	-5.05	1.54	1.59
1	AA	1438	G	P-O5'	-5.05	1.54	1.59
35	BA	320	A	C5-C4	5.05	1.42	1.38
35	BA	1364	G	C6-N1	-5.05	1.36	1.39
35	BA	1919	A	N3-C4	-5.05	1.31	1.34
35	BA	2053	G	C6-N1	-5.05	1.36	1.39
35	BA	2102	U	N1-C2	-5.05	1.34	1.38
35	BA	2288	A	N3-C4	-5.05	1.31	1.34
35	BA	2766	G	C6-N1	-5.05	1.36	1.39
35	BA	2774	C	C5'-C4'	-5.05	1.45	1.51
36	BB	77	U	C4'-O4'	-5.05	1.39	1.45
1	AA	1508	G	C2-N3	-5.05	1.28	1.32
35	BA	583	G	C2-N3	-5.05	1.28	1.32
1	AA	771	G	C8-N7	-5.05	1.27	1.30
1	AA	1000	U	C2-N3	5.05	1.41	1.37
1	AA	1211	U	C4-C5	5.05	1.48	1.43
1	AA	1272	G	N7-C5	-5.05	1.36	1.39
1	AA	1379	G	N7-C5	-5.05	1.36	1.39
23	AX	19	U	N3-C4	-5.05	1.33	1.38
35	BA	114	U	N1-C2	-5.05	1.34	1.38
35	BA	249	C	C4'-C3'	-5.05	1.47	1.52
35	BA	293	U	C2-N3	5.05	1.41	1.37
35	BA	2020	A	C6-N1	-5.05	1.32	1.35
35	BA	2154	G	N9-C4	5.05	1.42	1.38
35	BA	2353	G	N7-C5	-5.05	1.36	1.39
35	BA	2374	C	C4-C5	-5.05	1.39	1.43
35	BA	2574	G	N7-C5	-5.05	1.36	1.39
36	BB	85	G	C4'-O4'	-5.05	1.39	1.45
43	BK	79	ARG	CZ-NH1	-5.05	1.26	1.33
35	BA	1457	A	C6-N6	-5.04	1.29	1.33
35	BA	1986	A	C6-N6	-5.04	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	299	G	N9-C8	-5.04	1.34	1.37
1	AA	623	C	C4'-O4'	-5.04	1.39	1.45
35	BA	186	G	N9-C8	-5.04	1.34	1.37
35	BA	214	G	N9-C4	-5.04	1.33	1.38
35	BA	1694	C	C5'-C4'	-5.04	1.45	1.51
35	BA	1986	A	N3-C4	-5.04	1.31	1.34
35	BA	2015	A	C5-C4	5.04	1.42	1.38
35	BA	2750	A	C8-N7	-5.04	1.28	1.31
1	AA	272	C	N1-C6	-5.04	1.34	1.37
1	AA	708	C	N1-C6	5.04	1.40	1.37
1	AA	1160	G	C4'-C3'	-5.04	1.47	1.52
35	BA	61	G	C4'-C3'	-5.04	1.47	1.52
35	BA	593	G	C8-N7	-5.04	1.27	1.30
35	BA	1068	G	C8-N7	-5.04	1.27	1.30
35	BA	1511	C	C3'-C2'	-5.04	1.47	1.52
35	BA	1527	G	C4'-C3'	-5.04	1.47	1.52
35	BA	1643	G	N1-C2	-5.04	1.33	1.37
35	BA	2420	C	N1-C6	-5.04	1.34	1.37
1	AA	818	G	C5'-C4'	-5.04	1.45	1.51
1	AA	1114	C	P-O5'	-5.04	1.54	1.59
1	AA	46	G	C2'-C1'	-5.04	1.47	1.53
1	AA	224	C	C4'-C3'	-5.04	1.47	1.52
1	AA	729	A	C2'-C1'	-5.04	1.47	1.53
1	AA	767	A	C4'-C3'	-5.04	1.47	1.52
1	AA	1232	U	C2'-C1'	-5.04	1.47	1.53
22	AV	37	A	C2-N3	-5.04	1.29	1.33
35	BA	262	A	C2'-C1'	-5.04	1.47	1.53
35	BA	658	C	C4'-C3'	-5.04	1.47	1.52
35	BA	1135	C	C5-C6	-5.04	1.30	1.34
35	BA	2065	C	N3-C4	-5.04	1.30	1.33
35	BA	2088	G	N3-C4	-5.04	1.31	1.35
35	BA	2876	G	N3-C4	-5.04	1.31	1.35
1	AA	377	G	N1-C2	-5.04	1.33	1.37
11	AK	96	ARG	NE-CZ	-5.04	1.26	1.33
22	AV	11	A	C5-C4	-5.04	1.35	1.38
35	BA	2731	G	C1'-N9	-5.04	1.39	1.46
1	AA	900	A	C3'-C2'	-5.04	1.47	1.52
1	AA	1049	U	C4'-O4'	-5.04	1.39	1.45
35	BA	35	G	N7-C5	-5.04	1.36	1.39
35	BA	2008	C	N1-C6	-5.04	1.34	1.37
35	BA	2458	G	C5'-C4'	-5.04	1.45	1.51
35	BA	2664	G	C6-O6	-5.04	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	608	A	C5-C6	-5.03	1.36	1.41
1	AA	750	G	N3-C4	-5.03	1.31	1.35
1	AA	945	G	C6-N1	-5.03	1.36	1.39
1	AA	1013	G	C2-N3	-5.03	1.28	1.32
1	AA	1097	C	N3-C4	-5.03	1.30	1.33
1	AA	1142	G	C2-N2	-5.03	1.29	1.34
35	BA	1535	A	C5-C6	-5.03	1.36	1.41
35	BA	2249	U	N1-C6	-5.03	1.33	1.38
35	BA	2614	A	P-O5'	-5.03	1.54	1.59
36	BB	21	G	N3-C4	-5.03	1.31	1.35
35	BA	1762	A	N1-C2	-5.03	1.29	1.34
35	BA	2133	G	N1-C2	-5.03	1.33	1.37
36	BB	56	G	N1-C2	-5.03	1.33	1.37
1	AA	451	A	N3-C4	-5.03	1.31	1.34
1	AA	804	U	N3-C4	5.03	1.43	1.38
35	BA	575	A	N3-C4	-5.03	1.31	1.34
35	BA	890	A	N3-C4	-5.03	1.31	1.34
35	BA	1385	G	C2'-C1'	-5.03	1.47	1.53
35	BA	1602	U	C5-C6	5.03	1.38	1.34
1	AA	319	G	N9-C4	-5.03	1.33	1.38
1	AA	795	C	N1-C6	5.03	1.40	1.37
35	BA	692	C	C4'-C3'	-5.03	1.47	1.52
35	BA	964	C	N1-C6	5.03	1.40	1.37
35	BA	1186	G	C5'-C4'	-5.03	1.45	1.51
35	BA	2172	U	C2'-O2'	-5.03	1.35	1.41
35	BA	2368	C	C3'-C2'	-5.03	1.47	1.52
35	BA	2636	U	C5-C6	-5.03	1.29	1.34
1	AA	298	A	N9-C4	-5.03	1.34	1.37
1	AA	801	U	P-O5'	-5.03	1.54	1.59
1	AA	1038	C	C2-N3	-5.03	1.31	1.35
1	AA	1042	G	N9-C8	-5.03	1.34	1.37
1	AA	1245	A	N9-C4	-5.03	1.34	1.37
1	AA	1334	G	N7-C5	-5.03	1.36	1.39
1	AA	1428	A	N7-C5	-5.03	1.36	1.39
1	AA	1483	A	N7-C5	-5.03	1.36	1.39
35	BA	143	G	O3'-P	-5.03	1.55	1.61
35	BA	789	A	C8-N7	-5.03	1.28	1.31
35	BA	1449	A	C8-N7	-5.03	1.28	1.31
35	BA	1885	A	O3'-P	-5.03	1.55	1.61
1	AA	418	C	N1-C2	-5.03	1.35	1.40
1	AA	1393	U	N3-C4	-5.03	1.33	1.38
35	BA	142(A)	C	C4-N4	-5.03	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	469	G	C6-O6	-5.03	1.19	1.24
35	BA	1129	A	C6-N6	-5.03	1.29	1.33
1	AA	1134	G	C2-N3	-5.02	1.28	1.32
35	BA	1944	U	C2-N3	-5.02	1.34	1.37
35	BA	2443	C	P-O5'	-5.02	1.54	1.59
1	AA	817	C	C3'-O3'	5.02	1.49	1.42
1	AA	945	G	N3-C4	-5.02	1.31	1.35
1	AA	1519	A	C5-C6	5.02	1.45	1.41
22	AV	29	G	N7-C5	-5.02	1.36	1.39
35	BA	1250	G	C5-C4	-5.02	1.34	1.38
35	BA	1769	G	O3'-P	-5.02	1.55	1.61
35	BA	2158	A	N7-C5	-5.02	1.36	1.39
35	BA	2819	G	N1-C2	-5.02	1.33	1.37
1	AA	21	G	C8-N7	-5.02	1.27	1.30
1	AA	358	U	N1-C6	-5.02	1.33	1.38
1	AA	397	A	C6-N6	-5.02	1.29	1.33
35	BA	590	A	C8-N7	-5.02	1.28	1.31
35	BA	1378	A	C6-N6	-5.02	1.29	1.33
35	BA	1966	A	P-O5'	-5.02	1.54	1.59
35	BA	2463	C	P-O5'	-5.02	1.54	1.59
1	AA	934	C	C4-C5	-5.02	1.39	1.43
1	AA	1356	G	C3'-O3'	-5.02	1.35	1.42
35	BA	1476	C	C4-C5	-5.02	1.39	1.43
35	BA	1789	A	C5'-C4'	-5.02	1.45	1.51
35	BA	2509	G	C2'-O2'	-5.02	1.35	1.41
35	BA	2863	C	C2-O2	-5.02	1.20	1.24
1	AA	11	G	N3-C4	-5.02	1.31	1.35
1	AA	376	G	C8-N7	5.02	1.33	1.30
1	AA	778	G	N3-C4	-5.02	1.31	1.35
8	AH	44	PHE	CB-CG	-5.02	1.42	1.51
35	BA	95	G	N3-C4	-5.02	1.31	1.35
35	BA	336	C	N1-C6	-5.02	1.34	1.37
35	BA	745	G	P-O5'	-5.02	1.54	1.59
35	BA	1094	U	C2-O2	-5.02	1.17	1.22
35	BA	1541	G	C8-N7	5.02	1.33	1.30
35	BA	1596	A	C2-N3	-5.02	1.29	1.33
35	BA	1744	C	N1-C6	-5.02	1.34	1.37
35	BA	2527	C	C4-N4	-5.02	1.29	1.33
36	BB	82	G	N3-C4	-5.02	1.31	1.35
14	AN	54	PRO	N-CD	-5.02	1.40	1.47
1	AA	125	U	C4'-C3'	-5.01	1.47	1.52
1	AA	412	A	C6-N1	-5.01	1.32	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1396	A	N9-C4	-5.01	1.34	1.37
35	BA	157	U	N3-C4	-5.01	1.33	1.38
35	BA	237	C	C4-C5	-5.01	1.39	1.43
35	BA	478	A	C4'-C3'	-5.01	1.47	1.52
35	BA	716	A	C6-N1	-5.01	1.32	1.35
35	BA	788	A	N9-C8	-5.01	1.33	1.37
35	BA	940	G	C8-N7	-5.01	1.27	1.30
35	BA	980	A	C6-N1	-5.01	1.32	1.35
35	BA	1718	G	N1-C2	-5.01	1.33	1.37
35	BA	1842	G	C2-N3	5.01	1.36	1.32
35	BA	1916	A	N9-C4	-5.01	1.34	1.37
35	BA	2355	C	C2'-C1'	-5.01	1.47	1.53
35	BA	2541	A	C2'-C1'	-5.01	1.47	1.53
35	BA	2774	C	C2-O2	-5.01	1.20	1.24
1	AA	30	U	C2-N3	-5.01	1.34	1.37
1	AA	121	C	C2-N3	-5.01	1.31	1.35
1	AA	1060	C	C2-N3	-5.01	1.31	1.35
35	BA	407	G	C5-C4	-5.01	1.34	1.38
35	BA	2202	C	C2-N3	-5.01	1.31	1.35
35	BA	2559	C	C3'-C2'	-5.01	1.47	1.52
1	AA	37	U	C4'-C3'	-5.01	1.47	1.52
1	AA	239	U	P-O5'	-5.01	1.54	1.59
1	AA	1113	C	N3-C4	-5.01	1.30	1.33
1	AA	1203	C	N3-C4	-5.01	1.30	1.33
1	AA	1317	C	N1-C6	5.01	1.40	1.37
22	AV	49	G	N3-C4	-5.01	1.31	1.35
35	BA	142(A)	C	N3-C4	-5.01	1.30	1.33
35	BA	1147	C	C4'-C3'	-5.01	1.47	1.52
35	BA	1644	C	P-O5'	-5.01	1.54	1.59
35	BA	1683	C	P-O5'	-5.01	1.54	1.59
35	BA	1761	C	P-O5'	-5.01	1.54	1.59
35	BA	2483	C	P-O5'	-5.01	1.54	1.59
1	AA	675	A	N7-C5	-5.01	1.36	1.39
1	AA	889	A	N1-C2	-5.01	1.29	1.34
35	BA	153	C	C2-O2	-5.01	1.20	1.24
35	BA	449	A	N7-C5	-5.01	1.36	1.39
35	BA	1177	A	C5-C4	5.01	1.42	1.38
35	BA	1424	G	N7-C5	-5.01	1.36	1.39
35	BA	1509(B)	A	N7-C5	-5.01	1.36	1.39
1	AA	499	A	O3'-P	-5.01	1.55	1.61
1	AA	1201	A	N9-C4	-5.01	1.34	1.37
1	AA	1495	U	C2-O2	-5.01	1.17	1.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1951	U	C2-N3	-5.01	1.34	1.37
35	BA	2685	G	C3'-O3'	-5.01	1.35	1.42
1	AA	178	C	O3'-P	-5.01	1.55	1.61
1	AA	226	G	C5-C4	-5.01	1.34	1.38
1	AA	360	A	O4'-C1'	-5.01	1.35	1.41
1	AA	612	C	C4-C5	-5.01	1.39	1.43
1	AA	725	G	C5-C4	-5.01	1.34	1.38
35	BA	171	G	C3'-C2'	-5.01	1.47	1.52
35	BA	483	A	N3-C4	-5.01	1.31	1.34
35	BA	662	G	C2-N3	5.01	1.36	1.32
35	BA	1631	C	C4-C5	-5.01	1.39	1.43
35	BA	1707	G	C6-N1	-5.01	1.36	1.39
36	BB	24	G	N3-C4	-5.01	1.31	1.35
1	AA	831	U	N3-C4	-5.00	1.33	1.38
35	BA	9	U	C2'-C1'	-5.00	1.47	1.53
35	BA	223	A	C4'-C3'	-5.00	1.47	1.52
35	BA	2384	G	C5-C6	5.00	1.47	1.42
1	AA	539	A	C3'-C2'	-5.00	1.47	1.52
23	AX	12	A	N9-C8	-5.00	1.33	1.37
35	BA	324	A	C3'-C2'	-5.00	1.47	1.52
35	BA	1191	G	O3'-P	-5.00	1.55	1.61
35	BA	1583	A	N7-C5	5.00	1.42	1.39
35	BA	1756	G	O3'-P	-5.00	1.55	1.61
35	BA	1775	U	C5'-C4'	-5.00	1.45	1.51
35	BA	1846	G	C3'-C2'	-5.00	1.47	1.52
35	BA	2061	G	C6-O6	5.00	1.28	1.24
35	BA	2144	U	C2-O2	-5.00	1.17	1.22
35	BA	2171	A	C6-N1	-5.00	1.32	1.35
35	BA	2671	A	C8-N7	5.00	1.35	1.31
1	AA	73	G	C8-N7	-5.00	1.27	1.30
1	AA	528	C	C2'-C1'	-5.00	1.47	1.53
35	BA	44	G	C5-C6	-5.00	1.37	1.42
35	BA	776	G	C6-N1	-5.00	1.36	1.39
35	BA	1029	A	N1-C2	-5.00	1.29	1.34
35	BA	1831	G	C6-N1	-5.00	1.36	1.39
35	BA	1834	U	C4'-C3'	-5.00	1.47	1.52
35	BA	1957	C	C3'-C2'	-5.00	1.47	1.52
36	BB	86	G	N3-C4	-5.00	1.31	1.35

All (10352) bond angle outliers are listed below:

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	BG	112	PRO	O-C-N	-40.65	57.66	122.70
9	AI	53	VAL	O-C-N	-36.52	64.27	122.70
9	AI	104	ARG	O-C-N	-30.37	74.11	122.70
41	BG	112	PRO	CA-C-N	21.56	164.63	117.20
26	B1	20	ARG	NE-CZ-NH2	-18.37	111.11	120.30
39	BE	199	ARG	NE-CZ-NH2	16.01	128.31	120.30
51	BT	111	ARG	NE-CZ-NH1	15.26	127.93	120.30
41	BG	112	PRO	C-N-CA	-15.08	84.00	121.70
1	AA	263	A	N1-C2-N3	-14.16	122.22	129.30
1	AA	916	G	C2-N3-C4	14.12	118.96	111.90
24	AY	329	ARG	NE-CZ-NH1	-13.93	113.33	120.30
35	BA	1072	C	C6-N1-C2	-13.79	114.78	120.30
35	BA	543	C	C5-C6-N1	13.79	127.90	121.00
36	BB	7	G	N9-C4-C5	13.76	110.90	105.40
22	AV	54	U	C5-C6-N1	13.52	129.46	122.70
35	BA	2254	C	N3-C4-C5	-13.41	116.54	121.90
35	BA	47	C	C5-C6-N1	-13.29	114.36	121.00
1	AA	1379	G	C8-N9-C4	-13.20	101.12	106.40
1	AA	1028	C	C6-N1-C2	-13.19	115.03	120.30
18	AR	35	ARG	NE-CZ-NH2	-13.17	113.72	120.30
1	AA	307	C	C6-N1-C2	-13.09	115.06	120.30
1	AA	1063	C	N3-C4-C5	13.04	127.12	121.90
1	AA	1487	G	C8-N9-C4	-13.04	101.19	106.40
35	BA	2045	C	N3-C4-C5	-12.94	116.72	121.90
1	AA	189(A)	C	N3-C4-C5	-12.89	116.74	121.90
36	BB	67	G	C4-C5-N7	12.79	115.92	110.80
35	BA	1319	G	N3-C4-C5	12.71	134.96	128.60
1	AA	588	G	O4'-C1'-N9	12.68	118.34	108.20
51	BT	16	ARG	NE-CZ-NH1	12.68	126.64	120.30
35	BA	1319	G	C5-N7-C8	-12.67	97.97	104.30
35	BA	2606	C	C5-C6-N1	12.65	127.33	121.00
35	BA	271(B)	C	C6-N1-C2	-12.64	115.25	120.30
22	AV	43	A	C8-N9-C4	-12.63	100.75	105.80
41	BG	118	ARG	NE-CZ-NH1	-12.60	114.00	120.30
1	AA	588	G	C2-N3-C4	12.55	118.17	111.90
47	BP	55	ARG	NE-CZ-NH2	-12.54	114.03	120.30
35	BA	2157	G	C5-C6-N1	-12.47	105.26	111.50
1	AA	1214	C	N3-C4-C5	-12.47	116.91	121.90
1	AA	613	C	C6-N1-C2	-12.43	115.33	120.30
35	BA	2146	C	C6-N1-C2	12.42	125.27	120.30
35	BA	120	U	O4'-C1'-N1	12.37	118.10	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2294	C	C6-N1-C2	-12.36	115.36	120.30
35	BA	279	C	N3-C4-C5	-12.34	116.97	121.90
35	BA	2696	U	C5-C6-N1	-12.34	116.53	122.70
3	AC	79	ARG	NE-CZ-NH2	-12.33	114.14	120.30
35	BA	1610	A	C8-N9-C4	-12.32	100.87	105.80
1	AA	1529	G	C8-N9-C4	-12.31	101.47	106.40
35	BA	2858	C	O4'-C1'-N1	12.29	118.03	108.20
8	AH	12	ARG	NE-CZ-NH2	-12.29	114.15	120.30
35	BA	687	C	C6-N1-C2	12.26	125.20	120.30
35	BA	2586	C	C6-N1-C2	-12.26	115.40	120.30
35	BA	2018	G	N7-C8-N9	-12.21	106.99	113.10
35	BA	78	A	N1-C2-N3	12.21	135.40	129.30
1	AA	1198	G	C6-C5-N7	-12.16	123.10	130.40
6	AF	87	ARG	NE-CZ-NH1	-12.16	114.22	120.30
35	BA	1009	A	C5-N7-C8	12.12	109.96	103.90
1	AA	1082	G	C5-C6-O6	12.09	135.85	128.60
45	BN	115	ARG	NE-CZ-NH1	-12.04	114.28	120.30
9	AI	111	ARG	NE-CZ-NH2	-12.03	114.29	120.30
35	BA	911	A	N7-C8-N9	11.93	119.77	113.80
9	AI	120	ARG	NE-CZ-NH1	-11.92	114.34	120.30
1	AA	21	G	C4-C5-N7	-11.91	106.03	110.80
4	AD	114	ARG	NE-CZ-NH2	11.87	126.24	120.30
35	BA	86	C	N3-C4-C5	-11.87	117.15	121.90
35	BA	1744	C	N3-C4-C5	11.85	126.64	121.90
35	BA	2539	C	C6-N1-C2	-11.84	115.56	120.30
35	BA	2590	A	C8-N9-C4	-11.84	101.07	105.80
35	BA	1804	C	C2-N3-C4	11.80	125.80	119.90
14	AN	23	ARG	NE-CZ-NH1	-11.77	114.42	120.30
35	BA	2229	C	C6-N1-C2	11.76	125.00	120.30
1	AA	1465	C	C6-N1-C2	11.73	124.99	120.30
35	BA	956	G	N9-C4-C5	11.72	110.09	105.40
1	AA	496	A	N7-C8-N9	-11.70	107.95	113.80
35	BA	1024	G	N7-C8-N9	-11.66	107.27	113.10
1	AA	1290	G	N3-C4-C5	-11.65	122.77	128.60
35	BA	570	G	C6-N1-C2	11.64	132.08	125.10
35	BA	1610	A	N9-C4-C5	11.63	110.45	105.80
35	BA	1997	G	C4-C5-N7	11.62	115.45	110.80
1	AA	1429	C	C6-N1-C2	-11.61	115.66	120.30
1	AA	1165	C	C6-N1-C2	-11.60	115.66	120.30
35	BA	876	C	C2-N3-C4	-11.59	114.10	119.90
8	AH	102	ARG	NE-CZ-NH2	-11.59	114.51	120.30
1	AA	392	G	C4-C5-N7	11.58	115.43	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1045	C	C6-N1-C2	-11.53	115.69	120.30
35	BA	19	C	N3-C4-C5	11.53	126.51	121.90
44	BL	73	ARG	NE-CZ-NH1	-11.52	114.54	120.30
35	BA	463	G	N9-C4-C5	11.52	110.01	105.40
35	BA	1260	G	C2-N3-C4	11.51	117.66	111.90
35	BA	2269	A	C2-N3-C4	-11.45	104.87	110.60
35	BA	1760	A	N7-C8-N9	11.45	119.52	113.80
35	BA	525	U	C2-N3-C4	-11.44	120.14	127.00
24	AY	151	ARG	NE-CZ-NH2	11.43	126.02	120.30
51	BT	111	ARG	NE-CZ-NH2	-11.41	114.59	120.30
2	AB	157	ARG	NE-CZ-NH1	-11.40	114.60	120.30
35	BA	2111	C	C6-N1-C2	-11.40	115.74	120.30
1	AA	396	G	N7-C8-N9	11.39	118.80	113.10
22	AV	43	A	N1-C2-N3	-11.39	123.60	129.30
35	BA	583	G	N7-C8-N9	11.37	118.79	113.10
35	BA	1742	G	N9-C4-C5	-11.37	100.85	105.40
40	BF	54	ARG	NE-CZ-NH1	-11.37	114.62	120.30
40	BF	191	ARG	NE-CZ-NH2	11.36	125.98	120.30
40	BF	45	ARG	NE-CZ-NH2	11.35	125.97	120.30
39	BE	13	ARG	NE-CZ-NH1	-11.34	114.63	120.30
35	BA	1421	G	C4-C5-N7	11.34	115.34	110.80
35	BA	272(J)	C	O4'-C1'-N1	11.34	117.27	108.20
1	AA	916	G	C4-C5-N7	-11.33	106.27	110.80
35	BA	967	C	N3-C4-C5	11.30	126.42	121.90
35	BA	2364	C	C4-C5-C6	11.30	123.05	117.40
1	AA	855	G	C8-N9-C4	-11.30	101.88	106.40
35	BA	822	U	C5-C4-O4	-11.27	119.14	125.90
35	BA	214	G	N9-C4-C5	11.26	109.91	105.40
35	BA	47	C	C4-C5-C6	11.25	123.02	117.40
6	AF	3	ARG	NE-CZ-NH2	-11.24	114.68	120.30
35	BA	1366	A	N1-C6-N6	-11.23	111.86	118.60
15	AO	65	ARG	NE-CZ-NH1	-11.22	114.69	120.30
35	BA	115	C	N3-C4-C5	-11.22	117.41	121.90
56	BY	73	ARG	NE-CZ-NH2	-11.21	114.69	120.30
1	AA	1367	C	N3-C4-C5	11.20	126.38	121.90
1	AA	1475	G	N3-C2-N2	-11.20	112.06	119.90
35	BA	1149	G	C8-N9-C4	-11.20	101.92	106.40
35	BA	2755	C	C2-N3-C4	11.19	125.49	119.90
35	BA	1044	G	N3-C2-N2	-11.14	112.10	119.90
2	AB	157	ARG	NE-CZ-NH2	-11.12	114.74	120.30
1	AA	496	A	C8-N9-C4	11.10	110.24	105.80
42	BH	132	ARG	NE-CZ-NH2	-11.08	114.76	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	B7	28	ARG	NE-CZ-NH1	11.06	125.83	120.30
35	BA	2151	G	C4-C5-N7	11.06	115.22	110.80
35	BA	717	G	C2-N3-C4	-11.05	106.37	111.90
35	BA	564	C	C4-C5-C6	11.05	122.93	117.40
1	AA	797	C	C6-N1-C2	-11.04	115.88	120.30
26	B1	50	ARG	NE-CZ-NH1	-11.03	114.78	120.30
2	AB	178	ARG	NE-CZ-NH2	-11.03	114.78	120.30
35	BA	2018	G	C8-N9-C4	11.03	110.81	106.40
35	BA	972	G	N1-C6-O6	-11.03	113.28	119.90
35	BA	1460	A	N7-C8-N9	11.03	119.31	113.80
35	BA	1428	C	N3-C4-C5	-11.02	117.49	121.90
1	AA	800	G	C5-C6-O6	-11.02	121.99	128.60
35	BA	1462	C	N3-C4-C5	11.01	126.30	121.90
35	BA	1484	G	N9-C4-C5	11.01	109.80	105.40
35	BA	1319	G	C4-C5-N7	11.00	115.20	110.80
1	AA	1429	C	C5-C6-N1	10.99	126.50	121.00
35	BA	1164	G	C4-C5-N7	10.99	115.19	110.80
35	BA	2473	U	C4-C5-C6	-10.96	113.12	119.70
40	BF	168	ARG	NE-CZ-NH2	-10.95	114.83	120.30
35	BA	1760	A	C8-N9-C4	-10.94	101.42	105.80
50	BS	20	ARG	NE-CZ-NH1	-10.94	114.83	120.30
1	AA	875	C	C5-C6-N1	-10.93	115.54	121.00
35	BA	2225	A	N1-C2-N3	10.92	134.76	129.30
35	BA	1440	G	C8-N9-C4	-10.91	102.03	106.40
1	AA	659	U	C5-C6-N1	-10.91	117.25	122.70
35	BA	1203	G	N1-C6-O6	-10.91	113.36	119.90
1	AA	876	G	N9-C4-C5	10.90	109.76	105.40
38	BD	134	ARG	NE-CZ-NH2	-10.88	114.86	120.30
35	BA	1230	C	N3-C4-C5	10.87	126.25	121.90
12	AL	12	ARG	NE-CZ-NH1	-10.86	114.87	120.30
35	BA	1713	U	C5-C4-O4	-10.84	119.40	125.90
35	BA	1656	C	C6-N1-C2	10.82	124.63	120.30
51	BT	29	ARG	NE-CZ-NH1	10.82	125.71	120.30
1	AA	1386	G	N7-C8-N9	-10.80	107.70	113.10
9	AI	107	ARG	NE-CZ-NH2	-10.80	114.90	120.30
35	BA	1006	C	C2-N3-C4	10.79	125.30	119.90
22	AV	37	A	C5-N7-C8	10.78	109.29	103.90
22	AV	43	A	C2-N3-C4	10.77	115.99	110.60
35	BA	1997	G	N9-C4-C5	-10.77	101.09	105.40
35	BA	1593	G	C6-N1-C2	-10.77	118.64	125.10
35	BA	176	G	N1-C6-O6	10.76	126.36	119.90
35	BA	363(C)	G	C8-N9-C4	10.76	110.70	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	BT	103	ARG	NE-CZ-NH1	-10.75	114.92	120.30
1	AA	920	U	C5-C6-N1	10.73	128.07	122.70
1	AA	455	C	N3-C4-C5	10.73	126.19	121.90
35	BA	2896	C	C6-N1-C2	-10.73	116.01	120.30
1	AA	1213	A	N9-C4-C5	10.72	110.09	105.80
35	BA	2896	C	C5-C6-N1	10.70	126.35	121.00
35	BA	705	A	C2-N3-C4	-10.69	105.25	110.60
49	BR	86	ARG	NE-CZ-NH2	10.66	125.63	120.30
35	BA	1324	G	C8-N9-C4	-10.66	102.14	106.40
35	BA	475	U	C5-C6-N1	-10.66	117.37	122.70
1	AA	1147	C	C6-N1-C2	-10.66	116.04	120.30
1	AA	1334	G	C4-C5-N7	-10.65	106.54	110.80
35	BA	2111	C	C5-C6-N1	10.65	126.32	121.00
1	AA	1099	G	N3-C2-N2	-10.63	112.46	119.90
1	AA	511	C	C6-N1-C2	10.63	124.55	120.30
35	BA	2774	C	C2-N3-C4	10.63	125.22	119.90
35	BA	1740	G	N9-C4-C5	-10.63	101.15	105.40
1	AA	576	G	C8-N9-C4	-10.62	102.15	106.40
35	BA	658	C	N3-C4-C5	10.63	126.15	121.90
35	BA	2533	A	C4-C5-C6	-10.61	111.69	117.00
35	BA	1303	G	N7-C8-N9	10.60	118.40	113.10
35	BA	1327	C	C5-C6-N1	10.59	126.29	121.00
35	BA	540	C	N3-C4-C5	-10.58	117.67	121.90
35	BA	2658	C	C6-N1-C2	-10.57	116.07	120.30
1	AA	1323	G	C2-N3-C4	-10.56	106.62	111.90
35	BA	47	C	N3-C4-C5	-10.56	117.67	121.90
1	AA	1373	G	C4-C5-N7	-10.56	106.58	110.80
1	AA	1492	A	N7-C8-N9	-10.55	108.52	113.80
35	BA	432	A	C5-C6-N1	-10.55	112.42	117.70
35	BA	741	G	N9-C4-C5	-10.54	101.18	105.40
35	BA	1539	G	C5-C6-O6	10.54	134.92	128.60
35	BA	1652	A	N1-C6-N6	-10.53	112.28	118.60
1	AA	1516	G	C4-C5-N7	-10.51	106.59	110.80
35	BA	2199	A	C8-N9-C4	-10.51	101.60	105.80
6	AF	80	ARG	NE-CZ-NH1	10.49	125.55	120.30
35	BA	433	C	N3-C4-N4	10.49	125.34	118.00
1	AA	1420	C	C6-N1-C2	-10.48	116.11	120.30
51	BT	96	ARG	NE-CZ-NH1	10.47	125.53	120.30
35	BA	2548	G	C4-C5-N7	-10.46	106.61	110.80
1	AA	1519	A	N7-C8-N9	10.46	119.03	113.80
33	B8	30	ARG	NE-CZ-NH2	-10.45	115.08	120.30
1	AA	217	C	N3-C4-C5	10.44	126.08	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	77	C	N3-C4-C5	10.43	126.07	121.90
40	BF	205	ARG	NE-CZ-NH1	-10.43	115.08	120.30
22	AV	74	C	N3-C4-C5	-10.43	117.73	121.90
49	BR	104	ARG	NE-CZ-NH1	-10.42	115.09	120.30
1	AA	21	G	C5-N7-C8	10.42	109.51	104.30
35	BA	1850	G	C8-N9-C4	10.41	110.57	106.40
1	AA	1491	G	C4-C5-N7	-10.41	106.64	110.80
35	BA	2101	G	C5-C6-N1	-10.40	106.30	111.50
1	AA	532	A	O4'-C1'-N9	-10.40	99.88	108.20
1	AA	290	C	N3-C4-N4	10.39	125.28	118.00
35	BA	1558	A	N7-C8-N9	10.38	118.99	113.80
36	BB	103	G	C5'-C4'-C3'	-10.38	99.39	116.00
1	AA	475	G	C5-C6-O6	10.37	134.82	128.60
35	BA	2881	C	N1-C2-O2	10.36	125.11	118.90
35	BA	2541	A	N9-C4-C5	-10.34	101.66	105.80
35	BA	710	G	C8-N9-C4	-10.34	102.26	106.40
35	BA	2373	G	N9-C4-C5	10.33	109.53	105.40
30	B5	16	ARG	NE-CZ-NH1	10.31	125.45	120.30
1	AA	575	G	C2'-C3'-O3'	10.30	132.17	109.50
1	AA	1502	A	N9-C1'-C2'	10.30	127.39	114.00
35	BA	2439	A	N1-C6-N6	10.30	124.78	118.60
35	BA	23	G	N3-C4-N9	-10.30	119.82	126.00
35	BA	31	C	N3-C4-C5	10.30	126.02	121.90
1	AA	189(D)	C	N3-C4-N4	-10.30	110.79	118.00
35	BA	1438	U	C5-C6-N1	10.29	127.84	122.70
1	AA	796	C	O4'-C1'-N1	-10.28	99.97	108.20
35	BA	1686	C	C5-C6-N1	10.27	126.13	121.00
35	BA	2504	U	C5-C4-O4	10.27	132.06	125.90
35	BA	1943	U	N1-C2-N3	-10.26	108.75	114.90
36	BB	84	C	C6-N1-C2	-10.24	116.20	120.30
1	AA	1386	G	N3-C2-N2	-10.24	112.73	119.90
35	BA	1693	U	C5-C4-O4	-10.24	119.75	125.90
35	BA	2843	G	O4'-C1'-N9	-10.24	100.00	108.20
13	AM	91	ARG	NE-CZ-NH2	-10.22	115.19	120.30
35	BA	2614	A	C2-N3-C4	-10.22	105.49	110.60
35	BA	2268	A	C5-C6-N1	-10.22	112.59	117.70
1	AA	776	G	C4-C5-N7	-10.22	106.71	110.80
35	BA	2445	G	N9-C4-C5	10.21	109.48	105.40
35	BA	956	G	C8-N9-C4	-10.21	102.32	106.40
36	BB	57	A	C4-C5-C6	-10.21	111.90	117.00
35	BA	567	A	N1-C2-N3	10.20	134.40	129.30
1	AA	1492	A	O4'-C1'-N9	10.20	116.36	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AX	13	A	C8-N9-C4	-10.20	101.72	105.80
35	BA	1992	G	C2'-C3'-O3'	10.20	131.93	109.50
35	BA	2538	C	N1-C2-O2	10.19	125.02	118.90
1	AA	875	C	N3-C4-C5	10.19	125.97	121.90
35	BA	36	G	N3-C4-C5	10.18	133.69	128.60
35	BA	1710	C	C6-N1-C2	-10.18	116.23	120.30
35	BA	2727	G	C4-C5-N7	-10.18	106.73	110.80
1	AA	866	C	N3-C4-C5	10.17	125.97	121.90
38	BD	91	ARG	NE-CZ-NH1	-10.16	115.22	120.30
35	BA	1545	A	N7-C8-N9	10.15	118.87	113.80
1	AA	895	G	C5-C6-N1	10.13	116.57	111.50
35	BA	1932	A	C8-N9-C4	-10.13	101.75	105.80
35	BA	446	G	N1-C6-O6	-10.12	113.83	119.90
35	BA	1085	A	N9-C4-C5	10.11	109.84	105.80
39	BE	119	ARG	NE-CZ-NH2	10.11	125.35	120.30
1	AA	403	C	N3-C4-N4	-10.11	110.92	118.00
35	BA	2206	G	C5-C6-O6	-10.10	122.54	128.60
52	BU	28	ARG	NE-CZ-NH2	10.10	125.35	120.30
1	AA	1528	U	C5-C6-N1	10.10	127.75	122.70
1	AA	1031	G	N1-C6-O6	-10.09	113.84	119.90
5	AE	150	ARG	NE-CZ-NH1	-10.09	115.25	120.30
35	BA	1460	A	C8-N9-C4	-10.08	101.77	105.80
1	AA	426	G	C2-N3-C4	-10.07	106.86	111.90
35	BA	463	G	C4-C5-N7	-10.06	106.78	110.80
35	BA	2259	G	N3-C4-C5	-10.05	123.57	128.60
14	AN	45	ARG	NE-CZ-NH2	-10.05	115.28	120.30
1	AA	113	G	N9-C4-C5	-10.04	101.38	105.40
35	BA	705	A	C8-N9-C4	-10.04	101.78	105.80
35	BA	1942	C	N3-C4-C5	10.04	125.92	121.90
1	AA	913	A	C8-N9-C4	-10.04	101.78	105.80
35	BA	671	C	C6-N1-C2	-10.04	116.28	120.30
35	BA	2378	A	N9-C4-C5	10.03	109.81	105.80
35	BA	654(K)	C	C4-C5-C6	-10.03	112.38	117.40
35	BA	2690	C	C5-C6-N1	10.03	126.02	121.00
35	BA	1015	G	C4-C5-N7	10.03	114.81	110.80
5	AE	24	ARG	NE-CZ-NH1	-10.03	115.29	120.30
35	BA	1386	C	N3-C4-C5	-10.02	117.89	121.90
35	BA	477	A	N1-C2-N3	10.02	134.31	129.30
35	BA	1905	C	N3-C4-C5	10.01	125.91	121.90
1	AA	770	C	C6-N1-C2	10.01	124.30	120.30
35	BA	2104	G	N9-C4-C5	-10.00	101.40	105.40
35	BA	2003	G	C4-C5-N7	-10.00	106.80	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	BP	65	ARG	NE-CZ-NH2	-10.00	115.30	120.30
1	AA	503	C	N3-C4-C5	9.99	125.90	121.90
22	AV	37	A	N7-C8-N9	-9.99	108.80	113.80
35	BA	1700	A	N9-C4-C5	9.99	109.80	105.80
35	BA	1475	G	C5-C6-O6	-9.99	122.61	128.60
1	AA	1080	A	C5-N7-C8	-9.96	98.92	103.90
35	BA	1957	C	C6-N1-C2	-9.96	116.31	120.30
35	BA	174	C	C5-C6-N1	9.96	125.98	121.00
35	BA	2498	C	N3-C4-C5	9.96	125.88	121.90
51	BT	91	ARG	NE-CZ-NH1	9.95	125.28	120.30
35	BA	1369	G	C5-C6-N1	-9.94	106.53	111.50
35	BA	956	G	C4-C5-N7	-9.94	106.82	110.80
35	BA	976	C	C4-C5-C6	-9.93	112.43	117.40
1	AA	398	C	C5-C6-N1	-9.93	116.03	121.00
35	BA	1403	C	C5-C6-N1	9.93	125.97	121.00
35	BA	449	A	C2-N3-C4	9.93	115.56	110.60
1	AA	18	C	N3-C4-C5	-9.92	117.93	121.90
1	AA	189(B)	C	C5-C6-N1	9.91	125.95	121.00
1	AA	1082	G	C6-N1-C2	9.90	131.04	125.10
35	BA	2445	G	C8-N9-C4	-9.90	102.44	106.40
40	BF	184	TYR	CB-CG-CD2	-9.90	115.06	121.00
35	BA	1043	C	C6-N1-C2	9.89	124.26	120.30
35	BA	2003	G	N9-C4-C5	9.89	109.36	105.40
35	BA	911	A	C5-N7-C8	-9.89	98.96	103.90
36	BB	57	A	C2-N3-C4	-9.88	105.66	110.60
1	AA	519	C	C6-N1-C2	-9.88	116.35	120.30
35	BA	2735	G	C4-C5-N7	9.88	114.75	110.80
1	AA	1300	G	N9-C4-C5	9.88	109.35	105.40
1	AA	189(B)	C	N1-C2-O2	-9.87	112.98	118.90
35	BA	1656	C	O4'-C1'-N1	-9.87	100.30	108.20
1	AA	263	A	C6-N1-C2	9.87	124.52	118.60
35	BA	1006	C	N3-C4-C5	-9.87	117.95	121.90
1	AA	1409	C	C5-C6-N1	9.86	125.93	121.00
35	BA	885	C	C6-N1-C2	-9.86	116.36	120.30
1	AA	1392	G	C4-C5-N7	9.86	114.74	110.80
35	BA	1104	C	C5-C6-N1	-9.86	116.07	121.00
31	B6	37	ARG	NE-CZ-NH2	-9.85	115.37	120.30
17	AQ	38	ARG	NE-CZ-NH2	9.85	125.22	120.30
35	BA	351	G	N9-C4-C5	9.84	109.34	105.40
1	AA	1452	C	N3-C4-C5	-9.84	117.97	121.90
35	BA	282	A	N1-C2-N3	9.83	134.22	129.30
35	BA	625	G	C6-C5-N7	9.83	136.30	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2315	G	C5-N7-C8	9.83	109.22	104.30
1	AA	1086	U	C2-N3-C4	-9.83	121.10	127.00
1	AA	1442(A)	G	N1-C6-O6	-9.83	114.00	119.90
22	AV	31	G	C5-C6-O6	-9.82	122.70	128.60
35	BA	2570	G	N3-C4-C5	-9.82	123.69	128.60
35	BA	2773	C	O4'-C1'-N1	9.82	116.06	108.20
35	BA	1009	A	C4-C5-N7	-9.82	105.79	110.70
35	BA	155	U	C5-C6-N1	9.81	127.61	122.70
35	BA	482	A	C5-N7-C8	9.81	108.81	103.90
1	AA	1198	G	C4-C5-N7	9.81	114.72	110.80
36	BB	66	A	C5-C6-N1	-9.81	112.80	117.70
47	BP	61	ARG	NE-CZ-NH1	9.80	125.20	120.30
7	AG	94	ARG	NE-CZ-NH1	-9.80	115.40	120.30
35	BA	2490	G	N7-C8-N9	9.79	118.00	113.10
35	BA	271	A	C4-C5-C6	-9.79	112.11	117.00
1	AA	435	C	C6-N1-C2	9.79	124.22	120.30
35	BA	1434	A	N9-C4-C5	-9.79	101.89	105.80
36	BB	13	A	C8-N9-C4	-9.79	101.89	105.80
4	AD	153	ARG	NE-CZ-NH2	-9.79	115.41	120.30
35	BA	1561	G	C8-N9-C4	-9.78	102.49	106.40
35	BA	242	G	C2-N3-C4	9.77	116.79	111.90
35	BA	1790	C	C4-C5-C6	-9.77	112.51	117.40
35	BA	2533	A	N9-C4-C5	-9.77	101.89	105.80
35	BA	1002	G	C4-C5-N7	9.77	114.71	110.80
35	BA	1374	G	C8-N9-C4	9.77	110.31	106.40
1	AA	72	C	C4-C5-C6	9.77	122.28	117.40
4	AD	14	ARG	NE-CZ-NH1	-9.77	115.42	120.30
35	BA	2844	G	C5-N7-C8	9.77	109.18	104.30
35	BA	2678	C	N3-C4-C5	-9.76	117.99	121.90
35	BA	1381	G	C8-N9-C4	9.76	110.30	106.40
35	BA	1807	G	N9-C4-C5	-9.76	101.50	105.40
53	BV	82	ARG	NE-CZ-NH2	9.75	125.17	120.30
1	AA	916	G	C5-N7-C8	9.74	109.17	104.30
1	AA	916	G	N3-C4-C5	-9.74	123.73	128.60
35	BA	668	G	C4-C5-N7	9.74	114.70	110.80
35	BA	1215	G	N7-C8-N9	9.74	117.97	113.10
36	BB	9	G	N9-C4-C5	-9.74	101.51	105.40
1	AA	902	G	C5-N7-C8	-9.73	99.44	104.30
35	BA	1954	G	C5-C6-O6	-9.73	122.76	128.60
1	AA	1442	G	C8-N9-C4	9.73	110.29	106.40
38	BD	54	ARG	NE-CZ-NH1	-9.72	115.44	120.30
35	BA	1678	G	O4'-C1'-N9	-9.71	100.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1069	C	C4-C5-C6	9.70	122.25	117.40
1	AA	689	C	C6-N1-C2	-9.70	116.42	120.30
35	BA	260	G	C5-C6-O6	9.70	134.42	128.60
35	BA	570	G	C5-C6-O6	9.69	134.42	128.60
35	BA	2490	G	C8-N9-C4	-9.69	102.52	106.40
35	BA	1281	G	C5-N7-C8	-9.69	99.46	104.30
35	BA	1413	G	C4-C5-N7	9.69	114.67	110.80
35	BA	1908	C	N1-C2-O2	9.68	124.71	118.90
1	AA	1442	G	N9-C4-C5	-9.68	101.53	105.40
1	AA	613	C	C5-C6-N1	9.68	125.84	121.00
1	AA	934	C	N3-C4-N4	-9.68	111.22	118.00
35	BA	1434	A	C2-N3-C4	-9.67	105.77	110.60
35	BA	1819	A	N1-C2-N3	-9.66	124.47	129.30
35	BA	1895	C	C2-N3-C4	-9.66	115.07	119.90
35	BA	433	C	C5-C4-N4	-9.66	113.44	120.20
38	BD	239	ARG	NE-CZ-NH1	-9.65	115.47	120.30
35	BA	245	G	C8-N9-C4	9.65	110.26	106.40
35	BA	2875	C	C5-C6-N1	9.65	125.82	121.00
51	BT	96	ARG	NE-CZ-NH2	-9.65	115.48	120.30
35	BA	1089	G	C5-C6-O6	-9.64	122.81	128.60
36	BB	22	U	O4'-C1'-N1	-9.64	100.48	108.20
35	BA	1616	A	C2-N3-C4	9.64	115.42	110.60
45	BN	114	ARG	NE-CZ-NH2	-9.64	115.48	120.30
35	BA	2694	G	C8-N9-C4	9.63	110.25	106.40
35	BA	1337	G	C5-C6-O6	-9.62	122.83	128.60
1	AA	305	G	C8-N9-C4	-9.62	102.55	106.40
1	AA	505	G	C8-N9-C4	-9.62	102.55	106.40
22	AV	18	G	C5-C6-N1	9.62	116.31	111.50
35	BA	796	C	N1-C2-O2	9.62	124.67	118.90
35	BA	2089	U	N3-C4-O4	-9.62	112.67	119.40
35	BA	633	A	C8-N9-C4	-9.62	101.95	105.80
35	BA	2296	U	O4'-C1'-N1	-9.62	100.51	108.20
35	BA	1741	A	C8-N9-C4	9.61	109.65	105.80
35	BA	2835	A	N7-C8-N9	-9.61	108.99	113.80
1	AA	1026	G	O4'-C1'-N9	9.61	115.89	108.20
1	AA	1489	G	N1-C6-O6	9.61	125.67	119.90
1	AA	1143	G	N7-C8-N9	9.60	117.90	113.10
35	BA	1903	G	C8-N9-C4	9.60	110.24	106.40
1	AA	538	G	C5-C6-O6	-9.60	122.84	128.60
1	AA	581	G	N1-C6-O6	9.59	125.66	119.90
1	AA	1304	G	N3-C4-C5	-9.58	123.81	128.60
1	AA	979	C	N3-C2-O2	-9.58	115.19	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AH	41	ARG	NE-CZ-NH2	-9.58	115.51	120.30
35	BA	294	A	N9-C4-C5	-9.58	101.97	105.80
1	AA	780	A	C6-N1-C2	-9.57	112.86	118.60
35	BA	744	G	C5-C6-N1	-9.57	106.71	111.50
35	BA	769	G	C2-N3-C4	-9.57	107.11	111.90
35	BA	1591	G	C5-N7-C8	-9.57	99.52	104.30
1	AA	780	A	C5-C6-N1	9.56	122.48	117.70
35	BA	69	C	N1-C2-O2	9.55	124.63	118.90
1	AA	856	C	C2-N3-C4	9.55	124.68	119.90
35	BA	130	C	N3-C2-O2	-9.55	115.21	121.90
36	BB	39	A	N1-C2-N3	-9.55	124.53	129.30
50	BS	15	ARG	NE-CZ-NH2	9.55	125.07	120.30
24	AY	96	ARG	NE-CZ-NH2	9.53	125.07	120.30
1	AA	673	G	C4-C5-N7	9.53	114.61	110.80
35	BA	2342	C	N3-C4-C5	-9.53	118.09	121.90
40	BF	95	ARG	NE-CZ-NH2	-9.53	115.54	120.30
35	BA	2053	G	C8-N9-C4	9.52	110.21	106.40
35	BA	2830	G	N1-C6-O6	9.52	125.61	119.90
1	AA	78	G	C8-N9-C4	9.52	110.21	106.40
35	BA	773	U	C2-N3-C4	-9.52	121.29	127.00
35	BA	272(F)	C	C5-C6-N1	-9.52	116.24	121.00
22	AV	12	G	C2-N3-C4	9.51	116.66	111.90
50	BS	13	ARG	NE-CZ-NH1	-9.51	115.55	120.30
35	BA	1364	G	C8-N9-C4	-9.51	102.60	106.40
45	BN	123	TYR	CB-CG-CD1	-9.51	115.30	121.00
36	BB	7	G	C8-N9-C4	-9.50	102.60	106.40
36	BB	4	C	N1-C2-O2	9.50	124.60	118.90
8	AH	125	ARG	NE-CZ-NH2	-9.49	115.56	120.30
35	BA	2071	A	N1-C2-N3	9.49	134.04	129.30
1	AA	44	G	C4-C5-N7	-9.49	107.00	110.80
1	AA	384	G	N1-C6-O6	-9.48	114.21	119.90
1	AA	807	A	N1-C2-N3	-9.48	124.56	129.30
1	AA	639	G	C5-C6-O6	-9.47	122.92	128.60
1	AA	1357	A	N7-C8-N9	-9.47	109.06	113.80
8	AH	84	ARG	NE-CZ-NH1	-9.47	115.56	120.30
35	BA	1392	A	N1-C2-N3	9.47	134.03	129.30
35	BA	2735	G	N3-C4-C5	9.47	133.34	128.60
35	BA	1049	C	C6-N1-C2	-9.47	116.51	120.30
35	BA	2542	A	N9-C4-C5	-9.47	102.01	105.80
1	AA	238	G	C4-C5-N7	-9.46	107.01	110.80
36	BB	74	U	C6-N1-C2	-9.46	115.32	121.00
1	AA	188	C	N3-C4-C5	-9.46	118.12	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	581	G	C5-C6-O6	-9.46	122.92	128.60
1	AA	892	A	N1-C2-N3	9.45	134.03	129.30
35	BA	919	G	C5-C6-O6	-9.45	122.93	128.60
35	BA	2089	U	C5-C4-O4	9.45	131.57	125.90
35	BA	1516	C	O4'-C1'-N1	9.45	115.76	108.20
35	BA	2525	G	C5-C6-N1	-9.45	106.78	111.50
33	B8	13	ARG	NE-CZ-NH2	9.45	125.02	120.30
1	AA	706	A	C6-N1-C2	-9.44	112.94	118.60
35	BA	1888	G	C5-N7-C8	9.44	109.02	104.30
35	BA	1552	G	C2-N3-C4	-9.44	107.18	111.90
1	AA	118	U	C4-C5-C6	-9.44	114.04	119.70
1	AA	89	C	C5-C6-N1	9.44	125.72	121.00
35	BA	143(A)	C	C6-N1-C2	-9.43	116.53	120.30
1	AA	315	A	N1-C2-N3	-9.43	124.58	129.30
35	BA	2136	C	N3-C4-C5	-9.43	118.13	121.90
6	AF	82	ARG	NE-CZ-NH2	-9.43	115.59	120.30
35	BA	2531	A	N1-C2-N3	-9.42	124.59	129.30
35	BA	2766	G	C8-N9-C4	-9.42	102.63	106.40
35	BA	1005	C	C5-C6-N1	-9.42	116.29	121.00
35	BA	1997	G	C5-N7-C8	-9.42	99.59	104.30
1	AA	298	A	C4-C5-C6	-9.41	112.29	117.00
1	AA	869	G	N3-C4-C5	9.41	133.31	128.60
1	AA	283	C	C6-N1-C2	9.41	124.06	120.30
1	AA	979	C	N1-C2-O2	9.40	124.54	118.90
35	BA	2696	U	C4-C5-C6	9.40	125.34	119.70
35	BA	650	C	C2-N3-C4	9.39	124.60	119.90
35	BA	2590	A	N1-C2-N3	-9.39	124.60	129.30
35	BA	452	G	C4-C5-N7	9.39	114.56	110.80
54	BW	38	TYR	CB-CG-CD1	9.39	126.63	121.00
24	AY	96	ARG	NE-CZ-NH1	-9.39	115.61	120.30
35	BA	2799	C	N3-C4-C5	9.39	125.66	121.90
35	BA	805	G	N9-C4-C5	-9.39	101.64	105.40
1	AA	1442	G	N3-C4-C5	9.38	133.29	128.60
50	BS	30	ARG	NE-CZ-NH1	-9.38	115.61	120.30
35	BA	2490	G	C6-C5-N7	9.38	136.03	130.40
35	BA	1411	C	C6-N1-C2	9.38	124.05	120.30
35	BA	1487	G	C4-C5-N7	9.38	114.55	110.80
1	AA	198	G	C8-N9-C4	9.37	110.15	106.40
29	B4	43	TYR	N-CA-C	9.37	136.30	111.00
1	AA	1419	G	C5-C6-O6	-9.37	122.98	128.60
35	BA	1591	G	C4-C5-N7	9.37	114.55	110.80
1	AA	840	C	C6-N1-C2	-9.37	116.55	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	752	G	N3-C4-C5	-9.37	123.92	128.60
35	BA	2112	G	N7-C8-N9	9.37	117.78	113.10
35	BA	1171	G	C5-C6-O6	9.36	134.22	128.60
1	AA	267	C	C2-N3-C4	-9.36	115.22	119.90
13	AM	88	ARG	NE-CZ-NH1	9.36	124.98	120.30
1	AA	496	A	C5-N7-C8	9.36	108.58	103.90
29	B4	55	ARG	NE-CZ-NH1	9.36	124.98	120.30
35	BA	663	G	C5-C6-N1	-9.36	106.82	111.50
35	BA	1942	C	C5-C4-N4	-9.36	113.65	120.20
35	BA	520	G	N9-C4-C5	-9.35	101.66	105.40
35	BA	284	U	O4'-C1'-N1	-9.35	100.72	108.20
35	BA	2488	A	C8-N9-C4	-9.35	102.06	105.80
35	BA	659	C	N3-C4-C5	9.35	125.64	121.90
35	BA	1935	G	O4'-C1'-N9	-9.34	100.73	108.20
1	AA	204	U	O4'-C1'-N1	9.34	115.67	108.20
35	BA	1749	A	C8-N9-C4	-9.33	102.07	105.80
35	BA	2584	U	O4'-C1'-N1	9.33	115.67	108.20
22	AV	72	A	C5-C6-N1	9.33	122.36	117.70
35	BA	2520	C	C6-N1-C2	-9.32	116.57	120.30
35	BA	1039	G	C8-N9-C4	-9.32	102.67	106.40
1	AA	1288	A	N3-C4-C5	9.32	133.32	126.80
35	BA	945	A	N9-C1'-C2'	9.32	126.11	114.00
35	BA	2495	G	C4-C5-N7	9.31	114.53	110.80
35	BA	2039	C	C6-N1-C2	-9.31	116.58	120.30
1	AA	1419	G	C4-C5-N7	-9.31	107.08	110.80
42	BH	59	ARG	NE-CZ-NH1	9.30	124.95	120.30
36	BB	6	C	C5-C6-N1	9.30	125.65	121.00
1	AA	1465	C	C5-C6-N1	-9.30	116.35	121.00
35	BA	1488	G	C4-C5-N7	9.29	114.52	110.80
48	BQ	134	ARG	NE-CZ-NH2	-9.29	115.66	120.30
1	AA	61	G	C5-N7-C8	-9.29	99.66	104.30
1	AA	1203	C	C5-C6-N1	-9.29	116.36	121.00
37	BC	60	ARG	NE-CZ-NH2	-9.28	115.66	120.30
1	AA	443	C	N1-C2-O2	9.28	124.47	118.90
36	BB	112	U	C5-C6-N1	9.28	127.34	122.70
35	BA	476	G	C5-N7-C8	9.27	108.94	104.30
1	AA	109	A	C8-N9-C4	-9.27	102.09	105.80
35	BA	272(H)	C	N1-C2-O2	9.27	124.46	118.90
35	BA	272(C)	G	N7-C8-N9	-9.27	108.47	113.10
35	BA	1622	G	N3-C4-C5	-9.27	123.97	128.60
1	AA	1433	A	C5-C6-N1	9.26	122.33	117.70
26	B1	61	ARG	NE-CZ-NH2	-9.26	115.67	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	861	A	C8-N9-C4	-9.26	102.09	105.80
35	BA	742	G	C5-N7-C8	-9.26	99.67	104.30
35	BA	2013	A	C4-C5-C6	-9.26	112.37	117.00
35	BA	2496	C	N3-C2-O2	-9.25	115.42	121.90
35	BA	462	C	N1-C2-O2	-9.25	113.35	118.90
1	AA	245	C	N3-C4-C5	-9.25	118.20	121.90
35	BA	604	G	C5-C6-O6	9.25	134.15	128.60
22	AV	61	C	N3-C4-C5	-9.24	118.20	121.90
35	BA	2151	G	C6-C5-N7	-9.24	124.86	130.40
35	BA	2258	C	C4-C5-C6	-9.23	112.78	117.40
35	BA	252	G	C6-C5-N7	9.23	135.94	130.40
35	BA	2693	A	N9-C4-C5	9.23	109.49	105.80
1	AA	266	G	C6-C5-N7	-9.23	124.86	130.40
15	AO	77	ARG	NE-CZ-NH2	-9.23	115.69	120.30
35	BA	656	G	C5-C6-O6	9.23	134.14	128.60
35	BA	1840	G	C8-N9-C4	9.23	110.09	106.40
1	AA	1143	G	C5-N7-C8	-9.22	99.69	104.30
35	BA	1624	G	C8-N9-C4	-9.22	102.71	106.40
1	AA	1480	G	C4-C5-N7	-9.22	107.11	110.80
26	B1	61	ARG	NE-CZ-NH1	-9.21	115.69	120.30
35	BA	939	G	C6-C5-N7	-9.21	124.87	130.40
35	BA	2425	A	C8-N9-C4	-9.21	102.11	105.80
35	BA	919	G	N1-C6-O6	9.21	125.43	119.90
35	BA	1749	A	N9-C4-C5	9.21	109.48	105.80
35	BA	2222	G	C8-N9-C4	-9.21	102.72	106.40
1	AA	735	C	N3-C4-C5	9.21	125.58	121.90
35	BA	2774	C	N3-C4-C5	-9.21	118.22	121.90
35	BA	602	G	N9-C4-C5	-9.20	101.72	105.40
23	AX	12	A	C5-C6-N1	9.20	122.30	117.70
1	AA	189(A)	C	C6-N1-C2	-9.20	116.62	120.30
35	BA	660	G	C4-C5-N7	-9.20	107.12	110.80
35	BA	1605	C	C2-N3-C4	9.20	124.50	119.90
35	BA	2373	G	C8-N9-C4	-9.20	102.72	106.40
1	AA	712	A	N1-C2-N3	9.20	133.90	129.30
35	BA	2177	C	N3-C4-C5	-9.20	118.22	121.90
35	BA	1548	C	C4-C5-C6	9.20	122.00	117.40
35	BA	2202	C	C6-N1-C2	-9.19	116.62	120.30
1	AA	37	U	C6-N1-C2	-9.19	115.49	121.00
1	AA	44	G	N3-C4-C5	-9.19	124.01	128.60
4	AD	187	ARG	NE-CZ-NH2	9.19	124.89	120.30
35	BA	2870	C	N3-C4-C5	9.19	125.57	121.90
1	AA	750	G	N9-C4-C5	-9.18	101.73	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1319	G	C2-N3-C4	-9.18	107.31	111.90
54	BW	37	ARG	NE-CZ-NH2	9.18	124.89	120.30
35	BA	2138	C	N1-C2-O2	9.18	124.41	118.90
1	AA	824	C	C5-C6-N1	-9.17	116.41	121.00
35	BA	654(N)	G	C5-C6-N1	-9.17	106.91	111.50
35	BA	2735	G	N9-C4-C5	-9.17	101.73	105.40
1	AA	511	C	N3-C4-C5	9.17	125.57	121.90
1	AA	849	C	C4-C5-C6	-9.17	112.82	117.40
1	AA	1273	G	C5-N7-C8	9.17	108.88	104.30
35	BA	1403	C	C4-C5-C6	-9.17	112.82	117.40
35	BA	438	G	C6-C5-N7	9.16	135.90	130.40
36	BB	108	U	C5-C4-O4	9.16	131.40	125.90
1	AA	942	G	C5-N7-C8	9.16	108.88	104.30
35	BA	405	U	N1-C2-O2	9.16	129.21	122.80
1	AA	1103	C	N3-C4-C5	9.16	125.56	121.90
1	AA	220	G	C5-C6-O6	-9.15	123.11	128.60
35	BA	972	G	C5-C6-N1	9.15	116.08	111.50
1	AA	1273	G	C4-C5-N7	-9.15	107.14	110.80
5	AE	150	ARG	NE-CZ-NH2	9.15	124.87	120.30
1	AA	986	A	C6-N1-C2	9.14	124.09	118.60
35	BA	1822	G	C8-N9-C4	-9.14	102.74	106.40
35	BA	397	G	N1-C6-O6	9.13	125.38	119.90
7	AG	111	ARG	NE-CZ-NH2	-9.13	115.74	120.30
1	AA	1357	A	C5-N7-C8	9.12	108.46	103.90
35	BA	1950	G	C4-C5-N7	-9.12	107.15	110.80
16	AP	8	ARG	NE-CZ-NH1	-9.12	115.74	120.30
35	BA	1260	G	N3-C2-N2	9.12	126.28	119.90
1	AA	114	U	C5-C6-N1	-9.12	118.14	122.70
35	BA	1464	C	C6-N1-C2	-9.12	116.65	120.30
35	BA	2157	G	C6-N1-C2	9.12	130.57	125.10
1	AA	22	G	N1-C6-O6	9.11	125.37	119.90
35	BA	176	G	C5-C6-N1	-9.11	106.94	111.50
35	BA	279	C	C4-C5-C6	9.11	121.95	117.40
1	AA	800	G	N1-C6-O6	9.11	125.36	119.90
35	BA	1740	G	C8-N9-C4	9.10	110.04	106.40
1	AA	89	C	C6-N1-C2	-9.10	116.66	120.30
35	BA	868	U	C5-C6-N1	9.10	127.25	122.70
1	AA	565	U	N3-C4-O4	-9.10	113.03	119.40
35	BA	1845	G	C8-N9-C4	-9.10	102.76	106.40
22	AV	1	C	C6-N1-C2	-9.09	116.66	120.30
35	BA	2606	C	C6-N1-C2	-9.09	116.66	120.30
1	AA	189	G	C5-C6-N1	-9.09	106.95	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	668	G	C5-N7-C8	-9.09	99.75	104.30
35	BA	2558	C	C6-N1-C2	-9.09	116.66	120.30
35	BA	572	A	C2-N3-C4	9.09	115.14	110.60
35	BA	302	C	C5-C6-N1	-9.09	116.46	121.00
36	BB	119	G	N9-C4-C5	-9.09	101.77	105.40
35	BA	1850	G	C5-N7-C8	9.08	108.84	104.30
1	AA	968	A	C4-C5-C6	9.08	121.54	117.00
14	AN	29	ARG	NE-CZ-NH2	-9.08	115.76	120.30
35	BA	816	C	C6-N1-C2	9.08	123.93	120.30
35	BA	1089	G	N1-C6-O6	9.08	125.35	119.90
1	AA	1529	G	N7-C8-N9	9.08	117.64	113.10
4	AD	73	ARG	NE-CZ-NH2	-9.08	115.76	120.30
1	AA	1531	A	N1-C2-N3	9.07	133.84	129.30
35	BA	1916	A	N1-C2-N3	-9.07	124.77	129.30
1	AA	342	C	C6-N1-C2	-9.06	116.67	120.30
35	BA	2816	C	C2-N3-C4	-9.06	115.37	119.90
23	AX	14	A	C4-C5-C6	-9.06	112.47	117.00
35	BA	65	C	C4-C5-C6	9.05	121.93	117.40
35	BA	414	C	N3-C4-C5	-9.05	118.28	121.90
35	BA	52	A	C5-N7-C8	9.05	108.42	103.90
35	BA	239	U	C4-C5-C6	9.04	125.13	119.70
1	AA	309	G	C2-N3-C4	-9.04	107.38	111.90
35	BA	1047	G	C2-N3-C4	9.04	116.42	111.90
35	BA	478	A	C8-N9-C4	9.03	109.41	105.80
35	BA	1691	C	C6-N1-C2	9.03	123.91	120.30
35	BA	2805	G	C5-C6-N1	9.03	116.02	111.50
50	BS	89	ARG	NE-CZ-NH1	9.03	124.81	120.30
2	AB	82	ARG	NE-CZ-NH2	-9.03	115.79	120.30
35	BA	2403	C	N3-C4-C5	9.03	125.51	121.90
36	BB	66	A	N9-C4-C5	9.03	109.41	105.80
35	BA	685	A	N9-C4-C5	9.03	109.41	105.80
35	BA	271(R)	G	N9-C4-C5	9.02	109.01	105.40
35	BA	1440	G	N7-C8-N9	9.02	117.61	113.10
35	BA	2560	C	C5-C6-N1	9.02	125.51	121.00
35	BA	1994	C	C6-N1-C2	-9.02	116.69	120.30
36	BB	19	G	N9-C4-C5	-9.02	101.79	105.40
42	BH	69	ARG	NE-CZ-NH2	9.02	124.81	120.30
35	BA	996	A	C8-N9-C4	-9.01	102.19	105.80
1	AA	352	C	N1-C2-O2	-9.01	113.49	118.90
35	BA	664	C	O4'-C1'-N1	9.01	115.41	108.20
35	BA	2003	G	C8-N9-C4	-9.01	102.80	106.40
53	BV	83	ARG	NE-CZ-NH2	-9.01	115.80	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	482	A	C8-N9-C4	9.01	109.40	105.80
35	BA	1860	G	C5-N7-C8	9.01	108.80	104.30
1	AA	1214	C	C5-C4-N4	9.00	126.50	120.20
35	BA	2370	G	C8-N9-C4	9.00	110.00	106.40
1	AA	1296	C	C6-N1-C2	-9.00	116.70	120.30
1	AA	30	U	C2-N3-C4	9.00	132.40	127.00
35	BA	858	U	C5-C6-N1	-9.00	118.20	122.70
35	BA	1039	G	N7-C8-N9	9.00	117.60	113.10
1	AA	242	C	C6-N1-C2	9.00	123.90	120.30
1	AA	546	G	C4-C5-N7	-8.99	107.20	110.80
1	AA	1033	G	C4-C5-N7	8.99	114.40	110.80
22	AV	18	G	C5-C6-O6	-8.99	123.20	128.60
1	AA	1457	G	N9-C1'-C2'	-8.99	102.11	112.00
1	AA	47	C	C5-C6-N1	8.99	125.49	121.00
35	BA	419	C	N1-C2-O2	8.99	124.29	118.90
1	AA	225	C	C4-C5-C6	-8.98	112.91	117.40
35	BA	2754	U	C5-C6-N1	-8.98	118.21	122.70
35	BA	1827	C	C6-N1-C2	-8.97	116.71	120.30
35	BA	452	G	N3-C2-N2	8.96	126.17	119.90
24	AY	212	TYR	CG-CD2-CE2	8.96	128.47	121.30
35	BA	1319	G	N3-C4-N9	-8.96	120.62	126.00
35	BA	541	C	C6-N1-C2	-8.96	116.72	120.30
49	BR	86	ARG	NE-CZ-NH1	-8.95	115.82	120.30
1	AA	396	G	C8-N9-C4	-8.95	102.82	106.40
22	AV	31	G	C2-N3-C4	8.95	116.37	111.90
1	AA	22	G	O4'-C1'-N9	-8.95	101.04	108.20
50	BS	15	ARG	NE-CZ-NH1	-8.95	115.83	120.30
4	AD	191	ARG	NE-CZ-NH1	-8.95	115.83	120.30
35	BA	660	G	C6-C5-N7	8.94	135.77	130.40
35	BA	80	G	N1-C6-O6	8.94	125.27	119.90
1	AA	667	G	C6-N1-C2	-8.94	119.74	125.10
1	AA	247	G	C5-C6-O6	8.94	133.96	128.60
1	AA	1397	C	C5-C6-N1	-8.94	116.53	121.00
35	BA	2442	C	C2-N3-C4	8.93	124.37	119.90
35	BA	2730	C	O4'-C1'-N1	-8.93	101.06	108.20
35	BA	717	G	C5-C6-N1	-8.93	107.03	111.50
35	BA	1369	G	C5-C6-O6	8.93	133.96	128.60
35	BA	1496	A	N1-C2-N3	8.93	133.76	129.30
35	BA	2281	C	N3-C4-C5	-8.92	118.33	121.90
1	AA	869	G	N3-C4-N9	-8.92	120.65	126.00
11	AK	91	ARG	NE-CZ-NH1	-8.92	115.84	120.30
35	BA	1698	A	C8-N9-C4	8.91	109.36	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1764	G	C8-N9-C4	-8.91	102.83	106.40
35	BA	2495	G	C5-N7-C8	-8.91	99.84	104.30
35	BA	413	C	N3-C4-C5	8.91	125.46	121.90
35	BA	2845	G	C2-N3-C4	-8.91	107.45	111.90
35	BA	651	G	O4'-C1'-N9	-8.91	101.08	108.20
24	AY	484	ARG	NE-CZ-NH1	-8.90	115.85	120.30
35	BA	567	A	C6-N1-C2	-8.90	113.26	118.60
24	AY	628	ARG	NE-CZ-NH2	-8.90	115.85	120.30
35	BA	1229	G	N7-C8-N9	8.90	117.55	113.10
35	BA	1315	C	C5-C6-N1	-8.90	116.55	121.00
35	BA	463	G	N3-C2-N2	8.90	126.13	119.90
1	AA	1170	A	N7-C8-N9	-8.90	109.35	113.80
35	BA	1624	G	N3-C4-N9	-8.90	120.66	126.00
35	BA	2132	U	O4'-C1'-N1	8.90	115.32	108.20
35	BA	252	G	C4-C5-N7	-8.89	107.24	110.80
35	BA	610	G	C5-N7-C8	-8.89	99.85	104.30
35	BA	2073	C	C6-N1-C2	-8.89	116.74	120.30
1	AA	629	G	N7-C8-N9	-8.89	108.66	113.10
3	AC	190	ARG	NE-CZ-NH2	-8.89	115.86	120.30
22	AV	66	C	C6-N1-C2	8.89	123.86	120.30
35	BA	1526	G	C4-C5-N7	8.89	114.36	110.80
35	BA	2681	C	C2-N3-C4	-8.89	115.46	119.90
35	BA	390	A	N9-C4-C5	8.88	109.35	105.80
1	AA	1089	G	C5-N7-C8	8.88	108.74	104.30
35	BA	2778	A	C3'-C2'-C1'	8.88	108.60	101.50
35	BA	1457	A	C4-C5-C6	8.87	121.44	117.00
46	BO	23	ARG	NE-CZ-NH1	-8.87	115.86	120.30
35	BA	1605	C	C4-C5-C6	-8.87	112.97	117.40
35	BA	2569	G	N7-C8-N9	-8.87	108.67	113.10
35	BA	2730	C	N1-C2-O2	8.87	124.22	118.90
1	AA	915	A	C2-N3-C4	-8.87	106.17	110.60
35	BA	2565	A	C2-N3-C4	-8.86	106.17	110.60
35	BA	2475	C	C6-N1-C2	8.86	123.84	120.30
1	AA	1156	G	N3-C4-C5	-8.86	124.17	128.60
35	BA	438	G	C5-N7-C8	8.86	108.73	104.30
1	AA	1151	A	N9-C4-C5	-8.86	102.26	105.80
35	BA	1401	G	N1-C6-O6	8.86	125.21	119.90
35	BA	2602	A	C2-N3-C4	-8.86	106.17	110.60
37	BC	165	ARG	NE-CZ-NH1	-8.86	115.87	120.30
1	AA	1524	C	C6-N1-C2	8.85	123.84	120.30
1	AA	905	U	C5-C6-N1	-8.85	118.28	122.70
35	BA	326	G	N7-C8-N9	8.85	117.53	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	812	C	O4'-C1'-N1	8.85	115.28	108.20
35	BA	1421	G	C5-N7-C8	-8.85	99.88	104.30
35	BA	1964	G	O4'-C1'-N9	-8.84	101.13	108.20
35	BA	2015	A	C5-C6-N1	8.84	122.12	117.70
1	AA	708	C	C6-N1-C2	-8.84	116.76	120.30
35	BA	1301	A	N7-C8-N9	8.84	118.22	113.80
35	BA	2761	G	N3-C4-N9	8.84	131.30	126.00
1	AA	27	G	C4-C5-N7	-8.84	107.27	110.80
35	BA	1567	A	N1-C2-N3	8.84	133.72	129.30
35	BA	2864	G	C4'-C3'-C2'	-8.84	93.76	102.60
35	BA	1338	G	C5-C6-O6	-8.83	123.30	128.60
35	BA	2707	G	C5-N7-C8	8.83	108.72	104.30
1	AA	984	C	C2-N3-C4	-8.83	115.48	119.90
47	BP	61	ARG	NE-CZ-NH2	-8.83	115.89	120.30
35	BA	2363	C	N3-C4-C5	-8.83	118.37	121.90
36	BB	34	U	C5-C4-O4	8.83	131.20	125.90
34	B9	24	TYR	CB-CG-CD1	8.82	126.29	121.00
35	BA	271(P)	C	N3-C2-O2	-8.82	115.73	121.90
35	BA	1034	G	N3-C4-C5	8.82	133.01	128.60
1	AA	1299	A	C2-N3-C4	-8.82	106.19	110.60
35	BA	1429	G	C5-N7-C8	-8.82	99.89	104.30
1	AA	1472	U	C4-C5-C6	8.81	124.98	119.70
35	BA	1462	C	C2-N3-C4	-8.81	115.50	119.90
35	BA	2636	U	C5-C4-O4	-8.81	120.61	125.90
35	BA	438	G	C4-C5-N7	-8.80	107.28	110.80
35	BA	2494	G	C6-C5-N7	-8.81	125.12	130.40
35	BA	1149	G	N9-C4-C5	8.80	108.92	105.40
1	AA	318	G	N9-C4-C5	8.80	108.92	105.40
35	BA	1583	A	N1-C2-N3	8.80	133.70	129.30
1	AA	946	A	N9-C4-C5	-8.80	102.28	105.80
35	BA	1722	A	N7-C8-N9	8.80	118.20	113.80
1	AA	942	G	N7-C8-N9	-8.79	108.70	113.10
1	AA	1189	C	C5-C4-N4	-8.80	114.04	120.20
35	BA	445	C	N3-C4-N4	8.79	124.15	118.00
35	BA	643	A	C8-N9-C4	-8.79	102.28	105.80
35	BA	873	G	N9-C4-C5	8.79	108.92	105.40
35	BA	2254	C	C4-C5-C6	8.79	121.79	117.40
1	AA	28	G	N9-C4-C5	-8.78	101.89	105.40
1	AA	200	G	N7-C8-N9	8.78	117.49	113.10
35	BA	566	U	N3-C2-O2	-8.78	116.06	122.20
35	BA	1686	C	C4-C5-C6	-8.78	113.01	117.40
43	BK	79	ARG	NE-CZ-NH2	-8.78	115.91	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1388	C	N3-C2-O2	-8.78	115.76	121.90
15	AO	35	ARG	NE-CZ-NH2	-8.78	115.91	120.30
35	BA	1229	G	C8-N9-C4	-8.78	102.89	106.40
35	BA	2028	U	C2-N3-C4	8.78	132.27	127.00
35	BA	2658	C	N3-C2-O2	-8.78	115.76	121.90
35	BA	372	G	C6-N1-C2	-8.78	119.83	125.10
35	BA	1580	A	C5-C6-N1	8.78	122.09	117.70
1	AA	279	A	N9-C4-C5	8.77	109.31	105.80
1	AA	1033	G	N3-C4-C5	8.77	132.99	128.60
22	AV	6	G	C4-C5-N7	8.77	114.31	110.80
1	AA	1242	C	C4-C5-C6	8.77	121.78	117.40
35	BA	801	G	C5-C6-N1	8.77	115.88	111.50
35	BA	564	C	N3-C4-C5	-8.76	118.39	121.90
35	BA	2659	G	C2-N3-C4	8.76	116.28	111.90
1	AA	128	G	C8-N9-C4	-8.76	102.90	106.40
1	AA	543	C	N3-C4-C5	8.76	125.40	121.90
1	AA	588	G	N3-C4-N9	8.76	131.25	126.00
35	BA	1900	A	C2-N3-C4	-8.75	106.22	110.60
1	AA	274	A	C5-C6-N1	8.75	122.08	117.70
35	BA	786	C	O4'-C1'-N1	8.75	115.20	108.20
1	AA	1300	G	N3-C4-C5	-8.75	124.22	128.60
1	AA	1424	C	C4-C5-C6	8.75	121.78	117.40
35	BA	1765	C	C2-N3-C4	-8.74	115.53	119.90
10	AJ	29	ARG	NE-CZ-NH2	-8.74	115.93	120.30
36	BB	39	A	C4-C5-C6	-8.74	112.63	117.00
1	AA	1419	G	N1-C6-O6	8.74	125.14	119.90
1	AA	1149	C	C5-C4-N4	8.73	126.31	120.20
35	BA	558	G	N7-C8-N9	-8.73	108.73	113.10
1	AA	1300	G	C4-C5-N7	-8.73	107.31	110.80
1	AA	1031	G	C5-C6-O6	8.73	133.84	128.60
35	BA	1569	A	C2-N3-C4	-8.73	106.24	110.60
35	BA	1541	G	C2-N3-C4	-8.72	107.54	111.90
35	BA	1411	C	C5-C6-N1	-8.72	116.64	121.00
35	BA	317	G	N3-C4-C5	8.72	132.96	128.60
16	AP	39	TYR	CB-CG-CD2	-8.72	115.77	121.00
35	BA	174	C	C4-C5-C6	-8.72	113.04	117.40
35	BA	926	A	C2-N3-C4	8.71	114.96	110.60
35	BA	2656	U	C6-N1-C2	-8.72	115.77	121.00
2	AB	153	ARG	NE-CZ-NH2	8.71	124.66	120.30
35	BA	1850	G	N7-C8-N9	-8.71	108.74	113.10
35	BA	1748	G	N1-C6-O6	8.71	125.13	119.90
35	BA	739	G	C4-C5-N7	8.71	114.28	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AL	19	ARG	NE-CZ-NH1	-8.71	115.95	120.30
35	BA	2334	G	N9-C4-C5	-8.70	101.92	105.40
35	BA	2568	C	N3-C4-N4	8.70	124.09	118.00
35	BA	2112	G	C5-N7-C8	-8.70	99.95	104.30
35	BA	879	G	C5-C6-O6	8.70	133.82	128.60
1	AA	238	G	N7-C8-N9	-8.69	108.75	113.10
22	AV	43	A	N9-C4-C5	8.70	109.28	105.80
35	BA	123	G	C2-N3-C4	-8.69	107.55	111.90
35	BA	793	A	N1-C2-N3	8.70	133.65	129.30
35	BA	1895	C	C5-C6-N1	-8.70	116.65	121.00
35	BA	2688	U	N1-C2-N3	8.70	120.12	114.90
1	AA	298	A	C5-C6-N1	8.69	122.05	117.70
35	BA	2838	G	C8-N9-C4	-8.69	102.92	106.40
35	BA	1363	C	N3-C4-C5	-8.69	118.42	121.90
35	BA	2787	C	C6-N1-C2	-8.69	116.83	120.30
35	BA	1742	G	C4-C5-N7	8.69	114.27	110.80
1	AA	278	G	N7-C8-N9	-8.68	108.76	113.10
35	BA	2199	A	N7-C8-N9	8.68	118.14	113.80
1	AA	1213	A	C4-C5-N7	-8.68	106.36	110.70
35	BA	1403	C	N3-C4-C5	8.68	125.37	121.90
35	BA	271(U)	G	N1-C2-N3	-8.68	118.69	123.90
35	BA	741	G	N3-C4-N9	8.67	131.20	126.00
1	AA	571	U	C5-C6-N1	-8.67	118.37	122.70
35	BA	44	G	C2-N3-C4	-8.67	107.57	111.90
35	BA	2032	G	N7-C8-N9	8.67	117.43	113.10
36	BB	97	G	C4-C5-N7	-8.67	107.33	110.80
1	AA	883	C	C5-C6-N1	-8.66	116.67	121.00
35	BA	191	A	C6-N1-C2	-8.66	113.40	118.60
35	BA	317	G	C4-C5-C6	-8.66	113.60	118.80
45	BN	97	ARG	NE-CZ-NH2	-8.66	115.97	120.30
35	BA	2171	A	N9-C4-C5	-8.66	102.33	105.80
35	BA	34	C	N3-C4-C5	8.66	125.36	121.90
1	AA	371	G	N1-C6-O6	-8.66	114.71	119.90
35	BA	1644	C	C4-C5-C6	8.66	121.73	117.40
1	AA	616	G	C5-N7-C8	-8.65	99.97	104.30
35	BA	1291	C	C4-C5-C6	8.65	121.73	117.40
1	AA	1500	A	N9-C4-C5	8.65	109.26	105.80
3	AC	203	PHE	CB-CG-CD1	-8.65	114.74	120.80
35	BA	271(A)	A	N1-C6-N6	-8.65	113.41	118.60
35	BA	1488	G	C6-C5-N7	-8.65	125.21	130.40
13	AM	94	ARG	NE-CZ-NH2	-8.65	115.98	120.30
22	AV	76	A	N1-C6-N6	8.65	123.79	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1998	G	C5-N7-C8	-8.65	99.98	104.30
35	BA	2866	U	O4'-C1'-N1	8.65	115.12	108.20
35	BA	2005	A	N1-C2-N3	8.64	133.62	129.30
35	BA	280	C	N3-C4-C5	8.64	125.36	121.90
35	BA	888	C	N3-C4-C5	-8.64	118.44	121.90
35	BA	1558	A	C8-N9-C4	-8.64	102.34	105.80
35	BA	2032	G	C8-N9-C4	-8.64	102.94	106.40
39	BE	37	ARG	NE-CZ-NH1	-8.63	115.98	120.30
35	BA	1562	A	N9-C4-C5	-8.63	102.35	105.80
35	BA	2058	A	C4-C5-C6	8.63	121.32	117.00
35	BA	1330	C	N1-C2-O2	-8.63	113.72	118.90
35	BA	2152	G	C4-C5-N7	8.63	114.25	110.80
1	AA	119	A	N1-C2-N3	-8.63	124.99	129.30
35	BA	543	C	O4'-C1'-N1	-8.63	101.30	108.20
35	BA	2856	C	N3-C4-C5	-8.63	118.45	121.90
9	AI	92	TYR	CB-CG-CD1	-8.62	115.83	121.00
36	BB	79	C	C5-C6-N1	-8.62	116.69	121.00
1	AA	1192	C	N3-C4-C5	8.62	125.35	121.90
1	AA	726	C	C6-N1-C2	-8.61	116.86	120.30
35	BA	1303	G	C5-C6-O6	8.61	133.77	128.60
50	BS	23	ARG	NE-CZ-NH2	8.61	124.61	120.30
35	BA	2660	A	C5-N7-C8	-8.61	99.59	103.90
1	AA	301	G	N7-C8-N9	8.61	117.40	113.10
1	AA	487	A	N1-C2-N3	-8.61	125.00	129.30
35	BA	2198	A	C8-N9-C4	-8.61	102.36	105.80
35	BA	785	G	N7-C8-N9	8.61	117.40	113.10
35	BA	2253	G	N3-C2-N2	8.60	125.92	119.90
35	BA	603	A	N9-C4-C5	-8.60	102.36	105.80
1	AA	913	A	N7-C8-N9	8.60	118.10	113.80
1	AA	1287	A	N7-C8-N9	8.60	118.10	113.80
35	BA	801	G	N9-C4-C5	-8.60	101.96	105.40
35	BA	2821	A	N1-C2-N3	8.60	133.60	129.30
35	BA	471	A	C2-N3-C4	8.60	114.90	110.60
35	BA	140	G	N3-C2-N2	-8.59	113.89	119.90
35	BA	1276	A	C5-C6-N1	8.58	121.99	117.70
35	BA	372	G	N3-C2-N2	-8.58	113.89	119.90
35	BA	1996	C	C6-N1-C2	-8.58	116.87	120.30
1	AA	1397	C	C6-N1-C2	8.58	123.73	120.30
35	BA	1477	A	C8-N9-C4	-8.58	102.37	105.80
35	BA	2055	C	C4-C5-C6	8.58	121.69	117.40
56	BY	23	ARG	NE-CZ-NH2	-8.58	116.01	120.30
14	AN	3	ARG	NE-CZ-NH2	-8.57	116.01	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2844	G	N7-C8-N9	-8.57	108.81	113.10
1	AA	58	C	C4-C5-C6	8.57	121.69	117.40
35	BA	614(B)	G	C4-C5-N7	-8.57	107.37	110.80
1	AA	140	A	O4'-C1'-N9	8.56	115.05	108.20
1	AA	1492	A	C8-N9-C4	8.56	109.22	105.80
27	B2	59	ARG	NE-CZ-NH1	-8.56	116.02	120.30
35	BA	2586	C	C5-C6-N1	8.56	125.28	121.00
1	AA	1417	G	C5-C6-O6	-8.56	123.46	128.60
35	BA	1237	A	N9-C1'-C2'	8.56	125.13	114.00
35	BA	2572	A	C2-N3-C4	8.56	114.88	110.60
1	AA	337	C	N1-C2-O2	-8.55	113.77	118.90
35	BA	1331	A	N1-C2-N3	8.55	133.58	129.30
1	AA	1406	U	C5-C6-N1	-8.55	118.42	122.70
35	BA	1689	A	C5-C6-N1	8.55	121.98	117.70
35	BA	2561	A	C4-C5-N7	-8.55	106.42	110.70
35	BA	748	G	C2-N3-C4	-8.55	107.62	111.90
35	BA	1985	G	C8-N9-C4	8.55	109.82	106.40
35	BA	1959	G	C4-C5-N7	8.55	114.22	110.80
35	BA	2199	A	N1-C6-N6	-8.54	113.47	118.60
35	BA	654(Q)	C	C5-C6-N1	8.54	125.27	121.00
35	BA	2373	G	C2-N3-C4	8.54	116.17	111.90
1	AA	178	C	C6-N1-C2	-8.53	116.89	120.30
1	AA	1392	G	C5-N7-C8	-8.53	100.03	104.30
24	AY	439	ARG	NE-CZ-NH2	-8.53	116.03	120.30
35	BA	1826	G	C4-C5-N7	-8.53	107.39	110.80
1	AA	1519	A	C8-N9-C4	-8.53	102.39	105.80
35	BA	2690	C	N1-C2-O2	8.53	124.02	118.90
35	BA	2727	G	N3-C4-C5	-8.52	124.34	128.60
1	AA	1529	G	C4-C5-N7	-8.52	107.39	110.80
17	AQ	91	ARG	NE-CZ-NH2	-8.52	116.04	120.30
35	BA	1507	A	C4-C5-N7	8.52	114.96	110.70
1	AA	352	C	C2-N3-C4	-8.52	115.64	119.90
35	BA	2685	G	O4'-C1'-N9	8.52	115.01	108.20
35	BA	2875	C	C6-N1-C2	-8.52	116.89	120.30
1	AA	60	A	N1-C6-N6	-8.52	113.49	118.60
35	BA	383	U	C5-C6-N1	-8.52	118.44	122.70
35	BA	1031	G	C4-C5-N7	-8.52	107.39	110.80
13	AM	104	ARG	NE-CZ-NH2	8.51	124.56	120.30
35	BA	543	C	C6-N1-C2	-8.51	116.89	120.30
35	BA	1888	G	C8-N9-C4	8.51	109.81	106.40
1	AA	495	A	N1-C6-N6	-8.51	113.49	118.60
1	AA	775	G	N7-C8-N9	8.51	117.36	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	AQ	91	ARG	NE-CZ-NH1	8.51	124.56	120.30
35	BA	2011	U	C5-C4-O4	-8.51	120.79	125.90
35	BA	351	G	C8-N9-C4	-8.51	103.00	106.40
35	BA	413	C	C2-N3-C4	-8.50	115.65	119.90
36	BB	116	G	C6-N1-C2	8.50	130.20	125.10
35	BA	262	A	N1-C6-N6	8.49	123.70	118.60
1	AA	482	A	N7-C8-N9	-8.49	109.56	113.80
35	BA	2045	C	C6-N1-C2	-8.49	116.91	120.30
1	AA	1281	U	O4'-C1'-N1	8.48	114.99	108.20
35	BA	272(F)	C	C6-N1-C2	8.48	123.69	120.30
35	BA	2130	U	N3-C4-O4	8.48	125.34	119.40
1	AA	1061	G	N3-C4-C5	8.48	132.84	128.60
35	BA	631	A	N1-C2-N3	-8.48	125.06	129.30
1	AA	1173	G	C2-N3-C4	-8.48	107.66	111.90
35	BA	625	G	C4-C5-N7	-8.47	107.41	110.80
35	BA	2048	G	C8-N9-C4	-8.47	103.01	106.40
1	AA	27	G	N3-C4-C5	-8.47	124.36	128.60
35	BA	143(A)	C	N3-C4-C5	-8.47	118.51	121.90
35	BA	454	A	O4'-C1'-N9	-8.47	101.43	108.20
35	BA	1325	G	N1-C2-N3	-8.47	118.82	123.90
35	BA	2574	G	C5-C6-N1	8.46	115.73	111.50
1	AA	392	G	C6-C5-N7	-8.46	125.32	130.40
13	AM	55	ARG	NE-CZ-NH1	8.46	124.53	120.30
35	BA	48	G	N3-C4-N9	8.46	131.08	126.00
35	BA	1888	G	C4-C5-N7	-8.46	107.42	110.80
35	BA	1260	G	N1-C2-N3	-8.46	118.82	123.90
12	AL	97	ARG	NE-CZ-NH2	-8.46	116.07	120.30
35	BA	1283	G	C2-N3-C4	8.45	116.13	111.90
1	AA	795	C	N3-C4-C5	8.45	125.28	121.90
1	AA	1498	U	O4'-C1'-N1	-8.45	101.44	108.20
35	BA	1631(A)	A	N9-C4-C5	8.45	109.18	105.80
57	BZ	99	TYR	CB-CG-CD1	8.45	126.07	121.00
1	AA	403	C	C5-C6-N1	-8.45	116.78	121.00
26	B1	21	ARG	NE-CZ-NH1	-8.45	116.08	120.30
35	BA	1538	G	N9-C4-C5	-8.45	102.02	105.40
1	AA	1034	G	O4'-C1'-N9	8.45	114.96	108.20
35	BA	372	G	N1-C6-O6	-8.45	114.83	119.90
35	BA	549	G	C5-C6-O6	-8.45	123.53	128.60
35	BA	564	C	C5-C6-N1	-8.45	116.78	121.00
36	BB	92	C	N3-C4-C5	-8.44	118.52	121.90
1	AA	792	A	N1-C2-N3	-8.44	125.08	129.30
1	AA	1531	A	N7-C8-N9	8.44	118.02	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	85	G	C8-N9-C4	-8.44	103.02	106.40
22	AV	49	G	N7-C8-N9	8.44	117.32	113.10
35	BA	235	U	C5-C4-O4	-8.44	120.84	125.90
35	BA	2473	U	C5-C6-N1	8.44	126.92	122.70
1	AA	1430	C	O4'-C1'-N1	8.44	114.95	108.20
1	AA	40	C	C5-C4-N4	-8.43	114.30	120.20
35	BA	1431	U	C5-C6-N1	-8.43	118.48	122.70
35	BA	2517	C	C4-C5-C6	-8.43	113.18	117.40
35	BA	1562	A	C8-N9-C4	8.43	109.17	105.80
35	BA	336	C	C2-N3-C4	-8.42	115.69	119.90
35	BA	874	G	C6-N1-C2	8.42	130.15	125.10
36	BB	90	A	N9-C4-C5	8.42	109.17	105.80
35	BA	2590	A	C2-N3-C4	8.42	114.81	110.60
36	BB	73	A	N7-C8-N9	8.42	118.01	113.80
1	AA	115	G	C2'-C3'-O3'	8.41	128.01	109.50
9	AI	75	ASP	CB-CG-OD1	-8.41	110.73	118.30
35	BA	65	C	C5-C6-N1	-8.41	116.79	121.00
35	BA	1744	C	C4-C5-C6	-8.41	113.19	117.40
35	BA	13	A	N7-C8-N9	8.41	118.00	113.80
1	AA	1420	C	C5-C6-N1	8.41	125.20	121.00
35	BA	654(M)	C	C6-N1-C2	-8.41	116.94	120.30
35	BA	1882	C	C5-C6-N1	-8.41	116.80	121.00
35	BA	2218	U	C5-C6-N1	8.40	126.90	122.70
50	BS	17	ARG	NE-CZ-NH1	-8.40	116.10	120.30
35	BA	1225	G	C5-C6-O6	-8.40	123.56	128.60
35	BA	1276	A	N1-C6-N6	-8.40	113.56	118.60
1	AA	1104	G	N3-C4-C5	8.40	132.80	128.60
35	BA	1900	A	C4-C5-C6	-8.39	112.80	117.00
1	AA	1311	G	N3-C4-C5	8.39	132.80	128.60
35	BA	2409	G	N9-C4-C5	-8.39	102.04	105.40
35	BA	1406	U	C4-C5-C6	-8.39	114.67	119.70
1	AA	868	C	C6-N1-C2	-8.39	116.94	120.30
1	AA	512	U	N1-C2-O2	-8.39	116.93	122.80
35	BA	271(R)	G	N3-C4-C5	-8.39	124.41	128.60
35	BA	1413	G	N9-C4-C5	-8.39	102.05	105.40
35	BA	1345	C	C6-N1-C2	8.38	123.65	120.30
35	BA	2389	G	N1-C2-N3	8.38	128.93	123.90
1	AA	1334	G	N9-C4-C5	8.38	108.75	105.40
1	AA	1498	U	C2'-C3'-O3'	8.38	127.94	109.50
35	BA	862	G	N9-C4-C5	-8.38	102.05	105.40
35	BA	792	G	N3-C4-C5	-8.38	124.41	128.60
1	AA	37	U	C5-C6-N1	8.38	126.89	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1118	C	C6-N1-C2	-8.38	116.95	120.30
35	BA	1190	G	C4-C5-N7	8.38	114.15	110.80
35	BA	1575	C	C6-N1-C2	-8.38	116.95	120.30
35	BA	1659	U	C5-C6-N1	8.38	126.89	122.70
35	BA	113	G	N3-C4-C5	8.38	132.79	128.60
35	BA	963	U	C1'-O4'-C4'	-8.38	103.20	109.90
1	AA	342	C	C5-C6-N1	8.37	125.19	121.00
1	AA	958	A	C2-N3-C4	8.37	114.79	110.60
35	BA	2876	G	C5-C6-N1	-8.38	107.31	111.50
35	BA	2491	U	C4-C5-C6	-8.37	114.68	119.70
23	AX	11	U	C5-C6-N1	-8.37	118.52	122.70
35	BA	449	A	N1-C2-N3	-8.37	125.12	129.30
35	BA	1188	U	C1'-O4'-C4'	-8.37	103.21	109.90
1	AA	1288	A	C4-C5-C6	-8.37	112.82	117.00
35	BA	2397	G	N1-C2-N3	8.37	128.92	123.90
35	BA	861	A	C5-C6-N1	8.36	121.88	117.70
35	BA	1772	G	C5-N7-C8	-8.36	100.12	104.30
1	AA	423	G	C2-N3-C4	8.36	116.08	111.90
24	AY	538	TYR	CB-CG-CD2	-8.36	115.98	121.00
35	BA	1513	C	C2-N3-C4	8.36	124.08	119.90
1	AA	968	A	C8-N9-C4	-8.36	102.46	105.80
35	BA	1932	A	N9-C4-C5	8.36	109.14	105.80
1	AA	527	G	C8-N9-C4	-8.36	103.06	106.40
36	BB	32	C	N3-C4-C5	8.36	125.24	121.90
22	AV	51	C	C2-N3-C4	8.35	124.08	119.90
35	BA	2198	A	N9-C4-C5	8.35	109.14	105.80
1	AA	1170	A	C8-N9-C4	8.35	109.14	105.80
35	BA	38	A	C8-N9-C4	8.34	109.14	105.80
35	BA	1781	C	N3-C2-O2	-8.34	116.06	121.90
35	BA	1895	C	C4-C5-C6	8.34	121.57	117.40
1	AA	218	C	O4'-C1'-N1	-8.34	101.53	108.20
1	AA	1203	C	C6-N1-C2	8.34	123.64	120.30
22	AV	68	C	C6-N1-C2	-8.34	116.96	120.30
35	BA	2021	C	C5-C6-N1	8.34	125.17	121.00
36	BB	67	G	N1-C6-O6	8.34	124.90	119.90
1	AA	1063	C	C4-C5-C6	-8.34	113.23	117.40
35	BA	2229	C	C5-C6-N1	-8.34	116.83	121.00
35	BA	2606	C	C4-C5-C6	-8.34	113.23	117.40
1	AA	189(A)	C	C4-C5-C6	8.34	121.57	117.40
36	BB	11	C	C4-C5-C6	-8.34	113.23	117.40
22	AV	18	G	C5-N7-C8	-8.33	100.13	104.30
1	AA	323	U	C5-C4-O4	-8.33	120.90	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	441	A	C2-N3-C4	8.33	114.77	110.60
22	AV	16	C	C6-N1-C2	8.33	123.63	120.30
35	BA	700	G	C5-C6-O6	8.33	133.60	128.60
36	BB	29	A	C5-C6-N6	-8.33	117.04	123.70
35	BA	432	A	C6-N1-C2	8.32	123.59	118.60
35	BA	2283	C	N3-C4-C5	-8.32	118.57	121.90
35	BA	881	G	C8-N9-C4	8.32	109.73	106.40
1	AA	382	A	C5-N7-C8	8.32	108.06	103.90
35	BA	689	A	N1-C2-N3	-8.32	125.14	129.30
1	AA	61	G	N7-C8-N9	8.32	117.26	113.10
1	AA	1097	C	C6-N1-C2	-8.32	116.97	120.30
35	BA	1005	C	C2-N3-C4	-8.32	115.74	119.90
1	AA	159	G	C5-C6-N1	8.31	115.66	111.50
35	BA	21	A	C4-C5-N7	-8.31	106.54	110.70
1	AA	1086	U	N3-C4-C5	8.31	119.59	114.60
35	BA	1389	G	C4-C5-N7	-8.31	107.48	110.80
35	BA	1799	G	C2'-C3'-O3'	8.31	127.78	109.50
35	BA	2373	G	C5-C6-O6	8.31	133.59	128.60
1	AA	735	C	C2-N3-C4	-8.31	115.75	119.90
2	AB	153	ARG	NE-CZ-NH1	-8.31	116.15	120.30
35	BA	1467	C	C5-C6-N1	8.31	125.15	121.00
40	BF	18	ARG	NE-CZ-NH2	8.31	124.45	120.30
29	B4	42	PHE	CB-CG-CD2	-8.30	114.99	120.80
38	BD	103	ARG	NE-CZ-NH2	-8.30	116.15	120.30
1	AA	1414	U	O4'-C1'-N1	8.30	114.84	108.20
35	BA	980	A	N7-C8-N9	8.30	117.95	113.80
1	AA	244	U	C5-C4-O4	-8.29	120.92	125.90
1	AA	537	G	C2-N3-C4	8.29	116.05	111.90
35	BA	545	C	C5-C6-N1	8.29	125.15	121.00
35	BA	615	G	N1-C6-O6	8.29	124.88	119.90
35	BA	2811	G	C4-C5-N7	8.29	114.12	110.80
35	BA	272(B)	G	N3-C4-C5	8.29	132.74	128.60
35	BA	1142(A)	A	N9-C4-C5	-8.29	102.48	105.80
35	BA	2094	G	C5-C6-N1	8.29	115.64	111.50
1	AA	127	G	N1-C6-O6	-8.29	114.93	119.90
35	BA	1545	A	C8-N9-C4	-8.29	102.49	105.80
35	BA	1711	C	C2-N3-C4	-8.29	115.76	119.90
35	BA	2241	A	N7-C8-N9	-8.29	109.66	113.80
35	BA	2754	U	C4-C5-C6	8.28	124.67	119.70
6	AF	71	ARG	NE-CZ-NH1	8.28	124.44	120.30
35	BA	2306	C	C2-N3-C4	8.28	124.04	119.90
35	BA	2136	C	C2-N3-C4	8.28	124.04	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1273	G	N7-C8-N9	-8.28	108.96	113.10
35	BA	119	A	N1-C2-N3	8.28	133.44	129.30
35	BA	950	G	N1-C6-O6	-8.28	114.93	119.90
35	BA	540	C	N1-C2-O2	8.28	123.86	118.90
35	BA	1327	C	C6-N1-C2	-8.28	116.99	120.30
36	BB	29	A	N1-C6-N6	8.28	123.57	118.60
1	AA	1031	G	N7-C8-N9	-8.27	108.96	113.10
35	BA	327	G	C5-C6-N1	-8.27	107.36	111.50
35	BA	2082	A	C8-N9-C4	-8.27	102.49	105.80
35	BA	446	G	C5-C6-O6	8.27	133.56	128.60
35	BA	1302	A	N7-C8-N9	8.27	117.94	113.80
35	BA	2662	A	C2-N3-C4	-8.27	106.46	110.60
1	AA	246	A	N7-C8-N9	8.27	117.94	113.80
4	AD	47	ARG	NE-CZ-NH2	-8.27	116.17	120.30
35	BA	2094	G	C5-C6-O6	-8.27	123.64	128.60
35	BA	2856	C	C4-C5-C6	8.27	121.53	117.40
1	AA	1288	A	N3-C4-N9	-8.27	120.79	127.40
1	AA	39	G	C5-C6-O6	8.26	133.56	128.60
35	BA	1894	C	N3-C4-C5	8.26	125.21	121.90
1	AA	752	G	N3-C4-N9	8.26	130.96	126.00
1	AA	1319	A	N9-C4-C5	-8.26	102.50	105.80
28	B3	3	ARG	NE-CZ-NH1	-8.26	116.17	120.30
35	BA	271(Z)	C	C5-C4-N4	-8.26	114.42	120.20
35	BA	1006	C	N1-C2-O2	8.26	123.86	118.90
54	BW	8	ARG	NE-CZ-NH1	-8.26	116.17	120.30
35	BA	1998	G	C4-C5-N7	8.26	114.10	110.80
1	AA	1270	C	C6-N1-C2	8.26	123.60	120.30
1	AA	461	A	N7-C8-N9	8.25	117.93	113.80
1	AA	916	G	N1-C2-N3	-8.25	118.95	123.90
35	BA	2396	G	C5-N7-C8	8.25	108.43	104.30
35	BA	1505	C	C6-N1-C2	-8.25	117.00	120.30
1	AA	72	C	N3-C4-C5	-8.25	118.60	121.90
35	BA	1120	G	C5-C6-O6	-8.25	123.65	128.60
35	BA	2698	U	N1-C2-N3	8.25	119.85	114.90
1	AA	156	G	O4'-C1'-N9	8.25	114.80	108.20
1	AA	807	A	C6-N1-C2	8.25	123.55	118.60
35	BA	2259	G	C2-N3-C4	8.25	116.02	111.90
1	AA	1197	G	C2-N3-C4	-8.24	107.78	111.90
17	AQ	38	ARG	NE-CZ-NH1	-8.24	116.18	120.30
1	AA	323	U	O4'-C1'-N1	8.24	114.79	108.20
1	AA	443	C	N3-C2-O2	-8.24	116.13	121.90
35	BA	643	A	N9-C4-C5	8.24	109.10	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1575	C	N3-C4-C5	8.24	125.19	121.90
1	AA	968	A	N7-C8-N9	8.23	117.92	113.80
35	BA	842	G	N3-C2-N2	8.23	125.67	119.90
35	BA	2120	G	C5-C6-N1	8.23	115.62	111.50
1	AA	550	G	O4'-C1'-N9	8.23	114.79	108.20
35	BA	233	A	C5-N7-C8	8.23	108.02	103.90
35	BA	1084	A	C5-C6-N6	8.23	130.29	123.70
1	AA	460	G	C5-C6-N1	-8.23	107.39	111.50
1	AA	597	G	N1-C2-N3	8.23	128.84	123.90
1	AA	875	C	C6-N1-C2	8.23	123.59	120.30
35	BA	277	C	C5-C6-N1	8.23	125.11	121.00
35	BA	624	C	C6-N1-C2	-8.23	117.01	120.30
18	AR	74	ARG	NE-CZ-NH1	-8.23	116.19	120.30
35	BA	1465	G	C4-C5-N7	-8.23	107.51	110.80
35	BA	911	A	N1-C2-N3	-8.22	125.19	129.30
35	BA	727	A	C8-N9-C4	8.22	109.09	105.80
35	BA	2762	G	N3-C4-C5	8.22	132.71	128.60
35	BA	843	G	N3-C4-C5	8.22	132.71	128.60
35	BA	1902	C	C5-C4-N4	8.22	125.95	120.20
35	BA	2333	A	C4-C5-C6	8.22	121.11	117.00
35	BA	2391	G	N1-C2-N3	8.22	128.83	123.90
35	BA	2574	G	N1-C6-O6	-8.22	114.97	119.90
35	BA	1458	C	C2-N3-C4	8.21	124.01	119.90
35	BA	2363	C	C2-N3-C4	8.21	124.01	119.90
35	BA	2762	G	N3-C4-N9	-8.21	121.07	126.00
43	BK	132	ARG	NE-CZ-NH2	-8.21	116.19	120.30
1	AA	150	C	N1-C2-O2	-8.21	113.97	118.90
35	BA	1455	G	C4-C5-N7	-8.21	107.52	110.80
35	BA	2187	G	C4-C5-N7	8.21	114.08	110.80
35	BA	271(W)	G	N1-C6-O6	8.21	124.82	119.90
35	BA	654	A	N1-C6-N6	8.21	123.53	118.60
35	BA	1596	A	N1-C2-N3	8.21	133.41	129.30
35	BA	650	C	N3-C4-C5	-8.21	118.62	121.90
35	BA	2241	A	C8-N9-C4	8.21	109.08	105.80
1	AA	576	G	O5'-P-OP2	-8.20	98.32	105.70
35	BA	989	G	C5-C6-O6	-8.20	123.68	128.60
35	BA	1637	A	C5-C6-N1	-8.20	113.60	117.70
6	AF	46	ARG	NE-CZ-NH2	-8.20	116.20	120.30
35	BA	1745	C	N3-C4-C5	-8.20	118.62	121.90
1	AA	998	G	C5-C6-O6	8.20	133.52	128.60
35	BA	128	C	C5-C4-N4	-8.20	114.46	120.20
35	BA	1079	C	N3-C4-C5	-8.20	118.62	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1888	G	N7-C8-N9	-8.19	109.00	113.10
35	BA	1969	A	C8-N9-C4	-8.19	102.52	105.80
35	BA	2391	G	C2-N3-C4	-8.19	107.81	111.90
35	BA	2761	G	C5-N7-C8	8.19	108.39	104.30
1	AA	1272	G	N7-C8-N9	8.19	117.19	113.10
35	BA	80	G	C8-N9-C4	-8.19	103.12	106.40
1	AA	492	G	N9-C4-C5	-8.19	102.12	105.40
1	AA	1250	A	C4-C5-C6	8.19	121.09	117.00
35	BA	1788	C	C4-C5-C6	8.19	121.49	117.40
35	BA	2275	C	C5-C4-N4	-8.19	114.47	120.20
1	AA	545	C	C4-C5-C6	8.18	121.49	117.40
1	AA	921	U	C5'-C4'-C3'	-8.18	102.91	116.00
35	BA	261	G	C2-N3-C4	-8.18	107.81	111.90
35	BA	1274	A	N9-C4-C5	-8.18	102.53	105.80
1	AA	1493	A	C8-N9-C4	-8.18	102.53	105.80
1	AA	1188	A	N1-C6-N6	8.18	123.51	118.60
35	BA	639	U	C5-C6-N1	8.18	126.79	122.70
35	BA	1351	C	N3-C4-C5	8.18	125.17	121.90
35	BA	139	G	N9-C4-C5	-8.18	102.13	105.40
1	AA	1485	U	O4'-C1'-N1	8.18	114.74	108.20
35	BA	343	C	C6-N1-C2	8.18	123.57	120.30
35	BA	1345	C	C5-C6-N1	-8.18	116.91	121.00
36	BB	63	G	C2-N3-C4	8.18	115.99	111.90
1	AA	137	C	C2-N3-C4	-8.17	115.81	119.90
35	BA	2340	G	C8-N9-C4	8.17	109.67	106.40
35	BA	2088	G	N9-C4-C5	-8.17	102.13	105.40
1	AA	54	C	C6-N1-C2	8.16	123.57	120.30
35	BA	388	G	C4-C5-N7	-8.16	107.53	110.80
35	BA	1752	C	C6-N1-C2	-8.16	117.03	120.30
35	BA	654(U)	A	C5-C6-N1	8.16	121.78	117.70
35	BA	1997	G	N3-C4-N9	8.16	130.90	126.00
36	BB	66	A	C4-C5-C6	8.16	121.08	117.00
1	AA	475	G	N1-C6-O6	-8.16	115.00	119.90
1	AA	1320	C	C2-N3-C4	8.16	123.98	119.90
1	AA	278	G	C8-N9-C4	8.16	109.66	106.40
35	BA	355	G	O4'-C1'-N9	8.16	114.73	108.20
36	BB	23	G	C5-C6-N1	-8.15	107.42	111.50
1	AA	1151	A	N7-C8-N9	8.15	117.88	113.80
35	BA	2558	C	N3-C4-C5	-8.15	118.64	121.90
35	BA	567	A	N9-C4-C5	8.15	109.06	105.80
35	BA	1742	G	N3-C4-C5	8.15	132.68	128.60
35	BA	1760	A	C5-N7-C8	-8.15	99.83	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1641	A	N1-C2-N3	8.15	133.38	129.30
35	BA	1785	A	N7-C8-N9	8.15	117.87	113.80
35	BA	175	G	N7-C8-N9	-8.15	109.03	113.10
35	BA	178	G	C4-C5-N7	-8.15	107.54	110.80
35	BA	300	A	C6-N1-C2	-8.15	113.71	118.60
35	BA	225	A	C2-N3-C4	-8.14	106.53	110.60
35	BA	1301	A	C8-N9-C4	-8.14	102.54	105.80
35	BA	2177	C	N3-C4-N4	8.14	123.70	118.00
35	BA	2869	G	C2-N3-C4	-8.14	107.83	111.90
35	BA	1575	C	C4-C5-C6	-8.14	113.33	117.40
35	BA	316	C	C6-N1-C2	-8.14	117.04	120.30
35	BA	1401	G	C5-C6-N1	-8.14	107.43	111.50
1	AA	903	G	C8-N9-C4	8.14	109.66	106.40
35	BA	1765	C	O4'-C1'-N1	8.14	114.71	108.20
1	AA	167	G	C5-C6-O6	-8.13	123.72	128.60
35	BA	1084	A	N1-C6-N6	-8.13	113.72	118.60
35	BA	1513	C	C6-N1-C2	8.13	123.55	120.30
35	BA	25	U	N1-C2-O2	8.13	128.49	122.80
1	AA	92	C	O4'-C1'-N1	8.13	114.70	108.20
1	AA	191	G	N7-C8-N9	8.13	117.17	113.10
1	AA	792	A	C8-N9-C4	-8.13	102.55	105.80
1	AA	1190	G	N9-C1'-C2'	8.13	124.57	114.00
35	BA	1477	A	N1-C2-N3	8.13	133.37	129.30
4	AD	73	ARG	NE-CZ-NH1	8.13	124.36	120.30
51	BT	16	ARG	NE-CZ-NH2	-8.13	116.23	120.30
35	BA	2472	G	C4-C5-N7	8.13	114.05	110.80
1	AA	1187	G	C4-C5-N7	8.13	114.05	110.80
35	BA	1250	G	C4-C5-N7	-8.12	107.55	110.80
35	BA	86	C	C4-C5-C6	8.12	121.46	117.40
35	BA	1363	C	C6-N1-C2	-8.12	117.05	120.30
35	BA	2372	G	N9-C4-C5	-8.12	102.15	105.40
35	BA	654(M)	C	N3-C4-C5	-8.12	118.65	121.90
35	BA	2574	G	C4-C5-N7	8.12	114.05	110.80
35	BA	1746	G	N7-C8-N9	-8.11	109.04	113.10
56	BY	73	ARG	NE-CZ-NH1	8.11	124.36	120.30
1	AA	392	G	N9-C4-C5	-8.11	102.16	105.40
35	BA	969	U	C5-C6-N1	-8.11	118.64	122.70
1	AA	737	A	N9-C4-C5	-8.11	102.56	105.80
1	AA	746	A	N1-C2-N3	-8.11	125.25	129.30
35	BA	392	C	C4-C5-C6	8.11	121.45	117.40
1	AA	338	A	C5-N7-C8	-8.11	99.85	103.90
35	BA	2559	C	N1-C2-O2	-8.11	114.04	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	698	C	N3-C2-O2	8.11	127.57	121.90
35	BA	1929	G	N3-C4-N9	-8.11	121.14	126.00
1	AA	1386	G	C8-N9-C4	8.10	109.64	106.40
35	BA	463	G	C2-N3-C4	8.10	115.95	111.90
35	BA	1740	G	C4-C5-N7	8.10	114.04	110.80
2	AB	30	ARG	NE-CZ-NH1	8.10	124.35	120.30
35	BA	387	U	N1-C2-N3	8.10	119.76	114.90
35	BA	1622	G	C4-C5-C6	8.10	123.66	118.80
35	BA	2093	G	C6-N1-C2	8.10	129.96	125.10
35	BA	2541	A	C4-C5-N7	8.10	114.75	110.70
36	BB	115	G	C4-C5-C6	8.10	123.66	118.80
1	AA	1062	U	O4'-C1'-N1	-8.10	101.72	108.20
35	BA	537	C	C6-N1-C2	8.10	123.54	120.30
35	BA	2021	C	C6-N1-C2	-8.10	117.06	120.30
35	BA	476	G	N1-C6-O6	8.10	124.76	119.90
35	BA	1281	G	C4-C5-N7	8.09	114.04	110.80
35	BA	1536	C	N1-C2-O2	8.09	123.75	118.90
1	AA	1347	G	C2-N3-C4	-8.09	107.85	111.90
35	BA	1120	G	C2-N3-C4	8.09	115.94	111.90
50	BS	23	ARG	NE-CZ-NH1	-8.09	116.26	120.30
35	BA	770	G	N3-C4-C5	-8.09	124.56	128.60
1	AA	39	G	N1-C6-O6	-8.08	115.05	119.90
1	AA	127	G	C5-C6-N1	8.08	115.54	111.50
1	AA	715	A	C8-N9-C4	8.08	109.03	105.80
22	AV	2	G	N9-C4-C5	-8.08	102.17	105.40
35	BA	654(C)	G	N9-C4-C5	-8.08	102.17	105.40
35	BA	1243	G	C4-C5-N7	8.08	114.03	110.80
35	BA	1507	A	C5-N7-C8	-8.08	99.86	103.90
1	AA	291	C	C2-N3-C4	8.07	123.94	119.90
35	BA	521	G	C5-N7-C8	8.07	108.34	104.30
31	B6	15	GLU	OE1-CD-OE2	-8.07	113.61	123.30
35	BA	516	C	C6-N1-C2	-8.07	117.07	120.30
1	AA	1054	C	C4-C5-C6	8.07	121.44	117.40
1	AA	1511	G	N3-C2-N2	-8.07	114.25	119.90
35	BA	12	U	O4'-C1'-N1	-8.07	101.75	108.20
35	BA	98	G	C4-C5-N7	-8.07	107.57	110.80
35	BA	365	C	N3-C4-C5	-8.07	118.67	121.90
35	BA	583	G	C5-N7-C8	-8.07	100.27	104.30
35	BA	1043	C	N1-C2-O2	8.07	123.74	118.90
35	BA	1505	C	C5-C6-N1	8.07	125.03	121.00
1	AA	305	G	N7-C8-N9	8.06	117.13	113.10
4	AD	138	TYR	CB-CG-CD2	-8.06	116.16	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1758	G	C5-C6-N1	8.06	115.53	111.50
35	BA	2033	A	N7-C8-N9	8.06	117.83	113.80
1	AA	371	G	N9-C4-C5	-8.06	102.18	105.40
1	AA	66	G	O4'-C1'-N9	-8.05	101.76	108.20
35	BA	1857	G	C6-N1-C2	8.06	129.93	125.10
35	BA	2494	G	C4-C5-N7	8.06	114.02	110.80
1	AA	515	G	C4-C5-N7	8.05	114.02	110.80
1	AA	1289	A	N7-C8-N9	-8.05	109.77	113.80
35	BA	1280	G	N9-C4-C5	-8.05	102.18	105.40
1	AA	217	C	C6-N1-C2	8.05	123.52	120.30
35	BA	2884	U	N3-C4-O4	-8.05	113.76	119.40
1	AA	639	G	C5-C6-N1	8.05	115.53	111.50
1	AA	118	U	C5-C6-N1	8.05	126.72	122.70
1	AA	194	C	N3-C4-N4	8.05	123.63	118.00
1	AA	1379	G	N9-C4-C5	8.05	108.62	105.40
1	AA	1428	A	C8-N9-C4	-8.05	102.58	105.80
9	AI	107	ARG	NE-CZ-NH1	8.05	124.32	120.30
35	BA	1335	U	O4'-C1'-N1	8.05	114.64	108.20
35	BA	1523	U	C5-C6-N1	8.05	126.72	122.70
35	BA	1641	A	C6-N1-C2	-8.05	113.77	118.60
35	BA	2343	C	C5-C6-N1	-8.05	116.98	121.00
1	AA	1146	A	N1-C2-N3	-8.04	125.28	129.30
35	BA	568	U	C5-C6-N1	8.04	126.72	122.70
1	AA	539	A	C8-N9-C4	-8.04	102.58	105.80
35	BA	66	C	N1-C2-O2	-8.04	114.08	118.90
35	BA	751	A	N1-C2-N3	8.04	133.32	129.30
35	BA	2343	C	N1-C1'-C2'	8.04	124.45	114.00
47	BP	41	ARG	NE-CZ-NH2	8.04	124.32	120.30
1	AA	701	C	O4'-C1'-N1	8.04	114.63	108.20
35	BA	300	A	C5-C6-N1	8.04	121.72	117.70
35	BA	284	U	C3'-C2'-C1'	8.04	107.93	101.50
35	BA	610	G	C4-C5-N7	8.04	114.02	110.80
35	BA	2070	G	C5-N7-C8	8.04	108.32	104.30
35	BA	2345	G	N9-C4-C5	-8.04	102.18	105.40
35	BA	1283	G	N3-C2-N2	8.04	125.53	119.90
35	BA	1630	G	N7-C8-N9	-8.04	109.08	113.10
29	B4	42	PHE	CB-CG-CD1	8.03	126.42	120.80
35	BA	259	G	O4'-C1'-N9	8.03	114.63	108.20
1	AA	387	U	C6-N1-C2	-8.03	116.18	121.00
35	BA	132	G	C5-C6-N1	-8.03	107.48	111.50
1	AA	1492	A	C5-N7-C8	8.03	107.91	103.90
1	AA	1211	U	C5-C6-N1	-8.03	118.69	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1056	G	C6-N1-C2	-8.03	120.28	125.10
35	BA	2600	A	C4-C5-C6	8.03	121.01	117.00
35	BA	478	A	N1-C2-N3	-8.02	125.29	129.30
35	BA	2370	G	N7-C8-N9	-8.02	109.09	113.10
35	BA	945	A	C8-N9-C4	-8.02	102.59	105.80
35	BA	1939	U	C2-N3-C4	8.02	131.81	127.00
35	BA	2054	A	N1-C2-N3	-8.02	125.29	129.30
22	AV	9	G	C5-N7-C8	8.02	108.31	104.30
35	BA	59	U	C5-C4-O4	8.02	130.71	125.90
3	AC	127	ARG	NE-CZ-NH1	-8.01	116.29	120.30
35	BA	1015	G	C5-N7-C8	-8.01	100.29	104.30
35	BA	2553	G	C5-C6-N1	8.01	115.51	111.50
35	BA	178	G	N9-C4-C5	8.01	108.60	105.40
35	BA	1979	C	C5-C6-N1	8.01	125.00	121.00
1	AA	347	G	N3-C2-N2	-8.01	114.29	119.90
35	BA	2678	C	C5-C4-N4	8.01	125.81	120.20
35	BA	1164	G	C6-C5-N7	-8.01	125.60	130.40
35	BA	1700	A	C8-N9-C4	-8.01	102.60	105.80
1	AA	823	G	C4-C5-N7	-8.00	107.60	110.80
1	AA	1529	G	C4-C5-C6	8.00	123.60	118.80
35	BA	1429	G	N7-C8-N9	8.00	117.10	113.10
35	BA	976	C	C5-C6-N1	8.00	125.00	121.00
35	BA	2082	A	N7-C8-N9	8.00	117.80	113.80
35	BA	322	A	N7-C8-N9	-8.00	109.80	113.80
35	BA	815	C	C6-N1-C2	-8.00	117.10	120.30
35	BA	2591	C	N1-C2-O2	8.00	123.70	118.90
1	AA	851	G	N1-C2-N2	-7.99	109.01	116.20
1	AA	1390	U	N1-C2-N3	7.99	119.70	114.90
1	AA	1432	G	C5-C6-N1	7.99	115.50	111.50
35	BA	271(P)	C	N1-C2-O2	7.99	123.70	118.90
35	BA	437	G	C4-C5-N7	-7.99	107.60	110.80
1	AA	1408	A	N9-C4-C5	7.99	109.00	105.80
35	BA	1960	A	C4-C5-N7	-7.99	106.70	110.70
1	AA	1295	G	C8-N9-C4	7.99	109.60	106.40
35	BA	2105	C	N3-C4-C5	7.99	125.10	121.90
35	BA	2549	G	O4'-C1'-N9	-7.99	101.81	108.20
35	BA	570	G	C5-C6-N1	-7.99	107.51	111.50
1	AA	887	G	C5-C6-O6	-7.99	123.81	128.60
35	BA	2886	G	N9-C4-C5	-7.99	102.21	105.40
1	AA	424	G	C8-N9-C4	7.98	109.59	106.40
3	AC	179	ARG	NE-CZ-NH2	-7.98	116.31	120.30
1	AA	411	A	C5-C6-N1	-7.98	113.71	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AV	9	G	C4-C5-N7	-7.98	107.61	110.80
35	BA	1605	C	C5-C6-N1	7.98	124.99	121.00
1	AA	913	A	C5-N7-C8	-7.98	99.91	103.90
35	BA	1488	G	N9-C4-C5	-7.98	102.21	105.40
35	BA	1560	G	C4-C5-N7	-7.98	107.61	110.80
35	BA	2058	A	C5-C6-N1	-7.98	113.71	117.70
35	BA	785	G	C8-N9-C4	-7.98	103.21	106.40
35	BA	1552	G	N3-C4-C5	7.98	132.59	128.60
35	BA	1796	U	C5-C4-O4	7.98	130.69	125.90
35	BA	680	G	C8-N9-C4	-7.98	103.21	106.40
35	BA	1560	G	O4'-C1'-N9	-7.98	101.82	108.20
35	BA	2177	C	C6-N1-C2	-7.98	117.11	120.30
1	AA	495	A	C4-C5-C6	-7.97	113.01	117.00
35	BA	192	C	N3-C4-N4	7.97	123.58	118.00
35	BA	1305	C	N3-C4-C5	-7.97	118.71	121.90
35	BA	2259	G	C8-N9-C4	-7.97	103.21	106.40
1	AA	382	A	C4-C5-N7	-7.97	106.71	110.70
35	BA	372	G	C4-C5-N7	-7.97	107.61	110.80
35	BA	390	A	C8-N9-C4	-7.97	102.61	105.80
35	BA	695	G	N1-C6-O6	-7.97	115.12	119.90
35	BA	1860	G	N7-C8-N9	-7.97	109.11	113.10
35	BA	1271	G	C5-C6-O6	7.97	133.38	128.60
35	BA	1279	G	C5-C6-O6	-7.97	123.82	128.60
35	BA	2165	G	C2-N3-C4	7.97	115.89	111.90
35	BA	2318	G	C2-N3-C4	-7.97	107.92	111.90
35	BA	2378	A	C4-C5-N7	-7.97	106.72	110.70
37	BC	191	ARG	NE-CZ-NH1	-7.97	116.31	120.30
1	AA	492	G	C4-C5-N7	7.97	113.99	110.80
35	BA	1888	G	C6-C5-N7	7.97	135.18	130.40
1	AA	1055	A	N1-C2-N3	7.97	133.28	129.30
21	AU	15	ARG	NE-CZ-NH1	7.97	124.28	120.30
35	BA	1274	A	C4-C5-N7	7.97	114.68	110.70
35	BA	1509(A)	A	N9-C4-C5	-7.97	102.61	105.80
1	AA	341	C	N3-C4-C5	7.96	125.09	121.90
1	AA	646	U	O4'-C1'-N1	-7.96	101.83	108.20
1	AA	1063	C	C5-C4-N4	-7.96	114.62	120.20
19	AS	36	ARG	NE-CZ-NH2	7.96	124.28	120.30
35	BA	2130	U	C5-C4-O4	-7.96	121.12	125.90
35	BA	2495	G	C6-C5-N7	-7.96	125.62	130.40
35	BA	1755	A	C8-N9-C4	7.96	108.98	105.80
1	AA	968	A	N1-C6-N6	7.96	123.38	118.60
1	AA	680	C	N3-C4-C5	7.96	125.08	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	900	A	N9-C4-C5	7.96	108.98	105.80
1	AA	321	A	C4-C5-N7	7.96	114.68	110.70
1	AA	354	G	O4'-C1'-N9	-7.95	101.84	108.20
35	BA	2325	G	C5-C6-O6	-7.95	123.83	128.60
1	AA	183	G	C5-N7-C8	-7.95	100.32	104.30
1	AA	1417	G	N1-C6-O6	7.95	124.67	119.90
35	BA	2229	C	C2-N3-C4	-7.95	115.92	119.90
35	BA	1435	G	C8-N9-C4	-7.95	103.22	106.40
35	BA	1937	A	N1-C2-N3	7.95	133.27	129.30
35	BA	768	G	C5-C6-O6	7.95	133.37	128.60
1	AA	153	C	N1-C2-O2	7.95	123.67	118.90
3	AC	85	ARG	NE-CZ-NH1	7.95	124.27	120.30
24	AY	363	ARG	NE-CZ-NH1	7.95	124.27	120.30
35	BA	123	G	N1-C6-O6	7.95	124.67	119.90
35	BA	569	U	C5-C4-O4	-7.95	121.13	125.90
35	BA	2262	U	C5-C4-O4	7.95	130.67	125.90
35	BA	2473	U	N3-C4-C5	7.95	119.37	114.60
35	BA	2550	G	C4-C5-N7	-7.95	107.62	110.80
35	BA	1689	A	C5-C6-N6	-7.94	117.34	123.70
35	BA	1897	G	N3-C4-C5	-7.94	124.63	128.60
35	BA	2648	C	C4-C5-C6	-7.94	113.43	117.40
1	AA	348	G	N3-C2-N2	-7.94	114.34	119.90
1	AA	1171	G	C4-C5-N7	-7.94	107.62	110.80
35	BA	1087	G	N3-C2-N2	7.94	125.46	119.90
35	BA	2101	G	C6-N1-C2	7.94	129.86	125.10
41	BG	118	ARG	NE-CZ-NH2	7.94	124.27	120.30
1	AA	60	A	C5-C6-N6	7.93	130.05	123.70
35	BA	742	G	C6-C5-N7	-7.93	125.64	130.40
35	BA	2591	C	N3-C2-O2	-7.93	116.35	121.90
1	AA	1408	A	C8-N9-C4	-7.93	102.63	105.80
1	AA	1531	A	C2-N3-C4	-7.93	106.64	110.60
35	BA	1056	G	C2-N3-C4	7.93	115.86	111.90
35	BA	1781	C	C6-N1-C2	-7.93	117.13	120.30
8	AH	85	ARG	NE-CZ-NH2	7.93	124.26	120.30
25	B0	32	ARG	NE-CZ-NH2	-7.93	116.34	120.30
24	AY	182	ARG	NE-CZ-NH2	-7.93	116.34	120.30
1	AA	1227	A	O4'-C1'-N9	-7.92	101.86	108.20
35	BA	1891	G	O4'-C1'-N9	-7.92	101.86	108.20
35	BA	2352	A	C5-N7-C8	-7.92	99.94	103.90
39	BE	119	ARG	NE-CZ-NH1	-7.92	116.34	120.30
35	BA	1682	G	C5-N7-C8	-7.92	100.34	104.30
1	AA	90	U	C3'-C2'-C1'	7.92	107.84	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	206	U	N3-C4-O4	7.92	124.94	119.40
35	BA	1902	C	C2-N3-C4	7.92	123.86	119.90
35	BA	271(R)	G	C4-C5-N7	-7.92	107.63	110.80
35	BA	2704	C	N3-C4-C5	7.92	125.07	121.90
35	BA	381	G	N3-C4-N9	-7.92	121.25	126.00
35	BA	1212	G	O4'-C1'-N9	7.92	114.53	108.20
1	AA	605	U	C5-C6-N1	-7.91	118.74	122.70
35	BA	1484	G	C8-N9-C4	-7.91	103.24	106.40
54	BW	18	ARG	NE-CZ-NH2	-7.91	116.34	120.30
22	AV	59	A	C8-N9-C4	7.91	108.96	105.80
1	AA	384	G	C5-C6-N1	7.91	115.45	111.50
35	BA	1161	C	C5-C6-N1	7.91	124.95	121.00
35	BA	2334	G	C4-C5-N7	7.91	113.96	110.80
35	BA	1513	C	C5-C4-N4	7.90	125.73	120.20
35	BA	2144	U	N3-C4-C5	7.90	119.34	114.60
35	BA	1526	G	C6-C5-N7	-7.90	125.66	130.40
35	BA	1891	G	C4-C5-N7	7.90	113.96	110.80
35	BA	2010	G	C8-N9-C4	7.90	109.56	106.40
35	BA	2138	C	N3-C4-C5	7.90	125.06	121.90
20	AT	23	ARG	NE-CZ-NH2	-7.90	116.35	120.30
35	BA	1069	A	C8-N9-C4	-7.90	102.64	105.80
35	BA	450	G	O4'-C1'-N9	-7.90	101.88	108.20
35	BA	1567	A	C6-N1-C2	-7.90	113.86	118.60
35	BA	1147	C	O4'-C1'-N1	7.89	114.52	108.20
35	BA	1776	G	C4-C5-N7	-7.89	107.64	110.80
35	BA	2864	G	C2-N3-C4	7.89	115.85	111.90
57	BZ	35	ARG	NE-CZ-NH2	7.89	124.25	120.30
1	AA	230	G	C5-C6-N1	7.89	115.44	111.50
1	AA	826	C	C6-N1-C2	7.89	123.46	120.30
32	B7	47	ARG	NE-CZ-NH2	7.89	124.24	120.30
1	AA	288	A	C8-N9-C4	-7.89	102.64	105.80
1	AA	857	C	N3-C4-C5	7.89	125.05	121.90
35	BA	274	G	N9-C4-C5	-7.89	102.25	105.40
35	BA	463	G	C5-N7-C8	7.89	108.24	104.30
35	BA	614(B)	G	N1-C6-O6	-7.89	115.17	119.90
1	AA	720	C	C2-N3-C4	7.88	123.84	119.90
35	BA	2744	G	C8-N9-C4	-7.88	103.25	106.40
1	AA	1203	C	N1-C2-O2	7.88	123.63	118.90
35	BA	224	G	N1-C6-O6	-7.88	115.17	119.90
35	BA	654(H)	G	C2-N3-C4	7.88	115.84	111.90
35	BA	1711	C	N3-C4-C5	7.88	125.05	121.90
35	BA	287	C	C6-N1-C2	-7.88	117.15	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	AC	131	ARG	NE-CZ-NH2	7.88	124.24	120.30
22	AV	15	G	N1-C6-O6	-7.88	115.17	119.90
35	BA	408	G	C2-N3-C4	-7.88	107.96	111.90
35	BA	817	C	C4'-C3'-C2'	-7.88	94.72	102.60
35	BA	1923	U	C5-C6-N1	7.88	126.64	122.70
1	AA	917	G	C8-N9-C4	-7.88	103.25	106.40
11	AK	20	TYR	CB-CG-CD1	7.88	125.73	121.00
35	BA	633	A	N9-C4-C5	7.88	108.95	105.80
35	BA	1182	A	C4-C5-N7	-7.88	106.76	110.70
1	AA	627	G	N7-C8-N9	7.87	117.04	113.10
35	BA	363(C)	G	N7-C8-N9	-7.87	109.16	113.10
35	BA	2059	A	N7-C8-N9	-7.87	109.86	113.80
1	AA	1335	C	N1-C2-O2	7.87	123.62	118.90
2	AB	144	ARG	NE-CZ-NH2	-7.87	116.36	120.30
35	BA	36	G	C4-C5-N7	7.87	113.95	110.80
35	BA	1037	G	C8-N9-C4	7.87	109.55	106.40
35	BA	1139	G	N1-C6-O6	7.87	124.62	119.90
35	BA	2520	C	N3-C4-C5	-7.87	118.75	121.90
1	AA	1060	C	N3-C4-C5	-7.87	118.75	121.90
35	BA	71	A	C5-C6-N6	-7.87	117.41	123.70
35	BA	450	G	C6-C5-N7	-7.87	125.68	130.40
35	BA	771	G	C6-C5-N7	-7.87	125.68	130.40
35	BA	363(B)	G	N1-C6-O6	-7.87	115.18	119.90
35	BA	1930	G	C2-N3-C4	7.86	115.83	111.90
35	BA	2342	C	C6-N1-C2	-7.86	117.15	120.30
35	BA	2525	G	C4-C5-C6	7.86	123.52	118.80
22	AV	63	G	N3-C4-N9	7.86	130.72	126.00
35	BA	1386	C	C2-N3-C4	7.86	123.83	119.90
35	BA	233	A	C4-C5-N7	-7.86	106.77	110.70
35	BA	1493	C	C6-N1-C2	-7.86	117.16	120.30
1	AA	1529	G	N1-C2-N3	7.86	128.62	123.90
54	BW	84	ARG	NE-CZ-NH2	-7.86	116.37	120.30
1	AA	657	G	C5-C6-N1	7.86	115.43	111.50
35	BA	513	A	C2-N3-C4	-7.86	106.67	110.60
35	BA	1319	G	N7-C8-N9	7.86	117.03	113.10
39	BE	101	ARG	NE-CZ-NH2	-7.86	116.37	120.30
35	BA	179	G	C4-C5-N7	-7.85	107.66	110.80
1	AA	1100	C	C2-N3-C4	-7.85	115.97	119.90
35	BA	2032	G	C5-N7-C8	-7.85	100.37	104.30
35	BA	1295	C	O4'-C1'-N1	7.85	114.48	108.20
1	AA	612	C	C6-N1-C2	-7.85	117.16	120.30
1	AA	925	G	C6-C5-N7	7.85	135.11	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	321	A	C5-N7-C8	-7.85	99.98	103.90
35	BA	2153	G	C5-C6-O6	-7.85	123.89	128.60
35	BA	2772	C	O4'-C1'-N1	7.84	114.48	108.20
6	AF	47	ARG	NE-CZ-NH2	7.84	124.22	120.30
1	AA	189(C)	C	N3-C4-C5	7.84	125.04	121.90
35	BA	888	C	C4-C5-C6	7.84	121.32	117.40
35	BA	2389	G	N1-C2-N2	-7.84	109.14	116.20
40	BF	17	ARG	NE-CZ-NH1	7.84	124.22	120.30
35	BA	1447	G	C4-C5-N7	-7.84	107.66	110.80
35	BA	1990	C	C6-N1-C2	-7.84	117.17	120.30
1	AA	661	G	C3'-C2'-C1'	-7.84	95.23	101.50
35	BA	410	G	C6-C5-N7	7.84	135.10	130.40
35	BA	1537	G	C4-C5-N7	-7.84	107.67	110.80
35	BA	1801	G	C8-N9-C4	-7.84	103.27	106.40
35	BA	1434	A	N1-C6-N6	7.83	123.30	118.60
22	AV	70	G	C4-C5-N7	-7.83	107.67	110.80
35	BA	32	C	N3-C4-N4	-7.83	112.52	118.00
35	BA	886	C	N3-C4-C5	7.83	125.03	121.90
35	BA	908	C	C6-N1-C2	7.83	123.43	120.30
35	BA	1899	G	O4'-C1'-N9	-7.83	101.93	108.20
36	BB	27	C	C6-N1-C2	-7.83	117.17	120.30
1	AA	1156	G	N1-C6-O6	-7.83	115.20	119.90
1	AA	1343	G	N1-C2-N3	7.83	128.60	123.90
35	BA	2755	C	C5-C6-N1	7.83	124.92	121.00
35	BA	48	G	N3-C4-C5	-7.83	124.69	128.60
35	BA	346	A	N7-C8-N9	7.83	117.71	113.80
35	BA	307	G	C5-N7-C8	7.82	108.21	104.30
35	BA	594	U	C2-N3-C4	7.82	131.69	127.00
35	BA	662	G	C8-N9-C4	7.82	109.53	106.40
35	BA	787	U	O4'-C1'-N1	7.82	114.46	108.20
35	BA	1746	G	C5-N7-C8	7.82	108.21	104.30
35	BA	2149	G	N3-C4-C5	-7.82	124.69	128.60
1	AA	1147	C	N3-C4-N4	7.82	123.47	118.00
1	AA	1377	A	C5'-C4'-O4'	-7.82	99.72	109.10
42	BH	97	ARG	NE-CZ-NH1	-7.81	116.39	120.30
8	AH	14	ARG	NE-CZ-NH1	-7.81	116.39	120.30
35	BA	1201	C	C6-N1-C2	7.81	123.42	120.30
35	BA	2795	G	N7-C8-N9	7.81	117.01	113.10
1	AA	849	C	C5-C4-N4	-7.81	114.73	120.20
35	BA	656	G	N1-C6-O6	-7.81	115.22	119.90
35	BA	1118	C	N1-C2-O2	-7.81	114.22	118.90
1	AA	575	G	C5-C6-N1	-7.81	107.60	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	16	G	C4-C5-N7	7.81	113.92	110.80
35	BA	1588	C	N3-C4-C5	7.80	125.02	121.90
1	AA	1273	G	N9-C4-C5	7.80	108.52	105.40
35	BA	1021	A	C5-N7-C8	-7.80	100.00	103.90
35	BA	1325	G	N3-C2-N2	7.80	125.36	119.90
1	AA	391	G	N7-C8-N9	-7.80	109.20	113.10
35	BA	414	C	C4-C5-C6	7.80	121.30	117.40
3	AC	54	ARG	NE-CZ-NH1	-7.80	116.40	120.30
35	BA	2337	G	C2-N3-C4	7.80	115.80	111.90
1	AA	1204	A	C8-N9-C4	-7.80	102.68	105.80
35	BA	2268	A	C4-C5-C6	7.80	120.90	117.00
35	BA	2700	C	C6-N1-C2	7.80	123.42	120.30
1	AA	1244	C	N3-C2-O2	-7.79	116.44	121.90
35	BA	2325	G	N1-C6-O6	7.79	124.58	119.90
45	BN	75	TYR	CB-CG-CD1	-7.79	116.32	121.00
1	AA	1177	G	C4-C5-N7	-7.79	107.68	110.80
1	AA	1217	C	C6-N1-C2	7.79	123.42	120.30
1	AA	1495	U	C6-N1-C2	7.79	125.67	121.00
35	BA	1526	G	O4'-C1'-N9	7.79	114.43	108.20
35	BA	1885	A	C3'-C2'-C1'	-7.79	95.27	101.50
1	AA	236	G	C4-C5-N7	-7.79	107.68	110.80
35	BA	1746	G	C4-C5-N7	-7.79	107.69	110.80
35	BA	1311	G	C3'-C2'-C1'	7.79	107.73	101.50
35	BA	2295	C	C5-C6-N1	7.79	124.89	121.00
1	AA	734	G	N1-C2-N3	-7.78	119.23	123.90
35	BA	471	A	N1-C2-N3	-7.78	125.41	129.30
22	AV	6	G	C5-C6-O6	-7.78	123.93	128.60
35	BA	271(W)	G	C5-C6-N1	-7.78	107.61	111.50
1	AA	27	G	N9-C4-C5	7.78	108.51	105.40
35	BA	589	C	N3-C4-C5	-7.78	118.79	121.90
35	BA	1071	G	C8-N9-C4	-7.78	103.29	106.40
35	BA	2206	G	N1-C6-O6	7.78	124.57	119.90
1	AA	700	G	N3-C2-N2	-7.78	114.46	119.90
1	AA	1276	G	C6-N1-C2	7.78	129.76	125.10
1	AA	1498	U	C6-N1-C2	-7.78	116.33	121.00
13	AM	104	ARG	NE-CZ-NH1	-7.78	116.41	120.30
35	BA	934	G	C5-N7-C8	7.78	108.19	104.30
35	BA	1282	U	C2-N3-C4	7.78	131.66	127.00
35	BA	1859	A	C2-N3-C4	-7.78	106.71	110.60
35	BA	2655	G	C1'-O4'-C4'	-7.78	103.68	109.90
1	AA	366	C	C4-C5-C6	7.77	121.29	117.40
1	AA	1084	G	C4-C5-N7	-7.77	107.69	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1044	G	N1-C2-N2	7.77	123.19	116.20
35	BA	1112	G	C2-N3-C4	-7.77	108.01	111.90
35	BA	1169	G	N3-C2-N2	-7.77	114.46	119.90
35	BA	2870	C	N3-C4-N4	-7.77	112.56	118.00
11	AK	20	TYR	CB-CG-CD2	-7.77	116.34	121.00
36	BB	55	U	C5-C6-N1	-7.77	118.82	122.70
1	AA	1005	A	C2-N3-C4	7.77	114.48	110.60
1	AA	1008	C	C2-N3-C4	-7.77	116.02	119.90
36	BB	98	G	C6-C5-N7	7.77	135.06	130.40
22	AV	18	G	C4-C5-N7	7.76	113.91	110.80
35	BA	272(C)	G	O4'-C1'-N9	7.76	114.41	108.20
38	BD	273	ARG	NE-CZ-NH2	-7.76	116.42	120.30
16	AP	28	ARG	NE-CZ-NH1	-7.76	116.42	120.30
35	BA	98	G	N9-C4-C5	7.76	108.50	105.40
1	AA	1028	C	C5-C6-N1	7.76	124.88	121.00
24	AY	357	ARG	NE-CZ-NH1	-7.76	116.42	120.30
31	B6	19	ARG	NE-CZ-NH1	-7.76	116.42	120.30
35	BA	1760	A	C2-N3-C4	-7.76	106.72	110.60
35	BA	2135	A	N1-C6-N6	7.76	123.26	118.60
35	BA	233	A	N7-C8-N9	-7.76	109.92	113.80
35	BA	403	U	O4'-C1'-N1	-7.76	101.99	108.20
35	BA	1258	C	C5-C6-N1	-7.76	117.12	121.00
35	BA	1315	C	C6-N1-C2	7.76	123.40	120.30
35	BA	1857	G	C5-C6-N1	-7.76	107.62	111.50
35	BA	2179	C	N3-C4-C5	-7.76	118.80	121.90
1	AA	187	C	C6-N1-C2	-7.75	117.20	120.30
35	BA	425	G	O4'-C1'-N9	7.75	114.40	108.20
35	BA	450	G	C5-C6-N1	-7.75	107.62	111.50
35	BA	1269	A	C2-N3-C4	-7.75	106.72	110.60
35	BA	2807	G	O4'-C1'-N9	-7.75	102.00	108.20
35	BA	919	G	N1-C2-N3	-7.75	119.25	123.90
1	AA	399	G	N7-C8-N9	7.75	116.98	113.10
35	BA	8	A	N7-C8-N9	-7.75	109.92	113.80
35	BA	1771	C	N1-C2-O2	7.75	123.55	118.90
1	AA	1311	G	C6-C5-N7	7.75	135.05	130.40
35	BA	998	C	C4-C5-C6	-7.75	113.53	117.40
1	AA	595	G	O4'-C1'-N9	-7.75	102.00	108.20
1	AA	927	G	N3-C4-C5	-7.75	124.73	128.60
1	AA	1276	G	N1-C6-O6	7.75	124.55	119.90
35	BA	2556	C	C4-C5-C6	7.75	121.27	117.40
1	AA	764	C	C5-C6-N1	7.75	124.87	121.00
35	BA	13	A	N9-C4-C5	-7.75	102.70	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2339	G	C6-C5-N7	7.75	135.05	130.40
1	AA	24	U	N3-C2-O2	-7.74	116.78	122.20
1	AA	796	C	N3-C4-C5	7.74	125.00	121.90
1	AA	1071	C	C5-C4-N4	-7.74	114.78	120.20
1	AA	1529	G	N9-C4-C5	7.74	108.50	105.40
35	BA	312	G	C2-N3-C4	-7.74	108.03	111.90
1	AA	500	G	C6-N1-C2	7.74	129.75	125.10
35	BA	2676	C	C4-C5-C6	-7.74	113.53	117.40
1	AA	893	C	N3-C4-C5	7.74	125.00	121.90
35	BA	2375	G	C6-C5-N7	-7.74	125.76	130.40
35	BA	2587	A	C4-C5-C6	7.74	120.87	117.00
35	BA	1666	G	N9-C4-C5	7.74	108.50	105.40
1	AA	217	C	C5-C6-N1	-7.74	117.13	121.00
35	BA	219	G	N9-C4-C5	-7.74	102.31	105.40
1	AA	303	A	C2-N3-C4	7.73	114.47	110.60
22	AV	21	A	C2-N3-C4	7.73	114.47	110.60
35	BA	157	U	C5-C4-O4	7.73	130.54	125.90
35	BA	1140	C	N3-C4-C5	7.73	124.99	121.90
1	AA	183	G	N7-C8-N9	7.73	116.97	113.10
1	AA	915	A	N1-C2-N3	7.73	133.16	129.30
35	BA	43	A	N9-C4-C5	-7.73	102.71	105.80
1	AA	104	G	N3-C4-C5	7.73	132.46	128.60
1	AA	1185	G	O4'-C1'-N9	-7.73	102.02	108.20
35	BA	1796	U	N3-C4-O4	-7.73	113.99	119.40
36	BB	95	C	N3-C4-C5	7.72	124.99	121.90
1	AA	1155	G	C8-N9-C4	-7.72	103.31	106.40
15	AO	64	ARG	NE-CZ-NH1	-7.72	116.44	120.30
35	BA	1548	C	C5-C6-N1	-7.72	117.14	121.00
35	BA	1392	A	C5-N7-C8	7.72	107.76	103.90
1	AA	765	G	C5-C6-O6	-7.71	123.97	128.60
35	BA	2015	A	N1-C6-N6	-7.71	113.97	118.60
1	AA	1099	G	N7-C8-N9	-7.71	109.24	113.10
35	BA	2366	A	C5-N7-C8	7.71	107.76	103.90
35	BA	115	C	N3-C4-N4	7.71	123.40	118.00
35	BA	1618	A	N1-C2-N3	7.71	133.16	129.30
36	BB	67	G	C6-C5-N7	-7.71	125.77	130.40
51	BT	74	ARG	NE-CZ-NH1	-7.71	116.44	120.30
1	AA	797	C	C5-C6-N1	7.71	124.86	121.00
1	AA	859	A	N9-C4-C5	-7.71	102.72	105.80
35	BA	2087	G	C8-N9-C4	-7.71	103.32	106.40
35	BA	1316	U	C2-N3-C4	-7.71	122.38	127.00
35	BA	1765	C	N1-C2-N3	7.71	124.59	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1853	A	C6-N1-C2	7.71	123.22	118.60
35	BA	2153	G	N1-C6-O6	7.71	124.52	119.90
35	BA	271(U)	G	C2-N3-C4	7.70	115.75	111.90
36	BB	46	A	C2-N3-C4	7.70	114.45	110.60
35	BA	1106	G	C5-N7-C8	7.70	108.15	104.30
1	AA	965	A	N1-C2-N3	7.70	133.15	129.30
35	BA	1488	G	O4'-C1'-N9	-7.70	102.04	108.20
1	AA	571	U	O4'-C1'-N1	-7.70	102.04	108.20
35	BA	1122	G	C4-C5-N7	7.70	113.88	110.80
1	AA	1009	G	N1-C2-N3	7.70	128.52	123.90
1	AA	1294	G	N9-C1'-C2'	-7.70	103.53	112.00
22	AV	52	G	C5-C6-N1	7.70	115.35	111.50
35	BA	222	A	C5-C6-N1	7.70	121.55	117.70
35	BA	718	A	N9-C4-C5	-7.70	102.72	105.80
35	BA	1675	C	C6-N1-C2	-7.69	117.22	120.30
1	AA	1063	C	C2-N3-C4	-7.69	116.05	119.90
39	BE	113	PHE	CB-CG-CD2	-7.69	115.42	120.80
1	AA	633	G	N7-C8-N9	7.69	116.94	113.10
1	AA	636	U	N1-C2-N3	7.69	119.51	114.90
1	AA	739	C	C6-N1-C2	-7.69	117.22	120.30
1	AA	1146	A	C2-N3-C4	7.69	114.45	110.60
35	BA	1136	G	N1-C2-N3	-7.69	119.29	123.90
35	BA	2377	A	N1-C2-N3	-7.69	125.45	129.30
35	BA	525	U	N1-C2-N3	7.69	119.51	114.90
35	BA	1208	C	C2-N3-C4	-7.69	116.06	119.90
35	BA	70	G	N1-C6-O6	-7.69	115.29	119.90
1	AA	240	C	N3-C4-N4	7.68	123.38	118.00
35	BA	2188	C	N3-C2-O2	-7.68	116.52	121.90
1	AA	1156	G	C8-N9-C4	-7.68	103.33	106.40
35	BA	156	U	C2-N3-C4	7.68	131.61	127.00
1	AA	426	G	N1-C2-N3	7.68	128.51	123.90
35	BA	2187	G	C5-C6-O6	-7.68	123.99	128.60
35	BA	1463	C	C2-N3-C4	7.68	123.74	119.90
35	BA	47	C	C6-N1-C2	7.68	123.37	120.30
35	BA	70	G	C4-C5-N7	-7.68	107.73	110.80
35	BA	577	G	N1-C2-N3	7.68	128.51	123.90
35	BA	1265	A	N9-C4-C5	-7.68	102.73	105.80
1	AA	243	A	N9-C4-C5	7.67	108.87	105.80
22	AV	54	U	C4-C5-C6	-7.67	115.09	119.70
22	AV	73	A	N7-C8-N9	-7.67	109.96	113.80
7	AG	4	ARG	NE-CZ-NH1	-7.67	116.47	120.30
35	BA	2258	C	C5-C6-N1	7.67	124.83	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1230	C	N3-C4-N4	-7.67	112.63	118.00
35	BA	2018	G	C5-N7-C8	7.67	108.13	104.30
1	AA	675	A	O4'-C1'-N9	7.67	114.33	108.20
35	BA	381	G	N9-C4-C5	7.67	108.47	105.40
35	BA	1392	A	C4-C5-N7	-7.67	106.87	110.70
22	AV	17	C	C5-C6-N1	7.66	124.83	121.00
35	BA	1601	G	C6-N1-C2	7.66	129.70	125.10
35	BA	2688	U	N3-C2-O2	-7.66	116.83	122.20
35	BA	1440	G	C5-C6-N1	7.66	115.33	111.50
35	BA	1896	G	C2-N3-C4	-7.66	108.07	111.90
1	AA	122	G	C8-N9-C4	-7.66	103.34	106.40
1	AA	199	G	C5-C6-N1	7.66	115.33	111.50
1	AA	1082	G	C5-C6-N1	-7.66	107.67	111.50
1	AA	1105	A	C6-N1-C2	7.66	123.19	118.60
35	BA	622	G	C5-C6-N1	-7.66	107.67	111.50
35	BA	1438	U	C6-N1-C2	-7.66	116.41	121.00
35	BA	120	U	N3-C2-O2	7.66	127.56	122.20
1	AA	809	G	C4-C5-N7	7.65	113.86	110.80
35	BA	1384	A	C8-N9-C4	7.65	108.86	105.80
35	BA	670	A	O4'-C1'-N9	-7.65	102.08	108.20
35	BA	2471	C	C5-C6-N1	7.65	124.83	121.00
1	AA	1214	C	N1-C2-O2	-7.65	114.31	118.90
35	BA	271(U)	G	C6-N1-C2	7.64	129.69	125.10
35	BA	2101	G	C4-C5-C6	7.64	123.39	118.80
35	BA	2107	C	C6-N1-C2	7.64	123.36	120.30
35	BA	1366	A	C5-C6-N6	7.64	129.81	123.70
35	BA	1943	U	C2-N3-C4	7.64	131.58	127.00
1	AA	588	G	N3-C4-C5	-7.64	124.78	128.60
35	BA	972	G	C4-C5-N7	7.64	113.86	110.80
35	BA	62	C	C5-C6-N1	7.64	124.82	121.00
35	BA	684	G	C8-N9-C4	7.64	109.45	106.40
22	AV	76	A	C5-C6-N1	-7.63	113.88	117.70
35	BA	1374	G	N1-C2-N3	7.63	128.48	123.90
35	BA	342	G	C8-N9-C4	7.63	109.45	106.40
35	BA	1648	C	C4-C5-C6	7.63	121.22	117.40
1	AA	255	G	O4'-C1'-N9	7.63	114.31	108.20
1	AA	258	G	N3-C2-N2	-7.63	114.56	119.90
1	AA	262	A	C4-C5-N7	-7.63	106.88	110.70
1	AA	706	A	N1-C2-N3	7.63	133.12	129.30
35	BA	26	G	C5-N7-C8	7.63	108.11	104.30
35	BA	307	G	N7-C8-N9	-7.63	109.28	113.10
35	BA	1124	C	C5-C6-N1	-7.63	117.19	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1398	C	C4-C5-C6	-7.63	113.58	117.40
1	AA	104	G	C4-C5-N7	7.63	113.85	110.80
35	BA	1298	C	N1-C2-N3	-7.63	113.86	119.20
35	BA	2874	C	C5-C6-N1	-7.63	117.19	121.00
22	AV	62	C	C6-N1-C2	7.62	123.35	120.30
1	AA	776	G	C5-N7-C8	7.62	108.11	104.30
35	BA	1382	G	C5-N7-C8	-7.62	100.49	104.30
35	BA	1850	G	N9-C4-C5	-7.62	102.35	105.40
1	AA	587	G	N1-C6-O6	7.62	124.47	119.90
35	BA	762	U	O4'-C1'-N1	-7.62	102.10	108.20
1	AA	1112	C	C4-C5-C6	7.62	121.21	117.40
35	BA	676	A	C2-N3-C4	-7.62	106.79	110.60
1	AA	899	C	C2-N3-C4	7.62	123.71	119.90
35	BA	1023	U	C2-N3-C4	7.62	131.57	127.00
35	BA	1397	U	C5-C6-N1	-7.62	118.89	122.70
35	BA	454	A	C3'-C2'-C1'	7.61	107.59	101.50
35	BA	2062	A	C2-N3-C4	-7.61	106.79	110.60
35	BA	2485	G	N1-C2-N2	7.61	123.05	116.20
51	BT	32	TYR	CB-CG-CD2	7.61	125.57	121.00
1	AA	1326	C	C6-N1-C2	-7.61	117.26	120.30
35	BA	961	C	N1-C2-O2	7.61	123.47	118.90
35	BA	1375	C	N3-C4-C5	7.61	124.94	121.90
52	BU	3	ARG	NE-CZ-NH2	-7.61	116.49	120.30
1	AA	1336	C	N1-C2-O2	7.61	123.47	118.90
35	BA	52	A	C2-N3-C4	7.61	114.41	110.60
35	BA	531	C	N3-C4-C5	-7.61	118.86	121.90
1	AA	274	A	C8-N9-C4	-7.61	102.76	105.80
35	BA	1136	G	C6-N1-C2	7.61	129.66	125.10
35	BA	1923	U	C6-N1-C2	-7.61	116.44	121.00
35	BA	2684	U	C5-C4-O4	7.61	130.46	125.90
1	AA	1528	U	C4-C5-C6	-7.61	115.14	119.70
35	BA	1468	C	C2-N3-C4	7.61	123.70	119.90
1	AA	1123	A	N7-C8-N9	7.60	117.60	113.80
35	BA	158	U	N3-C4-O4	-7.60	114.08	119.40
35	BA	201	C	C4-C5-C6	7.60	121.20	117.40
35	BA	1256	G	C3'-C2'-C1'	7.60	107.58	101.50
35	BA	1805	U	C6-N1-C2	-7.60	116.44	121.00
35	BA	1078	U	C5-C6-N1	7.60	126.50	122.70
35	BA	1384	A	N7-C8-N9	-7.60	110.00	113.80
35	BA	1796	U	C5-C6-N1	7.60	126.50	122.70
41	BG	22	ARG	NE-CZ-NH2	-7.60	116.50	120.30
1	AA	64	G	C4-C5-N7	7.60	113.84	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	269	C	N3-C4-C5	-7.60	118.86	121.90
1	AA	1099	G	N1-C2-N3	7.60	128.46	123.90
35	BA	13	A	C5-N7-C8	-7.60	100.10	103.90
35	BA	470	A	C8-N9-C4	-7.60	102.76	105.80
35	BA	770	G	C2-N3-C4	7.60	115.70	111.90
35	BA	2441	C	O4'-C1'-N1	7.60	114.28	108.20
1	AA	477	A	C2-N3-C4	7.60	114.40	110.60
1	AA	171	A	N1-C6-N6	7.59	123.16	118.60
35	BA	350	U	N3-C4-C5	7.59	119.16	114.60
35	BA	769	G	N9-C4-C5	-7.59	102.36	105.40
35	BA	1994	C	C5-C6-N1	7.59	124.80	121.00
35	BA	1649	G	C4-C5-N7	-7.59	107.77	110.80
20	AT	80	ARG	NE-CZ-NH2	-7.59	116.51	120.30
22	AV	38	A	N9-C4-C5	-7.59	102.77	105.80
35	BA	108	U	N3-C4-O4	-7.59	114.09	119.40
35	BA	1998	G	N3-C4-N9	-7.59	121.45	126.00
35	BA	2034	U	C4-C5-C6	-7.59	115.15	119.70
35	BA	2250	G	C2-N3-C4	7.59	115.69	111.90
9	AI	121	ARG	NE-CZ-NH2	-7.58	116.51	120.30
35	BA	60	G	C8-N9-C4	7.58	109.43	106.40
35	BA	363(B)	G	C4-C5-N7	7.58	113.83	110.80
35	BA	945	A	N9-C4-C5	7.58	108.83	105.80
36	BB	78	A	C4-C5-C6	-7.58	113.21	117.00
1	AA	189(F)	U	C5-C4-O4	7.58	130.45	125.90
1	AA	340	U	C5-C4-O4	-7.58	121.35	125.90
1	AA	719	C	C6-N1-C2	-7.58	117.27	120.30
1	AA	1099	G	C5-N7-C8	7.58	108.09	104.30
34	B9	19	ARG	NE-CZ-NH1	-7.58	116.51	120.30
35	BA	500	G	C5-C6-N1	-7.58	107.71	111.50
1	AA	1262	C	N3-C4-N4	-7.58	112.69	118.00
22	AV	72	A	N1-C6-N6	-7.58	114.05	118.60
35	BA	1391	U	O5'-P-OP2	-7.58	98.88	105.70
35	BA	2811	G	N9-C4-C5	-7.58	102.37	105.40
35	BA	2816	C	N3-C4-C5	7.58	124.93	121.90
36	BB	65	C	C2-N3-C4	-7.58	116.11	119.90
35	BA	2813	A	C5-C6-N1	7.58	121.49	117.70
1	AA	586	C	C6-N1-C2	-7.58	117.27	120.30
35	BA	493	G	N3-C4-C5	-7.58	124.81	128.60
35	BA	1964	G	N3-C2-N2	7.58	125.20	119.90
35	BA	2313	C	N3-C2-O2	-7.58	116.60	121.90
35	BA	1208	C	C4-C5-C6	7.57	121.19	117.40
35	BA	2439	A	C5-C6-N1	-7.57	113.92	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2751	G	N7-C8-N9	7.57	116.89	113.10
35	BA	2894	G	C8-N9-C4	-7.57	103.37	106.40
1	AA	683	G	C6-C5-N7	-7.57	125.86	130.40
1	AA	1168	A	N9-C4-C5	-7.57	102.77	105.80
1	AA	101	A	C8-N9-C4	7.57	108.83	105.80
35	BA	75	G	C5-C6-O6	-7.57	124.06	128.60
35	BA	1185	C	C5-C6-N1	7.57	124.78	121.00
1	AA	1416	G	N1-C6-O6	-7.57	115.36	119.90
35	BA	132	G	O4'-C1'-N9	-7.57	102.15	108.20
35	BA	1536	C	N3-C4-C5	7.56	124.93	121.90
35	BA	646	A	C2-N3-C4	7.56	114.38	110.60
35	BA	843	G	C2-N3-C4	-7.56	108.12	111.90
36	BB	2	C	N1-C2-O2	7.56	123.44	118.90
54	BW	38	TYR	CB-CG-CD2	-7.56	116.46	121.00
1	AA	1048	G	N9-C4-C5	-7.56	102.38	105.40
35	BA	608	A	N1-C6-N6	7.56	123.14	118.60
35	BA	1527	G	C4-C5-N7	7.56	113.82	110.80
1	AA	24	U	N1-C2-N3	7.55	119.43	114.90
35	BA	1560	G	C5-N7-C8	7.55	108.08	104.30
35	BA	2208	A	C8-N9-C4	-7.55	102.78	105.80
35	BA	372	G	N1-C2-N3	7.55	128.43	123.90
35	BA	2397	G	C5-C6-O6	-7.55	124.07	128.60
1	AA	775	G	C8-N9-C4	-7.55	103.38	106.40
35	BA	837	C	N3-C4-C5	7.55	124.92	121.90
35	BA	2610	C	C4-C5-C6	-7.55	113.62	117.40
1	AA	1149	C	N3-C4-C5	-7.55	118.88	121.90
1	AA	1212	U	C5-C4-O4	-7.55	121.37	125.90
35	BA	86	C	C1'-O4'-C4'	7.55	115.94	109.90
35	BA	180	G	C2-N3-C4	7.55	115.67	111.90
17	AQ	68	ARG	NE-CZ-NH1	-7.54	116.53	120.30
35	BA	264	C	C6-N1-C2	-7.54	117.28	120.30
35	BA	910	A	C5-C6-N1	7.54	121.47	117.70
1	AA	509	A	C2-N3-C4	-7.54	106.83	110.60
1	AA	1523	G	N7-C8-N9	7.54	116.87	113.10
1	AA	1526	G	C8-N9-C4	7.54	109.42	106.40
35	BA	83	G	N1-C2-N3	7.54	128.43	123.90
35	BA	1976	U	N1-C2-N3	7.54	119.42	114.90
35	BA	2126	A	N9-C1'-C2'	7.54	123.80	114.00
35	BA	2794	C	C6-N1-C2	7.54	123.32	120.30
53	BV	66	ARG	NE-CZ-NH2	-7.54	116.53	120.30
1	AA	57	G	N3-C4-C5	7.54	132.37	128.60
35	BA	21	A	C5-N7-C8	7.54	107.67	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2676	C	C5-C6-N1	7.54	124.77	121.00
35	BA	1219	G	C4-C5-N7	-7.54	107.78	110.80
22	AV	62	C	C4-C5-C6	7.54	121.17	117.40
35	BA	2428	G	N9-C4-C5	-7.54	102.39	105.40
35	BA	2507	C	N3-C4-C5	-7.54	118.89	121.90
35	BA	820	A	N1-C2-N3	-7.53	125.53	129.30
35	BA	1215	G	C5-N7-C8	-7.53	100.53	104.30
1	AA	435	C	O4'-C1'-N1	7.53	114.23	108.20
35	BA	700	G	N1-C6-O6	-7.53	115.38	119.90
35	BA	1697	G	N3-C2-N2	7.53	125.17	119.90
35	BA	1524	G	C4-C5-N7	7.53	113.81	110.80
1	AA	171	A	C2-N3-C4	-7.53	106.84	110.60
35	BA	478	A	C6-N1-C2	7.53	123.12	118.60
35	BA	1230	C	C2-N3-C4	-7.53	116.14	119.90
35	BA	1303	G	C5-N7-C8	-7.53	100.54	104.30
35	BA	1862	G	N1-C2-N3	-7.53	119.38	123.90
35	BA	662	G	N9-C4-C5	-7.53	102.39	105.40
35	BA	1241	A	N1-C2-N3	7.53	133.06	129.30
17	AQ	25	ARG	NE-CZ-NH2	-7.52	116.54	120.30
35	BA	1910	G	C5-C6-O6	-7.52	124.09	128.60
35	BA	148	C	N3-C2-O2	-7.52	116.63	121.90
35	BA	240	G	N7-C8-N9	7.52	116.86	113.10
35	BA	602	G	C4-C5-N7	7.52	113.81	110.80
35	BA	657	U	C5-C4-O4	7.52	130.41	125.90
35	BA	1479	G	N9-C4-C5	-7.52	102.39	105.40
3	AC	59	ARG	NE-CZ-NH2	7.52	124.06	120.30
35	BA	756	C	C5-C6-N1	-7.52	117.24	121.00
35	BA	1310	G	C5-C6-O6	7.52	133.11	128.60
35	BA	466	A	N1-C6-N6	7.52	123.11	118.60
35	BA	859	G	C8-N9-C4	-7.52	103.39	106.40
1	AA	189(C)	C	C6-N1-C2	-7.52	117.29	120.30
35	BA	188	G	N1-C2-N3	7.52	128.41	123.90
35	BA	475	U	C4-C5-C6	7.52	124.21	119.70
35	BA	841	A	N7-C8-N9	7.52	117.56	113.80
35	BA	1445(A)	C	C4-C5-C6	7.51	121.16	117.40
35	BA	1224	C	C4-C5-C6	7.51	121.16	117.40
1	AA	739	C	N1-C2-N3	7.51	124.46	119.20
35	BA	801	G	C5-C6-O6	-7.51	124.09	128.60
39	BE	19	ARG	NE-CZ-NH2	-7.51	116.55	120.30
35	BA	606	U	C5-C4-O4	-7.51	121.39	125.90
35	BA	1814	G	N9-C4-C5	-7.51	102.40	105.40
35	BA	130	C	N1-C2-O2	7.51	123.41	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1107	G	C5-C6-O6	7.51	133.10	128.60
1	AA	1089	G	C8-N9-C4	7.51	109.40	106.40
35	BA	192	C	C4-C5-C6	7.51	121.15	117.40
35	BA	1325	G	C6-N1-C2	7.51	129.60	125.10
35	BA	1903	G	C3'-C2'-C1'	7.51	107.50	101.50
35	BA	1299	G	C6-N1-C2	-7.50	120.60	125.10
35	BA	271(R)	G	C2-N3-C4	7.50	115.65	111.90
35	BA	2779	U	O4'-C1'-N1	7.50	114.20	108.20
35	BA	1136	G	N3-C2-N2	7.50	125.15	119.90
38	BD	60	ARG	NE-CZ-NH1	7.50	124.05	120.30
4	AD	35	ARG	NE-CZ-NH2	-7.50	116.55	120.30
1	AA	587	G	C5-C6-O6	-7.50	124.10	128.60
35	BA	351	G	C4-C5-N7	-7.50	107.80	110.80
1	AA	857	C	C5-C6-N1	-7.50	117.25	121.00
35	BA	2735	G	C5-C6-N1	-7.50	107.75	111.50
1	AA	1165	C	N1-C2-O2	-7.50	114.40	118.90
1	AA	189(D)	C	C2-N3-C4	-7.49	116.15	119.90
35	BA	202	U	N1-C2-O2	-7.49	117.56	122.80
35	BA	903	C	N3-C4-N4	-7.49	112.76	118.00
1	AA	1290	G	N3-C4-N9	7.49	130.49	126.00
35	BA	1087	G	C2-N3-C4	7.49	115.64	111.90
35	BA	1950	G	C6-C5-N7	7.49	134.89	130.40
8	AH	104	ARG	NE-CZ-NH2	7.49	124.04	120.30
35	BA	429	A	C8-N9-C4	7.49	108.80	105.80
35	BA	1083	U	N3-C4-O4	-7.49	114.16	119.40
35	BA	2548	G	N9-C4-C5	7.49	108.39	105.40
35	BA	669	G	C3'-C2'-C1'	7.49	107.49	101.50
1	AA	38	G	C6-C5-N7	-7.49	125.91	130.40
1	AA	137	C	C6-N1-C2	7.49	123.29	120.30
24	AY	324	ARG	NE-CZ-NH1	7.49	124.04	120.30
31	B6	19	ARG	NE-CZ-NH2	7.49	124.04	120.30
35	BA	743	G	C6-N1-C2	-7.49	120.61	125.10
35	BA	1008	C	N3-C2-O2	7.49	127.14	121.90
1	AA	43	C	C4-C5-C6	7.48	121.14	117.40
1	AA	1118	C	C5-C6-N1	7.48	124.74	121.00
35	BA	1831	G	O4'-C1'-C2'	7.48	114.33	107.60
35	BA	375	C	C6-N1-C2	-7.48	117.31	120.30
35	BA	1788	C	C5-C6-N1	-7.48	117.26	121.00
35	BA	1428	C	C5-C4-N4	7.48	125.44	120.20
35	BA	1429	G	C8-N9-C4	-7.48	103.41	106.40
35	BA	1884	A	N1-C6-N6	7.48	123.09	118.60
35	BA	193	U	C4-C5-C6	7.48	124.19	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	845	G	N3-C2-N2	7.48	125.13	119.90
35	BA	1648	C	C6-N1-C2	-7.48	117.31	120.30
35	BA	1978	A	N9-C4-C5	7.48	108.79	105.80
35	BA	2762	G	C2-N3-C4	-7.48	108.16	111.90
1	AA	142	G	N9-C4-C5	7.47	108.39	105.40
1	AA	708	C	C5-C4-N4	-7.47	114.97	120.20
35	BA	428	A	N9-C4-C5	7.47	108.79	105.80
35	BA	1157	G	C4-C5-N7	-7.47	107.81	110.80
35	BA	1434	A	N1-C2-N3	7.47	133.04	129.30
35	BA	713	G	C5-N7-C8	7.47	108.03	104.30
35	BA	795	C	O5'-P-OP1	-7.47	98.98	105.70
35	BA	1493	C	N3-C2-O2	-7.47	116.67	121.90
35	BA	484	C	N3-C4-C5	7.47	124.89	121.90
35	BA	1845	G	N7-C8-N9	7.47	116.83	113.10
35	BA	521	G	N1-C6-O6	7.47	124.38	119.90
35	BA	718	A	C8-N9-C4	7.47	108.79	105.80
35	BA	2374	C	N3-C4-C5	7.47	124.89	121.90
35	BA	256	A	N9-C4-C5	-7.46	102.81	105.80
35	BA	848	G	C4-C5-N7	-7.46	107.81	110.80
35	BA	1237	A	N1-C2-N3	7.46	133.03	129.30
35	BA	619	G	N1-C6-O6	-7.46	115.42	119.90
1	AA	1336	C	N3-C2-O2	-7.46	116.68	121.90
35	BA	1428	C	C4-C5-C6	7.46	121.13	117.40
1	AA	818	G	C2-N3-C4	-7.46	108.17	111.90
35	BA	1382	G	N7-C8-N9	7.46	116.83	113.10
35	BA	1410	G	C4-C5-N7	-7.46	107.82	110.80
35	BA	2707	G	N9-C4-C5	-7.46	102.42	105.40
1	AA	1187	G	C5-N7-C8	-7.46	100.57	104.30
1	AA	1327	C	O4'-C1'-N1	7.45	114.16	108.20
35	BA	243	U	C2-N3-C4	-7.45	122.53	127.00
1	AA	97	G	C6-N1-C2	7.45	129.57	125.10
35	BA	537	C	N3-C2-O2	7.45	127.11	121.90
35	BA	1591	G	N7-C8-N9	7.45	116.83	113.10
1	AA	1516	G	C5-N7-C8	7.45	108.02	104.30
4	AD	57	ARG	NE-CZ-NH1	-7.45	116.58	120.30
1	AA	167	G	N9-C4-C5	-7.45	102.42	105.40
35	BA	2718	G	N7-C8-N9	-7.45	109.38	113.10
35	BA	1237	A	C2-N3-C4	-7.44	106.88	110.60
35	BA	1772	G	C2-N3-C4	-7.44	108.18	111.90
35	BA	2040	C	N3-C2-O2	-7.44	116.69	121.90
1	AA	848	C	C5-C6-N1	7.44	124.72	121.00
35	BA	945	A	C4-C5-C6	7.44	120.72	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1334	G	N3-C4-C5	7.44	132.32	128.60
35	BA	1484	G	C4-C5-N7	-7.44	107.82	110.80
35	BA	2151	G	N3-C4-N9	7.44	130.46	126.00
25	B0	41	ARG	NE-CZ-NH2	-7.44	116.58	120.30
35	BA	1250	G	C5-N7-C8	7.44	108.02	104.30
35	BA	2065	C	C2-N3-C4	7.44	123.62	119.90
1	AA	433	C	N3-C4-C5	7.44	124.88	121.90
1	AA	849	C	N3-C4-C5	7.44	124.88	121.90
1	AA	1092	A	C5-N7-C8	-7.44	100.18	103.90
35	BA	276	A	C6-N1-C2	-7.44	114.14	118.60
35	BA	1980	G	N9-C4-C5	7.44	108.38	105.40
35	BA	1993	U	N1-C2-O2	7.43	128.00	122.80
1	AA	896	C	C6-N1-C2	-7.43	117.33	120.30
35	BA	1009	A	C5-C6-N1	-7.43	113.98	117.70
1	AA	109	A	N9-C4-C5	7.43	108.77	105.80
1	AA	1267	C	N3-C4-C5	-7.43	118.93	121.90
1	AA	615	C	C2-N3-C4	-7.43	116.19	119.90
1	AA	1030(A)	G	C4-C5-N7	7.43	113.77	110.80
1	AA	1335	C	C4-C5-C6	7.43	121.11	117.40
1	AA	770	C	N3-C4-N4	-7.43	112.80	118.00
1	AA	1088	G	C5-N7-C8	-7.43	100.59	104.30
34	B9	9	ARG	NE-CZ-NH1	-7.43	116.59	120.30
35	BA	208	C	C6-N1-C2	7.43	123.27	120.30
35	BA	654(P)	C	O4'-C1'-N1	7.43	114.14	108.20
35	BA	2126	A	N1-C6-N6	7.43	123.06	118.60
1	AA	26	A	C5-N7-C8	-7.42	100.19	103.90
35	BA	635	C	N1-C2-O2	7.42	123.36	118.90
35	BA	1768	U	C5-C6-N1	7.42	126.41	122.70
35	BA	1764	G	C6-C5-N7	7.42	134.85	130.40
1	AA	247	G	N1-C6-O6	-7.42	115.45	119.90
35	BA	1386	C	C4-C5-C6	7.42	121.11	117.40
35	BA	2633	G	N3-C4-C5	-7.42	124.89	128.60
35	BA	26	G	C6-N1-C2	7.42	129.55	125.10
35	BA	49	A	N1-C2-N3	7.42	133.01	129.30
35	BA	549	G	C2-N3-C4	7.42	115.61	111.90
35	BA	2397	G	N1-C6-O6	7.42	124.35	119.90
45	BN	3	THR	N-CA-C	-7.42	90.97	111.00
35	BA	1528	A	C2-N3-C4	7.42	114.31	110.60
35	BA	2745	C	C4-C5-C6	7.42	121.11	117.40
1	AA	1504	G	C8-N9-C4	7.41	109.36	106.40
35	BA	998	C	C5-C6-N1	7.41	124.71	121.00
57	BZ	80	ARG	NE-CZ-NH2	-7.41	116.59	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	44	G	N9-C4-C5	7.41	108.36	105.40
1	AA	1304	G	C2-N3-C4	7.41	115.61	111.90
35	BA	990	A	C5'-C4'-O4'	-7.41	100.21	109.10
1	AA	1030(C)	G	N9-C4-C5	-7.41	102.44	105.40
1	AA	1212	U	O4'-C1'-N1	-7.41	102.27	108.20
35	BA	143	G	N7-C8-N9	-7.41	109.40	113.10
35	BA	426	C	O4'-C1'-N1	7.41	114.13	108.20
35	BA	823	G	C5-C6-N1	-7.41	107.80	111.50
35	BA	2093	G	N1-C6-O6	7.41	124.34	119.90
36	BB	50	G	O4'-C1'-N9	-7.41	102.27	108.20
1	AA	913	A	N1-C2-N3	7.41	133.00	129.30
1	AA	1399	C	C2-N3-C4	7.41	123.60	119.90
35	BA	1509(A)	A	C6-N1-C2	-7.41	114.16	118.60
35	BA	73	A	N1-C2-N3	-7.41	125.60	129.30
1	AA	792	A	N9-C4-C5	7.40	108.76	105.80
35	BA	377	C	N3-C4-C5	7.40	124.86	121.90
23	AX	12	A	C6-N1-C2	-7.40	114.16	118.60
35	BA	2366	A	N7-C8-N9	-7.40	110.10	113.80
1	AA	238	G	C2-N3-C4	7.40	115.60	111.90
35	BA	1816	G	C6-N1-C2	7.40	129.54	125.10
1	AA	275	G	N1-C2-N3	-7.40	119.46	123.90
1	AA	473	G	C8-N9-C4	-7.40	103.44	106.40
35	BA	705	A	N9-C4-C5	7.40	108.76	105.80
35	BA	790	C	C6-N1-C2	-7.40	117.34	120.30
35	BA	2727	G	C6-N1-C2	-7.40	120.66	125.10
25	B0	74	ARG	NE-CZ-NH1	7.40	124.00	120.30
35	BA	1447	G	N1-C6-O6	7.40	124.34	119.90
1	AA	179	A	C5-N7-C8	7.39	107.60	103.90
35	BA	2374	C	C5-C4-N4	-7.39	115.02	120.20
35	BA	23	G	N3-C4-C5	7.39	132.30	128.60
1	AA	1069	C	C5-C6-N1	-7.39	117.31	121.00
14	AN	57	ARG	NE-CZ-NH1	-7.39	116.61	120.30
35	BA	2838	G	N1-C6-O6	7.39	124.33	119.90
35	BA	2851	A	C8-N9-C4	-7.39	102.84	105.80
1	AA	379	C	C2-N3-C4	-7.39	116.21	119.90
35	BA	833	U	C5-C4-O4	-7.39	121.47	125.90
1	AA	851	G	N3-C2-N2	7.38	125.07	119.90
35	BA	2520	C	N3-C4-N4	7.38	123.17	118.00
35	BA	742	G	C4-C5-N7	7.38	113.75	110.80
1	AA	111	G	C5-C6-N1	-7.38	107.81	111.50
35	BA	2577	A	N1-C6-N6	-7.38	114.17	118.60
35	BA	2580	U	N1-C2-O2	7.38	127.97	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	925	G	C5-C6-O6	-7.38	124.17	128.60
35	BA	654(F)	C	O4'-C1'-N1	7.38	114.10	108.20
1	AA	1103	C	C4-C5-C6	-7.38	113.71	117.40
1	AA	1153	C	N1-C2-O2	7.38	123.33	118.90
22	AV	62	C	C5-C6-N1	-7.38	117.31	121.00
35	BA	1400	G	C5-C6-O6	-7.38	124.17	128.60
35	BA	2151	G	C5-N7-C8	-7.38	100.61	104.30
45	BN	58	ASP	CB-CG-OD2	-7.38	111.66	118.30
9	AI	42	ARG	NE-CZ-NH2	-7.38	116.61	120.30
1	AA	1061	G	C4-C5-N7	7.38	113.75	110.80
35	BA	239	U	C5-C6-N1	-7.38	119.01	122.70
1	AA	533	A	N7-C8-N9	7.37	117.49	113.80
35	BA	2707	G	N7-C8-N9	-7.37	109.41	113.10
35	BA	2805	G	C6-N1-C2	-7.37	120.68	125.10
35	BA	1203	G	C5-C6-O6	7.37	133.02	128.60
35	BA	748	G	N7-C8-N9	7.37	116.78	113.10
1	AA	30	U	N1-C1'-C2'	7.37	123.58	114.00
1	AA	1117	G	O4'-C1'-N9	-7.37	102.31	108.20
35	BA	342	G	N9-C4-C5	-7.37	102.45	105.40
35	BA	1436	G	C6-N1-C2	-7.37	120.68	125.10
35	BA	2183	C	O4'-C1'-N1	-7.37	102.31	108.20
1	AA	647	C	C4-C5-C6	7.37	121.08	117.40
1	AA	1356	G	C8-N9-C4	-7.37	103.45	106.40
35	BA	962	G	C5-C6-N1	7.37	115.18	111.50
36	BB	25	A	C5-N7-C8	7.37	107.58	103.90
35	BA	1085	A	C4-C5-N7	-7.36	107.02	110.70
35	BA	1182	A	C5-N7-C8	7.36	107.58	103.90
35	BA	2447	G	C8-N9-C4	7.36	109.35	106.40
41	BG	113	ARG	NE-CZ-NH1	-7.36	116.62	120.30
1	AA	1140	C	O4'-C1'-N1	7.36	114.09	108.20
1	AA	1106	G	N7-C8-N9	-7.36	109.42	113.10
1	AA	1179	A	N1-C2-N3	7.36	132.98	129.30
35	BA	1835	G	C2-N3-C4	-7.36	108.22	111.90
35	BA	2770	G	N3-C4-N9	-7.36	121.58	126.00
35	BA	2878	U	C6-N1-C2	-7.36	116.58	121.00
35	BA	2061	G	N1-C2-N3	-7.36	119.48	123.90
1	AA	1156	G	N3-C2-N2	7.36	125.05	119.90
35	BA	2410	G	N1-C6-O6	-7.36	115.49	119.90
1	AA	411	A	C8-N9-C4	7.35	108.74	105.80
1	AA	353	A	C1'-O4'-C4'	7.35	115.78	109.90
1	AA	528	C	O4'-C1'-N1	-7.35	102.32	108.20
35	BA	485	C	N3-C4-N4	7.35	123.15	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	47	C	C6-N1-C2	-7.35	117.36	120.30
1	AA	303	A	N1-C6-N6	7.35	123.01	118.60
35	BA	200	U	N3-C4-O4	-7.35	114.26	119.40
35	BA	632	A	C6-N1-C2	7.35	123.01	118.60
1	AA	1497	G	N9-C4-C5	7.35	108.34	105.40
35	BA	2256	G	N7-C8-N9	-7.35	109.43	113.10
35	BA	2681	C	N3-C2-O2	-7.35	116.76	121.90
1	AA	534	U	C5-C6-N1	7.35	126.37	122.70
29	B4	13	ARG	NE-CZ-NH2	-7.35	116.63	120.30
35	BA	309	G	C4-C5-N7	-7.35	107.86	110.80
35	BA	582	G	N3-C2-N2	-7.35	114.76	119.90
35	BA	1983	C	C2-N3-C4	-7.35	116.23	119.90
1	AA	1248	A	N1-C2-N3	-7.34	125.63	129.30
22	AV	4	G	O4'-C1'-N9	7.34	114.08	108.20
35	BA	621	A	O4'-C1'-N9	7.34	114.08	108.20
1	AA	180	U	C2-N3-C4	7.34	131.41	127.00
1	AA	222	U	C5-C4-O4	7.34	130.30	125.90
35	BA	52	A	N7-C8-N9	-7.34	110.13	113.80
35	BA	1031	G	C5-N7-C8	7.34	107.97	104.30
1	AA	1323	G	N1-C6-O6	7.34	124.30	119.90
25	B0	20	ARG	NE-CZ-NH2	7.33	123.97	120.30
35	BA	564	C	N3-C4-N4	7.33	123.14	118.00
1	AA	1497	G	C4-C5-C6	7.33	123.20	118.80
1	AA	189	G	C6-N1-C2	7.33	129.50	125.10
1	AA	319	G	C5-C6-O6	-7.33	124.20	128.60
1	AA	679	C	C5-C6-N1	-7.33	117.33	121.00
1	AA	999	C	C6-N1-C2	7.33	123.23	120.30
35	BA	1037	G	N9-C4-C5	-7.33	102.47	105.40
36	BB	1	U	C5-C6-N1	-7.33	119.03	122.70
1	AA	732	C	N3-C4-C5	7.33	124.83	121.90
1	AA	1496	C	C2-N3-C4	-7.33	116.23	119.90
35	BA	156	U	N3-C4-C5	-7.33	110.20	114.60
35	BA	1745	C	C2-N3-C4	7.33	123.56	119.90
36	BB	72	G	C6-C5-N7	7.33	134.79	130.40
1	AA	348	G	O4'-C1'-N9	-7.32	102.34	108.20
35	BA	798	G	N9-C4-C5	-7.32	102.47	105.40
35	BA	2570	G	N9-C4-C5	7.32	108.33	105.40
35	BA	2766	G	C4-C5-N7	-7.32	107.87	110.80
35	BA	37	C	C4-C5-C6	7.32	121.06	117.40
1	AA	721	G	C5-C6-N1	-7.32	107.84	111.50
1	AA	1101	A	N7-C8-N9	7.32	117.46	113.80
35	BA	1075	C	N1-C2-O2	-7.32	114.51	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1597	A	N1-C6-N6	-7.32	114.21	118.60
35	BA	158	U	C5-C4-O4	7.32	130.29	125.90
35	BA	1219	G	N9-C4-C5	7.32	108.33	105.40
35	BA	1705	G	C5-C6-O6	7.32	132.99	128.60
35	BA	2195	C	C1'-O4'-C4'	-7.32	104.05	109.90
1	AA	474	G	C2-N3-C4	-7.32	108.24	111.90
35	BA	520	G	C8-N9-C4	7.32	109.33	106.40
35	BA	1324	G	N9-C4-C5	7.32	108.33	105.40
1	AA	457	C	C4-C5-C6	-7.32	113.74	117.40
1	AA	584	G	N3-C4-N9	7.32	130.39	126.00
35	BA	993	G	C5-C6-N1	7.32	115.16	111.50
1	AA	8	A	N1-C6-N6	-7.31	114.21	118.60
1	AA	351	G	N3-C2-N2	-7.31	114.78	119.90
1	AA	658	G	O5'-P-OP1	-7.31	99.12	105.70
35	BA	2104	G	C4-C5-N7	7.31	113.72	110.80
47	BP	53	GLY	N-CA-C	-7.31	94.82	113.10
1	AA	716	A	C6-N1-C2	7.31	122.99	118.60
1	AA	1335	C	C6-N1-C2	7.31	123.22	120.30
22	AV	5	G	N9-C4-C5	-7.31	102.48	105.40
1	AA	707	C	N3-C4-C5	-7.31	118.98	121.90
1	AA	912	C	N3-C2-O2	-7.31	116.78	121.90
1	AA	917	G	C4-C5-N7	-7.31	107.88	110.80
35	BA	518	G	C5-C6-O6	7.31	132.98	128.60
35	BA	952	G	C8-N9-C4	-7.31	103.48	106.40
35	BA	1194	A	C8-N9-C4	7.31	108.72	105.80
35	BA	1954	G	N9-C4-C5	-7.31	102.48	105.40
55	BX	68	ARG	NE-CZ-NH1	7.31	123.95	120.30
1	AA	984	C	N3-C4-C5	7.30	124.82	121.90
35	BA	1251	C	C2-N3-C4	-7.30	116.25	119.90
35	BA	2558	C	O4'-C1'-N1	7.30	114.04	108.20
36	BB	50	G	C6-C5-N7	7.30	134.78	130.40
35	BA	1434	A	C5'-C4'-C3'	-7.30	104.32	116.00
35	BA	1994	C	C2-N3-C4	7.30	123.55	119.90
1	AA	22	G	C5-C6-O6	-7.30	124.22	128.60
35	BA	483	A	C2-N3-C4	7.30	114.25	110.60
35	BA	2839	G	C5-C6-N1	-7.30	107.85	111.50
35	BA	1891	G	C6-C5-N7	-7.30	126.02	130.40
1	AA	220	G	N1-C6-O6	7.30	124.28	119.90
35	BA	175	G	C5-N7-C8	7.30	107.95	104.30
35	BA	566	U	C5-C6-N1	7.30	126.35	122.70
35	BA	1179	C	C5-C6-N1	7.30	124.65	121.00
35	BA	1950	G	N7-C8-N9	-7.30	109.45	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2258	C	C5-C4-N4	-7.30	115.09	120.20
35	BA	2639	A	C5-C6-N1	7.30	121.35	117.70
1	AA	991	U	C2-N3-C4	-7.29	122.62	127.00
35	BA	2034	U	C5-C6-N1	7.29	126.35	122.70
35	BA	362	U	N3-C2-O2	-7.29	117.09	122.20
35	BA	2483	C	N3-C4-C5	7.29	124.82	121.90
1	AA	119	A	C3'-C2'-C1'	7.29	107.33	101.50
35	BA	1403	C	C6-N1-C2	-7.29	117.38	120.30
35	BA	1845	G	C2-N3-C4	7.29	115.55	111.90
36	BB	39	A	C6-N1-C2	7.29	122.97	118.60
1	AA	1067	A	C2-N3-C4	-7.29	106.95	110.60
1	AA	1225	A	O4'-C1'-N9	7.29	114.03	108.20
35	BA	363(E)	U	C5-C6-N1	-7.29	119.06	122.70
1	AA	1059	C	C6-N1-C2	7.29	123.22	120.30
35	BA	784	A	C3'-C2'-C1'	7.29	107.33	101.50
35	BA	860	U	C6-N1-C2	-7.29	116.63	121.00
35	BA	1303	G	C8-N9-C4	-7.29	103.48	106.40
35	BA	1393	A	O4'-C1'-N9	7.29	114.03	108.20
35	BA	2417	C	C3'-C2'-C1'	7.29	107.33	101.50
35	BA	271(S)	G	N9-C4-C5	-7.29	102.48	105.40
35	BA	1612	C	C5-C6-N1	-7.29	117.36	121.00
35	BA	2004	G	C5-N7-C8	7.29	107.94	104.30
35	BA	222	A	O4'-C1'-N9	7.29	114.03	108.20
35	BA	1005	C	N3-C4-C5	7.29	124.81	121.90
35	BA	1899	G	C8-N9-C4	7.29	109.31	106.40
1	AA	238	G	N3-C4-C5	-7.28	124.96	128.60
1	AA	309	G	C1'-O4'-C4'	-7.28	104.07	109.90
51	BT	3	ARG	NE-CZ-NH2	-7.28	116.66	120.30
1	AA	1157	A	C8-N9-C4	7.28	108.71	105.80
1	AA	1262	C	C5-C4-N4	7.28	125.30	120.20
35	BA	271(J)	C	N3-C4-C5	7.28	124.81	121.90
35	BA	1229	G	C5-N7-C8	-7.28	100.66	104.30
5	AE	64	ARG	NE-CZ-NH1	-7.28	116.66	120.30
22	AV	17	C	C3'-C2'-C1'	7.28	107.33	101.50
35	BA	590	A	C8-N9-C4	-7.28	102.89	105.80
1	AA	1324	A	O4'-C1'-N9	7.28	114.02	108.20
7	AG	151	TYR	CB-CG-CD1	-7.28	116.63	121.00
22	AV	55	U	C5-C6-N1	7.28	126.34	122.70
35	BA	244	A	C5-N7-C8	7.28	107.54	103.90
1	AA	1260	C	N1-C2-O2	-7.28	114.53	118.90
1	AA	1497	G	C8-N9-C4	-7.28	103.49	106.40
35	BA	571	A	C5-C6-N1	-7.28	114.06	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1407	C	C2-N3-C4	-7.28	116.26	119.90
15	AO	78	TYR	CB-CG-CD2	-7.28	116.63	121.00
35	BA	137	C	C2-N3-C4	-7.28	116.26	119.90
35	BA	1429	G	C4-C5-N7	7.28	113.71	110.80
35	BA	2500	U	C6-N1-C2	-7.28	116.64	121.00
36	BB	4	C	C2-N3-C4	7.28	123.54	119.90
35	BA	1635	G	C8-N9-C4	7.27	109.31	106.40
35	BA	23	G	C5-C6-O6	7.27	132.96	128.60
35	BA	306	U	C5-C6-N1	7.27	126.33	122.70
1	AA	268	C	N3-C4-C5	7.27	124.81	121.90
35	BA	628	G	N1-C2-N3	7.27	128.26	123.90
35	BA	827	U	C5-C6-N1	-7.27	119.07	122.70
35	BA	2675	A	C2-N3-C4	-7.27	106.97	110.60
16	AP	71	ARG	NE-CZ-NH2	-7.27	116.67	120.30
35	BA	2293	C	N1-C2-O2	7.27	123.26	118.90
35	BA	2727	G	N9-C4-C5	7.27	108.31	105.40
29	B4	51	ASP	CB-CG-OD1	7.26	124.84	118.30
35	BA	1396	U	N1-C1'-C2'	7.26	123.44	114.00
1	AA	1367	C	C2-N3-C4	-7.26	116.27	119.90
1	AA	47	C	C2-N3-C4	7.26	123.53	119.90
1	AA	390	C	N3-C4-C5	7.26	124.80	121.90
1	AA	390	C	N3-C4-N4	-7.26	112.92	118.00
1	AA	1388	C	N1-C2-O2	7.26	123.25	118.90
20	AT	64	ASP	CB-CG-OD1	-7.26	111.77	118.30
35	BA	2569	G	C5-N7-C8	7.26	107.93	104.30
37	BC	54	ARG	NE-CZ-NH2	-7.26	116.67	120.30
35	BA	2657	A	C8-N9-C4	-7.26	102.90	105.80
1	AA	917	G	N3-C2-N2	-7.26	114.82	119.90
22	AV	53	G	C6-N1-C2	7.26	129.45	125.10
35	BA	1313	U	N1-C1'-C2'	7.26	123.43	114.00
36	BB	72	G	C8-N9-C4	-7.26	103.50	106.40
1	AA	1084	G	N3-C4-C5	-7.25	124.97	128.60
1	AA	134	A	N7-C8-N9	-7.25	110.17	113.80
1	AA	371	G	N3-C4-C5	7.25	132.23	128.60
1	AA	519	C	C5-C6-N1	7.25	124.63	121.00
27	B2	31	GLU	OE1-CD-OE2	-7.25	114.59	123.30
35	BA	2693	A	C8-N9-C4	-7.25	102.90	105.80
35	BA	1661	G	C4-C5-N7	7.25	113.70	110.80
1	AA	232	G	C6-N1-C2	-7.25	120.75	125.10
1	AA	1213	A	C4-C5-C6	7.25	120.62	117.00
1	AA	162	A	C8-N9-C4	-7.25	102.90	105.80
35	BA	2315	G	C4-C5-C6	7.25	123.15	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	961	U	N3-C4-O4	-7.25	114.33	119.40
35	BA	2683	C	C5-C6-N1	7.24	124.62	121.00
1	AA	189(D)	C	C5-C4-N4	7.24	125.27	120.20
22	AV	49	G	C8-N9-C4	-7.24	103.50	106.40
35	BA	1509(A)	A	N3-C4-N9	7.24	133.19	127.40
35	BA	2671	A	N7-C8-N9	-7.24	110.18	113.80
35	BA	816	C	C5-C6-N1	-7.24	117.38	121.00
35	BA	1644	C	N1-C2-O2	7.24	123.24	118.90
35	BA	1850	G	N3-C4-N9	7.24	130.34	126.00
1	AA	235	C	N1-C2-O2	7.24	123.24	118.90
1	AA	1288	A	C6-C5-N7	7.24	137.37	132.30
35	BA	1343	G	N1-C2-N3	-7.24	119.56	123.90
35	BA	1996	C	N1-C2-O2	-7.24	114.56	118.90
1	AA	1133	G	C6-N1-C2	7.24	129.44	125.10
1	AA	1377	A	C3'-C2'-C1'	-7.24	95.71	101.50
35	BA	2567	G	C5-N7-C8	-7.23	100.68	104.30
35	BA	12	U	N3-C2-O2	-7.23	117.14	122.20
35	BA	279	C	C6-N1-C2	-7.23	117.41	120.30
35	BA	1828	G	N3-C4-N9	7.23	130.34	126.00
35	BA	2587	A	N9-C4-C5	7.23	108.69	105.80
1	AA	431	A	C4-C5-C6	7.23	120.61	117.00
1	AA	755	G	C5-C6-N1	-7.23	107.89	111.50
35	BA	879	G	N1-C6-O6	-7.23	115.56	119.90
1	AA	517	G	N7-C8-N9	7.23	116.71	113.10
35	BA	1786	A	N9-C1'-C2'	7.23	123.40	114.00
1	AA	113	G	C8-N9-C4	7.22	109.29	106.40
1	AA	316	G	C4-C5-N7	-7.22	107.91	110.80
22	AV	24	U	C5-C4-O4	7.22	130.24	125.90
40	BF	46	ARG	NE-CZ-NH1	7.22	123.91	120.30
1	AA	399	G	C5-N7-C8	-7.22	100.69	104.30
1	AA	1197	G	O4'-C1'-N9	-7.22	102.42	108.20
35	BA	1697	G	C2-N3-C4	7.22	115.51	111.90
35	BA	2072	G	C5'-C4'-O4'	7.22	117.77	109.10
35	BA	2256	G	C8-N9-C4	7.22	109.29	106.40
22	AV	8	U	C6-N1-C2	-7.22	116.67	121.00
35	BA	2238	G	N9-C4-C5	-7.22	102.51	105.40
35	BA	2548	G	C8-N9-C4	-7.22	103.51	106.40
35	BA	2895	U	C5-C4-O4	7.22	130.23	125.90
1	AA	63	C	C2-N3-C4	7.22	123.51	119.90
1	AA	1498	U	C4'-C3'-C2'	7.22	109.82	102.60
35	BA	1690	A	C5-C6-N1	-7.22	114.09	117.70
35	BA	2295	C	C4-C5-C6	-7.22	113.79	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2465	C	O4'-C1'-N1	7.22	113.97	108.20
1	AA	138	G	C5-C6-N1	-7.21	107.89	111.50
1	AA	222	U	N3-C4-C5	-7.21	110.27	114.60
1	AA	1379	G	N7-C8-N9	7.21	116.71	113.10
35	BA	304	G	N3-C2-N2	-7.21	114.85	119.90
35	BA	829	A	N9-C4-C5	7.21	108.69	105.80
35	BA	1315	C	N3-C4-N4	7.21	123.05	118.00
1	AA	189	G	C8-N9-C4	-7.21	103.52	106.40
35	BA	202	U	N3-C2-O2	7.21	127.25	122.20
35	BA	2003	G	N3-C4-C5	-7.21	124.99	128.60
35	BA	2030	A	C2-N3-C4	-7.21	106.99	110.60
35	BA	2238	G	C2-N3-C4	-7.21	108.29	111.90
35	BA	21	A	N9-C4-C5	7.21	108.68	105.80
22	AV	5	G	C8-N9-C4	7.21	109.28	106.40
35	BA	1828	G	N9-C4-C5	-7.21	102.52	105.40
1	AA	133	U	C4-C5-C6	7.21	124.02	119.70
35	BA	654	A	C8-N9-C4	-7.21	102.92	105.80
35	BA	1676	A	C5-C6-N1	-7.21	114.10	117.70
1	AA	792	A	O4'-C1'-N9	7.21	113.96	108.20
35	BA	17	G	O4'-C1'-N9	7.21	113.96	108.20
1	AA	432	A	O4'-C1'-N9	7.20	113.96	108.20
35	BA	378	C	N3-C4-C5	7.20	124.78	121.90
35	BA	1068	G	N7-C8-N9	7.20	116.70	113.10
35	BA	1990	C	C4-C5-C6	7.20	121.00	117.40
1	AA	132	C	C2-N3-C4	7.20	123.50	119.90
1	AA	403	C	C5-C4-N4	7.20	125.24	120.20
1	AA	532	A	C5'-C4'-O4'	-7.20	100.46	109.10
35	BA	654(K)	C	C5-C6-N1	7.20	124.60	121.00
35	BA	2400	G	N1-C6-O6	-7.20	115.58	119.90
1	AA	331	G	N9-C4-C5	-7.20	102.52	105.40
35	BA	13	A	C4-C5-N7	7.20	114.30	110.70
35	BA	272(I)	U	O4'-C1'-N1	-7.20	102.44	108.20
35	BA	2612	C	C4-C5-C6	7.20	121.00	117.40
1	AA	322	C	N3-C4-C5	-7.20	119.02	121.90
1	AA	1031	G	C8-N9-C4	7.20	109.28	106.40
1	AA	1109	C	C6-N1-C2	-7.20	117.42	120.30
1	AA	1115	C	C6-N1-C2	-7.20	117.42	120.30
35	BA	290	G	C6-N1-C2	-7.20	120.78	125.10
48	BQ	119	ARG	NE-CZ-NH2	-7.19	116.70	120.30
35	BA	916	G	N1-C6-O6	7.19	124.22	119.90
35	BA	1942	C	C2-N3-C4	-7.19	116.30	119.90
35	BA	2123	G	N1-C2-N3	7.19	128.22	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	695	A	N9-C4-C5	7.19	108.68	105.80
1	AA	1088	G	C4-C5-N7	7.19	113.68	110.80
35	BA	881	G	N7-C8-N9	-7.19	109.50	113.10
35	BA	1266	G	N1-C2-N3	7.19	128.21	123.90
1	AA	1037	C	N3-C4-C5	7.19	124.78	121.90
35	BA	569	U	O4'-C1'-N1	-7.19	102.45	108.20
35	BA	2678	C	C2-N3-C4	7.19	123.49	119.90
35	BA	2857	G	C8-N9-C4	-7.19	103.53	106.40
1	AA	306	G	C5-C6-O6	-7.19	124.29	128.60
1	AA	350	G	C2-N3-C4	7.19	115.49	111.90
1	AA	1069	C	N3-C4-C5	-7.19	119.03	121.90
1	AA	267	C	C5-C6-N1	-7.18	117.41	121.00
1	AA	615	C	N1-C2-N3	7.18	124.23	119.20
8	AH	102	ARG	NE-CZ-NH1	7.18	123.89	120.30
35	BA	290	G	C5-C6-O6	-7.18	124.29	128.60
35	BA	2375	G	C4-C5-C6	7.18	123.11	118.80
35	BA	2640	G	C5-C6-N1	7.18	115.09	111.50
35	BA	2644	G	N7-C8-N9	7.18	116.69	113.10
1	AA	204	U	C2-N3-C4	-7.18	122.69	127.00
24	AY	170	ARG	NE-CZ-NH1	7.18	123.89	120.30
1	AA	7	G	C5'-C4'-C3'	-7.18	104.51	116.00
1	AA	378	G	C5-C6-N1	7.18	115.09	111.50
35	BA	958	U	N1-C2-N3	-7.18	110.59	114.90
35	BA	1477	A	N7-C8-N9	7.18	117.39	113.80
1	AA	545	C	N3-C4-C5	-7.18	119.03	121.90
1	AA	633	G	N9-C4-C5	-7.18	102.53	105.40
1	AA	1168	A	C8-N9-C4	7.18	108.67	105.80
35	BA	71	A	C6-N1-C2	-7.18	114.29	118.60
35	BA	1584	C	N1-C1'-C2'	7.18	123.33	114.00
1	AA	425	G	C6-C5-N7	7.18	134.71	130.40
35	BA	315	G	C5'-C4'-C3'	-7.18	104.52	116.00
35	BA	931	G	O4'-C1'-N9	-7.18	102.46	108.20
35	BA	1137	G	N3-C2-N2	-7.18	114.88	119.90
35	BA	2757	A	C5-N7-C8	7.18	107.49	103.90
35	BA	2360	A	N1-C6-N6	7.17	122.90	118.60
35	BA	635	C	N3-C2-O2	-7.17	116.88	121.90
35	BA	763	G	C5-C6-O6	7.17	132.90	128.60
35	BA	2043	C	N3-C4-C5	-7.17	119.03	121.90
1	AA	150	C	C1'-O4'-C4'	7.17	115.64	109.90
1	AA	275	G	C2-N3-C4	7.17	115.48	111.90
1	AA	866	C	C2-N3-C4	-7.17	116.31	119.90
1	AA	1268	A	C2-N3-C4	7.17	114.18	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	72	G	C4-C5-N7	-7.17	107.93	110.80
35	BA	950	G	C5-C6-O6	7.17	132.90	128.60
35	BA	2028	U	N3-C2-O2	7.17	127.22	122.20
35	BA	2686	G	N9-C4-C5	-7.16	102.53	105.40
1	AA	1480	G	C2-N3-C4	7.16	115.48	111.90
35	BA	223	A	C8-N9-C4	-7.16	102.94	105.80
1	AA	370	C	N3-C4-C5	-7.16	119.04	121.90
1	AA	533	A	C8-N9-C4	-7.16	102.94	105.80
1	AA	732	C	C4-C5-C6	-7.16	113.82	117.40
1	AA	1030(D)	A	C5-C6-N1	-7.16	114.12	117.70
35	BA	1633	G	O4'-C1'-N9	-7.16	102.47	108.20
35	BA	2544	G	O4'-C1'-N9	7.16	113.93	108.20
1	AA	396	G	N1-C6-O6	-7.16	115.61	119.90
35	BA	139(A)	G	C5-C6-N1	7.16	115.08	111.50
35	BA	1114	G	C5-C6-O6	-7.16	124.31	128.60
35	BA	33	U	C6-N1-C2	7.15	125.29	121.00
35	BA	539	G	C4-C5-C6	7.15	123.09	118.80
35	BA	2396	G	C6-C5-N7	7.15	134.69	130.40
35	BA	2060	A	C5-C6-N1	7.15	121.28	117.70
35	BA	2581	G	C5-C6-O6	-7.15	124.31	128.60
1	AA	1256	A	N1-C2-N3	-7.15	125.73	129.30
35	BA	271	A	N3-C4-C5	7.15	131.80	126.80
35	BA	798	G	C2-N3-C4	-7.15	108.33	111.90
35	BA	1985	G	N9-C4-C5	-7.15	102.54	105.40
35	BA	2303	G	C2-N3-C4	7.15	115.47	111.90
36	BB	67	G	C5-C6-O6	-7.15	124.31	128.60
1	AA	1218	C	N3-C4-C5	7.15	124.76	121.90
35	BA	2549	G	N7-C8-N9	7.15	116.67	113.10
35	BA	19	C	C6-N1-C2	7.15	123.16	120.30
35	BA	644	A	C5-C6-N1	7.15	121.27	117.70
5	AE	14	ARG	NE-CZ-NH2	-7.14	116.73	120.30
35	BA	80	G	N7-C8-N9	7.14	116.67	113.10
35	BA	1618	A	N9-C4-C5	-7.14	102.94	105.80
1	AA	794	A	C8-N9-C4	7.14	108.66	105.80
35	BA	2189	U	N1-C2-N3	-7.14	110.61	114.90
35	BA	2859	G	N7-C8-N9	7.14	116.67	113.10
38	BD	218	ARG	NE-CZ-NH1	-7.14	116.73	120.30
1	AA	1176	A	N7-C8-N9	7.14	117.37	113.80
35	BA	1748	G	C5-C6-O6	-7.14	124.32	128.60
35	BA	2252	G	N1-C2-N3	-7.14	119.62	123.90
35	BA	687	C	N1-C2-O2	7.14	123.18	118.90
35	BA	1707	G	C8-N9-C4	-7.14	103.55	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	107	G	C6-N1-C2	-7.14	120.82	125.10
1	AA	1423	G	N7-C8-N9	-7.14	109.53	113.10
35	BA	1315	C	C4-C5-C6	7.14	120.97	117.40
1	AA	47	C	N3-C4-C5	-7.14	119.05	121.90
1	AA	600	C	C5-C6-N1	7.14	124.57	121.00
35	BA	654(N)	G	C8-N9-C4	-7.14	103.55	106.40
35	BA	1762	A	C2-N3-C4	7.14	114.17	110.60
1	AA	337	C	N3-C2-O2	7.13	126.89	121.90
36	BB	109	C	C2-N3-C4	-7.13	116.33	119.90
36	BB	115	G	C4-C5-N7	-7.13	107.95	110.80
1	AA	702	A	N9-C4-C5	7.13	108.65	105.80
1	AA	1198	G	N1-C2-N3	7.13	128.18	123.90
35	BA	270	A	O4'-C1'-N9	7.13	113.91	108.20
35	BA	2679	A	C8-N9-C4	-7.13	102.95	105.80
1	AA	771	G	N3-C4-C5	-7.13	125.03	128.60
1	AA	555	C	N3-C4-C5	7.13	124.75	121.90
1	AA	1098	C	N1-C2-O2	-7.13	114.62	118.90
35	BA	1252	G	N1-C6-O6	7.13	124.18	119.90
35	BA	2874	C	C2-N3-C4	-7.13	116.34	119.90
35	BA	126	A	N1-C2-N3	-7.13	125.74	129.30
35	BA	457	A	N1-C6-N6	-7.13	114.32	118.60
35	BA	1594	G	C2-N3-C4	7.13	115.46	111.90
35	BA	2012	G	N9-C4-C5	-7.13	102.55	105.40
1	AA	667	G	C5-C6-N1	7.12	115.06	111.50
7	AG	149	ARG	NE-CZ-NH2	-7.12	116.74	120.30
1	AA	1203	C	C4-C5-C6	7.12	120.96	117.40
35	BA	609	A	N1-C2-N3	-7.12	125.74	129.30
35	BA	1440	G	C5-N7-C8	-7.12	100.74	104.30
36	BB	61	G	C8-N9-C4	7.12	109.25	106.40
22	AV	6	G	N9-C4-C5	-7.12	102.55	105.40
35	BA	1509(A)	A	N1-C2-N3	7.12	132.86	129.30
1	AA	1221	G	C5-C6-O6	7.12	132.87	128.60
35	BA	1178	C	C4-C5-C6	7.12	120.96	117.40
1	AA	793	U	N1-C2-O2	-7.12	117.82	122.80
35	BA	122	G	N9-C1'-C2'	-7.12	104.17	112.00
35	BA	391	G	C5-C6-N1	7.12	115.06	111.50
35	BA	2203	U	C5-C6-N1	7.12	126.26	122.70
1	AA	1324	A	N1-C6-N6	7.12	122.87	118.60
35	BA	244	A	C4-C5-C6	-7.12	113.44	117.00
30	B5	16	ARG	NE-CZ-NH2	-7.12	116.74	120.30
35	BA	1407	C	N3-C4-C5	7.12	124.75	121.90
35	BA	1667	G	N3-C4-C5	7.12	132.16	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	622	A	C2-N3-C4	7.11	114.16	110.60
1	AA	1258	G	N9-C4-C5	7.11	108.25	105.40
24	AY	11	ARG	NE-CZ-NH1	7.11	123.86	120.30
35	BA	2111	C	C4-C5-C6	-7.11	113.84	117.40
1	AA	576	G	N3-C4-C5	-7.11	125.04	128.60
1	AA	1103	C	C1'-O4'-C4'	7.11	115.59	109.90
1	AA	134	A	O4'-C1'-N9	7.11	113.89	108.20
1	AA	820	U	O4'-C1'-N1	7.11	113.89	108.20
1	AA	967	C	C2-N3-C4	-7.11	116.34	119.90
35	BA	525	U	N3-C4-C5	7.11	118.87	114.60
35	BA	628	G	C2-N3-C4	-7.11	108.34	111.90
35	BA	2507	C	N3-C4-N4	7.11	122.98	118.00
1	AA	1314	C	N3-C4-N4	7.11	122.98	118.00
35	BA	616	G	O4'-C1'-N9	-7.11	102.51	108.20
35	BA	2177	C	C2-N3-C4	7.11	123.45	119.90
35	BA	2613	U	N3-C2-O2	-7.11	117.22	122.20
1	AA	733	A	C4-C5-C6	-7.11	113.45	117.00
1	AA	1289	A	C8-N9-C4	7.11	108.64	105.80
1	AA	877	C	N3-C4-C5	-7.10	119.06	121.90
35	BA	654(M)	C	C5-C6-N1	7.10	124.55	121.00
35	BA	1083	U	C2-N3-C4	-7.10	122.74	127.00
35	BA	1215	G	C4-C5-N7	7.10	113.64	110.80
35	BA	1957	C	C5-C6-N1	7.10	124.55	121.00
1	AA	445	G	C2-N3-C4	7.10	115.45	111.90
1	AA	631	G	C6-N1-C2	-7.10	120.84	125.10
1	AA	1276	G	C5-C6-N1	-7.10	107.95	111.50
35	BA	1646	C	O4'-C1'-N1	7.10	113.88	108.20
1	AA	1434	A	N7-C8-N9	-7.10	110.25	113.80
1	AA	520	A	N7-C8-N9	-7.10	110.25	113.80
35	BA	566	U	C6-N1-C2	-7.10	116.74	121.00
35	BA	812	C	C6-N1-C2	-7.10	117.46	120.30
35	BA	956	G	O4'-C1'-N9	7.10	113.88	108.20
1	AA	1046	A	C5-C6-N1	7.10	121.25	117.70
35	BA	837	C	C2-N3-C4	-7.10	116.35	119.90
35	BA	2377	A	N7-C8-N9	7.10	117.35	113.80
35	BA	825	C	O4'-C1'-N1	7.09	113.88	108.20
35	BA	952	G	C2-N3-C4	-7.09	108.35	111.90
35	BA	1281	G	N7-C8-N9	7.09	116.65	113.10
35	BA	1315	C	C5-C4-N4	-7.09	115.23	120.20
35	BA	1668	A	O4'-C1'-N9	7.09	113.88	108.20
35	BA	1758	G	N1-C6-O6	-7.09	115.64	119.90
35	BA	2861	G	N1-C6-O6	7.09	124.16	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1151	A	C4-C5-C6	-7.09	113.45	117.00
35	BA	272(C)	G	C5-N7-C8	7.09	107.85	104.30
35	BA	2664	G	N3-C2-N2	-7.09	114.94	119.90
1	AA	533	A	C5-N7-C8	-7.09	100.36	103.90
1	AA	1316	G	O4'-C1'-N9	7.09	113.87	108.20
35	BA	110	G	N9-C4-C5	7.09	108.24	105.40
35	BA	1543	C	N3-C4-C5	7.09	124.74	121.90
50	BS	89	ARG	NH1-CZ-NH2	-7.09	111.60	119.40
35	BA	1554	A	N1-C6-N6	-7.09	114.35	118.60
1	AA	1398	A	O5'-P-OP1	-7.09	99.32	105.70
35	BA	1601	G	C5-C6-N1	-7.09	107.96	111.50
1	AA	314	C	O4'-C4'-C3'	7.09	111.77	106.10
1	AA	1127	G	C6-N1-C2	7.09	129.35	125.10
35	BA	792	G	C5-C6-O6	-7.09	124.35	128.60
35	BA	2762	G	N7-C8-N9	-7.09	109.56	113.10
35	BA	2823	A	N1-C6-N6	-7.08	114.35	118.60
1	AA	225	C	C5-C6-N1	7.08	124.54	121.00
1	AA	902	G	C4-C5-N7	7.08	113.63	110.80
1	AA	1059	C	C5-C4-N4	7.08	125.16	120.20
35	BA	1136	G	N1-C6-O6	7.08	124.15	119.90
36	BB	93	G	C5-N7-C8	7.08	107.84	104.30
1	AA	1426	C	C6-N1-C2	-7.08	117.47	120.30
1	AA	1171	G	C6-C5-N7	7.08	134.65	130.40
1	AA	1180	A	N1-C2-N3	-7.08	125.76	129.30
35	BA	1543	C	C5-C4-N4	-7.08	115.24	120.20
35	BA	1756	G	C5-C6-O6	7.08	132.85	128.60
1	AA	149	A	C4-C5-C6	7.08	120.54	117.00
1	AA	775	G	N3-C4-C5	-7.08	125.06	128.60
35	BA	985	C	C2-N3-C4	-7.08	116.36	119.90
35	BA	2458	G	C2-N3-C4	-7.08	108.36	111.90
35	BA	2826	A	C5-N7-C8	7.08	107.44	103.90
35	BA	2625	G	C5-N7-C8	-7.08	100.76	104.30
1	AA	131	C	N1-C2-O2	7.08	123.15	118.90
1	AA	340	U	C5-C6-N1	7.08	126.24	122.70
1	AA	1500	A	C2-N3-C4	-7.08	107.06	110.60
24	AY	396	ARG	NE-CZ-NH1	7.08	123.84	120.30
35	BA	2517	C	O4'-C1'-N1	7.08	113.86	108.20
36	BB	30	C	N3-C2-O2	-7.08	116.95	121.90
35	BA	945	A	C5-C6-N1	-7.07	114.16	117.70
35	BA	1675	C	N3-C4-N4	7.07	122.95	118.00
35	BA	769	G	N3-C4-C5	7.07	132.14	128.60
1	AA	290	C	N3-C4-C5	-7.07	119.07	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1162	C	C2-N3-C4	7.07	123.44	119.90
1	AA	1487	G	N7-C8-N9	7.07	116.64	113.10
35	BA	271(Z)	C	N3-C4-N4	7.07	122.95	118.00
35	BA	431	U	C5-C4-O4	7.07	130.14	125.90
1	AA	1100	C	N1-C2-O2	-7.07	114.66	118.90
36	BB	69	G	C5-C6-N1	-7.07	107.97	111.50
35	BA	2722	G	C4-C5-C6	7.07	123.04	118.80
35	BA	1209	G	N3-C4-N9	-7.07	121.76	126.00
1	AA	179	A	N7-C8-N9	-7.06	110.27	113.80
1	AA	237	C	C5-C6-N1	-7.06	117.47	121.00
1	AA	1166	G	N3-C4-C5	-7.06	125.07	128.60
35	BA	2152	G	N1-C6-O6	-7.06	115.66	119.90
35	BA	2187	G	C5-N7-C8	-7.06	100.77	104.30
49	BR	12	ARG	NE-CZ-NH2	-7.06	116.77	120.30
35	BA	648	G	C4-C5-N7	-7.06	107.98	110.80
35	BA	751	A	C2-N3-C4	-7.06	107.07	110.60
35	BA	156	U	N1-C2-O2	7.06	127.74	122.80
36	BB	68	C	N3-C2-O2	-7.06	116.96	121.90
35	BA	558	G	C8-N9-C4	7.06	109.22	106.40
1	AA	43	C	C5-C6-N1	-7.06	117.47	121.00
1	AA	183	G	C2-N3-C4	-7.05	108.37	111.90
1	AA	428	G	C3'-C2'-C1'	7.05	107.14	101.50
35	BA	752	A	C4-C5-C6	-7.05	113.47	117.00
35	BA	2367	G	C2-N3-C4	7.05	115.43	111.90
35	BA	2801(A)	A	N1-C6-N6	-7.05	114.37	118.60
41	BG	22	ARG	NE-CZ-NH1	7.05	123.83	120.30
1	AA	734	G	C6-N1-C2	7.05	129.33	125.10
1	AA	1269	A	C2-N3-C4	7.05	114.12	110.60
35	BA	47	C	C2-N3-C4	7.05	123.42	119.90
35	BA	2260	C	C5-C6-N1	7.05	124.52	121.00
35	BA	2704	C	C2-N3-C4	-7.05	116.38	119.90
36	BB	61	G	N1-C6-O6	7.05	124.13	119.90
1	AA	127	G	C4-C5-N7	7.05	113.62	110.80
35	BA	962	G	C2-N3-C4	7.05	115.42	111.90
35	BA	1434	A	C4-C5-N7	7.05	114.22	110.70
35	BA	2220	G	C5-C6-O6	7.05	132.83	128.60
1	AA	515	G	C5'-C4'-O4'	7.05	117.56	109.10
1	AA	631	G	C6-C5-N7	7.05	134.63	130.40
35	BA	752	A	C4'-C3'-C2'	7.05	109.65	102.60
35	BA	1409	C	C6-N1-C2	7.05	123.12	120.30
35	BA	119	A	C2-N3-C4	-7.04	107.08	110.60
35	BA	962	G	N9-C4-C5	7.04	108.22	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	792	A	C6-N1-C2	7.04	122.83	118.60
1	AA	934	C	N3-C4-C5	7.04	124.72	121.90
1	AA	1197	G	N1-C2-N3	7.04	128.13	123.90
35	BA	23	G	C5-C6-N1	-7.04	107.98	111.50
1	AA	711	G	C5-N7-C8	7.04	107.82	104.30
35	BA	245	G	N7-C8-N9	-7.04	109.58	113.10
35	BA	743	G	N1-C2-N3	7.04	128.12	123.90
35	BA	867	C	N1-C2-O2	7.04	123.12	118.90
35	BA	930	U	C2-N1-C1'	7.04	126.15	117.70
35	BA	1104	C	C2-N3-C4	-7.04	116.38	119.90
35	BA	1119	C	C6-N1-C2	-7.04	117.48	120.30
35	BA	1277	G	C5-C6-O6	-7.04	124.38	128.60
48	BQ	137	TYR	CB-CG-CD2	-7.04	116.78	121.00
35	BA	2799	C	C2-N3-C4	-7.04	116.38	119.90
35	BA	691	C	N3-C4-C5	7.04	124.72	121.90
35	BA	2636	U	N3-C4-O4	7.04	124.33	119.40
35	BA	2826	A	N7-C8-N9	-7.04	110.28	113.80
1	AA	149	A	C8-N9-C4	-7.04	102.98	105.80
1	AA	1089	G	C4-C5-N7	-7.04	107.99	110.80
35	BA	1171	G	C6-C5-N7	-7.04	126.18	130.40
35	BA	1513	C	N3-C2-O2	7.04	126.82	121.90
1	AA	916	G	N9-C4-C5	7.03	108.21	105.40
35	BA	614(A)	U	N1-C1'-C2'	7.03	123.14	114.00
35	BA	1021	A	C6-C5-N7	-7.03	127.38	132.30
35	BA	1388	G	C4-C5-N7	-7.03	107.99	110.80
35	BA	1945	G	C3'-C2'-C1'	7.03	107.13	101.50
35	BA	2034	U	C5-C4-O4	-7.03	121.68	125.90
1	AA	167	G	C2-N3-C4	-7.03	108.39	111.90
35	BA	317	G	C5-C6-N1	7.03	115.02	111.50
35	BA	399	G	C4-C5-N7	-7.03	107.99	110.80
35	BA	2228	G	C2-N3-C4	-7.03	108.39	111.90
35	BA	2674	G	C8-N9-C4	-7.03	103.59	106.40
37	BC	214	TYR	CB-CG-CD1	7.03	125.22	121.00
1	AA	764	C	C6-N1-C2	-7.03	117.49	120.30
35	BA	271(G)	C	N3-C4-C5	-7.03	119.09	121.90
35	BA	689	A	C6-N1-C2	7.03	122.82	118.60
35	BA	692	C	C6-N1-C2	-7.03	117.49	120.30
35	BA	2087	G	C5-N7-C8	-7.03	100.79	104.30
35	BA	74	A	C5-C6-N6	7.03	129.32	123.70
35	BA	728	G	C5-N7-C8	7.03	107.81	104.30
35	BA	1260	G	C6-C5-N7	7.03	134.62	130.40
1	AA	945	G	N3-C4-N9	-7.03	121.78	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1461	G	C5-C6-N1	7.03	115.01	111.50
35	BA	2777	G	C8-N9-C4	7.02	109.21	106.40
35	BA	606	U	N3-C4-O4	7.02	124.32	119.40
35	BA	1257	C	C6-N1-C2	-7.02	117.49	120.30
35	BA	2193	G	C5-N7-C8	7.02	107.81	104.30
35	BA	156	U	C4-C5-C6	7.02	123.91	119.70
35	BA	332	A	N1-C2-N3	-7.02	125.79	129.30
37	BC	211	ARG	NE-CZ-NH1	-7.02	116.79	120.30
1	AA	164	U	C4-C5-C6	-7.02	115.49	119.70
1	AA	169	C	N3-C4-N4	7.02	122.91	118.00
1	AA	314	C	C2-N3-C4	7.02	123.41	119.90
11	AK	120	ARG	NE-CZ-NH1	-7.02	116.79	120.30
35	BA	1205	U	O4'-C1'-N1	7.02	113.81	108.20
35	BA	2070	G	C4-C5-N7	-7.02	107.99	110.80
1	AA	1250	A	N3-C4-C5	-7.02	121.89	126.80
35	BA	2680	C	C5-C6-N1	7.02	124.51	121.00
35	BA	39	C	C2-N3-C4	7.01	123.41	119.90
35	BA	1809	A	N1-C6-N6	-7.01	114.39	118.60
35	BA	2638	G	N1-C6-O6	7.01	124.11	119.90
35	BA	452	G	C6-C5-N7	-7.01	126.19	130.40
35	BA	2541	A	C5-N7-C8	-7.01	100.39	103.90
28	B3	30	ARG	NE-CZ-NH1	-7.01	116.79	120.30
35	BA	861	A	N7-C8-N9	7.01	117.31	113.80
1	AA	409	G	C5-C6-N1	7.01	115.00	111.50
35	BA	86	C	C5-C4-N4	7.01	125.11	120.20
35	BA	1478	G	N7-C8-N9	-7.01	109.59	113.10
1	AA	238	G	C5-N7-C8	7.01	107.80	104.30
1	AA	924	C	C5-C6-N1	7.01	124.50	121.00
1	AA	937	A	C6-C5-N7	-7.01	127.39	132.30
1	AA	781	A	C2-N3-C4	7.01	114.10	110.60
23	AX	13	A	N7-C8-N9	7.01	117.30	113.80
35	BA	1435	G	N7-C8-N9	7.01	116.60	113.10
35	BA	2615	U	C4-C5-C6	7.00	123.90	119.70
35	BA	2676	C	N3-C4-C5	7.00	124.70	121.90
1	AA	1114	C	N1-C2-O2	-7.00	114.70	118.90
35	BA	537	C	C5-C6-N1	-7.00	117.50	121.00
35	BA	663	G	C4-C5-C6	7.00	123.00	118.80
35	BA	210	C	C4-C5-C6	-7.00	113.90	117.40
35	BA	292	C	O4'-C1'-N1	7.00	113.80	108.20
35	BA	2231	C	N3-C2-O2	7.00	126.80	121.90
1	AA	232	G	N1-C2-N3	7.00	128.10	123.90
1	AA	1505	G	C6-N1-C2	7.00	129.30	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	133	C	N3-C4-N4	-7.00	113.10	118.00
35	BA	874	G	C5-C6-N1	-7.00	108.00	111.50
35	BA	1481	U	C4-C5-C6	-7.00	115.50	119.70
35	BA	1886	C	C5-C6-N1	7.00	124.50	121.00
35	BA	1392	A	C6-N1-C2	-7.00	114.40	118.60
35	BA	1481	U	C5-C6-N1	7.00	126.20	122.70
35	BA	1844	C	C2-N3-C4	-7.00	116.40	119.90
35	BA	2500	U	C5-C6-N1	7.00	126.20	122.70
36	BB	25	A	C4-C5-N7	-7.00	107.20	110.70
36	BB	94	C	C2-N3-C4	-7.00	116.40	119.90
1	AA	1105	A	N1-C6-N6	7.00	122.80	118.60
35	BA	57	C	C4-C5-C6	7.00	120.90	117.40
35	BA	192	C	C5-C6-N1	-7.00	117.50	121.00
35	BA	1210	A	O4'-C1'-N9	-6.99	102.61	108.20
1	AA	949	A	N1-C6-N6	-6.99	114.41	118.60
22	AV	31	G	N1-C2-N3	-6.99	119.70	123.90
35	BA	1301	A	C5-C6-N1	-6.99	114.20	117.70
1	AA	1101	A	N3-C4-C5	-6.99	121.91	126.80
24	AY	78	ARG	NE-CZ-NH1	6.99	123.80	120.30
1	AA	221	C	N1-C2-O2	6.99	123.09	118.90
35	BA	397	G	C5-C6-O6	-6.99	124.41	128.60
36	BB	101	G	C5-C6-N1	6.99	115.00	111.50
1	AA	927	G	C2-N3-C4	6.99	115.39	111.90
1	AA	140	A	C2-N3-C4	-6.99	107.11	110.60
1	AA	634	C	C2-N3-C4	-6.99	116.41	119.90
1	AA	640	A	C8-N9-C4	6.99	108.59	105.80
35	BA	242	G	N7-C8-N9	-6.99	109.61	113.10
35	BA	477	A	C5-N7-C8	6.99	107.39	103.90
35	BA	505	A	C4-C5-C6	-6.99	113.51	117.00
1	AA	1122	U	C5-C4-O4	6.98	130.09	125.90
1	AA	1200	C	O4'-C1'-N1	6.98	113.79	108.20
1	AA	193	C	C6-N1-C2	-6.98	117.51	120.30
1	AA	1030(D)	A	N1-C2-N3	6.98	132.79	129.30
9	AI	92	TYR	CG-CD1-CE1	-6.98	115.71	121.30
35	BA	705	A	N3-C4-N9	-6.98	121.81	127.40
35	BA	1029	A	C4-C5-N7	-6.98	107.21	110.70
35	BA	1507	A	N9-C4-C5	-6.98	103.01	105.80
35	BA	132	G	C6-N1-C2	6.98	129.29	125.10
35	BA	1051	G	N3-C4-C5	-6.98	125.11	128.60
35	BA	1159	U	C5-C6-N1	6.98	126.19	122.70
35	BA	1363	C	C2-N3-C4	6.98	123.39	119.90
35	BA	2283	C	C6-N1-C2	-6.98	117.51	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2565	A	N1-C6-N6	6.98	122.79	118.60
1	AA	616	G	N1-C2-N3	6.98	128.09	123.90
35	BA	1896	G	N3-C4-C5	6.98	132.09	128.60
22	AV	12	G	C5-C6-N1	6.98	114.99	111.50
35	BA	1880	C	O4'-C1'-N1	-6.98	102.62	108.20
1	AA	295	C	C5-C4-N4	6.97	125.08	120.20
35	BA	376	C	C6-N1-C2	-6.97	117.51	120.30
1	AA	388	G	C5-C6-O6	6.97	132.78	128.60
35	BA	1500	G	C4-C5-N7	6.97	113.59	110.80
1	AA	883	C	N1-C2-O2	-6.97	114.72	118.90
35	BA	1629	U	C4-C5-C6	-6.97	115.52	119.70
35	BA	2452	C	N1-C2-O2	-6.97	114.72	118.90
35	BA	2635	C	N3-C4-C5	-6.97	119.11	121.90
35	BA	2869	G	C5-C6-O6	-6.97	124.42	128.60
1	AA	867	G	C5-C6-N1	-6.97	108.02	111.50
1	AA	1148	U	C5-C4-O4	-6.97	121.72	125.90
3	AC	201	TYR	CB-CG-CD2	-6.97	116.82	121.00
35	BA	1920	C	C6-N1-C2	-6.97	117.51	120.30
35	BA	2052	G	N3-C2-N2	-6.97	115.02	119.90
35	BA	2658	C	N1-C2-N3	6.97	124.08	119.20
16	AP	32	TYR	CB-CG-CD1	6.96	125.18	121.00
53	BV	83	ARG	NE-CZ-NH1	6.96	123.78	120.30
16	AP	57	ARG	NE-CZ-NH1	-6.96	116.82	120.30
35	BA	1990	C	N1-C2-O2	-6.96	114.72	118.90
1	AA	793	U	N1-C2-N3	6.96	119.08	114.90
1	AA	876	G	C8-N9-C4	-6.96	103.62	106.40
35	BA	327	G	N1-C6-O6	6.96	124.08	119.90
35	BA	1998	G	C8-N9-C4	-6.96	103.62	106.40
35	BA	2337	G	C8-N9-C4	-6.96	103.62	106.40
1	AA	926	G	O4'-C1'-N9	-6.96	102.63	108.20
1	AA	1071	C	C2-N3-C4	-6.96	116.42	119.90
35	BA	243	U	N1-C2-O2	-6.96	117.93	122.80
35	BA	244	A	N7-C8-N9	-6.96	110.32	113.80
35	BA	2101	G	C3'-C2'-C1'	-6.96	95.93	101.50
35	BA	2457	U	C6-N1-C2	-6.96	116.83	121.00
35	BA	2484	G	C3'-C2'-C1'	-6.96	95.94	101.50
35	BA	1818	U	C4-C5-C6	6.96	123.87	119.70
36	BB	42	C	N3-C4-C5	-6.96	119.12	121.90
1	AA	123	C	C2-N3-C4	-6.95	116.42	119.90
1	AA	1124	G	N9-C4-C5	-6.95	102.62	105.40
35	BA	66	C	N3-C4-C5	6.95	124.68	121.90
35	BA	73	A	C2-N3-C4	6.95	114.08	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1123	C	C6-N1-C2	6.95	123.08	120.30
35	BA	1615	C	C5-C4-N4	-6.95	115.33	120.20
1	AA	330	C	C5'-C4'-C3'	-6.95	104.88	116.00
35	BA	2470	G	C5'-C4'-O4'	6.95	117.44	109.10
35	BA	2843	G	C6-C5-N7	6.95	134.57	130.40
1	AA	658	G	C5-C6-N1	6.95	114.97	111.50
1	AA	1123	A	C8-N9-C4	-6.95	103.02	105.80
35	BA	1744	C	C2-N3-C4	-6.95	116.42	119.90
35	BA	1908	C	N3-C2-O2	-6.95	117.03	121.90
1	AA	680	C	C4-C5-C6	-6.95	113.92	117.40
1	AA	1022	G	C5'-C4'-O4'	6.95	117.44	109.10
35	BA	463	G	C6-C5-N7	6.95	134.57	130.40
1	AA	1033	G	N9-C4-C5	-6.95	102.62	105.40
35	BA	538	G	C5-C6-O6	-6.95	124.43	128.60
35	BA	1942	C	C5-C6-N1	-6.95	117.53	121.00
35	BA	2303	G	C5-C6-O6	6.95	132.77	128.60
35	BA	300	A	N1-C2-N3	6.95	132.77	129.30
35	BA	447	A	N7-C8-N9	-6.95	110.33	113.80
35	BA	2724	C	N3-C4-C5	6.95	124.68	121.90
35	BA	2292	C	C5-C6-N1	-6.94	117.53	121.00
35	BA	2762	G	N3-C2-N2	6.94	124.76	119.90
1	AA	840	C	C5-C6-N1	6.94	124.47	121.00
16	AP	68	ASP	CB-CG-OD2	6.94	124.55	118.30
35	BA	639	U	C4-C5-C6	-6.94	115.53	119.70
35	BA	672	C	N1-C2-O2	-6.94	114.73	118.90
35	BA	1030	G	C5-C6-N1	-6.94	108.03	111.50
35	BA	1979	C	O4'-C1'-N1	-6.94	102.65	108.20
35	BA	2112	G	C6-C5-N7	-6.94	126.23	130.40
35	BA	2843	G	N3-C4-C5	6.94	132.07	128.60
1	AA	160	A	C5-C6-N1	-6.94	114.23	117.70
1	AA	1442(B)	A	O4'-C1'-N9	-6.94	102.65	108.20
35	BA	44	G	N3-C2-N2	-6.94	115.04	119.90
35	BA	1984	G	C1'-O4'-C4'	-6.94	104.35	109.90
35	BA	2114	A	C8-N9-C4	-6.94	103.02	105.80
35	BA	2258	C	N1-C2-O2	-6.94	114.73	118.90
35	BA	2397	G	C2-N3-C4	-6.94	108.43	111.90
35	BA	2434	A	C4-C5-N7	6.94	114.17	110.70
1	AA	1248	A	C8-N9-C4	-6.94	103.02	105.80
1	AA	1260	C	N3-C2-O2	6.94	126.76	121.90
35	BA	568	U	N1-C2-O2	-6.94	117.94	122.80
35	BA	1079	C	C6-N1-C2	6.94	123.08	120.30
35	BA	880	G	C8-N9-C4	6.94	109.17	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1741	A	C5-C6-N1	-6.94	114.23	117.70
13	AM	14	ARG	NE-CZ-NH2	6.94	123.77	120.30
35	BA	1093	G	N9-C4-C5	-6.94	102.63	105.40
1	AA	775	G	C5-N7-C8	-6.93	100.83	104.30
35	BA	31	C	C2-N3-C4	-6.93	116.43	119.90
35	BA	1648	C	N3-C2-O2	-6.93	117.05	121.90
1	AA	881	G	O4'-C1'-N9	6.93	113.75	108.20
1	AA	998	G	N3-C4-C5	6.93	132.07	128.60
35	BA	552	G	C4-C5-N7	6.93	113.57	110.80
35	BA	1898	U	C5-C4-O4	6.93	130.06	125.90
35	BA	2028	U	C5-C6-N1	6.93	126.17	122.70
35	BA	2319	G	C3'-C2'-C1'	6.93	107.05	101.50
36	BB	57	A	N3-C4-C5	6.93	131.65	126.80
1	AA	378	G	C6-N1-C2	-6.93	120.94	125.10
1	AA	307	C	N1-C2-O2	-6.93	114.74	118.90
1	AA	812	C	N1-C2-O2	6.93	123.06	118.90
11	AK	75	TYR	CB-CG-CD1	-6.93	116.84	121.00
35	BA	1629	U	N3-C4-O4	-6.93	114.55	119.40
20	AT	17	ARG	NE-CZ-NH1	6.93	123.76	120.30
35	BA	142(A)	C	C2-N3-C4	6.93	123.36	119.90
1	AA	1135	U	N1-C1'-C2'	6.93	123.00	114.00
1	AA	1138	G	C3'-C2'-C1'	6.93	107.04	101.50
12	AL	53	ARG	NE-CZ-NH2	-6.93	116.84	120.30
35	BA	1786	A	C6-N1-C2	6.93	122.76	118.60
35	BA	1995	U	O4'-C1'-N1	6.93	113.74	108.20
1	AA	511	C	C4-C5-C6	-6.92	113.94	117.40
34	B9	22	ARG	NE-CZ-NH2	-6.92	116.84	120.30
35	BA	1429	G	C6-C5-N7	-6.92	126.25	130.40
35	BA	1562	A	N7-C8-N9	-6.92	110.34	113.80
35	BA	2346	A	O4'-C1'-N9	6.92	113.74	108.20
35	BA	2533	A	C4-C5-N7	6.92	114.16	110.70
43	BK	50	ASP	CB-CG-OD1	6.92	124.53	118.30
1	AA	809	G	N9-C4-C5	-6.92	102.63	105.40
35	BA	2077	A	C4-C5-N7	-6.92	107.24	110.70
35	BA	2484	G	O4'-C1'-N9	-6.92	102.66	108.20
35	BA	2708	G	C2-N3-C4	6.92	115.36	111.90
36	BB	102	A	C6-N1-C2	-6.92	114.45	118.60
36	BB	118	G	C5-C6-O6	-6.92	124.45	128.60
1	AA	1090	U	C5-C6-N1	-6.92	119.24	122.70
1	AA	1488	G	C4-C5-N7	6.92	113.57	110.80
35	BA	1126	A	C4-C5-C6	-6.92	113.54	117.00
1	AA	572	A	N1-C2-N3	-6.92	125.84	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1098	C	N3-C4-N4	6.92	122.84	118.00
35	BA	845	G	C5-C6-N1	6.92	114.96	111.50
3	AC	156	ARG	NE-CZ-NH1	6.92	123.76	120.30
24	AY	210	ARG	NE-CZ-NH1	6.92	123.76	120.30
35	BA	1334	G	C2-N3-C4	-6.92	108.44	111.90
35	BA	2364	C	C5-C6-N1	-6.92	117.54	121.00
35	BA	2735	G	C5-N7-C8	-6.92	100.84	104.30
35	BA	2765	A	N9-C4-C5	-6.92	103.03	105.80
35	BA	214	G	C4-C5-N7	-6.92	108.03	110.80
35	BA	870	A	C2-N3-C4	-6.92	107.14	110.60
35	BA	2565	A	N1-C2-N3	6.92	132.76	129.30
1	AA	222	U	C6-N1-C2	-6.91	116.85	121.00
1	AA	1019	C	C6-N1-C2	-6.91	117.53	120.30
35	BA	654(K)	C	N3-C4-C5	6.91	124.67	121.90
35	BA	833	U	N3-C4-C5	6.91	118.75	114.60
35	BA	1047	G	C5-C6-N1	6.91	114.96	111.50
35	BA	1752	C	N3-C2-O2	-6.91	117.06	121.90
1	AA	967	C	N3-C4-C5	6.91	124.67	121.90
35	BA	603	A	C6-N1-C2	-6.91	114.45	118.60
35	BA	2623	G	C5-N7-C8	6.91	107.76	104.30
35	BA	2874	C	C4-C5-C6	6.91	120.86	117.40
1	AA	800	G	O4'-C1'-N9	-6.91	102.67	108.20
35	BA	1281	G	N3-C4-C5	6.91	132.05	128.60
1	AA	425	G	N3-C4-N9	-6.91	121.86	126.00
1	AA	1109	C	OP2-P-O3'	6.91	120.39	105.20
35	BA	1853	A	N1-C2-N3	-6.91	125.85	129.30
35	BA	2450	A	N1-C2-N3	-6.91	125.85	129.30
36	BB	42	C	O4'-C1'-N1	6.91	113.72	108.20
1	AA	772	U	O4'-C1'-N1	-6.90	102.68	108.20
35	BA	1601	G	N1-C6-O6	6.90	124.04	119.90
35	BA	1846	G	N9-C4-C5	6.90	108.16	105.40
1	AA	88	A	C4-C5-C6	6.90	120.45	117.00
1	AA	472	A	C4-C5-N7	6.90	114.15	110.70
1	AA	1284	C	N1-C2-O2	6.90	123.04	118.90
1	AA	1367	C	C4-C5-C6	-6.90	113.95	117.40
35	BA	36	G	N9-C4-C5	-6.90	102.64	105.40
35	BA	1285	G	C2-N3-C4	-6.90	108.45	111.90
35	BA	2488	A	N7-C8-N9	6.90	117.25	113.80
1	AA	347	G	C6-N1-C2	-6.90	120.96	125.10
1	AA	1279	A	C8-N9-C4	-6.90	103.04	105.80
18	AR	53	ARG	NE-CZ-NH2	-6.90	116.85	120.30
35	BA	148	C	N1-C2-O2	6.90	123.04	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2020	A	C3'-C2'-C1'	6.90	107.02	101.50
35	BA	2226	C	C4-C5-C6	-6.90	113.95	117.40
35	BA	272(J)	C	N3-C4-N4	6.90	122.83	118.00
3	AC	164	ARG	NE-CZ-NH2	6.90	123.75	120.30
35	BA	1174	A	C5-N7-C8	-6.90	100.45	103.90
35	BA	1754	C	N3-C4-C5	6.90	124.66	121.90
35	BA	2590	A	C5-C6-N1	6.90	121.15	117.70
1	AA	1393	U	C5-C6-N1	-6.89	119.25	122.70
16	AP	26	ARG	NE-CZ-NH2	-6.89	116.85	120.30
35	BA	556	G	C5-C6-N1	-6.89	108.05	111.50
35	BA	1233	C	C5-C6-N1	-6.89	117.55	121.00
35	BA	1513	C	N3-C4-C5	-6.89	119.14	121.90
35	BA	1536	C	C4-C5-C6	-6.89	113.95	117.40
35	BA	1686	C	N3-C4-C5	6.89	124.66	121.90
35	BA	1792	G	C2-N3-C4	-6.89	108.45	111.90
1	AA	460	G	N3-C2-N2	6.89	124.72	119.90
1	AA	1217	C	C5-C6-N1	-6.89	117.55	121.00
35	BA	1256	G	N7-C8-N9	6.89	116.55	113.10
35	BA	1782	C	N3-C4-C5	6.89	124.66	121.90
36	BB	72	G	C2-N3-C4	6.89	115.35	111.90
1	AA	1114	C	N3-C4-C5	6.89	124.66	121.90
35	BA	645	C	N3-C4-C5	-6.89	119.14	121.90
35	BA	1770	G	O4'-C1'-N9	6.89	113.71	108.20
35	BA	2624	G	N9-C1'-C2'	-6.89	104.42	112.00
35	BA	445	C	C5-C4-N4	-6.89	115.38	120.20
35	BA	2652	C	N1-C2-O2	6.89	123.03	118.90
37	BC	135	ARG	NE-CZ-NH1	6.89	123.74	120.30
1	AA	291	C	N3-C4-C5	-6.88	119.15	121.90
1	AA	311	C	N3-C4-C5	-6.88	119.15	121.90
35	BA	181	A	C5-N7-C8	6.88	107.34	103.90
35	BA	1929	G	N3-C4-C5	6.88	132.04	128.60
41	BG	181	ARG	NE-CZ-NH1	-6.88	116.86	120.30
1	AA	760	G	O4'-C1'-N9	6.88	113.71	108.20
1	AA	1104	G	N3-C4-N9	-6.88	121.87	126.00
35	BA	534	U	N1-C2-N3	6.88	119.03	114.90
35	BA	707	G	C8-N9-C4	6.88	109.15	106.40
1	AA	291	C	N1-C2-O2	6.88	123.03	118.90
35	BA	392	C	N3-C2-O2	-6.88	117.08	121.90
1	AA	651	C	N3-C2-O2	-6.88	117.08	121.90
35	BA	412	A	C1'-O4'-C4'	6.88	115.40	109.90
35	BA	1791	A	N1-C6-N6	6.88	122.73	118.60
35	BA	962	G	C8-N9-C4	-6.88	103.65	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2174	C	C6-N1-C2	6.88	123.05	120.30
35	BA	2758	A	C3'-C2'-C1'	-6.88	96.00	101.50
1	AA	383	A	C8-N9-C4	6.88	108.55	105.80
35	BA	2674	G	N9-C4-C5	6.88	108.15	105.40
1	AA	247	G	N9-C1'-C2'	-6.87	104.44	112.00
1	AA	1336	C	C2-N3-C4	-6.87	116.46	119.90
17	AQ	55	ASP	CB-CG-OD1	-6.87	112.11	118.30
35	BA	60	G	N7-C8-N9	-6.87	109.66	113.10
35	BA	222	A	N9-C4-C5	6.87	108.55	105.80
35	BA	443	A	C5-C6-N1	-6.87	114.26	117.70
35	BA	859	G	N1-C6-O6	-6.87	115.78	119.90
35	BA	1418	G	C4-C5-N7	6.87	113.55	110.80
35	BA	2287	A	N1-C2-N3	6.87	132.74	129.30
35	BA	1184	G	C8-N9-C4	-6.87	103.65	106.40
1	AA	558	G	O5'-P-OP1	6.87	118.94	110.70
31	B6	23	THR	N-CA-C	6.87	129.55	111.00
35	BA	61	G	C8-N9-C4	-6.87	103.65	106.40
35	BA	725	G	C3'-C2'-C1'	6.87	107.00	101.50
35	BA	2077	A	N1-C6-N6	6.87	122.72	118.60
35	BA	2392	A	C2-N3-C4	-6.87	107.17	110.60
1	AA	169	C	C5-C4-N4	-6.87	115.39	120.20
1	AA	840	C	C1'-O4'-C4'	6.87	115.39	109.90
35	BA	1216	G	C5-C6-N1	6.87	114.93	111.50
35	BA	2864	G	C8-N9-C4	-6.87	103.65	106.40
1	AA	119	A	C5-C6-N1	6.87	121.13	117.70
35	BA	370	G	N1-C2-N3	6.87	128.02	123.90
35	BA	955	C	C6-N1-C2	-6.87	117.55	120.30
35	BA	1455	G	N1-C2-N3	6.87	128.02	123.90
35	BA	1955	U	C5-C4-O4	6.87	130.02	125.90
35	BA	2359	C	C5-C6-N1	6.87	124.43	121.00
1	AA	1077	G	C5'-C4'-O4'	6.86	117.34	109.10
1	AA	1106	G	C8-N9-C4	6.86	109.14	106.40
35	BA	1672	C	N1-C2-O2	-6.86	114.78	118.90
50	BS	36	TYR	CB-CG-CD2	6.86	125.12	121.00
35	BA	1007	C	C5-C6-N1	6.86	124.43	121.00
35	BA	2150	U	C5-C6-N1	6.86	126.13	122.70
35	BA	71	A	C5-C6-N1	6.86	121.13	117.70
35	BA	360	G	O4'-C1'-N9	6.86	113.69	108.20
35	BA	1578	U	C5-C6-N1	-6.86	119.27	122.70
35	BA	1656	C	N1-C2-N3	-6.86	114.40	119.20
38	BD	176	ARG	NE-CZ-NH1	6.86	123.73	120.30
35	BA	771	G	C5-C6-N1	-6.86	108.07	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1392	A	C8-N9-C4	-6.86	103.06	105.80
1	AA	107	G	C4-C5-N7	6.86	113.54	110.80
1	AA	346	G	N9-C1'-C2'	6.86	122.91	114.00
1	AA	1285	A	C2'-C3'-O3'	6.86	124.67	113.70
1	AA	1432	G	N3-C4-N9	-6.86	121.89	126.00
1	AA	1489	G	C4-C5-N7	-6.86	108.06	110.80
35	BA	274	G	N3-C4-N9	6.86	130.11	126.00
35	BA	381	G	C5-C6-O6	6.86	132.71	128.60
47	BP	90	ARG	NE-CZ-NH2	6.85	123.73	120.30
1	AA	564	C	C6-N1-C2	-6.85	117.56	120.30
1	AA	1030(A)	G	N3-C4-C5	6.85	132.03	128.60
35	BA	792	G	O4'-C1'-N9	-6.85	102.72	108.20
35	BA	1369	G	C4-C5-C6	6.85	122.91	118.80
35	BA	2471	C	C6-N1-C2	-6.85	117.56	120.30
35	BA	2518	A	N1-C6-N6	6.85	122.71	118.60
35	BA	2597	G	C5-C6-N1	-6.85	108.07	111.50
35	BA	316	C	N3-C4-C5	-6.85	119.16	121.90
35	BA	1703	G	C5-N7-C8	6.85	107.72	104.30
35	BA	2488	A	N9-C4-C5	6.85	108.54	105.80
1	AA	345	C	C5-C6-N1	-6.85	117.58	121.00
52	BU	28	ARG	NE-CZ-NH1	-6.85	116.88	120.30
1	AA	622	A	C8-N9-C4	-6.85	103.06	105.80
35	BA	366	C	C5-C6-N1	6.85	124.42	121.00
35	BA	2313	C	C5-C6-N1	6.85	124.42	121.00
35	BA	2413	G	O4'-C1'-N9	6.85	113.68	108.20
1	AA	36	C	N3-C4-C5	6.84	124.64	121.90
1	AA	1216	G	N7-C8-N9	6.84	116.52	113.10
1	AA	1479	C	C6-N1-C2	6.84	123.04	120.30
35	BA	556	G	N9-C4-C5	-6.84	102.66	105.40
35	BA	1929	G	C2-N3-C4	-6.84	108.48	111.90
35	BA	2807	G	N3-C2-N2	6.84	124.69	119.90
1	AA	64	G	N3-C4-C5	6.84	132.02	128.60
1	AA	854	G	C3'-C2'-C1'	6.84	106.97	101.50
35	BA	1440	G	C5-C6-O6	-6.84	124.50	128.60
35	BA	1506	C	C5-C4-N4	-6.84	115.41	120.20
35	BA	2049	G	C2-N3-C4	-6.84	108.48	111.90
54	BW	99	ARG	NE-CZ-NH1	-6.84	116.88	120.30
1	AA	21	G	N9-C4-C5	6.84	108.14	105.40
1	AA	633	G	C6-C5-N7	-6.84	126.30	130.40
1	AA	665	A	C8-N9-C4	-6.84	103.06	105.80
1	AA	768	A	C5-C6-N1	6.84	121.12	117.70
1	AA	1114	C	C2-N3-C4	-6.84	116.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1319	G	C4-C5-C6	-6.84	114.70	118.80
35	BA	1374	G	N3-C2-N2	-6.84	115.11	119.90
35	BA	2188	C	C6-N1-C2	-6.84	117.56	120.30
35	BA	2189	U	N3-C4-O4	-6.84	114.61	119.40
1	AA	577	G	N7-C8-N9	-6.84	109.68	113.10
1	AA	33	A	N9-C4-C5	6.84	108.53	105.80
1	AA	1387	G	C8-N9-C4	-6.84	103.67	106.40
35	BA	616	G	C8-N9-C4	-6.84	103.67	106.40
35	BA	1876	A	N7-C8-N9	-6.84	110.38	113.80
1	AA	196	A	C5-N7-C8	-6.83	100.48	103.90
1	AA	110	C	C6-N1-C2	6.83	123.03	120.30
1	AA	575	G	C6-N1-C2	6.83	129.20	125.10
1	AA	928	G	C8-N9-C4	-6.83	103.67	106.40
9	AI	111	ARG	NE-CZ-NH1	6.83	123.72	120.30
35	BA	488	G	N3-C4-C5	6.83	132.02	128.60
35	BA	2149	G	C2-N3-C4	6.83	115.32	111.90
35	BA	2269	A	C6-C5-N7	-6.83	127.52	132.30
38	BD	134	ARG	NE-CZ-NH1	6.83	123.72	120.30
47	BP	52	GLU	N-CA-C	6.83	129.45	111.00
1	AA	992	U	C5-C4-O4	-6.83	121.80	125.90
35	BA	78	A	C4-C5-C6	6.83	120.42	117.00
35	BA	1496	A	C6-N1-C2	-6.83	114.50	118.60
35	BA	1581	G	N7-C8-N9	6.83	116.52	113.10
1	AA	1268	A	N1-C2-N3	-6.83	125.89	129.30
35	BA	1029	A	C5-N7-C8	6.83	107.31	103.90
35	BA	727	A	N9-C4-C5	-6.83	103.07	105.80
35	BA	2728	U	C5-C4-O4	-6.83	121.80	125.90
36	BB	115	G	N1-C2-N3	6.83	128.00	123.90
35	BA	2194	G	N9-C4-C5	6.83	108.13	105.40
1	AA	889	A	C5-C6-N1	-6.83	114.29	117.70
35	BA	408	G	N3-C4-N9	-6.83	121.90	126.00
35	BA	1314	C	C6-N1-C2	-6.83	117.57	120.30
35	BA	2664	G	C2-N3-C4	-6.83	108.49	111.90
35	BA	2732	G	N9-C1'-C2'	6.83	122.87	114.00
35	BA	2804	C	O4'-C1'-N1	-6.83	102.74	108.20
1	AA	194	C	C6-N1-C2	-6.82	117.57	120.30
1	AA	588	G	C8-N9-C4	6.82	109.13	106.40
1	AA	770	C	N3-C4-C5	6.82	124.63	121.90
1	AA	865	A	C4-C5-C6	-6.82	113.59	117.00
35	BA	794	G	N1-C6-O6	-6.82	115.81	119.90
35	BA	1237	A	C8-N9-C4	-6.82	103.07	105.80
35	BA	2417	C	C4-C5-C6	6.82	120.81	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2722	G	N3-C4-C5	-6.82	125.19	128.60
35	BA	2746	U	C3'-C2'-C1'	6.82	106.96	101.50
1	AA	553	A	N1-C2-N3	-6.82	125.89	129.30
35	BA	98	G	C8-N9-C4	-6.82	103.67	106.40
35	BA	469	G	C2-N3-C4	6.82	115.31	111.90
35	BA	654(K)	C	N1-C2-N3	-6.82	114.43	119.20
35	BA	1379	A	N9-C1'-C2'	6.82	122.87	114.00
1	AA	137	C	C5-C6-N1	-6.82	117.59	121.00
1	AA	672	U	C4-C5-C6	6.82	123.79	119.70
35	BA	463	G	C5-C6-O6	-6.82	124.51	128.60
35	BA	2829	C	N3-C4-C5	6.82	124.63	121.90
1	AA	1457	G	N3-C4-C5	-6.82	125.19	128.60
35	BA	372	G	N9-C4-C5	6.82	108.13	105.40
35	BA	861	A	C2-N3-C4	6.82	114.01	110.60
35	BA	1120	G	N1-C6-O6	6.82	123.99	119.90
35	BA	1487	G	C5-C6-O6	-6.82	124.51	128.60
35	BA	654(H)	G	N1-C2-N3	-6.81	119.81	123.90
35	BA	768	G	C5-C6-N1	-6.81	108.09	111.50
1	AA	556	C	C5-C6-N1	-6.81	117.59	121.00
1	AA	1300	G	O4'-C1'-N9	6.81	113.65	108.20
1	AA	1330	U	C4-C5-C6	6.81	123.79	119.70
35	BA	989	G	O4'-C1'-N9	-6.81	102.75	108.20
35	BA	2373	G	N1-C2-N2	6.81	122.33	116.20
1	AA	684	A	C5-C6-N6	6.81	129.15	123.70
1	AA	1210	C	N3-C4-C5	-6.81	119.17	121.90
1	AA	89	C	N3-C4-N4	-6.81	113.23	118.00
1	AA	536	C	C5-C6-N1	-6.81	117.59	121.00
35	BA	1373	A	N1-C6-N6	-6.81	114.52	118.60
35	BA	2299	G	C6-N1-C2	6.81	129.19	125.10
1	AA	301	G	C8-N9-C4	-6.81	103.68	106.40
1	AA	817	C	C5-C6-N1	-6.81	117.60	121.00
35	BA	607	U	N3-C4-C5	-6.81	110.52	114.60
35	BA	1966	A	C8-N9-C4	-6.81	103.08	105.80
1	AA	1236	A	N9-C4-C5	-6.81	103.08	105.80
35	BA	461	C	C4-C5-C6	6.81	120.80	117.40
35	BA	2770	G	N9-C4-C5	6.81	108.12	105.40
36	BB	45	A	C2-N3-C4	6.81	114.00	110.60
1	AA	626	U	C5'-C4'-C3'	-6.80	105.11	116.00
35	BA	317	G	N1-C6-O6	-6.80	115.82	119.90
1	AA	930	C	N3-C2-O2	-6.80	117.14	121.90
1	AA	1288	A	C2-N3-C4	-6.80	107.20	110.60
23	AX	21	C	N3-C2-O2	-6.80	117.14	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1378	A	N9-C4-C5	6.80	108.52	105.80
1	AA	37	U	C2-N3-C4	6.80	131.08	127.00
1	AA	640	A	N7-C8-N9	-6.80	110.40	113.80
35	BA	2859	G	C5-N7-C8	-6.80	100.90	104.30
35	BA	73	A	N7-C8-N9	-6.80	110.40	113.80
35	BA	740	U	C5'-C4'-O4'	6.80	117.26	109.10
36	BB	32	C	C5-C6-N1	-6.80	117.60	121.00
35	BA	280	C	C6-N1-C2	6.80	123.02	120.30
35	BA	2670	A	C5-N7-C8	-6.80	100.50	103.90
1	AA	915	A	C5-C6-N6	-6.80	118.26	123.70
35	BA	495	G	C8-N9-C4	6.80	109.12	106.40
35	BA	728	G	C4-C5-N7	-6.80	108.08	110.80
35	BA	984	A	C3'-C2'-C1'	6.80	106.94	101.50
35	BA	1614	A	C1'-O4'-C4'	-6.80	104.46	109.90
1	AA	61	G	C4-C5-N7	6.79	113.52	110.80
1	AA	878	G	C4-C5-N7	6.79	113.52	110.80
1	AA	1251	A	N9-C4-C5	6.79	108.52	105.80
35	BA	272(G)	C	N3-C4-C5	-6.79	119.18	121.90
35	BA	1612	C	C2-N3-C4	-6.79	116.50	119.90
35	BA	2010	G	N7-C8-N9	-6.79	109.70	113.10
1	AA	334	C	N3-C4-C5	-6.79	119.18	121.90
1	AA	1526	G	N7-C8-N9	-6.79	109.70	113.10
19	AS	5	LEU	CA-CB-CG	6.79	130.93	115.30
35	BA	237	C	N1-C2-O2	6.79	122.98	118.90
35	BA	2045	C	N3-C4-N4	6.79	122.76	118.00
35	BA	2520	C	O4'-C1'-N1	-6.79	102.77	108.20
35	BA	2546	U	C2-N3-C4	6.79	131.08	127.00
1	AA	50	A	N1-C6-N6	-6.79	114.53	118.60
35	BA	186	G	N3-C2-N2	-6.79	115.15	119.90
35	BA	666	G	C8-N9-C4	-6.79	103.68	106.40
35	BA	2523	G	C8-N9-C4	-6.79	103.68	106.40
1	AA	564	C	C5-C6-N1	6.79	124.39	121.00
1	AA	869	G	C4-C5-C6	-6.79	114.73	118.80
35	BA	1086	A	O4'-C1'-C2'	6.79	113.71	107.60
35	BA	2418	A	C4-C5-N7	6.79	114.09	110.70
1	AA	968	A	C5-C6-N1	-6.79	114.31	117.70
1	AA	1377	A	N7-C8-N9	-6.79	110.41	113.80
35	BA	300	A	C8-N9-C4	-6.79	103.08	105.80
35	BA	1418	G	C8-N9-C4	-6.79	103.69	106.40
1	AA	651	C	N1-C2-O2	6.79	122.97	118.90
24	AY	329	ARG	NE-CZ-NH2	6.79	123.69	120.30
35	BA	303	U	C2-N3-C4	6.79	131.07	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	675	A	N9-C1'-C2'	6.79	122.82	114.00
35	BA	1566	A	C5-N7-C8	-6.79	100.51	103.90
36	BB	87	G	N9-C4-C5	-6.79	102.69	105.40
35	BA	141	A	O4'-C1'-N9	6.78	113.63	108.20
35	BA	614(A)	U	C5'-C4'-O4'	-6.78	100.96	109.10
35	BA	2282	G	N7-C8-N9	-6.78	109.71	113.10
1	AA	126	G	O4'-C1'-N9	6.78	113.63	108.20
1	AA	231	G	C2-N3-C4	6.78	115.29	111.90
1	AA	299	G	C5-C6-N1	-6.78	108.11	111.50
1	AA	1469	G	C4-C5-N7	6.78	113.51	110.80
35	BA	796	C	C5-C6-N1	6.78	124.39	121.00
35	BA	1331	A	C4-C5-C6	6.78	120.39	117.00
36	BB	83	G	N9-C4-C5	-6.78	102.69	105.40
35	BA	859	G	C6-N1-C2	-6.78	121.03	125.10
1	AA	146	G	N7-C8-N9	6.78	116.49	113.10
1	AA	775	G	C2-N3-C4	6.78	115.29	111.90
1	AA	1265	G	C6-C5-N7	6.78	134.47	130.40
35	BA	987	G	C4-C5-N7	-6.78	108.09	110.80
1	AA	998	G	N1-C6-O6	-6.77	115.84	119.90
50	BS	71	ARG	NE-CZ-NH2	-6.77	116.91	120.30
1	AA	9	G	C4-C5-N7	6.77	113.51	110.80
1	AA	951	G	N3-C4-C5	6.77	131.99	128.60
5	AE	126	ARG	NE-CZ-NH2	-6.77	116.91	120.30
22	AV	31	G	N3-C4-N9	6.77	130.06	126.00
35	BA	888	C	N1-C2-O2	-6.77	114.84	118.90
36	BB	58	A	C8-N9-C4	-6.77	103.09	105.80
6	AF	4	TYR	CB-CG-CD2	6.77	125.06	121.00
35	BA	2429	G	N3-C4-N9	6.77	130.06	126.00
35	BA	2730	C	N3-C4-C5	6.77	124.61	121.90
1	AA	763	G	C4-C5-N7	6.77	113.51	110.80
35	BA	871	U	O4'-C1'-N1	-6.77	102.78	108.20
35	BA	2031	A	C8-N9-C4	6.77	108.51	105.80
1	AA	539	A	C5-N7-C8	-6.77	100.52	103.90
35	BA	2361	A	N9-C4-C5	6.77	108.51	105.80
35	BA	2530	A	N1-C6-N6	6.77	122.66	118.60
1	AA	472	A	C5-N7-C8	-6.77	100.52	103.90
35	BA	1066	U	C1'-O4'-C4'	6.77	115.31	109.90
1	AA	1332	A	C6-N1-C2	-6.76	114.54	118.60
35	BA	304	G	O5'-P-OP1	-6.76	99.61	105.70
35	BA	1758	G	N9-C1'-C2'	6.76	122.79	114.00
1	AA	127	G	C4-C5-C6	-6.76	114.74	118.80
1	AA	706	A	N9-C4-C5	6.76	108.50	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	AR	30	ASP	CB-CG-OD1	-6.76	112.22	118.30
35	BA	1542	A	N9-C4-C5	6.76	108.50	105.80
35	BA	1631(A)	A	C8-N9-C4	-6.76	103.09	105.80
35	BA	126	A	C6-N1-C2	6.76	122.66	118.60
35	BA	440	G	C5-C6-N1	-6.76	108.12	111.50
35	BA	609	A	C6-N1-C2	6.76	122.66	118.60
35	BA	636	G	C5-C6-N1	6.76	114.88	111.50
35	BA	693	C	C5-C4-N4	-6.76	115.47	120.20
35	BA	1821	A	N1-C2-N3	-6.76	125.92	129.30
35	BA	2630	G	C5-C6-O6	-6.76	124.54	128.60
1	AA	709	G	N9-C4-C5	6.76	108.10	105.40
1	AA	116	A	C5-C6-N1	-6.75	114.32	117.70
1	AA	157	G	N9-C4-C5	-6.75	102.70	105.40
1	AA	288	A	C2-N3-C4	6.75	113.98	110.60
35	BA	1822	G	N7-C8-N9	6.75	116.48	113.10
35	BA	2607	G	C4-C5-N7	6.75	113.50	110.80
1	AA	251	G	C5-N7-C8	-6.75	100.92	104.30
1	AA	1528	U	C6-N1-C2	-6.75	116.95	121.00
23	AX	14	A	N3-C4-C5	6.75	131.53	126.80
35	BA	176	G	C4-C5-N7	-6.75	108.10	110.80
35	BA	1246	A	C2-N3-C4	6.75	113.98	110.60
35	BA	1379	A	O4'-C1'-N9	6.75	113.60	108.20
35	BA	1500	G	C5-C6-N1	6.75	114.88	111.50
35	BA	1627	G	O4'-C1'-N9	-6.75	102.80	108.20
35	BA	2403	C	C6-N1-C2	6.75	123.00	120.30
35	BA	2820	A	C4-C5-N7	6.75	114.08	110.70
35	BA	2828	C	C6-N1-C2	6.75	123.00	120.30
36	BB	108	U	N3-C4-C5	-6.75	110.55	114.60
1	AA	693	G	N3-C4-C5	-6.75	125.22	128.60
35	BA	278	A	C4-C5-C6	6.75	120.38	117.00
47	BP	58	THR	N-CA-C	-6.75	92.77	111.00
1	AA	172	A	C8-N9-C4	-6.75	103.10	105.80
35	BA	1063	G	O4'-C1'-N9	-6.75	102.80	108.20
36	BB	65	C	N3-C4-C5	6.75	124.60	121.90
1	AA	916	G	N7-C8-N9	-6.75	109.73	113.10
35	BA	397	G	N3-C4-C5	6.75	131.97	128.60
35	BA	836	G	N9-C4-C5	6.75	108.10	105.40
35	BA	1506	C	N3-C2-O2	-6.75	117.18	121.90
49	BR	104	ARG	NE-CZ-NH2	6.75	123.67	120.30
1	AA	424	G	C4-C5-N7	6.75	113.50	110.80
35	BA	211	A	C2-N3-C4	6.75	113.97	110.60
35	BA	955	C	N3-C4-C5	-6.75	119.20	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1623	G	C8-N9-C4	-6.75	103.70	106.40
35	BA	1910	G	C5-C6-N1	6.75	114.87	111.50
35	BA	2829	C	N1-C2-O2	-6.75	114.85	118.90
24	AY	465	ARG	NE-CZ-NH2	-6.75	116.93	120.30
35	BA	363(C)	G	N9-C4-C5	-6.75	102.70	105.40
1	AA	673	G	C2-N3-C4	6.74	115.27	111.90
1	AA	1446	U	C5-C4-O4	-6.74	121.85	125.90
1	AA	1498	U	C5-C4-O4	-6.74	121.85	125.90
35	BA	1569	A	C8-N9-C4	6.74	108.50	105.80
35	BA	2644	G	C8-N9-C4	-6.74	103.70	106.40
36	BB	40	U	C4-C5-C6	6.74	123.75	119.70
1	AA	1160	G	C5-C6-O6	6.74	132.64	128.60
35	BA	543	C	N3-C2-O2	6.74	126.62	121.90
35	BA	1804	C	C5-C4-N4	6.74	124.92	120.20
1	AA	1101	A	C2-N3-C4	6.74	113.97	110.60
1	AA	1300	G	C2-N3-C4	6.74	115.27	111.90
35	BA	791	C	N1-C2-O2	6.74	122.94	118.90
35	BA	1241	A	C6-N1-C2	-6.74	114.56	118.60
1	AA	226	G	O4'-C1'-N9	6.74	113.59	108.20
1	AA	237	C	C6-N1-C2	6.74	123.00	120.30
1	AA	1170	A	C5-C6-N6	6.74	129.09	123.70
35	BA	1374	G	N9-C4-C5	-6.74	102.70	105.40
35	BA	2409	G	N1-C6-O6	-6.74	115.86	119.90
1	AA	472	A	C5-C6-N1	6.74	121.07	117.70
35	BA	363(E)	U	C4-C5-C6	6.74	123.74	119.70
35	BA	1233	C	C6-N1-C2	6.74	122.99	120.30
35	BA	1275	A	N9-C4-C5	6.74	108.49	105.80
35	BA	2030	A	N1-C6-N6	6.74	122.64	118.60
1	AA	901	A	C8-N9-C4	-6.73	103.11	105.80
1	AA	1057	G	C2-N3-C4	-6.73	108.53	111.90
35	BA	1539	G	N1-C6-O6	-6.73	115.86	119.90
1	AA	307	C	N1-C2-N3	6.73	123.91	119.20
1	AA	492	G	C8-N9-C4	6.73	109.09	106.40
1	AA	567	G	N3-C2-N2	-6.73	115.19	119.90
1	AA	700	G	N9-C1'-C2'	-6.73	104.59	112.00
35	BA	177	G	C1'-O4'-C4'	-6.73	104.51	109.90
35	BA	860	U	C5-C6-N1	6.73	126.07	122.70
35	BA	2673	G	N1-C6-O6	-6.73	115.86	119.90
6	AF	63	TYR	CB-CG-CD2	-6.73	116.96	121.00
35	BA	274	G	C5-C6-N1	6.73	114.86	111.50
35	BA	2607	G	C6-C5-N7	-6.73	126.36	130.40
36	BB	107	G	N1-C2-N3	6.73	127.94	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	34	C	N3-C4-C5	6.73	124.59	121.90
1	AA	1419	G	C5-N7-C8	6.73	107.66	104.30
35	BA	180	G	N7-C8-N9	-6.73	109.73	113.10
35	BA	823	G	N7-C8-N9	-6.73	109.73	113.10
35	BA	2481	G	N9-C1'-C2'	6.73	122.75	114.00
1	AA	992	U	O4'-C1'-N1	6.73	113.58	108.20
1	AA	1040	U	N3-C2-O2	6.73	126.91	122.20
35	BA	400	G	C8-N9-C4	6.73	109.09	106.40
35	BA	2146	C	C5-C6-N1	-6.73	117.64	121.00
35	BA	1790	C	N3-C4-C5	6.73	124.59	121.90
35	BA	939	G	C4-C5-N7	6.72	113.49	110.80
1	AA	119	A	C5-N7-C8	-6.72	100.54	103.90
1	AA	236	G	N3-C4-C5	-6.72	125.24	128.60
1	AA	756	C	N3-C4-C5	6.72	124.59	121.90
1	AA	1463	C	C4'-C3'-C2'	-6.72	95.88	102.60
35	BA	1704	G	N9-C1'-C2'	-6.72	104.61	112.00
35	BA	1007	C	C4-C5-C6	-6.72	114.04	117.40
35	BA	1776	G	N9-C4-C5	6.72	108.09	105.40
1	AA	266	G	C4-C5-C6	6.72	122.83	118.80
1	AA	1042	G	N1-C2-N3	6.72	127.93	123.90
1	AA	1317	C	N1-C2-O2	6.72	122.93	118.90
35	BA	192	C	C5-C4-N4	-6.72	115.50	120.20
1	AA	1170	A	N9-C4-C5	-6.72	103.11	105.80
35	BA	129	C	C5-C6-N1	6.72	124.36	121.00
35	BA	998	C	C6-N1-C2	-6.72	117.61	120.30
35	BA	2343	C	C4-C5-C6	6.72	120.76	117.40
35	BA	2420	C	N3-C4-C5	6.72	124.59	121.90
35	BA	2458	G	N1-C2-N3	6.72	127.93	123.90
1	AA	189(C)	C	C5-C6-N1	6.71	124.36	121.00
1	AA	266	G	C3'-C2'-C1'	6.71	106.87	101.50
1	AA	285	G	N3-C4-C5	-6.71	125.24	128.60
35	BA	2618	G	N3-C2-N2	6.71	124.60	119.90
1	AA	807	A	N7-C8-N9	-6.71	110.44	113.80
35	BA	1948	G	C5'-C4'-O4'	-6.71	101.04	109.10
35	BA	2750	A	C4-C5-N7	-6.71	107.34	110.70
1	AA	108	G	N1-C2-N3	-6.71	119.87	123.90
1	AA	869	G	C2-N3-C4	-6.71	108.54	111.90
1	AA	896	C	N3-C2-O2	-6.71	117.20	121.90
1	AA	1409	C	C4-C5-C6	-6.71	114.04	117.40
35	BA	1529	G	N7-C8-N9	-6.71	109.74	113.10
35	BA	1517	G	C8-N9-C4	-6.71	103.72	106.40
35	BA	2220	G	C6-C5-N7	-6.71	126.37	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2440	C	C5-C4-N4	-6.71	115.50	120.20
35	BA	2761	G	C2-N3-C4	6.71	115.25	111.90
1	AA	370	C	N3-C2-O2	6.71	126.60	121.90
35	BA	1280	G	C4-C5-C6	-6.71	114.78	118.80
35	BA	1593	G	N7-C8-N9	6.71	116.45	113.10
35	BA	2144	U	C5-C4-O4	-6.71	121.88	125.90
35	BA	2246	G	O4'-C1'-N9	6.71	113.57	108.20
1	AA	1242	C	N3-C4-N4	6.71	122.69	118.00
35	BA	139	G	C4-C5-N7	6.71	113.48	110.80
35	BA	1388	G	C5-N7-C8	6.71	107.65	104.30
35	BA	2409	G	C5-C6-O6	6.71	132.62	128.60
35	BA	2840	C	N1-C2-O2	6.71	122.92	118.90
46	BO	32	TYR	CB-CG-CD2	6.71	125.02	121.00
35	BA	258	G	N9-C4-C5	6.70	108.08	105.40
35	BA	515	A	N1-C2-N3	-6.70	125.95	129.30
35	BA	632	A	N9-C4-C5	-6.70	103.12	105.80
35	BA	1747(A)	G	C6-N1-C2	-6.70	121.08	125.10
35	BA	1950	G	C8-N9-C4	6.70	109.08	106.40
35	BA	2026	C	C5'-C4'-C3'	-6.70	105.28	116.00
35	BA	472	A	N7-C8-N9	-6.70	110.45	113.80
35	BA	1705	G	N7-C8-N9	-6.70	109.75	113.10
1	AA	946	A	C4-C5-N7	6.70	114.05	110.70
35	BA	801	G	N3-C4-N9	6.70	130.02	126.00
35	BA	1573	G	N9-C4-C5	-6.70	102.72	105.40
35	BA	2389	G	C2-N3-C4	-6.70	108.55	111.90
1	AA	446	G	O4'-C1'-N9	6.70	113.56	108.20
1	AA	607	A	C2-N3-C4	-6.70	107.25	110.60
15	AO	78	TYR	CB-CG-CD1	6.70	125.02	121.00
35	BA	1481	U	O4'-C1'-N1	-6.70	102.84	108.20
35	BA	1698	A	N9-C4-C5	-6.70	103.12	105.80
36	BB	97	G	N1-C6-O6	6.70	123.92	119.90
1	AA	35	G	N3-C4-C5	-6.70	125.25	128.60
1	AA	528	C	N1-C2-O2	6.70	122.92	118.90
1	AA	1146	A	C5-C6-N1	6.70	121.05	117.70
35	BA	2299	G	C5-C6-N1	-6.70	108.15	111.50
35	BA	2430	A	C5-C6-N1	-6.70	114.35	117.70
1	AA	500	G	C5-C6-O6	6.70	132.62	128.60
35	BA	121	G	C5-C6-O6	-6.70	124.58	128.60
1	AA	949	A	O4'-C1'-N9	-6.69	102.84	108.20
35	BA	621	A	C4-C5-N7	6.69	114.05	110.70
35	BA	643	A	C2-N3-C4	6.69	113.95	110.60
35	BA	1575	C	C5-C6-N1	6.69	124.35	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	405	U	C5-C4-O4	-6.69	121.88	125.90
8	AH	14	ARG	NE-CZ-NH2	-6.69	116.95	120.30
35	BA	228	A	N1-C6-N6	-6.69	114.58	118.60
35	BA	370	G	C6-N1-C2	-6.69	121.08	125.10
1	AA	64	G	C2-N3-C4	-6.69	108.56	111.90
35	BA	1445	A	O4'-C1'-N9	6.69	113.55	108.20
35	BA	2785	C	N3-C2-O2	6.69	126.58	121.90
1	AA	507	C	C4-C5-C6	6.69	120.74	117.40
35	BA	1184	G	N9-C4-C5	6.69	108.08	105.40
35	BA	1619	G	C6-C5-N7	-6.69	126.39	130.40
35	BA	2779	U	C5'-C4'-C3'	-6.69	105.30	116.00
35	BA	268	C	C2-N3-C4	6.69	123.24	119.90
35	BA	603	A	N1-C6-N6	-6.69	114.59	118.60
35	BA	2603	G	N3-C4-C5	6.69	131.94	128.60
1	AA	26	A	C1'-O4'-C4'	6.69	115.25	109.90
35	BA	856	C	C4-C5-C6	-6.69	114.06	117.40
35	BA	1718	G	C5-N7-C8	6.69	107.64	104.30
35	BA	272(H)	C	C2-N3-C4	6.68	123.24	119.90
35	BA	932	G	N7-C8-N9	6.68	116.44	113.10
35	BA	1075	C	C4-C5-C6	6.68	120.74	117.40
35	BA	2420	C	C4-C5-C6	-6.68	114.06	117.40
35	BA	2604	U	C5-C6-N1	-6.68	119.36	122.70
1	AA	851	G	C6-C5-N7	-6.68	126.39	130.40
1	AA	1083	U	N3-C4-C5	-6.68	110.59	114.60
35	BA	143(A)	C	C5-C6-N1	6.68	124.34	121.00
35	BA	301	G	C5-C6-N1	-6.68	108.16	111.50
35	BA	431	U	N3-C4-C5	-6.68	110.59	114.60
35	BA	677	A	C2-N3-C4	-6.68	107.26	110.60
35	BA	1000	A	C5-N7-C8	6.68	107.24	103.90
35	BA	1237	A	C5-N7-C8	6.68	107.24	103.90
35	BA	2818	G	N3-C2-N2	-6.68	115.22	119.90
35	BA	388	G	N3-C4-C5	-6.68	125.26	128.60
35	BA	654(N)	G	C4-C5-C6	6.68	122.81	118.80
35	BA	1029	A	C6-C5-N7	6.68	136.98	132.30
35	BA	1291	C	N3-C4-C5	-6.68	119.23	121.90
35	BA	1571	A	C6-N1-C2	-6.68	114.59	118.60
35	BA	1811	G	N3-C4-C5	-6.68	125.26	128.60
35	BA	153	C	N3-C4-N4	6.68	122.67	118.00
35	BA	429	A	N7-C8-N9	-6.68	110.46	113.80
35	BA	583	G	C4-C5-N7	6.68	113.47	110.80
35	BA	1802	A	N3-C4-C5	6.68	131.47	126.80
35	BA	1846	G	C4-C5-N7	-6.68	108.13	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2148	G	O4'-C1'-N9	-6.68	102.86	108.20
35	BA	1435	G	C5-C6-N1	6.68	114.84	111.50
35	BA	2793	G	C5-N7-C8	6.68	107.64	104.30
1	AA	115	G	N1-C2-N3	-6.68	119.89	123.90
46	BO	78	ARG	NE-CZ-NH1	6.68	123.64	120.30
1	AA	203	U	C2-N3-C4	-6.67	123.00	127.00
35	BA	2170	A	N1-C6-N6	6.67	122.60	118.60
35	BA	1808	U	C2-N3-C4	6.67	131.00	127.00
35	BA	2048	G	C6-N1-C2	6.67	129.10	125.10
1	AA	1313	U	C2-N3-C4	6.67	131.00	127.00
35	BA	261	G	N3-C4-C5	6.67	131.94	128.60
35	BA	1480	G	C8-N9-C4	-6.67	103.73	106.40
35	BA	2004	G	C4-C5-N7	-6.67	108.13	110.80
1	AA	1249	C	N3-C4-C5	6.67	124.57	121.90
1	AA	1410	G	N3-C4-C5	6.67	131.94	128.60
35	BA	1181	C	C5-C6-N1	-6.67	117.67	121.00
35	BA	2187	G	N7-C8-N9	6.67	116.44	113.10
35	BA	2225	A	C2-N3-C4	-6.67	107.27	110.60
1	AA	819	A	N1-C6-N6	6.67	122.60	118.60
22	AV	75	C	C4-C5-C6	6.67	120.73	117.40
35	BA	702	G	C8-N9-C4	6.67	109.07	106.40
35	BA	2748	A	N9-C4-C5	6.67	108.47	105.80
1	AA	1327	C	C5-C6-N1	6.67	124.33	121.00
35	BA	1415	U	C1'-O4'-C4'	-6.67	104.57	109.90
35	BA	1654	A	C4'-C3'-C2'	-6.67	95.93	102.60
35	BA	2356	C	N3-C4-C5	6.67	124.57	121.90
35	BA	930	U	N3-C4-C5	-6.67	110.60	114.60
1	AA	1330	U	C5-C6-N1	-6.66	119.37	122.70
1	AA	1480	G	N3-C4-C5	-6.66	125.27	128.60
22	AV	61	C	C4-C5-C6	6.66	120.73	117.40
35	BA	1647	G	C5-C6-O6	-6.66	124.60	128.60
21	AU	18	TYR	CB-CG-CD1	6.66	125.00	121.00
35	BA	271(A)	A	N1-C2-N3	6.66	132.63	129.30
35	BA	489	G	O5'-P-OP2	6.66	118.69	110.70
35	BA	2540	C	O4'-C1'-N1	6.66	113.53	108.20
1	AA	53	A	N9-C4-C5	6.66	108.46	105.80
35	BA	51	G	C5-N7-C8	-6.66	100.97	104.30
35	BA	1764	G	C5-C6-O6	-6.66	124.61	128.60
35	BA	1985	G	C4-C5-N7	6.66	113.46	110.80
35	BA	2339	G	C3'-C2'-C1'	-6.66	96.17	101.50
35	BA	982	C	N3-C4-N4	-6.66	113.34	118.00
35	BA	1018	C	C5-C6-N1	6.66	124.33	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	928	G	C6-N1-C2	6.65	129.09	125.10
35	BA	2139	C	C4-C5-C6	6.65	120.73	117.40
1	AA	657	G	N1-C2-N3	6.65	127.89	123.90
1	AA	820	U	C6-N1-C2	6.65	124.99	121.00
35	BA	2315	G	C5-C6-N1	-6.65	108.17	111.50
1	AA	1155	G	N9-C4-C5	6.65	108.06	105.40
35	BA	174	C	C6-N1-C2	-6.65	117.64	120.30
35	BA	907	U	O4'-C1'-N1	6.65	113.52	108.20
35	BA	1797	C	C2-N3-C4	-6.65	116.57	119.90
35	BA	2377	A	C8-N9-C4	-6.65	103.14	105.80
35	BA	2406	U	C5-C6-N1	-6.65	119.38	122.70
35	BA	280	C	C3'-C2'-C1'	6.65	106.82	101.50
35	BA	843	G	C4-C5-N7	6.65	113.46	110.80
35	BA	1271	G	N1-C2-N3	-6.65	119.91	123.90
35	BA	2123	G	C8-N9-C4	6.65	109.06	106.40
35	BA	2172	U	C5-C4-O4	-6.65	121.91	125.90
1	AA	1334	G	C5-N7-C8	6.65	107.62	104.30
22	AV	23	C	O4'-C1'-N1	6.65	113.52	108.20
35	BA	561	G	N3-C4-C5	-6.65	125.28	128.60
35	BA	2087	G	N7-C8-N9	6.65	116.42	113.10
35	BA	2136	C	N3-C4-N4	6.65	122.65	118.00
1	AA	328	C	C2'-C3'-O3'	6.65	124.33	113.70
1	AA	379	C	C5-C6-N1	-6.65	117.68	121.00
1	AA	837	G	N1-C6-O6	-6.65	115.91	119.90
35	BA	125	G	C6-N1-C2	-6.64	121.11	125.10
35	BA	327	G	C6-C5-N7	-6.64	126.41	130.40
35	BA	1105	U	N3-C4-C5	6.64	118.59	114.60
35	BA	2093	G	C2-N3-C4	-6.64	108.58	111.90
35	BA	750	A	C5-N7-C8	-6.64	100.58	103.90
35	BA	952	G	N1-C2-N3	6.64	127.89	123.90
35	BA	1594	G	N3-C4-C5	-6.64	125.28	128.60
35	BA	1656	C	N1-C2-O2	6.64	122.89	118.90
35	BA	1745(A)	C	O4'-C1'-N1	-6.64	102.89	108.20
1	AA	435	C	N3-C4-C5	6.64	124.56	121.90
35	BA	2656	U	C5-C6-N1	6.64	126.02	122.70
35	BA	1652	A	N9-C1'-C2'	6.64	122.63	114.00
1	AA	44	G	C5-N7-C8	6.64	107.62	104.30
1	AA	142	G	N7-C8-N9	6.64	116.42	113.10
1	AA	769	G	N9-C4-C5	6.64	108.06	105.40
1	AA	852	G	N9-C4-C5	6.64	108.06	105.40
35	BA	2052	G	C1'-O4'-C4'	6.64	115.21	109.90
1	AA	311	C	C5-C4-N4	6.64	124.84	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	912	C	N1-C2-O2	6.64	122.88	118.90
35	BA	1897	G	N3-C4-N9	6.64	129.98	126.00
35	BA	2744	G	N9-C4-C5	6.64	108.06	105.40
1	AA	477	A	C5-C6-N1	6.63	121.02	117.70
35	BA	976	C	N3-C4-C5	6.63	124.55	121.90
35	BA	1271	G	C8-N9-C4	6.63	109.05	106.40
35	BA	1347	G	C5-C6-N1	-6.63	108.18	111.50
35	BA	2880	C	C4-C5-C6	6.63	120.72	117.40
36	BB	92	C	C2-N3-C4	6.63	123.22	119.90
1	AA	158	G	N1-C2-N3	-6.63	119.92	123.90
1	AA	194	C	N1-C1'-C2'	6.63	122.62	114.00
1	AA	742	G	C4-C5-N7	6.63	113.45	110.80
23	AX	15	A	C2-N3-C4	6.63	113.92	110.60
35	BA	528	A	C4-C5-N7	-6.63	107.38	110.70
35	BA	2708	G	C4-C5-N7	6.63	113.45	110.80
36	BB	74	U	N1-C2-N3	6.63	118.88	114.90
1	AA	717	C	C2-N3-C4	6.63	123.22	119.90
1	AA	1198	G	C6-N1-C2	-6.63	121.12	125.10
35	BA	2621	A	N1-C2-N3	-6.63	125.98	129.30
1	AA	89	C	C5-C4-N4	6.63	124.84	120.20
1	AA	285	G	N9-C4-C5	6.63	108.05	105.40
1	AA	436	C	C6-N1-C2	-6.63	117.65	120.30
35	BA	2024	G	N9-C4-C5	-6.63	102.75	105.40
35	BA	2699	C	C2-N3-C4	-6.63	116.58	119.90
1	AA	112	G	C2-N3-C4	-6.63	108.59	111.90
1	AA	1089	G	N7-C8-N9	-6.63	109.79	113.10
1	AA	1385	G	N3-C4-C5	6.63	131.91	128.60
35	BA	763	G	N1-C6-O6	-6.63	115.92	119.90
35	BA	1363	C	C4-C5-C6	6.63	120.71	117.40
1	AA	703	G	N9-C4-C5	-6.62	102.75	105.40
35	BA	705	A	N7-C8-N9	6.62	117.11	113.80
35	BA	1840	G	N1-C6-O6	6.62	123.88	119.90
35	BA	2220	G	C5-N7-C8	-6.62	100.99	104.30
1	AA	352	C	N3-C4-C5	6.62	124.55	121.90
1	AA	640	A	C2-N3-C4	-6.62	107.29	110.60
1	AA	657	G	C6-C5-N7	6.62	134.37	130.40
35	BA	245	G	C4-C5-N7	-6.62	108.15	110.80
35	BA	302	C	C6-N1-C2	6.62	122.95	120.30
35	BA	716	A	C6-C5-N7	-6.62	127.66	132.30
1	AA	253	U	O4'-C1'-N1	-6.62	102.90	108.20
1	AA	1341	U	O4'-C1'-N1	6.62	113.50	108.20
35	BA	520	G	C4-C5-C6	-6.62	114.83	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	553	G	C5-C6-N1	-6.62	108.19	111.50
35	BA	1630	G	C5-N7-C8	6.62	107.61	104.30
1	AA	1069	C	N3-C2-O2	-6.62	117.27	121.90
1	AA	1202	G	C5-N7-C8	6.62	107.61	104.30
35	BA	1364	G	N9-C4-C5	6.62	108.05	105.40
1	AA	32	A	N1-C6-N6	6.62	122.57	118.60
1	AA	1377	A	C5-N7-C8	6.62	107.21	103.90
4	AD	115	ARG	NE-CZ-NH1	-6.62	116.99	120.30
35	BA	206	U	C2-N3-C4	6.62	130.97	127.00
35	BA	1062	G	C1'-O4'-C4'	-6.62	104.61	109.90
35	BA	1430	C	C4-C5-C6	6.62	120.71	117.40
35	BA	1767	C	N1-C2-O2	-6.62	114.93	118.90
35	BA	854	G	C5-N7-C8	6.62	107.61	104.30
1	AA	1084	G	C5-N7-C8	6.62	107.61	104.30
3	AC	132	ARG	NE-CZ-NH2	-6.62	116.99	120.30
35	BA	70	G	N7-C8-N9	6.62	116.41	113.10
35	BA	296	C	C5-C6-N1	6.62	124.31	121.00
35	BA	537	C	N1-C2-O2	-6.62	114.93	118.90
35	BA	1765	C	N1-C2-O2	-6.62	114.93	118.90
35	BA	2876	G	N1-C6-O6	6.62	123.87	119.90
35	BA	488	G	N3-C2-N2	6.61	124.53	119.90
35	BA	1970	A	O5'-P-OP2	-6.61	99.75	105.70
35	BA	659	C	C6-N1-C2	6.61	122.94	120.30
35	BA	2553	G	N7-C8-N9	6.61	116.41	113.10
35	BA	2582	G	C5-N7-C8	6.61	107.61	104.30
35	BA	2347	C	C6-N1-C2	-6.61	117.66	120.30
35	BA	2391	G	N3-C2-N2	-6.61	115.27	119.90
35	BA	587	C	C4-C5-C6	-6.61	114.10	117.40
35	BA	1317	A	N1-C2-N3	-6.61	126.00	129.30
1	AA	145	G	N3-C4-C5	6.61	131.90	128.60
1	AA	317	G	N1-C2-N3	6.61	127.86	123.90
1	AA	986	A	N1-C2-N3	-6.61	126.00	129.30
35	BA	1307	A	C2-N3-C4	-6.61	107.30	110.60
35	BA	1866	C	N1-C2-O2	6.61	122.86	118.90
35	BA	1326	U	N1-C2-O2	6.61	127.42	122.80
35	BA	2266	A	C2-N3-C4	-6.61	107.30	110.60
35	BA	2594	C	C5-C6-N1	6.61	124.30	121.00
1	AA	1358	U	C5-C6-N1	6.60	126.00	122.70
35	BA	741	G	N1-C6-O6	-6.60	115.94	119.90
1	AA	238	G	N9-C4-C5	6.60	108.04	105.40
1	AA	1068	G	O4'-C1'-N9	6.60	113.48	108.20
35	BA	278	A	C5-C6-N1	-6.60	114.40	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1958	C	N1-C2-O2	6.60	122.86	118.90
35	BA	2377	A	C2-N3-C4	6.60	113.90	110.60
36	BB	19	G	C4-C5-N7	6.60	113.44	110.80
1	AA	1093	A	N1-C6-N6	-6.60	114.64	118.60
1	AA	1390	U	C6-N1-C2	-6.60	117.04	121.00
35	BA	665	C	O4'-C1'-N1	6.60	113.48	108.20
1	AA	768	A	N7-C8-N9	-6.60	110.50	113.80
1	AA	805	C	N3-C4-C5	-6.60	119.26	121.90
1	AA	1352	C	N1-C2-O2	6.60	122.86	118.90
35	BA	156	U	N3-C4-O4	6.60	124.02	119.40
35	BA	530	G	C8-N9-C4	-6.60	103.76	106.40
35	BA	2455	G	C2-N3-C4	6.60	115.20	111.90
1	AA	971	G	O4'-C1'-N9	6.60	113.48	108.20
1	AA	1363	C	N1-C1'-C2'	6.60	122.58	114.00
35	BA	66	C	C2-N3-C4	-6.60	116.60	119.90
1	AA	1464	G	C5-C6-N1	-6.60	108.20	111.50
35	BA	2343	C	C6-N1-C2	6.60	122.94	120.30
1	AA	489	C	N1-C2-O2	6.59	122.86	118.90
35	BA	321	G	N3-C4-C5	6.59	131.90	128.60
35	BA	566	U	N1-C2-O2	6.59	127.42	122.80
35	BA	994	C	C6-N1-C2	-6.59	117.66	120.30
35	BA	2267	A	N1-C6-N6	6.59	122.56	118.60
1	AA	482	A	O4'-C1'-N9	-6.59	102.93	108.20
1	AA	911	U	O4'-C1'-N1	6.59	113.47	108.20
35	BA	1001	A	N1-C2-N3	-6.59	126.00	129.30
35	BA	545	C	C6-N1-C2	-6.59	117.66	120.30
35	BA	950	G	C8-N9-C4	-6.59	103.76	106.40
35	BA	1104	C	C4-C5-C6	6.59	120.70	117.40
35	BA	2147	G	N3-C4-N9	-6.59	122.05	126.00
35	BA	2510	C	N1-C2-O2	-6.59	114.94	118.90
1	AA	754	C	C1'-O4'-C4'	6.59	115.17	109.90
1	AA	992	U	N3-C2-O2	-6.59	117.59	122.20
33	B8	13	ARG	NE-CZ-NH1	-6.59	117.00	120.30
35	BA	2169	A	C2-N3-C4	-6.59	107.31	110.60
35	BA	2228	G	N1-C2-N3	6.59	127.85	123.90
35	BA	2429	G	N3-C2-N2	6.59	124.51	119.90
1	AA	302	G	O4'-C1'-N9	-6.59	102.93	108.20
35	BA	45	C	N3-C4-C5	-6.59	119.27	121.90
35	BA	1930	G	N3-C4-C5	-6.59	125.31	128.60
1	AA	653	A	N3-C4-C5	-6.58	122.19	126.80
35	BA	1304	C	C6-N1-C2	6.58	122.93	120.30
35	BA	1359	A	C3'-C2'-C1'	-6.58	96.23	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	31	C	N3-C2-O2	-6.58	117.29	121.90
35	BA	1860	G	N3-C2-N2	-6.58	115.29	119.90
36	BB	87	G	C4-C5-N7	6.58	113.43	110.80
1	AA	1266	G	C4-C5-C6	6.58	122.75	118.80
35	BA	1260	G	C4-C5-C6	-6.58	114.85	118.80
35	BA	2313	C	C6-N1-C2	-6.58	117.67	120.30
1	AA	1223	C	C6-N1-C2	6.58	122.93	120.30
35	BA	860	U	O4'-C1'-N1	6.58	113.46	108.20
35	BA	935	C	C4-C5-C6	-6.58	114.11	117.40
1	AA	409	G	C4-C5-C6	-6.58	114.85	118.80
1	AA	1095	U	C6-N1-C2	-6.58	117.05	121.00
1	AA	240	C	C5-C4-N4	-6.58	115.60	120.20
1	AA	785	G	C8-N9-C4	6.58	109.03	106.40
24	AY	31	ARG	NE-CZ-NH1	-6.58	117.01	120.30
35	BA	2267	A	C5-N7-C8	-6.58	100.61	103.90
1	AA	332	G	O4'-C1'-N9	-6.57	102.94	108.20
1	AA	1151	A	C5-N7-C8	-6.57	100.61	103.90
35	BA	30	G	N3-C4-C5	6.57	131.89	128.60
35	BA	204	A	P-O3'-C3'	6.57	127.59	119.70
35	BA	1935	G	N1-C6-O6	-6.57	115.96	119.90
1	AA	616	G	C2-N3-C4	-6.57	108.61	111.90
35	BA	902	C	C6-N1-C2	-6.57	117.67	120.30
1	AA	730	G	C5-N7-C8	-6.57	101.02	104.30
1	AA	891	U	N1-C2-O2	-6.57	118.20	122.80
35	BA	372	G	C5-N7-C8	6.57	107.58	104.30
35	BA	406	G	N3-C2-N2	6.57	124.50	119.90
35	BA	1624	G	N9-C4-C5	6.57	108.03	105.40
35	BA	272(E)	G	C2-N3-C4	-6.57	108.61	111.90
35	BA	735	A	N9-C4-C5	6.56	108.42	105.80
35	BA	2456	C	N3-C4-N4	6.56	122.59	118.00
35	BA	2591	C	N3-C4-C5	-6.56	119.27	121.90
35	BA	2839	G	C4-C5-C6	6.56	122.74	118.80
1	AA	887	G	C5-C6-N1	6.56	114.78	111.50
1	AA	1460	A	C4-C5-C6	-6.56	113.72	117.00
35	BA	16	G	N1-C6-O6	-6.56	115.96	119.90
35	BA	103	A	O4'-C1'-N9	-6.56	102.95	108.20
35	BA	153	C	C5-C4-N4	-6.56	115.61	120.20
35	BA	859	G	C5-C6-N1	6.56	114.78	111.50
1	AA	38	G	C4-C5-C6	6.56	122.73	118.80
1	AA	290	C	C5-C4-N4	-6.56	115.61	120.20
2	AB	82	ARG	NE-CZ-NH1	6.56	123.58	120.30
35	BA	139	G	N3-C4-N9	6.56	129.94	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2640	G	C4-C5-N7	6.56	113.42	110.80
36	BB	15	A	N7-C8-N9	6.56	117.08	113.80
54	BW	9	TYR	CG-CD2-CE2	6.56	126.55	121.30
1	AA	66	G	C5-N7-C8	6.56	107.58	104.30
1	AA	579	G	C6-N1-C2	-6.56	121.17	125.10
35	BA	925	C	C5-C6-N1	-6.56	117.72	121.00
35	BA	1583	A	C6-N1-C2	-6.56	114.67	118.60
35	BA	1689	A	C5-N7-C8	-6.56	100.62	103.90
35	BA	2861	G	C8-N9-C4	-6.56	103.78	106.40
1	AA	868	C	N1-C2-N3	6.56	123.79	119.20
35	BA	528	A	N7-C8-N9	-6.56	110.52	113.80
35	BA	1008	C	N1-C2-O2	-6.56	114.97	118.90
1	AA	61	G	N3-C4-N9	6.55	129.93	126.00
35	BA	411	G	C3'-C2'-C1'	6.55	106.74	101.50
35	BA	855	G	O4'-C1'-N9	6.55	113.44	108.20
35	BA	1264	G	C5-C6-N1	-6.55	108.22	111.50
1	AA	608	A	N1-C2-N3	6.55	132.58	129.30
1	AA	1348	U	O4'-C1'-C2'	6.55	113.50	107.60
35	BA	1276	A	C8-N9-C4	-6.55	103.18	105.80
36	BB	40	U	N3-C2-O2	-6.55	117.61	122.20
1	AA	189(C)	C	N3-C4-N4	-6.55	113.42	118.00
1	AA	1192	C	C4-C5-C6	-6.55	114.12	117.40
2	AB	21	ARG	NE-CZ-NH1	-6.55	117.03	120.30
35	BA	337	C	C4-C5-C6	6.55	120.67	117.40
35	BA	1485	G	O4'-C1'-N9	-6.55	102.96	108.20
35	BA	2479	G	C5-N7-C8	6.55	107.58	104.30
35	BA	2561	A	N1-C6-N6	6.55	122.53	118.60
22	AV	61	C	N3-C4-N4	6.55	122.58	118.00
35	BA	1274	A	C8-N9-C4	6.55	108.42	105.80
20	AT	57	ARG	NE-CZ-NH2	-6.55	117.03	120.30
35	BA	598	G	C4-C5-N7	6.55	113.42	110.80
35	BA	2737	G	N3-C2-N2	-6.55	115.32	119.90
35	BA	831	G	N7-C8-N9	-6.54	109.83	113.10
35	BA	1809	A	C5-C6-N6	6.54	128.94	123.70
35	BA	412	A	C2-N3-C4	6.54	113.87	110.60
35	BA	913	U	C5-C6-N1	6.54	125.97	122.70
1	AA	542	G	N1-C2-N3	6.54	127.83	123.90
1	AA	546	G	C5-N7-C8	6.54	107.57	104.30
1	AA	768	A	C4-C5-C6	-6.54	113.73	117.00
35	BA	336	C	N3-C4-C5	6.54	124.52	121.90
35	BA	1033	U	C5-C6-N1	6.54	125.97	122.70
35	BA	1643	G	C5-C6-O6	6.54	132.53	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2045	C	C2-N3-C4	6.54	123.17	119.90
36	BB	43	C	O4'-C1'-N1	6.54	113.43	108.20
35	BA	139(A)	G	N1-C6-O6	-6.54	115.98	119.90
35	BA	2474	C	C5-C6-N1	6.54	124.27	121.00
1	AA	1030(C)	G	N3-C4-N9	6.54	129.92	126.00
35	BA	179	G	C5-C6-N1	-6.54	108.23	111.50
35	BA	567	A	N7-C8-N9	-6.54	110.53	113.80
35	BA	705	A	C5-N7-C8	-6.54	100.63	103.90
35	BA	2491	U	C5'-C4'-C3'	-6.54	105.54	116.00
35	BA	2878	U	N1-C2-N3	6.54	118.82	114.90
10	AJ	66	ARG	NE-CZ-NH2	-6.54	117.03	120.30
35	BA	554	U	C6-N1-C2	-6.54	117.08	121.00
35	BA	1451	C	C2-N3-C4	-6.54	116.63	119.90
35	BA	1594	G	C5-N7-C8	6.54	107.57	104.30
1	AA	204	U	C1'-O4'-C4'	-6.53	104.67	109.90
22	AV	28	C	O4'-C1'-N1	6.53	113.43	108.20
35	BA	603	A	N3-C4-N9	6.53	132.63	127.40
35	BA	771	G	C4-C5-N7	6.53	113.41	110.80
35	BA	846	C	N3-C4-C5	6.53	124.51	121.90
35	BA	1047	G	N1-C2-N3	-6.53	119.98	123.90
35	BA	1063	G	C4-C5-N7	6.53	113.41	110.80
35	BA	2682	U	N3-C4-C5	-6.53	110.68	114.60
36	BB	11	C	C6-N1-C2	6.53	122.91	120.30
23	AX	21	C	N1-C2-O2	6.53	122.82	118.90
24	AY	172	ASP	CB-CG-OD2	6.53	124.18	118.30
35	BA	1266	G	C4-C5-N7	-6.53	108.19	110.80
35	BA	1559	G	C5-C6-O6	6.53	132.52	128.60
44	BL	55	ASP	CB-CG-OD1	-6.53	112.42	118.30
1	AA	975	A	C3'-C2'-C1'	6.53	106.72	101.50
1	AA	986	A	O4'-C1'-N9	-6.53	102.98	108.20
35	BA	70	G	N9-C4-C5	6.53	108.01	105.40
35	BA	236	C	C5-C6-N1	6.53	124.27	121.00
35	BA	258	G	C5-C6-O6	-6.53	124.68	128.60
35	BA	1354	A	N1-C2-N3	-6.53	126.03	129.30
35	BA	2885	C	C6-N1-C2	6.53	122.91	120.30
1	AA	666	G	C5-C6-N1	-6.53	108.24	111.50
1	AA	790	A	C5-C6-N1	-6.53	114.44	117.70
1	AA	837	G	C5-C6-O6	6.53	132.52	128.60
35	BA	32	C	N1-C2-N3	6.53	123.77	119.20
35	BA	669	G	C5-C6-O6	6.53	132.52	128.60
1	AA	189(I)	G	C2-N3-C4	6.53	115.16	111.90
1	AA	616	G	C5-C6-O6	-6.53	124.69	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	189	G	C8-N9-C4	6.53	109.01	106.40
35	BA	927	G	C8-N9-C4	-6.53	103.79	106.40
35	BA	1666	G	C4'-C3'-C2'	-6.53	96.08	102.60
35	BA	2382	G	C2-N3-C4	6.53	115.16	111.90
35	BA	2418	A	C4-C5-C6	-6.53	113.74	117.00
35	BA	1273	U	C4'-C3'-C2'	-6.52	96.08	102.60
1	AA	17	U	N3-C4-O4	-6.52	114.83	119.40
35	BA	146	G	C8-N9-C4	6.52	109.01	106.40
35	BA	614(B)	G	C5-C6-O6	6.52	132.51	128.60
35	BA	1669	A	N9-C1'-C2'	6.52	122.48	114.00
54	BW	90	ARG	NE-CZ-NH2	-6.52	117.04	120.30
22	AV	66	C	C2-N3-C4	6.52	123.16	119.90
1	AA	1458	G	C5'-C4'-C3'	-6.52	105.57	116.00
35	BA	855	G	N9-C4-C5	-6.52	102.79	105.40
35	BA	2580	U	C5-C6-N1	6.52	125.96	122.70
35	BA	2670	A	N9-C4-C5	-6.52	103.19	105.80
40	BF	164	ARG	NE-CZ-NH2	-6.52	117.04	120.30
1	AA	902	G	N7-C8-N9	6.52	116.36	113.10
35	BA	2064	C	C6-N1-C2	6.52	122.91	120.30
35	BA	2546	U	N3-C4-C5	-6.52	110.69	114.60
1	AA	1363	C	C6-N1-C2	6.52	122.91	120.30
1	AA	202	U	C1'-O4'-C4'	6.51	115.11	109.90
1	AA	247	G	C8-N9-C4	6.51	109.00	106.40
1	AA	550	G	C5-C6-N1	-6.51	108.24	111.50
35	BA	1616	A	C3'-C2'-C1'	-6.51	96.29	101.50
35	BA	2682	U	C5-C4-O4	6.51	129.81	125.90
1	AA	942	G	C8-N9-C4	6.51	109.00	106.40
35	BA	485	C	O4'-C1'-N1	6.51	113.41	108.20
35	BA	1184	G	N7-C8-N9	6.51	116.36	113.10
8	AH	94	TYR	CB-CG-CD1	-6.51	117.09	121.00
35	BA	16	G	C6-N1-C2	-6.51	121.19	125.10
35	BA	658	C	C6-N1-C2	6.51	122.90	120.30
35	BA	1400	G	C6-C5-N7	6.51	134.31	130.40
35	BA	2348	U	C5-C6-N1	6.51	125.96	122.70
1	AA	576	G	N9-C4-C5	6.51	108.00	105.40
29	B4	42	PHE	C-N-CA	6.51	137.97	121.70
35	BA	2038	G	C5-N7-C8	6.51	107.56	104.30
35	BA	2152	G	C6-N1-C2	-6.51	121.19	125.10
35	BA	2753	A	O4'-C1'-N9	6.51	113.41	108.20
1	AA	527	G	N7-C8-N9	6.51	116.35	113.10
35	BA	967	C	N3-C4-N4	-6.51	113.44	118.00
1	AA	1027	C	N3-C4-C5	6.51	124.50	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	8	A	C5-N7-C8	6.51	107.15	103.90
35	BA	788	A	N9-C1'-C2'	6.51	122.46	114.00
35	BA	1148	A	N1-C6-N6	6.51	122.50	118.60
35	BA	1840	G	N9-C4-C5	-6.51	102.80	105.40
35	BA	2157	G	C5-C6-O6	6.51	132.50	128.60
38	BD	183	ARG	NE-CZ-NH2	-6.51	117.05	120.30
35	BA	1523	U	C6-N1-C2	-6.50	117.10	121.00
35	BA	2667	C	C4-C5-C6	6.50	120.65	117.40
35	BA	2819	G	N7-C8-N9	-6.50	109.85	113.10
35	BA	977	G	C2-N3-C4	6.50	115.15	111.90
35	BA	1780	A	N1-C2-N3	6.50	132.55	129.30
1	AA	453	A	N9-C4-C5	-6.50	103.20	105.80
1	AA	570	G	C5-C6-O6	-6.50	124.70	128.60
35	BA	935	C	C2-N3-C4	6.50	123.15	119.90
35	BA	1762	A	O5'-P-OP1	6.50	118.50	110.70
1	AA	263	A	C5-N7-C8	-6.50	100.65	103.90
1	AA	1530	G	C4-C5-N7	6.50	113.40	110.80
35	BA	247	G	C1'-O4'-C4'	-6.50	104.70	109.90
35	BA	1447	G	N9-C4-C5	6.50	108.00	105.40
1	AA	279	A	C5-C6-N6	-6.50	118.50	123.70
1	AA	542	G	C6-N1-C2	-6.50	121.20	125.10
1	AA	1295	G	N7-C8-N9	-6.50	109.85	113.10
35	BA	287	C	C5-C6-N1	6.50	124.25	121.00
35	BA	2237	G	C4-C5-N7	-6.50	108.20	110.80
35	BA	2315	G	N7-C8-N9	-6.50	109.85	113.10
35	BA	294	A	N1-C6-N6	6.50	122.50	118.60
35	BA	1410	G	N9-C4-C5	6.50	108.00	105.40
35	BA	2194	G	C4-C5-N7	-6.50	108.20	110.80
35	BA	2635	C	C1'-O4'-C4'	6.50	115.10	109.90
36	BB	23	G	C8-N9-C4	6.50	109.00	106.40
1	AA	170	U	N1-C2-O2	6.50	127.35	122.80
1	AA	755	G	C6-N1-C2	6.50	129.00	125.10
35	BA	556	G	C6-C5-N7	-6.50	126.50	130.40
1	AA	128	G	N9-C4-C5	6.49	108.00	105.40
1	AA	928	G	C6-C5-N7	-6.49	126.50	130.40
24	AY	13	ARG	NE-CZ-NH1	6.49	123.55	120.30
35	BA	294	A	O4'-C1'-N9	6.49	113.39	108.20
35	BA	401	A	C5-N7-C8	-6.49	100.65	103.90
35	BA	928	G	C5-C6-N1	-6.49	108.25	111.50
35	BA	1284	A	C1'-O4'-C4'	6.49	115.09	109.90
35	BA	1550	C	C6-N1-C2	6.49	122.90	120.30
35	BA	1950	G	N9-C4-C5	6.49	108.00	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AV	1	C	C5-C6-N1	6.49	124.25	121.00
35	BA	1196	C	O4'-C1'-N1	6.49	113.39	108.20
1	AA	1528	U	N3-C4-C5	6.49	118.50	114.60
24	AY	644	ARG	NE-CZ-NH2	-6.49	117.06	120.30
35	BA	272(H)	C	C5-C6-N1	6.49	124.25	121.00
38	BD	274	ARG	NE-CZ-NH2	-6.49	117.06	120.30
1	AA	189(K)	U	N1-C2-N3	-6.49	111.01	114.90
1	AA	629	G	C8-N9-C4	6.49	109.00	106.40
22	AV	22	G	O4'-C1'-N9	6.49	113.39	108.20
35	BA	517	C	N1-C2-O2	6.49	122.79	118.90
35	BA	820	A	N1-C6-N6	-6.49	114.71	118.60
35	BA	870	A	C5-N7-C8	-6.49	100.66	103.90
35	BA	1507	A	C8-N9-C4	6.49	108.39	105.80
35	BA	2231	C	C2-N3-C4	6.49	123.14	119.90
56	BY	35	TYR	CB-CG-CD2	6.49	124.89	121.00
1	AA	102	G	N3-C2-N2	-6.49	115.36	119.90
35	BA	127	A	C8-N9-C4	6.49	108.39	105.80
35	BA	271(P)	C	C6-N1-C2	-6.49	117.70	120.30
35	BA	1886	C	N3-C2-O2	6.49	126.44	121.90
1	AA	40	C	C2-N3-C4	-6.49	116.66	119.90
1	AA	387	U	C5-C6-N1	6.49	125.94	122.70
1	AA	1248	A	C2-N3-C4	6.49	113.84	110.60
35	BA	271(W)	G	C8-N9-C4	-6.48	103.81	106.40
35	BA	1586	A	C6-N1-C2	-6.48	114.71	118.60
35	BA	2611	U	C5-C6-N1	6.48	125.94	122.70
1	AA	574	A	C6-N1-C2	6.48	122.49	118.60
1	AA	945	G	C6-C5-N7	6.48	134.29	130.40
1	AA	1287	A	N1-C6-N6	6.48	122.49	118.60
35	BA	2251	G	N9-C1'-C2'	6.48	122.43	114.00
35	BA	2632	A	C8-N9-C4	6.48	108.39	105.80
1	AA	521	G	C5-C6-O6	-6.48	124.71	128.60
1	AA	587	G	C4'-C3'-C2'	6.48	109.08	102.60
35	BA	704	G	N1-C6-O6	-6.48	116.01	119.90
35	BA	2761	G	N3-C4-C5	-6.48	125.36	128.60
35	BA	2766	G	N1-C6-O6	-6.48	116.01	119.90
36	BB	19	G	C6-C5-N7	-6.48	126.51	130.40
1	AA	298	A	C6-C5-N7	6.48	136.84	132.30
35	BA	2405	G	N1-C6-O6	6.48	123.79	119.90
1	AA	259	G	C5-C6-O6	6.48	132.49	128.60
3	AC	85	ARG	NE-CZ-NH2	-6.48	117.06	120.30
35	BA	1642	G	C6-C5-N7	-6.48	126.51	130.40
35	BA	1940	U	C5-C6-N1	6.48	125.94	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2452	C	C6-N1-C2	-6.48	117.71	120.30
35	BA	2782	G	C5'-C4'-O4'	-6.48	101.33	109.10
1	AA	736	C	N1-C2-O2	-6.48	115.02	118.90
35	BA	1180	C	N3-C2-O2	6.48	126.43	121.90
40	BF	106	ARG	NE-CZ-NH1	6.48	123.54	120.30
9	AI	104	ARG	CA-C-N	-6.47	102.96	117.20
22	AV	15	G	N3-C4-C5	-6.47	125.36	128.60
35	BA	1411	C	C4-C5-C6	6.47	120.64	117.40
1	AA	1101	A	C8-N9-C4	-6.47	103.21	105.80
1	AA	1166	G	C8-N9-C4	-6.47	103.81	106.40
35	BA	271(U)	G	C5-C6-N1	-6.47	108.26	111.50
25	B0	72	ARG	NE-CZ-NH1	-6.47	117.06	120.30
36	BB	67	G	C5-N7-C8	-6.47	101.07	104.30
1	AA	651	C	C5-C4-N4	-6.47	115.67	120.20
1	AA	669	U	N3-C4-O4	-6.47	114.87	119.40
1	AA	1446	U	O4'-C1'-N1	6.47	113.37	108.20
35	BA	1024	G	N9-C4-C5	6.47	107.99	105.40
35	BA	1675	C	C5-C6-N1	6.47	124.23	121.00
35	BA	1967	C	N3-C4-C5	6.47	124.49	121.90
35	BA	2773	C	C4-C5-C6	6.47	120.63	117.40
1	AA	1213	A	N7-C8-N9	-6.46	110.57	113.80
35	BA	262	A	C5-C6-N6	-6.46	118.53	123.70
35	BA	2705	A	N1-C6-N6	6.46	122.48	118.60
1	AA	70	G	O4'-C1'-N9	6.46	113.37	108.20
35	BA	1140	C	C2-N3-C4	-6.46	116.67	119.90
35	BA	1921	G	N9-C1'-C2'	-6.46	104.89	112.00
35	BA	1963	U	C1'-O4'-C4'	-6.46	104.73	109.90
1	AA	1017	G	N1-C2-N3	6.46	127.78	123.90
35	BA	831	G	C6-N1-C2	-6.46	121.22	125.10
35	BA	848	G	N9-C4-C5	6.46	107.98	105.40
35	BA	1077	A	C6-N1-C2	-6.46	114.72	118.60
35	BA	2303	G	N1-C6-O6	-6.46	116.02	119.90
1	AA	876	G	C4-C5-N7	-6.46	108.22	110.80
35	BA	959	A	N7-C8-N9	6.46	117.03	113.80
35	BA	967	C	N1-C1'-C2'	-6.46	104.89	112.00
35	BA	1921	G	C4-C5-C6	-6.46	114.92	118.80
13	AM	125	ARG	NE-CZ-NH1	-6.46	117.07	120.30
35	BA	1088	A	N1-C6-N6	-6.46	114.72	118.60
35	BA	2035	G	N3-C2-N2	-6.46	115.38	119.90
35	BA	2141	G	N3-C2-N2	6.46	124.42	119.90
35	BA	2454	G	C5-C6-O6	-6.46	124.72	128.60
35	BA	2509	G	C5-C6-O6	-6.46	124.72	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	445	G	N3-C4-N9	6.46	129.87	126.00
35	BA	1165	U	C6-N1-C2	6.46	124.87	121.00
35	BA	1241	A	O4'-C4'-C3'	-6.46	97.54	104.00
1	AA	1473	A	N9-C4-C5	6.46	108.38	105.80
1	AA	294	U	N3-C2-O2	6.45	126.72	122.20
35	BA	480	A	C4-C5-C6	6.45	120.23	117.00
35	BA	1777	U	C5-C6-N1	-6.45	119.47	122.70
35	BA	1009	A	C4-C5-C6	6.45	120.23	117.00
35	BA	2268	A	C6-C5-N7	-6.45	127.78	132.30
1	AA	216	G	N3-C2-N2	-6.45	115.39	119.90
1	AA	727	G	C2-N3-C4	6.45	115.12	111.90
1	AA	810	C	C6-N1-C2	6.45	122.88	120.30
1	AA	1209	C	O4'-C1'-N1	6.45	113.36	108.20
35	BA	513	A	N1-C2-N3	6.45	132.53	129.30
35	BA	1678	G	N7-C8-N9	-6.45	109.87	113.10
35	BA	1970	A	O4'-C1'-N9	-6.45	103.04	108.20
35	BA	2088	G	C4-C5-N7	6.45	113.38	110.80
35	BA	2549	G	C6-C5-N7	6.45	134.27	130.40
35	BA	2687	U	C6-N1-C2	-6.45	117.13	121.00
1	AA	1221	G	C6-N1-C2	6.45	128.97	125.10
29	B4	42	PHE	N-CA-C	6.45	128.41	111.00
35	BA	1506	C	N1-C2-O2	6.45	122.77	118.90
35	BA	1561	G	N1-C2-N3	6.45	127.77	123.90
35	BA	2252	G	N9-C4-C5	6.45	107.98	105.40
1	AA	868	C	C4-C5-C6	6.45	120.62	117.40
35	BA	577	G	C2-N3-C4	-6.45	108.68	111.90
35	BA	1171	G	N1-C2-N3	6.45	127.77	123.90
1	AA	576	G	C4-C5-N7	-6.45	108.22	110.80
35	BA	748	G	N1-C2-N3	6.45	127.77	123.90
35	BA	2445	G	C5-C6-N1	6.45	114.72	111.50
35	BA	1680	U	C2-N3-C4	6.44	130.87	127.00
36	BB	44	G	O4'-C1'-N9	-6.44	103.05	108.20
1	AA	595	G	C8-N9-C4	-6.44	103.82	106.40
35	BA	22	C	C6-N1-C2	-6.44	117.72	120.30
35	BA	966	G	C5-N7-C8	-6.44	101.08	104.30
35	BA	1356	G	C8-N9-C4	-6.44	103.82	106.40
35	BA	1890	A	N1-C6-N6	6.44	122.47	118.60
35	BA	2199	A	C5-C6-N1	6.44	120.92	117.70
40	BF	74	ARG	NE-CZ-NH1	-6.44	117.08	120.30
1	AA	189(A)	C	N1-C2-O2	-6.44	115.04	118.90
1	AA	1089	G	C6-N1-C2	-6.44	121.23	125.10
1	AA	1170	A	N1-C6-N6	-6.44	114.74	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	AF	47	ARG	NE-CZ-NH1	-6.44	117.08	120.30
35	BA	324	A	C3'-C2'-C1'	6.44	106.65	101.50
35	BA	1035	U	C5-C6-N1	-6.44	119.48	122.70
35	BA	1210	A	N7-C8-N9	-6.44	110.58	113.80
35	BA	1818	U	C5-C6-N1	-6.44	119.48	122.70
35	BA	2602	A	N1-C2-N3	6.44	132.52	129.30
1	AA	416	G	C8-N9-C4	-6.44	103.82	106.40
1	AA	1425	U	C2-N3-C4	-6.44	123.14	127.00
35	BA	739	G	C6-C5-N7	-6.44	126.54	130.40
35	BA	1114	G	C5-C6-N1	6.44	114.72	111.50
35	BA	77	C	N3-C4-N4	-6.44	113.49	118.00
35	BA	1456	G	C6-N1-C2	-6.44	121.24	125.10
1	AA	1218	C	C1'-O4'-C4'	-6.44	104.75	109.90
1	AA	1221	G	N7-C8-N9	6.44	116.32	113.10
1	AA	244	U	N3-C4-O4	6.43	123.90	119.40
1	AA	452	A	N7-C8-N9	-6.43	110.58	113.80
1	AA	894	G	C8-N9-C4	6.43	108.97	106.40
1	AA	1264	C	N1-C2-O2	6.43	122.76	118.90
35	BA	603	A	C5-C6-N1	6.43	120.92	117.70
35	BA	654(K)	C	C2-N3-C4	6.43	123.12	119.90
35	BA	1488	G	N1-C6-O6	6.43	123.76	119.90
35	BA	2299	G	C5-N7-C8	6.43	107.52	104.30
35	BA	2425	A	N7-C8-N9	6.43	117.02	113.80
1	AA	1366	C	C6-N1-C2	-6.43	117.73	120.30
1	AA	1472	U	N1-C2-N3	6.43	118.76	114.90
35	BA	697	C	N1-C2-O2	6.43	122.76	118.90
35	BA	1894	C	N3-C4-N4	-6.43	113.50	118.00
35	BA	2808	U	C5-C6-N1	6.43	125.92	122.70
36	BB	5	C	N1-C2-O2	6.43	122.76	118.90
35	BA	89	G	N9-C4-C5	-6.43	102.83	105.40
35	BA	836	G	C8-N9-C4	-6.43	103.83	106.40
1	AA	197	A	N9-C4-C5	6.43	108.37	105.80
35	BA	807	U	N3-C4-O4	-6.43	114.90	119.40
35	BA	1145	C	C5-C6-N1	-6.43	117.78	121.00
35	BA	1586	A	O4'-C1'-N9	6.43	113.34	108.20
35	BA	1951	U	C2-N3-C4	6.43	130.86	127.00
35	BA	2755	C	N1-C2-O2	6.43	122.76	118.90
7	AG	143	ARG	NE-CZ-NH2	-6.43	117.09	120.30
35	BA	1802	A	C2-N3-C4	-6.43	107.39	110.60
35	BA	1828	G	C4-C5-N7	6.43	113.37	110.80
19	AS	80	TYR	CZ-CE2-CD2	-6.43	114.02	119.80
35	BA	768	G	N3-C4-C5	6.43	131.81	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1430	C	C5-C6-N1	-6.43	117.79	121.00
35	BA	1440	G	C2-N3-C4	6.43	115.11	111.90
35	BA	2190	G	N9-C4-C5	-6.43	102.83	105.40
38	BD	217	ARG	NE-CZ-NH1	6.43	123.51	120.30
35	BA	94	C	O4'-C1'-N1	6.42	113.34	108.20
35	BA	1509(A)	A	C5-C6-N1	6.42	120.91	117.70
35	BA	1814	G	C8-N9-C4	6.42	108.97	106.40
35	BA	2287	A	C5-N7-C8	6.42	107.11	103.90
1	AA	559	A	N1-C6-N6	6.42	122.45	118.60
1	AA	994	A	C8-N9-C4	6.42	108.37	105.80
1	AA	1496	C	N3-C4-C5	6.42	124.47	121.90
1	AA	577	G	C6-N1-C2	-6.42	121.25	125.10
2	AB	199	TYR	CB-CG-CD2	6.42	124.85	121.00
35	BA	1659	U	C4-C5-C6	-6.42	115.85	119.70
35	BA	1888	G	N3-C2-N2	-6.42	115.41	119.90
1	AA	766	A	C5'-C4'-O4'	6.42	116.80	109.10
35	BA	475	U	C6-N1-C2	6.42	124.85	121.00
35	BA	727	A	N1-C2-N3	6.42	132.51	129.30
35	BA	1680	U	N3-C4-C5	-6.42	110.75	114.60
1	AA	1156	G	C2-N3-C4	6.42	115.11	111.90
24	AY	198	GLU	OE1-CD-OE2	-6.42	115.60	123.30
35	BA	1303	G	C5-C6-N1	-6.42	108.29	111.50
35	BA	1997	G	N7-C8-N9	6.42	116.31	113.10
35	BA	2775	A	N7-C8-N9	6.42	117.01	113.80
1	AA	438	G	N9-C4-C5	6.42	107.97	105.40
1	AA	938	A	N9-C4-C5	-6.42	103.23	105.80
35	BA	16	G	C5-N7-C8	6.42	107.51	104.30
35	BA	223	A	C1'-O4'-C4'	-6.42	104.77	109.90
35	BA	943	U	N1-C2-O2	-6.42	118.31	122.80
35	BA	1697	G	N1-C2-N3	-6.42	120.05	123.90
35	BA	1765	C	C5-C6-N1	-6.42	117.79	121.00
35	BA	2628	C	C6-N1-C2	-6.42	117.73	120.30
36	BB	24	G	C3'-C2'-C1'	6.42	106.63	101.50
38	BD	48	ARG	NE-CZ-NH2	-6.42	117.09	120.30
1	AA	969	A	N1-C6-N6	-6.42	114.75	118.60
35	BA	2456	C	C5-C4-N4	-6.42	115.71	120.20
1	AA	736	C	C5-C6-N1	-6.41	117.79	121.00
35	BA	1110	G	C8-N9-C4	-6.41	103.83	106.40
35	BA	1426	G	C6-C5-N7	-6.41	126.55	130.40
35	BA	2775	A	C6-N1-C2	-6.41	114.75	118.60
1	AA	24	U	C2-N3-C4	-6.41	123.15	127.00
1	AA	495	A	C5-C6-N1	6.41	120.91	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	585	G	N1-C2-N2	6.41	121.97	116.20
1	AA	1515	C	N1-C2-O2	-6.41	115.05	118.90
35	BA	79	G	C3'-C2'-C1'	6.41	106.63	101.50
35	BA	466	A	C5'-C4'-O4'	6.41	116.79	109.10
35	BA	654(J)	A	N1-C6-N6	6.41	122.45	118.60
35	BA	744	G	C4-C5-C6	6.41	122.65	118.80
35	BA	995	C	C2-N3-C4	-6.41	116.69	119.90
35	BA	1278	A	C5-N7-C8	6.41	107.11	103.90
35	BA	1307	A	N7-C8-N9	-6.41	110.59	113.80
35	BA	2886	G	C8-N9-C4	6.41	108.97	106.40
35	BA	88	G	N3-C2-N2	-6.41	115.42	119.90
35	BA	129	C	C4-C5-C6	-6.41	114.20	117.40
1	AA	741	G	C2-N3-C4	-6.41	108.70	111.90
35	BA	1271	G	N1-C6-O6	-6.41	116.06	119.90
35	BA	1977	A	N7-C8-N9	6.41	117.00	113.80
35	BA	2706	G	N3-C4-C5	6.41	131.80	128.60
35	BA	32	C	C2-N3-C4	-6.40	116.70	119.90
35	BA	2379	G	C4-C5-N7	-6.40	108.24	110.80
1	AA	603	U	O4'-C1'-N1	6.40	113.32	108.20
1	AA	942	G	N1-C6-O6	6.40	123.74	119.90
1	AA	1312	G	N9-C4-C5	6.40	107.96	105.40
1	AA	1400	C	C4-C5-C6	6.40	120.60	117.40
35	BA	2472	G	N9-C4-C5	-6.40	102.84	105.40
35	BA	720	C	C5-C4-N4	-6.40	115.72	120.20
35	BA	1410	G	C5-C6-N1	-6.40	108.30	111.50
35	BA	1959	G	C5-N7-C8	-6.40	101.10	104.30
35	BA	2388	A	N1-C6-N6	-6.40	114.76	118.60
35	BA	2441	C	C5'-C4'-O4'	6.40	116.78	109.10
35	BA	236	C	C6-N1-C2	-6.40	117.74	120.30
35	BA	2117	A	O4'-C1'-N9	6.40	113.32	108.20
35	BA	2372	G	C4-C5-N7	6.40	113.36	110.80
35	BA	525	U	O4'-C1'-N1	6.40	113.32	108.20
35	BA	1796	U	O4'-C1'-N1	-6.40	103.08	108.20
35	BA	2047	U	C5-C6-N1	6.40	125.90	122.70
35	BA	2498	C	C6-N1-C2	-6.40	117.74	120.30
38	BD	263	ARG	NE-CZ-NH2	-6.40	117.10	120.30
1	AA	18	C	C4-C5-C6	6.40	120.60	117.40
1	AA	29	G	N1-C6-O6	-6.40	116.06	119.90
35	BA	630	G	C4-C5-N7	-6.40	108.24	110.80
35	BA	2011	U	N3-C4-O4	6.40	123.88	119.40
1	AA	657	G	C6-N1-C2	-6.39	121.26	125.10
1	AA	916	G	C6-C5-N7	6.39	134.24	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	931	C	C2-N3-C4	6.39	123.10	119.90
24	AY	210	ARG	NE-CZ-NH2	-6.39	117.10	120.30
35	BA	272(B)	G	N3-C4-N9	-6.39	122.16	126.00
1	AA	1214	C	C4-C5-C6	6.39	120.60	117.40
1	AA	1236	A	C8-N9-C4	6.39	108.36	105.80
35	BA	326	G	C8-N9-C4	-6.39	103.84	106.40
36	BB	6	C	C1'-O4'-C4'	-6.39	104.79	109.90
1	AA	309	G	C8-N9-C4	6.39	108.96	106.40
35	BA	218	A	N1-C2-N3	-6.39	126.11	129.30
35	BA	1520	G	C4'-C3'-C2'	-6.39	96.21	102.60
35	BA	2052	G	N1-C2-N3	6.39	127.73	123.90
1	AA	538	G	N1-C6-O6	6.39	123.73	119.90
1	AA	750	G	C4-C5-N7	6.39	113.36	110.80
22	AV	55	U	N1-C2-N3	-6.39	111.07	114.90
35	BA	375	C	N3-C4-C5	6.39	124.46	121.90
35	BA	1476	C	C5-C6-N1	6.39	124.19	121.00
35	BA	2071	A	O4'-C1'-N9	-6.39	103.09	108.20
35	BA	2195	C	O4'-C1'-N1	-6.39	103.09	108.20
1	AA	243	A	N1-C6-N6	-6.39	114.77	118.60
1	AA	1226	C	C5-C4-N4	6.39	124.67	120.20
1	AA	189(B)	C	C5-C4-N4	-6.39	115.73	120.20
1	AA	363	A	C5-C6-N1	-6.39	114.51	117.70
1	AA	1483	A	N1-C2-N3	6.39	132.49	129.30
35	BA	70	G	C6-N1-C2	-6.39	121.27	125.10
35	BA	464	U	C5-C6-N1	6.39	125.89	122.70
35	BA	521	G	C5-C6-N1	-6.39	108.31	111.50
35	BA	2457	U	N3-C2-O2	-6.39	117.73	122.20
1	AA	719	C	C5-C4-N4	-6.38	115.73	120.20
35	BA	392	C	N1-C2-O2	6.38	122.73	118.90
35	BA	792	G	N1-C6-O6	6.38	123.73	119.90
1	AA	152	A	C5'-C4'-O4'	6.38	116.76	109.10
35	BA	1921	G	N3-C4-C5	6.38	131.79	128.60
35	BA	372	G	C5-C6-O6	6.38	132.43	128.60
35	BA	556	G	C2-N3-C4	-6.38	108.71	111.90
35	BA	1456	G	N1-C6-O6	-6.38	116.07	119.90
35	BA	1897	G	C4-C5-N7	-6.38	108.25	110.80
35	BA	1900	A	N9-C4-C5	-6.38	103.25	105.80
35	BA	2030	A	N1-C2-N3	6.38	132.49	129.30
35	BA	2040	C	C2-N3-C4	-6.38	116.71	119.90
35	BA	2304	G	N9-C4-C5	-6.38	102.85	105.40
35	BA	1764	G	C4-C5-N7	-6.38	108.25	110.80
35	BA	2060	A	C6-N1-C2	-6.38	114.77	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2256	G	C2-N3-C4	-6.38	108.71	111.90
35	BA	2768	C	C4-C5-C6	6.38	120.59	117.40
1	AA	472	A	C4-C5-C6	-6.38	113.81	117.00
1	AA	820	U	C5-C6-N1	-6.38	119.51	122.70
13	AM	91	ARG	NE-CZ-NH1	6.38	123.49	120.30
35	BA	1334	G	N9-C4-C5	-6.38	102.85	105.40
35	BA	1493	C	N1-C1'-C2'	6.38	122.29	114.00
35	BA	2339	G	C2-N3-C4	6.38	115.09	111.90
53	BV	81	TYR	CB-CG-CD2	6.38	124.83	121.00
1	AA	29	G	C8-N9-C4	-6.38	103.85	106.40
1	AA	1198	G	O4'-C1'-N9	6.38	113.30	108.20
1	AA	1475	G	C5-C6-O6	-6.38	124.77	128.60
1	AA	1489	G	C5-C6-N1	-6.38	108.31	111.50
35	BA	271(K)	U	O4'-C4'-C3'	6.38	111.20	106.10
35	BA	405	U	N3-C2-O2	-6.38	117.74	122.20
35	BA	1505	C	N3-C4-C5	-6.38	119.35	121.90
35	BA	2809	A	N1-C6-N6	-6.38	114.77	118.60
36	BB	46	A	N3-C4-N9	6.38	132.50	127.40
35	BA	1381	G	C2-N3-C4	6.38	115.09	111.90
36	BB	30	C	N1-C2-O2	6.38	122.72	118.90
14	AN	29	ARG	NE-CZ-NH1	6.37	123.49	120.30
35	BA	309	G	N3-C4-C5	-6.37	125.41	128.60
35	BA	738	G	C6-C5-N7	6.37	134.22	130.40
35	BA	1311	G	C6-C5-N7	-6.37	126.58	130.40
35	BA	1800	C	C4-C5-C6	6.37	120.59	117.40
35	BA	1862	G	C4-C5-N7	6.37	113.35	110.80
36	BB	34	U	C2-N3-C4	6.37	130.82	127.00
1	AA	22	G	C2-N3-C4	-6.37	108.71	111.90
1	AA	285	G	N9-C1'-C2'	-6.37	104.99	112.00
1	AA	775	G	N3-C4-N9	6.37	129.82	126.00
1	AA	1349	A	N1-C6-N6	6.37	122.42	118.60
35	BA	1184	G	N3-C4-C5	-6.37	125.41	128.60
1	AA	21	G	N7-C8-N9	-6.37	109.92	113.10
1	AA	225	C	N3-C4-C5	6.37	124.45	121.90
1	AA	895	G	C6-N1-C2	-6.37	121.28	125.10
1	AA	1290	G	C2-N3-C4	6.37	115.08	111.90
35	BA	1859	A	N9-C4-C5	-6.37	103.25	105.80
35	BA	1992	G	C4'-C3'-C2'	6.37	108.97	102.60
35	BA	2024	G	C8-N9-C4	6.37	108.95	106.40
35	BA	2149	G	N3-C4-N9	6.37	129.82	126.00
35	BA	1111	A	C5-N7-C8	6.37	107.08	103.90
35	BA	1277	G	C8-N9-C4	-6.37	103.85	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	875	C	N3-C4-N4	-6.37	113.54	118.00
35	BA	925	C	C4-C5-C6	6.37	120.58	117.40
50	BS	106	ARG	NE-CZ-NH1	-6.37	117.12	120.30
1	AA	20	U	N1-C2-N3	-6.36	111.08	114.90
1	AA	750	G	C8-N9-C4	6.36	108.94	106.40
35	BA	458	G	C4-C5-C6	-6.36	114.98	118.80
35	BA	1084	A	N7-C8-N9	-6.36	110.62	113.80
35	BA	1900	A	N3-C4-C5	6.36	131.25	126.80
35	BA	2313	C	C5'-C4'-O4'	-6.36	101.47	109.10
1	AA	122	G	O4'-C1'-N9	6.36	113.29	108.20
1	AA	745	C	O4'-C1'-N1	6.36	113.29	108.20
1	AA	1100	C	N3-C4-C5	6.36	124.44	121.90
4	AD	209	ARG	NE-CZ-NH1	-6.36	117.12	120.30
35	BA	283	A	C3'-C2'-C1'	-6.36	96.41	101.50
35	BA	476	G	C5-C6-N1	-6.36	108.32	111.50
35	BA	1020	A	C2'-C3'-O3'	6.36	123.88	113.70
35	BA	1086	A	C8-N9-C4	-6.36	103.26	105.80
1	AA	247	G	N3-C2-N2	6.36	124.35	119.90
1	AA	977	A	C2-N3-C4	-6.36	107.42	110.60
22	AV	15	G	C5-C6-O6	6.36	132.41	128.60
24	AY	160	ARG	NE-CZ-NH2	-6.36	117.12	120.30
35	BA	611	C	N1-C2-O2	-6.36	115.08	118.90
35	BA	701	G	O4'-C1'-N9	-6.36	103.11	108.20
35	BA	1278	A	N7-C8-N9	-6.36	110.62	113.80
36	BB	36	C	O4'-C1'-N1	6.36	113.29	108.20
1	AA	625	G	C4-C5-N7	-6.36	108.26	110.80
1	AA	852	G	N3-C2-N2	6.36	124.35	119.90
1	AA	1056	U	N3-C2-O2	-6.36	117.75	122.20
35	BA	279	C	C1'-O4'-C4'	6.36	114.98	109.90
35	BA	2198	A	C5-N7-C8	6.36	107.08	103.90
1	AA	411	A	C6-N1-C2	6.35	122.41	118.60
35	BA	191	A	C5-C6-N1	6.35	120.88	117.70
35	BA	1580	A	O4'-C1'-N9	6.35	113.28	108.20
35	BA	2801(A)	A	C4-C5-C6	-6.35	113.82	117.00
1	AA	139	G	N3-C2-N2	-6.35	115.45	119.90
1	AA	893	C	N3-C4-N4	-6.35	113.55	118.00
35	BA	476	G	N3-C2-N2	6.35	124.35	119.90
35	BA	1330	C	O4'-C1'-N1	6.35	113.28	108.20
35	BA	1577	C	C5-C6-N1	-6.35	117.82	121.00
35	BA	1712	C	C6-N1-C2	6.35	122.84	120.30
35	BA	2000	G	N3-C4-N9	6.35	129.81	126.00
35	BA	2761	G	N7-C8-N9	-6.35	109.92	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	35	G	C5-C6-O6	-6.35	124.79	128.60
1	AA	154	C	O4'-C1'-N1	-6.35	103.12	108.20
35	BA	796	C	N3-C2-O2	-6.35	117.45	121.90
1	AA	105	G	N3-C2-N2	-6.35	115.46	119.90
1	AA	524	G	O5'-P-OP1	-6.35	99.98	105.70
1	AA	587	G	N3-C4-C5	-6.35	125.42	128.60
1	AA	1066	C	C3'-C2'-C1'	-6.35	96.42	101.50
1	AA	1120	G	O5'-P-OP2	-6.35	99.99	105.70
35	BA	211	A	C5-C6-N1	6.35	120.88	117.70
35	BA	393	C	N1-C2-O2	6.35	122.71	118.90
35	BA	568	U	N3-C4-C5	-6.35	110.79	114.60
35	BA	2048	G	N9-C4-C5	6.35	107.94	105.40
1	AA	1030(B)	C	C4-C5-C6	6.35	120.57	117.40
1	AA	1309	G	N1-C6-O6	-6.35	116.09	119.90
35	BA	229	A	N1-C2-N3	6.35	132.47	129.30
35	BA	676	A	C5-C6-N1	6.35	120.87	117.70
1	AA	115	G	C6-C5-N7	6.34	134.21	130.40
1	AA	671	G	N3-C4-C5	-6.34	125.43	128.60
1	AA	927	G	N3-C4-N9	6.34	129.81	126.00
1	AA	1392	G	C5-C6-O6	-6.34	124.79	128.60
35	BA	331	A	N9-C1'-C2'	6.34	122.25	114.00
35	BA	875	G	C2-N3-C4	-6.34	108.73	111.90
35	BA	1083	U	N3-C4-C5	6.34	118.41	114.60
35	BA	2103	C	C1'-O4'-C4'	-6.34	104.83	109.90
35	BA	2198	A	N3-C4-N9	-6.34	122.32	127.40
1	AA	518	C	C5'-C4'-O4'	6.34	116.71	109.10
1	AA	1379	G	N3-C4-N9	-6.34	122.19	126.00
35	BA	1453	U	C5-C4-O4	-6.34	122.09	125.90
1	AA	129(A)	G	C5-N7-C8	6.34	107.47	104.30
1	AA	780	A	C5-C6-N6	-6.34	118.63	123.70
1	AA	1080	A	N1-C2-N3	-6.34	126.13	129.30
35	BA	171	G	N3-C2-N2	-6.34	115.46	119.90
35	BA	1252	G	N9-C1'-C2'	6.34	122.24	114.00
35	BA	2825	C	N1-C1'-C2'	-6.34	105.02	112.00
52	BU	112	ARG	NE-CZ-NH2	-6.34	117.13	120.30
1	AA	745	C	N1-C2-O2	6.34	122.70	118.90
35	BA	123	G	C5-C6-N1	-6.34	108.33	111.50
35	BA	923	C	C1'-O4'-C4'	-6.34	104.83	109.90
35	BA	1156	A	N9-C1'-C2'	6.34	122.24	114.00
35	BA	2410	G	N9-C4-C5	-6.34	102.86	105.40
1	AA	350	G	N1-C6-O6	-6.34	116.10	119.90
35	BA	2258	C	N3-C4-N4	6.34	122.44	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	772	U	C4'-C3'-C2'	-6.34	96.26	102.60
22	AV	52	G	C4-C5-C6	-6.34	115.00	118.80
35	BA	19	C	C5-C6-N1	-6.34	117.83	121.00
35	BA	70	G	C8-N9-C4	-6.34	103.87	106.40
35	BA	1243	G	N7-C8-N9	6.34	116.27	113.10
35	BA	1882	C	C4-C5-C6	6.34	120.57	117.40
36	BB	57	A	N9-C4-C5	-6.34	103.27	105.80
36	BB	74	U	C5-C6-N1	6.34	125.87	122.70
36	BB	102	A	C5'-C4'-C3'	-6.34	105.86	116.00
42	BH	60	ARG	NE-CZ-NH2	-6.34	117.13	120.30
1	AA	203	U	N1-C1'-C2'	6.33	122.23	114.00
1	AA	578	C	O4'-C1'-N1	6.33	113.27	108.20
1	AA	1110	A	C5-C6-N1	-6.33	114.53	117.70
1	AA	1157	A	N1-C2-N3	-6.33	126.13	129.30
35	BA	1609	A	O4'-C1'-N9	6.33	113.27	108.20
35	BA	2151	G	N9-C4-C5	-6.33	102.87	105.40
1	AA	27	G	C2-N3-C4	6.33	115.07	111.90
1	AA	503	C	C4-C5-C6	-6.33	114.23	117.40
1	AA	719	C	C5-C6-N1	6.33	124.17	121.00
1	AA	888	G	C8-N9-C4	-6.33	103.87	106.40
1	AA	1113	C	C6-N1-C2	-6.33	117.77	120.30
35	BA	764	A	C8-N9-C4	6.33	108.33	105.80
35	BA	1112	G	N1-C2-N3	6.33	127.70	123.90
1	AA	342	C	C2-N1-C1'	6.33	125.77	118.80
1	AA	752	G	C2-N3-C4	6.33	115.06	111.90
1	AA	1088	G	C6-C5-N7	-6.33	126.60	130.40
1	AA	1251	A	C5-C6-N1	6.33	120.86	117.70
35	BA	74	A	C4'-C3'-C2'	6.33	108.93	102.60
35	BA	540	C	C6-N1-C2	6.33	122.83	120.30
35	BA	632	A	C8-N9-C4	6.33	108.33	105.80
35	BA	654(N)	G	N7-C8-N9	6.33	116.27	113.10
35	BA	1205	U	C5-C6-N1	-6.33	119.53	122.70
35	BA	1947	C	C5-C4-N4	-6.33	115.77	120.20
35	BA	2024	G	N3-C4-C5	6.33	131.76	128.60
35	BA	2745	C	N3-C4-C5	-6.33	119.37	121.90
1	AA	292	G	C5-C6-N1	-6.33	108.33	111.50
35	BA	466	A	C5-C6-N1	-6.33	114.53	117.70
35	BA	1347	G	C6-N1-C2	6.33	128.90	125.10
11	AK	91	ARG	NE-CZ-NH2	6.33	123.46	120.30
35	BA	570	G	N1-C2-N3	-6.33	120.10	123.90
35	BA	1106	G	N1-C2-N3	6.33	127.70	123.90
36	BB	24	G	N3-C4-N9	6.33	129.80	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1306	A	C4-C5-N7	-6.33	107.54	110.70
35	BA	1866	C	O4'-C1'-N1	6.33	113.26	108.20
35	BA	1789	A	C4-C5-C6	6.33	120.16	117.00
35	BA	1988	C	C5-C6-N1	6.33	124.16	121.00
35	BA	2284	C	C2-N3-C4	6.33	123.06	119.90
54	BW	92	ARG	NE-CZ-NH2	-6.33	117.14	120.30
1	AA	343	U	C5-C6-N1	-6.32	119.54	122.70
1	AA	487	A	C6-N1-C2	6.32	122.39	118.60
1	AA	559	A	C5-N7-C8	6.32	107.06	103.90
22	AV	68	C	C5-C6-N1	6.32	124.16	121.00
35	BA	1015	G	C6-C5-N7	-6.32	126.61	130.40
35	BA	1156	A	C8-N9-C4	-6.32	103.27	105.80
35	BA	1581	G	C8-N9-C4	-6.32	103.87	106.40
35	BA	2194	G	N3-C4-C5	-6.32	125.44	128.60
1	AA	802	A	C5-N7-C8	6.32	107.06	103.90
28	B3	30	ARG	NE-CZ-NH2	6.32	123.46	120.30
35	BA	210	C	C5-C6-N1	6.32	124.16	121.00
35	BA	1896	G	C8-N9-C4	-6.32	103.87	106.40
35	BA	2630	G	C5'-C4'-C3'	-6.32	105.88	116.00
1	AA	364	A	N1-C6-N6	6.32	122.39	118.60
1	AA	630	G	N3-C2-N2	-6.32	115.48	119.90
35	BA	979	G	C5-C6-O6	6.32	132.39	128.60
35	BA	1527	G	C6-N1-C2	-6.32	121.31	125.10
35	BA	1969	A	C6-N1-C2	-6.32	114.81	118.60
35	BA	2155	G	C5-N7-C8	-6.32	101.14	104.30
1	AA	1173	G	C8-N9-C4	-6.32	103.87	106.40
5	AE	26	PHE	CB-CG-CD1	6.32	125.22	120.80
35	BA	6	A	C2-N3-C4	6.32	113.76	110.60
35	BA	2896	C	C4-C5-C6	-6.32	114.24	117.40
1	AA	23	C	C3'-C2'-C1'	-6.32	96.45	101.50
1	AA	760	G	C5-C6-O6	-6.32	124.81	128.60
35	BA	346	A	C5-N7-C8	-6.32	100.74	103.90
35	BA	654(H)	G	C5'-C4'-O4'	6.32	116.68	109.10
35	BA	764	A	C2-N3-C4	-6.32	107.44	110.60
35	BA	1354	A	C2-N3-C4	6.32	113.76	110.60
35	BA	1374	G	C6-N1-C2	-6.32	121.31	125.10
35	BA	1662	C	C2-N3-C4	6.32	123.06	119.90
35	BA	2195	C	O4'-C1'-C2'	6.32	113.29	107.60
1	AA	30	U	C5-C4-O4	6.32	129.69	125.90
1	AA	1130	A	N1-C2-N3	-6.32	126.14	129.30
35	BA	479	A	N9-C1'-C2'	6.32	122.21	114.00
35	BA	738	G	C4-C5-N7	-6.32	108.27	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2048	G	N7-C8-N9	6.32	116.26	113.10
1	AA	1363	C	O4'-C1'-C2'	6.31	113.28	107.60
35	BA	2441	C	C5-C4-N4	6.31	124.62	120.20
35	BA	2581	G	O4'-C1'-N9	6.31	113.25	108.20
11	AK	54	ARG	NE-CZ-NH2	-6.31	117.14	120.30
35	BA	70	G	N1-C2-N3	6.31	127.69	123.90
35	BA	1387	C	N3-C4-C5	-6.31	119.38	121.90
35	BA	2323	G	O4'-C1'-N9	-6.31	103.15	108.20
35	BA	2325	G	C8-N9-C4	-6.31	103.88	106.40
35	BA	2363	C	C4-C5-C6	6.31	120.56	117.40
35	BA	2601	C	C5-C6-N1	-6.31	117.84	121.00
35	BA	2888	C	C6-N1-C2	6.31	122.83	120.30
1	AA	517	G	C5-N7-C8	-6.31	101.14	104.30
35	BA	467	G	C4-C5-N7	-6.31	108.28	110.80
1	AA	1149	C	C1'-O4'-C4'	6.31	114.95	109.90
1	AA	1296	C	N1-C2-O2	6.31	122.69	118.90
1	AA	1495	U	N1-C2-N3	-6.31	111.11	114.90
20	AT	57	ARG	NE-CZ-NH1	6.31	123.45	120.30
35	BA	1148	A	C4-C5-N7	6.31	113.85	110.70
35	BA	1516	C	N3-C2-O2	-6.31	117.48	121.90
35	BA	2060	A	C5-C6-N6	-6.31	118.65	123.70
1	AA	18	C	N3-C2-O2	-6.31	117.48	121.90
1	AA	158	G	C2-N3-C4	6.31	115.05	111.90
1	AA	474	G	N7-C8-N9	-6.31	109.95	113.10
1	AA	673	G	N1-C2-N3	-6.31	120.12	123.90
1	AA	744	C	C6-N1-C2	-6.31	117.78	120.30
35	BA	272(J)	C	C5-C4-N4	-6.31	115.78	120.20
35	BA	430	G	N3-C2-N2	-6.31	115.48	119.90
35	BA	530	G	N9-C4-C5	6.31	107.92	105.40
35	BA	1631	C	N3-C4-C5	6.31	124.42	121.90
35	BA	1740	G	C4-N9-C1'	-6.31	118.30	126.50
1	AA	668	G	C2-N3-C4	6.31	115.05	111.90
35	BA	271(B)	C	O4'-C1'-N1	6.31	113.25	108.20
35	BA	291	C	O4'-C1'-N1	6.31	113.25	108.20
35	BA	1243	G	C5-C6-O6	-6.31	124.82	128.60
35	BA	1964	G	C1'-O4'-C4'	-6.31	104.86	109.90
35	BA	2551	C	C5-C6-N1	-6.31	117.85	121.00
1	AA	512	U	N3-C2-O2	6.30	126.61	122.20
35	BA	540	C	N3-C4-N4	6.30	122.41	118.00
35	BA	629	G	N1-C6-O6	-6.30	116.12	119.90
35	BA	1266	G	C2-N3-C4	-6.30	108.75	111.90
35	BA	1683	C	N1-C2-O2	-6.30	115.12	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1881	C	C6-N1-C2	-6.30	117.78	120.30
1	AA	520	A	C8-N9-C4	6.30	108.32	105.80
1	AA	1146	A	N9-C1'-C2'	-6.30	105.07	112.00
1	AA	1424	C	C5-C6-N1	-6.30	117.85	121.00
35	BA	574	C	N1-C1'-C2'	6.30	122.19	114.00
35	BA	1587	A	C4-C5-C6	-6.30	113.85	117.00
35	BA	1975	G	C8-N9-C4	6.30	108.92	106.40
35	BA	2047	U	N3-C2-O2	6.30	126.61	122.20
35	BA	2860	A	N1-C2-N3	-6.30	126.15	129.30
35	BA	270	A	N1-C2-N3	6.30	132.45	129.30
35	BA	361	G	N7-C8-N9	6.30	116.25	113.10
35	BA	621	A	N1-C6-N6	-6.30	114.82	118.60
35	BA	951	C	C6-N1-C2	-6.30	117.78	120.30
35	BA	1587	A	C5-C6-N1	6.30	120.85	117.70
35	BA	2225	A	C2'-C3'-O3'	6.30	123.78	113.70
35	BA	2716	U	N3-C4-O4	-6.30	114.99	119.40
1	AA	474	G	N3-C4-C5	6.30	131.75	128.60
35	BA	238	C	N3-C2-O2	-6.30	117.49	121.90
35	BA	1721	G	N3-C4-C5	-6.30	125.45	128.60
35	BA	2287	A	C6-N1-C2	-6.30	114.82	118.60
40	BF	18	ARG	NH1-CZ-NH2	-6.30	112.47	119.40
1	AA	787	A	O5'-P-OP2	-6.29	100.03	105.70
35	BA	1202	C	C4-C5-C6	-6.29	114.25	117.40
35	BA	1477	A	C6-N1-C2	-6.29	114.82	118.60
35	BA	2357	U	C5-C6-N1	-6.29	119.55	122.70
1	AA	51	A	N7-C8-N9	-6.29	110.65	113.80
1	AA	177	C	C6-N1-C2	6.29	122.82	120.30
6	AF	86	ARG	NE-CZ-NH1	-6.29	117.15	120.30
35	BA	350	U	N1-C2-O2	6.29	127.21	122.80
1	AA	185	A	N1-C6-N6	6.29	122.38	118.60
35	BA	374	A	C5-C6-N1	6.29	120.85	117.70
36	BB	48	A	C5-N7-C8	6.29	107.05	103.90
1	AA	1144	G	C4-C5-N7	-6.29	108.28	110.80
1	AA	1408	A	C5-C6-N6	-6.29	118.67	123.70
8	AH	94	TYR	CB-CG-CD2	6.29	124.77	121.00
35	BA	681	G	C4-C5-N7	-6.29	108.28	110.80
35	BA	1708	C	C6-N1-C2	-6.29	117.78	120.30
35	BA	2070	G	C4-C5-C6	6.29	122.57	118.80
35	BA	2352	A	C4-C5-N7	6.29	113.84	110.70
1	AA	57	G	C1'-O4'-C4'	-6.29	104.87	109.90
1	AA	576	G	O4'-C4'-C3'	6.29	111.13	106.10
35	BA	877	U	C5-C6-N1	-6.29	119.56	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1287	A	N1-C2-N3	-6.29	126.16	129.30
35	BA	2709	G	C5-C6-O6	-6.29	124.83	128.60
35	BA	604	G	N1-C6-O6	-6.29	116.13	119.90
35	BA	1259	G	O4'-C1'-N9	6.29	113.23	108.20
1	AA	920	U	C6-N1-C2	-6.29	117.23	121.00
2	AB	33	TYR	CB-CG-CD2	6.29	124.77	121.00
22	AV	1	C	C5-C4-N4	6.29	124.60	120.20
22	AV	37	A	C5-C6-N1	-6.29	114.56	117.70
35	BA	677	A	N1-C2-N3	6.29	132.44	129.30
35	BA	1306	C	O4'-C1'-N1	6.29	113.23	108.20
35	BA	1500	G	C4-C5-C6	-6.29	115.03	118.80
35	BA	2662	A	N1-C2-N3	6.29	132.44	129.30
54	BW	8	ARG	NH1-CZ-NH2	-6.29	112.48	119.40
1	AA	280	C	N3-C4-C5	6.28	124.41	121.90
35	BA	1789	A	C4-C5-N7	-6.28	107.56	110.70
35	BA	690	G	C3'-C2'-C1'	-6.28	96.47	101.50
35	BA	1644	C	C5-C6-N1	-6.28	117.86	121.00
35	BA	2263	C	N1-C2-O2	-6.28	115.13	118.90
35	BA	2755	C	C4-C5-C6	-6.28	114.26	117.40
1	AA	1106	G	C4-C5-N7	6.28	113.31	110.80
35	BA	271	A	C5-C6-N1	6.28	120.84	117.70
35	BA	874	G	N1-C2-N3	-6.28	120.13	123.90
35	BA	1242	A	C5-C6-N6	6.28	128.72	123.70
35	BA	1247	A	C5-C6-N1	-6.28	114.56	117.70
35	BA	667	U	N3-C2-O2	6.28	126.59	122.20
35	BA	2193	G	C6-C5-N7	6.28	134.17	130.40
1	AA	82	U	N3-C2-O2	6.28	126.59	122.20
35	BA	1885	A	C4-C5-N7	-6.28	107.56	110.70
35	BA	2176	A	C2-N3-C4	-6.28	107.46	110.60
35	BA	2414	G	C8-N9-C4	-6.28	103.89	106.40
35	BA	2775	A	N1-C2-N3	6.28	132.44	129.30
35	BA	654(V)	A	C4-C5-N7	6.28	113.84	110.70
35	BA	654(V)	A	N9-C1'-C2'	6.28	122.16	114.00
36	BB	89	G	C5-C6-O6	-6.28	124.83	128.60
1	AA	250	A	O4'-C1'-C2'	6.27	113.25	107.60
35	BA	1783	A	N1-C6-N6	6.27	122.36	118.60
6	AF	63	TYR	CB-CG-CD1	6.27	124.76	121.00
35	BA	245	G	C5-N7-C8	6.27	107.44	104.30
35	BA	308	G	C8-N9-C4	6.27	108.91	106.40
35	BA	1819	A	C2-N3-C4	6.27	113.74	110.60
35	BA	2026	C	C5-C6-N1	6.27	124.14	121.00
35	BA	2838	G	N9-C4-C5	6.27	107.91	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	97	G	C5-N7-C8	6.27	107.44	104.30
1	AA	1177	G	C8-N9-C4	-6.27	103.89	106.40
35	BA	1069	A	N1-C2-N3	-6.27	126.17	129.30
35	BA	2619	C	C5-C6-N1	6.27	124.14	121.00
35	BA	2755	C	C6-N1-C2	-6.27	117.79	120.30
36	BB	115	G	N1-C6-O6	6.27	123.66	119.90
1	AA	1184	G	C5-C6-O6	-6.27	124.84	128.60
1	AA	1500	A	C8-N9-C4	-6.27	103.29	105.80
35	BA	1905	C	N1-C2-O2	6.27	122.66	118.90
35	BA	2080	G	C4-N9-C1'	6.27	134.65	126.50
35	BA	2889	C	O4'-C1'-N1	6.27	113.21	108.20
1	AA	130	A	N9-C4-C5	6.27	108.31	105.80
35	BA	1508	A	N1-C6-N6	-6.27	114.84	118.60
35	BA	2030	A	C5-N7-C8	6.27	107.03	103.90
1	AA	818	G	C5-N7-C8	6.26	107.43	104.30
1	AA	1184	G	N1-C6-O6	6.26	123.66	119.90
35	BA	1392	A	N9-C4-C5	6.26	108.31	105.80
35	BA	1443	G	C4-C5-C6	-6.26	115.04	118.80
35	BA	2219	G	N9-C1'-C2'	-6.26	105.11	112.00
35	BA	2479	G	N3-C4-N9	-6.26	122.24	126.00
35	BA	1652	A	C5-C6-N6	6.26	128.71	123.70
36	BB	16	G	N9-C4-C5	-6.26	102.89	105.40
1	AA	894	G	N1-C6-O6	6.26	123.66	119.90
1	AA	1386	G	C5-N7-C8	6.26	107.43	104.30
35	BA	494	G	C5-C6-N1	-6.26	108.37	111.50
35	BA	1884	A	N7-C8-N9	-6.26	110.67	113.80
35	BA	2164	C	C2-N3-C4	6.26	123.03	119.90
1	AA	1347	G	N3-C2-N2	-6.26	115.52	119.90
16	AP	28	ARG	NE-CZ-NH2	6.26	123.43	120.30
35	BA	667	U	C5-C4-O4	6.26	129.66	125.90
35	BA	912	C	C5-C6-N1	6.26	124.13	121.00
35	BA	1457	A	C5-C6-N1	-6.26	114.57	117.70
35	BA	2413	G	C4-C5-N7	-6.26	108.30	110.80
35	BA	2870	C	C5'-C4'-O4'	-6.26	101.59	109.10
1	AA	69	G	C4-C5-N7	-6.26	108.30	110.80
7	AG	76	ARG	NE-CZ-NH1	-6.26	117.17	120.30
35	BA	944	G	C6-N1-C2	-6.26	121.35	125.10
35	BA	1045	A	C4'-C3'-C2'	6.26	108.86	102.60
35	BA	1652	A	C8-N9-C4	-6.26	103.30	105.80
35	BA	2799	C	C2'-C3'-O3'	6.26	123.71	113.70
1	AA	830	G	C6-C5-N7	-6.25	126.65	130.40
35	BA	2396	G	C4-C5-N7	-6.25	108.30	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	88	C	C6-N1-C2	-6.25	117.80	120.30
1	AA	246	A	C8-N9-C4	-6.25	103.30	105.80
22	AV	4	G	N9-C4-C5	6.25	107.90	105.40
35	BA	328	U	N3-C4-O4	6.25	123.78	119.40
35	BA	2242	G	O5'-P-OP2	-6.25	100.07	105.70
41	BG	170	ARG	NE-CZ-NH1	-6.25	117.17	120.30
1	AA	1142	G	C6-C5-N7	-6.25	126.65	130.40
1	AA	1459	C	O4'-C1'-N1	6.25	113.20	108.20
35	BA	298	G	N1-C6-O6	-6.25	116.15	119.90
35	BA	1397	U	C6-N1-C2	6.25	124.75	121.00
35	BA	1404	C	N1-C2-O2	6.25	122.65	118.90
1	AA	225	C	N1-C2-N3	-6.25	114.83	119.20
1	AA	607	A	N3-C4-C5	6.25	131.18	126.80
35	BA	834	C	N1-C1'-C2'	-6.25	105.12	112.00
1	AA	402	G	N9-C4-C5	6.25	107.90	105.40
1	AA	700	G	N1-C2-N3	6.25	127.65	123.90
1	AA	1269	A	O4'-C1'-N9	6.25	113.20	108.20
22	AV	75	C	O5'-P-OP1	-6.25	100.08	105.70
35	BA	2737	G	N1-C2-N2	6.25	121.83	116.20
35	BA	2384	G	C3'-C2'-C1'	-6.25	96.50	101.50
35	BA	2764	A	C8-N9-C4	-6.25	103.30	105.80
36	BB	52	A	C5-C6-N1	-6.25	114.58	117.70
1	AA	555	C	O4'-C1'-N1	-6.25	103.20	108.20
35	BA	2482	G	N1-C2-N3	-6.25	120.15	123.90
1	AA	503	C	N1-C2-O2	6.24	122.65	118.90
1	AA	687	A	C5-N7-C8	6.24	107.02	103.90
1	AA	800	G	N3-C4-N9	6.24	129.75	126.00
35	BA	604	G	C5-N7-C8	-6.24	101.18	104.30
35	BA	746	A	C5-N7-C8	6.24	107.02	103.90
35	BA	2444	G	N9-C4-C5	-6.24	102.90	105.40
1	AA	631	G	C5-N7-C8	6.24	107.42	104.30
35	BA	157	U	N1-C2-O2	6.24	127.17	122.80
35	BA	1282	U	N3-C4-O4	6.24	123.77	119.40
35	BA	2242	G	C5-N7-C8	6.24	107.42	104.30
57	BZ	77	ASP	CB-CG-OD2	-6.24	112.68	118.30
22	AV	64	G	N3-C2-N2	-6.24	115.53	119.90
35	BA	185	U	O4'-C1'-N1	6.24	113.19	108.20
35	BA	1192	G	C1'-O4'-C4'	6.24	114.89	109.90
35	BA	2781	A	C8-N9-C4	6.24	108.30	105.80
36	BB	10	C	N3-C4-C5	-6.24	119.40	121.90
1	AA	254	G	C5-N7-C8	-6.24	101.18	104.30
1	AA	721	G	C6-C5-N7	-6.24	126.66	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1306	A	C4-C5-C6	6.24	120.12	117.00
35	BA	1524	G	C4-C5-C6	-6.24	115.06	118.80
35	BA	2186	G	C4-C5-C6	-6.24	115.06	118.80
35	BA	2329	G	C5-C6-O6	6.24	132.34	128.60
36	BB	7	G	C4-C5-N7	-6.24	108.31	110.80
36	BB	9	G	N3-C2-N2	-6.24	115.53	119.90
35	BA	2836	U	C5-C6-N1	-6.24	119.58	122.70
1	AA	78	G	N3-C4-C5	6.24	131.72	128.60
1	AA	283	C	N3-C4-C5	-6.24	119.41	121.90
1	AA	837	G	C2-N3-C4	6.24	115.02	111.90
35	BA	317	G	C6-C5-N7	6.24	134.14	130.40
35	BA	604	G	N7-C8-N9	6.24	116.22	113.10
35	BA	1838	C	C2-N3-C4	-6.24	116.78	119.90
35	BA	2181	G	C5-N7-C8	6.24	107.42	104.30
35	BA	2876	G	C8-N9-C4	6.24	108.89	106.40
35	BA	54	G	C8-N9-C4	-6.23	103.91	106.40
35	BA	1150	C	C6-N1-C2	-6.23	117.81	120.30
35	BA	1932	A	N1-C2-N3	6.23	132.42	129.30
1	AA	285	G	C4-C5-N7	-6.23	108.31	110.80
1	AA	795	C	C6-N1-C2	-6.23	117.81	120.30
1	AA	952	U	C5-C4-O4	-6.23	122.16	125.90
1	AA	974	A	N1-C2-N3	6.23	132.42	129.30
1	AA	1343	G	C6-N1-C2	-6.23	121.36	125.10
35	BA	385	C	C6-N1-C2	6.23	122.79	120.30
35	BA	1300	U	N3-C4-C5	-6.23	110.86	114.60
35	BA	1331	A	C2-N3-C4	-6.23	107.48	110.60
35	BA	1803	A	N1-C2-N3	6.23	132.42	129.30
35	BA	1298	C	C6-N1-C2	6.23	122.79	120.30
35	BA	1632	A	N1-C6-N6	6.23	122.34	118.60
35	BA	2186	G	C6-C5-N7	6.23	134.14	130.40
35	BA	1782	C	O5'-P-OP2	-6.23	100.09	105.70
1	AA	245	C	C4-C5-C6	6.23	120.51	117.40
1	AA	499	A	C5'-C4'-C3'	-6.23	106.04	116.00
1	AA	786	G	N7-C8-N9	-6.23	109.99	113.10
1	AA	787	A	C5-C6-N1	6.23	120.81	117.70
1	AA	1011	G	O4'-C1'-N9	-6.23	103.22	108.20
1	AA	1378	C	N3-C2-O2	-6.23	117.54	121.90
35	BA	222	A	C8-N9-C4	-6.23	103.31	105.80
35	BA	978	G	N1-C6-O6	-6.23	116.16	119.90
35	BA	1171	G	N1-C6-O6	-6.23	116.16	119.90
35	BA	1546	C	C6-N1-C2	-6.23	117.81	120.30
35	BA	2776	A	N1-C2-N3	6.23	132.41	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2784	C	O4'-C1'-N1	6.23	113.18	108.20
1	AA	131	C	C2-N3-C4	6.23	123.01	119.90
35	BA	2107	C	C2-N3-C4	-6.23	116.79	119.90
17	AQ	86	GLU	OE1-CD-OE2	-6.22	115.83	123.30
35	BA	276	A	N1-C2-N3	6.22	132.41	129.30
35	BA	1432	C	N1-C2-O2	6.22	122.63	118.90
35	BA	2100	G	C1'-O4'-C4'	-6.22	104.92	109.90
1	AA	387	U	N1-C2-N3	6.22	118.63	114.90
1	AA	1269	A	C4-C5-N7	6.22	113.81	110.70
35	BA	142(A)	C	N3-C4-C5	-6.22	119.41	121.90
35	BA	2195	C	N3-C4-C5	-6.22	119.41	121.90
35	BA	1306	C	C1'-O4'-C4'	6.22	114.88	109.90
35	BA	2589	A	C6-N1-C2	-6.22	114.87	118.60
53	BV	12	TYR	CB-CG-CD1	6.22	124.73	121.00
1	AA	185	A	N9-C4-C5	6.22	108.29	105.80
1	AA	769	G	C8-N9-C4	-6.22	103.91	106.40
1	AA	944	G	N3-C4-N9	6.22	129.73	126.00
1	AA	1332	A	C5-C6-N1	6.22	120.81	117.70
35	BA	278	A	N7-C8-N9	-6.22	110.69	113.80
35	BA	293	U	C4-C5-C6	-6.22	115.97	119.70
35	BA	374	A	O4'-C1'-C2'	6.22	113.20	107.60
35	BA	750	A	C6-N1-C2	-6.22	114.87	118.60
35	BA	1113	U	C5-C4-O4	-6.22	122.17	125.90
35	BA	1316	U	C4-C5-C6	6.22	123.43	119.70
35	BA	1721	G	N3-C2-N2	6.22	124.25	119.90
35	BA	1801	G	N7-C8-N9	6.22	116.21	113.10
1	AA	848	C	C6-N1-C2	-6.22	117.81	120.30
32	B7	19	ARG	NE-CZ-NH2	-6.22	117.19	120.30
35	BA	253	C	C4-C5-C6	-6.22	114.29	117.40
35	BA	1513	C	N1-C2-N3	-6.22	114.85	119.20
1	AA	805	C	N1-C2-O2	-6.22	115.17	118.90
35	BA	2496	C	N1-C2-O2	6.22	122.63	118.90
35	BA	2557	G	N9-C4-C5	-6.22	102.91	105.40
1	AA	802	A	C5-C6-N1	-6.21	114.59	117.70
1	AA	883	C	C6-N1-C2	6.21	122.79	120.30
1	AA	1507	A	N1-C6-N6	-6.21	114.87	118.60
35	BA	412	A	O4'-C4'-C3'	-6.21	97.78	104.00
35	BA	817	C	O5'-P-OP1	-6.21	100.11	105.70
35	BA	2089	U	C4-C5-C6	-6.21	115.97	119.70
35	BA	150	C	C5-C6-N1	-6.21	117.89	121.00
35	BA	932	G	C6-N1-C2	-6.21	121.37	125.10
35	BA	1987	G	C5-C6-O6	-6.21	124.87	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	379	C	N3-C4-N4	-6.21	113.65	118.00
1	AA	531	U	N3-C2-O2	6.21	126.55	122.20
9	AI	9	ARG	NE-CZ-NH2	-6.21	117.19	120.30
35	BA	149	A	N9-C4-C5	6.21	108.28	105.80
35	BA	233	A	C2-N3-C4	6.21	113.71	110.60
35	BA	1479	G	C8-N9-C4	6.21	108.88	106.40
35	BA	1799	G	C5'-C4'-O4'	-6.21	101.65	109.10
35	BA	1845	G	C5-C6-N1	6.21	114.61	111.50
35	BA	2568	C	C5-C4-N4	-6.21	115.85	120.20
36	BB	5	C	N3-C2-O2	-6.21	117.55	121.90
1	AA	21	G	N3-C4-C5	-6.21	125.50	128.60
22	AV	26	G	C2-N3-C4	-6.21	108.80	111.90
35	BA	307	G	N3-C4-C5	6.21	131.71	128.60
35	BA	458	G	C5-C6-N1	6.21	114.61	111.50
35	BA	670	A	N9-C4-C5	6.21	108.28	105.80
35	BA	1379	A	N9-C4-C5	6.21	108.28	105.80
35	BA	1480	G	N7-C8-N9	6.21	116.20	113.10
35	BA	2123	G	C6-N1-C2	-6.21	121.37	125.10
1	AA	377	G	N7-C8-N9	6.21	116.20	113.10
35	BA	971	C	N1-C2-O2	6.21	122.62	118.90
35	BA	1270	C	C5'-C4'-O4'	-6.21	101.65	109.10
35	BA	1525	G	C6-N1-C2	-6.21	121.38	125.10
35	BA	1594	G	C5-C6-N1	6.21	114.60	111.50
35	BA	2831	G	C8-N9-C4	-6.21	103.92	106.40
1	AA	507	C	C2-N3-C4	-6.21	116.80	119.90
1	AA	520	A	C4-C5-C6	-6.21	113.90	117.00
1	AA	685	G	N9-C4-C5	-6.21	102.92	105.40
1	AA	1030(B)	C	C5-C6-N1	-6.21	117.90	121.00
1	AA	1070	U	N3-C2-O2	-6.21	117.86	122.20
1	AA	1483	A	C8-N9-C4	-6.21	103.32	105.80
25	B0	69	PHE	CB-CG-CD1	6.21	125.14	120.80
35	BA	23	G	N9-C4-C5	6.21	107.88	105.40
35	BA	266	G	N9-C1'-C2'	-6.21	105.17	112.00
35	BA	1084	A	C8-N9-C4	6.21	108.28	105.80
1	AA	792	A	C5'-C4'-C3'	-6.21	106.07	116.00
1	AA	990	C	N3-C4-C5	6.21	124.38	121.90
10	AJ	46	ARG	NE-CZ-NH1	-6.21	117.20	120.30
35	BA	1545	A	C4-C5-C6	-6.21	113.90	117.00
36	BB	47	C	N3-C4-C5	6.21	124.38	121.90
35	BA	228	A	C6-N1-C2	-6.20	114.88	118.60
35	BA	587	C	C5-C6-N1	6.20	124.10	121.00
35	BA	649	G	C5-C6-O6	6.20	132.32	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	967	C	C2-N3-C4	-6.20	116.80	119.90
35	BA	1002	G	C3'-C2'-C1'	-6.20	96.54	101.50
35	BA	2737	G	O4'-C1'-N9	-6.20	103.24	108.20
40	BF	188	ARG	NE-CZ-NH1	-6.20	117.20	120.30
24	AY	160	ARG	NE-CZ-NH1	6.20	123.40	120.30
35	BA	271(F)	C	C4-C5-C6	6.20	120.50	117.40
35	BA	612	C	N3-C4-C5	6.20	124.38	121.90
1	AA	838	G	O4'-C4'-C3'	-6.20	97.80	104.00
9	AI	36	TYR	CB-CG-CD1	-6.20	117.28	121.00
35	BA	1281	G	C5-C6-O6	6.20	132.32	128.60
35	BA	1540	U	C5-C6-N1	-6.20	119.60	122.70
35	BA	2454	G	C5-C6-N1	6.20	114.60	111.50
35	BA	2859	G	O4'-C1'-N9	-6.20	103.24	108.20
1	AA	119	A	C2-N3-C4	6.20	113.70	110.60
35	BA	94(A)	G	C2-N3-C4	-6.20	108.80	111.90
35	BA	795	C	N3-C4-C5	6.20	124.38	121.90
35	BA	2596	U	C5-C6-N1	-6.20	119.60	122.70
35	BA	741	G	C5-C6-O6	6.20	132.32	128.60
35	BA	1450	G	C5-C6-O6	6.20	132.32	128.60
1	AA	1364	U	O4'-C1'-N1	-6.20	103.24	108.20
35	BA	1015	G	N9-C4-C5	-6.20	102.92	105.40
35	BA	1426	G	N1-C2-N3	6.20	127.62	123.90
35	BA	2157	G	C4-C5-C6	6.20	122.52	118.80
35	BA	2757	A	O4'-C1'-N9	6.20	113.16	108.20
1	AA	1517	G	C3'-C2'-C1'	6.19	106.45	101.50
1	AA	187	C	O4'-C1'-N1	6.19	113.15	108.20
1	AA	869	G	C5-C6-O6	-6.19	124.88	128.60
1	AA	918	A	C5-N7-C8	6.19	107.00	103.90
35	BA	467	G	C6-C5-N7	6.19	134.12	130.40
35	BA	636	G	N7-C8-N9	-6.19	110.00	113.10
55	BX	68	ARG	NE-CZ-NH2	-6.19	117.20	120.30
1	AA	815	A	C5-C6-N1	6.19	120.80	117.70
1	AA	1052	U	O4'-C1'-N1	6.19	113.15	108.20
35	BA	10	G	N1-C2-N3	6.19	127.61	123.90
35	BA	357	A	C3'-C2'-C1'	6.19	106.45	101.50
1	AA	182	U	C2-N3-C4	-6.19	123.29	127.00
1	AA	1039	C	N3-C4-C5	6.19	124.38	121.90
1	AA	1200	C	C6-N1-C2	-6.19	117.82	120.30
35	BA	134	C	C2-N3-C4	-6.19	116.81	119.90
35	BA	2302	G	C6-C5-N7	6.19	134.11	130.40
1	AA	254	G	O4'-C1'-N9	6.19	113.15	108.20
1	AA	1176	A	C5-N7-C8	-6.19	100.81	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AI	20	ARG	NE-CZ-NH2	-6.19	117.21	120.30
35	BA	1417	C	C1'-O4'-C4'	-6.19	104.95	109.90
35	BA	1705	G	N1-C6-O6	-6.19	116.19	119.90
35	BA	2377	A	C6-N1-C2	6.19	122.31	118.60
35	BA	2791	C	C5-C6-N1	6.19	124.09	121.00
1	AA	685	G	C4-C5-N7	6.19	113.27	110.80
35	BA	1722	A	C5-N7-C8	-6.19	100.81	103.90
1	AA	521	G	C5-C6-N1	6.18	114.59	111.50
1	AA	1446	U	N3-C4-O4	6.18	123.73	119.40
35	BA	215	G	C2-N3-C4	6.18	114.99	111.90
35	BA	567	A	O4'-C1'-N9	6.18	113.15	108.20
35	BA	2101	G	C5-N7-C8	6.18	107.39	104.30
1	AA	475	G	N7-C8-N9	-6.18	110.01	113.10
1	AA	1519	A	C5-N7-C8	-6.18	100.81	103.90
35	BA	743	G	C5-N7-C8	6.18	107.39	104.30
36	BB	31	C	N1-C2-O2	6.18	122.61	118.90
35	BA	1771	C	N3-C4-C5	6.18	124.37	121.90
35	BA	2632	A	N1-C6-N6	-6.18	114.89	118.60
1	AA	79	G	C5-C6-N1	6.18	114.59	111.50
1	AA	189(B)	C	C6-N1-C2	-6.18	117.83	120.30
1	AA	1350	A	O4'-C1'-N9	6.18	113.14	108.20
23	AX	11	U	C6-N1-C2	6.18	124.71	121.00
26	B1	50	ARG	NE-CZ-NH2	6.18	123.39	120.30
35	BA	243	U	C5-C4-O4	6.18	129.61	125.90
35	BA	743	G	C4-C5-N7	-6.18	108.33	110.80
35	BA	1197	G	C4-C5-N7	6.18	113.27	110.80
35	BA	1778	U	C2-N3-C4	-6.18	123.29	127.00
35	BA	2364	C	N3-C4-C5	-6.18	119.43	121.90
1	AA	64	G	N7-C8-N9	-6.18	110.01	113.10
1	AA	141	A	N9-C4-C5	6.18	108.27	105.80
1	AA	445	G	C6-N1-C2	-6.18	121.39	125.10
35	BA	1383	C	C5-C6-N1	-6.18	117.91	121.00
35	BA	2280	G	N7-C8-N9	-6.18	110.01	113.10
35	BA	2538	C	C5-C6-N1	6.18	124.09	121.00
1	AA	398	C	C4-C5-C6	6.18	120.49	117.40
1	AA	422	C	C4-C5-C6	6.18	120.49	117.40
1	AA	558	G	N1-C2-N2	-6.18	110.64	116.20
1	AA	917	G	N9-C4-C5	6.18	107.87	105.40
1	AA	1462	G	N1-C2-N3	6.18	127.61	123.90
35	BA	53	A	C6-N1-C2	6.18	122.31	118.60
35	BA	205	G	C8-N9-C4	6.18	108.87	106.40
35	BA	954	G	C2-N3-C4	6.18	114.99	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1717	G	C4-C5-N7	6.18	113.27	110.80
1	AA	182	U	N3-C4-C5	6.17	118.31	114.60
1	AA	826	C	O4'-C1'-N1	6.17	113.14	108.20
22	AV	71	C	N1-C2-N3	-6.17	114.88	119.20
35	BA	40	C	C6-N1-C2	-6.17	117.83	120.30
35	BA	352	G	C2-N3-C4	6.17	114.99	111.90
35	BA	1243	G	N9-C4-C5	-6.17	102.93	105.40
35	BA	1624	G	C2-N3-C4	-6.17	108.81	111.90
35	BA	2284	C	C5-C6-N1	6.17	124.09	121.00
35	BA	2442	C	N1-C2-N3	-6.17	114.88	119.20
36	BB	77	U	N3-C4-C5	6.17	118.30	114.60
1	AA	380	G	N1-C6-O6	6.17	123.60	119.90
35	BA	1379	A	C3'-C2'-C1'	-6.17	96.56	101.50
35	BA	451	C	N3-C2-O2	6.17	126.22	121.90
35	BA	2171	A	N7-C8-N9	-6.17	110.71	113.80
35	BA	725	G	C5-C6-N1	-6.17	108.42	111.50
35	BA	772	C	C6-N1-C2	-6.17	117.83	120.30
35	BA	1464	C	N3-C4-C5	-6.17	119.43	121.90
35	BA	2417	C	C5'-C4'-O4'	-6.17	101.70	109.10
36	BB	34	U	N3-C4-O4	-6.17	115.08	119.40
1	AA	358	U	C5-C6-N1	6.17	125.78	122.70
1	AA	538	G	C8-N9-C4	-6.17	103.93	106.40
1	AA	1317	C	C2-N3-C4	6.17	122.98	119.90
1	AA	1514	C	N1-C2-O2	6.17	122.60	118.90
1	AA	1514	C	N3-C2-O2	-6.17	117.58	121.90
35	BA	180	G	N3-C4-C5	-6.17	125.52	128.60
35	BA	230	U	C4-C5-C6	6.17	123.40	119.70
35	BA	987	G	C2-N3-C4	-6.17	108.82	111.90
35	BA	1199	U	C5-C6-N1	-6.17	119.62	122.70
35	BA	1351	C	C5'-C4'-C3'	-6.17	106.13	116.00
35	BA	1590	U	N3-C2-O2	6.17	126.52	122.20
35	BA	2260	C	N3-C4-C5	6.17	124.37	121.90
36	BB	57	A	C6-C5-N7	6.17	136.62	132.30
1	AA	495	A	C6-C5-N7	6.17	136.62	132.30
1	AA	635	G	C4'-C3'-C2'	-6.17	96.43	102.60
1	AA	1269	A	N1-C6-N6	-6.17	114.90	118.60
1	AA	1406	U	C5-C4-O4	6.17	129.60	125.90
1	AA	1407	C	C5-C6-N1	-6.17	117.92	121.00
35	BA	1440	G	N9-C4-C5	6.17	107.87	105.40
35	BA	1989	G	C5-C6-O6	-6.17	124.90	128.60
36	BB	72	G	N9-C4-C5	6.17	107.87	105.40
35	BA	1931	U	N3-C2-O2	6.17	126.52	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1969	A	C5-C6-N1	6.17	120.78	117.70
35	BA	2229	C	N3-C4-C5	6.17	124.37	121.90
1	AA	783	C	C6-N1-C2	-6.16	117.83	120.30
1	AA	1324	A	C4-C5-C6	6.16	120.08	117.00
35	BA	915	C	C5-C6-N1	-6.16	117.92	121.00
35	BA	1625	C	C4-C5-C6	6.16	120.48	117.40
35	BA	1721	G	C2-N3-C4	6.16	114.98	111.90
35	BA	1761	C	N3-C4-C5	-6.16	119.43	121.90
35	BA	1785	A	C8-N9-C4	-6.16	103.33	105.80
35	BA	1997	G	C5-C6-N1	6.16	114.58	111.50
36	BB	102	A	C5-C6-N1	6.16	120.78	117.70
1	AA	1145	C	N3-C4-C5	-6.16	119.44	121.90
35	BA	681	G	C8-N9-C4	6.16	108.86	106.40
35	BA	748	G	N9-C1'-C2'	6.16	122.01	114.00
35	BA	205	G	C2-N3-C4	6.16	114.98	111.90
35	BA	305	U	N3-C4-O4	6.16	123.71	119.40
35	BA	706	A	N9-C4-C5	6.16	108.27	105.80
35	BA	1349	A	C6-N1-C2	-6.16	114.90	118.60
1	AA	29	G	N7-C8-N9	6.16	116.18	113.10
1	AA	495	A	C3'-C2'-C1'	-6.16	96.57	101.50
1	AA	1071	C	C6-N1-C2	6.16	122.76	120.30
1	AA	1319	A	C5-N7-C8	6.16	106.98	103.90
35	BA	586	A	C1'-O4'-C4'	6.16	114.83	109.90
35	BA	1027	A	C3'-C2'-C1'	6.16	106.43	101.50
35	BA	1067	A	C5'-C4'-O4'	-6.16	101.71	109.10
35	BA	1118	C	O4'-C1'-N1	-6.16	103.27	108.20
1	AA	289	G	C5-C6-O6	6.16	132.29	128.60
1	AA	1334	G	N1-C6-O6	6.16	123.59	119.90
1	AA	1520	G	N3-C4-C5	-6.16	125.52	128.60
35	BA	2475	C	C3'-C2'-C1'	6.16	106.43	101.50
35	BA	2799	C	C4'-C3'-C2'	6.16	108.76	102.60
1	AA	625	G	O4'-C1'-N9	6.16	113.12	108.20
18	AR	54	ARG	NE-CZ-NH2	-6.16	117.22	120.30
35	BA	388	G	C4-C5-C6	6.16	122.49	118.80
35	BA	1780	A	N9-C4-C5	-6.16	103.34	105.80
35	BA	1944	U	C5-C4-O4	-6.16	122.21	125.90
1	AA	339	C	C6-N1-C2	-6.15	117.84	120.30
35	BA	635	C	O4'-C1'-N1	6.15	113.12	108.20
35	BA	1023	U	N1-C2-N3	-6.15	111.21	114.90
35	BA	1476	C	N1-C2-O2	6.15	122.59	118.90
35	BA	1493	C	C1'-O4'-C4'	6.15	114.82	109.90
1	AA	501	C	C5-C6-N1	6.15	124.08	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	215	G	N1-C2-N3	-6.15	120.21	123.90
35	BA	2155	G	N7-C8-N9	6.15	116.18	113.10
56	BY	55	TYR	CB-CG-CD1	-6.15	117.31	121.00
1	AA	56	U	C5-C6-N1	6.15	125.78	122.70
1	AA	399	G	N9-C4-C5	6.15	107.86	105.40
35	BA	229	A	N7-C8-N9	6.15	116.88	113.80
35	BA	1759	A	N1-C2-N3	6.15	132.38	129.30
35	BA	1844	C	O4'-C1'-N1	6.15	113.12	108.20
35	BA	2333	A	C6-N1-C2	-6.15	114.91	118.60
35	BA	2567	G	N1-C6-O6	6.15	123.59	119.90
1	AA	637	G	C6-N1-C2	-6.15	121.41	125.10
1	AA	199	G	C5-N7-C8	-6.15	101.23	104.30
1	AA	406	G	N9-C4-C5	6.15	107.86	105.40
35	BA	290	G	C5-C6-N1	6.15	114.57	111.50
35	BA	391	G	C5-C6-O6	-6.15	124.91	128.60
35	BA	1860	G	C5-C6-O6	-6.15	124.91	128.60
35	BA	2179	C	O4'-C1'-N1	6.15	113.12	108.20
35	BA	2432	A	C4-C5-C6	-6.15	113.93	117.00
35	BA	2562	U	O4'-C1'-N1	6.15	113.12	108.20
35	BA	2582	G	N3-C4-C5	6.15	131.67	128.60
1	AA	180	U	N3-C4-C5	-6.15	110.91	114.60
35	BA	1362	C	C6-N1-C2	-6.15	117.84	120.30
36	BB	42	C	C6-N1-C2	6.15	122.76	120.30
35	BA	103	A	C8-N9-C4	6.14	108.26	105.80
35	BA	450	G	C4-C5-C6	6.14	122.49	118.80
35	BA	2550	G	N3-C4-C5	-6.14	125.53	128.60
35	BA	2598	A	O4'-C1'-N9	6.14	113.12	108.20
1	AA	993	G	C6-C5-N7	6.14	134.09	130.40
35	BA	2004	G	N3-C2-N2	6.14	124.20	119.90
1	AA	593	G	O4'-C1'-N9	-6.14	103.29	108.20
23	AX	12	A	N1-C6-N6	-6.14	114.92	118.60
35	BA	1364	G	N3-C4-C5	-6.14	125.53	128.60
35	BA	2101	G	N3-C4-N9	6.14	129.68	126.00
1	AA	235	C	C6-N1-C2	6.14	122.76	120.30
1	AA	572	A	N1-C6-N6	-6.14	114.92	118.60
1	AA	653	A	C2-N3-C4	6.14	113.67	110.60
35	BA	1622	G	N3-C4-N9	6.14	129.68	126.00
35	BA	2553	G	N1-C6-O6	-6.14	116.22	119.90
50	BS	89	ARG	NE-CZ-NH2	6.14	123.37	120.30
35	BA	863	A	C2-N3-C4	-6.14	107.53	110.60
1	AA	693	G	C2-N3-C4	6.14	114.97	111.90
1	AA	948	C	C2-N3-C4	-6.14	116.83	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1044	A	C4-C5-C6	-6.14	113.93	117.00
35	BA	110	G	C8-N9-C4	-6.14	103.94	106.40
35	BA	2386	C	N3-C2-O2	6.14	126.20	121.90
35	BA	2786	U	C5-C4-O4	-6.14	122.22	125.90
1	AA	165	C	N3-C4-C5	6.13	124.35	121.90
1	AA	576	G	C1'-O4'-C4'	-6.13	104.99	109.90
1	AA	875	C	C2-N3-C4	-6.13	116.83	119.90
1	AA	1110	A	C4-C5-C6	6.13	120.07	117.00
5	AE	63	ARG	NE-CZ-NH2	-6.13	117.23	120.30
6	AF	28	ARG	NE-CZ-NH2	-6.13	117.23	120.30
35	BA	293	U	C5-C6-N1	6.13	125.77	122.70
35	BA	456	C	C5-C4-N4	6.13	124.49	120.20
35	BA	862	G	C4-C5-N7	6.13	113.25	110.80
35	BA	919	G	C2-N3-C4	6.13	114.97	111.90
46	BO	94	ARG	NE-CZ-NH2	-6.13	117.23	120.30
1	AA	737	A	N1-C2-N3	6.13	132.37	129.30
1	AA	1458	G	C4-C5-N7	6.13	113.25	110.80
1	AA	409	G	N1-C6-O6	-6.13	116.22	119.90
1	AA	424	G	N9-C4-C5	-6.13	102.95	105.40
1	AA	815	A	C6-N1-C2	-6.13	114.92	118.60
35	BA	1351	C	C2-N3-C4	-6.13	116.83	119.90
35	BA	1463	C	N3-C4-C5	-6.13	119.45	121.90
1	AA	293	G	C4-C5-N7	6.13	113.25	110.80
1	AA	452	A	C8-N9-C4	6.13	108.25	105.80
15	AO	17	ARG	NE-CZ-NH2	-6.13	117.23	120.30
35	BA	271(S)	G	C8-N9-C4	6.13	108.85	106.40
35	BA	1058	G	N9-C4-C5	-6.13	102.95	105.40
35	BA	2385	C	C6-N1-C2	6.13	122.75	120.30
35	BA	2839	G	N7-C8-N9	6.13	116.17	113.10
1	AA	1159	U	N1-C2-N3	6.13	118.58	114.90
35	BA	512	G	C3'-C2'-C1'	6.13	106.40	101.50
35	BA	785	G	C2-N3-C4	-6.13	108.84	111.90
35	BA	1021	A	C5-C6-N1	-6.13	114.64	117.70
35	BA	1289	C	O4'-C1'-N1	6.13	113.10	108.20
35	BA	1401	G	N7-C8-N9	6.13	116.16	113.10
35	BA	1807	G	C8-N9-C4	6.13	108.85	106.40
35	BA	2776	A	C4-C5-C6	-6.13	113.94	117.00
57	BZ	20	ARG	NE-CZ-NH2	6.13	123.36	120.30
1	AA	781	A	C8-N9-C4	-6.13	103.35	105.80
1	AA	971	G	N1-C6-O6	6.13	123.58	119.90
1	AA	1096	C	N1-C1'-C2'	-6.13	105.26	112.00
1	AA	1531	A	C8-N9-C4	-6.13	103.35	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AV	76	A	C4-C5-C6	6.13	120.06	117.00
35	BA	130	C	C4-C5-C6	6.13	120.46	117.40
35	BA	822	U	N3-C4-O4	6.13	123.69	119.40
35	BA	1385	G	N9-C1'-C2'	6.13	121.97	114.00
35	BA	1717	G	N3-C4-C5	6.13	131.66	128.60
35	BA	2410	G	C5-C6-O6	6.13	132.28	128.60
1	AA	418	C	N3-C4-N4	6.12	122.29	118.00
35	BA	233	A	N9-C4-C5	6.12	108.25	105.80
35	BA	1886	C	C4-C5-C6	-6.12	114.34	117.40
35	BA	2827	C	C5-C4-N4	-6.12	115.91	120.20
1	AA	27	G	O4'-C1'-N9	-6.12	103.30	108.20
1	AA	388	G	N1-C6-O6	-6.12	116.23	119.90
35	BA	252	G	C5-N7-C8	6.12	107.36	104.30
35	BA	453	C	C2-N3-C4	-6.12	116.84	119.90
35	BA	568	U	C5-C4-O4	6.12	129.57	125.90
35	BA	1495	A	N9-C4-C5	6.12	108.25	105.80
35	BA	1703	G	N7-C8-N9	-6.12	110.04	113.10
35	BA	2035	G	N9-C1'-C2'	6.12	121.96	114.00
36	BB	78	A	C5-C6-N6	-6.12	118.80	123.70
1	AA	1070	U	C5-C6-N1	-6.12	119.64	122.70
1	AA	1177	G	N7-C8-N9	6.12	116.16	113.10
1	AA	1496	C	N3-C2-O2	-6.12	117.62	121.90
35	BA	701	G	C3'-C2'-C1'	-6.12	96.60	101.50
35	BA	945	A	C1'-O4'-C4'	-6.12	105.00	109.90
35	BA	1271	G	N9-C4-C5	-6.12	102.95	105.40
35	BA	2269	A	C4-C5-N7	6.12	113.76	110.70
35	BA	2897	U	C6-N1-C2	-6.12	117.33	121.00
1	AA	106	C	C3'-C2'-C1'	-6.12	96.60	101.50
1	AA	1466	C	C5'-C4'-O4'	6.12	116.44	109.10
35	BA	541	C	C2-N3-C4	-6.12	116.84	119.90
35	BA	1455	G	C5-C6-O6	6.12	132.27	128.60
35	BA	2094	G	N1-C2-N3	6.12	127.57	123.90
35	BA	2897	U	N1-C2-O2	-6.12	118.52	122.80
1	AA	786	G	N3-C2-N2	6.12	124.18	119.90
1	AA	1106	G	N3-C4-C5	6.12	131.66	128.60
35	BA	958	U	C4-C5-C6	-6.12	116.03	119.70
35	BA	1018	C	C5-C4-N4	-6.12	115.92	120.20
35	BA	2165	G	O4'-C1'-N9	-6.12	103.31	108.20
1	AA	538	G	O4'-C1'-N9	-6.12	103.31	108.20
1	AA	1491	G	N3-C2-N2	-6.12	115.62	119.90
35	BA	337	C	C6-N1-C2	6.12	122.75	120.30
35	BA	1557	C	C5-C6-N1	6.12	124.06	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1902	C	N3-C4-C5	-6.12	119.45	121.90
35	BA	2345	G	N3-C4-C5	6.12	131.66	128.60
35	BA	2854	G	C4-C5-N7	6.12	113.25	110.80
1	AA	59	A	C8-N9-C4	6.11	108.25	105.80
1	AA	507	C	C5-C6-N1	-6.11	117.94	121.00
1	AA	780	A	O4'-C1'-N9	6.11	113.09	108.20
35	BA	409	C	C6-N1-C2	-6.11	117.86	120.30
35	BA	456	C	N3-C4-N4	-6.11	113.72	118.00
35	BA	660	G	N9-C1'-C2'	-6.11	105.28	112.00
35	BA	1067	A	C5-C6-N1	6.11	120.76	117.70
35	BA	2223	G	O4'-C1'-N9	6.11	113.09	108.20
35	BA	2471	C	O4'-C1'-N1	6.11	113.09	108.20
36	BB	59	A	C4-C5-C6	6.11	120.06	117.00
1	AA	1479	C	O4'-C1'-N1	6.11	113.09	108.20
35	BA	1571	A	N1-C2-N3	6.11	132.36	129.30
35	BA	1580	A	C5-C6-N6	-6.11	118.81	123.70
1	AA	101	A	N1-C2-N3	6.11	132.36	129.30
1	AA	309	G	N3-C4-C5	6.11	131.66	128.60
1	AA	1469	G	C5-N7-C8	-6.11	101.25	104.30
35	BA	756	C	C4-C5-C6	6.11	120.45	117.40
35	BA	1354	A	N3-C4-N9	6.11	132.29	127.40
35	BA	1770	G	C8-N9-C4	-6.11	103.96	106.40
36	BB	98	G	C4-C5-N7	-6.11	108.36	110.80
43	BK	93	ARG	NE-CZ-NH1	-6.11	117.25	120.30
1	AA	780	A	C4-C5-N7	6.11	113.75	110.70
1	AA	139	G	C8-N9-C4	-6.11	103.96	106.40
1	AA	1099	G	C2-N3-C4	-6.11	108.85	111.90
35	BA	2149	G	C5-C6-O6	-6.11	124.94	128.60
36	BB	40	U	C5-C6-N1	-6.11	119.65	122.70
50	BS	12	PHE	CB-CG-CD2	-6.11	116.53	120.80
1	AA	594	G	C8-N9-C4	6.11	108.84	106.40
22	AV	65	C	N1-C2-O2	-6.11	115.24	118.90
35	BA	1106	G	C2-N3-C4	-6.11	108.85	111.90
35	BA	1531	C	C6-N1-C2	-6.11	117.86	120.30
35	BA	1544	A	C5-N7-C8	6.11	106.95	103.90
35	BA	2107	C	C5-C6-N1	-6.11	117.95	121.00
35	BA	2258	C	N3-C2-O2	6.11	126.17	121.90
35	BA	417	C	N3-C4-N4	-6.10	113.73	118.00
35	BA	1289	C	N1-C2-O2	6.10	122.56	118.90
35	BA	1661	G	N1-C2-N2	-6.10	110.71	116.20
35	BA	418	G	C2-N3-C4	-6.10	108.85	111.90
35	BA	1634	A	C5-N7-C8	6.10	106.95	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1658	C	C6-N1-C2	6.10	122.74	120.30
35	BA	2727	G	C5-N7-C8	6.10	107.35	104.30
36	BB	115	G	C2-N3-C4	-6.10	108.85	111.90
40	BF	96	ASP	CB-CG-OD1	-6.10	112.81	118.30
48	BQ	82	ARG	NE-CZ-NH2	-6.10	117.25	120.30
35	BA	350	U	N3-C2-O2	-6.10	117.93	122.20
36	BB	70	C	O4'-C1'-N1	-6.10	103.32	108.20
1	AA	415	A	C4-C5-C6	6.10	120.05	117.00
1	AA	837	G	N3-C4-C5	-6.10	125.55	128.60
1	AA	1249	C	C6-N1-C2	6.10	122.74	120.30
1	AA	1365	G	O5'-P-OP2	-6.10	100.21	105.70
35	BA	665	C	C6-N1-C2	-6.10	117.86	120.30
35	BA	1487	G	C5-C6-N1	6.10	114.55	111.50
35	BA	2047	U	C5-C4-O4	6.10	129.56	125.90
57	BZ	104	PHE	CB-CG-CD1	6.10	125.07	120.80
1	AA	9	G	N1-C6-O6	6.10	123.56	119.90
1	AA	181	G	C5-C6-O6	-6.10	124.94	128.60
1	AA	962	C	N1-C2-O2	-6.10	115.24	118.90
35	BA	275	G	N1-C6-O6	6.10	123.56	119.90
35	BA	454	A	C4-C5-N7	6.10	113.75	110.70
35	BA	1752	C	N1-C2-O2	6.10	122.56	118.90
1	AA	1352	C	N3-C2-O2	-6.10	117.63	121.90
35	BA	995	C	N3-C4-C5	6.10	124.34	121.90
35	BA	1601	G	N7-C8-N9	-6.10	110.05	113.10
1	AA	138	G	N3-C2-N2	-6.09	115.63	119.90
1	AA	417	C	C5-C4-N4	6.09	124.47	120.20
1	AA	923	A	C4-C5-C6	6.09	120.05	117.00
35	BA	469	G	N1-C2-N2	6.09	121.69	116.20
35	BA	482	A	N7-C8-N9	-6.09	110.75	113.80
35	BA	761	A	C2-N3-C4	-6.09	107.55	110.60
35	BA	2487	G	C4-C5-N7	-6.09	108.36	110.80
35	BA	1278	A	C2-N3-C4	6.09	113.65	110.60
35	BA	1536	C	N3-C2-O2	-6.09	117.64	121.90
1	AA	862	C	N3-C4-N4	-6.09	113.74	118.00
35	BA	744	G	N1-C6-O6	6.09	123.56	119.90
35	BA	1060	U	N1-C2-O2	-6.09	118.54	122.80
35	BA	1530	C	C2-N3-C4	6.09	122.95	119.90
35	BA	1997	G	C5'-C4'-C3'	6.09	125.75	116.00
35	BA	2101	G	C6-C5-N7	-6.09	126.75	130.40
35	BA	2484	G	N7-C8-N9	-6.09	110.05	113.10
1	AA	296	U	N3-C4-C5	6.09	118.25	114.60
1	AA	779	C	N1-C2-O2	-6.09	115.25	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	874	G	N3-C2-N2	6.09	124.16	119.90
1	AA	911	U	C6-N1-C2	-6.09	117.35	121.00
35	BA	650	C	N3-C2-O2	6.09	126.16	121.90
35	BA	2052	G	N9-C1'-C2'	-6.09	105.30	112.00
35	BA	2093	G	C6-C5-N7	6.09	134.05	130.40
35	BA	2749	A	N1-C2-N3	-6.09	126.25	129.30
1	AA	915	A	C4-C5-C6	-6.09	113.96	117.00
1	AA	953	G	N3-C4-C5	-6.09	125.56	128.60
1	AA	1058	G	C8-N9-C4	6.09	108.83	106.40
35	BA	98	G	C5-N7-C8	6.09	107.34	104.30
35	BA	1255	U	C5-C6-N1	-6.09	119.66	122.70
35	BA	2735	G	N1-C6-O6	6.09	123.55	119.90
56	BY	60	PHE	CB-CG-CD2	-6.09	116.54	120.80
1	AA	178	C	O4'-C1'-N1	6.09	113.07	108.20
1	AA	1269	A	C5-N7-C8	-6.09	100.86	103.90
1	AA	1506	U	C6-N1-C2	-6.09	117.35	121.00
35	BA	782	A	C2-N3-C4	6.09	113.64	110.60
35	BA	2624	G	C5-C6-O6	-6.09	124.95	128.60
35	BA	2679	A	C4-C5-N7	-6.09	107.66	110.70
1	AA	89	C	C4-C5-C6	-6.08	114.36	117.40
35	BA	1594	G	N3-C4-N9	6.08	129.65	126.00
1	AA	553	A	C2-N3-C4	6.08	113.64	110.60
1	AA	588	G	N7-C8-N9	-6.08	110.06	113.10
1	AA	692	U	C1'-O4'-C4'	6.08	114.77	109.90
35	BA	1979	C	C6-N1-C2	-6.08	117.87	120.30
35	BA	1986	A	N1-C2-N3	-6.08	126.26	129.30
35	BA	2442	C	N1-C2-O2	6.08	122.55	118.90
1	AA	122	G	C2-N3-C4	6.08	114.94	111.90
1	AA	481	G	C5-C6-N1	-6.08	108.46	111.50
35	BA	353	G	C5-C6-O6	-6.08	124.95	128.60
35	BA	818	G	N3-C4-N9	-6.08	122.35	126.00
35	BA	1329	U	O5'-P-OP1	-6.08	100.23	105.70
35	BA	1583	A	C8-N9-C4	6.08	108.23	105.80
35	BA	2283	C	C2-N3-C4	6.08	122.94	119.90
1	AA	716	A	N1-C2-N3	-6.08	126.26	129.30
35	BA	867	C	C2-N3-C4	6.08	122.94	119.90
1	AA	741	G	N3-C2-N2	-6.08	115.64	119.90
1	AA	856	C	C5-C6-N1	-6.08	117.96	121.00
1	AA	973	G	C5-C6-N1	-6.08	108.46	111.50
35	BA	1017	G	N9-C1'-C2'	-6.08	105.31	112.00
35	BA	1265	A	C8-N9-C4	6.08	108.23	105.80
35	BA	2346	A	N1-C2-N3	-6.08	126.26	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2640	G	N1-C6-O6	-6.08	116.25	119.90
47	BP	18	ARG	NE-CZ-NH2	6.08	123.34	120.30
1	AA	1120	G	C8-N9-C4	-6.08	103.97	106.40
22	AV	69	C	N1-C1'-C2'	-6.08	105.31	112.00
35	BA	1848	A	N1-C6-N6	-6.08	114.95	118.60
35	BA	2292	C	C4-C5-C6	6.08	120.44	117.40
48	BQ	51	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	AA	176	C	N3-C4-C5	-6.08	119.47	121.90
1	AA	426	G	C5-C6-N1	-6.08	108.46	111.50
1	AA	1230	C	N1-C2-O2	6.08	122.55	118.90
1	AA	1408	A	N1-C6-N6	6.08	122.25	118.60
24	AY	351	ARG	NE-CZ-NH2	6.08	123.34	120.30
32	B7	5	TRP	CD1-NE1-CE2	-6.07	103.53	109.00
35	BA	1041	C	O4'-C1'-N1	6.07	113.06	108.20
35	BA	2318	G	N1-C2-N3	6.07	127.54	123.90
35	BA	2414	G	C5-C6-N1	6.07	114.54	111.50
36	BB	7	G	N3-C4-C5	-6.07	125.56	128.60
35	BA	1687	G	C4-C5-N7	-6.07	108.37	110.80
35	BA	1746	G	C6-C5-N7	6.07	134.04	130.40
35	BA	2637	U	C2-N3-C4	6.07	130.64	127.00
40	BF	97	TYR	CB-CG-CD2	-6.07	117.36	121.00
1	AA	303	A	N1-C2-N3	-6.07	126.27	129.30
1	AA	1080	A	C4-C5-N7	6.07	113.73	110.70
1	AA	1304	G	OP1-P-OP2	6.07	128.71	119.60
22	AV	13	C	C5-C4-N4	-6.07	115.95	120.20
35	BA	555	U	C5-C6-N1	-6.07	119.67	122.70
35	BA	660	G	C5-N7-C8	6.07	107.33	104.30
35	BA	877	U	C4-C5-C6	6.07	123.34	119.70
35	BA	1136	G	C5-C6-O6	-6.07	124.96	128.60
35	BA	1663	C	C2-N3-C4	-6.07	116.86	119.90
1	AA	263	A	C4-C5-N7	6.07	113.73	110.70
35	BA	1508	A	C5-C6-N6	6.07	128.56	123.70
35	BA	1691	C	N1-C2-O2	6.07	122.54	118.90
35	BA	2613	U	N1-C2-O2	6.07	127.05	122.80
35	BA	2880	C	N3-C4-C5	-6.07	119.47	121.90
36	BB	44	G	C6-N1-C2	6.07	128.74	125.10
35	BA	846	C	C2-N3-C4	-6.07	116.87	119.90
35	BA	1107	G	N1-C6-O6	-6.07	116.26	119.90
1	AA	1045	C	C2-N1-C1'	6.07	125.47	118.80
1	AA	1226	C	O4'-C1'-N1	6.07	113.05	108.20
22	AV	71	C	C2-N3-C4	6.07	122.93	119.90
35	BA	663	G	O4'-C1'-N9	6.07	113.05	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	7	G	N3-C4-C5	6.06	131.63	128.60
35	BA	1338	G	C5-C6-N1	6.06	114.53	111.50
1	AA	338	A	N1-C2-N3	-6.06	126.27	129.30
1	AA	836	G	O4'-C1'-N9	6.06	113.05	108.20
35	BA	200	U	N3-C4-C5	6.06	118.24	114.60
1	AA	119	A	N7-C8-N9	6.06	116.83	113.80
1	AA	156	G	C4-C5-N7	6.06	113.22	110.80
1	AA	775	G	C6-C5-N7	-6.06	126.76	130.40
1	AA	973	G	C2-N3-C4	-6.06	108.87	111.90
35	BA	1772	G	N7-C8-N9	6.06	116.13	113.10
36	BB	32	C	N3-C4-N4	-6.06	113.76	118.00
1	AA	129(A)	G	C2-N3-C4	6.06	114.93	111.90
1	AA	445	G	N3-C4-C5	-6.06	125.57	128.60
1	AA	702	A	C3'-C2'-C1'	6.06	106.35	101.50
1	AA	1314	C	C5-C4-N4	-6.06	115.96	120.20
35	BA	60	G	N1-C2-N2	6.06	121.65	116.20
35	BA	458	G	C4-C5-N7	6.06	113.22	110.80
35	BA	1216	G	C6-N1-C2	-6.06	121.46	125.10
35	BA	1429	G	C8-N9-C1'	6.06	134.88	127.00
35	BA	1538	G	N3-C4-N9	6.06	129.63	126.00
35	BA	2875	C	C4-C5-C6	-6.06	114.37	117.40
1	AA	147	G	N3-C2-N2	-6.06	115.66	119.90
1	AA	290	C	C4-C5-C6	6.06	120.43	117.40
1	AA	523	A	C4-C5-C6	6.06	120.03	117.00
1	AA	1036	G	C4-C5-N7	6.06	113.22	110.80
1	AA	1442	G	C2-N3-C4	-6.06	108.87	111.90
35	BA	16	G	N7-C8-N9	-6.06	110.07	113.10
35	BA	625	G	C5-C6-O6	-6.06	124.97	128.60
35	BA	1430	C	O4'-C1'-N1	-6.06	103.35	108.20
35	BA	2454	G	N3-C4-N9	6.06	129.63	126.00
35	BA	2464	C	N1-C1'-C2'	-6.06	105.34	112.00
1	AA	672	U	C5-C6-N1	-6.06	119.67	122.70
1	AA	1198	G	N3-C4-N9	6.06	129.63	126.00
35	BA	293	U	N3-C4-C5	6.06	118.23	114.60
35	BA	1181	C	O4'-C1'-N1	6.06	113.05	108.20
35	BA	1906	G	C1'-O4'-C4'	-6.06	105.06	109.90
1	AA	1263	C	C2-N3-C4	6.05	122.93	119.90
1	AA	1296	C	N3-C2-O2	-6.05	117.66	121.90
1	AA	1499	A	C4-C5-C6	6.05	120.03	117.00
24	AY	637	ARG	NE-CZ-NH1	-6.05	117.27	120.30
35	BA	921	G	N3-C4-N9	-6.05	122.37	126.00
35	BA	1588	C	N1-C2-O2	-6.05	115.27	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	296	U	C5-C6-N1	-6.05	119.67	122.70
1	AA	1134	G	N3-C2-N2	-6.05	115.66	119.90
1	AA	1162	C	C1'-O4'-C4'	-6.05	105.06	109.90
35	BA	1160	G	C8-N9-C4	6.05	108.82	106.40
1	AA	171	A	C5-C6-N1	-6.05	114.67	117.70
1	AA	1195	C	P-O3'-C3'	6.05	126.96	119.70
1	AA	1467	G	N1-C2-N3	-6.05	120.27	123.90
22	AV	56	C	C5-C4-N4	-6.05	115.96	120.20
23	AX	12	A	C6-C5-N7	6.05	136.54	132.30
35	BA	111	A	O4'-C1'-N9	-6.05	103.36	108.20
35	BA	2119	A	C5-N7-C8	6.05	106.92	103.90
35	BA	2835	A	N9-C1'-C2'	6.05	121.87	114.00
35	BA	426	C	C6-N1-C2	-6.05	117.88	120.30
35	BA	1648	C	N3-C4-C5	-6.05	119.48	121.90
35	BA	2538	C	N3-C2-O2	-6.05	117.67	121.90
22	AV	19	G	C8-N9-C4	6.05	108.82	106.40
35	BA	2491	U	O4'-C1'-N1	6.05	113.04	108.20
35	BA	408	G	N3-C4-C5	6.05	131.62	128.60
35	BA	1085	A	N3-C4-C5	-6.05	122.57	126.80
35	BA	1423	G	C8-N9-C4	6.05	108.82	106.40
35	BA	1722	A	C8-N9-C4	-6.05	103.38	105.80
35	BA	2087	G	O4'-C1'-N9	-6.05	103.36	108.20
35	BA	2158	A	C4-C5-C6	6.05	120.02	117.00
35	BA	2643	G	N1-C2-N2	6.05	121.64	116.20
50	BS	25	ARG	NE-CZ-NH1	-6.05	117.28	120.30
1	AA	490	G	N1-C6-O6	-6.04	116.27	119.90
1	AA	1149	C	C4-C5-C6	6.04	120.42	117.40
35	BA	810	U	N3-C4-C5	-6.04	110.97	114.60
35	BA	1367	A	C8-N9-C4	6.04	108.22	105.80
1	AA	401	C	C6-N1-C2	6.04	122.72	120.30
1	AA	929	G	N3-C4-C5	-6.04	125.58	128.60
22	AV	76	A	C4-C5-N7	-6.04	107.68	110.70
35	BA	129	C	N1-C2-O2	6.04	122.53	118.90
35	BA	307	G	N9-C4-C5	-6.04	102.98	105.40
35	BA	539	G	C5-C6-N1	-6.04	108.48	111.50
35	BA	954	G	N3-C2-N2	6.04	124.13	119.90
35	BA	1411	C	N3-C4-C5	-6.04	119.48	121.90
35	BA	1495	A	N9-C1'-C2'	6.04	121.86	114.00
35	BA	1862	G	C8-N9-C4	-6.04	103.98	106.40
35	BA	2599	G	C5-C6-N1	6.04	114.52	111.50
1	AA	504	C	O4'-C1'-N1	-6.04	103.37	108.20
1	AA	1491	G	N9-C4-C5	6.04	107.82	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	AG	18	TYR	CB-CG-CD2	-6.04	117.38	121.00
35	BA	537	C	N1-C1'-C2'	-6.04	105.36	112.00
35	BA	1920	C	C5-C6-N1	6.04	124.02	121.00
35	BA	2544	G	N3-C4-C5	6.04	131.62	128.60
35	BA	993	G	C5-C6-O6	-6.04	124.98	128.60
35	BA	1596	A	C5-N7-C8	6.04	106.92	103.90
35	BA	2623	G	N1-C2-N3	6.04	127.52	123.90
1	AA	838	G	C4-C5-N7	6.04	113.22	110.80
1	AA	1050	G	O5'-P-OP1	-6.04	100.26	105.70
35	BA	2603	G	N9-C4-C5	-6.04	102.98	105.40
1	AA	1285	A	C4-C5-N7	-6.04	107.68	110.70
35	BA	778	G	N7-C8-N9	6.04	116.12	113.10
36	BB	23	G	O4'-C1'-N9	-6.04	103.37	108.20
1	AA	660	G	N9-C4-C5	-6.04	102.99	105.40
1	AA	765	G	C5-C6-N1	6.04	114.52	111.50
24	AY	212	TYR	CB-CG-CD2	6.04	124.62	121.00
35	BA	768	G	C2-N3-C4	-6.04	108.88	111.90
35	BA	818	G	C2-N3-C4	-6.04	108.88	111.90
35	BA	1145	C	C6-N1-C2	6.04	122.71	120.30
35	BA	1328	G	C4-C5-N7	-6.04	108.39	110.80
35	BA	2561	A	C6-N1-C2	6.04	122.22	118.60
1	AA	77	G	N1-C2-N3	-6.03	120.28	123.90
1	AA	586	C	N1-C2-O2	-6.03	115.28	118.90
1	AA	1373	G	C5-N7-C8	6.03	107.32	104.30
35	BA	268	C	C6-N1-C2	-6.03	117.89	120.30
35	BA	654(U)	A	N9-C4-C5	6.03	108.21	105.80
35	BA	1170	G	N3-C4-N9	6.03	129.62	126.00
35	BA	1366	A	N1-C2-N3	-6.03	126.28	129.30
35	BA	2123	G	N7-C8-N9	-6.03	110.08	113.10
35	BA	2371	G	C5-C6-O6	-6.03	124.98	128.60
1	AA	115	G	C4-C5-N7	-6.03	108.39	110.80
35	BA	784	A	C8-N9-C4	-6.03	103.39	105.80
35	BA	2287	A	C1'-O4'-C4'	6.03	114.72	109.90
1	AA	1386	G	N1-C2-N2	6.03	121.63	116.20
35	BA	631	A	C2-N3-C4	6.03	113.61	110.60
35	BA	1127	A	OP1-P-OP2	6.03	128.65	119.60
35	BA	1903	G	N9-C4-C5	-6.03	102.99	105.40
35	BA	1912	A	N9-C1'-C2'	6.03	121.84	114.00
1	AA	571	U	OP2-P-O3'	6.03	118.46	105.20
1	AA	1309	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	1527	G	C5-C6-N1	6.03	114.52	111.50
35	BA	1910	G	C4-C5-N7	-6.03	108.39	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	102	G	N9-C4-C5	-6.03	102.99	105.40
1	AA	1005	A	C8-N9-C4	-6.03	103.39	105.80
35	BA	1587	A	N9-C4-C5	-6.03	103.39	105.80
35	BA	1698	A	C4-C5-C6	-6.03	113.99	117.00
35	BA	2238	G	N7-C8-N9	-6.03	110.09	113.10
35	BA	2422	A	N1-C2-N3	-6.03	126.29	129.30
35	BA	2559	C	C5-C6-N1	-6.03	117.99	121.00
35	BA	2823	A	C5-C6-N1	6.03	120.71	117.70
1	AA	934	C	C5-C6-N1	-6.03	117.99	121.00
1	AA	1397	C	C4-C5-C6	6.03	120.41	117.40
1	AA	1472	U	C3'-C2'-C1'	-6.03	96.68	101.50
35	BA	1546	C	N3-C4-C5	-6.03	119.49	121.90
35	BA	2659	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	2662	A	C3'-C2'-C1'	6.03	106.32	101.50
35	BA	2785	C	C2-N3-C4	6.03	122.91	119.90
36	BB	78	A	N1-C2-N3	-6.03	126.29	129.30
35	BA	271(B)	C	N3-C4-C5	-6.02	119.49	121.90
35	BA	1181	C	C6-N1-C2	6.02	122.71	120.30
35	BA	1519	G	C5-N7-C8	6.02	107.31	104.30
35	BA	2241	A	C5-N7-C8	6.02	106.91	103.90
35	BA	2329	G	N7-C8-N9	6.02	116.11	113.10
1	AA	119	A	N9-C1'-C2'	6.02	121.83	114.00
1	AA	801	U	C2-N3-C4	6.02	130.61	127.00
13	AM	93	ARG	CD-NE-CZ	6.02	132.03	123.60
35	BA	337	C	N3-C4-C5	-6.02	119.49	121.90
35	BA	585	G	N1-C2-N3	-6.02	120.29	123.90
35	BA	1228	G	N1-C6-O6	-6.02	116.29	119.90
35	BA	2048	G	N3-C2-N2	6.02	124.12	119.90
35	BA	2094	G	C4-C5-C6	-6.02	115.19	118.80
35	BA	2439	A	C3'-C2'-C1'	6.02	106.32	101.50
1	AA	405	U	N3-C4-O4	6.02	123.61	119.40
35	BA	271(P)	C	N3-C4-N4	-6.02	113.78	118.00
35	BA	2464	C	C4-C5-C6	-6.02	114.39	117.40
35	BA	2530	A	N7-C8-N9	6.02	116.81	113.80
1	AA	1235	U	N3-C4-O4	6.02	123.61	119.40
1	AA	1285	A	OP2-P-O3'	6.02	118.44	105.20
35	BA	56	A	O4'-C1'-N9	-6.02	103.38	108.20
35	BA	775	G	N3-C2-N2	6.02	124.11	119.90
35	BA	829	A	C4-C5-N7	-6.02	107.69	110.70
35	BA	842	G	N1-C2-N2	-6.02	110.78	116.20
35	BA	1294	U	N1-C2-O2	-6.02	118.59	122.80
35	BA	2254	C	C1'-O4'-C4'	-6.02	105.08	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2344	U	O4'-C1'-C2'	6.02	113.02	107.60
35	BA	2373	G	C5-C6-N1	-6.02	108.49	111.50
35	BA	2117	A	N1-C2-N3	-6.02	126.29	129.30
47	BP	41	ARG	N-CA-C	-6.02	94.75	111.00
35	BA	912	C	C6-N1-C2	-6.02	117.89	120.30
1	AA	421	U	C4-C5-C6	6.01	123.31	119.70
1	AA	1164	G	C2-N3-C4	-6.01	108.89	111.90
1	AA	1166	G	C4-C5-C6	6.01	122.41	118.80
35	BA	11	G	O4'-C1'-N9	-6.01	103.39	108.20
35	BA	189	G	N3-C2-N2	-6.01	115.69	119.90
35	BA	879	G	C8-N9-C4	-6.01	103.99	106.40
35	BA	1324	G	C4-C5-N7	-6.01	108.39	110.80
35	BA	2270	G	O5'-P-OP1	-6.01	100.29	105.70
49	BR	22	ARG	NE-CZ-NH2	6.01	123.31	120.30
1	AA	351	G	N9-C4-C5	-6.01	103.00	105.40
1	AA	733	A	C4-C5-N7	6.01	113.71	110.70
35	BA	749	C	C2-N3-C4	-6.01	116.89	119.90
35	BA	794	G	C5-C6-O6	6.01	132.21	128.60
35	BA	1601	G	C8-N9-C4	6.01	108.81	106.40
1	AA	303	A	C5'-C4'-C3'	-6.01	106.38	116.00
1	AA	420	U	C6-N1-C2	-6.01	117.39	121.00
22	AV	12	G	C5-C6-O6	-6.01	124.99	128.60
35	BA	921	G	N3-C4-C5	6.01	131.61	128.60
35	BA	1382	G	C8-N9-C4	-6.01	104.00	106.40
35	BA	2737	G	C2-N3-C4	6.01	114.91	111.90
35	BA	2750	A	C5-N7-C8	6.01	106.91	103.90
36	BB	69	G	C6-N1-C2	6.01	128.71	125.10
1	AA	506	G	N3-C2-N2	-6.01	115.69	119.90
1	AA	877	C	C5-C6-N1	6.01	124.00	121.00
1	AA	1009	G	C6-N1-C2	-6.01	121.50	125.10
35	BA	1692	U	O4'-C1'-N1	6.01	113.01	108.20
1	AA	51	A	N1-C2-N3	6.01	132.30	129.30
1	AA	149	A	O4'-C1'-N9	6.01	113.01	108.20
35	BA	74	A	O4'-C1'-C2'	6.01	113.01	107.60
35	BA	552	G	O4'-C1'-N9	6.01	113.01	108.20
35	BA	1225	G	N9-C1'-C2'	6.01	121.81	114.00
35	BA	2414	G	C1'-O4'-C4'	-6.01	105.09	109.90
35	BA	2656	U	O4'-C1'-N1	6.01	113.01	108.20
1	AA	592	G	N3-C4-C5	6.01	131.60	128.60
35	BA	68	G	N3-C4-N9	6.01	129.60	126.00
35	BA	155	U	C6-N1-C2	-6.01	117.40	121.00
35	BA	1464	C	C2-N3-C4	6.01	122.90	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	433	C	C4-C5-C6	-6.00	114.40	117.40
1	AA	1218	C	N1-C2-O2	-6.00	115.30	118.90
35	BA	1078	U	C4-C5-C6	-6.00	116.10	119.70
35	BA	1087	G	N3-C4-C5	-6.00	125.60	128.60
35	BA	1963	U	C5-C6-N1	6.00	125.70	122.70
35	BA	2088	G	C8-N9-C4	6.00	108.80	106.40
35	BA	2623	G	C4-C5-N7	-6.00	108.40	110.80
1	AA	204	U	N3-C4-C5	6.00	118.20	114.60
1	AA	572	A	C5'-C4'-O4'	6.00	116.30	109.10
35	BA	261	G	C5-C6-N1	-6.00	108.50	111.50
35	BA	980	A	C4-C5-C6	6.00	120.00	117.00
35	BA	1595	G	N3-C4-C5	6.00	131.60	128.60
35	BA	2852	G	N7-C8-N9	-6.00	110.10	113.10
1	AA	119	A	C4-C5-C6	-6.00	114.00	117.00
1	AA	243	A	C5'-C4'-C3'	-6.00	106.40	116.00
1	AA	378	G	N1-C6-O6	-6.00	116.30	119.90
1	AA	748	C	N3-C2-O2	6.00	126.10	121.90
1	AA	777	A	N1-C6-N6	6.00	122.20	118.60
1	AA	1240	U	C5-C6-N1	-6.00	119.70	122.70
35	BA	1587	A	C8-N9-C4	6.00	108.20	105.80
1	AA	364	A	C5-C6-N1	-6.00	114.70	117.70
35	BA	1211	U	C5-C4-O4	6.00	129.50	125.90
35	BA	1861	G	O4'-C1'-N9	6.00	113.00	108.20
36	BB	32	C	C6-N1-C2	6.00	122.70	120.30
22	AV	8	U	C2-N3-C4	6.00	130.60	127.00
35	BA	43	A	C5-C6-N1	6.00	120.70	117.70
35	BA	193	U	C5-C6-N1	-6.00	119.70	122.70
35	BA	462	C	N3-C4-N4	-6.00	113.80	118.00
35	BA	1754	C	C5-C4-N4	-6.00	116.00	120.20
35	BA	2055	C	N1-C2-O2	-6.00	115.30	118.90
35	BA	2418	A	N3-C4-C5	6.00	131.00	126.80
36	BB	23	G	C6-C5-N7	-6.00	126.80	130.40
1	AA	1291	G	N3-C4-C5	6.00	131.60	128.60
35	BA	2485	G	N3-C2-N2	-6.00	115.70	119.90
35	BA	2517	C	C5-C6-N1	6.00	124.00	121.00
35	BA	2766	G	C6-C5-N7	6.00	134.00	130.40
35	BA	2778	A	N9-C1'-C2'	6.00	121.80	114.00
17	AQ	75	ARG	NE-CZ-NH1	-6.00	117.30	120.30
35	BA	457	A	N1-C2-N3	6.00	132.30	129.30
35	BA	768	G	N3-C4-N9	-6.00	122.40	126.00
35	BA	1369	G	C6-C5-N7	-6.00	126.80	130.40
1	AA	956	U	N3-C2-O2	5.99	126.40	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1303	C	N3-C4-C5	-5.99	119.50	121.90
15	AO	54	ARG	NE-CZ-NH2	5.99	123.30	120.30
35	BA	27	G	C4-C5-N7	-5.99	108.40	110.80
35	BA	1180	C	C5-C6-N1	5.99	124.00	121.00
35	BA	1615	C	N3-C4-N4	5.99	122.19	118.00
35	BA	2750	A	C4-C5-C6	5.99	120.00	117.00
1	AA	1170	A	C2-N3-C4	-5.99	107.60	110.60
35	BA	1459	G	N9-C1'-C2'	5.99	121.79	114.00
35	BA	1668	A	N9-C4-C5	-5.99	103.40	105.80
35	BA	2152	G	N9-C4-C5	-5.99	103.00	105.40
35	BA	2495	G	N9-C4-C5	-5.99	103.00	105.40
1	AA	117	G	C8-N9-C4	5.99	108.80	106.40
1	AA	986	A	C5-N7-C8	-5.99	100.91	103.90
1	AA	1030	C	C6-N1-C2	-5.99	117.90	120.30
1	AA	1499	A	C8-N9-C4	-5.99	103.40	105.80
5	AE	120	THR	CA-CB-CG2	-5.99	104.01	112.40
35	BA	741	G	C8-N9-C4	5.99	108.80	106.40
1	AA	1189	C	N3-C4-C5	5.99	124.30	121.90
22	AV	63	G	C6-C5-N7	-5.99	126.81	130.40
35	BA	791	C	N3-C2-O2	-5.99	117.71	121.90
35	BA	1860	G	N1-C2-N2	5.99	121.59	116.20
35	BA	2826	A	C4-C5-N7	-5.99	107.71	110.70
22	AV	74	C	C3'-C2'-C1'	5.99	106.29	101.50
35	BA	1605	C	N1-C2-O2	5.99	122.49	118.90
35	BA	1609	A	C5'-C4'-C3'	-5.99	106.42	116.00
1	AA	292	G	C2-N3-C4	-5.99	108.91	111.90
1	AA	1268	A	N1-C6-N6	-5.99	115.01	118.60
3	AC	54	ARG	NE-CZ-NH2	5.99	123.29	120.30
22	AV	20	U	N1-C2-O2	5.99	126.99	122.80
35	BA	640	C	N3-C4-C5	-5.99	119.51	121.90
35	BA	739	G	N9-C4-C5	-5.99	103.01	105.40
35	BA	1588	C	C4-C5-C6	-5.99	114.41	117.40
35	BA	2542	A	C8-N9-C4	5.99	108.19	105.80
35	BA	2559	C	N3-C2-O2	5.99	126.09	121.90
39	BE	146	THR	CA-CB-CG2	-5.99	104.02	112.40
1	AA	329	A	N1-C2-N3	-5.98	126.31	129.30
1	AA	799	G	C5-C6-O6	-5.98	125.01	128.60
1	AA	802	A	C2-N3-C4	-5.98	107.61	110.60
35	BA	583	G	C8-N9-C4	-5.98	104.01	106.40
35	BA	2614	A	N3-C4-C5	5.98	130.99	126.80
1	AA	711	G	N7-C8-N9	-5.98	110.11	113.10
1	AA	888	G	N7-C8-N9	5.98	116.09	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1304	G	C4-C5-N7	-5.98	108.41	110.80
35	BA	78	A	C6-N1-C2	-5.98	115.01	118.60
35	BA	529	A	C5'-C4'-C3'	5.98	125.57	116.00
35	BA	1675	C	N3-C4-C5	-5.98	119.51	121.90
35	BA	1881	C	O4'-C1'-N1	5.98	112.99	108.20
35	BA	1900	A	N1-C2-N3	5.98	132.29	129.30
35	BA	1934	C	N3-C2-O2	5.98	126.09	121.90
41	BG	113	ARG	NE-CZ-NH2	5.98	123.29	120.30
1	AA	452	A	N9-C4-C5	-5.98	103.41	105.80
1	AA	919	A	N9-C4-C5	-5.98	103.41	105.80
35	BA	1055	G	C8-N9-C4	-5.98	104.01	106.40
35	BA	1190	G	C4-C5-C6	-5.98	115.21	118.80
35	BA	1690	A	C4-C5-C6	5.98	119.99	117.00
35	BA	2395	C	N1-C2-O2	5.98	122.49	118.90
35	BA	2865	U	N3-C4-O4	5.98	123.59	119.40
1	AA	516	U	C6-N1-C2	-5.98	117.41	121.00
35	BA	335	C	C5-C6-N1	-5.98	118.01	121.00
1	AA	552	U	C2-N3-C4	-5.98	123.41	127.00
1	AA	773	G	C8-N9-C4	5.98	108.79	106.40
1	AA	971	G	C4-C5-N7	-5.98	108.41	110.80
1	AA	1071	C	N1-C2-O2	-5.98	115.31	118.90
1	AA	1187	G	N7-C8-N9	5.98	116.09	113.10
1	AA	1391	U	C5-C6-N1	-5.98	119.71	122.70
3	AC	21	ARG	NE-CZ-NH2	-5.98	117.31	120.30
22	AV	10	G	C8-N9-C4	5.98	108.79	106.40
32	B7	3	ARG	NE-CZ-NH2	5.98	123.29	120.30
35	BA	1259	G	C6-N1-C2	5.98	128.69	125.10
35	BA	1594	G	C5'-C4'-O4'	5.98	116.27	109.10
35	BA	2387	U	N3-C4-O4	-5.98	115.22	119.40
51	BT	29	ARG	NE-CZ-NH2	-5.98	117.31	120.30
1	AA	717	C	N3-C4-N4	-5.98	113.82	118.00
1	AA	1010	G	N3-C2-N2	-5.98	115.72	119.90
1	AA	1436	U	N1-C2-O2	-5.98	118.62	122.80
35	BA	1095	A	N9-C1'-C2'	5.98	121.77	114.00
35	BA	1234	U	O4'-C1'-N1	5.98	112.98	108.20
1	AA	511	C	N1-C1'-C2'	5.97	121.77	114.00
22	AV	18	G	O4'-C1'-N9	-5.97	103.42	108.20
35	BA	407	G	C5-C6-O6	5.97	132.19	128.60
35	BA	610	G	N7-C8-N9	5.97	116.09	113.10
35	BA	987	G	N9-C4-C5	5.97	107.79	105.40
35	BA	1913	A	C8-N9-C4	-5.97	103.41	105.80
10	AJ	33	GLN	O-C-N	5.97	132.26	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1132	A	C4-C5-C6	-5.97	114.01	117.00
36	BB	69	G	C6-C5-N7	-5.97	126.82	130.40
49	BR	90	ARG	NE-CZ-NH2	-5.97	117.31	120.30
35	BA	1378	A	N1-C2-N3	5.97	132.28	129.30
35	BA	334	C	C5-C6-N1	-5.97	118.02	121.00
35	BA	454	A	C5-C6-N6	-5.97	118.92	123.70
35	BA	2769	C	C5-C6-N1	-5.97	118.02	121.00
49	BR	107	ASP	CB-CG-OD1	5.97	123.67	118.30
1	AA	1282	C	C5-C6-N1	5.97	123.98	121.00
35	BA	204	A	N1-C6-N6	-5.97	115.02	118.60
35	BA	1828	G	N1-C6-O6	-5.97	116.32	119.90
36	BB	36	C	N3-C4-C5	-5.97	119.51	121.90
36	BB	42	C	C4-C5-C6	5.97	120.38	117.40
1	AA	61	G	C6-C5-N7	-5.97	126.82	130.40
1	AA	1384	C	N1-C2-O2	5.97	122.48	118.90
1	AA	1432	G	C6-C5-N7	5.97	133.98	130.40
22	AV	72	A	C4-C5-C6	-5.97	114.02	117.00
1	AA	200	G	C5'-C4'-O4'	5.96	116.26	109.10
1	AA	396	G	C5-N7-C8	-5.96	101.32	104.30
1	AA	492	G	N3-C4-C5	5.96	131.58	128.60
1	AA	915	A	N1-C6-N6	5.96	122.18	118.60
1	AA	1344	C	C1'-O4'-C4'	-5.96	105.13	109.90
35	BA	157	U	C2-N3-C4	5.96	130.58	127.00
35	BA	387	U	N3-C2-O2	-5.96	118.03	122.20
35	BA	533	G	C5-C6-N1	-5.96	108.52	111.50
35	BA	620	G	N1-C6-O6	5.96	123.48	119.90
35	BA	1275	A	C4-C5-N7	-5.96	107.72	110.70
35	BA	1355	G	C4-C5-N7	5.96	113.19	110.80
35	BA	1519	G	N1-C6-O6	-5.96	116.32	119.90
35	BA	1833	U	C6-N1-C2	-5.96	117.42	121.00
35	BA	1099	G	N3-C4-N9	-5.96	122.42	126.00
35	BA	2751	G	O4'-C1'-N9	5.96	112.97	108.20
1	AA	142	G	C8-N9-C4	-5.96	104.02	106.40
1	AA	536	C	C4-C5-C6	5.96	120.38	117.40
1	AA	636	U	C5-C4-O4	5.96	129.48	125.90
1	AA	739	C	N1-C2-O2	-5.96	115.32	118.90
1	AA	746	A	N9-C4-C5	5.96	108.18	105.80
1	AA	1230	C	C5-C6-N1	5.96	123.98	121.00
35	BA	359	A	C1'-O4'-C4'	-5.96	105.13	109.90
35	BA	981	A	N1-C2-N3	5.96	132.28	129.30
37	BC	155	ARG	NE-CZ-NH2	-5.96	117.32	120.30
39	BE	84	PHE	CB-CG-CD1	5.96	124.97	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	162	A	C5-N7-C8	-5.96	100.92	103.90
35	BA	256	A	C8-N9-C4	5.96	108.18	105.80
35	BA	506	G	C1'-O4'-C4'	-5.96	105.13	109.90
35	BA	699	A	C5-N7-C8	5.96	106.88	103.90
35	BA	968	G	C5-N7-C8	-5.96	101.32	104.30
35	BA	1063	G	N9-C4-C5	-5.96	103.02	105.40
35	BA	2426	A	N9-C4-C5	-5.96	103.42	105.80
1	AA	92	C	C6-N1-C2	-5.96	117.92	120.30
1	AA	782	A	C5-C6-N1	-5.96	114.72	117.70
1	AA	1100	C	N3-C4-N4	-5.96	113.83	118.00
35	BA	708	C	C2-N3-C4	5.96	122.88	119.90
35	BA	1971	A	N9-C1'-C2'	-5.96	105.45	112.00
35	BA	2306	C	N3-C2-O2	5.96	126.07	121.90
35	BA	2474	C	C4-C5-C6	-5.96	114.42	117.40
1	AA	179	A	C4-C5-N7	-5.96	107.72	110.70
1	AA	1019	C	C5-C6-N1	5.96	123.98	121.00
1	AA	1247	U	C5-C4-O4	-5.96	122.33	125.90
35	BA	536	A	C4-C5-C6	5.96	119.98	117.00
36	BB	33	G	N7-C8-N9	-5.96	110.12	113.10
35	BA	220	G	C4-C5-N7	-5.95	108.42	110.80
35	BA	1805	U	C5-C6-N1	5.95	125.68	122.70
1	AA	80	G	N9-C4-C5	-5.95	103.02	105.40
22	AV	37	A	C8-N9-C4	5.95	108.18	105.80
35	BA	2752	C	C6-N1-C2	-5.95	117.92	120.30
1	AA	168	G	N3-C2-N2	-5.95	115.73	119.90
1	AA	1236	A	C2-N3-C4	5.95	113.58	110.60
1	AA	1261	A	C6-N1-C2	-5.95	115.03	118.60
1	AA	480	U	C5-C4-O4	5.95	129.47	125.90
1	AA	758	G	N9-C4-C5	5.95	107.78	105.40
1	AA	1151	A	C2-N3-C4	-5.95	107.62	110.60
35	BA	476	G	C4-C5-N7	-5.95	108.42	110.80
35	BA	654(N)	G	C6-C5-N7	-5.95	126.83	130.40
35	BA	777	A	N7-C8-N9	-5.95	110.83	113.80
35	BA	930	U	C2-N3-C4	5.95	130.57	127.00
35	BA	2479	G	N7-C8-N9	-5.95	110.13	113.10
36	BB	23	G	N3-C2-N2	5.95	124.06	119.90
35	BA	1401	G	C8-N9-C4	-5.95	104.02	106.40
35	BA	2477	C	N3-C4-N4	-5.95	113.84	118.00
1	AA	901	A	N9-C4-C5	5.95	108.18	105.80
1	AA	1030(B)	C	N3-C4-N4	-5.95	113.84	118.00
1	AA	1111	A	N9-C4-C5	-5.95	103.42	105.80
35	BA	980	A	C8-N9-C4	-5.95	103.42	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1410	G	C5-C6-O6	5.95	132.17	128.60
35	BA	1507	A	N1-C6-N6	-5.95	115.03	118.60
35	BA	2320	A	C5-C6-N1	5.95	120.67	117.70
35	BA	2587	A	N7-C8-N9	-5.95	110.83	113.80
36	BB	97	G	N7-C8-N9	-5.95	110.13	113.10
1	AA	1526	G	N3-C4-N9	5.94	129.57	126.00
35	BA	477	A	C6-N1-C2	-5.94	115.03	118.60
35	BA	1614	A	C8-N9-C4	-5.94	103.42	105.80
35	BA	2464	C	N3-C4-C5	5.94	124.28	121.90
36	BB	30	C	C5-C6-N1	5.94	123.97	121.00
1	AA	571	U	C4-C5-C6	5.94	123.27	119.70
35	BA	764	A	N9-C4-C5	-5.94	103.42	105.80
35	BA	1052	C	C2-N3-C4	5.94	122.87	119.90
35	BA	1637	A	N1-C2-N3	5.94	132.27	129.30
35	BA	2081	C	N1-C2-O2	5.94	122.47	118.90
36	BB	118	G	N1-C6-O6	5.94	123.47	119.90
1	AA	704	A	C5-C6-N1	5.94	120.67	117.70
22	AV	44	A	N9-C4-C5	-5.94	103.42	105.80
35	BA	1264	G	C3'-C2'-C1'	5.94	106.25	101.50
35	BA	2525	G	C6-C5-N7	-5.94	126.84	130.40
1	AA	418	C	C6-N1-C2	5.94	122.67	120.30
1	AA	1402	C	C6-N1-C2	5.94	122.68	120.30
35	BA	334	C	C4-C5-C6	5.94	120.37	117.40
35	BA	983	A	N7-C8-N9	-5.94	110.83	113.80
35	BA	2385	C	C5-C4-N4	-5.94	116.04	120.20
1	AA	472	A	C3'-C2'-C1'	5.94	106.25	101.50
1	AA	998	G	O4'-C1'-N9	5.94	112.95	108.20
35	BA	1201	C	C5-C6-N1	-5.94	118.03	121.00
35	BA	2695	C	N3-C4-N4	5.94	122.16	118.00
21	AU	24	ARG	NE-CZ-NH2	5.94	123.27	120.30
35	BA	188	G	C4-C5-N7	-5.94	108.43	110.80
35	BA	344	G	N1-C2-N3	5.94	127.46	123.90
35	BA	1049	C	C5'-C4'-O4'	-5.94	101.98	109.10
1	AA	292	G	C4-C5-N7	5.93	113.17	110.80
1	AA	776	G	N9-C4-C5	5.93	107.77	105.40
1	AA	963	G	N9-C4-C5	5.93	107.77	105.40
1	AA	1527	C	N3-C2-O2	5.93	126.05	121.90
36	BB	75	G	C5'-C4'-O4'	5.93	116.22	109.10
1	AA	292	G	N9-C4-C5	-5.93	103.03	105.40
35	BA	25	U	C5-C6-N1	5.93	125.67	122.70
35	BA	467	G	C4'-C3'-C2'	-5.93	96.67	102.60
35	BA	558	G	C5-N7-C8	5.93	107.27	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	606	U	C1'-O4'-C4'	-5.93	105.15	109.90
35	BA	786	C	C6-N1-C2	5.93	122.67	120.30
35	BA	854	G	N7-C8-N9	-5.93	110.13	113.10
35	BA	1203	G	C2-N3-C4	5.93	114.87	111.90
35	BA	1305	C	C4-C5-C6	5.93	120.37	117.40
35	BA	1580	A	C2-N3-C4	5.93	113.57	110.60
36	BB	64	C	C6-N1-C2	5.93	122.67	120.30
1	AA	1327	C	C6-N1-C2	-5.93	117.93	120.30
35	BA	1656	C	C2-N3-C4	5.93	122.87	119.90
1	AA	700	G	C6-N1-C2	-5.93	121.54	125.10
35	BA	33	U	C2-N3-C4	-5.93	123.44	127.00
35	BA	325	G	C4-C5-N7	5.93	113.17	110.80
35	BA	1682	G	C4-C5-N7	5.93	113.17	110.80
35	BA	1983	C	C6-N1-C2	5.93	122.67	120.30
35	BA	2414	G	O4'-C1'-N9	-5.93	103.46	108.20
1	AA	557	G	N1-C6-O6	-5.93	116.34	119.90
1	AA	964	A	C4'-C3'-C2'	5.93	108.53	102.60
35	BA	463	G	C8-N9-C4	-5.93	104.03	106.40
35	BA	1347	G	N1-C6-O6	5.93	123.46	119.90
35	BA	1486	A	C5-N7-C8	-5.93	100.94	103.90
1	AA	231	G	N3-C4-C5	-5.93	125.64	128.60
1	AA	521	G	C6-N1-C2	-5.93	121.54	125.10
35	BA	948	G	C2-N3-C4	5.93	114.86	111.90
35	BA	1309	G	N3-C4-C5	5.93	131.56	128.60
35	BA	2105	C	N1-C2-O2	5.93	122.46	118.90
35	BA	2145	C	C5-C4-N4	-5.93	116.05	120.20
35	BA	2189	U	N1-C2-O2	5.93	126.95	122.80
35	BA	2454	G	N9-C4-C5	-5.93	103.03	105.40
35	BA	2735	G	C8-N9-C4	5.93	108.77	106.40
1	AA	31	G	O4'-C1'-N9	-5.92	103.46	108.20
1	AA	298	A	C5-C6-N6	-5.92	118.96	123.70
13	AM	110	ARG	NE-CZ-NH2	-5.92	117.34	120.30
22	AV	21	A	N3-C4-N9	5.92	132.14	127.40
25	B0	32	ARG	NE-CZ-NH1	5.92	123.26	120.30
35	BA	917	A	C5-N7-C8	-5.92	100.94	103.90
35	BA	1588	C	C6-N1-C2	-5.92	117.93	120.30
35	BA	2518	A	C8-N9-C4	-5.92	103.43	105.80
35	BA	2792	G	N9-C4-C5	5.92	107.77	105.40
1	AA	382	A	N9-C4-C5	5.92	108.17	105.80
1	AA	1492	A	N9-C4-C5	-5.92	103.43	105.80
4	AD	3	ARG	NE-CZ-NH1	-5.92	117.34	120.30
35	BA	321	G	N3-C4-N9	-5.92	122.45	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1441	G	C3'-C2'-C1'	5.92	106.24	101.50
35	BA	1711	C	N3-C2-O2	-5.92	117.75	121.90
1	AA	276	G	C5-C6-O6	5.92	132.15	128.60
1	AA	413	G	N1-C6-O6	5.92	123.45	119.90
1	AA	610	G	C6-C5-N7	5.92	133.95	130.40
1	AA	1131	G	C5-C6-O6	-5.92	125.05	128.60
35	BA	1524	G	N9-C4-C5	-5.92	103.03	105.40
36	BB	100	A	C8-N9-C4	-5.92	103.43	105.80
35	BA	13	A	C2-N3-C4	-5.92	107.64	110.60
35	BA	359	A	C4-C5-N7	-5.92	107.74	110.70
35	BA	359	A	C5-N7-C8	5.92	106.86	103.90
35	BA	1021	A	C4-C5-C6	5.92	119.96	117.00
35	BA	1502	C	C6-N1-C2	5.92	122.67	120.30
35	BA	1776	G	O4'-C1'-N9	-5.92	103.46	108.20
35	BA	142(A)	C	C4-C5-C6	5.92	120.36	117.40
35	BA	654(K)	C	O4'-C4'-C3'	5.92	110.83	106.10
35	BA	952	G	N3-C4-N9	-5.92	122.45	126.00
35	BA	1808	U	C5-C6-N1	5.92	125.66	122.70
35	BA	2383	G	C8-N9-C4	-5.92	104.03	106.40
36	BB	76	G	C5-C6-O6	-5.92	125.05	128.60
40	BF	97	TYR	CB-CG-CD1	5.92	124.55	121.00
1	AA	314	C	N3-C4-C5	-5.92	119.53	121.90
1	AA	531	U	O4'-C4'-C3'	5.92	110.83	106.10
1	AA	889	A	O4'-C1'-N9	5.92	112.93	108.20
35	BA	590	A	N7-C8-N9	5.92	116.76	113.80
35	BA	968	G	C2-N3-C4	5.92	114.86	111.90
35	BA	1421	G	C6-C5-N7	-5.92	126.85	130.40
35	BA	1963	U	C5-C4-O4	-5.92	122.35	125.90
35	BA	2766	G	N7-C8-N9	5.92	116.06	113.10
41	BG	91	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	AA	949	A	C2-N3-C4	5.92	113.56	110.60
35	BA	869	G	N1-C6-O6	-5.92	116.35	119.90
1	AA	142	G	C4-C5-N7	-5.91	108.44	110.80
13	AM	94	ARG	NE-CZ-NH1	-5.91	117.34	120.30
35	BA	312	G	C5-C6-N1	-5.91	108.54	111.50
35	BA	398	G	C4-C5-C6	-5.91	115.25	118.80
35	BA	1250	G	C6-C5-N7	5.91	133.95	130.40
35	BA	2080	G	C8-N9-C4	-5.91	104.03	106.40
1	AA	775	G	C4-C5-N7	5.91	113.17	110.80
35	BA	654(Q)	C	C6-N1-C2	-5.91	117.94	120.30
35	BA	1337	G	O5'-P-OP2	-5.91	100.38	105.70
1	AA	136	C	C4-C5-C6	5.91	120.36	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1269	A	N9-C4-C5	-5.91	103.44	105.80
35	BA	271(W)	G	C4-C5-N7	-5.91	108.44	110.80
35	BA	703	U	C5-C6-N1	-5.91	119.74	122.70
35	BA	903	C	N1-C2-O2	-5.91	115.35	118.90
35	BA	1038	C	N3-C4-C5	5.91	124.26	121.90
35	BA	1922	G	C4-C5-N7	5.91	113.16	110.80
35	BA	2176	A	C3'-C2'-C1'	-5.91	96.77	101.50
1	AA	1525	G	N1-C6-O6	5.91	123.44	119.90
35	BA	713	G	C2-N3-C4	5.91	114.86	111.90
35	BA	961	C	N1-C1'-C2'	5.91	121.68	114.00
35	BA	1641	A	N1-C6-N6	-5.91	115.06	118.60
1	AA	63	C	N1-C2-N3	-5.91	115.06	119.20
1	AA	1131	G	C8-N9-C4	-5.91	104.04	106.40
35	BA	90	U	C6-N1-C2	-5.91	117.46	121.00
35	BA	151	C	C5'-C4'-O4'	5.91	116.19	109.10
35	BA	887	A	C4-C5-C6	5.91	119.95	117.00
35	BA	1193	G	N1-C2-N3	-5.91	120.36	123.90
35	BA	2532	G	O4'-C1'-N9	5.91	112.93	108.20
36	BB	86	G	C8-N9-C4	-5.91	104.04	106.40
1	AA	116	A	C4-C5-C6	5.91	119.95	117.00
1	AA	1531	A	N1-C6-N6	5.91	122.14	118.60
31	B6	9	LEU	N-CA-C	5.91	126.95	111.00
35	BA	1049	C	C1'-O4'-C4'	-5.91	105.18	109.90
35	BA	1702	G	N3-C4-C5	5.91	131.55	128.60
35	BA	2638	G	C5-C6-O6	-5.91	125.06	128.60
51	BT	80	SER	N-CA-C	5.91	126.95	111.00
1	AA	848	C	C2-N3-C4	-5.90	116.95	119.90
13	AM	29	ARG	NE-CZ-NH2	5.90	123.25	120.30
35	BA	305	U	C2-N3-C4	5.90	130.54	127.00
35	BA	454	A	C5-N7-C8	-5.90	100.95	103.90
35	BA	827	U	C4-C5-C6	5.90	123.24	119.70
35	BA	1458	C	N3-C4-C5	-5.90	119.54	121.90
35	BA	1877	A	N1-C2-N3	5.90	132.25	129.30
36	BB	49	C	N3-C4-C5	-5.90	119.54	121.90
1	AA	156	G	C6-C5-N7	-5.90	126.86	130.40
1	AA	666	G	N3-C2-N2	5.90	124.03	119.90
1	AA	871	U	C5-C4-O4	-5.90	122.36	125.90
35	BA	1171	G	C1'-O4'-C4'	-5.90	105.18	109.90
35	BA	2046	G	C5-N7-C8	-5.90	101.35	104.30
35	BA	2306	C	N1-C2-N3	-5.90	115.07	119.20
36	BB	25	A	N7-C8-N9	-5.90	110.85	113.80
55	BX	28	PHE	CB-CG-CD1	-5.90	116.67	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	598	G	N9-C1'-C2'	-5.90	105.51	112.00
35	BA	1789	A	N9-C4-C5	5.90	108.16	105.80
1	AA	1386	G	C5'-C4'-O4'	5.90	116.18	109.10
23	AX	15	A	O4'-C1'-N9	-5.90	103.48	108.20
35	BA	123	G	N1-C2-N3	5.90	127.44	123.90
35	BA	481	G	N7-C8-N9	-5.90	110.15	113.10
35	BA	614(B)	G	C6-C5-N7	5.90	133.94	130.40
35	BA	1526	G	C6-N1-C2	-5.90	121.56	125.10
36	BB	39	A	C6-C5-N7	5.90	136.43	132.30
1	AA	1442	G	C4-C5-C6	-5.90	115.26	118.80
35	BA	684	G	N1-C6-O6	-5.90	116.36	119.90
35	BA	2255	G	C6-N1-C2	5.90	128.64	125.10
35	BA	2805	G	C8-N9-C4	-5.90	104.04	106.40
36	BB	72	G	N7-C8-N9	5.90	116.05	113.10
1	AA	608	A	N9-C4-C5	5.89	108.16	105.80
35	BA	23	G	C6-N1-C2	5.89	128.64	125.10
35	BA	205	G	N1-C6-O6	5.89	123.44	119.90
35	BA	516	C	C2-N1-C1'	5.89	125.28	118.80
35	BA	556	G	C4-C5-N7	5.89	113.16	110.80
35	BA	817	C	C1'-O4'-C4'	-5.89	105.19	109.90
35	BA	1245	G	N7-C8-N9	-5.89	110.15	113.10
35	BA	2267	A	N3-C4-C5	5.89	130.93	126.80
35	BA	2271	G	C2-N3-C4	-5.89	108.95	111.90
35	BA	2405	G	C5-C6-O6	-5.89	125.06	128.60
1	AA	88	A	N1-C2-N3	5.89	132.25	129.30
1	AA	1028	C	N3-C4-N4	5.89	122.12	118.00
1	AA	1077	G	O4'-C1'-N9	5.89	112.91	108.20
22	AV	57	A	C5-C6-N1	5.89	120.65	117.70
35	BA	744	G	C6-C5-N7	-5.89	126.86	130.40
35	BA	1989	G	C4-C5-C6	-5.89	115.26	118.80
35	BA	2730	C	C4'-C3'-C2'	5.89	108.49	102.60
35	BA	444	C	C6-N1-C2	-5.89	117.94	120.30
1	AA	873	A	N7-C8-N9	5.89	116.75	113.80
35	BA	438	G	N3-C2-N2	5.89	124.02	119.90
35	BA	2266	A	O4'-C1'-N9	5.89	112.91	108.20
35	BA	2584	U	C5-C6-N1	5.89	125.64	122.70
35	BA	2630	G	C5-C6-N1	5.89	114.44	111.50
1	AA	524	G	C8-N9-C4	5.89	108.75	106.40
1	AA	1250	A	N9-C4-C5	5.89	108.16	105.80
1	AA	1520	G	N3-C4-N9	5.89	129.53	126.00
23	AX	21	C	N3-C4-C5	5.89	124.25	121.90
35	BA	144	C	O4'-C1'-N1	5.89	112.91	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	328	U	O4'-C1'-N1	5.89	112.91	108.20
35	BA	551	G	C6-C5-N7	-5.89	126.87	130.40
35	BA	863	A	C5-C6-N1	-5.89	114.76	117.70
35	BA	2527	C	C6-N1-C2	-5.89	117.94	120.30
1	AA	481	G	C6-N1-C2	5.88	128.63	125.10
1	AA	937	A	C4-C5-N7	5.88	113.64	110.70
35	BA	267	C	N3-C4-C5	-5.88	119.55	121.90
35	BA	2487	G	C5-N7-C8	5.88	107.24	104.30
1	AA	238	G	C5-C6-N1	5.88	114.44	111.50
35	BA	1561	G	C1'-O4'-C4'	-5.88	105.19	109.90
39	BE	168	MET	N-CA-C	5.88	126.88	111.00
1	AA	129	U	C5-C6-N1	-5.88	119.76	122.70
1	AA	783	C	N3-C4-C5	5.88	124.25	121.90
1	AA	812	C	C6-N1-C2	5.88	122.65	120.30
24	AY	325	LEU	CB-CG-CD1	-5.88	101.00	111.00
35	BA	93	G	C5-C6-N1	5.88	114.44	111.50
35	BA	609	A	C5-C6-N1	-5.88	114.76	117.70
35	BA	1376	C	C2-N3-C4	-5.88	116.96	119.90
35	BA	2491	U	N3-C4-C5	5.88	118.13	114.60
35	BA	2645	G	C5-C6-O6	-5.88	125.07	128.60
1	AA	150	C	N3-C2-O2	5.88	126.02	121.90
1	AA	605	U	O4'-C1'-N1	5.88	112.90	108.20
35	BA	48	G	C2-N3-C4	5.88	114.84	111.90
35	BA	309	G	C4-C5-C6	5.88	122.33	118.80
35	BA	578	A	O4'-C1'-N9	5.88	112.90	108.20
35	BA	1268	A	C2-N3-C4	-5.88	107.66	110.60
35	BA	2350	C	N3-C4-C5	-5.88	119.55	121.90
35	BA	2467	C	N1-C2-O2	-5.88	115.37	118.90
35	BA	2475	C	O5'-P-OP2	-5.88	100.41	105.70
1	AA	57	G	C4-C5-N7	5.88	113.15	110.80
1	AA	370	C	N3-C4-N4	5.88	122.11	118.00
1	AA	642	A	C5-C6-N1	5.88	120.64	117.70
1	AA	944	G	C8-N9-C4	5.88	108.75	106.40
35	BA	790	C	C5-C6-N1	5.88	123.94	121.00
35	BA	840	C	C6-N1-C2	5.88	122.65	120.30
35	BA	1773	A	C4-C5-C6	5.88	119.94	117.00
1	AA	326	G	C5-C6-O6	5.88	132.12	128.60
1	AA	851	G	N3-C4-C5	-5.88	125.66	128.60
35	BA	1236	G	N9-C1'-C2'	5.88	121.64	114.00
35	BA	2735	G	C6-N1-C2	5.88	128.62	125.10
1	AA	134	A	C4-C5-C6	5.87	119.94	117.00
1	AA	329	A	C5-N7-C8	-5.87	100.96	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	B8	46	ARG	NE-CZ-NH2	-5.87	117.36	120.30
35	BA	10	G	C6-N1-C2	-5.87	121.58	125.10
35	BA	297	C	C1'-O4'-C4'	-5.87	105.20	109.90
35	BA	322	A	C6-N1-C2	-5.87	115.08	118.60
35	BA	1465	G	N1-C6-O6	5.87	123.42	119.90
35	BA	2445	G	C4-C5-N7	-5.87	108.45	110.80
1	AA	1267	C	C4'-C3'-C2'	-5.87	96.73	102.60
25	B0	45	PHE	CB-CG-CD1	5.87	124.91	120.80
32	B7	28	ARG	NE-CZ-NH2	-5.87	117.36	120.30
35	BA	2430	A	N1-C2-N3	5.87	132.24	129.30
35	BA	1337	G	N1-C6-O6	5.87	123.42	119.90
1	AA	869	G	N1-C6-O6	5.87	123.42	119.90
1	AA	1095	U	C5-C6-N1	5.87	125.64	122.70
35	BA	1091	G	N3-C2-N2	5.87	124.01	119.90
35	BA	1171	G	C4-C5-C6	5.87	122.32	118.80
35	BA	1825	A	C5-C6-N1	-5.87	114.77	117.70
35	BA	1994	C	N3-C4-C5	-5.87	119.55	121.90
35	BA	2311	A	C1'-O4'-C4'	5.87	114.59	109.90
1	AA	442	C	N3-C4-C5	5.87	124.25	121.90
1	AA	613	C	O4'-C1'-N1	5.87	112.89	108.20
35	BA	1398	C	N1-C2-O2	5.87	122.42	118.90
35	BA	2048	G	N1-C2-N3	-5.87	120.38	123.90
35	BA	437	G	N9-C4-C5	5.87	107.75	105.40
35	BA	1326	U	C5'-C4'-O4'	-5.87	102.06	109.10
35	BA	2081	C	N3-C2-O2	-5.87	117.79	121.90
1	AA	253	U	C4'-C3'-C2'	-5.86	96.74	102.60
1	AA	455	C	C3'-C2'-C1'	5.86	106.19	101.50
1	AA	558	G	N9-C4-C5	5.86	107.75	105.40
1	AA	1156	G	N9-C4-C5	5.86	107.75	105.40
1	AA	1218	C	C2-N1-C1'	5.86	125.25	118.80
35	BA	1277	G	C6-N1-C2	-5.86	121.58	125.10
35	BA	1599	C	C5-C6-N1	5.86	123.93	121.00
35	BA	1654	A	C3'-C2'-C1'	5.86	106.19	101.50
35	BA	2188	C	C3'-C2'-C1'	-5.86	96.81	101.50
1	AA	309	G	C6-N1-C2	-5.86	121.58	125.10
35	BA	476	G	C6-N1-C2	5.86	128.62	125.10
35	BA	2053	G	N1-C6-O6	5.86	123.42	119.90
1	AA	717	C	C5-C4-N4	5.86	124.30	120.20
35	BA	404	C	N3-C4-C5	-5.86	119.56	121.90
35	BA	409	C	C1'-O4'-C4'	-5.86	105.21	109.90
35	BA	1509(B)	A	C8-N9-C4	-5.86	103.46	105.80
35	BA	1895	C	N3-C2-O2	-5.86	117.80	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2449	U	N1-C1'-C2'	5.86	121.62	114.00
35	BA	2641	G	N1-C2-N3	5.86	127.42	123.90
35	BA	2852	G	C2-N3-C4	5.86	114.83	111.90
1	AA	274	A	C4-C5-C6	-5.86	114.07	117.00
35	BA	622	G	C6-N1-C2	5.86	128.62	125.10
35	BA	700	G	O4'-C1'-N9	5.86	112.89	108.20
1	AA	670	G	C5-C6-N1	5.86	114.43	111.50
1	AA	1508	G	N7-C8-N9	5.86	116.03	113.10
35	BA	107	C	N3-C4-C5	-5.86	119.56	121.90
35	BA	1660	C	C2-N3-C4	5.86	122.83	119.90
35	BA	1947	C	N3-C4-C5	5.86	124.24	121.90
1	AA	60	A	C2'-C3'-O3'	5.86	123.07	113.70
1	AA	1263	C	N3-C4-C5	-5.86	119.56	121.90
35	BA	865	C	N3-C4-C5	-5.86	119.56	121.90
35	BA	1907	G	N7-C8-N9	-5.86	110.17	113.10
35	BA	2499	C	C5-C6-N1	-5.86	118.07	121.00
1	AA	1115	C	C5-C4-N4	-5.85	116.10	120.20
35	BA	1629	U	N3-C4-C5	5.85	118.11	114.60
35	BA	2377	A	C5-C6-N6	5.85	128.38	123.70
35	BA	2482	G	C5-C6-N1	5.85	114.43	111.50
1	AA	324	G	N3-C4-N9	-5.85	122.49	126.00
1	AA	556	C	N3-C4-C5	5.85	124.24	121.90
1	AA	660	G	N3-C4-N9	5.85	129.51	126.00
1	AA	1179	A	C2-N3-C4	-5.85	107.67	110.60
35	BA	282	A	C2-N3-C4	-5.85	107.67	110.60
35	BA	358	U	C5-C4-O4	5.85	129.41	125.90
35	BA	628	G	N7-C8-N9	5.85	116.03	113.10
35	BA	636	G	C6-C5-N7	5.85	133.91	130.40
35	BA	1059	G	N9-C4-C5	5.85	107.74	105.40
35	BA	2320	A	N1-C2-N3	-5.85	126.37	129.30
35	BA	2453	A	N7-C8-N9	5.85	116.73	113.80
35	BA	2697	G	N9-C4-C5	5.85	107.74	105.40
46	BO	40	VAL	N-CA-C	-5.85	95.20	111.00
1	AA	1047	G	C4-C5-C6	5.85	122.31	118.80
35	BA	1063	G	N1-C2-N3	-5.85	120.39	123.90
35	BA	1712	C	N3-C2-O2	5.85	126.00	121.90
35	BA	2013	A	N1-C2-N3	-5.85	126.38	129.30
51	BT	3	ARG	NE-CZ-NH1	5.85	123.23	120.30
14	AN	21	TYR	CB-CG-CD2	5.85	124.51	121.00
22	AV	61	C	C2-N3-C4	5.85	122.83	119.90
35	BA	313	C	N3-C2-O2	-5.85	117.81	121.90
35	BA	670	A	C4-C5-N7	-5.85	107.78	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	691	C	C2-N3-C4	-5.85	116.97	119.90
35	BA	761	A	N3-C4-N9	-5.85	122.72	127.40
35	BA	1427	A	C2'-C3'-O3'	5.85	123.06	113.70
35	BA	1570	A	C2-N3-C4	-5.85	107.67	110.60
35	BA	1621	U	N3-C4-C5	5.85	118.11	114.60
35	BA	2169	A	O4'-C1'-N9	-5.85	103.52	108.20
35	BA	2531	A	N9-C4-C5	-5.85	103.46	105.80
35	BA	2830	G	C5-N7-C8	5.85	107.22	104.30
36	BB	95	C	C4-C5-C6	-5.85	114.47	117.40
1	AA	260	G	C4-C5-N7	-5.85	108.46	110.80
1	AA	474	G	N3-C4-N9	-5.85	122.49	126.00
1	AA	721	G	C2-N3-C4	-5.85	108.98	111.90
35	BA	28	A	C4-C5-C6	-5.85	114.08	117.00
35	BA	340	A	N7-C8-N9	-5.85	110.88	113.80
35	BA	379	G	C4-C5-N7	5.85	113.14	110.80
35	BA	662	G	N3-C4-N9	5.85	129.51	126.00
35	BA	888	C	C6-N1-C2	-5.85	117.96	120.30
35	BA	1221	C	O4'-C1'-N1	-5.85	103.52	108.20
35	BA	2002	G	C3'-C2'-C1'	5.85	106.18	101.50
35	BA	2038	G	N7-C8-N9	-5.85	110.18	113.10
35	BA	2531	A	C2-N3-C4	5.85	113.52	110.60
35	BA	2822	G	C8-N9-C4	-5.85	104.06	106.40
1	AA	1236	A	O4'-C1'-C2'	5.85	112.86	107.60
23	AX	11	U	C4-C5-C6	5.85	123.21	119.70
35	BA	2434	A	N1-C6-N6	5.85	122.11	118.60
35	BA	2567	G	N7-C8-N9	5.85	116.02	113.10
1	AA	964	A	O4'-C1'-N9	-5.84	103.53	108.20
35	BA	1056	G	C5-C6-O6	-5.84	125.09	128.60
35	BA	2570	G	C8-N9-C4	-5.84	104.06	106.40
35	BA	2686	G	N1-C2-N3	5.84	127.41	123.90
35	BA	2864	G	N1-C6-O6	-5.84	116.39	119.90
36	BB	66	A	N1-C6-N6	5.84	122.11	118.60
36	BB	79	C	C4-C5-C6	5.84	120.32	117.40
1	AA	929	G	C2-N3-C4	5.84	114.82	111.90
1	AA	1009	G	C4-C5-N7	-5.84	108.46	110.80
35	BA	2107	C	N1-C2-O2	-5.84	115.39	118.90
1	AA	177	C	C5-C6-N1	-5.84	118.08	121.00
1	AA	362	G	C8-N9-C4	5.84	108.74	106.40
1	AA	1368	G	N9-C4-C5	5.84	107.74	105.40
10	AJ	58	ASP	CB-CG-OD1	-5.84	113.04	118.30
35	BA	513	A	C1'-O4'-C4'	-5.84	105.23	109.90
35	BA	1141	U	N1-C1'-C2'	5.84	121.59	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2453	A	C6-N1-C2	-5.84	115.09	118.60
35	BA	2764	A	C1'-O4'-C4'	-5.84	105.23	109.90
1	AA	93	G	N1-C2-N2	-5.84	110.94	116.20
1	AA	189(H)	G	N3-C4-N9	-5.84	122.50	126.00
1	AA	1386	G	N9-C4-C5	-5.84	103.06	105.40
35	BA	272	G	C2-N3-C4	-5.84	108.98	111.90
35	BA	510	C	N3-C4-C5	-5.84	119.56	121.90
35	BA	1351	C	OP2-P-O3'	5.84	118.05	105.20
35	BA	1422	G	N1-C6-O6	5.84	123.40	119.90
36	BB	23	G	N7-C8-N9	-5.84	110.18	113.10
1	AA	574	A	C8-N9-C4	5.84	108.14	105.80
1	AA	1442(A)	G	N1-C2-N2	5.84	121.45	116.20
35	BA	1757	U	N1-C2-N3	-5.84	111.40	114.90
1	AA	189(B)	C	C4-C5-C6	-5.84	114.48	117.40
1	AA	1180	A	C6-N1-C2	5.84	122.10	118.60
35	BA	49	A	N9-C4-C5	-5.84	103.47	105.80
35	BA	946	G	C5-C6-N1	-5.84	108.58	111.50
35	BA	1786	A	O4'-C1'-C2'	-5.84	99.96	105.80
35	BA	1799	G	N9-C4-C5	-5.84	103.06	105.40
35	BA	2311	A	C5-C6-N1	5.84	120.62	117.70
1	AA	35	G	C5-N7-C8	5.83	107.22	104.30
35	BA	653	A	O4'-C1'-N9	5.83	112.87	108.20
35	BA	1932	A	C4-C5-N7	-5.83	107.78	110.70
36	BB	21	G	C4-C5-N7	-5.83	108.47	110.80
1	AA	731	G	N1-C6-O6	-5.83	116.40	119.90
1	AA	1089	G	N3-C4-N9	5.83	129.50	126.00
1	AA	1318	A	N9-C4-C5	-5.83	103.47	105.80
35	BA	54	G	N9-C4-C5	5.83	107.73	105.40
35	BA	279	C	N1-C2-O2	-5.83	115.40	118.90
35	BA	538	G	C4-C5-N7	-5.83	108.47	110.80
35	BA	957	A	C2-N3-C4	5.83	113.52	110.60
35	BA	1012	U	N1-C2-O2	-5.83	118.72	122.80
35	BA	1528	A	N9-C4-C5	5.83	108.13	105.80
1	AA	816	A	C4-C5-N7	5.83	113.62	110.70
4	AD	106	TYR	CG-CD2-CE2	5.83	125.97	121.30
35	BA	30	G	C4-C5-C6	-5.83	115.30	118.80
35	BA	190	A	N1-C2-N3	-5.83	126.39	129.30
35	BA	316	C	N3-C4-N4	5.83	122.08	118.00
35	BA	816	C	O4'-C1'-N1	-5.83	103.53	108.20
35	BA	1309	G	N9-C4-C5	-5.83	103.07	105.40
35	BA	1311	G	O4'-C4'-C3'	5.83	110.77	106.10
35	BA	1983	C	N3-C4-N4	-5.83	113.92	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2080	G	N9-C4-C5	5.83	107.73	105.40
35	BA	2266	A	C8-N9-C4	5.83	108.13	105.80
35	BA	2515	C	C5-C6-N1	5.83	123.92	121.00
1	AA	77	G	O4'-C1'-N9	-5.83	103.54	108.20
1	AA	1072	G	C6-N1-C2	5.83	128.60	125.10
1	AA	1080	A	N7-C8-N9	5.83	116.72	113.80
35	BA	693	C	N1-C2-O2	5.83	122.40	118.90
35	BA	1400	G	C5-C6-N1	5.83	114.42	111.50
35	BA	1762	A	C5-C6-N1	5.83	120.61	117.70
35	BA	2018	G	N9-C4-C5	-5.83	103.07	105.40
1	AA	631	G	C5-C6-N1	5.83	114.42	111.50
1	AA	1392	G	N1-C6-O6	5.83	123.40	119.90
1	AA	1433	A	N1-C2-N3	-5.83	126.39	129.30
21	AU	7	ARG	NE-CZ-NH2	-5.83	117.39	120.30
35	BA	1056	G	N9-C4-C5	5.83	107.73	105.40
35	BA	1071	G	N3-C4-N9	-5.83	122.50	126.00
35	BA	1394	U	O4'-C1'-N1	-5.83	103.54	108.20
35	BA	1469	A	C5-C6-N1	-5.83	114.79	117.70
35	BA	480	A	C1'-O4'-C4'	5.83	114.56	109.90
35	BA	1605	C	C1'-O4'-C4'	-5.83	105.24	109.90
22	AV	66	C	N1-C2-N3	-5.83	115.12	119.20
35	BA	1074	G	C5-C6-N1	-5.83	108.59	111.50
35	BA	2092	U	C2-N3-C4	-5.83	123.50	127.00
35	BA	2118	U	C4-C5-C6	-5.83	116.20	119.70
35	BA	2401	U	C3'-C2'-C1'	5.83	106.16	101.50
35	BA	2824	C	C4-C5-C6	5.83	120.31	117.40
41	BG	89	GLY	N-CA-C	-5.83	98.53	113.10
1	AA	1156	G	C5-C6-O6	5.82	132.09	128.60
6	AF	59	TYR	CB-CG-CD2	-5.82	117.51	121.00
35	BA	2181	G	C4-C5-N7	-5.82	108.47	110.80
38	BD	91	ARG	NH1-CZ-NH2	5.82	125.81	119.40
51	BT	101	PHE	CB-CG-CD1	-5.82	116.72	120.80
1	AA	547	A	N1-C2-N3	-5.82	126.39	129.30
1	AA	898	G	N3-C4-C5	5.82	131.51	128.60
1	AA	1153	C	C2-N3-C4	5.82	122.81	119.90
35	BA	1921	G	C5-C6-O6	-5.82	125.11	128.60
1	AA	366	C	C4'-C3'-C2'	5.82	108.42	102.60
1	AA	367	U	N3-C2-O2	5.82	126.27	122.20
1	AA	515	G	C6-C5-N7	-5.82	126.91	130.40
1	AA	913	A	C4'-C3'-C2'	5.82	108.42	102.60
1	AA	1248	A	P-O5'-C5'	5.82	130.21	120.90
35	BA	468	G	C8-N9-C4	-5.82	104.07	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	632	A	C5-N7-C8	5.82	106.81	103.90
35	BA	1349	A	C5-C6-N1	5.82	120.61	117.70
35	BA	2176	A	N1-C2-N3	5.82	132.21	129.30
35	BA	2200	C	O4'-C1'-N1	-5.82	103.54	108.20
36	BB	85	G	O4'-C1'-N9	5.82	112.86	108.20
35	BA	2401	U	O4'-C4'-C3'	5.82	110.75	106.10
39	BE	199	ARG	NE-CZ-NH1	-5.82	117.39	120.30
1	AA	614	A	N1-C2-N3	5.82	132.21	129.30
35	BA	642	G	C5-C6-O6	5.82	132.09	128.60
35	BA	808	G	C8-N9-C4	-5.82	104.07	106.40
35	BA	1190	G	C5-C6-N1	5.82	114.41	111.50
35	BA	1459	G	C5-N7-C8	5.82	107.21	104.30
35	BA	2000	G	O4'-C1'-N9	5.82	112.85	108.20
35	BA	2730	C	N3-C2-O2	-5.82	117.83	121.90
40	BF	44	ARG	NE-CZ-NH1	-5.82	117.39	120.30
1	AA	262	A	C4-C5-C6	5.82	119.91	117.00
1	AA	639	G	C4-C5-N7	5.82	113.13	110.80
1	AA	749	C	N3-C4-C5	5.82	124.23	121.90
1	AA	824	C	C6-N1-C2	5.82	122.63	120.30
1	AA	1376	U	O4'-C1'-N1	5.82	112.85	108.20
7	AG	149	ARG	NE-CZ-NH1	5.82	123.21	120.30
35	BA	567	A	C4-C5-C6	5.82	119.91	117.00
35	BA	664	C	C5-C6-N1	5.82	123.91	121.00
35	BA	2121	G	N3-C2-N2	-5.82	115.83	119.90
1	AA	283	C	C2-N3-C4	5.81	122.81	119.90
1	AA	861	G	N3-C2-N2	5.81	123.97	119.90
1	AA	1068	G	C5'-C4'-C3'	5.81	125.30	116.00
1	AA	1423	G	N3-C4-N9	-5.81	122.51	126.00
1	AA	1527	C	C6-N1-C2	5.81	122.63	120.30
35	BA	460	A	N7-C8-N9	5.81	116.71	113.80
35	BA	1005	C	C6-N1-C2	5.81	122.62	120.30
35	BA	271(Z)	C	C2-N3-C4	-5.81	116.99	119.90
35	BA	1108	U	C2-N3-C4	5.81	130.49	127.00
35	BA	2050	C	N1-C2-O2	5.81	122.39	118.90
35	BA	2304	G	C4-C5-N7	5.81	113.12	110.80
35	BA	2568	C	C4-C5-C6	5.81	120.31	117.40
1	AA	869	G	C6-C5-N7	5.81	133.89	130.40
1	AA	1500	A	C4-C5-N7	-5.81	107.79	110.70
35	BA	376	C	C5-C6-N1	5.81	123.91	121.00
35	BA	1303	G	C6-N1-C2	5.81	128.59	125.10
35	BA	1688	U	C5-C4-O4	5.81	129.39	125.90
46	BO	71	ARG	CD-NE-CZ	5.81	131.74	123.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	327	A	N9-C4-C5	5.81	108.12	105.80
17	AQ	72	ARG	NE-CZ-NH1	-5.81	117.40	120.30
35	BA	271(C)	C	C5-C4-N4	-5.81	116.13	120.20
35	BA	981	A	O4'-C1'-N9	-5.81	103.55	108.20
35	BA	1436	G	N3-C2-N2	-5.81	115.83	119.90
35	BA	2802	G	N9-C1'-C2'	5.81	121.55	114.00
1	AA	17	U	C2-N3-C4	-5.81	123.52	127.00
1	AA	42	G	N3-C4-C5	-5.81	125.70	128.60
7	AG	41	ARG	NE-CZ-NH1	-5.81	117.40	120.30
22	AV	59	A	N1-C2-N3	-5.81	126.40	129.30
35	BA	82	G	C6-C5-N7	5.81	133.88	130.40
35	BA	328	U	C5-C4-O4	-5.81	122.42	125.90
35	BA	401	A	C4-C5-C6	5.81	119.90	117.00
35	BA	1918	A	C8-N9-C4	5.81	108.12	105.80
35	BA	2171	A	C8-N9-C4	5.81	108.12	105.80
35	BA	2269	A	N3-C4-C5	5.81	130.87	126.80
35	BA	2682	U	C2-N3-C4	5.81	130.48	127.00
38	BD	222	ARG	NE-CZ-NH1	-5.81	117.40	120.30
35	BA	1176	G	N3-C4-C5	5.81	131.50	128.60
1	AA	64	G	C8-N9-C4	5.80	108.72	106.40
1	AA	101	A	N1-C6-N6	-5.80	115.12	118.60
1	AA	189(B)	C	N3-C2-O2	5.80	125.96	121.90
1	AA	274	A	N7-C8-N9	5.80	116.70	113.80
35	BA	845	G	N1-C6-O6	-5.80	116.42	119.90
35	BA	1446	C	N1-C2-O2	5.80	122.38	118.90
35	BA	1952	A	C2-N3-C4	5.80	113.50	110.60
35	BA	2852	G	C5-N7-C8	5.80	107.20	104.30
48	BQ	25	ASP	CB-CG-OD2	-5.80	113.08	118.30
1	AA	77	G	N7-C8-N9	5.80	116.00	113.10
1	AA	500	G	C5-C6-N1	-5.80	108.60	111.50
1	AA	1265	G	C4-C5-N7	-5.80	108.48	110.80
24	AY	259	PHE	CB-CG-CD2	5.80	124.86	120.80
35	BA	55	G	C2-N3-C4	5.80	114.80	111.90
35	BA	687	C	O4'-C1'-N1	5.80	112.84	108.20
35	BA	1806	C	C5-C6-N1	5.80	123.90	121.00
35	BA	2028	U	N3-C4-C5	-5.80	111.12	114.60
1	AA	1232	U	C5-C4-O4	5.80	129.38	125.90
16	AP	26	ARG	NE-CZ-NH1	-5.80	117.40	120.30
35	BA	538	G	N1-C6-O6	5.80	123.38	119.90
35	BA	551	G	N1-C2-N3	5.80	127.38	123.90
35	BA	1593	G	C8-N9-C4	-5.80	104.08	106.40
35	BA	1828	G	C5-C6-O6	5.80	132.08	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2465	C	N3-C4-C5	5.80	124.22	121.90
1	AA	295	C	N3-C4-N4	-5.80	113.94	118.00
1	AA	758	G	C5-C6-O6	-5.80	125.12	128.60
1	AA	1040	U	C5-C4-O4	5.80	129.38	125.90
9	AI	20	ARG	NE-CZ-NH1	5.80	123.20	120.30
35	BA	2063	C	C4-C5-C6	5.80	120.30	117.40
51	BT	30	VAL	N-CA-C	5.80	126.66	111.00
41	BG	51	ARG	NE-CZ-NH2	5.80	123.20	120.30
4	AD	20	TYR	CB-CG-CD2	-5.80	117.52	121.00
22	AV	71	C	C6-N1-C2	5.80	122.62	120.30
35	BA	436	C	C5-C6-N1	5.80	123.90	121.00
35	BA	1148	A	C5-C6-N6	-5.80	119.06	123.70
35	BA	1435	G	C6-C5-N7	5.80	133.88	130.40
35	BA	2604	U	C6-N1-C2	5.80	124.48	121.00
36	BB	91	C	C5-C4-N4	5.80	124.26	120.20
1	AA	1218	C	N3-C2-O2	5.79	125.96	121.90
1	AA	926	G	C5-C6-N1	-5.79	108.60	111.50
35	BA	1391	U	C5-C4-O4	-5.79	122.42	125.90
35	BA	1773	A	C8-N9-C4	-5.79	103.48	105.80
35	BA	2744	G	C6-N1-C2	-5.79	121.62	125.10
1	AA	55	A	N1-C2-N3	-5.79	126.41	129.30
1	AA	377	G	N1-C2-N3	5.79	127.38	123.90
1	AA	727	G	N9-C4-C5	-5.79	103.08	105.40
1	AA	833	U	O4'-C1'-N1	5.79	112.83	108.20
24	AY	123	ARG	NE-CZ-NH1	-5.79	117.40	120.30
35	BA	1236	G	N9-C4-C5	5.79	107.72	105.40
35	BA	1306	C	C6-N1-C2	5.79	122.62	120.30
35	BA	2609	U	C5-C6-N1	-5.79	119.80	122.70
57	BZ	80	ARG	NE-CZ-NH1	-5.79	117.40	120.30
1	AA	186	C	C4-C5-C6	-5.79	114.50	117.40
1	AA	129(A)	G	C1'-O4'-C4'	5.79	114.53	109.90
1	AA	744	C	C1'-O4'-C4'	-5.79	105.27	109.90
1	AA	946	A	N3-C4-C5	5.79	130.85	126.80
1	AA	1147	C	N3-C4-C5	-5.79	119.58	121.90
20	AT	25	ARG	NE-CZ-NH1	-5.79	117.41	120.30
35	BA	25	U	N3-C2-O2	-5.79	118.15	122.20
35	BA	121	G	C5-N7-C8	5.79	107.19	104.30
35	BA	1546	C	C4-C5-C6	5.79	120.29	117.40
35	BA	2073	C	C5-C6-N1	5.79	123.89	121.00
35	BA	2378	A	C4-C5-C6	5.79	119.89	117.00
35	BA	2428	G	C8-N9-C4	5.79	108.72	106.40
1	AA	411	A	C5-N7-C8	5.79	106.79	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1884	A	O4'-C1'-N9	-5.79	103.57	108.20
35	BA	2274	A	C2-N3-C4	5.79	113.49	110.60
35	BA	2700	C	N1-C2-N3	-5.79	115.15	119.20
1	AA	640	A	N9-C4-C5	-5.79	103.49	105.80
1	AA	1144	G	C6-C5-N7	5.79	133.87	130.40
35	BA	131	G	N1-C6-O6	5.79	123.37	119.90
35	BA	1030	G	C2-N3-C4	-5.79	109.01	111.90
35	BA	1109	C	N1-C2-O2	5.79	122.37	118.90
35	BA	1533	G	C8-N9-C4	5.79	108.71	106.40
35	BA	1866	C	N3-C2-O2	-5.79	117.85	121.90
35	BA	2590	A	N1-C6-N6	-5.79	115.13	118.60
39	BE	44	TYR	N-CA-C	5.79	126.62	111.00
22	AV	44	A	O4'-C1'-N9	-5.78	103.57	108.20
35	BA	561	G	C1'-O4'-C4'	-5.78	105.27	109.90
35	BA	2792	G	C8-N9-C4	-5.78	104.09	106.40
1	AA	983	A	N1-C2-N3	-5.78	126.41	129.30
1	AA	1323	G	N3-C4-C5	5.78	131.49	128.60
35	BA	2417	C	N3-C4-C5	-5.78	119.59	121.90
1	AA	781	A	N7-C8-N9	5.78	116.69	113.80
35	BA	271	A	C1'-O4'-C4'	-5.78	105.28	109.90
35	BA	815	C	N3-C2-O2	-5.78	117.85	121.90
35	BA	980	A	C5-C6-N1	-5.78	114.81	117.70
35	BA	1904	G	C5'-C4'-C3'	-5.78	106.75	116.00
35	BA	2845	G	N1-C6-O6	-5.78	116.43	119.90
36	BB	48	A	C5-C6-N6	-5.78	119.08	123.70
1	AA	139	G	N7-C8-N9	5.78	115.99	113.10
35	BA	47	C	N3-C4-N4	5.78	122.05	118.00
35	BA	272(H)	C	N3-C2-O2	-5.78	117.86	121.90
35	BA	680	G	O5'-P-OP2	-5.78	100.50	105.70
35	BA	911	A	C6-N1-C2	5.78	122.07	118.60
35	BA	1519	G	N1-C2-N3	-5.78	120.43	123.90
35	BA	2299	G	C5-C6-O6	5.78	132.07	128.60
1	AA	551	U	C5-C4-O4	5.78	129.37	125.90
1	AA	815	A	C5-C6-N6	-5.78	119.08	123.70
1	AA	1258	G	O4'-C1'-N9	5.78	112.82	108.20
11	AK	75	TYR	CG-CD2-CE2	-5.78	116.68	121.30
22	AV	51	C	C4'-C3'-C2'	5.78	108.38	102.60
35	BA	1597	A	C3'-C2'-C1'	5.78	106.12	101.50
35	BA	2259	G	N9-C4-C5	5.78	107.71	105.40
35	BA	2373	G	N1-C2-N3	-5.78	120.43	123.90
36	BB	6	C	C6-N1-C2	-5.78	117.99	120.30
1	AA	129	U	C4-C5-C6	5.78	123.17	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	930	C	N1-C1'-C2'	-5.78	105.65	112.00
1	AA	1101	A	C5'-C4'-O4'	5.78	116.03	109.10
1	AA	1127	G	N1-C2-N2	5.78	121.40	116.20
1	AA	1473	A	C8-N9-C4	-5.78	103.49	105.80
35	BA	121	G	C4-C5-N7	-5.78	108.49	110.80
35	BA	2000	G	N9-C4-C5	-5.78	103.09	105.40
35	BA	2277	G	C6-C5-N7	-5.78	126.93	130.40
1	AA	1304	G	C5'-C4'-C3'	-5.77	106.76	116.00
1	AA	1447	A	N7-C8-N9	5.77	116.69	113.80
35	BA	1464	C	C5-C6-N1	5.77	123.89	121.00
35	BA	1973	G	C2-N3-C4	-5.77	109.01	111.90
35	BA	2814	C	C5-C6-N1	-5.77	118.11	121.00
1	AA	1471	G	C2-N3-C4	5.77	114.79	111.90
35	BA	325	G	C8-N9-C4	-5.77	104.09	106.40
35	BA	352	G	N3-C2-N2	5.77	123.94	119.90
35	BA	976	C	C5-C4-N4	-5.77	116.16	120.20
35	BA	1024	G	N3-C4-N9	-5.77	122.54	126.00
35	BA	1668	A	C4-C5-N7	5.77	113.59	110.70
1	AA	12	U	C4-C5-C6	-5.77	116.24	119.70
1	AA	415	A	N9-C4-C5	5.77	108.11	105.80
35	BA	481	G	C3'-C2'-C1'	5.77	106.12	101.50
35	BA	540	C	C1'-O4'-C4'	-5.77	105.28	109.90
35	BA	1119	C	N3-C2-O2	-5.77	117.86	121.90
35	BA	1846	G	N3-C2-N2	-5.77	115.86	119.90
1	AA	618	C	C2-N3-C4	5.77	122.78	119.90
1	AA	669	U	C2-N3-C4	-5.77	123.54	127.00
1	AA	1347	G	OP2-P-O3'	5.77	117.89	105.20
4	AD	10	ARG	NE-CZ-NH1	5.77	123.19	120.30
35	BA	1384	A	N9-C4-C5	-5.77	103.49	105.80
35	BA	2171	A	C4-C5-N7	5.77	113.58	110.70
35	BA	2262	U	C5-C6-N1	-5.77	119.81	122.70
35	BA	2838	G	N7-C8-N9	5.77	115.98	113.10
1	AA	508	C	N3-C2-O2	-5.77	117.86	121.90
1	AA	735	C	N1-C2-N3	5.77	123.24	119.20
1	AA	1255	G	N9-C4-C5	5.77	107.71	105.40
35	BA	754	C	N3-C2-O2	-5.77	117.86	121.90
35	BA	862	G	N3-C4-N9	5.77	129.46	126.00
35	BA	1157	G	C5-N7-C8	5.77	107.18	104.30
35	BA	1180	C	C2-N3-C4	5.77	122.78	119.90
35	BA	1330	C	C4-C5-C6	5.77	120.28	117.40
35	BA	1506	C	N3-C4-C5	5.77	124.21	121.90
35	BA	1906	G	N3-C2-N2	5.77	123.94	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1070	U	N1-C2-N3	5.77	118.36	114.90
1	AA	1456	G	C5-C6-O6	5.77	132.06	128.60
28	B3	35	ARG	NE-CZ-NH2	5.77	123.18	120.30
35	BA	321	G	C2-N3-C4	-5.77	109.02	111.90
35	BA	1264	G	N9-C4-C5	5.77	107.71	105.40
35	BA	2793	G	N7-C8-N9	-5.77	110.22	113.10
1	AA	29	G	C5-C6-N1	5.76	114.38	111.50
1	AA	319	G	N3-C2-N2	-5.76	115.86	119.90
1	AA	1223	C	N1-C2-O2	5.76	122.36	118.90
35	BA	173	G	C5-C6-N1	5.76	114.38	111.50
35	BA	363(E)	U	C5-C4-O4	-5.76	122.44	125.90
35	BA	1381	G	C6-C5-N7	5.76	133.86	130.40
35	BA	2237	G	C4-C5-C6	5.76	122.26	118.80
35	BA	2592	G	C8-N9-C4	-5.76	104.09	106.40
36	BB	24	G	C8-N9-C4	5.76	108.71	106.40
36	BB	97	G	N9-C4-C5	5.76	107.71	105.40
1	AA	517	G	O4'-C1'-N9	-5.76	103.59	108.20
1	AA	1440	C	N3-C4-C5	5.76	124.20	121.90
1	AA	78	G	C6-N1-C2	5.76	128.56	125.10
1	AA	938	A	C4-C5-N7	5.76	113.58	110.70
1	AA	1338	G	C5-C6-O6	-5.76	125.14	128.60
1	AA	1349	A	N9-C4-C5	5.76	108.11	105.80
35	BA	74	A	C4-C5-C6	5.76	119.88	117.00
35	BA	205	G	N3-C4-N9	5.76	129.46	126.00
41	BG	72	ARG	NE-CZ-NH2	-5.76	117.42	120.30
1	AA	66	G	C5-C6-O6	-5.76	125.14	128.60
1	AA	116	A	N1-C6-N6	5.76	122.06	118.60
1	AA	1084	G	C2-N3-C4	5.76	114.78	111.90
1	AA	1300	G	N3-C2-N2	-5.76	115.87	119.90
22	AV	55	U	O4'-C1'-N1	5.76	112.81	108.20
22	AV	70	G	C5-N7-C8	5.76	107.18	104.30
35	BA	331	A	C4-C5-C6	-5.76	114.12	117.00
35	BA	702	G	C6-N1-C2	-5.76	121.64	125.10
35	BA	1236	G	N3-C4-C5	-5.76	125.72	128.60
35	BA	1295	C	N3-C4-C5	5.76	124.20	121.90
35	BA	2157	G	C6-C5-N7	-5.76	126.94	130.40
1	AA	590	C	C1'-O4'-C4'	5.76	114.51	109.90
41	BG	21	ARG	NE-CZ-NH1	-5.76	117.42	120.30
1	AA	306	G	C4-C5-C6	-5.76	115.35	118.80
1	AA	724	G	C6-C5-N7	-5.76	126.95	130.40
1	AA	884	U	C6-N1-C2	-5.76	117.55	121.00
1	AA	920	U	C5-C4-O4	5.76	129.35	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1234	C	N1-C2-O2	5.76	122.35	118.90
4	AD	25	ARG	NE-CZ-NH2	-5.76	117.42	120.30
22	AV	12	G	N9-C4-C5	-5.76	103.10	105.40
35	BA	1071	G	C5'-C4'-C3'	-5.76	106.79	116.00
35	BA	1334	G	C5-C6-O6	-5.76	125.15	128.60
35	BA	1992	G	N9-C1'-C2'	5.76	121.48	114.00
35	BA	2765	A	C5-N7-C8	-5.76	101.02	103.90
35	BA	2780	G	N7-C8-N9	5.76	115.98	113.10
35	BA	2830	G	C5-C6-O6	-5.76	125.15	128.60
1	AA	945	G	N3-C4-C5	5.75	131.48	128.60
35	BA	662	G	O4'-C1'-N9	-5.75	103.60	108.20
35	BA	1000	A	C5-C6-N1	-5.75	114.82	117.70
35	BA	1285	G	N3-C2-N2	-5.75	115.87	119.90
35	BA	2510	C	N3-C4-N4	5.75	122.03	118.00
1	AA	479	C	C5-C4-N4	-5.75	116.17	120.20
1	AA	1523	G	C5-N7-C8	-5.75	101.42	104.30
35	BA	274	G	C4-C5-C6	-5.75	115.35	118.80
35	BA	1105	U	N1-C2-O2	-5.75	118.77	122.80
35	BA	1293	C	C6-N1-C2	-5.75	118.00	120.30
35	BA	2194	G	OP1-P-OP2	-5.75	110.97	119.60
35	BA	2269	A	N1-C2-N3	5.75	132.18	129.30
35	BA	2314	C	C2-N3-C4	-5.75	117.02	119.90
1	AA	92	C	C2-N3-C4	5.75	122.78	119.90
1	AA	194	C	C5-C4-N4	-5.75	116.17	120.20
1	AA	673	G	C1'-O4'-C4'	-5.75	105.30	109.90
1	AA	1405	G	C2-N3-C4	-5.75	109.02	111.90
1	AA	1516	G	N9-C4-C5	5.75	107.70	105.40
22	AV	22	G	N3-C4-C5	5.75	131.48	128.60
22	AV	48	C	N1-C2-O2	-5.75	115.45	118.90
35	BA	130	C	N3-C4-C5	-5.75	119.60	121.90
35	BA	391	G	C6-N1-C2	-5.75	121.65	125.10
35	BA	974	G	N9-C4-C5	5.75	107.70	105.40
35	BA	1678	G	C5-N7-C8	5.75	107.18	104.30
35	BA	2244	U	C5-C6-N1	-5.75	119.82	122.70
35	BA	2782	G	N7-C8-N9	-5.75	110.22	113.10
35	BA	2152	G	C5-C6-O6	5.75	132.05	128.60
35	BA	2417	C	N3-C4-N4	5.75	122.03	118.00
35	BA	2843	G	C5-C6-N1	5.75	114.38	111.50
38	BD	52	ARG	NE-CZ-NH1	-5.75	117.42	120.30
1	AA	84	U	C5-C6-N1	-5.75	119.83	122.70
1	AA	189(K)	U	C2-N3-C4	5.75	130.45	127.00
1	AA	654	G	C5-C6-N1	-5.75	108.63	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AL	120	TYR	CB-CG-CD2	5.75	124.45	121.00
35	BA	355	G	N3-C4-N9	-5.75	122.55	126.00
35	BA	359	A	N1-C6-N6	5.75	122.05	118.60
35	BA	920	G	C5-N7-C8	5.75	107.17	104.30
35	BA	1059	G	C8-N9-C4	-5.75	104.10	106.40
35	BA	2071	A	C2-N3-C4	-5.75	107.73	110.60
35	BA	2282	G	N3-C4-C5	5.75	131.47	128.60
35	BA	2515	C	C6-N1-C2	-5.75	118.00	120.30
35	BA	2836	U	O4'-C1'-N1	5.75	112.80	108.20
1	AA	369	C	C3'-C2'-C1'	-5.75	96.90	101.50
35	BA	604	G	C4-C5-N7	5.75	113.10	110.80
35	BA	696	G	N1-C2-N2	5.75	121.37	116.20
35	BA	1115	G	N1-C2-N3	-5.75	120.45	123.90
35	BA	1243	G	C4-C5-C6	-5.75	115.35	118.80
51	BT	93	ARG	CD-NE-CZ	5.75	131.64	123.60
1	AA	968	A	C6-C5-N7	-5.75	128.28	132.30
1	AA	678	U	O4'-C1'-N1	5.74	112.80	108.20
22	AV	18	G	C2-N3-C4	5.74	114.77	111.90
35	BA	77	C	C2-N3-C4	-5.74	117.03	119.90
35	BA	83	G	N3-C4-C5	-5.74	125.73	128.60
35	BA	270	A	N9-C4-C5	5.74	108.10	105.80
35	BA	669	G	N1-C2-N3	-5.74	120.45	123.90
35	BA	1024	G	C5-N7-C8	5.74	107.17	104.30
35	BA	1212	G	P-O3'-C3'	5.74	126.59	119.70
35	BA	1654	A	C5'-C4'-C3'	5.74	125.19	116.00
35	BA	1742	G	C4-C5-C6	-5.74	115.35	118.80
35	BA	2872	G	C6-N1-C2	5.74	128.55	125.10
39	BE	16	ARG	NE-CZ-NH2	5.74	123.17	120.30
1	AA	827	U	C5-C4-O4	-5.74	122.45	125.90
35	BA	2597	G	C6-N1-C2	5.74	128.54	125.10
36	BB	65	C	N1-C2-O2	5.74	122.34	118.90
1	AA	706	A	N7-C8-N9	-5.74	110.93	113.80
35	BA	1023	U	N3-C2-O2	5.74	126.22	122.20
35	BA	2490	G	C4-C5-N7	-5.74	108.50	110.80
35	BA	2737	G	C4-C5-N7	-5.74	108.50	110.80
1	AA	189(K)	U	N3-C2-O2	5.74	126.22	122.20
1	AA	226	G	C5-C6-O6	5.74	132.04	128.60
22	AV	18	G	C4-C5-C6	-5.74	115.36	118.80
35	BA	271(R)	G	C8-N9-C4	-5.74	104.10	106.40
35	BA	375	C	N3-C2-O2	-5.74	117.88	121.90
35	BA	1225	G	C3'-C2'-C1'	5.74	106.09	101.50
35	BA	1962	C	C4-C5-C6	5.74	120.27	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2077	A	C5-C6-N1	-5.74	114.83	117.70
35	BA	2162	G	N1-C6-O6	5.74	123.34	119.90
35	BA	2653	U	N3-C4-C5	5.74	118.04	114.60
36	BB	105	A	C6-N1-C2	-5.74	115.16	118.60
1	AA	741	G	N9-C4-C5	-5.74	103.11	105.40
1	AA	755	G	C4-C5-N7	-5.74	108.50	110.80
35	BA	115	C	C2-N3-C4	5.74	122.77	119.90
35	BA	455	C	C6-N1-C2	-5.74	118.00	120.30
35	BA	833	U	C4-C5-C6	-5.74	116.26	119.70
35	BA	963	U	C5-C4-O4	5.74	129.34	125.90
35	BA	1065	U	C2-N3-C4	5.74	130.44	127.00
57	BZ	122	ARG	NE-CZ-NH1	-5.74	117.43	120.30
1	AA	76	C	N1-C2-O2	5.74	122.34	118.90
1	AA	752	G	C4-C5-C6	5.74	122.24	118.80
35	BA	497	A	O4'-C1'-N9	-5.74	103.61	108.20
35	BA	1224	C	N3-C2-O2	-5.74	117.89	121.90
35	BA	1298	C	N1-C2-O2	5.74	122.34	118.90
35	BA	1401	G	C4-C5-C6	5.74	122.24	118.80
35	BA	1899	G	N9-C4-C5	-5.74	103.11	105.40
35	BA	2634	G	C4-C5-N7	-5.74	108.51	110.80
1	AA	775	G	C5'-C4'-C3'	-5.73	106.83	116.00
1	AA	790	A	N7-C8-N9	-5.73	110.93	113.80
1	AA	1390	U	C4-C5-C6	5.73	123.14	119.70
22	AV	10	G	N9-C4-C5	-5.73	103.11	105.40
35	BA	1263	U	C4-C5-C6	5.73	123.14	119.70
35	BA	1526	G	C5-N7-C8	-5.73	101.43	104.30
1	AA	624	C	C5'-C4'-O4'	-5.73	102.22	109.10
1	AA	730	G	C4-C5-N7	5.73	113.09	110.80
1	AA	1168	A	C4-C5-C6	-5.73	114.13	117.00
35	BA	10	G	C8-N9-C4	-5.73	104.11	106.40
35	BA	139(A)	G	C6-N1-C2	-5.73	121.66	125.10
35	BA	1561	G	O4'-C1'-N9	5.73	112.79	108.20
35	BA	2243	U	C5-C6-N1	-5.73	119.83	122.70
35	BA	2884	U	C5-C4-O4	5.73	129.34	125.90
1	AA	855	G	N9-C4-C5	5.73	107.69	105.40
1	AA	1187	G	C5-C6-N1	5.73	114.36	111.50
1	AA	1414	U	C5-C4-O4	-5.73	122.46	125.90
1	AA	1520	G	N3-C2-N2	-5.73	115.89	119.90
24	AY	99	ARG	NE-CZ-NH1	-5.73	117.44	120.30
35	BA	464	U	C4-C5-C6	-5.73	116.26	119.70
35	BA	853	G	N7-C8-N9	5.73	115.97	113.10
35	BA	1189	A	C4-C5-C6	-5.73	114.14	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1865	G	C6-C5-N7	-5.73	126.96	130.40
35	BA	1969	A	N9-C4-C5	5.73	108.09	105.80
35	BA	2267	A	C5-C6-N1	-5.73	114.83	117.70
35	BA	2741	A	O4'-C1'-N9	5.73	112.78	108.20
35	BA	2818	G	N7-C8-N9	5.73	115.97	113.10
46	BO	8	LEU	CA-CB-CG	5.73	128.48	115.30
1	AA	1499	A	C1'-O4'-C4'	5.73	114.48	109.90
35	BA	1959	G	C5'-C4'-C3'	-5.73	106.83	116.00
50	BS	92	TYR	CB-CG-CD1	5.73	124.44	121.00
1	AA	883	C	C4-C5-C6	5.73	120.26	117.40
1	AA	1140	C	N3-C4-C5	-5.73	119.61	121.90
35	BA	624	C	C5-C6-N1	5.73	123.86	121.00
35	BA	946	G	C6-N1-C2	5.73	128.54	125.10
35	BA	1916	A	C5'-C4'-C3'	-5.73	106.84	116.00
1	AA	324	G	C2-N3-C4	-5.73	109.04	111.90
1	AA	425	G	C1'-O4'-C4'	-5.73	105.32	109.90
35	BA	2176	A	C5'-C4'-C3'	-5.73	106.84	116.00
1	AA	627	G	C5-N7-C8	-5.72	101.44	104.30
1	AA	703	G	C8-N9-C4	5.72	108.69	106.40
1	AA	1094	G	C5'-C4'-O4'	-5.72	102.23	109.10
1	AA	1281	U	O5'-P-OP1	-5.72	100.55	105.70
35	BA	183	C	C6-N1-C2	5.72	122.59	120.30
35	BA	1253	A	C3'-C2'-C1'	5.72	106.08	101.50
35	BA	1494	A	O4'-C1'-N9	5.72	112.78	108.20
1	AA	228	A	N9-C4-C5	5.72	108.09	105.80
1	AA	491	G	C8-N9-C4	-5.72	104.11	106.40
1	AA	722	A	N3-C4-N9	-5.72	122.82	127.40
1	AA	834	C	O4'-C1'-N1	5.72	112.78	108.20
1	AA	924	C	C6-N1-C2	-5.72	118.01	120.30
35	BA	271(V)	G	N9-C4-C5	-5.72	103.11	105.40
35	BA	2788	C	O4'-C1'-N1	5.72	112.78	108.20
35	BA	2809	A	C3'-C2'-C1'	5.72	106.08	101.50
1	AA	445	G	C5-C6-O6	-5.72	125.17	128.60
1	AA	1050	G	C8-N9-C4	-5.72	104.11	106.40
1	AA	1339	A	N1-C2-N3	5.72	132.16	129.30
1	AA	1456	G	C4-C5-N7	-5.72	108.51	110.80
35	BA	480	A	C5-N7-C8	5.72	106.76	103.90
35	BA	975(A)	G	C6-N1-C2	5.72	128.53	125.10
35	BA	1367	A	N9-C4-C5	-5.72	103.51	105.80
1	AA	70	G	N3-C2-N2	-5.72	115.90	119.90
1	AA	653	A	C3'-C2'-C1'	-5.72	96.92	101.50
1	AA	1366	C	C5-C6-N1	5.72	123.86	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1489	G	C6-N1-C2	5.72	128.53	125.10
35	BA	1109	C	C2-N3-C4	5.72	122.76	119.90
35	BA	2850	A	N1-C2-N3	-5.72	126.44	129.30
35	BA	1891	G	C2-N3-C4	-5.72	109.04	111.90
1	AA	532	A	C5-N7-C8	-5.72	101.04	103.90
1	AA	1080	A	C8-N9-C4	-5.72	103.51	105.80
13	AM	94	ARG	NH1-CZ-NH2	5.72	125.69	119.40
35	BA	326	G	C5-N7-C8	-5.72	101.44	104.30
35	BA	1949	G	N1-C6-O6	5.72	123.33	119.90
35	BA	2034	U	N3-C4-C5	5.72	118.03	114.60
35	BA	2070	G	N7-C8-N9	-5.72	110.24	113.10
35	BA	2299	G	C4-C5-N7	-5.72	108.51	110.80
1	AA	35	G	C4-C5-N7	-5.71	108.52	110.80
1	AA	70	G	C8-N9-C4	5.71	108.69	106.40
1	AA	978	A	C5'-C4'-C3'	-5.71	106.86	116.00
35	BA	573	G	N9-C4-C5	-5.71	103.11	105.40
35	BA	1290	C	O4'-C1'-N1	-5.71	103.63	108.20
35	BA	1302	A	C8-N9-C4	-5.71	103.52	105.80
35	BA	1398	C	C6-N1-C2	5.71	122.59	120.30
35	BA	1789	A	N1-C6-N6	5.71	122.03	118.60
35	BA	2307	G	C5-N7-C8	-5.71	101.44	104.30
35	BA	2320	A	C3'-C2'-C1'	5.71	106.07	101.50
35	BA	2394	C	O4'-C1'-N1	-5.71	103.63	108.20
35	BA	2548	G	C5'-C4'-O4'	5.71	115.96	109.10
35	BA	2753	A	N1-C2-N3	-5.71	126.44	129.30
52	BU	55	ARG	NE-CZ-NH2	-5.71	117.44	120.30
57	BZ	86	VAL	CA-CB-CG1	-5.71	102.33	110.90
1	AA	84	U	C5-C4-O4	5.71	129.33	125.90
35	BA	156	U	C2-N1-C1'	5.71	124.56	117.70
35	BA	324	A	N1-C6-N6	-5.71	115.17	118.60
35	BA	717	G	N1-C2-N2	-5.71	111.06	116.20
35	BA	1099	G	C8-N9-C4	-5.71	104.11	106.40
35	BA	1412	A	C5-C6-N1	5.71	120.56	117.70
35	BA	1707	G	N7-C8-N9	5.71	115.96	113.10
35	BA	2459	A	C2-N3-C4	5.71	113.46	110.60
1	AA	1246	C	N3-C4-C5	5.71	124.19	121.90
25	B0	78	TYR	CB-CG-CD2	-5.71	117.57	121.00
35	BA	1443	G	N1-C6-O6	-5.71	116.47	119.90
35	BA	1509(A)	A	C8-N9-C4	5.71	108.08	105.80
35	BA	1676	A	C8-N9-C4	5.71	108.08	105.80
35	BA	2239	G	C1'-O4'-C4'	-5.71	105.33	109.90
35	BA	2338	G	N3-C2-N2	-5.71	115.90	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2500	U	N3-C4-C5	-5.71	111.17	114.60
35	BA	2692	C	O4'-C1'-N1	-5.71	103.63	108.20
15	AO	35	ARG	NE-CZ-NH1	5.71	123.16	120.30
35	BA	1155	A	C1'-O4'-C4'	5.71	114.47	109.90
35	BA	1693	U	N3-C4-O4	5.71	123.40	119.40
35	BA	2303	G	N3-C4-C5	-5.71	125.75	128.60
1	AA	790	A	O4'-C1'-N9	-5.71	103.63	108.20
1	AA	1082	G	N1-C6-O6	-5.71	116.47	119.90
1	AA	1460	A	C5-C6-N6	-5.71	119.13	123.70
1	AA	1475	G	C4-C5-C6	-5.71	115.37	118.80
35	BA	836	G	N3-C4-C5	-5.71	125.75	128.60
35	BA	926	A	N3-C4-C5	-5.71	122.80	126.80
35	BA	1188	U	N3-C2-O2	-5.71	118.20	122.20
35	BA	1618	A	O4'-C4'-C3'	5.71	110.67	106.10
35	BA	1843	C	N3-C2-O2	-5.71	117.90	121.90
35	BA	2228	G	N3-C2-N2	-5.71	115.91	119.90
35	BA	2422	A	C2'-C3'-O3'	5.71	122.83	113.70
35	BA	2782	G	C8-N9-C4	5.71	108.68	106.40
35	BA	2783	G	C3'-C2'-C1'	5.71	106.07	101.50
36	BB	106	G	C4-C5-C6	-5.71	115.38	118.80
1	AA	388	G	C3'-C2'-C1'	-5.71	96.94	101.50
1	AA	539	A	N7-C8-N9	5.71	116.65	113.80
1	AA	752	G	C6-C5-N7	-5.71	126.98	130.40
1	AA	1243	C	C5-C6-N1	-5.71	118.15	121.00
35	BA	387	U	C6-N1-C2	-5.71	117.58	121.00
35	BA	591	C	N1-C2-O2	5.71	122.32	118.90
35	BA	831	G	C5-N7-C8	5.71	107.15	104.30
35	BA	1039	G	C5-N7-C8	-5.71	101.45	104.30
35	BA	1641	A	C5-C6-N1	5.71	120.55	117.70
35	BA	2495	G	C8-N9-C4	5.71	108.68	106.40
35	BA	2690	C	N1-C2-N3	-5.71	115.21	119.20
35	BA	2838	G	C5-C6-O6	-5.71	125.18	128.60
36	BB	30	C	C6-N1-C2	-5.71	118.02	120.30
22	AV	50	U	C4-C5-C6	-5.71	116.28	119.70
35	BA	654(K)	C	N1-C2-O2	5.71	122.32	118.90
1	AA	195	A	C4-C5-N7	5.70	113.55	110.70
1	AA	326	G	N1-C6-O6	-5.70	116.48	119.90
1	AA	543	C	C5-C6-N1	-5.70	118.15	121.00
1	AA	1250	A	C4-C5-N7	-5.70	107.85	110.70
1	AA	1266	G	C6-C5-N7	-5.70	126.98	130.40
1	AA	1393	U	C4-C5-C6	5.70	123.12	119.70
35	BA	276	A	O4'-C1'-N9	-5.70	103.64	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	975(A)	G	C5-C6-O6	5.70	132.02	128.60
35	BA	1097	U	N1-C2-N3	-5.70	111.48	114.90
35	BA	1556	C	C4-C5-C6	5.70	120.25	117.40
35	BA	2139	C	C5'-C4'-C3'	-5.70	106.87	116.00
35	BA	2508	G	N9-C1'-C2'	-5.70	105.73	112.00
36	BB	51	G	C5-N7-C8	-5.70	101.45	104.30
1	AA	510	A	C5'-C4'-O4'	5.70	115.94	109.10
13	AM	14	ARG	NE-CZ-NH1	-5.70	117.45	120.30
35	BA	399	G	C6-C5-N7	5.70	133.82	130.40
35	BA	731	C	N3-C4-C5	5.70	124.18	121.90
1	AA	533	A	C3'-C2'-C1'	5.70	106.06	101.50
1	AA	1030(C)	G	C6-C5-N7	-5.70	126.98	130.40
35	BA	397	G	C4'-C3'-C2'	5.70	108.30	102.60
35	BA	2013	A	N9-C4-C5	-5.70	103.52	105.80
35	BA	2036	C	O5'-P-OP2	-5.70	100.57	105.70
1	AA	238	G	C6-N1-C2	-5.70	121.68	125.10
1	AA	554	C	C6-N1-C2	-5.70	118.02	120.30
1	AA	892	A	C2-N3-C4	-5.70	107.75	110.60
1	AA	1529	G	C2-N3-C4	-5.70	109.05	111.90
22	AV	50	U	N3-C4-O4	-5.70	115.41	119.40
35	BA	314	A	C8-N9-C4	-5.70	103.52	105.80
35	BA	721	C	N1-C2-O2	5.70	122.32	118.90
35	BA	1298	C	C2-N3-C4	5.70	122.75	119.90
35	BA	1374	G	C2-N3-C4	-5.70	109.05	111.90
35	BA	1425	G	C6-C5-N7	-5.70	126.98	130.40
35	BA	1450(A)	C	C1'-O4'-C4'	5.70	114.46	109.90
35	BA	2781	A	C2-N3-C4	-5.70	107.75	110.60
35	BA	2846	G	O4'-C1'-N9	5.70	112.76	108.20
35	BA	421	U	C4-C5-C6	-5.70	116.28	119.70
35	BA	1890	A	C5-C6-N6	-5.70	119.14	123.70
1	AA	1341	U	N3-C4-O4	5.70	123.39	119.40
22	AV	58	A	N9-C4-C5	-5.70	103.52	105.80
35	BA	1595	G	C2-N3-C4	-5.70	109.05	111.90
35	BA	217	G	N3-C4-N9	5.69	129.42	126.00
35	BA	742	G	C2-N3-C4	-5.69	109.05	111.90
35	BA	2829	C	C4-C5-C6	-5.69	114.55	117.40
1	AA	553	A	N7-C8-N9	5.69	116.65	113.80
1	AA	654	G	N1-C6-O6	5.69	123.31	119.90
1	AA	1030(A)	G	N7-C8-N9	-5.69	110.25	113.10
1	AA	1115	C	C5-C6-N1	5.69	123.85	121.00
35	BA	614(B)	G	N1-C2-N3	5.69	127.32	123.90
35	BA	841	A	C5-N7-C8	-5.69	101.05	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1489	U	O4'-C1'-N1	5.69	112.75	108.20
1	AA	1103	C	C5-C6-N1	5.69	123.84	121.00
1	AA	1511	G	N1-C2-N2	5.69	121.32	116.20
35	BA	17	G	N1-C6-O6	5.69	123.31	119.90
35	BA	473	G	C2-N3-C4	-5.69	109.05	111.90
35	BA	573	G	C5-C6-O6	5.69	132.01	128.60
35	BA	1405	U	C4-C5-C6	5.69	123.11	119.70
35	BA	1472	A	N7-C8-N9	5.69	116.64	113.80
35	BA	2262	U	N1-C2-O2	5.69	126.78	122.80
35	BA	2316	C	N3-C4-C5	-5.69	119.62	121.90
1	AA	189(G)	G	O4'-C1'-N9	5.69	112.75	108.20
1	AA	192	U	O4'-C1'-C2'	5.69	112.72	107.60
1	AA	432	A	N1-C2-N3	-5.69	126.45	129.30
1	AA	1047	G	C4'-C3'-C2'	-5.69	96.91	102.60
35	BA	380	U	N3-C4-C5	-5.69	111.19	114.60
35	BA	528	A	C8-N9-C4	5.69	108.08	105.80
35	BA	2148	G	C6-C5-N7	-5.69	126.99	130.40
35	BA	2432	A	C6-C5-N7	5.69	136.28	132.30
36	BB	80	U	C2-N3-C4	5.69	130.41	127.00
1	AA	1193	G	C3'-C2'-C1'	5.69	106.05	101.50
35	BA	260	G	N1-C6-O6	-5.69	116.49	119.90
35	BA	754	C	N1-C2-O2	5.69	122.31	118.90
35	BA	1622	G	C2-N3-C4	5.69	114.74	111.90
35	BA	2808	U	C6-N1-C2	-5.69	117.59	121.00
1	AA	1131	G	N1-C6-O6	5.69	123.31	119.90
35	BA	30	G	N1-C6-O6	-5.69	116.49	119.90
35	BA	512	G	N7-C8-N9	-5.69	110.26	113.10
35	BA	710	G	N3-C4-N9	-5.69	122.59	126.00
35	BA	1280	G	C1'-O4'-C4'	5.69	114.45	109.90
35	BA	1671	U	O4'-C1'-N1	-5.69	103.65	108.20
35	BA	2434	A	C5'-C4'-C3'	-5.69	106.90	116.00
35	BA	2826	A	N1-C6-N6	-5.69	115.19	118.60
1	AA	686	U	C5-C4-O4	-5.68	122.49	125.90
1	AA	781	A	C4-C5-C6	-5.68	114.16	117.00
35	BA	569	U	C5-C6-N1	5.68	125.54	122.70
35	BA	833	U	C2-N1-C1'	-5.68	110.88	117.70
35	BA	2087	G	C6-C5-N7	-5.68	126.99	130.40
35	BA	2152	G	O4'-C1'-N9	5.68	112.75	108.20
35	BA	2412	A	O4'-C1'-N9	-5.68	103.65	108.20
35	BA	2727	G	N1-C2-N3	5.68	127.31	123.90
1	AA	121	C	C5-C6-N1	-5.68	118.16	121.00
1	AA	193	C	C5-C4-N4	5.68	124.18	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	295	C	C4-C5-C6	5.68	120.24	117.40
1	AA	441	A	O4'-C1'-N9	-5.68	103.65	108.20
35	BA	135	G	C8-N9-C4	-5.68	104.13	106.40
35	BA	1475	G	N1-C6-O6	5.68	123.31	119.90
35	BA	2722	G	N3-C2-N2	-5.68	115.92	119.90
1	AA	33	A	C4-C5-N7	-5.68	107.86	110.70
1	AA	1052	U	N3-C2-O2	-5.68	118.22	122.20
1	AA	1200	C	C5'-C4'-O4'	-5.68	102.28	109.10
1	AA	1443	G	N9-C4-C5	5.68	107.67	105.40
6	AF	33	TYR	CB-CG-CD2	-5.68	117.59	121.00
35	BA	1016	G	O4'-C1'-N9	5.68	112.75	108.20
35	BA	1071	G	N9-C4-C5	5.68	107.67	105.40
35	BA	2771	C	C5-C6-N1	-5.68	118.16	121.00
1	AA	32	A	N1-C2-N3	5.68	132.14	129.30
35	BA	593	G	C2-N3-C4	-5.68	109.06	111.90
35	BA	721	C	N3-C2-O2	-5.68	117.92	121.90
35	BA	1188	U	N1-C2-N3	5.68	118.31	114.90
35	BA	1188	U	O4'-C1'-C2'	5.68	112.71	107.60
35	BA	1603	A	N1-C2-N3	5.68	132.14	129.30
35	BA	1943	U	N1-C2-O2	5.68	126.78	122.80
35	BA	2228	G	C4-C5-N7	-5.68	108.53	110.80
35	BA	2250	G	N1-C2-N3	-5.68	120.49	123.90
35	BA	2438	U	C2-N3-C4	5.68	130.41	127.00
1	AA	543	C	C2-N3-C4	-5.68	117.06	119.90
35	BA	32	C	N3-C4-C5	5.68	124.17	121.90
35	BA	301	G	N9-C4-C5	-5.68	103.13	105.40
35	BA	748	G	C5-N7-C8	-5.68	101.46	104.30
35	BA	2499	C	C6-N1-C2	5.68	122.57	120.30
35	BA	2765	A	C8-N9-C4	5.68	108.07	105.80
1	AA	222	U	C5-C6-N1	5.68	125.54	122.70
1	AA	1153	C	C4-C5-C6	-5.68	114.56	117.40
1	AA	1242	C	C5-C6-N1	-5.68	118.16	121.00
1	AA	1400	C	N3-C2-O2	-5.68	117.93	121.90
1	AA	1441	G	N1-C6-O6	5.68	123.31	119.90
35	BA	1902	C	C6-N1-C2	5.68	122.57	120.30
35	BA	2414	G	C5'-C4'-O4'	-5.68	102.29	109.10
1	AA	260	G	N3-C2-N2	5.67	123.87	119.90
20	AT	17	ARG	NE-CZ-NH2	-5.67	117.46	120.30
22	AV	44	A	C4-C5-N7	5.67	113.54	110.70
35	BA	614(C)	A	C2-N3-C4	5.67	113.44	110.60
35	BA	852	G	N1-C6-O6	-5.67	116.50	119.90
35	BA	1029	A	N1-C2-N3	5.67	132.14	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1418	G	N7-C8-N9	5.67	115.94	113.10
35	BA	2256	G	C5-N7-C8	5.67	107.14	104.30
35	BA	2638	G	N3-C2-N2	-5.67	115.93	119.90
1	AA	1506	U	C5-C4-O4	-5.67	122.50	125.90
24	AY	538	TYR	CB-CG-CD1	5.67	124.40	121.00
35	BA	1271	G	C2-N3-C4	5.67	114.74	111.90
1	AA	1195	C	C6-N1-C2	-5.67	118.03	120.30
35	BA	640	C	C5-C6-N1	-5.67	118.17	121.00
35	BA	1002	G	N9-C4-C5	-5.67	103.13	105.40
35	BA	1249	U	C2-N3-C4	-5.67	123.60	127.00
35	BA	1292	U	N3-C4-C5	-5.67	111.20	114.60
35	BA	1983	C	N3-C4-C5	5.67	124.17	121.90
35	BA	2302	G	C5'-C4'-C3'	-5.67	106.93	116.00
35	BA	2840	C	N3-C4-C5	5.67	124.17	121.90
35	BA	2876	G	C4-C5-C6	5.67	122.20	118.80
1	AA	1146	A	N1-C6-N6	-5.67	115.20	118.60
35	BA	1291	C	N1-C1'-C2'	-5.67	105.76	112.00
36	BB	90	A	C1'-O4'-C4'	-5.67	105.36	109.90
1	AA	733	A	C5-C6-N1	5.67	120.53	117.70
1	AA	1415	G	O4'-C1'-N9	-5.67	103.67	108.20
22	AV	64	G	N1-C2-N3	5.67	127.30	123.90
35	BA	505	A	N9-C4-C5	-5.67	103.53	105.80
35	BA	681	G	C6-C5-N7	5.67	133.80	130.40
35	BA	805	G	N1-C2-N3	5.67	127.30	123.90
35	BA	1317	A	OP1-P-O3'	5.67	117.67	105.20
35	BA	2063	C	O4'-C1'-N1	5.67	112.73	108.20
35	BA	2253	G	C3'-C2'-C1'	5.67	106.03	101.50
35	BA	2358	G	OP1-P-OP2	5.67	128.10	119.60
35	BA	502	A	N1-C2-N3	5.67	132.13	129.30
35	BA	1577	C	C4-C5-C6	5.67	120.23	117.40
35	BA	1622	G	C6-C5-N7	-5.67	127.00	130.40
35	BA	2385	C	N3-C4-N4	5.67	121.97	118.00
1	AA	1258	G	C5-C6-O6	-5.67	125.20	128.60
35	BA	615	G	C5-C6-N1	-5.67	108.67	111.50
35	BA	1316	U	N1-C2-N3	5.67	118.30	114.90
35	BA	1383	C	N3-C4-N4	5.67	121.97	118.00
35	BA	2835	A	C5-N7-C8	5.67	106.73	103.90
42	BH	94	TYR	CB-CG-CD1	-5.67	117.60	121.00
1	AA	284	G	N3-C4-C5	-5.66	125.77	128.60
1	AA	807	A	C2-N3-C4	5.66	113.43	110.60
1	AA	1237	C	C2-N3-C4	5.66	122.73	119.90
35	BA	543	C	C2-N3-C4	5.66	122.73	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1237	A	C6-N1-C2	-5.66	115.20	118.60
35	BA	1282	U	N1-C2-O2	5.66	126.76	122.80
35	BA	1932	A	N7-C8-N9	5.66	116.63	113.80
51	BT	22	PHE	CB-CG-CD1	5.66	124.76	120.80
1	AA	181	G	C4-C5-N7	-5.66	108.53	110.80
1	AA	1040	U	N1-C2-O2	-5.66	118.84	122.80
35	BA	1080	C	N3-C2-O2	-5.66	117.94	121.90
35	BA	1170	G	C6-C5-N7	-5.66	127.00	130.40
35	BA	1425	G	C8-N9-C4	-5.66	104.14	106.40
35	BA	2152	G	N9-C1'-C2'	-5.66	105.77	112.00
35	BA	2498	C	C5-C6-N1	5.66	123.83	121.00
1	AA	197	A	N1-C2-N3	5.66	132.13	129.30
1	AA	783	C	N3-C2-O2	-5.66	117.94	121.90
23	AX	11	U	N1-C2-N3	-5.66	111.50	114.90
35	BA	215	G	N7-C8-N9	-5.66	110.27	113.10
35	BA	1080	C	N1-C2-O2	5.66	122.30	118.90
35	BA	1247	A	C4-C5-C6	5.66	119.83	117.00
35	BA	1444	G	C4-C5-C6	5.66	122.20	118.80
35	BA	2282	G	C5-N7-C8	5.66	107.13	104.30
35	BA	2528	U	C1'-O4'-C4'	-5.66	105.37	109.90
35	BA	2533	A	O4'-C1'-N9	-5.66	103.67	108.20
35	BA	2553	G	O4'-C1'-N9	-5.66	103.67	108.20
35	BA	2843	G	C5'-C4'-C3'	-5.66	106.94	116.00
22	AV	8	U	N3-C4-C5	-5.66	111.20	114.60
35	BA	271(A)	A	C6-N1-C2	-5.66	115.20	118.60
35	BA	621	A	C5-N7-C8	-5.66	101.07	103.90
35	BA	2357	U	N3-C4-C5	5.66	118.00	114.60
1	AA	19	C	C5-C6-N1	5.66	123.83	121.00
1	AA	1338	G	C2-N3-C4	5.66	114.73	111.90
35	BA	777	A	C8-N9-C4	5.66	108.06	105.80
35	BA	1306	C	C5-C6-N1	-5.66	118.17	121.00
35	BA	1400	G	C8-N9-C4	-5.66	104.14	106.40
35	BA	2138	C	C4-C5-C6	-5.66	114.57	117.40
35	BA	2205	C	N1-C2-O2	5.66	122.29	118.90
35	BA	2610	C	O4'-C1'-C2'	5.66	112.69	107.60
1	AA	316	G	N1-C2-N2	-5.66	111.11	116.20
1	AA	719	C	N3-C4-N4	5.66	121.96	118.00
1	AA	1099	G	O4'-C1'-N9	5.66	112.72	108.20
1	AA	1121	U	C5-C4-O4	-5.66	122.51	125.90
35	BA	355	G	N3-C4-C5	5.66	131.43	128.60
35	BA	430	G	N1-C2-N2	5.66	121.29	116.20
35	BA	542	C	C6-N1-C2	5.66	122.56	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	577	G	C4-C5-N7	-5.66	108.54	110.80
35	BA	1426	G	O4'-C1'-N9	-5.66	103.67	108.20
35	BA	2627	G	C5-C6-N1	-5.66	108.67	111.50
36	BB	68	C	C2-N3-C4	-5.66	117.07	119.90
1	AA	1331	G	C8-N9-C4	-5.65	104.14	106.40
22	AV	6	G	C5-N7-C8	-5.65	101.47	104.30
35	BA	421	U	C5-C4-O4	-5.65	122.51	125.90
35	BA	1455	G	O4'-C1'-N9	-5.65	103.68	108.20
35	BA	1813	G	C2-N3-C4	-5.65	109.07	111.90
35	BA	2835	A	C8-N9-C4	5.65	108.06	105.80
1	AA	1039	C	N3-C2-O2	5.65	125.86	121.90
35	BA	221	A	C2-N3-C4	-5.65	107.77	110.60
35	BA	428	A	C5-C6-N1	-5.65	114.87	117.70
35	BA	486	C	N3-C4-C5	5.65	124.16	121.90
35	BA	975(A)	G	C5-C6-N1	-5.65	108.67	111.50
35	BA	1219	G	C8-N9-C4	-5.65	104.14	106.40
35	BA	1676	A	C6-C5-N7	-5.65	128.34	132.30
35	BA	1740	G	C6-C5-N7	-5.65	127.01	130.40
35	BA	1783	A	N9-C4-C5	5.65	108.06	105.80
1	AA	262	A	N9-C4-C5	5.65	108.06	105.80
1	AA	306	G	N3-C4-C5	5.65	131.43	128.60
1	AA	1467	G	C2-N3-C4	5.65	114.72	111.90
35	BA	75	G	C5-C6-N1	5.65	114.33	111.50
35	BA	105	C	N3-C4-N4	-5.65	114.05	118.00
35	BA	1179	C	C6-N1-C2	-5.65	118.04	120.30
35	BA	1619	G	O4'-C1'-N9	-5.65	103.68	108.20
36	BB	9	G	N3-C4-N9	5.65	129.39	126.00
36	BB	103	G	C5-C6-N1	5.65	114.33	111.50
48	BQ	51	ARG	NE-CZ-NH2	5.65	123.12	120.30
1	AA	1174	G	N3-C2-N2	5.65	123.85	119.90
1	AA	1372	U	C5-C4-O4	5.65	129.29	125.90
35	BA	113	G	C5'-C4'-O4'	5.65	115.88	109.10
35	BA	694	U	N3-C2-O2	-5.65	118.25	122.20
35	BA	876	C	N3-C4-C5	5.65	124.16	121.90
1	AA	584	G	N3-C4-C5	-5.65	125.78	128.60
1	AA	1069	C	N1-C2-O2	5.65	122.29	118.90
35	BA	610	G	C3'-C2'-C1'	5.65	106.02	101.50
35	BA	1280	G	C4-C5-N7	5.65	113.06	110.80
35	BA	2169	A	N1-C2-N3	5.65	132.12	129.30
35	BA	2262	U	N3-C4-O4	-5.65	115.45	119.40
1	AA	547	A	N1-C6-N6	-5.65	115.21	118.60
35	BA	78	A	N3-C4-C5	-5.65	122.85	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	491	G	C4-C5-N7	5.65	113.06	110.80
35	BA	2023	G	C6-C5-N7	-5.65	127.01	130.40
23	AX	20	U	N3-C2-O2	5.64	126.15	122.20
27	B2	34	GLU	OE1-CD-OE2	-5.64	116.53	123.30
35	BA	71	A	N1-C2-N3	5.64	132.12	129.30
35	BA	243	U	N3-C4-O4	-5.64	115.45	119.40
35	BA	675	A	N1-C2-N3	5.64	132.12	129.30
35	BA	718	A	N1-C6-N6	5.64	121.99	118.60
35	BA	1593	G	N1-C2-N3	5.64	127.29	123.90
35	BA	1943	U	C5'-C4'-O4'	-5.64	102.33	109.10
35	BA	2059	A	P-O5'-C5'	-5.64	111.87	120.90
35	BA	2417	C	C4'-C3'-C2'	-5.64	96.96	102.60
35	BA	2895	U	N3-C4-O4	-5.64	115.45	119.40
1	AA	861	G	C2-N3-C4	5.64	114.72	111.90
1	AA	941	G	C8-N9-C4	5.64	108.66	106.40
1	AA	1227	A	C5'-C4'-O4'	5.64	115.87	109.10
1	AA	1279	A	C4'-C3'-C2'	5.64	108.24	102.60
1	AA	1461	G	C4-C5-N7	-5.64	108.54	110.80
1	AA	1531	A	C2'-C3'-O3'	-5.64	97.09	109.50
35	BA	728	G	C2-N3-C4	-5.64	109.08	111.90
35	BA	1445(A)	C	N3-C2-O2	-5.64	117.95	121.90
35	BA	1490	A	C6-C5-N7	-5.64	128.35	132.30
35	BA	1844	C	N1-C2-N3	5.64	123.15	119.20
1	AA	6	G	N7-C8-N9	5.64	115.92	113.10
1	AA	353	A	C5-C6-N6	5.64	128.21	123.70
24	AY	348	ARG	NE-CZ-NH1	-5.64	117.48	120.30
35	BA	26	G	N7-C8-N9	-5.64	110.28	113.10
35	BA	668	G	N7-C8-N9	5.64	115.92	113.10
35	BA	1362	C	C4-C5-C6	5.64	120.22	117.40
35	BA	1783	A	C8-N9-C4	-5.64	103.54	105.80
35	BA	2067	G	C4-C5-N7	5.64	113.06	110.80
1	AA	1267	C	C2-N3-C4	5.64	122.72	119.90
35	BA	1354	A	N3-C4-C5	-5.64	122.85	126.80
35	BA	1423	G	N9-C4-C5	-5.64	103.14	105.40
35	BA	1884	A	C8-N9-C4	5.64	108.06	105.80
1	AA	1042	G	N1-C2-N2	-5.64	111.13	116.20
35	BA	616	G	N9-C4-C5	5.64	107.66	105.40
35	BA	502	A	C8-N9-C4	-5.64	103.55	105.80
1	AA	280	C	C5-C4-N4	-5.63	116.26	120.20
1	AA	383	A	N1-C6-N6	5.63	121.98	118.60
1	AA	742	G	C4-C5-C6	-5.63	115.42	118.80
35	BA	113	G	N9-C4-C5	-5.63	103.15	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	502	A	N7-C8-N9	5.63	116.62	113.80
35	BA	830	G	C6-N1-C2	5.63	128.48	125.10
35	BA	2530	A	C2-N3-C4	-5.63	107.78	110.60
36	BB	94	C	N3-C4-C5	5.63	124.15	121.90
1	AA	903	G	N7-C8-N9	-5.63	110.28	113.10
35	BA	2011	U	N1-C2-N3	5.63	118.28	114.90
1	AA	372	C	N3-C4-C5	5.63	124.15	121.90
1	AA	502	G	C5'-C4'-O4'	5.63	115.86	109.10
1	AA	1055	A	C2-N3-C4	-5.63	107.78	110.60
24	AY	507	TYR	CB-CG-CD2	5.63	124.38	121.00
35	BA	249	C	N3-C4-C5	-5.63	119.65	121.90
35	BA	654(H)	G	N3-C4-C5	-5.63	125.78	128.60
35	BA	1891	G	N1-C6-O6	-5.63	116.52	119.90
35	BA	2330	G	N7-C8-N9	5.63	115.92	113.10
1	AA	693	G	C5-C6-O6	-5.63	125.22	128.60
1	AA	865	A	C5-C6-N1	5.63	120.52	117.70
22	AV	10	G	C4-C5-N7	5.63	113.05	110.80
35	BA	143	G	C5-N7-C8	5.63	107.11	104.30
35	BA	2572	A	C3'-C2'-C1'	5.63	106.00	101.50
36	BB	92	C	C4-C5-C6	5.63	120.22	117.40
1	AA	1193	G	C2-N3-C4	-5.63	109.09	111.90
35	BA	49	A	C2-N3-C4	-5.63	107.79	110.60
35	BA	252	G	N1-C6-O6	-5.63	116.52	119.90
35	BA	1125	G	C4-C5-C6	5.63	122.18	118.80
35	BA	1292	U	N3-C4-O4	5.63	123.34	119.40
35	BA	1356	G	O4'-C1'-N9	5.63	112.70	108.20
35	BA	1383	C	C5-C4-N4	-5.63	116.26	120.20
35	BA	1802	A	C3'-C2'-C1'	5.63	106.00	101.50
35	BA	2116	G	O5'-P-OP2	-5.63	100.63	105.70
35	BA	2387	U	N3-C4-C5	5.63	117.98	114.60
35	BA	2452	C	N3-C2-O2	5.63	125.84	121.90
35	BA	2610	C	N3-C4-C5	5.63	124.15	121.90
35	BA	2895	U	O4'-C1'-N1	-5.63	103.70	108.20
36	BB	60	C	C6-N1-C2	5.63	122.55	120.30
57	BZ	120	ILE	CB-CA-C	-5.63	100.34	111.60
1	AA	356	A	C4-C5-N7	-5.63	107.89	110.70
1	AA	516	U	N1-C2-N3	5.63	118.28	114.90
1	AA	972	C	N3-C4-N4	5.63	121.94	118.00
1	AA	1306	A	C5-C6-N1	-5.63	114.89	117.70
1	AA	1401	G	C4-C5-N7	5.63	113.05	110.80
35	BA	336	C	N1-C2-O2	-5.63	115.52	118.90
35	BA	1849	G	C5'-C4'-C3'	-5.63	107.00	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	785	G	O5'-P-OP1	-5.62	100.64	105.70
35	BA	827	U	O4'-C1'-N1	5.62	112.70	108.20
35	BA	2013	A	C6-C5-N7	5.62	136.24	132.30
35	BA	2587	A	C5-N7-C8	5.62	106.71	103.90
36	BB	11	C	N1-C1'-C2'	5.62	121.31	114.00
36	BB	95	C	C2-N3-C4	-5.62	117.09	119.90
1	AA	613	C	C5-C4-N4	5.62	124.14	120.20
1	AA	1198	G	C4-C5-C6	5.62	122.17	118.80
35	BA	271(J)	C	C5-C4-N4	-5.62	116.26	120.20
35	BA	519	U	C5-C4-O4	5.62	129.27	125.90
35	BA	614(A)	U	C2-N3-C4	5.62	130.37	127.00
35	BA	1077	A	C5-C6-N1	5.62	120.51	117.70
35	BA	1859	A	N1-C2-N3	5.62	132.11	129.30
35	BA	2021	C	O4'-C1'-N1	5.62	112.70	108.20
35	BA	2657	A	N7-C8-N9	5.62	116.61	113.80
35	BA	2673	G	C8-N9-C4	-5.62	104.15	106.40
1	AA	172	A	O4'-C1'-C2'	5.62	112.66	107.60
1	AA	1184	G	N1-C2-N3	-5.62	120.53	123.90
27	B2	51	ARG	NE-CZ-NH1	-5.62	117.49	120.30
35	BA	406	G	C2-N3-C4	5.62	114.71	111.90
35	BA	958	U	C5-C6-N1	5.62	125.51	122.70
35	BA	1487	G	N9-C4-C5	-5.62	103.15	105.40
35	BA	2672	G	N1-C6-O6	5.62	123.27	119.90
36	BB	95	C	C5-C6-N1	5.62	123.81	121.00
1	AA	1033	G	C5'-C4'-O4'	5.62	115.84	109.10
1	AA	1350	A	N9-C4-C5	5.62	108.05	105.80
35	BA	2172	U	N1-C2-O2	5.62	126.73	122.80
35	BA	2644	G	O4'-C1'-N9	-5.62	103.70	108.20
1	AA	1007	C	C5-C6-N1	-5.62	118.19	121.00
35	BA	451	C	N1-C2-O2	-5.62	115.53	118.90
35	BA	560	C	C5-C6-N1	-5.62	118.19	121.00
35	BA	1040	C	C4-C5-C6	5.62	120.21	117.40
35	BA	1270	C	C3'-C2'-C1'	5.62	106.00	101.50
35	BA	1626	G	N9-C4-C5	-5.62	103.15	105.40
37	BC	164	PHE	CB-CG-CD2	5.62	124.73	120.80
1	AA	5	U	C6-N1-C2	-5.62	117.63	121.00
35	BA	1469	A	C4-C5-C6	5.62	119.81	117.00
35	BA	2363	C	O4'-C1'-N1	5.62	112.69	108.20
35	BA	2473	U	C5-C4-O4	-5.62	122.53	125.90
38	BD	214	TRP	CD1-NE1-CE2	-5.62	103.94	109.00
1	AA	416	G	C2-N3-C4	5.62	114.71	111.90
1	AA	838	G	C4-C5-C6	-5.62	115.43	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	228	A	C5-C6-N1	5.62	120.51	117.70
35	BA	363(B)	G	C5-N7-C8	-5.62	101.49	104.30
35	BA	654(N)	G	N1-C6-O6	5.62	123.27	119.90
35	BA	770	G	C4-C5-N7	-5.62	108.55	110.80
35	BA	995	C	C5-C4-N4	-5.62	116.27	120.20
35	BA	1587	A	C4-C5-N7	5.62	113.51	110.70
35	BA	2302	G	C2-N3-C4	5.62	114.71	111.90
36	BB	47	C	C4-C5-C6	-5.62	114.59	117.40
52	BU	101	ARG	NE-CZ-NH2	-5.62	117.49	120.30
1	AA	816	A	O4'-C1'-N9	5.61	112.69	108.20
22	AV	73	A	C8-N9-C4	5.61	108.05	105.80
35	BA	603	A	O4'-C1'-N9	5.61	112.69	108.20
35	BA	809	G	N1-C2-N2	-5.61	111.15	116.20
35	BA	1010	A	C2-N3-C4	5.61	113.41	110.60
35	BA	1177	A	C4-C5-N7	-5.61	107.89	110.70
35	BA	1302	A	C5-N7-C8	-5.61	101.09	103.90
35	BA	1343	G	N3-C2-N2	5.61	123.83	119.90
35	BA	2156	G	N7-C8-N9	5.61	115.91	113.10
35	BA	2889	C	N1-C2-O2	5.61	122.27	118.90
38	BD	16	MET	N-CA-CB	-5.61	100.49	110.60
1	AA	797	C	N3-C4-C5	-5.61	119.66	121.90
1	AA	882	C	C2-N3-C4	5.61	122.71	119.90
35	BA	1215	G	C8-N9-C4	-5.61	104.16	106.40
1	AA	962	C	C5-C6-N1	5.61	123.81	121.00
1	AA	1226	C	N3-C4-N4	-5.61	114.07	118.00
1	AA	1475	G	N1-C2-N2	5.61	121.25	116.20
3	AC	131	ARG	NE-CZ-NH1	-5.61	117.50	120.30
35	BA	611	C	N3-C4-C5	-5.61	119.66	121.90
35	BA	1910	G	N9-C4-C5	5.61	107.64	105.40
35	BA	2053	G	N7-C8-N9	-5.61	110.30	113.10
35	BA	2505	G	C3'-C2'-C1'	5.61	105.99	101.50
35	BA	2776	A	C5-C6-N1	5.61	120.50	117.70
1	AA	148	G	C8-N9-C4	5.61	108.64	106.40
1	AA	401	C	C5-C4-N4	-5.61	116.27	120.20
35	BA	272	G	C4-C5-N7	-5.61	108.56	110.80
36	BB	69	G	N1-C6-O6	5.61	123.27	119.90
1	AA	251	G	C5'-C4'-O4'	5.61	115.83	109.10
1	AA	956	U	N1-C2-O2	-5.61	118.87	122.80
1	AA	1112	C	C5-C6-N1	-5.61	118.20	121.00
35	BA	244	A	C6-C5-N7	5.61	136.23	132.30
35	BA	257	A	C4-C5-N7	5.61	113.50	110.70
35	BA	585	G	C5-C6-O6	-5.61	125.24	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1457	A	C6-C5-N7	-5.61	128.37	132.30
35	BA	2312	U	C4-C5-C6	5.61	123.06	119.70
1	AA	17	U	N3-C4-C5	5.61	117.96	114.60
1	AA	605	U	C4-C5-C6	5.61	123.06	119.70
35	BA	110	G	C1'-O4'-C4'	-5.61	105.42	109.90
35	BA	180	G	N1-C2-N3	-5.61	120.54	123.90
35	BA	1152	C	C1'-O4'-C4'	-5.61	105.42	109.90
35	BA	2753	A	C5-N7-C8	-5.61	101.10	103.90
35	BA	2821	A	C2-N3-C4	-5.61	107.80	110.60
1	AA	382	A	N7-C8-N9	-5.60	111.00	113.80
1	AA	439	A	N9-C4-C5	-5.60	103.56	105.80
1	AA	1475	G	C6-C5-N7	5.60	133.76	130.40
35	BA	407	G	C6-N1-C2	5.60	128.46	125.10
35	BA	485	C	C6-N1-C2	-5.60	118.06	120.30
35	BA	563	G	C8-N9-C4	-5.60	104.16	106.40
35	BA	832	G	C5-C6-O6	-5.60	125.24	128.60
35	BA	1683	C	C4-C5-C6	5.60	120.20	117.40
35	BA	2651	C	C6-N1-C2	5.60	122.54	120.30
1	AA	812	C	OP2-P-O3'	5.60	117.53	105.20
35	BA	1203	G	N3-C4-N9	5.60	129.36	126.00
35	BA	2245	U	C4-C5-C6	-5.60	116.34	119.70
35	BA	2680	C	C3'-C2'-C1'	-5.60	97.02	101.50
1	AA	660	G	C6-C5-N7	-5.60	127.04	130.40
1	AA	1153	C	C5'-C4'-O4'	5.60	115.82	109.10
1	AA	1349	A	C3'-C2'-C1'	-5.60	97.02	101.50
35	BA	742	G	N1-C2-N3	5.60	127.26	123.90
35	BA	1022	G	C5-C6-O6	5.60	131.96	128.60
35	BA	1159	U	C5-C4-O4	-5.60	122.54	125.90
35	BA	1626	G	C8-N9-C4	5.60	108.64	106.40
1	AA	1144	G	O4'-C1'-N9	5.60	112.68	108.20
1	AA	1488	G	N1-C2-N3	-5.60	120.54	123.90
35	BA	445	C	C6-N1-C2	-5.60	118.06	120.30
35	BA	708	C	C6-N1-C2	-5.60	118.06	120.30
35	BA	932	G	C8-N9-C1'	5.60	134.28	127.00
35	BA	1523	U	O4'-C1'-N1	5.60	112.68	108.20
35	BA	1985	G	N7-C8-N9	-5.60	110.30	113.10
35	BA	2524	G	N1-C6-O6	-5.60	116.54	119.90
35	BA	2662	A	C5-N7-C8	5.60	106.70	103.90
1	AA	371	G	C4-C5-C6	-5.60	115.44	118.80
1	AA	953	G	C4-C5-N7	-5.60	108.56	110.80
35	BA	378	C	C2'-C3'-O3'	5.60	122.66	113.70
35	BA	480	A	N3-C4-C5	-5.60	122.88	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	629	G	N9-C4-C5	-5.60	103.16	105.40
35	BA	1579	A	N7-C8-N9	-5.60	111.00	113.80
1	AA	443	C	C6-N1-C2	5.60	122.54	120.30
1	AA	1173	G	N3-C4-N9	-5.60	122.64	126.00
35	BA	128	C	N3-C4-N4	5.60	121.92	118.00
35	BA	2490	G	C4-C5-C6	-5.60	115.44	118.80
35	BA	2562	U	C3'-C2'-C1'	-5.60	97.02	101.50
35	BA	2810	A	C1'-O4'-C4'	5.60	114.38	109.90
35	BA	60	G	N3-C2-N2	-5.59	115.98	119.90
35	BA	591	C	N3-C4-N4	5.59	121.92	118.00
35	BA	1756	G	N1-C6-O6	-5.59	116.54	119.90
35	BA	1887	C	O4'-C1'-N1	5.59	112.68	108.20
35	BA	2667	C	C5-C6-N1	-5.59	118.20	121.00
1	AA	884	U	C5-C6-N1	5.59	125.50	122.70
35	BA	1718	G	C5'-C4'-C3'	-5.59	107.05	116.00
35	BA	2429	G	N9-C4-C5	-5.59	103.16	105.40
1	AA	756	C	C2-N3-C4	-5.59	117.11	119.90
35	BA	326	G	C5-C6-O6	-5.59	125.25	128.60
35	BA	1136	G	O4'-C1'-N9	-5.59	103.73	108.20
35	BA	1198	U	C2-N1-C1'	5.59	124.41	117.70
35	BA	1382	G	O4'-C1'-N9	5.59	112.67	108.20
35	BA	1996	C	N3-C4-N4	-5.59	114.09	118.00
35	BA	2275	C	N3-C4-N4	5.59	121.91	118.00
35	BA	2664	G	C8-N9-C4	-5.59	104.16	106.40
35	BA	2681	C	C6-N1-C2	-5.59	118.06	120.30
57	BZ	45	ASP	CB-CG-OD2	5.59	123.33	118.30
1	AA	116	A	C8-N9-C4	5.59	108.04	105.80
1	AA	680	C	C6-N1-C2	-5.59	118.06	120.30
1	AA	1060	C	N3-C4-N4	5.59	121.91	118.00
1	AA	1138	G	C6-N1-C2	-5.59	121.75	125.10
35	BA	87	C	C6-N1-C2	-5.59	118.06	120.30
35	BA	1404	C	N3-C4-C5	5.59	124.14	121.90
35	BA	1929	G	C4-C5-N7	-5.59	108.56	110.80
1	AA	101	A	C5-C6-N6	5.59	128.17	123.70
1	AA	546	G	N9-C4-C5	5.59	107.64	105.40
35	BA	102	G	C2-N3-C4	-5.59	109.11	111.90
35	BA	2203	U	O4'-C1'-N1	-5.59	103.73	108.20
1	AA	1017	G	C5-C6-O6	5.59	131.95	128.60
1	AA	1110	A	N7-C8-N9	-5.59	111.01	113.80
1	AA	1146	A	C5'-C4'-O4'	-5.59	102.40	109.10
4	AD	20	TYR	CB-CG-CD1	5.59	124.35	121.00
35	BA	86	C	C3'-C2'-C1'	5.59	105.97	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	530	G	C5-C6-N1	-5.59	108.71	111.50
35	BA	1018	C	C6-N1-C2	-5.59	118.06	120.30
35	BA	1456	G	N1-C2-N3	5.59	127.25	123.90
35	BA	2084	C	C5-C6-N1	5.59	123.79	121.00
36	BB	76	G	O4'-C1'-N9	-5.59	103.73	108.20
36	BB	99	G	O4'-C1'-N9	-5.59	103.73	108.20
48	BQ	51	ARG	NH1-CZ-NH2	-5.59	113.25	119.40
1	AA	773	G	N9-C1'-C2'	-5.58	105.86	112.00
35	BA	1017	G	C5-C6-N1	5.58	114.29	111.50
35	BA	1056	G	N3-C4-C5	-5.58	125.81	128.60
35	BA	1178	C	N3-C4-C5	-5.58	119.67	121.90
35	BA	1443	G	C2-N3-C4	5.58	114.69	111.90
35	BA	1635	G	N9-C4-C5	-5.58	103.17	105.40
35	BA	2774	C	N1-C2-O2	5.58	122.25	118.90
35	BA	2813	A	C4-C5-C6	-5.58	114.21	117.00
1	AA	198	G	N7-C8-N9	-5.58	110.31	113.10
1	AA	1062	U	N3-C4-O4	5.58	123.31	119.40
12	AL	102	ARG	NE-CZ-NH1	-5.58	117.51	120.30
22	AV	13	C	O4'-C1'-N1	-5.58	103.73	108.20
35	BA	48	G	N3-C2-N2	-5.58	115.99	119.90
35	BA	96	G	C5-C6-O6	-5.58	125.25	128.60
35	BA	121	G	C5-C6-N1	5.58	114.29	111.50
35	BA	310	A	C4-C5-N7	-5.58	107.91	110.70
35	BA	500	G	C2-N3-C4	-5.58	109.11	111.90
35	BA	517	C	N3-C2-O2	-5.58	117.99	121.90
35	BA	663	G	N1-C6-O6	5.58	123.25	119.90
35	BA	1308	A	O4'-C1'-N9	5.58	112.67	108.20
35	BA	1539	G	C6-N1-C2	5.58	128.45	125.10
35	BA	1701	A	C6-N1-C2	5.58	121.95	118.60
35	BA	2055	C	C5-C6-N1	-5.58	118.21	121.00
35	BA	2267	A	N1-C2-N3	-5.58	126.51	129.30
35	BA	2693	A	N3-C4-N9	-5.58	122.93	127.40
35	BA	2721	A	C4-C5-C6	5.58	119.79	117.00
1	AA	741	G	N1-C2-N3	5.58	127.25	123.90
1	AA	1073	U	C4-C5-C6	5.58	123.05	119.70
1	AA	1456	G	C5-N7-C8	5.58	107.09	104.30
35	BA	1204	A	C1'-O4'-C4'	-5.58	105.44	109.90
35	BA	1231	G	N1-C6-O6	5.58	123.25	119.90
35	BA	1542	A	O4'-C1'-N9	5.58	112.67	108.20
35	BA	1835	G	C5'-C4'-C3'	-5.58	107.07	116.00
35	BA	1986	A	C4-C5-C6	5.58	119.79	117.00
35	BA	2242	G	N3-C2-N2	5.58	123.81	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2810	A	C4-C5-C6	-5.58	114.21	117.00
1	AA	154	C	C6-N1-C2	-5.58	118.07	120.30
35	BA	386	G	N7-C8-N9	5.58	115.89	113.10
35	BA	1139	G	C6-N1-C2	5.58	128.45	125.10
35	BA	1651	G	N1-C6-O6	5.58	123.25	119.90
35	BA	1842	G	C5-N7-C8	5.58	107.09	104.30
35	BA	1896	G	N7-C8-N9	5.58	115.89	113.10
35	BA	2004	G	C3'-C2'-C1'	5.58	105.96	101.50
35	BA	2262	U	C1'-O4'-C4'	-5.58	105.44	109.90
35	BA	2605	U	N3-C4-O4	-5.58	115.49	119.40
1	AA	8	A	C5-C6-N6	5.58	128.16	123.70
1	AA	262	A	N3-C4-C5	-5.58	122.89	126.80
1	AA	1001	A	N1-C2-N3	-5.58	126.51	129.30
35	BA	281	G	N3-C2-N2	5.58	123.81	119.90
35	BA	433	C	C5-C6-N1	5.58	123.79	121.00
35	BA	848	G	O4'-C1'-N9	-5.58	103.74	108.20
35	BA	1247	A	C8-N9-C4	5.58	108.03	105.80
35	BA	1802	A	C4-C5-N7	5.58	113.49	110.70
35	BA	2530	A	C5-N7-C8	-5.58	101.11	103.90
35	BA	2625	G	N7-C8-N9	5.58	115.89	113.10
1	AA	133	U	N3-C4-C5	-5.58	111.25	114.60
35	BA	115	C	C4-C5-C6	5.58	120.19	117.40
35	BA	1883	G	N9-C4-C5	-5.58	103.17	105.40
1	AA	1179	A	C1'-O4'-C4'	-5.58	105.44	109.90
15	AO	79	ARG	NE-CZ-NH1	-5.58	117.51	120.30
35	BA	738	G	N9-C4-C5	5.58	107.63	105.40
35	BA	839	U	C5-C4-O4	5.58	129.25	125.90
35	BA	1290	C	C6-N1-C2	-5.58	118.07	120.30
35	BA	2103	C	N3-C4-C5	5.58	124.13	121.90
35	BA	2238	G	N3-C4-C5	5.58	131.39	128.60
35	BA	2686	G	O4'-C1'-N9	5.58	112.66	108.20
1	AA	126	G	N3-C2-N2	-5.57	116.00	119.90
1	AA	129(A)	G	N1-C2-N3	-5.57	120.56	123.90
1	AA	313	A	C4-C5-N7	5.57	113.49	110.70
1	AA	1206	G	N1-C6-O6	5.57	123.24	119.90
35	BA	184	C	C2-N3-C4	-5.57	117.11	119.90
35	BA	765	G	O4'-C1'-N9	-5.57	103.74	108.20
35	BA	775	G	N1-C2-N2	-5.57	111.18	116.20
35	BA	1595	G	N3-C4-N9	-5.57	122.66	126.00
35	BA	1753	G	N9-C4-C5	5.57	107.63	105.40
35	BA	1854	A	N1-C2-N3	5.57	132.09	129.30
35	BA	2043	C	C2-N1-C1'	5.57	124.93	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1498	U	C5-C6-N1	5.57	125.49	122.70
35	BA	558	G	N3-C2-N2	5.57	123.80	119.90
35	BA	987	G	C8-N9-C4	-5.57	104.17	106.40
35	BA	1068	G	C6-N1-C2	5.57	128.44	125.10
1	AA	301	G	O4'-C1'-N9	5.57	112.66	108.20
1	AA	1175	G	C5-C6-O6	-5.57	125.26	128.60
1	AA	1222	G	N3-C4-C5	-5.57	125.81	128.60
1	AA	1239	A	N1-C2-N3	5.57	132.09	129.30
1	AA	1438	G	C5-N7-C8	-5.57	101.52	104.30
12	AL	64	TYR	CB-CG-CD2	-5.57	117.66	121.00
24	AY	191	ASP	CB-CG-OD1	5.57	123.31	118.30
35	BA	187	G	N7-C8-N9	-5.57	110.31	113.10
35	BA	271(W)	G	N9-C4-C5	5.57	107.63	105.40
35	BA	654(L)	G	C2-N3-C4	-5.57	109.11	111.90
35	BA	924	C	C5'-C4'-C3'	-5.57	107.09	116.00
35	BA	1943	U	N1-C1'-C2'	5.57	121.24	114.00
36	BB	71	C	C4-C5-C6	-5.57	114.61	117.40
1	AA	82	U	C5-C6-N1	5.57	125.48	122.70
1	AA	967	C	N3-C2-O2	-5.57	118.00	121.90
1	AA	1064	G	O4'-C1'-N9	5.57	112.66	108.20
1	AA	1303	C	C2-N3-C4	5.57	122.68	119.90
3	AC	196	LEU	CA-CB-CG	5.57	128.11	115.30
22	AV	6	G	C4-C5-C6	-5.57	115.46	118.80
31	B6	21	TYR	N-CA-C	5.57	126.04	111.00
35	BA	117	G	O4'-C1'-N9	5.57	112.66	108.20
35	BA	637	A	C8-N9-C4	-5.57	103.57	105.80
1	AA	1058	G	N9-C4-C5	-5.57	103.17	105.40
35	BA	79	G	N3-C2-N2	5.57	123.80	119.90
35	BA	1290	C	C4-C5-C6	5.57	120.18	117.40
35	BA	1620	G	N1-C6-O6	5.57	123.24	119.90
1	AA	136	C	N1-C2-O2	-5.57	115.56	118.90
1	AA	402	G	C8-N9-C4	-5.57	104.17	106.40
1	AA	705	U	N3-C4-C5	-5.57	111.26	114.60
1	AA	1144	G	C8-N9-C4	-5.57	104.17	106.40
1	AA	1391	U	N1-C2-O2	5.57	126.70	122.80
1	AA	1469	G	N7-C8-N9	5.57	115.88	113.10
35	BA	215	G	C4-C5-N7	5.57	113.03	110.80
35	BA	1219	G	C4-C5-C6	5.57	122.14	118.80
35	BA	1294	U	C5-C4-O4	5.57	129.24	125.90
35	BA	2094	G	C6-N1-C2	-5.57	121.76	125.10
35	BA	2309	A	C1'-O4'-C4'	-5.57	105.45	109.90
54	BW	22	ASP	CB-CG-OD2	-5.57	113.29	118.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	890	G	O4'-C1'-N9	-5.56	103.75	108.20
1	AA	413	G	C4-C5-N7	-5.56	108.58	110.80
1	AA	946	A	C8-N9-C4	5.56	108.03	105.80
1	AA	1142	G	C4-C5-N7	5.56	113.03	110.80
1	AA	1251	A	C6-N1-C2	-5.56	115.26	118.60
4	AD	207	TYR	CB-CG-CD1	5.56	124.34	121.00
22	AV	63	G	N3-C4-C5	-5.56	125.82	128.60
35	BA	2735	G	C2-N3-C4	-5.56	109.12	111.90
35	BA	2747	G	N7-C8-N9	5.56	115.88	113.10
35	BA	1977	A	N1-C6-N6	5.56	121.94	118.60
36	BB	90	A	C8-N9-C4	-5.56	103.58	105.80
1	AA	483	C	N3-C4-C5	-5.56	119.68	121.90
1	AA	699	C	O4'-C1'-N1	-5.56	103.75	108.20
1	AA	733	A	N7-C8-N9	5.56	116.58	113.80
1	AA	1189	C	O4'-C1'-N1	-5.56	103.75	108.20
35	BA	400	G	C3'-C2'-C1'	-5.56	97.05	101.50
35	BA	830	G	N3-C2-N2	5.56	123.79	119.90
35	BA	1076	C	N1-C2-O2	5.56	122.24	118.90
35	BA	1178	C	C5-C6-N1	-5.56	118.22	121.00
35	BA	1568	G	N3-C4-N9	-5.56	122.66	126.00
35	BA	1785	A	C6-N1-C2	5.56	121.94	118.60
35	BA	2467	C	N3-C4-C5	-5.56	119.68	121.90
35	BA	2475	C	C5-C6-N1	-5.56	118.22	121.00
57	BZ	88	PHE	CB-CG-CD1	-5.56	116.91	120.80
1	AA	189(G)	G	C8-N9-C4	5.56	108.62	106.40
1	AA	837	G	C6-C5-N7	-5.56	127.06	130.40
1	AA	1023	G	N9-C1'-C2'	-5.56	105.89	112.00
35	BA	219	G	C2-N3-C4	-5.56	109.12	111.90
35	BA	729	G	C4'-C3'-C2'	5.56	108.16	102.60
35	BA	739	G	C5-N7-C8	-5.56	101.52	104.30
35	BA	2134	A	O4'-C1'-N9	-5.56	103.75	108.20
35	BA	2298	A	C8-N9-C4	-5.56	103.58	105.80
56	BY	35	TYR	CB-CG-CD1	-5.56	117.67	121.00
42	BH	149	ARG	NE-CZ-NH1	-5.56	117.52	120.30
46	BO	12	ASP	CB-CG-OD1	5.56	123.30	118.30
1	AA	327	A	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	556	G	N3-C4-C5	5.55	131.38	128.60
35	BA	1041	C	C4-C5-C6	5.55	120.18	117.40
35	BA	1052	C	O4'-C1'-N1	-5.55	103.76	108.20
35	BA	1317	A	C5-C6-N1	5.55	120.48	117.70
35	BA	1378	A	C5'-C4'-O4'	-5.55	102.43	109.10
35	BA	1589	C	C6-N1-C2	-5.55	118.08	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1705	G	N3-C4-N9	5.55	129.33	126.00
35	BA	1987	G	C5'-C4'-C3'	-5.55	107.11	116.00
36	BB	119	G	C4-C5-N7	5.55	113.02	110.80
1	AA	631	G	C4-C5-N7	-5.55	108.58	110.80
1	AA	937	A	O4'-C1'-N9	5.55	112.64	108.20
1	AA	1175	G	N3-C4-C5	5.55	131.38	128.60
35	BA	2477	C	C5-C4-N4	5.55	124.09	120.20
1	AA	289	G	N3-C4-N9	5.55	129.33	126.00
1	AA	984	C	N3-C4-N4	-5.55	114.11	118.00
1	AA	1258	G	C8-N9-C4	-5.55	104.18	106.40
35	BA	507	A	C4'-C3'-C2'	-5.55	97.05	102.60
35	BA	867	C	C5-C6-N1	5.55	123.78	121.00
35	BA	1241	A	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	1513	C	C1'-O4'-C4'	-5.55	105.46	109.90
35	BA	2707	G	C2-N3-C4	-5.55	109.12	111.90
1	AA	403	C	C4-C5-C6	5.55	120.17	117.40
1	AA	531	U	C5-C6-N1	-5.55	119.93	122.70
1	AA	1407	C	N1-C2-N3	5.55	123.08	119.20
35	BA	10	G	N3-C4-N9	-5.55	122.67	126.00
35	BA	189	G	N9-C4-C5	-5.55	103.18	105.40
35	BA	493	G	C4-C5-N7	-5.55	108.58	110.80
35	BA	858	U	C4-C5-C6	5.55	123.03	119.70
35	BA	903	C	C5-C4-N4	5.55	124.08	120.20
35	BA	1529	G	C5-C6-O6	5.55	131.93	128.60
35	BA	2540	C	C6-N1-C2	-5.55	118.08	120.30
35	BA	52	A	N1-C6-N6	-5.55	115.27	118.60
35	BA	496	G	C3'-C2'-C1'	-5.55	97.06	101.50
35	BA	2306	C	C5-C6-N1	5.55	123.77	121.00
1	AA	189(C)	C	C2-N3-C4	-5.55	117.13	119.90
1	AA	266	G	C5'-C4'-O4'	-5.55	102.44	109.10
1	AA	294	U	N1-C2-O2	-5.55	118.92	122.80
1	AA	543	C	C2-N1-C1'	-5.55	112.70	118.80
1	AA	626	U	C5-C6-N1	5.55	125.47	122.70
1	AA	728	A	C2'-C3'-O3'	5.55	122.58	113.70
1	AA	1368	G	N3-C2-N2	5.55	123.78	119.90
1	AA	1529	G	N3-C4-C5	-5.55	125.83	128.60
2	AB	153	ARG	CD-NE-CZ	5.55	131.37	123.60
3	AC	188	LEU	CA-CB-CG	5.55	128.06	115.30
35	BA	309	G	N9-C4-C5	5.55	107.62	105.40
35	BA	1776	G	C8-N9-C4	-5.55	104.18	106.40
35	BA	2861	G	N7-C8-N9	5.55	115.87	113.10
35	BA	2881	C	C2-N3-C4	5.55	122.67	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	89	G	C8-N9-C4	5.55	108.62	106.40
1	AA	1047	G	C6-C5-N7	-5.54	127.07	130.40
35	BA	37	C	C5-C4-N4	5.54	124.08	120.20
35	BA	1899	G	N3-C4-C5	5.54	131.37	128.60
35	BA	2054	A	C4-C5-C6	-5.54	114.23	117.00
35	BA	2142	C	N1-C2-O2	5.54	122.23	118.90
35	BA	2157	G	C8-N9-C4	-5.54	104.18	106.40
35	BA	2820	A	O4'-C1'-N9	5.54	112.64	108.20
37	BC	74	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	AA	653	A	N3-C4-N9	5.54	131.84	127.40
1	AA	860	A	C6-N1-C2	5.54	121.93	118.60
24	AY	504	ARG	NE-CZ-NH2	-5.54	117.53	120.30
35	BA	654(C)	G	C8-N9-C4	5.54	108.62	106.40
35	BA	1499	C	N3-C2-O2	5.54	125.78	121.90
35	BA	1635	G	C6-C5-N7	-5.54	127.07	130.40
35	BA	2301	C	C6-N1-C2	-5.54	118.08	120.30
36	BB	13	A	N7-C8-N9	5.54	116.57	113.80
1	AA	629	G	C5-N7-C8	5.54	107.07	104.30
35	BA	680	G	C4-C5-N7	-5.54	108.58	110.80
35	BA	945	A	C5'-C4'-O4'	5.54	115.75	109.10
36	BB	53	A	C5-N7-C8	5.54	106.67	103.90
40	BF	18	ARG	NE-CZ-NH1	5.54	123.07	120.30
1	AA	122	G	N3-C2-N2	5.54	123.78	119.90
1	AA	1363(A)	A	C5-N7-C8	5.54	106.67	103.90
35	BA	10	G	C2-N3-C4	-5.54	109.13	111.90
35	BA	646	A	N9-C4-C5	5.54	108.02	105.80
35	BA	1672	C	C6-N1-C2	-5.54	118.08	120.30
36	BB	52	A	C4-C5-C6	5.54	119.77	117.00
36	BB	115	G	C5-C6-N1	-5.54	108.73	111.50
1	AA	1145	C	C2-N3-C4	5.54	122.67	119.90
3	AC	24	ALA	N-CA-CB	-5.54	102.34	110.10
35	BA	1280	G	N3-C4-C5	5.54	131.37	128.60
35	BA	2299	G	N7-C8-N9	-5.54	110.33	113.10
35	BA	2658	C	C2-N3-C4	-5.54	117.13	119.90
35	BA	2679	A	N9-C4-C5	5.54	108.02	105.80
1	AA	179	A	C8-N9-C4	5.54	108.02	105.80
1	AA	1497	G	C6-C5-N7	-5.54	127.08	130.40
35	BA	817	C	N1-C2-O2	5.54	122.22	118.90
1	AA	1238	A	O4'-C1'-N9	-5.54	103.77	108.20
1	AA	1244	C	C2-N3-C4	-5.54	117.13	119.90
1	AA	1298	C	N3-C2-O2	-5.54	118.03	121.90
35	BA	271(N)	U	C4'-C3'-C2'	5.54	108.14	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	272(B)	G	C2-N3-C4	-5.54	109.13	111.90
35	BA	593	G	N7-C8-N9	-5.54	110.33	113.10
35	BA	854	G	C6-C5-N7	5.54	133.72	130.40
35	BA	906	G	C5'-C4'-C3'	-5.54	107.14	116.00
35	BA	1490	A	C4-C5-N7	5.54	113.47	110.70
35	BA	1744	C	C6-N1-C2	5.54	122.51	120.30
35	BA	2429	G	N1-C2-N3	-5.54	120.58	123.90
36	BB	106	G	O4'-C1'-N9	-5.54	103.77	108.20
1	AA	947	G	N3-C4-C5	-5.53	125.83	128.60
24	AY	507	TYR	CB-CG-CD1	-5.53	117.68	121.00
35	BA	136	G	N3-C4-C5	5.53	131.37	128.60
35	BA	189	G	N1-C2-N3	5.53	127.22	123.90
35	BA	987	G	N3-C4-N9	-5.53	122.68	126.00
35	BA	1341	U	C5-C6-N1	5.53	125.47	122.70
35	BA	1529	G	N1-C2-N3	-5.53	120.58	123.90
35	BA	1866	C	C6-N1-C2	-5.53	118.09	120.30
35	BA	2145	C	C1'-O4'-C4'	5.53	114.33	109.90
49	BR	105	ARG	NE-CZ-NH2	-5.53	117.53	120.30
1	AA	106	C	O4'-C1'-N1	5.53	112.62	108.20
1	AA	926	G	C2-N3-C4	-5.53	109.13	111.90
22	AV	74	C	C4-C5-C6	5.53	120.17	117.40
35	BA	1139	G	C5'-C4'-C3'	5.53	124.85	116.00
35	BA	1465	G	C5-N7-C8	5.53	107.07	104.30
35	BA	1637	A	C4-C5-C6	5.53	119.77	117.00
35	BA	2742	C	N3-C4-C5	5.53	124.11	121.90
36	BB	71	C	N3-C4-N4	-5.53	114.13	118.00
35	BA	467	G	N9-C4-C5	5.53	107.61	105.40
35	BA	954	G	N1-C2-N3	-5.53	120.58	123.90
35	BA	1283	G	N1-C2-N3	-5.53	120.58	123.90
35	BA	2373	G	N7-C8-N9	5.53	115.87	113.10
35	BA	2470	G	N7-C8-N9	-5.53	110.33	113.10
35	BA	2573	C	N3-C2-O2	-5.53	118.03	121.90
1	AA	595	G	N7-C8-N9	5.53	115.86	113.10
1	AA	1032	G	O4'-C1'-N9	5.53	112.62	108.20
22	AV	13	C	N3-C4-N4	5.53	121.87	118.00
22	AV	44	A	C2-N3-C4	-5.53	107.84	110.60
35	BA	378	C	C2-N3-C4	-5.53	117.14	119.90
35	BA	1394	U	C5-C6-N1	-5.53	119.94	122.70
35	BA	1934	C	C6-N1-C2	5.53	122.51	120.30
1	AA	63	C	N3-C2-O2	5.53	125.77	121.90
1	AA	1044	A	N7-C8-N9	-5.53	111.04	113.80
1	AA	1170	A	C5-N7-C8	5.53	106.66	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	AC	190	ARG	NE-CZ-NH1	5.53	123.06	120.30
35	BA	872	A	C2-N3-C4	5.53	113.36	110.60
35	BA	1423	G	N3-C4-N9	5.53	129.32	126.00
36	BB	98	G	C5-N7-C8	5.53	107.06	104.30
1	AA	245	C	C5-C4-N4	5.53	124.07	120.20
1	AA	397	A	N1-C2-N3	-5.53	126.54	129.30
22	AV	63	G	N7-C8-N9	5.53	115.86	113.10
35	BA	729	G	N3-C4-C5	5.53	131.36	128.60
35	BA	780	G	C5-C6-O6	-5.53	125.28	128.60
35	BA	1225	G	N1-C6-O6	5.53	123.22	119.90
35	BA	1538	G	C8-N9-C4	5.53	108.61	106.40
1	AA	788	U	N1-C2-O2	-5.52	118.93	122.80
1	AA	865	A	N9-C4-C5	-5.52	103.59	105.80
1	AA	969	A	N9-C4-C5	5.52	108.01	105.80
1	AA	1121	U	N3-C2-O2	5.52	126.07	122.20
1	AA	1280	A	N1-C2-N3	-5.52	126.54	129.30
22	AV	64	G	C6-N1-C2	-5.52	121.79	125.10
35	BA	1954	G	C3'-C2'-C1'	-5.52	97.08	101.50
36	BB	103	G	O5'-P-OP2	5.52	117.33	110.70
35	BA	158	U	C3'-C2'-C1'	5.52	105.92	101.50
35	BA	993	G	C4-C5-N7	-5.52	108.59	110.80
35	BA	1011	G	N1-C6-O6	-5.52	116.59	119.90
35	BA	1190	G	N9-C1'-C2'	-5.52	105.92	112.00
35	BA	2866	U	C5-C6-N1	5.52	125.46	122.70
37	BC	54	ARG	NE-CZ-NH1	5.52	123.06	120.30
55	BX	44	GLU	OE1-CD-OE2	-5.52	116.67	123.30
35	BA	1801	G	C5-N7-C8	-5.52	101.54	104.30
1	AA	345	C	O4'-C1'-N1	5.52	112.62	108.20
1	AA	549	C	N1-C2-O2	5.52	122.21	118.90
1	AA	627	G	O4'-C1'-N9	5.52	112.62	108.20
1	AA	702	A	C4-C5-N7	-5.52	107.94	110.70
1	AA	925	G	C5'-C4'-C3'	-5.52	107.17	116.00
1	AA	1045	C	N3-C4-C5	-5.52	119.69	121.90
1	AA	1287	A	C5-N7-C8	-5.52	101.14	103.90
22	AV	42	G	N1-C6-O6	-5.52	116.59	119.90
22	AV	53	G	C5-C6-N1	-5.52	108.74	111.50
35	BA	353	G	N1-C6-O6	5.52	123.21	119.90
35	BA	1426	G	C2-N3-C4	-5.52	109.14	111.90
35	BA	1614	A	N1-C2-N3	-5.52	126.54	129.30
35	BA	2059	A	C8-N9-C4	5.52	108.01	105.80
35	BA	2525	G	N3-C4-C5	-5.52	125.84	128.60
1	AA	342	C	N3-C2-O2	-5.52	118.04	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	563	A	C3'-C2'-C1'	5.52	105.91	101.50
1	AA	1304	G	C4-C5-C6	5.52	122.11	118.80
35	BA	242	G	N1-C6-O6	-5.52	116.59	119.90
35	BA	362	U	O4'-C1'-N1	5.52	112.61	108.20
35	BA	823	G	O4'-C1'-N9	5.52	112.61	108.20
35	BA	943	U	C3'-C2'-C1'	5.52	105.91	101.50
35	BA	1777	U	C3'-C2'-C1'	-5.52	97.09	101.50
35	BA	2165	G	N1-C6-O6	-5.52	116.59	119.90
35	BA	2604	U	N3-C4-O4	-5.52	115.54	119.40
8	AH	91	ARG	NE-CZ-NH1	5.52	123.06	120.30
35	BA	2250	G	C6-C5-N7	-5.52	127.09	130.40
1	AA	857	C	C2-N3-C4	-5.51	117.14	119.90
1	AA	1080	A	C6-N1-C2	5.51	121.91	118.60
1	AA	1190	G	N3-C4-C5	5.51	131.36	128.60
1	AA	1510	U	C5-C6-N1	-5.51	119.94	122.70
35	BA	142	A	OP2-P-O3'	5.51	117.33	105.20
35	BA	573	G	C8-N9-C4	5.51	108.61	106.40
35	BA	1577	C	O4'-C1'-N1	-5.51	103.79	108.20
35	BA	1594	G	C4-C5-N7	-5.51	108.59	110.80
35	BA	1921	G	N1-C2-N3	-5.51	120.59	123.90
35	BA	1938	A	C4-C5-N7	5.51	113.46	110.70
35	BA	2426	A	C8-N9-C4	5.51	108.00	105.80
35	BA	2750	A	N3-C4-C5	-5.51	122.94	126.80
35	BA	2771	C	C2-N3-C4	-5.51	117.14	119.90
35	BA	2848	G	C8-N9-C4	-5.51	104.19	106.40
35	BA	2854	G	C6-C5-N7	-5.51	127.09	130.40
51	BT	112	ARG	NE-CZ-NH2	-5.51	117.54	120.30
1	AA	1281	U	C5-C6-N1	-5.51	119.94	122.70
35	BA	648	G	C5'-C4'-O4'	5.51	115.72	109.10
35	BA	875	G	N3-C4-N9	-5.51	122.69	126.00
35	BA	1710	C	N3-C2-O2	-5.51	118.04	121.90
35	BA	1986	A	C5-C6-N1	-5.51	114.94	117.70
35	BA	2471	C	C5-C4-N4	5.51	124.06	120.20
1	AA	1244	C	N1-C2-N3	5.51	123.06	119.20
1	AA	1460	A	C5-C6-N1	5.51	120.46	117.70
35	BA	454	A	C5-C6-N1	5.51	120.46	117.70
35	BA	482	A	C4-C5-N7	-5.51	107.94	110.70
35	BA	516	C	O4'-C1'-N1	-5.51	103.79	108.20
35	BA	1349	A	N7-C8-N9	-5.51	111.05	113.80
35	BA	1361	G	O4'-C1'-N9	-5.51	103.79	108.20
35	BA	1406	U	N3-C4-C5	5.51	117.91	114.60
35	BA	1991	U	C3'-C2'-C1'	5.51	105.91	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2239	G	C6-C5-N7	-5.51	127.09	130.40
35	BA	2872	G	C4-C5-C6	-5.51	115.49	118.80
36	BB	25	A	N9-C4-C5	5.51	108.00	105.80
1	AA	858	G	C5-C6-N1	-5.51	108.75	111.50
1	AA	902	G	N3-C4-N9	-5.51	122.69	126.00
1	AA	934	C	C5-C4-N4	5.51	124.06	120.20
35	BA	53	A	C5-C6-N1	-5.51	114.95	117.70
35	BA	2542	A	N9-C1'-C2'	5.51	121.16	114.00
1	AA	546	G	N7-C8-N9	-5.51	110.35	113.10
1	AA	1248	A	N7-C8-N9	5.51	116.55	113.80
4	AD	12	CYS	CA-CB-SG	5.51	123.91	114.00
35	BA	861	A	N9-C4-C5	5.51	108.00	105.80
35	BA	1964	G	C2-N3-C4	5.51	114.65	111.90
35	BA	2252	G	C4-C5-N7	-5.51	108.60	110.80
35	BA	2892	A	C4-C5-C6	-5.51	114.25	117.00
1	AA	531	U	N3-C4-O4	5.51	123.25	119.40
1	AA	1177	G	C2-N3-C4	5.51	114.65	111.90
35	BA	1788	C	C2-N3-C4	-5.51	117.15	119.90
35	BA	2000	G	C5'-C4'-O4'	-5.51	102.49	109.10
35	BA	2321	G	O4'-C1'-N9	-5.51	103.79	108.20
35	BA	2622	C	C5-C6-N1	-5.51	118.25	121.00
1	AA	933	G	N3-C4-C5	5.50	131.35	128.60
35	BA	1687	G	C4-N9-C1'	5.50	133.66	126.50
35	BA	1998	G	N9-C4-C5	5.50	107.60	105.40
1	AA	56	U	C5-C4-O4	5.50	129.20	125.90
35	BA	1651	G	C6-C5-N7	-5.50	127.10	130.40
1	AA	160	A	C6-C5-N7	-5.50	128.45	132.30
1	AA	175	C	N3-C4-C5	5.50	124.10	121.90
1	AA	1401	G	C2-N3-C4	5.50	114.65	111.90
4	AD	65	ARG	NE-CZ-NH2	5.50	123.05	120.30
22	AV	75	C	N1-C2-O2	-5.50	115.60	118.90
35	BA	59	U	N3-C4-O4	-5.50	115.55	119.40
35	BA	664	C	N3-C4-C5	5.50	124.10	121.90
35	BA	1105	U	N3-C4-O4	-5.50	115.55	119.40
35	BA	1883	G	N1-C6-O6	5.50	123.20	119.90
35	BA	2302	G	N9-C4-C5	5.50	107.60	105.40
35	BA	2441	C	N3-C4-N4	-5.50	114.15	118.00
36	BB	24	G	O5'-P-OP2	-5.50	100.75	105.70
1	AA	160	A	C4-C5-C6	5.50	119.75	117.00
1	AA	1341	U	C5-C4-O4	-5.50	122.60	125.90
35	BA	1619	G	N7-C8-N9	5.50	115.85	113.10
35	BA	1831	G	C5-C6-N1	5.50	114.25	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2552	U	C5-C6-N1	-5.50	119.95	122.70
1	AA	199	G	C4-C5-N7	5.50	113.00	110.80
1	AA	888	G	N1-C2-N3	-5.50	120.60	123.90
1	AA	1521	G	C8-N9-C4	5.50	108.60	106.40
35	BA	995	C	O4'-C1'-N1	-5.50	103.80	108.20
35	BA	1184	G	C2-N3-C4	5.50	114.65	111.90
35	BA	1189	A	C8-N9-C4	-5.50	103.60	105.80
1	AA	358	U	C6-N1-C2	-5.50	117.70	121.00
1	AA	825	G	C4-C5-C6	5.50	122.10	118.80
1	AA	1295	G	N1-C2-N3	-5.50	120.60	123.90
1	AA	1308	U	C5-C6-N1	5.50	125.45	122.70
23	AX	12	A	C4-C5-N7	-5.50	107.95	110.70
35	BA	350	U	C2-N3-C4	-5.50	123.70	127.00
35	BA	771	G	N9-C4-C5	-5.50	103.20	105.40
35	BA	1548	C	C6-N1-C2	5.50	122.50	120.30
35	BA	1888	G	C3'-C2'-C1'	5.50	105.90	101.50
35	BA	2545	G	C5-N7-C8	5.50	107.05	104.30
45	BN	97	ARG	NE-CZ-NH1	5.50	123.05	120.30
57	BZ	19	ARG	NE-CZ-NH1	-5.50	117.55	120.30
1	AA	1505	G	C4-C5-N7	-5.50	108.60	110.80
22	AV	23	C	N3-C4-C5	-5.50	119.70	121.90
35	BA	962	G	N7-C8-N9	5.50	115.85	113.10
35	BA	1076	C	O4'-C1'-N1	-5.50	103.80	108.20
35	BA	1757	U	N1-C2-O2	5.50	126.65	122.80
35	BA	1762	A	C6-C5-N7	5.50	136.15	132.30
35	BA	2688	U	C2-N3-C4	-5.50	123.70	127.00
1	AA	338	A	N7-C8-N9	5.49	116.55	113.80
1	AA	951	G	N3-C4-N9	-5.49	122.70	126.00
1	AA	1353	G	C4-C5-N7	5.49	113.00	110.80
35	BA	25	U	C1'-O4'-C4'	5.49	114.30	109.90
35	BA	607	U	C2-N3-C4	5.49	130.30	127.00
35	BA	1193	G	N3-C2-N2	5.49	123.75	119.90
35	BA	1295	C	C2-N3-C4	-5.49	117.15	119.90
35	BA	1492	G	N9-C4-C5	-5.49	103.20	105.40
35	BA	1571	A	C5-C6-N1	5.49	120.45	117.70
35	BA	1797	C	C4-C5-C6	5.49	120.15	117.40
35	BA	2271	G	N9-C4-C5	-5.49	103.20	105.40
35	BA	2531	A	N1-C6-N6	-5.49	115.30	118.60
35	BA	1704	G	N3-C2-N2	-5.49	116.06	119.90
35	BA	2730	C	C3'-C2'-C1'	-5.49	97.11	101.50
35	BA	2787	C	C4-C5-C6	5.49	120.15	117.40
35	BA	811	U	N3-C4-C5	5.49	117.89	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2053	G	C5-C6-O6	-5.49	125.31	128.60
1	AA	823	G	C5-N7-C8	5.49	107.04	104.30
1	AA	981	U	C2-N3-C4	5.49	130.29	127.00
1	AA	1142	G	N9-C4-C5	-5.49	103.20	105.40
1	AA	1318	A	C6-C5-N7	-5.49	128.46	132.30
35	BA	976	C	C6-N1-C2	-5.49	118.11	120.30
35	BA	1949	G	C5-C6-N1	-5.49	108.75	111.50
8	AH	18	ARG	NE-CZ-NH1	5.49	123.04	120.30
35	BA	955	C	C5-C6-N1	5.49	123.74	121.00
35	BA	1274	A	C5-N7-C8	-5.49	101.16	103.90
1	AA	1175	G	C2-N3-C4	-5.49	109.16	111.90
1	AA	1494	G	C5-N7-C8	5.49	107.04	104.30
23	AX	15	A	N1-C2-N3	-5.49	126.56	129.30
35	BA	632	A	C5-C6-N1	-5.49	114.96	117.70
35	BA	964	C	C5'-C4'-C3'	-5.49	107.22	116.00
35	BA	1696	G	C5-C6-N1	-5.49	108.76	111.50
35	BA	1858	G	C8-N9-C4	-5.49	104.21	106.40
35	BA	2135	A	C4-C5-C6	5.49	119.74	117.00
35	BA	2729	G	O4'-C4'-C3'	5.49	110.49	106.10
1	AA	557	G	C5-C6-O6	5.48	131.89	128.60
35	BA	1113	U	N3-C4-C5	5.48	117.89	114.60
1	AA	1432	G	N9-C4-C5	5.48	107.59	105.40
35	BA	290	G	N9-C4-C5	5.48	107.59	105.40
35	BA	413	C	O4'-C1'-N1	-5.48	103.81	108.20
35	BA	962	G	C5-N7-C8	-5.48	101.56	104.30
35	BA	1055	G	N7-C8-N9	5.48	115.84	113.10
35	BA	1136	G	C2-N3-C4	5.48	114.64	111.90
35	BA	1280	G	C5-C6-N1	5.48	114.24	111.50
35	BA	1705	G	C5-N7-C8	5.48	107.04	104.30
35	BA	1940	U	C3'-C2'-C1'	-5.48	97.11	101.50
35	BA	2749	A	N1-C6-N6	-5.48	115.31	118.60
35	BA	2820	A	C5-N7-C8	-5.48	101.16	103.90
35	BA	2859	G	C8-N9-C4	-5.48	104.21	106.40
1	AA	283	C	C5-C6-N1	-5.48	118.26	121.00
1	AA	835	U	C4-C5-C6	-5.48	116.41	119.70
1	AA	1423	G	C8-N9-C4	5.48	108.59	106.40
1	AA	1525	G	C5-C6-O6	-5.48	125.31	128.60
22	AV	21	A	C1'-O4'-C4'	-5.48	105.52	109.90
35	BA	634	C	N3-C4-C5	-5.48	119.71	121.90
35	BA	903	C	C2-N3-C4	-5.48	117.16	119.90
35	BA	1064	C	C2-N3-C4	-5.48	117.16	119.90
35	BA	1529	G	C2-N3-C4	5.48	114.64	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1699	G	C5-C6-O6	5.48	131.89	128.60
35	BA	1717	G	N7-C8-N9	5.48	115.84	113.10
35	BA	2299	G	C8-N9-C4	5.48	108.59	106.40
35	BA	2400	G	C6-N1-C2	-5.48	121.81	125.10
35	BA	2429	G	C2-N3-C4	5.48	114.64	111.90
35	BA	2522	U	N3-C2-O2	5.48	126.04	122.20
35	BA	2862	G	N9-C4-C5	5.48	107.59	105.40
36	BB	65	C	N3-C2-O2	-5.48	118.06	121.90
49	BR	8	ARG	NE-CZ-NH1	-5.48	117.56	120.30
1	AA	518	C	O4'-C1'-C2'	-5.48	100.32	105.80
1	AA	1064	G	N3-C2-N2	-5.48	116.06	119.90
1	AA	1404	C	C2-N3-C4	5.48	122.64	119.90
35	BA	702	G	N1-C2-N3	5.48	127.19	123.90
35	BA	1667	G	N3-C2-N2	5.48	123.74	119.90
35	BA	1838	C	N1-C1'-C2'	5.48	121.12	114.00
35	BA	2561	A	C5-C6-N1	-5.48	114.96	117.70
35	BA	2785	C	N1-C2-O2	-5.48	115.61	118.90
1	AA	335	C	N3-C4-C5	5.48	124.09	121.90
1	AA	910	C	N1-C2-O2	-5.48	115.61	118.90
1	AA	1002	G	C4-C5-N7	5.48	112.99	110.80
35	BA	932	G	N1-C2-N3	5.48	127.19	123.90
35	BA	1278	A	N1-C2-N3	-5.48	126.56	129.30
35	BA	1667	G	C6-N1-C2	5.48	128.39	125.10
35	BA	1930	G	O4'-C1'-N9	5.48	112.58	108.20
35	BA	2017	U	O5'-P-OP2	-5.48	100.77	105.70
35	BA	2162	G	C8-N9-C4	5.48	108.59	106.40
35	BA	2833	G	N7-C8-N9	5.48	115.84	113.10
36	BB	61	G	C5-C6-N1	-5.48	108.76	111.50
1	AA	1442	G	N7-C8-N9	-5.48	110.36	113.10
1	AA	1511	G	C5-C6-N1	5.48	114.24	111.50
35	BA	131	G	C4-C5-C6	5.48	122.09	118.80
35	BA	1612	C	C4-C5-C6	5.48	120.14	117.40
1	AA	300	A	O4'-C1'-N9	-5.47	103.82	108.20
1	AA	977	A	N1-C2-N3	5.47	132.04	129.30
16	AP	17	TYR	CB-CG-CD2	5.47	124.28	121.00
35	BA	536	A	N1-C2-N3	5.47	132.04	129.30
35	BA	568	U	N3-C2-O2	5.47	126.03	122.20
35	BA	901	A	C5'-C4'-C3'	-5.47	107.24	116.00
35	BA	1443	G	C4-C5-N7	5.47	112.99	110.80
35	BA	1642	G	C8-N9-C4	-5.47	104.21	106.40
35	BA	2333	A	N3-C4-C5	-5.47	122.97	126.80
35	BA	2394	C	N3-C4-C5	5.47	124.09	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2584	U	N1-C1'-C2'	-5.47	105.98	112.00
36	BB	3	C	C6-N1-C2	-5.47	118.11	120.30
1	AA	572	A	N9-C1'-C2'	5.47	121.11	114.00
1	AA	990	C	C2-N3-C4	-5.47	117.16	119.90
1	AA	1120	G	N7-C8-N9	5.47	115.84	113.10
35	BA	650	C	N1-C2-N3	-5.47	115.37	119.20
35	BA	1326	U	O4'-C1'-N1	-5.47	103.82	108.20
35	BA	2226	C	C5-C6-N1	5.47	123.74	121.00
35	BA	2604	U	N1-C2-O2	5.47	126.63	122.80
35	BA	2805	G	N1-C6-O6	-5.47	116.62	119.90
36	BB	11	C	O4'-C1'-N1	-5.47	103.82	108.20
1	AA	663	A	C6-C5-N7	-5.47	128.47	132.30
35	BA	733	G	C5-C6-N1	5.47	114.24	111.50
35	BA	909	A	N9-C4-C5	5.47	107.99	105.80
35	BA	1272	A	C6-N1-C2	5.47	121.88	118.60
35	BA	1332	G	N7-C8-N9	5.47	115.84	113.10
35	BA	2129	C	C3'-C2'-C1'	5.47	105.88	101.50
35	BA	2302	G	C4-C5-N7	-5.47	108.61	110.80
36	BB	13	A	N1-C2-N3	-5.47	126.56	129.30
48	BQ	135	ASP	CB-CG-OD1	-5.47	113.38	118.30
1	AA	1029	C	N3-C4-C5	-5.47	119.71	121.90
1	AA	1521	G	C2-N3-C4	5.47	114.64	111.90
22	AV	17	C	C4-C5-C6	-5.47	114.67	117.40
35	BA	2112	G	C8-N9-C4	-5.47	104.21	106.40
35	BA	2155	G	N3-C4-N9	5.47	129.28	126.00
35	BA	2608	G	C5-C6-N1	5.47	114.23	111.50
1	AA	491	G	C6-N1-C2	-5.47	121.82	125.10
1	AA	1442	G	C4-C5-N7	5.47	112.99	110.80
35	BA	1256	G	C4'-C3'-C2'	-5.47	97.13	102.60
35	BA	1784	A	C5-N7-C8	-5.47	101.17	103.90
35	BA	1876	A	C8-N9-C4	5.47	107.99	105.80
35	BA	2334	G	C6-C5-N7	-5.47	127.12	130.40
1	AA	156	G	N9-C4-C5	-5.47	103.21	105.40
1	AA	279	A	C5-C6-N1	5.47	120.43	117.70
1	AA	413	G	C6-N1-C2	5.47	128.38	125.10
1	AA	736	C	C4-C5-C6	5.47	120.13	117.40
22	AV	64	G	C8-N9-C4	-5.47	104.21	106.40
35	BA	195	A	C5-C6-N6	5.47	128.07	123.70
35	BA	969	U	C2-N3-C4	-5.47	123.72	127.00
35	BA	1266	G	C5-N7-C8	5.47	107.03	104.30
35	BA	1915	U	C5-C4-O4	-5.47	122.62	125.90
35	BA	2247	A	C8-N9-C4	-5.47	103.61	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2333	A	N1-C2-N3	5.47	132.03	129.30
35	BA	2444	G	C8-N9-C4	5.47	108.59	106.40
36	BB	85	G	C6-N1-C2	5.47	128.38	125.10
1	AA	9	G	C5-N7-C8	-5.46	101.57	104.30
1	AA	1287	A	O4'-C1'-N9	-5.46	103.83	108.20
35	BA	886	C	N3-C4-N4	-5.46	114.17	118.00
35	BA	1071	G	O4'-C1'-N9	-5.46	103.83	108.20
35	BA	1455	G	N3-C4-C5	-5.46	125.87	128.60
35	BA	2424	C	N3-C4-N4	5.46	121.83	118.00
1	AA	299	G	N3-C2-N2	-5.46	116.08	119.90
35	BA	195	A	N9-C4-C5	5.46	107.98	105.80
35	BA	544	G	N9-C4-C5	-5.46	103.22	105.40
35	BA	782	A	C6-N1-C2	-5.46	115.32	118.60
35	BA	1849	G	N3-C4-C5	-5.46	125.87	128.60
35	BA	2052	G	C2-N3-C4	-5.46	109.17	111.90
35	BA	2500	U	C5-C4-O4	5.46	129.18	125.90
1	AA	913	A	N9-C1'-C2'	5.46	121.10	114.00
1	AA	925	G	C5-C6-N1	5.46	114.23	111.50
1	AA	1504	G	C5-C6-N1	-5.46	108.77	111.50
35	BA	27	G	C5-N7-C8	5.46	107.03	104.30
35	BA	263	C	C1'-O4'-C4'	-5.46	105.53	109.90
35	BA	307	G	C5-C6-N1	-5.46	108.77	111.50
35	BA	1740	G	N3-C2-N2	-5.46	116.08	119.90
35	BA	1932	A	C6-N1-C2	-5.46	115.32	118.60
35	BA	2302	G	O4'-C1'-N9	-5.46	103.83	108.20
35	BA	2494	G	C2-N3-C4	-5.46	109.17	111.90
35	BA	2567	G	C1'-O4'-C4'	-5.46	105.53	109.90
35	BA	2162	G	N7-C8-N9	-5.46	110.37	113.10
35	BA	2860	A	C8-N9-C4	-5.46	103.62	105.80
35	BA	2886	G	N3-C4-N9	5.46	129.28	126.00
1	AA	132	C	C5-C6-N1	5.46	123.73	121.00
1	AA	563	A	C5-N7-C8	-5.46	101.17	103.90
1	AA	1235	U	C5-C4-O4	-5.46	122.62	125.90
35	BA	117	G	C5-C6-O6	5.46	131.88	128.60
35	BA	1046	A	C4-C5-C6	-5.46	114.27	117.00
35	BA	1359	A	N7-C8-N9	-5.46	111.07	113.80
35	BA	1571	A	N1-C6-N6	-5.46	115.33	118.60
35	BA	1781	C	C1'-O4'-C4'	-5.46	105.53	109.90
35	BA	2049	G	C4-C5-N7	5.46	112.98	110.80
35	BA	2329	G	C5-C6-N1	-5.46	108.77	111.50
50	BS	71	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	AA	1186	G	N3-C4-C5	5.46	131.33	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1392	G	N7-C8-N9	5.46	115.83	113.10
1	AA	1524	C	C5-C4-N4	5.46	124.02	120.20
22	AV	31	G	C5-N7-C8	5.46	107.03	104.30
35	BA	820	A	C5-N7-C8	-5.46	101.17	103.90
35	BA	989	G	N1-C6-O6	5.46	123.17	119.90
35	BA	1244	G	O4'-C1'-N9	-5.46	103.83	108.20
35	BA	1259	G	N1-C2-N3	-5.46	120.63	123.90
35	BA	1552	G	N3-C4-N9	-5.46	122.73	126.00
35	BA	1741	A	N7-C8-N9	-5.46	111.07	113.80
35	BA	2131	G	N3-C4-N9	5.46	129.27	126.00
35	BA	2155	G	C2-N3-C4	5.46	114.63	111.90
19	AS	36	ARG	NE-CZ-NH1	-5.46	117.57	120.30
35	BA	1698	A	N1-C6-N6	-5.46	115.33	118.60
35	BA	2704	C	C4-C5-C6	-5.46	114.67	117.40
1	AA	393	A	N9-C4-C5	5.45	107.98	105.80
1	AA	758	G	C8-N9-C4	-5.45	104.22	106.40
1	AA	768	A	C5-N7-C8	5.45	106.63	103.90
1	AA	1134	G	O4'-C1'-N9	-5.45	103.84	108.20
22	AV	4	G	N9-C1'-C2'	-5.45	106.00	112.00
22	AV	50	U	N3-C4-C5	5.45	117.87	114.60
35	BA	821	A	OP1-P-O3'	5.45	117.20	105.20
35	BA	1778	U	C5-C4-O4	-5.45	122.63	125.90
35	BA	2018	G	C4-C5-C6	-5.45	115.53	118.80
35	BA	2331	G	C5-C6-O6	-5.45	125.33	128.60
35	BA	2706	G	N3-C4-N9	-5.45	122.73	126.00
35	BA	2852	G	C4-C5-N7	-5.45	108.62	110.80
1	AA	1180	A	C8-N9-C4	5.45	107.98	105.80
35	BA	199	A	C4-C5-N7	-5.45	107.97	110.70
35	BA	335	C	C4-C5-C6	5.45	120.13	117.40
35	BA	1377	G	C6-N1-C2	-5.45	121.83	125.10
35	BA	1717	G	C5-N7-C8	-5.45	101.57	104.30
1	AA	112	G	N1-C2-N3	5.45	127.17	123.90
1	AA	168	G	C8-N9-C4	-5.45	104.22	106.40
1	AA	515	G	C5-C6-O6	-5.45	125.33	128.60
1	AA	1146	A	C4-C5-C6	-5.45	114.28	117.00
1	AA	1494	G	N9-C4-C5	-5.45	103.22	105.40
35	BA	221	A	C6-C5-N7	-5.45	128.49	132.30
35	BA	302	C	C4-C5-C6	5.45	120.12	117.40
35	BA	1041	C	C2-N3-C4	-5.45	117.17	119.90
35	BA	1855	G	C4-C5-N7	5.45	112.98	110.80
35	BA	2488	A	N1-C2-N3	5.45	132.03	129.30
1	AA	341	C	C5-C4-N4	-5.45	116.39	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	869	G	C6-N1-C2	5.45	128.37	125.10
1	AA	1497	G	N3-C4-C5	-5.45	125.88	128.60
35	BA	100	G	O4'-C1'-N9	5.45	112.56	108.20
35	BA	242	G	C3'-C2'-C1'	-5.45	97.14	101.50
35	BA	1193	G	C1'-O4'-C4'	5.45	114.26	109.90
35	BA	1528	A	N3-C4-C5	-5.45	122.99	126.80
35	BA	1947	C	O4'-C1'-N1	-5.45	103.84	108.20
35	BA	2359	C	N1-C2-O2	5.45	122.17	118.90
1	AA	857	C	N3-C4-N4	-5.45	114.19	118.00
35	BA	778	G	C6-C5-N7	-5.45	127.13	130.40
35	BA	1576	U	N1-C2-N3	-5.45	111.63	114.90
35	BA	1764	G	N1-C2-N3	5.45	127.17	123.90
1	AA	57	G	N7-C8-N9	-5.45	110.38	113.10
1	AA	57	G	O4'-C1'-N9	-5.45	103.84	108.20
1	AA	1428	A	C4-C5-C6	5.45	119.72	117.00
22	AV	17(A)	U	C2-N3-C4	5.45	130.27	127.00
35	BA	532	A	O4'-C1'-N9	5.45	112.56	108.20
35	BA	1223	G	C5-C6-O6	5.45	131.87	128.60
35	BA	1442	G	N1-C6-O6	-5.45	116.63	119.90
35	BA	2222	G	C4-C5-N7	5.45	112.98	110.80
35	BA	2678	C	C4-C5-C6	5.45	120.12	117.40
1	AA	1521	G	C4-C5-N7	-5.44	108.62	110.80
35	BA	139(A)	G	N3-C2-N2	-5.44	116.09	119.90
35	BA	501	A	O5'-P-OP1	-5.44	100.80	105.70
35	BA	539	G	C4-C5-N7	-5.44	108.62	110.80
35	BA	595	C	C5-C4-N4	5.44	124.01	120.20
35	BA	1067	A	C2-N3-C4	5.44	113.32	110.60
35	BA	2127	G	N7-C8-N9	-5.44	110.38	113.10
1	AA	52	G	N3-C4-C5	-5.44	125.88	128.60
1	AA	734	G	C4-C5-N7	-5.44	108.62	110.80
1	AA	825	G	C6-C5-N7	-5.44	127.14	130.40
3	AC	30	ARG	NE-CZ-NH1	-5.44	117.58	120.30
35	BA	57	C	C5-C6-N1	-5.44	118.28	121.00
35	BA	447	A	C8-N9-C4	5.44	107.98	105.80
35	BA	452	G	C6-N1-C2	5.44	128.37	125.10
35	BA	1199	U	C4-C5-C6	5.44	122.97	119.70
35	BA	2012	G	N7-C8-N9	5.44	115.82	113.10
35	BA	2275	C	N3-C2-O2	-5.44	118.09	121.90
35	BA	2320	A	C4-C5-N7	5.44	113.42	110.70
35	BA	2458	G	C8-N9-C4	5.44	108.58	106.40
35	BA	2817	G	N1-C2-N3	-5.44	120.64	123.90
36	BB	19	G	C2-N3-C4	-5.44	109.18	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	186	C	N3-C4-C5	5.44	124.08	121.90
1	AA	710	G	N7-C8-N9	5.44	115.82	113.10
1	AA	794	A	O5'-P-OP2	5.44	117.23	110.70
1	AA	944	G	C5'-C4'-O4'	5.44	115.63	109.10
7	AG	5	ARG	NE-CZ-NH2	-5.44	117.58	120.30
35	BA	121	G	C6-C5-N7	5.44	133.66	130.40
35	BA	1119	C	N3-C4-C5	-5.44	119.72	121.90
35	BA	1784	A	N1-C2-N3	5.44	132.02	129.30
35	BA	2456	C	C5-C6-N1	5.44	123.72	121.00
35	BA	2832	U	C4-C5-C6	-5.44	116.44	119.70
1	AA	140	A	N1-C2-N3	5.44	132.02	129.30
1	AA	191	G	C5-N7-C8	-5.44	101.58	104.30
1	AA	536	C	N3-C4-C5	-5.44	119.72	121.90
35	BA	521	G	C4-C5-C6	5.44	122.06	118.80
35	BA	582	G	O4'-C1'-N9	-5.44	103.85	108.20
35	BA	668	G	C6-C5-N7	-5.44	127.14	130.40
35	BA	980	A	N1-C6-N6	5.44	121.86	118.60
35	BA	1301	A	C5-N7-C8	-5.44	101.18	103.90
35	BA	2126	A	C5-C6-N6	-5.44	119.35	123.70
1	AA	175	C	C5-C6-N1	-5.44	118.28	121.00
1	AA	258	G	N1-C6-O6	-5.44	116.64	119.90
1	AA	500	G	N1-C2-N3	-5.44	120.64	123.90
1	AA	1266	G	C5-C6-N1	-5.44	108.78	111.50
35	BA	83	G	C1'-O4'-C4'	5.44	114.25	109.90
35	BA	1609	A	N9-C1'-C2'	5.44	121.07	114.00
35	BA	1935	G	C1'-O4'-C4'	5.44	114.25	109.90
35	BA	2757	A	N7-C8-N9	-5.44	111.08	113.80
45	BN	123	TYR	CB-CG-CD2	5.44	124.26	121.00
1	AA	1496	C	C6-N1-C2	-5.44	118.12	120.30
35	BA	478	A	N1-C6-N6	5.44	121.86	118.60
35	BA	1460	A	N1-C2-N3	5.44	132.02	129.30
35	BA	1619	G	N1-C6-O6	5.44	123.16	119.90
35	BA	2146	C	N1-C2-O2	5.44	122.16	118.90
35	BA	2525	G	N9-C4-C5	5.44	107.57	105.40
1	AA	998	G	N3-C4-N9	-5.43	122.74	126.00
35	BA	240	G	C8-N9-C4	-5.43	104.23	106.40
35	BA	377	C	C5-C4-N4	-5.43	116.40	120.20
35	BA	380	U	C5-C6-N1	5.43	125.42	122.70
35	BA	455	C	C5-C4-N4	-5.43	116.39	120.20
35	BA	1024	G	N3-C2-N2	-5.43	116.10	119.90
35	BA	1898	U	N3-C2-O2	-5.43	118.39	122.20
35	BA	2389	G	C5-C6-N1	-5.43	108.78	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2776	A	C6-C5-N7	5.43	136.10	132.30
36	BB	53	A	C2-N3-C4	5.43	113.32	110.60
1	AA	319	G	C6-N1-C2	-5.43	121.84	125.10
1	AA	1072	G	C5-C6-N1	-5.43	108.78	111.50
1	AA	1072	G	N1-C2-N3	-5.43	120.64	123.90
1	AA	1311	G	C5-N7-C8	5.43	107.02	104.30
35	BA	176	G	N7-C8-N9	5.43	115.82	113.10
35	BA	583	G	N3-C2-N2	-5.43	116.10	119.90
35	BA	1017	G	N9-C4-C5	-5.43	103.23	105.40
35	BA	1078	U	N1-C2-O2	5.43	126.60	122.80
35	BA	1696	G	N9-C1'-C2'	-5.43	106.02	112.00
35	BA	1753	G	N3-C4-C5	-5.43	125.88	128.60
35	BA	1891	G	N7-C8-N9	-5.43	110.38	113.10
35	BA	2396	G	N3-C4-C5	5.43	131.32	128.60
36	BB	50	G	N7-C8-N9	5.43	115.82	113.10
36	BB	54	G	C2-N3-C4	-5.43	109.18	111.90
36	BB	57	A	C1'-O4'-C4'	-5.43	105.55	109.90
51	BT	4	GLY	N-CA-C	-5.43	99.52	113.10
1	AA	50	A	C4-C5-C6	-5.43	114.28	117.00
1	AA	267	C	N1-C2-N3	5.43	123.00	119.20
1	AA	1263	C	N3-C4-N4	5.43	121.80	118.00
1	AA	1290	G	C5'-C4'-C3'	-5.43	107.31	116.00
35	BA	1310	G	C5'-C4'-C3'	5.43	124.69	116.00
1	AA	136	C	C5-C6-N1	-5.43	118.29	121.00
1	AA	725	G	N3-C4-N9	5.43	129.26	126.00
35	BA	207	A	O4'-C1'-N9	5.43	112.54	108.20
35	BA	636	G	C8-N9-C4	5.43	108.57	106.40
35	BA	1143	A	C5'-C4'-C3'	-5.43	107.31	116.00
35	BA	2556	C	C5'-C4'-O4'	5.43	115.62	109.10
35	BA	2891	G	N3-C4-N9	5.43	129.26	126.00
36	BB	114	C	N3-C4-C5	-5.43	119.73	121.90
1	AA	351	G	C3'-C2'-C1'	5.43	105.84	101.50
1	AA	616	G	C4-C5-N7	5.43	112.97	110.80
32	B7	35	ARG	NE-CZ-NH2	-5.43	117.59	120.30
35	BA	205	G	N3-C4-C5	-5.43	125.89	128.60
35	BA	881	G	N9-C4-C5	-5.43	103.23	105.40
35	BA	1896	G	N3-C4-N9	-5.43	122.74	126.00
35	BA	2642	G	N1-C6-O6	5.43	123.16	119.90
35	BA	2681	C	N3-C4-C5	5.43	124.07	121.90
1	AA	327	A	C8-N9-C4	-5.43	103.63	105.80
1	AA	428	G	C2'-C3'-O3'	5.43	122.38	113.70
1	AA	552	U	O4'-C1'-N1	5.43	112.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	372	G	N7-C8-N9	-5.43	110.39	113.10
35	BA	481	G	C5-N7-C8	5.43	107.01	104.30
35	BA	1196	C	N1-C2-O2	-5.43	115.64	118.90
35	BA	1224	C	N3-C4-N4	5.43	121.80	118.00
35	BA	1572	A	C4-C5-N7	-5.43	107.99	110.70
35	BA	1605	C	O4'-C1'-C2'	5.43	112.48	107.60
35	BA	1792	G	N3-C2-N2	-5.43	116.10	119.90
35	BA	2094	G	C8-N9-C4	5.43	108.57	106.40
35	BA	2371	G	O4'-C1'-N9	5.43	112.54	108.20
35	BA	2436	G	C2-N3-C4	5.43	114.61	111.90
1	AA	380	G	C5-C6-N1	-5.42	108.79	111.50
35	BA	627	A	C5-N7-C8	-5.42	101.19	103.90
35	BA	663	G	C6-C5-N7	-5.42	127.15	130.40
35	BA	964	C	C4-C5-C6	5.42	120.11	117.40
35	BA	1109	C	N3-C4-N4	5.42	121.80	118.00
35	BA	1477	A	O4'-C1'-C2'	5.42	112.48	107.60
36	BB	103	G	C5-C6-O6	-5.42	125.35	128.60
35	BA	223	A	N7-C8-N9	5.42	116.51	113.80
35	BA	1001	A	C6-N1-C2	5.42	121.85	118.60
1	AA	127	G	N9-C4-C5	-5.42	103.23	105.40
1	AA	1098	C	N3-C2-O2	5.42	125.69	121.90
20	AT	64	ASP	CB-CG-OD2	5.42	123.18	118.30
35	BA	378	C	N1-C2-O2	-5.42	115.65	118.90
35	BA	606	U	O4'-C4'-C3'	5.42	110.44	106.10
35	BA	621	A	N9-C4-C5	-5.42	103.63	105.80
35	BA	759	G	C5-C6-N1	5.42	114.21	111.50
35	BA	845	G	C3'-C2'-C1'	5.42	105.84	101.50
35	BA	1445(A)	C	N1-C2-O2	5.42	122.15	118.90
35	BA	1469	A	C4-C5-N7	-5.42	107.99	110.70
35	BA	2610	C	C3'-C2'-C1'	-5.42	97.16	101.50
1	AA	8	A	C4-C5-N7	5.42	113.41	110.70
1	AA	349	A	O4'-C1'-N9	5.42	112.54	108.20
1	AA	734	G	N3-C2-N2	5.42	123.69	119.90
1	AA	1327	C	N1-C2-O2	5.42	122.15	118.90
35	BA	1316	U	N3-C2-O2	-5.42	118.41	122.20
35	BA	1846	G	C4-C5-C6	5.42	122.05	118.80
35	BA	2589	A	N1-C2-N3	5.42	132.01	129.30
1	AA	67	C	N1-C2-O2	-5.42	115.65	118.90
1	AA	223	U	C4-C5-C6	-5.42	116.45	119.70
1	AA	256	U	P-O3'-C3'	5.42	126.20	119.70
1	AA	1106	G	N9-C4-C5	-5.42	103.23	105.40
1	AA	1374	A	N1-C2-N3	-5.42	126.59	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1430	C	C5-C6-N1	-5.42	118.29	121.00
35	BA	1440	G	C6-N1-C2	-5.42	121.85	125.10
35	BA	1484	G	C3'-C2'-C1'	-5.42	97.17	101.50
35	BA	1968	G	O5'-P-OP1	5.42	117.20	110.70
35	BA	2486	G	C5-C6-N1	-5.42	108.79	111.50
1	AA	150	C	C6-N1-C2	-5.42	118.13	120.30
1	AA	197	A	O4'-C1'-N9	5.42	112.53	108.20
1	AA	577	G	C5-N7-C8	5.42	107.01	104.30
1	AA	596	C	C6-N1-C2	5.42	122.47	120.30
1	AA	1209	C	N1-C1'-C2'	-5.42	106.04	112.00
19	AS	80	TYR	CG-CD2-CE2	5.42	125.63	121.30
35	BA	140	G	O4'-C4'-C3'	5.42	110.43	106.10
35	BA	189	G	C2-N3-C4	-5.42	109.19	111.90
35	BA	250	G	C8-N9-C4	-5.42	104.23	106.40
35	BA	573	G	C2-N3-C4	-5.42	109.19	111.90
35	BA	1069	A	N7-C8-N9	5.42	116.51	113.80
35	BA	1954	G	N3-C4-N9	5.42	129.25	126.00
35	BA	2761	G	N9-C4-C5	-5.42	103.23	105.40
1	AA	137	C	N3-C4-C5	5.42	124.07	121.90
1	AA	438	G	C3'-C2'-C1'	5.42	105.83	101.50
1	AA	1499	A	N9-C4-C5	5.42	107.97	105.80
35	BA	289	A	O4'-C1'-C2'	5.42	112.47	107.60
35	BA	1357	U	C5'-C4'-O4'	5.42	115.60	109.10
35	BA	1954	G	C5-C6-N1	5.42	114.21	111.50
1	AA	1212	U	C6-N1-C2	5.41	124.25	121.00
1	AA	1427	U	C4-C5-C6	5.41	122.95	119.70
35	BA	17	G	C2-N3-C4	5.41	114.61	111.90
35	BA	809	G	N3-C2-N2	5.41	123.69	119.90
35	BA	1645	G	C4-C5-N7	5.41	112.97	110.80
35	BA	2183	C	N1-C2-N3	-5.41	115.41	119.20
35	BA	2862	G	O4'-C1'-N9	5.41	112.53	108.20
51	BT	74	ARG	NE-CZ-NH2	5.41	123.01	120.30
1	AA	418	C	C5-C6-N1	-5.41	118.29	121.00
1	AA	1089	G	N1-C2-N2	-5.41	111.33	116.20
1	AA	1108	G	N3-C2-N2	-5.41	116.11	119.90
35	BA	132	G	C3'-C2'-C1'	5.41	105.83	101.50
35	BA	384	U	O4'-C1'-N1	5.41	112.53	108.20
35	BA	1105	U	C2-N3-C4	-5.41	123.75	127.00
35	BA	1516	C	C4-C5-C6	5.41	120.11	117.40
35	BA	1591	G	C8-N9-C4	-5.41	104.23	106.40
35	BA	2504	U	N3-C4-C5	-5.41	111.35	114.60
36	BB	3	C	C2-N1-C1'	5.41	124.75	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	267	C	N3-C2-O2	-5.41	118.11	121.90
1	AA	699	C	N1-C2-O2	-5.41	115.65	118.90
1	AA	917	G	N1-C2-N2	5.41	121.07	116.20
20	AT	22	ARG	NE-CZ-NH1	-5.41	117.59	120.30
35	BA	906	G	C4'-C3'-C2'	5.41	108.01	102.60
35	BA	911	A	N1-C6-N6	5.41	121.85	118.60
35	BA	1783	A	O5'-P-OP2	-5.41	100.83	105.70
35	BA	2393	A	C8-N9-C4	-5.41	103.64	105.80
35	BA	2561	A	C8-N9-C4	5.41	107.96	105.80
38	BD	260	ARG	NE-CZ-NH2	-5.41	117.59	120.30
1	AA	348	G	C2-N3-C4	-5.41	109.20	111.90
1	AA	489	C	C6-N1-C2	5.41	122.46	120.30
1	AA	1526	G	N9-C4-C5	-5.41	103.24	105.40
22	AV	20	U	N3-C4-O4	-5.41	115.61	119.40
35	BA	49	A	C4-C5-N7	5.41	113.40	110.70
35	BA	1193	G	C5-C6-N1	5.41	114.20	111.50
35	BA	1413	G	N1-C6-O6	-5.41	116.66	119.90
1	AA	852	G	C2-N3-C4	5.41	114.60	111.90
35	BA	428	A	C1'-O4'-C4'	-5.41	105.57	109.90
1	AA	636	U	C6-N1-C2	-5.41	117.76	121.00
1	AA	902	G	N3-C4-C5	5.41	131.30	128.60
1	AA	1303	C	C5'-C4'-O4'	5.41	115.59	109.10
35	BA	443	A	N1-C6-N6	5.41	121.84	118.60
35	BA	1131	G	N9-C1'-C2'	5.41	121.03	114.00
35	BA	1294	U	C5'-C4'-C3'	-5.41	107.35	116.00
35	BA	1930	G	C5-C6-O6	-5.41	125.36	128.60
35	BA	2147	G	C8-N9-C4	-5.41	104.24	106.40
22	AV	65	C	N3-C2-O2	5.40	125.68	121.90
35	BA	516	C	N1-C2-N3	5.40	122.98	119.20
35	BA	1403	C	C1'-O4'-C4'	-5.40	105.58	109.90
1	AA	563	A	N3-C4-N9	-5.40	123.08	127.40
1	AA	852	G	N3-C4-C5	-5.40	125.90	128.60
1	AA	999	C	C5-C6-N1	-5.40	118.30	121.00
1	AA	1248	A	C3'-C2'-C1'	5.40	105.82	101.50
1	AA	1433	A	C2-N3-C4	5.40	113.30	110.60
1	AA	1452	C	C6-N1-C2	-5.40	118.14	120.30
35	BA	589	C	C5-C4-N4	5.40	123.98	120.20
35	BA	763	G	N9-C4-C5	5.40	107.56	105.40
35	BA	978	G	O4'-C1'-N9	-5.40	103.88	108.20
35	BA	1272	A	C8-N9-C4	-5.40	103.64	105.80
39	BE	136	ARG	NE-CZ-NH2	-5.40	117.60	120.30
1	AA	236	G	C2-N3-C4	5.40	114.60	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	374	A	C4-C5-C6	-5.40	114.30	117.00
1	AA	1098	C	C5-C4-N4	-5.40	116.42	120.20
35	BA	613	G	O5'-P-OP1	-5.40	100.84	105.70
35	BA	872	A	C5-N7-C8	-5.40	101.20	103.90
35	BA	2316	C	N3-C4-N4	5.40	121.78	118.00
35	BA	74	A	N1-C6-N6	-5.40	115.36	118.60
35	BA	551	G	N3-C2-N2	-5.40	116.12	119.90
1	AA	390	C	C6-N1-C2	5.40	122.46	120.30
1	AA	553	A	C5-N7-C8	-5.40	101.20	103.90
35	BA	395	U	C5-C4-O4	-5.40	122.66	125.90
35	BA	1281	G	C2-N3-C4	-5.40	109.20	111.90
35	BA	2340	G	N3-C2-N2	5.40	123.68	119.90
35	BA	2484	G	N1-C6-O6	-5.40	116.66	119.90
42	BH	42	ARG	NE-CZ-NH1	5.40	123.00	120.30
1	AA	18	C	C5-C6-N1	-5.39	118.30	121.00
1	AA	115	G	C6-N1-C2	5.39	128.34	125.10
1	AA	605	U	C2-N3-C4	-5.39	123.76	127.00
35	BA	93	G	C5-N7-C8	-5.39	101.60	104.30
35	BA	141	A	C5-N7-C8	-5.39	101.20	103.90
35	BA	271(K)	U	C1'-O4'-C4'	-5.39	105.58	109.90
35	BA	1095	A	C4-C5-N7	5.39	113.40	110.70
35	BA	1616	A	N1-C2-N3	-5.39	126.60	129.30
35	BA	1624	G	N3-C4-C5	5.39	131.30	128.60
35	BA	1770	G	N7-C8-N9	5.39	115.80	113.10
1	AA	804	U	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	1024	G	O4'-C1'-N9	-5.39	103.89	108.20
2	AB	163	PHE	CB-CG-CD2	5.39	124.58	120.80
35	BA	2071	A	N1-C6-N6	-5.39	115.36	118.60
35	BA	2839	G	N3-C2-N2	-5.39	116.12	119.90
51	BT	64	ARG	NE-CZ-NH1	-5.39	117.60	120.30
1	AA	51	A	C5-N7-C8	5.39	106.59	103.90
1	AA	422	C	C1'-O4'-C4'	-5.39	105.59	109.90
1	AA	837	G	C4-C5-C6	5.39	122.03	118.80
35	BA	1373	A	C2-N3-C4	5.39	113.30	110.60
1	AA	27	G	C8-N9-C4	-5.39	104.24	106.40
1	AA	88	A	N1-C6-N6	5.39	121.83	118.60
1	AA	101	A	O4'-C1'-N9	5.39	112.51	108.20
1	AA	912	C	C5-C6-N1	5.39	123.69	121.00
1	AA	1157	A	N1-C6-N6	-5.39	115.37	118.60
35	BA	266	G	O4'-C1'-N9	5.39	112.51	108.20
35	BA	1569	A	C5'-C4'-O4'	5.39	115.57	109.10
35	BA	2811	G	N3-C4-C5	5.39	131.29	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2843	G	C5'-C4'-O4'	5.39	115.57	109.10
36	BB	52	A	C6-C5-N7	-5.39	128.53	132.30
42	BH	164	TYR	CB-CG-CD2	5.39	124.23	121.00
1	AA	424	G	C6-C5-N7	-5.39	127.17	130.40
1	AA	771	G	C4-C5-N7	-5.39	108.64	110.80
1	AA	1478	C	C2-N3-C4	5.39	122.59	119.90
35	BA	95	G	N1-C2-N3	-5.39	120.67	123.90
35	BA	1593	G	C5'-C4'-O4'	5.39	115.57	109.10
35	BA	1594	G	C6-C5-N7	5.39	133.63	130.40
35	BA	1747(A)	G	N1-C2-N3	5.39	127.13	123.90
35	BA	1843	C	C6-N1-C2	-5.39	118.14	120.30
1	AA	122	G	N9-C4-C5	5.39	107.55	105.40
1	AA	688	G	C1'-O4'-C4'	5.39	114.21	109.90
1	AA	1213	A	C5-N7-C8	5.39	106.59	103.90
35	BA	697	C	C5-C4-N4	5.39	123.97	120.20
35	BA	1625	C	N1-C2-O2	-5.39	115.67	118.90
35	BA	1896	G	O4'-C1'-N9	5.39	112.51	108.20
1	AA	457	C	C5-C6-N1	5.38	123.69	121.00
22	AV	18	G	C3'-C2'-C1'	5.38	105.81	101.50
35	BA	279	C	C5-C4-N4	5.38	123.97	120.20
35	BA	374	A	C1'-O4'-C4'	-5.38	105.59	109.90
35	BA	828	U	C5-C6-N1	5.38	125.39	122.70
35	BA	1142(A)	A	N3-C4-C5	5.38	130.57	126.80
35	BA	1842	G	C2-N3-C4	-5.38	109.21	111.90
35	BA	2043	C	C6-N1-C1'	-5.38	114.34	120.80
35	BA	2274	A	N9-C4-C5	5.38	107.95	105.80
1	AA	384	G	C6-N1-C2	-5.38	121.87	125.10
35	BA	330	A	N7-C8-N9	-5.38	111.11	113.80
35	BA	528	A	N9-C4-C5	5.38	107.95	105.80
35	BA	743	G	C5-C6-O6	-5.38	125.37	128.60
35	BA	940	G	O4'-C1'-N9	-5.38	103.89	108.20
35	BA	1952	A	C8-N9-C4	-5.38	103.65	105.80
1	AA	439	A	N7-C8-N9	5.38	116.49	113.80
1	AA	489	C	N1-C2-N3	-5.38	115.43	119.20
1	AA	573	A	C5'-C4'-O4'	5.38	115.56	109.10
1	AA	630	G	C2-N3-C4	-5.38	109.21	111.90
1	AA	1279	A	N9-C4-C5	5.38	107.95	105.80
18	AR	64	ARG	NE-CZ-NH1	5.38	122.99	120.30
25	B0	26	TYR	CZ-CE2-CD2	5.38	124.64	119.80
35	BA	545	C	N1-C1'-C2'	5.38	121.00	114.00
35	BA	991	C	C5-C4-N4	5.38	123.97	120.20
35	BA	1092	C	N3-C4-N4	-5.38	114.23	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1263	U	C5-C6-N1	-5.38	120.01	122.70
35	BA	2766	G	N9-C4-C5	5.38	107.55	105.40
1	AA	785	G	C5'-C4'-O4'	5.38	115.56	109.10
35	BA	748	G	C4-C5-N7	5.38	112.95	110.80
35	BA	961	C	OP1-P-O3'	5.38	117.04	105.20
35	BA	2821	A	C5-C6-N1	-5.38	115.01	117.70
1	AA	162	A	N7-C8-N9	5.38	116.49	113.80
17	AQ	92	ARG	NE-CZ-NH2	-5.38	117.61	120.30
22	AV	12	G	N3-C4-N9	5.38	129.23	126.00
23	AX	11	U	C6-N1-C1'	-5.38	113.67	121.20
35	BA	71	A	C6-C5-N7	5.38	136.06	132.30
35	BA	1045	A	N1-C2-N3	5.38	131.99	129.30
35	BA	1156	A	C2-N3-C4	5.38	113.29	110.60
35	BA	1422	G	N9-C4-C5	-5.38	103.25	105.40
35	BA	1818	U	N1-C1'-C2'	5.38	120.99	114.00
35	BA	2099	U	N3-C2-O2	5.38	125.97	122.20
35	BA	2430	A	N7-C8-N9	5.38	116.49	113.80
35	BA	2796	U	C4-C5-C6	5.38	122.93	119.70
35	BA	2832	U	N3-C4-C5	5.38	117.83	114.60
37	BC	24	ASP	CB-CG-OD1	-5.38	113.46	118.30
1	AA	531	U	C5-C4-O4	-5.38	122.67	125.90
1	AA	537	G	C4-C5-N7	5.38	112.95	110.80
1	AA	610	G	N3-C4-C5	5.38	131.29	128.60
35	BA	514	A	C3'-C2'-C1'	-5.38	97.20	101.50
35	BA	688	U	N3-C4-O4	-5.38	115.64	119.40
35	BA	789	A	C8-N9-C4	-5.38	103.65	105.80
35	BA	1182	A	C2-N3-C4	-5.38	107.91	110.60
35	BA	1224	C	C5-C4-N4	-5.38	116.44	120.20
35	BA	1633	G	C5-C6-O6	-5.38	125.37	128.60
35	BA	2010	G	N3-C4-N9	5.38	129.23	126.00
35	BA	2365	G	N1-C6-O6	5.38	123.13	119.90
35	BA	2642	G	C5-C6-N1	-5.38	108.81	111.50
35	BA	2801	A	C3'-C2'-C1'	5.38	105.80	101.50
35	BA	2848	G	C6-N1-C2	5.38	128.33	125.10
1	AA	526	C	C1'-O4'-C4'	-5.38	105.60	109.90
1	AA	927	G	C1'-O4'-C4'	5.38	114.20	109.90
1	AA	1228	C	N3-C2-O2	5.38	125.66	121.90
1	AA	1312	G	C5-C6-O6	5.38	131.82	128.60
35	BA	271	A	C6-C5-N7	5.38	136.06	132.30
35	BA	398	G	C5-C6-N1	5.38	114.19	111.50
35	BA	538	G	C8-N9-C4	-5.38	104.25	106.40
35	BA	639	U	N1-C2-O2	-5.38	119.04	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1213	A	C5-N7-C8	5.38	106.59	103.90
1	AA	679	C	N1-C2-O2	-5.37	115.68	118.90
1	AA	794	A	C2-N3-C4	-5.37	107.91	110.60
1	AA	946	A	N1-C2-N3	-5.37	126.61	129.30
1	AA	1376	U	C4-C5-C6	-5.37	116.48	119.70
35	BA	175	G	C5'-C4'-C3'	5.37	124.60	116.00
35	BA	211	A	C6-C5-N7	5.37	136.06	132.30
35	BA	222	A	C6-N1-C2	-5.37	115.38	118.60
35	BA	249	C	N1-C1'-C2'	5.37	120.98	114.00
35	BA	543	C	C4-C5-C6	-5.37	114.71	117.40
35	BA	654(J)	A	O4'-C1'-N9	5.37	112.50	108.20
35	BA	1203	G	N3-C4-C5	-5.37	125.91	128.60
35	BA	1720	U	C5-C4-O4	5.37	129.12	125.90
35	BA	2658	C	N3-C4-C5	5.37	124.05	121.90
35	BA	2694	G	N9-C4-C5	-5.37	103.25	105.40
1	AA	1001(A)	G	N9-C4-C5	-5.37	103.25	105.40
1	AA	1369	C	O4'-C1'-N1	5.37	112.50	108.20
35	BA	211	A	C5-N7-C8	5.37	106.58	103.90
35	BA	977	G	C5-N7-C8	5.37	106.98	104.30
35	BA	1309	G	C5-C6-O6	-5.37	125.38	128.60
35	BA	1406	U	C5-C6-N1	5.37	125.39	122.70
35	BA	2040	C	C6-N1-C2	-5.37	118.15	120.30
35	BA	2203	U	C6-N1-C2	-5.37	117.78	121.00
1	AA	501	C	C6-N1-C2	-5.37	118.15	120.30
1	AA	565	U	C5-C4-O4	5.37	129.12	125.90
1	AA	780	A	C5-N7-C8	-5.37	101.22	103.90
1	AA	943	U	C5-C6-N1	5.37	125.39	122.70
1	AA	968	A	O4'-C1'-N9	-5.37	103.90	108.20
35	BA	481	G	O4'-C1'-N9	5.37	112.50	108.20
35	BA	983	A	C8-N9-C4	5.37	107.95	105.80
35	BA	1124	C	C2-N3-C4	-5.37	117.22	119.90
1	AA	687	A	O4'-C1'-N9	5.37	112.49	108.20
1	AA	877	C	O4'-C1'-N1	5.37	112.49	108.20
1	AA	1133	G	N7-C8-N9	5.37	115.78	113.10
1	AA	1170	A	C6-N1-C2	5.37	121.82	118.60
1	AA	1256	A	C6-N1-C2	5.37	121.82	118.60
35	BA	112	U	C4-C5-C6	-5.37	116.48	119.70
35	BA	230	U	O4'-C1'-N1	-5.37	103.91	108.20
35	BA	766	C	C4-C5-C6	5.37	120.08	117.40
35	BA	866	A	N1-C2-N3	5.37	131.99	129.30
35	BA	1214	A	C2-N3-C4	5.37	113.28	110.60
35	BA	1570	A	C8-N9-C4	-5.37	103.65	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1748	G	C4-C5-C6	5.37	122.02	118.80
35	BA	2843	G	C2-N3-C4	-5.37	109.22	111.90
1	AA	728	A	O4'-C1'-N9	-5.37	103.91	108.20
30	B5	55	ARG	NE-CZ-NH2	-5.37	117.62	120.30
35	BA	654(L)	G	C1'-O4'-C4'	-5.37	105.61	109.90
35	BA	1346	G	O4'-C1'-N9	5.37	112.49	108.20
35	BA	1660	C	N3-C4-C5	-5.37	119.75	121.90
35	BA	2730	C	C4-C5-C6	-5.37	114.72	117.40
35	BA	389	G	C5-C6-N1	5.37	114.18	111.50
35	BA	916	G	N3-C2-N2	5.37	123.66	119.90
35	BA	1719	G	C2-N3-C4	-5.37	109.22	111.90
35	BA	2122	U	C5-C4-O4	5.37	129.12	125.90
35	BA	2781	A	C4'-C3'-C2'	5.37	107.97	102.60
1	AA	183	G	N3-C4-N9	-5.36	122.78	126.00
1	AA	533	A	C2'-C3'-O3'	5.36	122.28	113.70
1	AA	790	A	N9-C4-C5	-5.36	103.65	105.80
1	AA	1073	U	C5-C6-N1	-5.36	120.02	122.70
1	AA	1447	A	C5-N7-C8	-5.36	101.22	103.90
35	BA	61	G	N7-C8-N9	5.36	115.78	113.10
35	BA	271(V)	G	C8-N9-C4	5.36	108.55	106.40
35	BA	443	A	N7-C8-N9	-5.36	111.12	113.80
35	BA	614	U	C4-C5-C6	-5.36	116.48	119.70
35	BA	1564	C	N3-C2-O2	5.36	125.65	121.90
35	BA	2029	G	C4-C5-N7	5.36	112.95	110.80
35	BA	2433	A	N9-C4-C5	5.36	107.94	105.80
35	BA	2766	G	C5-C6-N1	5.36	114.18	111.50
15	AO	88	ARG	NE-CZ-NH1	-5.36	117.62	120.30
35	BA	94	C	C5-C6-N1	-5.36	118.32	121.00
35	BA	195	A	N1-C6-N6	-5.36	115.38	118.60
35	BA	853	G	C5-N7-C8	-5.36	101.62	104.30
35	BA	2481	G	O4'-C1'-N9	-5.36	103.91	108.20
1	AA	633	G	C4-C5-N7	5.36	112.94	110.80
1	AA	801	U	C5-C4-O4	5.36	129.12	125.90
1	AA	820	U	C3'-C2'-C1'	-5.36	97.21	101.50
22	AV	72	A	C6-C5-N7	5.36	136.05	132.30
33	B8	4	MET	O-C-N	5.36	131.28	122.70
35	BA	386	G	N1-C2-N3	5.36	127.12	123.90
35	BA	784	A	N9-C4-C5	5.36	107.94	105.80
35	BA	998	C	N3-C4-C5	5.36	124.05	121.90
35	BA	1400	G	C4-C5-C6	-5.36	115.58	118.80
35	BA	2771	C	C5-C4-N4	-5.36	116.45	120.20
1	AA	121	C	O4'-C1'-N1	-5.36	103.91	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1051	C	C6-N1-C2	-5.36	118.16	120.30
35	BA	33	U	C5-C6-N1	-5.36	120.02	122.70
35	BA	260	G	C2-N3-C4	-5.36	109.22	111.90
35	BA	426	C	C3'-C2'-C1'	5.36	105.79	101.50
35	BA	1097	U	C5-C4-O4	-5.36	122.69	125.90
35	BA	2712	U	N3-C4-C5	5.36	117.81	114.60
1	AA	189(B)	C	C2-N3-C4	-5.36	117.22	119.90
1	AA	727	G	C5-C6-N1	5.36	114.18	111.50
1	AA	1489	G	O4'-C1'-N9	-5.36	103.92	108.20
35	BA	38	A	N9-C4-C5	-5.36	103.66	105.80
35	BA	1445	A	N1-C2-N3	5.36	131.98	129.30
35	BA	2094	G	N3-C2-N2	-5.36	116.15	119.90
35	BA	2738	A	C8-N9-C4	5.36	107.94	105.80
36	BB	119	G	C8-N9-C4	5.36	108.54	106.40
39	BE	113	PHE	CB-CG-CD1	5.36	124.55	120.80
1	AA	1272	G	C8-N9-C4	-5.36	104.26	106.40
35	BA	654(D)	G	C5-C6-N1	-5.36	108.82	111.50
35	BA	745	G	N9-C1'-C2'	5.36	120.96	114.00
35	BA	1025	G	C4-C5-N7	-5.36	108.66	110.80
35	BA	1112	G	N9-C4-C5	-5.36	103.26	105.40
35	BA	1269	A	N3-C4-C5	5.36	130.55	126.80
35	BA	1298	C	C5-C6-N1	5.36	123.68	121.00
35	BA	2330	G	N3-C2-N2	-5.36	116.15	119.90
35	BA	2645	G	C5'-C4'-C3'	-5.36	107.43	116.00
35	BA	2698	U	N3-C2-O2	-5.36	118.45	122.20
40	BF	165	ARG	NE-CZ-NH2	-5.36	117.62	120.30
1	AA	70	G	N1-C2-N2	5.35	121.02	116.20
35	BA	510	C	C2-N3-C4	5.35	122.58	119.90
35	BA	699	A	N9-C4-C5	-5.35	103.66	105.80
35	BA	1314	C	C5-C6-N1	5.35	123.68	121.00
35	BA	1757	U	C2-N3-C4	5.35	130.21	127.00
35	BA	2141	G	C5'-C4'-O4'	5.35	115.53	109.10
35	BA	2162	G	N1-C2-N2	-5.35	111.38	116.20
35	BA	2552	U	C5-C4-O4	-5.35	122.69	125.90
36	BB	1	U	N1-C2-O2	5.35	126.55	122.80
40	BF	7	TYR	CG-CD2-CE2	5.35	125.58	121.30
57	BZ	183	LEU	CA-CB-CG	-5.35	102.98	115.30
1	AA	40	C	N3-C4-N4	5.35	121.75	118.00
35	BA	1167	U	P-O5'-C5'	-5.35	112.34	120.90
35	BA	1253	A	N9-C4-C5	-5.35	103.66	105.80
35	BA	1980	G	N3-C4-C5	-5.35	125.92	128.60
35	BA	2117	A	C5'-C4'-O4'	-5.35	102.68	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2144	U	C2-N3-C4	-5.35	123.79	127.00
35	BA	2333	A	C6-C5-N7	-5.35	128.55	132.30
1	AA	642	A	C6-N1-C2	-5.35	115.39	118.60
35	BA	251	A	N3-C4-C5	5.35	130.55	126.80
35	BA	1075	C	C6-N1-C2	-5.35	118.16	120.30
35	BA	1760	A	N9-C4-C5	5.35	107.94	105.80
35	BA	1900	A	C6-C5-N7	5.35	136.05	132.30
35	BA	2193	G	C4-C5-N7	-5.35	108.66	110.80
1	AA	185	A	C4-C5-C6	5.35	119.67	117.00
1	AA	487	A	C2-N3-C4	5.35	113.28	110.60
1	AA	606	G	N3-C2-N2	-5.35	116.16	119.90
1	AA	711	G	C6-N1-C2	-5.35	121.89	125.10
1	AA	796	C	C5'-C4'-O4'	5.35	115.52	109.10
1	AA	1021	G	N1-C2-N2	-5.35	111.39	116.20
1	AA	1405	G	C6-N1-C2	5.35	128.31	125.10
35	BA	82	G	C4-C5-N7	-5.35	108.66	110.80
35	BA	437	G	N3-C4-N9	-5.35	122.79	126.00
35	BA	748	G	C8-N9-C4	-5.35	104.26	106.40
35	BA	1005	C	N3-C4-N4	-5.35	114.25	118.00
35	BA	1274	A	N1-C6-N6	5.35	121.81	118.60
35	BA	1697	G	C4-C5-N7	-5.35	108.66	110.80
35	BA	1764	G	C5-N7-C8	5.35	106.97	104.30
1	AA	639	G	C6-N1-C2	-5.35	121.89	125.10
1	AA	727	G	N3-C4-N9	5.35	129.21	126.00
1	AA	1223	C	O4'-C1'-N1	5.35	112.48	108.20
1	AA	1412	C	OP2-P-O3'	5.35	116.96	105.20
1	AA	1444	C	C6-N1-C2	5.35	122.44	120.30
35	BA	924	C	O4'-C1'-N1	-5.35	103.92	108.20
35	BA	972	G	C6-N1-C2	-5.35	121.89	125.10
35	BA	1048	A	C4-C5-N7	5.35	113.37	110.70
35	BA	1343	G	C6-C5-N7	-5.35	127.19	130.40
35	BA	1501	C	C2-N1-C1'	5.35	124.68	118.80
35	BA	1593	G	C1'-O4'-C4'	5.35	114.18	109.90
35	BA	2260	C	C4-C5-C6	-5.35	114.73	117.40
35	BA	2318	G	C4-C5-N7	-5.35	108.66	110.80
35	BA	2778	A	N3-C4-C5	-5.35	123.06	126.80
35	BA	974	G	C4-C5-N7	-5.35	108.66	110.80
57	BZ	38	TYR	CB-CG-CD1	5.35	124.21	121.00
1	AA	418	C	C5'-C4'-O4'	5.34	115.51	109.10
1	AA	428	G	C5'-C4'-C3'	-5.34	107.45	116.00
1	AA	915	A	C6-C5-N7	5.34	136.04	132.30
24	AY	102	ASP	CB-CG-OD1	-5.34	113.49	118.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1902	C	N1-C2-O2	5.34	122.11	118.90
35	BA	2033	A	O4'-C1'-C2'	5.34	112.41	107.60
35	BA	2507	C	C4-C5-C6	5.34	120.07	117.40
36	BB	76	G	C8-N9-C4	-5.34	104.26	106.40
35	BA	244	A	C6-N1-C2	5.34	121.81	118.60
35	BA	861	A	N1-C2-N3	-5.34	126.63	129.30
35	BA	2029	G	N1-C2-N3	5.34	127.11	123.90
35	BA	2701	C	O4'-C1'-N1	-5.34	103.92	108.20
1	AA	118	U	N3-C4-C5	5.34	117.80	114.60
1	AA	219	C	N3-C4-C5	-5.34	119.76	121.90
1	AA	484	G	C5-N7-C8	5.34	106.97	104.30
1	AA	952	U	C4-C5-C6	-5.34	116.50	119.70
1	AA	1329	A	N1-C6-N6	5.34	121.81	118.60
35	BA	1457	A	N1-C6-N6	5.34	121.81	118.60
1	AA	986	A	C4-C5-N7	5.34	113.37	110.70
22	AV	67	C	C6-N1-C2	-5.34	118.16	120.30
35	BA	301	G	C5-N7-C8	-5.34	101.63	104.30
35	BA	904	C	C2-N3-C4	5.34	122.57	119.90
35	BA	1179	C	C2-N3-C4	-5.34	117.23	119.90
35	BA	1259	G	C2-N3-C4	5.34	114.57	111.90
35	BA	1414	G	O4'-C1'-N9	-5.34	103.93	108.20
35	BA	1803	A	C4-C5-C6	-5.34	114.33	117.00
35	BA	1877	A	C2-N3-C4	-5.34	107.93	110.60
35	BA	2832	U	C5-C6-N1	5.34	125.37	122.70
40	BF	191	ARG	NE-CZ-NH1	-5.34	117.63	120.30
1	AA	732	C	C5-C6-N1	5.34	123.67	121.00
1	AA	751	U	C5-C6-N1	-5.34	120.03	122.70
1	AA	957	U	C5-C6-N1	-5.34	120.03	122.70
1	AA	1045	C	C4-C5-C6	5.34	120.07	117.40
1	AA	1183	A	C2-N3-C4	5.34	113.27	110.60
33	B8	32	LEU	CA-CB-CG	5.34	127.58	115.30
35	BA	517	C	C5-C6-N1	5.34	123.67	121.00
35	BA	614(A)	U	P-O3'-C3'	5.34	126.11	119.70
35	BA	1446	C	C5-C6-N1	-5.34	118.33	121.00
35	BA	1798	U	N1-C2-N3	-5.34	111.70	114.90
35	BA	1100	C	N3-C2-O2	-5.34	118.17	121.90
35	BA	1106	G	N7-C8-N9	-5.34	110.43	113.10
35	BA	1714	G	C4-C5-N7	-5.34	108.67	110.80
35	BA	1821	A	C8-N9-C4	-5.34	103.67	105.80
35	BA	1958	C	N3-C2-O2	-5.34	118.16	121.90
35	BA	2132	U	N3-C4-C5	-5.34	111.40	114.60
35	BA	2329	G	N3-C2-N2	-5.34	116.16	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	9	G	C5-C6-O6	-5.33	125.40	128.60
35	BA	428	A	N3-C4-N9	-5.33	123.13	127.40
35	BA	817	C	O4'-C1'-N1	-5.33	103.93	108.20
35	BA	1311	G	N3-C4-C5	-5.33	125.93	128.60
35	BA	2581	G	N1-C6-O6	5.33	123.10	119.90
1	AA	419	C	C5-C6-N1	5.33	123.67	121.00
1	AA	856	C	C4-C5-C6	5.33	120.07	117.40
1	AA	948	C	N3-C2-O2	-5.33	118.17	121.90
1	AA	974	A	C4-C5-C6	5.33	119.67	117.00
35	BA	157	U	N1-C2-N3	-5.33	111.70	114.90
35	BA	654(N)	G	N9-C4-C5	5.33	107.53	105.40
35	BA	755	C	N1-C2-O2	5.33	122.10	118.90
35	BA	1443	G	N1-C2-N2	5.33	121.00	116.20
35	BA	1858	G	N7-C8-N9	5.33	115.77	113.10
35	BA	2062	A	N1-C2-N3	5.33	131.97	129.30
35	BA	2342	C	N1-C2-N3	5.33	122.93	119.20
36	BB	106	G	C5-C6-N1	5.33	114.17	111.50
35	BA	271(X)	G	C6-C5-N7	5.33	133.60	130.40
35	BA	323	G	C8-N9-C4	-5.33	104.27	106.40
35	BA	377	C	C5-C6-N1	-5.33	118.33	121.00
35	BA	419	C	N1-C2-N3	-5.33	115.47	119.20
35	BA	935	C	C1'-O4'-C4'	-5.33	105.63	109.90
35	BA	1157	G	N7-C8-N9	-5.33	110.44	113.10
35	BA	1236	G	C8-N9-C4	-5.33	104.27	106.40
35	BA	1466	G	C8-N9-C4	-5.33	104.27	106.40
35	BA	2238	G	C4-C5-N7	5.33	112.93	110.80
35	BA	2683	C	C2-N3-C4	-5.33	117.23	119.90
35	BA	2729	G	C4-C5-C6	5.33	122.00	118.80
35	BA	2738	A	N9-C4-C5	-5.33	103.67	105.80
36	BB	54	G	C6-N1-C2	5.33	128.30	125.10
1	AA	53	A	O4'-C1'-N9	5.33	112.46	108.20
1	AA	150	C	N1-C1'-C2'	5.33	120.93	114.00
1	AA	197	A	C8-N9-C4	-5.33	103.67	105.80
1	AA	696	A	O4'-C1'-N9	5.33	112.46	108.20
35	BA	1889	A	N7-C8-N9	5.33	116.47	113.80
35	BA	2317	C	OP2-P-O3'	5.33	116.93	105.20
35	BA	2388	A	C5-N7-C8	-5.33	101.23	103.90
35	BA	2547	U	C5-C6-N1	5.33	125.36	122.70
35	BA	2813	A	C6-N1-C2	-5.33	115.40	118.60
35	BA	2851	A	C5-C6-N1	-5.33	115.03	117.70
36	BB	103	G	C6-N1-C2	-5.33	121.90	125.10
1	AA	431	A	C2-N3-C4	5.33	113.26	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	954	G	N1-C2-N2	5.33	121.00	116.20
1	AA	1030(C)	G	N1-C2-N2	-5.33	111.41	116.20
1	AA	1060	C	C4-C5-C6	5.33	120.06	117.40
22	AV	68	C	N1-C2-N3	5.33	122.93	119.20
35	BA	426	C	C5-C6-N1	5.33	123.67	121.00
35	BA	552	G	N3-C4-C5	5.33	131.26	128.60
35	BA	658	C	N3-C4-N4	-5.33	114.27	118.00
35	BA	805	G	C4-C5-N7	5.33	112.93	110.80
35	BA	944	G	N9-C1'-C2'	5.33	120.93	114.00
35	BA	2119	A	N7-C8-N9	-5.33	111.14	113.80
35	BA	2472	G	C6-N1-C2	5.33	128.30	125.10
41	BG	147	ASP	CB-CG-OD2	-5.33	113.50	118.30
53	BV	60	GLU	OE1-CD-OE2	-5.33	116.91	123.30
1	AA	562	C	C5'-C4'-O4'	-5.33	102.71	109.10
1	AA	1356	G	N3-C2-N2	5.33	123.63	119.90
35	BA	73	A	C3'-C2'-C1'	5.33	105.76	101.50
35	BA	1630	G	C8-N9-C4	5.33	108.53	106.40
35	BA	2239	G	C5-C6-O6	-5.33	125.40	128.60
35	BA	2509	G	C3'-C2'-C1'	-5.33	97.24	101.50
1	AA	667	G	C5-C6-O6	-5.33	125.40	128.60
35	BA	12	U	C5-C4-O4	5.33	129.09	125.90
35	BA	143(A)	C	C2-N3-C4	5.33	122.56	119.90
35	BA	501	A	C8-N9-C4	-5.33	103.67	105.80
35	BA	827	U	O5'-P-OP1	5.33	117.09	110.70
35	BA	915	C	O4'-C1'-N1	5.33	112.46	108.20
35	BA	917	A	N1-C2-N3	-5.33	126.64	129.30
35	BA	1011	G	C4-C5-N7	5.33	112.93	110.80
35	BA	1296	G	O4'-C1'-N9	-5.33	103.94	108.20
35	BA	2289	G	C5-C6-O6	-5.33	125.41	128.60
1	AA	392	G	N3-C4-N9	5.32	129.19	126.00
1	AA	735	C	C2'-C3'-O3'	5.32	122.22	113.70
1	AA	1175	G	N1-C6-O6	5.32	123.09	119.90
1	AA	1204	A	C5-N7-C8	5.32	106.56	103.90
35	BA	289	A	C5-C6-N1	-5.32	115.04	117.70
35	BA	979	G	N1-C6-O6	-5.32	116.71	119.90
35	BA	1032	A	C6-N1-C2	-5.32	115.41	118.60
35	BA	1060	U	N3-C2-O2	5.32	125.93	122.20
35	BA	1529	G	C8-N9-C4	5.32	108.53	106.40
35	BA	1864	U	C5'-C4'-C3'	-5.32	107.48	116.00
35	BA	2102	U	C4-C5-C6	-5.32	116.51	119.70
1	AA	178	C	C5-C6-N1	5.32	123.66	121.00
1	AA	267	C	O4'-C1'-N1	-5.32	103.94	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	709	G	C6-N1-C2	-5.32	121.91	125.10
35	BA	2389	G	C4-C5-N7	-5.32	108.67	110.80
35	BA	2500	U	O4'-C1'-N1	5.32	112.46	108.20
1	AA	28	G	N3-C4-C5	5.32	131.26	128.60
1	AA	88	A	C4-C5-N7	-5.32	108.04	110.70
1	AA	398	C	C2-N3-C4	5.32	122.56	119.90
1	AA	491	G	N1-C2-N3	5.32	127.09	123.90
1	AA	664	G	OP2-P-O3'	5.32	116.91	105.20
1	AA	676	A	O4'-C1'-N9	5.32	112.46	108.20
1	AA	1087	G	C4-C5-N7	-5.32	108.67	110.80
24	AY	151	ARG	NE-CZ-NH1	-5.32	117.64	120.30
35	BA	985	C	N1-C2-N3	5.32	122.92	119.20
35	BA	1510	G	C5-N7-C8	-5.32	101.64	104.30
35	BA	1609	A	N1-C2-N3	5.32	131.96	129.30
36	BB	78	A	C5-C6-N1	5.32	120.36	117.70
1	AA	386	C	N3-C4-C5	-5.32	119.77	121.90
1	AA	1049	U	OP2-P-O3'	5.32	116.90	105.20
1	AA	1320	C	N3-C4-C5	-5.32	119.77	121.90
22	AV	31	G	C5-C6-N1	5.32	114.16	111.50
35	BA	124	G	C4-C5-N7	-5.32	108.67	110.80
35	BA	1224	C	C2-N3-C4	-5.32	117.24	119.90
35	BA	1544	A	N7-C8-N9	-5.32	111.14	113.80
35	BA	1719	G	C4-C5-N7	5.32	112.93	110.80
35	BA	2597	G	N3-C4-N9	5.32	129.19	126.00
36	BB	36	C	C2-N3-C4	5.32	122.56	119.90
1	AA	548	G	O5'-P-OP1	-5.32	100.92	105.70
1	AA	900	A	C4'-C3'-C2'	5.32	107.92	102.60
1	AA	963	G	C4-N9-C1'	5.32	133.41	126.50
1	AA	1105	A	N7-C8-N9	5.32	116.46	113.80
1	AA	1428	A	N9-C4-C5	5.32	107.93	105.80
10	AJ	63	PHE	CB-CG-CD2	5.32	124.52	120.80
35	BA	97	C	C6-N1-C2	5.32	122.43	120.30
35	BA	805	G	C2-N3-C4	-5.32	109.24	111.90
35	BA	943	U	N3-C2-O2	5.32	125.92	122.20
35	BA	1400	G	N3-C4-N9	-5.32	122.81	126.00
35	BA	1827	C	N1-C2-O2	-5.32	115.71	118.90
35	BA	2267	A	C6-N1-C2	5.32	121.79	118.60
1	AA	544	G	N3-C4-C5	5.32	131.26	128.60
1	AA	672	U	O4'-C1'-N1	5.32	112.45	108.20
1	AA	946	A	C4-C5-C6	-5.32	114.34	117.00
21	AU	22	ARG	NE-CZ-NH2	-5.32	117.64	120.30
29	B4	5	ILE	CB-CA-C	-5.32	100.97	111.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	66	C	N3-C2-O2	5.32	125.62	121.90
35	BA	290	G	N3-C4-C5	-5.32	125.94	128.60
35	BA	1026	U	C6-N1-C2	-5.32	117.81	121.00
35	BA	1791	A	N1-C2-N3	-5.32	126.64	129.30
45	BN	124	ALA	N-CA-CB	-5.32	102.66	110.10
1	AA	1109	C	C4'-C3'-C2'	-5.31	97.29	102.60
1	AA	168	G	N1-C2-N2	5.31	120.98	116.20
1	AA	247	G	N1-C2-N2	-5.31	111.42	116.20
1	AA	658	G	C6-N1-C2	-5.31	121.91	125.10
1	AA	1022	G	C3'-C2'-C1'	-5.31	97.25	101.50
35	BA	763	G	C4-C5-N7	-5.31	108.67	110.80
35	BA	1599	C	C6-N1-C2	-5.31	118.17	120.30
35	BA	1921	G	C5-C6-N1	5.31	114.16	111.50
35	BA	2229	C	C5'-C4'-O4'	-5.31	102.72	109.10
35	BA	2561	A	C5-N7-C8	5.31	106.56	103.90
35	BA	2624	G	C4'-C3'-C2'	-5.31	97.29	102.60
1	AA	1249	C	C2-N3-C4	-5.31	117.25	119.90
1	AA	1297	C	N1-C2-O2	-5.31	115.71	118.90
35	BA	254	G	C8-N9-C4	-5.31	104.28	106.40
36	BB	29	A	C5-N7-C8	5.31	106.56	103.90
1	AA	1293	G	N7-C8-N9	5.31	115.75	113.10
1	AA	1503	A	O5'-P-OP1	-5.31	100.92	105.70
8	AH	104	ARG	NE-CZ-NH1	-5.31	117.64	120.30
35	BA	282	A	C6-N1-C2	-5.31	115.42	118.60
35	BA	1033	U	C4-C5-C6	-5.31	116.51	119.70
35	BA	1055	G	O4'-C1'-N9	-5.31	103.95	108.20
35	BA	1084	A	N9-C4-C5	-5.31	103.68	105.80
35	BA	1219	G	N1-C6-O6	5.31	123.08	119.90
35	BA	1380	G	C6-N1-C2	-5.31	121.91	125.10
35	BA	2498	C	C2-N3-C4	-5.31	117.25	119.90
35	BA	2773	C	N3-C4-C5	-5.31	119.78	121.90
1	AA	72	C	C6-N1-C2	-5.31	118.18	120.30
1	AA	594	G	N1-C2-N2	-5.31	111.42	116.20
1	AA	617	G	N9-C4-C5	-5.31	103.28	105.40
1	AA	1024	G	N9-C1'-C2'	5.31	120.90	114.00
1	AA	1033	G	O4'-C1'-N9	5.31	112.45	108.20
12	AL	113	ARG	CD-NE-CZ	5.31	131.03	123.60
35	BA	351	G	N7-C8-N9	5.31	115.75	113.10
35	BA	1243	G	N3-C4-C5	5.31	131.25	128.60
35	BA	2768	C	C2-N3-C4	-5.31	117.25	119.90
35	BA	2768	C	C6-N1-C2	-5.31	118.18	120.30
35	BA	970	C	C5-C4-N4	-5.31	116.49	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	116	A	N9-C4-C5	-5.30	103.68	105.80
1	AA	475	G	C4-C5-C6	5.30	121.98	118.80
1	AA	499	A	O4'-C1'-N9	5.30	112.44	108.20
1	AA	1242	C	O4'-C1'-N1	5.30	112.44	108.20
35	BA	114	U	C1'-O4'-C4'	-5.30	105.66	109.90
35	BA	312	G	N3-C4-N9	-5.30	122.82	126.00
35	BA	658	C	C2-N3-C4	-5.30	117.25	119.90
35	BA	1480	G	N3-C4-C5	-5.30	125.95	128.60
35	BA	2372	G	O4'-C1'-N9	-5.30	103.96	108.20
1	AA	33	A	C5'-C4'-C3'	-5.30	107.51	116.00
1	AA	431	A	N3-C4-C5	-5.30	123.09	126.80
1	AA	1115	C	N3-C4-N4	5.30	121.71	118.00
35	BA	21	A	O4'-C1'-N9	-5.30	103.96	108.20
35	BA	591	C	C2-N3-C4	5.30	122.55	119.90
35	BA	2072	G	O4'-C1'-N9	-5.30	103.96	108.20
35	BA	2162	G	C5-C6-O6	-5.30	125.42	128.60
57	BZ	49	ARG	NE-CZ-NH1	-5.30	117.65	120.30
1	AA	475	G	N3-C4-C5	-5.30	125.95	128.60
1	AA	496	A	O4'-C1'-N9	-5.30	103.96	108.20
1	AA	537	G	N1-C2-N3	-5.30	120.72	123.90
1	AA	683	G	N1-C2-N3	5.30	127.08	123.90
1	AA	701	C	N3-C4-C5	5.30	124.02	121.90
1	AA	1061	G	N1-C2-N3	-5.30	120.72	123.90
1	AA	1356	G	N7-C8-N9	5.30	115.75	113.10
35	BA	154(A)	C	C6-N1-C2	5.30	122.42	120.30
35	BA	338	G	N7-C8-N9	-5.30	110.45	113.10
35	BA	624	C	C2-N3-C4	-5.30	117.25	119.90
35	BA	1556	C	C1'-O4'-C4'	-5.30	105.66	109.90
35	BA	2527	C	N1-C2-O2	-5.30	115.72	118.90
35	BA	2749	A	C8-N9-C4	-5.30	103.68	105.80
1	AA	274	A	C5'-C4'-C3'	-5.30	107.52	116.00
1	AA	305	G	N1-C6-O6	-5.30	116.72	119.90
1	AA	505	G	N3-C4-C5	-5.30	125.95	128.60
1	AA	594	G	N1-C2-N3	5.30	127.08	123.90
1	AA	1044	A	C5'-C4'-C3'	-5.30	107.52	116.00
1	AA	1177	G	O4'-C1'-N9	-5.30	103.96	108.20
1	AA	1369	C	N3-C2-O2	5.30	125.61	121.90
35	BA	80	G	C5-C6-O6	-5.30	125.42	128.60
35	BA	480	A	C5'-C4'-O4'	-5.30	102.74	109.10
35	BA	2105	C	C5-C4-N4	-5.30	116.49	120.20
35	BA	2623	G	C4-C5-C6	5.30	121.98	118.80
35	BA	30	G	O4'-C1'-N9	-5.30	103.96	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	927	G	N3-C4-C5	-5.30	125.95	128.60
35	BA	1085	A	C8-N9-C4	-5.30	103.68	105.80
35	BA	2682	U	C5'-C4'-O4'	-5.30	102.74	109.10
36	BB	44	G	N9-C4-C5	5.30	107.52	105.40
1	AA	229	U	C1'-O4'-C4'	-5.30	105.66	109.90
1	AA	285	G	C6-N1-C2	-5.30	121.92	125.10
1	AA	1129	C	O5'-P-OP1	-5.30	100.93	105.70
1	AA	1339	A	C8-N9-C4	-5.30	103.68	105.80
4	AD	59	ARG	NE-CZ-NH1	5.30	122.95	120.30
35	BA	402	A	N9-C4-C5	-5.30	103.68	105.80
35	BA	469	G	N1-C2-N3	-5.30	120.72	123.90
35	BA	982	C	C5-C6-N1	5.30	123.65	121.00
35	BA	1021	A	C3'-C2'-C1'	-5.30	97.26	101.50
35	BA	1155	A	N1-C2-N3	5.30	131.95	129.30
35	BA	2071	A	C6-N1-C2	-5.30	115.42	118.60
35	BA	2208	A	C3'-C2'-C1'	5.30	105.74	101.50
35	BA	2409	G	N1-C2-N3	-5.30	120.72	123.90
35	BA	2673	G	C5-C6-O6	5.30	131.78	128.60
35	BA	2867	G	O4'-C1'-N9	5.30	112.44	108.20
1	AA	477	A	N3-C4-C5	-5.29	123.09	126.80
35	BA	271(P)	C	C5-C4-N4	5.29	123.91	120.20
35	BA	1094	U	C5'-C4'-O4'	5.29	115.45	109.10
35	BA	1159	U	C3'-C2'-C1'	-5.29	97.26	101.50
1	AA	16	A	C4-C5-C6	-5.29	114.35	117.00
1	AA	83	U	OP2-P-O3'	5.29	116.85	105.20
1	AA	420	U	N3-C4-C5	-5.29	111.42	114.60
1	AA	867	G	C6-C5-N7	-5.29	127.22	130.40
22	AV	70	G	C6-C5-N7	5.29	133.58	130.40
35	BA	81	G	C2-N3-C4	-5.29	109.25	111.90
35	BA	669	G	C2-N3-C4	5.29	114.55	111.90
35	BA	1059	G	C1'-O4'-C4'	-5.29	105.67	109.90
35	BA	1359	A	O4'-C1'-N9	5.29	112.44	108.20
35	BA	1938	A	O4'-C4'-C3'	5.29	110.33	106.10
35	BA	2524	G	O4'-C1'-C2'	-5.29	100.51	105.80
35	BA	2638	G	N1-C2-N3	5.29	127.08	123.90
35	BA	2809	A	C8-N9-C4	5.29	107.92	105.80
1	AA	371	G	C5-C6-N1	5.29	114.14	111.50
1	AA	1205	U	C5-C6-N1	5.29	125.35	122.70
1	AA	1260	C	N3-C4-C5	5.29	124.02	121.90
35	BA	702	G	N9-C4-C5	-5.29	103.28	105.40
35	BA	785	G	C5'-C4'-O4'	5.29	115.45	109.10
35	BA	1923	U	C4-C5-C6	-5.29	116.53	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2059	A	C5-N7-C8	5.29	106.55	103.90
35	BA	2712	U	C3'-C2'-C1'	5.29	105.73	101.50
1	AA	1111	A	C6-N1-C2	5.29	121.77	118.60
1	AA	1210	C	C6-N1-C2	5.29	122.42	120.30
1	AA	1492	A	C2-N3-C4	-5.29	107.95	110.60
35	BA	1101	U	C5-C6-N1	5.29	125.34	122.70
35	BA	1645	G	C8-N9-C4	5.29	108.52	106.40
35	BA	2151	G	N1-C6-O6	-5.29	116.73	119.90
35	BA	2181	G	N7-C8-N9	-5.29	110.45	113.10
1	AA	242	C	C5-C6-N1	-5.29	118.36	121.00
35	BA	850	C	C5-C4-N4	-5.29	116.50	120.20
35	BA	1562	A	O4'-C1'-N9	5.29	112.43	108.20
35	BA	1771	C	N3-C2-O2	-5.29	118.20	121.90
35	BA	2479	G	C5-C6-N1	-5.29	108.86	111.50
35	BA	2538	C	C4-C5-C6	-5.29	114.76	117.40
50	BS	20	ARG	NE-CZ-NH2	5.29	122.94	120.30
1	AA	730	G	N9-C4-C5	-5.29	103.28	105.40
35	BA	2691	C	C2-N3-C4	5.29	122.54	119.90
35	BA	2719	G	O4'-C1'-N9	5.29	112.43	108.20
1	AA	303	A	C8-N9-C4	-5.29	103.69	105.80
1	AA	931	C	O4'-C1'-N1	5.29	112.43	108.20
1	AA	963	G	N3-C4-C5	-5.29	125.96	128.60
1	AA	1477	C	N3-C2-O2	5.29	125.60	121.90
35	BA	63	U	N3-C4-O4	5.29	123.10	119.40
35	BA	382	G	C5-N7-C8	-5.29	101.66	104.30
35	BA	489	G	C5-C6-N1	5.29	114.14	111.50
35	BA	523	C	N3-C2-O2	5.29	125.60	121.90
35	BA	1241	A	C8-N9-C4	-5.29	103.69	105.80
35	BA	1620	G	C5-N7-C8	5.29	106.94	104.30
35	BA	1750	G	C5-N7-C8	5.29	106.94	104.30
35	BA	2476	A	N1-C2-N3	5.29	131.94	129.30
35	BA	2872	G	C6-C5-N7	5.29	133.57	130.40
1	AA	296	U	C5-C4-O4	-5.28	122.73	125.90
1	AA	528	C	C5'-C4'-C3'	5.28	124.45	116.00
1	AA	803	G	C2-N3-C4	-5.28	109.26	111.90
1	AA	1145	C	C5-C6-N1	5.28	123.64	121.00
1	AA	1411	C	O4'-C1'-N1	-5.28	103.97	108.20
35	BA	271(L)	U	C4-C5-C6	-5.28	116.53	119.70
35	BA	1403	C	C5-C4-N4	-5.28	116.50	120.20
35	BA	1429	G	C2-N3-C4	5.28	114.54	111.90
1	AA	66	G	N7-C8-N9	-5.28	110.46	113.10
1	AA	413	G	O4'-C1'-N9	5.28	112.42	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1359	C	N1-C2-O2	-5.28	115.73	118.90
35	BA	1719	G	C5-C6-O6	5.28	131.77	128.60
35	BA	1800	C	P-O5'-C5'	5.28	129.35	120.90
35	BA	2319	G	C1'-O4'-C4'	5.28	114.12	109.90
40	BF	168	ARG	NE-CZ-NH1	5.28	122.94	120.30
1	AA	953	G	C2-N3-C4	5.28	114.54	111.90
1	AA	1340	A	C5'-C4'-C3'	5.28	124.45	116.00
35	BA	154(A)	C	N1-C2-O2	5.28	122.07	118.90
35	BA	192	C	O4'-C1'-N1	5.28	112.42	108.20
35	BA	231	C	C2-N3-C4	-5.28	117.26	119.90
35	BA	392	C	O4'-C1'-N1	5.28	112.42	108.20
35	BA	654(H)	G	C6-N1-C2	5.28	128.27	125.10
35	BA	738	G	C8-N9-C4	-5.28	104.29	106.40
35	BA	1095	A	C5-N7-C8	-5.28	101.26	103.90
35	BA	1929	G	C5-C6-N1	-5.28	108.86	111.50
35	BA	2459	A	C5-C6-N6	-5.28	119.47	123.70
1	AA	1238	A	C2-N3-C4	5.28	113.24	110.60
4	AD	67	ILE	CB-CA-C	-5.28	101.05	111.60
22	AV	59	A	N1-C6-N6	-5.28	115.43	118.60
35	BA	619	G	N7-C8-N9	5.28	115.74	113.10
35	BA	938	G	N7-C8-N9	-5.28	110.46	113.10
35	BA	1645	G	C1'-O4'-C4'	-5.28	105.68	109.90
35	BA	2084	C	C4-C5-C6	-5.28	114.76	117.40
35	BA	2197	U	C5-C6-N1	-5.28	120.06	122.70
35	BA	2307	G	N9-C4-C5	-5.28	103.29	105.40
35	BA	2505	G	C4'-C3'-C2'	-5.28	97.32	102.60
35	BA	2694	G	C5-C6-N1	-5.28	108.86	111.50
1	AA	275	G	N9-C4-C5	-5.28	103.29	105.40
1	AA	426	G	C6-C5-N7	-5.28	127.23	130.40
1	AA	682	G	C4-C5-N7	5.28	112.91	110.80
1	AA	1219	U	C5-C6-N1	-5.28	120.06	122.70
1	AA	1396	A	N7-C8-N9	5.28	116.44	113.80
22	AV	74	C	N3-C4-N4	5.28	121.69	118.00
35	BA	12	U	N1-C2-O2	5.28	126.49	122.80
35	BA	272(D)	G	C2-N3-C4	-5.28	109.26	111.90
35	BA	457	A	C2-N3-C4	-5.28	107.96	110.60
35	BA	575	A	N1-C2-N3	-5.28	126.66	129.30
35	BA	799	G	C6-C5-N7	5.28	133.56	130.40
35	BA	969	U	N3-C4-C5	5.28	117.77	114.60
35	BA	1166	C	N1-C2-O2	-5.28	115.73	118.90
35	BA	1208	C	N3-C4-N4	-5.28	114.31	118.00
35	BA	1667	G	C5'-C4'-C3'	-5.28	107.56	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2326	C	C2-N3-C4	-5.28	117.26	119.90
35	BA	2414	G	C5-C6-O6	-5.28	125.43	128.60
35	BA	2647	U	C6-N1-C2	-5.28	117.83	121.00
35	BA	2834	G	C5-C6-O6	5.28	131.77	128.60
38	BD	190	TYR	CB-CG-CD2	-5.28	117.83	121.00
1	AA	1119	C	C4-C5-C6	5.27	120.04	117.40
1	AA	1227	A	C4-C5-C6	5.27	119.64	117.00
1	AA	1520	G	N9-C1'-C2'	-5.27	106.20	112.00
35	BA	1530	C	C6-N1-C1'	5.27	127.13	120.80
35	BA	1535	A	C5-C6-N6	-5.27	119.48	123.70
35	BA	1651	G	N1-C2-N3	5.27	127.06	123.90
35	BA	2100	G	C5'-C4'-O4'	-5.27	102.77	109.10
35	BA	2161	C	N3-C4-N4	-5.27	114.31	118.00
35	BA	2190	G	N3-C4-N9	5.27	129.16	126.00
35	BA	2817	G	C6-N1-C2	5.27	128.26	125.10
1	AA	175	C	C5'-C4'-O4'	5.27	115.43	109.10
1	AA	181	G	C6-C5-N7	5.27	133.56	130.40
1	AA	791	G	C8-N9-C4	5.27	108.51	106.40
1	AA	913	A	C4-C5-N7	5.27	113.34	110.70
1	AA	957	U	C1'-O4'-C4'	-5.27	105.68	109.90
1	AA	1105	A	C2-N3-C4	-5.27	107.96	110.60
1	AA	1117	G	N9-C4-C5	-5.27	103.29	105.40
25	B0	20	ARG	NE-CZ-NH1	-5.27	117.66	120.30
35	BA	271(R)	G	O4'-C4'-C3'	-5.27	98.73	104.00
35	BA	344	G	O4'-C1'-N9	5.27	112.42	108.20
35	BA	538	G	N9-C4-C5	5.27	107.51	105.40
35	BA	619	G	N9-C4-C5	-5.27	103.29	105.40
35	BA	958	U	C2-N3-C4	5.27	130.16	127.00
35	BA	1449	A	N7-C8-N9	-5.27	111.16	113.80
35	BA	1508	A	O4'-C1'-N9	5.27	112.42	108.20
35	BA	1683	C	N3-C4-C5	-5.27	119.79	121.90
35	BA	2574	G	C5-N7-C8	-5.27	101.66	104.30
35	BA	632	A	C2-N3-C4	-5.27	107.97	110.60
35	BA	957	A	N7-C8-N9	5.27	116.44	113.80
56	BY	11	ASP	CB-CG-OD1	-5.27	113.56	118.30
35	BA	1926	U	C5-C6-N1	5.27	125.33	122.70
35	BA	2263	C	C2-N3-C4	-5.27	117.27	119.90
35	BA	2341	G	N9-C4-C5	5.27	107.51	105.40
35	BA	2670	A	C4-C5-N7	5.27	113.33	110.70
35	BA	2702	U	N1-C2-O2	5.27	126.49	122.80
35	BA	2775	A	C5-C6-N1	5.27	120.33	117.70
1	AA	889	A	O5'-P-OP2	-5.27	100.96	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	539	G	N1-C2-N3	5.27	127.06	123.90
35	BA	1363	C	C5-C4-N4	5.27	123.89	120.20
35	BA	1437	C	C3'-C2'-C1'	5.27	105.71	101.50
35	BA	1953	A	N9-C4-C5	-5.27	103.69	105.80
35	BA	2239	G	N1-C6-O6	5.27	123.06	119.90
35	BA	2481	G	C2-N3-C4	-5.27	109.27	111.90
35	BA	2520	C	C4-C5-C6	5.27	120.03	117.40
41	BG	125	PHE	CB-CG-CD1	-5.27	117.11	120.80
50	BS	42	ASP	CB-CG-OD1	-5.27	113.56	118.30
35	BA	131	G	C5-C6-N1	-5.27	108.87	111.50
35	BA	1773	A	N1-C2-N3	5.27	131.93	129.30
35	BA	1986	A	P-O3'-C3'	5.27	126.02	119.70
1	AA	259	G	C6-N1-C2	5.26	128.26	125.10
1	AA	666	G	N1-C6-O6	5.26	123.06	119.90
1	AA	827	U	OP2-P-O3'	5.26	116.78	105.20
1	AA	1033	G	C4-C5-C6	-5.26	115.64	118.80
2	AB	79	ASP	CB-CG-OD1	5.26	123.04	118.30
35	BA	1930	G	C8-N9-C4	-5.26	104.29	106.40
35	BA	2570	G	C4-C5-N7	-5.26	108.69	110.80
1	AA	1417	G	C8-N9-C4	-5.26	104.30	106.40
35	BA	418	G	N1-C6-O6	-5.26	116.74	119.90
35	BA	854	G	C4-C5-N7	-5.26	108.69	110.80
35	BA	1467	C	C4-C5-C6	-5.26	114.77	117.40
1	AA	119	A	O5'-P-OP2	-5.26	100.96	105.70
1	AA	132	C	N1-C2-N3	-5.26	115.52	119.20
1	AA	378	G	C6-C5-N7	5.26	133.56	130.40
1	AA	951	G	C4-C5-N7	5.26	112.90	110.80
7	AG	6	ARG	NE-CZ-NH1	-5.26	117.67	120.30
35	BA	56	A	N1-C2-N3	5.26	131.93	129.30
35	BA	245	G	N3-C2-N2	5.26	123.58	119.90
35	BA	1370	C	C5-C4-N4	-5.26	116.52	120.20
35	BA	1467	C	C2-N3-C4	5.26	122.53	119.90
35	BA	1679	U	C5'-C4'-O4'	5.26	115.41	109.10
35	BA	1963	U	O4'-C1'-C2'	5.26	112.33	107.60
35	BA	2192	G	C3'-C2'-C1'	5.26	105.71	101.50
36	BB	116	G	N3-C4-C5	5.26	131.23	128.60
1	AA	56	U	C2-N3-C4	5.26	130.16	127.00
1	AA	386	C	C5-C4-N4	5.26	123.88	120.20
1	AA	1413	A	N1-C2-N3	5.26	131.93	129.30
22	AV	71	C	C5'-C4'-C3'	-5.26	107.58	116.00
29	B4	47	GLN	N-CA-C	5.26	125.20	111.00
35	BA	290	G	C5'-C4'-O4'	5.26	115.41	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	849	A	C2-N3-C4	-5.26	107.97	110.60
35	BA	1235	G	C4-C5-N7	5.26	112.90	110.80
35	BA	1365	A	C4-C5-C6	5.26	119.63	117.00
35	BA	2543	G	C5-C6-O6	-5.26	125.44	128.60
35	BA	2718	G	C4-C5-N7	-5.26	108.70	110.80
35	BA	2741	A	C6-C5-N7	-5.26	128.62	132.30
1	AA	222	U	C4-C5-C6	5.26	122.86	119.70
1	AA	409	G	N7-C8-N9	5.26	115.73	113.10
35	BA	1223	G	N1-C6-O6	-5.26	116.75	119.90
35	BA	2277	G	C8-N9-C4	-5.26	104.30	106.40
1	AA	1334	G	O5'-P-OP2	5.26	117.01	110.70
35	BA	750	A	C4-C5-N7	5.26	113.33	110.70
35	BA	769	G	C8-N9-C4	5.26	108.50	106.40
35	BA	1197	G	N3-C2-N2	5.26	123.58	119.90
35	BA	1807	G	N3-C4-C5	5.26	131.23	128.60
35	BA	1810	A	C2-N3-C4	-5.26	107.97	110.60
35	BA	2561	A	N7-C8-N9	-5.26	111.17	113.80
1	AA	108	G	C6-N1-C2	5.25	128.25	125.10
22	AV	15	G	C6-N1-C2	-5.25	121.95	125.10
22	AV	37	A	C4-C5-C6	5.25	119.63	117.00
35	BA	2241	A	C1'-O4'-C4'	5.25	114.10	109.90
35	BA	2577	A	N9-C4-C5	-5.25	103.70	105.80
1	AA	786	G	N1-C2-N3	-5.25	120.75	123.90
1	AA	1047	G	N1-C2-N3	5.25	127.05	123.90
35	BA	1209	G	N3-C4-C5	5.25	131.23	128.60
35	BA	1368	G	N3-C4-C5	5.25	131.23	128.60
35	BA	1512	U	C6-N1-C2	5.25	124.15	121.00
35	BA	1907	G	C8-N9-C4	5.25	108.50	106.40
35	BA	2174	C	O4'-C1'-N1	-5.25	104.00	108.20
35	BA	2843	G	C5-C6-O6	-5.25	125.45	128.60
1	AA	78	G	O4'-C4'-C3'	-5.25	98.75	104.00
1	AA	761	G	C6-C5-N7	-5.25	127.25	130.40
1	AA	995	C	C4-C5-C6	-5.25	114.77	117.40
1	AA	1026	G	N3-C2-N2	-5.25	116.22	119.90
1	AA	1092	A	N7-C8-N9	5.25	116.43	113.80
35	BA	56	A	C5-N7-C8	-5.25	101.27	103.90
35	BA	156	U	C6-N1-C1'	-5.25	113.85	121.20
35	BA	360	G	C5-C6-O6	5.25	131.75	128.60
35	BA	425	G	N9-C4-C5	5.25	107.50	105.40
35	BA	1568	G	N3-C4-C5	5.25	131.23	128.60
1	AA	356	A	C5-N7-C8	5.25	106.53	103.90
1	AA	627	G	N1-C2-N3	5.25	127.05	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	820	U	N1-C2-N3	-5.25	111.75	114.90
1	AA	873	A	C8-N9-C4	-5.25	103.70	105.80
1	AA	162	A	N9-C4-C5	5.25	107.90	105.80
1	AA	450	G	N7-C8-N9	-5.25	110.48	113.10
1	AA	498	U	N1-C2-O2	-5.25	119.13	122.80
1	AA	764	C	C1'-O4'-C4'	-5.25	105.70	109.90
35	BA	619	G	C5-C6-O6	5.25	131.75	128.60
35	BA	1206	G	C2-N3-C4	5.25	114.52	111.90
35	BA	1635	G	N3-C2-N2	5.25	123.57	119.90
35	BA	2172	U	C2'-C3'-O3'	5.25	122.10	113.70
35	BA	2192	G	N7-C8-N9	5.25	115.72	113.10
35	BA	2475	C	O4'-C1'-N1	-5.25	104.00	108.20
1	AA	10	A	C6-C5-N7	5.25	135.97	132.30
1	AA	80	G	O4'-C1'-N9	-5.25	104.00	108.20
1	AA	969	A	N3-C4-C5	-5.25	123.13	126.80
1	AA	1199	U	O4'-C1'-N1	5.25	112.40	108.20
15	AO	15	PHE	CB-CG-CD2	-5.25	117.13	120.80
22	AV	21	A	N3-C4-C5	-5.25	123.13	126.80
35	BA	553	G	C6-C5-N7	-5.25	127.25	130.40
35	BA	2068	U	O4'-C1'-N1	-5.25	104.00	108.20
35	BA	2267	A	OP1-P-O3'	5.25	116.74	105.20
35	BA	2399	G	C3'-C2'-C1'	-5.25	97.30	101.50
35	BA	2599	G	C6-N1-C2	-5.25	121.95	125.10
35	BA	2783	G	N1-C6-O6	-5.25	116.75	119.90
1	AA	52	G	N3-C4-N9	5.25	129.15	126.00
1	AA	370	C	N1-C2-O2	-5.25	115.75	118.90
1	AA	915	A	N9-C1'-C2'	-5.25	106.23	112.00
22	AV	71	C	C4-C5-C6	-5.25	114.78	117.40
35	BA	299	A	O4'-C1'-N9	5.25	112.40	108.20
35	BA	1115	G	C5-C6-N1	5.25	114.12	111.50
35	BA	1495	A	C4'-C3'-C2'	5.25	107.84	102.60
35	BA	2765	A	C4-C5-N7	5.25	113.32	110.70
35	BA	2788	C	N3-C4-N4	-5.25	114.33	118.00
1	AA	20	U	N3-C2-O2	5.24	125.87	122.20
1	AA	204	U	N1-C2-O2	-5.24	119.13	122.80
1	AA	341	C	C4-C5-C6	-5.24	114.78	117.40
1	AA	678	U	N1-C2-N3	5.24	118.05	114.90
1	AA	1042	G	C6-N1-C2	-5.24	121.95	125.10
35	BA	371	A	C2-N3-C4	5.24	113.22	110.60
35	BA	1208	C	C5-C6-N1	-5.24	118.38	121.00
35	BA	1329	U	C5-C4-O4	5.24	129.05	125.90
35	BA	2395	C	C6-N1-C2	5.24	122.40	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2871	C	C6-N1-C2	-5.24	118.20	120.30
35	BA	639	U	C6-N1-C2	-5.24	117.86	121.00
35	BA	1938	A	C1'-O4'-C4'	-5.24	105.71	109.90
35	BA	2058	A	C6-C5-N7	-5.24	128.63	132.30
36	BB	46	A	N3-C4-C5	-5.24	123.13	126.80
1	AA	129(A)	G	N3-C4-N9	5.24	129.14	126.00
1	AA	364	A	O4'-C1'-N9	-5.24	104.01	108.20
1	AA	959	A	C4-C5-N7	5.24	113.32	110.70
1	AA	1155	G	O4'-C1'-N9	-5.24	104.01	108.20
1	AA	1518	A	C6-C5-N7	-5.24	128.63	132.30
2	AB	70	PHE	CB-CG-CD1	5.24	124.47	120.80
22	AV	3	C	C5-C6-N1	-5.24	118.38	121.00
35	BA	113	G	C8-N9-C4	5.24	108.50	106.40
35	BA	272(E)	G	N3-C4-C5	5.24	131.22	128.60
35	BA	355	G	C8-N9-C4	-5.24	104.30	106.40
35	BA	1651	G	C5-C6-N1	-5.24	108.88	111.50
35	BA	1953	A	C5-N7-C8	-5.24	101.28	103.90
35	BA	2061	G	C2-N3-C4	5.24	114.52	111.90
36	BB	4	C	N1-C2-N3	-5.24	115.53	119.20
45	BN	75	TYR	CB-CG-CD2	5.24	124.14	121.00
1	AA	897	C	C5'-C4'-O4'	5.24	115.39	109.10
1	AA	1160	G	N1-C6-O6	-5.24	116.76	119.90
35	BA	261	G	N1-C6-O6	5.24	123.04	119.90
35	BA	351	G	N3-C4-N9	-5.24	122.86	126.00
35	BA	1596	A	C4-C5-N7	-5.24	108.08	110.70
35	BA	1678	G	C2-N3-C4	-5.24	109.28	111.90
35	BA	1913	A	N9-C4-C5	5.24	107.89	105.80
35	BA	2284	C	C4-C5-C6	-5.24	114.78	117.40
36	BB	24	G	C4-C5-N7	5.24	112.89	110.80
22	AV	4	G	C3'-C2'-C1'	5.24	105.69	101.50
35	BA	10	G	C5-C6-O6	-5.24	125.46	128.60
35	BA	654(S)	G	O4'-C1'-N9	-5.24	104.01	108.20
35	BA	1601	G	C5-N7-C8	5.24	106.92	104.30
35	BA	1905	C	O4'-C1'-N1	5.24	112.39	108.20
1	AA	135	C	N3-C2-O2	-5.24	118.23	121.90
1	AA	708	C	N3-C4-N4	5.24	121.66	118.00
1	AA	913	A	P-O3'-C3'	5.24	125.98	119.70
1	AA	1090	U	OP1-P-OP2	-5.24	111.75	119.60
1	AA	1461	G	O4'-C1'-N9	-5.24	104.01	108.20
32	B7	19	ARG	NE-CZ-NH1	-5.24	117.68	120.30
35	BA	2047	U	C2-N3-C4	5.24	130.14	127.00
35	BA	2080	G	N3-C4-N9	-5.24	122.86	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2757	A	C4-C5-N7	-5.24	108.08	110.70
1	AA	176	C	C5-C6-N1	5.23	123.62	121.00
1	AA	450	G	N1-C6-O6	5.23	123.04	119.90
1	AA	451	A	C5-C6-N1	-5.23	115.08	117.70
1	AA	1009	G	N3-C2-N2	-5.23	116.24	119.90
1	AA	1192	C	O4'-C4'-C3'	5.23	110.29	106.10
13	AM	108	ARG	NE-CZ-NH1	-5.23	117.68	120.30
35	BA	1754	C	N1-C2-O2	-5.23	115.76	118.90
35	BA	2366	A	C8-N9-C4	5.23	107.89	105.80
36	BB	47	C	C6-N1-C2	5.23	122.39	120.30
1	AA	383	A	N7-C8-N9	-5.23	111.18	113.80
1	AA	1045	C	C5'-C4'-C3'	-5.23	107.63	116.00
22	AV	38	A	N7-C8-N9	5.23	116.42	113.80
35	BA	548	A	C4-C5-C6	5.23	119.62	117.00
35	BA	680	G	C4'-C3'-C2'	-5.23	97.37	102.60
35	BA	689	A	N9-C4-C5	-5.23	103.71	105.80
35	BA	884	C	C1'-O4'-C4'	-5.23	105.71	109.90
35	BA	989	G	C8-N9-C4	-5.23	104.31	106.40
35	BA	1269	A	N1-C2-N3	5.23	131.92	129.30
35	BA	1517	G	N3-C4-C5	-5.23	125.98	128.60
35	BA	1960	A	C5-C6-N1	-5.23	115.08	117.70
36	BB	14	U	N3-C4-O4	5.23	123.06	119.40
47	BP	59	LEU	CA-CB-CG	5.23	127.34	115.30
1	AA	111	G	C5-C6-O6	5.23	131.74	128.60
1	AA	412	A	C6-N1-C2	5.23	121.74	118.60
1	AA	596	C	C2-N3-C4	-5.23	117.28	119.90
1	AA	1347	G	O4'-C1'-C2'	5.23	112.31	107.60
1	AA	1465	C	C5-C4-N4	5.23	123.86	120.20
35	BA	852	G	N1-C2-N3	-5.23	120.76	123.90
35	BA	2074	U	N3-C2-O2	-5.23	118.54	122.20
35	BA	2138	C	N3-C2-O2	-5.23	118.24	121.90
35	BA	2325	G	N7-C8-N9	5.23	115.72	113.10
35	BA	2718	G	C5-N7-C8	5.23	106.92	104.30
36	BB	49	C	C6-N1-C2	-5.23	118.21	120.30
1	AA	764	C	N1-C2-O2	-5.23	115.76	118.90
35	BA	1609	A	C4-C5-C6	5.23	119.61	117.00
35	BA	1759	A	C6-N1-C2	-5.23	115.46	118.60
35	BA	2580	U	N3-C4-O4	-5.23	115.74	119.40
1	AA	15	G	C5-C6-O6	-5.23	125.46	128.60
1	AA	276	G	N3-C4-C5	5.23	131.21	128.60
1	AA	391	G	C8-N9-C4	5.23	108.49	106.40
1	AA	1070	U	C4-C5-C6	5.23	122.84	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1376	U	N3-C4-O4	-5.23	115.74	119.40
24	AY	505	GLY	N-CA-C	5.23	126.17	113.10
35	BA	14	A	C4-C5-N7	-5.23	108.09	110.70
35	BA	271(Q)	G	C6-C5-N7	-5.23	127.26	130.40
35	BA	358	U	N3-C4-C5	-5.23	111.46	114.60
35	BA	676	A	N3-C4-C5	5.23	130.46	126.80
35	BA	1007	C	N3-C2-O2	5.23	125.56	121.90
35	BA	1389	G	N9-C4-C5	5.23	107.49	105.40
35	BA	1517	G	C6-N1-C2	-5.23	121.96	125.10
35	BA	1800	C	C6-N1-C2	-5.23	118.21	120.30
35	BA	1828	G	C6-C5-N7	-5.23	127.26	130.40
36	BB	87	G	N3-C4-C5	5.23	131.21	128.60
1	AA	771	G	C5-N7-C8	5.23	106.91	104.30
1	AA	1058	G	C6-C5-N7	5.23	133.54	130.40
1	AA	1516	G	C6-C5-N7	5.23	133.54	130.40
35	BA	397	G	C4-C5-N7	5.23	112.89	110.80
35	BA	523	C	N1-C2-O2	-5.23	115.77	118.90
35	BA	581	C	C4-C5-C6	-5.23	114.79	117.40
35	BA	583	G	N9-C4-C5	-5.23	103.31	105.40
35	BA	717	G	N9-C1'-C2'	-5.23	106.25	112.00
35	BA	974	G	O4'-C4'-C3'	5.23	110.28	106.10
35	BA	1442	G	C8-N9-C4	-5.23	104.31	106.40
35	BA	1586	A	C5-C6-N1	5.23	120.31	117.70
35	BA	2637	U	N1-C2-N3	-5.23	111.77	114.90
35	BA	2693	A	C1'-O4'-C4'	5.23	114.08	109.90
1	AA	1400	C	N3-C4-C5	-5.22	119.81	121.90
35	BA	317	G	N3-C4-N9	-5.22	122.86	126.00
35	BA	1188	U	C5-C4-O4	5.22	129.03	125.90
35	BA	1418	G	C5-N7-C8	-5.22	101.69	104.30
35	BA	1605	C	N1-C2-N3	-5.22	115.54	119.20
35	BA	1963	U	C5'-C4'-O4'	-5.22	102.83	109.10
35	BA	2095	C	C5-C6-N1	5.22	123.61	121.00
35	BA	2358	G	N1-C6-O6	-5.22	116.77	119.90
35	BA	2707	G	C8-N9-C4	5.22	108.49	106.40
1	AA	238	G	C4'-C3'-C2'	-5.22	97.38	102.60
35	BA	571	A	N3-C4-N9	5.22	131.58	127.40
35	BA	1573	G	C8-N9-C4	5.22	108.49	106.40
35	BA	2060	A	C6-C5-N7	5.22	135.96	132.30
35	BA	2165	G	N1-C2-N3	-5.22	120.77	123.90
41	BG	33	ARG	CD-NE-CZ	5.22	130.91	123.60
1	AA	1066	C	C1'-O4'-C4'	-5.22	105.72	109.90
14	AN	31	ARG	NE-CZ-NH1	-5.22	117.69	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	489	G	C5-C6-O6	-5.22	125.47	128.60
35	BA	816	C	N3-C4-C5	5.22	123.99	121.90
35	BA	1078	U	N1-C2-N3	-5.22	111.77	114.90
1	AA	416	G	N7-C8-N9	5.22	115.71	113.10
1	AA	535	A	C5-C6-N1	5.22	120.31	117.70
1	AA	1189	C	N3-C4-N4	5.22	121.65	118.00
1	AA	1334	G	O4'-C1'-N9	-5.22	104.02	108.20
9	AI	36	TYR	CB-CG-CD2	5.22	124.13	121.00
22	AV	43	A	N7-C8-N9	5.22	116.41	113.80
35	BA	571	A	N9-C4-C5	-5.22	103.71	105.80
35	BA	676	A	C4-C5-N7	5.22	113.31	110.70
35	BA	975(A)	G	C8-N9-C4	5.22	108.49	106.40
35	BA	1049	C	N1-C2-N3	5.22	122.85	119.20
35	BA	1165	U	N1-C2-N3	-5.22	111.77	114.90
35	BA	1635	G	C3'-C2'-C1'	5.22	105.67	101.50
35	BA	1780	A	C6-C5-N7	-5.22	128.65	132.30
35	BA	2558	C	C4-C5-C6	5.22	120.01	117.40
35	BA	2688	U	C5-C6-N1	-5.22	120.09	122.70
35	BA	2735	G	C6-C5-N7	-5.22	127.27	130.40
1	AA	1034	G	N1-C2-N3	-5.22	120.77	123.90
1	AA	1273	G	C4-C5-C6	5.22	121.93	118.80
35	BA	147	U	N1-C2-O2	5.22	126.45	122.80
35	BA	944	G	N1-C6-O6	-5.22	116.77	119.90
1	AA	189(G)	G	C3'-C2'-C1'	-5.22	97.33	101.50
1	AA	345	C	N3-C2-O2	-5.22	118.25	121.90
1	AA	881	G	C8-N9-C4	-5.22	104.31	106.40
1	AA	944	G	C5-C6-O6	5.22	131.73	128.60
32	B7	12	ARG	NE-CZ-NH2	-5.22	117.69	120.30
35	BA	136	G	C2-N3-C4	-5.22	109.29	111.90
35	BA	326	G	N3-C2-N2	5.22	123.55	119.90
35	BA	654(L)	G	O4'-C1'-N9	5.22	112.37	108.20
35	BA	697	C	C2-N3-C4	5.22	122.51	119.90
35	BA	1223	G	C8-N9-C4	-5.22	104.31	106.40
35	BA	1833	U	C2-N3-C4	-5.22	123.87	127.00
1	AA	236	G	N9-C4-C5	5.21	107.49	105.40
1	AA	938	A	O4'-C1'-C2'	5.21	112.29	107.60
35	BA	70	G	C6-C5-N7	5.21	133.53	130.40
35	BA	563	G	N7-C8-N9	5.21	115.71	113.10
35	BA	928	G	C6-C5-N7	-5.21	127.27	130.40
35	BA	1534	U	C6-N1-C2	-5.21	117.87	121.00
35	BA	1641	A	C8-N9-C4	5.21	107.89	105.80
35	BA	2000	G	P-O5'-C5'	-5.21	112.56	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2324	C	N3-C4-C5	-5.21	119.81	121.90
35	BA	2643	G	N3-C4-C5	5.21	131.21	128.60
35	BA	2825	C	C4-C5-C6	5.21	120.01	117.40
1	AA	118	U	O3'-P-O5'	5.21	113.91	104.00
1	AA	435	C	C5-C6-N1	-5.21	118.39	121.00
1	AA	678	U	C6-N1-C2	-5.21	117.87	121.00
35	BA	30	G	C3'-C2'-C1'	5.21	105.67	101.50
35	BA	520	G	C3'-C2'-C1'	5.21	105.67	101.50
35	BA	2574	G	N3-C4-C5	5.21	131.21	128.60
35	BA	2693	A	O4'-C1'-N9	5.21	112.37	108.20
35	BA	2864	G	N9-C4-C5	5.21	107.48	105.40
1	AA	122	G	C4-C5-N7	-5.21	108.72	110.80
1	AA	425	G	N3-C4-C5	5.21	131.21	128.60
1	AA	704	A	C8-N9-C4	-5.21	103.72	105.80
1	AA	1071	C	N3-C4-C5	5.21	123.98	121.90
35	BA	432	A	C4-C5-C6	5.21	119.61	117.00
35	BA	445	C	C4'-C3'-C2'	5.21	107.81	102.60
35	BA	752	A	C6-N1-C2	-5.21	115.47	118.60
35	BA	1463	C	N3-C2-O2	5.21	125.55	121.90
35	BA	1664	A	C5'-C4'-C3'	-5.21	107.66	116.00
35	BA	1678	G	C6-N1-C2	5.21	128.23	125.10
36	BB	57	A	N1-C2-N3	5.21	131.91	129.30
1	AA	1021	G	N1-C6-O6	-5.21	116.77	119.90
1	AA	1306	A	N9-C4-C5	5.21	107.88	105.80
1	AA	1324	A	C5-C6-N1	-5.21	115.09	117.70
35	BA	857	C	N3-C4-N4	-5.21	114.35	118.00
35	BA	1379	A	C8-N9-C4	-5.21	103.72	105.80
35	BA	1928	A	C5-C6-N1	-5.21	115.09	117.70
1	AA	126	G	C5-C6-O6	5.21	131.72	128.60
1	AA	790	A	C8-N9-C4	5.21	107.88	105.80
1	AA	1053	G	C8-N9-C1'	5.21	133.77	127.00
1	AA	1381	U	C5'-C4'-C3'	-5.21	107.67	116.00
35	BA	653	A	C5-N7-C8	-5.21	101.30	103.90
35	BA	679	C	N3-C4-C5	5.21	123.98	121.90
35	BA	693	C	N3-C4-N4	5.21	121.64	118.00
35	BA	1332	G	N3-C4-C5	-5.21	126.00	128.60
35	BA	2061	G	N9-C4-C5	-5.21	103.32	105.40
35	BA	2139	C	C5'-C4'-O4'	5.21	115.35	109.10
35	BA	2425	A	C1'-O4'-C4'	-5.21	105.73	109.90
36	BB	40	U	N1-C1'-C2'	5.21	120.77	114.00
1	AA	506	G	C5-C6-O6	5.21	131.72	128.60
1	AA	1071	C	C5-C6-N1	-5.21	118.40	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AV	20	U	O4'-C1'-N1	5.21	112.36	108.20
35	BA	1086	A	C1'-O4'-C4'	-5.21	105.73	109.90
35	BA	1651	G	C4-C5-C6	5.21	121.92	118.80
35	BA	1755	A	N1-C2-N3	5.21	131.90	129.30
1	AA	658	G	N1-C6-O6	-5.21	116.78	119.90
1	AA	1336	C	N3-C4-C5	5.21	123.98	121.90
22	AV	5	G	N7-C8-N9	-5.21	110.50	113.10
35	BA	242	G	N1-C2-N3	-5.21	120.78	123.90
35	BA	654(T)	C	N1-C2-O2	-5.21	115.78	118.90
35	BA	710	G	N3-C4-C5	5.21	131.20	128.60
35	BA	779	U	N3-C4-O4	5.21	123.04	119.40
35	BA	2370	G	C5-N7-C8	5.21	106.90	104.30
35	BA	2539	C	N3-C4-C5	-5.21	119.82	121.90
1	AA	1313	U	C5-C4-O4	5.20	129.02	125.90
3	AC	193	TYR	CG-CD1-CE1	5.20	125.46	121.30
24	AY	212	TYR	CG-CD1-CE1	-5.20	117.14	121.30
35	BA	462	C	C5-C4-N4	5.20	123.84	120.20
35	BA	698	C	N1-C2-O2	-5.20	115.78	118.90
35	BA	2519	U	C6-N1-C2	5.20	124.12	121.00
35	BA	2548	G	C6-C5-N7	5.20	133.52	130.40
36	BB	101	G	N9-C4-C5	-5.20	103.32	105.40
46	BO	78	ARG	NH1-CZ-NH2	-5.20	113.67	119.40
48	BQ	29	PHE	CD1-CE1-CZ	-5.20	113.86	120.10
2	AB	64	ARG	NE-CZ-NH1	-5.20	117.70	120.30
35	BA	1374	G	N7-C8-N9	-5.20	110.50	113.10
35	BA	2270	G	C4-C5-C6	-5.20	115.68	118.80
1	AA	413	G	C5-C6-N1	-5.20	108.90	111.50
1	AA	456	C	C5-C6-N1	-5.20	118.40	121.00
1	AA	654	G	C8-N9-C4	5.20	108.48	106.40
1	AA	1061	G	N3-C4-N9	-5.20	122.88	126.00
1	AA	1296	C	C5-C6-N1	5.20	123.60	121.00
22	AV	14	A	C6-N1-C2	5.20	121.72	118.60
35	BA	16	G	C4-C5-N7	-5.20	108.72	110.80
35	BA	1395	A	C6-N1-C2	-5.20	115.48	118.60
35	BA	1409	C	C2-N3-C4	5.20	122.50	119.90
35	BA	1610	A	C4-C5-C6	5.20	119.60	117.00
35	BA	2010	G	C6-C5-N7	-5.20	127.28	130.40
35	BA	2146	C	O4'-C1'-N1	-5.20	104.04	108.20
35	BA	2235	G	N9-C4-C5	5.20	107.48	105.40
35	BA	2799	C	C4-C5-C6	-5.20	114.80	117.40
38	BD	14	ARG	CD-NE-CZ	5.20	130.88	123.60
54	BW	9	TYR	CB-CG-CD1	5.20	124.12	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	139	G	N3-C4-C5	5.20	131.20	128.60
1	AA	258	G	C5-C6-O6	5.20	131.72	128.60
1	AA	331	G	N3-C4-N9	5.20	129.12	126.00
1	AA	879	C	C4-C5-C6	5.20	120.00	117.40
35	BA	363(E)	U	N3-C4-O4	5.20	123.04	119.40
35	BA	1365	A	N1-C6-N6	5.20	121.72	118.60
35	BA	1401	G	N9-C4-C5	5.20	107.48	105.40
35	BA	1712	C	N1-C2-O2	-5.20	115.78	118.90
35	BA	1750	G	C4-C5-N7	-5.20	108.72	110.80
35	BA	2453	A	C8-N9-C4	-5.20	103.72	105.80
35	BA	2793	G	C6-N1-C2	5.20	128.22	125.10
36	BB	70	C	C2-N3-C4	5.20	122.50	119.90
1	AA	89	C	N1-C2-N3	5.20	122.84	119.20
35	BA	1327	C	C4-C5-C6	-5.20	114.80	117.40
35	BA	1833	U	N1-C2-N3	5.20	118.02	114.90
35	BA	2277	G	N7-C8-N9	5.20	115.70	113.10
35	BA	2731	G	N1-C2-N2	-5.20	111.52	116.20
1	AA	272	C	O4'-C1'-N1	5.20	112.36	108.20
1	AA	1043	C	C6-N1-C2	-5.20	118.22	120.30
1	AA	1168	A	C5'-C4'-O4'	5.20	115.33	109.10
12	AL	72	GLY	N-CA-C	5.20	126.09	113.10
35	BA	109	G	N3-C4-C5	-5.20	126.00	128.60
35	BA	178	G	C5-C6-O6	5.20	131.72	128.60
35	BA	381	G	O4'-C1'-N9	5.20	112.36	108.20
35	BA	484	C	N3-C4-N4	-5.20	114.36	118.00
35	BA	798	G	C6-N1-C2	5.20	128.22	125.10
35	BA	889	C	N3-C4-C5	5.20	123.98	121.90
35	BA	1216	G	N1-C6-O6	-5.20	116.78	119.90
35	BA	1274	A	C6-N1-C2	5.20	121.72	118.60
35	BA	2382	G	O4'-C1'-C2'	-5.20	100.61	105.80
35	BA	2590	A	N9-C4-C5	5.20	107.88	105.80
35	BA	2606	C	C2-N3-C4	5.20	122.50	119.90
35	BA	2820	A	N9-C4-C5	-5.20	103.72	105.80
35	BA	2848	G	C6-C5-N7	-5.20	127.28	130.40
36	BB	85	G	N1-C2-N3	-5.20	120.78	123.90
1	AA	1012	U	C2-N3-C4	5.19	130.12	127.00
22	AV	17(A)	U	N1-C2-O2	5.19	126.44	122.80
35	BA	2422	A	C2-N3-C4	5.19	113.20	110.60
50	BS	97	ARG	NE-CZ-NH2	-5.19	117.70	120.30
1	AA	46	G	O4'-C1'-N9	-5.19	104.05	108.20
1	AA	1057	G	N1-C2-N3	5.19	127.02	123.90
22	AV	44	A	C5-N7-C8	-5.19	101.30	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	957	A	C8-N9-C4	-5.19	103.72	105.80
35	BA	1396	U	C5'-C4'-O4'	5.19	115.33	109.10
35	BA	1511	C	C5-C4-N4	5.19	123.83	120.20
35	BA	1786	A	C5-N7-C8	-5.19	101.30	103.90
42	BH	138	LYS	N-CA-C	-5.19	96.98	111.00
1	AA	830	G	C2-N3-C4	5.19	114.50	111.90
1	AA	1267	C	C4-C5-C6	5.19	120.00	117.40
35	BA	221	A	N1-C2-N3	5.19	131.90	129.30
35	BA	286	C	C6-N1-C2	5.19	122.38	120.30
35	BA	788	A	C4-C5-C6	5.19	119.60	117.00
35	BA	856	C	C5-C6-N1	5.19	123.59	121.00
35	BA	1342	A	C5-C6-N1	5.19	120.30	117.70
35	BA	2270	G	N3-C2-N2	-5.19	116.27	119.90
35	BA	2335	A	C4'-C3'-C2'	-5.19	97.41	102.60
35	BA	2681	C	OP2-P-O3'	5.19	116.62	105.20
38	BD	103	ARG	CD-NE-CZ	5.19	130.87	123.60
1	AA	755	G	C5-C6-O6	5.19	131.71	128.60
1	AA	899	C	N3-C2-O2	5.19	125.53	121.90
1	AA	1062	U	C5-C4-O4	-5.19	122.79	125.90
1	AA	1442	G	N3-C2-N2	-5.19	116.27	119.90
1	AA	1502	A	C6-C5-N7	-5.19	128.67	132.30
22	AV	4	G	C5'-C4'-C3'	-5.19	107.70	116.00
35	BA	805	G	O4'-C1'-N9	-5.19	104.05	108.20
35	BA	1974	C	N3-C2-O2	5.19	125.53	121.90
35	BA	2638	G	C2-N3-C4	-5.19	109.31	111.90
38	BD	157	ARG	NE-CZ-NH1	-5.19	117.70	120.30
51	BT	117	ASP	CB-CG-OD1	-5.19	113.63	118.30
1	AA	227	G	C5-C6-O6	-5.19	125.49	128.60
1	AA	888	G	C4'-C3'-C2'	5.19	107.79	102.60
1	AA	1221	G	C5-C6-N1	-5.19	108.91	111.50
22	AV	21	A	N1-C6-N6	-5.19	115.49	118.60
22	AV	24	U	P-O5'-C5'	-5.19	112.60	120.90
35	BA	271(M)	G	C6-N1-C2	-5.19	121.99	125.10
35	BA	474	G	N7-C8-N9	-5.19	110.51	113.10
35	BA	818	G	N1-C6-O6	5.19	123.01	119.90
35	BA	831	G	C8-N9-C4	5.19	108.47	106.40
35	BA	1037	G	C2-N3-C4	-5.19	109.31	111.90
35	BA	1226	A	C5'-C4'-C3'	-5.19	107.70	116.00
35	BA	1389	G	O4'-C1'-N9	5.19	112.35	108.20
35	BA	1401	G	C5-N7-C8	-5.19	101.71	104.30
35	BA	1646	C	O4'-C4'-C3'	-5.19	98.81	104.00
35	BA	1749	A	C5-C6-N1	5.19	120.29	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2364	C	C6-N1-C2	-5.19	118.22	120.30
35	BA	2785	C	C5-C4-N4	5.19	123.83	120.20
55	BX	29	TRP	CD1-NE1-CE2	5.19	113.67	109.00
1	AA	864	A	N7-C8-N9	-5.19	111.21	113.80
1	AA	1434	A	C3'-C2'-C1'	-5.19	97.35	101.50
1	AA	1457	G	N3-C4-N9	5.19	129.11	126.00
1	AA	1460	A	N1-C2-N3	5.19	131.89	129.30
2	AB	199	TYR	CB-CG-CD1	-5.19	117.89	121.00
35	BA	581	C	C3'-C2'-C1'	5.19	105.65	101.50
1	AA	241	C	C3'-C2'-C1'	5.18	105.65	101.50
1	AA	527	G	O4'-C1'-N9	5.18	112.35	108.20
1	AA	610	G	C4-C5-C6	-5.18	115.69	118.80
1	AA	1143	G	C8-N9-C4	-5.18	104.33	106.40
1	AA	1288	A	N7-C8-N9	-5.18	111.21	113.80
1	AA	1520	G	C8-N9-C4	5.18	108.47	106.40
22	AV	24	U	N3-C2-O2	-5.18	118.57	122.20
35	BA	151	C	C4-C5-C6	-5.18	114.81	117.40
35	BA	1200	C	N1-C2-O2	5.18	122.01	118.90
35	BA	2351	G	N9-C1'-C2'	5.18	120.74	114.00
1	AA	298	A	N7-C8-N9	5.18	116.39	113.80
1	AA	942	G	C5-C6-N1	-5.18	108.91	111.50
1	AA	1414	U	C5-C6-N1	5.18	125.29	122.70
35	BA	323	G	C4-C5-N7	-5.18	108.73	110.80
35	BA	1318	C	C6-N1-C2	5.18	122.37	120.30
35	BA	1662	C	N3-C4-C5	-5.18	119.83	121.90
35	BA	2283	C	N1-C1'-C2'	-5.18	106.30	112.00
35	BA	2764	A	C2-N3-C4	-5.18	108.01	110.60
1	AA	539	A	N9-C4-C5	5.18	107.87	105.80
35	BA	654	A	C5-C6-N6	-5.18	119.56	123.70
35	BA	1358	G	N1-C2-N3	-5.18	120.79	123.90
35	BA	1398	C	C2-N3-C4	5.18	122.49	119.90
35	BA	1516	C	N3-C4-C5	-5.18	119.83	121.90
35	BA	1624	G	N7-C8-N9	5.18	115.69	113.10
35	BA	1849	G	N3-C4-N9	5.18	129.11	126.00
35	BA	1909	C	N3-C4-C5	-5.18	119.83	121.90
35	BA	2811	G	O4'-C1'-N9	-5.18	104.06	108.20
1	AA	263	A	O4'-C1'-C2'	5.18	112.26	107.60
1	AA	309	G	N1-C2-N3	5.18	127.01	123.90
1	AA	584	G	P-O5'-C5'	-5.18	112.61	120.90
1	AA	602	A	N1-C2-N3	-5.18	126.71	129.30
1	AA	1156	G	N1-C2-N3	-5.18	120.79	123.90
1	AA	1285	A	N3-C4-C5	-5.18	123.17	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1335	C	C2-N3-C4	-5.18	117.31	119.90
1	AA	1351	U	OP1-P-OP2	5.18	127.37	119.60
22	AV	65	C	C4-C5-C6	5.18	119.99	117.40
35	BA	213	A	C2-N3-C4	-5.18	108.01	110.60
35	BA	476	G	N7-C8-N9	-5.18	110.51	113.10
35	BA	621	A	C5-C6-N6	5.18	127.84	123.70
35	BA	2095	C	C6-N1-C2	-5.18	118.23	120.30
35	BA	2111	C	N3-C2-O2	-5.18	118.27	121.90
36	BB	23	G	N9-C4-C5	-5.18	103.33	105.40
36	BB	44	G	N3-C4-N9	-5.18	122.89	126.00
36	BB	73	A	C5-N7-C8	-5.18	101.31	103.90
54	BW	99	ARG	NE-CZ-NH2	5.18	122.89	120.30
1	AA	250	A	C5'-C4'-O4'	-5.18	102.89	109.10
24	AY	170	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
35	BA	364	C	O4'-C1'-N1	5.18	112.34	108.20
35	BA	494	G	C1'-O4'-C4'	5.18	114.04	109.90
35	BA	1193	G	O4'-C1'-N9	5.18	112.34	108.20
35	BA	1435	G	C4-C5-C6	-5.18	115.69	118.80
35	BA	2710	C	O4'-C1'-N1	-5.18	104.06	108.20
1	AA	766	A	C8-N9-C4	5.18	107.87	105.80
1	AA	1367	C	C5-C4-N4	-5.18	116.58	120.20
8	AH	14	ARG	NH1-CZ-NH2	5.18	125.09	119.40
35	BA	381	G	N3-C2-N2	5.18	123.52	119.90
35	BA	687	C	N1-C2-N3	-5.18	115.58	119.20
35	BA	1203	G	C5-N7-C8	5.18	106.89	104.30
35	BA	1368	G	C5'-C4'-O4'	-5.18	102.89	109.10
35	BA	1528(A)	A	C5-N7-C8	-5.18	101.31	103.90
35	BA	1546	C	N3-C4-N4	5.18	121.62	118.00
35	BA	2607	G	C5-N7-C8	-5.18	101.71	104.30
57	BZ	3	TYR	CB-CG-CD2	-5.18	117.89	121.00
1	AA	1178	G	N1-C6-O6	5.17	123.00	119.90
1	AA	1371	G	N1-C6-O6	5.17	123.00	119.90
2	AB	36	ARG	NE-CZ-NH1	-5.17	117.71	120.30
35	BA	117	G	C6-C5-N7	-5.17	127.30	130.40
35	BA	128	C	N3-C2-O2	5.17	125.52	121.90
35	BA	569	U	N3-C4-O4	5.17	123.02	119.40
35	BA	1021	A	O4'-C1'-N9	-5.17	104.06	108.20
35	BA	1282	U	C5'-C4'-O4'	-5.17	102.89	109.10
35	BA	1470	G	C5-N7-C8	5.17	106.89	104.30
1	AA	259	G	N3-C2-N2	5.17	123.52	119.90
1	AA	1050	G	N9-C4-C5	5.17	107.47	105.40
35	BA	127	A	N7-C8-N9	-5.17	111.21	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	644	A	C2-N3-C4	5.17	113.19	110.60
35	BA	743	G	N3-C2-N2	-5.17	116.28	119.90
35	BA	1586	A	C5-N7-C8	-5.17	101.31	103.90
35	BA	792	G	C2-N3-C4	5.17	114.49	111.90
35	BA	1304	C	C2-N3-C4	-5.17	117.31	119.90
35	BA	1401	G	C6-N1-C2	5.17	128.20	125.10
35	BA	1448	G	N1-C2-N3	-5.17	120.80	123.90
35	BA	1531	C	O4'-C1'-N1	5.17	112.34	108.20
35	BA	2085	C	O4'-C1'-N1	-5.17	104.06	108.20
35	BA	2433	A	C6-N1-C2	-5.17	115.50	118.60
35	BA	2617	C	N3-C2-O2	-5.17	118.28	121.90
35	BA	2639	A	C6-C5-N7	5.17	135.92	132.30
1	AA	314	C	C1'-O4'-C4'	-5.17	105.76	109.90
1	AA	707	C	C5-C4-N4	5.17	123.82	120.20
35	BA	186	G	N9-C4-C5	-5.17	103.33	105.40
1	AA	43	C	N3-C4-C5	-5.17	119.83	121.90
1	AA	175	C	C6-N1-C2	5.17	122.37	120.30
1	AA	331	G	C6-C5-N7	-5.17	127.30	130.40
1	AA	739	C	C2-N3-C4	-5.17	117.32	119.90
1	AA	780	A	C6-C5-N7	-5.17	128.68	132.30
1	AA	1293	G	O4'-C1'-N9	5.17	112.33	108.20
35	BA	94	C	N3-C2-O2	-5.17	118.28	121.90
35	BA	271(R)	G	C5-C6-O6	-5.17	125.50	128.60
35	BA	971	C	N3-C2-O2	-5.17	118.28	121.90
35	BA	1183	G	N9-C1'-C2'	-5.17	106.31	112.00
35	BA	1431	U	C4-C5-C6	5.17	122.80	119.70
35	BA	1823	G	O4'-C1'-N9	5.17	112.33	108.20
35	BA	2326	C	C1'-O4'-C4'	5.17	114.03	109.90
35	BA	2494	G	N3-C4-C5	5.17	131.18	128.60
1	AA	916	G	N1-C6-O6	-5.17	116.80	119.90
22	AV	56	C	N3-C4-C5	5.17	123.97	121.90
35	BA	331	A	C6-C5-N7	5.17	135.92	132.30
35	BA	498	G	C6-C5-N7	5.17	133.50	130.40
35	BA	800	A	C2-N3-C4	5.17	113.18	110.60
35	BA	872	A	C8-N9-C4	5.17	107.87	105.80
35	BA	2631	G	N1-C6-O6	5.17	123.00	119.90
36	BB	17	C	C4-C5-C6	5.17	119.98	117.40
36	BB	112	U	C6-N1-C2	-5.17	117.90	121.00
1	AA	574	A	N7-C8-N9	-5.17	111.22	113.80
35	BA	1382	G	C6-C5-N7	-5.17	127.30	130.40
35	BA	1609	A	N3-C4-C5	-5.17	123.18	126.80
35	BA	2621	A	C2-N3-C4	5.17	113.18	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	2869	G	N3-C4-N9	-5.17	122.90	126.00
1	AA	851	G	O5'-P-OP2	-5.16	101.05	105.70
1	AA	1248	A	C6-N1-C2	5.16	121.70	118.60
35	BA	789	A	C2-N3-C4	-5.16	108.02	110.60
35	BA	1525	G	N3-C4-C5	-5.16	126.02	128.60
35	BA	2497	A	O4'-C1'-N9	5.16	112.33	108.20
35	BA	2502	G	C5-C6-N1	5.16	114.08	111.50
35	BA	2549	G	C4-C5-N7	-5.16	108.73	110.80
1	AA	1354	C	C5'-C4'-C3'	-5.16	107.74	116.00
35	BA	36	G	C8-N9-C4	5.16	108.47	106.40
35	BA	320	A	C6-N1-C2	5.16	121.70	118.60
35	BA	1470	G	C4-C5-N7	-5.16	108.73	110.80
35	BA	1742	G	O4'-C1'-N9	-5.16	104.07	108.20
35	BA	2534	A	C8-N9-C4	5.16	107.86	105.80
35	BA	2875	C	N3-C2-O2	-5.16	118.29	121.90
36	BB	102	A	N1-C6-N6	-5.16	115.50	118.60
1	AA	887	G	N1-C2-N3	-5.16	120.80	123.90
1	AA	1157	A	C6-N1-C2	5.16	121.70	118.60
1	AA	1347	G	C1'-O4'-C4'	-5.16	105.77	109.90
1	AA	1530	G	C6-N1-C2	-5.16	122.00	125.10
35	BA	758	C	N1-C2-O2	5.16	122.00	118.90
35	BA	878	A	N7-C8-N9	-5.16	111.22	113.80
35	BA	1542	A	N3-C4-N9	-5.16	123.27	127.40
35	BA	1957	C	N3-C4-C5	5.16	123.96	121.90
35	BA	2742	C	C4-C5-C6	-5.16	114.82	117.40
35	BA	2838	G	C5-N7-C8	-5.16	101.72	104.30
1	AA	237	C	C4-C5-C6	5.16	119.98	117.40
1	AA	654	G	C6-N1-C2	5.16	128.19	125.10
22	AV	59	A	N9-C4-C5	-5.16	103.74	105.80
35	BA	717	G	N1-C2-N3	5.16	127.00	123.90
35	BA	2498	C	C4-C5-C6	-5.16	114.82	117.40
35	BA	2516	G	N1-C2-N2	-5.16	111.56	116.20
35	BA	2573	C	C2-N3-C4	-5.16	117.32	119.90
35	BA	2703	C	C4'-C3'-C2'	-5.16	97.44	102.60
1	AA	1056	U	C2-N3-C4	-5.16	123.91	127.00
35	BA	584	C	C6-N1-C2	-5.16	118.24	120.30
35	BA	768	G	C6-N1-C2	5.16	128.19	125.10
35	BA	1164	G	C5-C6-O6	-5.16	125.51	128.60
35	BA	1226	A	C2-N3-C4	5.16	113.18	110.60
35	BA	1613	G	C5-N7-C8	5.16	106.88	104.30
35	BA	2112	G	C4-C5-N7	5.16	112.86	110.80
36	BB	105	A	C4-C5-C6	5.16	119.58	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	117	G	C5-C6-O6	5.16	131.69	128.60
56	BY	60	PHE	CB-CG-CD1	5.16	124.41	120.80
1	AA	101	A	N9-C4-C5	-5.16	103.74	105.80
1	AA	106	C	C6-N1-C2	-5.16	118.24	120.30
1	AA	382	A	N3-C4-C5	-5.16	123.19	126.80
1	AA	501	C	N1-C2-O2	-5.16	115.81	118.90
1	AA	617	G	C1'-O4'-C4'	-5.16	105.78	109.90
1	AA	648	A	N7-C8-N9	-5.16	111.22	113.80
1	AA	1110	A	C6-N1-C2	5.16	121.69	118.60
1	AA	1221	G	N3-C4-N9	5.16	129.09	126.00
1	AA	1267	C	C5'-C4'-O4'	5.16	115.29	109.10
1	AA	1336	C	C6-N1-C2	5.16	122.36	120.30
35	BA	51	G	N7-C8-N9	5.16	115.68	113.10
35	BA	429	A	N1-C2-N3	-5.16	126.72	129.30
35	BA	620	G	C5-C6-O6	-5.16	125.51	128.60
35	BA	727	A	C6-N1-C2	-5.16	115.51	118.60
35	BA	1330	C	N3-C2-O2	5.16	125.51	121.90
35	BA	1333	C	C4-C5-C6	5.16	119.98	117.40
35	BA	1484	G	N7-C8-N9	5.16	115.68	113.10
35	BA	1491	G	C6-C5-N7	-5.16	127.31	130.40
35	BA	2023	G	N3-C4-N9	5.16	129.09	126.00
35	BA	2069	G	N1-C6-O6	-5.16	116.81	119.90
35	BA	2705	A	C6-N1-C2	-5.16	115.51	118.60
35	BA	2857	G	N7-C8-N9	5.16	115.68	113.10
36	BB	15	A	C5-C6-N6	-5.16	119.58	123.70
1	AA	558	G	N3-C4-N9	-5.15	122.91	126.00
35	BA	614	U	C5-C6-N1	5.15	125.28	122.70
35	BA	1041	C	C6-N1-C2	-5.15	118.24	120.30
35	BA	1641	A	O4'-C1'-N9	5.15	112.32	108.20
37	BC	219	MET	N-CA-C	5.15	124.92	111.00
1	AA	376	G	C8-N9-C4	5.15	108.46	106.40
1	AA	441	A	C3'-C2'-C1'	5.15	105.62	101.50
1	AA	442	C	C5-C4-N4	-5.15	116.59	120.20
1	AA	475	G	C8-N9-C4	5.15	108.46	106.40
1	AA	1338	G	N1-C2-N3	-5.15	120.81	123.90
1	AA	1414	U	C6-N1-C2	-5.15	117.91	121.00
1	AA	1481	U	N3-C2-O2	-5.15	118.59	122.20
1	AA	1502	A	O4'-C4'-C3'	5.15	110.22	106.10
14	AN	57	ARG	NE-CZ-NH2	-5.15	117.72	120.30
35	BA	754	C	N3-C4-C5	5.15	123.96	121.90
35	BA	1359	A	C5-N7-C8	5.15	106.48	103.90
35	BA	1472	A	C8-N9-C4	-5.15	103.74	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1708	C	N3-C2-O2	-5.15	118.29	121.90
35	BA	2603	G	N7-C8-N9	5.15	115.68	113.10
35	BA	2712	U	N1-C1'-C2'	5.15	120.70	114.00
1	AA	292	G	C6-C5-N7	-5.15	127.31	130.40
1	AA	455	C	N3-C4-N4	-5.15	114.39	118.00
1	AA	729	A	N1-C6-N6	5.15	121.69	118.60
35	BA	39	C	O4'-C1'-N1	5.15	112.32	108.20
35	BA	380	U	C2-N3-C4	5.15	130.09	127.00
35	BA	922	U	C6-N1-C2	-5.15	117.91	121.00
35	BA	1591	G	C5-C6-O6	-5.15	125.51	128.60
35	BA	1786	A	N1-C2-N3	-5.15	126.72	129.30
35	BA	1848	A	O4'-C1'-N9	5.15	112.32	108.20
35	BA	2018	G	C6-C5-N7	5.15	133.49	130.40
35	BA	2647	U	C5-C6-N1	5.15	125.28	122.70
1	AA	750	G	N3-C4-C5	5.15	131.17	128.60
35	BA	901	A	N1-C6-N6	5.15	121.69	118.60
35	BA	2268	A	C6-N1-C2	5.15	121.69	118.60
35	BA	2445	G	N3-C4-C5	-5.15	126.03	128.60
36	BB	100	A	N1-C6-N6	-5.15	115.51	118.60
35	BA	300	A	O4'-C1'-N9	-5.15	104.08	108.20
35	BA	423	A	N9-C4-C5	5.15	107.86	105.80
35	BA	626	U	O4'-C1'-N1	5.15	112.32	108.20
35	BA	657	U	N3-C4-C5	-5.15	111.51	114.60
35	BA	965	C	C4-C5-C6	5.15	119.97	117.40
35	BA	1449	A	C8-N9-C4	5.15	107.86	105.80
35	BA	2101	G	N1-C6-O6	5.15	122.99	119.90
35	BA	2380	C	C6-N1-C2	5.15	122.36	120.30
35	BA	2597	G	N9-C4-C5	-5.15	103.34	105.40
35	BA	2762	G	C5'-C4'-O4'	-5.15	102.92	109.10
1	AA	1496	C	N3-C4-N4	-5.15	114.40	118.00
1	AA	1507	A	C5-C6-N1	5.15	120.27	117.70
35	BA	119	A	O4'-C1'-N9	5.15	112.32	108.20
35	BA	1613	G	C6-C5-N7	5.15	133.49	130.40
35	BA	2071	A	N9-C4-C5	-5.15	103.74	105.80
35	BA	2756	U	N1-C1'-C2'	5.15	120.69	114.00
36	BB	34	U	N1-C2-N3	-5.15	111.81	114.90
36	BB	75	G	C8-N9-C4	-5.15	104.34	106.40
1	AA	232	G	C5-C6-N1	5.14	114.07	111.50
1	AA	1442	G	C5-C6-O6	-5.14	125.51	128.60
20	AT	89	ARG	NE-CZ-NH2	-5.14	117.73	120.30
35	BA	333	G	O4'-C1'-N9	-5.14	104.08	108.20
35	BA	393	C	N3-C2-O2	-5.14	118.30	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	659	C	C5-C4-N4	-5.14	116.60	120.20
35	BA	1275	A	N3-C4-N9	-5.14	123.28	127.40
35	BA	1432	C	C2-N3-C4	5.14	122.47	119.90
35	BA	1520	G	N1-C6-O6	-5.14	116.81	119.90
35	BA	1826	G	N9-C4-C5	5.14	107.46	105.40
35	BA	2333	A	N9-C4-C5	5.14	107.86	105.80
49	BR	58	GLY	N-CA-C	5.14	125.96	113.10
1	AA	334	C	C4-C5-C6	5.14	119.97	117.40
1	AA	473	G	N1-C2-N3	5.14	126.98	123.90
1	AA	816	A	N1-C6-N6	5.14	121.69	118.60
8	AH	85	ARG	NE-CZ-NH1	-5.14	117.73	120.30
35	BA	310	A	N9-C4-C5	5.14	107.86	105.80
35	BA	371	A	C3'-C2'-C1'	-5.14	97.39	101.50
35	BA	998	C	C2-N3-C4	5.14	122.47	119.90
35	BA	1161	C	C6-N1-C2	-5.14	118.24	120.30
35	BA	1163	G	N1-C6-O6	-5.14	116.81	119.90
35	BA	1446	C	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	1558	A	N9-C4-C5	5.14	107.86	105.80
35	BA	1984	G	C4'-C3'-C2'	-5.14	97.46	102.60
35	BA	2064	C	C5-C6-N1	-5.14	118.43	121.00
35	BA	2223	G	N9-C4-C5	-5.14	103.34	105.40
35	BA	2538	C	C2-N3-C4	5.14	122.47	119.90
35	BA	2623	G	C5-C6-O6	5.14	131.69	128.60
1	AA	1103	C	C2-N3-C4	-5.14	117.33	119.90
1	AA	1224	G	N3-C2-N2	-5.14	116.30	119.90
1	AA	1403	C	N1-C1'-C2'	5.14	120.68	114.00
35	BA	179	G	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	1003	G	C5-C6-O6	-5.14	125.52	128.60
35	BA	2459	A	C5-C6-N1	5.14	120.27	117.70
35	BA	2788	C	N3-C2-O2	-5.14	118.30	121.90
1	AA	135	C	C2-N3-C4	-5.14	117.33	119.90
1	AA	321	A	C4'-C3'-C2'	-5.14	97.46	102.60
1	AA	1017	G	O4'-C1'-N9	5.14	112.31	108.20
1	AA	1036	G	C2-N3-C4	5.14	114.47	111.90
4	AD	114	ARG	NH1-CZ-NH2	-5.14	113.75	119.40
35	BA	1085	A	C5-C6-N6	-5.14	119.59	123.70
35	BA	1961	C	C6-N1-C2	5.14	122.36	120.30
35	BA	2003	G	C4-C5-C6	5.14	121.88	118.80
1	AA	320	C	N3-C4-N4	-5.14	114.40	118.00
1	AA	684	A	C4-C5-C6	5.14	119.57	117.00
35	BA	337	C	C5-C6-N1	-5.14	118.43	121.00
1	AA	456	C	C4-C5-C6	5.14	119.97	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	888	G	O5'-P-OP1	5.14	116.86	110.70
1	AA	1122	U	C1'-O4'-C4'	-5.14	105.79	109.90
1	AA	1267	C	C5-C4-N4	5.14	123.80	120.20
35	BA	180	G	OP2-P-O3'	5.14	116.50	105.20
35	BA	576	U	O4'-C1'-N1	-5.14	104.09	108.20
35	BA	786	C	N1-C2-N3	-5.14	115.61	119.20
35	BA	1284	A	C2-N3-C4	5.14	113.17	110.60
35	BA	1798	U	C4-C5-C6	5.14	122.78	119.70
35	BA	1954	G	N1-C6-O6	5.14	122.98	119.90
35	BA	2307	G	C6-N1-C2	5.14	128.18	125.10
35	BA	2326	C	N3-C4-C5	5.14	123.95	121.90
35	BA	2791	C	C2-N3-C4	5.14	122.47	119.90
36	BB	108	U	C6-N1-C2	-5.14	117.92	121.00
36	BB	114	C	C5-C6-N1	5.14	123.57	121.00
1	AA	61	G	O4'-C1'-N9	5.13	112.31	108.20
1	AA	310	G	O4'-C1'-N9	-5.13	104.09	108.20
1	AA	1094	G	C3'-C2'-C1'	5.13	105.61	101.50
35	BA	761	A	N9-C4-C5	5.13	107.85	105.80
35	BA	1756	G	C5-N7-C8	-5.13	101.73	104.30
35	BA	1776	G	N3-C4-C5	-5.13	126.03	128.60
35	BA	1974	C	N1-C2-O2	-5.13	115.82	118.90
35	BA	2362	G	N3-C4-C5	-5.13	126.03	128.60
1	AA	611	A	C4-C5-N7	-5.13	108.13	110.70
35	BA	1810	A	C3'-C2'-C1'	5.13	105.61	101.50
1	AA	1316	G	C5-C6-O6	-5.13	125.52	128.60
1	AA	1471	G	N1-C2-N3	-5.13	120.82	123.90
35	BA	110	G	N3-C4-N9	-5.13	122.92	126.00
35	BA	313	C	O4'-C1'-N1	-5.13	104.09	108.20
35	BA	844	C	N1-C2-O2	-5.13	115.82	118.90
35	BA	1458	C	C6-N1-C2	5.13	122.35	120.30
35	BA	1929	G	C5-N7-C8	5.13	106.87	104.30
35	BA	2015	A	C5-N7-C8	-5.13	101.33	103.90
35	BA	2862	G	C2-N3-C4	5.13	114.47	111.90
36	BB	1	U	C6-N1-C2	5.13	124.08	121.00
1	AA	619	U	C6-N1-C2	5.13	124.08	121.00
1	AA	624	C	N3-C4-C5	5.13	123.95	121.90
1	AA	1394	A	C5'-C4'-C3'	-5.13	107.79	116.00
1	AA	1416	G	N3-C4-C5	5.13	131.16	128.60
35	BA	315	G	O4'-C1'-N9	-5.13	104.10	108.20
35	BA	1530	C	C2-N1-C1'	-5.13	113.16	118.80
1	AA	17	U	O4'-C1'-N1	5.13	112.30	108.20
1	AA	740	U	O4'-C1'-N1	5.13	112.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	946	A	C6-N1-C2	5.13	121.68	118.60
1	AA	968	A	N9-C4-C5	5.13	107.85	105.80
1	AA	1383	C	C4'-C3'-C2'	5.13	107.73	102.60
35	BA	288	C	N3-C4-N4	-5.13	114.41	118.00
35	BA	948	G	N1-C2-N3	-5.13	120.82	123.90
35	BA	981	A	O4'-C1'-C2'	5.13	112.22	107.60
35	BA	1186	G	N9-C1'-C2'	-5.13	106.36	112.00
35	BA	1579	A	C5'-C4'-O4'	-5.13	102.95	109.10
35	BA	1838	C	C6-N1-C2	-5.13	118.25	120.30
35	BA	1953	A	N1-C2-N3	-5.13	126.74	129.30
35	BA	1964	G	C8-N9-C4	-5.13	104.35	106.40
35	BA	2000	G	C6-C5-N7	-5.13	127.32	130.40
35	BA	2034	U	N3-C2-O2	5.13	125.79	122.20
35	BA	2375	G	C6-N1-C2	-5.13	122.02	125.10
35	BA	2527	C	C4-C5-C6	5.13	119.97	117.40
36	BB	42	C	C5-C6-N1	-5.13	118.44	121.00
57	BZ	45	ASP	CB-CG-OD1	-5.13	113.69	118.30
1	AA	1349	A	C2-N3-C4	5.13	113.16	110.60
35	BA	89	G	C8-N9-C4	5.13	108.45	106.40
35	BA	649	G	C5-C6-N1	-5.13	108.94	111.50
35	BA	1110	G	N7-C8-N9	5.13	115.66	113.10
35	BA	1607	C	C4-C5-C6	5.13	119.96	117.40
35	BA	2440	C	N3-C4-C5	5.13	123.95	121.90
35	BA	2492	U	C2-N3-C4	5.13	130.08	127.00
36	BB	86	G	N9-C4-C5	5.13	107.45	105.40
52	BU	92	ARG	NE-CZ-NH1	-5.13	117.74	120.30
1	AA	969	A	OP2-P-O3'	5.12	116.47	105.20
1	AA	1056	U	N3-C4-C5	5.12	117.67	114.60
1	AA	1239	A	C8-N9-C4	-5.12	103.75	105.80
1	AA	1299	A	N9-C4-C5	-5.12	103.75	105.80
20	AT	25	ARG	NE-CZ-NH2	-5.12	117.74	120.30
35	BA	211	A	N3-C4-N9	5.12	131.50	127.40
35	BA	402	A	C4-C5-N7	5.12	113.26	110.70
35	BA	1546	C	N1-C2-O2	-5.12	115.83	118.90
35	BA	1975	G	N9-C4-C5	-5.12	103.35	105.40
35	BA	2445	G	C5'-C4'-O4'	5.12	115.25	109.10
36	BB	60	C	C2-N3-C4	-5.12	117.34	119.90
46	BO	76	ALA	CB-CA-C	-5.12	102.41	110.10
1	AA	197	A	C5'-C4'-O4'	-5.12	102.95	109.10
1	AA	346	G	P-O5'-C5'	5.12	129.10	120.90
1	AA	684	A	N1-C6-N6	-5.12	115.53	118.60
1	AA	732	C	O4'-C1'-N1	5.12	112.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	871	U	C6-N1-C2	5.12	124.07	121.00
1	AA	1021	G	O4'-C1'-N9	5.12	112.30	108.20
24	AY	331	TYR	CB-CG-CD2	-5.12	117.93	121.00
35	BA	1103	A	C4'-C3'-C2'	5.12	107.72	102.60
35	BA	1290	C	N3-C2-O2	-5.12	118.31	121.90
35	BA	2585	U	N3-C4-C5	-5.12	111.53	114.60
35	BA	2627	G	N1-C2-N2	-5.12	111.59	116.20
1	AA	446	G	C2-N3-C4	-5.12	109.34	111.90
1	AA	1282	C	O4'-C1'-N1	-5.12	104.10	108.20
35	BA	198	C	O4'-C1'-N1	-5.12	104.10	108.20
35	BA	338	G	C8-N9-C4	5.12	108.45	106.40
35	BA	830	G	C1'-O4'-C4'	-5.12	105.80	109.90
35	BA	1184	G	C4'-C3'-C2'	-5.12	97.48	102.60
35	BA	1185	C	C5'-C4'-C3'	-5.12	107.81	116.00
35	BA	1474	C	N3-C4-N4	-5.12	114.42	118.00
35	BA	2430	A	C2-N3-C4	-5.12	108.04	110.60
36	BB	19	G	C1'-O4'-C4'	-5.12	105.80	109.90
40	BF	188	ARG	NE-CZ-NH2	-5.12	117.74	120.30
1	AA	411	A	O4'-C1'-N9	-5.12	104.10	108.20
1	AA	417	C	N3-C4-N4	-5.12	114.42	118.00
1	AA	735	C	C6-N1-C2	-5.12	118.25	120.30
35	BA	405	U	C2-N3-C4	5.12	130.07	127.00
35	BA	654(H)	G	C4-C5-N7	-5.12	108.75	110.80
35	BA	859	G	N1-C2-N3	5.12	126.97	123.90
35	BA	909	A	O4'-C1'-N9	-5.12	104.10	108.20
35	BA	1392	A	C6-C5-N7	5.12	135.88	132.30
35	BA	2434	A	N3-C4-C5	5.12	130.38	126.80
1	AA	696	A	C4-C5-C6	-5.12	114.44	117.00
1	AA	1062	U	C5-C6-N1	-5.12	120.14	122.70
1	AA	1307	U	N1-C2-O2	-5.12	119.22	122.80
35	BA	272	G	C5-C6-N1	-5.12	108.94	111.50
35	BA	326	G	C2-N3-C4	5.12	114.46	111.90
35	BA	616	G	N3-C2-N2	-5.12	116.32	119.90
35	BA	1184	G	OP2-P-O3'	5.12	116.46	105.20
35	BA	1618	A	N3-C4-N9	5.12	131.50	127.40
35	BA	1705	G	C6-C5-N7	-5.12	127.33	130.40
35	BA	2326	C	C5-C6-N1	-5.12	118.44	121.00
36	BB	58	A	N9-C4-C5	5.12	107.85	105.80
36	BB	115	G	N9-C4-C5	5.12	107.45	105.40
1	AA	78	G	C6-C5-N7	5.12	133.47	130.40
35	BA	221	A	C4-C5-C6	5.12	119.56	117.00
35	BA	272(H)	C	C4-C5-C6	-5.12	114.84	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	582	G	N1-C2-N2	5.12	120.81	116.20
35	BA	594	U	N3-C4-C5	-5.12	111.53	114.60
35	BA	1355	G	C5-N7-C8	-5.12	101.74	104.30
35	BA	2088	G	N3-C4-C5	5.12	131.16	128.60
36	BB	117	G	C8-N9-C4	-5.12	104.35	106.40
1	AA	514	C	C6-N1-C2	-5.12	118.25	120.30
1	AA	1154	G	N1-C2-N3	5.12	126.97	123.90
1	AA	1326	C	C5-C6-N1	5.12	123.56	121.00
35	BA	272(G)	C	N1-C2-O2	5.12	121.97	118.90
35	BA	292	C	C5-C6-N1	5.12	123.56	121.00
35	BA	344	G	C4-C5-N7	-5.12	108.75	110.80
35	BA	652	C	O4'-C1'-N1	-5.12	104.11	108.20
35	BA	1369	G	N3-C2-N2	-5.12	116.32	119.90
35	BA	1455	G	C4-C5-C6	5.12	121.87	118.80
35	BA	1586	A	N1-C2-N3	5.12	131.86	129.30
35	BA	2854	G	N7-C8-N9	-5.12	110.54	113.10
35	BA	2884	U	C4-C5-C6	-5.12	116.63	119.70
36	BB	13	A	N9-C4-C5	5.12	107.85	105.80
1	AA	343	U	C4-C5-C6	5.11	122.77	119.70
1	AA	380	G	C3'-C2'-C1'	5.11	105.59	101.50
1	AA	447	G	C4-C5-N7	-5.11	108.75	110.80
1	AA	625	G	N3-C4-C5	-5.11	126.04	128.60
1	AA	819	A	O4'-C1'-N9	-5.11	104.11	108.20
1	AA	1076	C	N1-C2-O2	5.11	121.97	118.90
35	BA	716	A	C4-C5-C6	5.11	119.56	117.00
35	BA	1164	G	N9-C4-C5	-5.11	103.36	105.40
35	BA	1552	G	N1-C2-N2	-5.11	111.60	116.20
35	BA	2464	C	C5'-C4'-C3'	-5.11	107.82	116.00
39	BE	19	ARG	O-C-N	-5.11	114.52	122.70
35	BA	1017	G	C6-N1-C2	-5.11	122.03	125.10
35	BA	1705	G	N1-C2-N3	-5.11	120.83	123.90
1	AA	274	A	N1-C6-N6	-5.11	115.53	118.60
1	AA	458	C	C4-C5-C6	5.11	119.95	117.40
1	AA	635	G	N3-C2-N2	-5.11	116.32	119.90
1	AA	1363(A)	A	C5'-C4'-O4'	-5.11	102.97	109.10
1	AA	1452	C	C5-C6-N1	5.11	123.56	121.00
1	AA	1530	G	N9-C4-C5	-5.11	103.36	105.40
35	BA	644	A	N3-C4-C5	-5.11	123.22	126.80
35	BA	1366	A	C6-N1-C2	5.11	121.67	118.60
35	BA	2432	A	N9-C4-C5	-5.11	103.76	105.80
40	BF	142	TRP	CG-CD2-CE3	5.11	138.50	133.90
1	AA	309	G	N9-C4-C5	-5.11	103.36	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	572	A	C2-N3-C4	5.11	113.16	110.60
1	AA	711	G	N9-C4-C5	5.11	107.44	105.40
1	AA	1416	G	C4-C5-C6	-5.11	115.73	118.80
1	AA	1456	G	N1-C6-O6	-5.11	116.83	119.90
35	BA	265	A	O4'-C1'-N9	5.11	112.29	108.20
35	BA	571	A	C6-C5-N7	-5.11	128.72	132.30
35	BA	710	G	C5-C6-N1	5.11	114.05	111.50
35	BA	2040	C	N1-C2-N3	5.11	122.78	119.20
35	BA	2731	G	C5'-C4'-O4'	5.11	115.23	109.10
41	BG	63	ILE	CB-CA-C	-5.11	101.38	111.60
1	AA	170	U	N3-C2-O2	-5.11	118.62	122.20
1	AA	200	G	C5-N7-C8	-5.11	101.75	104.30
1	AA	1375	A	OP2-P-O3'	5.11	116.44	105.20
1	AA	1376	U	N3-C4-C5	5.11	117.66	114.60
1	AA	1500	A	O5'-P-OP2	-5.11	101.10	105.70
35	BA	112	U	N1-C2-N3	-5.11	111.83	114.90
35	BA	886	C	C4-C5-C6	-5.11	114.85	117.40
35	BA	1825	A	O4'-C1'-N9	-5.11	104.11	108.20
35	BA	2030	A	C4-C5-N7	-5.11	108.15	110.70
35	BA	2665	A	N1-C2-N3	5.11	131.85	129.30
35	BA	2847	U	C3'-C2'-C1'	5.11	105.59	101.50
35	BA	2876	G	C5'-C4'-C3'	5.11	124.17	116.00
1	AA	106	C	C2-N3-C4	5.11	122.45	119.90
1	AA	324	G	P-O3'-C3'	-5.11	113.57	119.70
1	AA	520	A	N3-C4-C5	5.11	130.37	126.80
1	AA	581	G	N1-C2-N2	-5.11	111.61	116.20
1	AA	628	G	O4'-C1'-N9	-5.11	104.12	108.20
1	AA	1077	G	C4'-C3'-C2'	-5.11	97.49	102.60
23	AX	14	A	C6-C5-N7	5.11	135.87	132.30
24	AY	183	MET	CG-SD-CE	5.11	108.37	100.20
35	BA	551	G	O4'-C1'-N9	-5.11	104.12	108.20
35	BA	678	C	N3-C4-N4	5.11	121.57	118.00
35	BA	932	G	N9-C4-C5	5.11	107.44	105.40
35	BA	1223	G	N7-C8-N9	5.11	115.65	113.10
35	BA	1225	G	C2-N3-C4	5.11	114.45	111.90
35	BA	1374	G	N3-C4-N9	5.11	129.06	126.00
35	BA	2292	C	O4'-C1'-C2'	5.11	112.19	107.60
35	BA	2434	A	C5-C6-N1	-5.11	115.15	117.70
49	BR	82	GLU	OE1-CD-OE2	-5.11	117.17	123.30
1	AA	947	G	N9-C4-C5	5.10	107.44	105.40
1	AA	1137	C	N3-C4-C5	-5.10	119.86	121.90
35	BA	2502	G	C6-N1-C2	-5.10	122.04	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	48	C	C6-N1-C2	-5.10	118.26	120.30
1	AA	128	G	N7-C8-N9	5.10	115.65	113.10
1	AA	867	G	C4-C5-C6	5.10	121.86	118.80
1	AA	1331	G	C5'-C4'-C3'	-5.10	107.84	116.00
3	AC	128	PHE	CB-CG-CD2	5.10	124.37	120.80
23	AX	14	A	C2-N3-C4	-5.10	108.05	110.60
35	BA	26	G	N1-C2-N2	5.10	120.79	116.20
35	BA	1748	G	C6-C5-N7	-5.10	127.34	130.40
35	BA	1833	U	O4'-C1'-N1	5.10	112.28	108.20
35	BA	2254	C	C2-N3-C4	5.10	122.45	119.90
35	BA	2354	G	C6-N1-C2	-5.10	122.04	125.10
7	AG	116	ALA	N-CA-C	5.10	124.77	111.00
35	BA	944	G	C5-C6-N1	5.10	114.05	111.50
35	BA	1409	C	C1'-O4'-C4'	5.10	113.98	109.90
35	BA	1417	C	C6-N1-C2	-5.10	118.26	120.30
35	BA	2360	A	C5'-C4'-C3'	-5.10	107.84	116.00
1	AA	352	C	N1-C2-N3	5.10	122.77	119.20
1	AA	689	C	N1-C2-O2	-5.10	115.84	118.90
1	AA	1072	G	C4-C5-N7	-5.10	108.76	110.80
35	BA	11	G	C5-C6-O6	-5.10	125.54	128.60
35	BA	44	G	O4'-C1'-N9	5.10	112.28	108.20
35	BA	1525	G	C5-C6-N1	5.10	114.05	111.50
35	BA	1798	U	C2-N3-C4	5.10	130.06	127.00
35	BA	1978	A	C4-C5-C6	5.10	119.55	117.00
35	BA	2020	A	O4'-C1'-N9	-5.10	104.12	108.20
35	BA	2412	A	N7-C8-N9	5.10	116.35	113.80
1	AA	172	A	N9-C4-C5	5.10	107.84	105.80
1	AA	202	U	C5-C6-N1	-5.10	120.15	122.70
1	AA	1220	G	N1-C2-N3	5.10	126.96	123.90
1	AA	1395	C	C4-C5-C6	5.10	119.95	117.40
35	BA	63	U	P-O3'-C3'	5.10	125.82	119.70
35	BA	616	G	C4-C5-N7	-5.10	108.76	110.80
35	BA	1465	G	C5-C6-N1	-5.10	108.95	111.50
35	BA	2062	A	N3-C4-C5	5.10	130.37	126.80
35	BA	2101	G	C8-N9-C4	5.10	108.44	106.40
35	BA	2267	A	N3-C4-N9	-5.10	123.32	127.40
35	BA	2527	C	N3-C4-N4	5.10	121.57	118.00
35	BA	2618	G	C5'-C4'-O4'	5.10	115.22	109.10
35	BA	2631	G	C5-C6-O6	-5.10	125.54	128.60
35	BA	2636	U	N1-C2-N3	-5.10	111.84	114.90
35	BA	133	C	C5-C4-N4	5.10	123.77	120.20
35	BA	503	A	C2'-C3'-O3'	5.10	121.85	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1165	U	C5-C6-N1	-5.10	120.15	122.70
35	BA	1538	G	C4-C5-N7	5.10	112.84	110.80
35	BA	1758	G	O5'-P-OP1	-5.10	101.11	105.70
35	BA	2625	G	C1'-O4'-C4'	-5.10	105.82	109.90
1	AA	970	C	C3'-C2'-C1'	5.09	105.58	101.50
1	AA	1491	G	N7-C8-N9	5.09	115.65	113.10
22	AV	31	G	N3-C4-C5	-5.09	126.05	128.60
23	AX	15	A	C5'-C4'-C3'	-5.09	107.85	116.00
35	BA	253	C	C5-C6-N1	5.09	123.55	121.00
35	BA	378	C	OP1-P-OP2	-5.09	111.96	119.60
35	BA	518	G	C5-C6-N1	-5.09	108.95	111.50
35	BA	603	A	C8-N9-C4	5.09	107.84	105.80
35	BA	922	U	C5-C4-O4	5.09	128.96	125.90
35	BA	1252	G	C8-N9-C4	5.09	108.44	106.40
35	BA	1524	G	N3-C4-C5	5.09	131.15	128.60
35	BA	1770	G	N3-C2-N2	5.09	123.47	119.90
36	BB	108	U	C4-C5-C6	5.09	122.76	119.70
1	AA	516	U	C2-N1-C1'	5.09	123.81	117.70
35	BA	624	C	C5-C4-N4	-5.09	116.64	120.20
35	BA	848	G	OP2-P-O3'	5.09	116.40	105.20
35	BA	1043	C	N1-C2-N3	-5.09	115.64	119.20
35	BA	2359	C	C5-C4-N4	-5.09	116.64	120.20
35	BA	2649	U	N1-C2-O2	5.09	126.36	122.80
36	BB	87	G	C8-N9-C4	5.09	108.44	106.40
1	AA	288	A	N7-C8-N9	5.09	116.34	113.80
1	AA	300	A	C5'-C4'-O4'	5.09	115.21	109.10
1	AA	354	G	C5'-C4'-O4'	5.09	115.21	109.10
1	AA	615	C	N1-C2-O2	-5.09	115.84	118.90
1	AA	830	G	N3-C4-C5	-5.09	126.06	128.60
1	AA	874	G	C5-C6-O6	-5.09	125.55	128.60
1	AA	1001	A	C2-N3-C4	5.09	113.15	110.60
1	AA	1166	G	N9-C4-C5	5.09	107.44	105.40
1	AA	1173	G	N9-C4-C5	5.09	107.44	105.40
1	AA	1245	A	C6-N1-C2	5.09	121.65	118.60
8	AH	68	ARG	CD-NE-CZ	5.09	130.73	123.60
35	BA	855	G	N7-C8-N9	5.09	115.65	113.10
35	BA	2708	G	C5-N7-C8	-5.09	101.75	104.30
36	BB	59	A	C5-N7-C8	5.09	106.45	103.90
36	BB	110	G	N1-C2-N3	5.09	126.95	123.90
1	AA	313	A	C6-C5-N7	-5.09	128.74	132.30
1	AA	1019	C	O4'-C1'-N1	-5.09	104.13	108.20
1	AA	1164	G	C4-C5-C6	5.09	121.85	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1309	G	N7-C8-N9	-5.09	110.56	113.10
35	BA	307	G	N9-C1'-C2'	-5.09	106.40	112.00
35	BA	409	C	C3'-C2'-C1'	-5.09	97.43	101.50
35	BA	1149	G	C6-N1-C2	-5.09	122.05	125.10
35	BA	1171	G	N3-C2-N2	-5.09	116.34	119.90
35	BA	1978	A	C8-N9-C4	-5.09	103.76	105.80
36	BB	4	C	C5-C6-N1	5.09	123.55	121.00
36	BB	77	U	O4'-C1'-N1	5.09	112.27	108.20
1	AA	404	U	C1'-O4'-C4'	5.09	113.97	109.90
35	BA	42	G	C5-C6-O6	-5.09	125.55	128.60
35	BA	381	G	C8-N9-C1'	5.09	133.62	127.00
35	BA	1000	A	N1-C2-N3	5.09	131.84	129.30
45	BN	117	PHE	CB-CG-CD1	-5.09	117.24	120.80
1	AA	830	G	C5-C6-O6	5.09	131.65	128.60
1	AA	898	G	C6-N1-C2	5.09	128.15	125.10
1	AA	1200	C	N1-C1'-C2'	-5.09	106.41	112.00
1	AA	1360	A	N9-C1'-C2'	5.09	120.61	114.00
1	AA	1383	C	C5'-C4'-O4'	5.09	115.20	109.10
22	AV	32	C	N1-C2-O2	-5.09	115.85	118.90
35	BA	327	G	C4-C5-C6	5.09	121.85	118.80
35	BA	966	G	C5-C6-O6	5.09	131.65	128.60
35	BA	1095	A	N1-C6-N6	5.09	121.65	118.60
35	BA	1561	G	N7-C8-N9	5.09	115.64	113.10
35	BA	2376	A	C5-C6-N1	-5.09	115.16	117.70
35	BA	2597	G	C1'-O4'-C4'	5.09	113.97	109.90
35	BA	2888	C	C4-C5-C6	5.09	119.94	117.40
36	BB	119	G	C4-C5-C6	-5.09	115.75	118.80
37	BC	69	LEU	CA-CB-CG	5.09	127.00	115.30
1	AA	1461	G	N9-C1'-C2'	-5.08	106.41	112.00
35	BA	1061	U	O4'-C1'-N1	5.08	112.27	108.20
35	BA	2527	C	C5-C4-N4	-5.08	116.64	120.20
1	AA	340	U	N3-C4-O4	5.08	122.96	119.40
1	AA	355	C	N3-C4-C5	-5.08	119.87	121.90
1	AA	395	C	N3-C2-O2	5.08	125.46	121.90
1	AA	540	G	C3'-C2'-C1'	-5.08	97.43	101.50
1	AA	592	G	C4-C5-C6	-5.08	115.75	118.80
1	AA	703	G	C5-N7-C8	5.08	106.84	104.30
1	AA	1207	G	O4'-C1'-N9	-5.08	104.13	108.20
35	BA	667	U	N1-C2-O2	-5.08	119.24	122.80
35	BA	704	G	C5'-C4'-C3'	-5.08	107.87	116.00
35	BA	748	G	C6-C5-N7	-5.08	127.35	130.40
35	BA	1893	C	C4-C5-C6	5.08	119.94	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1935	G	C5-N7-C8	5.08	106.84	104.30
35	BA	2515	C	N3-C2-O2	-5.08	118.34	121.90
36	BB	2	C	C2-N3-C4	5.08	122.44	119.90
41	BG	29	TRP	CG-CD2-CE3	-5.08	129.32	133.90
1	AA	46	G	C2-N3-C4	-5.08	109.36	111.90
1	AA	506	G	N1-C6-O6	-5.08	116.85	119.90
1	AA	1477	C	N1-C2-O2	-5.08	115.85	118.90
7	AG	62	PHE	CB-CG-CD1	-5.08	117.24	120.80
35	BA	74	A	C5-C6-N1	-5.08	115.16	117.70
35	BA	448	U	N1-C1'-C2'	5.08	120.61	114.00
35	BA	963	U	C4-C5-C6	5.08	122.75	119.70
35	BA	1635	G	C5-N7-C8	-5.08	101.76	104.30
35	BA	1911	U	N1-C2-O2	5.08	126.36	122.80
35	BA	2039	C	C5-C6-N1	5.08	123.54	121.00
35	BA	2590	A	O4'-C1'-N9	-5.08	104.14	108.20
35	BA	2655	G	C5-C6-O6	5.08	131.65	128.60
1	AA	898	G	N3-C4-N9	-5.08	122.95	126.00
1	AA	1101	A	N9-C4-C5	5.08	107.83	105.80
35	BA	45	C	C2-N3-C4	5.08	122.44	119.90
35	BA	381	G	C4-C5-N7	-5.08	108.77	110.80
35	BA	706	A	C4-C5-N7	-5.08	108.16	110.70
35	BA	896	A	C8-N9-C4	5.08	107.83	105.80
1	AA	163	C	O4'-C1'-N1	-5.08	104.14	108.20
1	AA	490	G	C8-N9-C4	-5.08	104.37	106.40
22	AV	31	G	N1-C6-O6	5.08	122.95	119.90
22	AV	74	C	C2-N3-C4	5.08	122.44	119.90
35	BA	241	A	O4'-C1'-N9	5.08	112.26	108.20
35	BA	628	G	C8-N9-C4	-5.08	104.37	106.40
35	BA	836	G	C4-C5-N7	-5.08	108.77	110.80
35	BA	1455	G	C5-N7-C8	5.08	106.84	104.30
35	BA	1469	A	N9-C4-C5	5.08	107.83	105.80
35	BA	1633	G	N9-C4-C5	-5.08	103.37	105.40
35	BA	2288	A	C5'-C4'-C3'	-5.08	107.87	116.00
35	BA	2708	G	N3-C2-N2	-5.08	116.34	119.90
36	BB	73	A	C8-N9-C4	-5.08	103.77	105.80
1	AA	450	G	C5-C6-O6	-5.08	125.55	128.60
1	AA	934	C	N1-C1'-C2'	5.08	120.60	114.00
35	BA	732	C	O4'-C1'-N1	5.08	112.26	108.20
35	BA	2840	C	C6-N1-C2	5.08	122.33	120.30
36	BB	51	G	N7-C8-N9	5.08	115.64	113.10
1	AA	370	C	C4-C5-C6	5.08	119.94	117.40
1	AA	413	G	N7-C8-N9	-5.08	110.56	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	733	A	C8-N9-C4	-5.08	103.77	105.80
1	AA	1058	G	N3-C2-N2	-5.08	116.35	119.90
35	BA	1898	U	O4'-C1'-N1	5.08	112.26	108.20
35	BA	2116	G	C5-C6-O6	-5.08	125.56	128.60
35	BA	2881	C	N3-C2-O2	-5.08	118.35	121.90
1	AA	550	G	N1-C2-N3	-5.07	120.86	123.90
1	AA	1203	C	N3-C2-O2	-5.07	118.35	121.90
35	BA	614(C)	A	O4'-C1'-C2'	5.07	112.17	107.60
35	BA	680	G	N7-C8-N9	5.07	115.64	113.10
35	BA	863	A	C6-C5-N7	-5.07	128.75	132.30
35	BA	1858	G	C6-N1-C2	-5.07	122.06	125.10
35	BA	2077	A	C4-C5-C6	5.07	119.54	117.00
35	BA	2275	C	C6-N1-C2	-5.07	118.27	120.30
35	BA	2703	C	C5-C4-N4	-5.07	116.65	120.20
35	BA	2869	G	N3-C4-C5	5.07	131.14	128.60
36	BB	66	A	C4-C5-N7	-5.07	108.16	110.70
52	BU	63	VAL	CA-CB-CG2	-5.07	103.29	110.90
1	AA	189(J)	G	O4'-C1'-C2'	5.07	112.17	107.60
1	AA	1332	A	C2-N3-C4	5.07	113.14	110.60
35	BA	396	G	C5-C6-O6	-5.07	125.56	128.60
35	BA	1213	A	C4-C5-N7	-5.07	108.16	110.70
36	BB	114	C	C6-N1-C2	-5.07	118.27	120.30
1	AA	402	G	N7-C8-N9	5.07	115.64	113.10
1	AA	805	C	N3-C2-O2	5.07	125.45	121.90
1	AA	854	G	N3-C4-C5	-5.07	126.06	128.60
1	AA	910	C	C5-C6-N1	-5.07	118.47	121.00
1	AA	1175	G	N9-C1'-C2'	-5.07	106.42	112.00
1	AA	1198	G	N1-C2-N2	-5.07	111.64	116.20
1	AA	1418	A	C8-N9-C4	5.07	107.83	105.80
22	AV	69	C	C2-N3-C4	5.07	122.44	119.90
35	BA	28	A	N7-C8-N9	5.07	116.33	113.80
35	BA	103	A	C4-C5-C6	5.07	119.53	117.00
35	BA	272(F)	C	C2-N3-C4	-5.07	117.36	119.90
35	BA	594	U	N1-C2-N3	-5.07	111.86	114.90
35	BA	603	A	C2-N3-C4	5.07	113.14	110.60
35	BA	654(R)	C	O4'-C1'-C2'	5.07	112.16	107.60
35	BA	680	G	O4'-C1'-N9	-5.07	104.14	108.20
35	BA	1644	C	N3-C2-O2	-5.07	118.35	121.90
35	BA	2375	G	O4'-C1'-N9	5.07	112.26	108.20
35	BA	2627	G	N7-C8-N9	5.07	115.64	113.10
1	AA	44	G	C6-C5-N7	5.07	133.44	130.40
1	AA	338	A	P-O5'-C5'	-5.07	112.79	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	456	C	C1'-O4'-C4'	5.07	113.95	109.90
1	AA	504	C	C5-C6-N1	5.07	123.53	121.00
35	BA	1163	G	P-O5'-C5'	-5.07	112.79	120.90
35	BA	2653	U	C6-N1-C2	5.07	124.04	121.00
1	AA	446	G	N1-C2-N3	5.07	126.94	123.90
1	AA	888	G	C5'-C4'-O4'	5.07	115.18	109.10
1	AA	1179	A	C3'-C2'-C1'	-5.07	97.45	101.50
1	AA	1423	G	N3-C4-C5	5.07	131.13	128.60
1	AA	1436	U	O4'-C1'-N1	5.07	112.25	108.20
22	AV	71	C	C4'-C3'-C2'	-5.07	97.53	102.60
35	BA	703	U	N3-C4-O4	5.07	122.95	119.40
35	BA	849	A	C5'-C4'-O4'	5.07	115.18	109.10
35	BA	983	A	N1-C2-N3	-5.07	126.77	129.30
35	BA	1280	G	O4'-C1'-C2'	-5.07	100.73	105.80
35	BA	2164	C	C5-C6-N1	5.07	123.53	121.00
35	BA	2511	U	C4-C5-C6	-5.07	116.66	119.70
1	AA	549	C	C5-C6-N1	5.07	123.53	121.00
34	B9	4	ARG	NH1-CZ-NH2	-5.07	113.83	119.40
35	BA	196	A	C4-C5-C6	5.07	119.53	117.00
35	BA	199	A	N9-C4-C5	5.07	107.83	105.80
35	BA	568	U	C6-N1-C2	-5.07	117.96	121.00
35	BA	624	C	N1-C2-N3	5.07	122.75	119.20
35	BA	636	G	C5-C6-O6	-5.07	125.56	128.60
35	BA	1989	G	C4-C5-N7	5.07	112.83	110.80
35	BA	2866	U	C2-N3-C4	5.07	130.04	127.00
50	BS	25	ARG	CD-NE-CZ	5.07	130.69	123.60
50	BS	46	VAL	CB-CA-C	-5.07	101.78	111.40
1	AA	1022	G	C4'-C3'-C2'	5.06	107.66	102.60
1	AA	1279	A	N7-C8-N9	5.06	116.33	113.80
1	AA	1352	C	N3-C4-C5	5.06	123.93	121.90
35	BA	78	A	N3-C4-N9	5.06	131.45	127.40
35	BA	1845	G	N1-C2-N3	-5.06	120.86	123.90
35	BA	1907	G	O4'-C1'-N9	5.06	112.25	108.20
1	AA	151	A	C5-N7-C8	-5.06	101.37	103.90
1	AA	393	A	C5-C6-N1	5.06	120.23	117.70
1	AA	612	C	N1-C2-N3	5.06	122.74	119.20
1	AA	714	G	C2-N3-C4	5.06	114.43	111.90
1	AA	1228	C	O4'-C1'-N1	5.06	112.25	108.20
35	BA	485	C	C5-C4-N4	-5.06	116.66	120.20
35	BA	654(E)	G	N7-C8-N9	-5.06	110.57	113.10
35	BA	2376	A	N1-C6-N6	5.06	121.64	118.60
48	BQ	134	ARG	NH1-CZ-NH2	5.06	124.97	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	311	A	C2-N3-C4	-5.06	108.07	110.60
35	BA	1054	A	O4'-C4'-C3'	5.06	110.15	106.10
35	BA	1264	G	C4-C5-C6	5.06	121.84	118.80
35	BA	1849	G	C5-N7-C8	5.06	106.83	104.30
35	BA	2239	G	N9-C4-C5	-5.06	103.38	105.40
35	BA	2311	A	N9-C4-C5	-5.06	103.78	105.80
35	BA	2313	C	N1-C2-O2	5.06	121.94	118.90
1	AA	188	C	C5-C6-N1	5.06	123.53	121.00
1	AA	318	G	N3-C2-N2	-5.06	116.36	119.90
1	AA	352	C	N3-C4-N4	-5.06	114.46	118.00
1	AA	627	G	C2-N3-C4	-5.06	109.37	111.90
1	AA	710	G	C8-N9-C4	-5.06	104.38	106.40
35	BA	271(U)	G	C8-N9-C4	5.06	108.42	106.40
35	BA	296	C	N3-C2-O2	-5.06	118.36	121.90
35	BA	673	C	N3-C2-O2	5.06	125.44	121.90
35	BA	961	C	C5'-C4'-C3'	5.06	124.10	116.00
35	BA	2251	G	N1-C6-O6	-5.06	116.86	119.90
35	BA	2307	G	C2-N3-C4	-5.06	109.37	111.90
35	BA	2383	G	N3-C4-C5	-5.06	126.07	128.60
35	BA	2496	C	C2-N3-C4	-5.06	117.37	119.90
35	BA	2585	U	C5'-C4'-O4'	-5.06	103.03	109.10
36	BB	9	G	C5-C6-N1	-5.06	108.97	111.50
45	BN	13	TRP	CZ3-CH2-CZ2	-5.06	115.53	121.60
1	AA	73	G	O4'-C1'-N9	-5.06	104.16	108.20
1	AA	134	A	C8-N9-C4	5.06	107.82	105.80
1	AA	656	C	C3'-C2'-C1'	5.06	105.55	101.50
1	AA	819	A	N3-C4-N9	5.06	131.45	127.40
35	BA	33	U	N3-C4-O4	-5.06	115.86	119.40
35	BA	291	C	N3-C2-O2	5.06	125.44	121.90
35	BA	372	G	C4-C5-C6	5.06	121.83	118.80
35	BA	771	G	N3-C4-N9	5.06	129.03	126.00
35	BA	1064	C	N3-C4-N4	-5.06	114.46	118.00
35	BA	1560	G	C2-N3-C4	-5.06	109.37	111.90
35	BA	1746	G	N9-C4-C5	5.06	107.42	105.40
35	BA	2141	G	N9-C4-C5	-5.06	103.38	105.40
35	BA	2831	G	N9-C4-C5	5.06	107.42	105.40
36	BB	85	G	C6-C5-N7	-5.06	127.36	130.40
36	BB	92	C	C6-N1-C2	-5.06	118.28	120.30
35	BA	8	A	C5-C6-N1	-5.06	115.17	117.70
35	BA	687	C	C5-C6-N1	-5.06	118.47	121.00
35	BA	1311	G	C5-N7-C8	-5.06	101.77	104.30
35	BA	2331	G	C8-N9-C4	-5.06	104.38	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	30	U	C1'-O4'-C4'	5.05	113.94	109.90
1	AA	572	A	C5-C6-N1	5.05	120.23	117.70
1	AA	832	C	C2-N3-C4	5.05	122.43	119.90
1	AA	924	C	C5'-C4'-O4'	5.05	115.17	109.10
1	AA	988	G	N7-C8-N9	-5.05	110.57	113.10
35	BA	136	G	N3-C2-N2	-5.05	116.36	119.90
35	BA	615	G	C6-N1-C2	5.05	128.13	125.10
35	BA	729	G	C8-N9-C4	-5.05	104.38	106.40
35	BA	871	U	C5-C4-O4	5.05	128.93	125.90
35	BA	1718	G	N7-C8-N9	-5.05	110.57	113.10
35	BA	2047	U	N3-C4-O4	-5.05	115.86	119.40
35	BA	2843	G	C4-C5-C6	-5.05	115.77	118.80
35	BA	2885	C	C5-C6-N1	-5.05	118.47	121.00
36	BB	86	G	N3-C4-N9	-5.05	122.97	126.00
36	BB	101	G	O4'-C1'-N9	-5.05	104.16	108.20
39	BE	46	ALA	CB-CA-C	-5.05	102.52	110.10
1	AA	721	G	P-O5'-C5'	5.05	128.99	120.90
1	AA	1237	C	O4'-C1'-C2'	5.05	112.15	107.60
35	BA	422	A	C6-N1-C2	-5.05	115.57	118.60
35	BA	1072	C	O4'-C1'-N1	-5.05	104.16	108.20
36	BB	102	A	N1-C2-N3	5.05	131.83	129.30
1	AA	347	G	N1-C2-N3	5.05	126.93	123.90
1	AA	565	U	N3-C4-C5	5.05	117.63	114.60
13	AM	57	ARG	NE-CZ-NH1	-5.05	117.78	120.30
35	BA	267	C	O5'-P-OP1	-5.05	101.15	105.70
35	BA	271(Z)	C	N1-C2-O2	-5.05	115.87	118.90
35	BA	422	A	N9-C4-C5	5.05	107.82	105.80
35	BA	622	G	O4'-C1'-N9	-5.05	104.16	108.20
35	BA	1070	A	N7-C8-N9	5.05	116.33	113.80
35	BA	1170	G	C4-C5-C6	5.05	121.83	118.80
35	BA	1321	A	O4'-C1'-N9	-5.05	104.16	108.20
35	BA	1661	G	N3-C2-N2	5.05	123.44	119.90
35	BA	1838	C	C2'-C3'-O3'	5.05	121.78	113.70
35	BA	1857	G	N7-C8-N9	5.05	115.62	113.10
35	BA	1941	C	C5-C6-N1	-5.05	118.47	121.00
37	BC	94	TYR	CB-CG-CD1	-5.05	117.97	121.00
37	BC	214	TYR	CG-CD1-CE1	5.05	125.34	121.30
1	AA	585	G	N3-C2-N2	-5.05	116.36	119.90
1	AA	603	U	C5-C6-N1	5.05	125.22	122.70
1	AA	654	G	C5'-C4'-O4'	5.05	115.16	109.10
8	AH	68	ARG	NE-CZ-NH2	5.05	122.83	120.30
15	AO	72	ARG	NE-CZ-NH1	5.05	122.82	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	144	C	C4-C5-C6	5.05	119.92	117.40
35	BA	1307	A	C5-N7-C8	5.05	106.42	103.90
35	BA	1956	U	C4-C5-C6	5.05	122.73	119.70
35	BA	1985	G	C6-C5-N7	-5.05	127.37	130.40
35	BA	2173	A	C4-C5-C6	5.05	119.52	117.00
35	BA	2457	U	N1-C2-N3	5.05	117.93	114.90
35	BA	2503	A	C6-C5-N7	-5.05	128.76	132.30
35	BA	2844	G	C8-N9-C4	5.05	108.42	106.40
35	BA	1416	G	C8-N9-C4	5.05	108.42	106.40
35	BA	1494	A	C2'-C3'-O3'	5.05	121.78	113.70
35	BA	1809	A	C4-C5-C6	5.05	119.52	117.00
35	BA	2158	A	N7-C8-N9	-5.05	111.28	113.80
1	AA	38	G	N9-C1'-C2'	-5.05	106.45	112.00
1	AA	610	G	C8-N9-C4	-5.05	104.38	106.40
1	AA	803	G	C8-N9-C4	5.05	108.42	106.40
35	BA	1229	G	N9-C4-C5	5.05	107.42	105.40
35	BA	1713	U	N3-C4-O4	5.05	122.93	119.40
35	BA	2083	G	N7-C8-N9	-5.05	110.58	113.10
35	BA	2226	C	O4'-C1'-N1	5.05	112.24	108.20
1	AA	395	C	C1'-O4'-C4'	-5.04	105.86	109.90
1	AA	607	A	N3-C4-N9	-5.04	123.36	127.40
1	AA	856	C	N1-C1'-C2'	-5.04	106.45	112.00
22	AV	53	G	C4-C5-N7	5.04	112.82	110.80
35	BA	261	G	C8-N9-C4	5.04	108.42	106.40
35	BA	2242	G	C5-C6-N1	-5.04	108.98	111.50
1	AA	525	C	C2-N3-C4	5.04	122.42	119.90
8	AH	38	ILE	CB-CA-C	-5.04	101.51	111.60
35	BA	113	G	C2-N3-C4	-5.04	109.38	111.90
35	BA	304	G	N1-C2-N3	5.04	126.93	123.90
35	BA	2132	U	N3-C2-O2	-5.04	118.67	122.20
35	BA	2156	G	C5-N7-C8	-5.04	101.78	104.30
35	BA	2700	C	N1-C2-O2	5.04	121.93	118.90
35	BA	2835	A	C5-C6-N1	5.04	120.22	117.70
36	BB	54	G	N3-C4-C5	5.04	131.12	128.60
1	AA	254	G	C2-N3-C4	-5.04	109.38	111.90
1	AA	766	A	O4'-C1'-N9	5.04	112.23	108.20
1	AA	767	A	C5'-C4'-O4'	5.04	115.15	109.10
35	BA	96	G	C5-N7-C8	5.04	106.82	104.30
35	BA	634	C	C5-C4-N4	5.04	123.73	120.20
35	BA	654(A)	G	C5-C6-O6	-5.04	125.58	128.60
35	BA	1247	A	O4'-C4'-C3'	5.04	110.13	106.10
35	BA	1283	G	N3-C4-C5	-5.04	126.08	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1344	G	N7-C8-N9	5.04	115.62	113.10
35	BA	1927	A	N1-C6-N6	-5.04	115.58	118.60
35	BA	1931	U	C5-C6-N1	5.04	125.22	122.70
1	AA	485	G	C4-C5-C6	5.04	121.82	118.80
1	AA	1384	C	N3-C2-O2	-5.04	118.37	121.90
35	BA	470	A	N9-C4-C5	5.04	107.82	105.80
35	BA	1367	A	N9-C1'-C2'	-5.04	106.46	112.00
1	AA	889	A	C5-C6-N6	5.04	127.73	123.70
1	AA	1181	G	C5-C6-O6	-5.04	125.58	128.60
1	AA	1447	A	C8-N9-C4	-5.04	103.78	105.80
1	AA	1481	U	O4'-C1'-N1	-5.04	104.17	108.20
24	AY	35	TYR	CB-CG-CD2	-5.04	117.98	121.00
35	BA	597	U	C5'-C4'-C3'	5.04	124.06	116.00
35	BA	640	C	C6-N1-C2	5.04	122.31	120.30
35	BA	1335	U	C4-C5-C6	-5.04	116.68	119.70
35	BA	1638	C	C4-C5-C6	5.04	119.92	117.40
35	BA	1710	C	C2-N1-C1'	5.04	124.34	118.80
1	AA	481	G	N9-C4-C5	-5.04	103.39	105.40
1	AA	1198	G	C5-N7-C8	-5.04	101.78	104.30
1	AA	1202	G	N3-C4-C5	5.04	131.12	128.60
11	AK	66	LEU	CA-CB-CG	-5.04	103.72	115.30
35	BA	590	A	C5-N7-C8	-5.04	101.38	103.90
35	BA	1553	A	N9-C4-C5	-5.04	103.78	105.80
35	BA	1576	U	N3-C2-O2	5.04	125.73	122.20
35	BA	1593	G	C6-C5-N7	-5.04	127.38	130.40
35	BA	1799	G	N9-C1'-C2'	5.04	120.55	114.00
41	BG	83	ARG	NE-CZ-NH2	5.04	122.82	120.30
1	AA	193	C	C3'-C2'-C1'	5.04	105.53	101.50
1	AA	315	A	C6-N1-C2	5.04	121.62	118.60
1	AA	446	G	C5-C6-O6	-5.04	125.58	128.60
1	AA	895	G	C4-C5-N7	5.04	112.81	110.80
1	AA	1398	A	C5'-C4'-C3'	-5.04	107.94	116.00
22	AV	10	G	C5-C6-O6	-5.04	125.58	128.60
35	BA	187	G	C6-C5-N7	-5.04	127.38	130.40
35	BA	271(Q)	G	N3-C4-C5	-5.04	126.08	128.60
35	BA	272(B)	G	N1-C6-O6	-5.04	116.88	119.90
35	BA	430	G	C5-C6-O6	-5.04	125.58	128.60
35	BA	530	G	N7-C8-N9	5.04	115.62	113.10
35	BA	1129	A	O4'-C1'-C2'	5.04	112.13	107.60
35	BA	1376	C	N3-C4-N4	-5.04	114.47	118.00
35	BA	1842	G	N3-C2-N2	-5.04	116.38	119.90
35	BA	1904	G	C5-C6-N1	5.04	114.02	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	76	C	O4'-C1'-N1	5.03	112.23	108.20
1	AA	262	A	N1-C2-N3	5.03	131.82	129.30
1	AA	283	C	C1'-O4'-C4'	5.03	113.93	109.90
1	AA	363	A	C4-C5-C6	5.03	119.52	117.00
1	AA	384	G	N3-C2-N2	-5.03	116.38	119.90
1	AA	567	G	C4-C5-N7	-5.03	108.79	110.80
1	AA	682	G	N3-C2-N2	-5.03	116.38	119.90
1	AA	785	G	N9-C4-C5	-5.03	103.39	105.40
1	AA	996	A	N1-C2-N3	-5.03	126.78	129.30
7	AG	114	ARG	NE-CZ-NH1	5.03	122.82	120.30
35	BA	335	C	C2-N3-C4	-5.03	117.38	119.90
35	BA	688	U	N3-C2-O2	-5.03	118.68	122.20
35	BA	859	G	C3'-C2'-C1'	-5.03	97.47	101.50
35	BA	1057	A	C6-N1-C2	-5.03	115.58	118.60
35	BA	1188	U	C6-N1-C2	-5.03	117.98	121.00
35	BA	1488	G	C5'-C4'-C3'	-5.03	107.94	116.00
35	BA	1682	G	N7-C8-N9	5.03	115.62	113.10
35	BA	2192	G	C1'-O4'-C4'	5.03	113.93	109.90
35	BA	2363	C	C5-C4-N4	5.03	123.72	120.20
51	BT	53	ARG	NE-CZ-NH1	5.03	122.82	120.30
35	BA	271(R)	G	C5'-C4'-O4'	5.03	115.14	109.10
35	BA	1190	G	N9-C4-C5	-5.03	103.39	105.40
1	AA	36	C	C2-N3-C4	-5.03	117.38	119.90
1	AA	419	C	C1'-O4'-C4'	-5.03	105.88	109.90
1	AA	733	A	C5-N7-C8	-5.03	101.38	103.90
1	AA	898	G	C2-N3-C4	-5.03	109.39	111.90
1	AA	1507	A	C8-N9-C4	-5.03	103.79	105.80
22	AV	19	G	N7-C8-N9	-5.03	110.58	113.10
35	BA	112	U	O4'-C1'-N1	5.03	112.22	108.20
35	BA	501	A	C4'-C3'-C2'	-5.03	97.57	102.60
35	BA	866	A	C4-C5-N7	-5.03	108.18	110.70
35	BA	1146	C	C5-C6-N1	5.03	123.52	121.00
35	BA	1212	G	N3-C2-N2	-5.03	116.38	119.90
35	BA	1462	C	C4-C5-C6	-5.03	114.89	117.40
35	BA	1778	U	N3-C4-C5	5.03	117.62	114.60
35	BA	2580	U	N3-C2-O2	-5.03	118.68	122.20
35	BA	49	A	C6-C5-N7	-5.03	128.78	132.30
35	BA	1322	A	C4-C5-N7	-5.03	108.19	110.70
1	AA	514	C	C5-C6-N1	5.03	123.51	121.00
1	AA	529	G	C5-C6-N1	5.03	114.01	111.50
22	AV	4	G	C4-C5-N7	-5.03	108.79	110.80
35	BA	45	C	N1-C2-O2	5.03	121.92	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	136	G	C4-C5-N7	5.03	112.81	110.80
35	BA	243	U	N3-C2-O2	5.03	125.72	122.20
35	BA	1204	A	O4'-C4'-C3'	5.03	110.12	106.10
35	BA	1811	G	O4'-C1'-N9	-5.03	104.18	108.20
35	BA	1816	G	C5-C6-N1	-5.03	108.99	111.50
35	BA	2225	A	C5-C6-N6	5.03	127.72	123.70
35	BA	2645	G	C6-C5-N7	5.03	133.42	130.40
36	BB	3	C	C5-C6-N1	5.03	123.51	121.00
35	BA	175	G	C8-N9-C4	5.03	108.41	106.40
35	BA	1057	A	C8-N9-C4	-5.03	103.79	105.80
35	BA	1426	G	C4-C5-C6	5.03	121.82	118.80
35	BA	1444	G	C5-C6-N1	-5.03	108.99	111.50
35	BA	2294	C	C5'-C4'-O4'	5.03	115.13	109.10
35	BA	2318	G	C1'-O4'-C4'	-5.03	105.88	109.90
1	AA	419	C	N3-C4-C5	5.02	123.91	121.90
1	AA	538	G	N7-C8-N9	5.02	115.61	113.10
1	AA	1476	G	C5-C6-O6	5.02	131.61	128.60
1	AA	1498	U	OP2-P-O3'	5.02	116.25	105.20
35	BA	413	C	O5'-C5'-C4'	-5.02	102.15	111.70
1	AA	78	G	N7-C8-N9	-5.02	110.59	113.10
1	AA	514	C	N3-C4-N4	-5.02	114.48	118.00
1	AA	1224	G	O4'-C1'-N9	-5.02	104.18	108.20
3	AC	17	ASP	CB-CG-OD2	-5.02	113.78	118.30
21	AU	7	ARG	NE-CZ-NH1	-5.02	117.79	120.30
35	BA	1567	A	N7-C8-N9	5.02	116.31	113.80
35	BA	1656	C	C4-C5-C6	-5.02	114.89	117.40
35	BA	1657	C	O4'-C1'-N1	5.02	112.22	108.20
35	BA	1764	G	N1-C6-O6	5.02	122.91	119.90
35	BA	2183	C	C2-N3-C4	5.02	122.41	119.90
35	BA	2208	A	N7-C8-N9	5.02	116.31	113.80
35	BA	2352	A	C6-C5-N7	-5.02	128.78	132.30
35	BA	2544	G	C4-C5-N7	5.02	112.81	110.80
35	BA	2828	C	N3-C4-N4	5.02	121.52	118.00
1	AA	1030(B)	C	N3-C2-O2	-5.02	118.39	121.90
1	AA	1154	G	C6-C5-N7	-5.02	127.39	130.40
1	AA	1440	C	P-O5'-C5'	-5.02	112.87	120.90
1	AA	1486	G	N7-C8-N9	-5.02	110.59	113.10
1	AA	312	C	C5-C4-N4	-5.02	116.69	120.20
1	AA	418	C	C5-C4-N4	-5.02	116.69	120.20
1	AA	1505	G	C6-C5-N7	5.02	133.41	130.40
35	BA	634	C	C6-N1-C2	-5.02	118.29	120.30
35	BA	1142	U	N3-C4-O4	5.02	122.91	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1146	C	C3'-C2'-C1'	-5.02	97.48	101.50
35	BA	1235	G	N7-C8-N9	5.02	115.61	113.10
35	BA	2061	G	C6-N1-C2	5.02	128.11	125.10
35	BA	2202	C	C2-N3-C4	5.02	122.41	119.90
35	BA	2338	G	C4'-C3'-C2'	5.02	107.62	102.60
35	BA	2576	G	C5-C6-O6	-5.02	125.59	128.60
1	AA	305	G	N9-C4-C5	5.02	107.41	105.40
1	AA	535	A	C8-N9-C4	5.02	107.81	105.80
18	AR	55	ARG	NE-CZ-NH1	5.02	122.81	120.30
35	BA	962	G	C4-C5-C6	-5.02	115.79	118.80
35	BA	1347	G	C5-N7-C8	5.02	106.81	104.30
35	BA	2385	C	O5'-P-OP2	5.02	116.72	110.70
35	BA	2607	G	C5-C6-N1	-5.02	108.99	111.50
36	BB	78	A	N9-C4-C5	-5.02	103.79	105.80
1	AA	14	U	C4-C5-C6	-5.02	116.69	119.70
1	AA	822	C	N1-C2-O2	5.02	121.91	118.90
35	BA	129	C	N3-C2-O2	-5.02	118.39	121.90
35	BA	388	G	C5-N7-C8	5.02	106.81	104.30
35	BA	728	G	C5'-C4'-C3'	-5.02	107.97	116.00
35	BA	1353	A	C8-N9-C4	5.02	107.81	105.80
35	BA	1461	G	O4'-C1'-N9	-5.02	104.19	108.20
41	BG	104	GLU	OE1-CD-OE2	-5.02	117.28	123.30
1	AA	198	G	N9-C4-C5	-5.01	103.39	105.40
1	AA	302	G	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	339	C	N3-C2-O2	-5.01	118.39	121.90
1	AA	559	A	N1-C2-N3	5.01	131.81	129.30
1	AA	592	G	C4-C5-N7	5.01	112.81	110.80
1	AA	839	U	C1'-O4'-C4'	-5.01	105.89	109.90
1	AA	1111	A	C5-C6-N1	-5.01	115.19	117.70
1	AA	1151	A	N1-C2-N3	5.01	131.81	129.30
1	AA	1220	G	N9-C4-C5	5.01	107.41	105.40
35	BA	768	G	C4'-C3'-C2'	5.01	107.61	102.60
35	BA	1470	G	C8-N9-C4	5.01	108.41	106.40
35	BA	1569	A	N1-C2-N3	5.01	131.81	129.30
35	BA	1835	G	N9-C4-C5	-5.01	103.39	105.40
35	BA	2070	G	C5-C6-O6	5.01	131.61	128.60
35	BA	2342	C	N3-C4-N4	5.01	121.51	118.00
35	BA	2483	C	C2-N1-C1'	5.01	124.32	118.80
47	BP	49	ARG	NE-CZ-NH2	-5.01	117.79	120.30
1	AA	189(A)	C	C2-N3-C4	5.01	122.41	119.90
1	AA	765	G	O4'-C1'-N9	-5.01	104.19	108.20
35	BA	896	A	N9-C4-C5	-5.01	103.80	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1619	G	N3-C4-N9	5.01	129.01	126.00
46	BO	97	ARG	NE-CZ-NH2	-5.01	117.79	120.30
1	AA	1098	C	C6-N1-C2	-5.01	118.30	120.30
1	AA	1471	G	N3-C2-N2	5.01	123.41	119.90
35	BA	1391	U	N1-C2-O2	5.01	126.31	122.80
35	BA	1405	U	N3-C4-C5	-5.01	111.59	114.60
35	BA	1443	G	C5'-C4'-C3'	-5.01	107.98	116.00
35	BA	1826	G	N3-C4-C5	-5.01	126.09	128.60
35	BA	2148	G	C8-N9-C4	-5.01	104.39	106.40
1	AA	167	G	N1-C2-N3	5.01	126.91	123.90
1	AA	610	G	N7-C8-N9	5.01	115.61	113.10
1	AA	889	A	N1-C2-N3	5.01	131.81	129.30
1	AA	1084	G	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	1348	U	C1'-O4'-C4'	-5.01	105.89	109.90
1	AA	1477	C	C4-C5-C6	5.01	119.91	117.40
35	BA	1769	G	N9-C4-C5	-5.01	103.40	105.40
35	BA	1990	C	C2-N1-C1'	5.01	124.31	118.80
35	BA	2033	A	N9-C1'-C2'	5.01	120.51	114.00
36	BB	15	A	C4'-C3'-C2'	5.01	107.61	102.60
1	AA	289	G	N3-C4-C5	-5.01	126.10	128.60
1	AA	1067	A	C5-C6-N1	5.01	120.20	117.70
22	AV	73	A	C5-N7-C8	5.01	106.40	103.90
42	BH	130	ARG	NE-CZ-NH1	-5.01	117.80	120.30
42	BH	132	ARG	NE-CZ-NH1	5.01	122.80	120.30
1	AA	893	C	O4'-C1'-N1	5.01	112.20	108.20
1	AA	925	G	C4-C5-C6	-5.01	115.80	118.80
1	AA	1477	C	C1'-O4'-C4'	-5.01	105.89	109.90
1	AA	1513	A	C5-C6-N1	5.01	120.20	117.70
35	BA	225	A	N1-C2-N3	5.01	131.80	129.30
35	BA	260	G	C5-C6-N1	-5.01	109.00	111.50
35	BA	338	G	C3'-C2'-C1'	5.01	105.50	101.50
35	BA	596	G	N9-C4-C5	-5.01	103.40	105.40
35	BA	1760	A	N1-C2-N3	5.01	131.80	129.30
35	BA	2381	C	C3'-C2'-C1'	-5.01	97.50	101.50
35	BA	2663	G	N3-C4-C5	-5.01	126.10	128.60
41	BG	145	THR	CA-CB-CG2	-5.01	105.39	112.40
1	AA	79	G	C6-N1-C2	-5.00	122.10	125.10
1	AA	362	G	C6-N1-C2	5.00	128.10	125.10
1	AA	1036	G	N1-C2-N3	-5.00	120.90	123.90
35	BA	82	G	C6-N1-C2	5.00	128.10	125.10
35	BA	678	C	C2-N3-C4	5.00	122.40	119.90
35	BA	944	G	C8-N9-C1'	-5.00	120.49	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1713	U	N3-C4-C5	5.00	117.60	114.60
35	BA	2178	C	C5'-C4'-C3'	5.00	124.01	116.00
40	BF	45	ARG	NE-CZ-NH1	-5.00	117.80	120.30
1	AA	942	G	C4-C5-N7	-5.00	108.80	110.80
1	AA	1060	C	C6-N1-C2	-5.00	118.30	120.30
2	AB	137	ARG	NE-CZ-NH2	-5.00	117.80	120.30
9	AI	125	TYR	CB-CG-CD1	-5.00	118.00	121.00
34	B9	4	ARG	NE-CZ-NH2	5.00	122.80	120.30
35	BA	818	G	C8-N9-C4	-5.00	104.40	106.40
35	BA	880	G	N9-C4-C5	-5.00	103.40	105.40
35	BA	981	A	N9-C4-C5	5.00	107.80	105.80
35	BA	1591	G	C2-N3-C4	5.00	114.40	111.90
35	BA	1742	G	C8-N9-C4	5.00	108.40	106.40
35	BA	2035	G	N1-C2-N2	5.00	120.70	116.20
35	BA	2389	G	O4'-C1'-N9	-5.00	104.20	108.20
35	BA	2675	A	C6-N1-C2	5.00	121.60	118.60
39	BE	79	ARG	NE-CZ-NH2	-5.00	117.80	120.30
1	AA	505	G	N9-C4-C5	5.00	107.40	105.40
1	AA	777	A	C4-C5-C6	5.00	119.50	117.00
1	AA	864	A	N1-C6-N6	-5.00	115.60	118.60
1	AA	1154	G	C4-C5-C6	5.00	121.80	118.80

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
35	BA	1992	G	C3'

All (457) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1003	G	Sidechain
1	AA	1053	G	Sidechain
1	AA	1055	A	Sidechain
1	AA	1058	G	Sidechain
1	AA	106	C	Sidechain
1	AA	1064	G	Sidechain
1	AA	1065	U	Sidechain
1	AA	1073	U	Sidechain
1	AA	1077	G	Sidechain
1	AA	108	G	Sidechain
1	AA	1083	U	Sidechain
1	AA	1109	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1117	G	Sidechain
1	AA	1125	U	Sidechain
1	AA	1129	C	Sidechain
1	AA	1184	G	Sidechain
1	AA	1191	A	Sidechain
1	AA	1214	C	Sidechain
1	AA	1231	G	Sidechain
1	AA	1239	A	Sidechain
1	AA	1262	C	Sidechain
1	AA	1277	C	Sidechain
1	AA	1279	A	Sidechain
1	AA	129	U	Sidechain
1	AA	1293	G	Sidechain
1	AA	1330	U	Sidechain
1	AA	1331	G	Sidechain
1	AA	1345	U	Sidechain
1	AA	1347	G	Sidechain
1	AA	1355	G	Sidechain
1	AA	1357	A	Sidechain
1	AA	1370	G	Sidechain
1	AA	1383	C	Sidechain
1	AA	1391	U	Sidechain
1	AA	1401	G	Sidechain
1	AA	1402	C	Sidechain
1	AA	1413	A	Sidechain
1	AA	1414	U	Sidechain
1	AA	1416	G	Sidechain
1	AA	1421	G	Sidechain
1	AA	1447	A	Sidechain
1	AA	146	G	Sidechain
1	AA	1485	U	Sidechain
1	AA	1502	A	Sidechain
1	AA	1512	U	Sidechain
1	AA	1519	A	Sidechain
1	AA	1529	G	Sidechain
1	AA	181	G	Sidechain
1	AA	184	G	Sidechain
1	AA	189(G)	G	Sidechain
1	AA	203	U	Sidechain
1	AA	250	A	Sidechain
1	AA	262	A	Sidechain
1	AA	265	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	30	U	Sidechain
1	AA	315	A	Sidechain
1	AA	328	C	Sidechain
1	AA	368	U	Sidechain
1	AA	380	G	Sidechain
1	AA	436	C	Sidechain
1	AA	445	G	Sidechain
1	AA	493	G	Sidechain
1	AA	5	U	Sidechain
1	AA	529	G	Sidechain
1	AA	551	U	Sidechain
1	AA	560	U	Sidechain
1	AA	568	G	Sidechain
1	AA	573	A	Sidechain
1	AA	598	U	Sidechain
1	AA	633	G	Sidechain
1	AA	641	U	Sidechain
1	AA	648	A	Sidechain
1	AA	655	A	Sidechain
1	AA	657	G	Sidechain
1	AA	667	G	Sidechain
1	AA	669	U	Sidechain
1	AA	676	A	Sidechain
1	AA	688	G	Sidechain
1	AA	69	G	Sidechain
1	AA	691	G	Sidechain
1	AA	694	A	Sidechain
1	AA	702	A	Sidechain
1	AA	709	G	Sidechain
1	AA	712	A	Sidechain
1	AA	716	A	Sidechain
1	AA	720	C	Sidechain
1	AA	730	G	Sidechain
1	AA	736	C	Sidechain
1	AA	755	G	Sidechain
1	AA	758	G	Sidechain
1	AA	775	G	Sidechain
1	AA	781	A	Sidechain
1	AA	835	U	Sidechain
1	AA	867	G	Sidechain
1	AA	872	A	Sidechain
1	AA	881	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	882	C	Sidechain
1	AA	887	G	Sidechain
1	AA	892	A	Sidechain
1	AA	898	G	Sidechain
1	AA	950	U	Sidechain
1	AA	963	G	Sidechain
1	AA	968	A	Sidechain
1	AA	971	G	Sidechain
1	AA	980	C	Sidechain
1	AA	981	U	Sidechain
1	AA	991	U	Sidechain
2	AB	137	ARG	Sidechain
2	AB	144	ARG	Sidechain
2	AB	157	ARG	Sidechain
2	AB	231	GLU	Sidechain
2	AB	240	GLN	Sidechain
3	AC	104	GLN	Sidechain
3	AC	79	ARG	Sidechain
3	AC	89	GLU	Sidechain
4	AD	14	ARG	Sidechain
4	AD	35	ARG	Sidechain
4	AD	49	ARG	Sidechain
5	AE	14	ARG	Sidechain
5	AE	152	ARG	Sidechain
5	AE	64	ARG	Sidechain
5	AE	7	GLU	Sidechain
6	AF	27	GLN	Sidechain
6	AF	3	ARG	Sidechain
6	AF	46	ARG	Sidechain
6	AF	7	ASN	Sidechain
6	AF	82	ARG	Sidechain
6	AF	86	ARG	Sidechain
7	AG	115	ARG	Sidechain
7	AG	149	ARG	Sidechain
7	AG	45	ASP	Sidechain
7	AG	56	GLN	Sidechain
7	AG	72	ARG	Sidechain
7	AG	94	ARG	Sidechain
8	AH	102	ARG	Sidechain
8	AH	18	ARG	Sidechain
8	AH	41	ARG	Sidechain
8	AH	70	GLN	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
9	AI	104	ARG	Mainchain
9	AI	120	ARG	Sidechain
9	AI	121	ARG	Sidechain
9	AI	48	GLU	Sidechain
9	AI	53	VAL	Mainchain
10	AJ	60	ARG	Sidechain
10	AJ	76	ASN	Sidechain
11	AK	78	GLN	Sidechain
11	AK	93	GLN	Sidechain
12	AL	117	ARG	Sidechain
12	AL	41	ARG	Sidechain
12	AL	97	ARG	Sidechain
13	AM	110	ARG	Sidechain
13	AM	29	ARG	Sidechain
13	AM	3	ARG	Sidechain
14	AN	26	ARG	Sidechain
14	AN	35	ARG	Sidechain
15	AO	64	ARG	Sidechain
15	AO	65	ARG	Sidechain
15	AO	88	ARG	Sidechain
16	AP	14	ASN	Sidechain
16	AP	55	ARG	Sidechain
16	AP	57	ARG	Sidechain
16	AP	71	ARG	Sidechain
16	AP	8	ARG	Sidechain
16	AP	81	ARG	Sidechain
17	AQ	25	ARG	Sidechain
17	AQ	75	ARG	Sidechain
17	AQ	83	ASP	Sidechain
18	AR	32	ARG	Sidechain
18	AR	42	ARG	Sidechain
18	AR	74	ARG	Sidechain
19	AS	37	ARG	Sidechain
19	AS	73	GLU	Sidechain
19	AS	78	ARG	Sidechain
20	AT	23	ARG	Sidechain
20	AT	8	ARG	Sidechain
21	AU	10	ARG	Sidechain
21	AU	22	ARG	Sidechain
21	AU	9	ARG	Sidechain
22	AV	15	G	Sidechain
22	AV	29	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
22	AV	33	U	Sidechain
22	AV	4	G	Sidechain
22	AV	8	U	Sidechain
23	AX	12	A	Sidechain
24	AY	119	GLU	Sidechain
24	AY	123	ARG	Sidechain
24	AY	145	ASP	Sidechain
24	AY	170	ARG	Sidechain
24	AY	190	ASN	Sidechain
24	AY	198	GLU	Sidechain
24	AY	236	GLU	Sidechain
24	AY	31	ARG	Sidechain
24	AY	329	ARG	Sidechain
24	AY	354	ARG	Sidechain
24	AY	393	ASP	Sidechain
24	AY	473	ASP	Sidechain
24	AY	619	ASP	Sidechain
25	B0	72	ARG	Sidechain
26	B1	20	ARG	Sidechain
26	B1	61	ARG	Sidechain
26	B1	76	ARG	Sidechain
27	B2	22	GLU	Sidechain
27	B2	55	ARG	Sidechain
27	B2	56	GLN	Sidechain
27	B2	59	ARG	Sidechain
27	B2	69	ARG	Sidechain
27	B2	70	GLN	Sidechain
28	B3	29	ARG	Sidechain
28	B3	38	GLU	Sidechain
29	B4	38	LYS	Peptide
29	B4	47	GLN	Sidechain
29	B4	57	GLU	Sidechain
30	B5	51	TYR	Sidechain
30	B5	55	ARG	Sidechain
31	B6	28	ARG	Sidechain
31	B6	32	ASN	Sidechain
31	B6	37	ARG	Sidechain
32	B7	47	ARG	Sidechain
33	B8	35	GLN	Sidechain
33	B8	46	ARG	Sidechain
34	B9	18	ARG	Sidechain
34	B9	22	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
35	BA	1112	G	Sidechain
35	BA	1155	A	Sidechain
35	BA	1156	A	Sidechain
35	BA	1204	A	Sidechain
35	BA	1228	G	Sidechain
35	BA	1236	G	Sidechain
35	BA	1238	G	Sidechain
35	BA	1249	U	Sidechain
35	BA	1283	G	Sidechain
35	BA	1302	A	Sidechain
35	BA	1304	C	Sidechain
35	BA	1355	G	Sidechain
35	BA	1380	G	Sidechain
35	BA	1401	G	Sidechain
35	BA	1416	G	Sidechain
35	BA	1444	G	Sidechain
35	BA	1455	G	Sidechain
35	BA	1473	G	Sidechain
35	BA	1554	A	Sidechain
35	BA	1559	G	Sidechain
35	BA	1614	A	Sidechain
35	BA	1619	G	Sidechain
35	BA	1627	G	Sidechain
35	BA	1629	U	Sidechain
35	BA	1645	G	Sidechain
35	BA	1654	A	Sidechain
35	BA	1655	A	Sidechain
35	BA	1690	A	Sidechain
35	BA	1742	G	Sidechain
35	BA	1745	C	Sidechain
35	BA	1772	G	Sidechain
35	BA	1776	G	Sidechain
35	BA	178	G	Sidechain
35	BA	1791	A	Sidechain
35	BA	1797	C	Sidechain
35	BA	1822	G	Sidechain
35	BA	1827	C	Sidechain
35	BA	1858	G	Sidechain
35	BA	1860	G	Sidechain
35	BA	1920	C	Sidechain
35	BA	1926	U	Sidechain
35	BA	1929	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
35	BA	1935	G	Sidechain
35	BA	1944	U	Sidechain
35	BA	1966	A	Sidechain
35	BA	1968	G	Sidechain
35	BA	1971	A	Sidechain
35	BA	1977	A	Sidechain
35	BA	1992	G	Sidechain
35	BA	200	U	Sidechain
35	BA	2009	G	Sidechain
35	BA	2031	A	Sidechain
35	BA	2051	A	Sidechain
35	BA	2055	C	Sidechain
35	BA	2079	U	Sidechain
35	BA	2087	G	Sidechain
35	BA	2126	A	Sidechain
35	BA	2153	G	Sidechain
35	BA	2168	G	Sidechain
35	BA	2203	U	Sidechain
35	BA	2250	G	Sidechain
35	BA	2276	G	Sidechain
35	BA	2296	U	Sidechain
35	BA	2299	G	Sidechain
35	BA	2338	G	Sidechain
35	BA	2340	G	Sidechain
35	BA	2344	U	Sidechain
35	BA	2382	G	Sidechain
35	BA	2383	G	Sidechain
35	BA	2384	G	Sidechain
35	BA	2387	U	Sidechain
35	BA	2395	C	Sidechain
35	BA	2401	U	Sidechain
35	BA	2419	U	Sidechain
35	BA	2432	A	Sidechain
35	BA	2434	A	Sidechain
35	BA	2447	G	Sidechain
35	BA	2450	A	Sidechain
35	BA	2464	C	Sidechain
35	BA	2481	G	Sidechain
35	BA	2494	G	Sidechain
35	BA	2504	U	Sidechain
35	BA	2506	U	Sidechain
35	BA	2508	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
35	BA	2518	A	Sidechain
35	BA	2541	A	Sidechain
35	BA	2547	U	Sidechain
35	BA	2564	A	Sidechain
35	BA	2567	G	Sidechain
35	BA	2569	G	Sidechain
35	BA	2576	G	Sidechain
35	BA	2607	G	Sidechain
35	BA	2659	G	Sidechain
35	BA	2665	A	Sidechain
35	BA	268	C	Sidechain
35	BA	2685	G	Sidechain
35	BA	2687	U	Sidechain
35	BA	27	G	Sidechain
35	BA	271(U)	G	Sidechain
35	BA	271(Y)	U	Sidechain
35	BA	2732	G	Sidechain
35	BA	2776	A	Sidechain
35	BA	2778	A	Sidechain
35	BA	28	A	Sidechain
35	BA	2818	G	Sidechain
35	BA	2826	A	Sidechain
35	BA	2829	C	Sidechain
35	BA	2857	G	Sidechain
35	BA	306	U	Sidechain
35	BA	329	G	Sidechain
35	BA	331	A	Sidechain
35	BA	338	G	Sidechain
35	BA	34	C	Sidechain
35	BA	363(E)	U	Sidechain
35	BA	401	A	Sidechain
35	BA	45	C	Sidechain
35	BA	507	A	Sidechain
35	BA	511	U	Sidechain
35	BA	537	C	Sidechain
35	BA	558	G	Sidechain
35	BA	562	U	Sidechain
35	BA	583	G	Sidechain
35	BA	593	G	Sidechain
35	BA	600	G	Sidechain
35	BA	603	A	Sidechain
35	BA	621	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
35	BA	632	A	Sidechain
35	BA	647	G	Sidechain
35	BA	684	G	Sidechain
35	BA	686	G	Sidechain
35	BA	688	U	Sidechain
35	BA	690	G	Sidechain
35	BA	699	A	Sidechain
35	BA	715	G	Sidechain
35	BA	716	A	Sidechain
35	BA	726	G	Sidechain
35	BA	742	G	Sidechain
35	BA	776	G	Sidechain
35	BA	78	A	Sidechain
35	BA	788	A	Sidechain
35	BA	792	G	Sidechain
35	BA	83	G	Sidechain
35	BA	845	G	Sidechain
35	BA	913	U	Sidechain
35	BA	938	G	Sidechain
35	BA	945	A	Sidechain
35	BA	950	G	Sidechain
35	BA	958	U	Sidechain
35	BA	980	A	Sidechain
35	BA	984	A	Sidechain
35	BA	990	A	Sidechain
35	BA	995	C	Sidechain
36	BB	117	G	Sidechain
36	BB	21	G	Sidechain
36	BB	25	A	Sidechain
36	BB	31	C	Sidechain
36	BB	38	C	Sidechain
36	BB	51	G	Sidechain
37	BC	165	ARG	Sidechain
37	BC	188	ASP	Sidechain
37	BC	24	ASP	Sidechain
37	BC	28	ARG	Sidechain
37	BC	32	GLU	Sidechain
37	BC	54	ARG	Sidechain
38	BD	168	ARG	Sidechain
38	BD	211	ARG	Sidechain
39	BE	19	ARG	Sidechain
39	BE	36	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
39	BE	54	GLN	Sidechain
40	BF	119	ARG	Sidechain
40	BF	127	GLU	Sidechain
40	BF	95	ARG	Sidechain
41	BG	112	PRO	Mainchain,Peptide
41	BG	121	ASN	Sidechain
41	BG	153	ARG	Sidechain
41	BG	21	ARG	Sidechain
42	BH	101	ARG	Sidechain
42	BH	130	ARG	Sidechain
42	BH	149	ARG	Sidechain
42	BH	18	GLU	Sidechain
42	BH	47	GLU	Sidechain
42	BH	54	ARG	Sidechain
42	BH	60	ARG	Sidechain
42	BH	97	ARG	Sidechain
43	BK	42	ASN	Sidechain
43	BK	5	VAL	Peptide
43	BK	98	ARG	Sidechain
45	BN	114	ARG	Sidechain
45	BN	115	ARG	Sidechain
45	BN	97	ARG	Sidechain
46	BO	105	GLU	Sidechain
46	BO	107	ARG	Sidechain
46	BO	120	GLU	Sidechain
47	BP	15	ARG	Sidechain
47	BP	55	ARG	Sidechain
47	BP	7	ARG	Sidechain
47	BP	74	GLU	Sidechain
47	BP	9	ASN	Sidechain
48	BQ	119	ARG	Sidechain
48	BQ	25	ASP	Sidechain
48	BQ	6	ARG	Sidechain
49	BR	102	GLU	Sidechain
49	BR	88	ARG	Sidechain
50	BS	106	ARG	Sidechain
50	BS	13	ARG	Sidechain
50	BS	20	ARG	Sidechain
50	BS	30	ARG	Sidechain
50	BS	38	GLN	Sidechain
50	BS	71	ARG	Sidechain
51	BT	103	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
51	BT	123	GLN	Sidechain
51	BT	125	ARG	Sidechain
51	BT	41	ARG	Sidechain
51	BT	58	ASN	Sidechain
51	BT	74	ARG	Sidechain
52	BU	33	ARG	Sidechain
52	BU	66	ASN	Sidechain
52	BU	71	GLN	Sidechain
52	BU	91	ASP	Sidechain
53	BV	15	GLU	Sidechain
53	BV	53	GLU	Sidechain
54	BW	33	ARG	Sidechain
54	BW	60	ASN	Sidechain
54	BW	68	ARG	Sidechain
54	BW	8	ARG	Sidechain
55	BX	68	ARG	Sidechain
55	BX	76	ARG	Sidechain
56	BY	29	GLU	Sidechain
56	BY	50	ARG	Sidechain
56	BY	57	GLN	Sidechain
57	BZ	30	ASN	Sidechain
57	BZ	72	ARG	Sidechain
57	BZ	77	ASP	Sidechain
57	BZ	80	ARG	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	AA	32329	0	16041	1543	0
2	AB	1900	0	1951	244	0
3	AC	1612	0	1677	208	0
4	AD	1703	0	1767	205	0
5	AE	1146	0	1207	140	0
6	AF	843	0	857	95	0
7	AG	1257	0	1296	119	0
8	AH	1116	0	1177	110	0
9	AI	1010	0	1037	142	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	AJ	794	0	840	185	0
11	AK	885	0	904	92	0
12	AL	970	0	1057	144	0
13	AM	987	0	1059	139	0
14	AN	492	0	533	78	0
15	AO	734	0	771	74	0
16	AP	700	0	720	83	0
17	AQ	823	0	891	68	0
18	AR	574	0	644	77	0
19	AS	629	0	652	116	0
20	AT	763	0	861	112	0
21	AU	208	0	221	28	0
22	AV	1640	0	831	100	0
23	AX	230	0	114	17	0
24	AY	5214	0	5288	791	0
25	B0	662	0	688	91	0
26	B1	731	0	808	116	0
27	B2	598	0	653	94	0
28	B3	467	0	523	53	0
29	B4	450	0	449	93	0
30	B5	459	0	480	98	0
31	B6	433	0	461	148	0
32	B7	418	0	467	58	0
33	B8	507	0	576	103	0
34	B9	307	0	338	35	0
35	BA	62474	0	31032	3276	0
36	BB	2551	0	1281	164	0
37	BC	1742	0	1798	171	0
38	BD	2145	0	2234	305	0
39	BE	1563	0	1629	246	0
40	BF	1623	0	1677	283	0
41	BG	1474	0	1535	287	0
42	BH	1268	0	1337	232	0
43	BK	1025	0	1066	177	0
44	BL	477	0	509	14	0
45	BN	1104	0	1180	202	0
46	BO	933	0	996	124	0
47	BP	1114	0	1187	295	0
48	BQ	1122	0	1179	166	0
49	BR	960	0	1021	158	0
50	BS	770	0	832	168	0
51	BT	1141	0	1202	228	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
52	BU	958	0	1015	170	0
53	BV	779	0	852	148	0
54	BW	896	0	953	103	0
55	BX	725	0	778	93	0
56	BY	810	0	901	186	0
57	BZ	1467	0	1492	230	0
58	AY	37	0	47	12	0
59	AY	28	0	12	7	0
All	All	152777	0	105584	12183	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 47.

All (12183) 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)
1:AA:509:A:H5'	1:AA:510:A:OP2	1.26	1.30
24:AY:496:LYS:HE2	24:AY:498:ILE:CD1	1.66	1.25
53:BV:15:GLU:HB3	53:BV:16:PRO:HD2	1.23	1.20
41:BG:63:ILE:HA	41:BG:143:GLU:HG3	1.22	1.19
35:BA:925:C:H2'	35:BA:926:A:H5"	1.24	1.18
35:BA:996:A:H4'	52:BU:92:ARG:HE	1.01	1.18
39:BE:36:ARG:HH11	39:BE:36:ARG:HG2	1.07	1.17
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.19	1.17
1:AA:793:U:H3'	1:AA:794:A:H5"	1.25	1.16
35:BA:1503:U:H2'	35:BA:1504:C:H6	1.07	1.16
50:BS:13:ARG:HG3	50:BS:14:VAL:H	1.03	1.16
55:BX:12:VAL:HB	55:BX:17:ALA:HB1	1.23	1.16
24:AY:546:ILE:HG23	24:AY:590:ILE:HG13	1.26	1.16
37:BC:118:PRO:HA	37:BC:121:MET:CG	1.73	1.16
40:BF:53:THR:HG22	40:BF:56:GLU:HG3	1.22	1.14
4:AD:49:ARG:HE	4:AD:49:ARG:HA	1.03	1.14
1:AA:697:U:H2'	1:AA:698:G:H5'	1.23	1.14
7:AG:41:ARG:HG2	7:AG:41:ARG:HH11	1.02	1.13
42:BH:98:LEU:HB2	42:BH:125:VAL:HG21	1.25	1.13
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.25	1.13
56:BY:28:LYS:HB3	56:BY:37:VAL:HB	1.24	1.13
42:BH:16:SER:HB2	42:BH:27:LYS:HB2	1.30	1.13
45:BN:9:VAL:HG11	45:BN:39:ARG:HH22	1.02	1.13
41:BG:68:PRO:HA	41:BG:92:VAL:HG12	1.27	1.12
22:AV:17:C:H5"	22:AV:17(A):U:H6	1.12	1.12

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1378:A:O2'	35:BA:1379:A:H5"	1.48	1.12
26:B1:81:LYS:HE2	35:BA:271(H):G:H4'	1.32	1.11
40:BF:40:GLN:HE22	40:BF:182:ASN:HB2	1.06	1.11
55:BX:12:VAL:HG23	55:BX:13:LEU:H	1.14	1.11
35:BA:2133:G:H2'	35:BA:2157:G:H22	1.14	1.11
35:BA:1747(A):G:H2'	35:BA:1748:G:H5"	1.19	1.11
49:BR:99:LYS:H	49:BR:99:LYS:HD3	1.05	1.11
24:AY:409:ILE:HD11	24:AY:654:GLY:HA2	1.25	1.10
31:B6:10:LEU:H	31:B6:10:LEU:CD2	1.61	1.10
1:AA:1238:A:H5'	1:AA:1336:C:H41	1.08	1.10
31:B6:5:VAL:HG23	35:BA:2283:C:H5'	1.32	1.10
35:BA:1845:G:H2'	35:BA:1846:G:H5"	1.28	1.10
43:BK:99:ILE:HG23	43:BK:103:GLN:HB2	1.30	1.10
43:BK:115:LEU:HD22	43:BK:126:MET:HE2	1.28	1.10
10:AJ:6:ILE:HD11	10:AJ:72:VAL:CB	1.82	1.10
22:AV:17:C:H5"	22:AV:17(A):U:C6	1.85	1.10
35:BA:2473:U:H3'	35:BA:2474:C:H5"	1.12	1.10
39:BE:131:ALA:HB3	39:BE:134:ILE:HD11	1.32	1.10
1:AA:1321:C:H3'	1:AA:1322:C:H5"	1.28	1.09
41:BG:77:ILE:HG22	41:BG:80:PHE:H	1.08	1.09
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.14	1.09
38:BD:263:ARG:HH11	38:BD:263:ARG:HB2	1.05	1.09
35:BA:612:C:H2'	35:BA:613:G:H5"	1.33	1.09
35:BA:1747(A):G:C2'	35:BA:1748:G:H5"	1.80	1.09
40:BF:154:VAL:HG22	40:BF:191:ARG:HB3	1.22	1.09
24:AY:196:ILE:O	24:AY:197:ARG:HB2	1.50	1.09
42:BH:17:VAL:HG11	42:BH:50:VAL:HG21	1.31	1.09
57:BZ:151:HIS:HA	57:BZ:171:ILE:HG23	1.33	1.09
18:AR:37:VAL:HG23	18:AR:38:GLU:H	1.11	1.08
27:B2:69:ARG:HH22	35:BA:111:A:H4'	1.12	1.08
35:BA:2572:A:H5'	35:BA:2574:G:H4'	1.35	1.08
56:BY:76:CYS:SG	56:BY:77:PRO:HD2	1.91	1.08
10:AJ:6:ILE:CD1	10:AJ:72:VAL:HB	1.83	1.08
51:BT:65:LYS:HE3	51:BT:66:VAL:H	1.15	1.08
35:BA:272(J):C:H3'	35:BA:274:G:H5"	1.32	1.08
35:BA:286:C:H6	35:BA:286:C:H5'	1.17	1.08
35:BA:1884:A:H2'	35:BA:1885:A:H5"	1.35	1.08
13:AM:96:LEU:HB3	13:AM:97:PRO:HD2	1.16	1.07
35:BA:1203:G:H4'	47:BP:7:ARG:HD2	1.34	1.07
24:AY:85:PRO:HA	24:AY:94:VAL:HG22	1.27	1.07
24:AY:496:LYS:HE2	24:AY:498:ILE:HD11	1.35	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:212:G:H8	35:BA:212:G:H5'	0.97	1.07
39:BE:59:VAL:HG11	39:BE:63:LEU:HG	1.31	1.07
40:BF:53:THR:HG23	40:BF:55:GLY:N	1.69	1.07
1:AA:979:C:H3'	1:AA:980:C:H5"	1.07	1.07
35:BA:2012:G:H4'	54:BW:96:ILE:HD11	1.33	1.07
35:BA:903:C:H2'	35:BA:904:C:H5"	1.33	1.07
45:BN:48:MET:CE	45:BN:48:MET:H	1.68	1.07
47:BP:59:LEU:HA	47:BP:61:ARG:NE	1.70	1.07
40:BF:84:VAL:HG12	40:BF:85:GLY:H	1.20	1.06
55:BX:35:THR:HG22	55:BX:37:THR:H	1.20	1.06
35:BA:142:A:H1'	35:BA:1408:C:H1'	1.37	1.06
3:AC:70:VAL:HG12	3:AC:72:LYS:H	0.91	1.06
58:AY:701:FUA:H202	58:AY:701:FUA:H5	1.09	1.06
31:B6:10:LEU:H	31:B6:10:LEU:HD23	0.94	1.06
35:BA:212:G:H5'	35:BA:212:G:C8	1.89	1.06
42:BH:157:TYR:HE1	42:BH:171:LEU:CD2	1.67	1.06
35:BA:965:C:H5'	35:BA:2273:A:H1'	1.35	1.06
23:AX:13:A:C3'	23:AX:14:A:H5"	1.85	1.05
26:B1:76:ARG:HH12	26:B1:95:LEU:HD22	1.19	1.05
22:AV:21:A:H61	22:AV:46:G:H2'	1.17	1.05
37:BC:118:PRO:HA	37:BC:121:MET:HG2	1.10	1.05
1:AA:979:C:C3'	1:AA:980:C:H5"	1.85	1.05
24:AY:119:GLU:O	24:AY:121:VAL:HG22	1.55	1.05
43:BK:93:ARG:NH1	43:BK:94:GLU:HB2	1.71	1.05
35:BA:272(I):U:O4	35:BA:363(A):A:N1	1.89	1.05
40:BF:53:THR:HG23	40:BF:55:GLY:H	0.88	1.05
12:AL:38:THR:HG23	12:AL:39:VAL:HG23	1.36	1.04
23:AX:13:A:H3'	23:AX:14:A:H5"	1.38	1.04
2:AB:168:THR:HG23	2:AB:192:SER:HB3	1.39	1.04
41:BG:133:LEU:HD11	41:BG:157:ILE:HD12	1.36	1.04
42:BH:157:TYR:CE1	42:BH:171:LEU:HD22	1.91	1.04
55:BX:11:PRO:HA	55:BX:28:PHE:HB3	1.36	1.04
2:AB:223:ILE:HG12	2:AB:226:ARG:NH2	1.72	1.04
24:AY:496:LYS:HE2	24:AY:498:ILE:HD13	1.38	1.04
35:BA:2476:A:H2'	35:BA:2477:C:H5"	1.40	1.04
27:B2:3:LEU:HD22	27:B2:7:ARG:HH12	1.21	1.03
35:BA:272(H):C:H2'	35:BA:272(I):U:H5"	1.38	1.03
50:BS:24:LEU:HB3	50:BS:85:VAL:HG12	1.38	1.03
24:AY:428:LEU:HD13	24:AY:440:VAL:HG11	1.38	1.03
35:BA:2110:G:O2'	35:BA:2120:G:H5'	1.58	1.03
24:AY:238:THR:HG22	24:AY:241:GLU:HG2	1.05	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1818:U:H5”	38:BD:157:ARG:HB2	1.40	1.03
40:BF:192:LEU:HD21	40:BF:194:MET:HG3	1.36	1.03
47:BP:55:ARG:HG2	47:BP:56:SER:H	1.20	1.03
48:BQ:110:THR:HG23	48:BQ:113:GLN:HG3	1.39	1.03
24:AY:490:PRO:HG3	24:AY:516:PRO:HD2	1.40	1.03
40:BF:3:GLU:HA	40:BF:24:LEU:HG	1.40	1.03
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.16	1.03
24:AY:21:ILE:HD13	24:AY:21:ILE:H	1.22	1.03
38:BD:34:VAL:HG23	38:BD:35:LYS:H	1.23	1.03
47:BP:85:LEU:HD23	47:BP:85:LEU:H	1.16	1.03
35:BA:2645:G:H4’	35:BA:2732:G:O2’	1.59	1.02
57:BZ:28:MET:HB3	57:BZ:88:PHE:HB2	1.36	1.02
10:AJ:8:LEU:HD23	10:AJ:96:ILE:HG22	1.40	1.02
22:AV:46:G:H4’	22:AV:47:U:H5	1.20	1.02
42:BH:41:MET:CG	42:BH:43:VAL:HG13	1.89	1.02
5:AE:87:SER:HB3	5:AE:131:ILE:HD13	1.35	1.02
35:BA:272(G):C:H2’	35:BA:272(H):C:H5”	1.37	1.02
39:BE:111:ARG:HA	49:BR:2:ARG:HB3	1.39	1.02
24:AY:637:ARG:HH11	24:AY:637:ARG:HG3	1.22	1.02
28:B3:8:LEU:HD22	28:B3:31:LEU:HD23	1.38	1.02
35:BA:2310:A:O2’	35:BA:2311:A:H5’	1.60	1.02
35:BA:2796:U:H3’	35:BA:2799:C:H5’	1.42	1.02
35:BA:1803:A:O3’	38:BD:259:THR:HG21	1.60	1.01
50:BS:106:ARG:HB3	50:BS:106:ARG:HH11	1.23	1.01
1:AA:975:A:H4’	1:AA:976:G:H5”	1.40	1.01
35:BA:1301:A:O2’	35:BA:1302:A:H2’	1.58	1.01
43:BK:68:VAL:HG12	43:BK:70:LYS:NZ	1.75	1.01
52:BU:20:LEU:H	52:BU:20:LEU:HD22	1.24	1.01
24:AY:238:THR:HG22	24:AY:241:GLU:CG	1.89	1.01
9:AI:4:TYR:HB2	9:AI:19:LEU:HB2	1.40	1.01
19:AS:14:HIS:HD2	19:AS:15:LEU:HD23	1.25	1.01
35:BA:27:G:H22	35:BA:512:G:H2’	1.24	1.01
35:BA:2444:G:OP2	40:BF:68:LYS:HE2	1.59	1.01
42:BH:171:LEU:HD23	42:BH:171:LEU:C	1.78	1.01
40:BF:64:ILE:HD11	40:BF:65:TRP:CE2	1.96	1.01
35:BA:1814:G:H3’	35:BA:1815:A:H5”	1.41	1.00
41:BG:64:THR:HG23	41:BG:66:GLN:H	1.26	1.00
50:BS:65:VAL:O	50:BS:69:VAL:HG12	1.60	1.00
1:AA:1128:C:C2’	1:AA:1129:C:H5”	1.91	1.00
30:B5:44:THR:HG21	49:BR:101:ALA:HB2	1.42	1.00
35:BA:1503:U:H2’	35:BA:1504:C:C6	1.95	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BP:30:THR:HG22	47:BP:31:ALA:H	1.25	1.00
40:BF:157:VAL:CG2	40:BF:194:MET:HG2	1.90	1.00
1:AA:656:C:H4'	15:AO:62:GLN:HE22	1.26	1.00
39:BE:36:ARG:HH11	39:BE:36:ARG:CG	1.73	1.00
1:AA:1128:C:H2'	1:AA:1129:C:H5"	1.43	1.00
5:AE:7:GLU:HG2	5:AE:112:LEU:HD22	1.39	1.00
57:BZ:171:ILE:HG13	57:BZ:172:ALA:N	1.73	1.00
18:AR:29:PHE:H	18:AR:29:PHE:HD2	1.09	1.00
40:BF:8:GLN:HB3	40:BF:126:VAL:HA	1.40	1.00
35:BA:612:C:C2'	35:BA:613:G:H5"	1.92	0.99
42:BH:157:TYR:HE1	42:BH:171:LEU:HD21	1.25	0.99
35:BA:1899:G:N2	35:BA:1902:C:H41	1.58	0.99
40:BF:84:VAL:HG12	40:BF:85:GLY:N	1.72	0.99
35:BA:211:A:C2'	35:BA:212:G:H5"	1.92	0.99
37:BC:191:ARG:HH11	37:BC:191:ARG:HG3	1.25	0.99
41:BG:172:LEU:HD23	41:BG:176:LEU:HD11	1.43	0.99
2:AB:172:ILE:HD12	2:AB:172:ILE:H	1.24	0.99
4:AD:96:LEU:HD22	4:AD:96:LEU:H	1.27	0.99
28:B3:29:ARG:HB2	28:B3:29:ARG:HH11	1.25	0.99
35:BA:806:C:OP2	47:BP:39:LYS:HD3	1.62	0.99
38:BD:35:LYS:HD2	38:BD:36:PRO:N	1.78	0.99
41:BG:59:GLU:HA	41:BG:62:LEU:HD13	1.42	0.99
47:BP:102:ARG:HB3	47:BP:102:ARG:NH1	1.77	0.99
24:AY:427:ALA:HB1	24:AY:466:LEU:HD11	1.45	0.99
35:BA:1541:G:H4'	35:BA:1542:A:O5'	1.59	0.99
42:BH:137:ASP:HB2	42:BH:140:LYS:HD2	1.44	0.99
43:BK:106:GLU:HA	43:BK:109:LYS:HD3	1.41	0.99
24:AY:628:ARG:HH12	24:AY:680:PRO:HG2	1.25	0.98
39:BE:107:THR:O	39:BE:190:GLY:HA2	1.63	0.98
28:B3:17:LYS:HG2	35:BA:969:U:OP1	1.62	0.98
42:BH:12:PRO:HD3	42:BH:49:VAL:HG12	1.41	0.98
55:BX:24:GLY:O	55:BX:82:GLN:HA	1.62	0.98
3:AC:70:VAL:HG12	3:AC:72:LYS:N	1.76	0.98
40:BF:157:VAL:HG21	40:BF:194:MET:HG2	1.45	0.98
41:BG:77:ILE:HG22	41:BG:80:PHE:N	1.79	0.98
24:AY:276:VAL:HA	24:AY:280:LEU:HD23	1.44	0.98
35:BA:621:A:H2'	35:BA:622:G:H5'	1.44	0.98
37:BC:138:LEU:HD22	37:BC:139:PRO:HD2	1.45	0.98
35:BA:1043:C:H2'	35:BA:1044:G:H5"	1.46	0.98
35:BA:2523:G:H2'	35:BA:2524:G:H5"	1.43	0.98
42:BH:157:TYR:CE1	42:BH:171:LEU:CD2	2.43	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BB:112:U:H2'	36:BB:113:G:H8	1.29	0.97
41:BG:82:LEU:HD11	41:BG:87:PRO:HB3	1.43	0.97
35:BA:1845:G:C2'	35:BA:1846:G:H5"	1.95	0.97
47:BP:41:ARG:HA	47:BP:41:ARG:HH11	1.24	0.97
1:AA:80:G:H3'	1:AA:81:U:H5'	1.47	0.97
10:AJ:8:LEU:CD2	10:AJ:96:ILE:HG22	1.93	0.97
13:AM:96:LEU:HB3	13:AM:97:PRO:CD	1.93	0.97
35:BA:1142(A):A:C2'	35:BA:1143:A:H5"	1.95	0.97
40:BF:24:LEU:HB3	40:BF:25:PRO:HD2	1.46	0.97
46:BO:111:PHE:HB3	46:BO:114:ILE:HD13	1.44	0.97
25:B0:7:LEU:HD12	48:BQ:85:LYS:HE2	1.44	0.97
35:BA:1884:A:C2'	35:BA:1885:A:H5"	1.95	0.97
38:BD:70:TRP:CH2	38:BD:150:LYS:HA	1.99	0.97
41:BG:76:SER:CB	41:BG:83:ARG:HB3	1.95	0.97
12:AL:20:LYS:HD3	12:AL:20:LYS:H	1.27	0.97
47:BP:27:HIS:HD2	47:BP:28:GLY:N	1.61	0.97
3:AC:90:GLU:O	3:AC:93:LYS:HB3	1.65	0.97
35:BA:2138:C:H2'	35:BA:2139:C:H6	1.25	0.97
41:BG:97:ASP:H	41:BG:100:TRP:HD1	1.12	0.97
55:BX:27:THR:HB	55:BX:80:ILE:HG22	1.44	0.97
58:AY:701:FUA:H5	58:AY:701:FUA:C20	1.94	0.97
31:B6:5:VAL:CG2	35:BA:2283:C:H5'	1.95	0.97
35:BA:2262:U:H2'	35:BA:2263:C:H5'	1.46	0.97
53:BV:45:THR:O	53:BV:46:VAL:HG12	1.62	0.97
24:AY:409:ILE:CD1	24:AY:654:GLY:HA2	1.95	0.96
27:B2:15:LYS:O	27:B2:16:LEU:HD23	1.65	0.96
52:BU:90:VAL:HG21	53:BV:47:VAL:HG21	1.47	0.96
3:AC:16:ARG:HH11	3:AC:16:ARG:HB2	1.30	0.96
35:BA:2811:G:OP1	39:BE:60:ASN:HB2	1.64	0.96
37:BC:118:PRO:CA	37:BC:121:MET:HG2	1.94	0.96
46:BO:114:ILE:H	46:BO:114:ILE:HD12	1.29	0.96
16:AP:20:VAL:HG21	16:AP:32:TYR:HB2	1.44	0.96
38:BD:32:SER:O	38:BD:36:PRO:HG3	1.66	0.96
45:BN:46:VAL:HG13	45:BN:48:MET:HE2	1.48	0.96
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.01	0.96
30:B5:55:ARG:HH22	49:BR:33:ARG:HD2	1.28	0.96
35:BA:2732:G:H3'	35:BA:2733:A:H5'	1.46	0.96
53:BV:62:LEU:HD21	53:BV:95:LEU:HB2	1.48	0.96
49:BR:73:VAL:O	49:BR:76:VAL:HG12	1.66	0.95
1:AA:1116:C:H2'	1:AA:1117:G:H5"	1.46	0.95
1:AA:1452:C:H1'	1:AA:1456:G:N2	1.79	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:22:LYS:HE2	2:AB:22:LYS:HA	1.46	0.95
30:B5:16:ARG:HH11	30:B5:16:ARG:HG2	1.29	0.95
38:BD:134:ARG:HG3	38:BD:135:PHE:HD1	1.25	0.95
47:BP:55:ARG:HG2	47:BP:56:SER:N	1.74	0.95
57:BZ:53:ILE:HG22	57:BZ:71:VAL:HB	1.48	0.95
18:AR:58:LEU:HB3	18:AR:62:GLU:HB3	1.48	0.95
4:AD:114:ARG:HH11	4:AD:114:ARG:HG3	1.31	0.95
19:AS:15:LEU:HD21	19:AS:33:THR:OG1	1.67	0.95
33:B8:56:GLU:HA	33:B8:59:LYS:NZ	1.80	0.95
35:BA:195:A:OP1	47:BP:46:LYS:HE2	1.65	0.95
17:AQ:47:PRO:HG2	17:AQ:48:GLU:OE2	1.67	0.95
33:B8:33:ASN:HD22	33:B8:33:ASN:H	1.15	0.95
35:BA:925:C:C2'	35:BA:926:A:H5"	1.97	0.95
35:BA:2103:C:H2'	35:BA:2104:G:H5"	1.49	0.95
15:AO:82:ILE:HD13	15:AO:82:ILE:C	1.86	0.95
24:AY:416:LYS:HD3	24:AY:417:THR:H	1.32	0.95
35:BA:211:A:H2'	35:BA:212:G:H5"	1.49	0.95
35:BA:212:G:H8	35:BA:212:G:C5'	1.80	0.95
35:BA:2133:G:H2'	35:BA:2157:G:N2	1.80	0.95
20:AT:23:ARG:O	20:AT:27:LYS:HB2	1.67	0.95
43:BK:6:ALA:HB3	43:BK:59:ILE:HG22	1.48	0.95
58:AY:701:FUA:H202	58:AY:701:FUA:C5	1.94	0.95
50:BS:13:ARG:HG3	50:BS:14:VAL:N	1.79	0.95
35:BA:1658:C:H2'	35:BA:1659:U:H6	1.32	0.94
43:BK:7:VAL:HG13	43:BK:7:VAL:O	1.67	0.94
1:AA:1502:A:H2	1:AA:1505:G:H1	1.05	0.94
35:BA:1826:G:H4'	38:BD:242:ARG:HH21	1.32	0.94
35:BA:1782:C:H1'	35:BA:2609:U:H5'	1.45	0.94
47:BP:7:ARG:HB3	47:BP:8:PRO:HD3	1.46	0.94
3:AC:152:ILE:HG22	3:AC:167:TRP:HA	1.50	0.94
43:BK:77:LEU:HD23	43:BK:77:LEU:H	1.32	0.94
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.02	0.94
31:B6:8:LYS:HZ1	35:BA:2285:C:H5	1.07	0.94
3:AC:52:LEU:H	3:AC:52:LEU:HD23	1.31	0.94
48:BQ:110:THR:CG2	48:BQ:113:GLN:HG3	1.97	0.94
5:AE:101:ILE:HD11	5:AE:119:LEU:HD22	1.47	0.94
35:BA:1242:A:H5'	35:BA:1243:G:OP2	1.68	0.94
35:BA:1658:C:H2'	35:BA:1659:U:C6	2.03	0.94
35:BA:2473:U:H3'	35:BA:2474:C:C5'	1.98	0.94
35:BA:2742:C:O2'	35:BA:2743:C:H5'	1.66	0.94
1:AA:1054:C:O2'	1:AA:1055:A:H5"	1.68	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1517:G:H5'	35:BA:1517:G:H8	1.32	0.93
51:BT:38:ASN:C	51:BT:38:ASN:HD22	1.66	0.93
1:AA:509:A:C5'	1:AA:510:A:OP2	2.16	0.93
35:BA:2308:G:N7	35:BA:2310:A:H5'	1.83	0.93
10:AJ:92:THR:HG23	10:AJ:93:GLY:H	1.33	0.93
30:B5:2:ALA:HA	35:BA:2015:A:H1'	1.49	0.93
45:BN:133:GLN:HG2	45:BN:135:PRO:HD3	1.51	0.93
24:AY:238:THR:CG2	24:AY:241:GLU:HG2	1.97	0.93
35:BA:2425:A:H5'	35:BA:2427:C:O4'	1.69	0.93
50:BS:89:ARG:HG3	50:BS:92:TYR:CA	1.98	0.93
31:B6:10:LEU:HD23	31:B6:10:LEU:N	1.79	0.93
40:BF:167:ALA:HB1	40:BF:173:VAL:HG11	1.51	0.93
35:BA:813:U:H2'	35:BA:814:C:C6	2.04	0.93
39:BE:116:VAL:O	39:BE:117:MET:HB3	1.67	0.93
1:AA:686:U:HO2'	1:AA:687:A:H8	0.96	0.93
24:AY:33:LEU:HD23	24:AY:360:ALA:HB2	1.51	0.93
31:B6:43:CYS:CB	31:B6:44:ARG:HH21	1.82	0.93
10:AJ:48:THR:HA	10:AJ:62:HIS:HB3	1.50	0.93
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.48	0.93
24:AY:35:TYR:OH	24:AY:266:ASN:HB3	1.69	0.93
24:AY:555:LEU:HD11	24:AY:599:PRO:HB2	1.51	0.93
50:BS:15:ARG:HB3	50:BS:18:ILE:HD11	1.47	0.93
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.50	0.93
38:BD:44:ASN:HB3	38:BD:49:ILE:HA	1.48	0.93
35:BA:1059:G:H2'	35:BA:1060:U:C5	2.04	0.93
13:AM:15:VAL:HG12	13:AM:45:VAL:HG22	1.51	0.92
35:BA:2524:G:H8	35:BA:2524:G:H5'	1.35	0.92
35:BA:107:C:H2'	35:BA:108:U:H6	1.33	0.92
35:BA:900:A:H5'	35:BA:900:A:H8	1.32	0.92
43:BK:77:LEU:HD12	43:BK:107:ILE:HG23	1.50	0.92
4:AD:129:ASN:HD21	4:AD:145:GLU:H	1.16	0.92
26:B1:46:LEU:HB3	26:B1:63:ALA:HA	1.50	0.92
36:BB:7:G:H2'	36:BB:8:U:H5"	1.51	0.92
47:BP:38:GLN:HG3	47:BP:39:LYS:H	1.35	0.92
56:BY:46:LYS:H	56:BY:62:GLU:HB2	1.35	0.92
4:AD:49:ARG:HE	4:AD:49:ARG:CA	1.80	0.92
24:AY:491:VAL:HG11	24:AY:596:LYS:HD3	1.51	0.92
51:BT:28:VAL:HG22	51:BT:46:GLU:HA	1.52	0.92
35:BA:1539:G:C2	35:BA:1540:U:H1'	2.04	0.92
50:BS:49:VAL:HG12	50:BS:50:SER:H	1.35	0.92
26:B1:86:SER:HB3	26:B1:89:GLU:HB2	1.51	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:134:ARG:HG3	38:BD:135:PHE:CD1	2.04	0.92
56:BY:7:VAL:HB	56:BY:8:LYS:HD2	1.51	0.92
36:BB:65:C:N4	36:BB:109:C:H2'	1.85	0.91
50:BS:95:HIS:CG	50:BS:96:GLY:H	1.87	0.91
35:BA:1845:G:H2'	35:BA:1846:G:C5'	2.01	0.91
53:BV:6:LYS:O	53:BV:37:VAL:HG21	1.71	0.91
24:AY:517:LEU:HD23	24:AY:521:SER:HB3	1.53	0.91
57:BZ:69:THR:HG22	57:BZ:90:VAL:HA	1.49	0.91
1:AA:980:C:H5	1:AA:981:U:C2	1.89	0.91
35:BA:2761:G:H2'	35:BA:2762:G:H5"	1.49	0.91
43:BK:93:ARG:HB2	57:BZ:112:ARG:HH21	1.34	0.91
1:AA:625:G:H4'	16:AP:16:HIS:CD2	2.05	0.91
1:AA:1238:A:H5'	1:AA:1336:C:N4	1.85	0.91
2:AB:223:ILE:HG12	2:AB:226:ARG:CZ	2.01	0.91
36:BB:66:A:H61	36:BB:108:U:H2'	1.33	0.91
35:BA:279:C:H3'	35:BA:280:C:H5"	1.52	0.91
35:BA:666:G:H4'	47:BP:49:ARG:HH21	1.33	0.91
38:BD:9:TYR:C	38:BD:10:THR:HG22	1.91	0.91
51:BT:134:GLU:O	51:BT:135:ALA:HB2	1.70	0.91
3:AC:206:GLU:HG2	3:AC:207:VAL:H	1.36	0.91
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.51	0.91
40:BF:64:ILE:HD11	40:BF:65:TRP:CZ2	2.05	0.91
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.06	0.91
1:AA:1261:A:H2'	1:AA:1262:C:H5'	1.53	0.91
22:AV:17:C:H6	22:AV:17(A):U:H5	1.11	0.91
37:BC:201:LYS:HE3	37:BC:209:PHE:HB2	1.52	0.91
1:AA:697:U:C2'	1:AA:698:G:H5'	2.01	0.91
57:BZ:4:ARG:HH12	57:BZ:66:SER:HB2	1.36	0.91
35:BA:2463:C:O2'	35:BA:2464:C:H5'	1.71	0.90
40:BF:40:GLN:NE2	40:BF:182:ASN:HB2	1.85	0.90
1:AA:662:G:H2'	1:AA:663:A:C8	2.06	0.90
56:BY:86:ARG:HB3	56:BY:88:LYS:HZ2	1.37	0.90
33:B8:48:PHE:O	33:B8:49:VAL:HG13	1.71	0.90
35:BA:1494:A:C2'	35:BA:1495:A:H5"	2.00	0.90
39:BE:38:THR:HB	39:BE:41:LYS:HG2	1.52	0.90
35:BA:192:C:H2'	35:BA:193:U:H5'	1.52	0.90
35:BA:666:G:H4'	47:BP:49:ARG:NH2	1.86	0.90
2:AB:44:LEU:H	2:AB:44:LEU:HD12	1.35	0.90
33:B8:56:GLU:HA	33:B8:59:LYS:HZ1	1.35	0.90
35:BA:2756:U:H4'	35:BA:2757:A:OP1	1.68	0.90
35:BA:2787:C:H1'	39:BE:61:ARG:HG3	1.51	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:76:PRO:HG2	38:BD:98:VAL:HG21	1.53	0.90
51:BT:27:THR:O	51:BT:28:VAL:HG23	1.71	0.90
24:AY:157:LEU:H	24:AY:157:LEU:HD23	1.35	0.90
49:BR:84:ALA:HB3	49:BR:85:PRO:HD3	1.51	0.90
24:AY:423:LYS:HB3	24:AY:472:VAL:HG22	1.53	0.90
35:BA:2240:C:O2'	35:BA:2241:A:H5'	1.71	0.90
40:BF:155:LEU:HA	40:BF:174:VAL:HB	1.52	0.90
24:AY:84:THR:H	24:AY:85:PRO:HD2	1.35	0.90
29:B4:48:ARG:O	29:B4:48:ARG:HG2	1.70	0.90
35:BA:1494:A:O2'	35:BA:1495:A:H5"	1.71	0.90
41:BG:135:LEU:HD11	41:BG:155:MET:CG	2.02	0.90
56:BY:79:CYS:SG	56:BY:80:GLY:N	2.45	0.90
35:BA:674:G:H1'	40:BF:74:ARG:HD3	1.52	0.90
35:BA:2287:A:H62	35:BA:2344:U:H3	1.14	0.90
38:BD:44:ASN:CB	38:BD:49:ILE:HA	2.00	0.90
42:BH:43:VAL:HG11	42:BH:52:VAL:HA	1.53	0.90
47:BP:105:LEU:N	47:BP:105:LEU:HD12	1.86	0.90
24:AY:342:TYR:CE2	24:AY:396:ARG:HD2	2.07	0.89
24:AY:530:VAL:HG13	24:AY:531:GLY:H	1.34	0.89
24:AY:550:MET:CE	24:AY:563:ILE:HD11	2.02	0.89
35:BA:1223:G:H3'	35:BA:1224:C:H5"	1.54	0.89
35:BA:2138:C:H2'	35:BA:2139:C:C6	2.07	0.89
38:BD:65:ILE:HG22	38:BD:104:TYR:HB3	1.52	0.89
39:BE:36:ARG:HG2	39:BE:36:ARG:NH1	1.85	0.89
41:BG:108:ASN:O	41:BG:109:VAL:HG23	1.72	0.89
27:B2:3:LEU:HD22	27:B2:7:ARG:NH1	1.86	0.89
35:BA:358:U:H2'	35:BA:359:A:H8	1.37	0.89
45:BN:9:VAL:HG11	45:BN:39:ARG:NH2	1.87	0.89
43:BK:115:LEU:HD13	43:BK:126:MET:SD	2.12	0.89
3:AC:34:LEU:HD22	3:AC:38:ARG:HD2	1.54	0.89
12:AL:126:LYS:HG3	12:AL:128:ALA:H	1.37	0.89
35:BA:996:A:H4'	52:BU:92:ARG:NE	1.87	0.89
35:BA:1899:G:H22	35:BA:1902:C:N4	1.69	0.89
38:BD:35:LYS:HG2	38:BD:63:ARG:HA	1.52	0.89
39:BE:24:THR:HG22	39:BE:186:GLY:HA2	1.52	0.89
51:BT:57:PHE:O	51:BT:59:THR:HG23	1.72	0.89
1:AA:80:G:H3'	1:AA:81:U:C5'	2.01	0.89
1:AA:129(A):G:O2'	1:AA:189(F):U:H2'	1.71	0.89
1:AA:979:C:H3'	1:AA:980:C:C5'	2.00	0.89
7:AG:78:ARG:HH12	7:AG:79:ARG:HE	1.19	0.89
35:BA:1899:G:N2	35:BA:1902:C:N4	2.19	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2591:C:H2'	35:BA:2592:G:C8	2.07	0.89
35:BA:2807:G:H3'	35:BA:2808:U:H5"	1.54	0.89
46:BO:91:LEU:HD22	46:BO:91:LEU:N	1.86	0.89
24:AY:355:LEU:HD12	24:AY:369:LEU:HD13	1.52	0.89
35:BA:1609:A:H5'	35:BA:1610:A:OP2	1.73	0.89
36:BB:48:A:H4'	50:BS:95:HIS:HD2	1.37	0.89
39:BE:48:GLN:HE21	39:BE:78:LEU:HD22	1.36	0.89
19:AS:14:HIS:CD2	19:AS:15:LEU:HD23	2.08	0.89
19:AS:64:GLU:HG2	29:B4:48:ARG:NH2	1.87	0.89
24:AY:415:PRO:HA	24:AY:474:ALA:HB2	1.53	0.89
35:BA:2296:U:H4'	35:BA:2297:C:OP1	1.69	0.89
42:BH:13:LYS:HE2	42:BH:13:LYS:HA	1.53	0.89
10:AJ:7:LYS:HB2	10:AJ:97:GLU:HB2	1.53	0.89
15:AO:80:ALA:HB1	15:AO:84:LYS:HE2	1.54	0.89
24:AY:431:LEU:HD22	24:AY:466:LEU:HD13	1.55	0.89
34:B9:27:CYS:SG	34:B9:28:GLU:N	2.43	0.89
35:BA:203:C:H3'	35:BA:204:A:H5"	1.53	0.89
1:AA:179:A:H2'	1:AA:180:U:C6	2.08	0.89
1:AA:1364:U:H2'	1:AA:1364:U:O2	1.72	0.89
43:BK:4:VAL:HG12	43:BK:5:VAL:H	1.36	0.89
40:BF:152:GLU:O	40:BF:154:VAL:HG23	1.73	0.89
1:AA:194:C:H2'	1:AA:195:A:H5"	1.54	0.88
13:AM:66:LEU:HD12	13:AM:66:LEU:N	1.88	0.88
35:BA:2804:C:H2'	35:BA:2805:G:C8	2.08	0.88
49:BR:99:LYS:HD3	49:BR:99:LYS:N	1.87	0.88
24:AY:67:ALA:HB1	24:AY:327:PHE:CZ	2.09	0.88
35:BA:286:C:H5'	35:BA:286:C:C6	2.09	0.88
35:BA:2789:C:H1'	35:BA:2892:A:C2	2.07	0.88
51:BT:46:GLU:O	51:BT:65:LYS:HD2	1.73	0.88
12:AL:25:PRO:C	12:AL:27:LEU:H	1.76	0.88
24:AY:438:PHE:C	24:AY:438:PHE:CD2	2.44	0.88
25:B0:47:PRO:HG3	25:B0:59:LEU:HD21	1.53	0.88
35:BA:1697:G:H3'	35:BA:1698:A:H5"	1.55	0.88
46:BO:97:ARG:HG3	46:BO:97:ARG:HH11	1.36	0.88
51:BT:16:ARG:HG3	51:BT:16:ARG:HH11	1.35	0.88
55:BX:8:ILE:H	55:BX:8:ILE:HD12	1.37	0.88
1:AA:973:G:H1'	10:AJ:55:LYS:NZ	1.89	0.88
11:AK:29:ILE:HB	11:AK:44:SER:HB2	1.54	0.88
35:BA:1876:A:H2'	35:BA:1877:A:H8	1.35	0.88
35:BA:1946:U:H2'	35:BA:1947:C:H6	1.37	0.88
54:BW:36:LEU:N	54:BW:36:LEU:HD23	1.88	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:27:G:N2	35:BA:512:G:H2'	1.88	0.88
43:BK:17:ALA:CB	43:BK:38:VAL:HG22	2.03	0.88
13:AM:78:ILE:HA	13:AM:81:LEU:HD23	1.53	0.88
50:BS:13:ARG:CG	50:BS:14:VAL:H	1.83	0.88
1:AA:1053:G:N7	1:AA:1200:C:H5"	1.88	0.88
24:AY:252:ASP:CB	24:AY:254:LYS:HE3	2.02	0.88
47:BP:126:VAL:HA	47:BP:145:PRO:HB2	1.54	0.88
52:BU:31:SER:HB3	52:BU:34:LYS:HB2	1.55	0.88
1:AA:103:C:H3'	1:AA:104:G:H8	1.37	0.88
1:AA:483:C:H3'	1:AA:484:G:H5"	1.53	0.88
11:AK:27:ASN:HD22	11:AK:29:ILE:HG22	1.36	0.88
43:BK:100:THR:HA	43:BK:139:VAL:HB	1.53	0.88
56:BY:94:LYS:C	56:BY:102:CYS:HB2	1.94	0.88
4:AD:49:ARG:HA	4:AD:49:ARG:NE	1.88	0.88
10:AJ:44:VAL:HG22	10:AJ:66:ARG:HG2	1.55	0.88
35:BA:64:A:C4	55:BX:66:LEU:HD13	2.09	0.88
41:BG:172:LEU:CD2	41:BG:176:LEU:HD11	2.04	0.88
43:BK:93:ARG:HG3	57:BZ:112:ARG:HE	1.39	0.88
55:BX:12:VAL:HG23	55:BX:13:LEU:N	1.89	0.88
35:BA:1485:G:H1'	35:BA:1505:C:H42	1.38	0.88
35:BA:2291:U:H2'	35:BA:2292:C:C6	2.08	0.88
48:BQ:27:VAL:HG11	48:BQ:134:ARG:HD3	1.53	0.88
51:BT:28:VAL:HG13	51:BT:46:GLU:HA	1.54	0.88
53:BV:15:GLU:HB3	53:BV:16:PRO:CD	2.03	0.88
55:BX:12:VAL:HG12	55:BX:27:THR:O	1.72	0.88
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG22	1.55	0.87
14:AN:37:PHE:HB3	14:AN:39:LEU:HD12	1.56	0.87
12:AL:83:VAL:HG11	12:AL:100:ILE:HD13	1.55	0.87
31:B6:15:GLU:HG3	31:B6:47:THR:HG21	1.56	0.87
35:BA:2245:U:H5'	35:BA:2246:G:H5'	1.55	0.87
47:BP:27:HIS:CD2	47:BP:28:GLY:N	2.43	0.87
30:B5:55:ARG:O	30:B5:56:LYS:HB2	1.72	0.87
35:BA:2307:G:N2	35:BA:2308:G:H5"	1.89	0.87
35:BA:2666:C:H5'	35:BA:2667:C:OP2	1.75	0.87
42:BH:83:TYR:HB3	42:BH:134:SER:HA	1.57	0.87
52:BU:47:TYR:HA	52:BU:50:ARG:NH1	1.88	0.87
53:BV:21:ARG:HB3	53:BV:91:TYR:CD2	2.09	0.87
18:AR:37:VAL:HG23	18:AR:38:GLU:N	1.85	0.87
24:AY:9:LEU:HD21	24:AY:284:LEU:HB2	1.54	0.87
35:BA:1064:C:H4'	43:BK:89:HIS:HD2	1.38	0.87
24:AY:413:ILE:HD11	24:AY:474:ALA:HB3	1.56	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:3:LYS:HD2	30:B5:5:PRO:HD2	1.57	0.87
35:BA:1494:A:H2'	35:BA:1495:A:H5"	1.55	0.87
38:BD:71:ASP:HB2	38:BD:103:ARG:HH22	1.39	0.87
51:BT:23:ARG:HG2	51:BT:120:ARG:HH12	1.39	0.87
1:AA:1296:C:H5'	1:AA:1297:C:OP2	1.73	0.87
6:AF:36:ARG:NH1	6:AF:36:ARG:HB3	1.89	0.87
35:BA:2312:U:H2'	35:BA:2313:C:H5"	1.53	0.87
35:BA:2518:A:H5"	35:BA:2519:U:OP2	1.73	0.87
57:BZ:56:VAL:C	57:BZ:57:ILE:HD12	1.95	0.87
1:AA:1457:G:H8	1:AA:1457:G:O5'	1.57	0.87
4:AD:98:GLU:CG	4:AD:189:PRO:HG3	2.05	0.87
14:AN:23:ARG:HD2	14:AN:28:GLY:O	1.73	0.87
24:AY:21:ILE:HD13	24:AY:21:ILE:N	1.88	0.87
24:AY:513:LYS:CB	24:AY:566:THR:HB	2.05	0.87
31:B6:8:LYS:HE3	31:B6:25:LYS:HD3	1.57	0.87
35:BA:1946:U:H2'	35:BA:1947:C:C6	2.09	0.87
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.09	0.87
8:AH:41:ARG:HH22	8:AH:123:GLU:CD	1.77	0.87
24:AY:438:PHE:C	24:AY:438:PHE:HD2	1.77	0.87
26:B1:76:ARG:NH1	26:B1:95:LEU:HD22	1.88	0.87
35:BA:108:U:H2'	35:BA:109:G:C8	2.10	0.87
35:BA:500:G:N2	35:BA:502:A:H3'	1.90	0.87
48:BQ:3:MET:HB2	48:BQ:4:PRO:HD2	1.54	0.87
30:B5:41:PRO:HG2	30:B5:44:THR:OG1	1.74	0.86
35:BA:299:A:H5'	35:BA:300:A:OP2	1.75	0.86
35:BA:759:G:H2'	35:BA:760:G:H8	1.39	0.86
35:BA:2287:A:N6	35:BA:2344:U:H3	1.73	0.86
35:BA:2454:G:C2'	35:BA:2455:G:H5'	2.05	0.86
40:BF:160:ASN:OD1	40:BF:163:VAL:HG23	1.73	0.86
31:B6:37:ARG:NH1	35:BA:2286:A:N7	2.22	0.86
35:BA:2876:G:H4'	51:BT:3:ARG:HE	1.40	0.86
43:BK:68:VAL:HG12	43:BK:70:LYS:HZ2	1.34	0.86
1:AA:1404:C:H1'	1:AA:1499:A:C2	2.11	0.86
35:BA:1538:G:H2'	35:BA:1539:G:C8	2.10	0.86
35:BA:2584:U:H2'	35:BA:2585:U:H5'	1.56	0.86
39:BE:38:THR:HG22	39:BE:40:GLU:H	1.38	0.86
56:BY:8:LYS:HB2	56:BY:28:LYS:NZ	1.89	0.86
1:AA:1502:A:H2	1:AA:1505:G:N1	1.72	0.86
26:B1:86:SER:O	26:B1:90:ILE:HG12	1.75	0.86
35:BA:1314:C:H6	35:BA:1314:C:H5'	1.40	0.86
35:BA:1876:A:H2'	35:BA:1877:A:C8	2.09	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2076:U:H5'	35:BA:2238:G:H22	1.40	0.86
38:BD:144:ALA:HB3	38:BD:192:THR:HG23	1.56	0.86
45:BN:46:VAL:HG13	45:BN:47:ALA:H	1.37	0.86
7:AG:41:ARG:HH11	7:AG:41:ARG:CG	1.84	0.86
27:B2:69:ARG:NH2	35:BA:111:A:H4'	1.91	0.86
35:BA:107:C:H2'	35:BA:108:U:C6	2.11	0.86
40:BF:3:GLU:CA	40:BF:24:LEU:HG	2.05	0.86
31:B6:6:ARG:O	31:B6:7:ILE:HB	1.73	0.86
31:B6:43:CYS:HB2	31:B6:44:ARG:HH21	1.38	0.86
35:BA:272(H):C:H6	35:BA:272(H):C:H5'	1.40	0.86
8:AH:12:ARG:NH1	8:AH:27:PRO:HD3	1.90	0.86
24:AY:343:ASN:HD21	24:AY:345:THR:HB	1.37	0.86
37:BC:176:VAL:HG21	37:BC:190:ILE:CD1	2.06	0.86
49:BR:100:LEU:H	49:BR:100:LEU:HD22	1.40	0.86
1:AA:1117:G:H5'	1:AA:1117:G:H8	1.39	0.86
55:BX:7:VAL:HG12	55:BX:8:ILE:N	1.89	0.86
10:AJ:82:ILE:HD13	10:AJ:82:ILE:N	1.91	0.86
24:AY:453:GLY:HA3	24:AY:459:LEU:HD11	1.57	0.86
24:AY:466:LEU:HA	24:AY:470:PHE:CD2	2.11	0.86
26:B1:45:ASN:HB2	35:BA:2230:G:H1'	1.57	0.86
41:BG:111:LEU:HB2	41:BG:112:PRO:HD3	1.55	0.86
52:BU:44:ASN:HD21	53:BV:75:PHE:HB3	1.37	0.86
5:AE:9:LYS:HB2	5:AE:112:LEU:HD11	1.57	0.86
35:BA:154(A):C:H5"	35:BA:155:U:H5"	1.58	0.86
35:BA:2543:G:H5'	35:BA:2543:G:H8	1.39	0.86
35:BA:2577:A:H5'	35:BA:2578:G:H5'	1.58	0.86
36:BB:112:U:H2'	36:BB:113:G:C8	2.10	0.86
1:AA:353:A:H8	1:AA:353:A:H5'	1.40	0.85
33:B8:33:ASN:H	33:B8:33:ASN:ND2	1.74	0.85
35:BA:978:G:H1	35:BA:985:C:N4	1.73	0.85
35:BA:2171:A:H1'	35:BA:2172:U:C6	2.09	0.85
37:BC:73:VAL:HG11	37:BC:158:LYS:HA	1.58	0.85
22:AV:17:C:H6	22:AV:17(A):U:C5	1.93	0.85
33:B8:25:MET:HB2	47:BP:62:LEU:HD21	1.58	0.85
35:BA:1504:C:H2'	35:BA:1505:C:H5"	1.56	0.85
41:BG:171:ALA:O	41:BG:175:LEU:HG	1.76	0.85
15:AO:78:TYR:O	15:AO:82:ILE:HG22	1.75	0.85
16:AP:22:THR:HA	16:AP:33:ILE:HG12	1.56	0.85
35:BA:2523:G:C2'	35:BA:2524:G:H5"	2.05	0.85
16:AP:53:VAL:HG23	16:AP:54:GLU:N	1.89	0.85
24:AY:512:ILE:H	24:AY:512:ILE:HD13	1.41	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:263:ARG:HB2	38:BD:263:ARG:NH1	1.89	0.85
35:BA:2735:G:H2'	35:BA:2736:G:H8	1.40	0.85
35:BA:1747(A):G:H2'	35:BA:1748:G:C5'	2.06	0.85
37:BC:138:LEU:HD22	37:BC:139:PRO:CD	2.06	0.85
43:BK:30:HIS:HA	43:BK:59:ILE:HD12	1.58	0.85
54:BW:107:LEU:HD13	54:BW:107:LEU:N	1.91	0.85
56:BY:44:ILE:HG22	56:BY:45:VAL:H	1.41	0.85
2:AB:165:VAL:HG23	2:AB:166:ASP:N	1.92	0.85
42:BH:171:LEU:HD23	42:BH:172:LYS:N	1.91	0.85
47:BP:30:THR:HG22	47:BP:31:ALA:N	1.92	0.85
47:BP:34:GLY:O	47:BP:35:HIS:HB2	1.77	0.85
50:BS:34:HIS:HB3	50:BS:53:SER:HB3	1.55	0.85
53:BV:38:LEU:HD23	53:BV:39:LEU:N	1.91	0.85
1:AA:474:G:H2'	1:AA:475:G:H8	1.40	0.85
1:AA:1004:A:H61	1:AA:1034:G:H2'	1.40	0.85
22:AV:71:C:O2	22:AV:71:C:H2'	1.75	0.85
35:BA:979:G:H3'	35:BA:980:A:C5'	2.07	0.85
39:BE:82:ARG:HG3	39:BE:83:ASP:H	1.42	0.85
22:AV:75:C:C6	22:AV:76:A:C8	2.65	0.85
25:B0:50:ASN:HA	25:B0:62:LEU:HD12	1.55	0.85
31:B6:19:ARG:HG2	35:BA:2400:G:O5'	1.77	0.85
35:BA:2438:U:O3'	35:BA:2439:A:H4'	1.76	0.85
49:BR:62:ALA:O	49:BR:66:VAL:HG23	1.77	0.85
52:BU:20:LEU:HD22	52:BU:20:LEU:N	1.90	0.85
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.11	0.85
24:AY:15:ILE:HD11	24:AY:81:ILE:HG12	1.58	0.85
35:BA:903:C:C2'	35:BA:904:C:H5"	2.05	0.85
33:B8:4:MET:O	33:B8:62:LEU:HD12	1.76	0.84
57:BZ:151:HIS:HB3	57:BZ:170:THR:HA	1.58	0.84
58:AY:701:FUA:H211	58:AY:701:FUA:O2	1.76	0.84
43:BK:93:ARG:CZ	43:BK:94:GLU:HB2	2.06	0.84
53:BV:13:ARG:HH11	53:BV:13:ARG:CG	1.90	0.84
53:BV:77:ALA:O	53:BV:79:VAL:HG23	1.77	0.84
1:AA:631:G:H5'	1:AA:631:G:H8	1.42	0.84
5:AE:101:ILE:HD11	5:AE:119:LEU:CD2	2.07	0.84
25:B0:20:ARG:H	25:B0:20:ARG:HD2	1.41	0.84
35:BA:2502:G:H5"	35:BA:2503:A:H5'	1.58	0.84
45:BN:48:MET:H	45:BN:48:MET:HE2	1.43	0.84
52:BU:20:LEU:H	52:BU:20:LEU:CD2	1.91	0.84
1:AA:1321:C:C3'	1:AA:1322:C:H5"	2.04	0.84
36:BB:87:G:H2'	36:BB:88:C:H3'	1.57	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:95:LEU:HD12	38:BD:103:ARG:O	1.78	0.84
40:BF:110:LEU:HD12	40:BF:206:ILE:HD11	1.56	0.84
48:BQ:87:LYS:HG2	48:BQ:88:GLY:H	1.40	0.84
1:AA:1234:C:O2'	1:AA:1235:U:H5'	1.78	0.84
41:BG:68:PRO:HA	41:BG:92:VAL:CG1	2.07	0.84
41:BG:63:ILE:HA	41:BG:143:GLU:CG	2.07	0.84
43:BK:19:PRO:HB3	43:BK:34:ILE:HD12	1.60	0.84
11:AK:27:ASN:ND2	11:AK:29:ILE:HG22	1.91	0.84
2:AB:233:SER:HB2	2:AB:234:PRO:CD	2.08	0.84
13:AM:15:VAL:HG12	13:AM:45:VAL:CG2	2.06	0.84
31:B6:35:GLU:OE1	31:B6:35:GLU:HA	1.76	0.84
35:BA:861:A:H2'	35:BA:862:G:O4'	1.77	0.84
35:BA:1038:C:H3'	35:BA:1039:G:H5"	1.59	0.84
35:BA:1718:G:H5'	35:BA:1718:G:H8	1.43	0.84
35:BA:2852:G:H2'	35:BA:2853:C:C6	2.13	0.84
39:BE:101:ARG:NE	39:BE:171:GLU:HB2	1.93	0.84
40:BF:170:LEU:HB2	40:BF:173:VAL:HB	1.56	0.84
50:BS:67:ARG:HB3	50:BS:71:ARG:HH22	1.41	0.84
52:BU:61:TRP:O	52:BU:65:ILE:HG13	1.77	0.84
24:AY:647:VAL:HG21	24:AY:652:MET:SD	2.18	0.84
25:B0:14:ARG:HB2	25:B0:14:ARG:HH11	1.43	0.84
35:BA:733:G:H8	35:BA:733:G:O5'	1.59	0.84
35:BA:1847:A:H3'	35:BA:1848:A:H5'	1.60	0.84
7:AG:41:ARG:HG2	7:AG:41:ARG:NH1	1.84	0.83
26:B1:41:ARG:NH2	35:BA:1365:A:H5'	1.93	0.83
45:BN:61:ARG:HH11	45:BN:61:ARG:HG3	1.43	0.83
51:BT:65:LYS:HE3	51:BT:66:VAL:N	1.91	0.83
53:BV:18:LEU:HD13	53:BV:19:LYS:N	1.93	0.83
1:AA:1473:A:O2'	1:AA:1474:G:H5'	1.78	0.83
3:AC:150:LYS:HB2	3:AC:169:ALA:CB	2.08	0.83
41:BG:76:SER:CA	41:BG:83:ARG:HB3	2.08	0.83
1:AA:792:A:O2'	1:AA:794:A:N7	2.11	0.83
1:AA:1277:C:H2'	1:AA:1278:U:H5'	1.60	0.83
35:BA:954:G:H4'	48:BQ:13:GLN:NE2	1.92	0.83
35:BA:978:G:H1	35:BA:985:C:H42	1.20	0.83
49:BR:12:ARG:HH11	49:BR:12:ARG:HG3	1.43	0.83
10:AJ:92:THR:HG23	10:AJ:93:GLY:N	1.93	0.83
25:B0:20:ARG:HG2	25:B0:20:ARG:HH11	1.42	0.83
30:B5:25:LEU:CD1	54:BW:19:LEU:HB3	2.08	0.83
35:BA:613:G:H5'	35:BA:613:G:H8	1.43	0.83
47:BP:41:ARG:HH11	47:BP:41:ARG:CA	1.90	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1226:C:N4	13:AM:104:ARG:HD2	1.92	0.83
25:B0:27:GLU:H	25:B0:27:GLU:CD	1.82	0.83
31:B6:48:VAL:HG23	31:B6:49:HIS:N	1.92	0.83
49:BR:63:ARG:HH22	49:BR:77:ARG:HG2	1.42	0.83
52:BU:110:VAL:HG12	52:BU:114:LYS:HD3	1.60	0.83
53:BV:24:LYS:HA	53:BV:92:THR:HG23	1.60	0.83
1:AA:631:G:H2'	1:AA:632:A:C8	2.13	0.83
1:AA:814:A:H2'	1:AA:816:A:H5'	1.60	0.83
4:AD:158:ILE:O	4:AD:162:LEU:HB2	1.79	0.83
24:AY:264:LEU:O	24:AY:264:LEU:HD23	1.79	0.83
35:BA:598:G:H5'	47:BP:15:ARG:HB2	1.60	0.83
40:BF:110:LEU:C	40:BF:110:LEU:HD13	1.98	0.83
45:BN:14:VAL:HG11	45:BN:137:LYS:HD2	1.60	0.83
50:BS:85:VAL:HG23	50:BS:106:ARG:HG3	1.60	0.83
52:BU:88:ILE:HG13	52:BU:88:ILE:O	1.77	0.83
4:AD:30:LYS:C	4:AD:32:ALA:H	1.77	0.83
46:BO:4:PRO:O	46:BO:5:GLN:HB2	1.77	0.83
47:BP:115:LEU:HA	47:BP:134:ALA:HB3	1.61	0.83
1:AA:1206:G:H4'	3:AC:192:THR:O	1.79	0.83
13:AM:49:THR:HG22	13:AM:51:ALA:H	1.42	0.83
35:BA:240:G:H3'	35:BA:241:A:H5"	1.59	0.83
33:B8:29:LYS:HD2	33:B8:44:LYS:HG2	1.60	0.83
35:BA:1348:G:H2'	35:BA:1349:A:H5"	1.59	0.83
35:BA:2147:G:H2'	35:BA:2148:G:O4'	1.79	0.83
47:BP:16:ARG:HD3	47:BP:18:ARG:H	1.44	0.83
35:BA:940:G:H5'	35:BA:941:A:OP2	1.79	0.83
35:BA:2712:U:HO2'	35:BA:2712(A):A:H8	0.84	0.83
39:BE:49:LEU:HD22	39:BE:49:LEU:N	1.94	0.83
43:BK:81:ALA:HB1	43:BK:99:ILE:HD11	1.61	0.83
45:BN:65:LYS:HB3	45:BN:69:GLN:HG3	1.61	0.83
1:AA:201:C:H2'	1:AA:202:U:H5"	1.60	0.82
16:AP:53:VAL:HG23	16:AP:54:GLU:H	1.43	0.82
27:B2:7:ARG:HH11	27:B2:7:ARG:HG3	1.42	0.82
35:BA:1217:C:OP2	52:BU:15:LYS:NZ	2.12	0.82
42:BH:17:VAL:HG11	42:BH:50:VAL:CG2	2.09	0.82
45:BN:62:VAL:HG22	45:BN:66:LYS:HG3	1.58	0.82
28:B3:31:LEU:HD13	28:B3:32:GLN:HG2	1.61	0.82
35:BA:320:A:H2'	40:BF:136:THR:OG1	1.79	0.82
47:BP:146:VAL:HG13	47:BP:147:LEU:N	1.92	0.82
1:AA:1116:C:C2'	1:AA:1117:G:H5"	2.07	0.82
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	1.90	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BN:46:VAL:HG13	45:BN:48:MET:CE	2.08	0.82
50:BS:95:HIS:CG	50:BS:96:GLY:N	2.46	0.82
5:AE:76:ILE:HG13	5:AE:142:LEU:HD13	1.61	0.82
18:AR:85:LEU:HD12	18:AR:86:VAL:H	1.43	0.82
24:AY:18:ALA:O	24:AY:19:ALA:HB2	1.79	0.82
26:B1:41:ARG:HH22	35:BA:1365:A:H5'	1.43	0.82
35:BA:1070:A:H5'	35:BA:1072:C:OP2	1.77	0.82
42:BH:41:MET:HG2	42:BH:43:VAL:HG13	1.61	0.82
42:BH:41:MET:HG3	42:BH:43:VAL:HG13	1.59	0.82
12:AL:34:ARG:HG3	12:AL:105:TYR:HE1	1.44	0.82
24:AY:688:ILE:O	24:AY:688:ILE:HG22	1.80	0.82
39:BE:98:PRO:HG3	39:BE:175:VAL:HG12	1.59	0.82
1:AA:1281:U:H5"	1:AA:1282:C:H5	1.42	0.82
3:AC:86:VAL:HG23	3:AC:87:LEU:HD23	1.60	0.82
35:BA:1080:C:O2'	43:BK:126:MET:HG3	1.80	0.82
35:BA:1115:G:H5'	35:BA:1115:G:H8	1.42	0.82
38:BD:43:ARG:HB3	38:BD:54:ARG:HB2	1.61	0.82
52:BU:47:TYR:HA	52:BU:50:ARG:HH11	1.43	0.82
57:BZ:42:VAL:HG13	57:BZ:43:GLU:H	1.44	0.82
3:AC:46:GLU:O	3:AC:47:LEU:HB2	1.78	0.82
6:AF:36:ARG:HB3	6:AF:36:ARG:CZ	2.08	0.82
30:B5:34:PRO:O	30:B5:35:GLU:HB2	1.77	0.82
35:BA:871:U:OP1	48:BQ:5:ARG:HG3	1.80	0.82
35:BA:1223:G:H3'	35:BA:1224:C:C5'	2.10	0.82
37:BC:99:GLU:O	37:BC:100:ILE:HD13	1.80	0.82
41:BG:55:LYS:O	41:BG:58:GLN:HG3	1.80	0.82
42:BH:171:LEU:CD2	42:BH:171:LEU:C	2.48	0.82
49:BR:2:ARG:HD2	49:BR:5:LYS:HE2	1.58	0.82
10:AJ:34:VAL:HG22	10:AJ:74:ILE:HG22	1.60	0.82
30:B5:2:ALA:CA	35:BA:2015:A:H1'	2.09	0.82
47:BP:106:LEU:O	47:BP:107:LYS:HG2	1.78	0.82
13:AM:6:GLY:C	13:AM:8:GLU:H	1.80	0.82
35:BA:288:C:H2'	35:BA:289:A:C8	2.15	0.82
35:BA:2852:G:H2'	35:BA:2853:C:H6	1.42	0.82
41:BG:86:MET:N	41:BG:87:PRO:HD3	1.95	0.82
43:BK:17:ALA:HB1	43:BK:38:VAL:HG22	1.61	0.82
48:BQ:59:ARG:HA	57:BZ:180:VAL:HG23	1.61	0.82
1:AA:1152:A:H5"	10:AJ:13:HIS:HD2	1.44	0.82
1:AA:1489:G:H2'	1:AA:1490:C:H5"	1.61	0.82
10:AJ:61:GLU:OE1	14:AN:49:HIS:HE1	1.63	0.82
1:AA:163:C:O2'	1:AA:164:U:H5'	1.79	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:116:THR:HG22	5:AE:117:ASP:OD1	1.79	0.81
6:AF:55:ASP:OD1	6:AF:56:PRO:HD2	1.80	0.81
10:AJ:63:PHE:HB3	14:AN:58:LYS:HA	1.61	0.81
27:B2:41:ILE:HD11	27:B2:44:LEU:HD12	1.62	0.81
35:BA:882:G:H2'	35:BA:883:G:C8	2.15	0.81
35:BA:2189:U:H2'	35:BA:2190:G:H5"	1.62	0.81
36:BB:87:G:C3'	36:BB:88:C:H5"	2.10	0.81
51:BT:32:TYR:N	51:BT:32:TYR:CD1	2.48	0.81
57:BZ:115:GLY:HA2	57:BZ:177:PRO:HD3	1.61	0.81
3:AC:83:ARG:O	3:AC:86:VAL:HG22	1.78	0.81
11:AK:21:ILE:HG13	11:AK:30:VAL:HG12	1.62	0.81
11:AK:111:ASP:OD2	18:AR:84:LYS:HE2	1.79	0.81
24:AY:180:VAL:HG23	24:AY:181:LEU:H	1.45	0.81
35:BA:965:C:C5'	35:BA:2273:A:H1'	2.09	0.81
35:BA:2396:G:O2'	35:BA:2397:G:H5'	1.79	0.81
50:BS:89:ARG:HG2	50:BS:89:ARG:HH11	1.44	0.81
1:AA:662:G:H2'	1:AA:663:A:H8	1.44	0.81
11:AK:23:ALA:HB1	11:AK:88:GLY:HA3	1.62	0.81
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.09	0.81
13:AM:68:GLY:H	13:AM:71:ARG:HB3	1.43	0.81
19:AS:6:LYS:HE3	19:AS:6:LYS:H	1.45	0.81
35:BA:218:A:C2	35:BA:235:U:H4'	2.15	0.81
36:BB:54:G:O2'	36:BB:55:U:H5'	1.80	0.81
36:BB:60:C:H2'	36:BB:61:G:H8	1.45	0.81
39:BE:179:GLU:O	39:BE:180:ASN:HB2	1.81	0.81
42:BH:157:TYR:CD1	42:BH:171:LEU:HD22	2.15	0.81
45:BN:115:ARG:HH11	45:BN:115:ARG:HG3	1.44	0.81
52:BU:88:ILE:HG22	53:BV:47:VAL:O	1.81	0.81
52:BU:91:ASP:OD1	52:BU:96:ALA:HB2	1.80	0.81
35:BA:2258:C:O2'	35:BA:2426:A:H4'	1.80	0.81
36:BB:20:C:O2'	36:BB:21:G:H5"	1.81	0.81
45:BN:45:ASN:HD22	45:BN:45:ASN:H	1.28	0.81
47:BP:57:THR:OG1	47:BP:59:LEU:HB3	1.79	0.81
49:BR:117:VAL:O	49:BR:118:GLU:HB2	1.80	0.81
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.14	0.81
11:AK:48:ILE:HG22	11:AK:49:GLY:H	1.44	0.81
19:AS:6:LYS:H	19:AS:6:LYS:CE	1.93	0.81
33:B8:13:ARG:HB3	47:BP:63:PRO:HB3	1.60	0.81
35:BA:1913:A:H4'	35:BA:1914:C:H5"	1.62	0.81
38:BD:110:GLY:O	38:BD:112:GLN:HG3	1.79	0.81
40:BF:176:LEU:HG	40:BF:177:ALA:O	1.80	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BR:38:VAL:HB	49:BR:39:PRO:HD3	1.61	0.81
53:BV:18:LEU:HD22	53:BV:19:LYS:H	1.43	0.81
24:AY:227:ILE:HD11	24:AY:241:GLU:O	1.80	0.81
35:BA:2461:C:H5'	35:BA:2462:U:OP2	1.81	0.81
35:BA:2645:G:H3'	35:BA:2646:C:H5'	1.61	0.81
54:BW:95:ILE:O	54:BW:95:ILE:HG13	1.81	0.81
3:AC:50:ALA:HB1	3:AC:70:VAL:HG11	1.61	0.81
24:AY:21:ILE:O	24:AY:22:ASP:HB2	1.81	0.81
35:BA:533:G:H5"	52:BU:24:TYR:CE1	2.14	0.81
35:BA:745:G:H5'	35:BA:746:A:OP2	1.78	0.81
35:BA:2175:C:H4'	37:BC:219:MET:O	1.81	0.81
35:BA:2389:G:H5"	35:BA:2390:U:H5'	1.63	0.81
38:BD:263:ARG:HH11	38:BD:263:ARG:CB	1.90	0.81
45:BN:129:PRO:O	45:BN:130:HIS:HB3	1.80	0.81
50:BS:89:ARG:HG3	50:BS:92:TYR:CB	2.10	0.81
1:AA:461:A:O2'	1:AA:470:C:H5'	1.80	0.81
4:AD:114:ARG:HG3	4:AD:114:ARG:NH1	1.91	0.81
24:AY:67:ALA:HB1	24:AY:327:PHE:HZ	1.42	0.81
35:BA:1899:G:H22	35:BA:1902:C:H41	1.23	0.81
52:BU:90:VAL:CG2	53:BV:47:VAL:HG21	2.11	0.81
1:AA:1219:U:H2'	1:AA:1220:G:H8	1.45	0.81
3:AC:16:ARG:HB2	3:AC:16:ARG:NH1	1.94	0.81
6:AF:71:ARG:HH11	6:AF:71:ARG:HG3	1.45	0.81
24:AY:530:VAL:HG13	24:AY:531:GLY:N	1.96	0.81
35:BA:907:U:OP1	48:BQ:24:GLY:N	2.13	0.81
35:BA:2476:A:C2'	35:BA:2477:C:H5"	2.11	0.81
35:BA:2514:U:H2'	35:BA:2515:C:H6	1.46	0.81
40:BF:64:ILE:HG22	40:BF:76:GLY:O	1.81	0.81
47:BP:77:ARG:HB2	47:BP:78:PRO:HD2	1.62	0.81
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.15	0.81
9:AI:4:TYR:CE2	9:AI:88:TYR:HB2	2.16	0.81
31:B6:48:VAL:HG23	31:B6:49:HIS:H	1.46	0.81
35:BA:545:C:H2'	35:BA:547:A:H5"	1.63	0.81
35:BA:1036:G:OP1	42:BH:59:ARG:HD2	1.80	0.81
38:BD:145:VAL:HG22	38:BD:191:ALA:HB1	1.63	0.81
45:BN:48:MET:H	45:BN:48:MET:HE3	1.43	0.81
46:BO:69:ILE:HD13	46:BO:77:ILE:HG23	1.62	0.81
47:BP:85:LEU:HD12	47:BP:120:ALA:HB2	1.63	0.81
2:AB:230:VAL:HG23	2:AB:231:GLU:N	1.96	0.80
24:AY:277:VAL:HG13	24:AY:278:ASP:N	1.96	0.80
35:BA:2712:U:O2'	35:BA:2712(A):A:H8	1.62	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BB:91:C:OP1	48:BQ:16:ARG:HG3	1.80	0.80
46:BO:43:VAL:HG23	46:BO:56:ASP:O	1.80	0.80
48:BQ:75:THR:HG22	48:BQ:76:LYS:N	1.94	0.80
1:AA:1382:C:H2'	1:AA:1383:C:H6	1.46	0.80
5:AE:87:SER:HB3	5:AE:131:ILE:CD1	2.10	0.80
35:BA:2228:G:H2'	35:BA:2229:C:C6	2.16	0.80
35:BA:2579:C:H4'	39:BE:134:ILE:HG12	1.62	0.80
1:AA:491:G:H2'	1:AA:492:G:H8	1.46	0.80
49:BR:7:GLY:O	49:BR:8:ARG:HB2	1.80	0.80
50:BS:54:LEU:O	50:BS:54:LEU:HD13	1.82	0.80
48:BQ:6:ARG:O	48:BQ:7:MET:HG3	1.80	0.80
55:BX:35:THR:HG22	55:BX:37:THR:N	1.96	0.80
35:BA:970:C:H2'	35:BA:971:C:H6	1.46	0.80
42:BH:105:LEU:HD23	42:BH:113:VAL:HB	1.62	0.80
43:BK:99:ILE:HG23	43:BK:103:GLN:CB	2.09	0.80
50:BS:15:ARG:HB3	50:BS:18:ILE:CD1	2.10	0.80
1:AA:627:G:O2'	1:AA:628:G:H5'	1.80	0.80
19:AS:32:LYS:HA	19:AS:50:ALA:HB3	1.62	0.80
24:AY:122:TRP:CE3	24:AY:132:ARG:HD2	2.17	0.80
29:B4:5:ILE:O	29:B4:5:ILE:HG12	1.82	0.80
35:BA:1061:U:H4'	35:BA:1070:A:H1'	1.64	0.80
35:BA:1285:G:H2'	35:BA:1286:A:H5'	1.64	0.80
35:BA:2585:U:O2'	35:BA:2586:C:H5'	1.82	0.80
36:BB:15:A:H3'	36:BB:16:G:H5'	1.62	0.80
51:BT:129:ARG:O	51:BT:129:ARG:HG2	1.79	0.80
1:AA:1270:C:H2'	1:AA:1271:G:C8	2.16	0.80
12:AL:47:LYS:HB3	12:AL:47:LYS:HZ2	1.45	0.80
16:AP:49:LEU:HD22	16:AP:73:LEU:HD22	1.64	0.80
29:B4:27:THR:O	29:B4:28:LYS:HB3	1.81	0.80
35:BA:1020:A:N1	35:BA:1141:U:H2'	1.96	0.80
35:BA:1884:A:H2'	35:BA:1885:A:C5'	2.12	0.80
35:BA:1947:C:C2'	35:BA:1948:G:H5"	2.11	0.80
47:BP:146:VAL:HG22	47:BP:147:LEU:H	1.46	0.80
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.17	0.80
12:AL:75:HIS:HD2	12:AL:77:LEU:HD12	1.46	0.80
19:AS:64:GLU:HG2	29:B4:48:ARG:HH22	1.46	0.80
20:AT:13:LEU:HD12	20:AT:13:LEU:H	1.47	0.80
24:AY:550:MET:HE3	24:AY:563:ILE:HD11	1.61	0.80
37:BC:26:ALA:O	37:BC:30:VAL:HG23	1.82	0.80
41:BG:135:LEU:HD11	41:BG:155:MET:HG2	1.64	0.80
48:BQ:97:VAL:HG11	48:BQ:103:MET:HE3	1.63	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:129:ASN:ND2	4:AD:145:GLU:H	1.79	0.80
10:AJ:55:LYS:CE	10:AJ:55:LYS:H	1.94	0.80
25:B0:40:GLN:NE2	25:B0:43:THR:HA	1.95	0.80
35:BA:2521:C:H42	35:BA:2544:G:H1	1.29	0.80
35:BA:1846:G:H5'	35:BA:1846:G:H8	1.45	0.80
40:BF:20:LEU:HD23	40:BF:21:ALA:N	1.97	0.80
41:BG:56:ALA:HA	41:BG:59:GLU:OE1	1.82	0.80
50:BS:89:ARG:HG3	50:BS:92:TYR:HA	1.62	0.80
24:AY:512:ILE:H	24:AY:512:ILE:CD1	1.94	0.79
35:BA:2303:G:N2	35:BA:2313:C:O2	2.15	0.79
35:BA:2761:G:C2'	35:BA:2762:G:H5"	2.12	0.79
51:BT:23:ARG:HG2	51:BT:120:ARG:NH1	1.96	0.79
51:BT:107:ASP:CG	51:BT:108:ARG:H	1.85	0.79
1:AA:625:G:H2'	1:AA:626:U:C6	2.18	0.79
1:AA:1004:A:N6	1:AA:1034:G:H2'	1.97	0.79
3:AC:70:VAL:CG1	3:AC:72:LYS:H	1.85	0.79
5:AE:101:ILE:HD11	5:AE:119:LEU:HA	1.63	0.79
14:AN:29:ARG:HH11	14:AN:29:ARG:HG3	1.48	0.79
24:AY:555:LEU:HD21	24:AY:599:PRO:HG3	1.65	0.79
36:BB:50:G:OP1	50:BS:63:THR:HG23	1.81	0.79
42:BH:98:LEU:CB	42:BH:125:VAL:HG21	2.11	0.79
1:AA:559:A:H4'	1:AA:560:U:H5'	1.64	0.79
13:AM:68:GLY:N	13:AM:71:ARG:HB3	1.97	0.79
35:BA:847:U:O4	35:BA:933:A:N6	2.15	0.79
35:BA:2195:C:O2'	35:BA:2196:C:H5'	1.81	0.79
35:BA:2815:C:H2'	35:BA:2816:C:C6	2.17	0.79
43:BK:57:ILE:H	43:BK:57:ILE:HD12	1.44	0.79
54:BW:5:ALA:HB2	54:BW:54:ALA:HB2	1.63	0.79
3:AC:70:VAL:HG12	3:AC:71:ALA:N	1.91	0.79
25:B0:14:ARG:HB2	25:B0:14:ARG:NH1	1.97	0.79
26:B1:7:ILE:HG22	26:B1:8:SER:N	1.97	0.79
35:BA:406:G:C8	35:BA:406:G:OP2	2.36	0.79
35:BA:612:C:H2'	35:BA:613:G:C5'	2.12	0.79
35:BA:1902:C:H4'	38:BD:244:ARG:HB2	1.63	0.79
35:BA:2483:C:H3'	35:BA:2484:G:H5"	1.65	0.79
36:BB:103:G:H5'	36:BB:104:U:OP2	1.82	0.79
40:BF:148:LEU:HD23	40:BF:191:ARG:NH1	1.95	0.79
40:BF:181:LEU:HB3	40:BF:205:ARG:NH1	1.97	0.79
47:BP:40:SER:O	47:BP:41:ARG:HD2	1.80	0.79
54:BW:20:VAL:HG23	54:BW:21:VAL:N	1.98	0.79
1:AA:973:G:H1'	10:AJ:55:LYS:CE	2.13	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:33:GLN:O	10:AJ:75:ILE:HG12	1.82	0.79
10:AJ:64:GLU:HG2	14:AN:59:ALA:HB2	1.64	0.79
12:AL:24:VAL:O	12:AL:24:VAL:HG12	1.82	0.79
14:AN:41:ARG:HG2	14:AN:41:ARG:HH11	1.46	0.79
27:B2:63:VAL:HA	27:B2:66:GLU:HG2	1.65	0.79
35:BA:226:G:H4'	35:BA:227:A:OP1	1.83	0.79
35:BA:322:A:OP2	40:BF:169:ASN:HB2	1.81	0.79
35:BA:2012:G:C4'	54:BW:96:ILE:HD11	2.12	0.79
36:BB:115:G:H2'	36:BB:116:G:H8	1.48	0.79
43:BK:3:LYS:HB3	43:BK:29:GLN:HB3	1.63	0.79
56:BY:10:GLY:CA	56:BY:27:VAL:HG13	2.12	0.79
24:AY:380:LEU:O	24:AY:381:LYS:HE2	1.83	0.79
26:B1:5:CYS:HG	26:B1:62:VAL:HA	1.48	0.79
33:B8:6:THR:CG2	33:B8:63:PRO:HD3	2.13	0.79
52:BU:104:GLN:HB3	53:BV:44:LYS:NZ	1.98	0.79
53:BV:15:GLU:CB	53:BV:16:PRO:HD2	2.10	0.79
56:BY:97:ARG:HH11	56:BY:97:ARG:HG3	1.48	0.79
1:AA:294:U:H2'	1:AA:295:C:C6	2.17	0.79
35:BA:751:A:H5'	54:BW:90:ARG:HA	1.65	0.79
36:BB:7:G:C2'	36:BB:8:U:H5"	2.12	0.79
41:BG:106:LEU:HA	41:BG:110:ALA:HB3	1.64	0.79
24:AY:198:GLU:HG3	24:AY:198:GLU:O	1.83	0.79
24:AY:526:VAL:HB	24:AY:566:THR:HA	1.63	0.79
27:B2:7:ARG:NH1	27:B2:7:ARG:HG3	1.96	0.79
31:B6:5:VAL:HG12	31:B6:6:ARG:H	1.47	0.79
35:BA:1452:A:H3'	35:BA:1453:U:C5'	2.12	0.79
35:BA:2796:U:H3'	35:BA:2799:C:C5'	2.12	0.79
39:BE:81:ILE:O	39:BE:81:ILE:HG22	1.81	0.79
41:BG:56:ALA:HB1	41:BG:153:ARG:CZ	2.12	0.79
42:BH:16:SER:CB	42:BH:27:LYS:HB2	2.12	0.79
56:BY:8:LYS:HD2	56:BY:8:LYS:H	1.47	0.79
1:AA:243:A:H4'	1:AA:244:U:O5'	1.83	0.79
12:AL:17:LYS:HD3	12:AL:18:VAL:HG22	1.65	0.79
19:AS:43:GLU:O	19:AS:45:VAL:HG13	1.81	0.79
25:B0:60:PHE:CE2	35:BA:2365:G:H4'	2.17	0.79
29:B4:14:ILE:O	29:B4:21:VAL:HG13	1.83	0.79
35:BA:894:C:O2'	35:BA:895:U:H5'	1.81	0.79
35:BA:2555:U:H2'	35:BA:2556:C:H5'	1.65	0.79
41:BG:9:ARG:HD3	41:BG:13:GLU:OE2	1.83	0.79
47:BP:85:LEU:HD23	47:BP:85:LEU:N	1.93	0.79
2:AB:126:GLU:HA	2:AB:129:GLU:OE1	1.83	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2591:C:OP2	38:BD:239:ARG:HB3	1.83	0.79
13:AM:96:LEU:CB	13:AM:97:PRO:HD2	2.05	0.78
22:AV:46:G:H4'	22:AV:47:U:C5	2.12	0.78
24:AY:400:GLU:O	24:AY:402:ILE:HD12	1.83	0.78
24:AY:488:THR:O	24:AY:516:PRO:HG3	1.82	0.78
24:AY:613:PRO:C	24:AY:615:GLU:H	1.84	0.78
32:B7:41:ARG:HH22	35:BA:460:A:P	2.07	0.78
35:BA:528:A:C2	35:BA:2043:C:H5'	2.18	0.78
35:BA:1796:U:OP1	38:BD:276:LYS:HE3	1.83	0.78
38:BD:158:ALA:HB3	38:BD:161:THR:HG21	1.65	0.78
38:BD:226:MET:HB3	38:BD:230:ASP:HB2	1.63	0.78
39:BE:9:VAL:CG2	39:BE:10:GLY:N	2.46	0.78
42:BH:170:ARG:O	42:BH:171:LEU:HB3	1.83	0.78
45:BN:47:ALA:H	45:BN:48:MET:HE2	1.48	0.78
51:BT:125:ARG:HH11	51:BT:125:ARG:HA	1.47	0.78
57:BZ:84:GLU:O	57:BZ:85:HIS:HB2	1.82	0.78
1:AA:294:U:H2'	1:AA:295:C:H6	1.48	0.78
1:AA:998:G:H2'	1:AA:999:C:C2	2.17	0.78
10:AJ:22:LYS:O	10:AJ:22:LYS:HD2	1.82	0.78
24:AY:309:LEU:O	24:AY:390:VAL:HA	1.83	0.78
30:B5:40:LYS:NZ	30:B5:46:CYS:H	1.81	0.78
31:B6:14:THR:O	31:B6:49:HIS:HA	1.83	0.78
35:BA:1375:C:H2'	35:BA:1376:C:H6	1.48	0.78
35:BA:2723:C:H5"	49:BR:2:ARG:HH11	1.48	0.78
43:BK:93:ARG:CG	57:BZ:112:ARG:HE	1.96	0.78
50:BS:28:VAL:HG12	50:BS:29:PHE:H	1.48	0.78
52:BU:54:LYS:O	52:BU:58:ARG:HG3	1.83	0.78
2:AB:22:LYS:HE2	2:AB:22:LYS:CA	2.12	0.78
10:AJ:32:ALA:HB2	10:AJ:76:ASN:HD22	1.47	0.78
24:AY:416:LYS:CD	24:AY:417:THR:H	1.95	0.78
41:BG:28:VAL:O	41:BG:31:VAL:HG12	1.83	0.78
1:AA:269:C:H2'	1:AA:270:A:C8	2.19	0.78
5:AE:102:ALA:HB2	5:AE:120:THR:OG1	1.83	0.78
13:AM:23:TYR:HB3	13:AM:67:GLU:HB3	1.62	0.78
19:AS:78:ARG:HB2	19:AS:81:ARG:HH11	1.47	0.78
27:B2:3:LEU:CD2	27:B2:7:ARG:HH12	1.94	0.78
27:B2:21:LEU:O	27:B2:24:LEU:HB3	1.84	0.78
35:BA:2241:A:H2'	35:BA:2242:G:H8	1.48	0.78
35:BA:2348:U:C2'	35:BA:2349:G:H5"	2.13	0.78
41:BG:41:GLN:HB3	41:BG:43:LEU:CD2	2.12	0.78
1:AA:973:G:O4'	10:AJ:55:LYS:HG3	1.83	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:B4:48:ARG:O	29:B4:49:PHE:HD1	1.67	0.78
35:BA:739:G:H4'	35:BA:740:U:OP1	1.83	0.78
35:BA:756:C:O2'	35:BA:757:U:H5'	1.84	0.78
36:BB:106:G:H5"	57:BZ:31:ARG:HB3	1.66	0.78
40:BF:158:THR:HG23	40:BF:160:ASN:H	1.49	0.78
49:BR:21:TYR:HB3	49:BR:47:PHE:CD2	2.19	0.78
1:AA:55:A:HO2'	24:AY:321:TYR:HD1	1.28	0.78
11:AK:16:SER:O	11:AK:35:PRO:HG3	1.83	0.78
13:AM:65:LYS:C	13:AM:66:LEU:HD12	2.03	0.78
35:BA:272(H):C:C2'	35:BA:272(I):U:H5"	2.14	0.78
35:BA:392:C:H5"	35:BA:409:C:H5"	1.64	0.78
35:BA:784:A:H5"	38:BD:227:ASN:ND2	1.98	0.78
35:BA:1243:G:H1'	47:BP:8:PRO:HB3	1.65	0.78
35:BA:2103:C:C2'	35:BA:2104:G:H5"	2.13	0.78
35:BA:2313:C:H5'	35:BA:2313:C:H6	1.46	0.78
41:BG:41:GLN:HB3	41:BG:43:LEU:HD21	1.65	0.78
41:BG:135:LEU:HD11	41:BG:155:MET:HG3	1.65	0.78
43:BK:23:VAL:HG13	43:BK:27:LEU:HD22	1.64	0.78
46:BO:115:VAL:HG13	46:BO:121:VAL:HG21	1.64	0.78
53:BV:28:GLU:OE1	53:BV:31:ALA:HB2	1.83	0.78
22:AV:53:G:O2'	22:AV:54:U:H5'	1.84	0.78
35:BA:651:G:H2'	35:BA:652:C:H5'	1.65	0.78
35:BA:1188:U:O2'	35:BA:1189:A:H5'	1.84	0.78
35:BA:1721:G:C6	35:BA:1739:U:H5'	2.19	0.78
41:BG:173:LEU:HA	41:BG:176:LEU:HD12	1.65	0.78
45:BN:104:LYS:HE3	45:BN:117:PHE:CD2	2.18	0.78
2:AB:118:LEU:HB3	2:AB:142:LEU:HD12	1.66	0.78
4:AD:162:LEU:HD11	4:AD:181:MET:HG2	1.65	0.78
9:AI:114:TYR:HE1	10:AJ:60:ARG:H	1.32	0.78
22:AV:46:G:O3'	22:AV:47:U:H6	1.66	0.78
35:BA:548:A:H2'	35:BA:549:G:H5'	1.65	0.78
2:AB:22:LYS:H	2:AB:40:HIS:CE1	2.02	0.78
2:AB:83:MET:HG3	2:AB:234:PRO:HG3	1.66	0.78
9:AI:48:GLU:N	9:AI:49:PRO:HD2	1.99	0.78
10:AJ:32:ALA:HB2	10:AJ:76:ASN:ND2	1.98	0.78
24:AY:225:GLU:HB2	24:AY:228:MET:HE1	1.66	0.78
29:B4:10:VAL:HG23	29:B4:11:PRO:HD2	1.63	0.78
35:BA:154(A):C:H3'	35:BA:155:U:C5'	2.13	0.78
35:BA:288:C:H2'	35:BA:289:A:H8	1.47	0.78
35:BA:833:U:H5"	47:BP:48:PRO:HB3	1.63	0.78
35:BA:1748:G:H5'	35:BA:1748:G:H8	1.47	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2306:C:H5”	35:BA:2307:G:O4’	1.84	0.78
47:BP:79:ARG:O	47:BP:111:ARG:HB2	1.84	0.78
4:AD:98:GLU:HG2	4:AD:189:PRO:HG3	1.66	0.78
10:AJ:50:ILE:HD11	14:AN:41:ARG:NH1	1.99	0.78
24:AY:406:GLU:HB3	24:AY:407:PRO:HD2	1.66	0.78
35:BA:142:A:H8	35:BA:1595:G:H21	1.31	0.78
35:BA:1722:A:O2’	35:BA:1739:U:H5”	1.84	0.78
35:BA:2126:A:H4’	35:BA:2127:G:O5’	1.83	0.78
24:AY:141:LYS:O	24:AY:144:ALA:HB2	1.84	0.77
24:AY:513:LYS:HB2	24:AY:566:THR:HB	1.66	0.77
35:BA:195:A:H5”	35:BA:196:A:OP2	1.84	0.77
35:BA:1649:G:O2’	35:BA:1650:G:H5’	1.85	0.77
35:BA:2720:U:H2’	35:BA:2721:A:H8	1.48	0.77
41:BG:82:LEU:CD1	41:BG:87:PRO:HB3	2.13	0.77
1:AA:1219:U:H2’	1:AA:1220:G:C8	2.19	0.77
24:AY:453:GLY:HA3	24:AY:459:LEU:CD1	2.14	0.77
24:AY:519:ARG:NH1	24:AY:678:GLU:HB2	2.00	0.77
25:B0:16:SER:HB2	35:BA:2262:U:H5	1.49	0.77
35:BA:1142(A):A:H2’	35:BA:1143:A:H5”	1.65	0.77
35:BA:2055:C:H4’	35:BA:2056:G:H5”	1.67	0.77
35:BA:2348:U:H2’	35:BA:2349:G:H5”	1.66	0.77
38:BD:165:ILE:HD13	38:BD:175:LEU:HD21	1.66	0.77
43:BK:112:MET:HG3	43:BK:113:PRO:HD3	1.66	0.77
45:BN:23:LEU:HB3	45:BN:60:ILE:HG21	1.65	0.77
51:BT:13:ARG:NH1	51:BT:13:ARG:HA	1.99	0.77
53:BV:40:LEU:HA	53:BV:45:THR:HB	1.66	0.77
1:AA:161:A:H2’	1:AA:162:A:C8	2.20	0.77
8:AH:17:THR:HB	8:AH:78:GLN:OE1	1.84	0.77
27:B2:47:ASN:ND2	35:BA:94(A):G:H21	1.82	0.77
41:BG:77:ILE:CG2	41:BG:80:PHE:H	1.92	0.77
41:BG:91:ARG:HD2	41:BG:92:VAL:N	2.00	0.77
47:BP:84:ASN:HA	47:BP:115:LEU:O	1.83	0.77
47:BP:102:ARG:NH1	47:BP:102:ARG:CB	2.47	0.77
47:BP:126:VAL:HA	47:BP:145:PRO:CB	2.13	0.77
56:BY:7:VAL:HB	56:BY:8:LYS:CD	2.13	0.77
1:AA:438:G:H4’	1:AA:439:A:OP1	1.85	0.77
3:AC:50:ALA:O	3:AC:70:VAL:HG13	1.83	0.77
24:AY:637:ARG:HG3	24:AY:637:ARG:NH1	1.99	0.77
27:B2:69:ARG:HH22	35:BA:111:A:C4’	1.94	0.77
35:BA:1348:G:C2’	35:BA:1349:A:H5”	2.14	0.77
35:BA:2562:U:H1’	46:BO:23:ARG:HH11	1.50	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BF:107:LYS:O	40:BF:110:LEU:N	2.17	0.77
41:BG:76:SER:HB3	41:BG:83:ARG:HB3	1.66	0.77
53:BV:2:PHE:O	53:BV:3:ALA:HB3	1.83	0.77
1:AA:1026:G:H2'	1:AA:1027:C:H5'	1.65	0.77
3:AC:207:VAL:O	3:AC:207:VAL:HG12	1.82	0.77
7:AG:101:LEU:N	7:AG:101:LEU:HD23	1.98	0.77
7:AG:151:TYR:OH	11:AK:54:ARG:HD3	1.84	0.77
8:AH:109:ILE:HG12	8:AH:110:ALA:N	1.97	0.77
24:AY:9:LEU:CD2	24:AY:284:LEU:HB2	2.14	0.77
24:AY:276:VAL:HG12	24:AY:277:VAL:N	1.98	0.77
35:BA:533:G:H5"	52:BU:24:TYR:CD1	2.18	0.77
35:BA:894:C:C2'	35:BA:895:U:H5'	2.14	0.77
48:BQ:35:VAL:HG23	48:BQ:101:ARG:O	1.84	0.77
1:AA:1030(D):A:H2'	1:AA:1031:G:H5'	1.66	0.77
3:AC:20:SER:HB3	3:AC:40:ARG:HH22	1.50	0.77
12:AL:86:ARG:NH2	12:AL:99:HIS:CD2	2.53	0.77
16:AP:20:VAL:HG21	16:AP:32:TYR:CB	2.14	0.77
24:AY:12:LEU:O	24:AY:283:PRO:HD3	1.84	0.77
26:B1:56:GLN:HA	26:B1:56:GLN:HE21	1.50	0.77
35:BA:537:C:H2'	35:BA:538:G:H8	1.50	0.77
35:BA:1434:A:H61	35:BA:1558:A:N6	1.82	0.77
36:BB:86:G:H2'	36:BB:87:G:C8	2.19	0.77
37:BC:101:ILE:O	37:BC:105:LEU:HB2	1.84	0.77
38:BD:9:TYR:CD1	38:BD:10:THR:HG22	2.20	0.77
38:BD:132:PRO:HG3	38:BD:190:TYR:CE1	2.19	0.77
43:BK:17:ALA:HB3	43:BK:38:VAL:HG13	1.66	0.77
45:BN:104:LYS:HE3	45:BN:117:PHE:CE2	2.18	0.77
51:BT:65:LYS:HA	51:BT:65:LYS:NZ	1.99	0.77
53:BV:21:ARG:HG2	53:BV:21:ARG:HH11	1.49	0.77
1:AA:708:C:H2'	1:AA:709:G:H8	1.48	0.77
4:AD:36:ARG:CB	4:AD:36:ARG:HH11	1.98	0.77
13:AM:19:LEU:HB3	13:AM:25:ILE:HG21	1.66	0.77
35:BA:2132:U:C4	37:BC:6:LYS:HD2	2.20	0.77
36:BB:48:A:H4'	50:BS:95:HIS:CD2	2.18	0.77
40:BF:157:VAL:HG22	40:BF:194:MET:HG2	1.67	0.77
47:BP:85:LEU:H	47:BP:85:LEU:CD2	1.95	0.77
1:AA:1319:A:OP1	19:AS:10:PHE:CE1	2.37	0.77
2:AB:155:LEU:HD13	2:AB:155:LEU:C	2.05	0.77
10:AJ:49:VAL:CG2	14:AN:41:ARG:HB2	2.15	0.77
35:BA:1390:U:O2'	35:BA:1391:U:H5'	1.85	0.77
35:BA:2439:A:O2'	35:BA:2587:A:H5"	1.83	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:178:ARG:NH1	2:AB:178:ARG:HG2	1.98	0.77
2:AB:222:ILE:HB	2:AB:226:ARG:HH21	1.49	0.77
12:AL:28:LYS:HE2	12:AL:33:ARG:HH12	1.48	0.77
35:BA:272(H):C:H2'	35:BA:272(I):U:C5'	2.15	0.77
35:BA:845:G:H8	35:BA:845:G:OP2	1.68	0.77
35:BA:2807:G:C3'	35:BA:2808:U:H5"	2.13	0.77
51:BT:6:LEU:HD23	51:BT:6:LEU:C	2.05	0.77
56:BY:8:LYS:HB2	56:BY:28:LYS:HZ1	1.48	0.77
1:AA:773:G:O2'	1:AA:774:G:H5'	1.85	0.77
1:AA:1318:A:H1'	19:AS:37:ARG:HH21	1.49	0.77
1:AA:1423:G:C5'	46:BO:49:ARG:HH22	1.97	0.77
3:AC:16:ARG:HH11	3:AC:16:ARG:CB	1.96	0.77
15:AO:56:LEU:O	15:AO:60:VAL:HG23	1.84	0.77
18:AR:37:VAL:CG2	18:AR:38:GLU:H	1.95	0.77
58:AY:701:FUA:H231	58:AY:701:FUA:H122	1.64	0.77
35:BA:878:A:H2'	35:BA:879:G:O4'	1.84	0.77
40:BF:187:VAL:HG12	47:BP:7:ARG:NH2	2.00	0.77
42:BH:76:VAL:O	42:BH:79:VAL:HG22	1.85	0.77
54:BW:68:ARG:O	54:BW:109:GLU:HA	1.85	0.77
5:AE:50:GLU:OE2	5:AE:51:VAL:HG23	1.84	0.76
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.49	0.76
17:AQ:57:VAL:HG23	17:AQ:58:GLU:N	2.00	0.76
24:AY:466:LEU:HA	24:AY:470:PHE:HD2	1.47	0.76
25:B0:7:LEU:CD1	48:BQ:85:LYS:HE2	2.15	0.76
35:BA:654(G):C:H2'	35:BA:654(H):G:H8	1.50	0.76
35:BA:1043:C:C2'	35:BA:1044:G:H5"	2.14	0.76
35:BA:1265:A:H5'	35:BA:1267:U:H1'	1.65	0.76
35:BA:2183:C:O2'	35:BA:2184:G:H5'	1.85	0.76
37:BC:65:LEU:HD11	37:BC:162:ILE:HD13	1.67	0.76
37:BC:92:ALA:HB2	37:BC:154:ILE:HD13	1.67	0.76
38:BD:35:LYS:HG3	38:BD:63:ARG:HG3	1.67	0.76
46:BO:104:ARG:HH21	51:BT:33:LYS:HE3	1.50	0.76
11:AK:33:THR:HG22	11:AK:39:PRO:HA	1.67	0.76
30:B5:55:ARG:NH2	49:BR:33:ARG:HD2	2.00	0.76
31:B6:43:CYS:HB2	31:B6:44:ARG:NH2	1.98	0.76
35:BA:41:C:H2'	35:BA:42:G:O4'	1.84	0.76
35:BA:2454:G:H2'	35:BA:2455:G:H5'	1.66	0.76
36:BB:13:A:O2'	36:BB:14:U:H3'	1.84	0.76
24:AY:113:GLY:C	24:AY:115:GLU:H	1.84	0.76
24:AY:491:VAL:CG1	24:AY:596:LYS:HD3	2.15	0.76
33:B8:61:LEU:HD12	33:B8:62:LEU:H	1.48	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2636:U:H4'	39:BE:80:GLU:OE1	1.86	0.76
36:BB:87:G:H3'	36:BB:88:C:H5"	1.67	0.76
40:BF:53:THR:HG22	40:BF:56:GLU:CG	2.12	0.76
47:BP:147:LEU:C	47:BP:148:LEU:HD12	2.05	0.76
1:AA:793:U:H3'	1:AA:794:A:C5'	2.11	0.76
4:AD:88:VAL:O	4:AD:92:VAL:HG23	1.85	0.76
37:BC:215:VAL:HG23	37:BC:225:ILE:HG12	1.68	0.76
45:BN:67:LEU:CD2	45:BN:87:LEU:HB3	2.16	0.76
52:BU:95:LEU:HD12	53:BV:11:GLN:HG3	1.67	0.76
35:BA:336:C:H4'	56:BY:7:VAL:HG21	1.65	0.76
35:BA:406:G:HO2'	35:BA:407:G:H8	1.31	0.76
35:BA:2317:C:C2'	35:BA:2318:G:H5'	2.14	0.76
2:AB:107:THR:HA	2:AB:110:GLN:HE21	1.50	0.76
10:AJ:20:ALA:C	10:AJ:22:LYS:H	1.86	0.76
11:AK:29:ILE:O	11:AK:29:ILE:HG12	1.84	0.76
34:B9:29:ASN:HD22	34:B9:29:ASN:H	1.33	0.76
35:BA:363(B):G:H2'	35:BA:363(C):G:H8	1.48	0.76
35:BA:1053:C:C3'	35:BA:1054:A:H5"	2.15	0.76
35:BA:2074:U:H2'	35:BA:2075:U:C6	2.20	0.76
35:BA:2314:C:O2'	35:BA:2315:G:H5'	1.86	0.76
42:BH:98:LEU:HD12	42:BH:102:ALA:O	1.84	0.76
49:BR:45:ARG:HG3	49:BR:46:GLY:H	1.50	0.76
51:BT:28:VAL:CG2	51:BT:46:GLU:HA	2.16	0.76
1:AA:625:G:H2'	1:AA:626:U:H6	1.48	0.76
9:AI:79:LEU:HD11	9:AI:83:ARG:HD2	1.67	0.76
35:BA:272(G):C:C2'	35:BA:272(H):C:H5"	2.14	0.76
35:BA:2133:G:C2'	35:BA:2157:G:H22	1.97	0.76
36:BB:26:A:H2'	36:BB:27:C:C6	2.20	0.76
41:BG:98:ARG:N	41:BG:98:ARG:HH11	1.82	0.76
50:BS:34:HIS:CE1	50:BS:54:LEU:HB3	2.19	0.76
1:AA:41:G:H2'	1:AA:42:G:H8	1.50	0.76
28:B3:23:LEU:HA	28:B3:26:LEU:HD12	1.67	0.76
33:B8:13:ARG:NH1	47:BP:59:LEU:HG	2.01	0.76
35:BA:621:A:C2'	35:BA:622:G:H5'	2.15	0.76
35:BA:900:A:H5'	35:BA:900:A:C8	2.20	0.76
35:BA:2178:C:H4'	37:BC:47:LYS:HD3	1.67	0.76
37:BC:48:LEU:N	37:BC:48:LEU:HD12	2.01	0.76
41:BG:68:PRO:CB	41:BG:90:LEU:HD11	2.16	0.76
41:BG:135:LEU:N	41:BG:135:LEU:HD12	1.98	0.76
5:AE:7:GLU:HG2	5:AE:112:LEU:CD2	2.15	0.76
35:BA:279:C:C3'	35:BA:280:C:H5"	2.14	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:301:G:H1'	35:BA:302:C:C6	2.21	0.76
35:BA:328:U:H4'	56:BY:68:HIS:CD2	2.21	0.76
35:BA:484:C:OP1	56:BY:50:ARG:HG3	1.86	0.76
35:BA:1097:U:H2'	35:BA:1098:A:H5'	1.68	0.76
35:BA:2262:U:C2'	35:BA:2263:C:H5'	2.15	0.76
41:BG:49:ASP:O	41:BG:50:ALA:HB3	1.86	0.76
51:BT:80:SER:HB3	51:BT:81:PRO:HD3	1.66	0.76
24:AY:6:GLU:O	24:AY:6:GLU:HG2	1.86	0.76
24:AY:169:GLY:HA3	24:AY:173:THR:O	1.86	0.76
24:AY:605:ILE:HD11	24:AY:677:GLN:HG2	1.68	0.76
35:BA:395:U:H2'	35:BA:396:G:N7	2.00	0.76
35:BA:481:G:OP2	56:BY:47:LYS:HD3	1.86	0.76
35:BA:955:C:OP2	48:BQ:14:ARG:HD2	1.85	0.76
35:BA:1540:U:H3'	35:BA:1541:G:H3'	1.65	0.76
35:BA:1779:U:H5	35:BA:1784:A:N7	1.84	0.76
39:BE:111:ARG:CZ	49:BR:2:ARG:HH21	1.99	0.76
40:BF:26:ALA:O	40:BF:27:GLU:HG3	1.85	0.76
41:BG:34:LEU:HB2	41:BG:99:MET:CE	2.16	0.76
13:AM:90:LEU:O	13:AM:93:ARG:N	2.19	0.75
24:AY:513:LYS:HB3	24:AY:566:THR:HB	1.67	0.75
35:BA:142:A:H5'	35:BA:142(A):C:OP2	1.86	0.75
43:BK:75:SER:O	43:BK:79:ARG:HG3	1.86	0.75
56:BY:50:ARG:HD2	56:BY:50:ARG:O	1.86	0.75
2:AB:17:PHE:HB3	2:AB:44:LEU:HD21	1.68	0.75
35:BA:605:C:H2'	35:BA:606:U:H6	1.52	0.75
35:BA:2020:A:C2'	35:BA:2021:C:H5"	2.16	0.75
41:BG:34:LEU:HA	41:BG:161:THR:HA	1.68	0.75
1:AA:1328:C:H2'	1:AA:1329:A:H8	1.50	0.75
11:AK:58:PRO:HA	11:AK:90:GLY:HA3	1.68	0.75
12:AL:54:LYS:HB3	12:AL:70:ILE:HD11	1.67	0.75
14:AN:31:ARG:O	14:AN:32:SER:HB2	1.85	0.75
25:B0:25:ARG:HD2	25:B0:29:GLN:HE21	1.52	0.75
28:B3:52:HIS:H	28:B3:52:HIS:CD2	2.00	0.75
35:BA:2454:G:O2'	35:BA:2455:G:H5'	1.85	0.75
40:BF:192:LEU:HD23	40:BF:192:LEU:C	2.06	0.75
41:BG:97:ASP:O	41:BG:101:ILE:HG13	1.86	0.75
46:BO:114:ILE:HD12	46:BO:114:ILE:N	2.00	0.75
4:AD:189:PRO:HB2	4:AD:194:LEU:HD21	1.69	0.75
5:AE:76:ILE:HG13	5:AE:142:LEU:CD1	2.17	0.75
12:AL:47:LYS:HD2	12:AL:48:PRO:HD3	1.68	0.75
24:AY:201:ILE:H	24:AY:201:ILE:HD12	1.50	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:B0:27:GLU:HA	25:B0:67:VAL:O	1.87	0.75
30:B5:58:LEU:HD13	30:B5:58:LEU:C	2.07	0.75
31:B6:40:CYS:HB2	31:B6:46:HIS:CE1	2.22	0.75
35:BA:1174:A:H5'	35:BA:1175:U:H5"	1.66	0.75
35:BA:2171:A:H1'	35:BA:2172:U:C5	2.21	0.75
38:BD:44:ASN:HB2	38:BD:48:ARG:O	1.87	0.75
40:BF:178:PRO:HG2	40:BF:179:GLU:OE1	1.86	0.75
41:BG:131:TYR:HB3	41:BG:159:VAL:HG13	1.66	0.75
42:BH:169:VAL:HG22	42:BH:170:ARG:H	1.51	0.75
1:AA:512:U:H2'	1:AA:513:C:H6	1.52	0.75
1:AA:1208:C:H2'	1:AA:1209:C:H6	1.52	0.75
10:AJ:16:LEU:O	10:AJ:16:LEU:HD13	1.87	0.75
18:AR:74:ARG:HB3	18:AR:81:PHE:CE2	2.21	0.75
24:AY:416:LYS:HD3	24:AY:417:THR:N	2.02	0.75
35:BA:1887:C:H3'	35:BA:1888:G:H5"	1.69	0.75
45:BN:32:THR:HG23	45:BN:37:LYS:HB3	1.68	0.75
57:BZ:42:VAL:HG13	57:BZ:43:GLU:N	2.00	0.75
1:AA:584:G:H2'	1:AA:585:G:C8	2.22	0.75
1:AA:1497:G:O2'	1:AA:1498:U:H5'	1.87	0.75
3:AC:113:ALA:HB3	3:AC:183:ASP:OD2	1.86	0.75
9:AI:53:VAL:C	9:AI:55:ALA:H	1.90	0.75
12:AL:18:VAL:HG23	12:AL:19:ARG:H	1.49	0.75
24:AY:555:LEU:HD21	24:AY:599:PRO:CG	2.17	0.75
35:BA:389:G:H1	47:BP:71:VAL:HG12	1.51	0.75
35:BA:631:A:OP1	47:BP:64:LYS:HE2	1.86	0.75
39:BE:44:TYR:O	39:BE:45:THR:HB	1.85	0.75
40:BF:4:VAL:HG13	40:BF:19:GLU:OE2	1.87	0.75
41:BG:68:PRO:HB3	41:BG:90:LEU:HD11	1.66	0.75
53:BV:79:VAL:O	53:BV:80:GLN:HB2	1.86	0.75
1:AA:1037:C:H2'	1:AA:1038:C:C2	2.22	0.75
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	1.67	0.75
3:AC:14:ILE:HG13	3:AC:15:THR:N	2.02	0.75
6:AF:100:ASN:O	18:AR:28:GLU:HG2	1.86	0.75
24:AY:84:THR:H	24:AY:85:PRO:CD	1.98	0.75
26:B1:18:ILE:HD11	26:B1:37:ILE:HG12	1.68	0.75
35:BA:1035:U:H2'	35:BA:1036:G:H8	1.51	0.75
35:BA:2572:A:H5'	35:BA:2574:G:C4'	2.15	0.75
38:BD:9:TYR:O	38:BD:10:THR:HG22	1.87	0.75
51:BT:55:ASN:N	51:BT:59:THR:HG22	2.02	0.75
56:BY:7:VAL:HB	56:BY:8:LYS:CE	2.17	0.75
57:BZ:137:ILE:HG21	57:BZ:155:LEU:HD12	1.68	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1239:A:H2'	1:AA:1298:C:H42	1.51	0.75
35:BA:914:C:H2'	35:BA:915:C:H5'	1.68	0.75
35:BA:1080:C:H4'	43:BK:125:ARG:HB3	1.69	0.75
35:BA:1538:G:H2'	35:BA:1539:G:H8	1.49	0.75
35:BA:1541:G:H1'	35:BA:1542:A:C4	2.21	0.75
35:BA:2801(A):A:H4'	35:BA:2802:G:C8	2.21	0.75
56:BY:76:CYS:HB3	56:BY:96:ILE:HD11	1.69	0.75
24:AY:348:ARG:NH1	24:AY:382:GLU:HG3	2.01	0.75
26:B1:64:ALA:HA	26:B1:67:ILE:HG13	1.69	0.75
31:B6:35:GLU:HB2	31:B6:51:GLU:HB2	1.67	0.75
1:AA:477:A:O2'	1:AA:479:C:H5'	1.86	0.74
32:B7:46:VAL:HG12	32:B7:47:ARG:H	1.52	0.74
35:BA:1759:A:H5'	35:BA:2715:C:H1'	1.68	0.74
35:BA:2425:A:H4'	35:BA:2426:A:H5"	1.69	0.74
42:BH:105:LEU:CD2	42:BH:113:VAL:HB	2.17	0.74
57:BZ:179:ASP:HB3	57:BZ:182:LYS:HD2	1.68	0.74
1:AA:707:C:O2'	1:AA:708:C:H5'	1.87	0.74
3:AC:123:GLN:HB3	3:AC:128:PHE:HD2	1.53	0.74
8:AH:86:ILE:HG12	8:AH:135:CYS:HA	1.69	0.74
23:AX:13:A:H3'	23:AX:14:A:C5'	2.16	0.74
29:B4:8:LYS:O	29:B4:9:LEU:HB2	1.85	0.74
35:BA:2008:C:H2'	35:BA:2009:G:H8	1.50	0.74
37:BC:211:ARG:HH11	37:BC:211:ARG:HG3	1.52	0.74
38:BD:43:ARG:HD2	38:BD:44:ASN:OD1	1.87	0.74
38:BD:142:VAL:HG23	38:BD:192:THR:C	2.08	0.74
48:BQ:2:LEU:HD12	48:BQ:3:MET:H	1.52	0.74
56:BY:17:SER:CB	56:BY:71:LYS:HD2	2.17	0.74
3:AC:86:VAL:O	3:AC:90:GLU:HG2	1.86	0.74
4:AD:36:ARG:HH11	4:AD:36:ARG:HB3	1.50	0.74
24:AY:252:ASP:HB2	24:AY:254:LYS:HE3	1.68	0.74
24:AY:554:PRO:HG3	24:AY:594:VAL:HG12	1.69	0.74
30:B5:55:ARG:HH22	49:BR:33:ARG:CD	2.00	0.74
35:BA:1113:U:H2'	35:BA:1114:G:C8	2.21	0.74
35:BA:1678:G:N2	35:BA:1989:G:H22	1.85	0.74
38:BD:76:PRO:HG2	38:BD:98:VAL:CG2	2.16	0.74
1:AA:656:C:H4'	15:AO:62:GLN:NE2	2.02	0.74
3:AC:32:LEU:HB3	3:AC:59:ARG:HH22	1.51	0.74
5:AE:101:ILE:HD13	5:AE:118:ILE:O	1.87	0.74
9:AI:95:LYS:HD3	9:AI:96:LEU:N	2.02	0.74
24:AY:423:LYS:HB3	24:AY:472:VAL:CG2	2.18	0.74
25:B0:43:THR:H	35:BA:2331:G:H4'	1.52	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:18:ILE:CD1	26:B1:37:ILE:HG12	2.18	0.74
37:BC:84:ILE:HG23	37:BC:95:VAL:HG12	1.66	0.74
42:BH:19:VAL:HG12	42:BH:20:ALA:H	1.52	0.74
48:BQ:79:LEU:HD23	48:BQ:80:GLU:H	1.52	0.74
1:AA:182:U:H5'	1:AA:183:G:OP2	1.87	0.74
1:AA:490:G:H2'	1:AA:491:G:H8	1.52	0.74
1:AA:1346:A:H61	1:AA:1374:A:H3'	1.52	0.74
24:AY:655:TYR:OH	24:AY:659:LEU:HD23	1.87	0.74
35:BA:621:A:H2'	35:BA:622:G:C5'	2.17	0.74
35:BA:2334:G:H5'	50:BS:13:ARG:HD3	1.69	0.74
35:BA:2735:G:H2'	35:BA:2736:G:C8	2.22	0.74
41:BG:138:GLN:OE1	41:BG:153:ARG:HG2	1.86	0.74
57:BZ:77:ASP:O	57:BZ:79:ARG:N	2.20	0.74
1:AA:474:G:H2'	1:AA:475:G:C8	2.21	0.74
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.23	0.74
3:AC:150:LYS:HB2	3:AC:169:ALA:HB2	1.70	0.74
9:AI:104:ARG:O	9:AI:105:ASP:HB3	1.86	0.74
12:AL:75:HIS:CD2	12:AL:77:LEU:HB2	2.22	0.74
22:AV:21:A:N6	22:AV:46:G:H2'	1.99	0.74
29:B4:15:ILE:HB	29:B4:32:TYR:HA	1.68	0.74
35:BA:1203:G:H3'	35:BA:1204:A:H5"	1.69	0.74
37:BC:74:ARG:HG2	37:BC:74:ARG:HH11	1.52	0.74
42:BH:169:VAL:HG13	42:BH:170:ARG:N	2.02	0.74
46:BO:76:ALA:HB3	51:BT:75:ILE:HB	1.69	0.74
47:BP:30:THR:CG2	47:BP:31:ALA:H	1.99	0.74
1:AA:793:U:C3'	1:AA:794:A:H5"	2.13	0.74
2:AB:178:ARG:CG	2:AB:178:ARG:HH11	2.00	0.74
4:AD:13:ARG:HA	4:AD:33:MET:CE	2.17	0.74
10:AJ:9:ARG:HG2	10:AJ:69:ASN:OD1	1.88	0.74
13:AM:10:PRO:HG2	13:AM:11:ARG:H	1.51	0.74
27:B2:2:LYS:HB2	35:BA:97:C:H5"	1.69	0.74
33:B8:2:PRO:HA	35:BA:591:C:O2	1.87	0.74
35:BA:120:U:O2	35:BA:120:U:H2'	1.86	0.74
35:BA:419:C:H2'	35:BA:420:C:C6	2.22	0.74
35:BA:1064:C:H4'	43:BK:89:HIS:CD2	2.22	0.74
35:BA:1790:C:H5"	35:BA:1791:A:OP1	1.88	0.74
35:BA:2591:C:H2'	35:BA:2592:G:H8	1.52	0.74
38:BD:91:ARG:HG2	38:BD:91:ARG:HH11	1.53	0.74
1:AA:8:A:N6	4:AD:209:ARG:HB2	2.02	0.74
1:AA:663:A:O2'	1:AA:664:G:H5'	1.88	0.74
2:AB:29:ALA:O	2:AB:32:ILE:HG22	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:88:G:OP1	35:BA:90:U:H5	1.71	0.74
35:BA:229:A:H3'	35:BA:230:U:H5'	1.68	0.74
35:BA:1917:U:C2'	35:BA:1918:A:H5'	2.18	0.74
37:BC:30:VAL:HA	37:BC:33:LEU:HD12	1.69	0.74
1:AA:250:A:H4'	1:AA:251:G:O5'	1.87	0.74
10:AJ:22:LYS:HD2	10:AJ:22:LYS:C	2.08	0.74
24:AY:9:LEU:HD23	24:AY:9:LEU:C	2.08	0.74
33:B8:54:GLU:O	33:B8:58:ILE:HG12	1.88	0.74
35:BA:83:G:N2	35:BA:102:G:H2'	2.03	0.74
35:BA:1434:A:H61	35:BA:1558:A:H62	1.34	0.74
46:BO:1:MET:HG3	46:BO:67:LYS:HG2	1.70	0.74
1:AA:1238:A:N7	1:AA:1303:C:H1'	2.03	0.74
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.23	0.74
6:AF:67:MET:SD	6:AF:75:LEU:HD22	2.28	0.74
10:AJ:63:PHE:HB2	14:AN:57:ARG:O	1.87	0.74
25:B0:36:ILE:O	25:B0:36:ILE:HG13	1.86	0.74
35:BA:311:A:H5'	35:BA:332:A:C2	2.23	0.74
35:BA:395:U:H2'	35:BA:396:G:C8	2.22	0.74
41:BG:54:GLU:O	41:BG:57:ALA:HB3	1.87	0.74
41:BG:172:LEU:O	41:BG:176:LEU:HG	1.87	0.74
42:BH:83:TYR:O	42:BH:84:SER:HB3	1.88	0.74
43:BK:93:ARG:HG3	57:BZ:112:ARG:NE	2.02	0.74
51:BT:28:VAL:CG1	51:BT:46:GLU:HA	2.18	0.74
1:AA:736:C:H2'	1:AA:737:A:C8	2.23	0.73
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.23	0.73
3:AC:181:ASN:ND2	3:AC:204:LEU:HB2	2.01	0.73
24:AY:408:VAL:HG22	24:AY:454:MET:HA	1.70	0.73
24:AY:427:ALA:HB1	24:AY:466:LEU:CD1	2.17	0.73
25:B0:11:ARG:HH11	25:B0:11:ARG:HB2	1.51	0.73
35:BA:1812:A:O2'	35:BA:1813:G:H5'	1.87	0.73
35:BA:2189:U:C2'	35:BA:2190:G:H5"	2.18	0.73
48:BQ:75:THR:CG2	48:BQ:76:LYS:N	2.51	0.73
1:AA:178:C:O2'	1:AA:179:A:H5'	1.88	0.73
1:AA:1152:A:H5"	10:AJ:13:HIS:CD2	2.21	0.73
2:AB:233:SER:CB	2:AB:234:PRO:CD	2.66	0.73
9:AI:26:VAL:HG22	9:AI:61:ALA:HB3	1.70	0.73
35:BA:1062:G:H21	43:BK:133:SER:HA	1.53	0.73
35:BA:1075:C:H5'	35:BA:1076:C:OP2	1.88	0.73
35:BA:2122:U:H2'	35:BA:2123:G:C8	2.23	0.73
42:BH:52:VAL:O	42:BH:52:VAL:HG12	1.86	0.73
47:BP:146:VAL:O	47:BP:148:LEU:HD12	1.87	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BX:12:VAL:CG2	55:BX:13:LEU:H	1.95	0.73
56:BY:76:CYS:SG	56:BY:77:PRO:CD	2.74	0.73
57:BZ:166:SER:HB2	57:BZ:167:PRO:C	2.09	0.73
10:AJ:49:VAL:O	10:AJ:60:ARG:HB3	1.88	0.73
12:AL:113:ARG:HD2	12:AL:115:LYS:H	1.52	0.73
24:AY:261:GLY:HA3	24:AY:267:LYS:O	1.87	0.73
24:AY:632:LEU:HD12	24:AY:645:ALA:HA	1.70	0.73
28:B3:6:VAL:HB	28:B3:54:VAL:HG11	1.69	0.73
35:BA:145:G:H2'	35:BA:146:G:H8	1.51	0.73
35:BA:1378:A:H4'	35:BA:1379:A:OP1	1.87	0.73
35:BA:1504:C:C2'	35:BA:1505:C:H5"	2.18	0.73
35:BA:1917:U:O2'	35:BA:1918:A:H5'	1.88	0.73
35:BA:2720:U:H2'	35:BA:2721:A:C8	2.23	0.73
47:BP:41:ARG:HH11	47:BP:41:ARG:CB	2.00	0.73
47:BP:96:THR:O	47:BP:99:LEU:HB3	1.88	0.73
47:BP:146:VAL:HG13	47:BP:147:LEU:H	1.53	0.73
51:BT:102:ILE:HG22	51:BT:110:ILE:HD12	1.71	0.73
55:BX:7:VAL:HG12	55:BX:8:ILE:HD12	1.70	0.73
57:BZ:4:ARG:NH1	57:BZ:66:SER:HB2	2.04	0.73
1:AA:382:A:H2'	1:AA:383:A:C8	2.23	0.73
1:AA:1294:G:O2'	1:AA:1295:G:H5'	1.89	0.73
3:AC:70:VAL:O	3:AC:106:VAL:HG23	1.87	0.73
19:AS:78:ARG:HB2	19:AS:81:ARG:NH1	2.02	0.73
35:BA:2023:G:H5'	35:BA:2617:C:H4'	1.71	0.73
35:BA:2220:G:H2'	35:BA:2221:G:H8	1.54	0.73
37:BC:31:LYS:HE3	37:BC:179:ALA:O	1.88	0.73
38:BD:94:LEU:HD23	38:BD:95:LEU:N	2.02	0.73
43:BK:24:GLY:H	43:BK:25:PRO:HD2	1.52	0.73
43:BK:59:ILE:HG12	43:BK:60:TYR:H	1.53	0.73
48:BQ:59:ARG:HB3	57:BZ:180:VAL:HG21	1.70	0.73
56:BY:28:LYS:C	56:BY:38:ILE:HG22	2.09	0.73
1:AA:584:G:H2'	1:AA:585:G:H8	1.53	0.73
11:AK:33:THR:HA	11:AK:40:ILE:HG12	1.70	0.73
13:AM:46:LYS:O	13:AM:46:LYS:HD3	1.88	0.73
26:B1:5:CYS:SG	26:B1:62:VAL:HA	2.27	0.73
30:B5:44:THR:HG22	30:B5:45:VAL:H	1.53	0.73
30:B5:56:LYS:HG3	30:B5:57:VAL:H	1.52	0.73
31:B6:35:GLU:CB	31:B6:51:GLU:HB2	2.19	0.73
35:BA:528:A:H2	35:BA:2043:C:H5'	1.51	0.73
35:BA:1409:C:H2'	35:BA:1410:G:C8	2.24	0.73
35:BA:2713:A:H3'	35:BA:2714:G:H5'	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:34:VAL:HG23	38:BD:35:LYS:N	2.03	0.73
40:BF:187:VAL:HG12	47:BP:7:ARG:HH22	1.51	0.73
45:BN:43:THR:O	45:BN:46:VAL:HG12	1.87	0.73
45:BN:46:VAL:O	45:BN:47:ALA:HB3	1.87	0.73
48:BQ:27:VAL:HG12	48:BQ:28:ALA:N	2.01	0.73
1:AA:423:G:H2'	1:AA:424:G:H5'	1.68	0.73
1:AA:1100:C:H2'	1:AA:1101:A:H5"	1.71	0.73
1:AA:1221:G:H4'	19:AS:77:THR:HG21	1.71	0.73
7:AG:45:ASP:O	7:AG:49:ILE:HG12	1.88	0.73
25:B0:20:ARG:HH11	25:B0:20:ARG:CG	1.97	0.73
35:BA:286:C:H6	35:BA:286:C:C5'	1.99	0.73
35:BA:839:U:H2'	35:BA:840:C:C6	2.22	0.73
35:BA:2551:C:H2'	35:BA:2552:U:C6	2.24	0.73
39:BE:4:ILE:CD1	39:BE:28:ALA:HB1	2.18	0.73
39:BE:24:THR:HG22	39:BE:186:GLY:CA	2.18	0.73
43:BK:21:PRO:HA	43:BK:23:VAL:N	2.02	0.73
52:BU:86:ALA:HB3	52:BU:88:ILE:HG12	1.70	0.73
57:BZ:86:VAL:HG12	57:BZ:87:ASP:H	1.53	0.73
4:AD:173:TRP:HB3	4:AD:187:ARG:NH1	2.04	0.73
6:AF:37:VAL:HG12	6:AF:38:GLU:H	1.54	0.73
7:AG:64:GLN:HG3	7:AG:128:ALA:HB1	1.70	0.73
9:AI:41:VAL:O	9:AI:41:VAL:HG12	1.87	0.73
24:AY:71:THR:HG22	24:AY:80:ASN:OD1	1.87	0.73
31:B6:15:GLU:OE2	31:B6:44:ARG:NH2	2.21	0.73
35:BA:1007:C:H4'	45:BN:108:PRO:HD3	1.71	0.73
35:BA:1658:C:OP1	39:BE:132:HIS:ND1	2.15	0.73
36:BB:92:C:H2'	36:BB:93:G:H8	1.53	0.73
40:BF:84:VAL:CG1	40:BF:85:GLY:N	2.44	0.73
47:BP:7:ARG:CB	47:BP:8:PRO:HD3	2.17	0.73
56:BY:8:LYS:HD2	56:BY:8:LYS:N	2.03	0.73
1:AA:882:C:O2'	1:AA:883:C:H5'	1.88	0.73
20:AT:33:ILE:HD13	20:AT:63:ILE:HG12	1.70	0.73
22:AV:5:G:N2	22:AV:69:C:C2	2.57	0.73
24:AY:14:ASN:HB2	24:AY:102:ASP:OD1	1.88	0.73
34:B9:1:MET:O	34:B9:34:GLN:HG2	1.89	0.73
35:BA:654(S):G:H3'	35:BA:654(T):C:C5'	2.18	0.73
40:BF:34:TRP:HB2	47:BP:10:PRO:HB2	1.70	0.73
48:BQ:27:VAL:HG23	48:BQ:137:TYR:CD2	2.23	0.73
50:BS:89:ARG:HE	50:BS:91:PRO:HG2	1.54	0.73
1:AA:939:G:H5"	7:AG:102:ARG:NH2	2.04	0.73
1:AA:1014:A:H4'	19:AS:14:HIS:ND1	2.04	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:10:PHE:CE1	3:AC:178:LEU:HD11	2.24	0.73
24:AY:252:ASP:HB2	24:AY:254:LYS:HG2	1.71	0.73
35:BA:810:U:OP1	35:BA:1253:A:N7	2.22	0.73
35:BA:2691:C:H6	35:BA:2691:C:H5'	1.53	0.73
48:BQ:43:THR:O	48:BQ:47:ILE:HG13	1.89	0.73
53:BV:25:LEU:H	53:BV:92:THR:HG21	1.54	0.73
10:AJ:82:ILE:O	10:AJ:86:MET:HB2	1.89	0.73
12:AL:75:HIS:NE2	12:AL:77:LEU:HB2	2.03	0.73
24:AY:230:LYS:HB2	24:AY:230:LYS:HZ2	1.54	0.73
31:B6:15:GLU:OE2	31:B6:44:ARG:NH1	2.21	0.73
35:BA:85:G:OP1	56:BY:30:VAL:HB	1.88	0.73
35:BA:1395:A:H4'	35:BA:1397:U:C5	2.24	0.73
35:BA:2394:C:OP1	47:BP:63:PRO:HD2	1.88	0.73
35:BA:2584:U:C2'	35:BA:2585:U:H5'	2.18	0.73
41:BG:31:VAL:CG2	41:BG:32:PRO:HD2	2.19	0.73
47:BP:23:PRO:HB2	47:BP:33:ARG:HG3	1.70	0.73
51:BT:13:ARG:HA	51:BT:13:ARG:CZ	2.19	0.73
55:BX:41:ASN:O	55:BX:43:VAL:N	2.22	0.73
1:AA:1284:C:H3'	1:AA:1285:A:H5"	1.70	0.72
3:AC:90:GLU:HA	3:AC:93:LYS:HB3	1.70	0.72
13:AM:15:VAL:O	13:AM:19:LEU:HD23	1.89	0.72
19:AS:22:LEU:O	19:AS:26:GLY:HA2	1.89	0.72
24:AY:128:TYR:O	24:AY:129:LYS:HB2	1.86	0.72
24:AY:415:PRO:HA	24:AY:474:ALA:CB	2.19	0.72
25:B0:78:TYR:N	25:B0:78:TYR:CD1	2.56	0.72
31:B6:51:GLU:O	31:B6:52:VAL:HB	1.87	0.72
35:BA:2105:C:H42	35:BA:2184:G:H1	1.37	0.72
35:BA:2312:U:C2'	35:BA:2313:C:H5"	2.20	0.72
41:BG:98:ARG:HH11	41:BG:98:ARG:H	1.37	0.72
43:BK:58:THR:O	43:BK:66:THR:HG22	1.89	0.72
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.71	0.72
12:AL:76:ASN:CG	12:AL:76:ASN:O	2.27	0.72
17:AQ:52:LYS:H	17:AQ:52:LYS:HD2	1.53	0.72
18:AR:44:LEU:CD2	18:AR:79:LEU:HD22	2.19	0.72
24:AY:100:VAL:HG23	24:AY:329:ARG:HG2	1.70	0.72
35:BA:82:G:H5"	35:BA:296:C:H5'	1.70	0.72
35:BA:292:C:O2'	35:BA:293:U:H5'	1.89	0.72
35:BA:322:A:H3'	40:BF:169:ASN:HD21	1.54	0.72
35:BA:1833:U:H2'	35:BA:1834:U:H6	1.52	0.72
39:BE:48:GLN:NE2	39:BE:78:LEU:HD22	2.03	0.72
42:BH:50:VAL:HG12	42:BH:51:ARG:N	2.04	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BK:57:ILE:HA	43:BK:66:THR:O	1.88	0.72
47:BP:13:ASN:O	47:BP:14:LYS:HB2	1.87	0.72
56:BY:47:LYS:HG3	56:BY:60:PHE:HE1	1.51	0.72
1:AA:356:A:H2'	1:AA:357:G:H8	1.53	0.72
1:AA:1388:C:H2'	1:AA:1389:C:H6	1.54	0.72
3:AC:101:LEU:HD23	3:AC:101:LEU:C	2.10	0.72
4:AD:18:LYS:HE2	4:AD:20:TYR:HE2	1.53	0.72
7:AG:64:GLN:CG	7:AG:128:ALA:HB1	2.19	0.72
14:AN:12:ARG:NH1	14:AN:12:ARG:HB2	2.05	0.72
29:B4:56:VAL:O	29:B4:56:VAL:HG12	1.88	0.72
37:BC:92:ALA:HB3	37:BC:95:VAL:HG22	1.71	0.72
37:BC:118:PRO:HA	37:BC:121:MET:HG3	1.68	0.72
42:BH:149:ARG:HA	42:BH:162:ILE:CD1	2.18	0.72
42:BH:149:ARG:HD3	42:BH:164:TYR:CE1	2.24	0.72
43:BK:109:LYS:HA	43:BK:112:MET:CE	2.19	0.72
57:BZ:103:ARG:HD2	57:BZ:136:PHE:CD2	2.25	0.72
1:AA:1208:C:H2'	1:AA:1209:C:C6	2.23	0.72
8:AH:83:ILE:HD12	8:AH:137:VAL:HG22	1.69	0.72
24:AY:21:ILE:H	24:AY:21:ILE:CD1	2.00	0.72
28:B3:28:LEU:HA	28:B3:33:GLN:OE1	1.88	0.72
35:BA:643:A:O2'	35:BA:644:A:H5'	1.90	0.72
35:BA:1115:G:H5'	35:BA:1115:G:C8	2.25	0.72
36:BB:13:A:O2'	36:BB:15:A:H5"	1.89	0.72
51:BT:34:VAL:O	51:BT:34:VAL:HG12	1.89	0.72
53:BV:18:LEU:CD2	53:BV:19:LYS:H	2.02	0.72
1:AA:1129:C:O2'	1:AA:1130:A:C8	2.40	0.72
6:AF:60:PHE:C	6:AF:61:LEU:HD12	2.09	0.72
22:AV:68:C:H2'	22:AV:69:C:C6	2.25	0.72
35:BA:49:A:H5"	35:BA:51:G:O4'	1.89	0.72
35:BA:108:U:H2'	35:BA:109:G:H8	1.55	0.72
35:BA:2020:A:O2'	35:BA:2021:C:H5"	1.88	0.72
38:BD:83:GLU:HB2	38:BD:92:ILE:HD11	1.72	0.72
47:BP:41:ARG:HA	47:BP:41:ARG:NH1	2.01	0.72
47:BP:122:PRO:HB3	47:BP:141:ALA:HB1	1.70	0.72
55:BX:27:THR:CB	55:BX:80:ILE:HG22	2.18	0.72
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.25	0.72
1:AA:1318:A:H2'	1:AA:1319:A:H5'	1.69	0.72
1:AA:1442:G:C6	1:AA:1442(B):A:H2	2.07	0.72
11:AK:111:ASP:HA	18:AR:84:LYS:HD2	1.72	0.72
24:AY:277:VAL:HG13	24:AY:278:ASP:H	1.54	0.72
24:AY:485:GLU:HB2	24:AY:560:VAL:HG22	1.71	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:B4:39:CYS:O	29:B4:40:HIS:HB2	1.90	0.72
31:B6:27:LYS:HD2	31:B6:27:LYS:O	1.89	0.72
35:BA:2142:C:O2'	35:BA:2143:C:H5'	1.89	0.72
35:BA:2523:G:H2'	35:BA:2524:G:C5'	2.19	0.72
40:BF:192:LEU:HD23	40:BF:193:VAL:N	2.04	0.72
43:BK:109:LYS:HA	43:BK:112:MET:HE2	1.71	0.72
51:BT:55:ASN:H	51:BT:59:THR:HG21	1.54	0.72
24:AY:139:MET:CE	24:AY:167:PRO:HG3	2.19	0.72
24:AY:431:LEU:CD2	24:AY:466:LEU:HD13	2.19	0.72
29:B4:1:MET:HE2	41:BG:66:GLN:OE1	1.89	0.72
30:B5:4:HIS:HB3	30:B5:5:PRO:HD3	1.72	0.72
33:B8:52:LYS:N	33:B8:53:PRO:HD2	2.04	0.72
35:BA:1301:A:O2'	35:BA:1302:A:C2'	2.38	0.72
35:BA:2241:A:H2'	35:BA:2242:G:C8	2.25	0.72
35:BA:2807:G:H1	35:BA:2893:G:H1	1.35	0.72
36:BB:115:G:O4'	50:BS:47:THR:HB	1.90	0.72
37:BC:90:ALA:HA	37:BC:155:ARG:NH1	2.04	0.72
42:BH:18:GLU:HB2	42:BH:25:LYS:HB2	1.71	0.72
47:BP:102:ARG:HB3	47:BP:102:ARG:CZ	2.17	0.72
51:BT:42:ILE:HD13	51:BT:83:ILE:CD1	2.18	0.72
1:AA:692:U:OP1	11:AK:124:LYS:HE2	1.89	0.72
1:AA:717:C:H5"	1:AA:717:C:H6	1.55	0.72
35:BA:320:A:H4'	35:BA:322:A:C8	2.23	0.72
35:BA:419:C:H2'	35:BA:420:C:H6	1.53	0.72
35:BA:1682:G:H2'	35:BA:1683:C:C6	2.25	0.72
35:BA:1718:G:H5'	35:BA:1718:G:C8	2.23	0.72
35:BA:2103:C:C3'	35:BA:2104:G:H5"	2.20	0.72
35:BA:2286:A:H4'	35:BA:2287:A:H5'	1.70	0.72
36:BB:40:U:O2	36:BB:43:C:H5"	1.88	0.72
37:BC:138:LEU:CD2	37:BC:139:PRO:HD2	2.18	0.72
24:AY:227:ILE:O	24:AY:227:ILE:HG22	1.90	0.72
35:BA:83:G:O2'	35:BA:84:A:H8	1.73	0.72
35:BA:2337:G:H2'	35:BA:2338:G:H8	1.54	0.72
47:BP:102:ARG:CB	47:BP:102:ARG:HH11	2.02	0.72
49:BR:75:LEU:O	49:BR:75:LEU:HD13	1.89	0.72
51:BT:6:LEU:C	51:BT:6:LEU:CD2	2.59	0.72
52:BU:111:GLU:O	52:BU:115:ALA:HB2	1.90	0.72
1:AA:368:U:P	24:AY:353:ALA:HB1	2.30	0.72
1:AA:630:G:H2'	1:AA:631:G:H5'	1.71	0.72
1:AA:1014:A:H4'	19:AS:14:HIS:CE1	2.24	0.72
7:AG:31:MET:SD	7:AG:36:LYS:HB2	2.30	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:517:LEU:HB3	24:AY:521:SER:CB	2.20	0.72
30:B5:27:PRO:HG3	54:BW:23:LEU:HD11	1.71	0.72
35:BA:2198:A:H4'	35:BA:2199:A:OP1	1.88	0.72
38:BD:27:THR:CG2	38:BD:83:GLU:HG2	2.19	0.72
39:BE:111:ARG:HG3	49:BR:2:ARG:HG2	1.72	0.72
45:BN:9:VAL:CG1	45:BN:39:ARG:HH22	1.93	0.72
46:BO:2:ILE:HD11	46:BO:82:ASN:HD22	1.54	0.72
5:AE:60:TYR:HE1	5:AE:64:ARG:HH21	1.33	0.71
9:AI:79:LEU:HD13	9:AI:83:ARG:HB2	1.70	0.71
12:AL:47:LYS:HB3	12:AL:47:LYS:NZ	2.04	0.71
24:AY:77:HIS:NE2	24:AY:277:VAL:HG21	2.05	0.71
24:AY:177:ILE:HG22	24:AY:178:ILE:N	2.05	0.71
35:BA:64:A:H2'	35:BA:65:C:C6	2.25	0.71
35:BA:662:G:OP1	47:BP:18:ARG:HD2	1.88	0.71
35:BA:871:U:H4'	48:BQ:69:PHE:CE2	2.25	0.71
35:BA:940:G:H3'	35:BA:941:A:H5"	1.70	0.71
35:BA:2068:U:N3	35:BA:2430:A:H2	1.87	0.71
35:BA:2593:U:H2'	35:BA:2594:C:H6	1.53	0.71
36:BB:15:A:H3'	36:BB:16:G:C5'	2.17	0.71
38:BD:117:VAL:HG23	38:BD:129:ASN:HA	1.72	0.71
1:AA:1358:U:P	14:AN:35:ARG:HG3	2.30	0.71
2:AB:204:ASN:HD22	2:AB:205:ASP:N	1.87	0.71
3:AC:86:VAL:O	3:AC:89:GLU:HB3	1.89	0.71
5:AE:81:GLU:HG2	5:AE:90:VAL:HG22	1.72	0.71
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.72	0.71
25:B0:40:GLN:HE22	25:B0:43:THR:HA	1.55	0.71
35:BA:1059:G:H2'	35:BA:1060:U:C6	2.25	0.71
35:BA:1223:G:C3'	35:BA:1224:C:H5"	2.20	0.71
35:BA:1272:A:OP2	35:BA:1647:G:OP1	2.08	0.71
38:BD:131:LEU:HD12	38:BD:131:LEU:N	2.04	0.71
40:BF:100:THR:O	40:BF:100:THR:HG22	1.89	0.71
40:BF:117:ARG:NH2	47:BP:5:ASP:N	2.38	0.71
45:BN:22:THR:HA	45:BN:61:ARG:O	1.88	0.71
15:AO:82:ILE:HD13	15:AO:83:GLU:N	2.05	0.71
19:AS:31:ILE:HG23	19:AS:49:ILE:HG23	1.72	0.71
26:B1:76:ARG:HH12	26:B1:95:LEU:CD2	1.99	0.71
31:B6:45:LYS:HE3	35:BA:2371:G:H5"	1.71	0.71
35:BA:184:C:H2'	35:BA:185:U:C6	2.24	0.71
37:BC:23:ILE:HB	37:BC:229:SER:OXT	1.91	0.71
39:BE:34:VAL:HG12	39:BE:48:GLN:O	1.88	0.71
40:BF:38:ARG:O	40:BF:42:ALA:HB2	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BT:134:GLU:O	51:BT:135:ALA:CB	2.38	0.71
53:BV:32:THR:HG23	53:BV:59:ALA:O	1.90	0.71
57:BZ:180:VAL:HG12	57:BZ:181:GLU:HG2	1.72	0.71
1:AA:460:G:H5'	1:AA:461:A:OP2	1.90	0.71
4:AD:96:LEU:HD22	4:AD:96:LEU:N	2.03	0.71
24:AY:137:ASN:O	24:AY:262:SER:HA	1.90	0.71
24:AY:413:ILE:HG22	24:AY:449:THR:O	1.91	0.71
28:B3:45:GLY:HA3	35:BA:851:U:O2'	1.91	0.71
30:B5:36:CYS:SG	30:B5:48:GLU:O	2.48	0.71
35:BA:78:A:O2'	35:BA:79:G:H5'	1.90	0.71
35:BA:1053:C:H2'	35:BA:1054:A:H5"	1.72	0.71
35:BA:2462:U:H2'	35:BA:2463:C:C6	2.24	0.71
36:BB:53:A:H2'	36:BB:53:A:N3	2.04	0.71
48:BQ:27:VAL:HG21	48:BQ:134:ARG:HG2	1.73	0.71
49:BR:9:LYS:O	49:BR:10:LEU:HD23	1.90	0.71
49:BR:21:TYR:OH	49:BR:43:GLU:HG2	1.89	0.71
51:BT:29:ARG:CB	51:BT:85:LYS:HA	2.21	0.71
1:AA:833:U:H2'	1:AA:834:C:C6	2.24	0.71
1:AA:1478:C:O2'	1:AA:1479:C:H5'	1.90	0.71
3:AC:70:VAL:HG12	3:AC:71:ALA:H	1.56	0.71
25:B0:66:VAL:HG23	25:B0:84:LEU:HD23	1.71	0.71
25:B0:78:TYR:H	25:B0:78:TYR:HD1	1.36	0.71
27:B2:2:LYS:HD2	27:B2:5:GLU:OE1	1.89	0.71
35:BA:284:U:H2'	35:BA:285:C:H6	1.55	0.71
35:BA:406:G:OP2	35:BA:406:G:H8	1.73	0.71
35:BA:759:G:H2'	35:BA:760:G:C8	2.24	0.71
43:BK:3:LYS:HD3	43:BK:29:GLN:HG2	1.72	0.71
1:AA:631:G:H5'	1:AA:631:G:C8	2.25	0.71
1:AA:1038:C:H2'	1:AA:1039:C:C5	2.26	0.71
22:AV:6:G:H1	22:AV:67:C:H42	1.36	0.71
35:BA:145:G:H2'	35:BA:146:G:C8	2.25	0.71
35:BA:936:C:H2'	35:BA:937:U:C6	2.26	0.71
35:BA:997:G:OP1	52:BU:93:LYS:HD3	1.91	0.71
35:BA:2415:G:O3'	47:BP:66:GLY:HA3	1.91	0.71
42:BH:66:GLY:HA2	42:BH:69:ARG:HB3	1.72	0.71
47:BP:106:LEU:HD21	47:BP:112:LEU:HG	1.72	0.71
1:AA:1134:G:C2'	1:AA:1135:U:H5'	2.20	0.71
6:AF:80:ARG:HH11	6:AF:88:VAL:HB	1.56	0.71
7:AG:65:ALA:HB2	7:AG:128:ALA:HB2	1.73	0.71
19:AS:41:VAL:HG21	19:AS:44:MET:HB2	1.73	0.71
24:AY:146:LEU:HD22	24:AY:147:TRP:CZ3	2.25	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:265:LYS:HB3	24:AY:267:LYS:HE3	1.73	0.71
28:B3:40:THR:OG1	28:B3:43:ILE:HG12	1.91	0.71
35:BA:710:G:H1	35:BA:721:C:H42	1.39	0.71
35:BA:1582:C:H2'	35:BA:1583:A:H8	1.55	0.71
35:BA:2439:A:H2'	35:BA:2439:A:N3	2.06	0.71
1:AA:392:G:H2'	1:AA:393:A:H8	1.55	0.71
12:AL:57:LYS:HG2	12:AL:67:THR:HG22	1.72	0.71
26:B1:47:GLN:HG3	35:BA:2091:U:O2'	1.90	0.71
32:B7:24:THR:C	32:B7:26:GLY:H	1.94	0.71
35:BA:2230:G:H2'	35:BA:2231:C:H6	1.56	0.71
35:BA:2776:A:H4'	35:BA:2777:G:H5"	1.72	0.71
43:BK:17:ALA:HB3	43:BK:38:VAL:HG22	1.73	0.71
47:BP:24:GLY:CA	47:BP:33:ARG:NH1	2.53	0.71
50:BS:85:VAL:C	50:BS:106:ARG:HG2	2.10	0.71
52:BU:90:VAL:HG13	53:BV:39:LEU:HG	1.71	0.71
1:AA:715:A:H2'	1:AA:716:A:C8	2.25	0.71
1:AA:943:U:H2'	1:AA:944:G:H5'	1.70	0.71
1:AA:1160:G:N3	1:AA:1160:G:H2'	2.05	0.71
24:AY:550:MET:HE1	24:AY:563:ILE:HD11	1.73	0.71
26:B1:4:VAL:HG23	26:B1:10:LYS:O	1.89	0.71
30:B5:3:LYS:NZ	35:BA:2613:U:H2'	2.06	0.71
31:B6:27:LYS:HB3	31:B6:30:THR:HG22	1.73	0.71
31:B6:43:CYS:O	31:B6:44:ARG:HB2	1.90	0.71
35:BA:545:C:C2'	35:BA:547:A:H5"	2.20	0.71
35:BA:654(M):C:HO2'	35:BA:654(N):G:H8	1.36	0.71
35:BA:1774:C:O2	38:BD:11:PRO:HB2	1.91	0.71
35:BA:2524:G:H5'	35:BA:2524:G:C8	2.23	0.71
38:BD:147:LEU:HD13	38:BD:155:LEU:HD11	1.73	0.71
42:BH:43:VAL:CG1	42:BH:52:VAL:HA	2.19	0.71
42:BH:85:LYS:HE3	42:BH:145:ALA:HB1	1.71	0.71
45:BN:133:GLN:HG2	45:BN:134:ARG:N	2.06	0.71
51:BT:28:VAL:HG22	51:BT:47:GLY:N	2.05	0.71
53:BV:13:ARG:HH11	53:BV:13:ARG:HG3	1.55	0.71
1:AA:1298:C:H1'	1:AA:1299:A:C6	2.26	0.71
9:AI:104:ARG:O	9:AI:105:ASP:CB	2.25	0.71
12:AL:28:LYS:HE2	12:AL:33:ARG:NH1	2.06	0.71
19:AS:51:VAL:HG22	19:AS:71:LEU:HD13	1.73	0.71
30:B5:55:ARG:HH12	49:BR:33:ARG:HG2	1.54	0.71
31:B6:54:ILE:CD1	35:BA:2420:C:H5'	2.21	0.71
35:BA:654(L):G:H2'	35:BA:654(M):C:H4'	1.72	0.71
35:BA:1142(A):A:O2'	35:BA:1143:A:H5"	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1709:U:H2'	35:BA:1710:C:C6	2.25	0.71
35:BA:1751:C:O2'	35:BA:1752:C:H5'	1.90	0.71
37:BC:78:ILE:O	37:BC:120:VAL:HG21	1.89	0.71
42:BH:16:SER:HB2	42:BH:27:LYS:CB	2.17	0.71
47:BP:91:PHE:CE2	47:BP:95:VAL:HG12	2.25	0.71
55:BX:57:LEU:HD13	55:BX:57:LEU:N	2.06	0.71
57:BZ:79:ARG:O	57:BZ:80:ARG:HB2	1.89	0.71
1:AA:1117:G:O2'	9:AI:104:ARG:HD3	1.90	0.70
1:AA:1328:C:H2'	1:AA:1329:A:C8	2.26	0.70
10:AJ:4:ILE:HB	10:AJ:74:ILE:CG1	2.21	0.70
13:AM:97:PRO:CA	13:AM:110:ARG:HD3	2.21	0.70
35:BA:321:G:C2	35:BA:341:G:H4'	2.27	0.70
35:BA:581:C:H2'	35:BA:582:G:C8	2.26	0.70
35:BA:2122:U:H1'	37:BC:167:ASP:OD2	1.91	0.70
38:BD:248:SER:HB2	38:BD:249:PRO:HD2	1.73	0.70
40:BF:65:TRP:HZ3	40:BF:75:HIS:HD2	1.39	0.70
41:BG:96:ARG:O	41:BG:97:ASP:HB2	1.91	0.70
54:BW:10:VAL:HG23	54:BW:101:SER:O	1.90	0.70
56:BY:89:PHE:C	56:BY:90:LEU:HD23	2.11	0.70
1:AA:473:G:H2'	1:AA:474:G:H8	1.56	0.70
1:AA:559:A:H4'	1:AA:560:U:C5'	2.21	0.70
7:AG:27:ILE:CD1	7:AG:40:ALA:HA	2.22	0.70
9:AI:93:ARG:HA	9:AI:96:LEU:HB2	1.73	0.70
12:AL:111:LYS:O	12:AL:112:ASP:HB2	1.89	0.70
22:AV:3:C:H2'	22:AV:4:G:H5'	1.73	0.70
24:AY:388:THR:HG21	24:AY:399:LEU:H	1.55	0.70
28:B3:11:SER:HB3	35:BA:988:A:P	2.30	0.70
29:B4:2:LYS:HG2	36:BB:44:G:OP2	1.90	0.70
29:B4:16:CYS:SG	29:B4:17:GLY:N	2.64	0.70
30:B5:25:LEU:HD11	54:BW:19:LEU:HB3	1.73	0.70
35:BA:2262:U:H2'	35:BA:2263:C:C5'	2.20	0.70
37:BC:74:ARG:H	37:BC:112:ASP:HB2	1.54	0.70
50:BS:98:VAL:C	50:BS:100:ALA:H	1.92	0.70
55:BX:54:VAL:HG13	55:BX:81:VAL:HG12	1.72	0.70
56:BY:10:GLY:HA2	56:BY:27:VAL:HG13	1.73	0.70
57:BZ:108:PRO:HB3	57:BZ:141:VAL:CG1	2.21	0.70
1:AA:35:G:H2'	1:AA:36:C:C6	2.26	0.70
2:AB:147:LYS:HE2	2:AB:148:TYR:CE1	2.25	0.70
16:AP:32:TYR:HD2	16:AP:32:TYR:O	1.74	0.70
26:B1:45:ASN:C	26:B1:45:ASN:HD22	1.94	0.70
35:BA:154(A):C:C5'	35:BA:155:U:H5"	2.21	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:272(B):G:H2'	35:BA:272(C):G:H8	1.55	0.70
35:BA:559:G:H22	52:BU:49:HIS:CD2	2.08	0.70
35:BA:1068:G:H21	35:BA:1096:A:H5'	1.54	0.70
35:BA:2428:G:H5'	35:BA:2429:G:OP1	1.91	0.70
41:BG:145:THR:HG23	41:BG:148:MET:HB2	1.72	0.70
46:BO:97:ARG:HG3	46:BO:97:ARG:NH1	2.05	0.70
57:BZ:167:PRO:O	57:BZ:168:GLU:HB2	1.88	0.70
1:AA:447:G:H2'	1:AA:485:G:N2	2.06	0.70
4:AD:23:GLY:HA3	4:AD:112:VAL:HG22	1.73	0.70
17:AQ:80:GLY:O	17:AQ:81:ARG:HD2	1.92	0.70
20:AT:43:LEU:HB3	20:AT:48:LYS:HB2	1.74	0.70
20:AT:50:GLU:HG3	20:AT:51:GLU:N	2.07	0.70
33:B8:6:THR:HG22	33:B8:63:PRO:HD3	1.72	0.70
35:BA:514:A:H2'	35:BA:515:A:C8	2.25	0.70
35:BA:1012:U:C5	45:BN:28:THR:HG21	2.26	0.70
41:BG:31:VAL:HG23	41:BG:32:PRO:HD2	1.73	0.70
52:BU:25:TRP:CD1	52:BU:26:GLY:N	2.59	0.70
1:AA:1338:G:O2'	22:AV:42:G:H5'	1.92	0.70
1:AA:1409:C:H2'	1:AA:1410:G:H8	1.54	0.70
1:AA:1439:C:H6	1:AA:1439:C:H5"	1.56	0.70
1:AA:1479:C:H2'	1:AA:1480:G:H8	1.56	0.70
4:AD:121:VAL:HA	4:AD:126:ILE:HD13	1.73	0.70
35:BA:226:G:O2'	35:BA:227:A:C8	2.42	0.70
35:BA:1028:A:N6	35:BA:1125:G:H2'	2.06	0.70
45:BN:35:ARG:O	45:BN:37:LYS:HB2	1.91	0.70
53:BV:18:LEU:CG	53:BV:19:LYS:H	2.03	0.70
19:AS:51:VAL:O	19:AS:58:VAL:HG22	1.91	0.70
26:B1:86:SER:HB2	26:B1:90:ILE:HD11	1.73	0.70
31:B6:5:VAL:HG12	31:B6:6:ARG:N	2.05	0.70
35:BA:297:C:H2'	35:BA:298:G:O4'	1.91	0.70
35:BA:1430:C:H2'	35:BA:1431:U:C6	2.27	0.70
35:BA:2745:C:H2'	35:BA:2746:U:C6	2.27	0.70
35:BA:2887:U:H2'	35:BA:2888:C:C6	2.27	0.70
38:BD:72:LYS:HE2	38:BD:101:GLU:OE1	1.91	0.70
46:BO:60:ALA:HA	46:BO:87:ILE:CD1	2.21	0.70
48:BQ:108:GLY:HA3	57:BZ:116:VAL:HG11	1.73	0.70
51:BT:28:VAL:HG22	51:BT:46:GLU:CA	2.21	0.70
53:BV:62:LEU:HD22	53:BV:62:LEU:N	2.07	0.70
56:BY:105:ALA:C	56:BY:107:ASP:H	1.95	0.70
1:AA:423:G:C2'	1:AA:424:G:H5'	2.21	0.70
1:AA:1003:G:H2'	1:AA:1004:A:C4'	2.11	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1128:C:H2'	1:AA:1129:C:C5'	2.21	0.70
1:AA:1258:G:O2'	1:AA:1259:C:H5'	1.92	0.70
35:BA:272(B):G:H2'	35:BA:272(C):G:C8	2.26	0.70
35:BA:1814:G:C3'	35:BA:1815:A:H5"	2.21	0.70
35:BA:2532:G:H2'	35:BA:2533:A:O4'	1.92	0.70
39:BE:9:VAL:HG22	39:BE:10:GLY:N	2.07	0.70
40:BF:65:TRP:CZ3	40:BF:75:HIS:HD2	2.09	0.70
40:BF:140:LEU:O	40:BF:143:ALA:HB3	1.91	0.70
41:BG:108:ASN:O	41:BG:109:VAL:CG2	2.39	0.70
42:BH:19:VAL:O	42:BH:20:ALA:HB2	1.92	0.70
49:BR:97:VAL:HA	49:BR:113:LEU:O	1.92	0.70
1:AA:1134:G:H2'	1:AA:1135:U:H5'	1.73	0.70
2:AB:189:ASP:OD1	2:AB:205:ASP:HB3	1.92	0.70
3:AC:84:ILE:O	3:AC:88:ARG:HG3	1.92	0.70
4:AD:152:SER:O	4:AD:155:LEU:HG	1.90	0.70
10:AJ:67:THR:HG22	10:AJ:67:THR:O	1.92	0.70
15:AO:83:GLU:C	15:AO:85:LEU:H	1.94	0.70
20:AT:26:ASN:O	20:AT:30:LYS:HB2	1.92	0.70
31:B6:15:GLU:OE1	31:B6:44:ARG:NH2	2.24	0.70
35:BA:1052:C:H2'	35:BA:1053:C:C6	2.26	0.70
35:BA:1094:U:H2'	35:BA:1096:A:OP2	1.92	0.70
47:BP:59:LEU:HA	47:BP:61:ARG:CZ	2.21	0.70
51:BT:55:ASN:N	51:BT:59:THR:CG2	2.55	0.70
57:BZ:99:TYR:HE1	57:BZ:125:LEU:HD13	1.57	0.70
2:AB:101:MET:C	2:AB:102:LEU:HD12	2.12	0.70
2:AB:114:ARG:HH11	2:AB:118:LEU:HD21	1.57	0.70
4:AD:107:ARG:HH21	4:AD:194:LEU:HD12	1.57	0.70
22:AV:20:U:H3'	22:AV:21:A:H5'	1.72	0.70
35:BA:582:G:H2'	35:BA:583:G:H8	1.57	0.70
35:BA:2408:U:H2'	35:BA:2409:G:C8	2.27	0.70
38:BD:45:ASN:CG	38:BD:46:GLN:H	1.95	0.70
42:BH:83:TYR:HB3	42:BH:135:GLY:H	1.56	0.70
53:BV:64:HIS:ND1	53:BV:92:THR:HG22	2.05	0.70
53:BV:88:ARG:O	53:BV:90:PRO:HD3	1.92	0.70
54:BW:20:VAL:HG23	54:BW:21:VAL:H	1.54	0.70
2:AB:22:LYS:H	2:AB:40:HIS:HE1	1.38	0.70
20:AT:50:GLU:HB3	20:AT:99:LEU:HB2	1.73	0.70
20:AT:73:HIS:H	20:AT:76:ALA:HB3	1.56	0.70
24:AY:326:THR:O	24:AY:328:ILE:HG23	1.91	0.70
24:AY:464:ASP:O	24:AY:468:ARG:HB2	1.92	0.70
35:BA:208:C:H2'	35:BA:209:C:H6	1.57	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:406:G:O2'	35:BA:407:G:H8	1.75	0.70
35:BA:2377:A:H2'	35:BA:2378:A:C8	2.27	0.70
35:BA:2645:G:H3'	35:BA:2646:C:C5'	2.20	0.70
35:BA:2754:U:H2'	35:BA:2756:U:OP1	1.90	0.70
37:BC:84:ILE:O	37:BC:95:VAL:HG11	1.92	0.70
39:BE:170:LEU:H	39:BE:170:LEU:HD12	1.57	0.70
49:BR:2:ARG:CD	49:BR:5:LYS:HE2	2.21	0.70
1:AA:1250:A:H4'	9:AI:68:GLY:H	1.56	0.69
5:AE:122:GLU:O	5:AE:123:LEU:HD23	1.91	0.69
7:AG:82:GLY:HA3	23:AX:13:A:N1	2.06	0.69
10:AJ:48:THR:HA	10:AJ:62:HIS:CB	2.21	0.69
24:AY:446:THR:HG23	24:AY:446:THR:O	1.91	0.69
24:AY:505:GLY:HA3	24:AY:576:ASP:CG	2.12	0.69
30:B5:25:LEU:HD12	54:BW:19:LEU:HB3	1.74	0.69
35:BA:629:G:H5"	35:BA:650:C:O2'	1.91	0.69
41:BG:45:GLU:O	41:BG:51:ARG:HD3	1.91	0.69
45:BN:46:VAL:HG13	45:BN:47:ALA:N	2.06	0.69
49:BR:79:LEU:C	49:BR:79:LEU:HD13	2.11	0.69
51:BT:16:ARG:HG3	51:BT:16:ARG:NH1	2.02	0.69
57:BZ:41:LEU:O	57:BZ:44:PHE:N	2.24	0.69
1:AA:1358:U:OP1	14:AN:35:ARG:HG3	1.92	0.69
2:AB:33:TYR:HB2	2:AB:43:ASP:HB2	1.74	0.69
17:AQ:66:SER:O	17:AQ:70:ARG:NH1	2.25	0.69
32:B7:8:ASN:HD22	32:B7:9:ARG:N	1.90	0.69
35:BA:1125:G:H3'	35:BA:1126:A:H5"	1.71	0.69
35:BA:1472:A:O2'	35:BA:1473:G:H5'	1.92	0.69
36:BB:66:A:N6	36:BB:108:U:H2'	2.07	0.69
45:BN:26:LEU:C	45:BN:26:LEU:HD12	2.13	0.69
1:AA:20:U:H2'	1:AA:21:G:O4'	1.93	0.69
2:AB:55:PHE:HA	2:AB:58:ILE:HD12	1.73	0.69
10:AJ:16:LEU:HD12	10:AJ:70:ARG:HD3	1.74	0.69
11:AK:30:VAL:O	11:AK:30:VAL:HG23	1.92	0.69
16:AP:33:ILE:O	16:AP:34:GLU:HB2	1.91	0.69
17:AQ:69:LYS:O	17:AQ:70:ARG:HD2	1.93	0.69
28:B3:56:VAL:HG12	28:B3:57:GLU:H	1.57	0.69
35:BA:1717:G:C3'	35:BA:1718:G:H5"	2.22	0.69
37:BC:117:THR:HG22	37:BC:147:GLY:O	1.92	0.69
38:BD:145:VAL:HG12	38:BD:146:GLU:N	2.07	0.69
43:BK:37:PHE:O	43:BK:41:PHE:HB3	1.91	0.69
50:BS:106:ARG:O	50:BS:107:GLU:HB2	1.92	0.69
56:BY:88:LYS:HE2	56:BY:93:GLY:HA3	1.73	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BY:91:GLU:O	56:BY:92:ASN:HB2	1.93	0.69
1:AA:405:U:H3'	1:AA:406:G:H5'	1.73	0.69
1:AA:1123:A:O3'	10:AJ:36:GLY:HA3	1.92	0.69
1:AA:1299:A:H2'	1:AA:1299:A:N3	2.06	0.69
2:AB:165:VAL:CG2	2:AB:166:ASP:H	1.98	0.69
13:AM:106:ASN:O	13:AM:107:ALA:HB3	1.91	0.69
25:B0:43:THR:HG22	35:BA:2331:G:O3'	1.93	0.69
35:BA:214:G:H1'	35:BA:216:A:O2'	1.91	0.69
35:BA:676:A:H8	35:BA:2069:G:H21	1.40	0.69
35:BA:2681:C:H5	35:BA:2725:A:H62	1.39	0.69
35:BA:2804:C:H2'	35:BA:2805:G:H8	1.55	0.69
40:BF:174:VAL:HG21	40:BF:189:THR:CG2	2.22	0.69
41:BG:76:SER:HA	41:BG:83:ARG:HB3	1.74	0.69
47:BP:101:VAL:HG12	47:BP:106:LEU:CB	2.22	0.69
55:BX:12:VAL:HG12	55:BX:27:THR:HG23	1.74	0.69
1:AA:392:G:H2'	1:AA:393:A:C8	2.27	0.69
3:AC:167:TRP:HE3	3:AC:168:ALA:H	1.39	0.69
5:AE:79:GLU:HB3	5:AE:93:PRO:HD2	1.75	0.69
6:AF:1:MET:HE1	6:AF:68:PRO:HD3	1.74	0.69
16:AP:20:VAL:HG23	16:AP:34:GLU:O	1.91	0.69
35:BA:67:U:H2'	35:BA:68:G:C8	2.28	0.69
35:BA:545:C:C3'	35:BA:547:A:H5"	2.22	0.69
35:BA:1409:C:H2'	35:BA:1410:G:H8	1.55	0.69
35:BA:1607:C:H4'	35:BA:1608:A:O5'	1.91	0.69
37:BC:139:PRO:HA	37:BC:145:THR:HB	1.73	0.69
43:BK:23:VAL:O	43:BK:23:VAL:HG12	1.92	0.69
50:BS:12:PHE:O	50:BS:14:VAL:HG23	1.93	0.69
56:BY:31:LEU:HD22	56:BY:31:LEU:N	2.07	0.69
1:AA:41:G:H2'	1:AA:42:G:C8	2.27	0.69
1:AA:54:C:H2'	1:AA:352:C:H41	1.57	0.69
11:AK:54:ARG:O	11:AK:57:THR:HG22	1.93	0.69
27:B2:25:VAL:C	27:B2:27:GLU:H	1.92	0.69
27:B2:36:ARG:HA	27:B2:39:ALA:HB3	1.74	0.69
33:B8:32:LEU:HB3	33:B8:36:LYS:NZ	2.07	0.69
35:BA:958:U:OP2	48:BQ:14:ARG:NH1	2.25	0.69
40:BF:78:ILE:HA	40:BF:83:PHE:CD2	2.28	0.69
42:BH:12:PRO:HB2	42:BH:15:VAL:HG11	1.74	0.69
47:BP:108:LYS:HD2	47:BP:108:LYS:N	2.08	0.69
50:BS:67:ARG:HB3	50:BS:71:ARG:NH2	2.07	0.69
3:AC:46:GLU:HB3	3:AC:83:ARG:HH22	1.57	0.69
16:AP:20:VAL:CG2	16:AP:32:TYR:HB2	2.20	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:85:LEU:HD12	18:AR:86:VAL:N	2.06	0.69
20:AT:45:GLN:HB2	20:AT:91:LEU:HD13	1.74	0.69
24:AY:510:VAL:HG13	24:AY:569:ASP:O	1.92	0.69
26:B1:76:ARG:HH22	26:B1:95:LEU:HD13	1.56	0.69
35:BA:2056:G:H2'	35:BA:2056:G:N3	2.08	0.69
35:BA:2629:A:H2'	35:BA:2629:A:N3	2.07	0.69
43:BK:109:LYS:O	43:BK:112:MET:HG2	1.92	0.69
50:BS:106:ARG:HB3	50:BS:106:ARG:NH1	2.04	0.69
56:BY:9:LYS:HD3	56:BY:94:LYS:HE2	1.75	0.69
1:AA:986:A:H1'	19:AS:54:GLY:O	1.92	0.69
1:AA:1321:C:H5"	1:AA:1322:C:H5"	1.74	0.69
1:AA:1321:C:H5"	1:AA:1322:C:C5'	2.23	0.69
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.75	0.69
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.73	0.69
3:AC:6:HIS:HD2	3:AC:7:PRO:HD2	1.56	0.69
5:AE:43:LEU:HD21	5:AE:132:ALA:HB1	1.74	0.69
8:AH:7:ALA:HB2	8:AH:85:ARG:HD3	1.75	0.69
10:AJ:3:LYS:O	10:AJ:100:THR:HG23	1.92	0.69
15:AO:5:LYS:O	15:AO:9:GLN:HG2	1.92	0.69
15:AO:74:ASP:OD2	15:AO:77:ARG:HG2	1.92	0.69
17:AQ:45:HIS:CB	17:AQ:65:ILE:HD13	2.23	0.69
28:B3:29:ARG:HH11	28:B3:29:ARG:CB	2.03	0.69
35:BA:1316:U:O2'	35:BA:1317:A:H5'	1.92	0.69
35:BA:1452:A:C3'	35:BA:1453:U:H5"	2.23	0.69
35:BA:1656:C:H2'	35:BA:1657:C:H6	1.57	0.69
35:BA:1921:G:O2'	35:BA:1922:G:H5'	1.93	0.69
35:BA:2012:G:H4'	54:BW:96:ILE:CD1	2.19	0.69
40:BF:10:PRO:HG2	40:BF:11:VAL:H	1.56	0.69
40:BF:132:VAL:HG22	40:BF:133:ASN:N	2.06	0.69
40:BF:174:VAL:HG21	40:BF:189:THR:HG21	1.74	0.69
41:BG:7:LEU:O	41:BG:11:TYR:N	2.26	0.69
41:BG:106:LEU:HA	41:BG:110:ALA:CB	2.21	0.69
41:BG:114:ILE:O	41:BG:114:ILE:HG22	1.90	0.69
41:BG:133:LEU:HD11	41:BG:157:ILE:CD1	2.20	0.69
43:BK:99:ILE:HD12	43:BK:103:GLN:HB3	1.72	0.69
47:BP:23:PRO:HB2	47:BP:33:ARG:NE	2.07	0.69
48:BQ:24:GLY:O	48:BQ:102:VAL:HG23	1.93	0.69
49:BR:28:LEU:HD23	49:BR:29:LEU:HD12	1.75	0.69
50:BS:49:VAL:HG12	50:BS:50:SER:N	2.01	0.69
50:BS:89:ARG:HG3	50:BS:92:TYR:HB3	1.75	0.69
54:BW:8:ARG:HG3	54:BW:8:ARG:HH11	1.57	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BZ:56:VAL:HG12	57:BZ:57:ILE:N	2.06	0.69
57:BZ:120:ILE:HG22	57:BZ:120:ILE:O	1.92	0.69
1:AA:664:G:H22	1:AA:741:G:H1	1.41	0.69
1:AA:1325:C:H2'	1:AA:1326:C:H6	1.58	0.69
24:AY:213:HIS:O	24:AY:217:VAL:HG23	1.93	0.69
31:B6:10:LEU:CD2	31:B6:10:LEU:N	2.39	0.69
31:B6:37:ARG:HH22	35:BA:2286:A:H62	1.41	0.69
32:B7:34:ARG:HB3	32:B7:42:LEU:HD22	1.73	0.69
35:BA:1452:A:H3'	35:BA:1453:U:H5"	1.72	0.69
49:BR:72:ASP:OD2	49:BR:75:LEU:HB2	1.93	0.69
53:BV:32:THR:HG22	53:BV:33:VAL:N	2.07	0.69
1:AA:1030(A):G:H1'	1:AA:1031:G:H1	1.55	0.69
1:AA:1227:A:C2	13:AM:117:VAL:HG11	2.27	0.69
1:AA:1356:G:H2'	1:AA:1357:A:H8	1.55	0.69
5:AE:9:LYS:CB	5:AE:112:LEU:HD11	2.23	0.69
13:AM:74:VAL:O	13:AM:77:ASN:HB2	1.93	0.69
24:AY:165:GLN:HE21	24:AY:177:ILE:HG21	1.58	0.69
30:B5:16:ARG:HG2	30:B5:16:ARG:NH1	2.00	0.69
35:BA:1190:G:H5'	47:BP:35:HIS:H	1.58	0.69
35:BA:1578:U:H2'	35:BA:1579:A:H5"	1.75	0.69
36:BB:3:C:N4	36:BB:118:G:H1	1.91	0.69
38:BD:35:LYS:CG	38:BD:63:ARG:HG3	2.23	0.69
55:BX:35:THR:HB	55:BX:38:GLU:HB2	1.75	0.69
1:AA:170:U:O2'	1:AA:171:A:H5'	1.92	0.68
3:AC:5:ILE:HD13	3:AC:5:ILE:N	2.07	0.68
24:AY:115:GLU:CD	24:AY:118:SER:HB3	2.13	0.68
35:BA:9:U:H5	35:BA:2629:A:N6	1.92	0.68
35:BA:154(A):C:C5	35:BA:155:U:H1'	2.28	0.68
35:BA:481:G:H2'	35:BA:507:A:N1	2.08	0.68
39:BE:1:MET:HB3	39:BE:200:GLU:OE2	1.92	0.68
1:AA:731:G:OP1	1:AA:766:A:H1'	1.92	0.68
1:AA:1148:U:H2'	1:AA:1149:C:O4'	1.93	0.68
3:AC:16:ARG:HD3	3:AC:17:ASP:H	1.57	0.68
10:AJ:82:ILE:HD13	10:AJ:82:ILE:H	1.58	0.68
13:AM:81:LEU:HD12	13:AM:86:CYS:SG	2.34	0.68
21:AU:23:PRO:C	21:AU:25:LYS:H	1.96	0.68
24:AY:165:GLN:HB2	24:AY:260:LEU:HD11	1.74	0.68
24:AY:438:PHE:HD2	24:AY:438:PHE:O	1.76	0.68
24:AY:613:PRO:O	24:AY:615:GLU:N	2.26	0.68
24:AY:637:ARG:HH11	24:AY:637:ARG:CG	1.99	0.68
25:B0:51:VAL:HG22	25:B0:81:VAL:HG23	1.73	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B3:1:MET:HB3	28:B3:2:PRO:HD2	1.74	0.68
35:BA:191:A:H2'	35:BA:192:C:H6	1.56	0.68
35:BA:549:G:H8	35:BA:549:G:O5'	1.76	0.68
35:BA:674:G:C1'	40:BF:74:ARG:HD3	2.23	0.68
35:BA:840:C:H2'	35:BA:841:A:H5"	1.74	0.68
35:BA:975(A):G:O2'	35:BA:976:C:H5'	1.93	0.68
37:BC:28:ARG:HG2	37:BC:183:PRO:HB3	1.74	0.68
37:BC:77:ALA:HB3	37:BC:95:VAL:HA	1.75	0.68
39:BE:11:MET:HB2	39:BE:23:VAL:O	1.93	0.68
39:BE:95:ILE:HD13	39:BE:95:ILE:N	2.08	0.68
41:BG:91:ARG:HD2	41:BG:91:ARG:C	2.13	0.68
1:AA:194:C:C2'	1:AA:195:A:H5"	2.24	0.68
1:AA:275:G:H5"	17:AQ:14:LYS:CB	2.23	0.68
1:AA:1275:A:O2'	1:AA:1276:G:H5'	1.92	0.68
1:AA:1370:G:C2	1:AA:1371:G:C8	2.81	0.68
19:AS:6:LYS:O	19:AS:7:LYS:HE3	1.94	0.68
24:AY:343:ASN:HD22	24:AY:343:ASN:C	1.96	0.68
35:BA:363(B):G:H2'	35:BA:363(C):G:C8	2.28	0.68
35:BA:581:C:H2'	35:BA:582:G:H8	1.59	0.68
35:BA:614(A):U:H4'	35:BA:614(B):G:H5"	1.74	0.68
35:BA:695:G:OP1	35:BA:1380:G:H4'	1.93	0.68
39:BE:117:MET:HA	39:BE:122:PHE:H	1.57	0.68
46:BO:22:ILE:HG12	46:BO:41:ALA:HA	1.75	0.68
56:BY:28:LYS:O	56:BY:38:ILE:HG22	1.93	0.68
56:BY:74:PRO:O	56:BY:80:GLY:HA2	1.92	0.68
57:BZ:4:ARG:HH12	57:BZ:66:SER:CB	2.06	0.68
1:AA:96:U:HO2'	1:AA:97:G:H8	1.40	0.68
1:AA:148:G:H2'	1:AA:149:A:C8	2.29	0.68
1:AA:579:G:H5'	1:AA:728:A:H1'	1.75	0.68
2:AB:178:ARG:HG2	2:AB:178:ARG:HH11	1.57	0.68
8:AH:6:ILE:HD12	8:AH:6:ILE:N	2.06	0.68
20:AT:48:LYS:HB3	20:AT:51:GLU:HG2	1.75	0.68
24:AY:92:ILE:HG12	24:AY:405:PRO:HG2	1.76	0.68
24:AY:342:TYR:HE2	24:AY:396:ARG:HD2	1.54	0.68
35:BA:296:C:O2'	35:BA:297:C:H5'	1.93	0.68
35:BA:528:A:H2	35:BA:2043:C:C5'	2.06	0.68
35:BA:1290:C:H2'	35:BA:1291:C:C6	2.28	0.68
35:BA:1809:A:H2'	35:BA:1810:A:C8	2.29	0.68
46:BO:91:LEU:N	46:BO:91:LEU:CD2	2.56	0.68
56:BY:7:VAL:CG1	56:BY:8:LYS:HE3	2.24	0.68
1:AA:1170:A:H2'	1:AA:1171:G:O4'	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:57:ARG:H	4:AD:57:ARG:HD2	1.58	0.68
22:AV:20:U:C3'	22:AV:21:A:H5'	2.23	0.68
26:B1:26:ARG:HG3	26:B1:27:GLU:HG3	1.75	0.68
35:BA:510:C:H3'	35:BA:510:C:OP1	1.93	0.68
35:BA:1099:G:H2'	35:BA:1100:C:O4'	1.93	0.68
35:BA:1205:U:C5	40:BF:171:PRO:HA	2.28	0.68
35:BA:1812:A:H2'	35:BA:1813:G:H8	1.55	0.68
35:BA:2672:G:C3'	35:BA:2673:G:H5"	2.24	0.68
38:BD:26:LYS:H	38:BD:26:LYS:HE2	1.56	0.68
38:BD:26:LYS:O	38:BD:27:THR:HG22	1.92	0.68
38:BD:153:ALA:C	38:BD:154:LYS:HG3	2.14	0.68
40:BF:32:LEU:C	40:BF:32:LEU:HD23	2.12	0.68
41:BG:56:ALA:HB1	41:BG:153:ARG:NE	2.08	0.68
48:BQ:53:ALA:HA	48:BQ:56:ARG:HB2	1.76	0.68
51:BT:10:VAL:O	51:BT:13:ARG:HG2	1.94	0.68
8:AH:17:THR:HG22	8:AH:63:LEU:HD12	1.74	0.68
27:B2:24:LEU:HD23	27:B2:24:LEU:C	2.14	0.68
35:BA:123:G:O2'	35:BA:124:G:H5'	1.93	0.68
35:BA:693:C:O2'	35:BA:694:U:H5'	1.92	0.68
35:BA:1951:U:H2'	35:BA:1953:A:OP2	1.92	0.68
35:BA:2146:C:H4'	35:BA:2147:G:C8	2.28	0.68
36:BB:4:C:H2'	36:BB:5:C:C6	2.28	0.68
36:BB:20:C:H2'	36:BB:21:G:H5'	1.75	0.68
40:BF:63:LYS:HG3	40:BF:76:GLY:HA2	1.74	0.68
40:BF:110:LEU:HD13	40:BF:110:LEU:O	1.94	0.68
41:BG:68:PRO:CA	41:BG:92:VAL:HG12	2.17	0.68
42:BH:46:GLU:HG3	42:BH:51:ARG:H	1.59	0.68
45:BN:115:ARG:HA	45:BN:118:LYS:HE2	1.75	0.68
56:BY:84:ARG:HB2	56:BY:97:ARG:HB2	1.75	0.68
1:AA:183:G:H2'	1:AA:184:G:C8	2.28	0.68
1:AA:818:G:O2'	1:AA:819:A:H5'	1.93	0.68
4:AD:18:LYS:HE2	4:AD:20:TYR:CE2	2.29	0.68
10:AJ:4:ILE:HD12	10:AJ:4:ILE:N	2.09	0.68
10:AJ:6:ILE:HD12	10:AJ:6:ILE:O	1.93	0.68
10:AJ:71:LEU:HD12	10:AJ:72:VAL:H	1.59	0.68
24:AY:97:SER:O	24:AY:100:VAL:HG13	1.93	0.68
35:BA:2019:A:O3'	52:BU:27:LEU:HD12	1.94	0.68
36:BB:3:C:H42	36:BB:118:G:H1	1.40	0.68
41:BG:144:ILE:HD11	41:BG:149:VAL:HB	1.76	0.68
48:BQ:12:GLN:HE21	48:BQ:73:PRO:HD2	1.58	0.68
1:AA:1308:U:H5"	13:AM:98:VAL:HG23	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:70:ILE:HG22	12:AL:100:ILE:HD12	1.76	0.68
20:AT:12:ALA:O	20:AT:15:ARG:HB2	1.92	0.68
24:AY:18:ALA:O	24:AY:19:ALA:CB	2.42	0.68
24:AY:20:HIS:HB2	24:AY:87:HIS:HD2	1.58	0.68
24:AY:388:THR:HG21	24:AY:399:LEU:HD13	1.76	0.68
28:B3:28:LEU:HD23	28:B3:28:LEU:N	2.09	0.68
35:BA:556:G:H2'	35:BA:557:U:C6	2.28	0.68
35:BA:637:A:C6	35:BA:652:C:H4'	2.29	0.68
35:BA:654:A:N7	35:BA:654(V):A:H4'	2.09	0.68
35:BA:781:A:C8	38:BD:219:PRO:HG3	2.29	0.68
35:BA:848:G:N3	35:BA:933:A:H1'	2.09	0.68
35:BA:1819:A:H4'	35:BA:1820:U:H5'	1.76	0.68
35:BA:2657:A:H2'	35:BA:2658:C:H5'	1.76	0.68
37:BC:60:ARG:HG3	37:BC:165:ARG:HG3	1.76	0.68
40:BF:204:ASN:C	40:BF:206:ILE:H	1.94	0.68
42:BH:105:LEU:HD23	42:BH:105:LEU:H	1.58	0.68
48:BQ:109:VAL:CG1	48:BQ:113:GLN:HB2	2.23	0.68
49:BR:117:VAL:HG12	49:BR:118:GLU:N	2.09	0.68
1:AA:179:A:H2'	1:AA:180:U:H6	1.57	0.68
1:AA:269:C:H2'	1:AA:270:A:H8	1.59	0.68
1:AA:512:U:H2'	1:AA:513:C:C6	2.29	0.68
1:AA:1082:G:O2'	1:AA:1083:U:H5'	1.94	0.68
5:AE:33:VAL:HG12	5:AE:112:LEU:HD12	1.76	0.68
10:AJ:7:LYS:O	10:AJ:96:ILE:HA	1.94	0.68
23:AX:13:A:C2'	23:AX:14:A:H5"	2.24	0.68
24:AY:335:LEU:HD11	24:AY:352:VAL:HG11	1.75	0.68
26:B1:26:ARG:HG3	26:B1:27:GLU:H	1.59	0.68
35:BA:120:U:H5'	35:BA:121:G:OP1	1.93	0.68
35:BA:206:U:O2	35:BA:206:U:H2'	1.93	0.68
35:BA:381:G:O2'	35:BA:382:G:H5'	1.93	0.68
35:BA:483:A:H4'	56:BY:49:VAL:HA	1.75	0.68
35:BA:1717:G:H2'	35:BA:1718:G:H5"	1.76	0.68
35:BA:2018:G:H21	52:BU:34:LYS:NZ	1.92	0.68
35:BA:2161:C:O2'	35:BA:2162:G:H5'	1.94	0.68
35:BA:2313:C:H5'	35:BA:2313:C:C6	2.29	0.68
40:BF:99:TYR:CE2	40:BF:101:LEU:HD13	2.28	0.68
41:BG:34:LEU:HB2	41:BG:99:MET:HE1	1.76	0.68
42:BH:159:GLU:OE1	42:BH:159:GLU:HA	1.93	0.68
43:BK:21:PRO:HA	43:BK:23:VAL:H	1.59	0.68
48:BQ:29:PHE:HB2	48:BQ:105:GLU:OE2	1.94	0.68
51:BT:128:GLU:O	51:BT:129:ARG:HD3	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BU:34:LYS:HE2	52:BU:34:LYS:HA	1.76	0.68
52:BU:83:LEU:HD12	52:BU:113:ALA:HB2	1.75	0.68
1:AA:1318:A:H1'	19:AS:37:ARG:NH2	2.09	0.68
2:AB:121:LEU:HD22	2:AB:126:GLU:HB2	1.76	0.68
12:AL:47:LYS:HB3	12:AL:48:PRO:HD3	1.74	0.68
35:BA:622:G:O2'	35:BA:623:G:H5'	1.93	0.68
35:BA:710:G:H2'	35:BA:711:G:H8	1.59	0.68
35:BA:2455:G:H2'	35:BA:2456:C:C6	2.29	0.68
36:BB:65:C:H41	36:BB:109:C:H2'	1.58	0.68
40:BF:126:VAL:HG23	40:BF:127:GLU:N	2.07	0.68
43:BK:100:THR:OG1	43:BK:103:GLN:HG3	1.94	0.68
49:BR:12:ARG:HH11	49:BR:12:ARG:CG	2.06	0.68
1:AA:390:C:H2'	1:AA:391:G:C8	2.29	0.67
9:AI:4:TYR:CE1	9:AI:88:TYR:CD2	2.82	0.67
15:AO:18:PHE:CD1	15:AO:18:PHE:O	2.47	0.67
35:BA:67:U:H2'	35:BA:68:G:H8	1.57	0.67
35:BA:1035:U:H2'	35:BA:1036:G:C8	2.29	0.67
35:BA:2110:G:HO2'	35:BA:2120:G:H5'	1.59	0.67
35:BA:2334:G:C4	50:BS:15:ARG:HD3	2.29	0.67
37:BC:104:ILE:HG23	37:BC:108:TRP:O	1.92	0.67
38:BD:161:THR:O	38:BD:196:VAL:HG23	1.95	0.67
43:BK:7:VAL:O	43:BK:7:VAL:CG1	2.40	0.67
55:BX:35:THR:O	55:BX:39:ILE:HG12	1.94	0.67
1:AA:265:G:H2'	1:AA:267:C:H5	1.60	0.67
1:AA:275:G:H5"	17:AQ:14:LYS:HB2	1.76	0.67
1:AA:708:C:H2'	1:AA:709:G:C8	2.28	0.67
1:AA:1133:G:N2	1:AA:1143:G:H1'	2.10	0.67
1:AA:1269:A:C2	1:AA:1313:U:O4'	2.47	0.67
1:AA:1346:A:N1	1:AA:1374:A:H5"	2.08	0.67
3:AC:6:HIS:ND1	14:AN:49:HIS:HB3	2.10	0.67
5:AE:100:VAL:O	5:AE:100:VAL:HG23	1.93	0.67
8:AH:109:ILE:HG12	8:AH:110:ALA:H	1.57	0.67
13:AM:49:THR:HB	13:AM:52:GLU:HG3	1.76	0.67
13:AM:78:ILE:CA	13:AM:81:LEU:HD23	2.23	0.67
24:AY:424:LEU:O	24:AY:427:ALA:HB3	1.94	0.67
33:B8:33:ASN:O	33:B8:34:TRP:HB3	1.94	0.67
35:BA:176:G:O2'	35:BA:177:G:H5'	1.94	0.67
35:BA:654(M):C:O2'	35:BA:654(N):G:H8	1.77	0.67
35:BA:1183:G:O2'	35:BA:1184:G:H5'	1.94	0.67
35:BA:1847:A:H3'	35:BA:1848:A:C5'	2.23	0.67
43:BK:121:GLU:CD	43:BK:121:GLU:H	1.97	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BN:23:LEU:HD23	45:BN:23:LEU:O	1.93	0.67
45:BN:115:ARG:HH11	45:BN:115:ARG:CG	2.02	0.67
50:BS:46:VAL:HG12	50:BS:47:THR:N	2.09	0.67
51:BT:55:ASN:H	51:BT:59:THR:CG2	2.08	0.67
52:BU:96:ALA:C	52:BU:98:LEU:H	1.98	0.67
1:AA:974:A:H8	1:AA:974:A:OP1	1.77	0.67
1:AA:1225:A:H2'	1:AA:1225:A:N3	2.09	0.67
1:AA:1292:U:H2'	1:AA:1293:G:C8	2.29	0.67
1:AA:1489:G:C2'	1:AA:1490:C:H5"	2.23	0.67
3:AC:148:GLY:HA3	3:AC:172:ARG:O	1.93	0.67
4:AD:33:MET:O	4:AD:37:PRO:HG3	1.94	0.67
5:AE:144:THR:O	5:AE:148:VAL:HG23	1.94	0.67
11:AK:34:ASP:HB2	11:AK:35:PRO:CD	2.24	0.67
11:AK:85:ARG:HG2	11:AK:111:ASP:O	1.93	0.67
12:AL:75:HIS:CD2	12:AL:77:LEU:HD12	2.29	0.67
13:AM:78:ILE:O	13:AM:82:MET:HG2	1.94	0.67
19:AS:13:ASP:C	19:AS:15:LEU:H	1.94	0.67
24:AY:17:ILE:O	24:AY:85:PRO:HG2	1.93	0.67
30:B5:2:ALA:N	35:BA:2014:A:HO2'	1.90	0.67
30:B5:44:THR:HG21	49:BR:101:ALA:CB	2.21	0.67
35:BA:519:U:H5"	54:BW:25:ARG:NH2	2.10	0.67
35:BA:548:A:C2'	35:BA:549:G:H5'	2.24	0.67
35:BA:1910:G:O2'	35:BA:1911:U:H5'	1.94	0.67
35:BA:2393:A:H5"	47:BP:62:LEU:HB3	1.76	0.67
48:BQ:59:ARG:HB3	57:BZ:180:VAL:CG2	2.24	0.67
51:BT:28:VAL:HG21	51:BT:46:GLU:HG3	1.77	0.67
52:BU:56:ASP:O	52:BU:59:ARG:HB2	1.95	0.67
22:AV:17:C:C6	22:AV:17(A):U:H5	2.02	0.67
22:AV:75:C:C6	22:AV:76:A:N7	2.63	0.67
24:AY:380:LEU:O	24:AY:381:LYS:CE	2.43	0.67
35:BA:884:C:H41	35:BA:886:C:H42	1.41	0.67
35:BA:1163:G:O2'	35:BA:1164:G:H5'	1.94	0.67
35:BA:2205:C:H5'	35:BA:2206:G:OP2	1.94	0.67
37:BC:190:ILE:O	37:BC:194:ILE:HG12	1.94	0.67
40:BF:114:VAL:HG21	40:BF:202:PHE:CE1	2.28	0.67
41:BG:57:ALA:O	41:BG:68:PRO:HG2	1.94	0.67
42:BH:157:TYR:CE1	42:BH:171:LEU:HD21	2.17	0.67
51:BT:29:ARG:HB3	51:BT:85:LYS:HA	1.75	0.67
1:AA:943:U:C2'	1:AA:944:G:H5'	2.24	0.67
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.24	0.67
1:AA:1095:U:P	1:AA:1108:G:H1	2.18	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1261:A:C2'	1:AA:1262:C:H5'	2.23	0.67
1:AA:1485:U:O2'	1:AA:1486:G:H5'	1.94	0.67
3:AC:206:GLU:HG2	3:AC:207:VAL:N	2.07	0.67
24:AY:343:ASN:ND2	24:AY:345:THR:H	1.92	0.67
24:AY:411:VAL:CG1	24:AY:412:ALA:N	2.57	0.67
26:B1:86:SER:CB	26:B1:89:GLU:HB2	2.23	0.67
35:BA:191:A:H2'	35:BA:192:C:C6	2.29	0.67
35:BA:302:C:P	56:BY:73:ARG:HH12	2.17	0.67
35:BA:1120:G:H2'	35:BA:1121:C:C6	2.29	0.67
35:BA:1967:C:H2'	35:BA:1968:G:H5'	1.74	0.67
35:BA:2308:G:O6	35:BA:2310:A:H2'	1.93	0.67
35:BA:2344:U:H4'	35:BA:2345:G:OP1	1.95	0.67
35:BA:2774:C:H2'	35:BA:2775:A:O4'	1.95	0.67
35:BA:2850:A:C2	49:BR:61:HIS:CD2	2.83	0.67
39:BE:78:LEU:O	39:BE:79:ARG:HD2	1.95	0.67
48:BQ:51:ARG:O	48:BQ:54:MET:HB3	1.95	0.67
51:BT:80:SER:HB3	51:BT:81:PRO:CD	2.24	0.67
56:BY:17:SER:HB2	56:BY:71:LYS:HD2	1.75	0.67
57:BZ:13:GLU:C	57:BZ:14:LYS:HG3	2.14	0.67
57:BZ:130:PRO:O	57:BZ:133:ILE:HD11	1.95	0.67
1:AA:1003:G:C2	1:AA:1004:A:H1'	2.29	0.67
1:AA:1510:U:H2'	1:AA:1511:G:H8	1.58	0.67
4:AD:62:GLN:O	4:AD:66:ARG:HB2	1.94	0.67
8:AH:5:PRO:O	8:AH:8:ASP:HB3	1.93	0.67
9:AI:4:TYR:CE2	9:AI:88:TYR:CB	2.78	0.67
19:AS:42:PRO:C	19:AS:43:GLU:HG3	2.14	0.67
19:AS:44:MET:N	19:AS:44:MET:SD	2.67	0.67
22:AV:46:G:O3'	22:AV:47:U:C6	2.47	0.67
24:AY:554:PRO:HG3	24:AY:594:VAL:CG1	2.25	0.67
26:B1:3:LYS:HE3	35:BA:1364:G:C8	2.30	0.67
31:B6:15:GLU:CG	31:B6:47:THR:HG21	2.24	0.67
32:B7:24:THR:HG23	32:B7:27:GLY:H	1.60	0.67
35:BA:2039:C:H2'	35:BA:2040:C:H6	1.59	0.67
35:BA:2705:A:H2'	35:BA:2706:G:O4'	1.94	0.67
35:BA:2762:G:H5'	35:BA:2762:G:C8	2.29	0.67
47:BP:80:TYR:CE1	47:BP:111:ARG:HG2	2.30	0.67
52:BU:83:LEU:CD1	52:BU:83:LEU:H	2.07	0.67
52:BU:99:ALA:HB2	52:BU:106:PHE:CE1	2.30	0.67
57:BZ:23:LYS:CD	57:BZ:38:TYR:HE2	2.08	0.67
57:BZ:142:SER:H	57:BZ:144:LEU:HD23	1.60	0.67
1:AA:1392:G:N2	1:AA:1502:A:H8	1.93	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:43:LYS:HA	16:AP:48:TRP:HB3	1.76	0.67
19:AS:9:VAL:O	19:AS:11:VAL:N	2.28	0.67
24:AY:65:ILE:CD1	24:AY:65:ILE:H	2.08	0.67
29:B4:22:ILE:HG22	29:B4:23:GLU:N	2.10	0.67
35:BA:218:A:H2	35:BA:235:U:H4'	1.59	0.67
35:BA:271(I):G:H3'	35:BA:271(J):C:H6	1.60	0.67
35:BA:1573:G:H2'	35:BA:1574:C:H5'	1.77	0.67
35:BA:2193:G:H5'	35:BA:2193:G:H8	1.59	0.67
35:BA:2668:G:O2'	35:BA:2669:G:H5'	1.94	0.67
50:BS:34:HIS:NE2	50:BS:54:LEU:HB3	2.10	0.67
52:BU:109:LEU:O	52:BU:112:ARG:HB2	1.94	0.67
1:AA:183:G:H2'	1:AA:184:G:H8	1.58	0.67
5:AE:77:PRO:HD2	5:AE:142:LEU:HD13	1.77	0.67
24:AY:252:ASP:HB3	24:AY:254:LYS:HE3	1.74	0.67
24:AY:414:GLU:O	24:AY:474:ALA:HB1	1.95	0.67
24:AY:546:ILE:HG23	24:AY:590:ILE:CG1	2.17	0.67
26:B1:76:ARG:HH22	26:B1:95:LEU:HD22	1.59	0.67
32:B7:34:ARG:HH12	32:B7:39:ARG:HD2	1.60	0.67
35:BA:211:A:H2'	35:BA:212:G:C5'	2.24	0.67
35:BA:492:A:O2'	35:BA:493:G:H5'	1.94	0.67
35:BA:965:C:H5'	35:BA:2273:A:C1'	2.19	0.67
35:BA:1323:U:H3	35:BA:1331:A:H61	1.43	0.67
35:BA:1328:G:H8	35:BA:1328:G:O5'	1.77	0.67
35:BA:2202:C:H2'	38:BD:151:LYS:NZ	2.09	0.67
40:BF:3:GLU:HA	40:BF:24:LEU:CG	2.22	0.67
40:BF:170:LEU:CB	40:BF:173:VAL:HB	2.23	0.67
45:BN:48:MET:HE2	45:BN:48:MET:N	2.10	0.67
48:BQ:27:VAL:HG11	48:BQ:134:ARG:CD	2.25	0.67
49:BR:78:LYS:O	49:BR:83:ILE:HG12	1.95	0.67
1:AA:148:G:H2'	1:AA:149:A:H8	1.60	0.67
1:AA:673:G:H2'	1:AA:674:G:C8	2.29	0.67
1:AA:720:C:H3'	1:AA:721:G:H5"	1.77	0.67
1:AA:972:C:H4'	10:AJ:57:LYS:HB2	1.76	0.67
10:AJ:32:ALA:N	10:AJ:78:ASN:ND2	2.43	0.67
12:AL:117:ARG:CZ	12:AL:124:LYS:HA	2.24	0.67
13:AM:116:THR:HG22	13:AM:117:VAL:N	2.10	0.67
24:AY:337:SER:HA	24:AY:355:LEU:HD23	1.77	0.67
24:AY:514:VAL:HG21	24:AY:593:ALA:CB	2.25	0.67
24:AY:517:LEU:HB3	24:AY:521:SER:HB2	1.75	0.67
24:AY:534:ILE:HG13	24:AY:570:GLY:O	1.94	0.67
35:BA:198:C:H42	35:BA:248:G:H1	1.40	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1541:G:H5”	35:BA:1542:A:OP1	1.95	0.67
35:BA:1656:C:H2’	35:BA:1657:C:C6	2.30	0.67
35:BA:1827:C:O2’	35:BA:1828:G:H5’	1.94	0.67
35:BA:2291:U:H2’	35:BA:2292:C:H6	1.59	0.67
35:BA:2748:A:H2	42:BH:63:SER:HG	1.40	0.67
39:BE:11:MET:CB	39:BE:24:THR:HA	2.24	0.67
1:AA:1057:G:H5”	3:AC:154:SER:CB	2.25	0.67
1:AA:1318:A:C2’	1:AA:1319:A:H5’	2.25	0.67
3:AC:20:SER:HB3	3:AC:40:ARG:NH2	2.11	0.67
3:AC:82:GLU:O	3:AC:86:VAL:HG13	1.95	0.67
3:AC:206:GLU:CG	3:AC:207:VAL:H	1.99	0.67
19:AS:19:VAL:HG13	19:AS:44:MET:HG2	1.77	0.67
24:AY:432:ALA:HA	24:AY:438:PHE:CZ	2.29	0.67
35:BA:1948:G:C8	35:BA:1948:G:H5’	2.30	0.67
35:BA:2132:U:C5	37:BC:6:LYS:HD2	2.30	0.67
38:BD:127:VAL:HG22	38:BD:194:GLY:HA3	1.76	0.67
39:BE:4:ILE:HD11	39:BE:28:ALA:HB1	1.77	0.67
41:BG:77:ILE:HG21	41:BG:80:PHE:CB	2.25	0.67
45:BN:60:ILE:HG22	45:BN:61:ARG:N	2.10	0.67
57:BZ:182:LYS:C	57:BZ:183:LEU:HG	2.15	0.67
1:AA:103:C:H3’	1:AA:104:G:C8	2.26	0.66
1:AA:353:A:H5’	1:AA:353:A:C8	2.27	0.66
1:AA:678:U:H2’	1:AA:679:C:C6	2.30	0.66
1:AA:737:A:H2’	1:AA:738:C:C6	2.30	0.66
2:AB:148:TYR:O	2:AB:149:LEU:HD23	1.94	0.66
10:AJ:3:LYS:NZ	10:AJ:76:ASN:HA	2.10	0.66
16:AP:8:ARG:HB3	16:AP:28:ARG:HH12	1.59	0.66
24:AY:238:THR:HG23	24:AY:240:GLU:H	1.60	0.66
30:B5:3:LYS:HZ1	35:BA:2613:U:C2’	2.08	0.66
35:BA:272(J):C:C3’	35:BA:274:G:H5”	2.18	0.66
35:BA:591:C:H6	35:BA:591:C:H5”	1.59	0.66
35:BA:2011:U:H2’	35:BA:2012:G:H5’	1.77	0.66
35:BA:2552:U:C2	35:BA:2554:U:H5’	2.31	0.66
35:BA:2787:C:H1’	39:BE:61:ARG:CG	2.25	0.66
40:BF:185:ASP:HA	40:BF:188:ARG:CG	2.24	0.66
41:BG:46:ALA:CB	41:BG:88:ILE:HG12	2.26	0.66
52:BU:110:VAL:HG12	52:BU:114:LYS:CD	2.24	0.66
53:BV:47:VAL:O	53:BV:47:VAL:HG23	1.96	0.66
1:AA:1456:G:H2’	1:AA:1457:G:H5’	1.76	0.66
2:AB:12:GLU:O	2:AB:14:GLY:N	2.27	0.66
5:AE:101:ILE:CD1	5:AE:119:LEU:HD22	2.23	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:3:LYS:HZ2	10:AJ:76:ASN:HA	1.60	0.66
24:AY:468:ARG:HH11	24:AY:468:ARG:HG3	1.60	0.66
24:AY:512:ILE:CD1	24:AY:512:ILE:N	2.58	0.66
35:BA:2317:C:H2'	35:BA:2318:G:H5'	1.78	0.66
35:BA:2498:C:O2'	35:BA:2499:C:H5'	1.95	0.66
35:BA:2750:A:H2'	35:BA:2752:C:H41	1.60	0.66
38:BD:131:LEU:HD13	38:BD:136:ILE:HD11	1.78	0.66
40:BF:64:ILE:HD11	40:BF:65:TRP:CD2	2.30	0.66
43:BK:4:VAL:HG12	43:BK:5:VAL:N	2.09	0.66
45:BN:102:ALA:O	45:BN:106:MET:HE2	1.96	0.66
1:AA:161:A:H2'	1:AA:162:A:H8	1.61	0.66
5:AE:50:GLU:HG3	5:AE:52:PRO:HD2	1.76	0.66
6:AF:33:TYR:HA	6:AF:71:ARG:NH2	2.11	0.66
9:AI:128:ARG:O	13:AM:125:ARG:HD2	1.95	0.66
18:AR:59:SER:H	18:AR:62:GLU:HB2	1.60	0.66
24:AY:33:LEU:HD23	24:AY:360:ALA:CB	2.25	0.66
24:AY:122:TRP:CZ3	24:AY:132:ARG:HD2	2.30	0.66
24:AY:334:THR:HG21	24:AY:370:LYS:HG2	1.77	0.66
30:B5:4:HIS:O	35:BA:2056:G:N2	2.28	0.66
30:B5:40:LYS:HE2	30:B5:46:CYS:HB2	1.76	0.66
35:BA:1242:A:C6	47:BP:8:PRO:HG2	2.29	0.66
35:BA:2850:A:H2	49:BR:61:HIS:CD2	2.13	0.66
42:BH:53:GLU:OE1	42:BH:53:GLU:HA	1.95	0.66
55:BX:12:VAL:O	55:BX:13:LEU:HB2	1.94	0.66
1:AA:995:C:O2'	1:AA:996:A:H5'	1.93	0.66
10:AJ:6:ILE:HD11	10:AJ:72:VAL:HB	0.88	0.66
18:AR:29:PHE:CD2	18:AR:29:PHE:N	2.57	0.66
24:AY:329:ARG:HD3	24:AY:374:LEU:HD11	1.76	0.66
24:AY:388:THR:CG2	24:AY:399:LEU:HD13	2.24	0.66
24:AY:518:PRO:HD2	24:AY:521:SER:OG	1.95	0.66
34:B9:31:LYS:HD3	35:BA:2478:A:OP1	1.95	0.66
35:BA:27:G:O2'	35:BA:28:A:H8	1.79	0.66
35:BA:76:C:O2'	35:BA:77:C:H5'	1.95	0.66
35:BA:902:C:H2'	35:BA:903:C:C6	2.29	0.66
35:BA:961:C:N4	35:BA:2031:A:H1'	2.10	0.66
35:BA:2196:C:O2'	35:BA:2197:U:H5'	1.94	0.66
36:BB:88:C:H2'	36:BB:89:G:C8	2.30	0.66
37:BC:225:ILE:HD12	37:BC:225:ILE:O	1.95	0.66
50:BS:89:ARG:CG	50:BS:92:TYR:HA	2.25	0.66
52:BU:107:ALA:HA	52:BU:110:VAL:CG2	2.25	0.66
1:AA:720:C:O5'	1:AA:720:C:H6	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1404:C:H1'	1:AA:1499:A:N1	2.10	0.66
2:AB:129:GLU:O	2:AB:130:ARG:HB2	1.96	0.66
2:AB:233:SER:HB2	2:AB:234:PRO:HD3	1.76	0.66
4:AD:30:LYS:C	4:AD:32:ALA:N	2.49	0.66
24:AY:215:LYS:O	24:AY:219:VAL:N	2.28	0.66
24:AY:331:TYR:O	24:AY:371:ALA:HB1	1.94	0.66
31:B6:9:LEU:HD22	31:B6:26:ASN:HD22	1.59	0.66
35:BA:769:G:H2'	35:BA:770:G:H8	1.61	0.66
36:BB:28:C:O2'	36:BB:29:A:H5'	1.95	0.66
38:BD:123:ALA:HB3	38:BD:131:LEU:HG	1.78	0.66
53:BV:46:VAL:HG22	53:BV:47:VAL:H	1.61	0.66
1:AA:738:C:H5"	6:AF:69:GLU:HB2	1.77	0.66
1:AA:833:U:H2'	1:AA:834:C:H6	1.60	0.66
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.31	0.66
3:AC:70:VAL:CG1	3:AC:71:ALA:N	2.55	0.66
3:AC:114:PRO:HD3	3:AC:183:ASP:OD2	1.96	0.66
4:AD:96:LEU:H	4:AD:96:LEU:CD2	2.06	0.66
7:AG:57:GLU:H	7:AG:57:GLU:CD	1.97	0.66
10:AJ:6:ILE:HG22	10:AJ:98:ILE:HD12	1.76	0.66
24:AY:409:ILE:HG12	24:AY:656:ALA:CB	2.25	0.66
35:BA:28:A:N6	35:BA:512:G:H1'	2.10	0.66
35:BA:1053:C:C2'	35:BA:1054:A:H5"	2.26	0.66
35:BA:2552:U:O2	35:BA:2554:U:H5'	1.93	0.66
35:BA:2593:U:H2'	35:BA:2594:C:C6	2.30	0.66
38:BD:102:LYS:O	38:BD:103:ARG:HG2	1.96	0.66
1:AA:241:C:O2'	1:AA:242:C:H5'	1.95	0.66
1:AA:740:U:O2'	1:AA:741:G:H5'	1.96	0.66
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.58	0.66
12:AL:38:THR:CG2	12:AL:39:VAL:HG23	2.20	0.66
35:BA:20:C:O2'	35:BA:21:A:H5'	1.96	0.66
35:BA:545:C:H3'	35:BA:547:A:H5"	1.78	0.66
35:BA:1400:G:H2'	35:BA:1401:G:C8	2.30	0.66
35:BA:2223:G:H2'	35:BA:2224:G:H5'	1.77	0.66
37:BC:29:LEU:O	37:BC:32:GLU:HG2	1.94	0.66
39:BE:10:GLY:HA2	39:BE:192:ASN:HD21	1.60	0.66
46:BO:119:PRO:O	46:BO:120:GLU:HB2	1.94	0.66
47:BP:23:PRO:HB2	47:BP:33:ARG:CD	2.26	0.66
51:BT:89:VAL:CG1	51:BT:91:ARG:HG3	2.26	0.66
1:AA:190:U:O2'	1:AA:191:G:H5'	1.96	0.66
1:AA:1423:G:H5'	46:BO:49:ARG:HH22	1.61	0.66
5:AE:6:PHE:HB3	5:AE:35:GLY:O	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:12:ARG:HB2	14:AN:12:ARG:HH11	1.61	0.66
15:AO:62:GLN:HA	15:AO:65:ARG:HD3	1.78	0.66
24:AY:124:GLN:HA	24:AY:127:LYS:HD2	1.77	0.66
24:AY:530:VAL:HG22	24:AY:531:GLY:N	2.11	0.66
30:B5:3:LYS:NZ	35:BA:2613:U:C2'	2.58	0.66
35:BA:551:G:H2'	35:BA:552:G:H5'	1.76	0.66
35:BA:582:G:H2'	35:BA:583:G:C8	2.31	0.66
35:BA:1345:C:O2'	35:BA:1346:G:H5'	1.96	0.66
35:BA:2579:C:C4'	39:BE:134:ILE:HG12	2.24	0.66
35:BA:2873:A:H4'	49:BR:8:ARG:NH2	2.10	0.66
38:BD:35:LYS:HG2	38:BD:63:ARG:CA	2.25	0.66
40:BF:99:TYR:HE2	40:BF:101:LEU:CD1	2.09	0.66
40:BF:185:ASP:HA	40:BF:188:ARG:HG2	1.76	0.66
42:BH:121:ILE:CD1	42:BH:144:VAL:HG21	2.26	0.66
47:BP:89:ALA:O	47:BP:121:LYS:HD2	1.96	0.66
53:BV:66:ARG:CZ	53:BV:88:ARG:HH21	2.08	0.66
1:AA:449:C:O2	16:AP:42:ARG:HD2	1.96	0.66
1:AA:1316:G:O2'	14:AN:18:VAL:HG11	1.96	0.66
5:AE:150:ARG:NH1	5:AE:150:ARG:HB2	2.11	0.66
9:AI:40:LEU:CD1	9:AI:70:LYS:HG2	2.26	0.66
24:AY:13:ARG:HB2	24:AY:79:ILE:HG12	1.78	0.66
24:AY:490:PRO:HG3	24:AY:516:PRO:CD	2.23	0.66
25:B0:5:LYS:HB2	48:BQ:80:GLU:O	1.96	0.66
27:B2:38:GLN:O	27:B2:41:ILE:HG12	1.96	0.66
35:BA:144:C:H2'	35:BA:145:G:H8	1.60	0.66
35:BA:402:A:C2'	35:BA:403:U:H5'	2.26	0.66
35:BA:1516:C:H2'	35:BA:1517:G:C5'	2.25	0.66
35:BA:1943:U:O2	35:BA:1943:U:H2'	1.96	0.66
37:BC:73:VAL:HG13	37:BC:73:VAL:O	1.96	0.66
38:BD:70:TRP:HH2	38:BD:150:LYS:HA	1.57	0.66
38:BD:176:ARG:HG2	38:BD:176:ARG:HH11	1.60	0.66
42:BH:137:ASP:HB3	42:BH:140:LYS:HB2	1.77	0.66
5:AE:82:VAL:HG21	5:AE:138:ALA:HA	1.77	0.66
24:AY:303:PRO:HA	24:AY:331:TYR:O	1.94	0.66
25:B0:51:VAL:CG2	25:B0:81:VAL:HG23	2.26	0.66
26:B1:26:ARG:HG3	26:B1:27:GLU:N	2.09	0.66
35:BA:271(B):C:O2'	35:BA:271(C):C:H5'	1.95	0.66
35:BA:2801:A:H4'	35:BA:2801(A):A:O4'	1.96	0.66
41:BG:77:ILE:HG22	41:BG:77:ILE:O	1.96	0.66
42:BH:50:VAL:CG1	42:BH:51:ARG:N	2.59	0.66
43:BK:112:MET:CE	43:BK:120:LEU:HD21	2.26	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BZ:103:ARG:HB2	57:BZ:136:PHE:HB2	1.76	0.66
1:AA:188:C:H2'	1:AA:189:G:H8	1.61	0.65
1:AA:191:G:H1'	20:AT:105:SER:HA	1.78	0.65
1:AA:291:C:O2'	1:AA:292:G:H5'	1.95	0.65
1:AA:741:G:O2'	1:AA:742:G:H5'	1.95	0.65
1:AA:1126:U:O4'	1:AA:1281:U:H1'	1.96	0.65
2:AB:62:ALA:O	2:AB:64:ARG:N	2.28	0.65
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.77	0.65
25:B0:16:SER:HB2	35:BA:2262:U:C5	2.29	0.65
31:B6:11:LEU:HG	31:B6:26:ASN:ND2	2.10	0.65
31:B6:54:ILE:HD11	35:BA:2420:C:H5'	1.78	0.65
35:BA:1943:U:O2'	35:BA:1944:U:O5'	2.14	0.65
35:BA:2068:U:N3	35:BA:2430:A:C2	2.64	0.65
35:BA:2639:A:H2'	35:BA:2640:G:O4'	1.95	0.65
54:BW:62:HIS:O	54:BW:64:MET:HG3	1.96	0.65
1:AA:129(A):G:H8	1:AA:129(A):G:H5"	1.61	0.65
8:AH:119:LEU:HD12	8:AH:124:ALA:HB2	1.78	0.65
9:AI:88:TYR:O	9:AI:89:ASN:HB2	1.97	0.65
24:AY:25:LYS:HE3	59:AY:702:GDP:O2B	1.97	0.65
35:BA:175:G:O2'	35:BA:176:G:H5'	1.94	0.65
35:BA:491:G:H2'	35:BA:492:A:H8	1.59	0.65
35:BA:606:U:O2	35:BA:606:U:H2'	1.93	0.65
35:BA:654(S):G:H3'	35:BA:654(T):C:H5"	1.77	0.65
35:BA:1516:C:C2'	35:BA:1517:G:H5"	2.25	0.65
35:BA:2753:A:O2'	35:BA:2754:U:H5'	1.96	0.65
37:BC:74:ARG:HG2	37:BC:74:ARG:NH1	2.11	0.65
39:BE:152:LYS:HG3	39:BE:153:GLY:N	2.12	0.65
41:BG:8:LYS:HE3	41:BG:12:TYR:HE2	1.62	0.65
41:BG:85:GLY:C	41:BG:87:PRO:HD3	2.15	0.65
46:BO:52:VAL:O	46:BO:53:LYS:HG3	1.97	0.65
54:BW:9:TYR:H	54:BW:102:HIS:HD2	1.44	0.65
57:BZ:84:GLU:O	57:BZ:85:HIS:CB	2.44	0.65
10:AJ:92:THR:CG2	10:AJ:93:GLY:H	2.08	0.65
12:AL:47:LYS:HZ3	12:AL:48:PRO:HD3	1.60	0.65
13:AM:10:PRO:CB	13:AM:18:ALA:HB1	2.26	0.65
16:AP:21:VAL:O	16:AP:33:ILE:HB	1.97	0.65
17:AQ:63:ARG:HG2	17:AQ:64:PRO:HD2	1.78	0.65
22:AV:68:C:H2'	22:AV:69:C:H6	1.58	0.65
25:B0:47:PRO:HB3	25:B0:51:VAL:O	1.97	0.65
26:B1:86:SER:HB2	26:B1:90:ILE:CD1	2.26	0.65
30:B5:43:HIS:CD2	35:BA:2815:C:O2'	2.49	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:675:A:OP1	40:BF:63:LYS:HE2	1.97	0.65
35:BA:676:A:H2	35:BA:802:A:H61	1.44	0.65
35:BA:1599:C:H2'	35:BA:1600:C:H6	1.62	0.65
35:BA:1788:C:O2'	35:BA:1789:A:H5'	1.96	0.65
35:BA:2478:A:H2'	35:BA:2479:G:O4'	1.97	0.65
41:BG:31:VAL:O	41:BG:33:ARG:HD3	1.96	0.65
41:BG:131:TYR:HB3	41:BG:159:VAL:CG1	2.25	0.65
42:BH:86:GLU:HB2	42:BH:132:ARG:HB3	1.78	0.65
43:BK:6:ALA:CB	43:BK:59:ILE:HG22	2.26	0.65
47:BP:125:VAL:O	47:BP:145:PRO:HD2	1.96	0.65
51:BT:6:LEU:HD23	51:BT:6:LEU:O	1.96	0.65
51:BT:29:ARG:NE	51:BT:30:VAL:HG13	2.12	0.65
51:BT:108:ARG:HA	51:BT:111:ARG:NH1	2.12	0.65
54:BW:78:GLU:OE2	54:BW:99:ARG:HD2	1.97	0.65
56:BY:84:ARG:HG2	56:BY:84:ARG:HH11	1.59	0.65
1:AA:1030:C:H2'	1:AA:1030(A):G:H5'	1.77	0.65
1:AA:1168:A:H8	1:AA:1168:A:OP1	1.79	0.65
6:AF:71:ARG:HG3	6:AF:71:ARG:NH1	2.08	0.65
26:B1:76:ARG:NH2	26:B1:95:LEU:HD13	2.12	0.65
35:BA:272(G):C:H42	35:BA:363(C):G:H1	1.44	0.65
35:BA:492:A:C2'	35:BA:493:G:H5'	2.27	0.65
35:BA:1245:G:C5'	40:BF:34:TRP:HZ2	2.10	0.65
41:BG:77:ILE:HG22	41:BG:80:PHE:CA	2.27	0.65
51:BT:91:ARG:O	51:BT:117:ASP:HB2	1.95	0.65
52:BU:59:ARG:HG2	52:BU:59:ARG:HH11	1.62	0.65
53:BV:28:GLU:HB2	53:BV:31:ALA:CB	2.26	0.65
55:BX:8:ILE:HD12	55:BX:8:ILE:N	2.08	0.65
1:AA:50:A:N6	1:AA:361:G:H4'	2.11	0.65
1:AA:192:U:H2'	1:AA:193:C:C6	2.31	0.65
4:AD:16:GLY:HA2	4:AD:33:MET:HE1	1.79	0.65
13:AM:116:THR:CG2	13:AM:117:VAL:N	2.60	0.65
33:B8:32:LEU:HB3	33:B8:36:LYS:HZ2	1.60	0.65
35:BA:27:G:N2	35:BA:512:G:C2'	2.59	0.65
35:BA:799:G:H3'	35:BA:800:A:H5"	1.77	0.65
35:BA:814:C:H2'	35:BA:815:C:H6	1.61	0.65
35:BA:979:G:H3'	35:BA:980:A:H5'	1.78	0.65
35:BA:1885:A:H8	35:BA:1885:A:H5'	1.62	0.65
38:BD:35:LYS:HZ3	38:BD:36:PRO:HD3	1.62	0.65
41:BG:60:LEU:O	41:BG:63:ILE:HD11	1.97	0.65
47:BP:114:ILE:O	47:BP:130:PHE:HA	1.96	0.65
49:BR:10:LEU:HD22	49:BR:17:ARG:CD	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BR:21:TYR:HB3	49:BR:47:PHE:CE2	2.31	0.65
1:AA:160:A:H1'	1:AA:344:A:C5	2.31	0.65
1:AA:992:U:H1'	1:AA:993:G:C2	2.31	0.65
1:AA:1369:C:H2'	1:AA:1370:G:H8	1.60	0.65
11:AK:124:LYS:HD2	11:AK:125:PHE:CE1	2.32	0.65
22:AV:71:C:O2	22:AV:71:C:C2'	2.41	0.65
27:B2:3:LEU:HD22	27:B2:7:ARG:HH22	1.62	0.65
35:BA:518:G:H4'	54:BW:18:ARG:NH1	2.12	0.65
35:BA:641:C:H2'	35:BA:642:G:O4'	1.97	0.65
35:BA:764:A:N3	38:BD:213:ARG:NH1	2.44	0.65
35:BA:883:G:O2'	35:BA:884:C:H5'	1.96	0.65
35:BA:1053:C:H3'	35:BA:1054:A:H5"	1.77	0.65
35:BA:1378:A:HO2'	35:BA:1379:A:H5"	1.59	0.65
35:BA:1485:G:C1'	35:BA:1505:C:H42	2.08	0.65
36:BB:114:C:H2'	36:BB:115:G:C8	2.32	0.65
39:BE:101:ARG:NH1	39:BE:169:ASN:HD22	1.94	0.65
40:BF:24:LEU:HB3	40:BF:25:PRO:CD	2.24	0.65
52:BU:55:ARG:HA	52:BU:58:ARG:CG	2.26	0.65
56:BY:81:LYS:HD3	56:BY:97:ARG:O	1.97	0.65
1:AA:299:G:H2'	1:AA:300:A:C8	2.31	0.65
1:AA:596:C:O5'	1:AA:596:C:H6	1.79	0.65
1:AA:689:C:P	11:AK:46:GLY:HA3	2.37	0.65
3:AC:131:ARG:NH2	3:AC:168:ALA:HB2	2.11	0.65
9:AI:33:PHE:HD2	9:AI:34:ASN:OD1	1.79	0.65
19:AS:6:LYS:HE3	19:AS:6:LYS:N	2.10	0.65
25:B0:16:SER:OG	35:BA:2261:C:H3'	1.96	0.65
29:B4:1:MET:SD	41:BG:98:ARG:HG2	2.37	0.65
35:BA:482:A:H4'	56:BY:47:LYS:HG2	1.79	0.65
35:BA:555:U:H2'	35:BA:556:G:C8	2.32	0.65
35:BA:1571:A:H8	35:BA:1571:A:O5'	1.79	0.65
35:BA:1578:U:H2'	35:BA:1578:U:O2	1.95	0.65
35:BA:1819:A:H4'	35:BA:1820:U:C5'	2.25	0.65
35:BA:2262:U:C2'	35:BA:2263:C:C5'	2.74	0.65
35:BA:2313:C:O2'	35:BA:2314:C:H5'	1.97	0.65
41:BG:135:LEU:HD12	41:BG:135:LEU:H	1.59	0.65
56:BY:14:LEU:HD11	56:BY:22:GLY:HA2	1.78	0.65
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.32	0.65
1:AA:267:C:H2'	1:AA:268:C:H6	1.62	0.65
1:AA:1269:A:N1	1:AA:1312:G:O2'	2.26	0.65
1:AA:1342:C:H4'	9:AI:125:TYR:HB3	1.79	0.65
1:AA:1490:C:H6	1:AA:1490:C:C5'	2.10	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:108:ILE:N	11:AK:108:ILE:HD12	2.11	0.65
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.32	0.65
23:AX:15:A:H5'	23:AX:16:A:OP1	1.97	0.65
35:BA:58:G:H1	35:BA:69:C:H42	1.45	0.65
35:BA:654(V):A:H3'	35:BA:655:A:H2'	1.79	0.65
35:BA:664:C:O2'	35:BA:665:C:H5'	1.97	0.65
35:BA:811:U:O2'	35:BA:812:C:H5"	1.97	0.65
35:BA:1203:G:C4'	47:BP:7:ARG:HD2	2.19	0.65
35:BA:1278:A:O2'	35:BA:1279:G:H5'	1.97	0.65
35:BA:2472:G:H3'	35:BA:2475:C:H42	1.59	0.65
37:BC:93:ASP:O	37:BC:94:TYR:CD1	2.49	0.65
45:BN:57:ALA:H	45:BN:124:ALA:HA	1.62	0.65
51:BT:106:SER:HB2	51:BT:110:ILE:HG13	1.78	0.65
1:AA:1049:U:H1'	1:AA:1201:A:N7	2.12	0.65
2:AB:223:ILE:HA	2:AB:226:ARG:HB3	1.77	0.65
6:AF:47:ARG:HH11	6:AF:47:ARG:HG2	1.60	0.65
12:AL:82:VAL:HG12	12:AL:105:TYR:HD1	1.62	0.65
24:AY:128:TYR:O	24:AY:129:LYS:CB	2.45	0.65
24:AY:316:ILE:N	24:AY:316:ILE:HD13	2.11	0.65
24:AY:610:VAL:HG12	24:AY:669:PHE:HB3	1.77	0.65
29:B4:42:PHE:N	29:B4:42:PHE:CD1	2.65	0.65
35:BA:229:A:H8	35:BA:229:A:OP1	1.80	0.65
35:BA:284:U:H2'	35:BA:285:C:C6	2.32	0.65
35:BA:1142(A):A:H4'	45:BN:25:ARG:HH22	1.61	0.65
35:BA:1380:G:H2'	35:BA:1381:G:H8	1.61	0.65
35:BA:1505:C:C5	35:BA:1506:C:H1'	2.32	0.65
35:BA:1558:A:H4'	35:BA:1559:G:O5'	1.96	0.65
35:BA:1677:A:H2'	35:BA:1678:G:C8	2.32	0.65
35:BA:2348:U:H2'	35:BA:2349:G:C5'	2.26	0.65
38:BD:206:LEU:HD23	38:BD:211:ARG:HG2	1.79	0.65
41:BG:135:LEU:CD1	41:BG:155:MET:HG2	2.27	0.65
45:BN:48:MET:CE	45:BN:48:MET:N	2.52	0.65
51:BT:106:SER:HB2	51:BT:110:ILE:CG1	2.27	0.65
52:BU:47:TYR:CA	52:BU:50:ARG:NH1	2.60	0.65
1:AA:226:G:O2'	1:AA:227:G:H5'	1.97	0.65
1:AA:1388:C:H2'	1:AA:1389:C:C6	2.31	0.65
5:AE:98:THR:HB	5:AE:117:ASP:HB3	1.79	0.65
10:AJ:40:LEU:N	10:AJ:40:LEU:HD23	2.11	0.65
12:AL:20:LYS:H	12:AL:20:LYS:CD	2.07	0.65
12:AL:54:LYS:O	12:AL:70:ILE:HG12	1.97	0.65
19:AS:9:VAL:O	19:AS:9:VAL:HG12	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:B8:48:PHE:C	33:B8:49:VAL:HG22	2.16	0.65
35:BA:1258:C:O4'	40:BF:84:VAL:HG21	1.96	0.65
35:BA:1473:G:H2'	35:BA:1474:C:O4'	1.97	0.65
35:BA:1578:U:C2'	35:BA:1579:A:H5"	2.26	0.65
37:BC:28:ARG:NH1	37:BC:183:PRO:HB2	2.11	0.65
46:BO:60:ALA:HA	46:BO:87:ILE:HD11	1.79	0.65
51:BT:28:VAL:HG22	51:BT:47:GLY:H	1.62	0.65
56:BY:105:ALA:O	56:BY:106:LEU:HB2	1.97	0.65
57:BZ:151:HIS:HA	57:BZ:171:ILE:CG2	2.21	0.65
1:AA:218:C:H5'	1:AA:470:C:N4	2.12	0.64
1:AA:264:U:O2'	17:AQ:64:PRO:HB2	1.97	0.64
1:AA:644:G:C5	1:AA:645:C:C5	2.85	0.64
2:AB:129:GLU:O	2:AB:130:ARG:CB	2.45	0.64
3:AC:123:GLN:HB3	3:AC:128:PHE:CD2	2.31	0.64
5:AE:51:VAL:O	5:AE:55:VAL:HG23	1.97	0.64
7:AG:80:VAL:HG23	7:AG:81:GLY:N	2.12	0.64
10:AJ:47:PHE:CZ	14:AN:37:PHE:HE2	2.16	0.64
24:AY:486:THR:HG21	24:AY:602:LEU:HD11	1.78	0.64
27:B2:13:ALA:HA	27:B2:16:LEU:CD1	2.27	0.64
31:B6:5:VAL:HG22	35:BA:2283:C:OP1	1.97	0.64
35:BA:566:U:O2'	35:BA:567:A:H5'	1.96	0.64
35:BA:637:A:H2'	47:BP:117:GLU:OE2	1.97	0.64
35:BA:651:G:C2'	35:BA:652:C:H5'	2.27	0.64
35:BA:1539:G:N3	35:BA:1540:U:H1'	2.11	0.64
35:BA:2230:G:H2'	35:BA:2231:C:C6	2.31	0.64
35:BA:2749:A:N1	35:BA:2750:A:N6	2.44	0.64
35:BA:2778:A:H5'	35:BA:2779:U:OP2	1.97	0.64
37:BC:111:PHE:HE1	37:BC:137:LEU:HD13	1.60	0.64
37:BC:191:ARG:HH11	37:BC:191:ARG:CG	2.04	0.64
43:BK:59:ILE:HG12	43:BK:60:TYR:N	2.10	0.64
46:BO:4:PRO:O	46:BO:5:GLN:CB	2.43	0.64
47:BP:23:PRO:HB2	47:BP:33:ARG:CG	2.27	0.64
50:BS:56:LEU:HD23	50:BS:56:LEU:O	1.96	0.64
56:BY:95:LYS:HD3	56:BY:100:ALA:HB1	1.78	0.64
1:AA:332:G:H2'	1:AA:333:G:H8	1.62	0.64
1:AA:499:A:H4'	1:AA:500:G:OP1	1.97	0.64
1:AA:980:C:C5	1:AA:981:U:C2	2.78	0.64
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.32	0.64
1:AA:1424:C:H2'	1:AA:1425:U:H6	1.62	0.64
3:AC:150:LYS:HB2	3:AC:169:ALA:HB1	1.78	0.64
10:AJ:16:LEU:HD11	10:AJ:70:ARG:HB2	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:56:C:N4	35:BA:2169:A:C2	2.65	0.64
22:AV:75:C:C5	22:AV:76:A:N7	2.64	0.64
29:B4:31:ILE:HG23	29:B4:33:VAL:HG23	1.80	0.64
35:BA:36:G:H2'	35:BA:37:C:H6	1.60	0.64
35:BA:84:A:H5"	56:BY:9:LYS:NZ	2.12	0.64
35:BA:947:G:H2'	35:BA:948:G:H8	1.61	0.64
36:BB:7:G:C3'	36:BB:8:U:H5"	2.27	0.64
38:BD:146:GLU:HG2	38:BD:152:GLY:C	2.17	0.64
38:BD:183:ARG:HD2	38:BD:270:ILE:HG23	1.78	0.64
39:BE:36:ARG:HH21	39:BE:88:GLY:CA	2.10	0.64
39:BE:52:LEU:O	39:BE:74:PRO:HA	1.97	0.64
43:BK:77:LEU:HD23	43:BK:77:LEU:N	2.08	0.64
47:BP:101:VAL:HB	47:BP:107:LYS:HA	1.78	0.64
53:BV:38:LEU:O	53:BV:39:LEU:HD13	1.96	0.64
55:BX:7:VAL:HG12	55:BX:8:ILE:CD1	2.26	0.64
1:AA:309:G:H1'	1:AA:608:A:C2	2.32	0.64
2:AB:48:MET:HA	2:AB:51:LEU:HD12	1.80	0.64
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	1.79	0.64
12:AL:126:LYS:HE2	12:AL:128:ALA:N	2.12	0.64
20:AT:84:LEU:C	20:AT:86:ARG:H	2.01	0.64
24:AY:5:VAL:HG13	24:AY:6:GLU:N	2.12	0.64
35:BA:139:G:C6	35:BA:140:G:H2'	2.32	0.64
35:BA:359:A:H2'	35:BA:360:G:O4'	1.98	0.64
35:BA:613:G:H5'	35:BA:613:G:C8	2.30	0.64
35:BA:1541:G:H4'	35:BA:1542:A:C5'	2.26	0.64
35:BA:2097:C:H2'	35:BA:2098:U:C6	2.32	0.64
35:BA:2186:G:C3'	35:BA:2187:G:H5"	2.27	0.64
38:BD:77:ALA:O	38:BD:116:GLN:HG3	1.98	0.64
42:BH:20:ALA:HB1	42:BH:21:PRO:CD	2.27	0.64
45:BN:67:LEU:O	45:BN:68:GLU:HB2	1.97	0.64
48:BQ:30:GLY:HA2	48:BQ:107:ALA:HB2	1.78	0.64
57:BZ:29:TYR:HB3	57:BZ:34:ASN:HB2	1.78	0.64
1:AA:384:G:H2'	1:AA:385:C:C6	2.32	0.64
1:AA:525:C:OP1	12:AL:91:LYS:HE2	1.98	0.64
1:AA:1090:U:C4'	1:AA:1170:A:H2	2.11	0.64
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.33	0.64
1:AA:1415:G:H2'	1:AA:1416:G:H8	1.62	0.64
2:AB:43:ASP:OD2	2:AB:46:LYS:HB2	1.98	0.64
2:AB:220:ASP:O	2:AB:223:ILE:HG13	1.97	0.64
10:AJ:4:ILE:HB	10:AJ:74:ILE:HD11	1.80	0.64
25:B0:42:GLY:HA3	35:BA:2331:G:O4'	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:42:PRO:HB2	30:B5:43:HIS:CD2	2.32	0.64
31:B6:15:GLU:CD	31:B6:44:ARG:NH1	2.51	0.64
35:BA:756:C:C2'	35:BA:757:U:H5'	2.27	0.64
35:BA:2534:A:H2'	35:BA:2535:G:O5'	1.98	0.64
36:BB:68:C:H2'	36:BB:69:G:H8	1.61	0.64
45:BN:123:TYR:CD1	45:BN:123:TYR:N	2.66	0.64
47:BP:27:HIS:CD2	47:BP:27:HIS:C	2.71	0.64
50:BS:35:ILE:HD11	50:BS:99:LYS:HE3	1.77	0.64
51:BT:51:ARG:O	51:BT:61:PHE:HA	1.96	0.64
1:AA:757:U:O2'	1:AA:879:C:H1'	1.98	0.64
3:AC:94:LEU:O	3:AC:95:THR:HG23	1.98	0.64
5:AE:72:GLN:O	5:AE:73:ASN:HB2	1.97	0.64
7:AG:7:ALA:O	7:AG:8:GLU:HB2	1.98	0.64
12:AL:6:THR:HG23	12:AL:9:GLN:HE21	1.62	0.64
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.62	0.64
22:AV:47:U:H3'	22:AV:48:C:H5'	1.80	0.64
24:AY:137:ASN:ND2	24:AY:263:ALA:H	1.95	0.64
24:AY:496:LYS:CE	24:AY:498:ILE:HD13	2.23	0.64
29:B4:1:MET:CE	41:BG:66:GLN:OE1	2.46	0.64
30:B5:35:GLU:O	30:B5:36:CYS:HB3	1.96	0.64
31:B6:28:ARG:O	31:B6:32:ASN:HB2	1.97	0.64
32:B7:23:ARG:C	32:B7:28:ARG:HH12	2.01	0.64
35:BA:1097:U:C2'	35:BA:1098:A:H5'	2.28	0.64
35:BA:1514:U:H2'	35:BA:1515:G:C8	2.33	0.64
35:BA:1689:A:H62	35:BA:1698:A:H2	1.43	0.64
35:BA:2039:C:H2'	35:BA:2040:C:C6	2.33	0.64
36:BB:115:G:H2'	36:BB:116:G:C8	2.31	0.64
39:BE:11:MET:HB3	39:BE:24:THR:HA	1.78	0.64
40:BF:7:TYR:HB3	40:BF:16:GLY:C	2.18	0.64
43:BK:13:PRO:HA	43:BK:52:ILE:HA	1.80	0.64
48:BQ:34:LEU:HB2	48:BQ:118:LEU:HD22	1.79	0.64
51:BT:1:MET:N	51:BT:7:ILE:HD11	2.12	0.64
51:BT:29:ARG:HD3	51:BT:86:ILE:HG22	1.78	0.64
53:BV:2:PHE:O	53:BV:3:ALA:CB	2.44	0.64
55:BX:70:LEU:HD23	55:BX:71:GLY:N	2.11	0.64
57:BZ:20:ARG:NH1	57:BZ:20:ARG:HB2	2.12	0.64
1:AA:189:G:H2'	1:AA:189(A):C:C6	2.33	0.64
1:AA:723:U:H5'	1:AA:724:G:OP2	1.98	0.64
2:AB:155:LEU:HD13	2:AB:155:LEU:O	1.96	0.64
4:AD:64:LEU:HB2	4:AD:198:VAL:HG11	1.77	0.64
7:AG:27:ILE:HD11	7:AG:40:ALA:HA	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:3:GLN:NE2	9:AI:20:ARG:HH21	1.94	0.64
14:AN:44:LEU:HD12	14:AN:44:LEU:O	1.97	0.64
16:AP:4:ILE:HG13	16:AP:64:ALA:HB1	1.79	0.64
22:AV:61:C:O2'	22:AV:62:C:H5'	1.97	0.64
24:AY:8:ASP:O	24:AY:9:LEU:HB3	1.98	0.64
25:B0:51:VAL:HG21	25:B0:79:VAL:O	1.98	0.64
27:B2:3:LEU:HD22	27:B2:7:ARG:CZ	2.28	0.64
27:B2:67:LYS:O	27:B2:70:GLN:HG3	1.98	0.64
35:BA:723:G:H2'	35:BA:724:U:C6	2.32	0.64
35:BA:1034:G:H8	35:BA:1034:G:OP1	1.79	0.64
35:BA:1485:G:N3	35:BA:1505:C:N3	2.45	0.64
35:BA:1887:C:C3'	35:BA:1888:G:H5"	2.27	0.64
35:BA:2713:A:H3'	35:BA:2714:G:C5'	2.28	0.64
42:BH:89:ILE:O	42:BH:89:ILE:HG13	1.97	0.64
45:BN:102:ALA:O	45:BN:106:MET:CE	2.46	0.64
46:BO:69:ILE:HD12	46:BO:69:ILE:N	2.13	0.64
46:BO:87:ILE:HD13	46:BO:87:ILE:N	2.12	0.64
1:AA:203:U:H5"	1:AA:204:U:OP1	1.97	0.64
1:AA:1239:A:H2'	1:AA:1298:C:N4	2.13	0.64
1:AA:1298:C:O2	1:AA:1298:C:H2'	1.96	0.64
1:AA:1323:G:H2'	1:AA:1324:A:H8	1.61	0.64
1:AA:1342:C:O2'	1:AA:1343:G:H5'	1.98	0.64
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	2.13	0.64
18:AR:74:ARG:HD3	18:AR:81:PHE:CD2	2.33	0.64
20:AT:54:LYS:HA	20:AT:57:ARG:NH2	2.13	0.64
24:AY:105:ILE:N	24:AY:105:ILE:HD12	2.13	0.64
30:B5:48:GLU:O	30:B5:49:CYS:CB	2.43	0.64
35:BA:203:C:C3'	35:BA:204:A:H5"	2.26	0.64
35:BA:1947:C:H2'	35:BA:1948:G:H5"	1.79	0.64
35:BA:2170:A:H5"	37:BC:135:ARG:HH21	1.61	0.64
39:BE:8:LYS:HG2	39:BE:192:ASN:HA	1.79	0.64
43:BK:30:HIS:CE1	43:BK:59:ILE:HB	2.33	0.64
46:BO:10:VAL:HG21	46:BO:16:ALA:O	1.98	0.64
51:BT:28:VAL:HG13	51:BT:46:GLU:CA	2.26	0.64
1:AA:630:G:H2'	1:AA:631:G:C5'	2.27	0.64
3:AC:70:VAL:CG1	3:AC:71:ALA:H	2.09	0.64
3:AC:131:ARG:HH21	3:AC:168:ALA:HB2	1.63	0.64
3:AC:142:MET:HE2	3:AC:171:GLY:HA3	1.80	0.64
11:AK:48:ILE:HG22	11:AK:49:GLY:N	2.13	0.64
16:AP:53:VAL:CG2	16:AP:54:GLU:H	2.10	0.64
24:AY:614:GLU:HA	24:AY:617:MET:HB2	1.78	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B3:56:VAL:HG12	28:B3:57:GLU:N	2.13	0.64
35:BA:360:G:O2'	35:BA:361:G:H5'	1.98	0.64
35:BA:514:A:H2'	35:BA:515:A:H8	1.63	0.64
35:BA:1767:C:H2'	35:BA:1768:U:O4'	1.98	0.64
35:BA:2111:C:C2	35:BA:2147:G:N2	2.66	0.64
41:BG:16:ARG:O	41:BG:20:ILE:HG13	1.97	0.64
47:BP:71:VAL:O	47:BP:71:VAL:HG22	1.98	0.64
51:BT:66:VAL:HA	51:BT:71:GLY:HA2	1.80	0.64
52:BU:107:ALA:HA	52:BU:110:VAL:HG23	1.80	0.64
1:AA:1305:G:OP1	21:AU:2:GLY:N	2.31	0.64
1:AA:1363(A):A:H4'	1:AA:1364:U:H5"	1.80	0.64
4:AD:194:LEU:HB3	4:AD:196:LEU:CD1	2.28	0.64
4:AD:203:VAL:O	4:AD:206:PHE:HB3	1.97	0.64
7:AG:153:HIS:CE1	11:AK:58:PRO:HD2	2.33	0.64
10:AJ:32:ALA:HB3	10:AJ:78:ASN:HD21	1.63	0.64
24:AY:162:VAL:HG21	24:AY:255:ILE:HD11	1.79	0.64
24:AY:343:ASN:HD22	24:AY:344:THR:N	1.94	0.64
29:B4:4:GLY:O	29:B4:5:ILE:HG23	1.98	0.64
35:BA:271(F):C:O2'	35:BA:271(G):C:H5'	1.98	0.64
35:BA:1717:G:C2'	35:BA:1718:G:H5"	2.28	0.64
35:BA:2076:U:H5'	35:BA:2238:G:N2	2.12	0.64
35:BA:2150:U:H2'	35:BA:2151:G:C8	2.33	0.64
35:BA:2345:G:O2'	35:BA:2381:C:H2'	1.97	0.64
36:BB:21:G:H2'	36:BB:21:G:N3	2.11	0.64
40:BF:132:VAL:O	40:BF:133:ASN:HB2	1.97	0.64
42:BH:124:GLU:HB2	42:BH:132:ARG:HG3	1.79	0.64
43:BK:8:VAL:HG12	43:BK:10:LEU:HG	1.80	0.64
43:BK:42:ASN:O	43:BK:46:ALA:HB2	1.98	0.64
45:BN:30:ILE:HG22	45:BN:34:LEU:CD2	2.28	0.64
48:BQ:56:ARG:HH21	57:BZ:180:VAL:HG21	1.63	0.64
50:BS:30:ARG:NH2	50:BS:62:LYS:HD2	2.11	0.64
51:BT:42:ILE:HG13	51:BT:42:ILE:O	1.98	0.64
51:BT:99:LEU:CB	51:BT:101:PHE:HE1	2.11	0.64
1:AA:192:U:O4'	20:AT:103:GLY:HA2	1.98	0.64
10:AJ:55:LYS:H	10:AJ:55:LYS:HE3	1.62	0.64
11:AK:21:ILE:N	11:AK:21:ILE:HD12	2.13	0.64
24:AY:553:GLY:HA2	24:AY:560:VAL:CG2	2.28	0.64
35:BA:933:A:H2'	35:BA:934:G:O4'	1.98	0.64
35:BA:1849:G:H2'	35:BA:1849:G:N3	2.12	0.64
35:BA:1948:G:H5'	35:BA:1948:G:H8	1.63	0.64
35:BA:2219:G:H8	35:BA:2219:G:O5'	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:139:GLY:H	38:BD:165:ILE:HB	1.62	0.64
47:BP:24:GLY:HA2	47:BP:33:ARG:NH1	2.13	0.64
50:BS:77:ALA:HB1	50:BS:82:ILE:HB	1.80	0.64
53:BV:16:PRO:O	53:BV:96:ILE:O	2.16	0.64
55:BX:10:ALA:O	55:BX:28:PHE:HB2	1.97	0.64
1:AA:261:U:O2	1:AA:263:A:C8	2.51	0.63
1:AA:1377:A:H2'	7:AG:7:ALA:HB2	1.80	0.63
2:AB:82:ARG:O	2:AB:86:GLU:HG3	1.98	0.63
7:AG:78:ARG:NH1	7:AG:79:ARG:HE	1.92	0.63
11:AK:103:LEU:CD2	11:AK:103:LEU:N	2.60	0.63
19:AS:31:ILE:HG23	19:AS:31:ILE:O	1.97	0.63
22:AV:3:C:H42	22:AV:70:G:H1	1.45	0.63
24:AY:10:LYS:HE3	24:AY:284:LEU:HD23	1.80	0.63
27:B2:32:LEU:HG	27:B2:53:LEU:HD13	1.79	0.63
35:BA:253:C:H2'	35:BA:254:G:O4'	1.99	0.63
35:BA:904:C:H5'	35:BA:904:C:H6	1.64	0.63
35:BA:1052:C:H3'	35:BA:1052:C:H6	1.63	0.63
35:BA:2137:C:O2'	35:BA:2138:C:H5'	1.97	0.63
35:BA:2539:C:O2	35:BA:2539:C:H2'	1.98	0.63
35:BA:2672:G:C2'	35:BA:2673:G:H5"	2.29	0.63
38:BD:276:LYS:C	38:BD:276:LYS:HD3	2.17	0.63
39:BE:107:THR:O	39:BE:107:THR:HG22	1.98	0.63
41:BG:36:LYS:HA	41:BG:99:MET:SD	2.38	0.63
41:BG:82:LEU:HD21	41:BG:87:PRO:HG3	1.80	0.63
47:BP:16:ARG:CZ	47:BP:18:ARG:HB2	2.29	0.63
47:BP:64:LYS:O	47:BP:64:LYS:HD3	1.98	0.63
47:BP:147:LEU:O	47:BP:148:LEU:HB2	1.98	0.63
48:BQ:110:THR:HG23	48:BQ:113:GLN:CG	2.22	0.63
51:BT:129:ARG:O	51:BT:129:ARG:CG	2.47	0.63
57:BZ:151:HIS:CB	57:BZ:170:THR:HA	2.28	0.63
1:AA:300:A:H2'	1:AA:301:G:O4'	1.97	0.63
1:AA:356:A:H2'	1:AA:357:G:C8	2.31	0.63
2:AB:12:GLU:HA	2:AB:16:HIS:ND1	2.13	0.63
4:AD:8:VAL:HB	4:AD:21:LEU:HD12	1.80	0.63
9:AI:63:ILE:HG22	9:AI:64:THR:N	2.14	0.63
10:AJ:90:LEU:H	10:AJ:91:PRO:HD3	1.63	0.63
12:AL:34:ARG:O	12:AL:61:THR:HG23	1.97	0.63
12:AL:70:ILE:HD12	12:AL:75:HIS:CD2	2.33	0.63
16:AP:53:VAL:CG2	16:AP:54:GLU:N	2.61	0.63
26:B1:90:ILE:HG22	26:B1:94:LEU:CD1	2.28	0.63
35:BA:1435:G:H5'	35:BA:1436:G:OP2	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:49:LEU:N	39:BE:49:LEU:CD2	2.61	0.63
42:BH:170:ARG:O	42:BH:171:LEU:CB	2.44	0.63
45:BN:54:VAL:HB	45:BN:122:VAL:HG22	1.80	0.63
45:BN:119:ARG:HH11	45:BN:119:ARG:HG3	1.64	0.63
46:BO:98:VAL:CG2	46:BO:118:ALA:HA	2.29	0.63
47:BP:23:PRO:O	47:BP:33:ARG:HD2	1.98	0.63
47:BP:27:HIS:HD2	47:BP:28:GLY:H	1.46	0.63
51:BT:7:ILE:O	51:BT:10:VAL:HB	1.98	0.63
56:BY:84:ARG:HD2	56:BY:97:ARG:HD2	1.78	0.63
1:AA:1005:A:OP1	1:AA:1006:C:N3	2.32	0.63
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.34	0.63
2:AB:8:LYS:O	2:AB:11:LEU:N	2.31	0.63
5:AE:145:LYS:HA	8:AH:107:LEU:HD21	1.80	0.63
11:AK:29:ILE:HB	11:AK:44:SER:CB	2.28	0.63
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.33	0.63
25:B0:43:THR:HG23	25:B0:43:THR:O	1.99	0.63
26:B1:67:ILE:N	26:B1:68:PRO:HD2	2.14	0.63
29:B4:21:VAL:O	29:B4:21:VAL:HG12	1.97	0.63
31:B6:18:ARG:HG3	31:B6:19:ARG:H	1.63	0.63
35:BA:1996:C:H4'	35:BA:1997:G:H5'	1.81	0.63
35:BA:2345:G:C5'	35:BA:2346:A:H5'	2.28	0.63
35:BA:2462:U:H2'	35:BA:2463:C:H6	1.62	0.63
38:BD:9:TYR:HD1	38:BD:10:THR:HG22	1.60	0.63
40:BF:125:LEU:HD23	40:BF:125:LEU:H	1.62	0.63
41:BG:27:ASN:HB3	41:BG:30:GLU:HB2	1.80	0.63
41:BG:146:TYR:O	41:BG:149:VAL:HG12	1.98	0.63
47:BP:23:PRO:C	47:BP:33:ARG:CZ	2.67	0.63
47:BP:112:LEU:O	47:BP:128:HIS:HB2	1.99	0.63
54:BW:20:VAL:CG2	54:BW:21:VAL:H	2.11	0.63
1:AA:975:A:H5'	1:AA:975:A:H8	1.63	0.63
1:AA:1348:U:H2'	1:AA:1349:A:H8	1.64	0.63
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.62	0.63
22:AV:75:C:C6	22:AV:76:A:H8	2.14	0.63
24:AY:624:LEU:HD11	24:AY:655:TYR:OH	1.98	0.63
35:BA:319:C:O2'	35:BA:320:A:H5'	1.99	0.63
35:BA:528:A:C2	35:BA:2043:C:C5'	2.81	0.63
35:BA:1145:C:H2'	35:BA:1146:C:C6	2.34	0.63
35:BA:1237:A:O2'	35:BA:1238:G:O4'	2.16	0.63
35:BA:1835:G:H1'	35:BA:1931:U:O2	1.99	0.63
35:BA:2186:G:H2'	35:BA:2187:G:H5"	1.81	0.63
35:BA:2228:G:H2'	35:BA:2229:C:H6	1.62	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2769:C:O2'	35:BA:2770:G:H5'	1.99	0.63
38:BD:43:ARG:HB3	38:BD:54:ARG:CB	2.28	0.63
38:BD:155:LEU:HD23	38:BD:177:LEU:HD22	1.80	0.63
41:BG:139:LEU:HA	41:BG:144:ILE:HD13	1.81	0.63
42:BH:44:VAL:O	42:BH:46:GLU:HG2	1.96	0.63
43:BK:74:ALA:HB2	43:BK:111:LYS:HE2	1.80	0.63
45:BN:46:VAL:O	45:BN:47:ALA:CB	2.46	0.63
51:BT:42:ILE:HD13	51:BT:83:ILE:HD11	1.80	0.63
51:BT:45:PHE:CE2	51:BT:74:ARG:HB2	2.32	0.63
3:AC:138:VAL:O	3:AC:139:GLN:C	2.36	0.63
4:AD:13:ARG:O	4:AD:16:GLY:N	2.30	0.63
6:AF:87:ARG:HH11	6:AF:87:ARG:CG	2.11	0.63
7:AG:27:ILE:O	7:AG:27:ILE:HG23	1.97	0.63
7:AG:121:ALA:O	7:AG:125:MET:HG3	1.98	0.63
24:AY:170:ARG:O	24:AY:171:GLU:HG2	1.98	0.63
24:AY:544:LYS:O	24:AY:548:GLU:HB2	1.99	0.63
29:B4:27:THR:O	29:B4:28:LYS:CB	2.47	0.63
30:B5:34:PRO:O	30:B5:35:GLU:CB	2.44	0.63
30:B5:58:LEU:O	30:B5:58:LEU:HD22	1.97	0.63
31:B6:8:LYS:NZ	35:BA:2285:C:H5	1.90	0.63
35:BA:221:A:H61	35:BA:265:A:H8	1.46	0.63
35:BA:580:C:H2'	35:BA:581:C:H6	1.63	0.63
35:BA:1203:G:H3'	35:BA:1204:A:C5'	2.29	0.63
35:BA:2583:G:H2'	35:BA:2584:U:O2	1.98	0.63
35:BA:2810:A:H2'	39:BE:61:ARG:NH2	2.13	0.63
35:BA:2891:G:H4'	35:BA:2892:A:OP1	1.96	0.63
37:BC:176:VAL:HG21	37:BC:190:ILE:HD11	1.81	0.63
38:BD:26:LYS:HE2	38:BD:26:LYS:N	2.14	0.63
47:BP:38:GLN:HG3	47:BP:39:LYS:N	2.12	0.63
48:BQ:119:ARG:HG2	48:BQ:119:ARG:HH11	1.64	0.63
52:BU:37:GLU:O	52:BU:40:PHE:HB2	1.98	0.63
52:BU:90:VAL:HG21	53:BV:47:VAL:CG2	2.25	0.63
52:BU:104:GLN:HB3	53:BV:44:LYS:HZ1	1.63	0.63
1:AA:961:U:OP2	1:AA:1223:C:H4'	1.99	0.63
35:BA:402:A:O2'	35:BA:403:U:H5'	1.98	0.63
35:BA:821:A:H2'	35:BA:946:G:H5"	1.81	0.63
35:BA:1775:U:H2'	35:BA:1776:G:C5'	2.29	0.63
35:BA:2008:C:H2'	35:BA:2009:G:C8	2.32	0.63
35:BA:2750:A:H2'	35:BA:2752:C:N4	2.14	0.63
35:BA:2790:A:N3	35:BA:2790:A:H2'	2.14	0.63
38:BD:70:TRP:CD1	38:BD:70:TRP:C	2.72	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BH:89:ILE:C	42:BH:89:ILE:HD12	2.19	0.63
45:BN:61:ARG:HG3	45:BN:61:ARG:NH1	2.08	0.63
45:BN:67:LEU:HD23	45:BN:87:LEU:HB3	1.80	0.63
45:BN:89:LYS:O	45:BN:93:THR:HG22	1.99	0.63
47:BP:80:TYR:CD1	47:BP:111:ARG:HB3	2.34	0.63
53:BV:2:PHE:CE1	53:BV:13:ARG:NH1	2.66	0.63
54:BW:5:ALA:O	54:BW:6:ILE:HB	1.97	0.63
1:AA:1015:A:H2'	1:AA:1016:A:O4'	1.99	0.63
1:AA:1080:A:H5"	5:AE:16:THR:HG21	1.79	0.63
1:AA:1226:C:H41	13:AM:104:ARG:HD2	1.62	0.63
2:AB:233:SER:OG	2:AB:234:PRO:HD2	1.98	0.63
17:AQ:45:HIS:HB2	17:AQ:65:ILE:HD13	1.79	0.63
24:AY:314:PHE:HD1	24:AY:315:LYS:HB2	1.63	0.63
24:AY:468:ARG:C	24:AY:470:PHE:H	2.02	0.63
35:BA:272(J):C:H5'	35:BA:274:G:OP2	1.98	0.63
35:BA:892:G:H2'	35:BA:893:C:C6	2.33	0.63
35:BA:1542:A:H8	35:BA:1542:A:H3'	1.63	0.63
39:BE:119:ARG:HD2	39:BE:120:TRP:NE1	2.12	0.63
42:BH:42:ARG:HG3	42:BH:42:ARG:NH1	2.13	0.63
43:BK:93:ARG:HB2	57:BZ:112:ARG:NH2	2.10	0.63
50:BS:85:VAL:HG23	50:BS:106:ARG:CG	2.28	0.63
51:BT:30:VAL:HG21	51:BT:84:GLN:H	1.63	0.63
52:BU:51:LYS:HA	52:BU:54:LYS:HE2	1.81	0.63
55:BX:36:LYS:HB3	55:BX:56:THR:HG21	1.80	0.63
57:BZ:89:PHE:HE2	57:BZ:96:VAL:HG21	1.62	0.63
1:AA:1329:A:P	13:AM:28:ALA:HB3	2.39	0.63
4:AD:122:ARG:NH1	4:AD:134:ASP:HB2	2.13	0.63
12:AL:45:PRO:HG3	12:AL:53:ARG:HD3	1.81	0.63
33:B8:31:HIS:HE1	35:BA:2392:A:OP2	1.81	0.63
35:BA:212:G:C8	35:BA:212:G:C5'	2.65	0.63
35:BA:1225:G:H2'	35:BA:1226:A:C8	2.34	0.63
35:BA:2142:C:C2'	35:BA:2143:C:H5'	2.29	0.63
35:BA:2244:U:O2	35:BA:2434:A:H2'	1.99	0.63
35:BA:2577:A:C5'	35:BA:2578:G:H5'	2.26	0.63
36:BB:82:G:O2'	36:BB:83:G:H5'	1.99	0.63
39:BE:25:VAL:CG1	39:BE:26:ILE:N	2.61	0.63
41:BG:131:TYR:HE2	41:BG:133:LEU:HD23	1.63	0.63
45:BN:126:PRO:O	45:BN:127:ASP:HB2	1.99	0.63
52:BU:70:ARG:NH2	52:BU:75:ASN:HB2	2.14	0.63
56:BY:43:ASN:ND2	56:BY:64:GLU:HG3	2.14	0.63
1:AA:22:G:O2'	1:AA:913:A:N1	2.26	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1409:C:H2'	1:AA:1410:G:C8	2.33	0.63
6:AF:69:GLU:CD	6:AF:69:GLU:H	2.02	0.63
6:AF:91:VAL:HG12	6:AF:92:LYS:O	1.98	0.63
24:AY:25:LYS:HB2	59:AY:702:GDP:O2B	1.98	0.63
24:AY:132:ARG:O	24:AY:132:ARG:HG2	1.99	0.63
24:AY:415:PRO:CB	24:AY:421:GLN:HA	2.28	0.63
28:B3:40:THR:HG23	28:B3:43:ILE:HG13	1.80	0.63
29:B4:6:HIS:HB3	29:B4:7:PRO:CD	2.29	0.63
34:B9:29:ASN:HD21	34:B9:32:HIS:CG	2.17	0.63
35:BA:6:A:O2'	45:BN:130:HIS:HB2	1.99	0.63
35:BA:84:A:H5"	56:BY:9:LYS:HZ3	1.64	0.63
35:BA:1012:U:H3	45:BN:25:ARG:HE	1.46	0.63
35:BA:1058:G:N2	35:BA:1081:U:H1'	2.14	0.63
35:BA:2472:G:H3'	35:BA:2475:C:N4	2.14	0.63
35:BA:2832:U:H1'	35:BA:2834:G:N3	2.14	0.63
51:BT:42:ILE:HD13	51:BT:83:ILE:HD13	1.81	0.63
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.17	0.62
4:AD:153:ARG:NH1	4:AD:153:ARG:HG2	2.14	0.62
6:AF:19:LEU:O	6:AF:19:LEU:HD23	1.99	0.62
6:AF:69:GLU:O	6:AF:72:VAL:HG12	1.99	0.62
35:BA:16:G:O2'	35:BA:17:G:H5'	1.99	0.62
35:BA:71:A:H4'	35:BA:72:U:H5"	1.81	0.62
35:BA:580:C:H2'	35:BA:581:C:C6	2.33	0.62
35:BA:603:A:H4'	35:BA:604:G:O5'	1.99	0.62
35:BA:991:C:H6	35:BA:991:C:H5'	1.63	0.62
35:BA:1081:U:O3'	43:BK:117:THR:HG22	1.99	0.62
35:BA:1529:G:C2	35:BA:1541:G:N2	2.67	0.62
35:BA:1782:C:H2'	35:BA:1783:A:H5'	1.80	0.62
35:BA:2309:A:H2'	35:BA:2310:A:H5"	1.81	0.62
35:BA:2747:G:O2'	42:BH:67:LEU:HD12	1.99	0.62
39:BE:170:LEU:HD12	39:BE:170:LEU:N	2.14	0.62
41:BG:77:ILE:HG21	41:BG:80:PHE:HB2	1.81	0.62
42:BH:171:LEU:CD2	42:BH:172:LYS:O	2.47	0.62
43:BK:27:LEU:HA	43:BK:30:HIS:HB2	1.80	0.62
49:BR:100:LEU:HD22	49:BR:100:LEU:N	2.12	0.62
53:BV:54:GLY:O	53:BV:55:ALA:HB2	1.98	0.62
54:BW:64:MET:O	54:BW:65:LEU:HB3	1.99	0.62
56:BY:86:ARG:CB	56:BY:88:LYS:HZ2	2.11	0.62
1:AA:992:U:H4'	1:AA:993:G:O5'	1.99	0.62
1:AA:1220:G:H2'	1:AA:1221:G:H8	1.63	0.62
1:AA:1348:U:H4'	9:AI:120:ARG:HG3	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:167:PRO:HG2	2:AB:192:SER:OG	1.98	0.62
18:AR:31:LEU:HD23	18:AR:31:LEU:H	1.64	0.62
29:B4:12:ALA:HB1	29:B4:29:PRO:HA	1.81	0.62
35:BA:285:C:O2'	35:BA:286:C:H5"	1.99	0.62
35:BA:325:G:O2'	35:BA:326:G:H5'	1.99	0.62
35:BA:528:A:C2	35:BA:2043:C:H4'	2.34	0.62
35:BA:536:A:H2'	35:BA:537:C:C6	2.34	0.62
35:BA:1268:A:H2'	35:BA:1269:A:O4'	1.98	0.62
35:BA:2122:U:H2'	35:BA:2123:G:H8	1.62	0.62
38:BD:27:THR:HG21	38:BD:83:GLU:HG2	1.81	0.62
41:BG:63:ILE:HD12	41:BG:64:THR:HB	1.81	0.62
47:BP:146:VAL:O	47:BP:148:LEU:CD1	2.47	0.62
52:BU:70:ARG:HA	52:BU:74:LEU:O	1.99	0.62
54:BW:25:ARG:HB2	54:BW:25:ARG:NH1	2.15	0.62
56:BY:62:GLU:HG2	56:BY:63:LYS:H	1.64	0.62
1:AA:235:C:H5'	17:AQ:70:ARG:HG2	1.80	0.62
1:AA:1525:G:H2'	1:AA:1526:G:H8	1.64	0.62
3:AC:90:GLU:HA	3:AC:93:LYS:CB	2.29	0.62
7:AG:64:GLN:O	7:AG:67:GLU:HB3	2.00	0.62
10:AJ:4:ILE:HD11	10:AJ:77:PRO:HB3	1.80	0.62
24:AY:255:ILE:HG12	24:AY:256:THR:N	2.15	0.62
29:B4:19:GLY:O	29:B4:21:VAL:HG23	2.00	0.62
31:B6:41:PRO:HD2	31:B6:45:LYS:O	1.99	0.62
35:BA:363(A):A:H2'	35:BA:363(B):G:H8	1.62	0.62
35:BA:455:C:N3	35:BA:473:G:H5'	2.14	0.62
35:BA:528:A:H2	35:BA:2043:C:C4'	2.13	0.62
35:BA:567:A:N1	35:BA:571:A:H8	1.97	0.62
35:BA:653:A:H5'	35:BA:654:A:P	2.39	0.62
35:BA:1259:G:O2'	35:BA:1260:G:H5'	1.98	0.62
35:BA:1779:U:C5	35:BA:1784:A:N7	2.68	0.62
35:BA:2476:A:N1	35:BA:2477:C:C5	2.67	0.62
35:BA:2815:C:H2'	35:BA:2816:C:H6	1.59	0.62
37:BC:191:ARG:HG3	37:BC:191:ARG:NH1	2.05	0.62
38:BD:91:ARG:HG2	38:BD:91:ARG:NH1	2.13	0.62
39:BE:9:VAL:HG22	39:BE:10:GLY:H	1.63	0.62
40:BF:64:ILE:CD1	40:BF:65:TRP:CD2	2.81	0.62
41:BG:111:LEU:HA	41:BG:114:ILE:HD12	1.81	0.62
53:BV:28:GLU:HB2	53:BV:31:ALA:HB2	1.81	0.62
53:BV:39:LEU:CD1	53:BV:51:VAL:HA	2.29	0.62
54:BW:59:VAL:O	54:BW:59:VAL:HG12	1.99	0.62
57:BZ:180:VAL:HG12	57:BZ:181:GLU:N	2.13	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:72:C:H2'	1:AA:73:G:H8	1.63	0.62
1:AA:368:U:OP1	24:AY:353:ALA:HB1	1.99	0.62
1:AA:1310:G:O2'	1:AA:1311:G:H5'	1.99	0.62
1:AA:1513:A:H2'	1:AA:1514:C:H6	1.63	0.62
2:AB:97:TRP:CH2	2:AB:173:ALA:HA	2.34	0.62
6:AF:98:LEU:H	6:AF:98:LEU:HD12	1.64	0.62
16:AP:28:ARG:HG2	16:AP:28:ARG:HH11	1.64	0.62
24:AY:192:LEU:O	24:AY:192:LEU:HD13	1.99	0.62
35:BA:55:G:H2'	35:BA:56:A:H8	1.64	0.62
35:BA:99:U:O2	35:BA:99:U:H2'	1.99	0.62
35:BA:272(I):U:O2	35:BA:272(I):U:H3'	1.99	0.62
35:BA:2260:C:H2'	35:BA:2261:C:H6	1.64	0.62
37:BC:74:ARG:N	37:BC:112:ASP:HB2	2.14	0.62
39:BE:45:THR:O	39:BE:46:ALA:HB2	1.99	0.62
40:BF:4:VAL:HG22	40:BF:19:GLU:OE1	1.98	0.62
41:BG:42:GLY:HA2	41:BG:89:GLY:HA2	1.82	0.62
45:BN:35:ARG:O	45:BN:37:LYS:N	2.32	0.62
45:BN:47:ALA:N	45:BN:48:MET:HE2	2.14	0.62
47:BP:47:ASP:HB2	47:BP:51:PHE:HB2	1.80	0.62
47:BP:58:THR:O	47:BP:61:ARG:NE	2.23	0.62
49:BR:10:LEU:HD22	49:BR:17:ARG:HD3	1.80	0.62
49:BR:83:ILE:HA	49:BR:86:ARG:HD3	1.80	0.62
49:BR:87:TYR:C	49:BR:89:ASP:H	2.01	0.62
50:BS:66:ALA:O	50:BS:99:LYS:HA	1.99	0.62
50:BS:98:VAL:HG12	50:BS:100:ALA:H	1.63	0.62
52:BU:104:GLN:HB3	53:BV:44:LYS:HZ3	1.64	0.62
2:AB:168:THR:HG23	2:AB:192:SER:CB	2.24	0.62
6:AF:22:GLU:O	6:AF:26:ILE:HG13	1.99	0.62
10:AJ:61:GLU:OE1	14:AN:49:HIS:CE1	2.50	0.62
12:AL:86:ARG:HH22	12:AL:99:HIS:CD2	2.17	0.62
16:AP:9:PHE:CE2	16:AP:18:ARG:CZ	2.82	0.62
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.12	0.62
24:AY:20:HIS:CG	24:AY:117:GLN:HB3	2.35	0.62
24:AY:215:LYS:HA	24:AY:218:GLU:HB3	1.81	0.62
24:AY:404:VAL:N	24:AY:405:PRO:HD3	2.13	0.62
24:AY:411:VAL:HG12	24:AY:412:ALA:N	2.12	0.62
27:B2:3:LEU:HD22	27:B2:7:ARG:NH2	2.14	0.62
31:B6:43:CYS:HB3	31:B6:44:ARG:HH21	1.63	0.62
35:BA:1010:A:H1'	35:BA:1153:C:H1'	1.79	0.62
35:BA:1708:C:O2'	35:BA:1709:U:H5'	1.99	0.62
35:BA:1865:G:H2'	35:BA:1866:C:H5"	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2346:A:C2	35:BA:2383:G:C2	2.87	0.62
35:BA:2840:C:H5”	49:BR:53:HIS:CD2	2.34	0.62
35:BA:2876:G:H4’	51:BT:3:ARG:NE	2.12	0.62
45:BN:62:VAL:HG13	45:BN:62:VAL:O	1.99	0.62
45:BN:62:VAL:CG2	45:BN:66:LYS:HG3	2.28	0.62
51:BT:50:ILE:HG23	51:BT:99:LEU:O	2.00	0.62
57:BZ:115:GLY:H	57:BZ:177:PRO:CG	2.13	0.62
1:AA:1133:G:H22	1:AA:1143:G:H1’	1.64	0.62
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.82	0.62
8:AH:42:GLU:HG3	8:AH:109:ILE:HD12	1.81	0.62
9:AI:79:LEU:CD1	9:AI:83:ARG:HD2	2.28	0.62
13:AM:3:ARG:HA	13:AM:9:ILE:HG13	1.80	0.62
35:BA:569:U:C4	35:BA:570:G:C6	2.86	0.62
35:BA:979:G:H2’	35:BA:982:C:N4	2.15	0.62
35:BA:2162:G:H2’	35:BA:2163:C:C6	2.34	0.62
35:BA:2346:A:H1’	35:BA:2383:G:C8	2.35	0.62
35:BA:2662:A:H2’	35:BA:2663:G:O4’	2.00	0.62
35:BA:2732:G:H3’	35:BA:2733:A:C5’	2.27	0.62
36:BB:104:U:H6	36:BB:104:U:H5”	1.65	0.62
40:BF:182:ASN:ND2	40:BF:185:ASP:OD2	2.30	0.62
45:BN:40:PRO:HB2	52:BU:100:VAL:HG22	1.80	0.62
51:BT:85:LYS:NZ	51:BT:85:LYS:HB3	2.15	0.62
52:BU:113:ALA:C	52:BU:115:ALA:H	2.01	0.62
55:BX:41:ASN:C	55:BX:43:VAL:H	2.01	0.62
1:AA:1325:C:H2’	1:AA:1326:C:C6	2.34	0.62
2:AB:223:ILE:HA	2:AB:226:ARG:NE	2.15	0.62
3:AC:142:MET:CE	3:AC:171:GLY:HA3	2.29	0.62
6:AF:87:ARG:HH11	6:AF:87:ARG:HG2	1.63	0.62
24:AY:276:VAL:CA	24:AY:280:LEU:HD23	2.26	0.62
28:B3:44:ARG:O	28:B3:48:GLU:HG2	1.98	0.62
30:B5:56:LYS:HG3	30:B5:57:VAL:N	2.14	0.62
34:B9:31:LYS:HE2	35:BA:2478:A:H5’	1.81	0.62
35:BA:30:G:O2’	35:BA:31:C:H5’	1.99	0.62
35:BA:825:C:H2’	35:BA:826:U:O4’	1.99	0.62
35:BA:1657:C:O2’	35:BA:1658:C:H5’	1.99	0.62
35:BA:1662:C:H2’	35:BA:1663:C:C6	2.34	0.62
35:BA:2037:G:H2’	35:BA:2038:G:C8	2.35	0.62
35:BA:2543:G:H5’	35:BA:2543:G:C8	2.29	0.62
38:BD:112:GLN:H	38:BD:115:GLN:NE2	1.98	0.62
39:BE:101:ARG:HB3	39:BE:201:THR:HG21	1.82	0.62
47:BP:41:ARG:NH1	47:BP:41:ARG:HB3	2.14	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BP:108:LYS:C	47:BP:110:TYR:H	2.02	0.62
52:BU:72:HIS:HE1	52:BU:107:ALA:HB2	1.65	0.62
54:BW:6:ILE:HG13	54:BW:104:THR:HG23	1.82	0.62
55:BX:63:LYS:HA	55:BX:72:LYS:HA	1.82	0.62
1:AA:129(A):G:H5"	1:AA:129(A):G:C8	2.35	0.62
1:AA:176:C:H2'	1:AA:177:C:H6	1.62	0.62
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.34	0.62
1:AA:1347:G:O2'	1:AA:1348:U:P	2.58	0.62
28:B3:28:LEU:CD2	28:B3:35:ARG:HD2	2.30	0.62
31:B6:16:CYS:SG	31:B6:48:VAL:CG2	2.88	0.62
31:B6:24:GLU:OE2	35:BA:2346:A:H8	1.83	0.62
35:BA:880:G:H2'	35:BA:881:G:H8	1.64	0.62
35:BA:889:C:H2'	35:BA:890:A:O4'	1.99	0.62
35:BA:1437:C:H2'	35:BA:1438:U:C6	2.34	0.62
35:BA:1771:C:H2'	35:BA:1772:G:H8	1.64	0.62
35:BA:2189:U:C3'	35:BA:2190:G:H5"	2.30	0.62
37:BC:138:LEU:HD22	37:BC:139:PRO:N	2.15	0.62
38:BD:134:ARG:HD3	38:BD:135:PHE:HE1	1.65	0.62
40:BF:20:LEU:HD22	40:BF:23:ASP:OD2	1.98	0.62
40:BF:177:ALA:HB1	40:BF:178:PRO:HD2	1.82	0.62
42:BH:153:LYS:HG3	42:BH:154:PRO:HD2	1.81	0.62
44:BL:90:ALA:HB1	44:BL:91:PRO:HA	1.82	0.62
47:BP:106:LEU:N	47:BP:106:LEU:HD12	2.14	0.62
56:BY:28:LYS:HB3	56:BY:37:VAL:CB	2.17	0.62
10:AJ:3:LYS:HD2	10:AJ:77:PRO:CD	2.30	0.62
24:AY:247:ARG:O	24:AY:251:ILE:HG13	1.99	0.62
26:B1:86:SER:HA	26:B1:89:GLU:OE2	2.00	0.62
30:B5:40:LYS:HZ1	30:B5:46:CYS:H	1.46	0.62
33:B8:33:ASN:HA	33:B8:36:LYS:HG3	1.81	0.62
35:BA:364:C:H2'	35:BA:365:C:C5'	2.29	0.62
35:BA:1043:C:O5'	35:BA:1043:C:H6	1.82	0.62
35:BA:1212:G:O2'	35:BA:1236:G:N2	2.33	0.62
35:BA:1386:C:H2'	35:BA:1387:C:H6	1.64	0.62
35:BA:2186:G:C2'	35:BA:2187:G:H5"	2.30	0.62
35:BA:2336:A:N3	35:BA:2385:C:H1'	2.15	0.62
40:BF:9:ILE:HG12	40:BF:14:PRO:HA	1.80	0.62
42:BH:137:ASP:CB	42:BH:140:LYS:HD2	2.26	0.62
42:BH:144:VAL:HA	42:BH:147:ASN:HB2	1.82	0.62
47:BP:39:LYS:HE2	47:BP:40:SER:H	1.65	0.62
47:BP:114:ILE:HD12	47:BP:115:LEU:N	2.14	0.62
53:BV:6:LYS:HE2	53:BV:37:VAL:HG11	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:78:G:H1	1:AA:91:C:N4	1.98	0.62
1:AA:176:C:H2'	1:AA:177:C:C6	2.34	0.62
1:AA:688:G:H2'	1:AA:689:C:H6	1.65	0.62
1:AA:950:U:H2'	1:AA:951:G:C8	2.35	0.62
1:AA:1002:G:H22	1:AA:1039:C:H2'	1.65	0.62
1:AA:1029:C:O2'	1:AA:1032:G:N2	2.32	0.62
1:AA:1057:G:H5"	3:AC:154:SER:HB2	1.80	0.62
4:AD:114:ARG:NH1	4:AD:114:ARG:CG	2.60	0.62
15:AO:17:ARG:HG3	15:AO:17:ARG:NH1	2.15	0.62
18:AR:44:LEU:HD22	18:AR:79:LEU:HD22	1.81	0.62
29:B4:37:SER:O	29:B4:38:LYS:HB2	1.99	0.62
33:B8:13:ARG:HD3	47:BP:61:ARG:O	2.00	0.62
34:B9:10:ILE:O	34:B9:11:CYS:HB3	1.99	0.62
35:BA:1465:G:H2'	35:BA:1466:G:H8	1.65	0.62
35:BA:2223:G:C2'	35:BA:2224:G:H5'	2.30	0.62
35:BA:2312:U:OP1	41:BG:73:ALA:HA	1.98	0.62
38:BD:35:LYS:HD2	38:BD:36:PRO:CA	2.29	0.62
38:BD:130:ALA:HB2	38:BD:192:THR:HB	1.81	0.62
41:BG:59:GLU:C	41:BG:61:ALA:H	2.02	0.62
43:BK:10:LEU:HD12	43:BK:57:ILE:HD13	1.82	0.62
43:BK:103:GLN:O	43:BK:106:GLU:HG2	1.99	0.62
46:BO:64:ARG:NE	51:BT:70:VAL:HG21	2.15	0.62
46:BO:104:ARG:HE	51:BT:33:LYS:HE3	1.65	0.62
48:BQ:48:GLU:O	48:BQ:52:VAL:HG23	2.00	0.62
52:BU:49:HIS:O	52:BU:52:ARG:HB2	2.00	0.62
57:BZ:5:LEU:HB3	57:BZ:59:LEU:HD23	1.81	0.62
1:AA:718:G:C8	11:AK:116:HIS:HB3	2.34	0.61
2:AB:155:LEU:O	2:AB:155:LEU:CD1	2.48	0.61
3:AC:154:SER:O	3:AC:165:THR:HA	2.00	0.61
12:AL:126:LYS:HE2	12:AL:128:ALA:H	1.65	0.61
26:B1:84:GLY:O	26:B1:86:SER:N	2.33	0.61
35:BA:55:G:H2'	35:BA:56:A:C8	2.35	0.61
35:BA:586:A:H5'	40:BF:89:VAL:HG21	1.82	0.61
35:BA:1001:A:H2'	35:BA:1002:G:O4'	2.00	0.61
35:BA:1416:G:HO2'	35:BA:1417:C:H5	1.47	0.61
35:BA:1663:C:O2'	35:BA:1664:A:H5'	1.99	0.61
35:BA:1771:C:H2'	35:BA:1772:G:C8	2.35	0.61
35:BA:1803:A:O3'	38:BD:259:THR:CG2	2.44	0.61
35:BA:2631:G:N2	39:BE:61:ARG:HH12	1.98	0.61
51:BT:38:ASN:C	51:BT:38:ASN:ND2	2.44	0.61
53:BV:8:GLY:O	53:BV:10:LYS:CE	2.48	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BZ:18:LEU:O	57:BZ:21:ALA:HB3	2.00	0.61
1:AA:110:C:H6	1:AA:110:C:O5'	1.82	0.61
4:AD:57:ARG:HB3	4:AD:206:PHE:HB2	1.82	0.61
8:AH:88:LYS:HB3	8:AH:89:PRO:HD2	1.82	0.61
13:AM:81:LEU:HD22	13:AM:81:LEU:N	2.15	0.61
16:AP:1:MET:HG3	16:AP:65:GLN:HG3	1.82	0.61
24:AY:21:ILE:HG21	24:AY:88:VAL:HG13	1.82	0.61
24:AY:25:LYS:HE3	59:AY:702:GDP:PB	2.40	0.61
24:AY:248:LYS:O	24:AY:248:LYS:HG2	2.00	0.61
24:AY:298:VAL:HG13	24:AY:299:VAL:N	2.15	0.61
24:AY:343:ASN:ND2	24:AY:345:THR:N	2.47	0.61
31:B6:6:ARG:HB2	31:B6:7:ILE:HD13	1.83	0.61
35:BA:6:A:H2'	35:BA:6:A:N3	2.15	0.61
35:BA:295:G:H2'	35:BA:296:C:H6	1.65	0.61
35:BA:346:A:H2'	35:BA:346:A:N3	2.14	0.61
35:BA:825:C:O2'	35:BA:826:U:H5'	1.99	0.61
35:BA:936:C:H2'	35:BA:937:U:H6	1.65	0.61
35:BA:2626:C:H2'	35:BA:2627:G:O4'	2.00	0.61
35:BA:2631:G:N2	39:BE:61:ARG:NH1	2.48	0.61
35:BA:2672:G:H2'	35:BA:2673:G:H5"	1.82	0.61
35:BA:2884:U:H2'	35:BA:2885:C:H5'	1.82	0.61
38:BD:183:ARG:NH1	38:BD:183:ARG:HG2	2.15	0.61
38:BD:276:LYS:HD3	38:BD:276:LYS:OXT	1.99	0.61
40:BF:59:TYR:HE2	40:BF:85:GLY:O	1.83	0.61
40:BF:64:ILE:CD1	40:BF:65:TRP:CE2	2.81	0.61
41:BG:46:ALA:C	41:BG:51:ARG:HG3	2.20	0.61
42:BH:28:GLY:HA3	42:BH:79:VAL:CG2	2.30	0.61
42:BH:136:ILE:HD12	42:BH:136:ILE:N	2.15	0.61
57:BZ:59:LEU:O	57:BZ:66:SER:HA	2.00	0.61
1:AA:728:A:H2'	1:AA:729:A:C8	2.35	0.61
1:AA:1160:G:O6	1:AA:1181:G:O6	2.17	0.61
2:AB:230:VAL:HG23	2:AB:231:GLU:H	1.64	0.61
3:AC:181:ASN:HD22	3:AC:204:LEU:HB2	1.63	0.61
6:AF:50:TYR:CE1	18:AR:77:GLY:HA2	2.34	0.61
10:AJ:48:THR:HG23	10:AJ:62:HIS:ND1	2.16	0.61
14:AN:42:ILE:HG22	14:AN:43:CYS:N	2.15	0.61
24:AY:82:ILE:HD12	24:AY:101:LEU:HD22	1.80	0.61
29:B4:20:ASN:OD1	29:B4:36:CYS:SG	2.58	0.61
30:B5:56:LYS:CG	30:B5:57:VAL:H	2.10	0.61
34:B9:4:ARG:HH12	35:BA:2477:C:N4	1.98	0.61
35:BA:455:C:N3	35:BA:472:A:H2'	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:710:G:H2'	35:BA:711:G:C8	2.35	0.61
35:BA:1576:U:H2'	35:BA:1577:C:C6	2.35	0.61
35:BA:1722:A:H2	35:BA:1740:G:H2'	1.65	0.61
45:BN:137:LYS:O	45:BN:138:LEU:HD23	2.00	0.61
57:BZ:156:LYS:O	57:BZ:158:PRO:HD3	1.99	0.61
1:AA:59:A:H2'	1:AA:59:A:N3	2.13	0.61
1:AA:707:C:H2'	1:AA:708:C:C6	2.35	0.61
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.15	0.61
1:AA:1303:C:H2'	1:AA:1304:G:H5'	1.82	0.61
2:AB:97:TRP:HZ2	2:AB:102:LEU:HD13	1.64	0.61
13:AM:54:VAL:O	13:AM:56:LEU:N	2.32	0.61
15:AO:74:ASP:OD1	15:AO:76:GLU:HB3	2.01	0.61
24:AY:134:ALA:HB3	24:AY:258:VAL:HG22	1.81	0.61
24:AY:510:VAL:HA	24:AY:570:GLY:HA3	1.82	0.61
35:BA:2645:G:C3'	35:BA:2646:C:H5'	2.31	0.61
39:BE:104:VAL:HG22	39:BE:198:VAL:HG22	1.81	0.61
1:AA:1516:G:H2'	1:AA:1518:A:OP2	2.00	0.61
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.82	0.61
6:AF:37:VAL:HG12	6:AF:38:GLU:N	2.15	0.61
7:AG:145:ALA:O	7:AG:146:GLU:HB2	2.00	0.61
9:AI:92:TYR:O	9:AI:96:LEU:HD22	2.00	0.61
10:AJ:3:LYS:N	10:AJ:74:ILE:O	2.33	0.61
14:AN:37:PHE:HE1	14:AN:53:LEU:HD22	1.65	0.61
35:BA:276:A:O2'	35:BA:277:C:H5'	2.00	0.61
35:BA:537:C:H2'	35:BA:538:G:C8	2.34	0.61
35:BA:1035:U:O5'	42:BH:59:ARG:NH1	2.33	0.61
35:BA:1102:C:H2'	35:BA:1103:A:H8	1.65	0.61
35:BA:1301:A:H2'	35:BA:1302:A:H3'	1.83	0.61
35:BA:1973:G:H2'	35:BA:1974:C:C6	2.35	0.61
35:BA:2712:U:O2'	35:BA:2712(A):A:O5'	2.18	0.61
37:BC:115:VAL:HA	37:BC:145:THR:HG22	1.81	0.61
38:BD:127:VAL:HA	38:BD:193:VAL:HG13	1.82	0.61
40:BF:110:LEU:HD12	40:BF:206:ILE:CD1	2.28	0.61
43:BK:14:ALA:HA	43:BK:41:PHE:CE2	2.36	0.61
1:AA:345:C:H5'	1:AA:346:G:OP1	1.99	0.61
1:AA:663:A:C2'	1:AA:664:G:H5'	2.31	0.61
1:AA:1392:G:N2	1:AA:1502:A:C8	2.67	0.61
7:AG:91:VAL:HG12	7:AG:92:SER:H	1.65	0.61
8:AH:118:VAL:O	8:AH:119:LEU:HD23	2.00	0.61
10:AJ:20:ALA:C	10:AJ:22:LYS:N	2.53	0.61
17:AQ:47:PRO:CG	17:AQ:48:GLU:OE2	2.45	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:46:GLY:N	19:AS:62:ILE:HG23	2.14	0.61
24:AY:542:VAL:O	24:AY:542:VAL:HG22	2.01	0.61
30:B5:46:CYS:SG	30:B5:47:PRO:HD2	2.41	0.61
34:B9:36:GLN:OE1	35:BA:1124:C:H1'	2.01	0.61
35:BA:650:C:C3'	35:BA:651:G:H5"	2.30	0.61
35:BA:1168:G:H2'	35:BA:1169:G:C8	2.35	0.61
35:BA:1638:C:H2'	35:BA:1639:U:O4'	2.01	0.61
35:BA:2151:G:O2'	35:BA:2152:G:H5'	1.99	0.61
35:BA:2193:G:H5'	35:BA:2193:G:C8	2.36	0.61
35:BA:2287:A:N6	35:BA:2344:U:N3	2.46	0.61
35:BA:2378:A:C2	50:BS:19:LYS:HE3	2.36	0.61
35:BA:2474:C:H5'	35:BA:2475:C:C5	2.35	0.61
35:BA:2704:C:O2'	35:BA:2705:A:H5'	2.01	0.61
38:BD:106:ILE:HD11	38:BD:196:VAL:HG13	1.83	0.61
41:BG:61:ALA:HA	41:BG:64:THR:HG22	1.82	0.61
47:BP:95:VAL:C	47:BP:96:THR:HG23	2.21	0.61
1:AA:108:G:H5'	1:AA:109:A:H5"	1.83	0.61
1:AA:357:G:O2'	1:AA:358:U:H5'	2.01	0.61
1:AA:579:G:C5'	1:AA:728:A:H1'	2.30	0.61
1:AA:1026:G:C2'	1:AA:1027:C:H5'	2.30	0.61
1:AA:1130:A:C2	1:AA:1146:A:C4	2.88	0.61
1:AA:1277:C:H3'	1:AA:1277:C:H6	1.64	0.61
4:AD:12:CYS:SG	4:AD:19:LEU:O	2.58	0.61
4:AD:13:ARG:HA	4:AD:33:MET:HE1	1.81	0.61
4:AD:24:GLU:O	4:AD:27:TYR:HB2	2.01	0.61
5:AE:72:GLN:HE22	5:AE:144:THR:HG22	1.66	0.61
5:AE:78:HIS:O	5:AE:93:PRO:HD3	2.01	0.61
10:AJ:32:ALA:HB3	10:AJ:76:ASN:O	2.00	0.61
12:AL:90:VAL:O	12:AL:92:ASP:N	2.34	0.61
24:AY:210:ARG:O	24:AY:213:HIS:N	2.34	0.61
24:AY:539:ILE:HA	24:AY:542:VAL:HG12	1.81	0.61
35:BA:83:G:O2'	35:BA:84:A:C8	2.54	0.61
35:BA:910:A:C5	48:BQ:13:GLN:HG3	2.36	0.61
35:BA:990:A:N6	35:BA:1186:G:H1'	2.15	0.61
35:BA:1156:A:O2'	35:BA:1157:G:OP1	2.18	0.61
35:BA:1523:U:H2'	35:BA:1524:G:C8	2.35	0.61
36:BB:25:A:C2	36:BB:26:A:C4	2.89	0.61
41:BG:111:LEU:HA	41:BG:114:ILE:CD1	2.31	0.61
41:BG:173:LEU:HA	41:BG:176:LEU:CD1	2.31	0.61
45:BN:74:ARG:NH2	45:BN:83:LYS:HD3	2.16	0.61
47:BP:135:LEU:HD13	47:BP:135:LEU:O	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BS:35:ILE:HG22	50:BS:53:SER:HB2	1.83	0.61
57:BZ:109:ALA:C	57:BZ:111:VAL:H	2.04	0.61
1:AA:626:U:O2	1:AA:626:U:H2'	1.99	0.61
1:AA:1101:A:H4'	1:AA:1102:A:C4'	2.31	0.61
6:AF:91:VAL:HG12	6:AF:92:LYS:N	2.16	0.61
10:AJ:6:ILE:HG13	10:AJ:72:VAL:O	2.00	0.61
10:AJ:55:LYS:H	10:AJ:55:LYS:HE2	1.64	0.61
12:AL:47:LYS:NZ	12:AL:48:PRO:HD3	2.14	0.61
12:AL:117:ARG:NH2	12:AL:124:LYS:HB2	2.16	0.61
13:AM:70:LEU:HD23	13:AM:70:LEU:C	2.21	0.61
19:AS:64:GLU:O	29:B4:48:ARG:NH2	2.34	0.61
24:AY:530:VAL:CG1	24:AY:531:GLY:H	2.05	0.61
27:B2:48:HIS:HD1	35:BA:95:G:HO2'	1.47	0.61
35:BA:271(K):U:H3'	35:BA:271(L):U:H5"	1.83	0.61
35:BA:1030:G:OP2	48:BQ:128:LYS:HE2	2.01	0.61
35:BA:1079:C:H1'	43:BK:132:ARG:HH22	1.65	0.61
35:BA:1240:U:O2'	35:BA:1241:A:H5'	2.00	0.61
35:BA:1381:G:N2	35:BA:1382:G:H1'	2.15	0.61
38:BD:142:VAL:HG23	38:BD:192:THR:O	2.00	0.61
39:BE:31:CYS:HB3	39:BE:49:LEU:HB3	1.83	0.61
53:BV:32:THR:OG1	53:BV:60:GLU:HG3	2.01	0.61
54:BW:96:ILE:O	54:BW:96:ILE:HG23	2.00	0.61
56:BY:50:ARG:O	56:BY:50:ARG:CD	2.49	0.61
57:BZ:56:VAL:O	57:BZ:57:ILE:HD12	2.01	0.61
1:AA:939:G:H5"	7:AG:102:ARG:HH22	1.65	0.61
1:AA:1459:C:H2'	1:AA:1460:A:H8	1.65	0.61
13:AM:66:LEU:N	13:AM:66:LEU:CD1	2.61	0.61
24:AY:122:TRP:C	24:AY:124:GLN:H	2.02	0.61
24:AY:459:LEU:H	24:AY:459:LEU:HD12	1.66	0.61
31:B6:11:LEU:HD22	31:B6:12:GLU:N	2.15	0.61
35:BA:137:C:O2	35:BA:137:C:H2'	2.00	0.61
35:BA:221:A:H4'	35:BA:222:A:O5'	2.00	0.61
35:BA:573:G:O2'	35:BA:574:C:H3'	2.01	0.61
35:BA:848:G:H5'	35:BA:849:A:OP2	2.01	0.61
35:BA:2337:G:H2'	35:BA:2338:G:C8	2.35	0.61
37:BC:10:ALA:O	37:BC:13:GLU:HG2	1.99	0.61
41:BG:77:ILE:CG2	41:BG:80:PHE:CB	2.78	0.61
46:BO:105:GLU:O	46:BO:109:LYS:HG2	2.01	0.61
47:BP:105:LEU:N	47:BP:105:LEU:CD1	2.59	0.61
47:BP:112:LEU:HD22	47:BP:113:LYS:N	2.16	0.61
47:BP:146:VAL:HG22	47:BP:147:LEU:N	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BQ:54:MET:HG2	48:BQ:64:ILE:HD13	1.81	0.61
56:BY:12:THR:HA	56:BY:25:GLY:O	2.01	0.61
56:BY:31:LEU:HD23	56:BY:36:ALA:H	1.66	0.61
1:AA:201:C:C2'	1:AA:202:U:H5"	2.31	0.61
1:AA:945:G:C2	1:AA:946:A:C8	2.89	0.61
1:AA:1104:G:O5'	2:AB:111:ARG:HD2	2.01	0.61
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.16	0.61
1:AA:1457:G:O5'	1:AA:1457:G:C8	2.48	0.61
2:AB:124:SER:OG	2:AB:125:PRO:HD2	2.01	0.61
13:AM:11:ARG:HG2	13:AM:12:ASN:H	1.65	0.61
21:AU:2:GLY:O	21:AU:4:GLY:N	2.34	0.61
24:AY:28:THR:O	24:AY:32:ILE:HG13	2.00	0.61
24:AY:165:GLN:NE2	24:AY:177:ILE:HG21	2.15	0.61
35:BA:406:G:O2'	35:BA:407:G:C8	2.50	0.61
35:BA:925:C:H2'	35:BA:926:A:C5'	2.15	0.61
36:BB:105:A:P	57:BZ:72:ARG:HH12	2.24	0.61
42:BH:33:LEU:HD12	42:BH:75:ALA:O	2.00	0.61
45:BN:55:VAL:HG22	45:BN:126:PRO:HA	1.83	0.61
45:BN:57:ALA:HB3	45:BN:124:ALA:HA	1.82	0.61
47:BP:59:LEU:CA	47:BP:61:ARG:NE	2.58	0.61
47:BP:96:THR:HG22	47:BP:126:VAL:HB	1.83	0.61
47:BP:128:HIS:ND1	47:BP:148:LEU:HD13	2.16	0.61
50:BS:29:PHE:HB3	50:BS:36:TYR:HB2	1.83	0.61
51:BT:89:VAL:HG12	51:BT:91:ARG:H	1.65	0.61
56:BY:95:LYS:CD	56:BY:101:LYS:H	2.13	0.61
1:AA:6:G:H2'	5:AE:119:LEU:CD1	2.31	0.60
1:AA:67:C:H2'	1:AA:68:G:C8	2.36	0.60
1:AA:282:A:H3'	1:AA:283:C:C6	2.36	0.60
1:AA:940:C:O2'	1:AA:941:G:H5'	2.01	0.60
4:AD:152:SER:O	4:AD:154:ASN:N	2.34	0.60
4:AD:153:ARG:HG2	4:AD:153:ARG:HH11	1.66	0.60
9:AI:4:TYR:CE2	9:AI:59:PHE:HE2	2.19	0.60
20:AT:13:LEU:HD12	20:AT:13:LEU:N	2.15	0.60
24:AY:177:ILE:HG22	24:AY:178:ILE:H	1.65	0.60
35:BA:422:A:H2'	35:BA:423:A:C8	2.36	0.60
35:BA:1156:A:C2'	35:BA:1157:G:OP1	2.48	0.60
35:BA:1713:U:O2'	35:BA:1714:G:H5'	2.00	0.60
35:BA:2199:A:H3'	35:BA:2200:C:H6	1.64	0.60
35:BA:2506:U:H4'	35:BA:2507:C:OP1	2.00	0.60
35:BA:2761:G:C3'	35:BA:2762:G:H5"	2.30	0.60
36:BB:106:G:H2'	36:BB:107:G:H8	1.66	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:59:VAL:HG22	39:BE:62:PRO:O	2.01	0.60
41:BG:172:LEU:HD23	41:BG:176:LEU:CD1	2.27	0.60
46:BO:64:ARG:HH21	46:BO:100:GLY:HA3	1.66	0.60
49:BR:32:GLY:HA2	49:BR:116:LEU:HD12	1.81	0.60
51:BT:11:GLU:C	51:BT:13:ARG:H	2.03	0.60
51:BT:25:GLY:HA2	51:BT:92:GLY:HA2	1.83	0.60
52:BU:80:ILE:O	52:BU:84:LYS:HB2	2.00	0.60
57:BZ:10:ARG:NH2	57:BZ:26:GLY:O	2.33	0.60
1:AA:608:A:C2’	1:AA:609:A:H5’	2.31	0.60
1:AA:1094:G:O2’	1:AA:1095:U:OP2	2.19	0.60
1:AA:1287:A:H2’	1:AA:1288:A:C8	2.36	0.60
3:AC:14:ILE:HG13	3:AC:15:THR:H	1.62	0.60
5:AE:36:ASP:O	5:AE:37:ARG:HB2	2.01	0.60
8:AH:60:ARG:HG2	8:AH:62:TYR:CE2	2.36	0.60
8:AH:103:VAL:HG12	8:AH:108:GLY:HA3	1.83	0.60
10:AJ:50:ILE:HD13	10:AJ:50:ILE:H	1.64	0.60
16:AP:28:ARG:HG2	16:AP:28:ARG:NH1	2.16	0.60
20:AT:42:GLN:HA	20:AT:42:GLN:HE21	1.66	0.60
22:AV:52:G:C2	22:AV:53:G:C8	2.90	0.60
24:AY:121:VAL:HG23	24:AY:122:TRP:H	1.66	0.60
33:B8:56:GLU:O	33:B8:59:LYS:HE3	2.00	0.60
34:B9:3:VAL:O	34:B9:4:ARG:HB3	2.00	0.60
35:BA:784:A:H5”	38:BD:227:ASN:HD21	1.64	0.60
35:BA:1248:G:C2	52:BU:3:ARG:HD2	2.37	0.60
35:BA:1517:G:H5’	35:BA:1517:G:C8	2.24	0.60
35:BA:1993:U:H4’	39:BE:128:SER:OG	2.01	0.60
35:BA:2408:U:H2’	35:BA:2409:G:H8	1.66	0.60
35:BA:2783:G:N2	35:BA:2784:C:O2	2.34	0.60
35:BA:2816:C:O2	35:BA:2883:A:O2’	2.18	0.60
41:BG:164:GLU:O	41:BG:165:THR:HG23	2.01	0.60
42:BH:86:GLU:CB	42:BH:132:ARG:HB3	2.30	0.60
45:BN:74:ARG:HH21	45:BN:83:LYS:HD3	1.66	0.60
47:BP:107:LYS:HG3	47:BP:107:LYS:O	2.01	0.60
51:BT:33:LYS:HE2	51:BT:43:GLN:CD	2.21	0.60
1:AA:60:A:H5”	1:AA:331:G:H22	1.67	0.60
1:AA:402:G:O2’	1:AA:403:C:H5’	2.00	0.60
1:AA:1137:C:H4’	1:AA:1138:G:C2	2.37	0.60
2:AB:140:HIS:O	2:AB:143:GLU:HB2	2.00	0.60
4:AD:5:ILE:HA	4:AD:115:ARG:HH12	1.66	0.60
12:AL:60:LEU:HD21	12:AL:66:VAL:HG22	1.83	0.60
22:AV:17:C:C6	22:AV:17(A):U:C5	2.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:181:LEU:HB2	24:AY:216:LEU:HD11	1.83	0.60
24:AY:335:LEU:CD2	24:AY:355:LEU:HD11	2.31	0.60
24:AY:406:GLU:HB3	24:AY:407:PRO:CD	2.30	0.60
29:B4:16:CYS:HB3	29:B4:20:ASN:O	2.01	0.60
32:B7:34:ARG:HB3	32:B7:42:LEU:CD2	2.31	0.60
35:BA:271(D):G:O2'	35:BA:271(E):U:H5'	2.00	0.60
35:BA:751:A:C5'	54:BW:90:ARG:HA	2.31	0.60
35:BA:2428:G:H4'	35:BA:2429:G:O5'	2.01	0.60
37:BC:85:LYS:O	37:BC:89:GLU:HG3	2.02	0.60
38:BD:14:ARG:HG3	38:BD:15:PHE:N	2.14	0.60
39:BE:167:VAL:HG13	39:BE:170:LEU:HD11	1.83	0.60
40:BF:116:ASP:OD2	47:BP:5:ASP:HB2	2.00	0.60
41:BG:42:GLY:O	41:BG:44:GLY:N	2.34	0.60
41:BG:131:TYR:CE2	41:BG:133:LEU:HD23	2.36	0.60
45:BN:67:LEU:HB3	45:BN:88:GLU:HG2	1.83	0.60
49:BR:28:LEU:CD2	49:BR:29:LEU:HD12	2.30	0.60
50:BS:51:ALA:HB3	50:BS:73:LEU:HD12	1.82	0.60
51:BT:23:ARG:O	51:BT:25:GLY:N	2.33	0.60
51:BT:118:ARG:HA	51:BT:121:ILE:HB	1.81	0.60
1:AA:328:C:O2	1:AA:328:C:H2'	1.99	0.60
4:AD:16:GLY:HA2	4:AD:33:MET:CE	2.31	0.60
8:AH:120:THR:HG23	8:AH:123:GLU:OE1	2.01	0.60
14:AN:41:ARG:HG2	14:AN:41:ARG:NH1	2.14	0.60
24:AY:66:THR:O	24:AY:67:ALA:HB3	2.01	0.60
24:AY:100:VAL:HG22	24:AY:101:LEU:N	2.16	0.60
24:AY:228:MET:HE3	24:AY:229:LEU:HD21	1.83	0.60
26:B1:76:ARG:NH2	26:B1:95:LEU:HD22	2.17	0.60
28:B3:17:LYS:NZ	28:B3:20:LYS:HE3	2.17	0.60
32:B7:4:THR:O	35:BA:687:C:H5'	2.01	0.60
35:BA:493:G:H2'	35:BA:494:G:O4'	2.01	0.60
35:BA:572:A:C2	35:BA:2033:A:C2	2.89	0.60
35:BA:1514:U:H2'	35:BA:1515:G:H8	1.65	0.60
35:BA:2131:G:C8	35:BA:2133:G:N2	2.69	0.60
35:BA:2174:C:O2'	35:BA:2175:C:H5'	2.02	0.60
43:BK:6:ALA:O	43:BK:58:THR:HG23	2.01	0.60
47:BP:101:VAL:HG12	47:BP:106:LEU:HB2	1.83	0.60
47:BP:112:LEU:H	47:BP:128:HIS:CD2	2.18	0.60
48:BQ:52:VAL:O	48:BQ:55:VAL:HG12	2.01	0.60
48:BQ:55:VAL:HG21	57:BZ:178:GLU:HG2	1.83	0.60
50:BS:74:ALA:HB1	50:BS:103:GLU:CB	2.31	0.60
50:BS:106:ARG:HH11	50:BS:106:ARG:CB	2.06	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BV:69:LYS:HE3	53:BV:71:LEU:HD21	1.83	0.60
1:AA:52:G:O2'	1:AA:53:A:H5'	2.02	0.60
1:AA:1131:G:C6	1:AA:1132:C:N4	2.70	0.60
13:AM:22:ILE:HD12	13:AM:22:ILE:N	2.15	0.60
16:AP:25:ARG:HH11	16:AP:25:ARG:HG3	1.67	0.60
20:AT:16:HIS:O	20:AT:19:SER:HB3	2.01	0.60
24:AY:343:ASN:HD21	24:AY:345:THR:CB	2.10	0.60
26:B1:41:ARG:HH22	35:BA:1365:A:C5'	2.12	0.60
26:B1:68:PRO:C	26:B1:70:VAL:H	2.05	0.60
35:BA:212:G:C8	35:BA:212:G:H3'	2.36	0.60
35:BA:389:G:N1	47:BP:71:VAL:HG12	2.16	0.60
35:BA:640:C:C4	35:BA:641:C:N4	2.69	0.60
35:BA:814:C:H2'	35:BA:815:C:C6	2.36	0.60
35:BA:949:C:H2'	35:BA:950:G:H8	1.66	0.60
35:BA:1012:U:H5	45:BN:28:THR:HG21	1.66	0.60
35:BA:1059:G:H4'	43:BK:115:LEU:HD23	1.82	0.60
35:BA:1063:G:O2'	43:BK:87:GLY:HA3	2.01	0.60
35:BA:1495:A:C8	35:BA:1495:A:OP1	2.55	0.60
35:BA:1654:A:OP2	49:BR:3:HIS:HB2	2.01	0.60
35:BA:1775:U:C2'	35:BA:1776:G:H5'	2.32	0.60
35:BA:2113:U:H2'	35:BA:2114:A:H8	1.65	0.60
41:BG:61:ALA:HB1	41:BG:66:GLN:O	2.01	0.60
46:BO:114:ILE:H	46:BO:114:ILE:CD1	2.10	0.60
48:BQ:26:TYR:CE2	48:BQ:140:ALA:HB3	2.36	0.60
51:BT:49:VAL:O	51:BT:49:VAL:HG22	2.01	0.60
51:BT:50:ILE:HA	51:BT:99:LEU:CD1	2.31	0.60
52:BU:79:PHE:HE1	52:BU:83:LEU:HD11	1.66	0.60
57:BZ:180:VAL:HG12	57:BZ:181:GLU:CG	2.30	0.60
1:AA:658:G:H2'	1:AA:659:U:C6	2.36	0.60
1:AA:1116:C:H2'	1:AA:1117:G:C5'	2.26	0.60
3:AC:14:ILE:CG1	3:AC:15:THR:N	2.64	0.60
10:AJ:47:PHE:HD2	14:AN:44:LEU:HD21	1.66	0.60
17:AQ:9:VAL:CG1	17:AQ:56:VAL:HG22	2.31	0.60
18:AR:88:LYS:C	18:AR:88:LYS:HD3	2.21	0.60
24:AY:21:ILE:CG2	24:AY:88:VAL:HG13	2.31	0.60
24:AY:485:GLU:HG3	24:AY:553:GLY:HA3	1.81	0.60
24:AY:510:VAL:HG22	24:AY:534:ILE:CD1	2.32	0.60
26:B1:87:PRO:HG2	26:B1:88:LYS:H	1.66	0.60
31:B6:48:VAL:CG2	31:B6:49:HIS:N	2.65	0.60
32:B7:35:ARG:O	32:B7:38:GLY:N	2.34	0.60
35:BA:286:C:H2'	35:BA:287:C:C6	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:425:G:H2'	35:BA:426:C:H6	1.65	0.60
35:BA:859:G:N2	35:BA:917:A:OP2	2.27	0.60
35:BA:1278:A:H5"	49:BR:36:THR:HG22	1.84	0.60
35:BA:1948:G:H2'	35:BA:1949:G:H5'	1.82	0.60
38:BD:45:ASN:CG	38:BD:46:GLN:N	2.55	0.60
38:BD:267:SER:O	38:BD:269:PHE:N	2.33	0.60
41:BG:41:GLN:CB	41:BG:43:LEU:HD21	2.29	0.60
45:BN:30:ILE:HG22	45:BN:34:LEU:HD23	1.82	0.60
45:BN:120:LEU:HD11	45:BN:122:VAL:HG23	1.82	0.60
48:BQ:75:THR:CG2	48:BQ:76:LYS:H	2.14	0.60
54:BW:15:ARG:HA	54:BW:18:ARG:HD2	1.84	0.60
1:AA:631:G:C2'	1:AA:632:A:C8	2.83	0.60
1:AA:812:C:O2'	1:AA:813:U:OP2	2.15	0.60
1:AA:1057:G:N2	1:AA:1204:A:H1'	2.15	0.60
4:AD:73:ARG:HD2	4:AD:77:ASN:HD21	1.65	0.60
5:AE:101:ILE:HD13	5:AE:101:ILE:H	1.66	0.60
8:AH:49:GLU:HG3	8:AH:51:VAL:HG13	1.84	0.60
24:AY:70:THR:O	24:AY:80:ASN:HA	2.02	0.60
24:AY:427:ALA:O	24:AY:431:LEU:HB2	2.00	0.60
24:AY:441:SER:O	24:AY:449:THR:HG23	2.01	0.60
24:AY:507:TYR:CD1	24:AY:507:TYR:C	2.72	0.60
58:AY:701:FUA:H12	58:AY:701:FUA:O1	2.00	0.60
27:B2:63:VAL:CG1	27:B2:67:LYS:HE2	2.31	0.60
33:B8:52:LYS:HE2	35:BA:834:C:H4'	1.82	0.60
35:BA:143(A):C:H4'	55:BX:38:GLU:OE2	2.02	0.60
35:BA:287:C:H2'	35:BA:288:C:H6	1.66	0.60
35:BA:1105:U:H2'	35:BA:1106:G:O4'	2.02	0.60
35:BA:1541:G:O2'	35:BA:1542:A:H5"	2.02	0.60
35:BA:2305:A:C4	41:BG:154:GLY:HA3	2.37	0.60
36:BB:20:C:H2'	36:BB:21:G:C5'	2.30	0.60
36:BB:106:G:C5'	57:BZ:31:ARG:HB3	2.30	0.60
41:BG:97:ASP:CB	41:BG:98:ARG:HH12	2.15	0.60
41:BG:107:LEU:HD23	41:BG:111:LEU:CD1	2.32	0.60
42:BH:104:GLU:HA	42:BH:113:VAL:O	2.02	0.60
49:BR:101:ALA:O	49:BR:102:GLU:HB2	2.01	0.60
55:BX:27:THR:HB	55:BX:80:ILE:CG2	2.27	0.60
56:BY:84:ARG:HG2	56:BY:84:ARG:NH1	2.16	0.60
1:AA:950:U:H2'	1:AA:951:G:H8	1.67	0.60
1:AA:1303:C:C2'	1:AA:1304:G:H5'	2.32	0.60
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.67	0.60
1:AA:1423:G:P	46:BO:49:ARG:HH22	2.25	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:51:LEU:CD2	2:AB:201:ILE:HG23	2.31	0.60
2:AB:204:ASN:ND2	2:AB:206:ASP:H	1.99	0.60
10:AJ:5:ARG:HA	10:AJ:73:ASP:OD1	2.02	0.60
12:AL:38:THR:CG2	12:AL:57:LYS:HB3	2.31	0.60
12:AL:80:HIS:O	12:AL:81:SER:HB2	2.02	0.60
28:B3:8:LEU:HD22	28:B3:31:LEU:CD2	2.23	0.60
35:BA:363:G:H2'	35:BA:363(A):A:H8	1.67	0.60
35:BA:1328:G:H2'	35:BA:1330:C:C4	2.37	0.60
35:BA:2860:A:C2'	35:BA:2861:G:H5'	2.31	0.60
39:BE:7:VAL:HG12	39:BE:27:LEU:HB3	1.84	0.60
39:BE:25:VAL:HG11	39:BE:181:LEU:HD12	1.84	0.60
39:BE:33:VAL:HG12	39:BE:90:THR:H	1.66	0.60
43:BK:93:ARG:HD2	43:BK:93:ARG:C	2.22	0.60
45:BN:133:GLN:CG	45:BN:134:ARG:N	2.62	0.60
47:BP:101:VAL:HG12	47:BP:106:LEU:HB3	1.84	0.60
48:BQ:97:VAL:HG11	48:BQ:103:MET:CE	2.31	0.60
1:AA:1312:G:O2'	1:AA:1313:U:H5'	2.01	0.60
1:AA:1314:C:OP2	19:AS:6:LYS:HD3	2.02	0.60
1:AA:1360:A:H2'	1:AA:1361:G:O4'	2.02	0.60
7:AG:78:ARG:HG3	7:AG:79:ARG:N	2.16	0.60
8:AH:19:VAL:O	8:AH:19:VAL:HG23	2.02	0.60
10:AJ:33:GLN:N	10:AJ:75:ILE:HD11	2.17	0.60
24:AY:277:VAL:CG1	24:AY:278:ASP:H	2.14	0.60
24:AY:435:ASP:OD1	58:AY:701:FUA:H22	2.00	0.60
28:B3:15:TYR:HB3	28:B3:19:GLN:NE2	2.17	0.60
30:B5:4:HIS:CB	30:B5:5:PRO:HD3	2.32	0.60
33:B8:6:THR:HG21	33:B8:63:PRO:HD3	1.84	0.60
33:B8:48:PHE:O	33:B8:49:VAL:HG22	2.02	0.60
35:BA:491:G:H2'	35:BA:492:A:C8	2.37	0.60
35:BA:1775:U:H2'	35:BA:1776:G:H5'	1.84	0.60
35:BA:2442:C:H2'	35:BA:2443:C:H6	1.67	0.60
37:BC:43:GLU:HG3	37:BC:216:THR:HG23	1.82	0.60
38:BD:267:SER:HA	38:BD:270:ILE:HD11	1.83	0.60
42:BH:65:HIS:CE1	42:BH:69:ARG:HH11	2.19	0.60
45:BN:133:GLN:CG	45:BN:134:ARG:H	2.15	0.60
46:BO:3:GLN:HB2	46:BO:4:PRO:HD2	1.84	0.60
48:BQ:21:THR:HG23	48:BQ:101:ARG:HB2	1.84	0.60
50:BS:36:TYR:O	50:BS:37:ALA:HB2	2.02	0.60
52:BU:95:LEU:HD13	53:BV:4:ILE:HG23	1.83	0.60
54:BW:6:ILE:HG21	54:BW:8:ARG:NH1	2.16	0.60
1:AA:370:C:O2'	1:AA:371:G:H5'	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:538:G:O2'	1:AA:539:A:H5'	2.01	0.60
1:AA:1005:A:H5'	1:AA:1006:C:OP2	2.02	0.60
1:AA:1344:C:O2'	1:AA:1345:U:H5'	2.02	0.60
1:AA:1347:G:O2'	1:AA:1348:U:OP2	2.19	0.60
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.84	0.60
3:AC:72:LYS:CA	3:AC:72:LYS:HE3	2.31	0.60
3:AC:73:PRO:O	3:AC:76:VAL:HG22	2.02	0.60
3:AC:119:ARG:O	3:AC:123:GLN:HG3	2.01	0.60
3:AC:149:ALA:HA	3:AC:201:TYR:O	2.02	0.60
4:AD:104:VAL:HG21	4:AD:140:VAL:HG21	1.83	0.60
5:AE:8:GLU:HA	5:AE:34:VAL:HA	1.82	0.60
17:AQ:22:LEU:HD13	17:AQ:41:LYS:HG2	1.83	0.60
24:AY:288:PRO:HG2	24:AY:300:GLU:OE1	2.02	0.60
24:AY:340:TYR:CE2	24:AY:351:ARG:HD3	2.37	0.60
24:AY:681:LYS:HA	24:AY:684:GLN:HB2	1.84	0.60
35:BA:27:G:HO2'	35:BA:28:A:H8	1.50	0.60
35:BA:568:U:H2'	35:BA:570:G:OP2	2.02	0.60
35:BA:653:A:H5'	35:BA:654:A:OP2	2.01	0.60
35:BA:1114:G:H2'	35:BA:1115:G:H5'	1.83	0.60
35:BA:1748:G:H5'	35:BA:1748:G:C8	2.34	0.60
35:BA:2312:U:H2'	35:BA:2313:C:C5'	2.28	0.60
35:BA:2373:G:H2'	35:BA:2374:C:C6	2.37	0.60
38:BD:39:LYS:NZ	38:BD:87:ASN:HB3	2.16	0.60
42:BH:46:GLU:OE1	42:BH:51:ARG:HB2	2.02	0.60
47:BP:127:ALA:HB3	47:BP:130:PHE:CE1	2.36	0.60
49:BR:12:ARG:CG	49:BR:12:ARG:NH1	2.61	0.60
51:BT:25:GLY:HA2	51:BT:92:GLY:CA	2.31	0.60
53:BV:40:LEU:HD13	53:BV:46:VAL:H	1.66	0.60
56:BY:88:LYS:O	56:BY:90:LEU:HD23	2.02	0.60
1:AA:60:A:C5'	1:AA:331:G:H22	2.14	0.59
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.16	0.59
6:AF:51:PRO:HA	6:AF:55:ASP:O	2.01	0.59
13:AM:22:ILE:N	13:AM:22:ILE:CD1	2.64	0.59
20:AT:93:GLU:C	20:AT:95:ALA:H	2.04	0.59
22:AV:75:C:H2'	22:AV:76:A:H8	1.66	0.59
24:AY:123:ARG:HH11	24:AY:123:ARG:HG3	1.67	0.59
24:AY:273:LEU:O	24:AY:276:VAL:HB	2.02	0.59
24:AY:316:ILE:HD12	24:AY:326:THR:HG22	1.84	0.59
24:AY:415:PRO:HB2	24:AY:421:GLN:HA	1.84	0.59
30:B5:48:GLU:O	30:B5:49:CYS:HB3	2.02	0.59
32:B7:35:ARG:HH11	32:B7:35:ARG:HG2	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:611:C:H2'	35:BA:612:C:C6	2.37	0.59
35:BA:813:U:H2'	35:BA:814:C:H6	1.63	0.59
35:BA:1858:G:O2'	35:BA:1884:A:N6	2.34	0.59
35:BA:1909:C:O2'	35:BA:1910:G:H5'	2.02	0.59
38:BD:27:THR:HG23	38:BD:83:GLU:HG2	1.83	0.59
39:BE:81:ILE:O	39:BE:81:ILE:CG2	2.50	0.59
42:BH:30:LYS:HD2	42:BH:81:GLU:HG2	1.84	0.59
42:BH:54:ARG:HD2	42:BH:54:ARG:O	2.02	0.59
1:AA:46:G:O2'	1:AA:365:U:H1'	2.02	0.59
1:AA:174:C:H2'	1:AA:175:C:H6	1.66	0.59
1:AA:598:U:H2'	1:AA:599:C:C6	2.37	0.59
2:AB:54:THR:HG22	2:AB:58:ILE:HD11	1.82	0.59
9:AI:47:LEU:C	9:AI:49:PRO:HD2	2.22	0.59
10:AJ:29:ARG:CZ	10:AJ:29:ARG:HB3	2.30	0.59
10:AJ:33:GLN:HB2	10:AJ:75:ILE:HD13	1.83	0.59
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.17	0.59
12:AL:27:LEU:HB2	12:AL:62:SER:HB2	1.84	0.59
13:AM:22:ILE:HG22	13:AM:66:LEU:HD23	1.84	0.59
14:AN:12:ARG:HH11	14:AN:12:ARG:CB	2.15	0.59
24:AY:16:GLY:N	24:AY:101:LEU:HD13	2.17	0.59
24:AY:84:THR:N	24:AY:85:PRO:CD	2.63	0.59
24:AY:281:PRO:HB2	24:AY:286:ILE:HD11	1.84	0.59
24:AY:335:LEU:HD23	24:AY:355:LEU:HD11	1.84	0.59
24:AY:528:ALA:HB3	24:AY:567:LEU:O	2.01	0.59
31:B6:45:LYS:HD3	35:BA:2371:G:O3'	2.02	0.59
33:B8:4:MET:HE1	33:B8:61:LEU:HD22	1.84	0.59
35:BA:484:C:H2'	35:BA:485:C:C6	2.38	0.59
35:BA:1138:G:H2'	35:BA:1139:G:O4'	2.02	0.59
35:BA:1142:U:O5'	35:BA:1142:U:H6	1.85	0.59
35:BA:1308:A:H2'	35:BA:1309:G:O4'	2.02	0.59
35:BA:1582:C:O2'	35:BA:1586:A:C8	2.53	0.59
35:BA:1818:U:C5'	38:BD:157:ARG:HB2	2.24	0.59
35:BA:2062:A:N3	35:BA:2062:A:O4'	2.33	0.59
36:BB:15:A:H1'	36:BB:110:G:C5	2.37	0.59
38:BD:43:ARG:NH1	38:BD:49:ILE:HG22	2.16	0.59
39:BE:25:VAL:HG12	39:BE:26:ILE:N	2.16	0.59
40:BF:110:LEU:HD11	40:BF:202:PHE:CE1	2.36	0.59
4:AD:57:ARG:HG2	4:AD:57:ARG:HH11	1.67	0.59
4:AD:134:ASP:OD2	4:AD:134:ASP:N	2.32	0.59
7:AG:15:ASP:HB3	7:AG:20:ASP:H	1.67	0.59
18:AR:69:THR:O	18:AR:72:ARG:N	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:29:LYS:O	20:AT:33:ILE:HG13	2.02	0.59
31:B6:47:THR:HG23	31:B6:48:VAL:H	1.66	0.59
35:BA:1220:A:H3'	35:BA:1221:C:C5'	2.33	0.59
35:BA:1525:G:H2'	35:BA:1526:G:C8	2.37	0.59
35:BA:1542:A:H5'	35:BA:1543:C:OP2	2.02	0.59
35:BA:2504:U:H6	35:BA:2504:U:O5'	1.85	0.59
35:BA:2893:G:H5'	35:BA:2894:G:H5'	1.84	0.59
40:BF:9:ILE:HG12	40:BF:15:SER:N	2.17	0.59
48:BQ:109:VAL:HG12	48:BQ:110:THR:N	2.16	0.59
50:BS:98:VAL:HG12	50:BS:100:ALA:N	2.17	0.59
52:BU:98:LEU:O	52:BU:106:PHE:HB2	2.01	0.59
55:BX:10:ALA:HB1	55:BX:11:PRO:HD2	1.84	0.59
57:BZ:14:LYS:HB2	57:BZ:17:ALA:HB3	1.83	0.59
57:BZ:167:PRO:O	57:BZ:168:GLU:CB	2.50	0.59
1:AA:608:A:O2'	1:AA:609:A:H5'	2.01	0.59
1:AA:853:G:O2'	1:AA:854:G:H5'	2.02	0.59
1:AA:1338:G:O2'	22:AV:42:G:C5'	2.50	0.59
2:AB:223:ILE:C	2:AB:225:ALA:H	2.05	0.59
6:AF:68:PRO:HG2	6:AF:71:ARG:HB2	1.85	0.59
9:AI:5:TYR:HD2	9:AI:17:VAL:O	1.86	0.59
9:AI:48:GLU:N	9:AI:49:PRO:CD	2.65	0.59
9:AI:70:LYS:O	9:AI:74:ILE:HG13	2.03	0.59
24:AY:228:MET:HE3	24:AY:229:LEU:CD2	2.32	0.59
24:AY:230:LYS:HB2	24:AY:230:LYS:NZ	2.18	0.59
24:AY:496:LYS:CE	24:AY:498:ILE:HD11	2.21	0.59
24:AY:510:VAL:HG12	24:AY:511:LYS:N	2.17	0.59
26:B1:23:LYS:HD3	26:B1:28:GLY:HA3	1.84	0.59
35:BA:208:C:H2'	35:BA:209:C:C6	2.36	0.59
35:BA:272(J):C:H3'	35:BA:274:G:C5'	2.21	0.59
35:BA:602:G:H4'	35:BA:604:G:H4'	1.84	0.59
35:BA:1542:A:H3'	35:BA:1542:A:C8	2.37	0.59
35:BA:2733:A:H2'	35:BA:2734:A:O4'	2.02	0.59
39:BE:101:ARG:CZ	39:BE:171:GLU:HB2	2.31	0.59
40:BF:64:ILE:HG12	40:BF:65:TRP:CG	2.37	0.59
42:BH:146:ALA:O	42:BH:149:ARG:N	2.36	0.59
43:BK:17:ALA:HB3	43:BK:38:VAL:CG1	2.33	0.59
47:BP:40:SER:C	47:BP:41:ARG:HD2	2.22	0.59
48:BQ:59:ARG:O	48:BQ:60:ARG:HB2	2.01	0.59
51:BT:29:ARG:HG3	51:BT:30:VAL:HG13	1.85	0.59
51:BT:99:LEU:HB2	51:BT:101:PHE:CE1	2.37	0.59
52:BU:74:LEU:CD1	52:BU:74:LEU:C	2.70	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BW:66:GLU:HA	54:BW:69:LEU:CD1	2.32	0.59
1:AA:219:C:H2'	1:AA:220:G:O4'	2.03	0.59
1:AA:339:C:OP2	46:BO:97:ARG:NH1	2.35	0.59
1:AA:1329:A:O2'	1:AA:1330:U:H5'	2.02	0.59
3:AC:90:GLU:C	3:AC:93:LYS:HB3	2.22	0.59
7:AG:79:ARG:O	7:AG:80:VAL:HG13	2.03	0.59
9:AI:43:ALA:HA	9:AI:74:ILE:HD13	1.83	0.59
11:AK:103:LEU:N	11:AK:103:LEU:HD22	2.16	0.59
12:AL:37:CYS:HB3	12:AL:79:GLU:O	2.02	0.59
22:AV:14:A:H1'	22:AV:22:G:N2	2.17	0.59
29:B4:2:LYS:HB2	36:BB:40:U:O4	2.01	0.59
29:B4:10:VAL:N	29:B4:26:SER:O	2.35	0.59
29:B4:22:ILE:CG2	29:B4:23:GLU:N	2.65	0.59
35:BA:941:A:H4'	47:BP:35:HIS:HE1	1.65	0.59
35:BA:1028:A:H61	35:BA:1125:G:H2'	1.66	0.59
35:BA:1043:C:C3'	35:BA:1044:G:H5"	2.32	0.59
35:BA:1336:A:H2'	35:BA:1337:G:H8	1.67	0.59
38:BD:9:TYR:CD1	38:BD:10:THR:CG2	2.86	0.59
39:BE:188:VAL:HG23	39:BE:189:PRO:HD2	1.84	0.59
42:BH:31:GLY:O	42:BH:79:VAL:HG12	2.03	0.59
43:BK:100:THR:CA	43:BK:139:VAL:HB	2.30	0.59
50:BS:11:LYS:HD2	50:BS:11:LYS:N	2.16	0.59
51:BT:118:ARG:HA	51:BT:121:ILE:HD12	1.85	0.59
55:BX:53:LYS:HD2	55:BX:55:ASN:HD21	1.68	0.59
56:BY:13:VAL:HG22	56:BY:14:LEU:H	1.67	0.59
1:AA:187:C:OP1	20:AT:82:SER:HB2	2.02	0.59
1:AA:490:G:H2'	1:AA:491:G:C8	2.35	0.59
1:AA:491:G:H2'	1:AA:492:G:C8	2.34	0.59
1:AA:1314:C:H2'	1:AA:1315:U:H6	1.67	0.59
1:AA:1430:C:C2	1:AA:1471:G:N2	2.71	0.59
1:AA:1489:G:C3'	1:AA:1490:C:H5"	2.32	0.59
5:AE:10:MET:HG3	5:AE:32:VAL:HG22	1.85	0.59
6:AF:9:VAL:HB	6:AF:87:ARG:HB2	1.84	0.59
8:AH:6:ILE:CD1	8:AH:6:ILE:H	2.16	0.59
15:AO:82:ILE:HG12	15:AO:87:ILE:HG12	1.85	0.59
24:AY:402:ILE:HD12	24:AY:402:ILE:H	1.68	0.59
24:AY:468:ARG:HH11	24:AY:468:ARG:CG	2.15	0.59
26:B1:6:GLU:OE1	26:B1:60:PHE:HA	2.02	0.59
30:B5:7:PRO:HG2	35:BA:2016:U:O2	2.02	0.59
35:BA:118:A:OP2	35:BA:119:A:H2'	2.02	0.59
35:BA:158:U:H2'	35:BA:171:G:O4'	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:278:A:C2	35:BA:279:C:C2	2.90	0.59
35:BA:336:C:H4'	56:BY:7:VAL:CG2	2.33	0.59
35:BA:1902:C:H4'	38:BD:244:ARG:CB	2.32	0.59
35:BA:2439:A:C8	35:BA:2586:C:H4'	2.37	0.59
35:BA:2604:U:H2'	35:BA:2605:U:H6	1.68	0.59
35:BA:2688:U:H1'	35:BA:2721:A:N6	2.17	0.59
36:BB:48:A:H2'	36:BB:49:C:C6	2.38	0.59
37:BC:150:ILE:HD12	37:BC:153:ILE:HB	1.83	0.59
37:BC:195:ARG:HH11	37:BC:195:ARG:HG3	1.67	0.59
38:BD:73:VAL:O	38:BD:75:ILE:HG12	2.02	0.59
38:BD:92:ILE:H	38:BD:92:ILE:HD13	1.68	0.59
38:BD:172:TYR:HD1	38:BD:186:HIS:HA	1.67	0.59
41:BG:135:LEU:CD1	41:BG:135:LEU:O	2.51	0.59
42:BH:72:ILE:O	42:BH:75:ALA:N	2.34	0.59
45:BN:135:PRO:O	45:BN:136:GLU:C	2.40	0.59
51:BT:126:ALA:C	51:BT:128:GLU:H	2.04	0.59
57:BZ:107:THR:HG23	57:BZ:111:VAL:HB	1.84	0.59
1:AA:1305:G:N2	1:AA:1331:G:O2'	2.27	0.59
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.03	0.59
3:AC:140:ARG:HH11	3:AC:140:ARG:HG3	1.68	0.59
24:AY:227:ILE:HG23	24:AY:237:PRO:HG2	1.85	0.59
24:AY:554:PRO:HG2	24:AY:555:LEU:HG	1.83	0.59
30:B5:3:LYS:HG2	35:BA:747:U:O4	2.03	0.59
32:B7:26:GLY:O	32:B7:30:VAL:HG23	2.03	0.59
33:B8:8:LYS:HE3	35:BA:245:G:O6	2.01	0.59
35:BA:15:G:O2'	35:BA:16:G:H5'	2.02	0.59
35:BA:445:C:O2'	35:BA:446:G:H5'	2.02	0.59
35:BA:667:U:H2'	35:BA:668:G:O4'	2.01	0.59
35:BA:938:G:H2'	35:BA:939:G:H8	1.68	0.59
35:BA:1197:G:H2'	35:BA:1198:U:H6	1.66	0.59
35:BA:1791:A:C6	35:BA:1829:A:H5'	2.38	0.59
35:BA:2392:A:H8	47:BP:60:MET:HB3	1.68	0.59
51:BT:65:LYS:HA	51:BT:65:LYS:HZ1	1.67	0.59
1:AA:499:A:O2'	1:AA:500:G:C8	2.53	0.59
1:AA:1161:C:H2'	1:AA:1162:C:C6	2.38	0.59
1:AA:1271:G:H2'	1:AA:1272:G:H8	1.68	0.59
4:AD:190:ASP:HB3	4:AD:193:ASP:OD2	2.03	0.59
24:AY:180:VAL:CG2	24:AY:216:LEU:HD12	2.33	0.59
24:AY:457:LEU:O	24:AY:461:ILE:HG13	2.02	0.59
25:B0:26:TYR:HE2	35:BA:857:C:H1'	1.68	0.59
30:B5:3:LYS:CE	35:BA:2613:U:H2'	2.32	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:212:G:C8	35:BA:212:G:C3'	2.84	0.59
35:BA:528:A:H2	35:BA:2043:C:H4'	1.66	0.59
35:BA:1654:A:P	49:BR:3:HIS:HB2	2.43	0.59
35:BA:1718:G:H8	35:BA:1718:G:C5'	2.15	0.59
35:BA:2870:C:O2'	35:BA:2871:C:H5'	2.03	0.59
37:BC:108:TRP:HE1	37:BC:110:ASP:HB2	1.66	0.59
38:BD:240:ALA:HB1	38:BD:241:PRO:HD2	1.84	0.59
43:BK:68:VAL:CG1	43:BK:70:LYS:NZ	2.57	0.59
47:BP:48:PRO:O	47:BP:49:ARG:C	2.39	0.59
50:BS:51:ALA:HB3	50:BS:73:LEU:HB2	1.85	0.59
52:BU:25:TRP:O	52:BU:28:ARG:HB2	2.03	0.59
1:AA:265:G:H5'	17:AQ:64:PRO:O	2.02	0.59
1:AA:296:U:O2'	1:AA:297:G:H5'	2.02	0.59
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.32	0.59
2:AB:233:SER:CB	2:AB:234:PRO:HD2	2.32	0.59
10:AJ:96:ILE:HD13	10:AJ:96:ILE:H	1.66	0.59
12:AL:7:ILE:O	12:AL:11:VAL:HG23	2.03	0.59
12:AL:126:LYS:HG3	12:AL:128:ALA:N	2.13	0.59
25:B0:20:ARG:CG	25:B0:20:ARG:NH1	2.62	0.59
35:BA:191:A:O2'	35:BA:192:C:H5'	2.03	0.59
35:BA:364:C:H2'	35:BA:365:C:H5'	1.84	0.59
35:BA:947:G:N3	35:BA:984:A:H2	2.00	0.59
35:BA:1102:C:H2'	35:BA:1103:A:C8	2.37	0.59
35:BA:1147:C:H2'	35:BA:1148:A:H8	1.67	0.59
35:BA:2795:G:H2'	35:BA:2795:G:N3	2.18	0.59
41:BG:119:GLY:HA3	41:BG:181:ARG:H	1.67	0.59
41:BG:133:LEU:C	41:BG:133:LEU:HD12	2.23	0.59
47:BP:95:VAL:HG23	47:BP:125:VAL:HG23	1.85	0.59
48:BQ:19:GLY:HA3	57:BZ:79:ARG:HH12	1.67	0.59
53:BV:18:LEU:HD13	53:BV:19:LYS:H	1.66	0.59
53:BV:19:LYS:HG2	53:BV:94:LEU:HB2	1.84	0.59
1:AA:277:C:C2'	1:AA:278:G:H5'	2.33	0.59
4:AD:31:CYS:O	4:AD:31:CYS:SG	2.60	0.59
4:AD:58:LEU:HD22	4:AD:59:ARG:NH1	2.18	0.59
7:AG:12:LEU:CD1	7:AG:25:ALA:HB2	2.33	0.59
15:AO:9:GLN:HB3	15:AO:13:GLN:NE2	2.18	0.59
19:AS:9:VAL:HG21	29:B4:53:GLU:HG3	1.85	0.59
24:AY:73:PHE:CE2	24:AY:78:ARG:HB2	2.38	0.59
24:AY:289:ILE:O	24:AY:301:ILE:HG12	2.03	0.59
24:AY:524:GLU:O	24:AY:565:VAL:N	2.28	0.59
24:AY:530:VAL:HG22	24:AY:531:GLY:H	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B6:7:ILE:HG22	31:B6:7:ILE:O	2.02	0.59
31:B6:45:LYS:HG2	35:BA:2371:G:H5"	1.84	0.59
31:B6:54:ILE:HD13	35:BA:2420:C:C5'	2.32	0.59
35:BA:16:G:H2'	35:BA:17:G:H8	1.68	0.59
35:BA:363(E):U:O2'	35:BA:363(F):A:O4'	2.21	0.59
35:BA:877:U:O2'	35:BA:878:A:H5"	2.03	0.59
35:BA:2236:C:H2'	35:BA:2237:G:O4'	2.03	0.59
36:BB:20:C:C2'	36:BB:21:G:H5"	2.33	0.59
37:BC:92:ALA:HB3	37:BC:95:VAL:CG2	2.33	0.59
37:BC:139:PRO:HA	37:BC:145:THR:CB	2.33	0.59
39:BE:34:VAL:O	39:BE:35:GLN:HB2	2.02	0.59
40:BF:158:THR:HG21	40:BF:163:VAL:HB	1.85	0.59
41:BG:91:ARG:C	41:BG:91:ARG:CD	2.71	0.59
41:BG:97:ASP:HB2	41:BG:98:ARG:HH12	1.67	0.59
42:BH:17:VAL:HB	42:BH:45:VAL:HG13	1.84	0.59
43:BK:55:VAL:HG13	43:BK:57:ILE:HD11	1.85	0.59
45:BN:26:LEU:HD12	45:BN:26:LEU:O	2.02	0.59
45:BN:41:ASP:OD1	45:BN:41:ASP:N	2.33	0.59
46:BO:26:LYS:HB3	46:BO:30:ALA:HB2	1.85	0.59
51:BT:83:ILE:HG13	51:BT:84:GLN:HG2	1.85	0.59
51:BT:132:LYS:H	51:BT:132:LYS:HD3	1.68	0.59
1:AA:356:A:H1'	1:AA:368:U:O2'	2.03	0.58
1:AA:1006:C:H2'	1:AA:1007:C:C5	2.38	0.58
1:AA:1112:C:O2	3:AC:179:ARG:HG3	2.03	0.58
1:AA:1292:U:H2'	1:AA:1293:G:H8	1.68	0.58
2:AB:207:ALA:O	2:AB:211:ILE:HG13	2.03	0.58
6:AF:37:VAL:HG12	6:AF:38:GLU:O	2.03	0.58
15:AO:29:VAL:HG11	15:AO:67:LEU:HD21	1.85	0.58
16:AP:60:LEU:HA	16:AP:64:ALA:HB3	1.83	0.58
22:AV:4:G:O2'	22:AV:5:G:C8	2.56	0.58
24:AY:86:GLY:O	24:AY:88:VAL:HG22	2.02	0.58
24:AY:519:ARG:HH21	24:AY:677:GLN:HB2	1.67	0.58
26:B1:44:PRO:HB2	26:B1:46:LEU:HD12	1.85	0.58
29:B4:14:ILE:HG22	29:B4:15:ILE:N	2.17	0.58
31:B6:39:TYR:OH	35:BA:2347:C:OP1	2.20	0.58
35:BA:328:U:H4'	56:BY:68:HIS:NE2	2.17	0.58
35:BA:363(D):G:O2'	35:BA:363(E):U:H5'	2.03	0.58
35:BA:1079:C:C1'	43:BK:132:ARG:HH22	2.16	0.58
35:BA:2712:U:H1'	35:BA:2712(A):A:C8	2.38	0.58
35:BA:2732:G:H5"	35:BA:2733:A:C8	2.38	0.58
35:BA:2839:G:H2'	35:BA:2840:C:C6	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:134:ILE:HG22	39:BE:137:HIS:HB2	1.83	0.58
47:BP:47:ASP:HB3	47:BP:48:PRO:O	2.01	0.58
47:BP:133:SER:O	47:BP:136:GLU:HG2	2.03	0.58
52:BU:68:ALA:O	52:BU:71:GLN:HB3	2.03	0.58
52:BU:95:LEU:CD1	53:BV:11:GLN:HG3	2.32	0.58
53:BV:62:LEU:HD22	53:BV:62:LEU:H	1.66	0.58
57:BZ:53:ILE:CG2	57:BZ:71:VAL:HB	2.30	0.58
1:AA:72:C:H2'	1:AA:73:G:C8	2.38	0.58
1:AA:687:A:N6	1:AA:703:G:H1'	2.18	0.58
1:AA:738:C:OP1	6:AF:2:ARG:NH1	2.34	0.58
1:AA:946:A:H3'	1:AA:947:G:H8	1.67	0.58
1:AA:1129:C:H6	1:AA:1129:C:H5'	1.67	0.58
1:AA:1281:U:H5'	1:AA:1282:C:OP2	2.02	0.58
2:AB:215:LEU:O	2:AB:219:VAL:HG23	2.02	0.58
3:AC:112:SER:OG	3:AC:114:PRO:HD2	2.03	0.58
19:AS:60:VAL:O	19:AS:60:VAL:HG13	2.03	0.58
24:AY:17:ILE:N	24:AY:17:ILE:CD1	2.66	0.58
24:AY:85:PRO:HA	24:AY:94:VAL:CG2	2.17	0.58
24:AY:428:LEU:CD1	24:AY:440:VAL:HG11	2.25	0.58
27:B2:25:VAL:C	27:B2:27:GLU:N	2.56	0.58
30:B5:43:HIS:HD2	35:BA:2815:C:O2'	1.84	0.58
35:BA:1241:A:H2'	35:BA:1242:A:O4'	2.02	0.58
35:BA:1290:C:H2'	35:BA:1291:C:H6	1.67	0.58
35:BA:2131:G:H5'	35:BA:2133:G:H1'	1.84	0.58
38:BD:239:ARG:HH11	38:BD:239:ARG:HG2	1.68	0.58
39:BE:108:SER:O	39:BE:162:ALA:HA	2.03	0.58
40:BF:163:VAL:O	40:BF:166:ALA:HB3	2.03	0.58
47:BP:7:ARG:O	47:BP:10:PRO:HD2	2.03	0.58
52:BU:83:LEU:HD12	52:BU:83:LEU:N	2.17	0.58
1:AA:323:U:H2'	1:AA:324:G:O4'	2.04	0.58
1:AA:1237:C:OP1	1:AA:1238:A:H1'	2.03	0.58
1:AA:1439:C:H5"	1:AA:1439:C:C6	2.37	0.58
2:AB:44:LEU:H	2:AB:44:LEU:CD1	2.10	0.58
4:AD:98:GLU:OE2	4:AD:103:ASN:ND2	2.30	0.58
10:AJ:6:ILE:O	10:AJ:71:LEU:HD12	2.03	0.58
10:AJ:13:HIS:O	10:AJ:17:ASP:HB2	2.03	0.58
12:AL:8:ASN:O	12:AL:12:ARG:HG3	2.03	0.58
12:AL:58:VAL:O	12:AL:65:GLU:HA	2.03	0.58
22:AV:3:C:C2'	22:AV:4:G:H5'	2.34	0.58
24:AY:525:PHE:HA	24:AY:565:VAL:O	2.03	0.58
31:B6:30:THR:HG22	31:B6:32:ASN:ND2	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:451:C:H41	35:BA:453:C:H3'	1.68	0.58
35:BA:2103:C:H2'	35:BA:2103:C:O2	2.02	0.58
35:BA:2470:G:P	48:BQ:56:ARG:HH12	2.26	0.58
35:BA:2537:U:H2'	35:BA:2538:C:C6	2.38	0.58
38:BD:232:PRO:HD2	38:BD:249:PRO:HA	1.85	0.58
41:BG:111:LEU:HD22	41:BG:120:LEU:HD21	1.86	0.58
42:BH:17:VAL:O	42:BH:45:VAL:HG22	2.03	0.58
46:BO:2:ILE:HD11	46:BO:82:ASN:ND2	2.17	0.58
48:BQ:2:LEU:HD12	48:BQ:3:MET:N	2.19	0.58
49:BR:37:THR:HA	49:BR:111:LEU:HA	1.85	0.58
55:BX:90:GLU:HA	55:BX:93:GLU:HG2	1.84	0.58
57:BZ:59:LEU:HD11	57:BZ:88:PHE:CD2	2.38	0.58
1:AA:78:G:H1	1:AA:91:C:H42	1.50	0.58
1:AA:1445:C:H2'	1:AA:1446:U:H5'	1.85	0.58
2:AB:7:VAL:C	2:AB:11:LEU:HG	2.23	0.58
2:AB:223:ILE:HG23	2:AB:226:ARG:NH1	2.19	0.58
7:AG:91:VAL:HG12	7:AG:92:SER:N	2.18	0.58
8:AH:6:ILE:N	8:AH:6:ILE:CD1	2.66	0.58
10:AJ:8:LEU:HD21	10:AJ:96:ILE:HG22	1.81	0.58
12:AL:34:ARG:HG3	12:AL:105:TYR:CE1	2.32	0.58
13:AM:88:ARG:HG2	13:AM:88:ARG:HH11	1.68	0.58
16:AP:39:TYR:CE1	16:AP:73:LEU:HD21	2.38	0.58
19:AS:6:LYS:HG2	19:AS:7:LYS:HE3	1.84	0.58
20:AT:75:ASN:O	20:AT:76:ALA:C	2.38	0.58
22:AV:30:G:N2	22:AV:31:G:H1'	2.19	0.58
30:B5:19:ARG:HA	35:BA:2046:G:H5'	1.86	0.58
35:BA:1666:G:O3'	46:BO:6:THR:HG23	2.02	0.58
35:BA:2155:G:O2'	35:BA:2156:G:H5'	2.04	0.58
35:BA:2521:C:N4	35:BA:2544:G:H1	2.01	0.58
38:BD:9:TYR:C	38:BD:10:THR:CG2	2.64	0.58
41:BG:77:ILE:CG2	41:BG:80:PHE:HB2	2.33	0.58
42:BH:37:VAL:HG12	42:BH:38:SER:N	2.18	0.58
42:BH:149:ARG:HA	42:BH:162:ILE:HD12	1.84	0.58
43:BK:71:THR:HB	43:BK:72:PRO:HD2	1.84	0.58
46:BO:103:ALA:HB1	46:BO:105:GLU:OE1	2.03	0.58
49:BR:99:LYS:H	49:BR:99:LYS:CD	1.92	0.58
52:BU:112:ARG:CZ	53:BV:46:VAL:HG21	2.33	0.58
53:BV:49:THR:O	53:BV:50:PRO:C	2.40	0.58
56:BY:31:LEU:HD22	56:BY:31:LEU:H	1.66	0.58
1:AA:675:A:O2'	1:AA:676:A:H5'	2.04	0.58
1:AA:748:C:OP2	1:AA:748:C:H6	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:936:C:H2'	1:AA:937:A:O4'	2.03	0.58
1:AA:1270:C:H4'	1:AA:1313:U:O2'	2.04	0.58
2:AB:41:ILE:O	2:AB:41:ILE:HG22	2.04	0.58
5:AE:149:GLU:O	5:AE:153:LYS:HE2	2.03	0.58
15:AO:81:LEU:O	15:AO:85:LEU:HB2	2.03	0.58
22:AV:75:C:H2'	22:AV:76:A:C8	2.38	0.58
24:AY:146:LEU:HD22	24:AY:147:TRP:CE3	2.38	0.58
31:B6:6:ARG:H	31:B6:6:ARG:HD2	1.69	0.58
32:B7:46:VAL:HG12	32:B7:47:ARG:N	2.18	0.58
35:BA:665:C:H2'	35:BA:666:G:H8	1.68	0.58
35:BA:786:C:O2'	35:BA:787:U:H5'	2.04	0.58
35:BA:996:A:O3'	52:BU:92:ARG:HG2	2.04	0.58
35:BA:1164:G:H1	35:BA:1185:C:H42	1.50	0.58
35:BA:1942:C:H3'	35:BA:1943:U:H5"	1.84	0.58
35:BA:2188:C:H2'	35:BA:2189:U:C6	2.39	0.58
35:BA:2473:U:C3'	35:BA:2474:C:H5"	2.07	0.58
35:BA:2701:C:H2'	35:BA:2702:U:H2'	1.86	0.58
35:BA:2860:A:H2'	35:BA:2861:G:H5'	1.85	0.58
36:BB:7:G:H5'	50:BS:29:PHE:CE2	2.39	0.58
42:BH:89:ILE:HG23	42:BH:129:THR:O	2.04	0.58
43:BK:106:GLU:CA	43:BK:109:LYS:HD3	2.24	0.58
47:BP:105:LEU:HD12	47:BP:105:LEU:H	1.67	0.58
57:BZ:99:TYR:CE1	57:BZ:125:LEU:HD13	2.38	0.58
57:BZ:120:ILE:HB	57:BZ:171:ILE:O	2.03	0.58
1:AA:368:U:OP2	24:AY:353:ALA:CB	2.52	0.58
1:AA:625:G:H4'	16:AP:16:HIS:HD2	1.64	0.58
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.34	0.58
4:AD:33:MET:HG3	4:AD:37:PRO:HA	1.86	0.58
5:AE:7:GLU:HB3	5:AE:35:GLY:O	2.04	0.58
18:AR:58:LEU:HB3	18:AR:62:GLU:CB	2.28	0.58
24:AY:77:HIS:CD2	24:AY:277:VAL:HG21	2.39	0.58
24:AY:227:ILE:HG23	24:AY:237:PRO:CG	2.33	0.58
24:AY:413:ILE:HG23	24:AY:413:ILE:O	2.03	0.58
24:AY:519:ARG:HH12	24:AY:678:GLU:CB	2.16	0.58
25:B0:11:ARG:HB2	25:B0:11:ARG:NH1	2.18	0.58
26:B1:90:ILE:O	26:B1:94:LEU:HD12	2.03	0.58
27:B2:50:ILE:C	27:B2:52:ASP:H	2.06	0.58
35:BA:78:A:H2'	35:BA:79:G:H8	1.69	0.58
35:BA:1326:U:H5"	35:BA:2011:U:H1'	1.86	0.58
35:BA:1831:G:H2'	35:BA:1832:C:C6	2.39	0.58
35:BA:2450:A:O2'	35:BA:2451:A:H5'	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:98:PRO:CG	39:BE:175:VAL:HG12	2.32	0.58
43:BK:121:GLU:CD	43:BK:121:GLU:N	2.57	0.58
45:BN:104:LYS:CE	45:BN:117:PHE:CD2	2.85	0.58
46:BO:98:VAL:HG23	46:BO:118:ALA:HA	1.86	0.58
46:BO:106:LEU:O	46:BO:107:ARG:C	2.41	0.58
47:BP:112:LEU:N	47:BP:128:HIS:HD2	2.02	0.58
49:BR:79:LEU:HD22	49:BR:83:ILE:HB	1.85	0.58
53:BV:61:VAL:HA	53:BV:94:LEU:HD23	1.84	0.58
57:BZ:9:TYR:N	57:BZ:9:TYR:CD1	2.68	0.58
1:AA:255:G:O6	1:AA:266:G:O6	2.22	0.58
1:AA:345:C:C5’	1:AA:346:G:OP1	2.52	0.58
1:AA:624:C:O2’	1:AA:625:G:H5’	2.04	0.58
1:AA:633:G:H5’	1:AA:634:C:OP2	2.03	0.58
1:AA:963:G:H21	10:AJ:55:LYS:HD2	1.68	0.58
1:AA:977:A:H3’	1:AA:977:A:N3	2.18	0.58
1:AA:1226:C:H5”	13:AM:103:THR:CB	2.33	0.58
1:AA:1321:C:H3’	1:AA:1322:C:C5’	2.20	0.58
1:AA:1382:C:H2’	1:AA:1383:C:C6	2.34	0.58
2:AB:142:LEU:O	2:AB:142:LEU:HD23	2.03	0.58
5:AE:36:ASP:OD2	5:AE:40:ARG:HB2	2.02	0.58
7:AG:149:ARG:HD3	11:AK:59:TYR:CE1	2.39	0.58
10:AJ:4:ILE:HD13	10:AJ:74:ILE:HG13	1.85	0.58
13:AM:6:GLY:C	13:AM:8:GLU:N	2.52	0.58
24:AY:215:LYS:O	24:AY:219:VAL:HG23	2.04	0.58
24:AY:337:SER:HB2	24:AY:355:LEU:HD23	1.84	0.58
29:B4:12:ALA:CB	29:B4:29:PRO:HA	2.34	0.58
35:BA:675:A:H4’	40:BF:67:GLN:OE1	2.03	0.58
35:BA:2855:C:H2’	35:BA:2856:C:H6	1.69	0.58
41:BG:60:LEU:C	41:BG:63:ILE:HD11	2.24	0.58
43:BK:68:VAL:HG12	43:BK:70:LYS:HZ1	1.64	0.58
45:BN:43:THR:HG22	45:BN:45:ASN:HD22	1.69	0.58
45:BN:134:ARG:O	45:BN:136:GLU:N	2.37	0.58
50:BS:67:ARG:NH2	50:BS:100:ALA:HB3	2.18	0.58
51:BT:108:ARG:HG3	51:BT:109:GLU:N	2.17	0.58
54:BW:17:VAL:O	54:BW:20:VAL:HG22	2.03	0.58
56:BY:62:GLU:CG	56:BY:63:LYS:H	2.16	0.58
1:AA:247:G:H4’	1:AA:247:G:OP1	2.04	0.58
1:AA:270:A:H2’	1:AA:271:C:C6	2.39	0.58
1:AA:724:G:O2’	1:AA:725:G:H5’	2.03	0.58
1:AA:953:G:H5’	1:AA:965:A:H61	1.67	0.58
1:AA:1226:C:H5’	13:AM:96:LEU:CD1	2.34	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.38	0.58
2:AB:236:TYR:O	2:AB:237:ALA:C	2.41	0.58
6:AF:4:TYR:CE1	6:AF:92:LYS:HD2	2.39	0.58
6:AF:53:ALA:O	6:AF:54:LYS:HB2	2.04	0.58
20:AT:48:LYS:HB3	20:AT:51:GLU:CG	2.32	0.58
24:AY:277:VAL:CG1	24:AY:278:ASP:N	2.63	0.58
26:B1:76:ARG:CZ	26:B1:95:LEU:HD22	2.34	0.58
29:B4:1:MET:HG2	41:BG:98:ARG:NE	2.19	0.58
35:BA:192:C:C2'	35:BA:193:U:H5'	2.31	0.58
35:BA:769:G:H2'	35:BA:770:G:C8	2.39	0.58
35:BA:818:G:OP2	35:BA:1187:G:O6	2.21	0.58
35:BA:1040:C:C4	35:BA:1041:C:C4	2.92	0.58
35:BA:1068:G:N2	35:BA:1096:A:H5'	2.17	0.58
35:BA:1242:A:N1	47:BP:8:PRO:HG2	2.18	0.58
35:BA:2688:U:O2	35:BA:2688:U:H3'	2.04	0.58
35:BA:2762:G:H5'	35:BA:2762:G:H8	1.68	0.58
38:BD:39:LYS:HB2	38:BD:62:TYR:HB2	1.85	0.58
40:BF:66:PRO:O	40:BF:68:LYS:N	2.36	0.58
41:BG:117:PHE:HE1	41:BG:119:GLY:C	2.07	0.58
43:BK:57:ILE:HD12	43:BK:57:ILE:N	2.17	0.58
47:BP:6:LEU:HB3	47:BP:9:ASN:ND2	2.18	0.58
49:BR:12:ARG:HD3	49:BR:16:HIS:CD2	2.39	0.58
50:BS:25:ARG:HG3	50:BS:26:LEU:H	1.68	0.58
51:BT:107:ASP:CG	51:BT:108:ARG:N	2.54	0.58
55:BX:47:PHE:HD2	55:BX:89:ILE:HG21	1.67	0.58
56:BY:3:VAL:O	56:BY:3:VAL:HG12	2.04	0.58
1:AA:54:C:H2'	1:AA:352:C:N4	2.18	0.58
1:AA:319:G:O2'	1:AA:320:C:H5'	2.04	0.58
1:AA:628:G:O2'	1:AA:629:G:H5'	2.03	0.58
1:AA:830:G:H2'	1:AA:831:U:C6	2.38	0.58
1:AA:1375:A:OP1	7:AG:12:LEU:HD21	2.04	0.58
3:AC:112:SER:HB3	3:AC:115:LEU:HD12	1.86	0.58
5:AE:150:ARG:HB2	5:AE:150:ARG:HH11	1.69	0.58
10:AJ:3:LYS:HG3	10:AJ:75:ILE:O	2.04	0.58
10:AJ:61:GLU:HG3	14:AN:58:LYS:NZ	2.18	0.58
13:AM:108:ARG:HA	13:AM:108:ARG:HH11	1.69	0.58
16:AP:21:VAL:HG11	16:AP:59:TRP:NE1	2.19	0.58
16:AP:74:LEU:HD23	16:AP:79:VAL:HG21	1.83	0.58
20:AT:34:LYS:O	20:AT:37:SER:HB2	2.04	0.58
22:AV:17:C:C5'	22:AV:17(A):U:H6	2.01	0.58
22:AV:75:C:O2'	26:B1:30:VAL:HG11	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:614:GLU:HB3	24:AY:617:MET:HE3	1.86	0.58
30:B5:2:ALA:O	30:B5:3:LYS:HB3	2.04	0.58
35:BA:47:C:O5'	35:BA:47:C:H6	1.87	0.58
35:BA:967:C:O2'	35:BA:968:G:H5'	2.03	0.58
35:BA:1166:C:H2'	35:BA:1167:U:C6	2.38	0.58
35:BA:1175:U:H4'	35:BA:1176:G:H5'	1.84	0.58
35:BA:1196:C:O2'	35:BA:1227:G:H4'	2.04	0.58
35:BA:1865:G:C2'	35:BA:1866:C:H5"	2.34	0.58
35:BA:2245:U:H5'	35:BA:2246:G:C5'	2.30	0.58
38:BD:28:GLU:H	38:BD:29:PRO:HD2	1.67	0.58
38:BD:145:VAL:CG1	38:BD:146:GLU:N	2.65	0.58
42:BH:156:ALA:O	42:BH:158:HIS:N	2.37	0.58
45:BN:91:LEU:HD23	45:BN:98:VAL:HG21	1.86	0.58
47:BP:127:ALA:C	47:BP:148:LEU:HD11	2.24	0.58
48:BQ:41:TRP:NE1	48:BQ:96:VAL:HG22	2.18	0.58
54:BW:33:ARG:O	54:BW:37:ARG:HB2	2.04	0.58
1:AA:1117:G:O3'	9:AI:104:ARG:HD2	2.03	0.58
1:AA:1435:G:H2'	1:AA:1436:U:C5	2.39	0.58
2:AB:121:LEU:CD2	2:AB:126:GLU:HB2	2.34	0.58
3:AC:23:TYR:CG	3:AC:24:ALA:N	2.72	0.58
20:AT:57:ARG:NH1	20:AT:102:GLY:HA2	2.19	0.58
24:AY:623:ASP:HB2	24:AY:662:LYS:HE3	1.86	0.58
26:B1:45:ASN:C	26:B1:45:ASN:ND2	2.57	0.58
30:B5:51:TYR:HD1	30:B5:52:TYR:H	1.51	0.58
35:BA:322:A:P	40:BF:169:ASN:HD22	2.26	0.58
35:BA:1052:C:O2'	35:BA:1053:C:O5'	2.22	0.58
35:BA:1245:G:H5"	40:BF:34:TRP:HZ2	1.69	0.58
39:BE:101:ARG:HH11	39:BE:169:ASN:HD22	1.50	0.58
40:BF:18:ARG:HG2	40:BF:19:GLU:H	1.69	0.58
43:BK:77:LEU:HD12	43:BK:107:ILE:CG2	2.28	0.58
45:BN:49:GLY:HA3	45:BN:119:ARG:HH12	1.69	0.58
48:BQ:55:VAL:CG2	57:BZ:178:GLU:HG2	2.34	0.58
53:BV:32:THR:CG2	53:BV:33:VAL:N	2.66	0.58
1:AA:99:U:H2'	1:AA:100:C:C6	2.39	0.57
1:AA:363:A:H5'	12:AL:34:ARG:HB2	1.86	0.57
1:AA:998:G:H2'	1:AA:999:C:N1	2.19	0.57
3:AC:32:LEU:HD22	3:AC:59:ARG:HH12	1.69	0.57
3:AC:127:ARG:HG2	3:AC:127:ARG:HH11	1.69	0.57
12:AL:70:ILE:HG13	12:AL:70:ILE:O	2.04	0.57
15:AO:53:HIS:O	15:AO:56:LEU:HB3	2.03	0.57
20:AT:26:ASN:HB3	20:AT:71:THR:OG1	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:177:ILE:C	24:AY:178:ILE:HD12	2.24	0.57
24:AY:259:PHE:CE2	24:AY:275:ALA:CB	2.86	0.57
24:AY:434:GLU:OE1	24:AY:465:ARG:NH2	2.36	0.57
35:BA:35:G:O2'	35:BA:36:G:H5'	2.03	0.57
35:BA:302:C:H2'	35:BA:303:U:C6	2.39	0.57
35:BA:709:U:H2'	35:BA:710:G:H8	1.69	0.57
35:BA:1204:A:H2	35:BA:1241:A:N1	2.02	0.57
35:BA:1281:G:H2'	35:BA:1282:U:H6	1.69	0.57
35:BA:1336:A:H2'	35:BA:1337:G:C8	2.38	0.57
35:BA:1386:C:H2'	35:BA:1387:C:C6	2.38	0.57
35:BA:1590:U:O2'	35:BA:1591:G:H5'	2.04	0.57
35:BA:1787:A:H5"	35:BA:1788:C:OP2	2.03	0.57
35:BA:2759:G:O2'	35:BA:2760:C:H5'	2.03	0.57
37:BC:79:ALA:HB1	37:BC:83:LYS:HB2	1.85	0.57
38:BD:3:VAL:CG1	38:BD:17:THR:HB	2.34	0.57
46:BO:61:VAL:HG21	46:BO:111:PHE:CE2	2.39	0.57
47:BP:107:LYS:C	47:BP:109:GLY:N	2.57	0.57
49:BR:11:ASN:OD1	49:BR:12:ARG:N	2.36	0.57
50:BS:106:ARG:O	50:BS:107:GLU:CB	2.52	0.57
1:AA:627:G:HO2'	1:AA:628:G:H5'	1.69	0.57
1:AA:738:C:H2'	1:AA:739:C:H6	1.68	0.57
1:AA:946:A:C2	1:AA:947:G:C5	2.92	0.57
1:AA:1030(D):A:C2'	1:AA:1031:G:H5'	2.34	0.57
1:AA:1226:C:H5"	13:AM:103:THR:OG1	2.04	0.57
1:AA:1231:G:O2'	1:AA:1232:U:H5'	2.04	0.57
2:AB:137:ARG:HH11	2:AB:137:ARG:HG2	1.70	0.57
5:AE:15:ARG:HG3	5:AE:28:PHE:CE2	2.38	0.57
24:AY:230:LYS:HE2	24:AY:241:GLU:OE1	2.04	0.57
25:B0:28:GLY:O	35:BA:923:C:O2'	2.22	0.57
27:B2:47:ASN:HD22	35:BA:94(A):G:H21	1.49	0.57
31:B6:26:ASN:O	31:B6:27:LYS:HB2	2.03	0.57
33:B8:56:GLU:HA	33:B8:59:LYS:HZ3	1.69	0.57
35:BA:363(A):A:H2'	35:BA:363(B):G:C8	2.40	0.57
35:BA:491:G:O6	54:BW:49:LYS:HD3	2.04	0.57
35:BA:729:G:OP2	38:BD:13:ARG:NH1	2.36	0.57
35:BA:753:C:O5'	35:BA:753:C:H6	1.86	0.57
35:BA:1171:G:H2'	35:BA:1173:G:H4'	1.85	0.57
35:BA:1998:G:O2'	35:BA:1999:C:H5'	2.04	0.57
35:BA:2329:G:H2'	35:BA:2330:G:C8	2.39	0.57
35:BA:2742:C:C2'	35:BA:2743:C:H5'	2.34	0.57
37:BC:111:PHE:CE1	37:BC:137:LEU:HD13	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BN:17:ASP:OD2	45:BN:56:ASN:HB3	2.04	0.57
56:BY:27:VAL:HG12	56:BY:29:GLU:H	1.69	0.57
57:BZ:57:ILE:HD12	57:BZ:57:ILE:N	2.18	0.57
1:AA:830:G:H2'	1:AA:831:U:H6	1.69	0.57
1:AA:1056:U:H5'	3:AC:163:ALA:HB2	1.87	0.57
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.85	0.57
10:AJ:61:GLU:OE2	14:AN:45:ARG:NH1	2.36	0.57
12:AL:75:HIS:HD2	12:AL:77:LEU:CD1	2.16	0.57
18:AR:76:LEU:HB3	18:AR:78:LEU:HG	1.85	0.57
20:AT:43:LEU:O	20:AT:46:GLU:N	2.38	0.57
24:AY:605:ILE:HG23	24:AY:646:PHE:HB3	1.85	0.57
27:B2:64:LEU:O	27:B2:64:LEU:HD13	2.04	0.57
35:BA:654(P):C:C2'	35:BA:654(Q):C:H5'	2.34	0.57
35:BA:848:G:C4	35:BA:933:A:H8	2.21	0.57
35:BA:950:G:H2'	35:BA:951:C:C6	2.40	0.57
35:BA:1786:A:C2	35:BA:2606:C:H1'	2.39	0.57
35:BA:1930:G:O2'	35:BA:1931:U:P	2.63	0.57
35:BA:2148:G:O2'	35:BA:2149:G:H5'	2.04	0.57
35:BA:2756:U:H1'	35:BA:2757:A:C8	2.39	0.57
36:BB:54:G:H2'	36:BB:55:U:H6	1.69	0.57
36:BB:86:G:H2'	36:BB:87:G:H8	1.69	0.57
38:BD:126:GLN:HG3	38:BD:126:GLN:O	2.04	0.57
39:BE:34:VAL:O	39:BE:35:GLN:CB	2.51	0.57
43:BK:37:PHE:C	43:BK:39:LYS:H	2.06	0.57
45:BN:55:VAL:HG22	45:BN:56:ASN:N	2.18	0.57
45:BN:133:GLN:HG2	45:BN:134:ARG:H	1.68	0.57
46:BO:49:ARG:H	46:BO:49:ARG:HD3	1.69	0.57
46:BO:104:ARG:NH2	51:BT:33:LYS:HE3	2.16	0.57
47:BP:48:PRO:O	47:BP:50:ARG:N	2.38	0.57
48:BQ:3:MET:HB2	48:BQ:4:PRO:CD	2.31	0.57
50:BS:89:ARG:CG	50:BS:92:TYR:CB	2.83	0.57
56:BY:15:VAL:O	56:BY:22:GLY:N	2.35	0.57
1:AA:332:G:O2'	1:AA:333:G:H5'	2.03	0.57
1:AA:867:G:O2'	1:AA:868:C:H5'	2.04	0.57
1:AA:953:G:O6	1:AA:1228:C:N4	2.37	0.57
1:AA:1500:A:O2'	1:AA:1501:C:H5'	2.04	0.57
11:AK:21:ILE:HG13	11:AK:30:VAL:CG1	2.34	0.57
13:AM:36:LYS:HG3	13:AM:59:TYR:OH	2.03	0.57
13:AM:49:THR:O	13:AM:53:VAL:HG23	2.05	0.57
19:AS:20:LEU:HA	19:AS:23:ASN:HB2	1.85	0.57
24:AY:106:VAL:CG2	24:AY:132:ARG:HG3	2.34	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:176:GLY:HA3	24:AY:187:THR:HA	1.85	0.57
24:AY:495:GLY:O	24:AY:509:HIS:HA	2.04	0.57
27:B2:64:LEU:O	27:B2:68:ARG:HB2	2.04	0.57
29:B4:9:LEU:C	29:B4:10:VAL:HG12	2.24	0.57
34:B9:17:ILE:HG22	34:B9:18:ARG:N	2.19	0.57
35:BA:242:G:N2	35:BA:254:G:H2'	2.19	0.57
35:BA:1416:G:H1'	35:BA:1417:C:C5	2.39	0.57
35:BA:2688:U:H1'	35:BA:2721:A:H61	1.69	0.57
38:BD:267:SER:CA	38:BD:270:ILE:HD11	2.34	0.57
45:BN:104:LYS:HB2	45:BN:117:PHE:CE1	2.39	0.57
46:BO:60:ALA:C	46:BO:87:ILE:HD11	2.24	0.57
54:BW:83:LYS:O	54:BW:84:ARG:HG2	2.05	0.57
1:AA:8:A:C6	4:AD:209:ARG:HB2	2.39	0.57
1:AA:637:G:O2'	1:AA:638:G:H5'	2.04	0.57
1:AA:781:A:H4'	1:AA:1522:U:O2'	2.04	0.57
1:AA:973:G:H3'	1:AA:974:A:H5"	1.86	0.57
1:AA:1104:G:O2'	1:AA:1105:A:H5'	2.05	0.57
1:AA:1222:G:O2'	1:AA:1223:C:H5'	2.05	0.57
1:AA:1500:A:OP2	1:AA:1505:G:OP2	2.22	0.57
2:AB:75:LYS:C	2:AB:75:LYS:HD3	2.24	0.57
4:AD:36:ARG:HH11	4:AD:36:ARG:CG	2.17	0.57
5:AE:20:GLN:O	5:AE:21:ALA:C	2.43	0.57
7:AG:80:VAL:HG23	7:AG:81:GLY:H	1.67	0.57
9:AI:86:VAL:HB	9:AI:96:LEU:HD21	1.86	0.57
24:AY:137:ASN:HD21	24:AY:263:ALA:H	1.50	0.57
24:AY:228:MET:O	24:AY:232:LEU:HD23	2.04	0.57
24:AY:450:ILE:HG22	24:AY:451:ILE:N	2.17	0.57
26:B1:73:LEU:O	26:B1:73:LEU:HD23	2.05	0.57
35:BA:259:G:H21	35:BA:621:A:H8	1.53	0.57
35:BA:336:C:C4	35:BA:337:C:C5	2.93	0.57
35:BA:1027:A:C8	35:BA:1027:A:OP2	2.57	0.57
35:BA:1036:G:C6	35:BA:1120:G:C6	2.92	0.57
35:BA:1797:C:H4'	38:BD:257:LEU:O	2.04	0.57
35:BA:1846:G:H5'	35:BA:1846:G:C8	2.33	0.57
35:BA:2461:C:H42	35:BA:2489:G:H1	1.50	0.57
35:BA:2783:G:N2	35:BA:2784:C:C2	2.72	0.57
46:BO:17:ARG:HE	46:BO:47:ILE:HD11	1.68	0.57
48:BQ:27:VAL:O	48:BQ:28:ALA:HB3	2.03	0.57
57:BZ:153:SER:C	57:BZ:155:LEU:HD23	2.25	0.57
1:AA:961:U:O2'	1:AA:962:C:H5'	2.04	0.57
1:AA:1008:C:O5'	1:AA:1008:C:H6	1.88	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1198:G:H2'	1:AA:1199:U:O4'	2.05	0.57
2:AB:42:ILE:HD13	2:AB:203:GLY:HA2	1.86	0.57
3:AC:72:LYS:HE3	3:AC:72:LYS:HA	1.87	0.57
3:AC:151:VAL:CG1	3:AC:152:ILE:N	2.68	0.57
10:AJ:6:ILE:HG22	10:AJ:98:ILE:CD1	2.33	0.57
12:AL:60:LEU:HD22	12:AL:60:LEU:N	2.20	0.57
18:AR:36:ASN:O	18:AR:39:VAL:HG23	2.05	0.57
19:AS:5:LEU:HG	19:AS:10:PHE:CD1	2.39	0.57
27:B2:69:ARG:CG	27:B2:70:GLN:H	2.17	0.57
31:B6:41:PRO:HG2	31:B6:41:PRO:O	2.05	0.57
35:BA:272(D):G:H1	35:BA:364:C:H42	1.53	0.57
35:BA:750:A:H3'	35:BA:751:A:H5"	1.85	0.57
35:BA:811:U:H3'	35:BA:812:C:C5'	2.34	0.57
35:BA:1022:G:N2	35:BA:1142(A):A:H2	2.01	0.57
35:BA:1461:G:H2'	35:BA:1462:C:C6	2.40	0.57
35:BA:2177:C:O2	37:BC:173:HIS:HE1	1.87	0.57
37:BC:76:LEU:HD21	37:BC:104:ILE:HD11	1.85	0.57
38:BD:14:ARG:HD3	38:BD:15:PHE:CE1	2.40	0.57
42:BH:29:PRO:HD2	42:BH:79:VAL:O	2.03	0.57
47:BP:97:PRO:HD3	47:BP:126:VAL:O	2.05	0.57
53:BV:39:LEU:HD12	53:BV:50:PRO:O	2.05	0.57
53:BV:61:VAL:HG22	53:BV:63:GLY:H	1.69	0.57
1:AA:102:G:N3	1:AA:151:A:H2	2.03	0.57
1:AA:624:C:H2'	1:AA:625:G:H8	1.69	0.57
1:AA:1014:A:H5"	19:AS:14:HIS:HB2	1.85	0.57
1:AA:1368:G:O2'	1:AA:1369:C:H5'	2.03	0.57
2:AB:155:LEU:C	2:AB:155:LEU:CD1	2.71	0.57
5:AE:11:ILE:HD12	5:AE:31:LEU:CD1	2.35	0.57
5:AE:33:VAL:HG12	5:AE:34:VAL:N	2.20	0.57
15:AO:74:ASP:C	15:AO:76:GLU:H	2.08	0.57
16:AP:14:ASN:N	16:AP:15:PRO:HD3	2.20	0.57
17:AQ:66:SER:OG	17:AQ:69:LYS:HG3	2.04	0.57
22:AV:29:G:O2'	22:AV:30:G:H5'	2.05	0.57
22:AV:74:C:O2'	22:AV:75:C:H4'	2.03	0.57
24:AY:313:ALA:HA	24:AY:328:ILE:HG22	1.86	0.57
24:AY:314:PHE:CZ	24:AY:327:PHE:HB3	2.39	0.57
24:AY:385:THR:HG21	24:AY:436:PRO:HG3	1.86	0.57
24:AY:622:GLY:O	24:AY:625:ASN:N	2.36	0.57
29:B4:48:ARG:O	29:B4:49:PHE:CD1	2.53	0.57
35:BA:303:U:H2'	35:BA:304:G:C8	2.40	0.57
35:BA:816:C:O2'	35:BA:817:C:H5'	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:884:C:N4	35:BA:886:C:H42	2.03	0.57
35:BA:1432:C:H2'	35:BA:1433:U:O4'	2.05	0.57
35:BA:2242:G:N2	35:BA:2434:A:H2	2.02	0.57
38:BD:22:SER:O	38:BD:25:THR:OG1	2.23	0.57
39:BE:117:MET:O	39:BE:117:MET:HG2	2.05	0.57
41:BG:130:ASN:OD1	41:BG:160:VAL:HA	2.04	0.57
45:BN:95:PRO:HA	45:BN:98:VAL:HG23	1.87	0.57
47:BP:107:LYS:C	47:BP:109:GLY:H	2.07	0.57
50:BS:104:GLY:C	50:BS:106:ARG:H	2.08	0.57
52:BU:92:ARG:O	52:BU:94:ASN:N	2.37	0.57
54:BW:12:ILE:HG13	54:BW:42:ARG:NH1	2.20	0.57
55:BX:41:ASN:HA	55:BX:44:GLU:HG2	1.87	0.57
1:AA:66:G:H4'	1:AA:173:U:C5	2.39	0.57
1:AA:861:G:O2'	1:AA:862:C:H5'	2.04	0.57
1:AA:1126:U:O4	10:AJ:7:LYS:HE2	2.05	0.57
1:AA:1253:G:C2	1:AA:1254:C:C2	2.92	0.57
1:AA:1318:A:O3'	19:AS:10:PHE:CD2	2.58	0.57
3:AC:154:SER:OG	3:AC:155:GLY:N	2.36	0.57
5:AE:43:LEU:CD2	5:AE:132:ALA:HB1	2.34	0.57
5:AE:150:ARG:HH11	5:AE:150:ARG:CB	2.18	0.57
24:AY:122:TRP:C	24:AY:124:GLN:N	2.58	0.57
24:AY:132:ARG:O	24:AY:256:THR:HG23	2.05	0.57
24:AY:180:VAL:HG23	24:AY:216:LEU:HD12	1.86	0.57
24:AY:228:MET:CE	24:AY:229:LEU:CD2	2.82	0.57
24:AY:487:ILE:HD13	24:AY:487:ILE:H	1.69	0.57
26:B1:3:LYS:HG3	26:B1:4:VAL:H	1.68	0.57
29:B4:1:MET:HE2	41:BG:66:GLN:CD	2.24	0.57
30:B5:40:LYS:HZ3	30:B5:46:CYS:H	1.53	0.57
31:B6:27:LYS:HD2	31:B6:30:THR:HB	1.86	0.57
33:B8:33:ASN:HD22	33:B8:33:ASN:N	1.95	0.57
35:BA:142(A):C:O2'	35:BA:1597:A:H5"	2.05	0.57
35:BA:389:G:O4'	35:BA:2413:G:H4'	2.05	0.57
35:BA:840:C:C2'	35:BA:841:A:H5"	2.34	0.57
35:BA:909:A:O2'	35:BA:910:A:H5'	2.04	0.57
35:BA:1664:A:OP1	35:BA:1665:A:OP2	2.23	0.57
35:BA:1827:C:C2'	35:BA:1828:G:H5'	2.35	0.57
35:BA:1971:A:C4	38:BD:241:PRO:HD3	2.40	0.57
35:BA:2171:A:H4'	35:BA:2172:U:OP1	2.04	0.57
35:BA:2415:G:H4'	47:BP:66:GLY:C	2.25	0.57
37:BC:71:LYS:HG2	37:BC:72:GLN:H	1.70	0.57
39:BE:24:THR:CG2	39:BE:186:GLY:HA2	2.29	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BH:68:THR:O	42:BH:72:ILE:HG12	2.05	0.57
42:BH:103:LEU:HB2	42:BH:123:PHE:HD2	1.69	0.57
45:BN:55:VAL:HG22	45:BN:56:ASN:H	1.70	0.57
46:BO:18:LYS:HB2	46:BO:45:GLU:HG2	1.87	0.57
50:BS:30:ARG:NH1	50:BS:97:ARG:HG2	2.19	0.57
57:BZ:141:VAL:HG13	57:BZ:144:LEU:HD23	1.86	0.57
1:AA:160:A:H1'	1:AA:344:A:N7	2.20	0.57
1:AA:444:C:H42	1:AA:490:G:H1	1.53	0.57
1:AA:1152:A:OP1	10:AJ:68:HIS:HD2	1.88	0.57
1:AA:1271:G:H2'	1:AA:1272:G:C8	2.39	0.57
6:AF:43:LEU:H	6:AF:43:LEU:HD12	1.69	0.57
13:AM:27:LYS:HE2	13:AM:31:LYS:HE3	1.86	0.57
16:AP:19:ILE:N	16:AP:37:GLY:O	2.35	0.57
24:AY:149:VAL:O	24:AY:152:THR:HG22	2.04	0.57
26:B1:45:ASN:CB	35:BA:2230:G:H1'	2.33	0.57
34:B9:7:VAL:HG13	34:B9:34:GLN:CD	2.25	0.57
35:BA:11:G:H22	35:BA:2628:C:P	2.28	0.57
35:BA:94:C:H5'	35:BA:94(A):G:OP2	2.05	0.57
35:BA:302:C:OP2	56:BY:73:ARG:NH1	2.38	0.57
35:BA:608:A:H2'	35:BA:609:A:C8	2.40	0.57
35:BA:1038:C:C3'	35:BA:1039:G:H5"	2.33	0.57
35:BA:1516:C:H2'	35:BA:1517:G:H5'	1.86	0.57
35:BA:2240:C:HO2'	35:BA:2241:A:H5'	1.68	0.57
35:BA:2531:A:H4'	42:BH:157:TYR:CD2	2.40	0.57
35:BA:2787:C:O2	39:BE:61:ARG:HD3	2.05	0.57
38:BD:147:LEU:HD13	38:BD:155:LEU:CD1	2.34	0.57
40:BF:101:LEU:O	40:BF:106:ARG:NH1	2.38	0.57
42:BH:41:MET:CG	42:BH:43:VAL:CG1	2.76	0.57
47:BP:47:ASP:CB	47:BP:51:PHE:HB2	2.34	0.57
47:BP:101:VAL:HA	47:BP:107:LYS:H	1.70	0.57
50:BS:30:ARG:HH11	50:BS:97:ARG:HG2	1.70	0.57
50:BS:69:VAL:CG1	50:BS:99:LYS:HE2	2.35	0.57
52:BU:96:ALA:C	52:BU:98:LEU:N	2.57	0.57
53:BV:18:LEU:CD1	53:BV:19:LYS:N	2.67	0.57
56:BY:29:GLU:HB2	56:BY:38:ILE:HG21	1.87	0.57
57:BZ:155:LEU:HD23	57:BZ:155:LEU:N	2.20	0.57
1:AA:403:C:H2'	1:AA:404:U:H6	1.69	0.57
2:AB:223:ILE:HG12	2:AB:226:ARG:HH22	1.62	0.57
6:AF:62:TRP:CE2	18:AR:35:ARG:NH2	2.73	0.57
7:AG:43:PHE:O	7:AG:46:ALA:HB3	2.05	0.57
9:AI:40:LEU:HD11	9:AI:70:LYS:HG2	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:409:ILE:HD11	24:AY:654:GLY:CA	2.18	0.57
25:B0:73:GLY:C	25:B0:75:LEU:H	2.08	0.57
35:BA:680:G:O2'	35:BA:681:G:H5'	2.05	0.57
35:BA:946:G:H2'	35:BA:947:G:C8	2.40	0.57
35:BA:1151:G:H5"	52:BU:81:HIS:CE1	2.40	0.57
35:BA:1840:G:H1	35:BA:1902:C:H42	1.53	0.57
35:BA:1943:U:H4'	35:BA:1944:U:OP1	2.05	0.57
35:BA:2220:G:H2'	35:BA:2221:G:C8	2.37	0.57
35:BA:2229:C:O2'	35:BA:2230:G:H5'	2.05	0.57
35:BA:2888:C:H2'	35:BA:2889:C:H6	1.69	0.57
36:BB:81:G:H5'	36:BB:81:G:N3	2.20	0.57
37:BC:57:GLN:NE2	37:BC:205:ALA:HA	2.19	0.57
41:BG:59:GLU:O	41:BG:63:ILE:HG13	2.04	0.57
51:BT:75:ILE:N	51:BT:75:ILE:HD12	2.20	0.57
1:AA:192:U:H2'	1:AA:193:C:H6	1.68	0.56
1:AA:748:C:O2	1:AA:749:C:H5	1.88	0.56
1:AA:972:C:H4'	10:AJ:57:LYS:CB	2.35	0.56
1:AA:1258:G:H2'	1:AA:1259:C:C6	2.40	0.56
2:AB:131:PRO:HG2	2:AB:134:GLU:HG2	1.86	0.56
2:AB:142:LEU:CD2	2:AB:146:GLN:NE2	2.68	0.56
7:AG:46:ALA:O	7:AG:49:ILE:N	2.38	0.56
10:AJ:61:GLU:OE2	14:AN:45:ARG:HD2	2.05	0.56
10:AJ:81:THR:OG1	10:AJ:82:ILE:HD13	2.04	0.56
13:AM:27:LYS:CE	13:AM:31:LYS:HE3	2.35	0.56
16:AP:5:ARG:HE	16:AP:22:THR:HG21	1.69	0.56
16:AP:74:LEU:HD22	16:AP:79:VAL:HG11	1.86	0.56
17:AQ:48:GLU:O	17:AQ:49:GLU:C	2.43	0.56
19:AS:48:THR:HG22	19:AS:61:TYR:HA	1.87	0.56
25:B0:46:LYS:O	25:B0:78:TYR:HA	2.04	0.56
31:B6:25:LYS:HE2	33:B8:34:TRP:HE1	1.69	0.56
33:B8:39:LYS:HE3	35:BA:2365:G:O6	2.04	0.56
35:BA:271(H):G:H1	35:BA:271(P):C:H42	1.53	0.56
35:BA:342:G:O2'	35:BA:343:C:H5'	2.05	0.56
35:BA:562:U:C4	35:BA:2036:C:H1'	2.40	0.56
35:BA:781:A:H2'	35:BA:1777:U:O2'	2.05	0.56
35:BA:986:C:O2'	35:BA:987:G:H5'	2.05	0.56
35:BA:1027:A:OP2	35:BA:1027:A:H8	1.86	0.56
35:BA:1118:C:H2'	35:BA:1119:C:C6	2.40	0.56
35:BA:1306:C:H2'	35:BA:1307:A:H8	1.69	0.56
35:BA:1851:U:H2'	35:BA:1852:C:O4'	2.04	0.56
35:BA:2040:C:H2'	35:BA:2041:U:C6	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2134:A:H2'	35:BA:2134:A:N3	2.19	0.56
36:BB:20:C:C2'	36:BB:21:G:C5'	2.83	0.56
38:BD:158:ALA:HB3	38:BD:161:THR:CG2	2.34	0.56
40:BF:53:THR:CG2	40:BF:56:GLU:HG3	2.14	0.56
40:BF:110:LEU:HA	40:BF:183:VAL:CG1	2.35	0.56
45:BN:43:THR:HG22	45:BN:45:ASN:ND2	2.19	0.56
47:BP:95:VAL:O	47:BP:96:THR:CG2	2.53	0.56
49:BR:55:ALA:HA	49:BR:80:PHE:CE1	2.40	0.56
51:BT:23:ARG:HB2	51:BT:24:PRO:HD2	1.87	0.56
52:BU:53:ARG:HA	52:BU:56:ASP:OD2	2.04	0.56
53:BV:47:VAL:HB	53:BV:50:PRO:O	2.04	0.56
1:AA:942:G:N2	9:AI:124:GLN:NE2	2.52	0.56
1:AA:946:A:N6	1:AA:1236:A:N6	2.53	0.56
1:AA:1293:G:O2'	1:AA:1294:G:H5'	2.05	0.56
1:AA:1458:G:OP1	20:AT:35:THR:HG21	2.05	0.56
2:AB:7:VAL:O	2:AB:11:LEU:HG	2.05	0.56
2:AB:19:HIS:HD2	2:AB:189:ASP:OD2	1.88	0.56
4:AD:140:VAL:HG12	4:AD:141:ARG:O	2.04	0.56
27:B2:64:LEU:HD13	27:B2:64:LEU:C	2.25	0.56
29:B4:5:ILE:HD13	29:B4:5:ILE:N	2.19	0.56
29:B4:56:VAL:O	29:B4:57:GLU:HB2	2.04	0.56
31:B6:6:ARG:O	31:B6:7:ILE:CB	2.49	0.56
34:B9:19:ARG:HB3	35:BA:2756:U:H5'	1.87	0.56
35:BA:946:G:H2'	35:BA:947:G:H8	1.69	0.56
35:BA:1173:G:H5'	35:BA:1174:A:O5'	2.05	0.56
35:BA:1326:U:O2'	35:BA:1327:C:H5'	2.05	0.56
35:BA:1711:C:O2'	35:BA:1712:C:H5'	2.05	0.56
35:BA:2604:U:H2'	35:BA:2605:U:C6	2.39	0.56
35:BA:2855:C:H2'	35:BA:2856:C:C6	2.40	0.56
46:BO:10:VAL:HG23	46:BO:10:VAL:O	2.04	0.56
46:BO:60:ALA:CA	46:BO:87:ILE:HD11	2.35	0.56
53:BV:19:LYS:HB3	53:BV:94:LEU:O	2.05	0.56
1:AA:680:C:O2'	1:AA:681:C:H5'	2.04	0.56
1:AA:719:C:O2'	18:AR:49:LYS:HB3	2.05	0.56
1:AA:722:A:H3'	1:AA:722:A:N3	2.21	0.56
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.20	0.56
1:AA:829:G:O2'	1:AA:830:G:H5'	2.05	0.56
1:AA:1117:G:H5'	1:AA:1117:G:C8	2.30	0.56
1:AA:1415:G:H2'	1:AA:1416:G:C8	2.40	0.56
4:AD:102:ASP:HB3	4:AD:136:PRO:HB3	1.86	0.56
5:AE:29:GLY:HA2	5:AE:46:GLY:O	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:47:LEU:N	9:AI:47:LEU:HD12	2.20	0.56
10:AJ:4:ILE:HB	10:AJ:74:ILE:CD1	2.35	0.56
11:AK:18:ARG:HH21	11:AK:37:GLY:N	2.03	0.56
12:AL:17:LYS:HD3	12:AL:18:VAL:CG2	2.35	0.56
14:AN:44:LEU:HD12	14:AN:44:LEU:C	2.25	0.56
19:AS:42:PRO:HB3	29:B4:50:VAL:HG21	1.86	0.56
19:AS:53:ASN:O	19:AS:55:LYS:N	2.39	0.56
24:AY:17:ILE:HG22	24:AY:25:LYS:HG2	1.87	0.56
24:AY:113:GLY:C	24:AY:115:GLU:N	2.58	0.56
24:AY:409:ILE:HG12	24:AY:656:ALA:HB2	1.85	0.56
24:AY:519:ARG:NH1	24:AY:678:GLU:CB	2.67	0.56
31:B6:15:GLU:CD	31:B6:44:ARG:NH2	2.58	0.56
35:BA:904:C:H6	35:BA:904:C:C5'	2.18	0.56
35:BA:970:C:H2'	35:BA:971:C:C6	2.34	0.56
35:BA:1301:A:HO2'	35:BA:1302:A:P	2.28	0.56
35:BA:1591:G:O2'	35:BA:1592:C:H5'	2.06	0.56
35:BA:1780:A:H5'	35:BA:1781:C:OP2	2.05	0.56
35:BA:1899:G:N2	35:BA:1902:C:C4	2.73	0.56
35:BA:2297:C:O2'	35:BA:2298:A:H5'	2.05	0.56
35:BA:2320:A:C2	35:BA:2333:A:C8	2.92	0.56
35:BA:2543:G:C2	35:BA:2765:A:H2'	2.40	0.56
35:BA:2647:U:H2'	35:BA:2648:C:C6	2.40	0.56
35:BA:2832:U:H1'	35:BA:2834:G:C2	2.41	0.56
37:BC:211:ARG:HG3	37:BC:211:ARG:NH1	2.20	0.56
38:BD:176:ARG:HH11	38:BD:176:ARG:CG	2.19	0.56
38:BD:226:MET:HB3	38:BD:230:ASP:CB	2.34	0.56
39:BE:26:ILE:HG21	39:BE:196:VAL:HG21	1.87	0.56
39:BE:34:VAL:HG11	39:BE:78:LEU:HD22	1.87	0.56
39:BE:95:ILE:HD13	39:BE:95:ILE:H	1.67	0.56
40:BF:4:VAL:HA	40:BF:19:GLU:HB3	1.87	0.56
40:BF:99:TYR:CE2	40:BF:101:LEU:CD1	2.88	0.56
40:BF:110:LEU:C	40:BF:110:LEU:CD1	2.70	0.56
40:BF:132:VAL:CG2	40:BF:133:ASN:N	2.68	0.56
40:BF:185:ASP:OD1	40:BF:188:ARG:HD3	2.04	0.56
42:BH:33:LEU:HD21	42:BH:136:ILE:HG22	1.87	0.56
42:BH:140:LYS:O	42:BH:144:VAL:HG23	2.05	0.56
46:BO:24:VAL:HG23	46:BO:24:VAL:O	2.05	0.56
47:BP:71:VAL:CG1	47:BP:72:PRO:HD3	2.35	0.56
50:BS:14:VAL:CG1	50:BS:16:ASN:HD22	2.18	0.56
51:BT:10:VAL:C	51:BT:12:SER:N	2.56	0.56
56:BY:44:ILE:HG22	56:BY:45:VAL:N	2.14	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BY:76:CYS:HB3	56:BY:96:ILE:CD1	2.34	0.56
56:BY:95:LYS:N	56:BY:102:CYS:HB2	2.20	0.56
57:BZ:115:GLY:O	57:BZ:116:VAL:HG22	2.05	0.56
1:AA:820:U:H4'	1:AA:821:G:OP2	2.05	0.56
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.05	0.56
2:AB:156:LYS:O	2:AB:157:ARG:HB3	2.05	0.56
3:AC:52:LEU:HD23	3:AC:52:LEU:N	2.13	0.56
13:AM:22:ILE:CG2	13:AM:66:LEU:HD23	2.35	0.56
58:AY:701:FUA:O1	58:AY:701:FUA:C1	2.52	0.56
29:B4:37:SER:OG	41:BG:108:ASN:HA	2.05	0.56
33:B8:50:LEU:C	33:B8:53:PRO:HD2	2.26	0.56
34:B9:1:MET:SD	35:BA:2478:A:OP2	2.63	0.56
35:BA:9:U:C5	35:BA:2629:A:N6	2.74	0.56
35:BA:360:G:H2'	35:BA:361:G:H8	1.71	0.56
35:BA:1019:U:H3	35:BA:1142(A):A:N6	2.03	0.56
35:BA:1146:C:O2	35:BA:1146:C:H2'	2.03	0.56
35:BA:1297:C:H2'	35:BA:1298:C:H6	1.71	0.56
35:BA:1824:G:OP1	38:BD:52:ARG:HD3	2.05	0.56
35:BA:1882:C:H2'	35:BA:1883:G:O4'	2.06	0.56
35:BA:2030:A:H5"	35:BA:2031:A:OP1	2.05	0.56
35:BA:2681:C:H5	35:BA:2725:A:N6	2.01	0.56
37:BC:104:ILE:HG12	37:BC:108:TRP:CE3	2.41	0.56
37:BC:156:GLU:OE2	37:BC:161:ARG:HD3	2.06	0.56
40:BF:50:SER:HB2	40:BF:94:PRO:HD3	1.87	0.56
40:BF:64:ILE:HD11	40:BF:65:TRP:CH2	2.41	0.56
40:BF:125:LEU:HD23	40:BF:125:LEU:N	2.19	0.56
40:BF:158:THR:HG23	40:BF:160:ASN:N	2.20	0.56
40:BF:179:GLU:C	40:BF:181:LEU:H	2.09	0.56
43:BK:2:LYS:HB2	43:BK:2:LYS:NZ	2.20	0.56
47:BP:7:ARG:HA	47:BP:7:ARG:CZ	2.34	0.56
47:BP:12:ALA:HB1	47:BP:16:ARG:HB3	1.87	0.56
47:BP:112:LEU:HD22	47:BP:112:LEU:C	2.25	0.56
50:BS:95:HIS:CD2	50:BS:96:GLY:H	2.24	0.56
52:BU:64:ARG:O	52:BU:65:ILE:C	2.43	0.56
52:BU:83:LEU:HA	52:BU:88:ILE:HD11	1.87	0.56
53:BV:47:VAL:HG12	53:BV:52:VAL:HB	1.87	0.56
53:BV:58:VAL:O	53:BV:97:LYS:HB2	2.05	0.56
57:BZ:130:PRO:O	57:BZ:133:ILE:CD1	2.54	0.56
1:AA:382:A:H2'	1:AA:383:A:H8	1.68	0.56
1:AA:715:A:H2'	1:AA:716:A:H8	1.69	0.56
1:AA:895:G:H5"	1:AA:896:C:OP2	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1494:G:H2'	1:AA:1494:G:N3	2.20	0.56
5:AE:8:GLU:HB2	5:AE:34:VAL:HG23	1.86	0.56
5:AE:80:ILE:HG22	8:AH:104:ARG:NH2	2.19	0.56
10:AJ:32:ALA:N	10:AJ:78:ASN:HD21	2.03	0.56
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.88	0.56
25:B0:14:ARG:HH11	25:B0:14:ARG:CB	2.15	0.56
25:B0:40:GLN:NE2	25:B0:43:THR:CA	2.68	0.56
27:B2:55:ARG:O	27:B2:58:ALA:HB3	2.05	0.56
35:BA:589:C:O2'	35:BA:590:A:H5'	2.06	0.56
35:BA:1504:C:C3'	35:BA:1505:C:H5"	2.36	0.56
35:BA:1799:G:H5'	35:BA:1819:A:N6	2.21	0.56
35:BA:2678:C:O2'	35:BA:2679:A:H5'	2.05	0.56
35:BA:2845:G:O2'	35:BA:2846:G:H5'	2.05	0.56
40:BF:32:LEU:O	40:BF:36:VAL:HG23	2.06	0.56
53:BV:79:VAL:O	53:BV:79:VAL:HG12	2.05	0.56
1:AA:542:G:H5'	4:AD:41:GLY:CA	2.36	0.56
1:AA:1239:A:H62	1:AA:1299:A:N6	2.03	0.56
2:AB:220:ASP:O	2:AB:223:ILE:N	2.39	0.56
9:AI:104:ARG:O	9:AI:104:ARG:HG2	2.05	0.56
19:AS:13:ASP:C	19:AS:15:LEU:N	2.59	0.56
21:AU:18:TYR:CD2	21:AU:24:ARG:HA	2.41	0.56
24:AY:484:ARG:CD	24:AY:559:PRO:HB2	2.36	0.56
28:B3:8:LEU:O	28:B3:31:LEU:HD22	2.06	0.56
31:B6:5:VAL:CG1	31:B6:6:ARG:H	2.18	0.56
35:BA:28:A:H62	35:BA:512:G:H1'	1.70	0.56
35:BA:529:A:H4'	35:BA:530:G:O5'	2.06	0.56
36:BB:92:C:H2'	36:BB:93:G:C8	2.39	0.56
39:BE:105:THR:HG22	39:BE:106:GLY:N	2.21	0.56
40:BF:150:GLY:HA2	40:BF:172:TRP:CE3	2.41	0.56
41:BG:81:LYS:O	41:BG:83:ARG:HG3	2.05	0.56
42:BH:83:TYR:HB3	42:BH:135:GLY:N	2.21	0.56
42:BH:86:GLU:HG3	42:BH:130:ARG:HH11	1.69	0.56
42:BH:87:LEU:HD22	42:BH:163:TYR:O	2.05	0.56
51:BT:90:GLN:HG2	51:BT:120:ARG:NH2	2.20	0.56
57:BZ:14:LYS:O	57:BZ:18:LEU:HD13	2.05	0.56
57:BZ:23:LYS:HD2	57:BZ:38:TYR:HE2	1.69	0.56
57:BZ:155:LEU:O	57:BZ:157:LEU:HG	2.05	0.56
1:AA:395:C:H5'	24:AY:340:TYR:OH	2.06	0.56
1:AA:936:C:O2'	1:AA:937:A:H5'	2.05	0.56
1:AA:1248:A:C2'	1:AA:1249:C:H5'	2.35	0.56
2:AB:31:TYR:O	2:AB:42:ILE:HG13	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:86:GLU:C	2:AB:88:ALA:H	2.08	0.56
4:AD:58:LEU:HD23	4:AD:58:LEU:C	2.26	0.56
6:AF:15:ASP:C	6:AF:17:SER:N	2.58	0.56
10:AJ:16:LEU:HD12	10:AJ:70:ARG:CD	2.35	0.56
14:AN:8:GLU:O	14:AN:11:LYS:HB2	2.05	0.56
14:AN:41:ARG:HH11	14:AN:41:ARG:CG	2.14	0.56
31:B6:15:GLU:OE2	31:B6:44:ARG:CZ	2.53	0.56
35:BA:26:G:H1'	35:BA:515:A:H61	1.71	0.56
35:BA:662:G:P	47:BP:18:ARG:HD2	2.46	0.56
35:BA:737:C:C2'	35:BA:738:G:H5'	2.36	0.56
35:BA:1142(A):A:C5	35:BA:1144:G:C5	2.94	0.56
35:BA:1310:G:C2'	35:BA:1311:G:H5'	2.36	0.56
35:BA:1812:A:H2'	35:BA:1813:G:C8	2.39	0.56
35:BA:2415:G:H4'	47:BP:67:MET:N	2.20	0.56
35:BA:2461:C:O2	35:BA:2461:C:H2'	2.06	0.56
35:BA:2512:C:H2'	35:BA:2513:G:O4'	2.05	0.56
39:BE:4:ILE:HD13	39:BE:28:ALA:HB1	1.87	0.56
39:BE:77:ILE:HG22	39:BE:78:LEU:HD12	1.87	0.56
40:BF:2:LYS:HG3	40:BF:25:PRO:HG2	1.86	0.56
41:BG:90:LEU:HD12	41:BG:91:ARG:N	2.20	0.56
43:BK:70:LYS:HA	43:BK:70:LYS:HE3	1.87	0.56
43:BK:81:ALA:CB	43:BK:99:ILE:HD11	2.33	0.56
45:BN:1:MET:CE	45:BN:3:THR:OG1	2.54	0.56
47:BP:127:ALA:HB3	47:BP:130:PHE:CZ	2.40	0.56
49:BR:92:GLY:HA2	49:BR:94:TYR:CZ	2.41	0.56
52:BU:83:LEU:HD12	52:BU:83:LEU:H	1.71	0.56
53:BV:18:LEU:CD1	53:BV:19:LYS:H	2.18	0.56
1:AA:119:A:O2'	1:AA:120:A:OP2	2.18	0.56
1:AA:955:U:O2'	1:AA:956:U:H5'	2.06	0.56
1:AA:973:G:H1'	10:AJ:55:LYS:HZ2	1.70	0.56
1:AA:1132:C:N4	1:AA:1133:G:C6	2.74	0.56
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.40	0.56
1:AA:1423:G:C5'	46:BO:49:ARG:NH2	2.68	0.56
2:AB:239:VAL:O	2:AB:239:VAL:HG12	2.04	0.56
5:AE:10:MET:CG	5:AE:32:VAL:HG22	2.36	0.56
5:AE:76:ILE:HG13	5:AE:77:PRO:HD2	1.88	0.56
9:AI:126:SER:O	9:AI:128:ARG:HD2	2.06	0.56
10:AJ:47:PHE:O	10:AJ:62:HIS:HB2	2.05	0.56
18:AR:58:LEU:N	18:AR:58:LEU:HD12	2.21	0.56
24:AY:157:LEU:H	24:AY:157:LEU:CD2	2.12	0.56
24:AY:526:VAL:HB	24:AY:566:THR:HG23	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:3:LYS:HD2	30:B5:5:PRO:CD	2.33	0.56
35:BA:205:G:O2'	35:BA:206:U:OP2	2.21	0.56
35:BA:813:U:H2'	35:BA:814:C:C5	2.39	0.56
35:BA:1374:G:H2'	35:BA:1375:C:C6	2.41	0.56
35:BA:2000:G:OP2	49:BR:3:HIS:HE1	1.89	0.56
35:BA:2021:C:H4'	35:BA:2022:U:OP2	2.06	0.56
35:BA:2419:U:O2'	35:BA:2420:C:H5'	2.06	0.56
38:BD:136:ILE:O	38:BD:136:ILE:HG22	2.00	0.56
41:BG:55:LYS:HD3	41:BG:55:LYS:C	2.26	0.56
41:BG:86:MET:N	41:BG:87:PRO:CD	2.69	0.56
42:BH:124:GLU:CB	42:BH:132:ARG:HG3	2.35	0.56
42:BH:175:LYS:O	42:BH:176:ALA:HB3	2.05	0.56
43:BK:115:LEU:CD2	43:BK:126:MET:HE2	2.19	0.56
49:BR:76:VAL:O	49:BR:79:LEU:HB3	2.06	0.56
52:BU:66:ASN:HD21	52:BU:76:TYR:H	1.53	0.56
54:BW:6:ILE:HA	54:BW:103:ILE:O	2.05	0.56
56:BY:86:ARG:HB3	56:BY:88:LYS:NZ	2.16	0.56
57:BZ:120:ILE:O	57:BZ:120:ILE:CG2	2.54	0.56
1:AA:22:G:O2'	1:AA:23:C:H5'	2.06	0.56
1:AA:100:C:H2'	1:AA:101:A:C8	2.41	0.56
1:AA:1490:C:C5'	1:AA:1490:C:C6	2.89	0.56
3:AC:58:GLU:O	3:AC:59:ARG:HG3	2.06	0.56
4:AD:61:LYS:HD3	4:AD:206:PHE:CE2	2.41	0.56
4:AD:126:ILE:CG2	4:AD:127:THR:N	2.69	0.56
4:AD:187:ARG:NH2	4:AD:193:ASP:OD2	2.39	0.56
8:AH:6:ILE:HG21	8:AH:85:ARG:NH1	2.20	0.56
9:AI:36:TYR:CD2	9:AI:37:PHE:CE2	2.94	0.56
9:AI:53:VAL:C	9:AI:55:ALA:N	2.59	0.56
10:AJ:32:ALA:HB1	10:AJ:76:ASN:HB3	1.87	0.56
10:AJ:47:PHE:CZ	14:AN:37:PHE:CE2	2.94	0.56
17:AQ:3:LYS:HB3	17:AQ:61:GLU:HB3	1.88	0.56
18:AR:42:ARG:O	18:AR:42:ARG:HG2	2.05	0.56
26:B1:80:LEU:HD23	26:B1:81:LYS:H	1.69	0.56
35:BA:295:G:O2'	35:BA:296:C:H5'	2.06	0.56
35:BA:322:A:H3'	40:BF:169:ASN:ND2	2.20	0.56
35:BA:385:C:O2	47:BP:71:VAL:HG21	2.06	0.56
35:BA:619:G:H3'	35:BA:620:G:N2	2.20	0.56
35:BA:644:A:C2	35:BA:2369:A:H1'	2.41	0.56
35:BA:1305:C:O2'	35:BA:1306:C:H5'	2.06	0.56
35:BA:1344:G:H5'	35:BA:1384:A:C6	2.40	0.56
35:BA:1814:G:H5'	38:BD:51:VAL:HG21	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2118:U:OP1	35:BA:2148:G:H4'	2.06	0.56
35:BA:2175:C:H1'	37:BC:218:THR:O	2.06	0.56
35:BA:2443:C:O2	35:BA:2443:C:H2'	2.06	0.56
36:BB:91:C:O2'	36:BB:92:C:H5'	2.06	0.56
39:BE:9:VAL:HG23	39:BE:10:GLY:N	2.21	0.56
39:BE:195:LEU:HD12	39:BE:196:VAL:N	2.21	0.56
42:BH:85:LYS:HE3	42:BH:145:ALA:CB	2.35	0.56
47:BP:34:GLY:O	47:BP:35:HIS:CB	2.53	0.56
47:BP:58:THR:C	47:BP:61:ARG:HE	2.07	0.56
54:BW:9:TYR:H	54:BW:102:HIS:CD2	2.24	0.56
1:AA:519:C:H2'	1:AA:520:A:O4'	2.06	0.56
1:AA:677:U:H6	1:AA:677:U:O5'	1.89	0.56
1:AA:1226:C:H5'	13:AM:96:LEU:HD11	1.88	0.56
1:AA:1284:C:H3'	1:AA:1285:A:C5'	2.35	0.56
1:AA:1456:G:C2'	1:AA:1457:G:H5'	2.36	0.56
4:AD:129:ASN:HD21	4:AD:145:GLU:N	1.97	0.56
5:AE:42:GLY:HA3	5:AE:66:MET:HG2	1.87	0.56
12:AL:20:LYS:HD3	12:AL:20:LYS:N	2.05	0.56
13:AM:54:VAL:HG12	13:AM:58:GLU:CG	2.35	0.56
24:AY:25:LYS:NZ	24:AY:86:GLY:HA2	2.21	0.56
24:AY:162:VAL:CG2	24:AY:255:ILE:HD11	2.36	0.56
24:AY:499:ARG:O	24:AY:505:GLY:O	2.24	0.56
27:B2:6:VAL:HG13	27:B2:59:ARG:NH1	2.20	0.56
32:B7:24:THR:C	32:B7:26:GLY:N	2.59	0.56
35:BA:144:C:H2'	35:BA:145:G:C8	2.41	0.56
35:BA:690:G:H2'	35:BA:691:C:C6	2.41	0.56
35:BA:803:U:C2'	35:BA:804:A:H5'	2.36	0.56
35:BA:1532:C:O5'	35:BA:1532:C:H6	1.87	0.56
35:BA:1858:G:HO2'	35:BA:1859:A:H8	1.53	0.56
35:BA:1930:G:C2'	35:BA:1931:U:OP2	2.54	0.56
38:BD:172:TYR:CD1	38:BD:186:HIS:HA	2.40	0.56
38:BD:209:ALA:C	38:BD:210:GLY:O	2.42	0.56
45:BN:56:ASN:HA	45:BN:125:GLY:N	2.21	0.56
49:BR:72:ASP:CG	49:BR:75:LEU:H	2.08	0.56
54:BW:88:ARG:HD3	54:BW:94:ASP:OD2	2.06	0.56
54:BW:88:ARG:HB3	54:BW:92:ARG:HB3	1.88	0.56
55:BX:18:TYR:C	55:BX:20:GLY:H	2.09	0.56
1:AA:15:G:H4'	5:AE:24:ARG:NH1	2.21	0.55
1:AA:283:C:O5'	1:AA:283:C:H6	1.87	0.55
1:AA:1347:G:H2'	1:AA:1373:G:O6	2.05	0.55
5:AE:36:ASP:O	5:AE:37:ARG:CB	2.55	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:44:GLY:HA2	6:AF:59:TYR:CE1	2.41	0.55
10:AJ:27:ALA:HA	10:AJ:30:SER:OG	2.06	0.55
12:AL:119:LYS:O	12:AL:120:TYR:HB2	2.05	0.55
14:AN:29:ARG:HH11	14:AN:29:ARG:CG	2.17	0.55
22:AV:47:U:H3'	22:AV:48:C:C5'	2.36	0.55
24:AY:25:LYS:HZ2	24:AY:86:GLY:HA2	1.71	0.55
24:AY:139:MET:HE2	24:AY:167:PRO:HG3	1.87	0.55
24:AY:341:VAL:HG13	24:AY:352:VAL:HG12	1.87	0.55
24:AY:367:GLU:O	24:AY:367:GLU:HG2	2.05	0.55
24:AY:608:VAL:HG13	24:AY:670:VAL:O	2.05	0.55
28:B3:29:ARG:HB2	28:B3:29:ARG:NH1	2.08	0.55
29:B4:1:MET:SD	41:BG:98:ARG:CG	2.94	0.55
29:B4:31:ILE:CG2	29:B4:33:VAL:HG23	2.35	0.55
31:B6:5:VAL:HB	35:BA:2284:C:P	2.46	0.55
31:B6:37:ARG:NH2	35:BA:2286:A:H62	2.04	0.55
33:B8:49:VAL:O	33:B8:53:PRO:HG3	2.07	0.55
35:BA:110:G:O2'	35:BA:111:A:H5'	2.06	0.55
35:BA:201:C:C5	35:BA:202:U:C5	2.93	0.55
35:BA:492:A:H2'	35:BA:493:G:H5'	1.87	0.55
35:BA:1669:A:H2'	35:BA:1670:C:H5'	1.87	0.55
35:BA:2097:C:H2'	35:BA:2098:U:H6	1.72	0.55
35:BA:2099:U:OP2	35:BA:2099:U:H6	1.90	0.55
35:BA:2309:A:C2'	35:BA:2310:A:H5"	2.35	0.55
35:BA:2836:U:H2'	35:BA:2837:G:C8	2.41	0.55
42:BH:98:LEU:HD22	42:BH:125:VAL:HG23	1.88	0.55
45:BN:21:LYS:HD2	45:BN:26:LEU:HB3	1.86	0.55
45:BN:128:HIS:CG	45:BN:128:HIS:O	2.58	0.55
1:AA:188:C:H2'	1:AA:189:G:C8	2.40	0.55
1:AA:192:U:C4'	20:AT:103:GLY:HA2	2.36	0.55
1:AA:301:G:O2'	1:AA:302:G:H5'	2.07	0.55
1:AA:1056:U:H5'	3:AC:163:ALA:CB	2.36	0.55
2:AB:168:THR:CG2	2:AB:192:SER:HB3	2.25	0.55
12:AL:23:LYS:HE3	12:AL:89:ARG:HE	1.71	0.55
24:AY:388:THR:HG23	24:AY:399:LEU:HD22	1.87	0.55
30:B5:27:PRO:CG	54:BW:23:LEU:HD11	2.35	0.55
31:B6:8:LYS:NZ	35:BA:2285:C:C5	2.58	0.55
34:B9:1:MET:SD	34:B9:1:MET:N	2.72	0.55
34:B9:22:ARG:NH2	35:BA:2741:A:OP1	2.39	0.55
35:BA:68:G:H2'	35:BA:69:C:C6	2.41	0.55
35:BA:841:A:H5'	35:BA:841:A:H8	1.70	0.55
35:BA:1821:A:H2'	35:BA:1822:G:H8	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2115:G:N3	35:BA:2117:A:N7	2.54	0.55
35:BA:2469:A:H2	35:BA:2481:G:H21	1.54	0.55
35:BA:2869:G:O2'	35:BA:2870:C:H5'	2.06	0.55
37:BC:15:VAL:O	37:BC:15:VAL:HG23	2.06	0.55
40:BF:63:LYS:HA	40:BF:76:GLY:O	2.06	0.55
42:BH:154:PRO:O	42:BH:156:ALA:N	2.39	0.55
45:BN:128:HIS:HE1	45:BN:134:ARG:HH11	1.52	0.55
47:BP:115:LEU:N	47:BP:115:LEU:HD23	2.21	0.55
47:BP:122:PRO:HB3	47:BP:141:ALA:CB	2.37	0.55
48:BQ:27:VAL:H	48:BQ:137:TYR:HD2	1.55	0.55
56:BY:88:LYS:N	56:BY:88:LYS:HD2	2.22	0.55
1:AA:160:A:H1'	1:AA:344:A:C8	2.42	0.55
1:AA:1510:U:O2	1:AA:1526:G:C2	2.60	0.55
8:AH:20:TYR:CE1	8:AH:76:PRO:HG2	2.41	0.55
9:AI:19:LEU:HD23	9:AI:61:ALA:HB2	1.87	0.55
12:AL:89:ARG:HB2	12:AL:89:ARG:HH11	1.71	0.55
14:AN:37:PHE:CE1	14:AN:53:LEU:HD22	2.41	0.55
17:AQ:7:THR:O	17:AQ:23:VAL:HG13	2.05	0.55
24:AY:69:VAL:HG23	24:AY:82:ILE:HG12	1.89	0.55
24:AY:91:THR:O	24:AY:93:GLU:N	2.40	0.55
24:AY:515:GLU:CD	24:AY:564:LYS:HD3	2.27	0.55
35:BA:212:G:C8	35:BA:212:G:C4'	2.88	0.55
35:BA:448:U:O4	35:BA:583:G:H1'	2.07	0.55
35:BA:1484:G:H2'	35:BA:1485:G:H5"	1.88	0.55
35:BA:2020:A:H2'	35:BA:2021:C:H5"	1.86	0.55
35:BA:2078:C:H1'	35:BA:2434:A:H1'	1.86	0.55
35:BA:2117:A:H2	35:BA:2172:U:H3	1.55	0.55
35:BA:2286:A:H4'	35:BA:2287:A:C5'	2.37	0.55
37:BC:185:LYS:O	37:BC:186:LEU:C	2.44	0.55
39:BE:113:PHE:CE1	39:BE:158:GLY:HA2	2.41	0.55
40:BF:78:ILE:HG22	40:BF:83:PHE:CZ	2.41	0.55
41:BG:119:GLY:HA3	41:BG:181:ARG:N	2.20	0.55
45:BN:46:VAL:CG1	45:BN:48:MET:CE	2.84	0.55
47:BP:95:VAL:CG2	47:BP:125:VAL:HG23	2.36	0.55
51:BT:1:MET:SD	51:BT:1:MET:C	2.85	0.55
51:BT:102:ILE:CG2	51:BT:110:ILE:HD12	2.34	0.55
51:BT:120:ARG:O	51:BT:124:ASP:OD1	2.24	0.55
53:BV:64:HIS:HA	53:BV:92:THR:HA	1.86	0.55
55:BX:53:LYS:HD2	55:BX:55:ASN:ND2	2.21	0.55
57:BZ:29:TYR:CB	57:BZ:34:ASN:HB2	2.37	0.55
1:AA:522:C:H5	12:AL:53:ARG:NH2	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:624:C:H4'	16:AP:10:GLY:C	2.27	0.55
1:AA:841:U:H3'	1:AA:848:C:H5'	1.87	0.55
1:AA:1074:G:O2'	1:AA:1075:C:H5'	2.05	0.55
1:AA:1529:G:H4'	1:AA:1530:G:OP2	2.06	0.55
12:AL:47:LYS:CD	12:AL:48:PRO:HD3	2.34	0.55
13:AM:68:GLY:H	13:AM:71:ARG:CB	2.17	0.55
19:AS:40:ILE:HG21	19:AS:66:MET:O	2.07	0.55
19:AS:40:ILE:CD1	19:AS:74:PHE:HE2	2.19	0.55
20:AT:57:ARG:NH1	20:AT:57:ARG:HB2	2.21	0.55
24:AY:646:PHE:O	24:AY:647:VAL:HG13	2.06	0.55
24:AY:655:TYR:CZ	24:AY:659:LEU:HD23	2.41	0.55
32:B7:28:ARG:HH11	32:B7:28:ARG:HG3	1.71	0.55
35:BA:572:A:H2'	35:BA:573:G:O4'	2.07	0.55
35:BA:654(S):G:H3'	35:BA:654(T):C:C4'	2.36	0.55
35:BA:911:A:H2'	48:BQ:9:TYR:OH	2.07	0.55
35:BA:1005:C:OP2	35:BA:1011:G:H2'	2.07	0.55
35:BA:1223:G:H5'	35:BA:1224:C:OP2	2.07	0.55
35:BA:1891:G:O5'	35:BA:1891:G:H8	1.89	0.55
35:BA:2040:C:H2'	35:BA:2041:U:H6	1.70	0.55
35:BA:2468:G:HO2'	35:BA:2476:A:H8	1.53	0.55
35:BA:2653:U:O2'	42:BH:110:SER:HB3	2.07	0.55
35:BA:2807:G:C2'	35:BA:2808:U:H5"	2.36	0.55
36:BB:104:U:O3'	57:BZ:72:ARG:NH1	2.40	0.55
39:BE:59:VAL:HG21	39:BE:63:LEU:HA	1.88	0.55
39:BE:78:LEU:C	39:BE:79:ARG:HD2	2.27	0.55
48:BQ:109:VAL:CG1	48:BQ:110:THR:N	2.70	0.55
50:BS:12:PHE:C	50:BS:12:PHE:CD1	2.79	0.55
51:BT:27:THR:O	51:BT:28:VAL:CG2	2.50	0.55
51:BT:30:VAL:HG21	51:BT:83:ILE:HG12	1.89	0.55
55:BX:8:ILE:H	55:BX:8:ILE:CD1	2.13	0.55
56:BY:44:ILE:O	56:BY:62:GLU:HB3	2.06	0.55
1:AA:1003:G:C2'	1:AA:1004:A:H4'	2.13	0.55
1:AA:1216:G:OP1	14:AN:2:ALA:HA	2.06	0.55
1:AA:1226:C:H4'	1:AA:1227:A:OP1	2.07	0.55
1:AA:1308:U:H5"	13:AM:98:VAL:CG2	2.36	0.55
4:AD:192:GLU:H	4:AD:192:GLU:CD	2.09	0.55
7:AG:51:GLN:OE1	7:AG:51:GLN:HA	2.07	0.55
13:AM:37:THR:O	13:AM:39:ILE:HG13	2.07	0.55
13:AM:52:GLU:HA	13:AM:55:ARG:HD3	1.88	0.55
13:AM:54:VAL:HG12	13:AM:58:GLU:HG2	1.88	0.55
24:AY:135:PHE:CD1	24:AY:272:LEU:HD22	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:58:ILE:HD11	26:B1:91:LYS:CA	2.37	0.55
35:BA:344:G:H2'	35:BA:345:A:H8	1.72	0.55
35:BA:648:G:H2'	35:BA:649:G:C8	2.41	0.55
35:BA:1493:C:C4	35:BA:2206:G:O2'	2.60	0.55
35:BA:2202:C:H2'	38:BD:151:LYS:HZ1	1.70	0.55
35:BA:2690:C:OP2	35:BA:2690:C:C6	2.59	0.55
38:BD:161:THR:O	38:BD:162:SER:HB3	2.05	0.55
40:BF:99:TYR:HE2	40:BF:101:LEU:HD13	1.70	0.55
41:BG:64:THR:HG23	41:BG:66:GLN:N	2.10	0.55
41:BG:71:THR:HG23	41:BG:90:LEU:N	2.22	0.55
50:BS:83:LYS:HG2	50:BS:105:ALA:HB3	1.88	0.55
53:BV:35:LEU:O	53:BV:37:VAL:N	2.39	0.55
55:BX:12:VAL:CG1	55:BX:27:THR:HG23	2.37	0.55
56:BY:74:PRO:HG3	56:BY:83:THR:CG2	2.36	0.55
56:BY:90:LEU:HD23	56:BY:90:LEU:N	2.21	0.55
1:AA:96:U:O2'	1:AA:97:G:H8	1.88	0.55
1:AA:603:U:H2'	1:AA:604:G:C8	2.41	0.55
1:AA:1324:A:H2'	1:AA:1325:C:H6	1.71	0.55
1:AA:1342:C:H1'	9:AI:124:GLN:HG3	1.89	0.55
1:AA:1505:G:H5"	1:AA:1505:G:C8	2.41	0.55
3:AC:60:ALA:O	3:AC:61:ALA:HB2	2.07	0.55
3:AC:137:ALA:HA	3:AC:140:ARG:NH2	2.21	0.55
4:AD:194:LEU:HB3	4:AD:196:LEU:HD13	1.88	0.55
5:AE:152:ARG:HA	8:AH:64:LYS:HZ3	1.71	0.55
8:AH:109:ILE:HD11	8:AH:120:THR:CG2	2.36	0.55
24:AY:87:HIS:O	24:AY:88:VAL:C	2.44	0.55
24:AY:137:ASN:HD21	24:AY:263:ALA:CB	2.19	0.55
24:AY:498:ILE:HG13	24:AY:498:ILE:O	2.06	0.55
29:B4:31:ILE:HG22	29:B4:31:ILE:O	2.06	0.55
30:B5:55:ARG:C	30:B5:55:ARG:HD3	2.27	0.55
35:BA:271(D):G:H1	35:BA:271(T):C:H42	1.54	0.55
35:BA:1232:G:H2'	35:BA:1233:C:C6	2.42	0.55
35:BA:1336:A:OP2	55:BX:64:LYS:HE3	2.07	0.55
35:BA:1336:A:P	55:BX:64:LYS:HE3	2.47	0.55
35:BA:1461:G:H2'	35:BA:1462:C:H6	1.71	0.55
35:BA:1516:C:H2'	35:BA:1517:G:H5"	1.85	0.55
35:BA:2507:C:H2'	35:BA:2508:G:H8	1.71	0.55
35:BA:2687:U:C4	35:BA:2688:U:C5	2.95	0.55
35:BA:2840:C:H5"	49:BR:53:HIS:HD2	1.69	0.55
36:BB:49:C:OP1	50:BS:96:GLY:HA3	2.07	0.55
36:BB:114:C:O2'	50:BS:46:VAL:HG13	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:101:ARG:CB	39:BE:201:THR:HG21	2.37	0.55
40:BF:26:ALA:O	40:BF:27:GLU:CG	2.55	0.55
40:BF:157:VAL:HG22	40:BF:194:MET:HA	1.89	0.55
41:BG:15:VAL:HG22	41:BG:175:LEU:O	2.06	0.55
42:BH:37:VAL:HG12	42:BH:38:SER:H	1.71	0.55
45:BN:23:LEU:CB	45:BN:60:ILE:HG21	2.36	0.55
46:BO:26:LYS:HB3	46:BO:30:ALA:CB	2.37	0.55
47:BP:84:ASN:N	47:BP:84:ASN:HD22	2.05	0.55
53:BV:13:ARG:CG	53:BV:13:ARG:NH1	2.58	0.55
1:AA:278:G:O4’	1:AA:282:A:H1’	2.06	0.55
1:AA:1109:C:C2’	1:AA:1110:A:H5’	2.37	0.55
1:AA:1318:A:C1’	19:AS:37:ARG:HH21	2.19	0.55
1:AA:1325:C:C2	1:AA:1326:C:C5	2.95	0.55
1:AA:1423:G:OP1	46:BO:49:ARG:NH2	2.39	0.55
19:AS:24:ALA:O	19:AS:25:LYS:HB2	2.05	0.55
24:AY:438:PHE:HB2	24:AY:452:SER:O	2.06	0.55
24:AY:620:VAL:O	24:AY:624:LEU:HD13	2.05	0.55
25:B0:20:ARG:H	25:B0:20:ARG:CD	2.15	0.55
35:BA:246:C:H2’	35:BA:247:G:H5’	1.89	0.55
35:BA:285:C:H2’	35:BA:286:C:H5’	1.88	0.55
35:BA:322:A:C3’	40:BF:169:ASN:HD21	2.20	0.55
35:BA:769:G:H5’	35:BA:1379:A:N6	2.21	0.55
35:BA:941:A:H4’	47:BP:35:HIS:CE1	2.41	0.55
35:BA:1389:G:H2’	35:BA:1390:U:C6	2.41	0.55
35:BA:2454:G:H2’	35:BA:2455:G:C5’	2.36	0.55
35:BA:2652:C:O2	35:BA:2652:C:H2’	2.06	0.55
38:BD:129:ASN:O	38:BD:193:VAL:HG12	2.07	0.55
39:BE:119:ARG:HG2	39:BE:160:TYR:HB2	1.89	0.55
40:BF:132:VAL:HG22	40:BF:133:ASN:H	1.72	0.55
41:BG:131:TYR:CE2	41:BG:133:LEU:HB3	2.42	0.55
45:BN:1:MET:HE1	45:BN:3:THR:OG1	2.06	0.55
45:BN:22:THR:O	45:BN:25:ARG:HB2	2.07	0.55
45:BN:91:LEU:CD2	45:BN:98:VAL:HG21	2.37	0.55
46:BO:86:ILE:N	46:BO:86:ILE:HD12	2.22	0.55
47:BP:71:VAL:N	47:BP:72:PRO:CD	2.70	0.55
47:BP:95:VAL:HA	47:BP:99:LEU:HD23	1.89	0.55
55:BX:57:LEU:N	55:BX:57:LEU:CD1	2.69	0.55
56:BY:2:ARG:N	56:BY:4:LYS:HG2	2.21	0.55
56:BY:95:LYS:HD3	56:BY:101:LYS:H	1.70	0.55
1:AA:129(A):G:O2’	1:AA:189(F):U:C2’	2.51	0.55
1:AA:311:C:O2’	1:AA:312:C:H5’	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:489:C:H2'	1:AA:490:G:H8	1.71	0.55
1:AA:1334:G:H5'	1:AA:1335:C:OP2	2.06	0.55
3:AC:5:ILE:N	3:AC:5:ILE:CD1	2.69	0.55
4:AD:92:VAL:O	4:AD:96:LEU:HD22	2.07	0.55
5:AE:11:ILE:HG22	5:AE:12:LEU:N	2.21	0.55
10:AJ:58:ASP:O	10:AJ:59:SER:C	2.45	0.55
21:AU:6:ARG:HH21	21:AU:15:ARG:NH2	2.05	0.55
24:AY:121:VAL:HA	24:AY:124:GLN:HE22	1.72	0.55
24:AY:171:GLU:HG3	24:AY:172:ASP:H	1.71	0.55
24:AY:603:GLU:HB2	24:AY:604:PRO:HD2	1.88	0.55
25:B0:49:LYS:HG3	25:B0:80:HIS:ND1	2.21	0.55
33:B8:10:ALA:O	33:B8:14:VAL:HG12	2.06	0.55
35:BA:848:G:C2	35:BA:933:A:H1'	2.42	0.55
35:BA:1499:C:C2'	35:BA:1500:G:H5'	2.37	0.55
35:BA:2346:A:H1'	35:BA:2383:G:N9	2.22	0.55
35:BA:2787:C:C2	39:BE:61:ARG:HD3	2.42	0.55
35:BA:2811:G:O2'	35:BA:2812:G:H5'	2.06	0.55
35:BA:2861:G:C4	35:BA:2862:G:C8	2.95	0.55
37:BC:4:HIS:ND1	37:BC:8:TYR:HE2	2.02	0.55
39:BE:177:PRO:HG2	39:BE:178:GLU:H	1.72	0.55
41:BG:125:PHE:HB3	41:BG:166:ASP:HB3	1.88	0.55
45:BN:65:LYS:HZ3	45:BN:65:LYS:HA	1.72	0.55
46:BO:34:THR:O	46:BO:35:VAL:C	2.45	0.55
47:BP:59:LEU:HA	47:BP:61:ARG:CD	2.37	0.55
47:BP:97:PRO:O	47:BP:98:GLU:CB	2.55	0.55
47:BP:100:LEU:HA	47:BP:103:ALA:HB3	1.88	0.55
48:BQ:63:LYS:NZ	57:BZ:175:VAL:HG21	2.21	0.55
56:BY:56:PRO:O	56:BY:57:GLN:HB2	2.05	0.55
1:AA:57:G:H2'	1:AA:58:C:C6	2.42	0.55
1:AA:106:C:C2'	1:AA:107:G:H5'	2.37	0.55
1:AA:191:G:C4	20:AT:105:SER:HB3	2.41	0.55
1:AA:191:G:N3	20:AT:105:SER:HB3	2.21	0.55
1:AA:684:A:H2'	1:AA:685:G:C8	2.42	0.55
1:AA:1347:G:H3'	9:AI:108:VAL:O	2.07	0.55
2:AB:231:GLU:HG3	2:AB:232:PRO:O	2.07	0.55
2:AB:236:TYR:CD2	2:AB:239:VAL:HG21	2.42	0.55
7:AG:38:LEU:O	7:AG:42:ILE:HG13	2.07	0.55
7:AG:64:GLN:HG2	7:AG:128:ALA:HB1	1.88	0.55
7:AG:78:ARG:HH12	7:AG:79:ARG:NE	1.98	0.55
8:AH:41:ARG:HG2	8:AH:41:ARG:O	2.06	0.55
10:AJ:63:PHE:CD2	10:AJ:63:PHE:N	2.73	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:5:LEU:HG	19:AS:10:PHE:HD1	1.72	0.55
20:AT:50:GLU:HB3	20:AT:99:LEU:CB	2.37	0.55
24:AY:87:HIS:NE2	24:AY:120:THR:OG1	2.40	0.55
24:AY:334:THR:HG23	24:AY:370:LYS:HA	1.89	0.55
26:B1:58:ILE:HD11	26:B1:91:LYS:HA	1.87	0.55
29:B4:9:LEU:HD13	29:B4:26:SER:O	2.07	0.55
30:B5:45:VAL:HG22	30:B5:51:TYR:CE2	2.42	0.55
30:B5:55:ARG:NH2	49:BR:33:ARG:CD	2.66	0.55
31:B6:10:LEU:HB3	33:B8:34:TRP:CD1	2.42	0.55
35:BA:680:G:H2'	35:BA:681:G:C8	2.41	0.55
35:BA:1314:C:OP1	35:BA:1315:C:OP2	2.25	0.55
35:BA:1771:C:HO2'	35:BA:1786:A:H8	1.54	0.55
35:BA:2000:G:O2'	35:BA:2001:A:H5'	2.07	0.55
35:BA:2298:A:H62	35:BA:2318:G:H8	1.55	0.55
35:BA:2556:C:H2'	35:BA:2557:G:O4'	2.06	0.55
35:BA:2895:U:H3'	35:BA:2895:U:H6	1.71	0.55
36:BB:104:U:H6	36:BB:104:U:C5'	2.18	0.55
40:BF:43:LYS:HA	40:BF:98:SER:CB	2.37	0.55
40:BF:46:ARG:HH11	40:BF:46:ARG:HG3	1.71	0.55
40:BF:198:ALA:O	40:BF:201:VAL:HG12	2.06	0.55
42:BH:175:LYS:O	42:BH:176:ALA:CB	2.54	0.55
43:BK:10:LEU:HD12	43:BK:57:ILE:CD1	2.37	0.55
47:BP:47:ASP:HB3	47:BP:48:PRO:CA	2.37	0.55
51:BT:117:ASP:OD2	51:BT:120:ARG:HG3	2.06	0.55
53:BV:82:ARG:O	53:BV:83:ARG:HD3	2.07	0.55
56:BY:51:VAL:C	56:BY:53:PRO:HD2	2.28	0.55
57:BZ:120:ILE:O	57:BZ:121:HIS:HB2	2.06	0.55
1:AA:415:A:H2'	1:AA:416:G:C8	2.42	0.55
1:AA:1190:G:OP1	3:AC:5:ILE:HD12	2.07	0.55
1:AA:1299:A:C2	1:AA:1301:U:N3	2.75	0.55
5:AE:11:ILE:HD12	5:AE:31:LEU:HD13	1.88	0.55
6:AF:91:VAL:CG1	6:AF:92:LYS:N	2.70	0.55
8:AH:120:THR:O	8:AH:121:ASP:C	2.42	0.55
12:AL:110:VAL:CG2	12:AL:120:TYR:HB3	2.37	0.55
17:AQ:13:ASP:CB	17:AQ:19:VAL:HG12	2.37	0.55
19:AS:65:ASN:HA	29:B4:48:ARG:NH1	2.22	0.55
24:AY:603:GLU:C	24:AY:676:TYR:HD1	2.09	0.55
24:AY:606:MET:HE2	24:AY:671:MET:CE	2.36	0.55
31:B6:7:ILE:O	31:B6:27:LYS:HD3	2.07	0.55
31:B6:9:LEU:CD2	31:B6:26:ASN:HD22	2.19	0.55
34:B9:29:ASN:HD22	34:B9:29:ASN:N	1.97	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:83:G:O2'	35:BA:84:A:OP2	2.25	0.55
35:BA:136:G:H2'	35:BA:137:C:H6	1.71	0.55
35:BA:1285:G:C2'	35:BA:1286:A:H5'	2.35	0.55
35:BA:1485:G:H1'	35:BA:1505:C:N4	2.16	0.55
35:BA:1502:C:H2'	35:BA:1503:U:C6	2.42	0.55
35:BA:1819:A:H1'	35:BA:1821:A:C6	2.42	0.55
35:BA:2239:G:H5'	38:BD:251:GLY:HA3	1.87	0.55
39:BE:103:ASP:CG	39:BE:201:THR:HA	2.27	0.55
39:BE:202:LYS:CD	39:BE:202:LYS:N	2.69	0.55
40:BF:132:VAL:O	40:BF:138:GLU:OE1	2.25	0.55
43:BK:29:GLN:O	43:BK:59:ILE:HD12	2.06	0.55
43:BK:136:VAL:O	43:BK:136:VAL:HG13	2.07	0.55
47:BP:146:VAL:O	47:BP:148:LEU:N	2.40	0.55
49:BR:55:ALA:CB	49:BR:79:LEU:HD11	2.36	0.55
56:BY:13:VAL:O	56:BY:24:VAL:HA	2.07	0.55
56:BY:54:LYS:HE2	56:BY:55:TYR:HE1	1.71	0.55
57:BZ:20:ARG:CB	57:BZ:20:ARG:HH11	2.19	0.55
57:BZ:144:LEU:HD11	57:BZ:150:LEU:HD22	1.88	0.55
1:AA:268:C:O2	1:AA:268:C:H2'	2.05	0.54
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.89	0.54
1:AA:1202:G:C2	14:AN:42:ILE:HG21	2.42	0.54
3:AC:130:VAL:O	3:AC:134:ILE:HG13	2.07	0.54
4:AD:127:THR:HA	4:AD:132:ARG:HA	1.89	0.54
13:AM:37:THR:HG21	13:AM:56:LEU:HA	1.89	0.54
15:AO:18:PHE:CD1	15:AO:18:PHE:C	2.80	0.54
24:AY:505:GLY:HA3	24:AY:576:ASP:OD1	2.07	0.54
26:B1:76:ARG:HH22	26:B1:95:LEU:CD1	2.20	0.54
27:B2:17:SER:HB2	27:B2:18:PRO:HD2	1.89	0.54
28:B3:17:LYS:HZ3	28:B3:20:LYS:HE3	1.73	0.54
31:B6:13:CYS:HB3	31:B6:49:HIS:HB3	1.89	0.54
31:B6:42:TRP:CE3	31:B6:42:TRP:HA	2.43	0.54
35:BA:260:G:H1'	35:BA:621:A:H1'	1.88	0.54
35:BA:709:U:H2'	35:BA:710:G:C8	2.41	0.54
35:BA:803:U:O2'	35:BA:804:A:H5'	2.06	0.54
35:BA:848:G:H3'	35:BA:849:A:C8	2.42	0.54
35:BA:965:C:C4'	35:BA:2273:A:H1'	2.36	0.54
35:BA:1865:G:C3'	35:BA:1866:C:H5"	2.37	0.54
37:BC:132:LEU:HB3	37:BC:138:LEU:N	2.21	0.54
39:BE:51:PHE:N	39:BE:74:PRO:HG3	2.22	0.54
46:BO:63:VAL:HG23	46:BO:64:ARG:HG3	1.89	0.54
48:BQ:35:VAL:HG22	48:BQ:36:ALA:N	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BT:5:ALA:O	51:BT:7:ILE:N	2.40	0.54
54:BW:107:LEU:N	54:BW:107:LEU:CD1	2.66	0.54
1:AA:288:A:H2'	1:AA:289:G:H4'	1.88	0.54
1:AA:745:C:H2'	1:AA:746:A:C8	2.43	0.54
1:AA:1017:G:H2'	1:AA:1018:C:C6	2.41	0.54
1:AA:1038:C:H2'	1:AA:1039:C:C6	2.42	0.54
1:AA:1128:C:C3'	1:AA:1129:C:H5"	2.36	0.54
3:AC:77:ILE:HG22	3:AC:77:ILE:O	2.06	0.54
7:AG:29:LYS:CB	7:AG:105:VAL:HG21	2.37	0.54
11:AK:124:LYS:HB3	11:AK:125:PHE:HD1	1.72	0.54
23:AX:17:U:O2'	23:AX:18:G:H5'	2.08	0.54
24:AY:435:ASP:OD1	58:AY:701:FUA:H192	2.07	0.54
25:B0:21:LEU:HD22	25:B0:39:ARG:O	2.07	0.54
31:B6:5:VAL:CG2	35:BA:2283:C:OP1	2.55	0.54
35:BA:338:G:O2'	35:BA:339:U:H5'	2.07	0.54
35:BA:676:A:H1'	35:BA:2443:C:H1'	1.88	0.54
35:BA:769:G:O2'	35:BA:770:G:H5'	2.06	0.54
35:BA:2030:A:H4'	35:BA:2031:A:H8	1.72	0.54
35:BA:2170:A:H5"	37:BC:135:ARG:NH2	2.22	0.54
35:BA:2695:C:H2'	35:BA:2696:U:C6	2.42	0.54
49:BR:117:VAL:CG1	49:BR:118:GLU:N	2.69	0.54
51:BT:50:ILE:HA	51:BT:99:LEU:HD11	1.89	0.54
51:BT:50:ILE:CG1	51:BT:102:ILE:HD11	2.37	0.54
1:AA:141:A:H1'	1:AA:182:U:C2	2.43	0.54
1:AA:826:C:H2'	1:AA:827:U:H6	1.71	0.54
1:AA:1294:G:C2'	1:AA:1295:G:H5'	2.36	0.54
1:AA:1378:C:C5	1:AA:1379:G:C8	2.95	0.54
3:AC:16:ARG:HD3	3:AC:17:ASP:N	2.21	0.54
4:AD:126:ILE:HG22	4:AD:127:THR:N	2.21	0.54
5:AE:145:LYS:O	5:AE:149:GLU:HG2	2.07	0.54
9:AI:81:ILE:O	9:AI:85:LEU:HG	2.07	0.54
11:AK:59:TYR:CE2	11:AK:63:LEU:HD11	2.41	0.54
24:AY:485:GLU:HB2	24:AY:560:VAL:HA	1.90	0.54
25:B0:25:ARG:HD2	25:B0:29:GLN:NE2	2.22	0.54
26:B1:44:PRO:HB2	26:B1:46:LEU:CD1	2.36	0.54
27:B2:48:HIS:ND1	35:BA:95:G:O2'	2.39	0.54
32:B7:48:LYS:NZ	35:BA:125:G:H21	2.06	0.54
35:BA:85:G:H2'	35:BA:86:C:H5'	1.90	0.54
35:BA:1155:A:O3'	52:BU:55:ARG:NH1	2.41	0.54
35:BA:1310:G:H2'	35:BA:1311:G:H5'	1.90	0.54
35:BA:1902:C:H2'	35:BA:1903:G:O4'	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1947:C:H2'	35:BA:1948:G:C5'	2.36	0.54
35:BA:2116:G:N7	35:BA:2117:A:C5	2.75	0.54
35:BA:2344:U:O2'	35:BA:2345:G:H5"	2.07	0.54
35:BA:2713:A:C3'	35:BA:2714:G:H5'	2.37	0.54
35:BA:2791:C:H5	35:BA:2801(A):A:H62	1.54	0.54
39:BE:1:MET:HB2	39:BE:83:ASP:O	2.07	0.54
40:BF:192:LEU:C	40:BF:192:LEU:CD2	2.74	0.54
42:BH:105:LEU:CD2	42:BH:105:LEU:N	2.70	0.54
42:BH:169:VAL:HG13	42:BH:170:ARG:H	1.72	0.54
45:BN:45:ASN:HD22	45:BN:45:ASN:N	1.91	0.54
47:BP:112:LEU:H	47:BP:128:HIS:HD2	1.54	0.54
47:BP:127:ALA:O	47:BP:148:LEU:HD11	2.07	0.54
49:BR:51:LEU:H	49:BR:51:LEU:HD12	1.72	0.54
51:BT:33:LYS:HE2	51:BT:43:GLN:OE1	2.08	0.54
1:AA:778:G:H1'	11:AK:119:CYS:HB3	1.90	0.54
1:AA:1238:A:C8	1:AA:1303:C:H1'	2.43	0.54
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.42	0.54
2:AB:160:ASP:O	2:AB:161:ALA:HB2	2.06	0.54
3:AC:59:ARG:HG3	3:AC:64:VAL:HA	1.90	0.54
3:AC:136:GLN:C	3:AC:138:VAL:N	2.57	0.54
7:AG:97:GLN:O	7:AG:98:SER:C	2.45	0.54
8:AH:64:LYS:HD2	8:AH:79:VAL:HG21	1.88	0.54
13:AM:35:GLU:CG	13:AM:36:LYS:N	2.70	0.54
23:AX:13:A:H2'	23:AX:14:A:H5"	1.88	0.54
24:AY:218:GLU:O	24:AY:221:ALA:HB3	2.07	0.54
25:B0:38:VAL:HG12	25:B0:39:ARG:N	2.22	0.54
30:B5:13:LYS:NZ	35:BA:517:C:OP2	2.37	0.54
30:B5:44:THR:HG22	30:B5:45:VAL:N	2.19	0.54
32:B7:34:ARG:HH12	32:B7:39:ARG:CD	2.20	0.54
35:BA:194:G:H2'	35:BA:195:A:O4'	2.08	0.54
35:BA:214:G:H1'	35:BA:216:A:HO2'	1.72	0.54
35:BA:545:C:H2'	35:BA:547:A:C5'	2.36	0.54
35:BA:2328:A:H8	35:BA:2328:A:O5'	1.89	0.54
35:BA:2807:G:H3'	35:BA:2808:U:C5'	2.34	0.54
39:BE:30:PRO:O	39:BE:32:PRO:HD3	2.07	0.54
42:BH:42:ARG:HG3	42:BH:42:ARG:HH11	1.72	0.54
42:BH:105:LEU:HD23	42:BH:105:LEU:N	2.22	0.54
42:BH:169:VAL:HG22	42:BH:170:ARG:N	2.20	0.54
43:BK:105:LEU:CD2	43:BK:120:LEU:HD13	2.38	0.54
43:BK:120:LEU:HA	43:BK:123:ALA:HB3	1.87	0.54
46:BO:17:ARG:HB2	46:BO:45:GLU:HG3	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BQ:8:LYS:HB2	48:BQ:9:TYR:CD1	2.42	0.54
50:BS:17:ARG:O	50:BS:20:ARG:HG2	2.07	0.54
50:BS:98:VAL:C	50:BS:100:ALA:N	2.60	0.54
51:BT:99:LEU:HB3	51:BT:101:PHE:HE1	1.72	0.54
56:BY:17:SER:HB3	56:BY:71:LYS:HD2	1.88	0.54
1:AA:98:G:C2'	1:AA:99:U:H5'	2.37	0.54
1:AA:395:C:C4'	24:AY:340:TYR:OH	2.55	0.54
1:AA:703:G:C2'	1:AA:704:A:OP2	2.55	0.54
1:AA:1248:A:H2'	1:AA:1249:C:H5'	1.90	0.54
1:AA:1321:C:C5'	1:AA:1322:C:H5"	2.37	0.54
2:AB:19:HIS:O	2:AB:20:GLU:O	2.26	0.54
6:AF:35:ALA:O	6:AF:36:ARG:C	2.44	0.54
16:AP:60:LEU:HD21	16:AP:66:PRO:HD3	1.89	0.54
20:AT:75:ASN:HD22	20:AT:75:ASN:H	1.56	0.54
24:AY:34:TYR:HD2	24:AY:35:TYR:CE2	2.25	0.54
24:AY:415:PRO:HG3	24:AY:421:GLN:HG2	1.90	0.54
24:AY:428:LEU:HD13	24:AY:440:VAL:CG1	2.24	0.54
30:B5:7:PRO:HA	35:BA:2615:U:C2	2.43	0.54
30:B5:27:PRO:CD	54:BW:23:LEU:HD11	2.38	0.54
31:B6:15:GLU:OE2	31:B6:20:ASN:ND2	2.41	0.54
31:B6:54:ILE:HD13	35:BA:2420:C:H4'	1.90	0.54
35:BA:438:G:H2'	35:BA:440:G:H8	1.73	0.54
35:BA:943:U:OP2	47:BP:38:GLN:OE1	2.25	0.54
35:BA:1274:A:N3	35:BA:1297:C:H1'	2.22	0.54
35:BA:1759:A:C5'	35:BA:2715:C:H1'	2.36	0.54
35:BA:1774:C:O5'	35:BA:1774:C:H6	1.89	0.54
35:BA:1853:A:H2'	35:BA:1854:A:C8	2.42	0.54
35:BA:1967:C:C2'	35:BA:1968:G:H5'	2.38	0.54
35:BA:2131:G:N7	35:BA:2133:G:N2	2.56	0.54
35:BA:2259:G:O2'	35:BA:2260:C:H5'	2.07	0.54
36:BB:68:C:O2'	36:BB:69:G:H5'	2.08	0.54
37:BC:30:VAL:O	37:BC:33:LEU:N	2.40	0.54
37:BC:48:LEU:HD12	37:BC:48:LEU:H	1.72	0.54
38:BD:23:GLU:OE1	38:BD:23:GLU:HA	2.08	0.54
40:BF:187:VAL:CG1	47:BP:7:ARG:HH22	2.18	0.54
41:BG:82:LEU:CD1	41:BG:87:PRO:CB	2.85	0.54
43:BK:17:ALA:HB3	43:BK:38:VAL:CG2	2.38	0.54
45:BN:120:LEU:HD13	45:BN:121:LYS:N	2.23	0.54
47:BP:83:VAL:H	47:BP:115:LEU:CD2	2.21	0.54
49:BR:7:GLY:O	49:BR:8:ARG:CB	2.52	0.54
54:BW:36:LEU:HD23	54:BW:36:LEU:H	1.66	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:418:C:H2'	1:AA:419:C:C6	2.42	0.54
1:AA:1058:G:H2'	1:AA:1059:C:C6	2.43	0.54
2:AB:185:ILE:CG2	2:AB:199:TYR:HB2	2.18	0.54
5:AE:91:LEU:HD13	5:AE:120:THR:CG2	2.37	0.54
8:AH:1:MET:N	8:AH:1:MET:CE	2.70	0.54
8:AH:1:MET:O	8:AH:2:LEU:O	2.24	0.54
24:AY:180:VAL:HG23	24:AY:181:LEU:N	2.19	0.54
31:B6:11:LEU:HG	31:B6:26:ASN:HD21	1.73	0.54
31:B6:27:LYS:HB3	31:B6:30:THR:CG2	2.36	0.54
35:BA:308:G:O2'	56:BY:19:LYS:HE3	2.08	0.54
35:BA:344:G:H2'	35:BA:345:A:C8	2.43	0.54
35:BA:782:A:C2	38:BD:226:MET:HG2	2.42	0.54
35:BA:1678:G:H22	35:BA:1989:G:H22	1.56	0.54
35:BA:2039:C:O2'	35:BA:2040:C:H5'	2.07	0.54
35:BA:2122:U:H4'	37:BC:167:ASP:HB3	1.89	0.54
35:BA:2307:G:C2	35:BA:2308:G:H5"	2.43	0.54
35:BA:2747:G:H21	35:BA:2757:A:H62	1.54	0.54
38:BD:165:ILE:HD13	38:BD:175:LEU:CD2	2.36	0.54
38:BD:229:VAL:HG23	38:BD:230:ASP:N	2.21	0.54
48:BQ:42:ILE:HD12	48:BQ:42:ILE:N	2.23	0.54
50:BS:27:SER:HA	50:BS:88:ASP:HB3	1.89	0.54
1:AA:489:C:H2'	1:AA:490:G:C8	2.42	0.54
1:AA:509:A:H2	1:AA:543:C:H1'	1.73	0.54
1:AA:963:G:H21	10:AJ:55:LYS:CD	2.20	0.54
1:AA:1134:G:N2	1:AA:1141:C:C2	2.75	0.54
1:AA:1524:C:H2'	1:AA:1525:G:C8	2.43	0.54
3:AC:134:ILE:HD11	3:AC:153:VAL:HG23	1.89	0.54
11:AK:122:LYS:O	11:AK:124:LYS:N	2.40	0.54
11:AK:125:PHE:N	11:AK:125:PHE:CD1	2.74	0.54
16:AP:59:TRP:O	16:AP:62:VAL:HG22	2.07	0.54
20:AT:69:GLY:O	20:AT:73:HIS:NE2	2.40	0.54
22:AV:23:C:O2'	22:AV:24:U:H5'	2.07	0.54
24:AY:20:HIS:CD2	24:AY:117:GLN:HB3	2.42	0.54
24:AY:225:GLU:O	24:AY:228:MET:HB3	2.08	0.54
24:AY:431:LEU:HD22	24:AY:466:LEU:CD1	2.34	0.54
24:AY:463:VAL:O	24:AY:467:LYS:HB3	2.07	0.54
24:AY:573:HIS:HD2	24:AY:576:ASP:H	1.56	0.54
28:B3:43:ILE:O	28:B3:47:VAL:HG23	2.08	0.54
35:BA:250:G:H2'	35:BA:251:A:C8	2.43	0.54
35:BA:654(L):G:C2'	35:BA:654(M):C:H4'	2.37	0.54
35:BA:1036:G:OP2	42:BH:59:ARG:NH1	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1682:G:O2'	35:BA:1683:C:H5'	2.08	0.54
35:BA:1820:U:C2	38:BD:202:LYS:HG2	2.43	0.54
35:BA:2845:G:O5'	35:BA:2845:G:H8	1.91	0.54
35:BA:2870:C:H2'	35:BA:2871:C:H6	1.73	0.54
39:BE:59:VAL:CG1	39:BE:60:ASN:N	2.71	0.54
41:BG:163:ALA:HB1	41:BG:168:GLU:HB2	1.90	0.54
42:BH:52:VAL:O	42:BH:52:VAL:CG1	2.52	0.54
46:BO:49:ARG:HD3	46:BO:49:ARG:N	2.23	0.54
48:BQ:108:GLY:O	48:BQ:109:VAL:HG23	2.08	0.54
51:BT:99:LEU:HB2	51:BT:101:PHE:HE1	1.72	0.54
52:BU:79:PHE:CE1	52:BU:83:LEU:HD11	2.43	0.54
55:BX:59:VAL:HG12	55:BX:59:VAL:O	2.07	0.54
57:BZ:17:ALA:O	57:BZ:21:ALA:HB2	2.07	0.54
57:BZ:119:GLU:HG3	57:BZ:119:GLU:O	2.07	0.54
1:AA:178:C:C2'	1:AA:179:A:H5'	2.37	0.54
1:AA:748:C:O2'	1:AA:749:C:H6	1.91	0.54
1:AA:1381:U:C5	1:AA:1382:C:C5	2.96	0.54
3:AC:13:GLY:HA3	14:AN:57:ARG:NH2	2.23	0.54
3:AC:50:ALA:O	3:AC:70:VAL:CG1	2.55	0.54
3:AC:140:ARG:HG3	3:AC:140:ARG:NH1	2.22	0.54
24:AY:20:HIS:N	24:AY:121:VAL:HG11	2.23	0.54
24:AY:247:ARG:HG2	24:AY:251:ILE:HD11	1.90	0.54
24:AY:259:PHE:CE2	24:AY:275:ALA:HB2	2.43	0.54
24:AY:546:ILE:HG12	24:AY:590:ILE:HG12	1.90	0.54
35:BA:274:G:O2'	35:BA:275:G:H5"	2.07	0.54
35:BA:606:U:H5'	35:BA:607:U:OP2	2.08	0.54
35:BA:693:C:H2'	35:BA:694:U:C6	2.43	0.54
35:BA:1786:A:H2	35:BA:2606:C:H1'	1.73	0.54
35:BA:2103:C:N4	35:BA:2186:G:H1	2.06	0.54
35:BA:2223:G:H2'	35:BA:2224:G:C5'	2.36	0.54
35:BA:2329:G:H2'	35:BA:2330:G:H8	1.73	0.54
40:BF:9:ILE:HG12	40:BF:14:PRO:C	2.28	0.54
40:BF:152:GLU:OE1	40:BF:191:ARG:HD2	2.08	0.54
41:BG:62:LEU:N	41:BG:62:LEU:HD12	2.22	0.54
42:BH:89:ILE:HD13	42:BH:94:TYR:HB3	1.90	0.54
49:BR:92:GLY:HA2	49:BR:94:TYR:CE1	2.43	0.54
50:BS:66:ALA:HB1	50:BS:97:ARG:O	2.08	0.54
55:BX:47:PHE:O	55:BX:49:VAL:HG13	2.08	0.54
1:AA:521:G:O2'	1:AA:522:C:H5'	2.08	0.54
1:AA:812:C:HO2'	1:AA:813:U:P	2.29	0.54
1:AA:1004:A:H61	1:AA:1034:G:C2'	2.14	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1250:A:H5'	9:AI:67:GLY:HA2	1.89	0.54
1:AA:1277:C:H3'	1:AA:1277:C:C6	2.43	0.54
1:AA:1277:C:C3'	1:AA:1277:C:C6	2.91	0.54
1:AA:1351:U:O4'	7:AG:33:ASP:HB3	2.08	0.54
4:AD:14:ARG:C	4:AD:16:GLY:N	2.60	0.54
11:AK:58:PRO:HA	11:AK:90:GLY:CA	2.36	0.54
14:AN:47:LEU:O	14:AN:50:LYS:N	2.41	0.54
17:AQ:46:ASP:OD1	17:AQ:51:TYR:HD1	1.91	0.54
24:AY:379:GLY:O	24:AY:380:LEU:HB2	2.07	0.54
24:AY:415:PRO:O	24:AY:420:ASP:HB2	2.08	0.54
27:B2:18:PRO:HG2	27:B2:19:VAL:HG23	1.90	0.54
29:B4:8:LYS:O	29:B4:9:LEU:CB	2.56	0.54
31:B6:16:CYS:SG	31:B6:48:VAL:HG21	2.48	0.54
34:B9:17:ILE:HG21	34:B9:19:ARG:HE	1.73	0.54
35:BA:15:G:H2'	35:BA:16:G:H8	1.71	0.54
35:BA:223:A:C4	35:BA:422:A:C8	2.96	0.54
35:BA:364:C:C2'	35:BA:365:C:H5"	2.38	0.54
35:BA:600:G:H2'	35:BA:601:C:C6	2.43	0.54
35:BA:1080:C:O2'	35:BA:1081:U:H5'	2.08	0.54
35:BA:1276:A:H8	35:BA:1276:A:H5"	1.72	0.54
35:BA:1578:U:O2	35:BA:1578:U:C2'	2.56	0.54
35:BA:1847:A:H5'	35:BA:1848:A:C8	2.43	0.54
35:BA:2347:C:H2'	35:BA:2348:U:C6	2.43	0.54
36:BB:49:C:H2'	36:BB:50:G:C8	2.43	0.54
39:BE:38:THR:CB	39:BE:41:LYS:HG2	2.34	0.54
40:BF:6:VAL:H	40:BF:125:LEU:HD21	1.73	0.54
47:BP:95:VAL:O	47:BP:96:THR:HG23	2.08	0.54
48:BQ:36:ALA:HA	48:BQ:129:THR:HG22	1.90	0.54
50:BS:12:PHE:C	50:BS:12:PHE:HD1	2.12	0.54
51:BT:53:ARG:O	51:BT:59:THR:HB	2.08	0.54
52:BU:47:TYR:HE2	53:BV:74:LYS:HZ2	1.54	0.54
56:BY:59:GLY:O	56:BY:60:PHE:HB2	2.08	0.54
57:BZ:71:VAL:HG13	57:BZ:86:VAL:CG1	2.38	0.54
1:AA:811:C:H4'	1:AA:900:A:N6	2.22	0.54
1:AA:893:C:H2'	1:AA:894:G:H8	1.72	0.54
1:AA:1347:G:H2'	1:AA:1373:G:C6	2.43	0.54
4:AD:155:LEU:O	4:AD:156:GLU:C	2.46	0.54
7:AG:80:VAL:HG11	7:AG:85:TYR:HD1	1.73	0.54
9:AI:9:ARG:HG2	9:AI:14:VAL:HA	1.90	0.54
10:AJ:23:ILE:HG22	10:AJ:23:ILE:O	2.08	0.54
12:AL:47:LYS:CB	12:AL:48:PRO:CD	2.81	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:15:VAL:HA	13:AM:18:ALA:HB3	1.89	0.54
16:AP:50:LYS:O	16:AP:51:VAL:CG2	2.56	0.54
18:AR:74:ARG:HD3	18:AR:81:PHE:HD2	1.72	0.54
20:AT:73:HIS:H	20:AT:76:ALA:CB	2.21	0.54
24:AY:343:ASN:C	24:AY:343:ASN:ND2	2.60	0.54
25:B0:43:THR:HG22	35:BA:2331:G:O2'	2.08	0.54
26:B1:64:ALA:HA	26:B1:67:ILE:CG1	2.37	0.54
27:B2:69:ARG:CG	27:B2:70:GLN:N	2.71	0.54
33:B8:13:ARG:HH12	47:BP:59:LEU:HG	1.71	0.54
35:BA:492:A:H2'	35:BA:493:G:C5'	2.37	0.54
35:BA:2224:G:H4'	35:BA:2226:C:C2	2.43	0.54
35:BA:2255:G:H2'	35:BA:2256:G:O4'	2.08	0.54
35:BA:2453:A:OP1	35:BA:2573:C:H5	1.91	0.54
36:BB:52:A:O2'	36:BB:53:A:C8	2.55	0.54
41:BG:164:GLU:C	41:BG:165:THR:HG23	2.28	0.54
48:BQ:55:VAL:CG1	48:BQ:56:ARG:N	2.70	0.54
49:BR:18:LEU:HD21	49:BR:22:ARG:CZ	2.38	0.54
49:BR:63:ARG:HA	49:BR:80:PHE:CZ	2.42	0.54
51:BT:50:ILE:N	51:BT:50:ILE:HD12	2.23	0.54
51:BT:106:SER:O	51:BT:107:ASP:HB3	2.08	0.54
56:BY:28:LYS:CB	56:BY:37:VAL:HB	2.17	0.54
56:BY:76:CYS:O	56:BY:99:CYS:SG	2.66	0.54
57:BZ:81:ARG:HG3	57:BZ:81:ARG:O	2.08	0.54
1:AA:1089:G:O2'	1:AA:1090:U:H5'	2.07	0.53
2:AB:44:LEU:HA	2:AB:47:THR:OG1	2.07	0.53
3:AC:90:GLU:CA	3:AC:93:LYS:HB3	2.37	0.53
14:AN:41:ARG:NH1	14:AN:41:ARG:CG	2.70	0.53
24:AY:16:GLY:HA3	24:AY:101:LEU:CD1	2.39	0.53
24:AY:250:THR:O	24:AY:253:LEU:N	2.34	0.53
24:AY:257:PRO:HB2	24:AY:259:PHE:HE1	1.72	0.53
24:AY:688:ILE:N	24:AY:688:ILE:CD1	2.71	0.53
29:B4:2:LYS:CB	36:BB:40:U:O4	2.57	0.53
29:B4:2:LYS:CG	36:BB:44:G:OP2	2.57	0.53
35:BA:123:G:H2'	35:BA:124:G:O4'	2.08	0.53
35:BA:182:A:O2'	35:BA:183:C:H5'	2.08	0.53
35:BA:464:U:H2'	35:BA:465:G:O4'	2.08	0.53
35:BA:732:C:O2'	35:BA:733:G:H5'	2.08	0.53
35:BA:1142(A):A:O2'	35:BA:1143:A:H2'	2.09	0.53
35:BA:1198:U:O2	35:BA:1198:U:H2'	2.09	0.53
35:BA:2328:A:H2'	35:BA:2329:G:C8	2.43	0.53
35:BA:2872:G:C2	35:BA:2873:A:N6	2.76	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:206:LEU:HD23	38:BD:211:ARG:CG	2.39	0.53
40:BF:6:VAL:O	40:BF:6:VAL:HG12	2.07	0.53
41:BG:153:ARG:HB3	41:BG:153:ARG:NH1	2.22	0.53
42:BH:85:LYS:C	42:BH:85:LYS:HD3	2.28	0.53
56:BY:74:PRO:HG3	56:BY:83:THR:HG22	1.89	0.53
56:BY:94:LYS:HG3	56:BY:102:CYS:SG	2.47	0.53
57:BZ:115:GLY:HA2	57:BZ:177:PRO:CD	2.33	0.53
1:AA:830:G:O2'	1:AA:831:U:H5'	2.08	0.53
1:AA:960:U:C5	1:AA:1225:A:C8	2.96	0.53
2:AB:238:LEU:O	2:AB:239:VAL:C	2.46	0.53
4:AD:112:VAL:HG12	4:AD:116:GLN:OE1	2.08	0.53
4:AD:162:LEU:HD11	4:AD:181:MET:CG	2.36	0.53
10:AJ:32:ALA:CB	10:AJ:76:ASN:HB3	2.38	0.53
20:AT:82:SER:O	20:AT:86:ARG:HB2	2.07	0.53
24:AY:401:SER:O	24:AY:403:GLU:HG3	2.07	0.53
24:AY:434:GLU:O	24:AY:435:ASP:HB2	2.08	0.53
30:B5:10:LYS:HB2	35:BA:2017:U:O2	2.08	0.53
35:BA:180:G:N2	35:BA:214:G:O6	2.41	0.53
35:BA:409:C:O2'	35:BA:410:G:H5'	2.08	0.53
35:BA:611:C:H2'	35:BA:612:C:H6	1.73	0.53
35:BA:688:U:H2'	35:BA:689:A:H8	1.73	0.53
35:BA:1047:G:O2'	35:BA:1110:G:N2	2.37	0.53
35:BA:1221:C:O2'	35:BA:1221(A):C:H5'	2.08	0.53
35:BA:1773:A:H2'	35:BA:1774:C:H5'	1.91	0.53
37:BC:115:VAL:HG12	37:BC:145:THR:HG23	1.90	0.53
39:BE:82:ARG:HG3	39:BE:83:ASP:N	2.18	0.53
39:BE:103:ASP:OD2	39:BE:168:MET:HE2	2.08	0.53
41:BG:125:PHE:HZ	41:BG:173:LEU:HD12	1.73	0.53
42:BH:67:LEU:O	42:BH:71:LEU:HD12	2.08	0.53
45:BN:78:TYR:N	45:BN:78:TYR:CD1	2.76	0.53
47:BP:97:PRO:O	47:BP:98:GLU:HB3	2.08	0.53
48:BQ:56:ARG:HA	48:BQ:56:ARG:HE	1.72	0.53
57:BZ:153:SER:HB2	57:BZ:167:PRO:HB3	1.90	0.53
1:AA:697:U:H2'	1:AA:698:G:C5'	2.16	0.53
1:AA:946:A:H3'	1:AA:947:G:C8	2.43	0.53
1:AA:987:G:O2'	1:AA:988:G:H5'	2.08	0.53
1:AA:1165:C:C4	1:AA:1166:G:N7	2.76	0.53
2:AB:82:ARG:NH1	2:AB:82:ARG:HG3	2.22	0.53
3:AC:94:LEU:O	3:AC:94:LEU:HD12	2.08	0.53
4:AD:76:ARG:HG2	4:AD:76:ARG:HH11	1.73	0.53
13:AM:77:ASN:O	13:AM:80:ARG:N	2.36	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:13:ASP:O	19:AS:15:LEU:N	2.42	0.53
19:AS:42:PRO:C	19:AS:43:GLU:CG	2.75	0.53
24:AY:230:LYS:NZ	24:AY:230:LYS:CB	2.72	0.53
24:AY:607:ARG:O	24:AY:671:MET:HA	2.08	0.53
25:B0:40:GLN:HE22	25:B0:43:THR:CA	2.21	0.53
29:B4:25:TYR:O	29:B4:26:SER:HB3	2.09	0.53
35:BA:588:U:H2'	35:BA:589:C:C6	2.44	0.53
35:BA:1145:C:H2'	35:BA:1146:C:H6	1.70	0.53
35:BA:1565:C:H2'	38:BD:21:PHE:CE2	2.43	0.53
35:BA:1843:C:O2'	38:BD:256:GLY:O	2.26	0.53
37:BC:4:HIS:ND1	37:BC:8:TYR:CE2	2.77	0.53
38:BD:4:LYS:NZ	38:BD:20:ASP:HA	2.24	0.53
38:BD:61:LEU:HB3	38:BD:63:ARG:HH12	1.73	0.53
38:BD:155:LEU:HD23	38:BD:177:LEU:CD2	2.39	0.53
39:BE:26:ILE:HD12	39:BE:198:VAL:HG21	1.90	0.53
48:BQ:59:ARG:CA	57:BZ:180:VAL:HG23	2.34	0.53
48:BQ:130:LYS:NZ	57:BZ:80:ARG:HH11	2.06	0.53
52:BU:83:LEU:CD1	52:BU:83:LEU:N	2.70	0.53
52:BU:95:LEU:O	52:BU:98:LEU:HG	2.07	0.53
56:BY:7:VAL:HG11	56:BY:8:LYS:HE3	1.91	0.53
57:BZ:42:VAL:CG1	57:BZ:43:GLU:H	2.18	0.53
57:BZ:56:VAL:CG1	57:BZ:57:ILE:N	2.72	0.53
1:AA:636:U:H2'	1:AA:637:G:C8	2.44	0.53
1:AA:823:G:H2'	1:AA:824:C:C6	2.44	0.53
4:AD:98:GLU:HG3	4:AD:189:PRO:HG3	1.89	0.53
6:AF:36:ARG:NH1	6:AF:36:ARG:CB	2.67	0.53
9:AI:73:GLN:O	9:AI:76:ALA:N	2.39	0.53
12:AL:110:VAL:HG23	12:AL:120:TYR:HB3	1.91	0.53
20:AT:73:HIS:O	20:AT:74:LYS:C	2.47	0.53
22:AV:49:G:H1	22:AV:65:C:H42	1.55	0.53
22:AV:62:C:H2'	22:AV:63:G:O4'	2.07	0.53
24:AY:252:ASP:OD2	24:AY:252:ASP:N	2.41	0.53
24:AY:407:PRO:HB3	24:AY:452:SER:OG	2.08	0.53
24:AY:485:GLU:CB	24:AY:560:VAL:HG22	2.38	0.53
29:B4:39:CYS:O	29:B4:40:HIS:CB	2.57	0.53
33:B8:51:ALA:N	33:B8:53:PRO:HD2	2.23	0.53
35:BA:226:G:C4'	35:BA:227:A:OP1	2.54	0.53
35:BA:301:G:C4	35:BA:302:C:C5	2.97	0.53
35:BA:391:G:O2'	35:BA:392:C:H5'	2.08	0.53
35:BA:655:A:H1'	35:BA:656:G:C1'	2.38	0.53
35:BA:693:C:H2'	35:BA:694:U:H6	1.74	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:695:G:N2	35:BA:696:G:H1'	2.23	0.53
35:BA:1169:G:H1	35:BA:1180:C:H42	1.56	0.53
35:BA:1322:A:OP1	54:BW:11:ARG:HG3	2.07	0.53
35:BA:1334:G:O2'	35:BA:1335:U:H5'	2.08	0.53
35:BA:2317:C:O2'	35:BA:2318:G:H5'	2.09	0.53
35:BA:2794:C:H42	35:BA:2801(A):A:H61	1.55	0.53
37:BC:65:LEU:HD13	37:BC:189:ASN:ND2	2.23	0.53
38:BD:17:THR:O	38:BD:211:ARG:NH2	2.41	0.53
38:BD:26:LYS:O	38:BD:27:THR:CG2	2.56	0.53
38:BD:206:LEU:CD2	38:BD:211:ARG:HG2	2.38	0.53
39:BE:200:GLU:OE1	39:BE:200:GLU:N	2.41	0.53
40:BF:81:PRO:O	40:BF:83:PHE:N	2.42	0.53
49:BR:87:TYR:O	49:BR:89:ASP:N	2.39	0.53
50:BS:51:ALA:CB	50:BS:73:LEU:HB2	2.38	0.53
51:BT:65:LYS:HA	51:BT:65:LYS:CE	2.38	0.53
57:BZ:54:HIS:HE1	57:BZ:123:ASP:OD2	1.90	0.53
57:BZ:153:SER:O	57:BZ:155:LEU:HD23	2.08	0.53
1:AA:1284:C:O5'	1:AA:1284:C:H6	1.91	0.53
1:AA:1378:C:OP1	7:AG:7:ALA:HB3	2.08	0.53
1:AA:1479:C:H2'	1:AA:1480:G:C8	2.40	0.53
2:AB:114:ARG:NH1	2:AB:118:LEU:HD21	2.22	0.53
3:AC:10:PHE:CZ	3:AC:178:LEU:HD11	2.43	0.53
3:AC:101:LEU:HD23	3:AC:102:ASN:N	2.23	0.53
4:AD:17:VAL:O	4:AD:17:VAL:HG12	2.08	0.53
4:AD:154:ASN:CG	4:AD:154:ASN:O	2.47	0.53
10:AJ:47:PHE:CD2	14:AN:44:LEU:HD21	2.42	0.53
23:AX:16:A:H2'	23:AX:17:U:H6	1.74	0.53
24:AY:101:LEU:HD12	24:AY:103:GLY:O	2.07	0.53
35:BA:429:A:C2	35:BA:430:G:C2	2.96	0.53
35:BA:564:C:O2'	35:BA:565:C:H5'	2.09	0.53
35:BA:817:C:H2'	35:BA:818:G:O4'	2.08	0.53
35:BA:953:A:H2'	35:BA:954:G:C8	2.44	0.53
35:BA:1141:U:H5"	45:BN:63:THR:CG2	2.38	0.53
35:BA:2107:C:H42	35:BA:2182:G:H1	1.56	0.53
35:BA:2147:G:H2'	35:BA:2148:G:C4'	2.39	0.53
35:BA:2810:A:H2'	39:BE:61:ARG:HH21	1.73	0.53
36:BB:48:A:H2'	36:BB:49:C:H6	1.70	0.53
38:BD:28:GLU:N	38:BD:28:GLU:CD	2.62	0.53
42:BH:41:MET:HE2	42:BH:43:VAL:CG1	2.39	0.53
45:BN:41:ASP:C	52:BU:64:ARG:HH12	2.12	0.53
47:BP:29:LYS:HB3	47:BP:34:GLY:H	1.74	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BP:32:THR:HG22	47:BP:37:GLY:HA2	1.88	0.53
50:BS:12:PHE:O	50:BS:14:VAL:N	2.40	0.53
52:BU:62:ILE:HG23	52:BU:76:TYR:CE2	2.44	0.53
55:BX:7:VAL:CG1	55:BX:8:ILE:HD12	2.37	0.53
57:BZ:107:THR:HG23	57:BZ:111:VAL:CB	2.38	0.53
1:AA:164:U:H2'	1:AA:165:C:C6	2.43	0.53
1:AA:345:C:O2'	1:AA:346:G:N2	2.42	0.53
1:AA:1237:C:H2'	1:AA:1336:C:C5	2.43	0.53
1:AA:1424:C:O5'	1:AA:1424:C:H6	1.91	0.53
7:AG:116:ALA:O	7:AG:120:ILE:HG12	2.07	0.53
9:AI:3:GLN:NE2	9:AI:20:ARG:NH2	2.57	0.53
12:AL:117:ARG:HH22	12:AL:124:LYS:HB2	1.72	0.53
16:AP:7:ALA:O	16:AP:17:TYR:HA	2.09	0.53
16:AP:8:ARG:CB	16:AP:28:ARG:HH12	2.21	0.53
16:AP:9:PHE:CE2	16:AP:18:ARG:NE	2.77	0.53
19:AS:49:ILE:O	19:AS:60:VAL:HG12	2.08	0.53
20:AT:54:LYS:HA	20:AT:57:ARG:HH22	1.72	0.53
24:AY:89:ASP:OD2	24:AY:89:ASP:N	2.42	0.53
24:AY:487:ILE:HB	24:AY:597:GLY:O	2.08	0.53
24:AY:655:TYR:HD2	24:AY:669:PHE:CE2	2.26	0.53
27:B2:38:GLN:NE2	27:B2:44:LEU:HB2	2.23	0.53
30:B5:44:THR:HG23	49:BR:101:ALA:N	2.24	0.53
30:B5:48:GLU:O	30:B5:49:CYS:SG	2.66	0.53
35:BA:723:G:H2'	35:BA:724:U:H6	1.72	0.53
35:BA:1024:G:H8	35:BA:1024:G:O5'	1.92	0.53
35:BA:1810:A:H2'	35:BA:1811:G:O4'	2.09	0.53
35:BA:2105:C:N4	35:BA:2184:G:H1	2.06	0.53
35:BA:2200:C:H42	35:BA:2223:G:H1	1.55	0.53
38:BD:44:ASN:HB2	38:BD:49:ILE:HA	1.87	0.53
39:BE:152:LYS:HG3	39:BE:153:GLY:H	1.74	0.53
40:BF:66:PRO:O	40:BF:67:GLN:HB3	2.09	0.53
41:BG:68:PRO:CA	41:BG:92:VAL:CG1	2.83	0.53
41:BG:82:LEU:HD23	41:BG:82:LEU:C	2.29	0.53
43:BK:103:GLN:C	43:BK:106:GLU:HG2	2.29	0.53
47:BP:75:ILE:HD12	47:BP:75:ILE:N	2.23	0.53
49:BR:18:LEU:HD21	49:BR:22:ARG:NE	2.23	0.53
51:BT:102:ILE:HG13	51:BT:103:ARG:N	2.24	0.53
55:BX:47:PHE:CD2	55:BX:89:ILE:HG21	2.43	0.53
56:BY:14:LEU:HD12	56:BY:15:VAL:H	1.73	0.53
57:BZ:115:GLY:CA	57:BZ:177:PRO:HD3	2.35	0.53
1:AA:439:A:H2'	1:AA:441:A:H5'	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:902:G:H2'	1:AA:903:G:H8	1.74	0.53
1:AA:961:U:O2	1:AA:983:A:H2'	2.08	0.53
2:AB:31:TYR:HE1	2:AB:200:ILE:HD12	1.74	0.53
5:AE:12:LEU:HD12	5:AE:31:LEU:HB3	1.90	0.53
8:AH:50:ARG:NH1	8:AH:50:ARG:HG2	2.24	0.53
16:AP:50:LYS:C	16:AP:51:VAL:HG23	2.28	0.53
20:AT:94:ALA:O	20:AT:95:ALA:HB3	2.09	0.53
24:AY:210:ARG:O	24:AY:214:GLU:HG2	2.09	0.53
35:BA:523:C:H3'	35:BA:523:C:H6	1.74	0.53
35:BA:614(A):U:H4'	35:BA:614(B):G:C5'	2.38	0.53
35:BA:654(P):C:H2'	35:BA:654(Q):C:H5'	1.91	0.53
35:BA:848:G:H5"	35:BA:928:G:H22	1.74	0.53
35:BA:852:G:H2'	35:BA:853:G:H8	1.74	0.53
35:BA:910:A:H62	48:BQ:12:GLN:HA	1.74	0.53
35:BA:1252:G:N3	52:BU:33:ARG:HD2	2.23	0.53
35:BA:1314:C:H2'	35:BA:1315:C:H6	1.74	0.53
35:BA:1398:C:H2'	35:BA:1399:C:H6	1.72	0.53
35:BA:1515:G:H2'	35:BA:1516:C:C6	2.43	0.53
35:BA:1748:G:H2'	35:BA:1749:A:O4'	2.08	0.53
35:BA:1788:C:H2'	35:BA:1789:A:H8	1.72	0.53
35:BA:1799:G:H5'	35:BA:1819:A:H61	1.73	0.53
35:BA:1844:C:O2'	35:BA:1845:G:H5'	2.08	0.53
35:BA:2219:G:O2'	35:BA:2220:G:H5'	2.08	0.53
35:BA:2408:U:O5'	35:BA:2408:U:H6	1.90	0.53
35:BA:2783:G:C2	35:BA:2784:C:C2	2.97	0.53
35:BA:2820:A:O4'	49:BR:5:LYS:HG3	2.09	0.53
38:BD:79:VAL:O	38:BD:113:VAL:HG13	2.08	0.53
40:BF:18:ARG:HG2	40:BF:19:GLU:N	2.24	0.53
41:BG:44:GLY:O	41:BG:47:LYS:HD2	2.08	0.53
49:BR:44:LEU:C	49:BR:44:LEU:HD13	2.29	0.53
50:BS:28:VAL:HG12	50:BS:29:PHE:N	2.20	0.53
51:BT:80:SER:CB	51:BT:81:PRO:HD3	2.35	0.53
53:BV:82:ARG:N	53:BV:82:ARG:HD2	2.24	0.53
54:BW:86:LEU:HD12	54:BW:87:PRO:N	2.24	0.53
57:BZ:27:VAL:O	57:BZ:27:VAL:HG13	2.08	0.53
1:AA:38:G:C2	1:AA:397:A:C2	2.97	0.53
1:AA:421:U:O2	1:AA:421:U:H2'	2.08	0.53
2:AB:114:ARG:HH11	2:AB:118:LEU:CD2	2.22	0.53
8:AH:6:ILE:O	8:AH:9:MET:N	2.42	0.53
13:AM:4:ILE:HG22	13:AM:5:ALA:N	2.24	0.53
14:AN:12:ARG:C	14:AN:14:PRO:HD3	2.29	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:59:ILE:HG23	17:AQ:71:PHE:HB3	1.91	0.53
24:AY:512:ILE:HD12	24:AY:589:ALA:HB1	1.90	0.53
31:B6:15:GLU:CD	31:B6:44:ARG:CZ	2.77	0.53
31:B6:18:ARG:O	31:B6:20:ASN:ND2	2.42	0.53
32:B7:6:GLN:O	35:BA:686:G:H1'	2.08	0.53
35:BA:214:G:H2'	35:BA:215:G:O4'	2.08	0.53
35:BA:271(C):C:H2'	35:BA:271(D):G:C8	2.44	0.53
35:BA:733:G:O5'	35:BA:733:G:C8	2.50	0.53
35:BA:963:U:H2'	35:BA:964:C:C6	2.44	0.53
35:BA:1079:C:O2	43:BK:129:GLY:HA3	2.09	0.53
35:BA:1635:G:H2'	35:BA:1636:C:C6	2.44	0.53
35:BA:2466:C:O2'	35:BA:2467:C:H5'	2.09	0.53
35:BA:2656:U:N3	35:BA:2665:A:H2	2.07	0.53
35:BA:2723:C:H5"	49:BR:2:ARG:NH1	2.23	0.53
36:BB:64:C:O2'	36:BB:65:C:H5'	2.09	0.53
37:BC:139:PRO:HA	37:BC:145:THR:CG2	2.39	0.53
41:BG:116:ASP:O	41:BG:117:PHE:HB3	2.09	0.53
46:BO:19:ILE:HD12	46:BO:41:ALA:HB3	1.90	0.53
49:BR:50:HIS:CE1	49:BR:54:LEU:HD13	2.44	0.53
51:BT:64:ARG:HG2	51:BT:64:ARG:HH11	1.74	0.53
52:BU:29:SER:OG	52:BU:30:LYS:HE2	2.08	0.53
56:BY:15:VAL:HG12	56:BY:17:SER:H	1.74	0.53
1:AA:417:C:H2'	1:AA:418:C:C6	2.43	0.53
1:AA:1250:A:C2	1:AA:1251:A:C4	2.97	0.53
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.09	0.53
1:AA:1472:U:H2'	1:AA:1473:A:C8	2.44	0.53
5:AE:6:PHE:N	5:AE:6:PHE:CD1	2.74	0.53
5:AE:101:ILE:CD1	5:AE:119:LEU:HA	2.36	0.53
12:AL:53:ARG:NH1	12:AL:92:ASP:OD2	2.41	0.53
15:AO:83:GLU:C	15:AO:85:LEU:N	2.62	0.53
19:AS:40:ILE:HD11	19:AS:74:PHE:HE2	1.74	0.53
23:AX:19:U:H2'	23:AX:20:U:C6	2.44	0.53
24:AY:363:ARG:HH11	24:AY:363:ARG:HG3	1.74	0.53
24:AY:600:VAL:O	24:AY:600:VAL:HG13	2.08	0.53
24:AY:688:ILE:O	24:AY:688:ILE:CG2	2.50	0.53
25:B0:40:GLN:NE2	25:B0:44:ARG:N	2.57	0.53
28:B3:46:ASN:O	28:B3:49:LYS:N	2.41	0.53
29:B4:2:LYS:HB2	36:BB:40:U:C4	2.44	0.53
34:B9:4:ARG:NH1	35:BA:2477:C:N4	2.56	0.53
35:BA:252:G:O2'	35:BA:253:C:H5'	2.09	0.53
35:BA:307:G:O5'	35:BA:307:G:H8	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:796:C:H2'	35:BA:797:C:C6	2.43	0.53
35:BA:850:C:O2'	35:BA:851:U:H5'	2.09	0.53
35:BA:925:C:C3'	35:BA:926:A:H5"	2.39	0.53
35:BA:1658:C:OP1	39:BE:132:HIS:O	2.27	0.53
35:BA:1839:G:H2'	35:BA:1839:G:N3	2.24	0.53
35:BA:1947:C:H2'	35:BA:1948:G:H8	1.74	0.53
35:BA:2200:C:O2	35:BA:2200:C:H2'	2.07	0.53
35:BA:2392:A:C8	47:BP:60:MET:HB3	2.43	0.53
36:BB:40:U:H5"	36:BB:41:U:OP2	2.09	0.53
38:BD:35:LYS:HG3	38:BD:63:ARG:CG	2.38	0.53
40:BF:10:PRO:HD2	40:BF:13:SER:O	2.09	0.53
42:BH:68:THR:O	42:BH:70:THR:N	2.42	0.53
42:BH:84:SER:OG	42:BH:85:LYS:N	2.42	0.53
43:BK:112:MET:HE2	43:BK:120:LEU:HD21	1.89	0.53
45:BN:15:LEU:O	45:BN:136:GLU:HA	2.09	0.53
45:BN:128:HIS:CE1	45:BN:134:ARG:HH11	2.27	0.53
47:BP:33:ARG:O	47:BP:34:GLY:O	2.27	0.53
48:BQ:46:GLN:HG2	48:BQ:126:PRO:HD3	1.91	0.53
49:BR:118:GLU:OE1	49:BR:118:GLU:HA	2.08	0.53
53:BV:22:VAL:O	53:BV:23:GLU:HB2	2.09	0.53
57:BZ:26:GLY:O	57:BZ:27:VAL:HB	2.08	0.53
57:BZ:137:ILE:O	57:BZ:137:ILE:HG22	2.07	0.53
1:AA:539:A:H2'	1:AA:540:G:C8	2.44	0.53
1:AA:1004:A:H5'	1:AA:1025:U:N3	2.24	0.53
1:AA:1026:G:C3'	1:AA:1027:C:H5'	2.39	0.53
1:AA:1161:C:H2'	1:AA:1162:C:H6	1.74	0.53
4:AD:17:VAL:O	4:AD:18:LYS:O	2.27	0.53
5:AE:76:ILE:CG1	5:AE:77:PRO:HD2	2.39	0.53
12:AL:50:SER:O	12:AL:51:ALA:HB2	2.08	0.53
15:AO:65:ARG:H	15:AO:65:ARG:HD2	1.74	0.53
18:AR:46:GLU:HA	18:AR:46:GLU:OE2	2.09	0.53
24:AY:221:ALA:HB3	44:BL:80:LEU:CD2	2.39	0.53
24:AY:468:ARG:HB3	24:AY:469:GLU:OE2	2.09	0.53
24:AY:606:MET:O	24:AY:646:PHE:HA	2.09	0.53
26:B1:5:CYS:O	26:B1:9:GLY:HA2	2.09	0.53
31:B6:51:GLU:HG2	31:B6:52:VAL:H	1.74	0.53
31:B6:52:VAL:HG13	31:B6:53:LYS:N	2.24	0.53
33:B8:50:LEU:HG	33:B8:51:ALA:N	2.24	0.53
35:BA:635:C:O2'	35:BA:639:U:OP1	2.26	0.53
35:BA:742:G:O2'	35:BA:743:G:H5'	2.09	0.53
35:BA:852:G:H2'	35:BA:853:G:C8	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1683:C:O2'	35:BA:1684:C:H5'	2.09	0.53
35:BA:2051:A:H2'	35:BA:2578:G:O5'	2.09	0.53
35:BA:2348:U:C2'	35:BA:2349:G:C5'	2.87	0.53
35:BA:2663:G:O2'	35:BA:2664:G:H5'	2.09	0.53
35:BA:2712:U:H2'	35:BA:2713:A:H5'	1.90	0.53
35:BA:2736:G:O2'	35:BA:2737:G:H5'	2.09	0.53
37:BC:28:ARG:HG2	37:BC:183:PRO:CB	2.39	0.53
38:BD:155:LEU:O	38:BD:156:ALA:HB3	2.09	0.53
39:BE:47:VAL:HG12	39:BE:48:GLN:H	1.73	0.53
42:BH:41:MET:SD	42:BH:53:GLU:C	2.88	0.53
45:BN:57:ALA:N	45:BN:124:ALA:HA	2.24	0.53
46:BO:104:ARG:C	46:BO:106:LEU:H	2.12	0.53
47:BP:13:ASN:O	47:BP:14:LYS:CB	2.56	0.53
47:BP:41:ARG:HH11	47:BP:41:ARG:HB3	1.70	0.53
50:BS:36:TYR:N	50:BS:36:TYR:CD1	2.77	0.53
51:BT:10:VAL:O	51:BT:12:SER:N	2.43	0.53
51:BT:29:ARG:HE	51:BT:84:GLN:HG3	1.74	0.53
52:BU:8:VAL:CG2	52:BU:12:ARG:HE	2.21	0.53
52:BU:49:HIS:C	52:BU:52:ARG:HB2	2.29	0.53
52:BU:92:ARG:NH2	53:BV:11:GLN:H	2.07	0.53
53:BV:67:GLY:O	53:BV:88:ARG:HD2	2.08	0.53
54:BW:6:ILE:CG1	54:BW:104:THR:HG23	2.38	0.53
1:AA:409:G:H1	1:AA:433:C:H42	1.57	0.52
1:AA:526:C:C5	1:AA:527:G:H1'	2.44	0.52
1:AA:703:G:O2'	1:AA:704:A:OP2	2.27	0.52
1:AA:1047:G:H5"	14:AN:4:LYS:HD3	1.90	0.52
1:AA:1211:U:H5'	1:AA:1212:U:OP1	2.09	0.52
1:AA:1478:C:H2'	1:AA:1479:C:C6	2.44	0.52
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.44	0.52
2:AB:165:VAL:CG2	2:AB:166:ASP:N	2.63	0.52
3:AC:72:LYS:HE3	3:AC:72:LYS:C	2.29	0.52
7:AG:44:TYR:HA	7:AG:47:CYS:SG	2.50	0.52
10:AJ:78:ASN:HB2	10:AJ:81:THR:HG23	1.91	0.52
13:AM:72:ALA:O	13:AM:73:GLU:C	2.46	0.52
13:AM:121:LYS:HD3	13:AM:121:LYS:N	2.24	0.52
14:AN:23:ARG:CD	14:AN:28:GLY:O	2.52	0.52
17:AQ:99:SER:C	17:AQ:100:LYS:HG3	2.30	0.52
18:AR:30:ASP:C	18:AR:32:ARG:H	2.12	0.52
22:AV:35:A:O2'	22:AV:36:U:H5'	2.09	0.52
24:AY:337:SER:HA	24:AY:355:LEU:CD2	2.39	0.52
26:B1:30:VAL:H	35:BA:2396:G:H4'	1.72	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:44:PRO:O	26:B1:46:LEU:HD13	2.09	0.52
28:B3:27:GLY:C	28:B3:28:LEU:HD23	2.29	0.52
29:B4:10:VAL:HG23	29:B4:11:PRO:CD	2.38	0.52
31:B6:15:GLU:HG2	31:B6:16:CYS:N	2.23	0.52
31:B6:48:VAL:CG2	31:B6:49:HIS:H	2.17	0.52
32:B7:8:ASN:HD22	32:B7:9:ARG:H	1.56	0.52
33:B8:23:VAL:HG12	33:B8:46:ARG:HH11	1.74	0.52
35:BA:586:A:C2	35:BA:1254:A:C2	2.97	0.52
35:BA:665:C:O2'	35:BA:666:G:H5'	2.09	0.52
35:BA:833:U:OP1	47:BP:45:LEU:HD21	2.10	0.52
35:BA:877:U:C2'	35:BA:878:A:H5"	2.39	0.52
35:BA:954:G:H4'	48:BQ:13:GLN:HE22	1.74	0.52
35:BA:1328:G:O5'	35:BA:1328:G:C8	2.60	0.52
35:BA:1400:G:H2'	35:BA:1401:G:H8	1.71	0.52
35:BA:2394:C:C4	35:BA:2395:C:C5	2.97	0.52
35:BA:2552:U:C2	35:BA:2554:U:C5'	2.92	0.52
35:BA:2628:C:H5"	35:BA:2629:A:H5"	1.90	0.52
38:BD:99:ASP:C	38:BD:99:ASP:OD1	2.48	0.52
38:BD:146:GLU:HB2	38:BD:189:CYS:HB3	1.90	0.52
39:BE:8:LYS:O	39:BE:193:GLY:N	2.33	0.52
46:BO:107:ARG:O	46:BO:112:MET:HE1	2.09	0.52
50:BS:49:VAL:CG1	50:BS:50:SER:H	2.12	0.52
52:BU:8:VAL:HG22	52:BU:12:ARG:HG3	1.91	0.52
55:BX:12:VAL:HG12	55:BX:27:THR:C	2.29	0.52
56:BY:14:LEU:HD12	56:BY:15:VAL:N	2.24	0.52
56:BY:97:ARG:HG3	56:BY:97:ARG:NH1	2.19	0.52
57:BZ:141:VAL:HG12	57:BZ:142:SER:N	2.24	0.52
1:AA:518:C:H4'	1:AA:519:C:H5"	1.90	0.52
1:AA:630:G:C2'	1:AA:631:G:C5'	2.87	0.52
1:AA:1348:U:H2'	1:AA:1349:A:C8	2.44	0.52
2:AB:60:ASP:O	2:AB:64:ARG:NH2	2.43	0.52
2:AB:144:ARG:O	2:AB:145:LEU:C	2.47	0.52
2:AB:223:ILE:O	2:AB:226:ARG:HB3	2.09	0.52
3:AC:193:TYR:O	3:AC:193:TYR:CD1	2.62	0.52
7:AG:144:MET:O	7:AG:147:ALA:HB3	2.10	0.52
20:AT:88:VAL:O	20:AT:92:LEU:HG	2.10	0.52
24:AY:106:VAL:HG23	24:AY:132:ARG:HG3	1.91	0.52
24:AY:162:VAL:HG21	24:AY:255:ILE:CD1	2.39	0.52
28:B3:7:LYS:HE3	28:B3:32:GLN:O	2.10	0.52
28:B3:31:LEU:O	28:B3:32:GLN:HB2	2.10	0.52
29:B4:9:LEU:CD1	29:B4:10:VAL:H	2.22	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:64:A:H2'	35:BA:65:C:H6	1.73	0.52
35:BA:302:C:H2'	35:BA:303:U:H6	1.73	0.52
35:BA:729:G:N7	38:BD:208:LYS:HB2	2.24	0.52
35:BA:745:G:H21	35:BA:750:A:N6	2.07	0.52
35:BA:834:C:O2'	35:BA:835:A:H5'	2.09	0.52
35:BA:1199:U:H2'	35:BA:1200:C:C6	2.44	0.52
35:BA:1499:C:O2'	35:BA:1500:G:H5'	2.09	0.52
35:BA:1547:C:O2'	35:BA:1548:C:H5'	2.09	0.52
35:BA:2555:U:C2'	35:BA:2556:C:H5'	2.35	0.52
35:BA:2836:U:C4	35:BA:2883:A:N6	2.77	0.52
36:BB:67:G:O2'	36:BB:68:C:H5'	2.09	0.52
37:BC:101:ILE:H	37:BC:101:ILE:HD12	1.73	0.52
38:BD:26:LYS:HE2	38:BD:26:LYS:CA	2.39	0.52
39:BE:69:LYS:HD3	39:BE:89:ASP:HA	1.90	0.52
40:BF:41:LEU:HD23	40:BF:44:ARG:HE	1.74	0.52
41:BG:138:GLN:NE2	41:BG:149:VAL:HG23	2.24	0.52
42:BH:89:ILE:O	42:BH:89:ILE:CG1	2.56	0.52
42:BH:103:LEU:HB2	42:BH:123:PHE:CD2	2.45	0.52
43:BK:8:VAL:CG1	43:BK:10:LEU:HG	2.39	0.52
43:BK:103:GLN:HA	43:BK:106:GLU:HG2	1.91	0.52
48:BQ:34:LEU:HD11	48:BQ:129:THR:HB	1.90	0.52
50:BS:66:ALA:O	50:BS:99:LYS:HD3	2.09	0.52
51:BT:82:LEU:N	51:BT:82:LEU:HD12	2.24	0.52
54:BW:20:VAL:CG2	54:BW:21:VAL:N	2.62	0.52
55:BX:12:VAL:CG1	55:BX:27:THR:O	2.53	0.52
55:BX:18:TYR:C	55:BX:20:GLY:N	2.58	0.52
56:BY:30:VAL:HG12	56:BY:31:LEU:N	2.23	0.52
1:AA:17:U:H2'	1:AA:18:C:C6	2.43	0.52
1:AA:203:U:H5'	1:AA:216:G:N2	2.24	0.52
1:AA:275:G:H2'	1:AA:276:G:H8	1.73	0.52
1:AA:312:C:H2'	1:AA:313:A:H8	1.74	0.52
1:AA:407:G:H2'	1:AA:408:A:H8	1.73	0.52
1:AA:979:C:C3'	1:AA:980:C:C5'	2.73	0.52
1:AA:1065:U:O2'	1:AA:1066:C:P	2.66	0.52
4:AD:120:LEU:HB3	4:AD:126:ILE:HD11	1.92	0.52
5:AE:79:GLU:HB3	5:AE:93:PRO:CD	2.37	0.52
6:AF:45:LEU:O	6:AF:46:ARG:HG3	2.09	0.52
12:AL:70:ILE:CG2	12:AL:100:ILE:HD12	2.39	0.52
13:AM:56:LEU:O	13:AM:59:TYR:HB3	2.10	0.52
15:AO:65:ARG:HG2	15:AO:65:ARG:HH11	1.75	0.52
24:AY:238:THR:CG2	24:AY:241:GLU:H	2.22	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:510:VAL:HG22	24:AY:534:ILE:HD13	1.92	0.52
24:AY:512:ILE:HD13	24:AY:512:ILE:N	2.10	0.52
24:AY:534:ILE:HD11	24:AY:570:GLY:HA3	1.92	0.52
31:B6:42:TRP:HA	31:B6:42:TRP:HE3	1.74	0.52
33:B8:30:ARG:O	33:B8:31:HIS:HB3	2.08	0.52
35:BA:637:A:OP1	47:BP:133:SER:HB3	2.10	0.52
35:BA:654(S):G:H3'	35:BA:654(T):C:H4'	1.91	0.52
35:BA:752:A:O2'	35:BA:753:C:OP2	2.21	0.52
35:BA:2168:G:N2	35:BA:2170:A:H3'	2.25	0.52
35:BA:2393:A:H5'	47:BP:60:MET:O	2.09	0.52
35:BA:2524:G:H8	35:BA:2524:G:C5'	2.13	0.52
36:BB:22:U:H2'	36:BB:23:G:C8	2.45	0.52
36:BB:95:C:O2'	36:BB:96:U:H5'	2.09	0.52
38:BD:55:GLY:O	38:BD:216:GLY:HA2	2.08	0.52
39:BE:51:PHE:HD2	39:BE:52:LEU:CD1	2.22	0.52
45:BN:55:VAL:HG21	45:BN:127:ASP:N	2.23	0.52
46:BO:9:GLU:OE1	46:BO:9:GLU:HA	2.09	0.52
47:BP:41:ARG:CB	47:BP:41:ARG:NH1	2.69	0.52
50:BS:49:VAL:HG21	50:BS:77:ALA:HB2	1.91	0.52
51:BT:10:VAL:O	51:BT:11:GLU:C	2.48	0.52
51:BT:91:ARG:O	51:BT:117:ASP:CB	2.57	0.52
56:BY:4:LYS:O	56:BY:6:HIS:HD2	1.93	0.52
56:BY:9:LYS:O	56:BY:28:LYS:HE2	2.09	0.52
1:AA:190:U:O2	20:AT:105:SER:HB2	2.09	0.52
1:AA:956:U:O2'	1:AA:957:U:H5'	2.10	0.52
1:AA:1015:A:C5	1:AA:1016:A:C5	2.97	0.52
1:AA:1141:C:H2'	1:AA:1142:G:C8	2.44	0.52
1:AA:1459:C:H2'	1:AA:1460:A:C8	2.45	0.52
3:AC:52:LEU:H	3:AC:52:LEU:CD2	2.14	0.52
4:AD:159:ARG:O	4:AD:163:GLU:N	2.43	0.52
10:AJ:42:THR:HG23	10:AJ:68:HIS:HA	1.92	0.52
19:AS:29:ARG:O	19:AS:31:ILE:N	2.41	0.52
24:AY:15:ILE:HD12	24:AY:15:ILE:O	2.09	0.52
24:AY:16:GLY:HA3	24:AY:101:LEU:HD11	1.91	0.52
24:AY:507:TYR:O	24:AY:507:TYR:HD1	1.91	0.52
24:AY:519:ARG:HD3	24:AY:677:GLN:HA	1.92	0.52
24:AY:556:ILE:HD11	24:AY:558:PHE:CD1	2.45	0.52
27:B2:9:GLN:O	27:B2:13:ALA:N	2.42	0.52
35:BA:311:A:H5'	35:BA:332:A:N3	2.25	0.52
35:BA:365:C:H5'	35:BA:365:C:H6	1.74	0.52
35:BA:526:A:N6	35:BA:2626:C:H4'	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:588:U:H1'	40:BF:90:PHE:CG	2.44	0.52
35:BA:654(S):G:C5	35:BA:654(T):C:H1'	2.45	0.52
35:BA:737:C:H2'	35:BA:738:G:H5'	1.92	0.52
35:BA:802:A:H2'	35:BA:803:U:C6	2.45	0.52
35:BA:849:A:H61	35:BA:928:G:H1'	1.75	0.52
35:BA:1644:C:O2	35:BA:1644:C:H2'	2.10	0.52
38:BD:118:VAL:HG22	38:BD:119:ALA:N	2.24	0.52
40:BF:205:ARG:O	40:BF:206:ILE:HD13	2.09	0.52
41:BG:91:ARG:CD	41:BG:92:VAL:N	2.72	0.52
43:BK:81:ALA:O	43:BK:99:ILE:HD11	2.08	0.52
46:BO:60:ALA:HA	46:BO:87:ILE:HD13	1.89	0.52
48:BQ:41:TRP:HE1	48:BQ:96:VAL:HG22	1.74	0.52
51:BT:82:LEU:CD2	51:BT:85:LYS:HD2	2.39	0.52
52:BU:83:LEU:CD1	52:BU:113:ALA:HB2	2.37	0.52
53:BV:51:VAL:HG12	53:BV:52:VAL:H	1.74	0.52
54:BW:36:LEU:HD12	54:BW:48:ALA:HB2	1.92	0.52
56:BY:14:LEU:CD1	56:BY:22:GLY:HA2	2.39	0.52
56:BY:96:ILE:CG2	56:BY:99:CYS:HB3	2.39	0.52
57:BZ:58:VAL:HA	57:BZ:67:LEU:O	2.09	0.52
1:AA:151:A:C2'	1:AA:152:A:H5'	2.39	0.52
1:AA:376:G:H2'	1:AA:377:G:H8	1.75	0.52
1:AA:631:G:H2'	1:AA:632:A:N7	2.24	0.52
1:AA:1016:A:H2'	1:AA:1017:G:O4'	2.09	0.52
1:AA:1327:C:H5"	21:AU:20:LYS:HB3	1.92	0.52
2:AB:169:LYS:O	2:AB:169:LYS:HD3	2.10	0.52
4:AD:26:CYS:HA	4:AD:31:CYS:HA	1.92	0.52
4:AD:162:LEU:CD1	4:AD:181:MET:HG2	2.37	0.52
9:AI:84:ALA:C	9:AI:86:VAL:H	2.12	0.52
17:AQ:12:SER:HB3	17:AQ:20:THR:OG1	2.10	0.52
24:AY:165:GLN:HB2	24:AY:260:LEU:CD1	2.39	0.52
24:AY:252:ASP:HB2	24:AY:254:LYS:CE	2.39	0.52
24:AY:432:ALA:HA	24:AY:438:PHE:CE2	2.44	0.52
26:B1:7:ILE:CG2	26:B1:8:SER:N	2.67	0.52
30:B5:2:ALA:HB2	35:BA:2015:A:O4'	2.09	0.52
30:B5:39:MET:HG3	54:BW:34:ASN:ND2	2.24	0.52
33:B8:51:ALA:HA	33:B8:54:GLU:CD	2.30	0.52
35:BA:207:A:H2'	35:BA:208:C:O4'	2.09	0.52
35:BA:583:G:H2'	35:BA:584:C:H6	1.73	0.52
35:BA:1020:A:H1'	35:BA:1021:A:N1	2.24	0.52
35:BA:1118:C:C6	35:BA:1118:C:H3'	2.45	0.52
35:BA:1265:A:N1	35:BA:2013:A:H5"	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1420:U:H2'	35:BA:1421:G:H5'	1.92	0.52
35:BA:2573:C:O2	35:BA:2573:C:H2'	2.10	0.52
35:BA:2849:U:H4'	35:BA:2868:A:C2	2.44	0.52
36:BB:87:G:H1	36:BB:91:C:H42	1.57	0.52
37:BC:75:VAL:HA	37:BC:113:ALA:HB3	1.90	0.52
39:BE:201:THR:C	39:BE:202:LYS:HD2	2.29	0.52
40:BF:24:LEU:HD22	40:BF:24:LEU:N	2.25	0.52
40:BF:38:ARG:O	40:BF:42:ALA:CB	2.56	0.52
40:BF:66:PRO:C	40:BF:68:LYS:H	2.11	0.52
40:BF:181:LEU:HB3	40:BF:205:ARG:HH11	1.75	0.52
42:BH:19:VAL:O	42:BH:20:ALA:CB	2.54	0.52
42:BH:45:VAL:HA	42:BH:50:VAL:HG22	1.91	0.52
43:BK:95:LYS:HG2	43:BK:137:GLU:OE1	2.08	0.52
45:BN:18:ALA:HB1	45:BN:21:LYS:HB2	1.90	0.52
48:BQ:109:VAL:HG13	48:BQ:113:GLN:OE1	2.08	0.52
51:BT:102:ILE:HG22	51:BT:110:ILE:CD1	2.39	0.52
52:BU:39:LEU:O	52:BU:40:PHE:C	2.47	0.52
57:BZ:3:TYR:CE2	57:BZ:51:ALA:HB2	2.45	0.52
57:BZ:108:PRO:HB3	57:BZ:141:VAL:HG12	1.90	0.52
57:BZ:111:VAL:O	57:BZ:111:VAL:HG12	2.08	0.52
57:BZ:134:PRO:O	57:BZ:135:GLU:HG2	2.10	0.52
57:BZ:144:LEU:HD22	57:BZ:144:LEU:N	2.24	0.52
1:AA:936:C:H2'	1:AA:937:A:C5'	2.40	0.52
1:AA:1073:U:O2'	1:AA:1074:G:H5'	2.09	0.52
2:AB:17:PHE:O	2:AB:204:ASN:HB2	2.10	0.52
2:AB:230:VAL:HG23	2:AB:231:GLU:O	2.10	0.52
4:AD:160:GLN:O	4:AD:163:GLU:HB3	2.10	0.52
6:AF:62:TRP:CD1	18:AR:35:ARG:NH1	2.77	0.52
10:AJ:56:HIS:O	10:AJ:58:ASP:N	2.42	0.52
11:AK:108:ILE:N	11:AK:108:ILE:CD1	2.73	0.52
11:AK:122:LYS:O	11:AK:123:LYS:C	2.45	0.52
12:AL:54:LYS:HB3	12:AL:70:ILE:CD1	2.38	0.52
19:AS:51:VAL:CG2	19:AS:71:LEU:HD13	2.39	0.52
20:AT:61:SER:O	20:AT:63:ILE:N	2.43	0.52
24:AY:264:LEU:HD23	24:AY:264:LEU:C	2.29	0.52
24:AY:485:GLU:HG3	24:AY:558:PHE:O	2.09	0.52
30:B5:19:ARG:HA	35:BA:2046:G:C5'	2.40	0.52
31:B6:42:TRP:CH2	35:BA:643:A:N7	2.78	0.52
35:BA:74:A:O2'	35:BA:75:G:OP2	2.26	0.52
35:BA:271(E):U:H2'	35:BA:271(F):C:C6	2.45	0.52
35:BA:325:G:H2'	35:BA:326:G:H8	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:648:G:H2'	35:BA:649:G:H8	1.73	0.52
35:BA:733:G:C6	35:BA:761:A:N7	2.77	0.52
35:BA:809:G:H2'	35:BA:810:U:O4'	2.10	0.52
35:BA:848:G:N9	35:BA:933:A:H8	2.07	0.52
35:BA:1052:C:C3'	35:BA:1052:C:C6	2.93	0.52
35:BA:1436:G:H1'	35:BA:1477:A:O2'	2.08	0.52
35:BA:1477:A:H5'	35:BA:1478:G:OP2	2.09	0.52
35:BA:1528:A:C2	35:BA:1542:A:H2	2.28	0.52
35:BA:1582:C:H2'	35:BA:1583:A:C8	2.42	0.52
35:BA:1794:U:O2'	35:BA:1795:C:H5'	2.09	0.52
35:BA:1808:U:H2'	35:BA:1809:A:O4'	2.10	0.52
35:BA:1820:U:H1'	38:BD:202:LYS:HB3	1.90	0.52
35:BA:1917:U:H2'	35:BA:1918:A:H5'	1.89	0.52
35:BA:2543:G:C6	35:BA:2544:G:C6	2.97	0.52
35:BA:2550:G:C6	35:BA:2551:C:N4	2.78	0.52
35:BA:2657:A:H2'	35:BA:2658:C:C5'	2.39	0.52
35:BA:2657:A:O2'	42:BH:160:LYS:HE3	2.10	0.52
35:BA:2722:G:H2'	35:BA:2723:C:C6	2.45	0.52
37:BC:29:LEU:O	37:BC:30:VAL:C	2.47	0.52
40:BF:110:LEU:CD1	40:BF:206:ILE:HD11	2.35	0.52
45:BN:65:LYS:HB3	45:BN:65:LYS:HZ2	1.74	0.52
48:BQ:8:LYS:HB2	48:BQ:9:TYR:CE1	2.45	0.52
52:BU:8:VAL:HG21	52:BU:12:ARG:HE	1.75	0.52
53:BV:38:LEU:HD23	53:BV:38:LEU:C	2.30	0.52
54:BW:8:ARG:HH11	54:BW:8:ARG:CG	2.17	0.52
1:AA:59:A:H5"	1:AA:60:A:H5'	1.92	0.52
1:AA:261:U:H2'	1:AA:263:A:OP2	2.10	0.52
1:AA:547:A:OP2	4:AD:2:GLY:N	2.43	0.52
1:AA:1002:G:N2	1:AA:1039:C:H2'	2.25	0.52
1:AA:1300:G:O2'	1:AA:1301:U:P	2.67	0.52
2:AB:86:GLU:C	2:AB:88:ALA:N	2.63	0.52
2:AB:176:GLU:O	2:AB:177:ALA:C	2.47	0.52
2:AB:215:LEU:O	2:AB:218:ALA:HB3	2.09	0.52
3:AC:52:LEU:HD12	3:AC:55:VAL:HG22	1.91	0.52
5:AE:28:PHE:O	5:AE:47:LYS:HA	2.09	0.52
6:AF:7:ASN:OD1	6:AF:62:TRP:HD1	1.93	0.52
8:AH:119:LEU:HB3	8:AH:123:GLU:HB3	1.91	0.52
9:AI:93:ARG:C	9:AI:95:LYS:H	2.13	0.52
9:AI:114:TYR:HE1	10:AJ:60:ARG:N	2.06	0.52
10:AJ:4:ILE:HB	10:AJ:74:ILE:HG13	1.90	0.52
10:AJ:22:LYS:HZ2	10:AJ:88:LEU:HD23	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:30:SER:OG	10:AJ:81:THR:HG22	2.10	0.52
22:AV:73:A:H8	22:AV:73:A:O5'	1.93	0.52
24:AY:21:ILE:HA	24:AY:25:LYS:HZ3	1.74	0.52
24:AY:304:ASP:O	24:AY:306:ASN:N	2.40	0.52
24:AY:529:ILE:HD11	24:AY:567:LEU:HD11	1.91	0.52
26:B1:64:ALA:C	26:B1:66:HIS:H	2.12	0.52
32:B7:24:THR:HG23	32:B7:27:GLY:N	2.25	0.52
33:B8:33:ASN:N	33:B8:36:LYS:HD2	2.25	0.52
33:B8:52:LYS:N	33:B8:53:PRO:CD	2.72	0.52
35:BA:1168:G:H2'	35:BA:1169:G:O4'	2.10	0.52
35:BA:2562:U:H1'	46:BO:23:ARG:NH1	2.22	0.52
38:BD:26:LYS:O	38:BD:27:THR:CB	2.58	0.52
39:BE:77:ILE:HG22	39:BE:78:LEU:CD1	2.39	0.52
45:BN:67:LEU:HB3	45:BN:88:GLU:CG	2.40	0.52
54:BW:12:ILE:HG13	54:BW:42:ARG:HH11	1.75	0.52
56:BY:46:LYS:N	56:BY:62:GLU:HB2	2.15	0.52
1:AA:352:C:H4'	1:AA:354:G:OP1	2.10	0.52
1:AA:796:C:O2	1:AA:796:C:H2'	2.09	0.52
1:AA:797:C:OP1	11:AK:124:LYS:HE3	2.08	0.52
1:AA:1124:G:H5'	10:AJ:35:SER:HB2	1.92	0.52
1:AA:1461:G:O5'	1:AA:1461:G:H8	1.91	0.52
9:AI:97:LYS:O	9:AI:98:PRO:C	2.44	0.52
16:AP:9:PHE:HE2	16:AP:18:ARG:NE	2.08	0.52
18:AR:56:THR:HB	18:AR:58:LEU:HD13	1.92	0.52
19:AS:9:VAL:O	19:AS:9:VAL:CG1	2.57	0.52
22:AV:39:C:H2'	22:AV:40:C:H6	1.73	0.52
22:AV:76:A:H61	35:BA:2422:A:H5"	1.74	0.52
24:AY:92:ILE:HG21	24:AY:454:MET:HE1	1.91	0.52
24:AY:220:ALA:HB1	24:AY:245:ALA:CB	2.40	0.52
31:B6:43:CYS:O	31:B6:44:ARG:NE	2.43	0.52
31:B6:54:ILE:CD1	35:BA:2420:C:C5'	2.87	0.52
33:B8:62:LEU:HD13	35:BA:242:G:H5"	1.90	0.52
35:BA:624:C:H41	47:BP:107:LYS:NZ	2.08	0.52
35:BA:627:A:OP1	35:BA:627:A:H2'	2.10	0.52
35:BA:637:A:N6	35:BA:652:C:H4'	2.24	0.52
35:BA:1404:C:O2'	35:BA:1405:U:H5'	2.09	0.52
35:BA:1516:C:C2'	35:BA:1517:G:C5'	2.87	0.52
35:BA:1526:G:O2'	35:BA:1527:G:H5'	2.10	0.52
35:BA:2206:G:N2	35:BA:2207:G:H4'	2.25	0.52
35:BA:2543:G:N3	35:BA:2765:A:H2'	2.25	0.52
35:BA:2664:G:C2'	35:BA:2665:A:O5'	2.58	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BB:70:C:O2'	36:BB:71:C:H5'	2.10	0.52
36:BB:77:U:OP1	57:BZ:19:ARG:NH2	2.41	0.52
47:BP:84:ASN:HB3	47:BP:86:LYS:HB3	1.92	0.52
47:BP:107:LYS:O	47:BP:107:LYS:CG	2.58	0.52
52:BU:55:ARG:HA	52:BU:58:ARG:CD	2.40	0.52
54:BW:1:MET:CE	54:BW:62:HIS:HD2	2.23	0.52
54:BW:18:ARG:HH11	54:BW:18:ARG:HG2	1.74	0.52
55:BX:58:HIS:O	55:BX:59:VAL:HG23	2.10	0.52
56:BY:18:GLY:O	56:BY:21:LYS:HB2	2.10	0.52
57:BZ:14:LYS:O	57:BZ:17:ALA:N	2.42	0.52
1:AA:64:G:N2	1:AA:67:C:C4	2.78	0.52
1:AA:124:G:H2'	1:AA:125:U:O4'	2.09	0.52
1:AA:630:G:O2'	1:AA:631:G:H5"	2.09	0.52
1:AA:1353:G:H2'	1:AA:1354:C:H6	1.74	0.52
2:AB:79:ASP:O	2:AB:82:ARG:HB3	2.10	0.52
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.10	0.52
7:AG:65:ALA:HA	7:AG:128:ALA:HA	1.92	0.52
8:AH:104:ARG:O	8:AH:106:GLY:N	2.43	0.52
12:AL:86:ARG:NH2	12:AL:99:HIS:CG	2.78	0.52
19:AS:58:VAL:HG23	19:AS:58:VAL:O	2.10	0.52
24:AY:341:VAL:CG2	24:AY:350:GLU:HB2	2.40	0.52
26:B1:35:THR:HG21	35:BA:2080:G:OP1	2.10	0.52
26:B1:66:HIS:C	26:B1:68:PRO:HD2	2.30	0.52
30:B5:20:ARG:HG2	30:B5:23:HIS:CD2	2.45	0.52
30:B5:35:GLU:O	30:B5:36:CYS:CB	2.57	0.52
35:BA:134:C:H2'	35:BA:135:G:H8	1.75	0.52
35:BA:238:C:H2'	35:BA:239:U:O4'	2.10	0.52
35:BA:271(H):G:H2'	35:BA:271(I):G:H8	1.74	0.52
35:BA:1539:G:H2'	35:BA:1540:U:O4'	2.09	0.52
35:BA:1842:G:H2'	35:BA:1843:C:C6	2.45	0.52
35:BA:2078:C:C4	35:BA:2079:U:C4	2.98	0.52
36:BB:2:C:O5'	36:BB:2:C:H6	1.93	0.52
38:BD:53:PHE:CA	38:BD:218:ARG:HB2	2.40	0.52
40:BF:32:LEU:HD22	40:BF:33:LEU:HD12	1.91	0.52
41:BG:56:ALA:CB	41:BG:153:ARG:CZ	2.86	0.52
42:BH:41:MET:HE2	42:BH:42:ARG:C	2.30	0.52
43:BK:68:VAL:CG1	43:BK:70:LYS:HZ1	2.21	0.52
46:BO:61:VAL:N	46:BO:87:ILE:HD11	2.25	0.52
46:BO:104:ARG:C	46:BO:106:LEU:N	2.59	0.52
48:BQ:138:ASP:O	48:BQ:139:GLU:HB2	2.09	0.52
49:BR:12:ARG:HG3	49:BR:12:ARG:NH1	2.19	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BX:35:THR:HG22	55:BX:36:LYS:N	2.23	0.52
56:BY:25:GLY:HA3	56:BY:39:VAL:CG1	2.40	0.52
1:AA:91:C:C5	1:AA:92:C:C4	2.97	0.52
1:AA:142:G:N3	1:AA:196:A:H2	2.08	0.52
1:AA:234:C:H2'	1:AA:235:C:C6	2.44	0.52
1:AA:276:G:O2'	1:AA:277:C:H5'	2.10	0.52
1:AA:627:G:C2'	1:AA:628:G:H5'	2.40	0.52
1:AA:699:C:C6	1:AA:699:C:H5"	2.45	0.52
1:AA:719:C:C2	18:AR:50:ILE:HG12	2.45	0.52
1:AA:953:G:N7	13:AM:104:ARG:NH2	2.58	0.52
1:AA:967:C:H2'	1:AA:968:A:C8	2.44	0.52
1:AA:1122:U:C2'	1:AA:1123:A:H5'	2.40	0.52
1:AA:1271:G:H5'	1:AA:1314:C:H5"	1.91	0.52
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.25	0.52
1:AA:1405:G:H21	1:AA:1518:A:H1'	1.74	0.52
7:AG:54:THR:OG1	7:AG:56:GLN:HG2	2.10	0.52
8:AH:53:VAL:O	8:AH:54:ASP:HB2	2.11	0.52
8:AH:104:ARG:O	8:AH:107:LEU:N	2.43	0.52
24:AY:212:TYR:HA	24:AY:215:LYS:HD2	1.92	0.52
24:AY:228:MET:HE2	24:AY:229:LEU:HG	1.92	0.52
24:AY:265:LYS:HB3	24:AY:267:LYS:CE	2.37	0.52
24:AY:309:LEU:HD12	24:AY:310:ALA:N	2.25	0.52
29:B4:30:GLU:O	29:B4:31:ILE:HD12	2.10	0.52
32:B7:34:ARG:NH1	32:B7:34:ARG:HG2	2.25	0.52
35:BA:271(U):G:O2'	35:BA:271(V):G:H5'	2.10	0.52
35:BA:753:C:H2'	35:BA:754:C:H6	1.75	0.52
35:BA:755:C:H2'	35:BA:756:C:C6	2.45	0.52
35:BA:863:A:O2'	36:BB:101:G:H1'	2.10	0.52
35:BA:1862:G:N2	35:BA:1881:C:H1'	2.25	0.52
35:BA:2206:G:H21	35:BA:2207:G:H4'	1.75	0.52
35:BA:2233:U:H2'	35:BA:2234:G:C8	2.45	0.52
35:BA:2327:A:H2'	35:BA:2328:A:C8	2.45	0.52
35:BA:2359:C:H2'	35:BA:2360:A:O4'	2.10	0.52
35:BA:2713:A:C3'	35:BA:2714:G:C5'	2.87	0.52
39:BE:10:GLY:HA2	39:BE:192:ASN:ND2	2.25	0.52
39:BE:51:PHE:O	39:BE:74:PRO:HB3	2.10	0.52
39:BE:93:VAL:HG12	39:BE:175:VAL:HG21	1.91	0.52
40:BF:179:GLU:O	40:BF:181:LEU:N	2.43	0.52
41:BG:91:ARG:HG2	41:BG:92:VAL:H	1.75	0.52
42:BH:171:LEU:HD23	42:BH:172:LYS:O	2.08	0.52
51:BT:102:ILE:O	51:BT:106:SER:HB3	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BX:34:ALA:HA	55:BX:38:GLU:OE1	2.09	0.52
1:AA:540:G:H2'	1:AA:541:G:O4'	2.10	0.51
1:AA:1130:A:H5'	9:AI:18:PHE:HE1	1.74	0.51
1:AA:1279:A:H5'	1:AA:1280:A:OP1	2.10	0.51
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.45	0.51
4:AD:30:LYS:O	4:AD:32:ALA:N	2.43	0.51
6:AF:15:ASP:C	6:AF:17:SER:H	2.13	0.51
10:AJ:51:ARG:CG	10:AJ:60:ARG:O	2.59	0.51
16:AP:9:PHE:HE2	16:AP:18:ARG:HD2	1.75	0.51
17:AQ:52:LYS:H	17:AQ:52:LYS:CD	2.21	0.51
18:AR:70:ILE:O	18:AR:70:ILE:HG22	2.10	0.51
20:AT:57:ARG:NH1	20:AT:102:GLY:CA	2.73	0.51
24:AY:64:THR:HG23	24:AY:64:THR:O	2.08	0.51
24:AY:466:LEU:O	24:AY:470:PHE:HB2	2.10	0.51
25:B0:60:PHE:HE2	35:BA:2365:G:H4'	1.72	0.51
31:B6:46:HIS:HD2	35:BA:2372:G:O4'	1.93	0.51
35:BA:8:A:H2'	35:BA:9:U:C5	2.45	0.51
35:BA:445:C:O2	35:BA:449:A:H2	1.92	0.51
35:BA:556:G:H8	35:BA:556:G:O5'	1.93	0.51
35:BA:847:U:OP2	35:BA:928:G:O6	2.28	0.51
35:BA:884:C:C5	35:BA:885:C:O2	2.63	0.51
35:BA:1448:G:N3	35:BA:1528(A):A:H2	2.08	0.51
35:BA:1453:U:H2'	35:BA:1455:G:N7	2.25	0.51
35:BA:1654:A:H2	39:BE:113:PHE:CD2	2.28	0.51
35:BA:1935:G:H1'	35:BA:1964:G:N2	2.25	0.51
35:BA:2341:G:H2'	35:BA:2342:C:C6	2.46	0.51
35:BA:2483:C:H5'	35:BA:2484:G:OP2	2.10	0.51
35:BA:2849:U:O4	51:BT:23:ARG:NH2	2.44	0.51
41:BG:63:ILE:HG22	41:BG:143:GLU:HG2	1.91	0.51
41:BG:117:PHE:CE1	41:BG:119:GLY:CA	2.92	0.51
49:BR:30:THR:OG1	49:BR:75:LEU:HD21	2.10	0.51
53:BV:25:LEU:O	53:BV:27:ALA:N	2.43	0.51
54:BW:25:ARG:CB	54:BW:25:ARG:HH11	2.23	0.51
54:BW:66:GLU:HG3	54:BW:69:LEU:HD12	1.92	0.51
56:BY:87:LYS:O	56:BY:88:LYS:HB2	2.10	0.51
57:BZ:111:VAL:O	57:BZ:112:ARG:HB2	2.10	0.51
1:AA:538:G:OP2	12:AL:115:LYS:HG3	2.10	0.51
1:AA:688:G:H2'	1:AA:689:C:C6	2.46	0.51
1:AA:699:C:H5"	1:AA:699:C:H6	1.75	0.51
1:AA:851:G:H2'	1:AA:852:G:H8	1.75	0.51
1:AA:1014:A:H4'	19:AS:14:HIS:CG	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1148:U:O3'	9:AI:14:VAL:HG11	2.10	0.51
1:AA:1198:G:C6	1:AA:1199:U:N3	2.77	0.51
2:AB:223:ILE:HG23	2:AB:226:ARG:HD2	1.92	0.51
5:AE:75:THR:HG23	5:AE:76:ILE:O	2.11	0.51
7:AG:11:GLN:OE1	7:AG:11:GLN:HA	2.07	0.51
7:AG:111:ARG:HD2	7:AG:123:GLU:HB2	1.92	0.51
9:AI:20:ARG:O	9:AI:59:PHE:HA	2.10	0.51
12:AL:81:SER:O	12:AL:83:VAL:HG23	2.10	0.51
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.92	0.51
20:AT:26:ASN:N	20:AT:26:ASN:ND2	2.58	0.51
24:AY:9:LEU:CD2	24:AY:9:LEU:C	2.76	0.51
24:AY:348:ARG:NH1	24:AY:382:GLU:CG	2.71	0.51
26:B1:76:ARG:HH22	26:B1:95:LEU:CD2	2.22	0.51
31:B6:39:TYR:HB3	31:B6:49:HIS:CE1	2.46	0.51
35:BA:29:U:O2'	35:BA:30:G:H5'	2.10	0.51
35:BA:184:C:H2'	35:BA:185:U:H6	1.71	0.51
35:BA:272(H):C:H6	35:BA:272(H):C:C5'	2.16	0.51
35:BA:438:G:O2'	35:BA:440:G:H5'	2.10	0.51
35:BA:518:G:H4'	54:BW:18:ARG:HH12	1.76	0.51
35:BA:650:C:H3'	35:BA:651:G:H5"	1.92	0.51
35:BA:990:A:C6	35:BA:1186:G:H1'	2.45	0.51
35:BA:1062:G:H2'	35:BA:1063:G:C8	2.44	0.51
35:BA:1488:G:H5'	35:BA:1489:U:OP2	2.10	0.51
35:BA:1560:G:OP1	35:BA:1561:G:OP2	2.28	0.51
35:BA:2143:C:C2'	35:BA:2144:U:H5'	2.41	0.51
35:BA:2740:A:C6	35:BA:2741:A:C6	2.99	0.51
35:BA:2873:A:C4'	49:BR:8:ARG:NH2	2.73	0.51
38:BD:177:LEU:O	38:BD:179:SER:N	2.43	0.51
39:BE:183:LEU:N	39:BE:183:LEU:HD12	2.25	0.51
41:BG:55:LYS:HE2	41:BG:58:GLN:HE21	1.76	0.51
41:BG:97:ASP:N	41:BG:100:TRP:HD1	1.95	0.51
42:BH:28:GLY:HA3	42:BH:79:VAL:HB	1.92	0.51
45:BN:32:THR:CG2	45:BN:37:LYS:HB3	2.38	0.51
46:BO:63:VAL:O	46:BO:64:ARG:HG2	2.11	0.51
47:BP:84:ASN:C	47:BP:86:LYS:H	2.13	0.51
56:BY:95:LYS:HD3	56:BY:100:ALA:CB	2.40	0.51
57:BZ:29:TYR:HA	57:BZ:33:LEU:O	2.10	0.51
1:AA:336:C:O2'	1:AA:337:C:H5'	2.10	0.51
1:AA:841:U:H3'	1:AA:848:C:C5'	2.40	0.51
1:AA:936:C:C2'	1:AA:937:A:H5'	2.39	0.51
1:AA:1352:C:H2'	1:AA:1353:G:H8	1.73	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1422:G:H2'	1:AA:1423:G:H8	1.76	0.51
1:AA:1522:U:H2'	1:AA:1523:G:H8	1.75	0.51
2:AB:101:MET:HG2	2:AB:152:PHE:CE2	2.45	0.51
3:AC:136:GLN:O	3:AC:137:ALA:C	2.46	0.51
5:AE:12:LEU:HD13	5:AE:12:LEU:C	2.30	0.51
10:AJ:18:ALA:C	10:AJ:20:ALA:H	2.14	0.51
10:AJ:32:ALA:HB1	10:AJ:75:ILE:HG13	1.92	0.51
13:AM:15:VAL:HG12	13:AM:45:VAL:HG23	1.88	0.51
13:AM:102:ARG:HD3	13:AM:105:THR:OG1	2.09	0.51
24:AY:539:ILE:N	24:AY:540:PRO:CD	2.73	0.51
24:AY:680:PRO:O	24:AY:682:GLN:N	2.40	0.51
25:B0:7:LEU:HD13	48:BQ:85:LYS:HG3	1.93	0.51
27:B2:16:LEU:O	27:B2:20:GLU:HB3	2.10	0.51
35:BA:83:G:HO2'	35:BA:84:A:H8	1.58	0.51
35:BA:143:G:C6	35:BA:143(A):C:C4	2.98	0.51
35:BA:570:G:H2'	35:BA:2030:A:C5	2.44	0.51
35:BA:580:C:O2'	35:BA:581:C:H5'	2.10	0.51
35:BA:1464:C:O2'	35:BA:1528:A:C8	2.63	0.51
35:BA:1630:G:C2	35:BA:1637:A:C2	2.99	0.51
35:BA:2143:C:H2'	35:BA:2144:U:H5'	1.91	0.51
35:BA:2307:G:H3'	35:BA:2307:G:N3	2.25	0.51
35:BA:2495:G:H5"	48:BQ:82:ARG:HG2	1.92	0.51
35:BA:2762:G:H8	35:BA:2762:G:C5'	2.23	0.51
35:BA:2880:C:N4	35:BA:2881:C:H41	2.09	0.51
35:BA:2889:C:H2'	35:BA:2891:G:C8	2.45	0.51
39:BE:82:ARG:HG3	39:BE:82:ARG:HH11	1.75	0.51
39:BE:107:THR:C	39:BE:190:GLY:HA2	2.30	0.51
41:BG:56:ALA:CA	41:BG:59:GLU:OE1	2.56	0.51
42:BH:173:PRO:HG2	42:BH:174:GLY:H	1.76	0.51
49:BR:104:ARG:HG3	49:BR:111:LEU:HD21	1.91	0.51
50:BS:69:VAL:HG11	50:BS:99:LYS:HE2	1.91	0.51
51:BT:42:ILE:CD1	51:BT:83:ILE:HD11	2.39	0.51
57:BZ:82:ARG:HG2	57:BZ:82:ARG:HH11	1.74	0.51
57:BZ:86:VAL:HG12	57:BZ:87:ASP:N	2.23	0.51
1:AA:55:A:O2'	24:AY:321:TYR:HD1	1.91	0.51
1:AA:311:C:H2'	1:AA:312:C:H6	1.75	0.51
1:AA:344:A:H5"	1:AA:345:C:OP2	2.10	0.51
1:AA:450:G:H1	1:AA:483:C:H42	1.57	0.51
1:AA:487:A:H2'	1:AA:488:C:O4'	2.10	0.51
1:AA:509:A:H5'	1:AA:510:A:P	2.43	0.51
1:AA:624:C:O3'	16:AP:10:GLY:HA2	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:949:A:H1'	1:AA:1364:U:H3	1.75	0.51
1:AA:999:C:H2'	1:AA:1000:U:C5	2.44	0.51
1:AA:1133:G:C4	1:AA:1142:G:N2	2.79	0.51
1:AA:1321:C:C5'	1:AA:1322:C:C5'	2.88	0.51
1:AA:1410:G:H2'	1:AA:1411:C:H6	1.74	0.51
2:AB:27:LYS:HD3	2:AB:195:ASP:OD1	2.10	0.51
4:AD:68:TYR:N	4:AD:68:TYR:CD1	2.77	0.51
4:AD:105:VAL:HG12	4:AD:106:TYR:N	2.23	0.51
4:AD:107:ARG:HH21	4:AD:194:LEU:CD1	2.21	0.51
4:AD:156:GLU:O	4:AD:159:ARG:HB2	2.09	0.51
5:AE:68:GLU:HG3	5:AE:68:GLU:O	2.09	0.51
5:AE:118:ILE:O	5:AE:118:ILE:HG23	2.09	0.51
8:AH:112:LEU:HA	8:AH:134:ILE:HG12	1.93	0.51
11:AK:31:THR:O	11:AK:31:THR:CG2	2.58	0.51
15:AO:3:ILE:O	15:AO:3:ILE:HG13	2.10	0.51
15:AO:57:LEU:CD2	15:AO:57:LEU:N	2.73	0.51
17:AQ:94:ASN:O	17:AQ:96:GLU:N	2.43	0.51
20:AT:22:ARG:O	20:AT:26:ASN:ND2	2.43	0.51
22:AV:76:A:H61	35:BA:2422:A:C5'	2.24	0.51
24:AY:343:ASN:HD22	24:AY:345:THR:H	1.56	0.51
26:B1:59:THR:O	26:B1:91:LYS:NZ	2.38	0.51
27:B2:66:GLU:HA	27:B2:69:ARG:NE	2.26	0.51
29:B4:50:VAL:O	29:B4:51:ASP:CB	2.58	0.51
35:BA:677:A:O2'	35:BA:678:C:H5'	2.11	0.51
35:BA:739:G:HO2'	35:BA:740:U:H6	1.57	0.51
35:BA:1147:C:H2'	35:BA:1148:A:C8	2.44	0.51
35:BA:1220:A:H3'	35:BA:1221:C:H5'	1.91	0.51
35:BA:1494:A:H2'	35:BA:1495:A:C5'	2.35	0.51
35:BA:2103:C:C2'	35:BA:2103:C:O2	2.58	0.51
35:BA:2260:C:H2'	35:BA:2261:C:C6	2.45	0.51
35:BA:2534:A:C2'	35:BA:2535:G:O5'	2.59	0.51
35:BA:2852:G:H1	35:BA:2865:U:H3	1.57	0.51
38:BD:227:ASN:O	38:BD:230:ASP:N	2.44	0.51
42:BH:46:GLU:CD	42:BH:51:ARG:HB2	2.30	0.51
43:BK:55:VAL:HG23	43:BK:69:THR:HG22	1.92	0.51
45:BN:94:HIS:N	45:BN:95:PRO:CD	2.73	0.51
46:BO:104:ARG:HH21	51:BT:33:LYS:CE	2.22	0.51
47:BP:31:ALA:C	47:BP:33:ARG:N	2.60	0.51
52:BU:8:VAL:HG23	52:BU:11:ARG:HH21	1.75	0.51
57:BZ:11:GLU:H	57:BZ:11:GLU:CD	2.14	0.51
57:BZ:67:LEU:HD23	57:BZ:90:VAL:HG11	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:315:A:O2'	1:AA:316:G:P	2.69	0.51
1:AA:1088:G:H8	1:AA:1088:G:O5'	1.93	0.51
1:AA:1346:A:N6	1:AA:1374:A:H3'	2.24	0.51
1:AA:1368:G:C2'	1:AA:1369:C:H5'	2.40	0.51
1:AA:1445:C:C2'	1:AA:1446:U:H5'	2.41	0.51
1:AA:1501:C:OP2	1:AA:1504:G:H2'	2.11	0.51
2:AB:114:ARG:HD2	2:AB:118:LEU:HG	1.93	0.51
5:AE:100:VAL:O	5:AE:100:VAL:CG2	2.58	0.51
5:AE:121:LYS:HG2	5:AE:123:LEU:HD21	1.92	0.51
9:AI:33:PHE:CZ	9:AI:47:LEU:HD11	2.45	0.51
10:AJ:3:LYS:HD2	10:AJ:77:PRO:HD3	1.93	0.51
15:AO:17:ARG:HD3	15:AO:26:GLU:HG3	1.90	0.51
17:AQ:60:ILE:HG22	17:AQ:72:ARG:O	2.11	0.51
18:AR:34:TYR:CD2	18:AR:34:TYR:N	2.68	0.51
24:AY:65:ILE:CD1	24:AY:65:ILE:N	2.71	0.51
27:B2:63:VAL:O	27:B2:67:LYS:HG2	2.10	0.51
34:B9:29:ASN:H	34:B9:29:ASN:ND2	2.04	0.51
35:BA:198:C:N4	35:BA:248:G:H1	2.07	0.51
35:BA:848:G:O6	35:BA:928:G:H2'	2.09	0.51
35:BA:1358:G:O2'	35:BA:1359:A:H5"	2.11	0.51
35:BA:1850:G:H2'	35:BA:1850:G:N3	2.25	0.51
35:BA:2105:C:H2'	35:BA:2106:G:H5'	1.91	0.51
35:BA:2704:C:C2'	35:BA:2705:A:H5'	2.41	0.51
35:BA:2771:C:H2'	35:BA:2772:C:C6	2.46	0.51
35:BA:2808:U:O2'	35:BA:2809:A:H5'	2.11	0.51
35:BA:2853:C:H2'	35:BA:2854:G:C8	2.45	0.51
36:BB:87:G:C2'	36:BB:88:C:H5"	2.41	0.51
37:BC:154:ILE:HA	37:BC:157:ILE:HD12	1.92	0.51
40:BF:5:ALA:HB3	40:BF:18:ARG:O	2.11	0.51
41:BG:91:ARG:CG	41:BG:92:VAL:N	2.72	0.51
41:BG:138:GLN:O	41:BG:144:ILE:HD13	2.11	0.51
43:BK:34:ILE:O	43:BK:35:MET:HE1	2.11	0.51
45:BN:14:VAL:HG12	45:BN:15:LEU:N	2.26	0.51
46:BO:4:PRO:HA	46:BO:21:CYS:SG	2.51	0.51
46:BO:17:ARG:NE	46:BO:47:ILE:HD11	2.25	0.51
50:BS:42:ASP:O	50:BS:43:GLU:HB2	2.11	0.51
56:BY:81:LYS:HD2	56:BY:96:ILE:CG2	2.41	0.51
57:BZ:20:ARG:NH1	57:BZ:20:ARG:CB	2.73	0.51
57:BZ:40:ASP:OD1	57:BZ:42:VAL:HG12	2.11	0.51
57:BZ:109:ALA:HB1	57:BZ:145:GLU:OE2	2.11	0.51
1:AA:714:G:H2'	1:AA:715:A:C8	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:925:G:H5'	1:AA:926:G:OP1	2.11	0.51
1:AA:1237:C:H5"	1:AA:1238:A:C8	2.45	0.51
1:AA:1262:C:H42	1:AA:1273:G:H1	1.59	0.51
1:AA:1474:G:H4'	35:BA:1701:A:C2	2.46	0.51
2:AB:172:ILE:H	2:AB:172:ILE:CD1	1.95	0.51
3:AC:25:GLY:C	3:AC:27:LYS:H	2.13	0.51
3:AC:35:GLU:O	3:AC:36:ASP:C	2.49	0.51
4:AD:163:GLU:C	4:AD:165:MET:N	2.64	0.51
7:AG:29:LYS:HB2	7:AG:105:VAL:HG21	1.93	0.51
12:AL:20:LYS:CD	12:AL:20:LYS:N	2.72	0.51
12:AL:57:LYS:CG	12:AL:67:THR:HG22	2.41	0.51
14:AN:48:ALA:HB2	14:AN:53:LEU:HD12	1.92	0.51
24:AY:181:LEU:HD22	24:AY:279:TYR:OH	2.11	0.51
24:AY:251:ILE:O	24:AY:251:ILE:HG22	2.10	0.51
24:AY:409:ILE:HG12	24:AY:656:ALA:HB3	1.91	0.51
24:AY:523:PHE:CE1	24:AY:550:MET:SD	3.03	0.51
31:B6:41:PRO:O	31:B6:42:TRP:C	2.49	0.51
32:B7:4:THR:HB	35:BA:788:A:O2'	2.11	0.51
32:B7:41:ARG:NH2	35:BA:460:A:OP1	2.44	0.51
35:BA:135:G:O2'	35:BA:136:G:H5'	2.10	0.51
35:BA:271(R):G:O2'	35:BA:271(S):G:H5'	2.10	0.51
35:BA:962:G:H2'	35:BA:963:U:O4'	2.11	0.51
35:BA:1044:G:O2'	35:BA:1045:A:H5"	2.11	0.51
35:BA:1156:A:O2'	35:BA:1157:G:P	2.69	0.51
35:BA:1209:G:H21	35:BA:1210:A:H62	1.58	0.51
35:BA:1276:A:H5"	35:BA:1276:A:C8	2.46	0.51
35:BA:2378:A:N1	50:BS:19:LYS:HE3	2.26	0.51
35:BA:2428:G:C5'	35:BA:2429:G:OP1	2.58	0.51
35:BA:2514:U:H2'	35:BA:2515:C:C6	2.36	0.51
35:BA:2732:G:H5"	35:BA:2733:A:H8	1.74	0.51
35:BA:2809:A:H2'	35:BA:2810:A:C8	2.45	0.51
35:BA:2822:G:OP2	39:BE:110:GLY:O	2.28	0.51
35:BA:2849:U:H1'	35:BA:2866:U:H6	1.75	0.51
35:BA:2875:C:O2'	51:BT:5:ALA:HB3	2.11	0.51
35:BA:2876:G:OP1	51:BT:2:ASN:O	2.29	0.51
36:BB:74:U:H2'	36:BB:75:G:H5'	1.93	0.51
38:BD:108:PRO:HG2	38:BD:111:LEU:HB2	1.92	0.51
38:BD:267:SER:C	38:BD:269:PHE:H	2.14	0.51
40:BF:80:ALA:O	40:BF:83:PHE:HB2	2.10	0.51
40:BF:107:LYS:O	40:BF:108:LYS:C	2.49	0.51
41:BG:41:GLN:CB	41:BG:43:LEU:CD2	2.86	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BG:46:ALA:HA	41:BG:51:ARG:CG	2.40	0.51
42:BH:26:VAL:HG11	42:BH:75:ALA:O	2.11	0.51
42:BH:89:ILE:CD1	42:BH:94:TYR:HB3	2.40	0.51
46:BO:105:GLU:O	46:BO:109:LYS:CG	2.58	0.51
47:BP:33:ARG:O	47:BP:34:GLY:C	2.48	0.51
48:BQ:21:THR:O	48:BQ:22:LYS:HB3	2.11	0.51
50:BS:95:HIS:CD2	50:BS:96:GLY:N	2.79	0.51
51:BT:28:VAL:O	51:BT:28:VAL:HG12	2.11	0.51
52:BU:111:GLU:HA	52:BU:114:LYS:HG2	1.93	0.51
1:AA:25:C:H5'	1:AA:524:G:H1'	1.91	0.51
1:AA:346:G:H2'	1:AA:347:G:O4'	2.10	0.51
1:AA:417:C:H2'	1:AA:418:C:H6	1.76	0.51
1:AA:771:G:H2'	1:AA:772:U:H6	1.76	0.51
1:AA:1082:G:C2'	1:AA:1083:U:H5'	2.41	0.51
1:AA:1372:U:OP1	9:AI:71:SER:HB3	2.10	0.51
1:AA:1442(B):A:H2'	1:AA:1442(B):A:N3	2.26	0.51
1:AA:1511:G:O2'	1:AA:1512:U:H5'	2.11	0.51
5:AE:145:LYS:HA	8:AH:107:LEU:CD2	2.39	0.51
8:AH:124:ALA:HB1	8:AH:129:VAL:HG22	1.92	0.51
11:AK:125:PHE:HD1	11:AK:125:PHE:N	2.08	0.51
16:AP:75:ARG:O	16:AP:78:GLY:N	2.41	0.51
18:AR:29:PHE:HD2	18:AR:29:PHE:N	1.85	0.51
20:AT:49:ALA:HB1	20:AT:99:LEU:HG	1.91	0.51
22:AV:70:G:H2'	22:AV:71:C:H6	1.75	0.51
24:AY:174:PHE:CD2	24:AY:267:LYS:HD3	2.46	0.51
25:B0:7:LEU:HB3	48:BQ:85:LYS:HG3	1.92	0.51
35:BA:48:G:N2	35:BA:177:G:N2	2.59	0.51
35:BA:154(A):C:H42	35:BA:172:C:N4	2.07	0.51
35:BA:812:C:H1'	35:BA:1250:G:N2	2.26	0.51
35:BA:821:A:H5"	35:BA:822:U:C6	2.46	0.51
35:BA:953:A:H2'	35:BA:954:G:H8	1.74	0.51
35:BA:1064:C:H5'	43:BK:87:GLY:H	1.76	0.51
35:BA:1558:A:O2'	35:BA:1559:G:OP2	2.25	0.51
35:BA:1588:C:O2	35:BA:1588:C:H2'	2.11	0.51
35:BA:1600:C:O2	35:BA:1600:C:H2'	2.11	0.51
35:BA:2156:G:H2'	35:BA:2157:G:O4'	2.11	0.51
35:BA:2628:C:O2'	35:BA:2781:A:H2'	2.10	0.51
35:BA:2749:A:C5	35:BA:2750:A:N7	2.79	0.51
35:BA:2853:C:H2'	35:BA:2854:G:H8	1.75	0.51
37:BC:149:ASN:CG	37:BC:149:ASN:O	2.46	0.51
38:BD:134:ARG:HD3	38:BD:135:PHE:CE1	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:9:VAL:CG1	39:BE:25:VAL:HG12	2.41	0.51
39:BE:101:ARG:HD3	39:BE:171:GLU:HA	1.91	0.51
39:BE:116:VAL:HG22	39:BE:122:PHE:CG	2.46	0.51
40:BF:132:VAL:CG2	40:BF:133:ASN:H	2.24	0.51
46:BO:91:LEU:HD22	46:BO:91:LEU:H	1.70	0.51
48:BQ:21:THR:HG22	48:BQ:23:GLY:O	2.11	0.51
56:BY:77:PRO:O	56:BY:99:CYS:SG	2.58	0.51
1:AA:261:U:N3	1:AA:264:U:OP2	2.44	0.51
1:AA:354:G:C2	1:AA:355:C:C6	2.98	0.51
1:AA:368:U:C4	24:AY:354:ARG:NH2	2.79	0.51
1:AA:737:A:H2'	1:AA:738:C:H6	1.75	0.51
1:AA:865:A:H5'	1:AA:1078:U:O4	2.10	0.51
1:AA:1152:A:OP1	10:AJ:68:HIS:CD2	2.63	0.51
2:AB:12:GLU:HA	2:AB:16:HIS:CG	2.46	0.51
2:AB:60:ASP:O	2:AB:64:ARG:CZ	2.59	0.51
2:AB:164:VAL:HG12	2:AB:165:VAL:N	2.25	0.51
2:AB:204:ASN:HD22	2:AB:204:ASN:C	2.14	0.51
10:AJ:47:PHE:CE2	14:AN:37:PHE:CE2	2.99	0.51
17:AQ:83:ASP:N	17:AQ:83:ASP:OD1	2.44	0.51
24:AY:160:ARG:HB3	24:AY:254:LYS:O	2.11	0.51
24:AY:280:LEU:HD12	24:AY:281:PRO:HD2	1.93	0.51
24:AY:545:GLY:CA	24:AY:583:LYS:HG2	2.40	0.51
33:B8:28:GLY:HA2	33:B8:32:LEU:HD21	1.91	0.51
35:BA:11:G:N2	35:BA:2628:C:OP1	2.44	0.51
35:BA:271(N):U:H6	35:BA:271(N):U:O5'	1.93	0.51
35:BA:461:C:N4	35:BA:469:G:N2	2.59	0.51
35:BA:519:U:O2'	35:BA:520:G:H5'	2.11	0.51
35:BA:1445(A):C:H5'	35:BA:1446:C:OP2	2.11	0.51
35:BA:1467:C:C5	35:BA:1546:C:H2'	2.46	0.51
35:BA:1614:A:H2'	35:BA:1615:C:H5'	1.93	0.51
35:BA:2290:G:H4'	35:BA:2381:C:O2'	2.11	0.51
35:BA:2378:A:O5'	35:BA:2378:A:H8	1.93	0.51
35:BA:2632:A:N3	39:BE:61:ARG:NH1	2.59	0.51
35:BA:2748:A:H2	42:BH:63:SER:OG	1.94	0.51
35:BA:2839:G:H1	35:BA:2878:U:H3	1.57	0.51
36:BB:40:U:H3'	36:BB:41:U:H5"	1.92	0.51
37:BC:138:LEU:HD13	37:BC:139:PRO:O	2.10	0.51
38:BD:106:ILE:HD11	38:BD:196:VAL:CG1	2.41	0.51
39:BE:31:CYS:O	39:BE:91:VAL:N	2.42	0.51
40:BF:139:PHE:HB2	40:BF:166:ALA:HB1	1.93	0.51
40:BF:187:VAL:HG13	47:BP:5:ASP:O	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BN:60:ILE:CG2	45:BN:61:ARG:N	2.74	0.51
46:BO:21:CYS:SG	46:BO:22:ILE:N	2.84	0.51
46:BO:49:ARG:H	46:BO:49:ARG:CD	2.22	0.51
53:BV:39:LEU:HD12	53:BV:47:VAL:HG11	1.93	0.51
1:AA:658:G:O4'	15:AO:22:THR:HB	2.11	0.51
1:AA:1507:A:C8	1:AA:1530:G:N2	2.79	0.51
3:AC:165:THR:HG23	3:AC:165:THR:O	2.11	0.51
4:AD:13:ARG:O	4:AD:15:GLU:N	2.44	0.51
5:AE:57:LYS:HB3	5:AE:61:TYR:HE2	1.75	0.51
8:AH:30:ARG:CB	8:AH:30:ARG:HH11	2.24	0.51
20:AT:104:LEU:HD23	20:AT:104:LEU:C	2.31	0.51
24:AY:108:PHE:CE1	24:AY:118:SER:HB2	2.45	0.51
24:AY:165:GLN:NE2	24:AY:260:LEU:HD22	2.25	0.51
24:AY:348:ARG:CZ	24:AY:382:GLU:HG3	2.41	0.51
32:B7:17:GLY:O	32:B7:20:ALA:HB3	2.10	0.51
32:B7:48:LYS:NZ	35:BA:125:G:N2	2.59	0.51
35:BA:216:A:H2'	35:BA:217:G:C8	2.45	0.51
35:BA:497:A:H8	35:BA:497:A:O5'	1.94	0.51
35:BA:594:U:H2'	35:BA:595:C:C6	2.46	0.51
35:BA:962:G:O2'	35:BA:963:U:H5'	2.11	0.51
35:BA:1218:C:H2'	35:BA:1219:G:H8	1.76	0.51
35:BA:1676:A:H2'	35:BA:1677:A:O4'	2.10	0.51
35:BA:2171:A:HO2'	35:BA:2172:U:H5	1.59	0.51
35:BA:2556:C:C2'	35:BA:2557:G:O5'	2.59	0.51
35:BA:2572:A:H2'	39:BE:144:ARG:HE	1.76	0.51
35:BA:2617:C:O2'	35:BA:2618:G:H5'	2.11	0.51
35:BA:2772:C:H2'	35:BA:2773:C:H6	1.76	0.51
37:BC:90:ALA:HA	37:BC:155:ARG:HH12	1.73	0.51
38:BD:35:LYS:HD2	38:BD:36:PRO:HA	1.93	0.51
38:BD:136:ILE:HG23	38:BD:140:THR:OG1	2.11	0.51
38:BD:153:ALA:O	38:BD:154:LYS:CG	2.59	0.51
38:BD:200:ASP:O	38:BD:201:HIS:C	2.49	0.51
39:BE:3:GLY:HA3	39:BE:81:ILE:HD12	1.93	0.51
39:BE:111:ARG:CZ	49:BR:2:ARG:NH2	2.70	0.51
40:BF:24:LEU:N	40:BF:24:LEU:CD2	2.74	0.51
40:BF:127:GLU:OE1	40:BF:196:LEU:HD12	2.11	0.51
41:BG:54:GLU:C	41:BG:57:ALA:HB3	2.31	0.51
41:BG:117:PHE:CE1	41:BG:119:GLY:HA2	2.46	0.51
43:BK:96:VAL:HG12	43:BK:96:VAL:O	2.11	0.51
47:BP:50:ARG:HG2	47:BP:50:ARG:HH11	1.75	0.51
47:BP:122:PRO:O	47:BP:123:LEU:HD23	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BY:77:PRO:O	56:BY:78:ALA:HB2	2.11	0.51
57:BZ:13:GLU:HB3	57:BZ:14:LYS:NZ	2.26	0.51
1:AA:174:C:O2'	1:AA:175:C:H5'	2.10	0.51
1:AA:363:A:OP1	12:AL:33:ARG:HD3	2.10	0.51
1:AA:375:U:C2	1:AA:376:G:C8	2.99	0.51
1:AA:393:A:O2'	1:AA:394:G:H5'	2.10	0.51
1:AA:866:C:O5'	1:AA:866:C:H6	1.94	0.51
2:AB:35:GLU:O	2:AB:35:GLU:HG2	2.10	0.51
3:AC:84:ILE:O	3:AC:84:ILE:CG1	2.58	0.51
3:AC:110:ASN:OD1	3:AC:140:ARG:HD2	2.10	0.51
3:AC:133:ALA:O	3:AC:137:ALA:HB2	2.10	0.51
3:AC:151:VAL:HG12	3:AC:152:ILE:N	2.25	0.51
4:AD:13:ARG:HA	4:AD:33:MET:HE3	1.91	0.51
4:AD:162:LEU:HD22	4:AD:178:VAL:HG13	1.93	0.51
5:AE:143:ARG:NH1	8:AH:77:GLU:OE2	2.44	0.51
6:AF:16:GLN:CD	6:AF:16:GLN:H	2.15	0.51
6:AF:55:ASP:OD1	6:AF:56:PRO:CD	2.57	0.51
7:AG:18:TYR:N	7:AG:18:TYR:CD1	2.78	0.51
15:AO:50:HIS:O	15:AO:53:HIS:HB3	2.11	0.51
17:AQ:40:LYS:HE2	17:AQ:42:TYR:CZ	2.46	0.51
24:AY:339:SER:O	24:AY:351:ARG:HD2	2.11	0.51
24:AY:357:ARG:HH11	24:AY:373:ASP:CG	2.15	0.51
24:AY:404:VAL:O	24:AY:404:VAL:HG12	2.11	0.51
31:B6:11:LEU:HD22	31:B6:11:LEU:C	2.32	0.51
31:B6:15:GLU:CD	31:B6:44:ARG:HH12	2.12	0.51
35:BA:945:A:O2'	35:BA:946:G:H4'	2.11	0.51
35:BA:1052:C:H3'	35:BA:1052:C:C6	2.44	0.51
35:BA:1556:C:H2'	35:BA:1557:C:C6	2.45	0.51
35:BA:1944:U:O4'	35:BA:1955:U:H1'	2.11	0.51
35:BA:2349:G:H5'	35:BA:2349:G:H8	1.75	0.51
35:BA:2712:U:C2'	35:BA:2712(A):A:O5'	2.58	0.51
35:BA:2809:A:OP2	35:BA:2891:G:N1	2.44	0.51
36:BB:103:G:H5'	36:BB:104:U:P	2.51	0.51
38:BD:206:LEU:CD2	38:BD:211:ARG:CG	2.89	0.51
40:BF:31:HIS:O	40:BF:34:TRP:HB3	2.10	0.51
41:BG:19:LEU:HG	41:BG:175:LEU:HD12	1.93	0.51
41:BG:71:THR:HG23	41:BG:90:LEU:CA	2.40	0.51
42:BH:85:LYS:HD3	42:BH:85:LYS:O	2.11	0.51
43:BK:41:PHE:CE1	43:BK:45:THR:HG21	2.46	0.51
48:BQ:56:ARG:HA	48:BQ:56:ARG:NE	2.26	0.51
50:BS:42:ASP:C	50:BS:44:LYS:H	2.13	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BT:6:LEU:HD22	51:BT:7:ILE:N	2.26	0.51
51:BT:64:ARG:HG2	51:BT:64:ARG:NH1	2.26	0.51
56:BY:13:VAL:HG23	56:BY:73:ARG:C	2.32	0.51
56:BY:49:VAL:O	56:BY:51:VAL:HG23	2.11	0.51
57:BZ:9:TYR:HB3	57:BZ:35:ARG:NH2	2.26	0.51
57:BZ:42:VAL:CG1	57:BZ:43:GLU:N	2.71	0.51
57:BZ:109:ALA:HB3	57:BZ:144:LEU:O	2.10	0.51
1:AA:736:C:H2'	1:AA:737:A:H8	1.72	0.50
1:AA:1440:C:C2	1:AA:1462:G:N2	2.79	0.50
3:AC:167:TRP:O	3:AC:168:ALA:HB3	2.11	0.50
4:AD:158:ILE:HG22	4:AD:162:LEU:HD12	1.93	0.50
5:AE:139:LEU:C	5:AE:141:GLN:H	2.13	0.50
6:AF:22:GLU:OE2	6:AF:22:GLU:HA	2.11	0.50
10:AJ:47:PHE:N	10:AJ:47:PHE:CD1	2.78	0.50
12:AL:27:LEU:O	12:AL:29:GLY:N	2.44	0.50
13:AM:9:ILE:N	13:AM:9:ILE:HD12	2.26	0.50
15:AO:36:ILE:O	15:AO:37:ASN:C	2.49	0.50
24:AY:304:ASP:C	24:AY:306:ASN:H	2.14	0.50
26:B1:76:ARG:HH22	26:B1:95:LEU:CG	2.24	0.50
28:B3:44:ARG:O	28:B3:45:GLY:C	2.49	0.50
32:B7:25:PRO:CA	32:B7:28:ARG:NH2	2.74	0.50
35:BA:1450(A):C:H2'	35:BA:1451:C:C6	2.47	0.50
35:BA:1680:U:H2'	35:BA:1681:G:O4'	2.11	0.50
35:BA:1695:G:H3'	35:BA:1695:G:N3	2.26	0.50
35:BA:2314:C:C2'	35:BA:2315:G:H5'	2.40	0.50
35:BA:2706:G:H2'	35:BA:2706:G:N3	2.26	0.50
38:BD:145:VAL:HG12	38:BD:146:GLU:O	2.10	0.50
39:BE:48:GLN:NE2	39:BE:78:LEU:HD13	2.25	0.50
39:BE:101:ARG:NH1	39:BE:169:ASN:ND2	2.58	0.50
40:BF:43:LYS:HA	40:BF:98:SER:HB3	1.93	0.50
40:BF:121:GLY:O	40:BF:123:LEU:N	2.44	0.50
40:BF:168:ARG:C	40:BF:170:LEU:H	2.15	0.50
41:BG:97:ASP:CB	41:BG:98:ARG:NH1	2.74	0.50
41:BG:120:LEU:HD22	41:BG:133:LEU:HD22	1.93	0.50
46:BO:107:ARG:HG3	46:BO:107:ARG:NH1	2.24	0.50
51:BT:78:LEU:HB3	51:BT:79:HIS:ND1	2.27	0.50
52:BU:57:PHE:O	52:BU:58:ARG:C	2.49	0.50
57:BZ:14:LYS:HB2	57:BZ:17:ALA:CB	2.41	0.50
1:AA:523:A:H61	12:AL:53:ARG:HH12	1.59	0.50
1:AA:688:G:H5'	11:AK:47:VAL:HA	1.94	0.50
1:AA:741:G:H2'	1:AA:742:G:O4'	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1113:C:H6	1:AA:1113:C:O5'	1.93	0.50
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.46	0.50
2:AB:208:ILE:O	2:AB:212:GLN:HB2	2.11	0.50
8:AH:26:VAL:HG23	8:AH:27:PRO:HD2	1.94	0.50
9:AI:56:LEU:HD23	9:AI:56:LEU:C	2.31	0.50
18:AR:38:GLU:HA	18:AR:41:LYS:HB3	1.93	0.50
24:AY:684:GLN:O	24:AY:688:ILE:HD13	2.12	0.50
27:B2:53:LEU:O	27:B2:53:LEU:HD23	2.11	0.50
29:B4:17:GLY:HA3	29:B4:34:GLU:O	2.10	0.50
30:B5:33:CYS:HG	30:B5:49:CYS:HG	1.52	0.50
35:BA:134:C:H2'	35:BA:135:G:C8	2.47	0.50
35:BA:252:G:OP2	47:BP:50:ARG:NH2	2.43	0.50
35:BA:389:G:C6	47:BP:70:GLN:HG3	2.46	0.50
35:BA:585:G:H2'	35:BA:1251:C:H42	1.76	0.50
35:BA:588:U:H2'	35:BA:589:C:H6	1.77	0.50
35:BA:825:C:C2'	35:BA:826:U:H5'	2.41	0.50
35:BA:918:A:H1'	36:BB:80:U:O2'	2.10	0.50
35:BA:1430:C:H42	35:BA:1563:G:H1	1.57	0.50
35:BA:1607:C:H5'	35:BA:1608:A:C8	2.46	0.50
35:BA:1640:C:H2'	35:BA:1641:A:O4'	2.11	0.50
35:BA:2192:G:C3'	35:BA:2193:G:H5"	2.41	0.50
35:BA:2470:G:C6	35:BA:2471:C:C5	3.00	0.50
37:BC:73:VAL:CG1	37:BC:158:LYS:HA	2.35	0.50
38:BD:28:GLU:HB2	38:BD:29:PRO:CD	2.41	0.50
40:BF:118:ALA:O	40:BF:121:GLY:N	2.45	0.50
40:BF:205:ARG:C	40:BF:206:ILE:HG12	2.31	0.50
41:BG:44:GLY:O	41:BG:47:LYS:CD	2.59	0.50
41:BG:46:ALA:HB2	41:BG:88:ILE:HG12	1.93	0.50
42:BH:41:MET:HG2	42:BH:43:VAL:CG1	2.36	0.50
52:BU:70:ARG:NH2	52:BU:75:ASN:CB	2.75	0.50
57:BZ:145:GLU:OE1	57:BZ:146:ILE:HD13	2.11	0.50
1:AA:376:G:OP2	16:AP:67:THR:HG21	2.09	0.50
1:AA:425:G:O2'	1:AA:426:G:H5'	2.11	0.50
1:AA:552:U:H4'	12:AL:86:ARG:HG2	1.93	0.50
1:AA:942:G:H2'	1:AA:943:U:H6	1.75	0.50
2:AB:34:ALA:CB	2:AB:36:ARG:HD2	2.41	0.50
2:AB:91:PRO:CG	2:AB:155:LEU:HB2	2.41	0.50
4:AD:4:TYR:O	4:AD:5:ILE:HB	2.10	0.50
4:AD:173:TRP:CE2	4:AD:189:PRO:HB3	2.46	0.50
5:AE:101:ILE:CD1	5:AE:119:LEU:CD2	2.84	0.50
6:AF:89:MET:CE	18:AR:76:LEU:HD22	2.42	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:30:ARG:CB	8:AH:30:ARG:NH1	2.75	0.50
13:AM:3:ARG:HG2	13:AM:9:ILE:HD11	1.93	0.50
22:AV:7:G:H5"	22:AV:7:G:C8	2.46	0.50
24:AY:282:SER:O	24:AY:284:LEU:N	2.44	0.50
24:AY:465:ARG:O	24:AY:470:PHE:HD2	1.94	0.50
24:AY:524:GLU:O	24:AY:564:LYS:HA	2.12	0.50
26:B1:45:ASN:HD21	26:B1:47:GLN:HE21	1.58	0.50
27:B2:69:ARG:HG3	27:B2:70:GLN:N	2.27	0.50
30:B5:27:PRO:HG3	54:BW:23:LEU:CD1	2.42	0.50
31:B6:5:VAL:CG1	31:B6:6:ARG:N	2.74	0.50
31:B6:54:ILE:HD13	35:BA:2420:C:H5'	1.91	0.50
33:B8:51:ALA:C	33:B8:53:PRO:HD2	2.32	0.50
35:BA:443:A:H3'	40:BF:45:ARG:HH21	1.76	0.50
35:BA:851:U:H2'	35:BA:852:G:H8	1.76	0.50
35:BA:1210:A:O2'	35:BA:1211:U:OP2	2.29	0.50
35:BA:2011:U:C2'	35:BA:2012:G:H5'	2.39	0.50
35:BA:2078:C:C1'	35:BA:2434:A:H1'	2.41	0.50
35:BA:2309:A:H2'	35:BA:2310:A:C5'	2.41	0.50
35:BA:2762:G:C8	35:BA:2762:G:C5'	2.94	0.50
35:BA:2801(A):A:H4'	35:BA:2802:G:H8	1.71	0.50
38:BD:124:PRO:O	38:BD:129:ASN:ND2	2.45	0.50
39:BE:34:VAL:HG11	39:BE:78:LEU:CD2	2.42	0.50
40:BF:161:GLU:O	40:BF:165:ARG:HG3	2.11	0.50
40:BF:181:LEU:HB3	40:BF:205:ARG:HH12	1.76	0.50
41:BG:9:ARG:HG2	41:BG:13:GLU:HG2	1.94	0.50
41:BG:42:GLY:N	41:BG:43:LEU:HD22	2.26	0.50
42:BH:13:LYS:HA	42:BH:13:LYS:CE	2.34	0.50
42:BH:86:GLU:HA	42:BH:132:ARG:HA	1.93	0.50
44:BL:90:ALA:HA	44:BL:91:PRO:C	2.31	0.50
45:BN:27:ALA:HB1	45:BN:103:VAL:HG22	1.92	0.50
46:BO:64:ARG:O	46:BO:82:ASN:HA	2.12	0.50
46:BO:87:ILE:HG22	46:BO:92:GLU:C	2.31	0.50
50:BS:26:LEU:HD13	50:BS:87:PHE:HD1	1.75	0.50
51:BT:89:VAL:HG12	51:BT:91:ARG:HG3	1.93	0.50
1:AA:368:U:OP2	24:AY:353:ALA:HB2	2.12	0.50
1:AA:687:A:H62	1:AA:703:G:H1'	1.76	0.50
1:AA:1442:G:C5	1:AA:1442(B):A:H2	2.29	0.50
1:AA:1522:U:H6	1:AA:1522:U:O5'	1.94	0.50
3:AC:126:ARG:HB2	3:AC:128:PHE:CE2	2.46	0.50
4:AD:101:LEU:HB2	4:AD:138:TYR:HB3	1.94	0.50
10:AJ:40:LEU:CB	10:AJ:41:PRO:HD2	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:10:ARG:O	21:AU:13:ILE:N	2.44	0.50
22:AV:39:C:O5'	22:AV:39:C:H6	1.94	0.50
22:AV:76:A:OP1	26:B1:33:LYS:NZ	2.38	0.50
24:AY:289:ILE:HD11	24:AY:331:TYR:CZ	2.46	0.50
24:AY:512:ILE:CD1	24:AY:589:ALA:HB1	2.41	0.50
26:B1:4:VAL:HG23	26:B1:11:ARG:HB3	1.92	0.50
28:B3:54:VAL:HG12	28:B3:55:ARG:N	2.27	0.50
30:B5:25:LEU:HD12	54:BW:19:LEU:C	2.32	0.50
35:BA:177:G:H3'	35:BA:178:G:H8	1.77	0.50
35:BA:1127:A:H2'	35:BA:1128:A:H5"	1.94	0.50
35:BA:1164:G:H1	35:BA:1185:C:N4	2.10	0.50
35:BA:1245:G:H5'	40:BF:34:TRP:HZ2	1.75	0.50
35:BA:1396:U:O2	35:BA:1396:U:C2'	2.58	0.50
35:BA:1943:U:OP1	35:BA:1943:U:H6	1.94	0.50
35:BA:1971:A:N3	38:BD:240:ALA:HA	2.26	0.50
35:BA:2089:U:O2'	35:BA:2090:G:H5'	2.12	0.50
35:BA:2126:A:N1	35:BA:2162:G:O2'	2.44	0.50
35:BA:2131:G:C8	35:BA:2133:G:C2	2.98	0.50
35:BA:2137:C:H2'	35:BA:2138:C:C6	2.47	0.50
35:BA:2680:C:O2	35:BA:2680:C:H2'	2.10	0.50
35:BA:2749:A:C6	35:BA:2750:A:N6	2.79	0.50
38:BD:239:ARG:HG2	38:BD:239:ARG:NH1	2.26	0.50
41:BG:44:GLY:C	41:BG:46:ALA:H	2.15	0.50
41:BG:90:LEU:HD12	41:BG:91:ARG:H	1.77	0.50
42:BH:44:VAL:O	42:BH:50:VAL:HG13	2.11	0.50
43:BK:98:ARG:HD2	43:BK:139:VAL:HG22	1.94	0.50
47:BP:71:VAL:HG12	47:BP:72:PRO:HD3	1.93	0.50
49:BR:100:LEU:N	49:BR:100:LEU:HD13	2.27	0.50
51:BT:100:TYR:HD1	51:BT:100:TYR:H	1.60	0.50
55:BX:30:VAL:HG22	55:BX:77:LYS:O	2.10	0.50
1:AA:311:C:HO2'	1:AA:312:C:H5'	1.75	0.50
1:AA:337:C:H2'	1:AA:338:A:H8	1.77	0.50
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.47	0.50
1:AA:394:G:H2'	1:AA:395:C:C6	2.46	0.50
1:AA:630:G:C2'	1:AA:631:G:H5"	2.42	0.50
1:AA:993:G:N2	1:AA:996:A:N6	2.60	0.50
2:AB:115:LEU:HD13	2:AB:145:LEU:HB3	1.92	0.50
3:AC:36:ASP:O	3:AC:39:ILE:HB	2.10	0.50
8:AH:114:THR:C	8:AH:116:LYS:H	2.15	0.50
9:AI:45:ALA:O	9:AI:48:GLU:HB2	2.12	0.50
9:AI:95:LYS:HD3	9:AI:95:LYS:C	2.31	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:89:ALA:O	11:AK:91:ARG:N	2.39	0.50
16:AP:8:ARG:O	16:AP:9:PHE:CD1	2.64	0.50
20:AT:50:GLU:HG3	20:AT:51:GLU:H	1.77	0.50
21:AU:18:TYR:HD2	21:AU:24:ARG:HA	1.77	0.50
24:AY:19:ALA:HA	24:AY:121:VAL:HG11	1.93	0.50
24:AY:252:ASP:O	24:AY:254:LYS:HE3	2.12	0.50
24:AY:409:ILE:CG1	24:AY:656:ALA:HB3	2.42	0.50
24:AY:644:ARG:O	24:AY:645:ALA:HB2	2.11	0.50
25:B0:49:LYS:O	25:B0:51:VAL:HG23	2.11	0.50
26:B1:50:ARG:HD2	35:BA:2200:C:OP1	2.12	0.50
35:BA:85:G:C2'	35:BA:86:C:H5'	2.41	0.50
35:BA:108:U:C2	35:BA:109:G:N7	2.80	0.50
35:BA:231:C:H2'	35:BA:232:G:O4'	2.10	0.50
35:BA:267:C:H2'	35:BA:268:C:H6	1.76	0.50
35:BA:724:U:C2'	35:BA:725:G:H5'	2.42	0.50
35:BA:849:A:N6	35:BA:928:G:H1'	2.26	0.50
35:BA:883:G:H2'	35:BA:884:C:O4'	2.12	0.50
35:BA:1081:U:H5"	43:BK:122:ALA:HB1	1.94	0.50
35:BA:1344:G:H1	35:BA:1403:C:H42	1.59	0.50
35:BA:1349:A:N6	35:BA:1598:C:N4	2.59	0.50
35:BA:1353:A:H2'	35:BA:1354:A:C8	2.46	0.50
35:BA:1378:A:H2'	35:BA:1380:G:N7	2.26	0.50
35:BA:1884:A:C2'	35:BA:1885:A:C5'	2.78	0.50
36:BB:117:G:O2'	36:BB:118:G:H5'	2.12	0.50
38:BD:11:PRO:C	38:BD:13:ARG:H	2.14	0.50
38:BD:76:PRO:O	38:BD:98:VAL:HG23	2.10	0.50
38:BD:77:ALA:HB2	38:BD:97:TYR:CD2	2.46	0.50
39:BE:36:ARG:CG	39:BE:36:ARG:NH1	2.44	0.50
39:BE:52:LEU:O	39:BE:74:PRO:CA	2.58	0.50
39:BE:145:LYS:O	39:BE:148:GLY:N	2.44	0.50
40:BF:7:TYR:HD2	40:BF:16:GLY:HA3	1.75	0.50
41:BG:125:PHE:O	41:BG:126:ASP:C	2.50	0.50
43:BK:60:TYR:OH	43:BK:66:THR:HG21	2.11	0.50
45:BN:45:ASN:H	45:BN:45:ASN:ND2	2.05	0.50
48:BQ:134:ARG:NH2	57:BZ:122:ARG:NE	2.60	0.50
50:BS:89:ARG:HG2	50:BS:89:ARG:NH1	2.17	0.50
52:BU:74:LEU:C	52:BU:74:LEU:HD13	2.31	0.50
53:BV:19:LYS:NZ	53:BV:22:VAL:HG13	2.26	0.50
53:BV:21:ARG:HB3	53:BV:91:TYR:HD2	1.71	0.50
56:BY:88:LYS:HE2	56:BY:93:GLY:CA	2.40	0.50
1:AA:134:A:C2'	1:AA:135:C:H5'	2.42	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:260:G:H2'	1:AA:261:U:H6	1.77	0.50
1:AA:651:C:H2'	1:AA:652:U:C6	2.47	0.50
1:AA:1115:C:H1'	14:AN:61:TRP:O	2.12	0.50
1:AA:1130:A:H4'	9:AI:18:PHE:CE1	2.47	0.50
9:AI:83:ARG:O	9:AI:86:VAL:HG12	2.11	0.50
12:AL:109:GLY:HA3	12:AL:121:GLY:O	2.12	0.50
16:AP:9:PHE:HE2	16:AP:18:ARG:CZ	2.25	0.50
24:AY:259:PHE:CE2	24:AY:275:ALA:HB1	2.45	0.50
31:B6:43:CYS:CB	31:B6:44:ARG:NH2	2.60	0.50
31:B6:54:ILE:HD13	35:BA:2420:C:C4'	2.41	0.50
32:B7:16:HIS:O	32:B7:43:THR:HG23	2.11	0.50
32:B7:18:PHE:CE2	32:B7:22:MET:HG3	2.47	0.50
33:B8:43:GLN:O	33:B8:44:LYS:HD2	2.11	0.50
35:BA:211:A:O2'	35:BA:212:G:H5"	2.11	0.50
35:BA:657:U:H2'	35:BA:658:C:C6	2.46	0.50
35:BA:729:G:H2'	35:BA:1775:U:O2	2.11	0.50
35:BA:1169:G:N2	35:BA:1181:C:N3	2.58	0.50
35:BA:1196:C:O2'	35:BA:1197:G:H5'	2.12	0.50
35:BA:1567:A:C5'	38:BD:58:HIS:CD2	2.94	0.50
35:BA:1682:G:H2'	35:BA:1683:C:H6	1.71	0.50
35:BA:2135:A:H2'	35:BA:2136:C:O4'	2.12	0.50
35:BA:2352:A:H2'	35:BA:2353:G:H5'	1.93	0.50
35:BA:2577:A:H5'	35:BA:2578:G:C5'	2.38	0.50
35:BA:2884:U:H2'	35:BA:2885:C:C5'	2.42	0.50
41:BG:108:ASN:C	41:BG:109:VAL:HG23	2.28	0.50
41:BG:111:LEU:CD2	41:BG:120:LEU:HD21	2.41	0.50
42:BH:83:TYR:CB	42:BH:134:SER:HA	2.37	0.50
46:BO:115:VAL:CG1	46:BO:121:VAL:HG21	2.40	0.50
47:BP:84:ASN:C	47:BP:86:LYS:N	2.65	0.50
52:BU:55:ARG:HA	52:BU:58:ARG:HG3	1.93	0.50
53:BV:32:THR:CG2	53:BV:33:VAL:H	2.24	0.50
1:AA:202:U:H5'	1:AA:203:U:H5	1.77	0.50
1:AA:562:C:H1'	12:AL:15:ARG:HD2	1.93	0.50
1:AA:973:G:C1'	10:AJ:55:LYS:CE	2.86	0.50
1:AA:1225:A:H3'	1:AA:1226:C:C6	2.47	0.50
2:AB:62:ALA:C	2:AB:64:ARG:H	2.14	0.50
2:AB:86:GLU:O	2:AB:88:ALA:N	2.44	0.50
3:AC:35:GLU:O	3:AC:38:ARG:HG2	2.11	0.50
4:AD:78:LEU:HD13	4:AD:97:LEU:HD23	1.93	0.50
8:AH:29:SER:OG	8:AH:32:LYS:HG3	2.11	0.50
8:AH:104:ARG:HB3	8:AH:108:GLY:H	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:134:ILE:O	8:AH:135:CYS:HB3	2.12	0.50
9:AI:8:GLY:HA2	9:AI:79:LEU:HD12	1.94	0.50
9:AI:79:LEU:CD1	9:AI:83:ARG:HB2	2.39	0.50
13:AM:54:VAL:C	13:AM:56:LEU:N	2.63	0.50
13:AM:91:ARG:CD	13:AM:97:PRO:O	2.60	0.50
14:AN:37:PHE:CD1	14:AN:39:LEU:HD12	2.47	0.50
15:AO:76:GLU:C	15:AO:78:TYR:N	2.64	0.50
26:B1:80:LEU:CD2	26:B1:81:LYS:H	2.25	0.50
27:B2:41:ILE:HD11	27:B2:44:LEU:CD1	2.40	0.50
33:B8:53:PRO:HA	33:B8:56:GLU:HB2	1.93	0.50
35:BA:9:U:O4	35:BA:2629:A:N7	2.44	0.50
35:BA:240:G:C3'	35:BA:241:A:H5"	2.37	0.50
35:BA:259:G:H1'	35:BA:621:A:O2'	2.12	0.50
35:BA:338:G:H2'	35:BA:339:U:C6	2.47	0.50
35:BA:636:G:OP1	47:BP:132:LYS:HG3	2.11	0.50
35:BA:654(A):G:H2'	35:BA:654(B):C:O4'	2.12	0.50
35:BA:685:A:C5	35:BA:774:A:C2	3.00	0.50
35:BA:1221(A):C:C2	35:BA:1229:G:N2	2.80	0.50
35:BA:1409:C:O2'	35:BA:1410:G:H5'	2.11	0.50
35:BA:1756:G:H4'	35:BA:1758:G:O4'	2.12	0.50
35:BA:2121:G:O2'	37:BC:168:LYS:HG2	2.11	0.50
35:BA:2206:G:C2	35:BA:2207:G:H5'	2.46	0.50
35:BA:2820:A:C8	39:BE:191:PRO:HB2	2.46	0.50
35:BA:2838:G:H1'	49:BR:45:ARG:HH11	1.77	0.50
35:BA:2861:G:H2'	35:BA:2862:G:H8	1.77	0.50
42:BH:103:LEU:CB	42:BH:123:PHE:HD2	2.25	0.50
42:BH:149:ARG:HA	42:BH:162:ILE:HG13	1.93	0.50
43:BK:10:LEU:CD1	43:BK:57:ILE:HD13	2.42	0.50
47:BP:89:ALA:HA	47:BP:121:LYS:HD3	1.94	0.50
49:BR:18:LEU:HD23	49:BR:19:ALA:N	2.27	0.50
52:BU:53:ARG:O	52:BU:56:ASP:N	2.29	0.50
56:BY:13:VAL:CG2	56:BY:73:ARG:O	2.60	0.50
57:BZ:179:ASP:HB3	57:BZ:182:LYS:CD	2.40	0.50
1:AA:678:U:H2'	1:AA:679:C:H6	1.75	0.50
1:AA:707:C:H4'	11:AK:20:TYR:CD1	2.47	0.50
1:AA:1299:A:C2	1:AA:1301:U:C2	3.00	0.50
1:AA:1399:C:C2	1:AA:1401:G:C5	3.00	0.50
2:AB:223:ILE:HG23	2:AB:226:ARG:CZ	2.42	0.50
4:AD:163:GLU:C	4:AD:165:MET:H	2.15	0.50
6:AF:19:LEU:HD23	6:AF:19:LEU:C	2.32	0.50
9:AI:82:ALA:HA	9:AI:85:LEU:HD11	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:4:ILE:N	10:AJ:4:ILE:CD1	2.74	0.50
11:AK:106:LYS:O	11:AK:107:SER:HB3	2.12	0.50
19:AS:22:LEU:HD13	19:AS:27:GLU:CD	2.32	0.50
20:AT:97:ALA:O	20:AT:99:LEU:HD23	2.11	0.50
20:AT:103:GLY:O	20:AT:104:LEU:C	2.50	0.50
24:AY:147:TRP:O	24:AY:150:ILE:N	2.45	0.50
24:AY:204:GLU:O	24:AY:205:TYR:C	2.50	0.50
24:AY:252:ASP:CB	24:AY:254:LYS:CE	2.83	0.50
24:AY:649:LEU:HD21	24:AY:671:MET:HE3	1.94	0.50
58:AY:701:FUA:H241	58:AY:701:FUA:O5	2.11	0.50
27:B2:38:GLN:HA	27:B2:41:ILE:HG23	1.93	0.50
27:B2:66:GLU:O	27:B2:69:ARG:HG2	2.11	0.50
35:BA:302:C:O2'	35:BA:303:U:H5'	2.11	0.50
35:BA:559:G:N2	52:BU:49:HIS:CD2	2.79	0.50
35:BA:724:U:O2'	35:BA:725:G:H5'	2.11	0.50
35:BA:1097:U:H2'	35:BA:1098:A:C5'	2.40	0.50
35:BA:1517:G:H8	35:BA:1517:G:C5'	2.15	0.50
35:BA:2457:U:C2'	35:BA:2458:G:H5'	2.41	0.50
35:BA:2469:A:O3'	48:BQ:56:ARG:NH1	2.44	0.50
35:BA:2807:G:H2'	35:BA:2808:U:H5"	1.91	0.50
38:BD:35:LYS:NZ	38:BD:36:PRO:HD3	2.26	0.50
39:BE:47:VAL:CG2	39:BE:84:PHE:O	2.60	0.50
41:BG:62:LEU:CD1	41:BG:62:LEU:H	2.24	0.50
41:BG:106:LEU:O	41:BG:111:LEU:HD12	2.11	0.50
48:BQ:12:GLN:HE21	48:BQ:72:LYS:HA	1.76	0.50
48:BQ:130:LYS:HZ2	57:BZ:80:ARG:NH1	2.10	0.50
48:BQ:135:ASP:O	48:BQ:138:ASP:OD2	2.29	0.50
51:BT:6:LEU:O	51:BT:9:LEU:N	2.45	0.50
51:BT:11:GLU:C	51:BT:13:ARG:N	2.65	0.50
56:BY:29:GLU:HB2	56:BY:38:ILE:CG2	2.42	0.50
1:AA:930:C:O2'	1:AA:931:C:H5'	2.11	0.50
1:AA:961:U:C2'	1:AA:962:C:H5'	2.41	0.50
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.47	0.50
2:AB:53:ARG:O	2:AB:53:ARG:HG2	2.11	0.50
3:AC:136:GLN:O	3:AC:138:VAL:N	2.45	0.50
6:AF:33:TYR:HB2	6:AF:75:LEU:CD1	2.42	0.50
6:AF:80:ARG:NH1	6:AF:88:VAL:HB	2.25	0.50
7:AG:28:ASN:OD1	7:AG:36:LYS:NZ	2.44	0.50
8:AH:44:PHE:O	8:AH:80:ILE:HD11	2.11	0.50
8:AH:123:GLU:O	8:AH:126:LYS:HB3	2.12	0.50
9:AI:24:GLY:HA2	9:AI:59:PHE:O	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:82:VAL:HB	11:AK:108:ILE:HA	1.93	0.50
24:AY:114:VAL:O	24:AY:114:VAL:HG22	2.11	0.50
24:AY:252:ASP:HB3	24:AY:254:LYS:CE	2.42	0.50
24:AY:337:SER:CA	24:AY:355:LEU:HD23	2.42	0.50
24:AY:498:ILE:HG22	24:AY:507:TYR:CG	2.47	0.50
24:AY:572:TYR:N	24:AY:572:TYR:CD1	2.80	0.50
27:B2:29:LYS:O	27:B2:31:GLU:N	2.44	0.50
33:B8:53:PRO:HG2	33:B8:54:GLU:H	1.76	0.50
34:B9:3:VAL:HG22	34:B9:35:ARG:NH2	2.27	0.50
35:BA:41:C:H2'	35:BA:42:G:C1'	2.41	0.50
35:BA:220:G:H1	35:BA:427:U:H2'	1.77	0.50
35:BA:247:G:H4'	35:BA:386:G:C5	2.47	0.50
35:BA:1329:U:H5'	35:BA:1330:C:H5	1.77	0.50
35:BA:1531:C:H2'	35:BA:1532:C:C6	2.47	0.50
35:BA:1668:A:N6	35:BA:1676:A:H61	2.10	0.50
35:BA:2131:G:H5'	35:BA:2133:G:C1'	2.42	0.50
35:BA:2308:G:N7	35:BA:2310:A:C5'	2.65	0.50
35:BA:2694:G:O2'	35:BA:2695:C:H5'	2.11	0.50
35:BA:2850:A:OP2	35:BA:2866:U:H5	1.94	0.50
36:BB:51:G:H5'	36:BB:52:A:OP2	2.12	0.50
36:BB:68:C:H2'	36:BB:69:G:C8	2.44	0.50
36:BB:99:G:H8	36:BB:99:G:O5'	1.95	0.50
37:BC:97:GLY:O	37:BC:100:ILE:HG12	2.12	0.50
39:BE:25:VAL:HG22	39:BE:183:LEU:HG	1.93	0.50
39:BE:103:ASP:OD2	39:BE:201:THR:HA	2.12	0.50
40:BF:204:ASN:C	40:BF:206:ILE:N	2.64	0.50
43:BK:114:ASP:O	43:BK:115:LEU:O	2.30	0.50
47:BP:144:GLU:N	47:BP:145:PRO:HD3	2.26	0.50
48:BQ:58:PHE:O	48:BQ:59:ARG:C	2.49	0.50
49:BR:79:LEU:HD13	49:BR:79:LEU:O	2.10	0.50
50:BS:56:LEU:C	50:BS:58:LEU:H	2.14	0.50
56:BY:13:VAL:HG23	56:BY:74:PRO:HA	1.94	0.50
56:BY:20:TYR:N	56:BY:20:TYR:CD1	2.79	0.50
56:BY:75:ILE:HG23	56:BY:75:ILE:O	2.12	0.50
57:BZ:48:PHE:CE1	57:BZ:71:VAL:HG21	2.47	0.50
57:BZ:99:TYR:HA	57:BZ:124:ILE:O	2.12	0.50
1:AA:106:C:H2'	1:AA:107:G:H5'	1.94	0.49
1:AA:117:G:H8	1:AA:117:G:O5'	1.95	0.49
1:AA:439:A:H2'	1:AA:441:A:C5'	2.42	0.49
1:AA:472:A:H1'	16:AP:82:GLN:OE1	2.12	0.49
1:AA:499:A:C4'	1:AA:500:G:OP1	2.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:883:C:O2'	1:AA:884:U:H5'	2.12	0.49
1:AA:1320:C:N4	19:AS:36:ARG:HG3	2.26	0.49
1:AA:1361:G:C5'	1:AA:1362:C:OP2	2.60	0.49
2:AB:32:ILE:HD11	2:AB:40:HIS:HB3	1.94	0.49
3:AC:93:LYS:HG2	3:AC:93:LYS:O	2.12	0.49
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.92	0.49
9:AI:59:PHE:N	9:AI:59:PHE:CD1	2.79	0.49
19:AS:48:THR:HG22	19:AS:61:TYR:HD1	1.77	0.49
21:AU:8:THR:O	21:AU:9:ARG:C	2.48	0.49
21:AU:10:ARG:O	21:AU:13:ILE:HB	2.12	0.49
22:AV:7:G:H5"	22:AV:7:G:H8	1.74	0.49
24:AY:34:TYR:HD2	24:AY:35:TYR:CD2	2.30	0.49
24:AY:112:GLN:O	24:AY:115:GLU:HB3	2.12	0.49
24:AY:124:GLN:CA	24:AY:127:LYS:HD2	2.42	0.49
24:AY:218:GLU:HG2	44:BL:80:LEU:HB3	1.94	0.49
24:AY:659:LEU:HD13	24:AY:659:LEU:C	2.32	0.49
26:B1:25:LYS:HB2	26:B1:31:GLY:HA2	1.94	0.49
27:B2:58:ALA:O	27:B2:61:LEU:HB2	2.12	0.49
30:B5:2:ALA:N	35:BA:2015:A:N3	2.59	0.49
31:B6:38:LYS:HG3	31:B6:47:THR:O	2.12	0.49
35:BA:154(A):C:H3'	35:BA:155:U:H5"	1.92	0.49
35:BA:291:C:N3	35:BA:350:U:O2	2.45	0.49
35:BA:324:A:OP2	35:BA:1205:U:N3	2.42	0.49
35:BA:532:A:H4'	35:BA:533:G:C8	2.46	0.49
35:BA:848:G:H5'	35:BA:849:A:P	2.52	0.49
35:BA:1141:U:H5"	45:BN:63:THR:HG23	1.94	0.49
35:BA:1164:G:H2'	35:BA:1165:U:C6	2.46	0.49
35:BA:1899:G:O2'	35:BA:1900:A:H5"	2.12	0.49
35:BA:2305:A:H2'	35:BA:2306:C:O4'	2.12	0.49
35:BA:2749:A:H4'	42:BH:62:LYS:HB3	1.94	0.49
35:BA:2872:G:O2'	35:BA:2873:A:H5'	2.12	0.49
38:BD:117:VAL:CG2	38:BD:118:VAL:N	2.74	0.49
40:BF:121:GLY:C	40:BF:123:LEU:H	2.15	0.49
42:BH:31:GLY:O	42:BH:79:VAL:CG1	2.60	0.49
45:BN:78:TYR:HD1	45:BN:78:TYR:H	1.60	0.49
48:BQ:134:ARG:HH11	48:BQ:134:ARG:HG3	1.77	0.49
52:BU:61:TRP:HB3	52:BU:93:LYS:HB3	1.93	0.49
57:BZ:115:GLY:O	57:BZ:116:VAL:CG2	2.60	0.49
57:BZ:115:GLY:C	57:BZ:116:VAL:CG2	2.80	0.49
1:AA:473:G:H2'	1:AA:474:G:C8	2.42	0.49
1:AA:785:G:C2'	1:AA:786:G:H5'	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:949:A:H2'	1:AA:950:U:O4'	2.12	0.49
1:AA:955:U:H2'	1:AA:956:U:C6	2.48	0.49
1:AA:1129:C:H5'	1:AA:1129:C:C6	2.45	0.49
1:AA:1203:C:OP1	14:AN:3:ARG:HD3	2.11	0.49
2:AB:44:LEU:O	2:AB:47:THR:HB	2.12	0.49
2:AB:152:PHE:CD1	2:AB:152:PHE:C	2.85	0.49
3:AC:14:ILE:O	3:AC:15:THR:HB	2.12	0.49
3:AC:120:VAL:HG12	3:AC:121:ALA:N	2.27	0.49
4:AD:9:CYS:SG	4:AD:22:LYS:HD2	2.53	0.49
4:AD:129:ASN:N	4:AD:129:ASN:HD22	2.11	0.49
6:AF:3:ARG:HG3	6:AF:3:ARG:HH11	1.76	0.49
15:AO:24:SER:O	15:AO:25:THR:C	2.49	0.49
24:AY:154:GLN:HA	24:AY:158:GLY:HA2	1.93	0.49
24:AY:492:ASP:OD2	24:AY:513:LYS:HD2	2.11	0.49
27:B2:25:VAL:O	27:B2:27:GLU:N	2.45	0.49
35:BA:464:U:C2	35:BA:788:A:N6	2.80	0.49
35:BA:688:U:H2'	35:BA:689:A:C8	2.47	0.49
35:BA:917:A:H2'	35:BA:918:A:O4'	2.12	0.49
35:BA:948:G:H1	35:BA:969:U:H3	1.60	0.49
35:BA:1667:G:C2'	35:BA:1667:G:O5'	2.61	0.49
35:BA:1798:U:C4	35:BA:1819:A:C2	3.00	0.49
35:BA:1840:G:H1	35:BA:1902:C:N4	2.10	0.49
35:BA:2330:G:H2'	35:BA:2331:G:O4'	2.12	0.49
35:BA:2556:C:H2'	35:BA:2557:G:O5'	2.11	0.49
36:BB:16:G:N2	36:BB:69:G:H1'	2.26	0.49
36:BB:30:C:OP2	50:BS:32:LEU:HD21	2.12	0.49
36:BB:68:C:H2'	36:BB:69:G:O4'	2.12	0.49
38:BD:9:TYR:CE1	38:BD:13:ARG:HD3	2.47	0.49
38:BD:35:LYS:CG	38:BD:63:ARG:HA	2.33	0.49
41:BG:135:LEU:O	41:BG:135:LEU:HD13	2.12	0.49
51:BT:24:PRO:HA	51:BT:49:VAL:HG22	1.93	0.49
53:BV:8:GLY:O	53:BV:10:LYS:HE3	2.12	0.49
56:BY:49:VAL:HG12	56:BY:50:ARG:N	2.26	0.49
1:AA:61:G:H2'	1:AA:62:U:O4'	2.11	0.49
1:AA:184:G:O2'	1:AA:185:A:H5'	2.12	0.49
1:AA:388:G:H4'	1:AA:390:C:N4	2.25	0.49
1:AA:1318:A:H4'	19:AS:10:PHE:CD2	2.46	0.49
1:AA:1339:A:H2'	1:AA:1340:A:O4'	2.12	0.49
3:AC:32:LEU:HB3	3:AC:59:ARG:NH2	2.23	0.49
4:AD:173:TRP:HB3	4:AD:187:ARG:HH12	1.76	0.49
13:AM:70:LEU:HD23	13:AM:71:ARG:N	2.28	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:43:LEU:HB2	20:AT:52:ALA:HB2	1.94	0.49
24:AY:5:VAL:CG1	24:AY:6:GLU:N	2.75	0.49
24:AY:65:ILE:N	24:AY:65:ILE:HD13	2.26	0.49
24:AY:236:GLU:HG3	24:AY:236:GLU:O	2.12	0.49
24:AY:465:ARG:O	24:AY:470:PHE:CD2	2.66	0.49
58:AY:701:FUA:O2	58:AY:701:FUA:C21	2.54	0.49
27:B2:29:LYS:O	27:B2:30:ARG:C	2.50	0.49
33:B8:48:PHE:O	33:B8:49:VAL:CG1	2.53	0.49
33:B8:62:LEU:N	33:B8:63:PRO:CD	2.76	0.49
35:BA:426:C:O2'	35:BA:427:U:H5'	2.12	0.49
35:BA:528:A:N1	35:BA:2042:A:H2'	2.28	0.49
35:BA:552:G:O2'	35:BA:553:G:H5'	2.11	0.49
35:BA:654(P):C:H2'	35:BA:654(Q):C:C5'	2.43	0.49
35:BA:654(R):C:HO2'	35:BA:654(S):G:H8	1.57	0.49
35:BA:947:G:H2'	35:BA:948:G:C8	2.44	0.49
35:BA:1208:C:O2	35:BA:1208:C:H2'	2.12	0.49
35:BA:1773:A:C2'	35:BA:1774:C:H5'	2.42	0.49
35:BA:1941:C:C4	35:BA:1942:C:N4	2.80	0.49
35:BA:2394:C:C6	35:BA:2395:C:H5	2.29	0.49
35:BA:2531:A:OP1	42:BH:177:GLY:C	2.51	0.49
35:BA:2653:U:O2'	42:BH:110:SER:CB	2.60	0.49
39:BE:64:LYS:C	39:BE:66:HIS:H	2.15	0.49
39:BE:101:ARG:HH11	39:BE:169:ASN:ND2	2.11	0.49
41:BG:125:PHE:CZ	41:BG:173:LEU:HD12	2.48	0.49
42:BH:86:GLU:HG3	42:BH:130:ARG:NH1	2.26	0.49
43:BK:62:ASP:O	43:BK:63:ARG:HB2	2.12	0.49
45:BN:49:GLY:CA	45:BN:119:ARG:HH12	2.25	0.49
47:BP:47:ASP:OD2	47:BP:50:ARG:NH1	2.45	0.49
49:BR:96:ARG:O	49:BR:114:VAL:HA	2.13	0.49
51:BT:100:TYR:N	51:BT:100:TYR:CD1	2.79	0.49
53:BV:61:VAL:HA	53:BV:94:LEU:CD2	2.41	0.49
56:BY:8:LYS:HB2	56:BY:28:LYS:HZ3	1.75	0.49
1:AA:56:U:H2'	1:AA:57:G:C8	2.47	0.49
1:AA:149:A:N3	1:AA:149:A:H2'	2.27	0.49
1:AA:165:C:O2'	1:AA:166:G:H5'	2.13	0.49
1:AA:312:C:H2'	1:AA:313:A:C8	2.48	0.49
1:AA:1190:G:H3'	3:AC:3:ASN:HD22	1.77	0.49
3:AC:59:ARG:CG	3:AC:64:VAL:HA	2.42	0.49
3:AC:153:VAL:HG12	3:AC:154:SER:N	2.27	0.49
3:AC:167:TRP:CE3	3:AC:168:ALA:N	2.76	0.49
4:AD:62:GLN:O	4:AD:66:ARG:HD2	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:11:ASN:HB3	6:AF:14:LEU:HG	1.94	0.49
7:AG:4:ARG:HB3	7:AG:5:ARG:HH11	1.77	0.49
7:AG:21:VAL:HG23	7:AG:22:LEU:N	2.27	0.49
8:AH:30:ARG:NH1	8:AH:30:ARG:HB3	2.27	0.49
10:AJ:50:ILE:HD11	14:AN:41:ARG:HH11	1.77	0.49
13:AM:35:GLU:HG3	13:AM:36:LYS:N	2.26	0.49
13:AM:66:LEU:O	13:AM:70:LEU:HB3	2.13	0.49
15:AO:39:LEU:CD1	15:AO:56:LEU:HB2	2.43	0.49
17:AQ:17:LYS:HA	17:AQ:46:ASP:O	2.12	0.49
18:AR:53:ARG:C	18:AR:55:ARG:N	2.65	0.49
24:AY:206:LEU:O	24:AY:209:ALA:HB3	2.13	0.49
24:AY:415:PRO:HB2	24:AY:421:GLN:CA	2.42	0.49
24:AY:423:LYS:CB	24:AY:472:VAL:HG22	2.33	0.49
30:B5:2:ALA:N	35:BA:2015:A:H1'	2.27	0.49
35:BA:68:G:H2'	35:BA:69:C:H6	1.76	0.49
35:BA:82:G:C5'	35:BA:296:C:H5'	2.40	0.49
35:BA:92:A:H2'	35:BA:93:G:C8	2.47	0.49
35:BA:152:G:H1	35:BA:174:C:H42	1.60	0.49
35:BA:229:A:OP1	35:BA:229:A:C8	2.63	0.49
35:BA:1116:C:O5'	35:BA:1116:C:H6	1.95	0.49
35:BA:1484:G:H2'	35:BA:1485:G:C5'	2.42	0.49
35:BA:1516:C:O2'	35:BA:1517:G:H5"	2.11	0.49
35:BA:1697:G:C3'	35:BA:1698:A:H5"	2.36	0.49
35:BA:1967:C:H2'	35:BA:1968:G:C5'	2.41	0.49
35:BA:2014:A:H4'	54:BW:92:ARG:HH12	1.78	0.49
35:BA:2019:A:O4'	52:BU:34:LYS:HD2	2.12	0.49
35:BA:2199:A:H3'	35:BA:2200:C:C6	2.45	0.49
35:BA:2454:G:C2'	35:BA:2455:G:C5'	2.87	0.49
38:BD:145:VAL:HG13	38:BD:191:ALA:HB2	1.94	0.49
39:BE:101:ARG:NE	39:BE:171:GLU:CB	2.73	0.49
41:BG:106:LEU:O	41:BG:106:LEU:HG	2.11	0.49
45:BN:62:VAL:O	45:BN:63:THR:C	2.49	0.49
50:BS:14:VAL:O	50:BS:15:ARG:C	2.50	0.49
52:BU:82:GLY:C	52:BU:84:LYS:N	2.65	0.49
53:BV:5:VAL:HG23	53:BV:37:VAL:HG23	1.95	0.49
1:AA:59:A:H3'	1:AA:331:G:H22	1.77	0.49
1:AA:182:U:H3'	1:AA:183:G:C5'	2.42	0.49
1:AA:260:G:H2'	1:AA:261:U:C6	2.46	0.49
1:AA:659:U:O2'	1:AA:660:G:H5'	2.11	0.49
1:AA:1277:C:H6	1:AA:1277:C:C3'	2.23	0.49
3:AC:22:TRP:CZ2	14:AN:54:PRO:HG2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:12:CYS:HG	4:AD:31:CYS:HG	1.54	0.49
4:AD:200:GLU:CD	4:AD:200:GLU:H	2.15	0.49
4:AD:204:ILE:C	4:AD:206:PHE:N	2.66	0.49
15:AO:11:VAL:O	15:AO:14:GLU:HB3	2.13	0.49
20:AT:48:LYS:O	20:AT:49:ALA:C	2.51	0.49
24:AY:140:ASP:OD2	24:AY:265:LYS:HE2	2.13	0.49
24:AY:177:ILE:CG2	24:AY:178:ILE:N	2.75	0.49
27:B2:18:PRO:HG2	27:B2:19:VAL:H	1.77	0.49
32:B7:19:ARG:HA	32:B7:22:MET:HB2	1.95	0.49
35:BA:104:U:OP2	35:BA:105:C:H5	1.95	0.49
35:BA:406:G:O2'	35:BA:407:G:P	2.71	0.49
35:BA:680:G:H2'	35:BA:681:G:H8	1.78	0.49
35:BA:986:C:C2'	35:BA:987:G:H5'	2.43	0.49
35:BA:1095:A:H2'	35:BA:1096:A:C8	2.48	0.49
35:BA:1115:G:H2'	35:BA:1116:C:C6	2.46	0.49
35:BA:1166:C:H2'	35:BA:1167:U:H6	1.78	0.49
35:BA:1173:G:H4'	35:BA:1174:A:OP2	2.12	0.49
35:BA:2075:U:C2'	35:BA:2076:U:H5"	2.43	0.49
37:BC:117:THR:O	37:BC:120:VAL:HG22	2.13	0.49
38:BD:35:LYS:HD2	38:BD:35:LYS:C	2.31	0.49
40:BF:41:LEU:HD23	40:BF:44:ARG:NE	2.27	0.49
41:BG:117:PHE:HE1	41:BG:120:LEU:N	2.11	0.49
48:BQ:41:TRP:CD1	48:BQ:96:VAL:HG22	2.48	0.49
49:BR:50:HIS:O	49:BR:51:LEU:C	2.48	0.49
54:BW:50:VAL:HG13	54:BW:51:LEU:N	2.26	0.49
55:BX:36:LYS:HA	55:BX:39:ILE:HB	1.94	0.49
57:BZ:9:TYR:N	57:BZ:9:TYR:HD1	2.08	0.49
1:AA:123:C:OP1	1:AA:311:C:O2'	2.30	0.49
1:AA:452:A:H5'	16:AP:72:ARG:NH2	2.27	0.49
1:AA:505:G:H2'	1:AA:506:G:C8	2.47	0.49
1:AA:608:A:H2'	1:AA:609:A:H5'	1.94	0.49
1:AA:920:U:H2'	1:AA:921:U:C6	2.47	0.49
1:AA:1009:G:H2'	1:AA:1009:G:N3	2.27	0.49
1:AA:1116:C:H1'	1:AA:1185:G:N2	2.28	0.49
2:AB:90:MET:CE	2:AB:90:MET:HA	2.43	0.49
4:AD:14:ARG:C	4:AD:16:GLY:H	2.15	0.49
10:AJ:40:LEU:HD21	10:AJ:71:LEU:HB3	1.93	0.49
17:AQ:99:SER:O	17:AQ:100:LYS:HG3	2.13	0.49
20:AT:13:LEU:O	20:AT:16:HIS:N	2.45	0.49
22:AV:76:A:OP1	22:AV:76:A:H4'	2.11	0.49
24:AY:82:ILE:HD12	24:AY:101:LEU:CD2	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:227:ILE:HD13	24:AY:242:LEU:HA	1.95	0.49
24:AY:406:GLU:CB	24:AY:407:PRO:CD	2.91	0.49
25:B0:77:ARG:HH22	35:BA:857:C:H5'	1.78	0.49
33:B8:61:LEU:C	33:B8:63:PRO:HD2	2.32	0.49
35:BA:748:G:O6	35:BA:751:A:H4'	2.12	0.49
35:BA:898:C:H2'	35:BA:899:A:O4'	2.12	0.49
35:BA:1048:A:H5'	35:BA:1049:C:OP2	2.12	0.49
35:BA:1050:A:C5	35:BA:1051:G:H1'	2.48	0.49
35:BA:1092:C:H2'	35:BA:1093:G:H8	1.77	0.49
35:BA:1118:C:H6	35:BA:1118:C:O5'	1.96	0.49
35:BA:1141:U:H6	45:BN:63:THR:HG21	1.78	0.49
35:BA:1671:U:O5'	35:BA:1671:U:H6	1.95	0.49
35:BA:2070:G:H2'	35:BA:2071:A:C8	2.48	0.49
35:BA:2882:A:H5'	49:BR:96:ARG:HG3	1.93	0.49
36:BB:91:C:H5'	48:BQ:18:LYS:HE3	1.94	0.49
37:BC:57:GLN:HE21	37:BC:205:ALA:HA	1.78	0.49
37:BC:76:LEU:HB3	37:BC:114:VAL:HA	1.93	0.49
41:BG:59:GLU:C	41:BG:61:ALA:N	2.65	0.49
42:BH:18:GLU:CB	42:BH:25:LYS:HB2	2.41	0.49
42:BH:127:GLU:HB3	42:BH:128:PRO:HD2	1.94	0.49
43:BK:81:ALA:O	43:BK:82:ALA:HB2	2.12	0.49
45:BN:4:TYR:N	45:BN:4:TYR:CD1	2.79	0.49
47:BP:6:LEU:HG	47:BP:7:ARG:H	1.78	0.49
48:BQ:97:VAL:CG1	48:BQ:103:MET:HE3	2.39	0.49
50:BS:14:VAL:CG1	50:BS:16:ASN:ND2	2.75	0.49
51:BT:11:GLU:O	51:BT:13:ARG:N	2.41	0.49
54:BW:86:LEU:HD12	54:BW:86:LEU:C	2.32	0.49
57:BZ:28:MET:HA	57:BZ:88:PHE:O	2.13	0.49
57:BZ:137:ILE:CG2	57:BZ:155:LEU:HD12	2.39	0.49
1:AA:620:C:H2'	1:AA:621:A:O4'	2.13	0.49
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.12	0.49
1:AA:1166:G:H5'	1:AA:1168:A:OP2	2.13	0.49
2:AB:11:LEU:HD11	2:AB:217:ARG:NH2	2.26	0.49
4:AD:76:ARG:HG2	4:AD:76:ARG:NH1	2.27	0.49
4:AD:176:LEU:HD12	4:AD:182:LYS:O	2.12	0.49
5:AE:7:GLU:N	5:AE:35:GLY:O	2.45	0.49
11:AK:91:ARG:O	11:AK:91:ARG:HG2	2.13	0.49
12:AL:38:THR:C	12:AL:39:VAL:CG2	2.80	0.49
12:AL:105:TYR:N	12:AL:105:TYR:CD2	2.79	0.49
13:AM:92:HIS:O	13:AM:95:GLY:N	2.45	0.49
17:AQ:40:LYS:HE2	17:AQ:42:TYR:CE2	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:92:ILE:HG23	24:AY:93:GLU:N	2.28	0.49
24:AY:259:PHE:N	24:AY:259:PHE:CD1	2.80	0.49
24:AY:410:ASP:HB3	24:AY:450:ILE:CG2	2.43	0.49
24:AY:526:VAL:HG11	24:AY:566:THR:HG23	1.94	0.49
24:AY:526:VAL:CG1	24:AY:566:THR:HG23	2.42	0.49
27:B2:7:ARG:HH11	27:B2:7:ARG:CG	2.13	0.49
35:BA:88:G:OP1	35:BA:90:U:C5	2.59	0.49
35:BA:512:G:O2'	35:BA:513:A:H8	1.95	0.49
35:BA:1023:U:H2'	35:BA:1024:G:H5'	1.93	0.49
35:BA:1260:G:H2'	35:BA:1261:C:O4'	2.12	0.49
35:BA:1567:A:H2'	38:BD:84:TYR:HE2	1.77	0.49
35:BA:1862:G:H22	35:BA:1881:C:H1'	1.78	0.49
35:BA:1941:C:C4	35:BA:1942:C:C4	3.00	0.49
35:BA:1947:C:O2'	35:BA:1948:G:H5"	2.13	0.49
39:BE:4:ILE:HD12	39:BE:92:THR:O	2.12	0.49
39:BE:76:ARG:O	39:BE:77:ILE:C	2.51	0.49
40:BF:28:ILE:HD13	40:BF:28:ILE:H	1.77	0.49
40:BF:162:LEU:O	40:BF:166:ALA:N	2.44	0.49
41:BG:91:ARG:HG2	41:BG:92:VAL:N	2.27	0.49
42:BH:83:TYR:HB3	42:BH:134:SER:CA	2.37	0.49
43:BK:34:ILE:O	43:BK:35:MET:CE	2.61	0.49
43:BK:105:LEU:HD23	43:BK:120:LEU:HD13	1.94	0.49
47:BP:23:PRO:CB	47:BP:33:ARG:HG3	2.41	0.49
47:BP:47:ASP:HB3	47:BP:48:PRO:HA	1.93	0.49
48:BQ:50:ALA:O	48:BQ:51:ARG:C	2.51	0.49
49:BR:83:ILE:HD13	49:BR:83:ILE:N	2.27	0.49
49:BR:100:LEU:HD11	49:BR:113:LEU:HB2	1.93	0.49
50:BS:70:GLY:O	50:BS:72:ALA:N	2.46	0.49
53:BV:18:LEU:CG	53:BV:19:LYS:N	2.75	0.49
57:BZ:82:ARG:O	57:BZ:83:PRO:C	2.50	0.49
1:AA:25:C:H2'	1:AA:26:A:C8	2.47	0.49
1:AA:703:G:O2'	1:AA:704:A:P	2.70	0.49
2:AB:207:ALA:O	2:AB:208:ILE:C	2.50	0.49
3:AC:5:ILE:CD1	3:AC:5:ILE:H	2.25	0.49
3:AC:58:GLU:N	3:AC:65:ALA:HB3	2.27	0.49
7:AG:41:ARG:CG	7:AG:41:ARG:NH1	2.56	0.49
9:AI:5:TYR:CD2	9:AI:6:GLY:N	2.79	0.49
12:AL:39:VAL:CG2	12:AL:57:LYS:HB2	2.42	0.49
15:AO:7:GLU:O	15:AO:11:VAL:HG23	2.13	0.49
16:AP:28:ARG:HH11	16:AP:28:ARG:CG	2.21	0.49
24:AY:30:GLU:HG3	24:AY:31:ARG:N	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:74:TRP:CD1	24:AY:273:LEU:HB3	2.47	0.49
24:AY:176:GLY:CA	24:AY:187:THR:HA	2.43	0.49
24:AY:406:GLU:CB	24:AY:407:PRO:HD2	2.41	0.49
24:AY:460:GLU:O	24:AY:463:VAL:HB	2.13	0.49
25:B0:5:LYS:NZ	25:B0:5:LYS:HB3	2.28	0.49
26:B1:6:GLU:HG3	26:B1:61:ARG:HB2	1.94	0.49
32:B7:3:ARG:NH1	35:BA:789:A:C2	2.80	0.49
35:BA:10:G:C6	35:BA:2629:A:C8	3.00	0.49
35:BA:25:U:H2'	35:BA:26:G:O4'	2.13	0.49
35:BA:42:G:H2'	35:BA:42:G:N3	2.26	0.49
35:BA:300:A:P	56:BY:97:ARG:HE	2.35	0.49
35:BA:324:A:N6	35:BA:338:G:O2'	2.46	0.49
35:BA:860:U:H5	35:BA:917:A:N7	2.10	0.49
35:BA:1131:G:C2	35:BA:1132:A:C5	3.01	0.49
35:BA:1567:A:H5'	38:BD:58:HIS:CD2	2.47	0.49
35:BA:1577:C:H2'	35:BA:1578:U:O4'	2.11	0.49
35:BA:1943:U:OP1	35:BA:1943:U:C6	2.66	0.49
35:BA:2052:G:H4'	39:BE:143:ASN:O	2.13	0.49
35:BA:2088:G:C6	35:BA:2089:U:C4	3.00	0.49
35:BA:2184:G:H2'	35:BA:2185:C:C6	2.48	0.49
37:BC:36:ALA:HB1	37:BC:38:PHE:CE1	2.48	0.49
37:BC:98:GLU:O	37:BC:101:ILE:HD13	2.12	0.49
38:BD:28:GLU:OE1	38:BD:29:PRO:HD2	2.13	0.49
39:BE:47:VAL:HG23	39:BE:84:PHE:O	2.12	0.49
39:BE:179:GLU:HB3	39:BE:181:LEU:HD23	1.94	0.49
40:BF:81:PRO:C	40:BF:83:PHE:H	2.16	0.49
41:BG:31:VAL:O	41:BG:33:ARG:CD	2.61	0.49
41:BG:46:ALA:HA	41:BG:51:ARG:HG3	1.94	0.49
45:BN:18:ALA:O	45:BN:21:LYS:HB2	2.12	0.49
48:BQ:27:VAL:HG12	48:BQ:28:ALA:H	1.76	0.49
48:BQ:41:TRP:C	48:BQ:42:ILE:HD12	2.33	0.49
48:BQ:70:PRO:HA	48:BQ:95:ALA:HB2	1.94	0.49
49:BR:4:LEU:O	49:BR:4:LEU:HD13	2.12	0.49
49:BR:10:LEU:HD22	49:BR:17:ARG:HD2	1.94	0.49
50:BS:103:GLU:O	50:BS:104:GLY:C	2.51	0.49
52:BU:16:LYS:O	52:BU:20:LEU:CD2	2.61	0.49
52:BU:47:TYR:HE2	53:BV:74:LYS:NZ	2.10	0.49
52:BU:113:ALA:C	52:BU:115:ALA:N	2.66	0.49
54:BW:14:PRO:CG	54:BW:78:GLU:HB2	2.43	0.49
1:AA:22:G:H2'	1:AA:23:C:O4'	2.12	0.49
1:AA:277:C:H2'	1:AA:278:G:H5'	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:390:C:H2'	1:AA:391:G:H8	1.74	0.49
1:AA:407:G:O2'	4:AD:116:GLN:HG3	2.12	0.49
1:AA:821:G:O2'	1:AA:822:C:H5'	2.13	0.49
1:AA:933:G:OP2	7:AG:3:ARG:HB3	2.12	0.49
1:AA:1040:U:H2'	1:AA:1040:U:O2	2.12	0.49
2:AB:142:LEU:HD23	2:AB:142:LEU:C	2.33	0.49
4:AD:8:VAL:HB	4:AD:21:LEU:CD1	2.42	0.49
5:AE:60:TYR:HE1	5:AE:64:ARG:NH2	2.08	0.49
6:AF:82:ARG:HB2	6:AF:85:VAL:HG23	1.94	0.49
8:AH:1:MET:CE	8:AH:1:MET:H3	2.25	0.49
9:AI:4:TYR:HA	9:AI:88:TYR:CE1	2.48	0.49
9:AI:55:ALA:HA	9:AI:58:HIS:HD2	1.76	0.49
15:AO:55:GLY:HA2	15:AO:58:MET:HE3	1.93	0.49
20:AT:89:ARG:HD2	20:AT:104:LEU:HD11	1.95	0.49
22:AV:30:G:H21	22:AV:31:G:H1'	1.78	0.49
22:AV:38:A:O2'	22:AV:39:C:H5'	2.13	0.49
26:B1:90:ILE:HG22	26:B1:94:LEU:HD13	1.94	0.49
28:B3:6:VAL:HG12	28:B3:56:VAL:HG13	1.95	0.49
28:B3:46:ASN:O	28:B3:47:VAL:C	2.46	0.49
30:B5:2:ALA:HB2	35:BA:2015:A:C4'	2.43	0.49
35:BA:730:C:O2'	35:BA:731:C:H5'	2.13	0.49
35:BA:803:U:H2'	35:BA:804:A:H5'	1.95	0.49
35:BA:1011:G:O2'	35:BA:1013:C:H5"	2.13	0.49
35:BA:2086:U:H2'	35:BA:2087:G:C8	2.47	0.49
35:BA:2131:G:C8	35:BA:2133:G:N3	2.80	0.49
35:BA:2543:G:O2'	35:BA:2544:G:H5'	2.13	0.49
35:BA:2720:U:C2	35:BA:2721:A:C8	3.00	0.49
35:BA:2839:G:H5'	49:BR:46:GLY:HA2	1.95	0.49
37:BC:150:ILE:HG13	37:BC:154:ILE:HG13	1.95	0.49
39:BE:168:MET:CE	39:BE:202:LYS:HE2	2.42	0.49
39:BE:170:LEU:H	39:BE:170:LEU:CD1	2.25	0.49
43:BK:108:ALA:O	43:BK:112:MET:HB3	2.13	0.49
45:BN:17:ASP:CG	45:BN:56:ASN:HB3	2.33	0.49
45:BN:126:PRO:O	45:BN:127:ASP:CB	2.58	0.49
47:BP:32:THR:CG2	47:BP:37:GLY:HA2	2.42	0.49
52:BU:57:PHE:C	52:BU:59:ARG:N	2.65	0.49
1:AA:404:U:H2'	1:AA:405:U:C6	2.48	0.49
1:AA:578:C:O2'	1:AA:579:G:H5'	2.13	0.49
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.13	0.49
1:AA:1472:U:O2'	1:AA:1473:A:H5'	2.13	0.49
2:AB:82:ARG:HG3	2:AB:82:ARG:HH11	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:230:VAL:CG2	2:AB:231:GLU:N	2.65	0.49
5:AE:125:SER:O	5:AE:131:ILE:HD11	2.12	0.49
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.81	0.49
11:AK:67:ASP:O	11:AK:71:LYS:HG3	2.13	0.49
24:AY:38:ARG:O	24:AY:40:HIS:HB2	2.13	0.49
24:AY:221:ALA:CB	44:BL:80:LEU:CD2	2.90	0.49
24:AY:498:ILE:HA	24:AY:506:GLN:O	2.13	0.49
24:AY:681:LYS:HD2	24:AY:682:GLN:N	2.28	0.49
29:B4:50:VAL:O	29:B4:51:ASP:HB3	2.11	0.49
31:B6:22:ALA:C	31:B6:23:THR:HG23	2.31	0.49
31:B6:31:PRO:O	31:B6:32:ASN:CG	2.52	0.49
35:BA:143:G:O4'	55:BX:37:THR:HG21	2.13	0.49
35:BA:884:C:H5	35:BA:885:C:O2	1.96	0.49
35:BA:892:G:H2'	35:BA:893:C:H6	1.75	0.49
35:BA:1528:A:H2'	35:BA:1528:A:N3	2.28	0.49
35:BA:2292:C:H2'	35:BA:2293:C:H6	1.78	0.49
35:BA:2312:U:H4'	41:BG:71:THR:OG1	2.12	0.49
35:BA:2380:C:C5	35:BA:2381:C:H5	2.31	0.49
35:BA:2395:C:C2	35:BA:2396:G:C8	3.01	0.49
36:BB:59:A:C2'	36:BB:60:C:H5'	2.43	0.49
37:BC:223:VAL:HG12	37:BC:225:ILE:HG23	1.95	0.49
38:BD:132:PRO:HA	38:BD:189:CYS:O	2.13	0.49
40:BF:7:TYR:HD2	40:BF:16:GLY:CA	2.25	0.49
41:BG:97:ASP:HB3	41:BG:98:ARG:NH1	2.27	0.49
41:BG:135:LEU:HD12	41:BG:135:LEU:O	2.13	0.49
45:BN:14:VAL:HG21	45:BN:137:LYS:NZ	2.28	0.49
45:BN:35:ARG:O	45:BN:36:GLY:C	2.51	0.49
55:BX:44:GLU:HA	55:BX:49:VAL:O	2.13	0.49
56:BY:45:VAL:HG13	56:BY:61:ILE:HA	1.95	0.49
1:AA:16:A:N1	1:AA:919:A:H2	2.11	0.48
1:AA:424:G:H2'	1:AA:425:G:H8	1.77	0.48
1:AA:881:G:P	12:AL:12:ARG:HH22	2.36	0.48
1:AA:981:U:H2'	1:AA:982:U:C5	2.47	0.48
8:AH:10:LEU:HD22	8:AH:83:ILE:HD11	1.95	0.48
8:AH:114:THR:HG21	8:AH:129:VAL:HG23	1.95	0.48
10:AJ:22:LYS:NZ	10:AJ:88:LEU:HD23	2.28	0.48
11:AK:79:SER:OG	11:AK:106:LYS:HD2	2.12	0.48
11:AK:106:LYS:HB3	11:AK:106:LYS:NZ	2.28	0.48
19:AS:11:VAL:CG2	19:AS:16:LEU:HD11	2.43	0.48
20:AT:80:ARG:HH11	20:AT:80:ARG:HG2	1.77	0.48
24:AY:71:THR:HA	24:AY:79:ILE:O	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:285:ASP:OD2	24:AY:285:ASP:N	2.46	0.48
24:AY:492:ASP:OD2	24:AY:513:LYS:CD	2.61	0.48
31:B6:15:GLU:HB2	31:B6:49:HIS:CE1	2.48	0.48
31:B6:37:ARG:O	31:B6:48:VAL:O	2.30	0.48
32:B7:35:ARG:HH11	32:B7:35:ARG:CG	2.26	0.48
33:B8:14:VAL:HG21	33:B8:22:VAL:HG13	1.95	0.48
35:BA:345:A:H2'	35:BA:345:A:N3	2.28	0.48
35:BA:777:A:H2'	35:BA:778:G:C8	2.48	0.48
35:BA:904:C:O2'	57:BZ:169:GLU:OE2	2.31	0.48
35:BA:1029:A:H5"	48:BQ:128:LYS:HE3	1.94	0.48
35:BA:1218:C:H2'	35:BA:1219:G:C8	2.47	0.48
35:BA:1507:A:H2'	35:BA:1508:A:O4'	2.13	0.48
35:BA:1782:C:H1'	35:BA:2609:U:C5'	2.32	0.48
35:BA:2163:C:H2'	35:BA:2164:C:H5'	1.95	0.48
35:BA:2389:G:H5"	35:BA:2390:U:C5'	2.40	0.48
35:BA:2693:A:H2'	35:BA:2694:G:H8	1.77	0.48
38:BD:35:LYS:O	38:BD:36:PRO:C	2.51	0.48
39:BE:59:VAL:HG13	39:BE:60:ASN:N	2.28	0.48
45:BN:99:LEU:O	45:BN:102:ALA:HB3	2.12	0.48
45:BN:103:VAL:C	45:BN:105:GLY:N	2.66	0.48
45:BN:104:LYS:HE3	45:BN:117:PHE:CG	2.48	0.48
48:BQ:134:ARG:HH21	57:BZ:122:ARG:NE	2.11	0.48
49:BR:56:LYS:HE2	49:BR:88:ARG:HA	1.94	0.48
50:BS:46:VAL:CG1	50:BS:47:THR:N	2.75	0.48
51:BT:108:ARG:HA	51:BT:111:ARG:HH11	1.78	0.48
53:BV:18:LEU:HD22	53:BV:19:LYS:N	2.21	0.48
57:BZ:77:ASP:O	57:BZ:77:ASP:CG	2.51	0.48
1:AA:275:G:O5'	17:AQ:14:LYS:HD3	2.13	0.48
1:AA:316:G:C6	1:AA:338:A:C6	3.01	0.48
1:AA:505:G:H2'	1:AA:506:G:H8	1.77	0.48
1:AA:738:C:H6	1:AA:738:C:O5'	1.96	0.48
1:AA:994:A:C2	1:AA:995:C:C5	3.02	0.48
1:AA:1054:C:OP2	1:AA:1197:G:OP2	2.31	0.48
1:AA:1144:G:N2	1:AA:1145:C:C2	2.81	0.48
1:AA:1442:G:H1	1:AA:1461:G:H21	1.59	0.48
1:AA:1530:G:H5'	1:AA:1530:G:H8	1.78	0.48
2:AB:236:TYR:O	2:AB:238:LEU:N	2.46	0.48
3:AC:86:VAL:HG23	3:AC:87:LEU:CD2	2.38	0.48
7:AG:46:ALA:O	7:AG:47:CYS:C	2.51	0.48
7:AG:113:GLU:CG	7:AG:119:ARG:HG2	2.43	0.48
10:AJ:27:ALA:HB2	10:AJ:85:LEU:HD11	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:44:ALA:HA	20:AT:92:LEU:HD21	1.95	0.48
21:AU:23:PRO:C	21:AU:25:LYS:N	2.66	0.48
24:AY:113:GLY:O	24:AY:115:GLU:N	2.45	0.48
24:AY:603:GLU:O	24:AY:676:TYR:HA	2.13	0.48
25:B0:51:VAL:HG22	25:B0:81:VAL:CG2	2.41	0.48
27:B2:8:LYS:O	27:B2:9:GLN:C	2.51	0.48
31:B6:10:LEU:HB3	33:B8:34:TRP:HD1	1.78	0.48
35:BA:269:U:H2'	35:BA:270:A:H8	1.77	0.48
35:BA:527:C:N4	35:BA:2779:U:OP1	2.45	0.48
35:BA:541:C:H42	35:BA:552:G:H1	1.61	0.48
35:BA:1118:C:H2'	35:BA:1119:C:H6	1.78	0.48
35:BA:1197:G:C4	35:BA:1198:U:C5	3.01	0.48
35:BA:1446:C:H42	35:BA:1465:G:H1	1.61	0.48
35:BA:1494:A:O2'	35:BA:1495:A:OP1	2.31	0.48
35:BA:1539:G:N1	35:BA:1540:U:O2	2.45	0.48
35:BA:2352:A:C2'	35:BA:2353:G:H5'	2.43	0.48
36:BB:85:G:O2'	36:BB:86:G:H5'	2.13	0.48
38:BD:142:VAL:CG2	38:BD:192:THR:O	2.61	0.48
38:BD:153:ALA:C	38:BD:154:LYS:CG	2.82	0.48
42:BH:46:GLU:O	42:BH:47:GLU:HB2	2.13	0.48
45:BN:115:ARG:CG	45:BN:115:ARG:NH1	2.67	0.48
47:BP:24:GLY:CA	47:BP:33:ARG:HH12	2.26	0.48
47:BP:30:THR:O	47:BP:33:ARG:N	2.34	0.48
48:BQ:25:ASP:HA	48:BQ:100:GLY:O	2.13	0.48
48:BQ:26:TYR:CD2	48:BQ:140:ALA:HB3	2.48	0.48
49:BR:65:LEU:HD12	49:BR:65:LEU:O	2.13	0.48
50:BS:17:ARG:C	50:BS:19:LYS:H	2.16	0.48
50:BS:84:GLN:O	50:BS:84:GLN:HG3	2.13	0.48
51:BT:113:LYS:O	51:BT:114:LEU:HD23	2.14	0.48
55:BX:10:ALA:HB1	55:BX:11:PRO:CD	2.43	0.48
57:BZ:88:PHE:N	57:BZ:88:PHE:CD1	2.81	0.48
1:AA:255:G:O3'	17:AQ:17:LYS:HD2	2.13	0.48
1:AA:277:C:O2'	1:AA:278:G:H5'	2.13	0.48
1:AA:932:C:H5"	7:AG:3:ARG:HD2	1.95	0.48
1:AA:983:A:H5'	1:AA:984:C:OP2	2.14	0.48
2:AB:204:ASN:OD1	2:AB:207:ALA:HB2	2.13	0.48
4:AD:79:PHE:C	4:AD:81:GLU:H	2.17	0.48
10:AJ:88:LEU:HG	10:AJ:88:LEU:O	2.13	0.48
11:AK:24:SER:O	11:AK:88:GLY:HA2	2.13	0.48
13:AM:19:LEU:O	13:AM:22:ILE:HD13	2.13	0.48
16:AP:74:LEU:CD2	16:AP:79:VAL:HG21	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:18:TYR:CD2	21:AU:24:ARG:HG3	2.48	0.48
24:AY:141:LYS:O	24:AY:144:ALA:CB	2.58	0.48
24:AY:228:MET:O	24:AY:231:TYR:HB3	2.12	0.48
24:AY:495:GLY:O	24:AY:510:VAL:N	2.37	0.48
26:B1:92:LYS:HE2	35:BA:153:C:OP1	2.13	0.48
28:B3:36:VAL:HG23	28:B3:36:VAL:O	2.12	0.48
30:B5:3:LYS:HE2	35:BA:2613:U:H2'	1.95	0.48
31:B6:15:GLU:HG3	31:B6:41:PRO:HG3	1.95	0.48
31:B6:27:LYS:O	31:B6:27:LYS:CD	2.59	0.48
32:B7:19:ARG:HD3	35:BA:125:G:H5'	1.95	0.48
35:BA:26:G:H1'	35:BA:515:A:N6	2.28	0.48
35:BA:79:G:O2'	35:BA:80:G:H5'	2.13	0.48
35:BA:483:A:H3'	35:BA:484:C:C6	2.48	0.48
35:BA:511:U:H5	35:BA:512:G:C5	2.31	0.48
35:BA:954:G:O2'	35:BA:955:C:H5'	2.11	0.48
35:BA:978:G:N2	35:BA:979:G:H1'	2.28	0.48
35:BA:1061:U:H4'	35:BA:1070:A:C1'	2.39	0.48
35:BA:1144:G:O2'	35:BA:1145:C:H5'	2.13	0.48
35:BA:1149:G:H2'	35:BA:1150:C:C6	2.49	0.48
35:BA:1528:A:O2'	35:BA:1528(A):A:O5'	2.32	0.48
35:BA:1718:G:O2'	35:BA:1719:G:H5'	2.13	0.48
35:BA:1917:U:H2'	35:BA:1918:A:C5'	2.43	0.48
35:BA:2116:G:N7	35:BA:2117:A:C4	2.81	0.48
35:BA:2513:G:C5	35:BA:2514:U:C4	3.01	0.48
35:BA:2809:A:C2	35:BA:2892:A:N3	2.81	0.48
36:BB:60:C:H2'	36:BB:61:G:C8	2.36	0.48
41:BG:61:ALA:O	41:BG:65:GLY:N	2.42	0.48
46:BO:17:ARG:HH21	46:BO:47:ILE:HD11	1.78	0.48
46:BO:59:LYS:O	46:BO:86:ILE:HG23	2.13	0.48
50:BS:70:GLY:C	50:BS:72:ALA:H	2.16	0.48
51:BT:88:ILE:HG22	51:BT:89:VAL:HG23	1.95	0.48
53:BV:66:ARG:NH1	53:BV:88:ARG:HE	2.11	0.48
1:AA:101:A:O2'	1:AA:102:G:H5'	2.13	0.48
1:AA:275:G:H5"	17:AQ:14:LYS:HB3	1.94	0.48
1:AA:791:G:C5	1:AA:792:A:N7	2.81	0.48
1:AA:824:C:H2'	1:AA:825:G:H8	1.77	0.48
1:AA:961:U:OP2	1:AA:1223:C:C4'	2.61	0.48
1:AA:1237:C:H6	1:AA:1237:C:O5'	1.96	0.48
1:AA:1305:G:H3'	21:AU:4:GLY:O	2.12	0.48
1:AA:1316:G:H4'	14:AN:18:VAL:HG12	1.95	0.48
4:AD:8:VAL:O	4:AD:10:ARG:N	2.36	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:78:LEU:CD1	4:AD:97:LEU:HD23	2.44	0.48
4:AD:158:ILE:CG2	4:AD:162:LEU:HD12	2.43	0.48
5:AE:122:GLU:C	5:AE:123:LEU:HD23	2.34	0.48
6:AF:33:TYR:HA	6:AF:71:ARG:HH21	1.77	0.48
10:AJ:70:ARG:NH1	10:AJ:70:ARG:HG2	2.27	0.48
16:AP:59:TRP:O	16:AP:62:VAL:CG2	2.62	0.48
19:AS:15:LEU:O	19:AS:19:VAL:HB	2.13	0.48
24:AY:227:ILE:HD11	24:AY:241:GLU:C	2.33	0.48
24:AY:614:GLU:HA	24:AY:617:MET:CB	2.44	0.48
26:B1:86:SER:O	26:B1:90:ILE:N	2.47	0.48
35:BA:139:G:H2'	35:BA:140:G:N7	2.29	0.48
35:BA:177:G:H3'	35:BA:178:G:C8	2.48	0.48
35:BA:552:G:H5'	35:BA:552:G:H8	1.77	0.48
35:BA:645:C:O2	35:BA:645:C:H5"	2.13	0.48
35:BA:970:C:C5	35:BA:971:C:H5	2.31	0.48
35:BA:1551:C:H2'	35:BA:1552:G:O4'	2.13	0.48
35:BA:1721:G:H5'	35:BA:1722:A:OP2	2.14	0.48
35:BA:1910:G:C2'	35:BA:1911:U:H5'	2.43	0.48
35:BA:2381:C:H2'	35:BA:2381:C:O2	2.14	0.48
35:BA:2777:G:H5"	35:BA:2778:A:H5"	1.95	0.48
43:BK:30:HIS:HA	43:BK:59:ILE:CD1	2.38	0.48
43:BK:57:ILE:HG23	43:BK:67:PHE:HB3	1.94	0.48
44:BL:76:THR:OG1	44:BL:77:GLY:N	2.47	0.48
45:BN:57:ALA:HB3	45:BN:124:ALA:CA	2.43	0.48
45:BN:113:GLY:HA2	45:BN:116:LEU:HB2	1.95	0.48
47:BP:108:LYS:C	47:BP:110:TYR:N	2.64	0.48
50:BS:70:GLY:C	50:BS:72:ALA:N	2.65	0.48
51:BT:91:ARG:HB3	51:BT:116:ALA:HA	1.96	0.48
52:BU:47:TYR:N	52:BU:50:ARG:NH1	2.61	0.48
53:BV:35:LEU:C	53:BV:37:VAL:N	2.66	0.48
53:BV:49:THR:O	53:BV:50:PRO:O	2.31	0.48
56:BY:96:ILE:HG21	56:BY:99:CYS:HB3	1.95	0.48
1:AA:395:C:C5'	24:AY:340:TYR:OH	2.61	0.48
1:AA:407:G:H2'	1:AA:408:A:C8	2.48	0.48
1:AA:483:C:C3'	1:AA:484:G:H5"	2.33	0.48
1:AA:582:U:OP1	15:AO:68:ARG:NH2	2.47	0.48
1:AA:602:A:H2'	1:AA:603:U:C6	2.48	0.48
1:AA:629:G:O2'	1:AA:630:G:H5'	2.13	0.48
1:AA:1413:A:H2'	1:AA:1414:U:O4'	2.14	0.48
2:AB:178:ARG:HH11	2:AB:178:ARG:HB2	1.77	0.48
3:AC:10:PHE:CZ	3:AC:178:LEU:CD1	2.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:40:ARG:HG2	3:AC:55:VAL:HG11	1.94	0.48
4:AD:121:VAL:CA	4:AD:126:ILE:HD13	2.42	0.48
6:AF:1:MET:HE1	6:AF:68:PRO:CD	2.43	0.48
9:AI:9:ARG:HG2	9:AI:14:VAL:HG22	1.95	0.48
9:AI:16:ARG:HB2	9:AI:64:THR:HB	1.94	0.48
13:AM:83:ASP:CG	13:AM:84:ILE:H	2.15	0.48
13:AM:116:THR:CG2	13:AM:117:VAL:H	2.27	0.48
24:AY:115:GLU:OE1	24:AY:118:SER:HB3	2.14	0.48
24:AY:289:ILE:CD1	24:AY:331:TYR:CZ	2.96	0.48
32:B7:8:ASN:ND2	32:B7:9:ARG:N	2.59	0.48
32:B7:25:PRO:HA	32:B7:28:ARG:NH2	2.28	0.48
35:BA:716:A:H2'	35:BA:717:G:O5'	2.14	0.48
35:BA:750:A:C3'	35:BA:751:A:H5"	2.44	0.48
35:BA:807:U:OP2	47:BP:39:LYS:HG3	2.12	0.48
35:BA:826:U:H5"	35:BA:2428:G:O3'	2.13	0.48
35:BA:834:C:O5'	35:BA:834:C:H6	1.96	0.48
35:BA:945:A:C2	35:BA:2448:A:N1	2.82	0.48
35:BA:999:U:C5	35:BA:1154:G:C5	3.02	0.48
35:BA:1131:G:N3	35:BA:1132:A:C8	2.82	0.48
35:BA:1275:A:N1	35:BA:1295:C:O2'	2.43	0.48
35:BA:1344:G:H5'	35:BA:1384:A:N1	2.29	0.48
35:BA:1353:A:H4'	38:BD:38:LYS:HE3	1.95	0.48
35:BA:1494:A:O2'	35:BA:1495:A:C5'	2.54	0.48
35:BA:1632:A:C6	35:BA:1633:G:C6	3.02	0.48
35:BA:2553:G:H2'	35:BA:2554:U:O4'	2.14	0.48
37:BC:108:TRP:NE1	37:BC:110:ASP:HB2	2.29	0.48
38:BD:35:LYS:HZ2	38:BD:35:LYS:HB3	1.79	0.48
38:BD:229:VAL:CG2	38:BD:230:ASP:N	2.77	0.48
42:BH:41:MET:SD	42:BH:53:GLU:N	2.87	0.48
42:BH:41:MET:CE	42:BH:43:VAL:HG12	2.43	0.48
43:BK:12:LEU:HD21	43:BK:23:VAL:CG2	2.43	0.48
45:BN:14:VAL:CG1	45:BN:137:LYS:HD2	2.39	0.48
45:BN:45:ASN:ND2	45:BN:45:ASN:O	2.47	0.48
49:BR:33:ARG:HG3	49:BR:115:GLU:HG3	1.95	0.48
49:BR:117:VAL:CG1	49:BR:118:GLU:H	2.26	0.48
51:BT:1:MET:H2	51:BT:7:ILE:HD11	1.78	0.48
51:BT:102:ILE:O	51:BT:103:ARG:C	2.52	0.48
53:BV:15:GLU:O	53:BV:96:ILE:HG21	2.14	0.48
56:BY:7:VAL:HB	56:BY:8:LYS:NZ	2.28	0.48
1:AA:235:C:C5'	17:AQ:70:ARG:HG2	2.43	0.48
1:AA:322:C:H6	1:AA:322:C:O5'	1.97	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:590:C:H2'	1:AA:591:U:H6	1.79	0.48
1:AA:665:A:H2'	1:AA:732:C:O2	2.13	0.48
1:AA:666:G:H5'	1:AA:726:C:H1'	1.95	0.48
1:AA:943:U:O2'	1:AA:944:G:H5'	2.14	0.48
1:AA:963:G:HO2'	10:AJ:54:PHE:HZ	1.61	0.48
1:AA:1442(B):A:N3	1:AA:1442(B):A:C2'	2.77	0.48
2:AB:194:PRO:O	2:AB:197:VAL:HG23	2.13	0.48
3:AC:134:ILE:O	3:AC:135:LYS:C	2.52	0.48
4:AD:61:LYS:HE2	4:AD:62:GLN:HE21	1.79	0.48
7:AG:18:TYR:N	7:AG:18:TYR:HD1	2.12	0.48
8:AH:137:VAL:HG12	8:AH:138:TRP:N	2.27	0.48
13:AM:90:LEU:O	13:AM:92:HIS:N	2.46	0.48
24:AY:92:ILE:CG2	24:AY:93:GLU:N	2.77	0.48
24:AY:252:ASP:O	24:AY:253:LEU:HB2	2.12	0.48
24:AY:301:ILE:HG22	24:AY:332:SER:HB2	1.94	0.48
24:AY:368:GLU:C	24:AY:369:LEU:HD12	2.32	0.48
24:AY:546:ILE:O	24:AY:547:GLU:C	2.52	0.48
33:B8:4:MET:CE	33:B8:61:LEU:HD22	2.43	0.48
33:B8:50:LEU:HA	33:B8:53:PRO:HG3	1.95	0.48
35:BA:18:C:OP2	35:BA:18:C:H6	1.97	0.48
35:BA:332:A:C6	35:BA:335:C:C2	3.02	0.48
35:BA:618:C:H2'	35:BA:619:G:O4'	2.14	0.48
35:BA:805:G:H5'	35:BA:806:C:C5	2.49	0.48
35:BA:1324:G:O2'	35:BA:1325:G:H5'	2.13	0.48
35:BA:1362:C:O2'	35:BA:1363:C:H5'	2.13	0.48
35:BA:1478:G:HO2'	35:BA:1558:A:H2	1.58	0.48
35:BA:1580:A:H2'	35:BA:1581:G:O4'	2.13	0.48
35:BA:1805:U:H2'	35:BA:1806:C:H6	1.78	0.48
35:BA:1963:U:O2	35:BA:1963:U:H2'	2.13	0.48
35:BA:2292:C:H2'	35:BA:2293:C:C6	2.48	0.48
35:BA:2310:A:C8	41:BG:75:LYS:NZ	2.75	0.48
35:BA:2345:G:C4'	35:BA:2346:A:H5'	2.43	0.48
35:BA:2397:G:H2'	35:BA:2398:U:C6	2.49	0.48
37:BC:115:VAL:HA	37:BC:145:THR:CG2	2.44	0.48
38:BD:153:ALA:O	38:BD:154:LYS:HG3	2.14	0.48
40:BF:32:LEU:C	40:BF:32:LEU:CD2	2.81	0.48
40:BF:199:TRP:O	40:BF:202:PHE:HB3	2.13	0.48
48:BQ:12:GLN:HE21	48:BQ:73:PRO:CD	2.25	0.48
49:BR:97:VAL:HG13	49:BR:114:VAL:HG22	1.95	0.48
51:BT:62:THR:HA	51:BT:74:ARG:O	2.13	0.48
52:BU:79:PHE:O	52:BU:83:LEU:HD13	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BV:25:LEU:H	53:BV:92:THR:CG2	2.25	0.48
56:BY:14:LEU:HB2	56:BY:24:VAL:HG22	1.95	0.48
1:AA:318:G:O2'	1:AA:319:G:H5'	2.14	0.48
1:AA:355:C:C4	1:AA:356:A:N7	2.82	0.48
1:AA:977:A:H2'	1:AA:978:A:H5'	1.95	0.48
1:AA:1251:A:H4'	9:AI:12:GLU:OE1	2.13	0.48
1:AA:1329:A:C2'	1:AA:1330:U:H5'	2.43	0.48
1:AA:1402:C:O2	1:AA:1500:A:N1	2.46	0.48
2:AB:187:LEU:HD22	2:AB:201:ILE:O	2.13	0.48
3:AC:69:HIS:HA	3:AC:104:GLN:HB2	1.95	0.48
3:AC:139:GLN:O	3:AC:140:ARG:C	2.52	0.48
3:AC:191:THR:HG21	3:AC:193:TYR:CZ	2.48	0.48
6:AF:53:ALA:O	6:AF:54:LYS:CB	2.62	0.48
9:AI:63:ILE:CG2	9:AI:64:THR:N	2.77	0.48
15:AO:14:GLU:HB3	15:AO:15:PHE:H	1.52	0.48
17:AQ:51:TYR:CZ	17:AQ:73:VAL:HG11	2.49	0.48
20:AT:13:LEU:H	20:AT:13:LEU:CD1	2.15	0.48
20:AT:47:GLY:O	20:AT:49:ALA:N	2.40	0.48
24:AY:108:PHE:HE1	24:AY:118:SER:HB2	1.79	0.48
24:AY:162:VAL:HG21	24:AY:219:VAL:HG11	1.96	0.48
24:AY:542:VAL:O	24:AY:542:VAL:CG2	2.61	0.48
24:AY:573:HIS:CD2	24:AY:575:VAL:H	2.31	0.48
30:B5:3:LYS:CD	30:B5:5:PRO:HD2	2.39	0.48
31:B6:7:ILE:O	31:B6:7:ILE:CG2	2.62	0.48
33:B8:58:ILE:CG2	47:BP:49:ARG:HD3	2.43	0.48
35:BA:52:A:O2'	35:BA:53:A:H5'	2.13	0.48
35:BA:186:G:C2	35:BA:211:A:C2	3.01	0.48
35:BA:340:A:H2'	35:BA:341:G:O4'	2.14	0.48
35:BA:428:A:H3'	35:BA:429:A:H8	1.79	0.48
35:BA:548:A:C3'	35:BA:549:G:H5'	2.44	0.48
35:BA:624:C:N4	47:BP:107:LYS:NZ	2.61	0.48
35:BA:1022:G:O2'	35:BA:1023:U:P	2.71	0.48
35:BA:1827:C:H2'	35:BA:1828:G:O4'	2.13	0.48
35:BA:1856:G:H1	35:BA:1886:C:H42	1.60	0.48
35:BA:1858:G:H2'	35:BA:1883:G:H22	1.78	0.48
35:BA:2573:C:OP1	35:BA:2575:C:OP2	2.31	0.48
35:BA:2590:A:OP2	38:BD:238:GLY:HA2	2.14	0.48
37:BC:120:VAL:O	37:BC:124:VAL:HG23	2.14	0.48
37:BC:213:VAL:HG12	37:BC:225:ILE:HD11	1.95	0.48
42:BH:30:LYS:CD	42:BH:81:GLU:HG2	2.44	0.48
42:BH:171:LEU:CD2	42:BH:171:LEU:O	2.62	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BK:14:ALA:HA	43:BK:41:PHE:CZ	2.49	0.48
46:BO:47:ILE:CG2	46:BO:48:PRO:HD2	2.43	0.48
46:BO:119:PRO:O	46:BO:120:GLU:CB	2.59	0.48
48:BQ:70:PRO:CA	48:BQ:95:ALA:HB2	2.44	0.48
50:BS:15:ARG:CB	50:BS:18:ILE:HD11	2.33	0.48
51:BT:32:TYR:O	51:BT:33:LYS:HB2	2.13	0.48
52:BU:19:LYS:HB3	52:BU:20:LEU:HD22	1.94	0.48
53:BV:39:LEU:O	53:BV:40:LEU:HB2	2.14	0.48
54:BW:47:VAL:O	54:BW:47:VAL:HG12	2.13	0.48
56:BY:85:VAL:HG12	56:BY:86:ARG:N	2.29	0.48
57:BZ:171:ILE:HG13	57:BZ:172:ALA:H	1.69	0.48
1:AA:157:G:H2'	1:AA:158:G:H8	1.78	0.48
1:AA:399:G:H2'	1:AA:400:C:C6	2.49	0.48
1:AA:430:A:OP2	4:AD:8:VAL:HG22	2.14	0.48
1:AA:923:A:O2'	1:AA:924:C:H5'	2.14	0.48
1:AA:954:G:H2'	1:AA:955:U:O4'	2.14	0.48
1:AA:1134:G:O2'	1:AA:1135:U:H5'	2.12	0.48
2:AB:44:LEU:HD12	2:AB:44:LEU:N	2.16	0.48
4:AD:11:LEU:O	4:AD:12:CYS:C	2.52	0.48
6:AF:9:VAL:O	6:AF:9:VAL:HG12	2.12	0.48
11:AK:114:VAL:O	11:AK:114:VAL:HG13	2.13	0.48
14:AN:47:LEU:O	14:AN:48:ALA:C	2.51	0.48
15:AO:64:ARG:CZ	15:AO:64:ARG:HB2	2.44	0.48
16:AP:9:PHE:HE2	16:AP:18:ARG:CD	2.27	0.48
16:AP:33:ILE:O	16:AP:33:ILE:HG22	2.12	0.48
22:AV:32:C:C4	22:AV:33:U:C5	3.01	0.48
24:AY:22:ASP:O	59:AY:702:GDP:H5'	2.14	0.48
24:AY:65:ILE:H	24:AY:65:ILE:HD13	1.77	0.48
24:AY:92:ILE:HG12	24:AY:405:PRO:CG	2.43	0.48
24:AY:117:GLN:OE1	24:AY:120:THR:OG1	2.29	0.48
24:AY:150:ILE:O	24:AY:154:GLN:HG2	2.13	0.48
24:AY:486:THR:CG2	24:AY:602:LEU:HD11	2.42	0.48
24:AY:494:GLU:HG3	24:AY:511:LYS:HE2	1.95	0.48
24:AY:498:ILE:HG22	24:AY:507:TYR:CD2	2.49	0.48
28:B3:9:VAL:HG23	28:B3:10:LYS:H	1.79	0.48
30:B5:22:HIS:CE1	35:BA:2624:G:H1'	2.48	0.48
30:B5:27:PRO:HD3	54:BW:23:LEU:HD11	1.96	0.48
30:B5:55:ARG:O	30:B5:56:LYS:CB	2.50	0.48
31:B6:6:ARG:C	31:B6:8:LYS:H	2.16	0.48
35:BA:139(A):G:H22	55:BX:44:GLU:CD	2.17	0.48
35:BA:271(Q):G:H2'	35:BA:271(R):G:C8	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:364:C:H2'	35:BA:365:C:H5"	1.93	0.48
35:BA:560:C:H2'	35:BA:561:G:O4'	2.13	0.48
35:BA:567:A:N1	35:BA:571:A:C8	2.79	0.48
35:BA:803:U:H2'	35:BA:804:A:C5'	2.43	0.48
35:BA:977:G:H2'	35:BA:978:G:H8	1.79	0.48
35:BA:1142(A):A:C6	35:BA:1144:G:C5	3.02	0.48
35:BA:2481:G:O2'	35:BA:2482:G:P	2.71	0.48
36:BB:9:G:C6	36:BB:113:G:C6	3.02	0.48
39:BE:31:CYS:C	39:BE:90:THR:HG23	2.34	0.48
39:BE:48:GLN:O	39:BE:48:GLN:HG2	2.12	0.48
39:BE:110:GLY:O	49:BR:2:ARG:HD3	2.14	0.48
41:BG:15:VAL:HG13	41:BG:175:LEU:HB2	1.95	0.48
41:BG:126:ASP:OD2	41:BG:130:ASN:HB2	2.14	0.48
42:BH:35:VAL:O	42:BH:35:VAL:HG12	2.12	0.48
43:BK:99:ILE:O	43:BK:139:VAL:N	2.46	0.48
43:BK:102:GLU:HG3	43:BK:103:GLN:N	2.29	0.48
46:BO:86:ILE:HG22	46:BO:87:ILE:N	2.29	0.48
50:BS:62:LYS:O	50:BS:65:VAL:HB	2.14	0.48
50:BS:93:LYS:O	50:BS:94:TYR:C	2.52	0.48
51:BT:6:LEU:HD23	51:BT:10:VAL:HG23	1.96	0.48
51:BT:89:VAL:CG1	51:BT:91:ARG:CG	2.90	0.48
54:BW:106:ILE:C	54:BW:107:LEU:HD13	2.33	0.48
57:BZ:67:LEU:H	57:BZ:67:LEU:HD12	1.79	0.48
57:BZ:151:HIS:CA	57:BZ:171:ILE:HG23	2.24	0.48
1:AA:36:C:H4'	12:AL:122:THR:O	2.13	0.48
1:AA:55:A:C2	24:AY:321:TYR:O	2.67	0.48
1:AA:178:C:C2	1:AA:179:A:C8	3.01	0.48
1:AA:313:A:O2'	1:AA:314:C:H5'	2.13	0.48
1:AA:414:A:C2	1:AA:415:A:H1'	2.49	0.48
1:AA:452:A:O2'	1:AA:453:A:H8	1.97	0.48
1:AA:658:G:C6	1:AA:749:C:N4	2.81	0.48
1:AA:745:C:H2'	1:AA:746:A:H8	1.78	0.48
1:AA:1313:U:OP2	19:AS:6:LYS:HB3	2.14	0.48
2:AB:39:ILE:HG22	2:AB:41:ILE:HD12	1.94	0.48
2:AB:142:LEU:O	2:AB:146:GLN:HB2	2.14	0.48
3:AC:59:ARG:O	10:AJ:92:THR:O	2.31	0.48
3:AC:95:THR:O	3:AC:97:LYS:N	2.47	0.48
5:AE:82:VAL:HG21	5:AE:138:ALA:CA	2.41	0.48
6:AF:24:GLU:OE2	6:AF:28:ARG:NH1	2.46	0.48
9:AI:128:ARG:OXT	9:AI:128:ARG:HG2	2.13	0.48
12:AL:47:LYS:HZ2	12:AL:47:LYS:CB	2.19	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:33:THR:HG21	15:AO:85:LEU:HD22	1.95	0.48
16:AP:3:LYS:HG2	16:AP:65:GLN:O	2.14	0.48
19:AS:39:THR:HG22	19:AS:40:ILE:N	2.28	0.48
24:AY:262:SER:OG	24:AY:265:LYS:HG3	2.13	0.48
24:AY:603:GLU:O	24:AY:676:TYR:HD1	1.97	0.48
31:B6:18:ARG:CG	31:B6:19:ARG:H	2.26	0.48
32:B7:33:ARG:HB2	32:B7:33:ARG:HH11	1.78	0.48
32:B7:40:TRP:CG	35:BA:459:U:H5'	2.49	0.48
33:B8:42:ARG:HH11	35:BA:2350:C:H5	1.62	0.48
34:B9:29:ASN:ND2	34:B9:29:ASN:O	2.47	0.48
35:BA:262:A:H2'	35:BA:263:C:O4'	2.14	0.48
35:BA:996:A:C4'	52:BU:92:ARG:HE	1.96	0.48
35:BA:1226:A:H2'	35:BA:1227:G:H5'	1.94	0.48
35:BA:1328:G:H2'	35:BA:1330:C:C5	2.48	0.48
35:BA:1826:G:H4'	38:BD:242:ARG:NH2	2.14	0.48
35:BA:1847:A:H5'	35:BA:1848:A:H8	1.76	0.48
35:BA:2170:A:H5"	37:BC:135:ARG:HE	1.78	0.48
35:BA:2282:G:H5"	35:BA:2283:C:O4'	2.14	0.48
35:BA:2298:A:N6	35:BA:2318:G:H8	2.12	0.48
35:BA:2343:C:H2'	35:BA:2344:U:C6	2.49	0.48
35:BA:2447:G:C5	35:BA:2501:C:C2	3.01	0.48
35:BA:2464:C:O2'	35:BA:2465:C:O5'	2.32	0.48
35:BA:2511:U:O3'	39:BE:123:ALA:HB3	2.14	0.48
35:BA:2623:G:H4'	35:BA:2825:C:O2	2.14	0.48
39:BE:92:THR:OG1	39:BE:95:ILE:HD11	2.13	0.48
39:BE:111:ARG:NH2	49:BR:2:ARG:HH21	2.11	0.48
39:BE:168:MET:HE2	39:BE:202:LYS:HE2	1.95	0.48
41:BG:56:ALA:CB	41:BG:153:ARG:NH2	2.77	0.48
42:BH:149:ARG:HA	42:BH:162:ILE:CG1	2.43	0.48
45:BN:87:LEU:O	45:BN:88:GLU:C	2.52	0.48
47:BP:24:GLY:HA3	47:BP:33:ARG:HH12	1.79	0.48
50:BS:14:VAL:HG13	50:BS:16:ASN:HD22	1.77	0.48
50:BS:67:ARG:HD3	50:BS:71:ARG:HH22	1.78	0.48
50:BS:85:VAL:O	50:BS:106:ARG:HG2	2.13	0.48
51:BT:108:ARG:HB2	51:BT:108:ARG:HH11	1.78	0.48
54:BW:68:ARG:HA	54:BW:110:LYS:HG2	1.95	0.48
57:BZ:109:ALA:C	57:BZ:111:VAL:N	2.67	0.48
1:AA:122:G:O2'	1:AA:123:C:H5'	2.13	0.48
1:AA:402:G:C6	1:AA:403:C:C4	3.02	0.48
1:AA:514:C:H2'	1:AA:515:G:H8	1.79	0.48
1:AA:559:A:P	5:AE:126:ARG:HH22	2.37	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:34:ALA:HB1	2:AB:36:ARG:NE	2.28	0.48
2:AB:182:ILE:HA	2:AB:183:PRO:HD3	1.64	0.48
3:AC:36:ASP:HA	3:AC:39:ILE:HD12	1.95	0.48
3:AC:48:TYR:CD1	3:AC:48:TYR:O	2.66	0.48
4:AD:8:VAL:C	4:AD:10:ARG:N	2.66	0.48
6:AF:37:VAL:O	6:AF:38:GLU:HG3	2.14	0.48
7:AG:84:ASN:HD22	7:AG:84:ASN:N	2.12	0.48
9:AI:79:LEU:HD13	9:AI:79:LEU:C	2.33	0.48
24:AY:86:GLY:C	24:AY:88:VAL:HG22	2.34	0.48
24:AY:186:TYR:HA	24:AY:198:GLU:HA	1.94	0.48
27:B2:13:ALA:HA	27:B2:16:LEU:HD12	1.95	0.48
29:B4:50:VAL:HG12	29:B4:51:ASP:N	2.29	0.48
31:B6:11:LEU:HD12	31:B6:25:LYS:HA	1.95	0.48
32:B7:48:LYS:HZ3	35:BA:125:G:N2	2.11	0.48
34:B9:2:LYS:HD3	35:BA:2526:G:N3	2.29	0.48
35:BA:193:U:H2'	35:BA:194:G:H8	1.79	0.48
35:BA:361:G:N2	35:BA:362:U:O2	2.47	0.48
35:BA:453:C:H4'	35:BA:472:A:N6	2.29	0.48
35:BA:467:G:O2'	35:BA:468:G:H5'	2.14	0.48
35:BA:1416:G:H1'	35:BA:1417:C:C6	2.49	0.48
35:BA:1667:G:O5'	35:BA:1667:G:H2'	2.13	0.48
35:BA:2317:C:H2'	35:BA:2318:G:C5'	2.43	0.48
35:BA:2469:A:H2	35:BA:2481:G:N2	2.12	0.48
35:BA:2604:U:O2'	35:BA:2605:U:H5'	2.14	0.48
35:BA:2696:U:H2'	35:BA:2697:G:H8	1.78	0.48
35:BA:2831:G:O2'	35:BA:2883:A:H2'	2.14	0.48
37:BC:48:LEU:N	37:BC:48:LEU:CD1	2.74	0.48
37:BC:79:ALA:C	37:BC:120:VAL:HG11	2.34	0.48
37:BC:134:PRO:HB2	37:BC:135:ARG:HD2	1.96	0.48
37:BC:213:VAL:CG1	37:BC:225:ILE:HD11	2.43	0.48
38:BD:43:ARG:CB	38:BD:54:ARG:HB2	2.39	0.48
38:BD:257:LEU:HD23	38:BD:257:LEU:HA	1.67	0.48
39:BE:69:LYS:O	39:BE:70:ALA:C	2.50	0.48
40:BF:88:VAL:HG22	40:BF:89:VAL:H	1.79	0.48
40:BF:110:LEU:HD11	40:BF:202:PHE:HE1	1.79	0.48
41:BG:27:ASN:O	41:BG:28:VAL:C	2.50	0.48
42:BH:66:GLY:O	42:BH:67:LEU:C	2.52	0.48
47:BP:112:LEU:N	47:BP:128:HIS:CD2	2.81	0.48
48:BQ:87:LYS:HG2	48:BQ:88:GLY:N	2.20	0.48
48:BQ:116:GLU:O	48:BQ:120:ILE:HG12	2.13	0.48
50:BS:33:LYS:HG2	50:BS:34:HIS:CD2	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BU:84:LYS:C	52:BU:86:ALA:H	2.17	0.48
53:BV:2:PHE:O	53:BV:14:VAL:O	2.32	0.48
54:BW:79:GLY:C	54:BW:100:THR:CG2	2.82	0.48
56:BY:54:LYS:HE2	56:BY:55:TYR:CE1	2.49	0.48
1:AA:297:G:H4'	1:AA:557:G:H4'	1.95	0.47
1:AA:322:C:H41	1:AA:328:C:H6	1.61	0.47
1:AA:363:A:C5'	12:AL:34:ARG:HB2	2.44	0.47
1:AA:771:G:H2'	1:AA:772:U:C6	2.49	0.47
1:AA:778:G:C6	1:AA:779:C:C4	3.02	0.47
1:AA:1109:C:H2'	1:AA:1110:A:H5'	1.96	0.47
1:AA:1122:U:O2'	1:AA:1123:A:H5'	2.14	0.47
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.49	0.47
1:AA:1415:G:C2	1:AA:1486:G:C4	3.02	0.47
5:AE:142:LEU:O	5:AE:143:ARG:HD3	2.13	0.47
6:AF:69:GLU:CD	6:AF:69:GLU:N	2.66	0.47
7:AG:80:VAL:CG2	7:AG:81:GLY:N	2.77	0.47
12:AL:39:VAL:HB	12:AL:57:LYS:HB2	1.95	0.47
17:AQ:94:ASN:O	17:AQ:95:TYR:C	2.53	0.47
24:AY:422:GLU:C	24:AY:424:LEU:N	2.67	0.47
24:AY:539:ILE:CA	24:AY:542:VAL:HG12	2.44	0.47
25:B0:65:GLY:HA2	25:B0:84:LEU:HG	1.95	0.47
27:B2:55:ARG:HH21	35:BA:75:G:H4'	1.78	0.47
29:B4:7:PRO:O	29:B4:8:LYS:HB3	2.13	0.47
31:B6:11:LEU:HD23	31:B6:51:GLU:HG3	1.96	0.47
32:B7:24:THR:HG23	32:B7:27:GLY:HA3	1.95	0.47
35:BA:205:G:O2'	35:BA:206:U:P	2.71	0.47
35:BA:408:G:O2'	35:BA:409:C:H5'	2.14	0.47
35:BA:602:G:N1	35:BA:654(U):A:N7	2.61	0.47
35:BA:1263:U:H2'	35:BA:1264:G:C8	2.49	0.47
35:BA:1399:C:O2	35:BA:1399:C:H2'	2.13	0.47
35:BA:1475:G:N2	35:BA:1517:G:C4	2.82	0.47
35:BA:1577:C:H2'	35:BA:1578:U:C6	2.48	0.47
35:BA:1751:C:O5'	35:BA:1751:C:H6	1.97	0.47
35:BA:2056:G:N2	35:BA:2057:A:N9	2.62	0.47
35:BA:2443:C:H5'	40:BF:68:LYS:HD3	1.96	0.47
35:BA:2631:G:H2'	35:BA:2632:A:O4'	2.14	0.47
35:BA:2649:U:O2'	35:BA:2650:U:H5'	2.13	0.47
35:BA:2692:C:C2'	35:BA:2693:A:H5'	2.44	0.47
37:BC:132:LEU:O	37:BC:138:LEU:N	2.45	0.47
40:BF:105:VAL:HA	40:BF:108:LYS:HB2	1.95	0.47
41:BG:71:THR:HG23	41:BG:90:LEU:HA	1.94	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BG:98:ARG:N	41:BG:98:ARG:NH1	2.59	0.47
42:BH:54:ARG:HB3	42:BH:65:HIS:HB2	1.96	0.47
42:BH:94:TYR:CD1	42:BH:94:TYR:N	2.81	0.47
42:BH:168:PRO:HG2	42:BH:168:PRO:O	2.13	0.47
43:BK:21:PRO:HG3	43:BK:25:PRO:HD3	1.94	0.47
51:BT:129:ARG:O	51:BT:131:ALA:N	2.41	0.47
53:BV:32:THR:HG23	53:BV:60:GLU:HA	1.96	0.47
53:BV:52:VAL:O	53:BV:52:VAL:HG13	2.14	0.47
54:BW:20:VAL:O	54:BW:23:LEU:N	2.43	0.47
55:BX:52:VAL:O	55:BX:52:VAL:CG1	2.61	0.47
56:BY:55:TYR:N	56:BY:55:TYR:CD1	2.81	0.47
1:AA:429:U:H4'	1:AA:430:A:O5'	2.13	0.47
1:AA:800:G:H8	1:AA:800:G:O5'	1.97	0.47
1:AA:956:U:H2'	1:AA:957:U:H6	1.79	0.47
1:AA:1225:A:N3	1:AA:1225:A:C2'	2.76	0.47
1:AA:1301:U:H3'	1:AA:1302:U:H5"	1.96	0.47
1:AA:1490:C:C6	1:AA:1490:C:H5'	2.49	0.47
2:AB:35:GLU:O	2:AB:36:ARG:NH2	2.47	0.47
2:AB:51:LEU:HD23	2:AB:201:ILE:HG23	1.94	0.47
2:AB:178:ARG:HH11	2:AB:178:ARG:CB	2.27	0.47
7:AG:26:PHE:O	7:AG:30:ILE:HG12	2.15	0.47
8:AH:93:VAL:O	8:AH:132:GLU:HA	2.13	0.47
10:AJ:32:ALA:CB	10:AJ:78:ASN:HD21	2.26	0.47
12:AL:82:VAL:HG12	12:AL:105:TYR:CD1	2.47	0.47
12:AL:84:LEU:HD23	12:AL:101:VAL:HG21	1.97	0.47
13:AM:79:LYS:HA	13:AM:82:MET:HG3	1.95	0.47
18:AR:53:ARG:HA	18:AR:56:THR:OG1	2.14	0.47
24:AY:314:PHE:CE1	24:AY:327:PHE:HB3	2.49	0.47
27:B2:59:ARG:O	27:B2:60:LEU:C	2.51	0.47
30:B5:25:LEU:HD12	54:BW:19:LEU:O	2.14	0.47
34:B9:16:VAL:O	35:BA:1033:U:H5	1.97	0.47
35:BA:300:A:C2	35:BA:333:G:H2'	2.49	0.47
35:BA:418:G:H2'	35:BA:419:C:C6	2.49	0.47
35:BA:1030:G:O5'	35:BA:1030:G:H8	1.97	0.47
35:BA:1528(A):A:C8	35:BA:1529:G:C8	3.02	0.47
35:BA:1754:C:OP1	51:BT:96:ARG:NH1	2.47	0.47
35:BA:1858:G:H2'	35:BA:1883:G:N2	2.29	0.47
35:BA:2043:C:C2	35:BA:2044:C:C5	3.02	0.47
35:BA:2310:A:O2'	35:BA:2311:A:C5'	2.48	0.47
35:BA:2380:C:H2'	35:BA:2381:C:H6	1.79	0.47
35:BA:2416:C:H2'	35:BA:2417:C:C6	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2431:U:OP2	35:BA:2432:A:OP2	2.31	0.47
35:BA:2577:A:C5'	35:BA:2578:G:C5'	2.92	0.47
38:BD:158:ALA:O	38:BD:196:VAL:HG11	2.13	0.47
41:BG:16:ARG:NE	41:BG:31:VAL:HG11	2.29	0.47
45:BN:4:TYR:O	45:BN:5:VAL:C	2.52	0.47
46:BO:61:VAL:O	46:BO:84:ALA:HA	2.14	0.47
50:BS:74:ALA:HB1	50:BS:103:GLU:HB2	1.96	0.47
52:BU:52:ARG:O	52:BU:55:ARG:HG2	2.15	0.47
52:BU:66:ASN:ND2	52:BU:76:TYR:H	2.11	0.47
53:BV:5:VAL:HG23	53:BV:37:VAL:O	2.13	0.47
53:BV:17:GLY:O	53:BV:18:LEU:HB3	2.14	0.47
57:BZ:4:ARG:HA	57:BZ:58:VAL:O	2.15	0.47
1:AA:554:C:H2'	1:AA:555:C:C6	2.50	0.47
1:AA:878:G:H5'	8:AH:89:PRO:HG2	1.96	0.47
1:AA:1029:C:O5'	1:AA:1029:C:H6	1.97	0.47
1:AA:1089:G:C2'	1:AA:1090:U:H5'	2.43	0.47
1:AA:1402:C:C5	1:AA:1403:C:C5	3.02	0.47
2:AB:21:ARG:O	2:AB:22:LYS:HB2	2.14	0.47
4:AD:57:ARG:HD2	4:AD:57:ARG:N	2.26	0.47
4:AD:133:VAL:HG12	4:AD:134:ASP:N	2.29	0.47
6:AF:91:VAL:HG13	18:AR:72:ARG:NH2	2.28	0.47
7:AG:50:ILE:HA	7:AG:50:ILE:HD13	1.59	0.47
15:AO:75:PRO:O	15:AO:79:ARG:HG3	2.13	0.47
17:AQ:24:GLU:O	17:AQ:25:ARG:HB3	2.15	0.47
19:AS:53:ASN:C	19:AS:55:LYS:H	2.17	0.47
24:AY:12:LEU:C	24:AY:13:ARG:HD2	2.34	0.47
24:AY:123:ARG:HH11	24:AY:123:ARG:CG	2.25	0.47
24:AY:149:VAL:O	24:AY:152:THR:N	2.41	0.47
24:AY:324:ARG:HD3	24:AY:381:LYS:HE2	1.96	0.47
24:AY:348:ARG:HG2	24:AY:382:GLU:HG3	1.97	0.47
24:AY:518:PRO:O	24:AY:520:GLY:N	2.47	0.47
25:B0:45:PHE:O	25:B0:59:LEU:HD11	2.14	0.47
30:B5:44:THR:CG2	49:BR:101:ALA:HB2	2.30	0.47
31:B6:24:GLU:HG3	31:B6:37:ARG:HH21	1.79	0.47
33:B8:15:LYS:HB2	47:BP:65:ARG:HH12	1.78	0.47
34:B9:17:ILE:CG2	34:B9:18:ARG:N	2.77	0.47
34:B9:18:ARG:CG	34:B9:18:ARG:HH11	2.28	0.47
35:BA:60:G:N7	35:BA:63:U:H2'	2.30	0.47
35:BA:83:G:C2'	35:BA:84:A:OP2	2.62	0.47
35:BA:212:G:O2'	35:BA:213:A:H5'	2.15	0.47
35:BA:260:G:H2'	35:BA:260:G:N3	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:266:G:O6	35:BA:267:C:C4	2.67	0.47
35:BA:519:U:H5"	54:BW:25:ARG:HH21	1.77	0.47
35:BA:760:G:C2'	35:BA:761:A:H5'	2.43	0.47
35:BA:990:A:C5	35:BA:1186:G:H1'	2.49	0.47
35:BA:1196:C:O4'	35:BA:1226:A:C2	2.67	0.47
35:BA:1248:G:N3	52:BU:3:ARG:HD2	2.30	0.47
35:BA:1442:G:C2	35:BA:1550:C:O2	2.67	0.47
35:BA:1771:C:O2'	35:BA:1786:A:H8	1.97	0.47
35:BA:1925:C:O2'	35:BA:1926:U:H5'	2.15	0.47
35:BA:2163:C:C2'	35:BA:2164:C:H5'	2.45	0.47
35:BA:2272:U:H5"	35:BA:2273:A:OP1	2.14	0.47
36:BB:25:A:H2'	36:BB:25:A:N3	2.30	0.47
37:BC:51:ASP:OD1	37:BC:52:PRO:HD2	2.14	0.47
37:BC:225:ILE:HD12	37:BC:225:ILE:C	2.35	0.47
38:BD:26:LYS:HE2	38:BD:26:LYS:HA	1.95	0.47
41:BG:117:PHE:HE1	41:BG:119:GLY:CA	2.27	0.47
42:BH:41:MET:HG3	42:BH:42:ARG:N	2.29	0.47
47:BP:7:ARG:HA	47:BP:7:ARG:NH1	2.29	0.47
48:BQ:26:TYR:O	48:BQ:102:VAL:HG21	2.15	0.47
51:BT:29:ARG:CD	51:BT:86:ILE:HG22	2.43	0.47
52:BU:106:PHE:O	52:BU:109:LEU:HB2	2.15	0.47
56:BY:62:GLU:CG	56:BY:63:LYS:N	2.77	0.47
56:BY:105:ALA:C	56:BY:107:ASP:N	2.63	0.47
57:BZ:142:SER:H	57:BZ:144:LEU:CD2	2.27	0.47
1:AA:434:U:H2'	1:AA:435:C:C6	2.50	0.47
1:AA:448:A:P	1:AA:485:G:H22	2.37	0.47
1:AA:1343:G:C6	1:AA:1344:C:N4	2.83	0.47
1:AA:1343:G:H1'	9:AI:121:ARG:NH1	2.29	0.47
2:AB:8:LYS:NZ	2:AB:217:ARG:HH11	2.12	0.47
2:AB:95:GLN:C	2:AB:96:ARG:HD2	2.34	0.47
3:AC:108:ASN:C	3:AC:110:ASN:N	2.66	0.47
4:AD:105:VAL:HG12	4:AD:117:ALA:HB1	1.96	0.47
10:AJ:4:ILE:HD12	10:AJ:4:ILE:H	1.79	0.47
10:AJ:51:ARG:HG2	10:AJ:60:ARG:O	2.14	0.47
10:AJ:82:ILE:O	10:AJ:86:MET:CB	2.61	0.47
12:AL:18:VAL:O	12:AL:19:ARG:HB3	2.14	0.47
13:AM:96:LEU:O	13:AM:110:ARG:NE	2.44	0.47
22:AV:71:C:N4	22:AV:72:A:C6	2.83	0.47
24:AY:250:THR:O	24:AY:252:ASP:N	2.47	0.47
24:AY:336:THR:O	24:AY:339:SER:OG	2.24	0.47
24:AY:468:ARG:HG3	24:AY:468:ARG:NH1	2.24	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:555:LEU:CD1	24:AY:599:PRO:HB2	2.35	0.47
31:B6:11:LEU:C	31:B6:12:GLU:HG3	2.32	0.47
33:B8:33:ASN:OD1	33:B8:41:ILE:HG21	2.14	0.47
35:BA:451:C:N4	35:BA:454:A:H5'	2.30	0.47
35:BA:1049:C:H2'	35:BA:1050:A:H8	1.79	0.47
35:BA:1326:U:H4'	35:BA:2011:U:O4'	2.14	0.47
35:BA:1593:G:H2'	35:BA:1594:G:C8	2.49	0.47
35:BA:2020:A:C6	35:BA:2022:U:N3	2.82	0.47
35:BA:2496:C:OP1	48:BQ:83:MET:HG2	2.13	0.47
38:BD:78:LYS:HG2	38:BD:79:VAL:N	2.30	0.47
39:BE:195:LEU:HG	39:BE:195:LEU:O	2.14	0.47
42:BH:19:VAL:HG12	42:BH:20:ALA:N	2.23	0.47
47:BP:105:LEU:HB2	47:BP:106:LEU:HD12	1.95	0.47
49:BR:63:ARG:O	49:BR:67:LEU:HD23	2.14	0.47
51:BT:80:SER:CB	51:BT:81:PRO:CD	2.91	0.47
55:BX:10:ALA:O	55:BX:28:PHE:CB	2.61	0.47
1:AA:44:G:C2	1:AA:45:U:H1'	2.50	0.47
1:AA:264:U:H4'	17:AQ:63:ARG:HD3	1.96	0.47
1:AA:505:G:H5'	1:AA:534:U:H2'	1.96	0.47
1:AA:509:A:H3'	1:AA:510:A:C8	2.50	0.47
1:AA:1060:C:C4	3:AC:2:GLY:HA3	2.50	0.47
1:AA:1499:A:H1'	1:AA:1520:G:H5'	1.95	0.47
3:AC:134:ILE:O	3:AC:137:ALA:N	2.47	0.47
4:AD:29:PRO:C	4:AD:30:LYS:HG2	2.33	0.47
6:AF:20:ALA:O	6:AF:21:LEU:C	2.51	0.47
9:AI:77:ILE:O	9:AI:79:LEU:N	2.48	0.47
12:AL:38:THR:HG23	12:AL:57:LYS:HB3	1.96	0.47
13:AM:79:LYS:HA	13:AM:82:MET:CG	2.45	0.47
22:AV:61:C:H2'	22:AV:62:C:H6	1.78	0.47
24:AY:67:ALA:O	24:AY:68:ALA:C	2.52	0.47
24:AY:121:VAL:CA	24:AY:124:GLN:HE22	2.28	0.47
24:AY:572:TYR:N	24:AY:572:TYR:HD1	2.12	0.47
33:B8:21:LYS:HD3	33:B8:48:PHE:CE1	2.49	0.47
33:B8:56:GLU:C	33:B8:58:ILE:N	2.67	0.47
35:BA:271(H):G:H2'	35:BA:271(I):G:C8	2.50	0.47
35:BA:322:A:H5'	35:BA:340:A:H1'	1.96	0.47
35:BA:777:A:H2'	35:BA:778:G:H8	1.79	0.47
35:BA:811:U:C2'	35:BA:812:C:H5"	2.44	0.47
35:BA:894:C:H2'	35:BA:895:U:H5'	1.95	0.47
35:BA:1066:U:H2'	35:BA:1067:A:H3'	1.95	0.47
35:BA:1210:A:H5"	35:BA:1212:G:O4'	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1292:U:H2'	35:BA:1293:C:C6	2.50	0.47
35:BA:1593:G:H3'	35:BA:1594:G:H8	1.79	0.47
35:BA:1633:G:H2'	35:BA:1634:A:H5"	1.97	0.47
35:BA:2061:G:H5'	35:BA:2503:A:N1	2.30	0.47
35:BA:2136:C:H42	35:BA:2156:G:N2	2.13	0.47
35:BA:2286:A:N6	35:BA:2346:A:H62	2.11	0.47
35:BA:2295:C:H2'	35:BA:2296:U:C6	2.50	0.47
35:BA:2617:C:H2'	35:BA:2618:G:C5'	2.44	0.47
35:BA:2627:G:H2'	35:BA:2628:C:C6	2.50	0.47
37:BC:74:ARG:H	37:BC:112:ASP:CB	2.25	0.47
37:BC:185:LYS:N	37:BC:185:LYS:HD2	2.29	0.47
40:BF:57:VAL:HG12	40:BF:58:ALA:N	2.29	0.47
40:BF:184:TYR:O	40:BF:188:ARG:HG2	2.15	0.47
40:BF:185:ASP:HA	40:BF:188:ARG:CD	2.44	0.47
41:BG:12:TYR:O	41:BG:16:ARG:HB2	2.14	0.47
41:BG:40:ASN:ND2	41:BG:41:GLN:H	2.12	0.47
42:BH:41:MET:HE2	42:BH:43:VAL:N	2.29	0.47
43:BK:75:SER:C	43:BK:78:ILE:HG22	2.35	0.47
45:BN:65:LYS:HA	45:BN:65:LYS:NZ	2.29	0.47
48:BQ:60:ARG:HB2	48:BQ:60:ARG:NH1	2.30	0.47
49:BR:87:TYR:C	49:BR:89:ASP:N	2.67	0.47
50:BS:30:ARG:HH22	50:BS:62:LYS:HD2	1.79	0.47
51:BT:51:ARG:HG3	51:BT:98:LYS:HE3	1.97	0.47
52:BU:106:PHE:O	52:BU:109:LEU:N	2.46	0.47
56:BY:13:VAL:HG22	56:BY:14:LEU:N	2.27	0.47
1:AA:759:A:H2'	1:AA:760:G:H5'	1.95	0.47
1:AA:895:G:N3	1:AA:895:G:H2'	2.30	0.47
1:AA:999:C:C2	1:AA:1000:U:N3	2.83	0.47
1:AA:1005:A:H3'	1:AA:1006:C:O4'	2.14	0.47
1:AA:1132:C:O2'	1:AA:1133:G:H5'	2.14	0.47
1:AA:1288:A:H2'	1:AA:1289:A:C8	2.50	0.47
1:AA:1404:C:C1'	1:AA:1499:A:N1	2.77	0.47
1:AA:1502:A:C2	1:AA:1505:G:N1	2.62	0.47
2:AB:223:ILE:HG12	2:AB:226:ARG:NH1	2.29	0.47
3:AC:110:ASN:O	3:AC:111:LEU:HD23	2.15	0.47
5:AE:129:ILE:HG22	5:AE:130:ASN:N	2.29	0.47
5:AE:145:LYS:CA	8:AH:107:LEU:HD21	2.42	0.47
7:AG:80:VAL:HG11	7:AG:85:TYR:CD1	2.50	0.47
10:AJ:78:ASN:HD22	10:AJ:81:THR:HG21	1.79	0.47
17:AQ:51:TYR:CE1	17:AQ:73:VAL:HG11	2.50	0.47
20:AT:75:ASN:N	20:AT:75:ASN:ND2	2.62	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:9:ARG:O	21:AU:10:ARG:C	2.52	0.47
24:AY:102:ASP:HB3	24:AY:286:ILE:HG12	1.97	0.47
24:AY:125:ALA:C	24:AY:127:LYS:H	2.17	0.47
24:AY:238:THR:HG23	24:AY:241:GLU:H	1.79	0.47
24:AY:415:PRO:CG	24:AY:421:GLN:HA	2.44	0.47
27:B2:3:LEU:CD2	27:B2:7:ARG:HH22	2.28	0.47
27:B2:47:ASN:HB2	35:BA:95:G:H1'	1.97	0.47
33:B8:50:LEU:HG	33:B8:51:ALA:H	1.79	0.47
33:B8:62:LEU:N	33:B8:63:PRO:HD2	2.30	0.47
35:BA:310:A:OP2	56:BY:18:GLY:HA2	2.15	0.47
35:BA:612:C:C3'	35:BA:613:G:H5"	2.43	0.47
35:BA:725:G:C6	35:BA:726:G:N1	2.83	0.47
35:BA:811:U:O2'	35:BA:1250:G:H2'	2.14	0.47
35:BA:943:U:OP2	47:BP:38:GLN:CD	2.52	0.47
35:BA:1042:G:C2	35:BA:1043:C:C2	3.03	0.47
35:BA:1064:C:H1'	43:BK:89:HIS:HA	1.97	0.47
35:BA:1082:U:H4'	43:BK:116:ASN:OD1	2.15	0.47
35:BA:1248:G:OP1	40:BF:92:PRO:HG3	2.14	0.47
35:BA:1563:G:H8	35:BA:1563:G:O5'	1.97	0.47
35:BA:2113:U:O2'	35:BA:2114:A:H5'	2.14	0.47
35:BA:2464:C:HO2'	35:BA:2465:C:H6	1.61	0.47
35:BA:2579:C:H4'	39:BE:134:ILE:CG1	2.40	0.47
35:BA:2645:G:C4'	35:BA:2732:G:O2'	2.48	0.47
35:BA:2862:G:H2'	35:BA:2862:G:N3	2.29	0.47
36:BB:59:A:H2'	36:BB:60:C:H5'	1.97	0.47
37:BC:84:ILE:HG12	37:BC:96:GLY:O	2.15	0.47
38:BD:3:VAL:HG12	38:BD:17:THR:HB	1.97	0.47
38:BD:11:PRO:O	38:BD:13:ARG:N	2.47	0.47
39:BE:94:GLU:OE1	39:BE:177:PRO:HB2	2.14	0.47
40:BF:157:VAL:HG21	40:BF:194:MET:CG	2.33	0.47
41:BG:15:VAL:O	41:BG:18:GLU:HB3	2.14	0.47
41:BG:110:ALA:O	41:BG:111:LEU:C	2.51	0.47
42:BH:121:ILE:HG23	42:BH:133:VAL:HG13	1.96	0.47
43:BK:58:THR:HB	43:BK:66:THR:CG2	2.44	0.47
43:BK:78:ILE:HD13	43:BK:134:MET:SD	2.54	0.47
45:BN:26:LEU:C	45:BN:28:THR:H	2.16	0.47
45:BN:89:LYS:O	45:BN:93:THR:CG2	2.61	0.47
52:BU:76:TYR:O	52:BU:79:PHE:HB3	2.14	0.47
57:BZ:24:LEU:HD23	57:BZ:24:LEU:C	2.35	0.47
1:AA:193:C:C2	1:AA:194:C:C5	3.03	0.47
1:AA:282:A:H3'	1:AA:283:C:C5	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:284:G:C2	1:AA:285:G:C8	3.02	0.47
1:AA:318:G:C2	1:AA:336:C:N3	2.83	0.47
1:AA:424:G:O2'	1:AA:425:G:H5'	2.14	0.47
1:AA:506:G:C6	1:AA:507:C:N4	2.83	0.47
1:AA:526:C:C4	1:AA:527:G:H1'	2.49	0.47
1:AA:748:C:O2	1:AA:749:C:C5	2.66	0.47
1:AA:1004:A:H5'	1:AA:1025:U:C4	2.50	0.47
1:AA:1056:U:C5'	3:AC:163:ALA:HB2	2.44	0.47
1:AA:1180:A:OP1	9:AI:103:THR:HG23	2.14	0.47
1:AA:1216:G:H2'	1:AA:1217:C:C6	2.50	0.47
1:AA:1226:C:H5"	13:AM:103:THR:HB	1.96	0.47
1:AA:1426:C:O2'	1:AA:1427:U:H5'	2.15	0.47
1:AA:1465:C:C2'	1:AA:1466:C:H5'	2.44	0.47
1:AA:1477:C:H3'	1:AA:1477:C:C6	2.50	0.47
2:AB:51:LEU:HD22	2:AB:55:PHE:HE2	1.79	0.47
3:AC:29:TYR:HD2	3:AC:29:TYR:O	1.97	0.47
3:AC:46:GLU:O	3:AC:47:LEU:CB	2.48	0.47
4:AD:173:TRP:CB	4:AD:187:ARG:NH1	2.76	0.47
5:AE:59:GLY:O	5:AE:62:ALA:HB3	2.14	0.47
5:AE:76:ILE:HD11	5:AE:142:LEU:HD21	1.97	0.47
6:AF:60:PHE:O	6:AF:61:LEU:HD12	2.15	0.47
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.44	0.47
7:AG:61:VAL:O	7:AG:64:GLN:HB3	2.15	0.47
7:AG:152:ALA:C	7:AG:154:TYR:H	2.17	0.47
8:AH:30:ARG:HH11	8:AH:30:ARG:HB2	1.79	0.47
9:AI:77:ILE:C	9:AI:79:LEU:N	2.67	0.47
11:AK:34:ASP:CB	11:AK:35:PRO:CD	2.91	0.47
11:AK:111:ASP:HA	18:AR:84:LYS:CD	2.43	0.47
12:AL:46:LYS:NZ	12:AL:94:PRO:HG3	2.29	0.47
13:AM:97:PRO:HA	13:AM:110:ARG:CD	2.34	0.47
24:AY:34:TYR:O	24:AY:38:ARG:HB2	2.15	0.47
24:AY:130:VAL:HA	24:AY:131:PRO:HD3	1.61	0.47
24:AY:138:LYS:HE2	59:AY:702:GDP:C4	2.50	0.47
24:AY:170:ARG:H	24:AY:170:ARG:HD2	1.80	0.47
24:AY:316:ILE:N	24:AY:316:ILE:CD1	2.70	0.47
24:AY:466:LEU:CA	24:AY:470:PHE:HD2	2.20	0.47
24:AY:526:VAL:CB	24:AY:566:THR:HG23	2.44	0.47
24:AY:659:LEU:HD13	24:AY:659:LEU:O	2.15	0.47
28:B3:19:GLN:O	28:B3:22:ALA:HB3	2.15	0.47
32:B7:15:THR:HG22	32:B7:16:HIS:CD2	2.49	0.47
33:B8:13:ARG:HB3	47:BP:63:PRO:CB	2.41	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:65:C:H5'	55:BX:71:GLY:HA3	1.97	0.47
35:BA:94(A):G:H2'	35:BA:95:G:O4'	2.14	0.47
35:BA:178:G:C2	35:BA:179:G:C8	3.02	0.47
35:BA:271(J):C:O2	35:BA:271(J):C:H2'	2.15	0.47
35:BA:294:A:N6	35:BA:345:A:H1'	2.30	0.47
35:BA:341:G:H2'	35:BA:342:G:C8	2.49	0.47
35:BA:511:U:C5	35:BA:512:G:C4	3.02	0.47
35:BA:565:C:O2'	35:BA:566:U:H5'	2.15	0.47
35:BA:658:C:H2'	35:BA:659:C:C6	2.49	0.47
35:BA:663:G:C6	35:BA:664:C:C4	3.03	0.47
35:BA:768:G:H2'	35:BA:769:G:C8	2.49	0.47
35:BA:795:C:H2'	35:BA:796:C:C6	2.50	0.47
35:BA:1077:A:O2'	35:BA:1078:U:H5'	2.14	0.47
35:BA:1275:A:C4	49:BR:16:HIS:ND1	2.82	0.47
35:BA:1455:G:C2	35:BA:1456:G:C8	3.03	0.47
35:BA:1526:G:H2'	35:BA:1527:G:O4'	2.14	0.47
35:BA:1624:G:O2'	35:BA:1625:C:H5'	2.15	0.47
35:BA:1721:G:O6	35:BA:1739:U:H5'	2.12	0.47
35:BA:1814:G:H2'	35:BA:1815:A:C8	2.50	0.47
35:BA:1877:A:H2'	35:BA:1877:A:N3	2.29	0.47
35:BA:1947:C:C2'	35:BA:1948:G:C5'	2.90	0.47
35:BA:2456:C:O5'	35:BA:2456:C:H6	1.97	0.47
35:BA:2696:U:H2'	35:BA:2697:G:C8	2.50	0.47
35:BA:2847:U:OP1	51:BT:98:LYS:HD3	2.14	0.47
35:BA:2883:A:C5'	35:BA:2884:U:H5'	2.44	0.47
36:BB:54:G:H2'	36:BB:55:U:C6	2.48	0.47
37:BC:98:GLU:CG	37:BC:120:VAL:HB	2.44	0.47
37:BC:139:PRO:HA	37:BC:145:THR:HG21	1.96	0.47
38:BD:30:GLU:HG3	38:BD:63:ARG:CZ	2.45	0.47
38:BD:53:PHE:HA	38:BD:218:ARG:HB2	1.97	0.47
38:BD:147:LEU:HD11	38:BD:183:ARG:NH1	2.29	0.47
38:BD:155:LEU:HD12	38:BD:155:LEU:N	2.30	0.47
38:BD:243:GLY:O	38:BD:244:ARG:HB3	2.15	0.47
39:BE:48:GLN:C	39:BE:49:LEU:HD22	2.35	0.47
39:BE:195:LEU:HD12	39:BE:195:LEU:C	2.35	0.47
40:BF:36:VAL:O	40:BF:39:TRP:HB3	2.15	0.47
40:BF:120:GLU:HB3	40:BF:122:LYS:HG2	1.96	0.47
41:BG:32:PRO:HA	41:BG:162:THR:HB	1.96	0.47
41:BG:55:LYS:C	41:BG:57:ALA:N	2.67	0.47
41:BG:107:LEU:HD23	41:BG:111:LEU:HD12	1.96	0.47
41:BG:153:ARG:CB	41:BG:153:ARG:HH11	2.28	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BG:168:GLU:O	41:BG:169:ALA:C	2.53	0.47
42:BH:154:PRO:HB2	42:BH:163:TYR:CE2	2.50	0.47
45:BN:125:GLY:HA3	45:BN:126:PRO:C	2.35	0.47
46:BO:68:GLU:N	46:BO:68:GLU:OE1	2.47	0.47
46:BO:88:ASN:OD1	46:BO:88:ASN:N	2.47	0.47
48:BQ:12:GLN:HG2	48:BQ:73:PRO:HD2	1.96	0.47
48:BQ:35:VAL:CG2	48:BQ:36:ALA:N	2.78	0.47
48:BQ:79:LEU:HD23	48:BQ:80:GLU:N	2.25	0.47
49:BR:95:THR:N	49:BR:117:VAL:HG21	2.30	0.47
50:BS:65:VAL:C	50:BS:67:ARG:H	2.17	0.47
50:BS:70:GLY:C	50:BS:101:LEU:HD23	2.35	0.47
51:BT:50:ILE:HG23	51:BT:99:LEU:HD12	1.96	0.47
51:BT:55:ASN:HB3	51:BT:59:THR:HG22	1.96	0.47
51:BT:99:LEU:CB	51:BT:101:PHE:CE1	2.92	0.47
53:BV:16:PRO:O	53:BV:96:ILE:HB	2.14	0.47
54:BW:66:GLU:HA	54:BW:69:LEU:HD11	1.96	0.47
56:BY:12:THR:HG22	56:BY:75:ILE:HG21	1.97	0.47
1:AA:182:U:H5’	1:AA:183:G:P	2.54	0.47
1:AA:506:G:H2’	1:AA:507:C:C6	2.49	0.47
1:AA:943:U:H2’	1:AA:944:G:C5’	2.43	0.47
1:AA:986:A:H2’	1:AA:987:G:C8	2.50	0.47
1:AA:1313:U:P	19:AS:6:LYS:HG3	2.54	0.47
2:AB:8:LYS:NZ	2:AB:217:ARG:NH1	2.62	0.47
4:AD:105:VAL:CG1	4:AD:117:ALA:HB1	2.44	0.47
5:AE:107:ARG:HG2	5:AE:108:ALA:N	2.29	0.47
9:AI:93:ARG:HA	9:AI:96:LEU:CB	2.43	0.47
11:AK:17:GLY:O	11:AK:80:VAL:HA	2.15	0.47
12:AL:25:PRO:C	12:AL:27:LEU:N	2.51	0.47
12:AL:42:THR:HG23	12:AL:42:THR:O	2.13	0.47
13:AM:73:GLU:O	13:AM:74:VAL:C	2.52	0.47
13:AM:91:ARG:HD2	13:AM:97:PRO:O	2.14	0.47
16:AP:71:ARG:O	16:AP:72:ARG:C	2.54	0.47
24:AY:139:MET:HE3	24:AY:167:PRO:HG3	1.96	0.47
24:AY:411:VAL:HG12	24:AY:412:ALA:O	2.15	0.47
24:AY:510:VAL:CG1	24:AY:511:LYS:N	2.78	0.47
24:AY:567:LEU:O	24:AY:567:LEU:HG	2.15	0.47
26:B1:58:ILE:HG23	26:B1:58:ILE:O	2.14	0.47
27:B2:14:ARG:HG3	27:B2:14:ARG:HH11	1.78	0.47
29:B4:14:ILE:CG2	29:B4:15:ILE:N	2.78	0.47
32:B7:28:ARG:HG3	32:B7:28:ARG:NH1	2.29	0.47
33:B8:59:LYS:HD3	47:BP:50:ARG:HB3	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:271(K):U:H3'	35:BA:271(L):U:C5'	2.45	0.47
35:BA:902:C:H2'	35:BA:903:C:H6	1.78	0.47
35:BA:1040:C:C5	35:BA:1041:C:N4	2.83	0.47
35:BA:1204:A:H1'	35:BA:1206:G:N7	2.30	0.47
35:BA:1227:G:O2'	35:BA:1228:G:H5'	2.14	0.47
35:BA:1434:A:H5'	35:BA:1435:G:OP2	2.14	0.47
35:BA:1495:A:N3	35:BA:1496:A:C2	2.82	0.47
35:BA:1656:C:O2'	35:BA:1657:C:H5'	2.15	0.47
38:BD:80:ALA:HB3	38:BD:94:LEU:HB3	1.96	0.47
39:BE:25:VAL:CG1	39:BE:181:LEU:HD12	2.45	0.47
39:BE:199:ARG:NH1	39:BE:199:ARG:HB2	2.30	0.47
40:BF:10:PRO:HG2	40:BF:11:VAL:N	2.27	0.47
40:BF:39:TRP:CH2	40:BF:106:ARG:NE	2.76	0.47
43:BK:103:GLN:O	43:BK:107:ILE:HG13	2.15	0.47
49:BR:21:TYR:CD1	49:BR:21:TYR:N	2.83	0.47
52:BU:13:LYS:HA	52:BU:16:LYS:HD2	1.95	0.47
56:BY:31:LEU:HG	56:BY:34:LYS:HB2	1.96	0.47
1:AA:141:A:H1'	1:AA:182:U:O2	2.15	0.47
1:AA:255:G:H5'	17:AQ:16:GLN:O	2.15	0.47
1:AA:707:C:H4'	11:AK:20:TYR:CE1	2.50	0.47
1:AA:779:C:O2'	11:AK:120:ARG:HD3	2.15	0.47
1:AA:807:A:C5	1:AA:808:C:C4	3.03	0.47
1:AA:897:C:O2'	1:AA:898:G:H5'	2.15	0.47
3:AC:47:LEU:HD21	3:AC:68:VAL:HG11	1.96	0.47
3:AC:72:LYS:HA	3:AC:72:LYS:CE	2.44	0.47
4:AD:129:ASN:ND2	4:AD:129:ASN:N	2.63	0.47
15:AO:76:GLU:C	15:AO:78:TYR:H	2.18	0.47
19:AS:9:VAL:O	19:AS:10:PHE:C	2.53	0.47
19:AS:12:ASP:OD1	19:AS:35:SER:HB2	2.14	0.47
22:AV:54:U:C2'	22:AV:55:U:H5'	2.45	0.47
22:AV:57:A:H2'	22:AV:58:A:H5'	1.96	0.47
24:AY:227:ILE:O	24:AY:227:ILE:CG2	2.62	0.47
24:AY:290:LYS:HB3	24:AY:298:VAL:HG22	1.97	0.47
24:AY:616:TYR:CD2	24:AY:663:THR:HA	2.50	0.47
25:B0:7:LEU:HD12	48:BQ:85:LYS:CE	2.31	0.47
25:B0:23:VAL:HG13	25:B0:38:VAL:HG22	1.97	0.47
28:B3:10:LYS:HB3	28:B3:53:LEU:CD2	2.44	0.47
29:B4:18:CYS:O	29:B4:18:CYS:SG	2.73	0.47
29:B4:23:GLU:C	29:B4:24:THR:HG23	2.34	0.47
29:B4:25:TYR:O	41:BG:105:LYS:NZ	2.48	0.47
31:B6:13:CYS:HA	31:B6:50:ARG:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:259:G:N2	35:BA:621:A:H8	2.12	0.47
35:BA:483:A:C2	35:BA:484:C:H1'	2.50	0.47
35:BA:544:G:H21	35:BA:547:A:H2'	1.80	0.47
35:BA:729:G:C4	35:BA:1775:U:C2	3.02	0.47
35:BA:914:C:H2'	35:BA:915:C:C5'	2.42	0.47
35:BA:1108:U:O2	35:BA:1108:U:H2'	2.15	0.47
35:BA:1183:G:C8	35:BA:1183:G:H3'	2.50	0.47
35:BA:1296:G:O2'	35:BA:1297:C:H5'	2.15	0.47
35:BA:1485:G:H5'	35:BA:1485:G:H8	1.79	0.47
35:BA:1783:A:C2	35:BA:2587:A:C4	3.03	0.47
35:BA:1819:A:H2'	38:BD:179:SER:OG	2.14	0.47
35:BA:2416:C:H2'	35:BA:2417:C:H6	1.80	0.47
36:BB:21:G:O2'	36:BB:22:U:P	2.73	0.47
38:BD:26:LYS:O	38:BD:27:THR:HB	2.14	0.47
38:BD:94:LEU:HD23	38:BD:94:LEU:C	2.32	0.47
38:BD:210:GLY:O	38:BD:212:SER:N	2.45	0.47
40:BF:135:LYS:CB	40:BF:138:GLU:OE2	2.63	0.47
41:BG:34:LEU:HB2	41:BG:99:MET:HE3	1.95	0.47
43:BK:77:LEU:H	43:BK:77:LEU:CD2	2.02	0.47
46:BO:86:ILE:C	46:BO:87:ILE:HD13	2.35	0.47
49:BR:45:ARG:HG3	49:BR:46:GLY:N	2.23	0.47
49:BR:115:GLU:HG2	49:BR:117:VAL:H	1.79	0.47
51:BT:62:THR:HG22	51:BT:75:ILE:HG13	1.96	0.47
52:BU:82:GLY:O	52:BU:84:LYS:N	2.47	0.47
54:BW:22:ASP:HA	54:BW:25:ARG:HH12	1.79	0.47
57:BZ:92:SER:HB2	57:BZ:93:ASP:H	1.21	0.47
1:AA:605:U:C2'	1:AA:606:G:H5'	2.44	0.47
1:AA:965:A:C2	1:AA:969:A:C2	3.02	0.47
1:AA:1054:C:OP1	1:AA:1198:G:OP2	2.33	0.47
1:AA:1105:A:O2'	1:AA:1106:G:H5'	2.14	0.47
1:AA:1202:G:C2'	1:AA:1203:C:H5'	2.45	0.47
1:AA:1411:C:C2'	1:AA:1412:C:H5'	2.45	0.47
2:AB:221:LEU:HD13	2:AB:221:LEU:O	2.14	0.47
3:AC:6:HIS:CD2	3:AC:7:PRO:HD2	2.44	0.47
3:AC:155:GLY:O	3:AC:156:ARG:HB2	2.14	0.47
5:AE:91:LEU:HD13	5:AE:120:THR:HG21	1.96	0.47
10:AJ:3:LYS:N	10:AJ:75:ILE:O	2.48	0.47
12:AL:92:ASP:O	12:AL:94:PRO:HD3	2.14	0.47
20:AT:63:ILE:O	20:AT:65:LYS:N	2.48	0.47
24:AY:120:THR:O	24:AY:124:GLN:CD	2.54	0.47
24:AY:330:VAL:HB	24:AY:371:ALA:HA	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:413:ILE:HD11	24:AY:474:ALA:CB	2.36	0.47
24:AY:415:PRO:HB2	24:AY:421:GLN:N	2.29	0.47
26:B1:68:PRO:C	26:B1:70:VAL:N	2.68	0.47
26:B1:86:SER:C	26:B1:90:ILE:HG12	2.34	0.47
27:B2:20:GLU:O	27:B2:21:LEU:C	2.53	0.47
27:B2:69:ARG:HH22	35:BA:111:A:C5'	2.28	0.47
28:B3:7:LYS:O	28:B3:54:VAL:HG13	2.16	0.47
33:B8:30:ARG:NH1	35:BA:2419:U:O4	2.48	0.47
33:B8:33:ASN:O	33:B8:34:TRP:CB	2.61	0.47
34:B9:18:ARG:HG2	34:B9:18:ARG:O	2.15	0.47
35:BA:279:C:C2'	35:BA:280:C:H5"	2.45	0.47
35:BA:299:A:H1'	35:BA:322:A:N6	2.29	0.47
35:BA:311:A:O4'	35:BA:332:A:C4	2.67	0.47
35:BA:322:A:P	40:BF:169:ASN:HB2	2.54	0.47
35:BA:331:A:O2'	35:BA:332:A:OP1	2.31	0.47
35:BA:652:C:O2'	35:BA:653:A:H5"	2.15	0.47
35:BA:1633:G:C2'	35:BA:1634:A:H5"	2.45	0.47
35:BA:1819:A:O2'	35:BA:1820:U:P	2.72	0.47
35:BA:2322:A:O2'	35:BA:2323:G:H5'	2.15	0.47
35:BA:2367:G:H2'	35:BA:2368:C:H6	1.80	0.47
35:BA:2542:A:H2'	35:BA:2542:A:N3	2.29	0.47
36:BB:81:G:C2	36:BB:82:G:N7	2.83	0.47
37:BC:134:PRO:C	37:BC:135:ARG:HD2	2.35	0.47
37:BC:149:ASN:C	37:BC:149:ASN:ND2	2.63	0.47
43:BK:100:THR:HA	43:BK:139:VAL:CB	2.37	0.47
45:BN:26:LEU:C	45:BN:28:THR:N	2.69	0.47
47:BP:16:ARG:NH2	47:BP:18:ARG:HG3	2.30	0.47
50:BS:89:ARG:HG3	50:BS:92:TYR:N	2.28	0.47
52:BU:113:ALA:O	52:BU:115:ALA:N	2.48	0.47
54:BW:12:ILE:CG1	54:BW:42:ARG:NH1	2.78	0.47
56:BY:95:LYS:CE	56:BY:101:LYS:H	2.28	0.47
57:BZ:131:ARG:HG2	57:BZ:131:ARG:HH11	1.80	0.47
1:AA:160:A:H2'	1:AA:161:A:H5'	1.97	0.46
1:AA:164:U:H2'	1:AA:165:C:H6	1.80	0.46
1:AA:189(C):C:H2'	1:AA:189(D):C:O4'	2.15	0.46
1:AA:243:A:C2	1:AA:246:A:C8	3.02	0.46
1:AA:261:U:O2	1:AA:263:A:H8	1.98	0.46
1:AA:509:A:H2'	1:AA:509:A:N3	2.30	0.46
1:AA:1057:G:H5"	3:AC:154:SER:OG	2.15	0.46
1:AA:1163:C:H2'	1:AA:1164:G:C8	2.50	0.46
1:AA:1298:C:O2'	1:AA:1299:A:C2	2.67	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1508:G:O2'	1:AA:1509:C:H5'	2.14	0.46
2:AB:54:THR:O	2:AB:58:ILE:HG13	2.14	0.46
5:AE:52:PRO:O	5:AE:56:GLN:HB2	2.14	0.46
9:AI:10:ARG:O	9:AI:11:LYS:HB3	2.14	0.46
9:AI:42:ARG:O	9:AI:43:ALA:C	2.54	0.46
12:AL:6:THR:H	12:AL:9:GLN:NE2	2.13	0.46
12:AL:115:LYS:O	12:AL:117:ARG:N	2.48	0.46
15:AO:82:ILE:HD13	15:AO:82:ILE:O	2.14	0.46
16:AP:18:ARG:HD3	16:AP:35:LYS:HD2	1.96	0.46
16:AP:50:LYS:HG2	16:AP:51:VAL:H	1.79	0.46
21:AU:8:THR:O	21:AU:12:LYS:HB2	2.15	0.46
22:AV:4:G:O2'	22:AV:5:G:P	2.74	0.46
24:AY:121:VAL:CA	24:AY:124:GLN:NE2	2.79	0.46
24:AY:274:ASP:O	24:AY:277:VAL:HG12	2.14	0.46
25:B0:49:LYS:H	25:B0:80:HIS:HD1	1.63	0.46
26:B1:45:ASN:HD22	26:B1:46:LEU:N	2.12	0.46
31:B6:5:VAL:O	31:B6:8:LYS:HB3	2.14	0.46
32:B7:34:ARG:CB	32:B7:42:LEU:HD22	2.41	0.46
33:B8:7:HIS:HB2	33:B8:59:LYS:HB3	1.97	0.46
33:B8:33:ASN:HA	33:B8:36:LYS:HD2	1.96	0.46
35:BA:99:U:O2	35:BA:99:U:C2'	2.64	0.46
35:BA:99:U:H5"	35:BA:102:G:H1'	1.97	0.46
35:BA:104:U:OP2	35:BA:105:C:C5	2.68	0.46
35:BA:271(Q):G:H2'	35:BA:271(R):G:O4'	2.16	0.46
35:BA:402:A:H2'	35:BA:403:U:H5'	1.95	0.46
35:BA:999:U:OP2	35:BA:1153:C:OP2	2.33	0.46
35:BA:1052:C:H6	35:BA:1052:C:C3'	2.26	0.46
35:BA:1428:C:N4	35:BA:1569:A:H3'	2.31	0.46
35:BA:1434:A:H5'	35:BA:1435:G:P	2.55	0.46
35:BA:2081:C:H2'	35:BA:2082:A:C8	2.51	0.46
35:BA:2580:U:H4'	39:BE:130:GLY:HA3	1.96	0.46
37:BC:186:LEU:O	37:BC:189:ASN:N	2.48	0.46
39:BE:26:ILE:HG13	39:BE:182:LEU:HB3	1.96	0.46
39:BE:144:ARG:O	39:BE:145:LYS:O	2.32	0.46
42:BH:13:LYS:HE2	42:BH:13:LYS:CA	2.32	0.46
45:BN:22:THR:O	45:BN:25:ARG:N	2.44	0.46
45:BN:87:LEU:HD22	45:BN:91:LEU:CD2	2.45	0.46
47:BP:12:ALA:CB	47:BP:16:ARG:HB3	2.45	0.46
47:BP:55:ARG:CG	47:BP:56:SER:N	2.58	0.46
47:BP:136:GLU:O	47:BP:139:LYS:CB	2.63	0.46
48:BQ:6:ARG:O	48:BQ:7:MET:CG	2.58	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BS:52:SER:HB2	50:BS:55:ALA:HB3	1.97	0.46
51:BT:132:LYS:HG2	51:BT:133:GLU:N	2.30	0.46
52:BU:92:ARG:NH1	53:BV:11:GLN:CG	2.78	0.46
53:BV:13:ARG:HH11	53:BV:13:ARG:HG2	1.77	0.46
56:BY:54:LYS:CE	56:BY:55:TYR:HE1	2.28	0.46
1:AA:374:A:C4	1:AA:375:U:C5	3.03	0.46
1:AA:481:G:H4'	1:AA:482:A:OP1	2.16	0.46
1:AA:506:G:C6	1:AA:507:C:C4	3.03	0.46
1:AA:595:G:H2'	1:AA:641:U:O4	2.15	0.46
1:AA:699:C:H6	1:AA:699:C:C5'	2.28	0.46
1:AA:957:U:O2	1:AA:959:A:H8	1.98	0.46
1:AA:1010:G:H2'	1:AA:1011:G:H8	1.80	0.46
1:AA:1030:C:C2'	1:AA:1030(A):G:H5'	2.45	0.46
1:AA:1060:C:H5'	14:AN:45:ARG:HH22	1.80	0.46
1:AA:1065:U:C2'	1:AA:1066:C:OP2	2.64	0.46
1:AA:1163:C:H2'	1:AA:1164:G:H8	1.80	0.46
1:AA:1409:C:O2'	1:AA:1410:G:H5'	2.15	0.46
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.50	0.46
2:AB:207:ALA:C	2:AB:209:ARG:N	2.65	0.46
2:AB:229:VAL:HG12	2:AB:230:VAL:N	2.30	0.46
4:AD:70:ILE:O	4:AD:70:ILE:HG23	2.15	0.46
4:AD:70:ILE:HD11	4:AD:74:GLN:HB3	1.96	0.46
5:AE:119:LEU:N	5:AE:119:LEU:HD23	2.30	0.46
6:AF:56:PRO:HG2	6:AF:57:GLN:HG3	1.96	0.46
8:AH:46:LYS:HG3	8:AH:64:LYS:HB2	1.97	0.46
9:AI:11:LYS:C	9:AI:13:ALA:H	2.19	0.46
10:AJ:16:LEU:HD13	10:AJ:16:LEU:C	2.36	0.46
10:AJ:98:ILE:HD12	10:AJ:98:ILE:HA	1.81	0.46
19:AS:64:GLU:C	29:B4:48:ARG:HH22	2.19	0.46
20:AT:43:LEU:O	20:AT:44:ALA:C	2.53	0.46
24:AY:26:THR:O	24:AY:27:THR:C	2.53	0.46
24:AY:526:VAL:N	24:AY:565:VAL:O	2.48	0.46
24:AY:539:ILE:O	24:AY:542:VAL:HG12	2.16	0.46
26:B1:47:GLN:OE1	35:BA:2228:G:N2	2.48	0.46
27:B2:32:LEU:HD12	27:B2:53:LEU:HD22	1.98	0.46
31:B6:15:GLU:CG	31:B6:41:PRO:HG3	2.44	0.46
31:B6:45:LYS:HG2	35:BA:2371:G:H4'	1.98	0.46
32:B7:35:ARG:CG	32:B7:35:ARG:NH1	2.78	0.46
35:BA:389:G:O4'	35:BA:2413:G:C4'	2.64	0.46
35:BA:768:G:H2'	35:BA:769:G:H8	1.79	0.46
35:BA:967:C:H3'	35:BA:967:C:C6	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:979:G:H2'	35:BA:982:C:H41	1.79	0.46
35:BA:1019:U:N3	35:BA:1142(A):A:N6	2.63	0.46
35:BA:1231:G:H2'	35:BA:1232:G:H8	1.80	0.46
35:BA:1233:C:H2'	35:BA:1234:U:H6	1.80	0.46
35:BA:2128:C:O2'	35:BA:2174:C:H4'	2.15	0.46
35:BA:2326:C:O5'	35:BA:2326:C:H6	1.97	0.46
35:BA:2428:G:H5'	35:BA:2429:G:P	2.56	0.46
35:BA:2603:G:O2'	35:BA:2604:U:H5'	2.14	0.46
35:BA:2663:G:C2'	35:BA:2664:G:H5'	2.45	0.46
39:BE:36:ARG:NH2	39:BE:88:GLY:H	2.14	0.46
39:BE:82:ARG:CG	39:BE:83:ASP:H	2.13	0.46
41:BG:20:ILE:O	41:BG:21:ARG:C	2.53	0.46
41:BG:131:TYR:HE2	41:BG:133:LEU:HB3	1.80	0.46
41:BG:181:ARG:HG2	41:BG:181:ARG:O	2.14	0.46
45:BN:22:THR:HB	45:BN:25:ARG:HB2	1.97	0.46
47:BP:83:VAL:H	47:BP:115:LEU:HD21	1.79	0.46
47:BP:85:LEU:CD1	47:BP:120:ALA:HB2	2.41	0.46
48:BQ:39:PRO:HB3	48:BQ:99:PRO:HD3	1.96	0.46
49:BR:10:LEU:HB3	49:BR:17:ARG:NE	2.29	0.46
50:BS:89:ARG:NE	50:BS:91:PRO:HG2	2.27	0.46
51:BT:50:ILE:HA	51:BT:99:LEU:HD12	1.97	0.46
51:BT:89:VAL:C	51:BT:91:ARG:H	2.19	0.46
53:BV:35:LEU:HB3	53:BV:37:VAL:HG23	1.96	0.46
1:AA:32:A:H3'	1:AA:33:A:H8	1.80	0.46
1:AA:603:U:H2'	1:AA:604:G:H8	1.78	0.46
1:AA:624:C:H2'	1:AA:625:G:C8	2.50	0.46
1:AA:1060:C:H5'	14:AN:45:ARG:NH2	2.31	0.46
1:AA:1351:U:H5'	7:AG:33:ASP:OD1	2.15	0.46
1:AA:1361:G:H5'	1:AA:1362:C:OP2	2.15	0.46
4:AD:68:TYR:N	4:AD:68:TYR:HD1	2.13	0.46
4:AD:98:GLU:HG2	4:AD:189:PRO:CG	2.41	0.46
7:AG:141:VAL:O	7:AG:141:VAL:HG12	2.14	0.46
12:AL:28:LYS:CE	12:AL:33:ARG:HH22	2.28	0.46
16:AP:40:ASP:C	16:AP:40:ASP:OD2	2.52	0.46
20:AT:26:ASN:O	20:AT:30:LYS:CB	2.63	0.46
24:AY:359:HIS:O	24:AY:361:ASN:N	2.48	0.46
24:AY:584:ILE:O	24:AY:588:MET:HG3	2.15	0.46
24:AY:604:PRO:C	24:AY:605:ILE:HD12	2.36	0.46
24:AY:608:VAL:HG13	24:AY:669:PHE:HD2	1.79	0.46
24:AY:635:GLU:OE1	24:AY:644:ARG:HD2	2.15	0.46
27:B2:2:LYS:O	27:B2:6:VAL:HG23	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:B4:2:LYS:HG2	36:BB:44:G:P	2.55	0.46
30:B5:40:LYS:HE2	30:B5:46:CYS:CB	2.45	0.46
33:B8:61:LEU:H	33:B8:61:LEU:HG	1.27	0.46
35:BA:271(C):C:H2'	35:BA:271(D):G:H8	1.79	0.46
35:BA:290:G:O2'	35:BA:291:C:H5'	2.16	0.46
35:BA:1159:U:H6	35:BA:1159:U:H5"	1.81	0.46
35:BA:1188:U:C2'	35:BA:1189:A:H5'	2.45	0.46
35:BA:1287:A:H2'	35:BA:1287:A:N3	2.31	0.46
35:BA:1416:G:N3	35:BA:1417:C:C4	2.84	0.46
35:BA:1523:U:H2'	35:BA:1524:G:H8	1.79	0.46
35:BA:2037:G:H2'	35:BA:2038:G:H8	1.76	0.46
35:BA:2377:A:O2'	35:BA:2378:A:H5'	2.15	0.46
35:BA:2460:U:C4	35:BA:2461:C:C5	3.04	0.46
35:BA:2644:G:H2'	35:BA:2645:G:C8	2.50	0.46
35:BA:2838:G:C1'	49:BR:45:ARG:HH11	2.29	0.46
38:BD:201:HIS:O	38:BD:204:ILE:HG12	2.16	0.46
40:BF:13:SER:HA	40:BF:14:PRO:HD3	1.72	0.46
40:BF:102:PRO:HB2	40:BF:105:VAL:HG23	1.96	0.46
41:BG:34:LEU:HD11	41:BG:100:TRP:CH2	2.50	0.46
44:BL:68:VAL:O	44:BL:72:VAL:HG23	2.16	0.46
46:BO:102:VAL:HG23	46:BO:121:VAL:HG13	1.97	0.46
48:BQ:42:ILE:N	48:BQ:42:ILE:CD1	2.78	0.46
51:BT:115:ARG:HB3	51:BT:115:ARG:HH11	1.80	0.46
1:AA:357:G:HO2'	1:AA:358:U:H5'	1.80	0.46
1:AA:1329:A:H5"	13:AM:26:GLY:N	2.30	0.46
2:AB:97:TRP:CH2	2:AB:176:GLU:OE2	2.69	0.46
2:AB:121:LEU:HD21	2:AB:126:GLU:OE2	2.14	0.46
2:AB:145:LEU:O	2:AB:149:LEU:HB2	2.16	0.46
2:AB:153:ARG:C	2:AB:155:LEU:H	2.18	0.46
4:AD:86:LYS:HD3	4:AD:86:LYS:HA	1.31	0.46
4:AD:204:ILE:HG22	4:AD:205:GLU:N	2.29	0.46
6:AF:52:ILE:O	6:AF:53:ALA:HB3	2.16	0.46
6:AF:89:MET:HE1	18:AR:76:LEU:HD22	1.98	0.46
7:AG:104:LEU:HD13	7:AG:104:LEU:HA	1.60	0.46
13:AM:21:TYR:C	13:AM:22:ILE:HD12	2.36	0.46
13:AM:83:ASP:CG	13:AM:84:ILE:N	2.68	0.46
14:AN:18:VAL:HG23	14:AN:19:ARG:N	2.29	0.46
20:AT:23:ARG:HA	20:AT:26:ASN:HD21	1.80	0.46
24:AY:177:ILE:O	24:AY:178:ILE:HD12	2.15	0.46
35:BA:7:G:H2'	35:BA:8:A:O4'	2.16	0.46
35:BA:345:A:O2'	35:BA:346:A:N7	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:465:G:C6	35:BA:466:A:N6	2.83	0.46
35:BA:470:A:H2'	35:BA:471:A:O4'	2.14	0.46
35:BA:531:C:C5	35:BA:2035:G:C2	3.04	0.46
35:BA:583:G:C5	35:BA:584:C:C5	3.03	0.46
35:BA:769:G:H4'	35:BA:1379:A:N1	2.30	0.46
35:BA:786:C:C2'	35:BA:787:U:H5'	2.44	0.46
35:BA:910:A:C6	48:BQ:13:GLN:HG3	2.50	0.46
35:BA:968:G:C6	35:BA:969:U:C4	3.03	0.46
35:BA:975(A):G:HO2'	35:BA:976:C:H5'	1.78	0.46
35:BA:976:C:H4'	35:BA:1156:A:N6	2.30	0.46
35:BA:1058:G:H21	43:BK:126:MET:CE	2.28	0.46
35:BA:1299:G:H5"	35:BA:1300:U:OP1	2.16	0.46
35:BA:1462:C:H4'	35:BA:2703:C:H5'	1.96	0.46
35:BA:1747(A):G:O2'	35:BA:1748:G:H5"	2.10	0.46
35:BA:2704:C:H2'	35:BA:2705:A:O4'	2.16	0.46
35:BA:2787:C:H1'	39:BE:61:ARG:HD3	1.96	0.46
36:BB:74:U:O2	57:BZ:34:ASN:ND2	2.45	0.46
37:BC:145:THR:HG22	37:BC:145:THR:O	2.15	0.46
37:BC:186:LEU:O	37:BC:189:ASN:HB2	2.16	0.46
39:BE:16:ARG:O	39:BE:18:ASP:N	2.49	0.46
40:BF:33:LEU:HD12	40:BF:33:LEU:N	2.31	0.46
41:BG:101:ILE:O	41:BG:104:GLU:HB3	2.16	0.46
42:BH:121:ILE:HD13	42:BH:144:VAL:HG21	1.96	0.46
47:BP:100:LEU:HD22	47:BP:100:LEU:N	2.31	0.46
49:BR:22:ARG:O	49:BR:26:LYS:HG3	2.16	0.46
51:BT:45:PHE:HE2	51:BT:74:ARG:HB2	1.80	0.46
52:BU:55:ARG:CB	52:BU:58:ARG:HD2	2.45	0.46
55:BX:70:LEU:HD23	55:BX:70:LEU:C	2.34	0.46
56:BY:88:LYS:NZ	56:BY:93:GLY:O	2.42	0.46
57:BZ:49:ARG:HA	57:BZ:49:ARG:HD3	1.65	0.46
1:AA:259:G:O2'	1:AA:260:G:H5'	2.16	0.46
1:AA:295:C:H2'	1:AA:296:U:C6	2.49	0.46
1:AA:318:G:H2'	1:AA:319:G:H8	1.79	0.46
1:AA:321:A:C2	1:AA:333:G:C2	3.04	0.46
1:AA:513:C:O2'	1:AA:514:C:H5'	2.15	0.46
1:AA:779:C:H2'	1:AA:780:A:O4'	2.15	0.46
1:AA:831:U:O2'	1:AA:832:C:H5'	2.15	0.46
1:AA:992:U:O2'	1:AA:993:G:P	2.73	0.46
1:AA:1053:G:C6	1:AA:1199:U:H2'	2.50	0.46
1:AA:1346:A:H1'	1:AA:1348:U:C5	2.51	0.46
3:AC:173:VAL:N	3:AC:174:PRO:HD3	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:17:THR:O	8:AH:78:GLN:NE2	2.48	0.46
13:AM:50:GLU:H	13:AM:50:GLU:HG2	1.60	0.46
16:AP:50:LYS:HG2	16:AP:51:VAL:N	2.31	0.46
20:AT:84:LEU:C	20:AT:86:ARG:N	2.69	0.46
22:AV:75:C:N3	35:BA:2421:G:O2'	2.48	0.46
24:AY:65:ILE:O	24:AY:66:THR:C	2.54	0.46
24:AY:230:LYS:NZ	24:AY:237:PRO:HA	2.31	0.46
24:AY:414:GLU:HA	24:AY:415:PRO:HD2	1.74	0.46
24:AY:439:ARG:H	24:AY:452:SER:HB3	1.80	0.46
24:AY:535:PRO:HG2	24:AY:572:TYR:CD2	2.50	0.46
29:B4:1:MET:CE	29:B4:1:MET:N	2.78	0.46
31:B6:41:PRO:O	31:B6:41:PRO:CG	2.63	0.46
31:B6:43:CYS:O	31:B6:44:ARG:CB	2.61	0.46
35:BA:57:C:H2'	35:BA:58:G:O4'	2.16	0.46
35:BA:234:C:H2'	35:BA:235:U:C6	2.50	0.46
35:BA:291:C:H2'	35:BA:292:C:C6	2.51	0.46
35:BA:893:C:H2'	35:BA:894:C:C6	2.50	0.46
35:BA:953:A:O2'	35:BA:954:G:H5'	2.15	0.46
35:BA:970:C:C5	35:BA:971:C:C5	3.04	0.46
35:BA:1040:C:H42	35:BA:1115:G:H1	1.63	0.46
35:BA:1377:G:O5'	35:BA:1377:G:H8	1.97	0.46
35:BA:1926:U:O2	35:BA:1928:A:C8	2.68	0.46
35:BA:2573:C:OP1	35:BA:2574:G:OP1	2.33	0.46
35:BA:2888:C:H2'	35:BA:2889:C:C6	2.49	0.46
38:BD:95:LEU:CD1	38:BD:103:ARG:O	2.57	0.46
39:BE:161:GLY:O	39:BE:162:ALA:C	2.54	0.46
40:BF:61:GLY:O	40:BF:62:ARG:C	2.53	0.46
40:BF:110:LEU:CD1	40:BF:202:PHE:CE1	2.99	0.46
40:BF:116:ASP:OD1	40:BF:119:ARG:NH2	2.45	0.46
40:BF:164:ARG:HG2	40:BF:164:ARG:HH11	1.80	0.46
41:BG:5:VAL:HG12	41:BG:104:GLU:OE2	2.15	0.46
41:BG:27:ASN:CB	41:BG:30:GLU:HB2	2.44	0.46
42:BH:17:VAL:O	42:BH:45:VAL:CG2	2.64	0.46
45:BN:91:LEU:HD23	45:BN:91:LEU:N	2.30	0.46
45:BN:104:LYS:HE3	45:BN:117:PHE:CZ	2.49	0.46
45:BN:119:ARG:HG3	45:BN:119:ARG:NH1	2.28	0.46
49:BR:10:LEU:HB3	49:BR:17:ARG:HD3	1.98	0.46
49:BR:83:ILE:O	49:BR:87:TYR:HE2	1.99	0.46
50:BS:40:ILE:HG22	50:BS:41:ASP:N	2.31	0.46
50:BS:89:ARG:CB	50:BS:92:TYR:HB3	2.46	0.46
51:BT:28:VAL:CG2	51:BT:46:GLU:HG3	2.43	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BT:93:ARG:HA	51:BT:93:ARG:HD2	1.67	0.46
53:BV:19:LYS:HE2	53:BV:19:LYS:HA	1.98	0.46
53:BV:64:HIS:ND1	53:BV:92:THR:CG2	2.76	0.46
54:BW:88:ARG:CB	54:BW:92:ARG:HB3	2.45	0.46
55:BX:89:ILE:HG22	55:BX:91:ALA:HB3	1.98	0.46
56:BY:43:ASN:HA	56:BY:64:GLU:HA	1.98	0.46
57:BZ:4:ARG:HH11	57:BZ:60:GLU:HG2	1.81	0.46
57:BZ:89:PHE:CE2	57:BZ:96:VAL:HG21	2.47	0.46
57:BZ:99:TYR:CE1	57:BZ:125:LEU:HB2	2.51	0.46
57:BZ:158:PRO:O	57:BZ:160:GLY:N	2.42	0.46
1:AA:340:U:C2	1:AA:350:G:C2	3.04	0.46
1:AA:423:G:H2'	1:AA:424:G:C5'	2.40	0.46
1:AA:589:C:O2'	1:AA:590:C:H5'	2.15	0.46
1:AA:675:A:H2'	1:AA:676:A:H8	1.80	0.46
1:AA:1256:A:C2	1:AA:1277:C:C4	3.03	0.46
1:AA:1308:U:O2'	1:AA:1309:G:H5'	2.16	0.46
1:AA:1422:G:C2	1:AA:1423:G:C5	3.03	0.46
2:AB:168:THR:O	2:AB:169:LYS:C	2.53	0.46
3:AC:108:ASN:C	3:AC:110:ASN:H	2.14	0.46
3:AC:156:ARG:HD3	3:AC:193:TYR:O	2.16	0.46
4:AD:13:ARG:HD2	4:AD:38:TYR:O	2.15	0.46
5:AE:135:THR:O	5:AE:138:ALA:HB3	2.15	0.46
11:AK:66:LEU:HD23	11:AK:66:LEU:HA	1.54	0.46
12:AL:51:ALA:O	12:AL:52:LEU:HD23	2.16	0.46
14:AN:25:VAL:HG23	14:AN:38:GLY:O	2.15	0.46
18:AR:21:LYS:O	18:AR:24:ALA:HB3	2.14	0.46
18:AR:68:LYS:O	18:AR:69:THR:C	2.53	0.46
19:AS:52:TYR:HB2	19:AS:57:HIS:CE1	2.51	0.46
22:AV:20:U:C3'	22:AV:21:A:C5'	2.93	0.46
24:AY:174:PHE:HD2	24:AY:267:LYS:HD3	1.79	0.46
24:AY:408:VAL:HG22	24:AY:454:MET:CA	2.44	0.46
28:B3:40:THR:HG23	28:B3:43:ILE:CG1	2.46	0.46
35:BA:76:C:C2'	35:BA:77:C:H5'	2.46	0.46
35:BA:307:G:N2	35:BA:309:G:H3'	2.30	0.46
35:BA:760:G:H2'	35:BA:761:A:H5'	1.97	0.46
35:BA:777:A:C2	35:BA:778:G:C5	3.03	0.46
35:BA:833:U:H2'	35:BA:834:C:C6	2.51	0.46
35:BA:1608:A:C6	35:BA:1611:C:C2	3.03	0.46
35:BA:1859:A:H3'	35:BA:1860:G:C8	2.51	0.46
35:BA:2463:C:C2'	35:BA:2464:C:H5'	2.44	0.46
35:BA:2659:G:N2	35:BA:2661:G:H3'	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BC:118:PRO:HB2	37:BC:148:PHE:CZ	2.51	0.46
38:BD:48:ARG:HG3	38:BD:48:ARG:NH1	2.30	0.46
39:BE:54:GLN:HE21	39:BE:54:GLN:HB3	1.29	0.46
39:BE:111:ARG:HA	49:BR:2:ARG:CB	2.27	0.46
40:BF:34:TRP:HB2	47:BP:11:GLY:H	1.81	0.46
40:BF:110:LEU:CD1	40:BF:202:PHE:HE1	2.29	0.46
42:BH:41:MET:HE2	42:BH:43:VAL:CA	2.46	0.46
43:BK:6:ALA:HB1	43:BK:8:VAL:HG23	1.97	0.46
45:BN:87:LEU:O	45:BN:90:MET:N	2.48	0.46
46:BO:77:ILE:HD11	51:BT:72:VAL:CG1	2.45	0.46
49:BR:100:LEU:HD22	49:BR:112:ALA:HA	1.98	0.46
53:BV:38:LEU:H	53:BV:51:VAL:HG13	1.79	0.46
54:BW:80:PRO:O	54:BW:100:THR:CG2	2.64	0.46
57:BZ:179:ASP:O	57:BZ:180:VAL:C	2.54	0.46
1:AA:177:C:C2	1:AA:178:C:C5	3.04	0.46
1:AA:949:A:C1’	1:AA:1364:U:H3	2.29	0.46
1:AA:1027:C:H2’	1:AA:1028:C:C5	2.51	0.46
1:AA:1090:U:H4’	1:AA:1170:A:C2	2.50	0.46
1:AA:1115:C:C4	1:AA:1116:C:C5	3.04	0.46
1:AA:1368:G:OP2	9:AI:112:LYS:HD3	2.16	0.46
1:AA:1423:G:P	46:BO:49:ARG:NH2	2.88	0.46
2:AB:34:ALA:HB1	2:AB:36:ARG:CD	2.46	0.46
2:AB:34:ALA:HB3	2:AB:36:ARG:HD2	1.97	0.46
2:AB:220:ASP:O	2:AB:222:ILE:N	2.48	0.46
5:AE:139:LEU:C	5:AE:141:GLN:N	2.69	0.46
6:AF:67:MET:CE	6:AF:75:LEU:HD22	2.45	0.46
13:AM:10:PRO:CG	13:AM:18:ALA:HB1	2.45	0.46
15:AO:34:LEU:C	15:AO:34:LEU:HD12	2.34	0.46
16:AP:45:THR:OG1	16:AP:46:PRO:HD2	2.15	0.46
17:AQ:47:PRO:HG2	17:AQ:48:GLU:H	1.81	0.46
19:AS:40:ILE:HD11	19:AS:74:PHE:CE2	2.51	0.46
20:AT:72:LEU:O	20:AT:73:HIS:CG	2.68	0.46
20:AT:73:HIS:O	20:AT:74:LYS:O	2.34	0.46
24:AY:9:LEU:C	24:AY:11:ARG:H	2.17	0.46
25:B0:26:TYR:O	25:B0:29:GLN:HB2	2.16	0.46
31:B6:34:LEU:HD23	31:B6:51:GLU:HB3	1.98	0.46
31:B6:47:THR:HG23	31:B6:48:VAL:N	2.29	0.46
35:BA:27:G:H1’	35:BA:513:A:H62	1.80	0.46
35:BA:558:G:H5’	45:BN:112:LEU:HD22	1.97	0.46
35:BA:811:U:C3’	35:BA:812:C:C5’	2.94	0.46
35:BA:1062:G:H22	35:BA:1077:A:H1’	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1394:U:H3'	35:BA:1394:U:H6	1.80	0.46
35:BA:1441:G:O2'	35:BA:1442:G:H5'	2.15	0.46
35:BA:1452:A:C3'	35:BA:1453:U:C5'	2.84	0.46
35:BA:2155:G:C2'	35:BA:2156:G:H5'	2.46	0.46
35:BA:2463:C:O2'	35:BA:2464:C:C5'	2.55	0.46
35:BA:2657:A:O2'	42:BH:160:LYS:CE	2.64	0.46
35:BA:2867:G:N7	51:BT:23:ARG:NH1	2.64	0.46
36:BB:15:A:C3'	36:BB:16:G:H5'	2.40	0.46
38:BD:148:GLU:HB2	38:BD:151:LYS:CD	2.46	0.46
39:BE:59:VAL:CG2	39:BE:63:LEU:HA	2.44	0.46
39:BE:145:LYS:O	39:BE:146:THR:C	2.53	0.46
42:BH:137:ASP:O	42:BH:138:LYS:HB2	2.15	0.46
43:BK:56:GLU:O	43:BK:67:PHE:HA	2.15	0.46
43:BK:121:GLU:O	43:BK:125:ARG:HG3	2.16	0.46
45:BN:128:HIS:HE2	45:BN:134:ARG:HD3	1.79	0.46
47:BP:92:GLU:OE2	47:BP:121:LYS:HE2	2.16	0.46
47:BP:146:VAL:CG1	47:BP:147:LEU:N	2.65	0.46
51:BT:121:ILE:O	51:BT:122:ASP:C	2.50	0.46
55:BX:39:ILE:O	55:BX:40:LYS:C	2.51	0.46
56:BY:13:VAL:HG23	56:BY:73:ARG:O	2.16	0.46
57:BZ:45:ASP:OD1	57:BZ:49:ARG:HG2	2.16	0.46
57:BZ:100:VAL:HG12	57:BZ:101:PRO:HD2	1.97	0.46
1:AA:109:A:C6	1:AA:326:G:C6	3.04	0.46
1:AA:283:C:H2'	1:AA:284:G:H8	1.81	0.46
1:AA:666:G:C2	1:AA:667:G:C8	3.04	0.46
1:AA:1003:G:O2'	1:AA:1004:A:O3'	2.33	0.46
1:AA:1215:G:H2'	1:AA:1216:G:H8	1.81	0.46
1:AA:1300:G:O2'	1:AA:1301:U:OP2	2.34	0.46
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.16	0.46
3:AC:183:ASP:OD2	3:AC:184:TYR:N	2.49	0.46
4:AD:15:GLU:O	4:AD:17:VAL:HG23	2.15	0.46
4:AD:31:CYS:O	4:AD:32:ALA:HB3	2.16	0.46
5:AE:12:LEU:CD1	5:AE:31:LEU:HB3	2.44	0.46
5:AE:33:VAL:CG1	5:AE:34:VAL:N	2.78	0.46
10:AJ:51:ARG:H	10:AJ:60:ARG:HA	1.81	0.46
12:AL:86:ARG:HG2	12:AL:86:ARG:O	2.15	0.46
13:AM:86:CYS:HA	19:AS:73:GLU:O	2.16	0.46
15:AO:25:THR:O	15:AO:26:GLU:C	2.54	0.46
18:AR:60:ALA:O	18:AR:61:LYS:C	2.54	0.46
20:AT:73:HIS:O	20:AT:76:ALA:HB3	2.16	0.46
22:AV:17:C:H5	22:AV:17(A):U:O4	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:17:ILE:HG21	24:AY:25:LYS:HA	1.98	0.46
24:AY:111:SER:O	24:AY:113:GLY:N	2.49	0.46
24:AY:119:GLU:HB2	24:AY:120:THR:H	1.52	0.46
24:AY:486:THR:HG23	24:AY:600:VAL:CG1	2.46	0.46
31:B6:16:CYS:O	31:B6:17:LYS:HB2	2.16	0.46
31:B6:38:LYS:HD3	35:BA:2344:U:OP1	2.16	0.46
31:B6:51:GLU:HG2	31:B6:52:VAL:N	2.31	0.46
35:BA:42:G:H5'	35:BA:43:A:OP2	2.16	0.46
35:BA:128:C:O2'	35:BA:129:C:O5'	2.34	0.46
35:BA:272(I):U:O4	35:BA:363(A):A:C6	2.65	0.46
35:BA:332:A:H4'	35:BA:333:G:OP1	2.16	0.46
35:BA:410:G:C2	35:BA:2407:G:N7	2.84	0.46
35:BA:425:G:H2'	35:BA:426:C:C6	2.49	0.46
35:BA:483:A:H3'	35:BA:484:C:H6	1.81	0.46
35:BA:610:G:N2	35:BA:619:G:H1'	2.30	0.46
35:BA:718:A:H2'	35:BA:719:C:O4'	2.16	0.46
35:BA:779:U:OP1	38:BD:49:ILE:HG23	2.16	0.46
35:BA:1053:C:H2'	35:BA:1054:A:O4'	2.16	0.46
35:BA:1168:G:H2'	35:BA:1169:G:H8	1.77	0.46
35:BA:1390:U:H3	35:BA:1395:A:H62	1.64	0.46
35:BA:1511:C:H2'	35:BA:1512:U:O4'	2.15	0.46
35:BA:1952:A:C2	46:BO:22:ILE:HG23	2.51	0.46
35:BA:2072:G:C2	35:BA:2438:U:O2	2.69	0.46
35:BA:2305:A:O2'	41:BG:136:ARG:NH1	2.49	0.46
36:BB:5:C:O2'	36:BB:6:C:H5'	2.16	0.46
36:BB:61:G:O2'	36:BB:62:C:H5'	2.15	0.46
36:BB:103:G:OP2	36:BB:103:G:H8	1.99	0.46
42:BH:94:TYR:N	42:BH:94:TYR:HD1	2.14	0.46
42:BH:94:TYR:C	42:BH:95:ARG:HG2	2.36	0.46
42:BH:94:TYR:CD2	42:BH:107:VAL:HG12	2.51	0.46
47:BP:23:PRO:O	47:BP:29:LYS:O	2.34	0.46
48:BQ:109:VAL:HG12	48:BQ:110:THR:O	2.16	0.46
50:BS:63:THR:O	50:BS:66:ALA:N	2.47	0.46
51:BT:48:ILE:O	51:BT:63:VAL:HA	2.15	0.46
51:BT:50:ILE:HG12	51:BT:102:ILE:HD11	1.96	0.46
52:BU:25:TRP:CD1	52:BU:25:TRP:C	2.89	0.46
52:BU:66:ASN:O	52:BU:68:ALA:N	2.49	0.46
52:BU:76:TYR:CD1	52:BU:76:TYR:C	2.89	0.46
54:BW:79:GLY:C	54:BW:100:THR:HG23	2.36	0.46
57:BZ:70:LEU:HG	57:BZ:91:LEU:HD11	1.98	0.46
1:AA:60:A:H5"	1:AA:331:G:N2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:505:G:C6	1:AA:535:A:C2	3.04	0.46
1:AA:520:A:N1	1:AA:536:C:H1'	2.31	0.46
1:AA:541:G:O2'	1:AA:542:G:H5'	2.16	0.46
1:AA:652:U:C2	1:AA:752:G:N2	2.84	0.46
2:AB:208:ILE:HA	2:AB:211:ILE:HD12	1.97	0.46
5:AE:56:GLN:O	5:AE:59:GLY:N	2.49	0.46
6:AF:62:TRP:O	6:AF:63:TYR:CD2	2.69	0.46
7:AG:50:ILE:HG21	7:AG:58:PRO:HA	1.97	0.46
12:AL:27:LEU:C	12:AL:29:GLY:H	2.19	0.46
15:AO:6:GLU:O	15:AO:9:GLN:N	2.48	0.46
24:AY:38:ARG:O	24:AY:39:ILE:C	2.54	0.46
24:AY:90:PHE:HB2	24:AY:454:MET:HE2	1.98	0.46
24:AY:122:TRP:O	24:AY:125:ALA:N	2.30	0.46
24:AY:351:ARG:O	24:AY:351:ARG:HG3	2.16	0.46
24:AY:439:ARG:O	24:AY:452:SER:HB3	2.16	0.46
27:B2:33:MET:O	27:B2:37:PHE:HD1	1.99	0.46
29:B4:13:ARG:HG2	29:B4:29:PRO:O	2.16	0.46
32:B7:30:VAL:HA	32:B7:33:ARG:NH1	2.31	0.46
34:B9:2:LYS:HE3	34:B9:2:LYS:HB3	1.41	0.46
35:BA:483:A:H2'	35:BA:483:A:N3	2.30	0.46
35:BA:532:A:N1	35:BA:2020:A:H1'	2.31	0.46
35:BA:558:G:OP1	45:BN:112:LEU:HB2	2.16	0.46
35:BA:747:U:C5	35:BA:2613:U:C5	3.04	0.46
35:BA:1208:C:O2	35:BA:1208:C:C2'	2.61	0.46
35:BA:1826:G:H2'	35:BA:1827:C:C6	2.51	0.46
35:BA:1887:C:H2'	35:BA:1888:G:H5"	1.98	0.46
35:BA:1890:A:O5'	35:BA:1890:A:H8	1.98	0.46
37:BC:60:ARG:HD2	37:BC:142:LYS:HB3	1.97	0.46
38:BD:10:THR:HG23	38:BD:13:ARG:HB3	1.98	0.46
38:BD:132:PRO:HA	38:BD:190:TYR:HA	1.98	0.46
46:BO:77:ILE:HD11	51:BT:72:VAL:HG11	1.97	0.46
47:BP:91:PHE:HZ	47:BP:100:LEU:HD11	1.81	0.46
48:BQ:29:PHE:N	48:BQ:29:PHE:CD1	2.83	0.46
48:BQ:56:ARG:NE	48:BQ:56:ARG:CA	2.79	0.46
50:BS:83:LYS:HE3	50:BS:84:GLN:HG2	1.98	0.46
50:BS:85:VAL:H	50:BS:106:ARG:HA	1.81	0.46
50:BS:89:ARG:CG	50:BS:92:TYR:HB3	2.43	0.46
54:BW:44:ALA:O	54:BW:45:TYR:C	2.54	0.46
57:BZ:111:VAL:O	57:BZ:112:ARG:CB	2.63	0.46
57:BZ:127:LYS:O	57:BZ:128:VAL:HB	2.15	0.46
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1055:A:N7	1:AA:1200:C:N4	2.62	0.46
1:AA:1074:G:C2'	1:AA:1075:C:H5'	2.46	0.46
3:AC:29:TYR:CD1	14:AN:36:PHE:HE1	2.34	0.46
3:AC:101:LEU:C	3:AC:101:LEU:CD2	2.83	0.46
8:AH:10:LEU:CD2	8:AH:83:ILE:HD11	2.45	0.46
8:AH:91:ARG:O	8:AH:91:ARG:HG2	2.16	0.46
15:AO:9:GLN:HB3	15:AO:13:GLN:HE22	1.80	0.46
15:AO:43:LEU:HD12	15:AO:56:LEU:HD22	1.98	0.46
15:AO:57:LEU:N	15:AO:57:LEU:HD23	2.31	0.46
17:AQ:12:SER:HB3	17:AQ:20:THR:CB	2.46	0.46
20:AT:63:ILE:HG22	20:AT:64:ASP:N	2.30	0.46
24:AY:207:ASP:C	24:AY:207:ASP:OD1	2.54	0.46
24:AY:286:ILE:N	24:AY:286:ILE:HD12	2.31	0.46
24:AY:470:PHE:O	24:AY:472:VAL:N	2.49	0.46
24:AY:553:GLY:HA2	24:AY:560:VAL:HG23	1.98	0.46
24:AY:605:ILE:HD12	24:AY:605:ILE:N	2.30	0.46
25:B0:78:TYR:N	25:B0:78:TYR:HD1	2.01	0.46
26:B1:64:ALA:HA	26:B1:67:ILE:CD1	2.46	0.46
29:B4:1:MET:N	36:BB:43:C:H4'	2.31	0.46
35:BA:347:A:H8	35:BA:347:A:O5'	1.99	0.46
35:BA:639:U:C4	35:BA:640:C:N4	2.84	0.46
35:BA:1020:A:O2'	35:BA:1021:A:P	2.74	0.46
35:BA:1080:C:H2'	35:BA:1081:U:O4'	2.15	0.46
35:BA:1185:C:H5'	35:BA:1186:G:P	2.56	0.46
35:BA:1237:A:O2'	35:BA:1238:G:O5'	2.34	0.46
35:BA:1301:A:H4'	35:BA:1302:A:OP1	2.16	0.46
35:BA:1685:C:H2'	35:BA:1686:C:C6	2.51	0.46
35:BA:1741:A:H2'	35:BA:1742:G:O4'	2.15	0.46
35:BA:1773:A:H2	35:BA:1977:A:N1	2.14	0.46
35:BA:1807:G:C2	35:BA:1811:G:C6	3.04	0.46
35:BA:1843:C:H6	35:BA:1843:C:O5'	1.99	0.46
35:BA:2076:U:H5	35:BA:2596:U:C2	2.33	0.46
35:BA:2116:G:N7	35:BA:2117:A:C6	2.83	0.46
35:BA:2401:U:H2'	35:BA:2402:C:H1'	1.98	0.46
35:BA:2679:A:H4'	39:BE:165:VAL:HG11	1.98	0.46
35:BA:2881:C:C2	35:BA:2882:A:C8	3.04	0.46
38:BD:5:LYS:HD2	38:BD:17:THR:HG22	1.98	0.46
38:BD:177:LEU:C	38:BD:179:SER:H	2.19	0.46
40:BF:143:ALA:O	40:BF:148:LEU:HB2	2.16	0.46
41:BG:99:MET:O	41:BG:102:PHE:HB3	2.15	0.46
41:BG:106:LEU:CA	41:BG:110:ALA:HB3	2.41	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BK:10:LEU:HD11	43:BK:27:LEU:HD11	1.98	0.46
43:BK:32:ALA:O	43:BK:34:ILE:N	2.49	0.46
45:BN:58:ASP:O	45:BN:59:LYS:HB2	2.16	0.46
47:BP:93:GLY:O	47:BP:123:LEU:HB2	2.15	0.46
47:BP:95:VAL:C	47:BP:96:THR:CG2	2.84	0.46
47:BP:99:LEU:O	47:BP:99:LEU:HD12	2.15	0.46
52:BU:92:ARG:NH1	53:BV:11:GLN:HG3	2.31	0.46
53:BV:34:GLU:O	53:BV:36:PRO:HD2	2.16	0.46
1:AA:50:A:N6	1:AA:361:G:C4'	2.78	0.45
1:AA:403:C:H2'	1:AA:404:U:C6	2.49	0.45
1:AA:445:G:H2'	1:AA:446:G:H8	1.81	0.45
1:AA:1100:C:C2'	1:AA:1101:A:H5"	2.44	0.45
1:AA:1403:C:O2	1:AA:1403:C:H2'	2.14	0.45
3:AC:59:ARG:HD3	3:AC:64:VAL:HG22	1.97	0.45
7:AG:64:GLN:HG3	7:AG:128:ALA:CB	2.43	0.45
9:AI:37:PHE:CZ	9:AI:74:ILE:HG12	2.52	0.45
12:AL:91:LYS:HE2	12:AL:91:LYS:HB2	1.60	0.45
15:AO:74:ASP:OD1	15:AO:76:GLU:CB	2.64	0.45
24:AY:141:LYS:CE	59:AY:702:GDP:N2	2.80	0.45
24:AY:147:TRP:O	24:AY:148:LEU:C	2.53	0.45
24:AY:625:ASN:C	24:AY:627:ARG:H	2.19	0.45
27:B2:69:ARG:HG2	27:B2:70:GLN:H	1.80	0.45
28:B3:16:PRO:HB2	28:B3:18:ASP:OD1	2.16	0.45
33:B8:8:LYS:HD3	33:B8:8:LYS:HA	1.73	0.45
33:B8:58:ILE:HG22	33:B8:58:ILE:O	2.16	0.45
35:BA:220:G:N1	35:BA:427:U:H2'	2.31	0.45
35:BA:291:C:H2'	35:BA:292:C:H6	1.80	0.45
35:BA:643:A:H2'	35:BA:644:A:O4'	2.16	0.45
35:BA:695:G:C5	35:BA:768:G:C6	3.04	0.45
35:BA:832:G:OP1	47:BP:40:SER:HB3	2.16	0.45
35:BA:967:C:C6	35:BA:967:C:C3'	2.99	0.45
35:BA:975:C:OP2	35:BA:975:C:H4'	2.15	0.45
35:BA:1351:C:O2'	35:BA:1571:A:H1'	2.16	0.45
35:BA:1847:A:C3'	35:BA:1848:A:H5'	2.40	0.45
35:BA:2167:U:O2'	35:BA:2168:G:H5'	2.15	0.45
35:BA:2177:C:H4'	37:BC:214:TYR:CD1	2.51	0.45
35:BA:2221:G:C2	35:BA:2222:G:C8	3.04	0.45
35:BA:2351:G:HO2'	35:BA:2352:A:H8	1.63	0.45
35:BA:2405:G:HO2'	35:BA:2406:U:P	2.39	0.45
37:BC:23:ILE:CB	37:BC:229:SER:OXT	2.61	0.45
37:BC:115:VAL:HG12	37:BC:145:THR:CG2	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:38:THR:HG22	39:BE:40:GLU:HB2	1.99	0.45
40:BF:135:LYS:HB2	40:BF:138:GLU:OE2	2.16	0.45
41:BG:103:LEU:O	41:BG:104:GLU:C	2.55	0.45
45:BN:18:ALA:CB	45:BN:21:LYS:HB2	2.46	0.45
46:BO:103:ALA:O	46:BO:106:LEU:HG	2.16	0.45
46:BO:113:LYS:O	46:BO:117:LEU:HD12	2.16	0.45
48:BQ:18:LYS:HE2	48:BQ:18:LYS:HA	1.98	0.45
51:BT:129:ARG:HD3	51:BT:129:ARG:HH11	1.58	0.45
52:BU:99:ALA:HB2	52:BU:106:PHE:CZ	2.51	0.45
54:BW:25:ARG:NH2	54:BW:74:ALA:O	2.49	0.45
55:BX:3:THR:O	55:BX:4:ALA:HB3	2.16	0.45
56:BY:52:SER:N	56:BY:53:PRO:CD	2.79	0.45
1:AA:151:A:H2'	1:AA:152:A:H5'	1.97	0.45
1:AA:966:G:C4	22:AV:34:C:H4'	2.51	0.45
1:AA:994:A:C2	1:AA:995:C:C6	3.05	0.45
1:AA:1158:C:H3'	1:AA:1158:C:O2	2.17	0.45
1:AA:1504:G:OP1	1:AA:1507:A:H4'	2.16	0.45
4:AD:96:LEU:O	4:AD:97:LEU:C	2.51	0.45
8:AH:85:ARG:NH1	8:AH:85:ARG:HG3	2.31	0.45
8:AH:85:ARG:HG3	8:AH:85:ARG:HH11	1.81	0.45
9:AI:111:ARG:O	9:AI:119:ALA:HB2	2.15	0.45
9:AI:114:TYR:H	9:AI:114:TYR:HD2	1.64	0.45
13:AM:34:LEU:HD13	13:AM:41:PRO:HG3	1.98	0.45
18:AR:40:LEU:O	18:AR:42:ARG:N	2.49	0.45
19:AS:7:LYS:HA	19:AS:7:LYS:HD3	1.41	0.45
20:AT:63:ILE:O	20:AT:64:ASP:C	2.51	0.45
22:AV:28:C:O2	22:AV:43:A:C2	2.69	0.45
24:AY:31:ARG:HD2	24:AY:263:ALA:O	2.16	0.45
24:AY:64:THR:O	24:AY:64:THR:CG2	2.64	0.45
24:AY:355:LEU:HD22	24:AY:355:LEU:N	2.30	0.45
24:AY:519:ARG:HH12	24:AY:678:GLU:HB2	1.71	0.45
24:AY:606:MET:SD	24:AY:673:PHE:HA	2.56	0.45
24:AY:632:LEU:HD11	24:AY:646:PHE:CD2	2.51	0.45
27:B2:52:ASP:O	27:B2:56:GLN:HG3	2.16	0.45
29:B4:13:ARG:HB3	29:B4:13:ARG:NH1	2.30	0.45
29:B4:14:ILE:HD13	29:B4:22:ILE:HB	1.98	0.45
35:BA:28:A:H2'	35:BA:28:A:N3	2.31	0.45
35:BA:582:G:C6	35:BA:1259:G:N1	2.84	0.45
35:BA:1412:A:O2'	35:BA:1413:G:H5'	2.15	0.45
35:BA:1528(A):A:H8	35:BA:1529:G:C8	2.35	0.45
35:BA:1689:A:N7	35:BA:1698:A:N1	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1814:G:C5’	38:BD:51:VAL:HG21	2.47	0.45
35:BA:2093:G:C6	35:BA:2225:A:C8	3.04	0.45
35:BA:2347:C:H2’	35:BA:2348:U:C5	2.50	0.45
35:BA:2711:A:OP2	35:BA:2712(A):A:OP2	2.35	0.45
35:BA:2716:U:O2’	35:BA:2717:G:H5’	2.16	0.45
35:BA:2850:A:OP2	35:BA:2866:U:C5	2.69	0.45
35:BA:2884:U:C2’	35:BA:2885:C:H5’	2.45	0.45
36:BB:94:C:O2’	36:BB:95:C:H5’	2.15	0.45
38:BD:67:PHE:CE2	38:BD:157:ARG:NH2	2.85	0.45
40:BF:7:TYR:HA	40:BF:125:LEU:HG	1.99	0.45
40:BF:34:TRP:CB	47:BP:10:PRO:HB2	2.43	0.45
40:BF:46:ARG:HG3	40:BF:46:ARG:NH1	2.31	0.45
40:BF:181:LEU:O	40:BF:205:ARG:NH1	2.50	0.45
43:BK:37:PHE:C	43:BK:39:LYS:N	2.68	0.45
45:BN:44:PRO:O	45:BN:112:LEU:HD21	2.16	0.45
45:BN:50:ASP:O	45:BN:52:VAL:HG23	2.16	0.45
45:BN:91:LEU:HA	45:BN:95:PRO:HB3	1.98	0.45
46:BO:90:GLN:HB2	46:BO:92:GLU:HG3	1.98	0.45
47:BP:7:ARG:CB	47:BP:8:PRO:CD	2.92	0.45
49:BR:83:ILE:O	49:BR:83:ILE:HG22	2.16	0.45
50:BS:46:VAL:HG12	50:BS:47:THR:H	1.81	0.45
51:BT:6:LEU:CD2	51:BT:7:ILE:N	2.79	0.45
54:BW:62:HIS:O	54:BW:64:MET:CG	2.62	0.45
55:BX:14:SER:H	55:BX:17:ALA:HB3	1.80	0.45
1:AA:152:A:N6	1:AA:170:U:C2	2.85	0.45
1:AA:335:C:O2’	1:AA:336:C:H5’	2.16	0.45
1:AA:460:G:H2’	1:AA:460:G:N3	2.31	0.45
1:AA:625:G:C4	1:AA:626:U:C5	3.03	0.45
1:AA:626:U:O2	1:AA:626:U:C2’	2.65	0.45
2:AB:52:GLU:O	2:AB:56:ARG:HG2	2.16	0.45
4:AD:78:LEU:O	4:AD:81:GLU:HB3	2.16	0.45
7:AG:62:PHE:HD1	7:AG:124:LEU:HD21	1.81	0.45
9:AI:28:VAL:O	9:AI:31:GLN:N	2.48	0.45
12:AL:36:VAL:HG12	12:AL:37:CYS:N	2.30	0.45
20:AT:26:ASN:N	20:AT:26:ASN:HD22	2.14	0.45
20:AT:87:LYS:HD2	20:AT:87:LYS:HA	1.84	0.45
22:AV:50:U:O2’	22:AV:51:C:H5’	2.16	0.45
24:AY:147:TRP:O	24:AY:149:VAL:N	2.49	0.45
26:B1:30:VAL:H	35:BA:2396:G:C4’	2.30	0.45
30:B5:44:THR:O	30:B5:51:TYR:HE2	1.99	0.45
35:BA:211:A:C3’	35:BA:212:G:H5”	2.44	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:655:A:H1'	35:BA:656:G:H1'	1.97	0.45
35:BA:1024:G:H1	35:BA:1140:C:H42	1.64	0.45
35:BA:1181:C:O2'	35:BA:1182:A:H5'	2.16	0.45
35:BA:1469:A:H2'	35:BA:1470:G:O4'	2.16	0.45
35:BA:1485:G:C8	35:BA:1485:G:H3'	2.51	0.45
35:BA:1815:A:H1'	35:BA:1817:G:C8	2.51	0.45
35:BA:1829:A:H2'	35:BA:1830:C:O4'	2.16	0.45
35:BA:2050:C:H2'	35:BA:2051:A:O4'	2.17	0.45
35:BA:2400:G:H8	35:BA:2400:G:OP2	1.99	0.45
35:BA:2794:C:H42	35:BA:2801(A):A:N6	2.14	0.45
38:BD:177:LEU:C	38:BD:179:SER:N	2.69	0.45
39:BE:114:ALA:HB3	39:BE:160:TYR:HB3	1.98	0.45
40:BF:64:ILE:HG12	40:BF:65:TRP:N	2.28	0.45
42:BH:50:VAL:CG1	42:BH:51:ARG:H	2.29	0.45
42:BH:103:LEU:CB	42:BH:123:PHE:CD2	2.99	0.45
43:BK:78:ILE:HD11	43:BK:136:VAL:HG11	1.97	0.45
47:BP:90:ARG:O	47:BP:121:LYS:NZ	2.49	0.45
50:BS:52:SER:O	50:BS:69:VAL:HG23	2.16	0.45
52:BU:33:ARG:C	52:BU:35:ALA:N	2.68	0.45
53:BV:62:LEU:N	53:BV:62:LEU:CD2	2.77	0.45
53:BV:88:ARG:O	53:BV:90:PRO:CD	2.61	0.45
53:BV:93:GLU:O	53:BV:94:LEU:HD23	2.16	0.45
56:BY:54:LYS:HZ3	56:BY:55:TYR:HE1	1.65	0.45
56:BY:61:ILE:HG12	56:BY:62:GLU:N	2.31	0.45
56:BY:89:PHE:HB3	56:BY:90:LEU:HD23	1.97	0.45
57:BZ:9:TYR:HB3	57:BZ:35:ARG:HH22	1.80	0.45
57:BZ:9:TYR:HE1	57:BZ:61:LEU:HD13	1.81	0.45
57:BZ:23:LYS:HD3	57:BZ:38:TYR:HE2	1.79	0.45
1:AA:368:U:P	24:AY:353:ALA:CB	3.04	0.45
1:AA:1084:G:OP1	1:AA:1086:U:C4	2.69	0.45
2:AB:51:LEU:HD21	2:AB:201:ILE:HG23	1.97	0.45
2:AB:77:ALA:O	2:AB:81:VAL:HG23	2.16	0.45
10:AJ:39:PRO:HG2	10:AJ:39:PRO:O	2.16	0.45
11:AK:79:SER:HA	11:AK:104:GLN:O	2.16	0.45
17:AQ:9:VAL:HG13	17:AQ:56:VAL:HG22	1.98	0.45
17:AQ:13:ASP:HA	17:AQ:19:VAL:HG12	1.97	0.45
19:AS:12:ASP:OD1	19:AS:35:SER:CB	2.64	0.45
23:AX:16:A:H2'	23:AX:17:U:C6	2.50	0.45
23:AX:16:A:O2'	23:AX:17:U:H5'	2.16	0.45
24:AY:18:ALA:HA	24:AY:85:PRO:HG2	1.97	0.45
24:AY:379:GLY:O	24:AY:380:LEU:O	2.34	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:529:ILE:HD11	24:AY:567:LEU:CD1	2.46	0.45
25:B0:27:GLU:CD	25:B0:27:GLU:N	2.60	0.45
26:B1:64:ALA:CA	26:B1:67:ILE:HG13	2.43	0.45
31:B6:17:LYS:HB2	31:B6:44:ARG:HH12	1.81	0.45
32:B7:24:THR:HG23	32:B7:27:GLY:CA	2.47	0.45
33:B8:59:LYS:HE3	33:B8:59:LYS:HB2	1.65	0.45
35:BA:430:G:H2'	35:BA:431:U:H5'	1.99	0.45
35:BA:882:G:H22	35:BA:894:C:N4	2.14	0.45
35:BA:967:C:C2'	35:BA:968:G:H5'	2.46	0.45
35:BA:1091:G:H1	35:BA:1100:C:H42	1.63	0.45
35:BA:1341:U:OP1	35:BA:1397:U:N3	2.49	0.45
35:BA:1565:C:C2	35:BA:1567:A:C8	3.04	0.45
35:BA:1599:C:H2'	35:BA:1600:C:C6	2.47	0.45
35:BA:1719:G:C5	35:BA:1720:U:C5	3.04	0.45
35:BA:1763:G:H2'	35:BA:1764:G:H5'	1.99	0.45
35:BA:2015:A:H2'	35:BA:2016:U:O4'	2.16	0.45
35:BA:2086:U:H2'	35:BA:2087:G:H8	1.80	0.45
35:BA:2105:C:C2'	35:BA:2106:G:H5'	2.45	0.45
35:BA:2208:A:H1'	35:BA:2219:G:C4	2.52	0.45
35:BA:2359:C:O5'	35:BA:2359:C:H6	2.00	0.45
35:BA:2369:A:H2'	35:BA:2370:G:H8	1.80	0.45
35:BA:2837:G:H2'	35:BA:2838:G:H8	1.79	0.45
38:BD:108:PRO:HB3	38:BD:143:HIS:CE1	2.51	0.45
38:BD:112:GLN:HB2	38:BD:115:GLN:HE21	1.81	0.45
39:BE:27:LEU:HD12	39:BE:181:LEU:HD13	1.97	0.45
40:BF:28:ILE:O	40:BF:30:PRO:HD3	2.16	0.45
41:BG:54:GLU:HA	41:BG:57:ALA:HB3	1.98	0.45
41:BG:98:ARG:H	41:BG:98:ARG:NH1	2.09	0.45
41:BG:173:LEU:HB3	41:BG:178:PHE:CG	2.52	0.45
43:BK:124:ALA:O	43:BK:127:ILE:HB	2.16	0.45
47:BP:16:ARG:HD3	47:BP:16:ARG:C	2.37	0.45
47:BP:107:LYS:O	47:BP:109:GLY:N	2.49	0.45
56:BY:48:ALA:CB	56:BY:55:TYR:CE2	2.99	0.45
1:AA:189(D):C:H2'	1:AA:189(E):U:O4'	2.16	0.45
1:AA:230:G:H2'	1:AA:231:G:O4'	2.16	0.45
1:AA:429:U:H1'	1:AA:430:A:H5"	1.99	0.45
1:AA:432:A:N7	1:AA:433:C:C4	2.84	0.45
1:AA:448:A:C4	1:AA:487:A:C2	3.05	0.45
1:AA:689:C:OP1	11:AK:46:GLY:HA3	2.15	0.45
1:AA:975:A:H5'	1:AA:975:A:C8	2.49	0.45
1:AA:1002:G:H3'	1:AA:1003:G:C8	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1298:C:O2	1:AA:1298:C:C2'	2.63	0.45
1:AA:1472:U:H2'	1:AA:1473:A:H8	1.81	0.45
4:AD:148:VAL:HG11	4:AD:158:ILE:HD12	1.98	0.45
5:AE:12:LEU:HD13	5:AE:12:LEU:O	2.16	0.45
5:AE:34:VAL:O	5:AE:34:VAL:CG1	2.64	0.45
6:AF:24:GLU:O	6:AF:27:GLN:HB2	2.17	0.45
8:AH:17:THR:CG2	8:AH:63:LEU:HD12	2.45	0.45
8:AH:100:ILE:HA	8:AH:101:PRO:HD3	1.58	0.45
9:AI:36:TYR:HD2	9:AI:37:PHE:CE2	2.35	0.45
9:AI:111:ARG:HG2	9:AI:112:LYS:N	2.29	0.45
12:AL:38:THR:HG23	12:AL:57:LYS:CB	2.47	0.45
12:AL:89:ARG:HB2	12:AL:89:ARG:NH1	2.32	0.45
14:AN:42:ILE:HD13	14:AN:42:ILE:HA	1.63	0.45
17:AQ:22:LEU:HD13	17:AQ:41:LYS:CG	2.46	0.45
18:AR:36:ASN:O	18:AR:36:ASN:OD1	2.34	0.45
21:AU:6:ARG:NH2	21:AU:15:ARG:NH2	2.64	0.45
21:AU:10:ARG:HA	21:AU:13:ILE:HD12	1.97	0.45
31:B6:29:ASN:CG	31:B6:30:THR:N	2.70	0.45
33:B8:30:ARG:HA	33:B8:30:ARG:NE	2.31	0.45
35:BA:7:G:O2'	35:BA:8:A:H5'	2.16	0.45
35:BA:63:U:OP1	35:BA:63:U:H4'	2.17	0.45
35:BA:90:U:H4'	35:BA:92:A:C8	2.50	0.45
35:BA:487:C:H1'	54:BW:53:SER:HA	1.98	0.45
35:BA:859:G:O3'	35:BA:860:U:O2	2.34	0.45
35:BA:1012:U:C4	45:BN:28:THR:HG21	2.50	0.45
35:BA:1248:G:C4	52:BU:3:ARG:HD2	2.52	0.45
35:BA:1415:U:H3	35:BA:1587:A:H61	1.63	0.45
35:BA:1433:U:H1'	35:BA:1561:G:N2	2.31	0.45
35:BA:1654:A:C2	39:BE:113:PHE:CD2	3.05	0.45
35:BA:1819:A:H1'	35:BA:1821:A:C5	2.52	0.45
35:BA:1819:A:OP1	38:BD:156:ALA:HA	2.17	0.45
35:BA:1826:G:H2'	35:BA:1827:C:H6	1.80	0.45
35:BA:1888:G:C5'	35:BA:1888:G:N3	2.80	0.45
35:BA:2321:G:N3	35:BA:2321:G:H2'	2.31	0.45
35:BA:2447:G:C5	35:BA:2501:C:N3	2.84	0.45
35:BA:2850:A:H5'	35:BA:2868:A:H2	1.81	0.45
36:BB:89:G:C6	36:BB:90:A:C2	3.04	0.45
38:BD:30:GLU:HB2	38:BD:35:LYS:NZ	2.31	0.45
39:BE:7:VAL:CG1	39:BE:27:LEU:HB3	2.46	0.45
41:BG:81:LYS:HB3	41:BG:82:LEU:H	1.51	0.45
42:BH:41:MET:SD	42:BH:53:GLU:O	2.74	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BN:45:ASN:ND2	45:BN:45:ASN:N	2.62	0.45
48:BQ:1:MET:HE3	48:BQ:44:ALA:HB3	1.98	0.45
48:BQ:12:GLN:NE2	48:BQ:72:LYS:HA	2.31	0.45
49:BR:60:LEU:O	49:BR:63:ARG:HB3	2.16	0.45
50:BS:26:LEU:O	50:BS:26:LEU:HD22	2.16	0.45
56:BY:60:PHE:CG	56:BY:60:PHE:O	2.68	0.45
56:BY:95:LYS:HB3	56:BY:100:ALA:HA	1.99	0.45
57:BZ:40:ASP:HB3	57:BZ:43:GLU:HG2	1.99	0.45
57:BZ:47:VAL:O	57:BZ:51:ALA:HB3	2.16	0.45
57:BZ:176:PRO:HA	57:BZ:177:PRO:HD3	1.85	0.45
1:AA:263:A:OP2	20:AT:79:ARG:NH1	2.49	0.45
1:AA:707:C:H2'	1:AA:708:C:H6	1.79	0.45
1:AA:892:A:C6	1:AA:893:C:C4	3.04	0.45
1:AA:999:C:H2'	1:AA:1000:U:C6	2.52	0.45
1:AA:1129:C:O2'	1:AA:1130:A:O5'	2.34	0.45
1:AA:1411:C:H2'	1:AA:1411:C:O2	2.17	0.45
2:AB:8:LYS:O	2:AB:9:GLU:C	2.54	0.45
3:AC:100:ALA:O	3:AC:101:LEU:C	2.53	0.45
4:AD:36:ARG:CG	4:AD:36:ARG:NH1	2.78	0.45
8:AH:124:ALA:HB1	8:AH:129:VAL:CG2	2.46	0.45
10:AJ:75:ILE:CG1	10:AJ:76:ASN:H	2.05	0.45
11:AK:34:ASP:HB3	11:AK:40:ILE:HD11	1.98	0.45
13:AM:106:ASN:O	13:AM:107:ALA:CB	2.55	0.45
19:AS:41:VAL:C	19:AS:43:GLU:H	2.19	0.45
24:AY:65:ILE:O	24:AY:67:ALA:N	2.50	0.45
24:AY:124:GLN:HE21	24:AY:124:GLN:HB2	1.41	0.45
24:AY:683:VAL:O	24:AY:683:VAL:HG12	2.17	0.45
26:B1:44:PRO:HG2	26:B1:46:LEU:HD11	1.98	0.45
26:B1:86:SER:O	26:B1:89:GLU:N	2.49	0.45
35:BA:343:C:O2'	35:BA:344:G:H5'	2.17	0.45
35:BA:372:G:O2'	35:BA:373:U:OP2	2.34	0.45
35:BA:661:C:H4'	47:BP:18:ARG:HG2	1.98	0.45
35:BA:710:G:H1	35:BA:721:C:N4	2.11	0.45
35:BA:970:C:C6	35:BA:971:C:H5	2.34	0.45
35:BA:1080:C:H4'	43:BK:125:ARG:CB	2.44	0.45
35:BA:1257:C:H2'	35:BA:1258:C:H6	1.81	0.45
35:BA:1385:G:H4'	35:BA:1386:C:OP1	2.16	0.45
35:BA:1999:C:O2'	35:BA:2000:G:H5'	2.16	0.45
35:BA:2154:G:H21	35:BA:2155:G:H1'	1.81	0.45
35:BA:2320:A:C2	35:BA:2333:A:N7	2.85	0.45
35:BA:2415:G:H2'	35:BA:2416:C:C6	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2745:C:H1'	42:BH:143:GLN:HG2	1.99	0.45
36:BB:40:U:O2'	36:BB:43:C:C5	2.69	0.45
38:BD:148:GLU:O	38:BD:151:LYS:HG3	2.16	0.45
39:BE:66:HIS:O	39:BE:66:HIS:CG	2.70	0.45
39:BE:119:ARG:HD2	39:BE:120:TRP:CE2	2.52	0.45
41:BG:38:VAL:HG22	41:BG:93:THR:HG23	1.97	0.45
41:BG:44:GLY:C	41:BG:46:ALA:N	2.69	0.45
41:BG:169:ALA:O	41:BG:170:ARG:C	2.54	0.45
47:BP:71:VAL:H	47:BP:72:PRO:CD	2.30	0.45
48:BQ:17:LEU:N	48:BQ:17:LEU:HD23	2.32	0.45
49:BR:11:ASN:O	49:BR:12:ARG:HB2	2.16	0.45
50:BS:89:ARG:HD2	50:BS:90:GLY:N	2.32	0.45
55:BX:61:GLY:HA3	55:BX:73:ARG:O	2.17	0.45
56:BY:28:LYS:HA	56:BY:39:VAL:H	1.81	0.45
1:AA:437:U:H2'	1:AA:438:G:O4'	2.17	0.45
1:AA:495:A:H4'	1:AA:496:A:OP1	2.15	0.45
1:AA:542:G:H5'	4:AD:41:GLY:HA3	1.98	0.45
1:AA:1209:C:O2'	1:AA:1210:C:H5'	2.17	0.45
1:AA:1305:G:H5"	21:AU:4:GLY:O	2.16	0.45
1:AA:1321:C:H5"	1:AA:1322:C:H5'	1.96	0.45
2:AB:11:LEU:HB3	2:AB:213:LEU:HD11	1.98	0.45
3:AC:173:VAL:O	3:AC:175:LEU:HD12	2.16	0.45
7:AG:16:LEU:HD13	9:AI:42:ARG:HA	1.99	0.45
9:AI:22:GLY:HA3	9:AI:60:ASP:OD1	2.16	0.45
9:AI:41:VAL:O	9:AI:41:VAL:CG1	2.57	0.45
9:AI:79:LEU:O	9:AI:80:GLY:C	2.53	0.45
10:AJ:4:ILE:CB	10:AJ:74:ILE:HD11	2.45	0.45
11:AK:58:PRO:HB3	11:AK:90:GLY:HA2	1.98	0.45
11:AK:95:ILE:O	11:AK:96:ARG:C	2.55	0.45
13:AM:76:ALA:O	13:AM:79:LYS:HB2	2.17	0.45
17:AQ:80:GLY:O	17:AQ:81:ARG:CD	2.62	0.45
19:AS:39:THR:CG2	19:AS:40:ILE:N	2.79	0.45
24:AY:97:SER:O	24:AY:100:VAL:CG1	2.63	0.45
24:AY:538:TYR:CE2	24:AY:577:SER:HB3	2.52	0.45
25:B0:7:LEU:HD22	48:BQ:81:VAL:HG23	1.98	0.45
27:B2:32:LEU:O	27:B2:35:LEU:HB3	2.17	0.45
27:B2:63:VAL:HA	27:B2:66:GLU:CG	2.41	0.45
31:B6:35:GLU:HB3	31:B6:51:GLU:HB2	1.97	0.45
33:B8:14:VAL:CG2	33:B8:22:VAL:HG13	2.47	0.45
35:BA:287:C:H2'	35:BA:288:C:C6	2.48	0.45
35:BA:363(C):G:O2'	35:BA:363(D):G:H5'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:436:C:H2'	35:BA:437:G:C8	2.51	0.45
35:BA:1002:G:H8	35:BA:1002:G:O5'	1.99	0.45
35:BA:1186:G:H8	35:BA:1186:G:O5'	1.98	0.45
35:BA:1271:G:N2	35:BA:1617:C:O4'	2.50	0.45
35:BA:1448:G:N3	35:BA:1528(A):A:C2	2.84	0.45
35:BA:1582:C:O2'	35:BA:1583:A:H5'	2.17	0.45
35:BA:1718:G:C8	35:BA:1718:G:C5'	2.97	0.45
35:BA:1815:A:C5	35:BA:1817:G:C6	3.05	0.45
35:BA:1859:A:H3'	35:BA:1860:G:H8	1.81	0.45
35:BA:1899:G:N2	35:BA:1902:C:C5	2.85	0.45
35:BA:2110:G:H4'	35:BA:2111:C:OP2	2.16	0.45
35:BA:2270:G:H2'	35:BA:2271:G:O4'	2.16	0.45
35:BA:2406:U:C2	47:BP:72:PRO:HB2	2.51	0.45
35:BA:2531:A:C5'	42:BH:157:TYR:CZ	3.00	0.45
35:BA:2656:U:H2'	35:BA:2657:A:H5"	1.99	0.45
35:BA:2728:U:H5'	46:BO:70:LYS:HE2	1.98	0.45
35:BA:2887:U:H2'	35:BA:2888:C:H6	1.81	0.45
38:BD:24:ILE:O	38:BD:25:THR:O	2.35	0.45
38:BD:142:VAL:HG22	38:BD:143:HIS:N	2.31	0.45
39:BE:37:ARG:HA	39:BE:42:ASP:OD2	2.16	0.45
40:BF:3:GLU:HG3	40:BF:3:GLU:O	2.16	0.45
41:BG:41:GLN:HB3	41:BG:43:LEU:HD22	1.95	0.45
41:BG:95:ARG:O	41:BG:96:ARG:O	2.35	0.45
41:BG:109:VAL:CG1	41:BG:142:PRO:HD3	2.46	0.45
41:BG:141:PHE:O	41:BG:144:ILE:HG22	2.16	0.45
42:BH:88:LEU:HD13	42:BH:130:ARG:HG2	1.97	0.45
42:BH:99:VAL:O	42:BH:99:VAL:HG12	2.16	0.45
44:BL:106:LEU:O	44:BL:109:ALA:HB3	2.17	0.45
45:BN:28:THR:CG2	45:BN:29:LYS:N	2.80	0.45
45:BN:35:ARG:HB3	45:BN:42:TRP:CH2	2.51	0.45
48:BQ:18:LYS:HA	48:BQ:18:LYS:CE	2.47	0.45
48:BQ:139:GLU:OE1	48:BQ:141:GLN:HG3	2.17	0.45
49:BR:56:LYS:HE2	49:BR:88:ARG:H	1.82	0.45
51:BT:118:ARG:O	51:BT:122:ASP:N	2.47	0.45
53:BV:46:VAL:HG13	53:BV:47:VAL:N	2.31	0.45
56:BY:88:LYS:O	56:BY:90:LEU:CD2	2.65	0.45
57:BZ:9:TYR:OH	57:BZ:63:ASP:OD2	2.25	0.45
1:AA:48:C:H2'	1:AA:365:U:O4	2.17	0.45
1:AA:251:G:H4'	1:AA:252:U:O5'	2.16	0.45
1:AA:373:A:H2'	1:AA:374:A:H8	1.82	0.45
1:AA:383:A:H2'	1:AA:384:G:H5'	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:719:C:O2	18:AR:50:ILE:HG12	2.17	0.45
1:AA:765:G:H22	1:AA:812:C:HO2'	1.64	0.45
1:AA:948:C:H2'	1:AA:949:A:H8	1.81	0.45
1:AA:1007:C:H2'	1:AA:1008:C:C6	2.51	0.45
1:AA:1371:G:C5	1:AA:1372:U:C5	3.05	0.45
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.52	0.45
1:AA:1438:G:C4	1:AA:1464:G:N2	2.85	0.45
1:AA:1458:G:C6	1:AA:1459:C:C4	3.05	0.45
1:AA:1478:C:HO2'	1:AA:1479:C:H5'	1.80	0.45
2:AB:97:TRP:CZ2	2:AB:102:LEU:HD13	2.49	0.45
2:AB:223:ILE:O	2:AB:226:ARG:N	2.50	0.45
3:AC:207:VAL:O	3:AC:207:VAL:CG1	2.46	0.45
7:AG:78:ARG:HE	7:AG:156:TRP:HB3	1.82	0.45
8:AH:56:LYS:HA	8:AH:57:PRO:HD2	1.77	0.45
8:AH:63:LEU:HD22	8:AH:63:LEU:N	2.32	0.45
10:AJ:3:LYS:NZ	10:AJ:77:PRO:HD2	2.31	0.45
13:AM:91:ARG:HH21	19:AS:81:ARG:NH2	2.15	0.45
16:AP:13:HIS:C	16:AP:15:PRO:HD3	2.37	0.45
16:AP:18:ARG:HD2	16:AP:32:TYR:HE1	1.82	0.45
19:AS:48:THR:HG22	19:AS:61:TYR:CD1	2.52	0.45
19:AS:79:THR:HG22	19:AS:80:TYR:N	2.31	0.45
24:AY:388:THR:HG21	24:AY:399:LEU:N	2.28	0.45
24:AY:510:VAL:HG22	24:AY:534:ILE:HD11	1.97	0.45
31:B6:15:GLU:OE1	31:B6:44:ARG:CZ	2.65	0.45
35:BA:112:U:C2'	35:BA:113:G:H5'	2.46	0.45
35:BA:216:A:H2'	35:BA:217:G:H8	1.81	0.45
35:BA:285:C:H2'	35:BA:286:C:C5'	2.46	0.45
35:BA:285:C:C2'	35:BA:286:C:C5'	2.95	0.45
35:BA:321:G:N2	35:BA:341:G:H5"	2.31	0.45
35:BA:577:G:C6	35:BA:578:A:C6	3.05	0.45
35:BA:654(G):C:H2'	35:BA:654(H):G:C8	2.40	0.45
35:BA:812:C:H1'	35:BA:1250:G:C2	2.52	0.45
35:BA:883:G:H1	35:BA:893:C:H42	1.64	0.45
35:BA:1465:G:H2'	35:BA:1466:G:C8	2.49	0.45
35:BA:1839:G:C5	35:BA:1840:G:N7	2.85	0.45
35:BA:2314:C:O5'	35:BA:2314:C:H6	2.00	0.45
35:BA:2333:A:O4'	35:BA:2335:A:C5	2.70	0.45
38:BD:23:GLU:O	38:BD:24:ILE:C	2.55	0.45
38:BD:147:LEU:HD11	38:BD:183:ARG:HH12	1.82	0.45
38:BD:166:GLN:HB3	38:BD:174:ILE:HG22	1.99	0.45
38:BD:183:ARG:HG2	38:BD:183:ARG:HH11	1.79	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:245:PRO:O	38:BD:245:PRO:HG2	2.17	0.45
40:BF:103:LYS:C	40:BF:105:VAL:H	2.19	0.45
42:BH:72:ILE:O	42:BH:73:ALA:C	2.54	0.45
45:BN:120:LEU:CD1	45:BN:122:VAL:HG23	2.46	0.45
47:BP:61:ARG:H	47:BP:61:ARG:HD2	1.82	0.45
47:BP:85:LEU:HA	47:BP:88:LEU:HB3	1.99	0.45
48:BQ:90:VAL:HG12	48:BQ:91:GLU:N	2.32	0.45
49:BR:94:TYR:CD1	49:BR:94:TYR:N	2.85	0.45
51:BT:102:ILE:O	51:BT:103:ARG:O	2.35	0.45
52:BU:66:ASN:ND2	52:BU:76:TYR:HB2	2.31	0.45
53:BV:34:GLU:O	53:BV:36:PRO:CD	2.65	0.45
53:BV:45:THR:O	53:BV:46:VAL:CG1	2.50	0.45
56:BY:13:VAL:CG2	56:BY:73:ARG:C	2.86	0.45
57:BZ:115:GLY:C	57:BZ:116:VAL:HG23	2.37	0.45
57:BZ:145:GLU:O	57:BZ:146:ILE:C	2.55	0.45
1:AA:323:U:H5'	20:AT:23:ARG:HB2	1.99	0.45
1:AA:965:A:C2	1:AA:969:A:N1	2.85	0.45
1:AA:993:G:H22	1:AA:996:A:H61	1.63	0.45
1:AA:1124:G:C5'	10:AJ:35:SER:HB2	2.46	0.45
1:AA:1303:C:N4	1:AA:1304:G:C6	2.85	0.45
5:AE:79:GLU:HB3	5:AE:92:LYS:HA	1.99	0.45
7:AG:79:ARG:O	7:AG:80:VAL:CG1	2.65	0.45
9:AI:43:ALA:O	9:AI:45:ALA:N	2.50	0.45
9:AI:117:HIS:O	9:AI:118:LYS:HG3	2.17	0.45
10:AJ:30:SER:HA	10:AJ:80:LYS:NZ	2.32	0.45
14:AN:43:CYS:HA	14:AN:46:GLU:HG3	1.99	0.45
20:AT:96:GLY:O	20:AT:97:ALA:O	2.35	0.45
20:AT:100:ILE:HD12	20:AT:100:ILE:HA	1.77	0.45
22:AV:35:A:C2	23:AX:18:G:C2	3.05	0.45
24:AY:20:HIS:ND1	24:AY:21:ILE:CD1	2.80	0.45
24:AY:289:ILE:O	24:AY:301:ILE:N	2.50	0.45
24:AY:411:VAL:HG13	24:AY:477:GLY:O	2.17	0.45
24:AY:450:ILE:CG2	24:AY:451:ILE:N	2.79	0.45
24:AY:548:GLU:O	24:AY:551:GLN:HG2	2.16	0.45
25:B0:44:ARG:HG2	25:B0:44:ARG:HH11	1.81	0.45
28:B3:31:LEU:O	28:B3:32:GLN:CB	2.65	0.45
29:B4:9:LEU:HD12	29:B4:10:VAL:H	1.81	0.45
30:B5:45:VAL:HG21	49:BR:98:LEU:HB3	1.99	0.45
33:B8:48:PHE:HB3	33:B8:49:VAL:H	1.51	0.45
33:B8:60:LEU:C	33:B8:63:PRO:HD2	2.37	0.45
34:B9:32:HIS:O	34:B9:34:GLN:HG3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:110:G:H2'	35:BA:111:A:H8	1.82	0.45
35:BA:139:G:H1	35:BA:142(A):C:N4	2.15	0.45
35:BA:199:A:N6	35:BA:2433:A:H2'	2.32	0.45
35:BA:628:G:N2	35:BA:636:G:H1'	2.31	0.45
35:BA:744:G:C4	35:BA:745:G:C8	3.04	0.45
35:BA:1405:U:H2'	35:BA:1406:U:C6	2.52	0.45
35:BA:1472:A:H2'	35:BA:1473:G:H8	1.82	0.45
35:BA:2134:A:H1'	35:BA:2159:G:H21	1.82	0.45
35:BA:2206:G:H3'	35:BA:2207:G:C5'	2.47	0.45
35:BA:2772:C:H2'	35:BA:2773:C:C6	2.52	0.45
35:BA:2839:G:H2'	35:BA:2840:C:H6	1.80	0.45
37:BC:16:ASP:HA	37:BC:17:PRO:HD2	1.79	0.45
37:BC:176:VAL:HG21	37:BC:190:ILE:HD13	1.92	0.45
38:BD:61:LEU:HD13	38:BD:62:TYR:H	1.80	0.45
38:BD:127:VAL:CA	38:BD:193:VAL:HG13	2.47	0.45
39:BE:6:GLY:HA2	39:BE:27:LEU:O	2.17	0.45
39:BE:176:ILE:HG22	39:BE:178:GLU:HB3	1.97	0.45
40:BF:107:LYS:HD2	40:BF:205:ARG:O	2.17	0.45
41:BG:39:ILE:CG1	41:BG:92:VAL:HG22	2.47	0.45
41:BG:52:ILE:O	41:BG:54:GLU:HG3	2.16	0.45
41:BG:62:LEU:N	41:BG:62:LEU:CD1	2.79	0.45
42:BH:136:ILE:N	42:BH:136:ILE:CD1	2.80	0.45
43:BK:12:LEU:HA	43:BK:13:PRO:HD3	1.75	0.45
45:BN:67:LEU:C	45:BN:69:GLN:H	2.20	0.45
45:BN:90:MET:CE	45:BN:97:ARG:HD2	2.46	0.45
49:BR:55:ALA:HB2	49:BR:79:LEU:HD11	1.98	0.45
50:BS:36:TYR:N	50:BS:36:TYR:HD1	2.15	0.45
56:BY:47:LYS:O	56:BY:48:ALA:C	2.55	0.45
56:BY:91:GLU:HB2	56:BY:92:ASN:H	1.60	0.45
57:BZ:9:TYR:CE2	57:BZ:35:ARG:NH1	2.83	0.45
1:AA:60:A:C5'	1:AA:331:G:N2	2.80	0.45
1:AA:542:G:O2'	1:AA:543:C:H5'	2.16	0.45
1:AA:892:A:C6	1:AA:893:C:N4	2.85	0.45
1:AA:1004:A:C6	1:AA:1034:G:H2'	2.52	0.45
1:AA:1030(C):G:H2'	1:AA:1030(D):A:H8	1.80	0.45
1:AA:1458:G:C5	1:AA:1459:C:C5	3.04	0.45
2:AB:62:ALA:C	2:AB:64:ARG:N	2.67	0.45
3:AC:40:ARG:HG2	3:AC:55:VAL:CG1	2.47	0.45
4:AD:37:PRO:O	4:AD:38:TYR:HB3	2.17	0.45
4:AD:78:LEU:HD21	4:AD:96:LEU:CB	2.47	0.45
6:AF:99:ALA:O	6:AF:100:ASN:HB2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:50:ARG:HG2	8:AH:50:ARG:HH11	1.81	0.45
9:AI:118:LYS:O	9:AI:119:ALA:HB3	2.17	0.45
15:AO:86:GLY:C	15:AO:87:ILE:HG23	2.37	0.45
17:AQ:45:HIS:HB2	17:AQ:65:ILE:CD1	2.46	0.45
24:AY:106:VAL:HG21	24:AY:132:ARG:HG3	1.99	0.45
24:AY:166:LEU:HD21	24:AY:212:TYR:CD2	2.52	0.45
24:AY:168:ILE:HD11	24:AY:178:ILE:HD11	1.99	0.45
24:AY:610:VAL:HG23	24:AY:610:VAL:O	2.17	0.45
24:AY:637:ARG:NH1	24:AY:637:ARG:CG	2.65	0.45
25:B0:59:LEU:HD23	25:B0:59:LEU:HA	1.68	0.45
26:B1:56:GLN:HE21	26:B1:56:GLN:CA	2.25	0.45
31:B6:16:CYS:O	31:B6:17:LYS:C	2.55	0.45
32:B7:5:TRP:CH2	35:BA:686:G:N7	2.85	0.45
33:B8:50:LEU:CG	33:B8:51:ALA:H	2.30	0.45
35:BA:18:C:O2	35:BA:554:U:H5"	2.16	0.45
35:BA:24:G:N2	35:BA:517:C:C2	2.84	0.45
35:BA:154(A):C:N4	35:BA:171:G:H1	2.15	0.45
35:BA:275:G:H2'	35:BA:276:A:C2	2.52	0.45
35:BA:607:U:P	40:BF:103:LYS:HG3	2.57	0.45
35:BA:665:C:H2'	35:BA:666:G:C8	2.51	0.45
35:BA:687:C:H2'	35:BA:688:U:O4'	2.17	0.45
35:BA:778:G:C6	35:BA:779:U:C4	3.05	0.45
35:BA:884:C:H41	35:BA:886:C:N4	2.12	0.45
35:BA:1140:C:O2'	35:BA:1143:A:H2'	2.17	0.45
35:BA:1202:C:H2'	35:BA:1203:G:H5'	1.98	0.45
35:BA:1335:U:H2'	35:BA:1336:A:H8	1.82	0.45
35:BA:1529:G:C6	35:BA:1541:G:N1	2.85	0.45
35:BA:1603:A:H2'	35:BA:1604:C:C6	2.51	0.45
35:BA:2007:C:C6	35:BA:2007:C:H5"	2.52	0.45
35:BA:2412:A:N6	35:BA:2413:G:C2	2.84	0.45
35:BA:2813:A:C6	35:BA:2814:C:C4	3.05	0.45
36:BB:30:C:OP2	50:BS:32:LEU:HD11	2.17	0.45
39:BE:30:PRO:HD3	39:BE:180:ASN:ND2	2.32	0.45
39:BE:55:ASN:HD22	39:BE:55:ASN:HA	1.61	0.45
41:BG:76:SER:HB3	41:BG:83:ARG:CB	2.43	0.45
41:BG:100:TRP:O	41:BG:104:GLU:HB2	2.17	0.45
46:BO:2:ILE:HG22	46:BO:3:GLN:N	2.31	0.45
46:BO:77:ILE:HG13	46:BO:78:ARG:N	2.32	0.45
47:BP:24:GLY:N	47:BP:33:ARG:CZ	2.80	0.45
48:BQ:55:VAL:HG13	48:BQ:56:ARG:N	2.32	0.45
49:BR:9:LYS:HG2	49:BR:43:GLU:OE1	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BR:56:LYS:HE2	49:BR:88:ARG:N	2.32	0.45
54:BW:61:ASN:HD22	54:BW:61:ASN:HA	1.49	0.45
1:AA:182:U:O2	1:AA:182:U:H2'	2.16	0.44
1:AA:190:U:C2'	1:AA:191:G:H5'	2.47	0.44
1:AA:398:C:O5'	1:AA:398:C:H6	2.00	0.44
1:AA:738:C:H2'	1:AA:739:C:C6	2.49	0.44
1:AA:1303:C:OP1	1:AA:1304:G:OP2	2.35	0.44
4:AD:18:LYS:C	4:AD:19:LEU:HD12	2.37	0.44
6:AF:21:LEU:O	6:AF:24:GLU:N	2.48	0.44
7:AG:136:LYS:HB3	7:AG:136:LYS:HE3	1.82	0.44
10:AJ:43:ARG:HA	10:AJ:43:ARG:HD2	1.84	0.44
13:AM:96:LEU:C	13:AM:110:ARG:HE	2.20	0.44
17:AQ:45:HIS:O	17:AQ:73:VAL:HG23	2.17	0.44
17:AQ:45:HIS:CG	17:AQ:65:ILE:HD13	2.52	0.44
21:AU:6:ARG:HE	21:AU:15:ARG:CZ	2.30	0.44
22:AV:59:A:H2'	22:AV:60:U:H5'	1.98	0.44
24:AY:138:LYS:C	24:AY:140:ASP:H	2.20	0.44
24:AY:226:ASN:O	24:AY:230:LYS:HE3	2.18	0.44
24:AY:341:VAL:HG13	24:AY:352:VAL:CG1	2.47	0.44
26:B1:19:GLN:HB2	26:B1:35:THR:HG22	1.98	0.44
26:B1:73:LEU:CD2	26:B1:94:LEU:HD23	2.46	0.44
34:B9:27:CYS:SG	34:B9:29:ASN:ND2	2.90	0.44
35:BA:71:A:H5"	35:BA:72:U:O5'	2.17	0.44
35:BA:117:G:C6	35:BA:119:A:C6	3.05	0.44
35:BA:234:C:H2'	35:BA:235:U:H6	1.82	0.44
35:BA:706:A:H2'	35:BA:707:G:O4'	2.17	0.44
35:BA:947:G:N3	35:BA:984:A:C2	2.83	0.44
35:BA:1009:A:H1'	52:BU:59:ARG:NH1	2.33	0.44
35:BA:1053:C:H2'	35:BA:1054:A:C5'	2.45	0.44
35:BA:1314:C:H6	35:BA:1314:C:C5'	2.21	0.44
35:BA:1777:U:O2	35:BA:1777:U:H2'	2.17	0.44
35:BA:2240:C:C2'	35:BA:2241:A:H5'	2.47	0.44
35:BA:2287:A:N6	35:BA:2344:U:C2	2.86	0.44
38:BD:241:PRO:C	38:BD:242:ARG:HG3	2.37	0.44
42:BH:18:GLU:HG3	42:BH:25:LYS:HB2	1.99	0.44
45:BN:82:LEU:HD23	45:BN:82:LEU:C	2.38	0.44
45:BN:121:LYS:HD2	45:BN:121:LYS:HA	1.81	0.44
46:BO:17:ARG:NH2	46:BO:47:ILE:HD11	2.32	0.44
48:BQ:135:ASP:CG	57:BZ:49:ARG:NH1	2.70	0.44
49:BR:55:ALA:CB	49:BR:79:LEU:CD1	2.96	0.44
49:BR:116:LEU:O	49:BR:117:VAL:HB	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BS:31:SER:O	50:BS:32:LEU:C	2.51	0.44
51:BT:45:PHE:CE2	51:BT:63:VAL:HB	2.53	0.44
51:BT:55:ASN:HD22	51:BT:58:ASN:ND2	2.14	0.44
52:BU:26:GLY:O	52:BU:28:ARG:N	2.50	0.44
52:BU:61:TRP:CB	52:BU:93:LYS:HB3	2.47	0.44
52:BU:97:ASP:C	52:BU:99:ALA:H	2.20	0.44
1:AA:22:G:H2'	1:AA:23:C:C6	2.52	0.44
1:AA:193:C:N3	1:AA:194:C:N4	2.65	0.44
1:AA:229:U:O2'	1:AA:230:G:H5'	2.17	0.44
1:AA:786:G:C2	1:AA:797:C:O2	2.71	0.44
1:AA:1202:G:H2'	1:AA:1203:C:O4'	2.17	0.44
1:AA:1217:C:H5'	1:AA:1218:C:OP2	2.16	0.44
3:AC:43:LEU:C	3:AC:45:LYS:H	2.20	0.44
4:AD:18:LYS:O	4:AD:19:LEU:HD12	2.17	0.44
5:AE:51:VAL:O	5:AE:52:PRO:C	2.53	0.44
7:AG:52:GLU:O	7:AG:53:LYS:C	2.53	0.44
9:AI:27:THR:HG22	9:AI:31:GLN:H	1.82	0.44
9:AI:77:ILE:O	9:AI:78:LYS:C	2.55	0.44
13:AM:4:ILE:HG22	13:AM:5:ALA:H	1.82	0.44
13:AM:14:ARG:HE	13:AM:14:ARG:HB3	1.65	0.44
13:AM:113:PRO:O	13:AM:114:ARG:C	2.56	0.44
15:AO:62:GLN:O	15:AO:62:GLN:HG3	2.17	0.44
15:AO:65:ARG:HD2	15:AO:65:ARG:N	2.32	0.44
16:AP:50:LYS:O	16:AP:51:VAL:HG23	2.18	0.44
17:AQ:44:ALA:HA	17:AQ:71:PHE:O	2.17	0.44
20:AT:33:ILE:O	20:AT:37:SER:OG	2.33	0.44
24:AY:635:GLU:HA	24:AY:636:PRO:HD2	1.81	0.44
28:B3:15:TYR:HA	28:B3:16:PRO:HD3	1.73	0.44
33:B8:50:LEU:CG	33:B8:51:ALA:N	2.81	0.44
35:BA:80:G:O2'	35:BA:294:A:N1	2.50	0.44
35:BA:90:U:O2	35:BA:90:U:H3'	2.17	0.44
35:BA:247:G:C8	35:BA:249:C:C6	3.05	0.44
35:BA:327:G:N2	35:BA:328:U:H1'	2.32	0.44
35:BA:415:A:H8	35:BA:415:A:O5'	2.00	0.44
35:BA:605:C:C2	35:BA:606:U:C6	3.05	0.44
35:BA:939:G:H2'	35:BA:939:G:N3	2.31	0.44
35:BA:993:G:C5	35:BA:994:C:H5	2.35	0.44
35:BA:1204:A:N1	35:BA:1241:A:H2	2.15	0.44
35:BA:1306:C:H2'	35:BA:1307:A:C8	2.51	0.44
35:BA:1465:G:C2	35:BA:1466:G:C4	3.05	0.44
35:BA:1465:G:C4	35:BA:1466:G:C8	3.04	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1582:C:O5'	35:BA:1582:C:H6	2.00	0.44
35:BA:1712:C:H2'	35:BA:1713:U:O4'	2.17	0.44
35:BA:2617:C:C2'	35:BA:2618:G:H5'	2.47	0.44
35:BA:2880:C:O5'	35:BA:2880:C:H6	2.00	0.44
35:BA:2895:U:C3'	35:BA:2895:U:C6	3.00	0.44
38:BD:14:ARG:HG3	38:BD:15:PHE:H	1.81	0.44
38:BD:155:LEU:CD1	38:BD:155:LEU:N	2.80	0.44
40:BF:117:ARG:HH22	47:BP:5:ASP:N	2.14	0.44
40:BF:148:LEU:CD2	40:BF:191:ARG:NH1	2.74	0.44
40:BF:185:ASP:HA	40:BF:188:ARG:HD3	2.00	0.44
43:BK:30:HIS:ND1	43:BK:59:ILE:HB	2.32	0.44
45:BN:97:ARG:O	45:BN:101:HIS:HB2	2.16	0.44
48:BQ:1:MET:CE	48:BQ:44:ALA:HB3	2.46	0.44
52:BU:39:LEU:O	52:BU:42:ALA:N	2.51	0.44
53:BV:22:VAL:HG21	53:BV:94:LEU:HD12	1.99	0.44
53:BV:38:LEU:H	53:BV:51:VAL:CG1	2.30	0.44
1:AA:192:U:C1'	20:AT:103:GLY:HA2	2.47	0.44
1:AA:441:A:H2'	1:AA:442:C:H5'	2.00	0.44
1:AA:460:G:O6	1:AA:470:C:H4'	2.18	0.44
1:AA:691:G:H2'	1:AA:692:U:C6	2.52	0.44
1:AA:812:C:O2'	1:AA:813:U:P	2.74	0.44
1:AA:945:G:N3	1:AA:946:A:C8	2.86	0.44
1:AA:1123:A:H61	1:AA:1149:C:N4	2.15	0.44
1:AA:1162:C:C2	1:AA:1175:G:N2	2.85	0.44
1:AA:1275:A:C2'	1:AA:1276:G:H5'	2.46	0.44
1:AA:1430:C:C2	1:AA:1471:G:C2	3.06	0.44
1:AA:1442:G:H2'	51:BT:118:ARG:HH12	1.81	0.44
5:AE:15:ARG:HG3	5:AE:28:PHE:CZ	2.53	0.44
5:AE:144:THR:N	5:AE:147:ASP:OD2	2.39	0.44
8:AH:12:ARG:HH11	8:AH:26:VAL:HA	1.81	0.44
9:AI:40:LEU:C	9:AI:42:ARG:H	2.21	0.44
13:AM:10:PRO:HG3	13:AM:18:ALA:HB1	2.00	0.44
13:AM:11:ARG:HG2	13:AM:12:ASN:N	2.31	0.44
13:AM:120:LYS:N	13:AM:121:LYS:HZ2	2.15	0.44
14:AN:31:ARG:O	14:AN:32:SER:CB	2.60	0.44
19:AS:45:VAL:HA	19:AS:62:ILE:HG13	1.99	0.44
20:AT:63:ILE:O	20:AT:66:ALA:N	2.50	0.44
22:AV:4:G:O2'	22:AV:5:G:H8	2.00	0.44
22:AV:11:A:O2'	22:AV:12:G:H5'	2.17	0.44
24:AY:312:LEU:HB2	24:AY:331:TYR:HE2	1.82	0.44
24:AY:447:GLY:O	24:AY:448:GLN:C	2.55	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:576:ASP:O	24:AY:577:SER:C	2.55	0.44
24:AY:679:VAL:HA	24:AY:680:PRO:HD3	1.72	0.44
26:B1:8:SER:HB3	26:B1:66:HIS:CD2	2.52	0.44
28:B3:4:LEU:O	28:B3:36:VAL:HA	2.16	0.44
32:B7:34:ARG:NH1	32:B7:39:ARG:HG3	2.33	0.44
33:B8:34:TRP:CD1	33:B8:34:TRP:O	2.70	0.44
35:BA:38:A:C2	35:BA:442:G:C2	3.05	0.44
35:BA:201:C:C4	35:BA:202:U:C5	3.05	0.44
35:BA:633:A:H2'	35:BA:634:C:H5'	1.99	0.44
35:BA:742:G:N1	35:BA:743:G:C5	2.86	0.44
35:BA:753:C:H2'	35:BA:754:C:C6	2.52	0.44
35:BA:827:U:H4'	35:BA:828:U:O2	2.17	0.44
35:BA:882:G:H22	35:BA:894:C:H42	1.64	0.44
35:BA:1057:A:H2'	35:BA:1058:G:C8	2.53	0.44
35:BA:2056:G:N2	35:BA:2057:A:C8	2.85	0.44
35:BA:2489:G:C6	35:BA:2490:G:C6	3.05	0.44
38:BD:176:ARG:CG	38:BD:176:ARG:NH1	2.78	0.44
40:BF:39:TRP:CB	40:BF:101:LEU:HD22	2.48	0.44
41:BG:25:TYR:OH	41:BG:168:GLU:OE1	2.25	0.44
41:BG:78:SER:HA	41:BG:83:ARG:HG2	2.00	0.44
43:BK:23:VAL:CG1	43:BK:27:LEU:HD22	2.42	0.44
46:BO:68:GLU:CB	46:BO:78:ARG:HB2	2.47	0.44
47:BP:47:ASP:HB3	47:BP:48:PRO:C	2.38	0.44
52:BU:84:LYS:HD3	52:BU:84:LYS:HA	1.81	0.44
53:BV:34:GLU:HG3	53:BV:56:SER:OG	2.17	0.44
53:BV:49:THR:HB	53:BV:50:PRO:HD2	1.99	0.44
1:AA:33:A:H2'	1:AA:33:A:N3	2.33	0.44
1:AA:476:G:O2'	1:AA:477:A:H5'	2.16	0.44
1:AA:696:A:O2'	1:AA:697:U:H5'	2.17	0.44
1:AA:741:G:C2'	1:AA:742:G:H5'	2.47	0.44
1:AA:1005:A:OP1	1:AA:1024:G:N2	2.50	0.44
1:AA:1115:C:H2'	1:AA:1116:C:H6	1.81	0.44
1:AA:1147:C:O2'	9:AI:16:ARG:HD2	2.18	0.44
1:AA:1329:A:H4'	13:AM:24:GLY:O	2.18	0.44
1:AA:1345:U:OP1	9:AI:120:ARG:NH1	2.50	0.44
1:AA:1360:A:H8	1:AA:1360:A:OP1	2.00	0.44
1:AA:1432:G:H8	1:AA:1432:G:O5'	2.01	0.44
1:AA:1512:U:H2'	1:AA:1513:A:H8	1.82	0.44
2:AB:58:ILE:O	2:AB:61:LEU:N	2.46	0.44
5:AE:142:LEU:O	5:AE:143:ARG:CD	2.66	0.44
7:AG:17:VAL:HB	7:AG:18:TYR:HD1	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:15:LYS:O	14:AN:16:PHE:C	2.56	0.44
15:AO:55:GLY:HA2	15:AO:58:MET:CE	2.48	0.44
16:AP:4:ILE:O	16:AP:66:PRO:HA	2.17	0.44
19:AS:63:THR:OG1	19:AS:64:GLU:N	2.47	0.44
24:AY:111:SER:OG	24:AY:141:LYS:HB3	2.17	0.44
24:AY:122:TRP:CZ2	24:AY:159:ALA:HB2	2.53	0.44
24:AY:308:PRO:O	24:AY:333:GLY:N	2.50	0.44
24:AY:605:ILE:N	24:AY:605:ILE:CD1	2.81	0.44
25:B0:38:VAL:HG12	25:B0:40:GLN:N	2.32	0.44
28:B3:4:LEU:HD23	28:B3:58:VAL:HA	1.99	0.44
35:BA:229:A:H3'	35:BA:230:U:C5'	2.43	0.44
35:BA:260:G:C1'	35:BA:621:A:H1'	2.47	0.44
35:BA:358:U:H2'	35:BA:359:A:C8	2.30	0.44
35:BA:392:C:H2'	35:BA:393:C:H6	1.81	0.44
35:BA:428:A:H3'	35:BA:429:A:C8	2.53	0.44
35:BA:620:G:H4'	35:BA:621:A:C5'	2.47	0.44
35:BA:744:G:N3	35:BA:744:G:H2'	2.32	0.44
35:BA:1074:G:H2'	35:BA:1075:C:C6	2.52	0.44
35:BA:1131:G:N2	35:BA:1132:A:C4	2.85	0.44
35:BA:1307:A:C2	35:BA:1308:A:C8	3.06	0.44
35:BA:1464:C:C2	35:BA:1465:G:C8	3.04	0.44
35:BA:1472:A:C2'	35:BA:1473:G:H5'	2.47	0.44
35:BA:1565:C:H2'	38:BD:21:PHE:HE2	1.82	0.44
35:BA:1573:G:C2'	35:BA:1574:C:H5'	2.46	0.44
35:BA:1610:A:H4'	35:BA:1611:C:OP2	2.17	0.44
35:BA:1994:C:OP2	39:BE:127:ASP:HB2	2.17	0.44
35:BA:2366:A:O5'	35:BA:2366:A:H8	1.99	0.44
35:BA:2880:C:C4	35:BA:2881:C:H5	2.35	0.44
37:BC:179:ALA:O	37:BC:180:SER:C	2.54	0.44
38:BD:131:LEU:HD13	38:BD:136:ILE:CD1	2.46	0.44
38:BD:175:LEU:HD23	38:BD:175:LEU:HA	1.78	0.44
39:BE:134:ILE:HG22	39:BE:137:HIS:CB	2.48	0.44
40:BF:22:ALA:C	40:BF:24:LEU:N	2.70	0.44
40:BF:127:GLU:O	40:BF:127:GLU:CD	2.56	0.44
42:BH:13:LYS:C	42:BH:15:VAL:H	2.21	0.44
50:BS:35:ILE:O	50:BS:35:ILE:HG23	2.15	0.44
50:BS:35:ILE:CD1	50:BS:99:LYS:HE3	2.44	0.44
50:BS:53:SER:OG	50:BS:54:LEU:N	2.50	0.44
51:BT:126:ALA:C	51:BT:128:GLU:N	2.70	0.44
53:BV:39:LEU:HB3	53:BV:47:VAL:HG11	1.99	0.44
55:BX:18:TYR:O	55:BX:20:GLY:N	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:16:A:N1	1:AA:919:A:C2	2.86	0.44
1:AA:135:C:H2'	1:AA:136:C:H5'	1.99	0.44
1:AA:159:G:N1	1:AA:163:C:N4	2.65	0.44
1:AA:427:U:C4	1:AA:428:G:C6	3.06	0.44
1:AA:600:C:H4'	8:AH:128:GLY:O	2.17	0.44
1:AA:767:A:H2'	1:AA:768:A:C8	2.53	0.44
1:AA:851:G:C4	1:AA:852:G:C8	3.06	0.44
1:AA:969:A:N1	1:AA:970:C:C2	2.86	0.44
1:AA:1054:C:O2	1:AA:1054:C:C2'	2.65	0.44
1:AA:1370:G:C2	1:AA:1371:G:N7	2.86	0.44
1:AA:1426:C:H2'	1:AA:1427:U:C6	2.52	0.44
1:AA:1505:G:H4'	1:AA:1506:U:C5'	2.47	0.44
2:AB:90:MET:HA	2:AB:90:MET:HE2	1.99	0.44
5:AE:140:ARG:HE	5:AE:140:ARG:HB2	1.58	0.44
6:AF:8:ILE:CD1	6:AF:26:ILE:HD13	2.47	0.44
7:AG:87:VAL:HG22	7:AG:151:TYR:O	2.16	0.44
8:AH:109:ILE:CG1	8:AH:110:ALA:N	2.74	0.44
9:AI:20:ARG:O	9:AI:60:ASP:N	2.43	0.44
9:AI:74:ILE:O	9:AI:74:ILE:HG22	2.17	0.44
11:AK:124:LYS:HB3	11:AK:125:PHE:CD1	2.52	0.44
12:AL:27:LEU:C	12:AL:29:GLY:N	2.69	0.44
13:AM:91:ARG:HH21	19:AS:81:ARG:HH21	1.65	0.44
14:AN:18:VAL:CG2	14:AN:19:ARG:N	2.80	0.44
15:AO:64:ARG:CZ	15:AO:64:ARG:CB	2.96	0.44
24:AY:688:ILE:N	24:AY:688:ILE:HD12	2.30	0.44
27:B2:57:ILE:HG22	27:B2:61:LEU:CD1	2.47	0.44
30:B5:44:THR:CG2	49:BR:101:ALA:N	2.81	0.44
32:B7:37:LYS:HE2	35:BA:469:G:O6	2.18	0.44
33:B8:28:GLY:CA	33:B8:32:LEU:HD21	2.47	0.44
35:BA:142:A:H1'	35:BA:1408:C:C1'	2.27	0.44
35:BA:154(A):C:H3'	35:BA:155:U:C4'	2.48	0.44
35:BA:154(A):C:H3'	35:BA:155:U:H4'	1.98	0.44
35:BA:569:U:OP1	35:BA:945:A:C8	2.70	0.44
35:BA:777:A:C2	35:BA:778:G:C4	3.05	0.44
35:BA:835:A:O2'	35:BA:836:G:H5'	2.18	0.44
35:BA:845:G:OP2	35:BA:845:G:C8	2.59	0.44
35:BA:1114:G:H2'	35:BA:1115:G:C5'	2.47	0.44
35:BA:1485:G:C8	35:BA:1485:G:C3'	3.00	0.44
35:BA:1500:G:C6	35:BA:1501:C:C4	3.05	0.44
35:BA:1647:G:H3'	35:BA:1647:G:OP2	2.17	0.44
35:BA:1658:C:C2	35:BA:1659:U:C5	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1747(A):G:C3'	35:BA:1748:G:H5"	2.43	0.44
35:BA:2033:A:O2'	35:BA:2034:U:P	2.75	0.44
35:BA:2885:C:O5'	35:BA:2885:C:H6	2.00	0.44
36:BB:46:A:C6	36:BB:47:C:C4	3.05	0.44
36:BB:110:G:O2'	36:BB:111:G:H5'	2.17	0.44
38:BD:32:SER:O	38:BD:36:PRO:CG	2.54	0.44
39:BE:76:ARG:O	39:BE:77:ILE:O	2.34	0.44
39:BE:184:VAL:O	39:BE:186:GLY:N	2.42	0.44
41:BG:164:GLU:O	41:BG:165:THR:CG2	2.65	0.44
42:BH:46:GLU:CG	42:BH:51:ARG:HB2	2.48	0.44
43:BK:15:GLY:N	43:BK:41:PHE:HE2	2.16	0.44
43:BK:23:VAL:O	43:BK:23:VAL:CG1	2.65	0.44
43:BK:93:ARG:CB	57:BZ:112:ARG:HE	2.31	0.44
47:BP:31:ALA:C	47:BP:33:ARG:H	2.20	0.44
47:BP:71:VAL:O	47:BP:71:VAL:CG2	2.63	0.44
48:BQ:27:VAL:O	48:BQ:28:ALA:CB	2.62	0.44
49:BR:18:LEU:HD23	49:BR:18:LEU:C	2.38	0.44
52:BU:59:ARG:O	52:BU:62:ILE:HB	2.18	0.44
53:BV:4:ILE:HB	53:BV:39:LEU:O	2.18	0.44
53:BV:13:ARG:NH1	53:BV:13:ARG:HG2	2.29	0.44
53:BV:39:LEU:HD13	53:BV:51:VAL:HA	1.97	0.44
54:BW:6:ILE:HG21	54:BW:8:ARG:HH12	1.83	0.44
57:BZ:149:SER:HB2	57:BZ:172:ALA:O	2.18	0.44
1:AA:472:A:H2'	1:AA:473:G:O4'	2.17	0.44
1:AA:502:G:OP1	12:AL:118:SER:HB3	2.18	0.44
1:AA:542:G:H5'	4:AD:41:GLY:HA2	1.99	0.44
1:AA:841:U:C3'	1:AA:848:C:H5'	2.48	0.44
1:AA:891:U:H2'	1:AA:892:A:C8	2.53	0.44
1:AA:1378:C:OP1	7:AG:7:ALA:CB	2.65	0.44
1:AA:1419:G:C6	1:AA:1482:G:C2	3.05	0.44
1:AA:1424:C:H2'	1:AA:1425:U:C6	2.49	0.44
1:AA:1493:A:H3'	35:BA:1913:A:N1	2.33	0.44
1:AA:1518:A:C2	1:AA:1519:A:C2	3.06	0.44
2:AB:95:GLN:HE21	2:AB:147:LYS:CE	2.31	0.44
2:AB:98:LEU:O	2:AB:101:MET:HB2	2.16	0.44
3:AC:83:ARG:O	3:AC:86:VAL:N	2.50	0.44
3:AC:99:VAL:HG23	3:AC:99:VAL:O	2.17	0.44
3:AC:119:ARG:O	3:AC:122:GLU:HB2	2.18	0.44
4:AD:74:GLN:HE22	4:AD:137:SER:HB3	1.83	0.44
4:AD:92:VAL:O	4:AD:95:GLY:N	2.51	0.44
7:AG:155:ARG:HE	7:AG:155:ARG:HB2	1.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:32:ALA:H	10:AJ:78:ASN:CG	2.21	0.44
13:AM:37:THR:HG21	13:AM:56:LEU:CD2	2.47	0.44
18:AR:31:LEU:HD23	18:AR:31:LEU:N	2.30	0.44
18:AR:44:LEU:O	18:AR:45:SER:C	2.55	0.44
18:AR:72:ARG:O	18:AR:73:ALA:C	2.56	0.44
20:AT:69:GLY:O	20:AT:73:HIS:CE1	2.71	0.44
22:AV:15:G:H8	22:AV:15:G:O5'	2.00	0.44
24:AY:260:LEU:HD13	24:AY:260:LEU:N	2.33	0.44
24:AY:334:THR:HG23	24:AY:369:LEU:C	2.38	0.44
24:AY:495:GLY:N	24:AY:510:VAL:O	2.51	0.44
24:AY:616:TYR:O	24:AY:617:MET:C	2.55	0.44
26:B1:68:PRO:O	26:B1:70:VAL:N	2.50	0.44
33:B8:56:GLU:C	33:B8:58:ILE:H	2.20	0.44
35:BA:26:G:OP1	54:BW:80:PRO:HB3	2.18	0.44
35:BA:109:G:O2'	35:BA:110:G:H5'	2.18	0.44
35:BA:452:G:N3	35:BA:457:A:H2	2.15	0.44
35:BA:597:U:H2'	35:BA:598:G:C8	2.53	0.44
35:BA:750:A:C2	35:BA:753:C:C6	3.06	0.44
35:BA:990:A:H62	35:BA:1186:G:H1'	1.82	0.44
35:BA:1258:C:C2	35:BA:1259:G:C8	3.06	0.44
35:BA:1472:A:H2'	35:BA:1473:G:C8	2.53	0.44
35:BA:1542:A:C8	35:BA:1542:A:C3'	2.97	0.44
35:BA:1573:G:H2'	35:BA:1574:C:C5'	2.45	0.44
35:BA:1582:C:C2	35:BA:1583:A:C8	3.05	0.44
35:BA:1782:C:C6	35:BA:2609:U:C5	3.06	0.44
35:BA:2262:U:C2'	35:BA:2263:C:H5"	2.47	0.44
35:BA:2672:G:H3'	35:BA:2673:G:H5"	1.98	0.44
37:BC:149:ASN:C	37:BC:149:ASN:HD22	2.18	0.44
40:BF:65:TRP:HZ3	40:BF:75:HIS:CD2	2.27	0.44
41:BG:16:ARG:N	41:BG:17:PRO:HD2	2.33	0.44
41:BG:75:LYS:O	41:BG:76:SER:OG	2.30	0.44
41:BG:138:GLN:CD	41:BG:153:ARG:HG2	2.38	0.44
42:BH:54:ARG:NH1	42:BH:62:LYS:HA	2.32	0.44
42:BH:108:GLY:O	42:BH:109:PHE:C	2.55	0.44
45:BN:28:THR:HG23	45:BN:29:LYS:N	2.33	0.44
45:BN:58:ASP:C	45:BN:60:ILE:H	2.19	0.44
48:BQ:66:ILE:HG13	48:BQ:66:ILE:O	2.17	0.44
48:BQ:109:VAL:HG11	48:BQ:113:GLN:HB2	1.97	0.44
50:BS:59:LYS:HB2	50:BS:59:LYS:HE3	1.78	0.44
51:BT:91:ARG:CB	51:BT:116:ALA:HA	2.47	0.44
52:BU:88:ILE:O	52:BU:88:ILE:CG1	2.49	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BV:2:PHE:HB3	53:BV:41:GLY:C	2.38	0.44
54:BW:41:LYS:C	54:BW:43:GLY:N	2.71	0.44
55:BX:14:SER:N	55:BX:17:ALA:HB3	2.33	0.44
56:BY:96:ILE:HG22	56:BY:97:ARG:N	2.32	0.44
57:BZ:5:LEU:HD13	57:BZ:59:LEU:CD2	2.47	0.44
1:AA:217:C:O2'	1:AA:470:C:N4	2.51	0.44
1:AA:219:C:C4	1:AA:220:G:C8	3.06	0.44
1:AA:509:A:N1	1:AA:510:A:C2	2.86	0.44
1:AA:523:A:H61	12:AL:53:ARG:NH1	2.15	0.44
1:AA:684:A:H2'	1:AA:685:G:H8	1.83	0.44
1:AA:728:A:C6	1:AA:729:A:N6	2.86	0.44
1:AA:756:C:H2'	1:AA:757:U:O4'	2.17	0.44
1:AA:1090:U:H4'	1:AA:1170:A:H2	1.78	0.44
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.83	0.44
1:AA:1150:U:O4	1:AA:1151:A:N6	2.51	0.44
1:AA:1197:G:OP1	1:AA:1198:G:OP2	2.36	0.44
1:AA:1309:G:C6	1:AA:1329:A:N1	2.86	0.44
1:AA:1358:U:O2'	1:AA:1359:C:H5'	2.17	0.44
1:AA:1367:C:H4'	10:AJ:48:THR:HG21	1.98	0.44
1:AA:1440:C:C2	1:AA:1462:G:C2	3.06	0.44
2:AB:24:TRP:N	2:AB:24:TRP:CD1	2.80	0.44
2:AB:214:ILE:O	2:AB:218:ALA:HB2	2.16	0.44
4:AD:133:VAL:HG12	4:AD:135:LEU:H	1.83	0.44
10:AJ:23:ILE:HG23	10:AJ:85:LEU:HD22	2.00	0.44
10:AJ:38:ILE:HG13	10:AJ:71:LEU:HB3	2.00	0.44
15:AO:82:ILE:C	15:AO:82:ILE:CD1	2.60	0.44
20:AT:45:GLN:NE2	20:AT:45:GLN:C	2.71	0.44
20:AT:93:GLU:C	20:AT:95:ALA:N	2.70	0.44
24:AY:65:ILE:H	24:AY:65:ILE:HD12	1.81	0.44
24:AY:106:VAL:O	24:AY:108:PHE:HD2	2.00	0.44
24:AY:296:GLY:O	24:AY:297:GLU:HB3	2.17	0.44
24:AY:334:THR:HG23	24:AY:369:LEU:O	2.17	0.44
24:AY:568:TYR:CD2	24:AY:569:ASP:HB2	2.53	0.44
27:B2:58:ALA:O	27:B2:62:THR:N	2.43	0.44
29:B4:10:VAL:CG1	29:B4:27:THR:HA	2.47	0.44
31:B6:27:LYS:HB3	31:B6:32:ASN:ND2	2.32	0.44
35:BA:70:G:H5"	35:BA:112:U:O2	2.18	0.44
35:BA:123:G:H8	35:BA:123:G:O5'	2.00	0.44
35:BA:290:G:C5	35:BA:291:C:C5	3.06	0.44
35:BA:443:A:H1'	35:BA:1201:C:O4'	2.18	0.44
35:BA:510:C:OP1	35:BA:511:U:OP2	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:559:G:C6	35:BA:560:C:C4	3.06	0.44
35:BA:620:G:N3	35:BA:620:G:H5"	2.33	0.44
35:BA:823:G:C6	35:BA:824:A:C6	3.06	0.44
35:BA:949:C:H2'	35:BA:950:G:C8	2.49	0.44
35:BA:1133:U:O4	35:BA:2026:C:H1'	2.17	0.44
35:BA:1226:A:C2'	35:BA:1227:G:H5'	2.47	0.44
35:BA:1234:U:H2'	35:BA:1235:G:O4'	2.18	0.44
35:BA:1453:U:H2'	35:BA:1455:G:C8	2.53	0.44
35:BA:1675:C:O2	39:BE:129:HIS:HA	2.17	0.44
35:BA:1782:C:C2'	35:BA:1783:A:H5'	2.45	0.44
35:BA:1788:C:H2'	35:BA:1789:A:C8	2.51	0.44
35:BA:1798:U:O2	35:BA:1802:A:H2	2.01	0.44
35:BA:1945:G:C6	35:BA:1946:U:C4	3.06	0.44
35:BA:2370:G:H2'	35:BA:2371:G:O4'	2.18	0.44
35:BA:2406:U:N3	47:BP:72:PRO:HB2	2.32	0.44
35:BA:2781:A:H5"	35:BA:2782:G:H5'	2.00	0.44
35:BA:2837:G:H8	35:BA:2837:G:O5'	2.01	0.44
35:BA:2840:C:H2'	35:BA:2841:C:C6	2.52	0.44
39:BE:50:GLY:HA2	39:BE:78:LEU:HB3	1.98	0.44
40:BF:3:GLU:CB	40:BF:24:LEU:HG	2.47	0.44
40:BF:64:ILE:CD1	40:BF:65:TRP:CE3	3.01	0.44
41:BG:56:ALA:HB1	41:BG:153:ARG:NH2	2.33	0.44
46:BO:104:ARG:NE	51:BT:33:LYS:HE3	2.30	0.44
48:BQ:42:ILE:HG23	48:BQ:46:GLN:HB3	1.99	0.44
53:BV:39:LEU:N	53:BV:39:LEU:HD22	2.32	0.44
55:BX:26:TYR:N	55:BX:26:TYR:CD1	2.86	0.44
55:BX:35:THR:CG2	55:BX:36:LYS:N	2.81	0.44
55:BX:65:ARG:HG2	55:BX:66:LEU:N	2.32	0.44
1:AA:45:U:H2'	1:AA:46:G:C8	2.53	0.44
1:AA:402:G:C5	1:AA:403:C:C5	3.06	0.44
1:AA:436:C:O2'	1:AA:437:U:P	2.76	0.44
1:AA:992:U:O2	1:AA:992:U:H2'	2.16	0.44
1:AA:1115:C:O2'	1:AA:1116:C:H5'	2.18	0.44
1:AA:1237:C:H3'	1:AA:1336:C:H41	1.83	0.44
1:AA:1386:G:O2'	1:AA:1387:G:H5'	2.18	0.44
2:AB:97:TRP:CZ3	2:AB:173:ALA:HA	2.52	0.44
3:AC:23:TYR:O	3:AC:24:ALA:HB2	2.18	0.44
4:AD:26:CYS:O	4:AD:31:CYS:HB2	2.17	0.44
11:AK:20:TYR:C	11:AK:21:ILE:HD12	2.37	0.44
11:AK:21:ILE:N	11:AK:21:ILE:CD1	2.79	0.44
12:AL:117:ARG:NH2	12:AL:124:LYS:HA	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:13:ILE:C	21:AU:15:ARG:N	2.70	0.44
24:AY:86:GLY:O	24:AY:88:VAL:N	2.41	0.44
24:AY:165:GLN:C	24:AY:166:LEU:HD12	2.38	0.44
24:AY:214:GLU:O	24:AY:218:GLU:N	2.47	0.44
24:AY:290:LYS:HD3	24:AY:298:VAL:HG21	2.00	0.44
24:AY:373:ASP:C	24:AY:374:LEU:HD12	2.38	0.44
27:B2:67:LYS:O	27:B2:69:ARG:N	2.51	0.44
28:B3:56:VAL:CG1	28:B3:57:GLU:H	2.30	0.44
29:B4:6:HIS:HB3	29:B4:7:PRO:HD2	1.99	0.44
32:B7:48:LYS:HB3	32:B7:48:LYS:HE2	1.69	0.44
33:B8:49:VAL:O	33:B8:53:PRO:CG	2.66	0.44
35:BA:27:G:C2'	35:BA:28:A:OP2	2.66	0.44
35:BA:105:C:O2	35:BA:105:C:H2'	2.18	0.44
35:BA:272(H):C:H5'	35:BA:272(H):C:C6	2.33	0.44
35:BA:569:U:O4	35:BA:570:G:C6	2.70	0.44
35:BA:643:A:C2'	35:BA:644:A:H5'	2.47	0.44
35:BA:661:C:O3'	47:BP:18:ARG:HD2	2.18	0.44
35:BA:839:U:H2'	35:BA:840:C:H6	1.79	0.44
35:BA:960:A:H5"	35:BA:961:C:OP1	2.17	0.44
35:BA:1105:U:O5'	35:BA:1105:U:H6	2.01	0.44
35:BA:1132:A:C4	35:BA:1133:U:C5	3.06	0.44
35:BA:1141:U:OP1	45:BN:25:ARG:NH1	2.51	0.44
35:BA:1599:C:OP2	55:BX:36:LYS:HD3	2.17	0.44
35:BA:2074:U:H2'	35:BA:2075:U:H6	1.74	0.44
35:BA:2134:A:C2	35:BA:2159:G:O2'	2.67	0.44
35:BA:2467:C:O2	48:BQ:124:LYS:NZ	2.51	0.44
37:BC:29:LEU:HD23	37:BC:29:LEU:C	2.37	0.44
38:BD:67:PHE:HD1	38:BD:67:PHE:HA	1.60	0.44
38:BD:77:ALA:CB	38:BD:97:TYR:HA	2.48	0.44
39:BE:57:LYS:HE2	39:BE:63:LEU:HD11	2.00	0.44
39:BE:86:PRO:HB2	39:BE:87:GLU:H	1.63	0.44
39:BE:176:ILE:CG2	39:BE:178:GLU:HB3	2.47	0.44
40:BF:9:ILE:HG23	40:BF:13:SER:O	2.17	0.44
40:BF:16:GLY:O	40:BF:17:ARG:HG3	2.17	0.44
40:BF:69:HIS:CD2	40:BF:69:HIS:N	2.84	0.44
42:BH:44:VAL:HG12	42:BH:45:VAL:H	1.82	0.44
42:BH:106:THR:C	42:BH:107:VAL:HG13	2.37	0.44
45:BN:3:THR:HG22	45:BN:4:TYR:H	1.83	0.44
47:BP:84:ASN:CB	47:BP:86:LYS:HB3	2.48	0.44
48:BQ:56:ARG:HH21	57:BZ:180:VAL:CG2	2.29	0.44
51:BT:45:PHE:HE2	51:BT:63:VAL:HB	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BU:79:PHE:CE1	52:BU:83:LEU:HD21	2.52	0.44
53:BV:62:LEU:H	53:BV:62:LEU:CD2	2.29	0.44
55:BX:7:VAL:HG12	55:BX:8:ILE:CG1	2.48	0.44
55:BX:64:LYS:NZ	55:BX:73:ARG:NH2	2.66	0.44
56:BY:31:LEU:H	56:BY:31:LEU:CD2	2.31	0.44
56:BY:31:LEU:HB2	56:BY:32:PRO:HA	2.00	0.44
1:AA:303:A:H2'	1:AA:304:U:O4'	2.17	0.44
1:AA:315:A:O2'	1:AA:316:G:OP2	2.36	0.44
1:AA:563:A:N7	1:AA:567:G:H1'	2.33	0.44
1:AA:597:G:H1'	1:AA:644:G:N2	2.32	0.44
1:AA:645:C:H2'	1:AA:646:U:C6	2.53	0.44
1:AA:817:C:C5	1:AA:819:A:H1'	2.52	0.44
1:AA:973:G:O4'	10:AJ:55:LYS:HE2	2.18	0.44
1:AA:977:A:C2'	1:AA:978:A:H5'	2.48	0.44
1:AA:1206:G:O2'	1:AA:1207:G:H5'	2.17	0.44
1:AA:1287:A:C6	1:AA:1288:A:C6	3.05	0.44
1:AA:1359:C:OP2	14:AN:22:THR:HG21	2.18	0.44
1:AA:1440:C:C2'	1:AA:1441:G:H5'	2.48	0.44
2:AB:25:ASN:HA	2:AB:26:PRO:HD2	1.87	0.44
3:AC:34:LEU:CD2	3:AC:34:LEU:O	2.66	0.44
3:AC:42:LEU:O	3:AC:42:LEU:HD12	2.18	0.44
4:AD:100:ARG:HB3	4:AD:102:ASP:OD1	2.17	0.44
6:AF:70:ASP:OD1	6:AF:70:ASP:N	2.50	0.44
6:AF:87:ARG:CG	6:AF:87:ARG:NH1	2.77	0.44
8:AH:86:ILE:HG21	8:AH:133:LEU:HD22	1.99	0.44
8:AH:100:ILE:HD11	8:AH:112:LEU:HD11	1.99	0.44
17:AQ:18:THR:HG23	17:AQ:69:LYS:HE3	2.00	0.44
20:AT:33:ILE:HG21	20:AT:63:ILE:HG12	1.99	0.44
20:AT:73:HIS:HB3	20:AT:74:LYS:H	1.54	0.44
22:AV:41:C:O2'	22:AV:42:G:H5'	2.17	0.44
26:B1:4:VAL:CG2	26:B1:10:LYS:O	2.62	0.44
27:B2:48:HIS:CD2	35:BA:96:G:H4'	2.52	0.44
33:B8:29:LYS:HD2	33:B8:44:LYS:CG	2.39	0.44
35:BA:201:C:C5	35:BA:202:U:H5	2.33	0.44
35:BA:245:G:H5'	47:BP:73:GLY:HA2	2.00	0.44
35:BA:271(E):U:H3	35:BA:271(S):G:H1	1.66	0.44
35:BA:298:G:O5'	35:BA:298:G:H8	2.01	0.44
35:BA:361:G:H3'	35:BA:362:U:H5"	2.00	0.44
35:BA:496:G:H2'	35:BA:497:A:O4'	2.18	0.44
35:BA:861:A:C2	35:BA:917:A:C4	3.05	0.44
35:BA:910:A:C6	35:BA:911:A:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1499:C:H2'	35:BA:1500:G:O4'	2.17	0.44
35:BA:1600:C:O2	35:BA:1600:C:C2'	2.65	0.44
35:BA:2172:U:H1'	35:BA:2173:A:OP1	2.18	0.44
35:BA:2818:G:N2	35:BA:2829:C:C2	2.86	0.44
35:BA:2843:G:C2	35:BA:2875:C:N3	2.86	0.44
35:BA:2868:A:N6	35:BA:2869:G:C6	2.86	0.44
36:BB:38:C:O2	36:BB:48:A:H1'	2.16	0.44
41:BG:102:PHE:O	41:BG:105:LYS:N	2.49	0.44
42:BH:42:ARG:HH11	42:BH:42:ARG:CG	2.31	0.44
42:BH:65:HIS:HE1	42:BH:69:ARG:NH1	2.16	0.44
45:BN:57:ALA:CB	45:BN:124:ALA:HA	2.48	0.44
46:BO:22:ILE:O	46:BO:23:ARG:HB3	2.17	0.44
46:BO:47:ILE:O	46:BO:48:PRO:O	2.35	0.44
46:BO:52:VAL:C	46:BO:53:LYS:HG3	2.38	0.44
46:BO:112:MET:O	46:BO:113:LYS:C	2.56	0.44
47:BP:13:ASN:HD22	47:BP:13:ASN:N	2.14	0.44
47:BP:122:PRO:HG3	47:BP:141:ALA:HB3	1.98	0.44
48:BQ:74:TYR:HD1	48:BQ:74:TYR:HA	1.61	0.44
48:BQ:76:LYS:HB3	48:BQ:91:GLU:HG3	2.00	0.44
51:BT:29:ARG:HA	51:BT:29:ARG:HD2	1.68	0.44
51:BT:132:LYS:HG2	51:BT:133:GLU:H	1.83	0.44
52:BU:55:ARG:HA	52:BU:58:ARG:HB2	1.98	0.44
52:BU:59:ARG:HG2	52:BU:59:ARG:NH1	2.30	0.44
53:BV:28:GLU:HB2	53:BV:31:ALA:HB3	1.97	0.44
53:BV:31:ALA:C	53:BV:61:VAL:HG12	2.38	0.44
1:AA:756:C:O2'	1:AA:757:U:H5'	2.18	0.43
1:AA:1217:C:H5'	14:AN:9:LYS:HE2	1.99	0.43
1:AA:1305:G:H5"	21:AU:4:GLY:C	2.39	0.43
1:AA:1305:G:H22	1:AA:1331:G:C2'	2.27	0.43
1:AA:1497:G:C2'	1:AA:1498:U:H5'	2.47	0.43
3:AC:150:LYS:O	3:AC:151:VAL:HG23	2.17	0.43
5:AE:145:LYS:HB2	8:AH:107:LEU:HD21	2.00	0.43
6:AF:16:GLN:CD	6:AF:16:GLN:N	2.71	0.43
7:AG:92:SER:O	7:AG:93:PRO:C	2.56	0.43
7:AG:156:TRP:OXT	7:AG:156:TRP:CG	2.70	0.43
12:AL:75:HIS:CD2	12:AL:77:LEU:CB	2.99	0.43
12:AL:111:LYS:O	12:AL:112:ASP:CB	2.60	0.43
13:AM:91:ARG:NH2	19:AS:81:ARG:NH2	2.66	0.43
15:AO:82:ILE:HG12	15:AO:87:ILE:CG1	2.46	0.43
20:AT:84:LEU:O	20:AT:86:ARG:N	2.50	0.43
22:AV:17:C:C5	22:AV:17(A):U:O4	2.70	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AX:11:U:H2'	23:AX:11:U:O2	2.18	0.43
24:AY:78:ARG:HH11	24:AY:78:ARG:HG3	1.82	0.43
24:AY:153:MET:HA	24:AY:157:LEU:HD21	1.99	0.43
24:AY:223:PHE:CE1	24:AY:249:GLY:HA2	2.53	0.43
24:AY:228:MET:HE2	24:AY:229:LEU:CD2	2.48	0.43
24:AY:334:THR:CG2	24:AY:370:LYS:HG2	2.46	0.43
24:AY:530:VAL:CG1	24:AY:531:GLY:N	2.66	0.43
24:AY:573:HIS:HD2	24:AY:575:VAL:H	1.66	0.43
24:AY:612:THR:HA	24:AY:613:PRO:HD3	1.89	0.43
25:B0:9:SER:OG	25:B0:10:THR:N	2.51	0.43
26:B1:67:ILE:N	26:B1:68:PRO:CD	2.75	0.43
29:B4:23:GLU:O	29:B4:24:THR:CG2	2.66	0.43
30:B5:41:PRO:O	30:B5:44:THR:OG1	2.18	0.43
31:B6:25:LYS:O	35:BA:2286:A:N1	2.50	0.43
32:B7:33:ARG:HB2	32:B7:33:ARG:NH1	2.33	0.43
33:B8:25:MET:HG3	47:BP:64:LYS:HB2	2.00	0.43
33:B8:56:GLU:O	33:B8:58:ILE:N	2.51	0.43
35:BA:190:A:H3'	35:BA:204:A:H61	1.83	0.43
35:BA:464:U:C4	35:BA:788:A:N7	2.86	0.43
35:BA:570:G:O6	35:BA:2499:C:OP1	2.36	0.43
35:BA:631:A:H1'	35:BA:2415:G:O2'	2.17	0.43
35:BA:650:C:H2'	35:BA:651:G:H5"	2.00	0.43
35:BA:654(P):C:O2'	35:BA:654(Q):C:H5'	2.18	0.43
35:BA:805:G:H4'	35:BA:806:C:OP2	2.18	0.43
35:BA:826:U:OP1	35:BA:2428:G:H5"	2.18	0.43
35:BA:999:U:H5"	35:BA:1154:G:O6	2.18	0.43
35:BA:1042:G:H2'	35:BA:1043:C:C6	2.53	0.43
35:BA:1052:C:O2'	35:BA:1053:C:P	2.76	0.43
35:BA:1057:A:H2'	35:BA:1058:G:H8	1.83	0.43
35:BA:1270:C:H5"	35:BA:1271:G:C5'	2.48	0.43
35:BA:1555:G:N3	35:BA:1555:G:H2'	2.33	0.43
35:BA:1858:G:H8	35:BA:1858:G:OP2	2.02	0.43
35:BA:1893:C:H2'	35:BA:1894:C:H5'	2.00	0.43
35:BA:1902:C:C5'	38:BD:246:PRO:HD3	2.48	0.43
35:BA:1931:U:O2'	35:BA:1932:A:H5'	2.18	0.43
35:BA:1998:G:OP2	39:BE:136:ARG:NH2	2.41	0.43
35:BA:2064:C:H1'	35:BA:2450:A:C6	2.52	0.43
35:BA:2404:C:H2'	35:BA:2405:G:O4'	2.18	0.43
35:BA:2453:A:H2'	35:BA:2454:G:H8	1.83	0.43
35:BA:2539:C:O2	35:BA:2539:C:C2'	2.66	0.43
35:BA:2574:G:H2'	35:BA:2575:C:C6	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2657:A:H3'	35:BA:2658:C:H6	1.83	0.43
35:BA:2745:C:H4'	42:BH:142:GLY:O	2.17	0.43
36:BB:29:A:H3'	50:BS:32:LEU:HD11	2.00	0.43
36:BB:81:G:N3	36:BB:81:G:C5'	2.81	0.43
36:BB:96:U:N3	36:BB:97:G:N7	2.65	0.43
39:BE:188:VAL:CG2	39:BE:189:PRO:HD2	2.48	0.43
40:BF:24:LEU:CB	40:BF:25:PRO:HD2	2.29	0.43
41:BG:31:VAL:CG2	41:BG:32:PRO:CD	2.93	0.43
41:BG:106:LEU:HD12	41:BG:110:ALA:CB	2.48	0.43
42:BH:159:GLU:O	42:BH:160:LYS:O	2.35	0.43
43:BK:48:MET:H	43:BK:48:MET:HG3	1.68	0.43
43:BK:134:MET:HG3	43:BK:136:VAL:HG12	2.00	0.43
45:BN:65:LYS:CB	45:BN:69:GLN:HG3	2.40	0.43
45:BN:122:VAL:CG1	45:BN:123:TYR:N	2.76	0.43
47:BP:125:VAL:O	47:BP:125:VAL:HG13	2.17	0.43
48:BQ:92:GLY:C	48:BQ:93:TYR:CD1	2.91	0.43
50:BS:90:GLY:C	50:BS:92:TYR:H	2.21	0.43
51:BT:118:ARG:HG2	51:BT:121:ILE:HD12	2.00	0.43
52:BU:91:ASP:O	52:BU:95:LEU:HB2	2.18	0.43
53:BV:49:THR:HB	53:BV:50:PRO:CD	2.48	0.43
54:BW:68:ARG:CA	54:BW:110:LYS:HG2	2.47	0.43
57:BZ:96:VAL:HG22	57:BZ:97:GLU:N	2.33	0.43
1:AA:59:A:H4'	1:AA:388:G:OP1	2.18	0.43
1:AA:926:G:C6	1:AA:1505:G:C6	3.06	0.43
1:AA:980:C:H2'	1:AA:981:U:H5'	1.99	0.43
1:AA:1030:C:N4	1:AA:1032:G:C2	2.86	0.43
1:AA:1313:U:OP2	19:AS:6:LYS:CB	2.66	0.43
1:AA:1478:C:H2'	1:AA:1479:C:H6	1.83	0.43
2:AB:117:GLU:O	2:AB:120:ALA:N	2.49	0.43
3:AC:13:GLY:HA3	14:AN:57:ARG:HH21	1.82	0.43
3:AC:53:ALA:O	3:AC:54:ARG:HG3	2.18	0.43
8:AH:9:MET:O	8:AH:13:ILE:HG12	2.18	0.43
8:AH:104:ARG:NH2	8:AH:138:TRP:CH2	2.86	0.43
14:AN:8:GLU:O	14:AN:11:LYS:N	2.49	0.43
22:AV:7:G:H3'	22:AV:8:U:C5'	2.47	0.43
22:AV:38:A:H2'	22:AV:39:C:O4'	2.18	0.43
24:AY:162:VAL:O	24:AY:164:MET:HG2	2.18	0.43
24:AY:349:LYS:HB3	24:AY:349:LYS:HE3	1.72	0.43
24:AY:456:GLU:O	24:AY:457:LEU:C	2.56	0.43
24:AY:490:PRO:CG	24:AY:516:PRO:HD2	2.30	0.43
24:AY:549:ALA:O	24:AY:551:GLN:N	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:B2:43:GLN:HB2	27:B2:44:LEU:CD2	2.48	0.43
28:B3:10:LYS:HB3	28:B3:53:LEU:HD22	1.99	0.43
31:B6:30:THR:O	31:B6:32:ASN:N	2.50	0.43
35:BA:141:A:H8	35:BA:1409:C:H5'	1.82	0.43
35:BA:149:A:H2'	35:BA:150:C:O4'	2.18	0.43
35:BA:315:G:C5	35:BA:316:C:C4	3.06	0.43
35:BA:325:G:H2'	35:BA:326:G:C8	2.52	0.43
35:BA:345:A:H5'	35:BA:346:A:OP1	2.18	0.43
35:BA:763:G:C4	35:BA:765:G:C8	3.05	0.43
35:BA:847:U:H3	35:BA:934:G:N2	2.16	0.43
35:BA:1101:U:H2'	35:BA:1102:C:C6	2.53	0.43
35:BA:1245:G:H5'	40:BF:34:TRP:CZ2	2.53	0.43
35:BA:1341:U:H4'	55:BX:57:LEU:HB3	2.00	0.43
35:BA:1518:U:H2'	35:BA:1519:G:O4'	2.18	0.43
35:BA:1799:G:H8	38:BD:181:GLU:OE1	2.01	0.43
35:BA:1884:A:C3'	35:BA:1885:A:H5"	2.48	0.43
35:BA:2101:G:C6	35:BA:2102:U:N3	2.86	0.43
35:BA:2192:G:H2'	35:BA:2192:G:N3	2.31	0.43
35:BA:2305:A:H5"	41:BG:134:GLY:HA3	2.00	0.43
36:BB:30:C:H2'	36:BB:31:C:O4'	2.18	0.43
36:BB:85:G:C6	36:BB:93:G:C6	3.06	0.43
37:BC:72:GLN:HB3	37:BC:74:ARG:HH12	1.82	0.43
39:BE:46:ALA:HA	39:BE:82:ARG:O	2.18	0.43
40:BF:84:VAL:CG1	40:BF:85:GLY:H	1.91	0.43
40:BF:139:PHE:O	40:BF:140:LEU:C	2.56	0.43
40:BF:157:VAL:HA	40:BF:176:LEU:O	2.18	0.43
41:BG:76:SER:HG	41:BG:84:LYS:H	1.64	0.43
42:BH:92:ILE:O	42:BH:94:TYR:N	2.44	0.43
42:BH:100:GLY:C	42:BH:102:ALA:H	2.17	0.43
42:BH:146:ALA:HA	42:BH:149:ARG:HB3	2.00	0.43
47:BP:94:GLU:HG3	47:BP:124:LYS:O	2.17	0.43
47:BP:99:LEU:O	47:BP:103:ALA:HB2	2.18	0.43
48:BQ:9:TYR:CD1	48:BQ:9:TYR:N	2.86	0.43
50:BS:99:LYS:O	50:BS:101:LEU:N	2.51	0.43
51:BT:90:GLN:O	51:BT:91:ARG:C	2.56	0.43
52:BU:8:VAL:O	52:BU:9:VAL:C	2.55	0.43
55:BX:35:THR:O	55:BX:39:ILE:N	2.41	0.43
56:BY:52:SER:N	56:BY:53:PRO:HD2	2.33	0.43
1:AA:91:C:OP2	1:AA:91:C:H6	2.01	0.43
1:AA:384:G:H2'	1:AA:385:C:H6	1.82	0.43
1:AA:520:A:H2'	1:AA:521:G:O4'	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:748:C:OP2	1:AA:748:C:C6	2.68	0.43
1:AA:1065:U:O2	1:AA:1065:U:H2'	2.17	0.43
1:AA:1352:C:OP1	21:AU:3:LYS:HE2	2.17	0.43
2:AB:102:LEU:HD12	2:AB:102:LEU:N	2.33	0.43
2:AB:194:PRO:HG2	2:AB:195:ASP:H	1.83	0.43
3:AC:77:ILE:O	3:AC:77:ILE:CG2	2.65	0.43
6:AF:36:ARG:CB	6:AF:36:ARG:HH11	2.31	0.43
6:AF:37:VAL:CG1	6:AF:38:GLU:H	2.27	0.43
8:AH:26:VAL:O	8:AH:27:PRO:C	2.57	0.43
8:AH:87:SER:HB2	8:AH:93:VAL:HB	2.00	0.43
11:AK:58:PRO:O	11:AK:59:TYR:C	2.56	0.43
11:AK:87:THR:O	11:AK:88:GLY:C	2.56	0.43
15:AO:56:LEU:O	15:AO:59:MET:HB3	2.18	0.43
16:AP:15:PRO:O	16:AP:16:HIS:ND1	2.49	0.43
19:AS:52:TYR:HB2	19:AS:57:HIS:ND1	2.33	0.43
20:AT:26:ASN:HA	20:AT:29:LYS:HG2	1.99	0.43
25:B0:49:LYS:HE3	25:B0:80:HIS:CG	2.53	0.43
25:B0:66:VAL:CG2	25:B0:84:LEU:HD23	2.46	0.43
27:B2:3:LEU:O	27:B2:7:ARG:NH1	2.52	0.43
28:B3:43:ILE:HG12	28:B3:43:ILE:H	1.62	0.43
29:B4:5:ILE:N	29:B4:5:ILE:CD1	2.81	0.43
30:B5:55:ARG:NH1	49:BR:113:LEU:HD21	2.33	0.43
35:BA:120:U:O2'	35:BA:149:A:C8	2.69	0.43
35:BA:200:U:H2'	35:BA:201:C:H5'	2.00	0.43
35:BA:271(H):G:H1	35:BA:271(P):C:N4	2.16	0.43
35:BA:272(I):U:C4	35:BA:363(A):A:N1	2.79	0.43
35:BA:821:A:O2'	35:BA:945:A:H3'	2.19	0.43
35:BA:848:G:H5"	35:BA:928:G:N2	2.33	0.43
35:BA:1037:G:C2	35:BA:1119:C:N3	2.86	0.43
35:BA:1118:C:C6	35:BA:1118:C:C3'	3.01	0.43
35:BA:1161:C:H2'	35:BA:1162:G:C8	2.53	0.43
35:BA:1204:A:H61	35:BA:1240:U:H2'	1.83	0.43
35:BA:1344:G:H4'	35:BA:1384:A:C5	2.53	0.43
35:BA:1638:C:O2'	35:BA:1639:U:H5'	2.18	0.43
35:BA:1639:U:H2'	35:BA:1640:C:H5'	1.99	0.43
35:BA:2206:G:N2	35:BA:2207:G:H5'	2.33	0.43
35:BA:2361:A:H2'	35:BA:2361:A:N3	2.33	0.43
35:BA:2790:A:N3	35:BA:2791:C:H5"	2.33	0.43
36:BB:63:G:C2	36:BB:64:C:C2	3.06	0.43
37:BC:30:VAL:O	37:BC:31:LYS:C	2.55	0.43
37:BC:226:ASN:HA	37:BC:227:PRO:HD2	1.61	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:23:VAL:HG12	39:BE:184:VAL:O	2.19	0.43
39:BE:152:LYS:O	39:BE:153:GLY:C	2.54	0.43
40:BF:103:LYS:HA	40:BF:106:ARG:CG	2.47	0.43
40:BF:157:VAL:CG2	40:BF:194:MET:CG	2.80	0.43
41:BG:7:LEU:O	41:BG:8:LYS:C	2.56	0.43
42:BH:149:ARG:HG3	42:BH:162:ILE:O	2.18	0.43
42:BH:171:LEU:HD23	42:BH:171:LEU:O	2.15	0.43
47:BP:71:VAL:H	47:BP:72:PRO:HD3	1.84	0.43
47:BP:106:LEU:O	47:BP:107:LYS:CG	2.58	0.43
49:BR:30:THR:HA	49:BR:78:LYS:HZ3	1.84	0.43
51:BT:28:VAL:HG22	51:BT:46:GLU:C	2.38	0.43
51:BT:30:VAL:HG22	51:BT:84:GLN:O	2.18	0.43
51:BT:65:LYS:CE	51:BT:65:LYS:CA	2.96	0.43
52:BU:79:PHE:O	52:BU:79:PHE:HD1	2.01	0.43
57:BZ:166:SER:HB2	57:BZ:167:PRO:O	2.18	0.43
1:AA:43:C:O5’	1:AA:43:C:H6	2.02	0.43
1:AA:160:A:H2’	1:AA:161:A:C5’	2.48	0.43
1:AA:197:A:N6	1:AA:221:C:H4’	2.33	0.43
1:AA:398:C:H2’	1:AA:399:G:C8	2.53	0.43
1:AA:488:C:O5’	1:AA:488:C:H6	2.01	0.43
1:AA:504:C:O5’	1:AA:504:C:H6	2.01	0.43
1:AA:819:A:H4’	1:AA:820:U:OP2	2.17	0.43
1:AA:859:A:H2’	1:AA:860:A:O4’	2.18	0.43
1:AA:942:G:H2’	1:AA:943:U:C6	2.53	0.43
1:AA:1347:G:H1’	1:AA:1348:U:H5	1.83	0.43
2:AB:126:GLU:O	2:AB:127:ILE:C	2.55	0.43
9:AI:96:LEU:HA	9:AI:96:LEU:HD12	1.77	0.43
13:AM:10:PRO:HB2	13:AM:18:ALA:HB1	1.98	0.43
13:AM:54:VAL:C	13:AM:56:LEU:H	2.20	0.43
15:AO:23:GLY:O	15:AO:24:SER:O	2.36	0.43
15:AO:74:ASP:C	15:AO:76:GLU:N	2.70	0.43
18:AR:63:GLN:OE1	18:AR:63:GLN:HA	2.18	0.43
19:AS:41:VAL:O	19:AS:43:GLU:N	2.52	0.43
24:AY:66:THR:O	24:AY:67:ALA:CB	2.63	0.43
24:AY:86:GLY:O	24:AY:87:HIS:HB3	2.18	0.43
24:AY:166:LEU:HD12	24:AY:166:LEU:N	2.34	0.43
24:AY:314:PHE:CD1	24:AY:315:LYS:HB2	2.47	0.43
26:B1:51:VAL:HG12	26:B1:58:ILE:HG23	1.99	0.43
30:B5:7:PRO:HA	35:BA:2615:U:N1	2.33	0.43
31:B6:42:TRP:NE1	35:BA:643:A:OP1	2.51	0.43
33:B8:16:ILE:HD12	33:B8:57:ARG:HG2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:B8:34:TRP:HB2	35:BA:2420:C:OP1	2.19	0.43
35:BA:27:G:H1'	35:BA:513:A:N6	2.32	0.43
35:BA:88:G:H5"	35:BA:90:U:C4	2.54	0.43
35:BA:140:G:N3	35:BA:142:A:N1	2.66	0.43
35:BA:231:C:O2'	35:BA:232:G:H5'	2.18	0.43
35:BA:244:A:H4'	47:BP:74:GLU:HB2	2.00	0.43
35:BA:422:A:C2	35:BA:423:A:C4	3.06	0.43
35:BA:676:A:C8	35:BA:2443:C:H1'	2.53	0.43
35:BA:724:U:H2'	35:BA:725:G:H5'	2.00	0.43
35:BA:881:G:C2'	35:BA:882:G:H5'	2.48	0.43
35:BA:972:G:OP2	35:BA:974:G:H5"	2.18	0.43
35:BA:1081:U:H4'	43:BK:117:THR:CG2	2.49	0.43
35:BA:1163:G:HO2'	35:BA:1164:G:H5'	1.83	0.43
35:BA:1167:U:C2	35:BA:1183:G:N2	2.86	0.43
35:BA:1183:G:C8	35:BA:1183:G:C3'	3.02	0.43
35:BA:1416:G:O2'	35:BA:1417:C:H5	2.00	0.43
35:BA:1431:U:O5'	35:BA:1431:U:H6	2.01	0.43
35:BA:1505:C:H3'	35:BA:1506:C:H6	1.83	0.43
35:BA:1775:U:O2'	35:BA:1776:G:H5'	2.18	0.43
35:BA:1941:C:N4	35:BA:1942:C:N4	2.66	0.43
35:BA:2392:A:C2	35:BA:2429:G:C2	3.06	0.43
35:BA:2461:C:O2	35:BA:2461:C:C2'	2.67	0.43
35:BA:2784:C:O5'	35:BA:2784:C:H6	2.01	0.43
35:BA:2846:G:H2'	35:BA:2847:U:O4'	2.18	0.43
36:BB:86:G:C6	36:BB:87:G:C6	3.07	0.43
37:BC:29:LEU:C	37:BC:29:LEU:CD2	2.86	0.43
38:BD:138:VAL:HG23	38:BD:165:ILE:HG22	1.99	0.43
39:BE:70:ALA:O	39:BE:71:GLY:C	2.56	0.43
39:BE:102:VAL:HG23	39:BE:104:VAL:HG23	2.00	0.43
44:BL:110:LEU:CB	44:BL:117:VAL:HG21	2.48	0.43
45:BN:96:GLU:C	45:BN:98:VAL:N	2.70	0.43
46:BO:114:ILE:O	46:BO:117:LEU:N	2.41	0.43
47:BP:23:PRO:HD2	47:BP:33:ARG:HH21	1.82	0.43
47:BP:99:LEU:HA	47:BP:102:ARG:HH22	1.83	0.43
47:BP:122:PRO:HA	47:BP:141:ALA:O	2.19	0.43
50:BS:56:LEU:O	50:BS:58:LEU:N	2.52	0.43
51:BT:89:VAL:HB	51:BT:91:ARG:HG3	2.00	0.43
55:BX:8:ILE:HD11	55:BX:42:ALA:O	2.17	0.43
55:BX:52:VAL:O	55:BX:52:VAL:HG12	2.18	0.43
1:AA:439:A:C4	1:AA:496:A:C2	3.06	0.43
1:AA:571:U:O5'	1:AA:571:U:H6	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1006:C:H6	1:AA:1006:C:H3'	1.82	0.43
1:AA:1053:G:H4'	1:AA:1054:C:H5'	2.00	0.43
1:AA:1149:C:H2'	1:AA:1150:U:C6	2.53	0.43
1:AA:1178:G:N2	1:AA:1180:A:H3'	2.34	0.43
1:AA:1220:G:H2'	1:AA:1221:G:C8	2.48	0.43
1:AA:1296:C:H3'	1:AA:1297:C:H6	1.83	0.43
1:AA:1319:A:OP1	19:AS:10:PHE:CZ	2.70	0.43
4:AD:159:ARG:O	4:AD:162:LEU:N	2.51	0.43
5:AE:77:PRO:HG2	5:AE:78:HIS:H	1.83	0.43
6:AF:96:PRO:HB3	18:AR:30:ASP:CG	2.39	0.43
7:AG:152:ALA:O	7:AG:155:ARG:HG3	2.18	0.43
10:AJ:33:GLN:H	10:AJ:75:ILE:HD11	1.81	0.43
10:AJ:55:LYS:O	10:AJ:56:HIS:CG	2.72	0.43
13:AM:106:ASN:HB3	13:AM:107:ALA:H	1.54	0.43
18:AR:19:LYS:N	18:AR:55:ARG:HD2	2.34	0.43
19:AS:58:VAL:HA	19:AS:59:PRO:HD2	1.89	0.43
19:AS:65:ASN:HA	29:B4:48:ARG:NH2	2.33	0.43
24:AY:5:VAL:O	24:AY:7:TYR:N	2.51	0.43
24:AY:166:LEU:CD1	24:AY:180:VAL:HG13	2.49	0.43
24:AY:168:ILE:HG23	24:AY:205:TYR:CE2	2.53	0.43
25:B0:38:VAL:CG1	25:B0:39:ARG:N	2.81	0.43
27:B2:2:LYS:CB	35:BA:97:C:H5"	2.43	0.43
27:B2:59:ARG:HA	27:B2:62:THR:HB	2.01	0.43
30:B5:26:THR:HA	30:B5:27:PRO:HD3	1.77	0.43
31:B6:45:LYS:HG2	35:BA:2371:G:C5'	2.47	0.43
32:B7:40:TRP:CD2	35:BA:459:U:H5'	2.53	0.43
35:BA:130:C:O3'	35:BA:1349:A:H1'	2.17	0.43
35:BA:440:G:N2	40:BF:46:ARG:NH2	2.67	0.43
35:BA:600:G:H2'	35:BA:601:C:H6	1.83	0.43
35:BA:603:A:O2'	35:BA:604:G:OP2	2.33	0.43
35:BA:654(B):C:H2'	35:BA:654(C):G:C8	2.54	0.43
35:BA:708:C:O5'	35:BA:708:C:H6	2.02	0.43
35:BA:733:G:O6	35:BA:761:A:C8	2.71	0.43
35:BA:847:U:N3	35:BA:934:G:N2	2.66	0.43
35:BA:997:G:O2'	35:BA:998:C:H5'	2.19	0.43
35:BA:1064:C:C1'	43:BK:89:HIS:HA	2.48	0.43
35:BA:1070:A:H5'	35:BA:1072:C:P	2.59	0.43
35:BA:1078:U:H1'	35:BA:1088:A:H5"	2.00	0.43
35:BA:1451:C:H4'	35:BA:1452:A:C8	2.54	0.43
35:BA:1471:A:C2	35:BA:1472:A:C5	3.06	0.43
35:BA:1665:A:H4'	46:BO:67:LYS:HB2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:2126:A:H1'	35:BA:2127:G:O4'	2.18	0.43
35:BA:2305:A:O2'	41:BG:136:ARG:HG2	2.18	0.43
35:BA:2485:G:C2	35:BA:2486:G:C8	3.07	0.43
35:BA:2786:U:O2'	39:BE:62:PRO:HA	2.18	0.43
36:BB:81:G:C6	36:BB:97:G:C2	3.07	0.43
37:BC:76:LEU:HD21	37:BC:104:ILE:CD1	2.48	0.43
38:BD:206:LEU:HD13	38:BD:212:SER:OG	2.19	0.43
41:BG:29:TRP:C	41:BG:31:VAL:H	2.20	0.43
41:BG:77:ILE:HG21	41:BG:80:PHE:HB3	1.99	0.43
41:BG:180:PHE:O	41:BG:181:ARG:C	2.56	0.43
42:BH:154:PRO:HB2	42:BH:155:SER:H	1.56	0.43
45:BN:38:HIS:CE1	45:BN:50:ASP:OD2	2.71	0.43
46:BO:96:THR:C	46:BO:97:ARG:HG2	2.38	0.43
47:BP:84:ASN:HB3	47:BP:86:LYS:H	1.83	0.43
51:BT:29:ARG:HG3	51:BT:30:VAL:N	2.32	0.43
54:BW:26:GLY:HA2	54:BW:71:VAL:O	2.18	0.43
56:BY:54:LYS:NZ	56:BY:55:TYR:HE1	2.15	0.43
57:BZ:50:GLN:O	57:BZ:52:SER:N	2.51	0.43
1:AA:58:C:C6	1:AA:58:C:H3'	2.53	0.43
1:AA:68:G:O4'	1:AA:171:A:H1'	2.18	0.43
1:AA:308:C:H2'	1:AA:309:G:H8	1.84	0.43
1:AA:340:U:C2	1:AA:350:G:N2	2.87	0.43
1:AA:472:A:C1'	16:AP:82:GLN:HE22	2.31	0.43
1:AA:793:U:H5'	1:AA:794:A:H5'	2.00	0.43
1:AA:807:A:H2'	1:AA:808:C:C6	2.54	0.43
1:AA:961:U:H2'	1:AA:962:C:C5'	2.49	0.43
1:AA:980:C:C5	1:AA:981:U:N1	2.86	0.43
2:AB:166:ASP:OD1	2:AB:205:ASP:OD2	2.37	0.43
4:AD:92:VAL:HG12	4:AD:96:LEU:HD21	2.00	0.43
6:AF:4:TYR:HE1	6:AF:92:LYS:HD2	1.84	0.43
8:AH:36:LEU:O	8:AH:37:ARG:C	2.56	0.43
8:AH:54:ASP:C	8:AH:56:LYS:H	2.21	0.43
8:AH:54:ASP:O	8:AH:56:LYS:HG3	2.19	0.43
8:AH:88:LYS:CB	8:AH:89:PRO:HD2	2.47	0.43
10:AJ:79:ARG:HD3	10:AJ:79:ARG:HA	1.55	0.43
11:AK:120:ARG:NH1	11:AK:126:ARG:NE	2.66	0.43
16:AP:50:LYS:C	16:AP:51:VAL:CG2	2.86	0.43
17:AQ:52:LYS:HD2	17:AQ:55:ASP:OD2	2.17	0.43
18:AR:53:ARG:C	18:AR:55:ARG:H	2.20	0.43
20:AT:22:ARG:O	20:AT:23:ARG:C	2.56	0.43
22:AV:5:G:N2	22:AV:69:C:N3	2.65	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:17:ILE:N	24:AY:17:ILE:HD12	2.33	0.43
24:AY:259:PHE:C	24:AY:260:LEU:HD13	2.38	0.43
24:AY:308:PRO:O	24:AY:332:SER:OG	2.28	0.43
26:B1:11:ARG:HB2	26:B1:12:PRO:HD2	1.99	0.43
31:B6:37:ARG:NH2	35:BA:2286:A:N6	2.65	0.43
35:BA:87:C:P	35:BA:90:U:O4	2.76	0.43
35:BA:112:U:H2'	35:BA:113:G:H5'	2.01	0.43
35:BA:123:G:C6	35:BA:124:G:C5	3.06	0.43
35:BA:208:C:C2	35:BA:209:C:C5	3.07	0.43
35:BA:287:C:O2'	35:BA:288:C:H5'	2.19	0.43
35:BA:333:G:H2'	35:BA:333:G:N3	2.33	0.43
35:BA:418:G:H2'	35:BA:419:C:H6	1.83	0.43
35:BA:482:A:H1'	35:BA:498:G:N2	2.34	0.43
35:BA:579:G:C2	35:BA:1262:A:C4	3.07	0.43
35:BA:624:C:H41	47:BP:107:LYS:HZ3	1.66	0.43
35:BA:626:U:O2	47:BP:105:LEU:HG	2.19	0.43
35:BA:729:G:C5	38:BD:208:LYS:HB2	2.53	0.43
35:BA:903:C:C3'	35:BA:904:C:H5"	2.47	0.43
35:BA:1052:C:O2'	35:BA:1053:C:C5'	2.67	0.43
35:BA:1204:A:C2	35:BA:1241:A:N1	2.86	0.43
35:BA:1526:G:H2'	35:BA:1527:G:C8	2.53	0.43
35:BA:1778:U:H2'	35:BA:1784:A:N6	2.33	0.43
35:BA:1889:A:H1'	35:BA:2087:G:O4'	2.19	0.43
35:BA:1948:G:C2'	35:BA:1949:G:H5'	2.46	0.43
35:BA:2055:C:C4'	35:BA:2056:G:H5"	2.42	0.43
35:BA:2246:G:H2'	35:BA:2247:A:C8	2.53	0.43
35:BA:2262:U:O2'	35:BA:2263:C:H5"	2.18	0.43
35:BA:2693:A:C6	35:BA:2717:G:C6	3.06	0.43
35:BA:2751:G:OP1	35:BA:2751:G:N2	2.52	0.43
35:BA:2776:A:C6	35:BA:2782:G:H1'	2.54	0.43
36:BB:46:A:C6	36:BB:47:C:N3	2.87	0.43
38:BD:43:ARG:HH11	38:BD:44:ASN:CG	2.22	0.43
39:BE:24:THR:HG23	39:BE:184:VAL:HG23	2.01	0.43
39:BE:28:ALA:HB3	39:BE:93:VAL:HG22	2.01	0.43
39:BE:45:THR:O	39:BE:46:ALA:CB	2.62	0.43
39:BE:101:ARG:HE	39:BE:171:GLU:HB2	1.75	0.43
40:BF:20:LEU:O	40:BF:24:LEU:HD23	2.18	0.43
40:BF:107:LYS:O	40:BF:110:LEU:HB3	2.18	0.43
44:BL:94:LEU:O	44:BL:95:LYS:HG2	2.18	0.43
46:BO:23:ARG:HE	46:BO:23:ARG:HB2	1.24	0.43
47:BP:30:THR:CG2	47:BP:31:ALA:N	2.61	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BP:102:ARG:HH11	47:BP:102:ARG:HB2	1.78	0.43
48:BQ:137:TYR:CE2	57:BZ:81:ARG:CZ	3.02	0.43
51:BT:78:LEU:HB3	51:BT:79:HIS:CE1	2.53	0.43
53:BV:46:VAL:HG22	53:BV:47:VAL:N	2.29	0.43
54:BW:11:ARG:O	54:BW:11:ARG:HD3	2.18	0.43
1:AA:189(A):C:H2'	1:AA:189(B):C:H6	1.83	0.43
1:AA:360:A:O2'	1:AA:361:G:H5'	2.18	0.43
1:AA:504:C:O4'	1:AA:510:A:C2	2.71	0.43
1:AA:944:G:C2	1:AA:1340:A:C6	3.06	0.43
1:AA:1072:G:H2'	1:AA:1073:U:H6	1.79	0.43
1:AA:1084:G:OP1	1:AA:1086:U:C5	2.72	0.43
1:AA:1095:U:C4	1:AA:1096:C:C4	3.06	0.43
1:AA:1298:C:H5"	7:AG:114:ARG:HH22	1.84	0.43
1:AA:1346:A:N6	1:AA:1375:A:OP2	2.48	0.43
2:AB:102:LEU:O	2:AB:103:THR:C	2.57	0.43
4:AD:38:TYR:HA	4:AD:39:PRO:HD3	1.86	0.43
4:AD:159:ARG:HH11	4:AD:159:ARG:HG3	1.83	0.43
5:AE:12:LEU:HD22	5:AE:13:ILE:N	2.34	0.43
6:AF:61:LEU:HD12	6:AF:61:LEU:N	2.32	0.43
7:AG:12:LEU:HD13	7:AG:25:ALA:HB2	2.00	0.43
7:AG:80:VAL:CG2	7:AG:81:GLY:H	2.30	0.43
8:AH:85:ARG:O	8:AH:88:LYS:NZ	2.51	0.43
8:AH:102:ARG:HE	8:AH:102:ARG:HB2	1.63	0.43
9:AI:102:LEU:HA	9:AI:102:LEU:HD23	1.80	0.43
9:AI:122:ALA:HB1	9:AI:123:PRO:HD2	2.01	0.43
10:AJ:30:SER:HA	10:AJ:80:LYS:HE2	2.01	0.43
10:AJ:80:LYS:HB3	10:AJ:80:LYS:HZ3	1.84	0.43
12:AL:47:LYS:HB3	12:AL:48:PRO:HD2	1.95	0.43
13:AM:112:GLY:O	13:AM:113:PRO:C	2.57	0.43
19:AS:24:ALA:O	19:AS:25:LYS:CB	2.67	0.43
20:AT:22:ARG:H	20:AT:22:ARG:HG3	1.43	0.43
24:AY:237:PRO:HA	24:AY:241:GLU:OE1	2.19	0.43
24:AY:329:ARG:HG3	24:AY:331:TYR:CZ	2.54	0.43
24:AY:546:ILE:O	24:AY:550:MET:HG3	2.18	0.43
24:AY:591:LYS:HD3	24:AY:591:LYS:HA	1.87	0.43
26:B1:70:VAL:O	26:B1:73:LEU:N	2.45	0.43
26:B1:90:ILE:O	26:B1:94:LEU:CD1	2.67	0.43
31:B6:8:LYS:HE3	31:B6:25:LYS:CD	2.40	0.43
32:B7:45:ALA:C	32:B7:46:VAL:HG23	2.39	0.43
35:BA:88:G:P	35:BA:90:U:H5	2.42	0.43
35:BA:271(S):G:C6	35:BA:271(T):C:C4	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:532:A:N3	35:BA:532:A:H2'	2.34	0.43
35:BA:615:G:C6	35:BA:616:G:C5	3.06	0.43
35:BA:673:C:H5'	35:BA:674:G:OP2	2.19	0.43
35:BA:750:A:H3'	35:BA:751:A:C5'	2.48	0.43
35:BA:900:A:C2	35:BA:901:A:H1'	2.54	0.43
35:BA:977:G:C4	35:BA:978:G:C8	3.06	0.43
35:BA:1022:G:O2'	35:BA:1023:U:OP2	2.34	0.43
35:BA:1064:C:H5"	43:BK:86:LYS:HB2	2.01	0.43
35:BA:1398:C:H2'	35:BA:1399:C:O4'	2.17	0.43
35:BA:1420:U:H2'	35:BA:1421:G:C5'	2.48	0.43
35:BA:1495:A:H2'	35:BA:1496:A:N3	2.34	0.43
35:BA:1533:G:N2	35:BA:1535:A:OP1	2.51	0.43
35:BA:1649:G:C2'	35:BA:1650:G:H5'	2.49	0.43
35:BA:1692:U:H2'	35:BA:1694:C:C5	2.53	0.43
35:BA:2375:G:N2	35:BA:2377:A:H3'	2.33	0.43
35:BA:2400:G:N2	35:BA:2417:C:C2	2.87	0.43
35:BA:2413:G:C5	35:BA:2414:G:C8	3.06	0.43
35:BA:2464:C:N4	35:BA:2487:G:C6	2.87	0.43
35:BA:2557:G:H2'	35:BA:2558:C:C6	2.53	0.43
35:BA:2688:U:H2'	35:BA:2719:G:N2	2.33	0.43
36:BB:50:G:O5'	36:BB:50:G:H8	2.02	0.43
37:BC:114:VAL:O	37:BC:139:PRO:HG3	2.19	0.43
37:BC:216:THR:HB	37:BC:222:SER:HA	2.00	0.43
38:BD:39:LYS:HZ2	38:BD:87:ASN:HB3	1.84	0.43
39:BE:9:VAL:HG13	39:BE:25:VAL:HG12	1.99	0.43
39:BE:101:ARG:HG3	39:BE:169:ASN:ND2	2.34	0.43
40:BF:20:LEU:HD23	40:BF:21:ALA:H	1.78	0.43
40:BF:42:ALA:O	40:BF:45:ARG:HG3	2.19	0.43
40:BF:75:HIS:HE1	40:BF:82:ILE:HD11	1.84	0.43
40:BF:167:ALA:HA	40:BF:170:LEU:HD23	2.01	0.43
42:BH:172:LYS:HD3	42:BH:172:LYS:HA	1.86	0.43
45:BN:38:HIS:O	52:BU:67:ALA:HB1	2.19	0.43
48:BQ:34:LEU:HD12	48:BQ:130:LYS:O	2.19	0.43
51:BT:16:ARG:HB3	51:BT:17:THR:H	1.65	0.43
52:BU:12:ARG:O	52:BU:13:LYS:C	2.57	0.43
52:BU:65:ILE:HG12	52:BU:96:ALA:HB1	2.01	0.43
56:BY:43:ASN:ND2	56:BY:64:GLU:CG	2.82	0.43
57:BZ:175:VAL:HA	57:BZ:176:PRO:HD3	1.76	0.43
1:AA:295:C:C2	1:AA:296:U:C5	3.06	0.43
1:AA:397:A:H5'	1:AA:398:C:OP1	2.18	0.43
1:AA:619:U:N3	4:AD:134:ASP:OD2	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1119:C:O2'	1:AA:1120:G:H5'	2.19	0.43
1:AA:1254:C:H2'	1:AA:1255:G:C8	2.54	0.43
1:AA:1273:G:N3	1:AA:1273:G:H2'	2.34	0.43
1:AA:1291:G:H2'	1:AA:1292:U:C6	2.54	0.43
1:AA:1371:G:C6	1:AA:1372:U:C4	3.06	0.43
1:AA:1442:G:C5	1:AA:1442(B):A:C2	3.06	0.43
2:AB:32:ILE:HG23	2:AB:32:ILE:O	2.18	0.43
2:AB:207:ALA:O	2:AB:209:ARG:N	2.51	0.43
3:AC:6:HIS:NE2	3:AC:184:TYR:CE2	2.87	0.43
4:AD:57:ARG:HG2	4:AD:57:ARG:NH1	2.33	0.43
7:AG:23:VAL:HG13	7:AG:43:PHE:CE2	2.53	0.43
9:AI:11:LYS:O	9:AI:13:ALA:N	2.52	0.43
10:AJ:38:ILE:N	10:AJ:71:LEU:O	2.40	0.43
11:AK:20:TYR:HB2	11:AK:31:THR:HG22	2.00	0.43
12:AL:88:GLY:H	12:AL:98:TYR:HA	1.84	0.43
18:AR:37:VAL:C	18:AR:39:VAL:H	2.22	0.43
18:AR:66:LEU:HG	18:AR:70:ILE:HD11	1.99	0.43
22:AV:39:C:H2'	22:AV:40:C:C6	2.54	0.43
24:AY:15:ILE:CD1	24:AY:81:ILE:HG12	2.39	0.43
25:B0:46:LYS:HD2	25:B0:78:TYR:CE1	2.54	0.43
26:B1:88:LYS:O	26:B1:92:LYS:HB3	2.18	0.43
35:BA:15:G:H2'	35:BA:16:G:C8	2.52	0.43
35:BA:435:C:C2'	35:BA:436:C:H5'	2.48	0.43
35:BA:481:G:N2	35:BA:507:A:H1'	2.33	0.43
35:BA:551:G:C2'	35:BA:552:G:H5'	2.44	0.43
35:BA:592:G:N2	35:BA:593:G:H1'	2.33	0.43
35:BA:603:A:O2'	35:BA:604:G:P	2.77	0.43
35:BA:649:G:H2'	35:BA:650:C:O4'	2.19	0.43
35:BA:860:U:H1'	35:BA:2268:A:H5'	1.99	0.43
35:BA:1323:U:O4	35:BA:1324:G:O6	2.37	0.43
35:BA:1439:A:H2'	35:BA:1440:G:O4'	2.19	0.43
35:BA:1485:G:H5'	35:BA:1485:G:C8	2.53	0.43
35:BA:2192:G:H2'	35:BA:2193:G:H5"	2.01	0.43
35:BA:2259:G:C5	35:BA:2427:C:N4	2.87	0.43
35:BA:2306:C:C5	35:BA:2307:G:O2'	2.61	0.43
35:BA:2334:G:C2	50:BS:15:ARG:NH1	2.87	0.43
35:BA:2744:G:C2	35:BA:2761:G:C4	3.07	0.43
36:BB:39:A:C2	36:BB:44:G:C2	3.06	0.43
38:BD:9:TYR:O	38:BD:10:THR:CG2	2.59	0.43
38:BD:92:ILE:H	38:BD:92:ILE:CD1	2.30	0.43
38:BD:94:LEU:C	38:BD:94:LEU:CD2	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BE:177:PRO:CG	39:BE:178:GLU:H	2.32	0.43
40:BF:179:GLU:C	40:BF:181:LEU:N	2.72	0.43
42:BH:162:ILE:HD13	42:BH:162:ILE:HG21	1.70	0.43
48:BQ:44:ALA:O	48:BQ:47:ILE:HB	2.19	0.43
49:BR:41:ALA:O	49:BR:43:GLU:N	2.51	0.43
53:BV:33:VAL:HG23	53:BV:35:LEU:HD22	2.01	0.43
54:BW:58:ALA:O	54:BW:63:ASP:N	2.50	0.43
55:BX:26:TYR:HD2	55:BX:92:LEU:HD12	1.83	0.43
56:BY:8:LYS:CD	56:BY:8:LYS:N	2.69	0.43
56:BY:73:ARG:O	56:BY:74:PRO:O	2.37	0.43
57:BZ:13:GLU:HB3	57:BZ:14:LYS:HZ2	1.84	0.43
57:BZ:115:GLY:H	57:BZ:177:PRO:HG2	1.82	0.43
57:BZ:143:GLY:C	57:BZ:144:LEU:HD22	2.39	0.43
1:AA:37:U:C2'	1:AA:38:G:H5'	2.48	0.43
1:AA:147:G:N2	1:AA:148:G:H1'	2.33	0.43
1:AA:160:A:H2'	1:AA:161:A:O4'	2.19	0.43
1:AA:470:C:C2'	1:AA:471:G:OP1	2.67	0.43
1:AA:522:C:H41	12:AL:53:ARG:HH22	1.66	0.43
1:AA:620:C:C2	4:AD:135:LEU:HG	2.54	0.43
1:AA:901:A:C5	1:AA:902:G:H1'	2.54	0.43
1:AA:1286:A:H5'	21:AU:25:LYS:HD2	2.01	0.43
1:AA:1349:A:C6	1:AA:1374:A:C8	3.06	0.43
1:AA:1479:C:O2'	1:AA:1480:G:H5'	2.19	0.43
2:AB:114:ARG:O	2:AB:115:LEU:C	2.56	0.43
2:AB:230:VAL:CG2	2:AB:231:GLU:H	2.27	0.43
3:AC:136:GLN:C	3:AC:138:VAL:H	2.20	0.43
4:AD:111:ALA:HB2	4:AD:120:LEU:HD11	2.01	0.43
6:AF:67:MET:HE1	6:AF:75:LEU:HD22	1.99	0.43
9:AI:5:TYR:O	9:AI:84:ALA:HA	2.19	0.43
9:AI:16:ARG:O	9:AI:63:ILE:HG23	2.19	0.43
9:AI:47:LEU:N	9:AI:47:LEU:CD1	2.81	0.43
9:AI:95:LYS:C	9:AI:98:PRO:HD2	2.39	0.43
11:AK:116:HIS:O	11:AK:117:ASN:HB2	2.18	0.43
15:AO:86:GLY:O	15:AO:87:ILE:CG2	2.67	0.43
18:AR:58:LEU:HD23	18:AR:62:GLU:HB3	2.00	0.43
18:AR:59:SER:N	18:AR:62:GLU:HB2	2.30	0.43
19:AS:19:VAL:CG1	19:AS:44:MET:HG2	2.47	0.43
19:AS:35:SER:HG	19:AS:38:SER:HG	1.67	0.43
20:AT:26:ASN:ND2	20:AT:26:ASN:H	2.17	0.43
22:AV:9:G:N3	22:AV:45:G:H2'	2.34	0.43
25:B0:43:THR:CG2	35:BA:2331:G:O3'	2.65	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:B0:70:GLN:NE2	25:B0:80:HIS:NE2	2.67	0.43
26:B1:19:GLN:CB	26:B1:35:THR:HG22	2.48	0.43
30:B5:11:THR:OG1	35:BA:1263:U:O3'	2.37	0.43
33:B8:4:MET:O	33:B8:62:LEU:CD1	2.57	0.43
35:BA:594:U:H2'	35:BA:595:C:H6	1.82	0.43
35:BA:622:G:OP2	47:BP:108:LYS:NZ	2.43	0.43
35:BA:657:U:C2	35:BA:658:C:C5	3.07	0.43
35:BA:1037:G:N2	35:BA:1038:C:C2	2.87	0.43
35:BA:1231:G:H2'	35:BA:1232:G:C8	2.53	0.43
35:BA:1301:A:HO2'	35:BA:1302:A:C5'	2.28	0.43
35:BA:1325:G:OP2	35:BA:1616:A:H2'	2.18	0.43
35:BA:1367:A:H2'	35:BA:1368:G:H5'	2.00	0.43
35:BA:1572:A:O2'	35:BA:1573:G:H5'	2.19	0.43
35:BA:2415:G:C2	35:BA:2416:C:C2	3.07	0.43
35:BA:2777:G:C8	35:BA:2777:G:O5'	2.72	0.43
35:BA:2777:G:H4'	35:BA:2778:A:C5'	2.48	0.43
35:BA:2822:G:O6	49:BR:4:LEU:HB3	2.19	0.43
35:BA:2859:G:C6	35:BA:2860:A:N6	2.86	0.43
36:BB:70:C:HO2'	36:BB:71:C:H5'	1.83	0.43
38:BD:183:ARG:NH1	38:BD:183:ARG:CG	2.78	0.43
38:BD:213:ARG:HA	38:BD:213:ARG:HD2	1.61	0.43
40:BF:167:ALA:C	40:BF:170:LEU:HD23	2.39	0.43
41:BG:27:ASN:HB3	41:BG:30:GLU:H	1.84	0.43
41:BG:31:VAL:HG22	41:BG:32:PRO:HD2	2.00	0.43
42:BH:38:SER:C	42:BH:40:GLU:H	2.21	0.43
42:BH:59:ARG:O	42:BH:60:ARG:C	2.57	0.43
42:BH:122:THR:HG22	42:BH:123:PHE:N	2.34	0.43
43:BK:99:ILE:HD12	43:BK:103:GLN:CB	2.45	0.43
45:BN:40:PRO:O	52:BU:64:ARG:NH1	2.51	0.43
45:BN:96:GLU:O	45:BN:100:GLU:HG3	2.18	0.43
47:BP:66:GLY:O	47:BP:67:MET:CB	2.66	0.43
50:BS:66:ALA:HB2	50:BS:97:ARG:HB2	1.99	0.43
50:BS:87:PHE:CG	50:BS:88:ASP:N	2.87	0.43
51:BT:40:THR:HB	51:BT:41:ARG:H	1.65	0.43
51:BT:79:HIS:O	51:BT:80:SER:CB	2.66	0.43
52:BU:47:TYR:CA	52:BU:50:ARG:HH12	2.32	0.43
54:BW:50:VAL:CG1	54:BW:51:LEU:N	2.81	0.43
56:BY:85:VAL:HG13	56:BY:93:GLY:O	2.19	0.43
1:AA:384:G:O2'	1:AA:385:C:H5'	2.18	0.43
1:AA:748:C:O2'	1:AA:749:C:O5'	2.37	0.43
1:AA:789:U:O2	1:AA:791:G:C8	2.72	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1033:G:H2'	1:AA:1034:G:H5'	2.01	0.43
1:AA:1108:G:H5'	3:AC:176:HIS:CD2	2.54	0.43
1:AA:1226:C:N4	13:AM:104:ARG:CD	2.75	0.43
1:AA:1498:U:HO2'	1:AA:1499:A:P	2.42	0.43
2:AB:36:ARG:NE	2:AB:36:ARG:N	2.66	0.43
2:AB:168:THR:OG1	2:AB:169:LYS:N	2.52	0.43
5:AE:12:LEU:CD1	5:AE:31:LEU:CB	2.96	0.43
8:AH:53:VAL:HG12	8:AH:54:ASP:OD2	2.19	0.43
8:AH:85:ARG:HH12	8:AH:134:ILE:HG22	1.83	0.43
16:AP:67:THR:O	16:AP:70:ALA:HB3	2.19	0.43
19:AS:19:VAL:HG12	19:AS:20:LEU:HG	2.00	0.43
24:AY:176:GLY:C	24:AY:177:ILE:HG13	2.39	0.43
24:AY:276:VAL:O	24:AY:280:LEU:HB2	2.19	0.43
24:AY:549:ALA:C	24:AY:551:GLN:H	2.22	0.43
24:AY:659:LEU:CD1	24:AY:667:GLY:HA3	2.49	0.43
27:B2:24:LEU:HD22	27:B2:60:LEU:HD13	2.01	0.43
34:B9:17:ILE:HG22	34:B9:19:ARG:H	1.83	0.43
35:BA:72:U:O2'	35:BA:73:A:H5'	2.18	0.43
35:BA:186:G:O2'	35:BA:187:G:H5'	2.18	0.43
35:BA:564:C:H2'	35:BA:565:C:H6	1.83	0.43
35:BA:603:A:N6	35:BA:626:U:H4'	2.33	0.43
35:BA:625:G:H5'	35:BA:657:U:OP1	2.19	0.43
35:BA:716:A:C2'	35:BA:717:G:O5'	2.67	0.43
35:BA:733:G:C6	35:BA:761:A:C8	3.07	0.43
35:BA:769:G:H5'	35:BA:1379:A:H61	1.84	0.43
35:BA:868:U:C4	35:BA:869:G:N7	2.86	0.43
35:BA:1022:G:N2	35:BA:1024:G:N2	2.66	0.43
35:BA:1027:A:H2'	35:BA:1027:A:N3	2.34	0.43
35:BA:1141:U:H1'	35:BA:1142(A):A:C2	2.54	0.43
35:BA:1270:C:H5"	35:BA:1271:G:H5'	2.00	0.43
35:BA:1290:C:O5'	35:BA:1290:C:H6	2.01	0.43
35:BA:1362:C:H2'	35:BA:1363:C:H6	1.84	0.43
35:BA:1722:A:C2	35:BA:1740:G:C8	3.06	0.43
35:BA:1891:G:H2'	35:BA:1892:C:O4'	2.19	0.43
35:BA:2053:G:H1	35:BA:2616:C:H42	1.67	0.43
35:BA:2652:C:H42	35:BA:2668:G:H1	1.67	0.43
37:BC:4:HIS:HB3	37:BC:8:TYR:HD2	1.82	0.43
37:BC:6:LYS:O	37:BC:7:ARG:C	2.55	0.43
38:BD:138:VAL:HG13	38:BD:138:VAL:O	2.19	0.43
39:BE:63:LEU:O	39:BE:63:LEU:HD23	2.19	0.43
39:BE:133:LYS:C	39:BE:134:ILE:HG13	2.39	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BF:148:LEU:HD23	40:BF:191:ARG:HH12	1.80	0.43
42:BH:107:VAL:O	42:BH:107:VAL:HG23	2.19	0.43
43:BK:8:VAL:O	43:BK:56:GLU:HA	2.19	0.43
45:BN:9:VAL:HG12	45:BN:10:GLU:N	2.32	0.43
46:BO:9:GLU:O	46:BO:83:ALA:HA	2.19	0.43
47:BP:50:ARG:HG3	47:BP:51:PHE:N	2.34	0.43
49:BR:51:LEU:HD12	49:BR:51:LEU:N	2.33	0.43
50:BS:65:VAL:C	50:BS:67:ARG:N	2.71	0.43
50:BS:67:ARG:HH21	50:BS:100:ALA:HB3	1.82	0.43
51:BT:67:SER:O	51:BT:68:TYR:HB2	2.18	0.43
52:BU:50:ARG:C	52:BU:52:ARG:N	2.72	0.43
56:BY:36:ALA:HB1	56:BY:67:LEU:O	2.19	0.43
57:BZ:24:LEU:HD12	57:BZ:41:LEU:HD23	2.00	0.43
57:BZ:50:GLN:O	57:BZ:51:ALA:C	2.58	0.43
1:AA:234:C:H2'	1:AA:235:C:H6	1.84	0.42
1:AA:282:A:H3'	1:AA:283:C:H6	1.83	0.42
1:AA:310:G:C5	1:AA:311:C:C5	3.07	0.42
1:AA:415:A:H2'	1:AA:416:G:H8	1.83	0.42
1:AA:437:U:C5	1:AA:438:G:C5	3.07	0.42
1:AA:522:C:C5	12:AL:53:ARG:NH2	2.87	0.42
1:AA:644:G:N7	1:AA:645:C:C5	2.87	0.42
1:AA:698:G:C6	1:AA:699:C:C4	3.06	0.42
1:AA:753:A:H4'	1:AA:754:C:C5'	2.48	0.42
1:AA:993:G:H22	1:AA:996:A:N6	2.16	0.42
1:AA:1515:C:H2'	1:AA:1516:G:H8	1.82	0.42
2:AB:22:LYS:N	2:AB:40:HIS:HE1	2.11	0.42
4:AD:200:GLU:O	4:AD:201:GLN:C	2.56	0.42
10:AJ:55:LYS:HE3	10:AJ:55:LYS:N	2.31	0.42
12:AL:82:VAL:N	12:AL:106:ASP:OD2	2.44	0.42
14:AN:32:SER:O	14:AN:40:CYS:HA	2.19	0.42
15:AO:26:GLU:CG	15:AO:77:ARG:NH1	2.82	0.42
17:AQ:59:ILE:CG2	17:AQ:71:PHE:CD1	3.02	0.42
18:AR:51:LEU:HA	18:AR:52:PRO:HD3	1.79	0.42
18:AR:69:THR:O	18:AR:72:ARG:HB2	2.19	0.42
19:AS:6:LYS:H	19:AS:6:LYS:CD	2.31	0.42
22:AV:24:U:H2'	22:AV:25:C:H6	1.84	0.42
24:AY:401:SER:O	24:AY:403:GLU:CG	2.67	0.42
24:AY:519:ARG:NH2	24:AY:678:GLU:H	2.16	0.42
24:AY:656:ALA:C	24:AY:658:ASP:H	2.23	0.42
26:B1:30:VAL:HA	35:BA:2395:C:O2'	2.18	0.42
26:B1:44:PRO:C	26:B1:46:LEU:HD13	2.40	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B9:1:MET:HB3	34:B9:4:ARG:NH2	2.34	0.42
35:BA:123:G:C2'	35:BA:124:G:H5'	2.49	0.42
35:BA:143(A):C:O2	35:BA:143(A):C:H2'	2.19	0.42
35:BA:285:C:C2'	35:BA:286:C:H5"	2.49	0.42
35:BA:347:A:H2'	35:BA:348:G:C8	2.54	0.42
35:BA:435:C:H2'	35:BA:436:C:H5'	2.00	0.42
35:BA:496:G:C2'	35:BA:497:A:H5'	2.49	0.42
35:BA:650:C:C2'	35:BA:651:G:H5"	2.49	0.42
35:BA:766:C:O2'	35:BA:767:U:H5'	2.19	0.42
35:BA:1114:G:O2'	35:BA:1115:G:H5"	2.19	0.42
35:BA:1161:C:H2'	35:BA:1162:G:H8	1.84	0.42
35:BA:1576:U:H2'	35:BA:1577:C:H6	1.83	0.42
35:BA:1668:A:C5	35:BA:1674:G:C5	3.07	0.42
35:BA:1930:G:H2'	35:BA:1931:U:OP2	2.17	0.42
35:BA:2447:G:O6	35:BA:2504:U:O4	2.37	0.42
35:BA:2459:A:C2	35:BA:2460:U:H1'	2.54	0.42
35:BA:2488:A:H2'	35:BA:2489:G:C8	2.55	0.42
35:BA:2555:U:H2'	35:BA:2556:C:C5'	2.43	0.42
39:BE:64:LYS:O	39:BE:64:LYS:HG2	2.19	0.42
41:BG:42:GLY:C	41:BG:43:LEU:HD22	2.39	0.42
42:BH:68:THR:C	42:BH:70:THR:H	2.21	0.42
43:BK:4:VAL:HG12	43:BK:5:VAL:HG22	2.00	0.42
43:BK:15:GLY:HA2	43:BK:42:ASN:OD1	2.19	0.42
43:BK:24:GLY:N	43:BK:25:PRO:HD2	2.22	0.42
46:BO:107:ARG:HG3	46:BO:107:ARG:HH11	1.84	0.42
47:BP:75:ILE:N	47:BP:75:ILE:CD1	2.81	0.42
48:BQ:63:LYS:HZ3	57:BZ:175:VAL:HG21	1.82	0.42
52:BU:25:TRP:HD1	52:BU:26:GLY:N	2.15	0.42
52:BU:79:PHE:CD1	52:BU:79:PHE:C	2.91	0.42
53:BV:67:GLY:C	53:BV:68:LYS:O	2.53	0.42
57:BZ:41:LEU:O	57:BZ:42:VAL:C	2.57	0.42
1:AA:182:U:H3'	1:AA:183:G:H5'	2.01	0.42
1:AA:324:G:N2	1:AA:326:G:H3'	2.33	0.42
1:AA:745:C:H5"	1:AA:851:G:H1'	2.01	0.42
1:AA:936:C:H2'	1:AA:937:A:H5'	2.01	0.42
1:AA:975:A:C4'	1:AA:976:G:H5"	2.29	0.42
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.48	0.42
1:AA:1260:C:H4'	1:AA:1284:C:H5'	2.01	0.42
1:AA:1416:G:H2'	1:AA:1417:G:C8	2.54	0.42
1:AA:1434:A:H3'	1:AA:1435:G:C8	2.54	0.42
1:AA:1490:C:C6	1:AA:1490:C:C4'	3.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:187:LEU:HD23	2:AB:214:ILE:HG21	2.00	0.42
6:AF:72:VAL:HG13	6:AF:73:ASN:N	2.34	0.42
9:AI:9:ARG:HB2	9:AI:104:ARG:HH12	1.82	0.42
9:AI:83:ARG:O	9:AI:86:VAL:CG1	2.67	0.42
18:AR:41:LYS:O	18:AR:41:LYS:HG3	2.19	0.42
19:AS:25:LYS:O	19:AS:26:GLY:C	2.58	0.42
24:AY:93:GLU:O	24:AY:94:VAL:C	2.55	0.42
24:AY:99:ARG:CZ	24:AY:128:TYR:HB2	2.50	0.42
24:AY:230:LYS:NZ	24:AY:237:PRO:HG3	2.35	0.42
24:AY:451:ILE:O	24:AY:451:ILE:HG12	2.19	0.42
24:AY:507:TYR:C	24:AY:507:TYR:HD1	2.18	0.42
25:B0:19:LYS:HD3	25:B0:41:ARG:HH22	1.84	0.42
25:B0:40:GLN:NE2	25:B0:44:ARG:H	2.17	0.42
26:B1:82:LEU:C	26:B1:83:GLU:HG3	2.39	0.42
27:B2:60:LEU:HD23	27:B2:60:LEU:HA	1.85	0.42
30:B5:19:ARG:NH1	35:BA:1266:G:OP1	2.42	0.42
35:BA:271(P):C:H2'	35:BA:271(Q):G:C8	2.55	0.42
35:BA:338:G:H2'	35:BA:339:U:H6	1.84	0.42
35:BA:449:A:H2'	35:BA:450:G:C5'	2.49	0.42
35:BA:463:G:N2	35:BA:466:A:OP2	2.45	0.42
35:BA:563:G:C2	35:BA:564:C:C2	3.07	0.42
35:BA:649:G:C2	35:BA:650:C:C2	3.07	0.42
35:BA:692:C:N3	35:BA:771:G:C2	2.87	0.42
35:BA:1142(A):A:C5	35:BA:1144:G:N7	2.86	0.42
35:BA:1464:C:O2'	35:BA:1528:A:H8	2.02	0.42
35:BA:1503:U:O2'	35:BA:1504:C:H5'	2.19	0.42
35:BA:2192:G:C2'	35:BA:2193:G:H5"	2.49	0.42
35:BA:2201:C:N3	35:BA:2223:G:C2	2.87	0.42
35:BA:2328:A:N1	35:BA:2329:G:C6	2.87	0.42
35:BA:2414:G:H2'	35:BA:2414:G:N3	2.34	0.42
35:BA:2845:G:H5"	51:BT:55:ASN:HA	2.01	0.42
35:BA:2851:A:C5	35:BA:2852:G:C5	3.08	0.42
37:BC:7:ARG:O	37:BC:11:LEU:HG	2.18	0.42
37:BC:11:LEU:C	37:BC:13:GLU:N	2.73	0.42
38:BD:34:VAL:C	38:BD:36:PRO:HD2	2.39	0.42
38:BD:176:ARG:NH1	38:BD:176:ARG:HB3	2.34	0.42
39:BE:95:ILE:H	39:BE:95:ILE:CD1	2.18	0.42
40:BF:32:LEU:HD23	40:BF:32:LEU:O	2.18	0.42
41:BG:64:THR:CG2	41:BG:66:GLN:H	2.13	0.42
43:BK:3:LYS:CB	43:BK:29:GLN:HB3	2.41	0.42
50:BS:89:ARG:HB3	50:BS:92:TYR:HB3	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BS:101:LEU:HD13	50:BS:103:GLU:HB2	2.00	0.42
51:BT:10:VAL:C	51:BT:12:SER:H	2.21	0.42
52:BU:28:ARG:NH1	52:BU:38:THR:HG23	2.34	0.42
53:BV:19:LYS:HG2	53:BV:94:LEU:CB	2.50	0.42
54:BW:20:VAL:CG2	54:BW:47:VAL:HG21	2.49	0.42
54:BW:34:ASN:O	54:BW:37:ARG:HB3	2.19	0.42
54:BW:43:GLY:O	54:BW:44:ALA:C	2.58	0.42
54:BW:80:PRO:O	54:BW:100:THR:HG21	2.19	0.42
55:BX:7:VAL:CG1	55:BX:8:ILE:CD1	2.97	0.42
56:BY:94:LYS:O	56:BY:102:CYS:HB2	2.14	0.42
1:AA:190:U:C2	20:AT:105:SER:HB2	2.55	0.42
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.19	0.42
2:AB:121:LEU:HD23	2:AB:124:SER:HB3	2.01	0.42
2:AB:126:GLU:HA	2:AB:129:GLU:CD	2.39	0.42
5:AE:36:ASP:OD1	5:AE:38:GLN:N	2.38	0.42
5:AE:76:ILE:CG2	5:AE:118:ILE:HD13	2.49	0.42
5:AE:135:THR:O	5:AE:136:MET:C	2.57	0.42
5:AE:142:LEU:O	5:AE:143:ARG:NE	2.52	0.42
6:AF:23:LYS:O	6:AF:27:GLN:HG2	2.20	0.42
7:AG:95:ARG:O	7:AG:96:GLN:C	2.55	0.42
9:AI:79:LEU:O	9:AI:82:ALA:N	2.52	0.42
10:AJ:47:PHE:N	10:AJ:47:PHE:HD1	2.15	0.42
12:AL:6:THR:H	12:AL:9:GLN:HE21	1.67	0.42
12:AL:37:CYS:CB	12:AL:79:GLU:O	2.66	0.42
13:AM:57:ARG:C	13:AM:59:TYR:N	2.71	0.42
18:AR:85:LEU:CD1	18:AR:86:VAL:N	2.80	0.42
19:AS:44:MET:HB3	19:AS:47:HIS:HD2	1.83	0.42
20:AT:104:LEU:HD23	20:AT:105:SER:O	2.19	0.42
21:AU:6:ARG:HE	21:AU:15:ARG:NH2	2.17	0.42
22:AV:56:C:N4	35:BA:2169:A:N3	2.67	0.42
24:AY:138:LYS:HG2	59:AY:702:GDP:C6	2.54	0.42
24:AY:150:ILE:C	24:AY:152:THR:N	2.73	0.42
24:AY:228:MET:CE	24:AY:229:LEU:HD23	2.48	0.42
24:AY:513:LYS:N	24:AY:566:THR:O	2.53	0.42
26:B1:8:SER:HB3	26:B1:66:HIS:CG	2.54	0.42
28:B3:6:VAL:HB	28:B3:54:VAL:CG1	2.43	0.42
29:B4:4:GLY:O	29:B4:5:ILE:CG2	2.66	0.42
35:BA:7:G:H1	35:BA:2896:C:N4	2.16	0.42
35:BA:256:A:H2'	35:BA:257:A:C8	2.55	0.42
35:BA:363(F):A:O2'	35:BA:364:C:P	2.76	0.42
35:BA:392:C:H2'	35:BA:393:C:C6	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:392:C:OP1	35:BA:409:C:OP1	2.37	0.42
35:BA:570:G:H2'	35:BA:2030:A:N7	2.35	0.42
35:BA:1022:G:N2	35:BA:1142(A):A:C2	2.86	0.42
35:BA:1614:A:N1	54:BW:91:GLY:HA2	2.34	0.42
35:BA:1654:A:OP1	49:BR:3:HIS:HB2	2.19	0.42
35:BA:2152:G:C6	35:BA:2153:G:N7	2.87	0.42
35:BA:2328:A:H2'	35:BA:2329:G:H8	1.83	0.42
35:BA:2397:G:H2'	35:BA:2398:U:H6	1.83	0.42
35:BA:2443:C:O2	35:BA:2443:C:C2'	2.65	0.42
35:BA:2555:U:C6	35:BA:2556:C:C6	3.07	0.42
35:BA:2593:U:C2	35:BA:2594:C:C5	3.08	0.42
36:BB:21:G:O2'	36:BB:22:U:O4'	2.37	0.42
37:BC:80:LYS:HB3	37:BC:119:ASP:OD1	2.19	0.42
37:BC:181:PHE:HA	37:BC:182:PRO:HD3	1.91	0.42
38:BD:132:PRO:HG3	38:BD:190:TYR:CD1	2.55	0.42
39:BE:177:PRO:HG2	39:BE:178:GLU:N	2.33	0.42
40:BF:154:VAL:HG13	40:BF:191:ARG:O	2.20	0.42
41:BG:2:PRO:HB2	41:BG:3:LEU:H	1.63	0.42
41:BG:63:ILE:CD1	41:BG:64:THR:HB	2.48	0.42
41:BG:97:ASP:O	41:BG:101:ILE:N	2.49	0.42
42:BH:105:LEU:HD21	42:BH:113:VAL:HB	2.00	0.42
43:BK:70:LYS:HB3	43:BK:71:THR:H	1.73	0.42
45:BN:2:LYS:NZ	53:BV:12:TYR:HA	2.34	0.42
45:BN:14:VAL:CG1	45:BN:15:LEU:N	2.82	0.42
47:BP:91:PHE:H	47:BP:91:PHE:HD1	1.60	0.42
51:BT:23:ARG:HA	51:BT:52:ILE:HD11	2.01	0.42
56:BY:52:SER:O	56:BY:53:PRO:C	2.58	0.42
1:AA:622:A:C8	1:AA:623:C:C5	3.07	0.42
1:AA:669:U:H2'	1:AA:670:G:C8	2.55	0.42
1:AA:707:C:O2'	1:AA:708:C:C5'	2.63	0.42
1:AA:765:G:N2	1:AA:812:C:O2'	2.52	0.42
1:AA:1101:A:H4'	1:AA:1102:A:H4'	2.00	0.42
1:AA:1286:A:H2'	1:AA:1287:A:H4'	2.01	0.42
1:AA:1339:A:H4'	22:AV:41:C:H4'	2.01	0.42
2:AB:81:VAL:O	2:AB:82:ARG:C	2.58	0.42
2:AB:91:PRO:HG2	2:AB:155:LEU:HD23	2.02	0.42
2:AB:97:TRP:HH2	2:AB:176:GLU:CD	2.23	0.42
4:AD:120:LEU:CB	4:AD:126:ILE:HD11	2.49	0.42
4:AD:127:THR:HG23	4:AD:147:ALA:HB3	2.01	0.42
6:AF:38:GLU:HB2	6:AF:64:GLN:O	2.19	0.42
7:AG:108:ALA:HB1	7:AG:120:ILE:HD13	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:83:ILE:CD1	8:AH:137:VAL:HG22	2.43	0.42
10:AJ:65:LEU:HD12	14:AN:55:GLY:C	2.39	0.42
14:AN:23:ARG:NH1	14:AN:30:ALA:HB2	2.34	0.42
15:AO:9:GLN:O	15:AO:10:LYS:C	2.56	0.42
17:AQ:10:VAL:HG13	17:AQ:19:VAL:HB	2.00	0.42
17:AQ:67:LYS:CA	17:AQ:70:ARG:HH12	2.30	0.42
22:AV:64:G:C6	22:AV:65:C:C4	3.08	0.42
24:AY:125:ALA:C	24:AY:127:LYS:N	2.69	0.42
24:AY:468:ARG:C	24:AY:470:PHE:N	2.70	0.42
24:AY:509:HIS:CE1	24:AY:570:GLY:HA2	2.55	0.42
27:B2:43:GLN:H	27:B2:43:GLN:HG3	1.54	0.42
27:B2:67:LYS:C	27:B2:69:ARG:H	2.22	0.42
31:B6:51:GLU:O	31:B6:52:VAL:CB	2.60	0.42
33:B8:10:ALA:O	33:B8:11:LYS:C	2.57	0.42
35:BA:58:G:H1	35:BA:69:C:N4	2.16	0.42
35:BA:301:G:HO2'	35:BA:302:C:H6	1.66	0.42
35:BA:413:C:H4'	35:BA:1880:C:O2'	2.19	0.42
35:BA:703:U:C4	35:BA:704:G:C6	3.07	0.42
35:BA:826:U:OP1	35:BA:2429:G:OP1	2.37	0.42
35:BA:1087:G:H5"	35:BA:1088:A:OP2	2.19	0.42
35:BA:1473:G:O2'	35:BA:1474:C:H5'	2.18	0.42
35:BA:1581:G:C6	35:BA:1582:C:N3	2.88	0.42
35:BA:1917:U:C2'	35:BA:1918:A:C5'	2.94	0.42
35:BA:2473:U:C3'	35:BA:2474:C:C5'	2.85	0.42
35:BA:2483:C:H3'	35:BA:2484:G:C5'	2.44	0.42
35:BA:2498:C:HO2'	35:BA:2499:C:H5'	1.81	0.42
35:BA:2656:U:C4	35:BA:2665:A:H2	2.37	0.42
36:BB:87:G:O3'	36:BB:88:C:C6	2.72	0.42
37:BC:29:LEU:O	37:BC:32:GLU:N	2.50	0.42
38:BD:117:VAL:HG22	38:BD:118:VAL:N	2.34	0.42
38:BD:127:VAL:HG22	38:BD:194:GLY:CA	2.49	0.42
38:BD:148:GLU:HB2	38:BD:151:LYS:HG3	2.00	0.42
38:BD:210:GLY:HA2	38:BD:213:ARG:HB2	2.02	0.42
39:BE:26:ILE:CD1	39:BE:198:VAL:HG21	2.49	0.42
40:BF:83:PHE:O	40:BF:84:VAL:C	2.57	0.42
42:BH:97:ARG:O	42:BH:97:ARG:HG2	2.19	0.42
43:BK:79:ARG:HD2	43:BK:85:GLU:O	2.19	0.42
44:BL:94:LEU:C	44:BL:95:LYS:HG2	2.40	0.42
46:BO:111:PHE:O	46:BO:115:VAL:HG23	2.19	0.42
47:BP:106:LEU:N	47:BP:106:LEU:CD1	2.81	0.42
48:BQ:11:LYS:NZ	48:BQ:88:GLY:O	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BV:32:THR:HG22	53:BV:33:VAL:H	1.78	0.42
56:BY:4:LYS:O	56:BY:6:HIS:CD2	2.71	0.42
56:BY:95:LYS:HE2	56:BY:101:LYS:H	1.83	0.42
57:BZ:23:LYS:HD3	57:BZ:38:TYR:CE2	2.55	0.42
1:AA:119:A:N7	1:AA:288:A:C2	2.88	0.42
1:AA:189:G:H2'	1:AA:189(A):C:H6	1.80	0.42
1:AA:375:U:C4	1:AA:376:G:N7	2.87	0.42
1:AA:376:G:N3	1:AA:389:A:C2	2.88	0.42
1:AA:512:U:O2	1:AA:540:G:C2	2.73	0.42
1:AA:610:G:H2'	1:AA:610:G:N3	2.34	0.42
1:AA:1276:G:C2'	1:AA:1277:C:H5'	2.49	0.42
1:AA:1321:C:C5'	1:AA:1322:C:H5'	2.49	0.42
2:AB:219:VAL:O	2:AB:220:ASP:C	2.55	0.42
3:AC:16:ARG:CD	3:AC:17:ASP:N	2.82	0.42
3:AC:26:LYS:HD2	10:AJ:45:ARG:HH22	1.85	0.42
3:AC:83:ARG:C	3:AC:85:ARG:N	2.72	0.42
4:AD:91:SER:O	4:AD:92:VAL:C	2.58	0.42
4:AD:205:GLU:OE1	5:AE:100:VAL:HG22	2.20	0.42
5:AE:64:ARG:CZ	5:AE:64:ARG:HB2	2.50	0.42
5:AE:76:ILE:HG22	5:AE:118:ILE:HD13	2.00	0.42
5:AE:91:LEU:HA	5:AE:120:THR:HG22	2.00	0.42
7:AG:29:LYS:HB3	7:AG:105:VAL:HG21	2.01	0.42
11:AK:54:ARG:C	11:AK:56:GLY:H	2.22	0.42
14:AN:36:PHE:CD1	14:AN:36:PHE:C	2.92	0.42
16:AP:1:MET:HG3	16:AP:65:GLN:CG	2.49	0.42
19:AS:39:THR:OG1	19:AS:70:LYS:HE2	2.18	0.42
22:AV:35:A:C4	22:AV:36:U:C5	3.06	0.42
22:AV:76:A:H1'	35:BA:2421:G:N2	2.34	0.42
24:AY:115:GLU:OE1	24:AY:118:SER:CB	2.68	0.42
24:AY:272:LEU:O	24:AY:275:ALA:HB3	2.19	0.42
24:AY:286:ILE:HA	24:AY:287:PRO:HD3	1.65	0.42
24:AY:309:LEU:HA	24:AY:333:GLY:HA3	2.01	0.42
24:AY:491:VAL:HG21	24:AY:597:GLY:CA	2.49	0.42
24:AY:538:TYR:HE2	24:AY:577:SER:HB3	1.84	0.42
25:B0:19:LYS:CD	25:B0:41:ARG:HH22	2.31	0.42
29:B4:33:VAL:CG1	29:B4:34:GLU:N	2.82	0.42
35:BA:342:G:N2	35:BA:343:C:C2	2.87	0.42
35:BA:438:G:H2'	35:BA:440:G:C8	2.53	0.42
35:BA:478:A:C6	35:BA:480:A:C6	3.06	0.42
35:BA:523:C:H5'	35:BA:541:C:H1'	2.02	0.42
35:BA:848:G:C4	35:BA:933:A:C8	3.05	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:979:G:H3'	35:BA:980:A:H5"	1.93	0.42
35:BA:1289:C:O2	35:BA:1289:C:H2'	2.19	0.42
35:BA:1544:A:O2'	35:BA:1545:A:H5'	2.20	0.42
35:BA:1598:C:H2'	35:BA:1599:C:C6	2.54	0.42
35:BA:1771:C:H1'	35:BA:1786:A:C8	2.55	0.42
35:BA:1835:G:H1'	35:BA:1931:U:C2	2.55	0.42
35:BA:1854:A:H62	35:BA:1888:G:H8	1.67	0.42
35:BA:2333:A:C1'	35:BA:2335:A:C6	3.03	0.42
35:BA:2478:A:C2'	35:BA:2479:G:H5'	2.50	0.42
35:BA:2624:G:H2'	35:BA:2625:G:H5'	2.01	0.42
35:BA:2725:A:C4	35:BA:2727:G:C8	3.07	0.42
35:BA:2743:C:C2'	35:BA:2744:G:O5'	2.68	0.42
35:BA:2747:G:N2	35:BA:2757:A:H62	2.17	0.42
35:BA:2876:G:C5'	51:BT:3:ARG:HA	2.49	0.42
36:BB:28:C:C2'	36:BB:29:A:H5'	2.49	0.42
36:BB:114:C:O2'	50:BS:46:VAL:CG1	2.68	0.42
38:BD:183:ARG:HH11	38:BD:183:ARG:CG	2.33	0.42
39:BE:176:ILE:HG22	39:BE:179:GLU:H	1.85	0.42
40:BF:180:GLY:O	40:BF:182:ASN:N	2.52	0.42
41:BG:40:ASN:HD22	41:BG:91:ARG:HB2	1.85	0.42
41:BG:131:TYR:HE2	41:BG:133:LEU:CD2	2.31	0.42
42:BH:46:GLU:HG3	42:BH:51:ARG:HB2	2.00	0.42
42:BH:68:THR:C	42:BH:70:THR:N	2.73	0.42
42:BH:144:VAL:O	42:BH:144:VAL:HG12	2.18	0.42
43:BK:112:MET:HG3	43:BK:113:PRO:CD	2.44	0.42
47:BP:62:LEU:O	47:BP:62:LEU:HD23	2.20	0.42
48:BQ:19:GLY:O	48:BQ:20:ALA:HB3	2.19	0.42
50:BS:69:VAL:HG13	50:BS:99:LYS:HE2	2.01	0.42
50:BS:89:ARG:HB3	50:BS:92:TYR:CB	2.49	0.42
52:BU:49:HIS:HA	52:BU:52:ARG:HB2	2.02	0.42
52:BU:53:ARG:O	52:BU:54:LYS:C	2.58	0.42
54:BW:44:ALA:O	54:BW:47:VAL:N	2.52	0.42
55:BX:36:LYS:HB3	55:BX:56:THR:CG2	2.46	0.42
1:AA:444:C:O2	1:AA:444:C:H2'	2.20	0.42
1:AA:692:U:H5	11:AK:26:ASN:OD1	2.03	0.42
1:AA:999:C:H2'	1:AA:1000:U:C4	2.55	0.42
1:AA:1226:C:C5	13:AM:104:ARG:HB2	2.54	0.42
2:AB:128:GLU:HB3	2:AB:129:GLU:H	1.77	0.42
2:AB:235:SER:O	2:AB:237:ALA:N	2.48	0.42
6:AF:2:ARG:CZ	6:AF:69:GLU:HG3	2.49	0.42
7:AG:151:TYR:OH	11:AK:54:ARG:CD	2.63	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:109:ILE:CG2	8:AH:137:VAL:HB	2.50	0.42
9:AI:95:LYS:CA	9:AI:98:PRO:HD2	2.49	0.42
9:AI:117:HIS:C	9:AI:118:LYS:HG3	2.40	0.42
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	2.19	0.42
16:AP:43:LYS:HG3	16:AP:48:TRP:CE3	2.55	0.42
18:AR:45:SER:OG	18:AR:46:GLU:N	2.50	0.42
20:AT:63:ILE:C	20:AT:65:LYS:N	2.67	0.42
24:AY:42:ILE:O	24:AY:42:ILE:HG22	2.20	0.42
24:AY:165:GLN:HA	24:AY:178:ILE:O	2.19	0.42
24:AY:341:VAL:HG23	24:AY:350:GLU:HB2	2.02	0.42
24:AY:509:HIS:C	24:AY:510:VAL:HG23	2.40	0.42
26:B1:4:VAL:HG21	26:B1:11:ARG:HH11	1.84	0.42
26:B1:81:LYS:NZ	35:BA:271(H):G:O3’	2.32	0.42
31:B6:28:ARG:HB2	31:B6:29:ASN:H	1.65	0.42
33:B8:49:VAL:O	33:B8:53:PRO:HD3	2.19	0.42
35:BA:104:U:C6	35:BA:105:C:C6	3.08	0.42
35:BA:393:C:O2’	35:BA:394:A:H5’	2.18	0.42
35:BA:416:C:H6	35:BA:416:C:O5’	2.03	0.42
35:BA:652:C:O2’	35:BA:653:A:C5’	2.67	0.42
35:BA:653:A:H3’	35:BA:653:A:N3	2.34	0.42
35:BA:654:A:C8	35:BA:654(V):A:H4’	2.53	0.42
35:BA:684:G:O2’	35:BA:788:A:N7	2.53	0.42
35:BA:794:G:C2	35:BA:795:C:C2	3.08	0.42
35:BA:900:A:C5	35:BA:901:A:C8	3.07	0.42
35:BA:958:U:C3’	35:BA:958:U:C6	3.01	0.42
35:BA:978:G:N1	35:BA:985:C:N4	2.56	0.42
35:BA:1077:A:H2	35:BA:1088:A:H2’	1.84	0.42
35:BA:1171:G:N2	35:BA:1179:C:N3	2.67	0.42
35:BA:1452:A:H3’	35:BA:1453:U:H5’	1.99	0.42
35:BA:1653:G:O6	49:BR:11:ASN:HA	2.20	0.42
35:BA:1963:U:H4’	35:BA:1964:G:OP1	2.19	0.42
35:BA:2009:G:O2’	35:BA:2010:G:H5’	2.20	0.42
35:BA:2364:C:H2’	35:BA:2365:G:O4’	2.19	0.42
35:BA:2563:U:H2’	35:BA:2565:A:OP2	2.19	0.42
35:BA:2572:A:C5’	35:BA:2574:G:H4’	2.25	0.42
35:BA:2615:U:H2’	35:BA:2616:C:H6	1.84	0.42
35:BA:2624:G:C2’	35:BA:2625:G:H5’	2.50	0.42
35:BA:2876:G:H5”	51:BT:3:ARG:HA	2.01	0.42
36:BB:26:A:C8	36:BB:27:C:C5	3.07	0.42
36:BB:66:A:H4’	36:BB:67:G:OP1	2.18	0.42
37:BC:119:ASP:OD1	37:BC:120:VAL:HG13	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:7:LYS:HB3	38:BD:8:PRO:HD2	2.02	0.42
38:BD:75:ILE:HA	38:BD:76:PRO:HD2	1.92	0.42
39:BE:67:PHE:O	39:BE:70:ALA:HB2	2.19	0.42
40:BF:64:ILE:HD13	40:BF:65:TRP:CE3	2.54	0.42
40:BF:154:VAL:HA	40:BF:191:ARG:O	2.19	0.42
41:BG:58:GLN:OE1	41:BG:62:LEU:HD11	2.20	0.42
42:BH:85:LYS:C	42:BH:85:LYS:CD	2.87	0.42
43:BK:100:THR:HG1	43:BK:103:GLN:HG3	1.84	0.42
47:BP:114:ILE:O	47:BP:114:ILE:HG13	2.19	0.42
48:BQ:59:ARG:CB	57:BZ:180:VAL:CG2	2.97	0.42
51:BT:28:VAL:HB	51:BT:88:ILE:HD11	2.02	0.42
52:BU:13:LYS:O	52:BU:16:LYS:HB2	2.19	0.42
55:BX:3:THR:N	55:BX:6:ASP:OD2	2.52	0.42
55:BX:65:ARG:CG	55:BX:66:LEU:N	2.81	0.42
56:BY:46:LYS:HB3	56:BY:47:LYS:H	1.59	0.42
57:BZ:20:ARG:HB2	57:BZ:20:ARG:CZ	2.50	0.42
57:BZ:56:VAL:HG11	57:BZ:68:PRO:HB2	2.00	0.42
57:BZ:81:ARG:HB2	57:BZ:81:ARG:HH11	1.85	0.42
57:BZ:127:LYS:HB3	57:BZ:127:LYS:HZ3	1.84	0.42
57:BZ:129:SER:C	57:BZ:131:ARG:N	2.72	0.42
1:AA:409:G:C5’	4:AD:25:ARG:HB2	2.50	0.42
1:AA:535:A:H4’	1:AA:536:C:OP1	2.19	0.42
1:AA:649:G:H2’	1:AA:650:G:O4’	2.20	0.42
1:AA:721:G:H8	1:AA:721:G:OP1	2.02	0.42
1:AA:986:A:H2’	1:AA:987:G:H8	1.85	0.42
1:AA:1130:A:C5’	9:AI:18:PHE:HE1	2.31	0.42
1:AA:1217:C:O2	1:AA:1217:C:H2’	2.19	0.42
1:AA:1239:A:C2’	1:AA:1298:C:N4	2.81	0.42
1:AA:1442(B):A:C5	51:BT:118:ARG:NE	2.88	0.42
1:AA:1477:C:H2’	1:AA:1478:C:O4’	2.20	0.42
1:AA:1483:A:H2	35:BA:1959:G:N3	2.18	0.42
2:AB:224:GLN:HG2	2:AB:224:GLN:O	2.20	0.42
3:AC:65:ALA:O	3:AC:66:VAL:HB	2.19	0.42
5:AE:143:ARG:HD3	5:AE:143:ARG:HA	1.74	0.42
8:AH:7:ALA:HA	8:AH:10:LEU:HD12	2.02	0.42
8:AH:9:MET:HG3	8:AH:26:VAL:HG21	2.01	0.42
9:AI:4:TYR:CD2	9:AI:88:TYR:CB	2.94	0.42
10:AJ:61:GLU:HG3	14:AN:58:LYS:HZ1	1.82	0.42
11:AK:34:ASP:HB2	11:AK:35:PRO:HD2	2.00	0.42
11:AK:66:LEU:O	11:AK:67:ASP:C	2.56	0.42
11:AK:67:ASP:OD1	11:AK:71:LYS:HE3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:40:LEU:O	18:AR:43:PHE:HD1	2.03	0.42
20:AT:43:LEU:O	20:AT:45:GLN:N	2.53	0.42
20:AT:61:SER:O	20:AT:62:LEU:C	2.55	0.42
22:AV:76:A:N6	35:BA:2422:A:O4'	2.53	0.42
24:AY:251:ILE:HG13	24:AY:251:ILE:H	1.64	0.42
24:AY:260:LEU:O	24:AY:268:GLY:HA3	2.18	0.42
24:AY:529:ILE:HG12	24:AY:567:LEU:HG	2.02	0.42
25:B0:20:ARG:HD2	25:B0:20:ARG:N	2.19	0.42
25:B0:40:GLN:HE22	25:B0:43:THR:C	2.23	0.42
26:B1:45:ASN:ND2	26:B1:47:GLN:HE21	2.18	0.42
35:BA:87:C:H5"	35:BA:88:G:H5'	2.02	0.42
35:BA:322:A:O5'	40:BF:169:ASN:ND2	2.47	0.42
35:BA:1297:C:C2	35:BA:1298:C:C5	3.06	0.42
35:BA:1331:A:C2'	35:BA:1332:G:H5"	2.49	0.42
35:BA:1475:G:C2	35:BA:1517:G:C4	3.08	0.42
35:BA:1503:U:C2	35:BA:1504:C:C5	3.07	0.42
35:BA:1632:A:C5	35:BA:1633:G:C6	3.07	0.42
35:BA:1770:G:C2'	35:BA:1771:C:H5'	2.50	0.42
35:BA:1948:G:H2'	35:BA:1949:G:C5'	2.47	0.42
35:BA:2000:G:OP2	49:BR:3:HIS:CE1	2.70	0.42
35:BA:2028:U:H2'	35:BA:2029:G:C8	2.54	0.42
35:BA:2582:G:N3	35:BA:2582:G:H2'	2.34	0.42
35:BA:2720:U:H2'	35:BA:2721:A:O4'	2.18	0.42
35:BA:2735:G:O2'	35:BA:2736:G:H5'	2.19	0.42
35:BA:2861:G:N3	35:BA:2862:G:C8	2.88	0.42
35:BA:2881:C:H2'	35:BA:2882:A:H8	1.85	0.42
36:BB:9:G:P	50:BS:25:ARG:NH2	2.92	0.42
38:BD:61:LEU:HD22	38:BD:61:LEU:HA	1.86	0.42
39:BE:68:ALA:HB3	39:BE:69:LYS:HE2	2.02	0.42
39:BE:167:VAL:HG12	39:BE:189:PRO:CD	2.49	0.42
40:BF:53:THR:HG23	40:BF:55:GLY:CA	2.45	0.42
42:BH:65:HIS:HE1	42:BH:69:ARG:HH11	1.66	0.42
45:BN:67:LEU:HD23	45:BN:87:LEU:CB	2.49	0.42
46:BO:71:ARG:HH11	46:BO:71:ARG:HG3	1.85	0.42
52:BU:82:GLY:C	52:BU:84:LYS:H	2.23	0.42
1:AA:33:A:C2	12:AL:32:PHE:HE2	2.37	0.42
1:AA:98:G:H2'	1:AA:99:U:O4'	2.20	0.42
1:AA:542:G:N2	1:AA:543:C:C2	2.87	0.42
1:AA:1053:G:H3'	1:AA:1054:C:H5'	2.01	0.42
1:AA:1158:C:O2	1:AA:1158:C:C2'	2.67	0.42
1:AA:1238:A:OP1	1:AA:1336:C:H5	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1347:G:H2'	1:AA:1373:G:N1	2.35	0.42
2:AB:143:GLU:O	2:AB:146:GLN:HB3	2.20	0.42
3:AC:51:GLY:O	3:AC:115:LEU:HD21	2.20	0.42
3:AC:93:LYS:O	3:AC:93:LYS:CG	2.68	0.42
3:AC:182:ILE:HA	3:AC:202:ILE:O	2.19	0.42
4:AD:196:LEU:C	4:AD:198:VAL:H	2.23	0.42
5:AE:7:GLU:CB	5:AE:35:GLY:O	2.68	0.42
6:AF:81:ILE:O	6:AF:81:ILE:CG2	2.66	0.42
8:AH:6:ILE:C	8:AH:8:ASP:N	2.71	0.42
8:AH:17:THR:HB	8:AH:78:GLN:CD	2.38	0.42
9:AI:5:TYR:CD2	9:AI:17:VAL:O	2.71	0.42
12:AL:87:GLY:HA2	12:AL:98:TYR:HA	2.02	0.42
13:AM:99:ARG:O	13:AM:101:GLN:HG3	2.19	0.42
16:AP:71:ARG:O	16:AP:74:LEU:N	2.52	0.42
20:AT:75:ASN:H	20:AT:75:ASN:ND2	2.15	0.42
20:AT:92:LEU:HD23	20:AT:92:LEU:HA	1.88	0.42
24:AY:9:LEU:HD23	24:AY:9:LEU:O	2.19	0.42
24:AY:377:VAL:HG23	24:AY:378:VAL:N	2.35	0.42
24:AY:443:HIS:O	24:AY:445:GLU:N	2.52	0.42
24:AY:515:GLU:HG2	24:AY:564:LYS:HB3	2.01	0.42
24:AY:653:PHE:O	24:AY:654:GLY:C	2.56	0.42
35:BA:88:G:N3	35:BA:88:G:H2'	2.34	0.42
35:BA:272(I):U:O2	35:BA:272(I):U:C3'	2.66	0.42
35:BA:303:U:H2'	35:BA:304:G:H8	1.84	0.42
35:BA:321:G:OP2	40:BF:135:LYS:HD2	2.20	0.42
35:BA:481:G:H2'	35:BA:507:A:C2	2.54	0.42
35:BA:530:G:N3	35:BA:530:G:O4'	2.52	0.42
35:BA:659:C:H1'	40:BF:102:PRO:HD3	2.02	0.42
35:BA:775:G:C4	35:BA:794:G:C8	3.08	0.42
35:BA:1288:U:H4'	35:BA:1289:C:OP2	2.19	0.42
35:BA:1985:G:O2'	35:BA:1986:A:H5'	2.19	0.42
35:BA:2203:U:H1'	38:BD:151:LYS:HE3	2.01	0.42
35:BA:2296:U:C4'	35:BA:2297:C:OP1	2.55	0.42
35:BA:2728:U:H2'	35:BA:2729:G:H8	1.84	0.42
35:BA:2787:C:H1'	39:BE:61:ARG:CD	2.49	0.42
35:BA:2820:A:C8	39:BE:191:PRO:CB	3.03	0.42
37:BC:76:LEU:HD23	37:BC:114:VAL:HG13	2.01	0.42
37:BC:104:ILE:HG12	37:BC:108:TRP:HE3	1.83	0.42
39:BE:43:GLY:O	39:BE:44:TYR:HB3	2.20	0.42
48:BQ:118:LEU:CD1	48:BQ:131:ILE:HG23	2.50	0.42
49:BR:117:VAL:HG12	49:BR:118:GLU:H	1.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BU:83:LEU:HG	52:BU:88:ILE:HD11	2.02	0.42
1:AA:143:A:H2	1:AA:220:G:H1	1.67	0.42
1:AA:176:C:C2	1:AA:177:C:C5	3.08	0.42
1:AA:876:G:C6	1:AA:877:C:N4	2.88	0.42
1:AA:883:C:C2'	1:AA:884:U:H5'	2.50	0.42
1:AA:1125:U:H2'	1:AA:1126:U:H2'	2.01	0.42
1:AA:1414:U:H2'	1:AA:1415:G:C8	2.54	0.42
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.20	0.42
3:AC:79:ARG:HB2	3:AC:79:ARG:HH11	1.84	0.42
4:AD:192:GLU:O	4:AD:193:ASP:C	2.57	0.42
7:AG:82:GLY:HA3	23:AX:13:A:C2	2.53	0.42
8:AH:25:ASP:N	8:AH:25:ASP:OD1	2.53	0.42
9:AI:11:LYS:O	9:AI:11:LYS:HG2	2.19	0.42
10:AJ:32:ALA:CA	10:AJ:78:ASN:HD21	2.33	0.42
10:AJ:81:THR:C	10:AJ:83:GLU:N	2.70	0.42
10:AJ:81:THR:O	10:AJ:83:GLU:N	2.53	0.42
14:AN:3:ARG:HE	14:AN:3:ARG:HB3	1.67	0.42
14:AN:37:PHE:CB	14:AN:39:LEU:HD12	2.38	0.42
15:AO:34:LEU:HD12	15:AO:34:LEU:O	2.19	0.42
16:AP:20:VAL:CG2	16:AP:21:VAL:N	2.83	0.42
18:AR:62:GLU:O	18:AR:65:ILE:HG12	2.20	0.42
24:AY:150:ILE:C	24:AY:152:THR:H	2.22	0.42
24:AY:264:LEU:C	24:AY:264:LEU:CD2	2.88	0.42
24:AY:276:VAL:O	24:AY:277:VAL:C	2.58	0.42
24:AY:402:ILE:O	24:AY:402:ILE:HG22	2.18	0.42
24:AY:422:GLU:O	24:AY:425:SER:N	2.52	0.42
24:AY:519:ARG:NH2	24:AY:677:GLN:HB2	2.33	0.42
30:B5:16:ARG:NH1	30:B5:16:ARG:CG	2.75	0.42
34:B9:10:ILE:HB	34:B9:32:HIS:CE1	2.54	0.42
35:BA:121:G:N2	35:BA:122:G:H1'	2.35	0.42
35:BA:272(D):G:H1	35:BA:364:C:N4	2.16	0.42
35:BA:448:U:C4	35:BA:583:G:H1'	2.55	0.42
35:BA:523:C:C3'	35:BA:523:C:C6	3.03	0.42
35:BA:876:C:H2'	35:BA:877:U:O4'	2.20	0.42
35:BA:1052:C:C6	35:BA:1052:C:O5'	2.73	0.42
35:BA:1144:G:C2'	35:BA:1145:C:H5'	2.49	0.42
35:BA:1375:C:H2'	35:BA:1376:C:C6	2.38	0.42
35:BA:1416:G:C2	35:BA:1417:C:C4	3.08	0.42
35:BA:1596:A:O2'	35:BA:1597:A:H5'	2.19	0.42
35:BA:1632:A:H2'	35:BA:1633:G:C8	2.55	0.42
35:BA:1765:C:O2'	35:BA:1766:U:H5'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1845:G:C2'	35:BA:1846:G:C5'	2.76	0.42
35:BA:1912:A:C2	35:BA:1919:A:C6	3.08	0.42
35:BA:2126:A:O2'	35:BA:2127:G:P	2.78	0.42
35:BA:2219:G:O5'	35:BA:2219:G:C8	2.66	0.42
35:BA:2363:C:H2'	35:BA:2364:C:C6	2.55	0.42
35:BA:2469:A:N1	35:BA:2470:G:C4	2.88	0.42
35:BA:2547:U:H2'	35:BA:2548:G:H8	1.84	0.42
35:BA:2661:G:C6	35:BA:2662:A:C2	3.08	0.42
35:BA:2835:A:N6	35:BA:2878:U:H3'	2.35	0.42
36:BB:46:A:N6	36:BB:47:C:N4	2.67	0.42
36:BB:73:A:C4	36:BB:105:A:C2	3.08	0.42
38:BD:76:PRO:HB2	38:BD:116:GLN:NE2	2.35	0.42
40:BF:8:GLN:CB	40:BF:126:VAL:HA	2.30	0.42
40:BF:121:GLY:C	40:BF:123:LEU:N	2.72	0.42
41:BG:77:ILE:HG21	41:BG:77:ILE:HD13	1.65	0.42
43:BK:103:GLN:CA	43:BK:106:GLU:HG2	2.49	0.42
45:BN:61:ARG:HD3	45:BN:61:ARG:HA	1.88	0.42
45:BN:102:ALA:O	45:BN:106:MET:HE3	2.19	0.42
46:BO:71:ARG:HB3	46:BO:72:PRO:HD2	2.02	0.42
48:BQ:69:PHE:HA	48:BQ:70:PRO:HD2	1.88	0.42
51:BT:7:ILE:HG21	51:BT:7:ILE:HD13	1.72	0.42
52:BU:55:ARG:HA	52:BU:58:ARG:HD2	2.00	0.42
52:BU:106:PHE:HA	52:BU:109:LEU:HD12	2.02	0.42
53:BV:4:ILE:HA	53:BV:12:TYR:O	2.20	0.42
53:BV:54:GLY:O	53:BV:55:ALA:CB	2.66	0.42
56:BY:31:LEU:N	56:BY:31:LEU:CD2	2.79	0.42
1:AA:116:A:O2'	1:AA:117:G:H5'	2.19	0.42
1:AA:256:U:H2'	1:AA:257:G:C8	2.55	0.42
1:AA:310:G:C6	1:AA:311:C:C4	3.07	0.42
1:AA:587:G:C6	1:AA:755:G:C6	3.08	0.42
1:AA:715:A:H1'	1:AA:777:A:N1	2.35	0.42
1:AA:893:C:O2'	1:AA:894:G:H5'	2.19	0.42
1:AA:973:G:H1'	10:AJ:55:LYS:HZ3	1.80	0.42
1:AA:1049:U:O2'	1:AA:1050:G:OP2	2.28	0.42
1:AA:1103:C:H6	1:AA:1103:C:O5'	2.02	0.42
1:AA:1379:G:O2'	1:AA:1380:U:H5'	2.20	0.42
2:AB:23:ARG:HD2	2:AB:23:ARG:HA	1.71	0.42
2:AB:50:GLU:O	2:AB:51:LEU:C	2.56	0.42
2:AB:74:LYS:O	2:AB:75:LYS:C	2.58	0.42
4:AD:25:ARG:HH12	4:AD:30:LYS:HB2	1.84	0.42
5:AE:78:HIS:ND1	5:AE:79:GLU:N	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:20:ALA:O	10:AJ:24:VAL:HG23	2.19	0.42
12:AL:28:LYS:HE2	12:AL:33:ARG:CZ	2.49	0.42
12:AL:28:LYS:CG	12:AL:33:ARG:HH22	2.32	0.42
18:AR:37:VAL:O	18:AR:39:VAL:N	2.53	0.42
18:AR:40:LEU:C	18:AR:42:ARG:N	2.73	0.42
19:AS:80:TYR:CG	19:AS:80:TYR:O	2.72	0.42
20:AT:45:GLN:HB2	20:AT:91:LEU:HD22	2.01	0.42
22:AV:46:G:H3'	22:AV:46:G:C8	2.55	0.42
22:AV:59:A:C2'	22:AV:60:U:H5'	2.49	0.42
24:AY:120:THR:O	24:AY:121:VAL:C	2.59	0.42
24:AY:181:LEU:HD13	24:AY:216:LEU:HD21	2.02	0.42
24:AY:442:THR:HG23	24:AY:447:GLY:O	2.19	0.42
24:AY:486:THR:CG2	24:AY:600:VAL:CG1	2.97	0.42
24:AY:539:ILE:HA	24:AY:542:VAL:CG1	2.48	0.42
28:B3:6:VAL:O	28:B3:6:VAL:HG23	2.19	0.42
29:B4:22:ILE:CG2	29:B4:23:GLU:H	2.33	0.42
32:B7:39:ARG:NH2	35:BA:468:G:N7	2.61	0.42
34:B9:4:ARG:NH1	35:BA:2477:C:C4	2.85	0.42
35:BA:106:C:O2'	56:BY:2:ARG:NH2	2.52	0.42
35:BA:620:G:H4'	35:BA:621:A:H5"	2.01	0.42
35:BA:640:C:H2'	35:BA:641:C:C6	2.55	0.42
35:BA:660:G:H2'	35:BA:661:C:C6	2.55	0.42
35:BA:695:G:C5	35:BA:768:G:O6	2.73	0.42
35:BA:1448:G:H2'	35:BA:1449:A:C8	2.54	0.42
35:BA:1487:G:N3	35:BA:1487:G:H2'	2.35	0.42
35:BA:1499:C:C5	35:BA:1500:G:N7	2.88	0.42
35:BA:1541:G:H1'	35:BA:1542:A:N9	2.34	0.42
35:BA:1757:U:H2'	35:BA:1758:G:OP1	2.20	0.42
35:BA:1788:C:H2'	35:BA:1789:A:O4'	2.20	0.42
35:BA:1788:C:C2'	35:BA:1789:A:H5'	2.49	0.42
35:BA:1800:C:OP1	38:BD:266:SER:OG	2.26	0.42
35:BA:1801:G:H3'	35:BA:1802:A:H5'	2.01	0.42
35:BA:1863:G:H2'	35:BA:1864:U:O4'	2.19	0.42
35:BA:2286:A:C6	35:BA:2346:A:N6	2.87	0.42
35:BA:2531:A:H5'	42:BH:157:TYR:CZ	2.55	0.42
35:BA:2779:U:H5'	35:BA:2780:G:O5'	2.20	0.42
37:BC:191:ARG:CG	37:BC:191:ARG:NH1	2.71	0.42
38:BD:2:ALA:HB3	38:BD:20:ASP:OD2	2.20	0.42
38:BD:125:ILE:O	38:BD:125:ILE:HG22	2.20	0.42
38:BD:125:ILE:CD1	38:BD:137:PRO:HD3	2.50	0.42
39:BE:51:PHE:HD2	39:BE:52:LEU:HD13	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BF:201:VAL:HA	40:BF:204:ASN:HD22	1.85	0.42
41:BG:162:THR:O	41:BG:163:ALA:C	2.58	0.42
43:BK:57:ILE:H	43:BK:57:ILE:CD1	2.22	0.42
43:BK:119:ASP:HB3	43:BK:120:LEU:H	1.38	0.42
45:BN:87:LEU:HA	45:BN:90:MET:HB2	2.01	0.42
45:BN:99:LEU:HD13	45:BN:103:VAL:HG23	2.02	0.42
48:BQ:1:MET:HE1	48:BQ:45:GLN:N	2.35	0.42
48:BQ:12:GLN:NE2	48:BQ:72:LYS:HG3	2.35	0.42
48:BQ:68:ILE:HG23	48:BQ:103:MET:HA	2.01	0.42
48:BQ:130:LYS:HZ3	57:BZ:80:ARG:HH11	1.67	0.42
50:BS:66:ALA:CB	50:BS:97:ARG:HB2	2.50	0.42
50:BS:95:HIS:O	50:BS:96:GLY:C	2.56	0.42
51:BT:55:ASN:CA	51:BT:59:THR:HG22	2.49	0.42
54:BW:86:LEU:HD12	54:BW:87:PRO:CD	2.49	0.42
56:BY:32:PRO:C	56:BY:35:TYR:H	2.23	0.42
56:BY:55:TYR:N	56:BY:55:TYR:HD1	2.18	0.42
57:BZ:20:ARG:HH11	57:BZ:20:ARG:HB3	1.85	0.42
57:BZ:118:GLN:O	57:BZ:172:ALA:HB1	2.20	0.42
1:AA:163:C:C2’	1:AA:164:U:H5’	2.48	0.41
1:AA:192:U:H4’	20:AT:103:GLY:HA2	2.02	0.41
1:AA:283:C:C6	1:AA:283:C:O5’	2.72	0.41
1:AA:518:C:H5”	1:AA:519:C:C6	2.54	0.41
1:AA:555:C:H2’	1:AA:556:C:C6	2.55	0.41
1:AA:665:A:H2’	1:AA:725:G:N2	2.35	0.41
1:AA:724:G:C2	1:AA:725:G:C8	3.07	0.41
1:AA:774:G:H2’	1:AA:775:G:O4’	2.20	0.41
1:AA:1061:G:H1’	10:AJ:56:HIS:CE1	2.55	0.41
1:AA:1112:C:O2’	3:AC:179:ARG:HG2	2.20	0.41
1:AA:1221:G:P	19:AS:36:ARG:HD3	2.60	0.41
1:AA:1457:G:C8	1:AA:1457:G:H3’	2.54	0.41
2:AB:12:GLU:CA	2:AB:16:HIS:ND1	2.81	0.41
4:AD:149:ALA:O	4:AD:153:ARG:HG3	2.20	0.41
4:AD:192:GLU:O	4:AD:194:LEU:N	2.53	0.41
5:AE:60:TYR:CE1	5:AE:64:ARG:NH2	2.68	0.41
6:AF:32:ASN:HD22	6:AF:32:ASN:HA	1.68	0.41
7:AG:38:LEU:O	7:AG:41:ARG:HB2	2.20	0.41
8:AH:58:TYR:C	8:AH:59:LEU:HD23	2.40	0.41
8:AH:75:ARG:HA	8:AH:76:PRO:HD2	1.91	0.41
10:AJ:94:VAL:CG1	10:AJ:95:GLU:N	2.83	0.41
11:AK:107:SER:C	11:AK:108:ILE:HD12	2.40	0.41
12:AL:15:ARG:HA	12:AL:15:ARG:HD3	1.80	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:27:LEU:HB2	12:AL:62:SER:CB	2.49	0.41
12:AL:105:TYR:N	12:AL:105:TYR:HD2	2.17	0.41
13:AM:53:VAL:O	13:AM:56:LEU:HB3	2.19	0.41
13:AM:81:LEU:N	13:AM:81:LEU:CD2	2.81	0.41
15:AO:31:LEU:HD22	15:AO:31:LEU:N	2.34	0.41
22:AV:49:G:H1	22:AV:65:C:N4	2.18	0.41
24:AY:97:SER:HB3	24:AY:101:LEU:HD21	2.01	0.41
24:AY:165:GLN:NE2	24:AY:260:LEU:CD2	2.83	0.41
24:AY:420:ASP:HB3	24:AY:472:VAL:HG13	2.01	0.41
25:B0:62:LEU:C	25:B0:63:VAL:HG13	2.40	0.41
26:B1:4:VAL:HA	26:B1:10:LYS:O	2.19	0.41
30:B5:2:ALA:CA	35:BA:2015:A:C1’	2.91	0.41
33:B8:25:MET:O	33:B8:47:LYS:HG2	2.20	0.41
35:BA:284:U:O5’	35:BA:284:U:H6	2.03	0.41
35:BA:363:G:H2’	35:BA:363(A):A:C8	2.51	0.41
35:BA:364:C:C2’	35:BA:365:C:C5’	2.95	0.41
35:BA:482:A:N6	35:BA:506:G:C8	2.88	0.41
35:BA:717:G:H2’	35:BA:718:A:O4’	2.19	0.41
35:BA:814:C:N3	35:BA:1193:G:O6	2.53	0.41
35:BA:950:G:H2’	35:BA:951:C:H6	1.82	0.41
35:BA:1010:A:H1’	35:BA:1153:C:C1’	2.48	0.41
35:BA:1680:U:O2’	35:BA:1681:G:H5’	2.20	0.41
35:BA:1701:A:H2’	35:BA:1702:G:H5’	2.01	0.41
35:BA:1856:G:H1	35:BA:1886:C:N4	2.18	0.41
35:BA:1943:U:O2	35:BA:1943:U:C2’	2.67	0.41
35:BA:2189:U:H2’	35:BA:2189:U:O2	2.18	0.41
35:BA:2394:C:C5	35:BA:2395:C:C5	3.08	0.41
35:BA:2543:G:H2’	35:BA:2544:G:C8	2.55	0.41
35:BA:2655:G:HO2’	35:BA:2664:G:H1	1.64	0.41
35:BA:2656:U:H3	35:BA:2665:A:H2	1.66	0.41
35:BA:2693:A:C2	35:BA:2694:G:C8	3.08	0.41
35:BA:2720:U:O2’	35:BA:2721:A:H5’	2.20	0.41
36:BB:32:C:C2	36:BB:51:G:N2	2.88	0.41
38:BD:4:LYS:NZ	38:BD:21:PHE:H	2.17	0.41
38:BD:53:PHE:HB3	38:BD:218:ARG:HB2	2.01	0.41
38:BD:209:ALA:O	38:BD:210:GLY:O	2.38	0.41
39:BE:170:LEU:N	39:BE:170:LEU:CD1	2.83	0.41
40:BF:117:ARG:HD3	40:BF:117:ARG:HA	1.76	0.41
40:BF:133:ASN:O	40:BF:134:GLY:C	2.59	0.41
45:BN:133:GLN:O	45:BN:134:ARG:HB3	2.18	0.41
49:BR:10:LEU:HB3	49:BR:17:ARG:CD	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BR:82:GLU:O	49:BR:85:PRO:HD2	2.20	0.41
50:BS:63:THR:O	50:BS:64:GLU:C	2.59	0.41
55:BX:29:TRP:CH2	55:BX:76:ARG:NH2	2.88	0.41
55:BX:41:ASN:C	55:BX:43:VAL:N	2.67	0.41
56:BY:9:LYS:HD3	56:BY:94:LYS:CE	2.48	0.41
56:BY:69:ALA:O	56:BY:72:VAL:HG22	2.19	0.41
57:BZ:46:LYS:O	57:BZ:46:LYS:HG2	2.20	0.41
57:BZ:107:THR:CG2	57:BZ:111:VAL:HB	2.49	0.41
1:AA:110:C:H2'	1:AA:111:G:O4'	2.20	0.41
1:AA:238:G:O2'	1:AA:239:U:H5'	2.19	0.41
1:AA:265:G:H2'	1:AA:267:C:C5	2.48	0.41
1:AA:303:A:C5	1:AA:304:U:C5	3.08	0.41
1:AA:602:A:H2'	1:AA:603:U:H6	1.84	0.41
1:AA:973:G:H1'	10:AJ:55:LYS:HE2	2.01	0.41
1:AA:1452:C:C1'	1:AA:1456:G:N2	2.67	0.41
1:AA:1474:G:H4'	35:BA:1701:A:H2	1.83	0.41
2:AB:92:TYR:C	2:AB:92:TYR:CD1	2.92	0.41
2:AB:121:LEU:HD23	2:AB:121:LEU:HA	1.68	0.41
2:AB:152:PHE:C	2:AB:152:PHE:HD1	2.22	0.41
3:AC:62:ASP:O	3:AC:64:VAL:HG23	2.20	0.41
4:AD:28:SER:HB3	4:AD:29:PRO:CD	2.43	0.41
4:AD:67:ILE:HB	4:AD:68:TYR:HD1	1.85	0.41
4:AD:176:LEU:HD12	4:AD:177:ASP:H	1.84	0.41
4:AD:204:ILE:O	4:AD:206:PHE:N	2.53	0.41
7:AG:80:VAL:HG21	7:AG:85:TYR:CD1	2.55	0.41
7:AG:85:TYR:CD1	7:AG:154:TYR:HE1	2.38	0.41
12:AL:82:VAL:C	12:AL:83:VAL:CG2	2.88	0.41
12:AL:119:LYS:C	12:AL:121:GLY:H	2.23	0.41
13:AM:10:PRO:O	13:AM:11:ARG:CB	2.67	0.41
13:AM:21:TYR:N	13:AM:21:TYR:CD2	2.87	0.41
20:AT:78:ALA:HA	20:AT:81:LYS:HD3	2.01	0.41
21:AU:24:ARG:O	21:AU:25:LYS:CB	2.68	0.41
24:AY:99:ARG:NE	24:AY:128:TYR:HB2	2.34	0.41
24:AY:232:LEU:HD11	44:BL:69:ILE:CD1	2.50	0.41
24:AY:265:LYS:HB2	24:AY:267:LYS:HD2	2.01	0.41
24:AY:496:LYS:HA	24:AY:509:HIS:HB2	2.02	0.41
24:AY:627:ARG:C	24:AY:629:GLY:N	2.72	0.41
27:B2:41:ILE:CD1	27:B2:44:LEU:HD12	2.43	0.41
27:B2:58:ALA:O	27:B2:61:LEU:N	2.53	0.41
29:B4:16:CYS:SG	29:B4:36:CYS:SG	3.14	0.41
29:B4:43:TYR:HB2	29:B4:44:THR:H	1.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:34:PRO:HG3	35:BA:2885:C:O2'	2.19	0.41
33:B8:26:LYS:NZ	35:BA:2361:A:OP2	2.53	0.41
35:BA:187:G:N3	35:BA:1365:A:H2	2.18	0.41
35:BA:216:A:C4	35:BA:432:A:C2	3.08	0.41
35:BA:250:G:C6	35:BA:251:A:C6	3.07	0.41
35:BA:598:G:C5'	47:BP:15:ARG:HB2	2.41	0.41
35:BA:786:C:H6	35:BA:786:C:O5'	2.02	0.41
35:BA:881:G:H2'	35:BA:882:G:H5'	2.02	0.41
35:BA:1034:G:C6	35:BA:1035:U:N3	2.89	0.41
35:BA:1061:U:H5"	35:BA:1062:G:OP2	2.19	0.41
35:BA:1063:G:N2	35:BA:1076:C:O2	2.53	0.41
35:BA:1081:U:H4'	43:BK:117:THR:HG21	2.02	0.41
35:BA:1100:C:O2	35:BA:1100:C:H2'	2.19	0.41
35:BA:1169:G:H1	35:BA:1180:C:N4	2.19	0.41
35:BA:1203:G:OP2	35:BA:1204:A:H2'	2.20	0.41
35:BA:1545:A:N7	35:BA:1546:C:C2	2.88	0.41
35:BA:1688:U:O2	35:BA:1700:A:H5"	2.21	0.41
35:BA:2293:C:OP1	50:BS:92:TYR:OH	2.38	0.41
35:BA:2339:G:H2'	35:BA:2340:G:C8	2.55	0.41
35:BA:2345:G:N7	35:BA:2372:G:C2	2.87	0.41
35:BA:2748:A:C5	35:BA:2757:A:C6	3.07	0.41
35:BA:2835:A:N6	35:BA:2878:U:C6	2.88	0.41
35:BA:2857:G:C2	35:BA:2861:G:C6	3.09	0.41
36:BB:46:A:C5	36:BB:47:C:C4	3.08	0.41
36:BB:82:G:C2	36:BB:83:G:C8	3.08	0.41
39:BE:26:ILE:CG2	39:BE:196:VAL:HG21	2.47	0.41
39:BE:177:PRO:O	39:BE:178:GLU:C	2.58	0.41
40:BF:11:VAL:HB	40:BF:12:LEU:H	1.59	0.41
40:BF:198:ALA:HA	40:BF:201:VAL:HG12	2.01	0.41
41:BG:46:ALA:CA	41:BG:51:ARG:HG3	2.49	0.41
41:BG:54:GLU:CA	41:BG:57:ALA:HB3	2.51	0.41
41:BG:81:LYS:O	41:BG:82:LEU:C	2.57	0.41
41:BG:98:ARG:HA	41:BG:98:ARG:HD3	1.76	0.41
48:BQ:52:VAL:HG12	48:BQ:53:ALA:N	2.35	0.41
49:BR:78:LYS:O	49:BR:78:LYS:HG2	2.19	0.41
49:BR:84:ALA:CB	49:BR:85:PRO:HD3	2.33	0.41
50:BS:26:LEU:C	50:BS:26:LEU:CD2	2.89	0.41
50:BS:74:ALA:HB3	50:BS:103:GLU:HG3	2.02	0.41
51:BT:48:ILE:HD12	51:BT:48:ILE:N	2.35	0.41
51:BT:89:VAL:CB	51:BT:91:ARG:HG3	2.50	0.41
55:BX:18:TYR:HA	55:BX:21:PHE:CE2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:119:A:C8	1:AA:288:A:C2	3.09	0.41
1:AA:124:G:H2'	1:AA:125:U:C6	2.55	0.41
1:AA:174:C:O5'	1:AA:174:C:H6	2.02	0.41
1:AA:193:C:H2'	1:AA:194:C:C6	2.55	0.41
1:AA:605:U:O2'	1:AA:606:G:H5'	2.20	0.41
1:AA:666:G:N2	1:AA:667:G:H1'	2.35	0.41
1:AA:986:A:O2'	1:AA:987:G:H5'	2.20	0.41
1:AA:1047:G:O2'	1:AA:1048:G:H5'	2.20	0.41
1:AA:1122:U:H2'	1:AA:1123:A:H5'	2.02	0.41
1:AA:1226:C:C6	13:AM:103:THR:O	2.73	0.41
1:AA:1329:A:H5"	13:AM:26:GLY:H	1.85	0.41
1:AA:1350:A:C6	1:AA:1351:U:C4	3.08	0.41
1:AA:1452:C:H1'	1:AA:1456:G:C2	2.51	0.41
3:AC:113:ALA:N	3:AC:114:PRO:CD	2.83	0.41
3:AC:201:TYR:C	3:AC:202:ILE:HG12	2.41	0.41
4:AD:9:CYS:SG	4:AD:31:CYS:O	2.78	0.41
6:AF:97:PHE:HB2	18:AR:32:ARG:HH21	1.86	0.41
11:AK:26:ASN:O	11:AK:27:ASN:HB2	2.20	0.41
11:AK:27:ASN:HD22	11:AK:29:ILE:CG2	2.21	0.41
12:AL:78:GLN:O	12:AL:79:GLU:C	2.58	0.41
13:AM:70:LEU:O	13:AM:73:GLU:N	2.53	0.41
13:AM:80:ARG:O	13:AM:83:ASP:HB3	2.20	0.41
15:AO:63:ARG:O	15:AO:64:ARG:C	2.56	0.41
17:AQ:63:ARG:HA	17:AQ:64:PRO:HD3	1.79	0.41
18:AR:31:LEU:HD11	18:AR:62:GLU:HG2	2.02	0.41
18:AR:36:ASN:OD1	18:AR:39:VAL:CG2	2.68	0.41
19:AS:12:ASP:O	19:AS:15:LEU:HB2	2.20	0.41
24:AY:384:ILE:N	24:AY:387:ASP:OD2	2.53	0.41
24:AY:447:GLY:O	24:AY:448:GLN:O	2.37	0.41
24:AY:459:LEU:O	24:AY:463:VAL:HG23	2.21	0.41
24:AY:528:ALA:HB3	24:AY:568:TYR:HA	2.02	0.41
24:AY:571:SER:H	24:AY:571:SER:HG	1.63	0.41
26:B1:52:ARG:HA	26:B1:52:ARG:HD3	1.89	0.41
26:B1:89:GLU:O	26:B1:93:GLU:HG2	2.20	0.41
28:B3:28:LEU:N	28:B3:28:LEU:CD2	2.78	0.41
30:B5:33:CYS:HA	30:B5:34:PRO:HD2	1.91	0.41
35:BA:15:G:C4	35:BA:16:G:C8	3.09	0.41
35:BA:84:A:N6	35:BA:102:G:O2'	2.52	0.41
35:BA:137:C:N4	35:BA:139:G:O6	2.53	0.41
35:BA:271(P):C:H2'	35:BA:271(Q):G:O4'	2.20	0.41
35:BA:271(Z):C:H1'	35:BA:272(C):G:H1'	2.00	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:286:C:C6	35:BA:286:C:C5'	2.88	0.41
35:BA:442:G:O4'	40:BF:46:ARG:HG2	2.20	0.41
35:BA:503:A:O2'	35:BA:504:U:O5'	2.37	0.41
35:BA:685:A:C6	35:BA:774:A:C2	3.08	0.41
35:BA:813:U:C2	35:BA:814:C:C5	3.08	0.41
35:BA:814:C:C5	47:BP:27:HIS:CE1	3.08	0.41
35:BA:953:A:OP2	48:BQ:16:ARG:NH2	2.53	0.41
35:BA:1453:U:OP1	49:BR:63:ARG:NH2	2.52	0.41
35:BA:1680:U:O2	35:BA:1763:G:H3'	2.20	0.41
35:BA:1803:A:O5'	35:BA:1803:A:H8	2.02	0.41
35:BA:1821:A:H2'	35:BA:1822:G:C8	2.53	0.41
35:BA:1887:C:C2'	35:BA:1888:G:H5"	2.50	0.41
35:BA:2126:A:O2'	35:BA:2127:G:OP2	2.37	0.41
35:BA:2183:C:C2'	35:BA:2184:G:H5'	2.50	0.41
37:BC:60:ARG:CD	37:BC:142:LYS:O	2.69	0.41
39:BE:51:PHE:HB3	39:BE:52:LEU:H	1.69	0.41
39:BE:101:ARG:CD	39:BE:171:GLU:HA	2.51	0.41
40:BF:199:TRP:CZ3	40:BF:203:GLN:HG2	2.55	0.41
41:BG:37:VAL:HA	41:BG:158:ALA:O	2.20	0.41
41:BG:100:TRP:O	41:BG:101:ILE:C	2.55	0.41
42:BH:82:GLY:O	42:BH:83:TYR:O	2.39	0.41
43:BK:34:ILE:H	43:BK:34:ILE:HG12	1.44	0.41
45:BN:9:VAL:HG12	45:BN:10:GLU:H	1.84	0.41
45:BN:82:LEU:HD21	45:BN:84:LYS:HG3	2.02	0.41
47:BP:16:ARG:O	47:BP:18:ARG:N	2.54	0.41
49:BR:84:ALA:HB3	49:BR:85:PRO:CD	2.35	0.41
56:BY:17:SER:O	56:BY:21:LYS:HG2	2.21	0.41
56:BY:39:VAL:HG12	56:BY:40:GLU:N	2.35	0.41
57:BZ:30:ASN:HA	57:BZ:89:PHE:HE1	1.86	0.41
1:AA:160:A:C2'	1:AA:161:A:H5'	2.50	0.41
1:AA:313:A:H2'	1:AA:314:C:C6	2.54	0.41
1:AA:509:A:N3	1:AA:543:C:O2'	2.52	0.41
1:AA:522:C:H5	12:AL:53:ARG:HH22	1.66	0.41
1:AA:525:C:OP1	12:AL:91:LYS:CE	2.68	0.41
1:AA:763:G:H2'	1:AA:764:C:H6	1.86	0.41
1:AA:1047:G:C2'	1:AA:1048:G:H5'	2.50	0.41
1:AA:1066:C:O2	1:AA:1066:C:H2'	2.21	0.41
1:AA:1194:U:H2'	1:AA:1195:C:C6	2.55	0.41
1:AA:1270:C:H2'	1:AA:1271:G:H8	1.79	0.41
1:AA:1305:G:O2'	1:AA:1331:G:N2	2.53	0.41
1:AA:1457:G:C8	1:AA:1457:G:C3'	3.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1472:U:O5'	1:AA:1472:U:H6	2.03	0.41
1:AA:1515:C:H2'	1:AA:1516:G:C8	2.55	0.41
2:AB:163:PHE:HA	2:AB:185:ILE:HG13	2.03	0.41
3:AC:34:LEU:CD2	3:AC:34:LEU:C	2.89	0.41
4:AD:30:LYS:HB3	4:AD:35:ARG:HD2	2.02	0.41
4:AD:57:ARG:NH1	4:AD:205:GLU:OE2	2.51	0.41
4:AD:107:ARG:NH2	4:AD:194:LEU:HD12	2.29	0.41
7:AG:21:VAL:HG23	7:AG:22:LEU:H	1.85	0.41
8:AH:137:VAL:CG1	8:AH:138:TRP:N	2.82	0.41
11:AK:20:TYR:CE2	11:AK:83:ILE:HD12	2.55	0.41
18:AR:66:LEU:HG	18:AR:70:ILE:CD1	2.51	0.41
19:AS:6:LYS:C	19:AS:7:LYS:HE3	2.41	0.41
24:AY:74:TRP:NE1	24:AY:273:LEU:HB3	2.36	0.41
24:AY:121:VAL:HA	24:AY:124:GLN:NE2	2.35	0.41
24:AY:262:SER:HB3	24:AY:265:LYS:HB2	2.02	0.41
24:AY:302:HIS:HA	24:AY:303:PRO:HD2	1.62	0.41
24:AY:417:THR:O	24:AY:419:ALA:N	2.54	0.41
24:AY:519:ARG:HH12	24:AY:678:GLU:HB3	1.85	0.41
26:B1:53:VAL:O	26:B1:54:ALA:C	2.57	0.41
26:B1:92:LYS:NZ	35:BA:153:C:OP1	2.46	0.41
31:B6:42:TRP:HH2	35:BA:643:A:N7	2.17	0.41
33:B8:40:GLU:O	33:B8:44:LYS:HD3	2.21	0.41
35:BA:301:G:C4	35:BA:302:C:C4	3.08	0.41
35:BA:565:C:C2	35:BA:577:G:N2	2.88	0.41
35:BA:568:U:O2'	35:BA:570:G:N7	2.42	0.41
35:BA:664:C:H4'	35:BA:941:A:OP1	2.21	0.41
35:BA:705:A:C2	35:BA:727:A:H1'	2.55	0.41
35:BA:754:C:H2'	35:BA:755:C:C6	2.55	0.41
35:BA:1485:G:H2'	35:BA:1486:A:C8	2.55	0.41
35:BA:1814:G:C6	35:BA:1815:A:C6	3.08	0.41
35:BA:1860:G:C6	35:BA:1883:G:N2	2.89	0.41
35:BA:1983:C:O2'	35:BA:1984:G:H5'	2.20	0.41
35:BA:2033:A:HO2'	35:BA:2034:U:P	2.41	0.41
35:BA:2262:U:O2'	35:BA:2328:A:H1'	2.19	0.41
35:BA:2464:C:O2'	35:BA:2465:C:P	2.78	0.41
36:BB:29:A:OP2	50:BS:32:LEU:HG	2.19	0.41
36:BB:89:G:H8	36:BB:89:G:OP2	2.03	0.41
36:BB:115:G:C4	36:BB:116:G:C8	3.08	0.41
38:BD:133:LEU:O	38:BD:135:PHE:N	2.53	0.41
38:BD:148:GLU:HB2	38:BD:151:LYS:HD2	2.03	0.41
40:BF:106:ARG:CG	40:BF:106:ARG:HH11	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BG:34:LEU:HD12	41:BG:34:LEU:N	2.35	0.41
42:BH:40:GLU:O	42:BH:41:MET:CB	2.68	0.41
42:BH:130:ARG:CZ	42:BH:130:ARG:HB3	2.50	0.41
42:BH:173:PRO:O	42:BH:175:LYS:N	2.53	0.41
43:BK:99:ILE:O	43:BK:138:VAL:HA	2.20	0.41
45:BN:49:GLY:HA3	45:BN:119:ARG:NH1	2.35	0.41
46:BO:63:VAL:O	46:BO:64:ARG:CG	2.68	0.41
49:BR:59:ASP:O	49:BR:60:LEU:C	2.59	0.41
49:BR:63:ARG:HB2	49:BR:80:PHE:HE2	1.85	0.41
50:BS:83:LYS:HG2	50:BS:84:GLN:N	2.35	0.41
51:BT:29:ARG:CG	51:BT:85:LYS:HA	2.50	0.41
51:BT:29:ARG:HG2	51:BT:85:LYS:CA	2.50	0.41
51:BT:76:PHE:HA	51:BT:77:PRO:HD3	1.76	0.41
51:BT:120:ARG:HA	51:BT:123:GLN:HG2	2.02	0.41
51:BT:125:ARG:HH11	51:BT:125:ARG:CA	2.25	0.41
56:BY:7:VAL:CB	56:BY:8:LYS:CE	2.93	0.41
56:BY:42:VAL:HG23	56:BY:67:LEU:HD13	2.02	0.41
57:BZ:132:ASN:O	57:BZ:134:PRO:CD	2.69	0.41
1:AA:44:G:N2	1:AA:45:U:H1'	2.36	0.41
1:AA:146:G:C2	1:AA:147:G:C8	3.08	0.41
1:AA:552:U:H4'	12:AL:86:ARG:CG	2.51	0.41
1:AA:597:G:C4	1:AA:644:G:C2	3.09	0.41
1:AA:747:C:H2'	1:AA:748:C:C1'	2.50	0.41
1:AA:748:C:O2'	1:AA:749:C:C6	2.71	0.41
1:AA:769:G:C2'	1:AA:770:C:H5'	2.50	0.41
1:AA:1001(A):G:H8	1:AA:1002:G:C8	2.38	0.41
1:AA:1198:G:C6	1:AA:1199:U:C4	3.08	0.41
1:AA:1287:A:C5	1:AA:1288:A:C6	3.08	0.41
2:AB:60:ASP:O	2:AB:64:ARG:NE	2.53	0.41
3:AC:29:TYR:OH	14:AN:54:PRO:HD2	2.21	0.41
4:AD:61:LYS:CE	4:AD:62:GLN:HE21	2.32	0.41
4:AD:79:PHE:C	4:AD:81:GLU:N	2.73	0.41
4:AD:165:MET:HE2	4:AD:176:LEU:CD2	2.49	0.41
5:AE:57:LYS:O	5:AE:61:TYR:HD2	2.04	0.41
5:AE:80:ILE:HG22	8:AH:104:ARG:HH22	1.83	0.41
5:AE:92:LYS:HA	5:AE:93:PRO:HD2	1.71	0.41
8:AH:26:VAL:C	8:AH:58:TYR:HD2	2.23	0.41
9:AI:86:VAL:HB	9:AI:96:LEU:CD2	2.50	0.41
10:AJ:30:SER:O	10:AJ:81:THR:HG23	2.20	0.41
10:AJ:65:LEU:HD12	14:AN:55:GLY:O	2.20	0.41
12:AL:30:ALA:HA	12:AL:31:PRO:HD3	1.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:58:VAL:O	19:AS:60:VAL:N	2.52	0.41
19:AS:72:GLY:C	19:AS:74:PHE:H	2.23	0.41
20:AT:57:ARG:HB2	20:AT:57:ARG:HH11	1.85	0.41
20:AT:86:ARG:O	20:AT:90:GLN:HG3	2.21	0.41
24:AY:357:ARG:NH1	24:AY:373:ASP:OD1	2.53	0.41
25:B0:24:LYS:HA	25:B0:24:LYS:HD3	1.84	0.41
26:B1:58:ILE:HD11	26:B1:91:LYS:CB	2.49	0.41
27:B2:4:SER:O	27:B2:5:GLU:C	2.59	0.41
27:B2:20:GLU:O	27:B2:23:LYS:N	2.52	0.41
30:B5:31:VAL:HA	30:B5:32:PRO:HD3	1.95	0.41
31:B6:5:VAL:HB	35:BA:2284:C:OP1	2.21	0.41
34:B9:29:ASN:HA	34:B9:30:PRO:HD2	1.86	0.41
35:BA:265:A:H1'	35:BA:266:G:H1'	2.02	0.41
35:BA:279:C:H2'	35:BA:280:C:H5"	2.01	0.41
35:BA:312:G:C2	35:BA:313:C:C2	3.09	0.41
35:BA:492:A:C2'	35:BA:493:G:C5'	2.94	0.41
35:BA:637:A:OP1	47:BP:133:SER:CB	2.67	0.41
35:BA:646:A:H2'	35:BA:647:G:O4'	2.19	0.41
35:BA:738:G:H2'	35:BA:739:G:C8	2.56	0.41
35:BA:938:G:C2	35:BA:939:G:N7	2.89	0.41
35:BA:1210:A:O2'	35:BA:1211:U:P	2.79	0.41
35:BA:1332:G:H22	35:BA:1609:A:H3'	1.86	0.41
35:BA:1445(A):C:O2	35:BA:1445(A):C:H2'	2.21	0.41
35:BA:1467:C:H5	35:BA:1546:C:H2'	1.85	0.41
35:BA:1469:A:C6	35:BA:1470:G:C5	3.08	0.41
35:BA:1623:G:H2'	35:BA:1624:G:H8	1.86	0.41
35:BA:1786:A:H4'	35:BA:1787:A:OP2	2.20	0.41
35:BA:1865:G:C3'	35:BA:1866:C:C5'	2.98	0.41
35:BA:2298:A:N6	35:BA:2318:G:C8	2.86	0.41
35:BA:2404:C:C2'	35:BA:2405:G:H5'	2.50	0.41
35:BA:2814:C:H2'	35:BA:2815:C:H6	1.84	0.41
35:BA:2857:G:N1	35:BA:2861:G:C6	2.88	0.41
36:BB:89:G:C6	36:BB:90:A:N1	2.89	0.41
37:BC:34:ALA:HA	37:BC:40:GLU:OE2	2.21	0.41
39:BE:51:PHE:CD2	39:BE:52:LEU:HD12	2.55	0.41
42:BH:45:VAL:O	42:BH:47:GLU:N	2.54	0.41
45:BN:1:MET:HE3	45:BN:3:THR:OG1	2.20	0.41
49:BR:38:VAL:HB	49:BR:39:PRO:CD	2.41	0.41
49:BR:111:LEU:N	49:BR:111:LEU:HD23	2.35	0.41
50:BS:64:GLU:H	50:BS:64:GLU:CD	2.24	0.41
51:BT:29:ARG:HD3	51:BT:86:ILE:CG2	2.48	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BV:47:VAL:HB	53:BV:49:THR:O	2.19	0.41
55:BX:53:LYS:HB3	55:BX:82:GLN:HB3	2.03	0.41
1:AA:104:G:OP1	20:AT:21:LYS:NZ	2.34	0.41
1:AA:186:C:H2'	1:AA:187:C:C6	2.56	0.41
1:AA:745:C:OP1	1:AA:851:G:O2'	2.37	0.41
1:AA:771:G:C6	1:AA:809:G:N1	2.88	0.41
1:AA:918:A:H2'	1:AA:919:A:O4'	2.20	0.41
1:AA:1026:G:H3'	1:AA:1027:C:C5'	2.50	0.41
1:AA:1030(A):G:O2'	1:AA:1030(C):G:N7	2.50	0.41
1:AA:1065:U:O2'	1:AA:1066:C:OP2	2.37	0.41
1:AA:1118:C:O5'	1:AA:1118:C:H6	2.03	0.41
1:AA:1437:C:O2'	1:AA:1438:G:H5'	2.20	0.41
1:AA:1520:G:H2'	1:AA:1521:G:H8	1.85	0.41
2:AB:8:LYS:HZ3	2:AB:217:ARG:NH1	2.19	0.41
2:AB:51:LEU:CD2	2:AB:55:PHE:HE2	2.32	0.41
2:AB:75:LYS:HD3	2:AB:75:LYS:O	2.21	0.41
2:AB:113:HIS:HE1	2:AB:156:LYS:NZ	2.18	0.41
3:AC:61:ALA:C	3:AC:62:ASP:OD1	2.59	0.41
3:AC:83:ARG:C	3:AC:85:ARG:H	2.23	0.41
4:AD:10:ARG:O	4:AD:13:ARG:HB2	2.21	0.41
4:AD:50:ARG:HD2	4:AD:51:PRO:O	2.21	0.41
5:AE:69:VAL:HA	5:AE:70:PRO:HD2	1.76	0.41
6:AF:29:ALA:O	6:AF:30:LEU:C	2.57	0.41
6:AF:67:MET:HE1	6:AF:72:VAL:HA	2.03	0.41
7:AG:79:ARG:O	7:AG:79:ARG:HD2	2.21	0.41
8:AH:17:THR:HG22	8:AH:63:LEU:CD1	2.48	0.41
13:AM:22:ILE:CG2	13:AM:66:LEU:CD2	2.99	0.41
24:AY:16:GLY:CA	24:AY:101:LEU:HD13	2.49	0.41
24:AY:230:LYS:O	24:AY:235:GLU:O	2.39	0.41
24:AY:635:GLU:CD	24:AY:635:GLU:N	2.74	0.41
25:B0:73:GLY:C	25:B0:75:LEU:N	2.74	0.41
27:B2:67:LYS:C	27:B2:69:ARG:N	2.74	0.41
29:B4:1:MET:H1	36:BB:43:C:H4'	1.85	0.41
35:BA:405:U:H3'	35:BA:406:G:C5'	2.51	0.41
35:BA:467:G:H4'	35:BA:796:C:O2'	2.20	0.41
35:BA:511:U:C5	35:BA:512:G:C5	3.07	0.41
35:BA:723:G:C5	35:BA:724:U:C4	3.09	0.41
35:BA:920:G:O2'	35:BA:921:G:H5'	2.21	0.41
35:BA:970:C:C6	35:BA:971:C:C5	3.09	0.41
35:BA:1064:C:H42	35:BA:1074:G:H1	1.69	0.41
35:BA:1345:C:H5'	35:BA:1345:C:H6	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1354:A:H2'	35:BA:1355:G:O4'	2.20	0.41
35:BA:1445(A):C:H42	35:BA:1466:G:H1	1.68	0.41
35:BA:1654:A:O2'	35:BA:1655:A:H5'	2.20	0.41
35:BA:1775:U:C2'	35:BA:1776:G:C5'	2.95	0.41
35:BA:1907:G:O2'	35:BA:1908:C:H5'	2.20	0.41
35:BA:2171:A:C1'	35:BA:2172:U:C5	2.99	0.41
35:BA:2339:G:H2'	35:BA:2340:G:H8	1.85	0.41
35:BA:2632:A:H1'	39:BE:61:ARG:NH1	2.36	0.41
38:BD:69:ARG:O	38:BD:69:ARG:HG2	2.20	0.41
38:BD:145:VAL:O	38:BD:153:ALA:HA	2.19	0.41
40:BF:25:PRO:HB3	40:BF:119:ARG:HD3	2.01	0.41
41:BG:129:GLY:H	41:BG:166:ASP:N	2.18	0.41
42:BH:87:LEU:HD21	42:BH:164:TYR:CE1	2.56	0.41
48:BQ:21:THR:OG1	48:BQ:99:PRO:O	2.39	0.41
51:BT:50:ILE:N	51:BT:50:ILE:CD1	2.84	0.41
55:BX:59:VAL:HG21	55:BX:78:LYS:HD2	2.01	0.41
57:BZ:102:LEU:HD21	57:BZ:124:ILE:HD13	2.01	0.41
1:AA:33:A:C2	12:AL:32:PHE:CE2	3.09	0.41
1:AA:101:A:C2	1:AA:102:G:C8	3.09	0.41
1:AA:115:G:H1'	1:AA:116:A:N7	2.35	0.41
1:AA:622:A:C8	1:AA:623:C:C6	3.09	0.41
1:AA:796:C:O2	1:AA:796:C:C2'	2.68	0.41
1:AA:926:G:H4'	23:AX:12:A:N6	2.36	0.41
1:AA:1008:C:C6	1:AA:1008:C:C3'	3.04	0.41
1:AA:1015:A:O2'	1:AA:1218:C:H4'	2.19	0.41
1:AA:1310:G:C2	1:AA:1328:C:N3	2.89	0.41
1:AA:1323:G:C6	1:AA:1324:A:N6	2.88	0.41
1:AA:1447:A:H2'	1:AA:1447:A:N3	2.36	0.41
1:AA:1513:A:C4	1:AA:1514:C:C5	3.09	0.41
5:AE:103:GLY:O	5:AE:107:ARG:HB3	2.21	0.41
6:AF:16:GLN:HA	6:AF:19:LEU:HB3	2.02	0.41
6:AF:42:GLU:C	6:AF:44:GLY:H	2.24	0.41
9:AI:33:PHE:C	9:AI:35:GLU:H	2.23	0.41
11:AK:18:ARG:HH21	11:AK:36:ASP:C	2.24	0.41
13:AM:33:ALA:HA	13:AM:59:TYR:HE2	1.85	0.41
13:AM:89:GLY:O	13:AM:90:LEU:C	2.59	0.41
17:AQ:88:TYR:O	17:AQ:89:LEU:C	2.59	0.41
19:AS:10:PHE:CE2	19:AS:37:ARG:O	2.74	0.41
20:AT:49:ALA:CB	20:AT:99:LEU:HG	2.51	0.41
21:AU:13:ILE:C	21:AU:15:ARG:H	2.22	0.41
22:AV:29:G:O5'	22:AV:29:G:H8	2.04	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:70:G:C5	22:AV:71:C:C5	3.08	0.41
24:AY:89:ASP:HB2	24:AY:90:PHE:H	1.50	0.41
24:AY:120:THR:O	24:AY:124:GLN:NE2	2.53	0.41
24:AY:137:ASN:ND2	24:AY:263:ALA:HB2	2.36	0.41
24:AY:315:LYS:C	24:AY:316:ILE:HD13	2.41	0.41
24:AY:355:LEU:CD2	24:AY:355:LEU:N	2.83	0.41
27:B2:56:GLN:HA	27:B2:59:ARG:HE	1.85	0.41
30:B5:30:LEU:HD21	54:BW:38:TYR:CD2	2.55	0.41
31:B6:15:GLU:CB	31:B6:47:THR:HG21	2.50	0.41
35:BA:86:C:H4'	35:BA:104:U:H1'	2.02	0.41
35:BA:86:C:H2'	35:BA:87:C:C6	2.56	0.41
35:BA:116:C:H1'	35:BA:127:A:H1'	2.01	0.41
35:BA:118:A:H5'	35:BA:119:A:H8	1.86	0.41
35:BA:140:G:N2	35:BA:142:A:N1	2.62	0.41
35:BA:237:C:O2	35:BA:237:C:H2'	2.20	0.41
35:BA:654(P):C:H2'	35:BA:654(Q):C:O4'	2.21	0.41
35:BA:705:A:N1	35:BA:727:A:H1'	2.35	0.41
35:BA:755:C:H2'	35:BA:756:C:H6	1.84	0.41
35:BA:764:A:C5	38:BD:209:ALA:HB1	2.55	0.41
35:BA:1085:A:O2'	35:BA:1086:A:H5'	2.20	0.41
35:BA:1092:C:O2'	35:BA:1093:G:H5'	2.20	0.41
35:BA:1206:G:C6	35:BA:1207:C:C4	3.08	0.41
35:BA:1464:C:HO2'	35:BA:1528:A:H8	1.61	0.41
35:BA:1491:G:N2	35:BA:1492:G:H1'	2.36	0.41
35:BA:1654:A:OP2	49:BR:3:HIS:CD2	2.74	0.41
35:BA:1827:C:H2'	35:BA:1828:G:H5'	2.03	0.41
35:BA:1884:A:C3'	35:BA:1885:A:C5'	2.98	0.41
35:BA:1999:C:H4'	35:BA:2723:C:O2	2.20	0.41
35:BA:2068:U:C4	35:BA:2430:A:H2	2.37	0.41
35:BA:2130:U:O2'	35:BA:2158:A:N6	2.52	0.41
35:BA:2392:A:C2	35:BA:2429:G:N3	2.88	0.41
35:BA:2521:C:O2	35:BA:2521:C:H2'	2.20	0.41
35:BA:2607:G:C6	35:BA:2608:G:C6	3.09	0.41
35:BA:2616:C:O2	35:BA:2616:C:H2'	2.19	0.41
35:BA:2684:U:H2'	35:BA:2685:G:O4'	2.21	0.41
35:BA:2883:A:H5'	35:BA:2884:U:H5'	2.02	0.41
36:BB:104:U:C4'	36:BB:104:U:C6	3.04	0.41
37:BC:62:THR:OG1	37:BC:161:ARG:HD2	2.20	0.41
37:BC:195:ARG:HG3	37:BC:195:ARG:NH1	2.34	0.41
40:BF:31:HIS:O	40:BF:32:LEU:C	2.57	0.41
40:BF:89:VAL:HG12	40:BF:90:PHE:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BG:14:GLU:C	41:BG:17:PRO:HD2	2.40	0.41
41:BG:119:GLY:O	41:BG:181:ARG:HB2	2.21	0.41
42:BH:52:VAL:HG11	42:BH:68:THR:HB	2.03	0.41
42:BH:137:ASP:HB3	42:BH:140:LYS:CB	2.49	0.41
43:BK:58:THR:N	43:BK:66:THR:O	2.52	0.41
45:BN:43:THR:HB	45:BN:46:VAL:HG11	2.03	0.41
47:BP:135:LEU:HD13	47:BP:135:LEU:C	2.41	0.41
52:BU:92:ARG:CZ	53:BV:11:GLN:HG2	2.51	0.41
53:BV:8:GLY:O	53:BV:10:LYS:HE2	2.21	0.41
55:BX:65:ARG:HG2	55:BX:65:ARG:HH11	1.84	0.41
57:BZ:27:VAL:O	57:BZ:27:VAL:CG1	2.69	0.41
57:BZ:68:PRO:O	57:BZ:68:PRO:HG2	2.20	0.41
57:BZ:151:HIS:O	57:BZ:152:ALA:C	2.58	0.41
1:AA:6:G:H2'	5:AE:119:LEU:HD11	2.03	0.41
1:AA:110:C:O5'	1:AA:110:C:C6	2.69	0.41
1:AA:149:A:C2	1:AA:150:C:C2	3.09	0.41
1:AA:169:C:O2	1:AA:169:C:H2'	2.20	0.41
1:AA:547:A:H4'	1:AA:548:G:O5'	2.21	0.41
1:AA:657:G:H2'	1:AA:658:G:H8	1.85	0.41
1:AA:857:C:H2'	1:AA:858:G:O4'	2.20	0.41
1:AA:1111:A:N6	1:AA:1112:C:N4	2.68	0.41
1:AA:1465:C:H2'	1:AA:1466:C:C5'	2.51	0.41
2:AB:101:MET:O	2:AB:102:LEU:HD12	2.21	0.41
2:AB:211:ILE:HG22	2:AB:215:LEU:HD23	2.03	0.41
2:AB:236:TYR:C	2:AB:238:LEU:N	2.73	0.41
7:AG:91:VAL:CG1	7:AG:92:SER:H	2.33	0.41
8:AH:120:THR:O	8:AH:121:ASP:O	2.38	0.41
9:AI:96:LEU:HG	9:AI:102:LEU:HG	2.03	0.41
10:AJ:54:PHE:HA	10:AJ:55:LYS:HE3	2.03	0.41
11:AK:89:ALA:C	11:AK:91:ARG:H	2.21	0.41
14:AN:6:LEU:HA	14:AN:6:LEU:HD23	1.86	0.41
20:AT:27:LYS:O	20:AT:30:LYS:HB3	2.20	0.41
24:AY:335:LEU:O	24:AY:368:GLU:HB2	2.21	0.41
24:AY:499:ARG:NH1	24:AY:499:ARG:HG3	2.34	0.41
27:B2:63:VAL:HG12	27:B2:67:LYS:HE2	2.02	0.41
28:B3:50:VAL:O	28:B3:51:ALA:C	2.59	0.41
32:B7:32:LYS:HE2	35:BA:180:G:OP1	2.20	0.41
35:BA:87:C:OP2	35:BA:90:U:O4	2.39	0.41
35:BA:336:C:O3'	56:BY:7:VAL:HG22	2.21	0.41
35:BA:695:G:C6	35:BA:768:G:C6	3.08	0.41
35:BA:1024:G:C8	35:BA:1025:G:H2'	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1040:C:C6	35:BA:1041:C:C5	3.09	0.41
35:BA:1237:A:O2'	35:BA:1238:G:P	2.78	0.41
35:BA:1312:U:O2	35:BA:1603:A:C2	2.74	0.41
35:BA:1313:U:C2	35:BA:1610:A:H2	2.39	0.41
35:BA:1778:U:C4	35:BA:1784:A:C4	3.09	0.41
35:BA:1841:U:H2'	35:BA:1842:G:C8	2.56	0.41
35:BA:1899:G:C2'	35:BA:1900:A:OP2	2.68	0.41
35:BA:1908:C:O2'	35:BA:1909:C:H5'	2.21	0.41
35:BA:1971:A:C2	38:BD:240:ALA:HA	2.55	0.41
35:BA:2097:C:O2'	35:BA:2098:U:H5'	2.20	0.41
35:BA:2393:A:O2'	35:BA:2394:C:H5'	2.20	0.41
35:BA:2533:A:N6	35:BA:2534:A:C2	2.89	0.41
35:BA:2576:G:H3'	35:BA:2576:G:OP1	2.20	0.41
35:BA:2642:G:O2'	35:BA:2643:G:H5'	2.21	0.41
36:BB:36:C:H2'	36:BB:37:C:C6	2.55	0.41
36:BB:65:C:H42	36:BB:109:C:H2'	1.78	0.41
36:BB:86:G:C6	36:BB:92:C:N3	2.88	0.41
36:BB:115:G:C1'	50:BS:47:THR:HB	2.50	0.41
37:BC:115:VAL:CG1	37:BC:145:THR:HG23	2.51	0.41
37:BC:153:ILE:O	37:BC:157:ILE:HG13	2.21	0.41
39:BE:59:VAL:CG2	39:BE:62:PRO:O	2.68	0.41
40:BF:8:GLN:HG2	40:BF:126:VAL:HG12	2.03	0.41
40:BF:89:VAL:C	40:BF:91:GLY:H	2.24	0.41
41:BG:35:GLU:O	41:BG:36:LYS:HB3	2.20	0.41
41:BG:58:GLN:O	41:BG:61:ALA:HB3	2.20	0.41
41:BG:76:SER:CB	41:BG:83:ARG:CB	2.84	0.41
42:BH:86:GLU:HG2	42:BH:87:LEU:N	2.32	0.41
42:BH:100:GLY:C	42:BH:102:ALA:N	2.72	0.41
42:BH:105:LEU:CD2	42:BH:105:LEU:H	2.26	0.41
45:BN:125:GLY:CA	45:BN:126:PRO:O	2.69	0.41
47:BP:115:LEU:HD23	47:BP:115:LEU:H	1.85	0.41
50:BS:25:ARG:CG	50:BS:26:LEU:N	2.84	0.41
51:BT:57:PHE:C	51:BT:58:ASN:HD22	2.24	0.41
52:BU:31:SER:CB	52:BU:34:LYS:HB2	2.39	0.41
55:BX:63:LYS:HE2	55:BX:63:LYS:HB3	1.83	0.41
56:BY:46:LYS:C	56:BY:47:LYS:HD2	2.41	0.41
57:BZ:100:VAL:CG2	57:BZ:126:VAL:HG22	2.50	0.41
57:BZ:166:SER:HB2	57:BZ:167:PRO:CA	2.49	0.41
1:AA:55:A:N3	24:AY:321:TYR:O	2.54	0.41
1:AA:64:G:OP1	1:AA:382:A:N6	2.53	0.41
1:AA:93:G:N1	1:AA:96:U:C4	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:341:C:O2	1:AA:349:A:C2	2.74	0.41
1:AA:381:C:H2'	1:AA:382:A:O4'	2.21	0.41
1:AA:409:G:H5'	4:AD:25:ARG:HB2	2.02	0.41
1:AA:512:U:O2	1:AA:540:G:N2	2.54	0.41
1:AA:608:A:H2'	1:AA:609:A:C5'	2.50	0.41
1:AA:723:U:C5'	1:AA:724:G:OP2	2.69	0.41
1:AA:748:C:HO2'	1:AA:749:C:H6	1.68	0.41
1:AA:973:G:C1'	10:AJ:55:LYS:HE2	2.50	0.41
1:AA:1008:C:H2'	1:AA:1009:G:H8	1.86	0.41
1:AA:1060:C:N4	3:AC:2:GLY:HA3	2.36	0.41
1:AA:1342:C:H2'	1:AA:1343:G:H8	1.85	0.41
1:AA:1349:A:OP2	9:AI:118:LYS:NZ	2.53	0.41
1:AA:1371:G:OP2	9:AI:11:LYS:HD2	2.21	0.41
1:AA:1422:G:H2'	1:AA:1423:G:C8	2.55	0.41
1:AA:1458:G:OP2	1:AA:1458:G:H8	2.04	0.41
1:AA:1493:A:H4'	1:AA:1494:G:OP2	2.19	0.41
1:AA:1513:A:C6	1:AA:1514:C:N4	2.89	0.41
2:AB:15:VAL:HG21	2:AB:209:ARG:HH21	1.86	0.41
2:AB:19:HIS:CD2	2:AB:20:GLU:CD	2.94	0.41
2:AB:43:ASP:OD2	2:AB:46:LYS:HE3	2.21	0.41
2:AB:129:GLU:O	2:AB:130:ARG:HG3	2.21	0.41
2:AB:163:PHE:CD2	2:AB:185:ILE:HG13	2.56	0.41
3:AC:181:ASN:HD22	3:AC:205:GLY:H	1.68	0.41
4:AD:13:ARG:CA	4:AD:33:MET:HE1	2.48	0.41
4:AD:56:VAL:HG12	4:AD:202:LEU:HD13	2.02	0.41
4:AD:61:LYS:HE2	4:AD:61:LYS:HB3	1.92	0.41
4:AD:65:ARG:HD3	4:AD:75:PHE:CD2	2.56	0.41
4:AD:163:GLU:HA	4:AD:163:GLU:OE2	2.21	0.41
4:AD:204:ILE:C	4:AD:206:PHE:H	2.23	0.41
5:AE:34:VAL:O	5:AE:34:VAL:HG13	2.21	0.41
5:AE:144:THR:O	5:AE:147:ASP:OD2	2.39	0.41
7:AG:13:GLN:HG3	7:AG:14:PRO:HD2	2.03	0.41
7:AG:13:GLN:O	7:AG:24:THR:HG21	2.20	0.41
7:AG:31:MET:SD	7:AG:36:LYS:CB	3.05	0.41
7:AG:101:LEU:HD23	7:AG:101:LEU:H	1.80	0.41
7:AG:132:GLY:C	7:AG:134:ALA:N	2.73	0.41
8:AH:6:ILE:HD12	8:AH:6:ILE:H	1.75	0.41
8:AH:103:VAL:HG21	8:AH:136:GLU:HB2	2.02	0.41
9:AI:59:PHE:N	9:AI:59:PHE:HD1	2.17	0.41
9:AI:100:GLY:C	9:AI:102:LEU:H	2.23	0.41
11:AK:30:VAL:O	11:AK:30:VAL:CG2	2.63	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:59:TYR:O	11:AK:60:ALA:C	2.59	0.41
12:AL:28:LYS:O	12:AL:29:GLY:C	2.58	0.41
13:AM:22:ILE:HG21	13:AM:66:LEU:CD2	2.51	0.41
13:AM:34:LEU:HA	13:AM:34:LEU:HD23	1.81	0.41
13:AM:37:THR:HG21	13:AM:56:LEU:HD22	2.03	0.41
16:AP:14:ASN:N	16:AP:15:PRO:CD	2.84	0.41
16:AP:43:LYS:HA	16:AP:48:TRP:CB	2.49	0.41
18:AR:42:ARG:O	18:AR:42:ARG:CG	2.62	0.41
20:AT:11:SER:HA	20:AT:13:LEU:CD1	2.51	0.41
20:AT:42:GLN:HE21	20:AT:42:GLN:CA	2.28	0.41
20:AT:89:ARG:HD2	20:AT:104:LEU:CD1	2.51	0.41
21:AU:6:ARG:NH2	21:AU:15:ARG:HH22	2.19	0.41
22:AV:41:C:H2'	22:AV:42:G:O4'	2.21	0.41
24:AY:14:ASN:ND2	24:AY:80:ASN:HD22	2.19	0.41
24:AY:15:ILE:C	24:AY:101:LEU:HD13	2.41	0.41
24:AY:85:PRO:HG3	24:AY:94:VAL:HG13	2.03	0.41
24:AY:105:ILE:N	24:AY:105:ILE:CD1	2.81	0.41
24:AY:132:ARG:HH22	24:AY:253:LEU:HG	1.84	0.41
24:AY:148:LEU:HA	24:AY:148:LEU:HD12	1.79	0.41
24:AY:205:TYR:O	24:AY:206:LEU:C	2.58	0.41
24:AY:227:ILE:HG23	24:AY:237:PRO:CB	2.51	0.41
24:AY:337:SER:CB	24:AY:355:LEU:HD23	2.48	0.41
24:AY:354:ARG:C	24:AY:355:LEU:HD22	2.41	0.41
24:AY:486:THR:HG22	24:AY:600:VAL:HG13	2.03	0.41
24:AY:507:TYR:CD1	24:AY:507:TYR:O	2.71	0.41
24:AY:647:VAL:HA	24:AY:648:PRO:HD3	1.81	0.41
58:AY:701:FUA:H191	58:AY:701:FUA:H62	1.84	0.41
25:B0:11:ARG:O	25:B0:12:ASN:ND2	2.53	0.41
25:B0:14:ARG:NH1	35:BA:2279:G:N7	2.67	0.41
25:B0:25:ARG:HH11	25:B0:25:ARG:HG2	1.86	0.41
25:B0:27:GLU:HG3	25:B0:68:GLU:HA	2.03	0.41
25:B0:49:LYS:HG3	25:B0:80:HIS:CG	2.55	0.41
26:B1:64:ALA:C	26:B1:66:HIS:N	2.74	0.41
26:B1:78:LYS:O	26:B1:80:LEU:N	2.54	0.41
27:B2:7:ARG:NH1	27:B2:7:ARG:CG	2.64	0.41
29:B4:48:ARG:O	29:B4:48:ARG:CG	2.47	0.41
30:B5:58:LEU:HD13	30:B5:59:GLU:N	2.35	0.41
31:B6:7:ILE:N	31:B6:7:ILE:CD1	2.84	0.41
31:B6:11:LEU:HA	31:B6:54:ILE:O	2.20	0.41
31:B6:30:THR:O	31:B6:31:PRO:C	2.59	0.41
31:B6:30:THR:HG21	35:BA:2286:A:OP2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B6:44:ARG:HB3	31:B6:45:LYS:H	1.57	0.41
33:B8:61:LEU:O	33:B8:64:TYR:N	2.54	0.41
35:BA:48:G:N2	35:BA:177:G:H21	2.18	0.41
35:BA:182:A:C2	35:BA:183:C:C2	3.09	0.41
35:BA:191:A:H8	35:BA:191:A:O5'	2.02	0.41
35:BA:216:A:C8	35:BA:432:A:C6	3.09	0.41
35:BA:272(H):C:C2'	35:BA:272(I):U:C5'	2.88	0.41
35:BA:279:C:H3'	35:BA:280:C:C5'	2.37	0.41
35:BA:353:G:H2'	35:BA:354:G:H5'	2.03	0.41
35:BA:578:A:C8	35:BA:2018:G:H5'	2.56	0.41
35:BA:624:C:N4	47:BP:107:LYS:HZ2	2.19	0.41
35:BA:637:A:OP2	47:BP:115:LEU:HB2	2.20	0.41
35:BA:654:A:H4'	35:BA:654(A):G:O5'	2.21	0.41
35:BA:686:G:N2	35:BA:788:A:H61	2.18	0.41
35:BA:703:U:H2'	35:BA:704:G:O4'	2.20	0.41
35:BA:851:U:H2'	35:BA:852:G:C8	2.55	0.41
35:BA:1012:U:O4	45:BN:28:THR:HG21	2.21	0.41
35:BA:1050:A:C4	35:BA:1051:G:H1'	2.55	0.41
35:BA:1064:C:C5'	43:BK:87:GLY:H	2.33	0.41
35:BA:1125:G:C6	35:BA:1126:A:N6	2.89	0.41
35:BA:1177:A:H4'	35:BA:1178:C:H5'	2.03	0.41
35:BA:1187:G:H5"	53:BV:81:TYR:CE1	2.56	0.41
35:BA:1291:C:H2'	35:BA:1292:U:C6	2.56	0.41
35:BA:1399:C:O2	35:BA:1399:C:C2'	2.69	0.41
35:BA:1450:G:C6	35:BA:1450(A):C:N4	2.89	0.41
35:BA:1567:A:H2'	38:BD:84:TYR:CE2	2.55	0.41
35:BA:1629:U:H2'	35:BA:1630:G:C8	2.56	0.41
35:BA:1630:G:N1	35:BA:1637:A:N1	2.69	0.41
35:BA:1638:C:H1'	35:BA:2698:U:O2'	2.21	0.41
35:BA:1639:U:O2'	35:BA:1640:C:H5"	2.21	0.41
35:BA:1689:A:N6	35:BA:1698:A:H2	2.15	0.41
35:BA:1692:U:H2'	35:BA:1694:C:C4	2.56	0.41
35:BA:1827:C:H2'	35:BA:1828:G:C5'	2.51	0.41
35:BA:2103:C:H1'	35:BA:2187:G:H1	1.85	0.41
35:BA:2137:C:H2'	35:BA:2138:C:O4'	2.20	0.41
35:BA:2177:C:O5'	35:BA:2177:C:H6	2.04	0.41
35:BA:2369:A:H2'	35:BA:2370:G:C8	2.56	0.41
35:BA:2636:U:OP1	39:BE:79:ARG:HG3	2.21	0.41
35:BA:2787:C:O2	35:BA:2787:C:H2'	2.20	0.41
35:BA:2822:G:H2'	35:BA:2823:A:H5"	2.03	0.41
36:BB:5:C:O2'	36:BB:27:C:O2	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BB:75:G:H2'	36:BB:76:G:O4'	2.21	0.41
36:BB:77:U:O2	36:BB:101:G:O6	2.39	0.41
37:BC:27:ALA:C	37:BC:29:LEU:N	2.74	0.41
37:BC:101:ILE:HG23	37:BC:128:LEU:HG	2.02	0.41
38:BD:94:LEU:HD23	38:BD:95:LEU:H	1.84	0.41
39:BE:51:PHE:HD2	39:BE:52:LEU:HD12	1.84	0.41
39:BE:60:ASN:O	39:BE:61:ARG:C	2.59	0.41
40:BF:9:ILE:H	40:BF:9:ILE:HG13	1.62	0.41
40:BF:10:PRO:HB3	40:BF:127:GLU:CG	2.50	0.41
40:BF:106:ARG:NH1	40:BF:106:ARG:HG3	2.35	0.41
40:BF:117:ARG:NH1	40:BF:120:GLU:OE1	2.54	0.41
40:BF:157:VAL:O	40:BF:157:VAL:HG23	2.20	0.41
41:BG:23:PHE:CZ	41:BG:168:GLU:HA	2.56	0.41
41:BG:29:TRP:C	41:BG:31:VAL:N	2.73	0.41
41:BG:55:LYS:HE2	41:BG:58:GLN:NE2	2.36	0.41
41:BG:77:ILE:HG22	41:BG:80:PHE:CB	2.50	0.41
41:BG:79:ASN:OD1	41:BG:79:ASN:N	2.52	0.41
41:BG:82:LEU:CD2	41:BG:87:PRO:HG3	2.49	0.41
42:BH:20:ALA:HB1	42:BH:21:PRO:HD2	2.01	0.41
42:BH:152:ARG:O	42:BH:153:LYS:C	2.60	0.41
43:BK:75:SER:O	43:BK:78:ILE:HG22	2.21	0.41
43:BK:100:THR:HG22	43:BK:139:VAL:HB	2.03	0.41
45:BN:15:LEU:HD23	45:BN:53:VAL:HB	2.01	0.41
45:BN:21:LYS:O	45:BN:60:ILE:HG23	2.21	0.41
45:BN:23:LEU:HB3	45:BN:60:ILE:CG2	2.44	0.41
45:BN:55:VAL:HB	45:BN:128:HIS:HB3	2.03	0.41
45:BN:132:ALA:O	45:BN:133:GLN:HB2	2.21	0.41
46:BO:24:VAL:HG21	46:BO:30:ALA:HB3	2.03	0.41
46:BO:69:ILE:N	46:BO:69:ILE:CD1	2.80	0.41
47:BP:25:SER:O	47:BP:30:THR:OG1	2.24	0.41
47:BP:83:VAL:HG13	47:BP:114:ILE:HA	2.03	0.41
47:BP:114:ILE:HG13	47:BP:130:PHE:HD1	1.86	0.41
50:BS:19:LYS:C	50:BS:20:ARG:CZ	2.89	0.41
51:BT:1:MET:H1	51:BT:7:ILE:HD11	1.84	0.41
51:BT:25:GLY:HA3	51:BT:90:GLN:O	2.21	0.41
51:BT:79:HIS:O	51:BT:80:SER:HB3	2.20	0.41
51:BT:110:ILE:HD12	51:BT:110:ILE:HG23	1.81	0.41
52:BU:53:ARG:HG3	52:BU:57:PHE:HE1	1.86	0.41
54:BW:1:MET:HE2	54:BW:62:HIS:HD2	1.86	0.41
56:BY:36:ALA:C	56:BY:37:VAL:HG13	2.42	0.41
56:BY:81:LYS:HD2	56:BY:96:ILE:HG22	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BZ:52:SER:OG	57:BZ:53:ILE:N	2.52	0.41
57:BZ:110:GLY:HA2	57:BZ:145:GLU:OE1	2.21	0.41
1:AA:260:G:O2'	1:AA:261:U:H5'	2.21	0.41
1:AA:395:C:H4'	24:AY:340:TYR:OH	2.21	0.41
1:AA:765:G:H1	1:AA:812:C:H2'	1.86	0.41
1:AA:793:U:C3'	1:AA:794:A:C5'	2.85	0.41
1:AA:930:C:C2'	1:AA:931:C:H5'	2.51	0.41
1:AA:1089:G:N1	1:AA:1097:C:N3	2.69	0.41
1:AA:1221:G:H4'	19:AS:77:THR:CG2	2.47	0.41
2:AB:11:LEU:HD11	2:AB:217:ARG:HH22	1.86	0.41
2:AB:28:PHE:O	2:AB:29:ALA:C	2.58	0.41
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.90	0.41
4:AD:162:LEU:CD2	4:AD:178:VAL:HG13	2.51	0.41
5:AE:51:VAL:HG12	5:AE:55:VAL:CG2	2.51	0.41
8:AH:35:ILE:HG22	8:AH:39:LEU:HD21	2.03	0.41
9:AI:19:LEU:CD2	9:AI:61:ALA:HB2	2.50	0.41
9:AI:50:LEU:CB	9:AI:56:LEU:HG	2.50	0.41
10:AJ:24:VAL:C	10:AJ:26:ALA:N	2.72	0.41
11:AK:36:ASP:N	11:AK:36:ASP:OD2	2.54	0.41
11:AK:79:SER:CB	11:AK:106:LYS:HD2	2.51	0.41
11:AK:112:THR:HG23	11:AK:113:PRO:HD2	2.02	0.41
12:AL:93:LEU:HB2	12:AL:96:VAL:CG2	2.51	0.41
13:AM:68:GLY:CA	13:AM:71:ARG:HB3	2.51	0.41
15:AO:17:ARG:NH1	15:AO:17:ARG:CG	2.78	0.41
16:AP:57:ARG:O	16:AP:58:TYR:C	2.59	0.41
17:AQ:13:ASP:CA	17:AQ:19:VAL:HG12	2.51	0.41
19:AS:9:VAL:HG21	29:B4:53:GLU:CG	2.50	0.41
20:AT:74:LYS:HB2	20:AT:75:ASN:H	1.57	0.41
24:AY:21:ILE:HG23	24:AY:88:VAL:HG13	2.02	0.41
24:AY:162:VAL:HG23	24:AY:255:ILE:HG13	2.01	0.41
24:AY:180:VAL:HG23	24:AY:216:LEU:CD1	2.51	0.41
24:AY:549:ALA:HB2	24:AY:587:SER:OG	2.20	0.41
24:AY:631:ILE:HA	24:AY:645:ALA:HB2	2.03	0.41
26:B1:6:GLU:OE1	26:B1:61:ARG:N	2.39	0.41
26:B1:45:ASN:HD21	26:B1:47:GLN:NE2	2.19	0.41
32:B7:8:ASN:ND2	32:B7:8:ASN:C	2.75	0.41
33:B8:5:LYS:HG2	35:BA:242:G:C8	2.56	0.41
35:BA:154(A):C:N4	35:BA:172:C:N4	2.69	0.41
35:BA:182:A:C6	35:BA:183:C:C4	3.09	0.41
35:BA:271(B):C:C2'	35:BA:271(C):C:H5'	2.51	0.41
35:BA:300:A:H2'	35:BA:334:C:H1'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:583:G:C4	35:BA:584:C:C5	3.09	0.41
35:BA:701:G:C6	35:BA:732:C:N4	2.89	0.41
35:BA:747:U:C4	35:BA:2613:U:C5	3.09	0.41
35:BA:841:A:C2	35:BA:842:G:C4	3.09	0.41
35:BA:996:A:H2'	35:BA:997:G:H8	1.86	0.41
35:BA:1009:A:C2	35:BA:1010:A:C2	3.08	0.41
35:BA:1063:G:O2'	35:BA:1064:C:H5'	2.21	0.41
35:BA:1127:A:C6	35:BA:2518:A:C2	3.09	0.41
35:BA:1190:G:H5'	47:BP:35:HIS:N	2.32	0.41
35:BA:1401:G:C6	35:BA:1402:C:C4	3.09	0.41
35:BA:1441:G:H2'	35:BA:1442:G:H8	1.86	0.41
35:BA:1461:G:O2'	35:BA:1462:C:H5'	2.21	0.41
35:BA:1471:A:H2'	35:BA:1472:A:C8	2.56	0.41
35:BA:1528:A:N6	35:BA:1544:A:C2	2.89	0.41
35:BA:1578:U:H2'	35:BA:1579:A:C5'	2.47	0.41
35:BA:1721:G:H8	35:BA:1741:A:N6	2.18	0.41
35:BA:1722:A:H2	35:BA:1740:G:C2'	2.33	0.41
35:BA:1850:G:H5'	35:BA:1851:U:OP2	2.21	0.41
35:BA:1889:A:H8	35:BA:1889:A:H5"	1.86	0.41
35:BA:2147:G:O2'	35:BA:2148:G:H5'	2.21	0.41
35:BA:2313:C:H6	35:BA:2313:C:C5'	2.23	0.41
35:BA:2323:G:H8	35:BA:2323:G:O5'	2.03	0.41
35:BA:2681:C:H6	35:BA:2683:C:H41	1.69	0.41
35:BA:2792:G:N3	35:BA:2792:G:H2'	2.36	0.41
35:BA:2869:G:H2'	35:BA:2870:C:C6	2.56	0.41
36:BB:49:C:OP1	50:BS:97:ARG:HG3	2.21	0.41
36:BB:69:G:C2	36:BB:70:C:C2	3.09	0.41
37:BC:73:VAL:O	37:BC:73:VAL:CG1	2.66	0.41
37:BC:132:LEU:HD22	37:BC:137:LEU:CB	2.50	0.41
38:BD:182:LEU:HD23	38:BD:182:LEU:HA	1.74	0.41
40:BF:43:LYS:HG3	40:BF:44:ARG:N	2.35	0.41
40:BF:89:VAL:HG12	40:BF:90:PHE:H	1.86	0.41
40:BF:99:TYR:HE2	40:BF:101:LEU:HD12	1.84	0.41
41:BG:98:ARG:HG2	41:BG:98:ARG:NH1	2.34	0.41
42:BH:133:VAL:CG1	42:BH:134:SER:N	2.83	0.41
42:BH:156:ALA:C	42:BH:158:HIS:H	2.25	0.41
44:BL:64:ASN:O	44:BL:68:VAL:HG23	2.20	0.41
46:BO:83:ALA:O	46:BO:84:ALA:HB2	2.21	0.41
48:BQ:3:MET:CB	48:BQ:4:PRO:CD	2.97	0.41
48:BQ:130:LYS:NZ	57:BZ:80:ARG:NH1	2.66	0.41
49:BR:33:ARG:CG	49:BR:115:GLU:HG3	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BU:72:HIS:HE1	52:BU:107:ALA:CB	2.30	0.41
53:BV:15:GLU:O	53:BV:16:PRO:C	2.60	0.41
56:BY:43:ASN:HD21	56:BY:64:GLU:HG3	1.86	0.41
56:BY:61:ILE:CG1	56:BY:62:GLU:N	2.84	0.41
1:AA:37:U:H2'	1:AA:38:G:H5'	2.03	0.40
1:AA:93:G:O2'	1:AA:96:U:H5'	2.21	0.40
1:AA:97:G:HO2'	1:AA:98:G:P	2.44	0.40
1:AA:354:G:C2	1:AA:355:C:C5	3.09	0.40
1:AA:592:G:H2'	1:AA:593:G:H8	1.86	0.40
1:AA:961:U:H2'	1:AA:962:C:H5'	2.04	0.40
1:AA:1296:C:O2'	1:AA:1302:U:C5	2.63	0.40
1:AA:1423:G:H5"	46:BO:49:ARG:NH2	2.36	0.40
1:AA:1478:C:O5'	1:AA:1478:C:H6	2.04	0.40
2:AB:114:ARG:O	2:AB:117:GLU:HB2	2.21	0.40
4:AD:36:ARG:HB3	4:AD:38:TYR:CE2	2.56	0.40
4:AD:65:ARG:HD2	4:AD:72:GLU:HA	2.03	0.40
4:AD:112:VAL:HG12	4:AD:112:VAL:H	1.70	0.40
4:AD:159:ARG:O	4:AD:160:GLN:C	2.58	0.40
4:AD:163:GLU:O	4:AD:165:MET:N	2.54	0.40
5:AE:37:ARG:HG2	5:AE:37:ARG:HH11	1.86	0.40
5:AE:53:LEU:N	5:AE:53:LEU:HD23	2.36	0.40
5:AE:81:GLU:HA	5:AE:89:ILE:O	2.22	0.40
9:AI:69:GLY:O	9:AI:73:GLN:HG3	2.20	0.40
9:AI:99:LEU:HB2	9:AI:101:PHE:CE1	2.56	0.40
10:AJ:27:ALA:CB	10:AJ:85:LEU:HD11	2.51	0.40
13:AM:77:ASN:O	13:AM:81:LEU:CD2	2.69	0.40
16:AP:25:ARG:HG3	16:AP:25:ARG:NH1	2.35	0.40
16:AP:44:THR:O	16:AP:45:THR:HB	2.21	0.40
17:AQ:17:LYS:HA	17:AQ:49:GLU:HG2	2.03	0.40
17:AQ:89:LEU:HA	17:AQ:89:LEU:HD23	1.90	0.40
22:AV:71:C:H5'	22:AV:72:A:OP2	2.21	0.40
24:AY:10:LYS:CE	24:AY:284:LEU:HD23	2.50	0.40
24:AY:160:ARG:O	24:AY:255:ILE:HA	2.21	0.40
24:AY:553:GLY:H	24:AY:557:GLY:C	2.24	0.40
24:AY:684:GLN:HB2	24:AY:684:GLN:HE21	1.58	0.40
25:B0:44:ARG:HG2	25:B0:44:ARG:NH1	2.36	0.40
25:B0:55:ARG:HE	25:B0:55:ARG:HB3	1.60	0.40
27:B2:57:ILE:HG22	27:B2:61:LEU:HD12	2.02	0.40
28:B3:19:GLN:O	28:B3:22:ALA:N	2.44	0.40
31:B6:27:LYS:HB3	31:B6:32:ASN:HD21	1.86	0.40
33:B8:33:ASN:CA	33:B8:36:LYS:HD2	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:341:G:H2'	35:BA:342:G:H8	1.86	0.40
35:BA:352:G:H1'	35:BA:354:G:N7	2.36	0.40
35:BA:547:A:O2'	35:BA:548:A:N7	2.46	0.40
35:BA:605:C:C4	35:BA:606:U:C5	3.09	0.40
35:BA:806:C:P	47:BP:39:LYS:HD3	2.56	0.40
35:BA:1185:C:C5'	35:BA:1186:G:P	3.10	0.40
35:BA:1299:G:H8	35:BA:1299:G:O5'	2.03	0.40
35:BA:1335:U:OP1	55:BX:65:ARG:NH2	2.54	0.40
35:BA:1430:C:N4	35:BA:1563:G:H1	2.17	0.40
35:BA:1599:C:O5'	35:BA:1599:C:H6	2.04	0.40
35:BA:1668:A:N3	35:BA:1670:C:C4	2.88	0.40
35:BA:1705:G:O2'	35:BA:1706:U:H5'	2.21	0.40
35:BA:1722:A:O2'	35:BA:1739:U:C5'	2.63	0.40
35:BA:1722:A:C2	35:BA:1740:G:H2'	2.48	0.40
35:BA:1891:G:O5'	35:BA:1891:G:C8	2.72	0.40
35:BA:2262:U:C3'	35:BA:2263:C:H5'	2.51	0.40
35:BA:2820:A:H8	39:BE:191:PRO:HB3	1.86	0.40
35:BA:2832:U:H1'	35:BA:2834:G:C4	2.55	0.40
37:BC:109:MET:HA	37:BC:111:PHE:CE2	2.56	0.40
38:BD:27:THR:HG23	38:BD:27:THR:O	2.20	0.40
38:BD:183:ARG:HD2	38:BD:270:ILE:CG2	2.49	0.40
38:BD:268:ARG:HH11	38:BD:268:ARG:HD3	1.70	0.40
39:BE:55:ASN:C	39:BE:57:LYS:H	2.25	0.40
40:BF:70:THR:HB	40:BF:72:ARG:H	1.86	0.40
40:BF:109:GLY:HA2	40:BF:112:MET:HB2	2.01	0.40
41:BG:77:ILE:O	41:BG:80:PHE:N	2.54	0.40
42:BH:41:MET:CE	42:BH:43:VAL:CG1	2.99	0.40
42:BH:89:ILE:CD1	42:BH:94:TYR:CB	2.99	0.40
42:BH:92:ILE:C	42:BH:94:TYR:H	2.24	0.40
45:BN:65:LYS:HZ2	45:BN:65:LYS:CB	2.34	0.40
46:BO:64:ARG:NH1	46:BO:83:ALA:CB	2.84	0.40
48:BQ:37:LEU:HD21	48:BQ:130:LYS:HB2	2.03	0.40
48:BQ:50:ALA:O	48:BQ:52:VAL:N	2.55	0.40
49:BR:12:ARG:HD2	49:BR:20:LEU:HD22	2.03	0.40
49:BR:13:HIS:O	49:BR:14:SER:C	2.59	0.40
50:BS:102:ALA:O	50:BS:103:GLU:C	2.59	0.40
52:BU:52:ARG:O	52:BU:53:ARG:C	2.59	0.40
57:BZ:61:LEU:C	57:BZ:63:ASP:N	2.74	0.40
57:BZ:72:ARG:HG2	57:BZ:89:PHE:HB2	2.03	0.40
57:BZ:115:GLY:H	57:BZ:177:PRO:HG3	1.84	0.40
1:AA:63:C:O2'	1:AA:380:G:H4'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:103:C:H5'	1:AA:104:G:OP2	2.22	0.40
1:AA:117:G:H2'	1:AA:118:U:O4'	2.21	0.40
1:AA:310:G:H2'	1:AA:311:C:H6	1.86	0.40
1:AA:332:G:C4	1:AA:333:G:C8	3.10	0.40
1:AA:477:A:C2'	1:AA:479:C:H5'	2.52	0.40
1:AA:734:G:H2'	1:AA:735:C:O4'	2.21	0.40
1:AA:972:C:O2	10:AJ:55:LYS:HG2	2.20	0.40
1:AA:974:A:C8	14:AN:31:ARG:HD2	2.56	0.40
1:AA:1031:G:C2'	1:AA:1032:G:H5'	2.51	0.40
1:AA:1053:G:C4	1:AA:1199:U:C5	3.09	0.40
1:AA:1097:C:O2'	1:AA:1098:C:H5'	2.21	0.40
1:AA:1133:G:N3	1:AA:1142:G:N2	2.69	0.40
1:AA:1134:G:N1	1:AA:1142:G:C6	2.89	0.40
1:AA:1137:C:C4'	1:AA:1138:G:C2	3.04	0.40
3:AC:3:ASN:O	3:AC:4:LYS:HB2	2.21	0.40
3:AC:40:ARG:O	3:AC:44:GLU:HB2	2.21	0.40
3:AC:58:GLU:HB2	3:AC:65:ALA:CB	2.51	0.40
4:AD:57:ARG:HH11	4:AD:57:ARG:CG	2.32	0.40
7:AG:62:PHE:O	7:AG:63:LYS:C	2.59	0.40
7:AG:145:ALA:O	7:AG:146:GLU:CB	2.67	0.40
10:AJ:98:ILE:O	10:AJ:99:LYS:HD3	2.20	0.40
11:AK:55:LYS:HB2	11:AK:55:LYS:HE3	1.82	0.40
12:AL:7:ILE:HG22	12:AL:8:ASN:N	2.36	0.40
13:AM:88:ARG:HG2	13:AM:88:ARG:NH1	2.33	0.40
16:AP:65:GLN:HA	16:AP:66:PRO:HD2	1.82	0.40
17:AQ:67:LYS:HA	17:AQ:70:ARG:NH1	2.33	0.40
18:AR:45:SER:HB3	18:AR:51:LEU:HD21	2.02	0.40
19:AS:78:ARG:O	19:AS:81:ARG:HD3	2.21	0.40
20:AT:84:LEU:C	20:AT:84:LEU:HD12	2.42	0.40
22:AV:35:A:C6	22:AV:36:U:C4	3.08	0.40
24:AY:9:LEU:C	24:AY:11:ARG:N	2.74	0.40
24:AY:484:ARG:HA	24:AY:484:ARG:HD3	1.75	0.40
29:B4:56:VAL:O	29:B4:56:VAL:CG1	2.59	0.40
33:B8:7:HIS:HB3	33:B8:10:ALA:HB3	2.03	0.40
35:BA:222:A:N6	35:BA:224:G:C2	2.89	0.40
35:BA:281:G:N2	35:BA:358:U:C5	2.89	0.40
35:BA:286:C:O2'	35:BA:287:C:H5'	2.20	0.40
35:BA:444:C:O2'	35:BA:445:C:H5'	2.21	0.40
35:BA:775:G:H4'	35:BA:776:G:O5'	2.19	0.40
35:BA:777:A:N3	35:BA:778:G:C8	2.89	0.40
35:BA:841:A:C6	35:BA:842:G:C5	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1012:U:O4	45:BN:25:ARG:HA	2.21	0.40
35:BA:1042:G:O2'	35:BA:1043:C:H5'	2.21	0.40
35:BA:1052:C:H4'	35:BA:1053:C:OP1	2.21	0.40
35:BA:1221(A):C:C2	35:BA:1229:G:C2	3.09	0.40
35:BA:1329:U:H5'	35:BA:1330:C:C5	2.56	0.40
35:BA:1337:G:H2'	35:BA:1338:G:H8	1.85	0.40
35:BA:1558:A:HO2'	35:BA:1559:G:P	2.43	0.40
35:BA:1687:G:O2'	35:BA:1701:A:N6	2.50	0.40
35:BA:2061:G:OP2	35:BA:2502:G:OP2	2.39	0.40
35:BA:2346:A:O2'	35:BA:2383:G:C8	2.73	0.40
35:BA:2443:C:H2'	35:BA:2444:G:H5'	2.03	0.40
35:BA:2687:U:H2'	35:BA:2688:U:H5'	2.04	0.40
35:BA:2810:A:C2'	39:BE:61:ARG:NH2	2.82	0.40
36:BB:14:U:H5'	36:BB:71:C:O4'	2.22	0.40
36:BB:58:A:H2'	36:BB:59:A:C8	2.57	0.40
37:BC:86:GLU:O	37:BC:90:ALA:HB2	2.21	0.40
38:BD:9:TYR:O	38:BD:10:THR:CB	2.67	0.40
38:BD:11:PRO:C	38:BD:13:ARG:N	2.74	0.40
40:BF:113:ALA:HB1	40:BF:186:ILE:HG21	2.03	0.40
41:BG:109:VAL:HG11	41:BG:142:PRO:HD3	2.02	0.40
41:BG:153:ARG:HB3	41:BG:153:ARG:HH11	1.85	0.40
42:BH:83:TYR:HA	42:BH:135:GLY:O	2.20	0.40
46:BO:26:LYS:HB3	46:BO:27:GLY:H	1.59	0.40
46:BO:115:VAL:HG13	46:BO:121:VAL:CG2	2.43	0.40
47:BP:9:ASN:N	47:BP:10:PRO:CD	2.84	0.40
47:BP:23:PRO:O	47:BP:33:ARG:CD	2.67	0.40
47:BP:136:GLU:O	47:BP:139:LYS:HB2	2.21	0.40
49:BR:35:THR:HG23	49:BR:112:ALA:O	2.22	0.40
50:BS:16:ASN:OD1	50:BS:16:ASN:C	2.59	0.40
50:BS:74:ALA:HB2	50:BS:101:LEU:CD2	2.51	0.40
51:BT:6:LEU:CD2	51:BT:10:VAL:HG23	2.51	0.40
51:BT:29:ARG:CD	51:BT:30:VAL:HG13	2.51	0.40
51:BT:56:GLY:N	51:BT:59:THR:HG21	2.37	0.40
52:BU:11:ARG:O	52:BU:11:ARG:HG2	2.21	0.40
52:BU:17:ILE:HD13	52:BU:17:ILE:HG21	1.91	0.40
52:BU:78:THR:O	52:BU:79:PHE:C	2.59	0.40
52:BU:115:ALA:C	52:BU:117:GLN:N	2.74	0.40
56:BY:94:LYS:CG	56:BY:102:CYS:SG	3.09	0.40
57:BZ:57:ILE:N	57:BZ:57:ILE:CD1	2.85	0.40
1:AA:69:G:C2	1:AA:70:G:C5	3.09	0.40
1:AA:201:C:C3'	1:AA:202:U:H5"	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:677:U:H2'	1:AA:678:U:O4'	2.21	0.40
1:AA:836:G:C6	1:AA:851:G:C6	3.09	0.40
1:AA:908:A:H2'	1:AA:909:A:C8	2.55	0.40
1:AA:1117:G:O3'	9:AI:104:ARG:CD	2.70	0.40
1:AA:1352:C:OP1	21:AU:3:LYS:CE	2.70	0.40
1:AA:1442:G:H2'	51:BT:118:ARG:NH1	2.36	0.40
3:AC:5:ILE:HD13	3:AC:5:ILE:H	1.81	0.40
3:AC:52:LEU:HD12	3:AC:55:VAL:CG2	2.52	0.40
3:AC:84:ILE:HD11	3:AC:88:ARG:HH21	1.87	0.40
7:AG:153:HIS:ND1	7:AG:153:HIS:N	2.70	0.40
8:AH:103:VAL:CG1	8:AH:108:GLY:HA3	2.50	0.40
15:AO:34:LEU:O	15:AO:35:ARG:C	2.60	0.40
17:AQ:46:ASP:HA	17:AQ:47:PRO:HD2	1.78	0.40
20:AT:87:LYS:HA	20:AT:90:GLN:HB2	2.03	0.40
23:AX:11:U:H4'	23:AX:12:A:O5'	2.21	0.40
25:B0:10:THR:HG21	35:BA:2277:G:OP2	2.21	0.40
26:B1:82:LEU:HD23	26:B1:90:ILE:HG23	2.02	0.40
29:B4:1:MET:CE	29:B4:1:MET:H3	2.34	0.40
32:B7:16:HIS:ND1	35:BA:684:G:OP1	2.54	0.40
35:BA:51:G:N3	35:BA:119:A:C2	2.90	0.40
35:BA:279:C:C3'	35:BA:280:C:C5'	2.94	0.40
35:BA:286:C:C6	35:BA:286:C:C4'	3.04	0.40
35:BA:310:A:O2'	35:BA:311:A:H2'	2.21	0.40
35:BA:312:G:H5'	35:BA:331:A:H2'	2.03	0.40
35:BA:613:G:C2	35:BA:615:G:C5	3.10	0.40
35:BA:883:G:N2	35:BA:894:C:C2	2.89	0.40
35:BA:1343:G:N2	35:BA:1405:U:C2	2.89	0.40
35:BA:1635:G:C2	35:BA:1636:C:C2	3.09	0.40
35:BA:1820:U:H3	38:BD:199:ALA:HA	1.86	0.40
35:BA:1997:G:O2'	35:BA:1998:G:H5'	2.21	0.40
35:BA:2394:C:C5	35:BA:2395:C:H5	2.39	0.40
35:BA:2617:C:C4	35:BA:2618:G:N7	2.89	0.40
35:BA:2777:G:C5'	35:BA:2778:A:H5"	2.52	0.40
36:BB:76:G:O3'	57:BZ:19:ARG:NH2	2.52	0.40
37:BC:140:ASN:HB3	37:BC:143:ALA:HB2	2.02	0.40
40:BF:39:TRP:O	40:BF:43:LYS:HG2	2.20	0.40
40:BF:84:VAL:O	40:BF:86:GLY:N	2.50	0.40
43:BK:2:LYS:HB2	43:BK:2:LYS:HZ3	1.85	0.40
45:BN:34:LEU:HD13	45:BN:34:LEU:HA	1.97	0.40
46:BO:22:ILE:O	46:BO:22:ILE:HG22	2.20	0.40
47:BP:16:ARG:NH1	47:BP:16:ARG:HB2	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BP:16:ARG:NE	47:BP:18:ARG:HB2	2.36	0.40
47:BP:124:LYS:HD3	47:BP:143:GLY:CA	2.51	0.40
48:BQ:59:ARG:CB	57:BZ:180:VAL:HG23	2.51	0.40
50:BS:48:LEU:HD12	50:BS:48:LEU:N	2.37	0.40
50:BS:97:ARG:NH2	50:BS:98:VAL:HA	2.36	0.40
54:BW:34:ASN:HA	54:BW:37:ARG:HB3	2.04	0.40
56:BY:38:ILE:HG23	56:BY:39:VAL:N	2.36	0.40
57:BZ:24:LEU:C	57:BZ:24:LEU:CD2	2.89	0.40
1:AA:529:G:O6	12:AL:49:ASN:HA	2.21	0.40
1:AA:718:G:C1'	11:AK:116:HIS:HA	2.51	0.40
1:AA:867:G:H2'	1:AA:868:C:H6	1.87	0.40
1:AA:935:A:H2'	1:AA:936:C:C6	2.56	0.40
1:AA:1495:U:H2'	1:AA:1496:C:C6	2.57	0.40
2:AB:39:ILE:CG2	2:AB:40:HIS:N	2.84	0.40
3:AC:43:LEU:C	3:AC:45:LYS:N	2.74	0.40
3:AC:84:ILE:O	3:AC:84:ILE:HG12	2.21	0.40
5:AE:72:GLN:NE2	5:AE:144:THR:HG22	2.33	0.40
6:AF:54:LYS:HA	6:AF:54:LYS:HD3	1.82	0.40
6:AF:67:MET:HB2	6:AF:68:PRO:CD	2.48	0.40
7:AG:84:ASN:N	7:AG:84:ASN:ND2	2.68	0.40
7:AG:93:PRO:HG2	7:AG:94:ARG:H	1.86	0.40
7:AG:113:GLU:HG3	7:AG:119:ARG:HA	2.03	0.40
9:AI:84:ALA:C	9:AI:86:VAL:N	2.75	0.40
10:AJ:51:ARG:HG3	10:AJ:60:ARG:O	2.21	0.40
13:AM:54:VAL:O	13:AM:55:ARG:C	2.59	0.40
15:AO:31:LEU:N	15:AO:31:LEU:CD2	2.85	0.40
15:AO:36:ILE:HG22	15:AO:37:ASN:N	2.36	0.40
15:AO:86:GLY:C	15:AO:87:ILE:CG2	2.89	0.40
19:AS:63:THR:H	19:AS:63:THR:HG23	1.59	0.40
22:AV:38:A:C6	22:AV:39:C:C2	3.09	0.40
24:AY:177:ILE:CG2	24:AY:178:ILE:H	2.33	0.40
27:B2:47:ASN:HB3	27:B2:48:HIS:H	1.53	0.40
32:B7:25:PRO:N	32:B7:28:ARG:NH2	2.70	0.40
33:B8:42:ARG:C	33:B8:44:LYS:H	2.25	0.40
35:BA:370:G:C6	35:BA:424:G:C8	3.09	0.40
35:BA:537:C:H6	35:BA:537:C:O5'	2.05	0.40
35:BA:848:G:H3'	35:BA:849:A:H8	1.86	0.40
35:BA:892:G:O2'	35:BA:893:C:H5'	2.21	0.40
35:BA:1132:A:H2'	35:BA:1133:U:H6	1.87	0.40
35:BA:1344:G:C2	35:BA:1404:C:C2	3.09	0.40
35:BA:1548:C:C6	35:BA:1548:C:C3'	3.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BA:1902:C:O2'	38:BD:244:ARG:NE	2.50	0.40
35:BA:2291:U:O2'	35:BA:2292:C:H5'	2.21	0.40
35:BA:2318:G:C2'	35:BA:2319:G:OP1	2.69	0.40
35:BA:2470:G:H4'	35:BA:2470:G:OP1	2.20	0.40
35:BA:2519:U:H2'	35:BA:2541:A:H61	1.87	0.40
35:BA:2625:G:H2'	35:BA:2626:C:O4'	2.22	0.40
35:BA:2685:G:O2'	35:BA:2726:U:H5	2.04	0.40
35:BA:2825:C:O5'	35:BA:2825:C:H6	2.04	0.40
36:BB:58:A:H2'	36:BB:59:A:O4'	2.21	0.40
37:BC:27:ALA:C	37:BC:29:LEU:H	2.24	0.40
37:BC:54:ARG:HD2	37:BC:56:ASP:OD1	2.22	0.40
37:BC:140:ASN:HB3	37:BC:143:ALA:CB	2.51	0.40
37:BC:149:ASN:ND2	37:BC:153:ILE:HG13	2.36	0.40
38:BD:25:THR:HG22	38:BD:26:LYS:HD2	2.03	0.40
38:BD:197:GLY:O	38:BD:198:ASN:CB	2.69	0.40
39:BE:82:ARG:O	39:BE:84:PHE:N	2.55	0.40
40:BF:65:TRP:C	40:BF:67:GLN:H	2.24	0.40
41:BG:9:ARG:CG	41:BG:13:GLU:HG2	2.51	0.40
42:BH:169:VAL:CG2	42:BH:170:ARG:H	2.21	0.40
44:BL:94:LEU:C	44:BL:95:LYS:CG	2.90	0.40
49:BR:41:ALA:C	49:BR:43:GLU:N	2.74	0.40
49:BR:76:VAL:CG1	49:BR:77:ARG:N	2.84	0.40
49:BR:79:LEU:C	49:BR:79:LEU:CD1	2.83	0.40
50:BS:98:VAL:HG12	50:BS:100:ALA:HB2	2.03	0.40
51:BT:11:GLU:CD	51:BT:11:GLU:H	2.24	0.40
51:BT:82:LEU:HD22	51:BT:85:LYS:HD2	2.03	0.40
52:BU:55:ARG:HA	52:BU:58:ARG:CB	2.51	0.40
53:BV:59:ALA:HA	53:BV:95:LEU:O	2.21	0.40
57:BZ:4:ARG:O	57:BZ:5:LEU:HB2	2.21	0.40
57:BZ:19:ARG:NH1	57:BZ:25:PRO:HG3	2.37	0.40
57:BZ:105:VAL:HG13	57:BZ:105:VAL:O	2.22	0.40
1:AA:15:G:H4'	5:AE:24:ARG:HH12	1.85	0.40
1:AA:59:A:N3	1:AA:59:A:C2'	2.82	0.40
1:AA:178:C:N3	1:AA:179:A:C8	2.90	0.40
1:AA:341:C:C2	1:AA:349:A:C2	3.10	0.40
1:AA:375:U:N3	1:AA:376:G:N7	2.69	0.40
1:AA:448:A:C5	1:AA:487:A:C2	3.10	0.40
1:AA:826:C:C2	1:AA:827:U:C5	3.09	0.40
1:AA:913:A:H1'	1:AA:914:A:O4'	2.21	0.40
1:AA:968:A:H4'	1:AA:969:A:OP2	2.20	0.40
1:AA:999:C:C2	1:AA:1000:U:C4	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1282:C:H6	1:AA:1282:C:O5'	2.04	0.40
1:AA:1304:G:N7	1:AA:1305:G:C6	2.89	0.40
1:AA:1368:G:H5"	9:AI:112:LYS:HD2	2.02	0.40
1:AA:1416:G:H2'	1:AA:1417:G:O4'	2.21	0.40
1:AA:1452:C:H1'	1:AA:1456:G:H22	1.75	0.40
2:AB:24:TRP:HA	2:AB:190:THR:O	2.22	0.40
2:AB:32:ILE:CD1	2:AB:40:HIS:HB3	2.52	0.40
3:AC:69:HIS:CD2	3:AC:69:HIS:N	2.88	0.40
3:AC:73:PRO:HA	3:AC:76:VAL:HG22	2.02	0.40
4:AD:96:LEU:O	4:AD:99:SER:N	2.51	0.40
7:AG:27:ILE:HD13	7:AG:40:ALA:HA	2.01	0.40
7:AG:68:ASN:ND2	7:AG:128:ALA:HA	2.37	0.40
10:AJ:94:VAL:HG12	10:AJ:95:GLU:N	2.36	0.40
16:AP:9:PHE:CD2	16:AP:18:ARG:CZ	3.05	0.40
19:AS:36:ARG:HA	19:AS:71:LEU:HB2	2.02	0.40
19:AS:62:ILE:HG23	19:AS:62:ILE:O	2.21	0.40
20:AT:73:HIS:O	20:AT:76:ALA:N	2.55	0.40
20:AT:79:ARG:HH11	20:AT:79:ARG:HD3	1.71	0.40
24:AY:84:THR:O	24:AY:85:PRO:C	2.60	0.40
25:B0:23:VAL:HG11	25:B0:69:PHE:HZ	1.87	0.40
26:B1:75:GLU:HA	26:B1:75:GLU:OE1	2.21	0.40
29:B4:2:LYS:HD3	36:BB:44:G:OP1	2.21	0.40
29:B4:16:CYS:CB	29:B4:20:ASN:O	2.68	0.40
29:B4:26:SER:HB3	41:BG:105:LYS:NZ	2.37	0.40
30:B5:6:VAL:HG12	35:BA:2016:U:H1'	2.04	0.40
32:B7:5:TRP:CZ3	35:BA:464:U:H4'	2.57	0.40
33:B8:32:LEU:CB	33:B8:36:LYS:NZ	2.80	0.40
35:BA:383:U:H2'	35:BA:385:C:H5	1.87	0.40
35:BA:566:U:C2'	35:BA:567:A:H5'	2.52	0.40
35:BA:1139:G:C2	35:BA:1140:C:C5	3.10	0.40
35:BA:1216:G:N2	35:BA:1234:U:H1'	2.36	0.40
35:BA:1497:U:C2	35:BA:1578:U:OP1	2.74	0.40
35:BA:1607:C:H5"	35:BA:1608:A:H5'	2.03	0.40
35:BA:2290:G:C5	35:BA:2291:U:C4	3.09	0.40
35:BA:2307:G:H3'	35:BA:2308:G:C5'	2.52	0.40
35:BA:2345:G:C3'	35:BA:2346:A:H5'	2.50	0.40
35:BA:2380:C:C4	35:BA:2381:C:C5	3.09	0.40
35:BA:2579:C:H2'	35:BA:2580:U:O4'	2.21	0.40
36:BB:13:A:N6	36:BB:70:C:H5'	2.37	0.40
36:BB:81:G:H2'	36:BB:82:G:H5'	2.03	0.40
37:BC:197:LEU:O	37:BC:198:GLU:C	2.60	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BD:144:ALA:HB3	38:BD:192:THR:CG2	2.39	0.40
40:BF:10:PRO:CG	40:BF:11:VAL:N	2.84	0.40
40:BF:177:ALA:HB1	40:BF:178:PRO:CD	2.49	0.40
41:BG:33:ARG:HE	41:BG:33:ARG:HB2	1.72	0.40
41:BG:62:LEU:HD12	41:BG:62:LEU:H	1.83	0.40
41:BG:111:LEU:N	41:BG:112:PRO:CD	2.85	0.40
43:BK:48:MET:HB2	43:BK:49:GLY:H	1.77	0.40
43:BK:120:LEU:O	43:BK:124:ALA:CB	2.69	0.40
45:BN:62:VAL:O	45:BN:62:VAL:CG1	2.67	0.40
50:BS:20:ARG:HG2	50:BS:20:ARG:HH11	1.86	0.40
50:BS:31:SER:HB3	50:BS:34:HIS:O	2.22	0.40
51:BT:19:LEU:HD13	51:BT:78:LEU:HD22	2.03	0.40
51:BT:28:VAL:CB	51:BT:46:GLU:HA	2.51	0.40
51:BT:113:LYS:C	51:BT:114:LEU:HD23	2.41	0.40
53:BV:1:MET:CE	53:BV:1:MET:HA	2.52	0.40
54:BW:6:ILE:HG21	54:BW:6:ILE:HD13	1.87	0.40
56:BY:47:LYS:HA	56:BY:60:PHE:CD1	2.56	0.40
56:BY:87:LYS:C	56:BY:89:PHE:H	2.24	0.40
56:BY:88:LYS:HD3	56:BY:93:GLY:N	2.36	0.40
57:BZ:69:THR:HA	57:BZ:89:PHE:O	2.22	0.40
57:BZ:71:VAL:HG13	57:BZ:86:VAL:HG12	2.03	0.40
57:BZ:115:GLY:N	57:BZ:177:PRO:CG	2.81	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
2	AB	232/256 (91%)	146 (63%)	55 (24%)	31 (13%)	0 5
3	AC	204/239 (85%)	129 (63%)	58 (28%)	17 (8%)	1 12
4	AD	206/209 (99%)	133 (65%)	52 (25%)	21 (10%)	0 9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
5	AE	148/162 (91%)	116 (78%)	27 (18%)	5 (3%)	3 26
6	AF	99/101 (98%)	78 (79%)	15 (15%)	6 (6%)	1 17
7	AG	153/156 (98%)	107 (70%)	34 (22%)	12 (8%)	1 13
8	AH	136/138 (99%)	106 (78%)	23 (17%)	7 (5%)	2 19
9	AI	125/128 (98%)	84 (67%)	26 (21%)	15 (12%)	0 6
10	AJ	96/105 (91%)	64 (67%)	19 (20%)	13 (14%)	0 4
11	AK	117/129 (91%)	93 (80%)	18 (15%)	6 (5%)	2 19
12	AL	122/132 (92%)	81 (66%)	26 (21%)	15 (12%)	0 5
13	AM	122/126 (97%)	77 (63%)	25 (20%)	20 (16%)	0 3
14	AN	58/61 (95%)	48 (83%)	6 (10%)	4 (7%)	1 15
15	AO	86/89 (97%)	53 (62%)	25 (29%)	8 (9%)	0 11
16	AP	81/88 (92%)	58 (72%)	19 (24%)	4 (5%)	2 20
17	AQ	97/105 (92%)	76 (78%)	16 (16%)	5 (5%)	2 19
18	AR	68/88 (77%)	51 (75%)	11 (16%)	6 (9%)	1 11
19	AS	76/93 (82%)	39 (51%)	20 (26%)	17 (22%)	0 1
20	AT	97/106 (92%)	52 (54%)	30 (31%)	15 (16%)	0 3
21	AU	22/27 (82%)	14 (64%)	6 (27%)	2 (9%)	1 11
24	AY	662/691 (96%)	442 (67%)	135 (20%)	85 (13%)	0 5
25	B0	82/85 (96%)	64 (78%)	16 (20%)	2 (2%)	6 33
26	B1	91/98 (93%)	60 (66%)	20 (22%)	11 (12%)	0 6
27	B2	69/72 (96%)	34 (49%)	22 (32%)	13 (19%)	0 2
28	B3	57/60 (95%)	41 (72%)	12 (21%)	4 (7%)	1 14
29	B4	55/71 (78%)	25 (46%)	16 (29%)	14 (26%)	0 1
30	B5	57/60 (95%)	40 (70%)	6 (10%)	11 (19%)	0 2
31	B6	48/54 (89%)	22 (46%)	10 (21%)	16 (33%)	0 0
32	B7	46/49 (94%)	35 (76%)	9 (20%)	2 (4%)	2 22
33	B8	61/65 (94%)	35 (57%)	17 (28%)	9 (15%)	0 3
34	B9	35/37 (95%)	23 (66%)	8 (23%)	4 (11%)	0 7
37	BC	226/229 (99%)	173 (76%)	42 (19%)	11 (5%)	2 20
38	BD	273/276 (99%)	185 (68%)	55 (20%)	33 (12%)	0 6
39	BE	202/206 (98%)	121 (60%)	49 (24%)	32 (16%)	0 3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
40	BF	205/210 (98%)	134 (65%)	44 (22%)	27 (13%)	0 5
41	BG	179/182 (98%)	113 (63%)	44 (25%)	22 (12%)	0 5
42	BH	164/180 (91%)	89 (54%)	37 (23%)	38 (23%)	0 1
43	BK	137/147 (93%)	89 (65%)	36 (26%)	12 (9%)	1 11
44	BL	65/121 (54%)	56 (86%)	9 (14%)	0	100 100
45	BN	136/140 (97%)	89 (65%)	31 (23%)	16 (12%)	0 6
46	BO	120/122 (98%)	94 (78%)	17 (14%)	9 (8%)	1 13
47	BP	144/150 (96%)	75 (52%)	44 (31%)	25 (17%)	0 3
48	BQ	139/141 (99%)	104 (75%)	28 (20%)	7 (5%)	2 20
49	BR	115/118 (98%)	79 (69%)	24 (21%)	12 (10%)	0 8
50	BS	96/112 (86%)	43 (45%)	34 (35%)	19 (20%)	0 2
51	BT	135/146 (92%)	76 (56%)	34 (25%)	25 (18%)	0 2
52	BU	115/118 (98%)	70 (61%)	33 (29%)	12 (10%)	0 8
53	BV	99/101 (98%)	67 (68%)	15 (15%)	17 (17%)	0 3
54	BW	111/113 (98%)	80 (72%)	18 (16%)	13 (12%)	0 6
55	BX	90/96 (94%)	62 (69%)	23 (26%)	5 (6%)	2 19
56	BY	104/110 (94%)	45 (43%)	35 (34%)	24 (23%)	0 1
57	BZ	182/206 (88%)	108 (59%)	41 (22%)	33 (18%)	0 3
All	All	6645/7104 (94%)	4378 (66%)	1475 (22%)	792 (12%)	1 6

All (792) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	13	ALA
2	AB	20	GLU
2	AB	95	GLN
2	AB	190	THR
2	AB	195	ASP
2	AB	216	SER
2	AB	233	SER
2	AB	239	VAL
3	AC	12	LEU
3	AC	47	LEU
3	AC	95	THR
3	AC	154	SER
3	AC	156	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	3	ARG
4	AD	13	ARG
4	AD	14	ARG
4	AD	18	LYS
4	AD	30	LYS
4	AD	44	GLY
4	AD	153	ARG
4	AD	156	GLU
5	AE	11	ILE
6	AF	39	LYS
7	AG	8	GLU
7	AG	52	GLU
8	AH	105	ARG
9	AI	41	VAL
9	AI	43	ALA
9	AI	44	VAL
9	AI	61	ALA
9	AI	89	ASN
9	AI	105	ASP
10	AJ	33	GLN
10	AJ	55	LYS
10	AJ	56	HIS
10	AJ	57	LYS
10	AJ	59	SER
10	AJ	75	ILE
11	AK	123	LYS
11	AK	127	LYS
12	AL	18	VAL
12	AL	28	LYS
12	AL	38	THR
12	AL	45	PRO
12	AL	91	LYS
13	AM	12	ASN
13	AM	83	ASP
13	AM	90	LEU
13	AM	91	ARG
13	AM	100	GLY
13	AM	124	PRO
14	AN	15	LYS
14	AN	29	ARG
15	AO	24	SER
18	AR	38	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	10	PHE
19	AS	27	GLU
19	AS	28	LYS
19	AS	61	TYR
20	AT	74	LYS
20	AT	99	LEU
21	AU	3	LYS
24	AY	6	GLU
24	AY	21	ILE
24	AY	23	ALA
24	AY	34	TYR
24	AY	39	ILE
24	AY	66	THR
24	AY	68	ALA
24	AY	84	THR
24	AY	85	PRO
24	AY	88	VAL
24	AY	119	GLU
24	AY	121	VAL
24	AY	129	LYS
24	AY	144	ALA
24	AY	183	MET
24	AY	197	ARG
24	AY	203	GLU
24	AY	204	GLU
24	AY	205	TYR
24	AY	206	LEU
24	AY	209	ALA
24	AY	210	ARG
24	AY	251	ILE
24	AY	276	VAL
24	AY	299	VAL
24	AY	360	ALA
24	AY	402	ILE
24	AY	416	LYS
24	AY	447	GLY
24	AY	448	GLN
24	AY	456	GLU
24	AY	498	ILE
24	AY	530	VAL
24	AY	559	PRO
24	AY	614	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	B1	28	GLY
26	B1	52	ARG
26	B1	85	LEU
27	B2	19	VAL
27	B2	20	GLU
27	B2	47	ASN
27	B2	48	HIS
28	B3	3	ARG
29	B4	5	ILE
29	B4	20	ASN
29	B4	26	SER
29	B4	38	LYS
29	B4	40	HIS
29	B4	43	TYR
29	B4	44	THR
29	B4	50	VAL
30	B5	49	CYS
30	B5	53	ALA
30	B5	56	LYS
30	B5	57	VAL
30	B5	58	LEU
31	B6	7	ILE
31	B6	9	LEU
31	B6	18	ARG
31	B6	20	ASN
31	B6	27	LYS
31	B6	28	ARG
31	B6	31	PRO
31	B6	44	ARG
31	B6	52	VAL
33	B8	31	HIS
33	B8	33	ASN
33	B8	34	TRP
33	B8	49	VAL
34	B9	11	CYS
34	B9	35	ARG
38	BD	24	ILE
38	BD	25	THR
38	BD	27	THR
38	BD	34	VAL
38	BD	35	LYS
38	BD	127	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BD	225	ALA
38	BD	239	ARG
38	BD	246	PRO
39	BE	2	LYS
39	BE	35	GLN
39	BE	46	ALA
39	BE	53	PRO
39	BE	54	GLN
39	BE	77	ILE
39	BE	88	GLY
39	BE	90	THR
39	BE	118	LYS
39	BE	129	HIS
39	BE	145	LYS
39	BE	189	PRO
40	BF	11	VAL
40	BF	21	ALA
40	BF	82	ILE
40	BF	89	VAL
40	BF	127	GLU
41	BG	4	ASP
41	BG	6	ALA
41	BG	14	GLU
41	BG	47	LYS
41	BG	81	LYS
41	BG	87	PRO
41	BG	96	ARG
41	BG	109	VAL
41	BG	110	ALA
41	BG	181	ARG
42	BH	13	LYS
42	BH	46	GLU
42	BH	55	PRO
42	BH	83	TYR
42	BH	154	PRO
42	BH	155	SER
42	BH	157	TYR
42	BH	160	LYS
42	BH	169	VAL
42	BH	173	PRO
43	BK	51	ALA
43	BK	82	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BK	115	LEU
45	BN	8	GLN
45	BN	36	GLY
45	BN	46	VAL
45	BN	47	ALA
45	BN	58	ASP
45	BN	63	THR
45	BN	130	HIS
45	BN	133	GLN
46	BO	35	VAL
46	BO	48	PRO
46	BO	68	GLU
47	BP	12	ALA
47	BP	14	LYS
47	BP	17	LYS
47	BP	31	ALA
47	BP	47	ASP
47	BP	48	PRO
47	BP	52	GLU
47	BP	57	THR
47	BP	58	THR
47	BP	135	LEU
47	BP	147	LEU
48	BQ	27	VAL
48	BQ	135	ASP
49	BR	14	SER
49	BR	58	GLY
49	BR	88	ARG
49	BR	107	ASP
49	BR	117	VAL
50	BS	13	ARG
50	BS	37	ALA
50	BS	97	ARG
50	BS	103	GLU
51	BT	6	LEU
51	BT	24	PRO
51	BT	28	VAL
51	BT	30	VAL
51	BT	55	ASN
51	BT	80	SER
51	BT	91	ARG
51	BT	97	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	BT	103	ARG
51	BT	104	ASN
51	BT	107	ASP
51	BT	132	LYS
51	BT	133	GLU
52	BU	67	ALA
52	BU	91	ASP
52	BU	93	LYS
53	BV	16	PRO
53	BV	18	LEU
53	BV	26	ASP
53	BV	46	VAL
55	BX	42	ALA
56	BY	7	VAL
56	BY	17	SER
56	BY	24	VAL
56	BY	48	ALA
56	BY	60	PHE
56	BY	77	PRO
56	BY	78	ALA
56	BY	99	CYS
57	BZ	27	VAL
57	BZ	51	ALA
57	BZ	78	LYS
57	BZ	80	ARG
57	BZ	81	ARG
57	BZ	85	HIS
57	BZ	142	SER
57	BZ	146	ILE
57	BZ	163	LEU
57	BZ	168	GLU
57	BZ	180	VAL
2	AB	12	GLU
2	AB	18	GLY
2	AB	65	GLY
2	AB	153	ARG
2	AB	221	LEU
2	AB	224	GLN
2	AB	238	LEU
3	AC	61	ALA
3	AC	96	GLY
4	AD	5	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	32	ALA
4	AD	171	GLY
6	AF	34	GLY
6	AF	43	LEU
7	AG	41	ARG
7	AG	80	VAL
7	AG	90	GLU
7	AG	114	ARG
7	AG	131	LYS
8	AH	2	LEU
8	AH	121	ASP
10	AJ	19	SER
10	AJ	36	GLY
10	AJ	61	GLU
12	AL	27	LEU
12	AL	46	LYS
12	AL	47	LYS
12	AL	81	SER
12	AL	121	GLY
13	AM	4	ILE
13	AM	67	GLU
13	AM	70	LEU
13	AM	114	ARG
13	AM	116	THR
13	AM	118	ALA
13	AM	121	LYS
14	AN	14	PRO
16	AP	34	GLU
17	AQ	13	ASP
17	AQ	49	GLU
18	AR	37	VAL
18	AR	41	LYS
18	AR	45	SER
18	AR	60	ALA
19	AS	14	HIS
19	AS	25	LYS
19	AS	26	GLY
19	AS	29	ARG
19	AS	62	ILE
19	AS	63	THR
20	AT	49	ALA
20	AT	69	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	AY	19	ALA
24	AY	42	ILE
24	AY	92	ILE
24	AY	114	VAL
24	AY	120	THR
24	AY	196	ILE
24	AY	347	GLY
24	AY	380	LEU
24	AY	386	GLY
24	AY	396	ARG
24	AY	457	LEU
24	AY	458	HIS
24	AY	471	LYS
24	AY	505	GLY
24	AY	519	ARG
24	AY	618	GLY
24	AY	657	THR
25	B0	20	ARG
26	B1	53	VAL
26	B1	84	GLY
27	B2	18	PRO
27	B2	21	LEU
27	B2	26	ARG
27	B2	64	LEU
27	B2	68	ARG
28	B3	45	GLY
29	B4	8	LYS
29	B4	9	LEU
29	B4	48	ARG
30	B5	36	CYS
30	B5	59	GLU
31	B6	19	ARG
31	B6	43	CYS
33	B8	40	GLU
34	B9	2	LYS
37	BC	101	ILE
38	BD	12	SER
38	BD	32	SER
38	BD	36	PRO
38	BD	41	GLY
38	BD	198	ASN
39	BE	71	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BE	72	VAL
39	BE	82	ARG
39	BE	83	ASP
39	BE	134	ILE
39	BE	144	ARG
39	BE	185	LYS
39	BE	186	GLY
39	BE	187	ALA
40	BF	10	PRO
40	BF	64	ILE
40	BF	84	VAL
40	BF	85	GLY
40	BF	126	VAL
40	BF	167	ALA
40	BF	169	ASN
40	BF	181	LEU
40	BF	206	ILE
41	BG	22	ARG
41	BG	43	LEU
41	BG	82	LEU
41	BG	84	LYS
41	BG	102	PHE
41	BG	166	ASP
42	BH	21	PRO
42	BH	41	MET
42	BH	49	VAL
42	BH	69	ARG
42	BH	126	PRO
42	BH	138	LYS
42	BH	156	ALA
42	BH	158	HIS
42	BH	165	ALA
42	BH	171	LEU
42	BH	174	GLY
42	BH	176	ALA
43	BK	10	LEU
43	BK	87	GLY
45	BN	110	GLY
46	BO	5	GLN
46	BO	29	ASN
46	BO	89	ASN
46	BO	104	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	BO	120	GLU
47	BP	34	GLY
47	BP	36	LYS
47	BP	49	ARG
47	BP	98	GLU
47	BP	111	ARG
47	BP	123	LEU
48	BQ	52	VAL
48	BQ	71	ASP
49	BR	4	LEU
49	BR	8	ARG
49	BR	12	ARG
50	BS	23	ARG
50	BS	85	VAL
50	BS	94	TYR
50	BS	100	ALA
50	BS	102	ALA
50	BS	104	GLY
50	BS	105	ALA
51	BT	5	ALA
51	BT	17	THR
51	BT	130	ALA
51	BT	135	ALA
52	BU	114	LYS
53	BV	2	PHE
53	BV	67	GLY
54	BW	6	ILE
54	BW	18	ARG
54	BW	63	ASP
55	BX	12	VAL
55	BX	22	ALA
56	BY	38	ILE
56	BY	39	VAL
56	BY	41	GLY
56	BY	74	PRO
56	BY	92	ASN
56	BY	100	ALA
56	BY	104	GLY
57	BZ	30	ASN
57	BZ	42	VAL
57	BZ	112	ARG
57	BZ	120	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BZ	121	HIS
57	BZ	128	VAL
57	BZ	148	ASP
57	BZ	170	THR
57	BZ	185	GLU
2	AB	15	VAL
2	AB	83	MET
2	AB	97	TRP
2	AB	230	VAL
3	AC	129	ALA
3	AC	131	ARG
3	AC	168	ALA
4	AD	40	PRO
4	AD	149	ALA
4	AD	179	GLU
6	AF	21	LEU
7	AG	14	PRO
7	AG	62	PHE
7	AG	153	HIS
8	AH	33	GLU
9	AI	11	LYS
9	AI	12	GLU
9	AI	33	PHE
9	AI	34	ASN
9	AI	85	LEU
9	AI	95	LYS
10	AJ	84	GLN
12	AL	87	GLY
12	AL	92	ASP
13	AM	113	PRO
15	AO	14	GLU
15	AO	25	THR
15	AO	80	ALA
15	AO	84	LYS
16	AP	2	VAL
16	AP	76	GLN
17	AQ	95	TYR
19	AS	5	LEU
19	AS	54	GLY
19	AS	73	GLU
20	AT	21	LYS
20	AT	25	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	AT	34	LYS
20	AT	48	LYS
20	AT	62	LEU
24	AY	146	LEU
24	AY	148	LEU
24	AY	361	ASN
24	AY	385	THR
24	AY	406	GLU
24	AY	418	LYS
24	AY	506	GLN
24	AY	550	MET
24	AY	636	PRO
24	AY	680	PRO
24	AY	681	LYS
25	B0	13	GLY
26	B1	69	LYS
27	B2	49	LYS
28	B3	29	ARG
28	B3	32	GLN
29	B4	51	ASP
31	B6	23	THR
31	B6	41	PRO
31	B6	49	HIS
32	B7	17	GLY
37	BC	38	PHE
37	BC	168	LYS
37	BC	227	PRO
38	BD	19	ALA
38	BD	125	ILE
38	BD	129	ASN
38	BD	197	GLY
38	BD	242	ARG
38	BD	267	SER
38	BD	268	ARG
39	BE	17	ASP
39	BE	34	VAL
39	BE	73	GLU
39	BE	86	PRO
39	BE	117	MET
40	BF	3	GLU
40	BF	43	LYS
40	BF	108	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BF	122	LYS
40	BF	134	GLY
41	BG	99	MET
41	BG	116	ASP
41	BG	129	GLY
42	BH	42	ARG
42	BH	48	GLY
42	BH	85	LYS
42	BH	98	LEU
43	BK	48	MET
43	BK	63	ARG
43	BK	137	GLU
45	BN	40	PRO
45	BN	57	ALA
45	BN	60	ILE
45	BN	129	PRO
46	BO	54	GLU
47	BP	23	PRO
47	BP	43	GLY
49	BR	29	LEU
49	BR	45	ARG
50	BS	76	LYS
50	BS	92	TYR
50	BS	107	GLU
51	BT	11	GLU
51	BT	12	SER
51	BT	58	ASN
51	BT	127	ALA
52	BU	66	ASN
52	BU	83	LEU
53	BV	3	ALA
53	BV	19	LYS
53	BV	50	PRO
53	BV	53	GLU
53	BV	55	ALA
53	BV	78	LYS
54	BW	25	ARG
54	BW	57	ASN
54	BW	67	ASP
54	BW	93	ALA
54	BW	99	ARG
57	BZ	5	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BZ	83	PRO
57	BZ	152	ALA
57	BZ	159	PRO
57	BZ	166	SER
2	AB	29	ALA
2	AB	64	ARG
2	AB	128	GLU
2	AB	130	ARG
2	AB	151	GLY
2	AB	165	VAL
3	AC	15	THR
3	AC	26	LYS
3	AC	135	LYS
3	AC	144	SER
4	AD	4	TYR
4	AD	92	VAL
4	AD	123	HIS
4	AD	159	ARG
4	AD	193	ASP
4	AD	205	GLU
6	AF	30	LEU
6	AF	80	ARG
8	AH	104	ARG
8	AH	135	CYS
9	AI	127	LYS
10	AJ	83	GLU
13	AM	10	PRO
13	AM	11	ARG
14	AN	16	PHE
16	AP	56	ALA
17	AQ	25	ARG
17	AQ	88	TYR
20	AT	96	GLY
20	AT	97	ALA
21	AU	9	ARG
24	AY	22	ASP
24	AY	24	GLY
24	AY	25	LYS
24	AY	75	LYS
24	AY	112	GLN
24	AY	532	GLY
27	B2	58	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	B4	3	GLU
30	B5	35	GLU
31	B6	16	CYS
31	B6	36	LEU
33	B8	43	GLN
37	BC	14	LYS
37	BC	28	ARG
37	BC	30	VAL
37	BC	82	GLU
38	BD	3	VAL
38	BD	30	GLU
39	BE	64	LYS
40	BF	90	PHE
40	BF	115	ALA
40	BF	195	ASP
42	BH	20	ALA
42	BH	73	ALA
42	BH	84	SER
42	BH	170	ARG
43	BK	16	LYS
43	BK	116	ASN
47	BP	83	VAL
47	BP	89	ALA
47	BP	107	LYS
47	BP	146	VAL
48	BQ	76	LYS
48	BQ	134	ARG
50	BS	24	LEU
51	BT	88	ILE
51	BT	90	GLN
52	BU	27	LEU
53	BV	31	ALA
54	BW	11	ARG
54	BW	111	HIS
56	BY	81	LYS
56	BY	105	ALA
57	BZ	46	LYS
2	AB	161	ALA
2	AB	237	ALA
5	AE	8	GLU
5	AE	146	ALA
7	AG	47	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AK	34	ASP
11	AK	94	ALA
12	AL	19	ARG
12	AL	51	ALA
13	AM	7	VAL
13	AM	55	ARG
15	AO	77	ARG
18	AR	87	ARG
19	AS	51	VAL
19	AS	59	PRO
19	AS	69	HIS
20	AT	44	ALA
24	AY	67	ALA
24	AY	76	ASP
24	AY	90	PHE
24	AY	200	PRO
24	AY	277	VAL
24	AY	333	GLY
24	AY	393	ASP
24	AY	502	GLY
24	AY	535	PRO
24	AY	577	SER
24	AY	598	ASP
26	B1	54	ALA
26	B1	87	PRO
27	B2	30	ARG
27	B2	70	GLN
29	B4	28	LYS
33	B8	35	GLN
33	B8	37	SER
37	BC	12	LEU
38	BD	28	GLU
38	BD	90	ALA
38	BD	210	GLY
39	BE	45	THR
39	BE	57	LYS
40	BF	58	ALA
40	BF	66	PRO
41	BG	75	LYS
47	BP	33	ARG
47	BP	67	MET
49	BR	31	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BS	88	ASP
52	BU	46	ALA
52	BU	92	ARG
52	BU	110	VAL
53	BV	47	VAL
53	BV	51	VAL
54	BW	14	PRO
56	BY	37	VAL
56	BY	46	LYS
56	BY	90	LEU
57	BZ	119	GLU
57	BZ	165	VAL
3	AC	4	LYS
4	AD	71	SER
9	AI	80	GLY
11	AK	88	GLY
12	AL	71	PRO
15	AO	26	GLU
20	AT	63	ILE
20	AT	78	ALA
20	AT	98	PRO
24	AY	371	ALA
30	B5	3	LYS
30	B5	38	ALA
37	BC	198	GLU
38	BD	273	ARG
39	BE	69	LYS
41	BG	24	GLY
41	BG	64	THR
42	BH	47	GLU
45	BN	22	THR
50	BS	62	LYS
50	BS	89	ARG
50	BS	90	GLY
51	BT	41	ARG
55	BX	11	PRO
55	BX	59	VAL
56	BY	3	VAL
57	BZ	134	PRO
2	AB	26	PRO
2	AB	127	ILE
3	AC	66	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	42	ILE
10	AJ	23	ILE
10	AJ	91	PRO
24	AY	303	PRO
24	AY	444	PRO
26	B1	30	VAL
26	B1	86	SER
32	B7	25	PRO
38	BD	178	PRO
38	BD	236	GLY
42	BH	45	VAL
42	BH	92	ILE
51	BT	81	PRO
52	BU	90	VAL
53	BV	22	VAL
57	BZ	133	ILE
57	BZ	158	PRO
5	AE	118	ILE
5	AE	129	ILE
13	AM	53	VAL
15	AO	75	PRO
24	AY	622	GLY
38	BD	234	GLY
40	BF	180	GLY
45	BN	5	VAL
45	BN	134	ARG
49	BR	106	GLY
53	BV	35	LEU
56	BY	75	ILE
56	BY	98	VAL
57	BZ	126	VAL
2	AB	158	LEU
2	AB	232	PRO
8	AH	76	PRO
13	AM	74	VAL
19	AS	42	PRO
24	AY	65	ILE
30	B5	4	HIS
38	BD	10	THR
38	BD	228	PRO
39	BE	75	VAL
40	BF	81	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BH	52	VAL
42	BH	72	ILE
42	BH	107	VAL
43	BK	13	PRO
43	BK	34	ILE
54	BW	21	VAL
57	BZ	68	PRO
3	AC	145	GLY
11	AK	95	ILE
34	B9	30	PRO
38	BD	123	ALA
39	BE	55	ASN
42	BH	39	PRO
42	BH	111	HIS
48	BQ	62	GLY
56	BY	53	PRO
9	AI	81	ILE
26	B1	36	GLY
33	B8	58	ILE
37	BC	107	GLY
40	BF	132	VAL
52	BU	65	ILE
54	BW	59	VAL

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
2	AB	202/220 (92%)	178 (88%)	24 (12%)	5 20
3	AC	160/188 (85%)	133 (83%)	27 (17%)	2 12
4	AD	180/181 (99%)	158 (88%)	22 (12%)	5 20
5	AE	115/123 (94%)	101 (88%)	14 (12%)	5 20
6	AF	90/90 (100%)	80 (89%)	10 (11%)	6 22
7	AG	126/127 (99%)	113 (90%)	13 (10%)	7 25

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
8	AH	119/119 (100%)	106 (89%)	13 (11%)	6 23
9	AI	98/99 (99%)	88 (90%)	10 (10%)	7 25
10	AJ	88/92 (96%)	75 (85%)	13 (15%)	3 15
11	AK	90/99 (91%)	82 (91%)	8 (9%)	9 30
12	AL	104/109 (95%)	93 (89%)	11 (11%)	6 24
13	AM	99/101 (98%)	86 (87%)	13 (13%)	4 18
14	AN	49/50 (98%)	42 (86%)	7 (14%)	3 16
15	AO	79/80 (99%)	70 (89%)	9 (11%)	5 21
16	AP	72/74 (97%)	69 (96%)	3 (4%)	30 54
17	AQ	94/97 (97%)	86 (92%)	8 (8%)	10 33
18	AR	61/77 (79%)	58 (95%)	3 (5%)	25 50
19	AS	69/80 (86%)	59 (86%)	10 (14%)	3 15
20	AT	76/82 (93%)	66 (87%)	10 (13%)	4 18
21	AU	19/22 (86%)	19 (100%)	0	100 100
24	AY	563/582 (97%)	481 (85%)	82 (15%)	3 15
25	B0	66/67 (98%)	56 (85%)	10 (15%)	3 14
26	B1	78/83 (94%)	64 (82%)	14 (18%)	2 10
27	B2	66/67 (98%)	58 (88%)	8 (12%)	5 20
28	B3	51/52 (98%)	47 (92%)	4 (8%)	12 36
29	B4	51/63 (81%)	36 (71%)	15 (29%)	0 2
30	B5	51/52 (98%)	45 (88%)	6 (12%)	5 20
31	B6	49/52 (94%)	37 (76%)	12 (24%)	0 3
32	B7	41/42 (98%)	34 (83%)	7 (17%)	2 11
33	B8	53/55 (96%)	46 (87%)	7 (13%)	4 18
34	B9	34/34 (100%)	28 (82%)	6 (18%)	2 11
37	BC	180/181 (99%)	162 (90%)	18 (10%)	7 26
38	BD	217/218 (100%)	178 (82%)	39 (18%)	1 10
39	BE	165/166 (99%)	141 (86%)	24 (14%)	3 15
40	BF	165/166 (99%)	154 (93%)	11 (7%)	16 41
41	BG	155/156 (99%)	129 (83%)	26 (17%)	2 12
42	BH	136/148 (92%)	118 (87%)	18 (13%)	4 18

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
43	BK	104/111 (94%)	88 (85%)	16 (15%)	2 14
44	BL	46/85 (54%)	41 (89%)	5 (11%)	6 23
45	BN	117/119 (98%)	95 (81%)	22 (19%)	1 9
46	BO	100/100 (100%)	92 (92%)	8 (8%)	12 35
47	BP	112/116 (97%)	86 (77%)	26 (23%)	1 4
48	BQ	111/111 (100%)	94 (85%)	17 (15%)	2 14
49	BR	100/101 (99%)	89 (89%)	11 (11%)	6 22
50	BS	77/88 (88%)	66 (86%)	11 (14%)	3 16
51	BT	120/127 (94%)	95 (79%)	25 (21%)	1 6
52	BU	92/94 (98%)	82 (89%)	10 (11%)	6 23
53	BV	82/82 (100%)	70 (85%)	12 (15%)	3 15
54	BW	91/92 (99%)	78 (86%)	13 (14%)	3 16
55	BX	74/78 (95%)	63 (85%)	11 (15%)	3 15
56	BY	87/91 (96%)	75 (86%)	12 (14%)	3 17
57	BZ	162/179 (90%)	134 (83%)	28 (17%)	2 11
All	All	5586/5868 (95%)	4824 (86%)	762 (14%)	7 17

All (762) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	16	HIS
2	AB	17	PHE
2	AB	20	GLU
2	AB	24	TRP
2	AB	36	ARG
2	AB	44	LEU
2	AB	79	ASP
2	AB	94	ASN
2	AB	101	MET
2	AB	129	GLU
2	AB	137	ARG
2	AB	152	PHE
2	AB	155	LEU
2	AB	157	ARG
2	AB	162	ILE
2	AB	172	ILE
2	AB	178	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	192	SER
2	AB	200	ILE
2	AB	204	ASN
2	AB	212	GLN
2	AB	221	LEU
2	AB	223	ILE
2	AB	238	LEU
3	AC	5	ILE
3	AC	14	ILE
3	AC	16	ARG
3	AC	21	ARG
3	AC	22	TRP
3	AC	29	TYR
3	AC	34	LEU
3	AC	38	ARG
3	AC	46	GLU
3	AC	52	LEU
3	AC	56	ASP
3	AC	72	LYS
3	AC	75	VAL
3	AC	79	ARG
3	AC	95	THR
3	AC	125	GLU
3	AC	127	ARG
3	AC	131	ARG
3	AC	135	LYS
3	AC	152	ILE
3	AC	156	ARG
3	AC	165	THR
3	AC	167	TRP
3	AC	178	LEU
3	AC	179	ARG
3	AC	190	ARG
3	AC	192	THR
4	AD	3	ARG
4	AD	7	PRO
4	AD	8	VAL
4	AD	9	CYS
4	AD	12	CYS
4	AD	15	GLU
4	AD	22	LYS
4	AD	36	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	49	ARG
4	AD	53	ASP
4	AD	57	ARG
4	AD	68	TYR
4	AD	70	ILE
4	AD	73	ARG
4	AD	78	LEU
4	AD	96	LEU
4	AD	114	ARG
4	AD	127	THR
4	AD	132	ARG
4	AD	135	LEU
4	AD	162	LEU
4	AD	168	ARG
5	AE	12	LEU
5	AE	18	ARG
5	AE	20	GLN
5	AE	26	PHE
5	AE	31	LEU
5	AE	41	VAL
5	AE	56	GLN
5	AE	64	ARG
5	AE	67	VAL
5	AE	75	THR
5	AE	76	ILE
5	AE	79	GLU
5	AE	96	PRO
5	AE	101	ILE
6	AF	15	ASP
6	AF	32	ASN
6	AF	36	ARG
6	AF	43	LEU
6	AF	47	ARG
6	AF	69	GLU
6	AF	70	ASP
6	AF	86	ARG
6	AF	87	ARG
6	AF	98	LEU
7	AG	14	PRO
7	AG	18	TYR
7	AG	22	LEU
7	AG	27	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	57	GLU
7	AG	66	VAL
7	AG	75	VAL
7	AG	79	ARG
7	AG	98	SER
7	AG	104	LEU
7	AG	137	LYS
7	AG	151	TYR
7	AG	156	TRP
8	AH	1	MET
8	AH	21	LYS
8	AH	25	ASP
8	AH	26	VAL
8	AH	30	ARG
8	AH	41	ARG
8	AH	91	ARG
8	AH	98	LYS
8	AH	102	ARG
8	AH	104	ARG
8	AH	118	VAL
8	AH	122	ARG
8	AH	123	GLU
9	AI	4	TYR
9	AI	10	ARG
9	AI	29	ASN
9	AI	53	VAL
9	AI	59	PHE
9	AI	95	LYS
9	AI	114	TYR
9	AI	121	ARG
9	AI	125	TYR
9	AI	128	ARG
10	AJ	17	ASP
10	AJ	22	LYS
10	AJ	40	LEU
10	AJ	43	ARG
10	AJ	50	ILE
10	AJ	55	LYS
10	AJ	59	SER
10	AJ	62	HIS
10	AJ	63	PHE
10	AJ	70	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	82	ILE
10	AJ	91	PRO
10	AJ	96	ILE
11	AK	29	ILE
11	AK	31	THR
11	AK	57	THR
11	AK	87	THR
11	AK	91	ARG
11	AK	92	GLU
11	AK	117	ASN
11	AK	125	PHE
12	AL	7	ILE
12	AL	20	LYS
12	AL	37	CYS
12	AL	41	ARG
12	AL	47	LYS
12	AL	53	ARG
12	AL	81	SER
12	AL	85	ILE
12	AL	89	ARG
12	AL	105	TYR
12	AL	113	ARG
13	AM	22	ILE
13	AM	47	ASP
13	AM	57	ARG
13	AM	64	TRP
13	AM	66	LEU
13	AM	71	ARG
13	AM	98	VAL
13	AM	108	ARG
13	AM	113	PRO
13	AM	115	LYS
13	AM	120	LYS
13	AM	121	LYS
13	AM	122	LYS
14	AN	16	PHE
14	AN	29	ARG
14	AN	36	PHE
14	AN	41	ARG
14	AN	42	ILE
14	AN	44	LEU
14	AN	49	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	10	LYS
15	AO	18	PHE
15	AO	24	SER
15	AO	39	LEU
15	AO	41	GLU
15	AO	57	LEU
15	AO	82	ILE
15	AO	85	LEU
15	AO	88	ARG
16	AP	1	MET
16	AP	16	HIS
16	AP	32	TYR
17	AQ	7	THR
17	AQ	9	VAL
17	AQ	23	VAL
17	AQ	35	VAL
17	AQ	52	LYS
17	AQ	59	ILE
17	AQ	74	LEU
17	AQ	78	GLU
18	AR	29	PHE
18	AR	31	LEU
18	AR	82	THR
19	AS	4	SER
19	AS	5	LEU
19	AS	6	LYS
19	AS	7	LYS
19	AS	15	LEU
19	AS	19	VAL
19	AS	37	ARG
19	AS	44	MET
19	AS	63	THR
19	AS	66	MET
20	AT	13	LEU
20	AT	24	LEU
20	AT	26	ASN
20	AT	36	LEU
20	AT	42	GLN
20	AT	45	GLN
20	AT	50	GLU
20	AT	75	ASN
20	AT	84	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	AT	93	GLU
24	AY	17	ILE
24	AY	20	HIS
24	AY	21	ILE
24	AY	22	ASP
24	AY	40	HIS
24	AY	65	ILE
24	AY	83	ASP
24	AY	85	PRO
24	AY	87	HIS
24	AY	88	VAL
24	AY	89	ASP
24	AY	92	ILE
24	AY	96	ARG
24	AY	100	VAL
24	AY	101	LEU
24	AY	102	ASP
24	AY	109	ASP
24	AY	117	GLN
24	AY	124	GLN
24	AY	130	VAL
24	AY	132	ARG
24	AY	137	ASN
24	AY	152	THR
24	AY	157	LEU
24	AY	192	LEU
24	AY	232	LEU
24	AY	238	THR
24	AY	240	GLU
24	AY	242	LEU
24	AY	252	ASP
24	AY	255	ILE
24	AY	259	PHE
24	AY	260	LEU
24	AY	269	VAL
24	AY	285	ASP
24	AY	289	ILE
24	AY	298	VAL
24	AY	312	LEU
24	AY	316	ILE
24	AY	326	THR
24	AY	337	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	AY	343	ASN
24	AY	349	LYS
24	AY	357	ARG
24	AY	378	VAL
24	AY	381	LYS
24	AY	385	THR
24	AY	388	THR
24	AY	406	GLU
24	AY	409	ILE
24	AY	410	ASP
24	AY	421	GLN
24	AY	426	GLN
24	AY	428	LEU
24	AY	438	PHE
24	AY	440	VAL
24	AY	451	ILE
24	AY	468	ARG
24	AY	476	VAL
24	AY	481	VAL
24	AY	487	ILE
24	AY	499	ARG
24	AY	501	THR
24	AY	504	ARG
24	AY	506	GLN
24	AY	509	HIS
24	AY	512	ILE
24	AY	515	GLU
24	AY	527	ASN
24	AY	567	LEU
24	AY	572	TYR
24	AY	574	GLU
24	AY	595	GLN
24	AY	598	ASP
24	AY	614	GLU
24	AY	625	ASN
24	AY	630	GLN
24	AY	631	ILE
24	AY	634	MET
24	AY	644	ARG
24	AY	657	THR
24	AY	688	ILE
25	B0	5	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	B0	11	ARG
25	B0	20	ARG
25	B0	27	GLU
25	B0	41	ARG
25	B0	60	PHE
25	B0	64	ASP
25	B0	75	LEU
25	B0	78	TYR
25	B0	84	LEU
26	B1	3	LYS
26	B1	18	ILE
26	B1	35	THR
26	B1	45	ASN
26	B1	46	LEU
26	B1	56	GLN
26	B1	65	SER
26	B1	72	GLU
26	B1	75	GLU
26	B1	80	LEU
26	B1	82	LEU
26	B1	83	GLU
26	B1	94	LEU
26	B1	95	LEU
27	B2	3	LEU
27	B2	30	ARG
27	B2	32	LEU
27	B2	37	PHE
27	B2	43	GLN
27	B2	44	LEU
27	B2	52	ASP
27	B2	59	ARG
28	B3	18	ASP
28	B3	28	LEU
28	B3	38	GLU
28	B3	48	GLU
29	B4	1	MET
29	B4	5	ILE
29	B4	8	LYS
29	B4	9	LEU
29	B4	10	VAL
29	B4	13	ARG
29	B4	20	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	B4	31	ILE
29	B4	32	TYR
29	B4	39	CYS
29	B4	40	HIS
29	B4	42	PHE
29	B4	49	PHE
29	B4	51	ASP
29	B4	55	ARG
30	B5	3	LYS
30	B5	4	HIS
30	B5	23	HIS
30	B5	36	CYS
30	B5	55	ARG
30	B5	58	LEU
31	B6	6	ARG
31	B6	9	LEU
31	B6	10	LEU
31	B6	11	LEU
31	B6	15	GLU
31	B6	23	THR
31	B6	30	THR
31	B6	31	PRO
31	B6	39	TYR
31	B6	42	TRP
31	B6	52	VAL
31	B6	54	ILE
32	B7	1	MET
32	B7	4	THR
32	B7	8	ASN
32	B7	24	THR
32	B7	41	ARG
32	B7	44	PRO
32	B7	48	LYS
33	B8	31	HIS
33	B8	32	LEU
33	B8	33	ASN
33	B8	34	TRP
33	B8	44	LYS
33	B8	61	LEU
33	B8	64	TYR
34	B9	1	MET
34	B9	2	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	B9	12	ASP
34	B9	18	ARG
34	B9	26	ILE
34	B9	29	ASN
37	BC	18	ASN
37	BC	48	LEU
37	BC	53	ARG
37	BC	54	ARG
37	BC	60	ARG
37	BC	74	ARG
37	BC	115	VAL
37	BC	130	ARG
37	BC	135	ARG
37	BC	149	ASN
37	BC	150	ILE
37	BC	184	GLU
37	BC	185	LYS
37	BC	189	ASN
37	BC	191	ARG
37	BC	203	GLU
37	BC	212	SER
37	BC	216	THR
38	BD	8	PRO
38	BD	10	THR
38	BD	23	GLU
38	BD	24	ILE
38	BD	25	THR
38	BD	26	LYS
38	BD	35	LYS
38	BD	37	LEU
38	BD	43	ARG
38	BD	61	LEU
38	BD	63	ARG
38	BD	65	ILE
38	BD	67	PHE
38	BD	87	ASN
38	BD	92	ILE
38	BD	95	LEU
38	BD	96	HIS
38	BD	104	TYR
38	BD	106	ILE
38	BD	111	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BD	117	VAL
38	BD	131	LEU
38	BD	157	ARG
38	BD	166	GLN
38	BD	176	ARG
38	BD	183	ARG
38	BD	192	THR
38	BD	202	LYS
38	BD	211	ARG
38	BD	212	SER
38	BD	221	VAL
38	BD	228	PRO
38	BD	244	ARG
38	BD	245	PRO
38	BD	257	LEU
38	BD	260	ARG
38	BD	270	ILE
38	BD	271	ILE
38	BD	275	LYS
39	BE	4	ILE
39	BE	9	VAL
39	BE	17	ASP
39	BE	22	PRO
39	BE	36	ARG
39	BE	49	LEU
39	BE	54	GLN
39	BE	61	ARG
39	BE	67	PHE
39	BE	69	LYS
39	BE	76	ARG
39	BE	78	LEU
39	BE	79	ARG
39	BE	94	GLU
39	BE	95	ILE
39	BE	118	LYS
39	BE	119	ARG
39	BE	134	ILE
39	BE	144	ARG
39	BE	149	ARG
39	BE	192	ASN
39	BE	197	ILE
39	BE	202	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BE	203	LYS
40	BF	28	ILE
40	BF	41	LEU
40	BF	62	ARG
40	BF	64	ILE
40	BF	66	PRO
40	BF	83	PHE
40	BF	88	VAL
40	BF	125	LEU
40	BF	149	ASP
40	BF	165	ARG
40	BF	175	THR
41	BG	4	ASP
41	BG	5	VAL
41	BG	14	GLU
41	BG	22	ARG
41	BG	33	ARG
41	BG	34	LEU
41	BG	36	LYS
41	BG	43	LEU
41	BG	47	LYS
41	BG	60	LEU
41	BG	67	LYS
41	BG	71	THR
41	BG	80	PHE
41	BG	83	ARG
41	BG	88	ILE
41	BG	91	ARG
41	BG	97	ASP
41	BG	98	ARG
41	BG	118	ARG
41	BG	135	LEU
41	BG	143	GLU
41	BG	145	THR
41	BG	147	ASP
41	BG	148	MET
41	BG	150	ASP
41	BG	166	ASP
42	BH	42	ARG
42	BH	46	GLU
42	BH	49	VAL
42	BH	53	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BH	54	ARG
42	BH	71	LEU
42	BH	83	TYR
42	BH	84	SER
42	BH	89	ILE
42	BH	94	TYR
42	BH	104	GLU
42	BH	105	LEU
42	BH	111	HIS
42	BH	117	PRO
42	BH	143	GLN
42	BH	155	SER
42	BH	158	HIS
42	BH	169	VAL
43	BK	2	LYS
43	BK	3	LYS
43	BK	5	VAL
43	BK	29	GLN
43	BK	30	HIS
43	BK	34	ILE
43	BK	38	VAL
43	BK	47	ASN
43	BK	48	MET
43	BK	59	ILE
43	BK	62	ASP
43	BK	65	PHE
43	BK	70	LYS
43	BK	77	LEU
43	BK	86	LYS
43	BK	105	LEU
44	BL	58	LEU
44	BL	65	LYS
44	BL	73	ARG
44	BL	82	GLU
44	BL	120	LYS
45	BN	1	MET
45	BN	4	TYR
45	BN	21	LYS
45	BN	23	LEU
45	BN	25	ARG
45	BN	26	LEU
45	BN	39	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BN	41	ASP
45	BN	45	ASN
45	BN	48	MET
45	BN	56	ASN
45	BN	63	THR
45	BN	65	LYS
45	BN	78	TYR
45	BN	87	LEU
45	BN	90	MET
45	BN	93	THR
45	BN	96	GLU
45	BN	101	HIS
45	BN	109	LYS
45	BN	120	LEU
45	BN	123	TYR
46	BO	23	ARG
46	BO	38	VAL
46	BO	40	VAL
46	BO	48	PRO
46	BO	49	ARG
46	BO	87	ILE
46	BO	114	ILE
46	BO	117	LEU
47	BP	7	ARG
47	BP	13	ASN
47	BP	16	ARG
47	BP	18	ARG
47	BP	39	LYS
47	BP	40	SER
47	BP	41	ARG
47	BP	42	SER
47	BP	51	PHE
47	BP	57	THR
47	BP	59	LEU
47	BP	60	MET
47	BP	61	ARG
47	BP	62	LEU
47	BP	64	LYS
47	BP	70	GLN
47	BP	76	LYS
47	BP	84	ASN
47	BP	85	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	BP	108	LYS
47	BP	112	LEU
47	BP	114	ILE
47	BP	115	LEU
47	BP	123	LEU
47	BP	136	GLU
47	BP	149	GLU
48	BQ	14	ARG
48	BQ	17	LEU
48	BQ	29	PHE
48	BQ	45	GLN
48	BQ	46	GLN
48	BQ	56	ARG
48	BQ	58	PHE
48	BQ	76	LYS
48	BQ	81	VAL
48	BQ	97	VAL
48	BQ	104	PHE
48	BQ	106	VAL
48	BQ	110	THR
48	BQ	134	ARG
48	BQ	135	ASP
48	BQ	137	TYR
48	BQ	139	GLU
49	BR	8	ARG
49	BR	27	SER
49	BR	30	THR
49	BR	65	LEU
49	BR	71	GLN
49	BR	74	LYS
49	BR	75	LEU
49	BR	94	TYR
49	BR	97	VAL
49	BR	99	LYS
49	BR	100	LEU
50	BS	11	LYS
50	BS	12	PHE
50	BS	25	ARG
50	BS	26	LEU
50	BS	35	ILE
50	BS	61	ASN
50	BS	63	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BS	67	ARG
50	BS	92	TYR
50	BS	97	ARG
50	BS	106	ARG
51	BT	6	LEU
51	BT	13	ARG
51	BT	24	PRO
51	BT	32	TYR
51	BT	38	ASN
51	BT	46	GLU
51	BT	49	VAL
51	BT	58	ASN
51	BT	62	THR
51	BT	65	LYS
51	BT	74	ARG
51	BT	78	LEU
51	BT	81	PRO
51	BT	82	LEU
51	BT	90	GLN
51	BT	93	ARG
51	BT	96	ARG
51	BT	100	TYR
51	BT	108	ARG
51	BT	115	ARG
51	BT	124	ASP
51	BT	125	ARG
51	BT	128	GLU
51	BT	129	ARG
51	BT	132	LYS
52	BU	20	LEU
52	BU	40	PHE
52	BU	66	ASN
52	BU	69	CYS
52	BU	74	LEU
52	BU	79	PHE
52	BU	92	ARG
52	BU	101	ARG
52	BU	108	GLU
52	BU	112	ARG
53	BV	10	LYS
53	BV	13	ARG
53	BV	18	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	BV	19	LYS
53	BV	21	ARG
53	BV	39	LEU
53	BV	51	VAL
53	BV	62	LEU
53	BV	72	VAL
53	BV	89	GLN
53	BV	95	LEU
53	BV	99	ILE
54	BW	11	ARG
54	BW	36	LEU
54	BW	40	ASN
54	BW	51	LEU
54	BW	52	GLU
54	BW	61	ASN
54	BW	67	ASP
54	BW	70	TYR
54	BW	75	TYR
54	BW	88	ARG
54	BW	98	LYS
54	BW	106	ILE
54	BW	107	LEU
55	BX	3	THR
55	BX	7	VAL
55	BX	27	THR
55	BX	28	PHE
55	BX	51	VAL
55	BX	56	THR
55	BX	57	LEU
55	BX	68	ARG
55	BX	75	ASP
55	BX	76	ARG
55	BX	83	VAL
56	BY	2	ARG
56	BY	7	VAL
56	BY	9	LYS
56	BY	29	GLU
56	BY	32	PRO
56	BY	51	VAL
56	BY	53	PRO
56	BY	55	TYR
56	BY	77	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	BY	79	CYS
56	BY	90	LEU
56	BY	102	CYS
57	BZ	5	LEU
57	BZ	6	LYS
57	BZ	24	LEU
57	BZ	28	MET
57	BZ	29	TYR
57	BZ	30	ASN
57	BZ	31	ARG
57	BZ	34	ASN
57	BZ	55	HIS
57	BZ	63	ASP
57	BZ	68	PRO
57	BZ	78	LYS
57	BZ	83	PRO
57	BZ	86	VAL
57	BZ	87	ASP
57	BZ	92	SER
57	BZ	100	VAL
57	BZ	112	ARG
57	BZ	123	ASP
57	BZ	127	LYS
57	BZ	140	ASP
57	BZ	146	ILE
57	BZ	150	LEU
57	BZ	151	HIS
57	BZ	163	LEU
57	BZ	166	SER
57	BZ	171	ILE
57	BZ	186	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (177) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	19	HIS
2	AB	40	HIS
2	AB	78	GLN
2	AB	94	ASN
2	AB	95	GLN
2	AB	110	GLN
2	AB	113	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	146	GLN
2	AB	204	ASN
3	AC	3	ASN
3	AC	28	GLN
3	AC	37	GLN
3	AC	170	GLN
3	AC	176	HIS
3	AC	181	ASN
4	AD	62	GLN
4	AD	74	GLN
4	AD	77	ASN
4	AD	129	ASN
5	AE	20	GLN
5	AE	72	GLN
5	AE	73	ASN
6	AF	18	GLN
6	AF	27	GLN
6	AF	32	ASN
6	AF	73	ASN
6	AF	100	ASN
7	AG	13	GLN
7	AG	68	ASN
7	AG	84	ASN
7	AG	96	GLN
7	AG	106	GLN
9	AI	3	GLN
9	AI	58	HIS
9	AI	124	GLN
10	AJ	56	HIS
10	AJ	68	HIS
10	AJ	76	ASN
10	AJ	78	ASN
10	AJ	84	GLN
11	AK	22	HIS
11	AK	27	ASN
12	AL	9	GLN
12	AL	49	ASN
12	AL	75	HIS
12	AL	99	HIS
14	AN	49	HIS
15	AO	9	GLN
15	AO	13	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	28	GLN
15	AO	37	ASN
15	AO	62	GLN
16	AP	13	HIS
16	AP	76	GLN
17	AQ	16	GLN
19	AS	14	HIS
19	AS	47	HIS
19	AS	69	HIS
20	AT	18	GLN
20	AT	26	ASN
20	AT	42	GLN
20	AT	45	GLN
20	AT	75	ASN
24	AY	14	ASN
24	AY	124	GLN
24	AY	137	ASN
24	AY	165	GLN
24	AY	208	GLN
24	AY	270	GLN
24	AY	343	ASN
24	AY	421	GLN
24	AY	458	HIS
24	AY	475	ASN
24	AY	500	GLN
24	AY	527	ASN
24	AY	543	GLN
24	AY	573	HIS
24	AY	630	GLN
24	AY	641	GLN
25	B0	70	GLN
26	B1	45	ASN
26	B1	56	GLN
27	B2	9	GLN
27	B2	38	GLN
27	B2	47	ASN
27	B2	56	GLN
28	B3	19	GLN
28	B3	52	HIS
29	B4	20	ASN
30	B5	43	HIS
31	B6	20	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	B6	26	ASN
31	B6	32	ASN
31	B6	49	HIS
32	B7	8	ASN
32	B7	36	GLN
33	B8	31	HIS
33	B8	33	ASN
33	B8	43	GLN
34	B9	29	ASN
37	BC	58	ASN
37	BC	102	GLN
37	BC	149	ASN
37	BC	189	ASN
38	BD	58	HIS
38	BD	115	GLN
38	BD	116	GLN
38	BD	126	GLN
38	BD	166	GLN
38	BD	198	ASN
38	BD	227	ASN
38	BD	253	GLN
39	BE	48	GLN
39	BE	54	GLN
39	BE	55	ASN
39	BE	129	HIS
39	BE	143	ASN
39	BE	169	ASN
39	BE	180	ASN
39	BE	192	ASN
40	BF	69	HIS
40	BF	75	HIS
40	BF	133	ASN
40	BF	169	ASN
40	BF	204	ASN
41	BG	27	ASN
42	BH	65	HIS
42	BH	147	ASN
42	BH	158	HIS
43	BK	29	GLN
43	BK	30	HIS
43	BK	47	ASN
43	BK	89	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BN	45	ASN
45	BN	56	ASN
46	BO	5	GLN
46	BO	82	ASN
47	BP	9	ASN
47	BP	13	ASN
47	BP	27	HIS
47	BP	81	GLN
47	BP	84	ASN
47	BP	128	HIS
48	BQ	12	GLN
48	BQ	13	GLN
49	BR	3	HIS
49	BR	23	ASN
49	BR	50	HIS
49	BR	61	HIS
50	BS	16	ASN
50	BS	38	GLN
50	BS	95	HIS
51	BT	38	ASN
51	BT	43	GLN
51	BT	58	ASN
51	BT	90	GLN
52	BU	14	HIS
52	BU	44	ASN
52	BU	49	HIS
52	BU	66	ASN
52	BU	72	HIS
52	BU	94	ASN
52	BU	117	GLN
53	BV	11	GLN
54	BW	34	ASN
54	BW	61	ASN
54	BW	62	HIS
54	BW	102	HIS
55	BX	55	ASN
55	BX	82	GLN
56	BY	6	HIS
56	BY	43	ASN
57	BZ	30	ASN
57	BZ	54	HIS
57	BZ	75	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BZ	118	GLN
57	BZ	121	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	277 (18%)	47 (3%)
22	AV	76/77 (98%)	17 (22%)	0
23	AX	10/11 (90%)	5 (50%)	0
35	BA	2900/2915 (99%)	633 (21%)	77 (2%)
36	BB	118/122 (96%)	27 (22%)	2 (1%)
All	All	4607/4647 (99%)	959 (20%)	126 (2%)

All (959) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	33	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	60	A
1	AA	61	G
1	AA	62	U
1	AA	81	U
1	AA	84	U
1	AA	88	A
1	AA	89	C
1	AA	90	U
1	AA	91	C
1	AA	97	G
1	AA	98	G
1	AA	101	A
1	AA	104	G
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	129	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	129(A)	G
1	AA	131	C
1	AA	144	G
1	AA	146	G
1	AA	147	G
1	AA	149	A
1	AA	160	A
1	AA	163	C
1	AA	181	G
1	AA	182	U
1	AA	189(F)	U
1	AA	189(G)	G
1	AA	189(H)	G
1	AA	195	A
1	AA	197	A
1	AA	198	G
1	AA	202	U
1	AA	203	U
1	AA	204	U
1	AA	216	G
1	AA	243	A
1	AA	244	U
1	AA	247	G
1	AA	251	G
1	AA	266	G
1	AA	267	C
1	AA	268	C
1	AA	279	A
1	AA	281	G
1	AA	289	G
1	AA	316	G
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	350	G
1	AA	352	C
1	AA	353	A
1	AA	354	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	367	U
1	AA	372	C
1	AA	397	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	422	C
1	AA	429	U
1	AA	430	A
1	AA	435	C
1	AA	437	U
1	AA	439	A
1	AA	444	C
1	AA	452	A
1	AA	460	G
1	AA	461	A
1	AA	471	G
1	AA	480	U
1	AA	481	G
1	AA	484	G
1	AA	485	G
1	AA	496	A
1	AA	498	U
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	530	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	536	C
1	AA	547	A
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	572	A
1	AA	573	A
1	AA	575	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	576	G
1	AA	577	G
1	AA	588	G
1	AA	596	C
1	AA	631	G
1	AA	632	A
1	AA	650	G
1	AA	653	A
1	AA	665	A
1	AA	673	G
1	AA	682	G
1	AA	683	G
1	AA	686	U
1	AA	687	A
1	AA	688	G
1	AA	704	A
1	AA	721	G
1	AA	722	A
1	AA	723	U
1	AA	724	G
1	AA	728	A
1	AA	731	G
1	AA	734	G
1	AA	744	C
1	AA	748	C
1	AA	755	G
1	AA	759	A
1	AA	761	G
1	AA	777	A
1	AA	793	U
1	AA	794	A
1	AA	812	C
1	AA	813	U
1	AA	816	A
1	AA	817	C
1	AA	828	A
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	858	G
1	AA	859	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	867	G
1	AA	895	G
1	AA	907	A
1	AA	914	A
1	AA	921	U
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	951	G
1	AA	960	U
1	AA	961	U
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	980	C
1	AA	981	U
1	AA	982	U
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	997	U
1	AA	1003	G
1	AA	1004	A
1	AA	1005	A
1	AA	1027	C
1	AA	1030	C
1	AA	1030(B)	C
1	AA	1050	G
1	AA	1054	C
1	AA	1065	U
1	AA	1066	C
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1117	G
1	AA	1124	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1125	U
1	AA	1129	C
1	AA	1130	A
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1146	A
1	AA	1152	A
1	AA	1159	U
1	AA	1160	G
1	AA	1181	G
1	AA	1184	G
1	AA	1187	G
1	AA	1196	U
1	AA	1197	G
1	AA	1202	G
1	AA	1212	U
1	AA	1214	C
1	AA	1217	C
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1238	A
1	AA	1240	U
1	AA	1241	G
1	AA	1249	C
1	AA	1256	A
1	AA	1257	U
1	AA	1273	G
1	AA	1280	A
1	AA	1281	U
1	AA	1282	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1297	C
1	AA	1298	C
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1317	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1335	C
1	AA	1336	C
1	AA	1346	A
1	AA	1348	U
1	AA	1354	C
1	AA	1363	C
1	AA	1364	U
1	AA	1365	G
1	AA	1379	G
1	AA	1394	A
1	AA	1397	C
1	AA	1398	A
1	AA	1404	C
1	AA	1419	G
1	AA	1434	A
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1443	G
1	AA	1445	C
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1490	C
1	AA	1492	A
1	AA	1493	A
1	AA	1494	G
1	AA	1499	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1519	A
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	AV	4	G
22	AV	5	G
22	AV	8	U
22	AV	17	C
22	AV	17(A)	U
22	AV	18	G
22	AV	19	G
22	AV	20	U
22	AV	21	A
22	AV	36	U
22	AV	47	U
22	AV	48	C
22	AV	63	G
22	AV	71	C
22	AV	74	C
22	AV	75	C
22	AV	76	A
23	AX	12	A
23	AX	13	A
23	AX	14	A
23	AX	19	U
23	AX	21	C
35	BA	9	U
35	BA	18	C
35	BA	28	A
35	BA	35	G
35	BA	42	G
35	BA	43	A
35	BA	45	C
35	BA	49	A
35	BA	50	U
35	BA	61	G
35	BA	63	U
35	BA	69	C
35	BA	72	U
35	BA	75	G
35	BA	83	G
35	BA	84	A
35	BA	85	G
35	BA	88	G
35	BA	90	U
35	BA	92	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	94	C
35	BA	95	G
35	BA	100	G
35	BA	102	G
35	BA	106	C
35	BA	116	C
35	BA	118	A
35	BA	119	A
35	BA	121	G
35	BA	125	G
35	BA	129	C
35	BA	139(A)	G
35	BA	141	A
35	BA	142(A)	C
35	BA	155	U
35	BA	156	U
35	BA	157	U
35	BA	171	G
35	BA	174	C
35	BA	190	A
35	BA	191	A
35	BA	196	A
35	BA	199	A
35	BA	204	A
35	BA	205	G
35	BA	212	G
35	BA	215	G
35	BA	216	A
35	BA	221	A
35	BA	222	A
35	BA	227	A
35	BA	230	U
35	BA	233	A
35	BA	241	A
35	BA	248	G
35	BA	252	G
35	BA	261	G
35	BA	271(J)	C
35	BA	271(K)	U
35	BA	271(L)	U
35	BA	271(O)	C
35	BA	271(Y)	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	272	G
35	BA	272(A)	U
35	BA	272(B)	G
35	BA	272(G)	C
35	BA	272(H)	C
35	BA	272(I)	U
35	BA	274	G
35	BA	276	A
35	BA	280	C
35	BA	283	A
35	BA	286	C
35	BA	299	A
35	BA	310	A
35	BA	311	A
35	BA	329	G
35	BA	330	A
35	BA	332	A
35	BA	333	G
35	BA	336	C
35	BA	345	A
35	BA	346	A
35	BA	352	G
35	BA	353	G
35	BA	362	U
35	BA	363	G
35	BA	363(F)	A
35	BA	364	C
35	BA	365	C
35	BA	370	G
35	BA	371	A
35	BA	372	G
35	BA	386	G
35	BA	396	G
35	BA	405	U
35	BA	406	G
35	BA	407	G
35	BA	411	G
35	BA	412	A
35	BA	428	A
35	BA	444	C
35	BA	448	U
35	BA	449	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	451	C
35	BA	455	C
35	BA	456	C
35	BA	458	G
35	BA	475	U
35	BA	480	A
35	BA	481	G
35	BA	504	U
35	BA	505	A
35	BA	508	G
35	BA	509	C
35	BA	526	A
35	BA	527	C
35	BA	528	A
35	BA	529	A
35	BA	530	G
35	BA	531	C
35	BA	532	A
35	BA	533	G
35	BA	544	G
35	BA	548	A
35	BA	549	G
35	BA	552	G
35	BA	555	U
35	BA	556	G
35	BA	562	U
35	BA	563	G
35	BA	573	G
35	BA	575	A
35	BA	587	C
35	BA	591	C
35	BA	592	G
35	BA	599	G
35	BA	604	G
35	BA	607	U
35	BA	613	G
35	BA	614	U
35	BA	614(B)	G
35	BA	615	G
35	BA	620	G
35	BA	622	G
35	BA	627	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	637	A
35	BA	645	C
35	BA	646	A
35	BA	651	G
35	BA	653	A
35	BA	654	A
35	BA	654(I)	C
35	BA	654(J)	A
35	BA	654(K)	C
35	BA	654(M)	C
35	BA	654(T)	C
35	BA	655	A
35	BA	675	A
35	BA	682	G
35	BA	686	G
35	BA	695	G
35	BA	699	A
35	BA	722	A
35	BA	727	A
35	BA	729	G
35	BA	730	C
35	BA	740	U
35	BA	745	G
35	BA	746	A
35	BA	753	C
35	BA	764	A
35	BA	765	G
35	BA	775	G
35	BA	776	G
35	BA	782	A
35	BA	784	A
35	BA	785	G
35	BA	788	A
35	BA	789	A
35	BA	790	C
35	BA	791	C
35	BA	792	G
35	BA	793	A
35	BA	794	G
35	BA	800	A
35	BA	805	G
35	BA	811	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	812	C
35	BA	827	U
35	BA	828	U
35	BA	830	G
35	BA	840	C
35	BA	841	A
35	BA	845	G
35	BA	846	C
35	BA	859	G
35	BA	865	C
35	BA	866	A
35	BA	878	A
35	BA	889	C
35	BA	896	A
35	BA	897	C
35	BA	900	A
35	BA	904	C
35	BA	910	A
35	BA	926	A
35	BA	932	G
35	BA	940	G
35	BA	941	A
35	BA	945	A
35	BA	946	G
35	BA	948	G
35	BA	959	A
35	BA	961	C
35	BA	962	G
35	BA	969	U
35	BA	974	G
35	BA	975	C
35	BA	980	A
35	BA	983	A
35	BA	985	C
35	BA	989	G
35	BA	990	A
35	BA	991	C
35	BA	996	A
35	BA	1005	C
35	BA	1011	G
35	BA	1012	U
35	BA	1013	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1021	A
35	BA	1022	G
35	BA	1023	U
35	BA	1026	U
35	BA	1027	A
35	BA	1033	U
35	BA	1034	G
35	BA	1036	G
35	BA	1039	G
35	BA	1044	G
35	BA	1045	A
35	BA	1046	A
35	BA	1047	G
35	BA	1049	C
35	BA	1052	C
35	BA	1053	C
35	BA	1054	A
35	BA	1058	G
35	BA	1060	U
35	BA	1062	G
35	BA	1067	A
35	BA	1068	G
35	BA	1070	A
35	BA	1073	A
35	BA	1076	C
35	BA	1088	A
35	BA	1090	U
35	BA	1109	C
35	BA	1111	A
35	BA	1112	G
35	BA	1114	G
35	BA	1115	G
35	BA	1122	G
35	BA	1126	A
35	BA	1129	A
35	BA	1135	C
35	BA	1136	G
35	BA	1141	U
35	BA	1142(A)	A
35	BA	1143	A
35	BA	1146	C
35	BA	1152	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1155	A
35	BA	1157	G
35	BA	1158	C
35	BA	1159	U
35	BA	1170	G
35	BA	1173	G
35	BA	1174	A
35	BA	1175	U
35	BA	1176	G
35	BA	1177	A
35	BA	1204	A
35	BA	1210	A
35	BA	1211	U
35	BA	1212	G
35	BA	1213	A
35	BA	1220	A
35	BA	1221	C
35	BA	1224	C
35	BA	1238	G
35	BA	1247	A
35	BA	1248	G
35	BA	1250	G
35	BA	1251	C
35	BA	1252	G
35	BA	1255	U
35	BA	1256	G
35	BA	1266	G
35	BA	1271	G
35	BA	1272	A
35	BA	1273	U
35	BA	1287	A
35	BA	1300	U
35	BA	1302	A
35	BA	1314	C
35	BA	1321	A
35	BA	1326	U
35	BA	1329	U
35	BA	1330	C
35	BA	1332	G
35	BA	1342	A
35	BA	1345	C
35	BA	1349	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1359	A
35	BA	1365	A
35	BA	1368	G
35	BA	1379	A
35	BA	1380	G
35	BA	1384	A
35	BA	1385	G
35	BA	1386	C
35	BA	1396	U
35	BA	1403	C
35	BA	1406	U
35	BA	1411	C
35	BA	1416	G
35	BA	1421	G
35	BA	1427	A
35	BA	1428	C
35	BA	1434	A
35	BA	1435	G
35	BA	1445	A
35	BA	1445(A)	C
35	BA	1453	U
35	BA	1455	G
35	BA	1459	G
35	BA	1460	A
35	BA	1461	G
35	BA	1467	C
35	BA	1476	C
35	BA	1477	A
35	BA	1478	G
35	BA	1482	G
35	BA	1484	G
35	BA	1485	G
35	BA	1488	G
35	BA	1490	A
35	BA	1491	G
35	BA	1493	C
35	BA	1494	A
35	BA	1495	A
35	BA	1496	A
35	BA	1497	U
35	BA	1505	C
35	BA	1509	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1509(A)	A
35	BA	1517	G
35	BA	1528(A)	A
35	BA	1537	G
35	BA	1540	U
35	BA	1541	G
35	BA	1542	A
35	BA	1544	A
35	BA	1547	C
35	BA	1553	A
35	BA	1554	A
35	BA	1558	A
35	BA	1559	G
35	BA	1569	A
35	BA	1578	U
35	BA	1579	A
35	BA	1584	C
35	BA	1586	A
35	BA	1588	C
35	BA	1603	A
35	BA	1608	A
35	BA	1609	A
35	BA	1610	A
35	BA	1616	A
35	BA	1618	A
35	BA	1634	A
35	BA	1640	C
35	BA	1644	C
35	BA	1648	C
35	BA	1668	A
35	BA	1674	G
35	BA	1678	G
35	BA	1698	A
35	BA	1699	G
35	BA	1718	G
35	BA	1722	A
35	BA	1739	U
35	BA	1740	G
35	BA	1744	C
35	BA	1748	G
35	BA	1756	G
35	BA	1759	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1763	G
35	BA	1764	G
35	BA	1773	A
35	BA	1776	G
35	BA	1780	A
35	BA	1781	C
35	BA	1784	A
35	BA	1785	A
35	BA	1787	A
35	BA	1791	A
35	BA	1799	G
35	BA	1800	C
35	BA	1801	G
35	BA	1815	A
35	BA	1816	G
35	BA	1820	U
35	BA	1821	A
35	BA	1829	A
35	BA	1839	G
35	BA	1846	G
35	BA	1847	A
35	BA	1850	G
35	BA	1858	G
35	BA	1862	G
35	BA	1866	C
35	BA	1877	A
35	BA	1878	G
35	BA	1885	A
35	BA	1888	G
35	BA	1889	A
35	BA	1900	A
35	BA	1906	G
35	BA	1912	A
35	BA	1929	G
35	BA	1930	G
35	BA	1931	U
35	BA	1937	A
35	BA	1938	A
35	BA	1943	U
35	BA	1944	U
35	BA	1945	G
35	BA	1948	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	1955	U
35	BA	1960	A
35	BA	1963	U
35	BA	1964	G
35	BA	1967	C
35	BA	1969	A
35	BA	1970	A
35	BA	1971	A
35	BA	1972	A
35	BA	1993	U
35	BA	1997	G
35	BA	2004	G
35	BA	2021	C
35	BA	2022	U
35	BA	2023	G
35	BA	2031	A
35	BA	2033	A
35	BA	2034	U
35	BA	2043	C
35	BA	2055	C
35	BA	2056	G
35	BA	2060	A
35	BA	2061	G
35	BA	2062	A
35	BA	2065	C
35	BA	2069	G
35	BA	2076	U
35	BA	2100	G
35	BA	2103	C
35	BA	2104	G
35	BA	2112	G
35	BA	2116	G
35	BA	2118	U
35	BA	2127	G
35	BA	2131	G
35	BA	2132	U
35	BA	2133	G
35	BA	2134	A
35	BA	2147	G
35	BA	2157	G
35	BA	2158	A
35	BA	2159	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	2163	C
35	BA	2172	U
35	BA	2173	A
35	BA	2185	C
35	BA	2187	G
35	BA	2189	U
35	BA	2190	G
35	BA	2192	G
35	BA	2193	G
35	BA	2198	A
35	BA	2199	A
35	BA	2200	C
35	BA	2202	C
35	BA	2203	U
35	BA	2205	C
35	BA	2206	G
35	BA	2207	G
35	BA	2208	A
35	BA	2219	G
35	BA	2225	A
35	BA	2226	C
35	BA	2238	G
35	BA	2239	G
35	BA	2263	C
35	BA	2273	A
35	BA	2283	C
35	BA	2286	A
35	BA	2288	A
35	BA	2296	U
35	BA	2297	C
35	BA	2302	G
35	BA	2305	A
35	BA	2307	G
35	BA	2308	G
35	BA	2309	A
35	BA	2313	C
35	BA	2319	G
35	BA	2320	A
35	BA	2325	G
35	BA	2334	G
35	BA	2336	A
35	BA	2345	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	2346	A
35	BA	2347	C
35	BA	2348	U
35	BA	2349	G
35	BA	2350	C
35	BA	2383	G
35	BA	2385	C
35	BA	2402	C
35	BA	2406	U
35	BA	2423	U
35	BA	2424	C
35	BA	2425	A
35	BA	2426	A
35	BA	2427	C
35	BA	2428	G
35	BA	2429	G
35	BA	2430	A
35	BA	2431	U
35	BA	2434	A
35	BA	2435	A
35	BA	2439	A
35	BA	2441	C
35	BA	2448	A
35	BA	2461	C
35	BA	2465	C
35	BA	2469	A
35	BA	2470	G
35	BA	2473	U
35	BA	2474	C
35	BA	2475	C
35	BA	2476	A
35	BA	2477	C
35	BA	2478	A
35	BA	2482	G
35	BA	2484	G
35	BA	2491	U
35	BA	2502	G
35	BA	2503	A
35	BA	2505	G
35	BA	2513	G
35	BA	2518	A
35	BA	2519	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	2520	C
35	BA	2524	G
35	BA	2529	G
35	BA	2554	U
35	BA	2566	A
35	BA	2567	G
35	BA	2572	A
35	BA	2577	A
35	BA	2585	U
35	BA	2586	C
35	BA	2602	A
35	BA	2609	U
35	BA	2610	C
35	BA	2611	U
35	BA	2612	C
35	BA	2615	U
35	BA	2630	G
35	BA	2646	C
35	BA	2655	G
35	BA	2657	A
35	BA	2658	C
35	BA	2670	A
35	BA	2673	G
35	BA	2682	U
35	BA	2690	C
35	BA	2691	C
35	BA	2703	C
35	BA	2706	G
35	BA	2712	U
35	BA	2712(A)	A
35	BA	2713	A
35	BA	2726	U
35	BA	2733	A
35	BA	2750	A
35	BA	2751	G
35	BA	2755	C
35	BA	2756	U
35	BA	2757	A
35	BA	2758	A
35	BA	2762	G
35	BA	2763	G
35	BA	2764	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	2765	A
35	BA	2778	A
35	BA	2779	U
35	BA	2780	G
35	BA	2790	A
35	BA	2791	C
35	BA	2796	U
35	BA	2799	C
35	BA	2801	A
35	BA	2802	G
35	BA	2803	C
35	BA	2808	U
35	BA	2820	A
35	BA	2821	A
35	BA	2832	U
35	BA	2833	G
35	BA	2834	G
35	BA	2836	U
35	BA	2849	U
35	BA	2872	G
35	BA	2879	C
35	BA	2880	C
35	BA	2892	A
35	BA	2894	G
35	BA	2895	U
36	BB	8	U
36	BB	12	C
36	BB	13	A
36	BB	15	A
36	BB	16	G
36	BB	22	U
36	BB	24	G
36	BB	25	A
36	BB	33	G
36	BB	35	U
36	BB	41	U
36	BB	42	C
36	BB	45	A
36	BB	52	A
36	BB	53	A
36	BB	56	G
36	BB	67	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BB	73	A
36	BB	81	G
36	BB	82	G
36	BB	88	C
36	BB	89	G
36	BB	90	A
36	BB	103	G
36	BB	104	U
36	BB	110	G
36	BB	113	G

All (126) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	30	U
1	AA	60	A
1	AA	115	G
1	AA	119	A
1	AA	203	U
1	AA	243	A
1	AA	244	U
1	AA	250	A
1	AA	266	G
1	AA	315	A
1	AA	328	C
1	AA	344	A
1	AA	353	A
1	AA	366	C
1	AA	428	G
1	AA	429	U
1	AA	438	G
1	AA	532	A
1	AA	533	A
1	AA	535	A
1	AA	560	U
1	AA	561	U
1	AA	575	G
1	AA	631	G
1	AA	672	U
1	AA	703	G
1	AA	812	C
1	AA	913	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	992	U
1	AA	1049	U
1	AA	1065	U
1	AA	1094	G
1	AA	1101	A
1	AA	1129	C
1	AA	1201	A
1	AA	1225	A
1	AA	1226	C
1	AA	1285	A
1	AA	1299	A
1	AA	1300	G
1	AA	1335	C
1	AA	1347	G
1	AA	1364	U
1	AA	1493	A
1	AA	1498	U
1	AA	1505	G
1	AA	1529	G
35	BA	27	G
35	BA	49	A
35	BA	74	A
35	BA	120	U
35	BA	128	C
35	BA	221	A
35	BA	226	G
35	BA	286	C
35	BA	329	G
35	BA	331	A
35	BA	332	A
35	BA	363(F)	A
35	BA	474	G
35	BA	503	A
35	BA	603	A
35	BA	614(A)	U
35	BA	614(C)	A
35	BA	728	G
35	BA	739	G
35	BA	752	A
35	BA	764	A
35	BA	790	C
35	BA	945	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	961	C
35	BA	1020	A
35	BA	1022	G
35	BA	1052	C
35	BA	1057	A
35	BA	1067	A
35	BA	1143	A
35	BA	1155	A
35	BA	1156	A
35	BA	1210	A
35	BA	1212	G
35	BA	1237	A
35	BA	1288	U
35	BA	1301	A
35	BA	1378	A
35	BA	1427	A
35	BA	1453	U
35	BA	1494	A
35	BA	1528	A
35	BA	1541	G
35	BA	1558	A
35	BA	1799	G
35	BA	1819	A
35	BA	1838	C
35	BA	1846	G
35	BA	1930	G
35	BA	1943	U
35	BA	1948	G
35	BA	1992	G
35	BA	2033	A
35	BA	2111	C
35	BA	2126	A
35	BA	2172	U
35	BA	2198	A
35	BA	2225	A
35	BA	2282	G
35	BA	2296	U
35	BA	2344	U
35	BA	2345	G
35	BA	2422	A
35	BA	2425	A
35	BA	2428	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BA	2481	G
35	BA	2689	U
35	BA	2690	C
35	BA	2756	U
35	BA	2762	G
35	BA	2778	A
35	BA	2779	U
35	BA	2799	C
35	BA	2801(A)	A
35	BA	2835	A
35	BA	2849	U
35	BA	2891	G
36	BB	25	A
36	BB	40	U

5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

2 ligands are 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	GDP	AY	702	-	24,30,30	1.57	6 (25%)	30,47,47	1.71	7 (23%)
58	FUA	AY	701	-	39,40,40	2.10	12 (30%)	49,64,64	1.79	11 (22%)

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	GDP	AY	702	-	-	2/12/32/32	0/3/3/3
58	FUA	AY	701	-	-	5/15/92/92	0/4/4/4

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	AY	701	FUA	C23-C22	-5.40	1.37	1.51
58	AY	701	FUA	C23-C24	-4.19	1.39	1.53
59	AY	702	GDP	C5-C6	-4.16	1.39	1.47
58	AY	701	FUA	C15-C14	-3.97	1.46	1.54
58	AY	701	FUA	C29-C22	3.88	1.53	1.47
58	AY	701	FUA	C19-C10	-3.83	1.47	1.54
58	AY	701	FUA	C24-C25	-3.55	1.38	1.50
58	AY	701	FUA	O2-C16	-3.15	1.39	1.45
58	AY	701	FUA	C14-C8	-2.94	1.53	1.59
58	AY	701	FUA	C12-C11	-2.76	1.48	1.52
59	AY	702	GDP	C5-C4	-2.64	1.36	1.43
59	AY	702	GDP	PB-O3B	-2.57	1.44	1.54
58	AY	701	FUA	O5-C29	-2.14	1.24	1.30
59	AY	702	GDP	O4'-C1'	2.14	1.44	1.41
59	AY	702	GDP	PA-O2A	-2.12	1.45	1.55
58	AY	701	FUA	C14-C13	-2.09	1.51	1.57
59	AY	702	GDP	PB-O2B	-2.08	1.46	1.54
58	AY	701	FUA	O6-C3	-2.04	1.39	1.43

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	AY	701	FUA	C8-C9-C10	-6.55	109.63	116.34
58	AY	701	FUA	C6-C5-C10	-4.41	106.16	111.65
59	AY	702	GDP	PA-O3A-PB	-4.24	118.26	132.83
59	AY	702	GDP	C2-N1-C6	-3.60	118.46	125.10
58	AY	701	FUA	O6-C3-C2	-3.46	101.66	109.96
59	AY	702	GDP	O4'-C4'-C3'	2.93	110.91	105.11
58	AY	701	FUA	C19-C10-C5	-2.57	107.64	111.18
58	AY	701	FUA	C23-C24-C25	2.55	120.26	111.88
58	AY	701	FUA	C7-C6-C5	-2.42	108.91	113.11
59	AY	702	GDP	C5-C6-N1	2.40	118.19	113.95
58	AY	701	FUA	C18-C4-C5	-2.34	109.74	113.04

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	AY	701	FUA	C15-C14-C8	2.13	119.12	116.84
58	AY	701	FUA	O2-C31-C32	2.12	114.99	111.09
58	AY	701	FUA	O5-C29-O4	-2.11	118.77	123.61
59	AY	702	GDP	C8-N7-C5	2.08	106.96	102.99
59	AY	702	GDP	N2-C2-N1	2.08	121.14	116.71
59	AY	702	GDP	O2'-C2'-C3'	-2.06	105.16	111.82
58	AY	701	FUA	C20-C8-C7	2.04	111.33	107.84

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
58	AY	701	FUA	C13-C17-C22-C29
58	AY	701	FUA	C17-C22-C23-C24
58	AY	701	FUA	C29-C22-C23-C24
59	AY	702	GDP	C5'-O5'-PA-O3A
59	AY	702	GDP	C5'-O5'-PA-O1A
58	AY	701	FUA	C32-C31-O2-C16
58	AY	701	FUA	O3-C31-O2-C16

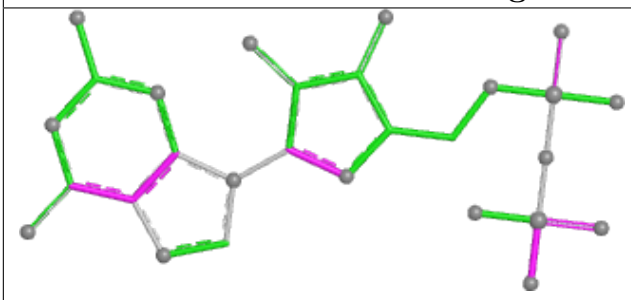
There are no ring outliers.

2 monomers are involved in 19 short contacts:

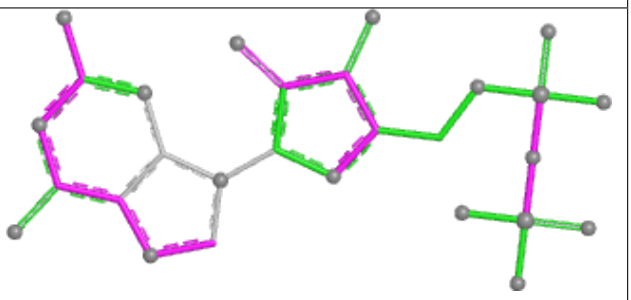
Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	AY	702	GDP	7	0
58	AY	701	FUA	12	0

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.

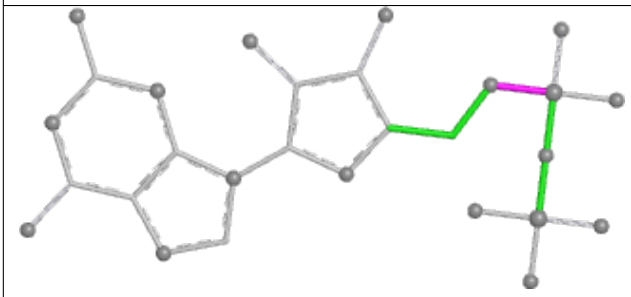
Ligand GDP AY 702



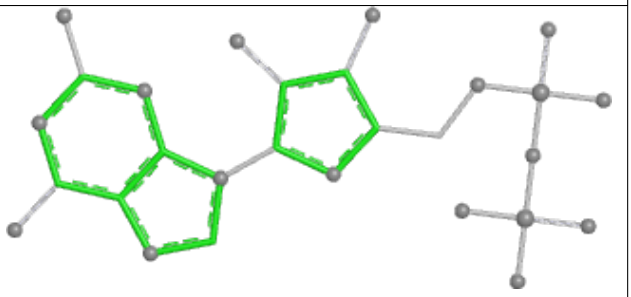
Bond lengths



Bond angles

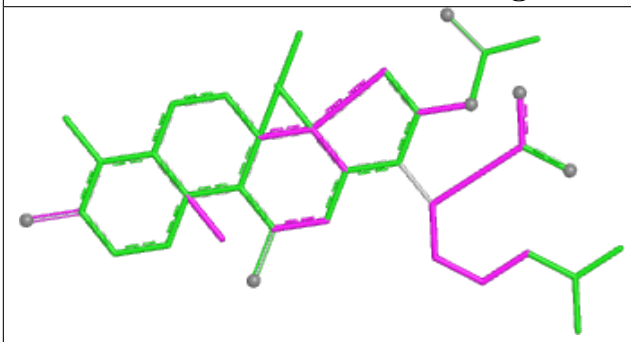


Torsions

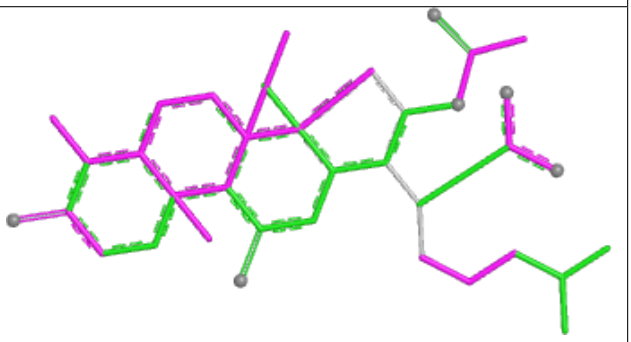


Rings

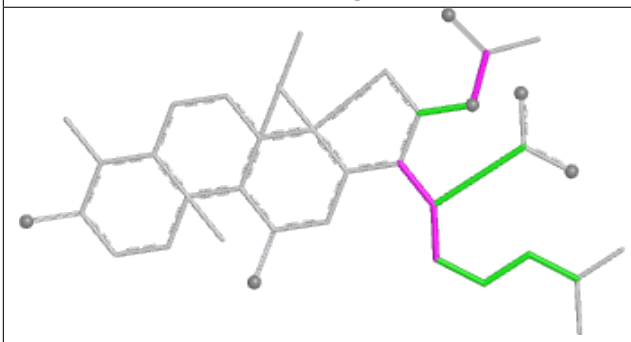
Ligand FUA AY 701



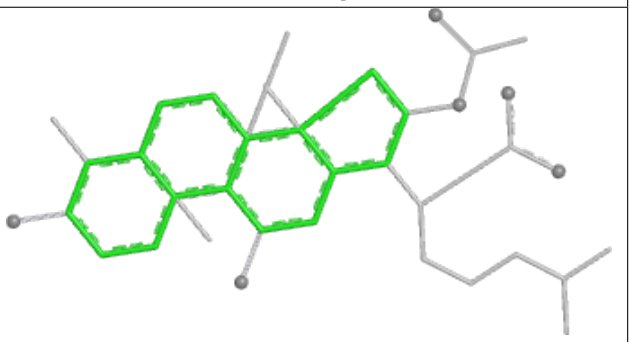
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

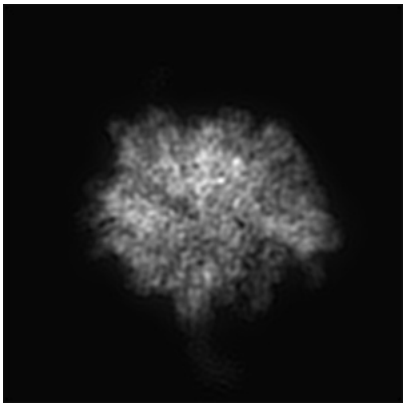
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-1798. These allow visual inspection of the internal detail of the map and identification of artifacts.

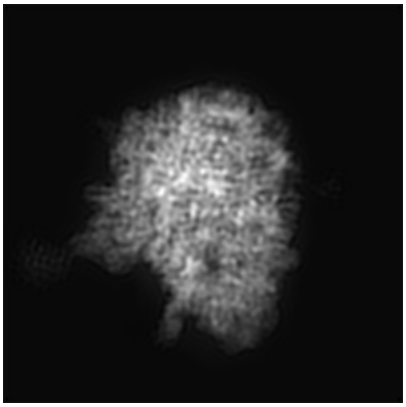
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

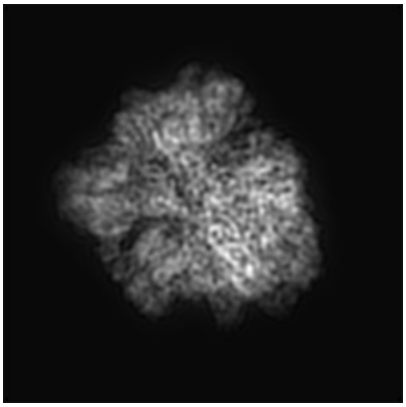
6.1.1 Primary map



X



Y

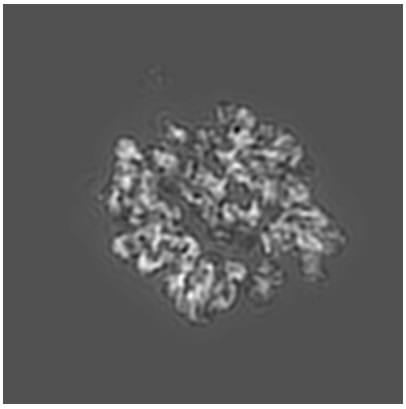


Z

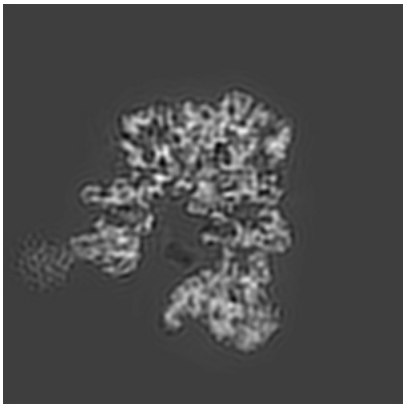
The images above show the map projected in three orthogonal directions.

6.2 Central slices

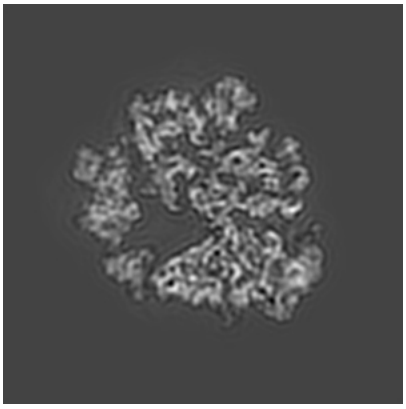
6.2.1 Primary map



X Index: 150



Y Index: 150



Z Index: 150

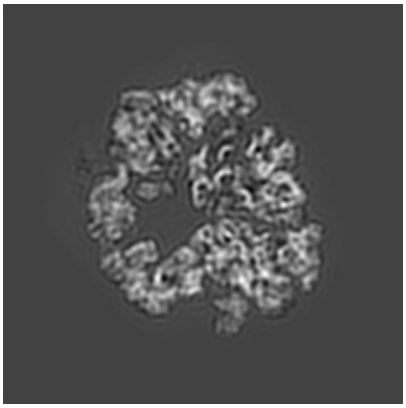
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 162

Y Index: 152

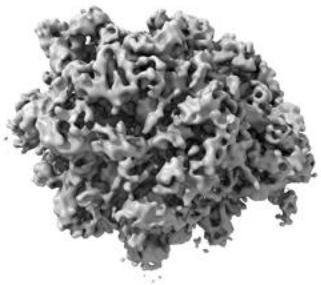


Z Index: 142

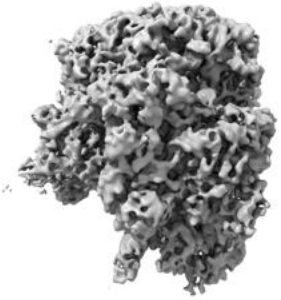
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map



X



Y

Z

The images above show the 3D surface view of the map at the recommended contour level 3000.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

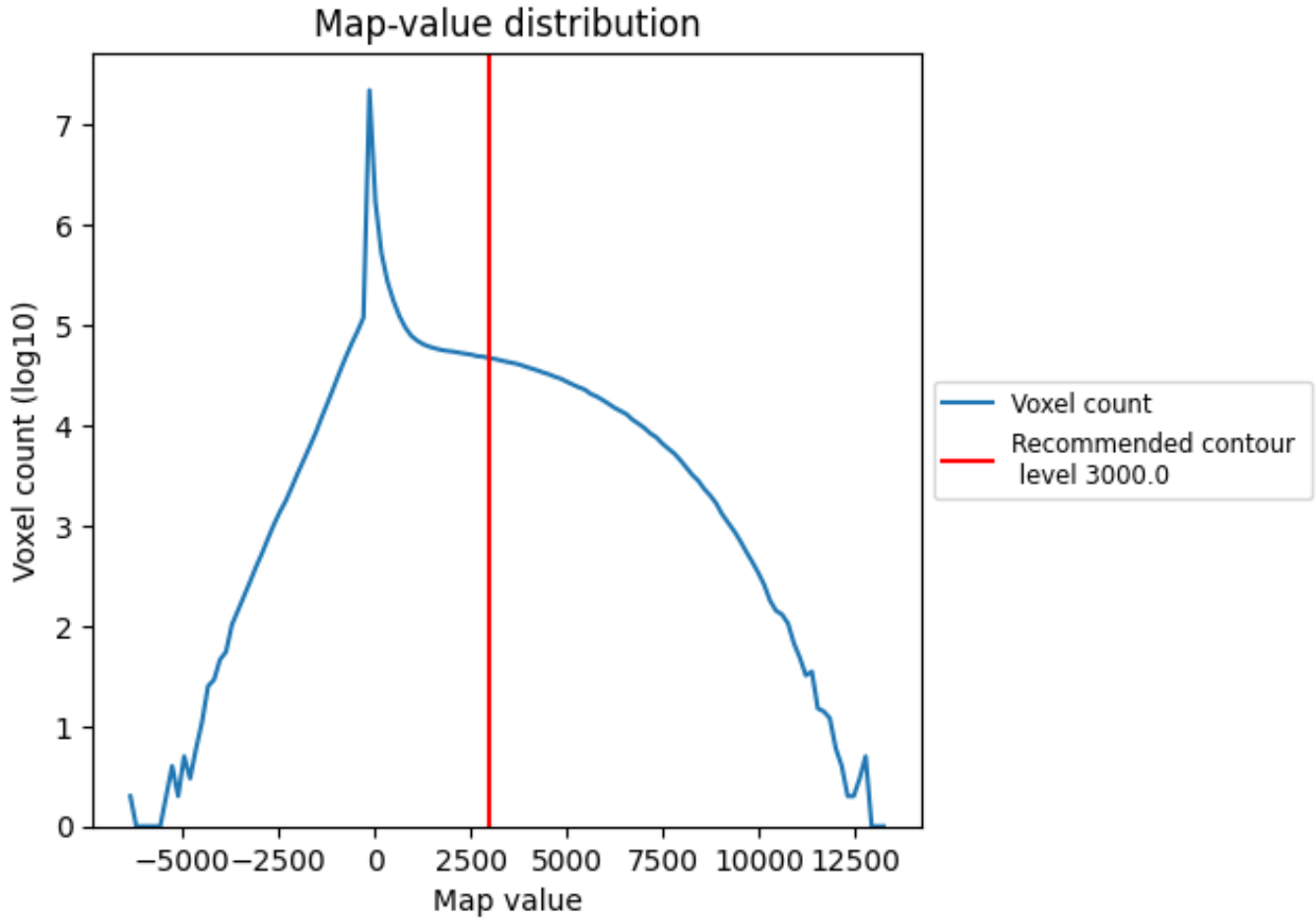
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

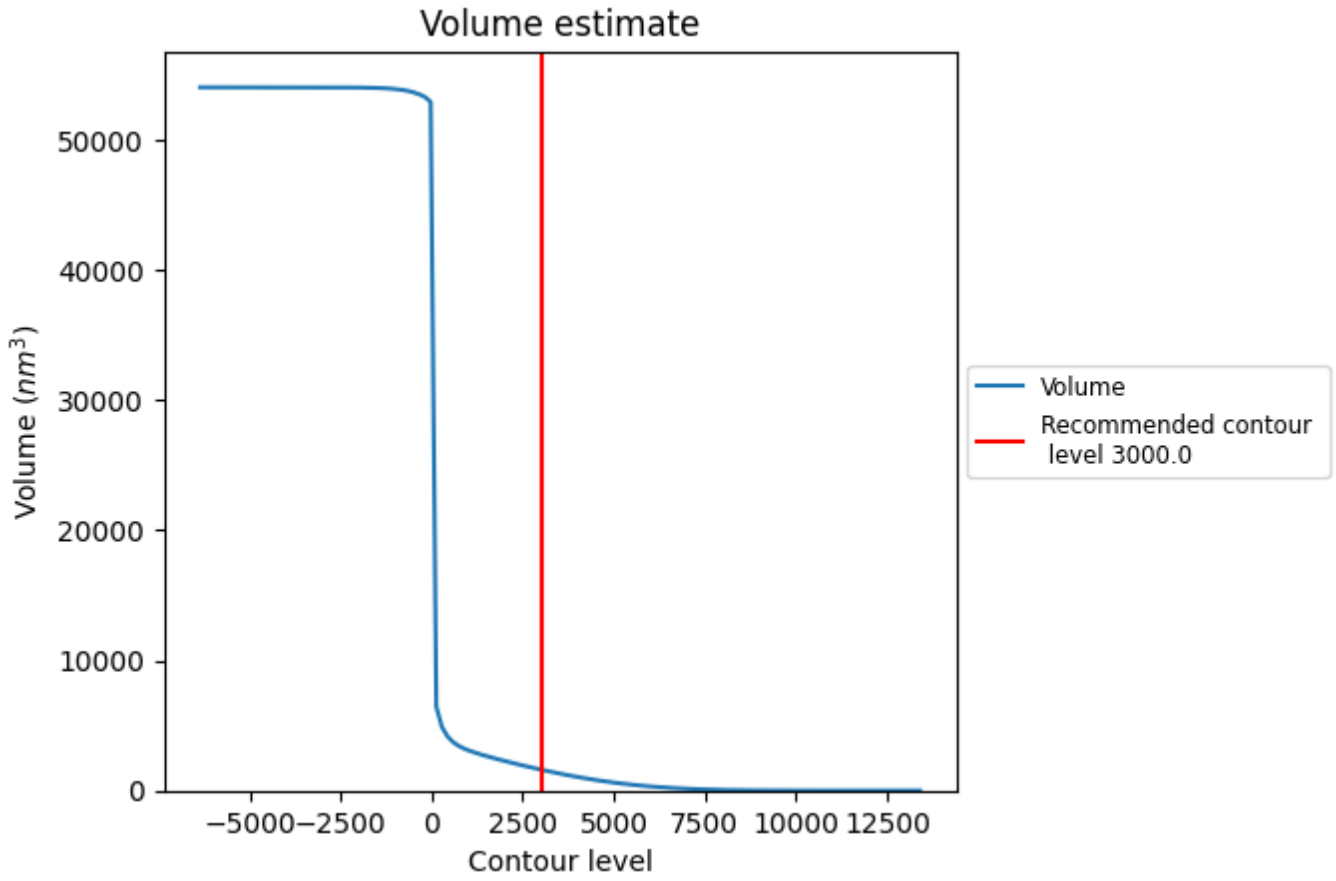
This section contains the results of statistical analysis of the map.

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.

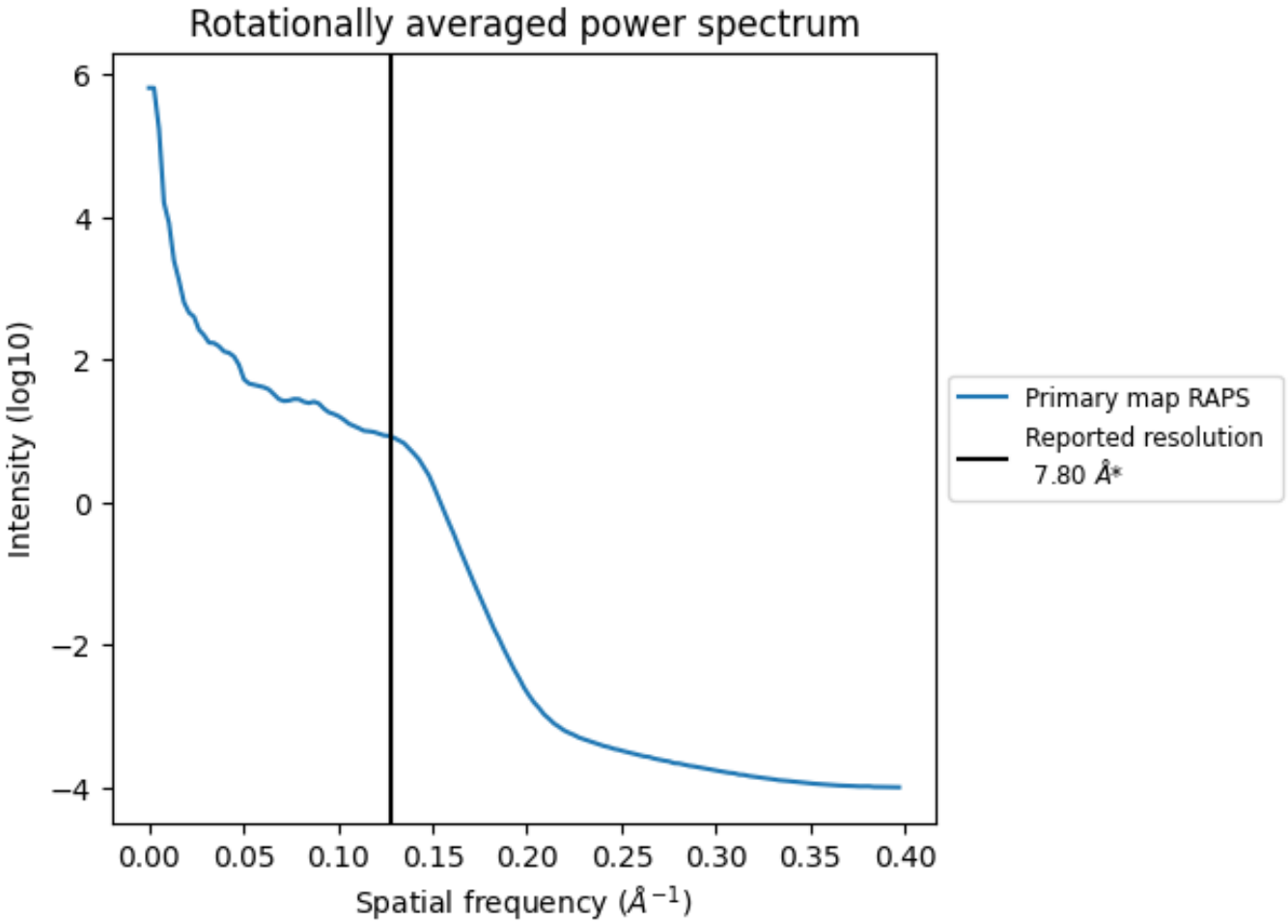
7.2 Volume estimate



The volume at the recommended contour level is 1609 nm^3; this corresponds to an approximate mass of 1453 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 0.128 Å^{-1}

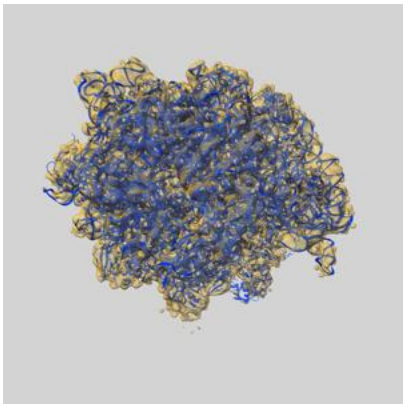
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

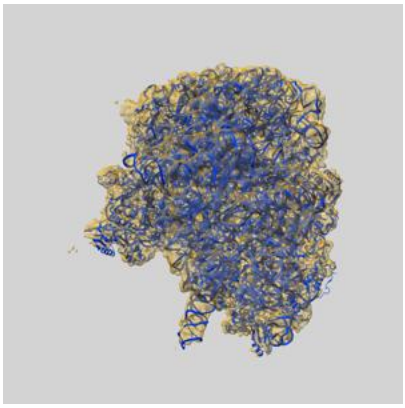
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-1798 and PDB model 4V5M. Per-residue inclusion information can be found in section 3 on page 16.

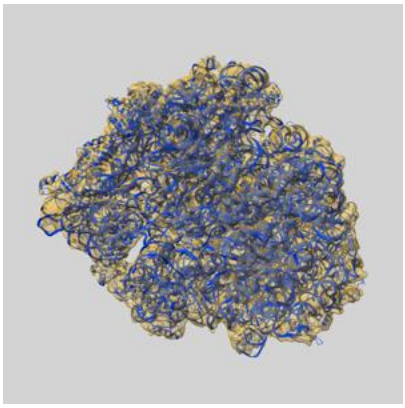
9.1 Map-model overlay



X



Y



Z

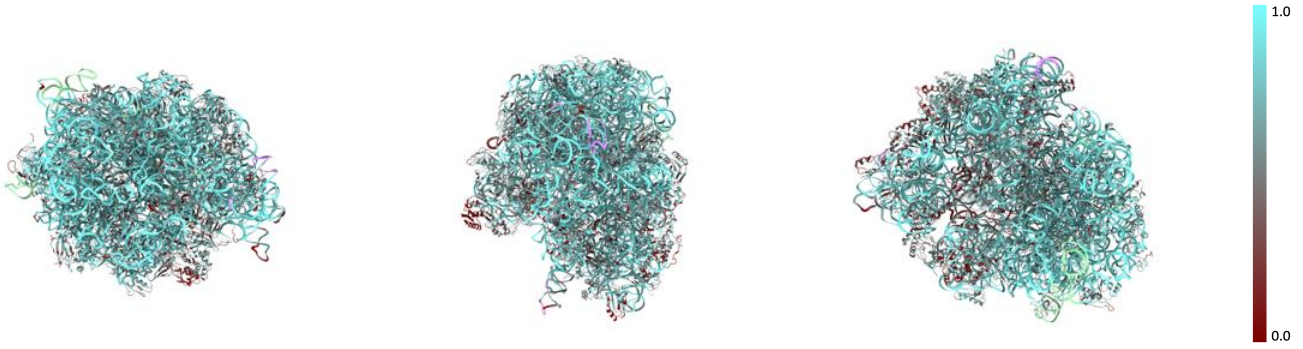
The images above show the 3D surface view of the map at the recommended contour level 3000.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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.

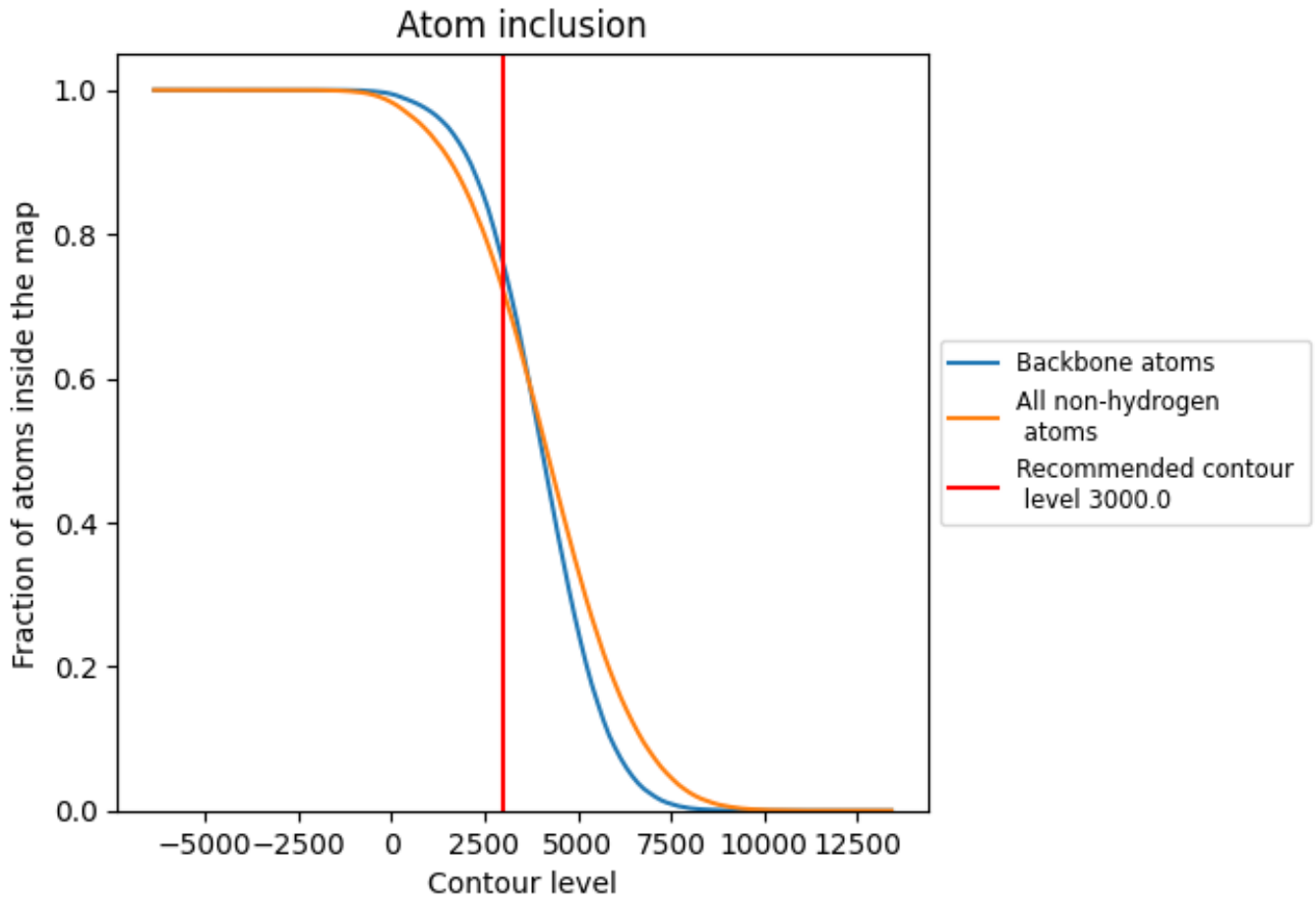
9.3 Atom inclusion mapped to coordinate model



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 (3000.0).

9.4 Atom inclusion (i)



At the recommended contour level, 76% of all backbone atoms, 72% 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 (3000.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7220	0.1590
AA	0.8289	0.1700
AB	0.4670	0.1320
AC	0.5498	0.1360
AD	0.5930	0.1270
AE	0.5824	0.1350
AF	0.5400	0.1510
AG	0.4983	0.1130
AH	0.5837	0.1400
AI	0.5864	0.0960
AJ	0.4571	0.0840
AK	0.5295	0.1310
AL	0.4578	0.1200
AM	0.4246	0.0790
AN	0.5974	0.1230
AO	0.5989	0.1410
AP	0.6297	0.1120
AQ	0.5514	0.1200
AR	0.5226	0.1210
AS	0.5220	0.0840
AT	0.5602	0.1220
AU	0.4764	0.0650
AV	0.6488	0.1350
AX	0.2696	0.0910
AY	0.4490	0.1190
B0	0.5205	0.0990
B1	0.5769	0.1340
B2	0.6332	0.1500
B3	0.6035	0.1520
B4	0.3878	0.1080
B5	0.5996	0.1540
B6	0.5938	0.0930
B7	0.6160	0.1230
B8	0.5535	0.1240
B9	0.2823	0.0620

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
BA	0.8406	0.1880
BB	0.8675	0.1790
BC	0.2516	0.0480
BD	0.5135	0.1240
BE	0.5332	0.1270
BF	0.6151	0.1380
BG	0.5165	0.0980
BH	0.5734	0.1330
BK	0.3594	0.0890
BL	0.0589	0.0440
BN	0.5870	0.1450
BO	0.3677	0.1210
BP	0.5853	0.1430
BQ	0.2793	0.0930
BR	0.5996	0.1370
BS	0.6622	0.1480
BT	0.4784	0.1260
BU	0.6310	0.1220
BV	0.5538	0.1420
BW	0.6049	0.1280
BX	0.6141	0.1420
BY	0.4968	0.1340
BZ	0.4570	0.0750