Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 07:31 pm GMT

PDB ID	:	4CSU
EMDB ID	:	EMD-2605
Title	:	Cryo-EM structures of the 50S ribosome subunit bound with ObgE
Authors	:	Feng, B.; Mandava, C.S.; Guo, Q.; Wang, J.; Cao, W.; Li, N.; Zhang, Y.; Zhang, Y.; Wang, Z.; Wu, J.; Sanyal, S.; Lei, J.; Gao, N.
Deposited on	:	2014-03-10
Resolution	:	5.50 Å(reported)
Based on initial model	:	3OFC

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:

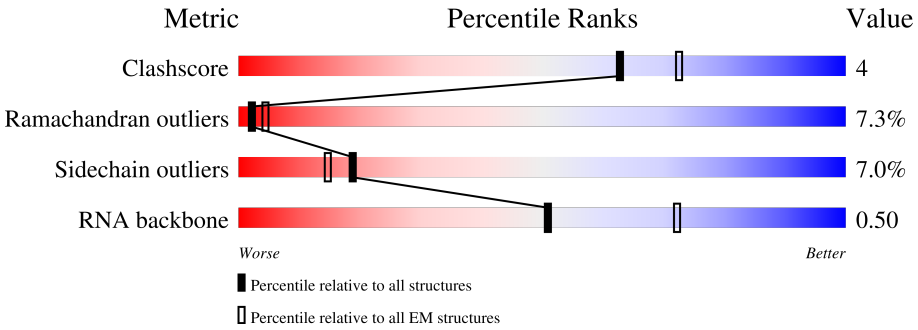
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

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 5.50 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	0	77	56% 32% 9%
2	1	63	71% 24% 5%
3	2	58	72% 24%
4	3	56	11% 57% 34% 7%
5	4	54	17% 72% 19% 6%
6	5	234	91% 77% 21%
7	6	46	54% 30% 11%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
8	7	64	58% 28% 11%
9	8	38	71% 24% 5%
10	9	390	22% 45% 25% 10% 6% 14%
11	A	118	28% 57% 13%
12	B	2903	31% 45% 25%
13	C	272	64% 29% 7%
14	D	209	67% 26% 5%
15	E	201	63% 30% 6%
16	F	178	68% 24% 7%
17	G	176	69% 25% 6%
18	H	149	64% 60% 30% 10%
19	I	141	6% 35% 11% 51%
20	J	142	61% 30% 8%
21	K	123	59% 29% 10%
22	L	143	69% 25%
23	M	136	65% 27% 7%
24	N	127	54% 31% 8% 5%
25	O	116	66% 27% 7%
26	P	114	66% 25% 7%
27	Q	117	60% 32% 7%
28	R	103	66% 25% 8%
29	S	110	60% 26% 10%
30	T	100	55% 30% 8% 6%
31	U	103	71% 18% 9%
32	W	94	77% 18% 5%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
33	Y	84	

2 Entry composition (i)

There are 33 unique types of molecules in this entry. The entry contains 94625 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	0	77	Total	C	N	O	S	0	0
			625	388	129	106	2		

- Molecule 2 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	1	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 3 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	2	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 4 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 5 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	4	51	Total	C	N	O	0	1
			410	263	76	71		

- Molecule 6 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	5	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 7 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	6	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

- Molecule 8 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	7	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 9 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	8	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 10 is a protein called GTPASE OBGE/CGTA.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	9	334	Total	C	N	O	S	0	1
			2541	1596	448	485	12		

- Molecule 11 is a RNA chain called 5S RRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	A	115	Total	C	N	O	P	0	0
			2455	1097	451	795	112		

- Molecule 12 is a RNA chain called 23S RRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	B	2903	Total	C	N	O	P	0	0
			62317	27801	11467	20147	2902		

- Molecule 13 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	C	272	Total	C	N	O	S	0	1
			2083	1288	424	364	7		

- Molecule 14 is a protein called 50S RIBOSOMAL PROTEIN L3.

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

- Molecule 15 is a protein called 50S RIBOSOMAL PROTEIN L4.

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

- Molecule 16 is a protein called 50S RIBOSOMAL PROTEIN L5.

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

- Molecule 17 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	G	176	Total	C	N	O	S	0	1
			1317	827	243	245	2		

- Molecule 18 is a protein called 50S RIBOSOMAL PROTEIN L9.

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

- Molecule 19 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	I	69	Total	C	N	O	S	0	0
			495	303	90	99	3		

- Molecule 20 is a protein called 50S RIBOSOMAL PROTEIN L13.

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

- Molecule 21 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	K	122	Total	C	N	O	S	0	1
			932	582	180	164	6		

- Molecule 22 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	L	143	Total	C	N	O	S	0	0
			1045	649	206	189	1		

- Molecule 23 is a protein called 50S RIBOSOMAL PROTEIN L16.

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

- Molecule 24 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	N	121	Total	C	N	O	S	0	1
			961	593	197	166	5		

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				AltConf	Trace
25	O	116	Total	C	N	O	0	0
			892	552	178	162		

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L19.

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

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L20.

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

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L21.

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

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L22.

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

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	T	94	Total	C	N	O	S	0	1
			739	466	140	131	2		

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms				AltConf	Trace
31	U	102	Total	C	N	O	0	3
			758	479	143	136		

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L25.

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

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L27.

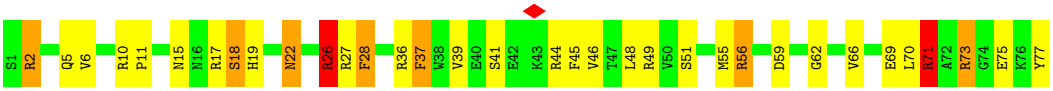
Mol	Chain	Residues	Atoms					AltConf	Trace
33	Y	79	Total	C	N	O	S	0	0
			596	367	120	108	1		

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.

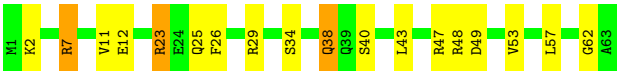
• Molecule 1: 50S RIBOSOMAL PROTEIN L28

Chain 0:



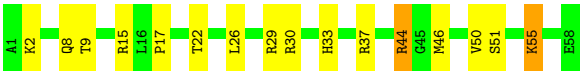
• Molecule 2: 50S RIBOSOMAL PROTEIN L29

Chain 1:



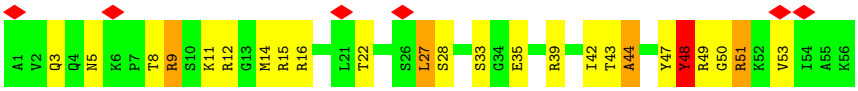
• Molecule 3: 50S RIBOSOMAL PROTEIN L30

Chain 2:



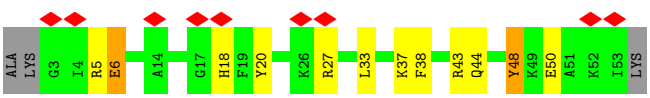
• Molecule 4: 50S RIBOSOMAL PROTEIN L32

Chain 3:



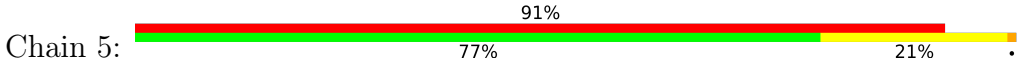
• Molecule 5: 50S RIBOSOMAL PROTEIN L33

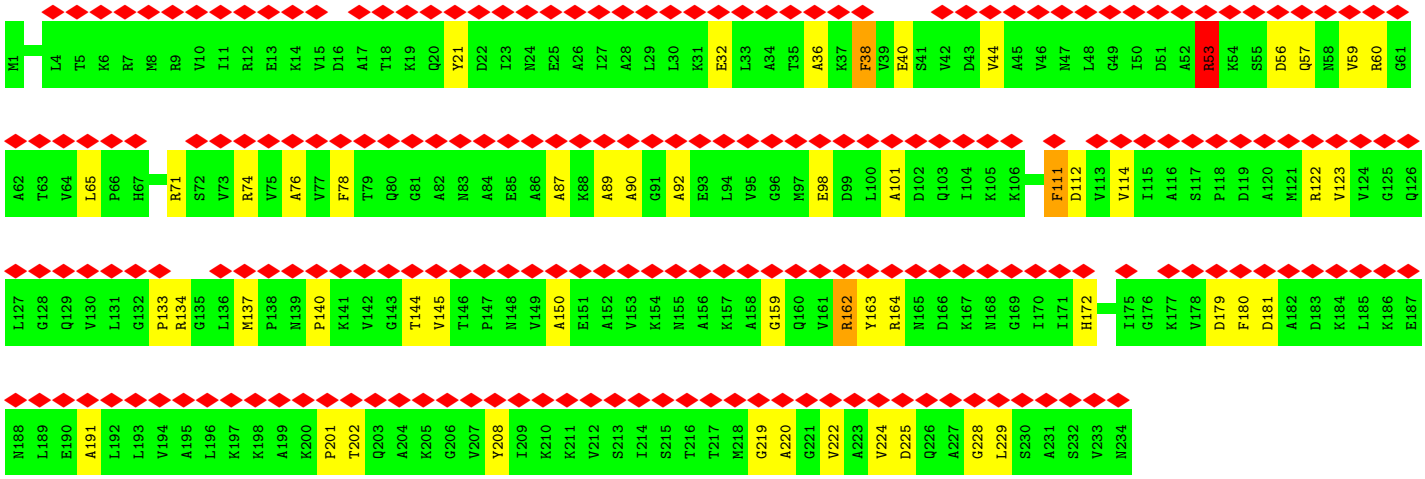
Chain 4:



• Molecule 6: 50S RIBOSOMAL PROTEIN L1

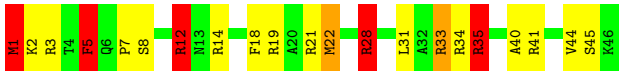
Chain 5:





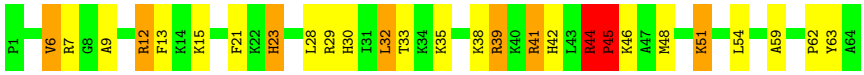
• Molecule 7: 50S RIBOSOMAL PROTEIN L34

Chain 6:



• Molecule 8: 50S RIBOSOMAL PROTEIN L35

Chain 7:

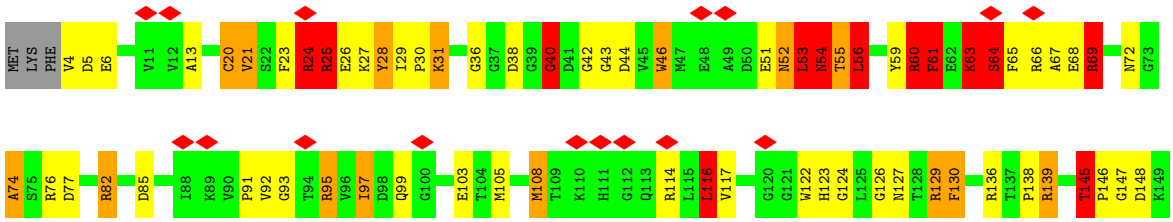


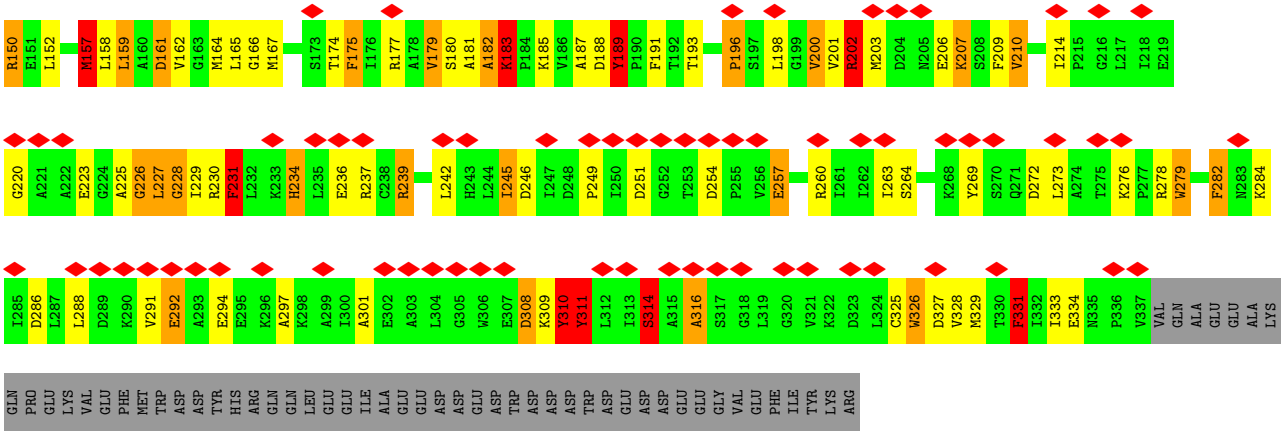
• Molecule 9: 50S RIBOSOMAL PROTEIN L36

Chain 8:

• Molecule 10: GTPASE OBGE/CGTA

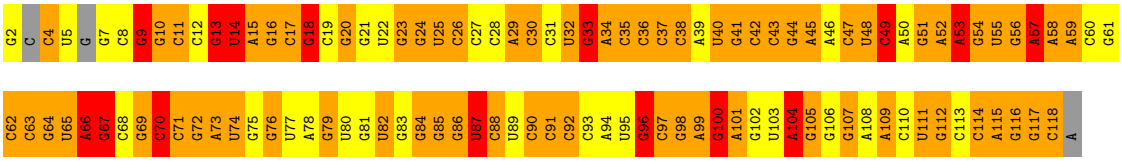
Chain 9:





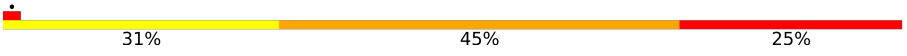
• Molecule 11: 5S RRNA

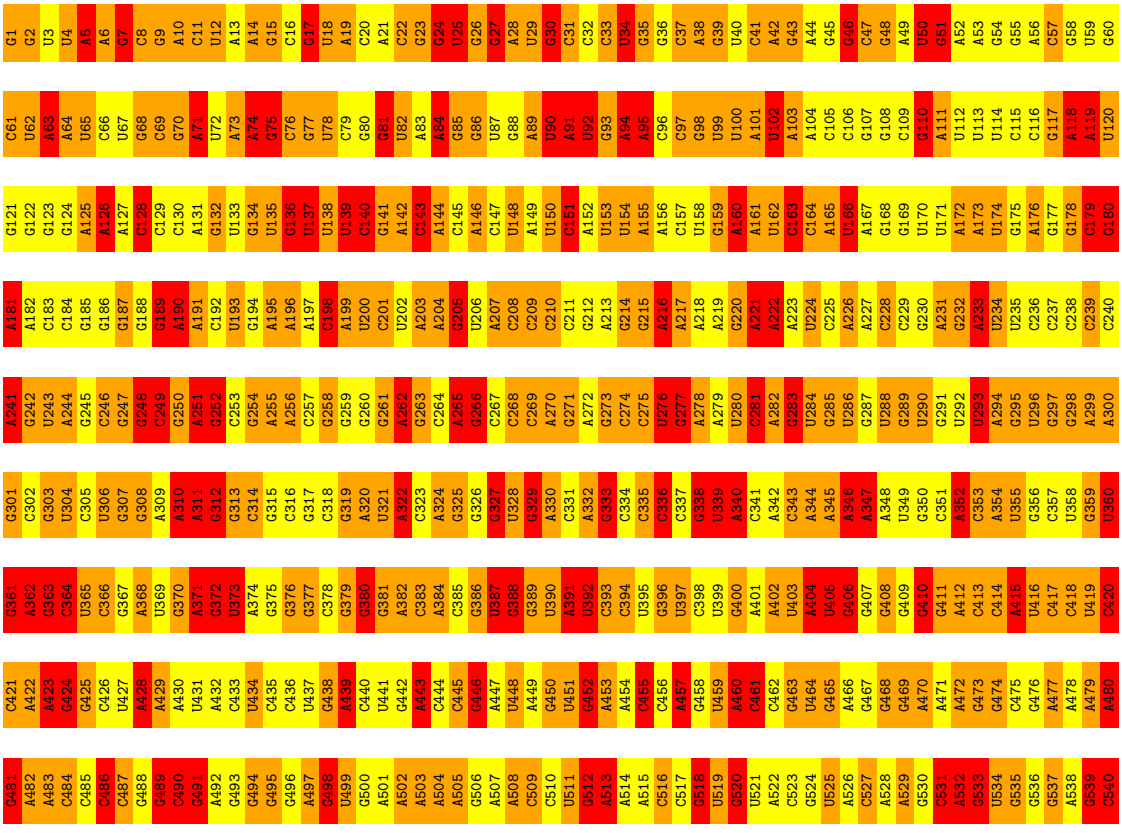
Chain A:

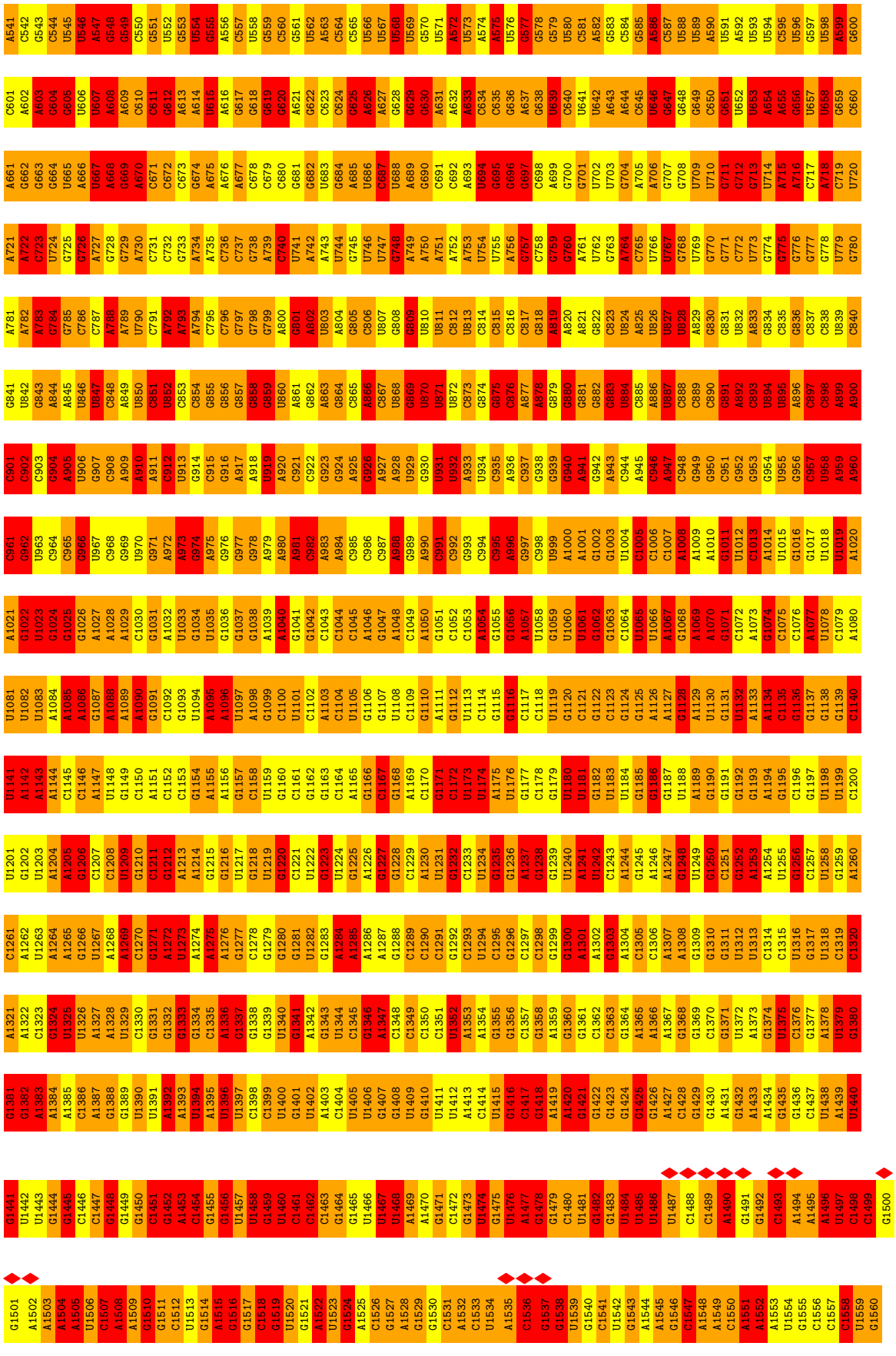


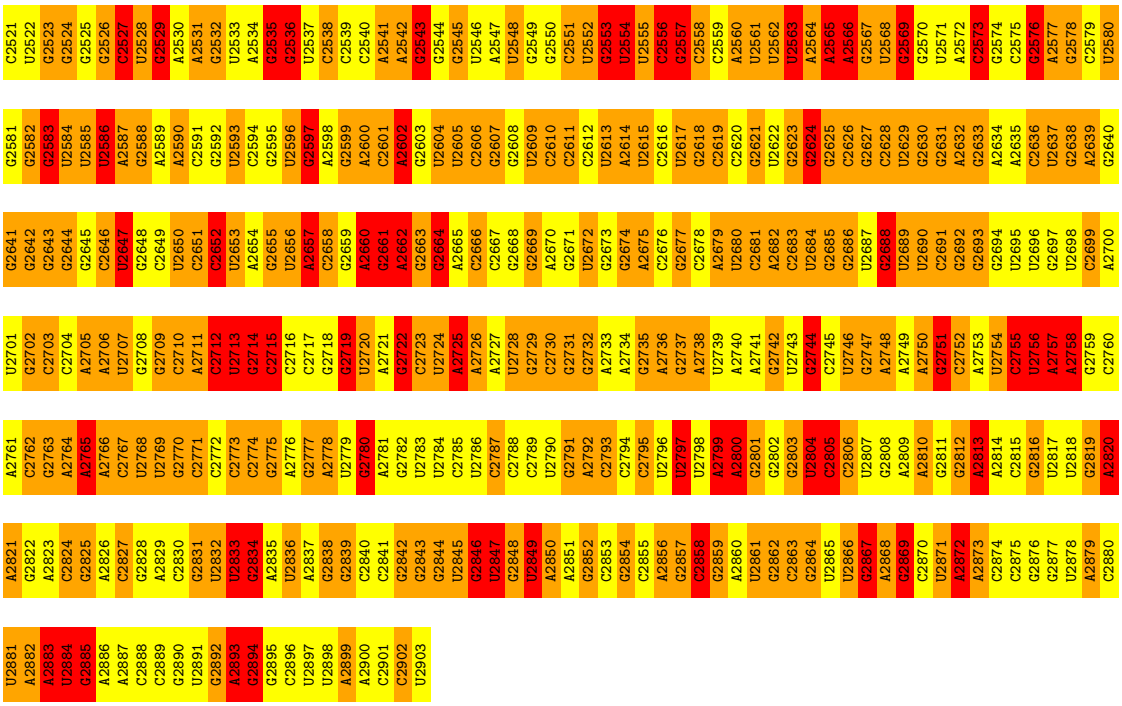
• Molecule 12: 23S RRNA

Chain B:



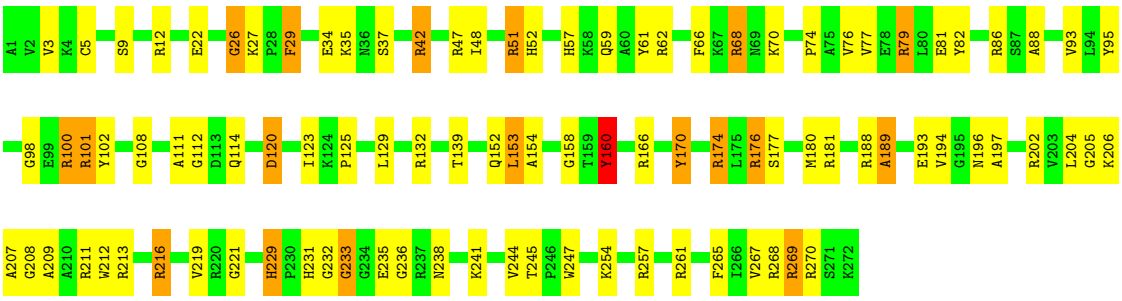






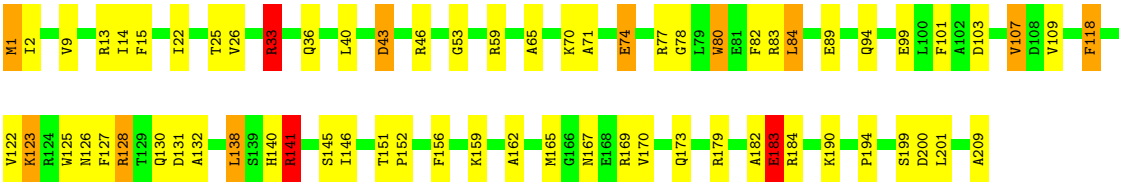
• Molecule 13: 50S RIBOSOMAL PROTEIN L2

Chain C:



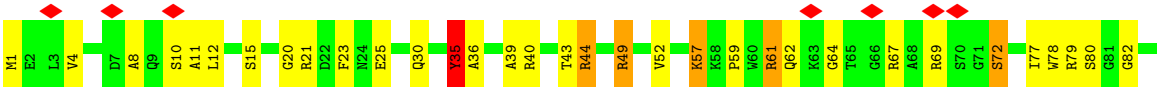
• Molecule 14: 50S RIBOSOMAL PROTEIN L3

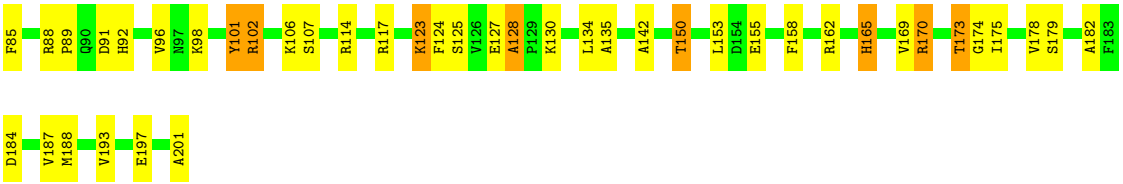
Chain D:



• Molecule 15: 50S RIBOSOMAL PROTEIN L4

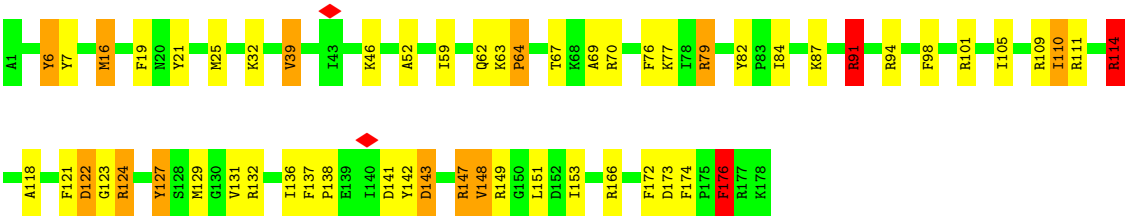
Chain E:





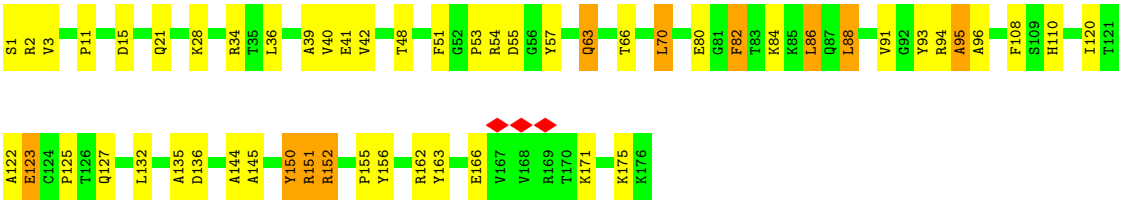
• Molecule 16: 50S RIBOSOMAL PROTEIN L5

Chain F:



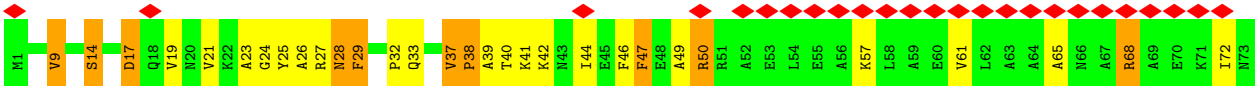
• Molecule 17: 50S RIBOSOMAL PROTEIN L6

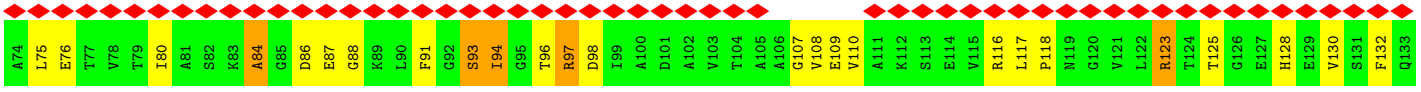
Chain G:

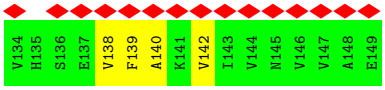


• Molecule 18: 50S RIBOSOMAL PROTEIN L9

Chain H:

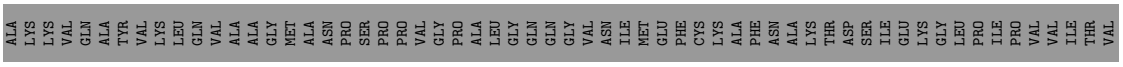


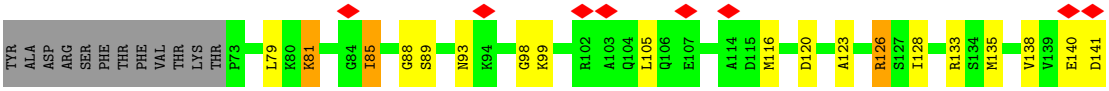




• Molecule 19: 50S RIBOSOMAL PROTEIN L11

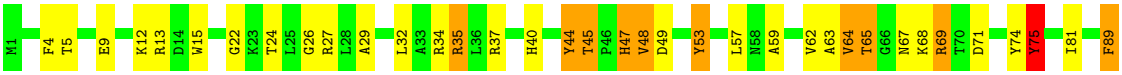
Chain I:





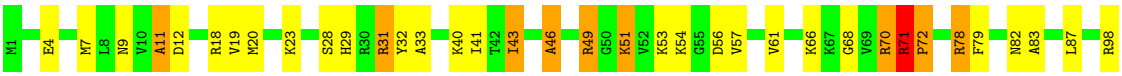
• Molecule 20: 50S RIBOSOMAL PROTEIN L13

Chain J:



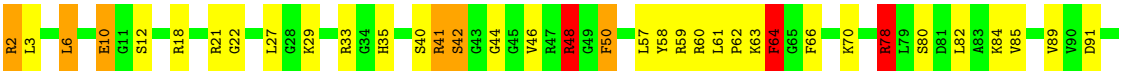
• Molecule 21: 50S RIBOSOMAL PROTEIN L14

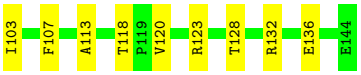
Chain K:



• Molecule 22: 50S RIBOSOMAL PROTEIN L15

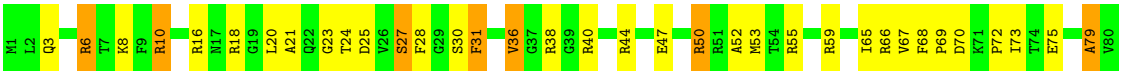
Chain L:





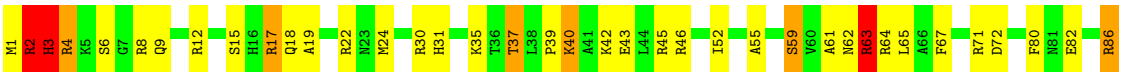
• Molecule 23: 50S RIBOSOMAL PROTEIN L16

Chain M:



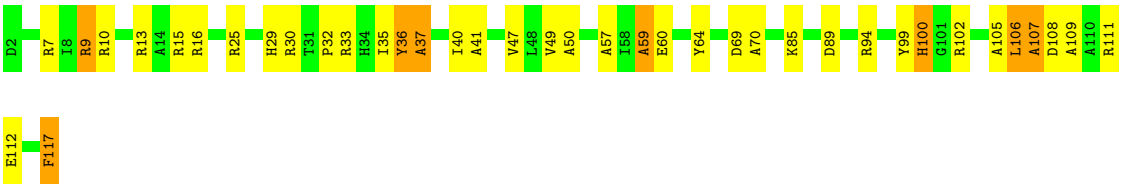
• Molecule 24: 50S RIBOSOMAL PROTEIN L17

Chain N:



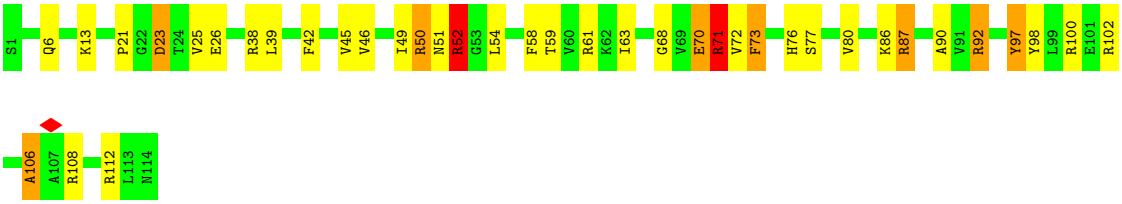
• Molecule 25: 50S RIBOSOMAL PROTEIN L18

Chain O:



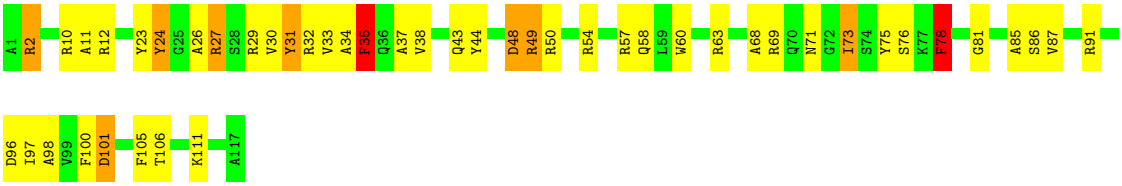
• Molecule 26: 50S RIBOSOMAL PROTEIN L19

Chain P:



• Molecule 27: 50S RIBOSOMAL PROTEIN L20

Chain Q:

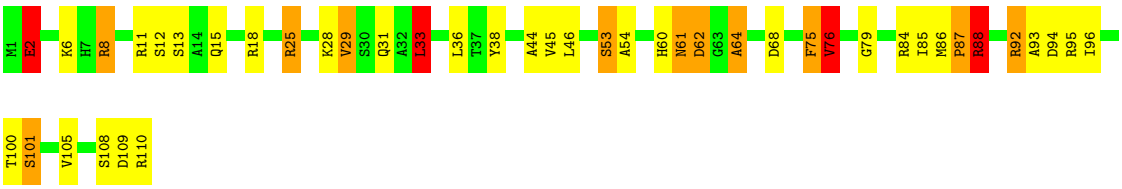


• Molecule 28: 50S RIBOSOMAL PROTEIN L21

Chain R:

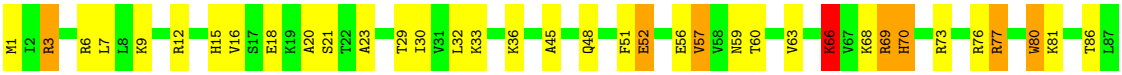
• Molecule 29: 50S RIBOSOMAL PROTEIN L22

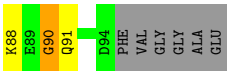
Chain S:



• Molecule 30: 50S RIBOSOMAL PROTEIN L23

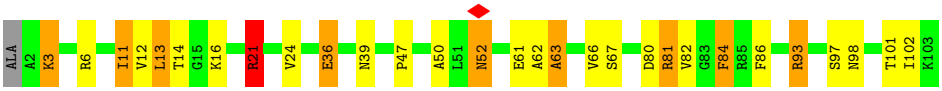
Chain T:





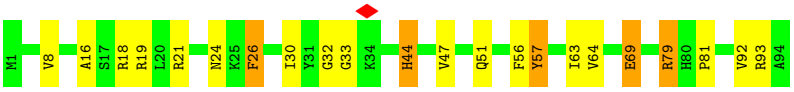
• Molecule 31: 50S RIBOSOMAL PROTEIN L24

Chain U:



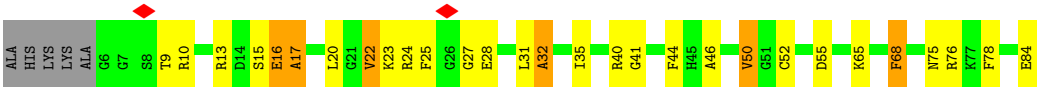
• Molecule 32: 50S RIBOSOMAL PROTEIN L25

Chain W:



• Molecule 33: 50S RIBOSOMAL PROTEIN L27

Chain Y:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	102814	Depositor
Resolution determination method	Not provided	
CTF correction method	INDIVIDUAL PARTICLES	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	59000	Depositor
Image detector	FEI EAGLE (4k x 4k)	Depositor
Maximum map value	0.191	Depositor
Minimum map value	-0.046	Depositor
Average map value	0.002	Depositor
Map value standard deviation	0.016	Depositor
Recommended contour level	0.045	Depositor
Map size (Å)	384.0, 384.0, 384.0	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.5, 1.5, 1.5	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	0	1.91	12/635 (1.9%)	2.26	26/848 (3.1%)
2	1	1.71	3/510 (0.6%)	1.90	8/677 (1.2%)
3	2	1.85	8/453 (1.8%)	1.91	10/605 (1.7%)
4	3	1.79	6/450 (1.3%)	2.16	16/599 (2.7%)
5	4	1.66	1/417 (0.2%)	1.93	5/556 (0.9%)
6	5	1.69	15/1748 (0.9%)	1.91	38/2355 (1.6%)
7	6	1.86	6/380 (1.6%)	2.24	15/498 (3.0%)
8	7	1.76	6/513 (1.2%)	1.99	14/676 (2.1%)
9	8	1.77	4/303 (1.3%)	1.84	3/397 (0.8%)
10	9	1.75	31/2584 (1.2%)	2.10	81/3487 (2.3%)
11	A	3.31	347/2744 (12.6%)	3.75	664/4276 (15.5%)
12	B	3.41	9451/69796 (13.5%)	3.79	16403/108888 (15.1%)
13	C	1.82	28/2122 (1.3%)	2.15	58/2854 (2.0%)
14	D	1.74	16/1586 (1.0%)	1.95	36/2134 (1.7%)
15	E	1.77	16/1571 (1.0%)	2.04	50/2113 (2.4%)
16	F	1.79	13/1444 (0.9%)	2.00	35/1937 (1.8%)
17	G	1.72	7/1336 (0.5%)	1.90	26/1805 (1.4%)
18	H	1.80	17/1122 (1.5%)	2.05	42/1515 (2.8%)
19	I	1.61	4/497 (0.8%)	1.98	9/662 (1.4%)
20	J	1.74	7/1152 (0.6%)	2.02	42/1551 (2.7%)
21	K	1.77	10/941 (1.1%)	2.00	29/1260 (2.3%)
22	L	1.81	17/1054 (1.6%)	2.02	32/1403 (2.3%)
23	M	1.84	20/1093 (1.8%)	1.97	26/1460 (1.8%)
24	N	1.80	11/974 (1.1%)	2.02	28/1303 (2.1%)
25	O	1.79	9/902 (1.0%)	2.02	28/1209 (2.3%)
26	P	1.77	9/929 (1.0%)	2.06	24/1242 (1.9%)
27	Q	1.81	11/960 (1.1%)	2.20	45/1278 (3.5%)
28	R	1.78	9/829 (1.1%)	2.04	24/1107 (2.2%)
29	S	1.83	13/864 (1.5%)	2.05	31/1156 (2.7%)
30	T	1.69	4/745 (0.5%)	2.01	22/996 (2.2%)
31	U	1.71	5/764 (0.7%)	1.86	11/1019 (1.1%)
32	W	1.76	8/766 (1.0%)	1.92	13/1025 (1.3%)
33	Y	1.76	5/603 (0.8%)	2.03	15/797 (1.9%)
All	All	3.02	10129/102787 (9.9%)	3.41	17909/153688 (11.7%)

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	0	0	2
2	1	0	2
3	2	0	1
4	3	0	2
5	4	0	2
6	5	0	3
7	6	0	6
8	7	0	3
9	8	0	1
10	9	0	27
11	A	0	55
12	B	0	1482
13	C	0	9
14	D	0	4
15	E	0	5
16	F	0	6
17	G	0	4
18	H	0	2
20	J	0	6
21	K	0	7
22	L	0	2
23	M	0	7
24	N	0	7
25	O	0	5
26	P	0	3
27	Q	0	4
28	R	0	5
29	S	0	3
30	T	0	2
31	U	0	2
32	W	0	3
33	Y	0	3
All	All	0	1675

All (10129) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2225	A	N7-C5	-20.53	1.26	1.39
12	B	2105	U	C2-N3	19.07	1.51	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1853	A	N7-C5	-18.25	1.28	1.39
12	B	548	G	N7-C5	-17.75	1.28	1.39
12	B	1501	G	C6-N1	17.64	1.51	1.39
12	B	2308	G	N7-C5	-17.58	1.28	1.39
12	B	1496	A	N7-C5	-17.48	1.28	1.39
12	B	895	U	C2-N3	17.16	1.49	1.37
12	B	2291	U	C2-N3	17.16	1.49	1.37
12	B	1872	A	N7-C5	17.08	1.49	1.39
12	B	2733	A	N7-C5	-16.79	1.29	1.39
12	B	190	A	N7-C5	-16.70	1.29	1.39
12	B	1784	A	N7-C5	-16.66	1.29	1.39
12	B	2020	A	N7-C5	-16.59	1.29	1.39
12	B	2430	A	N7-C5	-16.51	1.29	1.39
12	B	1808	A	N7-C5	-16.08	1.29	1.39
12	B	2598	A	N7-C5	-16.06	1.29	1.39
12	B	2761	A	N7-C5	-15.98	1.29	1.39
12	B	1465	G	C6-N1	15.95	1.50	1.39
12	B	2853	C	N1-C6	15.94	1.46	1.37
12	B	812	C	N1-C6	15.92	1.46	1.37
12	B	91	A	N3-C4	-15.85	1.25	1.34
12	B	547	A	N7-C5	-15.83	1.29	1.39
12	B	1098	A	N7-C5	-15.81	1.29	1.39
12	B	2452	C	N1-C6	15.78	1.46	1.37
12	B	1612	C	N1-C6	15.69	1.46	1.37
12	B	1586	A	N7-C5	-15.66	1.29	1.39
12	B	636	G	C2-N3	15.49	1.45	1.32
12	B	2378	A	N3-C4	-15.39	1.25	1.34
12	B	2217	G	N7-C5	-15.35	1.30	1.39
12	B	1336	A	N7-C5	-15.30	1.30	1.39
12	B	2108	A	N7-C5	-15.27	1.30	1.39
12	B	821	A	N7-C5	-15.25	1.30	1.39
12	B	891	G	N9-C4	-15.21	1.25	1.38
12	B	384	A	N9-C4	15.12	1.47	1.37
11	A	55	U	C2-N3	15.10	1.48	1.37
12	B	538	A	N9-C4	-15.09	1.28	1.37
12	B	727	A	N9-C4	-15.07	1.28	1.37
12	B	676	A	N3-C4	-15.06	1.25	1.34
12	B	342	A	N7-C5	-14.97	1.30	1.39
12	B	1384	A	N7-C5	-14.95	1.30	1.39
12	B	878	A	N3-C4	-14.89	1.25	1.34
12	B	2288	A	C6-N6	14.88	1.45	1.33
12	B	2530	A	N7-C5	-14.88	1.30	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1211	C	N1-C6	14.86	1.46	1.37
12	B	280	U	N3-C4	14.84	1.51	1.38
12	B	605	G	N7-C5	-14.82	1.30	1.39
12	B	1538	G	C2-N3	14.81	1.44	1.32
12	B	2518	A	N7-C5	-14.81	1.30	1.39
12	B	1377	G	N7-C5	-14.78	1.30	1.39
12	B	63	A	N7-C5	-14.75	1.30	1.39
12	B	843	G	N9-C8	14.72	1.48	1.37
12	B	2808	G	N7-C5	-14.67	1.30	1.39
12	B	450	G	C8-N7	-14.66	1.22	1.30
12	B	2049	G	N1-C2	14.65	1.49	1.37
12	B	1969	A	N7-C5	-14.64	1.30	1.39
12	B	30	G	N7-C5	-14.58	1.30	1.39
12	B	30	G	C2-N3	14.53	1.44	1.32
12	B	1676	A	N7-C5	-14.44	1.30	1.39
12	B	1678	A	C6-N6	14.41	1.45	1.33
12	B	1211	C	N3-C4	14.38	1.44	1.33
12	B	819	A	N7-C5	-14.36	1.30	1.39
12	B	1988	G	C5-C4	14.22	1.48	1.38
12	B	2789	C	N1-C6	14.22	1.45	1.37
12	B	2215	C	N1-C6	-14.21	1.28	1.37
12	B	2731	G	N9-C4	-14.21	1.26	1.38
12	B	2122	U	C2-N3	14.18	1.47	1.37
12	B	2303	G	N7-C5	-14.14	1.30	1.39
12	B	943	A	N9-C4	-14.11	1.29	1.37
12	B	2238	G	N7-C5	-14.11	1.30	1.39
12	B	374	A	N7-C5	-14.04	1.30	1.39
12	B	682	G	C6-N1	14.02	1.49	1.39
12	B	442	G	C2-N3	13.97	1.44	1.32
12	B	2834	G	N7-C5	-13.89	1.30	1.39
12	B	2587	A	N7-C5	-13.89	1.30	1.39
12	B	1641	A	N9-C4	-13.84	1.29	1.37
12	B	1878	G	C2-N3	13.83	1.43	1.32
12	B	1580	A	N7-C5	-13.81	1.30	1.39
12	B	2429	G	C2-N3	13.78	1.43	1.32
12	B	267	C	N1-C6	13.77	1.45	1.37
12	B	1816	C	N1-C6	13.76	1.45	1.37
12	B	2748	A	C6-N1	13.76	1.45	1.35
12	B	515	A	C8-N7	-13.76	1.22	1.31
12	B	953	G	N7-C5	-13.72	1.31	1.39
12	B	502	A	N7-C5	-13.71	1.31	1.39
12	B	2228	G	N9-C8	13.69	1.47	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1743	G	C2-N3	13.69	1.43	1.32
12	B	2224	G	C6-N1	13.69	1.49	1.39
12	B	44	A	N7-C5	-13.68	1.31	1.39
11	A	13	G	C8-N7	-13.67	1.22	1.30
12	B	705	A	C8-N7	-13.66	1.22	1.31
12	B	1948	G	N1-C2	13.65	1.48	1.37
12	B	750	A	N7-C5	-13.64	1.31	1.39
12	B	2800	A	C6-N6	13.63	1.44	1.33
12	B	2051	A	N7-C5	-13.61	1.31	1.39
12	B	1316	U	C2-N3	13.61	1.47	1.37
12	B	2711	A	N7-C5	-13.60	1.31	1.39
12	B	1357	C	N3-C4	13.59	1.43	1.33
12	B	1429	G	N7-C5	-13.58	1.31	1.39
12	B	2677	G	N7-C5	-13.58	1.31	1.39
12	B	505	A	N7-C5	-13.57	1.31	1.39
12	B	2093	G	N7-C5	-13.56	1.31	1.39
12	B	410	G	C2-N3	13.48	1.43	1.32
12	B	727	A	N3-C4	-13.48	1.26	1.34
12	B	370	G	N9-C8	-13.47	1.28	1.37
12	B	2784	U	C2-N3	13.46	1.47	1.37
12	B	1969	A	N9-C4	-13.46	1.29	1.37
12	B	1364	G	N7-C5	-13.40	1.31	1.39
12	B	152	A	N7-C5	13.40	1.47	1.39
12	B	2851	A	C6-N1	13.39	1.45	1.35
12	B	781	A	N7-C5	-13.34	1.31	1.39
12	B	2899	A	C5-C4	13.34	1.48	1.38
12	B	1666	G	N7-C5	-13.32	1.31	1.39
12	B	272	A	C6-N6	13.31	1.44	1.33
12	B	2879	A	N3-C4	-13.30	1.26	1.34
11	A	51	G	N3-C4	13.27	1.44	1.35
11	A	7	G	C2-N3	13.25	1.43	1.32
12	B	329	G	C2-N3	13.17	1.43	1.32
12	B	2732	G	N7-C5	-13.16	1.31	1.39
12	B	930	G	C5-C4	13.14	1.47	1.38
12	B	2114	A	N7-C5	-13.14	1.31	1.39
11	A	15	A	C8-N7	-13.13	1.22	1.31
12	B	1342	A	N7-C5	-13.12	1.31	1.39
12	B	697	G	C8-N7	-13.12	1.23	1.30
12	B	2174	C	C4-N4	13.10	1.45	1.33
12	B	478	A	N7-C5	-13.09	1.31	1.39
12	B	535	G	C6-N1	13.09	1.48	1.39
12	B	1679	A	P-O5'	-13.04	1.46	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1695	G	C2-N2	13.03	1.47	1.34
12	B	875	G	N9-C4	-13.02	1.27	1.38
12	B	2055	C	C2'-C1'	-13.02	1.39	1.53
12	B	980	A	N7-C5	-12.99	1.31	1.39
12	B	2838	G	N7-C5	-12.94	1.31	1.39
12	B	998	C	N1-C6	12.93	1.45	1.37
12	B	71	A	N7-C5	-12.92	1.31	1.39
12	B	513	A	N7-C5	-12.92	1.31	1.39
12	B	2018	G	C4'-C3'	-12.91	1.39	1.53
12	B	654	A	N3-C4	12.90	1.42	1.34
12	B	1745	A	N7-C5	-12.90	1.31	1.39
12	B	1059	G	C6-N1	12.88	1.48	1.39
12	B	364	C	N3-C4	12.85	1.43	1.33
12	B	1699	G	C6-N1	12.84	1.48	1.39
12	B	1913	A	N9-C4	-12.79	1.30	1.37
12	B	186	G	N7-C5	-12.79	1.31	1.39
12	B	381	G	N1-C2	12.78	1.48	1.37
12	B	2250	G	N7-C5	-12.72	1.31	1.39
12	B	1721	G	N7-C5	-12.71	1.31	1.39
12	B	194	G	C8-N7	-12.66	1.23	1.30
12	B	2640	G	C8-N7	12.66	1.38	1.30
12	B	676	A	N7-C5	-12.66	1.31	1.39
12	B	665	U	N3-C4	12.66	1.49	1.38
12	B	15	G	C2-N3	12.64	1.42	1.32
12	B	89	A	N3-C4	-12.64	1.27	1.34
12	B	2732	G	C8-N7	-12.63	1.23	1.30
12	B	625	G	C2-N3	12.63	1.42	1.32
12	B	1432	G	N7-C5	-12.63	1.31	1.39
12	B	1613	G	C8-N7	-12.62	1.23	1.30
12	B	1201	U	C2-N3	12.61	1.46	1.37
12	B	1124	G	C2-N3	12.61	1.42	1.32
12	B	474	G	C6-N1	12.59	1.48	1.39
12	B	961	C	N1-C6	12.58	1.44	1.37
12	B	1139	G	N7-C5	-12.57	1.31	1.39
12	B	1630	A	N7-C5	-12.57	1.31	1.39
12	B	181	A	N7-C5	-12.54	1.31	1.39
12	B	540	C	C2-N3	12.54	1.45	1.35
12	B	2430	A	N9-C4	12.53	1.45	1.37
12	B	1429	G	C2-N3	12.53	1.42	1.32
12	B	1809	A	N7-C5	-12.52	1.31	1.39
12	B	874	G	N7-C5	-12.51	1.31	1.39
12	B	1247	A	N9-C4	12.50	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1422	G	N9-C8	12.48	1.46	1.37
12	B	1689	A	N7-C5	-12.47	1.31	1.39
12	B	327	G	C6-N1	12.46	1.48	1.39
12	B	1144	A	C6-N6	12.45	1.44	1.33
12	B	2078	C	N3-C4	12.45	1.42	1.33
12	B	899	A	C6-N1	12.45	1.44	1.35
12	B	1811	G	N7-C5	-12.45	1.31	1.39
12	B	1817	G	C2-N3	12.44	1.42	1.32
12	B	2582	G	C6-N1	12.43	1.48	1.39
12	B	2727	A	N7-C5	-12.41	1.31	1.39
12	B	778	G	N7-C5	-12.36	1.31	1.39
12	B	1285	A	C5-C4	12.35	1.47	1.38
12	B	1897	G	C2-N3	12.35	1.42	1.32
12	B	2309	A	N7-C5	-12.35	1.31	1.39
12	B	1179	G	N1-C2	12.31	1.47	1.37
12	B	912	C	C4-N4	12.30	1.45	1.33
12	B	2835	A	N7-C5	-12.30	1.31	1.39
12	B	497	A	N7-C5	-12.29	1.31	1.39
12	B	960	A	C6-N6	12.29	1.43	1.33
12	B	51	G	N7-C5	-12.28	1.31	1.39
12	B	54	G	N1-C2	12.27	1.47	1.37
12	B	73	A	N7-C5	-12.25	1.31	1.39
12	B	1001	A	N7-C5	-12.25	1.31	1.39
12	B	1138	G	C2-N3	12.24	1.42	1.32
12	B	300	A	N7-C5	-12.24	1.31	1.39
12	B	1735	A	N7-C5	-12.23	1.31	1.39
12	B	1011	G	N3-C4	-12.21	1.26	1.35
12	B	2735	G	N1-C2	12.21	1.47	1.37
12	B	733	G	P-O5'	-12.21	1.47	1.59
12	B	2054	A	N7-C5	-12.19	1.31	1.39
12	B	1310	G	N7-C5	-12.19	1.31	1.39
12	B	146	A	C6-N1	12.18	1.44	1.35
12	B	2346	A	N7-C5	-12.17	1.31	1.39
12	B	1668	A	N7-C5	-12.16	1.31	1.39
12	B	1858	A	N7-C5	-12.15	1.31	1.39
12	B	1916	A	C6-N6	12.11	1.43	1.33
12	B	561	G	N3-C4	-12.10	1.26	1.35
12	B	2424	C	N3-C4	12.10	1.42	1.33
12	B	2353	G	N7-C5	-12.09	1.31	1.39
12	B	889	C	N3-C4	12.08	1.42	1.33
12	B	2027	G	N9-C8	-12.07	1.29	1.37
11	A	23	G	N1-C2	12.06	1.47	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1199	U	C2-N3	12.05	1.46	1.37
12	B	2044	C	N3-C4	12.04	1.42	1.33
12	B	1354	A	N3-C4	-12.04	1.27	1.34
12	B	1899	A	N9-C4	-12.04	1.30	1.37
12	B	2550	G	N9-C8	12.04	1.46	1.37
12	B	339	U	P-O5'	-12.03	1.47	1.59
12	B	270	A	N7-C5	12.02	1.46	1.39
12	B	946	C	N3-C4	12.00	1.42	1.33
12	B	2731	G	N7-C5	-11.98	1.32	1.39
12	B	2121	G	N3-C4	-11.96	1.27	1.35
12	B	1254	A	O3'-P	-11.95	1.46	1.61
12	B	1667	G	C2-N3	11.95	1.42	1.32
12	B	2082	A	N7-C5	-11.94	1.32	1.39
12	B	2297	A	N7-C5	-11.93	1.32	1.39
12	B	1544	A	N3-C4	-11.92	1.27	1.34
12	B	733	G	C6-N1	11.91	1.47	1.39
12	B	2369	A	N9-C4	-11.91	1.30	1.37
12	B	2725	A	N3-C4	-11.91	1.27	1.34
12	B	1504	A	N7-C5	-11.91	1.32	1.39
12	B	2264	C	C4-C5	-11.89	1.33	1.43
12	B	2467	C	P-O5'	-11.89	1.47	1.59
12	B	1894	C	N1-C6	11.88	1.44	1.37
12	B	908	C	N1-C6	11.87	1.44	1.37
12	B	1272	A	N3-C4	-11.85	1.27	1.34
12	B	1952	A	N3-C4	11.85	1.42	1.34
12	B	1096	A	N3-C4	-11.84	1.27	1.34
12	B	1750	G	C6-N1	11.81	1.47	1.39
12	B	152	A	N9-C4	11.80	1.45	1.37
12	B	1543	G	C2-N3	11.78	1.42	1.32
12	B	1733	G	C2-N3	11.77	1.42	1.32
12	B	2510	C	P-O5'	-11.77	1.48	1.59
12	B	1477	A	C6-N6	11.76	1.43	1.33
12	B	354	A	N7-C5	-11.74	1.32	1.39
12	B	2295	C	N3-C4	11.73	1.42	1.33
12	B	1598	A	N9-C4	11.72	1.44	1.37
12	B	1277	G	N9-C4	-11.71	1.28	1.38
12	B	2631	G	C6-N1	11.70	1.47	1.39
12	B	2365	G	N3-C4	-11.70	1.27	1.35
12	B	221	A	N7-C5	-11.69	1.32	1.39
12	B	1457	U	C2-N3	11.68	1.46	1.37
12	B	2763	G	C6-N1	11.67	1.47	1.39
12	B	2886	A	C6-N6	11.67	1.43	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2519	U	C2-N3	11.67	1.46	1.37
12	B	1566	A	N7-C5	-11.66	1.32	1.39
12	B	2156	G	N7-C5	-11.66	1.32	1.39
12	B	1553	A	C2'-C1'	-11.65	1.40	1.53
12	B	2223	G	C6-N1	11.65	1.47	1.39
12	B	287	G	C2-N3	11.65	1.42	1.32
12	B	2207	C	N3-C4	11.63	1.42	1.33
12	B	1134	A	N3-C4	11.63	1.41	1.34
12	B	1944	U	C2-N3	11.62	1.45	1.37
12	B	449	A	N7-C5	-11.62	1.32	1.39
12	B	959	A	N9-C4	11.62	1.44	1.37
12	B	54	G	N7-C5	-11.62	1.32	1.39
12	B	2650	U	P-O5'	-11.61	1.48	1.59
12	B	2669	G	N1-C2	11.61	1.47	1.37
12	B	1516	G	N7-C5	-11.60	1.32	1.39
12	B	1803	A	N7-C5	-11.59	1.32	1.39
12	B	1301	A	N7-C5	-11.59	1.32	1.39
12	B	1377	G	C2-N3	11.58	1.42	1.32
12	B	442	G	C6-N1	11.57	1.47	1.39
12	B	1952	A	N9-C4	11.56	1.44	1.37
12	B	2896	C	N1-C6	11.56	1.44	1.37
12	B	376	G	N3-C4	-11.54	1.27	1.35
12	B	1651	G	C2-N3	11.54	1.42	1.32
12	B	1717	A	P-O5'	-11.54	1.48	1.59
12	B	1080	A	N7-C5	-11.53	1.32	1.39
12	B	1355	G	C2-N3	11.53	1.42	1.32
12	B	1008	A	C6-N6	11.53	1.43	1.33
12	B	144	A	C6-N6	11.52	1.43	1.33
12	B	576	U	C2'-C1'	-11.52	1.40	1.53
12	B	1483	G	C6-N1	-11.51	1.31	1.39
12	B	1809	A	N9-C4	-11.51	1.30	1.37
12	B	689	A	N9-C8	-11.50	1.28	1.37
12	B	875	G	N7-C5	11.50	1.46	1.39
12	B	1702	G	C8-N7	-11.50	1.24	1.30
12	B	1552	A	N7-C5	-11.50	1.32	1.39
12	B	2737	G	N7-C5	-11.49	1.32	1.39
12	B	2059	A	C6-N6	11.49	1.43	1.33
12	B	1674	G	N7-C5	11.47	1.46	1.39
12	B	1405	U	C2-N3	11.46	1.45	1.37
12	B	977	G	N7-C5	-11.45	1.32	1.39
12	B	1280	G	C6-N1	11.46	1.47	1.39
12	B	2154	A	N7-C5	-11.45	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	82	U	C2-N3	11.44	1.45	1.37
11	A	107	G	C2-N3	11.44	1.41	1.32
12	B	96	C	N1-C6	11.43	1.44	1.37
12	B	202	U	C2-N3	11.43	1.45	1.37
12	B	1271	G	N1-C2	11.42	1.46	1.37
12	B	2534	A	N1-C2	11.42	1.44	1.34
12	B	1115	G	N9-C4	-11.42	1.28	1.38
12	B	715	A	C6-N6	11.42	1.43	1.33
12	B	1609	A	N9-C4	11.42	1.44	1.37
12	B	2756	U	C2-N3	11.42	1.45	1.37
12	B	119	A	C8-N7	-11.41	1.23	1.31
12	B	619	G	C2-N3	11.39	1.41	1.32
12	B	770	G	C6-N1	11.38	1.47	1.39
12	B	2277	G	C2-N3	11.38	1.41	1.32
12	B	1034	G	N7-C5	-11.38	1.32	1.39
12	B	1452	G	C6-N1	11.38	1.47	1.39
12	B	1637	A	P-O5'	-11.37	1.48	1.59
12	B	1722	A	N3-C4	-11.36	1.28	1.34
12	B	2560	A	C8-N7	-11.36	1.23	1.31
12	B	958	U	C2-N3	11.36	1.45	1.37
12	B	647	G	C8-N7	-11.35	1.24	1.30
12	B	1345	C	N3-C4	11.34	1.41	1.33
12	B	1689	A	C5-C6	-11.34	1.30	1.41
12	B	1232	G	N7-C5	-11.34	1.32	1.39
12	B	1373	A	N7-C5	-11.34	1.32	1.39
12	B	2337	G	P-O5'	11.33	1.71	1.59
12	B	826	U	C2-N3	11.32	1.45	1.37
12	B	2546	U	P-O5'	-11.32	1.48	1.59
12	B	2675	A	N9-C4	11.30	1.44	1.37
12	B	1253	A	C6-N6	11.29	1.43	1.33
12	B	1746	A	N3-C4	-11.29	1.28	1.34
12	B	1846	G	C5-C4	11.29	1.46	1.38
11	A	106	G	C5-C4	11.28	1.46	1.38
12	B	1587	G	C5-C4	11.28	1.46	1.38
12	B	2053	G	N3-C4	11.28	1.43	1.35
12	B	552	U	C2'-C1'	-11.27	1.41	1.53
12	B	1964	G	C2-N3	11.27	1.41	1.32
12	B	1347	A	N7-C5	-11.27	1.32	1.39
11	A	60	C	C4-N4	11.27	1.44	1.33
12	B	456	C	N3-C4	11.26	1.41	1.33
12	B	2029	G	C2-N2	11.26	1.45	1.34
12	B	101	A	N3-C4	-11.25	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1273	U	N1-C2	11.25	1.48	1.38
12	B	1829	A	C6-N6	11.25	1.43	1.33
12	B	1325	U	C2-N3	11.24	1.45	1.37
12	B	1822	C	N3-C4	11.24	1.41	1.33
12	B	2880	C	P-O5'	-11.24	1.48	1.59
12	B	1542	U	C2-N3	11.24	1.45	1.37
12	B	1860	G	C6-N1	11.24	1.47	1.39
12	B	261	G	N1-C2	11.22	1.46	1.37
12	B	136	G	N7-C5	-11.22	1.32	1.39
12	B	869	G	C6-N1	11.22	1.47	1.39
12	B	345	A	N3-C4	-11.21	1.28	1.34
12	B	563	A	N3-C4	-11.21	1.28	1.34
12	B	2786	U	N3-C4	11.21	1.48	1.38
12	B	160	A	N3-C4	-11.20	1.28	1.34
12	B	487	C	N3-C4	11.20	1.41	1.33
12	B	2072	C	N3-C4	11.20	1.41	1.33
12	B	2745	C	N1-C6	11.20	1.43	1.37
12	B	1151	A	N9-C4	-11.19	1.31	1.37
12	B	1324	G	N7-C5	-11.20	1.32	1.39
12	B	479	A	N9-C8	-11.19	1.28	1.37
12	B	2674	G	N1-C2	11.19	1.46	1.37
12	B	1707	G	C5-C6	-11.19	1.31	1.42
12	B	947	A	C5-C4	-11.18	1.30	1.38
11	A	71	C	P-O5'	-11.18	1.48	1.59
12	B	1239	G	N1-C2	11.17	1.46	1.37
12	B	2688	G	N3-C4	-11.17	1.27	1.35
12	B	2526	G	N9-C8	11.16	1.45	1.37
12	B	689	A	N3-C4	11.16	1.41	1.34
12	B	2770	G	C2-N3	11.15	1.41	1.32
12	B	2085	U	C2-N3	11.14	1.45	1.37
12	B	1528	A	N3-C4	-11.13	1.28	1.34
12	B	415	A	N9-C4	-11.13	1.31	1.37
12	B	1679	A	C6-N6	11.12	1.42	1.33
12	B	2856	A	N7-C5	-11.11	1.32	1.39
12	B	492	A	N3-C4	11.11	1.41	1.34
12	B	1017	G	N7-C5	-11.11	1.32	1.39
12	B	1649	G	N7-C5	-11.10	1.32	1.39
12	B	191	A	C6-N6	11.09	1.42	1.33
12	B	1997	C	C4-N4	11.08	1.44	1.33
12	B	2168	G	C2-N3	11.08	1.41	1.32
12	B	2067	G	C5'-C4'	11.08	1.64	1.51
12	B	2590	A	C6-N1	11.07	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	87	U	N3-C4	11.07	1.48	1.38
12	B	122	G	C2-N3	11.06	1.41	1.32
12	B	1175	A	N7-C5	-11.06	1.32	1.39
12	B	2332	C	N1-C6	11.06	1.43	1.37
12	B	2638	G	C2-N3	11.06	1.41	1.32
12	B	2204	G	C2-N3	11.05	1.41	1.32
12	B	2430	A	N3-C4	-11.05	1.28	1.34
12	B	1677	A	C2'-C1'	-11.04	1.41	1.53
12	B	626	A	N7-C5	-11.04	1.32	1.39
12	B	2325	G	N1-C2	11.03	1.46	1.37
12	B	1093	G	N9-C4	-11.03	1.29	1.38
12	B	1490	A	N9-C4	-11.03	1.31	1.37
12	B	638	G	C6-N1	11.03	1.47	1.39
12	B	1087	G	C2-N3	11.03	1.41	1.32
12	B	1431	A	N7-C5	-11.02	1.32	1.39
12	B	1577	C	N3-C4	11.02	1.41	1.33
12	B	1501	G	N7-C5	-11.02	1.32	1.39
12	B	2691	C	N3-C4	11.02	1.41	1.33
12	B	14	A	N7-C5	-11.01	1.32	1.39
12	B	374	A	N9-C4	-11.00	1.31	1.37
12	B	2645	G	N7-C5	-11.00	1.32	1.39
12	B	101	A	C6-N6	10.99	1.42	1.33
12	B	1835	G	N1-C2	10.99	1.46	1.37
12	B	2545	G	N3-C4	10.98	1.43	1.35
12	B	832	U	C2-N3	10.97	1.45	1.37
12	B	2822	G	P-O5'	-10.97	1.48	1.59
11	A	16	G	C8-N7	-10.97	1.24	1.30
12	B	98	G	C2-N3	10.97	1.41	1.32
12	B	1401	G	N7-C5	-10.97	1.32	1.39
12	B	272	A	N7-C5	-10.96	1.32	1.39
12	B	841	G	C2-N3	10.95	1.41	1.32
12	B	1331	G	N7-C5	-10.95	1.32	1.39
12	B	2898	U	C2-N3	10.94	1.45	1.37
12	B	2574	G	N1-C2	10.94	1.46	1.37
12	B	2747	G	N7-C5	-10.94	1.32	1.39
12	B	1713	A	N7-C5	-10.93	1.32	1.39
12	B	2495	G	N1-C2	10.93	1.46	1.37
12	B	1977	A	C2'-C1'	-10.93	1.41	1.53
12	B	58	G	N7-C5	-10.92	1.32	1.39
12	B	332	A	N9-C4	10.92	1.44	1.37
12	B	2082	A	C6-N1	10.91	1.43	1.35
12	B	2593	U	C2-N3	10.89	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2719	G	N3-C4	-10.89	1.27	1.35
12	B	1648	U	O3'-P	-10.88	1.48	1.61
12	B	2502	G	N3-C4	10.88	1.43	1.35
12	B	363	G	N7-C5	-10.88	1.32	1.39
12	B	905	A	C6-N6	10.88	1.42	1.33
12	B	1368	G	N9-C8	-10.88	1.30	1.37
12	B	2077	A	C6-N1	10.88	1.43	1.35
12	B	2270	A	N1-C2	10.88	1.44	1.34
12	B	443	A	C6-N1	10.87	1.43	1.35
12	B	1401	G	N1-C2	10.87	1.46	1.37
12	B	2047	C	N3-C4	10.86	1.41	1.33
12	B	2458	G	N1-C2	10.86	1.46	1.37
12	B	2770	G	N7-C5	-10.86	1.32	1.39
11	A	59	A	C2'-C1'	-10.86	1.41	1.53
12	B	1236	G	C8-N7	-10.85	1.24	1.30
12	B	146	A	N7-C5	-10.84	1.32	1.39
12	B	413	C	N1-C6	-10.84	1.30	1.37
12	B	1549	A	N7-C5	-10.83	1.32	1.39
12	B	1685	C	C4-C5	10.82	1.51	1.43
12	B	85	G	P-O5'	-10.82	1.49	1.59
12	B	2404	U	C4-C5	10.81	1.53	1.43
12	B	55	G	N7-C5	-10.81	1.32	1.39
12	B	2107	G	C6-N1	10.81	1.47	1.39
12	B	1259	G	C6-N1	10.80	1.47	1.39
12	B	914	G	N7-C5	-10.80	1.32	1.39
12	B	470	A	N9-C4	-10.80	1.31	1.37
12	B	2648	G	C6-N1	10.79	1.47	1.39
12	B	517	C	N3-C4	10.79	1.41	1.33
12	B	1545	A	C6-N1	10.79	1.43	1.35
12	B	2708	G	N1-C2	10.79	1.46	1.37
12	B	2074	U	C2'-C1'	-10.78	1.41	1.53
12	B	1269	A	N7-C5	-10.78	1.32	1.39
12	B	2740	A	N3-C4	-10.77	1.28	1.34
12	B	48	G	N1-C2	10.77	1.46	1.37
12	B	854	C	N3-C4	10.76	1.41	1.33
12	B	1103	A	N7-C5	-10.76	1.32	1.39
12	B	1158	C	N3-C4	10.76	1.41	1.33
12	B	1332	G	N1-C2	10.75	1.46	1.37
12	B	149	A	C6-N1	10.74	1.43	1.35
12	B	795	C	C4-N4	10.74	1.43	1.33
12	B	861	A	N7-C5	-10.74	1.32	1.39
11	A	24	G	C2-N3	10.74	1.41	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1291	C	N1-C6	10.73	1.43	1.37
12	B	2874	C	N1-C6	10.73	1.43	1.37
11	A	100	G	N1-C2	10.73	1.46	1.37
12	B	1530	G	C8-N7	10.72	1.37	1.30
12	B	187	G	C2-N3	10.72	1.41	1.32
12	B	918	A	C2'-C1'	-10.72	1.41	1.53
12	B	1112	G	C2-N3	10.72	1.41	1.32
12	B	2502	G	C6-N1	10.72	1.47	1.39
12	B	2097	A	C8-N7	-10.71	1.24	1.31
12	B	612	G	C8-N7	10.70	1.37	1.30
12	B	2469	A	C6-N6	10.70	1.42	1.33
12	B	450	G	C4'-C3'	10.69	1.65	1.53
12	B	340	A	N7-C5	-10.69	1.32	1.39
12	B	818	G	N7-C5	-10.69	1.32	1.39
12	B	2694	G	C2-N3	10.69	1.41	1.32
12	B	2669	G	C8-N7	-10.69	1.24	1.30
12	B	2678	C	C4-C5	-10.69	1.34	1.43
12	B	604	G	C2-N3	10.68	1.41	1.32
12	B	2126	A	C6-N1	10.68	1.43	1.35
12	B	2260	C	C4-C5	10.67	1.51	1.43
12	B	1641	A	N3-C4	-10.67	1.28	1.34
12	B	881	G	C5-C4	-10.66	1.30	1.38
12	B	1191	G	C6-N1	10.66	1.47	1.39
12	B	1338	G	N7-C5	-10.66	1.32	1.39
12	B	2047	C	N1-C6	-10.66	1.30	1.37
12	B	2682	A	N7-C5	-10.66	1.32	1.39
12	B	556	A	N7-C5	-10.65	1.32	1.39
12	B	944	C	C4-N4	10.65	1.43	1.33
12	B	1257	C	N1-C6	10.65	1.43	1.37
12	B	247	G	N7-C5	-10.64	1.32	1.39
12	B	76	C	C2'-C1'	-10.63	1.41	1.53
12	B	2876	G	N7-C5	-10.63	1.32	1.39
12	B	1009	A	C6-N6	10.63	1.42	1.33
12	B	721	A	N9-C4	10.63	1.44	1.37
12	B	1445	G	N9-C8	10.62	1.45	1.37
12	B	861	A	C8-N7	-10.62	1.24	1.31
12	B	1018	U	C2-N3	10.62	1.45	1.37
12	B	586	A	N7-C5	-10.62	1.32	1.39
12	B	1196	C	N1-C6	10.62	1.43	1.37
12	B	551	G	N7-C5	-10.61	1.32	1.39
11	A	63	C	P-O5'	-10.61	1.49	1.59
12	B	2382	G	C2'-C1'	-10.61	1.41	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1990	C	N1-C6	10.60	1.43	1.37
12	B	2171	A	N7-C5	-10.60	1.32	1.39
12	B	1459	G	C2-N3	10.60	1.41	1.32
12	B	1456	G	C6-N1	10.59	1.47	1.39
12	B	1277	G	C2'-C1'	-10.59	1.41	1.53
12	B	192	C	N3-C4	10.58	1.41	1.33
12	B	1739	A	N3-C4	10.58	1.41	1.34
12	B	367	G	C6-N1	10.58	1.47	1.39
12	B	1051	G	C2-N3	10.58	1.41	1.32
12	B	2678	C	C2-N3	10.58	1.44	1.35
12	B	1140	C	C2'-C1'	-10.57	1.41	1.53
12	B	1835	G	C6-N1	10.57	1.47	1.39
12	B	2385	C	N1-C6	10.57	1.43	1.37
12	B	1517	G	C2-N3	10.57	1.41	1.32
12	B	2820	A	C5-C4	10.56	1.46	1.38
12	B	120	U	C2-N3	10.56	1.45	1.37
12	B	1631	G	C8-N7	-10.56	1.24	1.30
12	B	640	C	N3-C4	10.56	1.41	1.33
12	B	1089	A	C6-N6	10.55	1.42	1.33
12	B	361	G	N7-C5	-10.54	1.32	1.39
12	B	1454	C	C4-N4	10.54	1.43	1.33
12	B	2239	G	C6-N1	10.54	1.47	1.39
12	B	198	C	N1-C6	10.53	1.43	1.37
12	B	1414	C	N3-C4	10.53	1.41	1.33
12	B	2190	G	C8-N7	-10.53	1.24	1.30
12	B	256	A	C2'-C1'	-10.52	1.41	1.53
12	B	1610	A	N7-C5	-10.52	1.32	1.39
12	B	1130	U	C2-N3	10.52	1.45	1.37
12	B	1959	G	C6-N1	10.52	1.47	1.39
12	B	2463	C	N1-C6	-10.52	1.30	1.37
12	B	698	C	N3-C4	10.51	1.41	1.33
12	B	485	C	C4-N4	10.50	1.43	1.33
12	B	97	C	P-O5'	-10.50	1.49	1.59
12	B	1488	C	N1-C6	10.50	1.43	1.37
12	B	1826	G	N7-C5	-10.49	1.32	1.39
12	B	2216	G	N7-C5	-10.49	1.32	1.39
12	B	557	C	N1-C6	10.49	1.43	1.37
12	B	2464	G	C2-N3	10.49	1.41	1.32
12	B	422	A	C6-N1	10.49	1.42	1.35
12	B	620	G	C5-C4	10.49	1.45	1.38
12	B	910	A	C6-N6	10.49	1.42	1.33
12	B	2462	C	C2-N3	10.48	1.44	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1071	G	C2-N3	10.47	1.41	1.32
12	B	1391	U	O4'-C1'	-10.47	1.28	1.41
12	B	815	C	N3-C4	10.47	1.41	1.33
12	B	442	G	C2'-C1'	-10.46	1.41	1.53
12	B	1383	A	C6-N1	10.46	1.42	1.35
12	B	1351	C	N1-C6	10.46	1.43	1.37
12	B	380	G	C5-C4	10.46	1.45	1.38
12	B	466	A	N7-C5	-10.45	1.32	1.39
12	B	233	A	C6-N6	10.45	1.42	1.33
12	B	462	C	N3-C4	10.45	1.41	1.33
12	B	70	G	C5-C4	10.45	1.45	1.38
12	B	1441	G	C8-N7	10.44	1.37	1.30
12	B	2090	A	N7-C5	-10.44	1.32	1.39
12	B	2885	G	C5'-C4'	10.43	1.63	1.51
12	B	661	A	C8-N7	-10.43	1.24	1.31
12	B	2700	A	N7-C5	-10.43	1.32	1.39
12	B	1323	C	C2-N3	10.43	1.44	1.35
12	B	1501	G	N1-C2	10.42	1.46	1.37
12	B	2762	C	N3-C4	10.42	1.41	1.33
12	B	2693	G	N1-C2	10.42	1.46	1.37
12	B	26	G	N9-C8	10.41	1.45	1.37
12	B	865	C	N1-C6	-10.41	1.30	1.37
12	B	1171	G	P-O5'	-10.41	1.49	1.59
12	B	342	A	C5-C4	10.41	1.46	1.38
12	B	1308	A	N7-C5	-10.40	1.33	1.39
12	B	2564	A	C6-N1	10.39	1.42	1.35
12	B	310	A	C6-N6	10.39	1.42	1.33
12	B	2461	A	P-O5'	-10.39	1.49	1.59
12	B	266	G	C2-N3	10.39	1.41	1.32
12	B	1773	A	N3-C4	-10.39	1.28	1.34
12	B	486	C	C4-N4	10.37	1.43	1.33
12	B	722	A	C6-N1	10.37	1.42	1.35
12	B	2279	G	N1-C2	10.36	1.46	1.37
12	B	2020	A	C5-C4	10.36	1.46	1.38
12	B	2556	C	N3-C4	10.36	1.41	1.33
12	B	2390	U	C2-N3	10.36	1.45	1.37
12	B	177	G	C6-N1	10.35	1.46	1.39
12	B	1804	C	N3-C4	10.35	1.41	1.33
12	B	1525	A	C6-N1	10.34	1.42	1.35
12	B	1136	G	C6-N1	10.34	1.46	1.39
12	B	2284	A	O3'-P	-10.34	1.48	1.61
12	B	1995	U	C2-N3	10.32	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1802	A	N7-C5	-10.31	1.33	1.39
11	A	47	C	N3-C4	10.31	1.41	1.33
12	B	194	G	N1-C2	10.31	1.46	1.37
12	B	1075	C	C4-N4	10.31	1.43	1.33
12	B	1175	A	C5-C4	10.31	1.46	1.38
12	B	2362	C	N1-C6	10.31	1.43	1.37
12	B	2764	A	C2'-C1'	-10.31	1.42	1.53
12	B	405	U	N3-C4	10.31	1.47	1.38
12	B	2847	U	C2-N3	10.30	1.45	1.37
12	B	1063	G	C8-N7	10.30	1.37	1.30
12	B	1075	C	N3-C4	10.29	1.41	1.33
12	B	2260	C	N1-C6	10.29	1.43	1.37
12	B	2397	G	C5-C4	10.29	1.45	1.38
12	B	1166	G	N7-C5	10.29	1.45	1.39
12	B	246	C	N3-C4	10.29	1.41	1.33
12	B	726	G	C8-N7	-10.29	1.24	1.30
12	B	2609	U	C2-N3	10.28	1.45	1.37
12	B	1147	A	N7-C5	-10.28	1.33	1.39
12	B	501	A	C6-N1	10.28	1.42	1.35
12	B	1048	A	C5-C4	-10.28	1.31	1.38
12	B	1888	G	N9-C8	10.28	1.45	1.37
12	B	1754	A	C6-N6	10.27	1.42	1.33
12	B	805	G	N9-C8	10.27	1.45	1.37
12	B	1277	G	C2-N3	10.26	1.41	1.32
12	B	1697	G	C2-N3	10.26	1.41	1.32
12	B	2399	G	C8-N7	-10.26	1.24	1.30
12	B	40	U	C5'-C4'	10.26	1.63	1.51
12	B	1131	G	C8-N7	-10.25	1.24	1.30
12	B	2406	A	C2'-C1'	-10.25	1.42	1.53
12	B	2382	G	C5-C4	-10.25	1.31	1.38
12	B	1510	G	N9-C8	10.24	1.45	1.37
12	B	1978	A	C6-N6	10.24	1.42	1.33
12	B	1985	C	C2-N3	10.24	1.44	1.35
11	A	15	A	N7-C5	-10.24	1.33	1.39
12	B	899	A	N7-C5	-10.22	1.33	1.39
12	B	651	G	C6-N1	10.22	1.46	1.39
12	B	1166	G	N9-C8	10.22	1.45	1.37
12	B	2811	G	N7-C5	-10.22	1.33	1.39
11	A	14	U	N3-C4	10.22	1.47	1.38
12	B	939	G	C2-N3	10.21	1.41	1.32
12	B	396	G	C2'-C1'	-10.21	1.42	1.53
12	B	800	A	C3'-C2'	10.21	1.64	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2744	G	N1-C2	10.21	1.46	1.37
12	B	1598	A	N7-C5	-10.20	1.33	1.39
12	B	107	G	N1-C2	10.20	1.46	1.37
12	B	603	A	C6-N6	10.19	1.42	1.33
11	A	117	G	N9-C8	-10.19	1.30	1.37
12	B	1103	A	N9-C4	10.19	1.44	1.37
12	B	1687	G	N7-C5	-10.19	1.33	1.39
12	B	295	G	N1-C2	10.19	1.45	1.37
12	B	2859	G	N7-C5	-10.18	1.33	1.39
12	B	979	A	C2'-C1'	-10.18	1.42	1.53
12	B	2386	A	C6-N1	10.18	1.42	1.35
12	B	2851	A	N7-C5	-10.17	1.33	1.39
11	A	44	G	C6-N1	10.17	1.46	1.39
12	B	2302	U	N3-C4	10.16	1.47	1.38
12	B	2439	A	N9-C4	10.16	1.44	1.37
12	B	2828	G	C2'-C1'	-10.15	1.42	1.53
12	B	842	U	C4'-C3'	-10.14	1.42	1.53
12	B	1344	U	C2'-C1'	-10.13	1.42	1.53
12	B	1485	U	C4-C5	10.13	1.52	1.43
12	B	2563	U	N3-C4	10.13	1.47	1.38
12	B	2846	G	C2-N3	10.13	1.40	1.32
12	B	205	G	C6-N1	10.13	1.46	1.39
12	B	628	G	C6-N1	10.12	1.46	1.39
12	B	54	G	N3-C4	10.12	1.42	1.35
12	B	1448	G	C6-N1	10.12	1.46	1.39
12	B	2500	U	C2-N3	10.11	1.44	1.37
12	B	226	A	C6-N1	10.11	1.42	1.35
12	B	2018	G	C5-C4	-10.11	1.31	1.38
12	B	1248	G	C2-N2	10.11	1.44	1.34
12	B	2230	G	N3-C4	-10.11	1.28	1.35
12	B	2569	G	N9-C4	-10.11	1.29	1.38
12	B	2091	C	N1-C6	-10.10	1.31	1.37
12	B	2330	G	N9-C8	10.10	1.45	1.37
12	B	2715	C	N3-C4	10.10	1.41	1.33
12	B	2366	A	N7-C5	-10.10	1.33	1.39
12	B	2819	G	N1-C2	10.10	1.45	1.37
12	B	1449	G	N7-C5	-10.10	1.33	1.39
12	B	631	A	N7-C5	10.09	1.45	1.39
12	B	1076	C	C4-N4	10.09	1.43	1.33
12	B	1692	U	N3-C4	10.09	1.47	1.38
12	B	723	C	N3-C4	10.08	1.41	1.33
12	B	1443	U	C2'-C1'	-10.07	1.42	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1733	G	C6-N1	10.07	1.46	1.39
12	B	27	G	C8-N7	-10.07	1.25	1.30
12	B	1918	A	N7-C5	-10.06	1.33	1.39
12	B	2467	C	N1-C6	10.06	1.43	1.37
12	B	345	A	C6-N1	10.05	1.42	1.35
12	B	963	U	P-O5'	-10.05	1.49	1.59
12	B	1572	A	C6-N1	10.05	1.42	1.35
12	B	1437	C	N3-C4	10.05	1.41	1.33
12	B	2031	A	N9-C8	-10.05	1.29	1.37
12	B	2895	G	P-O5'	-10.05	1.49	1.59
12	B	1613	G	P-O5'	-10.04	1.49	1.59
12	B	126	A	C8-N7	-10.04	1.24	1.31
11	A	113	C	N3-C4	10.03	1.41	1.33
12	B	559	G	N7-C5	-10.04	1.33	1.39
12	B	2608	G	C2-N3	10.03	1.40	1.32
12	B	1666	G	C2'-C1'	-10.03	1.42	1.53
12	B	1117	C	P-O5'	-10.03	1.49	1.59
12	B	2046	G	C2-N3	10.03	1.40	1.32
12	B	1852	U	P-O5'	-10.02	1.49	1.59
12	B	2225	A	O3'-P	-10.02	1.49	1.61
12	B	880	G	C6-N1	10.02	1.46	1.39
12	B	1677	A	N9-C4	-10.02	1.31	1.37
12	B	751	A	C6-N1	10.01	1.42	1.35
12	B	389	G	C2'-C1'	-10.01	1.42	1.53
12	B	2591	C	C4-C5	10.01	1.50	1.43
12	B	213	A	N9-C4	-10.01	1.31	1.37
12	B	1242	U	O3'-P	-10.01	1.49	1.61
12	B	351	C	N3-C4	10.00	1.41	1.33
12	B	1157	G	C8-N7	-10.00	1.25	1.30
12	B	17	G	N7-C5	-10.00	1.33	1.39
12	B	1250	G	N7-C5	-9.99	1.33	1.39
12	B	2516	A	C6-N1	9.99	1.42	1.35
12	B	1776	G	N7-C5	-9.99	1.33	1.39
12	B	150	U	C4-C5	9.99	1.52	1.43
12	B	2205	A	C6-N6	9.98	1.42	1.33
12	B	2574	G	C5-C4	-9.97	1.31	1.38
12	B	2472	G	N3-C4	-9.96	1.28	1.35
12	B	1495	A	C8-N7	-9.96	1.24	1.31
12	B	504	A	N9-C4	9.95	1.43	1.37
12	B	1642	G	C5-C4	9.95	1.45	1.38
12	B	2018	G	C2-N2	9.95	1.44	1.34
12	B	785	G	C2-N3	9.95	1.40	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2638	G	N7-C5	9.95	1.45	1.39
12	B	1157	G	C2-N3	9.95	1.40	1.32
12	B	667	U	N3-C4	9.94	1.47	1.38
12	B	1335	C	N3-C4	9.94	1.41	1.33
12	B	2100	G	C2-N3	9.94	1.40	1.32
12	B	1845	G	P-O5'	-9.94	1.49	1.59
12	B	356	G	C6-N1	9.93	1.46	1.39
12	B	808	G	C8-N7	-9.92	1.25	1.30
12	B	1320	C	C5-C6	9.92	1.42	1.34
12	B	892	A	N9-C8	-9.91	1.29	1.37
12	B	557	C	C2-N3	9.91	1.43	1.35
12	B	1273	U	C4-C5	-9.91	1.34	1.43
12	B	2576	G	N9-C8	-9.91	1.30	1.37
12	B	23	G	C6-N1	9.90	1.46	1.39
12	B	209	C	N1-C6	9.90	1.43	1.37
12	B	903	C	N3-C4	9.90	1.40	1.33
12	B	2208	C	C4-N4	9.90	1.42	1.33
12	B	263	G	N3-C4	-9.90	1.28	1.35
12	B	670	A	C6-N6	9.90	1.41	1.33
12	B	677	A	C6-N1	9.90	1.42	1.35
12	B	1356	G	N1-C2	9.89	1.45	1.37
12	B	2684	U	P-O5'	-9.89	1.49	1.59
12	B	1280	G	N3-C4	-9.88	1.28	1.35
12	B	2041	U	C2-N3	9.87	1.44	1.37
12	B	252	G	N3-C4	-9.87	1.28	1.35
12	B	1645	G	N7-C5	-9.87	1.33	1.39
12	B	1416	G	C5-C4	9.87	1.45	1.38
12	B	2407	A	N7-C5	-9.87	1.33	1.39
12	B	1436	G	N1-C2	9.87	1.45	1.37
12	B	1739	A	C6-N1	9.87	1.42	1.35
12	B	2318	G	N7-C5	-9.87	1.33	1.39
12	B	1077	A	C6-N6	9.86	1.41	1.33
12	B	2751	G	C2-N3	9.86	1.40	1.32
12	B	942	G	N7-C5	-9.86	1.33	1.39
11	A	112	G	O3'-P	-9.85	1.49	1.61
12	B	1907	G	C2-N3	9.85	1.40	1.32
12	B	2156	G	C5'-C4'	9.85	1.63	1.51
12	B	2214	C	N1-C6	-9.85	1.31	1.37
12	B	1938	A	C5-C4	9.85	1.45	1.38
12	B	1594	U	N3-C4	9.85	1.47	1.38
12	B	1810	A	N7-C5	-9.84	1.33	1.39
12	B	2196	C	C4-N4	9.84	1.42	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2857	G	N3-C4	-9.84	1.28	1.35
12	B	2445	G	C2-N3	9.84	1.40	1.32
12	B	420	C	N3-C4	9.84	1.40	1.33
12	B	2067	G	N7-C5	-9.84	1.33	1.39
12	B	121	G	N9-C8	9.83	1.44	1.37
12	B	1363	C	N3-C4	9.83	1.40	1.33
12	B	2005	A	C6-N1	9.83	1.42	1.35
12	B	2813	A	C2'-C1'	-9.83	1.42	1.53
12	B	682	G	N9-C8	-9.83	1.30	1.37
12	B	1831	G	N1-C2	9.82	1.45	1.37
12	B	277	G	C6-N1	9.82	1.46	1.39
12	B	2615	U	P-O5'	-9.82	1.50	1.59
12	B	2599	G	N7-C5	9.81	1.45	1.39
12	B	442	G	N9-C8	-9.81	1.30	1.37
12	B	1651	G	N1-C2	9.81	1.45	1.37
12	B	1147	A	N1-C2	-9.81	1.25	1.34
12	B	1448	G	N3-C4	9.81	1.42	1.35
12	B	2780	G	C2-N3	9.81	1.40	1.32
12	B	2826	A	N9-C4	-9.80	1.31	1.37
12	B	1790	C	N3-C4	9.80	1.40	1.33
12	B	758	C	N1-C6	9.80	1.43	1.37
12	B	543	G	P-O5'	-9.80	1.50	1.59
12	B	1677	A	C6-N6	9.80	1.41	1.33
12	B	71	A	C6-N1	9.79	1.42	1.35
12	B	869	G	N9-C8	9.79	1.44	1.37
12	B	1568	G	C6-N1	9.79	1.46	1.39
12	B	2430	A	C2-N3	9.79	1.42	1.33
12	B	2875	C	C4-N4	9.79	1.42	1.33
11	A	53	A	N7-C5	-9.78	1.33	1.39
12	B	1924	C	C4'-O4'	9.78	1.58	1.45
12	B	318	C	C4-N4	9.78	1.42	1.33
12	B	989	G	C6-N1	9.78	1.46	1.39
12	B	1333	G	C8-N7	-9.77	1.25	1.30
12	B	2311	A	N7-C5	-9.77	1.33	1.39
12	B	19	A	N9-C4	-9.76	1.31	1.37
12	B	565	C	N1-C6	9.76	1.43	1.37
12	B	1893	C	N3-C4	9.76	1.40	1.33
12	B	922	C	C4-N4	9.76	1.42	1.33
12	B	1281	G	N9-C8	9.76	1.44	1.37
11	A	49	C	N1-C6	-9.75	1.31	1.37
12	B	475	C	N1-C6	9.75	1.43	1.37
12	B	775	G	C5-C4	9.75	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	862	G	N1-C2	9.75	1.45	1.37
12	B	1169	A	C6-N6	9.75	1.41	1.33
12	B	2570	G	N7-C5	-9.75	1.33	1.39
12	B	538	A	C8-N7	-9.74	1.24	1.31
12	B	2360	G	C8-N7	9.74	1.36	1.30
12	B	778	G	C6-N1	9.74	1.46	1.39
12	B	1101	U	N3-C4	9.74	1.47	1.38
11	A	20	G	N9-C4	-9.74	1.30	1.38
12	B	256	A	N7-C5	-9.74	1.33	1.39
12	B	334	C	C2-N3	9.73	1.43	1.35
12	B	1861	G	C2-N3	9.72	1.40	1.32
12	B	260	G	C8-N7	9.72	1.36	1.30
12	B	329	G	N9-C8	-9.72	1.31	1.37
12	B	381	G	C6-N1	9.72	1.46	1.39
12	B	1543	G	N7-C5	-9.72	1.33	1.39
12	B	294	A	N7-C5	-9.72	1.33	1.39
12	B	553	G	C2-N3	9.72	1.40	1.32
12	B	1032	A	C5-C4	-9.72	1.31	1.38
12	B	493	G	C6-N1	9.71	1.46	1.39
12	B	2542	A	N7-C5	-9.71	1.33	1.39
12	B	2234	G	N7-C5	-9.70	1.33	1.39
11	A	108	A	N9-C4	9.70	1.43	1.37
12	B	725	G	C5-C6	9.70	1.52	1.42
12	B	938	G	C6-N1	9.70	1.46	1.39
12	B	1124	G	C8-N7	9.70	1.36	1.30
12	B	2432	A	C6-N6	9.69	1.41	1.33
12	B	494	G	N9-C8	9.69	1.44	1.37
12	B	1068	G	C6-N1	9.69	1.46	1.39
12	B	2635	A	N7-C5	-9.69	1.33	1.39
12	B	1780	A	N9-C4	9.68	1.43	1.37
12	B	2649	C	N3-C4	9.68	1.40	1.33
12	B	2661	G	C2-N3	9.68	1.40	1.32
12	B	1202	G	C6-N1	9.67	1.46	1.39
12	B	2881	U	N3-C4	9.67	1.47	1.38
12	B	1903	G	C5'-C4'	9.67	1.62	1.51
12	B	2369	A	N7-C5	-9.67	1.33	1.39
12	B	1263	U	N3-C4	9.67	1.47	1.38
11	A	116	G	C2'-C1'	-9.66	1.42	1.53
12	B	1674	G	N1-C2	9.66	1.45	1.37
12	B	778	G	C5'-C4'	9.66	1.62	1.51
12	B	1607	C	C4-N4	9.66	1.42	1.33
12	B	149	A	O3'-P	-9.66	1.49	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	70	G	C6-N1	9.65	1.46	1.39
12	B	2675	A	N3-C4	-9.65	1.29	1.34
12	B	146	A	C2'-C1'	-9.65	1.42	1.53
12	B	526	A	C6-N1	-9.65	1.28	1.35
12	B	2358	A	C6-N1	9.65	1.42	1.35
12	B	2335	A	C6-N6	9.65	1.41	1.33
12	B	2015	A	C5'-C4'	9.64	1.62	1.51
12	B	1501	G	N9-C8	-9.64	1.31	1.37
12	B	798	G	C6-N1	9.64	1.46	1.39
12	B	776	G	C6-N1	9.63	1.46	1.39
12	B	863	A	N7-C5	-9.63	1.33	1.39
12	B	1381	G	C2'-C1'	-9.63	1.42	1.53
12	B	613	A	N7-C5	-9.63	1.33	1.39
12	B	2011	U	N1-C6	9.63	1.46	1.38
12	B	2350	C	C4-N4	9.63	1.42	1.33
12	B	408	G	N9-C4	-9.63	1.30	1.38
12	B	1773	A	C6-N1	9.63	1.42	1.35
12	B	522	A	C2'-C1'	-9.62	1.42	1.53
12	B	1304	A	N9-C4	-9.62	1.32	1.37
12	B	1863	G	C2'-C1'	-9.62	1.42	1.53
12	B	134	G	C2-N3	9.61	1.40	1.32
12	B	2590	A	C6-N6	9.61	1.41	1.33
12	B	698	C	N1-C6	9.61	1.43	1.37
12	B	118	A	P-O5'	-9.61	1.50	1.59
12	B	263	G	N7-C5	-9.61	1.33	1.39
12	B	1407	G	N1-C2	9.61	1.45	1.37
12	B	563	A	N7-C5	-9.61	1.33	1.39
12	B	1241	A	C2-N3	9.61	1.42	1.33
12	B	1384	A	N3-C4	9.61	1.40	1.34
12	B	1731	G	N1-C2	9.60	1.45	1.37
12	B	415	A	C6-N6	9.60	1.41	1.33
12	B	2082	A	C8-N7	-9.60	1.24	1.31
12	B	2181	U	C2-N3	9.60	1.44	1.37
12	B	412	A	N7-C5	-9.60	1.33	1.39
12	B	2314	A	N9-C4	-9.60	1.32	1.37
12	B	493	G	N7-C5	-9.59	1.33	1.39
12	B	1949	G	N9-C4	-9.59	1.30	1.38
12	B	2408	U	N3-C4	9.59	1.47	1.38
12	B	1975	G	N9-C8	9.59	1.44	1.37
12	B	523	C	C2'-C1'	-9.59	1.42	1.53
12	B	1010	A	P-O5'	-9.59	1.50	1.59
12	B	2170	A	C5-C4	9.59	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	417	C	N3-C4	9.58	1.40	1.33
12	B	482	A	C2'-C1'	-9.58	1.42	1.53
12	B	1369	G	C5-C4	9.58	1.45	1.38
12	B	644	A	N7-C5	-9.58	1.33	1.39
12	B	1050	A	C6-N1	9.57	1.42	1.35
12	B	2205	A	N7-C5	-9.57	1.33	1.39
12	B	1968	G	N7-C5	-9.57	1.33	1.39
11	A	24	G	P-O5'	-9.57	1.50	1.59
12	B	1403	A	N9-C4	9.57	1.43	1.37
12	B	2198	A	N9-C4	9.57	1.43	1.37
12	B	300	A	C6-N6	9.57	1.41	1.33
12	B	151	C	C4-N4	9.56	1.42	1.33
12	B	294	A	C8-N7	-9.56	1.24	1.31
12	B	2035	G	C5-C6	-9.56	1.32	1.42
12	B	83	A	N3-C4	-9.56	1.29	1.34
12	B	310	A	C5-C4	9.56	1.45	1.38
11	A	56	G	C2-N3	9.55	1.40	1.32
12	B	2741	A	C6-N1	9.55	1.42	1.35
12	B	2885	G	C6-N1	9.55	1.46	1.39
12	B	317	G	N1-C2	9.55	1.45	1.37
12	B	329	G	N1-C2	9.55	1.45	1.37
12	B	1445	G	C8-N7	-9.55	1.25	1.30
12	B	538	A	C6-N6	9.55	1.41	1.33
12	B	2526	G	N3-C4	-9.54	1.28	1.35
12	B	1499	C	C4-C5	9.54	1.50	1.43
12	B	1881	C	N1-C6	9.54	1.42	1.37
12	B	1118	C	P-O5'	-9.54	1.50	1.59
12	B	1262	A	N7-C5	-9.54	1.33	1.39
12	B	1364	G	C2-N3	9.53	1.40	1.32
12	B	2003	A	N7-C5	-9.53	1.33	1.39
12	B	357	C	N1-C6	9.53	1.42	1.37
12	B	473	G	N7-C5	-9.53	1.33	1.39
12	B	248	G	C2-N3	9.53	1.40	1.32
12	B	310	A	C5'-C4'	9.53	1.62	1.51
12	B	344	A	N7-C5	-9.53	1.33	1.39
12	B	2230	G	N1-C2	9.53	1.45	1.37
12	B	116	C	C4-N4	9.53	1.42	1.33
12	B	2375	G	N1-C2	9.53	1.45	1.37
12	B	712	G	N7-C5	-9.52	1.33	1.39
12	B	817	C	N3-C4	9.52	1.40	1.33
12	B	2315	G	C6-N1	9.52	1.46	1.39
11	A	81	G	C6-N1	9.51	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	959	A	C6-N6	9.51	1.41	1.33
12	B	1032	A	C6-N6	9.51	1.41	1.33
12	B	1919	A	C6-N6	9.51	1.41	1.33
12	B	2200	C	C4-C5	9.51	1.50	1.43
12	B	2275	C	N3-C4	9.51	1.40	1.33
12	B	93	G	N7-C5	-9.51	1.33	1.39
12	B	1356	G	C6-N1	9.51	1.46	1.39
12	B	1190	G	C2-N3	9.50	1.40	1.32
12	B	533	G	C5-C4	9.50	1.45	1.38
12	B	1112	G	N7-C5	-9.50	1.33	1.39
12	B	833	A	C6-N1	9.50	1.42	1.35
12	B	1367	A	C8-N7	9.50	1.38	1.31
12	B	480	A	N9-C4	-9.49	1.32	1.37
12	B	265	A	N3-C4	-9.49	1.29	1.34
12	B	2887	A	N9-C4	9.49	1.43	1.37
12	B	1393	A	N9-C8	9.49	1.45	1.37
12	B	1910	G	N1-C2	9.49	1.45	1.37
12	B	2771	C	N1-C6	9.48	1.42	1.37
12	B	1633	G	N9-C8	-9.48	1.31	1.37
12	B	1929	G	N7-C5	-9.48	1.33	1.39
12	B	1002	G	N7-C5	-9.48	1.33	1.39
12	B	313	G	N7-C5	-9.47	1.33	1.39
12	B	83	A	C6-N6	9.47	1.41	1.33
12	B	542	C	C4-N4	9.47	1.42	1.33
12	B	1749	A	C6-N1	9.47	1.42	1.35
12	B	2850	A	N7-C5	-9.47	1.33	1.39
12	B	1652	A	N7-C5	-9.47	1.33	1.39
12	B	1855	U	C2-N3	9.47	1.44	1.37
12	B	328	U	C2-N3	9.46	1.44	1.37
12	B	765	C	N1-C6	9.46	1.42	1.37
12	B	1299	G	N7-C5	-9.46	1.33	1.39
12	B	2373	G	C6-N1	9.46	1.46	1.39
12	B	41	C	N3-C4	9.46	1.40	1.33
12	B	2420	C	C2'-C1'	-9.46	1.43	1.53
12	B	855	G	N9-C8	-9.45	1.31	1.37
12	B	2169	A	N7-C5	-9.45	1.33	1.39
12	B	462	C	N1-C6	-9.45	1.31	1.37
12	B	582	A	N7-C5	-9.45	1.33	1.39
12	B	1675	C	C4-N4	9.45	1.42	1.33
12	B	1669	A	N9-C4	9.44	1.43	1.37
12	B	1133	A	C4'-C3'	9.44	1.63	1.53
12	B	2032	G	C2'-C1'	-9.44	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	149	A	N7-C5	-9.44	1.33	1.39
12	B	1504	A	C6-N1	9.44	1.42	1.35
12	B	1464	G	C2-N3	9.44	1.40	1.32
12	B	2334	U	N3-C4	9.43	1.47	1.38
12	B	1937	A	N7-C5	-9.43	1.33	1.39
12	B	874	G	N3-C4	-9.43	1.28	1.35
12	B	2855	C	C4-N4	9.43	1.42	1.33
12	B	2543	G	C6-N1	9.42	1.46	1.39
12	B	921	C	N3-C4	9.42	1.40	1.33
12	B	1678	A	P-O5'	-9.42	1.50	1.59
12	B	1850	G	C5-C4	9.42	1.45	1.38
12	B	2497	A	C8-N7	-9.42	1.25	1.31
12	B	1054	A	C5-C4	9.41	1.45	1.38
12	B	1504	A	C2'-C1'	-9.41	1.43	1.53
12	B	2054	A	N9-C4	9.41	1.43	1.37
12	B	2679	A	C8-N7	-9.41	1.25	1.31
12	B	2801	G	N1-C2	9.41	1.45	1.37
12	B	560	C	N1-C6	9.40	1.42	1.37
12	B	2277	G	C5-C4	9.40	1.45	1.38
12	B	510	C	C4-C5	9.40	1.50	1.43
12	B	1969	A	N9-C8	-9.40	1.30	1.37
12	B	2617	U	C4-C5	-9.40	1.35	1.43
12	B	2660	A	C4'-C3'	9.40	1.63	1.53
11	A	59	A	N9-C4	9.39	1.43	1.37
12	B	1889	A	C5-C6	-9.39	1.32	1.41
12	B	2479	U	O4'-C1'	9.39	1.53	1.41
12	B	2550	G	C2-N3	9.39	1.40	1.32
12	B	2818	U	C2-N3	9.39	1.44	1.37
12	B	695	G	C6-N1	9.38	1.46	1.39
12	B	1969	A	N3-C4	-9.38	1.29	1.34
12	B	2450	A	C2'-C1'	-9.38	1.43	1.53
12	B	1595	C	N3-C4	9.37	1.40	1.33
12	B	975	A	C6-N1	9.37	1.42	1.35
12	B	2378	A	N9-C4	9.37	1.43	1.37
12	B	191	A	N7-C5	-9.37	1.33	1.39
12	B	890	C	N1-C6	9.37	1.42	1.37
12	B	1676	A	C8-N7	-9.37	1.25	1.31
12	B	2100	G	P-O5'	-9.37	1.50	1.59
12	B	2662	A	C6-N6	9.37	1.41	1.33
12	B	1708	C	P-O5'	-9.36	1.50	1.59
12	B	2037	A	C5-C4	-9.36	1.32	1.38
12	B	1095	A	N7-C5	-9.36	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1536	C	N1-C6	9.36	1.42	1.37
12	B	960	A	N9-C8	-9.36	1.30	1.37
12	B	1065	U	C2-N3	9.36	1.44	1.37
12	B	1315	C	C2'-C1'	-9.36	1.43	1.53
12	B	1723	G	N7-C5	-9.36	1.33	1.39
12	B	844	A	C6-N6	9.35	1.41	1.33
12	B	1206	G	C4'-C3'	9.35	1.63	1.53
12	B	2148	G	C6-N1	9.35	1.46	1.39
12	B	360	U	C2-N3	9.34	1.44	1.37
12	B	1466	U	N3-C4	9.34	1.46	1.38
12	B	762	U	N1-C2	9.34	1.47	1.38
12	B	820	A	C5'-C4'	9.34	1.62	1.51
12	B	1218	G	N3-C4	-9.34	1.28	1.35
12	B	2178	C	N1-C6	9.34	1.42	1.37
12	B	291	G	N9-C8	9.34	1.44	1.37
12	B	1522	A	N9-C4	-9.34	1.32	1.37
12	B	1797	G	C2-N3	9.33	1.40	1.32
12	B	2136	G	P-O5'	-9.33	1.50	1.59
12	B	1831	G	C2-N3	9.32	1.40	1.32
12	B	2071	A	C6-N6	9.32	1.41	1.33
12	B	2724	U	C4-C5	9.32	1.51	1.43
12	B	315	G	C6-N1	9.32	1.46	1.39
12	B	2008	C	N3-C4	9.31	1.40	1.33
12	B	2172	U	C2-N3	9.31	1.44	1.37
12	B	1196	C	C2'-C1'	-9.31	1.43	1.53
12	B	1488	C	C4'-C3'	9.31	1.63	1.53
12	B	2031	A	C6-N1	9.31	1.42	1.35
12	B	481	G	C6-N1	9.31	1.46	1.39
12	B	1303	G	N7-C5	-9.30	1.33	1.39
12	B	1131	G	C2-N3	9.30	1.40	1.32
12	B	308	G	N1-C2	9.30	1.45	1.37
12	B	1381	G	C6-N1	9.30	1.46	1.39
12	B	2764	A	N7-C5	-9.30	1.33	1.39
12	B	1252	G	C2-N3	9.29	1.40	1.32
12	B	2184	A	C6-N1	9.29	1.42	1.35
12	B	2814	A	C6-N1	9.29	1.42	1.35
12	B	1193	G	C8-N7	-9.29	1.25	1.30
11	A	40	U	C2-N3	9.29	1.44	1.37
12	B	734	A	C6-N6	9.29	1.41	1.33
12	B	1733	G	P-O5'	-9.29	1.50	1.59
12	B	595	C	N3-C4	9.28	1.40	1.33
12	B	122	G	P-O5'	-9.28	1.50	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1104	C	C5-C6	9.28	1.41	1.34
12	B	223	A	N3-C4	-9.28	1.29	1.34
12	B	1650	A	C6-N6	9.28	1.41	1.33
11	A	56	G	N1-C2	9.27	1.45	1.37
12	B	320	A	C6-N1	9.27	1.42	1.35
12	B	759	G	N7-C5	-9.27	1.33	1.39
12	B	1267	U	P-O5'	-9.27	1.50	1.59
12	B	1289	C	C5-C6	-9.27	1.26	1.34
12	B	648	G	C2-N3	9.27	1.40	1.32
12	B	1802	A	C6-N6	9.27	1.41	1.33
12	B	1166	G	C2'-C1'	-9.26	1.43	1.53
12	B	857	G	N9-C8	9.26	1.44	1.37
12	B	1470	A	C6-N6	9.26	1.41	1.33
12	B	316	C	N3-C4	9.26	1.40	1.33
12	B	998	C	C2-N3	9.26	1.43	1.35
12	B	488	G	N1-C2	9.25	1.45	1.37
12	B	2104	C	C2-N3	9.25	1.43	1.35
12	B	2199	A	N7-C5	-9.25	1.33	1.39
12	B	2736	A	N7-C5	-9.25	1.33	1.39
12	B	845	A	C8-N7	-9.25	1.25	1.31
12	B	458	G	N1-C2	9.25	1.45	1.37
12	B	1529	G	C6-N1	9.25	1.46	1.39
12	B	906	U	N1-C6	9.25	1.46	1.38
12	B	2126	A	N7-C5	-9.25	1.33	1.39
12	B	2610	C	C2'-C1'	-9.25	1.43	1.53
12	B	1945	G	C3'-C2'	-9.24	1.42	1.52
12	B	1455	G	N1-C2	9.24	1.45	1.37
12	B	2090	A	C3'-C2'	-9.24	1.42	1.52
12	B	1913	A	C6-N6	9.24	1.41	1.33
12	B	1918	A	C8-N7	-9.24	1.25	1.31
12	B	1857	G	N9-C4	9.23	1.45	1.38
12	B	1458	U	C5'-C4'	9.23	1.62	1.51
12	B	2406	A	N7-C5	-9.23	1.33	1.39
12	B	1848	A	N9-C4	9.22	1.43	1.37
12	B	608	A	N9-C4	9.22	1.43	1.37
12	B	708	G	C6-N1	9.22	1.46	1.39
12	B	1762	A	N7-C5	-9.22	1.33	1.39
12	B	934	U	C4-C5	9.22	1.51	1.43
12	B	1890	A	C3'-C2'	-9.22	1.42	1.52
12	B	2416	C	N3-C4	9.22	1.40	1.33
12	B	1076	C	N3-C4	9.22	1.40	1.33
12	B	1115	G	C2'-C1'	-9.22	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2846	G	C8-N7	-9.22	1.25	1.30
12	B	1803	A	N9-C4	-9.22	1.32	1.37
12	B	1845	G	N9-C4	9.22	1.45	1.38
12	B	1178	C	C5'-C4'	9.22	1.62	1.51
12	B	925	A	N9-C4	-9.21	1.32	1.37
12	B	2088	A	N9-C4	-9.21	1.32	1.37
12	B	1984	G	C6-N1	9.21	1.46	1.39
12	B	2197	U	C2-N3	9.21	1.44	1.37
12	B	1346	G	C5-C4	-9.21	1.31	1.38
12	B	379	G	C8-N7	-9.20	1.25	1.30
12	B	2409	G	C2-N3	9.20	1.40	1.32
12	B	77	G	N7-C5	-9.20	1.33	1.39
12	B	574	A	C2'-C1'	-9.20	1.43	1.53
12	B	2246	G	C8-N7	-9.19	1.25	1.30
3	2	15	ARG	CD-NE	9.19	1.62	1.46
12	B	594	U	N3-C4	9.19	1.46	1.38
12	B	1707	G	C2'-C1'	9.19	1.63	1.53
12	B	252	G	N9-C4	-9.18	1.30	1.38
12	B	556	A	O3'-P	-9.18	1.50	1.61
12	B	1048	A	N7-C5	-9.18	1.33	1.39
12	B	2125	G	C5-C4	9.18	1.44	1.38
12	B	1185	G	C2-N3	9.18	1.40	1.32
12	B	1414	C	N1-C6	9.18	1.42	1.37
12	B	2089	C	N3-C4	9.18	1.40	1.33
12	B	2096	C	P-O5'	-9.18	1.50	1.59
12	B	167	A	C6-N6	9.17	1.41	1.33
12	B	502	A	N9-C4	-9.17	1.32	1.37
12	B	662	G	N9-C8	9.17	1.44	1.37
12	B	816	C	C4-N4	9.17	1.42	1.33
12	B	1972	G	P-O5'	-9.17	1.50	1.59
12	B	1674	G	C2'-C1'	-9.16	1.43	1.53
12	B	2324	U	C2-N3	9.16	1.44	1.37
12	B	2352	A	C6-N6	9.16	1.41	1.33
12	B	2276	G	N7-C5	-9.16	1.33	1.39
12	B	768	G	C4'-C3'	-9.16	1.43	1.53
12	B	1336	A	C6-N6	9.15	1.41	1.33
12	B	2506	U	C4-C5	9.15	1.51	1.43
12	B	166	U	C2-N3	9.15	1.44	1.37
12	B	2803	G	N3-C4	-9.15	1.29	1.35
12	B	1678	A	N3-C4	-9.14	1.29	1.34
12	B	530	G	P-O5'	-9.13	1.50	1.59
12	B	2472	G	C5-C4	9.14	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2597	G	N3-C4	-9.14	1.29	1.35
12	B	550	C	N3-C4	9.13	1.40	1.33
12	B	1455	G	C5-C4	9.13	1.44	1.38
12	B	589	U	C2'-C1'	-9.13	1.43	1.53
12	B	674	G	N9-C8	9.13	1.44	1.37
12	B	720	U	N3-C4	9.13	1.46	1.38
12	B	1374	G	C6-N1	9.13	1.46	1.39
12	B	1966	A	N7-C5	-9.13	1.33	1.39
12	B	2055	C	N1-C6	9.13	1.42	1.37
11	A	64	G	N9-C8	9.13	1.44	1.37
12	B	1483	G	C2-N3	9.12	1.40	1.32
12	B	1618	A	C2-N3	9.12	1.41	1.33
12	B	1266	G	C6-N1	9.12	1.46	1.39
12	B	233	A	N9-C4	9.12	1.43	1.37
12	B	2139	U	C2-N3	9.12	1.44	1.37
12	B	2437	G	N1-C2	9.12	1.45	1.37
12	B	2717	C	C4-C5	9.12	1.50	1.43
12	B	818	G	C6-N1	9.11	1.46	1.39
12	B	1487	U	C2-N3	9.11	1.44	1.37
12	B	1896	G	C5-C4	9.11	1.44	1.38
12	B	1366	A	N7-C5	-9.11	1.33	1.39
12	B	1634	A	O3'-P	-9.11	1.50	1.61
12	B	262	A	N7-C5	-9.10	1.33	1.39
12	B	2138	G	C2-N3	9.10	1.40	1.32
12	B	2407	A	C6-N6	9.10	1.41	1.33
12	B	245	G	C6-N1	9.10	1.46	1.39
12	B	1611	C	C4'-O4'	-9.10	1.33	1.45
12	B	2320	U	C2-N3	9.10	1.44	1.37
12	B	2742	G	C8-N7	-9.10	1.25	1.30
12	B	355	U	C2-N3	9.10	1.44	1.37
12	B	1658	C	C2'-C1'	-9.09	1.43	1.53
12	B	1346	G	C6-N1	9.08	1.46	1.39
12	B	1600	C	C4-C5	9.08	1.50	1.43
12	B	1718	G	C5-C6	-9.08	1.33	1.42
12	B	2877	G	C2-N3	9.08	1.40	1.32
12	B	2474	U	N3-C4	9.08	1.46	1.38
12	B	63	A	C6-N1	9.08	1.42	1.35
12	B	2088	A	C2'-C1'	-9.08	1.43	1.53
12	B	1227	G	C5-C4	9.07	1.44	1.38
12	B	1465	G	N7-C5	9.07	1.44	1.39
12	B	1862	G	C2-N3	9.07	1.40	1.32
12	B	2286	G	C8-N7	9.07	1.36	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	981	A	C6-N6	9.07	1.41	1.33
12	B	1433	A	C6-N6	9.07	1.41	1.33
12	B	2246	G	C5-C6	-9.07	1.33	1.42
12	B	2525	G	C2-N3	9.07	1.40	1.32
12	B	1427	A	C2'-C1'	-9.06	1.43	1.53
11	A	85	G	C2-N2	9.06	1.43	1.34
12	B	330	A	C6-N6	9.06	1.41	1.33
12	B	757	G	C2-N3	9.06	1.40	1.32
12	B	1645	G	C5-C6	-9.06	1.33	1.42
12	B	2570	G	N9-C4	-9.06	1.30	1.38
12	B	1914	C	C4-N4	9.06	1.42	1.33
12	B	639	U	P-O5'	-9.06	1.50	1.59
12	B	176	A	C5-C4	9.05	1.45	1.38
12	B	1069	A	C6-N6	9.05	1.41	1.33
12	B	1410	G	N1-C2	9.05	1.45	1.37
12	B	1980	G	C1'-N9	9.05	1.62	1.48
12	B	269	C	N3-C4	9.05	1.40	1.33
12	B	6	A	C6-N6	9.05	1.41	1.33
12	B	2624	G	C4'-C3'	9.05	1.63	1.53
12	B	2660	A	N7-C5	-9.05	1.33	1.39
12	B	1532	A	N7-C5	-9.05	1.33	1.39
12	B	1899	A	C2'-C1'	-9.04	1.43	1.53
12	B	2688	G	N7-C5	-9.04	1.33	1.39
12	B	1192	G	C2'-C1'	-9.04	1.43	1.53
12	B	2283	C	C2'-C1'	-9.04	1.43	1.53
12	B	2322	A	C6-N6	9.04	1.41	1.33
12	B	1180	U	P-O5'	-9.04	1.50	1.59
12	B	92	U	N1-C6	9.04	1.46	1.38
12	B	794	A	N7-C5	-9.04	1.33	1.39
12	B	1379	U	C4-C5	9.04	1.51	1.43
12	B	2621	G	N1-C2	9.04	1.45	1.37
12	B	397	U	C4-C5	9.04	1.51	1.43
12	B	811	U	C4'-O4'	-9.04	1.33	1.45
12	B	2005	A	N9-C4	9.04	1.43	1.37
12	B	1682	G	C5-C6	-9.03	1.33	1.42
12	B	2792	A	C5-C4	9.03	1.45	1.38
12	B	2304	G	N7-C5	-9.03	1.33	1.39
12	B	956	G	N7-C5	-9.03	1.33	1.39
12	B	1758	U	C2-N3	9.03	1.44	1.37
12	B	1785	A	N3-C4	-9.03	1.29	1.34
12	B	564	C	C4-N4	9.03	1.42	1.33
12	B	976	G	N9-C4	-9.03	1.30	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1059	G	N9-C4	9.03	1.45	1.38
12	B	2780	G	C8-N7	-9.03	1.25	1.30
12	B	233	A	C6-N1	9.02	1.41	1.35
12	B	463	G	P-O5'	-9.02	1.50	1.59
12	B	1257	C	P-O5'	-9.02	1.50	1.59
12	B	1984	G	N3-C4	-9.02	1.29	1.35
12	B	180	G	C2-N3	9.01	1.40	1.32
12	B	510	C	C2-N3	9.01	1.43	1.35
12	B	1285	A	C2'-C1'	-9.01	1.43	1.53
12	B	798	G	N3-C4	9.01	1.41	1.35
12	B	972	A	C6-N1	9.01	1.41	1.35
12	B	2532	G	P-O5'	-9.01	1.50	1.59
12	B	432	A	N9-C4	9.01	1.43	1.37
12	B	962	G	N7-C5	-9.01	1.33	1.39
12	B	1667	G	C2'-C1'	-9.01	1.43	1.53
12	B	2557	G	N7-C5	-9.01	1.33	1.39
12	B	172	A	C5-C4	9.01	1.45	1.38
12	B	338	G	C2-N3	9.01	1.40	1.32
12	B	1127	A	N9-C8	-9.01	1.30	1.37
12	B	2258	C	C2-N3	9.01	1.43	1.35
12	B	1676	A	O3'-P	-9.01	1.50	1.61
12	B	2152	G	N7-C5	-9.01	1.33	1.39
12	B	1676	A	C5'-C4'	9.00	1.62	1.51
12	B	2101	A	N9-C4	9.00	1.43	1.37
12	B	529	A	C6-N1	9.00	1.41	1.35
12	B	2266	A	C8-N7	-9.00	1.25	1.31
12	B	285	G	N7-C5	-9.00	1.33	1.39
12	B	2153	C	N3-C4	9.00	1.40	1.33
12	B	2850	A	C8-N7	-9.00	1.25	1.31
12	B	848	C	N1-C6	8.99	1.42	1.37
12	B	783	A	N9-C8	-8.99	1.30	1.37
12	B	48	G	C2'-C1'	8.99	1.63	1.53
12	B	108	G	N1-C2	8.99	1.45	1.37
12	B	775	G	N3-C4	-8.99	1.29	1.35
12	B	855	G	N7-C5	-8.99	1.33	1.39
12	B	509	C	N3-C4	8.98	1.40	1.33
12	B	620	G	C6-N1	8.98	1.45	1.39
12	B	823	C	C2-N3	8.98	1.43	1.35
12	B	322	A	C8-N7	-8.98	1.25	1.31
12	B	477	A	C8-N7	-8.98	1.25	1.31
12	B	862	G	C8-N7	-8.98	1.25	1.30
12	B	772	C	C4-N4	8.97	1.42	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1004	U	N1-C2	8.97	1.46	1.38
12	B	2046	G	C6-N1	8.96	1.45	1.39
12	B	320	A	C6-N6	8.96	1.41	1.33
12	B	2401	U	C2-N3	8.96	1.44	1.37
12	B	2698	U	C3'-C2'	-8.96	1.42	1.52
12	B	999	U	N3-C4	8.95	1.46	1.38
12	B	1968	G	C2-N3	8.95	1.40	1.32
12	B	2466	C	C4-N4	8.95	1.42	1.33
12	B	196	A	N7-C5	-8.95	1.33	1.39
12	B	924	G	C6-N1	8.95	1.45	1.39
12	B	2558	C	N3-C4	8.95	1.40	1.33
12	B	2858	C	N1-C6	8.95	1.42	1.37
12	B	1125	G	C5-C4	8.94	1.44	1.38
12	B	2802	G	C6-N1	8.94	1.45	1.39
12	B	1935	G	C6-N1	8.93	1.45	1.39
12	B	2239	G	C2-N3	-8.93	1.25	1.32
12	B	801	G	O3'-P	-8.93	1.50	1.61
12	B	1838	C	N3-C4	8.93	1.40	1.33
12	B	2625	G	C2-N3	8.93	1.39	1.32
12	B	2741	A	C5'-C4'	8.93	1.62	1.51
12	B	1526	C	N1-C6	8.92	1.42	1.37
12	B	2820	A	C6-N6	8.92	1.41	1.33
12	B	877	A	N7-C5	-8.92	1.33	1.39
12	B	2536	G	C6-N1	8.92	1.45	1.39
12	B	1275	A	C5-C6	8.91	1.49	1.41
12	B	2819	G	C5'-C4'	8.91	1.62	1.51
12	B	1475	G	C2-N3	8.91	1.39	1.32
12	B	2575	C	C2-N3	8.91	1.42	1.35
12	B	1847	A	C6-N1	8.90	1.41	1.35
11	A	16	G	N9-C4	-8.90	1.30	1.38
12	B	705	A	C6-N6	8.90	1.41	1.33
12	B	2349	G	N1-C2	8.90	1.44	1.37
12	B	2024	G	C5-C4	-8.89	1.32	1.38
12	B	398	C	C2'-C1'	-8.89	1.43	1.53
12	B	1792	G	N3-C4	8.89	1.41	1.35
12	B	1896	G	C5-C6	-8.89	1.33	1.42
12	B	2778	A	N9-C8	8.89	1.44	1.37
12	B	2866	U	C2-N3	8.89	1.44	1.37
12	B	505	A	N3-C4	8.89	1.40	1.34
11	A	15	A	N9-C8	-8.88	1.30	1.37
12	B	124	G	N9-C8	-8.88	1.31	1.37
12	B	244	A	N9-C4	8.88	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1659	G	N3-C4	8.88	1.41	1.35
12	B	2713	U	N3-C4	8.88	1.46	1.38
12	B	2844	G	O3'-P	-8.88	1.50	1.61
12	B	858	G	N9-C4	-8.88	1.30	1.38
12	B	794	A	C4'-C3'	8.88	1.62	1.53
12	B	507	A	C5-C4	8.87	1.45	1.38
12	B	1492	G	N7-C5	-8.87	1.33	1.39
12	B	1697	G	N7-C5	-8.87	1.33	1.39
12	B	144	A	N7-C5	-8.87	1.33	1.39
12	B	350	G	N9-C8	-8.87	1.31	1.37
12	B	1912	A	N7-C5	-8.87	1.33	1.39
12	B	747	U	P-O5'	-8.87	1.50	1.59
12	B	2442	C	N3-C4	8.87	1.40	1.33
12	B	2615	U	C4'-C3'	-8.87	1.43	1.53
12	B	2859	G	P-O5'	-8.87	1.50	1.59
11	A	42	C	C2'-C1'	-8.86	1.43	1.53
12	B	1063	G	C2-N3	8.86	1.39	1.32
12	B	1140	C	N1-C6	8.86	1.42	1.37
12	B	1434	A	N7-C5	-8.86	1.33	1.39
12	B	2583	G	C2'-C1'	-8.86	1.43	1.53
12	B	1046	A	N9-C4	8.86	1.43	1.37
12	B	287	G	N3-C4	8.86	1.41	1.35
12	B	1978	A	N7-C5	-8.86	1.33	1.39
12	B	1321	A	C6-N6	8.86	1.41	1.33
12	B	1571	A	C6-N6	8.86	1.41	1.33
12	B	21	A	C8-N7	-8.85	1.25	1.31
12	B	574	A	C5-C4	8.85	1.45	1.38
12	B	1300	G	N1-C2	8.85	1.44	1.37
12	B	1304	A	C2'-C1'	-8.85	1.43	1.53
12	B	2449	U	C2-N3	8.85	1.44	1.37
12	B	428	A	N7-C5	-8.84	1.33	1.39
12	B	18	U	C2-N3	8.84	1.44	1.37
12	B	1827	U	N3-C4	8.84	1.46	1.38
12	B	2717	C	N3-C4	8.84	1.40	1.33
12	B	1388	G	C4'-C3'	-8.84	1.43	1.53
12	B	1604	C	C4-N4	8.84	1.42	1.33
12	B	401	A	C6-N1	8.84	1.41	1.35
12	B	1639	C	C2-N3	8.84	1.42	1.35
12	B	908	C	C4'-C3'	8.84	1.62	1.53
12	B	1845	G	C6-N1	8.84	1.45	1.39
12	B	2766	A	O3'-P	-8.84	1.50	1.61
12	B	2670	A	N9-C4	8.83	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	713	G	C4'-C3'	-8.83	1.43	1.53
12	B	1192	G	N3-C4	-8.83	1.29	1.35
12	B	971	G	C2'-C1'	-8.83	1.43	1.53
12	B	2005	A	C5-C4	8.83	1.45	1.38
12	B	1593	A	C6-N6	8.82	1.41	1.33
12	B	1847	A	C6-N6	8.82	1.41	1.33
12	B	2426	A	C2'-C1'	-8.82	1.43	1.53
12	B	265	A	C8-N7	-8.82	1.25	1.31
12	B	2231	U	P-O5'	-8.82	1.50	1.59
12	B	701	G	N1-C2	8.82	1.44	1.37
12	B	1469	A	N3-C4	-8.82	1.29	1.34
12	B	2399	G	C2-N3	8.81	1.39	1.32
12	B	2529	G	C8-N7	8.81	1.36	1.30
12	B	382	A	N9-C4	-8.81	1.32	1.37
12	B	1887	C	C4-N4	8.81	1.41	1.33
12	B	972	A	N3-C4	-8.81	1.29	1.34
12	B	1669	A	C6-N6	8.81	1.41	1.33
12	B	1720	U	C2-N3	8.81	1.44	1.37
12	B	2576	G	C6-N1	8.81	1.45	1.39
12	B	472	A	N3-C4	-8.81	1.29	1.34
12	B	768	G	C5-C4	-8.81	1.32	1.38
12	B	1468	U	N3-C4	8.81	1.46	1.38
12	B	2080	A	O3'-P	-8.81	1.50	1.61
12	B	2569	G	N9-C8	8.81	1.44	1.37
12	B	2315	G	C8-N7	8.81	1.36	1.30
11	A	105	G	C2-N2	8.80	1.43	1.34
12	B	1490	A	C2'-C1'	-8.80	1.43	1.53
12	B	566	U	C2-N3	8.80	1.44	1.37
12	B	810	U	N1-C2	8.80	1.46	1.38
12	B	1627	G	N9-C8	8.80	1.44	1.37
12	B	165	A	C6-N6	8.80	1.41	1.33
12	B	29	U	C2-N3	8.79	1.44	1.37
12	B	273	G	C4'-O4'	-8.79	1.34	1.45
12	B	1380	G	C5-C4	8.79	1.44	1.38
12	B	2357	G	N3-C4	-8.79	1.29	1.35
12	B	1615	C	C2-N3	8.79	1.42	1.35
12	B	1888	G	C8-N7	-8.79	1.25	1.30
12	B	1088	A	C6-N1	8.79	1.41	1.35
12	B	1128	G	C2'-C1'	-8.79	1.43	1.53
12	B	211	C	N3-C4	8.78	1.40	1.33
12	B	1032	A	C2'-C1'	-8.78	1.43	1.53
12	B	50	U	N3-C4	8.78	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	169	G	N1-C2	8.78	1.44	1.37
12	B	515	A	C6-N1	8.78	1.41	1.35
12	B	509	C	C2'-C1'	-8.78	1.43	1.53
12	B	1049	C	N1-C6	8.78	1.42	1.37
12	B	2288	A	N9-C4	-8.78	1.32	1.37
12	B	1700	A	N9-C4	-8.77	1.32	1.37
12	B	1538	G	N7-C5	-8.77	1.33	1.39
12	B	544	C	N1-C6	8.77	1.42	1.37
12	B	799	G	N9-C8	8.77	1.44	1.37
12	B	2061	G	N9-C4	8.77	1.45	1.38
12	B	2101	A	N7-C5	-8.77	1.33	1.39
12	B	2175	C	N3-C4	8.77	1.40	1.33
11	A	33	G	N9-C4	-8.76	1.30	1.38
12	B	303	G	N3-C4	-8.76	1.29	1.35
12	B	1599	U	C2-N3	8.76	1.43	1.37
12	B	1853	A	C6-N1	8.76	1.41	1.35
12	B	1867	G	C5-C4	8.76	1.44	1.38
12	B	2171	A	C4'-C3'	8.76	1.62	1.53
12	B	188	G	C2-N3	8.76	1.39	1.32
12	B	2578	G	C6-N1	8.76	1.45	1.39
12	B	1789	A	N9-C4	8.76	1.43	1.37
12	B	2299	U	C2-N3	8.76	1.43	1.37
12	B	2612	C	N1-C6	8.76	1.42	1.37
11	A	18	G	N7-C5	-8.75	1.33	1.39
12	B	2450	A	N7-C5	-8.75	1.33	1.39
12	B	2646	C	N1-C6	8.75	1.42	1.37
12	B	1095	A	P-O5'	8.75	1.68	1.59
12	B	2735	G	C8-N7	8.75	1.36	1.30
12	B	496	G	C8-N7	-8.75	1.25	1.30
12	B	1669	A	P-O5'	-8.75	1.51	1.59
12	B	1461	C	O3'-P	-8.74	1.50	1.61
11	A	38	C	N3-C4	8.74	1.40	1.33
12	B	539	G	N3-C4	8.74	1.41	1.35
12	B	2031	A	C6-N6	8.74	1.41	1.33
12	B	189	G	N1-C2	8.74	1.44	1.37
12	B	803	U	C5-C6	8.74	1.42	1.34
12	B	1386	C	N3-C4	8.74	1.40	1.33
12	B	2204	G	C2'-C1'	-8.74	1.43	1.53
12	B	494	G	N7-C5	-8.74	1.34	1.39
12	B	2722	G	C2-N3	8.74	1.39	1.32
12	B	2746	U	C2-N3	8.74	1.43	1.37
12	B	1859	U	C2-N3	8.73	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	669	G	N9-C8	8.73	1.44	1.37
12	B	900	A	P-O5'	-8.72	1.51	1.59
12	B	1301	A	C5-C4	8.72	1.44	1.38
12	B	2281	A	N7-C5	-8.72	1.34	1.39
12	B	2586	U	N1-C2	8.72	1.46	1.38
12	B	2101	A	C6-N6	8.72	1.41	1.33
12	B	2607	G	N1-C2	8.72	1.44	1.37
12	B	2659	G	C8-N7	8.72	1.36	1.30
12	B	704	G	N9-C4	8.72	1.45	1.38
12	B	1541	C	N1-C2	8.72	1.48	1.40
12	B	1043	C	N3-C4	8.72	1.40	1.33
12	B	797	G	C2'-C1'	-8.71	1.43	1.53
12	B	1872	A	C6-N1	-8.71	1.29	1.35
12	B	2556	C	P-O5'	-8.71	1.51	1.59
12	B	2588	G	N9-C8	8.71	1.44	1.37
12	B	2729	G	N1-C2	8.71	1.44	1.37
12	B	2666	C	O3'-P	-8.71	1.50	1.61
12	B	2792	A	C6-N1	8.71	1.41	1.35
12	B	1111	A	N9-C4	-8.71	1.32	1.37
12	B	1546	G	C2'-C1'	-8.71	1.43	1.53
12	B	2067	G	C6-N1	8.71	1.45	1.39
12	B	2282	G	C8-N7	-8.71	1.25	1.30
12	B	2827	C	N3-C4	8.70	1.40	1.33
12	B	1296	G	C8-N7	-8.70	1.25	1.30
11	A	29	A	N7-C5	-8.70	1.34	1.39
12	B	2752	C	N3-C4	8.69	1.40	1.33
12	B	1368	G	N7-C5	-8.69	1.34	1.39
12	B	1549	A	C6-N6	8.69	1.41	1.33
12	B	2401	U	C2'-C1'	-8.69	1.43	1.53
12	B	5	A	N9-C4	8.69	1.43	1.37
12	B	518	G	C5-C4	-8.69	1.32	1.38
12	B	1998	A	C5-C6	8.69	1.48	1.41
12	B	1976	U	C2-N3	8.69	1.43	1.37
12	B	2621	G	C2'-C1'	-8.69	1.43	1.53
11	A	78	A	P-O5'	-8.68	1.51	1.59
11	A	32	U	P-O5'	-8.68	1.51	1.59
12	B	204	A	P-O5'	-8.68	1.51	1.59
12	B	847	U	C2-N3	8.68	1.43	1.37
12	B	1010	A	N9-C8	-8.68	1.30	1.37
12	B	1374	G	C2-N3	8.68	1.39	1.32
12	B	2072	C	C4'-C3'	8.68	1.62	1.53
12	B	106	C	C2-N3	8.68	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	481	G	N3-C4	-8.68	1.29	1.35
12	B	2025	C	C4-N4	8.68	1.41	1.33
12	B	2235	G	C5-C4	-8.68	1.32	1.38
12	B	2502	G	N7-C5	-8.68	1.34	1.39
11	A	62	C	C4-N4	8.67	1.41	1.33
12	B	1028	A	N3-C4	8.67	1.40	1.34
12	B	957	C	N3-C4	8.67	1.40	1.33
12	B	2059	A	N3-C4	8.67	1.40	1.34
12	B	91	A	N7-C5	-8.67	1.34	1.39
12	B	474	G	N1-C2	8.67	1.44	1.37
12	B	2052	A	C8-N7	-8.67	1.25	1.31
12	B	2861	U	P-O5'	-8.67	1.51	1.59
12	B	91	A	C6-N6	8.67	1.40	1.33
12	B	801	G	C2-N3	8.67	1.39	1.32
12	B	809	G	C4'-C3'	8.67	1.62	1.53
12	B	2722	G	P-O5'	-8.67	1.51	1.59
12	B	1334	G	C8-N7	-8.66	1.25	1.30
12	B	1642	G	N1-C2	8.66	1.44	1.37
12	B	2730	C	N3-C4	8.66	1.40	1.33
12	B	74	A	N7-C5	-8.66	1.34	1.39
12	B	911	A	C6-N1	8.66	1.41	1.35
12	B	1241	A	P-O5'	-8.66	1.51	1.59
12	B	1415	U	C5'-C4'	8.66	1.61	1.51
12	B	2862	G	N9-C4	-8.66	1.31	1.38
12	B	548	G	N9-C8	-8.66	1.31	1.37
12	B	787	C	N3-C4	8.66	1.40	1.33
12	B	1022	G	C5'-C4'	8.66	1.61	1.51
12	B	1556	C	C4'-C3'	8.65	1.62	1.53
12	B	208	C	N3-C4	8.65	1.40	1.33
12	B	912	C	N1-C6	8.65	1.42	1.37
12	B	2254	C	N3-C4	8.65	1.40	1.33
12	B	825	A	N9-C4	8.65	1.43	1.37
12	B	2884	U	C2'-C1'	8.65	1.62	1.53
12	B	889	C	N1-C6	8.65	1.42	1.37
12	B	1817	G	O3'-P	-8.65	1.50	1.61
12	B	953	G	C2-N3	8.64	1.39	1.32
12	B	1665	A	P-O5'	-8.64	1.51	1.59
12	B	2334	U	C2'-C1'	-8.64	1.43	1.53
12	B	529	A	C5-C4	8.64	1.44	1.38
12	B	722	A	C4'-C3'	-8.64	1.43	1.53
12	B	2143	C	C4-C5	8.64	1.49	1.43
12	B	2433	A	C6-N6	8.64	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	112	U	C2-N3	8.63	1.43	1.37
12	B	379	G	N3-C4	-8.63	1.29	1.35
12	B	649	G	N9-C8	8.63	1.43	1.37
12	B	2182	U	C5'-C4'	8.63	1.61	1.51
12	B	2526	G	C8-N7	8.63	1.36	1.30
12	B	580	U	C2'-C1'	-8.63	1.43	1.53
12	B	1160	G	O3'-P	-8.63	1.50	1.61
12	B	1285	A	N7-C5	-8.63	1.34	1.39
12	B	194	G	C2'-C1'	-8.63	1.43	1.53
12	B	1311	G	C2'-C1'	-8.62	1.43	1.53
12	B	2693	G	P-O5'	-8.63	1.51	1.59
12	B	501	A	C5-C4	8.62	1.44	1.38
12	B	678	C	C2-N3	8.62	1.42	1.35
12	B	1152	C	N3-C4	8.62	1.40	1.33
12	B	1521	G	C2-N3	8.62	1.39	1.32
12	B	1595	C	C2'-C1'	-8.62	1.43	1.53
12	B	1272	A	C5'-C4'	8.61	1.61	1.51
12	B	1665	A	C5-C6	8.62	1.48	1.41
12	B	2364	C	C4-C5	-8.61	1.36	1.43
12	B	1860	G	C3'-C2'	-8.61	1.43	1.52
12	B	898	C	C3'-C2'	-8.61	1.43	1.52
12	B	659	G	C6-N1	8.61	1.45	1.39
12	B	843	G	C5-C4	8.61	1.44	1.38
12	B	2793	C	N1-C6	8.61	1.42	1.37
12	B	751	A	C6-N6	8.61	1.40	1.33
12	B	2166	U	N3-C4	8.61	1.46	1.38
12	B	1185	G	N9-C8	8.61	1.43	1.37
11	A	42	C	N1-C6	8.60	1.42	1.37
12	B	2375	G	N3-C4	-8.60	1.29	1.35
12	B	2221	G	C2-N3	8.60	1.39	1.32
12	B	1666	G	P-O5'	-8.60	1.51	1.59
12	B	2190	G	N3-C4	-8.60	1.29	1.35
12	B	2019	A	C6-N6	8.60	1.40	1.33
12	B	190	A	C6-N6	8.59	1.40	1.33
12	B	1633	G	N1-C2	8.59	1.44	1.37
12	B	2885	G	C8-N7	-8.59	1.25	1.30
12	B	197	A	N7-C5	-8.59	1.34	1.39
12	B	879	G	N1-C2	8.59	1.44	1.37
12	B	1184	U	C2'-C1'	-8.59	1.44	1.53
12	B	1488	C	C4-N4	8.59	1.41	1.33
12	B	2716	C	C4-N4	8.59	1.41	1.33
12	B	1344	U	C2-N3	8.58	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1054	A	C4'-C3'	-8.58	1.43	1.53
12	B	1168	G	C5-C4	8.58	1.44	1.38
12	B	2266	A	C6-N1	8.58	1.41	1.35
12	B	2840	C	N3-C4	8.58	1.40	1.33
12	B	2110	G	C2-N3	8.58	1.39	1.32
12	B	2290	G	N1-C2	8.58	1.44	1.37
12	B	304	U	N3-C4	8.58	1.46	1.38
12	B	949	G	C5-C4	8.58	1.44	1.38
12	B	2641	G	C4'-O4'	8.58	1.56	1.45
12	B	1086	A	C6-N6	8.57	1.40	1.33
12	B	1150	C	C4-N4	8.57	1.41	1.33
12	B	1455	G	N9-C4	8.57	1.44	1.38
12	B	2313	C	C4'-C3'	8.57	1.62	1.53
12	B	248	G	N9-C8	8.57	1.43	1.37
12	B	1075	C	N1-C6	-8.57	1.32	1.37
12	B	2710	C	N3-C4	8.57	1.40	1.33
12	B	1502	A	C6-N6	8.57	1.40	1.33
12	B	2674	G	N9-C8	-8.56	1.31	1.37
11	A	17	C	C3'-C2'	-8.56	1.43	1.52
12	B	522	A	C6-N6	8.56	1.40	1.33
12	B	1037	G	N1-C2	8.56	1.44	1.37
12	B	292	U	P-O5'	-8.56	1.51	1.59
12	B	378	C	C4-C5	8.56	1.49	1.43
12	B	2136	G	C6-N1	8.56	1.45	1.39
12	B	2315	G	N7-C5	-8.56	1.34	1.39
12	B	2311	A	N9-C4	8.56	1.43	1.37
12	B	507	A	N7-C5	-8.56	1.34	1.39
12	B	1135	C	N3-C4	8.56	1.40	1.33
12	B	1232	G	C6-N1	8.55	1.45	1.39
12	B	1238	G	N1-C2	8.55	1.44	1.37
12	B	1783	A	N9-C4	8.55	1.43	1.37
12	B	402	A	N7-C5	-8.55	1.34	1.39
12	B	2116	G	C5-C4	8.55	1.44	1.38
12	B	26	G	C8-N7	-8.55	1.25	1.30
12	B	1666	G	N9-C8	8.55	1.43	1.37
12	B	2530	A	C6-N6	8.55	1.40	1.33
12	B	469	G	N1-C2	8.54	1.44	1.37
12	B	1734	G	N7-C5	-8.54	1.34	1.39
12	B	2762	C	C3'-C2'	-8.54	1.43	1.52
12	B	982	C	C2'-C1'	8.54	1.62	1.53
12	B	1564	C	P-O5'	-8.54	1.51	1.59
11	A	54	G	N3-C4	-8.54	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	240	C	N3-C4	8.54	1.40	1.33
12	B	1784	A	C6-N6	8.54	1.40	1.33
12	B	2401	U	C4'-C3'	-8.53	1.43	1.53
12	B	479	A	N9-C4	8.53	1.43	1.37
12	B	551	G	N1-C2	8.53	1.44	1.37
12	B	618	G	C6-N1	8.53	1.45	1.39
12	B	225	C	C4'-C3'	8.53	1.62	1.53
12	B	2093	G	P-O5'	-8.53	1.51	1.59
12	B	857	G	C6-N1	8.53	1.45	1.39
12	B	1545	A	N3-C4	-8.53	1.29	1.34
12	B	1056	G	N9-C8	8.52	1.43	1.37
12	B	1634	A	N3-C4	-8.52	1.29	1.34
12	B	1772	A	C6-N6	8.52	1.40	1.33
12	B	2481	G	C8-N7	-8.52	1.25	1.30
12	B	1475	G	N7-C5	-8.52	1.34	1.39
12	B	2323	G	N7-C5	-8.52	1.34	1.39
12	B	2702	G	O3'-P	-8.52	1.50	1.61
12	B	487	C	N1-C6	8.52	1.42	1.37
12	B	1983	G	C6-N1	8.52	1.45	1.39
12	B	60	G	N9-C4	-8.51	1.31	1.38
12	B	471	A	N3-C4	8.51	1.40	1.34
12	B	377	G	N1-C2	8.51	1.44	1.37
12	B	738	G	C5-C4	8.51	1.44	1.38
12	B	991	C	C4-N4	8.51	1.41	1.33
12	B	1717	A	N3-C4	-8.51	1.29	1.34
12	B	467	G	N1-C2	8.51	1.44	1.37
12	B	390	U	C1'-N1	8.51	1.61	1.48
12	B	729	G	C2'-C1'	-8.51	1.44	1.53
12	B	927	A	P-O5'	-8.51	1.51	1.59
12	B	1740	G	C2-N3	8.51	1.39	1.32
12	B	2211	A	C5-C4	8.51	1.44	1.38
12	B	2359	C	P-O5'	-8.51	1.51	1.59
12	B	512	G	N1-C2	8.51	1.44	1.37
12	B	933	A	N7-C5	-8.51	1.34	1.39
12	B	1563	U	C2-N3	8.51	1.43	1.37
12	B	2521	C	N3-C4	8.51	1.40	1.33
12	B	985	C	N1-C6	8.50	1.42	1.37
12	B	1211	C	O3'-P	-8.50	1.50	1.61
12	B	1498	C	O3'-P	-8.50	1.50	1.61
12	B	2497	A	C6-N6	8.50	1.40	1.33
12	B	712	G	C5-C6	-8.50	1.33	1.42
12	B	1787	A	C6-N6	8.50	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1978	A	C5-C4	8.50	1.44	1.38
12	B	374	A	C5-C4	8.50	1.44	1.38
12	B	597	G	C2-N3	8.50	1.39	1.32
12	B	2084	C	C2-N3	8.50	1.42	1.35
12	B	452	G	C5-C4	8.49	1.44	1.38
12	B	1511	G	C8-N7	8.49	1.36	1.30
12	B	1970	A	N7-C5	-8.49	1.34	1.39
12	B	2171	A	C6-N1	8.49	1.41	1.35
12	B	2358	A	C5-C4	-8.49	1.32	1.38
12	B	2759	G	N9-C8	8.49	1.43	1.37
12	B	489	G	C5-C4	-8.49	1.32	1.38
12	B	506	G	P-O5'	-8.49	1.51	1.59
12	B	1353	A	C6-N6	8.49	1.40	1.33
12	B	1725	U	C2-N3	8.49	1.43	1.37
12	B	1971	U	C4-C5	8.49	1.51	1.43
12	B	238	C	P-O5'	-8.49	1.51	1.59
12	B	1631	G	N7-C5	-8.49	1.34	1.39
12	B	232	G	N7-C5	-8.48	1.34	1.39
12	B	1087	G	C8-N7	8.48	1.36	1.30
12	B	1102	C	N3-C4	8.48	1.39	1.33
12	B	2035	G	C5-C4	8.48	1.44	1.38
12	B	2773	C	C4-N4	8.48	1.41	1.33
12	B	635	C	O3'-P	-8.48	1.50	1.61
12	B	728	G	N7-C5	8.48	1.44	1.39
12	B	883	G	C2-N3	8.48	1.39	1.32
12	B	1452	G	C5-C4	8.48	1.44	1.38
12	B	2244	U	C5'-C4'	8.47	1.61	1.51
12	B	583	G	C5-C6	-8.47	1.33	1.42
12	B	219	A	N7-C5	-8.47	1.34	1.39
12	B	186	G	C4'-C3'	8.47	1.62	1.53
11	A	101	A	N7-C5	-8.47	1.34	1.39
12	B	1038	G	N9-C8	8.47	1.43	1.37
12	B	659	G	N3-C4	8.46	1.41	1.35
12	B	1168	G	C4'-C3'	-8.46	1.43	1.53
12	B	1236	G	C2-N3	8.46	1.39	1.32
12	B	1638	C	P-O5'	-8.47	1.51	1.59
12	B	2124	G	C2-N3	8.46	1.39	1.32
11	A	104	A	N9-C4	-8.46	1.32	1.37
12	B	2	G	C6-N1	8.46	1.45	1.39
12	B	2461	A	C8-N7	-8.46	1.25	1.31
12	B	577	G	C2-N3	8.46	1.39	1.32
12	B	1971	U	N1-C2	8.46	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2848	G	N9-C8	8.46	1.43	1.37
12	B	512	G	C2'-C1'	-8.46	1.44	1.53
12	B	817	C	C4-N4	8.45	1.41	1.33
12	B	2374	C	C4-N4	8.45	1.41	1.33
12	B	1142	A	C2-N3	-8.45	1.25	1.33
12	B	1849	G	N7-C5	-8.45	1.34	1.39
12	B	2570	G	C2'-C1'	-8.45	1.44	1.53
12	B	76	C	C4-N4	8.45	1.41	1.33
12	B	1549	A	C2'-C1'	-8.45	1.44	1.53
12	B	2819	G	C2'-C1'	-8.45	1.44	1.53
12	B	1905	C	N3-C4	8.45	1.39	1.33
12	B	111	A	N9-C8	8.44	1.44	1.37
12	B	2681	C	C4-C5	8.45	1.49	1.43
12	B	1367	A	N3-C4	-8.44	1.29	1.34
12	B	1866	A	N9-C4	-8.44	1.32	1.37
12	B	2323	G	C2-N2	8.44	1.43	1.34
12	B	1694	C	C4'-C3'	8.44	1.62	1.53
12	B	945	A	N7-C5	-8.44	1.34	1.39
12	B	2429	G	N3-C4	8.44	1.41	1.35
12	B	2461	A	C5-C4	8.44	1.44	1.38
12	B	356	G	C5-C4	8.43	1.44	1.38
12	B	1131	G	N1-C2	8.43	1.44	1.37
12	B	2001	C	C4-N4	8.43	1.41	1.33
12	B	2128	G	C6-N1	8.43	1.45	1.39
12	B	2545	G	N7-C5	8.43	1.44	1.39
12	B	1218	G	C2-N2	8.43	1.43	1.34
12	B	1329	U	C2-N3	8.43	1.43	1.37
12	B	1430	G	C6-N1	8.43	1.45	1.39
12	B	1990	C	N3-C4	8.43	1.39	1.33
12	B	2473	U	C2'-C1'	-8.43	1.44	1.53
12	B	2795	C	N1-C6	8.43	1.42	1.37
11	A	64	G	C6-N1	8.43	1.45	1.39
12	B	428	A	C6-N6	8.43	1.40	1.33
12	B	687	C	C2'-C1'	-8.43	1.44	1.53
12	B	890	C	N3-C4	8.43	1.39	1.33
12	B	1977	A	N7-C5	-8.42	1.34	1.39
12	B	2353	G	C6-N1	8.42	1.45	1.39
12	B	2472	G	N9-C8	8.42	1.43	1.37
12	B	2629	U	C5'-C4'	8.42	1.61	1.51
12	B	2722	G	C2'-C1'	-8.42	1.44	1.53
12	B	177	G	N7-C5	-8.42	1.34	1.39
12	B	1450	G	N7-C5	-8.42	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	721	A	C6-N1	8.41	1.41	1.35
12	B	2493	U	C2-N3	8.41	1.43	1.37
12	B	1125	G	N7-C5	-8.41	1.34	1.39
12	B	1136	G	N1-C2	8.40	1.44	1.37
12	B	2312	U	O4'-C1'	8.40	1.52	1.41
11	A	97	C	N3-C4	8.40	1.39	1.33
12	B	995	C	N1-C6	8.40	1.42	1.37
12	B	607	U	C2-N3	8.40	1.43	1.37
12	B	668	A	O3'-P	-8.40	1.51	1.61
12	B	714	U	N1-C6	8.40	1.45	1.38
12	B	1474	U	C4-C5	8.40	1.51	1.43
12	B	1517	G	N9-C8	8.40	1.43	1.37
12	B	1579	A	N9-C8	-8.40	1.31	1.37
12	B	1757	A	C8-N7	-8.40	1.25	1.31
12	B	2557	G	C2-N3	8.40	1.39	1.32
12	B	467	G	C8-N7	-8.40	1.25	1.30
12	B	1247	A	C6-N6	8.40	1.40	1.33
12	B	1674	G	C6-N1	8.40	1.45	1.39
11	A	34	A	N7-C5	-8.39	1.34	1.39
12	B	170	U	P-O5'	-8.39	1.51	1.59
12	B	409	G	C5-C6	-8.39	1.33	1.42
12	B	745	G	C4'-O4'	8.39	1.56	1.45
12	B	2741	A	C5-C4	8.39	1.44	1.38
12	B	2043	C	O3'-P	-8.39	1.51	1.61
12	B	396	G	C2-N3	8.39	1.39	1.32
12	B	658	U	P-O5'	-8.39	1.51	1.59
12	B	2617	U	O3'-P	-8.39	1.51	1.61
12	B	486	C	C4-C5	8.39	1.49	1.43
12	B	890	C	C4-N4	8.39	1.41	1.33
12	B	725	G	N1-C2	8.38	1.44	1.37
12	B	30	G	C6-N1	8.38	1.45	1.39
12	B	142	A	C6-N1	8.38	1.41	1.35
12	B	1495	A	C6-N1	8.38	1.41	1.35
12	B	1976	U	C1'-N1	8.38	1.61	1.48
12	B	2242	G	N1-C2	8.38	1.44	1.37
12	B	1371	G	C2-N3	8.38	1.39	1.32
12	B	2806	C	N1-C6	8.38	1.42	1.37
12	B	822	G	C2-N3	8.38	1.39	1.32
12	B	2403	C	N3-C4	8.38	1.39	1.33
12	B	616	A	C3'-C2'	-8.37	1.43	1.52
12	B	1645	G	C5-C4	8.37	1.44	1.38
12	B	1661	G	C2-N3	8.37	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2659	G	C2-N3	8.37	1.39	1.32
12	B	2076	U	N1-C6	8.37	1.45	1.38
12	B	367	G	C2-N3	8.37	1.39	1.32
12	B	2351	G	C2-N3	8.37	1.39	1.32
12	B	84	A	C8-N7	-8.37	1.25	1.31
12	B	577	G	C5-C6	-8.37	1.33	1.42
12	B	663	G	P-O5'	-8.37	1.51	1.59
12	B	1315	C	N3-C4	8.37	1.39	1.33
12	B	2821	A	N7-C5	-8.37	1.34	1.39
12	B	712	G	C2-N3	8.37	1.39	1.32
12	B	2466	C	P-O5'	-8.37	1.51	1.59
11	A	20	G	C2-N3	8.36	1.39	1.32
12	B	866	A	N9-C4	-8.36	1.32	1.37
12	B	1337	G	C8-N7	-8.36	1.25	1.30
12	B	1875	G	O3'-P	-8.36	1.51	1.61
12	B	587	C	C2'-C1'	-8.36	1.44	1.53
12	B	2011	U	N1-C2	8.36	1.46	1.38
12	B	196	A	N9-C8	-8.36	1.31	1.37
12	B	2504	U	C4-C5	8.36	1.51	1.43
12	B	469	G	C5-C4	8.35	1.44	1.38
12	B	2040	G	C6-N1	8.35	1.45	1.39
12	B	2693	G	C2-N3	8.35	1.39	1.32
12	B	1095	A	C2'-C1'	-8.35	1.44	1.53
12	B	2730	C	C4-C5	-8.35	1.36	1.43
12	B	2813	A	C6-N1	8.35	1.41	1.35
12	B	2046	G	N7-C5	-8.35	1.34	1.39
12	B	510	C	N1-C6	8.35	1.42	1.37
12	B	599	A	N3-C4	8.35	1.39	1.34
12	B	2187	U	N1-C2	8.35	1.46	1.38
11	A	34	A	N9-C4	-8.34	1.32	1.37
12	B	474	G	P-O5'	8.34	1.68	1.59
12	B	2588	G	C2-N3	8.34	1.39	1.32
12	B	908	C	N3-C4	8.34	1.39	1.33
12	B	1840	G	N7-C5	8.34	1.44	1.39
12	B	2003	A	N9-C4	-8.34	1.32	1.37
12	B	1742	U	C2'-C1'	-8.34	1.44	1.53
12	B	1423	G	C2-N3	8.33	1.39	1.32
12	B	1910	G	O4'-C1'	8.33	1.52	1.41
12	B	952	G	C6-N1	8.33	1.45	1.39
12	B	1109	C	C4-C5	8.33	1.49	1.43
12	B	1212	G	N1-C2	8.33	1.44	1.37
12	B	428	A	N3-C4	-8.32	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1255	U	C2-N3	8.32	1.43	1.37
12	B	2034	U	C3'-C2'	-8.32	1.43	1.52
12	B	2243	U	P-O5'	8.32	1.68	1.59
12	B	2820	A	C6-N1	8.32	1.41	1.35
12	B	422	A	C8-N7	-8.32	1.25	1.31
12	B	1028	A	C2'-C1'	-8.32	1.44	1.53
12	B	1550	C	N3-C4	8.32	1.39	1.33
12	B	368	A	C2'-C1'	-8.32	1.44	1.53
12	B	1023	U	C2-N3	8.31	1.43	1.37
12	B	1954	G	C2-N3	8.31	1.39	1.32
12	B	335	C	N1-C6	8.31	1.42	1.37
12	B	385	C	N1-C2	8.31	1.48	1.40
12	B	1204	A	N7-C5	-8.31	1.34	1.39
12	B	786	C	C5-C6	-8.31	1.27	1.34
12	B	1269	A	C6-N6	8.31	1.40	1.33
12	B	2057	G	C2-N3	8.31	1.39	1.32
12	B	2792	A	N7-C5	-8.31	1.34	1.39
12	B	1016	G	N9-C8	-8.30	1.32	1.37
12	B	1250	G	C2-N3	8.30	1.39	1.32
12	B	2640	G	C2-N3	8.30	1.39	1.32
12	B	2714	G	C6-N1	8.30	1.45	1.39
12	B	2505	G	N3-C4	8.30	1.41	1.35
12	B	397	U	P-O5'	-8.30	1.51	1.59
12	B	2807	U	N3-C4	8.30	1.46	1.38
12	B	31	C	N1-C6	-8.29	1.32	1.37
12	B	109	C	C4-N4	8.29	1.41	1.33
12	B	244	A	N1-C2	-8.29	1.26	1.34
12	B	2228	G	C2-N2	8.30	1.42	1.34
12	B	1522	A	C2'-C1'	-8.29	1.44	1.53
12	B	572	A	C5-C6	-8.29	1.33	1.41
12	B	1635	A	N9-C4	-8.29	1.32	1.37
12	B	393	C	P-O5'	-8.29	1.51	1.59
12	B	473	G	C2-N2	8.29	1.42	1.34
12	B	1955	U	N1-C2	8.29	1.46	1.38
12	B	2321	U	C4'-C3'	-8.29	1.44	1.53
12	B	2848	G	P-O5'	-8.29	1.51	1.59
12	B	2425	A	O4'-C1'	8.28	1.52	1.41
12	B	2808	G	C2'-C1'	-8.28	1.44	1.53
12	B	1354	A	P-O5'	-8.28	1.51	1.59
12	B	1733	G	N9-C4	8.28	1.44	1.38
12	B	2744	G	N9-C8	8.28	1.43	1.37
12	B	7	G	N9-C8	-8.28	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	579	G	N1-C2	8.28	1.44	1.37
12	B	2217	G	C2-N3	8.28	1.39	1.32
12	B	2778	A	N3-C4	-8.28	1.29	1.34
12	B	447	A	N7-C5	-8.27	1.34	1.39
12	B	2648	G	N3-C4	8.27	1.41	1.35
12	B	874	G	C8-N7	8.27	1.35	1.30
12	B	1716	U	N3-C4	8.27	1.45	1.38
12	B	786	C	N1-C6	8.26	1.42	1.37
12	B	835	C	C3'-C2'	-8.26	1.43	1.52
12	B	1494	A	N9-C4	-8.26	1.32	1.37
12	B	2886	A	N9-C8	-8.26	1.31	1.37
11	A	12	C	C2'-C1'	-8.26	1.44	1.53
12	B	1414	C	C4-C5	-8.26	1.36	1.43
12	B	394	C	N1-C6	8.26	1.42	1.37
12	B	685	A	C6-N6	8.26	1.40	1.33
12	B	1803	A	C5-C6	-8.26	1.33	1.41
12	B	1815	A	N9-C8	-8.26	1.31	1.37
12	B	2211	A	O4'-C1'	-8.26	1.30	1.41
12	B	2278	A	N3-C4	-8.26	1.29	1.34
12	B	90	U	C2-N3	8.26	1.43	1.37
11	A	55	U	N1-C6	8.25	1.45	1.38
12	B	1018	U	C5'-C4'	8.25	1.61	1.51
12	B	1362	C	N3-C4	8.25	1.39	1.33
12	B	1310	G	C8-N7	-8.25	1.25	1.30
12	B	25	U	C2'-C1'	-8.25	1.44	1.53
12	B	1466	U	N1-C2	8.25	1.46	1.38
12	B	1661	G	C5-C4	-8.25	1.32	1.38
12	B	1585	C	N1-C6	8.25	1.42	1.37
12	B	712	G	C8-N7	-8.24	1.26	1.30
12	B	97	C	C4-N4	8.24	1.41	1.33
12	B	539	G	N9-C8	8.24	1.43	1.37
12	B	1183	U	C2-N3	8.24	1.43	1.37
12	B	2266	A	C2'-C1'	-8.24	1.44	1.53
11	A	81	G	C8-N7	-8.24	1.26	1.30
11	A	85	G	N3-C4	-8.24	1.29	1.35
12	B	968	C	N3-C4	8.24	1.39	1.33
12	B	1044	C	C2-N3	8.23	1.42	1.35
12	B	1661	G	N1-C2	8.23	1.44	1.37
12	B	663	G	C2-N3	8.23	1.39	1.32
12	B	1125	G	C6-N1	8.23	1.45	1.39
12	B	1271	G	C2-N2	8.23	1.42	1.34
12	B	1143	A	C6-N6	8.23	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2694	G	C8-N7	-8.23	1.26	1.30
12	B	189	G	N7-C5	-8.22	1.34	1.39
12	B	244	A	C5-C6	8.22	1.48	1.41
12	B	2389	G	C2'-C1'	-8.22	1.44	1.53
11	A	2	G	C2-N2	8.22	1.42	1.34
11	A	108	A	C5-C6	-8.22	1.33	1.41
12	B	662	G	P-O5'	-8.22	1.51	1.59
12	B	2142	A	C6-N1	8.22	1.41	1.35
12	B	1913	A	N7-C5	-8.22	1.34	1.39
12	B	2056	G	C2-N3	8.22	1.39	1.32
12	B	385	C	P-O5'	-8.22	1.51	1.59
12	B	2153	C	C2'-C1'	-8.22	1.44	1.53
12	B	439	A	C6-N6	8.22	1.40	1.33
12	B	1600	C	N3-C4	8.22	1.39	1.33
12	B	27	G	N3-C4	-8.21	1.29	1.35
12	B	408	G	N3-C4	-8.21	1.29	1.35
12	B	1129	A	C5-C4	8.21	1.44	1.38
12	B	1244	A	C6-N6	8.21	1.40	1.33
12	B	1348	C	C2'-C1'	-8.21	1.44	1.53
12	B	684	G	N1-C2	8.21	1.44	1.37
12	B	944	C	N3-C4	8.21	1.39	1.33
12	B	1572	A	C6-N6	8.21	1.40	1.33
12	B	877	A	C5-C4	8.21	1.44	1.38
12	B	2528	U	P-O5'	-8.21	1.51	1.59
12	B	1741	C	C2-N3	8.21	1.42	1.35
12	B	1851	U	N1-C6	8.21	1.45	1.38
12	B	378	C	P-O5'	-8.21	1.51	1.59
12	B	890	C	C2'-C1'	-8.21	1.44	1.53
12	B	598	U	C2-N3	8.20	1.43	1.37
12	B	620	G	C8-N7	-8.20	1.26	1.30
12	B	632	A	C3'-C2'	-8.20	1.43	1.52
12	B	1535	A	C6-N6	8.20	1.40	1.33
12	B	1968	G	N3-C4	-8.20	1.29	1.35
12	B	2745	C	N1-C2	-8.20	1.31	1.40
12	B	1826	G	C4'-C3'	-8.20	1.44	1.53
12	B	1024	G	N7-C5	-8.20	1.34	1.39
12	B	195	A	C6-N1	8.19	1.41	1.35
11	A	57	A	C6-N1	8.19	1.41	1.35
12	B	40	U	C2-N3	8.19	1.43	1.37
12	B	903	C	C4-C5	8.19	1.49	1.43
12	B	1682	G	C2-N3	8.19	1.39	1.32
12	B	2140	G	C8-N7	8.19	1.35	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2640	G	C6-N1	8.19	1.45	1.39
12	B	2383	G	C2-N3	8.19	1.39	1.32
12	B	2765	A	N9-C4	8.19	1.42	1.37
12	B	951	C	N1-C6	-8.19	1.32	1.37
12	B	1064	C	C4'-C3'	8.19	1.62	1.53
12	B	1081	U	N1-C6	8.19	1.45	1.38
12	B	636	G	C8-N7	8.19	1.35	1.30
12	B	1257	C	C2-N3	8.19	1.42	1.35
12	B	970	U	N1-C6	8.19	1.45	1.38
12	B	1131	G	N3-C4	-8.19	1.29	1.35
12	B	135	U	P-O5'	-8.18	1.51	1.59
12	B	1086	A	C2'-C1'	-8.18	1.44	1.53
12	B	1202	G	N7-C5	-8.18	1.34	1.39
12	B	1500	G	C2-N3	8.18	1.39	1.32
12	B	1702	G	C6-N1	8.18	1.45	1.39
12	B	2632	A	C6-N6	8.18	1.40	1.33
12	B	2663	G	N9-C8	8.18	1.43	1.37
12	B	2134	A	C5'-C4'	8.18	1.61	1.51
11	A	68	C	C4-C5	8.17	1.49	1.43
12	B	347	A	C6-N1	8.17	1.41	1.35
12	B	680	C	P-O5'	-8.17	1.51	1.59
12	B	724	U	C4-C5	8.17	1.50	1.43
12	B	2373	G	C2'-C1'	-8.17	1.44	1.53
12	B	154	U	C2-N3	8.17	1.43	1.37
12	B	1115	G	N1-C2	8.17	1.44	1.37
12	B	2035	G	C2-N3	8.17	1.39	1.32
12	B	6	A	C6-N1	8.17	1.41	1.35
12	B	611	C	N1-C6	-8.17	1.32	1.37
12	B	1110	G	N7-C5	-8.17	1.34	1.39
12	B	1570	A	N7-C5	-8.17	1.34	1.39
12	B	1641	A	C6-N1	-8.17	1.29	1.35
12	B	2035	G	N3-C4	-8.17	1.29	1.35
12	B	2718	G	N9-C4	-8.17	1.31	1.38
12	B	2509	G	N7-C5	-8.16	1.34	1.39
12	B	1013	C	C2'-C1'	-8.16	1.44	1.53
12	B	1074	G	N1-C2	8.16	1.44	1.37
12	B	1830	C	N1-C6	8.16	1.42	1.37
12	B	2492	U	P-O5'	-8.16	1.51	1.59
12	B	32	C	N3-C4	8.16	1.39	1.33
12	B	806	C	N3-C4	8.16	1.39	1.33
12	B	892	A	N7-C5	-8.16	1.34	1.39
12	B	1045	C	N3-C4	8.16	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1817	G	N7-C5	-8.16	1.34	1.39
12	B	1101	U	C2-N3	8.15	1.43	1.37
12	B	1755	A	N9-C4	8.15	1.42	1.37
12	B	2887	A	N9-C8	-8.15	1.31	1.37
11	A	10	G	C2-N3	8.15	1.39	1.32
12	B	19	A	N7-C5	-8.15	1.34	1.39
12	B	1579	A	C6-N6	8.15	1.40	1.33
12	B	1750	G	N9-C8	8.15	1.43	1.37
12	B	2490	G	N7-C5	-8.15	1.34	1.39
12	B	1644	C	C1'-N1	8.15	1.60	1.48
12	B	2416	C	P-O5'	-8.15	1.51	1.59
11	A	23	G	N7-C5	-8.15	1.34	1.39
12	B	581	C	N3-C4	8.15	1.39	1.33
12	B	1158	C	P-O5'	-8.15	1.51	1.59
12	B	1339	G	C4'-C3'	8.15	1.62	1.53
12	B	2164	C	C2-N3	8.15	1.42	1.35
12	B	1551	A	C6-N6	8.14	1.40	1.33
12	B	74	A	C6-N6	8.14	1.40	1.33
12	B	1584	U	N3-C4	8.14	1.45	1.38
12	B	1896	G	C3'-C2'	-8.14	1.43	1.52
11	A	83	G	C2-N3	8.14	1.39	1.32
12	B	742	A	P-O5'	-8.14	1.51	1.59
12	B	1438	U	O3'-P	-8.14	1.51	1.61
12	B	1482	G	N9-C4	8.14	1.44	1.38
12	B	2872	A	N9-C4	8.14	1.42	1.37
12	B	1794	A	C2'-C1'	-8.13	1.44	1.53
12	B	167	A	O3'-P	-8.13	1.51	1.61
12	B	1120	G	C8-N7	-8.13	1.26	1.30
12	B	2196	C	C2-N3	-8.13	1.29	1.35
12	B	1093	G	C6-N1	8.13	1.45	1.39
12	B	2290	G	N3-C4	8.13	1.41	1.35
12	B	2688	G	C2-N3	8.13	1.39	1.32
12	B	28	A	N9-C4	8.13	1.42	1.37
12	B	1406	U	N3-C4	8.12	1.45	1.38
12	B	1477	A	C2-N3	8.12	1.40	1.33
12	B	1856	U	N3-C4	8.13	1.45	1.38
12	B	2583	G	C8-N7	-8.13	1.26	1.30
12	B	2616	C	N3-C4	8.13	1.39	1.33
12	B	1802	A	C6-N1	8.12	1.41	1.35
12	B	62	U	C4-C5	8.12	1.50	1.43
12	B	1008	A	C3'-C2'	-8.12	1.43	1.52
12	B	1426	G	C2'-C1'	-8.12	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	666	A	N1-C2	-8.12	1.27	1.34
12	B	714	U	P-O5'	-8.12	1.51	1.59
12	B	2529	G	N7-C5	8.12	1.44	1.39
12	B	2349	G	O3'-P	-8.12	1.51	1.61
11	A	69	G	C8-N7	-8.11	1.26	1.30
12	B	454	A	C6-N1	8.11	1.41	1.35
12	B	154	U	P-O5'	-8.11	1.51	1.59
12	B	877	A	O4'-C1'	8.11	1.52	1.41
12	B	2831	G	C5-C6	-8.11	1.34	1.42
12	B	1200	C	C4-N4	8.11	1.41	1.33
12	B	2370	G	C6-N1	8.11	1.45	1.39
12	B	2825	G	C2-N2	8.11	1.42	1.34
12	B	789	A	N9-C4	8.10	1.42	1.37
12	B	1437	C	C4-C5	8.10	1.49	1.43
12	B	1713	A	N9-C4	-8.10	1.32	1.37
12	B	1837	C	N3-C4	8.10	1.39	1.33
12	B	2238	G	N3-C4	-8.10	1.29	1.35
12	B	2639	A	N7-C5	-8.10	1.34	1.39
12	B	258	G	C6-N1	8.10	1.45	1.39
12	B	893	C	C2'-C1'	-8.10	1.44	1.53
12	B	1633	G	C5'-C4'	8.10	1.61	1.51
12	B	2885	G	C2-N2	8.10	1.42	1.34
12	B	2794	C	N3-C4	8.10	1.39	1.33
12	B	1469	A	N7-C5	-8.09	1.34	1.39
12	B	2445	G	C6-N1	8.09	1.45	1.39
12	B	213	A	N3-C4	-8.09	1.29	1.34
12	B	959	A	C5-C4	8.09	1.44	1.38
12	B	1028	A	C5'-C4'	8.09	1.61	1.51
12	B	328	U	C2'-C1'	-8.09	1.44	1.53
12	B	1200	C	P-O5'	-8.09	1.51	1.59
12	B	1439	A	O4'-C1'	8.09	1.52	1.41
12	B	1519	G	C8-N7	-8.09	1.26	1.30
12	B	777	G	N9-C8	-8.09	1.32	1.37
12	B	925	A	N7-C5	-8.08	1.34	1.39
12	B	739	A	C5'-C4'	8.08	1.61	1.51
12	B	1040	A	C6-N6	8.08	1.40	1.33
12	B	1945	G	C5-C6	-8.08	1.34	1.42
12	B	457	A	O3'-P	-8.08	1.51	1.61
12	B	610	C	P-O5'	-8.08	1.51	1.59
12	B	1936	A	N9-C4	-8.08	1.33	1.37
12	B	2641	G	N1-C2	8.08	1.44	1.37
12	B	27	G	N9-C8	-8.08	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	309	A	C4'-C3'	8.08	1.62	1.53
12	B	1180	U	N3-C4	8.08	1.45	1.38
12	B	1260	A	C6-N6	8.08	1.40	1.33
12	B	2507	C	C4-C5	8.08	1.49	1.43
12	B	39	G	C5-C4	8.07	1.44	1.38
12	B	2748	A	N7-C5	-8.07	1.34	1.39
12	B	285	G	C8-N7	-8.07	1.26	1.30
12	B	2464	G	O3'-P	-8.07	1.51	1.61
12	B	319	G	N1-C2	8.06	1.44	1.37
12	B	462	C	C2-O2	8.06	1.31	1.24
12	B	1235	G	C8-N7	-8.06	1.26	1.30
12	B	2570	G	P-O5'	-8.06	1.51	1.59
12	B	793	A	P-O5'	8.06	1.67	1.59
12	B	1062	G	C2-N2	8.06	1.42	1.34
12	B	88	G	N1-C2	8.06	1.44	1.37
12	B	438	G	N7-C5	-8.06	1.34	1.39
12	B	1069	A	N7-C5	-8.06	1.34	1.39
12	B	1098	A	O3'-P	-8.06	1.51	1.61
12	B	1853	A	N9-C4	-8.06	1.33	1.37
12	B	2587	A	C8-N7	-8.06	1.25	1.31
12	B	428	A	N9-C4	-8.06	1.33	1.37
12	B	1633	G	C2-N2	8.06	1.42	1.34
12	B	2228	G	C2-N3	8.06	1.39	1.32
12	B	654	A	C6-N6	8.05	1.40	1.33
12	B	929	U	C2'-C1'	-8.05	1.44	1.53
12	B	1651	G	C8-N7	-8.05	1.26	1.30
12	B	2857	G	N9-C8	8.05	1.43	1.37
12	B	77	G	C6-N1	8.05	1.45	1.39
12	B	466	A	O3'-P	-8.05	1.51	1.61
12	B	1381	G	N1-C2	8.05	1.44	1.37
12	B	1784	A	O3'-P	8.05	1.70	1.61
12	B	2191	A	N3-C4	8.05	1.39	1.34
12	B	2322	A	C8-N7	-8.05	1.25	1.31
12	B	550	C	C1'-N1	8.05	1.60	1.48
12	B	1310	G	C6-N1	8.05	1.45	1.39
12	B	1490	A	C1'-N9	8.05	1.60	1.48
12	B	1662	U	N3-C4	8.05	1.45	1.38
12	B	2307	G	N1-C2	8.05	1.44	1.37
12	B	2127	G	C6-N1	8.05	1.45	1.39
12	B	2583	G	N7-C5	-8.05	1.34	1.39
12	B	2233	U	C2-N3	8.04	1.43	1.37
12	B	1537	G	N7-C5	-8.04	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2365	G	C2-N3	8.04	1.39	1.32
12	B	132	G	C2-N3	8.04	1.39	1.32
12	B	933	A	O3'-P	-8.04	1.51	1.61
12	B	1330	C	N1-C6	8.04	1.42	1.37
12	B	2665	A	C6-N1	8.04	1.41	1.35
12	B	2199	A	C2'-C1'	-8.04	1.44	1.53
11	A	24	G	N9-C8	-8.03	1.32	1.37
12	B	954	G	C6-N1	8.03	1.45	1.39
12	B	1609	A	N7-C5	-8.03	1.34	1.39
12	B	1900	A	C6-N1	8.03	1.41	1.35
11	A	72	G	N7-C5	-8.03	1.34	1.39
12	B	265	A	C6-N6	8.03	1.40	1.33
12	B	36	G	C2-N3	8.03	1.39	1.32
12	B	1938	A	C6-N1	8.03	1.41	1.35
12	B	2097	A	N9-C4	8.03	1.42	1.37
12	B	430	A	C6-N1	8.02	1.41	1.35
12	B	1139	G	C2-N3	8.02	1.39	1.32
12	B	2697	G	C2'-C1'	-8.02	1.44	1.53
12	B	3	U	N3-C4	8.02	1.45	1.38
12	B	1684	G	C5-C4	-8.02	1.32	1.38
12	B	2038	G	C5-C4	-8.02	1.32	1.38
12	B	7	G	N1-C2	8.02	1.44	1.37
12	B	137	U	O4'-C1'	8.02	1.52	1.41
12	B	964	C	N3-C4	8.02	1.39	1.33
12	B	1199	U	P-O5'	-8.02	1.51	1.59
12	B	1390	U	C2'-C1'	-8.02	1.44	1.53
12	B	81	G	C2-N3	8.01	1.39	1.32
12	B	8	C	P-O5'	-8.01	1.51	1.59
12	B	175	G	C2-N2	8.01	1.42	1.34
12	B	908	C	O4'-C1'	8.01	1.52	1.41
11	A	105	G	C5-C4	8.01	1.44	1.38
12	B	984	A	C4'-C3'	-8.01	1.44	1.53
12	B	57	C	C2'-C1'	-8.01	1.44	1.53
12	B	793	A	C6-N1	8.01	1.41	1.35
12	B	1777	U	P-O5'	-8.01	1.51	1.59
12	B	785	G	N1-C2	8.00	1.44	1.37
12	B	47	C	C2'-C1'	-8.00	1.44	1.53
12	B	167	A	N9-C4	-8.00	1.33	1.37
12	B	1435	G	C2-N3	8.00	1.39	1.32
12	B	1655	A	N7-C5	-8.00	1.34	1.39
12	B	1656	C	C4-C5	8.00	1.49	1.43
12	B	2116	G	N1-C2	8.00	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1482	G	C3'-C2'	-8.00	1.44	1.52
12	B	1479	G	N1-C2	7.99	1.44	1.37
12	B	2201	G	C2-N3	7.99	1.39	1.32
12	B	1787	A	C5-C4	7.99	1.44	1.38
12	B	130	C	N1-C6	7.99	1.42	1.37
12	B	1009	A	C5'-C4'	7.99	1.60	1.51
12	B	1578	U	N3-C4	7.99	1.45	1.38
12	B	115	C	N3-C4	7.99	1.39	1.33
12	B	891	G	N3-C4	-7.99	1.29	1.35
12	B	633	A	N3-C4	-7.99	1.30	1.34
12	B	1835	G	O4'-C1'	7.99	1.52	1.41
12	B	2063	C	O3'-P	-7.99	1.51	1.61
12	B	2253	G	C2'-C1'	-7.99	1.44	1.53
12	B	2661	G	C2'-C1'	-7.99	1.44	1.53
12	B	648	G	N1-C2	7.98	1.44	1.37
12	B	1253	A	N7-C5	-7.98	1.34	1.39
12	B	1572	A	C8-N7	-7.98	1.25	1.31
12	B	2636	C	N3-C4	7.98	1.39	1.33
12	B	2795	C	O3'-P	-7.98	1.51	1.61
12	B	858	G	N9-C8	7.98	1.43	1.37
12	B	1237	A	N1-C2	7.98	1.41	1.34
12	B	504	A	N3-C4	-7.98	1.30	1.34
12	B	627	A	N7-C5	-7.98	1.34	1.39
12	B	464	U	C2-N3	7.98	1.43	1.37
12	B	2230	G	C2'-C1'	-7.98	1.44	1.53
12	B	178	G	C6-N1	7.97	1.45	1.39
12	B	1673	G	C5-C4	-7.97	1.32	1.38
12	B	2104	C	N3-C4	7.97	1.39	1.33
12	B	2106	U	C2-N3	7.97	1.43	1.37
12	B	51	G	P-O5'	-7.97	1.51	1.59
12	B	1486	U	N3-C4	7.97	1.45	1.38
12	B	2202	U	N3-C4	7.97	1.45	1.38
12	B	2746	U	C5'-C4'	7.97	1.60	1.51
12	B	1945	G	N1-C2	7.97	1.44	1.37
12	B	971	G	C6-N1	7.97	1.45	1.39
12	B	2135	A	N9-C4	-7.97	1.33	1.37
12	B	2249	U	N3-C4	7.97	1.45	1.38
12	B	2502	G	C2-N3	7.97	1.39	1.32
12	B	2621	G	C2-N3	7.97	1.39	1.32
12	B	960	A	N7-C5	-7.97	1.34	1.39
12	B	9	G	C2-N3	7.97	1.39	1.32
12	B	1225	G	C3'-C2'	-7.97	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1949	G	C8-N7	7.97	1.35	1.30
12	B	2237	G	C2-N3	7.97	1.39	1.32
12	B	2507	C	C4-N4	7.97	1.41	1.33
12	B	797	G	C6-N1	7.96	1.45	1.39
12	B	43	G	N1-C2	7.96	1.44	1.37
12	B	1724	G	N7-C5	-7.96	1.34	1.39
12	B	614	A	C5'-C4'	7.96	1.60	1.51
12	B	2400	G	N7-C5	-7.96	1.34	1.39
12	B	160	A	N7-C5	-7.96	1.34	1.39
12	B	312	G	C5-C4	7.96	1.44	1.38
12	B	979	A	N9-C4	7.96	1.42	1.37
12	B	2524	G	C2-N3	7.96	1.39	1.32
12	B	698	C	C4-N4	7.96	1.41	1.33
12	B	1235	G	C6-N1	7.96	1.45	1.39
12	B	884	U	N3-C4	7.96	1.45	1.38
12	B	1197	G	C5-C6	-7.96	1.34	1.42
11	A	68	C	C2'-C1'	-7.95	1.44	1.53
12	B	1073	A	C5'-C4'	7.95	1.60	1.51
12	B	1970	A	N9-C4	-7.95	1.33	1.37
12	B	1900	A	N9-C4	7.95	1.42	1.37
12	B	2341	G	N1-C2	7.95	1.44	1.37
12	B	1947	C	P-O5'	-7.95	1.51	1.59
12	B	2822	G	N7-C5	-7.95	1.34	1.39
12	B	388	G	P-O5'	7.95	1.67	1.59
12	B	589	U	C2-N3	7.95	1.43	1.37
12	B	2113	U	C2-N3	7.95	1.43	1.37
12	B	2588	G	N1-C2	7.95	1.44	1.37
12	B	1784	A	C5'-C4'	7.94	1.60	1.51
12	B	2630	G	N9-C4	-7.94	1.31	1.38
12	B	400	G	N7-C5	-7.94	1.34	1.39
12	B	1710	G	C6-N1	7.94	1.45	1.39
12	B	190	A	C2'-C1'	-7.94	1.44	1.53
12	B	1677	A	N7-C5	-7.94	1.34	1.39
12	B	1963	U	N1-C2	7.94	1.45	1.38
12	B	2108	A	C5'-C4'	7.94	1.60	1.51
12	B	1116	G	C5'-C4'	7.94	1.60	1.51
12	B	997	G	C8-N7	7.93	1.35	1.30
12	B	1567	G	C6-N1	7.93	1.45	1.39
12	B	2123	G	N7-C5	7.93	1.44	1.39
12	B	293	U	O3'-P	-7.93	1.51	1.61
12	B	1464	G	C6-N1	7.93	1.45	1.39
11	A	117	G	N3-C4	7.93	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1147	A	C8-N7	7.93	1.37	1.31
12	B	948	C	N1-C6	7.92	1.42	1.37
12	B	1922	G	C6-N1	7.92	1.45	1.39
12	B	2121	G	C2-N3	7.92	1.39	1.32
12	B	2436	G	C6-O6	-7.92	1.17	1.24
12	B	1703	G	N1-C2	7.92	1.44	1.37
12	B	1961	C	N1-C6	7.92	1.42	1.37
12	B	2151	U	C2-N3	7.92	1.43	1.37
12	B	2158	A	C6-N6	7.92	1.40	1.33
12	B	1683	U	N3-C4	7.92	1.45	1.38
12	B	2198	A	C6-N6	7.92	1.40	1.33
12	B	608	A	C6-N6	7.92	1.40	1.33
12	B	793	A	C5-C4	7.92	1.44	1.38
12	B	2738	A	N3-C4	-7.92	1.30	1.34
12	B	147	C	P-O5'	-7.92	1.51	1.59
12	B	1899	A	C6-N1	7.92	1.41	1.35
11	A	73	A	C3'-C2'	-7.91	1.44	1.52
12	B	2830	C	N3-C4	7.91	1.39	1.33
12	B	212	G	C2-N3	7.91	1.39	1.32
12	B	604	G	C2-N2	7.91	1.42	1.34
12	B	1587	G	N7-C5	-7.91	1.34	1.39
12	B	1632	A	N7-C5	-7.91	1.34	1.39
12	B	2131	U	C2-N3	7.91	1.43	1.37
12	B	2004	G	N1-C2	7.91	1.44	1.37
12	B	2743	U	C2-N3	7.91	1.43	1.37
8	7	41	ARG	NE-CZ	7.91	1.43	1.33
12	B	648	G	C5-C4	-7.91	1.32	1.38
12	B	784	G	C2-N3	7.91	1.39	1.32
12	B	2747	G	C6-N1	7.91	1.45	1.39
12	B	693	A	C6-N1	7.91	1.41	1.35
12	B	1162	G	N3-C4	7.91	1.41	1.35
12	B	2224	G	N9-C4	-7.91	1.31	1.38
12	B	1634	A	N9-C4	7.90	1.42	1.37
12	B	1982	U	C3'-C2'	-7.90	1.44	1.52
12	B	584	C	C4-N4	7.90	1.41	1.33
12	B	1799	G	N9-C4	-7.90	1.31	1.38
12	B	2895	G	N9-C8	-7.90	1.32	1.37
12	B	947	A	C6-N1	7.90	1.41	1.35
12	B	1798	U	C4'-C3'	7.90	1.61	1.53
12	B	2199	A	C6-N1	7.90	1.41	1.35
12	B	2803	G	N7-C5	-7.90	1.34	1.39
12	B	488	G	N3-C4	7.89	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	580	U	P-O5'	-7.89	1.51	1.59
12	B	2221	G	C5-C4	7.89	1.43	1.38
12	B	2485	G	C8-N7	7.89	1.35	1.30
12	B	1320	C	C2-N3	7.89	1.42	1.35
12	B	681	G	N1-C2	7.89	1.44	1.37
12	B	1787	A	C5'-C4'	7.89	1.60	1.51
12	B	668	A	C6-N6	7.89	1.40	1.33
12	B	1423	G	N9-C4	7.89	1.44	1.38
12	B	87	U	P-O5'	-7.89	1.51	1.59
12	B	503	A	N7-C5	-7.89	1.34	1.39
12	B	602	A	N9-C8	-7.89	1.31	1.37
12	B	1670	C	C4'-C3'	7.89	1.61	1.53
12	B	1766	G	C2-N2	7.89	1.42	1.34
12	B	1878	G	N1-C2	7.89	1.44	1.37
12	B	2069	G	C6-N1	7.89	1.45	1.39
12	B	2211	A	N7-C5	-7.89	1.34	1.39
11	A	11	C	C4-N4	7.88	1.41	1.33
12	B	1795	C	C2-N3	-7.88	1.29	1.35
12	B	2523	G	C5-C4	7.88	1.43	1.38
12	B	2141	G	C6-N1	7.88	1.45	1.39
12	B	117	G	C6-N1	7.88	1.45	1.39
12	B	172	A	C2'-C1'	-7.88	1.44	1.53
12	B	2435	A	C6-N6	7.88	1.40	1.33
11	A	71	C	C4-N4	7.88	1.41	1.33
12	B	365	U	C3'-C2'	7.88	1.61	1.52
12	B	675	A	C6-N1	7.88	1.41	1.35
12	B	1710	G	C4'-C3'	-7.88	1.44	1.53
12	B	2049	G	N9-C8	7.88	1.43	1.37
12	B	649	G	C4'-C3'	7.88	1.61	1.53
12	B	1422	G	C4'-C3'	7.88	1.61	1.53
12	B	1546	G	N1-C2	7.88	1.44	1.37
12	B	1890	A	C6-N1	7.88	1.41	1.35
12	B	124	G	N7-C5	7.87	1.44	1.39
12	B	2012	G	C6-N1	7.87	1.45	1.39
12	B	2293	G	C6-N1	7.87	1.45	1.39
12	B	165	A	C6-N1	7.87	1.41	1.35
12	B	1639	C	N1-C6	7.87	1.41	1.37
12	B	2859	G	C3'-C2'	7.87	1.61	1.52
12	B	2115	G	C2-N3	7.87	1.39	1.32
12	B	2490	G	N3-C4	7.87	1.41	1.35
12	B	729	G	O3'-P	-7.86	1.51	1.61
12	B	1756	G	C5'-C4'	7.86	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1075	C	O3'-P	-7.86	1.51	1.61
12	B	2882	A	C4'-C3'	-7.86	1.44	1.53
12	B	1344	U	C5-C6	-7.86	1.27	1.34
12	B	1464	G	C5'-C4'	7.86	1.60	1.51
12	B	1725	U	C5'-C4'	7.86	1.60	1.51
12	B	1920	C	C4-N4	7.86	1.41	1.33
12	B	2148	G	C5'-C4'	7.86	1.60	1.51
12	B	735	A	N1-C2	7.86	1.41	1.34
12	B	2330	G	C6-N1	7.86	1.45	1.39
12	B	1779	U	C2-N3	7.86	1.43	1.37
12	B	2356	U	C2-N3	7.86	1.43	1.37
12	B	2382	G	C2-N3	7.86	1.39	1.32
12	B	606	U	C2-N3	7.86	1.43	1.37
12	B	968	C	C2'-C1'	-7.86	1.44	1.53
12	B	1034	G	C5-C6	-7.86	1.34	1.42
12	B	1120	G	C2-N3	7.86	1.39	1.32
12	B	2592	G	N1-C2	7.85	1.44	1.37
12	B	493	G	C3'-C2'	-7.85	1.44	1.52
12	B	1116	G	N9-C4	-7.85	1.31	1.38
12	B	1300	G	N3-C4	7.85	1.41	1.35
12	B	2535	G	N1-C2	7.85	1.44	1.37
12	B	2660	A	N3-C4	-7.85	1.30	1.34
12	B	2320	U	N3-C4	7.85	1.45	1.38
11	A	82	U	C5-C6	7.85	1.41	1.34
12	B	933	A	N9-C8	-7.85	1.31	1.37
12	B	1422	G	P-O5'	-7.85	1.51	1.59
12	B	1620	G	C6-N1	7.85	1.45	1.39
12	B	1020	A	N3-C4	-7.85	1.30	1.34
12	B	886	A	N7-C5	-7.84	1.34	1.39
12	B	2671	G	C8-N7	-7.84	1.26	1.30
12	B	2714	G	C2-N3	7.84	1.39	1.32
12	B	1656	C	C2'-C1'	-7.84	1.44	1.53
12	B	1710	G	N9-C4	7.84	1.44	1.38
12	B	88	G	C2-N3	7.84	1.39	1.32
12	B	1259	G	N9-C4	-7.84	1.31	1.38
12	B	1514	G	C2-N3	7.84	1.39	1.32
12	B	1040	A	C8-N7	7.84	1.37	1.31
12	B	1613	G	N1-C2	7.84	1.44	1.37
12	B	1695	G	C2-N3	7.84	1.39	1.32
12	B	450	G	N9-C4	-7.84	1.31	1.38
12	B	849	A	N7-C5	-7.84	1.34	1.39
12	B	974	G	C2-N3	7.84	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1527	G	C2-N3	7.84	1.39	1.32
12	B	666	A	N7-C5	-7.84	1.34	1.39
12	B	1772	A	N7-C5	-7.84	1.34	1.39
12	B	2224	G	N9-C8	7.84	1.43	1.37
12	B	1165	A	C6-N6	7.83	1.40	1.33
12	B	1360	G	C6-N1	7.83	1.45	1.39
12	B	984	A	C6-N1	7.83	1.41	1.35
12	B	1385	A	N9-C4	7.83	1.42	1.37
12	B	1493	C	O3'-P	-7.83	1.51	1.61
12	B	1918	A	C6-N1	7.83	1.41	1.35
12	B	675	A	C6-N6	7.83	1.40	1.33
12	B	775	G	N7-C5	-7.83	1.34	1.39
12	B	1805	A	N1-C2	7.83	1.41	1.34
12	B	1596	A	N9-C4	-7.83	1.33	1.37
12	B	1833	C	C2'-C1'	-7.83	1.44	1.53
12	B	436	C	N3-C4	7.82	1.39	1.33
12	B	1691	C	N3-C4	7.82	1.39	1.33
11	A	58	A	N7-C5	-7.82	1.34	1.39
11	A	61	G	C2'-C1'	-7.82	1.44	1.53
12	B	1873	G	N1-C2	7.82	1.44	1.37
12	B	2305	U	N3-C4	7.82	1.45	1.38
12	B	276	U	O3'-P	-7.82	1.51	1.61
12	B	322	A	N3-C4	-7.82	1.30	1.34
12	B	2093	G	N9-C8	7.82	1.43	1.37
12	B	456	C	N1-C2	-7.81	1.32	1.40
12	B	2166	U	C2-N3	7.81	1.43	1.37
12	B	190	A	C8-N7	-7.81	1.26	1.31
12	B	629	G	N1-C2	7.81	1.44	1.37
12	B	1532	A	C2'-C1'	-7.81	1.44	1.53
12	B	2061	G	N1-C2	7.81	1.44	1.37
12	B	2645	G	N1-C2	7.81	1.44	1.37
12	B	277	G	P-O5'	-7.81	1.51	1.59
12	B	354	A	C6-N6	7.81	1.40	1.33
12	B	805	G	C6-N1	7.81	1.45	1.39
12	B	2485	G	C5-C4	-7.81	1.32	1.38
11	A	101	A	O3'-P	-7.81	1.51	1.61
12	B	942	G	C2'-C1'	-7.80	1.44	1.53
12	B	1842	G	N3-C4	-7.80	1.29	1.35
12	B	2197	U	C4'-O4'	7.80	1.55	1.45
11	A	34	A	O3'-P	7.80	1.70	1.61
12	B	380	G	C2-N2	7.80	1.42	1.34
12	B	2093	G	N9-C4	-7.80	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2856	A	C6-N6	7.80	1.40	1.33
12	B	735	A	N9-C8	-7.80	1.31	1.37
12	B	55	G	N1-C2	7.80	1.44	1.37
12	B	1303	G	C6-N1	7.80	1.45	1.39
12	B	1900	A	C6-N6	7.79	1.40	1.33
12	B	953	G	N9-C8	7.79	1.43	1.37
12	B	1927	A	C2'-C1'	-7.79	1.44	1.53
12	B	2645	G	C2-N3	7.79	1.39	1.32
12	B	122	G	C6-N1	7.79	1.45	1.39
12	B	281	C	P-O5'	-7.79	1.51	1.59
12	B	2507	C	N3-C4	7.79	1.39	1.33
12	B	2861	U	C2-N3	7.79	1.43	1.37
12	B	931	U	N3-C4	7.79	1.45	1.38
12	B	1306	C	C4-N4	7.79	1.41	1.33
12	B	2326	C	C4-N4	7.79	1.41	1.33
12	B	2340	A	C6-N6	7.79	1.40	1.33
12	B	1829	A	C2'-C1'	-7.79	1.44	1.53
12	B	524	G	C5-C4	7.79	1.43	1.38
12	B	1806	C	C5-C6	7.79	1.40	1.34
12	B	2262	U	C2'-C1'	-7.79	1.44	1.53
12	B	1874	C	C4-N4	7.78	1.41	1.33
12	B	95	A	C2-N3	7.78	1.40	1.33
12	B	1342	A	N9-C8	-7.78	1.31	1.37
12	B	659	G	C2-N3	7.78	1.39	1.32
12	B	1173	U	N3-C4	7.78	1.45	1.38
12	B	1789	A	C5-C4	7.78	1.44	1.38
12	B	2204	G	N3-C4	-7.78	1.30	1.35
12	B	2417	C	C2'-C1'	-7.78	1.44	1.53
12	B	979	A	C5'-C4'	7.77	1.60	1.51
12	B	1749	A	C6-N6	7.77	1.40	1.33
12	B	30	G	P-O5'	-7.77	1.51	1.59
12	B	1278	C	C4-C5	7.77	1.49	1.43
12	B	2895	G	C2-N3	7.77	1.39	1.32
12	B	1887	C	N3-C4	7.77	1.39	1.33
12	B	2315	G	P-O5'	-7.77	1.51	1.59
12	B	549	G	N9-C8	7.77	1.43	1.37
12	B	735	A	N7-C5	-7.77	1.34	1.39
12	B	1441	G	N9-C4	7.77	1.44	1.38
12	B	2770	G	C5-C4	7.77	1.43	1.38
11	A	70	C	C5'-C4'	7.77	1.60	1.51
12	B	2834	G	N9-C4	-7.77	1.31	1.38
11	A	16	G	N1-C2	7.77	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1591	A	N1-C2	7.77	1.41	1.34
12	B	1377	G	C6-N1	7.76	1.45	1.39
12	B	2010	G	C4'-C3'	-7.76	1.44	1.53
12	B	342	A	N9-C4	-7.76	1.33	1.37
12	B	680	C	C2'-C1'	-7.76	1.44	1.53
12	B	901	C	C4-C5	7.76	1.49	1.43
12	B	1098	A	N9-C4	-7.76	1.33	1.37
12	B	2025	C	N3-C4	7.76	1.39	1.33
12	B	2222	C	P-O5'	-7.76	1.51	1.59
12	B	332	A	C8-N7	-7.76	1.26	1.31
12	B	1165	A	C6-N1	7.76	1.41	1.35
12	B	1632	A	C6-N1	7.76	1.41	1.35
12	B	554	U	C2-N3	7.76	1.43	1.37
12	B	663	G	C4'-C3'	-7.76	1.44	1.53
12	B	721	A	C8-N7	7.76	1.36	1.31
12	B	821	A	C5-C4	7.76	1.44	1.38
12	B	1888	G	N9-C4	7.76	1.44	1.38
12	B	2561	U	C2-N3	7.76	1.43	1.37
12	B	2076	U	C2'-C1'	-7.75	1.44	1.53
12	B	839	U	C2-N3	7.75	1.43	1.37
12	B	2732	G	C2-N3	7.75	1.39	1.32
33	Y	10	ARG	CD-NE	7.75	1.59	1.46
12	B	685	A	C3'-C2'	7.75	1.61	1.52
12	B	1582	C	N1-C6	7.75	1.41	1.37
12	B	365	U	C4-C5	7.75	1.50	1.43
12	B	528	A	C6-N6	7.75	1.40	1.33
12	B	1138	G	C5-C4	-7.75	1.32	1.38
12	B	2894	G	C2'-C1'	7.75	1.61	1.53
12	B	721	A	N7-C5	-7.74	1.34	1.39
12	B	1984	G	C8-N7	7.74	1.35	1.30
12	B	413	C	C2'-C1'	-7.74	1.44	1.53
12	B	1332	G	C8-N7	-7.74	1.26	1.30
12	B	1334	G	C2'-C1'	-7.74	1.44	1.53
12	B	1587	G	N3-C4	7.74	1.40	1.35
12	B	2702	G	C5-C6	-7.74	1.34	1.42
12	B	333	G	N9-C8	7.74	1.43	1.37
12	B	736	C	N1-C6	7.74	1.41	1.37
12	B	1495	A	C5-C4	-7.74	1.33	1.38
11	A	111	U	C2'-C1'	-7.74	1.44	1.53
12	B	2425	A	N7-C5	-7.74	1.34	1.39
12	B	51	G	C3'-O3'	7.74	1.52	1.42
12	B	704	G	C2-N3	7.74	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1215	G	C6-N1	7.74	1.45	1.39
12	B	1818	U	C1'-N1	7.74	1.60	1.48
12	B	2024	G	N1-C2	7.74	1.44	1.37
12	B	2821	A	P-O5'	-7.74	1.52	1.59
12	B	560	C	O3'-P	-7.73	1.51	1.61
12	B	700	G	C8-N7	7.73	1.35	1.30
12	B	1039	A	N7-C5	-7.73	1.34	1.39
12	B	2298	A	N7-C5	-7.73	1.34	1.39
12	B	1369	G	C2'-C1'	-7.73	1.44	1.53
12	B	472	A	P-O5'	-7.73	1.52	1.59
12	B	2503	A	N9-C8	-7.73	1.31	1.37
12	B	1127	A	C2'-C1'	-7.73	1.44	1.53
12	B	1214	A	C8-N7	-7.73	1.26	1.31
18	H	93	SER	CA-CB	7.73	1.64	1.52
12	B	859	G	C2'-C1'	-7.73	1.44	1.53
12	B	987	C	N3-C4	7.73	1.39	1.33
12	B	2878	U	P-O5'	-7.73	1.52	1.59
12	B	1431	A	P-O5'	-7.72	1.52	1.59
12	B	1502	A	P-O5'	-7.72	1.52	1.59
12	B	1550	C	C3'-O3'	7.72	1.52	1.42
12	B	1592	C	C4-C5	7.72	1.49	1.43
12	B	267	C	N3-C4	7.72	1.39	1.33
12	B	495	G	C6-N1	7.72	1.45	1.39
12	B	1120	G	C5'-C4'	7.72	1.60	1.51
12	B	1958	C	O3'-P	-7.72	1.51	1.61
12	B	2572	A	C6-N1	7.72	1.41	1.35
12	B	1085	A	N7-C5	-7.72	1.34	1.39
12	B	1398	C	P-O5'	-7.72	1.52	1.59
12	B	62	U	N1-C6	-7.72	1.31	1.38
12	B	500	G	C5'-C4'	7.72	1.60	1.51
12	B	2595	G	N9-C8	7.72	1.43	1.37
11	A	81	G	N7-C5	-7.72	1.34	1.39
12	B	1031	G	C6-N1	7.72	1.45	1.39
12	B	70	G	N3-C4	-7.72	1.30	1.35
12	B	830	G	C3'-C2'	7.72	1.61	1.52
12	B	2157	G	C6-N1	7.72	1.45	1.39
12	B	2268	A	N3-C4	-7.72	1.30	1.34
12	B	42	A	N3-C4	7.71	1.39	1.34
12	B	1932	A	P-O5'	-7.71	1.52	1.59
12	B	12	U	C2-N3	7.71	1.43	1.37
12	B	1190	G	N7-C5	-7.71	1.34	1.39
12	B	1577	C	N1-C6	7.71	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2518	A	N3-C4	7.71	1.39	1.34
12	B	1018	U	P-O5'	-7.71	1.52	1.59
12	B	2088	A	C5-C6	-7.71	1.34	1.41
12	B	2110	G	C4'-C3'	7.71	1.61	1.53
12	B	2406	A	C8-N7	-7.71	1.26	1.31
12	B	2647	U	C2-N3	7.71	1.43	1.37
12	B	2243	U	C2-N3	7.71	1.43	1.37
12	B	1050	A	C8-N7	-7.71	1.26	1.31
12	B	1698	A	C6-N6	7.71	1.40	1.33
12	B	723	C	C4-N4	7.71	1.40	1.33
12	B	1715	G	C2-N3	7.71	1.39	1.32
12	B	2814	A	C5-C4	7.71	1.44	1.38
12	B	1220	G	N1-C2	7.71	1.44	1.37
11	A	105	G	C8-N7	7.70	1.35	1.30
12	B	1202	G	N1-C2	7.70	1.44	1.37
12	B	1857	G	N7-C5	-7.70	1.34	1.39
12	B	2880	C	N3-C4	7.70	1.39	1.33
12	B	704	G	N7-C5	7.70	1.43	1.39
12	B	1927	A	C6-N6	7.70	1.40	1.33
11	A	108	A	C4'-C3'	7.70	1.61	1.53
12	B	401	A	C8-N7	-7.70	1.26	1.31
12	B	1815	A	N9-C4	7.70	1.42	1.37
12	B	2438	U	C2-N3	7.70	1.43	1.37
12	B	2452	C	N3-C4	7.70	1.39	1.33
12	B	1533	C	C4-N4	7.70	1.40	1.33
12	B	2180	U	N1-C6	7.70	1.44	1.38
12	B	2652	C	C3'-O3'	7.70	1.52	1.42
12	B	812	C	C2'-C1'	-7.70	1.44	1.53
12	B	2813	A	C5-C4	7.70	1.44	1.38
12	B	662	G	N7-C5	-7.70	1.34	1.39
12	B	700	G	N1-C2	7.70	1.44	1.37
12	B	2550	G	N3-C4	7.70	1.40	1.35
12	B	397	U	C5-C6	7.69	1.41	1.34
12	B	365	U	N1-C6	7.69	1.44	1.38
12	B	501	A	N9-C4	-7.69	1.33	1.37
12	B	857	G	O4'-C1'	-7.69	1.31	1.41
12	B	2211	A	C5'-C4'	7.69	1.60	1.51
12	B	1187	G	N1-C2	7.69	1.44	1.37
12	B	1462	C	N1-C6	7.69	1.41	1.37
12	B	159	G	C2-N2	7.69	1.42	1.34
12	B	471	A	C5-C6	-7.69	1.34	1.41
12	B	988	A	C6-N6	7.69	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2282	G	N1-C2	7.69	1.43	1.37
12	B	213	A	C6-N1	7.68	1.41	1.35
12	B	1001	A	P-O5'	-7.68	1.52	1.59
12	B	11	C	N3-C4	7.68	1.39	1.33
12	B	417	C	C2-N3	-7.68	1.29	1.35
12	B	748	G	C2-N3	7.68	1.38	1.32
12	B	1054	A	C6-N1	7.68	1.41	1.35
12	B	1653	G	N1-C2	7.68	1.43	1.37
12	B	2077	A	C5-C4	-7.68	1.33	1.38
12	B	2148	G	C2-N3	7.68	1.38	1.32
12	B	2901	C	C4'-C3'	7.68	1.61	1.53
12	B	840	C	C5-C6	7.68	1.40	1.34
12	B	1407	G	C6-N1	7.68	1.45	1.39
12	B	1791	A	C6-N6	7.68	1.40	1.33
12	B	352	A	N7-C5	-7.68	1.34	1.39
12	B	1732	C	N1-C6	7.68	1.41	1.37
12	B	2648	G	C2-N3	7.68	1.38	1.32
12	B	2769	U	O3'-P	-7.68	1.51	1.61
12	B	2870	C	C2-N3	7.68	1.41	1.35
12	B	759	G	C2-N2	7.68	1.42	1.34
12	B	2299	U	O4'-C1'	7.68	1.51	1.41
12	B	274	C	C2-N3	-7.67	1.29	1.35
12	B	1066	U	N3-C4	7.67	1.45	1.38
12	B	1921	G	N9-C4	7.67	1.44	1.38
12	B	2662	A	C3'-C2'	7.67	1.61	1.52
12	B	2349	G	N7-C5	-7.67	1.34	1.39
15	E	67	ARG	CZ-NH1	7.67	1.43	1.33
12	B	310	A	O3'-P	-7.67	1.51	1.61
12	B	1069	A	C6-N1	7.67	1.41	1.35
12	B	2095	A	C6-N6	7.67	1.40	1.33
12	B	2658	C	N1-C6	7.67	1.41	1.37
12	B	1276	A	N9-C4	7.67	1.42	1.37
12	B	2665	A	N7-C5	7.67	1.43	1.39
12	B	2547	A	N7-C5	-7.67	1.34	1.39
12	B	1347	A	C5-C4	7.66	1.44	1.38
12	B	629	G	C5-C6	7.66	1.50	1.42
12	B	1358	G	O3'-P	-7.66	1.51	1.61
12	B	1891	G	C2-N2	7.66	1.42	1.34
12	B	2685	G	C2'-C1'	-7.66	1.45	1.53
12	B	128	C	O3'-P	-7.66	1.51	1.61
12	B	429	A	C6-N6	7.66	1.40	1.33
12	B	2518	A	P-O5'	-7.66	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1632	A	P-O5'	-7.65	1.52	1.59
12	B	1918	A	N9-C8	-7.65	1.31	1.37
12	B	2535	G	N3-C4	-7.65	1.30	1.35
11	A	44	G	C2-N3	7.65	1.38	1.32
12	B	2453	A	N3-C4	-7.65	1.30	1.34
12	B	2743	U	O3'-P	-7.65	1.51	1.61
15	E	35	TYR	CZ-OH	7.65	1.50	1.37
12	B	2271	G	C2-N2	7.65	1.42	1.34
12	B	946	C	C4-C5	7.65	1.49	1.43
12	B	769	U	C4'-O4'	7.64	1.55	1.45
12	B	2903	U	C2-N3	7.64	1.43	1.37
12	B	192	C	N1-C6	7.64	1.41	1.37
12	B	1145	C	N1-C6	7.64	1.41	1.37
12	B	1880	U	C4-C5	7.64	1.50	1.43
12	B	409	G	C5'-C4'	7.64	1.60	1.51
12	B	1891	G	N9-C4	-7.64	1.31	1.38
12	B	2002	G	N3-C4	-7.64	1.30	1.35
12	B	1808	A	N9-C4	7.64	1.42	1.37
12	B	836	G	C4'-C3'	7.63	1.61	1.53
12	B	941	A	N3-C4	-7.63	1.30	1.34
12	B	2754	U	C4-O4	7.63	1.29	1.23
12	B	646	U	N1-C2	7.63	1.45	1.38
12	B	2394	C	C4-N4	7.63	1.40	1.33
12	B	2833	U	C5'-C4'	7.63	1.60	1.51
12	B	1265	A	C2'-C1'	-7.63	1.45	1.53
12	B	1424	G	C5-C6	-7.63	1.34	1.42
12	B	1798	U	C2-N3	7.63	1.43	1.37
12	B	613	A	C2'-C1'	-7.63	1.45	1.53
12	B	880	G	C8-N7	-7.63	1.26	1.30
12	B	1231	U	C2-N3	7.63	1.43	1.37
12	B	2837	A	C6-N6	7.63	1.40	1.33
12	B	69	C	C5'-C4'	7.63	1.60	1.51
12	B	1328	A	N7-C5	-7.63	1.34	1.39
12	B	1549	A	C5-C6	-7.63	1.34	1.41
12	B	136	G	C6-N1	7.62	1.44	1.39
12	B	363	G	C2-N3	7.62	1.38	1.32
7	6	34	ARG	CD-NE	7.62	1.59	1.46
11	A	79	G	N1-C2	7.62	1.43	1.37
12	B	1953	A	P-O5'	-7.62	1.52	1.59
12	B	2139	U	C4'-O4'	-7.62	1.35	1.45
11	A	106	G	C8-N7	7.62	1.35	1.30
12	B	917	A	C5'-C4'	7.62	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1287	A	C6-N6	7.62	1.40	1.33
12	B	1953	A	C6-N6	7.62	1.40	1.33
12	B	1500	G	C6-N1	-7.62	1.34	1.39
12	B	1775	U	O4'-C1'	7.62	1.51	1.41
12	B	2304	G	O4'-C1'	7.62	1.51	1.41
12	B	2704	C	C2'-C1'	-7.62	1.45	1.53
12	B	1680	U	C5-C6	7.62	1.41	1.34
12	B	2113	U	P-O5'	-7.62	1.52	1.59
12	B	1429	G	C2-N2	7.62	1.42	1.34
12	B	669	G	C5'-C4'	7.61	1.60	1.51
12	B	2238	G	C6-N1	7.61	1.44	1.39
12	B	1095	A	C5'-C4'	7.61	1.60	1.51
12	B	860	U	C5'-C4'	7.61	1.60	1.51
12	B	1479	G	C6-N1	7.61	1.44	1.39
12	B	1593	A	N7-C5	-7.61	1.34	1.39
12	B	1598	A	N3-C4	-7.61	1.30	1.34
12	B	2327	A	N9-C8	-7.61	1.31	1.37
12	B	2691	C	N1-C6	7.61	1.41	1.37
12	B	1025	G	N1-C2	7.60	1.43	1.37
12	B	1861	G	C6-N1	7.60	1.44	1.39
12	B	2855	C	N3-C4	7.60	1.39	1.33
12	B	1511	G	N3-C4	-7.60	1.30	1.35
12	B	2628	C	C4-N4	7.60	1.40	1.33
12	B	2868	A	O3'-P	-7.60	1.52	1.61
12	B	1772	A	O3'-P	-7.60	1.52	1.61
12	B	2002	G	C5-C4	7.60	1.43	1.38
12	B	2654	A	N7-C5	-7.60	1.34	1.39
12	B	969	G	C2-N3	7.60	1.38	1.32
12	B	1026	G	N7-C5	-7.60	1.34	1.39
12	B	535	G	C5-C6	-7.59	1.34	1.42
12	B	1593	A	C6-N1	7.59	1.40	1.35
12	B	2567	G	C5-C4	-7.59	1.33	1.38
12	B	1587	G	N9-C4	-7.59	1.31	1.38
12	B	2280	G	N1-C2	7.59	1.43	1.37
12	B	706	A	C5-C6	-7.59	1.34	1.41
12	B	2230	G	C3'-C2'	-7.59	1.44	1.52
11	A	67	G	C6-N1	7.59	1.44	1.39
12	B	461	C	C2-O2	7.59	1.31	1.24
12	B	808	G	O3'-P	-7.59	1.52	1.61
12	B	1711	A	C6-N6	7.59	1.40	1.33
12	B	1172	C	C4-C5	-7.58	1.36	1.43
12	B	1264	A	C5-C6	-7.58	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1293	C	P-O5'	-7.58	1.52	1.59
12	B	1307	A	C6-N1	7.58	1.40	1.35
12	B	1728	C	N1-C6	7.58	1.41	1.37
11	A	50	A	N9-C4	-7.58	1.33	1.37
12	B	514	A	P-O5'	-7.58	1.52	1.59
12	B	1192	G	N1-C2	7.58	1.43	1.37
12	B	1635	A	C3'-C2'	7.58	1.61	1.52
12	B	2252	G	N3-C4	-7.58	1.30	1.35
12	B	2487	G	C4'-O4'	7.58	1.55	1.45
12	B	740	C	N1-C6	-7.58	1.32	1.37
12	B	2100	G	C2'-C1'	-7.58	1.45	1.53
12	B	549	G	C6-N1	7.58	1.44	1.39
12	B	592	A	C6-N6	7.58	1.40	1.33
12	B	761	A	C3'-C2'	-7.58	1.44	1.52
12	B	795	C	C2'-C1'	-7.58	1.45	1.53
12	B	2460	U	C2-N3	7.58	1.43	1.37
12	B	159	G	N7-C5	-7.58	1.34	1.39
12	B	2394	C	N3-C4	7.58	1.39	1.33
12	B	312	G	N7-C5	-7.58	1.34	1.39
12	B	498	G	C2-N2	7.58	1.42	1.34
12	B	732	C	C2-N3	7.58	1.41	1.35
12	B	1097	U	C5'-C4'	7.58	1.60	1.51
12	B	1103	A	C2-N3	7.58	1.40	1.33
12	B	1145	C	C1'-N1	7.58	1.60	1.48
12	B	1350	C	C4'-C3'	7.58	1.61	1.53
12	B	2855	C	C1'-N1	7.58	1.60	1.48
12	B	191	A	P-O5'	-7.57	1.52	1.59
12	B	220	G	N9-C8	7.57	1.43	1.37
12	B	1044	C	O3'-P	-7.57	1.52	1.61
12	B	1700	A	C5-C4	7.57	1.44	1.38
12	B	2355	G	N7-C5	-7.57	1.34	1.39
12	B	843	G	C2-N3	7.57	1.38	1.32
12	B	2214	C	C4-N4	7.57	1.40	1.33
12	B	804	A	C5-C4	7.57	1.44	1.38
12	B	1488	C	C2'-C1'	-7.57	1.45	1.53
12	B	259	G	C8-N7	7.57	1.35	1.30
12	B	2382	G	P-O5'	-7.57	1.52	1.59
12	B	2680	U	P-O5'	-7.57	1.52	1.59
28	R	13	ARG	CZ-NH2	7.56	1.42	1.33
12	B	776	G	C5-C4	7.56	1.43	1.38
12	B	2818	U	C4'-C3'	7.56	1.61	1.53
12	B	468	G	N7-C5	-7.56	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2014	A	N7-C5	7.56	1.43	1.39
12	B	630	G	N7-C5	-7.56	1.34	1.39
12	B	1633	G	C2-N3	7.56	1.38	1.32
12	B	440	C	N1-C6	-7.56	1.32	1.37
12	B	1187	G	C6-N1	7.56	1.44	1.39
12	B	2219	U	C2-N3	7.56	1.43	1.37
12	B	1057	A	N9-C4	7.55	1.42	1.37
12	B	2186	G	C5'-C4'	7.55	1.60	1.51
12	B	2731	G	C2-N3	7.55	1.38	1.32
11	A	15	A	C2'-C1'	-7.55	1.45	1.53
12	B	302	C	C3'-C2'	-7.55	1.44	1.52
12	B	500	G	C4'-C3'	7.55	1.61	1.53
12	B	1790	C	O3'-P	-7.55	1.52	1.61
12	B	2029	G	C2-N3	7.55	1.38	1.32
12	B	2305	U	O3'-P	-7.55	1.52	1.61
12	B	1218	G	N7-C5	-7.55	1.34	1.39
12	B	1870	C	O3'-P	-7.55	1.52	1.61
12	B	2324	U	C3'-C2'	7.55	1.61	1.52
12	B	539	G	C4'-C3'	7.54	1.61	1.53
12	B	1710	G	C2-N3	7.54	1.38	1.32
11	A	66	A	N7-C5	-7.54	1.34	1.39
12	B	1471	G	C5-C6	-7.54	1.34	1.42
12	B	1492	G	N1-C2	7.54	1.43	1.37
12	B	2643	G	C6-N1	-7.54	1.34	1.39
13	C	37	SER	CA-CB	7.54	1.64	1.52
11	A	19	C	C4'-C3'	7.54	1.61	1.53
12	B	1213	A	C6-N6	7.54	1.40	1.33
12	B	587	C	N1-C6	-7.54	1.32	1.37
12	B	883	G	C2-N2	7.54	1.42	1.34
12	B	333	G	C2-N3	7.53	1.38	1.32
12	B	991	C	O3'-P	-7.53	1.52	1.61
12	B	2427	C	C5'-C4'	7.53	1.60	1.51
12	B	2489	U	N1-C6	7.53	1.44	1.38
11	A	46	A	C6-N6	7.53	1.40	1.33
12	B	126	A	N7-C5	-7.53	1.34	1.39
12	B	941	A	C6-N6	7.53	1.40	1.33
12	B	433	C	N3-C4	7.53	1.39	1.33
12	B	2070	A	C4'-O4'	-7.53	1.35	1.45
12	B	2477	U	N3-C4	7.53	1.45	1.38
12	B	741	U	C2'-C1'	-7.53	1.45	1.53
12	B	926	G	C4'-C3'	7.53	1.61	1.53
12	B	2483	C	C5'-C4'	7.53	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	265	A	C6-N1	7.53	1.40	1.35
12	B	602	A	N3-C4	-7.53	1.30	1.34
12	B	1018	U	C5-C6	-7.53	1.27	1.34
12	B	2486	C	C5'-C4'	7.53	1.60	1.51
12	B	1719	G	C8-N7	-7.53	1.26	1.30
12	B	2690	U	C5'-C4'	7.53	1.60	1.51
12	B	2532	G	C2-N2	7.52	1.42	1.34
12	B	42	A	C6-N6	7.52	1.40	1.33
12	B	189	G	P-O5'	-7.52	1.52	1.59
12	B	1420	A	C6-N6	7.52	1.40	1.33
12	B	2485	G	C5'-C4'	7.52	1.60	1.51
12	B	2537	U	N3-C4	7.52	1.45	1.38
12	B	1710	G	C5-C6	-7.52	1.34	1.42
12	B	2825	G	N1-C2	7.52	1.43	1.37
12	B	493	G	C2'-C1'	-7.52	1.45	1.53
12	B	2094	A	N9-C4	7.52	1.42	1.37
12	B	1246	A	C6-N1	7.52	1.40	1.35
12	B	2559	C	C3'-C2'	-7.52	1.44	1.52
12	B	2270	A	N3-C4	-7.52	1.30	1.34
12	B	409	G	C8-N7	-7.51	1.26	1.30
12	B	592	A	C5-C4	7.51	1.44	1.38
12	B	1983	G	C2-N2	7.51	1.42	1.34
12	B	2895	G	C2-N2	7.51	1.42	1.34
12	B	1896	G	N1-C2	7.51	1.43	1.37
12	B	174	U	O3'-P	-7.51	1.52	1.61
12	B	180	G	N1-C2	7.51	1.43	1.37
12	B	1170	C	N3-C4	7.51	1.39	1.33
12	B	1237	A	P-O5'	7.51	1.67	1.59
12	B	1288	G	C6-N1	7.51	1.44	1.39
12	B	1717	A	N7-C5	-7.51	1.34	1.39
12	B	2031	A	C5'-C4'	7.51	1.60	1.51
12	B	2468	A	N7-C5	-7.51	1.34	1.39
12	B	663	G	N7-C5	7.51	1.43	1.39
12	B	949	G	C2-N3	7.51	1.38	1.32
12	B	2343	U	C2-N3	7.51	1.43	1.37
12	B	2801	G	N7-C5	7.51	1.43	1.39
12	B	743	A	N7-C5	-7.51	1.34	1.39
12	B	2437	G	N3-C4	-7.51	1.30	1.35
12	B	750	A	C5-C4	7.50	1.44	1.38
12	B	1054	A	C2'-C1'	-7.50	1.45	1.53
12	B	2437	G	N7-C5	-7.50	1.34	1.39
11	A	112	G	N7-C5	-7.50	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1080	A	O4'-C1'	7.50	1.51	1.41
12	B	2049	G	N7-C5	7.50	1.43	1.39
12	B	27	G	N7-C5	-7.50	1.34	1.39
12	B	1211	C	C4'-O4'	-7.50	1.35	1.45
12	B	1744	A	C2-N3	7.50	1.40	1.33
12	B	1840	G	N1-C2	7.50	1.43	1.37
11	A	21	G	N9-C8	7.50	1.43	1.37
12	B	1213	A	C4'-C3'	7.50	1.61	1.53
12	B	550	C	N1-C6	-7.50	1.32	1.37
12	B	849	A	C5-C6	7.50	1.47	1.41
12	B	852	U	C2'-C1'	-7.50	1.45	1.53
12	B	2481	G	C5-C4	-7.50	1.33	1.38
12	B	724	U	O3'-P	-7.50	1.52	1.61
12	B	1857	G	C6-N1	7.50	1.44	1.39
12	B	829	A	C6-N1	7.49	1.40	1.35
12	B	1167	C	C5'-C4'	7.49	1.60	1.51
12	B	2161	C	C4-C5	7.49	1.49	1.43
12	B	194	G	N9-C4	-7.49	1.31	1.38
12	B	1100	C	N1-C6	7.49	1.41	1.37
12	B	1979	U	N1-C2	7.49	1.45	1.38
12	B	1822	C	P-O5'	-7.49	1.52	1.59
12	B	661	A	N9-C8	7.49	1.43	1.37
12	B	711	G	C6-N1	7.49	1.44	1.39
12	B	2407	A	N3-C4	-7.49	1.30	1.34
12	B	1791	A	C4'-O4'	-7.48	1.35	1.45
32	W	79	ARG	CD-NE	7.48	1.59	1.46
11	A	96	G	C4'-O4'	7.48	1.55	1.45
11	A	115	A	C8-N7	-7.48	1.26	1.31
12	B	720	U	O3'-P	-7.48	1.52	1.61
12	B	1962	C	C4-C5	7.48	1.49	1.43
12	B	130	C	C4-N4	7.48	1.40	1.33
12	B	886	A	C2'-C1'	-7.48	1.45	1.53
12	B	1465	G	C5-C4	7.48	1.43	1.38
12	B	2013	A	C5-C4	-7.48	1.33	1.38
12	B	552	U	P-O5'	-7.48	1.52	1.59
12	B	608	A	C4'-O4'	-7.48	1.35	1.45
12	B	745	G	N1-C2	7.48	1.43	1.37
12	B	1556	C	N1-C6	7.48	1.41	1.37
12	B	2051	A	C6-N6	7.48	1.40	1.33
12	B	2214	C	C2'-C1'	7.48	1.61	1.53
12	B	1345	C	C4-N4	7.48	1.40	1.33
12	B	2198	A	P-O5'	7.48	1.67	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2724	U	C2'-C1'	-7.48	1.45	1.53
12	B	27	G	C5'-C4'	7.47	1.60	1.51
12	B	1100	C	C4-C5	7.47	1.49	1.43
12	B	1647	U	C5'-C4'	7.47	1.60	1.51
12	B	2138	G	C2'-C1'	-7.47	1.45	1.53
12	B	26	G	C2'-C1'	-7.47	1.45	1.53
12	B	685	A	C5-C4	7.47	1.44	1.38
12	B	874	G	N1-C2	7.47	1.43	1.37
12	B	2865	U	P-O5'	-7.47	1.52	1.59
12	B	1764	C	C2'-C1'	-7.47	1.45	1.53
12	B	1993	U	P-O5'	-7.47	1.52	1.59
12	B	322	A	C5'-C4'	7.47	1.60	1.51
12	B	756	A	N7-C5	-7.47	1.34	1.39
12	B	1581	G	N3-C4	-7.47	1.30	1.35
12	B	2127	G	N7-C5	7.47	1.43	1.39
12	B	2692	G	C2'-C1'	-7.47	1.45	1.53
12	B	793	A	N9-C4	-7.47	1.33	1.37
12	B	2383	G	C8-N7	-7.47	1.26	1.30
29	S	18	ARG	NE-CZ	7.47	1.42	1.33
12	B	571	U	N1-C6	7.46	1.44	1.38
12	B	1110	G	C2'-C1'	-7.46	1.45	1.53
12	B	1469	A	C5-C4	7.46	1.44	1.38
12	B	1849	G	N9-C8	-7.46	1.32	1.37
12	B	2424	C	N1-C6	7.46	1.41	1.37
12	B	13	A	C6-N6	7.46	1.40	1.33
12	B	799	G	C5-C6	-7.46	1.34	1.42
12	B	2108	A	N3-C4	7.46	1.39	1.34
12	B	889	C	C4'-C3'	7.46	1.61	1.53
12	B	1116	G	C4'-O4'	7.46	1.55	1.45
12	B	1365	A	N1-C2	7.46	1.41	1.34
12	B	1644	C	N3-C4	7.46	1.39	1.33
12	B	2458	G	C5-C4	7.46	1.43	1.38
12	B	2155	U	C5'-C4'	7.46	1.60	1.51
12	B	241	A	C6-N6	7.46	1.40	1.33
12	B	551	G	C2'-C1'	-7.46	1.45	1.53
12	B	2094	A	C5-C4	-7.46	1.33	1.38
12	B	2616	C	N1-C2	7.46	1.47	1.40
12	B	2192	U	N1-C6	7.46	1.44	1.38
12	B	71	A	C6-N6	7.45	1.40	1.33
12	B	1083	U	P-O5'	-7.45	1.52	1.59
12	B	1527	G	C5'-C4'	7.45	1.60	1.51
12	B	1980	G	C2-N3	7.45	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2705	A	P-O5'	-7.45	1.52	1.59
12	B	2602	A	O4'-C1'	-7.45	1.31	1.41
12	B	983	A	O4'-C1'	7.45	1.51	1.41
12	B	1422	G	C2-N3	7.44	1.38	1.32
12	B	25	U	C4'-C3'	7.44	1.61	1.53
12	B	1091	G	N9-C4	7.44	1.44	1.38
12	B	1129	A	C8-N7	-7.44	1.26	1.31
12	B	2764	A	C6-N1	7.44	1.40	1.35
12	B	16	C	N3-C4	7.44	1.39	1.33
12	B	904	G	C2-N3	7.44	1.38	1.32
12	B	1359	A	N1-C2	7.44	1.41	1.34
12	B	2882	A	N7-C5	-7.44	1.34	1.39
12	B	1941	C	O3'-P	-7.44	1.52	1.61
12	B	508	A	N7-C5	-7.44	1.34	1.39
12	B	1568	G	N7-C5	-7.44	1.34	1.39
12	B	1528	A	C2'-C1'	-7.43	1.45	1.53
12	B	1778	U	C2-N3	7.43	1.43	1.37
12	B	1770	G	N7-C5	7.43	1.43	1.39
12	B	2513	A	C5'-C4'	7.43	1.60	1.51
12	B	2631	G	N1-C2	7.43	1.43	1.37
12	B	330	A	N9-C8	-7.43	1.31	1.37
12	B	2018	G	N9-C4	7.43	1.43	1.38
12	B	1431	A	C6-N6	7.43	1.39	1.33
12	B	2208	C	C4-C5	7.43	1.48	1.43
12	B	2623	G	C6-N1	7.43	1.44	1.39
11	A	28	C	C2-N3	-7.43	1.29	1.35
12	B	1102	C	C4'-O4'	7.43	1.55	1.45
12	B	1359	A	C6-N6	7.43	1.39	1.33
12	B	1736	U	C2'-C1'	-7.43	1.45	1.53
12	B	1847	A	N3-C4	-7.43	1.30	1.34
12	B	2740	A	N9-C8	-7.43	1.31	1.37
12	B	417	C	C2'-C1'	-7.42	1.45	1.53
12	B	835	C	C4-C5	-7.42	1.37	1.43
12	B	836	G	C2-N3	7.42	1.38	1.32
12	B	2223	G	C1'-N9	7.42	1.59	1.48
12	B	149	A	C5'-C4'	7.42	1.60	1.51
12	B	2279	G	C2-N3	7.42	1.38	1.32
12	B	2283	C	N1-C6	7.42	1.41	1.37
12	B	2426	A	N9-C4	7.42	1.42	1.37
12	B	1955	U	P-O5'	-7.42	1.52	1.59
12	B	2685	G	C6-N1	7.42	1.44	1.39
12	B	2886	A	C8-N7	-7.42	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2024	G	N9-C8	-7.42	1.32	1.37
12	B	87	U	N1-C6	-7.42	1.31	1.38
12	B	425	G	C2'-C1'	-7.42	1.45	1.53
12	B	1106	G	N7-C5	-7.42	1.34	1.39
12	B	1189	A	N3-C4	-7.42	1.30	1.34
12	B	2298	A	N9-C4	7.42	1.42	1.37
12	B	1154	G	N7-C5	-7.42	1.34	1.39
12	B	2285	C	C3'-C2'	-7.42	1.44	1.52
12	B	2303	G	C2'-C1'	-7.42	1.45	1.53
11	A	23	G	C2-N3	7.41	1.38	1.32
12	B	873	C	N3-C4	7.41	1.39	1.33
12	B	1339	G	P-O5'	-7.41	1.52	1.59
12	B	504	A	C4'-O4'	-7.41	1.35	1.45
22	L	22	GLY	N-CA	-7.41	1.34	1.46
12	B	2201	G	C5-C4	-7.41	1.33	1.38
12	B	123	G	N1-C2	7.41	1.43	1.37
12	B	539	G	C2-N3	7.41	1.38	1.32
12	B	1957	C	C2'-C1'	-7.41	1.45	1.53
12	B	653	U	N1-C6	7.41	1.44	1.38
12	B	2778	A	O3'-P	-7.41	1.52	1.61
12	B	991	C	N3-C4	7.41	1.39	1.33
12	B	2150	C	C2-N3	7.41	1.41	1.35
12	B	2504	U	C2-N3	7.41	1.43	1.37
12	B	2578	G	N3-C4	-7.41	1.30	1.35
12	B	2800	A	C6-N1	7.41	1.40	1.35
12	B	1221	C	O4'-C1'	7.40	1.51	1.41
12	B	1610	A	N9-C8	-7.40	1.31	1.37
11	A	30	C	C4-N4	7.40	1.40	1.33
12	B	189	G	C5-C4	7.40	1.43	1.38
12	B	1206	G	C5-C4	-7.40	1.33	1.38
12	B	2029	G	C6-N1	7.40	1.44	1.39
12	B	2133	G	C5'-C4'	7.40	1.60	1.51
12	B	10	A	C6-N6	7.40	1.39	1.33
11	A	113	C	C1'-N1	7.40	1.59	1.48
12	B	36	G	C2-N2	7.40	1.42	1.34
12	B	663	G	N9-C8	7.40	1.43	1.37
12	B	996	A	C6-N6	7.40	1.39	1.33
12	B	1452	G	N1-C2	7.40	1.43	1.37
12	B	1654	A	C3'-O3'	7.40	1.52	1.42
12	B	2450	A	C8-N7	-7.40	1.26	1.31
12	B	425	G	C6-N1	7.39	1.44	1.39
12	B	550	C	C2'-C1'	-7.39	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	550	C	C4-N4	7.39	1.40	1.33
12	B	746	U	C2'-C1'	-7.39	1.45	1.53
12	B	1763	G	C5'-C4'	7.39	1.60	1.51
12	B	771	G	C6-N1	7.39	1.44	1.39
12	B	2331	G	C2-N3	7.39	1.38	1.32
12	B	2782	G	C2-N3	7.39	1.38	1.32
12	B	2527	C	C5'-C4'	7.39	1.60	1.51
12	B	878	A	C5-C6	7.39	1.47	1.41
12	B	2391	G	N1-C2	7.39	1.43	1.37
12	B	2573	C	N3-C4	7.39	1.39	1.33
12	B	224	U	C4-O4	7.38	1.29	1.23
12	B	225	C	P-O5'	-7.38	1.52	1.59
12	B	964	C	C2'-C1'	-7.38	1.45	1.53
12	B	323	C	C2-N3	-7.38	1.29	1.35
12	B	1205	A	C8-N7	7.38	1.36	1.31
12	B	1671	U	C5'-C4'	7.38	1.60	1.51
12	B	2027	G	O3'-P	-7.38	1.52	1.61
12	B	2043	C	C4-C5	7.38	1.48	1.43
12	B	2738	A	N7-C5	-7.38	1.34	1.39
12	B	1048	A	C6-N6	7.38	1.39	1.33
12	B	1079	C	N3-C4	7.38	1.39	1.33
12	B	1101	U	C2'-C1'	-7.38	1.45	1.53
12	B	137	U	N1-C6	7.38	1.44	1.38
12	B	632	A	C4'-C3'	7.38	1.61	1.53
12	B	892	A	C6-N1	7.38	1.40	1.35
12	B	1478	G	C8-N7	7.38	1.35	1.30
12	B	1499	C	C2-N3	-7.38	1.29	1.35
12	B	1738	G	N3-C4	-7.38	1.30	1.35
12	B	1193	G	C6-N1	7.38	1.44	1.39
12	B	663	G	N3-C4	7.38	1.40	1.35
12	B	2255	G	N9-C4	7.38	1.43	1.38
12	B	1605	C	N3-C4	7.37	1.39	1.33
12	B	2482	A	C5-C4	7.37	1.44	1.38
12	B	592	A	O3'-P	-7.37	1.52	1.61
12	B	2017	U	N3-C4	7.37	1.45	1.38
12	B	2371	G	C6-N1	7.37	1.44	1.39
12	B	585	G	C2'-C1'	-7.37	1.45	1.53
12	B	1399	C	C2-N3	7.37	1.41	1.35
12	B	1739	A	N9-C4	7.37	1.42	1.37
12	B	2239	G	C2'-C1'	-7.37	1.45	1.53
12	B	2439	A	C6-N6	7.37	1.39	1.33
23	M	59	ARG	CD-NE	7.37	1.58	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	O	15	ARG	CD-NE	7.37	1.58	1.46
12	B	552	U	C4-C5	-7.37	1.36	1.43
12	B	2536	G	C8-N7	-7.37	1.26	1.30
12	B	1700	A	C6-N6	7.37	1.39	1.33
12	B	332	A	O3'-P	-7.36	1.52	1.61
12	B	627	A	N3-C4	-7.36	1.30	1.34
12	B	1076	C	C2'-C1'	-7.36	1.45	1.53
12	B	1670	C	C4-N4	7.36	1.40	1.33
12	B	1959	G	C8-N7	7.36	1.35	1.30
12	B	112	U	P-O5'	-7.36	1.52	1.59
12	B	1201	U	C4'-C3'	7.36	1.61	1.53
12	B	515	A	N7-C5	-7.36	1.34	1.39
12	B	1219	U	C2-N3	7.36	1.43	1.37
12	B	1666	G	N1-C2	7.36	1.43	1.37
12	B	394	C	C3'-C2'	-7.36	1.44	1.52
12	B	887	U	C2-N3	7.36	1.43	1.37
12	B	2246	G	C2'-C1'	-7.36	1.45	1.53
12	B	233	A	C2-N3	7.36	1.40	1.33
12	B	165	A	N3-C4	-7.35	1.30	1.34
12	B	282	A	C6-N1	7.35	1.40	1.35
12	B	569	U	P-O5'	-7.35	1.52	1.59
12	B	2021	C	N1-C6	7.35	1.41	1.37
12	B	2741	A	P-O5'	-7.35	1.52	1.59
12	B	58	G	C6-N1	7.35	1.44	1.39
12	B	2775	G	C2-N3	7.35	1.38	1.32
12	B	1279	G	C5-C6	-7.35	1.35	1.42
12	B	2759	G	N7-C5	-7.35	1.34	1.39
12	B	2554	U	N3-C4	7.35	1.45	1.38
11	A	81	G	C2-N3	7.34	1.38	1.32
12	B	1090	A	C5'-C4'	7.34	1.60	1.51
12	B	1107	G	C5'-C4'	-7.34	1.42	1.51
12	B	1166	G	N9-C4	-7.34	1.32	1.38
12	B	1339	G	C6-N1	7.34	1.44	1.39
12	B	2531	A	C2'-C1'	-7.34	1.45	1.53
12	B	1911	U	C5'-C4'	7.34	1.60	1.51
12	B	2226	C	N1-C2	7.34	1.47	1.40
12	B	2842	G	C3'-C2'	7.34	1.61	1.52
12	B	2299	U	P-O5'	-7.34	1.52	1.59
12	B	73	A	P-O5'	-7.34	1.52	1.59
12	B	824	U	O3'-P	-7.34	1.52	1.61
12	B	1685	C	C4'-O4'	7.34	1.55	1.45
12	B	548	G	C2-N2	7.34	1.41	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1235	G	N7-C5	-7.34	1.34	1.39
12	B	1382	G	C5-C6	-7.34	1.35	1.42
12	B	2335	A	C5'-C4'	7.34	1.60	1.51
12	B	97	C	N3-C4	7.33	1.39	1.33
12	B	1052	C	P-O5'	-7.33	1.52	1.59
11	A	90	C	C4-N4	7.33	1.40	1.33
12	B	101	A	C6-N1	7.33	1.40	1.35
12	B	813	U	C2-N3	7.33	1.42	1.37
12	B	1134	A	C6-N1	7.33	1.40	1.35
12	B	1890	A	N3-C4	-7.33	1.30	1.34
12	B	960	A	P-O5'	-7.33	1.52	1.59
12	B	1455	G	O4'-C1'	7.33	1.51	1.41
12	B	1519	G	C2-N3	7.33	1.38	1.32
12	B	1803	A	O3'-P	-7.33	1.52	1.61
12	B	1878	G	C6-N1	-7.33	1.34	1.39
20	J	34	ARG	CZ-NH2	7.33	1.42	1.33
11	A	101	A	C2-N3	7.33	1.40	1.33
12	B	2880	C	C2'-C1'	-7.33	1.45	1.53
12	B	1052	C	N3-C4	7.33	1.39	1.33
12	B	1427	A	N9-C4	-7.33	1.33	1.37
12	B	1517	G	C2-N2	7.33	1.41	1.34
12	B	322	A	C6-N6	7.32	1.39	1.33
12	B	1853	A	C5-C4	-7.32	1.33	1.38
12	B	288	U	C1'-N1	7.32	1.59	1.48
12	B	1910	G	N7-C5	-7.32	1.34	1.39
12	B	2589	A	C6-N1	7.32	1.40	1.35
12	B	2679	A	N3-C4	-7.32	1.30	1.34
12	B	1005	C	P-O5'	-7.32	1.52	1.59
12	B	1366	A	C5-C6	7.32	1.47	1.41
12	B	1431	A	C2'-C1'	-7.32	1.45	1.53
12	B	2111	U	N1-C6	7.32	1.44	1.38
12	B	632	A	O3'-P	-7.32	1.52	1.61
12	B	1411	U	N3-C4	7.32	1.45	1.38
12	B	1841	U	C5'-C4'	7.32	1.60	1.51
12	B	2376	A	N3-C4	-7.32	1.30	1.34
12	B	2705	A	C6-N6	7.32	1.39	1.33
12	B	415	A	C8-N7	-7.32	1.26	1.31
12	B	511	U	C2-N3	7.31	1.42	1.37
12	B	1272	A	C6-N6	7.31	1.39	1.33
12	B	161	A	N3-C4	-7.31	1.30	1.34
12	B	686	U	C3'-O3'	-7.31	1.31	1.42
12	B	12	U	C1'-N1	7.31	1.59	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1046	A	C2'-C1'	-7.31	1.45	1.53
12	B	2692	G	C2-N2	7.31	1.41	1.34
12	B	118	A	N3-C4	7.31	1.39	1.34
12	B	769	U	P-O5'	-7.31	1.52	1.59
12	B	932	U	C2-N3	7.31	1.42	1.37
12	B	1582	C	C5'-C4'	-7.31	1.42	1.51
12	B	1906	G	C6-N1	7.31	1.44	1.39
12	B	2423	U	N3-C4	7.31	1.45	1.38
12	B	2609	U	C4-C5	7.31	1.50	1.43
12	B	193	U	C4'-C3'	7.30	1.61	1.53
12	B	838	C	N3-C4	7.30	1.39	1.33
12	B	882	G	N1-C2	7.30	1.43	1.37
12	B	2289	G	C2-N3	7.30	1.38	1.32
11	A	46	A	C5-C6	-7.30	1.34	1.41
11	A	73	A	C2'-C1'	-7.30	1.45	1.53
12	B	945	A	C5'-C4'	7.30	1.60	1.51
12	B	2040	G	C2-N3	7.30	1.38	1.32
12	B	500	G	C3'-C2'	-7.29	1.44	1.52
12	B	797	G	N1-C2	7.29	1.43	1.37
12	B	2529	G	C2-N3	7.29	1.38	1.32
12	B	476	G	C5'-C4'	7.29	1.60	1.51
7	6	12	ARG	CZ-NH1	7.29	1.42	1.33
12	B	726	G	C5-C6	-7.29	1.35	1.42
12	B	845	A	N3-C4	7.29	1.39	1.34
12	B	1628	G	C4'-C3'	-7.29	1.45	1.53
12	B	1667	G	N7-C5	-7.29	1.34	1.39
12	B	2625	G	C8-N7	-7.29	1.26	1.30
12	B	20	C	N3-C4	7.29	1.39	1.33
12	B	160	A	C2-N3	7.29	1.40	1.33
12	B	1004	U	C2-N3	7.29	1.42	1.37
12	B	261	G	C6-N1	7.29	1.44	1.39
12	B	374	A	C6-N1	7.29	1.40	1.35
12	B	509	C	C2-N3	-7.29	1.29	1.35
11	A	103	U	P-O5'	-7.28	1.52	1.59
12	B	1297	C	C5'-C4'	7.28	1.60	1.51
12	B	2471	A	C6-N1	7.28	1.40	1.35
12	B	1095	A	C4'-C3'	-7.28	1.45	1.53
12	B	1950	G	N1-C2	7.28	1.43	1.37
12	B	2133	G	P-O5'	7.28	1.67	1.59
12	B	2313	C	O3'-P	-7.28	1.52	1.61
12	B	471	A	C2'-C1'	-7.28	1.45	1.53
12	B	1014	A	P-O5'	-7.28	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1291	C	C2-N3	7.28	1.41	1.35
12	B	1235	G	N3-C4	-7.28	1.30	1.35
12	B	1708	C	N3-C4	7.28	1.39	1.33
12	B	2235	G	C2-N3	7.28	1.38	1.32
12	B	2413	G	C2'-C1'	-7.28	1.45	1.53
12	B	1313	U	N1-C2	7.27	1.45	1.38
12	B	2655	G	C8-N7	7.27	1.35	1.30
12	B	211	C	P-O5'	-7.27	1.52	1.59
12	B	379	G	C6-N1	7.27	1.44	1.39
12	B	1844	C	N3-C4	7.27	1.39	1.33
12	B	110	G	N1-C2	7.27	1.43	1.37
12	B	882	G	C8-N7	-7.27	1.26	1.30
12	B	2376	A	N7-C5	7.27	1.43	1.39
12	B	2478	A	P-O5'	-7.27	1.52	1.59
12	B	1784	A	C2-N3	7.27	1.40	1.33
12	B	1897	G	C3'-C2'	-7.27	1.44	1.52
12	B	2467	C	O3'-P	-7.27	1.52	1.61
12	B	240	C	C5'-C4'	7.27	1.60	1.51
12	B	819	A	C6-N1	7.27	1.40	1.35
12	B	966	G	C2-N3	7.27	1.38	1.32
12	B	12	U	C2'-C1'	-7.26	1.45	1.53
12	B	1555	G	C2-N3	7.26	1.38	1.32
12	B	1760	C	P-O5'	-7.26	1.52	1.59
12	B	329	G	C2'-C1'	-7.26	1.45	1.53
12	B	37	C	C2-N3	7.26	1.41	1.35
12	B	533	G	C2-N3	7.26	1.38	1.32
12	B	714	U	C2-N3	7.26	1.42	1.37
12	B	540	C	N3-C4	7.26	1.39	1.33
12	B	2281	A	N3-C4	7.26	1.39	1.34
12	B	2663	G	C5-C4	7.26	1.43	1.38
12	B	2718	G	N7-C5	-7.26	1.34	1.39
12	B	169	G	C5-C4	-7.25	1.33	1.38
12	B	186	G	C6-N1	7.25	1.44	1.39
12	B	262	A	N9-C4	-7.25	1.33	1.37
12	B	558	U	P-O5'	-7.25	1.52	1.59
12	B	1211	C	C2'-O2'	7.25	1.51	1.41
12	B	1497	U	N1-C2	7.25	1.45	1.38
12	B	543	G	C6-N1	-7.25	1.34	1.39
12	B	2470	G	C5-C4	7.25	1.43	1.38
12	B	2689	U	C2-N3	7.25	1.42	1.37
12	B	432	A	C6-N6	7.25	1.39	1.33
12	B	683	U	N1-C2	-7.25	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2592	G	C2-N3	7.25	1.38	1.32
12	B	132	G	C6-N1	7.25	1.44	1.39
12	B	624	C	N1-C6	7.25	1.41	1.37
12	B	1413	A	C6-N1	7.25	1.40	1.35
12	B	2852	G	C2'-C1'	-7.25	1.45	1.53
12	B	782	A	C5-C4	7.25	1.43	1.38
12	B	2505	G	C6-N1	7.25	1.44	1.39
12	B	342	A	C2'-C1'	-7.24	1.45	1.53
12	B	1257	C	C3'-O3'	7.24	1.52	1.42
12	B	1799	G	C8-N7	-7.24	1.26	1.30
12	B	1803	A	P-O5'	-7.24	1.52	1.59
12	B	1973	G	C2-N3	7.24	1.38	1.32
12	B	2134	A	N3-C4	7.24	1.39	1.34
12	B	1308	A	P-O5'	-7.24	1.52	1.59
12	B	1775	U	N3-C4	7.24	1.45	1.38
12	B	1967	C	C4-N4	7.24	1.40	1.33
12	B	2134	A	N9-C4	7.24	1.42	1.37
12	B	2729	G	C4'-C3'	7.24	1.61	1.53
12	B	2815	C	P-O5'	-7.24	1.52	1.59
11	A	31	C	O3'-P	-7.24	1.52	1.61
12	B	1387	A	N9-C8	-7.24	1.31	1.37
12	B	2569	G	C6-N1	7.24	1.44	1.39
12	B	2628	C	C4'-C3'	-7.24	1.45	1.53
12	B	2218	G	N1-C2	7.24	1.43	1.37
12	B	92	U	C2-N3	7.24	1.42	1.37
12	B	430	A	C2'-C1'	7.24	1.61	1.53
12	B	489	G	N7-C5	7.24	1.43	1.39
12	B	1881	C	C2-N3	-7.24	1.29	1.35
11	A	105	G	N1-C2	7.23	1.43	1.37
12	B	1847	A	C2'-C1'	-7.23	1.45	1.53
12	B	752	A	C6-N6	7.23	1.39	1.33
12	B	1645	G	C6-N1	7.23	1.44	1.39
12	B	1678	A	N9-C8	-7.23	1.31	1.37
12	B	2702	G	C2-N3	7.23	1.38	1.32
12	B	94	A	P-O5'	7.23	1.67	1.59
12	B	1134	A	C8-N7	-7.23	1.26	1.31
12	B	2234	G	C6-N1	7.23	1.44	1.39
12	B	2346	A	C6-N6	7.23	1.39	1.33
11	A	21	G	C2'-C1'	-7.23	1.45	1.53
12	B	370	G	O3'-P	-7.23	1.52	1.61
12	B	1225	G	C8-N7	-7.23	1.26	1.30
12	B	2186	G	C6-N1	7.23	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2406	A	C5'-C4'	7.23	1.60	1.51
12	B	2547	A	C6-N6	7.23	1.39	1.33
12	B	2623	G	C2-N3	7.23	1.38	1.32
12	B	2794	C	C3'-O3'	7.23	1.52	1.42
12	B	274	C	N3-C4	7.23	1.39	1.33
12	B	387	U	O3'-P	-7.23	1.52	1.61
12	B	1969	A	P-O5'	-7.23	1.52	1.59
12	B	2455	G	C8-N7	7.23	1.35	1.30
12	B	103	A	N9-C4	7.22	1.42	1.37
12	B	2186	G	C8-N7	-7.22	1.26	1.30
12	B	581	C	O3'-P	-7.22	1.52	1.61
12	B	995	C	C4-C5	7.22	1.48	1.43
12	B	1658	C	C4-C5	7.22	1.48	1.43
12	B	2399	G	N3-C4	7.22	1.40	1.35
12	B	60	G	N1-C2	7.22	1.43	1.37
11	A	75	G	N1-C2	7.22	1.43	1.37
12	B	2624	G	C6-N1	7.22	1.44	1.39
12	B	2805	C	O4'-C1'	-7.22	1.32	1.41
12	B	137	U	N1-C2	-7.22	1.32	1.38
12	B	444	C	N1-C2	7.22	1.47	1.40
12	B	714	U	C3'-C2'	-7.22	1.44	1.52
12	B	1789	A	P-O5'	-7.22	1.52	1.59
12	B	1807	G	C2'-C1'	-7.22	1.45	1.53
12	B	2697	G	N9-C8	7.22	1.43	1.37
12	B	961	C	N3-C4	7.21	1.39	1.33
12	B	380	G	N7-C5	-7.21	1.34	1.39
26	P	70	GLU	CD-OE2	7.21	1.33	1.25
12	B	1149	G	P-O5'	-7.21	1.52	1.59
12	B	1060	U	O3'-P	-7.21	1.52	1.61
12	B	1301	A	C2'-C1'	-7.21	1.45	1.53
11	A	7	G	N3-C4	-7.21	1.30	1.35
12	B	1055	G	C5-C4	7.21	1.43	1.38
12	B	1570	A	C6-N1	7.21	1.40	1.35
12	B	1751	U	N3-C4	7.21	1.45	1.38
12	B	2828	G	C6-N1	7.21	1.44	1.39
12	B	2848	G	C2-N3	7.21	1.38	1.32
11	A	28	C	N3-C4	7.21	1.39	1.33
12	B	403	U	N3-C4	7.21	1.45	1.38
12	B	1068	G	C2-N3	7.21	1.38	1.32
12	B	1270	C	O3'-P	-7.21	1.52	1.61
12	B	1932	A	N9-C4	7.21	1.42	1.37
12	B	2259	U	N3-C4	7.21	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2824	C	P-O5'	-7.21	1.52	1.59
12	B	309	A	C5-C4	7.21	1.43	1.38
12	B	1973	G	N1-C2	7.21	1.43	1.37
12	B	2294	G	C2-N2	7.21	1.41	1.34
12	B	310	A	N9-C4	7.20	1.42	1.37
12	B	1371	G	C5-C6	-7.20	1.35	1.42
12	B	2391	G	C4'-C3'	7.20	1.61	1.53
12	B	2785	C	N1-C6	7.20	1.41	1.37
11	A	31	C	P-O5'	-7.20	1.52	1.59
12	B	368	A	C6-N1	7.20	1.40	1.35
12	B	1377	G	N9-C4	-7.20	1.32	1.38
12	B	2477	U	C2-N3	7.20	1.42	1.37
12	B	2212	A	N9-C4	7.20	1.42	1.37
12	B	1694	C	N3-C4	7.20	1.39	1.33
12	B	312	G	C8-N7	7.20	1.35	1.30
12	B	463	G	N3-C4	-7.20	1.30	1.35
12	B	1354	A	O3'-P	-7.20	1.52	1.61
12	B	1480	C	N1-C6	7.20	1.41	1.37
12	B	2803	G	N9-C4	-7.20	1.32	1.38
12	B	1622	G	N7-C5	-7.19	1.34	1.39
12	B	662	G	C5-C6	7.19	1.49	1.42
12	B	2226	C	N3-C4	7.19	1.39	1.33
12	B	2231	U	C2-N3	7.19	1.42	1.37
12	B	2306	C	N1-C6	-7.19	1.32	1.37
12	B	257	C	N3-C4	7.19	1.39	1.33
12	B	341	C	P-O5'	-7.19	1.52	1.59
12	B	506	G	C5-C6	-7.19	1.35	1.42
12	B	1758	U	N3-C4	7.19	1.45	1.38
12	B	2214	C	C5'-C4'	7.19	1.59	1.51
12	B	2659	G	C5-C4	7.19	1.43	1.38
12	B	254	G	N7-C5	-7.19	1.34	1.39
12	B	426	C	N3-C4	7.19	1.39	1.33
12	B	1216	G	C8-N7	-7.19	1.26	1.30
12	B	275	C	C4-C5	7.19	1.48	1.43
12	B	22	C	C5'-C4'	7.18	1.59	1.51
12	B	1740	G	N9-C4	7.18	1.43	1.38
12	B	2820	A	N7-C5	-7.18	1.34	1.39
12	B	1038	G	C2'-C1'	-7.18	1.45	1.53
12	B	1064	C	O3'-P	-7.18	1.52	1.61
12	B	327	G	C6-O6	-7.18	1.17	1.24
12	B	574	A	O4'-C1'	7.18	1.50	1.41
12	B	1377	G	P-O5'	-7.18	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	272	A	C4'-C3'	-7.18	1.45	1.53
12	B	427	U	N1-C2	7.18	1.45	1.38
12	B	480	A	N7-C5	-7.18	1.34	1.39
12	B	1707	G	N3-C4	7.18	1.40	1.35
12	B	2306	C	C4-C5	7.18	1.48	1.43
12	B	2520	C	N3-C4	7.18	1.39	1.33
12	B	2828	G	N9-C8	7.18	1.42	1.37
12	B	565	C	C2-N3	7.18	1.41	1.35
12	B	2356	U	O4'-C1'	7.18	1.50	1.41
12	B	2310	C	O3'-P	-7.18	1.52	1.61
12	B	2213	U	N1-C6	7.17	1.44	1.38
12	B	2392	A	C8-N7	-7.17	1.26	1.31
12	B	155	A	N3-C4	-7.17	1.30	1.34
12	B	854	C	C2'-C1'	-7.17	1.45	1.53
12	B	1369	G	N1-C2	7.17	1.43	1.37
12	B	2560	A	N9-C8	7.17	1.43	1.37
12	B	2840	C	C4-N4	7.17	1.40	1.33
12	B	61	C	N1-C6	7.17	1.41	1.37
12	B	1598	A	C2'-C1'	-7.17	1.45	1.53
12	B	2889	C	C3'-C2'	-7.17	1.44	1.52
11	A	71	C	N3-C4	7.17	1.39	1.33
12	B	1962	C	C5'-C4'	7.17	1.59	1.51
12	B	2415	G	C2'-C1'	-7.17	1.45	1.53
15	E	174	GLY	CA-C	-7.17	1.40	1.51
11	A	84	G	P-O5'	-7.16	1.52	1.59
12	B	21	A	C4'-C3'	-7.16	1.45	1.53
12	B	1087	G	C5-C4	7.16	1.43	1.38
12	B	1186	G	N7-C5	-7.16	1.34	1.39
12	B	1478	G	C3'-C2'	-7.16	1.44	1.52
12	B	621	A	C8-N7	-7.16	1.26	1.31
12	B	802	A	C2'-C1'	-7.16	1.45	1.53
12	B	956	G	C8-N7	-7.16	1.26	1.30
12	B	1660	G	C8-N7	-7.16	1.26	1.30
12	B	2168	G	C4'-C3'	-7.16	1.45	1.53
12	B	2238	G	C2'-C1'	-7.16	1.45	1.53
12	B	526	A	N9-C4	7.16	1.42	1.37
12	B	830	G	C5'-C4'	7.16	1.59	1.51
12	B	1027	A	N3-C4	-7.16	1.30	1.34
12	B	1488	C	C3'-C2'	7.16	1.60	1.52
12	B	1924	C	C2'-C1'	-7.16	1.45	1.53
12	B	2227	A	O3'-P	-7.16	1.52	1.61
12	B	2297	A	C6-N1	-7.16	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2395	C	C3'-C2'	-7.16	1.44	1.52
12	B	617	G	N1-C2	7.16	1.43	1.37
12	B	2527	C	N3-C4	7.16	1.39	1.33
11	A	96	G	P-O5'	-7.15	1.52	1.59
12	B	1552	A	C8-N7	-7.15	1.26	1.31
12	B	2374	C	N3-C4	7.15	1.39	1.33
12	B	2737	G	C2-N3	7.15	1.38	1.32
11	A	70	C	N3-C4	7.15	1.39	1.33
12	B	6	A	C8-N7	7.15	1.36	1.31
12	B	715	A	C5'-C4'	7.15	1.59	1.51
12	B	920	A	C2'-C1'	-7.15	1.45	1.53
12	B	2692	G	N7-C5	-7.15	1.34	1.39
12	B	1668	A	C3'-O3'	-7.15	1.32	1.42
12	B	2475	C	P-O5'	-7.15	1.52	1.59
12	B	2670	A	N7-C5	-7.15	1.34	1.39
10	9	126	GLY	CA-C	-7.15	1.40	1.51
12	B	297	G	C6-N1	7.15	1.44	1.39
12	B	333	G	O4'-C1'	7.15	1.50	1.41
12	B	2492	U	C2'-C1'	-7.15	1.45	1.53
11	A	24	G	O3'-P	-7.14	1.52	1.61
12	B	435	C	C4'-C3'	-7.14	1.45	1.53
12	B	1618	A	O3'-P	-7.14	1.52	1.61
12	B	1993	U	C5-C6	7.14	1.40	1.34
12	B	1636	U	O3'-P	-7.14	1.52	1.61
12	B	2159	G	P-O5'	-7.14	1.52	1.59
12	B	579	G	N7-C5	-7.14	1.34	1.39
12	B	1478	G	C6-N1	7.14	1.44	1.39
12	B	2090	A	N9-C4	7.14	1.42	1.37
12	B	837	C	N3-C4	7.14	1.39	1.33
12	B	1659	G	C5-C6	-7.14	1.35	1.42
12	B	28	A	C5-C4	-7.14	1.33	1.38
12	B	49	A	C4'-C3'	7.14	1.61	1.53
12	B	1583	A	C2'-C1'	-7.14	1.45	1.53
12	B	2062	A	C6-N1	7.14	1.40	1.35
12	B	2119	A	N9-C4	7.14	1.42	1.37
12	B	2378	A	C6-N6	7.14	1.39	1.33
12	B	38	A	C2'-C1'	-7.14	1.45	1.53
12	B	101	A	C4'-C3'	7.14	1.61	1.53
12	B	264	C	C2-N3	7.14	1.41	1.35
12	B	935	C	N3-C4	7.14	1.39	1.33
12	B	2240	U	C2'-C1'	-7.14	1.45	1.53
12	B	269	C	O3'-P	-7.13	1.52	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	378	C	C4-N4	7.13	1.40	1.33
12	B	602	A	N7-C5	-7.13	1.34	1.39
12	B	229	C	C2-N3	-7.13	1.30	1.35
12	B	715	A	N9-C8	7.13	1.43	1.37
12	B	743	A	C5-C4	7.13	1.43	1.38
12	B	2658	C	N3-C4	7.13	1.39	1.33
12	B	2876	G	C3'-C2'	-7.13	1.45	1.52
11	A	20	G	C8-N7	7.13	1.35	1.30
12	B	799	G	P-O5'	-7.13	1.52	1.59
12	B	1142	A	C5-C6	-7.13	1.34	1.41
12	B	489	G	C2-N3	7.13	1.38	1.32
12	B	2438	U	C4-O4	7.13	1.29	1.23
12	B	37	C	P-O5'	-7.13	1.52	1.59
12	B	302	C	N1-C6	-7.13	1.32	1.37
12	B	1089	A	N7-C5	7.13	1.43	1.39
12	B	1839	G	C5-C4	7.13	1.43	1.38
12	B	1879	C	P-O5'	-7.13	1.52	1.59
12	B	303	G	N1-C2	7.13	1.43	1.37
12	B	2442	C	O3'-P	-7.13	1.52	1.61
12	B	1768	C	C5-C6	-7.12	1.28	1.34
12	B	35	G	N1-C2	7.12	1.43	1.37
12	B	631	A	C6-N6	7.12	1.39	1.33
12	B	1619	G	C5-C4	7.12	1.43	1.38
12	B	2749	A	N1-C2	-7.12	1.27	1.34
12	B	1417	C	O4'-C1'	-7.12	1.32	1.41
12	B	1685	C	O4'-C1'	7.12	1.50	1.41
12	B	2111	U	O4'-C1'	-7.12	1.32	1.41
12	B	2240	U	C4-C5	7.12	1.50	1.43
12	B	2559	C	N1-C6	-7.12	1.32	1.37
12	B	1317	G	N3-C4	-7.12	1.30	1.35
12	B	1505	A	N7-C5	-7.12	1.34	1.39
12	B	1081	U	N1-C2	7.12	1.45	1.38
12	B	2245	U	C5'-C4'	7.12	1.59	1.51
12	B	1119	U	N1-C6	7.12	1.44	1.38
12	B	1212	G	C8-N7	-7.12	1.26	1.30
12	B	363	G	C4'-C3'	7.11	1.60	1.53
12	B	410	G	N9-C8	-7.11	1.32	1.37
12	B	865	C	N3-C4	7.11	1.39	1.33
12	B	1287	A	N9-C8	7.11	1.43	1.37
12	B	2549	G	N1-C2	7.11	1.43	1.37
12	B	725	G	O3'-P	-7.11	1.52	1.61
12	B	973	A	C2'-C1'	-7.11	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2165	C	C5'-C4'	7.11	1.59	1.51
12	B	2604	U	C2-N3	7.11	1.42	1.37
12	B	892	A	C6-N6	7.11	1.39	1.33
12	B	1686	C	C5'-C4'	7.11	1.59	1.51
12	B	1967	C	N1-C6	7.11	1.41	1.37
12	B	382	A	N9-C8	7.11	1.43	1.37
12	B	512	G	C3'-C2'	7.11	1.60	1.52
12	B	765	C	C3'-C2'	-7.11	1.45	1.52
12	B	1082	U	O3'-P	-7.11	1.52	1.61
12	B	1526	C	P-O5'	-7.11	1.52	1.59
12	B	1867	G	C4'-O4'	7.11	1.54	1.45
12	B	2120	G	C5'-C4'	7.11	1.59	1.51
12	B	2469	A	C2'-O2'	-7.11	1.32	1.41
12	B	2876	G	N1-C2	7.11	1.43	1.37
12	B	1627	G	N3-C4	7.11	1.40	1.35
12	B	1630	A	C2-N3	-7.11	1.27	1.33
12	B	1763	G	C2-N3	7.11	1.38	1.32
12	B	2889	C	N1-C6	7.11	1.41	1.37
12	B	2255	G	N9-C8	-7.10	1.32	1.37
12	B	2420	C	N1-C6	-7.10	1.32	1.37
12	B	1664	A	P-O5'	-7.10	1.52	1.59
12	B	1667	G	C3'-C2'	-7.10	1.45	1.52
12	B	1706	C	C4-N4	7.10	1.40	1.33
12	B	1807	G	P-O5'	-7.10	1.52	1.59
12	B	1832	C	C4-N4	7.10	1.40	1.33
12	B	1814	G	C8-N7	-7.10	1.26	1.30
12	B	346	A	C5-C4	7.10	1.43	1.38
12	B	1697	G	C3'-C2'	-7.10	1.45	1.52
12	B	2013	A	N9-C8	-7.10	1.32	1.37
12	B	526	A	P-O5'	-7.10	1.52	1.59
12	B	532	A	N1-C2	7.10	1.40	1.34
12	B	1792	G	C6-N1	-7.10	1.34	1.39
12	B	2323	G	C2-N3	7.10	1.38	1.32
11	A	118	C	C4'-C3'	7.10	1.60	1.53
12	B	990	A	N9-C4	7.10	1.42	1.37
12	B	1991	U	C3'-C2'	-7.10	1.45	1.52
12	B	784	G	P-O5'	-7.09	1.52	1.59
12	B	1436	G	C2-N3	7.09	1.38	1.32
12	B	2461	A	C6-N6	7.09	1.39	1.33
19	I	126	ARG	CD-NE	7.09	1.58	1.46
12	B	1875	G	N9-C8	7.09	1.42	1.37
12	B	2250	G	C5-C4	7.09	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2766	A	N9-C4	-7.09	1.33	1.37
12	B	183	C	C2-N3	-7.09	1.30	1.35
12	B	797	G	N3-C4	-7.09	1.30	1.35
12	B	1081	U	O3'-P	-7.09	1.52	1.61
12	B	1189	A	C6-N1	7.09	1.40	1.35
12	B	1548	A	N9-C8	-7.09	1.32	1.37
12	B	301	G	C6-N1	7.09	1.44	1.39
12	B	1021	A	C6-N1	7.09	1.40	1.35
12	B	1149	G	C5-C4	7.09	1.43	1.38
12	B	2835	A	O3'-P	-7.09	1.52	1.61
12	B	215	G	N1-C2	7.09	1.43	1.37
12	B	710	U	C2'-C1'	-7.09	1.45	1.53
12	B	762	U	C2-N3	7.09	1.42	1.37
12	B	1341	G	N7-C5	-7.08	1.34	1.39
12	B	2624	G	N9-C4	-7.08	1.32	1.38
28	R	78	ARG	CZ-NH1	7.08	1.42	1.33
12	B	198	C	C5-C6	-7.08	1.28	1.34
12	B	778	G	C2-N3	7.08	1.38	1.32
12	B	2099	U	C4-C5	-7.08	1.37	1.43
23	M	66	ARG	NE-CZ	7.08	1.42	1.33
12	B	282	A	C2'-C1'	-7.08	1.45	1.53
12	B	2812	G	P-O5'	-7.08	1.52	1.59
12	B	2491	U	N1-C6	7.08	1.44	1.38
12	B	104	A	C2'-C1'	-7.08	1.45	1.53
12	B	330	A	C6-N1	7.08	1.40	1.35
12	B	687	C	O4'-C1'	7.08	1.50	1.41
12	B	1062	G	N1-C2	7.08	1.43	1.37
12	B	1504	A	N9-C8	7.08	1.43	1.37
12	B	1588	G	C6-N1	7.08	1.44	1.39
12	B	274	C	C2'-C1'	-7.08	1.45	1.53
12	B	328	U	P-O5'	-7.08	1.52	1.59
12	B	505	A	C5-C4	7.08	1.43	1.38
12	B	445	C	N3-C4	7.07	1.39	1.33
12	B	1901	A	N3-C4	-7.07	1.30	1.34
12	B	2054	A	C6-N6	7.07	1.39	1.33
12	B	2837	A	C3'-C2'	-7.07	1.45	1.52
12	B	1024	G	C2-N2	7.07	1.41	1.34
12	B	1687	G	C6-N1	7.07	1.44	1.39
12	B	2186	G	N9-C8	7.07	1.42	1.37
12	B	115	C	P-O5'	-7.07	1.52	1.59
12	B	609	A	C6-N6	7.07	1.39	1.33
12	B	1427	A	O3'-P	-7.07	1.52	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	416	U	N3-C4	7.07	1.44	1.38
12	B	1512	C	C4'-C3'	7.07	1.60	1.53
11	A	46	A	C8-N7	-7.07	1.26	1.31
12	B	830	G	C5-C4	-7.07	1.33	1.38
12	B	539	G	N7-C5	-7.07	1.35	1.39
12	B	712	G	C2'-C1'	-7.07	1.45	1.53
12	B	223	A	C4'-C3'	-7.06	1.45	1.53
12	B	1505	A	C2'-C1'	-7.06	1.45	1.53
12	B	1525	A	O3'-P	-7.06	1.52	1.61
12	B	1785	A	C6-N6	7.06	1.39	1.33
12	B	2483	C	P-O5'	-7.06	1.52	1.59
12	B	2765	A	C3'-C2'	-7.06	1.45	1.52
12	B	1500	G	N9-C4	-7.06	1.32	1.38
12	B	1885	A	O3'-P	-7.06	1.52	1.61
12	B	1989	G	C2'-C1'	-7.06	1.45	1.53
12	B	1153	C	N3-C4	7.06	1.38	1.33
12	B	2061	G	C8-N7	7.06	1.35	1.30
12	B	2192	U	C1'-N1	7.06	1.59	1.48
12	B	1749	A	C3'-C2'	7.06	1.60	1.52
12	B	2197	U	O3'-P	-7.06	1.52	1.61
12	B	291	G	C1'-N9	-7.06	1.36	1.46
12	B	2487	G	C2-N3	7.06	1.38	1.32
12	B	830	G	C2-N3	7.05	1.38	1.32
12	B	946	C	C5-C6	-7.05	1.28	1.34
12	B	1947	C	C4-C5	-7.05	1.37	1.43
12	B	2737	G	C3'-C2'	-7.05	1.45	1.52
12	B	1193	G	C2-N3	7.05	1.38	1.32
12	B	2117	A	O3'-P	-7.05	1.52	1.61
12	B	2220	U	C4'-O4'	7.05	1.54	1.45
12	B	393	C	C4-N4	7.05	1.40	1.33
12	B	1875	G	C2-N2	7.05	1.41	1.34
12	B	2303	G	C5-C4	7.05	1.43	1.38
11	A	64	G	C2'-C1'	-7.05	1.45	1.53
12	B	98	G	N9-C8	-7.05	1.32	1.37
12	B	1768	C	C4-N4	7.05	1.40	1.33
12	B	1939	U	C2'-C1'	-7.05	1.45	1.53
12	B	1983	G	N7-C5	-7.05	1.35	1.39
11	A	46	A	C5-C4	7.05	1.43	1.38
11	A	68	C	C4'-C3'	7.05	1.60	1.53
12	B	1016	G	N7-C5	-7.05	1.35	1.39
12	B	1977	A	C5-C4	7.05	1.43	1.38
12	B	2570	G	C2-N3	7.05	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2813	A	N3-C4	-7.05	1.30	1.34
21	K	108	ARG	NE-CZ	7.05	1.42	1.33
11	A	31	C	N1-C6	-7.05	1.32	1.37
12	B	327	G	N9-C8	-7.05	1.32	1.37
12	B	580	U	C4-C5	-7.05	1.37	1.43
12	B	1787	A	N7-C5	-7.04	1.35	1.39
12	B	2271	G	O3'-P	-7.04	1.52	1.61
12	B	2453	A	C5-C4	7.04	1.43	1.38
12	B	2569	G	C2-N3	7.04	1.38	1.32
12	B	595	C	C4-C5	7.04	1.48	1.43
12	B	1008	A	O4'-C1'	-7.04	1.32	1.41
12	B	1797	G	N1-C2	7.04	1.43	1.37
12	B	2273	A	C6-N6	7.04	1.39	1.33
12	B	2775	G	C8-N7	-7.04	1.26	1.30
12	B	602	A	C2'-C1'	-7.04	1.45	1.53
12	B	1241	A	C6-N1	7.04	1.40	1.35
12	B	1350	C	C2-O2	7.04	1.30	1.24
12	B	1546	G	N7-C5	-7.04	1.35	1.39
12	B	1615	C	C4'-O4'	7.04	1.54	1.45
12	B	1650	A	C8-N7	7.04	1.36	1.31
12	B	1203	U	N3-C4	7.04	1.44	1.38
12	B	35	G	C6-O6	-7.04	1.17	1.24
12	B	354	A	C4'-O4'	7.04	1.54	1.45
12	B	725	G	C2'-C1'	-7.04	1.45	1.53
12	B	905	A	C2-N3	7.04	1.39	1.33
12	B	1262	A	N3-C4	7.04	1.39	1.34
12	B	1421	G	C2'-C1'	-7.04	1.45	1.53
12	B	471	A	C4'-C3'	-7.04	1.45	1.53
12	B	2400	G	C8-N7	7.04	1.35	1.30
12	B	81	G	N9-C4	-7.04	1.32	1.38
12	B	458	G	C5-C6	-7.04	1.35	1.42
12	B	885	C	C4'-C3'	7.04	1.60	1.53
12	B	1432	G	C5'-C4'	7.04	1.59	1.51
12	B	1593	A	C5-C4	7.04	1.43	1.38
12	B	1823	G	C2-N2	7.04	1.41	1.34
12	B	1948	G	C2'-C1'	-7.04	1.45	1.53
12	B	2103	C	P-O5'	-7.03	1.52	1.59
11	A	19	C	N1-C6	7.03	1.41	1.37
12	B	203	A	C4'-O4'	7.03	1.54	1.45
12	B	1876	A	C6-N6	7.03	1.39	1.33
12	B	1580	A	C8-N7	-7.03	1.26	1.31
12	B	2464	G	C5-C4	7.03	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	529	A	N7-C5	-7.03	1.35	1.39
12	B	587	C	C4'-C3'	-7.03	1.45	1.53
12	B	913	U	C5'-C4'	7.03	1.59	1.51
12	B	2761	A	N1-C2	7.03	1.40	1.34
11	A	84	G	N9-C4	-7.03	1.32	1.38
12	B	156	A	C3'-C2'	-7.03	1.45	1.52
12	B	2674	G	C2'-C1'	-7.03	1.45	1.53
12	B	830	G	O3'-P	-7.02	1.52	1.61
12	B	952	G	C2'-C1'	-7.02	1.45	1.53
12	B	1848	A	N7-C5	-7.02	1.35	1.39
12	B	1993	U	N3-C4	7.02	1.44	1.38
12	B	2222	C	C4-N4	7.02	1.40	1.33
12	B	2487	G	N1-C2	7.02	1.43	1.37
3	2	51	SER	CA-CB	7.02	1.63	1.52
12	B	269	C	C2-N3	7.02	1.41	1.35
12	B	314	C	C4-N4	7.02	1.40	1.33
12	B	1342	A	C5-C4	7.02	1.43	1.38
12	B	1841	U	N3-C4	7.02	1.44	1.38
12	B	2810	A	N1-C2	7.02	1.40	1.34
12	B	1155	A	N7-C5	-7.02	1.35	1.39
12	B	2491	U	C4-O4	-7.02	1.18	1.23
12	B	2585	U	C5-C6	7.02	1.40	1.34
11	A	28	C	C2'-C1'	-7.02	1.45	1.53
12	B	808	G	N9-C4	7.02	1.43	1.38
12	B	1610	A	N9-C4	7.02	1.42	1.37
11	A	12	C	O3'-P	-7.01	1.52	1.61
12	B	498	G	C5'-C4'	7.01	1.59	1.51
12	B	1389	G	C4'-C3'	7.01	1.60	1.53
12	B	1513	U	N3-C4	7.01	1.44	1.38
12	B	2000	C	P-O5'	-7.01	1.52	1.59
12	B	2220	U	N3-C4	7.01	1.44	1.38
12	B	2467	C	C4'-C3'	-7.01	1.45	1.53
12	B	282	A	N9-C4	-7.01	1.33	1.37
12	B	430	A	N3-C4	-7.01	1.30	1.34
12	B	2852	G	C5-C4	7.01	1.43	1.38
12	B	390	U	N1-C2	7.01	1.44	1.38
12	B	690	G	C5-C6	-7.01	1.35	1.42
12	B	1808	A	C2-N3	7.01	1.39	1.33
12	B	2394	C	C2-N3	7.01	1.41	1.35
12	B	414	C	C5-C6	-7.01	1.28	1.34
12	B	494	G	N1-C2	7.01	1.43	1.37
12	B	1206	G	C8-N7	-7.01	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2012	G	C2-N3	7.01	1.38	1.32
12	B	2835	A	C5-C4	7.01	1.43	1.38
12	B	564	C	C2-N3	7.01	1.41	1.35
12	B	2643	G	C3'-O3'	7.01	1.51	1.42
12	B	1084	A	N3-C4	-7.00	1.30	1.34
12	B	73	A	N1-C2	7.00	1.40	1.34
12	B	1046	A	N3-C4	7.00	1.39	1.34
12	B	2549	G	C5-C4	7.00	1.43	1.38
12	B	1332	G	C2'-C1'	-7.00	1.45	1.53
12	B	1482	G	C4'-C3'	7.00	1.60	1.53
12	B	1222	U	C2-N3	7.00	1.42	1.37
12	B	2142	A	C3'-C2'	-7.00	1.45	1.52
12	B	631	A	N9-C4	7.00	1.42	1.37
12	B	1301	A	C8-N7	-7.00	1.26	1.31
12	B	1925	C	N3-C4	7.00	1.38	1.33
12	B	2344	U	O3'-P	-7.00	1.52	1.61
12	B	661	A	C6-N6	7.00	1.39	1.33
12	B	2016	U	C2-N3	7.00	1.42	1.37
12	B	2036	C	N1-C6	7.00	1.41	1.37
12	B	2333	A	N3-C4	-7.00	1.30	1.34
12	B	1477	A	N3-C4	-7.00	1.30	1.34
12	B	2014	A	C2-N3	7.00	1.39	1.33
12	B	231	A	C6-N1	6.99	1.40	1.35
12	B	271	G	C2-N3	6.99	1.38	1.32
12	B	577	G	C2'-C1'	-6.99	1.45	1.53
12	B	1535	A	N7-C5	-6.99	1.35	1.39
12	B	2027	G	N7-C5	6.99	1.43	1.39
12	B	2678	C	N3-C4	6.99	1.38	1.33
12	B	1918	A	C2-N3	6.99	1.39	1.33
12	B	2452	C	P-O5'	-6.99	1.52	1.59
12	B	1771	C	C3'-C2'	-6.99	1.45	1.52
12	B	2793	C	N3-C4	6.99	1.38	1.33
12	B	61	C	C2-N3	6.99	1.41	1.35
12	B	147	C	C4'-O4'	-6.99	1.36	1.45
12	B	1003	G	N9-C8	6.99	1.42	1.37
12	B	2488	G	C5-C6	-6.99	1.35	1.42
12	B	508	A	P-O5'	-6.99	1.52	1.59
12	B	2114	A	P-O5'	6.99	1.66	1.59
12	B	187	G	N3-C4	-6.99	1.30	1.35
12	B	705	A	N7-C5	-6.99	1.35	1.39
12	B	849	A	C5'-C4'	-6.99	1.43	1.51
12	B	1403	A	N3-C4	6.99	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1895	C	O3'-P	-6.99	1.52	1.61
12	B	2261	C	C2'-C1'	-6.99	1.45	1.53
12	B	2821	A	O3'-P	-6.99	1.52	1.61
12	B	2895	G	N3-C4	-6.98	1.30	1.35
12	B	1580	A	C3'-O3'	6.98	1.51	1.42
12	B	2683	C	C2'-C1'	6.98	1.61	1.53
27	Q	10	ARG	NE-CZ	6.98	1.42	1.33
12	B	1187	G	N9-C8	-6.98	1.32	1.37
12	B	1575	C	N3-C4	6.98	1.38	1.33
12	B	2051	A	C6-N1	6.98	1.40	1.35
12	B	2389	G	N3-C4	-6.98	1.30	1.35
12	B	993	G	C5'-C4'	6.98	1.59	1.51
12	B	1614	A	N7-C5	6.98	1.43	1.39
12	B	1928	A	C4'-C3'	6.98	1.60	1.53
12	B	2019	A	C6-N1	6.98	1.40	1.35
12	B	2	G	P-O5'	-6.97	1.52	1.59
12	B	118	A	C5-C4	6.97	1.43	1.38
12	B	272	A	N9-C4	-6.97	1.33	1.37
12	B	912	C	C4'-O4'	-6.97	1.36	1.45
12	B	1603	A	N9-C4	-6.97	1.33	1.37
12	B	2503	A	C5-C4	6.97	1.43	1.38
12	B	1340	U	C4-C5	6.97	1.49	1.43
12	B	1689	A	N1-C2	6.97	1.40	1.34
12	B	2503	A	C6-N1	6.97	1.40	1.35
12	B	72	U	C4'-C3'	6.97	1.60	1.53
12	B	110	G	C2'-C1'	-6.97	1.45	1.53
12	B	2102	G	N9-C8	-6.97	1.32	1.37
12	B	2732	G	C6-N1	6.97	1.44	1.39
12	B	2900	A	C6-N6	6.97	1.39	1.33
12	B	627	A	N9-C4	6.97	1.42	1.37
12	B	1770	G	C2'-C1'	-6.97	1.45	1.53
12	B	2264	C	P-O5'	-6.97	1.52	1.59
12	B	2577	A	N9-C8	-6.97	1.32	1.37
12	B	2665	A	N9-C4	6.97	1.42	1.37
12	B	2807	U	C2'-C1'	-6.97	1.45	1.53
12	B	1700	A	C8-N7	6.96	1.36	1.31
12	B	2777	G	N3-C4	6.96	1.40	1.35
12	B	1217	U	N3-C4	6.96	1.44	1.38
12	B	1226	A	C2'-C1'	-6.96	1.45	1.53
12	B	2223	G	P-O5'	-6.96	1.52	1.59
12	B	2514	U	N1-C2	6.96	1.44	1.38
12	B	253	C	C2-N3	6.96	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1849	G	C6-N1	6.96	1.44	1.39
12	B	2113	U	C3'-C2'	-6.96	1.45	1.52
12	B	1016	G	O3'-P	6.96	1.69	1.61
12	B	1367	A	C6-N6	6.96	1.39	1.33
12	B	1610	A	P-O5'	-6.96	1.52	1.59
12	B	2453	A	C2'-C1'	-6.96	1.45	1.53
12	B	219	A	N3-C4	-6.96	1.30	1.34
12	B	587	C	C2-N3	6.96	1.41	1.35
12	B	649	G	C2-N3	6.96	1.38	1.32
12	B	1238	G	C2-N3	6.96	1.38	1.32
12	B	2002	G	C2'-C1'	-6.96	1.45	1.53
11	A	86	G	C5-C4	6.95	1.43	1.38
12	B	1086	A	N7-C5	-6.95	1.35	1.39
12	B	2179	C	C2-O2	6.95	1.30	1.24
12	B	2659	G	C6-N1	6.95	1.44	1.39
12	B	2791	G	N1-C2	6.95	1.43	1.37
12	B	92	U	C1'-N1	6.95	1.59	1.48
12	B	2404	U	O3'-P	-6.95	1.52	1.61
12	B	2455	G	N3-C4	6.95	1.40	1.35
12	B	817	C	C4'-O4'	6.95	1.54	1.45
12	B	1099	G	N3-C4	6.95	1.40	1.35
12	B	1200	C	N1-C6	-6.95	1.32	1.37
12	B	1581	G	N9-C4	6.95	1.43	1.38
12	B	2158	A	N3-C4	-6.95	1.30	1.34
12	B	2867	G	N7-C5	-6.95	1.35	1.39
12	B	630	G	O3'-P	-6.95	1.52	1.61
12	B	1891	G	N7-C5	-6.95	1.35	1.39
12	B	2412	A	C8-N7	-6.95	1.26	1.31
25	O	25	ARG	CD-NE	6.95	1.58	1.46
12	B	151	C	N1-C6	6.94	1.41	1.37
12	B	418	C	N1-C6	6.94	1.41	1.37
12	B	1350	C	C5-C6	-6.94	1.28	1.34
12	B	1611	C	C4-N4	6.94	1.40	1.33
12	B	2599	G	C5'-C4'	6.94	1.59	1.51
12	B	2677	G	O3'-P	6.94	1.69	1.61
12	B	1491	G	N1-C2	6.94	1.43	1.37
12	B	1493	C	C3'-O3'	6.94	1.51	1.42
12	B	673	C	N1-C6	6.94	1.41	1.37
12	B	1701	A	N7-C5	-6.94	1.35	1.39
12	B	2617	U	N3-C4	6.94	1.44	1.38
12	B	2886	A	P-O5'	-6.94	1.52	1.59
12	B	583	G	C8-N7	6.94	1.35	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2852	G	C6-N1	6.94	1.44	1.39
12	B	55	G	C6-N1	6.93	1.44	1.39
12	B	1279	G	C5-C4	6.93	1.43	1.38
12	B	1500	G	C5-C4	6.93	1.43	1.38
12	B	2070	A	C2'-C1'	-6.93	1.45	1.53
12	B	2776	A	C6-N1	6.93	1.40	1.35
12	B	1068	G	C2'-C1'	-6.93	1.45	1.53
12	B	1139	G	C2'-C1'	-6.93	1.45	1.53
12	B	1151	A	N7-C5	-6.93	1.35	1.39
12	B	2080	A	P-O5'	-6.93	1.52	1.59
29	S	84	ARG	NE-CZ	6.93	1.42	1.33
12	B	2540	C	C2'-C1'	-6.93	1.45	1.53
12	B	2765	A	N3-C4	-6.93	1.30	1.34
12	B	80	G	C2'-C1'	-6.93	1.45	1.53
12	B	172	A	C6-N1	6.93	1.40	1.35
12	B	962	G	C8-N7	-6.93	1.26	1.30
12	B	2891	U	C5'-C4'	6.93	1.59	1.51
12	B	1126	A	P-O5'	-6.93	1.52	1.59
12	B	1737	G	C4'-O4'	-6.93	1.36	1.45
12	B	2363	G	C2-N3	6.93	1.38	1.32
12	B	2496	C	N3-C4	6.93	1.38	1.33
12	B	2678	C	N1-C6	6.93	1.41	1.37
16	F	132	ARG	CD-NE	6.93	1.58	1.46
12	B	1324	G	O4'-C1'	6.92	1.50	1.41
12	B	2409	G	C3'-C2'	-6.92	1.45	1.52
12	B	56	A	P-O5'	-6.92	1.52	1.59
12	B	277	G	N3-C4	-6.92	1.30	1.35
12	B	2296	U	C1'-N1	6.92	1.59	1.48
11	A	41	G	C2-N2	6.92	1.41	1.34
12	B	32	C	C1'-N1	6.92	1.59	1.48
12	B	1167	C	C5-C6	6.92	1.39	1.34
12	B	1608	A	N1-C2	-6.92	1.28	1.34
12	B	1929	G	C2-N3	6.92	1.38	1.32
12	B	2583	G	N1-C2	6.92	1.43	1.37
12	B	2893	A	C1'-N9	-6.92	1.37	1.46
12	B	97	C	N1-C6	6.92	1.41	1.37
12	B	1241	A	C3'-C2'	-6.92	1.45	1.52
12	B	1660	G	N7-C5	6.92	1.43	1.39
12	B	1805	A	C6-N6	6.92	1.39	1.33
12	B	2179	C	C3'-C2'	6.92	1.60	1.52
12	B	2432	A	N1-C2	6.92	1.40	1.34
1	0	10	ARG	CZ-NH1	6.92	1.42	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	842	U	C5-C6	6.92	1.40	1.34
12	B	168	G	C5-C4	-6.91	1.33	1.38
12	B	1048	A	O4'-C1'	6.91	1.50	1.41
12	B	1553	A	N3-C4	6.91	1.39	1.34
12	B	2018	G	C4'-O4'	6.91	1.54	1.45
12	B	644	A	C5'-C4'	6.91	1.59	1.51
12	B	2232	C	C5'-C4'	6.91	1.59	1.51
12	B	1452	G	C8-N7	-6.91	1.26	1.30
12	B	1657	U	N3-C4	6.91	1.44	1.38
12	B	2663	G	N7-C5	-6.91	1.35	1.39
24	N	2	ARG	NE-CZ	6.91	1.42	1.33
12	B	581	C	C4-C5	-6.91	1.37	1.43
12	B	1001	A	C6-N6	6.91	1.39	1.33
12	B	1628	G	C2-N3	6.91	1.38	1.32
12	B	2590	A	N3-C4	-6.91	1.30	1.34
12	B	1404	C	N1-C6	6.91	1.41	1.37
12	B	1028	A	O4'-C1'	6.91	1.50	1.41
12	B	1525	A	N7-C5	-6.91	1.35	1.39
12	B	1569	A	C6-N6	6.91	1.39	1.33
12	B	2429	G	C2'-C1'	-6.91	1.45	1.53
12	B	840	C	C4-N4	6.90	1.40	1.33
12	B	1572	A	N9-C4	6.90	1.42	1.37
12	B	1994	C	N1-C6	6.90	1.41	1.37
12	B	2754	U	N3-C4	6.90	1.44	1.38
12	B	728	G	N3-C4	6.90	1.40	1.35
12	B	850	U	C3'-O3'	6.90	1.51	1.42
12	B	1252	G	N9-C4	6.90	1.43	1.38
12	B	2472	G	C2-N3	6.90	1.38	1.32
12	B	233	A	C2'-C1'	-6.90	1.45	1.53
12	B	438	G	N9-C4	-6.90	1.32	1.38
12	B	1054	A	C6-N6	6.90	1.39	1.33
12	B	1676	A	C2'-C1'	-6.90	1.45	1.53
12	B	1988	G	N9-C4	-6.90	1.32	1.38
12	B	2261	C	N1-C6	6.90	1.41	1.37
12	B	2792	A	N9-C8	6.90	1.43	1.37
12	B	93	G	N9-C8	6.90	1.42	1.37
12	B	826	U	N3-C4	-6.90	1.32	1.38
12	B	1177	G	C2-N3	6.90	1.38	1.32
12	B	2316	G	N1-C2	6.90	1.43	1.37
12	B	598	U	O5'-C5'	-6.90	1.31	1.42
12	B	203	A	N3-C4	-6.89	1.30	1.34
12	B	1444	G	N7-C5	-6.89	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1824	G	N1-C2	6.89	1.43	1.37
12	B	2668	G	N1-C2	6.89	1.43	1.37
12	B	454	A	C5-C4	-6.89	1.33	1.38
12	B	2447	G	C2-N2	6.89	1.41	1.34
12	B	2447	G	C5-C6	-6.89	1.35	1.42
12	B	108	G	N9-C8	6.89	1.42	1.37
12	B	959	A	C6-N1	6.89	1.40	1.35
12	B	2085	U	O3'-P	-6.89	1.52	1.61
12	B	2158	A	N7-C5	-6.89	1.35	1.39
12	B	99	U	N1-C2	6.89	1.44	1.38
12	B	471	A	P-O5'	-6.89	1.52	1.59
12	B	633	A	C5-C4	6.89	1.43	1.38
12	B	656	G	C8-N7	-6.89	1.26	1.30
12	B	1692	U	C2'-C1'	-6.89	1.45	1.53
12	B	2367	G	C6-N1	6.89	1.44	1.39
12	B	1545	A	N9-C4	6.89	1.42	1.37
12	B	563	A	N9-C4	-6.89	1.33	1.37
12	B	728	G	O3'-P	-6.89	1.52	1.61
12	B	1271	G	N9-C8	-6.89	1.33	1.37
12	B	121	G	C2-N3	6.88	1.38	1.32
12	B	221	A	C8-N7	-6.88	1.26	1.31
12	B	1485	U	C4-O4	-6.88	1.18	1.23
12	B	1520	U	C2'-C1'	-6.88	1.45	1.53
12	B	2096	C	N1-C6	6.88	1.41	1.37
12	B	1733	G	N7-C5	-6.88	1.35	1.39
12	B	1864	U	P-O5'	-6.88	1.52	1.59
12	B	2816	G	C3'-C2'	-6.88	1.45	1.52
12	B	1735	A	C6-N6	6.88	1.39	1.33
12	B	2714	G	C5-C4	-6.88	1.33	1.38
12	B	2718	G	C2-N3	6.88	1.38	1.32
12	B	86	G	C4'-O4'	-6.88	1.36	1.45
12	B	631	A	C2-N3	6.88	1.39	1.33
29	S	38	TYR	CE2-CZ	6.88	1.47	1.38
12	B	1629	U	C2-N3	6.88	1.42	1.37
12	B	2697	G	C2-N3	6.88	1.38	1.32
12	B	695	G	C2'-C1'	-6.87	1.45	1.53
12	B	1385	A	C2'-C1'	-6.87	1.45	1.53
12	B	2693	G	C6-N1	6.87	1.44	1.39
12	B	2753	A	O3'-P	6.87	1.69	1.61
12	B	1054	A	P-O5'	6.87	1.66	1.59
12	B	2004	G	N7-C5	6.87	1.43	1.39
12	B	786	C	C4'-C3'	6.87	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	872	U	C2'-C1'	-6.87	1.45	1.53
12	B	987	C	C5'-C4'	6.87	1.59	1.51
12	B	2038	G	C6-N1	6.87	1.44	1.39
12	B	2643	G	C5-C6	6.87	1.49	1.42
12	B	1384	A	C5-C4	6.87	1.43	1.38
12	B	1933	G	C2-N3	6.87	1.38	1.32
12	B	2255	G	N7-C5	6.87	1.43	1.39
22	L	33	ARG	CZ-NH2	6.87	1.42	1.33
12	B	1425	G	P-O5'	-6.87	1.52	1.59
12	B	370	G	C2-N2	6.87	1.41	1.34
12	B	621	A	C6-N6	6.87	1.39	1.33
12	B	1022	G	C8-N7	-6.87	1.26	1.30
12	B	1230	A	N9-C8	6.87	1.43	1.37
12	B	1950	G	N9-C4	-6.87	1.32	1.38
12	B	2704	C	C5'-C4'	6.87	1.59	1.51
12	B	1537	G	P-O5'	-6.86	1.52	1.59
12	B	1569	A	C4'-C3'	-6.86	1.45	1.53
12	B	1913	A	O3'-P	-6.86	1.52	1.61
12	B	2540	C	N3-C4	6.86	1.38	1.33
12	B	1086	A	C3'-C2'	6.86	1.60	1.52
12	B	1260	A	C8-N7	-6.86	1.26	1.31
12	B	2067	G	C8-N7	-6.86	1.26	1.30
12	B	2678	C	P-O5'	-6.86	1.52	1.59
12	B	2864	G	N7-C5	-6.86	1.35	1.39
12	B	1551	A	O3'-P	-6.86	1.52	1.61
12	B	2277	G	N7-C5	-6.86	1.35	1.39
12	B	1853	A	C2'-C1'	-6.86	1.45	1.53
12	B	2354	C	N3-C4	6.86	1.38	1.33
12	B	332	A	C6-N6	6.86	1.39	1.33
12	B	432	A	O3'-P	-6.86	1.52	1.61
12	B	464	U	N1-C6	6.86	1.44	1.38
12	B	474	G	C2-N3	6.86	1.38	1.32
12	B	843	G	C8-N7	-6.86	1.26	1.30
12	B	1155	A	C4'-C3'	-6.86	1.45	1.53
12	B	1280	G	C8-N7	-6.86	1.26	1.30
12	B	1546	G	N9-C8	6.86	1.42	1.37
12	B	2153	C	C4-N4	6.86	1.40	1.33
12	B	2689	U	C4-C5	6.86	1.49	1.43
12	B	945	A	N3-C4	6.86	1.39	1.34
12	B	1727	C	C4'-C3'	6.86	1.60	1.53
12	B	1784	A	C3'-C2'	6.86	1.60	1.52
12	B	2109	U	C2-N3	6.86	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	509	C	C4-N4	6.85	1.40	1.33
12	B	1160	G	N3-C4	6.85	1.40	1.35
12	B	1828	G	C6-N1	6.85	1.44	1.39
12	B	1964	G	O3'-P	6.85	1.69	1.61
12	B	2849	U	C4-C5	6.85	1.49	1.43
13	C	212	TRP	NE1-CE2	-6.85	1.28	1.37
12	B	1116	G	N3-C4	-6.85	1.30	1.35
12	B	933	A	C4'-O4'	-6.85	1.36	1.45
12	B	1651	G	C4'-O4'	-6.85	1.36	1.45
12	B	1810	A	C6-N6	6.85	1.39	1.33
12	B	812	C	C1'-N1	6.85	1.59	1.48
12	B	1019	U	N1-C6	6.85	1.44	1.38
12	B	1093	G	N1-C2	6.85	1.43	1.37
12	B	1216	G	C6-N1	6.85	1.44	1.39
12	B	1432	G	N1-C2	6.85	1.43	1.37
12	B	2228	G	C5-C4	6.85	1.43	1.38
12	B	2346	A	C8-N7	-6.85	1.26	1.31
12	B	1158	C	C2'-C1'	-6.85	1.45	1.53
12	B	1509	A	C6-N6	6.85	1.39	1.33
12	B	899	A	N9-C4	-6.84	1.33	1.37
12	B	1613	G	N9-C8	-6.84	1.33	1.37
12	B	1818	U	C2-N3	6.84	1.42	1.37
12	B	2539	C	C2'-C1'	-6.84	1.45	1.53
12	B	658	U	C2-N3	6.84	1.42	1.37
12	B	1251	C	O3'-P	-6.84	1.52	1.61
12	B	1387	A	C6-N1	6.84	1.40	1.35
12	B	204	A	N9-C4	-6.84	1.33	1.37
12	B	745	G	C5'-C4'	6.84	1.59	1.51
12	B	886	A	N9-C4	-6.84	1.33	1.37
12	B	1672	A	C6-N6	6.84	1.39	1.33
12	B	1795	C	N1-C6	6.84	1.41	1.37
12	B	434	U	C3'-C2'	6.84	1.60	1.52
12	B	1053	C	C4-N4	6.84	1.40	1.33
12	B	1869	G	C8-N7	-6.84	1.26	1.30
12	B	1999	C	C4'-C3'	6.84	1.60	1.53
11	A	61	G	C6-N1	6.84	1.44	1.39
12	B	549	G	C5'-C4'	6.84	1.59	1.51
12	B	581	C	C2-O2	6.84	1.30	1.24
12	B	701	G	C4'-C3'	6.84	1.60	1.53
12	B	1182	G	C6-N1	6.84	1.44	1.39
12	B	1248	G	N9-C8	6.84	1.42	1.37
12	B	2204	G	C5-C4	6.84	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2488	G	P-O5'	-6.84	1.52	1.59
12	B	557	C	C2'-C1'	-6.84	1.45	1.53
12	B	681	G	N9-C4	6.84	1.43	1.38
12	B	1354	A	C5-C4	6.84	1.43	1.38
12	B	94	A	C6-N6	6.83	1.39	1.33
12	B	1395	A	N3-C4	-6.83	1.30	1.34
12	B	2376	A	C5-C4	-6.83	1.33	1.38
12	B	1660	G	N1-C2	6.83	1.43	1.37
12	B	2340	A	C5'-C4'	6.83	1.59	1.51
12	B	124	G	C2-N3	6.83	1.38	1.32
12	B	687	C	C4-N4	6.83	1.40	1.33
12	B	2535	G	C5'-C4'	6.83	1.59	1.51
12	B	363	G	C8-N7	-6.83	1.26	1.30
12	B	1696	G	C6-N1	6.83	1.44	1.39
12	B	2012	G	N9-C8	-6.83	1.33	1.37
12	B	1002	G	C8-N7	-6.83	1.26	1.30
12	B	226	A	N9-C4	6.83	1.42	1.37
12	B	671	C	O3'-P	-6.83	1.52	1.61
12	B	942	G	C6-N1	6.83	1.44	1.39
12	B	1049	C	C5-C6	-6.83	1.28	1.34
12	B	1474	U	N1-C2	6.83	1.44	1.38
12	B	2807	U	N1-C2	6.83	1.44	1.38
12	B	2236	U	P-O5'	-6.82	1.52	1.59
13	C	12	ARG	CZ-NH1	6.82	1.42	1.33
12	B	344	A	N3-C4	-6.82	1.30	1.34
12	B	1935	G	O4'-C1'	-6.82	1.32	1.41
12	B	2531	A	C8-N7	6.82	1.36	1.31
18	H	123	ARG	NE-CZ	6.82	1.42	1.33
12	B	38	A	C5-C4	-6.82	1.33	1.38
12	B	368	A	C8-N7	6.82	1.36	1.31
12	B	1030	C	P-O5'	-6.82	1.52	1.59
12	B	2260	C	C5'-C4'	6.82	1.59	1.51
12	B	535	G	C8-N7	-6.82	1.26	1.30
12	B	565	C	O3'-P	-6.82	1.52	1.61
12	B	672	C	C4-N4	6.82	1.40	1.33
12	B	1216	G	N7-C5	-6.82	1.35	1.39
12	B	1264	A	N9-C4	6.82	1.42	1.37
12	B	1002	G	N9-C4	-6.82	1.32	1.38
12	B	1165	A	N9-C4	6.82	1.42	1.37
12	B	1227	G	N3-C4	-6.82	1.30	1.35
12	B	1746	A	C5'-C4'	6.82	1.59	1.51
12	B	2454	G	P-O5'	-6.82	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2776	A	C5'-C4'	6.82	1.59	1.51
12	B	75	G	C2'-C1'	-6.82	1.45	1.53
12	B	1215	G	N7-C5	-6.82	1.35	1.39
12	B	1868	C	N1-C6	-6.82	1.33	1.37
12	B	2207	C	N1-C6	-6.82	1.33	1.37
12	B	1142	A	N9-C8	-6.81	1.32	1.37
12	B	1246	A	P-O5'	-6.81	1.52	1.59
12	B	424	G	C5'-C4'	6.81	1.59	1.51
12	B	1504	A	P-O5'	-6.81	1.52	1.59
12	B	1536	C	C3'-O3'	6.81	1.51	1.42
12	B	1711	A	C6-N1	6.81	1.40	1.35
12	B	1753	G	N3-C4	-6.81	1.30	1.35
12	B	1790	C	N1-C6	6.81	1.41	1.37
12	B	378	C	N1-C6	6.81	1.41	1.37
12	B	2138	G	N7-C5	-6.81	1.35	1.39
12	B	649	G	P-O5'	-6.81	1.52	1.59
12	B	655	A	N7-C5	6.81	1.43	1.39
12	B	1197	G	N7-C5	-6.81	1.35	1.39
12	B	2470	G	C3'-C2'	6.81	1.60	1.52
12	B	1701	A	C6-N1	6.81	1.40	1.35
12	B	1720	U	N3-C4	6.81	1.44	1.38
12	B	2253	G	C2-N3	6.81	1.38	1.32
12	B	1598	A	C5-C4	6.81	1.43	1.38
12	B	2610	C	P-O5'	6.81	1.66	1.59
12	B	154	U	C4-C5	-6.80	1.37	1.43
12	B	329	G	C5-C6	-6.80	1.35	1.42
12	B	449	A	O3'-P	-6.80	1.52	1.61
12	B	563	A	P-O5'	-6.80	1.52	1.59
12	B	805	G	C8-N7	-6.80	1.26	1.30
12	B	1078	U	C2-N3	6.80	1.42	1.37
12	B	433	C	C4'-O4'	-6.80	1.36	1.45
12	B	664	G	C2-N2	6.80	1.41	1.34
12	B	2367	G	C2-N3	6.80	1.38	1.32
12	B	818	G	C5-C4	6.80	1.43	1.38
12	B	686	U	C3'-C2'	6.80	1.60	1.52
12	B	1562	U	C5'-C4'	6.80	1.59	1.51
12	B	2701	U	N1-C6	6.80	1.44	1.38
12	B	206	U	O4'-C1'	6.79	1.50	1.41
23	M	40	ARG	CD-NE	6.79	1.58	1.46
12	B	2525	G	N7-C5	-6.79	1.35	1.39
12	B	2812	G	N3-C4	-6.79	1.30	1.35
12	B	1613	G	N7-C5	6.79	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1867	G	C2-N2	6.79	1.41	1.34
12	B	2235	G	N3-C4	6.79	1.40	1.35
12	B	2859	G	N9-C4	6.79	1.43	1.38
12	B	1025	G	N7-C5	-6.79	1.35	1.39
12	B	1701	A	N9-C4	-6.79	1.33	1.37
12	B	2773	C	C4'-C3'	6.79	1.60	1.53
12	B	449	A	P-O5'	-6.79	1.52	1.59
12	B	1335	C	N1-C6	6.79	1.41	1.37
12	B	2168	G	C2-N2	6.79	1.41	1.34
12	B	2624	G	C5-C4	6.79	1.43	1.38
12	B	2675	A	C6-N6	6.79	1.39	1.33
12	B	1095	A	C6-N6	6.78	1.39	1.33
12	B	1738	G	C8-N7	6.78	1.35	1.30
12	B	2797	U	C2-N3	6.78	1.42	1.37
12	B	2033	A	C2'-C1'	-6.78	1.45	1.53
12	B	2060	A	N3-C4	-6.78	1.30	1.34
12	B	2856	A	C6-N1	6.78	1.40	1.35
12	B	2343	U	C2-O2	6.78	1.28	1.22
12	B	2469	A	N3-C4	6.78	1.39	1.34
12	B	1210	G	C2-N3	6.78	1.38	1.32
12	B	1486	U	C3'-C2'	-6.78	1.45	1.52
12	B	2125	G	C6-N1	6.78	1.44	1.39
12	B	2436	G	N3-C4	-6.78	1.30	1.35
12	B	1596	A	N1-C2	6.78	1.40	1.34
12	B	1635	A	N7-C5	6.78	1.43	1.39
12	B	1789	A	N3-C4	-6.78	1.30	1.34
12	B	1937	A	N9-C4	-6.78	1.33	1.37
12	B	2132	U	C2'-C1'	-6.78	1.45	1.53
12	B	273	G	C6-O6	-6.78	1.18	1.24
12	B	325	G	C6-N1	6.78	1.44	1.39
12	B	431	U	P-O5'	-6.78	1.52	1.59
12	B	861	A	N9-C4	-6.78	1.33	1.37
12	B	1631	G	C2-N2	6.78	1.41	1.34
12	B	2316	G	C2-N3	6.78	1.38	1.32
12	B	2759	G	C5'-C4'	6.78	1.59	1.51
12	B	2782	G	C4'-C3'	-6.78	1.45	1.53
15	E	197	GLU	CD-OE1	6.78	1.33	1.25
12	B	1768	C	N1-C6	6.77	1.41	1.37
12	B	188	G	N7-C5	-6.77	1.35	1.39
12	B	770	G	N3-C4	-6.77	1.30	1.35
12	B	1192	G	C2-N3	6.77	1.38	1.32
12	B	2012	G	N1-C2	6.77	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2806	C	C4-N4	6.77	1.40	1.33
13	C	100	ARG	CZ-NH2	6.77	1.41	1.33
23	M	38	ARG	CZ-NH2	6.77	1.41	1.33
12	B	857	G	N7-C5	-6.77	1.35	1.39
12	B	203	A	C8-N7	-6.77	1.26	1.31
12	B	691	C	N1-C6	6.77	1.41	1.37
12	B	312	G	C3'-C2'	-6.77	1.45	1.52
12	B	743	A	P-O5'	-6.77	1.52	1.59
12	B	776	G	C2-N3	6.77	1.38	1.32
12	B	412	A	N3-C4	6.77	1.39	1.34
12	B	1154	G	C2'-C1'	-6.76	1.46	1.53
12	B	2146	C	N3-C4	6.76	1.38	1.33
12	B	2423	U	C4-C5	6.76	1.49	1.43
12	B	2686	G	N9-C8	-6.76	1.33	1.37
12	B	1462	C	C3'-C2'	6.76	1.60	1.52
12	B	1499	C	C4-N4	6.76	1.40	1.33
12	B	1719	G	N9-C4	-6.76	1.32	1.38
12	B	2135	A	O3'-P	-6.76	1.53	1.61
12	B	2808	G	N3-C4	-6.76	1.30	1.35
12	B	2843	G	C2'-C1'	-6.76	1.46	1.53
11	A	110	C	C4'-C3'	6.76	1.60	1.53
12	B	1168	G	P-O5'	-6.76	1.52	1.59
12	B	1189	A	C2'-O2'	6.76	1.50	1.41
12	B	1695	G	N1-C2	6.76	1.43	1.37
12	B	2178	C	C2-N3	6.76	1.41	1.35
12	B	2801	G	N9-C8	6.76	1.42	1.37
12	B	206	U	N1-C6	6.76	1.44	1.38
12	B	630	G	C2'-C1'	-6.76	1.46	1.53
12	B	1192	G	C5-C4	6.76	1.43	1.38
22	L	78	ARG	NE-CZ	6.76	1.41	1.33
12	B	1292	G	C5-C4	6.76	1.43	1.38
12	B	1646	C	C4-N4	6.76	1.40	1.33
12	B	388	G	N3-C4	-6.76	1.30	1.35
12	B	407	G	C2-N3	6.76	1.38	1.32
12	B	1890	A	C4'-C3'	6.76	1.60	1.53
12	B	1927	A	C1'-N9	6.76	1.58	1.48
11	A	102	G	N9-C8	6.75	1.42	1.37
12	B	153	U	C2-N3	6.75	1.42	1.37
12	B	1937	A	P-O5'	6.75	1.66	1.59
12	B	2820	A	P-O5'	-6.75	1.52	1.59
11	A	49	C	C2-N3	6.75	1.41	1.35
12	B	188	G	C5-C4	6.75	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	354	A	C2'-C1'	-6.75	1.46	1.53
12	B	2621	G	O3'-P	-6.75	1.53	1.61
12	B	2792	A	N3-C4	-6.75	1.30	1.34
12	B	2827	C	C5-C6	6.75	1.39	1.34
12	B	1374	G	C8-N7	-6.75	1.26	1.30
12	B	2295	C	O4'-C1'	6.75	1.50	1.41
12	B	644	A	N9-C4	-6.75	1.33	1.37
12	B	874	G	P-O5'	6.75	1.66	1.59
12	B	1180	U	C2-N3	6.75	1.42	1.37
12	B	1426	G	N7-C5	-6.75	1.35	1.39
12	B	1558	C	C4-N4	6.75	1.40	1.33
12	B	277	G	C8-N7	6.75	1.34	1.30
12	B	1766	G	C5-C4	-6.75	1.33	1.38
12	B	2410	G	C8-N7	6.75	1.34	1.30
12	B	2454	G	C6-N1	6.75	1.44	1.39
12	B	1631	G	N1-C2	6.75	1.43	1.37
10	9	25	ARG	CD-NE	6.74	1.57	1.46
11	A	96	G	N3-C4	6.74	1.40	1.35
12	B	561	G	C4'-C3'	6.74	1.60	1.53
12	B	939	G	C8-N7	-6.74	1.26	1.30
12	B	1622	G	N9-C4	6.74	1.43	1.38
15	E	40	ARG	CZ-NH1	6.74	1.41	1.33
12	B	139	U	C4'-O4'	6.74	1.54	1.45
12	B	250	G	C6-O6	-6.74	1.18	1.24
12	B	322	A	N7-C5	-6.74	1.35	1.39
12	B	1456	G	C5-C4	-6.74	1.33	1.38
12	B	1968	G	C5'-C4'	6.74	1.59	1.51
12	B	2157	G	N7-C5	6.74	1.43	1.39
12	B	2361	G	C5-C4	6.74	1.43	1.38
12	B	2530	A	N1-C2	-6.74	1.28	1.34
11	A	75	G	C5-C4	-6.74	1.33	1.38
12	B	56	A	N9-C4	-6.74	1.33	1.37
12	B	485	C	P-O5'	-6.74	1.53	1.59
12	B	609	A	O3'-P	-6.74	1.53	1.61
12	B	1432	G	C5-C4	6.74	1.43	1.38
12	B	1879	C	O3'-P	-6.74	1.53	1.61
12	B	2462	C	C3'-O3'	6.74	1.51	1.42
12	B	2902	C	P-O5'	-6.74	1.53	1.59
12	B	529	A	C5-C6	-6.74	1.34	1.41
12	B	2426	A	O3'-P	-6.74	1.53	1.61
12	B	2749	A	N3-C4	-6.74	1.30	1.34
12	B	1051	G	N9-C4	-6.74	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2412	A	C2'-C1'	-6.74	1.46	1.53
12	B	218	A	C6-N1	6.74	1.40	1.35
12	B	774	G	C2-N2	6.74	1.41	1.34
12	B	1171	G	C2'-C1'	-6.74	1.46	1.53
12	B	1398	C	N1-C6	-6.74	1.33	1.37
12	B	2390	U	C2'-C1'	6.74	1.60	1.53
12	B	2654	A	C8-N7	6.74	1.36	1.31
12	B	2890	G	N7-C5	-6.74	1.35	1.39
12	B	279	A	C4'-C3'	6.73	1.60	1.53
12	B	621	A	C6-N1	-6.73	1.30	1.35
12	B	1504	A	C5-C4	6.73	1.43	1.38
12	B	1644	C	N1-C2	6.73	1.46	1.40
12	B	1745	A	C6-N1	6.73	1.40	1.35
12	B	1813	G	C6-N1	6.73	1.44	1.39
11	A	44	G	O3'-P	-6.73	1.53	1.61
12	B	380	G	O3'-P	-6.73	1.53	1.61
12	B	1714	U	O3'-P	-6.73	1.53	1.61
12	B	1960	A	N7-C5	-6.73	1.35	1.39
12	B	2523	G	C4'-C3'	6.73	1.60	1.53
12	B	477	A	C5'-C4'	6.73	1.59	1.51
12	B	615	U	C3'-C2'	6.73	1.60	1.52
12	B	1309	G	C5-C4	-6.73	1.33	1.38
12	B	1935	G	C4'-C3'	6.73	1.60	1.53
12	B	2224	G	C4'-C3'	6.73	1.60	1.53
12	B	10	A	C2'-C1'	6.73	1.60	1.53
12	B	1235	G	C5-C4	-6.73	1.33	1.38
12	B	989	G	C8-N7	6.73	1.34	1.30
12	B	2460	U	P-O5'	-6.73	1.53	1.59
18	H	27	ARG	CZ-NH1	6.73	1.41	1.33
12	B	1015	U	C4-C5	-6.72	1.37	1.43
12	B	1098	A	N3-C4	6.72	1.38	1.34
12	B	1217	U	P-O5'	-6.72	1.53	1.59
12	B	1024	G	C2'-C1'	6.72	1.60	1.53
12	B	1566	A	C8-N7	-6.72	1.26	1.31
12	B	1600	C	C5'-C4'	6.72	1.59	1.51
12	B	1891	G	O3'-P	-6.72	1.53	1.61
12	B	2623	G	N9-C4	6.72	1.43	1.38
12	B	856	G	C2-N2	6.72	1.41	1.34
11	A	17	C	C4-C5	-6.72	1.37	1.43
12	B	2337	G	C2-N2	6.72	1.41	1.34
12	B	2816	G	C5-C6	-6.72	1.35	1.42
12	B	708	G	C2'-C1'	-6.72	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2168	G	N7-C5	-6.72	1.35	1.39
12	B	2278	A	C5'-C4'	6.72	1.59	1.51
11	A	112	G	C5-C6	-6.72	1.35	1.42
12	B	612	G	N1-C2	6.72	1.43	1.37
12	B	1574	C	C4-N4	6.72	1.40	1.33
12	B	2060	A	P-O5'	-6.72	1.53	1.59
12	B	2531	A	N7-C5	-6.72	1.35	1.39
12	B	2599	G	N1-C2	6.72	1.43	1.37
12	B	451	U	C4-O4	-6.71	1.18	1.23
12	B	910	A	P-O5'	-6.71	1.53	1.59
12	B	1031	G	N9-C8	-6.71	1.33	1.37
12	B	2108	A	C6-N1	6.71	1.40	1.35
12	B	51	G	C6-O6	6.71	1.30	1.24
12	B	246	C	N1-C6	6.71	1.41	1.37
12	B	1893	C	C2'-C1'	-6.71	1.46	1.53
12	B	1955	U	C2-N3	-6.71	1.33	1.37
12	B	2048	G	C2'-C1'	-6.71	1.46	1.53
12	B	2269	G	C2'-C1'	-6.71	1.46	1.53
12	B	49	A	C3'-C2'	6.71	1.60	1.52
12	B	1299	G	C2-N3	6.71	1.38	1.32
12	B	1603	A	C6-N1	6.71	1.40	1.35
12	B	2440	C	C1'-N1	6.71	1.58	1.48
12	B	1338	G	C2-N3	6.71	1.38	1.32
12	B	2173	A	C8-N7	-6.71	1.26	1.31
12	B	1573	G	C2-N3	6.71	1.38	1.32
12	B	2872	A	C6-N6	6.71	1.39	1.33
12	B	13	A	N7-C5	-6.71	1.35	1.39
12	B	77	G	N9-C4	-6.71	1.32	1.38
12	B	553	G	C8-N7	6.71	1.34	1.30
12	B	2015	A	C5-C4	6.71	1.43	1.38
12	B	2062	A	C3'-C2'	-6.71	1.45	1.52
12	B	2448	A	C5'-C4'	6.71	1.59	1.51
12	B	1063	G	N9-C8	6.70	1.42	1.37
12	B	1936	A	C8-N7	-6.70	1.26	1.31
12	B	2545	G	C8-N7	-6.70	1.26	1.30
12	B	2833	U	C2-N3	6.70	1.42	1.37
12	B	91	A	O3'-P	-6.70	1.53	1.61
12	B	1223	G	P-O5'	-6.70	1.53	1.59
12	B	2318	G	N1-C2	6.70	1.43	1.37
12	B	1798	U	P-O5'	-6.70	1.53	1.59
12	B	2411	A	C6-N6	6.70	1.39	1.33
12	B	141	G	N9-C4	6.70	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	527	C	C2'-C1'	-6.70	1.46	1.53
11	A	85	G	C2'-C1'	-6.70	1.46	1.53
12	B	496	G	C3'-C2'	-6.70	1.45	1.52
12	B	1960	A	C6-N1	6.70	1.40	1.35
12	B	2713	U	N1-C2	6.70	1.44	1.38
12	B	2042	A	N3-C4	-6.70	1.30	1.34
12	B	2710	C	C4-N4	6.70	1.40	1.33
12	B	712	G	C6-N1	6.69	1.44	1.39
12	B	1700	A	N7-C5	-6.69	1.35	1.39
12	B	299	A	O3'-P	-6.69	1.53	1.61
12	B	716	A	N9-C4	6.69	1.41	1.37
12	B	1162	G	C8-N7	-6.69	1.26	1.30
12	B	2042	A	C6-N1	6.69	1.40	1.35
12	B	2572	A	N9-C8	6.69	1.43	1.37
12	B	2136	G	N7-C5	6.69	1.43	1.39
12	B	2319	G	N9-C8	6.69	1.42	1.37
12	B	2331	G	C5'-C4'	6.69	1.59	1.51
12	B	2381	A	C5-C4	-6.69	1.34	1.38
12	B	879	G	N9-C8	-6.69	1.33	1.37
12	B	1771	C	C2-O2	-6.69	1.18	1.24
12	B	1776	G	C4'-C3'	-6.69	1.45	1.53
12	B	2694	G	P-O5'	6.69	1.66	1.59
12	B	629	G	C6-N1	6.69	1.44	1.39
12	B	1769	U	C4-C5	6.69	1.49	1.43
12	B	1887	C	N1-C6	6.69	1.41	1.37
12	B	1987	A	C6-N6	6.69	1.39	1.33
12	B	2184	A	P-O5'	-6.69	1.53	1.59
12	B	2343	U	C4-O4	6.69	1.29	1.23
12	B	2495	G	N9-C8	-6.69	1.33	1.37
12	B	2564	A	N9-C4	-6.69	1.33	1.37
12	B	1	G	N7-C5	-6.69	1.35	1.39
12	B	1204	A	C6-N6	6.69	1.39	1.33
12	B	2451	A	N9-C4	-6.69	1.33	1.37
12	B	2802	G	C4'-C3'	-6.69	1.45	1.53
12	B	1349	C	N3-C4	6.68	1.38	1.33
12	B	1545	A	N1-C2	6.68	1.40	1.34
12	B	1597	A	O4'-C1'	-6.68	1.32	1.41
12	B	1797	G	C2'-O2'	-6.68	1.32	1.41
16	F	109	ARG	CD-NE	6.68	1.57	1.46
12	B	915	C	C2-N3	6.68	1.41	1.35
12	B	1000	A	N9-C4	6.68	1.41	1.37
12	B	1010	A	N7-C5	-6.68	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2796	U	N1-C2	6.68	1.44	1.38
17	G	34	ARG	NE-CZ	6.68	1.41	1.33
12	B	805	G	C2'-C1'	-6.68	1.46	1.53
12	B	847	U	C5'-C4'	6.68	1.59	1.51
12	B	2329	U	C1'-N1	6.68	1.58	1.48
12	B	2680	U	N1-C2	6.68	1.44	1.38
12	B	1424	G	N9-C8	6.68	1.42	1.37
12	B	279	A	C6-N6	-6.68	1.28	1.33
12	B	741	U	O3'-P	-6.68	1.53	1.61
12	B	766	U	P-O5'	-6.68	1.53	1.59
12	B	1817	G	N1-C2	6.68	1.43	1.37
12	B	2029	G	N9-C8	-6.68	1.33	1.37
11	A	37	C	C3'-C2'	-6.67	1.45	1.52
12	B	1192	G	C6-N1	6.67	1.44	1.39
12	B	2766	A	C5-C4	6.67	1.43	1.38
12	B	771	G	N3-C4	-6.67	1.30	1.35
12	B	1888	G	N7-C5	-6.67	1.35	1.39
12	B	1101	U	C4-C5	6.67	1.49	1.43
12	B	1809	A	N3-C4	-6.67	1.30	1.34
12	B	1820	U	C1'-N1	6.67	1.58	1.48
12	B	2822	G	C2-N3	6.67	1.38	1.32
12	B	2235	G	P-O5'	-6.67	1.53	1.59
12	B	1321	A	N7-C5	-6.67	1.35	1.39
12	B	1628	G	N1-C2	-6.67	1.32	1.37
12	B	2504	U	C5'-C4'	6.67	1.59	1.51
12	B	2742	G	N1-C2	6.67	1.43	1.37
12	B	2799	A	C2'-C1'	-6.67	1.46	1.53
12	B	2863	C	C3'-O3'	6.67	1.51	1.42
33	Y	13	ARG	CZ-NH1	6.67	1.41	1.33
12	B	516	C	P-O5'	-6.67	1.53	1.59
12	B	908	C	C3'-C2'	-6.67	1.45	1.52
12	B	965	C	C5-C6	-6.67	1.29	1.34
12	B	2410	G	C2-N3	6.67	1.38	1.32
12	B	2584	U	N3-C4	6.67	1.44	1.38
12	B	243	U	C2-N3	6.67	1.42	1.37
12	B	525	U	C2-N3	6.67	1.42	1.37
12	B	632	A	N9-C4	6.67	1.41	1.37
12	B	635	C	C2'-C1'	-6.67	1.46	1.53
12	B	1609	A	C5-C4	-6.67	1.34	1.38
12	B	1684	G	N7-C5	-6.67	1.35	1.39
12	B	383	C	C4'-C3'	6.66	1.60	1.53
12	B	407	G	P-O5'	-6.66	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1969	A	C6-N6	6.66	1.39	1.33
12	B	2113	U	N3-C4	6.66	1.44	1.38
12	B	804	A	N9-C4	6.66	1.41	1.37
12	B	894	U	P-O5'	-6.66	1.53	1.59
12	B	1653	G	C2-N2	6.66	1.41	1.34
12	B	1856	U	C2-N3	6.66	1.42	1.37
12	B	536	G	C5-C4	6.66	1.43	1.38
12	B	720	U	C2-N3	6.66	1.42	1.37
12	B	930	G	C8-N7	6.66	1.34	1.30
12	B	1450	G	C2-N3	6.66	1.38	1.32
12	B	2266	A	N9-C8	6.66	1.43	1.37
12	B	2599	G	N9-C8	6.66	1.42	1.37
14	D	183	GLU	CG-CD	6.66	1.61	1.51
12	B	121	G	C6-N1	6.66	1.44	1.39
12	B	601	C	N3-C4	6.66	1.38	1.33
12	B	2386	A	N1-C2	6.66	1.40	1.34
12	B	2864	G	N9-C8	-6.66	1.33	1.37
12	B	222	A	N9-C4	6.66	1.41	1.37
12	B	962	G	C3'-C2'	-6.66	1.45	1.52
12	B	1287	A	C2'-C1'	-6.66	1.46	1.53
12	B	737	C	N3-C4	6.66	1.38	1.33
12	B	882	G	P-O5'	-6.66	1.53	1.59
12	B	1414	C	C4-N4	6.66	1.40	1.33
12	B	1825	U	C5'-C4'	6.66	1.59	1.51
12	B	1919	A	P-O5'	-6.66	1.53	1.59
12	B	2049	G	C6-N1	6.66	1.44	1.39
12	B	2899	A	C6-N6	6.66	1.39	1.33
12	B	348	A	O4'-C1'	-6.65	1.33	1.41
11	A	99	A	C2-N3	6.65	1.39	1.33
12	B	982	C	C4-N4	6.65	1.40	1.33
12	B	1355	G	O3'-P	-6.65	1.53	1.61
12	B	155	A	C6-N6	6.65	1.39	1.33
12	B	1631	G	C3'-C2'	6.65	1.60	1.52
12	B	384	A	C6-N6	6.65	1.39	1.33
12	B	1539	U	N1-C2	6.65	1.44	1.38
12	B	1783	A	N3-C4	-6.65	1.30	1.34
12	B	871	U	C5'-C4'	-6.65	1.43	1.51
12	B	1268	A	C8-N7	-6.65	1.26	1.31
12	B	2335	A	C2-N3	-6.65	1.27	1.33
12	B	1210	G	C6-N1	6.64	1.44	1.39
12	B	1496	A	N9-C8	-6.64	1.32	1.37
11	A	81	G	C2-N2	6.64	1.41	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	51	G	C1'-N9	-6.64	1.37	1.46
12	B	308	G	N7-C5	-6.64	1.35	1.39
12	B	717	C	C1'-N1	6.64	1.58	1.48
12	B	757	G	P-O5'	-6.64	1.53	1.59
12	B	1770	G	N3-C4	-6.64	1.30	1.35
12	B	1970	A	C4'-C3'	-6.64	1.45	1.53
12	B	2059	A	C2'-C1'	-6.64	1.46	1.53
12	B	2279	G	C5'-C4'	6.64	1.59	1.51
12	B	1483	G	N7-C5	-6.64	1.35	1.39
12	B	2150	C	N3-C4	6.64	1.38	1.33
12	B	504	A	N1-C2	-6.64	1.28	1.34
12	B	632	A	C6-N6	6.64	1.39	1.33
12	B	1022	G	P-O5'	-6.64	1.53	1.59
12	B	1301	A	C6-N6	6.64	1.39	1.33
12	B	2112	G	O3'-P	-6.64	1.53	1.61
12	B	2405	G	C6-N1	6.64	1.44	1.39
12	B	2578	G	N7-C5	6.64	1.43	1.39
12	B	42	A	O4'-C1'	6.64	1.50	1.41
12	B	1103	A	C5-C4	-6.64	1.34	1.38
12	B	9	G	N1-C2	6.64	1.43	1.37
12	B	144	A	C5-C4	6.64	1.43	1.38
12	B	1355	G	N7-C5	-6.64	1.35	1.39
12	B	1953	A	C8-N7	-6.64	1.26	1.31
12	B	2889	C	C2-N3	-6.64	1.30	1.35
12	B	35	G	N9-C8	6.63	1.42	1.37
12	B	905	A	C4'-O4'	-6.63	1.36	1.45
12	B	1656	C	P-O5'	-6.63	1.53	1.59
12	B	1801	A	C8-N7	-6.63	1.26	1.31
12	B	2523	G	N7-C5	6.63	1.43	1.39
12	B	1555	G	N9-C4	-6.63	1.32	1.38
12	B	2513	A	N9-C4	6.63	1.41	1.37
10	9	331	PHE	CG-CD1	6.63	1.48	1.38
12	B	129	C	C4'-O4'	6.63	1.54	1.45
11	A	116	G	N7-C5	6.63	1.43	1.39
12	B	103	A	C2-N3	6.63	1.39	1.33
12	B	146	A	C5'-C4'	6.63	1.59	1.51
12	B	2043	C	C3'-C2'	6.63	1.60	1.52
12	B	2152	G	C6-N1	6.63	1.44	1.39
12	B	2526	G	C6-O6	6.63	1.30	1.24
12	B	2538	C	C4'-C3'	6.63	1.60	1.53
12	B	2630	G	N3-C4	6.63	1.40	1.35
27	Q	44	TYR	CD2-CE2	6.63	1.49	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	969	G	N7-C5	-6.63	1.35	1.39
12	B	1194	A	N3-C4	-6.63	1.30	1.34
15	E	107	SER	CA-CB	6.63	1.62	1.52
12	B	195	A	C5-C4	-6.62	1.34	1.38
12	B	712	G	C2-N2	6.62	1.41	1.34
12	B	1055	G	C4'-C3'	6.62	1.60	1.53
12	B	438	G	N9-C8	-6.62	1.33	1.37
11	A	116	G	C6-N1	6.62	1.44	1.39
12	B	1185	G	C5-C4	6.62	1.43	1.38
12	B	1250	G	C4'-C3'	6.62	1.60	1.53
12	B	1254	A	C2-N3	6.62	1.39	1.33
12	B	2057	G	C6-N1	6.62	1.44	1.39
18	H	50	ARG	NE-CZ	6.62	1.41	1.33
12	B	386	G	C6-N1	6.62	1.44	1.39
12	B	1952	A	C4'-O4'	-6.62	1.36	1.45
11	A	81	G	C3'-C2'	-6.62	1.45	1.52
12	B	693	A	C5'-C4'	6.62	1.59	1.51
12	B	1970	A	N9-C8	6.62	1.43	1.37
12	B	2503	A	N3-C4	6.62	1.38	1.34
12	B	2901	C	N3-C4	6.62	1.38	1.33
12	B	303	G	C2-N3	6.62	1.38	1.32
12	B	1036	G	C1'-N9	-6.62	1.37	1.46
12	B	1835	G	C4'-C3'	-6.62	1.45	1.53
12	B	2252	G	C5-C6	-6.62	1.35	1.42
12	B	54	G	C6-N1	6.62	1.44	1.39
12	B	1029	A	N7-C5	-6.62	1.35	1.39
12	B	1893	C	C2-N3	6.62	1.41	1.35
12	B	2188	U	N1-C2	6.62	1.44	1.38
12	B	2229	U	N1-C2	6.62	1.44	1.38
12	B	2709	G	C2'-C1'	-6.62	1.46	1.53
12	B	229	C	C3'-C2'	-6.61	1.45	1.52
12	B	411	G	C2-N3	6.61	1.38	1.32
12	B	1076	C	C4-C5	6.61	1.48	1.43
12	B	1809	A	O3'-P	-6.61	1.53	1.61
12	B	2116	G	C2-N3	6.61	1.38	1.32
12	B	2777	G	C2-N3	6.61	1.38	1.32
12	B	2799	A	C5'-C4'	6.61	1.59	1.51
12	B	350	G	O4'-C1'	6.61	1.50	1.41
12	B	1142	A	N9-C4	6.61	1.41	1.37
12	B	1163	G	C2-N3	-6.61	1.27	1.32
12	B	2566	A	C5'-C4'	6.61	1.59	1.51
12	B	2634	A	O3'-P	-6.61	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	880	G	C5'-C4'	6.61	1.59	1.51
12	B	1801	A	P-O5'	-6.61	1.53	1.59
12	B	2142	A	P-O5'	-6.61	1.53	1.59
12	B	2154	A	C5'-C4'	6.61	1.59	1.51
12	B	1161	C	C4-N4	6.61	1.39	1.33
12	B	1433	A	C5'-C4'	6.61	1.59	1.51
12	B	476	G	O3'-P	-6.61	1.53	1.61
12	B	2079	U	C2-N3	6.61	1.42	1.37
12	B	2089	C	C2'-C1'	-6.61	1.46	1.53
12	B	396	G	N9-C8	6.61	1.42	1.37
12	B	878	A	C5-C4	6.61	1.43	1.38
12	B	1433	A	C6-N1	6.61	1.40	1.35
12	B	1522	A	C8-N7	-6.61	1.26	1.31
12	B	2052	A	C6-N6	-6.61	1.28	1.33
12	B	38	A	C8-N7	-6.60	1.26	1.31
12	B	1343	G	N3-C4	-6.60	1.30	1.35
12	B	2517	C	C2'-C1'	-6.60	1.46	1.53
12	B	1155	A	O3'-P	-6.60	1.53	1.61
12	B	1337	G	C3'-O3'	6.60	1.51	1.42
12	B	1502	A	C8-N7	-6.60	1.26	1.31
12	B	1503	A	C4'-O4'	-6.60	1.36	1.45
12	B	2113	U	C4-C5	-6.60	1.37	1.43
10	9	177	ARG	NE-CZ	6.60	1.41	1.33
12	B	502	A	C8-N7	-6.60	1.26	1.31
12	B	1256	G	C3'-O3'	6.60	1.51	1.42
12	B	1279	G	C2-N3	6.60	1.38	1.32
12	B	2055	C	C1'-N1	6.60	1.58	1.48
12	B	1376	C	N3-C4	6.60	1.38	1.33
12	B	1659	G	C2'-C1'	-6.60	1.46	1.53
12	B	2674	G	N9-C4	-6.60	1.32	1.38
12	B	946	C	P-O5'	-6.60	1.53	1.59
12	B	1072	C	O3'-P	-6.60	1.53	1.61
12	B	1996	C	N1-C6	6.60	1.41	1.37
12	B	2738	A	N9-C8	-6.60	1.32	1.37
12	B	2599	G	P-O5'	-6.59	1.53	1.59
12	B	2603	G	O3'-P	-6.59	1.53	1.61
12	B	2712	C	C4-N4	6.59	1.39	1.33
12	B	2192	U	C2-N3	6.59	1.42	1.37
12	B	912	C	C2'-C1'	-6.59	1.46	1.53
12	B	1256	G	O3'-P	-6.59	1.53	1.61
12	B	1521	G	N1-C2	6.59	1.43	1.37
12	B	1696	G	C2'-C1'	-6.59	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2486	C	C3'-C2'	6.59	1.60	1.52
11	A	97	C	C2-N3	6.59	1.41	1.35
12	B	2625	G	C2'-C1'	-6.59	1.46	1.53
12	B	2833	U	N1-C6	-6.59	1.32	1.38
12	B	1057	A	C5-C4	6.59	1.43	1.38
12	B	88	G	C2'-C1'	-6.59	1.46	1.53
12	B	266	G	N1-C2	6.59	1.43	1.37
12	B	780	G	C2-N3	6.59	1.38	1.32
12	B	828	U	O3'-P	-6.59	1.53	1.61
12	B	2054	A	C5-C4	6.59	1.43	1.38
12	B	2209	G	N9-C4	-6.59	1.32	1.38
12	B	2520	C	C2'-C1'	6.59	1.60	1.53
12	B	2614	A	C6-N6	6.59	1.39	1.33
11	A	86	G	N9-C4	-6.58	1.32	1.38
12	B	48	G	C8-N7	6.58	1.34	1.30
12	B	185	G	C8-N7	6.58	1.34	1.30
12	B	298	G	C4'-C3'	6.58	1.60	1.53
12	B	2216	G	C2-N3	6.58	1.38	1.32
12	B	173	A	N7-C5	-6.58	1.35	1.39
12	B	1450	G	C5-C6	-6.58	1.35	1.42
12	B	2067	G	C2-N3	6.58	1.38	1.32
12	B	419	U	N3-C4	6.58	1.44	1.38
12	B	532	A	C6-N1	6.58	1.40	1.35
12	B	601	C	C4-N4	6.58	1.39	1.33
12	B	1546	G	C8-N7	6.58	1.34	1.30
12	B	2171	A	C8-N7	-6.58	1.26	1.31
12	B	319	G	C8-N7	-6.58	1.27	1.30
12	B	622	G	N1-C2	6.58	1.43	1.37
12	B	697	G	N3-C4	-6.58	1.30	1.35
12	B	2351	G	C3'-C2'	-6.58	1.45	1.52
12	B	2502	G	C8-N7	-6.58	1.27	1.30
12	B	2835	A	N3-C4	-6.58	1.30	1.34
12	B	2618	G	C2-N3	6.58	1.38	1.32
12	B	1453	A	C6-N6	6.57	1.39	1.33
12	B	1133	A	C6-N6	6.57	1.39	1.33
12	B	1238	G	C8-N7	-6.57	1.27	1.30
12	B	1664	A	C2-N3	6.57	1.39	1.33
11	A	8	C	N3-C4	-6.57	1.29	1.33
12	B	852	U	C4-O4	-6.57	1.18	1.23
12	B	1154	G	P-O5'	-6.57	1.53	1.59
12	B	1168	G	N9-C4	6.57	1.43	1.38
12	B	1232	G	N3-C4	-6.57	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2140	G	N3-C4	-6.57	1.30	1.35
12	B	2511	U	C4-C5	6.57	1.49	1.43
12	B	2619	C	N1-C2	6.57	1.46	1.40
12	B	544	C	C4-C5	6.57	1.48	1.43
12	B	663	G	C5-C6	-6.57	1.35	1.42
12	B	923	G	P-O5'	-6.57	1.53	1.59
12	B	1953	A	C4'-C3'	6.57	1.60	1.53
12	B	2728	U	C4-C5	6.57	1.49	1.43
13	C	26	GLY	N-CA	-6.57	1.36	1.46
12	B	25	U	C2-N3	6.57	1.42	1.37
12	B	1389	G	C5-C4	-6.57	1.33	1.38
12	B	1859	U	C4'-C3'	6.57	1.60	1.53
12	B	1902	C	N1-C6	6.57	1.41	1.37
12	B	1037	G	O4'-C1'	-6.57	1.33	1.41
12	B	1628	G	C2-N2	6.57	1.41	1.34
12	B	2894	G	C2-N3	6.57	1.38	1.32
12	B	1721	G	N1-C2	6.56	1.43	1.37
12	B	152	A	O3'-P	-6.56	1.53	1.61
12	B	563	A	C6-N6	6.56	1.39	1.33
12	B	1218	G	O3'-P	-6.56	1.53	1.61
12	B	1610	A	C6-N6	6.56	1.39	1.33
12	B	1904	G	N7-C5	-6.56	1.35	1.39
12	B	2129	C	N3-C4	6.56	1.38	1.33
12	B	1760	C	C5-C6	-6.56	1.29	1.34
12	B	2628	C	C4-C5	-6.56	1.37	1.43
12	B	55	G	N3-C4	-6.56	1.30	1.35
12	B	535	G	C2'-C1'	-6.56	1.46	1.53
12	B	573	U	N1-C6	6.56	1.43	1.38
12	B	862	G	N3-C4	-6.56	1.30	1.35
12	B	98	G	C6-N1	6.56	1.44	1.39
12	B	1296	G	C2-N2	6.56	1.41	1.34
12	B	1444	G	P-O5'	-6.56	1.53	1.59
12	B	2763	G	P-O5'	6.56	1.66	1.59
12	B	518	G	C5'-C4'	6.56	1.59	1.51
12	B	834	G	O3'-P	-6.56	1.53	1.61
12	B	1084	A	N9-C8	-6.56	1.32	1.37
12	B	1260	A	N7-C5	6.56	1.43	1.39
12	B	94	A	C6-N1	6.55	1.40	1.35
12	B	410	G	N7-C5	-6.55	1.35	1.39
12	B	1593	A	N3-C4	-6.55	1.30	1.34
13	C	12	ARG	NE-CZ	6.55	1.41	1.33
12	B	1650	A	N9-C4	6.55	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1733	G	C5-C4	6.55	1.43	1.38
12	B	1364	G	C6-N1	6.55	1.44	1.39
12	B	1601	G	N1-C2	6.55	1.43	1.37
12	B	1185	G	P-O5'	-6.55	1.53	1.59
12	B	1451	C	N3-C4	6.55	1.38	1.33
12	B	2485	G	O3'-P	-6.55	1.53	1.61
11	A	2	G	N7-C5	-6.55	1.35	1.39
12	B	527	C	O3'-P	-6.55	1.53	1.61
12	B	597	G	N7-C5	-6.55	1.35	1.39
12	B	1227	G	C8-N7	-6.55	1.27	1.30
12	B	1141	U	N3-C4	6.55	1.44	1.38
12	B	1879	C	C4-N4	6.55	1.39	1.33
12	B	1946	U	C2-N3	6.55	1.42	1.37
12	B	108	G	C2-N3	6.54	1.38	1.32
12	B	2821	A	C2'-C1'	-6.54	1.46	1.53
12	B	178	G	C8-N7	-6.54	1.27	1.30
12	B	575	A	C5-C4	6.54	1.43	1.38
12	B	992	C	N3-C4	6.54	1.38	1.33
12	B	1787	A	N9-C8	6.54	1.43	1.37
12	B	2341	G	N9-C8	6.54	1.42	1.37
12	B	571	U	N3-C4	6.54	1.44	1.38
12	B	761	A	C6-N1	6.54	1.40	1.35
12	B	778	G	C5-C4	6.54	1.43	1.38
12	B	1182	G	O3'-P	-6.54	1.53	1.61
12	B	2518	A	C5-C6	6.54	1.47	1.41
12	B	833	A	C2'-C1'	-6.54	1.46	1.53
12	B	1049	C	N3-C4	6.54	1.38	1.33
12	B	2491	U	N3-C4	6.54	1.44	1.38
12	B	2340	A	C1'-N9	6.54	1.58	1.48
12	B	343	C	C3'-C2'	-6.54	1.45	1.52
12	B	519	U	C2-O2	6.54	1.28	1.22
12	B	644	A	P-O5'	-6.54	1.53	1.59
12	B	1226	A	C6-N1	6.54	1.40	1.35
12	B	1236	G	C5-C6	-6.54	1.35	1.42
12	B	2075	U	N1-C2	6.54	1.44	1.38
12	B	2598	A	C2'-C1'	-6.54	1.46	1.53
12	B	361	G	C3'-O3'	6.53	1.51	1.42
12	B	398	C	C2-N3	6.53	1.41	1.35
12	B	1026	G	N1-C2	6.53	1.43	1.37
11	A	41	G	N1-C2	6.53	1.43	1.37
12	B	1439	A	C2'-C1'	-6.53	1.46	1.53
12	B	1528	A	C6-N1	6.53	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2879	A	C2-N3	6.53	1.39	1.33
12	B	214	G	C2-N3	6.53	1.38	1.32
12	B	1073	A	N1-C2	6.53	1.40	1.34
12	B	1482	G	C6-N1	6.53	1.44	1.39
12	B	2035	G	C6-N1	6.53	1.44	1.39
12	B	2574	G	N3-C4	-6.53	1.30	1.35
12	B	2539	C	C4-C5	-6.53	1.37	1.43
12	B	2714	G	C8-N7	-6.53	1.27	1.30
12	B	1029	A	C5-C4	6.53	1.43	1.38
12	B	1153	C	O3'-P	-6.53	1.53	1.61
12	B	1858	A	C6-N6	-6.53	1.28	1.33
12	B	2154	A	C6-N6	6.53	1.39	1.33
12	B	2711	A	C2'-C1'	-6.53	1.46	1.53
12	B	380	G	C6-N1	6.53	1.44	1.39
12	B	315	G	C2-N2	6.52	1.41	1.34
12	B	1998	A	N7-C5	-6.52	1.35	1.39
12	B	2149	U	N1-C2	-6.52	1.32	1.38
12	B	561	G	C2-N3	6.52	1.38	1.32
12	B	862	G	C2-N3	6.52	1.38	1.32
12	B	1105	U	N1-C2	-6.52	1.32	1.38
12	B	1533	C	N3-C4	6.52	1.38	1.33
12	B	2257	U	C4'-O4'	-6.52	1.37	1.45
12	B	641	U	N1-C2	6.52	1.44	1.38
12	B	864	G	N7-C5	-6.52	1.35	1.39
12	B	1676	A	N3-C4	-6.52	1.30	1.34
12	B	1727	C	N3-C4	6.52	1.38	1.33
12	B	1631	G	C2'-C1'	-6.52	1.46	1.53
12	B	2286	G	N7-C5	-6.52	1.35	1.39
12	B	2627	G	C2-N3	6.52	1.38	1.32
17	G	162	ARG	CZ-NH1	6.52	1.41	1.33
12	B	55	G	N9-C8	6.52	1.42	1.37
12	B	210	C	C2'-O2'	-6.52	1.33	1.41
12	B	1871	A	C4'-C3'	6.52	1.60	1.53
12	B	1903	G	N1-C2	6.52	1.43	1.37
12	B	1958	C	C4-C5	6.52	1.48	1.43
12	B	1980	G	C2-N2	6.52	1.41	1.34
12	B	2328	A	C8-N7	-6.52	1.26	1.31
12	B	1989	G	C3'-C2'	-6.52	1.45	1.52
12	B	2525	G	C8-N7	-6.52	1.27	1.30
11	A	92	C	C4-N4	6.51	1.39	1.33
12	B	603	A	N1-C2	6.51	1.40	1.34
12	B	753	A	N1-C2	-6.51	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2041	U	C2'-C1'	-6.51	1.46	1.53
12	B	2089	C	O3'-P	-6.51	1.53	1.61
12	B	2331	G	N7-C5	-6.51	1.35	1.39
12	B	2601	C	O3'-P	-6.51	1.53	1.61
12	B	608	A	N1-C2	6.51	1.40	1.34
12	B	766	U	C5-C6	6.51	1.40	1.34
12	B	1033	U	N3-C4	6.51	1.44	1.38
12	B	1123	C	C2-N3	6.51	1.41	1.35
12	B	1570	A	C5-C6	6.51	1.47	1.41
23	M	59	ARG	CZ-NH1	6.51	1.41	1.33
12	B	1149	G	N7-C5	-6.51	1.35	1.39
12	B	1797	G	C6-N1	6.51	1.44	1.39
12	B	2168	G	C5'-C4'	6.51	1.59	1.51
12	B	319	G	N9-C4	6.51	1.43	1.38
12	B	386	G	C2-N3	6.51	1.38	1.32
12	B	966	G	C5-C4	-6.51	1.33	1.38
12	B	371	A	N9-C8	6.50	1.43	1.37
12	B	1133	A	N9-C4	6.50	1.41	1.37
12	B	1280	G	N1-C2	6.50	1.43	1.37
12	B	1795	C	C2'-C1'	-6.50	1.46	1.53
12	B	2857	G	C8-N7	6.50	1.34	1.30
12	B	247	G	C8-N7	-6.50	1.27	1.30
12	B	1623	G	N7-C5	-6.50	1.35	1.39
12	B	1718	G	C6-N1	6.50	1.44	1.39
12	B	2604	U	C5-C6	6.50	1.40	1.34
12	B	297	G	C2'-C1'	-6.50	1.46	1.53
12	B	1953	A	C3'-O3'	6.50	1.51	1.42
12	B	2376	A	C8-N7	-6.50	1.26	1.31
12	B	2445	G	C2'-C1'	-6.50	1.46	1.53
12	B	2652	C	P-O5'	-6.50	1.53	1.59
12	B	2656	U	N3-C4	6.50	1.44	1.38
11	A	38	C	C3'-O3'	6.50	1.51	1.42
12	B	68	G	C6-N1	6.50	1.44	1.39
12	B	289	G	P-O5'	-6.50	1.53	1.59
12	B	352	A	N3-C4	-6.50	1.30	1.34
12	B	574	A	C6-N6	6.50	1.39	1.33
12	B	713	G	C2'-C1'	-6.50	1.46	1.53
12	B	1588	G	C2-N2	6.50	1.41	1.34
12	B	2786	U	C5'-C4'	6.50	1.59	1.51
12	B	343	C	N1-C6	-6.50	1.33	1.37
12	B	685	A	P-O5'	6.50	1.66	1.59
12	B	1333	G	N9-C8	6.50	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2236	U	C2-N3	6.50	1.42	1.37
12	B	2825	G	C5-C4	6.50	1.42	1.38
12	B	2871	U	C4'-O4'	6.50	1.53	1.45
11	A	86	G	C2'-C1'	-6.50	1.46	1.53
12	B	422	A	N7-C5	-6.50	1.35	1.39
12	B	463	G	N7-C5	-6.50	1.35	1.39
12	B	700	G	C2-N2	-6.50	1.28	1.34
12	B	283	G	C6-N1	6.49	1.44	1.39
12	B	510	C	C5'-C4'	6.49	1.59	1.51
12	B	612	G	C6-N1	6.49	1.44	1.39
12	B	706	A	N9-C4	-6.49	1.33	1.37
12	B	1884	G	N3-C4	6.49	1.40	1.35
12	B	2773	C	N1-C6	6.49	1.41	1.37
11	A	96	G	C2'-C1'	-6.49	1.46	1.53
12	B	784	G	N7-C5	-6.49	1.35	1.39
12	B	343	C	N3-C4	6.49	1.38	1.33
12	B	526	A	O4'-C1'	-6.49	1.33	1.41
12	B	1648	U	N1-C2	-6.49	1.32	1.38
12	B	2892	G	N3-C4	-6.49	1.30	1.35
12	B	481	G	N9-C8	-6.49	1.33	1.37
12	B	980	A	C8-N7	-6.49	1.27	1.31
12	B	1110	G	C8-N7	6.49	1.34	1.30
12	B	1557	C	P-O5'	-6.49	1.53	1.59
12	B	1736	U	O3'-P	-6.49	1.53	1.61
12	B	2610	C	N1-C6	6.49	1.41	1.37
12	B	166	U	C4'-O4'	-6.49	1.37	1.45
12	B	711	G	C2-N3	6.49	1.38	1.32
12	B	25	U	N3-C4	6.49	1.44	1.38
12	B	312	G	N1-C2	6.49	1.43	1.37
12	B	599	A	N9-C4	-6.49	1.33	1.37
12	B	747	U	N3-C4	6.49	1.44	1.38
12	B	775	G	C2-N3	6.49	1.38	1.32
12	B	1188	U	N3-C4	6.49	1.44	1.38
12	B	1544	A	N1-C2	6.49	1.40	1.34
12	B	2049	G	C4'-O4'	6.49	1.53	1.45
12	B	2178	C	C5'-C4'	6.49	1.59	1.51
12	B	96	C	C4-C5	6.48	1.48	1.43
12	B	2138	G	O3'-P	-6.48	1.53	1.61
12	B	2541	A	N3-C4	6.48	1.38	1.34
6	5	71	ARG	CZ-NH1	6.48	1.41	1.33
12	B	1155	A	C5-C6	-6.48	1.35	1.41
12	B	2211	A	N9-C4	6.48	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2256	G	C6-N1	6.48	1.44	1.39
12	B	1105	U	C2-N3	6.48	1.42	1.37
12	B	1824	G	N3-C4	-6.48	1.30	1.35
12	B	2251	G	O4'-C1'	6.48	1.50	1.41
12	B	2372	U	N1-C2	6.48	1.44	1.38
12	B	2596	U	O3'-P	-6.48	1.53	1.61
12	B	2832	U	C4'-O4'	-6.48	1.37	1.45
12	B	206	U	N3-C4	6.48	1.44	1.38
12	B	1559	U	O3'-P	-6.48	1.53	1.61
12	B	2287	A	C6-N1	6.48	1.40	1.35
12	B	2402	U	N3-C4	6.48	1.44	1.38
12	B	257	C	P-O5'	-6.48	1.53	1.59
12	B	1769	U	C2-N3	6.48	1.42	1.37
12	B	2763	G	O3'-P	-6.48	1.53	1.61
13	C	216	ARG	CZ-NH1	6.48	1.41	1.33
12	B	140	C	C4-N4	6.47	1.39	1.33
12	B	2267	A	C6-N1	6.47	1.40	1.35
12	B	2495	G	N3-C4	6.47	1.40	1.35
12	B	299	A	N1-C2	6.47	1.40	1.34
12	B	1597	A	N7-C5	-6.47	1.35	1.39
12	B	1787	A	C8-N7	-6.47	1.27	1.31
12	B	1825	U	P-O5'	-6.47	1.53	1.59
12	B	1889	A	N3-C4	-6.47	1.30	1.34
12	B	315	G	C2-N3	6.47	1.38	1.32
12	B	928	A	C6-N1	6.47	1.40	1.35
12	B	1229	C	O3'-P	-6.47	1.53	1.61
12	B	1419	A	C6-N1	6.47	1.40	1.35
12	B	1717	A	O3'-P	-6.47	1.53	1.61
12	B	2113	U	C4'-C3'	6.47	1.60	1.53
12	B	2702	G	C6-O6	-6.47	1.18	1.24
12	B	2775	G	O4'-C1'	-6.47	1.33	1.41
32	W	18	ARG	NE-CZ	6.47	1.41	1.33
12	B	1123	C	N1-C6	6.47	1.41	1.37
12	B	1734	G	N9-C8	-6.47	1.33	1.37
12	B	778	G	N1-C2	6.47	1.43	1.37
12	B	1256	G	C2-N2	6.47	1.41	1.34
12	B	1691	C	C2-N3	6.47	1.41	1.35
12	B	2652	C	O3'-P	-6.47	1.53	1.61
12	B	1433	A	C8-N7	-6.46	1.27	1.31
12	B	1435	G	C5-C4	6.46	1.42	1.38
12	B	2272	U	C2-N3	6.46	1.42	1.37
12	B	2370	G	C2-N3	6.46	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2889	C	C4'-C3'	6.46	1.60	1.53
12	B	1299	G	O3'-P	-6.46	1.53	1.61
12	B	2024	G	N7-C5	-6.46	1.35	1.39
12	B	2141	G	C4'-C3'	6.46	1.60	1.53
24	N	6	SER	C-N	6.46	1.44	1.33
12	B	335	C	C3'-C2'	-6.46	1.45	1.52
12	B	386	G	N9-C4	6.46	1.43	1.38
12	B	1136	G	N7-C5	6.46	1.43	1.39
12	B	2900	A	N9-C4	6.46	1.41	1.37
12	B	1309	G	C4'-C3'	6.46	1.60	1.53
12	B	2351	G	N9-C8	6.46	1.42	1.37
12	B	718	A	C5-C4	6.46	1.43	1.38
12	B	791	C	P-O5'	6.46	1.66	1.59
12	B	1114	C	C5'-C4'	6.46	1.59	1.51
12	B	1279	G	C4'-C3'	-6.46	1.46	1.53
12	B	1502	A	C5'-C4'	6.46	1.59	1.51
12	B	1702	G	C5'-C4'	6.46	1.59	1.51
12	B	1963	U	N1-C6	6.46	1.43	1.38
12	B	2761	A	C6-N1	6.46	1.40	1.35
11	A	84	G	C6-N1	6.46	1.44	1.39
12	B	560	C	N3-C4	6.46	1.38	1.33
12	B	1849	G	P-O5'	-6.46	1.53	1.59
12	B	970	U	C1'-N1	6.46	1.58	1.48
12	B	980	A	O3'-P	-6.46	1.53	1.61
12	B	2116	G	N9-C8	-6.46	1.33	1.37
12	B	2176	A	N7-C5	-6.46	1.35	1.39
12	B	2877	G	C3'-O3'	-6.46	1.33	1.42
12	B	381	G	N7-C5	6.45	1.43	1.39
12	B	2428	G	N7-C5	6.45	1.43	1.39
12	B	304	U	C4-O4	-6.45	1.18	1.23
12	B	596	U	C4'-C3'	6.45	1.60	1.53
12	B	1359	A	O3'-P	-6.45	1.53	1.61
12	B	2162	G	N1-C2	6.45	1.43	1.37
12	B	2822	G	C5'-C4'	6.45	1.59	1.51
12	B	109	C	N1-C2	-6.45	1.33	1.40
12	B	691	C	C4-C5	6.45	1.48	1.43
12	B	1369	G	C2-N2	6.45	1.41	1.34
12	B	1985	C	C4-C5	6.45	1.48	1.43
12	B	2255	G	N3-C4	-6.45	1.30	1.35
12	B	2417	C	N3-C4	6.45	1.38	1.33
12	B	2549	G	C5'-C4'	-6.45	1.43	1.51
12	B	2670	A	N3-C4	-6.45	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2716	C	P-O5'	-6.45	1.53	1.59
12	B	1176	U	C4-C5	6.45	1.49	1.43
14	D	83	ARG	NE-CZ	6.45	1.41	1.33
12	B	1996	C	C5'-C4'	6.45	1.59	1.51
12	B	2172	U	P-O5'	-6.45	1.53	1.59
12	B	2631	G	C4'-O4'	6.45	1.53	1.45
12	B	444	C	N3-C4	6.45	1.38	1.33
12	B	506	G	N9-C4	-6.45	1.32	1.38
12	B	713	G	C5-C4	6.45	1.42	1.38
12	B	1313	U	O3'-P	-6.45	1.53	1.61
12	B	1371	G	N9-C8	6.45	1.42	1.37
12	B	1920	C	N3-C4	6.45	1.38	1.33
12	B	407	G	C2-N2	6.44	1.41	1.34
12	B	1623	G	N3-C4	6.44	1.40	1.35
12	B	2	G	N7-C5	-6.44	1.35	1.39
12	B	2403	C	C3'-C2'	-6.44	1.45	1.52
12	B	2774	C	N3-C4	6.44	1.38	1.33
12	B	1825	U	N1-C6	6.44	1.43	1.38
12	B	618	G	C3'-C2'	-6.44	1.45	1.52
12	B	1365	A	C6-N6	6.44	1.39	1.33
12	B	1628	G	N7-C5	-6.44	1.35	1.39
12	B	2405	G	N9-C8	6.44	1.42	1.37
12	B	43	G	C8-N7	-6.44	1.27	1.30
12	B	1042	G	C2-N2	6.44	1.41	1.34
12	B	1285	A	C6-N6	6.44	1.39	1.33
12	B	1560	G	P-O5'	-6.44	1.53	1.59
12	B	1722	A	C2'-O2'	6.44	1.50	1.41
12	B	2380	C	N3-C4	6.44	1.38	1.33
12	B	2541	A	C8-N7	6.44	1.36	1.31
12	B	2690	U	O3'-P	-6.44	1.53	1.61
12	B	1311	G	N1-C2	6.43	1.42	1.37
12	B	1871	A	N7-C5	-6.43	1.35	1.39
12	B	1940	U	C5-C6	6.43	1.40	1.34
12	B	2253	G	N1-C2	6.43	1.42	1.37
12	B	2359	C	C4-N4	6.43	1.39	1.33
12	B	2536	G	C2-N2	6.43	1.41	1.34
12	B	2750	A	C4'-C3'	-6.43	1.46	1.53
16	F	176	PHE	CG-CD1	6.43	1.48	1.38
12	B	495	G	C6-O6	6.43	1.29	1.24
12	B	535	G	C4'-C3'	6.43	1.60	1.53
12	B	858	G	O3'-P	-6.43	1.53	1.61
12	B	972	A	C5'-C4'	6.43	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1878	G	N7-C5	-6.43	1.35	1.39
12	B	1950	G	N3-C4	-6.43	1.30	1.35
12	B	2265	U	C2-N3	6.43	1.42	1.37
12	B	2799	A	C6-N6	6.43	1.39	1.33
16	F	142	TYR	CG-CD2	6.43	1.47	1.39
21	K	18	ARG	CZ-NH2	6.43	1.41	1.33
12	B	670	A	N3-C4	-6.43	1.30	1.34
12	B	876	C	P-O5'	-6.43	1.53	1.59
12	B	1490	A	O3'-P	-6.43	1.53	1.61
12	B	2245	U	N3-C4	6.43	1.44	1.38
12	B	185	G	N7-C5	-6.43	1.35	1.39
12	B	886	A	C6-N1	6.43	1.40	1.35
12	B	1256	G	N1-C2	6.43	1.42	1.37
12	B	1649	G	P-O5'	6.43	1.66	1.59
12	B	1767	G	C5-C6	-6.43	1.35	1.42
12	B	2867	G	C3'-C2'	6.43	1.60	1.52
12	B	2885	G	C5-C6	-6.43	1.35	1.42
12	B	1591	A	C2-N3	6.43	1.39	1.33
12	B	678	C	N3-C4	6.43	1.38	1.33
12	B	716	A	C2-N3	-6.43	1.27	1.33
12	B	1103	A	C6-N6	6.43	1.39	1.33
12	B	1531	C	C2-N3	6.43	1.40	1.35
12	B	2203	U	N3-C4	6.43	1.44	1.38
12	B	1239	G	N7-C5	6.42	1.43	1.39
12	B	1410	G	C8-N7	-6.42	1.27	1.30
12	B	1540	G	C2-N2	6.42	1.41	1.34
12	B	1970	A	C5-C4	6.42	1.43	1.38
12	B	2494	G	C3'-O3'	6.42	1.51	1.42
12	B	5	A	C2'-C1'	-6.42	1.46	1.53
12	B	706	A	C6-N1	6.42	1.40	1.35
12	B	926	G	C2'-C1'	-6.42	1.46	1.53
12	B	2041	U	N1-C6	-6.42	1.32	1.38
12	B	2413	G	C3'-C2'	-6.42	1.45	1.52
12	B	818	G	N1-C2	6.42	1.42	1.37
12	B	1148	U	N3-C4	-6.42	1.32	1.38
12	B	2429	G	C6-N1	6.42	1.44	1.39
12	B	2705	A	N7-C5	-6.42	1.35	1.39
11	A	68	C	C1'-N1	6.42	1.58	1.48
12	B	85	G	C2-N2	6.42	1.41	1.34
12	B	2174	C	C5-C6	-6.42	1.29	1.34
11	A	46	A	C4'-C3'	-6.42	1.46	1.53
12	B	1060	U	C4'-C3'	6.42	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2377	A	C2'-C1'	-6.42	1.46	1.53
12	B	2391	G	N7-C5	-6.42	1.35	1.39
12	B	2632	A	C6-N1	6.42	1.40	1.35
12	B	2706	A	C4'-O4'	6.42	1.53	1.45
12	B	2526	G	C2-N2	6.42	1.41	1.34
12	B	2815	C	C4'-C3'	6.42	1.60	1.53
11	A	29	A	N3-C4	-6.41	1.31	1.34
12	B	1794	A	N9-C4	6.41	1.41	1.37
12	B	2566	A	N7-C5	-6.41	1.35	1.39
12	B	686	U	C4'-C3'	6.41	1.60	1.53
12	B	2747	G	C2'-C1'	-6.41	1.46	1.53
3	2	30	ARG	CZ-NH1	6.41	1.41	1.33
12	B	122	G	C4'-C3'	6.41	1.60	1.53
12	B	739	A	N1-C2	6.41	1.40	1.34
12	B	1457	U	C4-C5	6.41	1.49	1.43
12	B	2037	A	C2'-C1'	-6.41	1.46	1.53
12	B	2142	A	C6-N6	6.41	1.39	1.33
12	B	2536	G	N1-C2	6.41	1.42	1.37
12	B	2868	A	N7-C5	-6.41	1.35	1.39
12	B	723	C	C5'-C4'	6.41	1.59	1.51
12	B	921	C	N1-C6	-6.41	1.33	1.37
12	B	1091	G	C5-C6	-6.41	1.35	1.42
12	B	1962	C	O4'-C1'	6.41	1.50	1.41
12	B	2569	G	N1-C2	6.41	1.42	1.37
11	A	69	G	N7-C5	-6.41	1.35	1.39
12	B	251	A	C6-N6	6.41	1.39	1.33
26	P	112	ARG	CD-NE	6.41	1.57	1.46
12	B	39	G	C2'-C1'	-6.41	1.46	1.53
12	B	273	G	C5'-C4'	6.41	1.59	1.51
12	B	310	A	N7-C5	-6.41	1.35	1.39
12	B	385	C	N3-C4	6.41	1.38	1.33
12	B	431	U	C2-N3	6.41	1.42	1.37
12	B	1192	G	N9-C8	-6.41	1.33	1.37
12	B	1410	G	N3-C4	6.41	1.40	1.35
12	B	2365	G	C6-N1	6.41	1.44	1.39
12	B	2118	U	O3'-P	-6.40	1.53	1.61
12	B	315	G	C5-C4	6.40	1.42	1.38
12	B	1825	U	C2'-C1'	-6.40	1.46	1.53
12	B	195	A	C5-C6	-6.40	1.35	1.41
12	B	1042	G	C5'-C4'	6.40	1.59	1.51
12	B	1465	G	C2'-C1'	-6.40	1.46	1.53
12	B	2591	C	N3-C4	6.40	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2668	G	P-O5'	-6.40	1.53	1.59
12	B	1011	G	N9-C8	-6.40	1.33	1.37
12	B	1454	C	C4-C5	-6.40	1.37	1.43
12	B	1571	A	N7-C5	-6.40	1.35	1.39
12	B	1664	A	C5-C4	6.40	1.43	1.38
12	B	1666	G	C6-N1	6.40	1.44	1.39
12	B	2472	G	N1-C2	6.40	1.42	1.37
12	B	360	U	C4-O4	-6.40	1.18	1.23
12	B	484	C	N3-C4	6.40	1.38	1.33
12	B	2017	U	C4'-C3'	6.40	1.60	1.53
11	A	65	U	C2-N3	6.39	1.42	1.37
12	B	276	U	C5-C6	6.39	1.40	1.34
12	B	589	U	O3'-P	-6.39	1.53	1.61
12	B	710	U	N1-C2	-6.39	1.32	1.38
12	B	1103	A	C2'-C1'	-6.39	1.46	1.53
12	B	2779	U	C2-N3	6.39	1.42	1.37
12	B	110	G	C5-C6	-6.39	1.35	1.42
12	B	582	A	C6-N6	6.39	1.39	1.33
12	B	2602	A	C3'-C2'	6.39	1.59	1.52
12	B	2813	A	N7-C5	-6.39	1.35	1.39
25	O	33	ARG	NE-CZ	6.39	1.41	1.33
12	B	126	A	P-O5'	-6.39	1.53	1.59
12	B	674	G	C1'-N9	6.39	1.58	1.48
11	A	20	G	N1-C2	6.39	1.42	1.37
12	B	1403	A	C6-N6	6.39	1.39	1.33
12	B	2567	G	N9-C8	-6.39	1.33	1.37
12	B	2863	C	C1'-N1	6.39	1.58	1.48
11	A	15	A	C6-N6	6.39	1.39	1.33
12	B	110	G	N7-C5	-6.39	1.35	1.39
12	B	188	G	C5-C6	-6.39	1.35	1.42
12	B	275	C	C4-N4	6.39	1.39	1.33
12	B	534	U	C4-C5	6.39	1.49	1.43
12	B	600	G	C5-C4	6.39	1.42	1.38
12	B	2206	C	P-O5'	-6.39	1.53	1.59
12	B	175	G	P-O5'	-6.38	1.53	1.59
12	B	300	A	N1-C2	-6.38	1.28	1.34
12	B	354	A	N1-C2	6.38	1.40	1.34
12	B	1235	G	C5'-C4'	6.38	1.59	1.51
12	B	1336	A	C5'-C4'	6.38	1.59	1.51
12	B	1480	C	C2'-C1'	-6.38	1.46	1.53
12	B	1548	A	C5'-C4'	6.38	1.59	1.51
12	B	547	A	N9-C8	-6.38	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1479	G	N7-C5	-6.38	1.35	1.39
12	B	2298	A	N3-C4	6.38	1.38	1.34
11	A	53	A	O4'-C1'	6.38	1.50	1.41
12	B	23	G	P-O5'	-6.38	1.53	1.59
12	B	245	G	C5-C4	-6.38	1.33	1.38
12	B	320	A	O3'-P	-6.38	1.53	1.61
12	B	473	G	C5-C4	-6.38	1.33	1.38
12	B	2542	A	P-O5'	6.38	1.66	1.59
12	B	805	G	C5-C4	6.38	1.42	1.38
12	B	1197	G	C4'-O4'	-6.38	1.37	1.45
12	B	1324	G	O3'-P	-6.38	1.53	1.61
12	B	1576	U	O3'-P	-6.38	1.53	1.61
12	B	2280	G	C2'-C1'	-6.38	1.46	1.53
12	B	2511	U	O3'-P	-6.38	1.53	1.61
12	B	2613	U	C2-N3	-6.38	1.33	1.37
12	B	878	A	C6-N6	6.38	1.39	1.33
12	B	1934	C	C1'-N1	6.38	1.58	1.48
12	B	2175	C	N1-C2	6.38	1.46	1.40
12	B	722	A	N3-C4	6.38	1.38	1.34
12	B	771	G	C2-N3	6.38	1.37	1.32
12	B	13	A	C5'-C4'	6.37	1.58	1.51
12	B	2551	C	C4-C5	6.37	1.48	1.43
12	B	2812	G	C2-N3	6.37	1.37	1.32
16	F	147	ARG	CZ-NH1	6.37	1.41	1.33
12	B	948	C	O3'-P	-6.37	1.53	1.61
12	B	1070	A	C6-N1	6.37	1.40	1.35
12	B	1356	G	C2-N2	6.37	1.41	1.34
12	B	1934	C	O4'-C1'	-6.37	1.33	1.41
11	A	95	U	N3-C4	6.37	1.44	1.38
12	B	1205	A	C6-N6	6.37	1.39	1.33
12	B	1243	C	C2-O2	-6.37	1.18	1.24
12	B	1631	G	P-O5'	6.37	1.66	1.59
12	B	1672	A	C2'-C1'	-6.37	1.46	1.53
12	B	2297	A	C4'-C3'	6.37	1.60	1.53
12	B	2307	G	C6-N1	-6.37	1.35	1.39
12	B	2610	C	N3-C4	6.37	1.38	1.33
12	B	2711	A	N3-C4	-6.37	1.31	1.34
12	B	686	U	N3-C4	6.37	1.44	1.38
12	B	2144	G	N1-C2	6.37	1.42	1.37
12	B	960	A	O3'-P	-6.37	1.53	1.61
12	B	1405	U	N1-C2	6.37	1.44	1.38
12	B	1705	A	C2'-C1'	-6.37	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	45	A	P-O5'	-6.36	1.53	1.59
11	A	98	G	C2-N2	6.36	1.41	1.34
12	B	491	G	N1-C2	6.36	1.42	1.37
12	B	1009	A	P-O5'	-6.36	1.53	1.59
12	B	1807	G	C4'-O4'	6.36	1.53	1.45
12	B	2700	A	C2-N3	6.36	1.39	1.33
12	B	2764	A	C8-N7	-6.36	1.27	1.31
12	B	220	G	C2-N3	6.36	1.37	1.32
12	B	715	A	O3'-P	-6.36	1.53	1.61
12	B	891	G	C6-N1	6.36	1.44	1.39
12	B	1645	G	N1-C2	6.36	1.42	1.37
12	B	2673	G	P-O5'	-6.36	1.53	1.59
12	B	94	A	N9-C8	6.36	1.42	1.37
12	B	1056	G	N7-C5	-6.36	1.35	1.39
12	B	2029	G	N1-C2	6.36	1.42	1.37
12	B	2379	G	C6-N1	6.36	1.44	1.39
12	B	1189	A	C2'-C1'	-6.36	1.46	1.53
12	B	2323	G	C5-C4	6.36	1.42	1.38
12	B	329	G	C5'-C4'	6.35	1.58	1.51
12	B	466	A	C6-N6	6.35	1.39	1.33
12	B	2043	C	C4'-C3'	-6.35	1.46	1.53
12	B	2159	G	C2-N3	6.35	1.37	1.32
12	B	247	G	N1-C2	6.35	1.42	1.37
12	B	967	U	N1-C6	6.35	1.43	1.38
12	B	1172	C	C4-N4	6.35	1.39	1.33
12	B	376	G	C3'-C2'	-6.35	1.45	1.52
12	B	776	G	C6-O6	-6.35	1.18	1.24
12	B	1427	A	N3-C4	-6.35	1.31	1.34
12	B	2186	G	C2'-C1'	-6.35	1.46	1.53
12	B	2385	C	C2'-C1'	-6.35	1.46	1.53
12	B	2842	G	C2-N3	6.35	1.37	1.32
12	B	266	G	C2'-C1'	-6.35	1.46	1.53
12	B	739	A	C4'-C3'	6.35	1.60	1.53
12	B	1212	G	N9-C4	-6.35	1.32	1.38
12	B	1300	G	N7-C5	-6.35	1.35	1.39
12	B	1500	G	C2-N2	6.35	1.40	1.34
12	B	2368	C	N3-C4	6.35	1.38	1.33
12	B	2485	G	N9-C4	-6.35	1.32	1.38
12	B	651	G	C2'-O2'	-6.35	1.33	1.41
12	B	2600	A	N9-C4	6.35	1.41	1.37
12	B	420	C	C5'-C4'	6.35	1.58	1.51
12	B	2676	C	C4'-C3'	-6.35	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2733	A	C5-C6	-6.35	1.35	1.41
12	B	2776	A	N9-C4	-6.35	1.34	1.37
12	B	837	C	O3'-P	-6.34	1.53	1.61
12	B	1974	C	N1-C6	-6.34	1.33	1.37
12	B	2025	C	C2-N3	6.34	1.40	1.35
12	B	2269	G	C2-N3	6.34	1.37	1.32
12	B	2366	A	C8-N7	-6.34	1.27	1.31
12	B	603	A	N7-C5	-6.34	1.35	1.39
12	B	729	G	P-O5'	-6.34	1.53	1.59
12	B	744	U	C1'-N1	6.34	1.58	1.48
12	B	882	G	C2-N2	6.34	1.40	1.34
12	B	1129	A	C6-N6	6.34	1.39	1.33
12	B	2856	A	N9-C8	-6.34	1.32	1.37
12	B	55	G	C5-C4	6.34	1.42	1.38
12	B	752	A	C6-N1	6.34	1.40	1.35
12	B	867	C	C4-C5	6.34	1.48	1.43
12	B	2416	C	C3'-C2'	-6.34	1.45	1.52
12	B	169	G	C6-N1	6.34	1.44	1.39
12	B	1748	C	C4-N4	6.34	1.39	1.33
11	A	34	A	N1-C2	6.34	1.40	1.34
12	B	1449	G	P-O5'	-6.34	1.53	1.59
12	B	2571	U	C1'-N1	6.34	1.58	1.48
12	B	2775	G	C2-N2	6.34	1.40	1.34
12	B	1468	U	C3'-C2'	-6.34	1.45	1.52
12	B	1644	C	C4-N4	6.34	1.39	1.33
12	B	1727	C	P-O5'	-6.34	1.53	1.59
12	B	2082	A	P-O5'	-6.34	1.53	1.59
12	B	2126	A	C2-N3	6.34	1.39	1.33
11	A	73	A	N7-C5	-6.33	1.35	1.39
12	B	978	G	C8-N7	6.33	1.34	1.30
12	B	1541	C	C2'-C1'	-6.33	1.46	1.53
12	B	1962	C	C2'-C1'	-6.33	1.46	1.53
12	B	77	G	N9-C8	-6.33	1.33	1.37
12	B	1242	U	C2-N3	6.33	1.42	1.37
12	B	1302	A	C3'-C2'	-6.33	1.45	1.52
12	B	1468	U	N1-C6	6.33	1.43	1.38
12	B	2252	G	C5-C4	6.33	1.42	1.38
12	B	2268	A	C3'-C2'	-6.33	1.45	1.52
12	B	2794	C	N1-C6	6.33	1.41	1.37
11	A	38	C	C4-C5	-6.33	1.37	1.43
12	B	577	G	N1-C2	6.33	1.42	1.37
12	B	1068	G	C2-N2	6.33	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1164	C	O3'-P	-6.33	1.53	1.61
12	B	1304	A	C5-C6	-6.33	1.35	1.41
12	B	1753	G	O4'-C1'	6.33	1.49	1.41
12	B	2210	U	C2'-C1'	-6.33	1.46	1.53
12	B	2644	G	C3'-C2'	6.33	1.59	1.52
25	O	102	ARG	NE-CZ	6.33	1.41	1.33
12	B	739	A	C8-N7	6.33	1.35	1.31
12	B	1525	A	N9-C8	-6.33	1.32	1.37
12	B	1996	C	N3-C4	6.33	1.38	1.33
12	B	2213	U	P-O5'	6.33	1.66	1.59
12	B	2850	A	C5-C6	6.33	1.46	1.41
12	B	1054	A	N3-C4	-6.33	1.31	1.34
12	B	1494	A	N3-C4	6.33	1.38	1.34
12	B	1640	A	N7-C5	-6.33	1.35	1.39
12	B	2098	U	O4'-C1'	-6.33	1.33	1.41
12	B	59	U	C2-N3	6.32	1.42	1.37
12	B	1107	G	C5-C6	6.32	1.48	1.42
12	B	1252	G	C6-N1	6.32	1.44	1.39
11	A	57	A	C6-N6	6.32	1.39	1.33
12	B	129	C	C4-N4	6.32	1.39	1.33
12	B	240	C	P-O5'	-6.32	1.53	1.59
12	B	2441	U	C2-N3	6.32	1.42	1.37
12	B	2520	C	C2-N3	6.32	1.40	1.35
12	B	503	A	O4'-C1'	-6.32	1.33	1.41
12	B	967	U	C2-N3	6.32	1.42	1.37
12	B	1358	G	C6-N1	6.32	1.44	1.39
12	B	866	A	C6-N6	6.32	1.39	1.33
12	B	1319	C	C4-N4	6.32	1.39	1.33
12	B	1528	A	C3'-O3'	6.32	1.50	1.42
12	B	2273	A	C8-N7	-6.32	1.27	1.31
12	B	2487	G	N3-C4	6.32	1.39	1.35
12	B	922	C	C2-N3	6.32	1.40	1.35
12	B	1022	G	C5-C6	-6.32	1.36	1.42
12	B	1027	A	C4'-C3'	6.32	1.60	1.53
12	B	1067	A	C6-N6	6.32	1.39	1.33
12	B	1613	G	C2-N2	6.32	1.40	1.34
12	B	1067	A	C5'-C4'	6.31	1.58	1.51
12	B	1756	G	N7-C5	6.31	1.43	1.39
12	B	1838	C	C2'-O2'	6.31	1.49	1.41
12	B	2221	G	C2'-C1'	-6.31	1.46	1.53
11	A	80	U	N3-C4	6.31	1.44	1.38
12	B	230	G	C5'-C4'	6.31	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	434	U	C2'-C1'	-6.31	1.46	1.53
12	B	833	A	C5'-C4'	6.31	1.58	1.51
12	B	1254	A	C6-N1	6.31	1.40	1.35
12	B	1557	C	C2'-O2'	6.31	1.49	1.41
12	B	2082	A	C5-C4	-6.31	1.34	1.38
12	B	430	A	P-O5'	-6.31	1.53	1.59
12	B	1754	A	N7-C5	-6.31	1.35	1.39
12	B	1807	G	N3-C4	6.31	1.39	1.35
12	B	2081	U	N1-C6	6.31	1.43	1.38
12	B	2330	G	C6-O6	6.31	1.29	1.24
12	B	2450	A	P-O5'	-6.31	1.53	1.59
12	B	2488	G	C5-C4	6.31	1.42	1.38
12	B	2680	U	C2'-C1'	-6.31	1.46	1.53
11	A	86	G	N1-C2	6.31	1.42	1.37
12	B	105	C	C2'-C1'	6.31	1.60	1.53
12	B	1579	A	N9-C4	-6.31	1.34	1.37
12	B	1758	U	P-O5'	-6.31	1.53	1.59
12	B	1932	A	C6-N1	6.31	1.40	1.35
12	B	1630	A	P-O5'	-6.31	1.53	1.59
12	B	2682	A	C6-N6	6.31	1.39	1.33
12	B	1050	A	N7-C5	-6.30	1.35	1.39
12	B	1548	A	C6-N1	6.30	1.40	1.35
12	B	2057	G	C5'-C4'	-6.30	1.43	1.51
12	B	2549	G	C2-N3	6.30	1.37	1.32
17	G	152	ARG	CZ-NH1	6.30	1.41	1.33
12	B	2008	C	C2-O2	6.30	1.30	1.24
12	B	2631	G	C2-N3	6.30	1.37	1.32
12	B	294	A	C2-N3	6.30	1.39	1.33
12	B	401	A	N7-C5	-6.30	1.35	1.39
12	B	1178	C	N3-C4	6.30	1.38	1.33
12	B	1248	G	C5'-C4'	6.30	1.58	1.51
12	B	1871	A	O3'-P	-6.30	1.53	1.61
12	B	2749	A	C2'-C1'	-6.30	1.46	1.53
12	B	298	G	O3'-P	-6.30	1.53	1.61
12	B	929	U	P-O5'	-6.30	1.53	1.59
12	B	1142	A	C2'-C1'	-6.30	1.46	1.53
12	B	1494	A	C6-N1	6.30	1.40	1.35
12	B	2382	G	N9-C8	-6.30	1.33	1.37
12	B	426	C	C2'-C1'	-6.30	1.46	1.53
12	B	1390	U	C4'-C3'	-6.30	1.46	1.53
12	B	1946	U	C4-C5	6.30	1.49	1.43
12	B	2134	A	C6-N1	6.30	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	632	A	C6-N1	6.30	1.40	1.35
12	B	708	G	N1-C2	6.30	1.42	1.37
12	B	1871	A	C5'-C4'	6.30	1.58	1.51
12	B	2489	U	P-O5'	-6.30	1.53	1.59
12	B	644	A	C6-N6	6.29	1.39	1.33
12	B	1116	G	C2-N3	6.29	1.37	1.32
12	B	2107	G	P-O5'	-6.29	1.53	1.59
11	A	115	A	C4'-C3'	-6.29	1.46	1.53
12	B	478	A	C6-N1	6.29	1.40	1.35
12	B	699	A	C4'-C3'	6.29	1.60	1.53
12	B	725	G	C8-N7	-6.29	1.27	1.30
12	B	2178	C	N3-C4	6.29	1.38	1.33
12	B	2569	G	P-O5'	-6.29	1.53	1.59
18	H	123	ARG	CD-NE	6.29	1.57	1.46
12	B	516	C	C3'-C2'	6.29	1.59	1.52
12	B	2201	G	N7-C5	-6.29	1.35	1.39
10	9	124	GLY	N-CA	-6.29	1.36	1.46
11	A	56	G	C5-C4	-6.29	1.33	1.38
11	A	43	C	C4-N4	6.29	1.39	1.33
12	B	1966	A	C5-C4	6.29	1.43	1.38
12	B	2768	U	C4'-O4'	6.29	1.53	1.45
11	A	31	C	C5'-C4'	6.29	1.58	1.51
12	B	377	G	N9-C8	6.29	1.42	1.37
12	B	364	C	C5'-C4'	6.29	1.58	1.51
12	B	750	A	C6-N1	6.29	1.40	1.35
12	B	1171	G	C6-N1	6.29	1.44	1.39
12	B	1642	G	C6-N1	6.29	1.44	1.39
12	B	2547	A	C5-C4	-6.29	1.34	1.38
12	B	216	A	N9-C4	6.28	1.41	1.37
12	B	414	C	C4'-O4'	-6.28	1.37	1.45
12	B	1501	G	C5-C4	6.28	1.42	1.38
12	B	80	G	N9-C8	-6.28	1.33	1.37
12	B	540	C	C4-C5	-6.28	1.38	1.43
12	B	1420	A	N3-C4	6.28	1.38	1.34
12	B	1877	A	P-O5'	6.28	1.66	1.59
12	B	2083	G	N9-C8	6.28	1.42	1.37
12	B	2224	G	N7-C5	-6.28	1.35	1.39
12	B	2618	G	C6-N1	6.28	1.44	1.39
12	B	682	G	C8-N7	6.28	1.34	1.30
12	B	1933	G	C8-N7	-6.28	1.27	1.30
12	B	2335	A	N7-C5	-6.28	1.35	1.39
12	B	2371	G	N7-C5	6.28	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	430	A	C5-C4	-6.28	1.34	1.38
12	B	700	G	C6-N1	6.28	1.44	1.39
12	B	1271	G	P-O5'	-6.28	1.53	1.59
12	B	1457	U	C5'-C4'	6.28	1.58	1.51
12	B	1476	U	P-O5'	-6.28	1.53	1.59
12	B	1564	C	N3-C4	6.28	1.38	1.33
12	B	2380	C	C4'-O4'	6.28	1.53	1.45
12	B	355	U	C2-O2	6.28	1.27	1.22
12	B	1038	G	N7-C5	-6.28	1.35	1.39
12	B	2498	C	C2'-C1'	-6.28	1.46	1.53
12	B	2523	G	N3-C4	6.28	1.39	1.35
12	B	220	G	N9-C4	-6.27	1.32	1.38
12	B	784	G	N1-C2	6.27	1.42	1.37
12	B	1465	G	C2-N2	6.27	1.40	1.34
12	B	2294	G	O3'-P	6.27	1.68	1.61
12	B	2407	A	C4'-O4'	6.27	1.53	1.45
10	9	76	ARG	CZ-NH1	6.27	1.41	1.33
11	A	13	G	N3-C4	6.27	1.39	1.35
12	B	68	G	N9-C4	-6.27	1.32	1.38
12	B	367	G	C5-C6	-6.27	1.36	1.42
12	B	756	A	C5'-C4'	6.27	1.58	1.51
12	B	1096	A	C5'-C4'	6.27	1.58	1.51
12	B	2028	U	C2-N3	6.27	1.42	1.37
12	B	2527	C	C4-C5	-6.27	1.38	1.43
12	B	2619	C	N3-C4	6.27	1.38	1.33
12	B	2757	A	N7-C5	-6.27	1.35	1.39
12	B	370	G	N9-C4	6.27	1.43	1.38
12	B	1102	C	C4-C5	-6.27	1.38	1.43
12	B	2567	G	C8-N7	-6.27	1.27	1.30
21	K	98	ARG	CZ-NH2	6.27	1.41	1.33
12	B	26	G	N3-C4	-6.27	1.31	1.35
12	B	1854	A	P-O5'	-6.27	1.53	1.59
12	B	2637	U	P-O5'	6.27	1.66	1.59
12	B	2864	G	C3'-C2'	-6.27	1.45	1.52
12	B	602	A	C6-N1	6.27	1.40	1.35
12	B	1025	G	N3-C4	-6.27	1.31	1.35
12	B	1357	C	P-O5'	-6.27	1.53	1.59
12	B	1366	A	C6-N1	6.27	1.40	1.35
12	B	1370	C	C2-N3	6.27	1.40	1.35
11	A	90	C	N3-C4	6.26	1.38	1.33
12	B	643	A	N3-C4	-6.26	1.31	1.34
12	B	662	G	N9-C4	-6.26	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	707	G	C2-N3	6.26	1.37	1.32
12	B	816	C	C4-C5	6.26	1.48	1.43
12	B	897	C	C2'-C1'	-6.26	1.46	1.53
12	B	981	A	N3-C4	-6.26	1.31	1.34
12	B	1820	U	C4'-C3'	6.26	1.60	1.53
12	B	1854	A	N9-C4	6.26	1.41	1.37
12	B	2529	G	C5-C6	6.26	1.48	1.42
12	B	2673	G	N1-C2	6.26	1.42	1.37
12	B	876	C	C4-N4	6.26	1.39	1.33
12	B	1789	A	C4'-O4'	-6.26	1.37	1.45
12	B	2253	G	C5-C4	6.26	1.42	1.38
12	B	2624	G	N1-C2	6.26	1.42	1.37
12	B	33	C	C2-N3	6.26	1.40	1.35
12	B	657	U	C2-N3	6.26	1.42	1.37
12	B	738	G	N1-C2	6.26	1.42	1.37
12	B	752	A	N7-C5	-6.26	1.35	1.39
12	B	1034	G	C8-N7	6.26	1.34	1.30
12	B	1439	A	N1-C2	-6.26	1.28	1.34
12	B	253	C	N3-C4	6.26	1.38	1.33
12	B	907	G	C4'-C3'	-6.26	1.46	1.53
12	B	1154	G	C6-N1	6.26	1.44	1.39
12	B	1323	C	C5'-C4'	6.26	1.58	1.51
12	B	1475	G	C8-N7	-6.26	1.27	1.30
12	B	1534	U	C2-N3	6.26	1.42	1.37
12	B	1723	G	N9-C8	6.26	1.42	1.37
12	B	2646	C	P-O5'	-6.26	1.53	1.59
12	B	2730	C	C4-N4	6.26	1.39	1.33
12	B	2835	A	C5'-C4'	6.26	1.58	1.51
11	A	83	G	C2-N2	6.26	1.40	1.34
12	B	76	C	N3-C4	6.26	1.38	1.33
12	B	2457	U	C4'-O4'	-6.26	1.37	1.45
12	B	2705	A	N9-C8	6.26	1.42	1.37
12	B	157	C	C4-C5	6.26	1.48	1.43
12	B	1773	A	C4'-C3'	6.26	1.60	1.53
12	B	2133	G	C2'-C1'	-6.26	1.46	1.53
12	B	2541	A	N1-C2	-6.26	1.28	1.34
12	B	1162	G	C6-N1	6.25	1.44	1.39
12	B	1757	A	C6-N6	6.25	1.39	1.33
12	B	845	A	C6-N6	6.25	1.39	1.33
12	B	926	G	N1-C2	6.25	1.42	1.37
12	B	1784	A	P-O5'	-6.25	1.53	1.59
12	B	2546	U	O3'-P	-6.25	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	217	A	N7-C5	-6.25	1.35	1.39
12	B	479	A	C6-N1	6.25	1.40	1.35
12	B	1021	A	N3-C4	-6.25	1.31	1.34
12	B	1708	C	C1'-N1	6.25	1.58	1.48
12	B	2551	C	C4-N4	6.25	1.39	1.33
12	B	147	C	C4'-C3'	-6.25	1.46	1.53
12	B	1400	U	N3-C4	6.25	1.44	1.38
12	B	1055	G	N3-C4	-6.25	1.31	1.35
12	B	1284	A	N9-C4	-6.25	1.34	1.37
12	B	2094	A	C6-N6	6.25	1.39	1.33
12	B	2245	U	C2-N3	6.25	1.42	1.37
12	B	2346	A	C3'-C2'	6.25	1.59	1.52
12	B	2464	G	N3-C4	-6.25	1.31	1.35
12	B	2818	U	C5-C6	6.25	1.39	1.34
12	B	189	G	N3-C4	-6.25	1.31	1.35
12	B	645	C	C5'-C4'	6.25	1.58	1.51
12	B	1185	G	N1-C2	6.25	1.42	1.37
12	B	1821	A	P-O5'	-6.25	1.53	1.59
12	B	2098	U	C4-C5	6.25	1.49	1.43
12	B	2236	U	C4-C5	6.25	1.49	1.43
12	B	896	A	C5-C4	6.25	1.43	1.38
12	B	2304	G	C4'-O4'	6.25	1.53	1.45
12	B	2824	C	N1-C2	6.25	1.46	1.40
11	A	16	G	C3'-O3'	6.24	1.50	1.42
11	A	40	U	C3'-O3'	6.24	1.50	1.42
12	B	1819	A	N3-C4	6.24	1.38	1.34
12	B	2354	C	C2-N3	6.24	1.40	1.35
12	B	2739	U	C4-C5	6.24	1.49	1.43
12	B	21	A	N9-C8	6.24	1.42	1.37
12	B	210	C	C5'-C4'	6.24	1.58	1.51
12	B	1056	G	C2-N2	6.24	1.40	1.34
12	B	766	U	O3'-P	-6.24	1.53	1.61
12	B	1952	A	N1-C2	6.24	1.40	1.34
12	B	126	A	C6-N6	6.24	1.39	1.33
12	B	155	A	N9-C4	-6.24	1.34	1.37
12	B	697	G	C2-N2	6.24	1.40	1.34
12	B	772	C	C2-N3	6.24	1.40	1.35
12	B	1067	A	C5-C4	6.24	1.43	1.38
12	B	1877	A	N7-C5	6.24	1.43	1.39
12	B	1552	A	C6-N6	6.24	1.39	1.33
12	B	1827	U	C2-N3	6.24	1.42	1.37
12	B	854	C	C3'-O3'	6.24	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1086	A	C8-N7	6.24	1.35	1.31
12	B	1317	G	C8-N7	6.24	1.34	1.30
12	B	1343	G	C8-N7	-6.24	1.27	1.30
12	B	1819	A	C2-N3	6.24	1.39	1.33
12	B	2033	A	C5'-C4'	6.24	1.58	1.51
12	B	2274	A	P-O5'	-6.24	1.53	1.59
12	B	882	G	C2'-C1'	-6.23	1.46	1.53
12	B	1303	G	P-O5'	-6.23	1.53	1.59
12	B	1388	G	C2-N3	6.23	1.37	1.32
12	B	2482	A	C2'-C1'	-6.23	1.46	1.53
12	B	2627	G	O3'-P	-6.23	1.53	1.61
12	B	496	G	N3-C4	-6.23	1.31	1.35
12	B	689	A	C2'-C1'	6.23	1.60	1.53
12	B	1234	U	C2-N3	6.23	1.42	1.37
12	B	1635	A	C5'-C4'	6.23	1.58	1.51
12	B	2080	A	C2'-C1'	-6.23	1.46	1.53
12	B	2406	A	C6-N6	6.23	1.39	1.33
12	B	2433	A	C5-C4	-6.23	1.34	1.38
12	B	2686	G	O4'-C1'	-6.23	1.33	1.41
12	B	237	C	C2'-C1'	-6.23	1.46	1.53
12	B	1009	A	C5-C6	-6.23	1.35	1.41
12	B	2131	U	C4-C5	6.23	1.49	1.43
12	B	2192	U	C4'-C3'	-6.23	1.46	1.53
12	B	2476	A	C6-N6	6.23	1.39	1.33
12	B	85	G	N1-C2	6.23	1.42	1.37
12	B	625	G	N3-C4	-6.23	1.31	1.35
12	B	880	G	N7-C5	-6.23	1.35	1.39
12	B	2244	U	P-O5'	-6.23	1.53	1.59
12	B	2481	G	C3'-O3'	6.23	1.50	1.42
12	B	2628	C	O3'-P	-6.23	1.53	1.61
12	B	2716	C	C4-C5	6.23	1.48	1.43
12	B	25	U	C3'-C2'	-6.22	1.46	1.52
12	B	513	A	N9-C8	-6.22	1.32	1.37
12	B	1346	G	P-O5'	-6.22	1.53	1.59
12	B	1446	C	C4-C5	6.22	1.48	1.43
12	B	1637	A	C2-N3	6.22	1.39	1.33
12	B	856	G	C2-N3	6.22	1.37	1.32
12	B	1476	U	C2'-C1'	-6.22	1.46	1.53
12	B	1733	G	C2'-C1'	-6.22	1.46	1.53
12	B	1736	U	C2-N3	6.22	1.42	1.37
12	B	2246	G	N1-C2	6.22	1.42	1.37
12	B	2421	G	N9-C8	6.22	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2577	A	C6-N6	6.22	1.39	1.33
12	B	519	U	C4'-C3'	-6.22	1.46	1.53
12	B	1342	A	C8-N7	-6.22	1.27	1.31
12	B	1774	C	O3'-P	-6.22	1.53	1.61
13	C	62	ARG	CZ-NH1	6.22	1.41	1.33
12	B	1067	A	N9-C4	6.22	1.41	1.37
12	B	1114	C	C3'-C2'	-6.22	1.46	1.52
12	B	1141	U	C2-N3	6.22	1.42	1.37
12	B	1517	G	N9-C4	-6.22	1.32	1.38
12	B	2157	G	P-O5'	6.22	1.66	1.59
12	B	2841	C	N1-C6	-6.22	1.33	1.37
23	M	114	ARG	NE-CZ	6.22	1.41	1.33
12	B	803	U	O4'-C1'	-6.22	1.33	1.41
12	B	849	A	O3'-P	-6.22	1.53	1.61
12	B	1188	U	O4'-C1'	6.22	1.49	1.41
12	B	661	A	N9-C4	6.22	1.41	1.37
12	B	685	A	N3-C4	-6.22	1.31	1.34
12	B	875	G	N1-C2	6.22	1.42	1.37
12	B	1092	C	N3-C4	6.22	1.38	1.33
12	B	1664	A	C6-N6	6.22	1.39	1.33
12	B	1744	A	N9-C8	-6.22	1.32	1.37
12	B	2015	A	C4'-C3'	6.22	1.59	1.53
12	B	2366	A	C6-N1	6.22	1.40	1.35
12	B	2745	C	O3'-P	-6.22	1.53	1.61
12	B	179	C	C5-C6	6.21	1.39	1.34
12	B	1317	G	P-O5'	-6.21	1.53	1.59
12	B	2135	A	C8-N7	-6.21	1.27	1.31
12	B	2504	U	N3-C4	6.21	1.44	1.38
12	B	2780	G	N9-C8	6.21	1.42	1.37
12	B	2345	G	P-O5'	-6.21	1.53	1.59
12	B	206	U	C2-N3	-6.21	1.33	1.37
12	B	1095	A	C5-C4	6.21	1.43	1.38
12	B	2235	G	C5-C6	6.21	1.48	1.42
12	B	1498	C	N3-C4	6.21	1.38	1.33
12	B	1857	G	P-O5'	-6.21	1.53	1.59
12	B	425	G	N1-C2	6.21	1.42	1.37
12	B	1728	C	O3'-P	-6.21	1.53	1.61
12	B	1756	G	C5-C4	6.21	1.42	1.38
12	B	2122	U	P-O5'	6.21	1.66	1.59
12	B	479	A	N3-C4	6.21	1.38	1.34
12	B	770	G	N1-C2	6.21	1.42	1.37
12	B	1448	G	N9-C8	-6.21	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2644	G	N3-C4	-6.21	1.31	1.35
4	3	49	ARG	CD-NE	6.21	1.56	1.46
12	B	2005	A	C6-N6	6.21	1.39	1.33
12	B	1319	C	C5'-C4'	6.20	1.58	1.51
12	B	1338	G	C6-N1	6.20	1.43	1.39
12	B	2832	U	C3'-C2'	6.20	1.59	1.52
12	B	2882	A	N9-C8	-6.20	1.32	1.37
1	0	41	SER	CB-OG	6.20	1.50	1.42
11	A	47	C	C2'-C1'	-6.20	1.46	1.53
12	B	149	A	C6-N6	6.20	1.39	1.33
12	B	465	G	O4'-C1'	6.20	1.49	1.41
12	B	1186	G	C3'-C2'	-6.20	1.46	1.52
12	B	2230	G	C2-N3	6.20	1.37	1.32
12	B	1992	G	C6-N1	6.20	1.43	1.39
12	B	2253	G	C6-N1	-6.20	1.35	1.39
12	B	2525	G	C2'-C1'	-6.20	1.46	1.53
12	B	2815	C	C1'-N1	6.20	1.58	1.48
11	A	51	G	N1-C2	6.20	1.42	1.37
12	B	75	G	C2-N2	6.20	1.40	1.34
12	B	997	G	C1'-N9	6.20	1.58	1.48
12	B	1511	G	N7-C5	6.20	1.43	1.39
12	B	1857	G	O3'-P	-6.20	1.53	1.61
12	B	2070	A	C6-N1	6.20	1.39	1.35
12	B	2086	U	N1-C6	6.20	1.43	1.38
12	B	2320	U	C3'-C2'	6.20	1.59	1.52
12	B	253	C	P-O5'	-6.20	1.53	1.59
12	B	574	A	P-O5'	-6.20	1.53	1.59
12	B	1821	A	C4'-O4'	6.20	1.53	1.45
12	B	196	A	N3-C4	-6.20	1.31	1.34
12	B	289	G	C3'-C2'	-6.20	1.46	1.52
12	B	387	U	C5'-C4'	6.20	1.58	1.51
12	B	534	U	N1-C6	6.20	1.43	1.38
12	B	1153	C	C2'-C1'	-6.20	1.46	1.53
12	B	2814	A	C2'-C1'	-6.20	1.46	1.53
12	B	581	C	C4-N4	6.19	1.39	1.33
12	B	1095	A	N9-C8	6.19	1.42	1.37
12	B	1723	G	N3-C4	6.19	1.39	1.35
12	B	2770	G	P-O5'	-6.19	1.53	1.59
12	B	307	G	N1-C2	6.19	1.42	1.37
12	B	317	G	N9-C8	6.19	1.42	1.37
12	B	401	A	O4'-C1'	-6.19	1.33	1.41
12	B	855	G	N1-C2	6.19	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1011	G	N7-C5	-6.19	1.35	1.39
12	B	1402	U	C2'-C1'	-6.19	1.46	1.53
12	B	1860	G	N9-C4	6.19	1.43	1.38
12	B	1905	C	C5-C6	-6.19	1.29	1.34
12	B	1960	A	N9-C4	6.19	1.41	1.37
15	E	25	GLU	CG-CD	6.19	1.61	1.51
11	A	56	G	C4'-C3'	6.19	1.59	1.53
12	B	908	C	O3'-P	-6.19	1.53	1.61
12	B	1090	A	C6-N1	6.19	1.39	1.35
12	B	1390	U	C4-C5	6.19	1.49	1.43
12	B	1502	A	C4'-O4'	-6.19	1.37	1.45
12	B	1810	A	P-O5'	-6.19	1.53	1.59
12	B	1869	G	P-O5'	-6.19	1.53	1.59
12	B	1888	G	N1-C2	6.19	1.42	1.37
12	B	2285	C	N1-C6	-6.19	1.33	1.37
12	B	2452	C	C2-O2	6.19	1.30	1.24
12	B	2723	C	N3-C4	6.19	1.38	1.33
12	B	493	G	N1-C2	6.19	1.42	1.37
12	B	529	A	C4'-C3'	6.19	1.59	1.53
12	B	135	U	N1-C2	6.19	1.44	1.38
12	B	371	A	C6-N6	6.19	1.39	1.33
12	B	1179	G	C5-C6	6.19	1.48	1.42
12	B	1673	G	N1-C2	6.19	1.42	1.37
12	B	2109	U	C4'-C3'	6.19	1.59	1.53
12	B	215	G	N7-C5	-6.19	1.35	1.39
12	B	2661	G	N7-C5	-6.19	1.35	1.39
12	B	220	G	C5-C4	6.18	1.42	1.38
12	B	538	A	C2'-C1'	-6.18	1.46	1.53
12	B	1392	A	C6-N1	6.18	1.39	1.35
12	B	2246	G	O3'-P	-6.18	1.53	1.61
12	B	485	C	C1'-N1	6.18	1.58	1.48
12	B	720	U	C3'-C2'	-6.18	1.46	1.52
12	B	1175	A	C6-N6	6.18	1.38	1.33
12	B	1362	C	C2'-C1'	-6.18	1.46	1.53
12	B	1953	A	C2'-C1'	6.18	1.60	1.53
12	B	2355	G	N9-C8	6.18	1.42	1.37
12	B	2549	G	O3'-P	-6.18	1.53	1.61
12	B	2809	A	N3-C4	-6.18	1.31	1.34
12	B	2097	A	C5'-C4'	6.18	1.58	1.51
12	B	1016	G	C8-N7	-6.18	1.27	1.30
12	B	1435	G	C4'-C3'	-6.18	1.46	1.53
12	B	1540	G	N7-C5	-6.18	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2342	C	N3-C4	6.18	1.38	1.33
12	B	2573	C	N1-C2	6.18	1.46	1.40
12	B	27	G	C3'-C2'	6.18	1.59	1.52
12	B	207	A	N1-C2	6.18	1.40	1.34
12	B	244	A	C6-N1	6.18	1.39	1.35
12	B	1285	A	C5'-C4'	6.18	1.58	1.51
12	B	2087	G	N7-C5	-6.18	1.35	1.39
11	A	50	A	N9-C8	6.18	1.42	1.37
12	B	682	G	N7-C5	6.18	1.43	1.39
12	B	800	A	N9-C8	6.18	1.42	1.37
12	B	1495	A	C6-N6	6.18	1.38	1.33
12	B	1502	A	N7-C5	-6.18	1.35	1.39
12	B	1921	G	C2-N2	6.18	1.40	1.34
12	B	348	A	C6-N6	6.17	1.38	1.33
12	B	386	G	C8-N7	6.17	1.34	1.30
12	B	1190	G	C3'-C2'	6.17	1.59	1.52
12	B	1871	A	C5-C4	-6.17	1.34	1.38
12	B	1997	C	C4-C5	6.17	1.47	1.43
12	B	2337	G	C2-N3	6.17	1.37	1.32
12	B	2533	U	C2-N3	6.17	1.42	1.37
12	B	184	C	C2'-C1'	-6.17	1.46	1.53
12	B	775	G	N9-C4	-6.17	1.33	1.38
12	B	2693	G	C2-N2	6.17	1.40	1.34
12	B	2727	A	N3-C4	-6.17	1.31	1.34
12	B	427	U	C2-N3	6.17	1.42	1.37
12	B	1216	G	N3-C4	-6.17	1.31	1.35
12	B	1291	C	C4'-O4'	6.17	1.53	1.45
12	B	1376	C	C4-N4	6.17	1.39	1.33
12	B	1935	G	N1-C2	6.17	1.42	1.37
12	B	2094	A	C4'-C3'	-6.17	1.46	1.53
12	B	2573	C	C1'-N1	6.17	1.58	1.48
12	B	722	A	C2-N3	6.17	1.39	1.33
12	B	1638	C	C2'-C1'	-6.17	1.46	1.53
12	B	2232	C	N3-C4	6.17	1.38	1.33
12	B	2699	C	C2'-C1'	-6.17	1.46	1.53
12	B	797	G	C2-N3	6.17	1.37	1.32
12	B	1006	C	C2-O2	6.17	1.30	1.24
12	B	2192	U	C5'-C4'	6.17	1.58	1.51
12	B	2439	A	N1-C2	-6.17	1.28	1.34
12	B	189	G	C2-N3	6.17	1.37	1.32
12	B	1779	U	N3-C4	6.17	1.44	1.38
12	B	2019	A	C4'-C3'	6.17	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2104	C	C2'-C1'	6.17	1.60	1.53
12	B	2336	A	C2'-C1'	-6.17	1.46	1.53
12	B	1725	U	N1-C2	6.17	1.44	1.38
12	B	2304	G	N1-C2	6.17	1.42	1.37
12	B	2822	G	N9-C8	6.16	1.42	1.37
12	B	307	G	N3-C4	-6.16	1.31	1.35
12	B	439	A	N9-C8	-6.16	1.32	1.37
12	B	2081	U	O4'-C1'	-6.16	1.33	1.41
12	B	2547	A	O4'-C1'	6.16	1.49	1.41
12	B	380	G	C2'-C1'	-6.16	1.46	1.53
12	B	658	U	O3'-P	-6.16	1.53	1.61
12	B	789	A	C5'-C4'	6.16	1.58	1.51
12	B	966	G	P-O5'	-6.16	1.53	1.59
12	B	1088	A	C3'-C2'	6.16	1.59	1.52
12	B	2027	G	C2'-C1'	-6.16	1.46	1.53
12	B	2179	C	C4-N4	6.16	1.39	1.33
12	B	2279	G	N7-C5	-6.16	1.35	1.39
12	B	2582	G	C4'-O4'	-6.16	1.37	1.45
12	B	2870	C	P-O5'	-6.16	1.53	1.59
12	B	390	U	C5'-C4'	6.16	1.58	1.51
12	B	503	A	N3-C4	6.16	1.38	1.34
12	B	556	A	N3-C4	-6.16	1.31	1.34
12	B	2018	G	N1-C2	6.16	1.42	1.37
12	B	2530	A	C5-C4	-6.16	1.34	1.38
12	B	2557	G	C5-C4	6.16	1.42	1.38
12	B	704	G	C2'-C1'	-6.16	1.46	1.53
12	B	1019	U	C2-N3	6.16	1.42	1.37
12	B	35	G	C8-N7	6.16	1.34	1.30
12	B	175	G	C5-C4	-6.16	1.34	1.38
12	B	290	U	C1'-N1	6.16	1.57	1.48
12	B	2085	U	C4-O4	6.16	1.28	1.23
12	B	2227	A	P-O5'	-6.16	1.53	1.59
12	B	48	G	C6-N1	6.15	1.43	1.39
12	B	182	A	C6-N6	6.15	1.38	1.33
12	B	296	U	N1-C6	-6.15	1.32	1.38
12	B	2106	U	N1-C2	-6.15	1.33	1.38
12	B	2112	G	N1-C2	6.15	1.42	1.37
12	B	2368	C	C4-N4	6.15	1.39	1.33
12	B	404	A	N7-C5	-6.15	1.35	1.39
12	B	1050	A	C6-N6	6.15	1.38	1.33
12	B	1088	A	C8-N7	-6.15	1.27	1.31
12	B	1413	A	N7-C5	-6.15	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1851	U	C2'-C1'	6.15	1.60	1.53
12	B	1878	G	C4'-C3'	-6.15	1.46	1.53
12	B	2155	U	N1-C6	-6.15	1.32	1.38
12	B	2216	G	C8-N7	-6.15	1.27	1.30
12	B	2428	G	N9-C8	6.15	1.42	1.37
12	B	2452	C	C5-C6	-6.15	1.29	1.34
12	B	280	U	N1-C6	6.15	1.43	1.38
12	B	408	G	C2-N3	6.15	1.37	1.32
12	B	412	A	N9-C4	6.15	1.41	1.37
12	B	641	U	C3'-C2'	-6.15	1.46	1.52
12	B	1688	U	N1-C6	6.15	1.43	1.38
12	B	1820	U	C2-N3	6.15	1.42	1.37
12	B	2053	G	C4'-C3'	6.15	1.59	1.53
12	B	2557	G	C8-N7	6.15	1.34	1.30
12	B	2826	A	N9-C8	6.15	1.42	1.37
12	B	599	A	C4'-C3'	6.15	1.59	1.53
12	B	1850	G	O3'-P	-6.15	1.53	1.61
12	B	2457	U	C2'-C1'	-6.15	1.46	1.53
12	B	2635	A	P-O5'	-6.15	1.53	1.59
12	B	124	G	N3-C4	6.15	1.39	1.35
12	B	497	A	P-O5'	-6.15	1.53	1.59
12	B	748	G	C6-N1	6.15	1.43	1.39
12	B	1205	A	N7-C5	-6.15	1.35	1.39
12	B	1406	U	C5-C6	6.15	1.39	1.34
12	B	1903	G	C5-C4	6.15	1.42	1.38
12	B	151	C	C5-C6	-6.15	1.29	1.34
12	B	2205	A	N9-C4	-6.15	1.34	1.37
12	B	546	U	C2-N3	6.14	1.42	1.37
12	B	735	A	N9-C4	-6.14	1.34	1.37
12	B	2030	A	C3'-C2'	6.14	1.59	1.52
12	B	2478	A	C5-C4	6.14	1.43	1.38
12	B	122	G	N9-C4	6.14	1.42	1.38
12	B	2446	G	C1'-N9	6.14	1.57	1.48
12	B	2885	G	C3'-O3'	6.14	1.50	1.42
12	B	239	C	N1-C6	6.14	1.40	1.37
12	B	181	A	C8-N7	-6.14	1.27	1.31
12	B	192	C	C2'-C1'	-6.14	1.46	1.53
12	B	924	G	C2-N2	6.14	1.40	1.34
12	B	2690	U	C2-N3	6.14	1.42	1.37
28	R	84	ARG	CZ-NH2	6.14	1.41	1.33
12	B	104	A	C5-C4	6.14	1.43	1.38
12	B	936	A	C6-N6	6.14	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1564	C	C5'-C4'	6.14	1.58	1.51
12	B	1653	G	N7-C5	-6.14	1.35	1.39
11	A	69	G	C2-N2	6.14	1.40	1.34
12	B	178	G	C4'-O4'	6.14	1.53	1.45
12	B	1290	C	C2-N3	6.14	1.40	1.35
12	B	250	G	O3'-P	-6.13	1.53	1.61
12	B	408	G	C3'-O3'	6.13	1.50	1.42
12	B	834	G	N7-C5	-6.13	1.35	1.39
12	B	930	G	N9-C8	6.13	1.42	1.37
12	B	1581	G	N1-C2	6.13	1.42	1.37
12	B	2380	C	C4-N4	6.13	1.39	1.33
12	B	2518	A	C6-N6	6.13	1.38	1.33
12	B	2861	U	C2'-C1'	-6.13	1.46	1.53
12	B	306	U	C3'-C2'	-6.13	1.46	1.52
12	B	2675	A	C6-N1	6.13	1.39	1.35
12	B	2768	U	N1-C2	-6.13	1.33	1.38
12	B	2883	A	C2'-C1'	-6.13	1.46	1.53
11	A	80	U	C3'-C2'	6.13	1.59	1.52
12	B	158	U	C4-C5	6.13	1.49	1.43
12	B	1147	A	N9-C8	-6.13	1.32	1.37
12	B	1380	G	N1-C2	6.13	1.42	1.37
12	B	1479	G	N3-C4	-6.13	1.31	1.35
12	B	2268	A	C8-N7	-6.13	1.27	1.31
12	B	2179	C	C2-N3	6.13	1.40	1.35
12	B	2426	A	C5-C4	-6.13	1.34	1.38
12	B	78	U	C5-C6	-6.13	1.28	1.34
12	B	1061	U	O3'-P	-6.13	1.53	1.61
12	B	1080	A	N3-C4	6.13	1.38	1.34
12	B	1515	A	C6-N6	6.13	1.38	1.33
12	B	1713	A	C6-N1	6.13	1.39	1.35
12	B	2290	G	O3'-P	6.13	1.68	1.61
12	B	2470	G	C6-N1	6.13	1.43	1.39
12	B	2487	G	C5-C4	-6.13	1.34	1.38
12	B	2699	C	N1-C6	6.13	1.40	1.37
12	B	930	G	C2-N2	6.13	1.40	1.34
12	B	1206	G	P-O5'	-6.13	1.53	1.59
12	B	2396	G	C2-N3	6.13	1.37	1.32
12	B	305	C	P-O5'	-6.12	1.53	1.59
12	B	528	A	C4'-C3'	6.12	1.59	1.53
12	B	699	A	C2'-O2'	-6.12	1.33	1.41
12	B	1155	A	C5'-C4'	6.12	1.58	1.51
12	B	1077	A	N7-C5	-6.12	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1213	A	N7-C5	-6.12	1.35	1.39
12	B	1395	A	O3'-P	-6.12	1.53	1.61
12	B	1926	U	C2-N3	6.12	1.42	1.37
12	B	2328	A	C5-C4	6.12	1.43	1.38
12	B	9	G	C5-C4	-6.12	1.34	1.38
12	B	836	G	C5-C4	6.12	1.42	1.38
12	B	1049	C	O4'-C1'	6.12	1.49	1.41
12	B	1934	C	N3-C4	6.12	1.38	1.33
12	B	2766	A	C2'-C1'	6.12	1.60	1.53
21	K	78	ARG	CD-NE	6.12	1.56	1.46
12	B	1079	C	C4'-O4'	-6.12	1.37	1.45
12	B	1861	G	C4'-C3'	-6.12	1.46	1.53
12	B	2498	C	N3-C4	6.12	1.38	1.33
12	B	1504	A	O3'-P	-6.12	1.53	1.61
12	B	2301	C	N3-C4	6.12	1.38	1.33
12	B	2654	A	C6-N1	6.12	1.39	1.35
12	B	2797	U	P-O5'	-6.12	1.53	1.59
12	B	2886	A	C4'-O4'	6.12	1.53	1.45
12	B	406	G	N9-C8	-6.12	1.33	1.37
12	B	1972	G	N3-C4	-6.12	1.31	1.35
12	B	2193	G	N1-C2	6.12	1.42	1.37
12	B	2225	A	C5-C4	6.12	1.43	1.38
13	C	213	ARG	CZ-NH2	6.12	1.41	1.33
12	B	307	G	C5'-C4'	6.11	1.58	1.51
12	B	371	A	C2'-C1'	-6.11	1.46	1.53
12	B	540	C	N1-C6	-6.11	1.33	1.37
12	B	579	G	C5'-C4'	-6.11	1.44	1.51
12	B	613	A	P-O5'	6.11	1.65	1.59
12	B	1844	C	C2'-C1'	6.11	1.60	1.53
12	B	2514	U	C2-N3	6.11	1.42	1.37
12	B	2751	G	P-O5'	-6.11	1.53	1.59
12	B	72	U	C5'-C4'	6.11	1.58	1.51
12	B	130	C	C3'-C2'	-6.11	1.46	1.52
12	B	2105	U	N1-C6	6.11	1.43	1.38
11	A	60	C	C3'-O3'	6.11	1.50	1.42
12	B	190	A	C5-C4	-6.11	1.34	1.38
12	B	1773	A	C6-N6	6.11	1.38	1.33
12	B	2871	U	C3'-O3'	-6.11	1.33	1.42
12	B	250	G	N9-C8	-6.11	1.33	1.37
12	B	1398	C	C5-C6	-6.11	1.29	1.34
12	B	1995	U	C3'-C2'	6.11	1.59	1.52
33	Y	84	GLU	CD-OE1	6.11	1.32	1.25

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	32	U	N3-C4	6.11	1.44	1.38
12	B	167	A	O4'-C1'	6.11	1.49	1.41
12	B	714	U	C4'-C3'	-6.11	1.46	1.53
12	B	967	U	O3'-P	-6.11	1.53	1.61
12	B	977	G	N9-C8	6.11	1.42	1.37
12	B	1251	C	C4-N4	6.11	1.39	1.33
12	B	1536	C	O3'-P	-6.11	1.53	1.61
12	B	1684	G	N9-C8	6.11	1.42	1.37
12	B	1803	A	O4'-C1'	6.11	1.49	1.41
12	B	2046	G	C2'-C1'	-6.11	1.46	1.53
12	B	2124	G	C2-N2	6.11	1.40	1.34
12	B	2328	A	N3-C4	-6.11	1.31	1.34
12	B	2486	C	O3'-P	-6.11	1.53	1.61
12	B	2616	C	C3'-O3'	6.11	1.50	1.42
12	B	2894	G	C6-N1	6.11	1.43	1.39
12	B	62	U	C5'-C4'	6.11	1.58	1.51
11	A	108	A	P-O5'	-6.10	1.53	1.59
12	B	116	C	O5'-C5'	6.10	1.54	1.44
12	B	1229	C	N1-C6	6.10	1.40	1.37
12	B	2862	G	N7-C5	6.10	1.43	1.39
12	B	454	A	C8-N7	-6.10	1.27	1.31
12	B	630	G	N1-C2	6.10	1.42	1.37
12	B	824	U	N1-C6	6.10	1.43	1.38
12	B	935	C	C4-N4	6.10	1.39	1.33
12	B	1398	C	C2-O2	6.10	1.29	1.24
12	B	1704	C	N3-C4	6.10	1.38	1.33
12	B	2006	C	C2'-C1'	6.10	1.60	1.53
12	B	1232	G	C8-N7	6.10	1.34	1.30
12	B	1815	A	C5-C4	-6.10	1.34	1.38
12	B	2483	C	N3-C4	6.10	1.38	1.33
12	B	2528	U	C2'-C1'	-6.10	1.46	1.53
12	B	977	G	C8-N7	-6.10	1.27	1.30
12	B	1483	G	N1-C2	6.10	1.42	1.37
12	B	2094	A	N7-C5	-6.10	1.35	1.39
12	B	2110	G	P-O5'	-6.10	1.53	1.59
12	B	2123	G	N1-C2	6.10	1.42	1.37
12	B	2524	G	C6-N1	6.10	1.43	1.39
12	B	2863	C	N3-C4	6.10	1.38	1.33
7	6	35	ARG	CZ-NH1	6.10	1.41	1.33
11	A	50	A	N3-C4	-6.10	1.31	1.34
12	B	418	C	P-O5'	-6.10	1.53	1.59
12	B	689	A	P-O5'	-6.10	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	970	U	P-O5'	-6.10	1.53	1.59
12	B	1013	C	N1-C6	6.10	1.40	1.37
12	B	1535	A	C8-N7	-6.10	1.27	1.31
12	B	2451	A	N1-C2	6.10	1.39	1.34
12	B	2466	C	N1-C6	6.10	1.40	1.37
13	C	268	ARG	NE-CZ	6.10	1.41	1.33
12	B	1336	A	N9-C4	6.10	1.41	1.37
12	B	471	A	O3'-P	-6.09	1.53	1.61
12	B	824	U	C2'-C1'	-6.09	1.46	1.53
12	B	1597	A	O3'-P	-6.09	1.53	1.61
12	B	126	A	N9-C8	6.09	1.42	1.37
12	B	479	A	C4'-O4'	-6.09	1.37	1.45
12	B	836	G	C3'-O3'	6.09	1.50	1.42
12	B	2156	G	N9-C8	-6.09	1.33	1.37
12	B	2644	G	N1-C2	6.09	1.42	1.37
12	B	271	G	C5-C6	6.09	1.48	1.42
12	B	775	G	O3'-P	-6.09	1.53	1.61
12	B	1409	U	C2'-C1'	-6.09	1.46	1.53
12	B	2159	G	N1-C2	6.09	1.42	1.37
12	B	608	A	C8-N7	-6.09	1.27	1.31
12	B	1866	A	N7-C5	-6.09	1.35	1.39
12	B	1871	A	C6-N6	6.09	1.38	1.33
12	B	1988	G	N9-C8	6.09	1.42	1.37
12	B	2062	A	O3'-P	-6.09	1.53	1.61
12	B	2637	U	C2'-C1'	-6.09	1.46	1.53
11	A	117	G	C2'-C1'	-6.09	1.46	1.53
12	B	1033	U	C2-N3	6.09	1.42	1.37
12	B	1496	A	C5-C4	-6.09	1.34	1.38
12	B	1563	U	P-O5'	-6.09	1.53	1.59
12	B	2120	G	C6-N1	6.09	1.43	1.39
12	B	121	G	C8-N7	-6.09	1.27	1.30
12	B	604	G	C8-N7	6.09	1.34	1.30
13	C	176	ARG	CZ-NH2	6.09	1.41	1.33
12	B	1354	A	N7-C5	-6.08	1.35	1.39
12	B	2591	C	N1-C6	-6.08	1.33	1.37
12	B	2656	U	C3'-C2'	-6.08	1.46	1.52
12	B	2837	A	N3-C4	-6.08	1.31	1.34
13	C	202	ARG	CZ-NH1	6.08	1.41	1.33
12	B	504	A	P-O5'	-6.08	1.53	1.59
12	B	558	U	N1-C2	-6.08	1.33	1.38
12	B	976	G	C4'-C3'	-6.08	1.46	1.53
12	B	1537	G	C4'-C3'	6.08	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1790	C	C2-N3	6.08	1.40	1.35
10	9	40	GLY	N-CA	-6.08	1.36	1.46
12	B	134	G	C6-N1	6.08	1.43	1.39
12	B	574	A	N3-C4	6.08	1.38	1.34
12	B	1028	A	C5-C4	-6.08	1.34	1.38
12	B	1198	U	N1-C6	6.08	1.43	1.38
12	B	283	G	C2-N3	6.08	1.37	1.32
12	B	2393	U	N1-C6	-6.08	1.32	1.38
11	A	85	G	C3'-C2'	6.08	1.59	1.52
12	B	809	G	C5-C4	6.08	1.42	1.38
12	B	1900	A	C5'-C4'	6.08	1.58	1.51
12	B	2153	C	N1-C6	-6.08	1.33	1.37
12	B	2558	C	C2'-C1'	-6.08	1.46	1.53
12	B	2778	A	C1'-N9	6.08	1.57	1.48
12	B	2852	G	N7-C5	-6.08	1.35	1.39
12	B	2861	U	N3-C4	6.08	1.44	1.38
15	E	162	ARG	CZ-NH1	6.08	1.41	1.33
11	A	31	C	C1'-N1	6.08	1.57	1.48
11	A	83	G	O4'-C1'	-6.08	1.33	1.41
12	B	761	A	C6-N6	6.08	1.38	1.33
12	B	1288	G	C5'-C4'	6.08	1.58	1.51
12	B	1312	U	C4'-C3'	6.08	1.59	1.53
12	B	1869	G	C4'-C3'	6.08	1.59	1.53
12	B	2234	G	N3-C4	6.08	1.39	1.35
12	B	593	U	C3'-C2'	-6.07	1.46	1.52
12	B	1096	A	N7-C5	-6.07	1.35	1.39
12	B	1926	U	N3-C4	6.07	1.44	1.38
12	B	2277	G	N1-C2	6.07	1.42	1.37
12	B	2782	G	N1-C2	6.07	1.42	1.37
12	B	619	G	C3'-O3'	6.07	1.50	1.42
12	B	845	A	C6-N1	6.07	1.39	1.35
12	B	1070	A	C2'-C1'	-6.07	1.46	1.53
12	B	664	G	C2-N3	6.07	1.37	1.32
12	B	2297	A	C8-N7	-6.07	1.27	1.31
12	B	2725	A	P-O5'	-6.07	1.53	1.59
12	B	514	A	N7-C5	-6.07	1.35	1.39
12	B	708	G	C5-C4	6.07	1.42	1.38
12	B	869	G	C5'-C4'	6.07	1.58	1.51
12	B	2112	G	C2-N3	6.07	1.37	1.32
12	B	2241	A	C6-N1	6.07	1.39	1.35
12	B	2514	U	C2'-C1'	-6.07	1.46	1.53
12	B	2539	C	N1-C6	-6.07	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	440	C	C5-C6	6.07	1.39	1.34
12	B	1322	A	C2'-C1'	-6.07	1.46	1.53
12	B	2664	G	C4'-C3'	-6.07	1.46	1.53
11	A	107	G	C2-N2	6.06	1.40	1.34
12	B	2463	C	N3-C4	6.06	1.38	1.33
12	B	2900	A	C6-N1	6.06	1.39	1.35
12	B	1256	G	C2'-C1'	-6.06	1.46	1.53
12	B	2172	U	C5'-C4'	6.06	1.58	1.51
12	B	19	A	O3'-P	-6.06	1.53	1.61
12	B	2468	A	N9-C4	-6.06	1.34	1.37
12	B	42	A	N9-C8	-6.06	1.32	1.37
12	B	754	U	C5'-C4'	6.06	1.58	1.51
12	B	1169	A	N9-C4	6.06	1.41	1.37
12	B	1322	A	C6-N6	6.06	1.38	1.33
12	B	1854	A	N9-C8	-6.06	1.32	1.37
12	B	2618	G	C3'-C2'	6.06	1.59	1.52
12	B	93	G	C2'-C1'	-6.06	1.46	1.53
12	B	551	G	C4'-C3'	6.06	1.59	1.53
12	B	1254	A	C5'-C4'	6.06	1.58	1.51
12	B	2450	A	O3'-P	-6.06	1.53	1.61
12	B	2514	U	C4'-C3'	-6.06	1.46	1.53
12	B	2845	U	C4'-C3'	-6.06	1.46	1.53
12	B	525	U	P-O5'	-6.06	1.53	1.59
12	B	2098	U	N1-C2	6.06	1.44	1.38
11	A	55	U	P-O5'	-6.05	1.53	1.59
12	B	88	G	N3-C4	6.05	1.39	1.35
12	B	373	U	C3'-C2'	-6.05	1.46	1.52
12	B	1402	U	P-O5'	-6.05	1.53	1.59
12	B	2283	C	N1-C2	6.05	1.46	1.40
12	B	30	G	C4'-C3'	-6.05	1.46	1.53
12	B	1141	U	C2'-C1'	-6.05	1.46	1.53
32	W	79	ARG	NE-CZ	6.05	1.41	1.33
12	B	27	G	C2-N3	6.05	1.37	1.32
12	B	299	A	C5-C4	6.05	1.43	1.38
12	B	945	A	C2'-O2'	-6.05	1.33	1.41
12	B	1044	C	C5-C6	6.05	1.39	1.34
11	A	65	U	P-O5'	-6.05	1.53	1.59
12	B	96	C	C4'-C3'	-6.05	1.46	1.53
12	B	682	G	N3-C4	6.05	1.39	1.35
12	B	965	C	C4-C5	6.05	1.47	1.43
12	B	1168	G	N3-C4	-6.05	1.31	1.35
12	B	2032	G	O3'-P	-6.05	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2275	C	O3'-P	-6.05	1.53	1.61
12	B	1784	A	C5-C4	6.05	1.43	1.38
12	B	188	G	N9-C8	-6.05	1.33	1.37
12	B	195	A	O3'-P	6.05	1.68	1.61
12	B	666	A	C5'-C4'	6.05	1.58	1.51
12	B	1304	A	C6-N1	6.05	1.39	1.35
12	B	1461	C	C4-C5	6.05	1.47	1.43
12	B	2186	G	C2-N3	6.05	1.37	1.32
12	B	2842	G	N1-C2	6.05	1.42	1.37
12	B	557	C	O3'-P	-6.04	1.53	1.61
12	B	1832	C	C4-C5	6.04	1.47	1.43
12	B	2296	U	N3-C4	6.04	1.43	1.38
12	B	151	C	N3-C4	6.04	1.38	1.33
12	B	1387	A	C4'-C3'	-6.04	1.46	1.53
12	B	2396	G	C6-N1	6.04	1.43	1.39
12	B	2858	C	N3-C4	6.04	1.38	1.33
12	B	797	G	C4'-O4'	-6.04	1.37	1.45
12	B	1457	U	C4'-C3'	6.04	1.59	1.53
12	B	2031	A	O3'-P	-6.04	1.53	1.61
12	B	2609	U	C4'-C3'	6.04	1.59	1.53
12	B	2903	U	C4-C5	-6.04	1.38	1.43
12	B	4	U	N3-C4	6.04	1.43	1.38
12	B	1108	U	C4'-C3'	-6.04	1.46	1.53
12	B	1332	G	O3'-P	-6.04	1.53	1.61
12	B	1819	A	N9-C8	-6.04	1.32	1.37
12	B	879	G	C2-N3	6.04	1.37	1.32
12	B	1040	A	N9-C4	-6.04	1.34	1.37
12	B	1237	A	N9-C8	-6.04	1.32	1.37
12	B	1895	C	P-O5'	-6.04	1.53	1.59
12	B	2054	A	N1-C2	-6.04	1.28	1.34
12	B	2143	C	O3'-P	-6.04	1.53	1.61
12	B	2264	C	O3'-P	-6.04	1.53	1.61
11	A	29	A	C2'-C1'	-6.04	1.46	1.53
12	B	1020	A	C5-C6	-6.04	1.35	1.41
12	B	2600	A	C6-N6	6.04	1.38	1.33
12	B	487	C	C4-N4	-6.04	1.28	1.33
12	B	2520	C	O4'-C1'	-6.04	1.33	1.41
12	B	2685	G	C4'-C3'	6.04	1.59	1.53
11	A	37	C	O3'-P	-6.03	1.53	1.61
12	B	201	C	C4-N4	6.03	1.39	1.33
12	B	480	A	C8-N7	-6.03	1.27	1.31
12	B	549	G	O3'-P	6.03	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	605	G	C8-N7	-6.03	1.27	1.30
12	B	631	A	C6-N1	6.03	1.39	1.35
12	B	691	C	C3'-C2'	6.03	1.59	1.52
12	B	844	A	N9-C8	-6.03	1.32	1.37
12	B	865	C	C4-C5	-6.03	1.38	1.43
12	B	1239	G	C8-N7	6.03	1.34	1.30
12	B	2053	G	C5'-C4'	-6.03	1.44	1.51
12	B	2618	G	N1-C2	6.03	1.42	1.37
12	B	2706	A	O3'-P	-6.03	1.53	1.61
12	B	184	C	C4-C5	6.03	1.47	1.43
12	B	704	G	C6-N1	-6.03	1.35	1.39
12	B	929	U	O3'-P	-6.03	1.53	1.61
12	B	45	G	C8-N7	-6.03	1.27	1.30
12	B	111	A	C6-N6	6.03	1.38	1.33
12	B	111	A	N3-C4	6.03	1.38	1.34
12	B	480	A	C5-C6	6.03	1.46	1.41
12	B	747	U	N1-C2	6.03	1.44	1.38
12	B	1031	G	C4'-C3'	-6.03	1.46	1.53
12	B	1152	C	C5-C6	-6.03	1.29	1.34
12	B	2854	G	C1'-N9	6.03	1.57	1.48
11	A	75	G	P-O5'	6.03	1.65	1.59
12	B	1543	G	C6-N1	6.03	1.43	1.39
12	B	1899	A	C8-N7	-6.03	1.27	1.31
12	B	1930	G	N1-C2	6.03	1.42	1.37
12	B	2084	C	O4'-C1'	6.03	1.49	1.41
12	B	2503	A	C2-N3	6.03	1.39	1.33
12	B	2772	C	N3-C4	6.03	1.38	1.33
12	B	199	A	C6-N6	6.03	1.38	1.33
12	B	239	C	C4'-C3'	6.03	1.59	1.53
12	B	242	G	C2-N3	6.03	1.37	1.32
12	B	326	G	C6-N1	6.03	1.43	1.39
12	B	1337	G	C6-N1	6.03	1.43	1.39
12	B	1645	G	P-O5'	-6.03	1.53	1.59
12	B	2212	A	C2'-C1'	-6.03	1.46	1.53
12	B	2287	A	C6-N6	6.03	1.38	1.33
12	B	2829	A	C3'-C2'	6.03	1.59	1.52
3	2	29	ARG	NE-CZ	6.03	1.40	1.33
12	B	1245	G	C6-N1	-6.03	1.35	1.39
12	B	1619	G	C8-N7	-6.03	1.27	1.30
12	B	2487	G	O4'-C1'	-6.03	1.33	1.41
12	B	2490	G	C6-N1	-6.03	1.35	1.39
12	B	2628	C	N3-C4	6.03	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2751	G	N1-C2	6.03	1.42	1.37
12	B	2853	C	C2'-C1'	-6.03	1.46	1.53
12	B	2839	G	N1-C2	6.02	1.42	1.37
12	B	504	A	C2'-C1'	-6.02	1.46	1.53
12	B	893	C	N3-C4	6.02	1.38	1.33
12	B	1328	A	C2-N3	6.02	1.39	1.33
12	B	2791	G	N7-C5	6.02	1.42	1.39
11	A	84	G	N1-C2	6.02	1.42	1.37
11	A	107	G	N1-C2	6.02	1.42	1.37
12	B	794	A	C6-N6	-6.02	1.29	1.33
11	A	33	G	C2-N3	6.02	1.37	1.32
12	B	8	C	C4-N4	6.02	1.39	1.33
12	B	148	U	P-O5'	6.02	1.65	1.59
12	B	2365	G	N1-C2	6.02	1.42	1.37
12	B	2550	G	N7-C5	-6.02	1.35	1.39
12	B	608	A	P-O5'	6.02	1.65	1.59
12	B	971	G	C8-N7	-6.02	1.27	1.30
12	B	642	U	P-O5'	-6.02	1.53	1.59
12	B	1193	G	N9-C4	6.02	1.42	1.38
12	B	2230	G	P-O5'	-6.02	1.53	1.59
12	B	2702	G	N9-C4	-6.02	1.33	1.38
3	2	37	ARG	CZ-NH2	6.01	1.40	1.33
12	B	117	G	C5-C4	6.01	1.42	1.38
12	B	2438	U	C4'-C3'	6.01	1.59	1.53
12	B	2561	U	P-O5'	-6.01	1.53	1.59
12	B	2566	A	C4'-C3'	-6.01	1.46	1.53
12	B	2776	A	C5-C4	6.01	1.43	1.38
12	B	2783	U	N3-C4	6.01	1.43	1.38
12	B	243	U	C5-C6	6.01	1.39	1.34
12	B	526	A	N1-C2	-6.01	1.28	1.34
12	B	1129	A	C4'-O4'	6.01	1.53	1.45
12	B	1221	C	C4-N4	6.01	1.39	1.33
12	B	2535	G	N7-C5	6.01	1.42	1.39
12	B	2642	G	C3'-O3'	6.01	1.50	1.42
12	B	356	G	O4'-C1'	-6.01	1.33	1.41
12	B	1301	A	C5'-C4'	6.01	1.58	1.51
12	B	1575	C	C4-N4	6.01	1.39	1.33
12	B	2411	A	C5-C4	6.01	1.43	1.38
12	B	2634	A	N3-C4	-6.01	1.31	1.34
11	A	18	G	C2-N3	6.01	1.37	1.32
12	B	100	U	N3-C4	6.01	1.43	1.38
12	B	1106	G	C6-N1	6.01	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2507	C	C5'-C4'	6.01	1.58	1.51
8	7	62	PRO	CA-CB	6.01	1.65	1.53
11	A	67	G	C3'-O3'	6.01	1.50	1.42
12	B	400	G	C3'-C2'	-6.01	1.46	1.52
12	B	608	A	N9-C8	-6.01	1.32	1.37
12	B	706	A	C5'-C4'	6.01	1.58	1.51
12	B	961	C	C2-N3	-6.01	1.30	1.35
12	B	1025	G	C5-C4	-6.01	1.34	1.38
12	B	1186	G	N3-C4	6.01	1.39	1.35
12	B	1320	C	N1-C6	6.01	1.40	1.37
12	B	2856	A	N3-C4	-6.01	1.31	1.34
12	B	16	C	C4-N4	6.00	1.39	1.33
12	B	1057	A	C6-N1	6.00	1.39	1.35
12	B	1630	A	N3-C4	-6.00	1.31	1.34
12	B	1653	G	N3-C4	6.00	1.39	1.35
12	B	2511	U	C4'-O4'	-6.00	1.37	1.45
6	5	38	PHE	CE1-CZ	6.00	1.48	1.37
12	B	84	A	N9-C4	-6.00	1.34	1.37
12	B	700	G	C3'-C2'	-6.00	1.46	1.52
12	B	1122	G	C5-C4	6.00	1.42	1.38
12	B	1310	G	C2-N3	6.00	1.37	1.32
12	B	1428	C	N1-C6	6.00	1.40	1.37
12	B	1673	G	N9-C4	6.00	1.42	1.38
12	B	2533	U	C3'-C2'	-6.00	1.46	1.52
12	B	1071	G	P-O5'	-6.00	1.53	1.59
12	B	2125	G	N7-C5	-6.00	1.35	1.39
12	B	2534	A	C6-N6	6.00	1.38	1.33
12	B	568	U	O3'-P	-6.00	1.53	1.61
12	B	2391	G	O3'-P	-6.00	1.53	1.61
12	B	2487	G	C6-N1	-6.00	1.35	1.39
12	B	2577	A	C3'-C2'	-6.00	1.46	1.52
12	B	1461	C	N3-C4	6.00	1.38	1.33
12	B	1478	G	N3-C4	6.00	1.39	1.35
12	B	1602	U	N3-C4	6.00	1.43	1.38
12	B	1705	A	N9-C4	6.00	1.41	1.37
12	B	2877	G	C4'-C3'	6.00	1.59	1.53
12	B	1046	A	C5'-C4'	6.00	1.58	1.51
12	B	2842	G	O3'-P	-6.00	1.53	1.61
12	B	1457	U	C2-O2	6.00	1.27	1.22
12	B	1529	G	C2-N3	6.00	1.37	1.32
12	B	2275	C	C5'-C4'	6.00	1.58	1.51
14	D	46	ARG	NE-CZ	6.00	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	534	U	P-O5'	-5.99	1.53	1.59
12	B	553	G	O3'-P	-5.99	1.53	1.61
12	B	1223	G	O3'-P	-5.99	1.53	1.61
12	B	2510	C	N1-C6	5.99	1.40	1.37
12	B	356	G	C2-N3	5.99	1.37	1.32
12	B	423	A	N7-C5	-5.99	1.35	1.39
12	B	477	A	N9-C8	-5.99	1.32	1.37
12	B	883	G	N1-C2	5.99	1.42	1.37
12	B	1212	G	C3'-C2'	-5.99	1.46	1.52
12	B	1426	G	C5-C4	-5.99	1.34	1.38
12	B	2162	G	N9-C4	5.99	1.42	1.38
12	B	2873	A	O3'-P	-5.99	1.53	1.61
11	A	84	G	C1'-N9	5.99	1.57	1.48
12	B	628	G	N9-C4	-5.99	1.33	1.38
12	B	996	A	N9-C8	-5.99	1.32	1.37
12	B	1763	G	P-O5'	-5.99	1.53	1.59
12	B	1906	G	N9-C8	-5.99	1.33	1.37
30	T	77	ARG	NE-CZ	5.99	1.40	1.33
12	B	283	G	C3'-C2'	-5.99	1.46	1.52
12	B	296	U	N1-C2	5.99	1.44	1.38
12	B	311	A	C6-N1	5.99	1.39	1.35
12	B	761	A	C8-N7	-5.99	1.27	1.31
12	B	1532	A	N3-C4	-5.99	1.31	1.34
12	B	1643	G	N9-C8	5.99	1.42	1.37
12	B	1689	A	C1'-N9	5.99	1.57	1.48
12	B	2405	G	C8-N7	-5.99	1.27	1.30
12	B	2742	G	N3-C4	-5.99	1.31	1.35
12	B	85	G	C8-N7	5.99	1.34	1.30
12	B	1080	A	C2'-C1'	-5.99	1.46	1.53
12	B	1314	C	C5'-C4'	5.99	1.58	1.51
12	B	1707	G	N9-C4	5.99	1.42	1.38
12	B	31	C	C1'-N1	5.99	1.57	1.48
12	B	670	A	N9-C4	5.99	1.41	1.37
12	B	804	A	C6-N6	5.99	1.38	1.33
12	B	1001	A	C8-N7	-5.99	1.27	1.31
12	B	2051	A	N9-C4	5.99	1.41	1.37
12	B	2193	G	C2-N2	5.99	1.40	1.34
12	B	2321	U	C1'-N1	5.99	1.57	1.48
31	U	84	PHE	CG-CD2	5.99	1.47	1.38
12	B	281	C	C2'-C1'	-5.98	1.46	1.53
12	B	619	G	C5-C4	5.98	1.42	1.38
12	B	977	G	N3-C4	-5.98	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1639	C	C5'-C4'	5.98	1.58	1.51
12	B	1672	A	N9-C8	-5.98	1.32	1.37
12	B	2447	G	N7-C5	-5.98	1.35	1.39
12	B	291	G	C2-N3	5.98	1.37	1.32
12	B	546	U	C4-O4	5.98	1.28	1.23
12	B	819	A	N3-C4	5.98	1.38	1.34
12	B	1129	A	N3-C4	-5.98	1.31	1.34
12	B	1752	C	P-O5'	-5.98	1.53	1.59
12	B	2725	A	N7-C5	-5.98	1.35	1.39
12	B	2876	G	C5-C4	5.98	1.42	1.38
12	B	331	C	C3'-O3'	5.98	1.50	1.42
12	B	562	U	C2-N3	5.98	1.42	1.37
12	B	600	G	N1-C2	5.98	1.42	1.37
12	B	1050	A	C4'-C3'	-5.98	1.46	1.52
12	B	1397	U	N3-C4	5.98	1.43	1.38
12	B	2355	G	C2'-C1'	-5.98	1.46	1.53
12	B	2455	G	P-O5'	-5.98	1.53	1.59
12	B	2612	C	C2-N3	5.98	1.40	1.35
12	B	2622	U	N3-C4	5.98	1.43	1.38
12	B	1477	A	N9-C8	-5.98	1.32	1.37
12	B	1617	C	C4-N4	5.98	1.39	1.33
12	B	1794	A	O3'-P	-5.98	1.53	1.61
12	B	2079	U	O3'-P	-5.98	1.53	1.61
12	B	1367	A	N7-C5	-5.98	1.35	1.39
12	B	2221	G	N9-C4	-5.98	1.33	1.38
12	B	2379	G	C6-O6	-5.98	1.18	1.24
12	B	415	A	O4'-C1'	5.97	1.49	1.41
12	B	1098	A	C4'-O4'	-5.97	1.37	1.45
12	B	1120	G	N7-C5	5.97	1.42	1.39
12	B	1180	U	C2'-C1'	-5.97	1.46	1.53
12	B	1183	U	C5'-C4'	5.97	1.58	1.51
12	B	1863	G	N7-C5	5.97	1.42	1.39
12	B	1946	U	O4'-C1'	5.97	1.49	1.41
12	B	1988	G	C3'-O3'	-5.97	1.33	1.42
12	B	2593	U	C3'-C2'	-5.97	1.46	1.52
12	B	248	G	C2'-C1'	5.97	1.59	1.53
12	B	303	G	C8-N7	-5.97	1.27	1.30
12	B	514	A	C6-N6	5.97	1.38	1.33
12	B	1147	A	C6-N6	5.97	1.38	1.33
12	B	2712	C	P-O5'	5.97	1.65	1.59
11	A	2	G	N9-C4	5.97	1.42	1.38
11	A	18	G	O4'-C1'	5.97	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	147	C	N3-C4	5.97	1.38	1.33
12	B	518	G	N7-C5	-5.97	1.35	1.39
12	B	629	G	N9-C8	5.97	1.42	1.37
12	B	1385	A	N7-C5	5.97	1.42	1.39
12	B	2547	A	C6-N1	5.97	1.39	1.35
12	B	2747	G	O3'-P	-5.97	1.53	1.61
12	B	122	G	N1-C2	5.97	1.42	1.37
12	B	1125	G	P-O5'	-5.97	1.53	1.59
12	B	1128	G	N7-C5	-5.97	1.35	1.39
12	B	1597	A	N3-C4	5.97	1.38	1.34
12	B	1687	G	N9-C8	-5.97	1.33	1.37
12	B	2439	A	C2-N3	5.97	1.39	1.33
12	B	2642	G	C8-N7	-5.97	1.27	1.30
11	A	10	G	C8-N7	-5.97	1.27	1.30
11	A	109	A	C2'-C1'	-5.97	1.46	1.53
12	B	19	A	C2'-C1'	-5.97	1.46	1.53
12	B	1215	G	C3'-C2'	-5.97	1.46	1.52
12	B	1360	G	N3-C4	-5.97	1.31	1.35
12	B	1773	A	O3'-P	-5.97	1.53	1.61
12	B	1964	G	C5'-C4'	5.97	1.58	1.51
12	B	2265	U	N1-C6	-5.97	1.32	1.38
12	B	2704	C	C1'-N1	5.97	1.57	1.48
12	B	621	A	P-O5'	-5.96	1.53	1.59
12	B	1091	G	N7-C5	-5.96	1.35	1.39
12	B	1583	A	P-O5'	-5.96	1.53	1.59
12	B	1834	U	N1-C6	5.96	1.43	1.38
12	B	479	A	N7-C5	-5.96	1.35	1.39
12	B	2722	G	N9-C8	-5.96	1.33	1.37
6	5	60	ARG	NE-CZ	5.96	1.40	1.33
12	B	548	G	C3'-C2'	-5.96	1.46	1.52
12	B	2263	C	C1'-N1	-5.96	1.38	1.46
23	M	30	SER	CA-CB	5.96	1.61	1.52
9	8	4	ARG	CZ-NH1	5.96	1.40	1.33
12	B	382	A	N3-C4	-5.96	1.31	1.34
12	B	482	A	C8-N7	-5.96	1.27	1.31
12	B	811	U	C2-N3	5.96	1.42	1.37
12	B	876	C	N1-C6	5.96	1.40	1.37
12	B	1349	C	N1-C6	5.96	1.40	1.37
12	B	1853	A	N9-C8	5.96	1.42	1.37
12	B	2293	G	N7-C5	-5.96	1.35	1.39
4	3	50	GLY	CA-C	-5.96	1.42	1.51
12	B	537	G	C5-C4	5.96	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	593	U	C3'-O3'	5.96	1.50	1.42
12	B	633	A	C8-N7	-5.96	1.27	1.31
12	B	664	G	O4'-C1'	-5.96	1.33	1.41
12	B	1322	A	C5-C6	5.96	1.46	1.41
12	B	1869	G	O3'-P	5.96	1.68	1.61
12	B	1935	G	C4'-O4'	5.96	1.53	1.45
12	B	2490	G	C2-N2	5.96	1.40	1.34
12	B	2726	A	O3'-P	-5.96	1.53	1.61
12	B	2849	U	C5'-C4'	5.96	1.58	1.51
12	B	625	G	N1-C2	5.96	1.42	1.37
12	B	674	G	N3-C4	5.96	1.39	1.35
12	B	723	C	P-O5'	-5.96	1.53	1.59
12	B	1558	C	C2'-O2'	5.96	1.49	1.41
12	B	2512	C	C5'-C4'	5.96	1.58	1.51
12	B	2812	G	C5'-C4'	5.96	1.58	1.51
12	B	53	A	O3'-P	-5.96	1.54	1.61
12	B	1078	U	C4-C5	5.96	1.49	1.43
12	B	1525	A	C2-N3	5.96	1.39	1.33
12	B	2018	G	N9-C8	-5.96	1.33	1.37
12	B	2247	A	C2'-C1'	-5.96	1.46	1.53
12	B	392	U	P-O5'	-5.95	1.53	1.59
12	B	2381	A	N3-C4	-5.95	1.31	1.34
12	B	356	G	N9-C4	-5.95	1.33	1.38
12	B	788	A	C5-C4	-5.95	1.34	1.38
12	B	2095	A	C4'-O4'	-5.95	1.37	1.45
10	9	122	TRP	CZ2-CH2	5.95	1.48	1.37
12	B	133	U	C5'-C4'	5.95	1.58	1.51
12	B	353	C	N3-C4	5.95	1.38	1.33
12	B	410	G	P-O5'	-5.95	1.53	1.59
12	B	727	A	C4'-O4'	5.95	1.53	1.45
12	B	780	G	N1-C2	5.95	1.42	1.37
12	B	1107	G	C6-N1	5.95	1.43	1.39
12	B	1698	A	C2-N3	5.95	1.39	1.33
12	B	1808	A	P-O5'	-5.95	1.53	1.59
12	B	1967	C	C2-N3	5.95	1.40	1.35
12	B	2101	A	N1-C2	-5.95	1.28	1.34
12	B	2327	A	C2'-C1'	-5.95	1.46	1.53
12	B	2669	G	N7-C5	-5.95	1.35	1.39
12	B	239	C	C4-N4	5.95	1.39	1.33
12	B	358	U	C2-N3	-5.95	1.33	1.37
12	B	482	A	N7-C5	-5.95	1.35	1.39
12	B	561	G	N9-C4	-5.95	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	940	G	C5-C4	5.95	1.42	1.38
12	B	1295	C	C4'-C3'	5.95	1.59	1.53
12	B	1305	C	C2-N3	5.95	1.40	1.35
12	B	2083	G	N9-C4	-5.95	1.33	1.38
12	B	2203	U	C2'-C1'	-5.95	1.46	1.53
12	B	2802	G	C1'-N9	5.95	1.57	1.48
12	B	2814	A	N7-C5	-5.95	1.35	1.39
12	B	497	A	C6-N6	5.95	1.38	1.33
12	B	117	G	O3'-P	-5.95	1.54	1.61
12	B	675	A	N7-C5	-5.95	1.35	1.39
12	B	814	C	C2'-C1'	-5.95	1.46	1.53
12	B	859	G	N9-C8	5.95	1.42	1.37
12	B	978	G	N1-C2	5.95	1.42	1.37
12	B	990	A	O3'-P	-5.95	1.54	1.61
12	B	1831	G	C5'-C4'	5.95	1.58	1.51
12	B	2654	A	C2'-C1'	-5.95	1.46	1.53
12	B	2781	A	C6-N1	5.95	1.39	1.35
12	B	2842	G	N7-C5	-5.95	1.35	1.39
12	B	38	A	P-O5'	5.94	1.65	1.59
12	B	562	U	C4-O4	5.94	1.28	1.23
12	B	1312	U	N3-C4	5.94	1.43	1.38
12	B	1822	C	C5'-C4'	5.94	1.58	1.51
12	B	2144	G	C2-N3	5.94	1.37	1.32
14	D	107	VAL	CB-CG2	5.94	1.65	1.52
12	B	205	G	C5'-C4'	5.94	1.58	1.51
12	B	309	A	N9-C8	-5.94	1.32	1.37
12	B	347	A	O3'-P	-5.94	1.54	1.61
12	B	1202	G	N9-C4	-5.94	1.33	1.38
12	B	1212	G	N3-C4	-5.94	1.31	1.35
12	B	1904	G	N1-C2	5.94	1.42	1.37
29	S	8	ARG	CZ-NH1	5.94	1.40	1.33
12	B	1449	G	O4'-C1'	5.94	1.49	1.41
12	B	1770	G	N1-C2	5.94	1.42	1.37
24	N	87	PHE	CG-CD2	5.94	1.47	1.38
12	B	437	U	O3'-P	-5.94	1.54	1.61
12	B	245	G	C2'-C1'	-5.94	1.46	1.53
12	B	516	C	C2-N3	-5.94	1.30	1.35
12	B	566	U	N1-C2	5.94	1.43	1.38
12	B	752	A	C8-N7	-5.94	1.27	1.31
12	B	770	G	P-O5'	-5.94	1.53	1.59
12	B	849	A	C6-N1	5.94	1.39	1.35
12	B	1189	A	C6-N6	5.94	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	53	A	C5-C6	-5.94	1.35	1.41
12	B	55	G	P-O5'	-5.94	1.53	1.59
12	B	443	A	C1'-N9	-5.94	1.38	1.46
12	B	782	A	C8-N7	5.94	1.35	1.31
12	B	1272	A	C6-N1	5.94	1.39	1.35
12	B	2594	C	C4-N4	5.94	1.39	1.33
15	E	89	PRO	N-CA	-5.94	1.37	1.47
12	B	224	U	C4'-C3'	-5.93	1.46	1.52
12	B	694	U	C4'-O4'	-5.93	1.37	1.45
12	B	1116	G	C6-N1	5.93	1.43	1.39
12	B	2723	C	N1-C6	-5.93	1.33	1.37
12	B	73	A	C2'-C1'	-5.93	1.46	1.53
12	B	93	G	C2-N2	-5.93	1.28	1.34
12	B	695	G	O3'-P	-5.93	1.54	1.61
12	B	1489	C	C2'-C1'	-5.93	1.46	1.53
12	B	2060	A	C4'-O4'	-5.93	1.37	1.45
15	E	179	SER	CA-CB	5.93	1.61	1.52
12	B	1465	G	C5-C6	-5.93	1.36	1.42
12	B	2184	A	C2'-C1'	-5.93	1.46	1.53
12	B	2190	G	C2-N3	5.93	1.37	1.32
12	B	133	U	C1'-N1	5.93	1.57	1.48
12	B	1647	U	P-O5'	-5.93	1.53	1.59
12	B	2507	C	C3'-C2'	-5.93	1.46	1.52
16	F	132	ARG	CZ-NH2	5.93	1.40	1.33
12	B	598	U	C5-C6	5.93	1.39	1.34
12	B	850	U	C2-N3	5.93	1.41	1.37
12	B	1241	A	N9-C4	5.93	1.41	1.37
12	B	2052	A	C2-N3	5.93	1.38	1.33
12	B	2230	G	N9-C4	5.93	1.42	1.38
12	B	2513	A	C6-N6	5.93	1.38	1.33
12	B	2737	G	C6-N1	5.93	1.43	1.39
12	B	327	G	N7-C5	-5.93	1.35	1.39
12	B	509	C	N1-C6	5.93	1.40	1.37
12	B	2090	A	N1-C2	-5.93	1.29	1.34
12	B	2447	G	C2'-O2'	-5.93	1.33	1.41
12	B	2768	U	P-O5'	-5.93	1.53	1.59
12	B	115	C	C5-C6	-5.92	1.29	1.34
12	B	252	G	C5-C6	-5.92	1.36	1.42
12	B	713	G	C2-N3	5.92	1.37	1.32
12	B	1594	U	C2-N3	5.92	1.41	1.37
12	B	2023	C	C2-O2	-5.92	1.19	1.24
12	B	2143	C	C2'-C1'	-5.92	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	12	C	C4'-C3'	5.92	1.59	1.53
12	B	2232	C	C2-N3	5.92	1.40	1.35
12	B	2541	A	C5-C6	5.92	1.46	1.41
12	B	2553	G	N7-C5	-5.92	1.35	1.39
12	B	67	U	C3'-C2'	5.92	1.59	1.52
12	B	402	A	C5'-C4'	5.92	1.58	1.51
12	B	456	C	O3'-P	-5.92	1.54	1.61
12	B	468	G	C2-N2	5.92	1.40	1.34
12	B	1515	A	C4'-C3'	-5.92	1.46	1.52
12	B	1613	G	C4'-O4'	5.92	1.53	1.45
12	B	2101	A	C8-N7	5.92	1.35	1.31
12	B	2277	G	N9-C4	-5.92	1.33	1.38
12	B	2374	C	C2'-C1'	-5.92	1.46	1.53
12	B	2802	G	N1-C2	5.92	1.42	1.37
23	M	6	ARG	CZ-NH1	5.92	1.40	1.33
12	B	292	U	C4'-O4'	-5.92	1.37	1.45
12	B	1603	A	O3'-P	-5.92	1.54	1.61
12	B	2159	G	C5'-C4'	5.92	1.58	1.51
12	B	647	G	C6-N1	5.92	1.43	1.39
12	B	1533	C	C2-N3	5.92	1.40	1.35
12	B	1623	G	C6-N1	5.92	1.43	1.39
12	B	1992	G	N7-C5	-5.92	1.35	1.39
12	B	1147	A	C5-C6	-5.92	1.35	1.41
12	B	1152	C	C4-N4	5.92	1.39	1.33
12	B	1743	G	C5-C6	-5.92	1.36	1.42
12	B	2487	G	C8-N7	5.92	1.34	1.30
12	B	1458	U	C5-C6	5.92	1.39	1.34
12	B	1941	C	C4-C5	5.92	1.47	1.43
28	R	55	ASP	N-CA	-5.92	1.34	1.46
12	B	220	G	O3'-P	-5.91	1.54	1.61
12	B	435	C	C3'-O3'	5.91	1.50	1.42
12	B	1043	C	N1-C6	-5.91	1.33	1.37
12	B	1198	U	C5'-C4'	5.91	1.58	1.51
12	B	1655	A	P-O5'	-5.91	1.53	1.59
12	B	1671	U	C3'-C2'	-5.91	1.46	1.52
12	B	1674	G	P-O5'	-5.91	1.53	1.59
12	B	1924	C	N3-C4	5.91	1.38	1.33
12	B	2105	U	N3-C4	5.91	1.43	1.38
12	B	2579	C	O4'-C1'	-5.91	1.33	1.41
12	B	1013	C	O4'-C1'	5.91	1.49	1.41
12	B	2284	A	C8-N7	-5.91	1.27	1.31
12	B	2415	G	N1-C2	5.91	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	115	A	P-O5'	5.91	1.65	1.59
12	B	468	G	C6-N1	5.91	1.43	1.39
12	B	724	U	C2'-C1'	-5.91	1.46	1.53
12	B	974	G	C6-N1	5.91	1.43	1.39
12	B	1445	G	N7-C5	-5.91	1.35	1.39
12	B	1839	G	C2-N3	5.91	1.37	1.32
12	B	2027	G	C5'-C4'	5.91	1.58	1.51
12	B	2093	G	O3'-P	-5.91	1.54	1.61
12	B	2252	G	C5'-C4'	5.91	1.58	1.51
12	B	356	G	O3'-P	-5.91	1.54	1.61
12	B	388	G	N7-C5	-5.91	1.35	1.39
12	B	1281	G	C5'-C4'	5.91	1.58	1.51
12	B	1809	A	C2-N3	-5.91	1.28	1.33
12	B	2117	A	N7-C5	5.91	1.42	1.39
12	B	2465	C	C4-N4	5.91	1.39	1.33
12	B	2763	G	N9-C8	-5.91	1.33	1.37
12	B	2136	G	C2-N3	5.91	1.37	1.32
12	B	2363	G	N7-C5	5.91	1.42	1.39
12	B	2581	G	N7-C5	-5.91	1.35	1.39
12	B	542	C	O4'-C1'	5.90	1.49	1.41
12	B	1731	G	C4'-O4'	-5.90	1.37	1.45
12	B	253	C	C2-O2	5.90	1.29	1.24
12	B	472	A	C5-C4	5.90	1.42	1.38
12	B	545	U	N3-C4	5.90	1.43	1.38
12	B	1122	G	C1'-N9	5.90	1.57	1.48
12	B	1985	C	C4'-C3'	-5.90	1.46	1.52
12	B	12	U	C4-O4	5.90	1.28	1.23
12	B	436	C	C4-N4	5.90	1.39	1.33
12	B	886	A	C6-N6	5.90	1.38	1.33
12	B	1093	G	P-O5'	-5.90	1.53	1.59
12	B	1382	G	C2'-C1'	-5.90	1.46	1.53
12	B	1626	A	C6-N6	5.90	1.38	1.33
12	B	2594	C	C5'-C4'	5.90	1.58	1.51
12	B	2744	G	N9-C4	-5.90	1.33	1.38
12	B	75	G	C8-N7	-5.90	1.27	1.30
12	B	81	G	P-O5'	-5.90	1.53	1.59
12	B	242	G	C5'-C4'	5.90	1.58	1.51
12	B	1288	G	O3'-P	-5.90	1.54	1.61
12	B	1503	A	N9-C8	5.90	1.42	1.37
12	B	1566	A	C6-N6	5.90	1.38	1.33
12	B	2458	G	N7-C5	-5.90	1.35	1.39
12	B	30	G	C5-C4	5.90	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	959	A	N9-C8	-5.90	1.33	1.37
12	B	2253	G	C5'-C4'	5.90	1.58	1.51
12	B	2792	A	N1-C2	-5.90	1.29	1.34
11	A	86	G	C5-C6	-5.89	1.36	1.42
12	B	348	A	N7-C5	-5.89	1.35	1.39
12	B	2593	U	C2'-O2'	-5.89	1.33	1.41
12	B	344	A	C6-N6	5.89	1.38	1.33
12	B	400	G	C6-O6	-5.89	1.18	1.24
12	B	437	U	N3-C4	5.89	1.43	1.38
12	B	1097	U	P-O5'	-5.89	1.53	1.59
12	B	1185	G	C6-N1	5.89	1.43	1.39
12	B	2310	C	C2-N3	-5.89	1.31	1.35
12	B	2879	A	C6-N6	5.89	1.38	1.33
12	B	2025	C	C5'-C4'	5.89	1.58	1.51
12	B	349	U	N1-C6	5.89	1.43	1.38
12	B	1121	C	C4-C5	5.89	1.47	1.43
12	B	1477	A	C5-C4	5.89	1.42	1.38
12	B	2248	C	C2-O2	5.89	1.29	1.24
12	B	2284	A	C5'-C4'	5.89	1.58	1.51
12	B	2677	G	C2-N2	5.89	1.40	1.34
12	B	2686	G	O3'-P	-5.89	1.54	1.61
26	P	52	ARG	CZ-NH1	5.89	1.40	1.33
12	B	2367	G	N7-C5	-5.89	1.35	1.39
11	A	101	A	C2'-C1'	-5.89	1.46	1.53
12	B	79	C	C3'-C2'	5.89	1.59	1.52
12	B	409	G	C2'-C1'	-5.89	1.46	1.53
12	B	669	G	C3'-O3'	5.89	1.50	1.42
12	B	1128	G	C6-N1	5.89	1.43	1.39
12	B	1440	U	C5-C6	5.89	1.39	1.34
12	B	2291	U	C4-C5	5.89	1.48	1.43
25	O	25	ARG	NE-CZ	5.89	1.40	1.33
11	A	100	G	C8-N7	5.88	1.34	1.30
12	B	859	G	C8-N7	5.88	1.34	1.30
12	B	1374	G	N3-C4	5.88	1.39	1.35
12	B	1780	A	C5-C4	5.88	1.42	1.38
12	B	2159	G	O3'-P	-5.88	1.54	1.61
12	B	2403	C	C5'-C4'	-5.88	1.44	1.51
12	B	157	C	C1'-N1	5.88	1.57	1.48
12	B	1954	G	C3'-C2'	5.88	1.59	1.52
12	B	2443	C	N3-C4	5.88	1.38	1.33
12	B	2657	A	C5-C6	5.88	1.46	1.41
12	B	1407	G	P-O5'	-5.88	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2200	C	N1-C6	5.88	1.40	1.37
12	B	2848	G	C2-N2	5.88	1.40	1.34
12	B	258	G	C5-C4	5.88	1.42	1.38
12	B	939	G	C3'-C2'	5.88	1.59	1.52
12	B	1534	U	C2'-C1'	5.88	1.59	1.53
12	B	116	C	C4'-O4'	-5.88	1.38	1.45
12	B	139	U	O3'-P	-5.88	1.54	1.61
12	B	234	U	N1-C6	5.88	1.43	1.38
12	B	422	A	N3-C4	5.88	1.38	1.34
12	B	1137	G	O3'-P	-5.88	1.54	1.61
12	B	1395	A	N7-C5	-5.88	1.35	1.39
12	B	1895	C	C4'-C3'	5.88	1.59	1.53
12	B	1930	G	C2-N3	5.88	1.37	1.32
12	B	2025	C	P-O5'	-5.88	1.53	1.59
15	E	127	GLU	CG-CD	5.88	1.60	1.51
17	G	57	TYR	N-CA	-5.88	1.34	1.46
22	L	2	ARG	NE-CZ	5.88	1.40	1.33
12	B	40	U	C1'-N1	5.88	1.57	1.48
12	B	191	A	C2-N3	5.88	1.38	1.33
12	B	872	U	C2-N3	5.88	1.41	1.37
12	B	1310	G	N9-C8	-5.88	1.33	1.37
12	B	1772	A	P-O5'	-5.88	1.53	1.59
12	B	1826	G	C4'-O4'	-5.88	1.38	1.45
12	B	2492	U	N3-C4	5.88	1.43	1.38
12	B	2532	G	N9-C4	5.88	1.42	1.38
12	B	2585	U	N1-C2	5.88	1.43	1.38
12	B	2661	G	C4'-C3'	-5.88	1.46	1.52
12	B	2778	A	C2'-C1'	-5.88	1.46	1.53
31	U	24	VAL	CA-CB	-5.88	1.42	1.54
12	B	731	C	C4-N4	5.88	1.39	1.33
12	B	1720	U	O3'-P	-5.88	1.54	1.61
12	B	2188	U	C2'-C1'	-5.88	1.46	1.53
12	B	2755	C	P-O5'	-5.88	1.53	1.59
12	B	67	U	N3-C4	5.87	1.43	1.38
12	B	561	G	N7-C5	-5.87	1.35	1.39
12	B	678	C	C4-N4	5.87	1.39	1.33
12	B	926	G	N9-C8	-5.87	1.33	1.37
12	B	1703	G	N7-C5	-5.87	1.35	1.39
12	B	1708	C	C2'-C1'	-5.87	1.46	1.53
12	B	2381	A	O3'-P	-5.87	1.54	1.61
11	A	33	G	C2-N2	5.87	1.40	1.34
12	B	556	A	N9-C4	-5.87	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1293	C	C4'-C3'	-5.87	1.46	1.52
12	B	1549	A	N9-C8	-5.87	1.33	1.37
12	B	2308	G	C3'-O3'	5.87	1.50	1.42
11	A	13	G	N9-C4	-5.87	1.33	1.38
12	B	406	G	N7-C5	-5.87	1.35	1.39
12	B	630	G	P-O5'	-5.87	1.53	1.59
12	B	916	G	C2-N3	5.87	1.37	1.32
12	B	1194	A	P-O5'	5.87	1.65	1.59
12	B	2209	G	N1-C2	5.87	1.42	1.37
12	B	2599	G	N3-C4	5.87	1.39	1.35
15	E	21	ARG	NE-CZ	5.87	1.40	1.33
11	A	107	G	C6-N1	5.87	1.43	1.39
12	B	640	C	O3'-P	-5.87	1.54	1.61
12	B	1640	A	O3'-P	-5.87	1.54	1.61
12	B	381	G	P-O5'	-5.87	1.53	1.59
12	B	383	C	P-O5'	5.87	1.65	1.59
12	B	922	C	P-O5'	-5.87	1.53	1.59
12	B	2821	A	C5-C4	5.87	1.42	1.38
21	K	105	ARG	CZ-NH2	5.87	1.40	1.33
12	B	514	A	C6-N1	5.86	1.39	1.35
12	B	653	U	C2-O2	5.86	1.27	1.22
12	B	1701	A	N3-C4	-5.86	1.31	1.34
12	B	2093	G	N1-C2	5.86	1.42	1.37
12	B	2265	U	C2'-C1'	-5.86	1.46	1.53
12	B	2270	A	N9-C4	-5.86	1.34	1.37
12	B	2277	G	C3'-O3'	5.86	1.50	1.42
12	B	40	U	O3'-P	-5.86	1.54	1.61
12	B	322	A	C6-N1	5.86	1.39	1.35
12	B	1983	G	C2-N3	5.86	1.37	1.32
12	B	2392	A	N7-C5	-5.86	1.35	1.39
12	B	273	G	N7-C5	5.86	1.42	1.39
12	B	300	A	C8-N7	-5.86	1.27	1.31
12	B	324	A	P-O5'	-5.86	1.53	1.59
12	B	562	U	C3'-C2'	-5.86	1.46	1.52
12	B	645	C	C4-C5	5.86	1.47	1.43
12	B	802	A	N1-C2	-5.86	1.29	1.34
12	B	829	A	C8-N7	-5.86	1.27	1.31
12	B	1256	G	N3-C4	-5.86	1.31	1.35
12	B	1385	A	C8-N7	-5.86	1.27	1.31
12	B	1488	C	N3-C4	5.86	1.38	1.33
12	B	2039	U	O3'-P	-5.86	1.54	1.61
12	B	2163	A	N7-C5	-5.86	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2312	U	C4'-C3'	-5.86	1.46	1.52
12	B	2420	C	C4-N4	5.86	1.39	1.33
12	B	2740	A	C2'-C1'	-5.86	1.47	1.53
12	B	1546	G	C4'-O4'	-5.86	1.38	1.45
12	B	1662	U	C2-N3	5.86	1.41	1.37
12	B	2285	C	C2'-C1'	-5.86	1.47	1.53
11	A	31	C	C4'-C3'	-5.86	1.46	1.52
12	B	242	G	N3-C4	-5.86	1.31	1.35
12	B	319	G	N7-C5	-5.86	1.35	1.39
12	B	1435	G	N1-C2	5.86	1.42	1.37
12	B	1907	G	C6-N1	5.86	1.43	1.39
12	B	78	U	C3'-C2'	-5.86	1.46	1.52
12	B	452	G	N7-C5	-5.86	1.35	1.39
12	B	490	C	C4'-C3'	5.86	1.59	1.53
12	B	777	G	C4'-C3'	-5.86	1.46	1.52
12	B	1734	G	C4'-C3'	5.86	1.59	1.53
12	B	1934	C	C4-N4	5.86	1.39	1.33
12	B	2606	C	C3'-C2'	5.86	1.59	1.52
12	B	2839	G	N3-C4	-5.86	1.31	1.35
12	B	233	A	N1-C2	-5.85	1.29	1.34
12	B	1739	A	C8-N7	-5.85	1.27	1.31
22	L	136	GLU	CG-CD	5.85	1.60	1.51
12	B	851	C	N3-C4	5.85	1.38	1.33
12	B	1111	A	C6-N6	5.85	1.38	1.33
12	B	1286	A	N7-C5	-5.85	1.35	1.39
12	B	1487	U	C4'-O4'	5.85	1.53	1.45
12	B	245	G	C2-N3	5.85	1.37	1.32
12	B	1545	A	N7-C5	-5.85	1.35	1.39
12	B	764	A	C5-C4	-5.85	1.34	1.38
12	B	1496	A	N3-C4	5.85	1.38	1.34
12	B	1938	A	N3-C4	-5.85	1.31	1.34
12	B	1975	G	C8-N7	-5.85	1.27	1.30
12	B	2188	U	C5'-C4'	5.85	1.58	1.51
12	B	2488	G	C2'-C1'	-5.85	1.47	1.53
12	B	2736	A	C2-N3	5.85	1.38	1.33
12	B	657	U	C4'-C3'	-5.85	1.46	1.52
12	B	1008	A	C5-C6	5.85	1.46	1.41
12	B	1350	C	C3'-C2'	-5.85	1.46	1.52
12	B	1560	G	N1-C2	5.85	1.42	1.37
12	B	1589	U	N3-C4	5.85	1.43	1.38
12	B	1842	G	C5-C6	-5.85	1.36	1.42
12	B	2134	A	C6-N6	5.85	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2148	G	N7-C5	5.85	1.42	1.39
21	K	109	SER	CA-CB	5.85	1.61	1.52
12	B	1038	G	N1-C2	5.85	1.42	1.37
12	B	1194	A	N1-C2	5.85	1.39	1.34
12	B	2108	A	C5-C6	-5.85	1.35	1.41
12	B	2564	A	C3'-C2'	5.85	1.59	1.52
11	A	52	A	N7-C5	-5.84	1.35	1.39
12	B	127	A	O3'-P	-5.84	1.54	1.61
12	B	195	A	C5'-C4'	5.84	1.58	1.51
12	B	248	G	C2-N2	5.84	1.40	1.34
12	B	410	G	C8-N7	-5.84	1.27	1.30
12	B	571	U	C1'-N1	5.84	1.57	1.48
12	B	696	G	C6-N1	5.84	1.43	1.39
12	B	829	A	O5'-C5'	5.84	1.53	1.44
12	B	836	G	N7-C5	-5.84	1.35	1.39
12	B	1202	G	C2'-C1'	-5.84	1.47	1.53
12	B	1329	U	C5-C6	-5.84	1.28	1.34
12	B	1766	G	C4'-O4'	-5.84	1.38	1.45
12	B	1786	A	C6-N1	5.84	1.39	1.35
31	U	93	ARG	CZ-NH2	5.84	1.40	1.33
12	B	244	A	N7-C5	-5.84	1.35	1.39
12	B	1402	U	C4-C5	-5.84	1.38	1.43
11	A	67	G	C3'-C2'	-5.84	1.46	1.52
12	B	748	G	N3-C4	-5.84	1.31	1.35
12	B	949	G	O4'-C1'	5.84	1.49	1.41
12	B	1288	G	P-O5'	-5.84	1.53	1.59
12	B	2117	A	C6-N6	5.84	1.38	1.33
13	C	176	ARG	CZ-NH1	5.84	1.40	1.33
12	B	1145	C	C2-N3	5.84	1.40	1.35
12	B	1309	G	C5-C6	-5.84	1.36	1.42
12	B	2216	G	O3'-P	-5.84	1.54	1.61
12	B	2592	G	O4'-C1'	5.84	1.49	1.41
12	B	2872	A	O3'-P	-5.84	1.54	1.61
12	B	213	A	C4'-C3'	-5.84	1.46	1.52
12	B	2097	A	C2'-C1'	-5.84	1.47	1.53
12	B	2516	A	C8-N7	-5.84	1.27	1.31
12	B	2642	G	P-O5'	-5.84	1.53	1.59
11	A	60	C	C2-O2	-5.84	1.19	1.24
12	B	345	A	C5-C4	-5.84	1.34	1.38
12	B	773	U	C2-N3	5.84	1.41	1.37
12	B	2266	A	N1-C2	-5.84	1.29	1.34
12	B	2490	G	C2'-C1'	-5.84	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2729	G	C2-N3	5.84	1.37	1.32
14	D	179	ARG	CD-NE	5.84	1.56	1.46
12	B	328	U	C2-O2	5.83	1.27	1.22
12	B	541	A	C6-N6	5.83	1.38	1.33
12	B	1126	A	N9-C4	-5.83	1.34	1.37
12	B	1287	A	C6-N1	5.83	1.39	1.35
12	B	1719	G	O3'-P	-5.83	1.54	1.61
11	A	20	G	C4'-O4'	5.83	1.53	1.45
12	B	374	A	P-O5'	-5.83	1.53	1.59
12	B	461	C	C2-N3	5.83	1.40	1.35
12	B	829	A	N9-C8	-5.83	1.33	1.37
12	B	1111	A	C5-C4	5.83	1.42	1.38
12	B	1853	A	P-O5'	-5.83	1.53	1.59
12	B	1878	G	C2-N2	5.83	1.40	1.34
12	B	2808	G	N9-C4	5.83	1.42	1.38
12	B	359	G	C6-N1	5.83	1.43	1.39
12	B	649	G	C6-O6	5.83	1.29	1.24
12	B	753	A	N9-C4	5.83	1.41	1.37
12	B	1047	G	N1-C2	5.83	1.42	1.37
12	B	1393	A	C8-N7	-5.83	1.27	1.31
10	9	136	ARG	NE-CZ	5.83	1.40	1.33
12	B	680	C	N3-C4	5.83	1.38	1.33
12	B	718	A	N3-C4	-5.83	1.31	1.34
12	B	1332	G	C2-N3	5.83	1.37	1.32
12	B	1353	A	N3-C4	5.83	1.38	1.34
12	B	1665	A	N3-C4	-5.83	1.31	1.34
11	A	75	G	C8-N7	-5.83	1.27	1.30
11	A	98	G	N3-C4	-5.83	1.31	1.35
12	B	197	A	C6-N6	5.83	1.38	1.33
12	B	756	A	C8-N7	-5.83	1.27	1.31
12	B	2565	A	C1'-N9	-5.83	1.38	1.46
12	B	2584	U	O5'-C5'	-5.83	1.33	1.42
12	B	2591	C	C5'-C4'	5.83	1.58	1.51
12	B	283	G	N1-C2	5.83	1.42	1.37
12	B	1911	U	P-O5'	-5.83	1.53	1.59
11	A	14	U	C2'-C1'	-5.83	1.47	1.53
11	A	110	C	O3'-P	5.83	1.68	1.61
12	B	39	G	C6-N1	-5.83	1.35	1.39
12	B	177	G	N1-C2	5.83	1.42	1.37
12	B	303	G	N9-C8	5.83	1.42	1.37
12	B	431	U	N1-C2	5.83	1.43	1.38
12	B	575	A	C2'-C1'	-5.83	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	745	G	N7-C5	-5.83	1.35	1.39
12	B	1374	G	C2-N2	5.83	1.40	1.34
12	B	2592	G	P-O5'	5.83	1.65	1.59
12	B	1222	U	C3'-C2'	-5.82	1.46	1.52
12	B	1815	A	C6-N1	5.82	1.39	1.35
12	B	2800	A	C5-C6	-5.82	1.35	1.41
18	H	9	VAL	CB-CG1	5.82	1.65	1.52
12	B	71	A	O3'-P	-5.82	1.54	1.61
12	B	547	A	C6-N6	5.82	1.38	1.33
12	B	1052	C	C4-C5	5.82	1.47	1.43
12	B	1059	G	C2-N3	5.82	1.37	1.32
12	B	1271	G	O3'-P	-5.82	1.54	1.61
12	B	1331	G	C2-N2	5.82	1.40	1.34
12	B	1971	U	C3'-C2'	5.82	1.59	1.52
12	B	2176	A	C4'-C3'	5.82	1.59	1.53
12	B	2578	G	C6-O6	-5.82	1.19	1.24
6	5	150	ALA	N-CA	-5.82	1.34	1.46
12	B	435	C	O3'-P	-5.82	1.54	1.61
12	B	482	A	C6-N1	5.82	1.39	1.35
12	B	1027	A	C6-N6	5.82	1.38	1.33
12	B	1117	C	C2-N3	5.82	1.40	1.35
12	B	1365	A	C3'-O3'	5.82	1.50	1.42
12	B	2361	G	N9-C4	5.82	1.42	1.38
12	B	2430	A	N9-C8	-5.82	1.33	1.37
12	B	2747	G	C2-N3	5.82	1.37	1.32
13	C	102	TYR	CG-CD2	5.82	1.46	1.39
27	Q	29	ARG	CZ-NH1	5.82	1.40	1.33
12	B	697	G	N7-C5	-5.82	1.35	1.39
12	B	793	A	C6-N6	5.82	1.38	1.33
12	B	1131	G	O3'-P	-5.82	1.54	1.61
12	B	1405	U	C4'-C3'	-5.82	1.46	1.52
12	B	1916	A	P-O5'	-5.82	1.53	1.59
12	B	74	A	N3-C4	-5.82	1.31	1.34
12	B	674	G	C6-N1	5.82	1.43	1.39
12	B	636	G	C2-N2	5.82	1.40	1.34
12	B	1387	A	N9-C4	5.82	1.41	1.37
12	B	2293	G	N9-C8	5.82	1.42	1.37
12	B	2718	G	C4'-C3'	-5.82	1.46	1.52
28	R	52	PRO	CA-C	-5.82	1.41	1.52
33	Y	10	ARG	NE-CZ	5.82	1.40	1.33
12	B	1270	C	C5'-C4'	5.81	1.58	1.51
12	B	2774	C	P-O5'	-5.81	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	652	U	C2'-C1'	-5.81	1.47	1.53
12	B	930	G	C5-C6	-5.81	1.36	1.42
12	B	1623	G	C2-N3	-5.81	1.28	1.32
12	B	1822	C	C3'-C2'	-5.81	1.46	1.52
12	B	2101	A	C2'-C1'	-5.81	1.47	1.53
12	B	2112	G	C5-C6	-5.81	1.36	1.42
12	B	2819	G	C4'-C3'	5.81	1.59	1.53
12	B	2896	C	N3-C4	5.81	1.38	1.33
16	F	101	ARG	CZ-NH1	5.81	1.40	1.33
12	B	831	G	C2'-C1'	-5.81	1.47	1.53
11	A	42	C	C4'-C3'	-5.81	1.46	1.52
11	A	91	C	O3'-P	-5.81	1.54	1.61
12	B	400	G	N3-C4	5.81	1.39	1.35
12	B	977	G	C6-N1	5.81	1.43	1.39
12	B	1137	G	C2'-C1'	-5.81	1.47	1.53
12	B	1439	A	N7-C5	-5.81	1.35	1.39
12	B	1667	G	C5-C4	5.81	1.42	1.38
12	B	1723	G	N1-C2	5.81	1.42	1.37
12	B	1747	U	C2'-C1'	-5.81	1.47	1.53
12	B	2104	C	N1-C6	5.81	1.40	1.37
23	M	81	ARG	NE-CZ	5.81	1.40	1.33
12	B	279	A	C8-N7	-5.81	1.27	1.31
12	B	1156	A	C4'-C3'	5.81	1.59	1.53
12	B	1622	G	N1-C2	5.81	1.42	1.37
12	B	2145	C	O4'-C1'	5.81	1.49	1.41
12	B	2315	G	N9-C8	-5.81	1.33	1.37
12	B	143	C	C4-C5	5.80	1.47	1.43
12	B	802	A	N3-C4	-5.80	1.31	1.34
12	B	971	G	C4'-C3'	-5.80	1.46	1.52
12	B	2213	U	C4-C5	5.80	1.48	1.43
12	B	2570	G	C1'-N9	5.80	1.57	1.48
12	B	2593	U	P-O5'	-5.80	1.53	1.59
12	B	2569	G	N7-C5	5.80	1.42	1.39
10	9	130	PHE	CA-CB	5.80	1.66	1.53
11	A	19	C	O3'-P	-5.80	1.54	1.61
12	B	376	G	C8-N7	-5.80	1.27	1.30
12	B	1618	A	C2'-C1'	-5.80	1.47	1.53
12	B	2816	G	C5-C4	-5.80	1.34	1.38
12	B	2847	U	N3-C4	5.80	1.43	1.38
29	S	101	SER	CA-CB	5.80	1.61	1.52
1	0	18	SER	CA-CB	5.80	1.61	1.52
12	B	364	C	N1-C6	5.80	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1469	A	P-O5'	5.80	1.65	1.59
12	B	1512	C	O4'-C1'	5.80	1.49	1.41
12	B	1567	G	N7-C5	-5.80	1.35	1.39
12	B	610	C	N3-C4	5.80	1.38	1.33
12	B	1262	A	C2-N3	5.80	1.38	1.33
12	B	1976	U	N3-C4	5.80	1.43	1.38
10	9	60	ARG	CZ-NH2	5.80	1.40	1.33
12	B	624	C	C2-O2	5.80	1.29	1.24
12	B	938	G	O3'-P	-5.80	1.54	1.61
12	B	1228	G	C4'-C3'	5.80	1.59	1.53
12	B	1601	G	N3-C4	-5.80	1.31	1.35
12	B	1620	G	N1-C2	5.80	1.42	1.37
12	B	1802	A	N3-C4	-5.80	1.31	1.34
12	B	1848	A	N9-C8	5.80	1.42	1.37
12	B	2098	U	C2-N3	5.80	1.41	1.37
12	B	877	A	N9-C4	-5.79	1.34	1.37
12	B	991	C	P-O5'	-5.79	1.53	1.59
12	B	1385	A	N3-C4	5.79	1.38	1.34
12	B	1634	A	P-O5'	-5.79	1.53	1.59
12	B	1682	G	N3-C4	5.79	1.39	1.35
11	A	38	C	C2-N3	5.79	1.40	1.35
12	B	19	A	C8-N7	5.79	1.35	1.31
12	B	151	C	C2'-C1'	-5.79	1.47	1.53
12	B	387	U	N3-C4	5.79	1.43	1.38
12	B	483	A	C5-C6	-5.79	1.35	1.41
12	B	669	G	O3'-P	-5.79	1.54	1.61
12	B	713	G	N9-C8	5.79	1.42	1.37
12	B	874	G	C2'-C1'	-5.79	1.47	1.53
12	B	1359	A	C5'-C4'	5.79	1.58	1.51
12	B	1489	C	N1-C2	5.79	1.46	1.40
12	B	1941	C	C4'-O4'	-5.79	1.38	1.45
12	B	2034	U	C2-N3	5.79	1.41	1.37
12	B	2410	G	N1-C2	5.79	1.42	1.37
12	B	2445	G	N3-C4	-5.79	1.31	1.35
12	B	1394	U	O4'-C1'	-5.79	1.34	1.41
12	B	1507	C	N1-C6	-5.79	1.33	1.37
22	L	85	VAL	CB-CG2	5.79	1.65	1.52
12	B	321	U	O3'-P	-5.79	1.54	1.61
12	B	331	C	C1'-N1	5.79	1.57	1.48
12	B	868	U	C4-O4	-5.79	1.19	1.23
12	B	1706	C	O3'-P	-5.79	1.54	1.61
12	B	2545	G	N1-C2	5.79	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	208	C	C3'-O3'	-5.79	1.34	1.42
12	B	516	C	C4-C5	5.79	1.47	1.43
12	B	941	A	C6-N1	5.79	1.39	1.35
12	B	1417	C	N1-C2	5.79	1.46	1.40
12	B	1430	G	N7-C5	-5.79	1.35	1.39
12	B	1656	C	C4-N4	5.79	1.39	1.33
12	B	2453	A	C6-N6	5.79	1.38	1.33
12	B	1119	U	C3'-O3'	5.79	1.50	1.42
12	B	1689	A	C5-C4	5.79	1.42	1.38
12	B	574	A	N9-C4	-5.79	1.34	1.37
12	B	1423	G	C5-C4	-5.79	1.34	1.38
12	B	1436	G	N3-C4	-5.79	1.31	1.35
12	B	1643	G	C2-N3	5.79	1.37	1.32
12	B	1686	C	N1-C6	5.79	1.40	1.37
12	B	2028	U	C2-O2	5.79	1.27	1.22
12	B	2058	A	N3-C4	5.79	1.38	1.34
12	B	2119	A	C6-N6	5.79	1.38	1.33
12	B	2162	G	P-O5'	-5.79	1.53	1.59
12	B	2287	A	C2'-C1'	-5.79	1.47	1.53
12	B	2378	A	C5-C4	5.79	1.42	1.38
12	B	2424	C	C2'-O2'	-5.79	1.34	1.41
12	B	2454	G	O3'-P	-5.79	1.54	1.61
12	B	345	A	C2-N3	5.78	1.38	1.33
12	B	934	U	N3-C4	5.78	1.43	1.38
12	B	961	C	C4-N4	5.78	1.39	1.33
12	B	1053	C	C2'-C1'	-5.78	1.47	1.53
12	B	1308	A	C6-N6	5.78	1.38	1.33
12	B	1875	G	C8-N7	-5.78	1.27	1.30
12	B	2059	A	C5-C6	-5.78	1.35	1.41
12	B	121	G	N3-C4	-5.78	1.31	1.35
12	B	514	A	C3'-O3'	5.78	1.50	1.42
12	B	2582	G	N9-C8	-5.78	1.33	1.37
12	B	49	A	C4'-O4'	5.78	1.53	1.45
12	B	640	C	C4-N4	5.78	1.39	1.33
12	B	663	G	C5-C4	-5.78	1.34	1.38
12	B	778	G	N9-C8	5.78	1.41	1.37
12	B	1196	C	N3-C4	5.78	1.38	1.33
12	B	2189	U	C2'-C1'	-5.78	1.47	1.53
12	B	2223	G	C8-N7	5.78	1.34	1.30
12	B	2442	C	C2'-C1'	-5.78	1.47	1.53
12	B	458	G	C4'-O4'	-5.78	1.38	1.45
12	B	639	U	C4'-C3'	-5.78	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	780	G	C4'-O4'	-5.78	1.38	1.45
12	B	1425	G	C2-N3	5.78	1.37	1.32
12	B	2495	G	C5'-C4'	5.78	1.58	1.51
22	L	84	LYS	CD-CE	5.78	1.65	1.51
10	9	278	ARG	NE-CZ	5.78	1.40	1.33
12	B	62	U	C2-N3	5.78	1.41	1.37
12	B	131	A	C3'-O3'	-5.78	1.34	1.42
12	B	261	G	C3'-O3'	5.78	1.50	1.42
12	B	879	G	N7-C5	-5.78	1.35	1.39
12	B	1055	G	N1-C2	5.78	1.42	1.37
12	B	1959	G	N3-C4	5.78	1.39	1.35
12	B	2331	G	N9-C8	5.78	1.41	1.37
12	B	2444	G	N9-C8	5.78	1.41	1.37
2	1	62	GLY	CA-C	-5.78	1.42	1.51
12	B	307	G	C6-O6	5.78	1.29	1.24
12	B	339	U	C2-N3	5.78	1.41	1.37
12	B	439	A	C5-C6	-5.78	1.35	1.41
12	B	641	U	N3-C4	5.78	1.43	1.38
12	B	726	G	C6-N1	5.78	1.43	1.39
12	B	958	U	C2'-C1'	-5.78	1.47	1.53
12	B	1059	G	N9-C8	-5.78	1.33	1.37
12	B	1104	C	C2-N3	5.78	1.40	1.35
12	B	1411	U	C4'-C3'	5.78	1.59	1.53
12	B	1413	A	C4'-C3'	5.78	1.59	1.53
12	B	1989	G	C8-N7	5.78	1.34	1.30
12	B	2893	A	C4'-C3'	5.78	1.59	1.53
12	B	206	U	C4-O4	5.77	1.28	1.23
12	B	2040	G	C2-N2	5.77	1.40	1.34
12	B	2702	G	P-O5'	-5.77	1.53	1.59
12	B	2819	G	C2-N3	5.77	1.37	1.32
12	B	166	U	C3'-O3'	5.77	1.50	1.42
12	B	408	G	C4'-O4'	5.77	1.53	1.45
12	B	770	G	N7-C5	-5.77	1.35	1.39
12	B	2326	C	N3-C4	5.77	1.38	1.33
12	B	2465	C	C3'-O3'	5.77	1.50	1.42
12	B	2544	G	P-O5'	-5.77	1.53	1.59
12	B	2551	C	P-O5'	-5.77	1.53	1.59
12	B	2778	A	C6-N6	5.77	1.38	1.33
18	H	97	ARG	CZ-NH1	5.77	1.40	1.33
20	J	4	PHE	CB-CG	5.77	1.61	1.51
12	B	456	C	C4'-C3'	-5.77	1.46	1.52
12	B	2722	G	N9-C4	-5.77	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	186	G	O4'-C1'	-5.77	1.34	1.41
12	B	326	G	N1-C2	5.77	1.42	1.37
12	B	1099	G	N1-C2	5.77	1.42	1.37
12	B	1977	A	C6-N6	5.77	1.38	1.33
12	B	413	C	C4-N4	5.77	1.39	1.33
12	B	1290	C	P-O5'	-5.77	1.53	1.59
12	B	1520	U	C5'-C4'	5.77	1.58	1.51
12	B	1530	G	C4'-C3'	-5.77	1.46	1.52
12	B	1692	U	C4-C5	-5.77	1.38	1.43
12	B	2020	A	P-O5'	-5.77	1.53	1.59
12	B	2022	U	C5'-C4'	5.77	1.58	1.51
27	Q	35	PHE	CB-CG	5.77	1.61	1.51
12	B	53	A	C6-N1	5.77	1.39	1.35
12	B	1488	C	C3'-O3'	5.77	1.50	1.42
11	A	63	C	C4-N4	5.76	1.39	1.33
12	B	60	G	N7-C5	-5.76	1.35	1.39
12	B	2102	G	C8-N7	5.76	1.34	1.30
12	B	2124	G	N7-C5	-5.76	1.35	1.39
12	B	2224	G	N1-C2	5.76	1.42	1.37
12	B	2486	C	C4-N4	5.76	1.39	1.33
18	H	50	ARG	CZ-NH1	5.76	1.40	1.33
12	B	1038	G	O3'-P	-5.76	1.54	1.61
12	B	309	A	C4'-O4'	-5.76	1.38	1.45
12	B	450	G	C5-C4	-5.76	1.34	1.38
12	B	520	G	C2-N3	5.76	1.37	1.32
12	B	603	A	C2'-C1'	-5.76	1.47	1.53
12	B	812	C	C5-C6	5.76	1.39	1.34
12	B	878	A	P-O5'	-5.76	1.53	1.59
12	B	1482	G	N7-C5	5.76	1.42	1.39
12	B	1884	G	C4'-O4'	-5.76	1.38	1.45
12	B	2010	G	N1-C2	5.76	1.42	1.37
12	B	2171	A	N3-C4	-5.76	1.31	1.34
12	B	2400	G	C5-C6	-5.76	1.36	1.42
12	B	2700	A	C6-N1	5.76	1.39	1.35
12	B	2843	G	C4'-C3'	-5.76	1.46	1.52
11	A	40	U	C4'-C3'	5.76	1.59	1.53
11	A	61	G	C5-C6	-5.76	1.36	1.42
12	B	226	A	N9-C8	-5.76	1.33	1.37
12	B	311	A	N9-C4	5.76	1.41	1.37
12	B	1256	G	C5-C4	5.76	1.42	1.38
12	B	1511	G	C5-C6	-5.76	1.36	1.42
12	B	2205	A	C4'-C3'	5.76	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	853	C	N3-C4	5.76	1.38	1.33
12	B	1583	A	C6-N1	5.76	1.39	1.35
12	B	2291	U	P-O5'	-5.76	1.53	1.59
25	O	10	ARG	NE-CZ	5.76	1.40	1.33
12	B	270	A	C6-N1	5.76	1.39	1.35
12	B	724	U	C3'-C2'	-5.76	1.46	1.52
12	B	785	G	C5-C4	5.76	1.42	1.38
12	B	1336	A	N3-C4	-5.76	1.31	1.34
12	B	1877	A	C5-C4	-5.76	1.34	1.38
12	B	1790	C	C5'-C4'	5.75	1.58	1.51
12	B	2115	G	C8-N7	-5.75	1.27	1.30
12	B	180	G	N9-C4	5.75	1.42	1.38
12	B	872	U	P-O5'	-5.75	1.53	1.59
12	B	1382	G	C6-O6	5.75	1.29	1.24
12	B	1642	G	C2-N3	5.75	1.37	1.32
12	B	1754	A	N3-C4	-5.75	1.31	1.34
12	B	2011	U	C4-O4	5.75	1.28	1.23
12	B	2857	G	N1-C2	5.75	1.42	1.37
12	B	777	G	C5-C6	-5.75	1.36	1.42
12	B	1484	U	P-O5'	-5.75	1.53	1.59
12	B	1523	U	C2-N3	5.75	1.41	1.37
12	B	1687	G	N1-C2	5.75	1.42	1.37
12	B	2897	U	O4'-C1'	5.75	1.49	1.41
31	U	93	ARG	CD-NE	5.75	1.56	1.46
12	B	54	G	C2'-C1'	-5.75	1.47	1.53
11	A	118	C	C4-N4	5.75	1.39	1.33
12	B	492	A	C5-C6	-5.75	1.35	1.41
12	B	1029	A	O3'-P	-5.75	1.54	1.61
12	B	1071	G	C6-N1	5.75	1.43	1.39
12	B	2555	U	C5'-C4'	5.75	1.58	1.51
12	B	2740	A	C3'-O3'	5.75	1.50	1.42
11	A	47	C	C4-N4	5.75	1.39	1.33
11	A	83	G	C5-C4	-5.75	1.34	1.38
12	B	1588	G	N9-C4	-5.75	1.33	1.38
12	B	2478	A	O3'-P	-5.75	1.54	1.61
12	B	2750	A	C2'-C1'	-5.75	1.47	1.53
12	B	68	G	N7-C5	-5.75	1.35	1.39
12	B	69	C	C4-N4	5.75	1.39	1.33
12	B	1908	C	C4-N4	5.75	1.39	1.33
12	B	2456	C	N3-C4	5.75	1.38	1.33
12	B	1264	A	N3-C4	-5.74	1.31	1.34
12	B	1380	G	C2-N3	5.74	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1458	U	N3-C4	5.74	1.43	1.38
12	B	1549	A	C6-N1	5.74	1.39	1.35
12	B	2114	A	C6-N1	5.74	1.39	1.35
12	B	2386	A	C3'-C2'	-5.74	1.46	1.52
12	B	2452	C	C4-N4	5.74	1.39	1.33
12	B	2436	G	C5-C4	5.74	1.42	1.38
29	S	95	ARG	CD-NE	5.74	1.56	1.46
12	B	31	C	O4'-C1'	5.74	1.49	1.41
12	B	103	A	N7-C5	-5.74	1.35	1.39
12	B	242	G	C5-C4	5.74	1.42	1.38
12	B	304	U	C2-O2	5.74	1.27	1.22
12	B	338	G	N9-C8	-5.74	1.33	1.37
12	B	993	G	C3'-O3'	5.74	1.50	1.42
12	B	1192	G	C5'-C4'	5.74	1.58	1.51
12	B	1204	A	N9-C8	-5.74	1.33	1.37
12	B	2534	A	N9-C8	-5.74	1.33	1.37
12	B	740	C	C4-N4	5.74	1.39	1.33
12	B	1163	G	N3-C4	-5.74	1.31	1.35
12	B	2116	G	O3'-P	-5.74	1.54	1.61
12	B	2331	G	N9-C4	5.74	1.42	1.38
12	B	2413	G	C5'-C4'	5.74	1.58	1.51
12	B	2598	A	N1-C2	5.74	1.39	1.34
16	F	82	TYR	CE1-CZ	5.74	1.46	1.38
12	B	868	U	P-O5'	-5.74	1.54	1.59
12	B	1486	U	C4-C5	5.74	1.48	1.43
12	B	1961	C	N3-C4	5.74	1.38	1.33
12	B	132	G	N9-C4	5.74	1.42	1.38
12	B	444	C	O3'-P	-5.74	1.54	1.61
12	B	612	G	O3'-P	-5.74	1.54	1.61
12	B	1441	G	C3'-O3'	5.74	1.50	1.42
12	B	1463	C	C5'-C4'	5.74	1.58	1.51
12	B	1494	A	C6-N6	5.74	1.38	1.33
12	B	2337	G	C2'-C1'	-5.74	1.47	1.53
12	B	2470	G	P-O5'	-5.74	1.54	1.59
12	B	2519	U	N3-C4	5.74	1.43	1.38
12	B	332	A	C5'-C4'	5.73	1.58	1.51
12	B	435	C	C4-N4	5.73	1.39	1.33
12	B	988	A	N1-C2	5.73	1.39	1.34
12	B	2576	G	C4'-O4'	5.73	1.53	1.45
12	B	2597	G	C2-N3	5.73	1.37	1.32
12	B	38	A	C3'-O3'	-5.73	1.34	1.42
12	B	552	U	C2-N3	5.73	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1025	G	C8-N7	-5.73	1.27	1.30
12	B	1259	G	C2'-C1'	-5.73	1.47	1.53
12	B	1883	U	C3'-C2'	-5.73	1.46	1.52
12	B	2066	C	C3'-C2'	-5.73	1.46	1.52
12	B	2090	A	P-O5'	-5.73	1.54	1.59
12	B	2141	G	C2-N3	5.73	1.37	1.32
12	B	2477	U	C2-O2	5.73	1.27	1.22
12	B	2715	C	N1-C6	5.73	1.40	1.37
12	B	296	U	C4-C5	-5.73	1.38	1.43
12	B	778	G	O3'-P	-5.73	1.54	1.61
12	B	1381	G	C5'-C4'	5.73	1.58	1.51
12	B	2450	A	N9-C8	-5.73	1.33	1.37
14	D	80	TRP	NE1-CE2	5.73	1.45	1.37
12	B	39	G	N3-C4	-5.73	1.31	1.35
12	B	377	G	C5-C4	5.73	1.42	1.38
12	B	400	G	C8-N7	-5.73	1.27	1.30
12	B	789	A	C5-C4	5.73	1.42	1.38
12	B	1675	C	N3-C4	-5.73	1.29	1.33
12	B	2892	G	C2'-C1'	-5.73	1.47	1.53
16	F	91	ARG	CZ-NH1	5.73	1.40	1.33
12	B	241	A	N7-C5	-5.73	1.35	1.39
12	B	960	A	C8-N7	-5.73	1.27	1.31
12	B	1319	C	N3-C4	5.73	1.38	1.33
12	B	1470	A	C4'-O4'	-5.73	1.38	1.45
12	B	1470	A	C5-C4	5.73	1.42	1.38
12	B	2375	G	N9-C8	5.73	1.41	1.37
12	B	2453	A	N7-C5	-5.73	1.35	1.39
12	B	2658	C	C5-C6	-5.73	1.29	1.34
11	A	106	G	N9-C4	-5.73	1.33	1.38
12	B	775	G	C2'-C1'	-5.73	1.47	1.53
10	9	228	GLY	CA-C	-5.72	1.42	1.51
12	B	108	G	N3-C4	-5.72	1.31	1.35
12	B	315	G	C5-C6	-5.72	1.36	1.42
12	B	380	G	P-O5'	-5.72	1.54	1.59
12	B	392	U	C4'-C3'	-5.72	1.46	1.52
12	B	1949	G	C5'-C4'	5.72	1.58	1.51
12	B	2303	G	N9-C8	5.72	1.41	1.37
12	B	2366	A	C4'-C3'	-5.72	1.46	1.52
12	B	2617	U	C2-N3	5.72	1.41	1.37
12	B	382	A	C8-N7	5.72	1.35	1.31
12	B	2023	C	C2'-C1'	-5.72	1.47	1.53
12	B	2638	G	C5'-C4'	5.72	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2796	U	O3'-P	-5.72	1.54	1.61
12	B	1597	A	C5-C4	-5.72	1.34	1.38
12	B	2387	U	N3-C4	5.72	1.43	1.38
12	B	2751	G	N7-C5	5.72	1.42	1.39
12	B	2753	A	C5'-C4'	5.72	1.58	1.51
12	B	2805	C	C4-C5	5.72	1.47	1.43
12	B	497	A	C8-N7	-5.72	1.27	1.31
12	B	571	U	C2'-C1'	-5.72	1.47	1.53
12	B	1455	G	C2'-O2'	5.72	1.49	1.41
12	B	1478	G	O3'-P	-5.72	1.54	1.61
12	B	1899	A	O3'-P	-5.72	1.54	1.61
12	B	2020	A	O3'-P	5.72	1.68	1.61
12	B	2393	U	C4'-O4'	5.72	1.52	1.45
12	B	592	A	P-O5'	-5.72	1.54	1.59
12	B	1036	G	O3'-P	-5.72	1.54	1.61
12	B	1063	G	N9-C4	5.72	1.42	1.38
12	B	1339	G	N1-C2	5.72	1.42	1.37
11	A	34	A	P-O5'	5.72	1.65	1.59
11	A	59	A	C2-N3	5.72	1.38	1.33
12	B	861	A	C2-N3	-5.72	1.28	1.33
12	B	1312	U	C4-C5	-5.72	1.38	1.43
12	B	1503	A	N9-C4	-5.72	1.34	1.37
12	B	2524	G	N9-C4	5.72	1.42	1.38
12	B	2141	G	C6-O6	-5.71	1.19	1.24
12	B	2478	A	N3-C4	-5.71	1.31	1.34
12	B	2759	G	C8-N7	-5.71	1.27	1.30
12	B	1731	G	O4'-C1'	5.71	1.49	1.41
12	B	2298	A	C4'-C3'	5.71	1.59	1.53
12	B	84	A	C5-C4	-5.71	1.34	1.38
12	B	665	U	C4-C5	5.71	1.48	1.43
12	B	1248	G	C2'-C1'	-5.71	1.47	1.53
12	B	1293	C	C1'-N1	5.71	1.57	1.48
12	B	1811	G	N3-C4	-5.71	1.31	1.35
12	B	2238	G	N1-C2	5.71	1.42	1.37
12	B	2391	G	C6-N1	5.71	1.43	1.39
12	B	2077	A	N7-C5	-5.71	1.35	1.39
12	B	2173	A	C2'-C1'	-5.71	1.47	1.53
11	A	34	A	C5'-C4'	5.71	1.58	1.51
12	B	1123	C	C5-C6	-5.71	1.29	1.34
12	B	1374	G	N1-C2	5.71	1.42	1.37
12	B	1376	C	C2'-C1'	-5.71	1.47	1.53
12	B	1814	G	C2-N2	5.71	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1945	G	C1'-N9	5.71	1.57	1.48
12	B	2181	U	C4-C5	5.71	1.48	1.43
12	B	2829	A	C8-N7	5.71	1.35	1.31
12	B	208	C	C5'-C4'	5.71	1.58	1.51
12	B	622	G	C2-N2	5.71	1.40	1.34
12	B	1493	C	N3-C4	5.71	1.38	1.33
12	B	1703	G	N3-C4	5.71	1.39	1.35
12	B	2184	A	N3-C4	-5.71	1.31	1.34
12	B	597	G	C6-N1	5.70	1.43	1.39
12	B	1228	G	N1-C2	5.70	1.42	1.37
12	B	1583	A	C8-N7	5.70	1.35	1.31
12	B	2544	G	C5'-C4'	5.70	1.58	1.51
12	B	1703	G	P-O5'	-5.70	1.54	1.59
12	B	2657	A	N9-C4	-5.70	1.34	1.37
12	B	449	A	C6-N6	5.70	1.38	1.33
12	B	2454	G	O4'-C1'	5.70	1.49	1.41
12	B	2577	A	C2'-O2'	5.70	1.49	1.41
12	B	2736	A	N3-C4	-5.70	1.31	1.34
12	B	2737	G	O4'-C1'	5.70	1.49	1.41
12	B	237	C	N3-C4	5.70	1.38	1.33
12	B	1399	C	C2'-O2'	-5.70	1.34	1.41
12	B	1923	U	C4'-C3'	5.70	1.59	1.53
12	B	2253	G	O3'-P	-5.70	1.54	1.61
12	B	2325	G	C6-N1	5.70	1.43	1.39
12	B	1898	U	P-O5'	-5.70	1.54	1.59
13	C	216	ARG	CZ-NH2	5.70	1.40	1.33
12	B	163	C	C4-C5	5.70	1.47	1.43
12	B	208	C	C3'-C2'	5.70	1.59	1.52
12	B	457	A	N9-C8	5.70	1.42	1.37
12	B	614	A	N3-C4	-5.70	1.31	1.34
12	B	725	G	C2-N2	5.70	1.40	1.34
12	B	2429	G	N1-C2	5.70	1.42	1.37
12	B	2512	C	P-O5'	5.70	1.65	1.59
15	E	155	GLU	N-CA	-5.70	1.34	1.46
12	B	473	G	N1-C2	5.69	1.42	1.37
12	B	729	G	C2-N3	5.69	1.37	1.32
12	B	1090	A	N7-C5	-5.69	1.35	1.39
12	B	254	G	P-O5'	-5.69	1.54	1.59
12	B	514	A	N9-C4	5.69	1.41	1.37
12	B	748	G	C1'-N9	-5.69	1.38	1.46
12	B	851	C	C4'-C3'	-5.69	1.46	1.52
12	B	2107	G	N3-C4	5.69	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2158	A	C6-N1	-5.69	1.31	1.35
12	B	2402	U	C4-C5	5.69	1.48	1.43
12	B	71	A	P-OP1	-5.69	1.39	1.49
12	B	530	G	C6-N1	5.69	1.43	1.39
12	B	647	G	N7-C5	-5.69	1.35	1.39
12	B	651	G	C2'-C1'	-5.69	1.47	1.53
12	B	915	C	C4'-C3'	5.69	1.59	1.53
12	B	1871	A	C2-N3	-5.69	1.28	1.33
12	B	2166	U	O4'-C1'	5.69	1.49	1.41
12	B	2169	A	N3-C4	5.69	1.38	1.34
12	B	2294	G	C2'-C1'	-5.69	1.47	1.53
12	B	2860	A	N7-C5	-5.69	1.35	1.39
12	B	1281	G	N9-C4	-5.69	1.33	1.38
12	B	1595	C	N1-C6	5.69	1.40	1.37
12	B	2123	G	P-O5'	5.69	1.65	1.59
12	B	2360	G	N3-C4	-5.69	1.31	1.35
12	B	2771	C	C5'-C4'	5.69	1.58	1.51
21	K	78	ARG	CZ-NH2	5.69	1.40	1.33
11	A	63	C	C2'-C1'	-5.69	1.47	1.53
12	B	73	A	C4'-O4'	5.69	1.52	1.45
12	B	691	C	C4-N4	5.69	1.39	1.33
12	B	737	C	O4'-C1'	5.69	1.49	1.41
12	B	1608	A	C2'-C1'	-5.69	1.47	1.53
12	B	1730	C	N1-C6	5.69	1.40	1.37
12	B	2611	C	C2-N3	5.69	1.40	1.35
12	B	977	G	N1-C2	5.69	1.42	1.37
12	B	1557	C	C2-N3	-5.69	1.31	1.35
12	B	1793	C	C4'-O4'	-5.69	1.38	1.45
11	A	40	U	P-O5'	-5.68	1.54	1.59
12	B	431	U	C2'-C1'	-5.68	1.47	1.53
12	B	910	A	C4'-C3'	-5.68	1.46	1.52
12	B	1045	C	O4'-C1'	-5.68	1.34	1.41
12	B	1149	G	C6-N1	5.68	1.43	1.39
12	B	1225	G	N1-C2	5.68	1.42	1.37
12	B	1950	G	C2'-C1'	-5.68	1.47	1.53
12	B	779	U	C1'-N1	5.68	1.57	1.48
12	B	1133	A	C2'-O2'	-5.68	1.34	1.41
12	B	1529	G	N9-C8	-5.68	1.33	1.37
12	B	2209	G	N9-C8	5.68	1.41	1.37
12	B	2409	G	N9-C8	-5.68	1.33	1.37
12	B	2694	G	N7-C5	-5.68	1.35	1.39
12	B	791	C	C2-N3	-5.68	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2007	U	C4'-C3'	5.68	1.59	1.53
12	B	2327	A	O3'-P	-5.68	1.54	1.61
12	B	2398	U	C4-C5	5.68	1.48	1.43
12	B	568	U	N1-C6	5.68	1.43	1.38
12	B	682	G	C4'-C3'	5.68	1.59	1.53
12	B	1275	A	N7-C5	-5.68	1.35	1.39
12	B	2137	U	C4'-C3'	5.68	1.59	1.53
12	B	2814	A	N3-C4	5.68	1.38	1.34
11	A	23	G	C1'-N9	5.68	1.57	1.48
12	B	4	U	C2-N3	5.68	1.41	1.37
12	B	217	A	N9-C8	-5.68	1.33	1.37
12	B	468	G	C5-C6	-5.68	1.36	1.42
12	B	734	A	N7-C5	-5.68	1.35	1.39
12	B	2580	U	O3'-P	-5.68	1.54	1.61
12	B	2903	U	C2-O2	5.68	1.27	1.22
12	B	287	G	N9-C8	5.68	1.41	1.37
12	B	1087	G	C3'-O3'	5.68	1.50	1.42
12	B	2454	G	N7-C5	-5.68	1.35	1.39
12	B	1318	U	N1-C2	5.67	1.43	1.38
12	B	1326	U	C4-C5	5.67	1.48	1.43
12	B	1425	G	O3'-P	-5.67	1.54	1.61
12	B	1653	G	C3'-C2'	5.67	1.59	1.52
12	B	1742	U	O3'-P	-5.67	1.54	1.61
12	B	1860	G	C2-N2	5.67	1.40	1.34
12	B	2432	A	C5-C6	-5.67	1.35	1.41
12	B	2736	A	C5-C6	-5.67	1.35	1.41
12	B	2837	A	C5-C6	5.67	1.46	1.41
13	C	101	ARG	CZ-NH1	5.67	1.40	1.33
32	W	56	PHE	CG-CD1	5.67	1.47	1.38
12	B	1144	A	C8-N7	-5.67	1.27	1.31
12	B	2726	A	N9-C4	5.67	1.41	1.37
12	B	566	U	C4'-O4'	5.67	1.52	1.45
12	B	820	A	N9-C8	5.67	1.42	1.37
12	B	829	A	N9-C4	-5.67	1.34	1.37
12	B	896	A	C8-N7	-5.67	1.27	1.31
12	B	1669	A	C8-N7	-5.67	1.27	1.31
11	A	105	G	N7-C5	-5.67	1.35	1.39
12	B	389	G	C2-N3	5.67	1.37	1.32
12	B	676	A	P-O5'	-5.67	1.54	1.59
12	B	825	A	N1-C2	5.67	1.39	1.34
28	R	80	ARG	CZ-NH1	5.67	1.40	1.33
12	B	769	U	C5-C6	-5.67	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	858	G	C4'-C3'	5.67	1.59	1.53
12	B	1042	G	P-O5'	-5.67	1.54	1.59
12	B	1104	C	O4'-C1'	5.67	1.49	1.41
12	B	1295	C	C2'-C1'	-5.67	1.47	1.53
12	B	1301	A	P-O5'	5.67	1.65	1.59
12	B	1556	C	C4-C5	-5.67	1.38	1.43
12	B	2305	U	C5'-C4'	5.67	1.58	1.51
12	B	2339	C	O3'-P	-5.67	1.54	1.61
12	B	2515	C	C5-C6	-5.67	1.29	1.34
12	B	2534	A	N7-C5	-5.67	1.35	1.39
12	B	2618	G	N7-C5	5.67	1.42	1.39
12	B	2786	U	P-O5'	-5.67	1.54	1.59
12	B	245	G	N3-C4	5.67	1.39	1.35
12	B	610	C	C1'-N1	5.67	1.57	1.48
12	B	1132	U	C4-C5	5.67	1.48	1.43
12	B	1638	C	N1-C6	-5.67	1.33	1.37
12	B	2160	C	C4-N4	5.67	1.39	1.33
12	B	2237	G	N3-C4	5.67	1.39	1.35
12	B	2677	G	C2-N3	-5.67	1.28	1.32
12	B	1275	A	C4'-O4'	-5.67	1.38	1.45
12	B	1677	A	C4'-C3'	-5.67	1.46	1.52
12	B	2739	U	N1-C2	5.67	1.43	1.38
12	B	485	C	N3-C4	5.66	1.38	1.33
12	B	768	G	P-O5'	-5.66	1.54	1.59
12	B	788	A	O3'-P	-5.66	1.54	1.61
12	B	1051	G	C5-C4	-5.66	1.34	1.38
12	B	1077	A	C5-C4	5.66	1.42	1.38
12	B	1265	A	O3'-P	-5.66	1.54	1.61
12	B	1690	A	N3-C4	5.66	1.38	1.34
12	B	2759	G	N3-C4	-5.66	1.31	1.35
12	B	74	A	C8-N7	-5.66	1.27	1.31
12	B	285	G	N1-C2	5.66	1.42	1.37
12	B	480	A	O3'-P	-5.66	1.54	1.61
12	B	921	C	C4-C5	5.66	1.47	1.43
12	B	1178	C	C3'-C2'	-5.66	1.46	1.52
11	A	52	A	O4'-C1'	-5.66	1.34	1.41
11	A	67	G	N1-C2	5.66	1.42	1.37
12	B	73	A	C6-N6	5.66	1.38	1.33
12	B	432	A	C5-C6	-5.66	1.35	1.41
12	B	690	G	C5-C4	5.66	1.42	1.38
12	B	1068	G	N9-C8	5.66	1.41	1.37
12	B	1112	G	C3'-C2'	-5.66	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1269	A	C6-N1	5.66	1.39	1.35
12	B	1612	C	O3'-P	-5.66	1.54	1.61
12	B	1773	A	C4'-O4'	5.66	1.52	1.45
12	B	2081	U	C2-N3	5.66	1.41	1.37
12	B	1022	G	N3-C4	-5.66	1.31	1.35
12	B	1210	G	N1-C2	5.66	1.42	1.37
12	B	1357	C	C4-N4	5.66	1.39	1.33
12	B	2235	G	N9-C4	-5.66	1.33	1.38
12	B	625	G	C4'-C3'	-5.66	1.46	1.52
12	B	1238	G	C6-N1	5.66	1.43	1.39
12	B	2594	C	C1'-N1	5.66	1.57	1.48
12	B	1004	U	C5'-C4'	5.66	1.58	1.51
12	B	1269	A	C5-C4	5.66	1.42	1.38
12	B	1531	C	C5'-C4'	5.66	1.58	1.51
12	B	2336	A	C6-N6	5.66	1.38	1.33
12	B	2686	G	C2-N2	5.66	1.40	1.34
12	B	2475	C	N1-C6	5.65	1.40	1.37
12	B	504	A	N7-C5	-5.65	1.35	1.39
12	B	574	A	C6-N1	5.65	1.39	1.35
12	B	1229	C	C5-C6	-5.65	1.29	1.34
12	B	1799	G	N9-C8	5.65	1.41	1.37
12	B	2767	C	C4-N4	5.65	1.39	1.33
12	B	377	G	N7-C5	-5.65	1.35	1.39
12	B	479	A	C5-C4	-5.65	1.34	1.38
12	B	1033	U	C4'-O4'	-5.65	1.38	1.45
12	B	1196	C	C4-C5	5.65	1.47	1.43
12	B	1281	G	C2-N2	5.65	1.40	1.34
12	B	1583	A	O3'-P	-5.65	1.54	1.61
23	M	66	ARG	CD-NE	5.65	1.56	1.46
11	A	39	A	C5-C4	-5.65	1.34	1.38
12	B	140	C	C4-C5	-5.65	1.38	1.43
12	B	171	U	N3-C4	5.65	1.43	1.38
12	B	446	G	C5-C4	5.65	1.42	1.38
12	B	1153	C	C5-C6	-5.65	1.29	1.34
12	B	1235	G	O3'-P	-5.65	1.54	1.61
12	B	1735	A	C1'-N9	5.65	1.57	1.48
12	B	2071	A	C8-N7	-5.65	1.27	1.31
12	B	2305	U	C4-O4	-5.65	1.19	1.23
12	B	2387	U	C2-N3	5.65	1.41	1.37
12	B	2501	C	C2'-C1'	5.65	1.59	1.53
12	B	151	C	C5'-C4'	5.65	1.58	1.51
12	B	377	G	C5'-C4'	5.65	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	574	A	C3'-O3'	5.65	1.50	1.42
12	B	1090	A	C8-N7	5.65	1.35	1.31
12	B	1649	G	N1-C2	5.65	1.42	1.37
12	B	2265	U	C1'-N1	5.65	1.57	1.48
12	B	68	G	N9-C8	-5.64	1.33	1.37
12	B	549	G	C2'-O2'	-5.64	1.34	1.41
12	B	1736	U	C4-C5	-5.64	1.38	1.43
12	B	1875	G	C6-N1	5.64	1.43	1.39
12	B	1950	G	C2-N3	5.64	1.37	1.32
12	B	2239	G	N7-C5	-5.64	1.35	1.39
12	B	2246	G	O4'-C1'	5.64	1.49	1.41
12	B	2573	C	C3'-O3'	5.64	1.50	1.42
17	G	123	GLU	CD-OE1	5.64	1.31	1.25
23	M	18	ARG	CZ-NH2	5.64	1.40	1.33
12	B	570	G	C2'-C1'	-5.64	1.47	1.53
12	B	902	C	N3-C4	5.64	1.38	1.33
12	B	1430	G	N9-C8	-5.64	1.33	1.37
12	B	1506	U	C2-N3	5.64	1.41	1.37
12	B	1598	A	N1-C2	5.64	1.39	1.34
12	B	2480	C	O3'-P	-5.64	1.54	1.61
12	B	212	G	C2'-C1'	-5.64	1.47	1.53
12	B	362	A	C5-C4	5.64	1.42	1.38
12	B	1305	C	P-O5'	-5.64	1.54	1.59
12	B	1388	G	N1-C2	5.64	1.42	1.37
12	B	189	G	N9-C4	-5.64	1.33	1.38
12	B	1015	U	O5'-C5'	-5.64	1.33	1.42
12	B	1382	G	C8-N7	-5.64	1.27	1.30
12	B	1571	A	C3'-C2'	-5.64	1.46	1.52
12	B	1740	G	N3-C4	-5.64	1.31	1.35
12	B	1774	C	C4'-C3'	5.64	1.59	1.53
12	B	2067	G	P-O5'	-5.64	1.54	1.59
12	B	2289	G	N7-C5	5.64	1.42	1.39
12	B	2700	A	C2'-C1'	-5.64	1.47	1.53
12	B	221	A	C4'-O4'	5.64	1.52	1.45
12	B	906	U	C3'-C2'	-5.64	1.46	1.52
12	B	1503	A	C5-C4	5.64	1.42	1.38
12	B	1822	C	N1-C6	5.64	1.40	1.37
12	B	2023	C	O4'-C1'	5.64	1.49	1.41
13	C	9	SER	CA-CB	5.64	1.61	1.52
12	B	41	C	C2-N3	5.64	1.40	1.35
12	B	982	C	C4-C5	5.64	1.47	1.43
12	B	1685	C	C2-N3	5.64	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1839	G	O3'-P	-5.64	1.54	1.61
12	B	2177	C	C4-N4	5.64	1.39	1.33
12	B	2440	C	N1-C6	5.64	1.40	1.37
12	B	2724	U	N1-C6	5.64	1.43	1.38
12	B	2819	G	C8-N7	-5.64	1.27	1.30
12	B	795	C	N3-C4	5.63	1.37	1.33
12	B	852	U	N3-C4	5.63	1.43	1.38
12	B	1418	G	N7-C5	-5.63	1.35	1.39
12	B	2434	A	C6-N6	5.63	1.38	1.33
19	I	88	GLY	CA-C	-5.63	1.42	1.51
11	A	32	U	C2'-C1'	-5.63	1.47	1.53
12	B	863	A	C5-C4	5.63	1.42	1.38
12	B	1711	A	N7-C5	-5.63	1.35	1.39
12	B	511	U	C4'-C3'	5.63	1.59	1.53
12	B	1584	U	P-O5'	-5.63	1.54	1.59
12	B	2097	A	P-O5'	-5.63	1.54	1.59
12	B	2740	A	C6-N6	-5.63	1.29	1.33
12	B	2784	U	N1-C6	5.63	1.43	1.38
12	B	816	C	N3-C4	5.63	1.37	1.33
12	B	1454	C	O4'-C1'	5.63	1.49	1.41
12	B	731	C	N3-C4	5.63	1.37	1.33
12	B	121	G	N7-C5	-5.63	1.35	1.39
12	B	505	A	C4'-O4'	5.63	1.52	1.45
12	B	1983	G	O3'-P	-5.63	1.54	1.61
12	B	2024	G	C5'-C4'	5.63	1.58	1.51
12	B	2861	U	C4-C5	5.63	1.48	1.43
12	B	2868	A	C2-N3	5.63	1.38	1.33
18	H	123	ARG	CZ-NH1	5.63	1.40	1.33
11	A	117	G	C2-N2	5.62	1.40	1.34
12	B	409	G	C2-N2	5.62	1.40	1.34
12	B	648	G	C6-N1	5.62	1.43	1.39
11	A	48	U	O3'-P	-5.62	1.54	1.61
12	B	65	U	C1'-N1	5.62	1.57	1.48
12	B	192	C	C4'-C3'	-5.62	1.47	1.52
12	B	208	C	C4'-O4'	-5.62	1.38	1.45
12	B	330	A	C8-N7	5.62	1.35	1.31
12	B	467	G	N3-C4	-5.62	1.31	1.35
12	B	690	G	C2'-C1'	-5.62	1.47	1.53
12	B	751	A	N3-C4	-5.62	1.31	1.34
12	B	746	U	N3-C4	5.62	1.43	1.38
12	B	1155	A	N3-C4	-5.62	1.31	1.34
12	B	2411	A	N7-C5	-5.62	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	M	93	VAL	CB-CG1	5.62	1.64	1.52
12	B	231	A	C4'-C3'	5.62	1.59	1.53
12	B	355	U	C3'-C2'	5.62	1.59	1.52
12	B	1401	G	O3'-P	-5.62	1.54	1.61
12	B	1416	G	N7-C5	-5.62	1.35	1.39
12	B	129	C	C2-O2	-5.62	1.19	1.24
12	B	717	C	N1-C6	5.62	1.40	1.37
12	B	720	U	C4-C5	-5.62	1.38	1.43
12	B	1538	G	C6-N1	5.62	1.43	1.39
12	B	2471	A	P-O5'	-5.62	1.54	1.59
12	B	2715	C	P-O5'	-5.62	1.54	1.59
12	B	2717	C	N1-C2	5.62	1.45	1.40
12	B	1311	G	C4'-O4'	5.62	1.52	1.45
12	B	2407	A	C4'-C3'	-5.62	1.47	1.52
12	B	2651	C	N1-C6	-5.62	1.33	1.37
16	F	70	ARG	NE-CZ	5.62	1.40	1.33
11	A	50	A	C3'-C2'	-5.62	1.46	1.52
12	B	234	U	C4-C5	5.62	1.48	1.43
12	B	287	G	C4'-C3'	5.62	1.59	1.53
12	B	352	A	C5'-C4'	5.62	1.58	1.51
12	B	438	G	C5-C6	-5.62	1.36	1.42
12	B	1601	G	C6-N1	5.62	1.43	1.39
12	B	1619	G	C2-N3	5.62	1.37	1.32
12	B	2657	A	O4'-C1'	-5.62	1.34	1.41
12	B	2790	U	P-O5'	-5.62	1.54	1.59
11	A	5	U	N1-C2	-5.61	1.33	1.38
11	A	79	G	P-O5'	-5.61	1.54	1.59
12	B	764	A	N7-C5	-5.61	1.35	1.39
12	B	1545	A	C2-N3	-5.61	1.28	1.33
12	B	1865	U	C2'-C1'	-5.61	1.47	1.53
12	B	2216	G	C5'-C4'	5.61	1.58	1.51
12	B	2252	G	N1-C2	5.61	1.42	1.37
12	B	2751	G	C8-N7	-5.61	1.27	1.30
12	B	2872	A	N9-C8	5.61	1.42	1.37
12	B	460	A	P-O5'	-5.61	1.54	1.59
12	B	1582	C	P-O5'	-5.61	1.54	1.59
12	B	2083	G	C4'-O4'	-5.61	1.38	1.45
12	B	2306	C	C4-N4	5.61	1.39	1.33
12	B	2506	U	N3-C4	5.61	1.43	1.38
12	B	442	G	O3'-P	-5.61	1.54	1.61
12	B	1081	U	C2'-C1'	-5.61	1.47	1.53
12	B	1317	G	N7-C5	5.61	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1349	C	P-O5'	-5.61	1.54	1.59
12	B	1622	G	C5-C4	-5.61	1.34	1.38
12	B	2168	G	C3'-C2'	5.61	1.59	1.52
12	B	2223	G	N3-C4	5.61	1.39	1.35
12	B	2835	A	C4'-C3'	5.61	1.59	1.53
12	B	2893	A	N9-C4	5.61	1.41	1.37
3	2	33	HIS	CA-CB	5.61	1.66	1.53
12	B	1049	C	C4'-C3'	5.61	1.59	1.53
12	B	1523	U	N3-C4	5.61	1.43	1.38
12	B	1864	U	C4-O4	-5.61	1.19	1.23
12	B	1995	U	C4-O4	5.61	1.28	1.23
12	B	2258	C	C4-C5	5.61	1.47	1.43
12	B	2659	G	C5-C6	-5.61	1.36	1.42
12	B	2875	C	C3'-O3'	5.61	1.50	1.42
13	C	211	ARG	NE-CZ	5.61	1.40	1.33
11	A	45	A	C2'-C1'	-5.61	1.47	1.53
12	B	163	C	C3'-C2'	5.61	1.59	1.52
12	B	419	U	C4'-O4'	-5.61	1.38	1.45
12	B	839	U	C3'-C2'	-5.61	1.46	1.52
12	B	1491	G	C2'-C1'	-5.61	1.47	1.53
12	B	1800	C	C2-N3	-5.61	1.31	1.35
12	B	2458	G	N9-C8	5.61	1.41	1.37
12	B	59	U	C3'-O3'	-5.60	1.34	1.42
12	B	374	A	C6-N6	5.60	1.38	1.33
12	B	1288	G	N9-C4	-5.60	1.33	1.38
12	B	1828	G	C4'-C3'	5.60	1.59	1.53
12	B	2267	A	C5'-C4'	5.60	1.58	1.51
12	B	2290	G	N9-C4	-5.60	1.33	1.38
12	B	154	U	C5-C6	-5.60	1.29	1.34
12	B	372	G	C6-N1	5.60	1.43	1.39
12	B	381	G	C4'-O4'	5.60	1.52	1.45
12	B	530	G	N9-C4	-5.60	1.33	1.38
12	B	740	C	C5-C6	5.60	1.38	1.34
12	B	845	A	C5-C4	-5.60	1.34	1.38
12	B	909	A	N9-C8	-5.60	1.33	1.37
12	B	1525	A	N9-C4	-5.60	1.34	1.37
12	B	2893	A	C6-N6	5.60	1.38	1.33
12	B	229	C	C4'-C3'	-5.60	1.47	1.52
12	B	463	G	C3'-O3'	5.60	1.50	1.42
12	B	1002	G	C2-N2	5.60	1.40	1.34
12	B	1430	G	O4'-C1'	5.60	1.49	1.41
12	B	2733	A	C4'-C3'	5.60	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	L	132	ARG	CZ-NH1	5.60	1.40	1.33
10	9	239	ARG	NE-CZ	5.60	1.40	1.33
12	B	260	G	N9-C8	5.60	1.41	1.37
12	B	317	G	C2-N3	5.60	1.37	1.32
12	B	584	C	O3'-P	-5.60	1.54	1.61
12	B	642	U	C4'-C3'	-5.60	1.47	1.52
12	B	1317	G	N9-C4	5.60	1.42	1.38
12	B	1522	A	N9-C8	5.60	1.42	1.37
12	B	2049	G	O4'-C1'	-5.60	1.34	1.41
11	A	98	G	O3'-P	-5.60	1.54	1.61
12	B	350	G	C3'-C2'	-5.60	1.46	1.52
12	B	537	G	C8-N7	-5.60	1.27	1.30
12	B	988	A	N9-C4	-5.60	1.34	1.37
12	B	1007	C	N3-C4	5.60	1.37	1.33
12	B	2275	C	C4-N4	5.60	1.39	1.33
11	A	85	G	C5'-C4'	5.59	1.58	1.51
12	B	275	C	N1-C2	5.59	1.45	1.40
12	B	478	A	N3-C4	-5.59	1.31	1.34
12	B	546	U	N3-C4	5.59	1.43	1.38
12	B	2301	C	C2-N3	5.59	1.40	1.35
12	B	2494	G	O3'-P	-5.59	1.54	1.61
12	B	2716	C	O3'-P	-5.59	1.54	1.61
12	B	45	G	C5-C6	-5.59	1.36	1.42
12	B	1182	G	C5'-C4'	5.59	1.58	1.51
12	B	2124	G	C3'-C2'	-5.59	1.46	1.52
12	B	2325	G	P-O5'	5.59	1.65	1.59
12	B	236	C	P-O5'	-5.59	1.54	1.59
12	B	241	A	C6-N1	-5.59	1.31	1.35
12	B	1077	A	C5'-C4'	5.59	1.58	1.51
12	B	1344	U	C4-O4	5.59	1.28	1.23
12	B	1850	G	C5-C6	-5.59	1.36	1.42
12	B	586	A	C2-N3	5.59	1.38	1.33
12	B	746	U	O3'-P	-5.59	1.54	1.61
12	B	1024	G	C8-N7	5.59	1.34	1.30
12	B	1272	A	N9-C4	5.59	1.41	1.37
12	B	2075	U	C5'-C4'	5.59	1.58	1.51
12	B	2080	A	N3-C4	5.59	1.38	1.34
12	B	2447	G	C4'-C3'	5.59	1.59	1.53
12	B	7	G	C2-N3	5.59	1.37	1.32
12	B	669	G	C5-C4	5.59	1.42	1.38
12	B	1135	C	N1-C2	5.59	1.45	1.40
12	B	1874	C	O3'-P	-5.59	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	468	G	O5'-C5'	-5.59	1.33	1.42
12	B	543	G	N1-C2	5.59	1.42	1.37
12	B	643	A	C2'-C1'	-5.59	1.47	1.53
12	B	992	C	C4-N4	5.59	1.39	1.33
12	B	2526	G	N9-C4	-5.59	1.33	1.38
12	B	2562	U	O3'-P	-5.59	1.54	1.61
12	B	497	A	C6-N1	5.58	1.39	1.35
12	B	2344	U	N1-C2	5.58	1.43	1.38
18	H	87	GLU	CG-CD	5.58	1.60	1.51
11	A	53	A	N9-C8	-5.58	1.33	1.37
12	B	454	A	C3'-C2'	-5.58	1.46	1.52
12	B	1859	U	O4'-C1'	5.58	1.49	1.41
12	B	1925	C	C2'-C1'	-5.58	1.47	1.53
12	B	1995	U	C1'-N1	5.58	1.57	1.48
12	B	2549	G	C2-N2	5.58	1.40	1.34
12	B	2744	G	P-O5'	-5.58	1.54	1.59
12	B	2864	G	N3-C4	-5.58	1.31	1.35
6	5	74	ARG	CD-NE	5.58	1.55	1.46
9	8	12	ARG	NE-CZ	5.58	1.40	1.33
12	B	246	C	P-O5'	-5.58	1.54	1.59
12	B	771	G	C8-N7	5.58	1.34	1.30
12	B	2030	A	C5'-C4'	5.58	1.58	1.51
12	B	2033	A	N9-C8	-5.58	1.33	1.37
12	B	2767	C	N3-C4	5.58	1.37	1.33
12	B	845	A	C5'-C4'	5.58	1.58	1.51
12	B	1048	A	N3-C4	-5.58	1.31	1.34
12	B	2042	A	N7-C5	-5.58	1.35	1.39
14	D	77	ARG	NE-CZ	5.58	1.40	1.33
12	B	35	G	O4'-C1'	5.58	1.49	1.41
12	B	41	C	N1-C6	-5.58	1.33	1.37
12	B	165	A	C5-C6	-5.58	1.36	1.41
12	B	911	A	C6-N6	5.58	1.38	1.33
12	B	2033	A	C5-C4	5.58	1.42	1.38
12	B	2364	C	N3-C4	5.58	1.37	1.33
12	B	2426	A	N1-C2	5.58	1.39	1.34
12	B	2798	U	C5'-C4'	5.58	1.58	1.51
12	B	213	A	C2'-C1'	5.58	1.59	1.53
12	B	637	A	C6-N6	5.58	1.38	1.33
12	B	1261	C	C4-N4	5.58	1.39	1.33
12	B	1542	U	N1-C2	5.58	1.43	1.38
12	B	1598	A	C5'-C4'	5.58	1.58	1.51
12	B	2566	A	N3-C4	-5.58	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2814	A	C4'-C3'	-5.58	1.47	1.52
12	B	477	A	C2'-C1'	5.58	1.59	1.53
12	B	566	U	C3'-C2'	-5.58	1.46	1.52
12	B	733	G	C5-C4	5.58	1.42	1.38
12	B	1061	U	C4-O4	5.58	1.28	1.23
12	B	1492	G	C5-C4	-5.58	1.34	1.38
12	B	1992	G	C6-O6	-5.58	1.19	1.24
12	B	2144	G	C6-N1	5.58	1.43	1.39
12	B	2608	G	C6-N1	-5.58	1.35	1.39
12	B	244	A	C4'-C3'	5.57	1.59	1.53
12	B	366	C	N3-C4	5.57	1.37	1.33
12	B	1058	U	N3-C4	5.57	1.43	1.38
12	B	1294	U	C4'-C3'	-5.57	1.47	1.52
12	B	2183	A	C6-N6	5.57	1.38	1.33
12	B	2336	A	N7-C5	-5.57	1.35	1.39
12	B	2492	U	C4'-C3'	-5.57	1.47	1.52
13	C	82	TYR	CG-CD2	5.57	1.46	1.39
12	B	1506	U	O3'-P	-5.57	1.54	1.61
12	B	186	G	C3'-O3'	5.57	1.50	1.42
12	B	220	G	N7-C5	-5.57	1.35	1.39
12	B	313	G	N1-C2	5.57	1.42	1.37
12	B	580	U	N3-C4	5.57	1.43	1.38
12	B	743	A	C6-N1	5.57	1.39	1.35
12	B	966	G	C6-N1	5.57	1.43	1.39
12	B	1120	G	P-O5'	-5.57	1.54	1.59
12	B	1170	C	N1-C6	-5.57	1.33	1.37
12	B	1767	G	N3-C4	-5.57	1.31	1.35
12	B	1830	C	C2'-C1'	-5.57	1.47	1.53
12	B	1900	A	C5-C4	5.57	1.42	1.38
12	B	2128	G	C5'-C4'	5.57	1.58	1.51
12	B	2197	U	C4'-C3'	-5.57	1.47	1.52
12	B	2375	G	N9-C4	-5.57	1.33	1.38
12	B	2560	A	C2'-C1'	-5.57	1.47	1.53
12	B	2752	C	P-O5'	-5.57	1.54	1.59
12	B	58	G	P-O5'	5.57	1.65	1.59
12	B	1861	G	C3'-C2'	-5.57	1.46	1.52
12	B	2731	G	N1-C2	5.57	1.42	1.37
12	B	990	A	C6-N6	5.57	1.38	1.33
12	B	1110	G	N3-C4	-5.57	1.31	1.35
12	B	1675	C	O4'-C1'	5.57	1.48	1.41
12	B	2345	G	C2-N2	5.57	1.40	1.34
12	B	2494	G	N9-C4	-5.57	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2882	A	P-O5'	-5.57	1.54	1.59
12	B	315	G	N1-C2	5.57	1.42	1.37
12	B	430	A	N9-C8	5.57	1.42	1.37
12	B	926	G	C5-C4	5.57	1.42	1.38
12	B	952	G	N3-C4	-5.57	1.31	1.35
12	B	1401	G	P-O5'	-5.57	1.54	1.59
12	B	1454	C	C3'-C2'	5.57	1.59	1.52
12	B	1674	G	C2-N2	5.57	1.40	1.34
12	B	1987	A	C2-N3	5.57	1.38	1.33
12	B	2223	G	N1-C2	5.57	1.42	1.37
12	B	2328	A	C3'-C2'	-5.57	1.46	1.52
12	B	2573	C	C4'-O4'	5.57	1.52	1.45
12	B	979	A	C3'-O3'	-5.56	1.34	1.42
12	B	1883	U	P-O5'	-5.56	1.54	1.59
12	B	1895	C	C4-N4	5.56	1.39	1.33
12	B	2405	G	O3'-P	-5.56	1.54	1.61
11	A	10	G	C5'-C4'	5.56	1.58	1.51
12	B	428	A	N1-C2	-5.56	1.29	1.34
12	B	484	C	C1'-N1	5.56	1.57	1.48
12	B	840	C	N1-C2	5.56	1.45	1.40
12	B	849	A	O4'-C1'	5.56	1.48	1.41
12	B	958	U	C4'-C3'	5.56	1.59	1.53
12	B	1376	C	C5-C6	5.56	1.38	1.34
12	B	1623	G	P-O5'	-5.56	1.54	1.59
23	M	55	ARG	CD-NE	5.56	1.55	1.46
29	S	29	VAL	CA-CB	-5.56	1.43	1.54
12	B	488	G	N9-C4	-5.56	1.33	1.38
12	B	1157	G	C5-C4	-5.56	1.34	1.38
12	B	1203	U	C5-C6	5.56	1.39	1.34
12	B	1327	A	N9-C8	5.56	1.42	1.37
12	B	1346	G	C5'-C4'	5.56	1.58	1.51
12	B	2289	G	O3'-P	-5.56	1.54	1.61
12	B	2318	G	N9-C8	5.56	1.41	1.37
12	B	2459	A	N7-C5	-5.56	1.35	1.39
12	B	2683	C	C5-C6	-5.56	1.29	1.34
12	B	2778	A	C5'-C4'	5.56	1.58	1.51
3	2	44	ARG	CZ-NH2	5.56	1.40	1.33
12	B	872	U	O3'-P	-5.56	1.54	1.61
12	B	1292	G	C2-N3	5.56	1.37	1.32
12	B	1982	U	C2-N3	5.56	1.41	1.37
12	B	2019	A	N1-C2	5.56	1.39	1.34
12	B	2190	G	C5'-C4'	5.56	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2332	C	P-O5'	-5.56	1.54	1.59
12	B	2594	C	N3-C4	5.56	1.37	1.33
18	H	25	TYR	CG-CD2	5.56	1.46	1.39
23	M	66	ARG	CZ-NH2	5.56	1.40	1.33
12	B	1490	A	N7-C5	5.56	1.42	1.39
12	B	1515	A	N9-C4	-5.56	1.34	1.37
12	B	1787	A	N3-C4	-5.56	1.31	1.34
12	B	2185	U	C4'-C3'	-5.56	1.47	1.52
12	B	2638	G	N9-C8	5.56	1.41	1.37
12	B	43	G	C5-C4	5.55	1.42	1.38
12	B	908	C	P-O5'	-5.55	1.54	1.59
12	B	1249	U	C5-C6	5.55	1.39	1.34
12	B	1995	U	N1-C6	-5.55	1.32	1.38
27	Q	69	ARG	CZ-NH1	5.55	1.40	1.33
12	B	375	G	C2-N2	5.55	1.40	1.34
12	B	524	G	C6-N1	5.55	1.43	1.39
12	B	1366	A	N9-C4	-5.55	1.34	1.37
12	B	1792	G	C5-C4	-5.55	1.34	1.38
12	B	1861	G	C8-N7	-5.55	1.27	1.30
12	B	2125	G	N3-C4	-5.55	1.31	1.35
12	B	2585	U	C4-C5	-5.55	1.38	1.43
12	B	77	G	C5-C4	-5.55	1.34	1.38
12	B	853	C	P-O5'	5.55	1.65	1.59
12	B	1786	A	P-O5'	5.55	1.65	1.59
12	B	2890	G	C2'-O2'	5.55	1.48	1.41
12	B	313	G	C5'-C4'	5.55	1.58	1.51
12	B	684	G	C5-C6	5.55	1.47	1.42
12	B	825	A	P-O5'	-5.55	1.54	1.59
12	B	993	G	N3-C4	-5.55	1.31	1.35
12	B	1801	A	C2-N3	5.55	1.38	1.33
12	B	1881	C	C3'-C2'	-5.55	1.46	1.52
12	B	1981	A	P-O5'	-5.55	1.54	1.59
12	B	2231	U	C3'-O3'	5.55	1.50	1.42
12	B	2679	A	C5'-C4'	5.55	1.58	1.51
25	O	99	TYR	CZ-OH	5.55	1.47	1.37
12	B	550	C	C4-C5	5.55	1.47	1.43
12	B	623	C	C3'-C2'	5.55	1.59	1.52
12	B	674	G	N9-C4	-5.55	1.33	1.38
12	B	965	C	C2'-C1'	-5.55	1.47	1.53
12	B	985	C	C2-N3	-5.55	1.31	1.35
12	B	1426	G	N9-C8	-5.55	1.33	1.37
12	B	1580	A	C5-C4	-5.55	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2147	A	O3'-P	-5.55	1.54	1.61
12	B	2772	C	P-O5'	-5.55	1.54	1.59
12	B	384	A	N3-C4	-5.55	1.31	1.34
12	B	432	A	N1-C2	-5.55	1.29	1.34
12	B	505	A	C5'-C4'	5.55	1.58	1.51
12	B	634	C	C4'-C3'	5.55	1.59	1.53
12	B	2331	G	C8-N7	-5.55	1.27	1.30
12	B	2440	C	C4-N4	5.55	1.39	1.33
12	B	2456	C	N1-C2	5.55	1.45	1.40
12	B	2475	C	C2-N3	5.55	1.40	1.35
12	B	2763	G	C4'-C3'	5.55	1.59	1.53
12	B	2869	G	C2-N2	5.55	1.40	1.34
13	C	170	TYR	CZ-OH	5.55	1.47	1.37
12	B	833	A	C6-N6	5.54	1.38	1.33
12	B	1803	A	C6-N6	5.54	1.38	1.33
12	B	369	U	N3-C4	5.54	1.43	1.38
12	B	853	C	C4-N4	5.54	1.39	1.33
12	B	1351	C	C2'-C1'	-5.54	1.47	1.53
12	B	1744	A	P-O5'	-5.54	1.54	1.59
12	B	1771	C	N1-C6	5.54	1.40	1.37
12	B	1985	C	N1-C6	-5.54	1.33	1.37
12	B	2035	G	P-O5'	-5.54	1.54	1.59
12	B	2183	A	O4'-C1'	5.54	1.48	1.41
12	B	2380	C	C3'-C2'	5.54	1.59	1.52
16	F	114	ARG	CZ-NH1	5.54	1.40	1.33
12	B	340	A	C5'-C4'	5.54	1.57	1.51
12	B	813	U	O3'-P	-5.54	1.54	1.61
12	B	1003	G	N7-C5	-5.54	1.35	1.39
12	B	1060	U	P-O5'	-5.54	1.54	1.59
12	B	1486	U	N1-C2	5.54	1.43	1.38
12	B	1596	A	C6-N6	5.54	1.38	1.33
1	0	39	VAL	CB-CG1	5.54	1.64	1.52
12	B	261	G	N7-C5	5.54	1.42	1.39
12	B	920	A	N9-C8	-5.54	1.33	1.37
12	B	1221	C	C2-N3	5.54	1.40	1.35
12	B	1254	A	P-O5'	-5.54	1.54	1.59
12	B	2530	A	C8-N7	-5.54	1.27	1.31
12	B	2611	C	C4-N4	5.54	1.39	1.33
12	B	44	A	N9-C4	-5.54	1.34	1.37
12	B	491	G	N9-C4	-5.54	1.33	1.38
12	B	525	U	C2'-C1'	-5.54	1.47	1.53
12	B	1554	U	C4-C5	5.54	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2461	A	C2'-C1'	-5.54	1.47	1.53
12	B	2716	C	C5'-C4'	5.54	1.57	1.51
12	B	2742	G	O3'-P	-5.54	1.54	1.61
12	B	2766	A	C2-N3	5.54	1.38	1.33
24	N	2	ARG	CD-NE	5.54	1.55	1.46
12	B	334	C	C3'-C2'	-5.54	1.46	1.52
12	B	357	C	C2-N3	5.54	1.40	1.35
12	B	729	G	C4'-C3'	-5.54	1.47	1.52
12	B	985	C	C4'-C3'	-5.54	1.47	1.52
12	B	2156	G	C8-N7	5.54	1.34	1.30
12	B	1000	A	C6-N1	5.53	1.39	1.35
12	B	1310	G	C4'-C3'	5.53	1.59	1.53
12	B	1471	G	C4'-O4'	-5.53	1.38	1.45
12	B	1505	A	P-O5'	5.53	1.65	1.59
12	B	1814	G	C5-C6	-5.53	1.36	1.42
12	B	2351	G	C2'-C1'	-5.53	1.47	1.53
12	B	2478	A	O4'-C1'	5.53	1.48	1.41
12	B	2633	G	C6-N1	5.53	1.43	1.39
12	B	2782	G	C5-C4	5.53	1.42	1.38
12	B	2821	A	N3-C4	-5.53	1.31	1.34
12	B	72	U	C3'-C2'	-5.53	1.46	1.52
12	B	258	G	C2'-C1'	-5.53	1.47	1.53
12	B	814	C	C4-N4	5.53	1.39	1.33
12	B	1945	G	N7-C5	5.53	1.42	1.39
12	B	1958	C	C3'-O3'	5.53	1.49	1.42
12	B	692	C	C3'-C2'	-5.53	1.46	1.52
12	B	866	A	C3'-C2'	5.53	1.59	1.52
12	B	1018	U	C4'-C3'	5.53	1.59	1.53
12	B	1283	G	C5'-C4'	5.53	1.57	1.51
12	B	1364	G	N1-C2	-5.53	1.33	1.37
12	B	1900	A	C4'-C3'	5.53	1.59	1.53
12	B	2415	G	N9-C4	-5.53	1.33	1.38
12	B	262	A	P-O5'	-5.53	1.54	1.59
12	B	1737	G	C2-N3	5.53	1.37	1.32
12	B	2143	C	C4-N4	5.53	1.39	1.33
12	B	2147	A	C6-N6	5.53	1.38	1.33
12	B	2434	A	C5-C6	5.53	1.46	1.41
27	Q	63	ARG	NE-CZ	5.53	1.40	1.33
12	B	1731	G	N7-C5	-5.53	1.35	1.39
12	B	1808	A	C5'-C4'	5.53	1.57	1.51
12	B	2023	C	C4-N4	5.53	1.39	1.33
12	B	2665	A	C3'-O3'	5.53	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2679	A	O3'-P	-5.53	1.54	1.61
12	B	2764	A	O4'-C1'	5.53	1.48	1.41
29	S	88	ARG	CZ-NH1	5.53	1.40	1.33
12	B	39	G	C5-C6	-5.53	1.36	1.42
12	B	825	A	O4'-C1'	-5.53	1.34	1.41
12	B	1887	C	C2-N3	5.53	1.40	1.35
12	B	167	A	C5-C6	-5.52	1.36	1.41
12	B	285	G	N9-C8	-5.52	1.33	1.37
12	B	856	G	N9-C8	-5.52	1.33	1.37
12	B	1795	C	O4'-C1'	5.52	1.48	1.41
14	D	65	ALA	C-N	5.52	1.43	1.33
12	B	105	C	N1-C2	5.52	1.45	1.40
12	B	1278	C	O4'-C1'	5.52	1.48	1.41
12	B	1497	U	N3-C4	5.52	1.43	1.38
12	B	2383	G	N9-C8	5.52	1.41	1.37
12	B	2516	A	N7-C5	-5.52	1.35	1.39
17	G	151	ARG	NE-CZ	5.52	1.40	1.33
12	B	1331	G	C2'-C1'	-5.52	1.47	1.53
12	B	1819	A	C8-N7	-5.52	1.27	1.31
12	B	1375	U	O4'-C1'	5.52	1.48	1.41
12	B	2162	G	C2-N2	5.52	1.40	1.34
12	B	2299	U	N3-C4	5.52	1.43	1.38
12	B	759	G	C3'-C2'	-5.52	1.46	1.52
12	B	971	G	C2'-O2'	-5.52	1.34	1.41
12	B	1024	G	N9-C4	-5.52	1.33	1.38
12	B	1118	C	C3'-C2'	-5.52	1.46	1.52
12	B	1510	G	C8-N7	-5.52	1.27	1.30
12	B	2476	A	C5-C4	5.52	1.42	1.38
12	B	2503	A	N1-C2	5.52	1.39	1.34
12	B	2846	G	C2-N2	5.52	1.40	1.34
12	B	371	A	C4'-C3'	5.52	1.59	1.53
12	B	951	C	O3'-P	-5.52	1.54	1.61
12	B	1408	G	C6-O6	-5.52	1.19	1.24
12	B	1753	G	C3'-C2'	-5.52	1.46	1.52
12	B	1988	G	O4'-C1'	5.52	1.48	1.41
12	B	2074	U	C2-N3	5.52	1.41	1.37
12	B	2193	G	C2'-C1'	5.52	1.59	1.53
10	9	237	ARG	NE-CZ	5.51	1.40	1.33
12	B	230	G	C2-N2	5.51	1.40	1.34
12	B	907	G	N3-C4	5.51	1.39	1.35
12	B	1370	C	N3-C4	5.51	1.37	1.33
12	B	1582	C	C4-N4	5.51	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1877	A	C2'-C1'	-5.51	1.47	1.53
12	B	1894	C	N1-C2	5.51	1.45	1.40
12	B	1945	G	N9-C4	-5.51	1.33	1.38
12	B	2038	G	C2-N3	5.51	1.37	1.32
12	B	2133	G	C2-N3	5.51	1.37	1.32
12	B	2190	G	N9-C4	-5.51	1.33	1.38
12	B	2505	G	C5-C4	5.51	1.42	1.38
12	B	2633	G	C2-N3	5.51	1.37	1.32
12	B	1669	A	N7-C5	-5.51	1.35	1.39
12	B	70	G	C2-N3	5.51	1.37	1.32
12	B	223	A	N7-C5	-5.51	1.35	1.39
12	B	754	U	P-O5'	-5.51	1.54	1.59
12	B	901	C	N3-C4	5.51	1.37	1.33
12	B	985	C	P-O5'	-5.51	1.54	1.59
12	B	1379	U	C2-N3	5.51	1.41	1.37
12	B	1561	C	N1-C2	5.51	1.45	1.40
12	B	1769	U	N3-C4	5.51	1.43	1.38
12	B	1942	C	C5'-C4'	-5.51	1.44	1.51
12	B	23	G	C5-C6	-5.51	1.36	1.42
12	B	403	U	C3'-O3'	5.51	1.49	1.42
12	B	940	G	C2'-C1'	-5.51	1.47	1.53
12	B	1460	U	O3'-P	-5.51	1.54	1.61
12	B	1659	G	C3'-O3'	5.51	1.49	1.42
12	B	2319	G	N9-C4	-5.51	1.33	1.38
12	B	2365	G	C8-N7	5.51	1.34	1.30
12	B	2439	A	P-O5'	-5.51	1.54	1.59
16	F	94	ARG	CZ-NH1	5.51	1.40	1.33
7	6	33	ARG	CZ-NH2	5.51	1.40	1.33
12	B	1179	G	N9-C4	5.51	1.42	1.38
12	B	450	G	O3'-P	-5.51	1.54	1.61
12	B	876	C	O3'-P	-5.51	1.54	1.61
12	B	919	U	O3'-P	-5.51	1.54	1.61
12	B	1139	G	C8-N7	5.51	1.34	1.30
12	B	1754	A	C4'-O4'	5.51	1.52	1.45
12	B	1761	C	C4-C5	5.51	1.47	1.43
12	B	2011	U	C3'-O3'	5.51	1.49	1.42
12	B	2089	C	P-O5'	-5.50	1.54	1.59
12	B	2509	G	C5'-C4'	5.50	1.57	1.51
12	B	71	A	C2-N3	-5.50	1.28	1.33
12	B	684	G	N7-C5	-5.50	1.35	1.39
12	B	722	A	C2'-C1'	-5.50	1.47	1.53
12	B	809	G	N3-C4	-5.50	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	856	G	C5-C4	-5.50	1.34	1.38
12	B	1107	G	C2-N3	5.50	1.37	1.32
12	B	1200	C	N3-C4	5.50	1.37	1.33
12	B	1240	U	C5'-C4'	5.50	1.57	1.51
12	B	1254	A	N7-C5	-5.50	1.35	1.39
12	B	1286	A	C4'-O4'	-5.50	1.38	1.45
11	A	88	C	C5'-C4'	5.50	1.57	1.51
12	B	301	G	N3-C4	5.50	1.39	1.35
12	B	361	G	C6-N1	5.50	1.43	1.39
12	B	364	C	C2'-C1'	-5.50	1.47	1.53
12	B	447	A	P-O5'	-5.50	1.54	1.59
12	B	734	A	C6-N1	5.50	1.39	1.35
12	B	920	A	N3-C4	-5.50	1.31	1.34
12	B	1009	A	N9-C8	5.50	1.42	1.37
12	B	1132	U	C2'-O2'	5.50	1.48	1.41
12	B	1146	C	N1-C6	-5.50	1.33	1.37
12	B	1236	G	O3'-P	-5.50	1.54	1.61
12	B	1290	C	C4-N4	5.50	1.39	1.33
12	B	1621	U	C3'-C2'	5.50	1.59	1.52
12	B	1902	C	C2-N3	5.50	1.40	1.35
12	B	2673	G	C2'-C1'	-5.50	1.47	1.53
12	B	2689	U	C4'-C3'	-5.50	1.47	1.52
14	D	46	ARG	CZ-NH2	5.50	1.40	1.33
14	D	77	ARG	CZ-NH2	5.50	1.40	1.33
19	I	89	SER	CB-OG	-5.50	1.35	1.42
12	B	47	C	C5'-C4'	5.50	1.57	1.51
12	B	718	A	C6-N1	5.50	1.39	1.35
12	B	975	A	C2'-C1'	-5.50	1.47	1.53
12	B	2118	U	C2-O2	5.50	1.27	1.22
12	B	2878	U	C4-O4	5.50	1.28	1.23
10	9	264	SER	CA-CB	5.50	1.61	1.52
12	B	636	G	N1-C2	5.50	1.42	1.37
12	B	1880	U	C2-O2	5.50	1.27	1.22
12	B	2220	U	C4-C5	5.50	1.48	1.43
12	B	2459	A	P-O5'	-5.50	1.54	1.59
12	B	2869	G	N9-C4	5.50	1.42	1.38
12	B	372	G	C5'-C4'	5.50	1.57	1.51
12	B	673	C	C4-N4	5.50	1.38	1.33
12	B	1286	A	O3'-P	-5.50	1.54	1.61
12	B	1341	G	N9-C4	-5.50	1.33	1.38
12	B	1382	G	N7-C5	-5.50	1.35	1.39
12	B	1674	G	C5-C6	-5.50	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2418	A	C5-C6	-5.50	1.36	1.41
11	A	102	G	N3-C4	-5.50	1.31	1.35
12	B	25	U	C1'-N1	5.50	1.56	1.48
12	B	303	G	C5-C4	-5.50	1.34	1.38
12	B	1522	A	P-O5'	-5.50	1.54	1.59
20	J	34	ARG	NE-CZ	5.50	1.40	1.33
12	B	40	U	C4-O4	-5.49	1.19	1.23
12	B	84	A	N7-C5	-5.49	1.35	1.39
12	B	252	G	N7-C5	-5.49	1.35	1.39
12	B	400	G	C2-N3	5.49	1.37	1.32
12	B	468	G	O3'-P	-5.49	1.54	1.61
12	B	800	A	C6-N1	5.49	1.39	1.35
12	B	1441	G	C6-N1	5.49	1.43	1.39
12	B	1640	A	N3-C4	-5.49	1.31	1.34
12	B	252	G	C2'-C1'	-5.49	1.47	1.53
12	B	1333	G	C5-C6	5.49	1.47	1.42
12	B	1474	U	C5'-C4'	5.49	1.57	1.51
12	B	1747	U	C4'-O4'	-5.49	1.38	1.45
12	B	508	A	C5-C4	5.49	1.42	1.38
12	B	618	G	N9-C8	5.49	1.41	1.37
12	B	1148	U	C4-C5	5.49	1.48	1.43
12	B	1279	G	N7-C5	-5.49	1.35	1.39
12	B	1445	G	N3-C4	5.49	1.39	1.35
12	B	1504	A	C3'-C2'	5.49	1.58	1.52
12	B	2388	A	C6-N6	5.49	1.38	1.33
12	B	2537	U	O3'-P	5.49	1.67	1.61
12	B	2775	G	N3-C4	-5.49	1.31	1.35
1	0	6	VAL	CB-CG1	5.49	1.64	1.52
12	B	9	G	N7-C5	-5.49	1.35	1.39
12	B	599	A	C6-N1	5.49	1.39	1.35
12	B	2780	G	N7-C5	-5.49	1.35	1.39
12	B	1154	G	C8-N7	-5.49	1.27	1.30
12	B	1541	C	O4'-C1'	5.49	1.48	1.41
12	B	2130	U	N3-C4	5.49	1.43	1.38
12	B	2334	U	C4'-C3'	5.49	1.59	1.53
12	B	2523	G	C8-N7	-5.49	1.27	1.30
12	B	2685	G	C5-C6	5.49	1.47	1.42
12	B	149	A	C4'-O4'	-5.49	1.38	1.45
12	B	969	G	C4'-O4'	5.49	1.52	1.45
12	B	1435	G	C2-N2	5.49	1.40	1.34
12	B	1484	U	C4-O4	5.49	1.28	1.23
12	B	2073	C	C2'-C1'	-5.49	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2120	G	C3'-O3'	5.49	1.49	1.42
11	A	96	G	C2-N3	5.48	1.37	1.32
12	B	924	G	C5-C4	-5.48	1.34	1.38
12	B	1292	G	N3-C4	-5.48	1.31	1.35
12	B	1376	C	O3'-P	-5.48	1.54	1.61
12	B	1508	A	N9-C8	-5.48	1.33	1.37
12	B	1514	G	N9-C8	5.48	1.41	1.37
12	B	1906	G	C5'-C4'	5.48	1.57	1.51
12	B	91	A	N9-C4	-5.48	1.34	1.37
12	B	445	C	C2-N3	5.48	1.40	1.35
12	B	604	G	N7-C5	-5.48	1.35	1.39
12	B	659	G	N1-C2	5.48	1.42	1.37
12	B	1256	G	N9-C8	-5.48	1.34	1.37
12	B	2720	U	P-O5'	5.48	1.65	1.59
12	B	2851	A	C5'-C4'	5.48	1.57	1.51
11	A	91	C	C4'-O4'	5.48	1.52	1.45
12	B	496	G	P-O5'	-5.48	1.54	1.59
12	B	633	A	C5-C6	-5.48	1.36	1.41
12	B	990	A	C3'-C2'	-5.48	1.46	1.52
12	B	1516	G	N1-C2	5.48	1.42	1.37
12	B	1697	G	C2'-C1'	-5.48	1.47	1.53
12	B	2761	A	C5-C4	-5.48	1.34	1.38
10	9	129	ARG	CD-NE	5.48	1.55	1.46
12	B	116	C	N3-C4	5.48	1.37	1.33
12	B	924	G	C2-N3	5.48	1.37	1.32
12	B	2805	C	C5'-C4'	5.48	1.57	1.51
12	B	94	A	N9-C4	5.48	1.41	1.37
12	B	104	A	N7-C5	-5.48	1.35	1.39
12	B	1210	G	O3'-P	-5.48	1.54	1.61
12	B	1268	A	C5-C6	-5.48	1.36	1.41
12	B	1306	C	C2-N3	5.48	1.40	1.35
12	B	1889	A	P-O5'	-5.48	1.54	1.59
12	B	2192	U	O3'-P	-5.48	1.54	1.61
12	B	2338	C	C4-C5	5.48	1.47	1.43
12	B	2622	U	C2'-C1'	-5.48	1.47	1.53
12	B	1202	G	O3'-P	-5.48	1.54	1.61
12	B	1464	G	C2'-C1'	-5.48	1.47	1.53
12	B	28	A	N7-C5	5.47	1.42	1.39
12	B	286	U	O3'-P	-5.47	1.54	1.61
12	B	504	A	C5-C6	5.47	1.46	1.41
12	B	855	G	C2-N3	5.47	1.37	1.32
12	B	898	C	N1-C6	5.47	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	906	U	C5'-C4'	5.47	1.57	1.51
12	B	914	G	C5'-C4'	5.47	1.57	1.51
12	B	1342	A	N9-C4	5.47	1.41	1.37
12	B	2535	G	C4'-C3'	-5.47	1.47	1.52
12	B	2673	G	N3-C4	-5.47	1.31	1.35
32	W	16	ALA	N-CA	-5.47	1.35	1.46
11	A	26	C	C1'-N1	5.47	1.56	1.48
12	B	346	A	C2'-C1'	-5.47	1.47	1.53
12	B	817	C	N1-C6	-5.47	1.33	1.37
12	B	929	U	C1'-N1	5.47	1.56	1.48
12	B	1334	G	P-O5'	-5.47	1.54	1.59
12	B	1351	C	P-O5'	-5.47	1.54	1.59
12	B	1430	G	C8-N7	-5.47	1.27	1.30
12	B	1592	C	O4'-C1'	5.47	1.48	1.41
12	B	1819	A	C4'-C3'	5.47	1.59	1.53
12	B	373	U	C2-N3	5.47	1.41	1.37
12	B	1117	C	O3'-P	5.47	1.67	1.61
12	B	1122	G	C5-C6	-5.47	1.36	1.42
12	B	1302	A	C4'-C3'	5.47	1.59	1.53
12	B	1411	U	C2-N3	5.47	1.41	1.37
12	B	1538	G	C2'-C1'	-5.47	1.47	1.53
12	B	2669	G	C5-C4	5.47	1.42	1.38
11	A	51	G	C2-N3	5.47	1.37	1.32
12	B	1020	A	C6-N1	5.47	1.39	1.35
12	B	1289	C	N1-C2	-5.47	1.34	1.40
12	B	1685	C	N1-C6	-5.47	1.33	1.37
12	B	1815	A	N7-C5	-5.47	1.35	1.39
12	B	578	G	N9-C4	-5.47	1.33	1.38
12	B	1676	A	N9-C4	-5.47	1.34	1.37
12	B	2372	U	C2'-C1'	-5.47	1.47	1.53
12	B	2636	C	O4'-C1'	-5.47	1.34	1.41
12	B	114	U	C2-N3	5.47	1.41	1.37
12	B	807	U	N3-C4	5.47	1.43	1.38
12	B	917	A	O3'-P	-5.47	1.54	1.61
12	B	1318	U	O4'-C1'	5.47	1.48	1.41
12	B	1616	A	N7-C5	-5.47	1.35	1.39
12	B	2610	C	C4-C5	5.47	1.47	1.43
12	B	2807	U	C4'-C3'	-5.47	1.47	1.52
32	W	79	ARG	CZ-NH1	5.47	1.40	1.33
12	B	43	G	P-O5'	5.46	1.65	1.59
12	B	936	A	N7-C5	-5.46	1.35	1.39
12	B	2026	U	C2-N3	5.46	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2885	G	C1'-N9	-5.46	1.39	1.46
12	B	859	G	C5'-C4'	5.46	1.57	1.51
12	B	2799	A	N3-C4	5.46	1.38	1.34
21	K	32	TYR	CE2-CZ	5.46	1.45	1.38
12	B	414	C	C2-N3	5.46	1.40	1.35
12	B	469	G	N3-C4	-5.46	1.31	1.35
12	B	588	U	O3'-P	-5.46	1.54	1.61
12	B	858	G	N1-C2	5.46	1.42	1.37
12	B	905	A	C6-N1	5.46	1.39	1.35
12	B	1090	A	C4'-C3'	5.46	1.59	1.53
12	B	1273	U	C5-C6	5.46	1.39	1.34
12	B	1305	C	N3-C4	5.46	1.37	1.33
12	B	1316	U	C3'-C2'	5.46	1.58	1.52
12	B	2059	A	N7-C5	-5.46	1.35	1.39
12	B	2141	G	N7-C5	5.46	1.42	1.39
12	B	2552	U	C4'-O4'	5.46	1.52	1.45
12	B	1145	C	C4-C5	-5.46	1.38	1.43
12	B	1264	A	N9-C8	5.46	1.42	1.37
12	B	1498	C	C2-O2	5.46	1.29	1.24
12	B	2085	U	P-O5'	-5.46	1.54	1.59
12	B	2087	G	C5-C4	5.46	1.42	1.38
12	B	2189	U	N1-C2	5.46	1.43	1.38
11	A	4	C	C2-O2	5.46	1.29	1.24
12	B	732	C	N1-C2	-5.46	1.34	1.40
12	B	1149	G	C2'-C1'	-5.46	1.47	1.53
12	B	1331	G	P-O5'	-5.46	1.54	1.59
12	B	1734	G	N1-C2	5.46	1.42	1.37
12	B	1780	A	C6-N6	5.46	1.38	1.33
12	B	2035	G	N1-C2	5.46	1.42	1.37
12	B	2367	G	C3'-C2'	5.46	1.58	1.52
12	B	2638	G	C2'-C1'	-5.46	1.47	1.53
12	B	2829	A	N7-C5	-5.46	1.35	1.39
12	B	2877	G	N3-C4	-5.46	1.31	1.35
11	A	17	C	C2'-C1'	-5.46	1.47	1.53
11	A	66	A	C6-N6	5.46	1.38	1.33
11	A	69	G	N3-C4	5.46	1.39	1.35
12	B	442	G	C5-C6	-5.46	1.36	1.42
12	B	715	A	C2'-C1'	-5.46	1.47	1.53
12	B	778	G	C2'-C1'	-5.46	1.47	1.53
12	B	861	A	C4'-O4'	-5.46	1.38	1.45
12	B	2088	A	N3-C4	5.46	1.38	1.34
12	B	2470	G	C6-O6	5.46	1.29	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2516	A	N3-C4	5.46	1.38	1.34
12	B	129	C	C5'-C4'	5.46	1.57	1.51
12	B	712	G	P-O5'	-5.46	1.54	1.59
12	B	1724	G	N1-C2	5.46	1.42	1.37
12	B	778	G	C5-C6	-5.45	1.36	1.42
12	B	1351	C	C4-C5	5.45	1.47	1.43
12	B	1699	G	C5-C4	-5.45	1.34	1.38
12	B	2332	C	C3'-C2'	5.45	1.58	1.52
12	B	2484	G	C6-N1	5.45	1.43	1.39
12	B	2635	A	C5-C6	-5.45	1.36	1.41
12	B	630	G	N3-C4	-5.45	1.31	1.35
12	B	1001	A	N9-C4	5.45	1.41	1.37
12	B	1066	U	N1-C2	5.45	1.43	1.38
12	B	1439	A	C6-N6	5.45	1.38	1.33
12	B	1852	U	C2'-C1'	-5.45	1.47	1.53
12	B	2348	U	C4-C5	5.45	1.48	1.43
12	B	2471	A	C2'-C1'	-5.45	1.47	1.53
12	B	2573	C	C4-C5	5.45	1.47	1.43
12	B	2641	G	C6-N1	5.45	1.43	1.39
12	B	53	A	C5-C4	-5.45	1.34	1.38
12	B	1366	A	C5-C4	-5.45	1.34	1.38
12	B	2080	A	C5-C4	5.45	1.42	1.38
12	B	2609	U	N1-C6	-5.45	1.33	1.38
20	J	37	ARG	NE-CZ	5.45	1.40	1.33
10	9	210	VAL	CB-CG1	5.45	1.64	1.52
12	B	56	A	C2'-C1'	-5.45	1.47	1.53
12	B	377	G	C6-N1	5.45	1.43	1.39
12	B	562	U	N3-C4	5.45	1.43	1.38
12	B	655	A	N9-C4	5.45	1.41	1.37
12	B	741	U	N1-C6	5.45	1.42	1.38
12	B	1216	G	C5'-C4'	5.45	1.57	1.51
12	B	1378	A	N9-C4	-5.45	1.34	1.37
12	B	1585	C	N3-C4	5.45	1.37	1.33
12	B	1814	G	C5-C4	-5.45	1.34	1.38
12	B	2120	G	C4'-O4'	-5.45	1.38	1.45
12	B	2532	G	C5'-C4'	5.45	1.57	1.51
12	B	2172	U	N1-C6	-5.45	1.33	1.38
12	B	2242	G	C2'-C1'	5.45	1.59	1.53
12	B	2820	A	C4'-C3'	5.45	1.59	1.53
10	9	334	GLU	CD-OE2	5.45	1.31	1.25
12	B	703	U	C5-C6	5.45	1.39	1.34
12	B	1350	C	N1-C6	5.45	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1401	G	C4'-C3'	-5.45	1.47	1.52
12	B	2545	G	C5-C4	-5.45	1.34	1.38
12	B	1581	G	C2-N3	5.44	1.37	1.32
12	B	1601	G	P-O5'	-5.44	1.54	1.59
12	B	1909	C	C5'-C4'	5.44	1.57	1.51
12	B	2098	U	N3-C4	5.44	1.43	1.38
11	A	27	C	C4-C5	5.44	1.47	1.43
11	A	85	G	C6-N1	5.44	1.43	1.39
12	B	283	G	C5'-C4'	5.44	1.57	1.51
12	B	450	G	N3-C4	5.44	1.39	1.35
12	B	1303	G	C5-C4	5.44	1.42	1.38
12	B	2289	G	N9-C8	5.44	1.41	1.37
12	B	2297	A	C2'-C1'	-5.44	1.47	1.53
12	B	2396	G	C5'-C4'	5.44	1.57	1.51
12	B	2776	A	P-O5'	-5.44	1.54	1.59
8	7	13	PHE	CG-CD1	5.44	1.47	1.38
12	B	135	U	C2-N3	5.44	1.41	1.37
12	B	293	U	C2-N3	5.44	1.41	1.37
12	B	468	G	N1-C2	5.44	1.42	1.37
12	B	556	A	P-O5'	-5.44	1.54	1.59
12	B	583	G	C2-N2	5.44	1.40	1.34
12	B	812	C	N3-C4	5.44	1.37	1.33
12	B	1203	U	C4'-C3'	-5.44	1.47	1.52
12	B	948	C	C5-C6	5.44	1.38	1.34
12	B	1139	G	O3'-P	-5.44	1.54	1.61
12	B	1303	G	C8-N7	5.44	1.34	1.30
12	B	2451	A	C2'-C1'	-5.44	1.47	1.53
12	B	2657	A	C5-C4	5.44	1.42	1.38
12	B	521	U	C5'-C4'	5.44	1.57	1.51
12	B	535	G	C2-N3	5.44	1.37	1.32
12	B	758	C	C3'-C2'	-5.44	1.46	1.52
12	B	1045	C	N1-C2	5.44	1.45	1.40
12	B	1640	A	P-O5'	-5.44	1.54	1.59
12	B	1767	G	N7-C5	-5.44	1.35	1.39
12	B	2002	G	C6-N1	5.44	1.43	1.39
12	B	2231	U	C4'-O4'	-5.44	1.38	1.45
8	7	41	ARG	CZ-NH1	5.44	1.40	1.33
12	B	1500	G	N9-C8	5.44	1.41	1.37
12	B	2727	A	C5'-C4'	5.44	1.57	1.51
11	A	8	C	N1-C6	-5.43	1.33	1.37
12	B	71	A	C4'-C3'	-5.43	1.47	1.52
12	B	749	A	O4'-C1'	-5.43	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	920	A	O5'-C5'	-5.43	1.34	1.42
12	B	2194	U	C2-N3	5.43	1.41	1.37
12	B	2276	G	C6-O6	-5.43	1.19	1.24
12	B	2521	C	C2'-C1'	-5.43	1.47	1.53
12	B	232	G	C6-N1	5.43	1.43	1.39
12	B	234	U	N1-C2	-5.43	1.33	1.38
12	B	362	A	C2'-C1'	-5.43	1.47	1.53
12	B	1144	A	C2'-C1'	-5.43	1.47	1.53
12	B	1688	U	N1-C2	5.43	1.43	1.38
12	B	2613	U	N3-C4	5.43	1.43	1.38
12	B	216	A	C8-N7	-5.43	1.27	1.31
12	B	301	G	C3'-C2'	-5.43	1.46	1.52
12	B	233	A	C3'-C2'	-5.43	1.46	1.52
12	B	265	A	N9-C4	-5.43	1.34	1.37
12	B	1881	C	N3-C4	-5.43	1.30	1.33
12	B	1967	C	O3'-P	-5.43	1.54	1.61
12	B	2771	C	O3'-P	-5.43	1.54	1.61
12	B	2810	A	N7-C5	-5.43	1.35	1.39
12	B	331	C	N3-C4	5.43	1.37	1.33
12	B	2083	G	C2'-C1'	-5.43	1.47	1.53
12	B	2111	U	N1-C2	-5.43	1.33	1.38
12	B	2198	A	C4'-O4'	5.43	1.52	1.45
12	B	2311	A	C6-N6	5.43	1.38	1.33
12	B	2588	G	C2'-C1'	-5.43	1.47	1.53
12	B	371	A	O3'-P	-5.43	1.54	1.61
12	B	537	G	C2-N3	-5.43	1.28	1.32
12	B	637	A	C5'-C4'	5.43	1.57	1.51
12	B	1018	U	N1-C6	5.43	1.42	1.38
12	B	1408	G	C6-N1	5.43	1.43	1.39
12	B	1519	G	N1-C2	5.43	1.42	1.37
12	B	1529	G	C5'-C4'	5.43	1.57	1.51
12	B	2297	A	C4'-O4'	-5.43	1.38	1.45
12	B	2487	G	N9-C8	5.43	1.41	1.37
12	B	2717	C	C4-N4	5.43	1.38	1.33
12	B	404	A	C2-N3	5.42	1.38	1.33
12	B	564	C	P-O5'	-5.42	1.54	1.59
12	B	571	U	C4-C5	5.42	1.48	1.43
12	B	964	C	N1-C6	5.42	1.40	1.37
12	B	1347	A	C6-N1	5.42	1.39	1.35
12	B	1630	A	C6-N6	5.42	1.38	1.33
12	B	2005	A	O3'-P	-5.42	1.54	1.61
12	B	2666	C	C3'-C2'	-5.42	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	956	G	N1-C2	5.42	1.42	1.37
12	B	2830	C	N1-C2	5.42	1.45	1.40
10	9	236	GLU	CB-CG	5.42	1.62	1.52
12	B	300	A	C2'-C1'	-5.42	1.47	1.53
12	B	786	C	C2'-C1'	-5.42	1.47	1.53
12	B	1209	U	C2-N3	5.42	1.41	1.37
12	B	1989	G	C2-N3	5.42	1.37	1.32
12	B	2819	G	N9-C8	-5.42	1.34	1.37
12	B	875	G	N3-C4	5.42	1.39	1.35
12	B	886	A	C3'-O3'	5.42	1.49	1.42
12	B	543	G	C5-C4	-5.42	1.34	1.38
12	B	950	G	C5-C4	5.42	1.42	1.38
12	B	1190	G	P-O5'	5.42	1.65	1.59
12	B	1478	G	C2-N3	5.42	1.37	1.32
12	B	1620	G	C5-C6	5.42	1.47	1.42
12	B	2495	G	N7-C5	5.42	1.42	1.39
12	B	2724	U	P-O5'	-5.42	1.54	1.59
12	B	2867	G	N1-C2	5.42	1.42	1.37
12	B	44	A	C2'-C1'	-5.42	1.47	1.53
12	B	49	A	N9-C4	5.42	1.41	1.37
12	B	857	G	N3-C4	-5.42	1.31	1.35
12	B	1835	G	C5-C4	5.42	1.42	1.38
12	B	2828	G	C3'-O3'	5.42	1.49	1.42
12	B	339	U	C2'-C1'	-5.42	1.47	1.53
12	B	785	G	N9-C4	-5.42	1.33	1.38
12	B	859	G	N7-C5	-5.42	1.36	1.39
12	B	1411	U	N1-C2	-5.42	1.33	1.38
12	B	1840	G	C3'-C2'	5.42	1.58	1.52
12	B	2462	C	C4-N4	5.42	1.38	1.33
12	B	728	G	C4'-O4'	5.41	1.52	1.45
12	B	780	G	C5-C6	-5.41	1.36	1.42
12	B	992	C	N1-C6	5.41	1.40	1.37
12	B	1039	A	C5-C6	-5.41	1.36	1.41
12	B	1039	A	N9-C4	5.41	1.41	1.37
12	B	1734	G	C3'-C2'	-5.41	1.46	1.52
12	B	1826	G	C2-N2	5.41	1.40	1.34
12	B	2447	G	C2-N3	5.41	1.37	1.32
12	B	2758	A	P-O5'	-5.41	1.54	1.59
12	B	2804	U	C2-N3	5.41	1.41	1.37
22	L	60	ARG	CD-NE	5.41	1.55	1.46
12	B	829	A	C5-C6	-5.41	1.36	1.41
12	B	1363	C	C2'-C1'	-5.41	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1973	G	N7-C5	-5.41	1.36	1.39
12	B	2892	G	P-O5'	-5.41	1.54	1.59
12	B	731	C	C4'-C3'	-5.41	1.47	1.52
12	B	788	A	N3-C4	-5.41	1.31	1.34
12	B	840	C	C3'-C2'	-5.41	1.46	1.52
12	B	1119	U	N3-C4	5.41	1.43	1.38
12	B	1300	G	C8-N7	5.41	1.34	1.30
12	B	1421	G	N1-C2	5.41	1.42	1.37
12	B	1424	G	N7-C5	5.41	1.42	1.39
12	B	1508	A	C3'-C2'	5.41	1.58	1.52
12	B	1735	A	C8-N7	-5.41	1.27	1.31
12	B	1775	U	C2'-C1'	-5.41	1.47	1.53
12	B	286	U	C2-N3	5.41	1.41	1.37
12	B	586	A	C2'-C1'	-5.41	1.47	1.53
12	B	807	U	O3'-P	-5.41	1.54	1.61
12	B	991	C	C4-C5	5.41	1.47	1.43
12	B	1304	A	O3'-P	-5.41	1.54	1.61
12	B	1788	C	N1-C6	-5.41	1.33	1.37
12	B	2389	G	N9-C8	5.41	1.41	1.37
12	B	2586	U	C4'-C3'	5.41	1.59	1.53
12	B	2884	U	C2-N3	5.41	1.41	1.37
22	L	66	PHE	CG-CD1	5.41	1.46	1.38
27	Q	101	ASP	CA-CB	5.41	1.65	1.53
12	B	738	G	C6-N1	5.41	1.43	1.39
12	B	1274	A	O3'-P	-5.41	1.54	1.61
12	B	1690	A	P-O5'	-5.41	1.54	1.59
12	B	1692	U	P-O5'	-5.41	1.54	1.59
12	B	1822	C	N1-C2	-5.41	1.34	1.40
12	B	1945	G	C3'-O3'	5.41	1.49	1.42
12	B	306	U	N3-C4	5.41	1.43	1.38
12	B	799	G	O3'-P	-5.41	1.54	1.61
12	B	1186	G	C5-C4	5.41	1.42	1.38
12	B	1254	A	N1-C2	5.41	1.39	1.34
12	B	2155	U	C2-N3	5.41	1.41	1.37
12	B	2574	G	C2-N2	5.41	1.40	1.34
12	B	726	G	C4'-C3'	5.40	1.59	1.53
12	B	749	A	C5-C4	-5.40	1.34	1.38
12	B	1046	A	C2-N3	5.40	1.38	1.33
12	B	1814	G	N7-C5	-5.40	1.36	1.39
12	B	1926	U	C4-C5	5.40	1.48	1.43
12	B	2116	G	C8-N7	-5.40	1.27	1.30
12	B	2327	A	C4'-O4'	-5.40	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2494	G	C6-N1	5.40	1.43	1.39
12	B	2757	A	C6-N6	5.40	1.38	1.33
12	B	1265	A	C6-N6	5.40	1.38	1.33
12	B	1562	U	N1-C2	5.40	1.43	1.38
12	B	2195	U	N1-C2	-5.40	1.33	1.38
12	B	2755	C	C2-N3	5.40	1.40	1.35
21	K	87	LEU	CA-CB	5.40	1.66	1.53
12	B	2	G	C2'-C1'	-5.40	1.47	1.53
12	B	1184	U	C4-O4	-5.40	1.19	1.23
12	B	1223	G	C5-C6	-5.40	1.36	1.42
12	B	1652	A	C2'-C1'	-5.40	1.47	1.53
12	B	1765	U	C4'-O4'	5.40	1.52	1.45
12	B	2032	G	C2-N2	5.40	1.40	1.34
18	H	128	HIS	CB-CG	-5.40	1.40	1.50
12	B	230	G	C3'-C2'	-5.40	1.46	1.52
12	B	298	G	C2'-C1'	-5.40	1.47	1.53
12	B	1056	G	C5-C4	-5.40	1.34	1.38
12	B	2708	G	C8-N7	-5.40	1.27	1.30
13	C	181	ARG	NE-CZ	5.40	1.40	1.33
11	A	21	G	N7-C5	-5.40	1.36	1.39
11	A	62	C	N3-C4	5.40	1.37	1.33
12	B	368	A	C6-N6	5.40	1.38	1.33
12	B	565	C	C4'-O4'	5.40	1.52	1.45
12	B	719	C	C2-N3	5.40	1.40	1.35
12	B	885	C	C4-C5	5.40	1.47	1.43
12	B	1135	C	P-O5'	-5.40	1.54	1.59
12	B	1150	C	N1-C6	5.40	1.40	1.37
12	B	1274	A	N3-C4	5.40	1.38	1.34
12	B	2458	G	C4'-C3'	5.40	1.59	1.53
12	B	2630	G	N1-C2	5.40	1.42	1.37
11	A	44	G	N1-C2	5.40	1.42	1.37
12	B	85	G	C3'-C2'	-5.40	1.46	1.52
12	B	1154	G	C5-C6	-5.40	1.36	1.42
12	B	2051	A	O3'-P	-5.40	1.54	1.61
12	B	2550	G	C3'-C2'	-5.40	1.46	1.52
12	B	1478	G	N7-C5	5.39	1.42	1.39
11	A	5	U	C4'-C3'	5.39	1.59	1.53
12	B	291	G	C2-N2	5.39	1.40	1.34
12	B	488	G	C2-N3	5.39	1.37	1.32
12	B	645	C	C3'-C2'	-5.39	1.46	1.52
12	B	679	C	C2-N3	5.39	1.40	1.35
12	B	753	A	C3'-C2'	-5.39	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1195	G	C2-N3	5.39	1.37	1.32
12	B	2430	A	C6-N6	5.39	1.38	1.33
12	B	2509	G	N1-C2	5.39	1.42	1.37
21	K	54	LYS	C-N	5.39	1.42	1.33
12	B	371	A	N9-C4	-5.39	1.34	1.37
12	B	1460	U	C5'-C4'	5.39	1.57	1.51
12	B	2066	C	O4'-C1'	-5.39	1.34	1.41
1	0	10	ARG	CG-CD	5.39	1.65	1.51
12	B	67	U	C4-C5	5.39	1.48	1.43
12	B	255	A	C6-N1	5.39	1.39	1.35
12	B	358	U	N1-C2	5.39	1.43	1.38
12	B	461	C	N1-C6	5.39	1.40	1.37
12	B	498	G	C2-N3	5.39	1.37	1.32
12	B	622	G	P-O5'	5.39	1.65	1.59
12	B	636	G	O3'-P	-5.39	1.54	1.61
12	B	745	G	C3'-C2'	-5.39	1.46	1.52
12	B	798	G	C8-N7	5.39	1.34	1.30
12	B	934	U	C2'-C1'	-5.39	1.47	1.53
12	B	1499	C	C2-O2	5.39	1.29	1.24
12	B	1780	A	C8-N7	-5.39	1.27	1.31
12	B	2398	U	C3'-C2'	5.39	1.58	1.52
22	L	18	ARG	CZ-NH1	5.39	1.40	1.33
12	B	346	A	N7-C5	-5.39	1.36	1.39
12	B	364	C	C4-N4	5.39	1.38	1.33
12	B	1565	C	N3-C4	5.39	1.37	1.33
12	B	1810	A	N3-C4	5.39	1.38	1.34
12	B	2056	G	N3-C4	5.39	1.39	1.35
12	B	2626	C	C2'-O2'	5.39	1.48	1.41
11	A	9	G	N7-C5	-5.39	1.36	1.39
12	B	621	A	C5'-C4'	5.39	1.57	1.51
12	B	1044	C	C4-N4	5.39	1.38	1.33
12	B	1641	A	C2'-C1'	-5.39	1.47	1.53
12	B	1938	A	N9-C4	5.39	1.41	1.37
12	B	2228	G	C2'-C1'	-5.39	1.47	1.53
12	B	2706	A	C2-N3	5.39	1.38	1.33
12	B	69	C	N3-C4	5.38	1.37	1.33
12	B	209	C	C2'-C1'	-5.38	1.47	1.53
12	B	217	A	O4'-C1'	5.38	1.48	1.41
12	B	798	G	O3'-P	5.38	1.67	1.61
12	B	803	U	C2-N3	5.38	1.41	1.37
12	B	1240	U	C2-N3	5.38	1.41	1.37
12	B	2126	A	N3-C4	-5.38	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	276	U	C2'-C1'	-5.38	1.47	1.53
12	B	684	G	O4'-C1'	-5.38	1.34	1.41
12	B	779	U	N1-C2	5.38	1.43	1.38
12	B	1544	A	C2-N3	5.38	1.38	1.33
12	B	2040	G	C2'-O2'	5.38	1.48	1.41
11	A	76	G	C3'-O3'	5.38	1.49	1.42
12	B	298	G	C2-N2	5.38	1.40	1.34
12	B	388	G	C5'-C4'	5.38	1.57	1.51
12	B	413	C	O4'-C1'	5.38	1.48	1.41
12	B	730	A	N1-C2	-5.38	1.29	1.34
12	B	1080	A	C6-N6	-5.38	1.29	1.33
12	B	1271	G	C6-N1	5.38	1.43	1.39
12	B	1628	G	C8-N7	-5.38	1.27	1.30
12	B	1733	G	C6-O6	5.38	1.28	1.24
12	B	2098	U	N1-C6	-5.38	1.33	1.38
12	B	2753	A	C5-C6	-5.38	1.36	1.41
10	9	36	GLY	N-CA	-5.38	1.38	1.46
12	B	614	A	N9-C4	5.38	1.41	1.37
12	B	2028	U	O4'-C1'	-5.38	1.34	1.41
12	B	2681	C	P-O5'	-5.38	1.54	1.59
12	B	2820	A	N9-C4	-5.38	1.34	1.37
12	B	496	G	C2-N3	5.38	1.37	1.32
12	B	1681	G	C5-C4	5.38	1.42	1.38
12	B	2555	U	N1-C6	-5.38	1.33	1.38
12	B	2617	U	C2'-C1'	-5.38	1.47	1.53
11	A	64	G	C5'-C4'	5.38	1.57	1.51
12	B	364	C	O3'-P	-5.38	1.54	1.61
12	B	1008	A	O3'-P	-5.38	1.54	1.61
12	B	1088	A	N7-C5	-5.38	1.36	1.39
12	B	1233	C	C4-N4	5.38	1.38	1.33
12	B	1291	C	C5'-C4'	-5.38	1.44	1.51
12	B	1460	U	N1-C2	5.38	1.43	1.38
12	B	1829	A	C8-N7	-5.38	1.27	1.31
12	B	1980	G	C2'-C1'	-5.38	1.47	1.53
12	B	2534	A	C3'-C2'	-5.38	1.46	1.52
1	0	56	ARG	NE-CZ	5.38	1.40	1.33
12	B	1088	A	C6-N6	-5.38	1.29	1.33
12	B	1429	G	C4'-O4'	-5.38	1.38	1.45
12	B	1716	U	C3'-C2'	-5.38	1.46	1.52
4	3	47	TYR	CE1-CZ	5.37	1.45	1.38
12	B	34	U	C4'-O4'	-5.37	1.38	1.45
12	B	76	C	P-O5'	-5.37	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1078	U	N1-C6	5.37	1.42	1.38
12	B	1383	A	C5'-C4'	5.37	1.57	1.51
12	B	1684	G	C4'-C3'	-5.37	1.47	1.52
12	B	1843	C	N1-C6	5.37	1.40	1.37
12	B	2191	A	C8-N7	-5.37	1.27	1.31
12	B	2409	G	N7-C5	-5.37	1.36	1.39
12	B	2488	G	C3'-C2'	-5.37	1.46	1.52
12	B	2635	A	O3'-P	-5.37	1.54	1.61
12	B	26	G	C6-N1	5.37	1.43	1.39
12	B	393	C	O4'-C1'	5.37	1.48	1.41
12	B	651	G	N9-C8	5.37	1.41	1.37
12	B	675	A	C3'-O3'	-5.37	1.34	1.42
12	B	894	U	C2-N3	-5.37	1.33	1.37
12	B	905	A	C2'-C1'	-5.37	1.47	1.53
12	B	1239	G	C5-C6	-5.37	1.36	1.42
12	B	1614	A	P-O5'	5.37	1.65	1.59
12	B	2495	G	C2-N3	5.37	1.37	1.32
12	B	2846	G	P-O5'	-5.37	1.54	1.59
12	B	7	G	C4'-C3'	5.37	1.59	1.53
12	B	498	G	C4'-C3'	5.37	1.59	1.53
12	B	2276	G	N1-C2	5.37	1.42	1.37
12	B	2451	A	C6-N6	5.37	1.38	1.33
12	B	2582	G	C5-C4	5.37	1.42	1.38
12	B	2887	A	C8-N7	5.37	1.35	1.31
11	A	39	A	N7-C5	-5.37	1.36	1.39
12	B	332	A	C1'-N9	-5.37	1.39	1.46
12	B	375	G	C2'-C1'	-5.37	1.47	1.53
12	B	1050	A	C5-C4	5.37	1.42	1.38
12	B	1483	G	C2'-C1'	-5.37	1.47	1.53
12	B	2117	A	C2'-C1'	5.37	1.59	1.53
12	B	2824	C	N1-C6	5.37	1.40	1.37
12	B	273	G	C5-C6	-5.37	1.36	1.42
12	B	732	C	C5'-C4'	5.37	1.57	1.51
12	B	1226	A	P-O5'	-5.37	1.54	1.59
12	B	2810	A	C2'-C1'	-5.37	1.47	1.53
12	B	59	U	C4'-O4'	5.37	1.52	1.45
12	B	218	A	C6-N6	5.37	1.38	1.33
12	B	245	G	C2-N2	5.37	1.40	1.34
12	B	382	A	P-O5'	-5.37	1.54	1.59
12	B	740	C	C3'-O3'	5.37	1.49	1.42
12	B	1057	A	C3'-C2'	5.37	1.58	1.52
12	B	1542	U	C4-C5	5.37	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1675	C	C3'-O3'	-5.37	1.34	1.42
12	B	2327	A	P-O5'	-5.37	1.54	1.59
14	D	182	ALA	CA-CB	5.37	1.63	1.52
10	9	260	ARG	NE-CZ	5.36	1.40	1.33
12	B	1444	G	O3'-P	-5.36	1.54	1.61
12	B	2148	G	N1-C2	5.36	1.42	1.37
12	B	2488	G	N9-C8	5.36	1.41	1.37
12	B	2525	G	C6-N1	5.36	1.43	1.39
12	B	2645	G	N9-C8	5.36	1.41	1.37
12	B	2850	A	N9-C4	-5.36	1.34	1.37
12	B	374	A	N3-C4	-5.36	1.31	1.34
12	B	1221	C	C4'-O4'	-5.36	1.38	1.45
12	B	1419	A	C2-N3	5.36	1.38	1.33
12	B	1580	A	C6-N1	5.36	1.39	1.35
12	B	1933	G	N1-C2	5.36	1.42	1.37
12	B	2063	C	C2-N3	5.36	1.40	1.35
12	B	2809	A	N7-C5	5.36	1.42	1.39
12	B	2872	A	C6-N1	5.36	1.39	1.35
12	B	543	G	N9-C8	-5.36	1.34	1.37
12	B	1347	A	C4'-C3'	5.36	1.59	1.53
12	B	1417	C	N1-C6	5.36	1.40	1.37
12	B	1913	A	C4'-C3'	-5.36	1.47	1.52
12	B	2012	G	N3-C4	5.36	1.39	1.35
12	B	2521	C	C4-N4	5.36	1.38	1.33
26	P	112	ARG	CZ-NH1	5.36	1.40	1.33
11	A	55	U	C2'-C1'	-5.36	1.47	1.53
12	B	696	G	N1-C2	5.36	1.42	1.37
12	B	1425	G	C1'-N9	-5.36	1.39	1.46
12	B	1641	A	N9-C8	5.36	1.42	1.37
12	B	2404	U	O4'-C1'	5.36	1.48	1.41
12	B	2471	A	C5-C4	-5.36	1.34	1.38
12	B	2685	G	C2-N3	5.36	1.37	1.32
11	A	42	C	C3'-O3'	5.36	1.49	1.42
12	B	122	G	C5-C4	5.36	1.42	1.38
12	B	199	A	C5'-C4'	5.36	1.57	1.51
12	B	1197	G	C2'-C1'	-5.36	1.47	1.53
12	B	1248	G	N3-C4	-5.36	1.31	1.35
12	B	2086	U	C3'-O3'	-5.36	1.34	1.42
12	B	2369	A	O4'-C1'	5.36	1.48	1.41
12	B	2388	A	C2'-C1'	-5.36	1.47	1.53
12	B	2636	C	P-O5'	-5.36	1.54	1.59
12	B	2638	G	C5-C4	5.36	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2899	A	C5'-C4'	5.36	1.57	1.51
12	B	241	A	N1-C2	5.36	1.39	1.34
12	B	406	G	C4'-O4'	5.36	1.52	1.45
12	B	575	A	N7-C5	-5.36	1.36	1.39
12	B	653	U	C5'-C4'	5.36	1.57	1.51
12	B	963	U	C5'-C4'	5.36	1.57	1.51
12	B	1089	A	O3'-P	-5.36	1.54	1.61
12	B	1130	U	C4'-O4'	5.36	1.52	1.45
12	B	1158	C	O3'-P	-5.36	1.54	1.61
12	B	1820	U	C3'-O3'	5.36	1.49	1.42
12	B	2009	A	C6-N6	-5.36	1.29	1.33
12	B	2147	A	C4'-O4'	5.36	1.52	1.45
12	B	2575	C	C4-N4	5.36	1.38	1.33
12	B	718	A	C8-N7	-5.35	1.27	1.31
12	B	1620	G	N9-C4	-5.35	1.33	1.38
12	B	1980	G	N9-C8	5.35	1.41	1.37
11	A	106	G	N1-C2	5.35	1.42	1.37
12	B	15	G	N3-C4	5.35	1.39	1.35
12	B	732	C	N3-C4	5.35	1.37	1.33
12	B	2631	G	C2-N2	5.35	1.40	1.34
12	B	2727	A	C8-N7	5.35	1.35	1.31
12	B	2822	G	N1-C2	5.35	1.42	1.37
22	L	120	VAL	CA-CB	-5.35	1.43	1.54
12	B	1093	G	C2-N3	5.35	1.37	1.32
12	B	1643	G	N7-C5	-5.35	1.36	1.39
12	B	1774	C	N1-C6	5.35	1.40	1.37
12	B	2129	C	C2-N3	5.35	1.40	1.35
12	B	2658	C	C2-N3	5.35	1.40	1.35
11	A	76	G	N1-C2	5.35	1.42	1.37
12	B	227	A	C5-C6	-5.35	1.36	1.41
12	B	369	U	N1-C2	-5.35	1.33	1.38
12	B	675	A	N3-C4	-5.35	1.31	1.34
12	B	1177	G	O3'-P	-5.35	1.54	1.61
12	B	1704	C	C4-N4	5.35	1.38	1.33
12	B	443	A	P-O5'	-5.35	1.54	1.59
12	B	1036	G	C2'-C1'	-5.35	1.47	1.53
12	B	1237	A	C4'-C3'	-5.35	1.47	1.52
12	B	2276	G	O5'-C5'	-5.35	1.34	1.42
12	B	2538	C	N3-C4	5.35	1.37	1.33
12	B	2762	C	N1-C6	-5.35	1.33	1.37
12	B	2771	C	C4-N4	5.35	1.38	1.33
24	N	17	ARG	CZ-NH1	5.35	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	360	U	C2-O2	-5.35	1.17	1.22
12	B	710	U	C2-O2	5.35	1.27	1.22
12	B	1775	U	C5'-C4'	5.35	1.57	1.51
12	B	1780	A	O3'-P	-5.35	1.54	1.61
12	B	262	A	N3-C4	-5.34	1.31	1.34
12	B	602	A	N9-C4	-5.34	1.34	1.37
12	B	858	G	N3-C4	5.34	1.39	1.35
12	B	1303	G	N9-C4	-5.34	1.33	1.38
12	B	1342	A	O4'-C1'	5.34	1.48	1.41
12	B	1647	U	C2-N3	5.34	1.41	1.37
12	B	1806	C	C2-O2	5.34	1.29	1.24
12	B	2433	A	C4'-C3'	-5.34	1.47	1.52
7	6	45	SER	CA-CB	5.34	1.60	1.52
12	B	1821	A	N7-C5	-5.34	1.36	1.39
12	B	2045	C	P-O5'	-5.34	1.54	1.59
12	B	2164	C	N1-C6	5.34	1.40	1.37
12	B	2638	G	N1-C2	5.34	1.42	1.37
12	B	512	G	C4'-O4'	5.34	1.52	1.45
12	B	520	G	C3'-O3'	5.34	1.49	1.42
12	B	575	A	C6-N6	5.34	1.38	1.33
12	B	661	A	N3-C4	-5.34	1.31	1.34
12	B	1345	C	O3'-P	-5.34	1.54	1.61
12	B	1552	A	C5-C6	5.34	1.45	1.41
12	B	1898	U	C5'-C4'	5.34	1.57	1.51
12	B	2345	G	N1-C2	5.34	1.42	1.37
12	B	2586	U	C2-N3	5.34	1.41	1.37
12	B	2596	U	C2-O2	5.34	1.27	1.22
11	A	82	U	C5'-C4'	-5.34	1.45	1.51
12	B	382	A	C4'-C3'	5.34	1.59	1.53
12	B	1333	G	N1-C2	5.34	1.42	1.37
12	B	1429	G	N9-C4	-5.34	1.33	1.38
12	B	1761	C	C2-O2	-5.34	1.19	1.24
12	B	2363	G	O4'-C1'	5.34	1.48	1.41
12	B	2638	G	C4'-C3'	-5.34	1.47	1.52
12	B	2	G	O3'-P	5.34	1.67	1.61
12	B	329	G	C5-C4	5.34	1.42	1.38
12	B	511	U	C4-O4	5.34	1.27	1.23
12	B	2027	G	C8-N7	-5.34	1.27	1.30
12	B	35	G	C4'-O4'	5.34	1.52	1.45
12	B	136	G	N1-C2	5.34	1.42	1.37
12	B	338	G	N1-C2	5.34	1.42	1.37
12	B	341	C	C5'-C4'	5.34	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	443	A	C4'-C3'	5.34	1.59	1.53
12	B	1135	C	C4'-C3'	-5.34	1.47	1.52
12	B	1740	G	N9-C8	5.34	1.41	1.37
12	B	1994	C	C2-N3	-5.34	1.31	1.35
12	B	2005	A	N1-C2	5.34	1.39	1.34
12	B	2497	A	N1-C2	5.34	1.39	1.34
18	H	130	VAL	CB-CG2	5.34	1.64	1.52
12	B	86	G	O5'-C5'	5.33	1.52	1.44
12	B	1217	U	N1-C6	5.33	1.42	1.38
12	B	2188	U	C2-N3	5.33	1.41	1.37
23	M	109	PRO	CA-C	-5.33	1.42	1.52
12	B	176	A	C2-N3	5.33	1.38	1.33
12	B	258	G	P-O5'	5.33	1.65	1.59
12	B	324	A	C2'-C1'	-5.33	1.47	1.53
12	B	707	G	C3'-O3'	5.33	1.49	1.42
12	B	759	G	N3-C4	-5.33	1.31	1.35
12	B	1851	U	O3'-P	-5.33	1.54	1.61
12	B	2050	C	C4'-O4'	-5.33	1.38	1.45
12	B	2058	A	C5-C4	-5.33	1.35	1.38
12	B	2092	U	C5-C6	5.33	1.39	1.34
12	B	25	U	O3'-P	-5.33	1.54	1.61
12	B	1027	A	C6-N1	5.33	1.39	1.35
12	B	1172	C	C4'-O4'	-5.33	1.38	1.45
12	B	1421	G	C6-N1	-5.33	1.35	1.39
12	B	1784	A	N9-C4	-5.33	1.34	1.37
12	B	2080	A	N9-C4	-5.33	1.34	1.37
12	B	2641	G	C2-N3	-5.33	1.28	1.32
12	B	2807	U	C2-N3	5.33	1.41	1.37
12	B	150	U	C3'-O3'	-5.33	1.34	1.42
12	B	1912	A	C5-C4	5.33	1.42	1.38
12	B	2793	C	C2-N3	5.33	1.40	1.35
11	A	43	C	C4-C5	-5.33	1.38	1.43
12	B	701	G	C8-N7	-5.33	1.27	1.30
12	B	733	G	N7-C5	-5.33	1.36	1.39
12	B	908	C	C5-C6	5.33	1.38	1.34
12	B	1422	G	N7-C5	5.33	1.42	1.39
12	B	2083	G	C2-N3	5.33	1.37	1.32
12	B	2127	G	N9-C8	5.33	1.41	1.37
12	B	2288	A	N3-C4	-5.33	1.31	1.34
12	B	2714	G	N3-C4	-5.33	1.31	1.35
12	B	110	G	N3-C4	-5.33	1.31	1.35
12	B	882	G	C2-N3	5.33	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1329	U	C2'-C1'	-5.33	1.47	1.53
12	B	1724	G	C2'-C1'	-5.33	1.47	1.53
11	A	79	G	N7-C5	-5.33	1.36	1.39
12	B	107	G	N9-C8	5.33	1.41	1.37
12	B	454	A	C4'-C3'	5.33	1.59	1.53
12	B	459	U	P-O5'	-5.33	1.54	1.59
12	B	1236	G	C2'-C1'	-5.33	1.47	1.53
12	B	1330	C	C4-C5	5.33	1.47	1.43
12	B	1722	A	N1-C2	-5.33	1.29	1.34
12	B	2227	A	N7-C5	-5.33	1.36	1.39
12	B	2286	G	O4'-C1'	5.33	1.48	1.41
12	B	2829	A	N9-C4	-5.33	1.34	1.37
13	C	261	ARG	CZ-NH1	5.33	1.40	1.33
12	B	714	U	N3-C4	5.32	1.43	1.38
12	B	887	U	N3-C4	5.32	1.43	1.38
12	B	919	U	O4'-C1'	5.32	1.48	1.41
12	B	1307	A	C5'-C4'	5.32	1.57	1.51
12	B	2237	G	O3'-P	-5.32	1.54	1.61
12	B	2601	C	N3-C4	5.32	1.37	1.33
20	J	69	ARG	CZ-NH2	5.32	1.40	1.33
23	M	75	GLU	CD-OE1	5.32	1.31	1.25
12	B	185	G	C5-C6	-5.32	1.37	1.42
12	B	769	U	C4'-C3'	5.32	1.59	1.53
12	B	1486	U	C5'-C4'	5.32	1.57	1.51
30	T	56	GLU	CD-OE2	5.32	1.31	1.25
12	B	654	A	C1'-N9	5.32	1.56	1.48
12	B	956	G	C5-C4	-5.32	1.34	1.38
12	B	1348	C	C5'-C4'	5.32	1.57	1.51
12	B	1961	C	C2-N3	5.32	1.40	1.35
12	B	2110	G	C2-N2	5.32	1.39	1.34
12	B	2365	G	C2-N2	5.32	1.39	1.34
12	B	2719	G	O3'-P	-5.32	1.54	1.61
12	B	2776	A	N7-C5	-5.32	1.36	1.39
12	B	2797	U	C4'-C3'	5.32	1.59	1.53
12	B	972	A	C2-N3	5.32	1.38	1.33
12	B	1243	C	C4-N4	5.32	1.38	1.33
12	B	1536	C	N3-C4	5.32	1.37	1.33
12	B	1558	C	C2-O2	5.32	1.29	1.24
12	B	2024	G	P-O5'	-5.32	1.54	1.59
12	B	38	A	O4'-C1'	5.32	1.48	1.41
12	B	459	U	C2-N3	-5.32	1.34	1.37
12	B	651	G	C8-N7	-5.32	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	695	G	C2-N2	5.32	1.39	1.34
12	B	793	A	C5'-C4'	5.32	1.57	1.51
12	B	953	G	C3'-O3'	-5.32	1.34	1.42
12	B	988	A	C2-N3	-5.32	1.28	1.33
12	B	1095	A	C2'-O2'	-5.32	1.34	1.41
12	B	1169	A	C6-N1	5.32	1.39	1.35
12	B	1490	A	C6-N1	5.32	1.39	1.35
12	B	1690	A	N9-C4	-5.32	1.34	1.37
12	B	2313	C	C5-C6	5.32	1.38	1.34
12	B	2454	G	C8-N7	5.32	1.34	1.30
12	B	2459	A	N9-C8	5.32	1.42	1.37
12	B	2565	A	C6-N6	5.32	1.38	1.33
12	B	202	U	O4'-C1'	5.32	1.48	1.41
12	B	337	C	N1-C2	5.32	1.45	1.40
12	B	680	C	C4-N4	5.32	1.38	1.33
12	B	893	C	C4'-C3'	-5.32	1.47	1.52
12	B	1941	C	C1'-N1	5.32	1.56	1.48
12	B	1951	U	O3'-P	-5.32	1.54	1.61
12	B	2057	G	O3'-P	-5.32	1.54	1.61
12	B	2466	C	N3-C4	5.32	1.37	1.33
12	B	2556	C	O5'-C5'	-5.32	1.34	1.42
12	B	2727	A	C6-N1	5.32	1.39	1.35
12	B	13	A	C5-C6	-5.31	1.36	1.41
12	B	1248	G	N1-C2	5.31	1.42	1.37
12	B	2084	C	N1-C6	5.31	1.40	1.37
12	B	2191	A	N7-C5	5.31	1.42	1.39
12	B	2749	A	N9-C8	-5.31	1.33	1.37
12	B	173	A	C5'-C4'	5.31	1.57	1.51
12	B	325	G	C8-N7	-5.31	1.27	1.30
12	B	437	U	C3'-C2'	-5.31	1.47	1.52
12	B	755	U	C3'-O3'	5.31	1.49	1.42
12	B	805	G	P-O5'	5.31	1.65	1.59
12	B	823	C	N3-C4	5.31	1.37	1.33
12	B	1252	G	N1-C2	5.31	1.42	1.37
12	B	1620	G	C3'-O3'	5.31	1.49	1.42
12	B	1663	G	P-O5'	5.31	1.65	1.59
12	B	1700	A	C4'-C3'	-5.31	1.47	1.52
12	B	1985	C	C5'-C4'	5.31	1.57	1.51
12	B	2114	A	N9-C4	-5.31	1.34	1.37
12	B	2229	U	C4-O4	-5.31	1.19	1.23
12	B	2488	G	N3-C4	-5.31	1.31	1.35
25	O	10	ARG	CZ-NH2	5.31	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	800	A	C5'-C4'	5.31	1.57	1.51
12	B	1016	G	C6-N1	5.31	1.43	1.39
12	B	1613	G	C2-N3	5.31	1.36	1.32
12	B	2173	A	N3-C4	-5.31	1.31	1.34
12	B	2513	A	N1-C2	-5.31	1.29	1.34
11	A	53	A	N9-C4	-5.31	1.34	1.37
12	B	642	U	N1-C2	5.31	1.43	1.38
12	B	1102	C	P-O5'	-5.31	1.54	1.59
12	B	2183	A	P-O5'	-5.31	1.54	1.59
12	B	84	A	C3'-O3'	5.31	1.49	1.42
12	B	234	U	C2-O2	5.31	1.27	1.22
12	B	622	G	N7-C5	-5.31	1.36	1.39
12	B	737	C	P-O5'	-5.31	1.54	1.59
12	B	1042	G	C3'-C2'	5.31	1.58	1.52
12	B	1136	G	C2-N3	5.31	1.36	1.32
12	B	1154	G	C2-N2	5.31	1.39	1.34
12	B	1436	G	N7-C5	-5.31	1.36	1.39
12	B	1445	G	C2-N3	5.31	1.36	1.32
12	B	1583	A	C3'-C2'	5.31	1.58	1.52
12	B	1864	U	N3-C4	5.31	1.43	1.38
12	B	1917	U	C4'-O4'	-5.31	1.38	1.45
12	B	2851	A	N9-C8	5.31	1.42	1.37
11	A	110	C	C2-O2	-5.31	1.19	1.24
12	B	1401	G	C5-C4	-5.31	1.34	1.38
11	A	12	C	C5-C6	5.30	1.38	1.34
11	A	54	G	N9-C8	-5.30	1.34	1.37
12	B	501	A	C4'-O4'	5.30	1.52	1.45
12	B	507	A	C6-N6	5.30	1.38	1.33
12	B	763	G	N1-C2	5.30	1.42	1.37
12	B	1696	G	C2-N3	5.30	1.36	1.32
12	B	1917	U	C5'-C4'	5.30	1.57	1.51
12	B	2626	C	C5-C6	5.30	1.38	1.34
12	B	2867	G	C2-N2	5.30	1.39	1.34
12	B	655	A	C5'-C4'	5.30	1.57	1.51
12	B	2132	U	C4-O4	5.30	1.27	1.23
12	B	2877	G	N7-C5	5.30	1.42	1.39
12	B	2891	U	N3-C4	5.30	1.43	1.38
12	B	276	U	P-O5'	-5.30	1.54	1.59
12	B	331	C	C4'-C3'	5.30	1.58	1.53
12	B	805	G	C4'-C3'	-5.30	1.47	1.52
12	B	990	A	C8-N7	-5.30	1.27	1.31
12	B	1166	G	P-O5'	-5.30	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1983	G	N9-C8	5.30	1.41	1.37
12	B	2312	U	C4'-O4'	5.30	1.52	1.45
12	B	2405	G	N7-C5	5.30	1.42	1.39
12	B	2641	G	O4'-C1'	-5.30	1.34	1.41
12	B	2660	A	C5-C6	5.30	1.45	1.41
12	B	2747	G	C8-N7	5.30	1.34	1.30
12	B	2801	G	O3'-P	-5.30	1.54	1.61
12	B	327	G	C5-C4	-5.30	1.34	1.38
12	B	513	A	C3'-O3'	5.30	1.49	1.42
12	B	1822	C	C4-C5	5.30	1.47	1.43
12	B	1947	C	C2'-C1'	-5.30	1.47	1.53
12	B	2173	A	N9-C4	5.30	1.41	1.37
12	B	2570	G	N3-C4	5.30	1.39	1.35
12	B	2681	C	N1-C6	5.30	1.40	1.37
12	B	892	A	P-O5'	5.30	1.65	1.59
12	B	2355	G	C2-N3	5.30	1.36	1.32
12	B	2643	G	N9-C4	-5.30	1.33	1.38
12	B	2802	G	N3-C4	-5.30	1.31	1.35
12	B	14	A	C3'-O3'	5.30	1.49	1.42
12	B	56	A	O3'-P	-5.30	1.54	1.61
12	B	1051	G	C6-N1	5.30	1.43	1.39
12	B	1056	G	C5-C6	5.30	1.47	1.42
12	B	1194	A	N9-C4	-5.30	1.34	1.37
12	B	1429	G	C6-N1	5.30	1.43	1.39
12	B	2038	G	C8-N7	-5.30	1.27	1.30
12	B	2121	G	O3'-P	5.30	1.67	1.61
12	B	2226	C	C5'-C4'	-5.30	1.45	1.51
12	B	2289	G	C2'-C1'	-5.30	1.47	1.53
26	P	50	ARG	CZ-NH1	5.30	1.40	1.33
12	B	54	G	P-O5'	-5.29	1.54	1.59
12	B	2859	G	C5-C4	-5.29	1.34	1.38
6	5	164	ARG	NE-CZ	5.29	1.40	1.33
11	A	15	A	C5'-C4'	5.29	1.57	1.51
11	A	53	A	C6-N6	5.29	1.38	1.33
12	B	590	A	C6-N1	5.29	1.39	1.35
12	B	621	A	C5-C6	5.29	1.45	1.41
12	B	875	G	C2'-C1'	-5.29	1.47	1.53
12	B	1284	A	C6-N6	5.29	1.38	1.33
12	B	1417	C	C5-C6	-5.29	1.30	1.34
12	B	1436	G	C6-N1	5.29	1.43	1.39
12	B	2505	G	C2'-C1'	-5.29	1.47	1.53
12	B	2758	A	C8-N7	-5.29	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2859	G	N9-C8	-5.29	1.34	1.37
29	S	45	VAL	CA-CB	-5.29	1.43	1.54
12	B	615	U	O3'-P	-5.29	1.54	1.61
12	B	1279	G	N9-C4	-5.29	1.33	1.38
12	B	1778	U	C3'-C2'	5.29	1.58	1.52
12	B	1973	G	N3-C4	-5.29	1.31	1.35
12	B	2269	G	P-O5'	-5.29	1.54	1.59
12	B	2721	A	O4'-C1'	5.29	1.48	1.41
12	B	2780	G	C3'-C2'	5.29	1.58	1.52
12	B	15	G	C6-N1	5.29	1.43	1.39
12	B	808	G	C5-C4	-5.29	1.34	1.38
12	B	1084	A	N7-C5	5.29	1.42	1.39
12	B	1273	U	C3'-O3'	5.29	1.49	1.42
12	B	1554	U	N3-C4	5.29	1.43	1.38
12	B	2823	A	C3'-C2'	-5.29	1.47	1.52
11	A	95	U	C4-C5	5.29	1.48	1.43
12	B	141	G	C2-N2	5.29	1.39	1.34
12	B	886	A	P-O5'	-5.29	1.54	1.59
12	B	918	A	C6-N1	5.29	1.39	1.35
12	B	1219	U	N1-C2	-5.29	1.33	1.38
12	B	2503	A	P-O5'	-5.29	1.54	1.59
12	B	2666	C	N3-C4	5.29	1.37	1.33
12	B	2770	G	C6-N1	5.29	1.43	1.39
12	B	2838	G	O4'-C1'	-5.29	1.34	1.41
12	B	235	U	C2-O2	5.29	1.27	1.22
12	B	1799	G	C6-N1	5.29	1.43	1.39
12	B	1852	U	C5'-C4'	-5.29	1.45	1.51
12	B	2397	G	N9-C8	5.29	1.41	1.37
12	B	2765	A	C5-C6	-5.29	1.36	1.41
12	B	3	U	C2'-C1'	-5.29	1.47	1.53
12	B	1879	C	C1'-N1	5.29	1.56	1.48
12	B	2130	U	C1'-N1	5.29	1.56	1.48
12	B	2426	A	C4'-C3'	5.29	1.58	1.53
12	B	2499	C	C4'-C3'	5.29	1.58	1.53
12	B	2837	A	C4'-O4'	5.29	1.52	1.45
12	B	947	A	N7-C5	5.28	1.42	1.39
12	B	1027	A	N7-C5	-5.28	1.36	1.39
12	B	1393	A	O3'-P	-5.28	1.54	1.61
12	B	1821	A	N9-C8	5.28	1.42	1.37
12	B	1902	C	C4'-C3'	5.28	1.58	1.53
12	B	2101	A	C5'-C4'	5.28	1.57	1.51
12	B	533	G	O3'-P	-5.28	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1072	C	N3-C4	5.28	1.37	1.33
12	B	1179	G	N7-C5	-5.28	1.36	1.39
12	B	2534	A	P-O5'	-5.28	1.54	1.59
12	B	2760	C	C3'-C2'	5.28	1.58	1.52
12	B	13	A	C3'-C2'	-5.28	1.47	1.52
12	B	637	A	N3-C4	-5.28	1.31	1.34
12	B	975	A	N1-C2	5.28	1.39	1.34
12	B	1032	A	N7-C5	5.28	1.42	1.39
12	B	1308	A	N9-C4	-5.28	1.34	1.37
12	B	1375	U	O3'-P	-5.28	1.54	1.61
12	B	1669	A	C5-C6	5.28	1.45	1.41
12	B	2083	G	O4'-C1'	5.28	1.48	1.41
12	B	2526	G	C5-C4	5.28	1.42	1.38
12	B	2633	G	C5'-C4'	5.28	1.57	1.51
12	B	1096	A	O3'-P	-5.28	1.54	1.61
12	B	1212	G	C2-N2	5.28	1.39	1.34
12	B	1908	C	C2'-O2'	-5.28	1.34	1.41
12	B	2137	U	P-O5'	-5.28	1.54	1.59
9	8	19	ARG	CZ-NH1	5.28	1.40	1.33
12	B	527	C	C5'-C4'	5.28	1.57	1.51
12	B	637	A	C1'-N9	-5.28	1.39	1.46
12	B	1993	U	O4'-C1'	5.28	1.48	1.41
12	B	2742	G	P-O5'	-5.28	1.54	1.59
10	9	51	GLU	CB-CG	5.27	1.62	1.52
12	B	774	G	C6-N1	5.27	1.43	1.39
12	B	1292	G	P-O5'	-5.27	1.54	1.59
12	B	2370	G	C5-C6	-5.27	1.37	1.42
12	B	2789	C	N3-C4	5.27	1.37	1.33
11	A	36	C	C4'-O4'	5.27	1.52	1.45
11	A	108	A	C3'-O3'	-5.27	1.34	1.42
12	B	1648	U	N1-C6	5.27	1.42	1.38
12	B	2174	C	N3-C4	5.27	1.37	1.33
12	B	2208	C	N3-C4	5.27	1.37	1.33
12	B	1584	U	C2'-C1'	-5.27	1.47	1.53
12	B	2271	G	C4'-O4'	5.27	1.52	1.45
22	L	78	ARG	CZ-NH2	5.27	1.40	1.33
11	A	48	U	C3'-C2'	-5.27	1.47	1.52
12	B	149	A	C5-C4	-5.27	1.35	1.38
12	B	307	G	C2-N2	5.27	1.39	1.34
12	B	484	C	P-O5'	-5.27	1.54	1.59
12	B	535	G	N3-C4	-5.27	1.31	1.35
12	B	535	G	N9-C8	5.27	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	992	C	O3'-P	-5.27	1.54	1.61
12	B	1375	U	C3'-C2'	5.27	1.58	1.52
12	B	1422	G	C2-N2	5.27	1.39	1.34
12	B	1798	U	C3'-O3'	5.27	1.49	1.42
12	B	1863	G	C6-O6	-5.27	1.19	1.24
12	B	2414	G	P-O5'	-5.27	1.54	1.59
11	A	9	G	C2-N2	5.27	1.39	1.34
12	B	180	G	C2'-C1'	-5.27	1.47	1.53
12	B	391	A	P-O5'	-5.27	1.54	1.59
12	B	1165	A	C5'-C4'	5.27	1.57	1.51
12	B	1282	U	C2'-C1'	-5.27	1.47	1.53
12	B	2882	A	C3'-O3'	5.27	1.49	1.42
15	E	10	SER	CA-CB	5.27	1.60	1.52
12	B	152	A	C4'-C3'	5.27	1.58	1.53
12	B	2273	A	N7-C5	-5.27	1.36	1.39
12	B	2639	A	C4'-C3'	-5.27	1.47	1.52
4	3	51	ARG	CZ-NH2	5.26	1.39	1.33
12	B	1390	U	N1-C2	5.26	1.43	1.38
12	B	1654	A	C2'-C1'	-5.26	1.47	1.53
12	B	1719	G	C4'-C3'	5.26	1.58	1.53
12	B	1920	C	C3'-C2'	-5.26	1.47	1.52
12	B	2274	A	O4'-C1'	-5.26	1.34	1.41
12	B	627	A	C5'-C4'	5.26	1.57	1.51
12	B	1073	A	C8-N7	-5.26	1.27	1.31
12	B	1663	G	N9-C8	-5.26	1.34	1.37
12	B	1782	U	C3'-O3'	5.26	1.49	1.42
12	B	1911	U	C4-O4	-5.26	1.19	1.23
12	B	1944	U	O4'-C1'	5.26	1.48	1.41
12	B	135	U	C2'-C1'	-5.26	1.47	1.53
12	B	308	G	N9-C4	5.26	1.42	1.38
12	B	856	G	C5-C6	-5.26	1.37	1.42
12	B	1338	G	C5-C4	-5.26	1.34	1.38
12	B	1547	C	C4'-C3'	-5.26	1.47	1.52
12	B	2314	A	C8-N7	-5.26	1.27	1.31
12	B	1732	C	C2-N3	5.26	1.40	1.35
12	B	2352	A	P-O5'	-5.26	1.54	1.59
12	B	289	G	N3-C4	-5.26	1.31	1.35
12	B	1768	C	N3-C4	5.26	1.37	1.33
12	B	2820	A	O3'-P	-5.26	1.54	1.61
12	B	245	G	C3'-O3'	5.26	1.49	1.42
12	B	715	A	C1'-N9	5.26	1.56	1.48
12	B	1225	G	C2-N2	5.26	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1244	A	N7-C5	-5.26	1.36	1.39
12	B	2018	G	N3-C4	-5.26	1.31	1.35
12	B	2071	A	C6-N1	5.26	1.39	1.35
12	B	2378	A	C6-N1	5.26	1.39	1.35
12	B	2389	G	P-O5'	-5.26	1.54	1.59
12	B	2571	U	C3'-O3'	5.26	1.49	1.42
12	B	169	G	C8-N7	5.25	1.34	1.30
12	B	326	G	C2'-C1'	-5.25	1.47	1.53
12	B	574	A	O3'-P	-5.25	1.54	1.61
12	B	1389	G	C2-N3	5.25	1.36	1.32
12	B	2286	G	C2-N2	5.25	1.39	1.34
11	A	59	A	C6-N1	5.25	1.39	1.35
12	B	101	A	O4'-C1'	-5.25	1.34	1.41
12	B	770	G	N9-C8	5.25	1.41	1.37
12	B	833	A	N9-C4	5.25	1.41	1.37
12	B	1008	A	N1-C2	-5.25	1.29	1.34
12	B	1265	A	C3'-C2'	5.25	1.58	1.52
12	B	1374	G	P-O5'	-5.25	1.54	1.59
12	B	1674	G	N9-C8	5.25	1.41	1.37
12	B	1931	U	N1-C2	5.25	1.43	1.38
12	B	2108	A	C2'-C1'	-5.25	1.47	1.53
12	B	2468	A	C5-C6	5.25	1.45	1.41
12	B	2503	A	C3'-C2'	-5.25	1.47	1.52
6	5	201	PRO	N-CD	-5.25	1.40	1.47
12	B	885	C	C5'-C4'	5.25	1.57	1.51
12	B	1434	A	O3'-P	-5.25	1.54	1.61
12	B	1470	A	C2'-C1'	5.25	1.59	1.53
12	B	2389	G	C5'-C4'	5.25	1.57	1.51
12	B	2747	G	C2-N2	5.25	1.39	1.34
17	G	171	LYS	CA-CB	5.25	1.65	1.53
12	B	156	A	N9-C4	-5.25	1.34	1.37
12	B	382	A	C2'-C1'	-5.25	1.47	1.53
12	B	592	A	N9-C8	-5.25	1.33	1.37
12	B	671	C	C5-C6	-5.25	1.30	1.34
12	B	697	G	C4'-O4'	5.25	1.52	1.45
12	B	1736	U	C3'-C2'	-5.25	1.47	1.52
12	B	2053	G	C8-N7	-5.25	1.27	1.30
12	B	2221	G	C6-N1	5.25	1.43	1.39
12	B	2237	G	N7-C5	-5.25	1.36	1.39
12	B	2301	C	N1-C6	-5.25	1.33	1.37
12	B	2317	A	C4'-C3'	5.25	1.58	1.53
12	B	2505	G	C5'-C4'	5.25	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2770	G	C5'-C4'	5.25	1.57	1.51
12	B	2880	C	N1-C6	5.25	1.40	1.37
11	A	64	G	C5-C6	-5.25	1.37	1.42
12	B	30	G	O3'-P	-5.25	1.54	1.61
12	B	318	C	C5'-C4'	-5.25	1.45	1.51
12	B	782	A	N9-C8	-5.25	1.33	1.37
12	B	1214	A	P-O5'	5.25	1.65	1.59
12	B	1383	A	C6-N6	5.25	1.38	1.33
12	B	1495	A	C4'-O4'	5.25	1.52	1.45
12	B	2122	U	C2-O2	-5.25	1.17	1.22
27	Q	75	TYR	CA-CB	5.25	1.65	1.53
6	5	21	TYR	CE1-CZ	5.25	1.45	1.38
12	B	436	C	C4-C5	5.25	1.47	1.43
12	B	798	G	C2'-C1'	-5.25	1.47	1.53
12	B	1055	G	C5'-C4'	5.25	1.57	1.51
12	B	1462	C	C4-N4	5.25	1.38	1.33
12	B	1823	G	C2-N3	5.25	1.36	1.32
12	B	2124	G	P-O5'	-5.25	1.54	1.59
12	B	666	A	N3-C4	5.25	1.38	1.34
12	B	1022	G	N1-C2	5.25	1.42	1.37
12	B	1969	A	C5-C4	-5.25	1.35	1.38
8	7	44	ARG	CZ-NH1	5.24	1.39	1.33
12	B	55	G	C5'-C4'	5.24	1.57	1.51
12	B	309	A	N3-C4	-5.24	1.31	1.34
12	B	765	C	C2-N3	5.24	1.40	1.35
12	B	1133	A	C5'-C4'	-5.24	1.45	1.51
12	B	1194	A	C6-N6	5.24	1.38	1.33
12	B	1792	G	N7-C5	5.24	1.42	1.39
12	B	1942	C	C4-C5	-5.24	1.38	1.43
12	B	2258	C	C4'-C3'	5.24	1.58	1.53
12	B	2676	C	P-O5'	-5.24	1.54	1.59
18	H	88	GLY	CA-C	-5.24	1.43	1.51
12	B	163	C	C4-N4	5.24	1.38	1.33
12	B	1731	G	C3'-C2'	5.24	1.58	1.52
12	B	2607	G	N9-C4	5.24	1.42	1.38
11	A	32	U	O4'-C1'	5.24	1.48	1.41
12	B	209	C	C3'-C2'	-5.24	1.47	1.52
12	B	273	G	O5'-C5'	-5.24	1.34	1.42
12	B	1007	C	C5'-C4'	5.24	1.57	1.51
12	B	1139	G	C4'-C3'	5.24	1.58	1.53
12	B	1445	G	C4'-C3'	5.24	1.58	1.53
12	B	1709	U	C4'-O4'	5.24	1.52	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1750	G	C4'-O4'	5.24	1.52	1.45
12	B	1958	C	P-O5'	-5.24	1.54	1.59
12	B	2094	A	C4'-O4'	-5.24	1.38	1.45
12	B	2655	G	N9-C8	-5.24	1.34	1.37
12	B	2742	G	C2-N2	5.24	1.39	1.34
12	B	1016	G	C5-C6	-5.24	1.37	1.42
12	B	1798	U	C2'-C1'	5.24	1.59	1.53
12	B	1953	A	N9-C8	5.24	1.42	1.37
12	B	1996	C	N1-C2	5.24	1.45	1.40
12	B	2024	G	C6-N1	-5.24	1.35	1.39
12	B	2180	U	C5-C6	5.24	1.38	1.34
22	L	41	ARG	CD-NE	5.24	1.55	1.46
11	A	50	A	C2'-C1'	-5.24	1.47	1.53
12	B	648	G	C4'-O4'	-5.24	1.38	1.45
12	B	904	G	O4'-C1'	5.24	1.48	1.41
12	B	1507	C	C4-C5	5.24	1.47	1.43
12	B	1682	G	C8-N7	5.24	1.34	1.30
12	B	2066	C	N1-C6	5.24	1.40	1.37
12	B	473	G	N9-C8	-5.24	1.34	1.37
12	B	1570	A	P-O5'	-5.24	1.54	1.59
12	B	1604	C	C2-O2	-5.24	1.19	1.24
12	B	1998	A	P-O5'	-5.24	1.54	1.59
12	B	2028	U	N1-C6	5.24	1.42	1.38
12	B	2172	U	C4-C5	-5.24	1.38	1.43
12	B	2752	C	C2'-C1'	-5.24	1.47	1.53
12	B	2879	A	P-O5'	-5.24	1.54	1.59
14	D	1	MET	CA-CB	5.24	1.65	1.53
10	9	326	TRP	CD2-CE2	5.23	1.47	1.41
12	B	976	G	C8-N7	-5.23	1.27	1.30
12	B	1853	A	C6-N6	5.23	1.38	1.33
12	B	2182	U	P-O5'	-5.23	1.54	1.59
12	B	2577	A	P-O5'	-5.23	1.54	1.59
12	B	213	A	C2-N3	-5.23	1.28	1.33
12	B	327	G	C3'-O3'	5.23	1.49	1.42
12	B	457	A	C2'-C1'	-5.23	1.47	1.53
12	B	841	G	N1-C2	-5.23	1.33	1.37
12	B	1404	C	N3-C4	5.23	1.37	1.33
12	B	1455	G	N9-C8	-5.23	1.34	1.37
12	B	2871	U	O3'-P	-5.23	1.54	1.61
11	A	102	G	C2-N3	5.23	1.36	1.32
12	B	539	G	C2'-C1'	-5.23	1.47	1.53
12	B	785	G	C5-C6	-5.23	1.37	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	952	G	C4'-C3'	5.23	1.58	1.53
12	B	1171	G	C2-N3	5.23	1.36	1.32
12	B	1238	G	C3'-C2'	5.23	1.58	1.52
12	B	1690	A	C3'-O3'	5.23	1.49	1.42
12	B	2224	G	C5-C4	5.23	1.42	1.38
12	B	2406	A	C5-C4	5.23	1.42	1.38
12	B	2423	U	N1-C2	5.23	1.43	1.38
12	B	2543	G	C2'-C1'	-5.23	1.47	1.53
12	B	2628	C	N1-C6	5.23	1.40	1.37
12	B	2630	G	C2-N3	5.23	1.36	1.32
12	B	2710	C	C3'-O3'	5.23	1.49	1.42
12	B	13	A	C4'-C3'	5.23	1.58	1.53
12	B	2145	C	P-O5'	-5.23	1.54	1.59
12	B	2371	G	N3-C4	5.23	1.39	1.35
12	B	2861	U	C3'-C2'	5.23	1.58	1.52
12	B	80	G	C3'-C2'	-5.23	1.47	1.52
12	B	271	G	C6-N1	5.23	1.43	1.39
12	B	410	G	O3'-P	-5.23	1.54	1.61
12	B	1206	G	N9-C4	-5.23	1.33	1.38
12	B	2227	A	C5'-C4'	5.23	1.57	1.51
12	B	2712	C	C4'-O4'	5.23	1.52	1.45
12	B	245	G	O4'-C1'	5.23	1.48	1.41
12	B	442	G	N7-C5	-5.23	1.36	1.39
12	B	497	A	C5'-C4'	5.23	1.57	1.51
12	B	2330	G	C5-C4	5.23	1.42	1.38
12	B	2385	C	C4-C5	-5.23	1.38	1.43
12	B	14	A	C2-N3	5.22	1.38	1.33
12	B	292	U	N1-C6	-5.22	1.33	1.38
12	B	564	C	N3-C4	5.22	1.37	1.33
12	B	805	G	C3'-O3'	5.22	1.49	1.42
12	B	861	A	N1-C2	5.22	1.39	1.34
12	B	1270	C	C2'-O2'	-5.22	1.34	1.41
12	B	1512	C	C5-C6	5.22	1.38	1.34
12	B	1678	A	O4'-C1'	5.22	1.48	1.41
12	B	2119	A	C3'-O3'	5.22	1.49	1.42
12	B	2209	G	C8-N7	-5.22	1.27	1.30
12	B	2431	U	C2-N3	5.22	1.41	1.37
12	B	2497	A	N9-C8	5.22	1.42	1.37
12	B	189	G	C2'-C1'	-5.22	1.47	1.53
12	B	1166	G	N1-C2	5.22	1.42	1.37
12	B	1441	G	O4'-C1'	-5.22	1.34	1.41
12	B	1672	A	C8-N7	5.22	1.35	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2033	A	C6-N6	5.22	1.38	1.33
12	B	2343	U	N3-C4	5.22	1.43	1.38
24	N	30	ARG	CZ-NH2	5.22	1.39	1.33
12	B	1133	A	C6-N1	5.22	1.39	1.35
10	9	292	GLU	CB-CG	5.22	1.62	1.52
11	A	24	G	N1-C2	5.22	1.42	1.37
12	B	399	U	C4'-C3'	-5.22	1.47	1.52
12	B	1073	A	C5-C4	5.22	1.42	1.38
12	B	1651	G	N3-C4	-5.22	1.31	1.35
12	B	1936	A	C2'-C1'	-5.22	1.47	1.53
12	B	2462	C	O4'-C1'	5.22	1.48	1.41
12	B	2712	C	N1-C6	5.22	1.40	1.37
12	B	2900	A	C3'-C2'	-5.22	1.47	1.52
12	B	167	A	N7-C5	-5.22	1.36	1.39
12	B	612	G	N9-C8	-5.22	1.34	1.37
12	B	982	C	N3-C4	5.22	1.37	1.33
12	B	1281	G	C6-N1	5.22	1.43	1.39
28	R	21	ARG	CZ-NH2	5.22	1.39	1.33
11	A	66	A	C5-C4	-5.22	1.35	1.38
12	B	78	U	N3-C4	5.22	1.43	1.38
12	B	227	A	N7-C5	-5.22	1.36	1.39
12	B	743	A	C2'-C1'	-5.22	1.47	1.53
12	B	1549	A	N3-C4	-5.22	1.31	1.34
12	B	2417	C	O3'-P	5.22	1.67	1.61
12	B	2748	A	C5'-C4'	5.22	1.57	1.51
22	L	21	ARG	CZ-NH1	5.22	1.39	1.33
12	B	397	U	C2-N3	5.21	1.41	1.37
12	B	787	C	C5'-C4'	5.21	1.57	1.51
12	B	1652	A	C5'-C4'	5.21	1.57	1.51
12	B	2668	G	C6-N1	5.21	1.43	1.39
12	B	2721	A	C5'-C4'	5.21	1.57	1.51
12	B	2722	G	C3'-O3'	5.21	1.49	1.42
13	C	181	ARG	CD-NE	5.21	1.55	1.46
11	A	5	U	N3-C4	5.21	1.43	1.38
12	B	1419	A	N7-C5	5.21	1.42	1.39
12	B	1667	G	N1-C2	5.21	1.42	1.37
12	B	1864	U	C4'-C3'	5.21	1.58	1.53
12	B	963	U	O4'-C1'	5.21	1.48	1.41
12	B	1085	A	C1'-N9	-5.21	1.39	1.46
12	B	1326	U	O3'-P	-5.21	1.54	1.61
12	B	1505	A	C4'-C3'	5.21	1.58	1.53
12	B	1759	A	C5-C6	5.21	1.45	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2524	G	N7-C5	-5.21	1.36	1.39
12	B	2647	U	C5-C6	5.21	1.38	1.34
12	B	2681	C	C2'-C1'	-5.21	1.47	1.53
12	B	2720	U	C5'-C4'	5.21	1.57	1.51
12	B	470	A	C8-N7	-5.21	1.27	1.31
12	B	1823	G	C5'-C4'	5.21	1.57	1.51
12	B	2008	C	P-O5'	-5.21	1.54	1.59
12	B	2053	G	O4'-C1'	5.21	1.48	1.41
12	B	2264	C	C4'-C3'	-5.21	1.47	1.52
6	5	164	ARG	CD-NE	5.21	1.55	1.46
12	B	66	C	O3'-P	-5.21	1.54	1.61
12	B	770	G	O3'-P	-5.21	1.54	1.61
12	B	882	G	N9-C8	5.21	1.41	1.37
12	B	939	G	C6-N1	5.21	1.43	1.39
12	B	1573	G	N9-C4	-5.21	1.33	1.38
12	B	2200	C	C2'-C1'	-5.21	1.47	1.53
12	B	2741	A	C6-N6	5.21	1.38	1.33
12	B	30	G	C3'-O3'	5.21	1.49	1.42
12	B	137	U	O3'-P	-5.21	1.54	1.61
12	B	570	G	N9-C4	-5.21	1.33	1.38
12	B	597	G	C5-C4	-5.21	1.34	1.38
12	B	810	U	C2'-C1'	5.21	1.59	1.53
12	B	903	C	C5'-C4'	5.21	1.57	1.51
12	B	1099	G	O3'-P	-5.21	1.54	1.61
12	B	1292	G	N9-C8	5.21	1.41	1.37
12	B	1466	U	C2'-C1'	-5.21	1.47	1.53
12	B	1648	U	C3'-O3'	-5.21	1.34	1.42
12	B	1661	G	P-O5'	-5.21	1.54	1.59
12	B	2630	G	C2'-C1'	-5.21	1.47	1.53
12	B	534	U	C5'-C4'	5.21	1.57	1.51
12	B	1048	A	C5-C6	-5.21	1.36	1.41
12	B	1145	C	C4-N4	-5.21	1.29	1.33
11	A	2	G	C2-N3	5.20	1.36	1.32
12	B	335	C	O3'-P	-5.20	1.54	1.61
12	B	991	C	C1'-N1	5.20	1.56	1.48
12	B	1470	A	N9-C4	-5.20	1.34	1.37
12	B	1608	A	O3'-P	-5.20	1.54	1.61
12	B	1809	A	C3'-C2'	-5.20	1.47	1.52
12	B	1973	G	C6-N1	5.20	1.43	1.39
12	B	2738	A	N9-C4	5.20	1.41	1.37
13	C	153	LEU	N-CA	-5.20	1.35	1.46
12	B	21	A	N1-C2	5.20	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	500	G	C2'-O2'	-5.20	1.34	1.41
12	B	1152	C	C3'-C2'	-5.20	1.47	1.52
12	B	2729	G	N7-C5	-5.20	1.36	1.39
12	B	1107	G	N7-C5	-5.20	1.36	1.39
12	B	1309	G	N9-C8	5.20	1.41	1.37
12	B	2233	U	N1-C6	5.20	1.42	1.38
12	B	2287	A	N7-C5	-5.20	1.36	1.39
12	B	2501	C	C2-N3	5.20	1.40	1.35
12	B	2610	C	C5'-C4'	5.20	1.57	1.51
12	B	382	A	C5-C4	5.20	1.42	1.38
12	B	1252	G	C8-N7	5.20	1.34	1.30
12	B	1337	G	C5'-C4'	5.20	1.57	1.51
12	B	1590	A	C2'-O2'	5.20	1.48	1.41
12	B	1748	C	P-O5'	-5.20	1.54	1.59
12	B	395	U	C2'-C1'	-5.20	1.47	1.53
12	B	1229	C	N3-C4	5.20	1.37	1.33
12	B	2407	A	C3'-O3'	5.20	1.49	1.42
12	B	265	A	C5-C4	5.20	1.42	1.38
12	B	386	G	C2'-C1'	-5.20	1.47	1.53
12	B	486	C	N1-C6	5.20	1.40	1.37
12	B	702	U	C4'-O4'	5.20	1.52	1.45
12	B	1175	A	O3'-P	-5.20	1.54	1.61
12	B	1275	A	P-O5'	-5.20	1.54	1.59
12	B	1439	A	C5'-C4'	5.20	1.57	1.51
12	B	1666	G	N3-C4	-5.20	1.31	1.35
12	B	2154	A	C6-N1	5.20	1.39	1.35
12	B	2179	C	P-O5'	-5.20	1.54	1.59
12	B	2413	G	N9-C8	-5.20	1.34	1.37
12	B	2449	U	C1'-N1	5.20	1.56	1.48
12	B	2608	G	C3'-O3'	-5.20	1.34	1.42
12	B	666	A	C6-N6	5.19	1.38	1.33
12	B	705	A	C6-N1	-5.19	1.31	1.35
12	B	1061	U	N3-C4	-5.19	1.33	1.38
12	B	1987	A	N3-C4	5.19	1.38	1.34
12	B	2159	G	C8-N7	-5.19	1.27	1.30
11	A	77	U	C2-N3	5.19	1.41	1.37
12	B	110	G	C2-N3	5.19	1.36	1.32
12	B	319	G	P-O5'	-5.19	1.54	1.59
12	B	672	C	C2-N3	5.19	1.40	1.35
12	B	941	A	P-O5'	-5.19	1.54	1.59
12	B	1703	G	C3'-C2'	5.19	1.58	1.52
12	B	1950	G	N7-C5	-5.19	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	37	C	N3-C4	5.19	1.37	1.33
12	B	407	G	C4'-C3'	-5.19	1.47	1.52
12	B	418	C	C4-N4	5.19	1.38	1.33
12	B	949	G	C5'-C4'	5.19	1.57	1.51
12	B	1261	C	P-O5'	5.19	1.65	1.59
12	B	1826	G	C8-N7	-5.19	1.27	1.30
12	B	1869	G	C3'-O3'	5.19	1.49	1.42
12	B	2186	G	C5-C4	5.19	1.42	1.38
12	B	2393	U	P-O5'	-5.19	1.54	1.59
6	5	122	ARG	CZ-NH2	5.19	1.39	1.33
12	B	675	A	C5'-C4'	5.19	1.57	1.51
12	B	1214	A	O3'-P	-5.19	1.54	1.61
12	B	1936	A	C6-N6	5.19	1.38	1.33
12	B	2529	G	C1'-N9	-5.19	1.39	1.46
12	B	2874	C	C4-N4	5.19	1.38	1.33
12	B	56	A	O4'-C1'	-5.19	1.34	1.41
12	B	1168	G	N1-C2	5.19	1.42	1.37
12	B	1261	C	N1-C6	5.19	1.40	1.37
12	B	1373	A	C3'-C2'	-5.19	1.47	1.52
12	B	1380	G	C6-N1	5.19	1.43	1.39
12	B	1867	G	O3'-P	-5.19	1.54	1.61
12	B	2461	A	N9-C4	5.19	1.41	1.37
12	B	2867	G	C8-N7	-5.19	1.27	1.30
12	B	380	G	C5-C6	-5.19	1.37	1.42
12	B	1073	A	N3-C4	5.19	1.38	1.34
12	B	1310	G	C5'-C4'	5.19	1.57	1.51
12	B	1366	A	N9-C8	-5.19	1.33	1.37
12	B	1921	G	C5'-C4'	5.19	1.57	1.51
12	B	2839	G	N9-C8	5.19	1.41	1.37
12	B	162	U	O3'-P	-5.18	1.54	1.61
12	B	558	U	C1'-N1	5.18	1.56	1.48
12	B	613	A	N9-C8	-5.18	1.33	1.37
12	B	630	G	C2-N3	5.18	1.36	1.32
12	B	801	G	N7-C5	-5.18	1.36	1.39
12	B	1514	G	C5'-C4'	5.18	1.57	1.51
12	B	1910	G	C5'-C4'	5.18	1.57	1.51
12	B	2543	G	N1-C2	5.18	1.41	1.37
12	B	2565	A	C2-N3	-5.18	1.28	1.33
12	B	666	A	C3'-C2'	5.18	1.58	1.52
12	B	1000	A	C3'-O3'	-5.18	1.34	1.42
12	B	1392	A	C5-C6	5.18	1.45	1.41
12	B	1504	A	N1-C2	5.18	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2068	U	C2-N3	5.18	1.41	1.37
12	B	2325	G	C2-N2	5.18	1.39	1.34
12	B	10	A	C1'-N9	5.18	1.56	1.48
12	B	576	U	N1-C2	5.18	1.43	1.38
12	B	1395	A	C5'-C4'	5.18	1.57	1.51
12	B	1462	C	N3-C4	5.18	1.37	1.33
12	B	46	G	C5-C4	-5.18	1.34	1.38
12	B	64	A	N9-C8	5.18	1.41	1.37
12	B	862	G	P-O5'	-5.18	1.54	1.59
12	B	1217	U	O3'-P	-5.18	1.54	1.61
12	B	1343	G	N9-C4	5.18	1.42	1.38
12	B	1513	U	C4'-C3'	5.18	1.58	1.53
12	B	1745	A	C6-N6	5.18	1.38	1.33
12	B	1811	G	C5-C6	-5.18	1.37	1.42
12	B	2304	G	C8-N7	-5.18	1.27	1.30
12	B	381	G	C5-C4	-5.18	1.34	1.38
12	B	1604	C	N1-C6	5.18	1.40	1.37
12	B	2002	G	N1-C2	5.18	1.41	1.37
12	B	2669	G	N9-C4	-5.18	1.33	1.38
12	B	217	A	C8-N7	-5.18	1.27	1.31
12	B	414	C	C4-C5	5.18	1.47	1.43
12	B	508	A	C4'-C3'	5.18	1.58	1.53
12	B	819	A	C4'-O4'	5.18	1.52	1.45
12	B	1349	C	C5'-C4'	5.18	1.57	1.51
12	B	1444	G	C8-N7	-5.18	1.27	1.30
12	B	1469	A	C4'-O4'	-5.18	1.38	1.45
12	B	1479	G	P-O5'	-5.18	1.54	1.59
12	B	1558	C	C4-C5	5.18	1.47	1.43
12	B	1928	A	N9-C8	5.18	1.41	1.37
12	B	2096	C	C2-N3	5.18	1.39	1.35
12	B	2259	U	C3'-C2'	-5.18	1.47	1.52
12	B	2261	C	C3'-O3'	5.18	1.49	1.42
11	A	76	G	C2'-C1'	-5.17	1.47	1.53
12	B	695	G	C2-N3	5.17	1.36	1.32
11	A	73	A	C5-C4	-5.17	1.35	1.38
12	B	15	G	N7-C5	5.17	1.42	1.39
12	B	1702	G	C2'-C1'	-5.17	1.47	1.53
12	B	1823	G	C5-C4	5.17	1.42	1.38
12	B	2506	U	N1-C6	5.17	1.42	1.38
12	B	257	C	N1-C6	5.17	1.40	1.37
12	B	1036	G	N3-C4	-5.17	1.31	1.35
12	B	1143	A	N9-C4	-5.17	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2026	U	C5'-C4'	5.17	1.57	1.51
12	B	2253	G	N9-C8	5.17	1.41	1.37
12	B	2325	G	O3'-P	-5.17	1.54	1.61
12	B	2726	A	C2'-C1'	-5.17	1.47	1.53
11	A	86	G	C5'-C4'	5.17	1.57	1.51
12	B	367	G	N1-C2	5.17	1.41	1.37
12	B	463	G	C5'-C4'	5.17	1.57	1.51
12	B	676	A	C6-N6	5.17	1.38	1.33
12	B	924	G	N9-C4	5.17	1.42	1.38
12	B	1424	G	O3'-P	-5.17	1.54	1.61
12	B	1619	G	N3-C4	-5.17	1.31	1.35
12	B	2176	A	C8-N7	5.17	1.35	1.31
12	B	2796	U	C4-C5	5.17	1.48	1.43
11	A	38	C	C5'-C4'	5.17	1.57	1.51
12	B	115	C	C4-C5	-5.17	1.38	1.43
12	B	204	A	C3'-C2'	-5.17	1.47	1.52
12	B	589	U	C4'-C3'	5.17	1.58	1.53
12	B	702	U	C4'-C3'	5.17	1.58	1.53
12	B	953	G	O3'-P	-5.17	1.54	1.61
12	B	1408	G	N7-C5	-5.17	1.36	1.39
12	B	1419	A	C6-N6	5.17	1.38	1.33
12	B	1713	A	C4'-C3'	5.17	1.58	1.53
12	B	1847	A	C4'-O4'	-5.17	1.38	1.45
12	B	2276	G	C4'-O4'	5.17	1.52	1.45
12	B	2419	U	C2'-C1'	-5.17	1.47	1.53
12	B	2788	C	N3-C4	5.17	1.37	1.33
27	Q	30	VAL	CB-CG1	5.17	1.63	1.52
12	B	189	G	O4'-C1'	5.17	1.48	1.41
12	B	213	A	N7-C5	-5.17	1.36	1.39
12	B	260	G	N9-C4	-5.17	1.33	1.38
12	B	945	A	C2-N3	5.17	1.38	1.33
12	B	1183	U	P-O5'	5.17	1.65	1.59
12	B	2158	A	C5-C6	5.17	1.45	1.41
12	B	2557	G	N1-C2	5.17	1.41	1.37
12	B	2836	U	C3'-C2'	-5.17	1.47	1.52
24	N	90	ARG	CZ-NH1	5.17	1.39	1.33
11	A	110	C	C3'-C2'	-5.17	1.47	1.52
12	B	2520	C	C4-N4	5.17	1.38	1.33
31	U	82	VAL	C-N	5.17	1.42	1.33
12	B	81	G	C6-N1	5.16	1.43	1.39
12	B	330	A	C5'-C4'	5.16	1.57	1.51
12	B	542	C	C5'-C4'	-5.16	1.45	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	750	A	C8-N7	-5.16	1.27	1.31
12	B	1013	C	C4-C5	5.16	1.47	1.43
12	B	2126	A	C6-N6	5.16	1.38	1.33
12	B	2257	U	N1-C6	5.16	1.42	1.38
10	9	249	PRO	N-CA	-5.16	1.38	1.47
12	B	940	G	N7-C5	-5.16	1.36	1.39
12	B	1029	A	P-O5'	-5.16	1.54	1.59
12	B	1184	U	O3'-P	5.16	1.67	1.61
12	B	1229	C	C4'-O4'	-5.16	1.38	1.45
12	B	245	G	C8-N7	5.16	1.34	1.30
12	B	506	G	C6-O6	-5.16	1.19	1.24
12	B	617	G	C6-N1	5.16	1.43	1.39
12	B	700	G	N9-C4	5.16	1.42	1.38
12	B	985	C	C2-O2	5.16	1.29	1.24
12	B	1231	U	N1-C6	5.16	1.42	1.38
12	B	1923	U	O3'-P	-5.16	1.54	1.61
12	B	2237	G	C2'-C1'	-5.16	1.47	1.53
12	B	2246	G	C2-N2	-5.16	1.29	1.34
12	B	2351	G	C2-N2	-5.16	1.29	1.34
10	9	139	ARG	CD-NE	5.16	1.55	1.46
11	A	100	G	C3'-C2'	-5.16	1.47	1.52
12	B	105	C	N1-C6	-5.16	1.34	1.37
12	B	1002	G	C2'-C1'	-5.16	1.47	1.53
12	B	1362	C	N1-C6	5.16	1.40	1.37
12	B	2013	A	O4'-C1'	-5.16	1.34	1.41
12	B	2481	G	N7-C5	5.16	1.42	1.39
12	B	312	G	C2'-C1'	-5.16	1.47	1.53
12	B	790	U	C4-C5	-5.16	1.39	1.43
12	B	1813	G	C5-C6	-5.16	1.37	1.42
12	B	2385	C	C5-C6	5.16	1.38	1.34
18	H	24	GLY	CA-C	-5.16	1.43	1.51
11	A	69	G	C6-N1	5.16	1.43	1.39
12	B	95	A	N7-C5	-5.16	1.36	1.39
12	B	230	G	N7-C5	-5.16	1.36	1.39
12	B	490	C	C2-O2	5.16	1.29	1.24
12	B	1173	U	C3'-O3'	5.16	1.49	1.42
12	B	1208	C	C2-O2	-5.16	1.19	1.24
12	B	1406	U	C4-O4	5.16	1.27	1.23
12	B	1509	A	P-O5'	-5.16	1.54	1.59
12	B	1735	A	N3-C4	-5.16	1.31	1.34
12	B	2023	C	N3-C4	5.16	1.37	1.33
12	B	2886	A	C3'-C2'	5.16	1.58	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	457	A	N1-C2	5.15	1.39	1.34
12	B	566	U	P-O5'	-5.15	1.54	1.59
12	B	1118	C	C4-C5	5.15	1.47	1.43
12	B	1263	U	O3'-P	-5.15	1.54	1.61
12	B	1482	G	C6-O6	-5.15	1.19	1.24
12	B	1659	G	C6-N1	5.15	1.43	1.39
12	B	1835	G	C2-N3	5.15	1.36	1.32
12	B	1978	A	C6-N1	5.15	1.39	1.35
12	B	1089	A	C8-N7	5.15	1.35	1.31
12	B	1356	G	C2-N3	5.15	1.36	1.32
12	B	1781	U	O3'-P	-5.15	1.54	1.61
12	B	2074	U	C3'-O3'	5.15	1.49	1.42
12	B	2115	G	N7-C5	-5.15	1.36	1.39
12	B	2222	C	C5-C6	5.15	1.38	1.34
12	B	2239	G	O3'-P	-5.15	1.54	1.61
12	B	2268	A	N1-C2	-5.15	1.29	1.34
12	B	2791	G	P-O5'	-5.15	1.54	1.59
12	B	46	G	C2-N3	5.15	1.36	1.32
12	B	119	A	C5'-C4'	5.15	1.57	1.51
12	B	338	G	C3'-C2'	-5.15	1.47	1.52
12	B	756	A	C3'-C2'	-5.15	1.47	1.52
12	B	1284	A	N1-C2	-5.15	1.29	1.34
12	B	1445	G	C5'-C4'	5.15	1.57	1.51
12	B	1723	G	C8-N7	-5.15	1.27	1.30
12	B	2721	A	O3'-P	5.15	1.67	1.61
11	A	109	A	C4'-O4'	5.15	1.52	1.45
12	B	194	G	C5-C6	-5.15	1.37	1.42
12	B	1113	U	C2'-O2'	-5.15	1.34	1.41
12	B	1714	U	C3'-O3'	-5.15	1.34	1.42
12	B	2365	G	N7-C5	-5.15	1.36	1.39
12	B	2597	G	O4'-C1'	5.15	1.48	1.41
12	B	525	U	N3-C4	5.15	1.43	1.38
12	B	2664	G	P-O5'	-5.15	1.54	1.59
12	B	446	G	C2-N3	5.15	1.36	1.32
12	B	512	G	C5-C4	5.15	1.42	1.38
12	B	684	G	O3'-P	-5.15	1.54	1.61
12	B	866	A	O3'-P	-5.15	1.54	1.61
12	B	1261	C	O4'-C1'	-5.15	1.34	1.41
12	B	81	G	N9-C8	5.14	1.41	1.37
12	B	158	U	C4-O4	-5.14	1.19	1.23
12	B	2024	G	C3'-C2'	-5.14	1.47	1.52
12	B	2307	G	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)
12	B	64	A	C2-N3	5.14	1.38	1.33
12	B	214	G	C5-C4	-5.14	1.34	1.38
12	B	347	A	C2-N3	5.14	1.38	1.33
12	B	1039	A	C5'-C4'	5.14	1.57	1.51
12	B	1633	G	C5-C4	5.14	1.42	1.38
12	B	1819	A	C3'-O3'	5.14	1.49	1.42
12	B	2828	G	C2-N3	5.14	1.36	1.32
25	O	16	ARG	NE-CZ	5.14	1.39	1.33
27	Q	57	ARG	CZ-NH1	5.14	1.39	1.33
12	B	17	G	C2-N2	5.14	1.39	1.34
12	B	1069	A	O3'-P	-5.14	1.54	1.61
12	B	1116	G	C5-C6	-5.14	1.37	1.42
12	B	1274	A	N9-C4	-5.14	1.34	1.37
12	B	1355	G	N1-C2	5.14	1.41	1.37
12	B	1378	A	N7-C5	-5.14	1.36	1.39
12	B	1567	G	C5-C4	5.14	1.42	1.38
12	B	1626	A	C5'-C4'	5.14	1.57	1.51
12	B	1956	U	C2-O2	5.14	1.26	1.22
12	B	2287	A	N3-C4	-5.14	1.31	1.34
5	4	43	ARG	CD-NE	5.14	1.55	1.46
12	B	52	A	C8-N7	-5.14	1.27	1.31
12	B	1358	G	N3-C4	-5.14	1.31	1.35
12	B	1812	U	O3'-P	-5.14	1.54	1.61
12	B	1829	A	C5-C4	-5.14	1.35	1.38
12	B	2219	U	N1-C2	5.14	1.43	1.38
12	B	2884	U	O4'-C1'	-5.14	1.34	1.41
12	B	178	G	P-O5'	-5.14	1.54	1.59
12	B	663	G	C6-O6	5.14	1.28	1.24
12	B	674	G	N1-C2	5.14	1.41	1.37
12	B	1144	A	C5-C4	5.14	1.42	1.38
12	B	1634	A	C5'-C4'	5.14	1.57	1.51
12	B	1846	G	N3-C4	-5.14	1.31	1.35
12	B	2401	U	C1'-N1	5.14	1.56	1.48
26	P	71	ARG	CD-NE	5.14	1.55	1.46
2	1	23	ARG	NE-CZ	5.14	1.39	1.33
12	B	21	A	C3'-C2'	-5.14	1.47	1.52
12	B	280	U	C4-O4	-5.14	1.19	1.23
12	B	465	G	C8-N7	-5.14	1.27	1.30
12	B	771	G	O3'-P	-5.14	1.54	1.61
12	B	892	A	O4'-C1'	5.14	1.48	1.41
12	B	1250	G	C5'-C4'	5.14	1.57	1.51
12	B	1500	G	O3'-P	-5.14	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1508	A	C2-N3	5.14	1.38	1.33
12	B	1592	C	C4-N4	5.14	1.38	1.33
12	B	1715	G	P-O5'	5.14	1.64	1.59
12	B	2045	C	C2'-C1'	-5.14	1.47	1.53
12	B	2330	G	N3-C4	-5.14	1.31	1.35
12	B	2795	C	C3'-O3'	-5.14	1.34	1.42
12	B	2833	U	N3-C4	5.14	1.43	1.38
12	B	251	A	C5-C6	5.13	1.45	1.41
12	B	396	G	N3-C4	-5.13	1.31	1.35
12	B	448	U	C4-O4	-5.13	1.19	1.23
12	B	789	A	N9-C8	-5.13	1.33	1.37
12	B	1488	C	C5'-C4'	5.13	1.57	1.51
12	B	2344	U	C2'-C1'	-5.13	1.47	1.53
16	F	166	ARG	CZ-NH2	5.13	1.39	1.33
18	H	28	ASN	CG-ND2	5.13	1.45	1.32
20	J	95	ARG	CD-NE	5.13	1.55	1.46
27	Q	57	ARG	NE-CZ	5.13	1.39	1.33
12	B	623	C	N1-C6	-5.13	1.34	1.37
12	B	666	A	C2-N3	5.13	1.38	1.33
12	B	936	A	O3'-P	-5.13	1.54	1.61
12	B	1854	A	C4'-C3'	5.13	1.58	1.53
12	B	2733	A	C8-N7	5.13	1.35	1.31
32	W	69	GLU	CA-C	-5.13	1.39	1.52
12	B	228	C	C4-N4	5.13	1.38	1.33
12	B	352	A	O4'-C1'	5.13	1.48	1.41
12	B	631	A	O3'-P	-5.13	1.54	1.61
12	B	938	G	C1'-N9	5.13	1.56	1.48
12	B	1080	A	C6-N1	5.13	1.39	1.35
12	B	2282	G	C2-N3	5.13	1.36	1.32
12	B	2437	G	C6-N1	-5.13	1.35	1.39
12	B	2760	C	N1-C6	5.13	1.40	1.37
12	B	216	A	C5-C6	-5.13	1.36	1.41
12	B	572	A	C4'-O4'	-5.13	1.38	1.45
12	B	750	A	C5-C6	-5.13	1.36	1.41
12	B	1719	G	C2-N3	5.13	1.36	1.32
12	B	2542	A	C1'-N9	5.13	1.56	1.48
23	M	28	PHE	CG-CD2	5.13	1.46	1.38
12	B	76	C	C4'-O4'	5.13	1.52	1.45
12	B	114	U	C3'-O3'	5.13	1.49	1.42
12	B	276	U	C4-O4	-5.13	1.19	1.23
12	B	381	G	C2'-C1'	-5.13	1.47	1.53
12	B	628	G	C6-O6	-5.13	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1479	G	C6-O6	-5.13	1.19	1.24
12	B	2216	G	C5-C4	5.13	1.42	1.38
12	B	2475	C	C5-C6	-5.13	1.30	1.34
11	A	23	G	C2'-C1'	-5.13	1.47	1.53
12	B	259	G	C6-N1	5.13	1.43	1.39
12	B	328	U	N3-C4	5.13	1.43	1.38
12	B	805	G	C5-C6	-5.13	1.37	1.42
12	B	2489	U	C2-N3	-5.13	1.34	1.37
12	B	2536	G	N9-C8	-5.13	1.34	1.37
12	B	2647	U	C4-C5	5.13	1.48	1.43
10	9	257	GLU	CD-OE2	5.12	1.31	1.25
12	B	1193	G	C3'-C2'	5.12	1.58	1.52
12	B	2059	A	O3'-P	-5.12	1.54	1.61
12	B	2777	G	N1-C2	5.12	1.41	1.37
12	B	217	A	C5'-C4'	5.12	1.57	1.51
12	B	1461	C	C2'-C1'	-5.12	1.47	1.53
12	B	1802	A	C4'-C3'	5.12	1.58	1.53
12	B	2138	G	N1-C2	5.12	1.41	1.37
12	B	2362	C	C4-N4	5.12	1.38	1.33
12	B	2395	C	C2-N3	5.12	1.39	1.35
12	B	2483	C	C4'-O4'	5.12	1.52	1.45
12	B	419	U	C2-N3	5.12	1.41	1.37
12	B	522	A	O4'-C1'	-5.12	1.34	1.41
12	B	667	U	C2-N3	5.12	1.41	1.37
12	B	933	A	N3-C4	5.12	1.38	1.34
12	B	1003	G	P-O5'	-5.12	1.54	1.59
12	B	1363	C	O3'-P	-5.12	1.55	1.61
12	B	1403	A	N7-C5	-5.12	1.36	1.39
12	B	1811	G	C5'-C4'	5.12	1.57	1.51
12	B	2375	G	C2'-C1'	-5.12	1.47	1.53
12	B	2814	A	C6-N6	5.12	1.38	1.33
24	N	71	ARG	NE-CZ	5.12	1.39	1.33
12	B	181	A	N9-C4	5.12	1.41	1.37
12	B	248	G	O3'-P	-5.12	1.55	1.61
12	B	255	A	C5'-C4'	5.12	1.57	1.51
12	B	1650	A	N3-C4	-5.12	1.31	1.34
12	B	2055	C	C4-N4	-5.12	1.29	1.33
8	7	12	ARG	NE-CZ	5.12	1.39	1.33
11	A	94	A	C6-N1	5.12	1.39	1.35
12	B	76	C	N1-C2	5.12	1.45	1.40
12	B	1450	G	N1-C2	5.12	1.41	1.37
12	B	1910	G	C2'-C1'	-5.12	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1978	A	C2'-C1'	-5.12	1.47	1.53
12	B	2090	A	C1'-N9	-5.12	1.39	1.46
12	B	2231	U	C5'-C4'	5.12	1.57	1.51
12	B	2281	A	O3'-P	-5.12	1.55	1.61
12	B	2390	U	P-O5'	-5.12	1.54	1.59
12	B	2631	G	N9-C4	5.12	1.42	1.38
24	N	12	ARG	CZ-NH2	5.12	1.39	1.33
6	5	78	PHE	CG-CD1	5.12	1.46	1.38
11	A	60	C	C2'-C1'	-5.12	1.47	1.53
12	B	923	G	N9-C8	5.12	1.41	1.37
12	B	601	C	P-O5'	5.12	1.64	1.59
12	B	1373	A	C8-N7	5.12	1.35	1.31
12	B	1760	C	C2'-O2'	-5.12	1.34	1.41
12	B	2214	C	C3'-C2'	-5.12	1.47	1.52
12	B	2236	U	N1-C2	5.12	1.43	1.38
12	B	2517	C	C3'-C2'	-5.12	1.47	1.52
12	B	2823	A	N9-C8	5.12	1.41	1.37
23	M	31	PHE	CB-CG	-5.12	1.42	1.51
12	B	2	G	C4'-C3'	5.11	1.58	1.53
12	B	27	G	C6-O6	-5.11	1.19	1.24
12	B	631	A	N9-C8	-5.11	1.33	1.37
12	B	825	A	C3'-C2'	-5.11	1.47	1.52
12	B	927	A	N9-C4	-5.11	1.34	1.37
12	B	1033	U	C3'-C2'	5.11	1.58	1.52
12	B	1190	G	C6-O6	5.11	1.28	1.24
12	B	1370	C	C1'-N1	5.11	1.56	1.48
12	B	1435	G	C5-C6	-5.11	1.37	1.42
12	B	1525	A	C4'-C3'	-5.11	1.47	1.52
12	B	1769	U	C4'-O4'	5.11	1.52	1.45
12	B	1774	C	N1-C2	5.11	1.45	1.40
12	B	2038	G	C5'-C4'	5.11	1.57	1.51
12	B	406	G	O4'-C1'	5.11	1.48	1.41
12	B	793	A	C8-N7	-5.11	1.27	1.31
12	B	1155	A	C8-N7	-5.11	1.27	1.31
12	B	1174	U	N1-C6	-5.11	1.33	1.38
12	B	2032	G	N1-C2	5.11	1.41	1.37
12	B	2902	C	C4-N4	5.11	1.38	1.33
1	0	44	ARG	CZ-NH1	5.11	1.39	1.33
11	A	46	A	C2'-C1'	-5.11	1.47	1.53
12	B	121	G	C5-C4	5.11	1.42	1.38
12	B	820	A	C6-N6	5.11	1.38	1.33
12	B	1210	G	C5-C4	-5.11	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1618	A	C3'-C2'	5.11	1.58	1.52
12	B	2639	A	C6-N6	5.11	1.38	1.33
14	D	141	ARG	NE-CZ	5.11	1.39	1.33
23	M	36	VAL	N-CA	-5.11	1.36	1.46
12	B	113	U	N1-C2	5.11	1.43	1.38
12	B	451	U	C3'-C2'	-5.11	1.47	1.52
12	B	1001	A	C2'-C1'	-5.11	1.47	1.53
12	B	1242	U	C5-C6	-5.11	1.29	1.34
12	B	2489	U	N3-C4	5.11	1.43	1.38
13	C	232	GLY	CA-C	-5.11	1.43	1.51
12	B	567	U	P-O5'	-5.11	1.54	1.59
12	B	1660	G	O3'-P	-5.11	1.55	1.61
12	B	1755	A	O3'-P	-5.11	1.55	1.61
12	B	1852	U	C4-O4	5.11	1.27	1.23
12	B	2454	G	N1-C2	5.11	1.41	1.37
13	C	81	GLU	CD-OE1	-5.11	1.20	1.25
15	E	69	ARG	NE-CZ	5.11	1.39	1.33
32	W	32	GLY	CA-C	-5.11	1.43	1.51
11	A	107	G	C8-N7	-5.11	1.27	1.30
12	B	99	U	C5'-C4'	5.11	1.57	1.51
12	B	202	U	C5'-C4'	5.11	1.57	1.51
12	B	207	A	O3'-P	-5.11	1.55	1.61
12	B	655	A	N9-C8	5.11	1.41	1.37
12	B	720	U	C4'-C3'	5.11	1.58	1.53
12	B	951	C	N3-C4	5.11	1.37	1.33
12	B	1607	C	C3'-C2'	5.11	1.58	1.52
12	B	2614	A	C5'-C4'	5.11	1.57	1.51
12	B	2688	G	C6-N1	-5.11	1.35	1.39
12	B	2839	G	C2'-O2'	-5.11	1.35	1.41
12	B	231	A	C8-N7	5.10	1.35	1.31
12	B	292	U	O3'-P	-5.10	1.55	1.61
12	B	1352	U	O4'-C1'	-5.10	1.35	1.41
12	B	2753	A	N9-C4	5.10	1.41	1.37
1	0	44	ARG	CZ-NH2	5.10	1.39	1.33
12	B	116	C	P-O5'	-5.10	1.54	1.59
12	B	292	U	N3-C4	5.10	1.43	1.38
12	B	659	G	C2'-C1'	-5.10	1.47	1.53
12	B	1041	G	C3'-O3'	5.10	1.49	1.42
12	B	1630	A	C5-C6	5.10	1.45	1.41
12	B	2000	C	O4'-C1'	-5.10	1.35	1.41
12	B	2326	C	C2-O2	-5.10	1.19	1.24
12	B	2410	G	N9-C4	-5.10	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2530	A	O4'-C1'	-5.10	1.35	1.41
12	B	2626	C	C2'-C1'	-5.10	1.47	1.53
14	D	89	GLU	CD-OE2	5.10	1.31	1.25
26	P	98	TYR	CE1-CZ	5.10	1.45	1.38
1	0	28	PHE	CE1-CZ	5.10	1.47	1.37
12	B	467	G	C4'-O4'	5.10	1.52	1.45
12	B	910	A	C5-C4	-5.10	1.35	1.38
12	B	1543	G	P-O5'	-5.10	1.54	1.59
12	B	1550	C	C2-O2	-5.10	1.19	1.24
12	B	1892	C	N1-C2	5.10	1.45	1.40
12	B	2044	C	P-O5'	-5.10	1.54	1.59
12	B	2564	A	N7-C5	-5.10	1.36	1.39
11	A	103	U	C4-O4	5.10	1.27	1.23
12	B	111	A	O3'-P	-5.10	1.55	1.61
12	B	164	C	C2'-C1'	-5.10	1.47	1.53
12	B	171	U	N1-C6	5.10	1.42	1.38
12	B	273	G	N1-C2	5.10	1.41	1.37
12	B	276	U	C2'-O2'	5.10	1.48	1.41
12	B	336	C	C2-N3	-5.10	1.31	1.35
12	B	698	C	C1'-N1	5.10	1.56	1.48
12	B	1223	G	C2'-C1'	-5.10	1.47	1.53
12	B	1907	G	O5'-C5'	-5.10	1.34	1.42
12	B	2142	A	C4'-C3'	5.10	1.58	1.53
12	B	2392	A	C6-N6	-5.10	1.29	1.33
12	B	2525	G	N3-C4	5.10	1.39	1.35
7	6	22	MET	CA-CB	5.10	1.65	1.53
12	B	699	A	C5'-C4'	5.10	1.57	1.51
12	B	1639	C	O3'-P	-5.10	1.55	1.61
12	B	1712	U	O3'-P	-5.10	1.55	1.61
12	B	1871	A	N3-C4	5.10	1.38	1.34
12	B	2511	U	C1'-N1	5.10	1.56	1.48
12	B	2687	U	P-O5'	-5.10	1.54	1.59
12	B	2794	C	C4-C5	5.10	1.47	1.43
12	B	2824	C	C2'-C1'	-5.10	1.47	1.53
14	D	36	GLN	CD-NE2	5.10	1.45	1.32
6	5	112	ASP	CA-CB	5.10	1.65	1.53
12	B	94	A	C8-N7	-5.10	1.27	1.31
12	B	724	U	N3-C4	5.10	1.43	1.38
12	B	1774	C	C3'-C2'	-5.10	1.47	1.52
12	B	1890	A	C6-N6	5.10	1.38	1.33
12	B	2065	C	N1-C6	5.10	1.40	1.37
1	0	62	GLY	CA-C	-5.09	1.43	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	5	111	PHE	CE2-CZ	5.09	1.47	1.37
12	B	47	C	C4-N4	5.09	1.38	1.33
12	B	65	U	C2-O2	-5.09	1.17	1.22
12	B	899	A	C5-C4	-5.09	1.35	1.38
12	B	1332	G	N9-C8	5.09	1.41	1.37
12	B	1601	G	C6-O6	-5.09	1.19	1.24
12	B	1860	G	C2'-C1'	-5.09	1.47	1.53
12	B	1889	A	C2'-C1'	-5.09	1.47	1.53
12	B	1926	U	C4-O4	5.09	1.27	1.23
12	B	1974	C	O3'-P	-5.09	1.55	1.61
12	B	2087	G	C3'-C2'	-5.09	1.47	1.52
12	B	200	U	C3'-C2'	-5.09	1.47	1.52
12	B	341	C	N1-C6	-5.09	1.34	1.37
12	B	2663	G	O4'-C1'	-5.09	1.35	1.41
12	B	2793	C	N1-C2	-5.09	1.35	1.40
12	B	220	G	C8-N7	-5.09	1.27	1.30
12	B	440	C	O3'-P	-5.09	1.55	1.61
12	B	612	G	C5'-C4'	5.09	1.57	1.51
12	B	925	A	C5-C6	-5.09	1.36	1.41
12	B	1036	G	C2-N3	5.09	1.36	1.32
12	B	1068	G	C8-N7	-5.09	1.27	1.30
12	B	1362	C	C4-N4	5.09	1.38	1.33
12	B	1721	G	C6-N1	5.09	1.43	1.39
12	B	2120	G	N9-C8	5.09	1.41	1.37
12	B	2208	C	N1-C6	-5.09	1.34	1.37
12	B	2252	G	N9-C8	5.09	1.41	1.37
12	B	290	U	C5'-C4'	5.09	1.57	1.51
12	B	337	C	N1-C6	5.09	1.40	1.37
12	B	388	G	C5-C4	5.09	1.42	1.38
12	B	1040	A	C2-N3	5.09	1.38	1.33
12	B	2162	G	N9-C8	-5.09	1.34	1.37
12	B	2382	G	N1-C2	5.09	1.41	1.37
12	B	2513	A	C2'-O2'	-5.09	1.35	1.41
12	B	2733	A	N9-C4	5.09	1.41	1.37
12	B	2825	G	C2'-C1'	-5.09	1.47	1.53
11	A	112	G	N1-C2	5.09	1.41	1.37
12	B	1987	A	C5-C4	5.09	1.42	1.38
11	A	11	C	C4'-O4'	-5.09	1.39	1.45
12	B	334	C	P-O5'	-5.09	1.54	1.59
12	B	346	A	C6-N6	5.09	1.38	1.33
12	B	399	U	C4-C5	-5.09	1.39	1.43
12	B	569	U	N3-C4	5.09	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	882	G	C5-C6	-5.09	1.37	1.42
12	B	1193	G	O4'-C1'	5.09	1.48	1.41
12	B	1519	G	C3'-O3'	-5.09	1.35	1.42
12	B	2560	A	C5-C6	5.09	1.45	1.41
12	B	1510	G	C1'-N9	5.08	1.56	1.48
12	B	35	G	N3-C4	-5.08	1.31	1.35
12	B	526	A	C8-N7	-5.08	1.27	1.31
12	B	592	A	C2'-C1'	-5.08	1.47	1.53
12	B	743	A	C6-N6	-5.08	1.29	1.33
12	B	1195	G	C2'-C1'	-5.08	1.47	1.53
12	B	1337	G	C2-N3	5.08	1.36	1.32
12	B	1735	A	N9-C8	-5.08	1.33	1.37
12	B	2388	A	C8-N7	5.08	1.35	1.31
12	B	2649	C	N1-C6	5.08	1.40	1.37
11	A	71	C	O3'-P	-5.08	1.55	1.61
12	B	1441	G	N3-C4	5.08	1.39	1.35
12	B	1919	A	N7-C5	-5.08	1.36	1.39
12	B	2479	U	P-O5'	5.08	1.64	1.59
12	B	61	C	C4-C5	5.08	1.47	1.43
12	B	584	C	P-O5'	-5.08	1.54	1.59
12	B	1120	G	C4'-C3'	5.08	1.58	1.53
12	B	1188	U	C5'-C4'	-5.08	1.45	1.51
12	B	1935	G	C8-N7	5.08	1.33	1.30
12	B	2549	G	N3-C4	5.08	1.39	1.35
29	S	79	GLY	CA-C	-5.08	1.43	1.51
11	A	72	G	C6-N1	5.08	1.43	1.39
12	B	477	A	C5-C4	-5.08	1.35	1.38
12	B	664	G	O3'-P	-5.08	1.55	1.61
12	B	668	A	N3-C4	-5.08	1.31	1.34
12	B	829	A	C3'-C2'	5.08	1.58	1.52
12	B	2048	G	C8-N7	-5.08	1.27	1.30
12	B	2400	G	C6-N1	5.08	1.43	1.39
12	B	2481	G	C2'-C1'	-5.08	1.47	1.53
12	B	2576	G	O4'-C1'	5.08	1.48	1.41
12	B	2768	U	C1'-N1	5.08	1.56	1.48
12	B	2854	G	N1-C2	5.08	1.41	1.37
12	B	2865	U	N1-C2	-5.08	1.33	1.38
19	I	98	GLY	N-CA	-5.08	1.38	1.46
12	B	618	G	N1-C2	5.08	1.41	1.37
12	B	1484	U	N3-C4	5.08	1.43	1.38
12	B	104	A	N3-C4	-5.08	1.31	1.34
12	B	560	C	C2-N3	-5.08	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	782	A	C2-N3	5.08	1.38	1.33
12	B	1334	G	C4'-O4'	5.08	1.52	1.45
12	B	1652	A	C2'-O2'	-5.08	1.35	1.41
12	B	2354	C	C2'-C1'	5.08	1.58	1.53
12	B	172	A	O3'-P	-5.07	1.55	1.61
12	B	2333	A	C5'-C4'	5.07	1.57	1.51
12	B	2822	G	C2'-C1'	-5.07	1.47	1.53
10	9	42	GLY	CA-C	-5.07	1.43	1.51
12	B	56	A	C5-C4	5.07	1.42	1.38
12	B	258	G	O3'-P	-5.07	1.55	1.61
12	B	484	C	C4-C5	-5.07	1.38	1.43
12	B	586	A	N9-C8	-5.07	1.33	1.37
12	B	649	G	N7-C5	-5.07	1.36	1.39
12	B	681	G	N3-C4	5.07	1.39	1.35
12	B	1162	G	C5'-C4'	5.07	1.57	1.51
12	B	1521	G	N9-C8	-5.07	1.34	1.37
12	B	2258	C	C1'-N1	5.07	1.56	1.48
12	B	2269	G	C3'-C2'	5.07	1.58	1.52
12	B	192	C	C5'-C4'	5.07	1.57	1.51
12	B	1186	G	C8-N7	-5.07	1.27	1.30
12	B	1559	U	C2'-C1'	-5.07	1.47	1.53
12	B	18	U	P-O5'	-5.07	1.54	1.59
12	B	276	U	N3-C4	5.07	1.43	1.38
12	B	284	U	C4'-C3'	5.07	1.58	1.53
12	B	1064	C	O4'-C1'	5.07	1.48	1.41
12	B	1094	U	C4-C5	5.07	1.48	1.43
12	B	1218	G	N1-C2	5.07	1.41	1.37
12	B	2095	A	O3'-P	-5.07	1.55	1.61
12	B	2251	G	C5-C4	5.07	1.41	1.38
12	B	2625	G	C5-C6	5.07	1.47	1.42
12	B	1382	G	N9-C8	-5.07	1.34	1.37
12	B	2439	A	O5'-C5'	-5.07	1.34	1.42
12	B	2557	G	C5'-C4'	5.07	1.57	1.51
12	B	2808	G	N9-C8	-5.07	1.34	1.37
11	A	37	C	C2'-C1'	-5.06	1.47	1.53
12	B	1138	G	C2'-C1'	-5.06	1.47	1.53
12	B	1307	A	C8-N7	5.06	1.35	1.31
12	B	2423	U	C3'-O3'	5.06	1.49	1.42
1	0	36	ARG	CZ-NH2	5.06	1.39	1.33
12	B	845	A	N9-C8	-5.06	1.33	1.37
12	B	927	A	N3-C4	-5.06	1.31	1.34
12	B	1432	G	O4'-C1'	-5.06	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1745	A	C5'-C4'	5.06	1.57	1.51
12	B	1922	G	C4'-C3'	5.06	1.58	1.53
12	B	2090	A	C4'-C3'	5.06	1.58	1.53
12	B	2632	A	C4'-C3'	-5.06	1.47	1.52
12	B	2590	A	C8-N7	-5.06	1.28	1.31
22	L	21	ARG	CZ-NH2	5.06	1.39	1.33
12	B	154	U	O3'-P	-5.06	1.55	1.61
12	B	356	G	N3-C4	-5.06	1.31	1.35
12	B	485	C	C2'-C1'	-5.06	1.47	1.53
12	B	1263	U	C4-C5	5.06	1.48	1.43
12	B	1532	A	N9-C4	-5.06	1.34	1.37
12	B	1847	A	O3'-P	-5.06	1.55	1.61
12	B	2398	U	C5'-C4'	5.06	1.57	1.51
12	B	243	U	C2-O2	5.06	1.26	1.22
12	B	511	U	N3-C4	5.06	1.43	1.38
12	B	1277	G	N3-C4	-5.06	1.31	1.35
12	B	1687	G	C5-C4	5.06	1.41	1.38
12	B	2562	U	C2'-O2'	-5.06	1.35	1.41
12	B	2647	U	O3'-P	-5.06	1.55	1.61
29	S	110	ARG	N-CA	-5.06	1.36	1.46
12	B	209	C	C4-N4	5.06	1.38	1.33
12	B	359	G	O3'-P	-5.06	1.55	1.61
12	B	1319	C	C3'-O3'	5.06	1.49	1.42
12	B	2240	U	O3'-P	-5.06	1.55	1.61
12	B	2436	G	C8-N7	5.06	1.33	1.30
29	S	95	ARG	CZ-NH2	5.06	1.39	1.33
11	A	109	A	C6-N1	5.05	1.39	1.35
12	B	218	A	N3-C4	5.05	1.37	1.34
12	B	698	C	C2'-C1'	5.05	1.58	1.53
12	B	738	G	P-O5'	-5.05	1.54	1.59
12	B	792	A	C6-N6	5.05	1.38	1.33
12	B	981	A	C2'-C1'	-5.05	1.47	1.53
12	B	1344	U	C1'-N1	5.05	1.56	1.48
12	B	1548	A	C8-N7	-5.05	1.28	1.31
15	E	23	PHE	CG-CD2	5.05	1.46	1.38
30	T	3	ARG	NE-CZ	5.05	1.39	1.33
12	B	16	C	C2'-C1'	-5.05	1.47	1.53
12	B	39	G	P-O5'	-5.05	1.54	1.59
12	B	326	G	N9-C8	5.05	1.41	1.37
12	B	2181	U	C2'-C1'	-5.05	1.47	1.53
12	B	2886	A	O4'-C1'	-5.05	1.35	1.41
11	A	85	G	O4'-C1'	5.05	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	323	C	C3'-C2'	5.05	1.58	1.52
12	B	673	C	N3-C4	5.05	1.37	1.33
12	B	881	G	N1-C2	5.05	1.41	1.37
12	B	952	G	C3'-C2'	5.05	1.58	1.52
12	B	1419	A	C4'-C3'	5.05	1.58	1.53
12	B	1894	C	P-O5'	-5.05	1.54	1.59
12	B	2227	A	C6-N1	5.05	1.39	1.35
12	B	2662	A	C4'-O4'	5.05	1.52	1.45
12	B	2897	U	C5'-C4'	5.05	1.57	1.51
12	B	914	G	C6-N1	5.05	1.43	1.39
12	B	1176	U	O3'-P	-5.05	1.55	1.61
12	B	1949	G	C3'-C2'	-5.05	1.47	1.52
12	B	2509	G	N9-C4	-5.05	1.33	1.38
12	B	2521	C	O3'-P	-5.05	1.55	1.61
29	S	13	SER	CA-CB	5.05	1.60	1.52
12	B	756	A	C5-C4	5.05	1.42	1.38
12	B	1053	C	C2-O2	-5.05	1.20	1.24
12	B	2318	G	C5-C4	5.05	1.41	1.38
12	B	2831	G	P-O5'	-5.05	1.54	1.59
12	B	327	G	N9-C4	5.05	1.42	1.38
12	B	1410	G	C5-C4	5.05	1.41	1.38
12	B	2016	U	C2'-C1'	-5.05	1.47	1.53
12	B	2111	U	C1'-N1	5.05	1.56	1.48
12	B	2156	G	C3'-O3'	5.05	1.49	1.42
12	B	2299	U	C2'-C1'	-5.05	1.47	1.53
12	B	2464	G	C6-N1	5.05	1.43	1.39
12	B	2569	G	C2'-C1'	-5.05	1.47	1.53
12	B	2832	U	P-O5'	-5.05	1.54	1.59
12	B	445	C	C2'-C1'	-5.04	1.47	1.53
12	B	500	G	N3-C4	5.04	1.39	1.35
12	B	935	C	C3'-C2'	5.04	1.58	1.52
12	B	2602	A	C2'-C1'	5.04	1.58	1.53
12	B	2825	G	O3'-P	5.04	1.67	1.61
12	B	2901	C	C5-C6	-5.04	1.30	1.34
23	M	92	TRP	CD2-CE2	5.04	1.47	1.41
12	B	446	G	C5-C6	-5.04	1.37	1.42
12	B	450	G	C6-N1	5.04	1.43	1.39
12	B	543	G	N9-C4	5.04	1.42	1.38
12	B	840	C	C4'-C3'	5.04	1.58	1.53
12	B	1526	C	O3'-P	-5.04	1.55	1.61
12	B	2297	A	O3'-P	-5.04	1.55	1.61
12	B	2434	A	C5'-C4'	5.04	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2711	A	N9-C4	-5.04	1.34	1.37
12	B	2855	C	C4-C5	5.04	1.47	1.43
10	9	314	SER	CB-OG	5.04	1.48	1.42
11	A	20	G	N3-C4	-5.04	1.31	1.35
11	A	34	A	C2-N3	5.04	1.38	1.33
12	B	1567	G	C2-N2	5.04	1.39	1.34
12	B	1907	G	C6-O6	-5.04	1.19	1.24
12	B	2488	G	C2-N3	5.04	1.36	1.32
12	B	2491	U	C2-N3	5.04	1.41	1.37
11	A	50	A	O3'-P	-5.04	1.55	1.61
12	B	160	A	C1'-N9	-5.04	1.39	1.46
12	B	716	A	O5'-C5'	5.04	1.52	1.44
12	B	1082	U	C2-N3	-5.04	1.34	1.37
12	B	1964	G	N1-C2	5.04	1.41	1.37
12	B	1993	U	C2-N3	5.04	1.41	1.37
6	5	123	VAL	CB-CG2	5.04	1.63	1.52
12	B	22	C	N3-C4	5.04	1.37	1.33
12	B	110	G	C5-C4	5.04	1.41	1.38
12	B	1514	G	C6-N1	5.04	1.43	1.39
12	B	2407	A	N9-C8	5.04	1.41	1.37
12	B	2564	A	N1-C2	-5.04	1.29	1.34
12	B	2662	A	C8-N7	-5.04	1.28	1.31
12	B	2878	U	N3-C4	5.04	1.43	1.38
20	J	35	ARG	CZ-NH2	5.04	1.39	1.33
28	R	37	GLU	CD-OE1	5.04	1.31	1.25
6	5	163	TYR	CG-CD2	5.04	1.45	1.39
12	B	520	G	C8-N7	-5.04	1.27	1.30
12	B	597	G	O3'-P	-5.04	1.55	1.61
12	B	676	A	O3'-P	-5.04	1.55	1.61
12	B	1911	U	C4-C5	-5.04	1.39	1.43
12	B	2480	C	N1-C2	5.04	1.45	1.40
4	3	15	ARG	NE-CZ	5.04	1.39	1.33
11	A	64	G	N3-C4	5.04	1.39	1.35
12	B	458	G	C8-N7	-5.04	1.27	1.30
12	B	707	G	O3'-P	5.04	1.67	1.61
12	B	1559	U	C5'-C4'	5.04	1.57	1.51
12	B	2024	G	C2-N3	5.04	1.36	1.32
12	B	2174	C	N1-C2	5.04	1.45	1.40
12	B	2215	C	C4'-O4'	5.04	1.52	1.45
12	B	2282	G	N7-C5	5.04	1.42	1.39
12	B	2468	A	C2-N3	5.04	1.38	1.33
12	B	2741	A	N9-C8	5.04	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	101	A	C8-N7	-5.03	1.28	1.31
12	B	144	A	N3-C4	5.03	1.37	1.34
12	B	187	G	C8-N7	-5.03	1.27	1.30
12	B	869	G	C2-N3	5.03	1.36	1.32
12	B	918	A	C8-N7	-5.03	1.28	1.31
12	B	1035	U	C4-C5	5.03	1.48	1.43
12	B	1297	C	N1-C6	5.03	1.40	1.37
12	B	1617	C	C4'-C3'	5.03	1.58	1.53
12	B	1873	G	C2'-C1'	-5.03	1.47	1.53
12	B	1948	G	C3'-O3'	5.03	1.49	1.42
12	B	2176	A	N9-C4	5.03	1.40	1.37
12	B	2248	C	C4'-C3'	-5.03	1.47	1.52
12	B	2362	C	C4'-C3'	-5.03	1.47	1.52
28	R	62	GLU	CD-OE2	-5.03	1.20	1.25
12	B	324	A	N7-C5	-5.03	1.36	1.39
12	B	365	U	C2-N3	5.03	1.41	1.37
12	B	1189	A	N1-C2	5.03	1.38	1.34
12	B	2217	G	C4'-C3'	5.03	1.58	1.53
12	B	194	G	N7-C5	-5.03	1.36	1.39
12	B	268	C	C2'-C1'	-5.03	1.47	1.53
12	B	814	C	C4-C5	-5.03	1.39	1.43
12	B	1054	A	N7-C5	-5.03	1.36	1.39
12	B	1231	U	C5-C6	5.03	1.38	1.34
12	B	1308	A	C2'-O2'	5.03	1.48	1.41
12	B	2223	G	C2-N2	5.03	1.39	1.34
24	N	103	ARG	NE-CZ	5.03	1.39	1.33
12	B	279	A	N7-C5	-5.03	1.36	1.39
12	B	1126	A	C6-N6	5.03	1.38	1.33
12	B	1344	U	C4'-O4'	-5.03	1.39	1.45
12	B	2863	C	O4'-C1'	5.03	1.48	1.41
22	L	33	ARG	CD-NE	5.03	1.54	1.46
11	A	19	C	C5-C6	-5.03	1.30	1.34
12	B	111	A	C6-N1	5.03	1.39	1.35
12	B	824	U	C2-N3	5.03	1.41	1.37
12	B	852	U	C2-O2	5.03	1.26	1.22
12	B	867	C	C2'-O2'	-5.03	1.35	1.41
12	B	1255	U	N1-C2	5.03	1.43	1.38
12	B	1789	A	C6-N6	5.03	1.38	1.33
12	B	1851	U	C2'-O2'	-5.03	1.35	1.41
12	B	1895	C	C5-C6	5.03	1.38	1.34
12	B	2472	G	N7-C5	-5.03	1.36	1.39
12	B	2618	G	C8-N7	-5.03	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2817	U	C4-C5	5.03	1.48	1.43
12	B	387	U	C2-O2	5.03	1.26	1.22
12	B	447	A	C5-C4	5.03	1.42	1.38
12	B	540	C	O4'-C1'	5.03	1.48	1.41
12	B	545	U	C5-C6	-5.03	1.29	1.34
12	B	672	C	C5-C6	5.03	1.38	1.34
12	B	943	A	C3'-O3'	5.03	1.49	1.42
12	B	1164	C	C2'-C1'	5.03	1.58	1.53
12	B	1664	A	N9-C4	5.03	1.40	1.37
12	B	1863	G	N1-C2	5.03	1.41	1.37
12	B	1888	G	C5-C6	5.03	1.47	1.42
33	Y	40	ARG	CZ-NH2	5.03	1.39	1.33
12	B	188	G	C3'-C2'	-5.02	1.47	1.52
12	B	398	C	C2'-O2'	-5.02	1.35	1.41
12	B	651	G	C5-C4	-5.02	1.34	1.38
12	B	889	C	O3'-P	-5.02	1.55	1.61
12	B	1678	A	C8-N7	5.02	1.35	1.31
2	1	40	SER	CA-CB	-5.02	1.45	1.52
3	2	30	ARG	CZ-NH2	5.02	1.39	1.33
11	A	85	G	C8-N7	-5.02	1.27	1.30
12	B	114	U	O5'-C5'	-5.02	1.34	1.42
12	B	342	A	P-O5'	-5.02	1.54	1.59
12	B	455	C	C1'-N1	5.02	1.56	1.48
12	B	1059	G	N3-C4	-5.02	1.31	1.35
12	B	2749	A	C5-C6	-5.02	1.36	1.41
12	B	224	U	C3'-C2'	-5.02	1.47	1.52
12	B	245	G	N7-C5	-5.02	1.36	1.39
12	B	306	U	O3'-P	-5.02	1.55	1.61
12	B	553	G	P-O5'	-5.02	1.54	1.59
12	B	560	C	C4-C5	-5.02	1.39	1.43
12	B	964	C	N1-C2	-5.02	1.35	1.40
12	B	1346	G	C8-N7	-5.02	1.27	1.30
12	B	1499	C	C2'-C1'	-5.02	1.47	1.53
10	9	129	ARG	CZ-NH2	5.02	1.39	1.33
12	B	561	G	C6-N1	5.02	1.43	1.39
12	B	621	A	C5-C4	5.02	1.42	1.38
12	B	1122	G	N3-C4	-5.02	1.31	1.35
12	B	1230	A	N7-C5	-5.02	1.36	1.39
12	B	2063	C	N3-C4	5.02	1.37	1.33
12	B	2068	U	C4-O4	5.02	1.27	1.23
12	B	2553	G	C2-N3	5.02	1.36	1.32
12	B	283	G	N3-C4	-5.02	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	506	G	C5-C4	-5.02	1.34	1.38
12	B	1366	A	C2'-C1'	-5.02	1.47	1.53
12	B	1400	U	C1'-N1	5.02	1.56	1.48
12	B	1451	C	C2-N3	5.02	1.39	1.35
12	B	1741	C	C5-C6	5.02	1.38	1.34
12	B	2315	G	C4'-O4'	5.02	1.52	1.45
12	B	2408	U	N1-C2	5.02	1.43	1.38
12	B	2659	G	O3'-P	-5.02	1.55	1.61
12	B	2818	U	C2'-C1'	-5.02	1.47	1.53
12	B	2881	U	P-O5'	-5.02	1.54	1.59
13	C	245	THR	N-CA	-5.02	1.36	1.46
14	D	162	ALA	C-N	5.02	1.42	1.33
26	P	38	ARG	CD-NE	5.02	1.54	1.46
12	B	411	G	C5'-C4'	5.02	1.57	1.51
12	B	568	U	N1-C2	5.02	1.43	1.38
12	B	1061	U	C5'-C4'	5.02	1.57	1.51
12	B	1672	A	N9-C4	5.02	1.40	1.37
12	B	2437	G	P-O5'	-5.02	1.54	1.59
12	B	2548	U	C2-N3	5.02	1.41	1.37
12	B	2729	G	C8-N7	-5.02	1.27	1.30
12	B	2821	A	O4'-C1'	5.02	1.48	1.41
24	N	82	GLU	CG-CD	5.02	1.59	1.51
9	8	19	ARG	CD-NE	5.01	1.54	1.46
12	B	210	C	C4'-C3'	5.01	1.58	1.53
12	B	522	A	C2-N3	5.01	1.38	1.33
12	B	1365	A	N9-C4	5.01	1.40	1.37
12	B	1897	G	P-O5'	5.01	1.64	1.59
12	B	2160	C	P-O5'	-5.01	1.54	1.59
12	B	2451	A	O3'-P	-5.01	1.55	1.61
4	3	35	GLU	CD-OE1	5.01	1.31	1.25
11	A	83	G	C3'-C2'	-5.01	1.47	1.52
12	B	656	G	C2-N3	5.01	1.36	1.32
12	B	1774	C	C1'-N1	5.01	1.56	1.48
12	B	2502	G	N9-C4	5.01	1.42	1.38
12	B	2676	C	C2-O2	5.01	1.28	1.24
12	B	279	A	O3'-P	-5.01	1.55	1.61
12	B	476	G	N9-C4	-5.01	1.33	1.38
12	B	676	A	N9-C8	-5.01	1.33	1.37
12	B	1174	U	C4'-O4'	5.01	1.52	1.45
12	B	1286	A	C6-N1	5.01	1.39	1.35
12	B	1341	G	C4'-C3'	-5.01	1.47	1.52
12	B	1855	U	N1-C2	5.01	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	2358	A	N9-C4	-5.01	1.34	1.37
12	B	2675	A	C4'-C3'	5.01	1.58	1.53
12	B	1635	A	O3'-P	-5.01	1.55	1.61
12	B	1736	U	N1-C2	5.01	1.43	1.38
12	B	1801	A	C6-N1	5.01	1.39	1.35
12	B	1839	G	N3-C4	5.01	1.39	1.35
12	B	2144	G	N9-C8	5.01	1.41	1.37
12	B	2298	A	C5'-C4'	5.01	1.57	1.51
12	B	2323	G	N9-C8	-5.01	1.34	1.37
12	B	2867	G	N9-C8	-5.01	1.34	1.37
12	B	2894	G	P-O5'	-5.01	1.54	1.59
30	T	52	GLU	CG-CD	5.01	1.59	1.51
12	B	1122	G	O4'-C1'	5.01	1.48	1.41
12	B	185	G	N9-C4	5.01	1.42	1.38
12	B	202	U	C2'-C1'	-5.01	1.47	1.53
12	B	674	G	C5-C6	5.01	1.47	1.42
12	B	955	U	C2-N3	-5.01	1.34	1.37
12	B	1060	U	O4'-C1'	5.01	1.48	1.41
12	B	1837	C	N1-C6	-5.01	1.34	1.37
12	B	1884	G	C6-N1	5.01	1.43	1.39
12	B	1922	G	N9-C4	-5.01	1.33	1.38
12	B	2299	U	C2-O2	5.01	1.26	1.22
12	B	2391	G	N9-C4	-5.01	1.33	1.38
12	B	2737	G	N1-C2	5.01	1.41	1.37
18	H	142	VAL	CB-CG2	5.01	1.63	1.52
12	B	222	A	C8-N7	-5.00	1.28	1.31
12	B	969	G	C4'-C3'	5.00	1.58	1.53
12	B	1856	U	C5'-C4'	5.00	1.57	1.51
12	B	19	A	N3-C4	5.00	1.37	1.34
12	B	504	A	C2-N3	5.00	1.38	1.33
12	B	1017	G	N9-C4	5.00	1.42	1.38
12	B	1202	G	N3-C4	5.00	1.39	1.35
12	B	1373	A	C6-N6	5.00	1.38	1.33
12	B	1567	G	N1-C2	5.00	1.41	1.37
12	B	2061	G	N3-C4	-5.00	1.31	1.35
12	B	2440	C	N3-C4	5.00	1.37	1.33
12	B	2441	U	N3-C4	5.00	1.43	1.38
12	B	2874	C	C3'-O3'	5.00	1.49	1.42
12	B	2888	C	N3-C4	5.00	1.37	1.33
26	P	71	ARG	CZ-NH1	5.00	1.39	1.33
12	B	548	G	N9-C4	5.00	1.42	1.38
12	B	573	U	C3'-O3'	5.00	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	1111	A	C2'-C1'	-5.00	1.47	1.53
12	B	1200	C	C4'-C3'	5.00	1.58	1.53
12	B	1269	A	N9-C4	5.00	1.40	1.37
12	B	2034	U	N3-C4	5.00	1.43	1.38
13	C	79	ARG	N-CA	-5.00	1.36	1.46

All (17909) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	751	A	N1-C6-N6	26.85	134.71	118.60
12	B	370	G	N1-C6-O6	26.32	135.69	119.90
12	B	928	A	N1-C6-N6	24.76	133.45	118.60
12	B	2360	G	N1-C6-O6	24.64	134.69	119.90
12	B	668	A	N1-C6-N6	24.57	133.34	118.60
12	B	956	G	N1-C6-O6	24.26	134.45	119.90
12	B	2352	A	N1-C6-N6	24.19	133.12	118.60
12	B	2838	G	N1-C6-O6	23.84	134.21	119.90
12	B	684	G	N1-C6-O6	23.52	134.01	119.90
12	B	1418	G	C5-C6-O6	-23.46	114.52	128.60
12	B	2282	G	N1-C6-O6	23.30	133.88	119.90
12	B	2286	G	N1-C6-O6	23.25	133.85	119.90
12	B	1418	G	N1-C6-O6	23.22	133.83	119.90
12	B	1050	A	N1-C6-N6	23.19	132.52	118.60
12	B	1780	A	P-O3'-C3'	23.17	147.50	119.70
12	B	1866	A	N1-C6-N6	22.80	132.28	118.60
12	B	1034	G	N1-C6-O6	22.62	133.47	119.90
12	B	2230	G	N1-C6-O6	22.44	133.37	119.90
12	B	482	A	N1-C6-N6	22.32	131.99	118.60
12	B	1419	A	N1-C6-N6	22.29	131.97	118.60
12	B	949	G	N1-C6-O6	22.28	133.27	119.90
12	B	352	A	N1-C6-N6	22.26	131.96	118.60
12	B	1545	A	N1-C6-N6	22.15	131.89	118.60
12	B	1444	G	N1-C6-O6	22.10	133.16	119.90
12	B	1287	A	N1-C6-N6	22.08	131.85	118.60
12	B	2184	A	N1-C6-N6	22.05	131.83	118.60
12	B	233	A	N1-C6-N6	22.04	131.82	118.60
12	B	1095	A	N1-C6-N6	21.98	131.79	118.60
12	B	1651	G	N1-C6-O6	21.88	133.03	119.90
12	B	2547	A	N1-C6-N6	21.61	131.57	118.60
12	B	1927	A	N1-C6-N6	21.61	131.56	118.60
12	B	2837	A	N1-C6-N6	21.60	131.56	118.60
12	B	1823	G	N1-C6-O6	21.44	132.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2838	G	C5-C6-O6	-21.37	115.78	128.60
12	B	1107	G	N1-C6-O6	21.35	132.71	119.90
12	B	1354	A	N1-C6-N6	21.31	131.39	118.60
12	B	2679	A	N1-C6-N6	21.26	131.35	118.60
12	B	2662	A	N1-C6-N6	21.16	131.30	118.60
12	B	563	A	N1-C6-N6	21.11	131.26	118.60
12	B	1407	G	N1-C6-O6	21.11	132.57	119.90
12	B	2383	G	C5-C6-O6	-21.06	115.97	128.60
12	B	2674	G	N1-C6-O6	21.00	132.50	119.90
12	B	2433	A	N1-C6-N6	20.98	131.19	118.60
12	B	849	A	N1-C6-N6	20.93	131.16	118.60
12	B	2831	G	N1-C6-O6	20.90	132.44	119.90
12	B	822	G	N1-C6-O6	20.86	132.41	119.90
12	B	2383	G	N1-C6-O6	20.83	132.40	119.90
12	B	608	A	N1-C6-N6	20.80	131.08	118.60
12	B	1223	G	N1-C6-O6	20.79	132.38	119.90
12	B	2294	G	N1-C6-O6	20.79	132.37	119.90
11	A	52	A	N1-C6-N6	20.75	131.05	118.60
12	B	259	G	N1-C6-O6	20.71	132.32	119.90
13	C	42	ARG	NE-CZ-NH2	-20.57	110.01	120.30
12	B	176	A	N1-C6-N6	20.53	130.92	118.60
12	B	1613	G	N1-C6-O6	20.50	132.20	119.90
12	B	1455	G	C5-C6-O6	-20.50	116.30	128.60
12	B	1791	A	N1-C6-N6	20.49	130.89	118.60
12	B	1073	A	N1-C6-N6	20.32	130.79	118.60
12	B	2590	A	N1-C6-N6	20.32	130.79	118.60
12	B	370	G	C5-C6-O6	-20.27	116.44	128.60
12	B	2806	C	N3-C4-C5	-20.22	113.81	121.90
12	B	1919	A	N1-C6-N6	20.19	130.71	118.60
12	B	797	G	N1-C6-O6	20.18	132.01	119.90
12	B	2748	A	N1-C6-N6	20.14	130.68	118.60
12	B	538	A	N1-C6-N6	20.14	130.68	118.60
12	B	2020	A	N1-C6-N6	20.10	130.66	118.60
12	B	600	G	N1-C6-O6	20.06	131.94	119.90
12	B	473	G	C5-C6-O6	-20.06	116.57	128.60
12	B	1847	A	N1-C6-N6	20.05	130.63	118.60
12	B	2336	A	N1-C6-N6	20.04	130.63	118.60
12	B	2352	A	C5-C6-N1	-20.03	107.69	117.70
12	B	2191	A	N1-C6-N6	20.03	130.62	118.60
12	B	324	A	N1-C6-N6	20.01	130.61	118.60
12	B	582	A	N1-C6-N6	19.99	130.60	118.60
12	B	1010	A	N1-C6-N6	19.98	130.59	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	603	A	N1-C6-N6	19.92	130.55	118.60
12	B	891	G	N1-C6-O6	19.91	131.85	119.90
12	B	991	C	N3-C4-C5	-19.91	113.94	121.90
12	B	684	G	C5-C6-O6	-19.91	116.65	128.60
12	B	2340	A	N1-C6-N6	19.91	130.54	118.60
12	B	185	G	C5-C6-O6	-19.90	116.66	128.60
12	B	556	A	N1-C6-N6	19.89	130.53	118.60
12	B	241	A	N1-C6-N6	19.88	130.53	118.60
12	B	2288	A	N1-C6-N6	19.88	130.53	118.60
12	B	207	A	N1-C6-N6	19.80	130.48	118.60
12	B	2009	A	N1-C6-N6	19.80	130.48	118.60
12	B	2363	G	N1-C6-O6	19.79	131.78	119.90
12	B	2738	A	N1-C6-N6	19.74	130.45	118.60
12	B	2490	G	C5-C6-O6	-19.71	116.77	128.60
12	B	1928	A	N1-C6-N6	19.70	130.42	118.60
12	B	2487	G	C5-C6-O6	-19.70	116.78	128.60
12	B	1378	A	N1-C6-N6	19.70	130.42	118.60
12	B	1099	G	N1-C6-O6	19.69	131.71	119.90
12	B	2010	G	C5-C6-O6	-19.64	116.82	128.60
12	B	1938	A	N1-C6-N6	19.57	130.34	118.60
12	B	804	A	N1-C6-N6	19.52	130.31	118.60
12	B	2870	C	N3-C4-C5	-19.50	114.10	121.90
12	B	1593	A	N1-C6-N6	19.48	130.29	118.60
12	B	2282	G	C5-C6-O6	-19.48	116.91	128.60
12	B	1810	A	N1-C6-N6	19.46	130.27	118.60
12	B	2271	G	N1-C6-O6	19.45	131.57	119.90
12	B	1787	A	N1-C6-N6	19.43	130.26	118.60
12	B	583	G	N1-C6-O6	19.42	131.55	119.90
12	B	1284	A	N1-C6-N6	19.41	130.25	118.60
12	B	861	A	N1-C6-N6	19.41	130.25	118.60
12	B	1433	A	N1-C6-N6	19.41	130.24	118.60
12	B	1154	G	N1-C6-O6	19.36	131.52	119.90
12	B	2461	A	N1-C6-N6	19.30	130.18	118.60
12	B	942	G	C8-N9-C4	-19.25	98.70	106.40
12	B	303	G	N1-C6-O6	19.22	131.43	119.90
12	B	1393	A	N1-C6-N6	19.21	130.13	118.60
12	B	2378	A	N1-C6-N6	19.21	130.13	118.60
12	B	2093	G	N1-C6-O6	19.18	131.41	119.90
12	B	2429	G	N1-C6-O6	19.15	131.39	119.90
12	B	2351	G	N1-C6-O6	19.12	131.37	119.90
12	B	2675	A	N1-C6-N6	19.08	130.05	118.60
12	B	152	A	N1-C6-N6	19.07	130.04	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	266	G	N1-C6-O6	19.07	131.34	119.90
12	B	2162	G	N1-C6-O6	19.04	131.32	119.90
12	B	733	G	N1-C6-O6	19.02	131.31	119.90
12	B	185	G	N1-C6-O6	18.96	131.28	119.90
12	B	2345	G	N1-C6-O6	18.94	131.26	119.90
12	B	2831	G	C5-C6-O6	-18.91	117.25	128.60
12	B	1230	A	N1-C6-N6	18.87	129.92	118.60
12	B	1780	A	N1-C6-N6	18.86	129.91	118.60
12	B	177	G	N1-C6-O6	18.85	131.21	119.90
12	B	1421	G	C5-C6-O6	-18.82	117.31	128.60
12	B	497	A	N1-C6-N6	18.79	129.87	118.60
12	B	924	G	N1-C6-O6	18.78	131.17	119.90
12	B	949	G	C5-C6-O6	-18.75	117.35	128.60
12	B	2127	G	N1-C6-O6	18.75	131.15	119.90
12	B	410	G	N1-C6-O6	18.74	131.14	119.90
12	B	920	A	N1-C6-N6	18.71	129.82	118.60
12	B	103	A	N1-C6-N6	18.70	129.82	118.60
12	B	1962	C	N3-C4-C5	-18.70	114.42	121.90
12	B	1933	G	C5-C6-O6	-18.69	117.39	128.60
12	B	1338	G	C5-C6-O6	-18.68	117.39	128.60
12	B	2204	G	N1-C6-O6	18.68	131.11	119.90
12	B	1269	A	N1-C6-N6	18.63	129.78	118.60
12	B	2101	A	N1-C6-N6	18.58	129.75	118.60
12	B	1500	G	C5-C6-O6	-18.58	117.45	128.60
12	B	2239	G	N1-C6-O6	18.58	131.05	119.90
11	A	27	C	N3-C4-C5	-18.55	114.48	121.90
12	B	298	G	C5-C6-O6	-18.51	117.49	128.60
12	B	1545	A	C5-C6-N1	-18.48	108.46	117.70
12	B	2014	A	N1-C6-N6	18.48	129.69	118.60
12	B	1057	A	N1-C6-N6	18.47	129.68	118.60
12	B	466	A	N1-C6-N6	18.47	129.68	118.60
12	B	196	A	N1-C6-N6	18.46	129.68	118.60
12	B	1034	G	C5-C6-O6	-18.45	117.53	128.60
12	B	155	A	N1-C6-N6	18.42	129.65	118.60
12	B	1801	A	N1-C6-N6	18.41	129.65	118.60
12	B	172	A	N1-C6-N6	18.34	129.60	118.60
12	B	60	G	N1-C6-O6	18.32	130.89	119.90
12	B	2230	G	C5-C6-O6	-18.30	117.62	128.60
12	B	60	G	C5-C6-O6	-18.24	117.66	128.60
12	B	890	C	P-O3'-C3'	18.23	141.58	119.70
12	B	297	G	N1-C6-O6	18.18	130.81	119.90
12	B	1470	A	N1-C6-N6	18.17	129.50	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1705	A	N1-C6-N6	18.15	129.49	118.60
12	B	734	A	N1-C6-N6	18.12	129.47	118.60
12	B	2429	G	C5-C6-O6	-18.07	117.76	128.60
12	B	2308	G	N1-C6-O6	18.06	130.74	119.90
12	B	1419	A	C5-C6-N6	-18.04	109.27	123.70
12	B	1772	A	N1-C6-N6	18.02	129.41	118.60
12	B	1151	A	N1-C6-N6	18.02	129.41	118.60
12	B	477	A	N1-C6-N6	18.01	129.41	118.60
12	B	2867	G	N1-C6-O6	17.97	130.68	119.90
12	B	2641	G	N1-C6-O6	17.96	130.68	119.90
12	B	2010	G	N1-C6-O6	17.94	130.66	119.90
12	B	822	G	C5-C6-O6	-17.94	117.84	128.60
12	B	2692	G	N1-C6-O6	17.93	130.66	119.90
12	B	1735	A	N1-C6-N6	17.90	129.34	118.60
12	B	2426	A	N1-C6-N6	17.89	129.34	118.60
12	B	2360	G	C5-C6-O6	-17.89	117.86	128.60
12	B	1878	G	C5-C6-O6	-17.88	117.87	128.60
12	B	2314	A	N1-C6-N6	17.86	129.31	118.60
11	A	112	G	C5-C6-O6	-17.85	117.89	128.60
12	B	1142	A	N1-C6-N6	17.83	129.30	118.60
12	B	410	G	C5-C6-O6	-17.82	117.91	128.60
12	B	2435	A	N1-C6-N6	17.82	129.29	118.60
12	B	95	A	N1-C6-N6	17.79	129.27	118.60
12	B	809	G	N1-C6-O6	17.78	130.57	119.90
12	B	2821	A	N1-C6-N6	17.78	129.27	118.60
12	B	2116	G	N1-C6-O6	17.74	130.54	119.90
12	B	2879	A	N1-C6-N6	17.70	129.22	118.60
12	B	188	G	N1-C6-O6	17.69	130.52	119.90
12	B	215	G	N1-C6-O6	17.68	130.51	119.90
12	B	1392	A	N1-C6-N6	17.68	129.21	118.60
12	B	2545	G	N1-C6-O6	17.67	130.50	119.90
12	B	2116	G	C5-C6-O6	-17.66	118.00	128.60
12	B	1685	C	N3-C4-C5	-17.64	114.84	121.90
12	B	2648	G	N1-C6-O6	17.64	130.48	119.90
12	B	2799	A	N1-C6-N6	17.64	129.18	118.60
12	B	1274	A	N1-C6-N6	17.63	129.18	118.60
12	B	910	A	N1-C6-N6	17.63	129.18	118.60
12	B	1644	C	N3-C4-N4	17.63	130.34	118.00
12	B	2597	G	N1-C6-O6	17.62	130.47	119.90
12	B	2290	G	N1-C6-O6	17.59	130.46	119.90
12	B	2856	A	N1-C6-N6	17.59	129.15	118.60
12	B	2840	C	N3-C4-C5	-17.55	114.88	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	468	G	C5-C6-O6	-17.53	118.08	128.60
12	B	2359	C	O4'-C1'-N1	17.53	122.22	108.20
12	B	425	G	N1-C6-O6	17.52	130.41	119.90
12	B	248	G	C5-C6-O6	-17.48	118.11	128.60
12	B	809	G	C5-C6-O6	-17.47	118.12	128.60
12	B	730	A	N1-C6-N6	17.46	129.07	118.60
12	B	2170	A	N1-C6-N6	17.44	129.07	118.60
12	B	1535	A	N1-C6-N6	17.43	129.06	118.60
12	B	255	A	N1-C6-N6	17.43	129.06	118.60
12	B	930	G	C5-C6-O6	-17.43	118.14	128.60
12	B	1439	A	N1-C6-N6	17.42	129.05	118.60
12	B	1590	A	N1-C6-N6	17.42	129.05	118.60
12	B	1384	A	N1-C6-N6	17.42	129.05	118.60
12	B	682	G	N1-C6-O6	17.42	130.35	119.90
12	B	944	C	N3-C4-C5	-17.40	114.94	121.90
12	B	1722	A	N1-C6-N6	17.39	129.03	118.60
12	B	1134	A	N1-C6-N6	17.38	129.03	118.60
12	B	2352	A	C4-C5-C6	17.37	125.68	117.00
12	B	2597	G	C5-C6-O6	-17.37	118.18	128.60
12	B	449	A	N1-C6-N6	17.35	129.01	118.60
12	B	2732	G	N1-C6-O6	17.35	130.31	119.90
12	B	478	A	N1-C6-N6	17.34	129.00	118.60
12	B	1571	A	N1-C6-N6	17.34	129.00	118.60
12	B	262	A	N1-C6-N6	17.33	129.00	118.60
11	A	101	A	N1-C6-N6	17.33	129.00	118.60
12	B	266	G	C5-C6-O6	-17.33	118.20	128.60
12	B	101	A	N1-C6-N6	17.32	128.99	118.60
12	B	1767	G	N1-C6-O6	17.30	130.28	119.90
12	B	993	G	N1-C6-O6	17.30	130.28	119.90
12	B	301	G	N1-C6-O6	17.27	130.26	119.90
12	B	2574	G	N1-C6-O6	17.24	130.24	119.90
11	A	17	C	C6-N1-C2	-17.23	113.41	120.30
12	B	244	A	N1-C6-N6	17.22	128.93	118.60
12	B	2251	G	N1-C6-O6	17.22	130.23	119.90
12	B	663	G	C5-C6-O6	-17.20	118.28	128.60
12	B	2531	A	N1-C6-N6	17.19	128.92	118.60
12	B	2781	A	N1-C6-N6	17.19	128.91	118.60
12	B	1464	G	C5-C6-O6	-17.17	118.30	128.60
12	B	298	G	N1-C6-O6	17.15	130.19	119.90
12	B	1904	G	C5-C6-O6	-17.13	118.32	128.60
12	B	1804	C	N3-C4-C5	-17.13	115.05	121.90
12	B	1679	A	N1-C6-N6	17.09	128.85	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	303	G	C5-C6-O6	-17.08	118.35	128.60
12	B	1280	G	N1-C6-O6	17.07	130.14	119.90
12	B	2399	G	N1-C6-O6	17.07	130.14	119.90
12	B	752	A	N1-C6-N6	17.06	128.84	118.60
12	B	827	U	P-O3'-C3'	17.06	140.18	119.70
12	B	655	A	N1-C6-N6	17.06	128.84	118.60
12	B	583	G	C5-C6-O6	-17.05	118.37	128.60
12	B	797	G	C5-C6-O6	-17.04	118.38	128.60
12	B	574	A	N1-C6-N6	17.02	128.81	118.60
11	A	66	A	N1-C6-N6	17.00	128.80	118.60
12	B	543	G	N1-C6-O6	17.00	130.10	119.90
12	B	1260	A	N1-C6-N6	16.99	128.79	118.60
12	B	2751	G	N1-C6-O6	16.98	130.09	119.90
12	B	56	A	N1-C6-N6	16.97	128.78	118.60
12	B	1544	A	N1-C6-N6	16.97	128.78	118.60
12	B	805	G	C5-C6-O6	-16.95	118.43	128.60
12	B	825	A	N1-C6-N6	16.95	128.77	118.60
12	B	226	A	N1-C6-N6	16.94	128.76	118.60
12	B	2094	A	N1-C6-N6	16.93	128.76	118.60
12	B	1746	A	N1-C6-N6	16.93	128.76	118.60
11	A	104	A	N1-C6-N6	16.92	128.75	118.60
12	B	2142	A	N1-C6-N6	16.92	128.75	118.60
12	B	169	G	N1-C6-O6	16.91	130.04	119.90
12	B	2140	G	N1-C6-O6	16.91	130.04	119.90
12	B	2365	G	N1-C6-O6	16.89	130.04	119.90
11	A	29	A	N1-C6-N6	16.88	128.73	118.60
6	5	122	ARG	NE-CZ-NH1	16.87	128.73	120.30
12	B	2311	A	N1-C6-N6	16.86	128.72	118.60
12	B	2589	A	C4-C5-C6	16.86	125.43	117.00
12	B	121	G	N1-C6-O6	16.86	130.01	119.90
12	B	1387	A	N1-C6-N6	16.86	128.71	118.60
12	B	265	A	N1-C6-N6	16.81	128.69	118.60
12	B	751	A	C5-C6-N1	-16.81	109.29	117.70
12	B	1424	G	C5-C6-O6	-16.80	118.52	128.60
12	B	563	A	C5-C6-N1	-16.75	109.32	117.70
12	B	1860	G	N1-C6-O6	16.75	129.95	119.90
12	B	2437	G	N1-C6-O6	16.75	129.95	119.90
12	B	1055	G	C5-C6-O6	-16.75	118.55	128.60
10	9	76	ARG	NE-CZ-NH1	16.74	128.67	120.30
12	B	863	A	N1-C6-N6	16.74	128.64	118.60
12	B	1552	A	N1-C6-N6	16.73	128.64	118.60
12	B	2766	A	N1-C6-N6	16.72	128.63	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1780	A	C5-N7-C8	16.70	112.25	103.90
11	A	94	A	C5-C6-N1	-16.70	109.35	117.70
12	B	259	G	C5-C6-O6	-16.68	118.59	128.60
12	B	1481	U	O4'-C1'-N1	16.67	121.54	108.20
12	B	1333	G	N1-C6-O6	16.66	129.90	119.90
12	B	2173	A	C5-N7-C8	16.66	112.23	103.90
12	B	1849	G	N1-C6-O6	16.66	129.90	119.90
12	B	1452	G	P-O3'-C3'	16.64	139.66	119.70
11	A	112	G	N1-C6-O6	16.63	129.88	119.90
12	B	1244	A	N1-C6-N6	16.62	128.57	118.60
12	B	1653	G	N1-C6-O6	16.62	129.87	119.90
12	B	2627	G	C5-C6-O6	-16.58	118.65	128.60
12	B	1551	A	N1-C6-N6	16.57	128.54	118.60
12	B	102	U	P-O3'-C3'	16.56	139.57	119.70
12	B	789	A	N1-C6-N6	16.55	128.53	118.60
12	B	2161	C	N3-C4-C5	-16.51	115.29	121.90
12	B	233	A	C5-C6-N6	-16.51	110.49	123.70
12	B	348	A	N1-C6-N6	16.51	128.50	118.60
12	B	1421	G	N1-C6-O6	16.48	129.79	119.90
12	B	1829	A	N1-C6-N6	16.48	128.49	118.60
12	B	1651	G	C5-C6-O6	-16.47	118.72	128.60
12	B	1608	A	C5-C6-N1	-16.46	109.47	117.70
12	B	1154	G	C5-C6-O6	-16.44	118.74	128.60
12	B	682	G	C5-C6-O6	-16.43	118.74	128.60
12	B	1933	G	N1-C6-O6	16.43	129.75	119.90
12	B	415	A	N1-C6-N6	16.39	128.44	118.60
12	B	414	C	C6-N1-C2	-16.39	113.75	120.30
12	B	1301	A	N1-C6-N6	16.37	128.42	118.60
12	B	974	G	C5-C6-O6	-16.36	118.78	128.60
12	B	251	A	N1-C6-N6	16.36	128.41	118.60
12	B	409	G	C5-C6-O6	-16.36	118.79	128.60
12	B	353	C	N3-C4-N4	16.36	129.45	118.00
12	B	674	G	N1-C6-O6	16.35	129.71	119.90
12	B	63	A	N1-C6-N6	16.34	128.41	118.60
12	B	1613	G	C5-C6-O6	-16.32	118.81	128.60
12	B	2145	C	N3-C4-N4	16.29	129.41	118.00
12	B	2641	G	C5-C6-O6	-16.29	118.83	128.60
12	B	2127	G	C5-C6-O6	-16.26	118.85	128.60
12	B	2758	A	N1-C6-N6	16.25	128.35	118.60
12	B	1583	A	N1-C6-N6	16.25	128.35	118.60
12	B	1906	G	C5-C6-O6	-16.25	118.85	128.60
12	B	388	G	N1-C6-O6	16.24	129.65	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1475	G	N3-C2-N2	16.24	131.27	119.90
12	B	924	G	C5-C6-O6	-16.24	118.86	128.60
12	B	69	C	N3-C4-C5	-16.24	115.41	121.90
12	B	1134	A	C5-C6-N1	-16.24	109.58	117.70
12	B	2077	A	N1-C6-N6	16.23	128.34	118.60
12	B	2024	G	C5-C6-O6	-16.22	118.87	128.60
12	B	2381	A	N1-C6-N6	16.22	128.33	118.60
11	A	58	A	C8-N9-C4	-16.22	99.31	105.80
12	B	1845	G	N1-C6-O6	16.22	129.63	119.90
12	B	2083	G	N1-C6-O6	16.22	129.63	119.90
12	B	1170	C	N3-C4-C5	-16.18	115.43	121.90
12	B	2208	C	O4'-C1'-N1	16.18	121.14	108.20
12	B	508	A	N1-C6-N6	16.18	128.31	118.60
12	B	1334	G	N1-C6-O6	16.16	129.60	119.90
12	B	980	A	N1-C6-N6	16.15	128.29	118.60
12	B	2209	G	N1-C6-O6	16.13	129.58	119.90
12	B	2076	U	P-O3'-C3'	16.12	139.05	119.70
12	B	2842	G	N1-C6-O6	16.12	129.57	119.90
12	B	976	G	N1-C6-O6	16.11	129.56	119.90
12	B	1469	A	N1-C6-N6	16.10	128.26	118.60
12	B	1586	A	N1-C6-N6	16.10	128.26	118.60
12	B	1872	A	N1-C6-N6	16.10	128.26	118.60
12	B	423	A	N1-C6-N6	16.09	128.26	118.60
12	B	1664	A	N1-C6-N6	16.09	128.26	118.60
12	B	777	G	N1-C6-O6	16.08	129.55	119.90
12	B	550	C	N3-C4-C5	-16.08	115.47	121.90
12	B	1936	A	N1-C6-N6	16.06	128.24	118.60
12	B	2286	G	C5-C6-O6	-16.06	118.96	128.60
12	B	2241	A	N1-C6-N6	16.06	128.23	118.60
12	B	2732	G	C5-C6-O6	-16.05	118.97	128.60
12	B	1385	A	N1-C6-N6	16.05	128.23	118.60
12	B	2746	U	C5-C6-N1	16.04	130.72	122.70
12	B	1671	U	C5-C6-N1	16.03	130.72	122.70
12	B	159	G	O4'-C1'-N9	16.01	121.01	108.20
12	B	2602	A	N1-C6-N6	15.98	128.19	118.60
12	B	2294	G	C5-C6-O6	-15.96	119.02	128.60
12	B	2311	A	C8-N9-C4	-15.96	99.42	105.80
12	B	1116	G	C5-C6-O6	-15.95	119.03	128.60
12	B	36	G	N1-C6-O6	15.94	129.46	119.90
12	B	559	G	N1-C6-O6	15.94	129.46	119.90
12	B	116	C	N3-C4-C5	-15.92	115.53	121.90
12	B	1500	G	N1-C6-O6	15.91	129.45	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2254	C	O4'-C1'-N1	15.91	120.93	108.20
12	B	976	G	C5-C6-O6	-15.90	119.06	128.60
12	B	1804	C	N3-C4-N4	15.90	129.13	118.00
12	B	318	C	N3-C4-C5	-15.90	115.54	121.90
12	B	1569	A	N1-C6-N6	15.89	128.13	118.60
12	B	578	G	C5-C6-O6	-15.88	119.07	128.60
12	B	2642	G	N1-C6-O6	15.88	129.43	119.90
12	B	1143	A	N1-C6-N6	15.87	128.12	118.60
12	B	749	A	N1-C6-N6	15.86	128.12	118.60
12	B	891	G	O4'-C1'-N9	15.86	120.89	108.20
12	B	281	C	N3-C4-C5	-15.86	115.56	121.90
12	B	1665	A	C5-C6-N1	-15.86	109.77	117.70
12	B	1142	A	C5-C6-N1	-15.86	109.77	117.70
12	B	1444	G	C5-C6-O6	-15.85	119.09	128.60
12	B	2095	A	N1-C2-N3	15.82	137.21	129.30
12	B	865	C	N3-C4-C5	-15.82	115.57	121.90
12	B	1230	A	C5-C6-N6	-15.82	111.05	123.70
12	B	2815	C	N3-C4-C5	-15.82	115.57	121.90
12	B	494	G	C5-C6-O6	-15.81	119.11	128.60
12	B	2507	C	C6-N1-C2	-15.81	113.98	120.30
12	B	2764	A	N1-C6-N6	15.80	128.08	118.60
12	B	1068	G	N1-C6-O6	15.79	129.38	119.90
12	B	2603	G	N1-C6-O6	15.78	129.37	119.90
12	B	533	G	N1-C6-O6	15.77	129.36	119.90
12	B	2507	C	N3-C4-C5	-15.77	115.59	121.90
12	B	1455	G	N1-C6-O6	15.77	129.36	119.90
12	B	2049	G	N1-C6-O6	15.76	129.36	119.90
12	B	611	C	C6-N1-C2	-15.74	114.00	120.30
12	B	1537	G	N1-C6-O6	15.74	129.34	119.90
12	B	2572	A	N1-C6-N6	15.71	128.03	118.60
12	B	631	A	C4-C5-C6	15.71	124.86	117.00
12	B	677	A	N1-C6-N6	15.70	128.02	118.60
12	B	1223	G	C5-C6-O6	-15.69	119.19	128.60
12	B	1105	U	O4'-C1'-N1	15.69	120.75	108.20
12	B	2082	A	N1-C6-N6	15.68	128.01	118.60
12	B	1596	A	N1-C6-N6	15.68	128.01	118.60
12	B	1275	A	N1-C6-N6	15.68	128.01	118.60
12	B	55	G	N1-C6-O6	15.67	129.30	119.90
12	B	608	A	C5-N7-C8	15.67	111.73	103.90
12	B	220	G	N1-C6-O6	15.66	129.30	119.90
12	B	1794	A	N1-C6-N6	15.65	127.99	118.60
12	B	2351	G	C5-C6-O6	-15.64	119.21	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2565	A	N1-C6-N6	15.64	127.98	118.60
12	B	2691	C	N3-C4-C5	-15.62	115.65	121.90
12	B	903	C	N3-C4-C5	-15.62	115.65	121.90
12	B	715	A	N1-C6-N6	15.61	127.97	118.60
12	B	330	A	N1-C6-N6	15.60	127.96	118.60
12	B	864	G	C5-C6-O6	-15.60	119.24	128.60
12	B	1711	A	N1-C6-N6	15.60	127.96	118.60
12	B	2657	A	N1-C6-N6	15.60	127.96	118.60
12	B	2445	G	N1-C6-O6	15.57	129.25	119.90
12	B	1216	G	N1-C6-O6	15.56	129.24	119.90
12	B	164	C	O4'-C1'-N1	15.56	120.65	108.20
12	B	407	G	N1-C6-O6	15.56	129.24	119.90
12	B	1700	A	N1-C6-N6	15.56	127.94	118.60
12	B	231	A	C8-N9-C4	15.56	112.02	105.80
12	B	1920	C	N3-C4-N4	15.56	128.89	118.00
12	B	2487	G	N1-C6-O6	15.54	129.22	119.90
12	B	592	A	O4'-C1'-N9	15.53	120.62	108.20
12	B	914	G	N1-C6-O6	15.53	129.22	119.90
12	B	2450	A	N1-C6-N6	15.53	127.92	118.60
12	B	272	A	N1-C6-N6	15.53	127.92	118.60
12	B	1795	C	C2-N3-C4	15.53	127.66	119.90
12	B	318	C	N3-C4-N4	15.52	128.86	118.00
12	B	805	G	N1-C6-O6	15.52	129.21	119.90
12	B	2077	A	C4-C5-C6	15.52	124.76	117.00
12	B	1116	G	N1-C6-O6	15.50	129.20	119.90
12	B	2405	G	N1-C6-O6	15.50	129.20	119.90
12	B	2529	G	N1-C6-O6	15.49	129.19	119.90
12	B	2237	G	N1-C6-O6	15.48	129.19	119.90
12	B	654	A	N1-C6-N6	15.47	127.88	118.60
12	B	1099	G	C5-C6-O6	-15.47	119.32	128.60
12	B	1181	U	O4'-C1'-N1	15.46	120.57	108.20
12	B	1892	C	C6-N1-C2	-15.46	114.12	120.30
12	B	422	A	N1-C6-N6	15.45	127.87	118.60
12	B	2430	A	N1-C6-N6	15.43	127.86	118.60
12	B	1046	A	N1-C6-N6	15.39	127.83	118.60
12	B	2328	A	N1-C6-N6	15.38	127.83	118.60
12	B	2186	G	C5-C6-O6	-15.37	119.38	128.60
16	F	70	ARG	NE-CZ-NH1	15.37	127.99	120.30
12	B	1819	A	C4-C5-C6	15.37	124.69	117.00
12	B	2172	U	O4'-C1'-N1	15.36	120.48	108.20
12	B	1144	A	N1-C6-N6	15.34	127.80	118.60
12	B	1610	A	C8-N9-C4	-15.34	99.67	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1715	G	N1-C6-O6	15.32	129.09	119.90
12	B	753	A	N1-C6-N6	15.32	127.79	118.60
12	B	1494	A	N1-C6-N6	15.32	127.79	118.60
13	C	86	ARG	NE-CZ-NH1	15.30	127.95	120.30
12	B	453	A	N1-C6-N6	15.29	127.78	118.60
12	B	488	G	C5-C6-O6	-15.28	119.43	128.60
12	B	1805	A	N1-C6-N6	15.27	127.76	118.60
12	B	1107	G	C5-C6-O6	-15.27	119.44	128.60
12	B	188	G	C5-C6-O6	-15.26	119.44	128.60
12	B	2767	C	C6-N1-C2	-15.25	114.20	120.30
15	E	158	PHE	CB-CG-CD2	15.25	131.47	120.80
12	B	13	A	N1-C6-N6	15.25	127.75	118.60
12	B	2162	G	C5-C6-O6	-15.24	119.45	128.60
12	B	1569	A	O4'-C1'-N9	15.24	120.39	108.20
12	B	261	G	N1-C6-O6	15.22	129.03	119.90
12	B	2616	C	N3-C4-C5	-15.21	115.82	121.90
12	B	2842	G	C5-C6-O6	-15.20	119.48	128.60
12	B	1895	C	C2-N3-C4	15.20	127.50	119.90
12	B	1252	G	N1-C6-O6	15.20	129.02	119.90
12	B	1822	C	N3-C4-C5	-15.20	115.82	121.90
12	B	1131	G	N1-C6-O6	15.19	129.02	119.90
12	B	2221	G	C5-C6-O6	-15.19	119.49	128.60
12	B	162	U	O4'-C1'-N1	15.19	120.35	108.20
12	B	2751	G	C5-C6-O6	-15.19	119.49	128.60
12	B	495	G	N1-C6-O6	15.18	129.01	119.90
12	B	1881	C	O4'-C1'-N1	15.16	120.33	108.20
12	B	1092	C	O4'-C1'-N1	15.15	120.32	108.20
12	B	644	A	N1-C6-N6	15.14	127.68	118.60
12	B	290	U	C6-N1-C2	-15.13	111.92	121.00
12	B	1155	A	N1-C6-N6	15.13	127.68	118.60
18	H	25	TYR	CB-CG-CD1	-15.12	111.93	121.00
12	B	948	C	C6-N1-C2	-15.11	114.25	120.30
12	B	2040	G	C5-C6-O6	-15.11	119.53	128.60
12	B	1422	G	N1-C6-O6	15.11	128.97	119.90
12	B	2544	G	C5-C6-O6	-15.11	119.53	128.60
12	B	761	A	N1-C2-N3	15.11	136.85	129.30
11	A	35	C	C6-N1-C2	-15.10	114.26	120.30
12	B	1002	G	N1-C6-O6	15.10	128.96	119.90
12	B	1498	C	P-O3'-C3'	15.09	137.81	119.70
12	B	216	A	N1-C6-N6	15.08	127.65	118.60
12	B	2279	G	N1-C2-N3	-15.08	114.85	123.90
12	B	956	G	C5-C6-O6	-15.08	119.55	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2711	A	N1-C6-N6	15.08	127.65	118.60
12	B	2813	A	N1-C2-N3	-15.07	121.77	129.30
12	B	1041	G	N1-C6-O6	15.06	128.94	119.90
7	6	28	ARG	NE-CZ-NH2	15.03	127.82	120.30
12	B	71	A	N1-C6-N6	15.03	127.62	118.60
12	B	1210	G	C5-C6-O6	-15.03	119.58	128.60
12	B	2412	A	N1-C6-N6	15.02	127.61	118.60
12	B	108	G	N1-C6-O6	15.01	128.91	119.90
12	B	1088	A	C5-C6-N1	-15.01	110.19	117.70
12	B	1262	A	N1-C6-N6	15.00	127.60	118.60
12	B	1299	G	N1-C6-O6	15.00	128.90	119.90
12	B	2290	G	C5-C6-O6	-15.00	119.60	128.60
12	B	2516	A	N1-C6-N6	14.99	127.59	118.60
12	B	873	C	N3-C4-C5	-14.99	115.91	121.90
12	B	2806	C	N3-C4-N4	14.98	128.49	118.00
12	B	414	C	C5-C6-N1	14.97	128.49	121.00
12	B	1342	A	N1-C6-N6	14.97	127.58	118.60
12	B	1978	A	N1-C6-N6	14.97	127.58	118.60
32	W	21	ARG	NE-CZ-NH1	14.97	127.79	120.30
12	B	28	A	N1-C6-N6	14.97	127.58	118.60
12	B	988	A	N1-C6-N6	14.97	127.58	118.60
11	A	15	A	N1-C6-N6	14.96	127.58	118.60
12	B	2371	G	O4'-C1'-N9	14.96	120.17	108.20
12	B	199	A	N1-C6-N6	14.95	127.57	118.60
12	B	2171	A	N1-C6-N6	14.95	127.57	118.60
12	B	2726	A	N1-C6-N6	14.94	127.56	118.60
12	B	131	A	O4'-C1'-N9	14.93	120.14	108.20
12	B	1997	C	O4'-C1'-N1	14.92	120.13	108.20
12	B	388	G	C5-C6-O6	-14.91	119.65	128.60
12	B	2709	G	C5-C6-O6	-14.89	119.66	128.60
12	B	1670	C	O4'-C1'-N1	14.89	120.11	108.20
12	B	2279	G	N1-C6-O6	14.89	128.83	119.90
12	B	1124	G	N1-C6-O6	14.88	128.83	119.90
12	B	106	C	N3-C4-C5	-14.88	115.95	121.90
12	B	2225	A	C5-N7-C8	14.87	111.34	103.90
12	B	2012	G	C8-N9-C4	-14.87	100.45	106.40
12	B	2442	C	N3-C4-C5	-14.87	115.95	121.90
12	B	2893	A	N1-C6-N6	14.86	127.52	118.60
12	B	578	G	N1-C6-O6	14.85	128.81	119.90
12	B	2117	A	N1-C6-N6	14.85	127.51	118.60
12	B	1992	G	C5-C6-O6	-14.85	119.69	128.60
12	B	1239	G	N1-C6-O6	14.84	128.81	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2887	A	C5-C6-N1	-14.83	110.28	117.70
12	B	777	G	C5-C6-O6	-14.83	119.70	128.60
12	B	111	A	N1-C6-N6	14.82	127.50	118.60
12	B	618	G	N1-C6-O6	14.82	128.79	119.90
12	B	217	A	N1-C6-N6	14.82	127.49	118.60
12	B	1317	G	N1-C6-O6	14.82	128.79	119.90
12	B	203	A	N1-C6-N6	14.82	127.49	118.60
12	B	1355	G	C5-C6-O6	-14.81	119.71	128.60
12	B	248	G	N1-C6-O6	14.81	128.78	119.90
12	B	2465	C	O4'-C1'-N1	14.81	120.05	108.20
12	B	1684	G	C4-C5-N7	14.79	116.72	110.80
12	B	2425	A	P-O3'-C3'	14.79	137.45	119.70
12	B	2887	A	C4-C5-C6	14.79	124.39	117.00
12	B	653	U	P-O3'-C3'	14.77	137.43	119.70
12	B	2345	G	C5-C6-O6	-14.77	119.74	128.60
11	A	76	G	N1-C6-O6	14.77	128.76	119.90
11	A	38	C	O4'-C1'-N1	14.76	120.01	108.20
12	B	764	A	N1-C6-N6	14.76	127.46	118.60
12	B	655	A	P-O3'-C3'	14.75	137.40	119.70
12	B	2031	A	N1-C6-N6	14.75	127.45	118.60
12	B	1632	A	N1-C6-N6	14.75	127.45	118.60
12	B	1962	C	N3-C4-N4	14.74	128.32	118.00
12	B	2544	G	N1-C6-O6	14.72	128.73	119.90
12	B	1490	A	N1-C6-N6	14.71	127.43	118.60
12	B	224	U	O4'-C1'-N1	14.71	119.97	108.20
11	A	87	U	P-O3'-C3'	14.70	137.34	119.70
12	B	2740	A	N1-C6-N6	14.70	127.42	118.60
12	B	1358	G	N1-C6-O6	14.70	128.72	119.90
12	B	2644	G	C5-C6-O6	-14.69	119.78	128.60
12	B	968	C	N3-C4-C5	-14.69	116.03	121.90
12	B	2448	A	N1-C6-N6	14.68	127.41	118.60
12	B	367	G	N1-C6-O6	14.68	128.71	119.90
12	B	1881	C	C2-N3-C4	14.67	127.24	119.90
11	A	70	C	N3-C4-C5	-14.67	116.03	121.90
12	B	869	G	N1-C6-O6	14.66	128.70	119.90
12	B	1422	G	C5-C6-O6	-14.65	119.81	128.60
12	B	1953	A	N1-C6-N6	14.65	127.39	118.60
12	B	190	A	N1-C6-N6	14.64	127.39	118.60
12	B	215	G	C5-C6-N1	-14.64	104.18	111.50
11	A	12	C	C6-N1-C2	14.63	126.15	120.30
12	B	2632	A	N1-C6-N6	14.63	127.38	118.60
12	B	1425	G	N1-C6-O6	14.62	128.68	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1492	G	C8-N9-C4	-14.62	100.55	106.40
12	B	2169	A	N1-C6-N6	14.62	127.37	118.60
12	B	2476	A	N1-C6-N6	14.62	127.37	118.60
12	B	1897	G	C2-N3-C4	-14.62	104.59	111.90
12	B	2342	C	N3-C4-C5	-14.62	116.05	121.90
12	B	1000	A	C4-C5-C6	14.61	124.31	117.00
12	B	1922	G	N1-C6-O6	14.61	128.67	119.90
11	A	58	A	N1-C6-N6	14.60	127.36	118.60
12	B	504	A	N1-C6-N6	14.60	127.36	118.60
10	9	129	ARG	NE-CZ-NH1	14.59	127.60	120.30
12	B	52	A	N1-C6-N6	14.59	127.36	118.60
12	B	1160	G	C5-C6-O6	-14.59	119.85	128.60
12	B	1325	U	C4-C5-C6	14.59	128.45	119.70
12	B	2559	C	O4'-C1'-N1	14.58	119.87	108.20
12	B	621	A	N1-C6-N6	14.58	127.35	118.60
12	B	260	G	N1-C6-O6	14.57	128.64	119.90
12	B	693	A	O4'-C1'-N9	14.57	119.86	108.20
12	B	283	G	N1-C6-O6	14.57	128.64	119.90
12	B	864	G	N1-C6-O6	14.56	128.64	119.90
12	B	353	C	C5-C4-N4	-14.56	110.01	120.20
12	B	737	C	N3-C4-N4	14.55	128.18	118.00
12	B	472	A	N1-C6-N6	14.54	127.33	118.60
12	B	993	G	C5-C6-O6	-14.54	119.88	128.60
12	B	1608	A	N1-C6-N6	14.52	127.31	118.60
15	E	79	ARG	NE-CZ-NH1	14.52	127.56	120.30
12	B	1055	G	N1-C6-O6	14.51	128.61	119.90
12	B	1904	G	N1-C6-O6	14.50	128.60	119.90
12	B	1139	G	C6-C5-N7	-14.49	121.70	130.40
12	B	2630	G	N1-C6-O6	14.49	128.59	119.90
12	B	2497	A	N1-C6-N6	14.49	127.29	118.60
12	B	1990	C	C6-N1-C2	-14.48	114.51	120.30
12	B	1721	G	C8-N9-C4	-14.47	100.61	106.40
12	B	350	G	N1-C6-O6	14.46	128.57	119.90
10	9	269	TYR	CB-CG-CD2	-14.45	112.33	121.00
12	B	1768	C	O4'-C1'-N1	14.45	119.76	108.20
12	B	731	C	N3-C4-N4	14.43	128.10	118.00
12	B	830	G	N1-C6-O6	14.43	128.56	119.90
12	B	1721	G	N1-C2-N3	-14.43	115.24	123.90
12	B	480	A	N1-C6-N6	14.43	127.26	118.60
12	B	2223	G	N1-C6-O6	14.43	128.56	119.90
12	B	1276	A	N1-C6-N6	14.41	127.25	118.60
12	B	2699	C	C6-N1-C2	-14.41	114.53	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	763	G	N1-C6-O6	14.41	128.55	119.90
12	B	2204	G	C5-C6-O6	-14.41	119.95	128.60
12	B	2322	A	N1-C6-N6	14.40	127.24	118.60
12	B	1127	A	N1-C6-N6	14.40	127.24	118.60
12	B	2251	G	C5-C6-O6	-14.39	119.96	128.60
12	B	1601	G	C5-C6-O6	-14.39	119.97	128.60
12	B	2429	G	N1-C2-N3	-14.39	115.27	123.90
12	B	891	G	C4-C5-N7	-14.38	105.05	110.80
11	A	16	G	C5-C6-O6	-14.38	119.97	128.60
12	B	253	C	N3-C4-N4	14.38	128.06	118.00
12	B	1663	G	N1-C6-O6	14.37	128.52	119.90
12	B	886	A	N1-C6-N6	14.36	127.22	118.60
12	B	783	A	N1-C6-N6	14.36	127.21	118.60
12	B	882	G	N1-C6-O6	14.36	128.51	119.90
12	B	2279	G	N3-C2-N2	14.36	129.95	119.90
12	B	473	G	N1-C6-O6	14.34	128.51	119.90
12	B	1314	C	C6-N1-C2	-14.34	114.56	120.30
12	B	1088	A	C4-C5-C6	14.33	124.17	117.00
12	B	1988	G	N1-C6-O6	14.32	128.50	119.90
12	B	2740	A	O4'-C1'-N9	14.32	119.66	108.20
12	B	843	G	N1-C6-O6	14.32	128.49	119.90
12	B	954	G	C5-C6-O6	-14.32	120.01	128.60
12	B	2791	G	C5-C6-O6	-14.31	120.01	128.60
12	B	2153	C	N3-C4-N4	14.31	128.01	118.00
12	B	816	C	N3-C4-N4	14.30	128.01	118.00
31	U	86	PHE	CB-CG-CD1	-14.30	110.79	120.80
12	B	504	A	C5-C6-N1	-14.29	110.55	117.70
12	B	2339	C	O4'-C1'-N1	14.29	119.64	108.20
12	B	1170	C	C4-C5-C6	14.29	124.55	117.40
12	B	2518	A	N1-C6-N6	14.29	127.17	118.60
12	B	1424	G	N3-C2-N2	14.28	129.89	119.90
11	A	93	C	N3-C4-C5	-14.26	116.20	121.90
12	B	1925	C	O4'-C1'-N1	14.25	119.60	108.20
12	B	1239	G	C5-C6-O6	-14.25	120.05	128.60
12	B	2053	G	C5-C6-O6	-14.24	120.06	128.60
12	B	2107	G	N1-C6-O6	14.24	128.44	119.90
12	B	445	C	N3-C4-C5	-14.24	116.20	121.90
12	B	579	G	N1-C6-O6	14.23	128.44	119.90
12	B	489	G	N1-C6-O6	14.22	128.44	119.90
12	B	1617	C	P-O3'-C3'	14.22	136.76	119.70
12	B	2644	G	N1-C6-O6	14.22	128.43	119.90
12	B	1338	G	N1-C6-O6	14.21	128.43	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1783	A	N1-C6-N6	14.21	127.12	118.60
12	B	1601	G	N1-C6-O6	14.20	128.42	119.90
5	4	48	TYR	CB-CG-CD2	-14.20	112.48	121.00
11	A	58	A	N9-C4-C5	14.20	111.48	105.80
12	B	1787	A	C5-C6-N1	-14.20	110.60	117.70
12	B	1802	A	C4-C5-C6	14.20	124.10	117.00
12	B	2140	G	C5-C6-O6	-14.20	120.08	128.60
12	B	2297	A	C8-N9-C4	-14.20	100.12	105.80
12	B	628	G	N1-C6-O6	14.20	128.42	119.90
12	B	748	G	N1-C6-O6	14.19	128.41	119.90
12	B	111	A	O4'-C1'-N9	14.17	119.54	108.20
12	B	2808	G	N1-C6-O6	14.17	128.40	119.90
12	B	2439	A	N1-C6-N6	14.16	127.10	118.60
12	B	134	G	N1-C6-O6	14.16	128.40	119.90
12	B	1749	A	N1-C6-N6	14.15	127.09	118.60
12	B	488	G	N1-C6-O6	14.12	128.37	119.90
13	C	100	ARG	NE-CZ-NH1	14.12	127.36	120.30
12	B	2415	G	N1-C6-O6	14.12	128.37	119.90
12	B	2764	A	C5-C6-N1	-14.11	110.64	117.70
12	B	1180	U	O4'-C1'-N1	14.11	119.49	108.20
12	B	2110	G	N1-C6-O6	14.10	128.36	119.90
12	B	1031	G	N1-C6-O6	14.09	128.35	119.90
12	B	1650	A	N1-C6-N6	14.09	127.06	118.60
12	B	1761	C	C2-N1-C1'	14.09	134.29	118.80
12	B	2716	C	O4'-C1'-N1	14.09	119.47	108.20
12	B	2686	G	N1-C6-O6	14.08	128.35	119.90
12	B	36	G	C5-C6-O6	-14.08	120.15	128.60
12	B	2198	A	N1-C6-N6	14.08	127.05	118.60
12	B	225	C	N3-C4-C5	-14.07	116.27	121.90
12	B	1286	A	C4-C5-C6	14.07	124.03	117.00
12	B	1684	G	C6-C5-N7	-14.07	121.96	130.40
12	B	368	A	N1-C6-N6	14.06	127.03	118.60
12	B	2757	A	N1-C6-N6	14.05	127.03	118.60
12	B	1348	C	N3-C4-C5	-14.05	116.28	121.90
12	B	882	G	C5-C6-O6	-14.04	120.17	128.60
12	B	1966	A	N1-C6-N6	14.04	127.03	118.60
12	B	2889	C	O4'-C1'-N1	14.04	119.43	108.20
10	9	150	ARG	NE-CZ-NH1	14.04	127.32	120.30
12	B	2363	G	C5-C6-O6	-14.03	120.18	128.60
12	B	69	C	C2-N3-C4	14.03	126.91	119.90
12	B	1501	G	N1-C6-O6	14.02	128.31	119.90
12	B	2867	G	C5-C6-N1	-14.02	104.49	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2660	A	N1-C6-N6	14.02	127.01	118.60
27	Q	10	ARG	NE-CZ-NH2	-14.01	113.29	120.30
12	B	730	A	C5-C6-N6	-14.01	112.50	123.70
12	B	609	A	N1-C6-N6	14.00	127.00	118.60
12	B	2215	C	O4'-C1'-N1	14.00	119.40	108.20
12	B	2670	A	C5-N7-C8	14.00	110.90	103.90
12	B	560	C	N3-C4-N4	13.99	127.80	118.00
12	B	1755	A	N1-C6-N6	13.99	127.00	118.60
12	B	984	A	N1-C6-N6	13.99	126.99	118.60
12	B	1333	G	C5-C6-O6	-13.99	120.21	128.60
12	B	384	A	C8-N9-C4	-13.99	100.20	105.80
12	B	1678	A	N1-C6-N6	13.98	126.99	118.60
12	B	1524	G	N1-C6-O6	13.98	128.29	119.90
12	B	2029	G	N1-C6-O6	13.98	128.29	119.90
12	B	1158	C	O4'-C1'-N1	13.98	119.38	108.20
12	B	2160	C	C6-N1-C2	-13.97	114.71	120.30
12	B	693	A	C4-C5-C6	13.96	123.98	117.00
12	B	1355	G	N1-C6-O6	13.96	128.28	119.90
12	B	2776	A	N1-C6-N6	13.96	126.97	118.60
12	B	2195	U	O4'-C1'-N1	13.96	119.36	108.20
12	B	2009	A	C5-C6-N6	-13.95	112.54	123.70
12	B	1167	C	O4'-C1'-N1	13.94	119.35	108.20
12	B	2583	G	N3-C2-N2	13.94	129.66	119.90
12	B	2810	A	C4-C5-C6	13.94	123.97	117.00
12	B	319	G	N1-C6-O6	13.94	128.26	119.90
12	B	968	C	N3-C4-N4	13.94	127.76	118.00
12	B	1168	G	N1-C6-O6	13.93	128.26	119.90
12	B	1414	C	N3-C4-N4	13.93	127.75	118.00
12	B	2766	A	C4-C5-C6	13.93	123.97	117.00
12	B	536	G	N1-C6-O6	13.93	128.26	119.90
12	B	1036	G	N1-C6-O6	13.92	128.25	119.90
12	B	526	A	C5-C6-N6	-13.90	112.58	123.70
12	B	1710	G	O4'-C1'-N9	13.90	119.32	108.20
12	B	268	C	C6-N1-C2	-13.90	114.74	120.30
12	B	673	C	O4'-C1'-N1	13.89	119.32	108.20
12	B	1110	G	N1-C6-O6	13.89	128.24	119.90
12	B	1238	G	N1-C6-O6	13.89	128.23	119.90
12	B	1766	G	C5-C6-O6	-13.89	120.27	128.60
12	B	9	G	N3-C2-N2	13.87	129.61	119.90
12	B	1172	C	N3-C4-C5	-13.87	116.35	121.90
12	B	2523	G	C4-C5-N7	-13.87	105.25	110.80
12	B	489	G	C6-C5-N7	-13.87	122.08	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	825	A	C5-C6-N1	-13.87	110.77	117.70
12	B	2529	G	C5-C6-O6	-13.86	120.28	128.60
12	B	2399	G	C5-C6-O6	-13.86	120.28	128.60
12	B	1761	C	C6-N1-C1'	-13.86	104.17	120.80
12	B	540	C	N3-C4-C5	-13.86	116.36	121.90
12	B	145	C	N3-C4-C5	-13.85	116.36	121.90
1	0	10	ARG	NE-CZ-NH2	13.85	127.22	120.30
12	B	1537	G	C5-C6-O6	-13.85	120.29	128.60
12	B	1780	A	C4-C5-N7	-13.85	103.78	110.70
12	B	505	A	N1-C6-N6	13.84	126.90	118.60
12	B	2114	A	C5-C6-N1	-13.83	110.78	117.70
12	B	2145	C	C5-C4-N4	-13.83	110.52	120.20
12	B	183	C	C6-N1-C2	-13.83	114.77	120.30
12	B	1059	G	N1-C6-O6	13.83	128.20	119.90
12	B	1084	A	N1-C6-N6	13.82	126.89	118.60
12	B	1869	G	C5-C6-O6	-13.82	120.31	128.60
21	K	105	ARG	NE-CZ-NH1	13.82	127.21	120.30
12	B	2434	A	N1-C6-N6	13.82	126.89	118.60
12	B	1195	G	N1-C6-O6	13.81	128.19	119.90
12	B	1998	A	N1-C6-N6	13.81	126.89	118.60
12	B	35	G	C5-C6-O6	-13.81	120.31	128.60
12	B	766	U	O4'-C1'-N1	13.81	119.25	108.20
12	B	1491	G	O4'-C1'-N9	13.80	119.24	108.20
12	B	2560	A	N1-C6-N6	13.79	126.88	118.60
12	B	2834	G	C5-C6-O6	-13.79	120.33	128.60
12	B	633	A	N1-C6-N6	13.79	126.87	118.60
12	B	559	G	C5-C6-O6	-13.79	120.33	128.60
12	B	1515	A	O4'-C1'-N9	13.79	119.23	108.20
12	B	318	C	C6-N1-C2	-13.78	114.79	120.30
12	B	608	A	C4-C5-N7	-13.77	103.81	110.70
12	B	474	G	C5-C6-O6	-13.77	120.34	128.60
12	B	602	A	C5-C6-N1	-13.77	110.81	117.70
12	B	1817	G	N1-C6-O6	13.77	128.16	119.90
12	B	965	C	N3-C4-N4	13.77	127.64	118.00
12	B	666	A	N1-C6-N6	13.77	126.86	118.60
12	B	2857	G	N3-C2-N2	13.77	129.54	119.90
12	B	930	G	N1-C6-O6	13.76	128.15	119.90
11	A	34	A	N1-C6-N6	13.76	126.85	118.60
12	B	1237	A	N1-C6-N6	13.76	126.85	118.60
12	B	1667	G	N1-C6-O6	13.75	128.15	119.90
12	B	2263	C	C5-C6-N1	13.74	127.87	121.00
12	B	1280	G	C5-C6-O6	-13.73	120.36	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1296	G	N1-C6-O6	13.73	128.14	119.90
12	B	2323	G	N1-C6-O6	13.72	128.13	119.90
12	B	2433	A	C5-C6-N1	-13.71	110.84	117.70
12	B	332	A	N1-C6-N6	13.71	126.83	118.60
12	B	837	C	N3-C4-C5	-13.71	116.42	121.90
12	B	229	C	C6-N1-C2	-13.71	114.82	120.30
12	B	918	A	C4-C5-C6	13.70	123.85	117.00
12	B	1891	G	N1-C6-O6	13.70	128.12	119.90
12	B	626	A	N1-C6-N6	13.69	126.82	118.60
12	B	1087	G	C5-C6-O6	-13.69	120.39	128.60
12	B	1284	A	P-O3'-C3'	13.69	136.13	119.70
12	B	324	A	N9-C4-C5	13.69	111.27	105.80
12	B	197	A	N1-C6-N6	13.68	126.81	118.60
12	B	2368	C	N3-C4-C5	-13.68	116.43	121.90
12	B	2016	U	O4'-C1'-N1	13.67	119.13	108.20
12	B	1425	G	C5-C6-O6	-13.66	120.40	128.60
12	B	2059	A	N1-C6-N6	13.66	126.80	118.60
12	B	2238	G	N1-C6-O6	13.66	128.09	119.90
12	B	2545	G	O4'-C1'-N9	13.66	119.13	108.20
12	B	2703	C	C5-C6-N1	13.65	127.83	121.00
12	B	693	A	C5-C6-N1	-13.65	110.88	117.70
12	B	2692	G	C5-C6-O6	-13.65	120.41	128.60
12	B	1059	G	N1-C2-N3	-13.64	115.71	123.90
12	B	1070	A	N1-C2-N3	-13.64	122.48	129.30
12	B	1407	G	C5-C6-O6	-13.64	120.42	128.60
12	B	1992	G	N1-C6-O6	13.64	128.08	119.90
12	B	38	A	N1-C6-N6	13.63	126.78	118.60
12	B	2862	G	C6-C5-N7	-13.63	122.22	130.40
12	B	363	G	C5-C6-O6	-13.63	120.42	128.60
12	B	2612	C	C5-C4-N4	-13.62	110.67	120.20
12	B	1879	C	O4'-C1'-N1	13.61	119.09	108.20
12	B	674	G	C5-C6-N1	-13.61	104.69	111.50
12	B	2266	A	N1-C6-N6	13.61	126.77	118.60
12	B	2709	G	N1-C6-O6	13.61	128.06	119.90
12	B	2318	G	N1-C6-O6	13.61	128.06	119.90
12	B	463	G	N1-C6-O6	13.59	128.06	119.90
12	B	2040	G	N1-C6-O6	13.59	128.06	119.90
12	B	1025	G	C5-C6-O6	-13.59	120.45	128.60
12	B	2717	C	O4'-C1'-N1	13.59	119.07	108.20
12	B	1646	C	N3-C4-C5	-13.58	116.47	121.90
12	B	648	G	N1-C6-O6	13.58	128.04	119.90
11	A	85	G	N1-C6-O6	13.57	128.04	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2147	A	N9-C4-C5	13.57	111.23	105.80
12	B	2886	A	N1-C6-N6	13.56	126.74	118.60
12	B	602	A	C4-C5-C6	13.56	123.78	117.00
12	B	2237	G	C5-C6-O6	-13.55	120.47	128.60
12	B	2524	G	N1-C6-O6	13.55	128.03	119.90
12	B	2854	G	N1-C6-O6	13.54	128.03	119.90
12	B	875	G	C5-C6-O6	-13.54	120.47	128.60
12	B	1733	G	C8-N9-C4	-13.54	100.98	106.40
12	B	974	G	N1-C6-O6	13.52	128.01	119.90
12	B	2437	G	C5-C6-O6	-13.51	120.50	128.60
13	C	176	ARG	NE-CZ-NH1	13.51	127.05	120.30
12	B	1808	A	N1-C6-N6	13.51	126.70	118.60
12	B	11	C	N3-C4-N4	13.50	127.45	118.00
12	B	307	G	N1-C6-O6	13.50	128.00	119.90
12	B	96	C	O4'-C1'-N1	13.50	119.00	108.20
12	B	2583	G	N1-C2-N3	-13.50	115.80	123.90
12	B	273	G	C5-C6-O6	-13.49	120.51	128.60
13	C	188	ARG	NE-CZ-NH2	13.48	127.04	120.30
12	B	359	G	C5-C6-O6	-13.48	120.51	128.60
12	B	2453	A	N1-C6-N6	13.47	126.68	118.60
12	B	879	G	C5-C6-O6	-13.47	120.52	128.60
12	B	1853	A	N1-C6-N6	13.47	126.68	118.60
12	B	2234	G	C4-C5-N7	13.47	116.19	110.80
12	B	574	A	C5-C6-N6	-13.47	112.92	123.70
12	B	1187	G	N1-C6-O6	13.46	127.98	119.90
12	B	2574	G	N1-C2-N3	-13.46	115.83	123.90
12	B	1408	G	N1-C6-O6	13.45	127.97	119.90
12	B	1695	G	N1-C6-O6	13.45	127.97	119.90
12	B	2261	C	O4'-C1'-N1	13.45	118.96	108.20
12	B	515	A	N1-C6-N6	13.45	126.67	118.60
12	B	1076	C	N3-C4-N4	13.45	127.41	118.00
12	B	1571	A	C4-C5-C6	13.44	123.72	117.00
12	B	923	G	C5-C6-O6	-13.44	120.53	128.60
12	B	2868	A	N1-C6-N6	13.44	126.66	118.60
12	B	672	C	N3-C4-C5	-13.43	116.53	121.90
12	B	1317	G	C5-C6-O6	-13.43	120.54	128.60
12	B	600	G	C5-C6-O6	-13.43	120.54	128.60
12	B	693	A	N1-C6-N6	13.43	126.66	118.60
12	B	869	G	C5-C6-O6	-13.42	120.55	128.60
30	T	73	ARG	NE-CZ-NH2	-13.42	113.59	120.30
12	B	2834	G	N1-C6-O6	13.42	127.95	119.90
12	B	2012	G	N7-C8-N9	13.42	119.81	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	560	C	N3-C4-C5	-13.41	116.53	121.90
12	B	2388	A	N1-C6-N6	13.41	126.65	118.60
12	B	918	A	C8-N9-C4	-13.41	100.44	105.80
12	B	1860	G	C8-N9-C4	-13.40	101.04	106.40
12	B	2269	G	N1-C6-O6	13.40	127.94	119.90
12	B	907	G	C4-C5-N7	-13.40	105.44	110.80
12	B	2012	G	N1-C6-O6	13.39	127.94	119.90
12	B	1205	A	N1-C6-N6	13.39	126.63	118.60
12	B	1847	A	P-O3'-C3'	13.38	135.76	119.70
1	0	71	ARG	NE-CZ-NH2	-13.38	113.61	120.30
12	B	2581	G	O4'-C1'-N9	13.38	118.90	108.20
12	B	2744	G	C5-C6-O6	-13.38	120.57	128.60
12	B	2031	A	C4-C5-C6	13.37	123.68	117.00
12	B	1906	G	C8-N9-C4	13.36	111.74	106.40
12	B	922	C	N3-C4-N4	13.35	127.34	118.00
12	B	1817	G	C5-C6-O6	-13.35	120.59	128.60
12	B	199	A	N9-C4-C5	-13.35	100.46	105.80
12	B	1014	A	N1-C6-N6	13.35	126.61	118.60
12	B	2739	U	O4'-C1'-N1	13.34	118.87	108.20
12	B	2468	A	N1-C6-N6	13.33	126.60	118.60
12	B	1054	A	N1-C6-N6	13.33	126.60	118.60
12	B	1669	A	N1-C6-N6	13.33	126.60	118.60
1	0	26	ARG	NE-CZ-NH1	13.33	126.96	120.30
11	A	100	G	C8-N9-C4	13.33	111.73	106.40
12	B	830	G	C5-C6-O6	-13.33	120.60	128.60
12	B	174	U	N3-C4-O4	13.32	128.72	119.40
12	B	367	G	C5-C6-O6	-13.32	120.61	128.60
12	B	2082	A	C5-C6-N6	-13.32	113.05	123.70
12	B	5	A	O4'-C1'-N9	13.31	118.85	108.20
12	B	734	A	C5-C6-N1	-13.30	111.05	117.70
12	B	900	A	N1-C6-N6	13.30	126.58	118.60
12	B	1465	G	N1-C6-O6	13.29	127.88	119.90
12	B	1224	U	O4'-C1'-N1	13.28	118.83	108.20
11	A	33	G	N1-C6-O6	13.28	127.87	119.90
12	B	1905	C	O4'-C1'-N1	13.27	118.82	108.20
12	B	2706	A	N1-C6-N6	13.27	126.56	118.60
12	B	2308	G	C5-C6-O6	-13.27	120.64	128.60
12	B	2423	U	O4'-C1'-N1	13.27	118.81	108.20
12	B	282	A	C4-C5-C6	13.27	123.63	117.00
12	B	2221	G	N1-C6-O6	13.27	127.86	119.90
12	B	902	C	C6-N1-C2	-13.26	114.99	120.30
12	B	2024	G	N1-C6-O6	13.26	127.86	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2089	C	N3-C4-N4	13.26	127.28	118.00
12	B	2643	G	N1-C6-O6	13.26	127.86	119.90
12	B	2071	A	N1-C6-N6	13.26	126.56	118.60
12	B	486	C	N3-C4-C5	-13.26	116.60	121.90
12	B	361	G	C8-N9-C4	-13.25	101.10	106.40
12	B	2407	A	N1-C6-N6	13.25	126.55	118.60
12	B	1261	C	N3-C4-N4	13.25	127.28	118.00
12	B	1838	C	N3-C4-C5	-13.25	116.60	121.90
12	B	2120	G	N1-C6-O6	13.25	127.85	119.90
12	B	2100	G	N1-C6-O6	13.24	127.85	119.90
12	B	1170	C	N3-C4-N4	13.24	127.27	118.00
12	B	242	G	C4-C5-N7	-13.24	105.51	110.80
12	B	2547	A	C5-C6-N1	-13.23	111.09	117.70
12	B	31	C	N3-C4-C5	-13.22	116.61	121.90
12	B	1304	A	N1-C6-N6	13.22	126.53	118.60
12	B	348	A	C4-C5-C6	13.22	123.61	117.00
12	B	1527	G	N1-C6-O6	13.22	127.83	119.90
12	B	602	A	N1-C6-N6	13.21	126.53	118.60
11	A	70	C	C6-N1-C2	13.21	125.58	120.30
12	B	1321	A	N1-C6-N6	13.21	126.53	118.60
12	B	1745	A	N1-C6-N6	13.21	126.53	118.60
12	B	198	C	N3-C4-C5	-13.21	116.62	121.90
12	B	320	A	N1-C6-N6	13.21	126.52	118.60
12	B	637	A	N1-C6-N6	13.20	126.52	118.60
12	B	2800	A	C8-N9-C4	-13.20	100.52	105.80
12	B	1482	G	C5-C6-O6	-13.20	120.68	128.60
12	B	780	G	C5-C6-O6	-13.20	120.68	128.60
12	B	1250	G	N1-C6-O6	13.20	127.82	119.90
12	B	1000	A	N1-C6-N6	13.19	126.51	118.60
12	B	1689	A	C2-N3-C4	-13.19	104.01	110.60
12	B	1598	A	N1-C6-N6	13.19	126.51	118.60
12	B	2484	G	O4'-C1'-N9	13.19	118.75	108.20
12	B	111	A	C5-C6-N6	-13.18	113.16	123.70
12	B	2560	A	C5-C6-N1	-13.18	111.11	117.70
12	B	2365	G	C5-C6-O6	-13.18	120.69	128.60
12	B	2668	G	N1-C6-O6	13.18	127.81	119.90
12	B	1756	G	N1-C6-O6	13.17	127.81	119.90
12	B	316	C	O4'-C1'-N1	13.17	118.74	108.20
12	B	727	A	N1-C6-N6	13.17	126.50	118.60
12	B	945	A	N1-C6-N6	13.17	126.50	118.60
12	B	1454	C	O4'-C1'-N1	13.17	118.73	108.20
12	B	2870	C	C2-N3-C4	13.17	126.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1767	G	C5-C6-O6	-13.16	120.70	128.60
12	B	63	A	C4-C5-C6	13.16	123.58	117.00
12	B	221	A	N1-C6-N6	13.16	126.50	118.60
12	B	290	U	N1-C2-N3	13.16	122.80	114.90
12	B	505	A	C8-N9-C4	-13.16	100.54	105.80
12	B	2012	G	C5-C6-N1	-13.16	104.92	111.50
12	B	1916	A	N1-C6-N6	13.15	126.49	118.60
12	B	2300	C	N3-C4-N4	13.15	127.21	118.00
12	B	528	A	O4'-C1'-N9	13.15	118.72	108.20
12	B	2279	G	C5-C6-O6	-13.15	120.71	128.60
12	B	1050	A	C5-C6-N6	-13.15	113.18	123.70
12	B	1212	G	N1-C6-O6	13.14	127.79	119.90
12	B	444	C	C6-N1-C2	13.14	125.56	120.30
12	B	865	C	C6-N1-C2	-13.14	115.05	120.30
12	B	482	A	C5-C6-N6	-13.14	113.19	123.70
12	B	2774	C	N3-C4-C5	-13.13	116.65	121.90
12	B	1589	U	O4'-C1'-N1	13.13	118.71	108.20
12	B	1978	A	C5-C6-N1	-13.13	111.14	117.70
12	B	1869	G	N1-C6-O6	13.11	127.77	119.90
12	B	2675	A	C5-C6-N1	-13.11	111.15	117.70
11	A	16	G	N1-C6-O6	13.10	127.76	119.90
12	B	2574	G	C5-C6-O6	-13.10	120.74	128.60
12	B	1283	G	N1-C6-O6	13.10	127.76	119.90
12	B	1431	A	N1-C6-N6	13.10	126.46	118.60
12	B	1548	A	N1-C6-N6	13.10	126.46	118.60
12	B	2719	G	N1-C6-O6	13.09	127.75	119.90
12	B	881	G	N1-C6-O6	13.09	127.75	119.90
12	B	9	G	N1-C6-O6	13.09	127.75	119.90
12	B	1635	A	N1-C6-N6	13.09	126.45	118.60
12	B	347	A	N1-C6-N6	13.08	126.45	118.60
12	B	2269	G	C5-C6-O6	-13.08	120.75	128.60
13	C	202	ARG	NE-CZ-NH1	13.08	126.84	120.30
12	B	1074	G	C6-C5-N7	-13.08	122.55	130.40
12	B	2281	A	N1-C6-N6	13.08	126.45	118.60
12	B	1211	C	P-O3'-C3'	13.07	135.39	119.70
12	B	2147	A	N1-C6-N6	13.07	126.44	118.60
12	B	585	G	C5-C6-O6	-13.07	120.76	128.60
12	B	1815	A	C4-C5-C6	13.05	123.53	117.00
12	B	1904	G	O4'-C1'-N9	13.05	118.64	108.20
24	N	103	ARG	NE-CZ-NH2	-13.05	113.78	120.30
12	B	2630	G	C5-C6-O6	-13.05	120.77	128.60
12	B	84	A	N1-C6-N6	13.04	126.43	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1545	A	C8-N9-C4	-13.05	100.58	105.80
12	B	1316	U	N3-C4-O4	13.04	128.53	119.40
12	B	1644	C	N3-C4-C5	-13.04	116.68	121.90
12	B	1653	G	C8-N9-C4	-13.04	101.19	106.40
12	B	1726	C	O4'-C1'-N1	13.04	118.63	108.20
12	B	1696	G	C8-N9-C4	-13.04	101.19	106.40
12	B	134	G	C5-C6-O6	-13.04	120.78	128.60
12	B	2469	A	N1-C6-N6	13.04	126.42	118.60
12	B	1027	A	N1-C6-N6	13.03	126.42	118.60
12	B	1391	U	O4'-C1'-N1	13.02	118.62	108.20
12	B	1510	G	N1-C6-O6	13.02	127.71	119.90
12	B	384	A	C5-C6-N1	-13.01	111.19	117.70
12	B	663	G	N1-C6-O6	13.01	127.71	119.90
12	B	2020	A	C5-C6-N6	-13.00	113.30	123.70
12	B	454	A	C4-C5-C6	12.99	123.50	117.00
12	B	2047	C	C5-C6-N1	12.99	127.50	121.00
12	B	465	G	C5-C6-O6	-12.99	120.81	128.60
12	B	1869	G	N3-C2-N2	12.99	128.99	119.90
12	B	2021	C	N3-C4-C5	-12.98	116.71	121.90
12	B	696	G	N1-C6-O6	12.98	127.69	119.90
12	B	157	C	O4'-C1'-N1	12.97	118.58	108.20
12	B	1574	C	C5-C4-N4	-12.97	111.12	120.20
12	B	1857	G	N1-C6-O6	12.97	127.68	119.90
12	B	423	A	C5-C6-N6	-12.97	113.33	123.70
12	B	1912	A	N1-C6-N6	12.97	126.38	118.60
12	B	1610	A	N7-C8-N9	12.96	120.28	113.80
12	B	670	A	P-O3'-C3'	12.95	135.24	119.70
12	B	928	A	C5-C6-N6	-12.95	113.34	123.70
12	B	1389	G	N1-C6-O6	12.95	127.67	119.90
12	B	2550	G	C4-C5-N7	12.95	115.98	110.80
12	B	334	C	N3-C4-N4	12.94	127.06	118.00
12	B	108	G	C4-C5-N7	12.94	115.97	110.80
12	B	269	C	C4-C5-C6	12.93	123.87	117.40
12	B	1453	A	C4-C5-C6	12.93	123.47	117.00
12	B	2105	U	O4'-C1'-N1	12.93	118.55	108.20
12	B	2274	A	N1-C6-N6	12.93	126.36	118.60
12	B	2550	G	C5-C6-O6	-12.93	120.84	128.60
12	B	1926	U	N3-C4-C5	-12.93	106.84	114.60
12	B	2214	C	O4'-C1'-N1	12.93	118.54	108.20
12	B	732	C	N3-C4-N4	12.92	127.05	118.00
12	B	1830	C	C5-C4-N4	-12.92	111.15	120.20
12	B	468	G	N1-C6-O6	12.92	127.65	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1021	A	N1-C6-N6	12.92	126.35	118.60
12	B	1180	U	N1-C2-N3	-12.92	107.15	114.90
12	B	2700	A	N1-C6-N6	12.92	126.35	118.60
12	B	1677	A	N1-C6-N6	12.91	126.35	118.60
12	B	222	A	N1-C6-N6	12.91	126.35	118.60
12	B	1682	G	C5-C6-O6	-12.91	120.85	128.60
12	B	796	C	N3-C4-C5	-12.90	116.74	121.90
12	B	1967	C	N3-C4-N4	12.90	127.03	118.00
12	B	383	C	N3-C4-C5	-12.90	116.74	121.90
12	B	1985	C	O4'-C1'-N1	12.89	118.51	108.20
12	B	2860	A	N1-C6-N6	12.89	126.33	118.60
12	B	942	G	N9-C4-C5	12.89	110.55	105.40
12	B	1866	A	C5-C6-N6	-12.88	113.39	123.70
12	B	2377	A	N1-C6-N6	12.88	126.33	118.60
12	B	2733	A	C4-C5-C6	12.88	123.44	117.00
12	B	2411	A	O4'-C1'-N9	12.88	118.51	108.20
12	B	2545	G	C5-C6-O6	-12.87	120.88	128.60
12	B	2030	A	N1-C6-N6	12.87	126.32	118.60
12	B	2147	A	P-O3'-C3'	12.87	135.14	119.70
12	B	2675	A	C4-C5-C6	12.87	123.43	117.00
12	B	2224	G	C5-C6-O6	-12.86	120.89	128.60
12	B	2547	A	C4-C5-C6	12.86	123.43	117.00
12	B	832	U	O4'-C1'-N1	12.85	118.48	108.20
12	B	2648	G	C5-C6-N1	-12.85	105.07	111.50
12	B	252	G	N1-C6-O6	12.84	127.61	119.90
12	B	2147	A	C8-N9-C4	-12.84	100.66	105.80
12	B	1819	A	N1-C6-N6	12.84	126.30	118.60
12	B	611	C	C5-C6-N1	12.84	127.42	121.00
12	B	1801	A	C5-N7-C8	12.84	110.32	103.90
12	B	246	C	O4'-C1'-N1	12.83	118.47	108.20
12	B	533	G	C5-C6-O6	-12.83	120.90	128.60
12	B	2303	G	O4'-C1'-N9	12.83	118.46	108.20
12	B	259	G	N1-C2-N3	-12.82	116.21	123.90
12	B	2323	G	C5-C6-O6	-12.82	120.91	128.60
12	B	2626	C	N3-C4-C5	-12.82	116.77	121.90
12	B	2725	A	N1-C6-N6	12.82	126.29	118.60
12	B	413	C	O4'-C1'-N1	12.81	118.45	108.20
12	B	386	G	C5-C6-O6	-12.81	120.91	128.60
12	B	1009	A	C4-C5-C6	12.81	123.41	117.00
12	B	1906	G	N9-C4-C5	-12.81	100.28	105.40
12	B	220	G	C5-C6-O6	-12.81	120.92	128.60
12	B	502	A	N1-C6-N6	12.80	126.28	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1596	A	C4-C5-C6	12.80	123.40	117.00
12	B	1195	G	C5-C6-O6	-12.79	120.92	128.60
12	B	1377	G	C5-C6-O6	-12.79	120.93	128.60
12	B	2406	A	N1-C6-N6	12.79	126.27	118.60
12	B	2703	C	C6-N1-C2	-12.79	115.18	120.30
12	B	1032	A	N1-C6-N6	12.78	126.27	118.60
1	0	45	PHE	CB-CG-CD2	-12.78	111.85	120.80
12	B	1283	G	O4'-C1'-N9	12.78	118.42	108.20
12	B	1197	G	C5-C6-O6	-12.78	120.93	128.60
12	B	2024	G	O4'-C1'-N9	12.78	118.42	108.20
12	B	1430	G	C8-N9-C4	-12.77	101.29	106.40
12	B	2353	G	N1-C6-O6	12.77	127.56	119.90
12	B	902	C	N3-C4-C5	-12.77	116.79	121.90
12	B	2385	C	C2-N3-C4	12.77	126.28	119.90
12	B	163	C	N3-C4-C5	-12.77	116.79	121.90
12	B	1633	G	N1-C6-O6	12.76	127.56	119.90
12	B	2612	C	N3-C4-N4	12.76	126.93	118.00
12	B	2802	G	N1-C6-O6	12.76	127.55	119.90
12	B	911	A	N1-C6-N6	12.76	126.25	118.60
12	B	180	G	P-O3'-C3'	12.75	135.00	119.70
12	B	1459	G	O4'-C1'-N9	12.75	118.40	108.20
12	B	1009	A	N1-C6-N6	12.74	126.25	118.60
12	B	2366	A	N1-C6-N6	12.74	126.25	118.60
12	B	2747	G	O4'-C1'-N9	12.74	118.39	108.20
12	B	889	C	N3-C4-C5	-12.74	116.80	121.90
22	L	78	ARG	NE-CZ-NH2	-12.74	113.93	120.30
12	B	697	G	N1-C6-O6	12.74	127.54	119.90
12	B	1743	G	P-O3'-C3'	12.74	134.99	119.70
13	C	29	PHE	CB-CG-CD2	-12.74	111.88	120.80
12	B	725	G	N1-C6-O6	12.73	127.54	119.90
12	B	2729	G	C5-C6-O6	-12.73	120.96	128.60
12	B	1860	G	N7-C8-N9	12.73	119.46	113.10
12	B	1285	A	N1-C2-N3	12.72	135.66	129.30
12	B	124	G	N1-C6-O6	12.72	127.53	119.90
12	B	2808	G	C5-C6-O6	-12.72	120.97	128.60
12	B	375	G	C5-C6-O6	-12.71	120.97	128.60
12	B	474	G	N1-C6-O6	12.71	127.53	119.90
12	B	867	C	O4'-C1'-N1	12.71	118.37	108.20
12	B	869	G	N1-C2-N3	-12.71	116.27	123.90
12	B	1482	G	N7-C8-N9	12.71	119.45	113.10
12	B	1653	G	C5-C6-O6	-12.71	120.97	128.60
11	A	56	G	N1-C6-O6	12.70	127.52	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	892	A	N1-C6-N6	12.70	126.22	118.60
12	B	2247	A	N1-C6-N6	12.70	126.22	118.60
12	B	1957	C	C6-N1-C2	-12.69	115.22	120.30
12	B	2565	A	C4-C5-C6	12.69	123.35	117.00
12	B	2114	A	C4-C5-C6	12.69	123.35	117.00
12	B	2472	G	N1-C6-O6	12.69	127.52	119.90
12	B	1876	A	O4'-C1'-N9	12.69	118.35	108.20
12	B	1918	A	N1-C6-N6	12.69	126.22	118.60
12	B	2749	A	C5-C6-N1	-12.69	111.35	117.70
12	B	325	G	C4-C5-N7	-12.69	105.72	110.80
27	Q	50	ARG	NE-CZ-NH1	12.69	126.64	120.30
12	B	1571	A	C5-C6-N1	-12.68	111.36	117.70
12	B	1890	A	C4-C5-C6	12.68	123.34	117.00
12	B	705	A	N1-C6-N6	12.68	126.21	118.60
12	B	2642	G	C5-C6-O6	-12.68	121.00	128.60
12	B	2490	G	N1-C6-O6	12.67	127.50	119.90
12	B	2714	G	N1-C6-O6	12.67	127.50	119.90
12	B	124	G	C4-C5-C6	12.66	126.40	118.80
12	B	2674	G	C5-C6-O6	-12.66	121.00	128.60
12	B	898	C	O4'-C1'-N1	12.66	118.33	108.20
12	B	1760	C	N3-C4-N4	12.66	126.86	118.00
12	B	1608	A	C6-C5-N7	-12.65	123.44	132.30
12	B	1216	G	C5-C6-O6	-12.65	121.01	128.60
12	B	2742	G	C8-N9-C4	-12.65	101.34	106.40
12	B	1962	C	C4-C5-C6	12.65	123.72	117.40
12	B	1252	G	C5-C6-O6	-12.63	121.02	128.60
12	B	2094	A	C6-C5-N7	-12.63	123.46	132.30
12	B	916	G	N1-C6-O6	12.63	127.48	119.90
12	B	181	A	N1-C6-N6	12.62	126.17	118.60
12	B	1430	G	N7-C8-N9	12.62	119.41	113.10
21	K	31	ARG	NE-CZ-NH2	-12.62	113.99	120.30
11	A	78	A	N1-C6-N6	12.61	126.17	118.60
12	B	1408	G	C5-C6-O6	-12.61	121.03	128.60
12	B	132	G	C5-C6-O6	-12.60	121.04	128.60
12	B	631	A	N1-C6-N6	12.60	126.16	118.60
12	B	1892	C	N1-C2-O2	-12.60	111.34	118.90
13	C	29	PHE	CB-CG-CD1	12.60	129.62	120.80
11	A	64	G	C5-C6-O6	-12.60	121.04	128.60
12	B	393	C	N3-C4-N4	12.60	126.82	118.00
12	B	506	G	N9-C4-C5	12.59	110.44	105.40
12	B	668	A	C5-C6-N6	-12.59	113.62	123.70
11	A	51	G	C5-C6-O6	-12.59	121.05	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2598	A	C4-C5-C6	12.59	123.29	117.00
12	B	450	G	N1-C6-O6	12.58	127.45	119.90
12	B	718	A	N1-C6-N6	12.58	126.15	118.60
12	B	2346	A	C5-N7-C8	12.58	110.19	103.90
12	B	430	A	C2-N3-C4	12.58	116.89	110.60
12	B	876	C	O4'-C1'-N1	12.58	118.26	108.20
29	S	92	ARG	NE-CZ-NH1	12.58	126.59	120.30
12	B	1342	A	N9-C4-C5	-12.58	100.77	105.80
12	B	2477	U	O4'-C1'-N1	12.58	118.26	108.20
12	B	1244	A	C5-C6-N1	-12.57	111.41	117.70
12	B	1484	U	O4'-C1'-N1	12.57	118.26	108.20
12	B	1350	C	N3-C4-C5	12.57	126.93	121.90
12	B	582	A	C8-N9-C4	-12.57	100.77	105.80
12	B	1866	A	C4-C5-C6	12.56	123.28	117.00
12	B	68	G	N1-C6-O6	12.56	127.44	119.90
12	B	1919	A	C5-C6-N6	-12.56	113.65	123.70
12	B	806	C	N3-C4-N4	12.56	126.79	118.00
12	B	1695	G	C5-C6-O6	-12.56	121.06	128.60
12	B	2281	A	O4'-C1'-N9	12.56	118.25	108.20
12	B	2420	C	O4'-C1'-N1	12.56	118.25	108.20
11	A	98	G	N1-C6-O6	12.55	127.43	119.90
12	B	363	G	N1-C6-O6	12.55	127.43	119.90
12	B	2560	A	C4-C5-C6	12.55	123.28	117.00
12	B	2141	G	C5-C6-O6	-12.55	121.07	128.60
12	B	1356	G	N1-C6-O6	12.54	127.43	119.90
12	B	2136	G	C5-C6-O6	-12.54	121.07	128.60
12	B	2100	G	C5-C6-O6	-12.54	121.08	128.60
12	B	1927	A	C4-C5-C6	12.54	123.27	117.00
12	B	1210	G	N1-C6-O6	12.53	127.42	119.90
12	B	1335	C	O4'-C1'-N1	12.53	118.22	108.20
12	B	301	G	C5-C6-O6	-12.53	121.08	128.60
12	B	1384	A	C5-C6-N6	-12.53	113.68	123.70
12	B	959	A	N1-C6-N6	12.52	126.11	118.60
12	B	1408	G	O4'-C1'-N9	12.52	118.22	108.20
12	B	1823	G	C5-C6-N1	-12.52	105.24	111.50
12	B	114	U	C2-N3-C4	-12.52	119.49	127.00
12	B	191	A	O4'-C1'-N9	12.52	118.22	108.20
12	B	2397	G	C5-C6-O6	-12.51	121.09	128.60
12	B	1478	G	C2-N3-C4	-12.51	105.64	111.90
12	B	376	G	N1-C6-O6	12.51	127.41	119.90
12	B	2415	G	C5-C6-O6	-12.51	121.10	128.60
12	B	2512	C	O4'-C1'-N1	12.50	118.20	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1524	G	C4-C5-N7	12.50	115.80	110.80
12	B	2047	C	N3-C4-C5	-12.50	116.90	121.90
12	B	1064	C	O4'-C1'-N1	12.50	118.20	108.20
12	B	960	A	N1-C6-N6	12.50	126.10	118.60
12	B	1626	A	N1-C6-N6	12.50	126.10	118.60
12	B	2833	U	P-O3'-C3'	12.50	134.70	119.70
12	B	445	C	C2-N3-C4	12.49	126.14	119.90
12	B	1966	A	C5-C6-N6	-12.49	113.71	123.70
12	B	2121	G	N1-C6-O6	12.49	127.39	119.90
12	B	470	A	C4-C5-C6	12.48	123.24	117.00
12	B	1226	A	N1-C6-N6	12.48	126.09	118.60
12	B	2596	U	P-O3'-C3'	12.48	134.68	119.70
12	B	782	A	N1-C6-N6	12.47	126.08	118.60
12	B	941	A	N1-C6-N6	12.47	126.08	118.60
12	B	1138	G	C4-C5-N7	12.47	115.79	110.80
12	B	2623	G	C5-C6-O6	-12.47	121.12	128.60
12	B	2844	G	C5-C6-O6	-12.46	121.12	128.60
12	B	1395	A	C4-C5-C6	12.46	123.23	117.00
12	B	2462	C	C5-C6-N1	12.46	127.23	121.00
12	B	2671	G	N1-C6-O6	12.46	127.38	119.90
12	B	1885	A	N1-C6-N6	12.46	126.08	118.60
12	B	929	U	O4'-C1'-N1	12.46	118.17	108.20
12	B	1502	A	N1-C6-N6	12.45	126.07	118.60
12	B	1733	G	C4-C5-N7	-12.45	105.82	110.80
12	B	2112	G	N1-C6-O6	12.45	127.37	119.90
12	B	222	A	C5-C6-N1	-12.45	111.48	117.70
12	B	1328	A	C2-N3-C4	-12.45	104.38	110.60
12	B	643	A	N1-C6-N6	12.44	126.06	118.60
12	B	1754	A	N1-C6-N6	12.44	126.06	118.60
12	B	1051	G	N1-C2-N3	-12.44	116.44	123.90
12	B	1501	G	O4'-C1'-N9	12.44	118.15	108.20
12	B	2589	A	C5-C6-N1	-12.44	111.48	117.70
12	B	2813	A	C2-N3-C4	12.44	116.82	110.60
12	B	2316	G	O4'-C1'-N9	12.43	118.14	108.20
12	B	1153	C	N3-C4-C5	-12.42	116.93	121.90
12	B	1765	U	O4'-C1'-N1	12.42	118.14	108.20
12	B	2457	U	O4'-C1'-N1	12.42	118.14	108.20
12	B	633	A	C4-C5-C6	12.42	123.21	117.00
12	B	938	G	N1-C6-O6	12.41	127.34	119.90
12	B	2173	A	N7-C8-N9	-12.41	107.59	113.80
12	B	2320	U	C2-N3-C4	-12.41	119.55	127.00
12	B	680	C	O4'-C1'-N1	12.41	118.12	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2051	A	N1-C6-N6	12.40	126.04	118.60
12	B	1888	G	C5-N7-C8	12.40	110.50	104.30
12	B	1948	G	N1-C6-O6	12.40	127.34	119.90
26	P	108	ARG	NE-CZ-NH1	-12.40	114.10	120.30
12	B	297	G	C5-C6-O6	-12.40	121.16	128.60
12	B	1850	G	C5-C6-O6	-12.40	121.16	128.60
12	B	1525	A	N1-C6-N6	12.39	126.04	118.60
12	B	324	A	C8-N9-C4	-12.39	100.84	105.80
12	B	1839	G	O4'-C1'-N9	12.39	118.11	108.20
12	B	302	C	O4'-C1'-N1	12.38	118.11	108.20
12	B	1070	A	N1-C6-N6	12.38	126.03	118.60
12	B	1143	A	C5-C6-N1	-12.38	111.51	117.70
12	B	789	A	C5-C6-N1	-12.38	111.51	117.70
12	B	2646	C	C6-N1-C2	-12.38	115.35	120.30
11	A	77	U	C5-C6-N1	12.37	128.89	122.70
12	B	1557	C	O4'-C1'-N1	12.37	118.10	108.20
12	B	1831	G	N3-C2-N2	12.36	128.56	119.90
12	B	1862	G	N1-C6-O6	12.37	127.32	119.90
12	B	2432	A	N1-C6-N6	12.36	126.02	118.60
12	B	2115	G	C5-C6-O6	-12.36	121.19	128.60
12	B	1813	G	N1-C6-O6	12.35	127.31	119.90
11	A	57	A	N1-C6-N6	12.35	126.01	118.60
12	B	532	A	P-O3'-C3'	12.35	134.52	119.70
12	B	2579	C	O4'-C1'-N1	12.35	118.08	108.20
12	B	107	G	N1-C6-O6	12.34	127.31	119.90
12	B	1646	C	C2-N3-C4	12.34	126.07	119.90
12	B	300	A	N1-C6-N6	12.33	126.00	118.60
12	B	1562	U	O4'-C1'-N1	12.33	118.06	108.20
12	B	108	G	C5-C6-O6	-12.32	121.21	128.60
12	B	2196	C	O4'-C1'-N1	12.32	118.06	108.20
12	B	700	G	C5-C6-O6	-12.31	121.21	128.60
12	B	2062	A	N1-C6-N6	12.31	125.99	118.60
12	B	2825	G	N1-C6-O6	12.31	127.29	119.90
12	B	817	C	O4'-C1'-N1	12.31	118.05	108.20
12	B	1063	G	N7-C8-N9	-12.30	106.95	113.10
12	B	1748	C	O4'-C1'-N1	12.31	118.04	108.20
12	B	2070	A	N9-C4-C5	-12.30	100.88	105.80
12	B	241	A	N9-C4-C5	12.30	110.72	105.80
12	B	1888	G	P-O3'-C3'	12.30	134.46	119.70
12	B	1238	G	C5-C6-O6	-12.30	121.22	128.60
12	B	1860	G	C5-C6-O6	-12.30	121.22	128.60
11	A	68	C	N3-C4-C5	-12.30	116.98	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	379	G	O4'-C1'-N9	12.30	118.04	108.20
12	B	1790	C	C5-C6-N1	12.30	127.15	121.00
12	B	1871	A	N1-C6-N6	12.29	125.98	118.60
12	B	2758	A	C8-N9-C4	-12.29	100.88	105.80
12	B	86	G	C2-N3-C4	12.29	118.05	111.90
12	B	2390	U	N1-C2-N3	-12.29	107.52	114.90
12	B	1377	G	N1-C6-O6	12.29	127.27	119.90
11	A	13	G	C1'-O4'-C4'	-12.29	100.07	109.90
12	B	166	U	O4'-C1'-N1	12.29	118.03	108.20
12	B	1480	C	N3-C4-C5	-12.29	116.98	121.90
11	A	67	G	C4-C5-C6	12.28	126.17	118.80
12	B	1802	A	C5-C6-N1	-12.28	111.56	117.70
12	B	582	A	C5-C6-N6	-12.28	113.88	123.70
12	B	1378	A	C5-C6-N6	-12.28	113.88	123.70
11	A	108	A	C5-N7-C8	12.28	110.04	103.90
12	B	1496	A	C4-C5-C6	12.28	123.14	117.00
12	B	2376	A	O4'-C1'-N9	12.28	118.02	108.20
12	B	2566	A	N1-C6-N6	12.28	125.97	118.60
12	B	2651	C	N3-C4-N4	12.28	126.59	118.00
26	P	61	ARG	NE-CZ-NH1	-12.28	114.16	120.30
12	B	175	G	O4'-C1'-N9	12.27	118.02	108.20
12	B	231	A	C5-C6-N1	-12.27	111.56	117.70
12	B	873	C	N3-C4-N4	12.27	126.59	118.00
12	B	2318	G	C5-C6-O6	-12.27	121.24	128.60
12	B	2093	G	C5-C6-O6	-12.27	121.24	128.60
12	B	1103	A	N1-C6-N6	12.27	125.96	118.60
12	B	2809	A	O4'-C1'-N9	12.27	118.02	108.20
12	B	1248	G	N1-C6-O6	12.27	127.26	119.90
12	B	816	C	C5-C4-N4	-12.26	111.62	120.20
12	B	865	C	C5-C6-N1	12.26	127.13	121.00
12	B	144	A	N1-C6-N6	12.26	125.96	118.60
12	B	2047	C	C6-N1-C2	-12.26	115.40	120.30
12	B	2307	G	N1-C2-N3	-12.26	116.54	123.90
12	B	1744	A	N1-C6-N6	12.26	125.95	118.60
12	B	1941	C	P-O3'-C3'	12.26	134.41	119.70
12	B	2168	G	N1-C6-O6	12.25	127.25	119.90
12	B	1349	C	O4'-C1'-N1	12.24	118.00	108.20
12	B	273	G	N1-C2-N3	-12.24	116.55	123.90
12	B	1640	A	N1-C6-N6	12.24	125.94	118.60
12	B	2106	U	N1-C2-O2	12.24	131.37	122.80
12	B	2840	C	N3-C4-N4	12.24	126.57	118.00
12	B	494	G	N1-C6-O6	12.24	127.24	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1121	C	O4'-C1'-N1	12.24	117.99	108.20
12	B	429	A	C4-C5-C6	12.23	123.12	117.00
12	B	1160	G	N1-C6-O6	12.23	127.24	119.90
12	B	869	G	C2-N3-C4	12.23	118.02	111.90
12	B	909	A	C4-C5-C6	12.23	123.11	117.00
12	B	991	C	N3-C4-N4	12.23	126.56	118.00
12	B	623	C	C6-N1-C2	-12.23	115.41	120.30
12	B	964	C	N3-C4-C5	-12.22	117.01	121.90
12	B	212	G	C5-C6-O6	-12.22	121.27	128.60
12	B	675	A	N1-C6-N6	12.21	125.93	118.60
12	B	924	G	O4'-C1'-N9	12.21	117.97	108.20
12	B	2348	U	O4'-C1'-N1	12.21	117.97	108.20
12	B	2616	C	N3-C4-N4	12.21	126.55	118.00
12	B	1660	G	C5-C6-O6	-12.21	121.27	128.60
12	B	1519	G	N1-C6-O6	12.21	127.23	119.90
12	B	1610	A	N1-C6-N6	-12.21	111.28	118.60
12	B	2198	A	C8-N9-C4	-12.21	100.92	105.80
12	B	853	C	O4'-C1'-N1	12.21	117.97	108.20
12	B	2872	A	C4-C5-C6	12.21	123.10	117.00
12	B	89	A	N1-C6-N6	12.20	125.92	118.60
12	B	1405	U	O4'-C1'-N1	12.20	117.96	108.20
12	B	2311	A	C5-C6-N1	-12.20	111.60	117.70
12	B	2445	G	C5-C6-O6	-12.20	121.28	128.60
12	B	2766	A	C5-C6-N1	-12.20	111.60	117.70
12	B	1640	A	O4'-C1'-N9	12.20	117.96	108.20
12	B	1345	C	N3-C4-C5	-12.19	117.02	121.90
12	B	649	G	N1-C6-O6	12.19	127.22	119.90
12	B	2598	A	C5-C6-N1	-12.19	111.60	117.70
12	B	116	C	O4'-C1'-N1	12.19	117.95	108.20
12	B	1464	G	N1-C6-O6	12.19	127.21	119.90
12	B	1578	U	O4'-C1'-N1	12.19	117.95	108.20
12	B	2171	A	C8-N9-C4	-12.18	100.93	105.80
28	R	53	PHE	CB-CG-CD2	-12.18	112.28	120.80
12	B	277	G	P-O5'-C5'	12.17	140.38	120.90
12	B	2224	G	C2-N3-C4	12.17	117.99	111.90
12	B	371	A	C2-N3-C4	-12.17	104.51	110.60
12	B	2573	C	N3-C4-C5	-12.17	117.03	121.90
12	B	413	C	N3-C4-C5	-12.16	117.03	121.90
12	B	950	G	N1-C6-O6	12.16	127.20	119.90
12	B	2033	A	C5-C6-N1	-12.16	111.62	117.70
12	B	1056	G	N7-C8-N9	-12.16	107.02	113.10
12	B	2600	A	N1-C6-N6	12.16	125.90	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2632	A	C5-C6-N6	-12.16	113.97	123.70
12	B	1039	A	N1-C2-N3	-12.16	123.22	129.30
12	B	469	G	N1-C6-O6	12.15	127.19	119.90
12	B	719	C	O4'-C1'-N1	12.15	117.92	108.20
12	B	2324	U	O4'-C1'-N1	12.15	117.92	108.20
12	B	1086	A	C5-N7-C8	12.14	109.97	103.90
12	B	2089	C	C5-C4-N4	-12.14	111.70	120.20
12	B	43	G	N1-C6-O6	12.14	127.18	119.90
12	B	218	A	N1-C6-N6	12.13	125.88	118.60
12	B	1977	A	N1-C6-N6	12.13	125.88	118.60
13	C	174	ARG	NE-CZ-NH1	12.13	126.37	120.30
12	B	2844	G	O4'-C1'-N9	12.13	117.90	108.20
12	B	717	C	O4'-C1'-N1	12.13	117.90	108.20
12	B	2337	G	N1-C6-O6	12.13	127.18	119.90
12	B	323	C	N3-C4-N4	12.13	126.49	118.00
12	B	475	C	C2-N3-C4	12.12	125.96	119.90
12	B	1369	G	N1-C6-O6	12.12	127.17	119.90
12	B	535	G	C5-C6-O6	-12.12	121.33	128.60
12	B	2367	G	C5-C6-O6	-12.12	121.33	128.60
12	B	2431	U	O4'-C1'-N1	12.12	117.89	108.20
12	B	2218	G	C6-C5-N7	-12.12	123.13	130.40
12	B	1310	G	N9-C4-C5	-12.11	100.55	105.40
12	B	2750	A	N1-C6-N6	12.11	125.87	118.60
12	B	1822	C	O4'-C1'-N1	12.11	117.89	108.20
12	B	2211	A	O4'-C1'-N9	12.11	117.89	108.20
12	B	2677	G	O4'-C1'-N9	12.11	117.88	108.20
12	B	35	G	N1-C6-O6	12.10	127.16	119.90
12	B	1786	A	N1-C6-N6	12.10	125.86	118.60
12	B	601	C	N3-C4-C5	-12.10	117.06	121.90
12	B	1215	G	N1-C6-O6	12.10	127.16	119.90
12	B	2621	G	N9-C4-C5	-12.10	100.56	105.40
12	B	285	G	N1-C6-O6	12.10	127.16	119.90
12	B	1773	A	N1-C6-N6	12.10	125.86	118.60
12	B	2021	C	N3-C4-N4	12.10	126.47	118.00
12	B	2715	C	C6-N1-C2	-12.09	115.47	120.30
26	P	100	ARG	NE-CZ-NH1	-12.09	114.26	120.30
12	B	1882	U	O4'-C1'-N1	12.09	117.87	108.20
11	A	20	G	O4'-C1'-N9	12.08	117.87	108.20
12	B	1314	C	N3-C4-C5	-12.08	117.07	121.90
12	B	899	A	P-O3'-C3'	-12.08	105.20	119.70
12	B	1086	A	N7-C8-N9	-12.08	107.76	113.80
12	B	1819	A	C4-C5-N7	-12.07	104.66	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	733	G	C5-C6-O6	-12.07	121.36	128.60
12	B	2713	U	C1'-O4'-C4'	-12.07	100.24	109.90
12	B	384	A	N1-C2-N3	12.07	135.34	129.30
12	B	2739	U	N3-C4-O4	12.07	127.85	119.40
12	B	621	A	C5-C6-N1	-12.07	111.67	117.70
12	B	735	A	O4'-C1'-N9	12.07	117.85	108.20
12	B	2237	G	N3-C2-N2	12.07	128.35	119.90
12	B	172	A	C5-C6-N1	-12.06	111.67	117.70
12	B	1994	C	O4'-C1'-N1	12.06	117.85	108.20
12	B	2216	G	C5-N7-C8	12.06	110.33	104.30
12	B	1235	G	N1-C2-N3	-12.06	116.66	123.90
23	M	66	ARG	NE-CZ-NH2	-12.06	114.27	120.30
12	B	327	G	N1-C6-O6	12.06	127.14	119.90
12	B	2129	C	C2-N1-C1'	12.06	132.06	118.80
12	B	119	A	N1-C6-N6	12.05	125.83	118.60
12	B	1801	A	C5-C6-N6	-12.05	114.06	123.70
12	B	1346	G	N1-C6-O6	12.05	127.13	119.90
12	B	2234	G	C6-C5-N7	-12.05	123.17	130.40
12	B	2521	C	O4'-C1'-N1	12.05	117.84	108.20
12	B	691	C	C5-C4-N4	-12.04	111.77	120.20
12	B	2246	G	N1-C6-O6	12.04	127.12	119.90
12	B	1550	C	O4'-C1'-N1	12.04	117.83	108.20
12	B	2497	A	C5-C6-N6	-12.04	114.07	123.70
12	B	24	G	C5-C6-O6	-12.04	121.38	128.60
12	B	672	C	C2-N3-C4	12.04	125.92	119.90
12	B	2602	A	N1-C2-N3	12.03	135.32	129.30
12	B	2653	U	N3-C4-O4	12.03	127.82	119.40
12	B	384	A	C2-N3-C4	-12.03	104.58	110.60
12	B	1269	A	C5-C6-N1	-12.03	111.69	117.70
12	B	1118	C	N3-C4-C5	-12.03	117.09	121.90
6	5	56	ASP	CB-CG-OD1	-12.02	107.48	118.30
12	B	1309	G	N1-C6-O6	12.02	127.11	119.90
12	B	1325	U	N3-C4-C5	-12.02	107.39	114.60
12	B	2212	A	N1-C6-N6	12.02	125.81	118.60
12	B	2235	G	N1-C6-O6	12.02	127.11	119.90
12	B	899	A	C2-N3-C4	12.01	116.61	110.60
12	B	1086	A	N1-C6-N6	12.01	125.81	118.60
12	B	856	G	C5-C6-O6	-12.01	121.39	128.60
12	B	1077	A	O4'-C1'-N9	12.01	117.81	108.20
12	B	1674	G	C2-N3-C4	12.01	117.90	111.90
12	B	327	G	C5-C6-O6	-12.01	121.40	128.60
12	B	914	G	C5-C6-O6	-12.01	121.40	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2534	A	C4-C5-C6	12.01	123.00	117.00
12	B	2657	A	C5-C6-N1	-12.01	111.70	117.70
12	B	2538	C	O4'-C1'-N1	12.00	117.80	108.20
12	B	1469	A	C5-C6-N6	-12.00	114.10	123.70
12	B	1554	U	O4'-C1'-N1	12.00	117.80	108.20
12	B	2115	G	N1-C6-O6	12.00	127.10	119.90
12	B	1058	U	O4'-C1'-N1	12.00	117.80	108.20
12	B	1212	G	N1-C2-N3	-12.00	116.70	123.90
12	B	2212	A	C8-N9-C4	-12.00	101.00	105.80
12	B	2877	G	C5-C6-O6	-12.00	121.40	128.60
12	B	1544	A	C4-C5-C6	11.99	123.00	117.00
12	B	2361	G	N1-C6-O6	11.99	127.09	119.90
12	B	608	A	C4-C5-C6	11.99	123.00	117.00
12	B	1843	C	O4'-C1'-N1	11.99	117.79	108.20
11	A	22	U	O4'-C1'-N1	11.99	117.79	108.20
11	A	93	C	C2-N3-C4	11.99	125.89	119.90
12	B	891	G	C5-C6-O6	-11.99	121.41	128.60
12	B	1766	G	N1-C6-O6	11.98	127.09	119.90
12	B	1328	A	C5-C6-N1	-11.98	111.71	117.70
12	B	2070	A	C8-N9-C4	11.98	110.59	105.80
12	B	2158	A	N1-C6-N6	11.98	125.79	118.60
12	B	2617	U	O4'-C1'-N1	11.98	117.78	108.20
12	B	103	A	C5-C6-N6	-11.97	114.12	123.70
12	B	1567	G	N3-C2-N2	11.97	128.28	119.90
5	4	48	TYR	CB-CG-CD1	11.97	128.18	121.00
12	B	823	C	O4'-C1'-N1	11.96	117.77	108.20
12	B	1393	A	C8-N9-C4	-11.96	101.01	105.80
12	B	2367	G	N7-C8-N9	11.96	119.08	113.10
12	B	2	G	O4'-C1'-N9	11.96	117.77	108.20
12	B	1260	A	O4'-C1'-N9	11.96	117.77	108.20
12	B	2844	G	N1-C6-O6	11.96	127.07	119.90
12	B	2136	G	N1-C6-O6	11.96	127.07	119.90
12	B	2806	C	C4-C5-C6	11.95	123.38	117.40
12	B	269	C	O4'-C1'-N1	11.95	117.76	108.20
12	B	1229	C	N3-C4-C5	-11.95	117.12	121.90
12	B	1627	G	N1-C6-O6	11.95	127.07	119.90
12	B	1301	A	N1-C2-N3	11.94	135.27	129.30
12	B	542	C	O4'-C1'-N1	11.94	117.75	108.20
12	B	788	A	N1-C6-N6	11.94	125.76	118.60
12	B	1881	C	N3-C4-C5	-11.94	117.12	121.90
12	B	1231	U	O4'-C1'-N1	11.93	117.75	108.20
12	B	778	G	C6-C5-N7	-11.93	123.24	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1780	A	C5-C6-N6	-11.93	114.16	123.70
12	B	2106	U	C6-N1-C2	11.92	128.15	121.00
12	B	2242	G	N1-C6-O6	11.92	127.05	119.90
12	B	1655	A	C8-N9-C4	-11.92	101.03	105.80
12	B	954	G	N1-C6-O6	11.92	127.05	119.90
12	B	2182	U	N1-C2-O2	-11.92	114.46	122.80
12	B	2663	G	N1-C6-O6	11.92	127.05	119.90
12	B	2077	A	C8-N9-C4	-11.91	101.03	105.80
12	B	987	C	N3-C4-C5	-11.91	117.14	121.90
12	B	1511	G	C2-N3-C4	11.91	117.86	111.90
12	B	656	G	C5-C6-O6	-11.91	121.46	128.60
12	B	2246	G	C5-C6-O6	-11.91	121.45	128.60
12	B	1567	G	C5-C6-O6	-11.91	121.46	128.60
12	B	98	G	N1-C2-N3	-11.90	116.76	123.90
12	B	857	G	C8-N9-C4	-11.90	101.64	106.40
33	Y	13	ARG	NE-CZ-NH2	-11.90	114.35	120.30
12	B	283	G	C5-C6-N1	-11.90	105.55	111.50
12	B	1817	G	O4'-C1'-N9	11.90	117.72	108.20
11	A	118	C	N3-C4-C5	-11.90	117.14	121.90
12	B	2495	G	C5-C6-O6	-11.90	121.46	128.60
12	B	325	G	O4'-C1'-N9	11.89	117.72	108.20
12	B	1107	G	O4'-C1'-N9	11.89	117.71	108.20
12	B	1848	A	C8-N9-C4	-11.89	101.04	105.80
12	B	2810	A	O4'-C1'-N9	11.89	117.71	108.20
12	B	2013	A	C6-C5-N7	-11.89	123.98	132.30
12	B	2757	A	C5-C6-N1	-11.88	111.76	117.70
12	B	2065	C	O4'-C1'-N1	11.88	117.71	108.20
12	B	1235	G	C5-C6-O6	-11.88	121.47	128.60
12	B	946	C	N3-C4-N4	11.88	126.31	118.00
12	B	1928	A	C5-C6-N6	-11.88	114.20	123.70
12	B	2442	C	N3-C4-N4	11.88	126.31	118.00
12	B	955	U	C5-C4-O4	-11.88	118.77	125.90
12	B	1870	C	C2-N1-C1'	11.87	131.86	118.80
12	B	1930	G	O4'-C1'-N9	11.87	117.70	108.20
12	B	1637	A	N1-C6-N6	11.87	125.72	118.60
12	B	2799	A	C5-C6-N6	-11.87	114.20	123.70
12	B	1524	G	C6-C5-N7	-11.87	123.28	130.40
12	B	2110	G	N3-C4-C5	-11.87	122.67	128.60
11	A	94	A	C6-N1-C2	11.86	125.71	118.60
12	B	14	A	C8-N9-C4	-11.86	101.06	105.80
12	B	1878	G	N1-C6-O6	11.85	127.01	119.90
12	B	291	G	O4'-C1'-N9	11.85	117.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	905	A	O4'-C1'-N9	11.85	117.68	108.20
12	B	2138	G	C5-C6-O6	-11.85	121.49	128.60
12	B	2156	G	N1-C6-O6	11.85	127.01	119.90
12	B	470	A	N1-C6-N6	11.84	125.70	118.60
12	B	249	C	C6-N1-C1'	-11.84	106.59	120.80
12	B	2332	C	C6-N1-C2	-11.84	115.56	120.30
12	B	751	A	C4-C5-C6	11.83	122.92	117.00
12	B	2731	G	C5-C6-O6	-11.83	121.50	128.60
12	B	1915	U	O4'-C1'-N1	11.83	117.66	108.20
12	B	230	G	C5-C6-O6	-11.82	121.51	128.60
12	B	1319	C	O4'-C1'-N1	11.82	117.66	108.20
12	B	1498	C	O4'-C1'-N1	11.82	117.66	108.20
12	B	2672	U	O4'-C1'-N1	11.82	117.66	108.20
12	B	317	G	N1-C6-O6	11.82	126.99	119.90
12	B	942	G	C5-C6-O6	-11.82	121.51	128.60
12	B	2531	A	C4-C5-C6	11.82	122.91	117.00
12	B	705	A	C4-C5-C6	11.82	122.91	117.00
12	B	1177	G	N1-C2-N3	-11.82	116.81	123.90
12	B	1095	A	C5-C6-N6	-11.82	114.25	123.70
12	B	923	G	N1-C6-O6	11.81	126.99	119.90
12	B	2108	A	N1-C6-N6	11.81	125.69	118.60
12	B	939	G	N1-C2-N3	-11.81	116.81	123.90
12	B	2190	G	P-O3'-C3'	-11.81	105.52	119.70
11	A	31	C	N3-C4-N4	11.81	126.27	118.00
12	B	43	G	C5-C6-O6	-11.81	121.51	128.60
12	B	1383	A	N1-C6-N6	11.81	125.69	118.60
12	B	1612	C	C6-N1-C2	-11.81	115.58	120.30
12	B	1746	A	C4-C5-C6	11.81	122.91	117.00
12	B	66	C	O4'-C1'-N1	11.81	117.65	108.20
12	B	155	A	C5-C6-N1	-11.81	111.80	117.70
12	B	738	G	N1-C6-O6	11.81	126.98	119.90
12	B	1109	C	C6-N1-C2	11.81	125.02	120.30
12	B	1177	G	C2-N3-C4	11.81	117.80	111.90
7	6	21	ARG	NE-CZ-NH2	11.80	126.20	120.30
12	B	946	C	O4'-C1'-N1	11.80	117.64	108.20
12	B	2106	U	O4'-C1'-N1	11.80	117.64	108.20
13	C	202	ARG	NE-CZ-NH2	-11.80	114.40	120.30
12	B	654	A	O4'-C1'-N9	11.80	117.64	108.20
12	B	1507	C	O4'-C1'-N1	11.80	117.64	108.20
12	B	2683	C	O4'-C1'-N1	11.80	117.64	108.20
12	B	1138	G	C6-C5-N7	-11.80	123.32	130.40
12	B	2335	A	C5-C6-N1	-11.80	111.80	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2507	C	C5-C6-N1	11.80	126.90	121.00
12	B	1009	A	N9-C4-C5	11.80	110.52	105.80
12	B	982	C	N3-C4-C5	-11.79	117.18	121.90
12	B	2845	U	O4'-C1'-N1	11.79	117.63	108.20
12	B	1687	G	O4'-C1'-N9	11.79	117.63	108.20
12	B	2366	A	C5-N7-C8	11.78	109.79	103.90
12	B	1139	G	N1-C6-O6	11.78	126.97	119.90
12	B	1969	A	N1-C6-N6	11.78	125.67	118.60
12	B	1248	G	C5-C6-O6	-11.77	121.54	128.60
12	B	2858	C	O4'-C1'-N1	11.77	117.62	108.20
12	B	1445	G	C5-C6-O6	-11.77	121.54	128.60
12	B	1839	G	C8-N9-C4	-11.77	101.69	106.40
12	B	784	G	C6-C5-N7	-11.76	123.34	130.40
12	B	761	A	N1-C6-N6	11.76	125.66	118.60
12	B	1062	G	N1-C6-O6	11.76	126.96	119.90
12	B	2485	G	N1-C6-O6	11.76	126.96	119.90
12	B	1093	G	C5-N7-C8	-11.76	98.42	104.30
12	B	2198	A	C5-C6-N6	-11.76	114.29	123.70
12	B	2791	G	N1-C6-O6	11.76	126.95	119.90
12	B	130	C	N3-C4-N4	11.75	126.23	118.00
12	B	2336	A	P-O3'-C3'	11.75	133.81	119.70
12	B	1776	G	C5-C6-O6	-11.75	121.55	128.60
12	B	2133	G	C5-C6-O6	-11.75	121.55	128.60
12	B	1845	G	C5-C6-O6	-11.75	121.55	128.60
12	B	1877	A	N9-C4-C5	11.74	110.50	105.80
12	B	2135	A	N1-C6-N6	11.74	125.64	118.60
12	B	1574	C	N3-C4-N4	11.73	126.21	118.00
12	B	1234	U	O4'-C1'-N1	11.73	117.59	108.20
11	A	118	C	N3-C4-N4	11.73	126.21	118.00
12	B	924	G	N3-C4-C5	11.73	134.47	128.60
12	B	1920	C	C5-C4-N4	-11.72	111.99	120.20
11	A	2	G	C5-C6-O6	-11.72	121.57	128.60
12	B	376	G	C8-N9-C4	-11.72	101.71	106.40
12	B	2792	A	N1-C6-N6	11.72	125.63	118.60
12	B	2780	G	N1-C6-O6	11.72	126.93	119.90
12	B	410	G	N9-C4-C5	-11.72	100.71	105.40
12	B	331	C	N3-C4-N4	11.71	126.20	118.00
12	B	273	G	N1-C6-O6	11.71	126.92	119.90
12	B	881	G	C5-C6-O6	-11.71	121.58	128.60
12	B	1137	G	N1-C6-O6	11.70	126.92	119.90
12	B	1039	A	C8-N9-C4	-11.70	101.12	105.80
12	B	2539	C	C6-N1-C2	-11.70	115.62	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	596	U	O4'-C1'-N1	11.70	117.56	108.20
12	B	1533	C	O4'-C1'-N1	11.70	117.56	108.20
12	B	335	C	O4'-C1'-N1	11.69	117.55	108.20
11	A	20	G	C5-C6-O6	-11.69	121.58	128.60
12	B	815	C	O4'-C1'-N1	11.69	117.55	108.20
12	B	1846	G	N1-C6-O6	11.69	126.91	119.90
12	B	1871	A	C8-N9-C4	-11.69	101.12	105.80
12	B	331	C	N3-C4-C5	-11.69	117.22	121.90
12	B	801	G	N1-C6-O6	11.69	126.91	119.90
12	B	1938	A	C5-C6-N6	-11.69	114.35	123.70
12	B	2110	G	C4-C5-C6	11.69	125.81	118.80
12	B	1687	G	N1-C6-O6	11.69	126.91	119.90
12	B	2094	A	C4-C5-C6	11.69	122.84	117.00
23	M	10	ARG	NE-CZ-NH1	-11.68	114.46	120.30
12	B	1479	G	O4'-C1'-N9	11.68	117.54	108.20
12	B	1285	A	C5-N7-C8	11.68	109.74	103.90
12	B	632	A	C5-C6-N1	-11.68	111.86	117.70
12	B	2590	A	C5-C6-N1	-11.68	111.86	117.70
12	B	351	C	O4'-C1'-N1	11.67	117.54	108.20
12	B	1093	G	N1-C2-N3	-11.67	116.90	123.90
12	B	124	G	C6-C5-N7	-11.67	123.40	130.40
12	B	2341	G	N3-C2-N2	11.67	128.07	119.90
12	B	2626	C	N3-C4-N4	11.67	126.17	118.00
12	B	2882	A	C4-C5-C6	11.67	122.83	117.00
12	B	1789	A	N1-C6-N6	11.66	125.60	118.60
12	B	2670	A	C5-C6-N1	-11.66	111.87	117.70
12	B	2775	G	C4-C5-N7	-11.66	106.14	110.80
12	B	599	A	C5-C6-N1	-11.66	111.87	117.70
12	B	2538	C	N3-C4-C5	-11.66	117.23	121.90
12	B	318	C	O4'-C1'-N1	11.66	117.53	108.20
12	B	879	G	C5'-C4'-O4'	11.66	123.09	109.10
13	C	101	ARG	NE-CZ-NH2	11.66	126.13	120.30
12	B	1296	G	C5-C6-O6	-11.65	121.61	128.60
12	B	1197	G	C8-N9-C4	-11.65	101.74	106.40
12	B	2577	A	N1-C6-N6	11.65	125.59	118.60
12	B	132	G	N1-C6-O6	11.65	126.89	119.90
12	B	1100	C	C5-C4-N4	-11.65	112.05	120.20
12	B	2414	G	N1-C6-O6	11.65	126.89	119.90
12	B	1275	A	C5-C6-N1	-11.65	111.88	117.70
12	B	2118	U	C1'-O4'-C4'	-11.65	100.58	109.90
12	B	1822	C	N3-C4-N4	11.64	126.15	118.00
12	B	2638	G	N1-C6-O6	11.64	126.89	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	902	C	N3-C4-N4	11.64	126.15	118.00
12	B	2618	G	N1-C6-O6	11.64	126.88	119.90
12	B	2475	C	N3-C4-N4	11.63	126.14	118.00
12	B	454	A	N1-C6-N6	11.63	125.58	118.60
12	B	2005	A	N1-C6-N6	11.63	125.58	118.60
12	B	1045	C	N3-C4-N4	11.62	126.14	118.00
12	B	2389	G	N1-C6-O6	11.62	126.88	119.90
12	B	1208	C	O4'-C1'-N1	11.62	117.49	108.20
12	B	471	A	C5-N7-C8	11.62	109.71	103.90
12	B	179	C	O4'-C1'-N1	11.61	117.49	108.20
12	B	1415	U	C5-C6-N1	11.61	128.50	122.70
12	B	2591	C	N3-C4-N4	11.61	126.13	118.00
12	B	2877	G	N1-C6-O6	11.61	126.86	119.90
12	B	619	G	N1-C6-O6	11.60	126.86	119.90
12	B	2006	C	N3-C4-N4	11.60	126.12	118.00
12	B	519	U	O4'-C1'-N1	11.60	117.48	108.20
12	B	394	C	C2-N3-C4	11.59	125.70	119.90
12	B	42	A	C5-C6-N1	-11.59	111.90	117.70
12	B	933	A	N1-C6-N6	11.59	125.56	118.60
12	B	608	A	C5-C6-N1	-11.59	111.91	117.70
12	B	1137	G	C5-C6-O6	-11.59	121.65	128.60
12	B	1632	A	C5-C6-N1	-11.59	111.91	117.70
12	B	394	C	N3-C4-C5	-11.59	117.27	121.90
12	B	478	A	C5-C6-N6	-11.58	114.43	123.70
12	B	767	U	O4'-C1'-N1	11.58	117.47	108.20
12	B	2373	G	C5-C6-N1	-11.58	105.71	111.50
12	B	1746	A	C5-C6-N1	-11.58	111.91	117.70
12	B	1964	G	N1-C2-N3	-11.58	116.95	123.90
12	B	427	U	C5-C6-N1	11.58	128.49	122.70
12	B	1635	A	C4-C5-C6	11.58	122.79	117.00
12	B	264	C	N3-C4-N4	11.58	126.10	118.00
12	B	1590	A	C4-C5-C6	11.58	122.79	117.00
12	B	1213	A	N1-C6-N6	11.57	125.54	118.60
12	B	597	G	N1-C6-O6	11.57	126.84	119.90
12	B	1603	A	N9-C4-C5	11.57	110.43	105.80
12	B	1552	A	C5-C6-N1	-11.56	111.92	117.70
12	B	1725	U	O4'-C1'-N1	11.56	117.45	108.20
15	E	158	PHE	CB-CG-CD1	-11.56	112.70	120.80
12	B	2307	G	C2-N3-C4	11.56	117.68	111.90
12	B	2077	A	N9-C4-C5	11.56	110.42	105.80
17	G	162	ARG	NE-CZ-NH1	11.56	126.08	120.30
12	B	2461	A	C5-C6-N6	-11.56	114.45	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2670	A	N1-C6-N6	11.56	125.53	118.60
12	B	2694	G	N1-C6-O6	11.55	126.83	119.90
12	B	1567	G	N1-C6-O6	11.55	126.83	119.90
12	B	1756	G	C5-C6-O6	-11.55	121.67	128.60
12	B	2148	G	C5-C6-O6	-11.55	121.67	128.60
12	B	61	C	O4'-C1'-N1	11.55	117.44	108.20
12	B	579	G	N1-C2-N3	-11.55	116.97	123.90
12	B	2627	G	N1-C6-O6	11.55	126.83	119.90
12	B	1555	G	N1-C6-O6	11.55	126.83	119.90
12	B	1218	G	C2-N3-C4	11.55	117.67	111.90
12	B	2814	A	N1-C6-N6	11.54	125.53	118.60
12	B	1124	G	C5-C6-O6	-11.54	121.68	128.60
12	B	2892	G	N1-C6-O6	11.54	126.82	119.90
12	B	1161	C	O4'-C1'-N1	11.54	117.43	108.20
12	B	1479	G	N1-C6-O6	11.54	126.82	119.90
12	B	1438	U	O4'-C1'-N1	11.54	117.43	108.20
12	B	603	A	C5-C6-N6	-11.53	114.47	123.70
12	B	1096	A	N1-C6-N6	11.53	125.52	118.60
12	B	1334	G	C5-C6-O6	-11.53	121.68	128.60
12	B	2428	G	N1-C6-O6	11.53	126.82	119.90
12	B	2470	G	C5-C6-O6	-11.53	121.68	128.60
12	B	899	A	N1-C6-N6	11.53	125.52	118.60
11	A	77	U	C6-N1-C2	-11.52	114.09	121.00
12	B	1750	G	N1-C6-O6	11.52	126.81	119.90
12	B	4	U	O4'-C1'-N1	11.52	117.42	108.20
12	B	1927	A	C5-C6-N1	-11.52	111.94	117.70
12	B	2547	A	N1-C2-N3	11.52	135.06	129.30
12	B	1614	A	N1-C6-N6	11.52	125.51	118.60
12	B	855	G	C5-C6-O6	-11.51	121.69	128.60
12	B	1206	G	C5-C6-O6	-11.51	121.69	128.60
12	B	987	C	O4'-C1'-N1	11.51	117.41	108.20
27	Q	69	ARG	NE-CZ-NH2	11.51	126.06	120.30
12	B	1129	A	N1-C6-N6	11.51	125.50	118.60
12	B	820	A	C4-C5-C6	11.51	122.75	117.00
12	B	170	U	O4'-C1'-N1	11.50	117.40	108.20
12	B	1156	A	N1-C2-N3	11.50	135.05	129.30
12	B	1424	G	O4'-C1'-N9	11.50	117.40	108.20
12	B	1804	C	C2-N3-C4	11.50	125.65	119.90
12	B	1805	A	C5-C6-N6	-11.50	114.50	123.70
12	B	2809	A	N1-C6-N6	11.50	125.50	118.60
12	B	614	A	C8-N9-C4	-11.50	101.20	105.80
12	B	1002	G	C5-C6-O6	-11.50	121.70	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2815	C	N3-C4-N4	11.50	126.05	118.00
12	B	650	C	N3-C4-N4	11.49	126.05	118.00
12	B	780	G	N1-C6-O6	11.49	126.80	119.90
12	B	986	C	N3-C4-N4	11.49	126.04	118.00
12	B	1309	G	C5-C6-O6	-11.49	121.71	128.60
12	B	2400	G	O4'-C1'-N9	11.49	117.39	108.20
12	B	2356	U	O4'-C1'-N1	11.49	117.39	108.20
12	B	850	U	C2-N3-C4	-11.49	120.11	127.00
12	B	1634	A	N1-C6-N6	11.48	125.49	118.60
12	B	339	U	O4'-C1'-N1	11.48	117.39	108.20
12	B	370	G	C8-N9-C4	11.48	110.99	106.40
12	B	922	C	N3-C4-C5	-11.48	117.31	121.90
12	B	726	G	C5-C6-O6	-11.48	121.71	128.60
12	B	2824	C	C2-N3-C4	11.48	125.64	119.90
12	B	2341	G	N1-C2-N3	-11.47	117.02	123.90
12	B	1186	G	O4'-C1'-N9	11.47	117.38	108.20
12	B	1343	G	N1-C6-O6	11.47	126.78	119.90
12	B	1845	G	C8-N9-C4	-11.47	101.81	106.40
12	B	1617	C	N3-C4-N4	11.47	126.03	118.00
12	B	2623	G	N1-C6-O6	11.47	126.78	119.90
12	B	359	G	N1-C6-O6	11.46	126.78	119.90
12	B	1157	G	C6-C5-N7	-11.46	123.52	130.40
12	B	1343	G	C5-C6-N1	-11.46	105.77	111.50
12	B	2887	A	N1-C2-N3	11.46	135.03	129.30
12	B	462	C	C6-N1-C2	11.46	124.89	120.30
12	B	591	U	O4'-C1'-N1	11.46	117.37	108.20
12	B	2652	C	N3-C4-N4	11.46	126.02	118.00
12	B	2761	A	N7-C8-N9	-11.46	108.07	113.80
12	B	2450	A	C5-C6-N6	-11.46	114.53	123.70
12	B	358	U	O4'-C1'-N1	11.46	117.36	108.20
12	B	585	G	N1-C6-O6	11.45	126.77	119.90
12	B	1086	A	C5-C6-N1	-11.45	111.97	117.70
12	B	1960	A	N1-C6-N6	11.45	125.47	118.60
12	B	2867	G	O4'-C1'-N9	11.45	117.36	108.20
12	B	465	G	N1-C6-O6	11.45	126.77	119.90
12	B	1848	A	C4-C5-C6	11.45	122.72	117.00
12	B	1855	U	C2-N3-C4	-11.45	120.13	127.00
12	B	522	A	C4-C5-N7	-11.44	104.98	110.70
12	B	2857	G	C5-C6-O6	-11.44	121.73	128.60
11	A	94	A	C4-C5-C6	11.44	122.72	117.00
12	B	810	U	O4'-C1'-N1	11.44	117.35	108.20
12	B	1966	A	C5-N7-C8	11.44	109.62	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2426	A	C5-C6-N6	-11.44	114.55	123.70
12	B	1713	A	N1-C6-N6	11.43	125.46	118.60
26	P	100	ARG	NE-CZ-NH2	11.43	126.02	120.30
12	B	934	U	O4'-C1'-N1	11.43	117.34	108.20
12	B	2417	C	N3-C4-C5	-11.43	117.33	121.90
12	B	2795	C	P-O3'-C3'	11.43	133.41	119.70
11	A	78	A	C8-N9-C4	-11.43	101.23	105.80
12	B	2289	G	C8-N9-C4	11.42	110.97	106.40
12	B	965	C	N3-C4-C5	-11.42	117.33	121.90
12	B	2620	C	O4'-C1'-N1	11.42	117.34	108.20
12	B	1596	A	C5-C6-N1	-11.42	111.99	117.70
12	B	1797	G	N1-C6-O6	11.42	126.75	119.90
12	B	2792	A	C5-C6-N1	-11.42	111.99	117.70
12	B	382	A	N9-C4-C5	11.41	110.36	105.80
12	B	517	C	O4'-C1'-N1	11.41	117.33	108.20
12	B	1745	A	C8-N9-C4	-11.41	101.23	105.80
12	B	676	A	N1-C6-N6	11.41	125.44	118.60
12	B	1179	G	N1-C6-O6	11.41	126.75	119.90
21	K	31	ARG	NE-CZ-NH1	11.41	126.00	120.30
12	B	1471	G	N1-C6-O6	11.40	126.74	119.90
12	B	843	G	C5-C6-O6	-11.39	121.76	128.60
12	B	2685	G	N1-C6-O6	11.39	126.74	119.90
12	B	2710	C	N3-C4-N4	11.39	125.97	118.00
12	B	2676	C	C5-C6-N1	11.39	126.69	121.00
16	F	142	TYR	CB-CG-CD2	-11.39	114.17	121.00
12	B	1290	C	O4'-C1'-N1	11.38	117.30	108.20
12	B	781	A	N1-C6-N6	11.38	125.43	118.60
12	B	849	A	C5-C6-N1	-11.38	112.01	117.70
12	B	485	C	O4'-C1'-N1	11.37	117.30	108.20
12	B	686	U	P-O3'-C3'	11.37	133.35	119.70
12	B	885	C	O4'-C1'-N1	11.37	117.30	108.20
12	B	2084	C	O4'-C1'-N1	11.37	117.30	108.20
12	B	862	G	C4-C5-N7	11.37	115.35	110.80
12	B	1311	G	N1-C6-O6	11.37	126.72	119.90
15	E	170	ARG	NE-CZ-NH2	11.37	125.98	120.30
12	B	173	A	N1-C6-N6	11.36	125.42	118.60
12	B	1615	C	O4'-C1'-N1	11.37	117.29	108.20
12	B	2603	G	O4'-C1'-N9	11.36	117.29	108.20
19	I	133	ARG	NE-CZ-NH2	-11.36	114.62	120.30
12	B	384	A	N1-C6-N6	11.36	125.41	118.60
12	B	417	C	C6-N1-C2	-11.35	115.76	120.30
12	B	535	G	N1-C6-O6	11.35	126.71	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1961	C	O4'-C1'-N1	11.35	117.28	108.20
11	A	33	G	N3-C4-C5	-11.35	122.92	128.60
12	B	1633	G	C4-C5-N7	-11.35	106.26	110.80
12	B	2179	C	N3-C4-C5	-11.35	117.36	121.90
12	B	2361	G	C5-C6-O6	-11.35	121.79	128.60
12	B	2389	G	C5-C6-O6	-11.34	121.80	128.60
12	B	1191	G	N1-C6-O6	11.34	126.70	119.90
12	B	1566	A	C5-N7-C8	11.34	109.57	103.90
12	B	1963	U	P-O3'-C3'	-11.34	106.09	119.70
12	B	2461	A	N1-C2-N3	11.34	134.97	129.30
12	B	691	C	N3-C4-N4	11.34	125.93	118.00
12	B	2271	G	C5-C6-N1	-11.34	105.83	111.50
12	B	2371	G	N3-C2-N2	11.33	127.83	119.90
12	B	902	C	O4'-C1'-N1	11.33	117.27	108.20
12	B	1013	C	N3-C4-C5	-11.33	117.37	121.90
12	B	1652	A	C8-N9-C4	-11.33	101.27	105.80
12	B	2239	G	C5-C6-N1	-11.33	105.83	111.50
12	B	1665	A	N1-C6-N6	11.33	125.40	118.60
12	B	2335	A	N1-C6-N6	11.33	125.40	118.60
12	B	685	A	C8-N9-C4	-11.33	101.27	105.80
12	B	2263	C	C6-N1-C2	-11.33	115.77	120.30
12	B	183	C	O4'-C1'-N1	11.32	117.26	108.20
12	B	727	A	C5-C6-N1	-11.32	112.04	117.70
12	B	536	G	C5-C6-O6	-11.32	121.81	128.60
12	B	189	G	N1-C6-O6	11.32	126.69	119.90
12	B	1475	G	C4-C5-C6	11.32	125.59	118.80
12	B	840	C	O4'-C1'-N1	11.32	117.25	108.20
12	B	1140	C	C5-C6-N1	11.32	126.66	121.00
12	B	2125	G	N1-C6-O6	11.32	126.69	119.90
12	B	2343	U	O4'-C1'-N1	11.31	117.25	108.20
12	B	1901	A	N1-C6-N6	11.31	125.39	118.60
12	B	1738	G	C8-N9-C4	-11.31	101.88	106.40
12	B	2558	C	O4'-C1'-N1	11.31	117.25	108.20
12	B	1989	G	O4'-C1'-N9	11.31	117.25	108.20
12	B	2146	C	N3-C4-C5	-11.30	117.38	121.90
25	O	30	ARG	NE-CZ-NH2	-11.30	114.65	120.30
12	B	722	A	N1-C6-N6	11.29	125.38	118.60
12	B	2416	C	N3-C4-N4	11.29	125.90	118.00
28	R	90	ARG	NE-CZ-NH2	-11.29	114.65	120.30
12	B	2506	U	C5-C6-N1	11.29	128.34	122.70
11	A	28	C	O4'-C1'-N1	11.29	117.23	108.20
12	B	160	A	N7-C8-N9	-11.29	108.16	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2584	U	O4'-C1'-N1	11.29	117.23	108.20
12	B	659	G	C5-C6-O6	-11.28	121.83	128.60
12	B	1139	G	C4-C5-C6	11.28	125.57	118.80
12	B	2362	C	O4'-C1'-N1	11.28	117.22	108.20
12	B	2588	G	N1-C2-N3	-11.28	117.13	123.90
11	A	12	C	C5-C6-N1	-11.28	115.36	121.00
12	B	701	G	C5-C6-O6	-11.28	121.83	128.60
12	B	343	C	N3-C4-N4	11.27	125.89	118.00
12	B	507	A	C2-N3-C4	-11.27	104.96	110.60
29	S	11	ARG	NE-CZ-NH2	-11.27	114.67	120.30
12	B	1275	A	O4'-C1'-N9	11.27	117.22	108.20
12	B	1942	C	N3-C4-C5	-11.27	117.39	121.90
12	B	215	G	C4-C5-C6	11.27	125.56	118.80
12	B	597	G	C5-C6-O6	-11.27	121.84	128.60
12	B	2355	G	C4-C5-N7	11.27	115.31	110.80
12	B	2485	G	C5-C6-O6	-11.27	121.84	128.60
12	B	2848	G	N1-C6-O6	11.27	126.66	119.90
12	B	110	G	C4'-C3'-C2'	-11.26	91.34	102.60
12	B	2548	U	N3-C4-C5	-11.26	107.84	114.60
12	B	2813	A	N1-C6-N6	11.26	125.36	118.60
12	B	2567	G	N1-C6-O6	11.26	126.66	119.90
12	B	66	C	C4-C5-C6	11.25	123.02	117.40
12	B	406	G	C5-C6-N1	-11.25	105.88	111.50
12	B	887	U	O4'-C1'-N1	11.24	117.19	108.20
12	B	941	A	C5-C6-N1	-11.24	112.08	117.70
12	B	1359	A	N1-C6-N6	11.24	125.35	118.60
12	B	2729	G	N1-C6-O6	11.24	126.64	119.90
12	B	1048	A	N1-C6-N6	11.24	125.34	118.60
12	B	2737	G	N1-C6-O6	11.24	126.64	119.90
12	B	859	G	N1-C6-O6	11.24	126.64	119.90
12	B	2472	G	C6-C5-N7	-11.24	123.66	130.40
12	B	956	G	C5-C6-N1	-11.23	105.88	111.50
12	B	2013	A	C4-C5-C6	11.23	122.62	117.00
12	B	2513	A	N1-C6-N6	11.23	125.34	118.60
12	B	2029	G	C5-C6-O6	-11.23	121.86	128.60
12	B	2034	U	O4'-C1'-N1	11.23	117.19	108.20
12	B	1029	A	N1-C6-N6	11.23	125.34	118.60
26	P	50	ARG	NE-CZ-NH2	11.23	125.92	120.30
12	B	819	A	N1-C6-N6	11.23	125.34	118.60
12	B	525	U	O4'-C1'-N1	11.22	117.18	108.20
12	B	1221	C	N3-C4-C5	-11.22	117.41	121.90
12	B	13	A	C5-C6-N6	-11.22	114.72	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1824	G	C5-C6-O6	-11.22	121.87	128.60
12	B	33	C	C5-C4-N4	-11.22	112.35	120.20
12	B	922	C	C4-C5-C6	11.22	123.01	117.40
12	B	2288	A	C5-C6-N1	-11.22	112.09	117.70
12	B	2353	G	C4-C5-N7	11.22	115.29	110.80
12	B	429	A	N1-C6-N6	11.21	125.33	118.60
12	B	94	A	C4-C5-C6	11.21	122.61	117.00
12	B	218	A	C5-C6-N1	-11.21	112.09	117.70
12	B	317	G	C5-C6-O6	-11.21	121.87	128.60
12	B	789	A	C4-C5-C6	11.21	122.61	117.00
12	B	1698	A	N1-C6-N6	11.21	125.33	118.60
12	B	1162	G	N3-C2-N2	11.21	127.75	119.90
12	B	745	G	N1-C6-O6	11.21	126.62	119.90
12	B	773	U	O4'-C1'-N1	11.20	117.16	108.20
12	B	2229	U	C2-N3-C4	11.20	133.72	127.00
12	B	1116	G	N1-C2-N3	-11.20	117.18	123.90
12	B	2715	C	O4'-C1'-N1	11.20	117.16	108.20
12	B	671	C	N3-C4-C5	-11.20	117.42	121.90
12	B	348	A	C5-C6-N1	-11.19	112.10	117.70
12	B	1673	G	N1-C6-O6	11.19	126.61	119.90
11	A	97	C	N3-C4-C5	-11.19	117.42	121.90
12	B	477	A	O4'-C1'-N9	11.19	117.15	108.20
12	B	1745	A	C4-C5-C6	11.19	122.59	117.00
12	B	34	U	C2-N1-C1'	11.18	131.12	117.70
12	B	2013	A	C5-C6-N1	-11.18	112.11	117.70
12	B	2189	U	O4'-C1'-N1	11.18	117.15	108.20
12	B	643	A	N1-C2-N3	11.18	134.89	129.30
12	B	829	A	N1-C6-N6	11.18	125.31	118.60
12	B	1230	A	N1-C2-N3	-11.18	123.71	129.30
12	B	1261	C	C5-C4-N4	-11.18	112.38	120.20
11	A	20	G	N3-C4-N9	-11.17	119.30	126.00
12	B	648	G	C5-C6-O6	-11.17	121.89	128.60
12	B	1013	C	N3-C4-N4	11.17	125.82	118.00
12	B	1077	A	N1-C6-N6	11.17	125.30	118.60
12	B	1343	G	C8-N9-C4	-11.17	101.93	106.40
12	B	1776	G	C2-N3-C4	11.17	117.49	111.90
12	B	2331	G	N9-C4-C5	-11.17	100.93	105.40
12	B	62	U	C5-C6-N1	11.17	128.28	122.70
12	B	865	C	O4'-C1'-N1	11.17	117.14	108.20
12	B	2184	A	C5-C6-N1	-11.17	112.11	117.70
11	A	54	G	N1-C6-O6	11.17	126.60	119.90
12	B	1942	C	C2-N3-C4	11.16	125.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1742	U	C5-C4-O4	-11.16	119.20	125.90
12	B	2787	C	C5-C6-N1	-11.16	115.42	121.00
12	B	1877	A	N1-C6-N6	11.16	125.30	118.60
12	B	2336	A	C5-C6-N1	-11.16	112.12	117.70
12	B	2337	G	C5-C6-O6	-11.15	121.91	128.60
12	B	941	A	N1-C2-N3	11.15	134.88	129.30
12	B	1018	U	C6-N1-C2	11.15	127.69	121.00
12	B	2216	G	N1-C6-O6	11.15	126.59	119.90
12	B	667	U	C5-C6-N1	11.15	128.28	122.70
12	B	944	C	C2-N3-C4	11.15	125.47	119.90
12	B	1366	A	N1-C6-N6	11.15	125.29	118.60
12	B	1889	A	N1-C6-N6	11.15	125.29	118.60
12	B	1690	A	N1-C2-N3	11.14	134.87	129.30
12	B	25	U	C5-C6-N1	11.14	128.27	122.70
12	B	253	C	O4'-C1'-N1	11.14	117.11	108.20
12	B	1788	C	C6-N1-C2	-11.14	115.84	120.30
12	B	1198	U	N1-C2-O2	11.14	130.60	122.80
4	3	9	ARG	NE-CZ-NH2	11.13	125.87	120.30
11	A	92	C	O4'-C1'-N1	11.13	117.11	108.20
11	A	91	C	O4'-C1'-N1	11.13	117.10	108.20
12	B	2676	C	O4'-C1'-N1	11.13	117.10	108.20
12	B	178	G	C5-C6-N1	-11.12	105.94	111.50
12	B	2736	A	N1-C6-N6	11.13	125.28	118.60
12	B	285	G	C5-C6-O6	-11.12	121.93	128.60
12	B	784	G	O4'-C1'-N9	11.12	117.10	108.20
12	B	124	G	N3-C4-C5	-11.12	123.04	128.60
12	B	1770	G	N7-C8-N9	11.12	118.66	113.10
12	B	2032	G	N1-C6-O6	11.12	126.57	119.90
12	B	2396	G	C6-C5-N7	-11.12	123.73	130.40
12	B	2639	A	N1-C6-N6	11.12	125.27	118.60
12	B	2852	G	N1-C6-O6	11.12	126.57	119.90
12	B	155	A	C4-C5-C6	11.12	122.56	117.00
12	B	1853	A	N7-C8-N9	-11.12	108.24	113.80
11	A	33	G	C5-C6-O6	-11.11	121.93	128.60
12	B	212	G	N1-C6-O6	11.11	126.57	119.90
12	B	2080	A	C5-C6-N1	-11.11	112.14	117.70
12	B	825	A	C4-C5-C6	11.11	122.55	117.00
12	B	161	A	N1-C6-N6	11.11	125.26	118.60
12	B	1175	A	N1-C6-N6	11.11	125.26	118.60
12	B	402	A	N1-C6-N6	11.10	125.26	118.60
12	B	1624	U	O4'-C1'-N1	11.10	117.08	108.20
12	B	1863	G	N9-C4-C5	11.10	109.84	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2086	U	O4'-C1'-N1	11.10	117.08	108.20
12	B	2093	G	C8-N9-C4	-11.10	101.96	106.40
12	B	1076	C	N3-C4-C5	-11.10	117.46	121.90
12	B	1395	A	O4'-C1'-N9	11.10	117.08	108.20
12	B	2867	G	C4-C5-C6	11.09	125.45	118.80
12	B	2752	C	C6-N1-C2	-11.09	115.86	120.30
11	A	116	G	O4'-C1'-N9	11.09	117.07	108.20
12	B	126	A	N1-C6-N6	11.09	125.25	118.60
12	B	687	C	C6-N1-C2	-11.08	115.87	120.30
12	B	2769	U	O4'-C1'-N1	11.08	117.06	108.20
12	B	2616	C	O4'-C1'-N1	11.07	117.06	108.20
12	B	2883	A	N1-C6-N6	11.07	125.24	118.60
12	B	1488	C	O4'-C1'-N1	11.07	117.06	108.20
12	B	1579	A	C4-C5-C6	11.07	122.54	117.00
12	B	726	G	N1-C6-O6	11.07	126.54	119.90
12	B	1222	U	O4'-C1'-N1	11.07	117.05	108.20
12	B	768	G	C5-C6-O6	-11.06	121.96	128.60
8	7	13	PHE	CB-CG-CD2	-11.06	113.06	120.80
12	B	956	G	C6-C5-N7	-11.06	123.76	130.40
12	B	1839	G	N9-C4-C5	11.06	109.82	105.40
12	B	526	A	C5-C6-N1	11.05	123.23	117.70
12	B	846	U	O4'-C1'-N1	11.05	117.04	108.20
12	B	891	G	C4-C5-C6	11.05	125.43	118.80
12	B	1254	A	O4'-C1'-N9	11.05	117.04	108.20
12	B	1667	G	N9-C4-C5	-11.05	100.98	105.40
12	B	1853	A	C5-N7-C8	11.05	109.43	103.90
12	B	330	A	C4-C5-C6	11.05	122.53	117.00
12	B	1073	A	C5-C6-N6	-11.05	114.86	123.70
12	B	2019	A	O4'-C1'-N9	11.05	117.04	108.20
12	B	2218	G	N9-C4-C5	-11.05	100.98	105.40
12	B	680	C	N3-C4-N4	11.05	125.73	118.00
12	B	2377	A	N1-C2-N3	11.04	134.82	129.30
12	B	537	G	N7-C8-N9	11.04	118.62	113.10
12	B	1806	C	N3-C4-N4	11.04	125.73	118.00
12	B	2212	A	O4'-C1'-N9	11.04	117.03	108.20
12	B	2344	U	P-O3'-C3'	11.04	132.95	119.70
12	B	2072	C	N3-C4-C5	-11.04	117.48	121.90
12	B	1528	A	C5-C6-N1	-11.03	112.18	117.70
11	A	104	A	C5-C6-N6	-11.03	114.88	123.70
12	B	329	G	C4-C5-N7	-11.03	106.39	110.80
27	Q	49	ARG	NE-CZ-NH1	11.03	125.82	120.30
12	B	442	G	N1-C2-N3	-11.03	117.28	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1289	C	O4'-C1'-N1	11.03	117.02	108.20
12	B	108	G	N9-C4-C5	-11.03	100.99	105.40
12	B	2402	U	C2-N1-C1'	11.03	130.93	117.70
12	B	1437	C	O4'-C1'-N1	11.02	117.02	108.20
12	B	2183	A	N1-C6-N6	11.02	125.21	118.60
11	A	103	U	C5-C4-O4	-11.02	119.29	125.90
12	B	2796	U	C2-N3-C4	11.02	133.61	127.00
12	B	263	G	C8-N9-C4	-11.01	102.00	106.40
12	B	2153	C	C5-C4-N4	-11.01	112.49	120.20
12	B	2558	C	N3-C4-C5	-11.01	117.50	121.90
12	B	2523	G	C5-C6-O6	-11.01	121.99	128.60
12	B	2879	A	C5-C6-N6	-11.01	114.89	123.70
12	B	862	G	N1-C6-O6	11.01	126.50	119.90
12	B	1395	A	C5-C6-N1	-11.01	112.20	117.70
12	B	1823	G	C5-C6-O6	-11.01	122.00	128.60
12	B	515	A	C8-N9-C4	-11.00	101.40	105.80
12	B	2583	G	N1-C6-O6	11.00	126.50	119.90
11	A	92	C	N3-C4-N4	11.00	125.70	118.00
12	B	1537	G	P-O3'-C3'	11.00	132.90	119.70
12	B	2143	C	N3-C4-C5	-11.00	117.50	121.90
12	B	2391	G	P-O3'-C3'	11.00	132.90	119.70
12	B	1151	A	C5-C6-N6	-10.99	114.90	123.70
11	A	118	C	C2-N3-C4	10.99	125.40	119.90
12	B	2377	A	C5-C6-N6	-10.99	114.91	123.70
12	B	2663	G	C8-N9-C4	-10.99	102.00	106.40
12	B	591	U	N1-C2-N3	-10.99	108.31	114.90
12	B	1381	G	N1-C6-O6	10.99	126.49	119.90
12	B	2331	G	N1-C6-O6	10.99	126.49	119.90
12	B	829	A	N1-C2-N3	-10.99	123.81	129.30
12	B	2841	C	O4'-C1'-N1	10.99	116.99	108.20
11	A	52	A	C5-C6-N6	-10.99	114.91	123.70
12	B	1269	A	C4-C5-C6	10.99	122.49	117.00
12	B	138	U	C2-N3-C4	10.98	133.59	127.00
12	B	2191	A	C5-C6-N6	-10.98	114.91	123.70
12	B	15	G	C5-C6-O6	-10.98	122.01	128.60
12	B	110	G	C5-C6-O6	-10.98	122.01	128.60
12	B	429	A	N9-C4-C5	10.98	110.19	105.80
12	B	1551	A	P-O3'-C3'	10.98	132.88	119.70
12	B	2161	C	O4'-C1'-N1	10.98	116.98	108.20
12	B	2469	A	N1-C2-N3	10.98	134.79	129.30
12	B	2780	G	C5-C6-O6	-10.98	122.01	128.60
12	B	2847	U	O4'-C1'-N1	10.98	116.98	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1268	A	C4-C5-N7	-10.98	105.21	110.70
4	3	15	ARG	NE-CZ-NH1	-10.98	114.81	120.30
12	B	868	U	C2-N3-C4	10.98	133.59	127.00
12	B	1134	A	C4-C5-C6	10.98	122.49	117.00
12	B	2030	A	C4-C5-C6	10.98	122.49	117.00
12	B	2579	C	N1-C2-O2	-10.98	112.31	118.90
12	B	948	C	C5-C6-N1	10.97	126.49	121.00
12	B	1715	G	C5-C6-O6	-10.97	122.02	128.60
12	B	878	A	N1-C6-N6	10.97	125.18	118.60
12	B	478	A	C8-N9-C4	-10.97	101.41	105.80
12	B	2420	C	C3'-C2'-C1'	-10.97	92.72	101.50
12	B	2523	G	N1-C6-O6	10.97	126.48	119.90
28	R	35	PHE	CB-CG-CD1	10.96	128.47	120.80
12	B	1475	G	N1-C6-O6	10.96	126.48	119.90
12	B	2739	U	C5-C4-O4	-10.96	119.32	125.90
12	B	1505	A	C8-N9-C4	-10.96	101.42	105.80
12	B	619	G	O4'-C1'-N9	10.95	116.96	108.20
12	B	632	A	C4-C5-C6	10.95	122.48	117.00
12	B	2602	A	C4-C5-C6	10.95	122.48	117.00
12	B	2681	C	N3-C4-C5	-10.95	117.52	121.90
12	B	2549	G	C6-N1-C2	10.95	131.67	125.10
12	B	538	A	C4-C5-C6	10.95	122.48	117.00
12	B	2882	A	C5-C6-N1	-10.95	112.22	117.70
12	B	1544	A	N1-C2-N3	-10.95	123.83	129.30
12	B	2888	C	N3-C4-N4	10.95	125.66	118.00
12	B	1721	G	C2-N3-C4	10.95	117.37	111.90
12	B	1753	G	N1-C6-O6	10.95	126.47	119.90
12	B	2284	A	N1-C6-N6	10.95	125.17	118.60
12	B	24	G	O4'-C1'-N9	10.94	116.95	108.20
12	B	520	G	C5-C6-N1	-10.94	106.03	111.50
12	B	859	G	P-O3'-C3'	10.94	132.83	119.70
12	B	1235	G	N3-C2-N2	10.94	127.56	119.90
12	B	1494	A	O4'-C1'-N9	10.94	116.95	108.20
12	B	1795	C	N3-C4-C5	-10.94	117.53	121.90
12	B	863	A	O4'-C1'-N9	10.93	116.94	108.20
12	B	939	G	O4'-C1'-N9	10.93	116.95	108.20
12	B	1422	G	N3-C4-C5	10.93	134.07	128.60
12	B	2104	C	O4'-C1'-N1	10.93	116.95	108.20
11	A	67	G	C6-C5-N7	-10.93	123.84	130.40
12	B	425	G	C5-C6-O6	-10.93	122.04	128.60
12	B	2044	C	N3-C4-C5	-10.93	117.53	121.90
12	B	2645	G	N1-C6-O6	10.93	126.46	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1100	C	N3-C4-N4	10.93	125.65	118.00
12	B	1676	A	C5-N7-C8	10.93	109.36	103.90
12	B	732	C	C5-C4-N4	-10.93	112.55	120.20
12	B	1858	A	N1-C6-N6	10.93	125.16	118.60
12	B	1988	G	C5-C6-O6	-10.93	122.05	128.60
12	B	2232	C	N3-C4-C5	-10.93	117.53	121.90
12	B	704	G	N3-C2-N2	10.92	127.55	119.90
12	B	797	G	N3-C2-N2	10.92	127.55	119.90
11	A	113	C	C6-N1-C2	10.92	124.67	120.30
12	B	1524	G	N3-C2-N2	10.92	127.54	119.90
12	B	2041	U	O4'-C1'-N1	10.92	116.94	108.20
12	B	1686	C	O4'-C1'-N1	10.92	116.93	108.20
12	B	2616	C	C2-N3-C4	10.92	125.36	119.90
12	B	2810	A	C8-N9-C4	-10.92	101.43	105.80
12	B	1692	U	N3-C2-O2	10.91	129.84	122.20
12	B	1025	G	N1-C6-O6	10.91	126.45	119.90
12	B	2486	C	N3-C4-N4	10.91	125.64	118.00
12	B	2670	A	O4'-C1'-N9	10.91	116.93	108.20
12	B	1373	A	N1-C6-N6	10.91	125.15	118.60
12	B	880	G	P-O3'-C3'	10.91	132.79	119.70
12	B	1091	G	N3-C4-C5	-10.91	123.15	128.60
12	B	1433	A	C5-C6-N1	-10.91	112.25	117.70
12	B	507	A	N7-C8-N9	10.90	119.25	113.80
12	B	1147	A	O4'-C1'-N9	10.90	116.92	108.20
12	B	2648	G	O4'-C1'-N9	10.90	116.92	108.20
12	B	1900	A	C8-N9-C4	-10.90	101.44	105.80
12	B	2880	C	N1-C2-O2	10.90	125.44	118.90
12	B	1858	A	C4-C5-C6	10.90	122.45	117.00
12	B	324	A	C5-C6-N6	-10.90	114.98	123.70
12	B	422	A	C4-C5-C6	10.90	122.45	117.00
12	B	1435	G	C2-N3-C4	-10.90	106.45	111.90
12	B	1494	A	C5-C6-N6	-10.90	114.98	123.70
12	B	232	G	N3-C2-N2	10.89	127.53	119.90
12	B	1696	G	N9-C4-C5	10.89	109.76	105.40
12	B	1424	G	C2-N3-C4	10.89	117.35	111.90
12	B	1545	A	C4-C5-C6	10.89	122.45	117.00
12	B	2837	A	C5-C6-N6	-10.89	114.99	123.70
12	B	2014	A	C5-C6-N6	-10.89	114.99	123.70
12	B	25	U	O4'-C1'-N1	10.89	116.91	108.20
12	B	149	A	N1-C6-N6	10.89	125.13	118.60
12	B	2361	G	C2-N3-C4	-10.89	106.46	111.90
12	B	2811	G	N1-C6-O6	10.89	126.43	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	407	G	C5-C6-N1	-10.88	106.06	111.50
12	B	94	A	N1-C6-N6	10.88	125.13	118.60
12	B	178	G	O4'-C1'-N9	10.88	116.91	108.20
12	B	566	U	N3-C2-O2	10.88	129.82	122.20
12	B	2031	A	N3-C4-C5	-10.88	119.18	126.80
12	B	2735	G	N1-C6-O6	10.88	126.43	119.90
12	B	2059	A	C4-C5-C6	10.88	122.44	117.00
12	B	573	U	O4'-C1'-N1	10.88	116.90	108.20
12	B	176	A	C5-C6-N6	-10.88	115.00	123.70
12	B	1598	A	C4-C5-C6	10.87	122.44	117.00
12	B	266	G	O4'-C1'-N9	10.87	116.89	108.20
12	B	470	A	C5-C6-N1	-10.87	112.27	117.70
12	B	1004	U	C5-C4-O4	-10.87	119.38	125.90
12	B	1239	G	O4'-C1'-N9	10.87	116.89	108.20
12	B	2662	A	C5-C6-N6	-10.87	115.01	123.70
12	B	1849	G	C5-C6-O6	-10.86	122.08	128.60
12	B	1983	G	N3-C4-N9	-10.86	119.48	126.00
12	B	2493	U	C2-N3-C4	-10.86	120.48	127.00
12	B	2741	A	C4-C5-C6	10.86	122.43	117.00
11	A	21	G	C5-C6-N1	-10.86	106.07	111.50
12	B	1701	A	N1-C6-N6	10.86	125.11	118.60
12	B	1592	C	O4'-C1'-N1	10.86	116.89	108.20
12	B	1900	A	N7-C8-N9	10.86	119.23	113.80
12	B	2119	A	O4'-C1'-N9	10.86	116.88	108.20
12	B	2296	U	C5-C6-N1	10.86	128.13	122.70
12	B	764	A	C5-C6-N6	-10.85	115.02	123.70
12	B	784	G	C4-C5-N7	10.85	115.14	110.80
12	B	1410	G	N1-C2-N3	-10.85	117.39	123.90
12	B	1934	C	O4'-C1'-N1	10.85	116.88	108.20
12	B	2818	U	N3-C4-O4	10.85	127.00	119.40
12	B	889	C	C2-N1-C1'	10.85	130.73	118.80
12	B	1549	A	C4-C5-C6	10.85	122.42	117.00
12	B	1556	C	O4'-C1'-N1	10.85	116.88	108.20
12	B	2033	A	N1-C6-N6	10.85	125.11	118.60
13	C	100	ARG	NE-CZ-NH2	-10.85	114.88	120.30
12	B	933	A	C4-C5-C6	10.85	122.42	117.00
12	B	1271	G	O4'-C1'-N9	10.85	116.88	108.20
12	B	2097	A	C4-C5-C6	10.85	122.42	117.00
12	B	2576	G	N1-C6-O6	10.85	126.41	119.90
12	B	951	C	N3-C4-C5	-10.84	117.56	121.90
12	B	2319	G	C4-C5-N7	10.84	115.14	110.80
11	A	57	A	C5-C6-N1	-10.84	112.28	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	228	C	O4'-C1'-N1	10.84	116.87	108.20
12	B	1655	A	N9-C4-C5	10.84	110.14	105.80
12	B	2435	A	C5-C6-N6	-10.84	115.03	123.70
12	B	276	U	O4'-C1'-N1	10.83	116.87	108.20
12	B	1740	G	C5-C6-O6	-10.83	122.10	128.60
12	B	69	C	O4'-C1'-N1	10.83	116.86	108.20
12	B	655	A	N1-C2-N3	10.83	134.72	129.30
12	B	449	A	C5-C6-N6	-10.83	115.04	123.70
12	B	1140	C	C4-C5-C6	-10.83	111.99	117.40
12	B	1198	U	N3-C2-O2	-10.83	114.62	122.20
12	B	1424	G	C5-C6-N1	10.83	116.91	111.50
12	B	429	A	C5-C6-N1	-10.82	112.29	117.70
12	B	1848	A	C6-C5-N7	-10.82	124.72	132.30
11	A	42	C	N3-C4-N4	10.82	125.57	118.00
12	B	599	A	N1-C6-N6	10.82	125.09	118.60
12	B	2022	U	C6-N1-C2	-10.82	114.51	121.00
12	B	2068	U	N3-C4-O4	10.82	126.97	119.40
12	B	1131	G	C5-C6-O6	-10.82	122.11	128.60
12	B	23	G	C5-C6-O6	-10.81	122.11	128.60
12	B	1388	G	C5-C6-N1	-10.81	106.09	111.50
12	B	2765	A	C4-C5-C6	10.81	122.41	117.00
12	B	379	G	N1-C6-O6	10.81	126.39	119.90
12	B	1505	A	N1-C6-N6	10.81	125.09	118.60
12	B	1734	G	O4'-C1'-N9	10.81	116.85	108.20
12	B	2734	A	C2-N3-C4	-10.81	105.19	110.60
12	B	2892	G	O4'-C1'-N9	10.81	116.85	108.20
12	B	294	A	C5-N7-C8	10.81	109.30	103.90
12	B	2654	A	N1-C6-N6	10.81	125.08	118.60
12	B	1528	A	N1-C6-N6	10.81	125.08	118.60
12	B	389	G	C5-C6-O6	-10.81	122.12	128.60
12	B	1400	U	O4'-C1'-N1	10.81	116.84	108.20
12	B	1937	A	C5-C6-N6	10.80	132.34	123.70
12	B	2741	A	C5-C6-N1	-10.80	112.30	117.70
12	B	493	G	N3-C4-C5	10.80	134.00	128.60
12	B	1909	C	C5-C6-N1	10.80	126.40	121.00
11	A	46	A	N1-C6-N6	10.80	125.08	118.60
12	B	918	A	N1-C6-N6	10.80	125.08	118.60
11	A	20	G	N1-C6-O6	10.80	126.38	119.90
12	B	1270	C	C5-C6-N1	10.80	126.40	121.00
12	B	177	G	C5-C6-O6	-10.79	122.12	128.60
12	B	1127	A	C5-C6-N6	-10.79	115.06	123.70
12	B	1448	G	N1-C2-N3	-10.79	117.42	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2799	A	P-O3'-C3'	10.79	132.65	119.70
12	B	214	G	O4'-C1'-N9	10.79	116.83	108.20
12	B	583	G	O4'-C1'-N9	10.79	116.83	108.20
12	B	2778	A	N1-C6-N6	10.79	125.08	118.60
12	B	187	G	N1-C6-O6	10.79	126.37	119.90
11	A	2	G	N1-C6-O6	10.79	126.37	119.90
12	B	2222	C	O4'-C1'-N1	10.79	116.83	108.20
12	B	2290	G	O4'-C1'-N9	10.79	116.83	108.20
12	B	1075	C	C5-C6-N1	10.79	126.39	121.00
12	B	1102	C	O4'-C1'-N1	10.79	116.83	108.20
12	B	2870	C	N3-C4-N4	10.79	125.55	118.00
12	B	1544	A	C5-C6-N1	-10.78	112.31	117.70
12	B	2053	G	C5-C6-N1	10.78	116.89	111.50
12	B	2332	C	N3-C4-N4	10.78	125.55	118.00
12	B	1575	C	N3-C4-N4	10.78	125.55	118.00
12	B	2070	A	O4'-C1'-N9	10.78	116.83	108.20
12	B	2257	U	O4'-C1'-N1	10.78	116.82	108.20
12	B	1970	A	C8-N9-C4	-10.78	101.49	105.80
12	B	823	C	N3-C4-C5	-10.77	117.59	121.90
12	B	2325	G	C5-C6-O6	-10.77	122.14	128.60
12	B	2643	G	C5-C6-O6	-10.77	122.14	128.60
12	B	961	C	C2-N3-C4	10.77	125.28	119.90
12	B	2618	G	N3-C2-N2	10.77	127.44	119.90
12	B	244	A	C5-C6-N6	-10.77	115.09	123.70
12	B	1960	A	O4'-C1'-N9	10.77	116.81	108.20
12	B	1614	A	C5-C6-N1	-10.76	112.32	117.70
12	B	2825	G	C5-C6-O6	-10.76	122.14	128.60
12	B	920	A	C5-C6-N1	-10.76	112.32	117.70
12	B	2404	U	P-O3'-C3'	10.76	132.61	119.70
12	B	1814	G	N3-C2-N2	10.76	127.43	119.90
12	B	806	C	N3-C4-C5	-10.76	117.60	121.90
12	B	1450	G	C5-C6-O6	-10.76	122.15	128.60
12	B	497	A	O4'-C1'-N9	10.75	116.80	108.20
11	A	94	A	N1-C6-N6	10.75	125.05	118.60
12	B	2201	G	C5-C6-O6	-10.75	122.15	128.60
12	B	1207	C	C6-N1-C2	-10.74	116.00	120.30
12	B	2882	A	N1-C6-N6	10.74	125.05	118.60
12	B	2331	G	O4'-C1'-N9	10.74	116.79	108.20
12	B	2592	G	C6-C5-N7	-10.74	123.95	130.40
12	B	192	C	C5-C6-N1	10.74	126.37	121.00
12	B	2426	A	C4-C5-C6	10.74	122.37	117.00
12	B	1648	U	O4'-C1'-N1	10.74	116.79	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1695	G	P-O3'-C3'	-10.74	106.82	119.70
12	B	1753	G	C5-C6-O6	-10.74	122.16	128.60
12	B	2691	C	N3-C4-N4	10.74	125.52	118.00
12	B	859	G	C5-C6-O6	-10.73	122.16	128.60
12	B	1069	A	O4'-C1'-N9	10.73	116.79	108.20
12	B	270	A	N1-C2-N3	10.73	134.67	129.30
12	B	1566	A	C5-C6-N6	-10.73	115.11	123.70
12	B	2516	A	C5-C6-N6	-10.73	115.11	123.70
12	B	1454	C	C2-N1-C1'	10.73	130.60	118.80
12	B	1864	U	O4'-C1'-N1	10.73	116.79	108.20
12	B	89	A	O4'-C1'-N9	10.73	116.78	108.20
12	B	1760	C	C5-C4-N4	-10.73	112.69	120.20
12	B	352	A	C5-C6-N6	-10.73	115.12	123.70
12	B	2705	A	N1-C6-N6	10.73	125.04	118.60
12	B	1886	U	C5-C4-O4	-10.73	119.46	125.90
12	B	1674	G	N1-C2-N3	-10.72	117.47	123.90
12	B	1091	G	C5-C6-O6	-10.72	122.17	128.60
12	B	2271	G	C5-C6-O6	-10.72	122.17	128.60
12	B	2677	G	N1-C6-O6	10.72	126.33	119.90
12	B	796	C	O4'-C1'-N1	10.72	116.78	108.20
12	B	1420	A	C8-N9-C4	-10.72	101.51	105.80
12	B	1970	A	N9-C4-C5	10.72	110.09	105.80
7	6	3	ARG	NE-CZ-NH2	10.72	125.66	120.30
12	B	1678	A	C5-C6-N6	-10.72	115.13	123.70
19	I	133	ARG	NE-CZ-NH1	10.72	125.66	120.30
12	B	513	A	N1-C6-N6	10.71	125.03	118.60
12	B	2444	G	N1-C6-O6	10.71	126.33	119.90
12	B	1328	A	N1-C6-N6	10.71	125.03	118.60
12	B	1922	G	C5-C6-O6	-10.71	122.17	128.60
12	B	2012	G	N3-C2-N2	10.71	127.40	119.90
12	B	2066	C	O4'-C1'-N1	10.71	116.77	108.20
12	B	847	U	O4'-C1'-N1	10.70	116.76	108.20
12	B	2763	G	O4'-C1'-N9	10.70	116.76	108.20
12	B	1608	A	C4-C5-C6	10.70	122.35	117.00
12	B	1719	G	C5-C6-O6	-10.70	122.18	128.60
12	B	1791	A	C5-C6-N6	-10.70	115.14	123.70
12	B	2290	G	N3-C2-N2	10.70	127.39	119.90
12	B	2515	C	C6-N1-C2	10.70	124.58	120.30
12	B	530	G	C5-C6-O6	-10.70	122.18	128.60
12	B	737	C	O4'-C1'-N1	10.69	116.75	108.20
12	B	1493	C	N3-C4-C5	-10.70	117.62	121.90
12	B	2082	A	C6-N1-C2	-10.70	112.18	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1061	U	O4'-C1'-N1	10.69	116.75	108.20
12	B	1368	G	O4'-C1'-N9	10.69	116.75	108.20
12	B	1619	G	N1-C6-O6	10.69	126.32	119.90
12	B	1568	G	N1-C6-O6	10.69	126.31	119.90
12	B	2505	G	C5-C6-N1	-10.69	106.16	111.50
11	A	17	C	N3-C4-N4	10.69	125.48	118.00
12	B	163	C	C6-N1-C2	-10.69	116.03	120.30
12	B	444	C	N3-C2-O2	10.69	129.38	121.90
12	B	1047	G	N1-C6-O6	10.69	126.31	119.90
12	B	1023	U	C5-C4-O4	-10.68	119.49	125.90
12	B	1816	C	C2-N3-C4	10.68	125.24	119.90
12	B	2085	U	O4'-C1'-N1	10.68	116.75	108.20
12	B	1774	C	C6-N1-C2	-10.68	116.03	120.30
12	B	1817	G	N1-C2-N3	-10.68	117.49	123.90
12	B	1287	A	C5-C6-N6	-10.68	115.16	123.70
12	B	753	A	C5-C6-N6	-10.67	115.16	123.70
12	B	2315	G	N1-C6-O6	10.67	126.31	119.90
12	B	2821	A	C4-C5-C6	10.67	122.34	117.00
12	B	760	G	N1-C6-O6	10.67	126.30	119.90
12	B	821	A	C5-N7-C8	10.67	109.23	103.90
12	B	1493	C	C2-N1-C1'	10.67	130.54	118.80
12	B	2559	C	N3-C4-N4	10.67	125.47	118.00
12	B	648	G	C6-C5-N7	-10.67	124.00	130.40
12	B	1320	C	C4-C5-C6	10.67	122.73	117.40
12	B	1209	U	O4'-C1'-N1	10.66	116.73	108.20
12	B	2352	A	C6-C5-N7	-10.66	124.83	132.30
12	B	2810	A	N1-C6-N6	10.66	125.00	118.60
12	B	323	C	N3-C4-C5	-10.66	117.64	121.90
12	B	956	G	O4'-C1'-N9	10.66	116.73	108.20
12	B	1654	A	N1-C6-N6	10.66	125.00	118.60
12	B	1186	G	C5-C6-O6	-10.66	122.20	128.60
12	B	1988	G	C8-N9-C4	-10.66	102.14	106.40
12	B	1773	A	C2-N3-C4	10.65	115.93	110.60
12	B	2170	A	C5-C6-N6	-10.65	115.18	123.70
12	B	2900	A	N1-C6-N6	10.65	124.99	118.60
12	B	675	A	N1-C2-N3	10.65	134.62	129.30
12	B	2785	C	O4'-C1'-N1	10.65	116.72	108.20
12	B	763	G	N3-C2-N2	10.65	127.35	119.90
21	K	49	ARG	NE-CZ-NH2	-10.65	114.98	120.30
12	B	855	G	N1-C2-N3	-10.64	117.51	123.90
12	B	1810	A	C5-C6-N6	-10.64	115.19	123.70
12	B	1897	G	O4'-C1'-N9	10.64	116.72	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1311	G	C6-C5-N7	-10.64	124.02	130.40
12	B	2461	A	C5-N7-C8	10.64	109.22	103.90
11	A	47	C	C5-C4-N4	-10.64	112.75	120.20
12	B	108	G	N3-C4-C5	10.64	133.92	128.60
12	B	1005	C	O4'-C1'-N1	10.64	116.71	108.20
12	B	1432	G	N1-C6-O6	10.64	126.28	119.90
12	B	1586	A	C5-C6-N6	-10.64	115.19	123.70
12	B	2603	G	C5-C6-O6	-10.64	122.22	128.60
12	B	2715	C	C5-C6-N1	10.64	126.32	121.00
12	B	2489	U	N1-C2-O2	-10.64	115.35	122.80
12	B	2688	G	N1-C6-O6	10.64	126.28	119.90
12	B	2433	A	C4-C5-C6	10.63	122.32	117.00
12	B	2851	A	C5-C6-N1	-10.63	112.38	117.70
12	B	1646	C	N3-C4-N4	10.63	125.44	118.00
12	B	1850	G	N1-C6-O6	10.63	126.28	119.90
12	B	2155	U	O4'-C1'-N1	10.63	116.70	108.20
12	B	2607	G	C8-N9-C4	-10.63	102.15	106.40
12	B	1454	C	C6-N1-C1'	-10.63	108.05	120.80
12	B	2035	G	C4-C5-N7	-10.62	106.55	110.80
12	B	2254	C	N3-C4-C5	-10.62	117.65	121.90
12	B	2367	G	C8-N9-C4	-10.62	102.15	106.40
12	B	2056	G	N1-C2-N3	-10.62	117.53	123.90
12	B	952	G	N1-C6-O6	10.62	126.27	119.90
12	B	827	U	C5-C6-N1	-10.62	117.39	122.70
12	B	721	A	N1-C6-N6	10.62	124.97	118.60
12	B	1211	C	O4'-C1'-N1	10.62	116.69	108.20
12	B	2612	C	O4'-C1'-N1	10.62	116.69	108.20
12	B	375	G	N1-C6-O6	10.62	126.27	119.90
12	B	1361	G	N1-C2-N3	-10.62	117.53	123.90
12	B	2469	A	C4-C5-C6	10.62	122.31	117.00
12	B	1930	G	C4-C5-N7	-10.61	106.55	110.80
12	B	2194	U	O4'-C1'-N1	10.61	116.69	108.20
12	B	1569	A	C5-C6-N6	-10.61	115.21	123.70
12	B	2731	G	O4'-C1'-N9	10.61	116.69	108.20
11	A	20	G	N9-C4-C5	10.60	109.64	105.40
12	B	452	G	N3-C2-N2	10.60	127.32	119.90
12	B	1350	C	C5-C4-N4	-10.60	112.78	120.20
12	B	552	U	O4'-C1'-N1	10.60	116.68	108.20
12	B	969	G	N1-C6-O6	10.60	126.26	119.90
12	B	2767	C	N3-C4-N4	10.60	125.42	118.00
11	A	72	G	N1-C6-O6	10.59	126.26	119.90
12	B	653	U	O4'-C1'-N1	10.59	116.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	763	G	N7-C8-N9	10.59	118.40	113.10
12	B	806	C	O4'-C1'-N1	10.59	116.67	108.20
12	B	2065	C	C5-C4-N4	-10.59	112.79	120.20
12	B	1836	C	N3-C4-C5	-10.59	117.67	121.90
12	B	80	G	N1-C6-O6	10.59	126.25	119.90
12	B	1987	A	C5-N7-C8	10.58	109.19	103.90
12	B	2133	G	N1-C6-O6	10.58	126.25	119.90
12	B	2378	A	C5-C6-N6	-10.58	115.23	123.70
12	B	2636	C	O4'-C1'-N1	10.58	116.67	108.20
12	B	238	C	N3-C4-N4	10.58	125.41	118.00
12	B	711	G	N1-C2-N3	-10.58	117.55	123.90
12	B	2130	U	C2-N1-C1'	10.58	130.40	117.70
12	B	752	A	C5-C6-N1	-10.58	112.41	117.70
12	B	1671	U	O4'-C1'-N1	10.58	116.66	108.20
12	B	1244	A	C2-N3-C4	10.58	115.89	110.60
11	A	45	A	N1-C6-N6	10.57	124.94	118.60
12	B	623	C	N3-C4-C5	-10.57	117.67	121.90
12	B	1278	C	N3-C4-N4	10.57	125.40	118.00
12	B	1690	A	C4-C5-C6	10.57	122.29	117.00
12	B	439	A	N7-C8-N9	10.57	119.08	113.80
12	B	1149	G	N1-C6-O6	10.57	126.24	119.90
12	B	2125	G	C5-C6-N1	-10.57	106.22	111.50
12	B	1245	G	O4'-C1'-N9	10.57	116.66	108.20
12	B	2472	G	C5-C6-O6	-10.57	122.26	128.60
12	B	2742	G	C2-N3-C4	10.56	117.18	111.90
12	B	2397	G	N1-C6-O6	10.56	126.24	119.90
12	B	1393	A	C5-C6-N1	-10.56	112.42	117.70
12	B	1761	C	O4'-C1'-N1	10.56	116.65	108.20
11	A	101	A	C5-C6-N6	-10.56	115.25	123.70
12	B	152	A	C4-C5-C6	10.56	122.28	117.00
12	B	689	A	C5-C6-N6	-10.56	115.25	123.70
12	B	1298	C	N3-C4-C5	-10.56	117.68	121.90
12	B	1609	A	C4-C5-C6	10.56	122.28	117.00
12	B	2119	A	C4-C5-C6	10.56	122.28	117.00
12	B	1760	C	O4'-C1'-N1	10.56	116.64	108.20
12	B	2209	G	C5-C6-N1	-10.55	106.22	111.50
12	B	2451	A	N7-C8-N9	-10.55	108.52	113.80
12	B	333	G	C6-C5-N7	-10.55	124.07	130.40
12	B	1475	G	C8-N9-C4	-10.55	102.18	106.40
12	B	55	G	C5-C6-O6	-10.55	122.27	128.60
12	B	205	G	N1-C6-O6	10.55	126.23	119.90
12	B	710	U	O4'-C1'-N1	10.55	116.64	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1268	A	N1-C6-N6	10.55	124.93	118.60
12	B	1480	C	O4'-C1'-N1	10.55	116.64	108.20
12	B	1573	G	N3-C4-N9	-10.55	119.67	126.00
12	B	708	G	C8-N9-C4	10.54	110.62	106.40
12	B	2080	A	N1-C6-N6	10.54	124.93	118.60
11	A	110	C	O4'-C1'-N1	10.54	116.63	108.20
12	B	538	A	C5-C6-N1	-10.54	112.43	117.70
12	B	727	A	C4-C5-C6	10.54	122.27	117.00
12	B	1354	A	C5-C6-N6	-10.54	115.27	123.70
12	B	2077	A	C6-C5-N7	-10.54	124.92	132.30
12	B	2328	A	C5-C6-N1	-10.54	112.43	117.70
12	B	2748	A	C5-C6-N6	-10.54	115.27	123.70
12	B	2774	C	N3-C4-N4	10.54	125.38	118.00
12	B	2180	U	O4'-C1'-N1	10.54	116.63	108.20
12	B	253	C	C5-C4-N4	-10.54	112.82	120.20
12	B	2209	G	C4-C5-C6	10.54	125.12	118.80
12	B	1679	A	C4-C5-C6	10.54	122.27	117.00
12	B	2850	A	O4'-C1'-N9	10.54	116.63	108.20
12	B	1041	G	C5-C6-O6	-10.54	122.28	128.60
12	B	265	A	C5-C6-N6	-10.53	115.27	123.70
12	B	1827	U	C3'-C2'-C1'	10.53	109.93	101.50
11	A	41	G	C5-C6-O6	-10.53	122.28	128.60
12	B	2083	G	C5-C6-O6	-10.53	122.28	128.60
12	B	408	G	N1-C6-O6	10.53	126.22	119.90
12	B	804	A	C5-C6-N6	-10.53	115.28	123.70
2	1	26	PHE	CB-CG-CD2	-10.53	113.43	120.80
11	A	109	A	N1-C6-N6	10.53	124.92	118.60
12	B	2830	C	N3-C4-N4	10.53	125.37	118.00
10	9	76	ARG	NE-CZ-NH2	-10.53	115.04	120.30
12	B	1256	G	C4-C5-C6	10.53	125.11	118.80
12	B	1575	C	N3-C4-C5	-10.53	117.69	121.90
12	B	1779	U	O4'-C1'-N1	10.53	116.62	108.20
12	B	2381	A	C5-C6-N1	-10.53	112.44	117.70
12	B	2894	G	N3-C2-N2	10.53	127.27	119.90
12	B	1521	G	N1-C6-O6	10.52	126.21	119.90
12	B	2244	U	O4'-C1'-N1	10.52	116.62	108.20
12	B	427	U	C6-N1-C2	-10.52	114.69	121.00
12	B	763	G	C5-C6-O6	-10.52	122.29	128.60
12	B	1987	A	C4-C5-N7	-10.52	105.44	110.70
11	A	47	C	O4'-C1'-N1	10.52	116.61	108.20
12	B	9	G	C4-C5-C6	10.52	125.11	118.80
12	B	258	G	N1-C6-O6	10.52	126.21	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1884	G	N1-C6-O6	10.52	126.21	119.90
12	B	1865	U	O4'-C1'-N1	10.52	116.61	108.20
12	B	544	C	N3-C4-C5	-10.52	117.69	121.90
25	O	9	ARG	NE-CZ-NH2	10.52	125.56	120.30
12	B	867	C	C5-C4-N4	-10.51	112.84	120.20
12	B	1940	U	C1'-O4'-C4'	-10.51	101.49	109.90
12	B	2490	G	C8-N9-C4	-10.51	102.19	106.40
12	B	2126	A	C5-C6-N1	-10.51	112.44	117.70
12	B	2531	A	C2-N3-C4	10.51	115.86	110.60
12	B	2895	G	C5-C6-O6	-10.51	122.29	128.60
12	B	143	C	C6-N1-C2	-10.51	116.10	120.30
12	B	903	C	N3-C4-N4	10.51	125.36	118.00
12	B	1777	U	O4'-C1'-N1	10.51	116.61	108.20
12	B	215	G	C8-N9-C4	-10.51	102.20	106.40
12	B	2366	A	N7-C8-N9	-10.51	108.55	113.80
12	B	523	C	O4'-C1'-N1	10.50	116.60	108.20
12	B	1413	A	O4'-C1'-N9	10.50	116.60	108.20
12	B	409	G	N1-C6-O6	10.50	126.20	119.90
12	B	663	G	N3-C2-N2	10.50	127.25	119.90
12	B	2743	U	O4'-C1'-N1	10.49	116.59	108.20
12	B	1083	U	O4'-C1'-N1	10.49	116.59	108.20
12	B	1301	A	C5-C6-N6	-10.49	115.31	123.70
12	B	2757	A	C4-C5-C6	10.49	122.25	117.00
12	B	2210	U	C5-C4-O4	-10.49	119.61	125.90
12	B	589	U	N1-C2-N3	-10.49	108.61	114.90
12	B	2679	A	C5-C6-N6	-10.49	115.31	123.70
12	B	2679	A	C5-N7-C8	10.49	109.14	103.90
12	B	1566	A	N1-C6-N6	10.48	124.89	118.60
12	B	2486	C	O4'-C1'-N1	10.48	116.59	108.20
12	B	33	C	N3-C4-N4	10.48	125.34	118.00
12	B	1987	A	N1-C2-N3	10.48	134.54	129.30
12	B	2649	C	N3-C4-N4	10.48	125.34	118.00
12	B	1527	G	C5-C6-O6	-10.48	122.31	128.60
12	B	2352	A	C6-N1-C2	10.48	124.89	118.60
12	B	430	A	C8-N9-C4	-10.48	101.61	105.80
12	B	2830	C	C4-C5-C6	10.48	122.64	117.40
12	B	1124	G	O4'-C1'-N9	10.47	116.58	108.20
12	B	527	C	C2-N1-C1'	10.47	130.32	118.80
12	B	894	U	O4'-C1'-N1	10.47	116.58	108.20
12	B	1311	G	C5-C6-O6	-10.47	122.32	128.60
12	B	1040	A	C4-C5-C6	10.47	122.23	117.00
12	B	2388	A	C5-C6-N1	-10.47	112.47	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2836	U	O4'-C1'-N1	10.47	116.58	108.20
12	B	1551	A	C5-C6-N6	-10.47	115.33	123.70
12	B	1582	C	O4'-C1'-N1	10.47	116.57	108.20
12	B	1663	G	C5-C6-O6	-10.47	122.32	128.60
12	B	928	A	C4-C5-C6	10.46	122.23	117.00
12	B	2119	A	N1-C6-N6	10.46	124.88	118.60
12	B	2624	G	C5-C6-N1	-10.46	106.27	111.50
33	Y	78	PHE	CB-CG-CD1	-10.46	113.47	120.80
12	B	593	U	N1-C2-O2	10.46	130.12	122.80
12	B	1801	A	C4-C5-N7	-10.46	105.47	110.70
12	B	2115	G	O4'-C1'-N9	10.46	116.57	108.20
12	B	2334	U	O4'-C1'-N1	10.46	116.57	108.20
12	B	2439	A	O4'-C1'-N9	10.46	116.57	108.20
12	B	2560	A	C5-N7-C8	10.46	109.13	103.90
12	B	2503	A	C4-C5-C6	10.46	122.23	117.00
12	B	793	A	N7-C8-N9	10.46	119.03	113.80
12	B	1821	A	N1-C6-N6	10.46	124.87	118.60
12	B	704	G	N1-C6-O6	10.45	126.17	119.90
12	B	2002	G	N1-C6-O6	10.45	126.17	119.90
12	B	1090	A	C8-N9-C4	-10.45	101.62	105.80
12	B	1958	C	N3-C4-C5	-10.45	117.72	121.90
12	B	431	U	O4'-C1'-N1	10.45	116.56	108.20
12	B	1863	G	N3-C2-N2	10.45	127.22	119.90
12	B	2510	C	O4'-C1'-N1	10.45	116.56	108.20
12	B	174	U	C5-C4-O4	-10.45	119.63	125.90
12	B	2161	C	C6-N1-C2	-10.45	116.12	120.30
12	B	2465	C	C1'-O4'-C4'	10.45	118.26	109.90
11	A	51	G	N1-C6-O6	10.44	126.17	119.90
12	B	1738	G	N1-C2-N3	-10.45	117.63	123.90
12	B	2565	A	C5-C6-N1	-10.45	112.48	117.70
12	B	1644	C	C5-C4-N4	-10.44	112.89	120.20
12	B	1670	C	N3-C4-C5	-10.44	117.72	121.90
12	B	1361	G	N1-C6-O6	10.44	126.16	119.90
12	B	1362	C	N3-C4-C5	-10.44	117.72	121.90
12	B	2610	C	N3-C4-C5	-10.44	117.72	121.90
12	B	2398	U	O4'-C1'-N1	10.44	116.55	108.20
12	B	633	A	C4-C5-N7	-10.44	105.48	110.70
12	B	1259	G	C6-C5-N7	-10.44	124.14	130.40
12	B	2706	A	O4'-C1'-N9	10.44	116.55	108.20
12	B	1764	C	N3-C4-C5	-10.44	117.73	121.90
12	B	2598	A	C5-N7-C8	10.44	109.12	103.90
11	A	65	U	O4'-C1'-N1	10.43	116.55	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2311	A	C6-N1-C2	10.43	124.86	118.60
12	B	1705	A	C5-C6-N6	-10.43	115.35	123.70
12	B	2780	G	O4'-C1'-N9	10.43	116.55	108.20
12	B	325	G	N1-C6-O6	10.43	126.16	119.90
12	B	2229	U	O4'-C1'-N1	10.43	116.54	108.20
12	B	2346	A	N7-C8-N9	-10.43	108.58	113.80
12	B	2857	G	N1-C6-O6	10.43	126.16	119.90
12	B	2857	G	N7-C8-N9	-10.43	107.89	113.10
12	B	336	C	O4'-C1'-N1	10.43	116.54	108.20
12	B	2433	A	O4'-C1'-N9	10.43	116.54	108.20
12	B	236	C	C5-C6-N1	10.42	126.21	121.00
12	B	493	G	O4'-C1'-N9	10.42	116.54	108.20
12	B	848	C	O4'-C1'-N1	10.42	116.54	108.20
12	B	2077	A	O4'-C1'-N9	10.42	116.54	108.20
12	B	2400	G	C5-C6-O6	-10.42	122.35	128.60
11	A	50	A	N1-C6-N6	10.42	124.85	118.60
12	B	2248	C	O4'-C1'-N1	10.42	116.53	108.20
12	B	990	A	N1-C6-N6	10.42	124.85	118.60
12	B	1018	U	N1-C2-N3	-10.42	108.65	114.90
12	B	1885	A	C4-C5-C6	10.42	122.21	117.00
12	B	2195	U	C5-C6-N1	-10.42	117.49	122.70
12	B	2900	A	N9-C4-C5	-10.42	101.63	105.80
16	F	142	TYR	CB-CG-CD1	10.42	127.25	121.00
12	B	1525	A	C5-C6-N1	-10.41	112.49	117.70
12	B	2531	A	N3-C4-C5	-10.41	119.51	126.80
12	B	2780	G	C5-N7-C8	10.41	109.51	104.30
11	A	106	G	C6-N1-C2	10.41	131.35	125.10
12	B	2608	G	N3-C2-N2	10.41	127.19	119.90
12	B	48	G	C5-C6-O6	-10.41	122.36	128.60
12	B	467	G	N1-C6-O6	10.41	126.14	119.90
12	B	1577	C	C5-C4-N4	-10.41	112.92	120.20
12	B	2652	C	N3-C4-C5	-10.41	117.74	121.90
12	B	354	A	N1-C6-N6	10.40	124.84	118.60
12	B	461	C	C5-C6-N1	10.40	126.20	121.00
12	B	1618	A	C4-C5-N7	-10.40	105.50	110.70
12	B	2738	A	C5-C6-N1	-10.40	112.50	117.70
12	B	2015	A	N1-C2-N3	10.40	134.50	129.30
12	B	918	A	C5-C6-N1	-10.39	112.50	117.70
12	B	1038	G	N1-C6-O6	10.39	126.14	119.90
12	B	1671	U	C4-C5-C6	-10.39	113.46	119.70
12	B	66	C	C5-C6-N1	-10.39	115.80	121.00
12	B	329	G	N1-C2-N3	-10.39	117.67	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1839	G	N3-C4-C5	-10.39	123.41	128.60
12	B	164	C	N3-C4-C5	-10.39	117.75	121.90
12	B	1470	A	C5-C6-N1	-10.39	112.51	117.70
12	B	2284	A	C5-C6-N1	-10.39	112.51	117.70
12	B	2332	C	N3-C4-C5	-10.39	117.75	121.90
12	B	2595	G	O4'-C1'-N9	10.39	116.51	108.20
12	B	1049	C	C6-N1-C2	-10.38	116.15	120.30
12	B	2368	C	N3-C4-N4	10.39	125.27	118.00
12	B	2534	A	C8-N9-C4	-10.38	101.65	105.80
12	B	2538	C	N3-C4-N4	10.38	125.27	118.00
12	B	508	A	C2-N3-C4	-10.38	105.41	110.60
12	B	2195	U	N3-C4-O4	10.38	126.67	119.40
12	B	2579	C	C2-N3-C4	-10.38	114.71	119.90
12	B	1307	A	N1-C6-N6	10.38	124.83	118.60
12	B	873	C	C4-C5-C6	10.37	122.59	117.40
12	B	2443	C	O4'-C1'-N1	10.38	116.50	108.20
12	B	2840	C	O4'-C1'-N1	10.38	116.50	108.20
12	B	325	G	C5-N7-C8	10.37	109.49	104.30
12	B	1721	G	N1-C6-O6	10.37	126.12	119.90
12	B	2574	G	C2-N3-C4	10.37	117.09	111.90
12	B	116	C	C2-N3-C4	10.37	125.08	119.90
12	B	1048	A	C6-C5-N7	-10.37	125.04	132.30
12	B	1815	A	C6-C5-N7	-10.37	125.04	132.30
12	B	1830	C	N3-C4-N4	10.37	125.26	118.00
12	B	15	G	N1-C6-O6	10.36	126.12	119.90
12	B	1347	A	N1-C6-N6	10.36	124.82	118.60
12	B	1972	G	N7-C8-N9	10.36	118.28	113.10
12	B	862	G	C5-C6-O6	-10.36	122.38	128.60
12	B	2549	G	N1-C2-N3	-10.36	117.68	123.90
12	B	2624	G	N1-C6-O6	10.36	126.12	119.90
12	B	2105	U	C4-C5-C6	10.36	125.92	119.70
12	B	1268	A	C4-C5-C6	10.36	122.18	117.00
12	B	761	A	C6-N1-C2	-10.35	112.39	118.60
12	B	2163	A	O4'-C1'-N9	10.35	116.48	108.20
12	B	58	G	C5-C6-O6	-10.35	122.39	128.60
12	B	419	U	O4'-C1'-N1	10.35	116.48	108.20
12	B	560	C	C6-N1-C2	-10.35	116.16	120.30
12	B	1019	U	O4'-C1'-N1	10.35	116.48	108.20
12	B	417	C	N3-C4-C5	-10.35	117.76	121.90
12	B	640	C	O4'-C1'-N1	10.35	116.48	108.20
12	B	2037	A	N1-C6-N6	10.34	124.81	118.60
12	B	2176	A	C8-N9-C4	-10.34	101.66	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2268	A	C5-C6-N1	-10.34	112.53	117.70
12	B	204	A	N1-C6-N6	10.34	124.80	118.60
12	B	332	A	O4'-C1'-N9	10.34	116.47	108.20
12	B	1279	G	N1-C6-O6	10.34	126.10	119.90
14	D	46	ARG	NE-CZ-NH1	10.34	125.47	120.30
12	B	2065	C	N3-C4-N4	10.34	125.23	118.00
12	B	863	A	C5-C6-N6	-10.33	115.43	123.70
12	B	2459	A	N1-C6-N6	10.33	124.80	118.60
12	B	952	G	C8-N9-C4	-10.33	102.27	106.40
12	B	1158	C	N3-C4-C5	-10.33	117.77	121.90
12	B	1410	G	O4'-C1'-N9	10.33	116.47	108.20
12	B	1766	G	N7-C8-N9	-10.33	107.94	113.10
12	B	595	C	N3-C4-C5	-10.33	117.77	121.90
12	B	820	A	N1-C6-N6	10.33	124.80	118.60
12	B	2367	G	N1-C6-O6	10.33	126.10	119.90
12	B	2761	A	C5-C6-N1	-10.33	112.53	117.70
12	B	2532	G	N3-C2-N2	10.33	127.13	119.90
11	A	47	C	C5-C6-N1	10.33	126.16	121.00
12	B	1504	A	N1-C6-N6	10.33	124.80	118.60
12	B	2154	A	N1-C6-N6	10.33	124.80	118.60
12	B	2303	G	N1-C6-O6	10.33	126.10	119.90
12	B	748	G	C5-C6-O6	-10.32	122.41	128.60
12	B	855	G	N1-C6-O6	10.32	126.09	119.90
12	B	1109	C	O4'-C1'-N1	10.32	116.46	108.20
12	B	1204	A	N1-C6-N6	10.32	124.79	118.60
12	B	1684	G	O4'-C1'-N9	10.32	116.46	108.20
12	B	375	G	O4'-C1'-N9	10.32	116.46	108.20
12	B	1954	G	N1-C6-O6	10.32	126.09	119.90
12	B	714	U	C5-C6-N1	10.32	127.86	122.70
12	B	260	G	C5-C6-O6	-10.32	122.41	128.60
12	B	251	A	C5-C6-N6	-10.31	115.45	123.70
12	B	447	A	C5-C6-N6	-10.31	115.45	123.70
12	B	1370	C	C4-C5-C6	10.31	122.56	117.40
12	B	309	A	N1-C6-N6	10.31	124.79	118.60
12	B	723	C	O4'-C1'-N1	10.31	116.45	108.20
12	B	743	A	N1-C6-N6	10.31	124.79	118.60
12	B	1152	C	C5-C6-N1	10.31	126.16	121.00
12	B	2176	A	N1-C2-N3	10.31	134.46	129.30
12	B	2380	C	N3-C4-N4	10.31	125.22	118.00
12	B	2381	A	C4-C5-C6	10.31	122.16	117.00
12	B	1186	G	N1-C6-O6	10.31	126.08	119.90
12	B	2011	U	C5-C4-O4	-10.30	119.72	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2282	G	P-O3'-C3'	10.31	132.07	119.70
12	B	2315	G	C5-C6-O6	-10.30	122.42	128.60
12	B	1173	U	C3'-C2'-C1'	10.30	109.74	101.50
12	B	945	A	C2-N3-C4	-10.30	105.45	110.60
12	B	737	C	N3-C4-C5	-10.30	117.78	121.90
12	B	984	A	C5-C6-N1	-10.30	112.55	117.70
12	B	1757	A	O4'-C1'-N9	10.30	116.44	108.20
12	B	62	U	N3-C4-C5	-10.29	108.42	114.60
12	B	917	A	N1-C2-N3	10.29	134.45	129.30
12	B	1814	G	C5-C6-O6	-10.29	122.42	128.60
12	B	1946	U	C2-N3-C4	-10.29	120.82	127.00
12	B	2869	G	N3-C2-N2	10.29	127.11	119.90
12	B	1159	U	O4'-C1'-N1	10.29	116.43	108.20
12	B	1664	A	C4-C5-C6	10.29	122.15	117.00
12	B	2711	A	C5-C6-N6	-10.29	115.47	123.70
12	B	2645	G	N3-C4-C5	10.29	133.74	128.60
4	3	49	ARG	NE-CZ-NH1	10.29	125.44	120.30
12	B	1285	A	C2-N3-C4	-10.28	105.46	110.60
12	B	1329	U	C5-C4-O4	-10.29	119.73	125.90
12	B	1597	A	N1-C6-N6	10.29	124.77	118.60
12	B	694	U	O4'-C1'-N1	10.28	116.42	108.20
12	B	794	A	N1-C6-N6	10.28	124.77	118.60
12	B	1707	G	N7-C8-N9	10.28	118.24	113.10
12	B	130	C	C5-C4-N4	-10.28	113.00	120.20
12	B	417	C	O4'-C1'-N1	10.28	116.42	108.20
12	B	595	C	N3-C4-N4	10.28	125.19	118.00
12	B	1031	G	N3-C2-N2	10.28	127.10	119.90
12	B	1162	G	N1-C6-O6	10.28	126.07	119.90
12	B	630	G	N1-C6-O6	10.28	126.07	119.90
12	B	1122	G	N1-C6-O6	10.28	126.07	119.90
11	A	33	G	N1-C2-N3	-10.28	117.73	123.90
11	A	7	G	O4'-C1'-N9	10.28	116.42	108.20
12	B	524	G	C6-N1-C2	10.27	131.26	125.10
12	B	1612	C	C5-C4-N4	-10.27	113.01	120.20
12	B	2753	A	N1-C6-N6	10.27	124.76	118.60
12	B	2505	G	C4-C5-N7	-10.27	106.69	110.80
12	B	1106	G	C5-C6-O6	-10.27	122.44	128.60
12	B	2621	G	C8-N9-C4	10.27	110.51	106.40
12	B	631	A	C4-C5-N7	-10.27	105.57	110.70
12	B	1106	G	N1-C6-O6	10.27	126.06	119.90
12	B	2126	A	N1-C6-N6	10.27	124.76	118.60
12	B	979	A	C4-C5-C6	10.27	122.13	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	45	A	O4'-C1'-N9	10.27	116.41	108.20
12	B	1069	A	C8-N9-C4	-10.27	101.69	105.80
12	B	1763	G	C5-C6-O6	-10.26	122.44	128.60
12	B	2885	G	C4-C5-N7	-10.26	106.70	110.80
11	A	64	G	N1-C6-O6	10.26	126.06	119.90
12	B	1434	A	O4'-C1'-N9	10.26	116.41	108.20
12	B	1032	A	O4'-C1'-N9	10.26	116.40	108.20
12	B	2297	A	C4-C5-C6	10.26	122.13	117.00
12	B	1524	G	C5-C6-O6	-10.25	122.45	128.60
12	B	1875	G	P-O3'-C3'	10.25	132.00	119.70
12	B	2364	C	C4-C5-C6	10.25	122.53	117.40
12	B	2028	U	O4'-C1'-N1	10.25	116.40	108.20
12	B	242	G	N3-C2-N2	10.25	127.07	119.90
12	B	1855	U	C5-C6-N1	-10.25	117.58	122.70
12	B	1371	G	O4'-C1'-N9	10.25	116.40	108.20
12	B	1010	A	C5-C6-N6	-10.25	115.50	123.70
12	B	496	G	N3-C4-C5	10.24	133.72	128.60
12	B	163	C	O4'-C1'-N1	10.24	116.39	108.20
12	B	2854	G	O4'-C1'-N9	10.24	116.39	108.20
12	B	114	U	N3-C4-C5	10.24	120.74	114.60
12	B	227	A	N1-C6-N6	10.24	124.74	118.60
12	B	672	C	O4'-C1'-N1	10.24	116.39	108.20
12	B	996	A	N9-C4-C5	-10.24	101.70	105.80
12	B	1606	C	C6-N1-C2	-10.24	116.20	120.30
12	B	1665	A	O4'-C1'-N9	10.24	116.39	108.20
12	B	186	G	O4'-C1'-N9	10.23	116.39	108.20
12	B	1844	C	N1-C2-O2	10.23	125.04	118.90
12	B	2635	A	N1-C6-N6	10.23	124.74	118.60
11	A	21	G	N1-C6-O6	10.23	126.04	119.90
12	B	10	A	C8-N9-C4	10.23	109.89	105.80
12	B	1235	G	N1-C6-O6	10.23	126.04	119.90
12	B	116	C	N3-C4-N4	10.23	125.16	118.00
12	B	565	C	O4'-C1'-N1	10.23	116.38	108.20
12	B	675	A	N7-C8-N9	-10.23	108.69	113.80
12	B	1679	A	C5-C6-N6	-10.23	115.52	123.70
12	B	2015	A	C4-C5-C6	10.23	122.11	117.00
12	B	389	G	N3-C2-N2	10.22	127.06	119.90
12	B	909	A	N1-C6-N6	10.22	124.73	118.60
12	B	2080	A	C4-C5-C6	10.22	122.11	117.00
12	B	2866	U	C5-C6-N1	10.22	127.81	122.70
12	B	95	A	C5-C6-N6	-10.22	115.52	123.70
10	9	231	PHE	CB-CG-CD1	10.22	127.95	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	975	A	C4-C5-C6	10.22	122.11	117.00
12	B	1505	A	N9-C4-C5	10.22	109.89	105.80
12	B	1618	A	N1-C6-N6	10.22	124.73	118.60
12	B	1557	C	N3-C4-N4	10.22	125.15	118.00
12	B	733	G	P-O5'-C5'	10.22	137.25	120.90
12	B	1162	G	O4'-C1'-N9	10.22	116.37	108.20
12	B	2018	G	O4'-C1'-N9	10.22	116.37	108.20
12	B	207	A	C5-C6-N6	-10.21	115.53	123.70
12	B	1160	G	C8-N9-C4	-10.21	102.31	106.40
12	B	1436	G	N3-C4-C5	10.21	133.71	128.60
12	B	841	G	N1-C6-O6	10.21	126.03	119.90
12	B	1978	A	C5-N7-C8	10.21	109.00	103.90
12	B	212	G	O4'-C1'-N9	10.21	116.36	108.20
12	B	1535	A	O4'-C1'-N9	10.21	116.36	108.20
12	B	1086	A	C4-C5-C6	10.20	122.10	117.00
12	B	1847	A	C5-C6-N6	-10.20	115.54	123.70
12	B	2168	G	C8-N9-C4	-10.20	102.32	106.40
12	B	2319	G	C5-N7-C8	-10.20	99.20	104.30
12	B	655	A	C2-N3-C4	-10.20	105.50	110.60
12	B	1178	C	N3-C4-N4	10.20	125.14	118.00
12	B	1259	G	C5-C6-N1	-10.20	106.40	111.50
12	B	1735	A	C5-C6-N6	-10.20	115.54	123.70
11	A	81	G	C4-C5-N7	10.20	114.88	110.80
12	B	1916	A	N9-C4-C5	10.20	109.88	105.80
12	B	2340	A	C5-C6-N6	-10.20	115.54	123.70
4	3	48	TYR	CB-CG-CD2	-10.20	114.88	121.00
12	B	2334	U	C5-C4-O4	10.19	132.02	125.90
12	B	1059	G	C5-C6-N1	-10.19	106.40	111.50
12	B	1123	C	N3-C4-C5	-10.19	117.82	121.90
12	B	1265	A	C6-N1-C2	-10.19	112.48	118.60
12	B	1416	G	C2-N3-C4	-10.19	106.80	111.90
11	A	42	C	N3-C4-C5	-10.19	117.82	121.90
12	B	198	C	C4-C5-C6	10.19	122.50	117.40
12	B	858	G	N1-C6-O6	10.19	126.01	119.90
12	B	2509	G	O4'-C1'-N9	10.19	116.35	108.20
12	B	2861	U	O4'-C1'-N1	10.19	116.35	108.20
12	B	449	A	C4-C5-C6	10.19	122.09	117.00
12	B	659	G	N1-C6-O6	10.19	126.01	119.90
12	B	2826	A	N1-C6-N6	10.19	124.71	118.60
12	B	2864	G	O4'-C1'-N9	10.19	116.35	108.20
12	B	1237	A	N7-C8-N9	10.18	118.89	113.80
12	B	1085	A	C8-N9-C4	-10.18	101.73	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2161	C	N3-C4-N4	10.18	125.13	118.00
12	B	2224	G	N1-C6-O6	10.18	126.01	119.90
12	B	2503	A	C4-C5-N7	-10.18	105.61	110.70
12	B	2672	U	C5-C4-O4	-10.18	119.79	125.90
12	B	279	A	N1-C2-N3	10.18	134.39	129.30
12	B	507	A	N1-C2-N3	10.18	134.39	129.30
12	B	617	G	N1-C6-O6	10.18	126.00	119.90
11	A	43	C	C6-N1-C2	-10.17	116.23	120.30
12	B	2633	G	O4'-C1'-N9	10.17	116.34	108.20
12	B	505	A	O4'-C1'-N9	10.17	116.34	108.20
12	B	910	A	C5-C6-N6	-10.17	115.56	123.70
12	B	1008	A	C5-N7-C8	10.17	108.98	103.90
6	5	56	ASP	CB-CG-OD2	10.16	127.45	118.30
12	B	472	A	C5-C6-N6	-10.16	115.57	123.70
12	B	1319	C	N3-C4-C5	-10.16	117.83	121.90
12	B	539	G	N3-C2-N2	10.16	127.01	119.90
12	B	1496	A	C5-C6-N1	-10.16	112.62	117.70
12	B	1838	C	N3-C4-N4	10.16	125.11	118.00
12	B	1899	A	N1-C6-N6	10.16	124.70	118.60
12	B	2004	G	C5-C6-O6	-10.16	122.50	128.60
12	B	2228	G	O4'-C1'-N9	10.16	116.33	108.20
12	B	169	G	C5-C6-N1	-10.16	106.42	111.50
12	B	186	G	N1-C6-O6	10.16	126.00	119.90
12	B	334	C	C5-C4-N4	-10.16	113.09	120.20
12	B	181	A	C8-N9-C4	-10.16	101.74	105.80
12	B	307	G	C6-C5-N7	-10.16	124.31	130.40
12	B	1905	C	N3-C4-C5	-10.16	117.84	121.90
12	B	2322	A	C5-C6-N1	-10.16	112.62	117.70
12	B	758	C	O4'-C1'-N1	10.16	116.33	108.20
12	B	2089	C	O4'-C1'-N1	10.16	116.33	108.20
12	B	1528	A	C4-C5-C6	10.15	122.08	117.00
12	B	649	G	C5-C6-O6	-10.15	122.51	128.60
12	B	1373	A	C6-C5-N7	-10.15	125.19	132.30
12	B	1654	A	N1-C2-N3	10.15	134.38	129.30
12	B	1787	A	C4-C5-C6	10.15	122.08	117.00
12	B	2858	C	C5-C6-N1	10.15	126.08	121.00
12	B	1244	A	C4-C5-C6	10.15	122.07	117.00
12	B	213	A	N1-C6-N6	10.15	124.69	118.60
12	B	1991	U	O4'-C1'-N1	10.15	116.32	108.20
20	J	116	ARG	NE-CZ-NH2	-10.15	115.23	120.30
12	B	1402	U	C5-C4-O4	-10.14	119.81	125.90
1	0	45	PHE	CB-CG-CD1	10.14	127.90	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	995	C	N3-C4-N4	10.14	125.10	118.00
12	B	1310	G	O4'-C1'-N9	10.14	116.31	108.20
12	B	1662	U	O4'-C1'-N1	10.14	116.31	108.20
12	B	41	C	N3-C4-C5	-10.14	117.85	121.90
12	B	193	U	O4'-C1'-N1	10.13	116.31	108.20
12	B	891	G	C5-C6-N1	-10.13	106.43	111.50
12	B	2242	G	C5-C6-O6	-10.13	122.52	128.60
12	B	2287	A	N1-C6-N6	10.13	124.68	118.60
12	B	2430	A	C4-C5-C6	10.13	122.06	117.00
12	B	2501	C	N3-C4-C5	-10.13	117.85	121.90
12	B	221	A	C4-C5-C6	10.12	122.06	117.00
12	B	522	A	C5-N7-C8	10.12	108.96	103.90
11	A	53	A	C4-C5-C6	10.12	122.06	117.00
12	B	1563	U	O4'-C1'-N1	10.12	116.30	108.20
12	B	783	A	C5-C6-N1	-10.11	112.64	117.70
12	B	912	C	N1-C2-O2	-10.12	112.83	118.90
12	B	252	G	C6-C5-N7	-10.11	124.33	130.40
12	B	816	C	O4'-C1'-N1	10.11	116.29	108.20
12	B	941	A	C4-C5-C6	10.11	122.06	117.00
12	B	2310	C	N1-C2-O2	10.11	124.97	118.90
12	B	843	G	C6-N1-C2	10.11	131.17	125.10
12	B	2211	A	N1-C6-N6	10.11	124.67	118.60
12	B	529	A	N1-C6-N6	10.11	124.67	118.60
12	B	2706	A	C5-C6-N1	-10.11	112.65	117.70
12	B	466	A	N1-C2-N3	-10.11	124.25	129.30
12	B	1265	A	N1-C2-N3	10.11	134.35	129.30
12	B	1414	C	C2-N3-C4	10.11	124.95	119.90
12	B	2703	C	C4-C5-C6	-10.11	112.35	117.40
12	B	460	A	N1-C6-N6	10.10	124.66	118.60
12	B	2068	U	C5-C4-O4	-10.10	119.84	125.90
12	B	338	G	N1-C6-O6	10.10	125.96	119.90
12	B	201	C	O4'-C1'-N1	10.10	116.28	108.20
12	B	1010	A	C4-C5-C6	10.10	122.05	117.00
12	B	2572	A	C8-N9-C4	-10.10	101.76	105.80
12	B	2869	G	O4'-C1'-N9	10.10	116.28	108.20
12	B	726	G	C4-C5-N7	-10.10	106.76	110.80
12	B	1505	A	C4-C5-C6	10.10	122.05	117.00
12	B	2795	C	O4'-C1'-N1	10.09	116.28	108.20
12	B	109	C	N3-C4-N4	10.09	125.06	118.00
12	B	1661	G	O4'-C1'-N9	10.09	116.27	108.20
12	B	455	C	P-O3'-C3'	-10.09	107.59	119.70
12	B	1311	G	N3-C4-C5	-10.09	123.56	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2600	A	C5-C6-N1	-10.09	112.66	117.70
12	B	59	U	C5-C6-N1	10.09	127.74	122.70
12	B	825	A	C8-N9-C4	-10.09	101.77	105.80
12	B	2224	G	N3-C2-N2	10.09	126.96	119.90
12	B	2240	U	O4'-C1'-N1	10.09	116.27	108.20
12	B	862	G	N3-C2-N2	10.08	126.96	119.90
12	B	1037	G	N1-C6-O6	10.08	125.95	119.90
12	B	2021	C	C2-N3-C4	10.08	124.94	119.90
12	B	289	G	O4'-C1'-N9	10.08	116.26	108.20
12	B	577	G	N1-C2-N3	-10.07	117.86	123.90
12	B	2207	C	O4'-C1'-N1	10.07	116.26	108.20
12	B	2537	U	P-O5'-C5'	10.07	137.02	120.90
12	B	1862	G	C5-C6-O6	-10.07	122.56	128.60
12	B	2646	C	N1-C2-O2	-10.07	112.86	118.90
12	B	507	A	N1-C6-N6	10.07	124.64	118.60
12	B	1732	C	N3-C4-C5	-10.07	117.87	121.90
12	B	2848	G	C5-C6-O6	-10.07	122.56	128.60
12	B	2330	G	N1-C2-N2	-10.07	107.14	116.20
12	B	2810	A	N9-C4-C5	10.07	109.83	105.80
12	B	2856	A	C5-C6-N6	-10.07	115.64	123.70
11	A	60	C	C4-C5-C6	10.07	122.43	117.40
12	B	386	G	N1-C6-O6	10.07	125.94	119.90
12	B	534	U	O4'-C1'-N1	10.07	116.25	108.20
12	B	2885	G	C5-N7-C8	10.07	109.33	104.30
15	E	170	ARG	NE-CZ-NH1	-10.07	115.27	120.30
12	B	675	A	C5-N7-C8	10.06	108.93	103.90
12	B	1223	G	C8-N9-C4	-10.06	102.37	106.40
12	B	110	G	N1-C6-O6	10.06	125.94	119.90
12	B	914	G	C5-N7-C8	10.06	109.33	104.30
12	B	1050	A	C5-N7-C8	10.06	108.93	103.90
12	B	2494	G	N1-C6-O6	10.06	125.94	119.90
12	B	2677	G	C8-N9-C4	-10.06	102.38	106.40
12	B	293	U	C5-C6-N1	10.06	127.73	122.70
12	B	1455	G	N3-C2-N2	10.06	126.94	119.90
12	B	2150	C	C5-C6-N1	10.06	126.03	121.00
12	B	2315	G	O4'-C1'-N9	10.06	116.25	108.20
12	B	81	G	N1-C6-O6	10.05	125.93	119.90
12	B	1699	G	C5-C6-O6	-10.05	122.57	128.60
12	B	178	G	C4-C5-N7	-10.05	106.78	110.80
12	B	341	C	N3-C4-C5	-10.05	117.88	121.90
12	B	2279	G	C6-C5-N7	-10.05	124.37	130.40
12	B	1827	U	C5-C6-N1	10.05	127.72	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2596	U	O4'-C1'-N1	10.05	116.24	108.20
12	B	199	A	C5-C6-N6	-10.05	115.66	123.70
12	B	711	G	N3-C2-N2	10.04	126.93	119.90
12	B	1484	U	N3-C4-O4	10.04	126.43	119.40
12	B	2033	A	C4-C5-N7	-10.04	105.68	110.70
12	B	1814	G	N1-C2-N3	-10.04	117.88	123.90
12	B	2424	C	C6-N1-C2	-10.04	116.28	120.30
12	B	974	G	O4'-C1'-N9	10.04	116.23	108.20
12	B	1392	A	C5-C6-N1	-10.04	112.68	117.70
12	B	2045	C	C6-N1-C2	-10.04	116.28	120.30
12	B	1028	A	N1-C6-N6	10.04	124.62	118.60
12	B	194	G	C8-N9-C4	-10.04	102.39	106.40
12	B	581	C	P-O5'-C5'	10.04	136.96	120.90
12	B	1057	A	C5-N7-C8	10.03	108.92	103.90
12	B	1711	A	O4'-C1'-N9	10.03	116.22	108.20
12	B	2451	A	O4'-C1'-N9	10.03	116.22	108.20
12	B	2666	C	C6-N1-C1'	-10.03	108.76	120.80
12	B	440	C	O4'-C1'-N1	10.03	116.22	108.20
12	B	282	A	C5-C6-N1	-10.03	112.69	117.70
12	B	2070	A	C5-C6-N1	-10.03	112.69	117.70
12	B	2724	U	O4'-C1'-N1	10.03	116.22	108.20
12	B	2870	C	O4'-C1'-N1	10.03	116.22	108.20
11	A	88	C	O4'-C1'-N1	10.02	116.22	108.20
12	B	2032	G	C5-C6-O6	-10.02	122.59	128.60
12	B	539	G	N1-C6-O6	10.02	125.91	119.90
12	B	592	A	C4-C5-C6	10.02	122.01	117.00
12	B	654	A	C5-C6-N6	-10.02	115.69	123.70
12	B	1284	A	C5-C6-N6	-10.02	115.69	123.70
12	B	2300	C	C6-N1-C2	-10.02	116.29	120.30
12	B	2674	G	C5-C6-N1	-10.02	106.49	111.50
12	B	1067	A	O4'-C1'-N9	10.02	116.21	108.20
12	B	2056	G	C2-N3-C4	10.02	116.91	111.90
12	B	2547	A	O4'-C1'-N9	10.02	116.21	108.20
12	B	1297	C	N3-C4-N4	10.01	125.01	118.00
12	B	1613	G	N9-C4-C5	-10.01	101.39	105.40
12	B	2412	A	C5-C6-N6	-10.01	115.69	123.70
12	B	2474	U	O4'-C1'-N1	10.01	116.21	108.20
12	B	2631	G	C6-C5-N7	-10.01	124.39	130.40
12	B	1385	A	C4-C5-C6	10.01	122.00	117.00
12	B	1286	A	C5-C6-N1	-10.01	112.70	117.70
12	B	2063	C	N3-C4-N4	10.01	125.01	118.00
12	B	281	C	C4-C5-C6	10.01	122.40	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2418	A	O4'-C1'-N9	10.00	116.20	108.20
12	B	2812	G	C5-C6-O6	-10.00	122.60	128.60
12	B	30	G	C5-C6-O6	-10.00	122.60	128.60
12	B	368	A	N1-C2-N3	10.00	134.30	129.30
12	B	392	U	C5-C4-O4	-10.00	119.90	125.90
12	B	951	C	O4'-C1'-N1	10.00	116.20	108.20
12	B	1495	A	N1-C6-N6	10.00	124.60	118.60
12	B	2201	G	N1-C6-O6	10.00	125.90	119.90
12	B	2585	U	O4'-C1'-N1	10.00	116.20	108.20
12	B	142	A	O4'-C1'-N9	10.00	116.20	108.20
12	B	1590	A	C5-C6-N1	-10.00	112.70	117.70
12	B	2200	C	O4'-C1'-N1	10.00	116.20	108.20
12	B	2591	C	N3-C4-C5	-9.99	117.90	121.90
12	B	636	G	N1-C6-O6	9.99	125.90	119.90
12	B	1269	A	C8-N9-C4	-9.99	101.80	105.80
12	B	724	U	O4'-C1'-N1	9.99	116.19	108.20
12	B	1927	A	C5-C6-N6	-9.99	115.71	123.70
12	B	532	A	N1-C2-N3	-9.99	124.31	129.30
12	B	1480	C	C2-N3-C4	9.99	124.89	119.90
12	B	1496	A	C6-C5-N7	-9.99	125.31	132.30
12	B	2208	C	N3-C4-C5	-9.99	117.90	121.90
12	B	2451	A	N1-C6-N6	9.99	124.59	118.60
11	A	103	U	O4'-C1'-N1	9.99	116.19	108.20
12	B	699	A	N1-C6-N6	9.99	124.59	118.60
12	B	2589	A	N1-C6-N6	9.99	124.59	118.60
12	B	1880	U	O4'-C1'-N1	9.98	116.19	108.20
12	B	467	G	C5-C6-O6	-9.98	122.61	128.60
12	B	840	C	C5-C4-N4	-9.98	113.21	120.20
12	B	916	G	C5-C6-N1	-9.98	106.51	111.50
12	B	765	C	O4'-C1'-N1	9.98	116.19	108.20
12	B	1414	C	O4'-C1'-N1	9.98	116.19	108.20
12	B	2590	A	C4-C5-C6	9.98	121.99	117.00
12	B	2749	A	N1-C6-N6	9.98	124.59	118.60
12	B	2884	U	O4'-C1'-N1	9.98	116.18	108.20
12	B	700	G	N1-C6-O6	9.98	125.89	119.90
12	B	1017	G	N1-C6-O6	9.98	125.89	119.90
12	B	1599	U	C5-C6-N1	9.98	127.69	122.70
12	B	83	A	N1-C6-N6	9.97	124.58	118.60
12	B	1032	A	N1-C2-N3	-9.97	124.31	129.30
12	B	2147	A	C4-C5-C6	9.97	121.99	117.00
12	B	2432	A	C4-C5-C6	9.97	121.99	117.00
11	A	66	A	P-O3'-C3'	9.97	131.66	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1430	G	C5-C6-N1	-9.97	106.51	111.50
12	B	2014	A	C4-C5-C6	9.97	121.99	117.00
12	B	706	A	C4-C5-C6	9.97	121.98	117.00
12	B	1448	G	N1-C6-O6	9.97	125.88	119.90
12	B	2648	G	C6-N1-C2	9.97	131.08	125.10
12	B	402	A	C8-N9-C4	-9.97	101.81	105.80
12	B	950	G	C5-C6-O6	-9.96	122.62	128.60
12	B	195	A	N1-C6-N6	9.96	124.58	118.60
12	B	1041	G	C6-C5-N7	-9.96	124.42	130.40
12	B	2691	C	O4'-C1'-N1	9.96	116.17	108.20
12	B	1276	A	C8-N9-C4	-9.96	101.82	105.80
12	B	1954	G	C8-N9-C4	9.96	110.38	106.40
12	B	2452	C	C6-N1-C2	-9.96	116.32	120.30
12	B	2310	C	N3-C2-O2	-9.96	114.93	121.90
11	A	23	G	C5-C6-O6	-9.95	122.63	128.60
12	B	152	A	C5-C6-N1	-9.95	112.72	117.70
12	B	871	U	C4-C5-C6	9.95	125.67	119.70
12	B	2645	G	C4-C5-N7	9.95	114.78	110.80
27	Q	69	ARG	NE-CZ-NH1	-9.95	115.33	120.30
12	B	1268	A	C5-N7-C8	9.95	108.87	103.90
12	B	1274	A	C5-C6-N1	-9.95	112.73	117.70
12	B	1407	G	C4-C5-N7	-9.95	106.82	110.80
12	B	1759	A	N9-C4-C5	9.94	109.78	105.80
12	B	1990	C	N1-C2-N3	9.95	126.16	119.20
11	A	103	U	N3-C4-O4	9.94	126.36	119.40
12	B	1547	C	N3-C4-C5	-9.94	117.92	121.90
12	B	1910	G	C5-C6-O6	-9.94	122.64	128.60
12	B	1348	C	C4-C5-C6	9.94	122.37	117.40
12	B	1502	A	C5-C6-N6	-9.94	115.75	123.70
12	B	2077	A	C5-C6-N1	-9.94	112.73	117.70
12	B	2410	G	N7-C8-N9	-9.94	108.13	113.10
12	B	2093	G	N9-C4-C5	9.94	109.37	105.40
12	B	2112	G	C5-C6-O6	-9.94	122.64	128.60
12	B	1044	C	N3-C4-C5	-9.93	117.93	121.90
12	B	1649	G	O4'-C1'-N9	9.93	116.15	108.20
12	B	2727	A	C5-C6-N1	-9.93	112.73	117.70
12	B	5	A	N1-C6-N6	9.93	124.56	118.60
12	B	1230	A	C8-N9-C4	-9.93	101.83	105.80
12	B	1266	G	C6-C5-N7	-9.93	124.44	130.40
12	B	1980	G	N3-C2-N2	9.93	126.85	119.90
12	B	908	C	O4'-C1'-N1	9.93	116.14	108.20
12	B	1727	C	N3-C4-N4	9.93	124.95	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1115	G	N7-C8-N9	-9.92	108.14	113.10
12	B	1682	G	N9-C4-C5	-9.92	101.43	105.40
11	A	36	C	N3-C4-C5	-9.92	117.93	121.90
12	B	2466	C	C6-N1-C2	-9.92	116.33	120.30
12	B	2553	G	C5-C6-O6	-9.92	122.65	128.60
12	B	191	A	C2-N3-C4	-9.92	105.64	110.60
12	B	439	A	C8-N9-C4	-9.92	101.83	105.80
12	B	1074	G	N1-C6-O6	9.92	125.85	119.90
12	B	1260	A	C5-C6-N6	-9.92	115.77	123.70
12	B	1317	G	C2-N3-C4	9.92	116.86	111.90
12	B	1683	U	O4'-C1'-N1	9.92	116.13	108.20
12	B	1906	G	N1-C6-O6	9.92	125.85	119.90
12	B	307	G	C5-C6-N1	-9.91	106.54	111.50
12	B	2885	G	O4'-C1'-N9	9.91	116.13	108.20
12	B	319	G	C5-N7-C8	9.91	109.26	104.30
12	B	964	C	O4'-C1'-N1	9.91	116.13	108.20
12	B	1618	A	N9-C4-C5	9.91	109.77	105.80
12	B	2184	A	C5-C6-N6	-9.91	115.77	123.70
12	B	2830	C	O4'-C1'-N1	9.91	116.13	108.20
12	B	2651	C	C5-C6-N1	9.91	125.95	121.00
12	B	1572	A	C4-C5-C6	9.91	121.95	117.00
12	B	2454	G	O4'-C1'-N9	9.91	116.13	108.20
12	B	2802	G	C6-C5-N7	-9.91	124.46	130.40
12	B	245	G	C6-C5-N7	-9.90	124.46	130.40
11	A	100	G	N1-C6-O6	9.90	125.84	119.90
12	B	670	A	C4-C5-C6	9.90	121.95	117.00
12	B	1276	A	C5-C6-N6	-9.90	115.78	123.70
11	A	14	U	C5-C6-N1	9.90	127.65	122.70
12	B	1518	C	O4'-C1'-N1	9.90	116.12	108.20
12	B	2019	A	N1-C6-N6	9.90	124.54	118.60
12	B	42	A	C4-C5-C6	9.90	121.95	117.00
12	B	273	G	C2-N3-C4	9.90	116.85	111.90
12	B	1725	U	C5-C6-N1	9.90	127.65	122.70
12	B	1896	G	C5-C6-O6	-9.90	122.66	128.60
12	B	2814	A	O4'-C1'-N9	9.90	116.12	108.20
12	B	665	U	O4'-C1'-N1	9.89	116.11	108.20
12	B	692	C	O4'-C1'-N1	9.89	116.11	108.20
12	B	808	G	N1-C6-O6	9.89	125.84	119.90
12	B	1929	G	P-O3'-C3'	9.89	131.57	119.70
12	B	368	A	N9-C4-C5	9.89	109.76	105.80
12	B	736	C	O4'-C1'-N1	9.89	116.11	108.20
12	B	2876	G	O4'-C1'-N9	9.89	116.11	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1230	A	O4'-C1'-N9	9.89	116.11	108.20
12	B	2424	C	N3-C4-C5	-9.89	117.94	121.90
12	B	2597	G	C8-N9-C4	-9.89	102.44	106.40
12	B	890	C	O4'-C1'-N1	9.88	116.11	108.20
12	B	2059	A	C8-N9-C4	-9.89	101.85	105.80
12	B	1580	A	C5-N7-C8	9.88	108.84	103.90
12	B	27	G	N3-C2-N2	9.88	126.82	119.90
12	B	2297	A	N1-C6-N6	9.88	124.53	118.60
12	B	256	A	O4'-C1'-N9	9.88	116.10	108.20
12	B	1070	A	C5-C6-N1	-9.88	112.76	117.70
12	B	1305	C	N3-C4-N4	9.88	124.91	118.00
12	B	2039	U	O4'-C1'-N1	9.88	116.10	108.20
12	B	2264	C	O4'-C1'-N1	9.88	116.10	108.20
12	B	2770	G	C5-C6-N1	-9.88	106.56	111.50
12	B	841	G	C5-C6-O6	-9.88	122.67	128.60
12	B	2796	U	C5-C6-N1	9.88	127.64	122.70
12	B	169	G	O4'-C1'-N9	9.87	116.10	108.20
12	B	421	C	O4'-C1'-N1	9.87	116.09	108.20
12	B	1073	A	C5-N7-C8	9.87	108.83	103.90
12	B	1091	G	C5-N7-C8	9.87	109.23	104.30
12	B	1179	G	C5-C6-N1	-9.87	106.56	111.50
12	B	1930	G	N9-C4-C5	9.87	109.35	105.40
12	B	2358	A	N1-C2-N3	-9.87	124.36	129.30
12	B	2521	C	N3-C4-N4	9.87	124.91	118.00
12	B	107	G	C4-C5-C6	9.87	124.72	118.80
12	B	2168	G	C5-C6-N1	-9.86	106.57	111.50
12	B	469	G	C5-C6-O6	-9.86	122.68	128.60
12	B	696	G	C5-C6-O6	-9.86	122.68	128.60
12	B	2670	A	C4-C5-N7	-9.86	105.77	110.70
12	B	370	G	N9-C4-C5	-9.86	101.46	105.40
12	B	1165	A	N1-C6-N6	9.86	124.51	118.60
12	B	1358	G	C2-N3-C4	9.86	116.83	111.90
12	B	845	A	O4'-C1'-N9	9.86	116.08	108.20
12	B	1684	G	N1-C6-O6	9.85	125.81	119.90
10	9	311	TYR	CB-CG-CD1	-9.85	115.09	121.00
12	B	893	C	O4'-C1'-N1	9.85	116.08	108.20
12	B	1436	G	N3-C2-N2	9.85	126.80	119.90
12	B	1711	A	C5-C6-N1	-9.85	112.77	117.70
12	B	2041	U	C5-C4-O4	-9.85	119.99	125.90
12	B	2631	G	O4'-C1'-N9	9.85	116.08	108.20
11	A	33	G	C2-N3-C4	9.85	116.83	111.90
12	B	391	A	P-O5'-C5'	9.85	136.66	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1840	G	C5-C6-O6	-9.85	122.69	128.60
12	B	92	U	O4'-C1'-N1	9.85	116.08	108.20
12	B	1929	G	N3-C2-N2	9.85	126.79	119.90
12	B	2063	C	O4'-C1'-N1	9.85	116.08	108.20
12	B	438	G	C4-C5-N7	9.85	114.74	110.80
12	B	1909	C	N3-C4-N4	9.85	124.89	118.00
12	B	2796	U	O4'-C1'-N1	9.85	116.08	108.20
12	B	2601	C	P-O3'-C3'	9.85	131.51	119.70
12	B	2627	G	P-O3'-C3'	9.84	131.51	119.70
12	B	1545	A	C6-C5-N7	-9.84	125.41	132.30
12	B	2675	A	O4'-C1'-N9	9.84	116.07	108.20
11	A	61	G	C4-C5-N7	-9.84	106.87	110.80
12	B	612	G	N1-C6-O6	9.84	125.80	119.90
12	B	2051	A	C5-N7-C8	9.84	108.82	103.90
12	B	2455	G	N1-C6-O6	9.84	125.80	119.90
12	B	2572	A	O4'-C1'-N9	9.84	116.07	108.20
12	B	817	C	N3-C4-C5	-9.83	117.97	121.90
12	B	2420	C	N3-C4-C5	-9.83	117.97	121.90
12	B	2601	C	C5-C4-N4	-9.83	113.32	120.20
12	B	370	G	C5-N7-C8	9.83	109.22	104.30
12	B	515	A	N7-C8-N9	9.83	118.72	113.80
12	B	540	C	O4'-C1'-N1	9.83	116.06	108.20
11	A	56	G	C5-C6-O6	-9.82	122.70	128.60
12	B	558	U	N3-C4-C5	-9.82	108.71	114.60
12	B	868	U	N1-C2-N3	-9.82	109.00	114.90
12	B	1009	A	C8-N9-C4	-9.82	101.87	105.80
12	B	1576	U	O4'-C1'-N1	9.82	116.06	108.20
12	B	1627	G	C5-C6-O6	-9.82	122.71	128.60
12	B	1916	A	C8-N9-C4	-9.82	101.87	105.80
12	B	169	G	C6-C5-N7	-9.82	124.51	130.40
12	B	438	G	C6-C5-N7	-9.82	124.51	130.40
12	B	1175	A	N3-C4-C5	-9.82	119.92	126.80
12	B	1403	A	C5-N7-C8	9.82	108.81	103.90
12	B	371	A	N1-C2-N3	9.82	134.21	129.30
12	B	110	G	C5-N7-C8	9.81	109.21	104.30
12	B	1475	G	N3-C4-C5	-9.81	123.69	128.60
12	B	1967	C	C5-C4-N4	-9.81	113.33	120.20
12	B	125	A	N1-C6-N6	9.81	124.49	118.60
12	B	1740	G	N1-C6-O6	9.81	125.79	119.90
12	B	2301	C	O4'-C1'-N1	9.81	116.05	108.20
12	B	2851	A	C8-N9-C4	-9.81	101.88	105.80
12	B	1988	G	N9-C4-C5	9.81	109.32	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	812	C	N3-C4-N4	9.81	124.87	118.00
12	B	1541	C	C6-N1-C2	-9.81	116.38	120.30
12	B	1941	C	O4'-C1'-N1	9.81	116.05	108.20
12	B	674	G	C6-C5-N7	-9.80	124.52	130.40
12	B	2009	A	C4-C5-N7	-9.80	105.80	110.70
11	A	11	C	O4'-C1'-N1	9.80	116.04	108.20
12	B	8	C	O4'-C1'-N1	9.80	116.04	108.20
12	B	11	C	C5-C4-N4	-9.80	113.34	120.20
12	B	2576	G	C5-C6-O6	-9.80	122.72	128.60
11	A	17	C	C5-C6-N1	9.80	125.90	121.00
11	A	57	A	C6-C5-N7	-9.80	125.44	132.30
12	B	190	A	C5-N7-C8	9.80	108.80	103.90
12	B	238	C	N3-C4-C5	-9.80	117.98	121.90
12	B	1256	G	C5-C6-N1	-9.80	106.60	111.50
12	B	584	C	O4'-C1'-N1	9.80	116.04	108.20
12	B	655	A	C5-C6-N6	-9.79	115.86	123.70
12	B	1326	U	C5-C6-N1	9.79	127.60	122.70
12	B	1475	G	C4-C5-N7	-9.79	106.88	110.80
12	B	2806	C	O4'-C1'-N1	9.79	116.03	108.20
12	B	867	C	N3-C4-N4	9.79	124.85	118.00
12	B	962	G	N1-C6-O6	9.79	125.78	119.90
12	B	997	G	C5-C6-O6	-9.79	122.72	128.60
12	B	1690	A	O4'-C1'-N9	9.79	116.03	108.20
12	B	2880	C	O4'-C1'-N1	9.79	116.03	108.20
12	B	2631	G	N1-C6-O6	9.79	125.78	119.90
12	B	810	U	C2-N3-C4	9.79	132.87	127.00
12	B	1710	G	C5-N7-C8	9.79	109.19	104.30
12	B	2089	C	C5-C6-N1	9.79	125.89	121.00
12	B	2113	U	C5-C6-N1	9.79	127.59	122.70
12	B	2463	C	O4'-C1'-N1	9.79	116.03	108.20
12	B	1450	G	O4'-C1'-N9	9.79	116.03	108.20
12	B	912	C	O4'-C1'-N1	9.78	116.03	108.20
12	B	2317	A	N1-C6-N6	9.78	124.47	118.60
12	B	2691	C	C2-N3-C4	9.78	124.79	119.90
12	B	739	A	N1-C6-N6	9.78	124.47	118.60
12	B	1660	G	N1-C6-O6	9.78	125.77	119.90
12	B	2249	U	P-O5'-C5'	9.78	136.54	120.90
13	C	111	ALA	CB-CA-C	9.78	124.76	110.10
12	B	63	A	C5-C6-N1	-9.77	112.82	117.70
12	B	874	G	O4'-C1'-N9	9.77	116.02	108.20
12	B	1755	A	C4-C5-C6	9.77	121.89	117.00
12	B	101	A	C5-C6-N6	-9.77	115.89	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1009	A	C5-C6-N1	-9.77	112.82	117.70
12	B	1692	U	N1-C2-O2	-9.77	115.96	122.80
12	B	2630	G	O4'-C1'-N9	9.77	116.01	108.20
12	B	346	A	N1-C6-N6	9.77	124.46	118.60
12	B	2895	G	C2-N3-C4	9.77	116.78	111.90
12	B	2744	G	N1-C2-N3	-9.76	118.04	123.90
12	B	1983	G	N3-C4-C5	9.76	133.48	128.60
12	B	242	G	C4-C5-C6	9.76	124.66	118.80
12	B	2670	A	C4-C5-C6	9.76	121.88	117.00
12	B	497	A	C5-C6-N1	-9.76	112.82	117.70
12	B	1065	U	N1-C2-O2	-9.76	115.97	122.80
12	B	1217	U	O4'-C1'-N1	9.76	116.00	108.20
12	B	1480	C	C4-C5-C6	9.76	122.28	117.40
12	B	1870	C	P-O3'-C3'	9.76	131.41	119.70
12	B	2736	A	C5-C6-N6	-9.76	115.89	123.70
12	B	1068	G	C5-C6-O6	-9.75	122.75	128.60
12	B	1650	A	C5-C6-N1	-9.75	112.82	117.70
12	B	1759	A	C4-C5-C6	9.75	121.88	117.00
12	B	255	A	C5-C6-N6	-9.75	115.90	123.70
12	B	1371	G	C5-C6-O6	-9.75	122.75	128.60
12	B	2371	G	N1-C6-O6	9.75	125.75	119.90
32	W	93	ARG	NE-CZ-NH2	-9.75	115.42	120.30
12	B	426	C	C5-C6-N1	9.75	125.87	121.00
12	B	1707	G	C8-N9-C4	-9.75	102.50	106.40
12	B	1731	G	C5-C6-O6	-9.75	122.75	128.60
12	B	2403	C	N3-C4-C5	-9.75	118.00	121.90
11	A	66	A	C5-C6-N6	-9.74	115.91	123.70
12	B	1155	A	C5-C6-N6	-9.74	115.91	123.70
12	B	1448	G	C8-N9-C4	-9.74	102.50	106.40
12	B	2572	A	N9-C4-C5	9.74	109.70	105.80
12	B	2692	G	O4'-C1'-N9	9.74	115.99	108.20
11	A	39	A	N1-C6-N6	9.74	124.44	118.60
12	B	750	A	N1-C6-N6	9.74	124.44	118.60
12	B	1754	A	C6-C5-N7	-9.74	125.48	132.30
12	B	1870	C	N3-C4-C5	-9.74	118.00	121.90
12	B	2154	A	C5-C6-N1	-9.74	112.83	117.70
12	B	1538	G	N1-C6-O6	9.74	125.74	119.90
12	B	1801	A	N1-C2-N3	-9.74	124.43	129.30
12	B	2530	A	N1-C6-N6	9.74	124.44	118.60
12	B	121	G	C5-C6-O6	-9.73	122.76	128.60
12	B	1486	U	O4'-C1'-N1	9.73	115.99	108.20
12	B	2129	C	C5-C4-N4	-9.73	113.39	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	375	G	C8-N9-C4	-9.73	102.51	106.40
12	B	2248	C	C6-N1-C2	-9.73	116.41	120.30
12	B	177	G	C5-C6-N1	-9.73	106.64	111.50
12	B	802	A	C5-C6-N1	-9.73	112.83	117.70
12	B	548	G	O4'-C1'-N9	9.73	115.98	108.20
12	B	689	A	N1-C6-N6	9.73	124.44	118.60
12	B	1497	U	C5-C6-N1	9.73	127.56	122.70
12	B	2050	C	O4'-C1'-N1	9.73	115.98	108.20
12	B	2347	C	O4'-C1'-N1	9.73	115.98	108.20
11	A	113	C	O4'-C1'-N1	9.72	115.98	108.20
12	B	508	A	O4'-C1'-N9	9.72	115.98	108.20
12	B	562	U	O4'-C1'-N1	9.72	115.98	108.20
12	B	650	C	N3-C4-C5	-9.72	118.01	121.90
12	B	1499	C	N3-C4-C5	-9.72	118.01	121.90
12	B	1757	A	N1-C6-N6	9.72	124.43	118.60
12	B	141	G	N1-C2-N3	-9.72	118.07	123.90
12	B	2334	U	N3-C4-C5	-9.72	108.77	114.60
12	B	2575	C	O4'-C1'-N1	9.72	115.98	108.20
12	B	231	A	N1-C6-N6	9.72	124.43	118.60
12	B	352	A	N1-C2-N3	9.72	134.16	129.30
12	B	341	C	O4'-C1'-N1	9.72	115.97	108.20
12	B	2027	G	O4'-C1'-N9	9.72	115.97	108.20
12	B	751	A	C5-C6-N6	-9.72	115.93	123.70
12	B	931	U	N3-C4-C5	-9.71	108.77	114.60
12	B	1311	G	C4-C5-C6	9.72	124.63	118.80
12	B	1373	A	C4-C5-C6	9.71	121.86	117.00
12	B	2183	A	O4'-C1'-N9	9.72	115.97	108.20
12	B	1525	A	C2-N3-C4	-9.71	105.74	110.60
11	A	100	G	O4'-C1'-N9	9.71	115.97	108.20
12	B	158	U	O4'-C1'-N1	9.71	115.97	108.20
12	B	480	A	C5-C6-N1	-9.71	112.84	117.70
12	B	522	A	N1-C6-N6	9.71	124.43	118.60
12	B	1000	A	C6-C5-N7	-9.71	125.50	132.30
12	B	1493	C	C5-C6-N1	9.71	125.86	121.00
12	B	2232	C	N3-C4-N4	9.71	124.80	118.00
12	B	2555	U	O4'-C1'-N1	9.71	115.97	108.20
12	B	1608	A	N9-C4-C5	-9.71	101.92	105.80
19	I	126	ARG	NE-CZ-NH2	9.71	125.15	120.30
12	B	1353	A	N1-C6-N6	9.71	124.42	118.60
12	B	1664	A	C5-C6-N6	-9.71	115.93	123.70
12	B	367	G	C6-C5-N7	-9.71	124.58	130.40
12	B	169	G	C4-C5-C6	9.70	124.62	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1292	G	N1-C6-O6	9.71	125.72	119.90
12	B	351	C	C6-N1-C2	9.70	124.18	120.30
12	B	2108	A	C5-C6-N6	-9.70	115.94	123.70
12	B	2243	U	O4'-C1'-N1	9.70	115.96	108.20
12	B	256	A	N1-C6-N6	9.70	124.42	118.60
12	B	1142	A	C4-C5-C6	9.70	121.85	117.00
12	B	1442	U	O4'-C1'-N1	9.70	115.96	108.20
12	B	613	A	N1-C6-N6	9.70	124.42	118.60
12	B	664	G	N1-C6-O6	9.70	125.72	119.90
12	B	1644	C	C4-C5-C6	9.70	122.25	117.40
12	B	385	C	C4-C5-C6	9.69	122.25	117.40
12	B	2627	G	C8-N9-C4	9.69	110.28	106.40
12	B	262	A	C5-C6-N6	-9.69	115.95	123.70
12	B	1455	G	N7-C8-N9	9.69	117.94	113.10
12	B	401	A	N1-C2-N3	-9.69	124.46	129.30
12	B	2899	A	N7-C8-N9	9.69	118.64	113.80
12	B	2324	U	N3-C2-O2	9.68	128.98	122.20
12	B	2409	G	N1-C6-O6	9.68	125.71	119.90
12	B	2831	G	O4'-C1'-N9	9.68	115.94	108.20
12	B	804	A	C8-N9-C4	-9.68	101.93	105.80
12	B	1593	A	C5-C6-N1	-9.68	112.86	117.70
12	B	2691	C	C4-C5-C6	9.68	122.24	117.40
12	B	2534	A	C4-C5-N7	-9.68	105.86	110.70
12	B	274	C	N3-C4-C5	-9.67	118.03	121.90
12	B	261	G	C5-C6-N1	-9.67	106.67	111.50
12	B	1924	C	O4'-C1'-N1	9.67	115.94	108.20
12	B	1250	G	C5-C6-O6	-9.67	122.80	128.60
12	B	1274	A	O4'-C1'-N9	9.67	115.94	108.20
12	B	2209	G	O4'-C1'-N9	9.67	115.94	108.20
12	B	2485	G	C6-C5-N7	-9.67	124.60	130.40
12	B	10	A	N7-C8-N9	-9.67	108.97	113.80
12	B	625	G	C6-C5-N7	-9.67	124.60	130.40
12	B	1123	C	O4'-C1'-N1	9.67	115.93	108.20
12	B	1345	C	C4-C5-C6	9.67	122.23	117.40
12	B	1885	A	C8-N9-C4	-9.66	101.93	105.80
12	B	2019	A	C5-C6-N1	-9.66	112.87	117.70
12	B	2839	G	C6-C5-N7	-9.66	124.60	130.40
12	B	2780	G	C4-C5-N7	-9.66	106.94	110.80
12	B	541	A	N1-C6-N6	9.66	124.39	118.60
12	B	2033	A	O4'-C1'-N9	9.66	115.93	108.20
12	B	29	U	O4'-C1'-N1	9.66	115.92	108.20
12	B	852	U	O4'-C1'-N1	9.66	115.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	218	A	C4-C5-C6	9.65	121.83	117.00
12	B	2541	A	C8-N9-C4	9.65	109.66	105.80
12	B	2806	C	C6-N1-C2	-9.65	116.44	120.30
12	B	2640	G	N1-C6-O6	9.65	125.69	119.90
12	B	473	G	O4'-C1'-N9	9.65	115.92	108.20
12	B	989	G	C5-C6-N1	-9.65	106.67	111.50
12	B	2247	A	O4'-C1'-N9	9.65	115.92	108.20
11	A	67	G	N1-C6-O6	9.65	125.69	119.90
12	B	24	G	N3-C2-N2	9.65	126.65	119.90
12	B	855	G	N9-C4-C5	-9.65	101.54	105.40
12	B	1800	C	C6-N1-C2	-9.65	116.44	120.30
12	B	1857	G	N9-C4-C5	-9.65	101.54	105.40
12	B	2524	G	C5-C6-O6	-9.65	122.81	128.60
11	A	15	A	C5-C6-N6	-9.64	115.98	123.70
12	B	2373	G	C4-C5-C6	9.64	124.59	118.80
12	B	555	G	C8-N9-C4	-9.64	102.54	106.40
12	B	2454	G	N7-C8-N9	-9.64	108.28	113.10
12	B	2644	G	N3-C2-N2	9.64	126.65	119.90
12	B	2748	A	O4'-C1'-N9	9.64	115.91	108.20
12	B	1216	G	N3-C2-N2	9.64	126.65	119.90
12	B	1325	U	O4'-C1'-N1	9.64	115.91	108.20
12	B	1411	U	C5-C6-N1	9.64	127.52	122.70
12	B	1447	C	O4'-C1'-N1	9.64	115.91	108.20
12	B	1926	U	C4-C5-C6	9.64	125.48	119.70
12	B	2441	U	N3-C4-C5	-9.64	108.81	114.60
12	B	2494	G	N3-C2-N2	9.64	126.65	119.90
12	B	2837	A	C5-C6-N1	-9.64	112.88	117.70
12	B	1772	A	C5-C6-N6	-9.64	115.99	123.70
12	B	2437	G	O4'-C1'-N9	9.64	115.91	108.20
12	B	348	A	N9-C4-C5	9.63	109.65	105.80
12	B	1281	G	N1-C6-O6	9.63	125.68	119.90
31	U	81	ARG	NE-CZ-NH1	9.63	125.12	120.30
12	B	1133	A	C8-N9-C4	-9.63	101.95	105.80
12	B	3	U	O4'-C1'-N1	9.63	115.90	108.20
12	B	2534	A	N1-C6-N6	9.63	124.38	118.60
12	B	113	U	O4'-C1'-N1	9.63	115.90	108.20
12	B	2400	G	N1-C6-O6	9.63	125.68	119.90
12	B	2463	C	N3-C4-N4	9.63	124.74	118.00
12	B	1919	A	C4-C5-C6	9.63	121.81	117.00
12	B	236	C	C6-N1-C2	-9.62	116.45	120.30
12	B	1836	C	O4'-C1'-N1	9.62	115.90	108.20
12	B	61	C	C4-C5-C6	9.62	122.21	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	556	A	C5-C6-N6	-9.62	116.00	123.70
12	B	757	G	N1-C2-N3	-9.62	118.13	123.90
12	B	1088	A	C6-C5-N7	-9.62	125.57	132.30
12	B	1358	G	N1-C2-N3	-9.62	118.13	123.90
12	B	1667	G	N3-C2-N2	9.62	126.63	119.90
12	B	2876	G	N1-C6-O6	9.62	125.67	119.90
12	B	2018	G	C6-C5-N7	-9.62	124.63	130.40
12	B	2307	G	C5-C6-O6	-9.62	122.83	128.60
12	B	2774	C	O4'-C1'-N1	9.62	115.89	108.20
12	B	1980	G	N1-C2-N3	-9.62	118.13	123.90
12	B	715	A	C4-C5-C6	9.61	121.81	117.00
12	B	1459	G	N1-C2-N3	-9.61	118.13	123.90
12	B	1568	G	C5-C6-O6	-9.61	122.83	128.60
12	B	1028	A	C5-C6-N1	-9.61	112.89	117.70
12	B	1693	U	C5-C4-O4	-9.61	120.13	125.90
12	B	1346	G	N3-C2-N2	9.61	126.63	119.90
12	B	1630	A	C8-N9-C4	-9.61	101.96	105.80
12	B	2624	G	C4-C5-C6	9.61	124.57	118.80
12	B	225	C	O4'-C1'-N1	9.61	115.89	108.20
12	B	371	A	N1-C6-N6	9.61	124.36	118.60
12	B	650	C	N1-C2-O2	-9.61	113.14	118.90
12	B	634	C	N1-C2-O2	9.60	124.66	118.90
12	B	1573	G	O4'-C1'-N9	9.60	115.88	108.20
12	B	452	G	C6-N1-C2	9.60	130.86	125.10
12	B	1175	A	C5-N7-C8	9.60	108.70	103.90
12	B	1730	C	N3-C4-N4	9.60	124.72	118.00
12	B	1990	C	O4'-C1'-N1	9.60	115.88	108.20
12	B	2208	C	N3-C4-N4	9.60	124.72	118.00
12	B	264	C	N3-C4-C5	-9.60	118.06	121.90
12	B	861	A	C5-C6-N6	-9.60	116.02	123.70
12	B	1049	C	N3-C4-C5	-9.60	118.06	121.90
12	B	2229	U	C5-C6-N1	9.60	127.50	122.70
12	B	2598	A	N1-C6-N6	9.60	124.36	118.60
12	B	2651	C	C5-C4-N4	-9.60	113.48	120.20
12	B	2763	G	N1-C6-O6	9.60	125.66	119.90
12	B	137	U	C2-N3-C4	-9.60	121.24	127.00
12	B	2726	A	C5-C6-N6	-9.60	116.02	123.70
12	B	719	C	C5-C4-N4	-9.60	113.48	120.20
12	B	996	A	C2-N3-C4	-9.60	105.80	110.60
12	B	2078	C	N3-C4-C5	-9.60	118.06	121.90
12	B	2875	C	N3-C4-N4	9.60	124.72	118.00
12	B	272	A	C5-C6-N1	-9.59	112.90	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	823	C	N3-C4-N4	9.59	124.71	118.00
12	B	557	C	O4'-C1'-N1	9.59	115.87	108.20
11	A	2	G	N9-C4-C5	-9.59	101.56	105.40
12	B	761	A	C5-C6-N6	-9.59	116.03	123.70
12	B	2835	A	C8-N9-C4	-9.59	101.97	105.80
12	B	352	A	C5-C6-N1	-9.59	112.91	117.70
12	B	1382	G	C5-C6-O6	-9.59	122.85	128.60
12	B	1730	C	C6-N1-C1'	-9.59	109.30	120.80
12	B	2373	G	N1-C6-O6	9.59	125.65	119.90
12	B	1279	G	C5-C6-O6	-9.58	122.85	128.60
12	B	401	A	C4'-C3'-C2'	-9.58	93.02	102.60
12	B	968	C	C2-N3-C4	9.58	124.69	119.90
12	B	361	G	C5-C6-O6	-9.58	122.85	128.60
12	B	2106	U	N1-C2-N3	-9.58	109.15	114.90
12	B	2154	A	C4-C5-C6	9.58	121.79	117.00
12	B	2048	G	N1-C6-O6	9.57	125.64	119.90
12	B	2110	G	C8-N9-C4	-9.57	102.57	106.40
12	B	2719	G	C5-C6-O6	-9.57	122.86	128.60
12	B	2730	C	O4'-C1'-N1	9.57	115.86	108.20
31	U	93	ARG	NE-CZ-NH1	9.57	125.09	120.30
12	B	26	G	O4'-C1'-N9	9.57	115.85	108.20
12	B	202	U	C6-N1-C2	-9.57	115.26	121.00
12	B	489	G	N1-C2-N3	-9.57	118.16	123.90
12	B	2249	U	C5-C6-N1	9.56	127.48	122.70
12	B	153	U	N3-C4-O4	9.56	126.09	119.40
12	B	370	G	C4-C5-C6	9.56	124.54	118.80
12	B	2488	G	C8-N9-C4	-9.56	102.58	106.40
11	A	110	C	N3-C4-N4	9.56	124.69	118.00
12	B	727	A	C2-N3-C4	-9.56	105.82	110.60
12	B	942	G	N1-C6-O6	9.56	125.64	119.90
12	B	2032	G	O4'-C1'-N9	9.56	115.85	108.20
12	B	1039	A	N1-C6-N6	9.56	124.34	118.60
12	B	2472	G	O4'-C1'-N9	9.56	115.85	108.20
12	B	1399	C	N3-C4-N4	9.56	124.69	118.00
12	B	2608	G	C5-C6-O6	-9.56	122.86	128.60
12	B	791	C	C6-N1-C2	9.56	124.12	120.30
12	B	1361	G	C5-C6-O6	-9.56	122.86	128.60
12	B	1591	A	N1-C2-N3	-9.56	124.52	129.30
12	B	2097	A	O4'-C1'-N9	9.56	115.85	108.20
12	B	1998	A	C5-C6-N1	-9.56	112.92	117.70
27	Q	86	SER	N-CA-CB	9.56	124.84	110.50
12	B	173	A	C5-C6-N6	-9.55	116.06	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	318	C	C2-N3-C4	9.55	124.68	119.90
12	B	1900	A	N1-C2-N3	-9.55	124.52	129.30
12	B	2148	G	N1-C6-O6	9.55	125.63	119.90
12	B	2681	C	O4'-C1'-N1	9.55	115.84	108.20
12	B	8	C	N3-C4-N4	9.55	124.69	118.00
12	B	1327	A	O4'-C1'-N9	9.55	115.84	108.20
12	B	2213	U	C2-N1-C1'	9.55	129.16	117.70
11	A	62	C	O4'-C1'-N1	9.55	115.84	108.20
12	B	836	G	N3-C4-C5	-9.55	123.83	128.60
12	B	1436	G	O4'-C1'-N9	9.55	115.84	108.20
12	B	1922	G	P-O5'-C5'	9.54	136.17	120.90
12	B	1509	A	N1-C6-N6	9.54	124.33	118.60
12	B	1730	C	O4'-C1'-N1	9.54	115.83	108.20
12	B	2655	G	C6-C5-N7	-9.54	124.67	130.40
12	B	479	A	C5-C6-N1	-9.54	112.93	117.70
12	B	2235	G	C5-C6-O6	-9.54	122.88	128.60
12	B	586	A	C4-C5-C6	9.53	121.77	117.00
12	B	731	C	C5-C4-N4	-9.53	113.53	120.20
12	B	177	G	C2-N3-C4	9.53	116.67	111.90
12	B	241	A	C8-N9-C4	-9.53	101.99	105.80
12	B	1514	G	N1-C6-O6	9.53	125.62	119.90
12	B	2733	A	C5-N7-C8	9.53	108.67	103.90
12	B	135	U	N1-C2-N3	-9.53	109.18	114.90
12	B	2891	U	N3-C4-O4	9.53	126.07	119.40
11	A	21	G	O4'-C1'-N9	9.53	115.82	108.20
12	B	1143	A	C4-C5-C6	9.53	121.76	117.00
12	B	999	U	C2-N3-C4	-9.52	121.28	127.00
12	B	21	A	C6-C5-N7	-9.52	125.64	132.30
12	B	1036	G	O4'-C1'-N9	9.52	115.82	108.20
12	B	1074	G	N1-C2-N3	-9.52	118.19	123.90
12	B	1229	C	O4'-C1'-N1	9.52	115.82	108.20
12	B	2459	A	C6-C5-N7	-9.52	125.64	132.30
12	B	447	A	N1-C6-N6	9.52	124.31	118.60
12	B	898	C	C4-C5-C6	9.52	122.16	117.40
12	B	932	U	C6-N1-C1'	-9.52	107.88	121.20
12	B	2665	A	P-O3'-C3'	-9.52	108.28	119.70
12	B	2700	A	C5-C6-N1	-9.52	112.94	117.70
12	B	97	C	N3-C4-C5	-9.52	118.09	121.90
12	B	216	A	C5-C6-N1	-9.52	112.94	117.70
12	B	790	U	C5-C4-O4	-9.52	120.19	125.90
12	B	1367	A	N1-C6-N6	9.52	124.31	118.60
12	B	1866	A	C6-C5-N7	-9.52	125.64	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	646	U	O4'-C1'-N1	9.51	115.81	108.20
12	B	1787	A	C6-C5-N7	-9.51	125.64	132.30
12	B	1988	G	C2-N3-C4	9.51	116.66	111.90
12	B	2273	A	N1-C2-N3	9.51	134.06	129.30
12	B	1369	G	C4-C5-N7	-9.51	107.00	110.80
12	B	1383	A	C5-C6-N6	-9.51	116.09	123.70
12	B	2802	G	O4'-C1'-N9	9.51	115.81	108.20
12	B	2859	G	N3-C2-N2	9.51	126.56	119.90
12	B	1847	A	C5-N7-C8	9.51	108.65	103.90
12	B	1913	A	O4'-C1'-N9	9.51	115.81	108.20
12	B	69	C	N3-C4-N4	9.51	124.65	118.00
12	B	241	A	C5-C6-N6	-9.51	116.10	123.70
12	B	1417	C	C4-C5-C6	9.51	122.15	117.40
12	B	1972	G	C5-N7-C8	-9.51	99.55	104.30
12	B	2182	U	O4'-C1'-N1	9.51	115.81	108.20
12	B	2794	C	C6-N1-C2	9.51	124.10	120.30
12	B	337	C	O4'-C1'-N1	9.50	115.80	108.20
12	B	631	A	C5-C6-N1	-9.50	112.95	117.70
12	B	669	G	C1'-O4'-C4'	9.50	117.50	109.90
12	B	1497	U	C5'-C4'-O4'	9.50	120.50	109.10
12	B	2364	C	O4'-C1'-N1	9.50	115.80	108.20
30	T	73	ARG	NE-CZ-NH1	9.50	125.05	120.30
12	B	2428	G	C5-C6-N1	-9.50	106.75	111.50
12	B	110	G	C4-C5-N7	-9.50	107.00	110.80
12	B	126	A	C2-N3-C4	-9.50	105.85	110.60
12	B	674	G	C1'-O4'-C4'	-9.50	102.30	109.90
12	B	1813	G	C5-C6-O6	-9.50	122.90	128.60
12	B	225	C	C2-N3-C4	9.49	124.65	119.90
12	B	268	C	C5-C6-N1	9.49	125.75	121.00
12	B	276	U	P-O5'-C5'	9.49	136.09	120.90
12	B	840	C	N3-C4-N4	9.49	124.65	118.00
12	B	1606	C	C5-C6-N1	9.49	125.75	121.00
12	B	2100	G	C6-C5-N7	-9.49	124.70	130.40
12	B	830	G	C6-C5-N7	-9.49	124.70	130.40
12	B	2705	A	C5-C6-N6	-9.49	116.11	123.70
12	B	2790	U	C2-N3-C4	9.49	132.70	127.00
12	B	1135	C	O4'-C1'-N1	9.49	115.79	108.20
12	B	2877	G	O4'-C1'-N9	9.49	115.79	108.20
12	B	804	A	O4'-C1'-N9	9.49	115.79	108.20
12	B	88	G	C5-C6-O6	-9.48	122.91	128.60
12	B	679	C	O4'-C1'-N1	9.48	115.79	108.20
12	B	1502	A	O4'-C1'-N9	9.48	115.79	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2154	A	C8-N9-C4	-9.48	102.01	105.80
12	B	2315	G	C8-N9-C4	-9.48	102.61	106.40
12	B	2351	G	N1-C2-N3	-9.48	118.21	123.90
12	B	2531	A	C5-C6-N6	-9.48	116.11	123.70
12	B	763	G	C5-N7-C8	-9.48	99.56	104.30
12	B	1420	A	C4-C5-C6	9.48	121.74	117.00
24	N	94	TYR	CB-CG-CD1	-9.48	115.31	121.00
12	B	137	U	O4'-C1'-N1	9.48	115.78	108.20
12	B	1256	G	N1-C6-O6	9.48	125.59	119.90
12	B	668	A	C5-C6-N1	-9.48	112.96	117.70
11	A	61	G	N1-C6-O6	9.47	125.58	119.90
12	B	1781	U	C5-C4-O4	-9.47	120.22	125.90
12	B	1029	A	C1'-O4'-C4'	-9.47	102.32	109.90
12	B	2088	A	C4-C5-C6	9.47	121.74	117.00
12	B	2229	U	C6-N1-C2	-9.47	115.32	121.00
11	A	86	G	N1-C6-O6	9.47	125.58	119.90
12	B	708	G	N3-C2-N2	9.47	126.53	119.90
12	B	2107	G	C5-C6-N1	-9.47	106.77	111.50
12	B	2679	A	C5-C6-N1	-9.47	112.97	117.70
12	B	920	A	P-O5'-C5'	9.47	136.05	120.90
12	B	1112	G	C2-N3-C4	-9.47	107.17	111.90
12	B	1244	A	N3-C4-C5	-9.47	120.17	126.80
12	B	2822	G	N3-C2-N2	9.47	126.53	119.90
12	B	2870	C	C4-C5-C6	9.47	122.13	117.40
12	B	345	A	N1-C6-N6	9.46	124.28	118.60
12	B	466	A	C5-C6-N6	-9.46	116.13	123.70
12	B	651	G	C5-C6-O6	-9.46	122.92	128.60
12	B	985	C	C5-C4-N4	-9.46	113.58	120.20
12	B	1022	G	C5-C6-O6	-9.46	122.92	128.60
12	B	1243	C	O4'-C1'-N1	9.46	115.77	108.20
12	B	2663	G	C5-C6-O6	-9.46	122.92	128.60
12	B	1997	C	C2-N3-C4	9.46	124.63	119.90
12	B	2245	U	O4'-C1'-N1	9.46	115.77	108.20
4	3	39	ARG	NE-CZ-NH1	9.46	125.03	120.30
11	A	10	G	N1-C6-O6	9.46	125.58	119.90
12	B	264	C	P-O3'-C3'	9.46	131.05	119.70
12	B	875	G	C6-N1-C2	-9.46	119.42	125.10
12	B	1336	A	N9-C4-C5	-9.46	102.02	105.80
12	B	1324	G	C5-C6-O6	-9.46	122.93	128.60
12	B	2046	G	C6-C5-N7	-9.46	124.73	130.40
12	B	2888	C	C5-C4-N4	-9.45	113.58	120.20
11	A	101	A	O4'-C1'-N9	9.45	115.76	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1281	G	C5-C6-O6	-9.45	122.93	128.60
12	B	2015	A	C5-C6-N1	-9.45	112.97	117.70
12	B	491	G	N9-C4-C5	-9.45	101.62	105.40
12	B	545	U	C6-N1-C2	-9.45	115.33	121.00
12	B	520	G	N1-C6-O6	9.45	125.57	119.90
12	B	1096	A	O4'-C1'-N9	9.45	115.76	108.20
12	B	2093	G	N1-C2-N3	-9.45	118.23	123.90
12	B	662	G	C8-N9-C4	-9.45	102.62	106.40
12	B	879	G	N1-C6-O6	9.44	125.57	119.90
12	B	899	A	C3'-C2'-C1'	-9.44	93.94	101.50
12	B	1428	C	N3-C4-N4	9.45	124.61	118.00
12	B	2503	A	N1-C6-N6	9.45	124.27	118.60
12	B	2752	C	N3-C4-C5	-9.45	118.12	121.90
4	3	49	ARG	NE-CZ-NH2	-9.44	115.58	120.30
12	B	74	A	C6-C5-N7	-9.44	125.69	132.30
12	B	1904	G	N3-C2-N2	9.44	126.51	119.90
11	A	37	C	O4'-C1'-N1	9.44	115.75	108.20
12	B	670	A	C8-N9-C4	-9.44	102.03	105.80
12	B	2037	A	C5-C6-N1	-9.44	112.98	117.70
12	B	1310	G	N1-C6-O6	9.44	125.56	119.90
12	B	644	A	C5-C6-N6	-9.43	116.15	123.70
12	B	662	G	C4-C5-N7	9.43	114.57	110.80
12	B	1590	A	N9-C4-C5	9.43	109.57	105.80
12	B	1989	G	C6-C5-N7	-9.43	124.74	130.40
12	B	2874	C	N3-C4-N4	9.43	124.60	118.00
12	B	1877	A	P-O3'-C3'	-9.43	108.39	119.70
12	B	373	U	O4'-C1'-N1	9.43	115.74	108.20
12	B	2347	C	N3-C4-C5	-9.43	118.13	121.90
12	B	269	C	C2-N3-C4	-9.42	115.19	119.90
12	B	774	G	C6-C5-N7	-9.42	124.75	130.40
12	B	836	G	C5-C6-O6	-9.42	122.95	128.60
12	B	1175	A	C4-C5-C6	9.42	121.71	117.00
12	B	1197	G	N1-C6-O6	9.42	125.55	119.90
12	B	1682	G	O4'-C1'-N9	9.42	115.74	108.20
12	B	1361	G	O4'-C1'-N9	9.42	115.74	108.20
12	B	1890	A	C5-C6-N1	-9.42	112.99	117.70
12	B	2309	A	O4'-C1'-N9	9.42	115.74	108.20
12	B	2727	A	N1-C6-N6	9.42	124.25	118.60
12	B	695	G	N1-C6-O6	9.42	125.55	119.90
12	B	1249	U	N1-C2-N3	9.42	120.55	114.90
12	B	2800	A	N9-C4-C5	9.42	109.57	105.80
12	B	522	A	C5-C6-N6	-9.42	116.17	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1287	A	C5-C6-N1	-9.42	112.99	117.70
12	B	2203	U	N3-C4-O4	9.42	125.99	119.40
12	B	28	A	C1'-O4'-C4'	9.42	117.43	109.90
12	B	1278	C	C5-C6-N1	9.42	125.71	121.00
12	B	1139	G	C8-N9-C4	-9.42	102.63	106.40
12	B	2130	U	O4'-C1'-N1	9.42	115.73	108.20
12	B	2478	A	P-O5'-C5'	9.41	135.96	120.90
12	B	2508	G	N3-C2-N2	9.41	126.49	119.90
12	B	1124	G	N1-C2-N3	-9.41	118.25	123.90
12	B	1340	U	O4'-C1'-N1	9.41	115.73	108.20
10	9	239	ARG	NE-CZ-NH2	-9.41	115.59	120.30
12	B	1057	A	C5-C6-N6	-9.41	116.17	123.70
12	B	1299	G	C6-N1-C2	9.41	130.75	125.10
12	B	1592	C	N1-C2-O2	9.41	124.55	118.90
12	B	1773	A	C5-C6-N6	-9.41	116.17	123.70
12	B	2012	G	C6-N1-C2	9.41	130.75	125.10
12	B	2306	C	N3-C4-N4	9.41	124.59	118.00
12	B	2788	C	O4'-C1'-N1	9.41	115.73	108.20
12	B	2812	G	N1-C6-O6	9.41	125.55	119.90
12	B	1482	G	N1-C6-O6	9.41	125.54	119.90
12	B	1495	A	O4'-C1'-N9	9.41	115.73	108.20
12	B	213	A	C5-C6-N1	-9.40	113.00	117.70
12	B	1388	G	C6-C5-N7	-9.40	124.76	130.40
12	B	1598	A	C5-C6-N1	-9.40	113.00	117.70
12	B	2674	G	N1-C2-N3	-9.40	118.26	123.90
12	B	822	G	N1-C2-N3	-9.40	118.26	123.90
12	B	2685	G	C5-C6-O6	-9.40	122.96	128.60
12	B	2897	U	O4'-C1'-N1	9.40	115.72	108.20
12	B	1268	A	N9-C4-C5	9.40	109.56	105.80
12	B	1988	G	C4-C5-N7	-9.40	107.04	110.80
12	B	2066	C	N3-C4-N4	9.40	124.58	118.00
12	B	96	C	N3-C4-N4	9.39	124.58	118.00
12	B	197	A	C5-C6-N6	-9.39	116.18	123.70
12	B	2120	G	O4'-C1'-N9	9.39	115.72	108.20
12	B	2147	A	C5-C6-N6	-9.39	116.18	123.70
12	B	1247	A	O4'-C1'-N9	9.39	115.71	108.20
12	B	2502	G	N1-C6-O6	9.39	125.54	119.90
12	B	2821	A	C5-C6-N1	-9.39	113.00	117.70
12	B	311	A	N1-C6-N6	9.39	124.23	118.60
12	B	144	A	C5-C6-N6	-9.39	116.19	123.70
12	B	807	U	O4'-C1'-N1	9.39	115.71	108.20
32	W	21	ARG	NE-CZ-NH2	-9.39	115.61	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2448	A	C5-C6-N1	-9.39	113.00	117.70
12	B	490	C	O4'-C1'-N1	9.39	115.71	108.20
12	B	1675	C	N3-C4-N4	9.39	124.57	118.00
12	B	2341	G	O4'-C1'-N9	9.39	115.71	108.20
12	B	1845	G	C4-C5-N7	9.39	114.56	110.80
12	B	350	G	O4'-C1'-N9	9.38	115.71	108.20
12	B	751	A	C5-N7-C8	9.38	108.59	103.90
12	B	2043	C	O4'-C1'-N1	9.38	115.71	108.20
12	B	2459	A	C4-C5-C6	9.38	121.69	117.00
12	B	1540	G	C8-N9-C4	-9.38	102.65	106.40
12	B	2157	G	O4'-C1'-N9	9.38	115.71	108.20
12	B	817	C	C6-N1-C2	-9.38	116.55	120.30
12	B	2420	C	O4'-C4'-C3'	-9.38	94.62	104.00
12	B	2433	A	N9-C4-C5	9.38	109.55	105.80
12	B	2771	C	O4'-C1'-N1	9.38	115.70	108.20
11	A	61	G	C5-C6-O6	-9.38	122.97	128.60
12	B	285	G	N9-C4-C5	-9.38	101.65	105.40
12	B	1067	A	N1-C6-N6	9.38	124.23	118.60
12	B	468	G	N1-C2-N3	-9.38	118.27	123.90
12	B	504	A	C8-N9-C4	-9.38	102.05	105.80
12	B	1824	G	O4'-C1'-N9	9.38	115.70	108.20
12	B	1651	G	C6-C5-N7	-9.37	124.78	130.40
12	B	2213	U	O4'-C1'-N1	9.37	115.70	108.20
12	B	14	A	C5-C6-N1	-9.37	113.01	117.70
12	B	981	A	O4'-C1'-N9	9.37	115.70	108.20
12	B	1299	G	C5-C6-O6	-9.37	122.98	128.60
12	B	1302	A	C4-C5-C6	9.37	121.69	117.00
12	B	2085	U	C5-C6-N1	9.37	127.39	122.70
12	B	2220	U	N3-C4-C5	-9.37	108.98	114.60
11	A	67	G	N3-C4-C5	-9.37	123.92	128.60
12	B	211	C	N3-C4-C5	-9.37	118.15	121.90
12	B	1798	U	O4'-C1'-N1	9.37	115.70	108.20
12	B	1808	A	C5-N7-C8	9.37	108.58	103.90
12	B	2126	A	O4'-C1'-N9	9.37	115.69	108.20
12	B	1661	G	C5-C6-O6	-9.37	122.98	128.60
12	B	1894	C	C5-C4-N4	-9.37	113.64	120.20
12	B	2444	G	C5-C6-O6	-9.36	122.98	128.60
11	A	46	A	C4-C5-C6	9.36	121.68	117.00
12	B	2773	C	O4'-C1'-N1	9.36	115.69	108.20
12	B	14	A	C4-C5-C6	9.36	121.68	117.00
12	B	1163	G	N1-C6-O6	9.36	125.52	119.90
12	B	1755	A	C8-N9-C4	-9.36	102.06	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2273	A	C4-C5-C6	9.36	121.68	117.00
12	B	2401	U	O4'-C1'-N1	9.36	115.69	108.20
12	B	567	U	C5-C4-O4	-9.36	120.29	125.90
12	B	147	C	O4'-C1'-N1	9.36	115.68	108.20
12	B	168	G	O4'-C1'-N9	9.36	115.69	108.20
12	B	2873	A	O4'-C1'-N9	9.36	115.69	108.20
12	B	2060	A	C5'-C4'-O4'	9.36	120.33	109.10
28	R	53	PHE	CB-CG-CD1	9.36	127.35	120.80
33	Y	78	PHE	CB-CG-CD2	9.36	127.35	120.80
12	B	1241	A	N1-C6-N6	9.35	124.21	118.60
12	B	1437	C	N3-C4-C5	-9.35	118.16	121.90
12	B	1945	G	C5-N7-C8	-9.35	99.62	104.30
11	A	45	A	C6-C5-N7	-9.35	125.75	132.30
12	B	48	G	C6-N1-C2	-9.35	119.49	125.10
12	B	2679	A	N1-C2-N3	9.35	133.98	129.30
12	B	1248	G	C8-N9-C1'	-9.35	114.84	127.00
12	B	2843	G	O4'-C1'-N9	9.35	115.68	108.20
12	B	1745	A	N9-C4-C5	9.35	109.54	105.80
12	B	1475	G	N9-C4-C5	9.35	109.14	105.40
12	B	2358	A	N1-C6-N6	9.35	124.21	118.60
12	B	742	A	N1-C6-N6	9.35	124.21	118.60
12	B	1968	G	C5-C6-O6	-9.35	122.99	128.60
12	B	2187	U	O4'-C1'-N1	9.35	115.68	108.20
12	B	33	C	O4'-C1'-N1	9.34	115.67	108.20
12	B	2816	G	C5-C6-O6	-9.34	122.99	128.60
12	B	543	G	C5-C6-O6	-9.34	123.00	128.60
12	B	946	C	C5-C6-N1	9.34	125.67	121.00
12	B	1604	C	C5-C4-N4	-9.34	113.66	120.20
10	9	202	ARG	NE-CZ-NH2	-9.34	115.63	120.30
12	B	91	A	N1-C6-N6	9.34	124.20	118.60
12	B	1151	A	N9-C4-C5	9.34	109.54	105.80
15	E	101	TYR	CB-CG-CD1	-9.34	115.40	121.00
12	B	1651	G	C4-C5-C6	9.34	124.40	118.80
12	B	1422	G	N3-C4-N9	-9.34	120.40	126.00
12	B	2009	A	N1-C2-N3	9.34	133.97	129.30
12	B	2579	C	C5-C4-N4	-9.34	113.66	120.20
12	B	2825	G	O4'-C1'-N9	9.34	115.67	108.20
12	B	2837	A	N7-C8-N9	9.34	118.47	113.80
12	B	573	U	C5-C4-O4	-9.33	120.30	125.90
12	B	666	A	C5-N7-C8	9.33	108.57	103.90
12	B	1687	G	N7-C8-N9	9.33	117.77	113.10
12	B	1362	C	C2-N3-C4	9.33	124.56	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	34	A	C2-N3-C4	-9.33	105.94	110.60
12	B	437	U	N3-C4-O4	9.33	125.93	119.40
12	B	1175	A	N3-C4-N9	9.33	134.86	127.40
12	B	1397	U	O4'-C1'-N1	9.33	115.66	108.20
12	B	1519	G	C5-C6-O6	-9.33	123.00	128.60
12	B	1908	C	C4-C5-C6	9.33	122.06	117.40
12	B	2600	A	C4-C5-C6	9.33	121.66	117.00
12	B	2635	A	C4-C5-C6	9.33	121.66	117.00
12	B	1080	A	C5-N7-C8	9.32	108.56	103.90
12	B	1557	C	C2-N3-C4	9.32	124.56	119.90
12	B	1792	G	O4'-C1'-N9	9.32	115.66	108.20
12	B	1689	A	O4'-C1'-N9	9.32	115.66	108.20
12	B	383	C	C6-N1-C2	-9.32	116.57	120.30
12	B	985	C	O4'-C1'-N1	9.32	115.66	108.20
12	B	1836	C	C2-N3-C4	9.32	124.56	119.90
12	B	2579	C	C4-C5-C6	9.32	122.06	117.40
12	B	2039	U	N3-C2-O2	9.32	128.72	122.20
12	B	2134	A	O4'-C1'-N9	9.32	115.66	108.20
11	A	81	G	O4'-C1'-N9	9.32	115.65	108.20
12	B	1722	A	C4-C5-C6	9.32	121.66	117.00
12	B	395	U	N1-C2-N3	-9.32	109.31	114.90
12	B	679	C	C4-C5-C6	9.32	122.06	117.40
12	B	1371	G	N3-C2-N2	9.32	126.42	119.90
12	B	1832	C	N3-C4-C5	-9.32	118.17	121.90
12	B	2265	U	C5-C6-N1	9.32	127.36	122.70
12	B	2688	G	C5-C6-N1	-9.32	106.84	111.50
12	B	1764	C	O4'-C1'-N1	9.31	115.65	108.20
12	B	2427	C	N3-C4-C5	-9.31	118.17	121.90
12	B	1978	A	C4-C5-N7	-9.31	106.04	110.70
12	B	2017	U	C2-N3-C4	-9.31	121.41	127.00
12	B	2282	G	C4-C5-N7	-9.31	107.08	110.80
12	B	579	G	C6-N1-C2	9.31	130.69	125.10
12	B	1031	G	C5-C6-O6	-9.31	123.01	128.60
12	B	1885	A	C5-C6-N1	-9.31	113.05	117.70
12	B	2096	C	O4'-C1'-N1	9.31	115.65	108.20
12	B	186	G	C5-C6-O6	-9.31	123.02	128.60
12	B	920	A	C4-C5-C6	9.31	121.66	117.00
12	B	420	C	C6-N1-C2	-9.31	116.58	120.30
12	B	932	U	C2-N1-C1'	9.31	128.87	117.70
12	B	1319	C	C4-C5-C6	9.31	122.05	117.40
12	B	2422	C	N1-C2-O2	9.31	124.48	118.90
12	B	1495	A	P-O3'-C3'	9.31	130.87	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2608	G	C8-N9-C4	-9.30	102.68	106.40
12	B	391	A	N1-C6-N6	9.30	124.18	118.60
12	B	1016	G	O4'-C1'-N9	9.30	115.64	108.20
12	B	1020	A	N1-C6-N6	9.30	124.18	118.60
12	B	2084	C	C5-C4-N4	-9.30	113.69	120.20
11	A	76	G	O4'-C1'-N9	9.30	115.64	108.20
12	B	778	G	C4-C5-N7	9.30	114.52	110.80
12	B	2599	G	C5-C6-O6	-9.30	123.02	128.60
12	B	2783	U	O4'-C1'-N1	9.30	115.64	108.20
12	B	1358	G	C5-C6-N1	-9.30	106.85	111.50
12	B	1957	C	O4'-C1'-N1	9.30	115.64	108.20
12	B	2453	A	C2-N3-C4	-9.30	105.95	110.60
12	B	2874	C	N3-C4-C5	-9.30	118.18	121.90
12	B	194	G	N7-C8-N9	9.29	117.75	113.10
12	B	518	G	C4-C5-N7	9.29	114.52	110.80
12	B	1249	U	N3-C4-O4	9.29	125.91	119.40
12	B	1308	A	O4'-C1'-N9	9.29	115.64	108.20
12	B	2192	U	O4'-C1'-N1	9.29	115.64	108.20
12	B	196	A	C5-C6-N6	-9.29	116.27	123.70
12	B	543	G	C5-C6-N1	-9.29	106.85	111.50
12	B	2293	G	C6-N1-C2	-9.29	119.53	125.10
12	B	165	A	C4-C5-C6	9.29	121.64	117.00
12	B	497	A	C4-C5-C6	9.29	121.64	117.00
12	B	1065	U	O4'-C1'-N1	9.29	115.63	108.20
12	B	2218	G	N3-C4-N9	9.29	131.57	126.00
12	B	2523	G	N3-C4-C5	-9.29	123.96	128.60
12	B	376	G	C5-C6-N1	-9.29	106.86	111.50
12	B	583	G	N1-C2-N3	-9.29	118.33	123.90
12	B	650	C	O4'-C1'-N1	9.29	115.63	108.20
12	B	1493	C	C6-N1-C1'	-9.29	109.66	120.80
12	B	1661	G	N1-C2-N3	-9.28	118.33	123.90
12	B	1844	C	O4'-C1'-N1	9.28	115.63	108.20
12	B	2827	C	O4'-C1'-N1	9.28	115.62	108.20
11	A	100	G	C5-C6-O6	-9.28	123.03	128.60
12	B	209	C	C1'-O4'-C4'	-9.28	102.48	109.90
12	B	918	A	C6-C5-N7	-9.28	125.81	132.30
12	B	1420	A	O4'-C1'-N9	9.28	115.62	108.20
12	B	228	C	N3-C4-C5	-9.28	118.19	121.90
12	B	1907	G	C5-C6-N1	-9.28	106.86	111.50
12	B	587	C	N3-C4-C5	-9.28	118.19	121.90
12	B	876	C	C1'-O4'-C4'	-9.28	102.48	109.90
12	B	2708	G	N1-C6-O6	9.28	125.47	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	19	C	O4'-C1'-N1	9.27	115.62	108.20
11	A	41	G	C5-N7-C8	9.27	108.94	104.30
12	B	160	A	N1-C2-N3	9.27	133.94	129.30
12	B	785	G	N7-C8-N9	9.27	117.73	113.10
12	B	1051	G	C2-N3-C4	9.27	116.54	111.90
12	B	1227	G	O4'-C1'-N9	9.27	115.62	108.20
12	B	1262	A	N9-C4-C5	-9.27	102.09	105.80
12	B	1404	C	C6-N1-C2	-9.27	116.59	120.30
11	A	76	G	C5-C6-O6	-9.27	123.04	128.60
12	B	178	G	N1-C6-O6	9.27	125.46	119.90
12	B	243	U	O4'-C1'-N1	9.27	115.62	108.20
12	B	843	G	N1-C2-N3	-9.27	118.34	123.90
12	B	2137	U	C5-C4-O4	-9.27	120.34	125.90
12	B	180	G	N1-C6-O6	9.27	125.46	119.90
12	B	2031	A	C4-C5-N7	-9.27	106.07	110.70
12	B	1873	G	C5-C6-N1	-9.26	106.87	111.50
12	B	2114	A	C5'-C4'-C3'	9.26	130.82	116.00
12	B	2238	G	C5-C6-N1	-9.26	106.87	111.50
12	B	432	A	C4'-C3'-C2'	-9.26	93.34	102.60
11	A	36	C	C6-N1-C2	-9.26	116.60	120.30
12	B	1661	G	N3-C2-N2	9.26	126.38	119.90
12	B	1795	C	O4'-C1'-N1	9.26	115.61	108.20
11	A	85	G	C5-C6-N1	-9.26	106.87	111.50
12	B	295	G	C5-C6-O6	-9.26	123.05	128.60
12	B	1203	U	P-O3'-C3'	9.26	130.81	119.70
12	B	2049	G	C5-C6-N1	-9.26	106.87	111.50
12	B	2120	G	C5-C6-N1	-9.26	106.87	111.50
12	B	2634	A	N7-C8-N9	-9.26	109.17	113.80
12	B	2406	A	C5-N7-C8	9.25	108.53	103.90
12	B	2480	C	N3-C2-O2	9.25	128.38	121.90
12	B	1796	U	O4'-C1'-N1	9.25	115.60	108.20
12	B	2278	A	O4'-C1'-N9	9.25	115.60	108.20
12	B	98	G	C6-N1-C2	9.25	130.65	125.10
12	B	1872	A	C5-C6-N6	-9.25	116.30	123.70
12	B	1909	C	O4'-C1'-N1	9.25	115.60	108.20
12	B	2341	G	C6-C5-N7	-9.25	124.85	130.40
12	B	1572	A	O4'-C1'-N9	9.25	115.60	108.20
12	B	2410	G	C8-N9-C4	9.25	110.10	106.40
12	B	1119	U	N3-C4-O4	9.24	125.87	119.40
12	B	1297	C	C5-C4-N4	-9.24	113.73	120.20
12	B	1330	C	C6-N1-C2	-9.24	116.60	120.30
12	B	1776	G	N1-C6-O6	9.24	125.45	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2223	G	C5-C6-O6	-9.24	123.05	128.60
12	B	2454	G	C6-C5-N7	-9.24	124.85	130.40
29	S	95	ARG	NE-CZ-NH2	9.24	124.92	120.30
12	B	1578	U	C2-N1-C1'	9.24	128.79	117.70
12	B	477	A	C5-C6-N6	-9.24	116.31	123.70
12	B	1583	A	O4'-C1'-N9	9.24	115.59	108.20
12	B	99	U	C6-N1-C2	-9.24	115.46	121.00
12	B	670	A	C5-C6-N1	-9.24	113.08	117.70
12	B	2088	A	N1-C6-N6	9.24	124.14	118.60
12	B	812	C	C5-C6-N1	-9.24	116.38	121.00
12	B	1168	G	C5-C6-O6	-9.24	123.06	128.60
12	B	2251	G	O4'-C1'-N9	9.24	115.59	108.20
12	B	1353	A	O4'-C1'-N9	9.23	115.59	108.20
12	B	2005	A	C4-C5-C6	9.23	121.62	117.00
12	B	1417	C	C6-N1-C2	-9.23	116.61	120.30
12	B	1903	G	N1-C6-O6	9.23	125.44	119.90
12	B	1755	A	C4-C5-N7	-9.23	106.09	110.70
12	B	1854	A	O4'-C1'-N9	9.23	115.58	108.20
12	B	1823	G	C4-C5-C6	9.23	124.34	118.80
12	B	517	C	N3-C4-C5	-9.22	118.21	121.90
12	B	1634	A	C4-C5-C6	9.22	121.61	117.00
11	A	39	A	C4-C5-C6	9.22	121.61	117.00
12	B	1043	C	C5-C6-N1	9.22	125.61	121.00
12	B	1422	G	N7-C8-N9	-9.22	108.49	113.10
11	A	60	C	N3-C4-C5	-9.22	118.21	121.90
12	B	283	G	C4-C5-C6	9.22	124.33	118.80
12	B	508	A	C5-C6-N6	-9.22	116.32	123.70
12	B	939	G	C2-N3-C4	9.22	116.51	111.90
12	B	1389	G	C6-C5-N7	-9.22	124.87	130.40
12	B	2129	C	C6-N1-C1'	-9.22	109.73	120.80
12	B	2451	A	N9-C4-C5	9.22	109.49	105.80
12	B	1389	G	C3'-C2'-C1'	-9.22	94.12	101.50
12	B	2069	G	C5-C6-O6	-9.22	123.07	128.60
12	B	2890	G	C8-N9-C4	-9.22	102.71	106.40
12	B	957	C	N3-C4-C5	-9.22	118.21	121.90
12	B	1743	G	O4'-C1'-N9	9.21	115.57	108.20
12	B	2033	A	C5-N7-C8	9.21	108.51	103.90
12	B	2698	U	O4'-C1'-N1	9.21	115.57	108.20
12	B	2798	U	O4'-C1'-N1	9.21	115.57	108.20
12	B	1389	G	C4-C5-C6	9.21	124.33	118.80
12	B	370	G	N3-C4-N9	9.21	131.53	126.00
12	B	1512	C	O4'-C1'-N1	9.21	115.57	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1731	G	N1-C2-N2	9.21	124.49	116.20
12	B	1887	C	N3-C4-N4	9.21	124.45	118.00
12	B	2781	A	C5-C6-N1	-9.21	113.09	117.70
12	B	1790	C	O4'-C1'-N1	9.21	115.56	108.20
12	B	1499	C	O4'-C1'-N1	9.20	115.56	108.20
12	B	1906	G	C4-C5-C6	-9.21	113.28	118.80
12	B	2225	A	O4'-C1'-N9	9.20	115.56	108.20
12	B	329	G	N3-C2-N2	9.20	126.34	119.90
12	B	1909	C	C5-C4-N4	-9.20	113.76	120.20
12	B	943	A	N1-C6-N6	9.20	124.12	118.60
12	B	38	A	O4'-C1'-N9	9.20	115.56	108.20
12	B	965	C	O4'-C1'-N1	9.20	115.56	108.20
12	B	1527	G	N1-C2-N3	-9.20	118.38	123.90
12	B	1755	A	C5-C6-N1	-9.20	113.10	117.70
12	B	1990	C	N3-C4-N4	9.20	124.44	118.00
12	B	2067	G	P-O3'-C3'	9.20	130.74	119.70
12	B	2175	C	N3-C4-C5	-9.20	118.22	121.90
12	B	2735	G	C5-C6-O6	-9.20	123.08	128.60
12	B	1642	G	N1-C2-N3	-9.20	118.38	123.90
12	B	1673	G	C5-C6-O6	-9.20	123.08	128.60
12	B	1937	A	N1-C6-N6	-9.20	113.08	118.60
12	B	2848	G	O4'-C1'-N9	9.20	115.56	108.20
12	B	2048	G	C5-C6-O6	-9.20	123.08	128.60
12	B	454	A	C5-C6-N1	-9.19	113.10	117.70
12	B	2413	G	N3-C2-N2	9.19	126.33	119.90
12	B	1076	C	O4'-C1'-N1	9.19	115.55	108.20
12	B	2714	G	N3-C2-N2	9.19	126.33	119.90
12	B	134	G	N1-C2-N3	-9.19	118.39	123.90
12	B	1649	G	N7-C8-N9	-9.19	108.51	113.10
12	B	2469	A	N3-C4-C5	-9.19	120.37	126.80
12	B	23	G	N1-C6-O6	9.19	125.41	119.90
12	B	1618	A	C8-N9-C4	-9.19	102.12	105.80
12	B	2193	G	O4'-C1'-N9	9.19	115.55	108.20
12	B	2300	C	C5-C4-N4	-9.19	113.77	120.20
12	B	2333	A	P-O3'-C3'	9.19	130.72	119.70
12	B	379	G	N3-C2-N2	9.18	126.33	119.90
12	B	1635	A	N1-C2-N3	9.18	133.89	129.30
12	B	2478	A	N1-C6-N6	9.18	124.11	118.60
12	B	93	G	C4-C5-N7	9.18	114.47	110.80
12	B	2256	G	C2-N3-C4	9.18	116.49	111.90
12	B	80	G	C8-N9-C4	9.18	110.07	106.40
12	B	426	C	O4'-C1'-N1	9.18	115.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	452	G	N1-C6-O6	9.18	125.41	119.90
12	B	599	A	C8-N9-C4	9.18	109.47	105.80
12	B	2225	A	C5-C6-N1	-9.18	113.11	117.70
12	B	2296	U	O4'-C1'-N1	9.18	115.54	108.20
12	B	2536	G	P-O3'-C3'	9.18	130.71	119.70
24	N	86	ARG	NE-CZ-NH1	9.18	124.89	120.30
12	B	1699	G	O4'-C1'-N9	9.18	115.54	108.20
12	B	1720	U	N1-C2-O2	-9.18	116.38	122.80
12	B	2239	G	C5-C6-O6	-9.18	123.09	128.60
12	B	205	G	C8-N9-C4	-9.17	102.73	106.40
12	B	564	C	C4-C5-C6	9.17	121.99	117.40
12	B	1206	G	N1-C6-O6	9.17	125.41	119.90
12	B	1587	G	C5-C6-O6	9.17	134.10	128.60
12	B	1870	C	C6-N1-C1'	-9.17	109.79	120.80
12	B	2801	G	C4-C5-C6	9.17	124.30	118.80
12	B	1027	A	C5-C6-N6	-9.17	116.36	123.70
12	B	2714	G	C5-C6-O6	-9.17	123.10	128.60
13	C	211	ARG	NE-CZ-NH1	-9.17	115.71	120.30
12	B	909	A	C4-C5-N7	-9.17	106.12	110.70
12	B	1248	G	C4-N9-C1'	9.17	138.42	126.50
12	B	1679	A	O4'-C1'-N9	9.17	115.53	108.20
12	B	2595	G	C2-N3-C4	9.17	116.48	111.90
11	A	45	A	C4-C5-C6	9.17	121.58	117.00
12	B	1790	C	C2-N3-C4	9.17	124.48	119.90
12	B	1219	U	O4'-C1'-N1	9.17	115.53	108.20
12	B	2227	A	N1-C6-N6	9.17	124.10	118.60
12	B	2263	C	O4'-C1'-N1	9.17	115.53	108.20
12	B	2731	G	N1-C6-O6	9.17	125.40	119.90
12	B	2781	A	C4-C5-C6	9.17	121.58	117.00
12	B	85	G	C5-C6-O6	-9.16	123.10	128.60
11	A	106	G	N1-C6-O6	9.16	125.40	119.90
12	B	701	G	N1-C6-O6	9.16	125.40	119.90
12	B	1861	G	C5-C6-O6	-9.16	123.10	128.60
12	B	2715	C	N3-C4-C5	-9.16	118.23	121.90
12	B	2761	A	C4-C5-C6	9.16	121.58	117.00
12	B	647	G	N3-C4-N9	9.16	131.50	126.00
12	B	746	U	C3'-C2'-C1'	9.16	108.83	101.50
20	J	120	ARG	NE-CZ-NH2	9.16	124.88	120.30
12	B	1290	C	N3-C4-C5	-9.16	118.24	121.90
12	B	1407	G	C5-C6-N1	-9.16	106.92	111.50
12	B	2018	G	C4-C5-C6	9.16	124.30	118.80
10	9	69	ARG	NE-CZ-NH2	-9.16	115.72	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	781	A	C5-C6-N1	-9.16	113.12	117.70
12	B	2053	G	O4'-C1'-N9	9.16	115.53	108.20
12	B	2175	C	N3-C2-O2	9.16	128.31	121.90
12	B	2872	A	C6-C5-N7	-9.16	125.89	132.30
11	A	69	G	N9-C4-C5	-9.15	101.74	105.40
12	B	1259	G	C5-N7-C8	-9.15	99.72	104.30
12	B	516	C	O4'-C1'-N1	9.15	115.52	108.20
12	B	630	G	C5-C6-N1	-9.15	106.92	111.50
12	B	194	G	N1-C6-O6	9.15	125.39	119.90
12	B	241	A	C4-C5-C6	9.15	121.58	117.00
12	B	746	U	O4'-C1'-N1	9.15	115.52	108.20
12	B	1829	A	C5-C6-N1	-9.15	113.12	117.70
12	B	1447	C	C6-N1-C2	-9.15	116.64	120.30
12	B	242	G	C4'-C3'-C2'	-9.15	93.45	102.60
12	B	1661	G	N3-C4-N9	-9.15	120.51	126.00
12	B	1682	G	C4-C5-N7	9.15	114.46	110.80
12	B	1725	U	N3-C4-C5	9.15	120.09	114.60
12	B	2842	G	N1-C2-N3	-9.15	118.41	123.90
12	B	1214	A	N1-C6-N6	9.14	124.09	118.60
12	B	1534	U	O4'-C1'-N1	9.14	115.52	108.20
12	B	1700	A	N3-C4-C5	-9.14	120.40	126.80
11	A	41	G	N1-C6-O6	9.14	125.38	119.90
12	B	1124	G	C6-C5-N7	-9.14	124.92	130.40
12	B	1609	A	C5-N7-C8	9.14	108.47	103.90
12	B	2603	G	C6-C5-N7	-9.14	124.92	130.40
12	B	2653	U	C5-C4-O4	-9.14	120.42	125.90
12	B	2147	A	N3-C4-C5	-9.14	120.40	126.80
12	B	2186	G	N1-C6-O6	9.14	125.38	119.90
11	A	108	A	N1-C6-N6	9.14	124.08	118.60
11	A	109	A	N9-C4-C5	9.14	109.45	105.80
12	B	897	C	O4'-C1'-N1	9.14	115.51	108.20
12	B	952	G	C5-C6-N1	-9.14	106.93	111.50
12	B	1110	G	C8-N9-C4	9.14	110.06	106.40
12	B	1373	A	C5-C6-N1	-9.14	113.13	117.70
12	B	1983	G	N1-C6-O6	9.14	125.38	119.90
12	B	240	C	O4'-C1'-N1	9.13	115.51	108.20
12	B	242	G	C5-C6-N1	-9.14	106.93	111.50
12	B	948	C	C4-C5-C6	-9.13	112.83	117.40
12	B	1410	G	N3-C2-N2	9.14	126.30	119.90
12	B	1414	C	C5-C4-N4	-9.13	113.81	120.20
12	B	1430	G	N3-C2-N2	9.13	126.29	119.90
12	B	471	A	N1-C6-N6	9.13	124.08	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	991	C	C6-N1-C2	-9.13	116.65	120.30
11	A	61	G	N3-C2-N2	9.13	126.29	119.90
12	B	80	G	C5-C6-O6	-9.13	123.12	128.60
12	B	1580	A	N1-C6-N6	9.13	124.08	118.60
11	A	78	A	O4'-C1'-N9	9.13	115.50	108.20
12	B	2279	G	C4-C5-N7	9.13	114.45	110.80
12	B	2489	U	C6-N1-C2	-9.13	115.52	121.00
12	B	2540	C	N3-C4-N4	9.13	124.39	118.00
12	B	226	A	O4'-C1'-N9	9.13	115.50	108.20
12	B	1218	G	N1-C2-N3	-9.13	118.42	123.90
12	B	1244	A	N3-C4-N9	9.13	134.70	127.40
12	B	123	G	N1-C6-O6	9.12	125.37	119.90
12	B	1007	C	O4'-C1'-N1	9.12	115.50	108.20
12	B	1036	G	C4-C5-C6	9.12	124.27	118.80
12	B	1448	G	P-O3'-C3'	-9.12	108.75	119.70
12	B	2638	G	C5-C6-O6	-9.12	123.13	128.60
12	B	168	G	C5-C6-O6	-9.12	123.13	128.60
12	B	521	U	O4'-C1'-N1	9.12	115.50	108.20
12	B	1473	G	N9-C4-C5	9.12	109.05	105.40
12	B	2671	G	N9-C4-C5	-9.12	101.75	105.40
12	B	2761	A	C6-C5-N7	-9.12	125.91	132.30
1	0	56	ARG	NE-CZ-NH2	9.12	124.86	120.30
12	B	732	C	C6-N1-C2	9.12	123.95	120.30
12	B	1521	G	C4-C5-C6	9.12	124.27	118.80
12	B	2143	C	O4'-C1'-N1	9.12	115.49	108.20
12	B	2481	G	N1-C6-O6	9.12	125.37	119.90
25	O	94	ARG	NE-CZ-NH2	-9.12	115.74	120.30
12	B	47	C	N3-C2-O2	9.12	128.28	121.90
12	B	579	G	C3'-C2'-C1'	-9.12	94.21	101.50
12	B	1146	C	N3-C4-N4	9.12	124.38	118.00
12	B	1839	G	N1-C6-O6	9.12	125.37	119.90
12	B	2326	C	N3-C4-C5	-9.12	118.25	121.90
12	B	2110	G	C5-C6-O6	-9.11	123.13	128.60
12	B	2272	U	C5-C6-N1	9.11	127.26	122.70
12	B	2594	C	N3-C4-N4	9.11	124.38	118.00
12	B	1824	G	N1-C6-O6	9.11	125.37	119.90
12	B	31	C	N3-C4-N4	9.11	124.38	118.00
12	B	1202	G	O4'-C1'-N9	9.11	115.49	108.20
12	B	2862	G	C4-C5-C6	9.11	124.27	118.80
12	B	1445	G	N3-C2-N2	9.11	126.28	119.90
12	B	1598	A	C5-N7-C8	9.11	108.45	103.90
12	B	415	A	C5-C6-N1	-9.11	113.15	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	755	U	O4'-C1'-N1	9.11	115.48	108.20
12	B	1814	G	N1-C6-O6	9.10	125.36	119.90
12	B	1687	G	C8-N9-C4	-9.10	102.76	106.40
12	B	2648	G	N3-C2-N2	9.10	126.27	119.90
12	B	588	U	C5-C4-O4	9.10	131.36	125.90
12	B	2679	A	O4'-C1'-N9	9.10	115.48	108.20
12	B	2744	G	C2-N3-C4	9.10	116.45	111.90
12	B	2702	G	C4-C5-C6	9.10	124.26	118.80
12	B	1388	G	N1-C6-O6	9.09	125.36	119.90
12	B	1988	G	N3-C4-C5	-9.09	124.05	128.60
12	B	2083	G	O4'-C1'-N9	9.09	115.47	108.20
12	B	314	C	P-O5'-C5'	9.09	135.44	120.90
12	B	1642	G	O4'-C1'-N9	9.09	115.47	108.20
12	B	2598	A	N9-C4-C5	9.09	109.44	105.80
12	B	2804	U	O4'-C1'-N1	9.09	115.47	108.20
12	B	1070	A	C2-N3-C4	9.09	115.14	110.60
12	B	1826	G	O4'-C1'-N9	9.09	115.47	108.20
12	B	2834	G	O4'-C1'-N9	9.09	115.47	108.20
12	B	1882	U	C5-C6-N1	-9.09	118.16	122.70
12	B	951	C	C5-C6-N1	9.09	125.54	121.00
12	B	1261	C	C6-N1-C2	-9.09	116.67	120.30
12	B	1742	U	O4'-C1'-N1	9.09	115.47	108.20
12	B	1901	A	C5-N7-C8	9.09	108.44	103.90
12	B	2654	A	C5-C6-N1	-9.09	113.16	117.70
12	B	308	G	C5-C6-O6	-9.08	123.15	128.60
12	B	1552	A	N9-C4-C5	-9.08	102.17	105.80
12	B	2811	G	O4'-C1'-N9	9.08	115.47	108.20
12	B	2524	G	C8-N9-C4	-9.08	102.77	106.40
15	E	40	ARG	NE-CZ-NH1	-9.08	115.76	120.30
11	A	29	A	C5-C6-N6	-9.08	116.44	123.70
12	B	651	G	C5-N7-C8	9.08	108.84	104.30
12	B	1211	C	P-O5'-C5'	-9.08	106.37	120.90
12	B	1730	C	C2-N1-C1'	9.08	128.79	118.80
12	B	1780	A	C8-N9-C4	-9.08	102.17	105.80
12	B	1853	A	C4'-C3'-C2'	-9.08	93.52	102.60
8	7	63	TYR	N-CA-CB	9.07	126.93	110.60
12	B	2097	A	N1-C6-N6	9.07	124.05	118.60
11	A	34	A	C5-C6-N1	-9.07	113.16	117.70
12	B	117	G	N1-C6-O6	9.07	125.34	119.90
12	B	708	G	N1-C2-N2	-9.07	108.03	116.20
12	B	1694	C	N3-C4-C5	-9.07	118.27	121.90
12	B	2120	G	C4-C5-C6	9.07	124.24	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2190	G	N7-C8-N9	9.07	117.64	113.10
12	B	2293	G	C4-C5-N7	9.07	114.43	110.80
12	B	2875	C	O4'-C1'-N1	9.07	115.46	108.20
11	A	76	G	C8-N9-C4	-9.07	102.77	106.40
12	B	2276	G	N1-C6-O6	9.07	125.34	119.90
12	B	489	G	N9-C4-C5	9.07	109.03	105.40
12	B	801	G	C5-C6-O6	-9.07	123.16	128.60
12	B	1028	A	C4-C5-C6	9.07	121.54	117.00
12	B	1609	A	C8-N9-C4	-9.07	102.17	105.80
12	B	554	U	O4'-C1'-N1	9.07	115.45	108.20
12	B	1342	A	C5-C6-N6	-9.07	116.45	123.70
12	B	2770	G	N1-C6-O6	9.07	125.34	119.90
12	B	1091	G	N1-C6-O6	9.06	125.34	119.90
12	B	2872	A	C5-C6-N1	-9.06	113.17	117.70
12	B	151	C	N3-C4-N4	9.06	124.34	118.00
12	B	373	U	N3-C4-O4	9.06	125.74	119.40
12	B	481	G	N1-C6-O6	9.06	125.34	119.90
12	B	545	U	O4'-C1'-N1	9.06	115.45	108.20
12	B	1146	C	O4'-C1'-N1	9.06	115.45	108.20
12	B	1561	C	O4'-C1'-N1	9.06	115.45	108.20
12	B	1714	U	P-O3'-C3'	9.06	130.57	119.70
12	B	2579	C	N3-C4-N4	9.06	124.34	118.00
11	A	73	A	C6-C5-N7	-9.05	125.96	132.30
12	B	1003	G	N7-C8-N9	-9.06	108.57	113.10
12	B	1074	G	C4-C5-N7	9.06	114.42	110.80
12	B	1831	G	C5-C6-O6	-9.05	123.17	128.60
12	B	1941	C	N1-C2-O2	-9.05	113.47	118.90
12	B	2470	G	C5'-C4'-C3'	-9.05	101.51	116.00
12	B	2559	C	C5-C4-N4	-9.05	113.86	120.20
6	5	163	TYR	CB-CG-CD2	-9.05	115.57	121.00
12	B	122	G	N7-C8-N9	9.05	117.63	113.10
12	B	453	A	C5-C6-N1	-9.05	113.17	117.70
12	B	875	G	C5-N7-C8	-9.05	99.77	104.30
12	B	2894	G	N1-C6-O6	9.05	125.33	119.90
12	B	849	A	C6-N1-C2	9.05	124.03	118.60
12	B	891	G	C5'-C4'-C3'	9.05	130.48	116.00
12	B	1215	G	C6-C5-N7	-9.05	124.97	130.40
12	B	2101	A	C5-C6-N6	-9.05	116.46	123.70
12	B	2868	A	C5-C6-N6	-9.05	116.46	123.70
11	A	27	C	C6-N1-C2	-9.04	116.68	120.30
12	B	947	A	C6-C5-N7	-9.04	125.97	132.30
12	B	1460	U	P-O3'-C3'	9.04	130.55	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1506	U	C5-C4-O4	-9.04	120.47	125.90
12	B	2405	G	C5-C6-O6	-9.04	123.17	128.60
12	B	93	G	C6-N1-C2	9.04	130.53	125.10
12	B	1144	A	C5-C6-N6	-9.04	116.47	123.70
12	B	2012	G	C4-C5-C6	9.04	124.23	118.80
12	B	2090	A	N1-C6-N6	9.04	124.03	118.60
12	B	1387	A	C4-C5-C6	9.04	121.52	117.00
12	B	2299	U	O4'-C1'-N1	9.04	115.43	108.20
12	B	2357	G	C5-C6-O6	-9.04	123.17	128.60
12	B	2366	A	C5-C6-N6	-9.04	116.47	123.70
12	B	2622	U	O4'-C1'-N1	9.04	115.43	108.20
12	B	2749	A	C4-C5-C6	9.04	121.52	117.00
12	B	223	A	C8-N9-C4	-9.04	102.18	105.80
12	B	1711	A	C4-C5-C6	9.04	121.52	117.00
12	B	556	A	C4-C5-C6	9.04	121.52	117.00
12	B	30	G	N1-C6-O6	9.03	125.32	119.90
12	B	231	A	C6-N1-C2	9.04	124.02	118.60
12	B	768	G	N1-C6-O6	9.04	125.32	119.90
12	B	2121	G	C8-N9-C4	-9.04	102.78	106.40
12	B	996	A	O4'-C1'-N9	9.03	115.43	108.20
12	B	1266	G	N3-C4-N9	9.04	131.42	126.00
12	B	1587	G	O4'-C1'-N9	9.03	115.43	108.20
12	B	2892	G	N9-C4-C5	-9.03	101.79	105.40
12	B	495	G	C5-C6-O6	-9.03	123.18	128.60
12	B	579	G	N3-C2-N2	9.03	126.22	119.90
12	B	2439	A	P-O5'-C5'	9.03	135.35	120.90
12	B	372	G	N1-C6-O6	9.03	125.32	119.90
12	B	1379	U	N3-C4-O4	9.03	125.72	119.40
12	B	1040	A	N1-C6-N6	9.03	124.02	118.60
12	B	1153	C	N3-C4-N4	9.03	124.32	118.00
12	B	2241	A	C5-C6-N6	-9.03	116.48	123.70
12	B	217	A	O4'-C1'-N9	9.03	115.42	108.20
12	B	588	U	O4'-C1'-N1	9.03	115.42	108.20
11	A	40	U	P-O5'-C5'	9.03	135.34	120.90
12	B	489	G	C4-C5-C6	9.03	124.22	118.80
12	B	1198	U	C2-N3-C4	9.03	132.41	127.00
12	B	1429	G	N9-C4-C5	9.03	109.01	105.40
12	B	2226	C	O4'-C1'-N1	9.03	115.42	108.20
11	A	118	C	O4'-C1'-N1	9.02	115.42	108.20
12	B	2268	A	N1-C6-N6	9.02	124.01	118.60
12	B	343	C	C5-C4-N4	-9.02	113.89	120.20
12	B	426	C	N3-C2-O2	-9.02	115.58	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	651	G	N7-C8-N9	-9.02	108.59	113.10
12	B	2758	A	O4'-C1'-N9	9.02	115.42	108.20
6	5	162	ARG	NE-CZ-NH2	-9.02	115.79	120.30
12	B	940	G	O4'-C1'-N9	9.02	115.42	108.20
12	B	1429	G	C8-N9-C4	-9.02	102.79	106.40
12	B	1860	G	N3-C2-N2	9.02	126.21	119.90
12	B	1974	C	C6-N1-C2	-9.02	116.69	120.30
12	B	320	A	P-O3'-C3'	9.02	130.52	119.70
12	B	368	A	C5-C6-N6	-9.02	116.49	123.70
12	B	1093	G	C2-N3-C4	9.02	116.41	111.90
12	B	2117	A	C5-C6-N6	-9.02	116.49	123.70
20	J	35	ARG	NE-CZ-NH2	-9.02	115.79	120.30
11	A	40	U	O4'-C1'-N1	9.01	115.41	108.20
12	B	1440	U	O4'-C1'-N1	9.01	115.41	108.20
12	B	1684	G	C5-C6-O6	-9.01	123.19	128.60
12	B	2025	C	O4'-C1'-N1	9.01	115.41	108.20
12	B	2256	G	N1-C2-N3	-9.01	118.49	123.90
12	B	2854	G	C5-C6-O6	-9.01	123.19	128.60
12	B	575	A	N1-C6-N6	9.01	124.01	118.60
12	B	1292	G	O4'-C1'-N9	9.01	115.41	108.20
12	B	2540	C	P-O3'-C3'	9.01	130.51	119.70
12	B	1891	G	C5-C6-O6	-9.01	123.19	128.60
12	B	2614	A	O4'-C1'-N9	9.01	115.41	108.20
12	B	2786	U	O4'-C1'-N1	9.01	115.41	108.20
12	B	2738	A	C4-C5-C6	9.01	121.50	117.00
12	B	1048	A	C5-C6-N1	-9.01	113.20	117.70
12	B	1429	G	C4-C5-C6	9.01	124.20	118.80
12	B	1516	G	N1-C6-O6	9.01	125.30	119.90
12	B	1932	A	O4'-C1'-N9	9.01	115.41	108.20
12	B	1973	G	N3-C4-C5	9.01	133.10	128.60
12	B	2557	G	N1-C6-O6	9.01	125.30	119.90
14	D	101	PHE	CB-CG-CD2	9.01	127.10	120.80
12	B	44	A	N1-C6-N6	9.00	124.00	118.60
12	B	489	G	C5-C6-N1	-9.00	107.00	111.50
12	B	1757	A	N1-C2-N3	9.00	133.80	129.30
12	B	763	G	C8-N9-C4	-9.00	102.80	106.40
12	B	928	A	C5-C6-N1	-9.00	113.20	117.70
12	B	1439	A	C5-C6-N1	-9.00	113.20	117.70
12	B	2517	C	O4'-C1'-N1	9.00	115.40	108.20
12	B	2795	C	C6-N1-C2	-9.00	116.70	120.30
12	B	328	U	O4'-C1'-N1	9.00	115.40	108.20
12	B	2901	C	C5-C6-N1	9.00	125.50	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1536	C	C6-N1-C2	-9.00	116.70	120.30
12	B	2094	A	C5-C6-N6	-9.00	116.50	123.70
12	B	2853	C	O4'-C1'-N1	9.00	115.40	108.20
11	A	71	C	O4'-C1'-N1	8.99	115.39	108.20
12	B	392	U	O4'-C1'-N1	8.99	115.40	108.20
12	B	1475	G	N1-C2-N2	-8.99	108.11	116.20
12	B	2238	G	C4-C5-N7	8.99	114.40	110.80
26	P	87	ARG	NE-CZ-NH1	-8.99	115.80	120.30
12	B	61	C	N3-C4-C5	-8.99	118.30	121.90
12	B	714	U	O4'-C1'-N1	8.99	115.39	108.20
12	B	1150	C	O4'-C1'-N1	8.99	115.39	108.20
12	B	2353	G	C6-C5-N7	-8.99	125.00	130.40
12	B	764	A	C8-N9-C4	-8.99	102.20	105.80
12	B	2579	C	N1-C2-N3	8.99	125.49	119.20
12	B	2859	G	N1-C6-O6	8.99	125.29	119.90
12	B	37	C	O4'-C1'-N1	8.99	115.39	108.20
12	B	567	U	N3-C4-O4	8.99	125.69	119.40
12	B	2682	A	C5-N7-C8	8.99	108.39	103.90
12	B	1953	A	C5-C6-N1	-8.98	113.21	117.70
12	B	2534	A	N9-C4-C5	8.98	109.39	105.80
12	B	199	A	C4-C5-N7	8.98	115.19	110.70
11	A	70	C	C2-N3-C4	8.98	124.39	119.90
12	B	743	A	C8-N9-C4	-8.98	102.21	105.80
12	B	2034	U	C5-C4-O4	-8.98	120.51	125.90
12	B	855	G	N3-C2-N2	8.98	126.19	119.90
12	B	2148	G	N3-C2-N2	8.98	126.19	119.90
12	B	2594	C	N3-C4-C5	-8.98	118.31	121.90
12	B	2645	G	N1-C2-N3	-8.98	118.51	123.90
12	B	2750	A	C4-C5-C6	8.98	121.49	117.00
12	B	301	G	O4'-C1'-N9	8.98	115.38	108.20
12	B	611	C	O4'-C1'-N1	8.98	115.38	108.20
12	B	32	C	N3-C4-N4	8.98	124.28	118.00
12	B	56	A	C5-C6-N6	-8.98	116.52	123.70
12	B	1751	U	C2-N3-C4	-8.98	121.61	127.00
26	P	98	TYR	CB-CG-CD2	-8.98	115.61	121.00
12	B	1046	A	C5-C6-N1	-8.98	113.21	117.70
12	B	1757	A	C4-C5-C6	8.98	121.49	117.00
12	B	2430	A	C5-C6-N1	-8.98	113.21	117.70
12	B	92	U	P-O5'-C5'	8.97	135.26	120.90
12	B	1696	G	O4'-C1'-N9	8.97	115.38	108.20
12	B	1608	A	O4'-C1'-N9	8.97	115.38	108.20
12	B	2058	A	C2-N3-C4	-8.97	106.11	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2482	A	N1-C6-N6	8.97	123.98	118.60
26	P	52	ARG	NE-CZ-NH2	8.97	124.79	120.30
12	B	93	G	N1-C2-N3	-8.97	118.52	123.90
12	B	992	C	N1-C2-O2	-8.97	113.52	118.90
12	B	1884	G	C5-C6-O6	-8.97	123.22	128.60
11	A	71	C	N3-C4-C5	-8.97	118.31	121.90
11	A	75	G	N3-C2-N2	8.96	126.17	119.90
12	B	272	A	C2-N3-C4	-8.96	106.12	110.60
12	B	973	A	N1-C2-N3	8.97	133.78	129.30
12	B	612	G	O4'-C1'-N9	8.96	115.37	108.20
12	B	1337	G	N1-C6-O6	8.96	125.28	119.90
12	B	1733	G	N9-C4-C5	8.97	108.99	105.40
12	B	2781	A	P-O3'-C3'	8.96	130.46	119.70
12	B	53	A	N9-C4-C5	8.96	109.39	105.80
12	B	650	C	C6-N1-C2	-8.96	116.72	120.30
12	B	1311	G	C8-N9-C4	-8.96	102.81	106.40
12	B	750	A	O4'-C1'-N9	8.96	115.37	108.20
12	B	978	G	N1-C2-N3	-8.96	118.52	123.90
12	B	2377	A	O4'-C1'-N9	8.96	115.37	108.20
12	B	869	G	N3-C2-N2	8.96	126.17	119.90
12	B	967	U	C5-C6-N1	-8.96	118.22	122.70
12	B	1360	G	N1-C2-N3	-8.96	118.53	123.90
12	B	360	U	P-O3'-C3'	8.95	130.44	119.70
12	B	368	A	C8-N9-C4	-8.95	102.22	105.80
12	B	473	G	P-O5'-C5'	-8.96	106.57	120.90
12	B	622	G	C8-N9-C4	-8.96	102.82	106.40
12	B	2370	G	O4'-C1'-N9	8.96	115.36	108.20
12	B	2392	A	C8-N9-C4	-8.96	102.22	105.80
12	B	95	A	C4-C5-C6	8.95	121.48	117.00
12	B	548	G	C8-N9-C4	-8.95	102.82	106.40
12	B	909	A	N9-C4-C5	8.95	109.38	105.80
20	J	74	TYR	CB-CG-CD2	-8.95	115.63	121.00
12	B	38	A	C5-C6-N6	-8.95	116.54	123.70
12	B	508	A	N1-C2-N3	8.95	133.77	129.30
12	B	1076	C	C2-N3-C4	8.95	124.37	119.90
12	B	1374	G	N1-C2-N3	-8.95	118.53	123.90
12	B	1746	A	C5-N7-C8	8.95	108.37	103.90
12	B	2802	G	C5-C6-N1	-8.95	107.03	111.50
12	B	584	C	C6-N1-C2	-8.95	116.72	120.30
12	B	833	A	N1-C6-N6	8.95	123.97	118.60
12	B	1211	C	C5-C4-N4	-8.95	113.94	120.20
11	A	85	G	N1-C2-N3	-8.94	118.53	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	638	G	C5-C6-N1	-8.94	107.03	111.50
12	B	995	C	O4'-C1'-N1	8.94	115.36	108.20
12	B	1121	C	N3-C4-N4	8.95	124.26	118.00
12	B	2405	G	P-O3'-C3'	8.95	130.43	119.70
12	B	2694	G	C5-C6-O6	-8.95	123.23	128.60
12	B	303	G	O4'-C1'-N9	8.94	115.35	108.20
12	B	397	U	N3-C2-O2	8.94	128.46	122.20
12	B	428	A	N1-C6-N6	8.94	123.97	118.60
12	B	675	A	C5-C6-N6	-8.94	116.55	123.70
12	B	586	A	N9-C4-C5	8.94	109.38	105.80
12	B	1249	U	C6-N1-C2	-8.94	115.64	121.00
12	B	1266	G	C8-N9-C4	8.94	109.98	106.40
12	B	1486	U	N3-C4-C5	-8.94	109.24	114.60
12	B	198	C	C2-N3-C4	8.94	124.37	119.90
12	B	556	A	N1-C2-N3	8.94	133.77	129.30
12	B	1520	U	N1-C2-O2	-8.94	116.54	122.80
12	B	1712	U	O4'-C1'-N1	8.94	115.35	108.20
12	B	1856	U	O4'-C1'-N1	8.94	115.35	108.20
12	B	1803	A	N1-C6-N6	8.94	123.96	118.60
12	B	7	G	O4'-C1'-N9	8.93	115.35	108.20
12	B	1826	G	N1-C6-O6	8.93	125.26	119.90
12	B	2517	C	N3-C4-N4	8.93	124.25	118.00
12	B	722	A	C4-C5-C6	8.93	121.47	117.00
12	B	1189	A	N1-C6-N6	8.93	123.96	118.60
12	B	1675	C	C5-C4-N4	-8.93	113.95	120.20
12	B	426	C	N3-C4-N4	8.93	124.25	118.00
12	B	550	C	O4'-C1'-N1	8.93	115.34	108.20
12	B	2424	C	C2-N1-C1'	8.93	128.62	118.80
12	B	1236	G	N1-C2-N3	-8.93	118.55	123.90
12	B	2901	C	O4'-C1'-N1	8.93	115.34	108.20
14	D	101	PHE	CB-CG-CD1	-8.93	114.55	120.80
12	B	1571	A	C8-N9-C4	-8.92	102.23	105.80
12	B	497	A	C5-C6-N6	-8.92	116.56	123.70
12	B	1393	A	N9-C4-C5	8.92	109.37	105.80
12	B	420	C	O4'-C1'-N1	8.92	115.33	108.20
12	B	608	A	C5-C6-N6	-8.92	116.57	123.70
12	B	962	G	C5-N7-C8	8.92	108.76	104.30
12	B	2122	U	O4'-C1'-N1	8.92	115.33	108.20
12	B	2198	A	P-O3'-C3'	8.92	130.40	119.70
12	B	2852	G	C8-N9-C4	-8.92	102.83	106.40
12	B	266	G	C6-C5-N7	-8.91	125.05	130.40
12	B	453	A	C4-C5-C6	8.91	121.46	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1412	U	O4'-C1'-N1	8.91	115.33	108.20
12	B	2410	G	O4'-C1'-N9	8.91	115.33	108.20
12	B	1542	U	O4'-C1'-N1	8.91	115.33	108.20
12	B	1856	U	N3-C4-O4	8.91	125.64	119.40
12	B	2355	G	N3-C4-C5	8.91	133.06	128.60
12	B	1418	G	C3'-C2'-C1'	-8.91	94.37	101.50
12	B	1493	C	C6-N1-C2	-8.91	116.74	120.30
12	B	1736	U	P-O3'-C3'	8.91	130.39	119.70
12	B	487	C	O4'-C1'-N1	8.91	115.33	108.20
12	B	709	U	O4'-C1'-N1	8.91	115.33	108.20
12	B	2057	G	N1-C2-N3	-8.91	118.55	123.90
12	B	2092	U	C5'-C4'-C3'	-8.91	101.74	116.00
12	B	1672	A	N1-C6-N6	8.91	123.94	118.60
12	B	725	G	O4'-C1'-N9	8.91	115.33	108.20
12	B	2336	A	C5-C6-N6	-8.91	116.58	123.70
12	B	2451	A	C5-N7-C8	8.91	108.35	103.90
12	B	290	U	C5-C6-N1	8.90	127.15	122.70
12	B	306	U	N3-C2-O2	8.90	128.43	122.20
12	B	774	G	N1-C6-O6	8.90	125.24	119.90
12	B	1794	A	C5-C6-N1	-8.90	113.25	117.70
12	B	2062	A	O4'-C1'-N9	8.90	115.32	108.20
12	B	2138	G	O4'-C1'-N9	8.90	115.32	108.20
12	B	2164	C	N3-C4-C5	-8.90	118.34	121.90
12	B	406	G	C4-C5-C6	8.90	124.14	118.80
12	B	1912	A	C5-C6-N6	-8.90	116.58	123.70
12	B	2806	C	C2-N3-C4	8.90	124.35	119.90
12	B	2869	G	N3-C4-C5	-8.90	124.15	128.60
1	0	73	ARG	NE-CZ-NH2	8.89	124.75	120.30
11	A	30	C	C5-C6-N1	8.89	125.45	121.00
11	A	102	G	C8-N9-C4	-8.89	102.84	106.40
12	B	182	A	N1-C6-N6	8.89	123.94	118.60
12	B	577	G	C5-C6-O6	-8.89	123.26	128.60
12	B	952	G	N9-C4-C5	8.89	108.96	105.40
12	B	1266	G	C4'-C3'-C2'	-8.89	93.70	102.60
12	B	1330	C	N3-C4-C5	-8.89	118.34	121.90
12	B	955	U	O4'-C1'-N1	8.89	115.31	108.20
12	B	262	A	C5-C6-N1	-8.89	113.25	117.70
12	B	528	A	N1-C6-N6	8.89	123.93	118.60
12	B	2313	C	O4'-C1'-N1	8.89	115.31	108.20
12	B	695	G	C5-C6-O6	-8.89	123.27	128.60
12	B	2501	C	N3-C4-N4	8.89	124.22	118.00
12	B	2867	G	C4-C5-N7	-8.89	107.25	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	250	G	N7-C8-N9	8.88	117.54	113.10
12	B	1016	G	N9-C4-C5	-8.88	101.85	105.40
12	B	1432	G	O4'-C1'-N9	8.88	115.31	108.20
12	B	2243	U	C5-C6-N1	-8.88	118.26	122.70
12	B	228	C	C2-N3-C4	8.88	124.34	119.90
12	B	328	U	N3-C2-O2	-8.88	115.98	122.20
12	B	496	G	N7-C8-N9	8.88	117.54	113.10
12	B	1336	A	C4-C5-N7	8.88	115.14	110.70
12	B	2291	U	P-O5'-C5'	8.88	135.11	120.90
12	B	2453	A	C5-C6-N6	-8.88	116.59	123.70
12	B	944	C	O4'-C1'-N1	8.88	115.31	108.20
12	B	1312	U	N3-C4-O4	8.88	125.62	119.40
12	B	2676	C	C4-C5-C6	-8.88	112.96	117.40
12	B	737	C	C5-C4-N4	-8.88	113.99	120.20
12	B	754	U	O4'-C1'-N1	8.88	115.30	108.20
12	B	1270	C	C6-N1-C2	-8.88	116.75	120.30
12	B	1501	G	C5-C6-N1	-8.88	107.06	111.50
12	B	2887	A	C2-N3-C4	-8.88	106.16	110.60
18	H	27	ARG	NE-CZ-NH1	8.88	124.74	120.30
23	M	66	ARG	NE-CZ-NH1	8.88	124.74	120.30
11	A	41	G	N7-C8-N9	-8.88	108.66	113.10
12	B	124	G	C5-N7-C8	-8.88	99.86	104.30
12	B	187	G	C5-C6-O6	-8.88	123.28	128.60
12	B	921	C	C5-C6-N1	8.87	125.44	121.00
12	B	1212	G	C5-C6-O6	-8.88	123.28	128.60
12	B	2286	G	C5-C6-N1	-8.88	107.06	111.50
12	B	2333	A	C8-N9-C4	-8.88	102.25	105.80
12	B	2472	G	N9-C4-C5	-8.87	101.85	105.40
11	A	97	C	N3-C4-N4	8.87	124.21	118.00
12	B	463	G	N3-C4-C5	8.87	133.04	128.60
12	B	886	A	C4-C5-C6	8.87	121.44	117.00
12	B	1124	G	C4-C5-N7	8.87	114.35	110.80
12	B	1414	C	N3-C4-C5	-8.87	118.35	121.90
12	B	28	A	C5-N7-C8	8.86	108.33	103.90
12	B	414	C	N3-C4-N4	8.86	124.20	118.00
12	B	653	U	C2-N1-C1'	8.87	128.34	117.70
12	B	1583	A	C5-C6-N1	-8.86	113.27	117.70
12	B	254	G	C5-C6-O6	-8.86	123.28	128.60
12	B	2731	G	N3-C4-C5	-8.86	124.17	128.60
12	B	862	G	C5-N7-C8	-8.86	99.87	104.30
12	B	1175	A	O4'-C1'-N9	8.86	115.29	108.20
12	B	1673	G	N1-C2-N3	-8.86	118.58	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2666	C	C2-N1-C1'	8.86	128.55	118.80
11	A	46	A	C5-C6-N1	-8.86	113.27	117.70
12	B	2839	G	C4-C5-C6	8.86	124.11	118.80
12	B	2766	A	N9-C4-C5	8.86	109.34	105.80
12	B	1095	A	C5-N7-C8	8.85	108.33	103.90
12	B	1375	U	O4'-C1'-N1	8.85	115.28	108.20
12	B	1759	A	N1-C2-N3	-8.85	124.87	129.30
12	B	1798	U	N3-C4-O4	8.85	125.60	119.40
12	B	2113	U	O4'-C1'-N1	8.85	115.28	108.20
12	B	2859	G	N3-C4-C5	-8.85	124.17	128.60
12	B	1377	G	N3-C2-N2	8.85	126.09	119.90
12	B	1638	C	O4'-C1'-N1	8.85	115.28	108.20
12	B	2585	U	P-O3'-C3'	-8.85	109.08	119.70
12	B	995	C	N3-C4-C5	-8.85	118.36	121.90
12	B	2901	C	C6-N1-C2	-8.85	116.76	120.30
12	B	2112	G	P-O3'-C3'	8.85	130.32	119.70
12	B	2227	A	C4-C5-C6	8.85	121.42	117.00
12	B	731	C	N3-C4-C5	-8.85	118.36	121.90
12	B	1752	C	C6-N1-C2	-8.85	116.76	120.30
16	F	129	MET	CG-SD-CE	-8.85	86.05	100.20
12	B	1056	G	O4'-C1'-N9	8.85	115.28	108.20
12	B	1354	A	C5-C6-N1	-8.85	113.28	117.70
12	B	47	C	N3-C4-N4	8.84	124.19	118.00
12	B	1807	G	N9-C1'-C2'	-8.84	102.27	112.00
28	R	78	ARG	NE-CZ-NH2	8.84	124.72	120.30
12	B	775	G	N1-C6-O6	8.84	125.20	119.90
12	B	850	U	O4'-C1'-N1	8.84	115.27	108.20
12	B	2230	G	C8-N9-C4	-8.84	102.86	106.40
12	B	1393	A	C4-C5-C6	8.84	121.42	117.00
12	B	1687	G	C5-C6-N1	-8.84	107.08	111.50
12	B	89	A	C4-C5-C6	8.84	121.42	117.00
12	B	707	G	N3-C2-N2	8.84	126.09	119.90
12	B	818	G	N7-C8-N9	8.84	117.52	113.10
12	B	1095	A	C2-N3-C4	-8.84	106.18	110.60
12	B	2335	A	C4-C5-C6	8.84	121.42	117.00
12	B	2380	C	N3-C4-C5	-8.84	118.36	121.90
11	A	31	C	O4'-C1'-N1	8.83	115.27	108.20
12	B	1535	A	C5-C6-N1	-8.83	113.28	117.70
12	B	2088	A	C5-C6-N6	-8.83	116.63	123.70
12	B	2679	A	C2-N3-C4	-8.83	106.18	110.60
12	B	1597	A	N9-C4-C5	8.83	109.33	105.80
12	B	205	G	C5-C6-N1	-8.83	107.08	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1358	G	P-O3'-C3'	8.83	130.29	119.70
4	3	44	ALA	N-CA-CB	8.83	122.46	110.10
12	B	466	A	C8-N9-C4	-8.83	102.27	105.80
12	B	1939	U	C5-C6-N1	8.83	127.11	122.70
12	B	2250	G	N1-C6-O6	8.83	125.20	119.90
12	B	2790	U	C5-C6-N1	8.83	127.11	122.70
12	B	2789	C	C2-N3-C4	8.83	124.31	119.90
12	B	2	G	N3-C4-C5	8.82	133.01	128.60
12	B	512	G	N7-C8-N9	8.82	117.51	113.10
10	9	105	MET	CG-SD-CE	-8.82	86.09	100.20
12	B	505	A	N7-C8-N9	8.82	118.21	113.80
12	B	791	C	C5-C6-N1	-8.82	116.59	121.00
12	B	896	A	O4'-C1'-N9	8.82	115.26	108.20
12	B	1228	G	C4-C5-N7	-8.82	107.27	110.80
12	B	2307	G	N1-C6-O6	8.82	125.19	119.90
12	B	1700	A	C4-C5-C6	8.82	121.41	117.00
12	B	108	G	N1-C2-N3	-8.82	118.61	123.90
12	B	1697	G	N3-C2-N2	8.82	126.07	119.90
12	B	865	C	N3-C4-N4	8.81	124.17	118.00
12	B	1881	C	N3-C4-N4	8.81	124.17	118.00
12	B	2447	G	C5-C6-O6	-8.81	123.31	128.60
12	B	2504	U	N1-C2-O2	-8.81	116.63	122.80
12	B	21	A	O4'-C1'-N9	8.81	115.25	108.20
12	B	1947	C	O4'-C1'-N1	8.81	115.25	108.20
12	B	2758	A	N9-C4-C5	8.81	109.32	105.80
12	B	986	C	C5-C4-N4	-8.81	114.03	120.20
12	B	2054	A	N1-C6-N6	8.81	123.88	118.60
12	B	2126	A	C5-N7-C8	8.81	108.30	103.90
12	B	2282	G	N3-C2-N2	8.81	126.06	119.90
12	B	2283	C	P-O5'-C5'	8.81	134.99	120.90
12	B	2418	A	N1-C6-N6	8.81	123.89	118.60
12	B	1505	A	P-O5'-C5'	8.80	134.99	120.90
12	B	1983	G	C8-N9-C4	-8.81	102.88	106.40
12	B	2019	A	C4-C5-C6	8.81	121.40	117.00
12	B	1708	C	C6-N1-C2	8.80	123.82	120.30
12	B	796	C	C5-C6-N1	8.80	125.40	121.00
12	B	1416	G	N1-C6-O6	8.80	125.18	119.90
12	B	996	A	N1-C2-N3	8.80	133.70	129.30
12	B	1643	G	O4'-C1'-N9	8.80	115.24	108.20
12	B	474	G	C6-N1-C2	-8.80	119.82	125.10
12	B	1229	C	C2-N3-C4	8.80	124.30	119.90
12	B	1444	G	N9-C4-C5	-8.80	101.88	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1605	C	N3-C4-C5	-8.80	118.38	121.90
12	B	1689	A	N1-C6-N6	8.80	123.88	118.60
12	B	2878	U	O4'-C1'-N1	8.80	115.24	108.20
12	B	963	U	C4-C5-C6	8.80	124.98	119.70
12	B	1358	G	O4'-C1'-N9	8.80	115.24	108.20
12	B	2430	A	C6-C5-N7	-8.80	126.14	132.30
12	B	51	G	P-O3'-C3'	-8.79	109.15	119.70
12	B	530	G	N1-C2-N3	-8.79	118.62	123.90
12	B	912	C	N3-C2-O2	8.79	128.06	121.90
12	B	226	A	C5-C6-N6	-8.79	116.67	123.70
12	B	1611	C	N3-C4-N4	8.79	124.16	118.00
12	B	2300	C	O4'-C1'-N1	8.79	115.23	108.20
12	B	382	A	C5-C6-N1	-8.79	113.30	117.70
12	B	1628	G	C5-C6-O6	-8.79	123.33	128.60
12	B	1974	C	O4'-C1'-N1	8.79	115.23	108.20
12	B	2046	G	N1-C6-O6	8.79	125.18	119.90
13	C	86	ARG	NH1-CZ-NH2	-8.79	109.73	119.40
12	B	1690	A	N9-C4-C5	8.79	109.32	105.80
12	B	581	C	O4'-C1'-N1	8.79	115.23	108.20
12	B	658	U	O4'-C1'-N1	8.79	115.23	108.20
12	B	657	U	O4'-C1'-N1	8.79	115.23	108.20
12	B	2022	U	C5-C6-N1	8.79	127.09	122.70
12	B	456	C	N3-C4-C5	-8.79	118.39	121.90
12	B	1608	A	N3-C4-N9	8.79	134.43	127.40
12	B	1809	A	O4'-C1'-N9	8.79	115.23	108.20
12	B	2384	U	O4'-C1'-N1	8.78	115.23	108.20
12	B	2782	G	N1-C6-O6	8.79	125.17	119.90
25	O	94	ARG	NE-CZ-NH1	8.79	124.69	120.30
12	B	349	U	O4'-C1'-N1	8.78	115.23	108.20
12	B	2002	G	N7-C8-N9	8.78	117.49	113.10
12	B	2083	G	C4-C5-C6	8.78	124.07	118.80
12	B	2525	G	C6-C5-N7	-8.78	125.13	130.40
12	B	83	A	C6-N1-C2	-8.78	113.33	118.60
12	B	121	G	C5-C6-N1	-8.78	107.11	111.50
12	B	531	C	O4'-C1'-N1	8.78	115.22	108.20
12	B	2355	G	N1-C2-N3	-8.78	118.63	123.90
12	B	2371	G	N1-C2-N3	-8.78	118.63	123.90
12	B	2592	G	C4-C5-N7	8.78	114.31	110.80
12	B	31	C	O4'-C1'-N1	8.78	115.22	108.20
12	B	1060	U	N1-C2-O2	-8.78	116.66	122.80
12	B	1666	G	C5-C6-O6	-8.78	123.33	128.60
12	B	1133	A	N9-C4-C5	8.77	109.31	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	256	A	C4-C5-C6	8.77	121.39	117.00
12	B	1623	G	N3-C4-C5	-8.77	124.22	128.60
12	B	1658	C	N3-C4-N4	8.77	124.14	118.00
12	B	2611	C	O4'-C1'-N1	8.77	115.22	108.20
12	B	141	G	N3-C2-N2	8.77	126.04	119.90
14	D	179	ARG	NE-CZ-NH1	-8.77	115.92	120.30
12	B	916	G	C8-N9-C4	-8.77	102.89	106.40
12	B	2833	U	O4'-C1'-N1	8.77	115.21	108.20
12	B	899	A	C4-C5-C6	8.77	121.38	117.00
12	B	1551	A	C4-C5-C6	8.77	121.38	117.00
12	B	1745	A	O4'-C1'-N9	8.77	115.21	108.20
12	B	1997	C	N3-C4-N4	8.77	124.14	118.00
12	B	400	G	C2-N3-C4	-8.76	107.52	111.90
12	B	711	G	C2-N3-C4	8.76	116.28	111.90
12	B	1776	G	N1-C2-N3	-8.76	118.64	123.90
12	B	587	C	C5-C6-N1	8.76	125.38	121.00
12	B	2058	A	N1-C2-N3	8.76	133.68	129.30
12	B	2311	A	N1-C2-N3	-8.76	124.92	129.30
13	C	42	ARG	NE-CZ-NH1	8.76	124.68	120.30
12	B	875	G	N9-C4-C5	8.76	108.90	105.40
12	B	2440	C	N3-C4-C5	-8.76	118.40	121.90
12	B	361	G	P-O5'-C5'	8.76	134.91	120.90
12	B	877	A	N1-C6-N6	8.76	123.85	118.60
12	B	1062	G	C5-C6-O6	-8.76	123.35	128.60
12	B	1479	G	C8-N9-C4	-8.76	102.90	106.40
12	B	2277	G	N3-C4-N9	8.76	131.25	126.00
12	B	5	A	C8-N9-C4	-8.75	102.30	105.80
12	B	864	G	O4'-C1'-N9	8.75	115.20	108.20
12	B	7	G	C5-C6-O6	-8.75	123.35	128.60
12	B	1423	G	N1-C6-O6	8.75	125.15	119.90
12	B	1622	G	C6-C5-N7	-8.75	125.15	130.40
12	B	685	A	O4'-C1'-N9	8.75	115.20	108.20
12	B	1046	A	C6-N1-C2	8.75	123.85	118.60
12	B	1788	C	N3-C4-N4	8.75	124.12	118.00
12	B	2753	A	C8-N9-C4	-8.75	102.30	105.80
20	J	49	ASP	CB-CG-OD2	8.75	126.17	118.30
10	9	59	TYR	CG-CD2-CE2	-8.75	114.30	121.30
12	B	133	U	N3-C4-O4	8.75	125.52	119.40
12	B	645	C	C6-N1-C1'	-8.75	110.31	120.80
12	B	886	A	C5-C6-N1	-8.75	113.33	117.70
12	B	1380	G	C5-C6-O6	-8.75	123.35	128.60
12	B	1519	G	C4-C5-C6	8.75	124.05	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1857	G	C5-C6-O6	-8.75	123.35	128.60
12	B	2504	U	C2-N3-C4	-8.75	121.75	127.00
12	B	2800	A	N1-C6-N6	8.75	123.85	118.60
12	B	504	A	C4-C5-C6	8.74	121.37	117.00
12	B	1266	G	C4-C5-C6	8.74	124.05	118.80
12	B	1817	G	C8-N9-C4	-8.74	102.90	106.40
12	B	2236	U	C5-C4-O4	-8.74	120.65	125.90
12	B	680	C	C5-C4-N4	-8.74	114.08	120.20
12	B	795	C	O4'-C1'-N1	8.74	115.19	108.20
12	B	802	A	O4'-C1'-N9	8.74	115.19	108.20
12	B	1821	A	O4'-C1'-N9	8.74	115.19	108.20
12	B	2186	G	C4-C5-N7	-8.74	107.30	110.80
11	A	8	C	O4'-C1'-N1	8.74	115.19	108.20
12	B	1573	G	C5-C6-O6	-8.74	123.36	128.60
12	B	63	A	C5-N7-C8	8.74	108.27	103.90
12	B	393	C	C5-C4-N4	-8.74	114.08	120.20
12	B	1661	G	N1-C6-O6	8.74	125.14	119.90
12	B	2298	A	C4-C5-C6	8.74	121.37	117.00
11	A	33	G	N3-C2-N2	8.74	126.02	119.90
12	B	196	A	C5-C6-N1	-8.74	113.33	117.70
12	B	1541	C	O4'-C1'-N1	8.74	115.19	108.20
12	B	414	C	C2-N1-C1'	8.73	128.41	118.80
12	B	608	A	P-O5'-C5'	-8.73	106.92	120.90
12	B	93	G	N9-C4-C5	-8.73	101.91	105.40
12	B	738	G	C5-C6-O6	-8.73	123.36	128.60
12	B	741	U	O4'-C1'-N1	8.73	115.18	108.20
12	B	1797	G	C5-C6-O6	-8.73	123.36	128.60
2	1	7	ARG	NE-CZ-NH1	8.73	124.66	120.30
12	B	1945	G	N3-C2-N2	8.73	126.01	119.90
12	B	2342	C	C4'-C3'-C2'	-8.73	93.87	102.60
12	B	241	A	C5-C6-N1	-8.73	113.34	117.70
12	B	538	A	C5-C6-N6	-8.73	116.72	123.70
12	B	1936	A	C5-C6-N6	-8.73	116.72	123.70
12	B	2126	A	C4-C5-N7	-8.73	106.34	110.70
12	B	2781	A	C6-C5-N7	-8.73	126.19	132.30
12	B	400	G	N1-C6-O6	8.72	125.13	119.90
12	B	787	C	N3-C4-N4	8.72	124.11	118.00
12	B	1095	A	C5-C6-N1	-8.72	113.34	117.70
12	B	2583	G	C2-N3-C4	8.72	116.26	111.90
12	B	2606	C	C3'-C2'-C1'	8.72	108.48	101.50
12	B	2659	G	N1-C6-O6	8.72	125.13	119.90
12	B	616	A	N1-C6-N6	8.72	123.83	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1645	G	N1-C2-N3	-8.72	118.67	123.90
12	B	2325	G	N1-C6-O6	8.72	125.13	119.90
12	B	775	G	C8-N9-C4	-8.72	102.91	106.40
12	B	1972	G	C5-C6-O6	-8.72	123.37	128.60
12	B	2353	G	C5-C6-O6	-8.72	123.37	128.60
12	B	107	G	C6-C5-N7	-8.72	125.17	130.40
12	B	125	A	O4'-C1'-N9	8.72	115.17	108.20
12	B	391	A	C4-C5-C6	8.72	121.36	117.00
12	B	745	G	C5-C6-O6	-8.72	123.37	128.60
12	B	2171	A	C3'-C2'-C1'	-8.72	94.53	101.50
12	B	2373	G	O4'-C1'-N9	8.72	115.17	108.20
12	B	2530	A	C2-N3-C4	-8.72	106.24	110.60
12	B	1283	G	C5-C6-N1	-8.72	107.14	111.50
28	R	13	ARG	NE-CZ-NH2	-8.72	115.94	120.30
12	B	917	A	C2-N3-C4	-8.71	106.24	110.60
12	B	1592	C	N3-C2-O2	-8.71	115.80	121.90
12	B	2900	A	O4'-C1'-N9	8.71	115.17	108.20
12	B	666	A	C5-C6-N6	-8.71	116.73	123.70
12	B	779	U	N3-C4-C5	-8.71	109.37	114.60
12	B	1490	A	N7-C8-N9	-8.71	109.44	113.80
12	B	926	G	N3-C2-N2	8.71	126.00	119.90
12	B	1187	G	C5-C6-O6	-8.71	123.37	128.60
12	B	1565	C	N3-C4-C5	-8.71	118.42	121.90
12	B	198	C	O4'-C1'-N1	8.71	115.17	108.20
12	B	619	G	C5-C6-O6	-8.71	123.37	128.60
12	B	1220	G	O4'-C1'-N9	8.71	115.17	108.20
12	B	1912	A	C5-N7-C8	8.71	108.25	103.90
12	B	2237	G	N1-C2-N3	-8.71	118.67	123.90
12	B	2022	U	O4'-C1'-N1	8.71	115.17	108.20
12	B	372	G	O4'-C1'-N9	8.70	115.16	108.20
12	B	1645	G	N1-C6-O6	8.70	125.12	119.90
12	B	1837	C	C4-C5-C6	8.70	121.75	117.40
12	B	280	U	C5-C6-N1	8.70	127.05	122.70
12	B	1109	C	N3-C4-N4	8.70	124.09	118.00
12	B	2378	A	C5-N7-C8	8.70	108.25	103.90
12	B	2822	G	C8-N9-C4	-8.70	102.92	106.40
11	A	59	A	C4-C5-C6	8.70	121.35	117.00
12	B	1444	G	C5-C6-N1	-8.70	107.15	111.50
12	B	2175	C	C2-N3-C4	8.70	124.25	119.90
11	A	31	C	C5-C4-N4	-8.70	114.11	120.20
12	B	317	G	O4'-C1'-N9	8.70	115.16	108.20
12	B	414	C	O4'-C1'-N1	8.70	115.16	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	966	G	C5'-C4'-C3'	-8.70	102.09	116.00
12	B	2354	C	N3-C4-N4	8.70	124.09	118.00
12	B	756	A	O4'-C1'-N9	8.69	115.16	108.20
12	B	1172	C	C6-N1-C2	-8.70	116.82	120.30
12	B	1376	C	C5-C6-N1	-8.70	116.65	121.00
12	B	2746	U	C4-C5-C6	-8.70	114.48	119.70
11	A	12	C	O4'-C1'-N1	8.69	115.15	108.20
12	B	366	C	N3-C4-C5	-8.69	118.42	121.90
12	B	1038	G	C5-C6-O6	-8.69	123.39	128.60
12	B	2252	G	C5-C6-O6	-8.69	123.39	128.60
12	B	2733	A	C5-C6-N1	-8.69	113.35	117.70
12	B	231	A	N9-C4-C5	-8.69	102.32	105.80
12	B	1853	A	C5'-C4'-O4'	8.69	119.53	109.10
12	B	733	G	C5-C6-N1	-8.69	107.16	111.50
12	B	924	G	C4-C5-N7	8.69	114.28	110.80
12	B	1257	C	O4'-C1'-N1	8.69	115.15	108.20
12	B	1002	G	C8-N9-C4	-8.69	102.93	106.40
12	B	1059	G	C6-N1-C2	8.69	130.31	125.10
12	B	2130	U	N3-C4-O4	8.69	125.48	119.40
12	B	2243	U	C4-C5-C6	8.69	124.91	119.70
12	B	279	A	N1-C6-N6	8.68	123.81	118.60
12	B	1110	G	N9-C4-C5	-8.68	101.93	105.40
12	B	407	G	C4-C5-C6	8.68	124.01	118.80
12	B	461	C	C6-N1-C2	-8.68	116.83	120.30
12	B	1002	G	N7-C8-N9	8.68	117.44	113.10
12	B	1084	A	P-O3'-C3'	8.68	130.12	119.70
12	B	1571	A	C6-N1-C2	8.68	123.81	118.60
12	B	2000	C	O4'-C1'-N1	8.68	115.15	108.20
12	B	1389	G	C5-C6-N1	-8.68	107.16	111.50
12	B	2236	U	O4'-C1'-N1	8.68	115.14	108.20
12	B	539	G	C5-C6-O6	-8.68	123.39	128.60
12	B	2671	G	C5-C6-O6	-8.68	123.39	128.60
12	B	2718	G	C6-C5-N7	-8.68	125.19	130.40
11	A	80	U	O4'-C1'-N1	8.68	115.14	108.20
12	B	408	G	C5-C6-O6	-8.68	123.39	128.60
12	B	664	G	N1-C2-N3	-8.68	118.69	123.90
12	B	1400	U	C5-C4-O4	-8.68	120.69	125.90
12	B	1723	G	C5-C6-O6	-8.68	123.39	128.60
12	B	1895	C	N1-C2-N3	-8.68	113.13	119.20
12	B	2646	C	C4'-C3'-C2'	-8.68	93.92	102.60
12	B	862	G	C6-C5-N7	-8.67	125.20	130.40
12	B	1524	G	N9-C4-C5	-8.67	101.93	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2570	G	O4'-C1'-N9	8.67	115.14	108.20
12	B	2792	A	C4-C5-C6	8.67	121.34	117.00
12	B	896	A	C4-C5-C6	8.67	121.33	117.00
12	B	1420	A	N9-C4-C5	8.67	109.27	105.80
12	B	2428	G	C6-N1-C2	8.67	130.30	125.10
12	B	2289	G	N1-C6-O6	8.67	125.10	119.90
12	B	256	A	C5-N7-C8	8.67	108.23	103.90
12	B	2684	U	C2-N3-C4	-8.67	121.80	127.00
12	B	470	A	N3-C4-C5	-8.67	120.73	126.80
12	B	903	C	C2-N3-C4	8.67	124.23	119.90
12	B	1027	A	C4-C5-C6	8.67	121.33	117.00
12	B	1080	A	O4'-C4'-C3'	-8.67	95.33	104.00
12	B	924	G	N9-C4-C5	-8.66	101.93	105.40
12	B	980	A	C5-C6-N1	-8.66	113.37	117.70
12	B	1492	G	C5-C6-O6	-8.66	123.40	128.60
12	B	1254	A	C3'-C2'-C1'	8.66	108.43	101.50
12	B	1471	G	C5-C6-O6	-8.66	123.40	128.60
12	B	2705	A	N1-C2-N3	8.66	133.63	129.30
12	B	1762	A	C6-C5-N7	-8.66	126.24	132.30
12	B	2694	G	N1-C2-N3	-8.66	118.70	123.90
12	B	800	A	P-O3'-C3'	8.66	130.09	119.70
12	B	1165	A	O4'-C1'-N9	8.66	115.13	108.20
12	B	2147	A	C2-N3-C4	8.66	114.93	110.60
12	B	849	A	C5-C6-N6	-8.66	116.78	123.70
12	B	1383	A	C8-N9-C4	-8.66	102.34	105.80
12	B	2260	C	O4'-C1'-N1	8.66	115.12	108.20
12	B	2400	G	N3-C4-C5	8.66	132.93	128.60
12	B	1202	G	C5-C6-O6	-8.65	123.41	128.60
12	B	1833	C	N3-C4-C5	-8.65	118.44	121.90
12	B	120	U	C2-N3-C4	-8.65	121.81	127.00
12	B	941	A	C4-C5-N7	-8.65	106.37	110.70
12	B	1577	C	P-O3'-C3'	8.65	130.08	119.70
12	B	1622	G	N1-C6-O6	8.65	125.09	119.90
12	B	1804	C	C5-C6-N1	8.65	125.33	121.00
12	B	1573	G	N1-C6-O6	8.65	125.09	119.90
12	B	1545	A	C5-C6-N6	-8.65	116.78	123.70
12	B	1721	G	N9-C4-C5	8.65	108.86	105.40
12	B	1733	G	C5-N7-C8	8.65	108.62	104.30
12	B	2719	G	O4'-C1'-N9	8.65	115.12	108.20
12	B	2750	A	C5-C6-N1	-8.65	113.38	117.70
12	B	22	C	O4'-C1'-N1	8.64	115.11	108.20
12	B	46	G	C5-C6-O6	-8.64	123.41	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	956	G	C4-C5-C6	8.64	123.99	118.80
12	B	1350	C	O4'-C1'-N1	8.64	115.11	108.20
12	B	1477	A	P-O3'-C3'	8.64	130.07	119.70
12	B	11	C	C6-N1-C2	-8.64	116.84	120.30
12	B	655	A	O4'-C1'-N9	8.64	115.11	108.20
12	B	1172	C	C4-C5-C6	8.64	121.72	117.40
12	B	1598	A	C8-N9-C4	-8.64	102.34	105.80
12	B	2272	U	O4'-C1'-N1	8.64	115.11	108.20
12	B	2677	G	N9-C4-C5	8.64	108.86	105.40
12	B	592	A	C5-C6-N1	-8.64	113.38	117.70
12	B	775	G	C5-C6-N1	-8.64	107.18	111.50
12	B	1191	G	C5-C6-O6	-8.64	123.42	128.60
12	B	1628	G	C5-C6-N1	8.64	115.82	111.50
12	B	2826	A	N7-C8-N9	-8.64	109.48	113.80
12	B	1529	G	N1-C6-O6	8.64	125.08	119.90
12	B	83	A	N1-C2-N3	8.63	133.62	129.30
12	B	987	C	N1-C2-O2	8.63	124.08	118.90
12	B	1571	A	N1-C2-N3	-8.64	124.98	129.30
12	B	2565	A	N1-C2-N3	8.63	133.62	129.30
12	B	368	A	C6-N1-C2	-8.63	113.42	118.60
12	B	671	C	N3-C4-N4	8.63	124.04	118.00
12	B	1731	G	C4-C5-N7	8.63	114.25	110.80
12	B	1958	C	N3-C4-N4	8.63	124.04	118.00
12	B	192	C	O4'-C1'-N1	8.63	115.10	108.20
12	B	695	G	N3-C2-N2	8.63	125.94	119.90
12	B	1119	U	N3-C4-C5	-8.63	109.42	114.60
12	B	1770	G	N3-C2-N2	8.63	125.94	119.90
12	B	2184	A	C4-C5-C6	8.63	121.31	117.00
12	B	2397	G	C4-C5-N7	-8.63	107.35	110.80
12	B	2580	U	O4'-C1'-N1	8.63	115.10	108.20
12	B	118	A	N1-C6-N6	8.62	123.78	118.60
12	B	1012	U	O4'-C1'-N1	8.62	115.10	108.20
12	B	1070	A	C6-N1-C2	8.62	123.78	118.60
12	B	1185	G	N1-C6-O6	8.62	125.08	119.90
12	B	1459	G	N3-C2-N2	8.62	125.94	119.90
12	B	2306	C	N3-C4-C5	-8.63	118.45	121.90
12	B	2302	U	C2-N3-C4	-8.62	121.83	127.00
12	B	2336	A	C6-N1-C2	8.62	123.78	118.60
12	B	2632	A	C4'-C3'-C2'	-8.62	93.97	102.60
12	B	2678	C	C4-C5-C6	8.62	121.71	117.40
15	E	85	PHE	CB-CG-CD1	-8.62	114.76	120.80
12	B	319	G	C5-C6-O6	-8.62	123.43	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1346	G	C5-C6-O6	-8.62	123.43	128.60
12	B	339	U	N3-C4-O4	8.62	125.44	119.40
12	B	973	A	N1-C6-N6	8.62	123.77	118.60
12	B	997	G	O4'-C1'-N9	8.62	115.10	108.20
12	B	2006	C	C5-C4-N4	-8.62	114.16	120.20
12	B	2419	U	O4'-C1'-N1	8.62	115.10	108.20
12	B	385	C	C5-C6-N1	-8.62	116.69	121.00
12	B	934	U	C5-C4-O4	8.62	131.07	125.90
12	B	1436	G	N1-C6-O6	8.62	125.07	119.90
12	B	1871	A	N9-C4-C5	8.62	109.25	105.80
12	B	2752	C	N3-C4-N4	8.62	124.03	118.00
12	B	2198	A	O4'-C1'-N9	8.62	115.09	108.20
12	B	2668	G	C5-C6-O6	-8.62	123.43	128.60
12	B	1914	C	C6-N1-C2	-8.62	116.85	120.30
12	B	2279	G	C2-N3-C4	8.62	116.21	111.90
12	B	2330	G	C5-C6-O6	-8.62	123.43	128.60
12	B	822	G	C4-C5-N7	-8.61	107.36	110.80
12	B	1031	G	N1-C2-N3	-8.61	118.73	123.90
12	B	1579	A	N3-C4-C5	-8.61	120.77	126.80
12	B	140	C	O4'-C1'-N1	8.61	115.09	108.20
12	B	988	A	C5-C6-N6	-8.61	116.81	123.70
12	B	2673	G	O4'-C1'-N9	8.61	115.09	108.20
12	B	172	A	C2-N3-C4	-8.61	106.30	110.60
12	B	1292	G	C5-C6-O6	-8.61	123.44	128.60
12	B	1467	U	O4'-C1'-N1	8.61	115.08	108.20
12	B	1726	C	N3-C4-C5	-8.61	118.46	121.90
12	B	1940	U	O4'-C1'-N1	8.61	115.08	108.20
12	B	2044	C	O4'-C1'-N1	8.61	115.08	108.20
12	B	1080	A	N1-C2-N3	8.60	133.60	129.30
12	B	1327	A	C5-C6-N6	-8.60	116.82	123.70
12	B	1593	A	C5-C6-N6	-8.60	116.82	123.70
12	B	2314	A	C5-C6-N6	-8.60	116.82	123.70
12	B	2424	C	C5-C6-N1	8.60	125.30	121.00
12	B	2572	A	C4-C5-C6	8.60	121.30	117.00
12	B	591	U	C6-N1-C2	8.60	126.16	121.00
12	B	848	C	N3-C4-C5	8.60	125.34	121.90
12	B	2142	A	C5-C6-N6	-8.60	116.82	123.70
12	B	2627	G	N7-C8-N9	-8.60	108.80	113.10
12	B	926	G	N1-C2-N3	-8.60	118.74	123.90
12	B	390	U	N3-C2-O2	8.60	128.22	122.20
12	B	455	C	N3-C4-N4	8.60	124.02	118.00
12	B	1045	C	C5-C4-N4	-8.60	114.18	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1450	G	N1-C6-O6	8.60	125.06	119.90
16	F	111	ARG	NE-CZ-NH1	8.60	124.60	120.30
12	B	1660	G	N7-C8-N9	8.60	117.40	113.10
12	B	1819	A	N9-C4-C5	8.60	109.24	105.80
12	B	2834	G	N3-C4-C5	-8.60	124.30	128.60
12	B	1305	C	C5-C4-N4	-8.60	114.18	120.20
12	B	2083	G	N3-C4-C5	-8.60	124.30	128.60
12	B	2087	G	N1-C6-O6	8.60	125.06	119.90
12	B	2310	C	N3-C4-N4	8.60	124.02	118.00
12	B	2475	C	P-O5'-C5'	8.60	134.66	120.90
11	A	75	G	N1-C6-O6	8.59	125.06	119.90
12	B	1722	A	C5-C6-N6	-8.59	116.83	123.70
11	A	73	A	O4'-C1'-N9	8.59	115.07	108.20
12	B	1422	G	C2-N3-C4	-8.59	107.61	111.90
12	B	2295	C	O4'-C1'-N1	8.59	115.07	108.20
12	B	1948	G	C5-C6-O6	-8.59	123.45	128.60
12	B	1281	G	C4-C5-N7	8.59	114.23	110.80
12	B	1504	A	C5-C6-N6	-8.59	116.83	123.70
12	B	2895	G	N3-C2-N2	8.59	125.91	119.90
12	B	216	A	C8-N9-C4	-8.59	102.37	105.80
12	B	493	G	C3'-C2'-C1'	8.59	108.37	101.50
12	B	730	A	N1-C2-N3	8.58	133.59	129.30
12	B	1585	C	C5-C6-N1	8.58	125.29	121.00
12	B	1829	A	C4-C5-C6	8.58	121.29	117.00
12	B	2439	A	C5-C6-N6	-8.58	116.83	123.70
12	B	2557	G	O4'-C1'-N9	8.58	115.07	108.20
12	B	620	G	O4'-C1'-N9	8.58	115.06	108.20
12	B	1463	C	O4'-C1'-N1	8.58	115.06	108.20
27	Q	48	ASP	CB-CG-OD2	-8.58	110.58	118.30
12	B	1498	C	N3-C4-N4	8.58	124.00	118.00
12	B	2893	A	C4-C5-C6	8.58	121.29	117.00
12	B	293	U	C6-N1-C2	-8.58	115.85	121.00
12	B	2596	U	C4-C5-C6	8.58	124.85	119.70
12	B	352	A	O4'-C1'-N9	8.58	115.06	108.20
6	5	164	ARG	NE-CZ-NH2	-8.57	116.01	120.30
11	A	45	A	N1-C2-N3	8.57	133.59	129.30
12	B	11	C	O4'-C1'-N1	8.57	115.06	108.20
12	B	742	A	C5-C6-N6	-8.57	116.84	123.70
12	B	491	G	N1-C6-O6	8.57	125.04	119.90
12	B	1195	G	N1-C2-N3	-8.57	118.76	123.90
12	B	1304	A	C5-C6-N6	-8.57	116.84	123.70
12	B	1393	A	P-O5'-C5'	-8.57	107.18	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1669	A	N3-C4-C5	-8.57	120.80	126.80
12	B	397	U	N1-C2-O2	-8.57	116.80	122.80
12	B	1845	G	C6-C5-N7	-8.57	125.26	130.40
12	B	2596	U	C5-C4-O4	8.57	131.04	125.90
12	B	260	G	O4'-C1'-N9	8.57	115.06	108.20
12	B	1350	C	C2-N3-C4	-8.57	115.61	119.90
12	B	1848	A	C5-C6-N1	-8.57	113.41	117.70
12	B	2385	C	N1-C2-N3	-8.57	113.20	119.20
12	B	2541	A	N9-C4-C5	-8.57	102.37	105.80
12	B	2895	G	N1-C2-N3	-8.57	118.76	123.90
12	B	36	G	O4'-C1'-N9	8.57	115.05	108.20
12	B	1959	G	C5-C6-O6	-8.57	123.46	128.60
12	B	132	G	C2-N3-C4	-8.57	107.62	111.90
12	B	426	C	N1-C2-O2	8.57	124.04	118.90
12	B	1237	A	O4'-C1'-N9	8.57	115.05	108.20
12	B	1616	A	N1-C6-N6	8.57	123.74	118.60
12	B	1919	A	C4-C5-N7	-8.57	106.42	110.70
12	B	2515	C	O4'-C1'-N1	8.57	115.05	108.20
12	B	261	G	N1-C2-N3	-8.56	118.76	123.90
12	B	497	A	C6-C5-N7	-8.56	126.30	132.30
12	B	607	U	C1'-O4'-C4'	-8.56	103.05	109.90
12	B	1465	G	C8-N9-C4	8.56	109.83	106.40
12	B	1480	C	N3-C2-O2	8.56	127.89	121.90
12	B	1690	A	N1-C6-N6	8.56	123.74	118.60
12	B	1935	G	C1'-O4'-C4'	8.56	116.75	109.90
12	B	2553	G	C4-C5-N7	8.56	114.23	110.80
12	B	1285	A	C5-C6-N1	-8.56	113.42	117.70
12	B	137	U	N3-C4-C5	8.56	119.74	114.60
12	B	889	C	P-O3'-C3'	8.56	129.97	119.70
12	B	989	G	O4'-C1'-N9	8.56	115.05	108.20
12	B	51	G	C5-C6-O6	-8.56	123.47	128.60
12	B	165	A	C8-N9-C4	-8.56	102.38	105.80
12	B	526	A	N1-C6-N6	8.56	123.73	118.60
12	B	1113	U	N1-C2-O2	-8.56	116.81	122.80
12	B	2115	G	N9-C4-C5	-8.56	101.98	105.40
12	B	2350	C	N3-C4-C5	-8.56	118.48	121.90
12	B	2634	A	N1-C6-N6	8.56	123.73	118.60
12	B	177	G	N1-C2-N3	-8.55	118.77	123.90
12	B	1256	G	N1-C2-N3	8.56	129.03	123.90
12	B	2640	G	C6-C5-N7	-8.55	125.27	130.40
12	B	2902	C	O4'-C1'-N1	8.55	115.04	108.20
12	B	1575	C	N3-C2-O2	-8.55	115.91	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1780	A	N9-C4-C5	8.55	109.22	105.80
12	B	2216	G	O4'-C1'-N9	8.55	115.04	108.20
12	B	2598	A	C2-N3-C4	8.55	114.88	110.60
12	B	466	A	C6-N1-C2	8.55	123.73	118.60
12	B	1921	G	N3-C2-N2	8.55	125.89	119.90
12	B	752	A	C1'-O4'-C4'	-8.55	103.06	109.90
2	1	29	ARG	NE-CZ-NH1	-8.55	116.03	120.30
11	A	4	C	O4'-C1'-N1	8.55	115.04	108.20
11	A	98	G	N1-C2-N3	-8.55	118.77	123.90
12	B	263	G	N9-C4-C5	8.55	108.82	105.40
12	B	530	G	N1-C6-O6	8.55	125.03	119.90
12	B	1182	G	C5-C6-O6	8.55	133.73	128.60
12	B	1259	G	N1-C6-O6	8.55	125.03	119.90
12	B	1363	C	O4'-C1'-N1	8.55	115.04	108.20
12	B	1525	A	O4'-C1'-N9	8.55	115.04	108.20
12	B	2075	U	C5-C4-O4	-8.55	120.77	125.90
12	B	2210	U	C5'-C4'-O4'	8.55	119.36	109.10
12	B	2886	A	O4'-C1'-N9	8.55	115.04	108.20
12	B	847	U	C5-C4-O4	-8.55	120.77	125.90
12	B	1647	U	O4'-C1'-N1	8.55	115.04	108.20
12	B	1854	A	N1-C6-N6	8.55	123.73	118.60
14	D	118	PHE	CB-CG-CD1	-8.55	114.82	120.80
12	B	556	A	C5-C6-N1	-8.54	113.43	117.70
12	B	1156	A	N1-C6-N6	8.54	123.72	118.60
12	B	1463	C	C4-C5-C6	8.54	121.67	117.40
12	B	2011	U	C6-N1-C2	-8.54	115.87	121.00
12	B	2032	G	N7-C8-N9	-8.54	108.83	113.10
12	B	2264	C	C5-C6-N1	-8.54	116.73	121.00
12	B	2774	C	C5-C6-N1	8.54	125.27	121.00
12	B	2795	C	C2-N1-C1'	8.54	128.19	118.80
12	B	270	A	C6-N1-C2	-8.54	113.48	118.60
12	B	1423	G	N3-C2-N2	8.54	125.88	119.90
12	B	1823	G	C4-C5-N7	-8.54	107.38	110.80
12	B	1916	A	C4-C5-N7	-8.54	106.43	110.70
12	B	2170	A	N1-C2-N3	8.54	133.57	129.30
15	E	162	ARG	NE-CZ-NH2	8.54	124.57	120.30
12	B	382	A	C8-N9-C4	-8.54	102.39	105.80
12	B	1095	A	N1-C2-N3	8.54	133.57	129.30
12	B	1407	G	C4-C5-C6	8.54	123.92	118.80
12	B	1502	A	P-O3'-C3'	8.54	129.94	119.70
12	B	1643	G	N3-C2-N2	8.53	125.87	119.90
12	B	1644	C	O4'-C1'-N1	8.54	115.03	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1844	C	N1-C2-N3	-8.54	113.23	119.20
12	B	210	C	C6-N1-C2	-8.53	116.89	120.30
12	B	618	G	C5-C6-N1	-8.53	107.23	111.50
12	B	982	C	N3-C4-N4	8.53	123.97	118.00
11	A	101	A	C2-N3-C4	-8.53	106.34	110.60
12	B	2895	G	N1-C6-O6	8.53	125.02	119.90
12	B	476	G	C6-C5-N7	-8.53	125.28	130.40
12	B	577	G	N3-C2-N2	8.53	125.87	119.90
12	B	705	A	O4'-C1'-N9	8.53	115.02	108.20
12	B	1864	U	P-O5'-C5'	8.53	134.54	120.90
10	9	234	HIS	CA-CB-CG	8.52	128.09	113.60
12	B	383	C	C2-N3-C4	8.52	124.16	119.90
12	B	1403	A	N1-C6-N6	8.52	123.71	118.60
12	B	1723	G	O4'-C1'-N9	8.52	115.02	108.20
12	B	2153	C	N3-C4-C5	-8.52	118.49	121.90
24	N	46	ARG	NE-CZ-NH1	8.52	124.56	120.30
11	A	34	A	N7-C8-N9	-8.52	109.54	113.80
12	B	169	G	C5-C6-O6	-8.52	123.49	128.60
12	B	891	G	N9-C4-C5	8.52	108.81	105.40
12	B	904	G	C8-N9-C4	-8.52	102.99	106.40
12	B	1254	A	C4-C5-C6	8.52	121.26	117.00
12	B	1929	G	C5-C6-O6	-8.52	123.49	128.60
12	B	2093	G	N3-C2-N2	8.52	125.86	119.90
12	B	1406	U	N3-C4-C5	-8.52	109.49	114.60
12	B	1988	G	N7-C8-N9	8.52	117.36	113.10
12	B	422	A	C5-C6-N6	-8.51	116.89	123.70
12	B	1113	U	O4'-C1'-N1	8.51	115.01	108.20
12	B	1380	G	N1-C6-O6	8.51	125.01	119.90
12	B	2460	U	O4'-C1'-N1	8.51	115.01	108.20
12	B	2862	G	N9-C4-C5	8.51	108.81	105.40
12	B	338	G	C2-N3-C4	-8.51	107.64	111.90
12	B	813	U	O4'-C1'-N1	8.51	115.01	108.20
12	B	1700	A	C5-C6-N6	-8.51	116.89	123.70
12	B	1702	G	N3-C2-N2	8.51	125.86	119.90
12	B	2162	G	O4'-C1'-N9	8.51	115.01	108.20
12	B	28	A	N7-C8-N9	-8.51	109.55	113.80
12	B	1835	G	N1-C2-N3	-8.51	118.80	123.90
11	A	63	C	O4'-C1'-N1	8.51	115.00	108.20
12	B	282	A	N9-C4-C5	8.51	109.20	105.80
12	B	507	A	C8-N9-C4	-8.51	102.40	105.80
12	B	2090	A	C2-N3-C4	-8.51	106.35	110.60
12	B	1364	G	C6-C5-N7	-8.50	125.30	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2760	C	O4'-C1'-N1	8.50	115.00	108.20
12	B	2803	G	N7-C8-N9	-8.50	108.85	113.10
12	B	509	C	C1'-O4'-C4'	-8.50	103.10	109.90
12	B	643	A	C5-C6-N6	-8.50	116.90	123.70
12	B	676	A	C8-N9-C4	-8.50	102.40	105.80
12	B	703	U	C2-N3-C4	8.50	132.10	127.00
12	B	980	A	C4-C5-C6	8.50	121.25	117.00
12	B	1799	G	N3-C2-N2	8.50	125.85	119.90
12	B	277	G	O4'-C1'-N9	8.50	115.00	108.20
12	B	792	A	O4'-C1'-N9	8.50	115.00	108.20
12	B	2789	C	O4'-C1'-N1	8.50	115.00	108.20
12	B	27	G	N9-C4-C5	-8.50	102.00	105.40
12	B	212	G	N3-C2-N2	8.50	125.85	119.90
12	B	377	G	O4'-C1'-N9	8.50	115.00	108.20
12	B	1365	A	N1-C6-N6	8.50	123.70	118.60
12	B	2768	U	O4'-C1'-N1	8.50	115.00	108.20
12	B	338	G	O4'-C1'-N9	8.49	115.00	108.20
12	B	609	A	C5-C6-N1	-8.49	113.45	117.70
12	B	654	A	C4-C5-C6	8.49	121.25	117.00
12	B	1003	G	N1-C2-N3	-8.49	118.80	123.90
12	B	1538	G	N3-C2-N2	8.49	125.84	119.90
12	B	882	G	C8-N9-C4	-8.49	103.00	106.40
11	A	13	G	C5-C6-O6	-8.49	123.51	128.60
12	B	314	C	C2-N3-C4	8.49	124.14	119.90
12	B	942	G	N3-C4-C5	-8.49	124.36	128.60
12	B	1357	C	N3-C4-N4	8.49	123.94	118.00
12	B	376	G	C2-N3-C4	8.49	116.14	111.90
12	B	823	C	C4-C5-C6	8.49	121.64	117.40
12	B	479	A	N1-C6-N6	8.48	123.69	118.60
12	B	1869	G	N1-C2-N2	-8.48	108.56	116.20
12	B	1477	A	N1-C6-N6	8.48	123.69	118.60
12	B	2056	G	N3-C4-C5	-8.48	124.36	128.60
12	B	2478	A	N3-C4-N9	8.48	134.19	127.40
12	B	20	C	C2-N3-C4	-8.48	115.66	119.90
12	B	27	G	N3-C4-C5	8.48	132.84	128.60
12	B	470	A	N9-C4-C5	8.48	109.19	105.80
12	B	1343	G	C6-C5-N7	-8.48	125.31	130.40
12	B	1418	G	N9-C4-C5	-8.48	102.01	105.40
12	B	2224	G	C6-C5-N7	-8.48	125.31	130.40
12	B	288	U	O4'-C1'-N1	8.48	114.98	108.20
12	B	635	C	N3-C4-C5	-8.48	118.51	121.90
12	B	1006	C	C4-C5-C6	8.48	121.64	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1110	G	C5-C6-O6	-8.48	123.51	128.60
12	B	1472	C	N3-C4-N4	8.48	123.94	118.00
12	B	1735	A	N9-C1'-C2'	-8.48	102.67	112.00
12	B	2412	A	C5-N7-C8	8.48	108.14	103.90
12	B	2526	G	C5-N7-C8	-8.48	100.06	104.30
12	B	1192	G	C5-C6-N1	-8.48	107.26	111.50
12	B	1207	C	N3-C4-C5	-8.48	118.51	121.90
12	B	1759	A	C5-C6-N1	-8.48	113.46	117.70
12	B	2127	G	P-O3'-C3'	8.48	129.87	119.70
12	B	2215	C	P-O5'-C5'	8.48	134.47	120.90
12	B	518	G	N1-C6-O6	8.47	124.98	119.90
12	B	1266	G	N1-C6-O6	8.47	124.98	119.90
12	B	1769	U	O4'-C1'-N1	8.47	114.98	108.20
12	B	1846	G	C4'-C3'-C2'	-8.47	94.13	102.60
12	B	1954	G	N7-C8-N9	-8.47	108.86	113.10
12	B	2421	G	O4'-C1'-N9	8.47	114.98	108.20
12	B	2873	A	N1-C6-N6	8.47	123.69	118.60
12	B	221	A	C6-C5-N7	-8.47	126.37	132.30
12	B	858	G	C5-C6-O6	-8.47	123.52	128.60
12	B	135	U	C2-N3-C4	8.47	132.08	127.00
12	B	2330	G	O4'-C1'-N9	8.47	114.98	108.20
12	B	2660	A	C2-N3-C4	8.47	114.83	110.60
12	B	1059	G	C2-N3-C4	8.47	116.13	111.90
12	B	458	G	O4'-C1'-N9	8.47	114.97	108.20
12	B	883	G	C5'-C4'-O4'	8.47	119.26	109.10
12	B	1316	U	N3-C4-C5	-8.47	109.52	114.60
12	B	1649	G	C6-C5-N7	-8.47	125.32	130.40
12	B	2518	A	C5-C6-N1	-8.47	113.47	117.70
12	B	2732	G	C6-C5-N7	-8.47	125.32	130.40
12	B	2813	A	O4'-C1'-N9	8.47	114.97	108.20
12	B	1006	C	O4'-C1'-N1	8.47	114.97	108.20
12	B	2626	C	C6-N1-C2	-8.47	116.91	120.30
12	B	1016	G	P-O3'-C3'	-8.46	109.54	119.70
12	B	975	A	N1-C6-N6	8.46	123.68	118.60
12	B	1093	G	O4'-C1'-N9	8.46	114.97	108.20
12	B	2314	A	C8-N9-C4	8.46	109.19	105.80
12	B	2634	A	C5-N7-C8	8.46	108.13	103.90
12	B	1631	G	O4'-C1'-N9	8.46	114.97	108.20
12	B	1724	G	N1-C6-O6	8.46	124.98	119.90
12	B	207	A	C4-C5-C6	8.46	121.23	117.00
12	B	1789	A	N1-C2-N3	8.46	133.53	129.30
12	B	1810	A	C2-N3-C4	-8.46	106.37	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2621	G	C5-C6-O6	-8.46	123.53	128.60
12	B	1571	A	C6-C5-N7	-8.46	126.38	132.30
12	B	318	C	C4-C5-C6	8.45	121.63	117.40
12	B	629	G	C2-N3-C4	8.45	116.13	111.90
12	B	2098	U	C4'-C3'-C2'	-8.46	94.14	102.60
12	B	2892	G	P-O3'-C3'	-8.46	109.55	119.70
20	J	119	PHE	CB-CG-CD1	8.46	126.72	120.80
12	B	83	A	C5-C6-N6	-8.45	116.94	123.70
12	B	474	G	N9-C4-C5	8.45	108.78	105.40
12	B	1036	G	C5-C6-O6	-8.45	123.53	128.60
12	B	1473	G	C8-N9-C4	-8.45	103.02	106.40
12	B	1511	G	N1-C2-N3	-8.45	118.83	123.90
12	B	1682	G	N1-C6-O6	8.45	124.97	119.90
12	B	1783	A	N1-C2-N3	8.45	133.53	129.30
12	B	2178	C	N3-C4-C5	-8.45	118.52	121.90
12	B	136	G	C8-N9-C4	-8.45	103.02	106.40
12	B	2867	G	C5-N7-C8	8.45	108.52	104.30
12	B	669	G	C5-C6-O6	-8.45	123.53	128.60
12	B	868	U	N3-C2-O2	8.45	128.11	122.20
12	B	905	A	C4-C5-C6	8.45	121.22	117.00
12	B	1815	A	C5-C6-N1	-8.45	113.48	117.70
12	B	1738	G	N9-C4-C5	8.45	108.78	105.40
12	B	2550	G	N1-C6-O6	8.45	124.97	119.90
12	B	2004	G	N1-C6-O6	8.44	124.97	119.90
12	B	2855	C	C6-N1-C2	8.44	123.68	120.30
12	B	1096	A	C5-C6-N1	-8.44	113.48	117.70
12	B	622	G	O4'-C1'-N9	8.44	114.95	108.20
12	B	1103	A	C6-C5-N7	-8.44	126.39	132.30
12	B	1954	G	N3-C2-N2	8.44	125.81	119.90
12	B	2539	C	O4'-C1'-N1	8.44	114.95	108.20
12	B	1453	A	C5-C6-N1	-8.44	113.48	117.70
12	B	247	G	O4'-C1'-N9	8.44	114.95	108.20
12	B	1682	G	C6-C5-N7	-8.44	125.34	130.40
11	A	42	C	C4-C5-C6	8.44	121.62	117.40
12	B	122	G	P-O5'-C5'	8.44	134.40	120.90
12	B	1715	G	C8-N9-C4	8.44	109.77	106.40
12	B	2062	A	C5-C6-N6	-8.44	116.95	123.70
12	B	2648	G	C6-C5-N7	-8.44	125.34	130.40
12	B	778	G	O4'-C1'-N9	8.43	114.95	108.20
12	B	1478	G	N1-C6-O6	8.43	124.96	119.90
12	B	1516	G	C5-C6-O6	-8.43	123.54	128.60
12	B	1692	U	P-O3'-C3'	8.43	129.82	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2206	C	N1-C2-O2	-8.43	113.84	118.90
12	B	2872	A	N1-C6-N6	8.43	123.66	118.60
12	B	802	A	N1-C6-N6	8.43	123.66	118.60
12	B	877	A	C2-N3-C4	8.43	114.81	110.60
12	B	947	A	N1-C6-N6	8.43	123.66	118.60
12	B	1443	U	O4'-C1'-N1	8.43	114.94	108.20
12	B	1610	A	C6-N1-C2	-8.43	113.54	118.60
12	B	2075	U	O4'-C1'-N1	8.43	114.94	108.20
12	B	2649	C	N3-C2-O2	8.43	127.80	121.90
23	M	10	ARG	NE-CZ-NH2	8.43	124.52	120.30
12	B	222	A	C6-C5-N7	-8.43	126.40	132.30
12	B	1348	C	C1'-O4'-C4'	-8.43	103.16	109.90
12	B	1665	A	C4-C5-C6	8.43	121.21	117.00
12	B	2893	A	C5-C6-N1	-8.43	113.49	117.70
12	B	224	U	C5-C6-N1	-8.43	118.49	122.70
12	B	299	A	N1-C6-N6	8.43	123.66	118.60
12	B	979	A	C6-C5-N7	-8.43	126.40	132.30
12	B	2711	A	O4'-C1'-N9	8.43	114.94	108.20
12	B	1048	A	C4-C5-C6	8.42	121.21	117.00
12	B	2631	G	C4-C5-C6	8.42	123.85	118.80
18	H	68	ARG	NE-CZ-NH2	8.42	124.51	120.30
12	B	1193	G	N1-C6-O6	8.42	124.95	119.90
11	A	35	C	N3-C4-C5	-8.42	118.53	121.90
12	B	1906	G	C4-C5-N7	8.42	114.17	110.80
12	B	2058	A	C4-C5-C6	8.42	121.21	117.00
12	B	2462	C	P-O3'-C3'	-8.42	109.60	119.70
11	A	98	G	N3-C2-N2	8.42	125.79	119.90
12	B	271	G	C2-N3-C4	8.42	116.11	111.90
12	B	1542	U	N3-C2-O2	8.42	128.09	122.20
12	B	192	C	C4-C5-C6	-8.41	113.19	117.40
12	B	697	G	C5-C6-N1	-8.41	107.29	111.50
12	B	1328	A	C4-C5-C6	8.41	121.21	117.00
12	B	2618	G	N1-C2-N3	-8.41	118.85	123.90
12	B	748	G	N1-C2-N3	-8.41	118.85	123.90
12	B	787	C	O4'-C1'-N1	8.41	114.93	108.20
12	B	1331	G	O4'-C1'-N9	8.41	114.93	108.20
12	B	1388	G	C4-C5-C6	8.41	123.85	118.80
12	B	1858	A	N1-C2-N3	-8.41	125.09	129.30
12	B	2204	G	C4-C5-C6	8.41	123.85	118.80
12	B	106	C	O4'-C1'-N1	8.41	114.93	108.20
12	B	1580	A	O4'-C1'-N9	8.41	114.93	108.20
11	A	34	A	C8-N9-C4	8.41	109.16	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	957	C	N3-C4-N4	8.41	123.88	118.00
12	B	1201	U	O4'-C1'-N1	8.41	114.93	108.20
12	B	1448	G	C5-C6-O6	-8.41	123.56	128.60
12	B	371	A	C5-C6-N1	-8.40	113.50	117.70
12	B	687	C	O4'-C1'-N1	8.40	114.92	108.20
12	B	1618	A	C5-C6-N6	-8.40	116.98	123.70
12	B	1654	A	C2-N3-C4	-8.40	106.40	110.60
12	B	1899	A	C6-C5-N7	-8.40	126.42	132.30
12	B	2752	C	C5-C6-N1	8.40	125.20	121.00
12	B	2890	G	P-O5'-C5'	8.40	134.35	120.90
12	B	760	G	O4'-C1'-N9	8.40	114.92	108.20
12	B	2344	U	N1-C2-O2	-8.40	116.92	122.80
12	B	2500	U	C5-C4-O4	-8.40	120.86	125.90
12	B	2835	A	N1-C6-N6	8.40	123.64	118.60
12	B	470	A	C4-C5-N7	-8.40	106.50	110.70
12	B	2277	G	C6-C5-N7	-8.40	125.36	130.40
12	B	2832	U	O4'-C1'-N1	8.40	114.92	108.20
11	A	50	A	C6-C5-N7	-8.40	126.42	132.30
12	B	244	A	O4'-C1'-N9	8.40	114.92	108.20
12	B	808	G	C8-N9-C4	-8.40	103.04	106.40
12	B	1022	G	C4-C5-N7	-8.40	107.44	110.80
12	B	1157	G	N1-C6-O6	8.40	124.94	119.90
12	B	1769	U	C5-C6-N1	8.40	126.90	122.70
12	B	2761	A	N1-C6-N6	8.40	123.64	118.60
11	A	21	G	C6-C5-N7	-8.39	125.36	130.40
12	B	1177	G	N3-C4-C5	-8.39	124.40	128.60
12	B	1913	A	N1-C6-N6	8.39	123.64	118.60
12	B	49	A	C6-N1-C2	-8.39	113.57	118.60
12	B	1490	A	C4-C5-C6	8.39	121.20	117.00
12	B	1685	C	O4'-C1'-N1	8.39	114.91	108.20
12	B	940	G	C5-C6-O6	-8.39	123.57	128.60
12	B	1874	C	O4'-C1'-N1	8.39	114.91	108.20
12	B	599	A	C2-N3-C4	-8.39	106.41	110.60
12	B	1470	A	C2-N3-C4	-8.39	106.41	110.60
12	B	2284	A	C8-N9-C4	-8.39	102.44	105.80
12	B	2495	G	N1-C6-O6	8.39	124.93	119.90
12	B	2587	A	C5-N7-C8	8.39	108.09	103.90
12	B	335	C	C6-N1-C2	-8.39	116.95	120.30
12	B	2738	A	C5-C6-N6	-8.39	116.99	123.70
12	B	980	A	C5-N7-C8	8.38	108.09	103.90
12	B	1237	A	C4-C5-C6	8.38	121.19	117.00
12	B	53	A	C4-C5-C6	8.38	121.19	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1021	A	C4-C5-C6	8.38	121.19	117.00
12	B	420	C	N3-C4-C5	-8.38	118.55	121.90
12	B	900	A	C5-C6-N6	-8.38	117.00	123.70
12	B	1199	U	O4'-C1'-N1	8.38	114.91	108.20
12	B	1544	A	N9-C4-C5	8.38	109.15	105.80
12	B	2630	G	C8-N9-C4	8.38	109.75	106.40
12	B	1202	G	N1-C6-O6	8.38	124.93	119.90
12	B	2531	A	N9-C4-C5	8.38	109.15	105.80
12	B	1405	U	N1-C2-N3	-8.38	109.87	114.90
12	B	2481	G	C5-C6-O6	-8.38	123.57	128.60
12	B	2882	A	C6-C5-N7	-8.38	126.44	132.30
12	B	1017	G	O4'-C1'-N9	8.38	114.90	108.20
12	B	1216	G	N1-C2-N3	-8.38	118.87	123.90
12	B	2066	C	N3-C4-C5	-8.38	118.55	121.90
12	B	2808	G	C3'-C2'-C1'	8.38	108.20	101.50
11	A	52	A	C5-C6-N1	-8.38	113.51	117.70
11	A	60	C	O4'-C1'-N1	8.38	114.90	108.20
12	B	1327	A	N9-C4-C5	8.38	109.15	105.80
12	B	1017	G	C4-C5-N7	8.37	114.15	110.80
12	B	2444	G	C4-C5-N7	8.37	114.15	110.80
12	B	2755	C	O4'-C1'-N1	8.38	114.90	108.20
12	B	1273	U	C3'-C2'-C1'	8.37	108.20	101.50
12	B	70	G	O4'-C1'-N9	8.37	114.90	108.20
12	B	785	G	C2-N3-C4	-8.37	107.72	111.90
12	B	820	A	C6-C5-N7	-8.37	126.44	132.30
12	B	2015	A	C2-N3-C4	-8.37	106.42	110.60
12	B	2666	C	O4'-C1'-N1	8.37	114.90	108.20
12	B	1178	C	C5-C4-N4	-8.37	114.34	120.20
12	B	2822	G	P-O3'-C3'	8.37	129.74	119.70
12	B	350	G	C5-C6-O6	-8.36	123.58	128.60
12	B	988	A	P-O5'-C5'	8.36	134.28	120.90
12	B	2249	U	P-O3'-C3'	8.36	129.74	119.70
12	B	259	G	C2-N3-C4	8.36	116.08	111.90
12	B	712	G	N1-C6-O6	8.36	124.92	119.90
12	B	1232	G	C1'-O4'-C4'	8.36	116.59	109.90
12	B	1797	G	O4'-C1'-N9	8.36	114.89	108.20
12	B	1858	A	C2-N3-C4	8.36	114.78	110.60
12	B	1946	U	O4'-C1'-N1	8.36	114.89	108.20
12	B	2042	A	O4'-C1'-N9	8.36	114.89	108.20
12	B	2648	G	C4-C5-C6	8.36	123.82	118.80
12	B	66	C	C6-N1-C2	8.36	123.64	120.30
12	B	98	G	N1-C6-O6	8.36	124.92	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	969	G	C5-C6-O6	-8.36	123.58	128.60
12	B	1540	G	N7-C8-N9	8.36	117.28	113.10
12	B	1858	A	N9-C4-C5	8.36	109.14	105.80
12	B	1961	C	C2-N3-C4	8.36	124.08	119.90
12	B	2202	U	O4'-C1'-N1	8.36	114.89	108.20
12	B	2485	G	N9-C4-C5	8.36	108.74	105.40
12	B	2852	G	C5-C6-O6	-8.36	123.58	128.60
25	O	30	ARG	NE-CZ-NH1	8.36	124.48	120.30
12	B	1959	G	C4-C5-N7	8.36	114.14	110.80
12	B	547	A	C5-C6-N1	-8.36	113.52	117.70
12	B	755	U	N3-C4-C5	-8.36	109.59	114.60
12	B	954	G	N9-C4-C5	-8.36	102.06	105.40
12	B	1627	G	N3-C2-N2	8.36	125.75	119.90
12	B	1681	G	C2-N3-C4	-8.36	107.72	111.90
12	B	1723	G	C4-C5-N7	8.36	114.14	110.80
12	B	2588	G	C6-N1-C2	8.36	130.11	125.10
12	B	877	A	C4-C5-C6	8.35	121.18	117.00
12	B	1027	A	C2-N3-C4	8.35	114.78	110.60
12	B	2660	A	C8-N9-C4	-8.35	102.46	105.80
12	B	1284	A	C4-C5-N7	-8.35	106.52	110.70
12	B	1290	C	C6-N1-C2	-8.35	116.96	120.30
12	B	2218	G	C5-C6-N1	-8.35	107.33	111.50
12	B	2389	G	P-O3'-C3'	8.35	129.72	119.70
12	B	2551	C	O4'-C1'-N1	8.35	114.88	108.20
12	B	114	U	N3-C4-O4	-8.35	113.56	119.40
12	B	274	C	N3-C4-N4	8.35	123.84	118.00
12	B	1809	A	N9-C4-C5	8.35	109.14	105.80
12	B	2070	A	N7-C8-N9	-8.35	109.63	113.80
12	B	392	U	N3-C4-C5	8.35	119.61	114.60
12	B	811	U	O4'-C1'-N1	8.35	114.88	108.20
12	B	1320	C	C5-C6-N1	-8.34	116.83	121.00
12	B	982	C	C2-N1-C1'	8.34	127.98	118.80
12	B	1137	G	O4'-C1'-N9	8.34	114.87	108.20
12	B	1457	U	O4'-C1'-N1	8.34	114.87	108.20
12	B	1860	G	O4'-C1'-N9	8.34	114.87	108.20
12	B	2234	G	N1-C6-O6	8.34	124.91	119.90
12	B	435	C	C5-C6-N1	8.34	125.17	121.00
14	D	128	ARG	NE-CZ-NH1	8.34	124.47	120.30
12	B	520	G	C2-N3-C4	-8.34	107.73	111.90
12	B	26	G	C4-N9-C1'	8.34	137.34	126.50
12	B	389	G	N1-C6-O6	8.34	124.90	119.90
12	B	629	G	C5-C6-O6	-8.34	123.60	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1331	G	C8-N9-C4	-8.34	103.06	106.40
12	B	2010	G	N7-C8-N9	-8.34	108.93	113.10
20	J	71	ASP	CB-CG-OD2	-8.34	110.80	118.30
12	B	2413	G	N9-C4-C5	-8.34	102.07	105.40
15	E	114	ARG	NE-CZ-NH2	-8.34	116.13	120.30
12	B	439	A	O4'-C1'-N9	8.33	114.87	108.20
12	B	1538	G	C5-C6-O6	-8.33	123.60	128.60
12	B	1980	G	C2-N3-C4	8.33	116.07	111.90
12	B	2592	G	C5-N7-C8	-8.33	100.13	104.30
12	B	886	A	C6-C5-N7	-8.33	126.47	132.30
12	B	1694	C	O4'-C1'-N1	8.33	114.86	108.20
12	B	2659	G	C5-N7-C8	8.33	108.47	104.30
12	B	526	A	C5-N7-C8	8.33	108.06	103.90
12	B	1750	G	C6-C5-N7	-8.33	125.40	130.40
12	B	2714	G	C6-C5-N7	-8.33	125.40	130.40
12	B	402	A	P-O5'-C5'	8.32	134.22	120.90
12	B	749	A	C4-C5-C6	8.32	121.16	117.00
12	B	2874	C	O4'-C1'-N1	8.32	114.86	108.20
12	B	109	C	O4'-C1'-N1	8.32	114.86	108.20
12	B	347	A	C5-C6-N1	-8.32	113.54	117.70
12	B	1737	G	P-O3'-C3'	8.32	129.69	119.70
12	B	1893	C	N3-C4-C5	-8.32	118.57	121.90
12	B	2093	G	C6-N1-C2	8.32	130.09	125.10
20	J	71	ASP	CB-CG-OD1	8.32	125.79	118.30
12	B	1477	A	C4-C5-C6	8.32	121.16	117.00
12	B	1828	G	O4'-C1'-N9	8.32	114.86	108.20
12	B	2021	C	C2-N1-C1'	8.32	127.95	118.80
12	B	862	G	N7-C8-N9	8.32	117.26	113.10
12	B	2003	A	N3-C4-C5	-8.32	120.98	126.80
17	G	82	PHE	CB-CG-CD2	8.32	126.62	120.80
12	B	613	A	C5-C6-N6	-8.31	117.05	123.70
12	B	1022	G	C5-N7-C8	8.31	108.46	104.30
12	B	1348	C	O4'-C1'-N1	8.31	114.85	108.20
12	B	2135	A	C4-C5-C6	8.31	121.16	117.00
12	B	2382	G	C6-C5-N7	-8.31	125.41	130.40
12	B	2559	C	C5-C6-N1	8.31	125.16	121.00
12	B	2826	A	C8-N9-C4	8.31	109.12	105.80
12	B	17	G	N3-C2-N2	8.31	125.72	119.90
12	B	211	C	O4'-C1'-N1	8.31	114.85	108.20
12	B	327	G	O4'-C1'-N9	8.31	114.85	108.20
12	B	672	C	N1-C2-O2	8.31	123.89	118.90
12	B	1163	G	C5-C6-O6	-8.31	123.61	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2203	U	C5-C4-O4	-8.31	120.91	125.90
12	B	2808	G	C5-N7-C8	8.31	108.45	104.30
15	E	101	TYR	CB-CG-CD2	8.31	125.99	121.00
12	B	154	U	O4'-C4'-C3'	-8.31	95.69	104.00
12	B	78	U	O4'-C1'-N1	8.31	114.85	108.20
12	B	1672	A	C4-C5-C6	8.31	121.15	117.00
12	B	2374	C	N3-C4-C5	-8.31	118.58	121.90
12	B	1676	A	N1-C6-N6	8.31	123.58	118.60
11	A	64	G	N1-C2-N3	-8.31	118.92	123.90
12	B	242	G	C5-N7-C8	8.30	108.45	104.30
12	B	656	G	O4'-C1'-N9	8.30	114.84	108.20
12	B	1261	C	O4'-C1'-N1	8.30	114.84	108.20
12	B	2060	A	C4-C5-C6	8.30	121.15	117.00
12	B	2093	G	C5-C6-N1	-8.31	107.35	111.50
12	B	2189	U	C5-C4-O4	-8.30	120.92	125.90
7	6	34	ARG	NE-CZ-NH1	8.30	124.45	120.30
12	B	118	A	C4-C5-N7	-8.30	106.55	110.70
12	B	1894	C	C6-N1-C2	-8.30	116.98	120.30
12	B	2685	G	O4'-C1'-N9	8.30	114.84	108.20
12	B	2801	G	C6-C5-N7	-8.30	125.42	130.40
12	B	592	A	N1-C6-N6	8.30	123.58	118.60
12	B	2156	G	C2-N3-C4	-8.30	107.75	111.90
12	B	2205	A	O4'-C1'-N9	8.30	114.84	108.20
12	B	8	C	C5-C4-N4	-8.30	114.39	120.20
12	B	1201	U	C5-C6-N1	8.30	126.85	122.70
12	B	2588	G	O4'-C1'-N9	8.30	114.84	108.20
12	B	2595	G	N3-C4-C5	-8.30	124.45	128.60
12	B	636	G	C8-N9-C4	8.29	109.72	106.40
12	B	898	C	C5-C6-N1	-8.29	116.85	121.00
12	B	2330	G	N3-C2-N2	8.29	125.70	119.90
12	B	2583	G	C6-N1-C2	8.29	130.08	125.10
12	B	1048	A	N1-C2-N3	-8.29	125.16	129.30
12	B	2891	U	C5-C4-O4	-8.29	120.92	125.90
15	E	128	ALA	N-CA-CB	8.29	121.71	110.10
12	B	366	C	C5-C6-N1	8.29	125.14	121.00
20	J	37	ARG	NE-CZ-NH1	-8.29	116.16	120.30
12	B	1431	A	N1-C2-N3	8.29	133.44	129.30
12	B	1534	U	N1-C2-O2	8.29	128.60	122.80
12	B	1802	A	C5-N7-C8	8.29	108.04	103.90
12	B	1906	G	N3-C4-C5	8.29	132.75	128.60
12	B	2475	C	N3-C4-C5	-8.29	118.58	121.90
12	B	2776	A	C5-C6-N6	-8.29	117.07	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2858	C	C6-N1-C2	-8.29	116.98	120.30
3	2	37	ARG	NE-CZ-NH2	-8.29	116.16	120.30
12	B	912	C	C5-C6-N1	-8.29	116.86	121.00
12	B	1197	G	C4-C5-N7	-8.29	107.49	110.80
12	B	1986	C	C6-N1-C2	-8.28	116.99	120.30
12	B	124	G	N7-C8-N9	8.28	117.24	113.10
12	B	992	C	C6-N1-C2	-8.28	116.99	120.30
12	B	1633	G	C5-C6-N1	-8.28	107.36	111.50
12	B	2101	A	C8-N9-C4	-8.28	102.49	105.80
12	B	2767	C	C5-C4-N4	-8.28	114.40	120.20
12	B	424	G	O4'-C1'-N9	8.28	114.82	108.20
11	A	30	C	C4-C5-C6	-8.28	113.26	117.40
12	B	1633	G	C4-C5-C6	8.28	123.77	118.80
12	B	2857	G	N1-C2-N2	-8.28	108.75	116.20
12	B	289	G	N1-C6-O6	8.28	124.86	119.90
12	B	1344	U	C5-C6-N1	8.28	126.84	122.70
12	B	53	A	N1-C6-N6	8.27	123.56	118.60
12	B	2484	G	N3-C2-N2	8.27	125.69	119.90
12	B	392	U	C2-N3-C4	-8.27	122.04	127.00
12	B	2237	G	O4'-C1'-N9	8.27	114.82	108.20
12	B	2645	G	C6-N1-C2	8.27	130.06	125.10
12	B	1074	G	N3-C4-N9	8.27	130.96	126.00
12	B	1987	A	C6-N1-C2	-8.27	113.64	118.60
12	B	2460	U	C5-C4-O4	-8.27	120.94	125.90
12	B	2506	U	C6-N1-C2	-8.27	116.04	121.00
12	B	2690	U	C5-C4-O4	-8.27	120.94	125.90
1	0	44	ARG	NE-CZ-NH2	-8.27	116.17	120.30
12	B	2021	C	O4'-C1'-N1	8.27	114.81	108.20
12	B	2342	C	N3-C2-O2	-8.27	116.11	121.90
12	B	2463	C	C5-C4-N4	-8.27	114.42	120.20
12	B	579	G	C5-C6-N1	-8.26	107.37	111.50
12	B	633	A	C5-C6-N1	-8.26	113.57	117.70
12	B	802	A	C4-C5-C6	8.26	121.13	117.00
12	B	986	C	O4'-C1'-N1	8.26	114.81	108.20
12	B	1810	A	O4'-C1'-N9	8.26	114.81	108.20
27	Q	96	ASP	CB-CG-OD2	8.26	125.74	118.30
12	B	1195	G	N3-C2-N2	8.26	125.68	119.90
12	B	1681	G	N1-C2-N2	-8.26	108.76	116.20
12	B	1767	G	N3-C2-N2	8.26	125.68	119.90
12	B	2078	C	C4-C5-C6	8.26	121.53	117.40
12	B	1810	A	N7-C8-N9	-8.26	109.67	113.80
12	B	2064	C	C6-N1-C2	-8.26	117.00	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2521	C	N3-C4-C5	-8.26	118.60	121.90
12	B	2545	G	C5-C6-N1	-8.26	107.37	111.50
12	B	2598	A	O4'-C1'-N9	8.26	114.81	108.20
12	B	2705	A	N7-C8-N9	-8.26	109.67	113.80
12	B	152	A	C5-C6-N6	-8.26	117.09	123.70
12	B	1127	A	N9-C4-C5	-8.26	102.50	105.80
12	B	1160	G	P-O5'-C5'	-8.26	107.69	120.90
12	B	2522	U	C5-C4-O4	-8.26	120.95	125.90
12	B	266	G	C4-C5-N7	8.26	114.10	110.80
12	B	880	G	C8-N9-C4	-8.26	103.10	106.40
12	B	2601	C	C5-C6-N1	8.26	125.13	121.00
12	B	2714	G	C8-N9-C4	-8.26	103.10	106.40
12	B	2830	C	N3-C4-C5	-8.26	118.60	121.90
11	A	70	C	O4'-C1'-N1	8.25	114.80	108.20
11	A	75	G	O4'-C1'-N9	8.25	114.80	108.20
12	B	1147	A	C2-N3-C4	-8.25	106.47	110.60
12	B	1151	A	C4-C5-C6	8.25	121.13	117.00
12	B	1212	G	N3-C2-N2	8.25	125.68	119.90
12	B	1415	U	C4-C5-C6	-8.25	114.75	119.70
12	B	2279	G	C6-N1-C2	8.25	130.05	125.10
12	B	2478	A	N3-C4-C5	-8.25	121.02	126.80
12	B	880	G	N7-C8-N9	8.25	117.22	113.10
12	B	1806	C	O4'-C1'-N1	8.25	114.80	108.20
12	B	1952	A	C5-N7-C8	8.25	108.03	103.90
12	B	2118	U	P-O3'-C3'	8.25	129.60	119.70
12	B	2256	G	C8-N9-C4	-8.25	103.10	106.40
12	B	2283	C	C4-C5-C6	8.25	121.53	117.40
12	B	2680	U	O4'-C1'-N1	8.25	114.80	108.20
12	B	412	A	N1-C6-N6	8.25	123.55	118.60
12	B	2193	G	C8-N9-C4	8.25	109.70	106.40
12	B	2448	A	C4-C5-C6	8.25	121.12	117.00
12	B	1722	A	N1-C2-N3	8.25	133.42	129.30
12	B	2782	G	C5-C6-O6	-8.25	123.65	128.60
12	B	1949	G	C5-N7-C8	-8.24	100.18	104.30
12	B	2110	G	N9-C4-C5	8.24	108.70	105.40
12	B	328	U	C2-N3-C4	-8.24	122.06	127.00
12	B	993	G	N3-C4-N9	8.24	130.94	126.00
12	B	1544	A	C8-N9-C4	-8.24	102.50	105.80
12	B	1807	G	C4-C5-C6	8.24	123.74	118.80
12	B	1919	A	C5-N7-C8	8.24	108.02	103.90
15	E	114	ARG	NE-CZ-NH1	8.24	124.42	120.30
27	Q	98	ALA	CB-CA-C	-8.24	97.75	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	335	C	N3-C4-C5	-8.23	118.61	121.90
12	B	401	A	O4'-C1'-N9	8.23	114.79	108.20
12	B	535	G	C6-C5-N7	-8.23	125.46	130.40
12	B	600	G	C5-C6-N1	-8.23	107.38	111.50
12	B	887	U	C5-C6-N1	8.23	126.82	122.70
12	B	1166	G	O4'-C4'-C3'	-8.23	95.77	104.00
12	B	1569	A	N7-C8-N9	-8.23	109.68	113.80
12	B	2612	C	C6-N1-C2	-8.23	117.01	120.30
12	B	1158	C	N3-C4-N4	8.23	123.76	118.00
12	B	1387	A	C5-C6-N1	-8.23	113.58	117.70
12	B	1619	G	O4'-C1'-N9	8.23	114.79	108.20
12	B	1621	U	O4'-C1'-N1	8.23	114.79	108.20
12	B	217	A	C1'-O4'-C4'	-8.23	103.31	109.90
12	B	438	G	N9-C4-C5	-8.23	102.11	105.40
12	B	1610	A	C5-C6-N1	8.23	121.81	117.70
12	B	2865	U	N1-C2-O2	-8.23	117.04	122.80
12	B	2308	G	O4'-C1'-N9	8.23	114.78	108.20
12	B	2511	U	P-O3'-C3'	8.23	129.58	119.70
12	B	2582	G	N1-C6-O6	8.23	124.84	119.90
12	B	68	G	C5-C6-O6	-8.23	123.66	128.60
12	B	796	C	C2-N3-C4	8.23	124.01	119.90
12	B	1617	C	O4'-C1'-N1	8.23	114.78	108.20
12	B	2166	U	C5-C6-N1	8.23	126.81	122.70
12	B	193	U	N3-C4-C5	8.23	119.53	114.60
12	B	461	C	C4-C5-C6	-8.23	113.29	117.40
12	B	972	A	C8-N9-C4	-8.23	102.51	105.80
12	B	1244	A	C6-N1-C2	8.23	123.54	118.60
12	B	1572	A	N3-C4-N9	8.23	133.98	127.40
12	B	2627	G	N9-C4-C5	-8.23	102.11	105.40
12	B	2059	A	N9-C4-C5	8.23	109.09	105.80
12	B	861	A	C5-C6-N1	-8.22	113.59	117.70
12	B	1163	G	C4'-C3'-C2'	-8.22	94.38	102.60
12	B	1653	G	N9-C4-C5	8.22	108.69	105.40
12	B	1799	G	N1-C2-N3	-8.22	118.97	123.90
12	B	1988	G	N1-C2-N3	-8.22	118.97	123.90
12	B	2557	G	C5-C6-O6	-8.22	123.67	128.60
12	B	2863	C	P-O3'-C3'	-8.22	109.83	119.70
12	B	1697	G	C8-N9-C4	-8.22	103.11	106.40
12	B	2350	C	O4'-C1'-N1	8.22	114.78	108.20
11	A	45	A	C2-N3-C4	-8.22	106.49	110.60
12	B	202	U	N1-C2-N3	8.22	119.83	114.90
12	B	2035	G	C4-C5-C6	8.22	123.73	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	335	C	N3-C4-N4	8.22	123.75	118.00
12	B	625	G	N1-C6-O6	8.22	124.83	119.90
12	B	2536	G	C5-C6-N1	-8.22	107.39	111.50
12	B	2831	G	C4-C5-N7	-8.22	107.51	110.80
12	B	941	A	O4'-C1'-N9	8.21	114.77	108.20
11	A	108	A	C4-C5-C6	8.21	121.11	117.00
12	B	268	C	N3-C4-C5	-8.21	118.61	121.90
12	B	66	C	N3-C4-C5	-8.21	118.62	121.90
12	B	242	G	N1-C6-O6	8.21	124.83	119.90
12	B	2115	G	N3-C4-C5	8.21	132.71	128.60
12	B	1694	C	N3-C4-N4	8.21	123.75	118.00
12	B	2851	A	C5-N7-C8	8.21	108.00	103.90
11	A	115	A	C4-C5-C6	8.21	121.10	117.00
12	B	1872	A	O4'-C1'-N9	8.21	114.77	108.20
12	B	2197	U	N3-C4-O4	8.21	125.15	119.40
12	B	426	C	C6-N1-C2	-8.21	117.02	120.30
12	B	1189	A	C5-C6-N1	-8.21	113.60	117.70
12	B	1577	C	N3-C4-N4	8.21	123.75	118.00
12	B	2119	A	C1'-O4'-C4'	8.21	116.47	109.90
12	B	2849	U	N1-C2-O2	-8.21	117.06	122.80
29	S	68	ASP	CB-CG-OD2	-8.21	110.91	118.30
11	A	83	G	N1-C6-O6	8.21	124.82	119.90
12	B	20	C	C4-C5-C6	8.21	121.50	117.40
12	B	626	A	N1-C2-N3	8.21	133.40	129.30
12	B	663	G	C3'-C2'-C1'	-8.21	94.94	101.50
12	B	686	U	C5-C4-O4	8.21	130.82	125.90
12	B	1600	C	N3-C4-C5	-8.21	118.62	121.90
11	A	111	U	O4'-C1'-N1	8.20	114.76	108.20
12	B	1343	G	N7-C8-N9	8.21	117.20	113.10
12	B	1585	C	C6-N1-C2	-8.20	117.02	120.30
12	B	1677	A	C5-C6-N1	-8.20	113.60	117.70
12	B	2556	C	C6-N1-C2	-8.21	117.02	120.30
12	B	515	A	C4-C5-C6	8.20	121.10	117.00
12	B	1465	G	C5-C6-N1	-8.20	107.40	111.50
12	B	1889	A	C4-C5-C6	8.20	121.10	117.00
12	B	2458	G	N3-C2-N2	8.20	125.64	119.90
12	B	597	G	C8-N9-C4	-8.20	103.12	106.40
12	B	2097	A	C5-C6-N1	-8.20	113.60	117.70
12	B	2322	A	C4-C5-C6	8.20	121.10	117.00
12	B	2532	G	N1-C2-N3	-8.20	118.98	123.90
12	B	704	G	C5-C6-O6	-8.20	123.68	128.60
12	B	1287	A	O4'-C1'-N9	8.20	114.76	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2589	A	N9-C4-C5	8.20	109.08	105.80
12	B	964	C	N3-C4-N4	8.20	123.74	118.00
12	B	2602	A	C5-C6-N6	-8.20	117.14	123.70
12	B	94	A	C5-N7-C8	8.19	108.00	103.90
12	B	1370	C	N3-C4-N4	8.19	123.73	118.00
12	B	1537	G	N9-C4-C5	8.19	108.68	105.40
12	B	2076	U	C2-N1-C1'	8.19	127.53	117.70
12	B	2209	G	C6-C5-N7	-8.19	125.48	130.40
12	B	2225	A	C5'-C4'-C3'	-8.19	102.89	116.00
12	B	1337	G	C5-C6-O6	-8.19	123.69	128.60
12	B	463	G	C5-C6-O6	-8.19	123.69	128.60
12	B	1383	A	C6-N1-C2	-8.19	113.69	118.60
12	B	1895	C	N3-C4-C5	-8.19	118.62	121.90
12	B	2179	C	N1-C2-O2	-8.19	113.99	118.90
12	B	2380	C	O4'-C1'-N1	8.19	114.75	108.20
19	I	141	ASP	CB-CG-OD2	-8.19	110.93	118.30
12	B	426	C	N3-C4-C5	-8.18	118.63	121.90
12	B	675	A	C8-N9-C4	8.18	109.07	105.80
12	B	1266	G	N3-C4-C5	-8.18	124.51	128.60
12	B	1951	U	C5-C6-N1	8.18	126.79	122.70
11	A	23	G	C6-C5-N7	-8.18	125.49	130.40
12	B	518	G	C6-C5-N7	-8.18	125.49	130.40
12	B	657	U	N1-C2-N3	-8.18	109.99	114.90
12	B	682	G	C2-N3-C4	8.18	115.99	111.90
12	B	1252	G	C4-C5-N7	-8.18	107.53	110.80
12	B	1809	A	C4-C5-N7	-8.18	106.61	110.70
12	B	1355	G	P-O5'-C5'	8.18	133.99	120.90
12	B	2671	G	P-O3'-C3'	-8.18	109.89	119.70
11	A	27	C	O4'-C1'-N1	8.18	114.74	108.20
12	B	13	A	C4'-C3'-C2'	-8.18	94.42	102.60
12	B	358	U	C5-C4-O4	-8.18	121.00	125.90
12	B	450	G	C5-C6-N1	-8.18	107.41	111.50
12	B	1087	G	C5-C6-N1	8.18	115.59	111.50
12	B	1634	A	C2-N3-C4	8.18	114.69	110.60
12	B	2023	C	O4'-C1'-N1	8.18	114.74	108.20
12	B	2266	A	C5-N7-C8	8.18	107.99	103.90
12	B	2426	A	C5-N7-C8	8.18	107.99	103.90
12	B	167	A	N1-C6-N6	8.17	123.50	118.60
12	B	493	G	N1-C2-N2	8.17	123.56	116.20
12	B	233	A	N1-C2-N3	8.17	133.39	129.30
12	B	615	U	C3'-C2'-C1'	-8.17	94.96	101.50
12	B	861	A	C4-C5-C6	8.17	121.09	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2451	A	C5-C6-N1	-8.17	113.61	117.70
12	B	2541	A	N1-C6-N6	8.17	123.50	118.60
12	B	2668	G	C5-C6-N1	-8.17	107.42	111.50
12	B	278	A	C8-N9-C4	-8.17	102.53	105.80
12	B	800	A	N1-C6-N6	8.17	123.50	118.60
12	B	2318	G	C6-C5-N7	-8.17	125.50	130.40
12	B	2756	U	O4'-C1'-N1	8.17	114.74	108.20
12	B	194	G	C6-C5-N7	-8.17	125.50	130.40
12	B	312	G	C5-C6-N1	-8.17	107.42	111.50
12	B	319	G	N1-C2-N3	-8.17	119.00	123.90
12	B	1623	G	O4'-C1'-N9	8.17	114.73	108.20
12	B	1739	A	C5-C6-N1	-8.17	113.62	117.70
12	B	2652	C	O4'-C1'-N1	8.17	114.73	108.20
12	B	160	A	N1-C6-N6	8.16	123.50	118.60
12	B	230	G	N1-C6-O6	8.16	124.80	119.90
12	B	2291	U	C5-C6-N1	8.16	126.78	122.70
12	B	663	G	N1-C2-N3	-8.16	119.00	123.90
12	B	996	A	N1-C6-N6	8.16	123.50	118.60
12	B	2382	G	O4'-C1'-N9	8.16	114.73	108.20
12	B	2268	A	O4'-C1'-N9	8.16	114.73	108.20
12	B	2549	G	N1-C6-O6	8.16	124.80	119.90
12	B	1509	A	C4-C5-C6	8.16	121.08	117.00
12	B	2087	G	C5-C6-O6	-8.16	123.70	128.60
12	B	2611	C	C2-N3-C4	-8.16	115.82	119.90
12	B	2088	A	N9-C4-C5	8.16	109.06	105.80
12	B	2402	U	C5-C6-N1	8.16	126.78	122.70
12	B	1882	U	N3-C4-O4	8.15	125.11	119.40
12	B	299	A	O4'-C1'-N9	8.15	114.72	108.20
12	B	443	A	C4-C5-C6	8.15	121.08	117.00
12	B	893	C	N3-C4-N4	8.15	123.71	118.00
12	B	1829	A	N1-C2-N3	-8.15	125.22	129.30
12	B	145	C	O4'-C1'-N1	8.15	114.72	108.20
12	B	202	U	C2-N3-C4	-8.15	122.11	127.00
12	B	425	G	C5-C6-N1	-8.15	107.43	111.50
12	B	515	A	C5-C6-N1	-8.15	113.62	117.70
12	B	1603	A	N1-C6-N6	8.15	123.49	118.60
12	B	397	U	C4-C5-C6	-8.15	114.81	119.70
12	B	1046	A	C5-N7-C8	8.15	107.97	103.90
12	B	279	A	C2-N3-C4	-8.14	106.53	110.60
12	B	784	G	N1-C2-N3	-8.14	119.01	123.90
12	B	1947	C	C4-C5-C6	8.14	121.47	117.40
12	B	47	C	C6-N1-C2	8.14	123.56	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	675	A	C6-N1-C2	-8.14	113.72	118.60
12	B	2664	G	O4'-C1'-N9	8.14	114.71	108.20
12	B	881	G	O4'-C1'-N9	8.14	114.71	108.20
12	B	1327	A	N1-C2-N3	8.14	133.37	129.30
12	B	2342	C	O4'-C1'-N1	8.14	114.71	108.20
12	B	52	A	C5-C6-N6	-8.14	117.19	123.70
12	B	662	G	O4'-C1'-N9	8.14	114.71	108.20
12	B	1143	A	C3'-C2'-C1'	-8.14	94.99	101.50
12	B	1252	G	O4'-C1'-N9	8.14	114.71	108.20
12	B	2195	U	C5-C4-O4	-8.14	121.02	125.90
12	B	2228	G	C6-C5-N7	-8.14	125.52	130.40
12	B	555	G	N1-C6-O6	8.14	124.78	119.90
12	B	2429	G	N7-C8-N9	-8.14	109.03	113.10
11	A	17	C	C5-C4-N4	-8.13	114.51	120.20
12	B	745	G	N3-C2-N2	8.13	125.59	119.90
12	B	1988	G	C6-N1-C2	8.14	129.98	125.10
25	O	59	ALA	N-CA-CB	8.14	121.49	110.10
12	B	1036	G	C8-N9-C1'	8.13	137.57	127.00
11	A	117	G	N7-C8-N9	8.13	117.17	113.10
12	B	669	G	N1-C6-O6	8.13	124.78	119.90
12	B	1521	G	C5-C6-O6	-8.13	123.72	128.60
12	B	2040	G	N9-C4-C5	-8.13	102.15	105.40
12	B	1285	A	C4-C5-N7	-8.13	106.64	110.70
12	B	404	A	N1-C6-N6	8.13	123.48	118.60
12	B	599	A	C4-C5-C6	8.13	121.06	117.00
12	B	1080	A	C4-C5-C6	8.13	121.06	117.00
12	B	1480	C	P-O3'-C3'	-8.13	109.95	119.70
12	B	1927	A	N3-C4-C5	-8.13	121.11	126.80
12	B	2432	A	C5-C6-N6	-8.13	117.20	123.70
12	B	104	A	C5-C6-N6	-8.13	117.20	123.70
12	B	577	G	C8-N9-C4	-8.13	103.15	106.40
12	B	661	A	N1-C2-N3	8.13	133.36	129.30
12	B	1116	G	C5'-C4'-O4'	8.13	118.85	109.10
12	B	1395	A	N1-C2-N3	8.13	133.36	129.30
12	B	106	C	C4-C5-C6	8.12	121.46	117.40
12	B	535	G	N9-C4-C5	-8.12	102.15	105.40
12	B	2440	C	C6-N1-C2	-8.12	117.05	120.30
12	B	945	A	N1-C2-N3	8.12	133.36	129.30
12	B	1617	C	C5-C4-N4	-8.12	114.51	120.20
12	B	2011	U	O4'-C1'-N1	8.12	114.70	108.20
12	B	2133	G	P-O3'-C3'	8.12	129.45	119.70
12	B	2211	A	C5-N7-C8	8.12	107.96	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2426	A	C4-C5-N7	-8.12	106.64	110.70
12	B	2547	A	C5-C6-N6	-8.12	117.20	123.70
12	B	488	G	O4'-C1'-N9	8.12	114.70	108.20
12	B	659	G	C8-N9-C4	-8.12	103.15	106.40
12	B	1143	A	C6-N1-C2	8.12	123.47	118.60
12	B	2696	U	C5-C4-O4	-8.12	121.03	125.90
12	B	91	A	C5-C6-N1	-8.12	113.64	117.70
12	B	123	G	C8-N9-C1'	8.12	137.55	127.00
12	B	491	G	C8-N9-C4	8.12	109.65	106.40
11	A	94	A	N1-C2-N3	-8.12	125.24	129.30
12	B	2215	C	N3-C4-C5	-8.12	118.65	121.90
12	B	2256	G	O5'-P-OP2	-8.12	98.39	105.70
12	B	324	A	C5-C6-N1	-8.11	113.64	117.70
12	B	378	C	N3-C4-N4	8.11	123.68	118.00
12	B	1177	G	C4-N9-C1'	-8.11	115.95	126.50
12	B	1645	G	O4'-C1'-N9	8.11	114.69	108.20
12	B	438	G	C5-N7-C8	-8.11	100.24	104.30
12	B	1888	G	N1-C6-O6	8.11	124.77	119.90
12	B	2758	A	C5-C6-N6	-8.11	117.21	123.70
12	B	253	C	C4-C5-C6	8.11	121.45	117.40
12	B	640	C	C4-C5-C6	-8.11	113.35	117.40
12	B	902	C	N1-C2-O2	-8.11	114.03	118.90
12	B	1423	G	N1-C2-N3	-8.11	119.03	123.90
12	B	2119	A	C4-C5-N7	-8.11	106.64	110.70
12	B	2360	G	C5-C6-N1	-8.11	107.45	111.50
11	A	58	A	C4-C5-C6	8.11	121.05	117.00
12	B	725	G	C5-C6-O6	-8.11	123.74	128.60
12	B	58	G	N1-C6-O6	8.11	124.76	119.90
12	B	138	U	N3-C4-C5	-8.11	109.74	114.60
12	B	972	A	N7-C8-N9	8.11	117.85	113.80
12	B	1330	C	C5-C6-N1	8.11	125.05	121.00
12	B	1463	C	P-O3'-C3'	-8.11	109.97	119.70
12	B	1839	G	N7-C8-N9	8.11	117.15	113.10
12	B	2171	A	C5-C6-N6	-8.11	117.22	123.70
12	B	2589	A	C6-C5-N7	-8.11	126.63	132.30
12	B	2590	A	C5-C6-N6	-8.11	117.22	123.70
12	B	2686	G	C5-C6-N1	-8.10	107.45	111.50
12	B	62	U	C6-N1-C2	-8.10	116.14	121.00
12	B	974	G	N9-C4-C5	-8.10	102.16	105.40
12	B	1139	G	C5-C6-N1	-8.10	107.45	111.50
12	B	2288	A	C4-C5-C6	8.10	121.05	117.00
12	B	451	U	O4'-C1'-N1	8.10	114.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	579	G	C5-C6-O6	-8.10	123.74	128.60
12	B	623	C	C5-C6-N1	8.10	125.05	121.00
12	B	693	A	C6-C5-N7	-8.10	126.63	132.30
12	B	858	G	N1-C2-N3	-8.10	119.04	123.90
12	B	1142	A	C4-C5-N7	-8.10	106.65	110.70
12	B	1706	C	O4'-C1'-N1	8.10	114.68	108.20
12	B	1189	A	C4-C5-C6	8.10	121.05	117.00
12	B	2899	A	N3-C4-C5	-8.10	121.13	126.80
11	A	69	G	O4'-C1'-N9	8.10	114.68	108.20
12	B	1507	C	C5-C6-N1	8.10	125.05	121.00
12	B	920	A	C2-N3-C4	-8.10	106.55	110.60
12	B	1569	A	C5-N7-C8	8.10	107.95	103.90
12	B	1721	G	O4'-C1'-N9	8.10	114.68	108.20
12	B	2090	A	C8-N9-C4	-8.10	102.56	105.80
12	B	2146	C	N3-C4-N4	8.10	123.67	118.00
12	B	432	A	O4'-C1'-N9	8.09	114.67	108.20
12	B	459	U	P-O3'-C3'	-8.09	109.99	119.70
12	B	1036	G	C8-N9-C4	-8.09	103.16	106.40
12	B	1741	C	C5-C4-N4	-8.09	114.53	120.20
12	B	1946	U	N3-C4-C5	8.09	119.46	114.60
12	B	2048	G	C3'-C2'-C1'	8.09	107.98	101.50
12	B	2684	U	P-O5'-C5'	8.09	133.85	120.90
12	B	527	C	C5-C4-N4	-8.09	114.54	120.20
12	B	1669	A	C5-C6-N6	-8.09	117.23	123.70
12	B	2049	G	C5-C6-O6	-8.09	123.75	128.60
12	B	2425	A	C5'-C4'-C3'	-8.09	103.06	116.00
12	B	2539	C	C5-C6-N1	8.09	125.05	121.00
12	B	394	C	O4'-C1'-N1	8.09	114.67	108.20
12	B	694	U	C5-C4-O4	-8.09	121.05	125.90
12	B	1284	A	C5-C6-N1	-8.09	113.66	117.70
12	B	1592	C	N3-C4-N4	8.09	123.66	118.00
12	B	1801	A	N7-C8-N9	-8.09	109.76	113.80
12	B	1838	C	P-O3'-C3'	8.09	129.40	119.70
12	B	2209	G	N9-C4-C5	8.09	108.63	105.40
12	B	2618	G	C5-C6-O6	-8.09	123.75	128.60
12	B	595	C	O4'-C1'-N1	8.08	114.67	108.20
12	B	1013	C	C2-N3-C4	8.08	123.94	119.90
12	B	2660	A	C5-C6-N6	-8.08	117.23	123.70
11	A	29	A	P-O3'-C3'	8.08	129.40	119.70
12	B	221	A	C8-N9-C4	-8.08	102.57	105.80
12	B	265	A	P-O5'-C5'	8.08	133.83	120.90
12	B	500	G	O4'-C1'-N9	8.08	114.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1178	C	O4'-C1'-N1	8.08	114.67	108.20
12	B	2328	A	C2-N3-C4	-8.08	106.56	110.60
12	B	2340	A	C4-C5-C6	8.08	121.04	117.00
12	B	2371	G	C5-C6-O6	-8.08	123.75	128.60
12	B	1259	G	C4-C5-C6	8.08	123.65	118.80
12	B	2572	A	C5-C6-N1	-8.08	113.66	117.70
11	A	75	G	N1-C2-N3	-8.08	119.05	123.90
12	B	1873	G	C4-C5-C6	8.08	123.65	118.80
12	B	282	A	C6-C5-N7	-8.08	126.65	132.30
11	A	112	G	C5-N7-C8	8.08	108.34	104.30
12	B	544	C	N3-C4-N4	8.08	123.65	118.00
12	B	877	A	N3-C4-N9	8.08	133.86	127.40
12	B	907	G	C6-N1-C2	8.08	129.94	125.10
12	B	1551	A	O4'-C1'-N9	8.08	114.66	108.20
12	B	2675	A	C8-N9-C4	-8.08	102.57	105.80
12	B	74	A	C4-C5-C6	8.07	121.04	117.00
12	B	321	U	C6-N1-C2	-8.07	116.16	121.00
12	B	955	U	N3-C4-O4	8.07	125.05	119.40
12	B	1430	G	O4'-C1'-N9	8.07	114.66	108.20
12	B	1490	A	C5-C6-N6	-8.07	117.24	123.70
12	B	1119	U	C2-N3-C4	8.07	131.84	127.00
12	B	1927	A	C6-N1-C2	8.07	123.44	118.60
12	B	2212	A	C5-C6-N6	-8.07	117.24	123.70
12	B	2742	G	N9-C4-C5	8.07	108.63	105.40
12	B	527	C	N3-C4-N4	8.07	123.65	118.00
12	B	814	C	P-O3'-C3'	-8.07	110.02	119.70
12	B	889	C	C6-N1-C1'	-8.07	111.11	120.80
12	B	961	C	P-O3'-C3'	8.07	129.38	119.70
12	B	2101	A	C5-C6-N1	-8.07	113.66	117.70
12	B	2543	G	C8-N9-C4	8.07	109.63	106.40
12	B	2221	G	O4'-C1'-N9	8.07	114.66	108.20
12	B	2587	A	C4-C5-C6	8.07	121.03	117.00
12	B	1618	A	C4-C5-C6	8.07	121.03	117.00
12	B	2761	A	O4'-C1'-N9	8.07	114.66	108.20
12	B	1745	A	N3-C4-C5	-8.07	121.15	126.80
12	B	2144	G	N3-C2-N2	8.07	125.55	119.90
12	B	2161	C	C4-C5-C6	8.07	121.43	117.40
12	B	2207	C	N3-C4-C5	-8.07	118.67	121.90
12	B	2770	G	C4-C5-C6	8.07	123.64	118.80
11	A	10	G	C5-C6-O6	-8.06	123.76	128.60
12	B	926	G	N1-C6-O6	8.06	124.74	119.90
12	B	439	A	C4-C5-C6	8.06	121.03	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1186	G	P-O5'-C5'	8.06	133.80	120.90
12	B	1247	A	C5-N7-C8	8.06	107.93	103.90
12	B	1666	G	C6-N1-C2	-8.06	120.26	125.10
12	B	2083	G	N3-C2-N2	8.06	125.55	119.90
12	B	2304	G	C8-N9-C4	-8.06	103.17	106.40
12	B	91	A	C4-C5-C6	8.06	121.03	117.00
12	B	805	G	C8-N9-C4	-8.06	103.18	106.40
12	B	1211	C	N3-C4-N4	8.06	123.64	118.00
12	B	1273	U	C5-C4-O4	-8.06	121.06	125.90
12	B	1847	A	C5-C6-N1	-8.06	113.67	117.70
12	B	471	A	C4-C5-N7	-8.06	106.67	110.70
12	B	590	A	O4'-C1'-N9	8.06	114.65	108.20
12	B	1703	G	C5-N7-C8	8.06	108.33	104.30
12	B	677	A	C5-C6-N1	-8.06	113.67	117.70
12	B	1676	A	O4'-C1'-N9	8.06	114.65	108.20
12	B	1846	G	C6-N1-C2	8.06	129.93	125.10
12	B	2206	C	O4'-C1'-N1	8.06	114.65	108.20
12	B	902	C	C2-N3-C4	8.06	123.93	119.90
12	B	475	C	N3-C4-C5	-8.05	118.68	121.90
12	B	1074	G	C5-C6-O6	-8.05	123.77	128.60
12	B	2177	C	N3-C4-N4	8.05	123.64	118.00
12	B	1867	G	C5-C6-O6	-8.05	123.77	128.60
12	B	2647	U	O4'-C1'-N1	8.05	114.64	108.20
12	B	479	A	C3'-C2'-C1'	-8.05	95.06	101.50
12	B	1643	G	C4-C5-N7	8.05	114.02	110.80
12	B	1858	A	C5-C6-N1	-8.05	113.67	117.70
12	B	1975	G	C6-C5-N7	-8.05	125.57	130.40
12	B	2210	U	P-O3'-C3'	-8.05	110.04	119.70
12	B	2314	A	C5-C6-N1	-8.05	113.67	117.70
12	B	1484	U	C5-C4-O4	-8.05	121.07	125.90
11	A	18	G	C5-C6-N1	-8.05	107.48	111.50
12	B	527	C	C6-N1-C1'	-8.05	111.14	120.80
12	B	2354	C	O4'-C1'-N1	8.05	114.64	108.20
12	B	385	C	C2-N3-C4	-8.05	115.88	119.90
12	B	1147	A	N1-C2-N3	8.05	133.32	129.30
12	B	2313	C	C4'-C3'-C2'	-8.05	94.55	102.60
12	B	149	A	C1'-O4'-C4'	8.04	116.33	109.90
12	B	190	A	C5-C6-N6	-8.04	117.26	123.70
12	B	1813	G	N1-C2-N3	-8.04	119.07	123.90
12	B	2259	U	N3-C2-O2	8.05	127.83	122.20
12	B	2317	A	C4-C5-C6	8.05	121.02	117.00
12	B	2294	G	N1-C2-N3	-8.04	119.07	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2751	G	N7-C8-N9	8.04	117.12	113.10
12	B	2762	C	N3-C4-C5	-8.04	118.68	121.90
12	B	2333	A	N1-C6-N6	8.04	123.43	118.60
12	B	929	U	N3-C2-O2	8.04	127.83	122.20
12	B	1867	G	C1'-O4'-C4'	-8.04	103.47	109.90
12	B	2700	A	C4-C5-C6	8.04	121.02	117.00
12	B	104	A	N1-C6-N6	8.04	123.42	118.60
12	B	949	G	C6-N1-C2	8.04	129.92	125.10
12	B	2848	G	N1-C2-N3	-8.04	119.08	123.90
12	B	277	G	N9-C4-C5	8.04	108.61	105.40
12	B	1040	A	C5-C6-N1	-8.04	113.68	117.70
12	B	2133	G	O4'-C1'-N9	8.04	114.63	108.20
12	B	2275	C	N3-C4-C5	-8.04	118.69	121.90
12	B	2519	U	O4'-C1'-N1	8.04	114.63	108.20
12	B	2084	C	N3-C2-O2	8.04	127.53	121.90
12	B	228	C	C5-C6-N1	8.03	125.02	121.00
12	B	402	A	C5-C6-N1	-8.03	113.68	117.70
12	B	2518	A	C8-N9-C4	-8.03	102.59	105.80
12	B	2823	A	N1-C6-N6	8.03	123.42	118.60
12	B	703	U	O4'-C1'-N1	8.03	114.63	108.20
12	B	1541	C	C5-C6-N1	8.03	125.02	121.00
12	B	636	G	C2-N3-C4	-8.03	107.88	111.90
12	B	1054	A	C5-C6-N1	-8.03	113.69	117.70
12	B	612	G	C5-C6-O6	-8.03	123.78	128.60
12	B	2630	G	N7-C8-N9	-8.03	109.09	113.10
12	B	203	A	C5-C6-N1	-8.03	113.69	117.70
12	B	488	G	P-O3'-C3'	-8.03	110.07	119.70
12	B	2867	G	C5-C6-O6	-8.03	123.78	128.60
12	B	946	C	C5-C4-N4	-8.02	114.58	120.20
12	B	275	C	C5-C4-N4	-8.02	114.58	120.20
12	B	1367	A	C6-C5-N7	-8.02	126.68	132.30
12	B	2328	A	N9-C4-C5	-8.02	102.59	105.80
16	F	101	ARG	NE-CZ-NH1	-8.02	116.29	120.30
12	B	2618	G	C6-C5-N7	-8.02	125.59	130.40
12	B	114	U	N1-C2-O2	-8.02	117.19	122.80
12	B	1014	A	C4-C5-C6	8.02	121.01	117.00
20	J	44	TYR	CB-CG-CD2	-8.02	116.19	121.00
12	B	1309	G	C6-C5-N7	-8.02	125.59	130.40
12	B	2157	G	C4-C5-N7	-8.02	107.59	110.80
12	B	2204	G	O4'-C1'-N9	8.02	114.61	108.20
12	B	2223	G	C4-C5-C6	8.02	123.61	118.80
12	B	2274	A	C5-C6-N6	-8.02	117.29	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2300	C	C5-C6-N1	8.02	125.01	121.00
12	B	2542	A	O4'-C1'-N9	8.02	114.61	108.20
12	B	2428	G	C6-C5-N7	-8.02	125.59	130.40
12	B	1063	G	N1-C6-O6	8.01	124.71	119.90
12	B	1428	C	C1'-O4'-C4'	8.01	116.31	109.90
12	B	1601	G	C2-N3-C4	8.01	115.91	111.90
12	B	2140	G	N3-C4-C5	-8.01	124.59	128.60
12	B	20	C	N3-C4-N4	8.01	123.61	118.00
11	A	58	A	C5-C6-N6	-8.01	117.29	123.70
12	B	491	G	C5'-C4'-O4'	8.01	118.71	109.10
12	B	937	C	N3-C4-N4	8.01	123.61	118.00
12	B	1433	A	C5-C6-N6	-8.01	117.29	123.70
12	B	1957	C	N3-C4-N4	8.01	123.61	118.00
12	B	2030	A	N3-C4-C5	-8.01	121.19	126.80
12	B	2548	U	O4'-C1'-N1	8.01	114.61	108.20
12	B	2583	G	C5-C6-O6	-8.01	123.79	128.60
12	B	2662	A	C5-C6-N1	-8.01	113.69	117.70
12	B	2828	G	N1-C6-O6	8.01	124.71	119.90
12	B	114	U	P-O3'-C3'	-8.01	110.09	119.70
12	B	195	A	C4-C5-C6	8.01	121.00	117.00
12	B	937	C	O4'-C1'-N1	8.01	114.61	108.20
12	B	1459	G	C6-N1-C2	8.01	129.90	125.10
12	B	1529	G	C5-C6-O6	-8.01	123.80	128.60
12	B	2407	A	C5-C6-N6	-8.01	117.30	123.70
12	B	2550	G	C6-C5-N7	-8.01	125.60	130.40
12	B	829	A	C5-C6-N6	-8.00	117.30	123.70
11	A	29	A	C5-C6-N1	-8.00	113.70	117.70
12	B	84	A	C5-C6-N6	-8.00	117.30	123.70
12	B	1987	A	O4'-C1'-N9	8.00	114.60	108.20
12	B	2323	G	N3-C2-N2	8.00	125.50	119.90
12	B	2063	C	N3-C4-C5	-8.00	118.70	121.90
12	B	184	C	C4-C5-C6	-8.00	113.40	117.40
12	B	473	G	C5-N7-C8	8.00	108.30	104.30
12	B	2081	U	O4'-C1'-N1	8.00	114.60	108.20
12	B	2231	U	C4-C5-C6	8.00	124.50	119.70
11	A	56	G	N3-C4-N9	-8.00	121.20	126.00
12	B	669	G	N3-C2-N2	8.00	125.50	119.90
12	B	938	G	C5-C6-N1	-8.00	107.50	111.50
12	B	1001	A	N1-C6-N6	8.00	123.40	118.60
12	B	1382	G	O4'-C1'-N9	8.00	114.60	108.20
12	B	1564	C	N3-C4-N4	8.00	123.60	118.00
12	B	2089	C	P-O5'-C5'	8.00	133.70	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2466	C	C5'-C4'-C3'	-8.00	103.20	116.00
12	B	2587	A	C8-N9-C4	-8.00	102.60	105.80
12	B	2634	A	O4'-C1'-N9	8.00	114.60	108.20
12	B	2732	G	O4'-C1'-N9	8.00	114.60	108.20
12	B	2757	A	N9-C4-C5	8.00	109.00	105.80
11	A	57	A	N7-C8-N9	-8.00	109.80	113.80
12	B	287	G	O4'-C1'-N9	8.00	114.60	108.20
12	B	903	C	O4'-C1'-N1	8.00	114.60	108.20
12	B	1288	G	O4'-C1'-N9	8.00	114.60	108.20
12	B	1710	G	C4-C5-N7	-8.00	107.60	110.80
12	B	1993	U	C1'-O4'-C4'	-8.00	103.50	109.90
12	B	2327	A	C4-C5-C6	8.00	121.00	117.00
12	B	1672	A	C4-C5-N7	-8.00	106.70	110.70
12	B	2721	A	N1-C6-N6	8.00	123.40	118.60
12	B	907	G	C5-N7-C8	7.99	108.30	104.30
12	B	2901	C	N3-C4-C5	-7.99	118.70	121.90
12	B	2235	G	C6-C5-N7	-7.99	125.61	130.40
12	B	445	C	N1-C2-N3	-7.99	113.61	119.20
12	B	896	A	N1-C6-N6	7.99	123.39	118.60
12	B	2560	A	N7-C8-N9	-7.99	109.81	113.80
12	B	1751	U	O4'-C1'-N1	7.99	114.59	108.20
12	B	1909	C	C6-N1-C2	-7.99	117.11	120.30
12	B	2591	C	O4'-C1'-N1	7.99	114.59	108.20
15	E	67	ARG	NE-CZ-NH1	-7.99	116.31	120.30
20	J	74	TYR	CB-CG-CD1	7.99	125.79	121.00
12	B	57	C	O4'-C1'-N1	7.99	114.59	108.20
12	B	58	G	C8-N9-C4	-7.99	103.21	106.40
12	B	381	G	N1-C6-O6	7.99	124.69	119.90
12	B	1482	G	P-O3'-C3'	7.99	129.28	119.70
12	B	2012	G	N1-C2-N3	-7.99	119.11	123.90
12	B	2613	U	C2-N3-C4	7.99	131.79	127.00
12	B	42	A	O4'-C1'-N9	7.98	114.59	108.20
12	B	1246	A	C5-C6-N1	-7.98	113.71	117.70
12	B	1468	U	C5-C4-O4	7.98	130.69	125.90
12	B	2124	G	C5-C6-O6	-7.98	123.81	128.60
12	B	819	A	C4-C5-C6	7.98	120.99	117.00
12	B	508	A	P-O3'-C3'	-7.98	110.13	119.70
12	B	1317	G	N1-C2-N3	-7.98	119.11	123.90
12	B	1517	G	N7-C8-N9	-7.98	109.11	113.10
12	B	2263	C	C4-C5-C6	-7.98	113.41	117.40
12	B	2444	G	C6-C5-N7	-7.98	125.61	130.40
11	A	47	C	N3-C4-N4	7.97	123.58	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	439	A	N3-C4-C5	-7.97	121.22	126.80
12	B	800	A	O4'-C1'-N9	7.97	114.58	108.20
12	B	2734	A	N1-C2-N3	7.97	133.29	129.30
12	B	2859	G	C4-C5-C6	7.97	123.58	118.80
12	B	207	A	C6-C5-N7	-7.97	126.72	132.30
12	B	644	A	C4-C5-C6	7.97	120.99	117.00
12	B	981	A	C4-C5-C6	7.97	120.99	117.00
12	B	1284	A	N9-C4-C5	7.97	108.99	105.80
12	B	1459	G	N3-C4-N9	-7.97	121.22	126.00
12	B	1783	A	C5-C6-N6	-7.97	117.32	123.70
12	B	2145	C	C2-N1-C1'	7.97	127.57	118.80
11	A	108	A	N7-C8-N9	-7.97	109.81	113.80
12	B	482	A	O4'-C1'-N9	7.97	114.58	108.20
12	B	491	G	O4'-C1'-N9	7.97	114.58	108.20
12	B	1727	C	P-O3'-C3'	7.97	129.26	119.70
12	B	2674	G	O4'-C1'-N9	7.97	114.58	108.20
12	B	1292	G	C2-N3-C4	7.97	115.89	111.90
12	B	2133	G	C4-C5-N7	-7.97	107.61	110.80
12	B	1539	U	O4'-C1'-N1	7.97	114.58	108.20
12	B	244	A	C8-N9-C4	-7.97	102.61	105.80
12	B	260	G	N7-C8-N9	-7.97	109.12	113.10
12	B	2573	C	O4'-C1'-C2'	7.97	114.77	107.60
11	A	26	C	N3-C4-C5	-7.96	118.71	121.90
12	B	180	G	N3-C2-N2	7.96	125.48	119.90
12	B	432	A	P-O3'-C3'	-7.96	110.14	119.70
12	B	1062	G	O4'-C1'-N9	7.96	114.57	108.20
12	B	1314	C	C5-C6-N1	7.96	124.98	121.00
12	B	1662	U	C5-C4-O4	-7.96	121.12	125.90
12	B	2455	G	C5'-C4'-O4'	7.96	118.66	109.10
12	B	2736	A	C5-N7-C8	7.96	107.88	103.90
12	B	2160	C	N3-C4-C5	-7.96	118.72	121.90
12	B	2325	G	N1-C2-N3	-7.96	119.12	123.90
12	B	9	G	O4'-C1'-N9	7.96	114.57	108.20
12	B	397	U	O4'-C1'-N1	7.96	114.57	108.20
12	B	2864	G	C5-C6-N1	-7.96	107.52	111.50
16	F	21	TYR	CB-CG-CD1	-7.96	116.22	121.00
12	B	242	G	N9-C4-C5	7.96	108.58	105.40
12	B	1056	G	C5-N7-C8	7.96	108.28	104.30
12	B	918	A	N7-C8-N9	7.96	117.78	113.80
12	B	1346	G	C4'-C3'-C2'	-7.96	94.64	102.60
12	B	1658	C	N3-C4-C5	-7.96	118.72	121.90
12	B	42	A	C2-N3-C4	-7.96	106.62	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	242	G	N1-C2-N3	-7.96	119.13	123.90
12	B	471	A	N7-C8-N9	-7.96	109.82	113.80
12	B	504	A	O4'-C1'-N9	7.96	114.56	108.20
12	B	876	C	N3-C4-N4	7.96	123.57	118.00
12	B	2034	U	N3-C4-O4	7.96	124.97	119.40
12	B	2113	U	N3-C2-O2	7.96	127.77	122.20
12	B	618	G	C5-C6-O6	-7.95	123.83	128.60
12	B	2103	C	O4'-C1'-N1	7.95	114.56	108.20
12	B	2885	G	C4-C5-C6	7.95	123.57	118.80
12	B	1323	C	C4-C5-C6	7.95	121.38	117.40
12	B	146	A	P-O3'-C3'	-7.95	110.16	119.70
12	B	242	G	N3-C4-C5	-7.95	124.62	128.60
12	B	412	A	C4-C5-C6	7.95	120.98	117.00
12	B	2225	A	C4-C5-N7	-7.95	106.72	110.70
12	B	1015	U	O4'-C1'-N1	7.95	114.56	108.20
12	B	1520	U	N3-C2-O2	7.95	127.76	122.20
12	B	1736	U	C5-C6-N1	7.95	126.67	122.70
12	B	245	G	C4-C5-C6	7.95	123.57	118.80
12	B	1959	G	O4'-C1'-N9	7.95	114.56	108.20
12	B	2070	A	N1-C6-N6	7.95	123.37	118.60
12	B	2303	G	C5-C6-O6	-7.95	123.83	128.60
16	F	127	TYR	CB-CG-CD2	-7.95	116.23	121.00
12	B	45	G	O4'-C1'-N9	7.94	114.56	108.20
12	B	1509	A	C5-C6-N1	-7.94	113.73	117.70
12	B	1791	A	C4-C5-C6	7.94	120.97	117.00
12	B	151	C	C5-C4-N4	-7.94	114.64	120.20
12	B	1437	C	N3-C4-N4	7.94	123.56	118.00
12	B	1732	C	N3-C4-N4	7.94	123.56	118.00
12	B	1761	C	C5-C4-N4	-7.94	114.64	120.20
12	B	2091	C	O4'-C1'-N1	7.94	114.56	108.20
12	B	2488	G	N7-C8-N9	7.94	117.07	113.10
12	B	2565	A	O4'-C1'-N9	7.94	114.55	108.20
12	B	1837	C	C6-N1-C2	7.94	123.48	120.30
12	B	2656	U	O4'-C1'-N1	7.94	114.55	108.20
11	A	55	U	O4'-C1'-N1	7.94	114.55	108.20
12	B	1301	A	C5-N7-C8	7.94	107.87	103.90
12	B	2098	U	N3-C2-O2	7.94	127.76	122.20
12	B	1043	C	C4-C5-C6	-7.94	113.43	117.40
12	B	1833	C	C6-N1-C2	-7.94	117.12	120.30
12	B	2310	C	C6-N1-C1'	-7.94	111.28	120.80
12	B	122	G	N1-C2-N3	-7.93	119.14	123.90
12	B	370	G	C5-C6-N1	-7.93	107.53	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1924	C	O4'-C4'-C3'	-7.93	96.06	104.00
12	B	2505	G	N1-C6-O6	7.93	124.66	119.90
11	A	68	C	C5'-C4'-O4'	7.93	118.62	109.10
11	A	107	G	N1-C2-N3	-7.93	119.14	123.90
12	B	520	G	C4-C5-C6	7.93	123.56	118.80
12	B	2800	A	C4-C5-C6	7.93	120.97	117.00
6	5	122	ARG	NE-CZ-NH2	-7.93	116.33	120.30
12	B	141	G	C5-C6-O6	-7.93	123.84	128.60
12	B	154	U	C4'-C3'-C2'	7.93	110.53	102.60
12	B	2048	G	C8-N9-C4	-7.93	103.23	106.40
12	B	477	A	C4-C5-C6	7.93	120.96	117.00
12	B	1789	A	C5-N7-C8	7.93	107.86	103.90
12	B	2046	G	C4-C5-C6	7.93	123.56	118.80
12	B	2288	A	C5-C6-N6	-7.93	117.36	123.70
11	A	109	A	O4'-C1'-N9	7.93	114.54	108.20
12	B	298	G	N3-C2-N2	7.93	125.45	119.90
12	B	1425	G	C5'-C4'-C3'	-7.93	103.31	116.00
12	B	2276	G	C4'-C3'-C2'	-7.93	94.67	102.60
12	B	2517	C	C2-N3-C4	7.93	123.86	119.90
12	B	836	G	C4-C5-N7	-7.93	107.63	110.80
12	B	1432	G	C8-N9-C4	-7.93	103.23	106.40
12	B	1511	G	N9-C4-C5	7.93	108.57	105.40
12	B	2499	C	C5-C6-N1	7.93	124.96	121.00
12	B	2636	C	N3-C2-O2	7.93	127.45	121.90
12	B	63	A	C4-C5-N7	-7.92	106.74	110.70
12	B	402	A	C4-C5-C6	7.92	120.96	117.00
12	B	622	G	N7-C8-N9	7.92	117.06	113.10
12	B	837	C	N3-C4-N4	7.92	123.55	118.00
12	B	2149	U	O4'-C1'-N1	7.92	114.54	108.20
12	B	1249	U	C5-C4-O4	-7.92	121.15	125.90
12	B	1753	G	O4'-C1'-N9	7.92	114.54	108.20
11	A	109	A	C2-N3-C4	7.92	114.56	110.60
12	B	95	A	N3-C4-N9	7.92	133.74	127.40
12	B	1264	A	N1-C6-N6	7.92	123.35	118.60
12	B	2530	A	N7-C8-N9	-7.92	109.84	113.80
12	B	382	A	C4-C5-C6	7.92	120.96	117.00
12	B	1418	G	P-O3'-C3'	-7.92	110.20	119.70
12	B	2608	G	O4'-C1'-N9	7.92	114.54	108.20
12	B	959	A	N1-C2-N3	7.92	133.26	129.30
12	B	1322	A	O4'-C1'-N9	7.92	114.53	108.20
12	B	1835	G	N3-C2-N2	7.92	125.44	119.90
12	B	190	A	C8-N9-C4	-7.92	102.63	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2115	G	N1-C2-N3	-7.92	119.15	123.90
12	B	2334	U	C2-N3-C4	7.92	131.75	127.00
12	B	2499	C	C6-N1-C2	-7.92	117.13	120.30
12	B	2800	A	O4'-C1'-N9	7.92	114.53	108.20
12	B	2880	C	N3-C2-O2	-7.92	116.36	121.90
12	B	2455	G	C5-C6-N1	-7.92	107.54	111.50
12	B	1041	G	O4'-C1'-N9	7.91	114.53	108.20
12	B	2276	G	N1-C2-N3	-7.91	119.15	123.90
12	B	2382	G	N1-C6-O6	7.91	124.65	119.90
12	B	2424	C	O4'-C1'-N1	7.91	114.53	108.20
12	B	2475	C	C6-N1-C2	-7.91	117.13	120.30
12	B	2582	G	C5-C6-O6	-7.91	123.85	128.60
12	B	2791	G	O4'-C1'-N9	7.91	114.53	108.20
12	B	2276	G	C2-N3-C4	7.91	115.86	111.90
12	B	2734	A	C8-N9-C4	7.91	108.97	105.80
12	B	2744	G	N1-C6-O6	7.91	124.65	119.90
12	B	587	C	C2-N3-C4	7.91	123.86	119.90
12	B	630	G	C4-C5-C6	7.91	123.55	118.80
12	B	940	G	C5-C6-N1	7.91	115.45	111.50
12	B	631	A	N9-C4-C5	7.91	108.96	105.80
12	B	1157	G	N9-C4-C5	-7.91	102.24	105.40
12	B	2158	A	C2-N3-C4	7.91	114.55	110.60
12	B	2381	A	C6-C5-N7	-7.91	126.77	132.30
12	B	2478	A	O4'-C1'-N9	7.91	114.53	108.20
12	B	2483	C	P-O5'-C5'	7.91	133.55	120.90
12	B	2531	A	N1-C2-N3	-7.91	125.35	129.30
12	B	260	G	N9-C4-C5	7.91	108.56	105.40
12	B	679	C	N3-C4-C5	-7.91	118.74	121.90
12	B	705	A	C8-N9-C4	-7.91	102.64	105.80
12	B	1445	G	N1-C6-O6	7.91	124.64	119.90
12	B	1527	G	P-O3'-C3'	7.91	129.19	119.70
11	A	48	U	C4-C5-C6	7.90	124.44	119.70
12	B	277	G	C2-N3-C4	7.90	115.85	111.90
12	B	1809	A	C4-C5-C6	7.90	120.95	117.00
12	B	1433	A	C4-C5-C6	7.90	120.95	117.00
12	B	586	A	C8-N9-C4	-7.90	102.64	105.80
12	B	1271	G	C6-C5-N7	-7.90	125.66	130.40
12	B	1354	A	O4'-C1'-N9	7.90	114.52	108.20
12	B	28	A	C5-C6-N6	-7.90	117.38	123.70
12	B	275	C	C6-N1-C2	-7.90	117.14	120.30
12	B	892	A	C5-N7-C8	7.90	107.85	103.90
12	B	1382	G	N7-C8-N9	7.90	117.05	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1968	G	N1-C6-O6	7.90	124.64	119.90
12	B	2404	U	O4'-C1'-N1	7.90	114.52	108.20
12	B	2434	A	C8-N9-C4	-7.90	102.64	105.80
12	B	2862	G	C5-N7-C8	-7.90	100.35	104.30
12	B	117	G	C4-C5-N7	-7.90	107.64	110.80
11	A	106	G	N1-C2-N3	-7.89	119.16	123.90
12	B	813	U	N1-C2-N3	-7.89	110.16	114.90
12	B	1007	C	N3-C4-N4	7.89	123.53	118.00
12	B	1649	G	C4-C5-C6	7.89	123.54	118.80
12	B	261	G	C8-N9-C4	7.89	109.56	106.40
12	B	1498	C	O4'-C4'-C3'	-7.89	96.11	104.00
12	B	1667	G	C5-C6-N1	-7.89	107.55	111.50
12	B	1732	C	C4-C5-C6	7.89	121.35	117.40
12	B	2705	A	O4'-C1'-N9	7.89	114.51	108.20
12	B	2747	G	C8-N9-C4	-7.89	103.24	106.40
12	B	345	A	C4-C5-C6	7.89	120.94	117.00
26	P	23	ASP	CB-CG-OD1	7.89	125.40	118.30
12	B	17	G	C6-C5-N7	-7.89	125.67	130.40
12	B	254	G	C8-N9-C4	-7.89	103.25	106.40
12	B	1535	A	C5-C6-N6	-7.89	117.39	123.70
12	B	1738	G	C2-N3-C4	7.89	115.84	111.90
12	B	2587	A	C5-C6-N1	-7.89	113.76	117.70
12	B	583	G	N3-C2-N2	7.89	125.42	119.90
12	B	1839	G	C4-C5-N7	-7.89	107.65	110.80
12	B	2466	C	O4'-C1'-N1	7.89	114.51	108.20
12	B	532	A	C2-N3-C4	7.88	114.54	110.60
12	B	590	A	N1-C6-N6	7.88	123.33	118.60
12	B	1163	G	C1'-O4'-C4'	-7.88	103.59	109.90
12	B	1759	A	N1-C6-N6	7.88	123.33	118.60
24	N	63	ARG	NE-CZ-NH2	7.88	124.24	120.30
12	B	2780	G	C4-N9-C1'	7.88	136.75	126.50
12	B	600	G	O4'-C1'-N9	7.88	114.50	108.20
12	B	1713	A	C5-C6-N6	-7.88	117.39	123.70
12	B	1840	G	N1-C6-O6	7.88	124.63	119.90
12	B	2706	A	C4-C5-C6	7.88	120.94	117.00
12	B	623	C	O4'-C1'-N1	7.88	114.50	108.20
12	B	1247	A	N1-C6-N6	7.88	123.33	118.60
12	B	591	U	C5-C4-O4	7.88	130.63	125.90
12	B	1302	A	O4'-C1'-N9	7.88	114.50	108.20
12	B	1787	A	N3-C4-N9	7.88	133.70	127.40
12	B	1949	G	O4'-C1'-N9	7.88	114.50	108.20
12	B	2121	G	C5-C6-N1	-7.88	107.56	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2808	G	N9-C4-C5	-7.88	102.25	105.40
12	B	2855	C	N3-C4-C5	-7.88	118.75	121.90
12	B	798	G	N1-C6-O6	7.88	124.62	119.90
12	B	1328	A	C8-N9-C4	7.88	108.95	105.80
12	B	1492	G	N7-C8-N9	7.88	117.04	113.10
12	B	1614	A	C4-C5-C6	7.88	120.94	117.00
12	B	2485	G	N1-C2-N3	-7.88	119.17	123.90
12	B	2627	G	O4'-C1'-N9	7.88	114.50	108.20
12	B	2892	G	C8-N9-C4	7.88	109.55	106.40
12	B	1771	C	C6-N1-C2	-7.88	117.15	120.30
12	B	2260	C	C6-N1-C2	-7.87	117.15	120.30
11	A	11	C	N3-C4-C5	-7.87	118.75	121.90
12	B	32	C	C5-C4-N4	-7.87	114.69	120.20
12	B	2371	G	N7-C8-N9	-7.87	109.16	113.10
12	B	2546	U	O4'-C1'-N1	7.87	114.50	108.20
12	B	241	A	C2-N3-C4	-7.87	106.67	110.60
12	B	1397	U	N3-C4-C5	-7.87	109.88	114.60
12	B	2783	U	N3-C4-O4	7.87	124.91	119.40
12	B	2858	C	N3-C4-N4	7.87	123.51	118.00
12	B	173	A	O4'-C1'-N9	7.87	114.49	108.20
12	B	628	G	C5-C6-N1	-7.87	107.57	111.50
12	B	1470	A	C5-C6-N6	-7.87	117.41	123.70
12	B	1935	G	C6-C5-N7	-7.87	125.68	130.40
12	B	89	A	C5-C6-N1	-7.87	113.77	117.70
12	B	1604	C	O4'-C1'-N1	7.87	114.49	108.20
12	B	1887	C	O4'-C1'-N1	7.87	114.49	108.20
12	B	2394	C	C5-C6-N1	7.87	124.93	121.00
12	B	2805	C	O4'-C1'-N1	7.87	114.49	108.20
12	B	263	G	C2-N3-C4	7.86	115.83	111.90
12	B	866	A	N1-C6-N6	7.86	123.32	118.60
12	B	1053	C	N1-C2-O2	7.86	123.62	118.90
12	B	1230	A	N9-C4-C5	7.86	108.94	105.80
12	B	1299	G	O4'-C1'-N9	7.86	114.49	108.20
12	B	2039	U	C5-C6-N1	7.86	126.63	122.70
12	B	678	C	C6-N1-C2	7.86	123.44	120.30
12	B	971	G	C4-C5-N7	-7.86	107.66	110.80
12	B	135	U	P-O5'-C5'	7.86	133.47	120.90
12	B	535	G	N3-C2-N2	7.86	125.40	119.90
12	B	1327	A	C6-N1-C2	-7.86	113.88	118.60
12	B	1454	C	C5'-C4'-O4'	7.86	118.53	109.10
12	B	1536	C	O4'-C1'-N1	7.86	114.49	108.20
12	B	2242	G	N7-C8-N9	-7.86	109.17	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2406	A	O4'-C1'-N9	7.86	114.49	108.20
12	B	836	G	N3-C2-N2	7.86	125.40	119.90
12	B	1132	U	C6-N1-C2	-7.86	116.28	121.00
12	B	1821	A	C5-C6-N6	-7.86	117.41	123.70
12	B	348	A	C5-N7-C8	7.86	107.83	103.90
12	B	740	C	O4'-C1'-N1	7.86	114.49	108.20
12	B	1370	C	O4'-C1'-N1	7.86	114.49	108.20
12	B	2027	G	N7-C8-N9	7.86	117.03	113.10
12	B	277	G	C5-C6-O6	7.86	133.31	128.60
12	B	2368	C	P-O5'-C5'	7.86	133.47	120.90
12	B	808	G	O4'-C1'-N9	7.85	114.48	108.20
11	A	33	G	C4-C5-C6	7.85	123.51	118.80
12	B	770	G	N1-C6-O6	7.85	124.61	119.90
12	B	907	G	N9-C4-C5	7.85	108.54	105.40
12	B	1165	A	C5-C6-N1	-7.85	113.77	117.70
12	B	1542	U	N3-C4-O4	7.85	124.90	119.40
12	B	1696	G	C4-C5-N7	-7.85	107.66	110.80
12	B	2672	U	N3-C4-O4	7.85	124.90	119.40
12	B	1198	U	C6-N1-C2	-7.85	116.29	121.00
12	B	1237	A	C8-N9-C4	-7.85	102.66	105.80
12	B	2459	A	C5-C6-N1	-7.85	113.78	117.70
12	B	1025	G	O4'-C1'-N9	7.85	114.48	108.20
12	B	1789	A	N9-C4-C5	-7.85	102.66	105.80
12	B	205	G	O4'-C1'-N9	7.85	114.48	108.20
12	B	424	G	N1-C6-O6	7.84	124.61	119.90
12	B	1447	C	C5-C6-N1	7.84	124.92	121.00
12	B	2005	A	O4'-C1'-N9	7.84	114.48	108.20
12	B	2374	C	O4'-C1'-N1	7.84	114.48	108.20
12	B	2578	G	C5-C6-O6	7.84	133.31	128.60
12	B	1402	U	O4'-C1'-N1	7.84	114.47	108.20
12	B	1685	C	C4-C5-C6	7.84	121.32	117.40
12	B	1050	A	C5-C6-N1	-7.84	113.78	117.70
12	B	1359	A	C5-C6-N6	-7.84	117.43	123.70
12	B	2152	G	N3-C2-N2	7.84	125.39	119.90
12	B	2278	A	N9-C4-C5	7.84	108.94	105.80
12	B	839	U	O4'-C1'-N1	7.84	114.47	108.20
12	B	941	A	C2-N3-C4	-7.84	106.68	110.60
12	B	2091	C	C4-C5-C6	-7.84	113.48	117.40
12	B	2295	C	C5-C6-N1	7.84	124.92	121.00
11	A	69	G	C5-C6-O6	-7.84	123.90	128.60
12	B	2344	U	N3-C2-O2	7.84	127.69	122.20
11	A	93	C	C6-N1-C2	-7.84	117.17	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1141	U	O4'-C1'-N1	7.84	114.47	108.20
12	B	1831	G	C4-C5-N7	7.84	113.94	110.80
12	B	2076	U	N3-C4-O4	7.84	124.89	119.40
12	B	2164	C	P-O3'-C3'	7.84	129.10	119.70
11	A	98	G	C5-C6-N1	-7.83	107.58	111.50
12	B	132	G	O4'-C1'-N9	7.83	114.47	108.20
12	B	905	A	N7-C8-N9	7.83	117.72	113.80
11	A	23	G	N3-C2-N2	7.83	125.38	119.90
12	B	662	G	N3-C2-N2	7.83	125.38	119.90
12	B	1390	U	O4'-C1'-N1	7.83	114.47	108.20
12	B	2035	G	O4'-C1'-N9	7.83	114.47	108.20
12	B	286	U	O4'-C1'-N1	7.83	114.46	108.20
12	B	492	A	C4-C5-C6	7.83	120.92	117.00
12	B	1393	A	C5-N7-C8	7.83	107.82	103.90
12	B	2301	C	N3-C4-C5	-7.83	118.77	121.90
11	A	99	A	N1-C2-N3	7.83	133.22	129.30
12	B	333	G	C4-C5-N7	7.83	113.93	110.80
12	B	502	A	P-O3'-C3'	7.83	129.10	119.70
12	B	664	G	C5-C6-O6	-7.83	123.90	128.60
12	B	902	C	C5-C6-N1	7.83	124.92	121.00
12	B	1828	G	N1-C6-O6	7.83	124.60	119.90
26	P	42	PHE	CB-CG-CD1	-7.83	115.32	120.80
12	B	1133	A	C4-C5-N7	-7.83	106.79	110.70
12	B	2419	U	N3-C2-O2	-7.83	116.72	122.20
12	B	2842	G	O4'-C1'-N9	7.83	114.46	108.20
12	B	100	U	N3-C4-O4	7.83	124.88	119.40
12	B	2618	G	C2-N3-C4	7.83	115.81	111.90
25	O	9	ARG	NE-CZ-NH1	-7.83	116.39	120.30
12	B	325	G	C5-C6-O6	-7.83	123.90	128.60
12	B	496	G	O4'-C1'-N9	7.83	114.46	108.20
12	B	2405	G	C5-C6-N1	-7.83	107.59	111.50
22	L	60	ARG	NE-CZ-NH1	7.83	124.21	120.30
11	A	23	G	N1-C2-N3	-7.82	119.21	123.90
12	B	123	G	C4-N9-C1'	-7.82	116.33	126.50
12	B	153	U	O4'-C1'-N1	7.82	114.46	108.20
12	B	216	A	C4-C5-C6	7.82	120.91	117.00
12	B	338	G	C5-C6-O6	-7.82	123.91	128.60
12	B	1302	A	N3-C4-C5	-7.82	121.32	126.80
12	B	2851	A	C5-C6-N6	7.82	129.96	123.70
12	B	329	G	C4-C5-C6	7.82	123.49	118.80
12	B	696	G	C4-C5-C6	7.82	123.49	118.80
12	B	1090	A	N3-C4-C5	-7.82	121.33	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1218	G	C5-C6-O6	-7.82	123.91	128.60
12	B	1984	G	O4'-C1'-N9	7.82	114.46	108.20
12	B	2288	A	C6-C5-N7	-7.82	126.83	132.30
12	B	1755	A	C5-N7-C8	7.82	107.81	103.90
12	B	2031	A	C5-C6-N6	-7.82	117.44	123.70
12	B	2325	G	C8-N9-C4	-7.82	103.27	106.40
12	B	458	G	C5'-C4'-O4'	7.82	118.48	109.10
12	B	498	G	N1-C6-O6	7.82	124.59	119.90
12	B	2721	A	C4-C5-N7	-7.82	106.79	110.70
12	B	2896	C	O4'-C1'-N1	7.82	114.45	108.20
12	B	715	A	C5-C6-N1	-7.82	113.79	117.70
12	B	1417	C	N3-C4-C5	-7.82	118.77	121.90
12	B	1479	G	C4-C5-C6	7.82	123.49	118.80
12	B	1666	G	C4-C5-N7	7.82	113.93	110.80
12	B	2099	U	O4'-C1'-N1	7.82	114.45	108.20
12	B	476	G	O4'-C1'-N9	7.81	114.45	108.20
8	7	63	TYR	CB-CG-CD1	7.81	125.69	121.00
12	B	647	G	N3-C2-N2	7.81	125.37	119.90
12	B	1149	G	C5-C6-O6	-7.81	123.91	128.60
12	B	1393	A	C5-C6-N6	-7.81	117.45	123.70
12	B	20	C	O4'-C1'-N1	7.81	114.45	108.20
12	B	1355	G	C8-N9-C1'	7.81	137.15	127.00
12	B	2698	U	C5-C4-O4	-7.81	121.21	125.90
12	B	638	G	N1-C6-O6	7.81	124.59	119.90
12	B	1138	G	C5-C6-O6	-7.81	123.91	128.60
12	B	1362	C	N3-C4-N4	7.81	123.47	118.00
12	B	2001	C	C5-C4-N4	-7.81	114.73	120.20
12	B	2174	C	C5-C6-N1	7.81	124.91	121.00
12	B	2441	U	C4-C5-C6	7.81	124.39	119.70
12	B	135	U	C5-C6-N1	7.81	126.60	122.70
12	B	1311	G	C2-N3-C4	7.81	115.80	111.90
12	B	2705	A	C6-N1-C2	-7.81	113.92	118.60
12	B	2868	A	C2-N3-C4	-7.81	106.70	110.60
12	B	905	A	C8-N9-C4	-7.81	102.68	105.80
12	B	1578	U	C3'-C2'-C1'	7.81	107.75	101.50
12	B	48	G	C2-N3-C4	7.80	115.80	111.90
12	B	330	A	C5-C6-N1	-7.80	113.80	117.70
12	B	942	G	N7-C8-N9	7.80	117.00	113.10
12	B	1649	G	C5-N7-C8	7.80	108.20	104.30
12	B	627	A	P-O3'-C3'	7.80	129.06	119.70
12	B	635	C	N3-C4-N4	7.80	123.46	118.00
12	B	1605	C	C2-N3-C4	7.80	123.80	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1929	G	C4-C5-N7	7.80	113.92	110.80
12	B	2003	A	N1-C6-N6	7.80	123.28	118.60
12	B	2097	A	C5-N7-C8	7.80	107.80	103.90
18	H	25	TYR	CB-CG-CD2	7.80	125.68	121.00
12	B	1328	A	N7-C8-N9	-7.80	109.90	113.80
12	B	1778	U	O4'-C1'-N1	7.80	114.44	108.20
12	B	2269	G	C6-C5-N7	-7.80	125.72	130.40
12	B	1899	A	C5-C6-N6	-7.80	117.46	123.70
12	B	126	A	N7-C8-N9	-7.80	109.90	113.80
12	B	738	G	N3-C2-N2	7.80	125.36	119.90
12	B	1318	U	C5-C6-N1	7.80	126.60	122.70
12	B	1731	G	N1-C6-O6	7.80	124.58	119.90
12	B	1940	U	C6-N1-C1'	-7.80	110.28	121.20
12	B	2394	C	O4'-C1'-N1	7.80	114.44	108.20
12	B	52	A	C8-N9-C4	-7.79	102.68	105.80
12	B	2588	G	C8-N9-C4	-7.79	103.28	106.40
12	B	21	A	C4-C5-C6	7.79	120.90	117.00
12	B	275	C	O4'-C1'-N1	7.79	114.44	108.20
12	B	851	C	N3-C4-C5	-7.79	118.78	121.90
12	B	917	A	P-O3'-C3'	-7.79	110.35	119.70
12	B	1736	U	O4'-C1'-N1	7.79	114.44	108.20
12	B	2657	A	C5-C6-N6	-7.79	117.47	123.70
11	A	100	G	N3-C2-N2	7.79	125.36	119.90
12	B	150	U	N3-C4-O4	7.79	124.85	119.40
12	B	362	A	N1-C6-N6	7.79	123.28	118.60
12	B	1039	A	C6-N1-C2	7.79	123.28	118.60
12	B	1327	A	N1-C6-N6	7.79	123.28	118.60
12	B	2043	C	C5-C6-N1	-7.79	117.10	121.00
12	B	2476	A	C5-N7-C8	7.79	107.80	103.90
12	B	571	U	O4'-C1'-N1	7.79	114.43	108.20
12	B	247	G	N1-C2-N3	-7.79	119.23	123.90
12	B	556	A	O4'-C1'-N9	7.79	114.43	108.20
12	B	2442	C	C2-N3-C4	7.79	123.79	119.90
12	B	2666	C	N3-C4-C5	-7.79	118.78	121.90
12	B	1631	G	C5-N7-C8	7.79	108.19	104.30
12	B	2025	C	C6-N1-C2	7.79	123.42	120.30
12	B	2160	C	N3-C4-N4	7.79	123.45	118.00
12	B	432	A	C5-N7-C8	7.79	107.79	103.90
12	B	957	C	C5-C6-N1	7.79	124.89	121.00
12	B	1758	U	N1-C2-N3	-7.79	110.23	114.90
12	B	2485	G	C2-N3-C4	7.79	115.79	111.90
12	B	2893	A	O4'-C1'-N9	7.79	114.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	961	C	C4-C5-C6	-7.78	113.51	117.40
12	B	1573	G	N9-C4-C5	7.78	108.51	105.40
12	B	1610	A	O4'-C1'-N9	7.78	114.43	108.20
12	B	1772	A	C8-N9-C4	-7.78	102.69	105.80
12	B	2022	U	C1'-O4'-C4'	7.78	116.13	109.90
12	B	2751	G	C6-C5-N7	-7.78	125.73	130.40
12	B	2183	A	C1'-O4'-C4'	7.78	116.12	109.90
12	B	67	U	P-O5'-C5'	7.78	133.35	120.90
12	B	281	C	O4'-C1'-N1	7.78	114.42	108.20
12	B	524	G	N1-C2-N3	-7.78	119.23	123.90
12	B	614	A	O4'-C1'-N9	7.78	114.42	108.20
12	B	640	C	C5-C4-N4	-7.78	114.75	120.20
12	B	1477	A	C4-C5-N7	-7.78	106.81	110.70
12	B	1506	U	O4'-C1'-N1	7.78	114.42	108.20
12	B	1492	G	N1-C6-O6	7.78	124.57	119.90
12	B	1791	A	P-O3'-C3'	-7.78	110.36	119.70
12	B	2855	C	N3-C4-N4	7.78	123.44	118.00
12	B	550	C	N3-C4-N4	7.78	123.44	118.00
12	B	784	G	N3-C2-N2	7.78	125.34	119.90
12	B	786	C	C2-N3-C4	-7.78	116.01	119.90
12	B	822	G	O4'-C1'-N9	7.78	114.42	108.20
12	B	1223	G	N9-C4-C5	7.78	108.51	105.40
12	B	1344	U	C1'-O4'-C4'	7.78	116.12	109.90
12	B	1665	A	C6-N1-C2	7.78	123.27	118.60
12	B	1893	C	C5-C6-N1	7.78	124.89	121.00
12	B	1996	C	O4'-C1'-N1	7.78	114.42	108.20
12	B	2186	G	C6-C5-N7	7.78	135.07	130.40
12	B	2225	A	C4-C5-C6	7.78	120.89	117.00
12	B	2298	A	C8-N9-C4	-7.78	102.69	105.80
12	B	2636	C	C6-N1-C2	7.78	123.41	120.30
12	B	2714	G	N1-C2-N3	-7.78	119.23	123.90
12	B	2758	A	C4-C5-N7	-7.78	106.81	110.70
12	B	2807	U	C2-N3-C4	-7.77	122.34	127.00
12	B	355	U	O4'-C1'-N1	7.77	114.42	108.20
12	B	1018	U	N1-C2-O2	7.77	128.24	122.80
12	B	1399	C	N3-C4-C5	-7.77	118.79	121.90
12	B	1843	C	C6-N1-C2	-7.77	117.19	120.30
12	B	2315	G	N9-C4-C5	7.77	108.51	105.40
11	A	31	C	N1-C2-O2	7.77	123.56	118.90
11	A	76	G	C5-C6-N1	-7.77	107.61	111.50
12	B	1120	G	N1-C6-O6	7.77	124.56	119.90
12	B	1567	G	N3-C4-N9	7.77	130.66	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2374	C	N1-C2-O2	-7.77	114.24	118.90
12	B	2598	A	C8-N9-C4	-7.77	102.69	105.80
12	B	34	U	C6-N1-C1'	-7.77	110.33	121.20
12	B	322	A	N1-C6-N6	7.77	123.26	118.60
12	B	2241	A	N9-C4-C5	7.77	108.91	105.80
12	B	2775	G	C5-N7-C8	7.77	108.18	104.30
27	Q	26	ALA	N-CA-CB	7.77	120.98	110.10
12	B	922	C	C2-N3-C4	7.77	123.78	119.90
12	B	1177	G	O4'-C1'-N9	7.77	114.41	108.20
12	B	2062	A	C5'-C4'-C3'	7.77	128.43	116.00
12	B	2205	A	N1-C6-N6	7.77	123.26	118.60
12	B	290	U	C2-N3-C4	-7.76	122.34	127.00
12	B	435	C	O4'-C1'-N1	7.76	114.41	108.20
12	B	635	C	O4'-C1'-N1	7.76	114.41	108.20
12	B	949	G	O4'-C1'-N9	7.76	114.41	108.20
12	B	463	G	N7-C8-N9	-7.76	109.22	113.10
12	B	1080	A	O4'-C1'-N9	7.76	114.41	108.20
12	B	257	C	P-O5'-C5'	7.76	133.32	120.90
12	B	295	G	N1-C6-O6	7.76	124.56	119.90
12	B	1604	C	C6-N1-C2	7.76	123.40	120.30
12	B	1898	U	O4'-C1'-N1	7.76	114.41	108.20
12	B	2613	U	O4'-C1'-N1	7.76	114.41	108.20
12	B	1360	G	O4'-C1'-N9	7.76	114.41	108.20
12	B	2044	C	C2-N3-C4	7.76	123.78	119.90
12	B	2138	G	N1-C2-N3	-7.76	119.24	123.90
12	B	2306	C	O4'-C1'-N1	7.76	114.41	108.20
12	B	2903	U	O4'-C1'-N1	7.76	114.41	108.20
11	A	67	G	C5-C6-N1	-7.76	107.62	111.50
11	A	70	C	N3-C4-N4	7.76	123.43	118.00
12	B	98	G	C5-C6-N1	-7.76	107.62	111.50
12	B	2289	G	N7-C8-N9	-7.76	109.22	113.10
11	A	21	G	N3-C2-N2	7.76	125.33	119.90
12	B	1895	C	C4'-C3'-C2'	-7.76	94.84	102.60
12	B	1991	U	P-O3'-C3'	7.76	129.01	119.70
12	B	2078	C	C5-C6-N1	-7.76	117.12	121.00
12	B	2358	A	N3-C4-N9	-7.76	121.19	127.40
12	B	2490	G	C5-C6-N1	7.76	115.38	111.50
12	B	283	G	C4-C5-N7	-7.75	107.70	110.80
12	B	667	U	C2-N3-C4	-7.75	122.35	127.00
12	B	2283	C	O5'-C5'-C4'	7.75	126.43	111.70
12	B	53	A	C8-N9-C4	-7.75	102.70	105.80
12	B	501	A	C4-C5-C6	7.75	120.88	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1837	C	N3-C4-C5	-7.75	118.80	121.90
12	B	2236	U	N3-C4-C5	7.75	119.25	114.60
12	B	2296	U	N3-C4-O4	7.75	124.83	119.40
12	B	1719	G	P-O3'-C3'	7.75	129.00	119.70
12	B	2091	C	C5-C6-N1	7.75	124.88	121.00
12	B	2259	U	N3-C4-C5	-7.75	109.95	114.60
12	B	2481	G	N3-C2-N2	7.75	125.33	119.90
12	B	2825	G	P-O3'-C3'	-7.75	110.40	119.70
12	B	1459	G	N3-C4-C5	7.75	132.47	128.60
12	B	1533	C	C5-C6-N1	7.75	124.88	121.00
11	A	39	A	N1-C2-N3	7.75	133.18	129.30
11	A	59	A	C6-C5-N7	-7.75	126.88	132.30
12	B	893	C	C5-C4-N4	-7.75	114.78	120.20
12	B	2529	G	O4'-C1'-N9	7.75	114.40	108.20
11	A	35	C	O4'-C1'-N1	7.75	114.40	108.20
12	B	1075	C	C6-N1-C2	-7.75	117.20	120.30
12	B	1128	G	N1-C6-O6	7.75	124.55	119.90
12	B	1232	G	N1-C6-O6	7.75	124.55	119.90
12	B	564	C	C5-C6-N1	-7.75	117.13	121.00
4	3	48	TYR	CB-CG-CD1	7.74	125.65	121.00
11	A	52	A	C8-N9-C4	-7.74	102.70	105.80
12	B	73	A	C8-N9-C4	-7.74	102.70	105.80
12	B	193	U	C2-N3-C4	-7.74	122.35	127.00
12	B	241	A	C4-C5-N7	-7.74	106.83	110.70
12	B	696	G	N9-C4-C5	7.74	108.50	105.40
12	B	2067	G	N1-C2-N3	-7.74	119.25	123.90
12	B	2851	A	C4-C5-C6	7.74	120.87	117.00
15	E	72	SER	N-CA-CB	7.74	122.12	110.50
12	B	126	A	C5-C6-N6	-7.74	117.51	123.70
12	B	221	A	O4'-C1'-N9	7.74	114.39	108.20
12	B	814	C	C1'-O4'-C4'	7.74	116.09	109.90
12	B	875	G	N1-C6-O6	7.74	124.55	119.90
12	B	1148	U	O4'-C1'-N1	7.74	114.39	108.20
12	B	1810	A	C5-C6-N1	-7.74	113.83	117.70
12	B	2262	U	C5-C6-N1	7.74	126.57	122.70
12	B	2882	A	O4'-C1'-N9	7.74	114.39	108.20
12	B	194	G	C4-C5-C6	7.74	123.44	118.80
12	B	725	G	C5-C6-N1	-7.74	107.63	111.50
12	B	1128	G	C1'-O4'-C4'	-7.74	103.71	109.90
12	B	444	C	N1-C2-N3	-7.74	113.78	119.20
12	B	524	G	N7-C8-N9	7.74	116.97	113.10
12	B	1698	A	C4-C5-C6	7.74	120.87	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2300	C	N3-C4-C5	-7.74	118.81	121.90
12	B	1625	C	O4'-C1'-N1	7.73	114.39	108.20
12	B	2280	G	C5-C6-O6	-7.73	123.96	128.60
12	B	138	U	N1-C2-N3	-7.73	110.26	114.90
12	B	1166	G	O4'-C1'-N9	7.73	114.39	108.20
12	B	734	A	C5'-C4'-O4'	7.73	118.38	109.10
12	B	842	U	N3-C4-C5	-7.73	109.96	114.60
12	B	1410	G	C4'-C3'-C2'	-7.73	94.87	102.60
12	B	1662	U	N1-C2-O2	-7.73	117.39	122.80
12	B	2194	U	N3-C4-C5	-7.73	109.96	114.60
12	B	2327	A	N1-C6-N6	7.73	123.24	118.60
12	B	2376	A	C5-C6-N1	-7.73	113.83	117.70
12	B	2605	U	N3-C4-O4	7.73	124.81	119.40
12	B	361	G	N1-C6-O6	7.73	124.54	119.90
12	B	537	G	C8-N9-C4	-7.73	103.31	106.40
12	B	1959	G	N1-C6-O6	7.73	124.54	119.90
12	B	2664	G	N1-C2-N3	-7.73	119.26	123.90
12	B	1168	G	C3'-C2'-C1'	-7.73	95.32	101.50
12	B	1553	A	C4-C5-C6	7.73	120.86	117.00
12	B	1750	G	O4'-C1'-N9	7.73	114.38	108.20
12	B	2310	C	C2-N1-C1'	7.72	127.30	118.80
12	B	2710	C	N3-C4-C5	-7.72	118.81	121.90
12	B	852	U	C5-C4-O4	-7.72	121.27	125.90
12	B	2072	C	C5'-C4'-O4'	7.72	118.37	109.10
12	B	2082	A	C6-C5-N7	-7.72	126.89	132.30
12	B	2567	G	C5-C6-O6	-7.72	123.97	128.60
11	A	100	G	N9-C4-C5	-7.72	102.31	105.40
12	B	456	C	N3-C4-N4	7.72	123.40	118.00
12	B	2469	A	P-O3'-C3'	-7.72	110.44	119.70
12	B	2570	G	C2-N3-C4	-7.72	108.04	111.90
12	B	2486	C	C6-N1-C2	7.72	123.39	120.30
12	B	208	C	N3-C4-N4	7.72	123.40	118.00
12	B	213	A	C4-C5-N7	-7.72	106.84	110.70
12	B	779	U	C6-N1-C2	-7.72	116.37	121.00
12	B	1310	G	N3-C2-N2	7.72	125.30	119.90
12	B	1916	A	C5-C6-N1	-7.72	113.84	117.70
12	B	2509	G	C5-C6-O6	-7.72	123.97	128.60
12	B	236	C	O4'-C1'-N1	7.71	114.37	108.20
12	B	524	G	C8-N9-C4	-7.71	103.31	106.40
12	B	1512	C	C5-C4-N4	-7.71	114.80	120.20
12	B	1770	G	C5-N7-C8	-7.71	100.44	104.30
12	B	2541	A	C4-C5-N7	7.71	114.56	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	D	46	ARG	NE-CZ-NH2	-7.71	116.44	120.30
12	B	639	U	N3-C4-C5	-7.71	109.97	114.60
12	B	1788	C	O4'-C1'-N1	7.71	114.37	108.20
12	B	1449	G	C1'-O4'-C4'	-7.71	103.73	109.90
12	B	2104	C	C6-N1-C2	-7.71	117.22	120.30
12	B	2327	A	C5-C6-N1	-7.71	113.84	117.70
11	A	112	G	N1-C2-N3	-7.71	119.28	123.90
12	B	142	A	N1-C2-N3	-7.71	125.45	129.30
12	B	431	U	C5-C6-N1	7.71	126.56	122.70
12	B	925	A	C5-C6-N6	-7.71	117.53	123.70
12	B	998	C	O4'-C1'-N1	7.71	114.37	108.20
12	B	1918	A	N1-C2-N3	7.71	133.16	129.30
12	B	2341	G	C4-C5-N7	7.71	113.88	110.80
12	B	476	G	C5-N7-C8	-7.71	100.45	104.30
12	B	667	U	C4-C5-C6	-7.71	115.08	119.70
12	B	1343	G	C4-C5-C6	7.71	123.42	118.80
12	B	1625	C	N3-C4-N4	7.71	123.39	118.00
12	B	1754	A	C4-C5-C6	7.71	120.85	117.00
12	B	2003	A	O4'-C1'-N9	7.71	114.37	108.20
12	B	1934	C	N3-C4-N4	7.71	123.39	118.00
12	B	2624	G	C6-C5-N7	-7.71	125.78	130.40
12	B	403	U	O4'-C1'-N1	7.70	114.36	108.20
12	B	1073	A	C4-C5-C6	7.70	120.85	117.00
12	B	1538	G	C6-C5-N7	-7.70	125.78	130.40
18	H	29	PHE	CB-CG-CD1	-7.70	115.41	120.80
12	B	63	A	C2-N3-C4	7.70	114.45	110.60
12	B	513	A	C5-C6-N6	-7.70	117.54	123.70
12	B	727	A	C6-C5-N7	-7.70	126.91	132.30
12	B	1301	A	N9-C4-C5	-7.70	102.72	105.80
12	B	1808	A	N1-C2-N3	7.70	133.15	129.30
12	B	2299	U	N3-C2-O2	7.70	127.59	122.20
12	B	693	A	N9-C4-C5	7.70	108.88	105.80
12	B	713	G	O4'-C1'-N9	7.70	114.36	108.20
12	B	971	G	C5-C6-N1	-7.70	107.65	111.50
12	B	1314	C	N3-C4-N4	7.70	123.39	118.00
12	B	2661	G	C6-C5-N7	-7.70	125.78	130.40
12	B	645	C	N3-C4-C5	-7.70	118.82	121.90
12	B	1021	A	C5-C6-N1	-7.70	113.85	117.70
12	B	1730	C	P-O3'-C3'	7.70	128.94	119.70
12	B	1808	A	O4'-C1'-N9	7.70	114.36	108.20
12	B	1809	A	C5-C6-N1	-7.70	113.85	117.70
12	B	2422	C	C1'-O4'-C4'	-7.70	103.74	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2446	G	C5-C6-O6	-7.70	123.98	128.60
12	B	1791	A	C5-C6-N1	-7.69	113.85	117.70
12	B	297	G	C4-C5-N7	-7.69	107.72	110.80
12	B	799	G	N1-C6-O6	7.69	124.52	119.90
12	B	1237	A	N1-C2-N3	-7.69	125.45	129.30
12	B	215	G	C6-N1-C2	7.69	129.72	125.10
12	B	328	U	C6-N1-C2	-7.69	116.39	121.00
12	B	990	A	C6-C5-N7	-7.69	126.92	132.30
12	B	1047	G	C5-C6-O6	-7.69	123.99	128.60
12	B	1251	C	C4-C5-C6	-7.69	113.56	117.40
12	B	1310	G	C5-C6-O6	-7.69	123.98	128.60
12	B	1485	U	C4'-C3'-C2'	-7.69	94.91	102.60
12	B	1745	A	C4-C5-N7	-7.69	106.86	110.70
12	B	2502	G	N3-C2-N2	7.69	125.28	119.90
12	B	2834	G	C3'-C2'-C1'	-7.69	95.35	101.50
12	B	259	G	N1-C2-N2	7.69	123.12	116.20
12	B	2325	G	N3-C4-N9	-7.69	121.39	126.00
12	B	270	A	C4-C5-N7	-7.69	106.86	110.70
12	B	1615	C	N3-C4-N4	7.69	123.38	118.00
12	B	1692	U	C5-C6-N1	7.69	126.54	122.70
12	B	1997	C	N3-C2-O2	7.69	127.28	121.90
12	B	2135	A	N7-C8-N9	7.69	117.64	113.80
12	B	2886	A	C5-C6-N6	-7.69	117.55	123.70
12	B	319	G	N3-C2-N2	7.68	125.28	119.90
12	B	614	A	N9-C4-C5	7.68	108.87	105.80
12	B	2188	U	O4'-C1'-N1	7.68	114.35	108.20
12	B	2196	C	C4-C5-C6	-7.68	113.56	117.40
12	B	2434	A	N9-C4-C5	7.68	108.87	105.80
12	B	2515	C	N1-C2-N3	-7.68	113.82	119.20
12	B	96	C	C5-C4-N4	-7.68	114.82	120.20
12	B	486	C	C5-C4-N4	7.68	125.58	120.20
12	B	1894	C	N3-C4-C5	7.68	124.97	121.90
12	B	1990	C	C5-C4-N4	-7.68	114.82	120.20
12	B	2623	G	N1-C2-N3	-7.68	119.29	123.90
12	B	2703	C	N3-C4-C5	7.68	124.97	121.90
33	Y	15	SER	N-CA-CB	7.68	122.03	110.50
12	B	40	U	O4'-C1'-N1	7.68	114.34	108.20
12	B	2892	G	N1-C2-N3	-7.68	119.29	123.90
12	B	540	C	N3-C4-N4	7.68	123.38	118.00
12	B	2056	G	C5-C6-O6	-7.68	123.99	128.60
12	B	2071	A	C5-C6-N6	-7.68	117.56	123.70
12	B	2142	A	C8-N9-C4	7.68	108.87	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2286	G	C4-C5-C6	7.68	123.41	118.80
12	B	2895	G	O4'-C1'-N9	7.68	114.34	108.20
12	B	1044	C	C4-C5-C6	7.68	121.24	117.40
12	B	1374	G	C5-C6-O6	-7.68	123.99	128.60
12	B	2314	A	N7-C8-N9	-7.68	109.96	113.80
12	B	159	G	C8-N9-C4	7.67	109.47	106.40
12	B	915	C	O4'-C1'-N1	7.67	114.34	108.20
12	B	1863	G	C8-N9-C4	-7.67	103.33	106.40
12	B	2363	G	C6-N1-C2	7.67	129.71	125.10
12	B	377	G	C5-C6-O6	-7.67	124.00	128.60
11	A	73	A	C4-C5-C6	7.67	120.84	117.00
12	B	1074	G	N3-C4-C5	-7.67	124.77	128.60
12	B	1722	A	C5-C6-N1	-7.67	113.86	117.70
12	B	2156	G	C6-C5-N7	-7.67	125.80	130.40
12	B	2190	G	N1-C6-O6	7.67	124.50	119.90
12	B	2566	A	C5-C6-N6	-7.67	117.56	123.70
22	L	48	ARG	NE-CZ-NH2	-7.67	116.47	120.30
12	B	820	A	N3-C4-C5	-7.67	121.43	126.80
12	B	185	G	C4'-C3'-C2'	-7.67	94.93	102.60
12	B	385	C	O4'-C1'-N1	7.67	114.33	108.20
12	B	1148	U	N3-C2-O2	7.67	127.57	122.20
12	B	1362	C	N3-C2-O2	7.67	127.27	121.90
12	B	2129	C	C2-N3-C4	-7.67	116.07	119.90
12	B	2709	G	N3-C2-N2	7.67	125.27	119.90
22	L	50	PHE	CB-CG-CD2	7.67	126.17	120.80
11	A	70	C	C5-C6-N1	-7.67	117.17	121.00
12	B	272	A	C4-C5-C6	7.67	120.83	117.00
12	B	1236	G	N7-C8-N9	7.67	116.93	113.10
12	B	2352	A	C8-N9-C4	-7.67	102.73	105.80
12	B	2400	G	C2-N3-C4	-7.67	108.07	111.90
12	B	2684	U	P-O3'-C3'	7.67	128.90	119.70
12	B	612	G	N1-C2-N3	-7.67	119.30	123.90
12	B	628	G	C5-C6-O6	-7.67	124.00	128.60
12	B	685	A	N9-C4-C5	7.67	108.87	105.80
12	B	1429	G	C6-C5-N7	-7.66	125.80	130.40
12	B	2485	G	N3-C4-C5	-7.66	124.77	128.60
12	B	2545	G	C6-C5-N7	-7.66	125.80	130.40
12	B	2603	G	C5-C6-N1	-7.66	107.67	111.50
12	B	1497	U	C6-N1-C2	-7.66	116.40	121.00
12	B	2547	A	C2-N3-C4	-7.66	106.77	110.60
12	B	570	G	N3-C2-N2	7.66	125.26	119.90
12	B	584	C	N3-C4-N4	7.66	123.36	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	662	G	C2-N3-C4	7.66	115.73	111.90
12	B	922	C	O4'-C1'-N1	7.66	114.33	108.20
12	B	471	A	C4-C5-C6	7.66	120.83	117.00
12	B	889	C	N3-C4-N4	7.66	123.36	118.00
12	B	1645	G	C5-C6-O6	-7.66	124.01	128.60
12	B	434	U	N3-C2-O2	7.66	127.56	122.20
12	B	471	A	N9-C4-C5	7.66	108.86	105.80
12	B	655	A	C1'-O4'-C4'	7.66	116.02	109.90
12	B	1632	A	C6-C5-N7	-7.66	126.94	132.30
22	L	58	TYR	CB-CG-CD2	-7.65	116.41	121.00
12	B	376	G	N9-C4-C5	7.65	108.46	105.40
12	B	746	U	C4'-C3'-C2'	-7.65	94.95	102.60
12	B	1079	C	O4'-C1'-N1	7.65	114.32	108.20
12	B	1336	A	N1-C6-N6	7.65	123.19	118.60
12	B	1385	A	C5-C6-N6	-7.65	117.58	123.70
12	B	2114	A	C8-N9-C4	-7.65	102.74	105.80
12	B	2156	G	C5-C6-N1	-7.65	107.67	111.50
12	B	2652	C	C5-C4-N4	-7.65	114.84	120.20
23	M	91	TYR	CB-CG-CD2	-7.65	116.41	121.00
12	B	733	G	N3-C2-N2	7.65	125.25	119.90
12	B	2171	A	O4'-C1'-N9	7.65	114.32	108.20
12	B	164	C	C2-N3-C4	7.64	123.72	119.90
12	B	296	U	O4'-C1'-N1	7.64	114.32	108.20
12	B	367	G	C4-C5-C6	7.64	123.39	118.80
12	B	1388	G	C6-N1-C2	7.64	129.69	125.10
12	B	1742	U	N3-C4-O4	7.64	124.75	119.40
12	B	1928	A	N1-C2-N3	-7.64	125.48	129.30
12	B	2030	A	O4'-C1'-N9	7.64	114.31	108.20
12	B	218	A	N1-C2-N3	7.64	133.12	129.30
12	B	473	G	C2-N3-C4	7.64	115.72	111.90
12	B	863	A	N9-C4-C5	-7.64	102.74	105.80
12	B	2228	G	C4-C5-N7	7.64	113.86	110.80
12	B	2422	C	C2-N3-C4	7.64	123.72	119.90
12	B	2602	A	C2-N3-C4	-7.64	106.78	110.60
12	B	1599	U	N3-C4-O4	7.64	124.75	119.40
12	B	1687	G	P-O3'-C3'	-7.64	110.53	119.70
12	B	656	G	N1-C6-O6	7.64	124.48	119.90
12	B	1351	C	O4'-C1'-N1	7.64	114.31	108.20
12	B	2273	A	C8-N9-C4	-7.64	102.75	105.80
12	B	2445	G	O4'-C1'-C2'	7.64	114.48	107.60
12	B	2869	G	C8-N9-C4	-7.64	103.34	106.40
12	B	1117	C	O4'-C1'-N1	7.64	114.31	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	119	A	C5'-C4'-C3'	-7.64	103.78	116.00
12	B	393	C	N3-C4-C5	-7.64	118.85	121.90
12	B	1188	U	O4'-C1'-N1	7.64	114.31	108.20
12	B	128	C	C1'-O4'-C4'	7.63	116.01	109.90
12	B	144	A	N1-C2-N3	7.63	133.12	129.30
12	B	1346	G	C4-C5-N7	7.63	113.85	110.80
12	B	1745	A	C5-C6-N6	-7.63	117.59	123.70
12	B	2839	G	N3-C4-C5	-7.63	124.78	128.60
12	B	72	U	N3-C2-O2	7.63	127.54	122.20
12	B	535	G	C4-C5-N7	7.63	113.85	110.80
12	B	1784	A	P-O3'-C3'	-7.63	110.54	119.70
12	B	2340	A	O4'-C1'-N9	7.63	114.31	108.20
12	B	63	A	N3-C4-C5	-7.63	121.46	126.80
12	B	345	A	N9-C4-C5	7.63	108.85	105.80
12	B	659	G	N7-C8-N9	7.63	116.92	113.10
12	B	872	U	P-O3'-C3'	7.63	128.86	119.70
12	B	1463	C	C5-C6-N1	-7.63	117.18	121.00
12	B	2236	U	C4-C5-C6	-7.63	115.12	119.70
12	B	2777	G	C6-N1-C2	7.63	129.68	125.10
12	B	1979	U	C4-C5-C6	-7.63	115.12	119.70
12	B	2267	A	C4-C5-C6	7.63	120.81	117.00
12	B	81	G	N1-C2-N3	-7.63	119.32	123.90
12	B	569	U	C4-C5-C6	-7.63	115.12	119.70
12	B	1237	A	C5-C6-N1	-7.63	113.89	117.70
12	B	1616	A	C4-C5-C6	7.63	120.81	117.00
12	B	2726	A	N1-C2-N3	7.63	133.11	129.30
12	B	407	G	C6-N1-C2	7.63	129.68	125.10
12	B	1292	G	N1-C2-N3	-7.63	119.32	123.90
12	B	2547	A	C1'-O4'-C4'	-7.63	103.80	109.90
12	B	164	C	C6-N1-C2	-7.62	117.25	120.30
12	B	455	C	C4-C5-C6	7.62	121.21	117.40
12	B	1382	G	O4'-C4'-C3'	-7.62	96.38	104.00
12	B	1465	G	C6-C5-N7	-7.62	125.83	130.40
12	B	2416	C	C5-C4-N4	-7.62	114.86	120.20
12	B	2865	U	N1-C2-N3	7.62	119.47	114.90
22	L	41	ARG	NE-CZ-NH2	-7.62	116.49	120.30
11	A	92	C	C5-C4-N4	-7.62	114.86	120.20
12	B	1357	C	O4'-C1'-N1	7.62	114.30	108.20
12	B	1677	A	N7-C8-N9	-7.62	109.99	113.80
12	B	1882	U	C4-C5-C6	7.62	124.27	119.70
12	B	2382	G	N1-C2-N3	-7.62	119.33	123.90
12	B	1160	G	N9-C4-C5	7.62	108.45	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1559	U	P-O3'-C3'	7.62	128.85	119.70
12	B	2195	U	C6-N1-C2	7.62	125.57	121.00
12	B	2688	G	P-O3'-C3'	-7.62	110.55	119.70
12	B	2820	A	P-O3'-C3'	7.62	128.85	119.70
12	B	86	G	N3-C4-C5	-7.62	124.79	128.60
12	B	949	G	N1-C2-N3	-7.62	119.33	123.90
12	B	1567	G	C6-C5-N7	-7.62	125.83	130.40
12	B	1583	A	C4-C5-C6	7.62	120.81	117.00
12	B	1845	G	N7-C8-N9	7.62	116.91	113.10
12	B	2274	A	O4'-C1'-N9	7.62	114.30	108.20
12	B	327	G	N1-C2-N3	-7.62	119.33	123.90
12	B	784	G	C8-N9-C4	-7.62	103.35	106.40
12	B	62	U	P-O5'-C5'	7.62	133.09	120.90
12	B	600	G	C1'-O4'-C4'	-7.62	103.81	109.90
12	B	1172	C	C2-N3-C4	7.62	123.71	119.90
12	B	2203	U	P-O3'-C3'	-7.62	110.56	119.70
12	B	2618	G	C4-C5-C6	7.62	123.37	118.80
12	B	1410	G	C2-N3-C4	7.61	115.71	111.90
12	B	2527	C	C5-C6-N1	7.61	124.81	121.00
12	B	2110	G	C4-C5-N7	-7.61	107.75	110.80
14	D	13	ARG	NE-CZ-NH1	-7.61	116.49	120.30
12	B	819	A	C5-C6-N1	-7.61	113.89	117.70
12	B	927	A	C5-C6-N1	-7.61	113.89	117.70
12	B	1228	G	N1-C6-O6	7.61	124.47	119.90
12	B	2069	G	C8-N9-C4	-7.61	103.36	106.40
12	B	2649	C	N3-C4-C5	-7.61	118.86	121.90
12	B	2675	A	C5-N7-C8	7.61	107.70	103.90
12	B	615	U	C6-N1-C2	-7.61	116.44	121.00
12	B	629	G	N1-C6-O6	7.61	124.47	119.90
12	B	2242	G	C4-N9-C1'	-7.61	116.61	126.50
12	B	2584	U	N1-C2-O2	7.61	128.13	122.80
12	B	2878	U	N3-C4-O4	7.61	124.73	119.40
12	B	212	G	N1-C2-N3	-7.61	119.33	123.90
12	B	539	G	C6-C5-N7	-7.61	125.84	130.40
12	B	1414	C	C6-N1-C2	-7.61	117.26	120.30
12	B	1727	C	O4'-C1'-N1	7.61	114.28	108.20
12	B	1858	A	N3-C4-C5	-7.61	121.47	126.80
11	A	96	G	N1-C2-N3	-7.61	119.34	123.90
12	B	118	A	C4'-C3'-C2'	-7.61	94.99	102.60
12	B	341	C	N3-C2-O2	7.61	127.22	121.90
12	B	662	G	C5-C6-N1	7.61	115.30	111.50
12	B	2349	G	C4-N9-C1'	-7.61	116.61	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1177	G	C8-N9-C1'	7.60	136.89	127.00
12	B	1262	A	C6-C5-N7	-7.60	126.98	132.30
12	B	2256	G	N9-C4-C5	7.60	108.44	105.40
12	B	1909	C	C3'-C2'-C1'	-7.60	95.42	101.50
12	B	2193	G	N9-C4-C5	-7.60	102.36	105.40
12	B	2307	G	N3-C4-N9	7.60	130.56	126.00
12	B	2351	G	C6-C5-N7	-7.60	125.84	130.40
12	B	2371	G	C8-N9-C4	7.60	109.44	106.40
12	B	2774	C	C6-N1-C2	-7.60	117.26	120.30
12	B	2447	G	N1-C2-N3	-7.60	119.34	123.90
12	B	2455	G	C4-C5-C6	7.60	123.36	118.80
12	B	2562	U	N3-C4-C5	-7.60	110.04	114.60
12	B	1475	G	N1-C2-N3	-7.60	119.34	123.90
12	B	712	G	C6-C5-N7	-7.59	125.84	130.40
12	B	1323	C	O4'-C1'-N1	7.59	114.28	108.20
12	B	1424	G	N3-C4-C5	-7.59	124.80	128.60
12	B	2649	C	O4'-C1'-N1	7.59	114.28	108.20
12	B	2722	G	N1-C6-O6	7.59	124.46	119.90
12	B	1	G	N3-C2-N2	7.59	125.21	119.90
12	B	160	A	C5-N7-C8	7.59	107.69	103.90
12	B	674	G	N7-C8-N9	-7.59	109.31	113.10
12	B	2647	U	N3-C4-O4	7.59	124.71	119.40
12	B	2890	G	N1-C6-O6	7.59	124.45	119.90
12	B	1681	G	O4'-C1'-N9	7.59	114.27	108.20
12	B	1866	A	N3-C4-C5	-7.59	121.49	126.80
12	B	1085	A	C5-C6-N1	-7.59	113.91	117.70
12	B	1424	G	N1-C6-O6	7.59	124.45	119.90
12	B	1906	G	C5-C6-N1	7.59	115.29	111.50
12	B	2206	C	P-O5'-C5'	-7.59	108.76	120.90
12	B	2726	A	P-O3'-C3'	7.59	128.80	119.70
12	B	944	C	C4-C5-C6	7.58	121.19	117.40
12	B	967	U	O4'-C1'-N1	7.58	114.27	108.20
12	B	1010	A	C5-C6-N1	-7.58	113.91	117.70
12	B	1093	G	N1-C2-N2	7.58	123.02	116.20
12	B	1353	A	C4'-C3'-C2'	-7.58	95.02	102.60
12	B	1448	G	C2-N3-C4	7.58	115.69	111.90
12	B	2009	A	N9-C4-C5	7.58	108.83	105.80
12	B	552	U	O4'-C4'-C3'	-7.58	96.42	104.00
12	B	596	U	C5-C6-N1	-7.58	118.91	122.70
12	B	1006	C	C5-C6-N1	-7.58	117.21	121.00
12	B	1369	G	C6-N1-C2	7.58	129.65	125.10
12	B	1433	A	O4'-C1'-N9	7.58	114.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2340	A	C5-C6-N1	-7.58	113.91	117.70
12	B	218	A	C6-C5-N7	-7.58	127.00	132.30
12	B	295	G	C8-N9-C4	7.58	109.43	106.40
12	B	774	G	C4-C5-C6	7.58	123.34	118.80
12	B	2012	G	C6-C5-N7	-7.58	125.85	130.40
12	B	2540	C	N3-C4-C5	-7.58	118.87	121.90
12	B	599	A	N7-C8-N9	-7.57	110.01	113.80
12	B	1471	G	C8-N9-C4	7.57	109.43	106.40
12	B	2320	U	O4'-C1'-N1	7.57	114.26	108.20
12	B	2700	A	C6-C5-N7	-7.57	127.00	132.30
12	B	540	C	C4-C5-C6	7.57	121.19	117.40
12	B	1085	A	N9-C4-C5	7.57	108.83	105.80
12	B	1226	A	P-O5'-C5'	7.57	133.02	120.90
12	B	2608	G	N1-C6-O6	7.57	124.44	119.90
11	A	7	G	N3-C2-N2	7.57	125.20	119.90
12	B	75	G	N9-C4-C5	7.57	108.43	105.40
12	B	265	A	C5-N7-C8	7.57	107.69	103.90
12	B	387	U	C6-N1-C2	7.57	125.54	121.00
12	B	1153	C	O4'-C1'-N1	7.57	114.26	108.20
12	B	2237	G	N9-C4-C5	-7.57	102.37	105.40
12	B	2407	A	C4'-C3'-C2'	7.57	110.17	102.60
12	B	2470	G	N1-C6-O6	7.57	124.44	119.90
12	B	1401	G	C6-C5-N7	-7.57	125.86	130.40
12	B	1517	G	N1-C2-N3	-7.57	119.36	123.90
12	B	2120	G	N9-C4-C5	7.57	108.43	105.40
12	B	1743	G	N3-C2-N2	7.57	125.20	119.90
12	B	2569	G	O4'-C1'-N9	7.57	114.25	108.20
12	B	2637	U	C4'-C3'-C2'	-7.57	95.03	102.60
3	2	44	ARG	NE-CZ-NH1	7.57	124.08	120.30
12	B	340	A	N1-C6-N6	7.57	123.14	118.60
12	B	1951	U	N3-C4-O4	7.57	124.70	119.40
12	B	2132	U	C5-C6-N1	7.57	126.48	122.70
12	B	2582	G	C4-C5-N7	-7.57	107.77	110.80
12	B	1587	G	C6-N1-C2	7.56	129.64	125.10
11	A	83	G	O4'-C1'-N9	7.56	114.25	108.20
12	B	710	U	N3-C4-O4	7.56	124.69	119.40
12	B	854	C	C5-C6-N1	7.56	124.78	121.00
12	B	979	A	N9-C4-C5	-7.56	102.78	105.80
12	B	1106	G	C2-N3-C4	-7.56	108.12	111.90
12	B	2640	G	C5-N7-C8	-7.56	100.52	104.30
12	B	99	U	C5-C6-N1	7.56	126.48	122.70
12	B	169	G	N1-C2-N3	-7.56	119.36	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1008	A	N1-C6-N6	7.56	123.14	118.60
12	B	1701	A	C5-C6-N6	-7.56	117.65	123.70
12	B	2569	G	N7-C8-N9	-7.56	109.32	113.10
12	B	2668	G	N1-C2-N3	-7.56	119.36	123.90
12	B	1133	A	C3'-C2'-C1'	7.56	107.55	101.50
12	B	2014	A	N9-C4-C5	7.56	108.82	105.80
12	B	2410	G	C5'-C4'-C3'	-7.56	103.91	116.00
12	B	2429	G	C6-N1-C2	7.56	129.63	125.10
12	B	1257	C	P-O3'-C3'	-7.56	110.63	119.70
12	B	239	C	O4'-C1'-N1	7.55	114.24	108.20
12	B	1336	A	C6-C5-N7	-7.55	127.01	132.30
12	B	1554	U	N1-C2-N3	7.55	119.43	114.90
12	B	2754	U	O4'-C1'-N1	7.55	114.24	108.20
12	B	575	A	C2-N3-C4	-7.55	106.82	110.60
12	B	1162	G	C5-C6-N1	-7.55	107.72	111.50
12	B	1574	C	O4'-C1'-N1	7.55	114.24	108.20
12	B	303	G	C4-C5-C6	7.55	123.33	118.80
12	B	1257	C	N3-C4-N4	7.55	123.29	118.00
12	B	1435	G	C4-C5-N7	-7.55	107.78	110.80
12	B	1492	G	N3-C4-N9	-7.55	121.47	126.00
12	B	1547	C	O4'-C1'-N1	7.55	114.24	108.20
12	B	2451	A	C4-C5-C6	7.55	120.78	117.00
12	B	2748	A	C5-C6-N1	-7.55	113.92	117.70
12	B	119	A	C5-C6-N6	-7.55	117.66	123.70
12	B	238	C	N1-C2-O2	7.55	123.43	118.90
12	B	416	U	O4'-C1'-N1	7.55	114.24	108.20
12	B	1278	C	O4'-C1'-N1	7.55	114.24	108.20
12	B	1725	U	C5-C4-O4	-7.55	121.37	125.90
12	B	2430	A	C5-N7-C8	7.55	107.67	103.90
12	B	2461	A	C4-C5-N7	-7.55	106.92	110.70
26	P	42	PHE	CB-CG-CD2	7.55	126.08	120.80
12	B	160	A	C6-N1-C2	-7.55	114.07	118.60
12	B	2665	A	C4-C5-N7	-7.55	106.93	110.70
12	B	2777	G	N9-C4-C5	-7.55	102.38	105.40
12	B	184	C	O4'-C1'-N1	7.55	114.24	108.20
12	B	1369	G	C5-C6-O6	-7.55	124.07	128.60
12	B	1641	A	C2-N3-C4	-7.55	106.83	110.60
12	B	1666	G	N7-C8-N9	-7.55	109.33	113.10
12	B	2276	G	C1'-O4'-C4'	-7.55	103.86	109.90
12	B	2434	A	C5-C6-N6	-7.55	117.66	123.70
12	B	2796	U	N3-C4-O4	7.55	124.68	119.40
11	A	108	A	C2-N3-C4	-7.54	106.83	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	609	A	C4-C5-C6	7.54	120.77	117.00
12	B	778	G	N1-C6-O6	7.54	124.43	119.90
12	B	2655	G	C5-C6-N1	-7.54	107.73	111.50
12	B	375	G	N7-C8-N9	7.54	116.87	113.10
12	B	1578	U	P-O3'-C3'	-7.54	110.65	119.70
12	B	2024	G	N3-C2-N2	7.54	125.18	119.90
12	B	2176	A	C5-C6-N6	-7.54	117.67	123.70
12	B	982	C	C2-N3-C4	7.54	123.67	119.90
12	B	1733	G	O5'-P-OP1	-7.54	98.91	105.70
12	B	45	G	N1-C6-O6	7.54	124.42	119.90
12	B	2412	A	O4'-C1'-N9	7.54	114.23	108.20
12	B	2618	G	N7-C8-N9	7.54	116.87	113.10
12	B	2801	G	O4'-C4'-C3'	-7.54	96.46	104.00
11	A	30	C	C2-N3-C4	7.54	123.67	119.90
12	B	2355	G	O4'-C1'-N9	7.54	114.23	108.20
12	B	561	G	O4'-C1'-N9	7.54	114.23	108.20
12	B	849	A	C5-N7-C8	7.54	107.67	103.90
12	B	1681	G	N1-C6-O6	7.54	124.42	119.90
12	B	2755	C	C5-C6-N1	7.54	124.77	121.00
12	B	2569	G	C8-N9-C4	7.53	109.41	106.40
12	B	2750	A	N9-C4-C5	7.53	108.81	105.80
12	B	555	G	C5-C6-O6	-7.53	124.08	128.60
12	B	796	C	C6-N1-C2	-7.53	117.29	120.30
12	B	1835	G	N7-C8-N9	7.53	116.87	113.10
12	B	2219	U	C4-C5-C6	7.53	124.22	119.70
12	B	2621	G	C4-C5-N7	7.53	113.81	110.80
10	9	44	ASP	CB-CG-OD1	7.53	125.08	118.30
12	B	607	U	C4'-C3'-C2'	-7.53	95.07	102.60
12	B	1043	C	O4'-C1'-N1	7.53	114.22	108.20
12	B	1411	U	C4'-C3'-C2'	-7.53	95.07	102.60
12	B	1585	C	O4'-C1'-N1	7.53	114.22	108.20
12	B	1593	A	C4-C5-C6	7.53	120.77	117.00
12	B	2215	C	C6-N1-C1'	-7.53	111.76	120.80
12	B	239	C	C3'-C2'-C1'	7.53	107.52	101.50
12	B	685	A	N7-C8-N9	7.53	117.56	113.80
12	B	2331	G	C5-C6-O6	-7.53	124.08	128.60
12	B	433	C	O4'-C1'-N1	7.53	114.22	108.20
12	B	614	A	N1-C6-N6	7.53	123.12	118.60
12	B	708	G	N7-C8-N9	-7.53	109.34	113.10
12	B	1168	G	C5-C6-N1	-7.53	107.74	111.50
12	B	1582	C	C6-N1-C2	-7.53	117.29	120.30
12	B	1634	A	C8-N9-C4	-7.53	102.79	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1693	U	P-O5'-C5'	-7.53	108.86	120.90
12	B	2667	C	O4'-C1'-N1	7.53	114.22	108.20
12	B	71	A	C5-C6-N6	-7.53	117.68	123.70
12	B	139	U	N1-C2-O2	-7.53	117.53	122.80
12	B	555	G	N9-C4-C5	7.53	108.41	105.40
12	B	1826	G	C5-C6-N1	-7.53	107.74	111.50
14	D	15	PHE	CB-CG-CD2	-7.53	115.53	120.80
12	B	2319	G	C6-C5-N7	-7.52	125.89	130.40
12	B	2549	G	C5-C6-N1	-7.52	107.74	111.50
12	B	2591	C	P-O5'-C5'	7.52	132.94	120.90
12	B	463	G	C8-N9-C4	7.52	109.41	106.40
12	B	752	A	C3'-C2'-C1'	-7.52	95.48	101.50
12	B	1472	C	O4'-C1'-N1	7.52	114.22	108.20
12	B	1937	A	C5-C6-N1	-7.52	113.94	117.70
12	B	1575	C	O4'-C1'-N1	7.52	114.22	108.20
12	B	1738	G	N3-C2-N2	7.52	125.16	119.90
12	B	2224	G	N3-C4-C5	-7.52	124.84	128.60
12	B	422	A	C5-N7-C8	7.52	107.66	103.90
12	B	978	G	C2-N3-C4	7.52	115.66	111.90
12	B	1175	A	C5-C6-N6	-7.52	117.68	123.70
12	B	1976	U	O4'-C1'-N1	7.52	114.22	108.20
12	B	1157	G	C5-C6-N1	-7.52	107.74	111.50
12	B	1454	C	N3-C4-C5	-7.52	118.89	121.90
12	B	2197	U	C5-C4-O4	-7.52	121.39	125.90
12	B	2218	G	C4-C5-C6	7.52	123.31	118.80
12	B	2476	A	C5-C6-N1	-7.52	113.94	117.70
12	B	2693	G	N1-C6-O6	7.52	124.41	119.90
12	B	2806	C	N3-C2-O2	-7.52	116.64	121.90
14	D	118	PHE	CB-CG-CD2	7.52	126.06	120.80
12	B	872	U	O4'-C1'-N1	7.52	114.21	108.20
12	B	2061	G	N1-C6-O6	7.52	124.41	119.90
12	B	2711	A	C8-N9-C4	-7.52	102.79	105.80
19	I	141	ASP	CB-CG-OD1	7.52	125.06	118.30
12	B	1017	G	C6-N1-C2	7.51	129.61	125.10
12	B	2060	A	C8-N9-C4	-7.51	102.79	105.80
12	B	2193	G	C4'-C3'-C2'	-7.51	95.08	102.60
12	B	504	A	C5-N7-C8	7.51	107.66	103.90
12	B	1905	C	C4-C5-C6	7.51	121.16	117.40
12	B	2189	U	N1-C2-O2	-7.51	117.54	122.80
12	B	289	G	O4'-C4'-C3'	-7.51	96.49	104.00
12	B	582	A	N9-C4-C5	7.51	108.80	105.80
12	B	1387	A	C5-C6-N6	-7.51	117.69	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1514	G	C5-C6-O6	-7.51	124.09	128.60
11	A	10	G	O4'-C1'-N9	7.51	114.21	108.20
12	B	496	G	C4-C5-C6	-7.51	114.30	118.80
12	B	630	G	C6-C5-N7	-7.51	125.89	130.40
12	B	726	G	O4'-C1'-N9	7.51	114.21	108.20
12	B	826	U	O4'-C1'-N1	7.51	114.21	108.20
12	B	1262	A	C6-N1-C2	7.51	123.11	118.60
12	B	1731	G	N3-C2-N2	-7.51	114.64	119.90
17	G	108	PHE	CB-CG-CD1	7.51	126.06	120.80
12	B	512	G	P-O3'-C3'	7.51	128.71	119.70
12	B	1270	C	O4'-C1'-N1	7.51	114.21	108.20
12	B	270	A	N1-C6-N6	7.51	123.10	118.60
12	B	1556	C	C5-C4-N4	-7.51	114.95	120.20
12	B	2757	A	O4'-C1'-N9	7.51	114.20	108.20
12	B	1556	C	N3-C4-N4	7.50	123.25	118.00
7	6	41	ARG	NE-CZ-NH1	-7.50	116.55	120.30
12	B	621	A	C6-N1-C2	7.50	123.10	118.60
12	B	2604	U	O4'-C1'-N1	7.50	114.20	108.20
12	B	877	A	N1-C2-N3	-7.50	125.55	129.30
12	B	892	A	C5-C6-N6	-7.50	117.70	123.70
12	B	1696	G	O5'-P-OP1	-7.50	98.95	105.70
12	B	1705	A	C4-C5-C6	7.50	120.75	117.00
12	B	2216	G	C5-C6-N1	-7.50	107.75	111.50
12	B	2738	A	O4'-C1'-N9	7.50	114.20	108.20
12	B	682	G	N3-C4-C5	-7.50	124.85	128.60
12	B	1404	C	O4'-C1'-N1	7.50	114.20	108.20
12	B	2098	U	N3-C4-C5	-7.50	110.10	114.60
12	B	414	C	N3-C4-C5	-7.50	118.90	121.90
12	B	1482	G	C8-N9-C4	-7.50	103.40	106.40
12	B	2309	A	C5-N7-C8	7.50	107.65	103.90
26	P	92	ARG	NE-CZ-NH2	-7.50	116.55	120.30
12	B	2708	G	P-O3'-C3'	-7.50	110.71	119.70
12	B	165	A	N1-C6-N6	7.49	123.10	118.60
12	B	326	G	C6-C5-N7	-7.49	125.90	130.40
12	B	463	G	C5-C6-N1	-7.49	107.75	111.50
12	B	1275	A	C6-N1-C2	7.49	123.10	118.60
12	B	1439	A	C5-C6-N6	-7.49	117.70	123.70
12	B	2080	A	N3-C4-C5	-7.49	121.56	126.80
12	B	2321	U	O4'-C1'-N1	7.49	114.19	108.20
12	B	2385	C	N3-C2-O2	7.49	127.15	121.90
12	B	2433	A	C5-C6-N6	-7.49	117.71	123.70
12	B	9	G	C5-C6-O6	-7.49	124.11	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2548	U	C4-C5-C6	7.49	124.19	119.70
12	B	1538	G	C4-C5-C6	7.49	123.29	118.80
12	B	1753	G	N3-C2-N2	7.49	125.14	119.90
12	B	107	G	C5-C6-O6	-7.49	124.11	128.60
12	B	524	G	N3-C2-N2	7.49	125.14	119.90
12	B	804	A	C4-C5-N7	-7.49	106.95	110.70
12	B	1205	A	P-O3'-C3'	7.49	128.69	119.70
12	B	1369	G	N1-C2-N3	-7.49	119.41	123.90
12	B	1560	G	C4-C5-N7	-7.49	107.81	110.80
21	K	105	ARG	NE-CZ-NH2	-7.49	116.56	120.30
12	B	191	A	N1-C6-N6	7.49	123.09	118.60
12	B	914	G	O4'-C1'-N9	7.49	114.19	108.20
12	B	9	G	C6-C5-N7	-7.49	125.91	130.40
12	B	334	C	O4'-C1'-N1	7.49	114.19	108.20
12	B	404	A	C4-C5-C6	7.49	120.74	117.00
12	B	845	A	N1-C6-N6	7.49	123.09	118.60
12	B	1546	G	N7-C8-N9	-7.49	109.36	113.10
12	B	1565	C	O4'-C1'-N1	7.49	114.19	108.20
12	B	1968	G	C4-C5-N7	7.49	113.79	110.80
12	B	2210	U	N3-C4-O4	7.49	124.64	119.40
12	B	2284	A	C4'-C3'-C2'	-7.49	95.11	102.60
12	B	2285	C	O4'-C1'-N1	7.49	114.19	108.20
12	B	2402	U	C6-N1-C1'	-7.49	110.72	121.20
12	B	2530	A	N1-C2-N3	7.49	133.04	129.30
12	B	2821	A	C5-C6-N6	-7.49	117.71	123.70
11	A	74	U	O4'-C1'-N1	7.48	114.19	108.20
12	B	208	C	N3-C4-C5	-7.48	118.91	121.90
12	B	2041	U	N3-C4-O4	7.48	124.64	119.40
12	B	2868	A	C5-N7-C8	7.48	107.64	103.90
12	B	1671	U	C6-N1-C2	-7.48	116.51	121.00
12	B	1842	G	O4'-C1'-N9	7.48	114.19	108.20
12	B	2513	A	C5-C6-N6	-7.48	117.71	123.70
12	B	88	G	N1-C6-O6	7.48	124.39	119.90
12	B	1527	G	C6-C5-N7	-7.48	125.91	130.40
12	B	1750	G	C5-C6-N1	-7.48	107.76	111.50
12	B	1776	G	C8-N9-C4	-7.48	103.41	106.40
11	A	46	A	C5-N7-C8	7.48	107.64	103.90
12	B	205	G	N1-C2-N3	-7.48	119.41	123.90
12	B	920	A	C5-C6-N6	-7.48	117.72	123.70
12	B	2228	G	C5-C6-O6	-7.48	124.11	128.60
12	B	2447	G	N1-C6-O6	7.48	124.39	119.90
11	A	83	G	C6-C5-N7	-7.48	125.91	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	350	G	C6-N1-C2	7.48	129.59	125.10
12	B	856	G	C8-N9-C4	7.48	109.39	106.40
12	B	2009	A	O4'-C1'-N9	7.48	114.18	108.20
12	B	2863	C	N3-C4-C5	-7.48	118.91	121.90
30	T	51	PHE	CB-CG-CD1	7.48	126.03	120.80
10	9	325	CYS	CB-CA-C	-7.48	95.45	110.40
12	B	342	A	C5-C6-N6	-7.47	117.72	123.70
12	B	353	C	C5-C6-N1	7.47	124.74	121.00
12	B	1097	U	N3-C4-C5	-7.47	110.11	114.60
12	B	1114	C	O4'-C1'-N1	7.47	114.18	108.20
12	B	1654	A	C6-N1-C2	-7.47	114.11	118.60
12	B	2009	A	C5-N7-C8	7.47	107.64	103.90
12	B	2502	G	C1'-O4'-C4'	7.47	115.88	109.90
12	B	2593	U	O4'-C1'-N1	7.47	114.18	108.20
12	B	2737	G	C5-C6-O6	-7.47	124.11	128.60
12	B	708	G	C5-C6-N1	-7.47	107.76	111.50
12	B	1269	A	C3'-C2'-C1'	-7.47	95.52	101.50
12	B	41	C	O4'-C1'-N1	7.47	114.18	108.20
12	B	945	A	O4'-C1'-N9	7.47	114.17	108.20
12	B	1929	G	N1-C2-N2	-7.47	109.48	116.20
11	A	50	A	C5-C6-N1	-7.47	113.97	117.70
12	B	307	G	C4-C5-C6	7.47	123.28	118.80
12	B	2081	U	C5-C6-N1	7.47	126.43	122.70
12	B	24	G	C2-N3-C4	7.46	115.63	111.90
12	B	225	C	N3-C4-N4	7.46	123.23	118.00
12	B	328	U	O3'-P-O5'	-7.46	89.82	104.00
12	B	898	C	N3-C4-N4	7.46	123.22	118.00
12	B	2496	C	O4'-C1'-N1	7.46	114.17	108.20
12	B	314	C	O4'-C1'-N1	7.46	114.17	108.20
12	B	763	G	N9-C4-C5	7.46	108.39	105.40
12	B	565	C	C3'-C2'-C1'	-7.46	95.53	101.50
12	B	1908	C	C6-N1-C2	-7.46	117.31	120.30
12	B	425	G	O4'-C1'-N9	7.46	114.17	108.20
12	B	825	A	C6-N1-C2	7.46	123.08	118.60
12	B	1110	G	C5-C6-N1	-7.46	107.77	111.50
12	B	1907	G	C6-C5-N7	-7.46	125.92	130.40
12	B	2173	A	C4-C5-N7	-7.46	106.97	110.70
12	B	2659	G	C4-C5-C6	7.46	123.28	118.80
12	B	2097	A	C6-C5-N7	-7.46	127.08	132.30
12	B	2392	A	N7-C8-N9	7.46	117.53	113.80
11	A	71	C	N3-C4-N4	7.46	123.22	118.00
12	B	1531	C	P-O3'-C3'	7.46	128.65	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1599	U	O4'-C1'-N1	7.46	114.17	108.20
12	B	1987	A	N3-C4-C5	-7.46	121.58	126.80
12	B	2012	G	O4'-C1'-N9	7.46	114.17	108.20
12	B	2015	A	N1-C6-N6	7.46	123.07	118.60
12	B	2396	G	C2-N3-C4	7.46	115.63	111.90
12	B	2447	G	N9-C4-C5	-7.46	102.42	105.40
12	B	2879	A	N7-C8-N9	7.46	117.53	113.80
12	B	261	G	C5-C6-O6	-7.46	124.13	128.60
12	B	381	G	C8-N9-C4	7.46	109.38	106.40
12	B	441	U	O4'-C1'-N1	7.46	114.16	108.20
12	B	666	A	O4'-C1'-N9	7.46	114.16	108.20
12	B	2234	G	O4'-C1'-N9	7.46	114.16	108.20
12	B	268	C	P-O3'-C3'	7.45	128.64	119.70
12	B	2666	C	C2-N3-C4	7.45	123.63	119.90
12	B	27	G	N7-C8-N9	7.45	116.83	113.10
12	B	1141	U	C5-C6-N1	7.45	126.42	122.70
12	B	1197	G	N9-C4-C5	7.45	108.38	105.40
12	B	1530	G	O4'-C1'-N9	7.45	114.16	108.20
12	B	2789	C	N3-C4-C5	-7.45	118.92	121.90
12	B	2806	C	N1-C2-O2	7.45	123.37	118.90
12	B	511	U	N3-C2-O2	7.45	127.41	122.20
12	B	583	G	C6-N1-C2	7.45	129.57	125.10
12	B	1053	C	O4'-C1'-N1	7.45	114.16	108.20
12	B	1129	A	C5-C6-N6	-7.45	117.74	123.70
12	B	1718	G	N1-C2-N3	-7.45	119.43	123.90
12	B	2111	U	C4-C5-C6	-7.45	115.23	119.70
12	B	2329	U	O4'-C1'-N1	7.45	114.16	108.20
12	B	965	C	C5-C4-N4	-7.45	114.99	120.20
12	B	2789	C	C6-N1-C2	-7.45	117.32	120.30
14	D	25	THR	CA-CB-CG2	-7.45	101.98	112.40
12	B	1110	G	O4'-C1'-N9	7.44	114.16	108.20
12	B	1307	A	O4'-C1'-N9	7.44	114.16	108.20
12	B	2614	A	N1-C6-N6	7.44	123.07	118.60
21	K	100	PHE	CB-CG-CD2	-7.44	115.59	120.80
12	B	1201	U	C5-C4-O4	-7.44	121.44	125.90
12	B	1877	A	C4-C5-C6	7.44	120.72	117.00
11	A	24	G	N3-C2-N2	7.44	125.11	119.90
12	B	261	G	N7-C8-N9	-7.44	109.38	113.10
12	B	841	G	C6-C5-N7	-7.44	125.94	130.40
12	B	1296	G	C5-N7-C8	7.44	108.02	104.30
12	B	2120	G	C6-C5-N7	-7.44	125.94	130.40
12	B	2790	U	N3-C4-C5	-7.44	110.14	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1454	C	C4-C5-C6	7.44	121.12	117.40
12	B	2281	A	N3-C4-N9	7.44	133.35	127.40
12	B	2808	G	C1'-O4'-C4'	-7.44	103.95	109.90
23	M	25	ASP	CB-CG-OD1	-7.44	111.61	118.30
12	B	28	A	C5'-C4'-C3'	7.44	127.90	116.00
12	B	165	A	N9-C4-C5	7.44	108.78	105.80
12	B	302	C	C5-C6-N1	7.44	124.72	121.00
12	B	382	A	N1-C6-N6	7.44	123.06	118.60
12	B	2345	G	C6-C5-N7	-7.44	125.94	130.40
12	B	2788	C	N3-C4-N4	7.44	123.21	118.00
12	B	2462	C	C4-C5-C6	-7.44	113.68	117.40
12	B	77	G	O4'-C1'-N9	7.43	114.15	108.20
12	B	545	U	C5-C6-N1	7.43	126.42	122.70
12	B	1400	U	N3-C4-O4	7.43	124.60	119.40
12	B	2264	C	C4-C5-C6	7.43	121.12	117.40
12	B	2657	A	O4'-C1'-N9	7.43	114.15	108.20
12	B	2893	A	N1-C2-N3	7.43	133.02	129.30
12	B	93	G	N3-C2-N2	7.43	125.10	119.90
12	B	797	G	N1-C2-N3	-7.43	119.44	123.90
12	B	1215	G	O4'-C1'-N9	7.43	114.15	108.20
12	B	1431	A	C5-C6-N6	-7.43	117.75	123.70
12	B	1566	A	N1-C2-N3	7.43	133.02	129.30
12	B	1797	G	C4-C5-N7	-7.43	107.83	110.80
12	B	2319	G	C8-N9-C4	-7.43	103.43	106.40
12	B	2486	C	C5-C4-N4	-7.43	115.00	120.20
12	B	2708	G	N1-C2-N2	7.43	122.89	116.20
12	B	179	C	P-O3'-C3'	-7.43	110.78	119.70
12	B	179	C	C5-C6-N1	-7.43	117.28	121.00
12	B	207	A	C5-C6-N1	-7.43	113.98	117.70
12	B	573	U	N3-C4-O4	7.43	124.60	119.40
12	B	802	A	C8-N9-C4	7.43	108.77	105.80
12	B	1032	A	C4-C5-C6	7.43	120.72	117.00
12	B	481	G	C5-C6-N1	-7.43	107.79	111.50
12	B	1313	U	O4'-C1'-N1	7.43	114.14	108.20
12	B	1359	A	O4'-C1'-N9	7.43	114.14	108.20
12	B	90	U	C5-C6-N1	7.43	126.41	122.70
12	B	1592	C	C5-C4-N4	-7.43	115.00	120.20
12	B	2325	G	N9-C4-C5	7.43	108.37	105.40
12	B	39	G	C5-C6-O6	-7.42	124.14	128.60
12	B	1291	C	O4'-C1'-N1	7.42	114.14	108.20
12	B	1820	U	P-O5'-C5'	7.42	132.78	120.90
12	B	2746	U	C3'-C2'-C1'	-7.42	95.56	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2775	G	N1-C2-N3	-7.42	119.45	123.90
12	B	643	A	O4'-C1'-N9	7.42	114.14	108.20
12	B	647	G	O4'-C1'-N9	7.42	114.14	108.20
12	B	787	C	N3-C4-C5	-7.42	118.93	121.90
11	A	64	G	P-O3'-C3'	7.42	128.61	119.70
12	B	1225	G	N3-C2-N2	7.42	125.10	119.90
12	B	1744	A	C5-C6-N6	-7.42	117.76	123.70
12	B	2255	G	N3-C2-N2	7.42	125.09	119.90
12	B	2870	C	N1-C2-O2	7.42	123.35	118.90
12	B	236	C	N3-C4-N4	7.42	123.19	118.00
12	B	477	A	C1'-O4'-C4'	7.42	115.84	109.90
12	B	2664	G	N1-C6-O6	7.42	124.35	119.90
12	B	2721	A	O4'-C1'-N9	7.42	114.14	108.20
12	B	262	A	N9-C4-C5	7.42	108.77	105.80
12	B	566	U	O4'-C1'-N1	7.42	114.14	108.20
12	B	1258	U	O4'-C1'-N1	7.42	114.14	108.20
12	B	1698	A	C5-C6-N6	-7.42	117.77	123.70
12	B	2462	C	O4'-C1'-N1	7.42	114.13	108.20
12	B	55	G	C8-N9-C4	-7.42	103.43	106.40
12	B	466	A	N9-C4-C5	7.42	108.77	105.80
12	B	1884	G	C4-C5-N7	-7.42	107.83	110.80
12	B	2286	G	O4'-C1'-N9	7.42	114.13	108.20
12	B	1566	A	C6-N1-C2	-7.42	114.15	118.60
21	K	78	ARG	NE-CZ-NH1	7.42	124.01	120.30
12	B	222	A	C2-N3-C4	-7.41	106.89	110.60
12	B	1139	G	C8-N9-C1'	7.41	136.64	127.00
12	B	2785	C	N1-C2-O2	7.41	123.35	118.90
12	B	272	A	N1-C2-N3	7.41	133.01	129.30
12	B	951	C	C6-N1-C2	-7.41	117.33	120.30
4	3	39	ARG	NE-CZ-NH2	-7.41	116.59	120.30
7	6	12	ARG	NE-CZ-NH2	7.41	124.00	120.30
11	A	69	G	N1-C6-O6	7.41	124.35	119.90
12	B	474	G	C4-C5-C6	7.41	123.25	118.80
12	B	568	U	C2-N3-C4	7.41	131.45	127.00
12	B	760	G	C6-C5-N7	-7.41	125.95	130.40
12	B	944	C	N3-C4-N4	7.41	123.19	118.00
12	B	1667	G	C5-C6-O6	-7.41	124.15	128.60
12	B	2665	A	N1-C2-N3	7.41	133.00	129.30
12	B	26	G	C8-N9-C1'	-7.41	117.37	127.00
12	B	674	G	C4-C5-C6	7.41	123.25	118.80
12	B	840	C	C6-N1-C2	-7.41	117.34	120.30
12	B	945	A	C5-C6-N6	-7.41	117.77	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1061	U	C6-N1-C2	-7.41	116.56	121.00
12	B	2139	U	C5-C4-O4	-7.41	121.45	125.90
12	B	2537	U	O4'-C1'-N1	7.41	114.13	108.20
12	B	1169	A	N1-C6-N6	7.41	123.04	118.60
12	B	2038	G	N1-C2-N3	-7.41	119.46	123.90
12	B	2121	G	C5-C6-O6	-7.41	124.16	128.60
12	B	1600	C	O4'-C1'-N1	7.41	114.12	108.20
12	B	2569	G	N1-C2-N3	-7.41	119.46	123.90
12	B	2803	G	O4'-C1'-N9	7.41	114.12	108.20
11	A	86	G	N1-C2-N3	-7.40	119.46	123.90
12	B	501	A	N1-C2-N3	7.40	133.00	129.30
12	B	919	U	C5'-C4'-O4'	7.40	117.98	109.10
12	B	2114	A	N9-C4-C5	7.40	108.76	105.80
12	B	2695	U	O4'-C1'-N1	7.40	114.12	108.20
12	B	853	C	C6-N1-C2	7.40	123.26	120.30
12	B	1853	A	C5-C6-N1	-7.40	114.00	117.70
12	B	2045	C	N3-C4-C5	-7.40	118.94	121.90
12	B	2058	A	O4'-C1'-N9	7.40	114.12	108.20
12	B	2160	C	P-O3'-C3'	7.40	128.58	119.70
12	B	2446	G	N3-C2-N2	7.40	125.08	119.90
12	B	252	G	C5-N7-C8	-7.40	100.60	104.30
12	B	489	G	C5-N7-C8	-7.40	100.60	104.30
12	B	1256	G	C2-N3-C4	-7.40	108.20	111.90
12	B	1707	G	P-O5'-C5'	7.40	132.74	120.90
12	B	2725	A	C2-N3-C4	7.40	114.30	110.60
12	B	2734	A	N1-C6-N6	7.40	123.04	118.60
24	N	59	SER	N-CA-CB	7.40	121.60	110.50
12	B	2751	G	O4'-C1'-N9	7.40	114.12	108.20
12	B	121	G	C5-N7-C8	7.40	108.00	104.30
12	B	176	A	C5-C6-N1	-7.40	114.00	117.70
12	B	288	U	N3-C4-O4	7.40	124.58	119.40
12	B	693	A	C8-N9-C4	-7.40	102.84	105.80
12	B	1107	G	C5-C6-N1	-7.40	107.80	111.50
12	B	1540	G	N1-C2-N3	-7.40	119.46	123.90
23	M	114	ARG	NE-CZ-NH2	7.40	124.00	120.30
11	A	50	A	N9-C4-C5	-7.40	102.84	105.80
12	B	1180	U	C6-N1-C2	7.40	125.44	121.00
12	B	661	A	C3'-C2'-C1'	-7.39	95.58	101.50
12	B	815	C	N3-C4-C5	-7.39	118.94	121.90
12	B	1059	G	C6-C5-N7	-7.39	125.96	130.40
12	B	1579	A	N3-C4-N9	7.39	133.31	127.40
12	B	2216	G	C6-N1-C2	7.39	129.54	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	12	C	P-O5'-C5'	7.39	132.73	120.90
12	B	1356	G	C5-C6-N1	-7.39	107.80	111.50
12	B	1954	G	C6-N1-C2	7.39	129.54	125.10
12	B	2314	A	C4-C5-C6	7.39	120.70	117.00
12	B	2462	C	C2-N3-C4	7.39	123.60	119.90
12	B	2536	G	C6-C5-N7	-7.39	125.96	130.40
12	B	2841	C	C5-C4-N4	-7.39	115.03	120.20
12	B	495	G	C5-C6-N1	-7.39	107.81	111.50
12	B	1235	G	C2-N3-C4	7.39	115.59	111.90
12	B	2355	G	C5-N7-C8	-7.39	100.60	104.30
12	B	2782	G	N3-C4-N9	7.39	130.43	126.00
12	B	34	U	C5-C6-N1	7.39	126.39	122.70
12	B	249	C	O4'-C1'-N1	7.39	114.11	108.20
12	B	731	C	O4'-C1'-N1	7.39	114.11	108.20
12	B	1478	G	N3-C4-N9	-7.39	121.57	126.00
12	B	1827	U	O4'-C1'-N1	7.39	114.11	108.20
12	B	2669	G	N1-C6-O6	7.39	124.33	119.90
12	B	597	G	N9-C4-C5	7.39	108.36	105.40
12	B	1448	G	N7-C8-N9	7.39	116.79	113.10
12	B	181	A	C5-C6-N6	-7.39	117.79	123.70
12	B	1022	G	N1-C2-N3	-7.39	119.47	123.90
12	B	1200	C	O4'-C1'-N1	7.39	114.11	108.20
12	B	2312	U	O4'-C1'-N1	7.39	114.11	108.20
12	B	2526	G	C4-C5-N7	7.39	113.75	110.80
12	B	2723	C	N3-C4-C5	-7.39	118.94	121.90
20	J	116	ARG	NE-CZ-NH1	7.39	123.99	120.30
27	Q	57	ARG	NE-CZ-NH1	7.39	123.99	120.30
12	B	190	A	C2-N3-C4	-7.38	106.91	110.60
12	B	1643	G	C5-C6-O6	-7.38	124.17	128.60
12	B	1926	U	C2-N3-C4	7.38	131.43	127.00
12	B	1930	G	P-O3'-C3'	7.38	128.56	119.70
12	B	2000	C	N1-C2-O2	-7.38	114.47	118.90
12	B	2125	G	C4-C5-C6	7.38	123.23	118.80
12	B	1004	U	C5-C6-N1	7.38	126.39	122.70
12	B	1552	A	O4'-C1'-N9	7.38	114.11	108.20
12	B	76	C	N3-C4-N4	7.38	123.17	118.00
12	B	344	A	O4'-C1'-N9	7.38	114.11	108.20
12	B	511	U	N1-C2-N3	-7.38	110.47	114.90
12	B	783	A	N7-C8-N9	7.38	117.49	113.80
12	B	1021	A	C6-C5-N7	-7.38	127.13	132.30
12	B	1619	G	N9-C4-C5	-7.38	102.45	105.40
12	B	2209	G	C5-C6-O6	-7.38	124.17	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2707	U	O4'-C1'-N1	7.38	114.11	108.20
12	B	2842	G	N3-C2-N2	7.38	125.07	119.90
12	B	675	A	O4'-C1'-N9	7.38	114.10	108.20
12	B	1609	A	C1'-O4'-C4'	-7.38	104.00	109.90
12	B	571	U	P-O5'-C5'	7.38	132.71	120.90
12	B	812	C	C5-C4-N4	-7.38	115.03	120.20
12	B	1754	A	C5-C6-N1	-7.38	114.01	117.70
12	B	2002	G	P-O5'-C5'	-7.38	109.10	120.90
12	B	2704	C	C3'-C2'-C1'	-7.38	95.60	101.50
12	B	1637	A	C5-C6-N1	-7.38	114.01	117.70
12	B	2693	G	N1-C2-N3	-7.38	119.47	123.90
12	B	2710	C	C5-C4-N4	-7.38	115.04	120.20
12	B	2879	A	C4-C5-C6	7.38	120.69	117.00
12	B	320	A	C5-C6-N6	-7.38	117.80	123.70
12	B	417	C	N3-C4-N4	7.38	123.16	118.00
11	A	116	G	C4-C5-N7	-7.37	107.85	110.80
12	B	24	G	C5-C6-N1	7.37	115.19	111.50
12	B	1207	C	C5-C6-N1	7.37	124.69	121.00
12	B	1425	G	O4'-C1'-N9	7.37	114.10	108.20
12	B	2276	G	C5-C6-O6	-7.37	124.18	128.60
12	B	2436	G	N1-C6-O6	7.37	124.32	119.90
18	H	47	PHE	CB-CG-CD1	-7.37	115.64	120.80
12	B	782	A	N1-C2-N3	7.37	132.99	129.30
12	B	1216	G	N3-C4-C5	7.37	132.29	128.60
12	B	2541	A	C2-N3-C4	-7.37	106.92	110.60
12	B	2618	G	N3-C4-C5	-7.37	124.91	128.60
12	B	1891	G	C6-C5-N7	-7.37	125.98	130.40
12	B	2553	G	N1-C6-O6	7.37	124.32	119.90
11	A	49	C	N3-C4-N4	7.37	123.16	118.00
12	B	727	A	O4'-C1'-N9	7.37	114.09	108.20
12	B	1145	C	O4'-C1'-N1	7.37	114.09	108.20
12	B	2864	G	C4-C5-C6	7.37	123.22	118.80
12	B	62	U	O4'-C1'-N1	7.37	114.09	108.20
12	B	505	A	C5-C6-N6	-7.37	117.81	123.70
12	B	2837	A	C8-N9-C4	-7.37	102.85	105.80
11	A	14	U	C2-N3-C4	-7.37	122.58	127.00
12	B	1328	A	N9-C4-C5	-7.37	102.85	105.80
12	B	18	U	C5-C6-N1	7.36	126.38	122.70
12	B	252	G	C5-C6-N1	-7.36	107.82	111.50
12	B	1336	A	C2-N3-C4	7.36	114.28	110.60
12	B	1444	G	C6-C5-N7	-7.36	125.98	130.40
12	B	2261	C	C6-N1-C2	-7.36	117.35	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2674	G	C4-C5-N7	-7.36	107.85	110.80
12	B	487	C	N3-C4-C5	-7.36	118.95	121.90
12	B	998	C	N3-C4-C5	-7.36	118.95	121.90
12	B	134	G	C4'-C3'-C2'	7.36	109.96	102.60
12	B	429	A	C4-C5-N7	-7.36	107.02	110.70
12	B	662	G	C4'-C3'-C2'	-7.36	95.24	102.60
12	B	749	A	C5-C6-N6	-7.36	117.81	123.70
12	B	1271	G	C5-N7-C8	-7.36	100.62	104.30
12	B	1379	U	C5-C4-O4	-7.36	121.48	125.90
12	B	2155	U	C5-C4-O4	-7.36	121.48	125.90
12	B	2537	U	C5-C6-N1	7.36	126.38	122.70
12	B	1007	C	N3-C4-C5	-7.36	118.96	121.90
12	B	1732	C	C2-N3-C4	7.36	123.58	119.90
12	B	1825	U	C5-C6-N1	7.36	126.38	122.70
12	B	2254	C	C6-N1-C2	-7.36	117.36	120.30
12	B	42	A	N1-C6-N6	7.36	123.01	118.60
12	B	761	A	O4'-C1'-N9	7.36	114.08	108.20
12	B	993	G	C5-N7-C8	7.36	107.98	104.30
12	B	2140	G	C4-C5-C6	7.36	123.21	118.80
12	B	2605	U	O4'-C1'-N1	7.36	114.08	108.20
20	J	63	ALA	N-CA-CB	7.36	120.40	110.10
12	B	569	U	N1-C2-N3	-7.35	110.49	114.90
12	B	938	G	C5-C6-O6	-7.35	124.19	128.60
12	B	2003	A	C4-C5-C6	7.35	120.68	117.00
11	A	36	C	N3-C4-N4	7.35	123.15	118.00
12	B	18	U	N3-C4-O4	7.35	124.55	119.40
12	B	709	U	N3-C2-O2	-7.35	117.05	122.20
12	B	1049	C	C4-C5-C6	7.35	121.08	117.40
12	B	1129	A	P-O3'-C3'	7.35	128.52	119.70
12	B	1832	C	N3-C4-N4	7.35	123.15	118.00
12	B	1984	G	N1-C6-O6	7.35	124.31	119.90
12	B	2098	U	N1-C2-O2	-7.35	117.65	122.80
12	B	2426	A	O4'-C1'-N9	7.35	114.08	108.20
12	B	2280	G	O4'-C1'-N9	7.35	114.08	108.20
12	B	2443	C	N3-C4-N4	7.35	123.15	118.00
12	B	2571	U	O4'-C1'-N1	7.35	114.08	108.20
12	B	524	G	C5-C6-N1	-7.35	107.83	111.50
12	B	1534	U	C4-C5-C6	-7.35	115.29	119.70
12	B	1651	G	N1-C2-N3	-7.35	119.49	123.90
12	B	1745	A	C5-N7-C8	7.35	107.58	103.90
12	B	1854	A	N7-C8-N9	7.35	117.47	113.80
12	B	1859	U	C2-N3-C4	-7.35	122.59	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1900	A	N1-C6-N6	7.35	123.01	118.60
12	B	2868	A	N1-C2-N3	7.35	132.97	129.30
11	A	8	C	C6-N1-C2	-7.35	117.36	120.30
12	B	855	G	C8-N9-C4	7.35	109.34	106.40
12	B	1083	U	N3-C4-O4	7.35	124.54	119.40
12	B	1693	U	N3-C4-O4	7.35	124.54	119.40
12	B	1759	A	O4'-C1'-N9	7.35	114.08	108.20
12	B	2279	G	N9-C1'-C2'	-7.35	103.92	112.00
12	B	1997	C	N3-C4-C5	-7.35	118.96	121.90
12	B	1415	U	O4'-C1'-N1	7.34	114.08	108.20
12	B	1901	A	N7-C8-N9	-7.34	110.13	113.80
12	B	2152	G	C4'-C3'-C2'	-7.34	95.25	102.60
12	B	2152	G	C4-C5-C6	7.34	123.21	118.80
12	B	2266	A	C5-C6-N6	-7.34	117.83	123.70
12	B	2484	G	N1-C2-N3	-7.34	119.49	123.90
12	B	2527	C	C6-N1-C2	-7.34	117.36	120.30
12	B	2534	A	P-O5'-C5'	7.34	132.65	120.90
12	B	2673	G	N9-C4-C5	7.34	108.34	105.40
12	B	971	G	O4'-C1'-N9	7.34	114.07	108.20
12	B	1860	G	C2-N3-C4	7.34	115.57	111.90
12	B	95	A	O4'-C1'-N9	7.34	114.07	108.20
12	B	380	G	C5-C6-O6	-7.34	124.19	128.60
12	B	399	U	O4'-C1'-N1	7.34	114.07	108.20
12	B	1844	C	N3-C4-C5	-7.34	118.96	121.90
27	Q	31	TYR	CG-CD2-CE2	-7.34	115.43	121.30
12	B	626	A	C8-N9-C4	-7.34	102.86	105.80
12	B	637	A	C1'-O4'-C4'	-7.34	104.03	109.90
12	B	662	G	C5-N7-C8	-7.34	100.63	104.30
12	B	1801	A	C1'-O4'-C4'	7.34	115.77	109.90
12	B	2122	U	N3-C2-O2	7.34	127.34	122.20
12	B	89	A	N9-C4-C5	7.34	108.73	105.80
12	B	110	G	O4'-C1'-N9	7.34	114.07	108.20
12	B	520	G	N1-C2-N2	-7.34	109.60	116.20
12	B	622	G	C5-N7-C8	-7.34	100.63	104.30
12	B	923	G	N1-C2-N3	-7.34	119.50	123.90
12	B	974	G	C8-N9-C4	7.34	109.33	106.40
12	B	1909	C	C1'-O4'-C4'	-7.34	104.03	109.90
12	B	97	C	C3'-C2'-C1'	-7.34	95.63	101.50
12	B	217	A	C5-C6-N1	-7.34	114.03	117.70
12	B	2028	U	C5-C4-O4	-7.34	121.50	125.90
12	B	2447	G	C4-C5-N7	7.34	113.73	110.80
12	B	2480	C	O4'-C1'-N1	7.34	114.07	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2763	G	C4-C5-N7	-7.34	107.86	110.80
12	B	879	G	C4-N9-C1'	7.33	136.04	126.50
12	B	1274	A	C8-N9-C4	-7.33	102.87	105.80
12	B	539	G	C8-N9-C4	-7.33	103.47	106.40
12	B	1901	A	C8-N9-C4	7.33	108.73	105.80
12	B	2002	G	C8-N9-C4	-7.33	103.47	106.40
12	B	2164	C	C2-N3-C4	7.33	123.57	119.90
12	B	2499	C	O4'-C1'-N1	7.33	114.07	108.20
12	B	2626	C	N1-C2-O2	-7.33	114.50	118.90
12	B	2686	G	C5-C6-O6	-7.33	124.20	128.60
11	A	75	G	C5-C6-O6	-7.33	124.20	128.60
11	A	99	A	C4-C5-C6	7.33	120.67	117.00
12	B	637	A	C5-C6-N1	-7.33	114.03	117.70
12	B	2006	C	O4'-C1'-N1	7.33	114.07	108.20
12	B	2173	A	C4-C5-C6	7.33	120.67	117.00
12	B	2227	A	O4'-C1'-N9	7.33	114.06	108.20
12	B	2324	U	C5-C4-O4	7.33	130.30	125.90
12	B	451	U	C1'-O4'-C4'	-7.33	104.04	109.90
12	B	2645	G	C6-C5-N7	-7.33	126.00	130.40
12	B	2756	U	P-O3'-C3'	7.33	128.49	119.70
12	B	232	G	C5'-C4'-O4'	7.33	117.89	109.10
12	B	312	G	C6-N1-C2	7.33	129.50	125.10
12	B	405	U	C5-C6-N1	7.33	126.36	122.70
12	B	2095	A	C2-N3-C4	-7.33	106.94	110.60
12	B	167	A	C4-C5-C6	7.33	120.66	117.00
12	B	458	G	C4-C5-C6	7.33	123.20	118.80
12	B	749	A	C5-C6-N1	-7.33	114.04	117.70
12	B	1111	A	C8-N9-C4	7.33	108.73	105.80
12	B	1165	A	C4-C5-N7	-7.33	107.04	110.70
12	B	1439	A	O4'-C1'-N9	7.33	114.06	108.20
12	B	1774	C	O4'-C1'-N1	7.33	114.06	108.20
12	B	2038	G	N1-C6-O6	7.33	124.30	119.90
12	B	2598	A	N3-C4-C5	-7.33	121.67	126.80
12	B	2819	G	C5-C6-O6	-7.33	124.20	128.60
12	B	107	G	O4'-C1'-N9	7.32	114.06	108.20
12	B	1689	A	C6-C5-N7	-7.32	127.17	132.30
12	B	2860	A	C5-C6-N6	-7.32	117.84	123.70
12	B	81	G	C5-C6-N1	-7.32	107.84	111.50
12	B	1528	A	N1-C2-N3	7.32	132.96	129.30
12	B	279	A	C4-C5-C6	7.32	120.66	117.00
12	B	959	A	C4-C5-N7	-7.32	107.04	110.70
12	B	1039	A	C2-N3-C4	7.32	114.26	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1701	A	N9-C4-C5	7.32	108.73	105.80
12	B	1873	G	O4'-C1'-N9	7.32	114.06	108.20
12	B	2211	A	N9-C4-C5	-7.32	102.87	105.80
12	B	2254	C	C5-C6-N1	7.32	124.66	121.00
17	G	136	ASP	N-CA-CB	7.32	123.78	110.60
12	B	350	G	C5-C6-N1	-7.32	107.84	111.50
12	B	2333	A	N9-C4-C5	7.32	108.73	105.80
6	5	112	ASP	CB-CG-OD2	7.32	124.89	118.30
12	B	317	G	N3-C2-N2	7.32	125.02	119.90
12	B	1022	G	N1-C6-O6	7.32	124.29	119.90
12	B	1305	C	C2-N3-C4	-7.32	116.24	119.90
12	B	1868	C	O4'-C1'-N1	7.32	114.06	108.20
12	B	2193	G	N3-C4-N9	7.32	130.39	126.00
11	A	13	G	N1-C6-O6	7.32	124.29	119.90
12	B	273	G	N1-C2-N2	7.32	122.78	116.20
12	B	1148	U	C5-C6-N1	7.32	126.36	122.70
12	B	1588	G	C4-C5-N7	-7.32	107.87	110.80
12	B	1919	A	N3-C4-C5	-7.32	121.68	126.80
12	B	2588	G	N1-C6-O6	7.31	124.29	119.90
11	A	65	U	C5-C6-N1	7.31	126.36	122.70
12	B	339	U	N1-C2-O2	-7.31	117.68	122.80
12	B	1142	A	C2-N3-C4	-7.31	106.94	110.60
12	B	2765	A	C6-C5-N7	-7.31	127.18	132.30
12	B	2892	G	N7-C8-N9	-7.31	109.44	113.10
12	B	861	A	C8-N9-C4	-7.31	102.88	105.80
11	A	5	U	C6-N1-C2	7.31	125.39	121.00
12	B	73	A	C2-N3-C4	7.31	114.25	110.60
12	B	2237	G	C6-N1-C2	7.31	129.49	125.10
12	B	2896	C	N3-C4-N4	7.31	123.12	118.00
12	B	214	G	C4-C5-N7	7.31	113.72	110.80
12	B	1490	A	C2-N3-C4	7.31	114.25	110.60
12	B	2343	U	N3-C4-O4	7.31	124.52	119.40
12	B	2429	G	N3-C2-N2	7.31	125.02	119.90
12	B	486	C	O4'-C1'-N1	7.31	114.05	108.20
12	B	702	U	C5-C4-O4	-7.31	121.52	125.90
12	B	479	A	C6-N1-C2	7.30	122.98	118.60
12	B	1177	G	N7-C8-N9	-7.30	109.45	113.10
12	B	1371	G	N1-C6-O6	7.30	124.28	119.90
12	B	319	G	O4'-C1'-N9	7.30	114.04	108.20
12	B	1735	A	O4'-C1'-N9	7.30	114.04	108.20
12	B	2169	A	C5-C6-N6	-7.30	117.86	123.70
12	B	2483	C	O4'-C1'-N1	7.30	114.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2804	U	P-O5'-C5'	7.30	132.59	120.90
11	A	83	G	C5-C6-O6	-7.30	124.22	128.60
12	B	430	A	C6-N1-C2	-7.30	114.22	118.60
12	B	729	G	C4-C5-N7	-7.30	107.88	110.80
12	B	2028	U	P-O3'-C3'	7.30	128.46	119.70
12	B	2349	G	C8-N9-C1'	7.30	136.49	127.00
12	B	2681	C	N3-C4-N4	7.30	123.11	118.00
12	B	2565	A	C6-C5-N7	-7.30	127.19	132.30
12	B	1806	C	N3-C4-C5	-7.30	118.98	121.90
12	B	2023	C	P-O5'-C5'	7.30	132.58	120.90
12	B	2126	A	C4-C5-C6	7.30	120.65	117.00
12	B	133	U	O4'-C1'-N1	7.30	114.04	108.20
12	B	639	U	N1-C2-N3	-7.30	110.52	114.90
12	B	1076	C	C5-C4-N4	-7.30	115.09	120.20
12	B	1154	G	O4'-C1'-N9	7.30	114.04	108.20
12	B	1893	C	N3-C2-O2	7.30	127.01	121.90
12	B	2726	A	C8-N9-C4	-7.30	102.88	105.80
12	B	1677	A	C4-C5-C6	7.29	120.65	117.00
12	B	2058	A	N1-C6-N6	7.29	122.98	118.60
12	B	126	A	C5-N7-C8	7.29	107.55	103.90
12	B	254	G	N1-C6-O6	7.29	124.28	119.90
12	B	625	G	N1-C2-N3	-7.29	119.52	123.90
12	B	634	C	O4'-C1'-N1	7.29	114.03	108.20
12	B	2674	G	C2-N3-C4	7.29	115.55	111.90
12	B	2856	A	C5-N7-C8	7.29	107.55	103.90
12	B	178	G	C4-C5-C6	7.29	123.17	118.80
12	B	331	C	C4-C5-C6	7.29	121.05	117.40
12	B	1610	A	N3-C4-C5	-7.29	121.70	126.80
12	B	2872	A	C5-N7-C8	7.29	107.55	103.90
12	B	977	G	C8-N9-C4	-7.29	103.48	106.40
12	B	2545	G	N9-C1'-C2'	-7.29	103.98	112.00
12	B	782	A	C2-N3-C4	-7.29	106.96	110.60
12	B	955	U	N1-C2-O2	7.29	127.90	122.80
12	B	1095	A	C4-C5-C6	7.29	120.64	117.00
12	B	1162	G	N1-C2-N2	-7.29	109.64	116.20
12	B	1321	A	C5-C6-N6	-7.29	117.87	123.70
11	A	30	C	C1'-O4'-C4'	7.29	115.73	109.90
12	B	1637	A	O4'-C1'-N9	7.29	114.03	108.20
15	E	35	TYR	CB-CG-CD2	-7.29	116.63	121.00
12	B	789	A	C6-C5-N7	-7.29	127.20	132.30
12	B	1098	A	C5-C6-N1	-7.29	114.06	117.70
12	B	1449	G	C5-C6-N1	-7.29	107.86	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1763	G	C5'-C4'-O4'	7.29	117.84	109.10
12	B	2392	A	P-O3'-C3'	7.29	128.44	119.70
12	B	2826	A	N9-C4-C5	-7.29	102.89	105.80
12	B	95	A	N3-C4-C5	-7.28	121.70	126.80
12	B	835	C	C5-C4-N4	-7.28	115.10	120.20
12	B	1741	C	N3-C4-N4	7.28	123.10	118.00
12	B	2579	C	C6-N1-C2	-7.28	117.39	120.30
12	B	2600	A	C8-N9-C4	-7.28	102.89	105.80
12	B	521	U	P-O5'-C5'	7.28	132.55	120.90
12	B	1847	A	C5'-C4'-O4'	7.28	117.84	109.10
12	B	1860	G	N1-C2-N3	-7.28	119.53	123.90
12	B	2543	G	N1-C6-O6	7.28	124.27	119.90
6	5	60	ARG	NE-CZ-NH1	7.28	123.94	120.30
12	B	883	G	N1-C2-N3	-7.28	119.53	123.90
12	B	1321	A	N1-C2-N3	-7.28	125.66	129.30
12	B	1387	A	N7-C8-N9	7.28	117.44	113.80
12	B	1701	A	C4-C5-N7	-7.28	107.06	110.70
12	B	1903	G	N1-C2-N3	-7.28	119.53	123.90
12	B	2886	A	C4-C5-C6	7.28	120.64	117.00
12	B	2137	U	O4'-C1'-N1	7.28	114.02	108.20
12	B	539	G	N3-C4-C5	-7.28	124.96	128.60
12	B	901	C	C6-N1-C2	-7.28	117.39	120.30
12	B	916	G	N7-C8-N9	7.28	116.74	113.10
12	B	1445	G	C5-N7-C8	7.28	107.94	104.30
12	B	1637	A	C4-C5-C6	7.28	120.64	117.00
12	B	1988	G	N3-C2-N2	7.28	124.99	119.90
12	B	2486	C	N3-C4-C5	-7.28	118.99	121.90
12	B	2899	A	C4-C5-C6	7.28	120.64	117.00
12	B	2238	G	C6-C5-N7	-7.28	126.03	130.40
12	B	18	U	N3-C4-C5	-7.27	110.23	114.60
11	A	45	A	C5-C6-N1	-7.27	114.06	117.70
12	B	205	G	C2-N3-C4	7.27	115.54	111.90
12	B	364	C	O4'-C1'-N1	7.27	114.02	108.20
12	B	1090	A	C6-N1-C2	-7.27	114.24	118.60
12	B	1945	G	N1-C2-N3	-7.27	119.54	123.90
12	B	2119	A	C5-N7-C8	7.27	107.54	103.90
12	B	2505	G	O4'-C1'-N9	7.27	114.02	108.20
12	B	2832	U	C6-N1-C2	-7.27	116.64	121.00
12	B	2870	C	N1-C2-N3	-7.27	114.11	119.20
11	A	79	G	N1-C6-O6	7.27	124.26	119.90
12	B	45	G	N1-C2-N3	-7.27	119.54	123.90
12	B	1554	U	N1-C2-O2	-7.27	117.71	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1631	G	N1-C6-O6	7.27	124.26	119.90
12	B	2678	C	N3-C4-N4	7.27	123.09	118.00
12	B	597	G	C6-C5-N7	-7.27	126.04	130.40
12	B	794	A	C5-C6-N1	-7.27	114.07	117.70
12	B	1508	A	O4'-C1'-N9	7.27	114.01	108.20
12	B	2635	A	N9-C4-C5	7.27	108.71	105.80
12	B	640	C	P-O5'-C5'	-7.27	109.28	120.90
12	B	1205	A	O4'-C1'-N9	7.27	114.01	108.20
12	B	1623	G	N3-C4-N9	7.27	130.36	126.00
12	B	2748	A	P-O3'-C3'	-7.27	110.98	119.70
11	A	87	U	O4'-C1'-N1	7.26	114.01	108.20
12	B	508	A	C4'-C3'-C2'	-7.26	95.34	102.60
12	B	677	A	C4-C5-C6	7.26	120.63	117.00
12	B	1068	G	C5-C6-N1	-7.26	107.87	111.50
12	B	2092	U	C2-N1-C1'	7.26	126.42	117.70
12	B	2134	A	C5-C6-N6	-7.26	117.89	123.70
12	B	2355	G	C1'-O4'-C4'	-7.26	104.09	109.90
12	B	2743	U	N3-C2-O2	7.26	127.28	122.20
12	B	1383	A	N7-C8-N9	7.26	117.43	113.80
12	B	2671	G	O4'-C1'-N9	7.26	114.01	108.20
11	A	50	A	N1-C2-N3	-7.26	125.67	129.30
12	B	112	U	O4'-C1'-N1	7.26	114.01	108.20
12	B	2014	A	C2-N3-C4	-7.26	106.97	110.60
4	3	15	ARG	NE-CZ-NH2	7.26	123.93	120.30
12	B	479	A	C4-C5-C6	7.26	120.63	117.00
12	B	1631	G	C2-N3-C4	-7.26	108.27	111.90
12	B	2312	U	C3'-C2'-C1'	7.26	107.31	101.50
12	B	1239	G	C6-C5-N7	-7.26	126.05	130.40
12	B	2162	G	N1-C2-N2	7.26	122.73	116.20
12	B	797	G	C5-C6-N1	-7.26	107.87	111.50
12	B	1644	C	C6-N1-C2	-7.26	117.40	120.30
12	B	1717	A	C4-C5-C6	7.26	120.63	117.00
12	B	506	G	C4-C5-N7	-7.25	107.90	110.80
12	B	2186	G	C2-N3-C4	7.25	115.53	111.90
9	8	19	ARG	NE-CZ-NH1	7.25	123.93	120.30
11	A	114	C	O4'-C1'-N1	7.25	114.00	108.20
12	B	1112	G	N3-C4-C5	7.25	132.23	128.60
12	B	1677	A	O4'-C4'-C3'	-7.25	96.75	104.00
12	B	1704	C	N3-C2-O2	7.25	126.98	121.90
12	B	1898	U	C2-N3-C4	7.25	131.35	127.00
12	B	2090	A	N1-C2-N3	7.25	132.93	129.30
12	B	1941	C	N3-C2-O2	7.25	126.98	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2026	U	C5-C6-N1	-7.25	119.07	122.70
12	B	2289	G	C6-C5-N7	-7.25	126.05	130.40
12	B	781	A	C4-C5-C6	7.25	120.62	117.00
12	B	1080	A	N7-C8-N9	-7.25	110.17	113.80
12	B	2448	A	C5'-C4'-O4'	7.25	117.80	109.10
12	B	17	G	C4'-C3'-C2'	-7.25	95.35	102.60
12	B	962	G	C4-C5-C6	7.25	123.15	118.80
12	B	1423	G	C5-N7-C8	7.25	107.92	104.30
12	B	1707	G	C5-C6-O6	-7.25	124.25	128.60
12	B	1890	A	C8-N9-C4	-7.25	102.90	105.80
12	B	514	A	C4-C5-C6	7.25	120.62	117.00
12	B	862	G	N3-C4-C5	7.25	132.22	128.60
12	B	2810	A	C5-C6-N1	-7.25	114.08	117.70
12	B	297	G	C5-C6-N1	-7.24	107.88	111.50
12	B	1052	C	N3-C4-N4	7.24	123.07	118.00
12	B	1468	U	N1-C2-N3	-7.24	110.55	114.90
12	B	2051	A	C5-C6-N6	-7.24	117.91	123.70
12	B	2722	G	C5'-C4'-O4'	7.24	117.79	109.10
12	B	699	A	P-O3'-C3'	-7.24	111.01	119.70
12	B	1418	G	N3-C2-N2	7.24	124.97	119.90
27	Q	49	ARG	NE-CZ-NH2	-7.24	116.68	120.30
12	B	605	G	N1-C6-O6	7.24	124.24	119.90
12	B	1358	G	C5-C6-O6	-7.24	124.25	128.60
12	B	1823	G	C5-N7-C8	7.24	107.92	104.30
12	B	2594	C	O4'-C1'-N1	7.24	113.99	108.20
12	B	625	G	C4-C5-C6	7.24	123.14	118.80
12	B	739	A	C5-C6-N6	-7.24	117.91	123.70
12	B	1583	A	C5-C6-N6	-7.24	117.91	123.70
12	B	1690	A	C4-C5-N7	-7.24	107.08	110.70
12	B	1886	U	C5-C6-N1	-7.24	119.08	122.70
12	B	2266	A	C5-C6-N1	-7.24	114.08	117.70
12	B	756	A	C5-N7-C8	7.24	107.52	103.90
12	B	1387	A	C2-N3-C4	7.24	114.22	110.60
12	B	734	A	C5-N7-C8	7.24	107.52	103.90
12	B	1017	G	N9-C4-C5	-7.24	102.50	105.40
12	B	1262	A	C5-C6-N1	-7.24	114.08	117.70
12	B	1685	C	N3-C4-N4	7.24	123.06	118.00
12	B	2061	G	N7-C8-N9	-7.24	109.48	113.10
12	B	1643	G	N9-C4-C5	-7.23	102.51	105.40
11	A	86	G	O4'-C1'-N9	7.23	113.99	108.20
12	B	213	A	N9-C4-C5	7.23	108.69	105.80
12	B	670	A	N9-C4-C5	7.23	108.69	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1116	G	N3-C2-N2	7.23	124.96	119.90
12	B	1140	C	O4'-C1'-N1	7.23	113.98	108.20
12	B	2393	U	O4'-C1'-N1	7.23	113.98	108.20
11	A	106	G	C5-C6-N1	-7.23	107.89	111.50
12	B	1409	U	N3-C4-O4	7.23	124.46	119.40
11	A	4	C	C5-C6-N1	-7.23	117.39	121.00
12	B	570	G	C8-N9-C4	7.23	109.29	106.40
12	B	1140	C	C6-N1-C2	-7.23	117.41	120.30
12	B	1274	A	C5-C6-N6	-7.23	117.92	123.70
12	B	1316	U	C5-C4-O4	-7.23	121.56	125.90
12	B	1366	A	O4'-C1'-N9	7.23	113.98	108.20
15	E	79	ARG	NH1-CZ-NH2	-7.23	111.45	119.40
12	B	1304	A	O4'-C1'-N9	7.23	113.98	108.20
12	B	2414	G	C6-C5-N7	-7.23	126.06	130.40
12	B	2609	U	N3-C4-O4	7.23	124.46	119.40
12	B	835	C	N3-C4-N4	7.22	123.06	118.00
12	B	1346	G	N3-C4-C5	7.22	132.21	128.60
12	B	2272	U	C6-N1-C2	-7.22	116.67	121.00
13	C	82	TYR	CZ-CE2-CD2	-7.22	113.30	119.80
31	U	52	ASN	N-CA-CB	7.22	123.61	110.60
12	B	574	A	N7-C8-N9	7.22	117.41	113.80
12	B	718	A	C5-C6-N6	-7.22	117.92	123.70
12	B	2585	U	C4-C5-C6	7.22	124.03	119.70
12	B	2607	G	C6-C5-N7	-7.22	126.07	130.40
31	U	6	ARG	NE-CZ-NH2	-7.22	116.69	120.30
7	6	21	ARG	NE-CZ-NH1	-7.22	116.69	120.30
12	B	1278	C	C6-N1-C2	-7.22	117.41	120.30
12	B	1337	G	C5'-C4'-C3'	-7.22	104.45	116.00
12	B	1460	U	O4'-C1'-N1	7.22	113.97	108.20
12	B	1652	A	N9-C4-C5	7.22	108.69	105.80
12	B	2099	U	P-O3'-C3'	-7.22	111.04	119.70
12	B	2426	A	N1-C2-N3	-7.22	125.69	129.30
12	B	9	G	C8-N9-C4	-7.22	103.51	106.40
12	B	150	U	N3-C4-C5	-7.22	110.27	114.60
12	B	1107	G	C6-C5-N7	-7.22	126.07	130.40
12	B	1939	U	N3-C2-O2	-7.22	117.15	122.20
11	A	7	G	N1-C2-N3	-7.22	119.57	123.90
12	B	729	G	C6-N1-C2	7.22	129.43	125.10
12	B	1416	G	C5'-C4'-C3'	7.22	127.55	116.00
12	B	2659	G	N7-C8-N9	-7.22	109.49	113.10
12	B	2679	A	P-O3'-C3'	7.22	128.36	119.70
12	B	877	A	N3-C4-C5	-7.21	121.75	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1540	G	C4'-C3'-C2'	-7.21	95.39	102.60
12	B	1878	G	C5-C6-N1	7.21	115.11	111.50
12	B	2001	C	N3-C4-N4	7.21	123.05	118.00
12	B	719	C	N3-C4-N4	7.21	123.05	118.00
12	B	1519	G	O4'-C1'-N9	7.21	113.97	108.20
12	B	2615	U	O4'-C1'-N1	7.21	113.97	108.20
12	B	287	G	N9-C4-C5	7.21	108.28	105.40
12	B	564	C	C6-N1-C2	7.21	123.18	120.30
12	B	955	U	C4-C5-C6	-7.21	115.37	119.70
12	B	2073	C	C5-C4-N4	-7.21	115.15	120.20
12	B	1843	C	N3-C4-N4	7.21	123.05	118.00
12	B	124	G	C5-C6-N1	-7.21	107.89	111.50
12	B	701	G	O4'-C1'-N9	7.21	113.97	108.20
12	B	856	G	O4'-C1'-N9	7.21	113.97	108.20
12	B	1021	A	N3-C4-C5	-7.21	121.75	126.80
12	B	2817	U	O4'-C1'-N1	7.21	113.97	108.20
12	B	18	U	C2-N3-C4	7.21	131.32	127.00
12	B	305	C	O4'-C1'-N1	7.21	113.97	108.20
12	B	1151	A	N3-C4-C5	-7.21	121.75	126.80
12	B	1226	A	C2-N3-C4	-7.21	107.00	110.60
12	B	1961	C	N1-C2-O2	7.21	123.22	118.90
12	B	2123	G	O4'-C1'-N9	7.21	113.97	108.20
12	B	157	C	N3-C4-N4	7.21	123.04	118.00
12	B	2281	A	C6-C5-N7	-7.21	127.26	132.30
12	B	2427	C	O4'-C1'-N1	7.21	113.96	108.20
12	B	2646	C	C5-C6-N1	7.21	124.60	121.00
12	B	297	G	N3-C4-N9	-7.20	121.68	126.00
12	B	493	G	N3-C2-N2	-7.20	114.86	119.90
12	B	1734	G	C5-C6-N1	-7.20	107.90	111.50
12	B	1842	G	P-O5'-C5'	-7.20	109.37	120.90
12	B	1855	U	C4-C5-C6	7.20	124.02	119.70
12	B	1954	G	C5-C6-N1	-7.20	107.90	111.50
12	B	2147	A	O4'-C1'-N9	7.20	113.96	108.20
12	B	2406	A	C5-C6-N6	-7.20	117.94	123.70
12	B	2518	A	N1-C2-N3	7.20	132.90	129.30
12	B	2578	G	O4'-C1'-N9	7.20	113.96	108.20
12	B	217	A	C5-C6-N6	-7.20	117.94	123.70
12	B	357	C	C6-N1-C2	-7.20	117.42	120.30
11	A	104	A	C2-N3-C4	-7.20	107.00	110.60
12	B	189	G	C5-C6-N1	-7.20	107.90	111.50
12	B	1179	G	C6-C5-N7	-7.20	126.08	130.40
12	B	1245	G	P-O3'-C3'	-7.20	111.06	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1555	G	C5-C6-O6	-7.20	124.28	128.60
12	B	1932	A	C5-C6-N1	-7.20	114.10	117.70
12	B	2166	U	C2-N3-C4	-7.20	122.68	127.00
12	B	2404	U	N1-C2-O2	-7.20	117.76	122.80
12	B	81	G	P-O5'-C5'	7.20	132.42	120.90
12	B	1371	G	N1-C2-N3	-7.20	119.58	123.90
12	B	1766	G	O4'-C1'-N9	7.20	113.96	108.20
12	B	2734	A	C5-C6-N6	-7.20	117.94	123.70
12	B	2777	G	N3-C2-N2	7.20	124.94	119.90
12	B	2903	U	C2-N1-C1'	7.20	126.34	117.70
12	B	1644	C	C2-N1-C1'	7.20	126.72	118.80
12	B	1954	G	N1-C2-N3	-7.20	119.58	123.90
12	B	1970	A	C4-C5-C6	7.20	120.60	117.00
33	Y	10	ARG	NE-CZ-NH2	7.20	123.90	120.30
12	B	1325	U	N3-C4-O4	7.20	124.44	119.40
12	B	1925	C	P-O3'-C3'	-7.20	111.07	119.70
12	B	1241	A	C5-C6-N6	-7.19	117.94	123.70
12	B	1781	U	N3-C4-O4	7.19	124.44	119.40
11	A	100	G	N7-C8-N9	-7.19	109.50	113.10
12	B	103	A	C5-N7-C8	7.19	107.50	103.90
12	B	369	U	N3-C4-O4	7.19	124.44	119.40
12	B	933	A	N3-C4-C5	-7.19	121.77	126.80
12	B	1254	A	C8-N9-C4	-7.19	102.92	105.80
12	B	901	C	C5-C6-N1	7.19	124.60	121.00
12	B	1490	A	C8-N9-C4	7.19	108.68	105.80
12	B	1529	G	O4'-C1'-N9	7.19	113.95	108.20
12	B	1720	U	N1-C2-N3	7.19	119.22	114.90
12	B	2023	C	C6-N1-C2	-7.19	117.42	120.30
12	B	2481	G	O4'-C1'-N9	7.19	113.95	108.20
12	B	731	C	C3'-C2'-C1'	-7.19	95.75	101.50
12	B	1831	G	N1-C2-N3	-7.19	119.59	123.90
12	B	2111	U	C5-C6-N1	7.19	126.30	122.70
10	9	278	ARG	N-CA-C	-7.19	91.59	111.00
12	B	460	A	C2-N3-C4	7.19	114.19	110.60
12	B	751	A	C4-C5-N7	-7.19	107.11	110.70
12	B	1580	A	C8-N9-C4	-7.19	102.92	105.80
12	B	2078	C	C6-N1-C2	7.19	123.17	120.30
12	B	2817	U	N1-C2-N3	7.19	119.21	114.90
12	B	123	G	C4-C5-C6	7.18	123.11	118.80
12	B	891	G	C8-N9-C4	7.18	109.27	106.40
12	B	1487	U	O4'-C1'-N1	7.18	113.95	108.20
12	B	2140	G	C2-N3-C4	7.18	115.49	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2740	A	C5-C6-N6	-7.18	117.95	123.70
13	C	66	PHE	CB-CG-CD1	7.18	125.83	120.80
12	B	575	A	C5-C6-N6	-7.18	117.95	123.70
12	B	953	G	C8-N9-C4	-7.18	103.53	106.40
12	B	1123	C	C2-N3-C4	7.18	123.49	119.90
12	B	1646	C	C5-C6-N1	7.18	124.59	121.00
12	B	2010	G	C6-C5-N7	-7.18	126.09	130.40
12	B	2029	G	O4'-C1'-N9	7.18	113.95	108.20
12	B	836	G	C8-N9-C4	-7.18	103.53	106.40
12	B	1762	A	N3-C4-N9	7.18	133.14	127.40
12	B	1807	G	N1-C6-O6	7.18	124.21	119.90
12	B	2373	G	C6-C5-N7	-7.18	126.09	130.40
12	B	244	A	C4'-C3'-C2'	-7.18	95.42	102.60
12	B	458	G	N1-C6-O6	7.18	124.21	119.90
12	B	511	U	O4'-C1'-N1	7.18	113.94	108.20
12	B	825	A	C6-C5-N7	-7.18	127.27	132.30
12	B	866	A	N9-C4-C5	7.18	108.67	105.80
12	B	1000	A	C5-C6-N6	-7.18	117.96	123.70
12	B	1142	A	P-O3'-C3'	7.18	128.31	119.70
12	B	1485	U	C2-N1-C1'	-7.18	109.08	117.70
12	B	1770	G	C8-N9-C4	-7.18	103.53	106.40
12	B	1912	A	O4'-C1'-N9	7.18	113.94	108.20
12	B	2141	G	C5-C6-N1	7.18	115.09	111.50
12	B	2517	C	N1-C2-O2	7.18	123.21	118.90
12	B	2548	U	N3-C4-O4	7.18	124.43	119.40
12	B	799	G	O4'-C1'-N9	7.18	113.94	108.20
12	B	2134	A	C6-C5-N7	-7.18	127.28	132.30
12	B	2303	G	C6-C5-N7	-7.18	126.09	130.40
11	A	98	G	C6-N1-C2	7.18	129.41	125.10
12	B	77	G	C5-C6-N1	-7.18	107.91	111.50
12	B	1473	G	O4'-C1'-N9	7.18	113.94	108.20
12	B	1843	C	C5-C4-N4	-7.18	115.18	120.20
11	A	61	G	C5-N7-C8	7.17	107.89	104.30
12	B	223	A	N1-C6-N6	7.17	122.91	118.60
12	B	312	G	N1-C6-O6	7.17	124.20	119.90
12	B	678	C	N1-C2-O2	7.17	123.20	118.90
12	B	2590	A	C2-N3-C4	7.17	114.19	110.60
15	E	43	THR	CA-CB-CG2	-7.17	102.36	112.40
1	0	2	ARG	NE-CZ-NH1	-7.17	116.71	120.30
12	B	2268	A	C4-C5-C6	7.17	120.59	117.00
12	B	2876	G	P-O5'-C5'	-7.17	109.42	120.90
12	B	230	G	C8-N9-C4	-7.17	103.53	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	799	G	C5-C6-O6	-7.17	124.30	128.60
12	B	1151	A	N1-C2-N3	7.17	132.89	129.30
12	B	2206	C	C4-C5-C6	7.17	120.99	117.40
11	A	100	G	N1-C2-N3	-7.17	119.60	123.90
12	B	81	G	C2-N3-C4	7.17	115.48	111.90
12	B	384	A	C4-C5-C6	7.17	120.58	117.00
12	B	952	G	C2-N3-C4	7.17	115.48	111.90
12	B	1076	C	P-O3'-C3'	-7.17	111.10	119.70
12	B	1603	A	C5-C6-N6	-7.17	117.96	123.70
12	B	2325	G	N7-C8-N9	7.17	116.69	113.10
12	B	2382	G	N3-C2-N2	7.17	124.92	119.90
12	B	2828	G	N7-C8-N9	-7.17	109.52	113.10
12	B	85	G	N1-C6-O6	7.17	124.20	119.90
12	B	632	A	C2-N3-C4	-7.17	107.02	110.60
12	B	1461	C	O4'-C1'-N1	7.17	113.94	108.20
12	B	1510	G	C5-C6-N1	-7.17	107.92	111.50
12	B	1661	G	N3-C4-C5	7.17	132.19	128.60
12	B	2315	G	N3-C4-N9	-7.17	121.70	126.00
12	B	2828	G	C8-N9-C4	7.17	109.27	106.40
12	B	111	A	N1-C2-N3	7.17	132.88	129.30
12	B	330	A	N9-C4-C5	7.17	108.67	105.80
12	B	560	C	C4-C5-C6	7.17	120.98	117.40
12	B	1587	G	N7-C8-N9	7.17	116.68	113.10
12	B	1763	G	O4'-C1'-N9	7.17	113.93	108.20
12	B	2136	G	N3-C4-N9	7.17	130.30	126.00
12	B	2382	G	C4-C5-C6	7.17	123.10	118.80
12	B	2601	C	C2-N3-C4	-7.17	116.32	119.90
12	B	2602	A	C6-C5-N7	-7.17	127.28	132.30
12	B	2788	C	C5-C4-N4	-7.17	115.18	120.20
12	B	1368	G	N9-C4-C5	-7.17	102.53	105.40
11	A	24	G	P-O3'-C3'	7.16	128.30	119.70
12	B	477	A	C5-C6-N1	-7.16	114.12	117.70
12	B	1318	U	O4'-C1'-N1	7.16	113.93	108.20
12	B	1496	A	O4'-C1'-N9	7.16	113.93	108.20
12	B	1808	A	C4-C5-C6	7.16	120.58	117.00
12	B	2289	G	C6-N1-C2	7.16	129.40	125.10
11	A	38	C	C3'-C2'-C1'	-7.16	95.77	101.50
12	B	1581	G	C6-N1-C2	-7.16	120.80	125.10
12	B	1735	A	C4-C5-C6	7.16	120.58	117.00
12	B	1892	C	C4-C5-C6	7.16	120.98	117.40
12	B	1897	G	N3-C4-C5	7.16	132.18	128.60
12	B	2124	G	N1-C6-O6	7.16	124.20	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2436	G	N1-C2-N3	-7.16	119.60	123.90
12	B	310	A	N9-C4-C5	-7.16	102.94	105.80
12	B	537	G	C6-N1-C2	7.16	129.40	125.10
12	B	563	A	C4-C5-C6	7.16	120.58	117.00
12	B	760	G	C5-C6-O6	-7.16	124.31	128.60
12	B	1620	G	C6-N1-C2	-7.16	120.80	125.10
12	B	1651	G	C5-C6-N1	-7.16	107.92	111.50
12	B	1816	C	N3-C4-N4	7.16	123.01	118.00
12	B	2059	A	C2-N3-C4	-7.16	107.02	110.60
12	B	2183	A	C5-N7-C8	7.16	107.48	103.90
12	B	2473	U	O4'-C1'-N1	7.16	113.93	108.20
12	B	9	G	N1-C2-N2	-7.16	109.76	116.20
12	B	537	G	O4'-C1'-N9	7.16	113.93	108.20
12	B	351	C	N3-C4-C5	-7.16	119.04	121.90
12	B	845	A	C4'-C3'-C2'	-7.16	95.44	102.60
12	B	889	C	C4-C5-C6	7.16	120.98	117.40
12	B	1507	C	C2-N1-C1'	7.16	126.67	118.80
12	B	1863	G	C2-N3-C4	7.16	115.48	111.90
12	B	2100	G	O4'-C1'-N9	7.16	113.92	108.20
12	B	304	U	C2-N1-C1'	-7.15	109.11	117.70
12	B	788	A	C4-C5-C6	7.15	120.58	117.00
12	B	1037	G	C5-C6-N1	-7.15	107.92	111.50
12	B	1000	A	P-O3'-C3'	7.15	128.28	119.70
12	B	2531	A	C8-N9-C4	-7.15	102.94	105.80
12	B	2835	A	C4-C5-C6	7.15	120.58	117.00
12	B	166	U	N3-C4-O4	7.15	124.41	119.40
12	B	258	G	C5-C6-N1	-7.15	107.92	111.50
12	B	275	C	N3-C4-N4	7.15	123.00	118.00
12	B	315	G	N1-C2-N3	-7.15	119.61	123.90
12	B	457	A	C4-C5-C6	7.15	120.58	117.00
12	B	2067	G	C2-N3-C4	7.15	115.48	111.90
12	B	2456	C	N3-C4-N4	7.15	123.00	118.00
12	B	820	A	N1-C2-N3	7.15	132.88	129.30
12	B	901	C	C3'-C2'-C1'	7.15	107.22	101.50
12	B	1055	G	O4'-C1'-N9	7.15	113.92	108.20
12	B	2200	C	C5-C6-N1	-7.15	117.43	121.00
29	S	92	ARG	NE-CZ-NH2	-7.15	116.73	120.30
12	B	1259	G	C3'-C2'-C1'	-7.15	95.78	101.50
13	C	34	GLU	N-CA-CB	7.15	123.47	110.60
12	B	596	U	C6-N1-C2	7.15	125.29	121.00
12	B	1463	C	N3-C4-C5	-7.15	119.04	121.90
12	B	2619	C	O4'-C1'-N1	7.15	113.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	121	G	C4-C5-C6	7.14	123.09	118.80
12	B	804	A	C5-N7-C8	7.14	107.47	103.90
12	B	995	C	C1'-O4'-C4'	-7.14	104.18	109.90
12	B	1087	G	N7-C8-N9	-7.14	109.53	113.10
12	B	1376	C	C4-C5-C6	7.14	120.97	117.40
12	B	1551	A	C2-N3-C4	7.14	114.17	110.60
12	B	1969	A	C5-C6-N1	-7.14	114.13	117.70
12	B	2633	G	N1-C2-N3	-7.14	119.61	123.90
12	B	2686	G	C4-C5-N7	-7.14	107.94	110.80
12	B	2851	A	N9-C4-C5	7.14	108.66	105.80
12	B	1666	G	C4'-C3'-C2'	-7.14	95.46	102.60
12	B	1807	G	C5-C6-N1	-7.14	107.93	111.50
12	B	1855	U	N3-C4-C5	7.14	118.89	114.60
12	B	2213	U	C6-N1-C1'	-7.14	111.20	121.20
12	B	2817	U	C4-C5-C6	-7.14	115.41	119.70
12	B	666	A	N7-C8-N9	-7.14	110.23	113.80
12	B	2082	A	C2-N3-C4	7.14	114.17	110.60
12	B	2121	G	C4-C5-C6	7.14	123.08	118.80
11	A	62	C	N3-C4-C5	-7.14	119.04	121.90
11	A	110	C	C2-N3-C4	7.14	123.47	119.90
12	B	26	G	N1-C6-O6	7.14	124.18	119.90
12	B	247	G	C8-N9-C4	-7.14	103.55	106.40
12	B	1799	G	O4'-C1'-N9	7.14	113.91	108.20
12	B	2700	A	O4'-C1'-N9	7.14	113.91	108.20
12	B	415	A	P-O3'-C3'	-7.14	111.14	119.70
12	B	1542	U	C5-C4-O4	-7.14	121.62	125.90
12	B	1887	C	C5-C4-N4	-7.14	115.20	120.20
12	B	2603	G	C4-C5-C6	7.14	123.08	118.80
12	B	2781	A	C5-C6-N6	-7.14	117.99	123.70
12	B	1518	C	N1-C2-N3	-7.14	114.20	119.20
12	B	1914	C	N3-C4-C5	-7.14	119.05	121.90
12	B	2428	G	P-O3'-C3'	7.14	128.26	119.70
12	B	2759	G	C5-N7-C8	7.14	107.87	104.30
15	E	49	ARG	NE-CZ-NH1	-7.14	116.73	120.30
11	A	55	U	P-O5'-C5'	7.13	132.31	120.90
12	B	277	G	C5-C6-N1	-7.13	107.93	111.50
12	B	466	A	C5-C6-N1	-7.13	114.13	117.70
12	B	1020	A	C8-N9-C4	-7.13	102.95	105.80
12	B	1159	U	N3-C4-O4	7.13	124.39	119.40
12	B	1372	U	O4'-C1'-N1	7.13	113.91	108.20
12	B	1424	G	N1-C2-N2	-7.13	109.78	116.20
12	B	2404	U	C5-C6-N1	7.13	126.27	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2550	G	N1-C2-N3	-7.13	119.62	123.90
12	B	2887	A	N1-C6-N6	7.13	122.88	118.60
24	N	72	ASP	CB-CG-OD1	7.13	124.72	118.30
12	B	1071	G	N3-C4-C5	-7.13	125.03	128.60
12	B	1374	G	C8-N9-C4	-7.13	103.55	106.40
12	B	1507	C	C6-N1-C2	-7.13	117.45	120.30
12	B	2163	A	C4-C5-C6	7.13	120.57	117.00
12	B	449	A	C4'-C3'-C2'	-7.13	95.47	102.60
12	B	858	G	O4'-C1'-N9	7.13	113.91	108.20
12	B	1668	A	C8-N9-C4	-7.13	102.95	105.80
12	B	2282	G	C4'-C3'-C2'	7.13	109.73	102.60
12	B	183	C	N1-C2-N3	7.13	124.19	119.20
12	B	2015	A	C6-C5-N7	-7.13	127.31	132.30
12	B	2606	C	C4'-C3'-C2'	-7.13	95.47	102.60
12	B	384	A	N7-C8-N9	7.13	117.36	113.80
12	B	1417	C	P-O5'-C5'	7.13	132.31	120.90
12	B	2239	G	O4'-C1'-N9	7.13	113.90	108.20
12	B	142	A	C4-C5-N7	-7.13	107.14	110.70
12	B	191	A	C3'-C2'-C1'	-7.13	95.80	101.50
12	B	945	A	C4-C5-C6	7.13	120.56	117.00
12	B	1431	A	O4'-C1'-N9	7.13	113.90	108.20
12	B	2421	G	N1-C6-O6	7.13	124.18	119.90
12	B	604	G	C8-N9-C1'	7.12	136.26	127.00
12	B	790	U	N3-C4-C5	7.12	118.88	114.60
12	B	124	G	C5-C6-O6	-7.12	124.33	128.60
12	B	237	C	O4'-C1'-N1	7.12	113.90	108.20
12	B	238	C	C2-N3-C4	7.12	123.46	119.90
12	B	346	A	N7-C8-N9	7.12	117.36	113.80
12	B	526	A	C6-C5-N7	7.12	137.29	132.30
12	B	1254	A	N1-C6-N6	7.12	122.87	118.60
12	B	92	U	N3-C4-O4	-7.12	114.42	119.40
12	B	1057	A	C5-C6-N1	-7.12	114.14	117.70
12	B	1805	A	O4'-C1'-N9	7.12	113.90	108.20
27	Q	32	ARG	NE-CZ-NH2	7.12	123.86	120.30
12	B	388	G	O4'-C1'-N9	7.12	113.90	108.20
12	B	575	A	O4'-C1'-N9	7.12	113.90	108.20
12	B	810	U	N3-C4-C5	-7.12	110.33	114.60
12	B	838	C	C5-C6-N1	7.12	124.56	121.00
12	B	2082	A	C4-C5-C6	7.12	120.56	117.00
12	B	1358	G	C5-N7-C8	7.12	107.86	104.30
12	B	1817	G	C6-C5-N7	-7.12	126.13	130.40
12	B	1886	U	N3-C4-O4	7.12	124.38	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2042	A	N1-C6-N6	7.12	122.87	118.60
12	B	2304	G	N1-C6-O6	7.12	124.17	119.90
12	B	608	A	O4'-C1'-N9	7.11	113.89	108.20
12	B	633	A	N3-C4-C5	-7.11	121.82	126.80
12	B	2505	G	N3-C2-N2	7.11	124.88	119.90
12	B	2728	U	P-O3'-C3'	7.11	128.24	119.70
12	B	2823	A	N7-C8-N9	-7.11	110.24	113.80
12	B	2865	U	O4'-C1'-N1	7.11	113.89	108.20
12	B	2822	G	N3-C4-C5	7.11	132.16	128.60
12	B	71	A	C5-C6-N1	-7.11	114.14	117.70
12	B	334	C	C5-C6-N1	7.11	124.56	121.00
12	B	380	G	N1-C6-O6	7.11	124.17	119.90
12	B	628	G	N1-C2-N3	-7.11	119.63	123.90
12	B	1309	G	O4'-C1'-N9	7.11	113.89	108.20
12	B	2367	G	O4'-C1'-N9	7.11	113.89	108.20
12	B	2379	G	C6-N1-C2	-7.11	120.83	125.10
12	B	2475	C	C5-C4-N4	-7.11	115.22	120.20
12	B	2746	U	O4'-C1'-N1	7.11	113.89	108.20
12	B	2186	G	C5-N7-C8	7.11	107.86	104.30
12	B	2506	U	O4'-C1'-N1	7.11	113.89	108.20
12	B	82	U	O4'-C1'-N1	7.11	113.89	108.20
12	B	383	C	C5-C6-N1	7.11	124.55	121.00
12	B	707	G	C5-C6-O6	-7.11	124.34	128.60
12	B	1125	G	N7-C8-N9	7.11	116.65	113.10
12	B	1407	G	O4'-C1'-N9	7.11	113.89	108.20
12	B	1759	A	C8-N9-C4	-7.11	102.96	105.80
12	B	1896	G	C2-N3-C4	-7.11	108.35	111.90
12	B	1955	U	O4'-C1'-N1	7.11	113.89	108.20
12	B	2557	G	C4-C5-N7	-7.11	107.96	110.80
28	R	77	PHE	CB-CG-CD2	-7.11	115.82	120.80
11	A	48	U	N3-C4-C5	-7.11	110.34	114.60
12	B	984	A	C4-C5-C6	7.11	120.55	117.00
12	B	2080	A	C4-C5-N7	-7.11	107.15	110.70
12	B	2394	C	C5'-C4'-O4'	7.11	117.63	109.10
12	B	2512	C	C1'-O4'-C4'	-7.11	104.22	109.90
12	B	2524	G	N3-C4-N9	-7.11	121.74	126.00
23	M	31	PHE	CB-CG-CD1	-7.11	115.83	120.80
11	A	108	A	P-O3'-C3'	7.10	128.22	119.70
12	B	807	U	C2-N3-C4	-7.10	122.74	127.00
12	B	1286	A	C4-C5-N7	-7.10	107.15	110.70
12	B	1667	G	C1'-O4'-C4'	-7.10	104.22	109.90
12	B	2681	C	C2-N3-C4	7.10	123.45	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	408	G	C4'-C3'-C2'	-7.10	95.50	102.60
12	B	769	U	C2-N3-C4	-7.10	122.74	127.00
12	B	916	G	N1-C2-N2	-7.10	109.81	116.20
12	B	1093	G	N1-C6-O6	7.10	124.16	119.90
12	B	1501	G	C5-C6-O6	-7.10	124.34	128.60
12	B	1543	G	P-O3'-C3'	7.10	128.22	119.70
12	B	2093	G	O4'-C1'-N9	7.10	113.88	108.20
12	B	2130	U	C6-N1-C1'	-7.10	111.25	121.20
12	B	2282	G	N1-C2-N2	-7.10	109.81	116.20
12	B	2654	A	C4-C5-C6	7.10	120.55	117.00
12	B	2706	A	C1'-O4'-C4'	-7.10	104.22	109.90
11	A	78	A	N7-C8-N9	7.10	117.35	113.80
12	B	98	G	N3-C2-N2	7.10	124.87	119.90
12	B	614	A	C4-C5-N7	-7.10	107.15	110.70
12	B	1115	G	C5'-C4'-O4'	7.10	117.62	109.10
12	B	1691	C	O4'-C1'-N1	7.10	113.88	108.20
12	B	2226	C	N3-C4-C5	-7.10	119.06	121.90
12	B	2487	G	N7-C8-N9	-7.10	109.55	113.10
12	B	17	G	O4'-C1'-N9	7.10	113.88	108.20
12	B	169	G	N7-C8-N9	-7.10	109.55	113.10
12	B	236	C	N3-C2-O2	-7.10	116.93	121.90
12	B	309	A	N7-C8-N9	7.10	117.35	113.80
12	B	684	G	N3-C2-N2	7.10	124.87	119.90
12	B	719	C	N1-C2-O2	7.10	123.16	118.90
12	B	1463	C	C6-N1-C2	7.10	123.14	120.30
12	B	2487	G	C6-C5-N7	-7.10	126.14	130.40
12	B	728	G	C8-N9-C4	7.10	109.24	106.40
12	B	1774	C	C4-C5-C6	7.10	120.95	117.40
12	B	2411	A	C4-C5-C6	7.10	120.55	117.00
12	B	2753	A	C5-C6-N6	-7.10	118.02	123.70
19	I	126	ARG	NE-CZ-NH1	-7.10	116.75	120.30
29	S	75	PHE	CB-CG-CD1	7.10	125.77	120.80
12	B	468	G	C2-N3-C4	7.09	115.45	111.90
12	B	549	G	C5-C6-O6	-7.09	124.34	128.60
12	B	582	A	N1-C2-N3	7.09	132.85	129.30
12	B	1086	A	C4-C5-N7	-7.09	107.15	110.70
12	B	1580	A	C4-C5-C6	7.09	120.55	117.00
12	B	1827	U	C6-N1-C2	-7.09	116.74	121.00
12	B	2225	A	N7-C8-N9	-7.09	110.25	113.80
12	B	424	G	N3-C4-N9	7.09	130.26	126.00
12	B	1205	A	C5-C6-N6	-7.09	118.03	123.70
12	B	1862	G	C3'-C2'-C1'	-7.09	95.83	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1063	G	C5-N7-C8	7.09	107.85	104.30
12	B	1365	A	O4'-C1'-N9	7.09	113.87	108.20
12	B	1632	A	O4'-C1'-N9	7.09	113.87	108.20
12	B	1808	A	O4'-C1'-C2'	-7.09	98.71	105.80
12	B	2146	C	C2-N3-C4	7.09	123.45	119.90
12	B	448	U	O4'-C1'-N1	7.09	113.87	108.20
12	B	722	A	C8-N9-C4	-7.09	102.96	105.80
12	B	921	C	N3-C4-N4	7.09	122.96	118.00
12	B	1285	A	N1-C6-N6	7.09	122.85	118.60
12	B	1432	G	C5-C6-N1	-7.09	107.96	111.50
12	B	1699	G	O4'-C1'-C2'	-7.09	98.71	105.80
12	B	2387	U	C5-C6-N1	7.09	126.25	122.70
12	B	2669	G	N3-C4-C5	7.09	132.15	128.60
12	B	153	U	N3-C4-C5	-7.09	110.35	114.60
12	B	710	U	C4'-C3'-C2'	-7.09	95.51	102.60
12	B	1526	C	C2-N3-C4	7.09	123.44	119.90
12	B	2802	G	C4-C5-C6	7.09	123.05	118.80
12	B	302	C	C4-C5-C6	-7.09	113.86	117.40
12	B	1252	G	N3-C2-N2	7.09	124.86	119.90
12	B	1336	A	N3-C4-N9	7.09	133.07	127.40
12	B	1703	G	N1-C6-O6	7.09	124.15	119.90
12	B	2573	C	O4'-C1'-N1	7.09	113.87	108.20
12	B	2850	A	C8-N9-C4	-7.09	102.97	105.80
11	A	14	U	O4'-C1'-N1	7.08	113.87	108.20
12	B	348	A	C4-C5-N7	-7.08	107.16	110.70
12	B	1076	C	N1-C2-N3	-7.08	114.24	119.20
12	B	2422	C	N1-C2-N3	-7.08	114.24	119.20
11	A	103	U	N1-C1'-C2'	-7.08	104.21	112.00
12	B	752	A	C5-C6-N6	-7.08	118.03	123.70
12	B	997	G	N1-C6-O6	7.08	124.15	119.90
12	B	1075	C	O4'-C1'-N1	7.08	113.87	108.20
12	B	2081	U	C6-N1-C2	-7.08	116.75	121.00
12	B	2509	G	N1-C6-O6	7.08	124.15	119.90
12	B	2517	C	C2-N1-C1'	7.08	126.59	118.80
12	B	2581	G	C4-N9-C1'	7.08	135.71	126.50
12	B	2767	C	C5-C6-N1	7.08	124.54	121.00
12	B	629	G	N3-C2-N2	7.08	124.86	119.90
12	B	753	A	O4'-C1'-N9	7.08	113.86	108.20
12	B	1112	G	N1-C6-O6	7.08	124.15	119.90
12	B	1510	G	C5-C6-O6	-7.08	124.35	128.60
12	B	1515	A	N9-C1'-C2'	-7.08	104.21	112.00
12	B	1911	U	O4'-C1'-N1	7.08	113.86	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1912	A	C5'-C4'-C3'	7.08	127.33	116.00
12	B	1997	C	N1-C2-N3	-7.08	114.24	119.20
12	B	2810	A	C4-C5-N7	-7.08	107.16	110.70
12	B	2092	U	C1'-O4'-C4'	7.08	115.56	109.90
11	A	112	G	N7-C8-N9	-7.08	109.56	113.10
12	B	717	C	C1'-O4'-C4'	-7.08	104.24	109.90
12	B	907	G	N1-C2-N3	-7.08	119.65	123.90
12	B	1459	G	O5'-P-OP2	7.08	119.19	110.70
12	B	1498	C	C5-C6-N1	7.08	124.54	121.00
12	B	2714	G	O4'-C1'-N9	7.08	113.86	108.20
14	D	169	ARG	NE-CZ-NH2	7.08	123.84	120.30
11	A	24	G	N1-C6-O6	7.08	124.15	119.90
12	B	194	G	P-O3'-C3'	-7.08	111.21	119.70
12	B	545	U	N1-C2-N3	7.08	119.15	114.90
12	B	1609	A	C3'-C2'-C1'	-7.08	95.84	101.50
12	B	2244	U	N1-C2-N3	-7.08	110.65	114.90
12	B	2527	C	O4'-C1'-N1	7.08	113.86	108.20
12	B	2838	G	C4-C5-N7	7.08	113.63	110.80
12	B	9	G	C5-C6-N1	-7.08	107.96	111.50
12	B	1026	G	C1'-O4'-C4'	-7.08	104.24	109.90
20	J	122	LEU	CB-CG-CD1	-7.08	98.97	111.00
12	B	222	A	C4-C5-C6	7.07	120.54	117.00
12	B	1036	G	N9-C1'-C2'	-7.07	104.22	112.00
12	B	1551	A	N1-C2-N3	-7.07	125.76	129.30
12	B	1743	G	C6-C5-N7	-7.07	126.16	130.40
12	B	114	U	N1-C2-N3	7.07	119.14	114.90
12	B	648	G	C4-C5-N7	7.07	113.63	110.80
12	B	2244	U	O5'-P-OP2	-7.07	99.33	105.70
12	B	2603	G	C8-N9-C4	-7.07	103.57	106.40
11	A	22	U	N3-C4-O4	7.07	124.35	119.40
12	B	927	A	O4'-C1'-N9	7.07	113.86	108.20
12	B	1973	G	N3-C4-N9	-7.07	121.76	126.00
12	B	2363	G	P-O3'-C3'	-7.07	111.22	119.70
12	B	2416	C	N3-C4-C5	-7.07	119.07	121.90
17	G	152	ARG	NE-CZ-NH2	-7.07	116.77	120.30
12	B	410	G	O4'-C1'-N9	7.07	113.86	108.20
11	A	62	C	C6-N1-C2	-7.07	117.47	120.30
12	B	493	G	C4'-C3'-C2'	-7.07	95.53	102.60
12	B	638	G	C8-N9-C4	-7.07	103.57	106.40
12	B	1033	U	N3-C4-O4	7.07	124.35	119.40
12	B	1187	G	O4'-C1'-N9	7.07	113.85	108.20
12	B	1529	G	C2-N3-C4	7.07	115.43	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1757	A	C5-C6-N1	-7.07	114.17	117.70
12	B	2103	C	N3-C4-N4	7.07	122.95	118.00
12	B	2338	C	N3-C2-O2	7.07	126.85	121.90
12	B	2805	C	N3-C4-C5	-7.07	119.07	121.90
12	B	1237	A	P-O3'-C3'	7.07	128.18	119.70
12	B	1635	A	C5-C6-N6	-7.07	118.05	123.70
12	B	2067	G	C6-C5-N7	-7.07	126.16	130.40
12	B	2297	A	N9-C4-C5	7.07	108.63	105.80
12	B	2829	A	N1-C2-N3	7.07	132.83	129.30
12	B	24	G	N3-C4-C5	-7.06	125.07	128.60
12	B	522	A	C6-C5-N7	7.06	137.25	132.30
12	B	980	A	C5-C6-N6	-7.06	118.05	123.70
12	B	2431	U	C5-C6-N1	7.06	126.23	122.70
12	B	2710	C	C4'-C3'-C2'	-7.06	95.54	102.60
11	A	26	C	C4'-C3'-C2'	-7.06	95.54	102.60
12	B	1094	U	O4'-C1'-N1	7.06	113.85	108.20
12	B	1518	C	C2-N3-C4	7.06	123.43	119.90
12	B	1551	A	C5-C6-N1	-7.06	114.17	117.70
12	B	2366	A	O4'-C1'-N9	7.06	113.85	108.20
12	B	2648	G	C5-C6-O6	-7.06	124.36	128.60
12	B	2764	A	C4-C5-C6	7.06	120.53	117.00
12	B	913	U	O4'-C1'-N1	7.06	113.85	108.20
12	B	1590	A	C5-C6-N6	-7.06	118.05	123.70
12	B	1815	A	N1-C2-N3	7.06	132.83	129.30
22	L	46	VAL	CA-CB-CG2	7.06	121.49	110.90
12	B	48	G	C5-C6-N1	7.06	115.03	111.50
12	B	309	A	C2-N3-C4	-7.06	107.07	110.60
12	B	1157	G	C4-C5-N7	7.06	113.62	110.80
12	B	1533	C	C6-N1-C2	-7.06	117.48	120.30
12	B	1546	G	O4'-C1'-N9	7.06	113.85	108.20
12	B	1677	A	C5-N7-C8	7.06	107.43	103.90
12	B	1984	G	N7-C8-N9	-7.06	109.57	113.10
11	A	84	G	N9-C4-C5	7.06	108.22	105.40
12	B	619	G	C6-N1-C2	7.06	129.33	125.10
12	B	645	C	C2-N1-C1'	7.06	126.56	118.80
12	B	982	C	C5-C6-N1	7.06	124.53	121.00
12	B	1351	C	N3-C4-N4	7.06	122.94	118.00
13	C	189	ALA	N-CA-CB	7.06	119.98	110.10
12	B	1076	C	C5-C6-N1	7.06	124.53	121.00
12	B	1576	U	C5'-C4'-O4'	7.06	117.57	109.10
12	B	1646	C	C2-N1-C1'	7.06	126.56	118.80
12	B	2060	A	C5-C6-N1	-7.06	114.17	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	188	G	C6-N1-C2	7.05	129.33	125.10
12	B	1278	C	C2-N3-C4	7.05	123.43	119.90
12	B	1844	C	C3'-C2'-C1'	-7.05	95.86	101.50
12	B	2109	U	O4'-C1'-N1	7.05	113.84	108.20
12	B	648	G	O4'-C1'-N9	7.05	113.84	108.20
12	B	704	G	N1-C2-N2	-7.05	109.86	116.20
12	B	1800	C	N3-C4-N4	7.05	122.94	118.00
12	B	2414	G	C5-C6-N1	-7.05	107.97	111.50
12	B	2836	U	N3-C2-O2	7.05	127.14	122.20
13	C	247	TRP	CD1-CG-CD2	7.05	111.94	106.30
12	B	430	A	C5-C6-N6	-7.05	118.06	123.70
12	B	906	U	O4'-C4'-C3'	-7.05	96.95	104.00
12	B	1462	C	N3-C4-C5	-7.05	119.08	121.90
12	B	2749	A	C2-N3-C4	-7.05	107.08	110.60
20	J	125	TYR	CB-CG-CD2	-7.05	116.77	121.00
12	B	142	A	O4'-C4'-C3'	-7.05	96.95	104.00
12	B	102	U	C5-C4-O4	7.05	130.13	125.90
12	B	2557	G	C8-N9-C4	-7.05	103.58	106.40
11	A	52	A	C4-C5-C6	7.04	120.52	117.00
12	B	54	G	N9-C4-C5	-7.04	102.58	105.40
12	B	1689	A	C5-C6-N1	-7.04	114.18	117.70
12	B	2627	G	OP1-P-OP2	-7.04	109.03	119.60
12	B	88	G	P-O5'-C5'	-7.04	109.63	120.90
12	B	369	U	N1-C2-N3	7.04	119.13	114.90
12	B	677	A	C5-C6-N6	-7.04	118.06	123.70
12	B	718	A	N1-C2-N3	7.04	132.82	129.30
12	B	1243	C	C5-C4-N4	-7.04	115.27	120.20
12	B	2586	U	O4'-C1'-N1	7.04	113.83	108.20
12	B	1631	G	C8-N9-C4	-7.04	103.58	106.40
12	B	2125	G	N3-C4-C5	-7.04	125.08	128.60
12	B	2736	A	C4-C5-C6	7.04	120.52	117.00
12	B	180	G	C5-C6-N1	-7.04	107.98	111.50
12	B	1000	A	C3'-C2'-C1'	-7.04	95.87	101.50
12	B	1721	G	C5-C6-O6	-7.04	124.38	128.60
12	B	2159	G	C8-N9-C4	-7.04	103.58	106.40
10	9	200	VAL	CA-CB-CG2	-7.04	100.34	110.90
12	B	150	U	C2-N3-C4	7.04	131.22	127.00
12	B	919	U	C3'-C2'-C1'	7.04	107.13	101.50
12	B	1178	C	P-O3'-C3'	7.04	128.15	119.70
12	B	1228	G	N7-C8-N9	-7.04	109.58	113.10
12	B	1596	A	C6-C5-N7	-7.04	127.37	132.30
12	B	2396	G	C3'-C2'-C1'	-7.04	95.87	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	363	G	N3-C2-N2	7.04	124.83	119.90
12	B	476	G	C5-C6-N1	-7.04	107.98	111.50
12	B	842	U	C3'-C2'-C1'	-7.04	95.87	101.50
12	B	1385	A	C5-C6-N1	-7.04	114.18	117.70
15	E	44	ARG	N-CA-CB	7.04	123.27	110.60
28	R	21	ARG	NE-CZ-NH1	-7.04	116.78	120.30
30	T	3	ARG	NE-CZ-NH2	-7.04	116.78	120.30
12	B	342	A	N1-C6-N6	7.04	122.82	118.60
12	B	474	G	O4'-C1'-N9	7.04	113.83	108.20
12	B	1289	C	C5'-C4'-C3'	-7.04	104.74	116.00
12	B	1315	C	C4-C5-C6	-7.04	113.88	117.40
12	B	1666	G	N3-C4-C5	7.04	132.12	128.60
12	B	1806	C	C5-C4-N4	-7.04	115.28	120.20
12	B	1907	G	C2-N3-C4	-7.04	108.38	111.90
12	B	2063	C	P-O5'-C5'	-7.04	109.64	120.90
12	B	2071	A	C4-C5-N7	-7.04	107.18	110.70
12	B	2525	G	C8-N9-C4	-7.04	103.59	106.40
12	B	389	G	O4'-C1'-N9	7.03	113.83	108.20
12	B	453	A	C5-C6-N6	-7.03	118.07	123.70
12	B	1002	G	C5-N7-C8	-7.03	100.78	104.30
12	B	1109	C	C5-C4-N4	-7.03	115.28	120.20
12	B	1633	G	N3-C2-N2	7.03	124.82	119.90
12	B	2490	G	C6-N1-C2	-7.03	120.88	125.10
12	B	2491	U	O4'-C1'-N1	7.03	113.83	108.20
12	B	1604	C	C5-C6-N1	-7.03	117.48	121.00
12	B	2646	C	N3-C4-C5	-7.03	119.09	121.90
11	A	22	U	C6-N1-C2	-7.03	116.78	121.00
12	B	201	C	C2-N3-C4	7.03	123.42	119.90
12	B	1154	G	C6-C5-N7	-7.03	126.18	130.40
12	B	1439	A	C6-N1-C2	7.03	122.82	118.60
12	B	1584	U	O4'-C1'-N1	7.03	113.82	108.20
11	A	115	A	N1-C6-N6	7.03	122.82	118.60
12	B	454	A	C8-N9-C4	-7.03	102.99	105.80
12	B	1413	A	C8-N9-C4	-7.03	102.99	105.80
12	B	1863	G	O4'-C1'-N9	7.03	113.82	108.20
11	A	67	G	N9-C4-C5	7.03	108.21	105.40
12	B	1311	G	N7-C8-N9	7.03	116.61	113.10
12	B	2281	A	C5-C6-N6	-7.03	118.08	123.70
12	B	1620	G	C6-C5-N7	-7.03	126.19	130.40
12	B	1910	G	N1-C6-O6	7.03	124.12	119.90
12	B	2158	A	C8-N9-C4	-7.03	102.99	105.80
12	B	2430	A	C8-N9-C4	-7.03	102.99	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2596	U	C5-C6-N1	-7.03	119.19	122.70
12	B	196	A	O4'-C1'-N9	7.02	113.82	108.20
12	B	368	A	O4'-C1'-N9	7.02	113.82	108.20
12	B	182	A	O4'-C1'-N9	7.02	113.82	108.20
12	B	946	C	N3-C4-C5	-7.02	119.09	121.90
12	B	1281	G	N3-C4-C5	7.02	132.11	128.60
12	B	1731	G	C6-C5-N7	-7.02	126.19	130.40
12	B	1732	C	C3'-C2'-C1'	-7.02	95.88	101.50
12	B	1819	A	C5-C6-N1	-7.02	114.19	117.70
12	B	2123	G	C5-N7-C8	-7.02	100.79	104.30
12	B	2871	U	O4'-C1'-N1	7.02	113.82	108.20
12	B	1952	A	N3-C4-C5	-7.02	121.89	126.80
12	B	215	G	C6-C5-N7	-7.02	126.19	130.40
12	B	290	U	O4'-C1'-N1	7.02	113.82	108.20
12	B	1366	A	C5-C6-N1	-7.02	114.19	117.70
12	B	1378	A	O4'-C1'-N9	7.02	113.82	108.20
12	B	1625	C	P-O5'-C5'	7.02	132.13	120.90
12	B	2354	C	P-O5'-C5'	-7.02	109.67	120.90
12	B	2684	U	O4'-C1'-N1	7.02	113.82	108.20
12	B	137	U	O4'-C4'-C3'	-7.02	96.98	104.00
12	B	1395	A	C6-C5-N7	-7.02	127.39	132.30
12	B	1713	A	C5'-C4'-O4'	7.02	117.52	109.10
12	B	2262	U	C6-N1-C2	-7.02	116.79	121.00
14	D	199	SER	N-CA-CB	7.02	121.03	110.50
12	B	291	G	C8-N9-C4	-7.02	103.59	106.40
12	B	422	A	N3-C4-C5	-7.02	121.89	126.80
12	B	1402	U	N3-C4-O4	7.01	124.31	119.40
12	B	2235	G	C4-C5-N7	7.01	113.61	110.80
12	B	2587	A	N3-C4-C5	-7.01	121.89	126.80
12	B	2637	U	C5'-C4'-C3'	-7.01	104.78	116.00
33	Y	13	ARG	NE-CZ-NH1	7.01	123.81	120.30
12	B	51	G	C5-C6-N1	7.01	115.01	111.50
12	B	1849	G	C5-C6-N1	-7.01	107.99	111.50
12	B	2886	A	C8-N9-C4	7.01	108.61	105.80
12	B	270	A	O4'-C1'-N9	7.01	113.81	108.20
12	B	366	C	O4'-C1'-N1	7.01	113.81	108.20
12	B	649	G	C2-N3-C4	-7.01	108.39	111.90
12	B	1511	G	N3-C4-C5	-7.01	125.09	128.60
12	B	1789	A	N3-C4-N9	7.01	133.01	127.40
12	B	1890	A	C6-C5-N7	-7.01	127.39	132.30
12	B	2100	G	C5-N7-C8	-7.01	100.79	104.30
12	B	2346	A	C2-N3-C4	-7.01	107.09	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2572	A	C5-C6-N6	-7.01	118.09	123.70
12	B	1004	U	O4'-C1'-N1	7.01	113.81	108.20
12	B	1786	A	C5-C6-N6	-7.01	118.09	123.70
12	B	2621	G	N1-C2-N3	-7.01	119.69	123.90
12	B	434	U	N3-C4-O4	7.01	124.31	119.40
12	B	2734	A	N3-C4-C5	7.01	131.71	126.80
12	B	489	G	C5-C6-O6	-7.01	124.40	128.60
12	B	792	A	C4-C5-C6	7.01	120.50	117.00
12	B	1744	A	C4-C5-C6	7.01	120.50	117.00
12	B	2098	U	C5-C6-N1	7.01	126.20	122.70
12	B	2425	A	O4'-C4'-C3'	7.01	111.70	106.10
12	B	2561	U	C5-C6-N1	7.01	126.20	122.70
12	B	2800	A	N7-C8-N9	7.01	117.30	113.80
12	B	538	A	C4-C5-N7	-7.00	107.20	110.70
12	B	619	G	N3-C2-N2	7.00	124.80	119.90
12	B	1620	G	C2-N3-C4	7.00	115.40	111.90
12	B	1746	A	C5-C6-N6	-7.00	118.10	123.70
12	B	1784	A	O4'-C1'-N9	7.00	113.80	108.20
12	B	1920	C	N3-C4-C5	-7.00	119.10	121.90
12	B	1939	U	C4-C5-C6	-7.00	115.50	119.70
12	B	2531	A	C4'-C3'-C2'	-7.00	95.59	102.60
11	A	54	G	C5-C6-O6	-7.00	124.40	128.60
12	B	205	G	C3'-C2'-C1'	-7.00	95.90	101.50
12	B	261	G	C5-N7-C8	7.00	107.80	104.30
12	B	390	U	O4'-C1'-N1	7.00	113.80	108.20
12	B	774	G	O4'-C1'-N9	7.00	113.80	108.20
12	B	1351	C	N3-C4-C5	-7.00	119.10	121.90
12	B	1903	G	C5-C6-O6	-7.00	124.40	128.60
12	B	2658	C	C6-N1-C2	-7.00	117.50	120.30
12	B	2894	G	C5-C6-O6	-7.00	124.40	128.60
12	B	83	A	N9-C4-C5	-7.00	103.00	105.80
12	B	856	G	C5'-C4'-C3'	-7.00	104.80	116.00
12	B	1262	A	C5-C6-N6	-7.00	118.10	123.70
12	B	1302	A	N1-C6-N6	7.00	122.80	118.60
12	B	1530	G	N1-C6-O6	7.00	124.10	119.90
12	B	2397	G	N3-C2-N2	-7.00	115.00	119.90
12	B	81	G	N3-C4-C5	-7.00	125.10	128.60
12	B	406	G	N1-C6-O6	7.00	124.10	119.90
12	B	1252	G	C5-N7-C8	7.00	107.80	104.30
12	B	1268	A	C8-N9-C4	-7.00	103.00	105.80
12	B	1990	C	C2-N3-C4	-7.00	116.40	119.90
12	B	67	U	C4'-C3'-C2'	-7.00	95.60	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	494	G	N7-C8-N9	-7.00	109.60	113.10
12	B	618	G	N3-C4-N9	-7.00	121.80	126.00
12	B	781	A	C8-N9-C4	-7.00	103.00	105.80
12	B	1184	U	C3'-C2'-C1'	-7.00	95.90	101.50
12	B	1299	G	C5-C6-N1	-7.00	108.00	111.50
12	B	1499	C	P-O3'-C3'	7.00	128.10	119.70
12	B	1695	G	C8-N9-C1'	-7.00	117.90	127.00
12	B	2231	U	O4'-C1'-N1	7.00	113.80	108.20
12	B	2399	G	C6-C5-N7	-7.00	126.20	130.40
12	B	199	A	N1-C2-N3	-7.00	125.80	129.30
12	B	602	A	C6-C5-N7	-7.00	127.40	132.30
12	B	1384	A	C5-N7-C8	7.00	107.40	103.90
12	B	1622	G	C5-C6-O6	-7.00	124.40	128.60
12	B	1679	A	C5-C6-N1	-7.00	114.20	117.70
12	B	1681	G	N3-C2-N2	7.00	124.80	119.90
12	B	2217	G	N1-C2-N3	-7.00	119.70	123.90
12	B	1028	A	N1-C2-N3	-7.00	125.80	129.30
12	B	1916	A	C4-C5-C6	7.00	120.50	117.00
12	B	2050	C	N3-C4-N4	7.00	122.90	118.00
12	B	2725	A	C5-C6-N6	-7.00	118.10	123.70
12	B	376	G	C4-C5-N7	-6.99	108.00	110.80
12	B	1404	C	N1-C2-N3	6.99	124.09	119.20
12	B	1406	U	N3-C4-O4	6.99	124.30	119.40
12	B	2247	A	C5-C6-N1	-6.99	114.20	117.70
12	B	2542	A	C8-N9-C4	-6.99	103.00	105.80
12	B	1636	U	C4-C5-C6	-6.99	115.50	119.70
12	B	1710	G	C4-C5-C6	6.99	123.00	118.80
12	B	1735	A	C8-N9-C4	-6.99	103.00	105.80
12	B	2777	G	C6-C5-N7	-6.99	126.20	130.40
12	B	1	G	C8-N9-C4	-6.99	103.60	106.40
12	B	253	C	N3-C4-C5	-6.99	119.10	121.90
12	B	288	U	C5-C6-N1	-6.99	119.20	122.70
12	B	1241	A	O4'-C1'-N9	6.99	113.79	108.20
12	B	1779	U	C4'-C3'-C2'	-6.99	95.61	102.60
12	B	1940	U	C6-N1-C2	6.99	125.19	121.00
12	B	36	G	N1-C2-N3	-6.99	119.71	123.90
12	B	559	G	O4'-C1'-N9	6.99	113.79	108.20
12	B	685	A	N1-C6-N6	6.99	122.79	118.60
12	B	1177	G	C5-N7-C8	6.99	107.79	104.30
12	B	1223	G	C1'-O4'-C4'	-6.99	104.31	109.90
12	B	1831	G	C6-C5-N7	-6.99	126.21	130.40
12	B	1919	A	P-O5'-C5'	6.99	132.08	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	309	A	C5-C6-N1	-6.99	114.21	117.70
12	B	716	A	N1-C6-N6	6.99	122.79	118.60
12	B	730	A	C4'-C3'-C2'	-6.99	95.61	102.60
12	B	1039	A	N7-C8-N9	6.99	117.29	113.80
12	B	92	U	C5'-C4'-O4'	6.99	117.48	109.10
12	B	159	G	N9-C4-C5	-6.99	102.61	105.40
12	B	574	A	C4-C5-N7	-6.99	107.21	110.70
12	B	638	G	N1-C2-N3	-6.99	119.71	123.90
12	B	782	A	C5-C6-N6	-6.99	118.11	123.70
12	B	1125	G	C8-N9-C4	-6.99	103.61	106.40
12	B	1392	A	C5-C6-N6	-6.99	118.11	123.70
12	B	2006	C	C2-N3-C4	6.99	123.39	119.90
12	B	2679	A	C4-C5-N7	-6.99	107.21	110.70
12	B	2899	A	C8-N9-C4	-6.99	103.01	105.80
25	O	33	ARG	NE-CZ-NH1	6.99	123.79	120.30
27	Q	24	TYR	CB-CG-CD2	-6.99	116.81	121.00
12	B	1020	A	C5-C6-N6	-6.98	118.11	123.70
12	B	2369	A	C2-N3-C4	-6.98	107.11	110.60
12	B	2883	A	C4-C5-C6	6.98	120.49	117.00
12	B	1051	G	N3-C2-N2	6.98	124.79	119.90
12	B	1598	A	N1-C2-N3	6.98	132.79	129.30
12	B	1717	A	O4'-C1'-N9	6.98	113.78	108.20
12	B	2336	A	C4-C5-C6	6.98	120.49	117.00
12	B	2703	C	O4'-C1'-N1	6.98	113.79	108.20
12	B	1597	A	C4-C5-C6	6.98	120.49	117.00
12	B	2038	G	C5-C6-O6	-6.98	124.41	128.60
12	B	2178	C	C4'-C3'-C2'	-6.98	95.62	102.60
12	B	2429	G	C5-N7-C8	6.98	107.79	104.30
12	B	2454	G	N1-C6-O6	6.98	124.09	119.90
12	B	2781	A	C4'-C3'-C2'	-6.98	95.62	102.60
16	F	82	TYR	CB-CG-CD2	-6.98	116.81	121.00
12	B	806	C	C5-C4-N4	-6.98	115.31	120.20
12	B	1221	C	N3-C4-N4	6.98	122.89	118.00
12	B	2297	A	N3-C4-C5	-6.98	121.92	126.80
12	B	2331	G	C5-N7-C8	6.98	107.79	104.30
12	B	2668	G	C4'-C3'-C2'	-6.98	95.62	102.60
12	B	2721	A	C4-C5-C6	6.98	120.49	117.00
12	B	484	C	N3-C4-N4	6.98	122.88	118.00
12	B	700	G	C8-N9-C4	-6.98	103.61	106.40
12	B	900	A	C4'-C3'-C2'	-6.98	95.62	102.60
12	B	964	C	C2-N3-C4	6.98	123.39	119.90
12	B	1552	A	C6-N1-C2	6.98	122.79	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2116	G	P-O3'-C3'	6.98	128.07	119.70
12	B	2364	C	N3-C4-N4	6.98	122.88	118.00
11	A	105	G	C6-C5-N7	-6.98	126.21	130.40
12	B	390	U	P-O5'-C5'	6.98	132.06	120.90
12	B	442	G	C8-N9-C4	-6.98	103.61	106.40
12	B	632	A	N1-C2-N3	6.98	132.79	129.30
12	B	1021	A	C2-N3-C4	6.97	114.09	110.60
12	B	2495	G	N7-C8-N9	6.97	116.59	113.10
12	B	2729	G	P-O3'-C3'	6.97	128.07	119.70
12	B	2801	G	N3-C4-C5	-6.97	125.11	128.60
12	B	366	C	N1-C2-O2	6.97	123.08	118.90
12	B	1002	G	C8-N9-C1'	6.97	136.06	127.00
12	B	1599	U	N3-C2-O2	6.97	127.08	122.20
12	B	1792	G	C5-C6-O6	-6.97	124.42	128.60
12	B	2451	A	C4-C5-N7	-6.97	107.21	110.70
12	B	2667	C	N3-C4-N4	6.97	122.88	118.00
12	B	1059	G	N7-C8-N9	6.97	116.59	113.10
12	B	1278	C	C5-C4-N4	-6.97	115.32	120.20
12	B	1870	C	C3'-C2'-C1'	-6.97	95.92	101.50
12	B	1969	A	C4-C5-C6	6.97	120.48	117.00
12	B	232	G	O4'-C1'-N9	6.97	113.78	108.20
12	B	267	C	O4'-C1'-N1	6.97	113.78	108.20
12	B	707	G	O4'-C1'-N9	6.97	113.78	108.20
12	B	974	G	C2-N3-C4	6.97	115.39	111.90
12	B	1176	U	O4'-C1'-N1	6.97	113.78	108.20
12	B	1673	G	N7-C8-N9	-6.97	109.61	113.10
12	B	2145	C	C6-N1-C2	-6.97	117.51	120.30
12	B	2219	U	P-O5'-C5'	6.97	132.05	120.90
12	B	2518	A	C4-C5-C6	6.97	120.48	117.00
12	B	2792	A	C6-C5-N7	-6.97	127.42	132.30
32	W	56	PHE	CB-CG-CD2	-6.97	115.92	120.80
12	B	448	U	N1-C2-O2	-6.97	117.92	122.80
12	B	758	C	C2-N3-C4	6.97	123.38	119.90
12	B	933	A	N1-C2-N3	-6.97	125.82	129.30
12	B	1076	C	C6-N1-C2	6.97	123.09	120.30
12	B	1421	G	C5'-C4'-O4'	6.97	117.46	109.10
12	B	2014	A	C4-C5-N7	-6.97	107.22	110.70
12	B	687	C	N3-C4-C5	-6.97	119.11	121.90
12	B	2534	A	C5'-C4'-O4'	6.97	117.46	109.10
12	B	2793	C	O4'-C1'-N1	6.97	113.77	108.20
12	B	346	A	O4'-C1'-N9	6.96	113.77	108.20
12	B	531	C	C4'-C3'-C2'	-6.96	95.64	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	835	C	O4'-C1'-N1	6.96	113.77	108.20
12	B	1029	A	O4'-C1'-N9	6.96	113.77	108.20
12	B	1401	G	C5-C6-O6	-6.96	124.42	128.60
12	B	1529	G	N3-C2-N2	6.96	124.78	119.90
12	B	2365	G	C8-N9-C4	6.96	109.19	106.40
12	B	2390	U	C6-N1-C2	6.96	125.18	121.00
12	B	2396	G	N3-C2-N2	6.96	124.78	119.90
12	B	2758	A	C4-C5-C6	6.96	120.48	117.00
13	C	82	TYR	CB-CG-CD1	-6.96	116.82	121.00
11	A	86	G	C5-C6-O6	-6.96	124.42	128.60
12	B	207	A	O4'-C1'-N9	6.96	113.77	108.20
12	B	1479	G	N9-C4-C5	6.96	108.19	105.40
12	B	260	G	C5-C6-N1	-6.96	108.02	111.50
12	B	547	A	N1-C6-N6	6.96	122.78	118.60
12	B	702	U	C1'-O4'-C4'	-6.96	104.33	109.90
12	B	869	G	C8-N9-C1'	6.96	136.05	127.00
12	B	1041	G	C4-C5-N7	6.96	113.58	110.80
12	B	2797	U	O4'-C1'-N1	6.96	113.77	108.20
12	B	911	A	C2-N3-C4	-6.96	107.12	110.60
12	B	1458	U	C2-N3-C4	-6.96	122.82	127.00
12	B	2777	G	N1-C6-O6	6.96	124.08	119.90
12	B	960	A	P-O3'-C3'	6.96	128.05	119.70
12	B	1535	A	C5-N7-C8	6.96	107.38	103.90
12	B	1696	G	N3-C4-C5	-6.96	125.12	128.60
12	B	1936	A	C5'-C4'-O4'	6.96	117.45	109.10
12	B	2205	A	C4-C5-C6	6.96	120.48	117.00
12	B	2551	C	C2-N3-C4	-6.96	116.42	119.90
12	B	353	C	C2-N3-C4	6.96	123.38	119.90
12	B	1153	C	C4-C5-C6	6.96	120.88	117.40
12	B	1184	U	C5-C4-O4	-6.96	121.73	125.90
12	B	1805	A	P-O3'-C3'	-6.96	111.35	119.70
12	B	1977	A	C5-N7-C8	6.96	107.38	103.90
12	B	1996	C	N3-C4-N4	6.96	122.87	118.00
12	B	2798	U	C5'-C4'-O4'	6.96	117.45	109.10
24	N	45	ARG	NE-CZ-NH1	6.96	123.78	120.30
12	B	496	G	N1-C2-N2	6.96	122.46	116.20
12	B	2012	G	N9-C4-C5	6.96	108.18	105.40
12	B	87	U	C2-N3-C4	-6.95	122.83	127.00
12	B	591	U	C2-N3-C4	6.95	131.17	127.00
12	B	916	G	C2-N3-C4	-6.95	108.42	111.90
12	B	1420	A	C4-C5-N7	-6.95	107.22	110.70
12	B	1533	C	N3-C4-C5	-6.95	119.12	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2069	G	O4'-C4'-C3'	-6.95	97.05	104.00
12	B	2191	A	C4-C5-C6	6.95	120.48	117.00
12	B	2460	U	N3-C2-O2	6.95	127.07	122.20
12	B	141	G	C4-C5-N7	6.95	113.58	110.80
12	B	306	U	C5-C6-N1	6.95	126.17	122.70
12	B	1567	G	N3-C4-C5	-6.95	125.12	128.60
12	B	1746	A	C5'-C4'-C3'	-6.95	104.88	116.00
12	B	1762	A	C4-C5-C6	6.95	120.47	117.00
12	B	1847	A	N7-C8-N9	-6.95	110.33	113.80
12	B	1895	C	O4'-C1'-N1	6.95	113.76	108.20
12	B	2096	C	N3-C4-C5	-6.95	119.12	121.90
12	B	2682	A	N1-C6-N6	6.95	122.77	118.60
12	B	2793	C	N3-C4-N4	6.95	122.87	118.00
12	B	2840	C	C4-C5-C6	6.95	120.88	117.40
26	P	46	VAL	CA-CB-CG2	-6.95	100.47	110.90
12	B	370	G	N7-C8-N9	-6.95	109.62	113.10
12	B	409	G	C5-C6-N1	6.95	114.97	111.50
12	B	1673	G	N3-C2-N2	6.95	124.76	119.90
12	B	1797	G	C4-C5-C6	6.95	122.97	118.80
12	B	2316	G	N3-C2-N2	6.95	124.76	119.90
12	B	644	A	P-O3'-C3'	-6.95	111.36	119.70
12	B	822	G	C6-N1-C2	6.95	129.27	125.10
12	B	1081	U	C5-C4-O4	-6.95	121.73	125.90
12	B	1342	A	O4'-C1'-N9	6.95	113.76	108.20
12	B	2175	C	P-O3'-C3'	6.95	128.04	119.70
12	B	2630	G	C6-C5-N7	-6.95	126.23	130.40
12	B	2725	A	C8-N9-C4	-6.95	103.02	105.80
12	B	592	A	C4-C5-N7	-6.95	107.23	110.70
12	B	942	G	C4-C5-N7	-6.95	108.02	110.80
12	B	1315	C	N1-C2-O2	6.95	123.07	118.90
12	B	2277	G	P-O5'-C5'	-6.95	109.79	120.90
12	B	2578	G	N3-C2-N2	6.95	124.76	119.90
12	B	2811	G	N1-C2-N3	-6.95	119.73	123.90
10	9	291	VAL	O-C-N	-6.94	111.59	122.70
12	B	290	U	N1-C1'-C2'	-6.94	104.36	112.00
12	B	1973	G	N7-C8-N9	6.94	116.57	113.10
12	B	330	A	P-O5'-C5'	-6.94	109.79	120.90
12	B	744	U	O4'-C1'-N1	6.94	113.75	108.20
12	B	2159	G	C4-C5-N7	-6.94	108.02	110.80
12	B	2347	C	C4-C5-C6	6.94	120.87	117.40
12	B	2505	G	C5-N7-C8	6.94	107.77	104.30
12	B	974	G	C8-N9-C1'	-6.94	117.98	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2664	G	C2-N3-C4	6.94	115.37	111.90
12	B	1874	C	C2-N3-C4	-6.94	116.43	119.90
12	B	2641	G	C6-C5-N7	6.94	134.56	130.40
12	B	363	G	C5'-C4'-C3'	-6.94	104.90	116.00
12	B	575	A	C5'-C4'-C3'	-6.94	104.90	116.00
12	B	647	G	N9-C4-C5	-6.94	102.62	105.40
12	B	825	A	N1-C2-N3	-6.94	125.83	129.30
12	B	922	C	C5-C4-N4	-6.94	115.34	120.20
12	B	1037	G	O4'-C1'-N9	6.94	113.75	108.20
12	B	1073	A	C4-C5-N7	-6.94	107.23	110.70
12	B	1324	G	C4-C5-N7	6.94	113.58	110.80
12	B	1470	A	N1-C2-N3	6.94	132.77	129.30
12	B	1845	G	C5-N7-C8	-6.94	100.83	104.30
12	B	1918	A	C5-C6-N6	-6.94	118.15	123.70
12	B	2195	U	C4-C5-C6	6.94	123.86	119.70
12	B	2252	G	O4'-C4'-C3'	-6.94	97.06	104.00
12	B	2301	C	C5-C6-N1	6.94	124.47	121.00
12	B	1608	A	C6-N1-C2	6.94	122.76	118.60
12	B	2813	A	C6-N1-C2	6.94	122.76	118.60
12	B	2281	A	N3-C4-C5	-6.93	121.95	126.80
12	B	2505	G	C6-N1-C2	6.93	129.26	125.10
12	B	2624	G	O4'-C1'-N9	6.93	113.75	108.20
12	B	548	G	N3-C2-N2	6.93	124.75	119.90
12	B	947	A	O4'-C1'-N9	6.93	113.75	108.20
12	B	1099	G	C5-C6-N1	-6.93	108.03	111.50
12	B	1355	G	N1-C2-N3	-6.93	119.74	123.90
12	B	1706	C	C2-N3-C4	6.93	123.37	119.90
12	B	2279	G	C8-N9-C4	-6.93	103.63	106.40
12	B	2330	G	OP1-P-OP2	-6.93	109.20	119.60
12	B	2363	G	C5-C6-N1	-6.93	108.03	111.50
12	B	2391	G	O3'-P-O5'	-6.93	90.83	104.00
12	B	2474	U	P-O3'-C3'	-6.93	111.38	119.70
16	F	98	PHE	CB-CG-CD2	-6.93	115.95	120.80
12	B	911	A	C4-C5-C6	6.93	120.47	117.00
12	B	2418	A	C5-C6-N1	-6.93	114.23	117.70
12	B	569	U	O4'-C1'-N1	6.93	113.74	108.20
12	B	820	A	C6-N1-C2	-6.93	114.44	118.60
12	B	1821	A	C5-N7-C8	6.93	107.36	103.90
12	B	2875	C	C5-C4-N4	-6.93	115.35	120.20
20	J	75	TYR	CB-CG-CD2	-6.93	116.84	121.00
10	9	308	ASP	N-CA-C	-6.93	92.29	111.00
12	B	204	A	C5-C6-N6	-6.93	118.16	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1016	G	C8-N9-C4	6.93	109.17	106.40
12	B	1831	G	O4'-C1'-N9	6.93	113.74	108.20
12	B	2651	C	C6-N1-C2	-6.93	117.53	120.30
11	A	109	A	N3-C4-C5	-6.93	121.95	126.80
12	B	17	G	C4-C5-N7	6.93	113.57	110.80
12	B	354	A	C5-N7-C8	6.93	107.36	103.90
12	B	812	C	C6-N1-C2	6.93	123.07	120.30
12	B	2018	G	C4'-C3'-C2'	6.93	109.53	102.60
12	B	2566	A	P-O3'-C3'	6.93	128.01	119.70
12	B	2591	C	C5-C6-N1	6.93	124.46	121.00
12	B	2776	A	C8-N9-C4	6.93	108.57	105.80
12	B	30	G	O4'-C1'-N9	6.92	113.74	108.20
12	B	1900	A	C2-N3-C4	6.92	114.06	110.60
12	B	2802	G	O4'-C1'-C2'	-6.92	98.88	105.80
12	B	634	C	C2-N3-C4	6.92	123.36	119.90
12	B	708	G	N1-C6-O6	6.92	124.05	119.90
12	B	1299	G	N1-C2-N3	-6.92	119.75	123.90
12	B	1790	C	N3-C4-N4	6.92	122.85	118.00
12	B	2189	U	C2-N3-C4	-6.92	122.85	127.00
12	B	2859	G	C5-N7-C8	6.92	107.76	104.30
12	B	130	C	O4'-C1'-N1	6.92	113.74	108.20
12	B	633	A	C5-N7-C8	6.92	107.36	103.90
12	B	963	U	O4'-C1'-N1	6.92	113.74	108.20
12	B	1201	U	C4-C5-C6	-6.92	115.55	119.70
12	B	2536	G	N7-C8-N9	6.92	116.56	113.10
12	B	2771	C	C4-C5-C6	6.92	120.86	117.40
12	B	1549	A	C4-C5-N7	-6.92	107.24	110.70
12	B	42	A	C6-N1-C2	6.92	122.75	118.60
12	B	135	U	O4'-C1'-N1	6.92	113.73	108.20
12	B	231	A	N7-C8-N9	-6.92	110.34	113.80
12	B	1301	A	P-O3'-C3'	6.92	128.00	119.70
12	B	1389	G	N9-C4-C5	6.92	108.17	105.40
12	B	1877	A	N1-C2-N3	-6.92	125.84	129.30
12	B	1965	C	C2-N3-C4	6.92	123.36	119.90
12	B	119	A	C5-N7-C8	6.92	107.36	103.90
12	B	512	G	N3-C2-N2	6.92	124.74	119.90
12	B	547	A	C6-C5-N7	-6.92	127.46	132.30
12	B	1014	A	C5-C6-N1	-6.92	114.24	117.70
12	B	1035	U	O4'-C1'-N1	6.92	113.73	108.20
12	B	2282	G	C4-C5-C6	6.92	122.95	118.80
12	B	2689	U	C5-C6-N1	-6.92	119.24	122.70
12	B	298	G	N3-C4-N9	6.92	130.15	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	502	A	C5'-C4'-C3'	-6.92	104.94	116.00
12	B	774	G	C5-C6-N1	-6.92	108.04	111.50
12	B	1903	G	O4'-C1'-N9	6.92	113.73	108.20
12	B	2887	A	C6-C5-N7	-6.92	127.46	132.30
12	B	80	G	N3-C4-N9	6.91	130.15	126.00
12	B	528	A	C5-C6-N1	-6.91	114.24	117.70
12	B	789	A	C3'-C2'-C1'	-6.91	95.97	101.50
12	B	959	A	C5-C6-N6	-6.91	118.17	123.70
12	B	1147	A	C4'-C3'-C2'	-6.91	95.69	102.60
12	B	2028	U	N3-C4-O4	6.91	124.24	119.40
12	B	2168	G	C4-C5-C6	6.91	122.95	118.80
12	B	2171	A	N9-C4-C5	6.91	108.56	105.80
12	B	2630	G	C4-C5-C6	6.91	122.95	118.80
20	J	99	ARG	NE-CZ-NH1	6.91	123.76	120.30
12	B	28	A	O4'-C1'-N9	6.91	113.73	108.20
12	B	288	U	C5-C4-O4	-6.91	121.75	125.90
12	B	1595	C	O4'-C1'-N1	6.91	113.73	108.20
12	B	2776	A	C5'-C4'-O4'	6.91	117.39	109.10
11	A	68	C	O4'-C1'-N1	6.91	113.73	108.20
11	A	106	G	N3-C2-N2	6.91	124.74	119.90
12	B	94	A	C5-C6-N1	-6.91	114.25	117.70
12	B	142	A	N9-C4-C5	6.91	108.56	105.80
12	B	270	A	C4'-C3'-C2'	6.91	109.51	102.60
12	B	629	G	O4'-C1'-N9	6.91	113.73	108.20
12	B	918	A	O4'-C1'-N9	6.91	113.73	108.20
12	B	980	A	P-O3'-C3'	6.91	127.99	119.70
12	B	1309	G	C4-C5-C6	6.91	122.95	118.80
12	B	2073	C	N3-C4-N4	6.91	122.84	118.00
12	B	398	C	C5-C6-N1	6.91	124.45	121.00
12	B	435	C	C2-N3-C4	6.91	123.35	119.90
12	B	560	C	C5-C4-N4	-6.91	115.36	120.20
12	B	795	C	N3-C4-C5	-6.91	119.14	121.90
12	B	1237	A	O4'-C4'-C3'	-6.91	97.09	104.00
12	B	1462	C	C4-C5-C6	6.91	120.85	117.40
12	B	2000	C	C6-N1-C2	-6.91	117.54	120.30
12	B	2164	C	O4'-C1'-N1	6.91	113.73	108.20
12	B	2551	C	C4-C5-C6	-6.91	113.94	117.40
30	T	12	ARG	NE-CZ-NH1	6.91	123.75	120.30
12	B	1287	A	O4'-C4'-C3'	-6.91	97.09	104.00
12	B	182	A	C5-C6-N6	-6.91	118.18	123.70
12	B	1399	C	O4'-C1'-N1	6.91	113.72	108.20
12	B	1726	C	C2-N3-C4	6.91	123.35	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1870	C	O4'-C1'-N1	6.91	113.72	108.20
12	B	1885	A	C6-C5-N7	-6.91	127.47	132.30
12	B	2815	C	C4-C5-C6	6.91	120.85	117.40
12	B	457	A	N1-C6-N6	6.90	122.74	118.60
12	B	2289	G	N9-C4-C5	-6.90	102.64	105.40
12	B	2399	G	O4'-C1'-N9	6.90	113.72	108.20
12	B	151	C	C3'-C2'-C1'	6.90	107.02	101.50
12	B	370	G	P-O3'-C3'	6.90	127.98	119.70
12	B	400	G	C5-C6-O6	-6.90	124.46	128.60
12	B	513	A	C2-N3-C4	-6.90	107.15	110.60
12	B	705	A	C6-C5-N7	-6.90	127.47	132.30
12	B	841	G	N3-C2-N2	6.90	124.73	119.90
12	B	1396	U	C5-C4-O4	-6.90	121.76	125.90
12	B	1641	A	N3-C4-N9	-6.90	121.88	127.40
12	B	2451	A	O4'-C4'-C3'	-6.90	97.10	104.00
12	B	2665	A	C5-N7-C8	6.90	107.35	103.90
12	B	2722	G	O4'-C1'-N9	6.90	113.72	108.20
12	B	309	A	N1-C2-N3	6.90	132.75	129.30
12	B	507	A	C5-C6-N6	-6.90	118.18	123.70
12	B	621	A	C4-C5-C6	6.90	120.45	117.00
12	B	1597	A	C8-N9-C4	-6.90	103.04	105.80
12	B	1629	U	O4'-C1'-N1	6.90	113.72	108.20
12	B	1828	G	N3-C2-N2	6.90	124.73	119.90
12	B	2123	G	P-O3'-C3'	6.90	127.98	119.70
12	B	2417	C	N3-C4-N4	6.90	122.83	118.00
12	B	2892	G	C5-C6-O6	-6.90	124.46	128.60
12	B	532	A	C8-N9-C1'	-6.90	115.28	127.70
12	B	569	U	P-O3'-C3'	-6.90	111.42	119.70
12	B	640	C	N3-C4-N4	6.90	122.83	118.00
12	B	948	C	N1-C2-O2	-6.90	114.76	118.90
12	B	2191	A	C4-C5-N7	-6.90	107.25	110.70
12	B	2794	C	O4'-C1'-N1	6.90	113.72	108.20
12	B	262	A	C2-N3-C4	-6.90	107.15	110.60
12	B	2223	G	N9-C4-C5	6.90	108.16	105.40
12	B	1341	G	C5-C6-O6	6.90	132.74	128.60
12	B	2682	A	N7-C8-N9	-6.90	110.35	113.80
12	B	2765	A	N3-C4-C5	-6.90	121.97	126.80
11	A	101	A	C1'-O4'-C4'	-6.89	104.38	109.90
12	B	137	U	N1-C2-N3	6.89	119.04	114.90
12	B	260	G	C4-C5-N7	-6.89	108.04	110.80
12	B	557	C	C2-N1-C1'	6.89	126.38	118.80
12	B	604	G	C4-N9-C1'	-6.89	117.54	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	962	G	N3-C2-N2	6.89	124.73	119.90
12	B	2128	G	C2-N3-C4	6.89	115.35	111.90
12	B	2815	C	N1-C2-O2	-6.89	114.76	118.90
30	T	33	LYS	N-CA-CB	6.89	123.01	110.60
11	A	111	U	P-O3'-C3'	-6.89	111.43	119.70
12	B	34	U	O4'-C1'-N1	6.89	113.71	108.20
12	B	963	U	C5-C6-N1	-6.89	119.25	122.70
12	B	1415	U	C6-N1-C2	-6.89	116.86	121.00
12	B	1523	U	P-O3'-C3'	-6.89	111.43	119.70
12	B	2095	A	N1-C6-N6	6.89	122.73	118.60
12	B	2403	C	O4'-C1'-N1	6.89	113.71	108.20
12	B	2598	A	C4-C5-N7	-6.89	107.25	110.70
11	A	60	C	C5-C4-N4	6.89	125.02	120.20
11	A	78	A	C5-C6-N6	-6.89	118.19	123.70
12	B	455	C	N3-C4-C5	-6.89	119.14	121.90
12	B	803	U	O4'-C1'-N1	6.89	113.71	108.20
12	B	1177	G	C4-C5-C6	6.89	122.93	118.80
12	B	1505	A	N3-C4-C5	-6.89	121.98	126.80
12	B	1990	C	C5-C6-N1	6.89	124.44	121.00
12	B	2453	A	N1-C2-N3	6.89	132.75	129.30
12	B	2517	C	C5-C4-N4	-6.89	115.38	120.20
12	B	813	U	N3-C2-O2	6.89	127.02	122.20
12	B	653	U	C6-N1-C1'	-6.89	111.56	121.20
12	B	812	C	N1-C2-O2	6.89	123.03	118.90
12	B	974	G	N1-C2-N3	-6.89	119.77	123.90
12	B	1192	G	O4'-C1'-N9	6.89	113.71	108.20
12	B	1502	A	C4-C5-N7	-6.89	107.26	110.70
12	B	2850	A	N1-C6-N6	6.89	122.73	118.60
12	B	794	A	C4'-C3'-C2'	-6.89	95.71	102.60
12	B	1024	G	N7-C8-N9	-6.89	109.66	113.10
12	B	1363	C	N3-C4-C5	-6.89	119.14	121.90
12	B	1823	G	C4'-C3'-C2'	-6.89	95.71	102.60
28	R	71	LYS	N-CA-CB	6.89	123.00	110.60
12	B	58	G	N3-C2-N2	6.88	124.72	119.90
12	B	496	G	C5'-C4'-C3'	-6.88	104.99	116.00
12	B	1602	U	O4'-C1'-N1	6.88	113.71	108.20
12	B	2134	A	N1-C6-N6	6.88	122.73	118.60
12	B	2349	G	C6-C5-N7	-6.88	126.27	130.40
12	B	593	U	O4'-C1'-N1	6.88	113.71	108.20
12	B	2809	A	C5-C6-N6	-6.88	118.19	123.70
11	A	82	U	N1-C2-O2	-6.88	117.98	122.80
12	B	376	G	C4'-C3'-C2'	-6.88	95.72	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1145	C	N1-C2-N3	-6.88	114.38	119.20
12	B	1998	A	C6-C5-N7	-6.88	127.48	132.30
12	B	2179	C	C6-N1-C2	-6.88	117.55	120.30
12	B	2199	A	N1-C6-N6	6.88	122.73	118.60
12	B	2741	A	N3-C4-C5	-6.88	121.98	126.80
13	C	61	TYR	CD1-CE1-CZ	6.88	125.99	119.80
26	P	112	ARG	NE-CZ-NH1	-6.88	116.86	120.30
12	B	2196	C	P-O5'-C5'	-6.88	109.89	120.90
12	B	2689	U	N1-C2-O2	-6.88	117.98	122.80
12	B	167	A	N1-C2-N3	6.88	132.74	129.30
12	B	473	G	C4-C5-N7	-6.88	108.05	110.80
12	B	704	G	P-O3'-C3'	6.88	127.95	119.70
12	B	1316	U	N3-C2-O2	6.88	127.01	122.20
12	B	2850	A	C4-C5-N7	-6.88	107.26	110.70
11	A	18	G	C6-N1-C2	6.88	129.23	125.10
12	B	1039	A	O4'-C1'-N9	6.88	113.70	108.20
12	B	1550	C	P-O3'-C3'	-6.88	111.45	119.70
12	B	1694	C	C2-N3-C4	6.88	123.34	119.90
12	B	2070	A	C4-C5-C6	6.88	120.44	117.00
12	B	2541	A	C4-C5-C6	-6.88	113.56	117.00
28	R	90	ARG	NE-CZ-NH1	6.88	123.74	120.30
12	B	558	U	C4-C5-C6	6.88	123.83	119.70
12	B	368	A	C4-C5-C6	6.87	120.44	117.00
12	B	812	C	O4'-C1'-N1	6.87	113.70	108.20
12	B	1103	A	C4-C5-N7	6.87	114.14	110.70
12	B	1203	U	O4'-C1'-N1	6.87	113.70	108.20
12	B	1751	U	P-O3'-C3'	-6.87	111.45	119.70
12	B	1866	A	O4'-C1'-N9	6.87	113.70	108.20
12	B	2349	G	C5-C6-N1	-6.87	108.06	111.50
12	B	2403	C	N3-C4-N4	6.87	122.81	118.00
12	B	2700	A	C2-N3-C4	-6.87	107.16	110.60
12	B	2829	A	O4'-C1'-N9	6.87	113.70	108.20
29	S	54	ALA	N-CA-CB	6.87	119.72	110.10
12	B	36	G	C2-N3-C4	6.87	115.33	111.90
12	B	856	G	N3-C2-N2	6.87	124.71	119.90
12	B	983	A	O4'-C1'-N9	6.87	113.70	108.20
12	B	1364	G	C4-C5-N7	6.87	113.55	110.80
12	B	1662	U	C5-C6-N1	6.87	126.14	122.70
12	B	2310	C	C5-C4-N4	-6.87	115.39	120.20
18	H	116	ARG	NE-CZ-NH1	-6.87	116.86	120.30
12	B	270	A	C5-C6-N6	-6.87	118.20	123.70
12	B	479	A	C5-N7-C8	6.87	107.33	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1359	A	C8-N9-C4	6.87	108.55	105.80
12	B	2255	G	P-O5'-C5'	-6.87	109.91	120.90
12	B	2365	G	C6-C5-N7	-6.87	126.28	130.40
22	L	50	PHE	CB-CG-CD1	-6.87	115.99	120.80
12	B	1155	A	O4'-C1'-N9	6.87	113.69	108.20
12	B	875	G	C5-C6-N1	6.87	114.93	111.50
12	B	1317	G	O4'-C1'-N9	6.87	113.69	108.20
12	B	2210	U	O4'-C1'-N1	6.87	113.69	108.20
10	9	54	ASN	C-N-CA	6.87	138.87	121.70
12	B	64	A	C5-C6-N6	-6.87	118.21	123.70
12	B	372	G	C5-C6-O6	-6.87	124.48	128.60
12	B	874	G	N1-C6-O6	6.87	124.02	119.90
12	B	1008	A	N7-C8-N9	-6.87	110.37	113.80
12	B	1080	A	N1-C6-N6	6.87	122.72	118.60
12	B	1647	U	N3-C4-O4	6.87	124.21	119.40
12	B	1737	G	C4-C5-C6	6.87	122.92	118.80
12	B	1888	G	N3-C2-N2	6.87	124.71	119.90
12	B	1926	U	O4'-C1'-N1	6.87	113.69	108.20
12	B	2828	G	O4'-C1'-N9	6.87	113.69	108.20
11	A	22	U	N3-C4-C5	-6.86	110.48	114.60
12	B	88	G	N7-C8-N9	-6.86	109.67	113.10
12	B	178	G	C5-N7-C8	6.86	107.73	104.30
12	B	2045	C	O4'-C1'-N1	6.86	113.69	108.20
12	B	2170	A	O4'-C1'-N9	6.86	113.69	108.20
12	B	2413	G	N3-C4-N9	6.86	130.12	126.00
20	J	69	ARG	NE-CZ-NH1	6.86	123.73	120.30
12	B	1336	A	C5'-C4'-C3'	-6.86	105.02	116.00
12	B	2280	G	N1-C6-O6	6.86	124.02	119.90
12	B	2526	G	C6-C5-N7	-6.86	126.28	130.40
13	C	102	TYR	CB-CG-CD2	-6.86	116.88	121.00
12	B	291	G	C1'-O4'-C4'	6.86	115.39	109.90
12	B	947	A	C4-C5-C6	6.86	120.43	117.00
12	B	2638	G	O4'-C1'-N9	6.86	113.69	108.20
12	B	297	G	C5-N7-C8	6.86	107.73	104.30
12	B	500	G	N1-C6-O6	6.86	124.02	119.90
12	B	915	C	P-O5'-C5'	-6.86	109.92	120.90
12	B	699	A	C5-C6-N6	-6.86	118.21	123.70
12	B	1810	A	C5-N7-C8	6.86	107.33	103.90
12	B	2425	A	C3'-C2'-C1'	6.86	106.99	101.50
12	B	2702	G	P-O5'-C5'	6.86	131.87	120.90
12	B	1028	A	C6-N1-C2	6.86	122.71	118.60
12	B	1103	A	N9-C4-C5	-6.86	103.06	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1215	G	C5-C6-O6	-6.86	124.49	128.60
12	B	1282	U	O4'-C1'-N1	6.86	113.68	108.20
12	B	1288	G	N1-C2-N3	-6.86	119.79	123.90
12	B	1607	C	N3-C4-N4	6.86	122.80	118.00
12	B	2526	G	P-O3'-C3'	6.86	127.93	119.70
12	B	195	A	P-O3'-C3'	-6.85	111.47	119.70
12	B	2011	U	C5-C6-N1	6.85	126.13	122.70
12	B	52	A	N7-C8-N9	6.85	117.23	113.80
12	B	589	U	C4-C5-C6	-6.85	115.59	119.70
12	B	849	A	N7-C8-N9	-6.85	110.37	113.80
12	B	926	G	O4'-C1'-N9	6.85	113.68	108.20
12	B	1528	A	C2-N3-C4	-6.85	107.17	110.60
12	B	2142	A	C5-C6-N1	-6.85	114.27	117.70
12	B	2152	G	C6-C5-N7	-6.85	126.29	130.40
12	B	2597	G	N3-C2-N2	6.85	124.70	119.90
12	B	2764	A	C2-N3-C4	-6.85	107.17	110.60
14	D	184	ARG	NE-CZ-NH2	6.85	123.73	120.30
12	B	1640	A	C4-C5-C6	6.85	120.42	117.00
12	B	2363	G	O4'-C1'-N9	6.85	113.68	108.20
12	B	2728	U	C4'-C3'-C2'	-6.85	95.75	102.60
11	A	47	C	C2-N1-C1'	6.85	126.33	118.80
12	B	1077	A	C8-N9-C4	-6.85	103.06	105.80
12	B	1239	G	C5-N7-C8	-6.85	100.88	104.30
12	B	1557	C	C5-C4-N4	-6.85	115.41	120.20
12	B	1667	G	C6-C5-N7	-6.85	126.29	130.40
12	B	2235	G	N7-C8-N9	-6.85	109.67	113.10
12	B	2466	C	N3-C4-N4	6.85	122.79	118.00
12	B	374	A	C5-N7-C8	6.85	107.32	103.90
12	B	1179	G	C4-C5-C6	6.85	122.91	118.80
12	B	1248	G	N3-C2-N2	6.85	124.69	119.90
12	B	1650	A	C4-C5-C6	6.85	120.42	117.00
12	B	1930	G	C5-N7-C8	6.85	107.72	104.30
12	B	2155	U	P-O3'-C3'	6.85	127.92	119.70
12	B	2733	A	N9-C4-C5	6.85	108.54	105.80
12	B	222	A	C6-N1-C2	6.85	122.71	118.60
12	B	2083	G	C5-C6-N1	-6.85	108.08	111.50
12	B	2211	A	P-O5'-C5'	6.85	131.85	120.90
12	B	462	C	O4'-C1'-N1	6.84	113.67	108.20
12	B	1162	G	C4-C5-C6	6.84	122.91	118.80
12	B	1173	U	C4'-C3'-C2'	-6.84	95.76	102.60
12	B	1410	G	C5-C6-O6	-6.84	124.49	128.60
12	B	1833	C	O4'-C1'-N1	6.84	113.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2484	G	C4-C5-N7	-6.84	108.06	110.80
12	B	2490	G	C5-N7-C8	6.84	107.72	104.30
11	A	4	C	C2-N3-C4	-6.84	116.48	119.90
12	B	262	A	C8-N9-C4	-6.84	103.06	105.80
12	B	715	A	C5-C6-N6	-6.84	118.23	123.70
12	B	1300	G	C3'-C2'-C1'	-6.84	96.03	101.50
12	B	821	A	N1-C6-N6	6.84	122.70	118.60
12	B	1213	A	C4-C5-C6	6.84	120.42	117.00
12	B	2279	G	N7-C8-N9	6.84	116.52	113.10
11	A	56	G	O4'-C1'-C2'	6.84	113.75	107.60
12	B	95	A	C2-N3-C4	6.84	114.02	110.60
12	B	272	A	O4'-C1'-N9	6.84	113.67	108.20
12	B	2386	A	N1-C6-N6	6.84	122.70	118.60
12	B	2886	A	N3-C4-N9	6.84	132.87	127.40
12	B	1163	G	O4'-C1'-N9	6.84	113.67	108.20
12	B	1581	G	C5-C6-O6	-6.84	124.50	128.60
12	B	2182	U	N3-C2-O2	6.84	126.99	122.20
12	B	2480	C	N1-C2-N3	-6.84	114.41	119.20
12	B	1514	G	O4'-C1'-N9	6.84	113.67	108.20
12	B	1660	G	C5-N7-C8	-6.84	100.88	104.30
12	B	1713	A	O4'-C1'-N9	6.84	113.67	108.20
12	B	2251	G	N3-C2-N2	6.84	124.69	119.90
12	B	330	A	C5-C6-N6	-6.83	118.23	123.70
12	B	807	U	C5-C4-O4	-6.83	121.80	125.90
12	B	1689	A	C4-C5-C6	6.83	120.42	117.00
12	B	2818	U	C5-C4-O4	-6.83	121.80	125.90
12	B	549	G	P-O3'-C3'	-6.83	111.50	119.70
12	B	935	C	P-O3'-C3'	-6.83	111.50	119.70
12	B	935	C	N3-C4-C5	-6.83	119.17	121.90
12	B	957	C	O4'-C1'-N1	6.83	113.67	108.20
12	B	1084	A	O4'-C4'-C3'	-6.83	97.17	104.00
12	B	1901	A	N9-C4-C5	-6.83	103.07	105.80
12	B	2388	A	N1-C2-N3	6.83	132.72	129.30
12	B	2766	A	C8-N9-C4	-6.83	103.07	105.80
12	B	315	G	C5-C6-O6	-6.83	124.50	128.60
12	B	745	G	C2-N3-C4	6.83	115.32	111.90
12	B	1122	G	C5-C6-O6	-6.83	124.50	128.60
12	B	1332	G	N1-C6-O6	6.83	124.00	119.90
12	B	2076	U	O4'-C1'-N1	6.83	113.67	108.20
12	B	2174	C	N3-C4-C5	6.83	124.63	121.90
12	B	2614	A	N1-C2-N3	6.83	132.72	129.30
12	B	2668	G	P-O3'-C3'	-6.83	111.50	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	475	C	O4'-C1'-N1	6.83	113.66	108.20
12	B	2341	G	C2-N3-C4	6.83	115.31	111.90
12	B	2657	A	C4-C5-C6	6.83	120.42	117.00
14	D	26	VAL	CA-CB-CG2	-6.83	100.66	110.90
12	B	209	C	N3-C4-N4	6.83	122.78	118.00
12	B	493	G	N7-C8-N9	6.83	116.51	113.10
12	B	999	U	C5-C4-O4	-6.83	121.80	125.90
12	B	1183	U	N3-C4-O4	6.83	124.18	119.40
12	B	1560	G	C5-C6-O6	-6.83	124.50	128.60
12	B	108	G	C6-C5-N7	-6.83	126.30	130.40
12	B	609	A	O4'-C1'-N9	6.83	113.66	108.20
12	B	871	U	N3-C4-O4	6.83	124.18	119.40
12	B	1095	A	N7-C8-N9	-6.83	110.39	113.80
12	B	1525	A	C5-N7-C8	-6.83	100.49	103.90
12	B	2010	G	C4-C5-N7	-6.83	108.07	110.80
7	6	18	PHE	CB-CG-CD2	6.83	125.58	120.80
12	B	579	G	C4-C5-C6	6.83	122.89	118.80
12	B	1090	A	N9-C4-C5	6.83	108.53	105.80
12	B	1752	C	O4'-C1'-N1	6.83	113.66	108.20
12	B	2519	U	C4-C5-C6	6.83	123.80	119.70
12	B	2859	G	C5-C6-O6	-6.83	124.50	128.60
11	A	18	G	C4-C5-C6	6.82	122.89	118.80
12	B	492	A	N9-C4-C5	6.82	108.53	105.80
12	B	669	G	C8-N9-C1'	-6.82	118.13	127.00
12	B	1303	G	O4'-C1'-N9	6.82	113.66	108.20
12	B	1484	U	N1-C2-N3	-6.82	110.81	114.90
12	B	1639	C	C5-C6-N1	6.82	124.41	121.00
12	B	1794	A	C2-N3-C4	-6.82	107.19	110.60
12	B	1957	C	C2-N1-C1'	6.82	126.31	118.80
12	B	2209	G	C8-N9-C4	-6.82	103.67	106.40
12	B	2721	A	C5-N7-C8	6.82	107.31	103.90
12	B	1074	G	C4-C5-C6	6.82	122.89	118.80
12	B	1147	A	N9-C4-C5	6.82	108.53	105.80
12	B	1465	G	N3-C2-N2	6.82	124.67	119.90
12	B	2024	G	N3-C4-C5	6.82	132.01	128.60
12	B	2142	A	O4'-C1'-N9	6.82	113.66	108.20
12	B	2335	A	C6-N1-C2	6.82	122.69	118.60
11	A	7	G	C5-C6-O6	-6.82	124.51	128.60
12	B	763	G	N1-C2-N3	-6.82	119.81	123.90
12	B	993	G	C8-N9-C4	6.82	109.13	106.40
12	B	1034	G	P-O5'-C5'	6.82	131.81	120.90
12	B	1296	G	N1-C2-N3	-6.82	119.81	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1513	U	P-O3'-C3'	-6.82	111.52	119.70
12	B	1801	A	N9-C4-C5	6.82	108.53	105.80
12	B	2364	C	C2-N1-C1'	-6.82	111.30	118.80
12	B	2504	U	C3'-C2'-C1'	6.82	106.95	101.50
12	B	1382	G	C5-C6-N1	6.82	114.91	111.50
12	B	1896	G	N7-C8-N9	6.82	116.51	113.10
12	B	2444	G	C5-N7-C8	-6.82	100.89	104.30
12	B	349	U	O4'-C1'-C2'	-6.81	98.99	105.80
12	B	1873	G	C2-N3-C4	-6.81	108.49	111.90
12	B	2016	U	C5-C4-O4	-6.81	121.81	125.90
12	B	2792	A	C8-N9-C4	-6.81	103.07	105.80
15	E	187	VAL	CA-CB-CG2	-6.81	100.68	110.90
31	U	97	SER	N-CA-CB	6.81	120.72	110.50
12	B	157	C	C2-N3-C4	6.81	123.31	119.90
12	B	339	U	C5-C6-N1	6.81	126.11	122.70
12	B	506	G	C8-N9-C4	-6.81	103.67	106.40
12	B	730	A	O4'-C1'-N9	6.81	113.65	108.20
12	B	1086	A	O4'-C1'-N9	6.81	113.65	108.20
12	B	1473	G	N1-C2-N3	-6.81	119.81	123.90
12	B	1701	A	O5'-P-OP2	-6.81	99.57	105.70
12	B	1725	U	C4-C5-C6	-6.81	115.61	119.70
12	B	2418	A	N9-C4-C5	6.81	108.53	105.80
14	D	170	VAL	CA-CB-CG1	6.81	121.12	110.90
12	B	904	G	C6-C5-N7	-6.81	126.31	130.40
12	B	122	G	C8-N9-C4	-6.81	103.68	106.40
12	B	307	G	N3-C2-N2	6.81	124.67	119.90
12	B	497	A	C8-N9-C4	-6.81	103.08	105.80
12	B	822	G	N9-C4-C5	6.81	108.12	105.40
12	B	843	G	N9-C4-C5	-6.81	102.68	105.40
12	B	1087	G	N1-C6-O6	6.81	123.99	119.90
12	B	1278	C	N3-C4-C5	-6.81	119.18	121.90
12	B	2564	A	C4'-C3'-C2'	-6.81	95.79	102.60
12	B	92	U	C2-N3-C4	-6.81	122.92	127.00
12	B	155	A	C6-C5-N7	-6.81	127.53	132.30
12	B	418	C	C5-C4-N4	-6.81	115.44	120.20
12	B	1036	G	C5-C6-N1	-6.81	108.10	111.50
12	B	1337	G	O4'-C1'-N9	6.81	113.65	108.20
12	B	1804	C	C5-C4-N4	-6.81	115.44	120.20
12	B	2167	U	N1-C2-O2	6.81	127.56	122.80
12	B	161	A	C5-C6-N6	-6.81	118.25	123.70
12	B	252	G	C5-C6-O6	-6.81	124.52	128.60
12	B	1590	A	C4-C5-N7	-6.81	107.30	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2121	G	N3-C2-N2	6.81	124.66	119.90
11	A	58	A	N1-C2-N3	6.80	132.70	129.30
12	B	30	G	N1-C2-N3	-6.80	119.82	123.90
12	B	442	G	C5-C6-N1	-6.80	108.10	111.50
12	B	662	G	C4-C5-C6	-6.80	114.72	118.80
12	B	1392	A	N1-C2-N3	-6.80	125.90	129.30
12	B	1515	A	C3'-C2'-C1'	6.80	106.94	101.50
12	B	2414	G	C4-N9-C1'	-6.80	117.66	126.50
12	B	2736	A	N9-C4-C5	6.80	108.52	105.80
12	B	2836	U	C2-N3-C4	6.80	131.08	127.00
11	A	110	C	C5-C4-N4	-6.80	115.44	120.20
12	B	25	U	C3'-C2'-C1'	6.80	106.94	101.50
12	B	751	A	C1'-O4'-C4'	-6.80	104.46	109.90
11	A	76	G	C4-C5-C6	6.80	122.88	118.80
12	B	154	U	C1'-O4'-C4'	6.80	115.34	109.90
12	B	1392	A	O4'-C1'-N9	6.80	113.64	108.20
12	B	1850	G	N7-C8-N9	6.80	116.50	113.10
12	B	1937	A	N9-C4-C5	6.80	108.52	105.80
12	B	2782	G	C6-C5-N7	-6.80	126.32	130.40
25	O	10	ARG	NE-CZ-NH2	-6.80	116.90	120.30
12	B	475	C	N3-C4-N4	6.80	122.76	118.00
12	B	751	A	N7-C8-N9	-6.80	110.40	113.80
12	B	842	U	N3-C4-O4	6.80	124.16	119.40
12	B	1051	G	N1-C6-O6	6.80	123.98	119.90
12	B	1378	A	C2-N3-C4	-6.80	107.20	110.60
12	B	1528	A	O4'-C1'-N9	6.80	113.64	108.20
12	B	1750	G	N3-C2-N2	6.80	124.66	119.90
12	B	2067	G	O4'-C1'-N9	6.80	113.64	108.20
12	B	2269	G	C4-C5-N7	6.80	113.52	110.80
12	B	2293	G	C5-C6-N1	6.80	114.90	111.50
12	B	1038	G	C8-N9-C4	-6.80	103.68	106.40
12	B	1084	A	C5-C6-N6	-6.80	118.26	123.70
12	B	1425	G	C4-C5-C6	6.80	122.88	118.80
12	B	1849	G	P-O3'-C3'	-6.80	111.54	119.70
12	B	1918	A	C8-N9-C4	-6.80	103.08	105.80
12	B	1972	G	C5-C6-N1	6.80	114.90	111.50
12	B	2426	A	N9-C4-C5	6.80	108.52	105.80
12	B	57	C	P-O3'-C3'	-6.79	111.55	119.70
12	B	95	A	P-O5'-C5'	6.79	131.77	120.90
12	B	521	U	C5-C6-N1	6.79	126.10	122.70
12	B	622	G	N1-C2-N3	-6.79	119.82	123.90
12	B	1038	G	N1-C2-N3	-6.79	119.82	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1471	G	C2-N3-C4	-6.79	108.50	111.90
12	B	2543	G	N7-C8-N9	-6.79	109.70	113.10
22	L	82	LEU	CB-CG-CD2	6.79	122.55	111.00
12	B	1285	A	C4-C5-C6	6.79	120.40	117.00
12	B	1285	A	O4'-C1'-N9	6.79	113.63	108.20
12	B	1297	C	O4'-C1'-N1	6.79	113.63	108.20
12	B	1465	G	C5-C6-O6	-6.79	124.52	128.60
12	B	1575	C	C5'-C4'-C3'	-6.79	105.13	116.00
12	B	2002	G	N3-C2-N2	6.79	124.66	119.90
12	B	2090	A	O4'-C1'-N9	6.79	113.64	108.20
12	B	2349	G	C4-C5-C6	6.79	122.88	118.80
28	R	98	ILE	N-CA-CB	6.79	126.42	110.80
12	B	94	A	C6-C5-N7	-6.79	127.55	132.30
12	B	155	A	C5-C6-N6	-6.79	118.27	123.70
12	B	308	G	N1-C2-N3	-6.79	119.83	123.90
12	B	526	A	C4-C5-C6	-6.79	113.60	117.00
12	B	594	U	O4'-C1'-N1	6.79	113.63	108.20
12	B	1226	A	C5-C6-N6	-6.79	118.27	123.70
12	B	1831	G	N1-C2-N2	-6.79	110.09	116.20
12	B	2186	G	C5-C6-N1	6.79	114.90	111.50
12	B	2327	A	C6-C5-N7	-6.79	127.55	132.30
18	H	91	PHE	CB-CG-CD2	-6.79	116.05	120.80
12	B	577	G	O5'-P-OP2	-6.79	99.59	105.70
12	B	1595	C	N3-C4-N4	6.79	122.75	118.00
12	B	2159	G	O4'-C1'-N9	6.79	113.63	108.20
12	B	2532	G	N7-C8-N9	-6.79	109.70	113.10
13	C	61	TYR	CB-CA-C	6.79	123.98	110.40
12	B	1319	C	N3-C4-N4	6.79	122.75	118.00
12	B	1332	G	O4'-C1'-N9	6.79	113.63	108.20
12	B	1394	U	P-O5'-C5'	6.79	131.76	120.90
12	B	2061	G	C5-N7-C8	6.79	107.69	104.30
12	B	2636	C	C6-N1-C1'	-6.79	112.65	120.80
27	Q	38	VAL	CA-CB-CG1	6.79	121.08	110.90
11	A	19	C	C2-N3-C4	-6.79	116.51	119.90
11	A	95	U	O4'-C1'-N1	6.79	113.63	108.20
12	B	53	A	O4'-C1'-N9	6.79	113.63	108.20
12	B	132	G	N3-C4-C5	6.79	131.99	128.60
12	B	274	C	C2-N3-C4	6.79	123.29	119.90
12	B	1645	G	N9-C4-C5	-6.79	102.69	105.40
12	B	2056	G	N1-C6-O6	6.79	123.97	119.90
12	B	2127	G	O4'-C1'-N9	6.79	113.63	108.20
12	B	2320	U	C3'-C2'-C1'	-6.79	96.07	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2773	C	N3-C4-C5	-6.79	119.19	121.90
12	B	51	G	N7-C8-N9	-6.78	109.71	113.10
12	B	281	C	N3-C4-N4	6.78	122.75	118.00
12	B	926	G	O4'-C4'-C3'	-6.78	97.22	104.00
12	B	2428	G	N1-C2-N2	6.78	122.30	116.20
12	B	50	U	C2-N3-C4	-6.78	122.93	127.00
12	B	368	A	C2-N3-C4	-6.78	107.21	110.60
12	B	749	A	C6-C5-N7	-6.78	127.55	132.30
12	B	1196	C	N3-C4-C5	-6.78	119.19	121.90
12	B	1472	C	C4-C5-C6	6.78	120.79	117.40
12	B	1955	U	O4'-C1'-C2'	-6.78	99.02	105.80
12	B	2095	A	C4-C5-C6	6.78	120.39	117.00
12	B	2376	A	C4-C5-C6	6.78	120.39	117.00
12	B	1475	G	C6-N1-C2	6.78	129.17	125.10
12	B	1844	C	C2-N3-C4	6.78	123.29	119.90
12	B	2277	G	N9-C4-C5	-6.78	102.69	105.40
12	B	2383	G	C8-N9-C4	-6.78	103.69	106.40
12	B	473	G	C5-C6-N1	6.78	114.89	111.50
12	B	958	U	C2-N3-C4	-6.78	122.93	127.00
12	B	982	C	C6-N1-C1'	-6.78	112.67	120.80
12	B	1329	U	P-O3'-C3'	-6.78	111.57	119.70
12	B	1784	A	C5-N7-C8	6.78	107.29	103.90
12	B	2396	G	N1-C2-N3	-6.78	119.83	123.90
12	B	771	G	N1-C2-N2	6.78	122.30	116.20
12	B	2277	G	C4-C5-C6	6.78	122.87	118.80
25	O	117	PHE	CB-CG-CD1	6.78	125.54	120.80
12	B	111	A	C2-N3-C4	-6.77	107.21	110.60
12	B	428	A	N9-C4-C5	-6.77	103.09	105.80
12	B	1042	G	O4'-C1'-N9	6.77	113.62	108.20
12	B	1332	G	C5-C6-O6	-6.77	124.53	128.60
12	B	2406	A	C4-C5-N7	-6.77	107.31	110.70
22	L	91	ASP	CB-CG-OD2	-6.77	112.20	118.30
11	A	34	A	C4-C5-C6	6.77	120.39	117.00
12	B	606	U	N3-C2-O2	6.77	126.94	122.20
12	B	858	G	C5'-C4'-C3'	-6.77	105.16	116.00
12	B	1483	G	C8-N9-C4	-6.77	103.69	106.40
12	B	2062	A	N7-C8-N9	6.77	117.19	113.80
12	B	2152	G	O4'-C1'-N9	6.77	113.62	108.20
12	B	2345	G	N1-C2-N3	-6.77	119.84	123.90
12	B	2479	U	C5-C6-N1	6.77	126.09	122.70
12	B	541	A	N3-C4-C5	-6.77	122.06	126.80
12	B	1866	A	C5-C6-N1	-6.77	114.31	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2089	C	C4-C5-C6	-6.77	114.01	117.40
12	B	2185	U	O4'-C1'-N1	6.77	113.62	108.20
12	B	2836	U	N3-C4-C5	-6.77	110.54	114.60
8	7	13	PHE	CB-CG-CD1	6.77	125.54	120.80
11	A	115	A	C4'-C3'-C2'	-6.77	95.83	102.60
12	B	432	A	N3-C4-C5	-6.77	122.06	126.80
12	B	1468	U	O4'-C1'-N1	6.77	113.62	108.20
12	B	1718	G	O4'-C1'-N9	6.77	113.61	108.20
12	B	2761	A	C5-N7-C8	6.77	107.28	103.90
10	9	237	ARG	NE-CZ-NH1	-6.77	116.92	120.30
12	B	297	G	N9-C4-C5	6.77	108.11	105.40
12	B	309	A	C4-C5-C6	6.77	120.38	117.00
12	B	658	U	N1-C2-N3	-6.77	110.84	114.90
12	B	953	G	O4'-C1'-N9	6.77	113.61	108.20
12	B	1465	G	O4'-C1'-N9	6.77	113.61	108.20
12	B	1629	U	C2-N3-C4	-6.77	122.94	127.00
12	B	1673	G	C5-N7-C8	6.77	107.68	104.30
12	B	1749	A	C5-C6-N6	-6.77	118.29	123.70
12	B	2508	G	C4-N9-C1'	-6.77	117.70	126.50
12	B	1236	G	C8-N9-C4	-6.77	103.69	106.40
12	B	762	U	C6-N1-C2	-6.76	116.94	121.00
12	B	1146	C	C5-C4-N4	-6.76	115.47	120.20
12	B	1157	G	O4'-C1'-N9	6.76	113.61	108.20
12	B	1208	C	C6-N1-C2	6.76	123.01	120.30
12	B	2553	G	N3-C2-N2	6.76	124.64	119.90
12	B	1195	G	C2-N3-C4	6.76	115.28	111.90
12	B	1816	C	N3-C4-C5	-6.76	119.19	121.90
12	B	1862	G	N7-C8-N9	6.76	116.48	113.10
12	B	2174	C	O4'-C1'-N1	6.76	113.61	108.20
12	B	2336	A	C8-N9-C4	-6.76	103.09	105.80
10	9	95	ARG	NE-CZ-NH2	6.76	123.68	120.30
12	B	465	G	N3-C2-N2	6.76	124.63	119.90
12	B	653	U	C1'-O4'-C4'	-6.76	104.49	109.90
12	B	834	G	N1-C6-O6	6.76	123.96	119.90
12	B	1034	G	C2-N3-C4	-6.76	108.52	111.90
12	B	1477	A	C5-C6-N1	-6.76	114.32	117.70
12	B	1536	C	N3-C2-O2	6.76	126.63	121.90
12	B	1878	G	N9-C4-C5	-6.76	102.69	105.40
12	B	2454	G	C4-C5-C6	6.76	122.86	118.80
12	B	2471	A	C5-C6-N1	-6.76	114.32	117.70
12	B	2787	C	N1-C2-O2	6.76	122.96	118.90
12	B	268	C	C2-N1-C1'	6.76	126.23	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	270	A	N9-C4-C5	6.76	108.50	105.80
12	B	910	A	C5-C6-N1	-6.76	114.32	117.70
12	B	1193	G	C5-C6-O6	-6.76	124.54	128.60
12	B	1727	C	C5-C4-N4	-6.76	115.47	120.20
12	B	1738	G	N3-C4-C5	-6.76	125.22	128.60
12	B	1979	U	C2-N3-C4	-6.76	122.94	127.00
12	B	2338	C	C6-N1-C2	6.76	123.00	120.30
12	B	2852	G	C5-C6-N1	-6.76	108.12	111.50
12	B	1537	G	N3-C4-N9	-6.76	121.94	126.00
12	B	43	G	N7-C8-N9	6.76	116.48	113.10
12	B	77	G	N1-C6-O6	6.76	123.95	119.90
12	B	501	A	O4'-C1'-N9	6.76	113.61	108.20
12	B	891	G	N3-C4-C5	-6.76	125.22	128.60
12	B	995	C	C6-N1-C2	6.76	123.00	120.30
12	B	1376	C	C3'-C2'-C1'	6.76	106.91	101.50
12	B	1908	C	N3-C4-C5	-6.76	119.20	121.90
12	B	2150	C	N1-C2-N3	-6.76	114.47	119.20
12	B	1819	A	N3-C4-C5	-6.75	122.07	126.80
26	P	97	TYR	CB-CG-CD1	-6.75	116.95	121.00
11	A	54	G	O4'-C1'-N9	6.75	113.60	108.20
12	B	220	G	C4-C5-C6	6.75	122.85	118.80
12	B	563	A	C5-C6-N6	-6.75	118.30	123.70
12	B	2030	A	C4-C5-N7	-6.75	107.32	110.70
12	B	2049	G	C4-C5-C6	6.75	122.85	118.80
12	B	2659	G	N3-C2-N2	6.75	124.63	119.90
12	B	77	G	C6-C5-N7	-6.75	126.35	130.40
12	B	1315	C	C2-N3-C4	6.75	123.28	119.90
12	B	1357	C	N3-C4-C5	-6.75	119.20	121.90
12	B	1398	C	C6-N1-C2	-6.75	117.60	120.30
12	B	1424	G	N1-C2-N3	-6.75	119.85	123.90
12	B	1503	A	C1'-O4'-C4'	6.75	115.30	109.90
12	B	1507	C	N3-C4-N4	6.75	122.72	118.00
12	B	1513	U	N1-C2-O2	-6.75	118.07	122.80
12	B	1727	C	C5'-C4'-C3'	6.75	126.80	116.00
12	B	1932	A	C4-C5-C6	6.75	120.38	117.00
12	B	2098	U	O4'-C1'-N1	6.75	113.60	108.20
12	B	2401	U	N1-C1'-C2'	-6.75	104.57	112.00
12	B	324	A	C4-C5-C6	6.75	120.38	117.00
12	B	664	G	N9-C4-C5	-6.75	102.70	105.40
12	B	2199	A	C5'-C4'-C3'	-6.75	105.20	116.00
12	B	22	C	N3-C4-N4	6.75	122.72	118.00
12	B	62	U	N1-C2-N3	6.75	118.95	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1229	C	N3-C4-N4	6.75	122.72	118.00
14	D	33	ARG	NE-CZ-NH1	-6.75	116.93	120.30
12	B	275	C	C4'-C3'-C2'	-6.75	95.85	102.60
12	B	974	G	N3-C2-N2	6.75	124.62	119.90
12	B	1475	G	C5-C6-N1	-6.75	108.13	111.50
12	B	2902	C	N3-C4-N4	6.75	122.72	118.00
11	A	10	G	N3-C2-N2	6.75	124.62	119.90
12	B	520	G	N3-C2-N2	6.75	124.62	119.90
18	H	84	ALA	N-CA-CB	6.75	119.54	110.10
11	A	111	U	C5-C4-O4	6.74	129.95	125.90
12	B	1348	C	C6-N1-C2	-6.74	117.60	120.30
12	B	1486	U	P-O5'-C5'	6.74	131.69	120.90
12	B	1863	G	N3-C4-C5	-6.74	125.23	128.60
12	B	1949	G	P-O5'-C5'	6.74	131.69	120.90
12	B	1981	A	N1-C2-N3	6.74	132.67	129.30
12	B	2093	G	C4-C5-C6	6.74	122.85	118.80
12	B	2218	G	C8-N9-C4	6.74	109.10	106.40
12	B	2892	G	C4-N9-C1'	-6.74	117.73	126.50
14	D	156	PHE	CB-CG-CD1	-6.74	116.08	120.80
12	B	937	C	N3-C4-C5	-6.74	119.20	121.90
12	B	1362	C	O4'-C1'-N1	6.74	113.59	108.20
11	A	79	G	C4-C5-C6	6.74	122.84	118.80
12	B	319	G	C5-C6-N1	-6.74	108.13	111.50
12	B	1424	G	C6-N1-C2	-6.74	121.06	125.10
12	B	1714	U	C5'-C4'-C3'	-6.74	105.22	116.00
12	B	2054	A	C5-N7-C8	6.74	107.27	103.90
12	B	2223	G	O4'-C1'-N9	6.74	113.59	108.20
12	B	2388	A	C4-C5-C6	6.74	120.37	117.00
12	B	2417	C	O4'-C1'-N1	6.74	113.59	108.20
12	B	188	G	C4-C5-N7	-6.74	108.11	110.80
12	B	516	C	N1-C2-O2	-6.74	114.86	118.90
12	B	651	G	N1-C6-O6	6.74	123.94	119.90
12	B	996	A	C5'-C4'-C3'	-6.74	105.22	116.00
12	B	1344	U	C2-N1-C1'	6.74	125.79	117.70
12	B	1631	G	C4'-C3'-C2'	-6.74	95.86	102.60
12	B	2058	A	C5-C6-N1	-6.74	114.33	117.70
12	B	2538	C	O4'-C4'-C3'	-6.74	97.26	104.00
12	B	2722	G	C5-C6-O6	-6.74	124.56	128.60
12	B	834	G	O4'-C1'-N9	6.74	113.59	108.20
12	B	1783	A	C3'-C2'-C1'	-6.74	96.11	101.50
12	B	2333	A	C5-C6-N6	-6.74	118.31	123.70
12	B	2863	C	N3-C4-N4	6.74	122.72	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	33	C	C5-C6-N1	6.74	124.37	121.00
12	B	102	U	C2-N1-C1'	6.74	125.78	117.70
12	B	175	G	N7-C8-N9	-6.74	109.73	113.10
12	B	287	G	C4-C5-N7	-6.74	108.11	110.80
12	B	293	U	C2-N1-C1'	6.74	125.78	117.70
12	B	317	G	N1-C2-N3	-6.74	119.86	123.90
12	B	454	A	C6-C5-N7	-6.74	127.59	132.30
12	B	512	G	C6-C5-N7	-6.74	126.36	130.40
12	B	772	C	P-O3'-C3'	6.74	127.78	119.70
12	B	979	A	C5-C6-N1	-6.74	114.33	117.70
12	B	1256	G	C6-C5-N7	-6.74	126.36	130.40
12	B	1283	G	C4-C5-C6	6.74	122.84	118.80
12	B	1505	A	C5-C6-N1	-6.74	114.33	117.70
12	B	1567	G	N1-C2-N3	-6.74	119.86	123.90
12	B	11	C	N3-C4-C5	-6.73	119.21	121.90
12	B	400	G	N1-C2-N2	-6.73	110.14	116.20
12	B	2176	A	N1-C6-N6	6.73	122.64	118.60
12	B	365	U	C4'-C3'-C2'	-6.73	95.87	102.60
12	B	1073	A	C5-C6-N1	-6.73	114.33	117.70
12	B	1689	A	N1-C2-N3	6.73	132.67	129.30
12	B	1715	G	N9-C4-C5	-6.73	102.71	105.40
12	B	2664	G	N3-C2-N2	6.73	124.61	119.90
12	B	614	A	C2-N3-C4	6.73	113.97	110.60
12	B	973	A	C5-C6-N6	-6.73	118.31	123.70
12	B	1721	G	P-O5'-C5'	6.73	131.67	120.90
12	B	1919	A	O4'-C1'-N9	6.73	113.58	108.20
12	B	2043	C	N3-C4-C5	-6.73	119.21	121.90
12	B	2773	C	N3-C4-N4	6.73	122.71	118.00
12	B	2816	G	C8-N9-C4	-6.73	103.71	106.40
10	9	145	THR	CA-CB-CG2	-6.73	102.98	112.40
12	B	109	C	C5-C4-N4	-6.73	115.49	120.20
12	B	509	C	C6-N1-C2	-6.73	117.61	120.30
12	B	1215	G	C4-C5-C6	6.73	122.84	118.80
12	B	1587	G	N3-C2-N2	6.73	124.61	119.90
12	B	2678	C	O4'-C1'-N1	6.73	113.58	108.20
12	B	203	A	C5-C6-N6	-6.73	118.32	123.70
12	B	233	A	C6-N1-C2	-6.73	114.56	118.60
12	B	480	A	C4-C5-N7	-6.73	107.34	110.70
12	B	979	A	C4-N9-C1'	-6.73	114.19	126.30
12	B	2884	U	C2-N3-C4	-6.73	122.96	127.00
10	9	53	LEU	N-CA-CB	6.73	123.85	110.40
12	B	25	U	N3-C4-O4	6.73	124.11	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	101	A	O4'-C1'-N9	6.73	113.58	108.20
12	B	1171	G	N1-C6-O6	6.73	123.94	119.90
12	B	2739	U	C3'-C2'-C1'	6.73	106.88	101.50
12	B	256	A	C4-C5-N7	-6.72	107.34	110.70
12	B	407	G	C5-C6-O6	-6.72	124.56	128.60
12	B	1730	C	C5-C4-N4	-6.72	115.49	120.20
12	B	1909	C	O3'-P-O5'	6.72	116.78	104.00
12	B	2268	A	C6-C5-N7	-6.72	127.59	132.30
12	B	817	C	N3-C4-N4	6.72	122.71	118.00
12	B	1342	A	C5-N7-C8	6.72	107.26	103.90
12	B	2653	U	O5'-C5'-C4'	-6.72	98.93	111.70
12	B	2768	U	C4-C5-C6	-6.72	115.67	119.70
12	B	2815	C	O4'-C1'-N1	6.72	113.58	108.20
12	B	69	C	C4-C5-C6	6.72	120.76	117.40
12	B	76	C	N3-C4-C5	-6.72	119.21	121.90
12	B	2134	A	N3-C4-C5	-6.72	122.09	126.80
12	B	7	G	N1-C6-O6	6.72	123.93	119.90
12	B	388	G	C2-N3-C4	6.72	115.26	111.90
12	B	506	G	C4-C5-C6	6.72	122.83	118.80
12	B	582	A	O4'-C1'-N9	6.72	113.58	108.20
12	B	1573	G	C2-N3-C4	-6.72	108.54	111.90
12	B	2424	C	C6-N1-C1'	-6.72	112.74	120.80
12	B	882	G	P-O5'-C5'	6.72	131.65	120.90
12	B	1801	A	C4'-C3'-C2'	6.72	109.32	102.60
12	B	1958	C	O4'-C1'-N1	6.72	113.57	108.20
3	2	51	SER	CB-CA-C	-6.71	97.34	110.10
12	B	1050	A	C2-N3-C4	-6.71	107.24	110.60
12	B	1240	U	C5-C4-O4	-6.71	121.87	125.90
12	B	1649	G	N1-C6-O6	6.71	123.93	119.90
12	B	2170	A	C8-N9-C4	-6.71	103.11	105.80
12	B	2614	A	C5-C6-N6	-6.71	118.33	123.70
12	B	10	A	C5-C6-N6	-6.71	118.33	123.70
12	B	1040	A	O4'-C1'-N9	6.71	113.57	108.20
12	B	1968	G	C6-C5-N7	-6.71	126.37	130.40
12	B	2372	U	O4'-C1'-N1	6.71	113.57	108.20
12	B	2673	G	C8-N9-C4	-6.71	103.72	106.40
7	6	14	ARG	NE-CZ-NH2	6.71	123.66	120.30
11	A	30	C	N1-C2-N3	-6.71	114.50	119.20
11	A	44	G	N1-C2-N3	-6.71	119.87	123.90
12	B	1215	G	C5-C6-N1	-6.71	108.14	111.50
12	B	1368	G	C4'-C3'-C2'	-6.71	95.89	102.60
12	B	2062	A	P-O3'-C3'	6.71	127.75	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2692	G	C4'-C3'-C2'	-6.71	95.89	102.60
12	B	2857	G	C2-N3-C4	6.71	115.25	111.90
12	B	55	G	N3-C4-N9	-6.71	121.97	126.00
12	B	419	U	N1-C2-N3	-6.71	110.87	114.90
12	B	529	A	C5-C6-N6	-6.71	118.33	123.70
12	B	818	G	C4'-C3'-C2'	-6.71	95.89	102.60
12	B	917	A	C5-N7-C8	6.71	107.25	103.90
12	B	939	G	N1-C6-O6	6.71	123.93	119.90
29	S	76	VAL	CG1-CB-CG2	6.71	121.64	110.90
1	0	37	PHE	CB-CG-CD1	6.71	125.50	120.80
6	5	180	PHE	N-CA-C	-6.71	92.89	111.00
12	B	1074	G	N3-C2-N2	6.71	124.60	119.90
12	B	1354	A	C4-C5-C6	6.71	120.35	117.00
12	B	2072	C	N3-C4-N4	6.71	122.70	118.00
12	B	2665	A	C4-C5-C6	6.71	120.36	117.00
12	B	559	G	C6-C5-N7	-6.71	126.38	130.40
12	B	605	G	O4'-C1'-N9	6.71	113.56	108.20
12	B	651	G	C5'-C4'-O4'	6.71	117.15	109.10
12	B	739	A	C5'-C4'-O4'	6.71	117.15	109.10
12	B	1003	G	C2-N3-C4	6.71	115.25	111.90
12	B	1084	A	N7-C8-N9	6.71	117.15	113.80
12	B	2811	G	C6-N1-C2	6.71	129.12	125.10
12	B	97	C	N3-C4-N4	6.71	122.69	118.00
12	B	180	G	C5-N7-C8	6.71	107.65	104.30
12	B	536	G	C3'-C2'-C1'	-6.71	96.14	101.50
12	B	1465	G	C4-C5-C6	6.71	122.82	118.80
12	B	1791	A	C4-C5-N7	-6.71	107.35	110.70
12	B	1852	U	C5-C6-N1	6.71	126.05	122.70
12	B	1961	C	N1-C2-N3	-6.71	114.51	119.20
12	B	259	G	O4'-C1'-N9	6.70	113.56	108.20
12	B	457	A	O4'-C1'-N9	6.70	113.56	108.20
12	B	622	G	N1-C2-N2	6.70	122.23	116.20
12	B	917	A	N1-C6-N6	6.70	122.62	118.60
12	B	1929	G	C5'-C4'-C3'	-6.70	105.28	116.00
12	B	2729	G	N9-C4-C5	-6.70	102.72	105.40
12	B	2758	A	C5-C6-N1	-6.70	114.35	117.70
12	B	237	C	C5-C6-N1	6.70	124.35	121.00
12	B	1196	C	N3-C4-N4	6.70	122.69	118.00
12	B	1812	U	C2-N3-C4	6.70	131.02	127.00
12	B	2212	A	C4'-C3'-C2'	-6.70	95.90	102.60
12	B	2505	G	N3-C4-C5	-6.70	125.25	128.60
12	B	2536	G	C4-C5-C6	6.70	122.82	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2849	U	N3-C2-O2	6.70	126.89	122.20
12	B	130	C	O4'-C4'-C3'	-6.70	97.30	104.00
12	B	756	A	N3-C4-N9	6.70	132.76	127.40
12	B	1407	G	N1-C2-N3	-6.70	119.88	123.90
12	B	2110	G	P-O3'-C3'	-6.70	111.66	119.70
12	B	2177	C	C2-N3-C4	6.70	123.25	119.90
31	U	11	ILE	C-N-CA	6.70	138.45	121.70
12	B	678	C	N1-C2-N3	-6.70	114.51	119.20
12	B	981	A	C6-C5-N7	-6.70	127.61	132.30
12	B	1011	G	C5-C6-N1	-6.70	108.15	111.50
12	B	1379	U	O4'-C1'-N1	6.70	113.56	108.20
12	B	1429	G	N1-C6-O6	6.70	123.92	119.90
12	B	1888	G	O4'-C1'-N9	6.70	113.56	108.20
12	B	2142	A	N7-C8-N9	-6.70	110.45	113.80
12	B	2760	C	C5-C4-N4	-6.70	115.51	120.20
11	A	4	C	C2-N1-C1'	-6.70	111.43	118.80
12	B	379	G	P-O3'-C3'	-6.70	111.66	119.70
12	B	1742	U	C2-N3-C4	-6.70	122.98	127.00
12	B	1912	A	N7-C8-N9	-6.70	110.45	113.80
12	B	2550	G	N9-C4-C5	-6.70	102.72	105.40
12	B	39	G	N1-C2-N3	-6.70	119.88	123.90
12	B	243	U	N3-C4-C5	-6.70	110.58	114.60
12	B	445	C	N1-C2-O2	6.70	122.92	118.90
12	B	688	U	O4'-C1'-N1	6.70	113.56	108.20
12	B	968	C	O4'-C1'-N1	6.70	113.56	108.20
12	B	1646	C	C6-N1-C2	-6.70	117.62	120.30
12	B	1753	G	N1-C2-N2	-6.70	110.17	116.20
12	B	2139	U	P-O3'-C3'	6.70	127.73	119.70
12	B	2187	U	P-O5'-C5'	6.70	131.61	120.90
12	B	2650	U	N1-C2-N3	6.70	118.92	114.90
17	G	152	ARG	NE-CZ-NH1	6.70	123.65	120.30
12	B	919	U	N3-C4-O4	6.69	124.08	119.40
12	B	1814	G	C2-N3-C4	6.69	115.25	111.90
12	B	1921	G	N9-C4-C5	-6.69	102.72	105.40
12	B	2217	G	C6-N1-C2	6.69	129.12	125.10
12	B	139	U	O4'-C1'-N1	6.69	113.55	108.20
12	B	1961	C	C2-N1-C1'	-6.69	111.44	118.80
12	B	2336	A	N1-C2-N3	-6.69	125.95	129.30
12	B	616	A	C5-C6-N6	-6.69	118.35	123.70
12	B	878	A	C5-C6-N6	-6.69	118.35	123.70
12	B	1381	G	C5-C6-N1	-6.69	108.16	111.50
16	F	69	ALA	CB-CA-C	-6.69	100.07	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	57	C	N3-C4-N4	6.69	122.68	118.00
12	B	267	C	C5'-C4'-C3'	-6.69	105.30	116.00
12	B	383	C	O4'-C1'-N1	6.69	113.55	108.20
12	B	396	G	O4'-C1'-N9	6.69	113.55	108.20
12	B	438	G	N3-C2-N2	6.69	124.58	119.90
12	B	584	C	N3-C4-C5	-6.69	119.22	121.90
12	B	977	G	O4'-C1'-N9	6.69	113.55	108.20
12	B	1625	C	N3-C4-C5	-6.69	119.22	121.90
12	B	2037	A	N9-C4-C5	6.69	108.47	105.80
12	B	2599	G	C8-N9-C4	6.69	109.08	106.40
12	B	2667	C	P-O3'-C3'	-6.69	111.67	119.70
12	B	174	U	O4'-C1'-N1	6.69	113.55	108.20
12	B	473	G	N1-C2-N3	-6.69	119.89	123.90
12	B	862	G	P-O5'-C5'	6.69	131.60	120.90
12	B	1442	U	C5-C6-N1	6.69	126.04	122.70
12	B	862	G	N9-C1'-C2'	-6.68	104.65	112.00
12	B	1618	A	N7-C8-N9	6.68	117.14	113.80
12	B	2140	G	N3-C2-N2	6.68	124.58	119.90
12	B	2216	G	C4-C5-N7	-6.68	108.13	110.80
12	B	708	G	OP1-P-OP2	-6.68	109.58	119.60
12	B	713	G	C5-C6-O6	-6.68	124.59	128.60
12	B	777	G	N1-C2-N3	-6.68	119.89	123.90
12	B	1353	A	N7-C8-N9	-6.68	110.46	113.80
12	B	1598	A	C2-N3-C4	-6.68	107.26	110.60
12	B	1678	A	O4'-C1'-N9	6.68	113.55	108.20
12	B	1798	U	C1'-O4'-C4'	6.68	115.25	109.90
12	B	2617	U	N1-C2-N3	-6.68	110.89	114.90
12	B	75	G	C4-C5-N7	-6.68	108.13	110.80
12	B	841	G	C4-C5-N7	6.68	113.47	110.80
12	B	1640	A	C5-C6-N6	-6.68	118.36	123.70
12	B	2427	C	N3-C4-N4	6.68	122.68	118.00
12	B	2552	U	C4'-C3'-C2'	-6.68	95.92	102.60
12	B	223	A	N9-C4-C5	6.68	108.47	105.80
12	B	1406	U	O4'-C1'-N1	6.68	113.54	108.20
12	B	1504	A	C5-N7-C8	6.68	107.24	103.90
12	B	2256	G	C5'-C4'-C3'	6.68	126.69	116.00
12	B	2288	A	O4'-C1'-N9	6.68	113.54	108.20
12	B	1486	U	N3-C2-O2	6.68	126.87	122.20
12	B	1543	G	C6-C5-N7	-6.68	126.39	130.40
12	B	2839	G	C5-C6-N1	-6.68	108.16	111.50
12	B	324	A	C4-C5-N7	-6.68	107.36	110.70
12	B	521	U	N3-C2-O2	6.68	126.87	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	627	A	C5-C6-N1	-6.68	114.36	117.70
12	B	1078	U	N1-C2-O2	6.68	127.47	122.80
12	B	2294	G	O4'-C1'-N9	6.68	113.54	108.20
12	B	415	A	C5-C6-N6	-6.67	118.36	123.70
12	B	438	G	O4'-C1'-N9	6.67	113.54	108.20
12	B	1388	G	C2-N3-C4	-6.67	108.56	111.90
12	B	1570	A	C8-N9-C4	-6.67	103.13	105.80
12	B	2182	U	C6-N1-C2	-6.67	117.00	121.00
12	B	2189	U	C4-C5-C6	-6.67	115.70	119.70
12	B	2644	G	N1-C2-N3	-6.67	119.89	123.90
11	A	26	C	C6-N1-C1'	-6.67	112.79	120.80
12	B	328	U	C5-C6-N1	6.67	126.04	122.70
12	B	1404	C	C2-N3-C4	-6.67	116.56	119.90
12	B	1498	C	C6-N1-C2	-6.67	117.63	120.30
12	B	1885	A	O4'-C1'-N9	6.67	113.54	108.20
12	B	2256	G	O4'-C1'-N9	6.67	113.54	108.20
27	Q	44	TYR	CB-CG-CD2	6.67	125.00	121.00
12	B	664	G	C6-N1-C2	6.67	129.10	125.10
12	B	1036	G	C4-C5-N7	-6.67	108.13	110.80
12	B	1578	U	C5-C6-N1	6.67	126.04	122.70
12	B	2110	G	C6-C5-N7	-6.67	126.40	130.40
12	B	2444	G	C8-N9-C4	-6.67	103.73	106.40
12	B	2763	G	C4-C5-C6	6.67	122.80	118.80
12	B	190	A	N7-C8-N9	-6.67	110.47	113.80
12	B	2690	U	O4'-C1'-N1	6.67	113.54	108.20
12	B	865	C	C2-N3-C4	6.67	123.23	119.90
12	B	1124	G	C2-N3-C4	6.67	115.23	111.90
12	B	2033	A	C8-N9-C4	6.67	108.47	105.80
12	B	2073	C	C5-C6-N1	6.67	124.33	121.00
12	B	2682	A	O4'-C1'-N9	6.67	113.53	108.20
12	B	2718	G	C4-C5-N7	6.67	113.47	110.80
10	9	150	ARG	NE-CZ-NH2	-6.67	116.97	120.30
12	B	1262	A	C2-N3-C4	-6.67	107.27	110.60
12	B	1274	A	C4-C5-C6	6.67	120.33	117.00
12	B	1730	C	C4-C5-C6	6.67	120.73	117.40
12	B	2094	A	C6-N1-C2	-6.67	114.60	118.60
12	B	2555	U	N3-C4-C5	-6.67	110.60	114.60
12	B	2903	U	C5'-C4'-O4'	6.67	117.10	109.10
12	B	2505	G	N9-C4-C5	6.67	108.07	105.40
12	B	420	C	C3'-C2'-C1'	-6.66	96.17	101.50
12	B	756	A	P-O3'-C3'	6.66	127.70	119.70
12	B	1235	G	C8-N9-C4	-6.66	103.73	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	F	143	ASP	N-CA-CB	6.66	122.59	110.60
12	B	2205	A	C6-C5-N7	-6.66	127.64	132.30
12	B	2234	G	C8-N9-C1'	6.66	135.66	127.00
12	B	2498	C	O4'-C1'-N1	6.66	113.53	108.20
12	B	437	U	N3-C4-C5	-6.66	110.60	114.60
12	B	687	C	C2-N1-C1'	6.66	126.13	118.80
12	B	776	G	C5'-C4'-O4'	6.66	117.09	109.10
12	B	896	A	N3-C4-C5	-6.66	122.14	126.80
12	B	899	A	N3-C4-C5	-6.66	122.14	126.80
12	B	1167	C	C6-N1-C2	-6.66	117.64	120.30
12	B	2661	G	O4'-C1'-N9	6.66	113.53	108.20
12	B	2709	G	C2-N3-C4	6.66	115.23	111.90
12	B	2881	U	N1-C2-O2	-6.66	118.14	122.80
29	S	33	LEU	CB-CG-CD2	6.66	122.32	111.00
12	B	14	A	C6-C5-N7	-6.66	127.64	132.30
12	B	90	U	O4'-C1'-N1	6.66	113.53	108.20
12	B	754	U	C5-C6-N1	6.66	126.03	122.70
12	B	1632	A	C2-N3-C4	-6.66	107.27	110.60
12	B	2115	G	C5'-C4'-O4'	6.66	117.09	109.10
12	B	2317	A	C8-N9-C4	-6.66	103.14	105.80
12	B	1650	A	N9-C1'-C2'	-6.66	104.68	112.00
12	B	1853	A	C4-C5-C6	6.66	120.33	117.00
12	B	2458	G	O4'-C1'-N9	6.66	113.53	108.20
12	B	2778	A	N7-C8-N9	-6.66	110.47	113.80
14	D	200	ASP	CB-CG-OD2	-6.66	112.31	118.30
12	B	734	A	C2-N3-C4	-6.66	107.27	110.60
20	J	15	TRP	CB-CG-CD2	-6.66	117.95	126.60
7	6	5	PHE	CB-CG-CD2	6.65	125.46	120.80
12	B	214	G	N3-C2-N2	6.65	124.56	119.90
12	B	958	U	O4'-C1'-N1	6.65	113.52	108.20
12	B	1024	G	P-O3'-C3'	6.65	127.68	119.70
12	B	1283	G	C5-N7-C8	6.65	107.63	104.30
12	B	1840	G	C8-N9-C4	6.65	109.06	106.40
12	B	2078	C	O4'-C1'-N1	6.65	113.52	108.20
12	B	2391	G	C4-C5-N7	6.65	113.46	110.80
12	B	2724	U	N3-C4-C5	-6.65	110.61	114.60
11	A	20	G	C6-C5-N7	-6.65	126.41	130.40
12	B	239	C	N1-C1'-C2'	-6.65	104.69	112.00
12	B	664	G	N7-C8-N9	-6.65	109.77	113.10
12	B	684	G	C8-N9-C4	6.65	109.06	106.40
12	B	1046	A	N1-C2-N3	-6.65	125.97	129.30
12	B	1423	G	C6-C5-N7	-6.65	126.41	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1760	C	N3-C4-C5	-6.65	119.24	121.90
12	B	939	G	C5-C6-O6	-6.65	124.61	128.60
12	B	997	G	C2-N3-C4	6.65	115.22	111.90
12	B	1898	U	N3-C4-C5	-6.65	110.61	114.60
12	B	1989	G	N1-C6-O6	6.65	123.89	119.90
12	B	2038	G	N3-C2-N2	6.65	124.55	119.90
12	B	2573	C	C1'-O4'-C4'	-6.65	104.58	109.90
12	B	2669	G	C5-C6-N1	-6.65	108.18	111.50
12	B	1031	G	O4'-C1'-N9	6.65	113.52	108.20
12	B	1346	G	C6-C5-N7	-6.65	126.41	130.40
12	B	664	G	C8-N9-C4	6.64	109.06	106.40
12	B	1169	A	O4'-C1'-N9	6.64	113.52	108.20
12	B	1421	G	C2-N3-C4	6.64	115.22	111.90
12	B	1829	A	C5-C6-N6	-6.64	118.38	123.70
12	B	2216	G	N1-C2-N3	-6.64	119.91	123.90
11	A	29	A	C4-C5-C6	6.64	120.32	117.00
12	B	36	G	N3-C4-C5	-6.64	125.28	128.60
12	B	491	G	C1'-O4'-C4'	-6.64	104.59	109.90
12	B	1841	U	C5-C4-O4	-6.64	121.92	125.90
12	B	2092	U	O4'-C1'-N1	6.64	113.51	108.20
12	B	1861	G	O4'-C1'-N9	6.64	113.51	108.20
12	B	2305	U	C5-C6-N1	6.64	126.02	122.70
11	A	72	G	C5-C6-O6	-6.64	124.62	128.60
12	B	1028	A	C6-C5-N7	-6.64	127.65	132.30
12	B	1341	G	N1-C6-O6	-6.64	115.92	119.90
12	B	1434	A	N7-C8-N9	-6.64	110.48	113.80
12	B	2146	C	C5-C6-N1	6.64	124.32	121.00
12	B	2556	C	N3-C4-N4	6.64	122.65	118.00
12	B	2752	C	N1-C2-O2	-6.64	114.92	118.90
12	B	442	G	N9-C4-C5	6.64	108.06	105.40
12	B	1532	A	N9-C4-C5	-6.64	103.14	105.80
12	B	2517	C	C6-N1-C1'	-6.64	112.83	120.80
11	A	38	C	C1'-O4'-C4'	-6.64	104.59	109.90
12	B	204	A	C2-N3-C4	6.64	113.92	110.60
12	B	712	G	C4-C5-C6	6.64	122.78	118.80
12	B	775	G	N9-C4-C5	6.64	108.05	105.40
12	B	1092	C	C2-N1-C1'	6.64	126.10	118.80
12	B	1567	G	N7-C8-N9	6.64	116.42	113.10
12	B	2630	G	N1-C2-N3	-6.64	119.92	123.90
10	9	269	TYR	CB-CG-CD1	6.63	124.98	121.00
12	B	832	U	N1-C2-N3	-6.63	110.92	114.90
12	B	1749	A	O4'-C1'-N9	6.63	113.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1830	C	P-O3'-C3'	-6.63	111.74	119.70
20	J	15	TRP	CB-CG-CD1	6.63	135.62	127.00
12	B	245	G	N7-C8-N9	-6.63	109.78	113.10
12	B	472	A	C2-N3-C4	-6.63	107.28	110.60
12	B	597	G	C4-C5-C6	6.63	122.78	118.80
12	B	1311	G	N3-C2-N2	6.63	124.54	119.90
12	B	1489	C	N3-C2-O2	6.63	126.54	121.90
12	B	2177	C	C5-C4-N4	-6.63	115.56	120.20
12	B	2650	U	O4'-C1'-N1	6.63	113.51	108.20
12	B	151	C	P-O3'-C3'	6.63	127.66	119.70
12	B	1233	C	O4'-C1'-N1	6.63	113.51	108.20
12	B	1264	A	O5'-P-OP2	-6.63	99.73	105.70
12	B	1701	A	O4'-C1'-N9	6.63	113.50	108.20
12	B	1858	A	O4'-C1'-N9	6.63	113.50	108.20
12	B	2198	A	N9-C4-C5	6.63	108.45	105.80
12	B	2331	G	N3-C4-N9	6.63	129.98	126.00
12	B	2874	C	C4-C5-C6	6.63	120.72	117.40
12	B	395	U	N3-C4-C5	-6.63	110.62	114.60
12	B	1046	A	C5-C6-N6	-6.63	118.40	123.70
11	A	67	G	C1'-O4'-C4'	-6.63	104.60	109.90
12	B	157	C	N3-C4-C5	-6.63	119.25	121.90
12	B	875	G	O4'-C1'-N9	6.63	113.50	108.20
12	B	1473	G	N3-C4-N9	-6.63	122.02	126.00
12	B	1546	G	C2-N3-C4	6.63	115.22	111.90
12	B	1906	G	C4-N9-C1'	-6.63	117.88	126.50
12	B	1960	A	C5-C6-N6	-6.63	118.40	123.70
12	B	2349	G	N1-C6-O6	6.63	123.88	119.90
12	B	2544	G	N1-C2-N3	-6.63	119.92	123.90
12	B	128	C	O4'-C1'-N1	6.63	113.50	108.20
12	B	129	C	N3-C4-C5	-6.63	119.25	121.90
12	B	182	A	C3'-C2'-C1'	-6.63	96.20	101.50
12	B	1204	A	C4-C5-C6	6.63	120.31	117.00
12	B	1485	U	P-O5'-C5'	6.63	131.50	120.90
12	B	1995	U	C5-C4-O4	-6.63	121.92	125.90
12	B	2022	U	C4-C5-C6	-6.63	115.72	119.70
12	B	2361	G	N3-C4-C5	6.63	131.91	128.60
12	B	2469	A	N3-C4-N9	6.63	132.70	127.40
12	B	2526	G	N1-C2-N3	-6.63	119.92	123.90
12	B	2846	G	O4'-C1'-N9	6.63	113.50	108.20
12	B	126	A	C6-C5-N7	-6.62	127.66	132.30
12	B	1269	A	C5-C6-N6	-6.62	118.40	123.70
12	B	1952	A	C5-C6-N6	-6.62	118.40	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2066	C	C4-C5-C6	6.62	120.71	117.40
12	B	2331	G	C6-C5-N7	-6.62	126.42	130.40
12	B	2530	A	C5-N7-C8	6.62	107.21	103.90
12	B	1917	U	C5-C6-N1	6.62	126.01	122.70
12	B	2157	G	N3-C2-N2	6.62	124.54	119.90
12	B	2201	G	N1-C2-N3	-6.62	119.93	123.90
12	B	299	A	C5-C6-N6	-6.62	118.40	123.70
12	B	631	A	O4'-C1'-N9	6.62	113.50	108.20
12	B	1313	U	C1'-O4'-C4'	-6.62	104.60	109.90
12	B	1383	A	O4'-C1'-N9	6.62	113.50	108.20
12	B	2297	A	C5-C6-N1	-6.62	114.39	117.70
12	B	2454	G	C8-N9-C4	6.62	109.05	106.40
12	B	2471	A	N1-C6-N6	6.62	122.57	118.60
12	B	2654	A	C6-C5-N7	-6.62	127.67	132.30
12	B	395	U	C2-N3-C4	6.62	130.97	127.00
12	B	407	G	C4-C5-N7	-6.62	108.15	110.80
12	B	508	A	C4-C5-C6	6.62	120.31	117.00
12	B	781	A	O4'-C1'-N9	6.62	113.50	108.20
12	B	838	C	P-O3'-C3'	-6.62	111.76	119.70
12	B	1069	A	C5-C6-N1	-6.62	114.39	117.70
12	B	1297	C	C6-N1-C2	6.62	122.95	120.30
12	B	1763	G	N7-C8-N9	-6.62	109.79	113.10
12	B	1798	U	N3-C2-O2	6.62	126.83	122.20
12	B	2230	G	N3-C2-N2	6.62	124.53	119.90
12	B	896	A	C5-C6-N1	-6.62	114.39	117.70
12	B	1532	A	C4-C5-C6	6.62	120.31	117.00
12	B	1666	G	C5-C6-N1	6.62	114.81	111.50
3	2	46	MET	CG-SD-CE	-6.62	89.61	100.20
12	B	808	G	C5-N7-C8	6.62	107.61	104.30
12	B	948	C	C5-C4-N4	-6.62	115.57	120.20
12	B	1025	G	N3-C4-C5	6.62	131.91	128.60
12	B	1152	C	O4'-C1'-N1	6.62	113.49	108.20
12	B	2119	A	N3-C4-C5	-6.62	122.17	126.80
12	B	2369	A	C5-C6-N1	-6.62	114.39	117.70
12	B	2530	A	C6-C5-N7	-6.62	127.67	132.30
12	B	2740	A	C4-C5-N7	-6.62	107.39	110.70
12	B	680	C	C2-N3-C4	6.61	123.21	119.90
12	B	1373	A	C8-N9-C4	-6.61	103.16	105.80
12	B	1896	G	N3-C4-C5	6.61	131.91	128.60
12	B	2020	A	C5-N7-C8	6.61	107.21	103.90
12	B	2314	A	O4'-C1'-N9	6.61	113.49	108.20
12	B	2706	A	C6-C5-N7	-6.61	127.67	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1098	A	C4-C5-C6	6.61	120.31	117.00
12	B	1856	U	N3-C4-C5	-6.61	110.63	114.60
12	B	2869	G	C4-C5-C6	6.61	122.77	118.80
12	B	572	A	C5-C6-N6	-6.61	118.41	123.70
12	B	1389	G	O4'-C4'-C3'	-6.61	97.39	104.00
12	B	2425	A	C8-N9-C4	-6.61	103.16	105.80
12	B	1725	U	C2-N3-C4	-6.61	123.03	127.00
12	B	2357	G	C6-N1-C2	-6.61	121.14	125.10
12	B	2560	A	N1-C2-N3	6.61	132.60	129.30
12	B	2595	G	N7-C8-N9	-6.61	109.80	113.10
12	B	59	U	O4'-C1'-N1	6.61	113.48	108.20
12	B	753	A	C6-C5-N7	-6.61	127.68	132.30
12	B	1397	U	C5'-C4'-O4'	6.61	117.03	109.10
12	B	1548	A	C5-C6-N1	-6.61	114.40	117.70
12	B	1616	A	C5-C6-N1	-6.61	114.40	117.70
12	B	1808	A	C5-C6-N6	-6.61	118.42	123.70
12	B	2601	C	N3-C4-C5	6.61	124.54	121.90
12	B	141	G	C5-C6-N1	6.60	114.80	111.50
12	B	2335	A	C6-C5-N7	-6.60	127.68	132.30
12	B	174	U	N1-C2-O2	6.60	127.42	122.80
12	B	754	U	C1'-O4'-C4'	6.60	115.18	109.90
12	B	839	U	C2-N3-C4	6.60	130.96	127.00
12	B	1839	G	C4-C5-C6	6.60	122.76	118.80
12	B	2052	A	C4-C5-N7	-6.60	107.40	110.70
12	B	2163	A	C8-N9-C4	-6.60	103.16	105.80
12	B	2597	G	C1'-O4'-C4'	6.60	115.18	109.90
12	B	626	A	C5-C6-N6	-6.60	118.42	123.70
12	B	830	G	O4'-C1'-N9	6.60	113.48	108.20
12	B	2505	G	C8-N9-C4	-6.60	103.76	106.40
12	B	2859	G	C2-N3-C4	6.60	115.20	111.90
12	B	168	G	C5-C6-N1	6.60	114.80	111.50
12	B	2273	A	C5-C6-N1	-6.60	114.40	117.70
12	B	2549	G	C5'-C4'-C3'	-6.60	105.44	116.00
12	B	2551	C	N3-C4-C5	6.60	124.54	121.90
12	B	496	G	C5-C6-O6	-6.60	124.64	128.60
12	B	601	C	C2-N3-C4	6.60	123.20	119.90
12	B	606	U	N1-C2-O2	-6.60	118.18	122.80
12	B	1144	A	C5-N7-C8	6.60	107.20	103.90
12	B	1476	U	C5-C6-N1	-6.60	119.40	122.70
12	B	2070	A	C6-C5-N7	-6.60	127.68	132.30
12	B	2141	G	O4'-C1'-N9	6.60	113.48	108.20
12	B	2579	C	C5-C6-N1	-6.60	117.70	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	E	101	TYR	CB-CA-C	-6.60	97.20	110.40
12	B	1300	G	C4-N9-C1'	6.60	135.07	126.50
12	B	1455	G	C1'-O4'-C4'	-6.60	104.62	109.90
12	B	109	C	N3-C4-C5	-6.59	119.26	121.90
12	B	369	U	N3-C2-O2	-6.59	117.58	122.20
12	B	638	G	C6-C5-N7	-6.59	126.44	130.40
12	B	1697	G	C6-C5-N7	-6.59	126.44	130.40
12	B	2070	A	C2-N3-C4	-6.59	107.30	110.60
12	B	2250	G	C5-C6-O6	-6.59	124.64	128.60
12	B	2661	G	C3'-C2'-C1'	6.59	106.78	101.50
12	B	2708	G	N3-C2-N2	-6.59	115.28	119.90
12	B	2895	G	N3-C4-C5	-6.59	125.30	128.60
12	B	82	U	C2-N3-C4	-6.59	123.04	127.00
12	B	1467	U	P-O5'-C5'	-6.59	110.35	120.90
12	B	2104	C	P-O3'-C3'	6.59	127.61	119.70
12	B	2854	G	C6-C5-N7	-6.59	126.44	130.40
12	B	450	G	C4-C5-C6	6.59	122.75	118.80
12	B	895	U	N1-C2-O2	6.59	127.41	122.80
12	B	1256	G	O4'-C1'-N9	6.59	113.47	108.20
12	B	1455	G	P-O3'-C3'	-6.59	111.79	119.70
12	B	2587	A	O4'-C1'-N9	6.59	113.47	108.20
12	B	2658	C	N3-C4-N4	6.59	122.61	118.00
12	B	2733	A	C8-N9-C4	-6.59	103.16	105.80
12	B	98	G	C4-C5-N7	-6.59	108.16	110.80
12	B	332	A	C5-C6-N6	-6.59	118.43	123.70
12	B	400	G	N3-C2-N2	6.59	124.51	119.90
12	B	606	U	C5-C4-O4	-6.59	121.95	125.90
12	B	1456	G	N1-C2-N3	-6.59	119.95	123.90
12	B	2499	C	C5-C4-N4	-6.59	115.59	120.20
12	B	2731	G	N9-C4-C5	6.59	108.04	105.40
12	B	1858	A	C8-N9-C4	-6.59	103.17	105.80
12	B	2494	G	C5-C6-N1	-6.59	108.21	111.50
12	B	2685	G	C4'-C3'-C2'	-6.59	96.01	102.60
12	B	131	A	C4'-C3'-C2'	-6.59	96.01	102.60
12	B	196	A	C4-C5-C6	6.59	120.29	117.00
12	B	320	A	O4'-C1'-N9	6.59	113.47	108.20
12	B	331	C	O4'-C1'-N1	6.59	113.47	108.20
12	B	418	C	N3-C4-C5	6.59	124.53	121.90
12	B	656	G	N1-C2-N3	-6.59	119.95	123.90
12	B	1324	G	N1-C6-O6	6.59	123.85	119.90
12	B	2504	U	C4'-C3'-C2'	-6.59	96.01	102.60
12	B	2601	C	C6-N1-C2	-6.59	117.67	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1740	G	N1-C2-N3	-6.58	119.95	123.90
12	B	2043	C	N3-C4-N4	6.58	122.61	118.00
12	B	2581	G	OP1-P-OP2	-6.58	109.72	119.60
12	B	238	C	O4'-C1'-N1	6.58	113.47	108.20
12	B	318	C	C5-C4-N4	-6.58	115.59	120.20
12	B	570	G	N7-C8-N9	-6.58	109.81	113.10
12	B	672	C	N1-C2-N3	-6.58	114.59	119.20
12	B	721	A	N1-C2-N3	6.58	132.59	129.30
12	B	1074	G	C2-N3-C4	6.58	115.19	111.90
12	B	1792	G	N1-C6-O6	6.58	123.85	119.90
12	B	1821	A	C1'-O4'-C4'	-6.58	104.63	109.90
12	B	311	A	C4-C5-C6	6.58	120.29	117.00
12	B	362	A	OP1-P-OP2	-6.58	109.73	119.60
12	B	722	A	N9-C4-C5	6.58	108.43	105.80
12	B	804	A	C5-C6-N1	-6.58	114.41	117.70
12	B	2459	A	O4'-C1'-N9	6.58	113.47	108.20
12	B	222	A	N9-C4-C5	-6.58	103.17	105.80
12	B	2105	U	N3-C4-O4	6.58	124.01	119.40
12	B	346	A	C8-N9-C4	-6.58	103.17	105.80
12	B	624	C	C5-C4-N4	-6.58	115.60	120.20
12	B	1036	G	N9-C4-C5	6.58	108.03	105.40
12	B	1198	U	N3-C4-C5	-6.58	110.65	114.60
12	B	1370	C	N3-C4-C5	-6.58	119.27	121.90
12	B	2764	A	C5-N7-C8	6.58	107.19	103.90
12	B	664	G	N3-C4-C5	6.58	131.89	128.60
12	B	1304	A	C4-C5-C6	6.58	120.29	117.00
12	B	1863	G	C8-N9-C1'	6.58	135.55	127.00
12	B	2074	U	O4'-C1'-N1	6.58	113.46	108.20
12	B	2718	G	C8-N9-C4	6.58	109.03	106.40
11	A	15	A	O4'-C1'-N9	6.58	113.46	108.20
12	B	422	A	C8-N9-C4	-6.58	103.17	105.80
12	B	979	A	N3-C4-N9	6.58	132.66	127.40
12	B	1515	A	N1-C2-N3	6.58	132.59	129.30
17	G	15	ASP	CB-CG-OD1	-6.58	112.38	118.30
12	B	220	G	N3-C4-C5	-6.57	125.31	128.60
12	B	330	A	C4-C5-N7	-6.57	107.41	110.70
12	B	358	U	C4'-C3'-C2'	-6.57	96.03	102.60
12	B	739	A	C5-N7-C8	-6.57	100.61	103.90
12	B	827	U	O4'-C1'-N1	6.57	113.46	108.20
12	B	1030	C	C4'-C3'-C2'	-6.57	96.03	102.60
12	B	1356	G	C6-C5-N7	-6.57	126.46	130.40
12	B	1532	A	C5'-C4'-C3'	-6.57	105.48	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2631	G	C5-C6-O6	-6.57	124.66	128.60
10	9	30	PRO	N-CA-C	6.57	129.19	112.10
12	B	856	G	O5'-C5'-C4'	-6.57	99.21	111.70
12	B	2746	U	C6-N1-C2	-6.57	117.06	121.00
12	B	2873	A	C5-C6-N6	-6.57	118.44	123.70
12	B	1045	C	C5'-C4'-O4'	-6.57	101.22	109.10
12	B	1537	G	C4-C5-N7	-6.57	108.17	110.80
12	B	1550	C	C2-N3-C4	-6.57	116.61	119.90
12	B	2163	A	N3-C4-C5	-6.57	122.20	126.80
12	B	2527	C	P-O5'-C5'	6.57	131.41	120.90
12	B	2779	U	N1-C2-N3	-6.57	110.96	114.90
12	B	996	A	C5-C6-N6	-6.57	118.44	123.70
12	B	1337	G	N3-C2-N2	6.57	124.50	119.90
12	B	2584	U	N3-C4-O4	6.57	124.00	119.40
12	B	789	A	O4'-C1'-N9	6.57	113.45	108.20
12	B	1780	A	C4-C5-C6	6.57	120.28	117.00
12	B	1794	A	C4-C5-C6	6.57	120.28	117.00
12	B	2577	A	C5-C6-N1	-6.57	114.42	117.70
12	B	145	C	P-O5'-C5'	6.57	131.41	120.90
12	B	535	G	N3-C4-C5	6.57	131.88	128.60
12	B	581	C	C6-N1-C2	-6.57	117.67	120.30
12	B	759	G	N1-C6-O6	6.57	123.84	119.90
12	B	1382	G	P-O5'-C5'	-6.57	110.39	120.90
12	B	1428	C	N3-C4-C5	-6.57	119.27	121.90
12	B	1756	G	P-O3'-C3'	6.57	127.58	119.70
12	B	1786	A	O4'-C1'-N9	6.57	113.45	108.20
12	B	1951	U	N3-C2-O2	6.57	126.80	122.20
28	R	95	ASP	CB-CG-OD1	6.57	124.21	118.30
12	B	1173	U	O4'-C1'-N1	6.56	113.45	108.20
12	B	1983	G	C5-C6-N1	-6.56	108.22	111.50
12	B	2176	A	N7-C8-N9	6.56	117.08	113.80
15	E	135	ALA	N-CA-CB	6.56	119.29	110.10
12	B	799	G	C2-N3-C4	6.56	115.18	111.90
12	B	824	U	O4'-C1'-N1	6.56	113.45	108.20
12	B	1672	A	N9-C4-C5	6.56	108.42	105.80
12	B	2708	G	C5-C6-O6	-6.56	124.66	128.60
12	B	2724	U	C5-C4-O4	6.56	129.84	125.90
12	B	171	U	N1-C2-N3	-6.56	110.96	114.90
12	B	421	C	C3'-C2'-C1'	6.56	106.75	101.50
12	B	1669	A	C4-C5-C6	6.56	120.28	117.00
12	B	2850	A	C3'-C2'-C1'	6.56	106.75	101.50
11	A	62	C	N3-C2-O2	6.56	126.49	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	137	U	C4-C5-C6	-6.56	115.76	119.70
12	B	2472	G	C5'-C4'-C3'	6.56	126.50	116.00
12	B	55	G	C5-C6-N1	-6.56	108.22	111.50
12	B	221	A	N7-C8-N9	6.56	117.08	113.80
12	B	820	A	C5-C6-N6	-6.56	118.45	123.70
12	B	821	A	O4'-C1'-N9	6.56	113.45	108.20
12	B	926	G	C5-C6-O6	-6.56	124.67	128.60
12	B	1428	C	C2-N3-C4	6.56	123.18	119.90
12	B	1546	G	N1-C2-N3	-6.56	119.97	123.90
12	B	1619	G	C5-C6-O6	-6.56	124.67	128.60
12	B	2141	G	N1-C6-O6	6.56	123.83	119.90
12	B	2573	C	P-O3'-C3'	-6.56	111.83	119.70
12	B	2694	G	C6-N1-C2	6.56	129.03	125.10
21	K	108	ARG	NE-CZ-NH1	-6.56	117.02	120.30
11	A	108	A	C5-C6-N1	-6.56	114.42	117.70
12	B	762	U	N3-C4-O4	6.56	123.99	119.40
12	B	1600	C	C5'-C4'-C3'	-6.56	105.51	116.00
12	B	1702	G	P-O3'-C3'	-6.56	111.83	119.70
12	B	354	A	C3'-C2'-C1'	6.55	106.74	101.50
12	B	645	C	O4'-C1'-N1	6.55	113.44	108.20
12	B	989	G	N1-C2-N3	-6.55	119.97	123.90
12	B	1180	U	C2-N3-C4	6.55	130.93	127.00
12	B	1674	G	C4-C5-C6	6.55	122.73	118.80
12	B	1853	A	N9-C4-C5	6.55	108.42	105.80
12	B	2149	U	P-O5'-C5'	-6.55	110.41	120.90
12	B	2176	A	C6-N1-C2	-6.55	114.67	118.60
12	B	2444	G	O4'-C1'-N9	6.55	113.44	108.20
12	B	2660	A	C1'-O4'-C4'	6.55	115.14	109.90
12	B	2883	A	C5-N7-C8	6.55	107.18	103.90
12	B	1174	U	O4'-C1'-N1	6.55	113.44	108.20
12	B	1667	G	N1-C2-N2	-6.55	110.30	116.20
12	B	1781	U	O4'-C1'-N1	6.55	113.44	108.20
12	B	2115	G	C5-N7-C8	6.55	107.58	104.30
12	B	2844	G	N1-C2-N2	6.55	122.10	116.20
12	B	2875	C	N3-C4-C5	-6.55	119.28	121.90
11	A	108	A	C4'-C3'-C2'	-6.55	96.05	102.60
12	B	1904	G	C4-C5-N7	6.55	113.42	110.80
12	B	2061	G	N3-C2-N2	6.55	124.48	119.90
12	B	2075	U	N3-C4-O4	6.55	123.98	119.40
12	B	2193	G	C5-C6-O6	-6.55	124.67	128.60
12	B	2228	G	N1-C6-O6	6.55	123.83	119.90
12	B	2377	A	C6-N1-C2	-6.55	114.67	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1875	G	O4'-C1'-N9	6.55	113.44	108.20
12	B	2489	U	O4'-C1'-N1	6.55	113.44	108.20
11	A	59	A	O4'-C1'-N9	6.55	113.44	108.20
12	B	67	U	C5-C6-N1	6.55	125.97	122.70
12	B	356	G	N3-C2-N2	6.55	124.48	119.90
12	B	697	G	O4'-C1'-N9	6.55	113.44	108.20
12	B	842	U	O4'-C1'-N1	6.55	113.44	108.20
12	B	1626	A	C5-C6-N1	-6.55	114.43	117.70
12	B	2242	G	C8-N9-C4	6.55	109.02	106.40
23	M	59	ARG	NE-CZ-NH2	6.55	123.57	120.30
12	B	523	C	N3-C4-N4	6.54	122.58	118.00
12	B	810	U	N1-C2-O2	6.54	127.38	122.80
12	B	1289	C	C5'-C4'-O4'	6.54	116.95	109.10
12	B	148	U	O4'-C1'-N1	6.54	113.44	108.20
12	B	1086	A	N9-C4-C5	6.54	108.42	105.80
12	B	1678	A	C4-C5-C6	6.54	120.27	117.00
12	B	2094	A	N1-C2-N3	6.54	132.57	129.30
12	B	2375	G	N3-C4-N9	-6.54	122.07	126.00
12	B	2505	G	C4-C5-C6	6.54	122.73	118.80
12	B	2876	G	N9-C1'-C2'	-6.54	104.80	112.00
11	A	26	C	O4'-C1'-N1	6.54	113.43	108.20
12	B	156	A	C4-C5-C6	6.54	120.27	117.00
12	B	952	G	C4-C5-N7	-6.54	108.18	110.80
12	B	1391	U	C1'-O4'-C4'	6.54	115.13	109.90
12	B	2128	G	C4-C5-N7	-6.54	108.18	110.80
12	B	2283	C	O4'-C1'-N1	6.54	113.43	108.20
12	B	2304	G	C4-N9-C1'	6.54	135.00	126.50
12	B	2476	A	C6-N1-C2	6.54	122.53	118.60
20	J	95	ARG	NE-CZ-NH1	6.54	123.57	120.30
12	B	714	U	C5-C4-O4	-6.54	121.98	125.90
12	B	2042	A	C6-C5-N7	-6.54	127.72	132.30
12	B	2074	U	C3'-C2'-C1'	6.54	106.73	101.50
12	B	263	G	N3-C2-N2	6.54	124.48	119.90
12	B	1425	G	C6-C5-N7	-6.54	126.48	130.40
12	B	2252	G	N1-C6-O6	6.54	123.82	119.90
12	B	2760	C	C2-N3-C4	-6.54	116.63	119.90
12	B	474	G	C4-C5-N7	-6.54	108.19	110.80
12	B	912	C	C1'-O4'-C4'	6.54	115.13	109.90
12	B	2333	A	C4-C5-C6	6.54	120.27	117.00
12	B	2742	G	O4'-C1'-N9	6.54	113.43	108.20
12	B	219	A	N1-C6-N6	6.54	122.52	118.60
12	B	382	A	P-O3'-C3'	6.54	127.54	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	793	A	N1-C2-N3	6.54	132.57	129.30
12	B	856	G	N1-C6-O6	6.54	123.82	119.90
12	B	1027	A	C3'-C2'-C1'	-6.54	96.27	101.50
12	B	1786	A	C2-N3-C4	6.54	113.87	110.60
12	B	2223	G	C4-C5-N7	-6.54	108.19	110.80
12	B	2295	C	N1-C2-O2	6.54	122.82	118.90
12	B	2307	G	N3-C2-N2	6.54	124.47	119.90
15	E	184	ASP	N-CA-CB	6.54	122.36	110.60
11	A	110	C	O4'-C4'-C3'	-6.53	97.47	104.00
12	B	186	G	C4'-C3'-C2'	-6.53	96.07	102.60
12	B	407	G	C6-C5-N7	-6.53	126.48	130.40
12	B	443	A	C4-C5-N7	-6.53	107.43	110.70
12	B	505	A	C6-N1-C2	6.53	122.52	118.60
12	B	1359	A	C4-C5-C6	6.53	120.27	117.00
12	B	1465	G	N9-C4-C5	-6.53	102.79	105.40
12	B	1719	G	O4'-C1'-N9	6.53	113.43	108.20
23	M	117	PHE	CB-CG-CD1	6.53	125.37	120.80
11	A	70	C	N1-C2-N3	-6.53	114.63	119.20
12	B	102	U	C6-N1-C2	-6.53	117.08	121.00
12	B	150	U	O4'-C1'-N1	6.53	113.43	108.20
12	B	468	G	P-O5'-C5'	6.53	131.35	120.90
12	B	1657	U	O4'-C1'-N1	6.53	113.42	108.20
12	B	308	G	N1-C6-O6	6.53	123.82	119.90
12	B	1500	G	C4'-C3'-C2'	-6.53	96.07	102.60
12	B	2112	G	C5-N7-C8	6.53	107.56	104.30
12	B	2637	U	C4-C5-C6	-6.53	115.78	119.70
12	B	375	G	C5'-C4'-C3'	-6.53	105.55	116.00
12	B	1223	G	C5-C6-N1	-6.53	108.23	111.50
12	B	1500	G	O4'-C1'-N9	6.53	113.42	108.20
12	B	1734	G	C6-C5-N7	-6.53	126.48	130.40
12	B	2488	G	C5-C6-O6	-6.53	124.68	128.60
29	S	61	ASN	N-CA-CB	6.53	122.35	110.60
12	B	352	A	C2-N3-C4	-6.53	107.34	110.60
12	B	1643	G	C4'-C3'-C2'	-6.53	96.07	102.60
12	B	1846	G	C5-C6-N1	-6.53	108.24	111.50
12	B	1871	A	C4-C5-C6	6.53	120.26	117.00
12	B	1890	A	N1-C6-N6	6.53	122.52	118.60
12	B	195	A	O4'-C1'-N9	6.53	113.42	108.20
12	B	448	U	C2-N3-C4	-6.53	123.08	127.00
12	B	979	A	N7-C8-N9	-6.53	110.54	113.80
12	B	1002	G	C4-C5-N7	6.53	113.41	110.80
12	B	1091	G	C4-C5-N7	-6.53	108.19	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1519	G	C6-C5-N7	-6.53	126.48	130.40
12	B	2441	U	N3-C4-O4	6.53	123.97	119.40
12	B	2659	G	C4-C5-N7	-6.53	108.19	110.80
12	B	579	G	C2-N3-C4	6.52	115.16	111.90
12	B	676	A	C4-C5-C6	6.52	120.26	117.00
12	B	1329	U	N3-C4-O4	6.52	123.97	119.40
12	B	1670	C	C5-C4-N4	6.52	124.77	120.20
12	B	1864	U	C2-N3-C4	-6.52	123.09	127.00
12	B	192	C	C6-N1-C2	-6.52	117.69	120.30
12	B	714	U	C6-N1-C2	-6.52	117.09	121.00
12	B	1401	G	O4'-C1'-N9	6.52	113.42	108.20
12	B	1906	G	O4'-C1'-N9	6.52	113.42	108.20
12	B	2043	C	N1-C2-O2	6.52	122.81	118.90
12	B	2182	U	C2-N1-C1'	6.52	125.53	117.70
12	B	2472	G	O4'-C4'-C3'	-6.52	97.48	104.00
12	B	2584	U	C5-C4-O4	-6.52	121.99	125.90
12	B	542	C	C5-C4-N4	-6.52	115.64	120.20
12	B	87	U	N1-C2-O2	-6.52	118.24	122.80
12	B	1374	G	N1-C6-O6	6.52	123.81	119.90
12	B	1383	A	P-O3'-C3'	-6.52	111.88	119.70
12	B	1638	C	C3'-C2'-C1'	6.52	106.72	101.50
12	B	1957	C	C5-C4-N4	-6.52	115.64	120.20
12	B	2293	G	O4'-C1'-N9	6.52	113.42	108.20
12	B	2608	G	N7-C8-N9	6.52	116.36	113.10
12	B	538	A	N3-C4-C5	-6.52	122.24	126.80
12	B	929	U	N1-C2-O2	-6.52	118.24	122.80
12	B	1245	G	C5-N7-C8	6.52	107.56	104.30
12	B	1423	G	C4-C5-C6	6.52	122.71	118.80
12	B	1982	U	C4-C5-C6	6.52	123.61	119.70
12	B	2448	A	OP1-P-OP2	-6.52	109.83	119.60
12	B	2777	G	N3-C4-N9	6.52	129.91	126.00
12	B	506	G	C6-N1-C2	-6.51	121.19	125.10
12	B	1051	G	C4-C5-C6	6.51	122.71	118.80
12	B	1269	A	C2-N3-C4	-6.51	107.34	110.60
12	B	2651	C	O4'-C1'-N1	6.51	113.41	108.20
11	A	60	C	N1-C2-O2	-6.51	114.99	118.90
12	B	356	G	O4'-C1'-N9	6.51	113.41	108.20
12	B	1125	G	P-O5'-C5'	6.51	131.32	120.90
12	B	340	A	O4'-C1'-N9	6.51	113.41	108.20
12	B	363	G	C6-C5-N7	-6.51	126.49	130.40
12	B	532	A	N1-C6-N6	6.51	122.51	118.60
12	B	836	G	N9-C4-C5	6.51	108.00	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1860	G	C5-C6-N1	-6.51	108.24	111.50
12	B	1959	G	C6-C5-N7	-6.51	126.49	130.40
12	B	2295	C	N3-C4-N4	6.51	122.56	118.00
12	B	2669	G	C6-N1-C2	6.51	129.01	125.10
12	B	49	A	O4'-C1'-N9	6.51	113.41	108.20
12	B	1552	A	C6-C5-N7	-6.51	127.74	132.30
12	B	1623	G	C3'-C2'-C1'	-6.51	96.29	101.50
12	B	1923	U	C6-N1-C1'	6.51	130.31	121.20
12	B	2107	G	C5-C6-O6	-6.51	124.69	128.60
12	B	2258	C	C1'-O4'-C4'	6.51	115.11	109.90
11	A	22	U	C5-C6-N1	6.51	125.95	122.70
12	B	489	G	C8-N9-C4	-6.51	103.80	106.40
12	B	1457	U	C5-C6-N1	6.51	125.95	122.70
12	B	2811	G	C5-C6-N1	-6.51	108.25	111.50
16	F	70	ARG	NE-CZ-NH2	-6.51	117.05	120.30
12	B	1671	U	O4'-C4'-C3'	-6.51	97.49	104.00
12	B	1703	G	C5'-C4'-C3'	-6.51	105.59	116.00
12	B	2592	G	N1-C6-O6	6.51	123.80	119.90
12	B	513	A	O4'-C1'-N9	6.50	113.40	108.20
12	B	542	C	C6-N1-C1'	-6.50	112.99	120.80
12	B	2158	A	C5-N7-C8	6.50	107.15	103.90
12	B	2561	U	C6-N1-C2	-6.50	117.10	121.00
12	B	201	C	N3-C4-C5	-6.50	119.30	121.90
12	B	1085	A	N1-C6-N6	6.50	122.50	118.60
12	B	1093	G	C4-C5-N7	6.50	113.40	110.80
12	B	1144	A	C4-C5-C6	6.50	120.25	117.00
12	B	1610	A	C5'-C4'-C3'	-6.50	105.59	116.00
12	B	1953	A	C5-C6-N6	-6.50	118.50	123.70
12	B	2279	G	C5'-C4'-C3'	-6.50	105.59	116.00
12	B	2607	G	C1'-O4'-C4'	-6.50	104.70	109.90
12	B	2650	U	P-O3'-C3'	-6.50	111.89	119.70
12	B	2668	G	C4-C5-C6	6.50	122.70	118.80
12	B	2817	U	C5-C4-O4	-6.50	122.00	125.90
13	C	160	TYR	CB-CG-CD1	-6.50	117.10	121.00
12	B	1199	U	P-O3'-C3'	-6.50	111.90	119.70
12	B	2253	G	O4'-C1'-N9	6.50	113.40	108.20
12	B	2331	G	N3-C2-N2	6.50	124.45	119.90
12	B	2458	G	N7-C8-N9	-6.50	109.85	113.10
12	B	2613	U	N3-C4-C5	-6.50	110.70	114.60
12	B	2627	G	N1-C2-N3	-6.50	120.00	123.90
12	B	104	A	C4'-C3'-C2'	-6.50	96.10	102.60
12	B	250	G	C5-N7-C8	-6.50	101.05	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1034	G	C5'-C4'-O4'	6.50	116.90	109.10
12	B	1893	C	C3'-C2'-C1'	-6.50	96.30	101.50
12	B	1929	G	N9-C4-C5	-6.50	102.80	105.40
12	B	2535	G	N7-C8-N9	6.50	116.35	113.10
12	B	2791	G	N3-C4-N9	-6.50	122.10	126.00
12	B	2807	U	O4'-C1'-N1	6.50	113.40	108.20
12	B	419	U	C2-N3-C4	6.50	130.90	127.00
12	B	1227	G	N1-C2-N2	-6.50	110.35	116.20
12	B	1421	G	N1-C2-N3	-6.50	120.00	123.90
12	B	1801	A	P-O5'-C5'	6.50	131.29	120.90
12	B	1947	C	C5-C6-N1	-6.50	117.75	121.00
12	B	2353	G	O4'-C1'-N9	6.50	113.40	108.20
12	B	2688	G	N3-C2-N2	6.50	124.45	119.90
12	B	323	C	C6-N1-C1'	-6.50	113.01	120.80
12	B	402	A	N9-C4-C5	6.50	108.40	105.80
12	B	542	C	C2-N1-C1'	6.50	125.94	118.80
12	B	2017	U	O4'-C1'-N1	6.50	113.40	108.20
12	B	2190	G	C8-N9-C4	-6.50	103.80	106.40
12	B	2475	C	O4'-C1'-N1	6.50	113.40	108.20
12	B	2645	G	N3-C4-N9	-6.50	122.10	126.00
12	B	376	G	N7-C8-N9	6.49	116.35	113.10
12	B	639	U	O4'-C1'-N1	6.49	113.39	108.20
12	B	904	G	C5-C6-N1	-6.49	108.25	111.50
12	B	1654	A	C5-C6-N6	-6.49	118.51	123.70
12	B	2140	G	C6-C5-N7	-6.49	126.50	130.40
12	B	2557	G	C4-C5-C6	6.49	122.70	118.80
12	B	2756	U	C2-N3-C4	-6.49	123.10	127.00
11	A	98	G	C4-C5-C6	6.49	122.69	118.80
12	B	865	C	P-O3'-C3'	-6.49	111.91	119.70
12	B	895	U	O4'-C1'-N1	6.49	113.39	108.20
12	B	1622	G	C4-C5-C6	6.49	122.69	118.80
12	B	1827	U	C5'-C4'-O4'	-6.49	101.31	109.10
12	B	2466	C	P-O5'-C5'	6.49	131.28	120.90
12	B	300	A	C5-N7-C8	6.49	107.14	103.90
12	B	1100	C	C4'-C3'-C2'	-6.49	96.11	102.60
12	B	1713	A	N9-C4-C5	6.49	108.40	105.80
12	B	1715	G	N3-C2-N2	6.49	124.44	119.90
12	B	1833	C	P-O3'-C3'	6.49	127.49	119.70
12	B	2058	A	P-O3'-C3'	6.49	127.49	119.70
12	B	2077	A	C6-N1-C2	-6.49	114.71	118.60
12	B	2310	C	O4'-C1'-C2'	6.49	113.44	107.60
12	B	221	A	C5-C6-N6	-6.49	118.51	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	488	G	C2-N3-C4	-6.49	108.66	111.90
10	9	279	TRP	CG-CD2-CE3	-6.49	128.06	133.90
12	B	373	U	C5-C4-O4	-6.49	122.01	125.90
12	B	1567	G	C3'-C2'-C1'	-6.49	96.31	101.50
12	B	1720	U	C6-N1-C2	-6.49	117.11	121.00
12	B	1856	U	P-O3'-C3'	6.49	127.48	119.70
12	B	2524	G	N3-C4-C5	6.49	131.84	128.60
12	B	2816	G	C4-C5-N7	6.49	113.39	110.80
15	E	162	ARG	NE-CZ-NH1	-6.49	117.06	120.30
12	B	623	C	C2-N3-C4	6.48	123.14	119.90
12	B	908	C	N3-C4-N4	6.48	122.54	118.00
12	B	2781	A	N7-C8-N9	6.48	117.04	113.80
18	H	140	ALA	N-CA-CB	6.48	119.18	110.10
11	A	57	A	C5-N7-C8	6.48	107.14	103.90
12	B	496	G	C4-C5-N7	6.48	113.39	110.80
12	B	759	G	C5-C6-O6	-6.48	124.71	128.60
12	B	988	A	O4'-C1'-N9	6.48	113.39	108.20
12	B	1627	G	N7-C8-N9	-6.48	109.86	113.10
12	B	1726	C	C6-N1-C2	-6.48	117.71	120.30
12	B	1918	A	P-O5'-C5'	-6.48	110.53	120.90
12	B	2825	G	C4-N9-C1'	6.48	134.93	126.50
12	B	2886	A	N9-C4-C5	-6.48	103.21	105.80
12	B	35	G	C4'-C3'-C2'	-6.48	96.12	102.60
12	B	706	A	C4-C5-N7	-6.48	107.46	110.70
12	B	1111	A	C6-N1-C2	-6.48	114.71	118.60
12	B	1400	U	C6-N1-C2	6.48	124.89	121.00
12	B	1564	C	N3-C4-C5	-6.48	119.31	121.90
12	B	1606	C	O4'-C1'-N1	6.48	113.38	108.20
12	B	1607	C	C6-N1-C2	-6.48	117.71	120.30
12	B	1622	G	P-O3'-C3'	-6.48	111.92	119.70
12	B	1654	A	C6-C5-N7	-6.48	127.76	132.30
12	B	1339	G	C5-C6-O6	-6.48	124.71	128.60
12	B	1641	A	N1-C6-N6	6.48	122.49	118.60
12	B	1794	A	O4'-C1'-N9	6.48	113.38	108.20
12	B	2426	A	P-O3'-C3'	6.48	127.47	119.70
12	B	331	C	C5'-C4'-O4'	6.48	116.87	109.10
12	B	544	C	O4'-C1'-N1	6.48	113.38	108.20
12	B	819	A	C5-N7-C8	6.48	107.14	103.90
12	B	924	G	N1-C2-N3	-6.48	120.01	123.90
12	B	1195	G	O4'-C1'-N9	6.48	113.38	108.20
12	B	1352	U	C1'-O4'-C4'	6.48	115.08	109.90
12	B	1530	G	C5-C6-O6	-6.48	124.71	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1536	C	C5-C6-N1	6.48	124.24	121.00
12	B	1555	G	C6-N1-C2	6.48	128.99	125.10
12	B	1603	A	C6-N1-C2	-6.48	114.71	118.60
12	B	1759	A	C2-N3-C4	6.48	113.84	110.60
12	B	1797	G	N3-C2-N2	6.48	124.43	119.90
12	B	1933	G	C4'-C3'-C2'	-6.48	96.12	102.60
12	B	2077	A	C5-C6-N6	-6.48	118.52	123.70
12	B	189	G	P-O5'-C5'	6.48	131.26	120.90
12	B	1410	G	N7-C8-N9	6.48	116.34	113.10
12	B	1426	G	N7-C8-N9	-6.48	109.86	113.10
12	B	2279	G	C5-N7-C8	-6.48	101.06	104.30
12	B	22	C	N3-C2-O2	-6.47	117.37	121.90
12	B	374	A	N1-C6-N6	6.47	122.48	118.60
12	B	532	A	C4-N9-C1'	6.47	137.95	126.30
12	B	922	C	P-O5'-C5'	6.47	131.26	120.90
12	B	2780	G	C8-N9-C4	-6.47	103.81	106.40
12	B	2820	A	C6-N1-C2	-6.47	114.72	118.60
12	B	2869	G	N1-C2-N2	-6.47	110.37	116.20
12	B	1059	G	N3-C2-N2	6.47	124.43	119.90
12	B	1545	A	N9-C4-C5	6.47	108.39	105.80
12	B	1738	G	C3'-C2'-C1'	6.47	106.68	101.50
12	B	1801	A	O4'-C1'-N9	6.47	113.38	108.20
12	B	2223	G	C8-N9-C1'	6.47	135.41	127.00
12	B	2370	G	C5-C6-O6	-6.47	124.72	128.60
15	E	169	VAL	CA-CB-CG1	-6.47	101.19	110.90
11	A	65	U	P-O5'-C5'	6.47	131.25	120.90
12	B	721	A	C6-C5-N7	-6.47	127.77	132.30
12	B	1037	G	N3-C4-C5	6.47	131.84	128.60
12	B	1109	C	N3-C4-C5	-6.47	119.31	121.90
12	B	2472	G	C4-C5-N7	6.47	113.39	110.80
12	B	2820	A	C5-C6-N6	-6.47	118.52	123.70
11	A	81	G	C8-N9-C4	-6.47	103.81	106.40
12	B	49	A	C5'-C4'-O4'	6.47	116.86	109.10
12	B	64	A	C8-N9-C4	-6.47	103.21	105.80
12	B	164	C	N3-C4-N4	6.47	122.53	118.00
12	B	590	A	C5-N7-C8	6.47	107.14	103.90
12	B	617	G	C5-C6-O6	-6.47	124.72	128.60
12	B	1140	C	C5-C4-N4	-6.47	115.67	120.20
12	B	1208	C	N1-C2-O2	6.47	122.78	118.90
12	B	1286	A	P-O5'-C5'	-6.47	110.55	120.90
12	B	1424	G	O5'-P-OP2	-6.47	99.88	105.70
12	B	1479	G	C5-C6-N1	-6.47	108.27	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1921	G	N3-C4-N9	6.47	129.88	126.00
12	B	1935	G	C4-C5-N7	6.47	113.39	110.80
12	B	64	A	N1-C6-N6	6.47	122.48	118.60
12	B	200	U	N1-C2-O2	6.47	127.33	122.80
12	B	294	A	N7-C8-N9	-6.47	110.57	113.80
12	B	392	U	C1'-O4'-C4'	-6.47	104.73	109.90
12	B	910	A	C4-C5-C6	6.47	120.23	117.00
12	B	1096	A	C4-C5-C6	6.47	120.23	117.00
12	B	1101	U	C4'-C3'-C2'	-6.47	96.13	102.60
12	B	1108	U	P-O3'-C3'	-6.47	111.94	119.70
12	B	2033	A	C4'-C3'-C2'	-6.47	96.13	102.60
12	B	2191	A	C5-C6-N1	-6.47	114.47	117.70
11	A	11	C	C2-N3-C4	6.46	123.13	119.90
12	B	344	A	C5-N7-C8	6.46	107.13	103.90
12	B	566	U	N1-C2-N3	-6.46	111.02	114.90
12	B	739	A	P-O3'-C3'	6.46	127.46	119.70
12	B	932	U	N3-C2-O2	6.46	126.72	122.20
12	B	1232	G	N3-C2-N2	6.46	124.42	119.90
12	B	1490	A	N3-C4-C5	-6.46	122.28	126.80
12	B	1559	U	C3'-C2'-C1'	-6.46	96.33	101.50
12	B	2055	C	O4'-C4'-C3'	-6.46	97.54	104.00
12	B	2070	A	C4'-C3'-C2'	-6.46	96.14	102.60
12	B	2330	G	C6-N1-C2	-6.46	121.22	125.10
12	B	236	C	C5-C4-N4	-6.46	115.68	120.20
12	B	440	C	N3-C4-C5	-6.46	119.31	121.90
12	B	1131	G	N9-C4-C5	-6.46	102.81	105.40
12	B	1667	G	C4-C5-N7	6.46	113.39	110.80
12	B	2087	G	N3-C2-N2	6.46	124.42	119.90
12	B	2508	G	N9-C4-C5	-6.46	102.81	105.40
11	A	72	G	C5-C6-N1	-6.46	108.27	111.50
12	B	62	U	C5-C4-O4	6.46	129.78	125.90
12	B	430	A	N1-C6-N6	6.46	122.48	118.60
12	B	1469	A	C4'-C3'-C2'	-6.46	96.14	102.60
12	B	2321	U	O4'-C4'-C3'	-6.46	97.54	104.00
12	B	2573	C	C4-C5-C6	6.46	120.63	117.40
12	B	2673	G	C5-C6-N1	-6.46	108.27	111.50
12	B	2814	A	N1-C2-N3	6.46	132.53	129.30
1	0	2	ARG	N-CA-CB	6.46	122.23	110.60
12	B	880	G	C3'-C2'-C1'	-6.46	96.33	101.50
12	B	983	A	N3-C4-C5	-6.46	122.28	126.80
12	B	1063	G	C5-C6-O6	-6.46	124.72	128.60
12	B	1499	C	P-O5'-C5'	-6.46	110.56	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2502	G	C4'-C3'-C2'	6.46	109.06	102.60
12	B	189	G	O4'-C1'-N9	6.46	113.37	108.20
12	B	1089	A	C6-C5-N7	-6.46	127.78	132.30
12	B	1298	C	N3-C4-N4	6.46	122.52	118.00
12	B	1600	C	N3-C4-N4	6.46	122.52	118.00
12	B	2069	G	N7-C8-N9	6.46	116.33	113.10
12	B	2160	C	C5-C6-N1	6.46	124.23	121.00
12	B	2578	G	C4'-C3'-C2'	-6.46	96.14	102.60
12	B	2596	U	O4'-C4'-C3'	-6.46	97.54	104.00
12	B	2738	A	N7-C8-N9	6.46	117.03	113.80
12	B	213	A	C4-C5-C6	6.46	120.23	117.00
12	B	1193	G	C5-N7-C8	6.46	107.53	104.30
12	B	1656	C	N3-C4-N4	6.46	122.52	118.00
12	B	2354	C	C5-C4-N4	-6.46	115.68	120.20
12	B	2357	G	C4'-C3'-C2'	-6.46	96.14	102.60
12	B	2859	G	C8-N9-C4	-6.46	103.82	106.40
12	B	1091	G	C4-C5-C6	6.46	122.67	118.80
12	B	1335	C	N3-C4-N4	6.46	122.52	118.00
12	B	2468	A	C5-C6-N6	-6.46	118.54	123.70
12	B	2599	G	N1-C6-O6	6.46	123.77	119.90
12	B	268	C	C2-N3-C4	6.45	123.13	119.90
12	B	512	G	C5-N7-C8	-6.45	101.07	104.30
12	B	1240	U	OP1-P-OP2	-6.45	109.92	119.60
12	B	1455	G	C8-N9-C4	-6.45	103.82	106.40
12	B	2013	A	O4'-C1'-N9	6.45	113.36	108.20
12	B	2135	A	C8-N9-C4	-6.45	103.22	105.80
12	B	2816	G	N1-C6-O6	6.45	123.77	119.90
12	B	2889	C	C5-C6-N1	-6.45	117.77	121.00
12	B	379	G	C5'-C4'-C3'	-6.45	105.68	116.00
12	B	604	G	N1-C2-N3	-6.45	120.03	123.90
12	B	755	U	P-O3'-C3'	-6.45	111.96	119.70
12	B	781	A	C5-N7-C8	6.45	107.12	103.90
12	B	1381	G	P-O3'-C3'	-6.45	111.96	119.70
12	B	1393	A	C4'-C3'-C2'	-6.45	96.15	102.60
12	B	1658	C	C5'-C4'-O4'	6.45	116.84	109.10
12	B	2310	C	C5-C6-N1	-6.45	117.78	121.00
12	B	2414	G	C4-C5-C6	6.45	122.67	118.80
12	B	624	C	O4'-C1'-N1	6.45	113.36	108.20
12	B	1046	A	O4'-C1'-N9	6.45	113.36	108.20
12	B	1098	A	N1-C6-N6	6.45	122.47	118.60
12	B	1978	A	O4'-C1'-N9	6.45	113.36	108.20
12	B	2071	A	C4-C5-C6	6.45	120.22	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2860	A	O4'-C1'-N9	6.45	113.36	108.20
12	B	1210	G	C6-N1-C2	-6.45	121.23	125.10
12	B	1243	C	C5'-C4'-C3'	-6.45	105.69	116.00
12	B	1622	G	C8-N9-C4	-6.45	103.82	106.40
12	B	2088	A	O4'-C1'-N9	6.45	113.36	108.20
12	B	2222	C	N3-C4-N4	6.45	122.51	118.00
12	B	2556	C	N1-C2-O2	-6.45	115.03	118.90
12	B	1797	G	N9-C4-C5	6.45	107.98	105.40
12	B	984	A	C6-C5-N7	-6.44	127.79	132.30
12	B	1085	A	O4'-C1'-N9	6.44	113.36	108.20
12	B	1392	A	C4'-C3'-C2'	-6.44	96.16	102.60
12	B	1979	U	N3-C4-C5	6.44	118.47	114.60
12	B	2518	A	C6-C5-N7	-6.44	127.79	132.30
11	A	92	C	N3-C4-C5	-6.44	119.32	121.90
12	B	226	A	C5-C6-N1	-6.44	114.48	117.70
12	B	247	G	N7-C8-N9	6.44	116.32	113.10
12	B	684	G	N3-C4-C5	6.44	131.82	128.60
12	B	1083	U	C1'-O4'-C4'	6.44	115.05	109.90
12	B	1243	C	C1'-O4'-C4'	-6.44	104.75	109.90
12	B	1355	G	C4-N9-C1'	-6.44	118.12	126.50
12	B	1492	G	N9-C4-C5	6.44	107.98	105.40
12	B	2233	U	C6-N1-C2	-6.44	117.13	121.00
12	B	2546	U	C5-C4-O4	6.44	129.76	125.90
11	A	29	A	N7-C8-N9	-6.44	110.58	113.80
12	B	32	C	O4'-C1'-N1	6.44	113.35	108.20
12	B	381	G	P-O3'-C3'	-6.44	111.97	119.70
12	B	481	G	C4'-C3'-C2'	-6.44	96.16	102.60
12	B	688	U	N1-C2-O2	-6.44	118.29	122.80
12	B	1415	U	C2-N3-C4	6.44	130.87	127.00
12	B	1991	U	C2-N3-C4	6.44	130.86	127.00
12	B	2073	C	C6-N1-C2	-6.44	117.72	120.30
12	B	2341	G	C6-N1-C2	6.44	128.96	125.10
12	B	2484	G	C5-C6-O6	-6.44	124.73	128.60
12	B	2809	A	P-O3'-C3'	6.44	127.43	119.70
12	B	488	G	N7-C8-N9	6.44	116.32	113.10
12	B	1555	G	C6-C5-N7	-6.44	126.54	130.40
12	B	1909	C	C4-C5-C6	-6.44	114.18	117.40
12	B	1948	G	N1-C2-N3	-6.44	120.04	123.90
12	B	119	A	O4'-C1'-N9	6.44	113.35	108.20
12	B	605	G	C6-C5-N7	-6.44	126.54	130.40
12	B	1430	G	C6-N1-C2	6.44	128.96	125.10
12	B	1479	G	N1-C2-N3	-6.44	120.04	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2059	A	C5-C6-N6	-6.44	118.55	123.70
12	B	2116	G	P-O5'-C5'	6.44	131.20	120.90
12	B	2445	G	C1'-O4'-C4'	-6.44	104.75	109.90
12	B	2624	G	C3'-C2'-C1'	-6.44	96.35	101.50
22	L	18	ARG	NE-CZ-NH2	-6.44	117.08	120.30
12	B	1301	A	C2-N3-C4	-6.44	107.38	110.60
12	B	1527	G	C5'-C4'-O4'	6.44	116.82	109.10
12	B	2853	C	C4-C5-C6	6.44	120.62	117.40
12	B	159	G	N7-C8-N9	-6.43	109.88	113.10
12	B	370	G	C6-C5-N7	-6.43	126.54	130.40
12	B	1128	G	C5-C6-O6	-6.43	124.74	128.60
12	B	1913	A	C5-C6-N1	-6.43	114.48	117.70
12	B	2129	C	N3-C4-C5	6.43	124.47	121.90
12	B	2727	A	C6-C5-N7	-6.43	127.80	132.30
11	A	34	A	C5-N7-C8	6.43	107.12	103.90
11	A	49	C	O4'-C1'-N1	6.43	113.35	108.20
12	B	72	U	C3'-C2'-C1'	6.43	106.65	101.50
12	B	673	C	P-O3'-C3'	-6.43	111.98	119.70
12	B	804	A	N9-C4-C5	6.43	108.37	105.80
12	B	815	C	C5-C6-N1	6.43	124.22	121.00
12	B	979	A	C5-N7-C8	6.43	107.12	103.90
12	B	1168	G	C6-C5-N7	-6.43	126.54	130.40
12	B	1553	A	O4'-C1'-N9	6.43	113.34	108.20
12	B	2138	G	N3-C2-N2	6.43	124.40	119.90
12	B	2157	G	C2-N3-C4	6.43	115.12	111.90
27	Q	63	ARG	NE-CZ-NH1	-6.43	117.08	120.30
12	B	682	G	C6-C5-N7	-6.43	126.54	130.40
12	B	851	C	O4'-C1'-N1	6.43	113.34	108.20
12	B	949	G	N3-C2-N2	6.43	124.40	119.90
12	B	1072	C	O4'-C1'-N1	6.43	113.34	108.20
12	B	1807	G	C4-C5-N7	-6.43	108.23	110.80
12	B	126	A	O4'-C1'-N9	6.43	113.34	108.20
12	B	674	G	C6-N1-C2	6.43	128.96	125.10
12	B	1875	G	N3-C2-N2	6.43	124.40	119.90
12	B	2296	U	C5-C4-O4	-6.43	122.04	125.90
11	A	27	C	N1-C2-O2	-6.43	115.04	118.90
12	B	547	A	C4'-C3'-C2'	-6.43	96.17	102.60
12	B	837	C	O4'-C1'-N1	6.43	113.34	108.20
12	B	1398	C	O4'-C1'-N1	6.43	113.34	108.20
12	B	2183	A	C4-C5-C6	6.43	120.21	117.00
12	B	2399	G	C2-N3-C4	-6.43	108.69	111.90
12	B	2460	U	C5-C6-N1	6.43	125.91	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2461	A	C5-C6-N1	-6.43	114.49	117.70
12	B	2705	A	C2-N3-C4	-6.43	107.39	110.60
12	B	1022	G	O5'-C5'-C4'	-6.42	99.49	111.70
12	B	1165	A	C6-N1-C2	6.42	122.45	118.60
12	B	1578	U	C2'-C3'-O3'	6.42	123.98	113.70
12	B	2146	C	C6-N1-C2	-6.42	117.73	120.30
12	B	1045	C	N3-C4-C5	-6.42	119.33	121.90
12	B	1709	U	N3-C4-O4	6.42	123.90	119.40
12	B	2480	C	C2-N3-C4	6.42	123.11	119.90
12	B	2697	G	O4'-C1'-N9	6.42	113.34	108.20
11	A	20	G	N3-C2-N2	6.42	124.39	119.90
11	A	100	G	N3-C4-C5	6.42	131.81	128.60
12	B	2041	U	C2-N3-C4	-6.42	123.15	127.00
12	B	2283	C	O4'-C4'-C3'	-6.42	97.58	104.00
12	B	2781	A	C8-N9-C4	-6.42	103.23	105.80
18	H	98	ASP	CB-CG-OD2	6.42	124.08	118.30
32	W	19	ARG	NE-CZ-NH2	6.42	123.51	120.30
11	A	25	U	P-O5'-C5'	-6.42	110.63	120.90
12	B	17	G	C8-N9-C4	-6.42	103.83	106.40
12	B	429	A	C8-N9-C4	-6.42	103.23	105.80
12	B	430	A	C3'-C2'-C1'	-6.42	96.36	101.50
12	B	921	C	C4-C5-C6	-6.42	114.19	117.40
12	B	1851	U	C5-C6-N1	-6.42	119.49	122.70
12	B	2437	G	P-O3'-C3'	-6.42	112.00	119.70
6	5	225	ASP	CB-CG-OD2	-6.42	112.52	118.30
12	B	86	G	N1-C2-N3	-6.42	120.05	123.90
12	B	676	A	C5-C6-N1	-6.42	114.49	117.70
12	B	1020	A	N7-C8-N9	6.42	117.01	113.80
12	B	1640	A	N1-C2-N3	6.42	132.51	129.30
12	B	1646	C	O4'-C1'-N1	6.42	113.33	108.20
12	B	1845	G	O4'-C1'-N9	6.42	113.33	108.20
12	B	1954	G	N9-C4-C5	-6.42	102.83	105.40
12	B	1966	A	C4-C5-N7	-6.42	107.49	110.70
12	B	2495	G	N3-C2-N2	6.42	124.39	119.90
12	B	2520	C	O4'-C1'-N1	6.42	113.33	108.20
12	B	769	U	O4'-C1'-N1	6.42	113.33	108.20
12	B	1715	G	C5-C6-N1	-6.42	108.29	111.50
12	B	1896	G	N9-C4-C5	-6.42	102.83	105.40
12	B	2797	U	C5-C6-N1	6.42	125.91	122.70
12	B	371	A	O3'-P-O5'	-6.42	91.81	104.00
12	B	896	A	C8-N9-C4	-6.42	103.23	105.80
12	B	1180	U	C5-C4-O4	-6.42	122.05	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	78	A	N9-C4-C5	6.41	108.36	105.80
12	B	115	C	C1'-O4'-C4'	-6.41	104.77	109.90
12	B	279	A	C3'-C2'-C1'	-6.41	96.37	101.50
12	B	762	U	O4'-C1'-N1	6.41	113.33	108.20
12	B	834	G	C5-C6-O6	-6.41	124.75	128.60
12	B	1088	A	C5'-C4'-C3'	-6.41	105.74	116.00
12	B	1514	G	N3-C2-N2	6.41	124.39	119.90
12	B	1575	C	C6-N1-C2	-6.41	117.73	120.30
12	B	1745	A	OP1-P-OP2	-6.41	109.98	119.60
12	B	1838	C	C2-N3-C4	6.41	123.11	119.90
12	B	1990	C	N3-C2-O2	-6.41	117.41	121.90
12	B	2322	A	C4-C5-N7	-6.41	107.49	110.70
12	B	2833	U	C5-C6-N1	6.41	125.91	122.70
23	M	91	TYR	CB-CG-CD1	6.41	124.85	121.00
12	B	898	C	C5-C4-N4	-6.41	115.71	120.20
12	B	1296	G	C4-C5-N7	-6.41	108.23	110.80
12	B	2060	A	N3-C4-C5	-6.41	122.31	126.80
12	B	2536	G	O4'-C1'-N9	6.41	113.33	108.20
11	A	55	U	C2-N1-C1'	-6.41	110.01	117.70
12	B	322	A	C5-N7-C8	6.41	107.11	103.90
12	B	606	U	N3-C4-O4	6.41	123.89	119.40
12	B	1100	C	C2-N3-C4	6.41	123.11	119.90
12	B	1134	A	C8-N9-C4	-6.41	103.24	105.80
12	B	2132	U	C3'-C2'-C1'	6.41	106.63	101.50
1	0	26	ARG	NE-CZ-NH2	-6.41	117.09	120.30
11	A	45	A	N9-C4-C5	-6.41	103.24	105.80
12	B	1001	A	C8-N9-C4	-6.41	103.24	105.80
12	B	1542	U	N1-C2-N3	-6.41	111.06	114.90
12	B	2428	G	N1-C2-N3	-6.41	120.06	123.90
12	B	2770	G	C5-N7-C8	6.41	107.50	104.30
12	B	553	G	C4-C5-N7	6.41	113.36	110.80
12	B	1653	G	C5'-C4'-O4'	6.41	116.79	109.10
12	B	2414	G	C5-C6-O6	-6.41	124.76	128.60
11	A	13	G	N7-C8-N9	6.41	116.30	113.10
11	A	15	A	C5-N7-C8	6.41	107.10	103.90
12	B	205	G	C4-C5-C6	6.41	122.64	118.80
12	B	1207	C	O4'-C1'-N1	6.41	113.33	108.20
12	B	1258	U	N3-C2-O2	6.41	126.68	122.20
12	B	1281	G	O4'-C1'-N9	6.41	113.33	108.20
12	B	1413	A	N1-C6-N6	6.41	122.44	118.60
12	B	1476	U	O4'-C1'-N1	6.41	113.32	108.20
12	B	1702	G	C8-N9-C4	6.41	108.96	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1929	G	N1-C6-O6	6.41	123.74	119.90
11	A	85	G	O4'-C1'-N9	6.40	113.32	108.20
12	B	1112	G	C6-C5-N7	-6.40	126.56	130.40
12	B	1931	U	C4-C5-C6	6.40	123.54	119.70
12	B	2770	G	P-O5'-C5'	6.40	131.15	120.90
12	B	223	A	O4'-C1'-N9	6.40	113.32	108.20
12	B	390	U	N1-C2-O2	-6.40	118.32	122.80
12	B	922	C	N1-C2-N3	-6.40	114.72	119.20
12	B	2083	G	C4-C5-N7	-6.40	108.24	110.80
12	B	2131	U	O4'-C1'-N1	6.40	113.32	108.20
11	A	14	U	P-O3'-C3'	-6.40	112.02	119.70
12	B	538	A	C4'-C3'-C2'	-6.40	96.20	102.60
12	B	827	U	C2-N3-C4	-6.40	123.16	127.00
12	B	918	A	N9-C4-C5	6.40	108.36	105.80
12	B	1307	A	C4'-C3'-C2'	-6.40	96.20	102.60
12	B	1498	C	C5'-C4'-C3'	6.40	126.24	116.00
12	B	2021	C	C6-N1-C1'	-6.40	113.12	120.80
12	B	2567	G	N3-C2-N2	6.40	124.38	119.90
12	B	2609	U	OP1-P-OP2	-6.40	110.00	119.60
12	B	2621	G	C5-C6-N1	6.40	114.70	111.50
12	B	2725	A	P-O3'-C3'	6.40	127.38	119.70
12	B	1590	A	O4'-C1'-N9	6.40	113.32	108.20
12	B	1716	U	N3-C4-C5	-6.40	110.76	114.60
12	B	2399	G	P-O5'-C5'	-6.40	110.66	120.90
12	B	2539	C	C6-N1-C1'	6.40	128.48	120.80
11	A	109	A	C8-N9-C4	-6.40	103.24	105.80
12	B	112	U	C3'-C2'-C1'	6.40	106.62	101.50
12	B	132	G	C5-N7-C8	6.40	107.50	104.30
12	B	884	U	N3-C4-O4	6.40	123.88	119.40
12	B	1316	U	O4'-C1'-N1	6.40	113.32	108.20
12	B	1533	C	N3-C4-N4	6.40	122.48	118.00
12	B	1668	A	O4'-C1'-N9	6.40	113.32	108.20
12	B	1757	A	C5-N7-C8	6.40	107.10	103.90
12	B	1823	G	C6-N1-C2	6.40	128.94	125.10
12	B	2037	A	N3-C4-N9	-6.40	122.28	127.40
12	B	2650	U	C4-C5-C6	6.40	123.54	119.70
12	B	511	U	C6-N1-C2	6.40	124.84	121.00
12	B	962	G	C5-C6-N1	-6.40	108.30	111.50
12	B	1200	C	C1'-O4'-C4'	6.40	115.02	109.90
12	B	1544	A	C4-C5-N7	-6.40	107.50	110.70
12	B	1876	A	P-O3'-C3'	6.40	127.38	119.70
12	B	355	U	N3-C4-C5	-6.39	110.76	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	786	C	C4'-C3'-C2'	-6.39	96.21	102.60
12	B	1200	C	C5-C6-N1	6.39	124.20	121.00
12	B	1610	A	C2-N3-C4	6.39	113.80	110.60
12	B	1676	A	C5-C6-N6	-6.39	118.58	123.70
12	B	1848	A	O4'-C1'-N9	6.39	113.32	108.20
12	B	1858	A	C5-N7-C8	6.39	107.10	103.90
12	B	1969	A	C2-N3-C4	6.39	113.80	110.60
12	B	2003	A	N1-C2-N3	6.39	132.50	129.30
12	B	2343	U	N3-C4-C5	-6.39	110.76	114.60
12	B	2476	A	C5-C6-N6	-6.39	118.58	123.70
12	B	2832	U	N3-C4-O4	6.39	123.88	119.40
12	B	670	A	C2'-C3'-O3'	6.39	123.93	113.70
12	B	1356	G	C5-C6-O6	-6.39	124.77	128.60
12	B	1787	A	N9-C4-C5	-6.39	103.24	105.80
12	B	1921	G	C6-C5-N7	-6.39	126.56	130.40
12	B	2818	U	C1'-O4'-C4'	6.39	115.01	109.90
15	E	12	LEU	N-CA-CB	6.39	123.19	110.40
16	F	174	PHE	CB-CG-CD1	6.39	125.28	120.80
11	A	59	A	N7-C8-N9	6.39	117.00	113.80
12	B	715	A	C4'-C3'-C2'	-6.39	96.21	102.60
12	B	982	C	O4'-C1'-N1	6.39	113.31	108.20
12	B	1017	G	N1-C2-N2	6.39	121.95	116.20
12	B	1091	G	N3-C4-N9	6.39	129.84	126.00
12	B	2045	C	C4-C5-C6	6.39	120.59	117.40
12	B	2803	G	N3-C2-N2	6.39	124.37	119.90
12	B	56	A	C5-C6-N1	-6.39	114.50	117.70
12	B	571	U	N3-C4-O4	6.39	123.87	119.40
12	B	1775	U	O4'-C1'-N1	6.39	113.31	108.20
12	B	1998	A	C5-C6-N6	-6.39	118.59	123.70
12	B	2002	G	C4-C5-N7	-6.39	108.24	110.80
12	B	2148	G	O4'-C1'-N9	6.39	113.31	108.20
12	B	1183	U	O4'-C1'-N1	6.39	113.31	108.20
12	B	1801	A	C5'-C4'-C3'	-6.39	105.78	116.00
1	0	59	ASP	CB-CG-OD1	-6.39	112.55	118.30
12	B	227	A	N1-C2-N3	6.39	132.49	129.30
12	B	491	G	C4-C5-N7	6.39	113.36	110.80
12	B	689	A	C8-N9-C4	6.39	108.35	105.80
12	B	815	C	C2-N3-C4	6.39	123.09	119.90
12	B	1228	G	C5-C6-O6	-6.39	124.77	128.60
12	B	1525	A	C4-C5-C6	6.39	120.19	117.00
12	B	1696	G	C2-N3-C4	6.39	115.09	111.90
12	B	1984	G	C5-C6-N1	-6.39	108.31	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2294	G	C5-C6-N1	-6.39	108.31	111.50
12	B	2521	C	C2-N3-C4	6.39	123.09	119.90
12	B	1196	C	P-O5'-C5'	6.38	131.11	120.90
12	B	2591	C	C5-C4-N4	-6.38	115.73	120.20
12	B	2716	C	C4'-C3'-C2'	-6.38	96.22	102.60
12	B	546	U	N3-C4-C5	-6.38	110.77	114.60
12	B	1002	G	N3-C2-N2	6.38	124.37	119.90
12	B	1995	U	C5-C6-N1	6.38	125.89	122.70
12	B	2311	A	C5-C6-N6	-6.38	118.59	123.70
12	B	2385	C	C4-C5-C6	-6.38	114.21	117.40
12	B	2390	U	N1-C2-O2	6.38	127.27	122.80
10	9	67	ALA	C-N-CA	6.38	137.65	121.70
12	B	232	G	N1-C2-N2	-6.38	110.46	116.20
12	B	705	A	C5-C6-N6	-6.38	118.59	123.70
12	B	1115	G	O4'-C1'-C2'	6.38	113.34	107.60
12	B	1612	C	N3-C4-N4	6.38	122.47	118.00
12	B	1935	G	O4'-C4'-C3'	-6.38	97.62	104.00
12	B	2031	A	C5-C6-N1	-6.38	114.51	117.70
12	B	2655	G	C4-C5-C6	6.38	122.63	118.80
26	P	86	LYS	N-CA-CB	6.38	122.09	110.60
29	S	88	ARG	NE-CZ-NH2	6.38	123.49	120.30
12	B	457	A	C6-C5-N7	-6.38	127.83	132.30
12	B	632	A	C6-C5-N7	-6.38	127.83	132.30
12	B	824	U	C5-C4-O4	6.38	129.73	125.90
12	B	2323	G	O5'-C5'-C4'	-6.38	99.58	111.70
12	B	199	A	C8-N9-C4	6.38	108.35	105.80
12	B	712	G	C5-C6-O6	-6.38	124.77	128.60
12	B	1735	A	N7-C8-N9	6.38	116.99	113.80
12	B	1839	G	P-O5'-C5'	-6.38	110.69	120.90
12	B	2157	G	N1-C6-O6	6.38	123.73	119.90
12	B	2183	A	C4-C5-N7	-6.38	107.51	110.70
12	B	2503	A	O4'-C1'-N9	6.38	113.30	108.20
12	B	2898	U	C5'-C4'-C3'	-6.38	105.80	116.00
12	B	215	G	C4-C5-N7	-6.38	108.25	110.80
12	B	283	G	C5-C6-O6	-6.38	124.77	128.60
12	B	1920	C	C4-C5-C6	6.38	120.59	117.40
23	M	31	PHE	CB-CG-CD2	6.38	125.26	120.80
12	B	1312	U	C4-C5-C6	6.38	123.53	119.70
25	O	47	VAL	CG1-CB-CG2	6.38	121.10	110.90
12	B	1065	U	N3-C2-O2	6.37	126.66	122.20
12	B	1767	G	N1-C2-N3	-6.37	120.08	123.90
12	B	1927	A	C4-C5-N7	-6.37	107.51	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2742	G	N3-C4-C5	-6.37	125.41	128.60
11	A	50	A	C4-C5-N7	6.37	113.89	110.70
12	B	449	A	C8-N9-C4	-6.37	103.25	105.80
12	B	636	G	O4'-C1'-N9	6.37	113.30	108.20
12	B	808	G	C5-C6-O6	-6.37	124.78	128.60
12	B	1324	G	C8-N9-C4	-6.37	103.85	106.40
12	B	1417	C	OP1-P-OP2	-6.37	110.04	119.60
12	B	1682	G	N3-C4-N9	6.37	129.82	126.00
12	B	1773	A	C4'-C3'-C2'	-6.37	96.23	102.60
12	B	1979	U	O4'-C1'-N1	6.37	113.30	108.20
12	B	2381	A	C3'-C2'-C1'	-6.37	96.40	101.50
12	B	2655	G	P-O3'-C3'	6.37	127.35	119.70
12	B	177	G	C4-C5-C6	6.37	122.62	118.80
12	B	1555	G	C5-C6-N1	-6.37	108.31	111.50
12	B	1826	G	N1-C2-N3	-6.37	120.08	123.90
12	B	520	G	C6-N1-C2	6.37	128.92	125.10
12	B	620	G	N7-C8-N9	6.37	116.28	113.10
12	B	654	A	C4-C5-N7	-6.37	107.52	110.70
12	B	817	C	C5-C6-N1	6.37	124.19	121.00
12	B	1585	C	C4-C5-C6	-6.37	114.22	117.40
12	B	1648	U	P-O3'-C3'	6.37	127.34	119.70
12	B	1827	U	N3-C2-O2	-6.37	117.74	122.20
12	B	2688	G	C6-C5-N7	-6.37	126.58	130.40
12	B	154	U	O5'-P-OP2	-6.37	99.97	105.70
12	B	1951	U	O4'-C1'-N1	6.37	113.29	108.20
12	B	366	C	N3-C4-N4	6.37	122.46	118.00
12	B	957	C	C6-N1-C2	-6.37	117.75	120.30
12	B	1074	G	P-O3'-C3'	-6.37	112.06	119.70
12	B	1573	G	N3-C4-C5	6.37	131.78	128.60
12	B	1968	G	O4'-C1'-N9	6.37	113.29	108.20
12	B	2063	C	C2-N3-C4	6.37	123.08	119.90
12	B	2292	U	O4'-C1'-N1	6.37	113.29	108.20
12	B	2461	A	C4-C5-C6	6.37	120.18	117.00
12	B	2496	C	N3-C4-C5	-6.37	119.35	121.90
12	B	2550	G	O4'-C1'-N9	6.37	113.29	108.20
12	B	2741	A	N1-C6-N6	6.37	122.42	118.60
11	A	115	A	C4-C5-N7	-6.36	107.52	110.70
12	B	486	C	C2-N3-C4	6.36	123.08	119.90
12	B	535	G	O4'-C1'-N9	6.36	113.29	108.20
12	B	818	G	O4'-C1'-N9	6.36	113.29	108.20
12	B	1534	U	C2-N1-C1'	-6.36	110.06	117.70
22	L	50	PHE	N-CA-CB	6.36	122.05	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	123	G	C5-C6-N1	-6.36	108.32	111.50
12	B	138	U	C3'-C2'-C1'	6.36	106.59	101.50
12	B	1212	G	N3-C4-N9	-6.36	122.18	126.00
12	B	1426	G	C5-N7-C8	6.36	107.48	104.30
12	B	2327	A	C2-N3-C4	-6.36	107.42	110.60
12	B	2524	G	C2-N3-C4	-6.36	108.72	111.90
12	B	2696	U	N3-C4-O4	6.36	123.85	119.40
12	B	145	C	C2-N3-C4	6.36	123.08	119.90
12	B	645	C	C6-N1-C2	6.36	122.84	120.30
12	B	1002	G	N1-C2-N3	-6.36	120.08	123.90
12	B	1328	A	O4'-C1'-C2'	6.36	113.32	107.60
12	B	1357	C	C6-N1-C2	-6.36	117.75	120.30
12	B	1705	A	C5-C6-N1	-6.36	114.52	117.70
12	B	2286	G	N9-C4-C5	6.36	107.94	105.40
12	B	2637	U	O4'-C1'-N1	6.36	113.29	108.20
12	B	512	G	N1-C6-O6	6.36	123.72	119.90
12	B	732	C	O4'-C1'-N1	6.36	113.29	108.20
12	B	1076	C	C1'-O4'-C4'	-6.36	104.81	109.90
12	B	1188	U	C5-C4-O4	-6.36	122.08	125.90
12	B	1193	G	C6-C5-N7	-6.36	126.58	130.40
12	B	1258	U	N3-C4-O4	6.36	123.85	119.40
12	B	2223	G	C5-C6-N1	-6.36	108.32	111.50
12	B	2601	C	C4-C5-C6	-6.36	114.22	117.40
12	B	2610	C	C5-C6-N1	-6.36	117.82	121.00
12	B	2846	G	N1-C6-O6	6.36	123.71	119.90
12	B	2878	U	P-O5'-C5'	6.36	131.07	120.90
12	B	2900	A	C4-C5-N7	6.36	113.88	110.70
12	B	15	G	N1-C2-N3	-6.36	120.09	123.90
12	B	185	G	N1-C2-N3	-6.36	120.09	123.90
12	B	889	C	C2-N3-C4	6.36	123.08	119.90
12	B	1219	U	C2-N3-C4	-6.36	123.19	127.00
12	B	2095	A	C5-N7-C8	6.36	107.08	103.90
12	B	2242	G	C4-C5-N7	-6.36	108.26	110.80
12	B	2361	G	N9-C4-C5	-6.36	102.86	105.40
12	B	2379	G	N7-C8-N9	-6.36	109.92	113.10
12	B	2439	A	C5-N7-C8	6.36	107.08	103.90
12	B	2277	G	O4'-C1'-N9	6.35	113.28	108.20
12	B	53	A	C4-C5-N7	-6.35	107.52	110.70
12	B	168	G	C5'-C4'-C3'	-6.35	105.84	116.00
12	B	2243	U	C2-N3-C4	-6.35	123.19	127.00
12	B	180	G	C6-N1-C2	6.35	128.91	125.10
12	B	312	G	C4-C5-C6	6.35	122.61	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1000	A	P-O5'-C5'	-6.35	110.74	120.90
12	B	2089	C	C6-N1-C2	-6.35	117.76	120.30
12	B	2484	G	C4'-C3'-C2'	-6.35	96.25	102.60
12	B	2547	A	C6-C5-N7	-6.35	127.86	132.30
12	B	2678	C	C5-C4-N4	-6.35	115.75	120.20
12	B	2777	G	N1-C2-N3	-6.35	120.09	123.90
12	B	33	C	C4-C5-C6	-6.35	114.23	117.40
12	B	911	A	O4'-C1'-N9	6.35	113.28	108.20
12	B	1068	G	C4-C5-C6	6.35	122.61	118.80
12	B	1180	U	N1-C2-O2	6.35	127.24	122.80
12	B	1250	G	C8-N9-C4	-6.35	103.86	106.40
12	B	1908	C	P-O3'-C3'	-6.35	112.08	119.70
12	B	2271	G	O5'-P-OP2	-6.35	99.99	105.70
12	B	2313	C	O4'-C4'-C3'	-6.35	97.65	104.00
21	K	78	ARG	NE-CZ-NH2	-6.35	117.13	120.30
29	S	62	ASP	N-CA-CB	6.35	122.03	110.60
12	B	1010	A	C8-N9-C4	-6.35	103.26	105.80
12	B	1388	G	C5'-C4'-O4'	6.35	116.72	109.10
12	B	2804	U	N1-C1'-C2'	-6.35	105.02	112.00
12	B	348	A	C5-C6-N6	-6.34	118.62	123.70
12	B	1802	A	P-O3'-C3'	-6.34	112.09	119.70
12	B	1977	A	O4'-C4'-C3'	-6.34	97.66	104.00
12	B	2249	U	O4'-C1'-N1	6.34	113.28	108.20
12	B	2483	C	N3-C4-N4	6.34	122.44	118.00
12	B	2825	G	C8-N9-C1'	-6.34	118.75	127.00
12	B	798	G	N3-C4-N9	-6.34	122.19	126.00
12	B	952	G	N1-C2-N3	-6.34	120.09	123.90
12	B	2088	A	P-O3'-C3'	-6.34	112.09	119.70
12	B	2638	G	N1-C2-N3	-6.34	120.09	123.90
7	6	1	MET	CG-SD-CE	-6.34	90.06	100.20
12	B	389	G	N9-C4-C5	-6.34	102.86	105.40
12	B	862	G	C8-N9-C4	-6.34	103.86	106.40
12	B	910	A	P-O3'-C3'	6.34	127.31	119.70
12	B	1326	U	N1-C2-O2	-6.34	118.36	122.80
12	B	1466	U	N1-C2-O2	-6.34	118.36	122.80
12	B	1808	A	C4'-C3'-C2'	-6.34	96.26	102.60
12	B	2744	G	N7-C8-N9	-6.34	109.93	113.10
12	B	2774	C	N1-C2-O2	-6.34	115.09	118.90
12	B	2800	A	C6-C5-N7	-6.34	127.86	132.30
11	A	61	G	N1-C2-N2	-6.34	110.49	116.20
12	B	171	U	C2-N3-C4	6.34	130.80	127.00
12	B	308	G	C5-N7-C8	6.34	107.47	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	372	G	P-O3'-C3'	6.34	127.31	119.70
12	B	467	G	N1-C2-N3	-6.34	120.10	123.90
12	B	1381	G	N7-C8-N9	-6.34	109.93	113.10
12	B	1525	A	C6-C5-N7	-6.34	127.86	132.30
12	B	2167	U	N1-C2-N3	-6.34	111.10	114.90
12	B	2724	U	C2-N3-C4	6.34	130.80	127.00
12	B	168	G	C2-N3-C4	6.34	115.07	111.90
12	B	174	U	OP1-P-OP2	-6.34	110.09	119.60
12	B	1268	A	C5-C6-N1	-6.34	114.53	117.70
12	B	1908	C	N3-C4-N4	6.34	122.44	118.00
12	B	2294	G	N9-C4-C5	6.34	107.94	105.40
11	A	66	A	P-O5'-C5'	6.34	131.04	120.90
12	B	243	U	N3-C4-O4	6.34	123.83	119.40
12	B	280	U	O4'-C1'-N1	6.34	113.27	108.20
12	B	359	G	P-O3'-C3'	6.34	127.30	119.70
12	B	904	G	O3'-P-O5'	-6.34	91.96	104.00
12	B	1703	G	N7-C8-N9	-6.34	109.93	113.10
12	B	2040	G	C4-C5-N7	6.34	113.33	110.80
12	B	2054	A	C5-C6-N6	-6.34	118.63	123.70
12	B	2208	C	C6-N1-C1'	-6.34	113.19	120.80
12	B	2246	G	N1-C2-N3	-6.34	120.10	123.90
12	B	2271	G	C4-C5-C6	6.34	122.60	118.80
12	B	2153	C	C5-C6-N1	6.33	124.17	121.00
12	B	543	G	C6-N1-C2	6.33	128.90	125.10
12	B	756	A	N3-C4-C5	-6.33	122.37	126.80
12	B	1069	A	N7-C8-N9	6.33	116.97	113.80
12	B	1472	C	C5-C4-N4	-6.33	115.77	120.20
12	B	2725	A	C5'-C4'-C3'	-6.33	105.86	116.00
1	0	2	ARG	N-CA-C	-6.33	93.90	111.00
11	A	118	C	C4-C5-C6	6.33	120.57	117.40
12	B	66	C	N3-C4-N4	6.33	122.43	118.00
12	B	719	C	N1-C2-N3	-6.33	114.77	119.20
12	B	1334	G	O4'-C1'-N9	6.33	113.27	108.20
12	B	1337	G	P-O3'-C3'	-6.33	112.10	119.70
12	B	1488	C	C6-N1-C2	-6.33	117.77	120.30
12	B	2602	A	C5-C6-N1	-6.33	114.53	117.70
12	B	2714	G	N7-C8-N9	6.33	116.27	113.10
12	B	2850	A	C5-N7-C8	6.33	107.06	103.90
12	B	918	A	C2-N3-C4	-6.33	107.44	110.60
12	B	1056	G	C4-C5-C6	-6.33	115.00	118.80
12	B	1358	G	C6-N1-C2	6.33	128.90	125.10
12	B	1487	U	N1-C2-O2	6.33	127.23	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1496	A	P-O3'-C3'	-6.33	112.10	119.70
12	B	1767	G	C4-C5-C6	6.33	122.60	118.80
12	B	1922	G	O4'-C1'-N9	6.33	113.26	108.20
12	B	2733	A	C6-C5-N7	-6.33	127.87	132.30
12	B	177	G	C6-N1-C2	6.33	128.90	125.10
12	B	469	G	C4-C5-C6	6.33	122.60	118.80
12	B	1009	A	C6-C5-N7	-6.33	127.87	132.30
12	B	2118	U	O4'-C4'-C3'	6.33	111.16	106.10
12	B	2869	G	N1-C6-O6	6.33	123.70	119.90
11	A	35	C	C4-C5-C6	6.33	120.56	117.40
12	B	533	G	C6-N1-C2	6.33	128.90	125.10
12	B	1847	A	C4-C5-C6	6.33	120.16	117.00
12	B	1918	A	C6-N1-C2	-6.33	114.80	118.60
12	B	2115	G	N7-C8-N9	-6.33	109.94	113.10
12	B	661	A	N9-C4-C5	-6.33	103.27	105.80
12	B	1328	A	C6-C5-N7	-6.33	127.87	132.30
12	B	1527	G	P-O5'-C5'	6.33	131.02	120.90
12	B	2104	C	C3'-C2'-C1'	6.33	106.56	101.50
12	B	2847	U	N3-C4-C5	-6.33	110.81	114.60
12	B	482	A	OP1-P-OP2	-6.32	110.12	119.60
12	B	650	C	C5-C4-N4	-6.32	115.77	120.20
12	B	744	U	N3-C2-O2	6.32	126.63	122.20
12	B	1356	G	C4-C5-C6	6.32	122.59	118.80
12	B	2100	G	C4-C5-N7	6.32	113.33	110.80
12	B	2101	A	O4'-C1'-N9	6.32	113.26	108.20
12	B	2464	G	N1-C6-O6	6.32	123.69	119.90
15	E	184	ASP	CB-CG-OD2	-6.32	112.61	118.30
12	B	818	G	N1-C6-O6	6.32	123.69	119.90
12	B	1596	A	O4'-C1'-N9	6.32	113.26	108.20
12	B	2048	G	P-O3'-C3'	6.32	127.29	119.70
12	B	2059	A	C5-C6-N1	-6.32	114.54	117.70
10	9	63	LYS	N-CA-CB	6.32	121.98	110.60
12	B	1087	G	C8-N9-C4	6.32	108.93	106.40
12	B	1243	C	C6-N1-C2	6.32	122.83	120.30
12	B	1423	G	O4'-C1'-N9	6.32	113.26	108.20
12	B	1485	U	O4'-C1'-N1	6.32	113.26	108.20
12	B	1545	A	N3-C4-N9	-6.32	122.34	127.40
12	B	2455	G	N7-C8-N9	-6.32	109.94	113.10
12	B	2893	A	C5-C6-N6	-6.32	118.64	123.70
29	S	84	ARG	NE-CZ-NH2	-6.32	117.14	120.30
12	B	1302	A	C1'-O4'-C4'	-6.32	104.84	109.90
12	B	1639	C	N1-C2-N3	-6.32	114.78	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2077	A	P-O3'-C3'	6.32	127.28	119.70
12	B	2525	G	C4-C5-C6	6.32	122.59	118.80
32	W	8	VAL	CG1-CB-CG2	6.32	121.01	110.90
11	A	56	G	C2-N3-C4	-6.32	108.74	111.90
12	B	383	C	N3-C4-N4	6.32	122.42	118.00
12	B	614	A	N1-C2-N3	-6.32	126.14	129.30
12	B	788	A	C5-C6-N1	-6.32	114.54	117.70
12	B	1428	C	O4'-C1'-N1	6.32	113.25	108.20
12	B	2170	A	P-O3'-C3'	6.32	127.28	119.70
12	B	2642	G	C4'-C3'-C2'	-6.32	96.28	102.60
10	9	116	LEU	N-CA-CB	6.32	123.03	110.40
12	B	233	A	C1'-O4'-C4'	-6.32	104.85	109.90
12	B	632	A	O4'-C1'-N9	6.32	113.25	108.20
12	B	1935	G	O4'-C1'-N9	6.32	113.25	108.20
12	B	2030	A	C5-C6-N6	-6.32	118.65	123.70
12	B	2218	G	O4'-C1'-N9	6.32	113.25	108.20
12	B	2593	U	N3-C2-O2	6.32	126.62	122.20
12	B	2854	G	N3-C2-N2	6.32	124.32	119.90
12	B	1914	C	O4'-C1'-N1	6.31	113.25	108.20
12	B	2141	G	N1-C2-N3	-6.31	120.11	123.90
12	B	2415	G	C8-N9-C4	6.31	108.92	106.40
12	B	2693	G	C3'-C2'-C1'	-6.31	96.45	101.50
12	B	2699	C	N1-C2-O2	-6.31	115.11	118.90
12	B	514	A	C5-N7-C8	6.31	107.06	103.90
12	B	575	A	P-O5'-C5'	6.31	131.00	120.90
12	B	1547	C	C5'-C4'-C3'	6.31	126.10	116.00
12	B	1613	G	C2-N3-C4	-6.31	108.74	111.90
12	B	1944	U	O4'-C1'-N1	6.31	113.25	108.20
12	B	2174	C	C5-C4-N4	-6.31	115.78	120.20
12	B	111	A	C6-N1-C2	-6.31	114.81	118.60
12	B	597	G	O4'-C1'-N9	6.31	113.25	108.20
12	B	911	A	C5-C6-N6	-6.31	118.65	123.70
12	B	1291	C	P-O5'-C5'	-6.31	110.80	120.90
12	B	108	G	C4-N9-C1'	-6.31	118.30	126.50
12	B	581	C	N1-C2-O2	-6.31	115.11	118.90
12	B	690	G	C4-N9-C1'	-6.31	118.30	126.50
12	B	1003	G	N3-C2-N2	6.31	124.32	119.90
12	B	1232	G	C5-C6-O6	-6.31	124.81	128.60
12	B	1269	A	C4'-C3'-C2'	6.31	108.91	102.60
12	B	1283	G	C5-C6-O6	-6.31	124.81	128.60
12	B	13	A	C2-N3-C4	-6.31	107.45	110.60
12	B	280	U	N1-C2-N3	6.31	118.68	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1013	C	C5-C4-N4	-6.31	115.78	120.20
15	E	43	THR	CA-CB-OG1	6.31	122.24	109.00
12	B	9	G	C5-N7-C8	6.31	107.45	104.30
12	B	841	G	O4'-C1'-N9	6.31	113.25	108.20
12	B	1076	C	C4'-C3'-C2'	-6.31	96.29	102.60
12	B	1509	A	C6-C5-N7	-6.31	127.89	132.30
12	B	1669	A	N3-C4-N9	6.31	132.44	127.40
12	B	2732	G	C8-N9-C4	-6.31	103.88	106.40
11	A	28	C	N3-C2-O2	-6.30	117.49	121.90
11	A	47	C	C4-C5-C6	-6.30	114.25	117.40
12	B	391	A	C5-C6-N6	-6.30	118.66	123.70
12	B	2583	G	C8-N9-C4	-6.30	103.88	106.40
12	B	393	C	O4'-C1'-N1	6.30	113.24	108.20
12	B	445	C	C6-N1-C2	6.30	122.82	120.30
12	B	963	U	P-O5'-C5'	6.30	130.99	120.90
12	B	1576	U	C5'-C4'-C3'	-6.30	105.92	116.00
12	B	2332	C	C2-N3-C4	6.30	123.05	119.90
12	B	2384	U	C5-C4-O4	6.30	129.68	125.90
12	B	2750	A	C6-N1-C2	6.30	122.38	118.60
11	A	8	C	C4'-C3'-C2'	-6.30	96.30	102.60
12	B	1581	G	O4'-C1'-N9	6.30	113.24	108.20
12	B	2278	A	C5-N7-C8	6.30	107.05	103.90
12	B	2357	G	C2-N3-C4	6.30	115.05	111.90
12	B	851	C	C6-N1-C2	-6.30	117.78	120.30
12	B	1398	C	N3-C4-C5	-6.30	119.38	121.90
12	B	1479	G	C6-C5-N7	-6.30	126.62	130.40
12	B	1587	G	C5-C6-N1	-6.30	108.35	111.50
12	B	1669	A	N9-C4-C5	-6.30	103.28	105.80
12	B	1875	G	N1-C6-O6	6.30	123.68	119.90
12	B	2649	C	C5-C4-N4	-6.30	115.79	120.20
12	B	2697	G	C4-N9-C1'	-6.30	118.31	126.50
12	B	2894	G	O4'-C1'-N9	6.30	113.24	108.20
27	Q	106	THR	CA-CB-CG2	-6.30	103.58	112.40
11	A	5	U	C5-C6-N1	-6.30	119.55	122.70
12	B	1877	A	N7-C8-N9	-6.30	110.65	113.80
12	B	151	C	O4'-C1'-N1	6.30	113.24	108.20
12	B	195	A	N9-C4-C5	6.30	108.32	105.80
12	B	909	A	O4'-C1'-N9	6.30	113.24	108.20
12	B	1159	U	C5-C6-N1	6.30	125.85	122.70
12	B	1246	A	C5-N7-C8	6.30	107.05	103.90
12	B	1373	A	N1-C2-N3	6.30	132.45	129.30
12	B	1552	A	N3-C4-N9	6.30	132.44	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1787	A	C5-C6-N6	-6.30	118.66	123.70
12	B	2845	U	N3-C2-O2	6.30	126.61	122.20
12	B	752	A	C6-N1-C2	6.29	122.38	118.60
12	B	871	U	C3'-C2'-C1'	6.29	106.54	101.50
12	B	1174	U	C2-N1-C1'	6.29	125.25	117.70
12	B	1266	G	N7-C8-N9	-6.29	109.95	113.10
12	B	304	U	O4'-C1'-N1	6.29	113.23	108.20
12	B	489	G	C2-N3-C4	6.29	115.05	111.90
12	B	1339	G	N1-C2-N3	-6.29	120.12	123.90
12	B	1885	A	N3-C4-C5	-6.29	122.39	126.80
12	B	2013	A	N1-C6-N6	6.29	122.38	118.60
12	B	91	A	C5-N7-C8	6.29	107.05	103.90
12	B	94	A	N3-C4-C5	-6.29	122.40	126.80
12	B	323	C	C4-C5-C6	6.29	120.55	117.40
12	B	557	C	C6-N1-C2	-6.29	117.78	120.30
12	B	1717	A	C6-C5-N7	-6.29	127.90	132.30
12	B	1731	G	C8-N9-C4	-6.29	103.88	106.40
12	B	1757	A	C2-N3-C4	-6.29	107.45	110.60
12	B	2144	G	N1-C2-N3	-6.29	120.12	123.90
12	B	2145	C	P-O5'-C5'	6.29	130.97	120.90
12	B	2444	G	N7-C8-N9	6.29	116.25	113.10
12	B	2635	A	C5-C6-N1	-6.29	114.56	117.70
12	B	985	C	N3-C4-N4	6.29	122.40	118.00
12	B	1696	G	P-O3'-C3'	-6.29	112.15	119.70
12	B	2811	G	C5'-C4'-C3'	-6.29	105.94	116.00
17	G	163	TYR	CG-CD2-CE2	-6.29	116.27	121.30
12	B	669	G	O4'-C1'-N9	6.29	113.23	108.20
12	B	738	G	N1-C2-N3	-6.29	120.13	123.90
12	B	829	A	C5-C6-N1	-6.29	114.56	117.70
12	B	981	A	C5-C6-N1	-6.29	114.56	117.70
12	B	1008	A	C6-C5-N7	6.29	136.70	132.30
12	B	1166	G	C5-N7-C8	-6.29	101.16	104.30
12	B	1333	G	N9-C4-C5	-6.29	102.89	105.40
12	B	1792	G	N1-C2-N3	-6.29	120.13	123.90
12	B	2603	G	N9-C1'-C2'	-6.29	105.08	112.00
30	T	77	ARG	NE-CZ-NH1	-6.29	117.16	120.30
12	B	1300	G	C1'-O4'-C4'	-6.29	104.87	109.90
1	0	70	LEU	CB-CG-CD1	6.29	121.68	111.00
12	B	512	G	C1'-O4'-C4'	-6.29	104.87	109.90
12	B	518	G	C5'-C4'-C3'	-6.29	105.94	116.00
12	B	685	A	C5-C6-N6	-6.29	118.67	123.70
12	B	693	A	C2-N3-C4	-6.29	107.46	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1347	A	C5-N7-C8	6.29	107.04	103.90
12	B	1401	G	C6-N1-C2	-6.29	121.33	125.10
12	B	1628	G	C4-C5-N7	6.29	113.31	110.80
12	B	1846	G	C4-C5-N7	-6.29	108.29	110.80
12	B	2104	C	P-O5'-C5'	6.29	130.96	120.90
12	B	2287	A	N9-C4-C5	-6.29	103.29	105.80
12	B	2697	G	C8-N9-C1'	6.29	135.17	127.00
12	B	2698	U	C2-N3-C4	-6.29	123.23	127.00
12	B	99	U	O4'-C1'-N1	6.28	113.23	108.20
12	B	941	A	N9-C4-C5	6.28	108.31	105.80
12	B	1185	G	C5-C6-O6	-6.28	124.83	128.60
12	B	1288	G	C5-C6-N1	-6.28	108.36	111.50
12	B	1608	A	C4-C5-N7	6.28	113.84	110.70
12	B	1811	G	O4'-C1'-N9	6.28	113.23	108.20
12	B	1831	G	N1-C6-O6	6.28	123.67	119.90
12	B	2282	G	C5-N7-C8	6.28	107.44	104.30
12	B	1626	A	C4-C5-C6	6.28	120.14	117.00
12	B	1730	C	C4'-C3'-C2'	6.28	108.88	102.60
12	B	2039	U	C5-C4-O4	-6.28	122.13	125.90
12	B	2845	U	N1-C2-O2	-6.28	118.40	122.80
12	B	2872	A	N3-C4-C5	-6.28	122.40	126.80
12	B	909	A	N3-C4-C5	-6.28	122.40	126.80
12	B	1014	A	C6-N1-C2	6.28	122.37	118.60
12	B	2299	U	N3-C4-C5	-6.28	110.83	114.60
12	B	2542	A	C6-N1-C2	-6.28	114.83	118.60
12	B	2834	G	C8-N9-C4	-6.28	103.89	106.40
12	B	512	G	C4'-C3'-C2'	-6.28	96.32	102.60
12	B	1131	G	C6-C5-N7	-6.28	126.63	130.40
12	B	2039	U	N1-C2-O2	-6.28	118.41	122.80
12	B	2105	U	C2-N3-C4	-6.28	123.23	127.00
12	B	2589	A	C4-C5-N7	-6.28	107.56	110.70
11	A	26	C	C2-N1-C1'	6.28	125.70	118.80
11	A	27	C	C2-N3-C4	6.28	123.04	119.90
12	B	398	C	O4'-C1'-N1	6.28	113.22	108.20
12	B	779	U	N3-C4-O4	6.28	123.79	119.40
12	B	793	A	C4-C5-N7	-6.28	107.56	110.70
12	B	921	C	N3-C4-C5	-6.28	119.39	121.90
12	B	975	A	C8-N9-C4	-6.28	103.29	105.80
12	B	1250	G	C6-C5-N7	-6.28	126.63	130.40
12	B	2686	G	O4'-C1'-N9	6.28	113.22	108.20
12	B	2738	A	C8-N9-C4	-6.28	103.29	105.80
12	B	2785	C	N3-C2-O2	-6.28	117.50	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	63	C	C6-N1-C2	-6.28	117.79	120.30
12	B	603	A	C5-N7-C8	6.28	107.04	103.90
12	B	647	G	N1-C2-N3	-6.28	120.13	123.90
12	B	841	G	N1-C2-N3	-6.28	120.13	123.90
12	B	1492	G	O4'-C4'-C3'	-6.28	97.72	104.00
12	B	1835	G	C2-N3-C4	6.28	115.04	111.90
12	B	2577	A	C4-C5-C6	6.28	120.14	117.00
12	B	172	A	C5-C6-N6	-6.27	118.68	123.70
12	B	179	C	N3-C4-N4	6.27	122.39	118.00
12	B	271	G	N9-C4-C5	-6.27	102.89	105.40
12	B	907	G	C5-C6-N1	-6.27	108.36	111.50
12	B	1938	A	N1-C2-N3	6.27	132.44	129.30
12	B	2378	A	C2-N3-C4	6.27	113.74	110.60
12	B	1878	G	C4'-C3'-C2'	-6.27	96.33	102.60
12	B	2525	G	N1-C6-O6	6.27	123.66	119.90
11	A	53	A	C6-N1-C2	-6.27	114.84	118.60
12	B	496	G	N3-C2-N2	-6.27	115.51	119.90
12	B	1133	A	C5-N7-C8	6.27	107.03	103.90
12	B	1759	A	C4-C5-N7	-6.27	107.56	110.70
12	B	1856	U	C5-C6-N1	6.27	125.84	122.70
12	B	1903	G	C8-N9-C4	-6.27	103.89	106.40
12	B	2554	U	C5-C6-N1	6.27	125.83	122.70
19	I	120	ASP	CB-CG-OD1	-6.27	112.66	118.30
12	B	374	A	C4-C5-C6	6.27	120.14	117.00
12	B	572	A	N1-C6-N6	6.27	122.36	118.60
12	B	1290	C	N1-C2-O2	-6.27	115.14	118.90
12	B	1980	G	C5-C6-O6	-6.27	124.84	128.60
12	B	2443	C	N3-C4-C5	-6.27	119.39	121.90
12	B	2488	G	N3-C4-C5	-6.27	125.47	128.60
12	B	2616	C	N1-C2-N3	-6.27	114.81	119.20
12	B	15	G	O4'-C1'-N9	6.27	113.21	108.20
12	B	325	G	N7-C8-N9	-6.27	109.97	113.10
12	B	349	U	N3-C4-O4	6.27	123.79	119.40
12	B	744	U	N1-C2-N3	-6.27	111.14	114.90
12	B	1080	A	N3-C4-C5	-6.27	122.41	126.80
12	B	1157	G	N1-C2-N3	-6.27	120.14	123.90
12	B	1204	A	C5-C6-N1	-6.27	114.57	117.70
12	B	1617	C	C6-N1-C1'	-6.27	113.28	120.80
12	B	2114	A	C4-C5-N7	-6.27	107.57	110.70
12	B	2828	G	C6-C5-N7	-6.27	126.64	130.40
12	B	354	A	C4-C5-C6	6.27	120.13	117.00
12	B	932	U	C3'-C2'-C1'	6.27	106.51	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	95	U	N3-C4-O4	6.26	123.79	119.40
12	B	353	C	C4-C5-C6	-6.26	114.27	117.40
12	B	434	U	N3-C4-C5	-6.26	110.84	114.60
12	B	1008	A	C4-C5-N7	-6.26	107.57	110.70
12	B	1255	U	O4'-C1'-N1	6.26	113.21	108.20
12	B	1361	G	C6-N1-C2	6.26	128.86	125.10
12	B	1551	A	P-O5'-C5'	-6.26	110.88	120.90
12	B	2152	G	C5-C6-O6	6.26	132.36	128.60
12	B	2378	A	N1-C2-N3	-6.26	126.17	129.30
2	1	48	ARG	NE-CZ-NH2	-6.26	117.17	120.30
12	B	2623	G	C2-N3-C4	6.26	115.03	111.90
11	A	62	C	N1-C2-O2	-6.26	115.14	118.90
12	B	39	G	C1'-O4'-C4'	6.26	114.91	109.90
12	B	412	A	C6-C5-N7	-6.26	127.92	132.30
12	B	1347	A	C8-N9-C4	-6.26	103.30	105.80
12	B	1524	G	N1-C2-N2	-6.26	110.56	116.20
12	B	1854	A	C5-C6-N6	-6.26	118.69	123.70
12	B	1998	A	O4'-C1'-N9	6.26	113.21	108.20
12	B	2136	G	C6-C5-N7	-6.26	126.64	130.40
12	B	2517	C	N3-C4-C5	-6.26	119.40	121.90
12	B	332	A	C8-N9-C4	-6.26	103.30	105.80
12	B	733	G	N1-C2-N2	-6.26	110.57	116.20
12	B	1493	C	C2-N3-C4	6.26	123.03	119.90
12	B	1802	A	C4-C5-N7	-6.26	107.57	110.70
12	B	2285	C	N1-C2-O2	-6.26	115.14	118.90
12	B	2302	U	O4'-C1'-N1	6.26	113.21	108.20
12	B	2371	G	C2-N3-C4	6.26	115.03	111.90
12	B	2688	G	O4'-C1'-N9	6.26	113.21	108.20
12	B	2853	C	N3-C4-C5	-6.26	119.40	121.90
12	B	862	G	O4'-C1'-N9	6.26	113.21	108.20
12	B	1464	G	C6-N1-C2	-6.26	121.34	125.10
12	B	1702	G	N9-C4-C5	-6.26	102.90	105.40
12	B	2335	A	N7-C8-N9	-6.26	110.67	113.80
12	B	2817	U	C2-N3-C4	-6.26	123.25	127.00
12	B	875	G	C4-C5-N7	-6.26	108.30	110.80
12	B	888	C	N3-C2-O2	6.26	126.28	121.90
12	B	1580	A	C4'-C3'-C2'	-6.26	96.34	102.60
12	B	1966	A	C2-N3-C4	6.26	113.73	110.60
12	B	2238	G	C5-C6-O6	-6.26	124.85	128.60
12	B	2434	A	C4-C5-N7	-6.26	107.57	110.70
12	B	2609	U	P-O3'-C3'	6.26	127.21	119.70
12	B	2829	A	C5-C6-N6	-6.26	118.69	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	129	C	N3-C4-N4	6.25	122.38	118.00
12	B	774	G	C1'-O4'-C4'	6.25	114.90	109.90
12	B	1102	C	C4-C5-C6	6.25	120.53	117.40
12	B	1476	U	P-O3'-C3'	6.25	127.21	119.70
12	B	1660	G	P-O3'-C3'	-6.25	112.19	119.70
12	B	656	G	C4-C5-N7	-6.25	108.30	110.80
12	B	1193	G	N9-C4-C5	-6.25	102.90	105.40
12	B	1396	U	N3-C4-O4	6.25	123.78	119.40
12	B	1831	G	C5-N7-C8	-6.25	101.17	104.30
12	B	2101	A	C5-N7-C8	6.25	107.03	103.90
12	B	2355	G	N3-C2-N2	6.25	124.28	119.90
12	B	2560	A	C6-C5-N7	-6.25	127.92	132.30
12	B	2669	G	N1-C2-N3	-6.25	120.15	123.90
11	A	21	G	C6-N1-C2	6.25	128.85	125.10
12	B	27	G	N1-C2-N3	-6.25	120.15	123.90
12	B	707	G	C4-C5-N7	6.25	113.30	110.80
12	B	1097	U	C3'-C2'-C1'	-6.25	96.50	101.50
12	B	1739	A	C4-C5-C6	6.25	120.13	117.00
12	B	1846	G	C5-C6-O6	-6.25	124.85	128.60
12	B	2609	U	C5-C4-O4	-6.25	122.15	125.90
12	B	1877	A	C5-C6-N1	-6.25	114.58	117.70
12	B	2688	G	C5-N7-C8	6.25	107.42	104.30
12	B	819	A	C3'-C2'-C1'	6.25	106.50	101.50
12	B	1593	A	O4'-C1'-N9	6.25	113.20	108.20
12	B	2465	C	O4'-C1'-C2'	-6.25	99.55	105.80
12	B	2503	A	N7-C8-N9	6.25	116.92	113.80
13	C	265	PHE	CB-CG-CD1	6.25	125.17	120.80
12	B	13	A	C6-C5-N7	-6.25	127.93	132.30
12	B	160	A	C4-C5-C6	6.25	120.12	117.00
12	B	267	C	N3-C4-C5	-6.25	119.40	121.90
12	B	554	U	C1'-O4'-C4'	6.25	114.90	109.90
12	B	594	U	P-O5'-C5'	6.25	130.90	120.90
12	B	802	A	C6-N1-C2	6.25	122.35	118.60
12	B	1144	A	N3-C4-N9	6.25	132.40	127.40
12	B	1179	G	C5-N7-C8	6.25	107.42	104.30
12	B	1853	A	C1'-O4'-C4'	-6.25	104.90	109.90
12	B	1873	G	N1-C6-O6	6.25	123.65	119.90
12	B	2162	G	N1-C2-N3	-6.25	120.15	123.90
12	B	2242	G	N1-C2-N2	6.25	121.82	116.20
12	B	264	C	C5-C4-N4	-6.25	115.83	120.20
12	B	999	U	C1'-O4'-C4'	6.25	114.90	109.90
12	B	511	U	P-O5'-C5'	6.24	130.89	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	866	A	C8-N9-C4	-6.24	103.30	105.80
12	B	904	G	O4'-C1'-N9	6.24	113.19	108.20
12	B	962	G	N1-C2-N3	-6.24	120.15	123.90
12	B	1197	G	P-O5'-C5'	-6.24	110.91	120.90
12	B	1247	A	C3'-C2'-C1'	-6.24	96.51	101.50
12	B	1757	A	P-O5'-C5'	6.24	130.89	120.90
12	B	2136	G	C4-C5-C6	6.24	122.55	118.80
12	B	2365	G	N7-C8-N9	-6.24	109.98	113.10
12	B	2422	C	N3-C4-C5	-6.24	119.40	121.90
12	B	126	A	N1-C2-N3	6.24	132.42	129.30
12	B	442	G	C4-C5-N7	-6.24	108.30	110.80
12	B	752	A	C4-C5-C6	6.24	120.12	117.00
12	B	1810	A	C4-C5-C6	6.24	120.12	117.00
12	B	1833	C	N3-C4-N4	6.24	122.37	118.00
10	9	157	MET	N-CA-CB	6.24	121.83	110.60
12	B	121	G	C8-N9-C4	-6.24	103.90	106.40
12	B	990	A	C8-N9-C4	-6.24	103.30	105.80
12	B	1218	G	N3-C2-N2	6.24	124.27	119.90
12	B	1278	C	C5'-C4'-O4'	6.24	116.59	109.10
12	B	1686	C	N3-C4-C5	-6.24	119.40	121.90
12	B	2762	C	O4'-C1'-N1	6.24	113.19	108.20
12	B	2888	C	O4'-C1'-N1	6.24	113.19	108.20
12	B	444	C	C5-C6-N1	-6.24	117.88	121.00
12	B	537	G	C5-C6-N1	-6.24	108.38	111.50
12	B	974	G	C5'-C4'-O4'	6.24	116.59	109.10
12	B	1676	A	N7-C8-N9	-6.24	110.68	113.80
12	B	1875	G	N1-C2-N3	-6.24	120.16	123.90
12	B	1973	G	C8-N9-C4	-6.24	103.90	106.40
12	B	2080	A	N9-C4-C5	6.24	108.30	105.80
12	B	2826	A	C6-C5-N7	-6.24	127.93	132.30
11	A	112	G	N3-C2-N2	6.24	124.27	119.90
12	B	279	A	C5-C6-N1	-6.24	114.58	117.70
12	B	2028	U	N1-C2-O2	6.24	127.17	122.80
12	B	2715	C	C2-N1-C1'	6.24	125.66	118.80
10	9	198	LEU	O-C-N	-6.24	112.60	123.20
11	A	117	G	N3-C2-N2	6.24	124.27	119.90
12	B	479	A	N1-C2-N3	-6.24	126.18	129.30
12	B	654	A	C5-N7-C8	6.24	107.02	103.90
12	B	668	A	C6-N1-C2	6.24	122.34	118.60
12	B	928	A	C6-C5-N7	-6.24	127.94	132.30
12	B	1136	G	C4-C5-C6	6.24	122.54	118.80
12	B	1393	A	C6-N1-C2	6.24	122.34	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2170	A	N7-C8-N9	6.24	116.92	113.80
12	B	2357	G	N1-C6-O6	6.24	123.64	119.90
12	B	2447	G	N3-C2-N2	6.24	124.27	119.90
12	B	2890	G	N1-C2-N2	-6.24	110.59	116.20
1	0	66	VAL	CA-CB-CG2	-6.23	101.55	110.90
11	A	21	G	N9-C1'-C2'	-6.23	105.14	112.00
12	B	705	A	N3-C4-C5	-6.23	122.44	126.80
12	B	1400	U	C5-C6-N1	-6.23	119.58	122.70
12	B	1492	G	P-O3'-C3'	-6.23	112.22	119.70
12	B	1572	A	N3-C4-C5	-6.23	122.44	126.80
12	B	1655	A	O4'-C1'-N9	6.23	113.19	108.20
12	B	2355	G	C6-N1-C2	6.23	128.84	125.10
12	B	2403	C	C4-C5-C6	6.23	120.52	117.40
12	B	2839	G	C2-N3-C4	6.23	115.02	111.90
12	B	240	C	N3-C4-N4	6.23	122.36	118.00
12	B	489	G	C4-N9-C1'	6.23	134.60	126.50
12	B	594	U	C5-C6-N1	6.23	125.82	122.70
12	B	641	U	N1-C2-N3	-6.23	111.16	114.90
12	B	721	A	C5-C6-N6	-6.23	118.71	123.70
12	B	1184	U	N3-C4-O4	6.23	123.76	119.40
12	B	1206	G	O3'-P-O5'	-6.23	92.16	104.00
12	B	1461	C	C5-C6-N1	6.23	124.12	121.00
12	B	1502	A	C8-N9-C4	-6.23	103.31	105.80
12	B	1541	C	C1'-O4'-C4'	-6.23	104.92	109.90
12	B	1690	A	C2-N3-C4	-6.23	107.48	110.60
12	B	2843	G	C5-N7-C8	6.23	107.42	104.30
12	B	2890	G	C5-C6-O6	-6.23	124.86	128.60
12	B	2890	G	C5-N7-C8	6.23	107.42	104.30
12	B	164	C	C5-C6-N1	6.23	124.11	121.00
12	B	518	G	C5-C6-O6	-6.23	124.86	128.60
12	B	576	U	C6-N1-C2	-6.23	117.26	121.00
12	B	878	A	O4'-C1'-N9	6.23	113.18	108.20
12	B	1937	A	N1-C2-N3	6.23	132.41	129.30
12	B	2050	C	C5-C4-N4	-6.23	115.84	120.20
16	F	127	TYR	CB-CG-CD1	-6.23	117.26	121.00
12	B	681	G	C2-N3-C4	-6.23	108.79	111.90
12	B	1392	A	C6-N1-C2	6.23	122.34	118.60
12	B	1928	A	C4-C5-C6	6.23	120.11	117.00
12	B	2436	G	O4'-C1'-N9	6.23	113.18	108.20
12	B	178	G	P-O5'-C5'	6.23	130.86	120.90
12	B	734	A	C6-N1-C2	6.23	122.34	118.60
12	B	824	U	N3-C4-C5	-6.23	110.86	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1422	G	P-O3'-C3'	-6.23	112.23	119.70
12	B	1871	A	C5-C6-N6	-6.23	118.72	123.70
12	B	2005	A	C5-C6-N6	-6.23	118.72	123.70
12	B	2064	C	N3-C4-N4	6.23	122.36	118.00
12	B	2366	A	C4-C5-C6	6.23	120.11	117.00
12	B	2643	G	P-O3'-C3'	-6.23	112.23	119.70
12	B	435	C	C4-C5-C6	-6.23	114.29	117.40
12	B	621	A	C4'-C3'-C2'	-6.23	96.37	102.60
12	B	1370	C	N3-C2-O2	-6.23	117.54	121.90
12	B	1471	G	N9-C4-C5	-6.23	102.91	105.40
12	B	1530	G	N3-C2-N2	6.23	124.26	119.90
24	N	96	ARG	NE-CZ-NH2	-6.23	117.19	120.30
12	B	374	A	C5-C6-N1	-6.22	114.59	117.70
12	B	894	U	P-O5'-C5'	6.22	130.86	120.90
12	B	1578	U	C6-N1-C1'	-6.22	112.49	121.20
30	T	6	ARG	NE-CZ-NH1	6.22	123.41	120.30
12	B	641	U	O4'-C1'-N1	6.22	113.18	108.20
12	B	686	U	O4'-C4'-C3'	-6.22	97.78	104.00
12	B	918	A	N1-C2-N3	6.22	132.41	129.30
12	B	1479	G	C5-C6-O6	-6.22	124.87	128.60
12	B	1553	A	N1-C6-N6	6.22	122.33	118.60
12	B	1986	C	C5-C6-N1	6.22	124.11	121.00
12	B	267	C	P-O3'-C3'	6.22	127.17	119.70
12	B	1316	U	C2-N3-C4	6.22	130.73	127.00
12	B	251	A	O4'-C1'-N9	6.22	113.17	108.20
12	B	993	G	N9-C4-C5	-6.22	102.91	105.40
12	B	1627	G	O4'-C1'-N9	6.22	113.18	108.20
12	B	1678	A	N1-C2-N3	6.22	132.41	129.30
12	B	1745	A	O5'-C5'-C4'	-6.22	99.88	111.70
12	B	2500	U	C4-C5-C6	-6.22	115.97	119.70
12	B	2679	A	N7-C8-N9	-6.22	110.69	113.80
12	B	2814	A	C4-C5-N7	-6.22	107.59	110.70
18	H	132	PHE	CB-CG-CD1	-6.22	116.45	120.80
11	A	109	A	C4-C5-C6	6.22	120.11	117.00
12	B	64	A	O4'-C1'-N9	6.22	113.17	108.20
12	B	975	A	C5-C6-N1	-6.22	114.59	117.70
12	B	1475	G	C6-C5-N7	-6.22	126.67	130.40
12	B	1503	A	N1-C6-N6	6.22	122.33	118.60
12	B	2054	A	N3-C4-C5	-6.22	122.45	126.80
12	B	2184	A	C3'-C2'-C1'	-6.22	96.53	101.50
12	B	2341	G	C5-C6-N1	-6.22	108.39	111.50
12	B	2883	A	C4-C5-N7	-6.22	107.59	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	0	17	ARG	NE-CZ-NH2	6.21	123.41	120.30
12	B	538	A	O4'-C1'-N9	6.21	113.17	108.20
12	B	542	C	N3-C4-C5	6.21	124.39	121.90
12	B	764	A	C2-N3-C4	6.21	113.71	110.60
12	B	855	G	P-O3'-C3'	-6.21	112.24	119.70
12	B	1581	G	C8-N9-C4	-6.21	103.92	106.40
12	B	1652	A	N3-C4-C5	-6.21	122.45	126.80
12	B	75	G	C8-N9-C4	-6.21	103.92	106.40
12	B	107	G	C4'-C3'-C2'	-6.21	96.39	102.60
12	B	394	C	N3-C4-N4	6.21	122.35	118.00
12	B	977	G	C3'-C2'-C1'	-6.21	96.53	101.50
12	B	1679	A	C4'-C3'-C2'	-6.21	96.39	102.60
12	B	1845	G	C5-C6-N1	-6.21	108.39	111.50
29	S	2	GLU	N-CA-CB	6.21	121.78	110.60
11	A	59	A	C8-N9-C4	-6.21	103.31	105.80
12	B	135	U	N3-C2-O2	6.21	126.55	122.20
12	B	846	U	C5-C6-N1	6.21	125.81	122.70
12	B	881	G	C6-C5-N7	-6.21	126.67	130.40
12	B	1772	A	C5-C6-N1	-6.21	114.59	117.70
12	B	1921	G	C4-C5-N7	6.21	113.28	110.80
12	B	2141	G	C2-N3-C4	6.21	115.01	111.90
12	B	2230	G	N7-C8-N9	6.21	116.21	113.10
12	B	2280	G	O5'-P-OP1	6.21	118.16	110.70
12	B	2352	A	N9-C4-C5	6.21	108.28	105.80
12	B	2368	C	O4'-C1'-N1	6.21	113.17	108.20
12	B	2469	A	C5-C6-N1	-6.21	114.59	117.70
12	B	2689	U	C2-N3-C4	-6.21	123.27	127.00
12	B	617	G	C5'-C4'-C3'	-6.21	106.07	116.00
12	B	1028	A	C8-N9-C4	-6.21	103.32	105.80
12	B	1436	G	C5-C6-O6	-6.21	124.88	128.60
12	B	1557	C	N3-C4-C5	-6.21	119.42	121.90
12	B	2242	G	N3-C2-N2	-6.21	115.55	119.90
12	B	2372	U	N3-C4-O4	6.21	123.75	119.40
12	B	2490	G	N1-C2-N3	6.21	127.63	123.90
12	B	2532	G	N9-C4-C5	-6.21	102.92	105.40
12	B	2577	A	C8-N9-C1'	6.21	138.88	127.70
12	B	2718	G	C4'-C3'-C2'	-6.21	96.39	102.60
12	B	2760	C	C4'-C3'-C2'	-6.21	96.39	102.60
20	J	45	THR	N-CA-CB	6.21	122.10	110.30
11	A	19	C	O4'-C4'-C3'	-6.21	97.79	104.00
12	B	414	C	OP1-P-OP2	-6.21	110.29	119.60
12	B	463	G	C3'-C2'-C1'	-6.21	96.54	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2139	U	C1'-O4'-C4'	6.21	114.86	109.90
12	B	131	A	C1'-O4'-C4'	-6.21	104.94	109.90
12	B	257	C	N3-C4-C5	-6.21	119.42	121.90
12	B	387	U	P-O3'-C3'	6.21	127.15	119.70
12	B	636	G	C6-C5-N7	-6.21	126.68	130.40
12	B	1365	A	C2-N3-C4	-6.21	107.50	110.60
12	B	2823	A	C2-N3-C4	-6.21	107.50	110.60
12	B	22	C	C4-C5-C6	6.20	120.50	117.40
12	B	463	G	N3-C4-N9	-6.20	122.28	126.00
12	B	507	A	C5-N7-C8	-6.20	100.80	103.90
12	B	859	G	C4-C5-N7	6.20	113.28	110.80
12	B	2242	G	C5-N7-C8	6.20	107.40	104.30
12	B	2644	G	O4'-C1'-N9	6.20	113.16	108.20
12	B	2788	C	N1-C2-O2	6.20	122.62	118.90
12	B	2883	A	N9-C4-C5	6.20	108.28	105.80
18	H	110	VAL	CA-CB-CG2	6.20	120.20	110.90
12	B	137	U	N3-C2-O2	-6.20	117.86	122.20
12	B	442	G	C4-C5-C6	6.20	122.52	118.80
12	B	712	G	C5-N7-C8	6.20	107.40	104.30
12	B	1531	C	C6-N1-C2	-6.20	117.82	120.30
12	B	1602	U	N1-C2-N3	6.20	118.62	114.90
12	B	20	C	C5-C4-N4	-6.20	115.86	120.20
12	B	599	A	C5-N7-C8	6.20	107.00	103.90
12	B	728	G	N7-C8-N9	-6.20	110.00	113.10
12	B	825	A	N7-C8-N9	6.20	116.90	113.80
12	B	1246	A	N1-C6-N6	6.20	122.32	118.60
12	B	1404	C	C1'-O4'-C4'	-6.20	104.94	109.90
12	B	1821	A	P-O5'-C5'	6.20	130.82	120.90
12	B	2564	A	O4'-C1'-N9	6.20	113.16	108.20
33	Y	68	PHE	CB-CG-CD2	-6.20	116.46	120.80
11	A	5	U	O4'-C1'-N1	6.20	113.16	108.20
12	B	282	A	N1-C6-N6	6.20	122.32	118.60
12	B	560	C	O4'-C1'-N1	6.20	113.16	108.20
12	B	1483	G	P-O5'-C5'	-6.20	110.98	120.90
12	B	2054	A	C8-N9-C4	-6.20	103.32	105.80
12	B	2297	A	C3'-C2'-C1'	-6.20	96.54	101.50
12	B	2817	U	C3'-C2'-C1'	-6.20	96.54	101.50
12	B	2885	G	P-O3'-C3'	-6.20	112.26	119.70
12	B	203	A	P-O5'-C5'	6.20	130.81	120.90
12	B	627	A	C5'-C4'-O4'	6.20	116.54	109.10
12	B	1051	G	O4'-C1'-N9	6.20	113.16	108.20
12	B	1391	U	C5-C6-N1	6.20	125.80	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2489	U	N1-C2-N3	6.20	118.62	114.90
11	A	45	A	C5'-C4'-C3'	-6.20	106.09	116.00
12	B	490	C	C4-C5-C6	6.20	120.50	117.40
12	B	741	U	N3-C4-O4	-6.20	115.06	119.40
12	B	1398	C	C4-C5-C6	6.20	120.50	117.40
12	B	1656	C	C5-C4-N4	-6.20	115.86	120.20
12	B	1670	C	C1'-O4'-C4'	6.20	114.86	109.90
12	B	1848	A	C5'-C4'-O4'	6.20	116.53	109.10
12	B	1929	G	C2-N3-C4	-6.20	108.80	111.90
12	B	2247	A	C4'-C3'-C2'	-6.20	96.40	102.60
12	B	2445	G	C4-C5-C6	6.20	122.52	118.80
12	B	2475	C	C5-C6-N1	6.20	124.10	121.00
12	B	2484	G	C2-N3-C4	6.20	115.00	111.90
12	B	2614	A	C3'-C2'-C1'	6.20	106.46	101.50
12	B	242	G	C2'-C3'-O3'	6.19	123.61	113.70
12	B	996	A	C8-N9-C4	6.19	108.28	105.80
12	B	1446	C	O4'-C1'-N1	6.19	113.16	108.20
12	B	1926	U	N3-C4-O4	6.19	123.74	119.40
29	S	110	ARG	NE-CZ-NH1	-6.19	117.20	120.30
12	B	100	U	C5-C6-N1	6.19	125.80	122.70
12	B	210	C	N3-C4-N4	6.19	122.33	118.00
12	B	1571	A	N9-C4-C5	6.19	108.28	105.80
12	B	1913	A	C6-C5-N7	-6.19	127.97	132.30
12	B	2153	C	O4'-C1'-N1	6.19	113.15	108.20
12	B	2168	G	C6-C5-N7	-6.19	126.68	130.40
12	B	2324	U	N1-C2-N3	-6.19	111.18	114.90
12	B	2458	G	N9-C4-C5	-6.19	102.92	105.40
12	B	2558	C	C6-N1-C2	-6.19	117.82	120.30
12	B	2649	C	N1-C2-O2	-6.19	115.19	118.90
12	B	2766	A	C4-C5-N7	-6.19	107.60	110.70
11	A	99	A	C6-N1-C2	-6.19	114.89	118.60
12	B	722	A	N1-C2-N3	6.19	132.40	129.30
12	B	781	A	N9-C4-C5	6.19	108.28	105.80
12	B	782	A	C4-C5-N7	-6.19	107.61	110.70
12	B	933	A	C6-C5-N7	-6.19	127.97	132.30
12	B	1763	G	C8-N9-C4	6.19	108.88	106.40
12	B	2204	G	C4-C5-N7	-6.19	108.32	110.80
12	B	2381	A	O4'-C1'-N9	6.19	113.15	108.20
12	B	2473	U	C5-C4-O4	-6.19	122.19	125.90
12	B	2896	C	C5-C4-N4	-6.19	115.87	120.20
12	B	2903	U	N1-C2-N3	-6.19	111.19	114.90
12	B	298	G	N3-C4-C5	-6.19	125.50	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	912	C	C4-C5-C6	6.19	120.49	117.40
12	B	1187	G	C5-C6-N1	-6.19	108.41	111.50
12	B	1284	A	C4-C5-C6	6.19	120.09	117.00
12	B	1960	A	C5'-C4'-C3'	-6.19	106.10	116.00
12	B	2270	A	C6-N1-C2	-6.19	114.89	118.60
12	B	2504	U	O4'-C1'-N1	6.19	113.15	108.20
12	B	166	U	C5'-C4'-O4'	6.19	116.52	109.10
12	B	891	G	N7-C8-N9	-6.19	110.01	113.10
12	B	1090	A	N1-C6-N6	6.19	122.31	118.60
12	B	1259	G	N9-C4-C5	6.19	107.88	105.40
12	B	1367	A	C4-C5-C6	6.19	120.09	117.00
12	B	1377	G	N1-C2-N2	-6.19	110.63	116.20
12	B	2203	U	C4'-C3'-C2'	-6.19	96.41	102.60
12	B	2791	G	N3-C2-N2	6.19	124.23	119.90
12	B	2817	U	N3-C4-C5	6.19	118.31	114.60
11	A	58	A	N3-C4-N9	-6.19	122.45	127.40
12	B	63	A	C5-C6-N6	-6.19	118.75	123.70
12	B	1619	G	C6-C5-N7	-6.19	126.69	130.40
12	B	1699	G	N1-C6-O6	6.19	123.61	119.90
12	B	1935	G	O5'-C5'-C4'	-6.19	99.95	111.70
12	B	2160	C	N1-C2-N3	6.19	123.53	119.20
12	B	303	G	C6-C5-N7	-6.18	126.69	130.40
12	B	637	A	N9-C4-C5	-6.18	103.33	105.80
12	B	656	G	C2-N3-C4	6.18	114.99	111.90
12	B	812	C	C4-C5-C6	6.18	120.49	117.40
12	B	2498	C	P-O3'-C3'	-6.18	112.28	119.70
12	B	2888	C	C6-N1-C2	-6.18	117.83	120.30
11	A	69	G	C8-N9-C4	6.18	108.87	106.40
12	B	16	C	P-O3'-C3'	-6.18	112.28	119.70
12	B	161	A	N1-C2-N3	6.18	132.39	129.30
12	B	436	C	N3-C4-N4	6.18	122.33	118.00
12	B	1082	U	N1-C2-N3	6.18	118.61	114.90
12	B	1286	A	C5-N7-C8	6.18	106.99	103.90
12	B	1453	A	N9-C4-C5	6.18	108.27	105.80
12	B	1692	U	O4'-C1'-N1	6.18	113.15	108.20
12	B	2038	G	N9-C4-C5	6.18	107.87	105.40
12	B	2044	C	N3-C4-N4	6.18	122.33	118.00
12	B	2310	C	C4-C5-C6	6.18	120.49	117.40
12	B	2352	A	P-O5'-C5'	6.18	130.79	120.90
11	A	5	U	O5'-C5'-C4'	-6.18	99.96	111.70
12	B	247	G	C5-C6-O6	-6.18	124.89	128.60
12	B	743	A	C4-C5-C6	6.18	120.09	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1999	C	N3-C4-N4	6.18	122.33	118.00
12	B	2114	A	O4'-C1'-N9	6.18	113.14	108.20
12	B	2746	U	C5-C4-O4	-6.18	122.19	125.90
12	B	107	G	C5-C6-N1	-6.18	108.41	111.50
12	B	323	C	C5-C4-N4	-6.18	115.88	120.20
12	B	482	A	N9-C4-C5	-6.18	103.33	105.80
12	B	1266	G	C2-N3-C4	6.18	114.99	111.90
12	B	1927	A	P-O5'-C5'	6.18	130.79	120.90
12	B	2169	A	C5-N7-C8	6.18	106.99	103.90
12	B	2741	A	C6-C5-N7	-6.18	127.97	132.30
12	B	2771	C	C2-N3-C4	6.18	122.99	119.90
12	B	971	G	N1-C2-N3	-6.18	120.19	123.90
12	B	1014	A	N9-C4-C5	6.18	108.27	105.80
12	B	2004	G	C8-N9-C4	6.18	108.87	106.40
12	B	2219	U	N1-C2-O2	-6.18	118.47	122.80
17	G	145	ALA	N-CA-CB	6.18	118.75	110.10
11	A	73	A	N1-C6-N6	6.18	122.31	118.60
12	B	463	G	C5-N7-C8	6.18	107.39	104.30
12	B	701	G	C3'-C2'-C1'	-6.18	96.56	101.50
12	B	840	C	N3-C2-O2	-6.18	117.58	121.90
12	B	1223	G	N3-C4-N9	-6.18	122.30	126.00
12	B	1246	A	C4-C5-C6	6.18	120.09	117.00
12	B	1956	U	O4'-C1'-N1	6.18	113.14	108.20
12	B	2381	A	C1'-O4'-C4'	-6.18	104.96	109.90
12	B	2702	G	C4-C5-N7	-6.18	108.33	110.80
12	B	539	G	O4'-C1'-N9	6.17	113.14	108.20
12	B	686	U	N1-C2-O2	-6.17	118.48	122.80
12	B	1604	C	N3-C4-N4	6.17	122.32	118.00
12	B	1611	C	N3-C4-C5	-6.17	119.43	121.90
12	B	1794	A	C5-C6-N6	-6.17	118.76	123.70
12	B	2862	G	N3-C2-N2	6.17	124.22	119.90
12	B	2075	U	C5-C6-N1	-6.17	119.61	122.70
12	B	189	G	C8-N9-C4	-6.17	103.93	106.40
12	B	224	U	N3-C2-O2	6.17	126.52	122.20
12	B	468	G	C6-N1-C2	-6.17	121.40	125.10
12	B	1227	G	N9-C4-C5	-6.17	102.93	105.40
12	B	2628	C	O4'-C1'-N1	6.17	113.14	108.20
12	B	601	C	C5'-C4'-C3'	6.17	125.87	116.00
12	B	684	G	N7-C8-N9	-6.17	110.02	113.10
12	B	2211	A	N3-C4-N9	6.17	132.34	127.40
12	B	2457	U	P-O3'-C3'	-6.17	112.30	119.70
12	B	507	A	N3-C4-C5	6.17	131.12	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1404	C	C2-N1-C1'	6.17	125.58	118.80
12	B	1781	U	P-O3'-C3'	6.17	127.10	119.70
12	B	1892	C	O4'-C1'-N1	6.17	113.14	108.20
12	B	2803	G	C6-N1-C2	-6.17	121.40	125.10
12	B	175	G	C6-N1-C2	-6.17	121.40	125.10
12	B	575	A	N1-C2-N3	6.17	132.38	129.30
12	B	1918	A	C4-C5-C6	6.17	120.08	117.00
12	B	2414	G	O4'-C1'-N9	6.17	113.13	108.20
27	Q	31	TYR	CZ-CE2-CD2	6.17	125.35	119.80
32	W	44	HIS	CA-CB-CG	-6.17	103.12	113.60
11	A	80	U	OP2-P-O3'	6.17	118.76	105.20
12	B	101	A	C5-N7-C8	6.17	106.98	103.90
12	B	189	G	P-O3'-C3'	-6.17	112.30	119.70
12	B	897	C	OP1-P-OP2	-6.17	110.35	119.60
12	B	78	U	N3-C2-O2	6.16	126.51	122.20
12	B	91	A	C1'-O4'-C4'	6.16	114.83	109.90
12	B	205	G	N9-C4-C5	6.16	107.86	105.40
12	B	978	G	N3-C2-N2	6.16	124.21	119.90
12	B	1017	G	C5-C6-O6	-6.16	124.90	128.60
12	B	1085	A	C4-C5-C6	6.16	120.08	117.00
12	B	1326	U	C6-N1-C2	-6.16	117.30	121.00
12	B	1598	A	C3'-C2'-C1'	-6.16	96.57	101.50
12	B	2370	G	P-O5'-C5'	6.16	130.76	120.90
12	B	2750	A	N9-C1'-C2'	-6.16	105.22	112.00
12	B	1299	G	OP1-P-OP2	-6.16	110.36	119.60
12	B	1829	A	C6-C5-N7	-6.16	127.99	132.30
12	B	2412	A	C4-C5-C6	6.16	120.08	117.00
12	B	2471	A	C4-C5-C6	6.16	120.08	117.00
12	B	824	U	C6-N1-C2	-6.16	117.30	121.00
12	B	1167	C	C5-C6-N1	6.16	124.08	121.00
12	B	1429	G	O4'-C1'-N9	6.16	113.13	108.20
12	B	1506	U	C4-C5-C6	-6.16	116.00	119.70
12	B	1527	G	C4-C5-C6	6.16	122.50	118.80
12	B	1575	C	C4-C5-C6	6.16	120.48	117.40
12	B	1749	A	C5-C6-N1	-6.16	114.62	117.70
12	B	1983	G	O4'-C4'-C3'	-6.16	97.84	104.00
12	B	2186	G	N1-C2-N3	-6.16	120.20	123.90
24	N	30	ARG	NE-CZ-NH2	-6.16	117.22	120.30
11	A	27	C	P-O5'-C5'	6.16	130.75	120.90
11	A	72	G	O4'-C1'-N9	6.16	113.13	108.20
12	B	247	G	N1-C2-N2	6.16	121.74	116.20
12	B	798	G	P-O3'-C3'	-6.16	112.31	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	850	U	N3-C4-C5	6.16	118.30	114.60
12	B	1048	A	N7-C8-N9	-6.16	110.72	113.80
12	B	1257	C	C4-C5-C6	6.16	120.48	117.40
12	B	1540	G	N1-C2-N2	6.16	121.74	116.20
12	B	1793	C	P-O5'-C5'	6.16	130.75	120.90
12	B	2094	A	C5-C6-N1	-6.16	114.62	117.70
13	C	81	GLU	OE1-CD-OE2	6.16	130.69	123.30
23	M	23	GLY	N-CA-C	-6.16	97.70	113.10
11	A	15	A	N7-C8-N9	6.16	116.88	113.80
12	B	496	G	C8-N9-C4	-6.16	103.94	106.40
12	B	205	G	N7-C8-N9	6.16	116.18	113.10
12	B	1211	C	C1'-O4'-C4'	6.16	114.82	109.90
12	B	1706	C	P-O3'-C3'	6.16	127.09	119.70
12	B	2108	A	C5-N7-C8	6.16	106.98	103.90
12	B	2693	G	C5-C6-O6	-6.16	124.91	128.60
12	B	2740	A	C5-C6-N1	-6.16	114.62	117.70
12	B	715	A	O4'-C1'-N9	6.15	113.12	108.20
12	B	779	U	C4-C5-C6	6.15	123.39	119.70
12	B	962	G	C4-C5-N7	-6.15	108.34	110.80
12	B	1881	C	C4-C5-C6	6.15	120.48	117.40
12	B	2413	G	C4-C5-N7	6.15	113.26	110.80
12	B	2418	A	C3'-C2'-C1'	-6.15	96.58	101.50
12	B	53	A	C5-C6-N1	-6.15	114.62	117.70
12	B	273	G	N9-C4-C5	6.15	107.86	105.40
12	B	412	A	C5-C6-N1	-6.15	114.62	117.70
12	B	422	A	C4-C5-N7	-6.15	107.62	110.70
12	B	472	A	N1-C2-N3	6.15	132.38	129.30
12	B	487	C	C2-N3-C4	6.15	122.98	119.90
12	B	1000	A	N3-C4-C5	-6.15	122.49	126.80
12	B	1241	A	C2-N3-C4	-6.15	107.52	110.60
12	B	2280	G	N9-C4-C5	-6.15	102.94	105.40
12	B	2442	C	O4'-C1'-N1	6.15	113.12	108.20
12	B	2541	A	C3'-C2'-C1'	-6.15	96.58	101.50
12	B	27	G	C4-C5-N7	6.15	113.26	110.80
12	B	159	G	N3-C4-N9	6.15	129.69	126.00
12	B	232	G	C6-C5-N7	-6.15	126.71	130.40
12	B	235	U	O4'-C1'-N1	6.15	113.12	108.20
12	B	1026	G	C4'-C3'-C2'	-6.15	96.45	102.60
12	B	1084	A	C5-N7-C8	-6.15	100.82	103.90
12	B	1418	G	N1-C2-N2	-6.15	110.67	116.20
12	B	1951	U	P-O3'-C3'	6.15	127.08	119.70
12	B	2079	U	N1-C2-O2	6.15	127.11	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2223	G	C5-N7-C8	6.15	107.38	104.30
12	B	2298	A	C5-N7-C8	6.15	106.97	103.90
12	B	2644	G	C5'-C4'-C3'	-6.15	106.16	116.00
12	B	1115	G	C8-N9-C4	6.15	108.86	106.40
12	B	290	U	N3-C2-O2	-6.15	117.90	122.20
12	B	339	U	O4'-C4'-C3'	-6.15	97.85	104.00
12	B	586	A	C4-C5-N7	-6.15	107.63	110.70
12	B	784	G	C5-N7-C8	-6.15	101.23	104.30
12	B	1566	A	N7-C8-N9	-6.15	110.73	113.80
12	B	2327	A	P-O5'-C5'	6.15	130.74	120.90
12	B	2408	U	O4'-C4'-C3'	-6.15	97.85	104.00
12	B	2710	C	C6-N1-C2	-6.15	117.84	120.30
12	B	2837	A	C5-N7-C8	-6.15	100.83	103.90
24	N	67	PHE	CB-CG-CD2	-6.15	116.50	120.80
11	A	19	C	C5-C4-N4	-6.15	115.90	120.20
12	B	600	G	N7-C8-N9	6.15	116.17	113.10
12	B	2676	C	C3'-C2'-C1'	-6.15	96.58	101.50
12	B	2881	U	C2-N3-C4	-6.15	123.31	127.00
12	B	751	A	C6-N1-C2	6.14	122.29	118.60
12	B	833	A	C8-N9-C4	-6.14	103.34	105.80
12	B	1426	G	C2-N3-C4	6.14	114.97	111.90
12	B	1452	G	N3-C4-N9	6.14	129.69	126.00
12	B	1496	A	N1-C6-N6	6.14	122.29	118.60
12	B	1525	A	N7-C8-N9	6.14	116.87	113.80
12	B	1570	A	N1-C6-N6	6.14	122.29	118.60
12	B	2024	G	N3-C4-N9	-6.14	122.31	126.00
12	B	2104	C	C5'-C4'-O4'	6.14	116.47	109.10
12	B	2315	G	N7-C8-N9	6.14	116.17	113.10
12	B	2350	C	C6-N1-C2	-6.14	117.84	120.30
12	B	2498	C	C6-N1-C2	6.14	122.76	120.30
12	B	2557	G	N9-C4-C5	6.14	107.86	105.40
12	B	382	A	C6-C5-N7	-6.14	128.00	132.30
12	B	1148	U	C4'-C3'-C2'	-6.14	96.46	102.60
12	B	2323	G	O4'-C1'-N9	6.14	113.11	108.20
12	B	2485	G	C4-C5-C6	6.14	122.49	118.80
12	B	2528	U	O4'-C1'-N1	6.14	113.11	108.20
12	B	493	G	N1-C6-O6	6.14	123.58	119.90
12	B	1235	G	N3-C4-N9	-6.14	122.32	126.00
12	B	1277	G	O4'-C1'-N9	6.14	113.11	108.20
12	B	1570	A	N9-C4-C5	6.14	108.26	105.80
12	B	1827	U	N3-C4-O4	6.14	123.70	119.40
12	B	2178	C	C2-N3-C4	6.14	122.97	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2397	G	N9-C4-C5	6.14	107.86	105.40
12	B	2412	A	N7-C8-N9	-6.14	110.73	113.80
4	3	27	LEU	CB-CG-CD2	6.14	121.44	111.00
11	A	39	A	C5-C6-N6	-6.14	118.79	123.70
11	A	85	G	C5-C6-O6	-6.14	124.92	128.60
12	B	103	A	N7-C8-N9	-6.14	110.73	113.80
12	B	454	A	C5-C6-N6	-6.14	118.79	123.70
12	B	635	C	O4'-C4'-C3'	-6.14	97.86	104.00
12	B	700	G	C6-N1-C2	-6.14	121.42	125.10
12	B	1367	A	N1-C2-N3	6.14	132.37	129.30
12	B	1634	A	O4'-C1'-N9	6.14	113.11	108.20
12	B	1818	U	N3-C2-O2	6.14	126.50	122.20
12	B	1921	G	O4'-C1'-N9	6.14	113.11	108.20
12	B	2374	C	C4-C5-C6	6.14	120.47	117.40
12	B	2828	G	N9-C4-C5	-6.14	102.94	105.40
12	B	2886	A	C3'-C2'-C1'	6.14	106.41	101.50
23	M	117	PHE	CB-CG-CD2	-6.14	116.50	120.80
12	B	798	G	C5-C6-O6	-6.14	124.92	128.60
12	B	1103	A	C8-N9-C4	-6.14	103.34	105.80
12	B	2520	C	N3-C4-N4	6.14	122.30	118.00
12	B	2802	G	C8-N9-C4	-6.14	103.94	106.40
12	B	2875	C	C6-N1-C2	-6.14	117.84	120.30
12	B	221	A	C5-C6-N1	-6.14	114.63	117.70
12	B	473	G	N7-C8-N9	-6.14	110.03	113.10
12	B	799	G	N3-C2-N2	6.14	124.20	119.90
12	B	1032	A	C5-C6-N6	-6.14	118.79	123.70
12	B	1094	U	C2-N3-C4	6.14	130.68	127.00
12	B	1532	A	C5-C6-N1	-6.14	114.63	117.70
12	B	1555	G	N1-C2-N3	-6.14	120.22	123.90
12	B	2009	A	C2-N3-C4	-6.14	107.53	110.60
12	B	2553	G	O4'-C1'-N9	6.14	113.11	108.20
12	B	2742	G	C8-N9-C1'	6.14	134.98	127.00
27	Q	27	ARG	NE-CZ-NH1	-6.14	117.23	120.30
12	B	230	G	N1-C2-N3	-6.13	120.22	123.90
12	B	803	U	N1-C2-N3	-6.13	111.22	114.90
12	B	1171	G	C5-C6-N1	-6.13	108.43	111.50
12	B	2487	G	P-O3'-C3'	6.13	127.06	119.70
12	B	1060	U	C5-C4-O4	-6.13	122.22	125.90
12	B	1449	G	C8-N9-C4	-6.13	103.95	106.40
12	B	1672	A	C5-C6-N1	-6.13	114.64	117.70
12	B	2458	G	C3'-C2'-C1'	-6.13	96.59	101.50
12	B	2500	U	N1-C2-N3	-6.13	111.22	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2903	U	C6-N1-C1'	-6.13	112.62	121.20
28	R	83	TYR	CB-CG-CD2	6.13	124.68	121.00
12	B	378	C	N3-C4-C5	-6.13	119.45	121.90
12	B	1053	C	C5-C4-N4	-6.13	115.91	120.20
12	B	1498	C	N3-C4-C5	-6.13	119.45	121.90
12	B	2063	C	C5-C6-N1	6.13	124.06	121.00
11	A	51	G	O4'-C1'-N9	6.13	113.10	108.20
12	B	69	C	N3-C2-O2	6.13	126.19	121.90
12	B	81	G	C4-C5-C6	6.13	122.48	118.80
12	B	638	G	O4'-C1'-N9	6.13	113.10	108.20
12	B	713	G	C5-C6-N1	6.13	114.56	111.50
12	B	1370	C	C6-N1-C2	-6.13	117.85	120.30
12	B	1572	A	C6-C5-N7	-6.13	128.01	132.30
12	B	2002	G	C5-C6-N1	-6.13	108.44	111.50
12	B	2114	A	C5-N7-C8	6.13	106.96	103.90
12	B	2378	A	C5-C6-N1	-6.13	114.64	117.70
7	6	28	ARG	NH1-CZ-NH2	-6.13	112.66	119.40
12	B	257	C	O4'-C1'-N1	6.13	113.10	108.20
12	B	379	G	C2-N3-C4	6.13	114.96	111.90
12	B	416	U	C4-C5-C6	6.13	123.38	119.70
12	B	916	G	O4'-C1'-N9	6.13	113.10	108.20
12	B	1458	U	N1-C2-O2	-6.13	118.51	122.80
12	B	1977	A	C5-C6-N6	-6.13	118.80	123.70
12	B	2448	A	N9-C4-C5	6.13	108.25	105.80
12	B	18	U	P-O5'-C5'	-6.12	111.10	120.90
12	B	400	G	C8-N9-C4	-6.12	103.95	106.40
11	A	44	G	C1'-O4'-C4'	6.12	114.80	109.90
11	A	54	G	C4-C5-C6	6.12	122.47	118.80
12	B	901	C	N1-C2-O2	-6.12	115.23	118.90
12	B	1280	G	N3-C2-N2	6.12	124.19	119.90
12	B	1778	U	P-O3'-C3'	6.12	127.05	119.70
12	B	1790	C	C4-C5-C6	-6.12	114.34	117.40
12	B	1837	C	C4'-C3'-C2'	-6.12	96.48	102.60
12	B	2360	G	C4-C5-C6	6.12	122.47	118.80
12	B	2530	A	C5-C6-N1	-6.12	114.64	117.70
12	B	2683	C	C4-C5-C6	-6.12	114.34	117.40
12	B	2806	C	P-O3'-C3'	6.12	127.05	119.70
12	B	429	A	N1-C2-N3	6.12	132.36	129.30
12	B	533	G	N9-C4-C5	-6.12	102.95	105.40
12	B	1330	C	C2-N3-C4	6.12	122.96	119.90
12	B	1356	G	N1-C2-N3	-6.12	120.23	123.90
12	B	1617	C	N3-C4-C5	-6.12	119.45	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1891	G	O4'-C1'-N9	6.12	113.10	108.20
12	B	2192	U	N1-C2-N3	-6.12	111.23	114.90
12	B	2218	G	C4-C5-N7	6.12	113.25	110.80
12	B	2324	U	N3-C4-C5	-6.12	110.93	114.60
12	B	2410	G	C3'-C2'-C1'	-6.12	96.60	101.50
12	B	2544	G	O4'-C1'-N9	6.12	113.10	108.20
12	B	2652	C	P-O3'-C3'	-6.12	112.35	119.70
12	B	2687	U	C2-N3-C4	6.12	130.67	127.00
12	B	2766	A	C6-C5-N7	-6.12	128.01	132.30
11	A	66	A	C5-C6-N1	-6.12	114.64	117.70
12	B	324	A	O4'-C1'-N9	6.12	113.10	108.20
12	B	335	C	C2-N1-C1'	6.12	125.53	118.80
12	B	1091	G	C4'-C3'-C2'	-6.12	96.48	102.60
12	B	1502	A	C4-C5-C6	6.12	120.06	117.00
12	B	2850	A	N9-C4-C5	6.12	108.25	105.80
11	A	42	C	O4'-C1'-N1	6.12	113.09	108.20
12	B	254	G	C2-N3-C4	6.12	114.96	111.90
12	B	1132	U	N1-C2-O2	-6.12	118.52	122.80
12	B	1462	C	O4'-C1'-N1	6.12	113.09	108.20
12	B	1587	G	C5'-C4'-O4'	6.12	116.44	109.10
12	B	1788	C	C2-N3-C4	-6.12	116.84	119.90
12	B	2158	A	C5-C6-N6	-6.12	118.81	123.70
12	B	2173	A	O4'-C1'-N9	6.12	113.09	108.20
12	B	2412	A	C2-N3-C4	-6.12	107.54	110.60
12	B	2661	G	N9-C4-C5	-6.12	102.95	105.40
12	B	2675	A	C5-C6-N6	-6.12	118.81	123.70
12	B	1655	A	N1-C6-N6	6.12	122.27	118.60
12	B	2027	G	N3-C2-N2	6.12	124.18	119.90
11	A	28	C	N3-C4-N4	6.12	122.28	118.00
12	B	68	G	C3'-C2'-C1'	-6.12	96.61	101.50
12	B	1366	A	C4-N9-C1'	6.12	137.31	126.30
12	B	2229	U	N3-C4-C5	-6.12	110.93	114.60
12	B	2319	G	N7-C8-N9	6.12	116.16	113.10
12	B	2856	A	N7-C8-N9	-6.12	110.74	113.80
12	B	280	U	N3-C2-O2	-6.11	117.92	122.20
12	B	514	A	C5'-C4'-C3'	6.11	125.78	116.00
12	B	874	G	C5'-C4'-C3'	-6.11	106.22	116.00
12	B	1641	A	N9-C4-C5	6.11	108.25	105.80
12	B	2021	C	C4-C5-C6	6.11	120.46	117.40
12	B	2121	G	C6-C5-N7	-6.11	126.73	130.40
12	B	2156	G	C5-C6-O6	-6.11	124.93	128.60
12	B	2456	C	P-O3'-C3'	6.11	127.03	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2511	U	O4'-C1'-N1	6.11	113.09	108.20
12	B	2890	G	N9-C4-C5	6.11	107.85	105.40
24	N	24	MET	CG-SD-CE	-6.11	90.42	100.20
11	A	96	G	O4'-C1'-N9	6.11	113.09	108.20
12	B	1802	A	C8-N9-C4	-6.11	103.36	105.80
12	B	2411	A	C8-N9-C4	-6.11	103.36	105.80
15	E	1	MET	CG-SD-CE	-6.11	90.42	100.20
6	5	38	PHE	CZ-CE2-CD2	6.11	127.43	120.10
12	B	180	G	C4-C5-C6	6.11	122.47	118.80
12	B	1262	A	O4'-C1'-N9	6.11	113.09	108.20
12	B	1497	U	O4'-C1'-N1	6.11	113.09	108.20
12	B	1503	A	P-O3'-C3'	6.11	127.03	119.70
12	B	1421	G	C4-C5-N7	-6.11	108.36	110.80
12	B	2541	A	N1-C2-N3	6.11	132.35	129.30
6	5	201	PRO	N-CD-CG	6.11	112.36	103.20
12	B	202	U	N1-C2-O2	-6.11	118.53	122.80
12	B	1125	G	C5-N7-C8	-6.11	101.25	104.30
12	B	1326	U	C2-N1-C1'	6.11	125.03	117.70
12	B	1938	A	C5-C6-N1	-6.11	114.65	117.70
12	B	639	U	P-O5'-C5'	6.11	130.67	120.90
12	B	886	A	O4'-C1'-N9	6.11	113.08	108.20
12	B	1662	U	C6-N1-C2	-6.11	117.34	121.00
12	B	2326	C	O4'-C1'-N1	6.11	113.08	108.20
12	B	2756	U	C5-C6-N1	-6.11	119.65	122.70
12	B	2780	G	C8-N9-C1'	-6.11	119.06	127.00
12	B	301	G	C6-C5-N7	-6.10	126.74	130.40
12	B	681	G	C8-N9-C4	-6.10	103.96	106.40
12	B	1310	G	C6-C5-N7	-6.10	126.74	130.40
12	B	1518	C	N1-C2-O2	6.10	122.56	118.90
12	B	77	G	C4-C5-C6	6.10	122.46	118.80
12	B	121	G	P-O5'-C5'	-6.10	111.14	120.90
12	B	369	U	O4'-C1'-N1	6.10	113.08	108.20
12	B	945	A	C6-C5-N7	-6.10	128.03	132.30
12	B	1040	A	C6-C5-N7	-6.10	128.03	132.30
12	B	1135	C	C4'-C3'-C2'	-6.10	96.50	102.60
12	B	1269	A	C6-C5-N7	-6.10	128.03	132.30
12	B	1629	U	N1-C2-O2	-6.10	118.53	122.80
12	B	1813	G	P-O3'-C3'	-6.10	112.38	119.70
12	B	1830	C	N3-C2-O2	-6.10	117.63	121.90
12	B	1944	U	N1-C2-N3	-6.10	111.24	114.90
12	B	2508	G	C5-C6-O6	6.10	132.26	128.60
12	B	2621	G	C4-N9-C1'	-6.10	118.57	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2674	G	C6-N1-C2	6.10	128.76	125.10
18	H	72	ILE	N-CA-CB	6.10	124.83	110.80
12	B	966	G	C4-C5-C6	6.10	122.46	118.80
12	B	339	U	N3-C2-O2	6.10	126.47	122.20
12	B	459	U	C3'-C2'-C1'	-6.10	96.62	101.50
12	B	960	A	C5-C6-N6	-6.10	118.82	123.70
12	B	1131	G	N1-C2-N2	6.10	121.69	116.20
24	N	9	GLN	CG-CD-OE1	-6.10	109.40	121.60
11	A	84	G	N1-C2-N3	-6.10	120.24	123.90
12	B	118	A	C5-N7-C8	6.10	106.95	103.90
12	B	152	A	O4'-C1'-N9	6.10	113.08	108.20
12	B	586	A	N3-C4-C5	-6.10	122.53	126.80
12	B	870	U	C3'-C2'-C1'	-6.10	96.62	101.50
12	B	1988	G	O4'-C1'-N9	6.10	113.08	108.20
12	B	2042	A	C4-C5-N7	6.10	113.75	110.70
12	B	2224	G	N1-C2-N3	-6.10	120.24	123.90
12	B	2400	G	C4'-C3'-C2'	-6.10	96.50	102.60
12	B	785	G	C5-N7-C8	-6.10	101.25	104.30
12	B	1835	G	C5-C6-O6	-6.10	124.94	128.60
12	B	262	A	C4-C5-C6	6.09	120.05	117.00
12	B	925	A	C5-C6-N1	6.09	120.75	117.70
12	B	1453	A	C6-C5-N7	-6.09	128.03	132.30
12	B	1532	A	C6-C5-N7	-6.09	128.03	132.30
12	B	1378	A	C8-N9-C4	6.09	108.24	105.80
12	B	1502	A	C5-N7-C8	6.09	106.95	103.90
12	B	2645	G	C5-C6-N1	-6.09	108.45	111.50
11	A	101	A	N3-C4-C5	6.09	131.06	126.80
12	B	379	G	C5-C6-N1	-6.09	108.45	111.50
12	B	916	G	N3-C2-N2	6.09	124.16	119.90
12	B	1549	A	C5-N7-C8	6.09	106.95	103.90
12	B	2297	A	N7-C8-N9	6.09	116.84	113.80
11	A	105	G	C4-C5-N7	6.09	113.24	110.80
12	B	341	C	N1-C2-O2	-6.09	115.25	118.90
12	B	793	A	N1-C6-N6	6.09	122.25	118.60
12	B	1044	C	C2-N3-C4	6.09	122.94	119.90
12	B	1272	A	C5-C6-N1	-6.09	114.66	117.70
12	B	1280	G	C4-C5-C6	6.09	122.45	118.80
12	B	1659	G	C4-C5-C6	6.09	122.45	118.80
12	B	1970	A	N1-C6-N6	6.09	122.25	118.60
12	B	2434	A	O4'-C1'-N9	6.09	113.07	108.20
12	B	2705	A	C5-N7-C8	6.09	106.94	103.90
12	B	2772	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})
16	F	142	TYR	CG-CD2-CE2	-6.09	116.43	121.30
12	B	123	G	C5-N7-C8	6.09	107.34	104.30
12	B	1367	A	P-O3'-C3'	6.09	127.00	119.70
12	B	1759	A	C6-N1-C2	6.09	122.25	118.60
12	B	2105	U	N3-C4-C5	-6.09	110.95	114.60
12	B	2228	G	N1-C2-N3	-6.09	120.25	123.90
12	B	1120	G	C5-C6-O6	-6.08	124.95	128.60
12	B	2493	U	O4'-C1'-N1	6.08	113.07	108.20
12	B	308	G	N3-C2-N2	6.08	124.16	119.90
12	B	356	G	C5-C6-N1	-6.08	108.46	111.50
12	B	1397	U	C6-N1-C1'	-6.08	112.68	121.20
12	B	408	G	P-O3'-C3'	-6.08	112.40	119.70
12	B	656	G	C8-N9-C4	6.08	108.83	106.40
12	B	1287	A	N7-C8-N9	-6.08	110.76	113.80
12	B	54	G	N1-C2-N3	-6.08	120.25	123.90
12	B	28	A	C5-C6-N1	-6.08	114.66	117.70
12	B	283	G	C5-N7-C8	6.08	107.34	104.30
12	B	2160	C	C3'-C2'-C1'	6.08	106.36	101.50
12	B	2469	A	C5-C6-N6	-6.08	118.84	123.70
25	O	50	ALA	N-CA-CB	6.08	118.61	110.10
32	W	26	PHE	CB-CG-CD1	-6.08	116.54	120.80
12	B	332	A	C5-C6-N1	-6.08	114.66	117.70
12	B	1159	U	N1-C2-O2	-6.08	118.55	122.80
12	B	1768	C	C2-N3-C4	-6.08	116.86	119.90
12	B	1860	G	C8-N9-C1'	6.08	134.90	127.00
12	B	1992	G	C5'-C4'-O4'	6.08	116.39	109.10
12	B	2108	A	N7-C8-N9	-6.08	110.76	113.80
12	B	2287	A	C5-C6-N6	-6.08	118.84	123.70
12	B	128	C	C6-N1-C2	-6.08	117.87	120.30
12	B	498	G	N9-C4-C5	-6.08	102.97	105.40
12	B	1002	G	C6-N1-C2	6.08	128.75	125.10
12	B	1399	C	C5-C4-N4	-6.08	115.95	120.20
12	B	1553	A	P-O3'-C3'	-6.08	112.41	119.70
12	B	2613	U	N3-C4-O4	6.08	123.65	119.40
12	B	2624	G	N1-C2-N3	6.08	127.55	123.90
12	B	2632	A	C6-C5-N7	-6.08	128.05	132.30
10	9	159	LEU	CB-CG-CD2	6.07	121.33	111.00
11	A	31	C	N3-C4-C5	-6.07	119.47	121.90
11	A	69	G	N3-C4-C5	6.07	131.64	128.60
12	B	75	G	N3-C4-C5	-6.07	125.56	128.60
12	B	252	G	C4-C5-C6	6.07	122.44	118.80
12	B	634	C	N1-C2-N3	-6.07	114.95	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1032	A	C6-C5-N7	-6.07	128.05	132.30
12	B	1433	A	C4'-C3'-C2'	-6.07	96.53	102.60
12	B	2584	U	O3'-P-O5'	-6.07	92.46	104.00
11	A	88	C	C6-N1-C2	-6.07	117.87	120.30
12	B	208	C	C4'-C3'-C2'	-6.07	96.53	102.60
12	B	279	A	C5-N7-C8	6.07	106.94	103.90
12	B	1533	C	C5'-C4'-C3'	6.07	125.72	116.00
12	B	1935	G	N1-C6-O6	6.07	123.54	119.90
12	B	2829	A	N1-C6-N6	6.07	122.24	118.60
11	A	10	G	C6-C5-N7	-6.07	126.76	130.40
12	B	315	G	C2-N3-C4	6.07	114.94	111.90
12	B	337	C	C4-C5-C6	6.07	120.44	117.40
12	B	451	U	C5'-C4'-O4'	6.07	116.38	109.10
12	B	664	G	O4'-C1'-N9	6.07	113.06	108.20
12	B	1368	G	P-O3'-C3'	-6.07	112.42	119.70
12	B	1856	U	N3-C2-O2	6.07	126.45	122.20
29	S	38	TYR	CB-CG-CD2	-6.07	117.36	121.00
11	A	97	C	C4-C5-C6	6.07	120.43	117.40
12	B	810	U	C6-N1-C2	-6.07	117.36	121.00
12	B	1061	U	C2-N3-C4	6.07	130.64	127.00
12	B	1078	U	C5-C6-N1	-6.07	119.67	122.70
12	B	1188	U	C4'-C3'-C2'	-6.07	96.53	102.60
12	B	300	A	C5-C6-N1	-6.07	114.67	117.70
12	B	989	G	C6-C5-N7	-6.07	126.76	130.40
12	B	1813	G	C6-C5-N7	-6.07	126.76	130.40
12	B	2397	G	C8-N9-C4	-6.07	103.97	106.40
12	B	206	U	C6-N1-C2	-6.07	117.36	121.00
12	B	356	G	N1-C2-N3	-6.07	120.26	123.90
12	B	761	A	C5'-C4'-O4'	6.07	116.38	109.10
12	B	763	G	C6-N1-C2	6.07	128.74	125.10
12	B	798	G	O4'-C1'-N9	6.07	113.05	108.20
12	B	861	A	N1-C2-N3	6.07	132.33	129.30
12	B	907	G	N3-C2-N2	6.07	124.15	119.90
12	B	1775	U	N3-C4-C5	-6.07	110.96	114.60
12	B	1056	G	N1-C2-N3	-6.06	120.26	123.90
12	B	1325	U	C2-N3-C4	6.06	130.64	127.00
12	B	198	C	N3-C4-N4	6.06	122.24	118.00
12	B	199	A	N3-C4-N9	6.06	132.25	127.40
12	B	259	G	C8-N9-C4	-6.06	103.97	106.40
12	B	1478	G	C5-C6-N1	-6.06	108.47	111.50
12	B	1743	G	N1-C2-N3	-6.06	120.26	123.90
12	B	1867	G	C5'-C4'-O4'	6.06	116.38	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1871	A	P-O3'-C3'	6.06	126.97	119.70
12	B	1875	G	C5-C6-O6	-6.06	124.96	128.60
12	B	2031	A	O4'-C1'-N9	6.06	113.05	108.20
12	B	2567	G	O4'-C1'-N9	6.06	113.05	108.20
11	A	45	A	C5'-C4'-O4'	6.06	116.37	109.10
12	B	185	G	C2-N3-C4	6.06	114.93	111.90
12	B	756	A	N1-C6-N6	6.06	122.24	118.60
12	B	1385	A	C2-N3-C4	-6.06	107.57	110.60
12	B	1699	G	C6-N1-C2	-6.06	121.46	125.10
12	B	2328	A	C4-C5-C6	6.06	120.03	117.00
11	A	88	C	N3-C4-C5	-6.06	119.48	121.90
12	B	82	U	C4'-C3'-C2'	-6.06	96.54	102.60
12	B	264	C	P-O5'-C5'	-6.06	111.20	120.90
12	B	280	U	C2-N3-C4	-6.06	123.36	127.00
12	B	609	A	N7-C8-N9	6.06	116.83	113.80
12	B	1386	C	C6-N1-C1'	6.06	128.07	120.80
12	B	1963	U	C2-N1-C1'	6.06	124.97	117.70
12	B	2334	U	N1-C2-N3	-6.06	111.27	114.90
12	B	2626	C	O4'-C1'-N1	6.06	113.05	108.20
12	B	2834	G	C4-C5-C6	6.06	122.44	118.80
23	M	79	ALA	N-CA-CB	6.06	118.58	110.10
12	B	308	G	C2-N3-C4	6.06	114.93	111.90
12	B	397	U	C5-C4-O4	-6.06	122.27	125.90
12	B	783	A	C5-C6-N6	-6.06	118.85	123.70
12	B	1075	C	N3-C4-N4	6.06	122.24	118.00
12	B	1177	G	P-O3'-C3'	6.06	126.97	119.70
12	B	1450	G	N7-C8-N9	-6.06	110.07	113.10
12	B	1618	A	N1-C2-N3	6.06	132.33	129.30
12	B	2038	G	C2-N3-C4	6.06	114.93	111.90
12	B	2364	C	N1-C2-O2	6.06	122.53	118.90
11	A	109	A	C5'-C4'-C3'	-6.06	106.31	116.00
12	B	142	A	C4-C5-C6	6.06	120.03	117.00
12	B	396	G	N7-C8-N9	-6.06	110.07	113.10
12	B	541	A	C3'-C2'-C1'	-6.06	96.66	101.50
12	B	1667	G	O4'-C1'-N9	6.06	113.05	108.20
12	B	2158	A	C5'-C4'-O4'	6.06	116.37	109.10
12	B	2229	U	P-O3'-C3'	-6.06	112.43	119.70
12	B	2238	G	N9-C4-C5	-6.06	102.98	105.40
12	B	35	G	C1'-O4'-C4'	-6.05	105.06	109.90
12	B	86	G	N3-C2-N2	6.05	124.14	119.90
12	B	114	U	C4-C5-C6	-6.05	116.07	119.70
12	B	432	A	C2-N3-C4	6.05	113.63	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	679	C	C5-C6-N1	-6.05	117.97	121.00
12	B	1571	A	C5-C6-N6	-6.05	118.86	123.70
12	B	2136	G	O4'-C1'-N9	6.05	113.04	108.20
12	B	2340	A	N9-C4-C5	6.05	108.22	105.80
12	B	2826	A	N3-C4-N9	6.05	132.24	127.40
12	B	41	C	N1-C2-O2	6.05	122.53	118.90
12	B	326	G	N1-C6-O6	6.05	123.53	119.90
12	B	438	G	N3-C4-N9	6.05	129.63	126.00
12	B	604	G	C6-C5-N7	-6.05	126.77	130.40
12	B	1521	G	C6-C5-N7	-6.05	126.77	130.40
12	B	1849	G	C6-C5-N7	-6.05	126.77	130.40
11	A	7	G	N7-C8-N9	-6.05	110.07	113.10
11	A	35	C	N3-C4-N4	6.05	122.24	118.00
12	B	47	C	N1-C2-N3	-6.05	114.96	119.20
12	B	883	G	C6-C5-N7	-6.05	126.77	130.40
12	B	1407	G	P-O3'-C3'	-6.05	112.44	119.70
12	B	2067	G	N3-C4-N9	6.05	129.63	126.00
12	B	2399	G	P-O3'-C3'	-6.05	112.44	119.70
12	B	2598	A	N1-C2-N3	-6.05	126.28	129.30
12	B	2716	C	C6-N1-C2	6.05	122.72	120.30
12	B	2835	A	C5-C6-N1	-6.05	114.67	117.70
12	B	227	A	C5-C6-N6	-6.05	118.86	123.70
12	B	305	C	N1-C2-O2	6.05	122.53	118.90
12	B	463	G	P-O5'-C5'	6.05	130.58	120.90
12	B	1011	G	N1-C2-N3	-6.05	120.27	123.90
12	B	1296	G	N9-C1'-C2'	-6.05	105.35	112.00
12	B	1763	G	P-O3'-C3'	6.05	126.96	119.70
12	B	1811	G	P-O5'-C5'	6.05	130.58	120.90
12	B	2113	U	C5'-C4'-O4'	6.05	116.36	109.10
12	B	2464	G	N9-C1'-C2'	-6.05	105.34	112.00
12	B	2520	C	N3-C4-C5	-6.05	119.48	121.90
6	5	38	PHE	CG-CD2-CE2	-6.05	114.15	120.80
12	B	317	G	N3-C4-N9	-6.05	122.37	126.00
10	9	196	PRO	N-CA-C	6.05	127.82	112.10
12	B	837	C	C4-C5-C6	6.05	120.42	117.40
12	B	1063	G	O4'-C1'-N9	6.05	113.04	108.20
12	B	1077	A	C5'-C4'-O4'	6.05	116.36	109.10
12	B	1412	U	N3-C4-O4	6.05	123.63	119.40
12	B	2078	C	C2-N1-C1'	-6.05	112.15	118.80
12	B	2883	A	C8-N9-C4	-6.05	103.38	105.80
12	B	2061	G	P-O3'-C3'	6.04	126.95	119.70
12	B	2084	C	N3-C4-N4	6.04	122.23	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2201	G	N3-C4-N9	-6.04	122.37	126.00
12	B	2631	G	C8-N9-C4	-6.04	103.98	106.40
12	B	443	A	N1-C2-N3	6.04	132.32	129.30
12	B	1303	G	N1-C2-N3	-6.04	120.27	123.90
12	B	2260	C	C2-N1-C1'	6.04	125.45	118.80
12	B	2298	A	C5-C6-N1	-6.04	114.68	117.70
12	B	89	A	C4-C5-N7	-6.04	107.68	110.70
12	B	329	G	N7-C8-N9	6.04	116.12	113.10
12	B	348	A	N1-C2-N3	6.04	132.32	129.30
12	B	604	G	OP1-P-OP2	-6.04	110.54	119.60
12	B	1423	G	N7-C8-N9	-6.04	110.08	113.10
12	B	1678	A	C6-N1-C2	-6.04	114.97	118.60
12	B	2410	G	C2-N3-C4	-6.04	108.88	111.90
12	B	2754	U	N1-C2-N3	6.04	118.53	114.90
11	A	96	G	C4-N9-C1'	-6.04	118.65	126.50
12	B	497	A	N1-C2-N3	-6.04	126.28	129.30
12	B	793	A	C8-N9-C4	-6.04	103.38	105.80
12	B	967	U	C5-C4-O4	-6.04	122.28	125.90
12	B	1184	U	C1'-O4'-C4'	-6.04	105.07	109.90
12	B	1707	G	C5-N7-C8	-6.04	101.28	104.30
18	H	49	ALA	CB-CA-C	-6.04	101.04	110.10
12	B	2	G	N9-C4-C5	-6.04	102.98	105.40
12	B	274	C	P-O5'-C5'	-6.04	111.24	120.90
12	B	1070	A	C6-C5-N7	-6.04	128.07	132.30
12	B	1613	G	O4'-C4'-C3'	-6.04	97.96	104.00
12	B	1715	G	C6-N1-C2	6.04	128.72	125.10
12	B	1906	G	P-O5'-C5'	-6.04	111.24	120.90
12	B	1987	A	N9-C4-C5	6.04	108.22	105.80
12	B	2566	A	C4-C5-C6	6.04	120.02	117.00
12	B	2607	G	C8-N9-C1'	6.04	134.85	127.00
20	J	96	ARG	CG-CD-NE	-6.04	99.12	111.80
12	B	730	A	C4-C5-N7	-6.04	107.68	110.70
12	B	1212	G	N3-C4-C5	6.04	131.62	128.60
12	B	1310	G	C8-N9-C4	6.04	108.81	106.40
12	B	1528	A	C5'-C4'-C3'	6.04	125.66	116.00
12	B	1616	A	C4-C5-N7	-6.04	107.68	110.70
12	B	2709	G	N9-C4-C5	6.04	107.81	105.40
11	A	81	G	N3-C4-C5	6.04	131.62	128.60
12	B	551	G	C5-C6-O6	-6.04	124.98	128.60
12	B	556	A	C5-N7-C8	6.04	106.92	103.90
12	B	700	G	C4-C5-N7	6.04	113.21	110.80
12	B	2410	G	N3-C4-N9	-6.04	122.38	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2523	G	O4'-C1'-N9	6.04	113.03	108.20
25	O	33	ARG	NE-CZ-NH2	-6.04	117.28	120.30
12	B	312	G	C6-C5-N7	-6.03	126.78	130.40
12	B	395	U	C6-N1-C2	6.03	124.62	121.00
12	B	1001	A	C5-N7-C8	6.03	106.92	103.90
12	B	2311	A	O4'-C1'-N9	6.03	113.03	108.20
12	B	2800	A	N9-C1'-C2'	-6.03	105.36	112.00
12	B	2898	U	O4'-C1'-N1	6.03	113.03	108.20
12	B	26	G	C5-C6-N1	-6.03	108.48	111.50
12	B	249	C	N3-C4-N4	6.03	122.22	118.00
12	B	467	G	C4-C5-N7	-6.03	108.39	110.80
12	B	838	C	O4'-C1'-N1	6.03	113.03	108.20
12	B	928	A	O4'-C1'-N9	6.03	113.03	108.20
12	B	1212	G	C5-C6-N1	-6.03	108.48	111.50
12	B	1436	G	N3-C4-N9	-6.03	122.38	126.00
10	9	182	ALA	CB-CA-C	-6.03	101.05	110.10
12	B	595	C	OP1-P-OP2	-6.03	110.56	119.60
12	B	597	G	O5'-C5'-C4'	-6.03	100.24	111.70
12	B	849	A	P-O3'-C3'	6.03	126.94	119.70
12	B	1276	A	N9-C4-C5	6.03	108.21	105.80
12	B	1832	C	O4'-C1'-N1	6.03	113.03	108.20
12	B	2545	G	C5'-C4'-O4'	6.03	116.34	109.10
12	B	2677	G	C5-C6-N1	-6.03	108.48	111.50
12	B	1018	U	C3'-C2'-C1'	-6.03	96.68	101.50
12	B	1639	C	C4'-C3'-C2'	6.03	108.63	102.60
12	B	2025	C	N1-C2-N3	-6.03	114.98	119.20
12	B	2137	U	C5'-C4'-O4'	6.03	116.33	109.10
12	B	2145	C	O4'-C1'-N1	6.03	113.02	108.20
12	B	183	C	N3-C2-O2	-6.03	117.68	121.90
12	B	464	U	N3-C4-O4	6.03	123.62	119.40
12	B	2190	G	O4'-C1'-N9	6.03	113.02	108.20
12	B	2239	G	C4-C5-C6	6.03	122.42	118.80
11	A	98	G	C5-C6-O6	-6.03	124.98	128.60
12	B	286	U	C5'-C4'-O4'	6.03	116.33	109.10
12	B	1416	G	C3'-C2'-C1'	-6.03	96.68	101.50
12	B	1647	U	C5-C4-O4	-6.03	122.28	125.90
12	B	1738	G	N1-C6-O6	6.03	123.52	119.90
12	B	2199	A	C1'-O4'-C4'	6.03	114.72	109.90
12	B	267	C	C2-N3-C4	6.02	122.91	119.90
12	B	728	G	P-O3'-C3'	6.02	126.93	119.70
12	B	788	A	C6-C5-N7	-6.02	128.08	132.30
12	B	1031	G	C5-C6-N1	-6.02	108.49	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	64	A	C4-C5-C6	6.02	120.01	117.00
12	B	74	A	OP1-P-OP2	-6.02	110.57	119.60
12	B	126	A	C5-C6-N1	-6.02	114.69	117.70
12	B	684	G	C4-N9-C1'	-6.02	118.67	126.50
12	B	748	G	C5'-C4'-O4'	6.02	116.33	109.10
12	B	862	G	N1-C2-N2	-6.02	110.78	116.20
12	B	1420	A	C5-C6-N1	-6.02	114.69	117.70
12	B	1544	A	C5-C6-N6	-6.02	118.88	123.70
12	B	1600	C	C5-C6-N1	6.02	124.01	121.00
12	B	1835	G	C5-C6-N1	6.02	114.51	111.50
12	B	2246	G	C3'-C2'-C1'	-6.02	96.68	101.50
12	B	2750	A	C4-C5-N7	-6.02	107.69	110.70
12	B	2751	G	C4-C5-C6	6.02	122.41	118.80
12	B	2879	A	C6-C5-N7	-6.02	128.08	132.30
23	M	103	TYR	CZ-CE2-CD2	-6.02	114.38	119.80
25	O	37	ALA	N-CA-CB	6.02	118.53	110.10
12	B	1121	C	C5-C4-N4	-6.02	115.99	120.20
12	B	1165	A	C4-C5-C6	6.02	120.01	117.00
12	B	2763	G	C5-C6-N1	-6.02	108.49	111.50
11	A	68	C	N3-C4-N4	6.02	122.21	118.00
12	B	92	U	P-O3'-C3'	6.02	126.92	119.70
12	B	155	A	N7-C8-N9	-6.02	110.79	113.80
12	B	1671	U	C6-N1-C1'	-6.02	112.77	121.20
12	B	1809	A	C8-N9-C4	-6.02	103.39	105.80
12	B	2330	G	N1-C6-O6	6.02	123.51	119.90
12	B	75	G	C4-C5-C6	6.02	122.41	118.80
12	B	142	A	N1-C6-N6	6.02	122.21	118.60
12	B	514	A	P-O3'-C3'	-6.02	112.48	119.70
12	B	1667	G	N3-C4-C5	6.02	131.61	128.60
12	B	1715	G	C5'-C4'-C3'	-6.02	106.37	116.00
12	B	1784	A	C5-C6-N6	-6.02	118.89	123.70
12	B	2445	G	C6-C5-N7	-6.02	126.79	130.40
4	3	51	ARG	NE-CZ-NH2	6.02	123.31	120.30
12	B	1848	A	N3-C4-C5	-6.02	122.59	126.80
12	B	2121	G	C8-N9-C1'	6.02	134.82	127.00
12	B	2642	G	C2-N3-C4	-6.02	108.89	111.90
12	B	169	G	C2-N3-C4	6.01	114.91	111.90
12	B	725	G	C6-C5-N7	-6.01	126.79	130.40
12	B	2480	C	C4'-C3'-C2'	-6.01	96.58	102.60
12	B	2627	G	C5-C6-N1	6.01	114.51	111.50
12	B	1298	C	N1-C2-O2	-6.01	115.29	118.90
22	L	66	PHE	CB-CG-CD2	-6.01	116.59	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	M	40	ARG	NE-CZ-NH1	6.01	123.31	120.30
10	9	24	ARG	N-CA-CB	6.01	121.42	110.60
12	B	1014	A	P-O5'-C5'	6.01	130.52	120.90
12	B	1057	A	C4-C5-N7	-6.01	107.69	110.70
12	B	1082	U	C2-N3-C4	-6.01	123.39	127.00
12	B	1546	G	N1-C6-O6	6.01	123.51	119.90
12	B	1589	U	C4'-C3'-C2'	-6.01	96.59	102.60
12	B	1626	A	C5-C6-N6	-6.01	118.89	123.70
12	B	2623	G	C4'-C3'-C2'	-6.01	96.59	102.60
12	B	102	U	O4'-C1'-N1	6.01	113.01	108.20
12	B	247	G	C4-C5-N7	6.01	113.20	110.80
12	B	665	U	C6-N1-C2	6.01	124.61	121.00
12	B	1468	U	N3-C4-C5	-6.01	111.00	114.60
12	B	1645	G	C6-N1-C2	6.01	128.71	125.10
12	B	1932	A	C6-C5-N7	-6.01	128.09	132.30
12	B	2071	A	O4'-C1'-N9	6.01	113.01	108.20
25	O	100	HIS	N-CA-CB	6.01	121.42	110.60
12	B	109	C	C1'-O4'-C4'	-6.01	105.09	109.90
12	B	432	A	C4-C5-N7	-6.01	107.70	110.70
12	B	587	C	N1-C2-N3	-6.01	114.99	119.20
12	B	629	G	N3-C4-C5	-6.01	125.60	128.60
12	B	1445	G	O4'-C1'-N9	6.01	113.01	108.20
12	B	219	A	P-O3'-C3'	6.01	126.91	119.70
12	B	310	A	N1-C6-N6	6.01	122.20	118.60
12	B	978	G	C4'-C3'-C2'	-6.01	96.59	102.60
12	B	1531	C	O4'-C1'-N1	6.01	113.00	108.20
12	B	1707	G	C4-C5-N7	6.01	113.20	110.80
12	B	1942	C	P-O3'-C3'	6.01	126.91	119.70
12	B	2030	A	C5-N7-C8	6.01	106.90	103.90
12	B	2482	A	C5-C6-N1	-6.01	114.70	117.70
21	K	12	ASP	CB-CG-OD2	6.01	123.71	118.30
22	L	64	PHE	CB-CG-CD1	-6.01	116.60	120.80
12	B	812	C	N3-C4-C5	-6.00	119.50	121.90
12	B	2091	C	N3-C4-N4	6.00	122.20	118.00
12	B	2119	A	C8-N9-C4	-6.00	103.40	105.80
29	S	11	ARG	NE-CZ-NH1	6.00	123.30	120.30
12	B	677	A	C6-C5-N7	-6.00	128.10	132.30
12	B	711	G	N1-C6-O6	6.00	123.50	119.90
12	B	2323	G	N7-C8-N9	6.00	116.10	113.10
12	B	2655	G	O4'-C1'-N9	6.00	113.00	108.20
12	B	2814	A	C5-C6-N6	-6.00	118.90	123.70
11	A	31	C	C5-C6-N1	6.00	124.00	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	77	U	N1-C2-N3	6.00	118.50	114.90
12	B	656	G	C5-N7-C8	6.00	107.30	104.30
12	B	730	A	C2-N3-C4	-6.00	107.60	110.60
12	B	868	U	O4'-C1'-N1	6.00	113.00	108.20
12	B	892	A	C4-C5-N7	-6.00	107.70	110.70
12	B	1597	A	C5-C6-N6	-6.00	118.90	123.70
12	B	1607	C	O4'-C1'-N1	6.00	113.00	108.20
12	B	1763	G	N1-C6-O6	6.00	123.50	119.90
12	B	2040	G	C5'-C4'-C3'	-6.00	106.40	116.00
12	B	336	C	P-O3'-C3'	-6.00	112.50	119.70
12	B	623	C	N1-C2-O2	6.00	122.50	118.90
12	B	878	A	C6-N1-C2	-6.00	115.00	118.60
12	B	1071	G	N3-C4-N9	6.00	129.60	126.00
12	B	2002	G	C5-C6-O6	-6.00	125.00	128.60
12	B	2876	G	P-O3'-C3'	6.00	126.90	119.70
12	B	354	A	C5-C6-N1	-6.00	114.70	117.70
12	B	914	G	C4-C5-N7	-6.00	108.40	110.80
12	B	952	G	N7-C8-N9	6.00	116.10	113.10
12	B	1133	A	O4'-C4'-C3'	-6.00	98.00	104.00
12	B	1481	U	P-O5'-C5'	-6.00	111.30	120.90
12	B	1681	G	C5-C6-N1	-6.00	108.50	111.50
12	B	1722	A	O4'-C1'-N9	6.00	113.00	108.20
12	B	2307	G	C1'-O4'-C4'	-6.00	105.10	109.90
12	B	2537	U	N3-C4-C5	-6.00	111.00	114.60
12	B	2830	C	C5-C4-N4	-6.00	116.00	120.20
12	B	223	A	C5-N7-C8	6.00	106.90	103.90
12	B	407	G	N3-C2-N2	6.00	124.10	119.90
12	B	1488	C	P-O5'-C5'	-6.00	111.31	120.90
12	B	1602	U	N3-C4-O4	6.00	123.60	119.40
12	B	1968	G	N1-C2-N3	-6.00	120.30	123.90
17	G	55	ASP	CB-CG-OD2	-6.00	112.90	118.30
12	B	18	U	C4'-C3'-C2'	-6.00	96.61	102.60
12	B	642	U	C6-N1-C2	-6.00	117.40	121.00
12	B	2479	U	C6-N1-C2	-6.00	117.40	121.00
12	B	2790	U	C6-N1-C2	-6.00	117.40	121.00
12	B	484	C	C5-C4-N4	-5.99	116.00	120.20
12	B	501	A	C5-C6-N1	-5.99	114.70	117.70
12	B	1077	A	C4-C5-C6	5.99	120.00	117.00
12	B	1170	C	O4'-C1'-N1	5.99	113.00	108.20
12	B	1403	A	C5-C6-N6	-5.99	118.91	123.70
12	B	2531	A	C6-C5-N7	-5.99	128.10	132.30
24	N	96	ARG	NE-CZ-NH1	5.99	123.30	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	46	G	N3-C2-N2	5.99	124.09	119.90
12	B	289	G	C1'-O4'-C4'	5.99	114.69	109.90
12	B	2004	G	N3-C4-C5	5.99	131.60	128.60
12	B	2150	C	C2-N3-C4	5.99	122.90	119.90
12	B	2164	C	N1-C2-N3	-5.99	115.00	119.20
12	B	2443	C	C5-C6-N1	5.99	124.00	121.00
11	A	112	G	O4'-C1'-N9	5.99	112.99	108.20
12	B	442	G	C6-N1-C2	5.99	128.69	125.10
12	B	492	A	N1-C2-N3	5.99	132.29	129.30
12	B	540	C	N3-C2-O2	5.99	126.09	121.90
12	B	609	A	C6-C5-N7	-5.99	128.11	132.30
12	B	853	C	C6-N1-C1'	-5.99	113.61	120.80
12	B	1504	A	C8-N9-C4	-5.99	103.40	105.80
12	B	1654	A	C4-C5-C6	5.99	120.00	117.00
12	B	1994	C	C1'-O4'-C4'	5.99	114.69	109.90
8	7	48	MET	CG-SD-CE	-5.99	90.62	100.20
12	B	330	A	O4'-C1'-N9	5.99	112.99	108.20
12	B	423	A	N9-C4-C5	-5.99	103.41	105.80
12	B	760	G	C1'-O4'-C4'	-5.99	105.11	109.90
12	B	1149	G	C4'-C3'-C2'	-5.99	96.61	102.60
12	B	2094	A	C4-C5-N7	5.99	113.69	110.70
12	B	2175	C	N1-C2-O2	-5.99	115.31	118.90
12	B	2188	U	N3-C4-C5	-5.99	111.01	114.60
12	B	2625	G	C5-C6-N1	-5.99	108.51	111.50
22	L	40	SER	C-N-CA	5.99	136.67	121.70
11	A	11	C	P-O3'-C3'	5.99	126.88	119.70
12	B	195	A	P-O5'-C5'	-5.99	111.32	120.90
12	B	570	G	N3-C4-C5	5.99	131.59	128.60
12	B	1247	A	C4-C5-C6	5.99	119.99	117.00
12	B	1333	G	C4'-C3'-C2'	-5.99	96.61	102.60
12	B	261	G	C2-N3-C4	5.99	114.89	111.90
12	B	617	G	O4'-C1'-N9	5.99	112.99	108.20
12	B	1503	A	C4-C5-C6	5.99	119.99	117.00
12	B	1934	C	C5'-C4'-O4'	5.99	116.28	109.10
12	B	2123	G	N7-C8-N9	5.99	116.09	113.10
12	B	2207	C	C5-C4-N4	5.99	124.39	120.20
12	B	2446	G	N1-C6-O6	5.99	123.49	119.90
12	B	409	G	O4'-C4'-C3'	-5.98	98.02	104.00
12	B	482	A	C5-C6-N1	-5.98	114.71	117.70
12	B	1464	G	C8-N9-C4	5.98	108.79	106.40
12	B	1679	A	N9-C4-C5	5.98	108.19	105.80
12	B	2130	U	C5-C4-O4	-5.98	122.31	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2269	G	N9-C4-C5	-5.98	103.01	105.40
10	9	246	ASP	N-CA-C	-5.98	94.84	111.00
12	B	63	A	C8-N9-C4	-5.98	103.41	105.80
12	B	592	A	C5-N7-C8	5.98	106.89	103.90
12	B	1017	G	N3-C4-C5	5.98	131.59	128.60
12	B	1051	G	N9-C4-C5	5.98	107.79	105.40
12	B	1165	A	C4'-C3'-C2'	-5.98	96.62	102.60
12	B	1290	C	P-O5'-C5'	5.98	130.47	120.90
12	B	1975	G	C2-N3-C4	5.98	114.89	111.90
12	B	2060	A	N1-C6-N6	5.98	122.19	118.60
12	B	2110	G	C5-C6-N1	-5.98	108.51	111.50
12	B	2157	G	C8-N9-C1'	-5.98	119.22	127.00
12	B	2458	G	N3-C4-N9	5.98	129.59	126.00
12	B	2617	U	N3-C2-O2	5.98	126.39	122.20
12	B	2770	G	C6-C5-N7	-5.98	126.81	130.40
12	B	2902	C	P-O5'-C5'	5.98	130.47	120.90
18	H	38	PRO	N-CA-CB	5.98	110.48	103.30
12	B	220	G	N1-C2-N3	-5.98	120.31	123.90
12	B	673	C	OP1-P-OP2	-5.98	110.63	119.60
12	B	1000	A	O4'-C1'-N9	5.98	112.98	108.20
12	B	1330	C	N1-C2-O2	-5.98	115.31	118.90
12	B	1519	G	C5'-C4'-C3'	-5.98	106.43	116.00
12	B	1829	A	C3'-C2'-C1'	5.98	106.28	101.50
12	B	492	A	N1-C6-N6	5.98	122.19	118.60
12	B	771	G	C5-C6-N1	-5.98	108.51	111.50
12	B	2010	G	C4-C5-C6	5.98	122.39	118.80
12	B	2147	A	C4-C5-N7	-5.98	107.71	110.70
12	B	2170	A	O3'-P-O5'	-5.98	92.64	104.00
12	B	2311	A	N9-C4-C5	5.98	108.19	105.80
12	B	2862	G	C5-C6-N1	-5.98	108.51	111.50
11	A	105	G	O4'-C1'-N9	5.98	112.98	108.20
12	B	160	A	C6-C5-N7	-5.98	128.12	132.30
12	B	695	G	N1-C2-N2	-5.98	110.82	116.20
12	B	1061	U	C3'-C2'-C1'	5.98	106.28	101.50
12	B	1213	A	C5-C6-N6	-5.98	118.92	123.70
12	B	1318	U	C5'-C4'-C3'	-5.98	106.44	116.00
12	B	1407	G	C4'-C3'-C2'	-5.98	96.62	102.60
12	B	1496	A	N3-C4-C5	-5.98	122.62	126.80
12	B	1569	A	C4-C5-N7	-5.98	107.71	110.70
12	B	2015	A	C3'-C2'-C1'	5.98	106.28	101.50
12	B	2045	C	N3-C2-O2	-5.98	117.72	121.90
12	B	2328	A	N1-C2-N3	5.98	132.29	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2549	G	N3-C2-N2	5.98	124.08	119.90
12	B	379	G	N1-C2-N2	-5.98	110.82	116.20
12	B	1952	A	N1-C6-N6	5.98	122.19	118.60
12	B	261	G	O4'-C1'-N9	5.97	112.98	108.20
12	B	754	U	P-O3'-C3'	-5.97	112.53	119.70
12	B	1029	A	C4'-C3'-C2'	-5.97	96.63	102.60
12	B	1119	U	N3-C2-O2	5.97	126.38	122.20
12	B	1262	A	C4-C5-N7	5.97	113.69	110.70
12	B	1389	G	O4'-C1'-N9	5.97	112.98	108.20
12	B	1441	G	N7-C8-N9	-5.97	110.11	113.10
12	B	2574	G	C4-C5-C6	5.97	122.39	118.80
12	B	2687	U	P-O5'-C5'	5.97	130.46	120.90
12	B	433	C	C6-N1-C2	-5.97	117.91	120.30
12	B	502	A	C5-C6-N1	-5.97	114.71	117.70
12	B	553	G	N1-C2-N3	-5.97	120.32	123.90
12	B	935	C	N1-C2-N3	-5.97	115.02	119.20
12	B	1569	A	C4'-C3'-C2'	-5.97	96.63	102.60
12	B	2165	C	N3-C4-N4	5.97	122.18	118.00
12	B	2263	C	N3-C4-N4	5.97	122.18	118.00
12	B	2266	A	P-O3'-C3'	5.97	126.87	119.70
12	B	2612	C	C1'-O4'-C4'	5.97	114.68	109.90
12	B	2819	G	O4'-C1'-C2'	5.97	112.97	107.60
13	C	5	CYS	C-N-CA	5.97	136.63	121.70
30	T	66	LYS	N-CA-CB	5.97	121.35	110.60
12	B	50	U	C6-N1-C2	-5.97	117.42	121.00
12	B	616	A	O4'-C1'-N9	5.97	112.98	108.20
12	B	1798	U	P-O3'-C3'	-5.97	112.53	119.70
12	B	2135	A	C5-C6-N1	-5.97	114.72	117.70
12	B	2854	G	C5-C6-N1	-5.97	108.51	111.50
12	B	112	U	N3-C4-C5	-5.97	111.02	114.60
12	B	649	G	C6-C5-N7	-5.97	126.82	130.40
12	B	994	C	P-O5'-C5'	5.97	130.45	120.90
12	B	1133	A	O4'-C1'-C2'	-5.97	99.83	105.80
12	B	1720	U	O4'-C1'-N1	5.97	112.98	108.20
12	B	1746	A	N9-C4-C5	5.97	108.19	105.80
12	B	2042	A	C5'-C4'-O4'	5.97	116.26	109.10
12	B	2614	A	C6-N1-C2	-5.97	115.02	118.60
12	B	789	A	P-O5'-C5'	5.97	130.45	120.90
12	B	1517	G	C6-C5-N7	-5.97	126.82	130.40
12	B	1562	U	P-O3'-C3'	5.97	126.86	119.70
12	B	723	C	N3-C4-C5	-5.97	119.51	121.90
12	B	758	C	N3-C4-N4	5.97	122.18	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	933	A	C5-C6-N1	-5.97	114.72	117.70
12	B	1174	U	C6-N1-C1'	-5.97	112.85	121.20
12	B	2424	C	P-O3'-C3'	5.97	126.86	119.70
12	B	2531	A	C5-C6-N1	-5.97	114.72	117.70
12	B	2732	G	C3'-C2'-C1'	5.97	106.27	101.50
12	B	2803	G	C1'-O4'-C4'	-5.97	105.13	109.90
12	B	121	G	O4'-C1'-N9	5.96	112.97	108.20
12	B	829	A	C6-N1-C2	5.96	122.18	118.60
12	B	908	C	C6-N1-C2	5.96	122.69	120.30
12	B	1145	C	C6-N1-C2	5.96	122.69	120.30
12	B	750	A	N7-C8-N9	5.96	116.78	113.80
12	B	1863	G	C4-C5-N7	-5.96	108.42	110.80
12	B	1067	A	C5-C6-N6	-5.96	118.93	123.70
12	B	2051	A	O4'-C1'-N9	5.96	112.97	108.20
12	B	2058	A	N9-C1'-C2'	-5.96	105.44	112.00
12	B	2787	C	N3-C2-O2	-5.96	117.73	121.90
12	B	703	U	N1-C2-N3	-5.96	111.32	114.90
12	B	966	G	N1-C2-N3	-5.96	120.32	123.90
12	B	1678	A	P-O3'-C3'	5.96	126.85	119.70
12	B	2171	A	N3-C4-N9	-5.96	122.63	127.40
12	B	2754	U	C2-N3-C4	-5.96	123.42	127.00
11	A	58	A	C5'-C4'-C3'	-5.96	106.47	116.00
12	B	51	G	N9-C4-C5	-5.96	103.02	105.40
12	B	707	G	P-O3'-C3'	-5.96	112.55	119.70
12	B	1594	U	O4'-C1'-N1	5.96	112.97	108.20
12	B	2255	G	C2-N3-C4	5.96	114.88	111.90
12	B	2263	C	OP1-P-OP2	-5.96	110.66	119.60
12	B	2370	G	C4-C5-N7	-5.96	108.42	110.80
12	B	2430	A	C5-C6-N6	-5.96	118.93	123.70
12	B	2434	A	N3-C4-C5	-5.96	122.63	126.80
12	B	2586	U	P-O5'-C5'	5.96	130.43	120.90
29	S	18	ARG	CD-NE-CZ	-5.96	115.26	123.60
12	B	10	A	C5-N7-C8	5.96	106.88	103.90
12	B	30	G	P-O3'-C3'	5.96	126.85	119.70
12	B	265	A	C8-N9-C4	5.96	108.18	105.80
12	B	665	U	N1-C1'-C2'	-5.96	105.45	112.00
12	B	935	C	N1-C2-O2	5.96	122.47	118.90
12	B	1252	G	C1'-O4'-C4'	5.96	114.67	109.90
12	B	2036	C	N1-C2-O2	5.96	122.47	118.90
12	B	2187	U	N3-C4-C5	-5.96	111.03	114.60
12	B	2753	A	P-O5'-C5'	5.96	130.43	120.90
14	D	125	TRP	N-CA-C	-5.96	94.92	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	T	70	HIS	N-CA-CB	5.96	121.32	110.60
11	A	22	U	P-O3'-C3'	-5.96	112.56	119.70
12	B	434	U	N1-C2-N3	-5.96	111.33	114.90
12	B	1370	C	C2-N3-C4	-5.96	116.92	119.90
12	B	1388	G	O4'-C1'-N9	5.96	112.96	108.20
12	B	2136	G	P-O3'-C3'	-5.96	112.55	119.70
12	B	2237	G	C4-C5-N7	5.96	113.18	110.80
12	B	23	G	N3-C2-N2	5.95	124.07	119.90
12	B	194	G	C4'-C3'-C2'	-5.95	96.65	102.60
12	B	1022	G	N7-C8-N9	-5.95	110.12	113.10
12	B	1789	A	C1'-O4'-C4'	5.95	114.66	109.90
12	B	2327	A	N1-C2-N3	5.95	132.28	129.30
12	B	2340	A	C8-N9-C4	-5.95	103.42	105.80
12	B	2733	A	N7-C8-N9	-5.95	110.82	113.80
24	N	3	HIS	N-CA-CB	5.95	121.32	110.60
11	A	14	U	C2-N1-C1'	5.95	124.84	117.70
12	B	108	G	C6-N1-C2	5.95	128.67	125.10
12	B	203	A	C1'-O4'-C4'	-5.95	105.14	109.90
12	B	626	A	C5-C6-N1	-5.95	114.72	117.70
12	B	1145	C	N3-C4-C5	5.95	124.28	121.90
12	B	1416	G	N3-C4-C5	5.95	131.57	128.60
12	B	1536	C	O4'-C1'-C2'	-5.95	99.85	105.80
12	B	1873	G	P-O3'-C3'	-5.95	112.56	119.70
12	B	1907	G	N1-C6-O6	5.95	123.47	119.90
12	B	2188	U	C2-N3-C4	5.95	130.57	127.00
12	B	2640	G	C4-C5-N7	5.95	113.18	110.80
12	B	2648	G	C2-N3-C4	-5.95	108.92	111.90
12	B	2718	G	N9-C4-C5	-5.95	103.02	105.40
12	B	3	U	C4-C5-C6	-5.95	116.13	119.70
12	B	90	U	C4-C5-C6	-5.95	116.13	119.70
12	B	724	U	C3'-C2'-C1'	5.95	106.26	101.50
12	B	771	G	O4'-C1'-N9	5.95	112.96	108.20
12	B	939	G	N7-C8-N9	5.95	116.07	113.10
12	B	1043	C	C1'-O4'-C4'	5.95	114.66	109.90
12	B	1274	A	N9-C1'-C2'	-5.95	105.46	112.00
12	B	1413	A	C4'-C3'-C2'	-5.95	96.65	102.60
12	B	1484	U	N1-C2-O2	5.95	126.96	122.80
12	B	1951	U	N1-C2-O2	-5.95	118.64	122.80
12	B	2733	A	C4'-C3'-C2'	-5.95	96.65	102.60
12	B	1050	A	OP1-P-OP2	-5.95	110.68	119.60
12	B	1345	C	O4'-C1'-N1	5.95	112.96	108.20
12	B	1496	A	N9-C1'-C2'	-5.95	105.46	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1520	U	O4'-C1'-N1	5.95	112.96	108.20
12	B	2635	A	C5-N7-C8	5.95	106.87	103.90
11	A	13	G	C5'-C4'-O4'	5.95	116.23	109.10
12	B	986	C	C2-N3-C4	5.95	122.87	119.90
12	B	2572	A	O4'-C1'-C2'	-5.95	99.85	105.80
28	R	78	ARG	NH1-CZ-NH2	-5.95	112.86	119.40
11	A	68	C	C2-N3-C4	5.94	122.87	119.90
12	B	458	G	C5-C6-N1	-5.94	108.53	111.50
12	B	889	C	C6-N1-C2	-5.94	117.92	120.30
12	B	2731	G	C6-N1-C2	-5.94	121.53	125.10
12	B	20	C	N1-C2-N3	5.94	123.36	119.20
12	B	242	G	C6-N1-C2	5.94	128.67	125.10
12	B	658	U	C5-C4-O4	5.94	129.47	125.90
12	B	960	A	C5-C6-N1	-5.94	114.73	117.70
12	B	1256	G	C4-C5-N7	-5.94	108.42	110.80
12	B	1765	U	OP1-P-OP2	-5.94	110.69	119.60
12	B	2130	U	C5-C6-N1	5.94	125.67	122.70
12	B	2168	G	N7-C8-N9	5.94	116.07	113.10
12	B	2264	C	C1'-O4'-C4'	-5.94	105.15	109.90
12	B	2297	A	C4-C5-N7	-5.94	107.73	110.70
12	B	2724	U	C3'-C2'-C1'	5.94	106.25	101.50
12	B	2776	A	O5'-P-OP1	-5.94	100.35	105.70
12	B	203	A	O4'-C1'-N9	5.94	112.95	108.20
12	B	423	A	O4'-C1'-N9	5.94	112.95	108.20
12	B	814	C	O4'-C4'-C3'	-5.94	98.06	104.00
12	B	1501	G	C4-C5-C6	5.94	122.36	118.80
12	B	1663	G	N1-C2-N3	-5.94	120.34	123.90
12	B	1723	G	N1-C2-N3	-5.94	120.34	123.90
12	B	1732	C	O4'-C1'-N1	5.94	112.95	108.20
12	B	1974	C	C5-C6-N1	5.94	123.97	121.00
12	B	2049	G	O4'-C1'-N9	5.94	112.95	108.20
12	B	2212	A	P-O3'-C3'	5.94	126.83	119.70
12	B	2709	G	O4'-C1'-N9	5.94	112.95	108.20
12	B	2803	G	C8-N9-C4	5.94	108.78	106.40
12	B	84	A	C6-C5-N7	-5.94	128.14	132.30
12	B	283	G	O4'-C1'-N9	5.94	112.95	108.20
12	B	950	G	C4-C5-N7	-5.94	108.42	110.80
12	B	1639	C	C5-C4-N4	-5.94	116.04	120.20
12	B	1770	G	N1-C2-N3	-5.94	120.34	123.90
12	B	2138	G	C8-N9-C4	-5.94	104.02	106.40
12	B	2658	C	C5'-C4'-O4'	5.94	116.23	109.10
11	A	106	G	O4'-C1'-N9	5.94	112.95	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	110	G	C1'-O4'-C4'	-5.94	105.15	109.90
12	B	429	A	C2-N3-C4	-5.94	107.63	110.60
12	B	488	G	C8-N9-C4	-5.94	104.03	106.40
12	B	887	U	N3-C2-O2	5.94	126.36	122.20
12	B	1648	U	C4-C5-C6	-5.94	116.14	119.70
12	B	2156	G	N3-C4-C5	5.94	131.57	128.60
12	B	2173	A	C8-N9-C4	5.94	108.17	105.80
12	B	2225	A	N3-C4-C5	-5.94	122.64	126.80
17	G	93	TYR	CG-CD2-CE2	-5.94	116.55	121.30
12	B	622	G	C4-C5-N7	5.94	113.17	110.80
12	B	1570	A	N1-C2-N3	5.94	132.27	129.30
12	B	1764	C	N3-C4-N4	5.94	122.16	118.00
12	B	2013	A	C8-N9-C4	5.94	108.17	105.80
12	B	2137	U	O4'-C4'-C3'	-5.94	98.06	104.00
12	B	2529	G	C8-N9-C4	5.94	108.77	106.40
12	B	273	G	O4'-C1'-N9	5.93	112.95	108.20
12	B	494	G	C5-N7-C8	5.93	107.27	104.30
12	B	660	C	P-O3'-C3'	-5.93	112.58	119.70
12	B	874	G	C5-N7-C8	5.93	107.27	104.30
12	B	1068	G	C5-N7-C8	5.93	107.27	104.30
12	B	1156	A	C4-C5-C6	5.93	119.97	117.00
12	B	1207	C	N3-C4-N4	5.93	122.15	118.00
12	B	1260	A	N1-C2-N3	5.93	132.27	129.30
12	B	1439	A	C8-N9-C4	-5.93	103.43	105.80
12	B	1633	G	C5-C6-O6	-5.93	125.04	128.60
12	B	2837	A	O4'-C1'-N9	5.93	112.95	108.20
12	B	216	A	C5-C6-N6	-5.93	118.95	123.70
12	B	288	U	P-O3'-C3'	-5.93	112.58	119.70
12	B	563	A	C6-N1-C2	5.93	122.16	118.60
12	B	647	G	C6-C5-N7	-5.93	126.84	130.40
12	B	833	A	O4'-C1'-N9	5.93	112.95	108.20
12	B	1062	G	N7-C8-N9	-5.93	110.13	113.10
12	B	1634	A	N3-C4-C5	-5.93	122.65	126.80
12	B	1668	A	P-O3'-C3'	5.93	126.82	119.70
12	B	1840	G	N3-C2-N2	5.93	124.05	119.90
12	B	2093	G	C4-C5-N7	-5.93	108.43	110.80
12	B	2270	A	C5-C6-N6	-5.93	118.95	123.70
12	B	2352	A	C5-C6-N6	-5.93	118.95	123.70
12	B	2893	A	N3-C4-N9	5.93	132.15	127.40
12	B	16	C	O4'-C1'-N1	5.93	112.94	108.20
12	B	81	G	N3-C2-N2	5.93	124.05	119.90
12	B	432	A	C4-C5-C6	5.93	119.97	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1072	C	C5-C6-N1	5.93	123.97	121.00
12	B	1302	A	N3-C4-N9	5.93	132.15	127.40
12	B	2889	C	C2-N3-C4	5.93	122.87	119.90
11	A	4	C	C4-C5-C6	5.93	120.36	117.40
12	B	74	A	C5-C6-N1	-5.93	114.73	117.70
12	B	500	G	N1-C2-N2	-5.93	110.86	116.20
12	B	572	A	C1'-O4'-C4'	5.93	114.64	109.90
12	B	711	G	C3'-C2'-C1'	-5.93	96.76	101.50
12	B	909	A	N1-C2-N3	5.93	132.26	129.30
12	B	938	G	O4'-C1'-N9	5.93	112.94	108.20
12	B	1133	A	N1-C6-N6	5.93	122.16	118.60
12	B	1721	G	N3-C4-C5	-5.93	125.64	128.60
12	B	1786	A	P-O3'-C3'	5.93	126.82	119.70
12	B	1919	A	N9-C1'-C2'	-5.93	105.48	112.00
12	B	2133	G	C6-C5-N7	5.93	133.96	130.40
12	B	2574	G	C5-C6-N1	-5.93	108.53	111.50
12	B	2636	C	N3-C4-N4	5.93	122.15	118.00
12	B	858	G	C6-N1-C2	5.93	128.66	125.10
12	B	2073	C	C4-C5-C6	-5.93	114.44	117.40
12	B	602	A	C4-C5-N7	-5.93	107.74	110.70
12	B	715	A	C6-C5-N7	-5.93	128.15	132.30
12	B	955	U	C5-C6-N1	5.93	125.66	122.70
12	B	960	A	C4-C5-C6	5.93	119.96	117.00
12	B	1084	A	C5-C6-N1	-5.93	114.74	117.70
12	B	1157	G	C4-C5-C6	5.93	122.36	118.80
12	B	1403	A	C8-N9-C4	-5.93	103.43	105.80
12	B	1987	A	C4-C5-C6	5.93	119.96	117.00
12	B	2365	G	N9-C4-C5	-5.93	103.03	105.40
12	B	2796	U	N1-C2-N3	-5.93	111.34	114.90
12	B	11	C	C5-C6-N1	5.92	123.96	121.00
12	B	697	G	C8-N9-C4	-5.92	104.03	106.40
12	B	886	A	C5-C6-N6	-5.92	118.96	123.70
12	B	1071	G	C6-C5-N7	-5.92	126.85	130.40
12	B	1527	G	C8-N9-C4	-5.92	104.03	106.40
12	B	1903	G	N7-C8-N9	5.92	116.06	113.10
12	B	2219	U	O4'-C4'-C3'	-5.92	98.08	104.00
12	B	2420	C	C6-N1-C2	5.92	122.67	120.30
12	B	2634	A	N1-C2-N3	5.92	132.26	129.30
12	B	2808	G	P-O5'-C5'	5.92	130.38	120.90
12	B	478	A	C8-N9-C1'	5.92	138.36	127.70
12	B	726	G	C5-N7-C8	5.92	107.26	104.30
12	B	1548	A	C5-C6-N6	-5.92	118.96	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1873	G	N9-C1'-C2'	-5.92	105.48	112.00
12	B	2093	G	C2-N3-C4	5.92	114.86	111.90
12	B	2514	U	P-O5'-C5'	-5.92	111.42	120.90
12	B	2576	G	N1-C2-N3	-5.92	120.35	123.90
11	A	80	U	C1'-O4'-C4'	5.92	114.64	109.90
12	B	103	A	C4-C5-C6	5.92	119.96	117.00
12	B	596	U	C4'-C3'-C2'	-5.92	96.68	102.60
12	B	2114	A	C6-C5-N7	-5.92	128.15	132.30
12	B	2175	C	P-O5'-C5'	-5.92	111.43	120.90
12	B	2353	G	P-O3'-C3'	-5.92	112.59	119.70
12	B	2820	A	N3-C4-N9	5.92	132.14	127.40
12	B	2892	G	C2-N3-C4	5.92	114.86	111.90
15	E	134	LEU	CB-CG-CD2	-5.92	100.93	111.00
11	A	85	G	N3-C4-N9	-5.92	122.45	126.00
12	B	1311	G	N3-C4-N9	5.92	129.55	126.00
12	B	1616	A	C5-N7-C8	5.92	106.86	103.90
12	B	2030	A	N3-C4-N9	5.92	132.14	127.40
12	B	2362	C	N3-C4-N4	5.92	122.14	118.00
12	B	2729	G	C2-N3-C4	-5.92	108.94	111.90
12	B	266	G	N3-C2-N2	5.92	124.04	119.90
12	B	864	G	N1-C2-N3	-5.92	120.35	123.90
12	B	1093	G	C5-C6-O6	-5.92	125.05	128.60
12	B	1532	A	C4'-C3'-C2'	-5.92	96.68	102.60
12	B	1583	A	P-O3'-C3'	5.92	126.80	119.70
12	B	1971	U	C5-C4-O4	-5.92	122.35	125.90
12	B	2502	G	N9-C4-C5	-5.92	103.03	105.40
12	B	2819	G	N3-C4-C5	5.92	131.56	128.60
12	B	71	A	C2-N3-C4	5.92	113.56	110.60
12	B	484	C	N1-C2-O2	-5.92	115.35	118.90
12	B	510	C	N3-C4-C5	-5.92	119.53	121.90
12	B	1490	A	N9-C4-C5	5.92	108.17	105.80
12	B	1575	C	C3'-C2'-C1'	-5.92	96.77	101.50
12	B	1672	A	C5-N7-C8	5.92	106.86	103.90
12	B	493	G	N3-C4-N9	-5.92	122.45	126.00
12	B	2595	G	C4-C5-C6	5.92	122.35	118.80
12	B	2876	G	C5-C6-O6	-5.92	125.05	128.60
12	B	56	A	C4-C5-C6	5.91	119.96	117.00
12	B	1284	A	C5-N7-C8	5.91	106.86	103.90
12	B	1312	U	N3-C4-C5	-5.91	111.05	114.60
12	B	2780	G	N9-C4-C5	5.91	107.77	105.40
12	B	914	G	C4-N9-C1'	5.91	134.19	126.50
12	B	2473	U	N3-C4-O4	5.91	123.54	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2610	C	N3-C4-N4	5.91	122.14	118.00
12	B	2709	G	N1-C2-N3	-5.91	120.35	123.90
12	B	93	G	N7-C8-N9	-5.91	110.14	113.10
12	B	342	A	N3-C4-C5	-5.91	122.66	126.80
12	B	457	A	C4'-C3'-C2'	-5.91	96.69	102.60
12	B	613	A	C4-C5-N7	5.91	113.66	110.70
12	B	1011	G	C2-N3-C4	5.91	114.86	111.90
12	B	1021	A	C5-C6-N6	-5.91	118.97	123.70
12	B	1548	A	P-O5'-C5'	-5.91	111.44	120.90
12	B	1906	G	C5'-C4'-C3'	5.91	125.46	116.00
12	B	2129	C	C6-N1-C2	-5.91	117.94	120.30
12	B	2273	A	C4'-C3'-C2'	-5.91	96.69	102.60
12	B	453	A	N9-C4-C5	5.91	108.16	105.80
12	B	468	G	C8-N9-C4	-5.91	104.04	106.40
12	B	891	G	P-O5'-C5'	5.91	130.35	120.90
12	B	971	G	C5-N7-C8	5.91	107.25	104.30
12	B	1131	G	N3-C4-C5	5.91	131.55	128.60
12	B	1474	U	C5'-C4'-O4'	5.91	116.19	109.10
12	B	1809	A	N1-C6-N6	5.91	122.14	118.60
12	B	2455	G	C6-N1-C2	5.91	128.65	125.10
12	B	2813	A	P-O3'-C3'	-5.91	112.61	119.70
1	0	27	ARG	NE-CZ-NH2	-5.91	117.35	120.30
10	9	67	ALA	N-CA-CB	5.91	118.37	110.10
12	B	1854	A	P-O5'-C5'	5.91	130.35	120.90
12	B	1945	G	C4'-C3'-C2'	5.91	108.51	102.60
12	B	97	C	C2-N3-C4	5.91	122.85	119.90
12	B	224	U	C4-C5-C6	5.91	123.24	119.70
12	B	619	G	OP1-P-OP2	-5.91	110.74	119.60
12	B	747	U	N1-C2-O2	-5.91	118.67	122.80
12	B	1446	C	N3-C2-O2	-5.91	117.77	121.90
12	B	1971	U	P-O3'-C3'	5.91	126.79	119.70
12	B	2030	A	C5-C6-N1	-5.91	114.75	117.70
12	B	2178	C	C6-N1-C2	-5.91	117.94	120.30
12	B	2558	C	C3'-C2'-C1'	-5.91	96.78	101.50
12	B	2564	A	N1-C6-N6	5.91	122.14	118.60
24	N	35	LYS	N-CA-C	-5.91	95.06	111.00
11	A	4	C	P-O3'-C3'	-5.90	112.61	119.70
12	B	217	A	C4-C5-C6	5.90	119.95	117.00
12	B	1337	G	C5'-C4'-O4'	5.90	116.18	109.10
12	B	1510	G	C3'-C2'-C1'	5.90	106.22	101.50
12	B	2433	A	C4-C5-N7	-5.90	107.75	110.70
12	B	2601	C	N3-C4-N4	5.90	122.13	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	K	43	ILE	CA-CB-CG1	5.90	122.22	111.00
27	Q	96	ASP	N-CA-CB	5.90	121.23	110.60
12	B	428	A	C8-N9-C4	5.90	108.16	105.80
12	B	750	A	C8-N9-C4	-5.90	103.44	105.80
12	B	775	G	C4-C5-C6	5.90	122.34	118.80
12	B	907	G	N1-C6-O6	5.90	123.44	119.90
12	B	1162	G	C8-N9-C4	-5.90	104.04	106.40
12	B	1663	G	C6-N1-C2	5.90	128.64	125.10
14	D	138	LEU	CB-CG-CD1	-5.90	100.96	111.00
12	B	190	A	P-O3'-C3'	5.90	126.78	119.70
12	B	262	A	C3'-C2'-C1'	-5.90	96.78	101.50
12	B	382	A	N1-C2-N3	5.90	132.25	129.30
12	B	467	G	C2-N3-C4	5.90	114.85	111.90
12	B	1190	G	C8-N9-C4	-5.90	104.04	106.40
12	B	1470	A	C3'-C2'-C1'	-5.90	96.78	101.50
12	B	1712	U	N3-C4-C5	-5.90	111.06	114.60
12	B	1901	A	N1-C2-N3	5.90	132.25	129.30
12	B	2822	G	O4'-C1'-N9	5.90	112.92	108.20
12	B	50	U	N1-C2-N3	5.90	118.44	114.90
12	B	1078	U	C5'-C4'-O4'	-5.90	102.02	109.10
12	B	1707	G	N1-C2-N3	-5.90	120.36	123.90
12	B	1755	A	C5-C6-N6	-5.90	118.98	123.70
12	B	2616	C	C5-C6-N1	5.90	123.95	121.00
12	B	557	C	C5'-C4'-C3'	-5.90	106.56	116.00
12	B	854	C	O4'-C1'-N1	5.90	112.92	108.20
12	B	1177	G	N3-C2-N2	5.90	124.03	119.90
12	B	1598	A	O4'-C1'-N9	5.90	112.92	108.20
12	B	1728	C	C4-C5-C6	-5.90	114.45	117.40
12	B	1985	C	N3-C4-N4	5.90	122.13	118.00
12	B	2342	C	C4-C5-C6	5.90	120.35	117.40
12	B	2355	G	C5'-C4'-C3'	-5.90	106.56	116.00
12	B	2661	G	N3-C4-N9	5.90	129.54	126.00
11	A	62	C	C5'-C4'-C3'	-5.90	106.57	116.00
12	B	1284	A	C6-N1-C2	5.90	122.14	118.60
12	B	1763	G	P-O5'-C5'	5.90	130.33	120.90
12	B	1902	C	P-O3'-C3'	-5.90	112.62	119.70
12	B	316	C	N3-C4-C5	-5.89	119.54	121.90
12	B	547	A	N9-C4-C5	-5.89	103.44	105.80
12	B	899	A	C5'-C4'-C3'	-5.89	106.57	116.00
12	B	934	U	C4'-C3'-C2'	-5.89	96.71	102.60
12	B	1798	U	C5-C6-N1	5.89	125.65	122.70
12	B	1802	A	O4'-C1'-N9	5.89	112.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1910	G	N9-C1'-C2'	-5.89	105.52	112.00
12	B	2460	U	N1-C2-O2	-5.89	118.67	122.80
14	D	14	ILE	CB-CA-C	5.89	123.39	111.60
12	B	143	C	C5'-C4'-O4'	5.89	116.17	109.10
12	B	588	U	N3-C4-O4	-5.89	115.28	119.40
12	B	1164	C	N3-C4-C5	-5.89	119.54	121.90
12	B	1703	G	C4-C5-N7	-5.89	108.44	110.80
12	B	2395	C	C1'-O4'-C4'	-5.89	105.19	109.90
12	B	2838	G	N3-C4-C5	5.89	131.55	128.60
11	A	64	G	N3-C2-N2	5.89	124.02	119.90
12	B	1484	U	C2-N3-C4	5.89	130.53	127.00
12	B	1599	U	C5-C4-O4	-5.89	122.36	125.90
12	B	1730	C	N3-C4-C5	-5.89	119.54	121.90
12	B	1846	G	P-O3'-C3'	-5.89	112.63	119.70
12	B	2093	G	C5-N7-C8	5.89	107.25	104.30
11	A	7	G	C5-N7-C8	5.89	107.24	104.30
12	B	1386	C	O4'-C1'-N1	5.89	112.91	108.20
12	B	1619	G	C5-C6-N1	-5.89	108.56	111.50
12	B	2137	U	P-O5'-C5'	5.89	130.32	120.90
12	B	2343	U	C5-C6-N1	5.89	125.64	122.70
12	B	2547	A	N9-C4-C5	5.89	108.16	105.80
12	B	2771	C	P-O3'-C3'	-5.89	112.63	119.70
23	M	6	ARG	NE-CZ-NH2	-5.89	117.36	120.30
12	B	648	G	C4-C5-C6	5.89	122.33	118.80
12	B	2649	C	C2-N3-C4	5.89	122.84	119.90
12	B	306	U	C5-C4-O4	5.89	129.43	125.90
12	B	389	G	N1-C2-N3	-5.89	120.37	123.90
12	B	989	G	C4-C5-C6	5.89	122.33	118.80
12	B	1570	A	O4'-C1'-N9	5.89	112.91	108.20
12	B	1904	G	C5-N7-C8	-5.89	101.36	104.30
12	B	2370	G	C2-N3-C4	5.89	114.84	111.90
2	1	26	PHE	CB-CG-CD1	5.88	124.92	120.80
12	B	882	G	C6-C5-N7	-5.88	126.87	130.40
12	B	1080	A	N9-C1'-C2'	-5.88	105.53	112.00
12	B	1223	G	O5'-P-OP2	-5.88	100.41	105.70
12	B	1963	U	N3-C2-O2	5.88	126.32	122.20
12	B	2578	G	N1-C2-N2	-5.88	110.90	116.20
12	B	2715	C	N3-C2-O2	-5.88	117.78	121.90
12	B	893	C	N1-C1'-C2'	-5.88	105.53	112.00
12	B	1170	C	C6-N1-C2	-5.88	117.95	120.30
12	B	1714	U	N3-C2-O2	5.88	126.32	122.20
12	B	2125	G	N3-C2-N2	5.88	124.02	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2775	G	C4-C5-C6	5.88	122.33	118.80
12	B	2836	U	N3-C4-O4	5.88	123.52	119.40
12	B	156	A	O4'-C4'-C3'	-5.88	98.12	104.00
12	B	1324	G	N3-C2-N2	5.88	124.02	119.90
12	B	1855	U	C5-C4-O4	-5.88	122.37	125.90
12	B	2325	G	O4'-C4'-C3'	-5.88	98.12	104.00
12	B	2370	G	C4'-C3'-C2'	-5.88	96.72	102.60
12	B	2430	A	C4'-C3'-C2'	5.88	108.48	102.60
12	B	168	G	P-O5'-C5'	5.88	130.31	120.90
12	B	1444	G	C2-N3-C4	-5.88	108.96	111.90
12	B	1480	C	C5-C6-N1	-5.88	118.06	121.00
12	B	1799	G	C2-N3-C4	5.88	114.84	111.90
12	B	1840	G	N9-C4-C5	-5.88	103.05	105.40
10	9	198	LEU	CA-C-N	5.88	127.95	116.20
12	B	97	C	C5-C6-N1	5.88	123.94	121.00
12	B	1590	A	C5-N7-C8	5.88	106.84	103.90
12	B	2119	A	N9-C4-C5	5.88	108.15	105.80
12	B	2194	U	N3-C4-O4	5.88	123.51	119.40
12	B	2370	G	N9-C4-C5	5.88	107.75	105.40
12	B	2685	G	C5-N7-C8	5.88	107.24	104.30
12	B	123	G	C6-C5-N7	-5.88	126.88	130.40
12	B	686	U	N1-C2-N3	5.88	118.43	114.90
12	B	696	G	O4'-C1'-N9	5.88	112.90	108.20
12	B	1250	G	C4-C5-C6	5.88	122.33	118.80
12	B	1365	A	C5-C6-N6	-5.88	119.00	123.70
12	B	2088	A	N3-C4-C5	-5.88	122.69	126.80
12	B	2899	A	N1-C2-N3	5.88	132.24	129.30
14	D	77	ARG	NE-CZ-NH1	-5.88	117.36	120.30
12	B	17	G	P-O5'-C5'	-5.88	111.50	120.90
12	B	806	C	N1-C2-N3	-5.88	115.09	119.20
12	B	2169	A	C5-C6-N1	-5.88	114.76	117.70
11	A	32	U	C1'-O4'-C4'	-5.87	105.20	109.90
12	B	1113	U	C2-N3-C4	-5.87	123.48	127.00
12	B	1340	U	P-O3'-C3'	5.87	126.75	119.70
12	B	1504	A	C6-N1-C2	-5.87	115.08	118.60
12	B	1521	G	C1'-O4'-C4'	5.87	114.60	109.90
12	B	2193	G	C4-C5-N7	5.87	113.15	110.80
12	B	2674	G	C4-C5-C6	5.87	122.32	118.80
12	B	2754	U	C1'-O4'-C4'	5.87	114.60	109.90
12	B	2794	C	C5-C6-N1	-5.87	118.06	121.00
12	B	2863	C	C6-N1-C2	5.87	122.65	120.30
17	G	150	TYR	CB-CG-CD1	-5.87	117.48	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	H	26	ALA	N-CA-CB	5.87	118.32	110.10
29	S	94	ASP	N-CA-CB	5.87	121.17	110.60
11	A	85	G	P-O3'-C3'	-5.87	112.65	119.70
12	B	115	C	C3'-C2'-C1'	-5.87	96.80	101.50
12	B	242	G	P-O3'-C3'	5.87	126.75	119.70
12	B	1665	A	C8-N9-C4	5.87	108.15	105.80
12	B	1738	G	C4'-C3'-C2'	-5.87	96.73	102.60
12	B	2319	G	N3-C2-N2	5.87	124.01	119.90
12	B	2635	A	C4-C5-N7	-5.87	107.76	110.70
14	D	130	GLN	N-CA-CB	5.87	121.17	110.60
12	B	502	A	C5-C6-N6	-5.87	119.00	123.70
12	B	914	G	N3-C4-C5	-5.87	125.67	128.60
12	B	1402	U	C3'-C2'-C1'	-5.87	96.80	101.50
12	B	2189	U	N3-C4-C5	5.87	118.12	114.60
12	B	2767	C	N3-C4-C5	-5.87	119.55	121.90
12	B	1796	U	C4'-C3'-C2'	-5.87	96.73	102.60
12	B	2234	G	C8-N9-C4	-5.87	104.05	106.40
12	B	2742	G	N7-C8-N9	5.87	116.03	113.10
12	B	234	U	O4'-C1'-N1	5.87	112.89	108.20
12	B	271	G	N1-C2-N3	-5.87	120.38	123.90
12	B	645	C	N1-C2-O2	5.87	122.42	118.90
12	B	1016	G	N3-C4-N9	5.87	129.52	126.00
12	B	2526	G	C2-N3-C4	5.87	114.83	111.90
12	B	2849	U	N3-C4-O4	5.87	123.51	119.40
16	F	172	PHE	CB-CG-CD1	-5.87	116.69	120.80
11	A	33	G	N9-C4-C5	5.87	107.75	105.40
11	A	46	A	O4'-C1'-N9	5.87	112.89	108.20
12	B	95	A	C6-C5-N7	-5.87	128.19	132.30
12	B	176	A	C6-N1-C2	5.87	122.12	118.60
12	B	1321	A	C6-N1-C2	5.87	122.12	118.60
12	B	1523	U	C5-C6-N1	5.87	125.63	122.70
12	B	1544	A	C2-N3-C4	5.87	113.53	110.60
12	B	1788	C	N3-C4-C5	-5.87	119.55	121.90
12	B	2067	G	C8-N9-C4	-5.87	104.05	106.40
11	A	34	A	P-O3'-C3'	5.86	126.74	119.70
12	B	109	C	N1-C2-O2	5.86	122.42	118.90
12	B	190	A	C5-C6-N1	-5.86	114.77	117.70
12	B	211	C	C6-N1-C2	5.86	122.64	120.30
12	B	477	A	O5'-P-OP1	5.86	117.73	110.70
12	B	1191	G	C1'-O4'-C4'	5.86	114.59	109.90
12	B	1466	U	C2-N3-C4	-5.86	123.48	127.00
12	B	2023	C	N3-C4-C5	-5.86	119.55	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2317	A	C5-C6-N6	-5.86	119.01	123.70
12	B	2324	U	C5'-C4'-O4'	5.86	116.14	109.10
12	B	2495	G	O4'-C1'-N9	5.86	112.89	108.20
12	B	2661	G	C4-C5-C6	5.86	122.32	118.80
12	B	721	A	O4'-C1'-N9	5.86	112.89	108.20
12	B	729	G	N1-C2-N3	-5.86	120.38	123.90
12	B	1739	A	O5'-P-OP2	-5.86	100.42	105.70
12	B	2271	G	C8-N9-C4	-5.86	104.06	106.40
12	B	2822	G	C4-C5-N7	5.86	113.14	110.80
12	B	807	U	OP1-P-OP2	-5.86	110.81	119.60
12	B	847	U	C2-N3-C4	-5.86	123.48	127.00
12	B	1055	G	C4-C5-N7	-5.86	108.46	110.80
12	B	1193	G	C4-C5-C6	5.86	122.32	118.80
12	B	1461	C	C2-N3-C4	5.86	122.83	119.90
12	B	1471	G	C1'-O4'-C4'	5.86	114.59	109.90
12	B	1653	G	N7-C8-N9	5.86	116.03	113.10
12	B	2017	U	C5-C4-O4	-5.86	122.38	125.90
12	B	2590	A	C6-C5-N7	-5.86	128.20	132.30
12	B	2595	G	N9-C4-C5	5.86	107.74	105.40
12	B	379	G	C5-C6-O6	-5.86	125.08	128.60
12	B	475	C	N3-C2-O2	5.86	126.00	121.90
12	B	2154	A	C5-N7-C8	5.86	106.83	103.90
12	B	2262	U	C4-C5-C6	-5.86	116.19	119.70
12	B	2342	C	N1-C2-O2	5.86	122.42	118.90
12	B	471	A	P-O3'-C3'	-5.86	112.67	119.70
12	B	1245	G	N3-C2-N2	5.86	124.00	119.90
12	B	1283	G	N1-C2-N2	-5.86	110.93	116.20
12	B	1288	G	C2-N3-C4	5.86	114.83	111.90
12	B	1346	G	N1-C2-N3	-5.86	120.39	123.90
12	B	1461	C	N3-C4-C5	-5.86	119.56	121.90
12	B	1666	G	C8-N9-C1'	5.86	134.62	127.00
12	B	1916	A	C5-N7-C8	5.86	106.83	103.90
12	B	2161	C	C4'-C3'-C2'	-5.86	96.74	102.60
12	B	2424	C	O4'-C4'-C3'	5.86	110.79	106.10
12	B	2425	A	C6-C5-N7	-5.86	128.20	132.30
12	B	799	G	N3-C4-C5	-5.86	125.67	128.60
12	B	979	A	C8-N9-C4	5.86	108.14	105.80
12	B	1049	C	O4'-C1'-N1	5.86	112.88	108.20
12	B	1299	G	P-O3'-C3'	5.86	126.73	119.70
12	B	1362	C	N1-C2-O2	-5.86	115.39	118.90
12	B	1695	G	C4-N9-C1'	5.86	134.11	126.50
12	B	1699	G	C3'-C2'-C1'	-5.86	96.82	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1762	A	N3-C4-C5	-5.86	122.70	126.80
12	B	1818	U	C6-N1-C2	-5.86	117.49	121.00
12	B	1986	C	O4'-C1'-N1	5.86	112.88	108.20
12	B	2092	U	C6-N1-C1'	-5.86	113.00	121.20
12	B	2782	G	N3-C4-C5	-5.86	125.67	128.60
14	D	84	LEU	CB-CG-CD2	5.86	120.95	111.00
12	B	512	G	C8-N9-C4	-5.85	104.06	106.40
12	B	2420	C	C2-N3-C4	5.85	122.83	119.90
12	B	2645	G	C5-C6-O6	-5.85	125.09	128.60
12	B	2762	C	P-O5'-C5'	-5.85	111.53	120.90
12	B	2894	G	C4'-C3'-C2'	5.85	108.45	102.60
29	S	94	ASP	CB-CG-OD1	5.85	123.57	118.30
12	B	710	U	N3-C4-C5	-5.85	111.09	114.60
12	B	846	U	C2-N3-C4	-5.85	123.49	127.00
12	B	1389	G	C5-C6-O6	-5.85	125.09	128.60
12	B	1685	C	N1-C1'-C2'	-5.85	105.56	112.00
12	B	1862	G	C5-N7-C8	-5.85	101.37	104.30
12	B	1918	A	C5-N7-C8	5.85	106.83	103.90
12	B	1949	G	C4-C5-N7	5.85	113.14	110.80
12	B	2182	U	N1-C2-N3	5.85	118.41	114.90
12	B	2193	G	C6-C5-N7	-5.85	126.89	130.40
12	B	2401	U	P-O5'-C5'	-5.85	111.53	120.90
12	B	2652	C	C6-N1-C2	-5.85	117.96	120.30
12	B	2839	G	N1-C6-O6	5.85	123.41	119.90
12	B	2842	G	C6-N1-C2	5.85	128.61	125.10
12	B	1428	C	C5-C4-N4	-5.85	116.10	120.20
12	B	1582	C	C3'-C2'-C1'	-5.85	96.82	101.50
12	B	2120	G	N3-C4-C5	-5.85	125.67	128.60
12	B	283	G	C1'-O4'-C4'	-5.85	105.22	109.90
12	B	671	C	OP1-P-OP2	-5.85	110.83	119.60
12	B	718	A	O4'-C1'-N9	5.85	112.88	108.20
12	B	762	U	C5-C6-N1	5.85	125.62	122.70
12	B	1217	U	C5'-C4'-O4'	5.85	116.12	109.10
12	B	1313	U	N1-C2-O2	5.85	126.89	122.80
12	B	1366	A	C8-N9-C1'	-5.85	117.17	127.70
12	B	1923	U	C2-N1-C1'	-5.85	110.68	117.70
12	B	2008	C	C5-C6-N1	5.85	123.92	121.00
12	B	2148	G	N1-C2-N3	-5.85	120.39	123.90
12	B	2232	C	C4'-C3'-C2'	-5.85	96.75	102.60
12	B	2358	A	C5-C6-N6	-5.85	119.02	123.70
12	B	2416	C	P-O5'-C5'	5.85	130.26	120.90
12	B	2624	G	O4'-C4'-C3'	-5.85	98.15	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2630	G	N3-C2-N2	5.85	123.99	119.90
11	A	84	G	N3-C4-N9	-5.85	122.49	126.00
12	B	366	C	C2-N3-C4	5.85	122.82	119.90
12	B	1031	G	C2-N3-C4	5.85	114.82	111.90
12	B	1310	G	C5-N7-C8	5.85	107.22	104.30
12	B	1989	G	C4-C5-C6	5.85	122.31	118.80
11	A	16	G	C2-N3-C4	-5.85	108.98	111.90
12	B	419	U	C1'-O4'-C4'	5.85	114.58	109.90
11	A	35	C	N1-C2-N3	5.84	123.29	119.20
12	B	135	U	O5'-C5'-C4'	-5.84	100.59	111.70
12	B	496	G	C5-N7-C8	-5.84	101.38	104.30
12	B	640	C	P-O3'-C3'	5.84	126.71	119.70
12	B	718	A	N7-C8-N9	5.84	116.72	113.80
12	B	904	G	C4-C5-C6	5.84	122.31	118.80
12	B	924	G	N7-C8-N9	-5.84	110.18	113.10
12	B	1780	A	N1-C2-N3	5.84	132.22	129.30
12	B	1783	A	O4'-C1'-N9	5.84	112.88	108.20
12	B	1787	A	C1'-O4'-C4'	5.84	114.58	109.90
12	B	2398	U	OP1-P-OP2	-5.84	110.83	119.60
12	B	2758	A	N7-C8-N9	5.84	116.72	113.80
12	B	2790	U	N3-C4-O4	5.84	123.49	119.40
14	D	122	VAL	CA-CB-CG1	5.84	119.67	110.90
12	B	39	G	P-O3'-C3'	5.84	126.71	119.70
12	B	128	C	N3-C4-N4	5.84	122.09	118.00
12	B	1344	U	P-O5'-C5'	5.84	130.25	120.90
12	B	1948	G	O4'-C1'-N9	5.84	112.87	108.20
12	B	19	A	N1-C6-N6	5.84	122.11	118.60
12	B	328	U	C4'-C3'-C2'	-5.84	96.76	102.60
12	B	492	A	C8-N9-C4	-5.84	103.46	105.80
12	B	888	C	N3-C4-C5	-5.84	119.56	121.90
12	B	1483	G	C5'-C4'-C3'	-5.84	106.65	116.00
12	B	1615	C	C5-C4-N4	-5.84	116.11	120.20
12	B	1668	A	N1-C6-N6	5.84	122.11	118.60
12	B	1754	A	C8-N9-C4	-5.84	103.46	105.80
12	B	2061	G	C2-N3-C4	5.84	114.82	111.90
12	B	2189	U	C5-C6-N1	5.84	125.62	122.70
12	B	2499	C	C4'-C3'-C2'	-5.84	96.76	102.60
12	B	2534	A	N7-C8-N9	5.84	116.72	113.80
12	B	2550	G	N3-C2-N2	5.84	123.99	119.90
12	B	2556	C	C5'-C4'-C3'	-5.84	106.65	116.00
12	B	2734	A	C4'-C3'-C2'	-5.84	96.76	102.60
11	A	71	C	C6-N1-C2	-5.84	117.96	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	262	A	P-O5'-C5'	5.84	130.25	120.90
12	B	605	G	N9-C4-C5	-5.84	103.06	105.40
12	B	1048	A	C4-C5-N7	5.84	113.62	110.70
12	B	1728	C	O4'-C1'-N1	5.84	112.87	108.20
12	B	2018	G	O4'-C4'-C3'	-5.84	98.16	104.00
12	B	2172	U	N3-C2-O2	5.84	126.29	122.20
12	B	2548	U	C2-N3-C4	5.84	130.50	127.00
12	B	2766	A	N3-C4-C5	-5.84	122.71	126.80
10	9	130	PHE	CB-CG-CD1	-5.84	116.71	120.80
12	B	2493	U	N1-C2-O2	-5.84	118.71	122.80
13	C	101	ARG	NH1-CZ-NH2	-5.84	112.98	119.40
20	J	95	ARG	NE-CZ-NH2	-5.84	117.38	120.30
11	A	38	C	C6-N1-C2	5.84	122.63	120.30
12	B	166	U	C5-C4-O4	-5.84	122.40	125.90
12	B	345	A	C8-N9-C4	-5.84	103.47	105.80
12	B	1003	G	C2'-C3'-O3'	5.84	123.04	113.70
12	B	1311	G	P-O3'-C3'	-5.84	112.69	119.70
12	B	1612	C	N3-C2-O2	-5.84	117.81	121.90
12	B	1634	A	C6-C5-N7	-5.84	128.22	132.30
12	B	1696	G	C4-C5-C6	5.84	122.30	118.80
12	B	1949	G	N1-C2-N3	-5.84	120.40	123.90
12	B	2164	C	C5-C6-N1	5.84	123.92	121.00
12	B	2464	G	C5-C6-N1	-5.84	108.58	111.50
12	B	1344	U	C5'-C4'-C3'	-5.83	106.67	116.00
12	B	1784	A	C6-N1-C2	-5.83	115.10	118.60
12	B	2252	G	N1-C2-N3	-5.83	120.40	123.90
12	B	2742	G	C6-N1-C2	-5.83	121.60	125.10
12	B	59	U	C4-C5-C6	-5.83	116.20	119.70
12	B	786	C	P-O3'-C3'	-5.83	112.70	119.70
12	B	1263	U	N3-C4-C5	-5.83	111.10	114.60
12	B	1315	C	C6-N1-C2	5.83	122.63	120.30
12	B	1436	G	C3'-C2'-C1'	-5.83	96.83	101.50
12	B	2278	A	C4-C5-C6	5.83	119.92	117.00
12	B	2676	C	C2-N3-C4	5.83	122.82	119.90
17	G	41	GLU	N-CA-CB	5.83	121.10	110.60
17	G	162	ARG	CG-CD-NE	-5.83	99.55	111.80
11	A	57	A	C6-N1-C2	5.83	122.10	118.60
12	B	30	G	C3'-C2'-C1'	5.83	106.17	101.50
12	B	328	U	N1-C2-N3	5.83	118.40	114.90
12	B	767	U	N1-C2-N3	-5.83	111.40	114.90
12	B	1193	G	N3-C4-N9	5.83	129.50	126.00
12	B	1208	C	C5'-C4'-C3'	5.83	125.33	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1632	A	C4-C5-C6	5.83	119.92	117.00
12	B	1846	G	O4'-C1'-N9	5.83	112.86	108.20
12	B	28	A	O4'-C4'-C3'	-5.83	98.17	104.00
12	B	259	G	C4'-C3'-C2'	-5.83	96.77	102.60
12	B	648	G	N3-C4-C5	5.83	131.51	128.60
12	B	1386	C	C2-N1-C1'	-5.83	112.39	118.80
12	B	1879	C	C2-N3-C4	-5.83	116.98	119.90
11	A	39	A	C5-N7-C8	5.83	106.81	103.90
12	B	27	G	C6-N1-C2	5.83	128.60	125.10
12	B	154	U	N1-C2-O2	5.83	126.88	122.80
12	B	625	G	C5-C6-N1	-5.83	108.59	111.50
12	B	1257	C	N3-C4-C5	-5.83	119.57	121.90
12	B	1541	C	N1-C2-O2	-5.83	115.40	118.90
12	B	1910	G	C1'-O4'-C4'	-5.83	105.24	109.90
12	B	1927	A	C5-N7-C8	5.83	106.81	103.90
12	B	2380	C	C4-C5-C6	5.83	120.31	117.40
12	B	2409	G	C5-C6-O6	-5.83	125.10	128.60
12	B	2486	C	N1-C2-O2	5.83	122.40	118.90
24	N	45	ARG	CG-CD-NE	-5.83	99.56	111.80
12	B	2078	C	N3-C4-N4	5.83	122.08	118.00
12	B	2138	G	N1-C6-O6	5.83	123.40	119.90
11	A	76	G	P-O3'-C3'	-5.83	112.71	119.70
12	B	1322	A	O4'-C4'-C3'	-5.83	98.17	104.00
6	5	78	PHE	CB-CG-CD2	-5.82	116.72	120.80
12	B	815	C	N3-C4-N4	5.82	122.08	118.00
12	B	1218	G	O4'-C1'-N9	5.82	112.86	108.20
12	B	1220	G	C5-C6-O6	-5.82	125.11	128.60
12	B	1525	A	N1-C2-N3	5.82	132.21	129.30
12	B	1824	G	N9-C1'-C2'	-5.82	105.59	112.00
12	B	2010	G	C5-N7-C8	5.82	107.21	104.30
12	B	2186	G	N1-C2-N2	5.82	121.44	116.20
12	B	2500	U	P-O3'-C3'	5.82	126.69	119.70
12	B	125	A	C3'-C2'-C1'	-5.82	96.84	101.50
12	B	432	A	C8-N9-C4	-5.82	103.47	105.80
12	B	639	U	C2-N3-C4	5.82	130.49	127.00
12	B	1032	A	C5-C6-N1	-5.82	114.79	117.70
12	B	1663	G	O4'-C1'-N9	5.82	112.86	108.20
12	B	2438	U	C5-C6-N1	5.82	125.61	122.70
12	B	2638	G	N1-C2-N2	5.82	121.44	116.20
11	A	46	A	C1'-O4'-C4'	-5.82	105.24	109.90
12	B	30	G	N9-C4-C5	-5.82	103.07	105.40
12	B	1009	A	P-O5'-C5'	5.82	130.21	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1179	G	C8-N9-C4	-5.82	104.07	106.40
12	B	1852	U	N3-C2-O2	-5.82	118.13	122.20
12	B	1934	C	C6-N1-C2	-5.82	117.97	120.30
12	B	2033	A	C4-C5-C6	5.82	119.91	117.00
12	B	2439	A	C4-C5-N7	-5.82	107.79	110.70
21	K	11	ALA	CB-CA-C	-5.82	101.37	110.10
12	B	3	U	C2-N3-C4	-5.82	123.51	127.00
12	B	2735	G	O4'-C1'-N9	5.82	112.86	108.20
12	B	585	G	O4'-C1'-N9	5.82	112.85	108.20
12	B	631	A	C5'-C4'-O4'	5.82	116.08	109.10
12	B	1483	G	C6-N1-C2	5.82	128.59	125.10
12	B	1840	G	P-O3'-C3'	-5.82	112.72	119.70
12	B	2394	C	C6-N1-C2	-5.82	117.97	120.30
12	B	2458	G	C6-C5-N7	-5.82	126.91	130.40
12	B	2581	G	C8-N9-C1'	-5.82	119.44	127.00
12	B	2611	C	N3-C4-C5	5.82	124.23	121.90
12	B	300	A	C4-C5-C6	5.82	119.91	117.00
12	B	320	A	N1-C2-N3	5.82	132.21	129.30
12	B	377	G	N1-C2-N3	-5.82	120.41	123.90
12	B	797	G	C4'-C3'-C2'	-5.82	96.78	102.60
12	B	1586	A	N7-C8-N9	-5.82	110.89	113.80
12	B	1754	A	C4-C5-N7	5.82	113.61	110.70
12	B	1947	C	P-O3'-C3'	-5.82	112.72	119.70
12	B	2344	U	C2-N3-C4	-5.82	123.51	127.00
12	B	2462	C	N1-C2-N3	-5.82	115.13	119.20
12	B	2588	G	C5-N7-C8	5.82	107.21	104.30
12	B	2830	C	C6-N1-C2	5.82	122.63	120.30
23	M	52	ALA	N-CA-CB	5.82	118.24	110.10
30	T	45	ALA	CB-CA-C	-5.82	101.38	110.10
12	B	202	U	O4'-C1'-N1	5.81	112.85	108.20
12	B	569	U	N3-C2-O2	5.81	126.27	122.20
12	B	1005	C	N3-C4-N4	5.81	122.07	118.00
12	B	1483	G	C4-N9-C1'	5.81	134.06	126.50
12	B	2282	G	C5-C6-N1	-5.81	108.59	111.50
12	B	2605	U	N3-C4-C5	-5.81	111.11	114.60
6	5	90	ALA	N-CA-CB	5.81	118.24	110.10
11	A	77	U	C4'-C3'-C2'	-5.81	96.79	102.60
12	B	386	G	P-O3'-C3'	5.81	126.68	119.70
12	B	621	A	O4'-C1'-N9	5.81	112.85	108.20
12	B	949	G	C6-C5-N7	-5.81	126.91	130.40
12	B	1496	A	C5'-C4'-O4'	5.81	116.08	109.10
12	B	1654	A	O4'-C1'-N9	5.81	112.85	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2260	C	C1'-O4'-C4'	5.81	114.55	109.90
12	B	2624	G	C1'-O4'-C4'	5.81	114.55	109.90
11	A	98	G	C6-C5-N7	-5.81	126.91	130.40
12	B	209	C	C5-C4-N4	-5.81	116.13	120.20
12	B	1502	A	C5'-C4'-C3'	5.81	125.30	116.00
12	B	1756	G	O4'-C1'-N9	5.81	112.85	108.20
12	B	397	U	P-O3'-C3'	-5.81	112.73	119.70
12	B	593	U	C2-N3-C4	5.81	130.49	127.00
12	B	1227	G	N7-C8-N9	5.81	116.00	113.10
12	B	1958	C	C4-C5-C6	5.81	120.31	117.40
12	B	1989	G	C8-N9-C1'	5.81	134.55	127.00
12	B	2240	U	C5-C6-N1	5.81	125.60	122.70
12	B	2757	A	C8-N9-C4	-5.81	103.48	105.80
12	B	2815	C	C2-N3-C4	5.81	122.81	119.90
20	J	13	ARG	NE-CZ-NH1	-5.81	117.39	120.30
12	B	252	G	O4'-C1'-N9	5.81	112.84	108.20
12	B	442	G	N3-C2-N2	5.81	123.97	119.90
12	B	514	A	N7-C8-N9	-5.81	110.90	113.80
12	B	1011	G	N1-C2-N2	5.81	121.43	116.20
12	B	2255	G	O4'-C1'-N9	5.81	112.85	108.20
12	B	2402	U	O4'-C1'-N1	5.81	112.85	108.20
12	B	2554	U	N3-C4-O4	5.81	123.47	119.40
12	B	863	A	C6-C5-N7	-5.81	128.24	132.30
12	B	1332	G	C5'-C4'-O4'	5.81	116.07	109.10
12	B	2345	G	C5-C6-N1	-5.81	108.60	111.50
12	B	2831	G	N1-C2-N3	-5.81	120.42	123.90
11	A	85	G	C6-N1-C2	5.80	128.58	125.10
12	B	860	U	N3-C4-C5	-5.80	111.12	114.60
12	B	879	G	C8-N9-C1'	-5.80	119.45	127.00
12	B	943	A	C2-N3-C4	-5.80	107.70	110.60
12	B	1128	G	C8-N9-C4	-5.80	104.08	106.40
12	B	1173	U	N3-C4-C5	-5.80	111.12	114.60
12	B	1397	U	C2-N1-C1'	5.80	124.67	117.70
12	B	1745	A	C2-N3-C4	5.80	113.50	110.60
12	B	1934	C	C5-C6-N1	5.80	123.90	121.00
12	B	2283	C	C3'-C2'-C1'	-5.80	96.86	101.50
16	F	111	ARG	NH1-CZ-NH2	-5.80	113.02	119.40
11	A	53	A	C6-C5-N7	-5.80	128.24	132.30
12	B	138	U	C4-C5-C6	5.80	123.18	119.70
12	B	521	U	N1-C2-N3	-5.80	111.42	114.90
12	B	552	U	C5-C6-N1	5.80	125.60	122.70
12	B	871	U	C5'-C4'-O4'	-5.80	102.14	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1026	G	O4'-C1'-N9	5.80	112.84	108.20
12	B	1413	A	C4-C5-C6	5.80	119.90	117.00
12	B	1645	G	C4-N9-C1'	-5.80	118.96	126.50
12	B	2101	A	N9-C4-C5	5.80	108.12	105.80
12	B	2277	G	N1-C6-O6	5.80	123.38	119.90
11	A	69	G	N3-C2-N2	5.80	123.96	119.90
12	B	256	A	C5'-C4'-C3'	-5.80	106.72	116.00
12	B	319	G	N9-C4-C5	-5.80	103.08	105.40
12	B	1126	A	N1-C6-N6	-5.80	115.12	118.60
12	B	1292	G	N9-C1'-C2'	-5.80	105.62	112.00
12	B	1416	G	C5-C6-O6	-5.80	125.12	128.60
12	B	2278	A	C5-C6-N1	-5.80	114.80	117.70
12	B	2766	A	P-O3'-C3'	5.80	126.66	119.70
3	2	50	VAL	CB-CA-C	-5.80	100.38	111.40
12	B	29	U	N3-C2-O2	5.80	126.26	122.20
12	B	135	U	P-O3'-C3'	5.80	126.66	119.70
12	B	1380	G	N9-C4-C5	-5.80	103.08	105.40
12	B	1726	C	N3-C4-N4	5.80	122.06	118.00
12	B	1900	A	C6-N1-C2	5.80	122.08	118.60
12	B	1991	U	C3'-C2'-C1'	5.80	106.14	101.50
12	B	2504	U	C5-C4-O4	-5.80	122.42	125.90
12	B	2878	U	C5-C4-O4	-5.80	122.42	125.90
27	Q	24	TYR	CB-CG-CD1	5.80	124.48	121.00
12	B	256	A	C5-C6-N6	-5.80	119.06	123.70
12	B	948	C	O4'-C1'-N1	5.80	112.84	108.20
12	B	1012	U	P-O3'-C3'	5.80	126.66	119.70
12	B	1727	C	N3-C4-C5	-5.80	119.58	121.90
11	A	23	G	C8-N9-C4	-5.80	104.08	106.40
12	B	114	U	O4'-C1'-N1	5.80	112.84	108.20
12	B	350	G	C8-N9-C1'	5.80	134.53	127.00
12	B	459	U	O4'-C4'-C3'	-5.80	98.20	104.00
12	B	686	U	N3-C4-C5	-5.80	111.12	114.60
12	B	730	A	N9-C4-C5	5.80	108.12	105.80
12	B	887	U	C2-N1-C1'	5.80	124.66	117.70
12	B	1628	G	N9-C4-C5	-5.80	103.08	105.40
12	B	1765	U	C3'-C2'-C1'	5.80	106.14	101.50
12	B	1825	U	P-O5'-C5'	5.80	130.17	120.90
12	B	2157	G	C4-N9-C1'	5.80	134.04	126.50
12	B	2778	A	C5-C6-N6	-5.80	119.06	123.70
12	B	2780	G	N7-C8-N9	-5.80	110.20	113.10
12	B	2834	G	C2-N3-C4	5.80	114.80	111.90
11	A	113	C	N3-C4-C5	-5.79	119.58	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	736	C	C1'-O4'-C4'	5.79	114.54	109.90
12	B	1127	A	C6-C5-N7	-5.79	128.24	132.30
12	B	1179	G	C5'-C4'-O4'	5.79	116.05	109.10
12	B	1608	A	P-O3'-C3'	5.79	126.65	119.70
6	5	89	ALA	N-CA-CB	-5.79	101.99	110.10
12	B	278	A	P-O5'-C5'	5.79	130.17	120.90
12	B	657	U	C2-N3-C4	5.79	130.48	127.00
12	B	678	C	O4'-C1'-N1	5.79	112.83	108.20
12	B	697	G	C5-C6-O6	-5.79	125.12	128.60
12	B	866	A	C5-C6-N6	-5.79	119.07	123.70
12	B	1986	C	N3-C4-C5	-5.79	119.58	121.90
12	B	2152	G	N1-C2-N2	-5.79	110.99	116.20
12	B	2244	U	N3-C4-O4	5.79	123.45	119.40
12	B	2308	G	C5-C6-N1	-5.79	108.60	111.50
12	B	2525	G	N3-C4-C5	-5.79	125.70	128.60
12	B	2743	U	C3'-C2'-C1'	-5.79	96.87	101.50
12	B	159	G	C4'-C3'-C2'	-5.79	96.81	102.60
12	B	2129	C	C5-C6-N1	5.79	123.89	121.00
12	B	2429	G	C2-N3-C4	5.79	114.80	111.90
12	B	2635	A	C8-N9-C4	-5.79	103.48	105.80
12	B	2748	A	C6-C5-N7	-5.79	128.25	132.30
10	9	193	THR	CA-CB-CG2	-5.79	104.29	112.40
12	B	81	G	O4'-C1'-N9	5.79	112.83	108.20
12	B	365	U	C6-N1-C2	-5.79	117.53	121.00
12	B	1612	C	O4'-C1'-N1	5.79	112.83	108.20
12	B	1902	C	C6-N1-C2	-5.79	117.98	120.30
12	B	2159	G	C5'-C4'-O4'	5.79	116.05	109.10
12	B	2585	U	C5-C6-N1	-5.79	119.81	122.70
1	0	62	GLY	N-CA-C	-5.79	98.63	113.10
12	B	444	C	P-O3'-C3'	5.79	126.65	119.70
12	B	449	A	C6-C5-N7	-5.79	128.25	132.30
12	B	803	U	C4'-C3'-C2'	-5.79	96.81	102.60
12	B	1271	G	P-O3'-C3'	5.79	126.64	119.70
12	B	1552	A	C4-C5-C6	5.79	119.89	117.00
12	B	1666	G	C4-N9-C1'	-5.79	118.97	126.50
12	B	1749	A	C4-C5-C6	5.79	119.89	117.00
12	B	2095	A	C5'-C4'-C3'	-5.79	106.74	116.00
12	B	2230	G	N3-C4-N9	-5.79	122.53	126.00
14	D	190	LYS	O-C-N	5.79	133.04	123.20
12	B	47	C	O4'-C4'-C3'	-5.79	98.21	104.00
12	B	507	A	C4-C5-C6	-5.79	114.11	117.00
12	B	986	C	P-O3'-C3'	5.79	126.64	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2449	U	N3-C4-O4	5.79	123.45	119.40
12	B	2641	G	O4'-C4'-C3'	-5.79	98.21	104.00
12	B	2737	G	C6-C5-N7	-5.79	126.93	130.40
12	B	1040	A	C4'-C3'-C2'	-5.79	96.81	102.60
12	B	1271	G	N7-C8-N9	5.79	115.99	113.10
12	B	1273	U	N3-C4-O4	5.79	123.45	119.40
12	B	1367	A	O4'-C1'-N9	5.79	112.83	108.20
12	B	1719	G	N1-C6-O6	5.79	123.37	119.90
12	B	1752	C	C4'-C3'-C2'	-5.79	96.81	102.60
12	B	1761	C	C3'-C2'-C1'	5.79	106.13	101.50
12	B	1889	A	C6-C5-N7	-5.79	128.25	132.30
12	B	1961	C	N3-C4-C5	-5.79	119.59	121.90
12	B	2149	U	O4'-C4'-C3'	-5.79	98.21	104.00
12	B	2587	A	N1-C6-N6	5.79	122.07	118.60
21	K	68	GLY	C-N-CA	5.79	136.16	121.70
25	O	107	ALA	N-CA-CB	5.79	118.20	110.10
12	B	327	G	C4-N9-C1'	-5.78	118.98	126.50
12	B	495	G	C4-N9-C1'	-5.78	118.98	126.50
12	B	1124	G	C6-N1-C2	5.78	128.57	125.10
12	B	1142	A	C5'-C4'-O4'	5.78	116.04	109.10
12	B	1280	G	C6-N1-C2	-5.78	121.63	125.10
12	B	1557	C	C6-N1-C2	5.78	122.61	120.30
12	B	1724	G	C1'-O4'-C4'	5.78	114.53	109.90
12	B	2262	U	C5-C4-O4	-5.78	122.43	125.90
12	B	2317	A	C6-C5-N7	-5.78	128.25	132.30
21	K	7	MET	CG-SD-CE	-5.78	90.95	100.20
12	B	446	G	O4'-C1'-N9	5.78	112.83	108.20
12	B	1103	A	C5'-C4'-O4'	5.78	116.04	109.10
12	B	1158	C	N3-C2-O2	-5.78	117.85	121.90
12	B	1741	C	P-O3'-C3'	-5.78	112.76	119.70
12	B	1926	U	C5-C4-O4	5.78	129.37	125.90
12	B	2313	C	C5-C6-N1	5.78	123.89	121.00
11	A	114	C	N1-C2-O2	5.78	122.37	118.90
12	B	125	A	C5-C6-N1	-5.78	114.81	117.70
12	B	388	G	C6-C5-N7	-5.78	126.93	130.40
12	B	609	A	P-O3'-C3'	5.78	126.64	119.70
12	B	836	G	N1-C2-N3	-5.78	120.43	123.90
12	B	840	C	C5-C6-N1	5.78	123.89	121.00
12	B	1173	U	N3-C4-O4	5.78	123.45	119.40
12	B	1274	A	C2-N3-C4	-5.78	107.71	110.60
12	B	1514	G	C6-C5-N7	-5.78	126.93	130.40
12	B	1697	G	C1'-O4'-C4'	-5.78	105.28	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2025	C	C1'-O4'-C4'	5.78	114.52	109.90
12	B	2128	G	N1-C2-N3	-5.78	120.43	123.90
12	B	2375	G	N3-C4-C5	5.78	131.49	128.60
12	B	2508	G	O5'-C5'-C4'	-5.78	100.72	111.70
12	B	2832	U	C5-C4-O4	-5.78	122.43	125.90
17	G	42	VAL	CA-CB-CG2	-5.78	102.23	110.90
8	7	44	ARG	NE-CZ-NH1	-5.78	117.41	120.30
12	B	54	G	N3-C4-C5	5.78	131.49	128.60
12	B	482	A	C6-C5-N7	-5.78	128.25	132.30
12	B	549	G	N7-C8-N9	-5.78	110.21	113.10
12	B	1106	G	N1-C2-N3	5.78	127.37	123.90
12	B	1944	U	N3-C2-O2	5.78	126.25	122.20
12	B	2304	G	C5-C6-O6	-5.78	125.13	128.60
6	5	224	VAL	CG1-CB-CG2	-5.78	101.66	110.90
10	9	74	ALA	CB-CA-C	-5.78	101.43	110.10
12	B	543	G	N3-C2-N2	5.78	123.94	119.90
12	B	593	U	N3-C4-O4	5.78	123.44	119.40
12	B	734	A	C5-C6-N6	-5.78	119.08	123.70
12	B	858	G	C5'-C4'-O4'	5.78	116.03	109.10
12	B	1010	A	N1-C2-N3	-5.78	126.41	129.30
12	B	1651	G	C1'-O4'-C4'	5.78	114.52	109.90
12	B	1782	U	C5'-C4'-C3'	-5.78	106.76	116.00
12	B	1791	A	C5-N7-C8	5.78	106.79	103.90
12	B	1853	A	O4'-C1'-N9	5.78	112.82	108.20
12	B	1924	C	N3-C2-O2	5.78	125.94	121.90
12	B	2813	A	O4'-C4'-C3'	-5.78	98.22	104.00
16	F	122	ASP	CB-CG-OD2	-5.78	113.10	118.30
4	3	43	THR	C-N-CA	5.78	136.14	121.70
12	B	110	G	P-O3'-C3'	-5.78	112.77	119.70
12	B	602	A	C5'-C4'-O4'	5.78	116.03	109.10
12	B	700	G	N7-C8-N9	5.78	115.99	113.10
12	B	947	A	C4-C5-N7	5.78	113.59	110.70
12	B	1001	A	C5-C6-N6	-5.78	119.08	123.70
12	B	1003	G	C5-C6-O6	-5.78	125.13	128.60
12	B	1117	C	O4'-C4'-C3'	-5.78	98.22	104.00
12	B	1137	G	O5'-P-OP2	-5.78	100.50	105.70
12	B	1431	A	N9-C1'-C2'	-5.78	105.65	112.00
12	B	1689	A	C4'-C3'-C2'	-5.78	96.83	102.60
12	B	1894	C	P-O3'-C3'	-5.78	112.77	119.70
12	B	2360	G	N9-C4-C5	5.78	107.71	105.40
12	B	2607	G	O4'-C1'-N9	5.78	112.82	108.20
12	B	2796	U	N3-C4-C5	-5.78	111.14	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2895	G	C4'-C3'-C2'	-5.78	96.83	102.60
12	B	160	A	C2-N3-C4	-5.77	107.71	110.60
12	B	961	C	C1'-O4'-C4'	5.77	114.52	109.90
12	B	1144	A	O4'-C1'-N9	5.77	112.82	108.20
12	B	1847	A	N1-C2-N3	5.77	132.19	129.30
12	B	2222	C	P-O5'-C5'	5.77	130.14	120.90
12	B	85	G	C4'-C3'-C2'	-5.77	96.83	102.60
12	B	381	G	C1'-O4'-C4'	-5.77	105.28	109.90
12	B	1046	A	N7-C8-N9	-5.77	110.91	113.80
12	B	1489	C	O4'-C1'-N1	5.77	112.82	108.20
12	B	2381	A	C5-C6-N6	-5.77	119.08	123.70
12	B	2502	G	C6-N1-C2	5.77	128.56	125.10
12	B	2576	G	C1'-O4'-C4'	-5.77	105.28	109.90
12	B	2675	A	C4-C5-N7	-5.77	107.81	110.70
12	B	858	G	N1-C2-N2	5.77	121.39	116.20
12	B	2259	U	N1-C2-N3	-5.77	111.44	114.90
12	B	2308	G	C5'-C4'-C3'	-5.77	106.77	116.00
12	B	2547	A	C8-N9-C4	-5.77	103.49	105.80
12	B	2862	G	N3-C4-C5	-5.77	125.72	128.60
12	B	142	A	C2-N3-C4	5.77	113.48	110.60
12	B	234	U	C4-C5-C6	-5.77	116.24	119.70
12	B	345	A	C5-C6-N1	-5.77	114.82	117.70
12	B	387	U	C2-N3-C4	-5.77	123.54	127.00
12	B	450	G	C5-C6-O6	-5.77	125.14	128.60
12	B	502	A	N9-C4-C5	-5.77	103.49	105.80
12	B	876	C	C5-C4-N4	-5.77	116.16	120.20
12	B	1309	G	C4'-C3'-C2'	-5.77	96.83	102.60
12	B	1627	G	N1-C2-N2	-5.77	111.01	116.20
12	B	1660	G	C2'-C3'-O3'	5.77	122.93	113.70
12	B	1802	A	C6-C5-N7	-5.77	128.26	132.30
12	B	1812	U	N3-C4-O4	5.77	123.44	119.40
12	B	2440	C	P-O3'-C3'	5.77	126.62	119.70
12	B	2573	C	C6-N1-C1'	-5.77	113.88	120.80
12	B	287	G	C5'-C4'-C3'	-5.77	106.77	116.00
12	B	339	U	C5-C4-O4	-5.77	122.44	125.90
12	B	539	G	P-O5'-C5'	5.77	130.13	120.90
12	B	933	A	O4'-C1'-N9	5.77	112.81	108.20
12	B	1077	A	C5-C6-N6	-5.77	119.09	123.70
12	B	1127	A	N3-C4-N9	5.77	132.01	127.40
12	B	1406	U	C4'-C3'-C2'	-5.77	96.83	102.60
12	B	1566	A	C4-C5-N7	-5.77	107.82	110.70
12	B	1753	G	C8-N9-C4	-5.77	104.09	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1970	A	C4-C5-N7	-5.77	107.82	110.70
12	B	2472	G	C4-C5-C6	5.77	122.26	118.80
12	B	2650	U	C6-N1-C2	-5.77	117.54	121.00
12	B	1091	G	C2-N3-C4	5.77	114.78	111.90
12	B	1139	G	C5-C6-O6	-5.77	125.14	128.60
12	B	1628	G	C4-C5-C6	-5.77	115.34	118.80
12	B	2501	C	C6-N1-C2	-5.77	117.99	120.30
12	B	2542	A	C3'-C2'-C1'	5.77	106.11	101.50
12	B	2624	G	C2-N3-C4	-5.77	109.02	111.90
12	B	110	G	C4-C5-C6	5.76	122.26	118.80
12	B	493	G	C8-N9-C4	-5.76	104.09	106.40
12	B	1803	A	O4'-C1'-N9	5.76	112.81	108.20
12	B	1858	A	C4-C5-N7	-5.76	107.82	110.70
12	B	1866	A	P-O3'-C3'	-5.76	112.78	119.70
12	B	1906	G	C4'-C3'-C2'	-5.76	96.83	102.60
12	B	2209	G	N1-C2-N3	-5.76	120.44	123.90
12	B	2428	G	N9-C4-C5	-5.76	103.09	105.40
12	B	2843	G	N9-C4-C5	5.76	107.71	105.40
8	7	39	ARG	NE-CZ-NH2	-5.76	117.42	120.30
12	B	47	C	C5-C4-N4	-5.76	116.17	120.20
12	B	226	A	C8-N9-C4	5.76	108.11	105.80
12	B	655	A	P-O5'-C5'	-5.76	111.68	120.90
12	B	1194	A	N1-C6-N6	5.76	122.06	118.60
12	B	1232	G	O4'-C4'-C3'	-5.76	98.24	104.00
12	B	1686	C	N1-C2-O2	-5.76	115.44	118.90
12	B	1948	G	C6-C5-N7	-5.76	126.94	130.40
12	B	2033	A	C6-N1-C2	5.76	122.06	118.60
12	B	2535	G	N1-C6-O6	5.76	123.36	119.90
12	B	2722	G	P-O5'-C5'	5.76	130.12	120.90
12	B	2753	A	O4'-C1'-N9	5.76	112.81	108.20
12	B	2813	A	C5-C6-N6	-5.76	119.09	123.70
21	K	121	GLU	N-CA-CB	5.76	120.97	110.60
12	B	321	U	P-O3'-C3'	-5.76	112.79	119.70
12	B	331	C	C5-C4-N4	-5.76	116.17	120.20
12	B	485	C	N3-C4-C5	-5.76	119.60	121.90
12	B	735	A	C2-N3-C4	-5.76	107.72	110.60
12	B	1004	U	N3-C4-O4	5.76	123.43	119.40
12	B	1033	U	N3-C4-C5	-5.76	111.14	114.60
12	B	1731	G	N7-C8-N9	5.76	115.98	113.10
12	B	2061	G	C6-C5-N7	-5.76	126.94	130.40
12	B	2843	G	C4-C5-N7	-5.76	108.50	110.80
12	B	85	G	P-O5'-C5'	5.76	130.11	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	514	A	N1-C2-N3	5.76	132.18	129.30
12	B	661	A	N1-C6-N6	5.76	122.06	118.60
12	B	1928	A	O4'-C1'-N9	5.76	112.81	108.20
12	B	2590	A	P-O3'-C3'	5.76	126.61	119.70
12	B	2879	A	N1-C2-N3	-5.76	126.42	129.30
11	A	80	U	N3-C4-C5	-5.76	111.15	114.60
12	B	243	U	C3'-C2'-C1'	-5.76	96.89	101.50
12	B	309	A	O4'-C1'-N9	5.76	112.81	108.20
12	B	747	U	N3-C2-O2	5.76	126.23	122.20
12	B	976	G	N3-C2-N2	5.76	123.93	119.90
12	B	1134	A	C6-N1-C2	5.76	122.05	118.60
12	B	1443	U	C4-C5-C6	-5.76	116.25	119.70
12	B	1911	U	P-O5'-C5'	5.76	130.11	120.90
12	B	1966	A	O4'-C1'-N9	5.76	112.81	108.20
12	B	2565	A	C2-N3-C4	-5.76	107.72	110.60
13	C	88	ALA	N-CA-CB	5.76	118.16	110.10
15	E	193	VAL	CB-CA-C	-5.76	100.46	111.40
12	B	3	U	C3'-C2'-C1'	5.75	106.10	101.50
12	B	803	U	N3-C2-O2	5.75	126.23	122.20
12	B	822	G	C8-N9-C4	-5.75	104.10	106.40
12	B	888	C	O4'-C1'-N1	5.75	112.80	108.20
12	B	1151	A	C8-N9-C4	-5.75	103.50	105.80
12	B	1914	C	C4-C5-C6	5.75	120.28	117.40
12	B	2229	U	N1-C2-N3	-5.75	111.45	114.90
12	B	2640	G	OP1-P-OP2	-5.75	110.97	119.60
12	B	1066	U	O4'-C1'-N1	5.75	112.80	108.20
12	B	1072	C	C6-N1-C2	-5.75	118.00	120.30
12	B	1304	A	P-O3'-C3'	-5.75	112.80	119.70
12	B	1430	G	N1-C6-O6	5.75	123.35	119.90
12	B	1484	U	C4-C5-C6	-5.75	116.25	119.70
12	B	2846	G	N3-C2-N2	5.75	123.93	119.90
12	B	2865	U	C3'-C2'-C1'	-5.75	96.90	101.50
12	B	86	G	C5-C6-O6	-5.75	125.15	128.60
12	B	446	G	C5-C6-O6	-5.75	125.15	128.60
12	B	974	G	P-O3'-C3'	5.75	126.60	119.70
12	B	1004	U	N1-C2-O2	5.75	126.83	122.80
12	B	1286	A	N3-C4-C5	-5.75	122.77	126.80
12	B	1895	C	OP1-P-OP2	-5.75	110.97	119.60
12	B	2076	U	O4'-C4'-C3'	-5.75	98.25	104.00
12	B	2098	U	C3'-C2'-C1'	5.75	106.10	101.50
12	B	2388	A	O4'-C1'-N9	5.75	112.80	108.20
11	A	90	C	O4'-C1'-N1	5.75	112.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	47	C	C2-N3-C4	5.75	122.78	119.90
12	B	999	U	N3-C4-C5	5.75	118.05	114.60
6	5	78	PHE	CG-CD1-CE1	-5.75	114.48	120.80
12	B	87	U	C5-C6-N1	5.75	125.57	122.70
12	B	154	U	C5-C6-N1	5.75	125.57	122.70
12	B	183	C	C5-C6-N1	5.75	123.87	121.00
12	B	252	G	N1-C2-N3	-5.75	120.45	123.90
12	B	484	C	C6-N1-C2	-5.75	118.00	120.30
12	B	1020	A	C3'-C2'-C1'	5.75	106.10	101.50
12	B	1407	G	C2-N3-C4	5.75	114.77	111.90
12	B	1507	C	C5'-C4'-O4'	5.75	116.00	109.10
12	B	1597	A	C5-C6-N1	-5.75	114.83	117.70
12	B	1878	G	P-O3'-C3'	-5.75	112.80	119.70
22	L	60	ARG	NE-CZ-NH2	-5.75	117.43	120.30
12	B	98	G	N3-C4-N9	-5.75	122.55	126.00
12	B	283	G	N1-C2-N2	5.75	121.37	116.20
12	B	901	C	O4'-C1'-N1	5.75	112.80	108.20
12	B	955	U	N3-C2-O2	-5.75	118.18	122.20
12	B	1226	A	C5'-C4'-O4'	5.75	116.00	109.10
12	B	1421	G	N9-C4-C5	5.75	107.70	105.40
12	B	2263	C	C4'-C3'-C2'	-5.75	96.85	102.60
12	B	2393	U	N1-C2-O2	-5.75	118.78	122.80
24	N	106	ASP	O-C-N	-5.75	113.51	122.70
11	A	57	A	C8-N9-C4	5.75	108.10	105.80
12	B	1	G	C6-C5-N7	-5.75	126.95	130.40
12	B	552	U	C1'-O4'-C4'	5.75	114.50	109.90
12	B	728	G	C5-C6-O6	-5.75	125.15	128.60
12	B	841	G	C6-N1-C2	5.75	128.55	125.10
12	B	1761	C	N3-C4-N4	5.75	122.02	118.00
12	B	2325	G	C5-N7-C8	-5.75	101.43	104.30
12	B	297	G	N3-C2-N2	5.74	123.92	119.90
12	B	388	G	N3-C4-C5	-5.74	125.73	128.60
12	B	516	C	P-O5'-C5'	5.74	130.09	120.90
12	B	706	A	C5-C6-N1	-5.74	114.83	117.70
12	B	1350	C	N3-C2-O2	-5.74	117.88	121.90
12	B	1635	A	N3-C4-C5	-5.74	122.78	126.80
12	B	2105	U	C2-N1-C1'	5.74	124.59	117.70
12	B	2416	C	O4'-C1'-N1	5.74	112.80	108.20
12	B	2629	U	C5-C4-O4	-5.74	122.45	125.90
12	B	1595	C	N3-C4-C5	-5.74	119.60	121.90
12	B	1825	U	C5-C4-O4	-5.74	122.45	125.90
12	B	1915	U	C4'-C3'-C2'	-5.74	96.86	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2281	A	C4-C5-C6	5.74	119.87	117.00
12	B	2285	C	C4-C5-C6	-5.74	114.53	117.40
17	G	48	THR	N-CA-CB	5.74	121.21	110.30
11	A	70	C	N3-C2-O2	5.74	125.92	121.90
12	B	183	C	P-O5'-C5'	5.74	130.09	120.90
12	B	308	G	O4'-C1'-N9	5.74	112.79	108.20
12	B	590	A	C5-C6-N1	-5.74	114.83	117.70
12	B	775	G	P-O3'-C3'	5.74	126.59	119.70
12	B	824	U	O5'-P-OP2	-5.74	100.53	105.70
12	B	884	U	C5-C4-O4	-5.74	122.46	125.90
12	B	1000	A	O4'-C1'-C2'	5.74	112.77	107.60
12	B	1329	U	O4'-C1'-N1	5.74	112.79	108.20
12	B	1517	G	N3-C2-N2	5.74	123.92	119.90
12	B	1598	A	C6-C5-N7	-5.74	128.28	132.30
12	B	1937	A	C2-N3-C4	-5.74	107.73	110.60
12	B	2116	G	N9-C4-C5	-5.74	103.10	105.40
12	B	2866	U	C3'-C2'-C1'	-5.74	96.91	101.50
12	B	388	G	P-O3'-C3'	-5.74	112.81	119.70
12	B	589	U	N3-C4-O4	-5.74	115.38	119.40
12	B	1240	U	N3-C2-O2	5.74	126.22	122.20
12	B	1380	G	C4'-C3'-C2'	-5.74	96.86	102.60
12	B	1545	A	O4'-C1'-N9	5.74	112.79	108.20
12	B	1669	A	C6-C5-N7	-5.74	128.28	132.30
12	B	1706	C	C6-N1-C2	-5.74	118.00	120.30
12	B	1735	A	C5-C6-N1	-5.74	114.83	117.70
12	B	2103	C	C5-C4-N4	-5.74	116.18	120.20
12	B	2334	U	C4'-C3'-C2'	-5.74	96.86	102.60
28	R	65	ALA	N-CA-CB	5.74	118.13	110.10
12	B	2208	C	C4'-C3'-C2'	-5.74	96.86	102.60
12	B	2864	G	C6-C5-N7	-5.74	126.96	130.40
12	B	1101	U	O4'-C1'-N1	5.74	112.79	108.20
12	B	1322	A	C1'-O4'-C4'	5.74	114.49	109.90
12	B	1789	A	C5-C6-N1	-5.74	114.83	117.70
12	B	2076	U	N3-C4-C5	-5.74	111.16	114.60
12	B	2126	A	N9-C4-C5	5.74	108.09	105.80
12	B	703	U	N3-C4-C5	-5.73	111.16	114.60
12	B	1441	G	C4-C5-N7	5.73	113.09	110.80
12	B	1792	G	O4'-C4'-C3'	-5.73	98.27	104.00
12	B	2689	U	C4-C5-C6	5.73	123.14	119.70
12	B	89	A	C3'-C2'-C1'	-5.73	96.91	101.50
12	B	405	U	C2-N3-C4	-5.73	123.56	127.00
12	B	406	G	C6-C5-N7	-5.73	126.96	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	879	G	O4'-C1'-N9	5.73	112.78	108.20
12	B	947	A	N9-C1'-C2'	-5.73	105.69	112.00
12	B	1103	A	C5-C6-N1	-5.73	114.83	117.70
12	B	2168	G	N3-C4-C5	-5.73	125.73	128.60
12	B	2260	C	N3-C4-C5	-5.73	119.61	121.90
12	B	258	G	N1-C2-N3	-5.73	120.46	123.90
12	B	341	C	C4'-C3'-C2'	-5.73	96.87	102.60
12	B	482	A	C4-C5-C6	5.73	119.86	117.00
12	B	1317	G	N3-C2-N2	5.73	123.91	119.90
12	B	1534	U	N3-C2-O2	-5.73	118.19	122.20
12	B	1640	A	C6-C5-N7	-5.73	128.29	132.30
12	B	1909	C	O4'-C1'-C2'	5.73	112.76	107.60
12	B	1945	G	N7-C8-N9	5.73	115.97	113.10
12	B	2177	C	N3-C2-O2	5.73	125.91	121.90
12	B	2725	A	C5'-C4'-O4'	5.73	115.97	109.10
11	A	60	C	C6-N1-C2	-5.73	118.01	120.30
11	A	83	G	C4-C5-C6	5.73	122.24	118.80
11	A	116	G	P-O3'-C3'	-5.73	112.83	119.70
12	B	242	G	N7-C8-N9	-5.73	110.23	113.10
12	B	1000	A	O3'-P-O5'	-5.73	93.11	104.00
12	B	1778	U	N3-C2-O2	5.73	126.21	122.20
12	B	2023	C	C2-N1-C1'	5.73	125.10	118.80
12	B	2084	C	OP1-P-OP2	-5.73	111.01	119.60
12	B	2252	G	C3'-C2'-C1'	-5.73	96.92	101.50
12	B	2888	C	N3-C4-C5	-5.73	119.61	121.90
12	B	14	A	O4'-C1'-N9	5.73	112.78	108.20
12	B	228	C	C6-N1-C2	-5.73	118.01	120.30
12	B	544	C	C1'-O4'-C4'	-5.73	105.32	109.90
12	B	577	G	N1-C6-O6	5.73	123.34	119.90
12	B	645	C	C3'-C2'-C1'	5.73	106.08	101.50
12	B	1839	G	C6-N1-C2	5.73	128.54	125.10
12	B	1901	A	O4'-C1'-N9	5.73	112.78	108.20
15	E	182	ALA	O-C-N	-5.73	113.54	122.70
12	B	433	C	C5-C6-N1	5.73	123.86	121.00
12	B	812	C	C4'-C3'-C2'	-5.73	96.87	102.60
12	B	1312	U	O4'-C1'-N1	5.73	112.78	108.20
12	B	1913	A	C4-C5-C6	5.73	119.86	117.00
12	B	2386	A	C5-C6-N6	-5.73	119.12	123.70
12	B	2818	U	C3'-C2'-C1'	5.73	106.08	101.50
30	T	68	LYS	C-N-CA	5.73	136.02	121.70
11	A	30	C	N1-C2-O2	5.72	122.33	118.90
12	B	188	G	N1-C2-N3	-5.72	120.47	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	387	U	C5'-C4'-O4'	5.72	115.97	109.10
12	B	611	C	N3-C4-N4	5.72	122.01	118.00
12	B	622	G	C6-C5-N7	-5.72	126.97	130.40
12	B	636	G	C5-C6-N1	-5.72	108.64	111.50
12	B	793	A	OP1-P-O3'	5.72	117.79	105.20
12	B	1731	G	C1'-O4'-C4'	5.72	114.48	109.90
12	B	2616	C	P-O5'-C5'	5.72	130.06	120.90
12	B	2752	C	C2-N1-C1'	5.72	125.10	118.80
12	B	2764	A	C6-N1-C2	5.72	122.03	118.60
22	L	10	GLU	N-CA-CB	5.72	120.91	110.60
12	B	31	C	C2-N3-C4	5.72	122.76	119.90
12	B	87	U	C5-C4-O4	-5.72	122.47	125.90
12	B	238	C	C5-C4-N4	-5.72	116.19	120.20
12	B	400	G	C4-C5-N7	5.72	113.09	110.80
12	B	631	A	C5'-C4'-C3'	5.72	125.16	116.00
12	B	752	A	N1-C2-N3	-5.72	126.44	129.30
12	B	1660	G	N3-C2-N2	5.72	123.91	119.90
12	B	1882	U	N3-C4-C5	-5.72	111.17	114.60
12	B	2030	A	C3'-C2'-C1'	-5.72	96.92	101.50
12	B	2051	A	O4'-C4'-C3'	-5.72	98.28	104.00
12	B	2177	C	N1-C2-N3	-5.72	115.19	119.20
12	B	2321	U	C2-N1-C1'	5.72	124.57	117.70
12	B	2430	A	C5'-C4'-O4'	5.72	115.97	109.10
12	B	2605	U	O4'-C4'-C3'	-5.72	98.28	104.00
13	C	98	GLY	N-CA-C	-5.72	98.80	113.10
18	H	86	ASP	CB-CG-OD2	-5.72	113.15	118.30
12	B	88	G	N1-C2-N2	5.72	121.35	116.20
12	B	350	G	N1-C2-N3	-5.72	120.47	123.90
12	B	2447	G	C1'-O4'-C4'	-5.72	105.32	109.90
11	A	110	C	N3-C4-C5	-5.72	119.61	121.90
12	B	899	A	C5-N7-C8	5.72	106.76	103.90
12	B	991	C	C4-C5-C6	5.72	120.26	117.40
12	B	1030	C	C5-C4-N4	-5.72	116.20	120.20
12	B	1108	U	O4'-C1'-N1	5.72	112.78	108.20
12	B	1244	A	C6-C5-N7	-5.72	128.30	132.30
12	B	1251	C	C5-C4-N4	-5.72	116.20	120.20
12	B	1577	C	O4'-C1'-N1	5.72	112.78	108.20
12	B	1723	G	N1-C6-O6	5.72	123.33	119.90
12	B	1732	C	N3-C2-O2	5.72	125.90	121.90
12	B	1910	G	N3-C2-N2	5.72	123.90	119.90
12	B	2662	A	C8-N9-C4	-5.72	103.51	105.80
33	Y	17	ALA	N-CA-CB	5.72	118.11	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	283	G	C4-N9-C1'	-5.72	119.07	126.50
12	B	1019	U	N3-C4-O4	5.72	123.40	119.40
12	B	1114	C	C1'-O4'-C4'	-5.72	105.33	109.90
12	B	1274	A	C5'-C4'-O4'	5.72	115.96	109.10
12	B	1425	G	C5'-C4'-O4'	5.72	115.96	109.10
12	B	2841	C	N3-C4-N4	5.72	122.00	118.00
15	E	91	ASP	CB-CG-OD2	-5.72	113.15	118.30
23	M	103	TYR	CB-CG-CD2	-5.72	117.57	121.00
31	U	47	PRO	N-CA-C	-5.72	97.23	112.10
12	B	223	A	C4-C5-N7	-5.72	107.84	110.70
12	B	351	C	C4'-C3'-C2'	-5.72	96.88	102.60
12	B	1259	G	OP1-P-OP2	-5.72	111.03	119.60
12	B	1661	G	C8-N9-C4	-5.72	104.11	106.40
12	B	1683	U	N3-C2-O2	5.72	126.20	122.20
12	B	2049	G	C5-N7-C8	5.72	107.16	104.30
12	B	2410	G	N1-C6-O6	5.72	123.33	119.90
12	B	2589	A	N3-C4-C5	-5.72	122.80	126.80
12	B	2702	G	O4'-C1'-N9	5.72	112.77	108.20
11	A	9	G	C5-C6-O6	-5.71	125.17	128.60
11	A	51	G	C5'-C4'-C3'	-5.71	106.86	116.00
12	B	808	G	C3'-C2'-C1'	-5.71	96.93	101.50
12	B	878	A	C4'-C3'-C2'	-5.71	96.89	102.60
12	B	2151	U	C2-N3-C4	5.71	130.43	127.00
11	A	42	C	C1'-O4'-C4'	-5.71	105.33	109.90
12	B	42	A	C1'-O4'-C4'	-5.71	105.33	109.90
12	B	148	U	C2-N3-C4	5.71	130.43	127.00
12	B	1701	A	C2-N3-C4	5.71	113.46	110.60
23	M	25	ASP	CB-CG-OD2	5.71	123.44	118.30
26	P	98	TYR	CD1-CE1-CZ	-5.71	114.66	119.80
11	A	21	G	N9-C4-C5	-5.71	103.11	105.40
12	B	145	C	C4-C5-C6	5.71	120.26	117.40
12	B	524	G	O4'-C1'-N9	5.71	112.77	108.20
12	B	1368	G	C3'-C2'-C1'	-5.71	96.93	101.50
12	B	1708	C	C2-N3-C4	-5.71	117.04	119.90
12	B	1783	A	N9-C4-C5	-5.71	103.52	105.80
12	B	1841	U	N3-C4-O4	5.71	123.40	119.40
12	B	2166	U	C6-N1-C2	-5.71	117.57	121.00
12	B	2313	C	N3-C4-N4	5.71	122.00	118.00
12	B	2464	G	O4'-C1'-N9	5.71	112.77	108.20
12	B	2710	C	O4'-C1'-N1	5.71	112.77	108.20
12	B	2812	G	C6-C5-N7	-5.71	126.97	130.40
12	B	530	G	O4'-C1'-N9	5.71	112.77	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	618	G	C4-C5-C6	5.71	122.23	118.80
12	B	1190	G	C2-N3-C4	-5.71	109.05	111.90
12	B	262	A	C5'-C4'-O4'	5.71	115.95	109.10
12	B	394	C	C6-N1-C2	-5.71	118.02	120.30
12	B	1014	A	C5-C6-N6	-5.71	119.13	123.70
12	B	1110	G	C3'-C2'-C1'	5.71	106.07	101.50
12	B	1188	U	P-O5'-C5'	-5.71	111.77	120.90
12	B	1326	U	N3-C4-O4	5.71	123.40	119.40
12	B	1430	G	N1-C2-N3	-5.71	120.47	123.90
12	B	1529	G	N1-C2-N3	-5.71	120.47	123.90
12	B	2524	G	OP1-P-OP2	-5.71	111.04	119.60
12	B	2783	U	N3-C4-C5	-5.71	111.17	114.60
18	H	125	THR	CA-CB-CG2	-5.71	104.41	112.40
10	9	230	ARG	CB-CA-C	-5.71	98.99	110.40
12	B	252	G	C4-C5-N7	5.71	113.08	110.80
12	B	282	A	O4'-C1'-N9	5.71	112.77	108.20
12	B	324	A	N3-C4-N9	-5.71	122.83	127.40
12	B	861	A	N3-C4-C5	-5.71	122.81	126.80
12	B	1044	C	O4'-C1'-N1	5.71	112.77	108.20
12	B	1125	G	C6-C5-N7	-5.71	126.98	130.40
12	B	1417	C	C4'-C3'-C2'	-5.71	96.89	102.60
12	B	1544	A	P-O3'-C3'	-5.71	112.85	119.70
12	B	1703	G	C5-C6-N1	-5.71	108.65	111.50
12	B	2286	G	P-O5'-C5'	5.71	130.03	120.90
12	B	2393	U	O5'-P-OP1	-5.71	100.56	105.70
12	B	2453	A	C5-N7-C8	5.71	106.75	103.90
12	B	2615	U	C5-C6-N1	5.71	125.55	122.70
12	B	2639	A	C5-C6-N1	-5.71	114.85	117.70
28	R	81	LYS	N-CA-CB	5.71	120.87	110.60
12	B	758	C	C5-C6-N1	5.71	123.85	121.00
12	B	1857	G	N1-C2-N2	-5.71	111.06	116.20
12	B	241	A	C5'-C4'-O4'	5.70	115.94	109.10
12	B	636	G	N3-C4-C5	5.70	131.45	128.60
12	B	2655	G	C3'-C2'-C1'	-5.70	96.94	101.50
18	H	17	ASP	CB-CG-OD2	5.70	123.43	118.30
11	A	27	C	C4-C5-C6	5.70	120.25	117.40
12	B	48	G	P-O3'-C3'	5.70	126.54	119.70
12	B	699	A	C6-C5-N7	-5.70	128.31	132.30
12	B	1572	A	N9-C4-C5	-5.70	103.52	105.80
12	B	1743	G	C2-N3-C4	-5.70	109.05	111.90
12	B	2458	G	C5'-C4'-O4'	5.70	115.94	109.10
11	A	51	G	C4-C5-C6	5.70	122.22	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	673	C	C5'-C4'-O4'	5.70	115.94	109.10
12	B	1559	U	O4'-C1'-N1	5.70	112.76	108.20
12	B	1938	A	C4-C5-N7	-5.70	107.85	110.70
12	B	2488	G	C2-N3-C4	5.70	114.75	111.90
12	B	2578	G	C5-C6-N1	-5.70	108.65	111.50
12	B	2597	G	C6-C5-N7	-5.70	126.98	130.40
12	B	2677	G	C5-C6-O6	-5.70	125.18	128.60
12	B	467	G	C5-N7-C8	5.70	107.15	104.30
12	B	1209	U	C5-C6-N1	-5.70	119.85	122.70
12	B	1328	A	P-O3'-C3'	5.70	126.54	119.70
12	B	1530	G	C5-N7-C8	-5.70	101.45	104.30
18	H	28	ASN	N-CA-CB	5.70	120.86	110.60
11	A	60	C	C4'-C3'-C2'	-5.70	96.90	102.60
11	A	76	G	N9-C4-C5	5.70	107.68	105.40
12	B	67	U	P-O3'-C3'	-5.70	112.86	119.70
12	B	193	U	C5-C6-N1	5.70	125.55	122.70
12	B	301	G	C5-C6-N1	-5.70	108.65	111.50
12	B	1088	A	C8-N9-C4	-5.70	103.52	105.80
14	D	36	GLN	N-CA-CB	5.70	120.85	110.60
11	A	109	A	C4-C5-N7	-5.70	107.85	110.70
12	B	167	A	C8-N9-C4	-5.70	103.52	105.80
12	B	255	A	C5-C6-N1	-5.70	114.85	117.70
12	B	764	A	C6-C5-N7	-5.70	128.31	132.30
12	B	868	U	N3-C4-C5	-5.70	111.18	114.60
12	B	1295	C	C4-C5-C6	5.70	120.25	117.40
12	B	1887	C	P-O3'-C3'	5.70	126.54	119.70
12	B	1942	C	O4'-C1'-N1	5.70	112.76	108.20
12	B	2058	A	C6-C5-N7	-5.70	128.31	132.30
12	B	2430	A	N1-C2-N3	5.70	132.15	129.30
12	B	2556	C	C4'-C3'-C2'	-5.70	96.90	102.60
12	B	1446	C	N3-C4-N4	5.69	121.99	118.00
12	B	2312	U	O4'-C1'-C2'	-5.69	100.11	105.80
12	B	2468	A	C5-C6-N1	-5.69	114.85	117.70
12	B	593	U	N1-C2-N3	-5.69	111.48	114.90
12	B	668	A	O4'-C1'-N9	5.69	112.75	108.20
12	B	830	G	C4-C5-N7	5.69	113.08	110.80
12	B	1933	G	C8-N9-C4	-5.69	104.12	106.40
12	B	2136	G	N3-C4-C5	-5.69	125.75	128.60
12	B	2781	A	O4'-C1'-N9	5.69	112.75	108.20
12	B	120	U	P-O3'-C3'	5.69	126.53	119.70
12	B	402	A	C6-C5-N7	-5.69	128.32	132.30
12	B	968	C	C5-C4-N4	-5.69	116.22	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1064	C	C5-C4-N4	-5.69	116.22	120.20
12	B	2060	A	C2-N3-C4	5.69	113.44	110.60
12	B	2115	G	C8-N9-C4	5.69	108.68	106.40
12	B	2681	C	C6-N1-C2	-5.69	118.02	120.30
12	B	124	G	N1-C2-N3	-5.69	120.49	123.90
12	B	1722	A	C5-N7-C8	5.69	106.74	103.90
12	B	1991	U	N3-C4-C5	-5.69	111.19	114.60
12	B	2337	G	C6-C5-N7	-5.69	126.99	130.40
12	B	2438	U	C2-N3-C4	-5.69	123.59	127.00
11	A	107	G	C8-N9-C4	-5.69	104.12	106.40
12	B	261	G	C4-C5-C6	5.69	122.21	118.80
12	B	289	G	C5-C6-O6	-5.69	125.19	128.60
12	B	402	A	C1'-O4'-C4'	-5.69	105.35	109.90
12	B	1190	G	C8-N9-C1'	5.69	134.39	127.00
12	B	1313	U	C5-C4-O4	-5.69	122.49	125.90
12	B	1829	A	C6-N1-C2	5.69	122.01	118.60
12	B	1834	U	C6-N1-C2	-5.69	117.59	121.00
12	B	2797	U	C6-N1-C2	-5.69	117.59	121.00
12	B	2816	G	C5-N7-C8	-5.69	101.46	104.30
16	F	149	ARG	NE-CZ-NH1	5.69	123.14	120.30
11	A	44	G	C6-C5-N7	-5.69	126.99	130.40
12	B	1141	U	C6-N1-C2	-5.69	117.59	121.00
12	B	1332	G	P-O3'-C3'	-5.69	112.88	119.70
12	B	261	G	N3-C2-N2	5.68	123.88	119.90
12	B	283	G	P-O5'-C5'	5.68	130.00	120.90
12	B	347	A	C5'-C4'-O4'	5.68	115.92	109.10
12	B	498	G	N3-C2-N2	5.68	123.88	119.90
12	B	1284	A	P-O5'-C5'	-5.68	111.80	120.90
12	B	1548	A	N7-C8-N9	5.68	116.64	113.80
12	B	1741	C	O4'-C1'-N1	5.68	112.75	108.20
12	B	2063	C	C5-C4-N4	-5.68	116.22	120.20
12	B	86	G	C8-N9-C4	-5.68	104.13	106.40
12	B	124	G	N3-C4-N9	5.68	129.41	126.00
12	B	785	G	C4-C5-C6	5.68	122.21	118.80
12	B	2307	G	C5'-C4'-O4'	5.68	115.92	109.10
12	B	802	A	N3-C4-N9	5.68	131.94	127.40
12	B	868	U	P-O3'-C3'	5.68	126.52	119.70
12	B	1310	G	N3-C4-N9	5.68	129.41	126.00
12	B	1714	U	C5'-C4'-O4'	5.68	115.92	109.10
12	B	195	A	N1-C2-N3	-5.68	126.46	129.30
12	B	535	G	N1-C2-N3	-5.68	120.49	123.90
12	B	647	G	N3-C4-C5	-5.68	125.76	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	782	A	C4-C5-C6	5.68	119.84	117.00
12	B	1347	A	C5-C6-N6	-5.68	119.16	123.70
12	B	2362	C	C5-C6-N1	-5.68	118.16	121.00
12	B	2385	C	O4'-C1'-N1	5.68	112.74	108.20
12	B	2818	U	N3-C4-C5	-5.68	111.19	114.60
24	N	61	ALA	N-CA-CB	5.68	118.05	110.10
12	B	653	U	N3-C4-C5	5.68	118.01	114.60
12	B	1306	C	C5-C6-N1	5.68	123.84	121.00
12	B	668	A	C5-N7-C8	5.68	106.74	103.90
12	B	894	U	N1-C2-N3	5.68	118.31	114.90
12	B	1259	G	OP2-P-O3'	5.68	117.69	105.20
12	B	2276	G	P-O5'-C5'	5.68	129.98	120.90
12	B	2425	A	N1-C2-N3	-5.68	126.46	129.30
12	B	2499	C	N3-C4-C5	5.68	124.17	121.90
12	B	2568	U	C5-C6-N1	5.68	125.54	122.70
12	B	2708	G	C8-N9-C4	-5.68	104.13	106.40
29	S	54	ALA	CB-CA-C	-5.68	101.58	110.10
12	B	230	G	C1'-O4'-C4'	-5.67	105.36	109.90
12	B	384	A	C6-C5-N7	-5.67	128.33	132.30
12	B	853	C	C5'-C4'-C3'	-5.67	106.92	116.00
12	B	869	G	C4-N9-C1'	-5.67	119.12	126.50
12	B	883	G	N1-C2-N2	5.67	121.31	116.20
12	B	1787	A	C6-N1-C2	5.67	122.00	118.60
12	B	2502	G	P-O3'-C3'	5.67	126.51	119.70
12	B	2691	C	N1-C2-N3	-5.67	115.23	119.20
14	D	82	PHE	CB-CG-CD1	5.67	124.77	120.80
18	H	72	ILE	CB-CA-C	-5.67	100.25	111.60
27	Q	12	ARG	NE-CZ-NH2	-5.67	117.46	120.30
12	B	427	U	O4'-C1'-N1	5.67	112.74	108.20
12	B	889	C	O4'-C1'-N1	5.67	112.74	108.20
12	B	919	U	C5-C4-O4	-5.67	122.50	125.90
12	B	1121	C	C3'-C2'-C1'	-5.67	96.96	101.50
12	B	1590	A	C3'-C2'-C1'	-5.67	96.96	101.50
12	B	1621	U	P-O5'-C5'	5.67	129.98	120.90
12	B	1746	A	N7-C8-N9	-5.67	110.96	113.80
12	B	1889	A	C5-C6-N6	-5.67	119.16	123.70
12	B	2620	C	N3-C4-N4	5.67	121.97	118.00
12	B	2622	U	C2-N3-C4	-5.67	123.60	127.00
12	B	2710	C	C5-C6-N1	5.67	123.84	121.00
12	B	2796	U	P-O5'-C5'	5.67	129.98	120.90
12	B	2878	U	O5'-C5'-C4'	-5.67	100.92	111.70
12	B	101	A	C5-C6-N1	-5.67	114.86	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	611	C	P-O5'-C5'	5.67	129.97	120.90
12	B	1452	G	C2-N3-C4	5.67	114.73	111.90
12	B	1679	A	N3-C4-C5	-5.67	122.83	126.80
12	B	1203	U	N1-C1'-C2'	-5.67	105.76	112.00
12	B	1653	G	N3-C4-N9	-5.67	122.60	126.00
12	B	1834	U	N1-C2-N3	5.67	118.30	114.90
11	A	20	G	C1'-O4'-C4'	-5.67	105.36	109.90
11	A	75	G	C6-C5-N7	-5.67	127.00	130.40
12	B	1083	U	N3-C4-C5	-5.67	111.20	114.60
12	B	1421	G	C5'-C4'-C3'	-5.67	106.93	116.00
12	B	1828	G	C4-C5-N7	5.67	113.07	110.80
12	B	2280	G	C5-N7-C8	5.67	107.13	104.30
12	B	2303	G	C8-N9-C4	-5.67	104.13	106.40
12	B	2726	A	N3-C4-C5	-5.67	122.83	126.80
11	A	25	U	C6-N1-C1'	5.67	129.13	121.20
12	B	1326	U	N3-C2-O2	5.67	126.17	122.20
12	B	1369	G	C5-C6-N1	-5.67	108.67	111.50
12	B	1967	C	N3-C4-C5	-5.67	119.63	121.90
12	B	2664	G	C5-C6-O6	-5.67	125.20	128.60
12	B	2664	G	C6-C5-N7	-5.67	127.00	130.40
12	B	105	C	C5-C4-N4	-5.67	116.23	120.20
12	B	464	U	O4'-C1'-N1	5.67	112.73	108.20
12	B	2253	G	N1-C2-N3	-5.67	120.50	123.90
12	B	2342	C	C2-N3-C4	5.67	122.73	119.90
12	B	2834	G	C6-C5-N7	-5.67	127.00	130.40
12	B	2892	G	C6-C5-N7	-5.67	127.00	130.40
12	B	271	G	P-O3'-C3'	5.66	126.50	119.70
12	B	448	U	C5-C4-O4	-5.66	122.50	125.90
12	B	549	G	N1-C6-O6	5.66	123.30	119.90
12	B	699	A	C4-C5-C6	5.66	119.83	117.00
12	B	701	G	N9-C1'-C2'	-5.66	105.77	112.00
12	B	1690	A	C6-N1-C2	-5.66	115.20	118.60
12	B	1970	A	P-O5'-C5'	-5.66	111.84	120.90
12	B	2076	U	C6-N1-C2	-5.66	117.60	121.00
12	B	2242	G	C8-N9-C1'	5.66	134.36	127.00
12	B	2308	G	N3-C2-N2	5.66	123.86	119.90
12	B	2329	U	N1-C1'-C2'	-5.66	105.77	112.00
12	B	2379	G	N3-C4-N9	5.66	129.40	126.00
12	B	2484	G	C5-N7-C8	5.66	107.13	104.30
12	B	2490	G	C4-C5-N7	-5.66	108.53	110.80
12	B	272	A	C5-C6-N6	-5.66	119.17	123.70
12	B	975	A	O4'-C1'-N9	5.66	112.73	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2371	G	C6-N1-C2	5.66	128.50	125.10
12	B	2518	A	C2-N3-C4	-5.66	107.77	110.60
6	5	222	VAL	CB-CA-C	-5.66	100.64	111.40
11	A	15	A	C8-N9-C4	-5.66	103.54	105.80
12	B	77	G	N9-C4-C5	5.66	107.66	105.40
12	B	376	G	C5-C6-O6	-5.66	125.20	128.60
12	B	989	G	C6-N1-C2	5.66	128.50	125.10
12	B	1150	C	C1'-O4'-C4'	5.66	114.43	109.90
12	B	1264	A	C5-C6-N6	-5.66	119.17	123.70
12	B	1277	G	N1-C2-N3	-5.66	120.50	123.90
12	B	1424	G	C8-N9-C4	-5.66	104.14	106.40
12	B	1638	C	C6-N1-C2	5.66	122.56	120.30
12	B	1667	G	C8-N9-C4	5.66	108.66	106.40
12	B	2146	C	C2-N1-C1'	5.66	125.03	118.80
12	B	2350	C	P-O5'-C5'	-5.66	111.84	120.90
12	B	2760	C	N3-C2-O2	-5.66	117.94	121.90
12	B	2859	G	C6-C5-N7	-5.66	127.00	130.40
25	O	102	ARG	NE-CZ-NH2	-5.66	117.47	120.30
11	A	27	C	O4'-C4'-C3'	-5.66	98.34	104.00
12	B	39	G	C2'-C3'-O3'	5.66	122.75	113.70
12	B	239	C	N3-C2-O2	5.66	125.86	121.90
12	B	522	A	O4'-C1'-C2'	5.66	112.69	107.60
12	B	1141	U	C2-N3-C4	-5.66	123.61	127.00
12	B	1895	C	N1-C2-O2	5.66	122.30	118.90
12	B	2449	U	O4'-C1'-N1	5.66	112.73	108.20
12	B	2465	C	N3-C2-O2	-5.66	117.94	121.90
12	B	2588	G	O4'-C1'-C2'	5.66	112.69	107.60
16	F	148	VAL	CG1-CB-CG2	-5.66	101.85	110.90
23	M	50	ARG	NE-CZ-NH1	5.66	123.13	120.30
11	A	96	G	P-O3'-C3'	-5.66	112.91	119.70
12	B	830	G	C4-C5-C6	5.66	122.19	118.80
12	B	1219	U	C5-C4-O4	-5.66	122.51	125.90
12	B	2223	G	C4-N9-C1'	-5.66	119.14	126.50
12	B	2795	C	N3-C4-C5	-5.66	119.64	121.90
12	B	226	A	C5'-C4'-O4'	5.66	115.89	109.10
12	B	493	G	C4-C5-N7	5.66	113.06	110.80
12	B	893	C	P-O3'-C3'	-5.66	112.91	119.70
12	B	898	C	OP1-P-OP2	-5.66	111.12	119.60
12	B	1110	G	N3-C2-N2	5.66	123.86	119.90
12	B	1634	A	C5-C6-N1	-5.66	114.87	117.70
12	B	1711	A	C4-C5-N7	-5.66	107.87	110.70
12	B	2286	G	C8-N9-C4	-5.66	104.14	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	84	G	C4-C5-N7	-5.65	108.54	110.80
12	B	214	G	C5-N7-C8	-5.65	101.47	104.30
12	B	1028	A	C3'-C2'-C1'	5.65	106.02	101.50
12	B	1627	G	C5-N7-C8	5.65	107.13	104.30
12	B	1808	A	C5-C6-N1	-5.65	114.87	117.70
12	B	2394	C	C5'-C4'-C3'	-5.65	106.95	116.00
12	B	2518	A	C5-C6-N6	-5.65	119.18	123.70
12	B	2780	G	C4'-C3'-C2'	-5.65	96.95	102.60
10	9	129	ARG	CB-CG-CD	5.65	126.30	111.60
11	A	46	A	C4-C5-N7	-5.65	107.87	110.70
12	B	1191	G	C5-N7-C8	5.65	107.13	104.30
12	B	1432	G	C2-N3-C4	-5.65	109.07	111.90
12	B	1516	G	O4'-C1'-N9	5.65	112.72	108.20
12	B	2129	C	O4'-C1'-N1	5.65	112.72	108.20
12	B	2182	U	N3-C4-C5	-5.65	111.21	114.60
12	B	2222	C	C2-N3-C4	5.65	122.73	119.90
12	B	2722	G	N1-C2-N3	-5.65	120.51	123.90
12	B	2780	G	O4'-C1'-C2'	-5.65	100.15	105.80
12	B	2856	A	C8-N9-C4	5.65	108.06	105.80
20	J	125	TYR	N-CA-CB	5.65	120.77	110.60
27	Q	11	ALA	N-CA-CB	5.65	118.01	110.10
12	B	152	A	C6-C5-N7	-5.65	128.34	132.30
12	B	194	G	C5-C6-N1	-5.65	108.67	111.50
12	B	1161	C	P-O3'-C3'	-5.65	112.92	119.70
12	B	1273	U	C4-C5-C6	5.65	123.09	119.70
12	B	1811	G	C3'-C2'-C1'	-5.65	96.98	101.50
12	B	1891	G	C5-C6-N1	-5.65	108.67	111.50
12	B	1908	C	OP1-P-OP2	-5.65	111.13	119.60
12	B	2171	A	C5-C6-N1	-5.65	114.88	117.70
12	B	2193	G	C6-N1-C2	-5.65	121.71	125.10
12	B	2404	U	OP1-P-OP2	-5.65	111.12	119.60
12	B	2757	A	C6-C5-N7	-5.65	128.34	132.30
12	B	1804	C	C6-N1-C2	-5.65	118.04	120.30
12	B	1959	G	C5-N7-C8	-5.65	101.48	104.30
12	B	2467	C	N3-C4-N4	5.65	121.95	118.00
12	B	2892	G	C5-C6-N1	-5.65	108.67	111.50
11	A	107	G	C4-C5-N7	-5.65	108.54	110.80
12	B	338	G	N3-C4-C5	5.65	131.42	128.60
12	B	520	G	C6-C5-N7	-5.65	127.01	130.40
12	B	526	A	N7-C8-N9	-5.65	110.98	113.80
12	B	2411	A	C5-C6-N1	-5.65	114.88	117.70
12	B	2803	G	C5-C6-O6	-5.65	125.21	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	149	A	O4'-C1'-N9	5.65	112.72	108.20
12	B	1041	G	C5-C6-N1	-5.65	108.68	111.50
12	B	2011	U	N3-C4-O4	5.65	123.35	119.40
12	B	2328	A	C5-C6-N6	-5.65	119.18	123.70
12	B	2612	C	C2-N1-C1'	5.65	125.01	118.80
17	G	166	GLU	CB-CG-CD	-5.65	98.96	114.20
12	B	260	G	P-O5'-C5'	5.64	129.93	120.90
12	B	395	U	N3-C4-O4	5.64	123.35	119.40
12	B	443	A	C6-N1-C2	-5.64	115.21	118.60
12	B	650	C	C5-C6-N1	5.64	123.82	121.00
12	B	782	A	C3'-C2'-C1'	-5.64	96.98	101.50
12	B	794	A	O4'-C1'-N9	5.64	112.72	108.20
12	B	898	C	P-O5'-C5'	5.64	129.93	120.90
12	B	1351	C	P-O3'-C3'	5.64	126.47	119.70
12	B	1482	G	C5-N7-C8	-5.64	101.48	104.30
12	B	1559	U	C5-C4-O4	-5.64	122.51	125.90
12	B	1806	C	C2-N3-C4	5.64	122.72	119.90
12	B	1836	C	C6-N1-C2	-5.64	118.04	120.30
12	B	1944	U	C6-N1-C2	5.64	124.39	121.00
12	B	2158	A	O4'-C1'-N9	5.64	112.72	108.20
12	B	2616	C	C4-C5-C6	5.64	120.22	117.40
12	B	2772	C	N3-C4-N4	5.64	121.95	118.00
12	B	969	G	C6-N1-C2	5.64	128.49	125.10
12	B	1334	G	C1'-O4'-C4'	-5.64	105.39	109.90
12	B	1700	A	C4-C5-N7	-5.64	107.88	110.70
12	B	2255	G	N9-C4-C5	-5.64	103.14	105.40
15	E	169	VAL	CA-CB-CG2	5.64	119.36	110.90
12	B	37	C	OP1-P-OP2	-5.64	111.14	119.60
12	B	47	C	N3-C4-C5	-5.64	119.64	121.90
12	B	165	A	C6-N1-C2	-5.64	115.22	118.60
12	B	620	G	C8-N9-C1'	-5.64	119.67	127.00
12	B	1340	U	C1'-O4'-C4'	5.64	114.41	109.90
12	B	1423	G	P-O3'-C3'	-5.64	112.93	119.70
12	B	2222	C	C5-C6-N1	5.64	123.82	121.00
12	B	341	C	C5-C6-N1	5.64	123.82	121.00
12	B	549	G	C6-N1-C2	-5.64	121.72	125.10
12	B	1106	G	N3-C4-C5	5.64	131.42	128.60
12	B	1483	G	N9-C4-C5	5.64	107.66	105.40
12	B	2173	A	C5-C6-N1	-5.64	114.88	117.70
12	B	2621	G	N3-C4-C5	5.64	131.42	128.60
12	B	2877	G	C2-N3-C4	-5.64	109.08	111.90
12	B	2883	A	C5-C6-N1	-5.64	114.88	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	313	G	O4'-C1'-N9	5.64	112.71	108.20
12	B	1017	G	C3'-C2'-C1'	-5.64	96.99	101.50
12	B	1237	A	C5-C6-N6	-5.64	119.19	123.70
12	B	1354	A	P-O3'-C3'	5.64	126.47	119.70
12	B	1370	C	N1-C2-N3	5.64	123.15	119.20
12	B	2887	A	C4-C5-N7	-5.64	107.88	110.70
22	L	33	ARG	NE-CZ-NH2	5.64	123.12	120.30
6	5	144	THR	CA-CB-CG2	-5.64	104.51	112.40
11	A	46	A	N3-C4-C5	-5.64	122.85	126.80
12	B	541	A	N3-C4-N9	5.64	131.91	127.40
12	B	582	A	C5-C6-N1	-5.64	114.88	117.70
12	B	943	A	C5-C6-N1	-5.64	114.88	117.70
12	B	1273	U	C5'-C4'-C3'	-5.64	106.98	116.00
12	B	1492	G	N9-C1'-C2'	-5.64	105.80	112.00
12	B	1524	G	C5-N7-C8	-5.64	101.48	104.30
12	B	1668	A	C6-C5-N7	-5.64	128.35	132.30
12	B	1875	G	C3'-C2'-C1'	-5.64	96.99	101.50
12	B	2565	A	C4'-C3'-C2'	-5.64	96.96	102.60
12	B	2671	G	C4'-C3'-C2'	-5.64	96.96	102.60
20	J	141	ASP	CB-CG-OD1	5.64	123.37	118.30
25	O	108	ASP	CB-CG-OD1	-5.64	113.23	118.30
12	B	127	A	O4'-C4'-C3'	-5.63	98.36	104.00
12	B	503	A	C5-N7-C8	5.63	106.72	103.90
12	B	1134	A	C6-C5-N7	-5.63	128.36	132.30
12	B	1562	U	N3-C4-O4	5.63	123.34	119.40
12	B	1591	A	C8-N9-C4	-5.63	103.55	105.80
12	B	2236	U	N3-C2-O2	5.63	126.14	122.20
12	B	2816	G	O4'-C1'-N9	5.63	112.71	108.20
26	P	73	PHE	CB-CA-C	-5.63	99.13	110.40
11	A	39	A	C6-N1-C2	-5.63	115.22	118.60
12	B	256	A	N9-C4-C5	5.63	108.05	105.80
12	B	312	G	C4-N9-C1'	5.63	133.82	126.50
12	B	861	A	C5-N7-C8	5.63	106.72	103.90
12	B	1426	G	N1-C2-N3	-5.63	120.52	123.90
12	B	2817	U	N1-C2-O2	-5.63	118.86	122.80
12	B	300	A	C5-C6-N6	-5.63	119.19	123.70
12	B	1014	A	N3-C4-C5	-5.63	122.86	126.80
12	B	1693	U	C5-C6-N1	-5.63	119.88	122.70
12	B	1696	G	C5-C6-N1	-5.63	108.68	111.50
12	B	1711	A	C5-C6-N6	-5.63	119.19	123.70
12	B	2144	G	C5'-C4'-C3'	-5.63	106.99	116.00
12	B	2294	G	C4-C5-N7	-5.63	108.55	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2836	U	N1-C2-O2	-5.63	118.86	122.80
12	B	175	G	C8-N9-C4	5.63	108.65	106.40
12	B	816	C	N1-C2-O2	-5.63	115.52	118.90
12	B	829	A	C4-C5-N7	-5.63	107.89	110.70
12	B	1191	G	O4'-C1'-N9	5.63	112.70	108.20
12	B	2622	U	N1-C2-O2	-5.63	118.86	122.80
12	B	2623	G	C8-N9-C4	-5.63	104.15	106.40
12	B	380	G	C5-N7-C8	5.63	107.11	104.30
12	B	485	C	C2-N3-C4	5.63	122.71	119.90
12	B	855	G	O4'-C1'-N9	5.63	112.70	108.20
12	B	1517	G	C2-N3-C4	5.63	114.71	111.90
12	B	2178	C	C4-C5-C6	5.63	120.21	117.40
12	B	2187	U	C4-C5-C6	5.63	123.08	119.70
12	B	2351	G	O4'-C1'-N9	5.63	112.70	108.20
12	B	2420	C	N3-C4-N4	5.63	121.94	118.00
12	B	2883	A	N3-C4-C5	-5.63	122.86	126.80
11	A	58	A	O4'-C1'-N9	5.63	112.70	108.20
11	A	70	C	C4-C5-C6	5.63	120.21	117.40
12	B	7	G	C4-C5-N7	-5.63	108.55	110.80
12	B	72	U	C2-N3-C4	5.63	130.38	127.00
12	B	215	G	C5-C6-O6	-5.63	125.22	128.60
12	B	264	C	O4'-C1'-N1	5.63	112.70	108.20
12	B	609	A	C8-N9-C4	-5.63	103.55	105.80
12	B	959	A	C8-N9-C4	-5.63	103.55	105.80
12	B	1131	G	N1-C2-N3	-5.63	120.52	123.90
12	B	1217	U	C5'-C4'-C3'	-5.63	107.00	116.00
12	B	1503	A	N1-C2-N3	5.63	132.11	129.30
12	B	1567	G	N1-C2-N2	-5.63	111.14	116.20
12	B	1836	C	C5'-C4'-O4'	5.63	115.85	109.10
12	B	2006	C	N1-C2-O2	5.63	122.28	118.90
12	B	2062	A	C5-N7-C8	-5.63	101.09	103.90
12	B	2076	U	P-O5'-C5'	5.63	129.90	120.90
12	B	2187	U	C6-N1-C2	-5.63	117.62	121.00
26	P	61	ARG	NE-CZ-NH2	5.63	123.11	120.30
11	A	56	G	N3-C2-N2	-5.62	115.96	119.90
12	B	197	A	C5'-C4'-O4'	5.62	115.85	109.10
12	B	1697	G	N1-C2-N2	-5.62	111.14	116.20
12	B	261	G	C4-C5-N7	-5.62	108.55	110.80
12	B	342	A	N3-C4-N9	5.62	131.90	127.40
12	B	398	C	O4'-C4'-C3'	-5.62	98.38	104.00
12	B	694	U	N3-C4-O4	5.62	123.34	119.40
12	B	1068	G	C4-C5-N7	-5.62	108.55	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1120	G	O5'-C5'-C4'	-5.62	101.02	111.70
12	B	1261	C	P-O3'-C3'	-5.62	112.95	119.70
12	B	1576	U	P-O3'-C3'	-5.62	112.95	119.70
12	B	2393	U	C5-C6-N1	5.62	125.51	122.70
12	B	2663	G	C6-C5-N7	-5.62	127.03	130.40
11	A	87	U	C5'-C4'-O4'	5.62	115.85	109.10
12	B	1364	G	C5-C6-N1	-5.62	108.69	111.50
12	B	1580	A	N1-C2-N3	5.62	132.11	129.30
12	B	1874	C	C4-C5-C6	5.62	120.21	117.40
12	B	2456	C	C5-C4-N4	-5.62	116.27	120.20
12	B	2617	U	OP1-P-OP2	-5.62	111.17	119.60
12	B	2797	U	N3-C4-O4	-5.62	115.46	119.40
12	B	1103	A	C5-C6-N6	-5.62	119.20	123.70
12	B	1152	C	C5-C4-N4	-5.62	116.27	120.20
12	B	2273	A	C2-N3-C4	-5.62	107.79	110.60
11	A	9	G	N3-C2-N2	5.62	123.83	119.90
11	A	43	C	P-O5'-C5'	5.62	129.89	120.90
12	B	118	A	C5-C6-N6	-5.62	119.20	123.70
12	B	589	U	C6-N1-C2	5.62	124.37	121.00
12	B	1513	U	N3-C4-O4	5.62	123.33	119.40
12	B	2227	A	C5-N7-C8	5.62	106.71	103.90
12	B	2269	G	C4'-C3'-C2'	-5.62	96.98	102.60
12	B	2290	G	C4-C5-C6	5.62	122.17	118.80
11	A	18	G	O4'-C1'-N9	5.62	112.69	108.20
12	B	179	C	C4'-C3'-C2'	-5.62	96.98	102.60
12	B	271	G	O5'-C5'-C4'	-5.62	101.03	111.70
12	B	540	C	N1-C2-N3	-5.62	115.27	119.20
12	B	1269	A	N7-C8-N9	5.62	116.61	113.80
12	B	2548	U	C6-N1-C2	-5.62	117.63	121.00
13	C	160	TYR	CG-CD1-CE1	-5.62	116.81	121.30
11	A	81	G	C6-C5-N7	-5.62	127.03	130.40
12	B	394	C	N1-C2-N3	-5.62	115.27	119.20
12	B	567	U	O4'-C1'-N1	5.62	112.69	108.20
12	B	759	G	O4'-C1'-N9	5.62	112.69	108.20
12	B	836	G	C2-N3-C4	5.62	114.71	111.90
12	B	962	G	O4'-C4'-C3'	-5.62	98.39	104.00
12	B	1145	C	C3'-C2'-C1'	-5.62	97.01	101.50
12	B	1393	A	O4'-C1'-N9	5.62	112.69	108.20
12	B	1590	A	N3-C4-C5	-5.62	122.87	126.80
12	B	1755	A	N9-C4-C5	5.62	108.05	105.80
12	B	1892	C	C2-N1-C1'	5.62	124.98	118.80
12	B	2125	G	N3-C4-N9	5.62	129.37	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	E	49	ARG	CD-NE-CZ	-5.62	115.74	123.60
10	9	52	ASN	C-N-CA	5.61	135.73	121.70
12	B	141	G	C2-N3-C4	5.61	114.71	111.90
12	B	318	C	C2-N1-C1'	5.61	124.98	118.80
12	B	1054	A	O4'-C4'-C3'	-5.61	98.39	104.00
12	B	1452	G	N3-C4-C5	-5.61	125.79	128.60
12	B	2476	A	C4-C5-N7	-5.61	107.89	110.70
12	B	2833	U	N1-C1'-C2'	-5.61	105.83	112.00
1	0	48	LEU	CB-CG-CD2	5.61	120.54	111.00
12	B	2609	U	C5-C6-N1	5.61	125.51	122.70
25	O	29	HIS	CB-CA-C	5.61	121.62	110.40
11	A	97	C	N3-C2-O2	5.61	125.83	121.90
12	B	161	A	O4'-C4'-C3'	-5.61	98.39	104.00
12	B	684	G	N9-C4-C5	-5.61	103.16	105.40
12	B	697	G	C8-N9-C1'	5.61	134.29	127.00
12	B	1123	C	C5-C6-N1	5.61	123.81	121.00
12	B	1448	G	C4-C5-N7	-5.61	108.56	110.80
12	B	1736	U	C6-N1-C2	-5.61	117.63	121.00
12	B	1775	U	P-O5'-C5'	5.61	129.88	120.90
12	B	2079	U	O4'-C1'-N1	5.61	112.69	108.20
12	B	2331	G	N1-C2-N2	-5.61	111.15	116.20
21	K	20	MET	CG-SD-CE	-5.61	91.22	100.20
33	Y	13	ARG	O-C-N	5.61	131.68	122.70
12	B	105	C	O4'-C1'-N1	5.61	112.69	108.20
12	B	315	G	O4'-C1'-N9	5.61	112.69	108.20
12	B	2901	C	P-O5'-C5'	5.61	129.88	120.90
12	B	293	U	C4'-C3'-C2'	-5.61	96.99	102.60
12	B	493	G	P-O5'-C5'	5.61	129.87	120.90
12	B	894	U	N3-C2-O2	-5.61	118.28	122.20
12	B	1971	U	N1-C2-N3	-5.61	111.54	114.90
12	B	2049	G	N7-C8-N9	-5.61	110.30	113.10
12	B	2693	G	C6-C5-N7	-5.61	127.03	130.40
12	B	713	G	C8-N9-C4	-5.61	104.16	106.40
12	B	723	C	C4'-C3'-C2'	-5.61	96.99	102.60
12	B	880	G	C6-C5-N7	-5.61	127.04	130.40
12	B	991	C	C2-N3-C4	5.61	122.70	119.90
12	B	1005	C	C3'-C2'-C1'	5.61	105.98	101.50
12	B	2267	A	C3'-C2'-C1'	-5.61	97.02	101.50
12	B	2484	G	O5'-C5'-C4'	-5.61	101.05	111.70
12	B	2728	U	C5'-C4'-C3'	-5.61	107.03	116.00
11	A	53	A	N3-C4-C5	-5.60	122.88	126.80
12	B	1674	G	C6-C5-N7	-5.60	127.04	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1892	C	N1-C2-N3	5.60	123.12	119.20
12	B	2772	C	O4'-C1'-N1	5.60	112.68	108.20
12	B	280	U	C6-N1-C2	-5.60	117.64	121.00
12	B	551	G	N1-C6-O6	5.60	123.26	119.90
12	B	692	C	C2-N3-C4	5.60	122.70	119.90
12	B	920	A	N7-C8-N9	5.60	116.60	113.80
12	B	1159	U	N3-C2-O2	5.60	126.12	122.20
12	B	1179	G	C2-N3-C4	5.60	114.70	111.90
12	B	1210	G	N3-C4-C5	5.60	131.40	128.60
12	B	1371	G	C5-N7-C8	5.60	107.10	104.30
12	B	1495	A	C5-C6-N1	-5.60	114.90	117.70
12	B	1932	A	C2-N3-C4	-5.60	107.80	110.60
12	B	1965	C	C5'-C4'-O4'	5.60	115.82	109.10
12	B	2217	G	N1-C6-O6	5.60	123.26	119.90
12	B	2312	U	C5'-C4'-O4'	5.60	115.82	109.10
12	B	2323	G	C6-N1-C2	5.60	128.46	125.10
12	B	2726	A	C4-C5-C6	5.60	119.80	117.00
16	F	141	ASP	CB-CA-C	-5.60	99.19	110.40
12	B	1037	G	N3-C4-N9	-5.60	122.64	126.00
12	B	1632	A	C5-C6-N6	-5.60	119.22	123.70
16	F	127	TYR	CD1-CG-CD2	5.60	124.06	117.90
10	9	152	LEU	CB-CG-CD2	-5.60	101.48	111.00
12	B	100	U	C5-C4-O4	-5.60	122.54	125.90
12	B	359	G	C3'-C2'-C1'	5.60	105.98	101.50
12	B	571	U	C5-C4-O4	-5.60	122.54	125.90
12	B	709	U	C4'-C3'-C2'	-5.60	97.00	102.60
12	B	1074	G	O4'-C4'-C3'	-5.60	98.40	104.00
12	B	1387	A	C6-C5-N7	-5.60	128.38	132.30
12	B	1452	G	C4-C5-C6	5.60	122.16	118.80
12	B	1609	A	P-O3'-C3'	-5.60	112.98	119.70
12	B	1663	G	C6-C5-N7	-5.60	127.04	130.40
12	B	1936	A	C5-C6-N1	-5.60	114.90	117.70
12	B	2477	U	P-O3'-C3'	5.60	126.42	119.70
12	B	2508	G	C4-C5-N7	5.60	113.04	110.80
12	B	2666	C	N1-C2-N3	-5.60	115.28	119.20
12	B	2852	G	N7-C8-N9	5.60	115.90	113.10
12	B	132	G	N9-C4-C5	-5.60	103.16	105.40
12	B	432	A	N1-C2-N3	-5.60	126.50	129.30
12	B	492	A	C2-N3-C4	-5.60	107.80	110.60
12	B	729	G	C5'-C4'-C3'	5.60	124.95	116.00
12	B	789	A	C5-C6-N6	-5.60	119.22	123.70
12	B	922	C	N1-C2-O2	5.60	122.26	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1061	U	N3-C4-C5	-5.60	111.24	114.60
12	B	1089	A	C4-C5-C6	5.60	119.80	117.00
12	B	1126	A	O4'-C1'-N9	-5.60	103.72	108.20
12	B	1295	C	N3-C4-N4	5.60	121.92	118.00
12	B	1379	U	C6-N1-C2	-5.60	117.64	121.00
12	B	1606	C	N3-C4-C5	-5.60	119.66	121.90
12	B	1788	C	C5-C4-N4	-5.60	116.28	120.20
12	B	1875	G	C2-N3-C4	5.60	114.70	111.90
12	B	1937	A	O4'-C1'-N9	5.60	112.68	108.20
12	B	2290	G	C4-C5-N7	-5.60	108.56	110.80
12	B	2749	A	N7-C8-N9	5.60	116.60	113.80
27	Q	10	ARG	NH1-CZ-NH2	5.60	125.56	119.40
12	B	818	G	C8-N9-C4	-5.60	104.16	106.40
12	B	869	G	P-O5'-C5'	5.60	129.85	120.90
12	B	1742	U	C4'-C3'-C2'	-5.60	97.00	102.60
12	B	2369	A	N1-C6-N6	5.60	121.96	118.60
12	B	219	A	N1-C2-N3	-5.59	126.50	129.30
12	B	318	C	P-O5'-C5'	5.59	129.85	120.90
12	B	871	U	C2-N1-C1'	5.59	124.41	117.70
12	B	902	C	C5-C4-N4	-5.59	116.28	120.20
12	B	1054	A	C4-C5-C6	5.59	119.80	117.00
12	B	1314	C	C4-C5-C6	5.59	120.20	117.40
12	B	1407	G	N9-C4-C5	5.59	107.64	105.40
12	B	1469	A	C1'-O4'-C4'	-5.59	105.42	109.90
12	B	1767	G	N9-C4-C5	5.59	107.64	105.40
12	B	1949	G	C5'-C4'-O4'	5.59	115.81	109.10
12	B	2197	U	O4'-C1'-N1	5.59	112.67	108.20
12	B	2515	C	N3-C4-N4	5.59	121.92	118.00
12	B	2541	A	N7-C8-N9	-5.59	111.00	113.80
12	B	2837	A	C6-N1-C2	5.59	121.96	118.60
12	B	2876	G	N3-C2-N2	5.59	123.82	119.90
22	L	58	TYR	CD1-CG-CD2	5.59	124.05	117.90
11	A	23	G	C4-C5-N7	5.59	113.04	110.80
12	B	46	G	C6-C5-N7	-5.59	127.04	130.40
12	B	93	G	C4-N9-C1'	-5.59	119.23	126.50
12	B	910	A	C5-N7-C8	5.59	106.70	103.90
1	0	49	ARG	N-CA-CB	5.59	120.67	110.60
12	B	46	G	N1-C6-O6	5.59	123.25	119.90
12	B	126	A	N9-C4-C5	-5.59	103.56	105.80
12	B	344	A	C4-C5-C6	5.59	119.80	117.00
12	B	874	G	N9-C4-C5	5.59	107.64	105.40
12	B	1554	U	P-O5'-C5'	-5.59	111.95	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1592	C	C1'-O4'-C4'	-5.59	105.43	109.90
12	B	1593	A	N1-C2-N3	5.59	132.10	129.30
12	B	2032	G	C8-N9-C4	5.59	108.64	106.40
12	B	2049	G	C3'-C2'-C1'	5.59	105.97	101.50
12	B	2118	U	C6-N1-C1'	-5.59	113.37	121.20
12	B	2370	G	C4-C5-C6	5.59	122.15	118.80
12	B	2515	C	C2-N3-C4	5.59	122.70	119.90
12	B	2782	G	C4-C5-C6	5.59	122.16	118.80
12	B	2890	G	C4-C5-N7	-5.59	108.56	110.80
11	A	62	C	N3-C4-N4	5.59	121.91	118.00
12	B	218	A	P-O3'-C3'	5.59	126.41	119.70
12	B	491	G	C5-C6-O6	-5.59	125.25	128.60
12	B	815	C	C6-N1-C2	-5.59	118.06	120.30
12	B	2082	A	N3-C4-C5	-5.59	122.89	126.80
12	B	2321	U	P-O5'-C5'	-5.59	111.96	120.90
12	B	2736	A	N7-C8-N9	-5.59	111.01	113.80
12	B	2803	G	C5'-C4'-C3'	-5.59	107.06	116.00
12	B	2878	U	C4'-C3'-C2'	-5.59	97.01	102.60
12	B	554	U	C5-C6-N1	5.59	125.49	122.70
12	B	692	C	N1-C2-N3	-5.59	115.29	119.20
12	B	853	C	C4'-C3'-C2'	-5.59	97.01	102.60
11	A	7	G	C2'-C3'-O3'	5.59	122.64	113.70
12	B	877	A	C5-C6-N1	-5.59	114.91	117.70
12	B	1471	G	C4-N9-C1'	-5.59	119.24	126.50
12	B	2013	A	N9-C4-C5	-5.59	103.56	105.80
12	B	133	U	C5-C4-O4	-5.58	122.55	125.90
12	B	190	A	O4'-C1'-N9	5.58	112.67	108.20
12	B	772	C	N3-C2-O2	-5.58	117.99	121.90
12	B	886	A	C3'-C2'-C1'	-5.58	97.03	101.50
12	B	2585	U	C2-N3-C4	5.58	130.35	127.00
12	B	410	G	N1-C2-N3	-5.58	120.55	123.90
12	B	552	U	C4'-C3'-C2'	-5.58	97.02	102.60
12	B	631	A	C6-C5-N7	-5.58	128.39	132.30
12	B	669	G	C4-N9-C1'	5.58	133.76	126.50
12	B	1614	A	C6-C5-N7	-5.58	128.39	132.30
12	B	2469	A	C6-C5-N7	-5.58	128.39	132.30
12	B	2603	G	N7-C8-N9	5.58	115.89	113.10
12	B	2711	A	N9-C4-C5	5.58	108.03	105.80
12	B	44	A	C5-C6-N6	-5.58	119.23	123.70
12	B	301	G	N3-C2-N2	5.58	123.81	119.90
12	B	690	G	N3-C4-N9	5.58	129.35	126.00
12	B	700	G	C8-N9-C1'	5.58	134.26	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	866	A	C4-C5-C6	5.58	119.79	117.00
12	B	905	A	N1-C6-N6	5.58	121.95	118.60
12	B	995	C	C5-C6-N1	-5.58	118.21	121.00
12	B	2068	U	P-O3'-C3'	5.58	126.40	119.70
12	B	2507	C	O4'-C1'-N1	5.58	112.67	108.20
12	B	2532	G	C5-N7-C8	5.58	107.09	104.30
12	B	2708	G	C8-N9-C1'	5.58	134.25	127.00
12	B	2843	G	C5'-C4'-O4'	5.58	115.80	109.10
12	B	481	G	O4'-C1'-N9	5.58	112.66	108.20
12	B	875	G	C5'-C4'-C3'	-5.58	107.07	116.00
12	B	887	U	N1-C2-O2	-5.58	118.89	122.80
12	B	1006	C	N1-C2-O2	-5.58	115.55	118.90
12	B	1236	G	OP1-P-O3'	5.58	117.48	105.20
12	B	1331	G	C4-C5-N7	5.58	113.03	110.80
12	B	2094	A	N3-C4-N9	5.58	131.86	127.40
12	B	2659	G	P-O3'-C3'	-5.58	113.00	119.70
12	B	2853	C	C6-N1-C2	-5.58	118.07	120.30
6	5	53	ARG	NE-CZ-NH1	5.58	123.09	120.30
12	B	77	G	C3'-C2'-C1'	-5.58	97.04	101.50
12	B	609	A	C5-C6-N6	-5.58	119.24	123.70
12	B	1206	G	O4'-C1'-N9	5.58	112.66	108.20
12	B	1334	G	C5-C6-N1	-5.58	108.71	111.50
12	B	1743	G	C4-C5-C6	5.58	122.15	118.80
12	B	2102	G	P-O5'-C5'	5.58	129.82	120.90
12	B	2182	U	O3'-P-O5'	-5.58	93.40	104.00
12	B	2448	A	C5-C6-N6	-5.58	119.24	123.70
12	B	2557	G	C5'-C4'-C3'	-5.58	107.07	116.00
27	Q	68	ALA	CB-CA-C	-5.58	101.73	110.10
12	B	197	A	C4-C5-C6	5.58	119.79	117.00
12	B	350	G	N3-C2-N2	5.58	123.80	119.90
12	B	822	G	P-O5'-C5'	-5.58	111.98	120.90
12	B	833	A	C5-C6-N1	-5.58	114.91	117.70
12	B	879	G	OP1-P-OP2	-5.58	111.23	119.60
12	B	1494	A	N7-C8-N9	-5.58	111.01	113.80
12	B	1660	G	O4'-C1'-N9	5.58	112.66	108.20
12	B	2770	G	C6-N1-C2	5.58	128.45	125.10
8	7	6	VAL	N-CA-C	-5.58	95.95	111.00
11	A	64	G	C2-N3-C4	5.58	114.69	111.90
12	B	91	A	N1-C2-N3	5.58	132.09	129.30
12	B	108	G	C8-N9-C1'	5.58	134.25	127.00
12	B	1066	U	C5-C4-O4	-5.58	122.56	125.90
12	B	1639	C	N3-C4-N4	5.58	121.90	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1754	A	C5-C6-N6	-5.58	119.24	123.70
12	B	1920	C	N3-C2-O2	5.58	125.80	121.90
12	B	2306	C	P-O3'-C3'	5.58	126.39	119.70
12	B	2329	U	C5-C4-O4	5.58	129.25	125.90
12	B	2532	G	C5'-C4'-O4'	5.58	115.79	109.10
12	B	2730	C	C3'-C2'-C1'	-5.58	97.04	101.50
12	B	2747	G	N1-C6-O6	5.58	123.25	119.90
12	B	64	A	N3-C4-C5	-5.57	122.90	126.80
12	B	219	A	C4-C5-N7	5.57	113.49	110.70
12	B	310	A	N3-C4-N9	5.57	131.86	127.40
12	B	332	A	C6-N1-C2	5.57	121.94	118.60
12	B	425	G	OP1-P-OP2	5.57	127.96	119.60
12	B	485	C	N3-C4-N4	5.57	121.90	118.00
12	B	574	A	C8-N9-C4	-5.57	103.57	105.80
12	B	743	A	C5-C6-N1	-5.57	114.91	117.70
12	B	765	C	N3-C4-C5	5.57	124.13	121.90
12	B	978	G	N7-C8-N9	-5.57	110.31	113.10
12	B	986	C	N3-C4-C5	-5.57	119.67	121.90
12	B	1906	G	C5'-C4'-O4'	-5.57	102.41	109.10
12	B	1927	A	N9-C4-C5	5.57	108.03	105.80
12	B	2005	A	N3-C4-N9	5.57	131.86	127.40
12	B	2190	G	C5-C6-N1	-5.57	108.71	111.50
12	B	2399	G	C4-C5-C6	5.57	122.14	118.80
12	B	2417	C	P-O3'-C3'	-5.57	113.01	119.70
12	B	2640	G	C5-C6-O6	-5.57	125.26	128.60
21	K	71	ARG	N-CA-C	-5.57	95.95	111.00
10	9	311	TYR	N-CA-C	-5.57	95.95	111.00
12	B	708	G	C4'-C3'-C2'	-5.57	97.03	102.60
12	B	2400	G	N3-C4-N9	-5.57	122.66	126.00
12	B	2401	U	N1-C2-N3	-5.57	111.56	114.90
12	B	2647	U	C5-C4-O4	-5.57	122.56	125.90
11	A	13	G	C6-C5-N7	-5.57	127.06	130.40
11	A	82	U	N3-C2-O2	5.57	126.10	122.20
12	B	229	C	N1-C2-N3	5.57	123.10	119.20
12	B	440	C	N3-C4-N4	5.57	121.90	118.00
12	B	977	G	C6-C5-N7	-5.57	127.06	130.40
12	B	1133	A	C4-C5-C6	5.57	119.78	117.00
12	B	1263	U	O4'-C1'-N1	5.57	112.66	108.20
12	B	1642	G	C8-N9-C1'	5.57	134.24	127.00
12	B	1719	G	C5-C6-N1	5.57	114.28	111.50
16	F	121	PHE	CB-CG-CD2	-5.57	116.90	120.80
11	A	72	G	N9-C4-C5	-5.57	103.17	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	149	A	C5-C6-N6	-5.57	119.25	123.70
12	B	312	G	O4'-C1'-N9	5.57	112.66	108.20
12	B	799	G	N1-C2-N3	-5.57	120.56	123.90
12	B	1036	G	C4-N9-C1'	-5.57	119.26	126.50
12	B	1238	G	O4'-C4'-C3'	-5.57	98.43	104.00
12	B	80	G	N9-C4-C5	-5.57	103.17	105.40
12	B	633	A	C5-C6-N6	-5.57	119.25	123.70
12	B	689	A	C2-N3-C4	5.57	113.38	110.60
12	B	1051	G	C5-C6-O6	-5.57	125.26	128.60
12	B	1381	G	N9-C4-C5	-5.57	103.17	105.40
12	B	1428	C	C5-C6-N1	5.57	123.78	121.00
12	B	1479	G	N3-C4-N9	-5.57	122.66	126.00
12	B	1655	A	C4-C5-N7	-5.57	107.92	110.70
12	B	1853	A	C5-C6-N6	-5.57	119.25	123.70
12	B	2351	G	C6-N1-C2	5.57	128.44	125.10
12	B	9	G	N1-C2-N3	-5.57	120.56	123.90
12	B	210	C	O4'-C1'-N1	5.57	112.65	108.20
12	B	216	A	C6-N1-C2	5.57	121.94	118.60
12	B	327	G	C8-N9-C1'	5.57	134.24	127.00
12	B	702	U	O4'-C1'-N1	5.57	112.65	108.20
12	B	942	G	C5'-C4'-C3'	-5.57	107.10	116.00
12	B	1443	U	C3'-C2'-C1'	5.57	105.95	101.50
12	B	1739	A	C5-N7-C8	5.57	106.68	103.90
12	B	1893	C	N1-C2-N3	-5.57	115.30	119.20
12	B	2500	U	N1-C2-O2	5.57	126.70	122.80
12	B	2509	G	C6-C5-N7	-5.57	127.06	130.40
12	B	2553	G	C6-C5-N7	-5.57	127.06	130.40
12	B	967	U	N3-C4-O4	5.56	123.30	119.40
12	B	2130	U	N1-C1'-C2'	-5.56	105.88	112.00
15	E	117	ARG	CG-CD-NE	-5.56	100.12	111.80
12	B	727	A	C8-N9-C4	5.56	108.03	105.80
12	B	878	A	P-O3'-C3'	-5.56	113.02	119.70
12	B	1684	G	C5-N7-C8	-5.56	101.52	104.30
12	B	1784	A	N3-C4-C5	-5.56	122.91	126.80
12	B	1812	U	N3-C2-O2	5.56	126.09	122.20
12	B	2421	G	C5-C6-O6	-5.56	125.26	128.60
12	B	2820	A	C5-N7-C8	5.56	106.68	103.90
12	B	659	G	C5-N7-C8	-5.56	101.52	104.30
12	B	2469	A	O4'-C1'-N9	5.56	112.65	108.20
12	B	2626	C	O4'-C4'-C3'	-5.56	98.44	104.00
12	B	2629	U	C5'-C4'-C3'	5.56	124.90	116.00
12	B	2643	G	N3-C2-N2	5.56	123.79	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2766	A	C5'-C4'-C3'	-5.56	107.10	116.00
11	A	85	G	C4-C5-N7	-5.56	108.58	110.80
11	A	101	A	N9-C4-C5	-5.56	103.58	105.80
12	B	480	A	C5-C6-N6	-5.56	119.25	123.70
12	B	543	G	O4'-C1'-N9	5.56	112.65	108.20
12	B	827	U	C6-N1-C2	5.56	124.34	121.00
12	B	952	G	C6-N1-C2	5.56	128.44	125.10
12	B	1291	C	C1'-O4'-C4'	-5.56	105.45	109.90
12	B	1572	A	C2-N3-C4	5.56	113.38	110.60
12	B	1664	A	C4-C5-N7	-5.56	107.92	110.70
12	B	1711	A	C5-N7-C8	5.56	106.68	103.90
12	B	2130	U	C5'-C4'-O4'	5.56	115.77	109.10
12	B	2482	A	C4-C5-C6	5.56	119.78	117.00
12	B	2590	A	C5-N7-C8	5.56	106.68	103.90
12	B	2714	G	C5-N7-C8	-5.56	101.52	104.30
11	A	70	C	OP2-P-O3'	5.56	117.42	105.20
12	B	81	G	C6-C5-N7	-5.56	127.07	130.40
12	B	241	A	C5-N7-C8	5.56	106.68	103.90
12	B	263	G	C5-C6-O6	-5.56	125.27	128.60
12	B	784	G	C1'-O4'-C4'	-5.56	105.45	109.90
12	B	940	G	O4'-C4'-C3'	-5.56	98.44	104.00
12	B	1221	C	C4-C5-C6	5.56	120.18	117.40
12	B	1963	U	O4'-C1'-N1	5.56	112.65	108.20
12	B	2554	U	O4'-C1'-N1	5.56	112.64	108.20
12	B	2846	G	N1-C2-N3	-5.56	120.57	123.90
11	A	115	A	C5-N7-C8	5.56	106.68	103.90
12	B	260	G	N3-C4-N9	-5.56	122.67	126.00
12	B	558	U	N3-C4-O4	5.56	123.29	119.40
12	B	1358	G	N7-C8-N9	-5.56	110.32	113.10
12	B	1378	A	N1-C2-N3	5.56	132.08	129.30
12	B	1706	C	C5'-C4'-C3'	-5.56	107.11	116.00
12	B	2235	G	C2-N3-C4	-5.56	109.12	111.90
12	B	2468	A	C8-N9-C4	-5.56	103.58	105.80
12	B	2666	C	C6-N1-C2	5.56	122.52	120.30
11	A	46	A	C5'-C4'-C3'	-5.55	107.11	116.00
11	A	65	U	C6-N1-C2	-5.55	117.67	121.00
12	B	861	A	C3'-C2'-C1'	-5.55	97.06	101.50
12	B	983	A	C4-C5-N7	-5.55	107.92	110.70
12	B	1680	U	C5-C6-N1	-5.55	119.92	122.70
12	B	1932	A	O4'-C4'-C3'	-5.55	98.44	104.00
12	B	1997	C	C5-C4-N4	-5.55	116.31	120.20
12	B	2149	U	P-O3'-C3'	5.55	126.36	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2589	A	C8-N9-C4	-5.55	103.58	105.80
12	B	761	A	C4-C5-N7	-5.55	107.92	110.70
12	B	957	C	C4'-C3'-C2'	-5.55	97.05	102.60
12	B	1355	G	O5'-P-OP1	5.55	117.36	110.70
12	B	2158	A	N1-C2-N3	-5.55	126.52	129.30
12	B	2217	G	P-O3'-C3'	-5.55	113.04	119.70
12	B	25	U	N3-C4-C5	-5.55	111.27	114.60
12	B	888	C	C2-N3-C4	5.55	122.68	119.90
12	B	899	A	N9-C4-C5	5.55	108.02	105.80
12	B	1100	C	C5-C6-N1	5.55	123.78	121.00
12	B	1164	C	N3-C4-N4	5.55	121.89	118.00
12	B	1503	A	N9-C4-C5	5.55	108.02	105.80
12	B	1751	U	N1-C2-N3	5.55	118.23	114.90
12	B	2053	G	C4-C5-C6	-5.55	115.47	118.80
12	B	2585	U	C5-C4-O4	5.55	129.23	125.90
12	B	2606	C	O4'-C1'-N1	5.55	112.64	108.20
12	B	2851	A	C8-N9-C1'	5.55	137.69	127.70
12	B	2858	C	C2-N3-C4	5.55	122.67	119.90
12	B	2868	A	O4'-C1'-N9	5.55	112.64	108.20
22	L	41	ARG	N-CA-CB	5.55	120.59	110.60
12	B	52	A	N9-C4-C5	5.55	108.02	105.80
12	B	63	A	N9-C4-C5	5.55	108.02	105.80
12	B	415	A	C4-C5-N7	-5.55	107.92	110.70
12	B	970	U	C5-C4-O4	-5.55	122.57	125.90
12	B	630	G	N3-C2-N2	5.55	123.78	119.90
12	B	1665	A	C4'-C3'-C2'	-5.55	97.05	102.60
12	B	569	U	OP1-P-OP2	-5.55	111.28	119.60
12	B	745	G	C6-C5-N7	-5.55	127.07	130.40
12	B	948	C	N3-C4-N4	5.55	121.88	118.00
12	B	1312	U	P-O5'-C5'	-5.55	112.03	120.90
12	B	1324	G	C3'-C2'-C1'	5.55	105.94	101.50
12	B	2285	C	N3-C2-O2	5.55	125.78	121.90
12	B	2536	G	C5-N7-C8	-5.55	101.53	104.30
12	B	2594	C	P-O3'-C3'	-5.55	113.04	119.70
12	B	2773	C	C4'-C3'-C2'	-5.55	97.05	102.60
12	B	2892	G	OP1-P-O3'	5.55	117.40	105.20
11	A	7	G	O4'-C4'-C3'	-5.54	98.45	104.00
11	A	41	G	O4'-C1'-N9	5.54	112.64	108.20
12	B	6	A	N1-C2-N3	5.54	132.07	129.30
12	B	250	G	N1-C6-O6	5.54	123.23	119.90
12	B	347	A	C5-C6-N6	-5.54	119.26	123.70
12	B	590	A	N9-C1'-C2'	-5.54	105.90	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	876	C	P-O3'-C3'	-5.54	113.05	119.70
12	B	1154	G	C2-N3-C4	-5.54	109.13	111.90
12	B	2006	C	N3-C4-C5	-5.54	119.68	121.90
12	B	2138	G	C5-C6-N1	5.54	114.27	111.50
12	B	2146	C	P-O3'-C3'	5.54	126.35	119.70
11	A	14	U	C6-N1-C2	-5.54	117.67	121.00
12	B	271	G	C5'-C4'-O4'	-5.54	102.45	109.10
12	B	822	G	N3-C4-C5	-5.54	125.83	128.60
12	B	1166	G	N3-C4-N9	-5.54	122.67	126.00
12	B	1287	A	C2-N3-C4	5.54	113.37	110.60
12	B	1368	G	C5-C6-O6	-5.54	125.27	128.60
12	B	1560	G	N1-C6-O6	5.54	123.23	119.90
12	B	1869	G	C5'-C4'-O4'	5.54	115.75	109.10
12	B	1902	C	C1'-O4'-C4'	-5.54	105.47	109.90
12	B	1959	G	N9-C4-C5	-5.54	103.18	105.40
12	B	2469	A	C4'-C3'-C2'	-5.54	97.06	102.60
12	B	2592	G	C8-N9-C4	-5.54	104.18	106.40
12	B	2750	A	OP1-P-O3'	5.54	117.40	105.20
12	B	2776	A	C6-C5-N7	-5.54	128.42	132.30
5	4	37	LYS	N-CA-CB	5.54	120.58	110.60
10	9	245	ILE	N-CA-C	-5.54	96.04	111.00
11	A	79	G	C8-N9-C4	-5.54	104.18	106.40
12	B	1	G	C2-N3-C4	5.54	114.67	111.90
12	B	305	C	N3-C4-C5	-5.54	119.68	121.90
12	B	530	G	C2-N3-C4	5.54	114.67	111.90
12	B	887	U	C5-C4-O4	-5.54	122.58	125.90
12	B	930	G	N1-C2-N3	-5.54	120.58	123.90
12	B	936	A	C5-C6-N6	-5.54	119.27	123.70
12	B	1244	A	N1-C2-N3	-5.54	126.53	129.30
12	B	1517	G	OP1-P-OP2	-5.54	111.29	119.60
12	B	1538	G	C5-N7-C8	5.54	107.07	104.30
12	B	1551	A	N7-C8-N9	-5.54	111.03	113.80
12	B	1803	A	C4-C5-C6	5.54	119.77	117.00
12	B	1972	G	C8-N9-C4	-5.54	104.18	106.40
12	B	2338	C	N3-C4-C5	-5.54	119.68	121.90
12	B	2387	U	O4'-C1'-N1	5.54	112.63	108.20
12	B	2401	U	C4'-C3'-C2'	5.54	108.14	102.60
12	B	2439	A	C1'-O4'-C4'	5.54	114.33	109.90
12	B	2631	G	C5-C6-N1	-5.54	108.73	111.50
18	H	40	THR	CA-CB-CG2	-5.54	104.64	112.40
12	B	542	C	C5-C6-N1	-5.54	118.23	121.00
12	B	1579	A	N1-C2-N3	5.54	132.07	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2882	A	C6-N1-C2	5.54	121.92	118.60
11	A	68	C	C4'-C3'-C2'	-5.54	97.06	102.60
11	A	98	G	C2-N3-C4	5.54	114.67	111.90
12	B	4	U	N3-C4-C5	-5.54	111.28	114.60
12	B	68	G	C5-C6-N1	-5.54	108.73	111.50
12	B	109	C	C6-N1-C1'	-5.54	114.15	120.80
12	B	157	C	C5'-C4'-O4'	5.54	115.75	109.10
12	B	371	A	C6-C5-N7	-5.54	128.42	132.30
12	B	1312	U	N3-C2-O2	5.54	126.08	122.20
12	B	1334	G	C4-C5-N7	-5.54	108.58	110.80
12	B	1470	A	C6-N1-C2	5.54	121.92	118.60
12	B	1492	G	N1-C2-N3	-5.54	120.58	123.90
12	B	2120	G	C5-C6-O6	-5.54	125.28	128.60
8	7	59	ALA	CB-CA-C	-5.54	101.79	110.10
12	B	585	G	C4-C5-N7	5.54	113.02	110.80
12	B	1562	U	C6-N1-C2	-5.54	117.68	121.00
12	B	2811	G	C5-C6-O6	-5.54	125.28	128.60
20	J	37	ARG	NE-CZ-NH2	5.54	123.07	120.30
12	B	1247	A	C5-C6-N1	-5.54	114.93	117.70
12	B	1276	A	C5'-C4'-O4'	5.54	115.74	109.10
12	B	1717	A	O5'-C5'-C4'	-5.54	101.18	111.70
12	B	1776	G	C4-C5-N7	5.54	113.01	110.80
12	B	2451	A	N3-C4-N9	-5.54	122.97	127.40
12	B	2713	U	N3-C4-C5	-5.54	111.28	114.60
12	B	350	G	C3'-C2'-C1'	-5.53	97.07	101.50
12	B	478	A	C5-N7-C8	5.53	106.67	103.90
12	B	1235	G	N3-C4-C5	5.53	131.37	128.60
12	B	1595	C	C6-N1-C2	-5.53	118.09	120.30
12	B	2253	G	N3-C4-C5	-5.53	125.83	128.60
12	B	2368	C	C2-N3-C4	5.53	122.67	119.90
12	B	2780	G	N1-C2-N3	-5.53	120.58	123.90
11	A	7	G	C3'-C2'-C1'	5.53	105.93	101.50
12	B	881	G	C5'-C4'-O4'	5.53	115.74	109.10
12	B	1897	G	N1-C6-O6	5.53	123.22	119.90
11	A	43	C	N1-C2-O2	-5.53	115.58	118.90
12	B	750	A	P-O3'-C3'	5.53	126.34	119.70
12	B	937	C	C6-N1-C2	-5.53	118.09	120.30
12	B	1115	G	C4-C5-N7	-5.53	108.59	110.80
12	B	1143	A	C6-C5-N7	-5.53	128.43	132.30
12	B	1385	A	C4'-C3'-C2'	-5.53	97.07	102.60
12	B	1450	G	N1-C2-N2	5.53	121.18	116.20
12	B	1973	G	N3-C2-N2	5.53	123.77	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2047	C	N1-C2-O2	-5.53	115.58	118.90
12	B	2066	C	C5-C6-N1	-5.53	118.23	121.00
12	B	2168	G	N1-C2-N3	-5.53	120.58	123.90
12	B	2476	A	N1-C2-N3	-5.53	126.53	129.30
12	B	2715	C	N3-C4-N4	5.53	121.87	118.00
12	B	2847	U	N1-C2-N3	-5.53	111.58	114.90
12	B	468	G	C5-C6-N1	5.53	114.26	111.50
12	B	1759	A	N3-C4-C5	-5.53	122.93	126.80
12	B	2531	A	O4'-C1'-N9	5.53	112.62	108.20
12	B	79	C	O4'-C1'-N1	5.53	112.62	108.20
12	B	83	A	C5-N7-C8	5.53	106.66	103.90
12	B	106	C	P-O5'-C5'	5.53	129.74	120.90
12	B	216	A	P-O3'-C3'	-5.53	113.07	119.70
12	B	515	A	O4'-C1'-N9	5.53	112.62	108.20
12	B	516	C	N3-C4-C5	-5.53	119.69	121.90
12	B	539	G	C4-C5-C6	5.53	122.12	118.80
12	B	764	A	P-O5'-C5'	-5.53	112.06	120.90
12	B	1039	A	C5-C6-N1	-5.53	114.94	117.70
12	B	1190	G	P-O3'-C3'	-5.53	113.07	119.70
12	B	1205	A	C4-C5-C6	5.53	119.76	117.00
12	B	1249	U	O4'-C1'-N1	5.53	112.62	108.20
12	B	1826	G	C6-N1-C2	5.53	128.42	125.10
12	B	2001	C	O4'-C1'-N1	5.53	112.62	108.20
12	B	2056	G	C3'-C2'-C1'	-5.53	97.08	101.50
12	B	2185	U	C1'-O4'-C4'	-5.53	105.48	109.90
12	B	2380	C	C2-N1-C1'	5.53	124.88	118.80
12	B	2639	A	C5-C6-N6	-5.53	119.28	123.70
12	B	2656	U	C2-N3-C4	-5.53	123.68	127.00
12	B	2780	G	C4-C5-C6	5.53	122.12	118.80
12	B	2803	G	N1-C2-N2	-5.53	111.22	116.20
12	B	298	G	C6-C5-N7	-5.53	127.08	130.40
12	B	452	G	C5-C6-N1	-5.53	108.74	111.50
12	B	1034	G	N3-C4-N9	-5.53	122.68	126.00
12	B	1078	U	C6-N1-C2	5.53	124.32	121.00
12	B	1088	A	N7-C8-N9	5.53	116.56	113.80
12	B	1283	G	C4-C5-N7	-5.53	108.59	110.80
12	B	2732	G	N9-C4-C5	-5.53	103.19	105.40
13	C	238	ASN	N-CA-CB	5.53	120.54	110.60
10	9	74	ALA	N-CA-CB	5.52	117.83	110.10
12	B	1010	A	N9-C4-C5	5.52	108.01	105.80
12	B	1319	C	C5-C6-N1	-5.52	118.24	121.00
12	B	1944	U	C4'-C3'-C2'	5.52	108.12	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2363	G	C3'-C2'-C1'	5.52	105.92	101.50
12	B	2797	U	N1-C2-O2	-5.52	118.93	122.80
10	9	64	SER	N-CA-C	5.52	125.91	111.00
12	B	151	C	C4'-C3'-C2'	-5.52	97.08	102.60
12	B	325	G	C4-C5-C6	5.52	122.11	118.80
12	B	647	G	OP2-P-O3'	5.52	117.35	105.20
12	B	691	C	C4'-C3'-C2'	-5.52	97.08	102.60
12	B	757	G	C6-N1-C2	5.52	128.41	125.10
12	B	1380	G	N3-C4-C5	5.52	131.36	128.60
12	B	1579	A	N1-C6-N6	5.52	121.91	118.60
12	B	1733	G	C5-C6-O6	-5.52	125.29	128.60
12	B	1744	A	N7-C8-N9	5.52	116.56	113.80
12	B	1857	G	C2-N3-C4	-5.52	109.14	111.90
12	B	2261	C	C5-C6-N1	5.52	123.76	121.00
12	B	220	G	N9-C4-C5	5.52	107.61	105.40
12	B	422	A	N3-C4-N9	5.52	131.82	127.40
12	B	885	C	P-O3'-C3'	-5.52	113.08	119.70
12	B	973	A	O4'-C1'-N9	5.52	112.62	108.20
12	B	1291	C	C5-C4-N4	-5.52	116.34	120.20
12	B	1384	A	C6-C5-N7	-5.52	128.44	132.30
12	B	1974	C	P-O5'-C5'	-5.52	112.07	120.90
12	B	2864	G	C5-C6-O6	5.52	131.91	128.60
12	B	481	G	C8-N9-C4	5.52	108.61	106.40
12	B	624	C	N3-C4-N4	5.52	121.86	118.00
12	B	696	G	C4-C5-N7	-5.52	108.59	110.80
12	B	936	A	C8-N9-C4	-5.52	103.59	105.80
12	B	957	C	O4'-C1'-C2'	-5.52	100.28	105.80
12	B	1189	A	O4'-C1'-N9	5.52	112.61	108.20
12	B	1316	U	N1-C2-N3	-5.52	111.59	114.90
12	B	1509	A	C2-N3-C4	-5.52	107.84	110.60
12	B	1783	A	P-O3'-C3'	-5.52	113.08	119.70
12	B	2414	G	C8-N9-C4	5.52	108.61	106.40
12	B	2560	A	C3'-C2'-C1'	-5.52	97.08	101.50
12	B	2728	U	C5-C6-N1	5.52	125.46	122.70
12	B	49	A	N7-C8-N9	5.52	116.56	113.80
12	B	1042	G	N3-C4-N9	5.52	129.31	126.00
12	B	1501	G	C5-N7-C8	5.52	107.06	104.30
12	B	2143	C	C4-C5-C6	5.52	120.16	117.40
12	B	2286	G	C6-C5-N7	-5.52	127.09	130.40
12	B	2324	U	P-O3'-C3'	5.52	126.32	119.70
12	B	2717	C	O4'-C4'-C3'	-5.52	98.48	104.00
12	B	2732	G	C4-C5-C6	5.52	122.11	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	H	108	VAL	CA-CB-CG1	5.52	119.18	110.90
20	J	92	MET	CA-CB-CG	5.52	122.68	113.30
12	B	529	A	C3'-C2'-C1'	5.52	105.91	101.50
12	B	1423	G	C5-C6-O6	-5.52	125.29	128.60
12	B	2542	A	N9-C4-C5	5.52	108.01	105.80
11	A	36	C	C2-N3-C4	5.51	122.66	119.90
12	B	507	A	C4-C5-N7	5.51	113.46	110.70
12	B	526	A	C6-N1-C2	-5.51	115.29	118.60
12	B	754	U	C3'-C2'-C1'	5.51	105.91	101.50
12	B	897	C	O3'-P-O5'	5.51	114.48	104.00
12	B	1725	U	C6-N1-C2	-5.51	117.69	121.00
12	B	2002	G	C2-N3-C4	5.51	114.66	111.90
12	B	2092	U	P-O3'-C3'	-5.51	113.08	119.70
12	B	2271	G	C5'-C4'-O4'	-5.51	102.48	109.10
12	B	2375	G	O4'-C1'-N9	5.51	112.61	108.20
12	B	2507	C	P-O5'-C5'	5.51	129.72	120.90
12	B	2566	A	C5-N7-C8	5.51	106.66	103.90
12	B	2685	G	N7-C8-N9	-5.51	110.34	113.10
12	B	2765	A	C8-N9-C4	-5.51	103.59	105.80
12	B	473	G	C6-N1-C2	-5.51	121.79	125.10
12	B	1191	G	N7-C8-N9	-5.51	110.34	113.10
12	B	1299	G	C6-C5-N7	-5.51	127.09	130.40
12	B	37	C	N3-C4-N4	5.51	121.86	118.00
12	B	644	A	N3-C4-C5	-5.51	122.94	126.80
12	B	804	A	N1-C2-N3	5.51	132.06	129.30
12	B	819	A	C5'-C4'-O4'	-5.51	102.49	109.10
12	B	916	G	C4-C5-C6	5.51	122.11	118.80
12	B	933	A	C6-N1-C2	5.51	121.91	118.60
12	B	1112	G	C5-C6-O6	-5.51	125.29	128.60
12	B	1198	U	C3'-C2'-C1'	5.51	105.91	101.50
12	B	1418	G	N3-C4-N9	5.51	129.31	126.00
12	B	1907	G	O4'-C1'-N9	5.51	112.61	108.20
12	B	2092	U	N3-C4-O4	5.51	123.26	119.40
12	B	2109	U	C6-N1-C2	-5.51	117.69	121.00
12	B	2540	C	O4'-C1'-N1	5.51	112.61	108.20
10	9	210	VAL	CA-CB-CG2	5.51	119.16	110.90
10	9	316	ALA	N-CA-CB	5.51	117.81	110.10
11	A	81	G	N9-C4-C5	-5.51	103.20	105.40
12	B	101	A	C4'-C3'-C2'	-5.51	97.09	102.60
12	B	155	A	C8-N9-C4	5.51	108.00	105.80
12	B	319	G	C6-N1-C2	5.51	128.41	125.10
12	B	496	G	N3-C4-N9	-5.51	122.69	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	499	U	N3-C4-O4	5.51	123.26	119.40
12	B	772	C	O4'-C1'-N1	5.51	112.61	108.20
12	B	1228	G	C4-C5-C6	5.51	122.11	118.80
12	B	1512	C	N3-C4-C5	5.51	124.10	121.90
12	B	1666	G	P-O3'-C3'	-5.51	113.09	119.70
12	B	2132	U	C5-C4-O4	-5.51	122.59	125.90
12	B	449	A	O4'-C1'-N9	5.51	112.61	108.20
12	B	1749	A	C8-N9-C4	5.51	108.00	105.80
12	B	1790	C	N1-C2-N3	-5.51	115.34	119.20
12	B	1870	C	C2-N3-C4	5.51	122.65	119.90
12	B	2340	A	O5'-C5'-C4'	-5.51	101.23	111.70
12	B	2750	A	C5-N7-C8	5.51	106.65	103.90
29	S	105	VAL	CA-CB-CG2	-5.51	102.64	110.90
12	B	656	G	N3-C4-N9	5.51	129.30	126.00
12	B	808	G	N1-C2-N2	5.51	121.16	116.20
12	B	995	C	C5-C4-N4	-5.51	116.34	120.20
12	B	1528	A	C6-C5-N7	-5.51	128.44	132.30
12	B	1959	G	O5'-C5'-C4'	-5.51	101.24	111.70
12	B	1983	G	N1-C2-N3	-5.51	120.60	123.90
12	B	2033	A	N7-C8-N9	-5.51	111.05	113.80
12	B	2182	U	N3-C4-O4	5.51	123.25	119.40
12	B	2556	C	C1'-O4'-C4'	-5.51	105.49	109.90
26	P	106	ALA	N-CA-CB	5.51	117.81	110.10
11	A	46	A	C4'-C3'-C2'	-5.50	97.09	102.60
12	B	1431	A	C2-N3-C4	-5.50	107.85	110.60
12	B	1703	G	N3-C2-N2	5.50	123.75	119.90
12	B	1798	U	C5-C4-O4	-5.50	122.60	125.90
8	7	63	TYR	CB-CG-CD2	-5.50	117.70	121.00
10	9	63	LYS	N-CA-C	-5.50	96.14	111.00
12	B	10	A	N1-C6-N6	5.50	121.90	118.60
12	B	133	U	C4-C5-C6	5.50	123.00	119.70
12	B	177	G	P-O5'-C5'	-5.50	112.09	120.90
12	B	408	G	N7-C8-N9	-5.50	110.35	113.10
12	B	436	C	C5-C6-N1	5.50	123.75	121.00
12	B	525	U	OP1-P-OP2	-5.50	111.35	119.60
12	B	561	G	C6-C5-N7	-5.50	127.10	130.40
12	B	660	C	O4'-C1'-N1	5.50	112.60	108.20
12	B	810	U	N3-C4-O4	5.50	123.25	119.40
12	B	1092	C	C2-N3-C4	-5.50	117.15	119.90
12	B	1106	G	O4'-C1'-N9	5.50	112.60	108.20
12	B	1115	G	N1-C2-N3	-5.50	120.60	123.90
12	B	1180	U	N3-C4-O4	5.50	123.25	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2323	G	N1-C2-N3	-5.50	120.60	123.90
12	B	2465	C	C5-C6-N1	5.50	123.75	121.00
10	9	53	LEU	CB-CA-C	-5.50	99.75	110.20
12	B	126	A	C5'-C4'-O4'	5.50	115.70	109.10
12	B	908	C	N1-C2-O2	5.50	122.20	118.90
12	B	1404	C	N3-C2-O2	-5.50	118.05	121.90
12	B	1617	C	O4'-C1'-C2'	-5.50	100.30	105.80
12	B	1934	C	N3-C4-C5	-5.50	119.70	121.90
12	B	2168	G	C6-N1-C2	5.50	128.40	125.10
12	B	2335	A	C5-N7-C8	5.50	106.65	103.90
12	B	2341	G	C5-N7-C8	-5.50	101.55	104.30
12	B	2809	A	C4-C5-N7	-5.50	107.95	110.70
30	T	63	VAL	N-CA-C	-5.50	96.15	111.00
11	A	48	U	C5'-C4'-C3'	-5.50	107.20	116.00
12	B	548	G	C4-N9-C1'	5.50	133.65	126.50
12	B	1228	G	P-O5'-C5'	-5.50	112.10	120.90
12	B	2012	G	N3-C4-N9	-5.50	122.70	126.00
5	4	18	HIS	CA-CB-CG	5.50	122.95	113.60
12	B	732	C	N1-C2-O2	5.50	122.20	118.90
12	B	886	A	N9-C1'-C2'	-5.50	105.95	112.00
12	B	956	G	N9-C1'-C2'	-5.50	105.95	112.00
12	B	1023	U	N3-C4-O4	5.50	123.25	119.40
12	B	2014	A	C3'-C2'-C1'	5.50	105.90	101.50
12	B	2185	U	P-O5'-C5'	-5.50	112.10	120.90
12	B	2313	C	C5'-C4'-C3'	-5.50	107.20	116.00
12	B	2351	G	P-O3'-C3'	5.50	126.30	119.70
12	B	2537	U	N1-C2-O2	5.50	126.65	122.80
12	B	2787	C	O4'-C1'-N1	5.50	112.60	108.20
12	B	264	C	C4-C5-C6	5.50	120.15	117.40
12	B	312	G	N3-C4-C5	-5.50	125.85	128.60
12	B	338	G	N1-C2-N2	-5.50	111.25	116.20
12	B	1480	C	N1-C2-O2	-5.50	115.60	118.90
12	B	1801	A	C4-C5-C6	5.50	119.75	117.00
12	B	1931	U	P-O5'-C5'	-5.50	112.11	120.90
12	B	2218	G	C6-N1-C2	5.50	128.40	125.10
12	B	2392	A	C4-C5-C6	5.50	119.75	117.00
12	B	2772	C	N3-C2-O2	5.50	125.75	121.90
30	T	57	VAL	CA-CB-CG1	5.50	119.14	110.90
12	B	284	U	C4-C5-C6	-5.50	116.40	119.70
12	B	333	G	C4-N9-C1'	5.50	133.64	126.50
12	B	966	G	C5-C6-N1	-5.50	108.75	111.50
12	B	1818	U	N1-C2-O2	-5.50	118.95	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1959	G	C8-N9-C4	5.50	108.60	106.40
12	B	2083	G	C6-N1-C2	5.50	128.40	125.10
12	B	2428	G	C4-C5-N7	5.50	113.00	110.80
12	B	683	U	C4'-C3'-C2'	-5.49	97.11	102.60
12	B	1100	C	N3-C2-O2	5.49	125.75	121.90
12	B	1181	U	C5'-C4'-C3'	-5.49	107.21	116.00
12	B	1454	C	C2-N3-C4	5.49	122.65	119.90
12	B	1524	G	O4'-C1'-N9	5.49	112.59	108.20
12	B	1749	A	C3'-C2'-C1'	-5.49	97.11	101.50
12	B	1804	C	P-O3'-C3'	-5.49	113.11	119.70
12	B	1819	A	C5-N7-C8	5.49	106.65	103.90
12	B	1991	U	OP1-P-OP2	-5.49	111.36	119.60
12	B	2502	G	C5-C6-N1	-5.49	108.75	111.50
12	B	2611	C	N1-C1'-C2'	-5.49	105.96	112.00
10	9	28	TYR	CB-CG-CD2	-5.49	117.70	121.00
12	B	215	G	N7-C8-N9	5.49	115.85	113.10
12	B	271	G	C8-N9-C4	5.49	108.60	106.40
12	B	721	A	C8-N9-C1'	5.49	137.59	127.70
12	B	1332	G	C6-C5-N7	-5.49	127.11	130.40
12	B	1638	C	C6-N1-C1'	-5.49	114.21	120.80
12	B	2080	A	C6-N1-C2	5.49	121.89	118.60
12	B	2095	A	C6-N1-C2	-5.49	115.31	118.60
12	B	2307	G	N9-C4-C5	-5.49	103.20	105.40
12	B	2900	A	C6-C5-N7	-5.49	128.46	132.30
13	C	68	ARG	NE-CZ-NH1	-5.49	117.55	120.30
27	Q	73	ILE	CA-CB-CG1	5.49	121.44	111.00
12	B	30	G	N7-C8-N9	-5.49	110.36	113.10
12	B	711	G	C4-N9-C1'	-5.49	119.36	126.50
12	B	795	C	N3-C4-N4	5.49	121.84	118.00
12	B	1331	G	P-O3'-C3'	-5.49	113.11	119.70
12	B	1360	G	N1-C6-O6	5.49	123.19	119.90
12	B	1377	G	C8-N9-C4	-5.49	104.20	106.40
12	B	1448	G	C6-N1-C2	5.49	128.39	125.10
12	B	1615	C	C6-N1-C2	5.49	122.50	120.30
12	B	1670	C	C2-N3-C4	5.49	122.64	119.90
12	B	2122	U	N1-C2-O2	-5.49	118.96	122.80
12	B	2220	U	N3-C4-O4	5.49	123.24	119.40
12	B	2469	A	O5'-P-OP2	-5.49	100.76	105.70
29	S	85	ILE	CB-CA-C	-5.49	100.62	111.60
12	B	640	C	C5'-C4'-O4'	5.49	115.69	109.10
12	B	1658	C	C5-C6-N1	5.49	123.74	121.00
12	B	1871	A	C5-C6-N1	-5.49	114.96	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1912	A	C4'-C3'-C2'	-5.49	97.11	102.60
12	B	2134	A	N3-C4-N9	5.49	131.79	127.40
12	B	2159	G	C5-C6-O6	-5.49	125.31	128.60
12	B	2337	G	C8-N9-C1'	-5.49	119.86	127.00
12	B	2405	G	C6-C5-N7	-5.49	127.11	130.40
12	B	2735	G	P-O3'-C3'	-5.49	113.11	119.70
12	B	2769	U	C2-N3-C4	5.49	130.29	127.00
12	B	2804	U	C5-C6-N1	5.49	125.44	122.70
12	B	2858	C	N3-C4-C5	-5.49	119.70	121.90
12	B	2860	A	C4-C5-C6	5.49	119.74	117.00
11	A	83	G	N9-C1'-C2'	-5.49	105.96	112.00
12	B	1020	A	C4-C5-N7	-5.49	107.96	110.70
12	B	1680	U	C5-C4-O4	-5.49	122.61	125.90
12	B	2070	A	N9-C1'-C2'	-5.49	105.96	112.00
30	T	15	HIS	N-CA-CB	5.49	120.48	110.60
6	5	145	VAL	CA-CB-CG2	-5.49	102.67	110.90
12	B	61	C	OP1-P-OP2	-5.49	111.37	119.60
12	B	814	C	O4'-C1'-N1	5.49	112.59	108.20
12	B	874	G	N7-C8-N9	-5.49	110.36	113.10
12	B	1258	U	C5-C6-N1	5.49	125.44	122.70
12	B	1987	A	N7-C8-N9	-5.49	111.06	113.80
12	B	2120	G	N3-C2-N2	5.49	123.74	119.90
12	B	2669	G	O4'-C1'-N9	5.49	112.59	108.20
12	B	2680	U	C6-N1-C2	-5.49	117.71	121.00
21	K	28	SER	N-CA-CB	5.49	118.73	110.50
12	B	789	A	P-O3'-C3'	5.48	126.28	119.70
12	B	1249	U	C4-C5-C6	5.48	122.99	119.70
12	B	2204	G	N1-C2-N3	-5.48	120.61	123.90
12	B	2422	C	O4'-C1'-C2'	5.48	112.53	107.60
12	B	2826	A	C4-C5-C6	5.48	119.74	117.00
12	B	423	A	O5'-P-OP1	-5.48	100.77	105.70
12	B	659	G	N1-C2-N3	-5.48	120.61	123.90
12	B	998	C	N3-C2-O2	5.48	125.74	121.90
12	B	1108	U	OP1-P-OP2	-5.48	111.38	119.60
12	B	1481	U	C3'-C2'-C1'	-5.48	97.11	101.50
12	B	1694	C	OP1-P-O3'	5.48	117.26	105.20
12	B	1804	C	C5'-C4'-C3'	5.48	124.77	116.00
12	B	1918	A	N7-C8-N9	5.48	116.54	113.80
12	B	2042	A	C6-N1-C2	-5.48	115.31	118.60
12	B	2120	G	C8-N9-C1'	5.48	134.13	127.00
12	B	2200	C	N3-C2-O2	5.48	125.74	121.90
12	B	2455	G	N9-C4-C5	5.48	107.59	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2648	G	C8-N9-C4	-5.48	104.21	106.40
12	B	2751	G	C8-N9-C4	-5.48	104.21	106.40
12	B	2816	G	OP1-P-OP2	-5.48	111.38	119.60
12	B	2866	U	C6-N1-C2	-5.48	117.71	121.00
13	C	233	GLY	N-CA-C	-5.48	99.39	113.10
12	B	140	C	C5-C6-N1	-5.48	118.26	121.00
12	B	545	U	OP1-P-O3'	5.48	117.26	105.20
12	B	601	C	O4'-C1'-N1	5.48	112.58	108.20
12	B	737	C	N1-C2-O2	5.48	122.19	118.90
12	B	1242	U	N1-C2-N3	-5.48	111.61	114.90
12	B	1639	C	C2-N3-C4	5.48	122.64	119.90
12	B	1652	A	C5-C6-N6	5.48	128.08	123.70
12	B	2458	G	C8-N9-C4	5.48	108.59	106.40
12	B	2694	G	O4'-C1'-N9	5.48	112.58	108.20
3	2	22	THR	CA-CB-CG2	-5.48	104.73	112.40
11	A	11	C	N3-C4-N4	5.48	121.83	118.00
11	A	52	A	P-O3'-C3'	5.48	126.28	119.70
12	B	603	A	C5-C6-N1	-5.48	114.96	117.70
12	B	1465	G	N3-C4-N9	5.48	129.29	126.00
12	B	2604	U	C2-N3-C4	-5.48	123.71	127.00
11	A	102	G	N1-C6-O6	5.48	123.19	119.90
12	B	89	A	C8-N9-C4	-5.48	103.61	105.80
12	B	640	C	C3'-C2'-C1'	5.48	105.88	101.50
12	B	783	A	N1-C2-N3	5.48	132.04	129.30
12	B	925	A	OP1-P-OP2	-5.48	111.38	119.60
12	B	1640	A	OP2-P-O3'	5.48	117.25	105.20
12	B	1718	G	C5-C6-O6	-5.48	125.31	128.60
12	B	1732	C	N1-C2-O2	-5.48	115.61	118.90
12	B	2598	A	C6-N1-C2	5.48	121.89	118.60
12	B	72	U	O4'-C1'-N1	5.48	112.58	108.20
12	B	80	G	N1-C2-N3	-5.48	120.61	123.90
12	B	241	A	N3-C4-N9	-5.48	123.02	127.40
12	B	266	G	N9-C4-C5	-5.48	103.21	105.40
12	B	597	G	P-O3'-C3'	5.48	126.27	119.70
12	B	1120	G	C4-C5-C6	5.48	122.08	118.80
12	B	2233	U	N1-C2-N3	5.48	118.19	114.90
12	B	2655	G	C5-N7-C8	-5.48	101.56	104.30
12	B	2844	G	C8-N9-C4	-5.48	104.21	106.40
23	M	103	TYR	CG-CD1-CE1	-5.48	116.92	121.30
11	A	28	C	N1-C2-O2	5.47	122.18	118.90
12	B	437	U	O4'-C1'-N1	5.47	112.58	108.20
12	B	575	A	C5-N7-C8	5.47	106.64	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1043	C	C4'-C3'-C2'	-5.47	97.13	102.60
12	B	1712	U	N3-C4-O4	5.47	123.23	119.40
12	B	2688	G	C4-C5-C6	5.47	122.08	118.80
12	B	172	A	N1-C2-N3	5.47	132.04	129.30
12	B	914	G	C2-N3-C4	5.47	114.64	111.90
12	B	1044	C	N3-C4-N4	5.47	121.83	118.00
12	B	1086	A	O3'-P-O5'	-5.47	93.60	104.00
12	B	1346	G	N9-C4-C5	-5.47	103.21	105.40
12	B	1368	G	N1-C6-O6	5.47	123.18	119.90
12	B	1611	C	C5-C4-N4	-5.47	116.37	120.20
12	B	1808	A	N7-C8-N9	-5.47	111.06	113.80
12	B	2351	G	C5-C6-N1	-5.47	108.76	111.50
13	C	62	ARG	NE-CZ-NH1	-5.47	117.56	120.30
12	B	232	G	C5-C6-N1	-5.47	108.77	111.50
12	B	370	G	C4-C5-N7	-5.47	108.61	110.80
12	B	1950	G	O4'-C1'-N9	5.47	112.58	108.20
12	B	2132	U	C1'-O4'-C4'	-5.47	105.52	109.90
15	E	201	ALA	CB-CA-C	-5.47	101.89	110.10
11	A	14	U	N3-C2-O2	-5.47	118.37	122.20
12	B	35	G	N9-C4-C5	5.47	107.59	105.40
12	B	1142	A	N1-C2-N3	5.47	132.03	129.30
12	B	1796	U	N1-C2-O2	-5.47	118.97	122.80
12	B	1802	A	N9-C4-C5	5.47	107.99	105.80
12	B	1877	A	O4'-C1'-N9	5.47	112.58	108.20
12	B	2119	A	C5-C6-N1	-5.47	114.97	117.70
12	B	2610	C	O4'-C1'-N1	5.47	112.58	108.20
12	B	2802	G	C5-C6-O6	-5.47	125.32	128.60
32	W	57	TYR	CB-CA-C	-5.47	99.46	110.40
12	B	1041	G	N3-C4-N9	5.47	129.28	126.00
12	B	1381	G	C5-C6-O6	-5.47	125.32	128.60
12	B	1609	A	O4'-C1'-N9	5.47	112.58	108.20
12	B	1652	A	N1-C6-N6	-5.47	115.32	118.60
12	B	2355	G	N7-C8-N9	5.47	115.83	113.10
12	B	2510	C	N3-C4-C5	-5.47	119.71	121.90
12	B	2644	G	C8-N9-C4	-5.47	104.21	106.40
11	A	33	G	N3-C4-N9	5.47	129.28	126.00
12	B	923	G	N9-C4-C5	-5.47	103.21	105.40
12	B	1274	A	N9-C4-C5	5.47	107.99	105.80
12	B	1353	A	C5-C6-N1	-5.47	114.97	117.70
12	B	1645	G	N3-C4-C5	5.47	131.33	128.60
12	B	1743	G	N1-C6-O6	5.47	123.18	119.90
12	B	1788	C	C5-C6-N1	5.47	123.73	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2279	G	N3-C4-N9	5.47	129.28	126.00
12	B	2455	G	N3-C2-N2	5.47	123.73	119.90
12	B	2860	A	N1-C2-N3	5.47	132.03	129.30
15	E	67	ARG	NE-CZ-NH2	5.47	123.03	120.30
15	E	135	ALA	CB-CA-C	-5.47	101.90	110.10
11	A	33	G	O4'-C1'-N9	5.46	112.57	108.20
12	B	220	G	C8-N9-C4	-5.46	104.21	106.40
12	B	2402	U	N3-C2-O2	-5.46	118.38	122.20
12	B	2538	C	P-O3'-C3'	-5.46	113.14	119.70
12	B	2736	A	O4'-C1'-N9	5.46	112.57	108.20
12	B	2756	U	N3-C2-O2	-5.46	118.38	122.20
13	C	247	TRP	CE2-CD2-CE3	5.46	125.26	118.70
12	B	249	C	C2-N1-C1'	5.46	124.81	118.80
12	B	360	U	N1-C2-O2	5.46	126.62	122.80
12	B	2201	G	C8-N9-C4	-5.46	104.22	106.40
12	B	2590	A	N3-C4-C5	-5.46	122.98	126.80
12	B	56	A	C1'-O4'-C4'	5.46	114.27	109.90
12	B	102	U	N3-C4-C5	-5.46	111.32	114.60
12	B	642	U	N1-C2-O2	-5.46	118.98	122.80
12	B	1266	G	C5-C6-N1	-5.46	108.77	111.50
12	B	1448	G	O4'-C1'-N9	5.46	112.57	108.20
12	B	1585	C	N3-C4-N4	5.46	121.82	118.00
12	B	2331	G	N7-C8-N9	-5.46	110.37	113.10
12	B	2514	U	O4'-C1'-N1	5.46	112.57	108.20
12	B	2867	G	N1-C2-N2	-5.46	111.28	116.20
18	H	123	ARG	NE-CZ-NH2	5.46	123.03	120.30
12	B	468	G	C4-C5-N7	5.46	112.98	110.80
12	B	611	C	C3'-C2'-C1'	5.46	105.87	101.50
12	B	1767	G	C4-C5-N7	-5.46	108.62	110.80
12	B	2736	A	C8-N9-C4	-5.46	103.62	105.80
11	A	33	G	C3'-C2'-C1'	-5.46	97.13	101.50
12	B	2069	G	N1-C6-O6	5.46	123.17	119.90
12	B	2585	U	O4'-C4'-C3'	-5.46	98.54	104.00
12	B	2703	C	C2-N1-C1'	5.46	124.80	118.80
18	H	46	PHE	CB-CG-CD2	-5.46	116.98	120.80
11	A	53	A	N1-C6-N6	5.46	121.87	118.60
12	B	362	A	C5-C6-N1	-5.46	114.97	117.70
12	B	593	U	N3-C2-O2	-5.46	118.38	122.20
12	B	710	U	O5'-C5'-C4'	-5.46	101.33	111.70
12	B	1690	A	C5-N7-C8	5.46	106.63	103.90
12	B	1738	G	O4'-C1'-N9	5.46	112.56	108.20
12	B	2319	G	O4'-C4'-C3'	-5.46	98.54	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2466	C	C1'-O4'-C4'	-5.46	105.53	109.90
12	B	2585	U	N3-C4-C5	-5.46	111.33	114.60
12	B	2759	G	C6-N1-C2	-5.46	121.83	125.10
11	A	113	C	N1-C2-N3	-5.46	115.38	119.20
12	B	524	G	OP2-P-O3'	5.46	117.20	105.20
12	B	674	G	O4'-C1'-C2'	5.46	112.51	107.60
12	B	969	G	N9-C4-C5	-5.46	103.22	105.40
12	B	2212	A	O4'-C1'-C2'	-5.46	100.34	105.80
12	B	2577	A	C5-C6-N6	-5.46	119.34	123.70
11	A	67	G	C8-N9-C4	-5.45	104.22	106.40
12	B	151	C	C1'-O4'-C4'	5.45	114.26	109.90
12	B	263	G	C6-N1-C2	-5.45	121.83	125.10
12	B	701	G	N3-C2-N2	5.45	123.72	119.90
12	B	904	G	C8-N9-C1'	5.45	134.09	127.00
12	B	1126	A	C5'-C4'-O4'	5.45	115.64	109.10
12	B	1197	G	N1-C2-N3	-5.45	120.63	123.90
12	B	1499	C	N3-C2-O2	-5.45	118.08	121.90
12	B	1702	G	C2-N3-C4	5.45	114.63	111.90
12	B	2526	G	C8-N9-C4	-5.45	104.22	106.40
12	B	2535	G	O4'-C1'-N9	5.45	112.56	108.20
12	B	2584	U	N3-C2-O2	-5.45	118.38	122.20
28	R	35	PHE	CB-CG-CD2	-5.45	116.98	120.80
11	A	56	G	C4-C5-C6	5.45	122.07	118.80
12	B	442	G	N3-C4-N9	-5.45	122.73	126.00
12	B	790	U	C2-N3-C4	-5.45	123.73	127.00
12	B	884	U	C4'-C3'-C2'	-5.45	97.15	102.60
12	B	1572	A	C5-C6-N1	-5.45	114.97	117.70
12	B	2572	A	P-O3'-C3'	5.45	126.24	119.70
12	B	2818	U	O4'-C1'-N1	5.45	112.56	108.20
11	A	113	C	C5'-C4'-C3'	5.45	124.72	116.00
12	B	189	G	C5-C6-O6	-5.45	125.33	128.60
12	B	386	G	N1-C2-N2	5.45	121.11	116.20
12	B	748	G	C5'-C4'-C3'	-5.45	107.28	116.00
12	B	842	U	C2-N3-C4	5.45	130.27	127.00
12	B	950	G	N7-C8-N9	5.45	115.83	113.10
12	B	1226	A	C4-C5-N7	5.45	113.42	110.70
12	B	1304	A	N9-C4-C5	5.45	107.98	105.80
12	B	1312	U	N1-C2-N3	-5.45	111.63	114.90
12	B	1379	U	N1-C2-N3	5.45	118.17	114.90
12	B	1776	G	P-O3'-C3'	5.45	126.24	119.70
12	B	1839	G	C5-C6-O6	-5.45	125.33	128.60
12	B	1888	G	N7-C8-N9	-5.45	110.38	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2071	A	C5-N7-C8	5.45	106.63	103.90
12	B	2101	A	C6-N1-C2	5.45	121.87	118.60
12	B	2135	A	N1-C2-N3	5.45	132.03	129.30
12	B	2165	C	C5-C4-N4	-5.45	116.39	120.20
13	C	181	ARG	NE-CZ-NH1	5.45	123.03	120.30
15	E	15	SER	N-CA-CB	5.45	118.67	110.50
22	L	103	ILE	CB-CG1-CD1	5.45	129.16	113.90
27	Q	54	ARG	NE-CZ-NH1	-5.45	117.57	120.30
11	A	116	G	C4'-C3'-C2'	-5.45	97.15	102.60
12	B	9	G	N9-C4-C5	5.45	107.58	105.40
12	B	168	G	N1-C2-N3	-5.45	120.63	123.90
12	B	290	U	C5-C4-O4	-5.45	122.63	125.90
12	B	433	C	C5'-C4'-O4'	5.45	115.64	109.10
12	B	620	G	C4-N9-C1'	5.45	133.58	126.50
12	B	703	U	N3-C2-O2	5.45	126.01	122.20
12	B	1286	A	C6-C5-N7	-5.45	128.49	132.30
12	B	1717	A	C5-C6-N1	-5.45	114.98	117.70
12	B	2059	A	O4'-C1'-N9	5.45	112.56	108.20
12	B	2084	C	N3-C4-C5	5.45	124.08	121.90
12	B	2143	C	C5-C4-N4	5.45	124.01	120.20
12	B	2427	C	C4-C5-C6	5.45	120.12	117.40
12	B	2530	A	O4'-C1'-N9	5.45	112.56	108.20
12	B	2820	A	N3-C4-C5	-5.45	122.99	126.80
17	G	48	THR	CA-CB-CG2	-5.45	104.77	112.40
12	B	358	U	N3-C4-O4	5.45	123.21	119.40
12	B	362	A	O4'-C1'-N9	5.45	112.56	108.20
12	B	1876	A	N1-C6-N6	5.45	121.87	118.60
12	B	2305	U	N3-C4-O4	5.45	123.21	119.40
10	9	129	ARG	NH1-CZ-NH2	-5.45	113.41	119.40
12	B	460	A	C5-C6-N1	-5.45	114.98	117.70
12	B	576	U	O4'-C4'-C3'	-5.45	98.55	104.00
12	B	804	A	C4-C5-C6	5.45	119.72	117.00
12	B	1010	A	C4-C5-N7	-5.45	107.98	110.70
12	B	1232	G	C5-N7-C8	5.45	107.02	104.30
12	B	1688	U	C5'-C4'-C3'	-5.45	107.29	116.00
12	B	2135	A	C1'-O4'-C4'	-5.45	105.54	109.90
12	B	2147	A	N7-C8-N9	5.45	116.52	113.80
12	B	2324	U	C5'-C4'-C3'	-5.45	107.29	116.00
12	B	2625	G	N1-C6-O6	5.45	123.17	119.90
12	B	2822	G	P-O5'-C5'	5.45	129.61	120.90
12	B	2823	A	O4'-C1'-N9	5.45	112.56	108.20
12	B	2843	G	N7-C8-N9	-5.45	110.38	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	346	A	P-O3'-C3'	5.44	126.23	119.70
12	B	742	A	P-O5'-C5'	5.44	129.61	120.90
12	B	1688	U	C5-C4-O4	-5.44	122.63	125.90
12	B	2133	G	N3-C2-N2	5.44	123.71	119.90
12	B	2277	G	N3-C4-C5	-5.44	125.88	128.60
12	B	2318	G	C5'-C4'-O4'	5.44	115.63	109.10
12	B	2419	U	C1'-O4'-C4'	-5.44	105.54	109.90
12	B	22	C	N1-C1'-C2'	-5.44	106.01	112.00
12	B	299	A	C4-C5-C6	5.44	119.72	117.00
12	B	335	C	N1-C2-O2	-5.44	115.64	118.90
12	B	765	C	O5'-P-OP2	-5.44	100.80	105.70
12	B	924	G	O5'-C5'-C4'	-5.44	101.36	111.70
12	B	1093	G	C6-C5-N7	-5.44	127.13	130.40
12	B	1148	U	P-O3'-C3'	-5.44	113.17	119.70
12	B	1354	A	C3'-C2'-C1'	-5.44	97.15	101.50
12	B	1367	A	C5-C6-N1	-5.44	114.98	117.70
12	B	1533	C	C1'-O4'-C4'	5.44	114.25	109.90
12	B	1893	C	C2-N3-C4	5.44	122.62	119.90
12	B	2196	C	C6-N1-C2	-5.44	118.12	120.30
12	B	2232	C	C4-C5-C6	5.44	120.12	117.40
12	B	2593	U	N1-C2-O2	-5.44	118.99	122.80
12	B	2818	U	C4'-C3'-C2'	-5.44	97.16	102.60
12	B	2831	G	C6-N1-C2	5.44	128.37	125.10
6	5	140	PRO	N-CD-CG	5.44	111.36	103.20
12	B	551	G	C4-C5-N7	5.44	112.98	110.80
12	B	786	C	O4'-C1'-N1	5.44	112.55	108.20
12	B	2158	A	O3'-P-O5'	-5.44	93.67	104.00
12	B	2307	G	O4'-C1'-N9	5.44	112.55	108.20
12	B	2603	G	OP1-P-OP2	-5.44	111.44	119.60
21	K	23	LYS	N-CA-CB	5.44	120.39	110.60
8	7	29	ARG	NE-CZ-NH2	5.44	123.02	120.30
12	B	401	A	C2-N3-C4	5.44	113.32	110.60
12	B	10	A	N1-C2-N3	-5.44	126.58	129.30
12	B	134	G	C3'-C2'-C1'	-5.44	97.15	101.50
12	B	989	G	C1'-O4'-C4'	5.44	114.25	109.90
12	B	1180	U	N1-C1'-C2'	-5.44	106.02	112.00
12	B	1271	G	N3-C2-N2	5.44	123.71	119.90
12	B	1477	A	N9-C1'-C2'	-5.44	106.02	112.00
12	B	1853	A	C8-N9-C4	-5.44	103.62	105.80
12	B	2440	C	C5-C6-N1	5.44	123.72	121.00
12	B	2633	G	C4'-C3'-C2'	-5.44	97.16	102.60
12	B	2657	A	C8-N9-C4	5.44	107.97	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2858	C	C4-C5-C6	-5.44	114.68	117.40
20	J	119	PHE	CZ-CE2-CD2	-5.44	113.58	120.10
12	B	422	A	C5'-C4'-O4'	5.44	115.62	109.10
12	B	593	U	C5-C6-N1	5.44	125.42	122.70
12	B	1250	G	C3'-C2'-C1'	5.44	105.85	101.50
12	B	1269	A	C6-N1-C2	5.44	121.86	118.60
12	B	1333	G	C4-C5-N7	5.44	112.97	110.80
12	B	1450	G	C5-N7-C8	5.44	107.02	104.30
12	B	1859	U	O4'-C1'-N1	5.44	112.55	108.20
12	B	1877	A	C5-C6-N6	-5.44	119.35	123.70
12	B	2487	G	C4-C5-N7	5.44	112.97	110.80
12	B	2850	A	C4'-C3'-C2'	-5.44	97.16	102.60
27	Q	48	ASP	CB-CG-OD1	5.44	123.19	118.30
12	B	656	G	N7-C8-N9	-5.43	110.38	113.10
12	B	890	C	C2-N3-C4	5.43	122.62	119.90
12	B	1092	C	C4-C5-C6	5.43	120.12	117.40
12	B	1516	G	N1-C2-N3	-5.43	120.64	123.90
12	B	1788	C	N1-C2-N3	5.43	123.00	119.20
12	B	1938	A	C5-N7-C8	5.43	106.62	103.90
12	B	2557	G	P-O5'-C5'	-5.43	112.20	120.90
12	B	2655	G	N1-C6-O6	5.43	123.16	119.90
12	B	2844	G	N3-C2-N2	-5.43	116.10	119.90
17	G	144	ALA	N-CA-CB	5.43	117.71	110.10
12	B	12	U	C5-C6-N1	5.43	125.42	122.70
12	B	229	C	C5-C6-N1	5.43	123.72	121.00
12	B	746	U	C4-C5-C6	5.43	122.96	119.70
12	B	883	G	N1-C6-O6	5.43	123.16	119.90
12	B	939	G	C3'-C2'-C1'	-5.43	97.15	101.50
12	B	1313	U	C2-N1-C1'	5.43	124.22	117.70
12	B	1517	G	N3-C4-C5	-5.43	125.88	128.60
12	B	2172	U	C2-N3-C4	-5.43	123.74	127.00
12	B	2488	G	P-O5'-C5'	5.43	129.59	120.90
12	B	2523	G	P-O5'-C5'	5.43	129.59	120.90
12	B	2530	A	C4-C5-C6	5.43	119.72	117.00
12	B	2816	G	C6-C5-N7	-5.43	127.14	130.40
12	B	797	G	N7-C8-N9	-5.43	110.39	113.10
12	B	2347	C	N3-C4-N4	5.43	121.80	118.00
12	B	2351	G	N7-C8-N9	-5.43	110.38	113.10
12	B	2445	G	N3-C2-N2	5.43	123.70	119.90
12	B	789	A	C5'-C4'-C3'	-5.43	107.31	116.00
12	B	844	A	O4'-C1'-N9	5.43	112.54	108.20
12	B	903	C	N1-C2-O2	5.43	122.16	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	981	A	C8-N9-C4	-5.43	103.63	105.80
12	B	1063	G	N1-C2-N3	-5.43	120.64	123.90
12	B	1142	A	C4'-C3'-C2'	5.43	108.03	102.60
12	B	1579	A	C4-C5-N7	-5.43	107.98	110.70
12	B	1712	U	C4-C5-C6	5.43	122.96	119.70
12	B	2105	U	N1-C2-N3	5.43	118.16	114.90
12	B	2198	A	N7-C8-N9	5.43	116.51	113.80
12	B	2785	C	C6-N1-C2	-5.43	118.13	120.30
29	S	96	ILE	N-CA-C	-5.43	96.34	111.00
12	B	631	A	N3-C4-C5	-5.43	123.00	126.80
12	B	1243	C	N3-C4-C5	5.43	124.07	121.90
12	B	1708	C	O4'-C1'-N1	5.43	112.54	108.20
12	B	1766	G	C5-N7-C8	5.43	107.01	104.30
12	B	2355	G	C3'-C2'-C1'	-5.43	97.16	101.50
12	B	2663	G	O4'-C1'-N9	5.43	112.54	108.20
12	B	215	G	N9-C4-C5	5.43	107.57	105.40
12	B	449	A	N3-C4-C5	-5.43	123.00	126.80
12	B	601	C	N1-C2-O2	5.43	122.16	118.90
12	B	1105	U	OP1-P-OP2	-5.43	111.46	119.60
12	B	1483	G	N1-C6-O6	5.43	123.16	119.90
12	B	1803	A	C5-C6-N6	-5.43	119.36	123.70
12	B	1828	G	C5-C6-O6	-5.43	125.34	128.60
12	B	1899	A	C4-C5-C6	5.43	119.71	117.00
12	B	2809	A	N1-C2-N3	5.43	132.01	129.30
12	B	2861	U	C5-C4-O4	5.43	129.16	125.90
12	B	108	G	N3-C2-N2	5.42	123.70	119.90
12	B	220	G	C4-C5-N7	-5.42	108.63	110.80
12	B	685	A	P-O5'-C5'	-5.42	112.22	120.90
12	B	714	U	C4'-C3'-C2'	-5.42	97.17	102.60
12	B	1022	G	C4'-C3'-C2'	-5.42	97.18	102.60
12	B	1152	C	N3-C4-N4	5.42	121.80	118.00
12	B	1234	U	C5-C6-N1	-5.42	119.99	122.70
12	B	1352	U	O4'-C1'-N1	5.42	112.54	108.20
12	B	1581	G	C5'-C4'-O4'	5.42	115.61	109.10
12	B	1609	A	C6-C5-N7	-5.42	128.50	132.30
12	B	1940	U	C5-C6-N1	-5.42	119.99	122.70
12	B	2104	C	N1-C2-O2	-5.42	115.65	118.90
12	B	2169	A	O4'-C1'-N9	5.42	112.54	108.20
12	B	2187	U	C1'-O4'-C4'	5.42	114.24	109.90
12	B	2232	C	O4'-C1'-N1	5.42	112.54	108.20
12	B	2449	U	C2-N1-C1'	5.42	124.21	117.70
21	K	9	ASN	CA-CB-CG	-5.42	101.47	113.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	544	C	C2-N3-C4	5.42	122.61	119.90
12	B	764	A	C3'-C2'-C1'	5.42	105.84	101.50
12	B	1121	C	N3-C4-C5	-5.42	119.73	121.90
12	B	2212	A	C5'-C4'-O4'	5.42	115.61	109.10
12	B	2733	A	O4'-C1'-N9	5.42	112.54	108.20
20	J	53	TYR	CB-CG-CD1	-5.42	117.75	121.00
8	7	45	PRO	O-C-N	5.42	131.38	122.70
12	B	193	U	N3-C4-O4	-5.42	115.61	119.40
12	B	367	G	N3-C2-N2	5.42	123.69	119.90
12	B	1833	C	C5-C6-N1	5.42	123.71	121.00
12	B	2139	U	O4'-C1'-N1	5.42	112.54	108.20
12	B	2542	A	N1-C2-N3	5.42	132.01	129.30
12	B	2592	G	N1-C2-N3	-5.42	120.65	123.90
12	B	2801	G	OP1-P-OP2	-5.42	111.47	119.60
10	9	237	ARG	N-CA-C	5.42	125.64	111.00
12	B	1149	G	C8-N9-C1'	5.42	134.05	127.00
12	B	2116	G	O4'-C1'-N9	5.42	112.54	108.20
10	9	61	PHE	N-CA-CB	5.42	120.35	110.60
12	B	321	U	C5-C6-N1	5.42	125.41	122.70
12	B	690	G	O4'-C1'-N9	5.42	112.53	108.20
12	B	738	G	C6-C5-N7	-5.42	127.15	130.40
12	B	905	A	C5-C6-N1	-5.42	114.99	117.70
12	B	1259	G	N7-C8-N9	5.42	115.81	113.10
12	B	1275	A	C5'-C4'-O4'	5.42	115.60	109.10
12	B	1456	G	N1-C6-O6	5.42	123.15	119.90
12	B	1536	C	C2-N3-C4	5.42	122.61	119.90
12	B	1892	C	C2-N3-C4	-5.42	117.19	119.90
12	B	1972	G	C6-N1-C2	-5.42	121.85	125.10
12	B	2684	U	C1'-O4'-C4'	-5.42	105.56	109.90
22	L	80	SER	N-CA-CB	5.42	118.63	110.50
30	T	90	GLY	N-CA-C	-5.42	99.56	113.10
12	B	14	A	N7-C8-N9	5.42	116.51	113.80
12	B	110	G	N7-C8-N9	-5.42	110.39	113.10
12	B	217	A	P-O5'-C5'	5.42	129.57	120.90
12	B	456	C	O4'-C1'-N1	5.42	112.53	108.20
12	B	648	G	C4-N9-C1'	-5.42	119.46	126.50
12	B	658	U	P-O5'-C5'	5.42	129.57	120.90
12	B	1138	G	N9-C4-C5	-5.42	103.23	105.40
12	B	1476	U	C5'-C4'-O4'	5.42	115.60	109.10
12	B	1522	A	N7-C8-N9	5.42	116.51	113.80
12	B	1745	A	C5-C6-N1	-5.42	114.99	117.70
12	B	2034	U	C5-C6-N1	5.42	125.41	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2188	U	O5'-P-OP1	-5.42	100.82	105.70
12	B	2337	G	N3-C4-N9	5.42	129.25	126.00
12	B	2821	A	C5-N7-C8	5.42	106.61	103.90
12	B	244	A	N3-C4-C5	-5.42	123.01	126.80
12	B	763	G	C4'-C3'-C2'	5.42	108.02	102.60
12	B	828	U	C5'-C4'-O4'	5.42	115.60	109.10
12	B	1103	A	N1-C2-N3	-5.42	126.59	129.30
12	B	1650	A	O4'-C4'-C3'	-5.42	98.58	104.00
10	9	231	PHE	CD1-CG-CD2	-5.41	111.26	118.30
12	B	177	G	C5-N7-C8	5.41	107.01	104.30
12	B	345	A	N1-C2-N3	-5.41	126.59	129.30
12	B	1025	G	C6-N1-C2	-5.41	121.85	125.10
12	B	1487	U	P-O3'-C3'	-5.41	113.20	119.70
12	B	1583	A	C6-C5-N7	-5.41	128.51	132.30
12	B	1626	A	C6-C5-N7	-5.41	128.51	132.30
12	B	1871	A	C5-N7-C8	5.41	106.61	103.90
12	B	2225	A	C5'-C4'-O4'	5.41	115.59	109.10
12	B	563	A	P-O3'-C3'	5.41	126.19	119.70
12	B	899	A	C5-C6-N6	-5.41	119.37	123.70
12	B	2363	G	C5-N7-C8	-5.41	101.59	104.30
12	B	2659	G	C5-C6-O6	-5.41	125.35	128.60
12	B	2849	U	C5-C4-O4	-5.41	122.65	125.90
18	H	39	ALA	N-CA-C	-5.41	96.39	111.00
11	A	29	A	C8-N9-C4	5.41	107.96	105.80
12	B	22	C	C2-N3-C4	-5.41	117.19	119.90
12	B	226	A	C5-N7-C8	5.41	106.61	103.90
12	B	287	G	C4-C5-C6	5.41	122.05	118.80
12	B	622	G	C5'-C4'-C3'	-5.41	107.34	116.00
12	B	1053	C	C4-C5-C6	-5.41	114.69	117.40
12	B	1071	G	P-O5'-C5'	5.41	129.56	120.90
12	B	1125	G	N1-C6-O6	5.41	123.15	119.90
12	B	1794	A	C6-N1-C2	5.41	121.85	118.60
12	B	2054	A	N3-C4-N9	5.41	131.73	127.40
12	B	2267	A	N1-C6-N6	5.41	121.85	118.60
12	B	525	U	N3-C4-C5	-5.41	111.36	114.60
12	B	535	G	C4'-C3'-C2'	-5.41	97.19	102.60
12	B	550	C	C4-C5-C6	5.41	120.10	117.40
12	B	560	C	C2-N3-C4	5.41	122.60	119.90
12	B	1138	G	N1-C6-O6	5.41	123.15	119.90
12	B	2035	G	C8-N9-C4	-5.41	104.24	106.40
12	B	2118	U	C5'-C4'-O4'	5.41	115.59	109.10
12	B	2402	U	C5-C4-O4	-5.41	122.66	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	L	12	SER	N-CA-CB	5.41	118.61	110.50
26	P	39	LEU	N-CA-C	-5.41	96.40	111.00
12	B	504	A	C2-N3-C4	-5.41	107.90	110.60
12	B	1140	C	N3-C4-C5	5.41	124.06	121.90
12	B	1295	C	N3-C4-C5	-5.41	119.74	121.90
12	B	1815	A	C6-N1-C2	-5.41	115.36	118.60
12	B	1896	G	C5-C6-N1	5.41	114.20	111.50
12	B	2142	A	C6-N1-C2	5.41	121.84	118.60
12	B	2896	C	C2-N3-C4	5.41	122.60	119.90
2	1	47	ARG	NE-CZ-NH1	5.41	123.00	120.30
12	B	270	A	C4-C5-C6	5.41	119.70	117.00
12	B	411	G	N1-C6-O6	5.41	123.14	119.90
12	B	458	G	C6-C5-N7	-5.41	127.16	130.40
12	B	637	A	C6-C5-N7	-5.41	128.52	132.30
12	B	696	G	C8-N9-C4	-5.41	104.24	106.40
12	B	740	C	C4-C5-C6	-5.41	114.70	117.40
12	B	971	G	N1-C6-O6	5.41	123.14	119.90
12	B	996	A	O5'-C5'-C4'	5.41	121.97	111.70
12	B	1054	A	C5'-C4'-O4'	5.41	115.59	109.10
12	B	1061	U	C2'-C3'-O3'	5.41	122.35	113.70
12	B	1688	U	C4'-C3'-C2'	-5.41	97.19	102.60
12	B	1797	G	N3-C4-N9	-5.41	122.76	126.00
12	B	1833	C	O4'-C4'-C3'	-5.41	98.59	104.00
12	B	2125	G	C8-N9-C4	-5.41	104.24	106.40
12	B	2380	C	C5-C4-N4	-5.41	116.42	120.20
13	C	51	ARG	NE-CZ-NH1	5.41	123.00	120.30
11	A	27	C	N3-C4-N4	5.40	121.78	118.00
12	B	283	G	C8-N9-C1'	5.40	134.03	127.00
27	Q	27	ARG	NE-CZ-NH2	5.40	123.00	120.30
11	A	19	C	P-O5'-C5'	5.40	129.54	120.90
12	B	164	C	OP1-P-OP2	-5.40	111.50	119.60
12	B	591	U	C4'-C3'-C2'	-5.40	97.20	102.60
12	B	664	G	N1-C2-N2	5.40	121.06	116.20
12	B	717	C	C5-C6-N1	-5.40	118.30	121.00
12	B	745	G	C3'-C2'-C1'	5.40	105.82	101.50
12	B	1448	G	C3'-C2'-C1'	-5.40	97.18	101.50
12	B	1613	G	C5-C6-N1	-5.40	108.80	111.50
12	B	1700	A	N9-C4-C5	5.40	107.96	105.80
12	B	1755	A	P-O3'-C3'	5.40	126.18	119.70
12	B	1901	A	C4-C5-C6	5.40	119.70	117.00
12	B	2133	G	N1-C2-N3	-5.40	120.66	123.90
12	B	2607	G	C4'-C3'-C2'	-5.40	97.20	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	97	C	C2-N3-C4	5.40	122.60	119.90
12	B	845	A	O3'-P-O5'	5.40	114.26	104.00
12	B	1122	G	N1-C2-N3	-5.40	120.66	123.90
12	B	1223	G	O4'-C1'-C2'	5.40	112.46	107.60
12	B	1955	U	N1-C2-O2	-5.40	119.02	122.80
12	B	2858	C	P-O3'-C3'	-5.40	113.22	119.70
12	B	147	C	N3-C4-C5	-5.40	119.74	121.90
12	B	983	A	C4-C5-C6	5.40	119.70	117.00
12	B	983	A	C5-N7-C8	5.40	106.60	103.90
12	B	1225	G	C4-C5-N7	-5.40	108.64	110.80
12	B	1451	C	C5-C4-N4	-5.40	116.42	120.20
12	B	1480	C	N3-C4-N4	5.40	121.78	118.00
12	B	1726	C	C5-C6-N1	5.40	123.70	121.00
12	B	1860	G	C5-N7-C8	-5.40	101.60	104.30
12	B	2750	A	O4'-C1'-N9	5.40	112.52	108.20
12	B	2893	A	C6-C5-N7	-5.40	128.52	132.30
12	B	123	G	N7-C8-N9	-5.40	110.40	113.10
12	B	591	U	C5-C6-N1	-5.40	120.00	122.70
12	B	688	U	C1'-O4'-C4'	5.40	114.22	109.90
12	B	1235	G	C5-N7-C8	5.40	107.00	104.30
12	B	1970	A	N1-C2-N3	5.40	132.00	129.30
12	B	2525	G	O5'-C5'-C4'	-5.40	101.44	111.70
12	B	2743	U	OP1-P-OP2	-5.40	111.50	119.60
12	B	39	G	N1-C6-O6	5.40	123.14	119.90
12	B	517	C	P-O3'-C3'	-5.40	113.22	119.70
12	B	804	A	OP1-P-O3'	5.40	117.07	105.20
12	B	1922	G	C1'-O4'-C4'	-5.40	105.58	109.90
12	B	2083	G	N1-C2-N2	-5.40	111.34	116.20
12	B	2458	G	C8-N9-C1'	-5.40	119.98	127.00
11	A	110	C	OP1-P-OP2	-5.39	111.51	119.60
12	B	37	C	C5-C4-N4	-5.39	116.42	120.20
12	B	163	C	C5'-C4'-O4'	5.39	115.57	109.10
12	B	314	C	N1-C2-N3	-5.39	115.42	119.20
12	B	734	A	O4'-C1'-N9	5.39	112.52	108.20
12	B	1028	A	C1'-O4'-C4'	-5.39	105.58	109.90
12	B	1298	C	O4'-C1'-N1	5.39	112.52	108.20
12	B	1339	G	C2-N3-C4	5.39	114.60	111.90
12	B	1418	G	O5'-P-OP2	-5.39	100.84	105.70
12	B	1863	G	C4-C5-C6	5.39	122.04	118.80
12	B	2466	C	C4-C5-C6	5.39	120.10	117.40
12	B	2596	U	C5'-C4'-C3'	5.39	124.63	116.00
12	B	2801	G	N1-C6-O6	5.39	123.14	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	0	27	ARG	NE-CZ-NH1	5.39	123.00	120.30
12	B	39	G	C4-C5-N7	-5.39	108.64	110.80
12	B	189	G	C4-N9-C1'	5.39	133.51	126.50
12	B	301	G	N3-C4-N9	5.39	129.24	126.00
12	B	412	A	C2-N3-C4	-5.39	107.90	110.60
12	B	494	G	C4'-C3'-C2'	-5.39	97.21	102.60
12	B	626	A	P-O3'-C3'	5.39	126.17	119.70
12	B	1417	C	N1-C1'-C2'	5.39	121.01	114.00
12	B	1552	A	C5-C6-N6	-5.39	119.39	123.70
12	B	1653	G	C4-C5-C6	5.39	122.03	118.80
12	B	1818	U	P-O3'-C3'	5.39	126.17	119.70
12	B	1859	U	N1-C2-O2	5.39	126.57	122.80
12	B	1980	G	P-O5'-C5'	-5.39	112.27	120.90
12	B	2583	G	C5-C6-N1	-5.39	108.80	111.50
12	B	2745	C	N1-C2-O2	-5.39	115.66	118.90
21	K	100	PHE	CB-CG-CD1	5.39	124.57	120.80
22	L	2	ARG	NE-CZ-NH2	-5.39	117.60	120.30
12	B	183	C	C2-N1-C1'	5.39	124.73	118.80
12	B	578	G	O4'-C1'-N9	5.39	112.51	108.20
12	B	625	G	P-O3'-C3'	-5.39	113.23	119.70
12	B	1389	G	N3-C4-N9	-5.39	122.77	126.00
12	B	1890	A	N9-C4-C5	5.39	107.96	105.80
18	H	130	VAL	CA-CB-CG2	-5.39	102.81	110.90
12	B	48	G	O4'-C1'-N9	5.39	112.51	108.20
12	B	845	A	C4-C5-N7	-5.39	108.01	110.70
12	B	990	A	C5-C6-N6	-5.39	119.39	123.70
12	B	1288	G	C6-C5-N7	-5.39	127.17	130.40
12	B	1702	G	C4-N9-C1'	-5.39	119.49	126.50
12	B	2162	G	C2-N3-C4	5.39	114.59	111.90
12	B	2217	G	O4'-C1'-N9	5.39	112.51	108.20
12	B	2388	A	N9-C4-C5	5.39	107.96	105.80
12	B	2721	A	N9-C4-C5	5.39	107.96	105.80
12	B	180	G	N1-C2-N3	-5.39	120.67	123.90
12	B	794	A	C4-C5-C6	5.39	119.69	117.00
12	B	899	A	C5-C6-N1	-5.39	115.01	117.70
12	B	1489	C	N3-C4-N4	5.39	121.77	118.00
12	B	2618	G	C4-C5-N7	-5.39	108.64	110.80
12	B	2668	G	C6-N1-C2	5.39	128.33	125.10
12	B	2670	A	N9-C4-C5	5.39	107.95	105.80
12	B	2820	A	N1-C6-N6	5.39	121.83	118.60
17	G	54	ARG	NE-CZ-NH1	5.39	122.99	120.30
12	B	22	C	N1-C2-N3	5.39	122.97	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	89	A	C5-N7-C8	5.39	106.59	103.90
12	B	1053	C	N3-C4-C5	5.39	124.06	121.90
12	B	1165	A	N1-C2-N3	-5.39	126.61	129.30
12	B	1244	A	C4'-C3'-C2'	-5.39	97.21	102.60
12	B	1387	A	N3-C4-N9	5.39	131.71	127.40
12	B	2285	C	C5-C6-N1	5.39	123.69	121.00
12	B	2348	U	N3-C2-O2	-5.39	118.43	122.20
12	B	2349	G	C5-N7-C8	5.39	106.99	104.30
12	B	2380	C	C6-N1-C2	-5.39	118.15	120.30
10	9	116	LEU	CB-CA-C	-5.38	99.97	110.20
11	A	15	A	C1'-O4'-C4'	-5.38	105.59	109.90
12	B	24	G	C8-N9-C4	-5.38	104.25	106.40
12	B	78	U	N1-C2-N3	-5.38	111.67	114.90
12	B	109	C	C4'-C3'-C2'	-5.38	97.22	102.60
12	B	205	G	C6-C5-N7	-5.38	127.17	130.40
12	B	348	A	C2-N3-C4	-5.38	107.91	110.60
12	B	377	G	C8-N9-C4	-5.38	104.25	106.40
12	B	400	G	N3-C4-C5	5.38	131.29	128.60
12	B	599	A	O4'-C1'-N9	5.38	112.51	108.20
12	B	1190	G	O4'-C1'-N9	5.38	112.51	108.20
12	B	1245	G	C3'-C2'-C1'	-5.38	97.19	101.50
12	B	1248	G	N1-C2-N3	-5.38	120.67	123.90
12	B	1346	G	O4'-C1'-N9	5.38	112.51	108.20
12	B	1529	G	N3-C4-N9	5.38	129.23	126.00
12	B	2249	U	C4-C5-C6	-5.38	116.47	119.70
12	B	2773	C	C4-C5-C6	5.38	120.09	117.40
12	B	2826	A	C5-C6-N6	-5.38	119.39	123.70
12	B	2893	A	C5'-C4'-O4'	5.38	115.56	109.10
12	B	55	G	C2-N3-C4	-5.38	109.21	111.90
12	B	368	A	C6-C5-N7	-5.38	128.53	132.30
12	B	559	G	C4-C5-N7	5.38	112.95	110.80
12	B	768	G	N3-C4-N9	-5.38	122.77	126.00
12	B	1156	A	C3'-C2'-C1'	-5.38	97.19	101.50
12	B	1383	A	P-O5'-C5'	-5.38	112.29	120.90
12	B	2097	A	C3'-C2'-C1'	-5.38	97.19	101.50
12	B	2599	G	N9-C4-C5	-5.38	103.25	105.40
12	B	1342	A	C6-N1-C2	5.38	121.83	118.60
12	B	1638	C	C4'-C3'-C2'	-5.38	97.22	102.60
12	B	1881	C	N3-C2-O2	5.38	125.67	121.90
12	B	2150	C	N3-C4-C5	-5.38	119.75	121.90
12	B	2195	U	OP1-P-OP2	-5.38	111.53	119.60
12	B	2575	C	N1-C2-O2	5.38	122.13	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2623	G	C6-C5-N7	-5.38	127.17	130.40
12	B	2662	A	C3'-C2'-C1'	-5.38	97.19	101.50
12	B	2699	C	O4'-C1'-N1	5.38	112.50	108.20
12	B	2737	G	C8-N9-C4	-5.38	104.25	106.40
15	E	142	ALA	CB-CA-C	5.38	118.17	110.10
10	9	272	ASP	N-CA-CB	5.38	120.28	110.60
11	A	76	G	C6-C5-N7	-5.38	127.17	130.40
12	B	492	A	C4-C5-N7	-5.38	108.01	110.70
12	B	573	U	C5'-C4'-O4'	5.38	115.56	109.10
12	B	575	A	OP1-P-OP2	-5.38	111.53	119.60
12	B	856	G	N3-C4-C5	5.38	131.29	128.60
12	B	1047	G	C6-C5-N7	-5.38	127.17	130.40
12	B	1335	C	N3-C4-C5	-5.38	119.75	121.90
12	B	2241	A	C4'-C3'-C2'	-5.38	97.22	102.60
20	J	89	PHE	CB-CG-CD2	5.38	124.57	120.80
11	A	23	G	N1-C6-O6	5.38	123.13	119.90
11	A	93	C	N3-C4-N4	5.38	121.77	118.00
12	B	227	A	C2-N3-C4	-5.38	107.91	110.60
12	B	547	A	O4'-C1'-N9	5.38	112.50	108.20
12	B	721	A	C8-N9-C4	-5.38	103.65	105.80
12	B	806	C	C4-C5-C6	5.38	120.09	117.40
12	B	959	A	C5-N7-C8	5.38	106.59	103.90
12	B	1090	A	N7-C8-N9	5.38	116.49	113.80
12	B	1201	U	O4'-C4'-C3'	-5.38	98.62	104.00
12	B	1537	G	C4-N9-C1'	5.38	133.49	126.50
12	B	1747	U	C2-N1-C1'	-5.38	111.25	117.70
12	B	2082	A	N3-C4-N9	5.38	131.70	127.40
11	A	43	C	O4'-C1'-N1	5.38	112.50	108.20
11	A	102	G	N9-C4-C5	5.38	107.55	105.40
12	B	380	G	N9-C4-C5	-5.38	103.25	105.40
12	B	722	A	C5-C6-N1	-5.38	115.01	117.70
12	B	1102	C	C2'-C3'-O3'	5.38	122.30	113.70
12	B	1995	U	N3-C4-O4	5.38	123.16	119.40
12	B	2381	A	N3-C4-C5	-5.38	123.04	126.80
12	B	2697	G	N1-C2-N3	-5.38	120.67	123.90
12	B	2718	G	O4'-C1'-N9	5.38	112.50	108.20
18	H	42	LYS	C-N-CA	5.38	135.14	121.70
12	B	423	A	N3-C4-N9	5.38	131.70	127.40
12	B	824	U	C5-C6-N1	5.38	125.39	122.70
12	B	1452	G	C5-C6-N1	-5.38	108.81	111.50
12	B	1613	G	C4-C5-N7	-5.38	108.65	110.80
12	B	1917	U	C3'-C2'-C1'	5.38	105.80	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2139	U	C2-N3-C4	-5.38	123.78	127.00
12	B	2885	G	O4'-C1'-C2'	-5.38	100.42	105.80
12	B	2894	G	N1-C2-N2	-5.38	111.36	116.20
6	5	164	ARG	NE-CZ-NH1	5.37	122.99	120.30
12	B	136	G	OP1-P-OP2	-5.37	111.54	119.60
12	B	328	U	P-O3'-C3'	-5.37	113.25	119.70
12	B	735	A	C6-N1-C2	-5.37	115.38	118.60
12	B	927	A	C2-N3-C4	-5.37	107.91	110.60
12	B	1333	G	N1-C2-N3	-5.37	120.67	123.90
12	B	1616	A	N9-C4-C5	5.37	107.95	105.80
12	B	1887	C	C6-N1-C2	5.37	122.45	120.30
12	B	2430	A	N9-C4-C5	-5.37	103.65	105.80
12	B	2598	A	N7-C8-N9	-5.37	111.11	113.80
12	B	226	A	C1'-O4'-C4'	5.37	114.20	109.90
12	B	613	A	C6-C5-N7	-5.37	128.54	132.30
12	B	792	A	C1'-O4'-C4'	-5.37	105.60	109.90
12	B	957	C	C5'-C4'-C3'	-5.37	107.41	116.00
12	B	1631	G	C5-C6-O6	-5.37	125.38	128.60
12	B	1742	U	N1-C2-N3	5.37	118.12	114.90
12	B	1753	G	C5'-C4'-O4'	5.37	115.55	109.10
12	B	1800	C	C5-C4-N4	-5.37	116.44	120.20
12	B	1857	G	C5-C6-N1	-5.37	108.81	111.50
12	B	2132	U	C4-C5-C6	-5.37	116.48	119.70
12	B	2140	G	O4'-C1'-N9	5.37	112.50	108.20
12	B	2795	C	C6-N1-C1'	-5.37	114.35	120.80
12	B	2892	G	C5'-C4'-C3'	5.37	124.59	116.00
16	F	153	ILE	N-CA-CB	5.37	123.16	110.80
6	5	101	ALA	N-CA-CB	5.37	117.62	110.10
12	B	1473	G	N3-C2-N2	5.37	123.66	119.90
12	B	2564	A	P-O3'-C3'	5.37	126.14	119.70
11	A	58	A	C4-N9-C1'	5.37	135.96	126.30
12	B	1273	U	C4'-C3'-C2'	-5.37	97.23	102.60
12	B	1543	G	O4'-C1'-N9	5.37	112.50	108.20
12	B	1563	U	N3-C4-O4	5.37	123.16	119.40
12	B	1831	G	C8-N9-C4	5.37	108.55	106.40
12	B	1963	U	O4'-C4'-C3'	-5.37	98.63	104.00
12	B	2063	C	O4'-C4'-C3'	-5.37	98.63	104.00
12	B	2124	G	N9-C4-C5	-5.37	103.25	105.40
12	B	2136	G	C6-N1-C2	-5.37	121.88	125.10
12	B	2152	G	C5-C6-N1	-5.37	108.82	111.50
12	B	2489	U	N3-C4-C5	-5.37	111.38	114.60
12	B	1044	C	C6-N1-C2	5.37	122.45	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1109	C	P-O5'-C5'	-5.37	112.31	120.90
12	B	1149	G	N1-C2-N2	-5.37	111.37	116.20
12	B	1280	G	N1-C2-N3	-5.37	120.68	123.90
12	B	1940	U	N1-C2-N3	-5.37	111.68	114.90
22	L	107	PHE	CB-CG-CD2	-5.37	117.04	120.80
12	B	245	G	O4'-C1'-N9	5.37	112.49	108.20
12	B	770	G	C6-C5-N7	-5.37	127.18	130.40
12	B	1287	A	C4-C5-C6	5.37	119.68	117.00
12	B	1612	C	P-O5'-C5'	5.37	129.49	120.90
12	B	1676	A	C4-C5-N7	-5.37	108.02	110.70
11	A	73	A	C6-N1-C2	-5.36	115.38	118.60
12	B	140	C	N3-C4-C5	5.36	124.05	121.90
12	B	364	C	C2-N1-C1'	5.36	124.70	118.80
12	B	381	G	C6-C5-N7	-5.36	127.18	130.40
12	B	732	C	N1-C2-N3	-5.36	115.44	119.20
12	B	1096	A	C6-C5-N7	-5.36	128.54	132.30
12	B	1960	A	OP1-P-OP2	-5.36	111.56	119.60
12	B	2093	G	N3-C4-C5	-5.36	125.92	128.60
12	B	2321	U	C6-N1-C2	-5.36	117.78	121.00
12	B	2553	G	C5-N7-C8	-5.36	101.62	104.30
12	B	2608	G	C6-C5-N7	-5.36	127.18	130.40
12	B	2641	G	N3-C2-N2	5.36	123.66	119.90
12	B	2680	U	C4'-C3'-C2'	-5.36	97.24	102.60
12	B	2727	A	C8-N9-C4	-5.36	103.66	105.80
22	L	136	GLU	OE1-CD-OE2	5.36	129.74	123.30
12	B	278	A	N9-C4-C5	5.36	107.94	105.80
12	B	332	A	C6-C5-N7	-5.36	128.55	132.30
12	B	1081	U	N1-C2-N3	-5.36	111.68	114.90
12	B	1268	A	C1'-O4'-C4'	-5.36	105.61	109.90
12	B	1291	C	N3-C4-N4	5.36	121.75	118.00
12	B	2216	G	C5-C6-O6	-5.36	125.38	128.60
24	N	1	MET	C-N-CA	5.36	135.10	121.70
12	B	156	A	N1-C6-N6	5.36	121.82	118.60
12	B	541	A	C4-C5-C6	5.36	119.68	117.00
12	B	1520	U	C5-C6-N1	5.36	125.38	122.70
12	B	2204	G	C5-C6-N1	-5.36	108.82	111.50
12	B	2434	A	C4-C5-C6	5.36	119.68	117.00
11	A	29	A	C6-C5-N7	-5.36	128.55	132.30
12	B	613	A	N9-C4-C5	-5.36	103.66	105.80
12	B	971	G	C6-N1-C2	5.36	128.31	125.10
12	B	1334	G	C8-N9-C4	-5.36	104.26	106.40
12	B	1773	A	C6-N1-C2	-5.36	115.39	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1916	A	C5'-C4'-C3'	5.36	124.57	116.00
16	F	172	PHE	CB-CG-CD2	5.36	124.55	120.80
12	B	323	C	C5-C6-N1	-5.36	118.32	121.00
12	B	674	G	C3'-C2'-C1'	-5.36	97.21	101.50
12	B	1018	U	O4'-C1'-N1	5.36	112.49	108.20
12	B	1032	A	C8-N9-C4	5.36	107.94	105.80
12	B	1098	A	C4'-C3'-C2'	5.36	107.96	102.60
12	B	1200	C	P-O3'-C3'	-5.36	113.27	119.70
12	B	1360	G	C5-C6-N1	-5.36	108.82	111.50
12	B	1593	A	C2-N3-C4	-5.36	107.92	110.60
12	B	1740	G	O4'-C1'-N9	5.36	112.49	108.20
12	B	2544	G	N3-C2-N2	5.36	123.65	119.90
12	B	2573	C	C2-N1-C1'	5.36	124.69	118.80
12	B	2574	G	N7-C8-N9	-5.36	110.42	113.10
12	B	2756	U	C5-C4-O4	-5.36	122.69	125.90
12	B	2793	C	P-O3'-C3'	5.36	126.13	119.70
12	B	1315	C	N1-C2-N3	-5.36	115.45	119.20
12	B	1585	C	C2-N1-C1'	5.36	124.69	118.80
12	B	2064	C	C5-C6-N1	5.36	123.68	121.00
12	B	2720	U	N3-C2-O2	5.36	125.95	122.20
12	B	2731	G	C2-N3-C4	5.36	114.58	111.90
12	B	220	G	C5-C6-N1	-5.35	108.82	111.50
12	B	1031	G	C8-N9-C4	5.35	108.54	106.40
12	B	1210	G	N3-C2-N2	5.35	123.65	119.90
12	B	2252	G	N3-C2-N2	5.35	123.65	119.90
1	0	51	SER	N-CA-CB	5.35	118.53	110.50
12	B	243	U	P-O5'-C5'	5.35	129.46	120.90
12	B	468	G	O4'-C1'-N9	5.35	112.48	108.20
12	B	825	A	O4'-C1'-N9	5.35	112.48	108.20
12	B	961	C	N1-C2-N3	-5.35	115.45	119.20
12	B	1110	G	N7-C8-N9	-5.35	110.42	113.10
12	B	1486	U	C5-C4-O4	5.35	129.11	125.90
12	B	1488	C	C4'-C3'-C2'	-5.35	97.25	102.60
12	B	1787	A	N3-C4-C5	-5.35	123.05	126.80
12	B	2170	A	C4-C5-C6	5.35	119.68	117.00
12	B	2181	U	C1'-O4'-C4'	-5.35	105.62	109.90
12	B	2734	A	N7-C8-N9	-5.35	111.12	113.80
12	B	2810	A	N3-C4-C5	-5.35	123.05	126.80
12	B	769	U	N1-C2-O2	-5.35	119.05	122.80
12	B	1642	G	C4-C5-N7	-5.35	108.66	110.80
12	B	2666	C	N3-C4-N4	5.35	121.75	118.00
18	H	46	PHE	CB-CG-CD1	5.35	124.55	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	285	G	N3-C4-N9	5.35	129.21	126.00
12	B	467	G	C4-C5-C6	5.35	122.01	118.80
12	B	566	U	C3'-C2'-C1'	5.35	105.78	101.50
12	B	603	A	C5'-C4'-C3'	-5.35	107.44	116.00
12	B	636	G	C5-C6-O6	-5.35	125.39	128.60
12	B	940	G	C3'-C2'-C1'	-5.35	97.22	101.50
12	B	1039	A	P-O5'-C5'	5.35	129.46	120.90
12	B	1491	G	C3'-C2'-C1'	5.35	105.78	101.50
12	B	1537	G	C5-N7-C8	5.35	106.97	104.30
12	B	1635	A	C6-N1-C2	-5.35	115.39	118.60
12	B	2291	U	C5'-C4'-O4'	5.35	115.52	109.10
12	B	2388	A	C3'-C2'-C1'	5.35	105.78	101.50
12	B	2673	G	C4'-C3'-C2'	-5.35	97.25	102.60
13	C	219	VAL	CA-CB-CG1	-5.35	102.88	110.90
10	9	44	ASP	CB-CG-OD2	-5.35	113.49	118.30
12	B	225	C	P-O5'-C5'	5.35	129.46	120.90
12	B	339	U	C1'-O4'-C4'	5.35	114.18	109.90
12	B	490	C	C2-N3-C4	-5.35	117.23	119.90
12	B	529	A	P-O3'-C3'	-5.35	113.28	119.70
12	B	911	A	C5-C6-N1	-5.35	115.03	117.70
12	B	961	C	N3-C4-N4	5.35	121.74	118.00
12	B	1031	G	C6-N1-C2	5.35	128.31	125.10
12	B	1059	G	C5-C6-O6	-5.35	125.39	128.60
12	B	1979	U	OP1-P-OP2	-5.35	111.58	119.60
12	B	2353	G	C5-C6-N1	-5.35	108.83	111.50
12	B	2650	U	N1-C2-O2	-5.35	119.06	122.80
25	O	89	ASP	CB-CG-OD2	-5.35	113.49	118.30
27	Q	100	PHE	CB-CG-CD2	5.35	124.54	120.80
12	B	379	G	C8-N9-C1'	5.35	133.95	127.00
12	B	387	U	N3-C2-O2	5.35	125.94	122.20
12	B	420	C	P-O3'-C3'	5.35	126.11	119.70
12	B	1051	G	N3-C4-C5	-5.35	125.93	128.60
12	B	1298	C	C6-N1-C2	-5.35	118.16	120.30
12	B	1543	G	N1-C6-O6	5.35	123.11	119.90
11	A	96	G	C8-N9-C1'	5.34	133.95	127.00
12	B	164	C	C4'-C3'-C2'	-5.34	97.26	102.60
12	B	262	A	N3-C4-N9	-5.34	123.12	127.40
12	B	706	A	N1-C6-N6	5.34	121.81	118.60
12	B	1216	G	C1'-O4'-C4'	-5.34	105.62	109.90
12	B	2172	U	C1'-O4'-C4'	-5.34	105.62	109.90
12	B	2691	C	P-O5'-C5'	5.34	129.45	120.90
12	B	2870	C	P-O5'-C5'	5.34	129.45	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	86	G	N1-C6-O6	5.34	123.11	119.90
12	B	169	G	C4-N9-C1'	-5.34	119.55	126.50
12	B	468	G	C6-C5-N7	-5.34	127.19	130.40
12	B	1231	U	N3-C4-O4	5.34	123.14	119.40
12	B	1562	U	N3-C4-C5	-5.34	111.39	114.60
12	B	1688	U	OP1-P-O3'	5.34	116.95	105.20
4	3	47	TYR	CB-CG-CD2	-5.34	117.80	121.00
12	B	340	A	C5-C6-N6	-5.34	119.43	123.70
12	B	495	G	C8-N9-C1'	5.34	133.94	127.00
12	B	645	C	N3-C4-N4	5.34	121.74	118.00
12	B	696	G	C2-N3-C4	5.34	114.57	111.90
12	B	805	G	C5-N7-C8	5.34	106.97	104.30
12	B	898	C	P-O3'-C3'	5.34	126.11	119.70
12	B	990	A	C4-C5-N7	5.34	113.37	110.70
12	B	1108	U	C5-C4-O4	5.34	129.10	125.90
12	B	1133	A	O4'-C1'-N9	-5.34	103.93	108.20
12	B	1288	G	C4-C5-C6	5.34	122.00	118.80
12	B	1298	C	C4-C5-C6	5.34	120.07	117.40
12	B	1321	A	C5-N7-C8	5.34	106.57	103.90
12	B	1481	U	C5'-C4'-C3'	5.34	124.55	116.00
12	B	1512	C	C5'-C4'-O4'	5.34	115.51	109.10
12	B	1681	G	N3-C4-N9	-5.34	122.80	126.00
12	B	1952	A	O4'-C1'-N9	5.34	112.47	108.20
12	B	2396	G	C4-C5-C6	5.34	122.00	118.80
12	B	2416	C	N1-C2-O2	5.34	122.11	118.90
12	B	2498	C	N3-C4-N4	5.34	121.74	118.00
18	H	23	ALA	N-CA-CB	5.34	117.58	110.10
11	A	96	G	C6-C5-N7	-5.34	127.20	130.40
11	A	117	G	C5-N7-C8	-5.34	101.63	104.30
12	B	124	G	N3-C2-N2	5.34	123.64	119.90
12	B	183	C	N1-C1'-C2'	-5.34	106.13	112.00
12	B	491	G	C6-C5-N7	-5.34	127.20	130.40
12	B	1475	G	C5-C6-O6	-5.34	125.40	128.60
12	B	1491	G	P-O5'-C5'	5.34	129.44	120.90
12	B	1597	A	P-O3'-C3'	5.34	126.11	119.70
12	B	1642	G	OP1-P-OP2	-5.34	111.59	119.60
12	B	1756	G	C1'-O4'-C4'	5.34	114.17	109.90
12	B	2037	A	C5'-C4'-C3'	-5.34	107.46	116.00
12	B	2700	A	OP1-P-O3'	5.34	116.94	105.20
12	B	2825	G	N9-C1'-C2'	-5.34	106.13	112.00
13	C	189	ALA	CB-CA-C	-5.34	102.09	110.10
12	B	749	A	P-O5'-C5'	-5.34	112.36	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	827	U	O4'-C1'-C2'	5.34	112.41	107.60
12	B	1316	U	C5-C6-N1	5.34	125.37	122.70
12	B	1580	A	N7-C8-N9	-5.34	111.13	113.80
12	B	1943	U	P-O3'-C3'	5.34	126.11	119.70
12	B	2720	U	O4'-C1'-N1	5.34	112.47	108.20
14	D	165	MET	N-CA-C	-5.34	96.59	111.00
12	B	612	G	C8-N9-C4	5.34	108.53	106.40
12	B	1741	C	C5-C6-N1	-5.34	118.33	121.00
12	B	2427	C	C2-N3-C4	5.34	122.57	119.90
12	B	2637	U	C1'-O4'-C4'	-5.34	105.63	109.90
12	B	2794	C	C1'-O4'-C4'	5.34	114.17	109.90
17	G	150	TYR	CB-CG-CD2	5.34	124.20	121.00
6	5	98	GLU	CB-CA-C	-5.33	99.73	110.40
11	A	111	U	C4-C5-C6	5.33	122.90	119.70
12	B	412	A	O4'-C1'-N9	5.33	112.47	108.20
12	B	580	U	C2-N3-C4	-5.33	123.80	127.00
12	B	822	G	C2-N3-C4	5.33	114.57	111.90
12	B	1239	G	N3-C2-N2	5.33	123.63	119.90
12	B	1543	G	C8-N9-C4	5.33	108.53	106.40
12	B	1623	G	N1-C2-N2	-5.33	111.40	116.20
12	B	1641	A	C5-C6-N1	-5.33	115.03	117.70
12	B	1873	G	C6-C5-N7	-5.33	127.20	130.40
3	2	26	LEU	C-N-CA	5.33	133.50	122.30
11	A	81	G	C3'-C2'-C1'	5.33	105.77	101.50
12	B	1	G	C4'-C3'-C2'	-5.33	97.27	102.60
12	B	117	G	O5'-C5'-C4'	-5.33	101.56	111.70
12	B	120	U	O4'-C1'-N1	5.33	112.47	108.20
12	B	894	U	C3'-C2'-C1'	-5.33	97.23	101.50
12	B	1456	G	C2-N3-C4	5.33	114.57	111.90
12	B	1898	U	N1-C1'-C2'	-5.33	106.13	112.00
12	B	2040	G	C6-C5-N7	-5.33	127.20	130.40
12	B	2135	A	O4'-C1'-N9	5.33	112.47	108.20
12	B	2453	A	N9-C4-C5	-5.33	103.67	105.80
12	B	2781	A	N3-C4-C5	-5.33	123.07	126.80
13	C	129	LEU	CB-CG-CD1	5.33	120.07	111.00
17	G	96	ALA	N-CA-CB	5.33	117.57	110.10
29	S	86	MET	CG-SD-CE	-5.33	91.67	100.20
11	A	21	G	C4-C5-N7	5.33	112.93	110.80
12	B	45	G	C5-C6-O6	-5.33	125.40	128.60
12	B	160	A	N9-C4-C5	-5.33	103.67	105.80
12	B	187	G	N1-C2-N3	-5.33	120.70	123.90
12	B	707	G	C4'-C3'-C2'	-5.33	97.27	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	713	G	P-O5'-C5'	5.33	129.43	120.90
12	B	1488	C	C4-C5-C6	5.33	120.07	117.40
12	B	1618	A	C2-N3-C4	-5.33	107.94	110.60
12	B	1762	A	C4'-C3'-C2'	5.33	107.93	102.60
12	B	1924	C	N3-C4-C5	-5.33	119.77	121.90
12	B	2357	G	C4-C5-C6	5.33	122.00	118.80
12	B	2370	G	C5'-C4'-C3'	-5.33	107.47	116.00
12	B	2508	G	C6-N1-C2	5.33	128.30	125.10
12	B	2574	G	N3-C2-N2	5.33	123.63	119.90
15	E	35	TYR	CB-CG-CD1	5.33	124.20	121.00
12	B	373	U	C6-N1-C2	-5.33	117.80	121.00
12	B	896	A	N3-C4-N9	5.33	131.66	127.40
12	B	990	A	C4-C5-C6	5.33	119.67	117.00
12	B	1118	C	O4'-C1'-N1	5.33	112.46	108.20
12	B	1194	A	C6-N1-C2	-5.33	115.40	118.60
12	B	1236	G	N1-C6-O6	5.33	123.10	119.90
12	B	2521	C	C5-C4-N4	-5.33	116.47	120.20
25	O	36	TYR	CB-CG-CD1	-5.33	117.80	121.00
29	S	109	ASP	N-CA-C	-5.33	96.61	111.00
11	A	39	A	N7-C8-N9	-5.33	111.14	113.80
12	B	242	G	C2-N3-C4	5.33	114.56	111.90
12	B	263	G	N3-C4-C5	-5.33	125.94	128.60
12	B	489	G	N3-C4-C5	-5.33	125.94	128.60
12	B	492	A	C5-C6-N6	-5.33	119.44	123.70
12	B	562	U	C5'-C4'-O4'	-5.33	102.71	109.10
12	B	597	G	N3-C2-N2	5.33	123.63	119.90
12	B	708	G	N9-C4-C5	-5.33	103.27	105.40
12	B	812	C	C2-N3-C4	5.33	122.56	119.90
12	B	845	A	C5-C6-N6	-5.33	119.44	123.70
12	B	1055	G	C5-N7-C8	5.33	106.97	104.30
12	B	1461	C	N3-C4-N4	5.33	121.73	118.00
12	B	1653	G	C3'-C2'-C1'	-5.33	97.24	101.50
12	B	1657	U	C3'-C2'-C1'	-5.33	97.24	101.50
12	B	1812	U	N3-C4-C5	-5.33	111.40	114.60
12	B	1959	G	C3'-C2'-C1'	-5.33	97.24	101.50
12	B	1961	C	C6-N1-C2	5.33	122.43	120.30
12	B	2027	G	C5-C6-N1	-5.33	108.83	111.50
12	B	2159	G	N9-C4-C5	5.33	107.53	105.40
12	B	2636	C	C5-C4-N4	-5.33	116.47	120.20
12	B	2671	G	C5-C6-N1	-5.33	108.83	111.50
12	B	2743	U	P-O3'-C3'	5.33	126.09	119.70
30	T	80	TRP	N-CA-C	-5.33	96.61	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	859	G	C6-C5-N7	-5.33	127.20	130.40
12	B	1559	U	N3-C4-O4	5.33	123.13	119.40
12	B	2104	C	N3-C4-N4	5.33	121.73	118.00
12	B	2326	C	C1'-O4'-C4'	-5.33	105.64	109.90
12	B	2506	U	P-O5'-C5'	-5.33	112.38	120.90
12	B	121	G	C4'-C3'-C2'	-5.33	97.28	102.60
12	B	134	G	P-O5'-C5'	-5.33	112.38	120.90
12	B	398	C	C2-N3-C4	5.33	122.56	119.90
12	B	1228	G	C8-N9-C4	5.33	108.53	106.40
12	B	1295	C	O4'-C1'-N1	5.33	112.46	108.20
12	B	1307	A	C5-C6-N6	-5.33	119.44	123.70
12	B	1376	C	O5'-P-OP2	-5.33	100.91	105.70
12	B	1891	G	N9-C1'-C2'	-5.33	106.14	112.00
12	B	2396	G	C4-C5-N7	5.33	112.93	110.80
12	B	2424	C	C2-N3-C4	5.33	122.56	119.90
12	B	92	U	N3-C4-C5	5.32	117.79	114.60
12	B	106	C	C6-N1-C2	-5.32	118.17	120.30
12	B	230	G	P-O5'-C5'	-5.32	112.38	120.90
12	B	262	A	C4-C5-N7	-5.32	108.04	110.70
12	B	637	A	C5-C6-N6	-5.32	119.44	123.70
12	B	879	G	N7-C8-N9	5.32	115.76	113.10
12	B	990	A	C2-N3-C4	-5.32	107.94	110.60
12	B	1199	U	N3-C4-O4	5.32	123.13	119.40
12	B	1356	G	N3-C4-N9	-5.32	122.81	126.00
12	B	1750	G	N7-C8-N9	-5.32	110.44	113.10
12	B	2107	G	C6-N1-C2	5.32	128.29	125.10
12	B	2245	U	OP1-P-OP2	-5.32	111.61	119.60
12	B	2464	G	P-O5'-C5'	-5.32	112.38	120.90
12	B	2690	U	C6-N1-C2	-5.32	117.81	121.00
23	M	6	ARG	NE-CZ-NH1	5.32	122.96	120.30
12	B	404	A	C5'-C4'-C3'	5.32	124.52	116.00
12	B	1346	G	P-O5'-C5'	-5.32	112.38	120.90
12	B	2086	U	O4'-C4'-C3'	-5.32	98.68	104.00
12	B	141	G	N9-C4-C5	-5.32	103.27	105.40
12	B	682	G	C4-C5-C6	5.32	121.99	118.80
12	B	1082	U	N1-C2-O2	-5.32	119.08	122.80
12	B	1320	C	C6-N1-C2	-5.32	118.17	120.30
12	B	1343	G	O4'-C1'-N9	5.32	112.46	108.20
12	B	1491	G	C4-C5-C6	5.32	121.99	118.80
12	B	1696	G	C8-N9-C1'	5.32	133.92	127.00
12	B	1722	A	N7-C8-N9	-5.32	111.14	113.80
12	B	2226	C	C4-C5-C6	5.32	120.06	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2537	U	N3-C4-O4	5.32	123.12	119.40
12	B	2667	C	C5-C4-N4	-5.32	116.47	120.20
12	B	2801	G	P-O5'-C5'	5.32	129.41	120.90
25	O	70	ALA	N-CA-CB	5.32	117.55	110.10
12	B	110	G	C8-N9-C4	-5.32	104.27	106.40
12	B	430	A	N9-C4-C5	5.32	107.93	105.80
12	B	571	U	N1-C2-N3	5.32	118.09	114.90
12	B	821	A	C4-C5-N7	-5.32	108.04	110.70
12	B	821	A	O5'-P-OP2	-5.32	100.91	105.70
12	B	2855	C	N1-C2-O2	5.32	122.09	118.90
10	9	63	LYS	C-N-CA	5.32	134.99	121.70
12	B	1716	U	O4'-C1'-N1	5.32	112.45	108.20
12	B	1964	G	N3-C2-N2	5.32	123.62	119.90
12	B	2419	U	C4'-C3'-C2'	-5.32	97.28	102.60
12	B	125	A	N3-C4-C5	-5.32	123.08	126.80
12	B	768	G	N9-C4-C5	5.32	107.53	105.40
12	B	882	G	C4-C5-C6	5.32	121.99	118.80
12	B	958	U	P-O3'-C3'	5.32	126.08	119.70
12	B	979	A	C8-N9-C1'	5.32	137.27	127.70
12	B	1028	A	N9-C4-C5	5.32	107.93	105.80
12	B	1694	C	C5-C6-N1	5.32	123.66	121.00
12	B	2233	U	C4-C5-C6	5.32	122.89	119.70
12	B	2370	G	C1'-O4'-C4'	-5.32	105.65	109.90
12	B	2524	G	C5-C6-N1	-5.32	108.84	111.50
20	J	99	ARG	NE-CZ-NH2	-5.32	117.64	120.30
8	7	33	THR	CA-CB-CG2	-5.31	104.96	112.40
12	B	600	G	C6-N1-C2	5.31	128.29	125.10
12	B	614	A	C5-N7-C8	5.31	106.56	103.90
12	B	1443	U	C2-N3-C4	-5.31	123.81	127.00
6	5	208	TYR	CG-CD2-CE2	5.31	125.55	121.30
12	B	197	A	C5-N7-C8	5.31	106.56	103.90
12	B	274	C	O4'-C1'-N1	5.31	112.45	108.20
12	B	362	A	C5-N7-C8	5.31	106.56	103.90
12	B	1060	U	N3-C4-O4	5.31	123.12	119.40
12	B	1408	G	C3'-C2'-C1'	-5.31	97.25	101.50
12	B	1420	A	C1'-O4'-C4'	-5.31	105.65	109.90
12	B	1863	G	N1-C6-O6	5.31	123.09	119.90
12	B	2633	G	C2-N3-C4	5.31	114.56	111.90
20	J	89	PHE	CB-CG-CD1	-5.31	117.08	120.80
12	B	65	U	C5-C4-O4	-5.31	122.71	125.90
12	B	783	A	C4-C5-C6	5.31	119.66	117.00
12	B	1176	U	C2-N3-C4	5.31	130.19	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1284	A	O4'-C1'-N9	5.31	112.45	108.20
12	B	1759	A	O3'-P-O5'	-5.31	93.91	104.00
12	B	1904	G	N1-C2-N3	-5.31	120.71	123.90
12	B	2353	G	C5-N7-C8	-5.31	101.64	104.30
24	N	31	HIS	N-CA-C	-5.31	96.66	111.00
12	B	365	U	C5-C4-O4	-5.31	122.71	125.90
12	B	481	G	C4-N9-C1'	-5.31	119.60	126.50
12	B	806	C	C6-N1-C2	5.31	122.42	120.30
12	B	908	C	C5-C4-N4	-5.31	116.48	120.20
12	B	1008	A	N9-C4-C5	5.31	107.92	105.80
12	B	1918	A	O4'-C1'-C2'	5.31	112.38	107.60
12	B	2020	A	C8-N9-C4	-5.31	103.68	105.80
12	B	2306	C	C4-C5-C6	5.31	120.06	117.40
12	B	2439	A	C5'-C4'-O4'	5.31	115.47	109.10
12	B	2439	A	C6-N1-C2	5.31	121.79	118.60
12	B	2577	A	N7-C8-N9	5.31	116.45	113.80
12	B	2592	G	N7-C8-N9	5.31	115.75	113.10
12	B	579	G	N3-C4-C5	-5.31	125.95	128.60
12	B	685	A	N1-C2-N3	5.31	131.95	129.30
12	B	795	C	P-O5'-C5'	-5.31	112.41	120.90
12	B	1074	G	O4'-C1'-N9	5.31	112.45	108.20
12	B	1885	A	N7-C8-N9	5.31	116.45	113.80
12	B	2015	A	C8-N9-C4	-5.31	103.68	105.80
12	B	2414	G	N1-C2-N3	-5.31	120.72	123.90
12	B	2567	G	N1-C2-N3	-5.31	120.72	123.90
12	B	2600	A	P-O3'-C3'	-5.31	113.33	119.70
12	B	2642	G	C8-N9-C1'	5.31	133.90	127.00
24	N	19	ALA	O-C-N	5.31	131.19	122.70
12	B	983	A	N7-C8-N9	-5.31	111.15	113.80
12	B	1989	G	C4-N9-C1'	-5.31	119.60	126.50
12	B	1995	U	C2-N3-C4	-5.31	123.82	127.00
10	9	56	LEU	CB-CG-CD1	5.30	120.02	111.00
12	B	219	A	C5-C6-N6	-5.30	119.46	123.70
12	B	521	U	C2-N3-C4	5.30	130.18	127.00
12	B	1342	A	C5-C6-N1	-5.30	115.05	117.70
12	B	1426	G	C5'-C4'-C3'	-5.30	107.51	116.00
12	B	1480	C	C5'-C4'-C3'	5.30	124.49	116.00
12	B	1609	A	OP1-P-OP2	-5.30	111.64	119.60
12	B	1731	G	C5'-C4'-C3'	-5.30	107.51	116.00
12	B	1734	G	C6-N1-C2	5.30	128.28	125.10
12	B	2125	G	C4-N9-C1'	5.30	133.40	126.50
12	B	2183	A	C5-C6-N6	-5.30	119.46	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2545	G	C4-C5-C6	5.30	121.98	118.80
12	B	2595	G	N1-C2-N3	-5.30	120.72	123.90
12	B	1065	U	C2-N3-C4	-5.30	123.82	127.00
12	B	1333	G	C6-C5-N7	-5.30	127.22	130.40
12	B	1749	A	OP1-P-OP2	-5.30	111.64	119.60
12	B	1789	A	C4-C5-C6	5.30	119.65	117.00
12	B	2594	C	C2-N3-C4	5.30	122.55	119.90
12	B	2798	U	C5-C4-O4	-5.30	122.72	125.90
17	G	51	PHE	CB-CG-CD1	5.30	124.51	120.80
12	B	298	G	C4-N9-C1'	5.30	133.39	126.50
12	B	808	G	C4-C5-N7	-5.30	108.68	110.80
12	B	861	A	O4'-C1'-N9	5.30	112.44	108.20
12	B	1112	G	C4-N9-C1'	-5.30	119.61	126.50
12	B	1314	C	O4'-C1'-N1	5.30	112.44	108.20
12	B	1325	U	P-O3'-C3'	-5.30	113.34	119.70
12	B	1497	U	C4'-C3'-C2'	5.30	107.90	102.60
12	B	1639	C	O4'-C1'-N1	5.30	112.44	108.20
12	B	1650	A	C6-C5-N7	-5.30	128.59	132.30
12	B	1989	G	C4-C5-N7	5.30	112.92	110.80
12	B	2318	G	C8-N9-C1'	-5.30	120.11	127.00
12	B	2864	G	N9-C1'-C2'	-5.30	106.17	112.00
9	8	29	ALA	N-CA-CB	5.30	117.52	110.10
12	B	6	A	N9-C4-C5	5.30	107.92	105.80
12	B	46	G	N1-C2-N3	-5.30	120.72	123.90
12	B	356	G	OP2-P-O3'	5.30	116.86	105.20
12	B	548	G	N7-C8-N9	5.30	115.75	113.10
12	B	707	G	N1-C2-N2	-5.30	111.43	116.20
12	B	759	G	P-O5'-C5'	5.30	129.38	120.90
12	B	1161	C	N3-C4-C5	-5.30	119.78	121.90
12	B	1204	A	C4'-C3'-C2'	-5.30	97.30	102.60
12	B	1344	U	P-O3'-C3'	5.30	126.06	119.70
12	B	1653	G	C5-C6-N1	-5.30	108.85	111.50
12	B	2234	G	C5-N7-C8	-5.30	101.65	104.30
12	B	2304	G	O4'-C1'-C2'	-5.30	100.50	105.80
12	B	2525	G	P-O3'-C3'	-5.30	113.34	119.70
11	A	5	U	C6-N1-C1'	-5.30	113.78	121.20
12	B	58	G	N1-C2-N2	-5.30	111.43	116.20
12	B	193	U	C6-N1-C2	-5.30	117.82	121.00
12	B	382	A	N3-C4-C5	-5.30	123.09	126.80
12	B	479	A	O3'-P-O5'	-5.30	93.93	104.00
12	B	935	C	N3-C4-N4	5.30	121.71	118.00
12	B	1159	U	C5-C4-O4	-5.30	122.72	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1394	U	N3-C4-C5	-5.30	111.42	114.60
12	B	1706	C	N3-C4-C5	-5.30	119.78	121.90
12	B	471	A	C5-C6-N6	-5.30	119.46	123.70
12	B	615	U	C2-N3-C4	-5.30	123.82	127.00
12	B	1236	G	N3-C2-N2	5.30	123.61	119.90
12	B	1680	U	C3'-C2'-C1'	-5.30	97.26	101.50
12	B	1722	A	O4'-C4'-C3'	-5.30	98.70	104.00
12	B	2246	G	N3-C2-N2	5.30	123.61	119.90
12	B	2254	C	N1-C1'-C2'	-5.30	106.17	112.00
12	B	2306	C	C5-C4-N4	-5.30	116.49	120.20
12	B	2827	C	C6-N1-C2	5.30	122.42	120.30
13	C	12	ARG	NE-CZ-NH1	-5.30	117.65	120.30
33	Y	40	ARG	NE-CZ-NH1	-5.30	117.65	120.30
2	1	53	VAL	CA-CB-CG1	-5.29	102.96	110.90
12	B	78	U	C1'-O4'-C4'	-5.29	105.66	109.90
12	B	576	U	N3-C4-O4	5.29	123.11	119.40
12	B	619	G	O5'-C5'-C4'	-5.29	101.64	111.70
12	B	767	U	C5-C4-O4	-5.29	122.72	125.90
12	B	914	G	C8-N9-C1'	-5.29	120.12	127.00
12	B	1056	G	P-O3'-C3'	5.29	126.05	119.70
12	B	1652	A	O4'-C1'-N9	5.29	112.44	108.20
12	B	1856	U	C6-N1-C2	-5.29	117.82	121.00
12	B	2224	G	P-O5'-C5'	5.29	129.37	120.90
12	B	2634	A	P-O3'-C3'	-5.29	113.35	119.70
14	D	82	PHE	CB-CG-CD2	-5.29	117.09	120.80
12	B	1017	G	N1-C2-N3	-5.29	120.72	123.90
12	B	1197	G	C5-N7-C8	5.29	106.95	104.30
12	B	1344	U	C5'-C4'-O4'	5.29	115.45	109.10
12	B	1642	G	C8-N9-C4	-5.29	104.28	106.40
12	B	2155	U	C6-N1-C2	5.29	124.18	121.00
12	B	2396	G	N1-C6-O6	5.29	123.08	119.90
12	B	2459	A	C8-N9-C4	-5.29	103.68	105.80
12	B	2626	C	N1-C2-N3	5.29	122.91	119.20
18	H	21	VAL	CA-CB-CG2	5.29	118.84	110.90
21	K	99	ILE	N-CA-C	-5.29	96.71	111.00
32	W	92	VAL	CA-CB-CG2	-5.29	102.96	110.90
7	6	14	ARG	NE-CZ-NH1	-5.29	117.65	120.30
12	B	439	A	C6-C5-N7	-5.29	128.59	132.30
12	B	589	U	C4'-C3'-C2'	-5.29	97.31	102.60
12	B	729	G	P-O3'-C3'	5.29	126.05	119.70
12	B	1029	A	C5-C6-N6	-5.29	119.47	123.70
12	B	1030	C	O4'-C1'-N1	5.29	112.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1185	G	C4-C5-C6	5.29	121.97	118.80
12	B	1540	G	C6-N1-C2	5.29	128.27	125.10
12	B	2035	G	N9-C4-C5	5.29	107.52	105.40
12	B	2192	U	C2-N3-C4	5.29	130.18	127.00
12	B	2330	G	C3'-C2'-C1'	-5.29	97.27	101.50
12	B	2367	G	C5-N7-C8	-5.29	101.65	104.30
12	B	2427	C	P-O3'-C3'	5.29	126.05	119.70
12	B	2768	U	N3-C4-C5	5.29	117.78	114.60
12	B	2857	G	C5-N7-C8	5.29	106.94	104.30
21	K	11	ALA	N-CA-CB	5.29	117.51	110.10
12	B	306	U	N1-C2-O2	-5.29	119.10	122.80
12	B	1160	G	N3-C4-N9	-5.29	122.83	126.00
12	B	1401	G	C4-C5-C6	5.29	121.97	118.80
12	B	1750	G	C5-C6-O6	-5.29	125.43	128.60
12	B	1975	G	C1'-O4'-C4'	5.29	114.13	109.90
12	B	2088	A	C4-C5-N7	-5.29	108.06	110.70
10	9	138	PRO	N-CA-CB	5.29	109.65	103.30
12	B	423	A	C4'-C3'-C2'	5.29	107.89	102.60
12	B	525	U	C5-C6-N1	5.29	125.34	122.70
12	B	778	G	N1-C2-N3	-5.29	120.73	123.90
12	B	1080	A	N9-C4-C5	5.29	107.92	105.80
12	B	1389	G	C2-N3-C4	-5.29	109.26	111.90
12	B	1464	G	C5-C6-N1	5.29	114.14	111.50
12	B	1721	G	C4-C5-C6	5.29	121.97	118.80
12	B	1762	A	C5-C6-N1	-5.29	115.06	117.70
12	B	2086	U	OP2-P-O3'	5.29	116.83	105.20
12	B	2241	A	C3'-C2'-C1'	5.29	105.73	101.50
12	B	2310	C	C1'-O4'-C4'	-5.29	105.67	109.90
12	B	2314	A	C4'-C3'-C2'	-5.29	97.31	102.60
12	B	2651	C	N3-C4-C5	-5.29	119.78	121.90
12	B	2757	A	C3'-C2'-C1'	-5.29	97.27	101.50
12	B	588	U	P-O3'-C3'	-5.29	113.36	119.70
12	B	2036	C	N3-C4-N4	5.29	121.70	118.00
12	B	2349	G	O4'-C1'-N9	5.29	112.43	108.20
12	B	2775	G	C2-N3-C4	5.29	114.54	111.90
1	0	46	VAL	C-N-CA	5.29	134.91	121.70
10	9	297	ALA	C-N-CA	5.29	134.91	121.70
11	A	102	G	C6-C5-N7	-5.29	127.23	130.40
12	B	129	C	P-O5'-C5'	5.29	129.36	120.90
12	B	1946	U	C1'-O4'-C4'	-5.29	105.67	109.90
12	B	2265	U	N3-C4-C5	-5.29	111.43	114.60
12	B	2418	A	C4-C5-N7	-5.29	108.06	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2501	C	C5-C6-N1	5.29	123.64	121.00
12	B	2525	G	C5-C6-N1	-5.29	108.86	111.50
12	B	2588	G	N3-C2-N2	5.29	123.60	119.90
12	B	2678	C	N1-C2-O2	5.29	122.07	118.90
12	B	2754	U	P-O3'-C3'	5.29	126.04	119.70
12	B	2850	A	N1-C2-N3	5.29	131.94	129.30
12	B	2861	U	OP2-P-O3'	5.29	116.83	105.20
17	G	1	SER	CB-CA-C	5.29	120.14	110.10
12	B	61	C	C5-C6-N1	-5.28	118.36	121.00
12	B	602	A	C1'-O4'-C4'	5.28	114.13	109.90
12	B	672	C	N3-C4-N4	5.28	121.70	118.00
12	B	858	G	P-O5'-C5'	-5.28	112.45	120.90
12	B	1112	G	OP1-P-OP2	-5.28	111.67	119.60
12	B	1476	U	N3-C4-O4	5.28	123.10	119.40
12	B	1604	C	N3-C4-C5	5.28	124.01	121.90
12	B	2203	U	C2-N3-C4	-5.28	123.83	127.00
12	B	2456	C	N1-C2-N3	-5.28	115.50	119.20
12	B	2563	U	C2-N3-C4	-5.28	123.83	127.00
25	O	7	ARG	NE-CZ-NH2	-5.28	117.66	120.30
11	A	109	A	C4'-C3'-C2'	-5.28	97.32	102.60
12	B	30	G	O5'-C5'-C4'	-5.28	101.67	111.70
12	B	684	G	O4'-C1'-N9	5.28	112.43	108.20
12	B	1256	G	C8-N9-C4	5.28	108.51	106.40
12	B	1580	A	C5-C6-N6	-5.28	119.47	123.70
6	5	180	PHE	CB-CG-CD2	5.28	124.50	120.80
12	B	46	G	C5'-C4'-O4'	5.28	115.44	109.10
12	B	524	G	N3-C4-C5	5.28	131.24	128.60
12	B	765	C	C4-C5-C6	-5.28	114.76	117.40
12	B	1087	G	C4-N9-C1'	-5.28	119.64	126.50
12	B	1131	G	C5-C6-N1	-5.28	108.86	111.50
12	B	1387	A	N3-C4-C5	-5.28	123.10	126.80
12	B	1989	G	C5-C6-O6	-5.28	125.43	128.60
12	B	2368	C	C4-C5-C6	5.28	120.04	117.40
12	B	2572	A	O5'-P-OP2	-5.28	100.95	105.70
12	B	2641	G	C4-C5-N7	-5.28	108.69	110.80
12	B	2654	A	O4'-C1'-N9	5.28	112.42	108.20
28	R	14	VAL	CA-CB-CG1	5.28	118.82	110.90
32	W	16	ALA	CB-CA-C	-5.28	102.18	110.10
11	A	97	C	N1-C1'-C2'	-5.28	106.19	112.00
11	A	99	A	C4-C5-N7	-5.28	108.06	110.70
12	B	1018	U	P-O3'-C3'	5.28	126.03	119.70
12	B	1027	A	N1-C2-N3	-5.28	126.66	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2210	U	O4'-C4'-C3'	-5.28	98.72	104.00
12	B	2401	U	N3-C4-C5	-5.28	111.43	114.60
12	B	2459	A	P-O3'-C3'	-5.28	113.36	119.70
27	Q	76	SER	CA-C-O	5.28	131.19	120.10
12	B	153	U	C4-C5-C6	5.28	122.87	119.70
12	B	516	C	C4-C5-C6	-5.28	114.76	117.40
12	B	1022	G	N3-C2-N2	5.28	123.59	119.90
12	B	1064	C	N3-C4-N4	5.28	121.69	118.00
12	B	1117	C	P-O5'-C5'	5.28	129.34	120.90
12	B	1491	G	C6-C5-N7	-5.28	127.23	130.40
12	B	1699	G	C5-N7-C8	-5.28	101.66	104.30
12	B	1940	U	C2-N1-C1'	5.28	124.03	117.70
12	B	2135	A	C5'-C4'-C3'	-5.28	107.56	116.00
12	B	2364	C	C5-C6-N1	-5.28	118.36	121.00
12	B	2547	A	C4'-C3'-C2'	-5.28	97.32	102.60
12	B	2626	C	C5-C4-N4	-5.28	116.51	120.20
12	B	2692	G	C5-C6-N1	-5.28	108.86	111.50
11	A	48	U	N1-C2-N3	5.28	118.07	114.90
12	B	264	C	C1'-O4'-C4'	-5.28	105.68	109.90
12	B	324	A	C2-N3-C4	-5.28	107.96	110.60
12	B	354	A	C8-N9-C4	-5.28	103.69	105.80
12	B	366	C	N1-C1'-C2'	-5.28	106.20	112.00
12	B	485	C	P-O5'-C5'	5.28	129.34	120.90
12	B	531	C	O4'-C1'-C2'	-5.28	100.52	105.80
12	B	643	A	P-O5'-C5'	-5.28	112.46	120.90
12	B	868	U	C3'-C2'-C1'	-5.28	97.28	101.50
12	B	978	G	P-O3'-C3'	-5.28	113.37	119.70
12	B	989	G	N9-C4-C5	5.28	107.51	105.40
12	B	1059	G	C8-N9-C4	-5.28	104.29	106.40
12	B	1154	G	OP1-P-OP2	-5.28	111.69	119.60
12	B	1516	G	C1'-O4'-C4'	5.28	114.12	109.90
12	B	2189	U	C2'-C3'-O3'	5.28	122.14	113.70
12	B	2331	G	C2-N3-C4	-5.28	109.26	111.90
12	B	2498	C	C5-C4-N4	-5.28	116.51	120.20
12	B	2517	C	N1-C2-N3	-5.28	115.51	119.20
12	B	2550	G	C5-C6-N1	5.28	114.14	111.50
12	B	391	A	O4'-C1'-N9	5.27	112.42	108.20
12	B	504	A	N1-C2-N3	5.27	131.94	129.30
12	B	1214	A	C5-C6-N1	-5.27	115.06	117.70
12	B	1805	A	C4'-C3'-C2'	-5.27	97.33	102.60
12	B	1901	A	C4'-C3'-C2'	-5.27	97.33	102.60
12	B	1901	A	C5-C6-N6	-5.27	119.48	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	C	267	VAL	CB-CA-C	-5.27	101.38	111.40
16	F	16	MET	N-CA-CB	5.27	120.09	110.60
30	T	60	THR	CA-CB-CG2	-5.27	105.02	112.40
12	B	57	C	C5-C4-N4	-5.27	116.51	120.20
12	B	277	G	C5'-C4'-C3'	5.27	124.44	116.00
12	B	383	C	P-O3'-C3'	-5.27	113.37	119.70
12	B	452	G	N1-C2-N2	-5.27	111.45	116.20
12	B	759	G	N3-C2-N2	5.27	123.59	119.90
12	B	2865	U	C2-N3-C4	-5.27	123.84	127.00
29	S	18	ARG	NE-CZ-NH2	5.27	122.94	120.30
11	A	9	G	C8-N9-C4	-5.27	104.29	106.40
12	B	118	A	C1'-O4'-C4'	-5.27	105.68	109.90
12	B	238	C	N1-C2-N3	-5.27	115.51	119.20
12	B	250	G	C8-N9-C4	-5.27	104.29	106.40
12	B	314	C	N3-C4-N4	5.27	121.69	118.00
12	B	850	U	N1-C2-N3	5.27	118.06	114.90
12	B	2331	G	C4-C5-N7	5.27	112.91	110.80
11	A	50	A	C4-C5-C6	5.27	119.64	117.00
12	B	575	A	C5'-C4'-O4'	5.27	115.42	109.10
12	B	1030	C	N3-C4-N4	5.27	121.69	118.00
12	B	2073	C	O4'-C1'-N1	5.27	112.42	108.20
12	B	2271	G	C6-C5-N7	-5.27	127.24	130.40
12	B	2412	A	N1-C2-N3	5.27	131.94	129.30
12	B	2553	G	C4'-C3'-C2'	-5.27	97.33	102.60
12	B	2788	C	N3-C2-O2	-5.27	118.21	121.90
12	B	2789	C	N3-C4-N4	5.27	121.69	118.00
18	H	17	ASP	N-CA-CB	5.27	120.08	110.60
10	9	165	LEU	CB-CG-CD1	5.27	119.96	111.00
12	B	85	G	O4'-C1'-N9	5.27	112.41	108.20
12	B	424	G	N3-C4-C5	-5.27	125.97	128.60
12	B	768	G	C5-N7-C8	-5.27	101.67	104.30
12	B	779	U	C5-C6-N1	5.27	125.33	122.70
12	B	884	U	OP1-P-OP2	-5.27	111.70	119.60
12	B	910	A	N7-C8-N9	-5.27	111.17	113.80
12	B	1063	G	C5'-C4'-C3'	5.27	124.43	116.00
12	B	1327	A	C2-N3-C4	-5.27	107.97	110.60
12	B	1539	U	N1-C2-N3	-5.27	111.74	114.90
12	B	2070	A	C5-N7-C8	5.27	106.53	103.90
12	B	2071	A	P-O3'-C3'	5.27	126.02	119.70
12	B	2155	U	C1'-O4'-C4'	5.27	114.11	109.90
12	B	2209	G	C6-N1-C2	5.27	128.26	125.10
12	B	2319	G	N1-C2-N3	-5.27	120.74	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	N	91	ALA	CB-CA-C	-5.27	102.20	110.10
12	B	439	A	C5-N7-C8	-5.27	101.27	103.90
12	B	1428	C	N1-C2-O2	5.27	122.06	118.90
12	B	1731	G	OP2-P-O3'	5.27	116.78	105.20
12	B	1970	A	O4'-C1'-N9	5.27	112.41	108.20
12	B	2029	G	C4-C5-C6	5.27	121.96	118.80
12	B	2165	C	O4'-C1'-N1	5.27	112.41	108.20
12	B	2688	G	C6-N1-C2	5.27	128.26	125.10
11	A	13	G	N1-C2-N3	-5.26	120.74	123.90
12	B	230	G	N9-C4-C5	5.26	107.51	105.40
12	B	564	C	N3-C4-N4	5.26	121.68	118.00
12	B	921	C	C5'-C4'-O4'	5.26	115.42	109.10
12	B	1331	G	C5'-C4'-C3'	-5.26	107.58	116.00
12	B	1405	U	N3-C2-O2	5.26	125.88	122.20
12	B	1656	C	O4'-C1'-N1	5.26	112.41	108.20
12	B	1986	C	N3-C4-N4	5.26	121.69	118.00
12	B	2526	G	N1-C6-O6	5.26	123.06	119.90
12	B	2777	G	C5-C6-O6	-5.26	125.44	128.60
12	B	2874	C	OP1-P-O3'	5.26	116.78	105.20
20	J	98	GLU	CB-CA-C	-5.26	99.87	110.40
28	R	36	ALA	N-CA-CB	-5.26	102.73	110.10
11	A	33	G	C6-N1-C2	5.26	128.26	125.10
12	B	188	G	O4'-C1'-N9	5.26	112.41	108.20
12	B	493	G	C8-N9-C1'	5.26	133.84	127.00
12	B	1097	U	N3-C4-O4	5.26	123.08	119.40
12	B	1475	G	C5-N7-C8	5.26	106.93	104.30
12	B	1943	U	C2-N1-C1'	5.26	124.02	117.70
12	B	2625	G	C4-C5-C6	5.26	121.96	118.80
12	B	2763	G	C5-C6-O6	-5.26	125.44	128.60
13	C	244	VAL	CA-CB-CG1	-5.26	103.01	110.90
20	J	113	PRO	N-CD-CG	5.26	111.09	103.20
11	A	57	A	C5'-C4'-O4'	5.26	115.41	109.10
12	B	122	G	C4-C5-N7	5.26	112.91	110.80
12	B	266	G	C5-N7-C8	-5.26	101.67	104.30
12	B	484	C	C3'-C2'-C1'	-5.26	97.29	101.50
12	B	1501	G	N1-C2-N3	-5.26	120.74	123.90
12	B	1532	A	C8-N9-C4	5.26	107.90	105.80
12	B	1664	A	C3'-C2'-C1'	-5.26	97.29	101.50
12	B	2663	G	P-O3'-C3'	-5.26	113.39	119.70
20	J	65	THR	CA-CB-CG2	-5.26	105.03	112.40
21	K	46	ALA	N-CA-CB	5.26	117.47	110.10
31	U	21	ARG	NE-CZ-NH1	5.26	122.93	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	14	A	N9-C4-C5	5.26	107.90	105.80
12	B	343	C	N3-C4-C5	-5.26	119.80	121.90
12	B	854	C	N3-C4-C5	-5.26	119.80	121.90
12	B	1609	A	O3'-P-O5'	-5.26	94.01	104.00
18	H	46	PHE	CB-CA-C	-5.26	99.88	110.40
11	A	85	G	N3-C4-C5	5.26	131.23	128.60
12	B	423	A	C8-N9-C4	5.26	107.90	105.80
12	B	474	G	C5'-C4'-C3'	-5.26	107.59	116.00
12	B	1189	A	C5-N7-C8	5.26	106.53	103.90
12	B	1231	U	C5'-C4'-C3'	-5.26	107.59	116.00
12	B	1479	G	O5'-C5'-C4'	-5.26	101.71	111.70
12	B	1848	A	N9-C1'-C2'	5.26	120.83	114.00
12	B	2631	G	C3'-C2'-C1'	5.26	105.71	101.50
12	B	2742	G	C5-C6-O6	-5.26	125.44	128.60
12	B	84	A	C4-C5-C6	5.26	119.63	117.00
12	B	179	C	C5-C4-N4	-5.26	116.52	120.20
12	B	283	G	C6-C5-N7	-5.26	127.25	130.40
12	B	352	A	N9-C4-C5	-5.26	103.70	105.80
12	B	390	U	C5-C4-O4	-5.26	122.75	125.90
12	B	407	G	O4'-C1'-N9	5.26	112.41	108.20
12	B	705	A	N3-C4-N9	5.26	131.60	127.40
12	B	776	G	O4'-C1'-N9	5.26	112.41	108.20
12	B	1547	C	C3'-C2'-C1'	-5.26	97.30	101.50
12	B	1696	G	C1'-O4'-C4'	-5.26	105.69	109.90
12	B	1874	C	C4'-C3'-C2'	-5.26	97.34	102.60
12	B	2376	A	C8-N9-C4	5.26	107.90	105.80
12	B	2636	C	N1-C2-N3	-5.26	115.52	119.20
10	9	327	ASP	CB-CG-OD2	5.25	123.03	118.30
12	B	75	G	O4'-C4'-C3'	-5.25	98.75	104.00
12	B	1054	A	C5-C6-N6	-5.25	119.50	123.70
12	B	1693	U	C2-N3-C4	-5.25	123.85	127.00
12	B	1819	A	C5-C6-N6	-5.25	119.50	123.70
12	B	2319	G	C5'-C4'-O4'	5.25	115.41	109.10
12	B	2653	U	O4'-C1'-N1	5.25	112.40	108.20
12	B	103	A	C3'-C2'-C1'	-5.25	97.30	101.50
12	B	307	G	C5-C6-O6	-5.25	125.45	128.60
12	B	362	A	C2-N3-C4	-5.25	107.97	110.60
12	B	804	A	OP1-P-OP2	-5.25	111.72	119.60
12	B	2673	G	C4-C5-C6	5.25	121.95	118.80
12	B	76	C	C6-N1-C2	-5.25	118.20	120.30
12	B	80	G	C6-C5-N7	-5.25	127.25	130.40
12	B	552	U	O4'-C1'-C2'	-5.25	100.55	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	587	C	C6-N1-C2	-5.25	118.20	120.30
12	B	863	A	OP2-P-O3'	5.25	116.75	105.20
12	B	927	A	C4-C5-C6	5.25	119.62	117.00
12	B	1461	C	C1'-O4'-C4'	-5.25	105.70	109.90
12	B	2134	A	N9-C4-C5	-5.25	103.70	105.80
12	B	2362	C	C5-C4-N4	-5.25	116.52	120.20
12	B	2608	G	N1-C2-N2	-5.25	111.47	116.20
12	B	2673	G	N3-C4-N9	-5.25	122.85	126.00
12	B	2867	G	C6-C5-N7	-5.25	127.25	130.40
13	C	139	THR	CA-CB-CG2	-5.25	105.05	112.40
12	B	215	G	C1'-O4'-C4'	5.25	114.10	109.90
12	B	434	U	C2-N3-C4	5.25	130.15	127.00
12	B	1400	U	C2-N3-C4	-5.25	123.85	127.00
12	B	2279	G	O4'-C1'-N9	5.25	112.40	108.20
12	B	72	U	OP2-P-O3'	5.25	116.75	105.20
12	B	311	A	O5'-C5'-C4'	5.25	121.67	111.70
12	B	470	A	C8-N9-C4	-5.25	103.70	105.80
12	B	547	A	C4-C5-C6	5.25	119.62	117.00
12	B	1558	C	C5-C6-N1	5.25	123.62	121.00
12	B	2070	A	N3-C4-N9	5.25	131.60	127.40
12	B	2238	G	N3-C4-C5	5.25	131.22	128.60
12	B	2299	U	N3-C4-O4	5.25	123.07	119.40
12	B	2664	G	P-O5'-C5'	5.25	129.30	120.90
11	A	97	C	O4'-C1'-N1	5.25	112.40	108.20
12	B	678	C	C1'-O4'-C4'	-5.25	105.70	109.90
12	B	2100	G	N7-C8-N9	5.25	115.72	113.10
12	B	2650	U	N3-C4-O4	5.25	123.07	119.40
12	B	2677	G	C6-C5-N7	-5.25	127.25	130.40
11	A	114	C	C4'-C3'-C2'	-5.25	97.36	102.60
12	B	1584	U	N3-C2-O2	5.25	125.87	122.20
12	B	1975	G	N3-C2-N2	5.25	123.57	119.90
12	B	2413	G	O4'-C1'-N9	5.25	112.40	108.20
12	B	2415	G	O5'-C5'-C4'	-5.25	101.73	111.70
12	B	2587	A	C1'-O4'-C4'	5.25	114.10	109.90
12	B	311	A	C5-C6-N1	-5.24	115.08	117.70
12	B	1506	U	P-O5'-C5'	5.24	129.29	120.90
12	B	1767	G	C5-C6-N1	-5.24	108.88	111.50
12	B	2150	C	O4'-C1'-N1	5.24	112.40	108.20
12	B	2531	A	C5-N7-C8	5.24	106.52	103.90
12	B	2867	G	C2-N3-C4	-5.24	109.28	111.90
24	N	8	ARG	NE-CZ-NH1	-5.24	117.68	120.30
12	B	117	G	C8-N9-C1'	5.24	133.81	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	233	A	C5-N7-C8	5.24	106.52	103.90
12	B	323	C	C2-N1-C1'	5.24	124.57	118.80
12	B	864	G	C2-N3-C4	5.24	114.52	111.90
12	B	1116	G	C2-N3-C4	5.24	114.52	111.90
12	B	1923	U	C6-N1-C2	-5.24	117.86	121.00
6	5	44	VAL	CA-CB-CG1	5.24	118.76	110.90
11	A	13	G	O4'-C1'-N9	5.24	112.39	108.20
12	B	35	G	N3-C4-N9	-5.24	122.86	126.00
12	B	396	G	C5-N7-C8	5.24	106.92	104.30
12	B	550	C	C2-N3-C4	5.24	122.52	119.90
12	B	754	U	C4'-C3'-C2'	-5.24	97.36	102.60
12	B	1158	C	N1-C2-O2	5.24	122.04	118.90
12	B	1492	G	N3-C2-N2	5.24	123.57	119.90
12	B	1663	G	N3-C4-N9	5.24	129.14	126.00
12	B	1822	C	C2-N3-C4	5.24	122.52	119.90
12	B	2479	U	N3-C4-O4	5.24	123.07	119.40
12	B	2660	A	N3-C4-C5	-5.24	123.13	126.80
12	B	2775	G	N1-C2-N2	5.24	120.92	116.20
12	B	2826	A	O4'-C1'-N9	5.24	112.39	108.20
12	B	84	A	C8-N9-C4	-5.24	103.70	105.80
12	B	173	A	C1'-O4'-C4'	5.24	114.09	109.90
12	B	847	U	N3-C4-O4	5.24	123.07	119.40
12	B	947	A	C3'-C2'-C1'	-5.24	97.31	101.50
12	B	1338	G	C5-C6-N1	5.24	114.12	111.50
12	B	1462	C	C4'-C3'-C2'	-5.24	97.36	102.60
12	B	1591	A	C4-C5-C6	5.24	119.62	117.00
12	B	2161	C	N1-C2-N3	5.24	122.87	119.20
12	B	2214	C	O5'-C5'-C4'	-5.24	101.75	111.70
12	B	2453	A	N3-C4-C5	5.24	130.47	126.80
12	B	75	G	O3'-P-O5'	-5.24	94.05	104.00
12	B	833	A	O4'-C4'-C3'	-5.24	98.76	104.00
12	B	1051	G	C6-C5-N7	-5.24	127.26	130.40
12	B	1147	A	P-O3'-C3'	-5.24	113.42	119.70
12	B	2228	G	N3-C4-N9	5.24	129.14	126.00
12	B	2426	A	P-O5'-C5'	-5.24	112.52	120.90
11	A	50	A	C8-N9-C4	5.24	107.89	105.80
11	A	114	C	O4'-C1'-C2'	-5.24	100.56	105.80
11	A	117	G	O4'-C4'-C3'	-5.24	98.77	104.00
12	B	1264	A	P-O3'-C3'	5.24	125.98	119.70
12	B	1535	A	P-O3'-C3'	5.24	125.98	119.70
12	B	1950	G	C1'-O4'-C4'	-5.24	105.71	109.90
12	B	1987	A	C5-C6-N1	5.24	120.32	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2150	C	N1-C2-O2	5.24	122.04	118.90
12	B	2290	G	N1-C2-N2	-5.24	111.49	116.20
12	B	2356	U	N1-C2-N3	-5.24	111.76	114.90
12	B	2857	G	C8-N9-C4	5.24	108.49	106.40
17	G	91	VAL	CA-CB-CG1	-5.24	103.05	110.90
29	S	44	ALA	C-N-CA	5.24	134.79	121.70
30	T	6	ARG	NE-CZ-NH2	-5.24	117.68	120.30
12	B	533	G	N1-C2-N3	-5.23	120.76	123.90
12	B	656	G	N3-C4-C5	-5.23	125.98	128.60
12	B	1365	A	N9-C4-C5	-5.23	103.71	105.80
12	B	2017	U	C6-N1-C2	-5.23	117.86	121.00
12	B	51	G	C5-N7-C8	5.23	106.92	104.30
12	B	69	C	O3'-P-O5'	-5.23	94.06	104.00
12	B	1060	U	O4'-C1'-N1	5.23	112.39	108.20
12	B	1218	G	N1-C6-O6	5.23	123.04	119.90
12	B	2052	A	C8-N9-C4	-5.23	103.71	105.80
12	B	2640	G	C1'-O4'-C4'	5.23	114.09	109.90
21	K	72	PRO	N-CA-CB	-5.23	96.84	102.60
25	O	106	LEU	N-CA-CB	5.23	120.86	110.40
12	B	34	U	N3-C4-C5	-5.23	111.46	114.60
12	B	739	A	C4'-C3'-C2'	-5.23	97.37	102.60
12	B	789	A	N3-C4-N9	5.23	131.59	127.40
12	B	1230	A	C6-N1-C2	5.23	121.74	118.60
12	B	1339	G	OP1-P-O3'	5.23	116.71	105.20
12	B	1412	U	C1'-O4'-C4'	5.23	114.08	109.90
12	B	2433	A	C5-N7-C8	5.23	106.52	103.90
12	B	2500	U	C5'-C4'-O4'	5.23	115.38	109.10
12	B	2507	C	C2-N3-C4	5.23	122.52	119.90
12	B	2617	U	C4'-C3'-C2'	-5.23	97.37	102.60
18	H	57	LYS	C-N-CA	5.23	134.78	121.70
12	B	82	U	P-O5'-C5'	5.23	129.27	120.90
12	B	1715	G	C4'-C3'-C2'	-5.23	97.37	102.60
12	B	2703	C	C5-C4-N4	-5.23	116.54	120.20
12	B	332	A	N1-C2-N3	-5.23	126.69	129.30
12	B	520	G	C8-N9-C1'	5.23	133.80	127.00
12	B	661	A	C2-N3-C4	-5.23	107.99	110.60
12	B	875	G	N3-C4-N9	-5.23	122.86	126.00
12	B	884	U	C1'-O4'-C4'	-5.23	105.72	109.90
12	B	1916	A	O4'-C1'-N9	5.23	112.38	108.20
12	B	2247	A	C5-C6-N6	-5.23	119.52	123.70
12	B	2515	C	N1-C2-O2	5.23	122.04	118.90
12	B	2673	G	N1-C6-O6	5.23	123.04	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2824	C	N1-C2-N3	-5.23	115.54	119.20
12	B	2848	G	N3-C4-N9	-5.23	122.86	126.00
13	C	176	ARG	NH1-CZ-NH2	-5.23	113.65	119.40
18	H	139	PHE	CB-CG-CD1	-5.23	117.14	120.80
23	M	27	SER	CB-CA-C	-5.23	100.17	110.10
12	B	298	G	N1-C2-N2	-5.23	111.50	116.20
12	B	1393	A	C4-C5-N7	-5.23	108.09	110.70
12	B	1395	A	N1-C6-N6	5.23	121.73	118.60
12	B	1542	U	C5-C6-N1	5.23	125.31	122.70
12	B	1577	C	C5'-C4'-C3'	5.23	124.36	116.00
12	B	2814	A	C4-C5-C6	5.23	119.61	117.00
16	F	151	LEU	N-CA-CB	5.23	120.85	110.40
11	A	21	G	N7-C8-N9	-5.22	110.49	113.10
12	B	466	A	C4-C5-C6	5.22	119.61	117.00
12	B	829	A	C4-C5-C6	5.22	119.61	117.00
12	B	862	G	N9-C4-C5	-5.22	103.31	105.40
12	B	899	A	N7-C8-N9	-5.22	111.19	113.80
12	B	926	G	C3'-C2'-C1'	-5.22	97.32	101.50
12	B	941	A	C5-N7-C8	5.22	106.51	103.90
12	B	1174	U	C5-C6-N1	5.22	125.31	122.70
12	B	1213	A	P-O3'-C3'	-5.22	113.43	119.70
12	B	1242	U	O4'-C1'-N1	5.22	112.38	108.20
12	B	1528	A	C1'-O4'-C4'	-5.22	105.72	109.90
12	B	1630	A	N1-C6-N6	5.22	121.73	118.60
12	B	2627	G	C5'-C4'-O4'	-5.22	102.83	109.10
13	C	174	ARG	NH1-CZ-NH2	-5.22	113.65	119.40
18	H	96	THR	N-CA-CB	5.22	120.23	110.30
11	A	86	G	OP1-P-OP2	-5.22	111.77	119.60
12	B	263	G	N1-C6-O6	5.22	123.03	119.90
12	B	390	U	O5'-P-OP2	-5.22	101.00	105.70
12	B	667	U	N1-C2-O2	-5.22	119.14	122.80
12	B	1034	G	C6-C5-N7	-5.22	127.27	130.40
12	B	1246	A	O4'-C1'-N9	5.22	112.38	108.20
12	B	1270	C	N3-C4-N4	5.22	121.66	118.00
12	B	1365	A	O4'-C4'-C3'	-5.22	98.78	104.00
12	B	1632	A	C1'-O4'-C4'	5.22	114.08	109.90
12	B	1644	C	OP1-P-OP2	-5.22	111.77	119.60
12	B	1761	C	N1-C2-O2	-5.22	115.77	118.90
12	B	1789	A	C5-C6-N6	-5.22	119.52	123.70
12	B	2790	U	P-O5'-C5'	5.22	129.26	120.90
12	B	2854	G	OP1-P-OP2	-5.22	111.77	119.60
14	D	15	PHE	CB-CG-CD1	5.22	124.46	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	N	112	TYR	CB-CG-CD2	-5.22	117.87	121.00
12	B	561	G	O5'-P-OP2	5.22	116.97	110.70
12	B	1682	G	C8-N9-C4	5.22	108.49	106.40
12	B	2571	U	C1'-O4'-C4'	5.22	114.08	109.90
12	B	2711	A	C2-N3-C4	5.22	113.21	110.60
11	A	55	U	C6-N1-C1'	5.22	128.51	121.20
12	B	690	G	C8-N9-C1'	5.22	133.78	127.00
12	B	1227	G	N9-C1'-C2'	-5.22	106.26	112.00
12	B	1337	G	OP2-P-O3'	5.22	116.68	105.20
12	B	1361	G	OP1-P-O3'	5.22	116.68	105.20
12	B	1498	C	C5-C4-N4	-5.22	116.55	120.20
12	B	1547	C	O4'-C4'-C3'	-5.22	98.78	104.00
12	B	1611	C	C6-N1-C2	-5.22	118.21	120.30
12	B	1667	G	C2-N3-C4	-5.22	109.29	111.90
12	B	1809	A	C5-N7-C8	5.22	106.51	103.90
12	B	2014	A	C5-C6-N1	-5.22	115.09	117.70
12	B	2289	G	N1-C2-N3	-5.22	120.77	123.90
12	B	2324	U	C5-C6-N1	5.22	125.31	122.70
12	B	2484	G	P-O3'-C3'	-5.22	113.44	119.70
12	B	2572	A	C5'-C4'-O4'	5.22	115.36	109.10
20	J	62	VAL	CA-CB-CG2	5.22	118.73	110.90
12	B	326	G	C2-N3-C4	5.22	114.51	111.90
12	B	1948	G	C5-C6-N1	-5.22	108.89	111.50
12	B	2175	C	C6-N1-C2	-5.22	118.21	120.30
12	B	2586	U	O5'-P-OP1	-5.22	101.00	105.70
10	9	117	VAL	N-CA-C	-5.22	96.91	111.00
12	B	734	A	C4-C5-C6	5.22	119.61	117.00
12	B	916	G	C6-C5-N7	-5.22	127.27	130.40
12	B	1275	A	P-O3'-C3'	5.22	125.96	119.70
12	B	1546	G	C4-C5-N7	5.22	112.89	110.80
12	B	1649	G	C1'-O4'-C4'	-5.22	105.73	109.90
12	B	1959	G	OP2-P-O3'	5.22	116.68	105.20
12	B	2575	C	P-O3'-C3'	5.22	125.96	119.70
12	B	2673	G	N1-C2-N3	-5.22	120.77	123.90
12	B	2850	A	C4-C5-C6	5.22	119.61	117.00
1	0	10	ARG	NE-CZ-NH1	-5.21	117.69	120.30
11	A	80	U	N1-C2-N3	-5.21	111.77	114.90
12	B	88	G	N1-C2-N3	-5.21	120.77	123.90
12	B	144	A	N3-C4-C5	-5.21	123.15	126.80
12	B	889	C	P-O5'-C5'	-5.21	112.56	120.90
12	B	1126	A	C5-C6-N6	5.21	127.87	123.70
12	B	1773	A	N7-C8-N9	5.21	116.41	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2051	A	C1'-O4'-C4'	5.21	114.07	109.90
12	B	2088	A	N7-C8-N9	-5.21	111.19	113.80
12	B	2460	U	N3-C4-O4	5.21	123.05	119.40
12	B	1650	A	C8-N9-C4	-5.21	103.72	105.80
12	B	1872	A	C6-N1-C2	5.21	121.73	118.60
12	B	2565	A	C5-C6-N6	-5.21	119.53	123.70
12	B	2824	C	N1-C2-O2	5.21	122.03	118.90
12	B	636	G	C4-C5-C6	5.21	121.93	118.80
12	B	921	C	C1'-O4'-C4'	5.21	114.07	109.90
12	B	930	G	O4'-C1'-N9	5.21	112.37	108.20
12	B	1027	A	C6-C5-N7	-5.21	128.65	132.30
12	B	1390	U	N1-C2-N3	5.21	118.03	114.90
12	B	1967	C	C6-N1-C2	-5.21	118.22	120.30
12	B	2682	A	C4-C5-C6	5.21	119.61	117.00
13	C	261	ARG	N-CA-C	-5.21	96.93	111.00
12	B	1575	C	N1-C2-O2	5.21	122.03	118.90
12	B	1684	G	C6-N1-C2	-5.21	121.97	125.10
12	B	1806	C	C6-N1-C2	5.21	122.38	120.30
12	B	2078	C	P-O5'-C5'	5.21	129.24	120.90
11	A	86	G	C5'-C4'-O4'	5.21	115.35	109.10
12	B	422	A	C2-N3-C4	5.21	113.20	110.60
12	B	755	U	N3-C4-O4	5.21	123.05	119.40
12	B	1180	U	C4-C5-C6	-5.21	116.58	119.70
12	B	1379	U	P-O3'-C3'	5.21	125.95	119.70
12	B	1437	C	C6-N1-C2	5.21	122.38	120.30
12	B	2001	C	C4-C5-C6	-5.21	114.80	117.40
12	B	2056	G	N3-C4-N9	5.21	129.12	126.00
12	B	2293	G	N9-C1'-C2'	-5.21	106.27	112.00
12	B	2410	G	C4-C5-N7	-5.21	108.72	110.80
12	B	1477	A	N1-C2-N3	5.21	131.90	129.30
12	B	1513	U	C2-N3-C4	-5.21	123.88	127.00
12	B	1676	A	P-O3'-C3'	5.21	125.95	119.70
12	B	2089	C	C2-N3-C4	5.21	122.50	119.90
12	B	2183	A	N9-C1'-C2'	-5.21	106.27	112.00
27	Q	44	TYR	CB-CG-CD1	-5.21	117.88	121.00
27	Q	105	PHE	O-C-N	-5.21	114.37	122.70
11	A	40	U	N3-C4-C5	-5.21	111.48	114.60
12	B	213	A	O4'-C1'-N9	5.21	112.36	108.20
12	B	372	G	N3-C2-N2	5.21	123.54	119.90
12	B	644	A	C5-N7-C8	5.21	106.50	103.90
12	B	2211	A	C8-N9-C1'	-5.21	118.33	127.70
12	B	2802	G	C4'-C3'-C2'	-5.21	97.39	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	56	G	N3-C4-C5	5.20	131.20	128.60
12	B	66	C	O5'-C5'-C4'	-5.20	101.81	111.70
12	B	293	U	C5-C4-O4	-5.20	122.78	125.90
12	B	372	G	N1-C2-N2	-5.20	111.52	116.20
12	B	566	U	N1-C2-O2	-5.20	119.16	122.80
12	B	643	A	P-O3'-C3'	5.20	125.94	119.70
12	B	1076	C	C5'-C4'-C3'	5.20	124.32	116.00
12	B	1553	A	C8-N9-C4	-5.20	103.72	105.80
12	B	1560	G	O4'-C1'-N9	5.20	112.36	108.20
12	B	1573	G	C8-N9-C4	-5.20	104.32	106.40
12	B	1717	A	C5'-C4'-C3'	5.20	124.33	116.00
12	B	2153	C	C1'-O4'-C4'	-5.20	105.74	109.90
12	B	2226	C	C5-C4-N4	5.20	123.84	120.20
12	B	2740	A	C5-N7-C8	5.20	106.50	103.90
12	B	722	A	C4-C5-N7	-5.20	108.10	110.70
12	B	2121	G	N9-C4-C5	5.20	107.48	105.40
12	B	2317	A	N7-C8-N9	5.20	116.40	113.80
12	B	2588	G	C1'-O4'-C4'	-5.20	105.74	109.90
14	D	184	ARG	C-N-CA	5.20	134.71	121.70
12	B	475	C	N1-C2-N3	-5.20	115.56	119.20
12	B	761	A	C5'-C4'-C3'	-5.20	107.68	116.00
12	B	1114	C	N3-C4-C5	-5.20	119.82	121.90
12	B	1746	A	C3'-C2'-C1'	-5.20	97.34	101.50
12	B	1762	A	C1'-O4'-C4'	5.20	114.06	109.90
12	B	2157	G	N1-C2-N3	-5.20	120.78	123.90
12	B	2220	U	C5'-C4'-C3'	5.20	124.32	116.00
12	B	2286	G	P-O3'-C3'	5.20	125.94	119.70
12	B	2302	U	O5'-P-OP2	-5.20	101.02	105.70
12	B	2461	A	N9-C4-C5	-5.20	103.72	105.80
24	N	65	LEU	CB-CA-C	-5.20	100.32	110.20
12	B	4	U	C5-C6-N1	-5.20	120.10	122.70
12	B	119	A	C2-N3-C4	5.20	113.20	110.60
12	B	492	A	N3-C4-C5	-5.20	123.16	126.80
12	B	857	G	C6-C5-N7	-5.20	127.28	130.40
12	B	1044	C	P-O3'-C3'	5.20	125.94	119.70
12	B	1045	C	C5-C6-N1	5.20	123.60	121.00
12	B	1071	G	C5-C6-O6	-5.20	125.48	128.60
12	B	1369	G	N3-C2-N2	5.20	123.54	119.90
12	B	1381	G	C6-C5-N7	-5.20	127.28	130.40
12	B	1408	G	C8-N9-C4	-5.20	104.32	106.40
12	B	1572	A	P-O3'-C3'	5.20	125.94	119.70
12	B	1784	A	C4-C5-C6	5.20	119.60	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2008	C	O4'-C1'-N1	5.20	112.36	108.20
12	B	2087	G	C4-C5-N7	-5.20	108.72	110.80
12	B	2139	U	N3-C4-O4	5.20	123.04	119.40
12	B	2269	G	O4'-C1'-N9	5.20	112.36	108.20
12	B	2465	C	C5-C4-N4	-5.20	116.56	120.20
12	B	2738	A	C2-N3-C4	-5.20	108.00	110.60
12	B	2798	U	C6-N1-C2	5.20	124.12	121.00
6	5	32	GLU	CB-CA-C	-5.20	100.01	110.40
12	B	119	A	C4-C5-N7	-5.20	108.10	110.70
12	B	322	A	O3'-P-O5'	5.20	113.87	104.00
12	B	354	A	C4'-C3'-C2'	-5.20	97.40	102.60
12	B	785	G	N3-C4-N9	-5.20	122.88	126.00
12	B	885	C	C4'-C3'-C2'	-5.20	97.40	102.60
12	B	1129	A	C4-C5-N7	-5.20	108.10	110.70
12	B	1337	G	N7-C8-N9	5.20	115.70	113.10
11	A	2	G	C1'-O4'-C4'	-5.20	105.74	109.90
12	B	46	G	O4'-C1'-N9	5.20	112.36	108.20
12	B	476	G	C4-C5-C6	5.20	121.92	118.80
12	B	538	A	N9-C4-C5	5.20	107.88	105.80
12	B	1308	A	C3'-C2'-C1'	-5.20	97.34	101.50
12	B	1624	U	N3-C4-O4	5.20	123.04	119.40
12	B	1949	G	C8-N9-C1'	-5.20	120.25	127.00
12	B	2053	G	N1-C6-O6	5.20	123.02	119.90
12	B	2208	C	C2-N1-C1'	5.20	124.52	118.80
12	B	2351	G	C4-C5-C6	5.20	121.92	118.80
12	B	2552	U	N3-C4-O4	5.20	123.04	119.40
12	B	2552	U	O4'-C1'-N1	5.20	112.36	108.20
12	B	2794	C	C5-C4-N4	-5.20	116.56	120.20
16	F	151	LEU	CA-C-O	5.20	131.01	120.10
24	N	40	LYS	N-CA-CB	5.20	119.95	110.60
11	A	16	G	N3-C4-C5	5.19	131.20	128.60
12	B	304	U	C4'-C3'-C2'	-5.19	97.41	102.60
12	B	345	A	C4-C5-N7	-5.19	108.10	110.70
12	B	417	C	C2-N3-C4	5.19	122.50	119.90
12	B	472	A	O4'-C1'-N9	5.19	112.36	108.20
12	B	659	G	O4'-C1'-N9	5.19	112.36	108.20
12	B	1410	G	C8-N9-C1'	5.19	133.75	127.00
12	B	2487	G	O5'-P-OP2	-5.19	101.03	105.70
12	B	2752	C	O4'-C1'-N1	5.19	112.36	108.20
12	B	296	U	C5-C6-N1	5.19	125.30	122.70
12	B	314	C	C1'-O4'-C4'	5.19	114.05	109.90
12	B	717	C	N1-C1'-C2'	-5.19	106.29	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	997	G	N1-C2-N3	-5.19	120.78	123.90
12	B	1124	G	N1-C2-N2	5.19	120.87	116.20
12	B	1301	A	C6-N1-C2	-5.19	115.48	118.60
12	B	1340	U	N3-C4-O4	5.19	123.03	119.40
12	B	1985	C	C2-N3-C4	-5.19	117.30	119.90
12	B	2183	A	O4'-C4'-C3'	-5.19	98.81	104.00
12	B	2791	G	N3-C4-C5	5.19	131.20	128.60
18	H	65	ALA	CB-CA-C	-5.19	102.31	110.10
12	B	65	U	N3-C4-O4	5.19	123.03	119.40
12	B	88	G	OP1-P-OP2	-5.19	111.81	119.60
12	B	557	C	P-O5'-C5'	5.19	129.20	120.90
12	B	882	G	C8-N9-C1'	5.19	133.75	127.00
12	B	943	A	O3'-P-O5'	-5.19	94.14	104.00
12	B	1285	A	P-O5'-C5'	5.19	129.20	120.90
12	B	1441	G	P-O5'-C5'	5.19	129.20	120.90
12	B	1743	G	C1'-O4'-C4'	-5.19	105.75	109.90
12	B	1825	U	C4-C5-C6	-5.19	116.59	119.70
12	B	2467	C	C5-C4-N4	-5.19	116.57	120.20
12	B	2680	U	C2-N3-C4	-5.19	123.89	127.00
12	B	2834	G	N9-C4-C5	5.19	107.48	105.40
12	B	2871	U	C2-N3-C4	-5.19	123.89	127.00
30	T	66	LYS	N-CA-C	-5.19	96.99	111.00
12	B	2373	G	N3-C2-N2	5.19	123.53	119.90
28	R	42	ALA	N-CA-CB	5.19	117.36	110.10
11	A	8	C	N3-C4-C5	-5.19	119.83	121.90
12	B	473	G	O3'-P-O5'	-5.19	94.15	104.00
12	B	476	G	C6-N1-C2	5.19	128.21	125.10
12	B	615	U	N1-C2-O2	-5.19	119.17	122.80
12	B	1531	C	C5-C6-N1	5.19	123.59	121.00
12	B	1552	A	C1'-O4'-C4'	5.19	114.05	109.90
12	B	1870	C	C6-N1-C2	-5.19	118.22	120.30
12	B	2706	A	C6-N1-C2	5.19	121.71	118.60
12	B	2737	G	O4'-C1'-N9	5.19	112.35	108.20
12	B	2881	U	N3-C2-O2	5.19	125.83	122.20
14	D	15	PHE	C-N-CA	5.19	134.67	121.70
28	R	21	ARG	N-CA-C	-5.19	96.99	111.00
12	B	527	C	O4'-C1'-N1	5.19	112.35	108.20
12	B	670	A	C6-C5-N7	-5.19	128.67	132.30
12	B	996	A	C5'-C4'-O4'	5.19	115.32	109.10
12	B	1162	G	C2-N3-C4	-5.19	109.31	111.90
12	B	1562	U	C5'-C4'-C3'	-5.19	107.70	116.00
28	R	21	ARG	NE-CZ-NH2	5.19	122.89	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	357	C	N3-C4-C5	-5.18	119.83	121.90
12	B	408	G	C5'-C4'-C3'	-5.18	107.70	116.00
12	B	520	G	C8-N9-C4	-5.18	104.33	106.40
12	B	709	U	C2-N3-C4	-5.18	123.89	127.00
12	B	1831	G	C3'-C2'-C1'	-5.18	97.35	101.50
12	B	2116	G	N7-C8-N9	5.18	115.69	113.10
12	B	2478	A	C5-C6-N6	-5.18	119.55	123.70
12	B	2616	C	N3-C2-O2	5.18	125.53	121.90
12	B	133	U	N3-C4-C5	-5.18	111.49	114.60
12	B	371	A	C5'-C4'-O4'	5.18	115.32	109.10
12	B	662	G	C5-C6-O6	-5.18	125.49	128.60
12	B	682	G	O4'-C1'-N9	5.18	112.35	108.20
12	B	688	U	N3-C2-O2	5.18	125.83	122.20
12	B	743	A	O4'-C1'-N9	5.18	112.35	108.20
12	B	1402	U	C5-C6-N1	5.18	125.29	122.70
12	B	1762	A	O4'-C4'-C3'	-5.18	98.82	104.00
12	B	1861	G	C1'-O4'-C4'	-5.18	105.75	109.90
12	B	2305	U	P-O3'-C3'	5.18	125.92	119.70
12	B	2429	G	C8-N9-C4	5.18	108.47	106.40
12	B	489	G	C6-N1-C2	5.18	128.21	125.10
12	B	1454	C	C4'-C3'-C2'	5.18	107.78	102.60
12	B	1766	G	C8-N9-C4	5.18	108.47	106.40
12	B	1841	U	C5-C6-N1	-5.18	120.11	122.70
12	B	2120	G	C5'-C4'-C3'	-5.18	107.71	116.00
33	Y	65	LYS	N-CA-CB	5.18	119.93	110.60
12	B	199	A	C6-N1-C2	5.18	121.71	118.60
12	B	251	A	O5'-P-OP1	-5.18	101.04	105.70
12	B	697	G	C3'-C2'-C1'	5.18	105.64	101.50
12	B	1165	A	C8-N9-C4	-5.18	103.73	105.80
12	B	1302	A	C6-C5-N7	-5.18	128.68	132.30
12	B	2064	C	O4'-C1'-N1	5.18	112.34	108.20
12	B	189	G	N1-C2-N3	-5.18	120.79	123.90
12	B	628	G	C6-C5-N7	-5.18	127.29	130.40
12	B	721	A	C2-N3-C4	-5.18	108.01	110.60
12	B	1580	A	C6-N1-C2	-5.18	115.49	118.60
12	B	2059	A	C6-C5-N7	-5.18	128.68	132.30
12	B	2315	G	OP2-P-O3'	5.18	116.59	105.20
12	B	2629	U	O3'-P-O5'	-5.18	94.16	104.00
22	L	27	LEU	CB-CG-CD2	5.18	119.80	111.00
11	A	70	C	O5'-C5'-C4'	-5.18	101.86	111.70
12	B	43	G	P-O3'-C3'	-5.18	113.49	119.70
12	B	148	U	OP1-P-O3'	5.18	116.59	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	544	C	N3-C2-O2	-5.18	118.28	121.90
12	B	577	G	N7-C8-N9	5.18	115.69	113.10
12	B	731	C	N1-C2-O2	-5.18	115.79	118.90
12	B	820	A	C5'-C4'-C3'	5.18	124.28	116.00
12	B	852	U	C4-C5-C6	-5.18	116.59	119.70
12	B	1060	U	P-O3'-C3'	5.18	125.91	119.70
12	B	1173	U	C1'-O4'-C4'	5.18	114.04	109.90
12	B	1337	G	C8-N9-C4	-5.18	104.33	106.40
12	B	1495	A	C5-C6-N6	-5.18	119.56	123.70
12	B	1571	A	C5-N7-C8	5.18	106.49	103.90
12	B	1910	G	N9-C4-C5	-5.18	103.33	105.40
12	B	2052	A	N9-C1'-C2'	-5.18	106.31	112.00
12	B	2583	G	C5-N7-C8	5.18	106.89	104.30
12	B	2793	C	C5-C4-N4	-5.18	116.58	120.20
12	B	452	G	C5-C6-O6	-5.17	125.50	128.60
12	B	802	A	C6-C5-N7	-5.17	128.68	132.30
12	B	1223	G	C4-C5-C6	5.17	121.91	118.80
12	B	1474	U	N3-C2-O2	5.17	125.82	122.20
12	B	1556	C	C4'-C3'-C2'	-5.17	97.42	102.60
12	B	1663	G	N1-C2-N2	5.17	120.86	116.20
12	B	2019	A	C6-C5-N7	-5.17	128.68	132.30
10	9	40	GLY	N-CA-C	5.17	126.03	113.10
12	B	1155	A	C5-N7-C8	5.17	106.49	103.90
12	B	1401	G	N1-C6-O6	5.17	123.00	119.90
12	B	1966	A	N7-C8-N9	-5.17	111.21	113.80
12	B	1982	U	N3-C4-O4	5.17	123.02	119.40
12	B	1984	G	C8-N9-C4	5.17	108.47	106.40
12	B	2625	G	C6-C5-N7	-5.17	127.30	130.40
12	B	2838	G	N3-C4-N9	-5.17	122.90	126.00
27	Q	60	TRP	CG-CD2-CE3	-5.17	129.24	133.90
11	A	109	A	C5-C6-N6	-5.17	119.56	123.70
12	B	80	G	N3-C2-N2	5.17	123.52	119.90
12	B	82	U	C5'-C4'-O4'	5.17	115.31	109.10
12	B	697	G	C6-N1-C2	5.17	128.20	125.10
12	B	797	G	O4'-C1'-N9	5.17	112.34	108.20
12	B	1436	G	N1-C2-N2	-5.17	111.55	116.20
12	B	1628	G	O4'-C1'-N9	5.17	112.34	108.20
12	B	2206	C	N3-C4-N4	5.17	121.62	118.00
12	B	2875	C	C5'-C4'-C3'	-5.17	107.73	116.00
15	E	124	PHE	CB-CG-CD2	5.17	124.42	120.80
11	A	39	A	P-O5'-C5'	-5.17	112.63	120.90
12	B	757	G	N3-C2-N2	5.17	123.52	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	834	G	P-O3'-C3'	-5.17	113.50	119.70
12	B	939	G	N3-C2-N2	5.17	123.52	119.90
12	B	1194	A	C4-C5-C6	5.17	119.58	117.00
12	B	1306	C	C4'-C3'-C2'	-5.17	97.43	102.60
12	B	2047	C	N1-C2-N3	5.17	122.82	119.20
12	B	2419	U	N1-C1'-C2'	-5.17	106.31	112.00
12	B	563	A	C2-N3-C4	-5.17	108.02	110.60
12	B	631	A	C8-N9-C4	-5.17	103.73	105.80
12	B	654	A	N9-C1'-C2'	-5.17	106.31	112.00
12	B	836	G	C4'-C3'-C2'	-5.17	97.43	102.60
12	B	935	C	C1'-O4'-C4'	-5.17	105.77	109.90
12	B	2112	G	C4-C5-C6	5.17	121.90	118.80
12	B	2364	C	N3-C4-C5	-5.17	119.83	121.90
13	C	47	ARG	N-CA-CB	5.17	119.90	110.60
1	0	77	TYR	CB-CG-CD1	-5.17	117.90	121.00
12	B	24	G	N1-C2-N3	-5.17	120.80	123.90
12	B	795	C	N1-C2-O2	5.17	122.00	118.90
12	B	1161	C	N1-C2-O2	-5.17	115.80	118.90
12	B	1567	G	C4-C5-C6	5.17	121.90	118.80
12	B	1583	A	C4'-C3'-C2'	-5.17	97.43	102.60
12	B	1686	C	N3-C2-O2	5.17	125.52	121.90
12	B	2675	A	C6-C5-N7	-5.17	128.68	132.30
12	B	2704	C	C5-C6-N1	5.17	123.58	121.00
12	B	2723	C	C3'-C2'-C1'	5.17	105.63	101.50
13	C	108	GLY	N-CA-C	-5.17	100.18	113.10
22	L	89	VAL	N-CA-C	-5.17	97.05	111.00
8	7	21	PHE	CB-CG-CD1	-5.17	117.18	120.80
12	B	2810	A	C6-C5-N7	-5.17	128.68	132.30
12	B	106	C	N3-C4-N4	5.16	121.61	118.00
12	B	148	U	P-O3'-C3'	5.16	125.90	119.70
12	B	180	G	C6-C5-N7	-5.16	127.30	130.40
12	B	791	C	OP1-P-OP2	-5.16	111.86	119.60
12	B	1272	A	O5'-C5'-C4'	5.16	121.51	111.70
12	B	1351	C	C4-C5-C6	5.16	119.98	117.40
12	B	1838	C	C4-C5-C6	5.16	119.98	117.40
12	B	1939	U	C5-C4-O4	-5.16	122.80	125.90
12	B	2211	A	N7-C8-N9	-5.16	111.22	113.80
12	B	2221	G	N7-C8-N9	5.16	115.68	113.10
12	B	2355	G	C8-N9-C4	-5.16	104.33	106.40
12	B	2608	G	P-O3'-C3'	-5.16	113.50	119.70
26	P	58	PHE	CG-CD1-CE1	-5.16	115.12	120.80
12	B	152	A	OP1-P-O3'	5.16	116.56	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	644	A	O3'-P-O5'	-5.16	94.19	104.00
12	B	901	C	N3-C4-N4	5.16	121.61	118.00
12	B	1258	U	N1-C2-N3	-5.16	111.80	114.90
12	B	1535	A	C4-C5-C6	5.16	119.58	117.00
12	B	1649	G	C3'-C2'-C1'	-5.16	97.37	101.50
12	B	2023	C	C5-C6-N1	5.16	123.58	121.00
12	B	2075	U	C4-C5-C6	5.16	122.80	119.70
12	B	2609	U	C4'-C3'-C2'	-5.16	97.44	102.60
12	B	802	A	N3-C4-C5	-5.16	123.19	126.80
12	B	1603	A	C4-N9-C1'	5.16	135.59	126.30
12	B	1789	A	O4'-C1'-N9	5.16	112.33	108.20
12	B	1896	G	C6-N1-C2	-5.16	122.00	125.10
12	B	2099	U	O4'-C4'-C3'	-5.16	98.84	104.00
22	L	61	LEU	N-CA-CB	5.16	120.72	110.40
12	B	488	G	C5'-C4'-O4'	5.16	115.29	109.10
12	B	1115	G	C5-N7-C8	5.16	106.88	104.30
12	B	1931	U	O4'-C1'-N1	5.16	112.33	108.20
12	B	2021	C	C6-N1-C2	-5.16	118.24	120.30
12	B	2203	U	OP1-P-OP2	-5.16	111.86	119.60
12	B	2313	C	C5-C4-N4	-5.16	116.59	120.20
12	B	2756	U	C6-N1-C1'	-5.16	113.98	121.20
12	B	2809	A	C2-N3-C4	-5.16	108.02	110.60
30	T	12	ARG	NE-CZ-NH2	-5.16	117.72	120.30
12	B	240	C	C5-C4-N4	-5.16	116.59	120.20
12	B	398	C	N3-C4-C5	-5.16	119.84	121.90
12	B	620	G	C5'-C4'-O4'	5.16	115.29	109.10
12	B	651	G	C2-N3-C4	5.16	114.48	111.90
12	B	995	C	C4'-C3'-C2'	5.16	107.76	102.60
12	B	995	C	C5'-C4'-C3'	5.16	124.25	116.00
12	B	1461	C	P-O3'-C3'	5.16	125.89	119.70
12	B	1812	U	N1-C2-N3	-5.16	111.81	114.90
12	B	2346	A	N1-C6-N6	5.16	121.69	118.60
12	B	2511	U	N3-C4-C5	-5.16	111.51	114.60
12	B	2664	G	N3-C4-N9	5.16	129.09	126.00
12	B	2864	G	C1'-O4'-C4'	-5.16	105.77	109.90
32	W	64	VAL	CG1-CB-CG2	-5.16	102.65	110.90
12	B	464	U	C6-N1-C2	-5.16	117.91	121.00
12	B	604	G	N1-C6-O6	5.16	122.99	119.90
12	B	676	A	N9-C4-C5	5.16	107.86	105.80
12	B	706	A	C5-N7-C8	5.16	106.48	103.90
12	B	1115	G	N9-C4-C5	5.16	107.46	105.40
12	B	1298	C	N3-C2-O2	5.16	125.51	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1351	C	C2-N3-C4	5.16	122.48	119.90
12	B	1748	C	C2-N1-C1'	5.16	124.47	118.80
12	B	1987	A	C5-C6-N6	-5.16	119.58	123.70
20	J	27	ARG	N-CA-C	-5.16	97.08	111.00
12	B	391	A	N3-C4-C5	-5.15	123.19	126.80
12	B	1463	C	N1-C2-O2	5.15	121.99	118.90
12	B	2076	U	C2-N3-C4	5.15	130.09	127.00
12	B	2158	A	N3-C4-C5	-5.15	123.19	126.80
12	B	2586	U	C4-C5-C6	5.15	122.79	119.70
12	B	144	A	N3-C4-N9	5.15	131.52	127.40
12	B	173	A	O4'-C4'-C3'	-5.15	98.85	104.00
12	B	246	C	P-O3'-C3'	-5.15	113.52	119.70
12	B	625	G	C1'-O4'-C4'	-5.15	105.78	109.90
12	B	1423	G	C8-N9-C1'	5.15	133.70	127.00
12	B	1518	C	P-O3'-C3'	-5.15	113.52	119.70
12	B	1671	U	N3-C4-O4	-5.15	115.79	119.40
12	B	1733	G	C8-N9-C1'	5.15	133.70	127.00
12	B	1790	C	N3-C4-C5	-5.15	119.84	121.90
12	B	2058	A	N9-C4-C5	5.15	107.86	105.80
33	Y	50	VAL	CA-CB-CG1	5.15	118.63	110.90
12	B	287	G	C5-N7-C8	5.15	106.88	104.30
12	B	584	C	C4-C5-C6	5.15	119.97	117.40
12	B	628	G	P-O5'-C5'	5.15	129.14	120.90
12	B	993	G	N3-C4-C5	-5.15	126.03	128.60
12	B	1124	G	C1'-O4'-C4'	-5.15	105.78	109.90
12	B	1328	A	C5-N7-C8	5.15	106.47	103.90
12	B	1332	G	C3'-C2'-C1'	5.15	105.62	101.50
12	B	1364	G	N7-C8-N9	-5.15	110.52	113.10
12	B	1649	G	C5-C6-N1	-5.15	108.92	111.50
12	B	1649	G	O5'-C5'-C4'	-5.15	101.92	111.70
12	B	1663	G	C5-C6-N1	-5.15	108.92	111.50
12	B	1665	A	C6-C5-N7	-5.15	128.69	132.30
12	B	1770	G	C5-C6-N1	-5.15	108.92	111.50
12	B	1874	C	N3-C2-O2	-5.15	118.30	121.90
12	B	1901	A	C5-C6-N1	-5.15	115.12	117.70
12	B	2048	G	P-O5'-C5'	5.15	129.14	120.90
12	B	2527	C	C2-N3-C4	-5.15	117.33	119.90
16	F	131	VAL	CG1-CB-CG2	-5.15	102.66	110.90
23	M	66	ARG	CB-CA-C	-5.15	100.10	110.40
28	R	5	PHE	CB-CG-CD2	-5.15	117.19	120.80
12	B	260	G	C6-N1-C2	5.15	128.19	125.10
12	B	631	A	O4'-C4'-C3'	-5.15	98.85	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2426	A	N7-C8-N9	-5.15	111.22	113.80
11	A	5	U	C3'-C2'-C1'	5.15	105.62	101.50
12	B	533	G	N3-C4-N9	5.15	129.09	126.00
12	B	553	G	O5'-C5'-C4'	-5.15	101.92	111.70
12	B	852	U	C5'-C4'-O4'	5.15	115.28	109.10
12	B	1317	G	C4-C5-N7	5.15	112.86	110.80
12	B	1493	C	OP1-P-O3'	5.15	116.53	105.20
12	B	1708	C	P-O3'-C3'	5.15	125.88	119.70
12	B	1962	C	C5-C6-N1	-5.15	118.43	121.00
12	B	2088	A	C5-N7-C8	5.15	106.47	103.90
12	B	2545	G	C6-N1-C2	5.15	128.19	125.10
12	B	2653	U	N3-C4-C5	-5.15	111.51	114.60
12	B	2678	C	OP1-P-OP2	-5.15	111.88	119.60
12	B	2711	A	C4-C5-C6	5.15	119.57	117.00
12	B	2726	A	C6-N1-C2	-5.15	115.51	118.60
15	E	173	THR	CA-CB-CG2	-5.15	105.19	112.40
12	B	395	U	N1-C2-O2	5.15	126.40	122.80
12	B	1113	U	N3-C2-O2	5.15	125.80	122.20
12	B	1416	G	C8-N9-C4	-5.15	104.34	106.40
12	B	2350	C	C4-C5-C6	5.15	119.97	117.40
12	B	2902	C	N3-C4-C5	-5.15	119.84	121.90
27	Q	85	ALA	N-CA-CB	5.15	117.31	110.10
12	B	75	G	N1-C2-N3	-5.14	120.81	123.90
12	B	97	C	O4'-C1'-N1	5.14	112.31	108.20
12	B	681	G	N3-C4-N9	-5.14	122.91	126.00
12	B	1131	G	C5'-C4'-O4'	5.14	115.27	109.10
12	B	1251	C	C1'-O4'-C4'	-5.14	105.78	109.90
12	B	1564	C	C5'-C4'-C3'	5.14	124.23	116.00
12	B	1921	G	C2-N3-C4	5.14	114.47	111.90
12	B	2492	U	C5-C6-N1	5.14	125.27	122.70
12	B	2568	U	C1'-O4'-C4'	-5.14	105.78	109.90
12	B	309	A	C4-C5-N7	-5.14	108.13	110.70
12	B	618	G	C8-N9-C1'	5.14	133.68	127.00
12	B	640	C	C5'-C4'-C3'	-5.14	107.77	116.00
12	B	803	U	C2-N3-C4	5.14	130.09	127.00
12	B	1036	G	O4'-C4'-C3'	-5.14	98.86	104.00
12	B	1581	G	N7-C8-N9	5.14	115.67	113.10
12	B	1737	G	P-O5'-C5'	5.14	129.13	120.90
12	B	1748	C	N3-C4-N4	5.14	121.60	118.00
12	B	2393	U	C2-N3-C4	-5.14	123.91	127.00
12	B	2408	U	N3-C4-O4	5.14	123.00	119.40
12	B	461	C	C5'-C4'-O4'	5.14	115.27	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1620	G	O4'-C1'-N9	5.14	112.31	108.20
12	B	1918	A	C5'-C4'-C3'	-5.14	107.77	116.00
12	B	2050	C	N1-C2-O2	-5.14	115.82	118.90
12	B	2081	U	C5-C4-O4	-5.14	122.81	125.90
12	B	2508	G	C8-N9-C1'	5.14	133.68	127.00
12	B	2633	G	C5'-C4'-C3'	-5.14	107.77	116.00
11	A	42	C	C5-C4-N4	-5.14	116.60	120.20
11	A	116	G	N1-C6-O6	5.14	122.98	119.90
12	B	174	U	N3-C4-C5	-5.14	111.52	114.60
12	B	208	C	O4'-C1'-N1	5.14	112.31	108.20
12	B	291	G	O4'-C4'-C3'	-5.14	98.86	104.00
12	B	551	G	N3-C4-C5	5.14	131.17	128.60
12	B	713	G	C6-N1-C2	-5.14	122.02	125.10
12	B	896	A	C4'-C3'-C2'	-5.14	97.46	102.60
12	B	1124	G	C5-N7-C8	-5.14	101.73	104.30
12	B	1193	G	N3-C2-N2	-5.14	116.30	119.90
12	B	933	A	C5-C6-N6	-5.14	119.59	123.70
12	B	1427	A	C5-N7-C8	-5.14	101.33	103.90
12	B	2085	U	C6-N1-C1'	5.14	128.39	121.20
12	B	46	G	C1'-O4'-C4'	5.14	114.01	109.90
12	B	142	A	N3-C4-C5	-5.14	123.20	126.80
12	B	1029	A	C5-C6-N1	-5.14	115.13	117.70
12	B	1522	A	C5-N7-C8	-5.14	101.33	103.90
12	B	1986	C	N3-C2-O2	-5.14	118.31	121.90
12	B	2109	U	N1-C2-N3	5.14	117.98	114.90
12	B	2494	G	C6-N1-C2	5.14	128.18	125.10
12	B	2702	G	C3'-C2'-C1'	-5.14	97.39	101.50
12	B	66	C	N1-C2-O2	5.13	121.98	118.90
12	B	190	A	C4-C5-C6	5.13	119.57	117.00
12	B	674	G	C5-C6-O6	-5.13	125.52	128.60
12	B	763	G	C5-C6-N1	-5.13	108.93	111.50
12	B	767	U	N3-C4-O4	5.13	122.99	119.40
12	B	1419	A	C4'-C3'-C2'	-5.13	97.47	102.60
12	B	1656	C	N1-C2-O2	5.13	121.98	118.90
12	B	1692	U	C6-N1-C2	-5.13	117.92	121.00
12	B	2118	U	C2-N1-C1'	5.13	123.86	117.70
12	B	2725	A	C5-C6-N1	-5.13	115.13	117.70
12	B	748	G	C5-C6-N1	-5.13	108.93	111.50
12	B	922	C	N1-C1'-C2'	-5.13	106.35	112.00
12	B	1443	U	C5-C4-O4	-5.13	122.82	125.90
12	B	1453	A	N3-C4-C5	-5.13	123.21	126.80
12	B	1494	A	C4-C5-N7	-5.13	108.13	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1789	A	O4'-C4'-C3'	-5.13	98.87	104.00
12	B	2038	G	O4'-C4'-C3'	-5.13	98.87	104.00
12	B	2527	C	C4-C5-C6	-5.13	114.83	117.40
6	5	87	ALA	CB-CA-C	-5.13	102.40	110.10
11	A	104	A	N3-C4-N9	-5.13	123.29	127.40
12	B	413	C	C2-N3-C4	5.13	122.47	119.90
12	B	500	G	N3-C2-N2	5.13	123.49	119.90
12	B	829	A	C2-N3-C4	5.13	113.17	110.60
12	B	1144	A	N9-C4-C5	-5.13	103.75	105.80
12	B	1429	G	C8-N9-C1'	5.13	133.67	127.00
12	B	1455	G	N1-C2-N2	-5.13	111.58	116.20
12	B	1632	A	OP1-P-OP2	-5.13	111.90	119.60
12	B	1878	G	C2-N3-C4	-5.13	109.33	111.90
12	B	2420	C	C4'-C3'-C2'	5.13	107.73	102.60
12	B	2499	C	O3'-P-O5'	-5.13	94.25	104.00
12	B	2843	G	N1-C6-O6	5.13	122.98	119.90
13	C	51	ARG	NE-CZ-NH2	-5.13	117.73	120.30
11	A	101	A	C5'-C4'-C3'	-5.13	107.80	116.00
11	A	118	C	C5-C4-N4	-5.13	116.61	120.20
12	B	13	A	C5'-C4'-O4'	5.13	115.25	109.10
12	B	18	U	C1'-O4'-C4'	5.13	114.00	109.90
12	B	418	C	C6-N1-C2	-5.13	118.25	120.30
12	B	1026	G	OP1-P-OP2	-5.13	111.91	119.60
12	B	1138	G	C2-N3-C4	-5.13	109.33	111.90
12	B	1139	G	N3-C2-N2	5.13	123.49	119.90
12	B	1213	A	C8-N9-C4	-5.13	103.75	105.80
12	B	1381	G	N3-C2-N2	-5.13	116.31	119.90
12	B	1574	C	O3'-P-O5'	-5.13	94.26	104.00
12	B	2137	U	N3-C4-O4	5.13	122.99	119.40
12	B	2142	A	N3-C4-C5	5.13	130.39	126.80
12	B	2278	A	N7-C8-N9	-5.13	111.23	113.80
12	B	2658	C	N3-C4-C5	-5.13	119.85	121.90
12	B	2874	C	C5'-C4'-O4'	5.13	115.25	109.10
10	9	60	ARG	CD-NE-CZ	5.13	130.78	123.60
12	B	189	G	C4-C5-C6	5.13	121.88	118.80
12	B	400	G	O4'-C1'-N9	5.13	112.30	108.20
12	B	584	C	C2-N1-C1'	5.13	124.44	118.80
12	B	745	G	N3-C4-N9	5.13	129.08	126.00
12	B	774	G	N1-C2-N3	-5.13	120.82	123.90
12	B	877	A	C6-C5-N7	-5.13	128.71	132.30
12	B	1151	A	C5-C6-N1	-5.13	115.14	117.70
12	B	1155	A	C4-C5-N7	-5.13	108.14	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1233	C	N3-C2-O2	5.13	125.49	121.90
12	B	1244	A	O4'-C1'-N9	5.13	112.30	108.20
12	B	1345	C	N3-C4-N4	5.13	121.59	118.00
12	B	1658	C	C5-C4-N4	-5.13	116.61	120.20
12	B	1965	C	N1-C2-N3	-5.13	115.61	119.20
12	B	2438	U	C5-C4-O4	-5.13	122.82	125.90
12	B	2461	A	N3-C4-N9	5.13	131.50	127.40
12	B	2555	U	N1-C1'-C2'	-5.13	106.36	112.00
12	B	2630	G	P-O3'-C3'	-5.13	113.55	119.70
12	B	2735	G	C5'-C4'-C3'	-5.13	107.80	116.00
26	P	108	ARG	NH1-CZ-NH2	5.13	125.04	119.40
27	Q	100	PHE	CB-CG-CD1	-5.13	117.21	120.80
12	B	24	G	N1-C6-O6	5.12	122.97	119.90
12	B	632	A	P-O5'-C5'	5.12	129.10	120.90
12	B	1824	G	P-O5'-C5'	-5.12	112.70	120.90
6	5	36	ALA	N-CA-C	-5.12	97.17	111.00
12	B	110	G	N9-C4-C5	5.12	107.45	105.40
12	B	540	C	P-O3'-C3'	5.12	125.85	119.70
12	B	639	U	O3'-P-O5'	-5.12	94.27	104.00
12	B	764	A	C4-C5-C6	5.12	119.56	117.00
12	B	897	C	P-O3'-C3'	-5.12	113.55	119.70
12	B	1205	A	N9-C4-C5	5.12	107.85	105.80
12	B	1551	A	N3-C4-C5	-5.12	123.21	126.80
12	B	1605	C	N1-C2-N3	-5.12	115.61	119.20
12	B	1629	U	C6-N1-C2	-5.12	117.93	121.00
12	B	1670	C	C6-N1-C2	5.12	122.35	120.30
12	B	1696	G	N1-C2-N3	-5.12	120.83	123.90
12	B	2027	G	C6-N1-C2	5.12	128.17	125.10
12	B	2136	G	C8-N9-C4	5.12	108.45	106.40
12	B	2183	A	C3'-C2'-C1'	5.12	105.60	101.50
12	B	2492	U	N3-C4-O4	5.12	122.99	119.40
27	Q	100	PHE	CZ-CE2-CD2	-5.12	113.95	120.10
12	B	40	U	C6-N1-C2	-5.12	117.93	121.00
12	B	498	G	C6-N1-C2	5.12	128.17	125.10
12	B	660	C	C6-N1-C2	-5.12	118.25	120.30
12	B	1456	G	C5-C6-O6	-5.12	125.53	128.60
12	B	1521	G	N1-C2-N3	-5.12	120.83	123.90
12	B	1537	G	O4'-C1'-N9	5.12	112.30	108.20
12	B	1669	A	C2-N3-C4	5.12	113.16	110.60
12	B	1930	G	N1-C2-N3	-5.12	120.83	123.90
12	B	2120	G	C5'-C4'-O4'	5.12	115.25	109.10
12	B	2516	A	O4'-C1'-N9	5.12	112.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2830	C	N1-C2-N3	-5.12	115.61	119.20
27	Q	50	ARG	NE-CZ-NH2	-5.12	117.74	120.30
12	B	753	A	C4-C5-C6	5.12	119.56	117.00
12	B	1302	A	O5'-C5'-C4'	5.12	121.43	111.70
12	B	1460	U	P-O5'-C5'	5.12	129.09	120.90
12	B	1468	U	N1-C2-O2	5.12	126.38	122.80
12	B	1587	G	N1-C2-N2	-5.12	111.59	116.20
12	B	1716	U	N3-C4-O4	5.12	122.98	119.40
12	B	2250	G	C2-N3-C4	5.12	114.46	111.90
12	B	443	A	N9-C4-C5	5.12	107.85	105.80
12	B	1382	G	C6-N1-C2	-5.12	122.03	125.10
12	B	1484	U	C6-N1-C1'	-5.12	114.03	121.20
12	B	1744	A	OP1-P-O3'	5.12	116.46	105.20
12	B	1809	A	C1'-O4'-C4'	5.12	114.00	109.90
12	B	2321	U	C2-N3-C4	-5.12	123.93	127.00
12	B	2544	G	C2-N3-C4	5.12	114.46	111.90
12	B	15	G	C5'-C4'-C3'	-5.12	107.81	116.00
12	B	852	U	C5-C6-N1	5.12	125.26	122.70
12	B	1118	C	N3-C4-N4	5.12	121.58	118.00
12	B	1446	C	C5-C4-N4	-5.12	116.62	120.20
12	B	2294	G	C2-N3-C4	5.12	114.46	111.90
12	B	2395	C	C2-N1-C1'	5.12	124.43	118.80
15	E	123	LYS	CB-CG-CD	5.12	124.90	111.60
10	9	21	VAL	CB-CA-C	-5.12	101.68	111.40
10	9	85	ASP	CB-CG-OD2	-5.12	113.70	118.30
12	B	334	C	N3-C4-C5	-5.12	119.85	121.90
12	B	496	G	C5'-C4'-O4'	5.12	115.24	109.10
12	B	656	G	C5-C6-N1	5.12	114.06	111.50
12	B	903	C	P-O3'-C3'	-5.12	113.56	119.70
12	B	1408	G	N3-C2-N2	5.12	123.48	119.90
12	B	1432	G	C1'-O4'-C4'	5.12	113.99	109.90
12	B	1725	U	OP1-P-OP2	-5.12	111.93	119.60
12	B	2409	G	C6-N1-C2	5.12	128.17	125.10
12	B	2607	G	C4-C5-C6	5.12	121.87	118.80
27	Q	2	ARG	NE-CZ-NH2	5.12	122.86	120.30
6	5	163	TYR	CG-CD2-CE2	-5.11	117.21	121.30
12	B	232	G	C4-C5-C6	5.11	121.87	118.80
12	B	1098	A	N3-C4-C5	-5.11	123.22	126.80
12	B	1779	U	C6-N1-C2	5.11	124.07	121.00
12	B	2073	C	N1-C2-O2	-5.11	115.83	118.90
12	B	2099	U	N3-C4-C5	-5.11	111.53	114.60
12	B	2134	A	C6-N1-C2	-5.11	115.53	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2138	G	C4-C5-N7	5.11	112.85	110.80
12	B	2571	U	C4-C5-C6	-5.11	116.63	119.70
12	B	2573	C	O5'-P-OP1	5.11	116.84	110.70
12	B	2577	A	C4-N9-C1'	-5.11	117.10	126.30
12	B	2787	C	C4-C5-C6	5.11	119.96	117.40
2	1	49	ASP	O-C-N	-5.11	114.52	122.70
10	9	326	TRP	CA-CB-CG	5.11	123.41	113.70
11	A	94	A	C6-C5-N7	-5.11	128.72	132.30
12	B	457	A	C5'-C4'-O4'	5.11	115.23	109.10
12	B	722	A	C5-C6-N6	-5.11	119.61	123.70
12	B	728	G	O4'-C1'-N9	5.11	112.29	108.20
12	B	1582	C	N1-C2-O2	-5.11	115.83	118.90
12	B	1677	A	C4-C5-N7	-5.11	108.14	110.70
12	B	1694	C	C6-N1-C2	-5.11	118.25	120.30
12	B	2358	A	N3-C4-C5	5.11	130.38	126.80
12	B	2402	U	N3-C4-O4	5.11	122.98	119.40
12	B	2867	G	C1'-O4'-C4'	-5.11	105.81	109.90
21	K	51	LYS	C-N-CA	5.11	134.48	121.70
27	Q	23	TYR	CB-CG-CD2	5.11	124.07	121.00
12	B	155	A	P-O3'-C3'	-5.11	113.57	119.70
12	B	486	C	C6-N1-C2	-5.11	118.26	120.30
12	B	505	A	C5'-C4'-O4'	5.11	115.23	109.10
12	B	888	C	N3-C4-N4	5.11	121.58	118.00
12	B	1104	C	C1'-O4'-C4'	-5.11	105.81	109.90
12	B	1259	G	O4'-C1'-N9	5.11	112.29	108.20
12	B	1478	G	N3-C4-C5	5.11	131.16	128.60
12	B	2300	C	P-O3'-C3'	5.11	125.83	119.70
12	B	2438	U	N1-C2-O2	-5.11	119.22	122.80
12	B	2495	G	C4-C5-N7	-5.11	108.76	110.80
12	B	2632	A	O3'-P-O5'	-5.11	94.29	104.00
12	B	2751	G	C5-N7-C8	-5.11	101.74	104.30
12	B	126	A	C4'-C3'-C2'	-5.11	97.49	102.60
12	B	412	A	C8-N9-C4	-5.11	103.76	105.80
12	B	526	A	OP1-P-OP2	-5.11	111.94	119.60
12	B	690	G	N9-C1'-C2'	-5.11	106.38	112.00
12	B	1530	G	O3'-P-O5'	-5.11	94.29	104.00
12	B	2165	C	C5'-C4'-O4'	5.11	115.23	109.10
10	9	65	PHE	CB-CG-CD2	5.11	124.38	120.80
12	B	176	A	C4-C5-C6	5.11	119.55	117.00
12	B	473	G	C3'-C2'-C1'	-5.11	97.41	101.50
12	B	555	G	C4-N9-C1'	5.11	133.14	126.50
12	B	586	A	O4'-C1'-N9	5.11	112.29	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	631	A	N7-C8-N9	5.11	116.35	113.80
12	B	1508	A	N1-C6-N6	5.11	121.67	118.60
12	B	1611	C	C5-C6-N1	5.11	123.55	121.00
12	B	1772	A	O5'-C5'-C4'	-5.11	102.00	111.70
12	B	1981	A	C4-C5-C6	5.11	119.55	117.00
12	B	2163	A	N1-C2-N3	5.11	131.85	129.30
12	B	2541	A	O4'-C1'-N9	5.11	112.29	108.20
12	B	2713	U	C5-C4-O4	5.11	128.96	125.90
12	B	2810	A	N7-C8-N9	5.11	116.35	113.80
19	I	116	MET	CG-SD-CE	-5.11	92.03	100.20
11	A	94	A	C8-N9-C4	-5.11	103.76	105.80
12	B	205	G	P-O3'-C3'	5.11	125.83	119.70
12	B	761	A	C5-N7-C8	5.11	106.45	103.90
12	B	775	G	N7-C8-N9	5.11	115.65	113.10
12	B	1315	C	P-O5'-C5'	-5.11	112.73	120.90
12	B	2135	A	O4'-C1'-C2'	5.11	112.19	107.60
12	B	2773	C	N3-C2-O2	5.11	125.47	121.90
12	B	2824	C	C5'-C4'-C3'	5.11	124.17	116.00
15	E	150	THR	N-CA-CB	5.11	120.00	110.30
5	4	5	ARG	N-CA-C	-5.10	97.22	111.00
11	A	71	C	P-O5'-C5'	5.10	129.07	120.90
12	B	88	G	C6-C5-N7	-5.10	127.34	130.40
12	B	689	A	C5-C6-N1	5.10	120.25	117.70
12	B	1027	A	N3-C4-C5	-5.10	123.23	126.80
12	B	1509	A	O4'-C1'-N9	5.10	112.28	108.20
12	B	2029	G	N1-C2-N3	-5.10	120.84	123.90
33	Y	22	VAL	CA-CB-CG2	5.10	118.56	110.90
12	B	126	A	C4-C5-C6	5.10	119.55	117.00
12	B	424	G	C4-C5-C6	5.10	121.86	118.80
12	B	555	G	C6-C5-N7	-5.10	127.34	130.40
12	B	917	A	N7-C8-N9	-5.10	111.25	113.80
12	B	1276	A	O4'-C1'-N9	5.10	112.28	108.20
12	B	1286	A	N1-C6-N6	5.10	121.66	118.60
12	B	1295	C	P-O5'-C5'	-5.10	112.74	120.90
12	B	1674	G	N3-C4-C5	-5.10	126.05	128.60
12	B	1703	G	N1-C2-N3	-5.10	120.84	123.90
12	B	1756	G	N7-C8-N9	5.10	115.65	113.10
12	B	1929	G	N3-C4-C5	5.10	131.15	128.60
12	B	1975	G	N1-C2-N3	-5.10	120.84	123.90
12	B	2079	U	N1-C2-N3	-5.10	111.84	114.90
12	B	2108	A	O4'-C1'-N9	5.10	112.28	108.20
12	B	2271	G	C6-N1-C2	5.10	128.16	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	O	105	ALA	C-N-CA	5.10	134.46	121.70
12	B	410	G	C8-N9-C4	5.10	108.44	106.40
12	B	423	A	N7-C8-N9	-5.10	111.25	113.80
12	B	938	G	P-O3'-C3'	-5.10	113.58	119.70
12	B	1240	U	N3-C4-O4	5.10	122.97	119.40
12	B	1863	G	N1-C2-N3	-5.10	120.84	123.90
21	K	114	LYS	N-CA-CB	5.10	119.78	110.60
28	R	58	VAL	CA-CB-CG2	5.10	118.55	110.90
10	9	310	TYR	CB-CG-CD1	-5.10	117.94	121.00
12	B	36	G	C4-C5-C6	5.10	121.86	118.80
12	B	620	G	N9-C4-C5	-5.10	103.36	105.40
12	B	1736	U	N1-C2-N3	-5.10	111.84	114.90
12	B	2135	A	C5-C6-N6	-5.10	119.62	123.70
12	B	2316	G	C4-C5-N7	-5.10	108.76	110.80
12	B	2489	U	N3-C2-O2	5.10	125.77	122.20
12	B	2855	C	C5'-C4'-C3'	-5.10	107.84	116.00
18	H	14	SER	N-CA-CB	5.10	118.15	110.50
25	O	32	PRO	N-CD-CG	5.10	110.85	103.20
12	B	13	A	C4-C5-C6	5.10	119.55	117.00
12	B	99	U	N3-C4-O4	5.10	122.97	119.40
12	B	117	G	C5-C6-O6	-5.10	125.54	128.60
12	B	436	C	C5-C4-N4	-5.10	116.63	120.20
12	B	1182	G	N1-C6-O6	-5.10	116.84	119.90
12	B	1531	C	C1'-O4'-C4'	-5.10	105.82	109.90
12	B	1973	G	N1-C2-N3	-5.10	120.84	123.90
12	B	2045	C	P-O3'-C3'	5.10	125.82	119.70
12	B	2577	A	C8-N9-C4	-5.10	103.76	105.80
12	B	2610	C	OP1-P-O3'	5.10	116.41	105.20
12	B	258	G	C5-C6-O6	-5.10	125.54	128.60
12	B	265	A	C2-N3-C4	-5.10	108.05	110.60
12	B	477	A	P-O5'-C5'	-5.10	112.75	120.90
12	B	680	C	N1-C2-N3	-5.10	115.63	119.20
12	B	735	A	C4-C5-C6	5.10	119.55	117.00
12	B	836	G	N1-C6-O6	5.10	122.96	119.90
12	B	1407	G	N3-C4-C5	-5.10	126.05	128.60
12	B	1575	C	C5-C4-N4	-5.10	116.63	120.20
12	B	1634	A	C5-C6-N6	-5.10	119.62	123.70
12	B	2250	G	N7-C8-N9	5.10	115.65	113.10
12	B	2333	A	C8-N9-C1'	5.10	136.87	127.70
12	B	2482	A	N1-C2-N3	5.10	131.85	129.30
12	B	16	C	C4-C5-C6	-5.09	114.85	117.40
12	B	591	U	N1-C2-O2	5.09	126.37	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1039	A	P-O3'-C3'	-5.09	113.59	119.70
12	B	1275	A	C5-C6-N6	-5.09	119.62	123.70
12	B	1283	G	N3-C2-N2	5.09	123.47	119.90
12	B	1289	C	N3-C4-C5	-5.09	119.86	121.90
12	B	1811	G	C4-C5-N7	5.09	112.84	110.80
12	B	1879	C	P-O5'-C5'	5.09	129.05	120.90
12	B	2206	C	C3'-C2'-C1'	-5.09	97.42	101.50
12	B	2262	U	C2'-C3'-O3'	5.09	121.85	113.70
12	B	2519	U	C5-C6-N1	-5.09	120.15	122.70
12	B	2893	A	P-O3'-C3'	5.09	125.81	119.70
12	B	52	A	C4-C5-N7	-5.09	108.15	110.70
12	B	905	A	P-O3'-C3'	-5.09	113.59	119.70
12	B	2278	A	C1'-O4'-C4'	5.09	113.97	109.90
12	B	2699	C	C5'-C4'-C3'	5.09	124.15	116.00
4	3	16	ARG	CG-CD-NE	-5.09	101.11	111.80
6	5	21	TYR	CG-CD1-CE1	-5.09	117.23	121.30
11	A	33	G	C6-C5-N7	-5.09	127.35	130.40
12	B	265	A	C4'-C3'-C2'	-5.09	97.51	102.60
12	B	295	G	O5'-C5'-C4'	-5.09	102.03	111.70
12	B	558	U	O4'-C1'-N1	5.09	112.27	108.20
12	B	637	A	C4-C5-C6	5.09	119.55	117.00
12	B	1280	G	C4-C5-N7	-5.09	108.76	110.80
12	B	1346	G	C3'-C2'-C1'	-5.09	97.43	101.50
12	B	1403	A	C5'-C4'-C3'	-5.09	107.85	116.00
12	B	1450	G	C4-C5-N7	-5.09	108.76	110.80
12	B	1763	G	C5-C6-N1	5.09	114.05	111.50
12	B	2160	C	O4'-C1'-N1	5.09	112.27	108.20
12	B	2736	A	C6-N1-C2	-5.09	115.55	118.60
12	B	2839	G	N3-C4-N9	5.09	129.06	126.00
16	F	52	ALA	N-CA-CB	5.09	117.23	110.10
26	P	92	ARG	NE-CZ-NH1	5.09	122.85	120.30
6	5	179	ASP	CB-CG-OD1	5.09	122.88	118.30
12	B	480	A	C4-C5-C6	5.09	119.54	117.00
12	B	1157	G	O5'-C5'-C4'	-5.09	102.03	111.70
12	B	1212	G	C6-N1-C2	5.09	128.15	125.10
12	B	1543	G	N7-C8-N9	-5.09	110.56	113.10
12	B	1594	U	N3-C4-C5	-5.09	111.55	114.60
12	B	1900	A	C1'-O4'-C4'	-5.09	105.83	109.90
12	B	1930	G	N3-C4-N9	-5.09	122.95	126.00
12	B	1969	A	C1'-O4'-C4'	-5.09	105.83	109.90
12	B	2255	G	N1-C2-N3	-5.09	120.85	123.90
12	B	2423	U	N3-C4-C5	-5.09	111.55	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2533	U	C5-C4-O4	-5.09	122.85	125.90
9	8	31	PRO	N-CD-CG	5.09	110.83	103.20
12	B	1453	A	C4'-C3'-C2'	5.09	107.69	102.60
12	B	1699	G	C6-C5-N7	-5.09	127.35	130.40
12	B	2503	A	C5-C6-N1	-5.09	115.16	117.70
11	A	65	U	C4-C5-C6	-5.09	116.65	119.70
12	B	338	G	N3-C2-N2	5.09	123.46	119.90
12	B	705	A	C5-C6-N1	-5.09	115.16	117.70
12	B	723	C	N3-C4-N4	5.09	121.56	118.00
12	B	890	C	O4'-C4'-C3'	-5.09	98.91	104.00
12	B	905	A	C4-C5-N7	-5.09	108.16	110.70
12	B	1645	G	P-O3'-C3'	5.09	125.80	119.70
12	B	1949	G	N3-C4-C5	5.09	131.14	128.60
12	B	2059	A	N1-C2-N3	5.09	131.84	129.30
12	B	2471	A	N7-C8-N9	-5.09	111.26	113.80
12	B	122	G	C1'-O4'-C4'	5.08	113.97	109.90
12	B	439	A	N3-C4-N9	5.08	131.47	127.40
12	B	579	G	C6-C5-N7	-5.08	127.35	130.40
12	B	1317	G	N7-C8-N9	-5.08	110.56	113.10
12	B	1330	C	O4'-C1'-N1	5.08	112.27	108.20
12	B	2121	G	N3-C4-N9	-5.08	122.95	126.00
12	B	2161	C	N3-C2-O2	-5.08	118.34	121.90
12	B	2281	A	N9-C4-C5	-5.08	103.77	105.80
31	U	86	PHE	CD1-CG-CD2	5.08	124.91	118.30
12	B	43	G	O4'-C1'-N9	5.08	112.27	108.20
12	B	187	G	N3-C4-N9	5.08	129.05	126.00
12	B	477	A	P-O3'-C3'	-5.08	113.60	119.70
12	B	973	A	C8-N9-C4	-5.08	103.77	105.80
12	B	1027	A	O4'-C4'-C3'	-5.08	98.92	104.00
12	B	1034	G	C5'-C4'-C3'	-5.08	107.87	116.00
12	B	1298	C	OP1-P-OP2	-5.08	111.97	119.60
12	B	1319	C	P-O3'-C3'	-5.08	113.60	119.70
12	B	1473	G	C4'-C3'-C2'	-5.08	97.52	102.60
12	B	1910	G	C6-N1-C2	-5.08	122.05	125.10
12	B	2363	G	N9-C4-C5	-5.08	103.37	105.40
12	B	2392	A	C6-C5-N7	-5.08	128.74	132.30
12	B	2700	A	C5-N7-C8	5.08	106.44	103.90
24	N	55	ALA	N-CA-CB	5.08	117.22	110.10
10	9	46	TRP	CE2-CD2-CE3	5.08	124.80	118.70
11	A	43	C	N3-C4-C5	-5.08	119.87	121.90
11	A	49	C	C2-N3-C4	-5.08	117.36	119.90
11	A	59	A	N1-C6-N6	5.08	121.65	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	114	C	P-O3'-C3'	-5.08	113.60	119.70
12	B	167	A	C2-N3-C4	-5.08	108.06	110.60
12	B	277	G	N3-C4-N9	-5.08	122.95	126.00
12	B	552	U	O5'-C5'-C4'	-5.08	102.05	111.70
12	B	788	A	C2-N3-C4	5.08	113.14	110.60
12	B	1043	C	N3-C4-N4	5.08	121.56	118.00
12	B	1767	G	N9-C1'-C2'	-5.08	106.41	112.00
12	B	1930	G	C3'-C2'-C1'	5.08	105.57	101.50
12	B	2280	G	C5'-C4'-C3'	-5.08	107.87	116.00
12	B	2553	G	C2-N3-C4	5.08	114.44	111.90
16	F	147	ARG	NE-CZ-NH2	5.08	122.84	120.30
11	A	82	U	C4-C5-C6	-5.08	116.65	119.70
12	B	404	A	O3'-P-O5'	-5.08	94.35	104.00
12	B	701	G	N9-C4-C5	-5.08	103.37	105.40
12	B	775	G	N3-C4-C5	-5.08	126.06	128.60
12	B	826	U	OP1-P-OP2	-5.08	111.98	119.60
12	B	1125	G	P-O3'-C3'	5.08	125.80	119.70
12	B	1364	G	N3-C2-N2	5.08	123.46	119.90
12	B	1420	A	N3-C4-C5	-5.08	123.24	126.80
12	B	1720	U	C2-N3-C4	-5.08	123.95	127.00
12	B	1789	A	P-O5'-C5'	5.08	129.03	120.90
12	B	2086	U	N1-C2-N3	-5.08	111.85	114.90
12	B	312	G	N1-C2-N3	-5.08	120.85	123.90
12	B	562	U	C2-N3-C4	-5.08	123.95	127.00
12	B	627	A	C4-C5-C6	5.08	119.54	117.00
12	B	830	G	C5-N7-C8	-5.08	101.76	104.30
12	B	937	C	C2-N3-C4	5.08	122.44	119.90
12	B	940	G	C2-N3-C4	5.08	114.44	111.90
12	B	1077	A	N1-C2-N3	5.08	131.84	129.30
12	B	1097	U	C4-C5-C6	5.08	122.75	119.70
12	B	1325	U	C5-C6-N1	-5.08	120.16	122.70
12	B	1547	C	C6-N1-C2	-5.08	118.27	120.30
12	B	1683	U	N1-C2-O2	-5.08	119.25	122.80
12	B	1797	G	N1-C2-N3	-5.08	120.85	123.90
12	B	2210	U	N1-C2-N3	-5.08	111.85	114.90
12	B	2824	C	N3-C4-C5	-5.08	119.87	121.90
12	B	2900	A	C5-C6-N6	-5.08	119.64	123.70
22	L	42	SER	N-CA-CB	5.08	118.12	110.50
12	B	543	G	C4-C5-C6	5.08	121.85	118.80
12	B	2032	G	C5-N7-C8	5.08	106.84	104.30
12	B	2339	C	C6-N1-C1'	-5.08	114.71	120.80
12	B	2589	A	P-O5'-C5'	-5.08	112.78	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2856	A	C5-C6-N1	-5.08	115.16	117.70
12	B	539	G	N1-C2-N2	-5.08	111.63	116.20
12	B	1004	U	C4-C5-C6	-5.08	116.65	119.70
12	B	1120	G	O4'-C1'-N9	5.08	112.26	108.20
12	B	1450	G	C4-C5-C6	5.08	121.84	118.80
12	B	2076	U	C3'-C2'-C1'	-5.08	97.44	101.50
12	B	2123	G	C4-C5-N7	5.08	112.83	110.80
12	B	2443	C	C2-N3-C4	5.08	122.44	119.90
12	B	2504	U	N3-C2-O2	5.08	125.75	122.20
16	F	39	VAL	CA-CB-CG2	5.08	118.51	110.90
3	2	55	LYS	CA-C-N	-5.07	106.04	117.20
12	B	419	U	N3-C2-O2	5.07	125.75	122.20
12	B	794	A	C2-N3-C4	-5.07	108.06	110.60
12	B	1416	G	C5-N7-C8	5.07	106.84	104.30
12	B	1638	C	P-O5'-C5'	5.07	129.02	120.90
12	B	1747	U	N1-C2-N3	-5.07	111.86	114.90
12	B	2151	U	N3-C4-C5	-5.07	111.56	114.60
12	B	2377	A	P-O5'-C5'	5.07	129.02	120.90
12	B	2534	A	C5-C6-N1	-5.07	115.16	117.70
12	B	2557	G	C5-N7-C8	5.07	106.84	104.30
12	B	2595	G	N3-C2-N2	5.07	123.45	119.90
12	B	99	U	P-O3'-C3'	5.07	125.79	119.70
12	B	154	U	C6-N1-C2	-5.07	117.96	121.00
12	B	869	G	C8-N9-C4	-5.07	104.37	106.40
12	B	1317	G	N9-C4-C5	-5.07	103.37	105.40
12	B	1796	U	C5-C4-O4	-5.07	122.86	125.90
12	B	1844	C	C6-N1-C2	5.07	122.33	120.30
12	B	2046	G	N3-C2-N2	5.07	123.45	119.90
12	B	2263	C	C5-C4-N4	-5.07	116.65	120.20
12	B	2694	G	N3-C2-N2	5.07	123.45	119.90
12	B	391	A	C5-N7-C8	5.07	106.44	103.90
12	B	592	A	N3-C4-N9	5.07	131.46	127.40
12	B	631	A	N9-C1'-C2'	-5.07	106.42	112.00
12	B	848	C	C4-C5-C6	-5.07	114.86	117.40
12	B	1033	U	O4'-C1'-N1	5.07	112.26	108.20
12	B	1177	G	C3'-C2'-C1'	-5.07	97.44	101.50
12	B	1655	A	N3-C4-N9	-5.07	123.34	127.40
12	B	1910	G	O4'-C1'-N9	5.07	112.26	108.20
12	B	2333	A	C4-C5-N7	-5.07	108.16	110.70
12	B	2467	C	C6-N1-C2	-5.07	118.27	120.30
12	B	2765	A	N3-C4-N9	5.07	131.46	127.40
11	A	100	G	C4-N9-C1'	-5.07	119.91	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	348	A	C8-N9-C4	-5.07	103.77	105.80
12	B	580	U	O4'-C1'-N1	5.07	112.26	108.20
12	B	1204	A	C6-C5-N7	-5.07	128.75	132.30
12	B	2141	G	C6-N1-C2	-5.07	122.06	125.10
12	B	2178	C	C5-C6-N1	5.07	123.53	121.00
12	B	2211	A	C5-C6-N6	-5.07	119.64	123.70
12	B	2274	A	C4-C5-C6	5.07	119.53	117.00
12	B	2327	A	C5-N7-C8	-5.07	101.37	103.90
12	B	2754	U	C5-C4-O4	-5.07	122.86	125.90
12	B	2768	U	O5'-C5'-C4'	-5.07	102.07	111.70
12	B	879	G	N1-C2-N3	-5.07	120.86	123.90
12	B	931	U	C1'-O4'-C4'	5.07	113.95	109.90
12	B	1207	C	C2-N3-C4	5.07	122.43	119.90
12	B	1473	G	C2-N3-C4	5.07	114.43	111.90
12	B	1552	A	O4'-C4'-C3'	-5.07	98.93	104.00
12	B	1953	A	C4-C5-C6	5.07	119.53	117.00
12	B	2512	C	C6-N1-C1'	-5.07	114.72	120.80
12	B	2823	A	C5-C6-N1	-5.07	115.17	117.70
19	I	135	MET	CB-CA-C	-5.07	100.27	110.40
22	L	123	ARG	NE-CZ-NH2	-5.07	117.77	120.30
12	B	534	U	C4-C5-C6	-5.07	116.66	119.70
12	B	621	A	C4-C5-N7	-5.07	108.17	110.70
12	B	772	C	N1-C2-O2	5.07	121.94	118.90
12	B	1002	G	C6-C5-N7	-5.07	127.36	130.40
12	B	1055	G	N3-C2-N2	5.07	123.44	119.90
12	B	1191	G	O4'-C4'-C3'	-5.07	98.93	104.00
12	B	1770	G	N1-C6-O6	5.07	122.94	119.90
12	B	2070	A	OP1-P-OP2	-5.07	112.00	119.60
12	B	2464	G	N3-C2-N2	5.07	123.44	119.90
12	B	2608	G	N3-C4-C5	-5.07	126.07	128.60
12	B	517	C	C2-N3-C4	5.06	122.43	119.90
12	B	523	C	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	580	U	C6-N1-C2	-5.06	117.96	121.00
11	A	56	G	N9-C4-C5	5.06	107.42	105.40
12	B	146	A	N1-C6-N6	5.06	121.64	118.60
12	B	301	G	C2-N3-C4	5.06	114.43	111.90
12	B	313	G	N7-C8-N9	-5.06	110.57	113.10
12	B	905	A	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	1667	G	C6-N1-C2	5.06	128.14	125.10
12	B	1902	C	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	1977	A	C5-C6-N1	-5.06	115.17	117.70
12	B	2027	G	N1-C2-N3	-5.06	120.86	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2175	C	C3'-C2'-C1'	5.06	105.55	101.50
12	B	2224	G	C8-N9-C4	-5.06	104.38	106.40
12	B	2840	C	C2-N3-C4	5.06	122.43	119.90
11	A	48	U	N1-C1'-C2'	-5.06	106.43	112.00
11	A	97	C	C5'-C4'-C3'	5.06	124.10	116.00
12	B	54	G	N1-C6-O6	5.06	122.94	119.90
12	B	184	C	C6-N1-C2	5.06	122.32	120.30
12	B	862	G	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	1507	C	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	2600	A	C6-C5-N7	-5.06	128.76	132.30
12	B	42	A	C3'-C2'-C1'	5.06	105.55	101.50
12	B	69	C	C1'-O4'-C4'	5.06	113.95	109.90
12	B	115	C	O4'-C1'-N1	5.06	112.25	108.20
12	B	118	A	C8-N9-C4	5.06	107.82	105.80
12	B	333	G	O4'-C1'-N9	5.06	112.25	108.20
12	B	580	U	C4'-C3'-C2'	-5.06	97.54	102.60
12	B	1050	A	N1-C2-N3	5.06	131.83	129.30
12	B	1353	A	C5'-C4'-C3'	-5.06	107.90	116.00
12	B	1376	C	C6-N1-C2	5.06	122.32	120.30
12	B	1378	A	N7-C8-N9	-5.06	111.27	113.80
12	B	1643	G	C6-C5-N7	-5.06	127.36	130.40
12	B	1892	C	N3-C2-O2	5.06	125.44	121.90
12	B	2167	U	O4'-C1'-N1	5.06	112.25	108.20
12	B	2395	C	N1-C2-O2	5.06	121.94	118.90
12	B	2437	G	C4-N9-C1'	-5.06	119.92	126.50
12	B	2781	A	O4'-C1'-C2'	-5.06	100.74	105.80
12	B	2810	A	N1-C2-N3	5.06	131.83	129.30
12	B	2857	G	N1-C2-N3	-5.06	120.86	123.90
4	3	28	SER	N-CA-CB	5.06	118.09	110.50
12	B	33	C	O4'-C1'-C2'	-5.06	100.74	105.80
12	B	36	G	N3-C2-N2	5.06	123.44	119.90
12	B	198	C	P-O5'-C5'	5.06	128.99	120.90
12	B	206	U	N3-C2-O2	-5.06	118.66	122.20
12	B	227	A	C8-N9-C4	-5.06	103.78	105.80
12	B	414	C	C5-C4-N4	-5.06	116.66	120.20
12	B	638	G	C6-N1-C2	5.06	128.13	125.10
12	B	700	G	C5-N7-C8	-5.06	101.77	104.30
12	B	962	G	C6-N1-C2	5.06	128.13	125.10
12	B	1270	C	C2-N3-C4	5.06	122.43	119.90
12	B	1760	C	N1-C2-O2	5.06	121.93	118.90
12	B	2036	C	C5-C4-N4	-5.06	116.66	120.20
12	B	2199	A	C5-C6-N6	-5.06	119.65	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2374	C	N3-C4-N4	5.06	121.54	118.00
12	B	2872	A	N3-C4-N9	5.06	131.45	127.40
15	E	174	GLY	C-N-CA	5.06	134.34	121.70
32	W	63	ILE	CA-CB-CG2	-5.06	100.78	110.90
33	Y	32	ALA	N-CA-CB	5.06	117.18	110.10
6	5	92	ALA	N-CA-CB	5.06	117.18	110.10
11	A	66	A	C3'-C2'-C1'	5.06	105.55	101.50
12	B	388	G	N3-C2-N2	5.06	123.44	119.90
12	B	684	G	N1-C2-N2	-5.06	111.65	116.20
12	B	699	A	N3-C4-C5	-5.06	123.26	126.80
12	B	1368	G	N7-C8-N9	5.06	115.63	113.10
12	B	1810	A	OP1-P-O3'	5.06	116.32	105.20
27	Q	60	TRP	CB-CG-CD2	-5.06	120.03	126.60
29	S	38	TYR	CD1-CG-CD2	5.06	123.46	117.90
11	A	47	C	C6-N1-C2	-5.05	118.28	120.30
11	A	107	G	C4-C5-C6	5.05	121.83	118.80
12	B	353	C	O4'-C1'-N1	5.05	112.24	108.20
12	B	535	G	O4'-C4'-C3'	-5.05	98.94	104.00
12	B	589	U	O4'-C1'-N1	5.05	112.24	108.20
12	B	721	A	C6-N1-C2	-5.05	115.57	118.60
12	B	777	G	N7-C8-N9	5.05	115.63	113.10
12	B	868	U	C5-C6-N1	5.05	125.23	122.70
12	B	1700	A	C5-C6-N1	-5.05	115.17	117.70
12	B	1731	G	N1-C2-N3	-5.05	120.87	123.90
12	B	1750	G	C4-C5-C6	5.05	121.83	118.80
12	B	1890	A	N3-C4-C5	-5.05	123.26	126.80
12	B	2077	A	P-O5'-C5'	5.05	128.99	120.90
12	B	2239	G	O4'-C4'-C3'	-5.05	98.94	104.00
12	B	2595	G	C5-N7-C8	5.05	106.83	104.30
12	B	2637	U	C3'-C2'-C1'	5.05	105.54	101.50
12	B	2842	G	C8-N9-C4	-5.05	104.38	106.40
12	B	553	G	N3-C4-C5	5.05	131.13	128.60
12	B	618	G	N3-C4-C5	5.05	131.13	128.60
12	B	2180	U	C1'-O4'-C4'	5.05	113.94	109.90
12	B	2772	C	C4'-C3'-C2'	-5.05	97.55	102.60
25	O	85	LYS	O-C-N	-5.05	114.61	123.20
11	A	61	G	O5'-C5'-C4'	-5.05	102.10	111.70
11	A	71	C	P-O3'-C3'	5.05	125.76	119.70
12	B	76	C	C1'-O4'-C4'	-5.05	105.86	109.90
12	B	402	A	N1-C2-N3	-5.05	126.77	129.30
12	B	421	C	P-O5'-C5'	-5.05	112.82	120.90
12	B	576	U	O3'-P-O5'	-5.05	94.40	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	605	G	C5-C6-O6	-5.05	125.57	128.60
12	B	818	G	C5-N7-C8	-5.05	101.77	104.30
12	B	985	C	N3-C4-C5	5.05	123.92	121.90
12	B	1127	A	OP2-P-O3'	5.05	116.31	105.20
12	B	1223	G	C8-N9-C1'	5.05	133.57	127.00
12	B	1259	G	N3-C4-N9	-5.05	122.97	126.00
12	B	1422	G	C4'-C3'-C2'	-5.05	97.55	102.60
12	B	1938	A	OP2-P-O3'	5.05	116.31	105.20
12	B	2157	G	C5-C6-O6	-5.05	125.57	128.60
12	B	2670	A	N7-C8-N9	-5.05	111.27	113.80
20	J	75	TYR	CB-CG-CD1	5.05	124.03	121.00
27	Q	37	ALA	CB-CA-C	-5.05	102.52	110.10
3	2	17	PRO	N-CA-CB	5.05	109.36	103.30
11	A	52	A	N9-C1'-C2'	-5.05	106.44	112.00
11	A	79	G	C6-C5-N7	-5.05	127.37	130.40
12	B	308	G	C4-N9-C1'	5.05	133.06	126.50
12	B	682	G	N3-C2-N2	5.05	123.44	119.90
12	B	1859	U	C5-C4-O4	-5.05	122.87	125.90
12	B	1976	U	C2-N3-C4	-5.05	123.97	127.00
12	B	2029	G	C6-C5-N7	-5.05	127.37	130.40
12	B	2139	U	C5'-C4'-O4'	5.05	115.16	109.10
12	B	2589	A	C5-N7-C8	5.05	106.42	103.90
12	B	2901	C	C6-N1-C1'	5.05	126.86	120.80
18	H	138	VAL	CG1-CB-CG2	-5.05	102.82	110.90
12	B	2200	C	C6-N1-C2	5.05	122.32	120.30
12	B	2277	G	N3-C2-N2	5.05	123.43	119.90
11	A	9	G	O4'-C1'-N9	5.05	112.24	108.20
11	A	39	A	N9-C4-C5	5.05	107.82	105.80
12	B	205	G	N3-C4-C5	-5.05	126.08	128.60
12	B	1213	A	C5-C6-N1	-5.05	115.18	117.70
12	B	1370	C	O4'-C1'-C2'	5.05	112.14	107.60
12	B	1467	U	P-O3'-C3'	-5.05	113.64	119.70
12	B	2060	A	C6-C5-N7	-5.05	128.77	132.30
12	B	2317	A	C5'-C4'-O4'	5.05	115.16	109.10
12	B	2417	C	C4-C5-C6	5.05	119.92	117.40
12	B	2723	C	C5-C6-N1	5.05	123.52	121.00
30	T	81	LYS	N-CA-CB	5.05	119.68	110.60
31	U	63	ALA	N-CA-CB	5.05	117.17	110.10
6	5	92	ALA	O-C-N	-5.04	114.63	122.70
12	B	2	G	C4-C5-N7	5.04	112.82	110.80
12	B	341	C	C2-N3-C4	5.04	122.42	119.90
12	B	493	G	O4'-C1'-C2'	-5.04	100.75	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1023	U	C5'-C4'-O4'	5.04	115.16	109.10
12	B	1243	C	N1-C2-N3	-5.04	115.67	119.20
12	B	1708	C	C4'-C3'-C2'	-5.04	97.56	102.60
12	B	1916	A	C5-C6-N6	-5.04	119.66	123.70
12	B	2230	G	C4-C5-N7	-5.04	108.78	110.80
3	2	8	GLN	C-N-CA	5.04	134.31	121.70
12	B	154	U	N3-C2-O2	-5.04	118.67	122.20
12	B	250	G	O4'-C1'-N9	5.04	112.23	108.20
12	B	692	C	P-O5'-C5'	-5.04	112.83	120.90
12	B	897	C	C2-N3-C4	-5.04	117.38	119.90
12	B	2182	U	C4-C5-C6	5.04	122.73	119.70
12	B	2183	A	C5'-C4'-O4'	5.04	115.15	109.10
12	B	2553	G	C1'-O4'-C4'	-5.04	105.86	109.90
12	B	2818	U	C5-C6-N1	5.04	125.22	122.70
16	F	110	ILE	CA-CB-CG1	5.04	120.58	111.00
29	S	64	ALA	CB-CA-C	-5.04	102.53	110.10
11	A	83	G	P-O3'-C3'	-5.04	113.65	119.70
12	B	82	U	C5-C4-O4	-5.04	122.88	125.90
12	B	177	G	C6-C5-N7	-5.04	127.38	130.40
12	B	332	A	C5-N7-C8	5.04	106.42	103.90
12	B	480	A	C8-N9-C4	-5.04	103.78	105.80
12	B	789	A	N3-C4-C5	-5.04	123.27	126.80
12	B	1182	G	N3-C4-C5	5.04	131.12	128.60
12	B	1495	A	C4-C5-C6	5.04	119.52	117.00
12	B	1572	A	N1-C6-N6	5.04	121.62	118.60
12	B	1635	A	C8-N9-C4	5.04	107.82	105.80
12	B	1673	G	O4'-C1'-N9	5.04	112.23	108.20
12	B	2448	A	C5-N7-C8	5.04	106.42	103.90
12	B	2858	C	C2-N1-C1'	5.04	124.34	118.80
12	B	2881	U	C5'-C4'-C3'	-5.04	107.93	116.00
11	A	8	C	C5-C6-N1	5.04	123.52	121.00
12	B	514	A	N1-C6-N6	5.04	121.62	118.60
12	B	707	G	N9-C4-C5	-5.04	103.38	105.40
12	B	1210	G	C2-N3-C4	-5.04	109.38	111.90
12	B	1709	U	N3-C4-C5	-5.04	111.58	114.60
12	B	1731	G	C5-N7-C8	-5.04	101.78	104.30
12	B	2289	G	C5-C6-O6	-5.04	125.58	128.60
12	B	2397	G	N7-C8-N9	5.04	115.62	113.10
12	B	2561	U	O4'-C1'-N1	5.04	112.23	108.20
21	K	70	ARG	CD-NE-CZ	-5.04	116.55	123.60
11	A	9	G	N3-C4-C5	-5.04	126.08	128.60
11	A	51	G	C2-N3-C4	-5.04	109.38	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	381	G	C5-C6-N1	-5.04	108.98	111.50
12	B	455	C	OP2-P-O3'	5.04	116.29	105.20
12	B	1438	U	N3-C2-O2	-5.04	118.67	122.20
12	B	1746	A	C6-C5-N7	-5.04	128.77	132.30
12	B	1759	A	C5-N7-C8	5.04	106.42	103.90
12	B	2106	U	C6-N1-C1'	-5.04	114.15	121.20
12	B	2280	G	N1-C2-N3	-5.04	120.88	123.90
12	B	2337	G	N9-C4-C5	-5.04	103.39	105.40
12	B	2522	U	O4'-C1'-N1	5.04	112.23	108.20
12	B	2673	G	C5'-C4'-C3'	-5.04	107.94	116.00
12	B	864	G	N3-C2-N2	5.04	123.43	119.90
12	B	1751	U	P-O5'-C5'	5.04	128.96	120.90
12	B	1992	G	C2-N3-C4	-5.04	109.38	111.90
12	B	2778	A	N9-C4-C5	5.04	107.81	105.80
11	A	54	G	C5-C6-N1	-5.04	108.98	111.50
12	B	596	U	OP1-P-O3'	5.04	116.28	105.20
12	B	759	G	P-O3'-C3'	-5.04	113.66	119.70
12	B	765	C	C4'-C3'-C2'	-5.04	97.56	102.60
12	B	823	C	N1-C2-O2	5.04	121.92	118.90
12	B	1730	C	OP1-P-OP2	-5.04	112.05	119.60
12	B	2115	G	C4-C5-C6	-5.04	115.78	118.80
12	B	2264	C	C2-N3-C4	-5.04	117.38	119.90
12	B	2532	G	C2-N3-C4	5.04	114.42	111.90
12	B	167	A	C1'-O4'-C4'	-5.03	105.87	109.90
12	B	234	U	N3-C2-O2	5.03	125.72	122.20
12	B	902	C	N3-C2-O2	5.03	125.42	121.90
12	B	1043	C	C5-C4-N4	-5.03	116.68	120.20
12	B	1783	A	OP2-P-O3'	5.03	116.27	105.20
12	B	1871	A	O4'-C1'-N9	5.03	112.23	108.20
12	B	1886	U	O4'-C1'-N1	5.03	112.23	108.20
12	B	2247	A	N1-C2-N3	-5.03	126.78	129.30
12	B	2721	A	N7-C8-N9	-5.03	111.28	113.80
12	B	2855	C	C3'-C2'-C1'	-5.03	97.47	101.50
18	H	80	ILE	O-C-N	5.03	130.75	122.70
11	A	77	U	C4-C5-C6	-5.03	116.68	119.70
12	B	10	A	C3'-C2'-C1'	-5.03	97.47	101.50
12	B	17	G	N1-C6-O6	5.03	122.92	119.90
12	B	1271	G	C4-C5-N7	5.03	112.81	110.80
12	B	1680	U	N3-C4-O4	5.03	122.92	119.40
12	B	2338	C	O4'-C1'-N1	5.03	112.23	108.20
12	B	2627	G	O3'-P-O5'	-5.03	94.44	104.00
20	J	27	ARG	NE-CZ-NH1	5.03	122.82	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	9	166	GLY	O-C-N	5.03	130.75	122.70
12	B	123	G	C4-C5-N7	-5.03	108.79	110.80
12	B	375	G	N1-C2-N3	-5.03	120.88	123.90
12	B	376	G	O4'-C1'-N9	5.03	112.22	108.20
12	B	453	A	C4-C5-N7	-5.03	108.18	110.70
12	B	690	G	P-O5'-C5'	-5.03	112.85	120.90
12	B	908	C	C1'-O4'-C4'	-5.03	105.88	109.90
12	B	1097	U	P-O3'-C3'	5.03	125.74	119.70
12	B	1122	G	C4-C5-C6	5.03	121.82	118.80
12	B	1456	G	N3-C2-N2	5.03	123.42	119.90
12	B	1628	G	C5'-C4'-O4'	-5.03	103.06	109.10
12	B	1971	U	N3-C4-O4	5.03	122.92	119.40
12	B	2041	U	C5-C6-N1	5.03	125.22	122.70
12	B	2493	U	C4'-C3'-C2'	-5.03	97.57	102.60
12	B	2625	G	C2-N3-C4	-5.03	109.39	111.90
12	B	2640	G	C5-C6-N1	-5.03	108.98	111.50
12	B	2755	C	N3-C4-N4	5.03	121.52	118.00
11	A	111	U	N3-C4-O4	-5.03	115.88	119.40
12	B	750	A	C5-C6-N6	-5.03	119.68	123.70
12	B	771	G	N3-C2-N2	-5.03	116.38	119.90
12	B	901	C	P-O3'-C3'	5.03	125.73	119.70
12	B	2600	A	O4'-C1'-N9	5.03	112.22	108.20
12	B	2814	A	N3-C4-C5	-5.03	123.28	126.80
13	C	9	SER	N-CA-C	-5.03	97.42	111.00
13	C	269	ARG	NE-CZ-NH1	5.03	122.81	120.30
12	B	297	G	N7-C8-N9	-5.03	110.59	113.10
12	B	329	G	C8-N9-C4	-5.03	104.39	106.40
12	B	424	G	C5-N7-C8	5.03	106.81	104.30
12	B	839	U	N3-C4-C5	-5.03	111.58	114.60
12	B	1314	C	C2-N1-C1'	5.03	124.33	118.80
12	B	1639	C	N3-C2-O2	5.03	125.42	121.90
12	B	2190	G	C5-N7-C8	-5.03	101.79	104.30
12	B	2217	G	C4-C5-N7	5.03	112.81	110.80
12	B	2263	C	C5'-C4'-O4'	-5.03	103.07	109.10
12	B	2569	G	C5-C6-N1	-5.03	108.99	111.50
12	B	2677	G	P-O3'-C3'	-5.03	113.67	119.70
14	D	200	ASP	CB-CG-OD1	5.03	122.82	118.30
27	Q	78	PHE	C-N-CA	5.03	134.27	121.70
7	6	8	SER	N-CA-CB	5.03	118.04	110.50
11	A	46	A	N3-C4-N9	5.03	131.42	127.40
12	B	533	G	O4'-C1'-N9	5.03	112.22	108.20
12	B	540	C	C3'-C2'-C1'	-5.03	97.48	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	554	U	O4'-C4'-C3'	-5.03	98.97	104.00
12	B	587	C	C5-C4-N4	5.03	123.72	120.20
12	B	883	G	C5-C6-O6	-5.03	125.58	128.60
12	B	930	G	C8-N9-C4	5.03	108.41	106.40
12	B	1034	G	C5-C6-N1	-5.03	108.99	111.50
12	B	1611	C	C2-N3-C4	5.03	122.41	119.90
12	B	1782	U	C5-C6-N1	5.03	125.21	122.70
12	B	1983	G	P-O3'-C3'	-5.03	113.67	119.70
12	B	2017	U	N3-C4-O4	5.03	122.92	119.40
12	B	2052	A	C3'-C2'-C1'	-5.03	97.48	101.50
12	B	2117	A	C2-N3-C4	-5.03	108.09	110.60
12	B	2142	A	C5-N7-C8	5.03	106.41	103.90
12	B	2183	A	C5-C6-N1	-5.03	115.19	117.70
12	B	2492	U	N3-C2-O2	5.03	125.72	122.20
12	B	2502	G	C5-C6-O6	-5.03	125.58	128.60
12	B	2616	C	C3'-C2'-C1'	-5.03	97.48	101.50
12	B	2720	U	C4'-C3'-C2'	-5.03	97.58	102.60
12	B	2774	C	N3-C2-O2	5.03	125.42	121.90
12	B	52	A	C5-C6-N1	-5.02	115.19	117.70
12	B	1313	U	C6-N1-C1'	-5.02	114.17	121.20
12	B	2154	A	C4-C5-N7	-5.02	108.19	110.70
11	A	101	A	C6-C5-N7	-5.02	128.78	132.30
12	B	481	G	C2-N3-C4	5.02	114.41	111.90
12	B	654	A	N1-C2-N3	5.02	131.81	129.30
12	B	677	A	O4'-C1'-N9	5.02	112.22	108.20
12	B	1075	C	N3-C4-C5	-5.02	119.89	121.90
12	B	1113	U	C5-C4-O4	-5.02	122.89	125.90
12	B	1135	C	C4-C5-C6	5.02	119.91	117.40
12	B	1154	G	N9-C4-C5	-5.02	103.39	105.40
12	B	1228	G	C5-N7-C8	5.02	106.81	104.30
12	B	1304	A	C6-C5-N7	-5.02	128.78	132.30
12	B	1385	A	N1-C2-N3	5.02	131.81	129.30
12	B	1545	A	P-O3'-C3'	-5.02	113.67	119.70
12	B	1707	G	C5'-C4'-C3'	-5.02	107.96	116.00
12	B	2171	A	N7-C8-N9	5.02	116.31	113.80
12	B	2359	C	N3-C4-C5	-5.02	119.89	121.90
12	B	2670	A	C8-N9-C4	-5.02	103.79	105.80
17	G	57	TYR	CB-CG-CD2	-5.02	117.99	121.00
12	B	125	A	C5-C6-N6	-5.02	119.68	123.70
12	B	438	G	N1-C2-N3	-5.02	120.89	123.90
12	B	892	A	C3'-C2'-C1'	5.02	105.52	101.50
12	B	1476	U	C4-C5-C6	5.02	122.71	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	L	35	HIS	O-C-N	5.02	130.73	122.70
10	9	196	PRO	CA-N-CD	-5.02	104.47	111.50
11	A	80	U	C5-C6-N1	5.02	125.21	122.70
12	B	171	U	O4'-C1'-N1	5.02	112.22	108.20
12	B	896	A	C4-C5-N7	-5.02	108.19	110.70
12	B	907	G	C4-C5-C6	5.02	121.81	118.80
12	B	956	G	C6-N1-C2	5.02	128.11	125.10
12	B	1306	C	O4'-C1'-N1	5.02	112.22	108.20
12	B	1453	A	C5-N7-C8	5.02	106.41	103.90
12	B	1620	G	C4-N9-C1'	-5.02	119.97	126.50
12	B	1946	U	C5-C4-O4	-5.02	122.89	125.90
12	B	2096	C	C4-C5-C6	5.02	119.91	117.40
12	B	2221	G	C5-N7-C8	-5.02	101.79	104.30
12	B	2370	G	N1-C6-O6	5.02	122.91	119.90
12	B	2526	G	C2'-C3'-O3'	5.02	121.73	113.70
12	B	2744	G	C5-C6-N1	5.02	114.01	111.50
12	B	2767	C	N1-C2-N3	5.02	122.71	119.20
12	B	2798	U	C6-N1-C1'	-5.02	114.17	121.20
13	C	254	LYS	CB-CA-C	5.02	120.44	110.40
18	H	118	PRO	N-CA-CB	5.02	109.32	103.30
29	S	53	SER	N-CA-C	-5.02	97.45	111.00
12	B	432	A	C6-N1-C2	5.02	121.61	118.60
12	B	462	C	N1-C2-N3	-5.02	115.69	119.20
12	B	792	A	C6-C5-N7	-5.02	128.79	132.30
12	B	943	A	C4-C5-C6	5.02	119.51	117.00
12	B	1111	A	O4'-C1'-N9	5.02	112.21	108.20
12	B	1173	U	OP2-P-O3'	5.02	116.24	105.20
12	B	1650	A	N9-C4-C5	5.02	107.81	105.80
12	B	1688	U	C6-N1-C2	-5.02	117.99	121.00
12	B	1933	G	N1-C2-N3	-5.02	120.89	123.90
12	B	2018	G	N9-C1'-C2'	-5.02	106.48	112.00
12	B	2219	U	N3-C4-C5	-5.02	111.59	114.60
12	B	2749	A	C6-C5-N7	-5.02	128.79	132.30
12	B	2899	A	N1-C6-N6	5.02	121.61	118.60
16	F	149	ARG	N-CA-CB	5.02	119.63	110.60
12	B	589	U	C2-N3-C4	5.02	130.01	127.00
12	B	744	U	C2-N3-C4	5.02	130.01	127.00
12	B	1146	C	C3'-C2'-C1'	-5.02	97.49	101.50
12	B	1437	C	N1-C1'-C2'	-5.02	106.48	112.00
12	B	1580	A	P-O5'-C5'	-5.02	112.87	120.90
12	B	2297	A	C8-N9-C1'	5.02	136.73	127.70
12	B	2540	C	C5-C4-N4	-5.02	116.69	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	2713	U	N3-C2-O2	5.02	125.71	122.20
14	D	70	LYS	CA-CB-CG	5.02	124.43	113.40
12	B	48	G	C3'-C2'-C1'	-5.01	97.49	101.50
12	B	271	G	C4-C5-C6	-5.01	115.79	118.80
12	B	2099	U	C4-C5-C6	5.01	122.71	119.70
12	B	2558	C	N3-C4-N4	5.01	121.51	118.00
12	B	2721	A	C1'-O4'-C4'	-5.01	105.89	109.90
12	B	2747	G	C5-C6-O6	-5.01	125.59	128.60
12	B	51	G	C4-C5-C6	-5.01	115.79	118.80
12	B	156	A	O4'-C1'-N9	5.01	112.21	108.20
12	B	290	U	N1-C2-O2	-5.01	119.29	122.80
12	B	410	G	C1'-O4'-C4'	5.01	113.91	109.90
12	B	673	C	C5'-C4'-C3'	-5.01	107.98	116.00
12	B	681	G	C5-N7-C8	5.01	106.81	104.30
12	B	869	G	N9-C4-C5	5.01	107.41	105.40
12	B	1339	G	C4-C5-N7	5.01	112.81	110.80
12	B	2220	U	O4'-C4'-C3'	-5.01	98.99	104.00
12	B	2893	A	C5-N7-C8	5.01	106.41	103.90
15	E	61	ARG	CA-CB-CG	5.01	124.43	113.40
11	A	17	C	N3-C4-C5	-5.01	119.89	121.90
11	A	44	G	C8-N9-C1'	5.01	133.51	127.00
12	B	327	G	C5-N7-C8	5.01	106.81	104.30
12	B	729	G	N1-C2-N2	5.01	120.71	116.20
12	B	841	G	N9-C4-C5	-5.01	103.40	105.40
12	B	1139	G	N3-C4-C5	-5.01	126.09	128.60
12	B	1506	U	N1-C2-N3	-5.01	111.89	114.90
12	B	1716	U	N1-C2-N3	-5.01	111.89	114.90
12	B	1863	G	C5-C6-N1	-5.01	108.99	111.50
12	B	1885	A	C5-C6-N6	-5.01	119.69	123.70
12	B	2028	U	N3-C2-O2	-5.01	118.69	122.20
12	B	2099	U	N3-C4-O4	5.01	122.91	119.40
12	B	2212	A	N7-C8-N9	5.01	116.31	113.80
12	B	2533	U	N3-C4-O4	5.01	122.91	119.40
12	B	2880	C	C5-C6-N1	5.01	123.51	121.00
13	C	208	GLY	C-N-CA	5.01	134.23	121.70
11	A	28	C	C4'-C3'-C2'	-5.01	97.59	102.60
12	B	186	G	N3-C2-N2	5.01	123.41	119.90
12	B	676	A	N7-C8-N9	5.01	116.31	113.80
12	B	736	C	N3-C4-N4	5.01	121.51	118.00
12	B	1474	U	O4'-C1'-N1	5.01	112.21	108.20
12	B	1621	U	C1'-O4'-C4'	-5.01	105.89	109.90
12	B	1762	A	C4-C5-N7	5.01	113.20	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1811	G	C5-C6-O6	-5.01	125.59	128.60
12	B	2230	G	C5-C6-N1	-5.01	109.00	111.50
12	B	2332	C	C5-C4-N4	-5.01	116.69	120.20
12	B	2445	G	C3'-C2'-C1'	-5.01	97.49	101.50
12	B	2455	G	C4-C5-N7	-5.01	108.80	110.80
12	B	2744	G	O5'-C5'-C4'	-5.01	102.18	111.70
12	B	1627	G	P-O3'-C3'	-5.01	113.69	119.70
12	B	2087	G	C5-N7-C8	5.01	106.80	104.30
11	A	77	U	OP1-P-OP2	-5.01	112.09	119.60
12	B	424	G	C6-C5-N7	-5.01	127.40	130.40
12	B	515	A	C5-C6-N6	-5.01	119.69	123.70
12	B	659	G	C6-C5-N7	-5.01	127.40	130.40
12	B	1170	C	C3'-C2'-C1'	-5.01	97.50	101.50
12	B	2171	A	C1'-O4'-C4'	-5.01	105.89	109.90
12	B	2341	G	O5'-C5'-C4'	-5.01	102.19	111.70
12	B	2365	G	N1-C2-N3	-5.01	120.90	123.90
12	B	2461	A	OP1-P-O3'	5.01	116.21	105.20
12	B	2623	G	P-O3'-C3'	-5.01	113.69	119.70
12	B	2660	A	P-O3'-C3'	5.01	125.71	119.70
13	C	245	THR	CA-CB-CG2	-5.01	105.39	112.40
20	J	5	THR	CA-CB-OG1	5.01	119.51	109.00
7	6	5	PHE	CB-CG-CD1	-5.00	117.30	120.80
12	B	135	U	C1'-O4'-C4'	-5.00	105.90	109.90
12	B	361	G	P-O3'-C3'	-5.00	113.69	119.70
12	B	661	A	O5'-C5'-C4'	-5.00	102.19	111.70
12	B	1092	C	P-O3'-C3'	5.00	125.70	119.70
12	B	1454	C	O4'-C4'-C3'	-5.00	99.00	104.00
12	B	1701	A	N3-C4-C5	-5.00	123.30	126.80
12	B	1724	G	C5-C6-O6	-5.00	125.60	128.60
12	B	2090	A	C5-C6-N1	-5.00	115.20	117.70
12	B	2444	G	N3-C2-N2	5.00	123.40	119.90
10	9	105	MET	N-CA-C	-5.00	97.49	111.00
12	B	67	U	C4-C5-C6	-5.00	116.70	119.70
12	B	170	U	P-O5'-C5'	5.00	128.90	120.90
12	B	443	A	N1-C6-N6	5.00	121.60	118.60
12	B	591	U	P-O5'-C5'	5.00	128.91	120.90
12	B	762	U	C3'-C2'-C1'	-5.00	97.50	101.50
12	B	788	A	C5-C6-N6	-5.00	119.70	123.70
12	B	987	C	C5-C6-N1	5.00	123.50	121.00
12	B	1150	C	N3-C4-C5	-5.00	119.90	121.90
12	B	1259	G	C8-N9-C1'	5.00	133.50	127.00
12	B	1445	G	N1-C2-N2	-5.00	111.70	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B	1620	G	N3-C4-C5	-5.00	126.10	128.60
12	B	1635	A	C4-C5-N7	-5.00	108.20	110.70
12	B	2020	A	P-O3'-C3'	-5.00	113.70	119.70
12	B	2371	G	C4-C5-N7	-5.00	108.80	110.80
12	B	2418	A	C1'-O4'-C4'	-5.00	105.90	109.90
12	B	2480	C	O4'-C1'-C2'	-5.00	100.80	105.80
12	B	2484	G	N1-C6-O6	5.00	122.90	119.90
15	E	57	LYS	O-C-N	5.00	130.70	122.70
25	O	40	ILE	O-C-N	5.00	130.71	122.70
12	B	95	A	C5-C6-N1	-5.00	115.20	117.70
12	B	192	C	P-O5'-C5'	5.00	128.90	120.90
12	B	423	A	C5-N7-C8	5.00	106.40	103.90
12	B	493	G	N1-C2-N3	-5.00	120.90	123.90
12	B	505	A	OP1-P-O3'	5.00	116.20	105.20
12	B	770	G	C5-C6-N1	-5.00	109.00	111.50
12	B	1300	G	C8-N9-C1'	-5.00	120.50	127.00
12	B	1833	C	C4-C5-C6	5.00	119.90	117.40
12	B	1919	A	N9-C4-C5	5.00	107.80	105.80
12	B	2293	G	OP1-P-OP2	-5.00	112.10	119.60
12	B	2318	G	N7-C8-N9	-5.00	110.60	113.10
12	B	2376	A	N1-C6-N6	5.00	121.60	118.60
12	B	2395	C	C6-N1-C2	-5.00	118.30	120.30
12	B	2409	G	N1-C2-N3	-5.00	120.90	123.90
12	B	2705	A	P-O3'-C3'	-5.00	113.70	119.70
21	K	4	GLU	N-CA-CB	5.00	119.60	110.60
33	Y	55	ASP	CB-CG-OD2	5.00	122.80	118.30

There are no chirality outliers.

All (1675) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	0	37	PHE	Sidechain
1	0	56	ARG	Sidechain
2	1	23	ARG	Sidechain
2	1	7	ARG	Sidechain
3	2	44	ARG	Sidechain
4	3	12	ARG	Sidechain
4	3	9	ARG	Sidechain
5	4	20	TYR	Sidechain
5	4	48	TYR	Sidechain
6	5	134	ARG	Sidechain
6	5	38	PHE	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
6	5	53	ARG	Sidechain
7	6	12	ARG	Sidechain
7	6	19	ARG	Sidechain
7	6	28	ARG	Sidechain
7	6	33	ARG	Sidechain
7	6	35	ARG	Sidechain
7	6	5	PHE	Sidechain
8	7	23	HIS	Sidechain
8	7	44	ARG	Sidechain
8	7	7	ARG	Sidechain
9	8	4	ARG	Sidechain
10	9	108	MET	Peptide
10	9	114	ARG	Sidechain
10	9	130	PHE	Sidechain
10	9	139	ARG	Sidechain
10	9	150	ARG	Sidechain
10	9	157	MET	Peptide
10	9	158	LEU	Peptide
10	9	175	PHE	Sidechain
10	9	183	LYS	Mainchain
10	9	189	TYR	Sidechain
10	9	202	ARG	Sidechain
10	9	226	GLY	Peptide
10	9	231	PHE	Sidechain
10	9	234	HIS	Sidechain
10	9	239	ARG	Sidechain
10	9	24	ARG	Sidechain
10	9	25	ARG	Sidechain
10	9	28	TYR	Sidechain
10	9	282	PHE	Sidechain
10	9	310	TYR	Sidechain
10	9	311	TYR	Sidechain
10	9	331	PHE	Sidechain
10	9	40	GLY	Mainchain
10	9	53	LEU	Peptide
10	9	54	ASN	Mainchain
10	9	60	ARG	Peptide
10	9	82	ARG	Sidechain
11	A	10	G	Sidechain
11	A	100	G	Sidechain
11	A	104	A	Sidechain
11	A	105	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
11	A	107	G	Sidechain
11	A	11	C	Sidechain
11	A	111	U	Sidechain
11	A	114	C	Sidechain
11	A	115	A	Sidechain
11	A	116	G	Sidechain
11	A	117	G	Sidechain
11	A	118	C	Sidechain
11	A	13	G	Sidechain
11	A	14	U	Sidechain
11	A	17	C	Sidechain
11	A	18	G	Sidechain
11	A	20	G	Sidechain
11	A	23	G	Sidechain
11	A	24	G	Sidechain
11	A	25	U	Sidechain
11	A	32	U	Sidechain
11	A	33	G	Sidechain
11	A	36	C	Sidechain
11	A	37	C	Sidechain
11	A	38	C	Sidechain
11	A	4	C	Sidechain
11	A	40	U	Sidechain
11	A	43	C	Sidechain
11	A	44	G	Sidechain
11	A	49	C	Sidechain
11	A	53	A	Sidechain
11	A	55	U	Sidechain
11	A	56	G	Sidechain
11	A	57	A	Sidechain
11	A	58	A	Sidechain
11	A	59	A	Sidechain
11	A	62	C	Sidechain
11	A	63	C	Sidechain
11	A	64	G	Sidechain
11	A	65	U	Sidechain
11	A	66	A	Sidechain
11	A	70	C	Sidechain
11	A	71	C	Sidechain
11	A	72	G	Sidechain
11	A	74	U	Sidechain
11	A	76	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
11	A	79	G	Sidechain
11	A	82	U	Sidechain
11	A	84	G	Sidechain
11	A	85	G	Sidechain
11	A	86	G	Sidechain
11	A	87	U	Sidechain
11	A	92	C	Sidechain
11	A	96	G	Sidechain
11	A	98	G	Sidechain
12	B	1	G	Sidechain
12	B	10	A	Sidechain
12	B	1001	A	Sidechain
12	B	1002	G	Sidechain
12	B	1003	G	Sidechain
12	B	1005	C	Sidechain
12	B	1006	C	Sidechain
12	B	1007	C	Sidechain
12	B	1008	A	Sidechain
12	B	101	A	Sidechain
12	B	1011	G	Sidechain
12	B	1014	A	Sidechain
12	B	1016	G	Sidechain
12	B	1019	U	Sidechain
12	B	102	U	Sidechain
12	B	1021	A	Sidechain
12	B	1022	G	Sidechain
12	B	1023	U	Sidechain
12	B	1024	G	Sidechain
12	B	1025	G	Sidechain
12	B	1026	G	Sidechain
12	B	1027	A	Sidechain
12	B	1031	G	Sidechain
12	B	1034	G	Sidechain
12	B	1035	U	Sidechain
12	B	1038	G	Sidechain
12	B	1040	A	Sidechain
12	B	1042	G	Sidechain
12	B	1044	C	Sidechain
12	B	1045	C	Sidechain
12	B	1047	G	Sidechain
12	B	1054	A	Sidechain
12	B	1056	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1059	G	Sidechain
12	B	1060	U	Sidechain
12	B	1061	U	Sidechain
12	B	1063	G	Sidechain
12	B	1065	U	Sidechain
12	B	1067	A	Sidechain
12	B	1068	G	Sidechain
12	B	1069	A	Sidechain
12	B	1070	A	Sidechain
12	B	1071	G	Sidechain
12	B	1074	G	Sidechain
12	B	1077	A	Sidechain
12	B	1081	U	Sidechain
12	B	1085	A	Sidechain
12	B	1086	A	Sidechain
12	B	1087	G	Sidechain
12	B	1088	A	Sidechain
12	B	1090	A	Sidechain
12	B	1091	G	Sidechain
12	B	1095	A	Sidechain
12	B	1096	A	Sidechain
12	B	1098	A	Sidechain
12	B	1099	G	Sidechain
12	B	110	G	Sidechain
12	B	1100	C	Sidechain
12	B	1103	A	Sidechain
12	B	1105	U	Sidechain
12	B	111	A	Sidechain
12	B	1110	G	Sidechain
12	B	1116	G	Sidechain
12	B	1122	G	Sidechain
12	B	1123	C	Sidechain
12	B	1124	G	Sidechain
12	B	1125	G	Sidechain
12	B	1126	A	Sidechain
12	B	1127	A	Sidechain
12	B	1128	G	Sidechain
12	B	1129	A	Sidechain
12	B	1131	G	Sidechain
12	B	1132	U	Sidechain
12	B	1134	A	Sidechain
12	B	1135	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1136	G	Sidechain
12	B	1137	G	Sidechain
12	B	1138	G	Sidechain
12	B	1139	G	Sidechain
12	B	1140	C	Sidechain
12	B	1141	U	Sidechain
12	B	1142	A	Sidechain
12	B	1143	A	Sidechain
12	B	1144	A	Sidechain
12	B	1146	C	Sidechain
12	B	1147	A	Sidechain
12	B	1157	G	Sidechain
12	B	1158	C	Sidechain
12	B	1166	G	Sidechain
12	B	1167	C	Sidechain
12	B	1168	G	Sidechain
12	B	117	G	Sidechain
12	B	1171	G	Sidechain
12	B	1172	C	Sidechain
12	B	1173	U	Sidechain
12	B	1174	U	Sidechain
12	B	118	A	Sidechain
12	B	1180	U	Sidechain
12	B	1181	U	Sidechain
12	B	1183	U	Sidechain
12	B	1185	G	Sidechain
12	B	1186	G	Sidechain
12	B	1189	A	Sidechain
12	B	119	A	Sidechain
12	B	1190	G	Sidechain
12	B	1192	G	Sidechain
12	B	1193	G	Sidechain
12	B	1194	A	Sidechain
12	B	1195	G	Sidechain
12	B	1198	U	Sidechain
12	B	1199	U	Sidechain
12	B	1204	A	Sidechain
12	B	1205	A	Sidechain
12	B	1206	G	Sidechain
12	B	1208	C	Sidechain
12	B	1209	U	Sidechain
12	B	1210	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1211	C	Sidechain
12	B	1212	G	Sidechain
12	B	1213	A	Sidechain
12	B	1216	G	Sidechain
12	B	1220	G	Sidechain
12	B	1223	G	Sidechain
12	B	1225	G	Sidechain
12	B	1227	G	Sidechain
12	B	1228	G	Sidechain
12	B	1230	A	Sidechain
12	B	1231	U	Sidechain
12	B	1232	G	Sidechain
12	B	1234	U	Sidechain
12	B	1235	G	Sidechain
12	B	1236	G	Sidechain
12	B	1237	A	Sidechain
12	B	1238	G	Sidechain
12	B	1240	U	Sidechain
12	B	1241	A	Sidechain
12	B	1242	U	Sidechain
12	B	1244	A	Sidechain
12	B	125	A	Sidechain
12	B	1250	G	Sidechain
12	B	1251	C	Sidechain
12	B	1252	G	Sidechain
12	B	1253	A	Sidechain
12	B	1256	G	Sidechain
12	B	1258	U	Sidechain
12	B	126	A	Sidechain
12	B	1260	A	Sidechain
12	B	1261	C	Sidechain
12	B	1264	A	Sidechain
12	B	1267	U	Sidechain
12	B	1269	A	Sidechain
12	B	1271	G	Sidechain
12	B	1272	A	Sidechain
12	B	1273	U	Sidechain
12	B	1275	A	Sidechain
12	B	1277	G	Sidechain
12	B	128	C	Sidechain
12	B	1280	G	Sidechain
12	B	1284	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1285	A	Sidechain
12	B	1289	C	Sidechain
12	B	1290	C	Sidechain
12	B	1291	C	Sidechain
12	B	1293	C	Sidechain
12	B	1294	U	Sidechain
12	B	1296	G	Sidechain
12	B	1298	C	Sidechain
12	B	1303	G	Sidechain
12	B	1305	C	Sidechain
12	B	1307	A	Sidechain
12	B	1310	G	Sidechain
12	B	1317	G	Sidechain
12	B	1318	U	Sidechain
12	B	132	G	Sidechain
12	B	1320	C	Sidechain
12	B	1324	G	Sidechain
12	B	1326	U	Sidechain
12	B	1327	A	Sidechain
12	B	1328	A	Sidechain
12	B	1331	G	Sidechain
12	B	1333	G	Sidechain
12	B	1335	C	Sidechain
12	B	1336	A	Sidechain
12	B	1337	G	Sidechain
12	B	134	G	Sidechain
12	B	1340	U	Sidechain
12	B	1341	G	Sidechain
12	B	1344	U	Sidechain
12	B	1345	C	Sidechain
12	B	1346	G	Sidechain
12	B	1347	A	Sidechain
12	B	1349	C	Sidechain
12	B	135	U	Sidechain
12	B	1352	U	Sidechain
12	B	1353	A	Sidechain
12	B	1355	G	Sidechain
12	B	1356	G	Sidechain
12	B	1358	G	Sidechain
12	B	136	G	Sidechain
12	B	1360	G	Sidechain
12	B	1363	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1366	A	Sidechain
12	B	137	U	Sidechain
12	B	1371	G	Sidechain
12	B	1375	U	Sidechain
12	B	1378	A	Sidechain
12	B	1379	U	Sidechain
12	B	1381	G	Sidechain
12	B	1382	G	Sidechain
12	B	1383	A	Sidechain
12	B	1384	A	Sidechain
12	B	1387	A	Sidechain
12	B	1388	G	Sidechain
12	B	139	U	Sidechain
12	B	1390	U	Sidechain
12	B	1392	A	Sidechain
12	B	1395	A	Sidechain
12	B	1396	U	Sidechain
12	B	1397	U	Sidechain
12	B	1399	C	Sidechain
12	B	14	A	Sidechain
12	B	1400	U	Sidechain
12	B	1401	G	Sidechain
12	B	1402	U	Sidechain
12	B	1405	U	Sidechain
12	B	1406	U	Sidechain
12	B	1407	G	Sidechain
12	B	1408	G	Sidechain
12	B	1409	U	Sidechain
12	B	1410	G	Sidechain
12	B	1415	U	Sidechain
12	B	1416	G	Sidechain
12	B	1417	C	Sidechain
12	B	1418	G	Sidechain
12	B	142	A	Sidechain
12	B	1421	G	Sidechain
12	B	1422	G	Sidechain
12	B	1423	G	Sidechain
12	B	1424	G	Sidechain
12	B	1425	G	Sidechain
12	B	1429	G	Sidechain
12	B	143	C	Sidechain
12	B	1432	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1433	A	Sidechain
12	B	1435	G	Sidechain
12	B	1438	U	Sidechain
12	B	1439	A	Sidechain
12	B	1440	U	Sidechain
12	B	1441	G	Sidechain
12	B	1445	G	Sidechain
12	B	1447	C	Sidechain
12	B	1448	G	Sidechain
12	B	1450	G	Sidechain
12	B	1451	C	Sidechain
12	B	1453	A	Sidechain
12	B	1454	C	Sidechain
12	B	1456	G	Sidechain
12	B	1458	U	Sidechain
12	B	1459	G	Sidechain
12	B	146	A	Sidechain
12	B	1460	U	Sidechain
12	B	1462	C	Sidechain
12	B	1464	G	Sidechain
12	B	1467	U	Sidechain
12	B	1468	U	Sidechain
12	B	1471	G	Sidechain
12	B	1474	U	Sidechain
12	B	1475	G	Sidechain
12	B	1476	U	Sidechain
12	B	1477	A	Sidechain
12	B	1478	G	Sidechain
12	B	148	U	Sidechain
12	B	1480	C	Sidechain
12	B	1482	G	Sidechain
12	B	1484	U	Sidechain
12	B	1485	U	Sidechain
12	B	1486	U	Sidechain
12	B	1487	U	Sidechain
12	B	1489	C	Sidechain
12	B	1490	A	Sidechain
12	B	1492	G	Sidechain
12	B	1493	C	Sidechain
12	B	1494	A	Sidechain
12	B	1495	A	Sidechain
12	B	1497	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1499	C	Sidechain
12	B	15	G	Sidechain
12	B	1504	A	Sidechain
12	B	1505	A	Sidechain
12	B	1506	U	Sidechain
12	B	1508	A	Sidechain
12	B	151	C	Sidechain
12	B	1510	G	Sidechain
12	B	1512	C	Sidechain
12	B	1514	G	Sidechain
12	B	1515	A	Sidechain
12	B	1516	G	Sidechain
12	B	1517	G	Sidechain
12	B	1518	C	Sidechain
12	B	1519	G	Sidechain
12	B	1520	U	Sidechain
12	B	1522	A	Sidechain
12	B	1524	G	Sidechain
12	B	1526	C	Sidechain
12	B	1527	G	Sidechain
12	B	153	U	Sidechain
12	B	1531	C	Sidechain
12	B	1533	C	Sidechain
12	B	1534	U	Sidechain
12	B	1536	C	Sidechain
12	B	1537	G	Sidechain
12	B	1538	G	Sidechain
12	B	1539	U	Sidechain
12	B	154	U	Sidechain
12	B	1541	C	Sidechain
12	B	1543	G	Sidechain
12	B	1545	A	Sidechain
12	B	1547	C	Sidechain
12	B	1549	A	Sidechain
12	B	1551	A	Sidechain
12	B	1552	A	Sidechain
12	B	1558	C	Sidechain
12	B	1559	U	Sidechain
12	B	1563	U	Sidechain
12	B	1564	C	Sidechain
12	B	1565	C	Sidechain
12	B	1567	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1568	G	Sidechain
12	B	1569	A	Sidechain
12	B	1571	A	Sidechain
12	B	1573	G	Sidechain
12	B	1574	C	Sidechain
12	B	1576	U	Sidechain
12	B	1577	C	Sidechain
12	B	1580	A	Sidechain
12	B	1581	G	Sidechain
12	B	1583	A	Sidechain
12	B	1584	U	Sidechain
12	B	1585	C	Sidechain
12	B	1588	G	Sidechain
12	B	159	G	Sidechain
12	B	1592	C	Sidechain
12	B	1598	A	Sidechain
12	B	1599	U	Sidechain
12	B	160	A	Sidechain
12	B	1600	C	Sidechain
12	B	1602	U	Sidechain
12	B	1603	A	Sidechain
12	B	1605	C	Sidechain
12	B	1607	C	Sidechain
12	B	161	A	Sidechain
12	B	1610	A	Sidechain
12	B	1611	C	Sidechain
12	B	1613	G	Sidechain
12	B	1616	A	Sidechain
12	B	1619	G	Sidechain
12	B	162	U	Sidechain
12	B	1620	G	Sidechain
12	B	1621	U	Sidechain
12	B	1627	G	Sidechain
12	B	1628	G	Sidechain
12	B	1629	U	Sidechain
12	B	163	C	Sidechain
12	B	1630	A	Sidechain
12	B	1631	G	Sidechain
12	B	1633	G	Sidechain
12	B	1634	A	Sidechain
12	B	1638	C	Sidechain
12	B	1639	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1641	A	Sidechain
12	B	1645	G	Sidechain
12	B	1646	C	Sidechain
12	B	1649	G	Sidechain
12	B	1652	A	Sidechain
12	B	1656	C	Sidechain
12	B	1658	C	Sidechain
12	B	166	U	Sidechain
12	B	1660	G	Sidechain
12	B	1661	G	Sidechain
12	B	1662	U	Sidechain
12	B	1663	G	Sidechain
12	B	1666	G	Sidechain
12	B	1668	A	Sidechain
12	B	1669	A	Sidechain
12	B	1671	U	Sidechain
12	B	1672	A	Sidechain
12	B	1673	G	Sidechain
12	B	1674	G	Sidechain
12	B	1676	A	Sidechain
12	B	1677	A	Sidechain
12	B	1679	A	Sidechain
12	B	1680	U	Sidechain
12	B	1688	U	Sidechain
12	B	1692	U	Sidechain
12	B	17	G	Sidechain
12	B	1700	A	Sidechain
12	B	1701	A	Sidechain
12	B	1702	G	Sidechain
12	B	1703	G	Sidechain
12	B	1705	A	Sidechain
12	B	1706	C	Sidechain
12	B	1711	A	Sidechain
12	B	1712	U	Sidechain
12	B	1713	A	Sidechain
12	B	1715	G	Sidechain
12	B	1716	U	Sidechain
12	B	1717	A	Sidechain
12	B	1718	G	Sidechain
12	B	1719	G	Sidechain
12	B	1720	U	Sidechain
12	B	1721	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1722	A	Sidechain
12	B	1723	G	Sidechain
12	B	1724	G	Sidechain
12	B	173	A	Sidechain
12	B	1732	C	Sidechain
12	B	1733	G	Sidechain
12	B	1737	G	Sidechain
12	B	1738	G	Sidechain
12	B	174	U	Sidechain
12	B	1741	C	Sidechain
12	B	1743	G	Sidechain
12	B	1745	A	Sidechain
12	B	1746	A	Sidechain
12	B	1750	G	Sidechain
12	B	1751	U	Sidechain
12	B	1753	G	Sidechain
12	B	1756	G	Sidechain
12	B	1757	A	Sidechain
12	B	1759	A	Sidechain
12	B	176	A	Sidechain
12	B	1761	C	Sidechain
12	B	1762	A	Sidechain
12	B	1763	G	Sidechain
12	B	1764	C	Sidechain
12	B	1766	G	Sidechain
12	B	1768	C	Sidechain
12	B	1769	U	Sidechain
12	B	1771	C	Sidechain
12	B	1774	C	Sidechain
12	B	1775	U	Sidechain
12	B	1776	G	Sidechain
12	B	1777	U	Sidechain
12	B	1778	U	Sidechain
12	B	1781	U	Sidechain
12	B	1783	A	Sidechain
12	B	1784	A	Sidechain
12	B	1785	A	Sidechain
12	B	1787	A	Sidechain
12	B	1788	C	Sidechain
12	B	1789	A	Sidechain
12	B	179	C	Sidechain
12	B	1792	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1793	C	Sidechain
12	B	1797	G	Sidechain
12	B	1798	U	Sidechain
12	B	1799	G	Sidechain
12	B	180	G	Sidechain
12	B	1801	A	Sidechain
12	B	1806	C	Sidechain
12	B	1809	A	Sidechain
12	B	181	A	Sidechain
12	B	1813	G	Sidechain
12	B	1815	A	Sidechain
12	B	1819	A	Sidechain
12	B	1821	A	Sidechain
12	B	1823	G	Sidechain
12	B	1824	G	Sidechain
12	B	1825	U	Sidechain
12	B	1827	U	Sidechain
12	B	1829	A	Sidechain
12	B	1831	G	Sidechain
12	B	1832	C	Sidechain
12	B	1835	G	Sidechain
12	B	1838	C	Sidechain
12	B	1841	U	Sidechain
12	B	1842	G	Sidechain
12	B	1843	C	Sidechain
12	B	1844	C	Sidechain
12	B	1845	G	Sidechain
12	B	1846	G	Sidechain
12	B	1849	G	Sidechain
12	B	1850	G	Sidechain
12	B	1856	U	Sidechain
12	B	1858	A	Sidechain
12	B	1859	U	Sidechain
12	B	1860	G	Sidechain
12	B	1861	G	Sidechain
12	B	1862	G	Sidechain
12	B	1863	G	Sidechain
12	B	1864	U	Sidechain
12	B	1866	A	Sidechain
12	B	1867	G	Sidechain
12	B	187	G	Sidechain
12	B	1872	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1875	G	Sidechain
12	B	1879	C	Sidechain
12	B	1880	U	Sidechain
12	B	1882	U	Sidechain
12	B	1883	U	Sidechain
12	B	1885	A	Sidechain
12	B	1887	C	Sidechain
12	B	1888	G	Sidechain
12	B	1889	A	Sidechain
12	B	189	G	Sidechain
12	B	1891	G	Sidechain
12	B	1893	C	Sidechain
12	B	1896	G	Sidechain
12	B	1897	G	Sidechain
12	B	1899	A	Sidechain
12	B	190	A	Sidechain
12	B	1900	A	Sidechain
12	B	1903	G	Sidechain
12	B	1906	G	Sidechain
12	B	1907	G	Sidechain
12	B	1908	C	Sidechain
12	B	1909	C	Sidechain
12	B	191	A	Sidechain
12	B	1915	U	Sidechain
12	B	1918	A	Sidechain
12	B	1919	A	Sidechain
12	B	1920	C	Sidechain
12	B	1922	G	Sidechain
12	B	1923	U	Sidechain
12	B	1924	C	Sidechain
12	B	1925	C	Sidechain
12	B	1927	A	Sidechain
12	B	1928	A	Sidechain
12	B	1929	G	Sidechain
12	B	193	U	Sidechain
12	B	1930	G	Sidechain
12	B	1936	A	Sidechain
12	B	1937	A	Sidechain
12	B	1939	U	Sidechain
12	B	1941	C	Sidechain
12	B	1943	U	Sidechain
12	B	1944	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	1945	G	Sidechain
12	B	1948	G	Sidechain
12	B	1949	G	Sidechain
12	B	1952	A	Sidechain
12	B	1953	A	Sidechain
12	B	1954	G	Sidechain
12	B	1956	U	Sidechain
12	B	1960	A	Sidechain
12	B	1962	C	Sidechain
12	B	1963	U	Sidechain
12	B	1964	G	Sidechain
12	B	1967	C	Sidechain
12	B	1968	G	Sidechain
12	B	1970	A	Sidechain
12	B	1971	U	Sidechain
12	B	1973	G	Sidechain
12	B	1975	G	Sidechain
12	B	1978	A	Sidechain
12	B	1979	U	Sidechain
12	B	198	C	Sidechain
12	B	1983	G	Sidechain
12	B	1988	G	Sidechain
12	B	1991	U	Sidechain
12	B	1992	G	Sidechain
12	B	1993	U	Sidechain
12	B	1999	C	Sidechain
12	B	2	G	Sidechain
12	B	200	U	Sidechain
12	B	2003	A	Sidechain
12	B	2005	A	Sidechain
12	B	2007	U	Sidechain
12	B	201	C	Sidechain
12	B	2010	G	Sidechain
12	B	2012	G	Sidechain
12	B	2013	A	Sidechain
12	B	2014	A	Sidechain
12	B	2015	A	Sidechain
12	B	2017	U	Sidechain
12	B	2022	U	Sidechain
12	B	2024	G	Sidechain
12	B	2028	U	Sidechain
12	B	2029	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	203	A	Sidechain
12	B	2032	G	Sidechain
12	B	2033	A	Sidechain
12	B	2038	G	Sidechain
12	B	204	A	Sidechain
12	B	2041	U	Sidechain
12	B	2042	A	Sidechain
12	B	2046	G	Sidechain
12	B	2048	G	Sidechain
12	B	205	G	Sidechain
12	B	2051	A	Sidechain
12	B	2053	G	Sidechain
12	B	2057	G	Sidechain
12	B	2058	A	Sidechain
12	B	2061	G	Sidechain
12	B	2062	A	Sidechain
12	B	2066	C	Sidechain
12	B	2067	G	Sidechain
12	B	2070	A	Sidechain
12	B	2071	A	Sidechain
12	B	2075	U	Sidechain
12	B	2076	U	Sidechain
12	B	2077	A	Sidechain
12	B	2079	U	Sidechain
12	B	208	C	Sidechain
12	B	2081	U	Sidechain
12	B	2085	U	Sidechain
12	B	2086	U	Sidechain
12	B	2088	A	Sidechain
12	B	209	C	Sidechain
12	B	2093	G	Sidechain
12	B	2094	A	Sidechain
12	B	2097	A	Sidechain
12	B	2098	U	Sidechain
12	B	210	C	Sidechain
12	B	2100	G	Sidechain
12	B	2101	A	Sidechain
12	B	2105	U	Sidechain
12	B	2106	U	Sidechain
12	B	2109	U	Sidechain
12	B	2110	G	Sidechain
12	B	2111	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2112	G	Sidechain
12	B	2113	U	Sidechain
12	B	2115	G	Sidechain
12	B	2116	G	Sidechain
12	B	2117	A	Sidechain
12	B	2123	G	Sidechain
12	B	2125	G	Sidechain
12	B	2126	A	Sidechain
12	B	2127	G	Sidechain
12	B	2128	G	Sidechain
12	B	2129	C	Sidechain
12	B	2130	U	Sidechain
12	B	2133	G	Sidechain
12	B	2134	A	Sidechain
12	B	2136	G	Sidechain
12	B	2137	U	Sidechain
12	B	2138	G	Sidechain
12	B	214	G	Sidechain
12	B	2141	G	Sidechain
12	B	2142	A	Sidechain
12	B	2144	G	Sidechain
12	B	2147	A	Sidechain
12	B	2148	G	Sidechain
12	B	215	G	Sidechain
12	B	2151	U	Sidechain
12	B	2152	G	Sidechain
12	B	2155	U	Sidechain
12	B	2156	G	Sidechain
12	B	216	A	Sidechain
12	B	2160	C	Sidechain
12	B	2162	G	Sidechain
12	B	2164	C	Sidechain
12	B	2168	G	Sidechain
12	B	2171	A	Sidechain
12	B	2175	C	Sidechain
12	B	2180	U	Sidechain
12	B	2182	U	Sidechain
12	B	2185	U	Sidechain
12	B	2186	G	Sidechain
12	B	2187	U	Sidechain
12	B	2191	A	Sidechain
12	B	2193	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2194	U	Sidechain
12	B	2195	U	Sidechain
12	B	2197	U	Sidechain
12	B	2199	A	Sidechain
12	B	22	C	Sidechain
12	B	220	G	Sidechain
12	B	2200	C	Sidechain
12	B	2202	U	Sidechain
12	B	2207	C	Sidechain
12	B	2210	U	Sidechain
12	B	2213	U	Sidechain
12	B	2214	C	Sidechain
12	B	2216	G	Sidechain
12	B	2217	G	Sidechain
12	B	2218	G	Sidechain
12	B	222	A	Sidechain
12	B	2220	U	Sidechain
12	B	2221	G	Sidechain
12	B	2223	G	Sidechain
12	B	2224	G	Sidechain
12	B	2227	A	Sidechain
12	B	2228	G	Sidechain
12	B	2229	U	Sidechain
12	B	2230	G	Sidechain
12	B	2231	U	Sidechain
12	B	2232	C	Sidechain
12	B	2233	U	Sidechain
12	B	2235	G	Sidechain
12	B	2236	U	Sidechain
12	B	2237	G	Sidechain
12	B	2238	G	Sidechain
12	B	224	U	Sidechain
12	B	2241	A	Sidechain
12	B	2242	G	Sidechain
12	B	2244	U	Sidechain
12	B	2248	C	Sidechain
12	B	2253	G	Sidechain
12	B	2254	C	Sidechain
12	B	2255	G	Sidechain
12	B	2256	G	Sidechain
12	B	2258	C	Sidechain
12	B	226	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2260	C	Sidechain
12	B	2262	U	Sidechain
12	B	2263	C	Sidechain
12	B	2264	C	Sidechain
12	B	2265	U	Sidechain
12	B	2266	A	Sidechain
12	B	2269	G	Sidechain
12	B	2270	A	Sidechain
12	B	2271	G	Sidechain
12	B	2273	A	Sidechain
12	B	2275	C	Sidechain
12	B	2279	G	Sidechain
12	B	2280	G	Sidechain
12	B	2281	A	Sidechain
12	B	2282	G	Sidechain
12	B	2284	A	Sidechain
12	B	2285	C	Sidechain
12	B	2286	G	Sidechain
12	B	2288	A	Sidechain
12	B	2289	G	Sidechain
12	B	2290	G	Sidechain
12	B	2292	U	Sidechain
12	B	2293	G	Sidechain
12	B	2294	G	Sidechain
12	B	2296	U	Sidechain
12	B	2298	A	Sidechain
12	B	2303	G	Sidechain
12	B	2304	G	Sidechain
12	B	2305	U	Sidechain
12	B	2306	C	Sidechain
12	B	2307	G	Sidechain
12	B	2308	G	Sidechain
12	B	231	A	Sidechain
12	B	2316	G	Sidechain
12	B	2318	G	Sidechain
12	B	2319	G	Sidechain
12	B	2321	U	Sidechain
12	B	2324	U	Sidechain
12	B	2325	G	Sidechain
12	B	2327	A	Sidechain
12	B	2328	A	Sidechain
12	B	233	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2330	G	Sidechain
12	B	2333	A	Sidechain
12	B	2334	U	Sidechain
12	B	2336	A	Sidechain
12	B	2337	G	Sidechain
12	B	2338	C	Sidechain
12	B	234	U	Sidechain
12	B	2340	A	Sidechain
12	B	2342	C	Sidechain
12	B	2344	U	Sidechain
12	B	2345	G	Sidechain
12	B	2349	G	Sidechain
12	B	2350	C	Sidechain
12	B	2351	G	Sidechain
12	B	2352	A	Sidechain
12	B	2353	G	Sidechain
12	B	2355	G	Sidechain
12	B	2356	U	Sidechain
12	B	2357	G	Sidechain
12	B	2359	C	Sidechain
12	B	2360	G	Sidechain
12	B	2363	G	Sidechain
12	B	2364	C	Sidechain
12	B	2365	G	Sidechain
12	B	2370	G	Sidechain
12	B	2373	G	Sidechain
12	B	2375	G	Sidechain
12	B	2377	A	Sidechain
12	B	2378	A	Sidechain
12	B	2380	C	Sidechain
12	B	2381	A	Sidechain
12	B	2382	G	Sidechain
12	B	2383	G	Sidechain
12	B	2384	U	Sidechain
12	B	2385	C	Sidechain
12	B	2386	A	Sidechain
12	B	2388	A	Sidechain
12	B	239	C	Sidechain
12	B	2390	U	Sidechain
12	B	2392	A	Sidechain
12	B	2393	U	Sidechain
12	B	2395	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2396	G	Sidechain
12	B	2397	G	Sidechain
12	B	2399	G	Sidechain
12	B	24	G	Sidechain
12	B	2400	G	Sidechain
12	B	2401	U	Sidechain
12	B	2403	C	Sidechain
12	B	2405	G	Sidechain
12	B	2406	A	Sidechain
12	B	2407	A	Sidechain
12	B	2408	U	Sidechain
12	B	241	A	Sidechain
12	B	2410	G	Sidechain
12	B	2412	A	Sidechain
12	B	2413	G	Sidechain
12	B	2414	G	Sidechain
12	B	2415	G	Sidechain
12	B	2416	C	Sidechain
12	B	2419	U	Sidechain
12	B	242	G	Sidechain
12	B	2421	G	Sidechain
12	B	2422	C	Sidechain
12	B	2423	U	Sidechain
12	B	2424	C	Sidechain
12	B	2425	A	Sidechain
12	B	2426	A	Sidechain
12	B	2427	C	Sidechain
12	B	2429	G	Sidechain
12	B	243	U	Sidechain
12	B	2430	A	Sidechain
12	B	2432	A	Sidechain
12	B	2433	A	Sidechain
12	B	2435	A	Sidechain
12	B	2436	G	Sidechain
12	B	2437	G	Sidechain
12	B	2439	A	Sidechain
12	B	244	A	Sidechain
12	B	2440	C	Sidechain
12	B	2441	U	Sidechain
12	B	2444	G	Sidechain
12	B	2445	G	Sidechain
12	B	2448	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2450	A	Sidechain
12	B	2451	A	Sidechain
12	B	2452	C	Sidechain
12	B	2457	U	Sidechain
12	B	2458	G	Sidechain
12	B	246	C	Sidechain
12	B	2463	C	Sidechain
12	B	2464	G	Sidechain
12	B	2467	C	Sidechain
12	B	2468	A	Sidechain
12	B	2470	G	Sidechain
12	B	2471	A	Sidechain
12	B	2473	U	Sidechain
12	B	2474	U	Sidechain
12	B	2475	C	Sidechain
12	B	2476	A	Sidechain
12	B	2477	U	Sidechain
12	B	248	G	Sidechain
12	B	2481	G	Sidechain
12	B	2482	A	Sidechain
12	B	2483	C	Sidechain
12	B	2484	G	Sidechain
12	B	2485	G	Sidechain
12	B	2487	G	Sidechain
12	B	2488	G	Sidechain
12	B	249	C	Sidechain
12	B	2493	U	Sidechain
12	B	2494	G	Sidechain
12	B	2495	G	Sidechain
12	B	2497	A	Sidechain
12	B	2498	C	Sidechain
12	B	2499	C	Sidechain
12	B	25	U	Sidechain
12	B	250	G	Sidechain
12	B	2500	U	Sidechain
12	B	2502	G	Sidechain
12	B	2503	A	Sidechain
12	B	2504	U	Sidechain
12	B	2506	U	Sidechain
12	B	2507	C	Sidechain
12	B	2509	G	Sidechain
12	B	251	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2513	A	Sidechain
12	B	2516	A	Sidechain
12	B	2518	A	Sidechain
12	B	252	G	Sidechain
12	B	2523	G	Sidechain
12	B	2524	G	Sidechain
12	B	2526	G	Sidechain
12	B	2527	C	Sidechain
12	B	2529	G	Sidechain
12	B	2532	G	Sidechain
12	B	2535	G	Sidechain
12	B	2536	G	Sidechain
12	B	2538	C	Sidechain
12	B	254	G	Sidechain
12	B	2541	A	Sidechain
12	B	2543	G	Sidechain
12	B	2545	G	Sidechain
12	B	2548	U	Sidechain
12	B	2551	C	Sidechain
12	B	2552	U	Sidechain
12	B	2553	G	Sidechain
12	B	2554	U	Sidechain
12	B	2556	C	Sidechain
12	B	2557	G	Sidechain
12	B	2558	C	Sidechain
12	B	2560	A	Sidechain
12	B	2561	U	Sidechain
12	B	2562	U	Sidechain
12	B	2563	U	Sidechain
12	B	2565	A	Sidechain
12	B	2566	A	Sidechain
12	B	2569	G	Sidechain
12	B	2573	C	Sidechain
12	B	2576	G	Sidechain
12	B	2577	A	Sidechain
12	B	258	G	Sidechain
12	B	2580	U	Sidechain
12	B	2582	G	Sidechain
12	B	2583	G	Sidechain
12	B	2584	U	Sidechain
12	B	2586	U	Sidechain
12	B	2590	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2593	U	Sidechain
12	B	2597	G	Sidechain
12	B	2599	G	Sidechain
12	B	26	G	Sidechain
12	B	2600	A	Sidechain
12	B	2602	A	Sidechain
12	B	2604	U	Sidechain
12	B	2605	U	Sidechain
12	B	2606	C	Sidechain
12	B	2607	G	Sidechain
12	B	261	G	Sidechain
12	B	2610	C	Sidechain
12	B	2611	C	Sidechain
12	B	2614	A	Sidechain
12	B	2615	U	Sidechain
12	B	2617	U	Sidechain
12	B	2618	G	Sidechain
12	B	2619	C	Sidechain
12	B	262	A	Sidechain
12	B	2621	G	Sidechain
12	B	2623	G	Sidechain
12	B	2624	G	Sidechain
12	B	2630	G	Sidechain
12	B	2631	G	Sidechain
12	B	2632	A	Sidechain
12	B	2633	G	Sidechain
12	B	2636	C	Sidechain
12	B	2637	U	Sidechain
12	B	2638	G	Sidechain
12	B	2639	A	Sidechain
12	B	2641	G	Sidechain
12	B	2642	G	Sidechain
12	B	2643	G	Sidechain
12	B	2644	G	Sidechain
12	B	2647	U	Sidechain
12	B	265	A	Sidechain
12	B	2650	U	Sidechain
12	B	2651	C	Sidechain
12	B	2652	C	Sidechain
12	B	2655	G	Sidechain
12	B	2657	A	Sidechain
12	B	2658	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	266	G	Sidechain
12	B	2660	A	Sidechain
12	B	2662	A	Sidechain
12	B	2664	G	Sidechain
12	B	2666	C	Sidechain
12	B	2669	G	Sidechain
12	B	2672	U	Sidechain
12	B	2674	G	Sidechain
12	B	2675	A	Sidechain
12	B	2677	G	Sidechain
12	B	2679	A	Sidechain
12	B	2680	U	Sidechain
12	B	2683	C	Sidechain
12	B	2684	U	Sidechain
12	B	2685	G	Sidechain
12	B	2686	G	Sidechain
12	B	2688	G	Sidechain
12	B	269	C	Sidechain
12	B	2692	G	Sidechain
12	B	2693	G	Sidechain
12	B	2699	C	Sidechain
12	B	27	G	Sidechain
12	B	270	A	Sidechain
12	B	2702	G	Sidechain
12	B	2705	A	Sidechain
12	B	2706	A	Sidechain
12	B	2707	U	Sidechain
12	B	2709	G	Sidechain
12	B	2710	C	Sidechain
12	B	2711	A	Sidechain
12	B	2712	C	Sidechain
12	B	2713	U	Sidechain
12	B	2714	G	Sidechain
12	B	2715	C	Sidechain
12	B	2719	G	Sidechain
12	B	2722	G	Sidechain
12	B	2725	A	Sidechain
12	B	2726	A	Sidechain
12	B	2728	U	Sidechain
12	B	2729	G	Sidechain
12	B	2730	C	Sidechain
12	B	2731	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	2732	G	Sidechain
12	B	2735	G	Sidechain
12	B	2736	A	Sidechain
12	B	2737	G	Sidechain
12	B	2738	A	Sidechain
12	B	274	C	Sidechain
12	B	2742	G	Sidechain
12	B	2746	U	Sidechain
12	B	275	C	Sidechain
12	B	2750	A	Sidechain
12	B	2751	G	Sidechain
12	B	2752	C	Sidechain
12	B	2754	U	Sidechain
12	B	2755	C	Sidechain
12	B	2756	U	Sidechain
12	B	2758	A	Sidechain
12	B	276	U	Sidechain
12	B	2762	C	Sidechain
12	B	2763	G	Sidechain
12	B	2764	A	Sidechain
12	B	2765	A	Sidechain
12	B	2766	A	Sidechain
12	B	2767	C	Sidechain
12	B	277	G	Sidechain
12	B	2770	G	Sidechain
12	B	2771	C	Sidechain
12	B	2773	C	Sidechain
12	B	2774	C	Sidechain
12	B	2775	G	Sidechain
12	B	278	A	Sidechain
12	B	2780	G	Sidechain
12	B	2787	C	Sidechain
12	B	2795	C	Sidechain
12	B	2797	U	Sidechain
12	B	2799	A	Sidechain
12	B	2803	G	Sidechain
12	B	2804	U	Sidechain
12	B	2805	C	Sidechain
12	B	2810	A	Sidechain
12	B	2813	A	Sidechain
12	B	2816	G	Sidechain
12	B	2819	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	282	A	Sidechain
12	B	2824	C	Sidechain
12	B	2825	G	Sidechain
12	B	2827	C	Sidechain
12	B	2831	G	Sidechain
12	B	2833	U	Sidechain
12	B	2834	G	Sidechain
12	B	2842	G	Sidechain
12	B	2843	G	Sidechain
12	B	2844	G	Sidechain
12	B	2845	U	Sidechain
12	B	2846	G	Sidechain
12	B	2847	U	Sidechain
12	B	285	G	Sidechain
12	B	2852	G	Sidechain
12	B	2854	G	Sidechain
12	B	2856	A	Sidechain
12	B	2857	G	Sidechain
12	B	2858	C	Sidechain
12	B	2861	U	Sidechain
12	B	2862	G	Sidechain
12	B	2863	C	Sidechain
12	B	2864	G	Sidechain
12	B	2866	U	Sidechain
12	B	2867	G	Sidechain
12	B	2869	G	Sidechain
12	B	2871	U	Sidechain
12	B	2872	A	Sidechain
12	B	2881	U	Sidechain
12	B	2882	A	Sidechain
12	B	2883	A	Sidechain
12	B	2884	U	Sidechain
12	B	2892	G	Sidechain
12	B	2893	A	Sidechain
12	B	2894	G	Sidechain
12	B	2899	A	Sidechain
12	B	29	U	Sidechain
12	B	290	U	Sidechain
12	B	2902	C	Sidechain
12	B	293	U	Sidechain
12	B	295	G	Sidechain
12	B	296	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	297	G	Sidechain
12	B	30	G	Sidechain
12	B	300	A	Sidechain
12	B	301	G	Sidechain
12	B	303	G	Sidechain
12	B	304	U	Sidechain
12	B	306	U	Sidechain
12	B	308	G	Sidechain
12	B	310	A	Sidechain
12	B	311	A	Sidechain
12	B	312	G	Sidechain
12	B	313	G	Sidechain
12	B	314	C	Sidechain
12	B	319	G	Sidechain
12	B	322	A	Sidechain
12	B	324	A	Sidechain
12	B	325	G	Sidechain
12	B	327	G	Sidechain
12	B	328	U	Sidechain
12	B	329	G	Sidechain
12	B	33	C	Sidechain
12	B	332	A	Sidechain
12	B	333	G	Sidechain
12	B	335	C	Sidechain
12	B	336	C	Sidechain
12	B	338	G	Sidechain
12	B	339	U	Sidechain
12	B	34	U	Sidechain
12	B	340	A	Sidechain
12	B	343	C	Sidechain
12	B	344	A	Sidechain
12	B	346	A	Sidechain
12	B	352	A	Sidechain
12	B	359	G	Sidechain
12	B	360	U	Sidechain
12	B	361	G	Sidechain
12	B	363	G	Sidechain
12	B	365	U	Sidechain
12	B	366	C	Sidechain
12	B	368	A	Sidechain
12	B	37	C	Sidechain
12	B	370	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	371	A	Sidechain
12	B	373	U	Sidechain
12	B	376	G	Sidechain
12	B	377	G	Sidechain
12	B	379	G	Sidechain
12	B	38	A	Sidechain
12	B	380	G	Sidechain
12	B	382	A	Sidechain
12	B	383	C	Sidechain
12	B	384	A	Sidechain
12	B	386	G	Sidechain
12	B	387	U	Sidechain
12	B	388	G	Sidechain
12	B	39	G	Sidechain
12	B	390	U	Sidechain
12	B	391	A	Sidechain
12	B	392	U	Sidechain
12	B	393	C	Sidechain
12	B	394	C	Sidechain
12	B	397	U	Sidechain
12	B	4	U	Sidechain
12	B	402	A	Sidechain
12	B	404	A	Sidechain
12	B	405	U	Sidechain
12	B	406	G	Sidechain
12	B	408	G	Sidechain
12	B	410	G	Sidechain
12	B	413	C	Sidechain
12	B	414	C	Sidechain
12	B	415	A	Sidechain
12	B	417	C	Sidechain
12	B	420	C	Sidechain
12	B	423	A	Sidechain
12	B	424	G	Sidechain
12	B	425	G	Sidechain
12	B	428	A	Sidechain
12	B	429	A	Sidechain
12	B	434	U	Sidechain
12	B	438	G	Sidechain
12	B	439	A	Sidechain
12	B	443	A	Sidechain
12	B	445	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	446	G	Sidechain
12	B	448	U	Sidechain
12	B	450	G	Sidechain
12	B	452	G	Sidechain
12	B	455	C	Sidechain
12	B	457	A	Sidechain
12	B	459	U	Sidechain
12	B	460	A	Sidechain
12	B	461	C	Sidechain
12	B	463	G	Sidechain
12	B	464	U	Sidechain
12	B	465	G	Sidechain
12	B	468	G	Sidechain
12	B	469	G	Sidechain
12	B	473	G	Sidechain
12	B	474	G	Sidechain
12	B	477	A	Sidechain
12	B	48	G	Sidechain
12	B	480	A	Sidechain
12	B	481	G	Sidechain
12	B	482	A	Sidechain
12	B	483	A	Sidechain
12	B	484	C	Sidechain
12	B	486	C	Sidechain
12	B	489	G	Sidechain
12	B	490	C	Sidechain
12	B	491	G	Sidechain
12	B	497	A	Sidechain
12	B	498	G	Sidechain
12	B	499	U	Sidechain
12	B	5	A	Sidechain
12	B	50	U	Sidechain
12	B	502	A	Sidechain
12	B	503	A	Sidechain
12	B	51	G	Sidechain
12	B	511	U	Sidechain
12	B	513	A	Sidechain
12	B	516	C	Sidechain
12	B	518	G	Sidechain
12	B	520	G	Sidechain
12	B	525	U	Sidechain
12	B	527	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	529	A	Sidechain
12	B	531	C	Sidechain
12	B	535	G	Sidechain
12	B	537	G	Sidechain
12	B	539	G	Sidechain
12	B	540	C	Sidechain
12	B	541	A	Sidechain
12	B	548	G	Sidechain
12	B	549	G	Sidechain
12	B	551	G	Sidechain
12	B	553	G	Sidechain
12	B	554	U	Sidechain
12	B	557	C	Sidechain
12	B	562	U	Sidechain
12	B	564	C	Sidechain
12	B	566	U	Sidechain
12	B	567	U	Sidechain
12	B	568	U	Sidechain
12	B	569	U	Sidechain
12	B	57	C	Sidechain
12	B	572	A	Sidechain
12	B	575	A	Sidechain
12	B	577	G	Sidechain
12	B	579	G	Sidechain
12	B	580	U	Sidechain
12	B	581	C	Sidechain
12	B	582	A	Sidechain
12	B	585	G	Sidechain
12	B	586	A	Sidechain
12	B	587	C	Sidechain
12	B	588	U	Sidechain
12	B	589	U	Sidechain
12	B	590	A	Sidechain
12	B	595	C	Sidechain
12	B	596	U	Sidechain
12	B	598	U	Sidechain
12	B	599	A	Sidechain
12	B	600	G	Sidechain
12	B	604	G	Sidechain
12	B	605	G	Sidechain
12	B	607	U	Sidechain
12	B	608	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	611	C	Sidechain
12	B	612	G	Sidechain
12	B	615	U	Sidechain
12	B	617	G	Sidechain
12	B	619	G	Sidechain
12	B	620	G	Sidechain
12	B	622	G	Sidechain
12	B	624	C	Sidechain
12	B	625	G	Sidechain
12	B	626	A	Sidechain
12	B	627	A	Sidechain
12	B	629	G	Sidechain
12	B	63	A	Sidechain
12	B	630	G	Sidechain
12	B	633	A	Sidechain
12	B	639	U	Sidechain
12	B	640	C	Sidechain
12	B	642	U	Sidechain
12	B	643	A	Sidechain
12	B	644	A	Sidechain
12	B	645	C	Sidechain
12	B	646	U	Sidechain
12	B	647	G	Sidechain
12	B	651	G	Sidechain
12	B	653	U	Sidechain
12	B	654	A	Sidechain
12	B	655	A	Sidechain
12	B	656	G	Sidechain
12	B	658	U	Sidechain
12	B	660	C	Sidechain
12	B	663	G	Sidechain
12	B	666	A	Sidechain
12	B	667	U	Sidechain
12	B	668	A	Sidechain
12	B	669	G	Sidechain
12	B	670	A	Sidechain
12	B	674	G	Sidechain
12	B	675	A	Sidechain
12	B	677	A	Sidechain
12	B	682	G	Sidechain
12	B	684	G	Sidechain
12	B	685	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	687	C	Sidechain
12	B	688	U	Sidechain
12	B	689	A	Sidechain
12	B	690	G	Sidechain
12	B	694	U	Sidechain
12	B	695	G	Sidechain
12	B	696	G	Sidechain
12	B	697	G	Sidechain
12	B	7	G	Sidechain
12	B	70	G	Sidechain
12	B	701	G	Sidechain
12	B	706	A	Sidechain
12	B	709	U	Sidechain
12	B	71	A	Sidechain
12	B	711	G	Sidechain
12	B	712	G	Sidechain
12	B	713	G	Sidechain
12	B	714	U	Sidechain
12	B	715	A	Sidechain
12	B	716	A	Sidechain
12	B	718	A	Sidechain
12	B	721	A	Sidechain
12	B	722	A	Sidechain
12	B	723	C	Sidechain
12	B	724	U	Sidechain
12	B	726	G	Sidechain
12	B	727	A	Sidechain
12	B	729	G	Sidechain
12	B	734	A	Sidechain
12	B	736	C	Sidechain
12	B	737	C	Sidechain
12	B	738	G	Sidechain
12	B	739	A	Sidechain
12	B	74	A	Sidechain
12	B	740	C	Sidechain
12	B	744	U	Sidechain
12	B	746	U	Sidechain
12	B	748	G	Sidechain
12	B	749	A	Sidechain
12	B	75	G	Sidechain
12	B	750	A	Sidechain
12	B	753	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	754	U	Sidechain
12	B	756	A	Sidechain
12	B	757	G	Sidechain
12	B	759	G	Sidechain
12	B	76	C	Sidechain
12	B	760	G	Sidechain
12	B	765	C	Sidechain
12	B	767	U	Sidechain
12	B	770	G	Sidechain
12	B	771	G	Sidechain
12	B	772	C	Sidechain
12	B	773	U	Sidechain
12	B	775	G	Sidechain
12	B	776	G	Sidechain
12	B	777	G	Sidechain
12	B	779	U	Sidechain
12	B	78	U	Sidechain
12	B	780	G	Sidechain
12	B	783	A	Sidechain
12	B	784	G	Sidechain
12	B	786	C	Sidechain
12	B	788	A	Sidechain
12	B	792	A	Sidechain
12	B	793	A	Sidechain
12	B	794	A	Sidechain
12	B	796	C	Sidechain
12	B	797	G	Sidechain
12	B	798	G	Sidechain
12	B	799	G	Sidechain
12	B	801	G	Sidechain
12	B	802	A	Sidechain
12	B	803	U	Sidechain
12	B	806	C	Sidechain
12	B	809	G	Sidechain
12	B	81	G	Sidechain
12	B	815	C	Sidechain
12	B	817	C	Sidechain
12	B	818	G	Sidechain
12	B	819	A	Sidechain
12	B	827	U	Sidechain
12	B	836	G	Sidechain
12	B	84	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	840	C	Sidechain
12	B	847	U	Sidechain
12	B	848	C	Sidechain
12	B	85	G	Sidechain
12	B	850	U	Sidechain
12	B	851	C	Sidechain
12	B	852	U	Sidechain
12	B	854	C	Sidechain
12	B	856	G	Sidechain
12	B	857	G	Sidechain
12	B	858	G	Sidechain
12	B	859	G	Sidechain
12	B	86	G	Sidechain
12	B	860	U	Sidechain
12	B	866	A	Sidechain
12	B	868	U	Sidechain
12	B	869	G	Sidechain
12	B	870	U	Sidechain
12	B	873	C	Sidechain
12	B	875	G	Sidechain
12	B	876	C	Sidechain
12	B	878	A	Sidechain
12	B	880	G	Sidechain
12	B	882	G	Sidechain
12	B	883	G	Sidechain
12	B	884	U	Sidechain
12	B	886	A	Sidechain
12	B	887	U	Sidechain
12	B	891	G	Sidechain
12	B	892	A	Sidechain
12	B	893	C	Sidechain
12	B	894	U	Sidechain
12	B	895	U	Sidechain
12	B	897	C	Sidechain
12	B	898	C	Sidechain
12	B	899	A	Sidechain
12	B	9	G	Sidechain
12	B	90	U	Sidechain
12	B	900	A	Sidechain
12	B	902	C	Sidechain
12	B	904	G	Sidechain
12	B	905	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	906	U	Sidechain
12	B	908	C	Sidechain
12	B	91	A	Sidechain
12	B	910	A	Sidechain
12	B	911	A	Sidechain
12	B	912	C	Sidechain
12	B	913	U	Sidechain
12	B	915	C	Sidechain
12	B	916	G	Sidechain
12	B	917	A	Sidechain
12	B	919	U	Sidechain
12	B	92	U	Sidechain
12	B	921	C	Sidechain
12	B	923	G	Sidechain
12	B	924	G	Sidechain
12	B	926	G	Sidechain
12	B	929	U	Sidechain
12	B	93	G	Sidechain
12	B	931	U	Sidechain
12	B	932	U	Sidechain
12	B	935	C	Sidechain
12	B	937	C	Sidechain
12	B	939	G	Sidechain
12	B	94	A	Sidechain
12	B	940	G	Sidechain
12	B	941	A	Sidechain
12	B	943	A	Sidechain
12	B	946	C	Sidechain
12	B	947	A	Sidechain
12	B	949	G	Sidechain
12	B	950	G	Sidechain
12	B	951	C	Sidechain
12	B	953	G	Sidechain
12	B	955	U	Sidechain
12	B	956	G	Sidechain
12	B	957	C	Sidechain
12	B	958	U	Sidechain
12	B	959	A	Sidechain
12	B	960	A	Sidechain
12	B	961	C	Sidechain
12	B	962	G	Sidechain
12	B	965	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	B	966	G	Sidechain
12	B	97	C	Sidechain
12	B	971	G	Sidechain
12	B	972	A	Sidechain
12	B	973	A	Sidechain
12	B	974	G	Sidechain
12	B	975	A	Sidechain
12	B	977	G	Sidechain
12	B	978	G	Sidechain
12	B	98	G	Sidechain
12	B	981	A	Sidechain
12	B	982	C	Sidechain
12	B	988	A	Sidechain
12	B	99	U	Sidechain
12	B	990	A	Sidechain
12	B	991	C	Sidechain
12	B	992	C	Sidechain
12	B	995	C	Sidechain
12	B	996	A	Sidechain
12	B	997	G	Sidechain
12	B	999	U	Sidechain
13	C	160	TYR	Sidechain
13	C	170	TYR	Sidechain
13	C	176	ARG	Sidechain
13	C	216	ARG	Sidechain
13	C	270	ARG	Sidechain
13	C	29	PHE	Sidechain
13	C	51	ARG	Sidechain
13	C	68	ARG	Sidechain
13	C	95	TYR	Sidechain
14	D	127	PHE	Sidechain
14	D	141	ARG	Sidechain
14	D	151	THR	Peptide
14	D	59	ARG	Sidechain
15	E	102	ARG	Sidechain
15	E	35	TYR	Sidechain
15	E	57	LYS	Peptide
15	E	88	ARG	Sidechain
15	E	92	HIS	Sidechain
16	F	127	TYR	Sidechain
16	F	137	PHE	Sidechain
16	F	147	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
16	F	176	PHE	Sidechain
16	F	6	TYR	Sidechain
16	F	7	TYR	Sidechain
17	G	150	TYR	Sidechain
17	G	152	ARG	Sidechain
17	G	156	TYR	Sidechain
17	G	82	PHE	Sidechain
18	H	123	ARG	Sidechain
18	H	97	ARG	Sidechain
20	J	120	ARG	Sidechain
20	J	44	TYR	Sidechain
20	J	53	TYR	Sidechain
20	J	69	ARG	Sidechain
20	J	75	TYR	Sidechain
20	J	99	ARG	Sidechain
21	K	100	PHE	Sidechain
21	K	112	PHE	Sidechain
21	K	31	ARG	Sidechain
21	K	70	ARG	Sidechain
21	K	71	ARG	Peptide,Sidechain
21	K	79	PHE	Sidechain
22	L	64	PHE	Sidechain
22	L	78	ARG	Sidechain
23	M	114	ARG	Sidechain
23	M	16	ARG	Sidechain
23	M	31	PHE	Sidechain
23	M	44	ARG	Sidechain
23	M	50	ARG	Sidechain
23	M	81	ARG	Sidechain
23	M	91	TYR	Sidechain
24	N	101	GLY	Peptide
24	N	17	ARG	Sidechain
24	N	2	ARG	Sidechain
24	N	22	ARG	Sidechain
24	N	4	ARG	Sidechain
24	N	64	ARG	Sidechain
24	N	80	PHE	Sidechain
25	O	111	ARG	Sidechain
25	O	117	PHE	Sidechain
25	O	13	ARG	Sidechain
25	O	36	TYR	Sidechain
25	O	9	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	P	102	ARG	Sidechain
26	P	51	ASN	Peptide
26	P	71	ARG	Sidechain
27	Q	24	TYR	Sidechain
27	Q	35	PHE	Sidechain
27	Q	49	ARG	Sidechain
27	Q	78	PHE	Sidechain
28	R	21	ARG	Sidechain
28	R	79	ARG	Sidechain
28	R	80	ARG	Mainchain
28	R	82	HIS	Peptide
28	R	83	TYR	Sidechain
29	S	25	ARG	Sidechain
29	S	88	ARG	Sidechain
29	S	92	ARG	Sidechain
30	T	3	ARG	Sidechain
30	T	76	ARG	Sidechain
31	U	21	ARG	Sidechain
31	U	93	ARG	Sidechain
32	W	26	PHE	Sidechain
32	W	57	TYR	Sidechain
32	W	79	ARG	Sidechain
33	Y	24	ARG	Sidechain
33	Y	68	PHE	Sidechain
33	Y	76	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	0	625	0	655	4	0
2	1	509	0	543	1	0
3	2	449	0	491	0	0
4	3	444	0	461	3	0
5	4	410	0	440	2	0
6	5	1733	0	1824	6	0
7	6	377	0	418	3	0
8	7	504	0	574	8	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	8	302	0	343	1	0
10	9	2541	0	2555	66	0
11	A	2455	0	1253	15	0
12	B	62317	0	31306	522	0
13	C	2083	0	2157	14	0
14	D	1565	0	1616	9	0
15	E	1552	0	1619	6	0
16	F	1420	0	1460	8	0
17	G	1317	0	1364	7	0
18	H	1111	0	1148	2	0
19	I	495	0	525	4	0
20	J	1129	0	1162	7	0
21	K	932	0	1003	9	0
22	L	1045	0	1117	8	0
23	M	1074	0	1157	7	0
24	N	961	0	1000	8	0
25	O	892	0	923	3	0
26	P	917	0	965	13	0
27	Q	947	0	1022	4	0
28	R	816	0	839	5	0
29	S	857	0	922	9	0
30	T	739	0	807	7	0
31	U	758	0	807	8	0
32	W	753	0	780	1	0
33	Y	596	0	610	5	0
All	All	94625	0	63866	702	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 4.

All (702) 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)
12:B:1481:U:H3	12:B:1511:G:H21	1.23	0.85
12:B:2267:A:H61	12:B:2271:G:H1	1.25	0.79
30:T:20:ALA:H	30:T:23:ALA:HB3	1.50	0.75
10:9:279:TRP:CG	10:9:328:VAL:HG13	2.21	0.75
12:B:2507:C:H41	12:B:2576:G:H22	1.35	0.74
20:J:35:ARG:HA	20:J:40:HIS:CD2	2.22	0.74
10:9:279:TRP:CD2	10:9:328:VAL:HG13	2.23	0.73
12:B:91:A:H61	30:T:69:ARG:HH22	1.36	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:9:182:ALA:HB2	12:B:2661:G:H1'	1.71	0.72
12:B:2719:G:H21	12:B:2872:A:H61	1.37	0.70
6:5:114:VAL:H	6:5:162:ARG:HH21	1.40	0.68
12:B:962:G:H21	12:B:2250:G:H1	1.41	0.68
8:7:6:VAL:HG13	12:B:247:G:H1	1.59	0.67
12:B:327:G:H21	31:U:67:SER:HB3	1.61	0.66
26:P:63:ILE:H	26:P:68:GLY:HA2	1.59	0.66
12:B:877:A:H61	12:B:900:A:H62	1.44	0.66
10:9:200:VAL:HG22	10:9:210:VAL:HG12	1.78	0.65
10:9:187:ALA:HB3	10:9:189:TYR:CZ	2.33	0.63
14:D:141:ARG:HE	14:D:141:ARG:HA	1.64	0.62
12:B:2013:A:H2	29:S:88:ARG:HH22	1.47	0.62
10:9:56:LEU:HD22	12:B:2529:G:H4'	1.81	0.61
12:B:1048:A:H61	17:G:2:ARG:HH22	1.49	0.61
6:5:172:HIS:CG	12:B:2123:G:H21	2.18	0.61
13:C:74:PRO:HB2	13:C:114:GLN:HE21	1.66	0.61
20:J:24:THR:HG23	20:J:64:VAL:HA	1.83	0.60
12:B:546:U:H4'	12:B:547:A:H5"	1.83	0.60
12:B:64:A:H2'	12:B:65:U:C6	2.35	0.60
12:B:2320:U:H5"	12:B:2321:U:C2	2.37	0.59
12:B:2132:U:H5"	12:B:2133:G:C8	2.37	0.59
12:B:1782:U:O5'	12:B:1782:U:H6	1.86	0.59
10:9:46:TRP:CE2	10:9:116:LEU:HB3	2.38	0.58
12:B:2472:G:H3'	12:B:2473:U:H5"	1.85	0.58
12:B:28:A:C2	12:B:513:A:C8	2.91	0.58
10:9:95:ARG:HH21	10:9:97:ILE:CG2	2.16	0.58
12:B:2847:U:C5	12:B:2848:G:C5	2.92	0.58
12:B:1715:G:H1'	12:B:1716:U:C5	2.39	0.57
12:B:446:G:H5"	27:Q:2:ARG:HH11	1.69	0.57
12:B:855:G:H21	33:Y:23:LYS:HE3	1.70	0.57
12:B:1820:U:H3	13:C:197:ALA:HA	1.68	0.57
12:B:2233:U:H2'	12:B:2234:G:C8	2.40	0.57
12:B:2267:A:N6	12:B:2271:G:H1	2.00	0.57
12:B:2311:A:C5	16:F:76:PHE:CE2	2.93	0.57
12:B:17:G:H2'	12:B:18:U:C6	2.40	0.57
12:B:713:G:H21	12:B:718:A:H2	1.53	0.56
11:A:54:G:H21	16:F:25:MET:HG3	1.70	0.56
12:B:661:A:C2	12:B:662:G:C5	2.93	0.56
12:B:2086:U:H2'	12:B:2087:G:C8	2.40	0.56
26:P:77:SER:HB2	26:P:80:VAL:HG23	1.87	0.56
10:9:60:ARG:HA	12:B:2478:A:N1	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:2202:U:H4'	12:B:2203:U:C5	2.41	0.56
23:M:3:GLN:CD	23:M:3:GLN:H	2.09	0.56
12:B:1394:U:H4'	12:B:1603:A:H5"	1.87	0.56
18:H:94:ILE:HD12	18:H:94:ILE:H	1.70	0.56
10:9:95:ARG:HH21	10:9:97:ILE:HG21	1.72	0.55
10:9:189:TYR:HB2	10:9:191:PHE:CE1	2.41	0.55
12:B:1281:G:C5	12:B:1282:U:C4	2.94	0.55
12:B:2446:G:H21	12:B:2449:U:H3	1.54	0.55
10:9:229:ILE:HG22	12:B:1069:A:H62	1.72	0.55
12:B:480:A:H3'	12:B:481:G:H5"	1.89	0.55
12:B:2453:A:N6	12:B:2499:C:H42	2.04	0.55
8:7:44:ARG:H	8:7:45:PRO:CD	2.20	0.54
12:B:1172:C:C4	12:B:1173:U:C2	2.95	0.54
12:B:2115:G:H3'	12:B:2116:G:C5'	2.38	0.54
13:C:221:GLY:HA3	13:C:229:HIS:CD2	2.43	0.54
4:3:8:THR:H	4:3:11:LYS:HD2	1.71	0.54
6:5:57:GLN:HB3	6:5:202:THR:HG21	1.90	0.54
12:B:604:G:C6	12:B:625:G:C6	2.96	0.54
21:K:11:ALA:HB2	21:K:83:ALA:HB1	1.90	0.54
7:6:7:PRO:HB3	7:6:12:ARG:HH12	1.73	0.54
12:B:1454:C:N4	12:B:2703:C:H41	2.06	0.54
10:9:279:TRP:CG	10:9:328:VAL:CG1	2.90	0.54
12:B:2627:G:H2'	12:B:2628:C:C6	2.42	0.54
12:B:2849:U:H2'	26:P:92:ARG:HH12	1.72	0.54
12:B:1711:A:C2	12:B:1748:C:O2	2.61	0.53
10:9:5:ASP:HB3	10:9:191:PHE:HA	1.90	0.53
12:B:870:U:H2'	12:B:871:U:H5"	1.90	0.53
12:B:895:U:O4	12:B:897:C:C4	2.61	0.53
13:C:42:ARG:HA	13:C:48:ILE:HA	1.90	0.53
12:B:919:U:H2'	12:B:920:A:C8	2.43	0.53
12:B:1496:A:H2'	12:B:1498:C:C6	2.43	0.53
12:B:2095:A:H2'	12:B:2096:C:C6	2.43	0.53
12:B:2411:A:H2'	12:B:2412:A:C8	2.44	0.53
12:B:2505:G:H21	12:B:2506:U:H5	1.55	0.53
12:B:1167:C:H42	12:B:1182:G:H1	1.56	0.53
12:B:1827:U:H4'	12:B:1972:G:H5"	1.90	0.53
10:9:53:LEU:HD22	10:9:91:PRO:HB3	1.90	0.53
10:9:209:PHE:CZ	10:9:333:ILE:HD11	2.44	0.53
12:B:603:A:H1'	12:B:625:G:N2	2.24	0.53
12:B:1343:G:H1'	12:B:1597:A:C4	2.44	0.53
12:B:1800:C:C5	13:C:153:LEU:HD21	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:1620:G:C6	12:B:1621:U:C4	2.97	0.52
12:B:851:C:H2'	12:B:852:U:C6	2.43	0.52
12:B:2199:A:C2	12:B:2225:A:C4	2.98	0.52
14:D:33:ARG:HH12	14:D:53:GLY:HA2	1.74	0.52
24:N:52:ILE:HG21	24:N:94:TYR:CG	2.44	0.52
26:P:73:PHE:CD1	26:P:80:VAL:HG22	2.45	0.52
12:B:626:A:H3'	22:L:78:ARG:HH21	1.74	0.52
12:B:1269:A:H2'	12:B:1270:C:C6	2.44	0.52
12:B:722:A:C5	12:B:723:C:C5	2.97	0.52
12:B:1455:G:H5'	24:N:63:ARG:HH12	1.75	0.52
20:J:47:HIS:CG	20:J:48:VAL:H	2.27	0.52
12:B:46:G:C6	12:B:47:C:C4	2.97	0.52
12:B:2120:G:H2'	12:B:2121:G:C8	2.44	0.52
12:B:1518:C:C2	12:B:1519:G:C8	2.97	0.52
12:B:1837:C:H2'	12:B:1838:C:H5'	1.91	0.52
12:B:1040:A:C2	12:B:1116:G:N1	2.78	0.52
12:B:1214:A:H61	12:B:1235:G:H1'	1.75	0.51
12:B:1275:A:H61	12:B:1295:C:H1'	1.75	0.51
12:B:2849:U:H6	26:P:92:ARG:HH22	1.57	0.51
10:9:301:ALA:HB1	10:9:309:LYS:HA	1.93	0.51
12:B:1205:A:H3'	15:E:165:HIS:CE1	2.45	0.51
21:K:72:PRO:HD2	26:P:71:ARG:HH12	1.74	0.51
12:B:1281:G:H2'	12:B:1282:U:C6	2.45	0.51
12:B:2402:U:H6	12:B:2403:C:H41	1.57	0.51
12:B:2370:G:C6	12:B:2371:G:C5	2.99	0.51
10:9:20:CYS:H	10:9:127:ASN:HD21	1.59	0.51
12:B:1749:A:C2	12:B:1750:G:C4	2.98	0.51
13:C:257:ARG:HB3	13:C:269:ARG:HH22	1.76	0.51
21:K:46:ALA:HB3	21:K:51:LYS:HG3	1.93	0.51
12:B:247:G:C2	12:B:252:G:C6	2.98	0.51
12:B:2359:C:H2'	12:B:2360:G:C8	2.45	0.51
14:D:173:GLN:HE21	14:D:209:ALA:HA	1.76	0.51
26:P:63:ILE:H	26:P:68:GLY:CA	2.24	0.51
12:B:661:A:C2	12:B:662:G:C4	2.98	0.51
12:B:1341:G:OP1	12:B:1602:U:C2	2.64	0.51
12:B:1632:A:H2'	12:B:1633:G:C2	2.45	0.51
10:9:61:PHE:CD2	12:B:2472:G:H5"	2.46	0.50
12:B:1476:U:C4	12:B:1516:G:C6	2.99	0.50
12:B:2820:A:H4'	24:N:3:HIS:CG	2.46	0.50
26:P:49:ILE:HG23	26:P:52:ARG:HH22	1.77	0.50
12:B:1637:A:H4'	12:B:1760:C:H1'	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:2564:A:C2	12:B:2647:U:H4'	2.46	0.50
12:B:618:G:C6	12:B:619:G:C5	3.00	0.50
21:K:19:VAL:HG13	21:K:43:ILE:HA	1.92	0.50
10:9:207:LYS:HA	12:B:2662:A:O2'	2.10	0.50
12:B:24:G:C5	12:B:25:U:C4	3.00	0.50
12:B:2838:G:C6	12:B:2839:G:C5	3.00	0.50
12:B:1456:G:C6	12:B:1457:U:C4	3.00	0.50
12:B:1473:G:C5	12:B:1474:U:C4	3.00	0.50
12:B:2556:C:C5	12:B:2557:G:C8	3.00	0.50
19:I:85:ILE:HD13	19:I:85:ILE:H	1.77	0.50
10:9:242:LEU:HD11	10:9:279:TRP:HB2	1.93	0.50
12:B:2858:C:C4	12:B:2859:G:C6	2.99	0.50
10:9:200:VAL:HG13	10:9:210:VAL:HG12	1.94	0.50
12:B:418:C:C4	12:B:419:U:C4	3.00	0.50
12:B:1655:A:H4'	14:D:118:PHE:CD2	2.46	0.50
18:H:37:VAL:HB	18:H:47:PHE:CE1	2.47	0.50
10:9:54:ASN:HD21	10:9:185:LYS:HZ1	1.60	0.50
12:B:619:G:H3'	12:B:620:G:H21	1.76	0.50
12:B:1537:G:C6	12:B:1538:G:H1'	2.47	0.50
12:B:2712:C:H3'	12:B:2714:G:H5"	1.94	0.50
10:9:181:ALA:H	10:9:202:ARG:HG3	1.77	0.49
10:9:228:GLY:HA3	12:B:1095:A:N3	2.27	0.49
12:B:178:G:C6	12:B:179:C:C5	3.00	0.49
12:B:371:A:C8	12:B:373:U:C2	3.00	0.49
12:B:519:U:H4'	29:S:25:ARG:HH22	1.77	0.49
12:B:1062:G:C4	12:B:1077:A:C2	3.00	0.49
12:B:1090:A:H61	12:B:1101:U:H3	1.60	0.49
12:B:2756:U:H1'	12:B:2757:A:H5"	1.94	0.49
29:S:33:LEU:HA	29:S:36:LEU:HD12	1.93	0.49
31:U:39:ASN:HB3	31:U:62:ALA:H	1.76	0.49
7:6:1:MET:HG2	7:6:2:LYS:H	1.76	0.49
12:B:646:U:C5	12:B:647:G:H1'	2.48	0.49
12:B:952:G:C6	12:B:966:G:C6	3.00	0.49
12:B:1065:U:C5	12:B:1066:U:C4	3.01	0.49
12:B:2722:G:H2'	12:B:2723:C:C6	2.47	0.49
12:B:629:G:C6	12:B:630:G:C5	3.00	0.49
12:B:892:A:C6	12:B:893:C:C4	2.99	0.49
4:3:42:ILE:HG22	24:N:100:CYS:HA	1.94	0.49
16:F:114:ARG:HA	16:F:114:ARG:NE	2.28	0.49
28:R:2:TYR:O	28:R:3:ALA:HB2	2.13	0.49
8:7:44:ARG:H	8:7:45:PRO:HD2	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:30:G:H2'	12:B:31:C:C6	2.47	0.49
24:N:15:SER:HA	24:N:18:GLN:HE21	1.77	0.49
12:B:71:A:H5"	12:B:73:A:C4	2.47	0.49
12:B:866:A:C5	12:B:867:C:C5	3.01	0.49
11:A:34:A:H3'	16:F:91:ARG:HH22	1.78	0.49
12:B:5:A:C2	12:B:6:A:C4	3.01	0.49
12:B:2444:G:C6	12:B:2445:G:C5	3.01	0.49
14:D:126:ASN:HD22	14:D:141:ARG:HH12	1.59	0.49
12:B:957:C:C5	12:B:959:A:C5	3.01	0.49
12:B:1483:G:H22	12:B:1507:C:H1'	1.78	0.49
24:N:37:THR:HG22	24:N:39:PRO:HD2	1.95	0.49
12:B:150:U:H2'	12:B:151:C:O4'	2.13	0.49
12:B:262:A:C6	12:B:263:G:C4	3.01	0.49
11:A:69:G:H3'	11:A:70:C:H6	1.77	0.48
12:B:1218:G:C6	12:B:1232:G:C6	3.01	0.48
12:B:898:C:H3'	12:B:899:A:H8	1.78	0.48
12:B:1341:G:H1'	30:T:59:ASN:HB3	1.95	0.48
12:B:2065:C:C2	12:B:2446:G:N2	2.82	0.48
12:B:2373:G:C2	12:B:2381:A:C2	3.01	0.48
28:R:39:LEU:HB2	28:R:53:PHE:H	1.78	0.48
10:9:227:LEU:HB3	10:9:231:PHE:CG	2.48	0.48
12:B:664:G:H2'	12:B:665:U:H6	1.79	0.48
12:B:719:C:C5	12:B:720:U:C5	3.01	0.48
12:B:1024:G:H3'	12:B:1025:G:H5"	1.94	0.48
13:C:70:LYS:H	13:C:101:ARG:NH2	2.11	0.48
12:B:1037:G:C2	12:B:1119:U:C2	3.01	0.48
12:B:1721:G:H1'	12:B:1739:A:H61	1.78	0.48
12:B:195:A:H61	12:B:198:C:H3'	1.77	0.48
12:B:322:A:H5'	12:B:340:A:H1'	1.94	0.48
12:B:519:U:H2'	12:B:520:G:C8	2.48	0.48
12:B:2681:C:C4	12:B:2724:U:C4	3.01	0.48
10:9:182:ALA:CB	12:B:2661:G:H1'	2.43	0.48
12:B:870:U:C2'	12:B:871:U:H5"	2.44	0.48
12:B:1023:U:C5	12:B:1024:G:C4	3.01	0.48
12:B:1877:A:H2'	12:B:1878:G:C8	2.49	0.48
12:B:346:A:H3'	12:B:347:A:C8	2.49	0.48
12:B:452:G:H3'	12:B:453:A:H8	1.79	0.48
12:B:494:G:C2	12:B:495:G:C4	3.02	0.48
12:B:1503:A:H2'	12:B:1504:A:C8	2.48	0.48
12:B:2373:G:H2'	12:B:2374:C:C6	2.48	0.48
5:4:38:PHE:CD2	12:B:2348:U:H1'	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:9:123:HIS:H	10:9:145:THR:HG21	1.78	0.48
12:B:486:C:H2'	12:B:487:C:C6	2.48	0.48
12:B:813:U:H5"	28:R:84:ARG:HH11	1.78	0.48
12:B:1128:G:C6	12:B:2518:A:C6	3.02	0.48
12:B:2661:G:H2'	12:B:2662:A:C8	2.49	0.48
12:B:901:C:H2'	12:B:902:C:C6	2.49	0.48
12:B:1300:G:H1'	12:B:1626:A:C2	2.49	0.48
12:B:1551:A:H3'	12:B:1552:A:H5"	1.94	0.48
12:B:1620:G:C5	12:B:1621:U:C5	3.02	0.48
12:B:1752:C:H2'	12:B:1753:G:C8	2.49	0.48
15:E:35:TYR:CD1	15:E:178:VAL:HG21	2.49	0.48
11:A:33:G:H21	11:A:35:C:N4	2.12	0.48
12:B:298:G:C2	12:B:339:U:C5	3.02	0.48
12:B:546:U:OP1	12:B:548:G:C8	2.67	0.48
22:L:48:ARG:H	22:L:48:ARG:HD2	1.78	0.48
28:R:6:GLN:HE22	28:R:11:GLN:HE21	1.61	0.48
8:7:54:LEU:HD12	8:7:54:LEU:H	1.78	0.47
10:9:180:SER:OG	10:9:182:ALA:HB3	2.13	0.47
12:B:1838:C:C6	12:B:1899:A:C6	3.03	0.47
6:5:76:ALA:HB2	6:5:111:PHE:CD2	2.48	0.47
12:B:1019:U:H2'	12:B:1020:A:C8	2.49	0.47
12:B:1311:G:H21	12:B:1603:A:H62	1.62	0.47
12:B:2063:C:C5	12:B:2064:C:C5	3.01	0.47
12:B:2846:G:C5	12:B:2847:U:C4	3.02	0.47
11:A:51:G:C8	25:O:64:TYR:HE2	2.32	0.47
12:B:1074:G:C5	12:B:1075:C:C5	3.02	0.47
12:B:1887:C:C5	12:B:1888:G:C6	3.02	0.47
12:B:2458:G:H8	12:B:2459:A:H62	1.63	0.47
10:9:26:GLU:HB2	10:9:29:ILE:H	1.79	0.47
12:B:155:A:C2	12:B:172:A:C2	3.02	0.47
12:B:490:C:H4'	12:B:491:G:OP2	2.15	0.47
12:B:1120:G:C6	12:B:1121:C:C4	3.02	0.47
12:B:1613:G:C6	12:B:1619:G:C6	3.02	0.47
29:S:87:PRO:HA	29:S:93:ALA:HA	1.97	0.47
12:B:2043:C:C4	12:B:2777:G:C5	3.02	0.47
31:U:101:THR:HG22	31:U:102:ILE:H	1.80	0.47
11:A:48:U:H4'	25:O:100:HIS:HB2	1.95	0.47
12:B:2849:U:H5'	12:B:2868:A:C6	2.50	0.47
13:C:57:HIS:CD2	13:C:59:GLN:H	2.32	0.47
12:B:27:G:H22	12:B:512:G:H2'	1.79	0.47
12:B:559:G:C5	12:B:560:C:C5	3.03	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:1209:U:N3	12:B:1238:G:C6	2.83	0.47
12:B:1551:A:N6	12:B:1552:A:C2	2.83	0.47
12:B:1778:U:C2	12:B:1787:A:C2	3.03	0.47
12:B:603:A:H1'	12:B:625:G:H21	1.79	0.47
12:B:603:A:C4	12:B:655:A:C2	3.03	0.47
12:B:704:G:H2'	12:B:726:G:H22	1.80	0.47
10:9:66:ARG:HH22	12:B:2481:G:H5'	1.79	0.47
12:B:68:G:C5	12:B:69:C:C5	3.03	0.47
12:B:298:G:C2	12:B:339:U:C4	3.03	0.47
12:B:338:G:C4	12:B:339:U:C6	3.03	0.47
12:B:1308:A:N6	12:B:1606:C:H1'	2.30	0.47
12:B:1478:G:C6	12:B:1479:G:C6	3.03	0.47
12:B:863:A:H2'	12:B:864:G:C8	2.50	0.46
12:B:1550:C:H5"	12:B:1740:G:H21	1.80	0.46
12:B:2401:U:H2'	12:B:2402:U:C2	2.50	0.46
12:B:41:C:C2	12:B:439:A:C2	3.03	0.46
12:B:136:G:C5	12:B:137:U:C5	3.02	0.46
12:B:221:A:H61	12:B:428:A:H62	1.63	0.46
12:B:554:U:C4	12:B:555:G:C5	3.03	0.46
12:B:2688:G:C2	12:B:2720:U:C5	3.03	0.46
12:B:858:G:H3'	12:B:859:G:C8	2.50	0.46
12:B:1381:G:C5	12:B:1382:G:C2	3.02	0.46
12:B:2306:C:C5	12:B:2307:G:C5	3.04	0.46
11:A:18:G:C2	11:A:67:G:C5	3.04	0.46
12:B:422:A:H3'	12:B:423:A:C8	2.50	0.46
6:5:65:LEU:HD22	6:5:191:ALA:HB1	1.97	0.46
12:B:633:A:H5"	22:L:70:LYS:HE3	1.97	0.46
12:B:1420:A:C5	12:B:2211:A:C8	3.04	0.46
19:I:123:ALA:HA	19:I:126:ARG:HH21	1.81	0.46
31:U:11:ILE:HD13	31:U:21:ARG:HH11	1.80	0.46
11:A:100:G:C6	11:A:101:A:C5	3.04	0.46
12:B:898:C:H3'	12:B:899:A:C8	2.51	0.46
12:B:1154:G:H5"	27:Q:58:GLN:HE22	1.80	0.46
12:B:1324:G:H3'	12:B:1325:U:H4'	1.98	0.46
12:B:1906:G:H1	12:B:1924:C:H42	1.63	0.46
12:B:1933:G:C5	12:B:1934:C:C5	3.04	0.46
12:B:2091:C:C5	12:B:2092:U:H2'	2.50	0.46
12:B:2427:C:C5'	12:B:2429:G:H5'	2.46	0.46
21:K:104:THR:HB	21:K:106:GLU:H	1.81	0.46
10:9:69:ARG:NH1	10:9:147:GLY:H	2.14	0.46
12:B:548:G:H5'	12:B:549:G:C5	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:715:A:H2'	12:B:716:A:C8	2.51	0.46
12:B:1011:G:C2	12:B:1013:C:C2	3.04	0.46
12:B:1128:G:C5	12:B:2518:A:N1	2.83	0.46
12:B:1613:G:H3'	12:B:1617:C:H42	1.81	0.46
12:B:2364:C:H2'	12:B:2365:G:C8	2.50	0.46
10:9:21:VAL:HG13	10:9:72:ASN:HD21	1.81	0.46
12:B:1900:A:C2	12:B:1970:A:C4	3.04	0.46
10:9:164:MET:HA	10:9:242:LEU:HB2	1.98	0.46
12:B:404:A:C6	12:B:421:C:H2'	2.51	0.46
12:B:907:G:H21	23:M:68:PHE:HB3	1.81	0.46
12:B:2318:G:C5	12:B:2319:G:C6	3.04	0.46
16:F:63:LYS:HB2	16:F:64:PRO:HD2	1.98	0.46
12:B:892:A:C5	12:B:893:C:C4	3.04	0.46
12:B:1850:G:C4	12:B:1851:U:C5	3.04	0.46
12:B:415:A:C5	12:B:416:U:C5	3.04	0.45
12:B:605:G:H21	12:B:658:U:H5'	1.82	0.45
12:B:710:U:H2'	12:B:711:G:C8	2.51	0.45
12:B:2104:C:H42	12:B:2184:A:N6	2.14	0.45
12:B:2495:G:C5	12:B:2496:C:C5	3.04	0.45
12:B:2555:U:C5	12:B:2556:C:C2	3.03	0.45
29:S:100:THR:HG22	29:S:101:SER:N	2.31	0.45
10:9:27:LYS:HE3	12:B:2504:U:H3'	1.98	0.45
10:9:53:LEU:HD13	10:9:91:PRO:HA	1.98	0.45
10:9:54:ASN:HD21	10:9:185:LYS:NZ	2.15	0.45
12:B:2409:G:C6	12:B:2410:G:C5	3.04	0.45
12:B:2625:G:C6	12:B:2626:C:C4	3.04	0.45
31:U:66:VAL:O	31:U:66:VAL:HG22	2.16	0.45
12:B:843:G:C6	12:B:844:A:C6	3.05	0.45
12:B:2400:G:C5	12:B:2401:U:C5	3.05	0.45
24:N:59:SER:HB2	24:N:62:ASN:H	1.80	0.45
12:B:232:G:H22	12:B:420:C:H5"	1.82	0.45
12:B:1705:A:C5	12:B:1706:C:C4	3.04	0.45
23:M:6:ARG:HH21	23:M:8:LYS:HB3	1.82	0.45
7:6:28:ARG:HA	7:6:31:LEU:HD12	1.98	0.45
12:B:61:C:H2'	12:B:62:U:C6	2.51	0.45
12:B:443:A:H2'	12:B:443:A:N3	2.32	0.45
12:B:657:U:H2'	12:B:658:U:C6	2.52	0.45
12:B:1584:U:C6	12:B:1584:U:H3'	2.52	0.45
10:9:242:LEU:CD1	10:9:279:TRP:HB2	2.46	0.45
11:A:96:G:C5	11:A:97:C:C5	3.05	0.45
12:B:858:G:H22	12:B:919:U:H3	1.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:1270:C:HO2'	12:B:1325:U:H6	1.64	0.45
12:B:1641:A:C8	12:B:1642:G:C8	3.05	0.45
12:B:1696:G:C6	12:B:1697:G:C4	3.05	0.45
12:B:94:A:H3'	12:B:95:A:H8	1.81	0.45
12:B:372:G:H22	12:B:400:G:H3'	1.82	0.45
12:B:876:C:HO2'	12:B:877:A:H8	1.63	0.45
12:B:1583:A:H4'	12:B:1585:C:C6	2.52	0.45
12:B:2568:U:H2'	12:B:2569:G:C8	2.51	0.45
30:T:29:THR:H	30:T:91:GLN:HG2	1.82	0.45
12:B:599:A:C6	12:B:659:G:C6	3.05	0.45
12:B:1797:G:N1	12:B:1823:G:C5	2.85	0.45
12:B:1874:C:C5	12:B:1875:G:C8	3.05	0.45
10:9:188:ASP:HB2	17:G:175:LYS:HZ1	1.82	0.45
12:B:741:U:H2'	12:B:742:A:C8	2.52	0.45
12:B:1902:C:C5	12:B:1903:G:C8	3.05	0.45
12:B:360:U:C6	12:B:361:G:C6	3.06	0.44
12:B:672:C:C2	12:B:809:G:C2	3.05	0.44
12:B:947:A:H2'	12:B:948:C:C6	2.52	0.44
12:B:1320:C:C5	12:B:1329:U:H5"	2.51	0.44
13:C:158:GLY:H	13:C:194:VAL:HG13	1.82	0.44
12:B:23:G:C6	12:B:518:G:C6	3.05	0.44
12:B:960:A:C8	12:B:962:G:C8	3.05	0.44
12:B:1071:G:H1'	12:B:1089:A:H3'	1.98	0.44
12:B:1082:U:O2	12:B:1086:A:C6	2.70	0.44
12:B:2757:A:H2'	12:B:2758:A:H5'	1.99	0.44
12:B:2805:C:C4	12:B:2806:C:C4	3.05	0.44
12:B:455:C:C6	12:B:472:A:C2	3.06	0.44
12:B:532:A:H4'	12:B:533:G:C8	2.51	0.44
12:B:826:U:C2	12:B:828:U:H4'	2.53	0.44
12:B:858:G:N2	12:B:919:U:H3	2.15	0.44
12:B:1056:G:H5'	12:B:1057:A:H5'	1.98	0.44
12:B:1484:U:C5	12:B:1485:U:C5	3.05	0.44
12:B:656:G:H2'	12:B:657:U:C6	2.53	0.44
12:B:764:A:C6	13:C:207:ALA:HB1	2.53	0.44
12:B:1877:A:C2'	12:B:1878:G:C8	3.00	0.44
12:B:1948:G:C6	12:B:1949:G:C5	3.06	0.44
16:F:118:ALA:HB3	16:F:176:PHE:HA	1.99	0.44
12:B:533:G:C6	12:B:534:U:C4	3.06	0.44
27:Q:31:TYR:O	27:Q:34:ALA:HB3	2.17	0.44
10:9:52:ASN:HB3	10:9:54:ASN:HD22	1.83	0.44
12:B:871:U:H4'	23:M:68:PHE:CE1	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:1090:A:N6	12:B:1101:U:H3	2.15	0.44
12:B:1256:G:H21	15:E:77:ILE:HB	1.82	0.44
12:B:1265:A:H62	12:B:2015:A:N6	2.16	0.44
12:B:1416:G:N2	12:B:1585:C:H41	2.16	0.44
12:B:1715:G:H1'	12:B:1716:U:C6	2.52	0.44
12:B:2306:C:C4	12:B:2307:G:C6	3.06	0.44
12:B:2527:C:C4	12:B:2528:U:C4	3.05	0.44
30:T:69:ARG:HD2	30:T:70:HIS:CE1	2.52	0.44
10:9:226:GLY:H	10:9:228:GLY:H	1.65	0.44
12:B:280:U:C4	12:B:281:C:C4	3.06	0.44
12:B:610:C:H2'	12:B:611:C:C6	2.53	0.44
12:B:2464:G:C6	12:B:2487:G:C6	3.06	0.44
12:B:2624:G:C2	12:B:2625:G:C8	3.06	0.44
12:B:2884:U:OP2	12:B:2885:G:C2	2.71	0.44
12:B:81:G:N7	12:B:82:U:C5	2.85	0.44
12:B:89:A:C5	12:B:90:U:C5	3.06	0.44
12:B:649:G:H2'	12:B:650:C:C6	2.53	0.44
12:B:2061:G:C8	12:B:2503:A:H5'	2.52	0.44
12:B:2191:A:H3'	12:B:2192:U:H6	1.83	0.44
12:B:2396:G:C6	12:B:2421:G:C6	3.05	0.44
12:B:2461:A:C2	12:B:2491:U:O4	2.71	0.44
12:B:2563:U:O2	12:B:2565:A:C8	2.71	0.44
12:B:2768:U:C4	12:B:2769:U:C5	3.05	0.44
21:K:78:ARG:H	26:P:70:GLU:HB3	1.83	0.44
12:B:391:A:C5	12:B:392:U:C6	3.06	0.44
12:B:927:A:H2'	12:B:928:A:C8	2.53	0.44
12:B:1000:A:H62	12:B:1154:G:H2'	1.83	0.44
12:B:1069:A:C2	12:B:1095:A:H2'	2.53	0.44
12:B:1418:G:O6	12:B:1578:U:H5"	2.18	0.44
12:B:1877:A:O2'	12:B:1878:G:C8	2.69	0.44
12:B:2111:U:C4	12:B:2142:A:H4'	2.53	0.44
12:B:89:A:H2'	12:B:90:U:H6	1.83	0.43
12:B:1000:A:C4	12:B:1155:A:C6	3.06	0.43
12:B:2279:G:C8	33:Y:9:THR:HG21	2.53	0.43
12:B:2305:U:H2'	12:B:2306:C:C6	2.53	0.43
12:B:2714:G:C4	12:B:2715:C:C6	3.06	0.43
13:C:77:VAL:HG22	13:C:93:VAL:HG22	1.98	0.43
10:9:69:ARG:HH12	10:9:147:GLY:H	1.66	0.43
12:B:1141:U:C4	20:J:67:ASN:HB2	2.54	0.43
12:B:1375:U:N3	12:B:1376:C:C5	2.87	0.43
12:B:2411:A:H2'	12:B:2412:A:H8	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:118:A:H5'	12:B:119:A:H8	1.84	0.43
12:B:519:U:H2'	12:B:520:G:H8	1.81	0.43
12:B:532:A:N6	12:B:2020:A:H1'	2.33	0.43
12:B:696:G:C2	12:B:767:U:C2	3.06	0.43
12:B:1451:C:H4'	12:B:1452:G:C8	2.53	0.43
12:B:1468:U:H2'	12:B:1522:A:H61	1.82	0.43
12:B:1564:C:H2'	12:B:1565:C:C6	2.53	0.43
12:B:1784:A:O5'	12:B:1784:A:C8	2.71	0.43
12:B:2371:G:C6	12:B:2372:U:C4	3.06	0.43
25:O:106:LEU:H	25:O:109:ALA:HB3	1.82	0.43
12:B:1484:U:C5	12:B:1485:U:C4	3.06	0.43
12:B:1681:G:H4'	12:B:1763:G:N7	2.34	0.43
12:B:1798:U:C4	12:B:1819:A:C2	3.06	0.43
12:B:1935:G:N2	12:B:1964:G:C5	2.86	0.43
12:B:2292:U:H5"	12:B:2378:A:H61	1.83	0.43
12:B:2681:C:C5	12:B:2724:U:C5	3.06	0.43
12:B:2747:G:O6	12:B:2755:C:H5"	2.17	0.43
8:7:23:HIS:HA	22:L:64:PHE:CZ	2.54	0.43
10:9:25:ARG:HB3	12:B:2452:C:H4'	2.01	0.43
12:B:42:A:C2	12:B:43:G:H1'	2.54	0.43
12:B:1180:U:C4	12:B:1181:U:C4	3.05	0.43
12:B:1281:G:C6	12:B:1282:U:C4	3.07	0.43
12:B:2199:A:H61	12:B:2224:G:H1'	1.82	0.43
13:C:206:LYS:HG3	13:C:209:ALA:H	1.83	0.43
10:9:288:LEU:HD23	10:9:288:LEU:HA	1.96	0.43
12:B:189:G:H2'	12:B:205:G:H22	1.82	0.43
12:B:667:U:H2'	12:B:668:A:O4'	2.18	0.43
12:B:696:G:C2	12:B:697:G:C4	3.07	0.43
12:B:892:A:C5	12:B:893:C:C5	3.06	0.43
12:B:2199:A:H5'	12:B:2200:C:OP2	2.18	0.43
15:E:98:LYS:HA	15:E:101:TYR:CD1	2.54	0.43
10:9:91:PRO:HG3	10:9:189:TYR:HA	2.01	0.43
11:A:33:G:H21	11:A:35:C:H41	1.65	0.43
12:B:1484:U:C6	12:B:1485:U:C5	3.07	0.43
12:B:2267:A:C8	12:B:2267:A:H3'	2.53	0.43
17:G:122:ALA:HB2	17:G:132:LEU:HA	2.00	0.43
26:P:59:THR:HG22	26:P:72:VAL:HA	2.00	0.43
12:B:2516:A:C5	12:B:2517:C:C4	3.07	0.43
12:B:2714:G:C6	12:B:2715:C:C4	3.07	0.43
31:U:3:LYS:HD3	31:U:84:PHE:CZ	2.54	0.43
12:B:12:U:O2	12:B:2626:C:H4'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:825:A:C2	12:B:833:A:C2	3.07	0.43
12:B:1448:G:H1'	12:B:1528:A:C2	2.54	0.43
20:J:57:LEU:HD22	20:J:129:GLU:H	1.83	0.43
10:9:4:VAL:HA	10:9:191:PHE:CE2	2.53	0.43
12:B:329:G:H1	31:U:16:LYS:HE3	1.84	0.43
12:B:636:G:H3'	22:L:128:THR:HB	2.00	0.43
12:B:1237:A:H2'	12:B:1237:A:N3	2.33	0.43
29:S:75:PHE:HD2	29:S:76:VAL:H	1.67	0.43
10:9:179:VAL:HB	10:9:314:SER:H	1.83	0.42
11:A:34:A:C2	11:A:49:C:N3	2.87	0.42
12:B:354:A:H3'	12:B:355:U:C6	2.54	0.42
12:B:740:C:H1'	12:B:1981:A:C4	2.54	0.42
12:B:1460:U:H5"	12:B:1461:C:C5	2.54	0.42
12:B:1462:C:C4	12:B:1463:C:C5	3.06	0.42
12:B:1567:G:H4'	12:B:1568:G:C2	2.54	0.42
12:B:2064:C:H1'	12:B:2450:A:C6	2.54	0.42
12:B:2352:A:C2	12:B:2366:A:C2	3.07	0.42
12:B:2553:G:N3	12:B:2583:G:H1'	2.34	0.42
22:L:6:LEU:H	22:L:6:LEU:HD23	1.84	0.42
1:0:19:HIS:O	1:0:19:HIS:CG	2.73	0.42
8:7:9:ALA:HA	8:7:12:ARG:HH21	1.84	0.42
12:B:251:A:C5	12:B:252:G:H1'	2.54	0.42
12:B:1418:G:C2	12:B:1579:A:N7	2.86	0.42
12:B:2219:U:C4	12:B:2220:U:C5	3.07	0.42
12:B:2476:A:N1	12:B:2477:U:C5	2.87	0.42
33:Y:25:PHE:CE1	33:Y:32:ALA:O	2.72	0.42
10:9:54:ASN:C	12:B:2531:A:OP1	2.58	0.42
12:B:165:A:C2	12:B:166:U:C2	3.07	0.42
12:B:711:G:C2	12:B:712:G:C5	3.08	0.42
12:B:1855:U:H2'	12:B:1856:U:C6	2.54	0.42
12:B:2209:G:C6	12:B:2210:U:C4	3.07	0.42
12:B:2513:A:C2	12:B:2514:U:C2	3.07	0.42
12:B:2596:U:C5	12:B:2597:G:C6	3.08	0.42
33:Y:27:GLY:HA3	33:Y:31:LEU:HD13	2.00	0.42
12:B:288:U:H2'	12:B:289:G:O4'	2.19	0.42
12:B:607:U:C5	12:B:620:G:C2	3.07	0.42
12:B:974:G:H5"	12:B:1186:G:H21	1.84	0.42
12:B:2165:C:C5	12:B:2166:U:C2	3.07	0.42
12:B:2446:G:H2'	12:B:2447:G:H4'	2.01	0.42
12:B:2868:A:H2'	12:B:2869:G:C8	2.54	0.42
30:T:66:LYS:H	30:T:77:ARG:HB3	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:81:G:C8	12:B:82:U:C5	3.07	0.42
12:B:307:G:C2	12:B:310:A:C8	3.08	0.42
12:B:1440:U:H2'	12:B:1441:G:C8	2.54	0.42
12:B:1651:G:H2'	12:B:1652:A:C8	2.54	0.42
12:B:7:G:H2'	12:B:8:C:C6	2.54	0.42
12:B:608:A:C2	12:B:609:A:C4	3.07	0.42
12:B:801:G:C4	15:E:49:ARG:HD3	2.54	0.42
12:B:891:G:H2'	12:B:892:A:C8	2.55	0.42
12:B:1252:G:C2	12:B:1253:A:C2	3.08	0.42
12:B:2028:U:N3	12:B:2029:G:C5	2.87	0.42
12:B:2355:G:C6	12:B:2363:G:C6	3.08	0.42
12:B:2368:C:H2'	12:B:2369:A:C8	2.55	0.42
12:B:2543:G:H21	12:B:2646:C:H5"	1.85	0.42
10:9:245:ILE:HG21	10:9:282:PHE:CD2	2.54	0.42
12:B:460:A:C2	12:B:470:A:C4	3.07	0.42
12:B:486:C:H4'	29:S:60:HIS:CE1	2.54	0.42
12:B:1477:A:C2	12:B:1515:A:C2	3.07	0.42
12:B:1658:C:H5"	14:D:138:LEU:HD22	2.02	0.42
12:B:2663:G:C8	12:B:2664:G:C8	3.07	0.42
12:B:2681:C:C4	12:B:2724:U:C5	3.08	0.42
12:B:2846:G:C6	12:B:2847:U:C4	3.07	0.42
14:D:183:GLU:CD	14:D:183:GLU:H	2.23	0.42
30:T:30:ILE:HG23	30:T:86:THR:H	1.85	0.42
10:9:60:ARG:HG3	12:B:2478:A:C2	2.55	0.42
10:9:180:SER:HG	10:9:182:ALA:HB3	1.84	0.42
11:A:73:A:C4	11:A:104:A:C2	3.07	0.42
12:B:559:G:C6	12:B:560:C:C4	3.07	0.42
12:B:1171:G:C5	12:B:1172:C:C4	3.07	0.42
12:B:1247:A:H3'	12:B:1248:G:H5"	2.02	0.42
12:B:1797:G:C2	12:B:1823:G:C4	3.08	0.42
12:B:1867:G:C6	12:B:1868:C:C4	3.08	0.42
12:B:1935:G:N2	12:B:1964:G:C4	2.88	0.42
12:B:2279:G:C6	12:B:2280:G:C5	3.07	0.42
12:B:2846:G:H5"	26:P:52:ARG:NH1	2.34	0.42
12:B:572:A:C2	12:B:2033:A:C2	3.08	0.42
12:B:823:C:H2'	12:B:824:U:C6	2.55	0.42
12:B:940:G:C2	12:B:941:A:H1'	2.54	0.42
12:B:1547:C:H2'	12:B:1548:A:H8	1.84	0.42
12:B:1783:A:C2	12:B:2587:A:C5	3.07	0.42
12:B:1791:A:C8	12:B:1792:G:C8	3.07	0.42
12:B:1930:G:H22	12:B:1968:G:H2'	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:2596:U:C4	12:B:2597:G:C2	3.08	0.42
12:B:2652:C:C4	12:B:2653:U:C4	3.08	0.42
16:F:105:ILE:HG23	16:F:138:PRO:HD3	2.02	0.42
22:L:6:LEU:H	22:L:6:LEU:CD2	2.33	0.42
10:9:206:GLU:HA	12:B:2662:A:H5"	2.02	0.42
12:B:783:A:H4'	12:B:2588:G:H4'	2.02	0.42
12:B:870:U:C3'	12:B:871:U:H5"	2.50	0.42
12:B:1498:C:H2'	12:B:1499:C:C6	2.55	0.42
12:B:1585:C:H3'	12:B:1586:A:H8	1.85	0.42
12:B:2028:U:C4	12:B:2029:G:C5	3.08	0.42
12:B:2091:C:H3'	12:B:2092:U:H5"	2.02	0.42
13:C:221:GLY:HA3	13:C:229:HIS:HD2	1.81	0.42
23:M:20:LEU:HD22	32:W:81:PRO:HG2	2.01	0.42
4:3:5:ASN:HD21	12:B:2019:A:H3'	1.85	0.41
12:B:422:A:H3'	12:B:423:A:H8	1.85	0.41
12:B:1022:G:C6	12:B:1140:C:C4	3.07	0.41
12:B:1448:G:H21	12:B:1529:G:H5'	1.85	0.41
12:B:2724:U:H2'	12:B:2725:A:C8	2.54	0.41
9:8:2:LYS:HG3	9:8:3:VAL:H	1.85	0.41
10:9:183:LYS:NZ	12:B:2661:G:C6	2.78	0.41
12:B:89:A:C6	12:B:90:U:C4	3.08	0.41
12:B:1467:U:C5	12:B:1546:G:H2'	2.55	0.41
12:B:2472:G:C5	12:B:2475:C:C4	3.08	0.41
12:B:2792:A:C2	12:B:2805:C:C2	3.08	0.41
2:1:11:VAL:HG23	2:1:12:GLU:N	2.36	0.41
10:9:231:PHE:CD2	10:9:231:PHE:N	2.88	0.41
12:B:221:A:C2	12:B:233:A:C5	3.08	0.41
12:B:646:U:C6	12:B:647:G:H1'	2.55	0.41
12:B:925:A:C2	12:B:926:G:C4	3.08	0.41
12:B:1316:U:H3	12:B:1336:A:H61	1.68	0.41
12:B:1380:G:N2	12:B:1571:A:C2	2.88	0.41
12:B:1444:G:H2'	12:B:1445:G:C8	2.55	0.41
12:B:1473:G:C6	12:B:1474:U:C4	3.08	0.41
12:B:2323:G:C5	12:B:2324:U:C5	3.08	0.41
12:B:2328:A:C2	12:B:2329:U:C2	3.08	0.41
12:B:2352:A:C8	12:B:2353:G:C8	3.08	0.41
12:B:2455:G:C6	12:B:2456:C:C4	3.08	0.41
21:K:66:LYS:HE3	21:K:82:ASN:HD21	1.85	0.41
12:B:1425:G:H2'	12:B:1426:G:C8	2.55	0.41
12:B:2073:C:C2	12:B:2437:G:C2	3.08	0.41
29:S:2:GLU:HA	29:S:108:SER:HA	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:5:172:HIS:CD2	12:B:2123:G:H21	2.38	0.41
12:B:190:A:C4	12:B:207:A:C2	3.07	0.41
12:B:410:G:H2'	12:B:2407:A:N7	2.36	0.41
12:B:883:G:C5	12:B:884:U:C5	3.09	0.41
12:B:1223:G:C6	12:B:1227:G:C6	3.09	0.41
12:B:2232:C:C4	12:B:2233:U:C4	3.09	0.41
12:B:2345:G:H1'	12:B:2382:G:H5'	2.00	0.41
12:B:2812:G:C2	12:B:2813:A:C4	3.08	0.41
12:B:2832:U:H1'	12:B:2834:G:C4	2.55	0.41
10:9:200:VAL:HG11	12:B:2661:G:C2	2.56	0.41
12:B:6:A:C2	12:B:7:G:C5	3.09	0.41
12:B:539:G:C5	12:B:540:C:C5	3.08	0.41
12:B:1028:A:H2'	12:B:1029:A:C8	2.55	0.41
12:B:1071:G:OP1	12:B:1097:U:H4'	2.20	0.41
12:B:1219:U:H2'	12:B:1220:G:H8	1.85	0.41
12:B:1688:U:N3	12:B:1698:A:C2	2.88	0.41
12:B:2284:A:H61	12:B:2384:U:H3	1.68	0.41
12:B:2294:G:C5	12:B:2295:C:C5	3.08	0.41
21:K:40:LYS:HE3	21:K:57:VAL:HB	2.02	0.41
8:7:32:LEU:HB3	8:7:39:ARG:HH12	1.86	0.41
12:B:327:G:C2	12:B:336:C:C2	3.08	0.41
12:B:634:C:H2'	12:B:635:C:C6	2.55	0.41
12:B:694:U:H5"	12:B:1569:A:C6	2.54	0.41
12:B:695:G:C2	12:B:768:G:C4	3.09	0.41
12:B:1005:C:C2	12:B:1143:A:C6	3.09	0.41
12:B:1665:A:C2	12:B:1666:G:C4	3.08	0.41
12:B:2393:U:H1'	22:L:59:ARG:HG2	2.03	0.41
12:B:2578:G:C5	14:D:145:SER:HB2	2.55	0.41
12:B:2800:A:N6	12:B:2801:G:C5	2.89	0.41
16:F:124:ARG:HD3	16:F:124:ARG:HA	1.91	0.41
17:G:86:LEU:HB2	17:G:132:LEU:HD11	2.02	0.41
12:B:77:G:C6	12:B:110:G:C6	3.08	0.41
12:B:869:G:C2	12:B:909:A:C2	3.09	0.41
12:B:1167:C:N4	12:B:1182:G:H1	2.17	0.41
17:G:88:LEU:HD21	17:G:95:ALA:CB	2.51	0.41
19:I:79:LEU:HD11	19:I:128:ILE:HG23	2.03	0.41
1:0:71:ARG:NH1	1:0:75:GLU:H	2.19	0.41
8:7:38:LYS:O	8:7:42:HIS:CD2	2.74	0.41
10:9:61:PHE:HD1	10:9:61:PHE:H	1.68	0.41
10:9:223:GLU:OE2	12:B:1067:A:C8	2.73	0.41
12:B:138:U:H2'	12:B:140:C:C4	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:247:G:C5	12:B:249:C:H1'	2.56	0.41
12:B:255:A:C6	12:B:256:A:C4	3.09	0.41
12:B:293:U:C5	12:B:345:A:C6	3.08	0.41
12:B:361:G:H2'	12:B:362:A:H8	1.85	0.41
12:B:638:G:C5	12:B:639:U:C4	3.09	0.41
12:B:895:U:O4	12:B:897:C:C5	2.74	0.41
12:B:1960:A:C5	12:B:1961:C:C5	3.09	0.41
12:B:2542:A:H4'	12:B:2543:G:H5'	2.01	0.41
12:B:2656:U:C2	12:B:2657:A:C8	3.09	0.41
12:B:2804:U:N3	12:B:2805:C:C5	2.88	0.41
12:B:2834:G:H1'	12:B:2883:A:N6	2.34	0.41
14:D:78:GLY:HA3	14:D:80:TRP:CZ2	2.56	0.41
23:M:65:ILE:HG22	23:M:103:TYR:CE1	2.56	0.41
24:N:96:ARG:HH22	24:N:120:GLU:H	1.69	0.41
29:S:6:LYS:HD2	29:S:8:ARG:HH11	1.85	0.41
10:9:175:PHE:CZ	10:9:284:LYS:HG2	2.56	0.41
12:B:1873:G:C6	12:B:1874:C:C4	3.09	0.41
12:B:2345:G:C6	12:B:2381:A:C6	3.09	0.41
12:B:611:C:C4	12:B:612:G:C5	3.09	0.40
12:B:668:A:H2'	12:B:670:A:H62	1.85	0.40
12:B:883:G:C5	12:B:884:U:C4	3.10	0.40
12:B:1638:C:C4	12:B:1639:C:C5	3.09	0.40
12:B:2714:G:C5	12:B:2715:C:C4	3.10	0.40
13:C:154:ALA:HB1	13:C:160:TYR:HA	2.04	0.40
15:E:36:ALA:O	15:E:39:ALA:HB3	2.21	0.40
10:9:13:ALA:CB	10:9:43:GLY:O	2.69	0.40
10:9:24:ARG:HH12	12:B:2583:G:H2'	1.87	0.40
10:9:61:PHE:CE2	12:B:2472:G:H5"	2.56	0.40
10:9:182:ALA:HB1	10:9:200:VAL:HB	2.03	0.40
11:A:9:G:C6	11:A:112:G:C6	3.09	0.40
12:B:232:G:H22	12:B:420:C:C5'	2.33	0.40
12:B:277:G:H1'	12:B:360:U:O4	2.22	0.40
12:B:380:G:H2'	12:B:381:G:O4'	2.21	0.40
12:B:893:C:C4	12:B:894:U:C6	3.10	0.40
12:B:1301:A:C8	12:B:1303:G:C8	3.10	0.40
12:B:1319:C:H1'	12:B:1334:G:N2	2.36	0.40
12:B:1485:U:C4	12:B:1486:U:C4	3.09	0.40
12:B:2279:G:N7	33:Y:9:THR:HG21	2.35	0.40
12:B:2744:G:H5'	12:B:2755:C:C5	2.56	0.40
20:J:26:GLY:H	20:J:29:ALA:HB3	1.86	0.40
23:M:114:ARG:HG2	23:M:130:PHE:CE1	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:9:61:PHE:CG	12:B:2472:G:H5”	2.56	0.40
10:9:175:PHE:CD1	10:9:175:PHE:N	2.85	0.40
12:B:7:G:C6	12:B:8:C:C4	3.09	0.40
12:B:363:G:C6	12:B:364:C:C4	3.09	0.40
12:B:577:G:C6	12:B:578:G:C6	3.09	0.40
12:B:759:G:C4	12:B:760:G:C8	3.09	0.40
12:B:904:G:C2	12:B:905:A:C4	3.09	0.40
12:B:1346:G:C6	12:B:1347:A:C5	3.10	0.40
12:B:2345:G:C5	12:B:2347:C:C5	3.09	0.40
21:K:105:ARG:HH12	26:P:71:ARG:HD3	1.85	0.40
26:P:54:LEU:HD12	26:P:76:HIS:CD2	2.56	0.40
5:4:6:GLU:HB3	5:4:27:ARG:HH21	1.86	0.40
12:B:283:G:C6	12:B:284:U:C4	3.09	0.40
12:B:531:C:N3	12:B:2019:A:C2	2.90	0.40
12:B:1381:G:C2’	12:B:1382:G:H5’	2.51	0.40
12:B:1558:C:C6	12:B:1560:G:H1’	2.57	0.40
12:B:1628:G:C6	12:B:1629:U:C4	3.10	0.40
12:B:1684:G:C5	12:B:1685:C:C5	3.09	0.40
12:B:1934:C:H2’	12:B:1935:G:C8	2.56	0.40
12:B:2127:G:HO2’	12:B:2173:A:H2	1.67	0.40
12:B:2371:G:C6	12:B:2372:U:C5	3.09	0.40
17:G:40:VAL:HG13	17:G:63:GLN:HB3	2.03	0.40
19:I:81:LYS:HD2	19:I:81:LYS:C	2.42	0.40
28:R:39:LEU:CB	28:R:53:PHE:H	2.35	0.40
1:0:18:SER:HB2	1:0:22:ASN:H	1.86	0.40
1:0:28:PHE:HB3	12:B:396:G:H1’	2.04	0.40
10:9:23:PHE:HB3	10:9:31:LYS:HE3	2.04	0.40
10:9:273:LEU:HA	10:9:276:LYS:HG2	2.04	0.40
11:A:47:C:C4	11:A:48:U:C4	3.10	0.40
11:A:69:G:H3’	11:A:70:C:C6	2.54	0.40
12:B:18:U:H2’	12:B:19:A:C8	2.57	0.40
12:B:1563:U:H2’	12:B:1564:C:C6	2.56	0.40
12:B:1961:C:H2’	12:B:1963:U:H3	1.86	0.40
12:B:2528:U:C2	12:B:2536:G:C2	3.10	0.40
17:G:66:THR:HG22	17:G:70:LEU:HD22	2.04	0.40
20:J:103:ILE:HG21	20:J:103:ILE:HD13	1.87	0.40
27:Q:31:TYR:CZ	27:Q:35:PHE:CZ	3.10	0.40
31:U:36:GLU:CD	31:U:36:GLU:H	2.25	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	0	75/77 (97%)	61 (81%)	10 (13%)	4 (5%)	2 19
2	1	61/63 (97%)	50 (82%)	8 (13%)	3 (5%)	2 20
3	2	56/58 (97%)	50 (89%)	5 (9%)	1 (2%)	8 40
4	3	54/56 (96%)	43 (80%)	4 (7%)	7 (13%)	0 5
5	4	49/54 (91%)	43 (88%)	4 (8%)	2 (4%)	3 22
6	5	232/234 (99%)	197 (85%)	25 (11%)	10 (4%)	2 22
7	6	44/46 (96%)	33 (75%)	8 (18%)	3 (7%)	1 15
8	7	62/64 (97%)	47 (76%)	10 (16%)	5 (8%)	1 12
9	8	36/38 (95%)	27 (75%)	7 (19%)	2 (6%)	2 18
10	9	332/390 (85%)	261 (79%)	43 (13%)	28 (8%)	1 11
13	C	270/272 (99%)	216 (80%)	31 (12%)	23 (8%)	1 11
14	D	207/209 (99%)	160 (77%)	34 (16%)	13 (6%)	1 16
15	E	199/201 (99%)	163 (82%)	16 (8%)	20 (10%)	0 9
16	F	176/178 (99%)	135 (77%)	22 (12%)	19 (11%)	0 8
17	G	172/176 (98%)	126 (73%)	31 (18%)	15 (9%)	1 11
18	H	147/149 (99%)	112 (76%)	21 (14%)	14 (10%)	0 10
19	I	67/141 (48%)	65 (97%)	0	2 (3%)	4 28
20	J	140/142 (99%)	108 (77%)	20 (14%)	12 (9%)	1 11
21	K	120/123 (98%)	98 (82%)	16 (13%)	6 (5%)	2 20
22	L	141/143 (99%)	115 (82%)	17 (12%)	9 (6%)	1 16
23	M	134/136 (98%)	112 (84%)	16 (12%)	6 (4%)	2 22
24	N	119/127 (94%)	94 (79%)	17 (14%)	8 (7%)	1 15
25	O	114/116 (98%)	88 (77%)	20 (18%)	6 (5%)	2 19
26	P	112/114 (98%)	84 (75%)	19 (17%)	9 (8%)	1 12
27	Q	115/117 (98%)	95 (83%)	12 (10%)	8 (7%)	1 14

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
28	R	101/103 (98%)	83 (82%)	14 (14%)	4 (4%)	3 23
29	S	108/110 (98%)	87 (81%)	11 (10%)	10 (9%)	0 10
30	T	92/100 (92%)	68 (74%)	16 (17%)	8 (9%)	1 11
31	U	96/103 (93%)	73 (76%)	15 (16%)	8 (8%)	1 12
32	W	92/94 (98%)	78 (85%)	11 (12%)	3 (3%)	4 26
33	Y	77/84 (92%)	54 (70%)	15 (20%)	8 (10%)	0 8
All	All	3800/4018 (95%)	3026 (80%)	498 (13%)	276 (7%)	2 13

All (276) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	0	73	ARG
3	2	9	THR
4	3	3	GLN
6	5	40	GLU
10	9	54	ASN
10	9	55	THR
10	9	63	LYS
10	9	64	SER
10	9	68	GLU
10	9	77	ASP
10	9	92	VAL
10	9	145	THR
10	9	159	LEU
10	9	225	ALA
10	9	227	LEU
10	9	254	ASP
10	9	308	ASP
13	C	52	HIS
13	C	166	ARG
13	C	177	SER
14	D	107	VAL
14	D	123	LYS
15	E	44	ARG
15	E	96	VAL
15	E	130	LYS
16	F	46	LYS
16	F	110	ILE
17	G	95	ALA
17	G	120	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	H	84	ALA
20	J	45	THR
20	J	59	ALA
20	J	68	LYS
20	J	111	LYS
20	J	132	HIS
21	K	33	ALA
21	K	71	ARG
22	L	3	LEU
22	L	50	PHE
22	L	113	ALA
24	N	2	ARG
24	N	3	HIS
25	O	37	ALA
25	O	59	ALA
26	P	25	VAL
26	P	45	VAL
26	P	90	ALA
26	P	106	ALA
27	Q	101	ASP
29	S	2	GLU
29	S	62	ASP
29	S	76	VAL
30	T	9	LYS
30	T	36	LYS
30	T	57	VAL
31	U	12	VAL
31	U	80	ASP
33	Y	17	ALA
33	Y	75	ASN
1	0	2	ARG
2	1	34	SER
4	3	33	SER
4	3	48	TYR
5	4	50	GLU
6	5	181	ASP
6	5	229	LEU
7	6	40	ALA
8	7	35	LYS
8	7	51	LYS
10	9	40	GLY
10	9	53	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	9	74	ALA
10	9	148	ASP
10	9	157	MET
10	9	161	ASP
10	9	214	ILE
10	9	316	ALA
13	C	120	ASP
13	C	189	ALA
13	C	233	GLY
13	C	235	GLU
14	D	74	GLU
15	E	4	VAL
15	E	30	GLN
15	E	52	VAL
15	E	80	SER
15	E	123	LYS
15	E	125	SER
16	F	84	ILE
16	F	143	ASP
16	F	148	VAL
17	G	3	VAL
17	G	21	GLN
17	G	84	LYS
17	G	135	ALA
18	H	28	ASN
18	H	41	LYS
18	H	76	GLU
20	J	65	THR
21	K	110	GLU
22	L	64	PHE
23	M	67	VAL
24	N	63	ARG
25	O	57	ALA
26	P	71	ARG
27	Q	27	ARG
29	S	12	SER
29	S	28	LYS
29	S	29	VAL
29	S	53	SER
29	S	61	ASN
29	S	64	ALA
30	T	69	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	T	90	GLY
31	U	13	LEU
33	Y	46	ALA
33	Y	52	CYS
1	0	26	ARG
2	1	2	LYS
2	1	38	GLN
4	3	22	THR
6	5	159	GLY
6	5	219	GLY
6	5	220	ALA
9	8	37	GLN
10	9	38	ASP
13	C	26	GLY
13	C	35	LYS
13	C	79	ARG
13	C	204	LEU
14	D	71	ALA
14	D	94	GLN
14	D	131	ASP
14	D	152	PRO
14	D	159	LYS
14	D	194	PRO
15	E	8	ALA
15	E	20	GLY
15	E	62	GLN
15	E	64	GLY
15	E	82	GLY
15	E	150	THR
16	F	16	MET
16	F	77	LYS
16	F	114	ARG
16	F	123	GLY
16	F	136	ILE
17	G	80	GLU
17	G	151	ARG
18	H	107	GLY
20	J	48	VAL
20	J	64	VAL
22	L	44	GLY
23	M	72	PRO
24	N	42	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	O	60	GLU
25	O	107	ALA
26	P	13	LYS
27	Q	71	ASN
27	Q	81	GLY
28	R	3	ALA
28	R	17	GLY
28	R	87	GLN
30	T	88	LYS
33	Y	20	LEU
4	3	51	ARG
5	4	33	LEU
6	5	228	GLY
7	6	35	ARG
8	7	30	HIS
8	7	32	LEU
8	7	44	ARG
10	9	146	PRO
10	9	196	PRO
13	C	27	LYS
13	C	112	GLY
13	C	125	PRO
13	C	152	GLN
13	C	205	GLY
13	C	231	HIS
13	C	236	GLY
14	D	43	ASP
14	D	109	VAL
14	D	140	HIS
15	E	106	LYS
15	E	128	ALA
16	F	6	TYR
16	F	19	PHE
16	F	124	ARG
16	F	173	ASP
17	G	39	ALA
18	H	14	SER
18	H	17	ASP
18	H	29	PHE
18	H	32	PRO
18	H	33	GLN
18	H	75	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	I	140	GLU
20	J	22	GLY
21	K	29	HIS
21	K	113	MET
22	L	41	ARG
22	L	42	SER
23	M	27	SER
23	M	73	ILE
23	M	79	ALA
24	N	98	LEU
24	N	100	CYS
26	P	87	ARG
30	T	21	SER
31	U	50	ALA
31	U	63	ALA
32	W	24	ASN
33	Y	16	GLU
33	Y	28	GLU
33	Y	41	GLY
1	0	71	ARG
9	8	16	ILE
10	9	93	GLY
10	9	314	SER
13	C	132	ARG
13	C	229	HIS
13	C	241	LYS
15	E	11	ALA
16	F	32	LYS
16	F	64	PRO
16	F	79	ARG
18	H	117	LEU
20	J	136	GLN
21	K	53	LYS
24	N	43	GLU
25	O	41	ALA
26	P	97	TYR
28	R	98	ILE
30	T	18	GLU
31	U	14	THR
31	U	98	ASN
32	W	44	HIS
4	3	44	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	5	53	ARG
10	9	251	ASP
13	C	196	ASN
14	D	132	ALA
15	E	59	PRO
16	F	59	ILE
17	G	110	HIS
17	G	123	GLU
18	H	38	PRO
18	H	93	SER
19	I	93	ASN
22	L	10	GLU
22	L	62	PRO
23	M	21	ALA
26	P	52	ARG
27	Q	78	PHE
27	Q	91	ARG
31	U	52	ASN
16	F	39	VAL
17	G	11	PRO
4	3	53	VAL
10	9	220	GLY
13	C	123	ILE
17	G	125	PRO
17	G	155	PRO
20	J	137	PRO
6	5	59	VAL
7	6	44	VAL
15	E	175	ILE
20	J	81	ILE
27	Q	33	VAL
29	S	87	PRO
6	5	133	PRO
17	G	53	PRO
24	N	97	ILE
27	Q	97	ILE
32	W	33	GLY

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM

entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	0	67/67 (100%)	60 (90%)	7 (10%)	7 26
2	1	55/55 (100%)	51 (93%)	4 (7%)	14 40
3	2	48/48 (100%)	46 (96%)	2 (4%)	30 54
4	3	47/47 (100%)	44 (94%)	3 (6%)	17 44
5	4	45/48 (94%)	43 (96%)	2 (4%)	28 53
6	5	181/181 (100%)	179 (99%)	2 (1%)	73 84
7	6	38/38 (100%)	35 (92%)	3 (8%)	12 38
8	7	51/51 (100%)	45 (88%)	6 (12%)	5 21
9	8	34/34 (100%)	31 (91%)	3 (9%)	10 33
10	9	268/321 (84%)	231 (86%)	37 (14%)	3 18
13	C	216/217 (100%)	208 (96%)	8 (4%)	34 58
14	D	164/164 (100%)	146 (89%)	18 (11%)	6 24
15	E	165/165 (100%)	156 (94%)	9 (6%)	21 48
16	F	149/149 (100%)	143 (96%)	6 (4%)	31 56
17	G	136/137 (99%)	128 (94%)	8 (6%)	19 46
18	H	114/114 (100%)	105 (92%)	9 (8%)	12 38
19	I	51/109 (47%)	46 (90%)	5 (10%)	8 28
20	J	116/116 (100%)	108 (93%)	8 (7%)	15 42
21	K	102/104 (98%)	95 (93%)	7 (7%)	15 42
22	L	102/102 (100%)	95 (93%)	7 (7%)	15 42
23	M	109/109 (100%)	98 (90%)	11 (10%)	7 27
24	N	100/103 (97%)	93 (93%)	7 (7%)	15 41
25	O	86/86 (100%)	82 (95%)	4 (5%)	26 52
26	P	99/99 (100%)	94 (95%)	5 (5%)	24 50
27	Q	89/89 (100%)	84 (94%)	5 (6%)	21 47
28	R	84/84 (100%)	79 (94%)	5 (6%)	19 46
29	S	93/93 (100%)	89 (96%)	4 (4%)	29 54
30	T	80/84 (95%)	72 (90%)	8 (10%)	7 27
31	U	81/84 (96%)	76 (94%)	5 (6%)	18 45

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
32	W	78/78 (100%)	74 (95%)	4 (5%)	24 50
33	Y	59/62 (95%)	54 (92%)	5 (8%)	10 35
All	All	3107/3238 (96%)	2890 (93%)	217 (7%)	19 41

All (217) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	5	GLN
1	0	11	PRO
1	0	15	ASN
1	0	22	ASN
1	0	26	ARG
1	0	55	MET
1	0	69	GLU
2	1	25	GLN
2	1	38	GLN
2	1	43	LEU
2	1	57	LEU
3	2	2	LYS
3	2	55	LYS
4	3	14	MET
4	3	27	LEU
4	3	48	TYR
5	4	6	GLU
5	4	44	GLN
6	5	53	ARG
6	5	137	MET
7	6	1	MET
7	6	5	PHE
7	6	22	MET
8	7	15	LYS
8	7	28	LEU
8	7	41	ARG
8	7	45	PRO
8	7	46	LYS
8	7	51	LYS
9	8	8	LYS
9	8	12	ARG
9	8	20	ASP
10	9	6	GLU
10	9	20	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	9	31	LYS
10	9	55	THR
10	9	56	LEU
10	9	60	ARG
10	9	61	PHE
10	9	63	LYS
10	9	64	SER
10	9	69	ARG
10	9	82	ARG
10	9	97	ILE
10	9	99	GLN
10	9	103	GLU
10	9	108	MET
10	9	116	LEU
10	9	129	ARG
10	9	161	ASP
10	9	162	VAL
10	9	167	MET
10	9	174	THR
10	9	179	VAL
10	9	183	LYS
10	9	189	TYR
10	9	201	VAL
10	9	203	MET
10	9	207	LYS
10	9	257	GLU
10	9	263	ILE
10	9	286	ASP
10	9	292	GLU
10	9	294	GLU
10	9	310	TYR
10	9	311	TYR
10	9	326	TRP
10	9	329	MET
10	9	331	PHE
13	C	3	VAL
13	C	22	GLU
13	C	76	VAL
13	C	100	ARG
13	C	120	ASP
13	C	174	ARG
13	C	180	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	C	193	GLU
14	D	1	MET
14	D	2	ILE
14	D	9	VAL
14	D	22	ILE
14	D	33	ARG
14	D	40	LEU
14	D	43	ASP
14	D	74	GLU
14	D	84	LEU
14	D	99	GLU
14	D	103	ASP
14	D	123	LYS
14	D	128	ARG
14	D	141	ARG
14	D	146	ILE
14	D	167	ASN
14	D	183	GLU
14	D	201	LEU
15	E	61	ARG
15	E	72	SER
15	E	78	TRP
15	E	102	ARG
15	E	153	LEU
15	E	165	HIS
15	E	170	ARG
15	E	173	THR
15	E	188	MET
16	F	62	GLN
16	F	67	THR
16	F	79	ARG
16	F	87	LYS
16	F	91	ARG
16	F	122	ASP
17	G	28	LYS
17	G	36	LEU
17	G	63	GLN
17	G	70	LEU
17	G	86	LEU
17	G	88	LEU
17	G	94	ARG
17	G	127	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	H	9	VAL
18	H	19	VAL
18	H	37	VAL
18	H	44	ILE
18	H	50	ARG
18	H	61	VAL
18	H	68	ARG
18	H	94	ILE
18	H	109	GLU
19	I	81	LYS
19	I	85	ILE
19	I	99	LYS
19	I	105	LEU
19	I	138	VAL
20	J	9	GLU
20	J	12	LYS
20	J	32	LEU
20	J	47	HIS
20	J	75	TYR
20	J	89	PHE
20	J	101	ILE
20	J	130	HIS
21	K	41	ILE
21	K	49	ARG
21	K	56	ASP
21	K	61	VAL
21	K	71	ARG
21	K	111	LYS
21	K	114	LYS
22	L	2	ARG
22	L	6	LEU
22	L	29	LYS
22	L	48	ARG
22	L	57	LEU
22	L	63	LYS
22	L	118	THR
23	M	10	ARG
23	M	24	THR
23	M	36	VAL
23	M	47	GLU
23	M	53	MET
23	M	69	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	M	70	ASP
23	M	84	LYS
23	M	105	MET
23	M	115	GLU
23	M	119	LEU
24	N	2	ARG
24	N	4	ARG
24	N	37	THR
24	N	40	LYS
24	N	86	ARG
24	N	90	ARG
24	N	114	GLU
25	O	35	ILE
25	O	49	VAL
25	O	69	ASP
25	O	112	GLU
26	P	6	GLN
26	P	21	PRO
26	P	23	ASP
26	P	26	GLU
26	P	50	ARG
27	Q	43	GLN
27	Q	48	ASP
27	Q	73	ILE
27	Q	87	VAL
27	Q	111	LYS
28	R	2	TYR
28	R	4	VAL
28	R	21	ARG
28	R	22	LEU
28	R	37	GLU
29	S	15	GLN
29	S	31	GLN
29	S	33	LEU
29	S	46	LEU
30	T	1	MET
30	T	7	LEU
30	T	16	VAL
30	T	32	LEU
30	T	48	GLN
30	T	52	GLU
30	T	66	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	T	80	TRP
31	U	3	LYS
31	U	13	LEU
31	U	36	GLU
31	U	61	GLU
31	U	81	ARG
32	W	30	ILE
32	W	47	VAL
32	W	51	GLN
32	W	69	GLU
33	Y	16	GLU
33	Y	22	VAL
33	Y	35	ILE
33	Y	44	PHE
33	Y	50	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (44) such sidechains are listed below:

Mol	Chain	Res	Type
1	0	5	GLN
3	2	8	GLN
4	3	40	HIS
6	5	58	ASN
10	9	52	ASN
10	9	54	ASN
10	9	99	GLN
10	9	127	ASN
10	9	243	HIS
13	C	14	HIS
13	C	24	HIS
13	C	57	HIS
13	C	114	GLN
13	C	229	HIS
14	D	32	ASN
14	D	58	ASN
14	D	126	ASN
14	D	164	GLN
14	D	173	GLN
15	E	29	HIS
15	E	156	ASN
15	E	165	HIS
16	F	126	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	G	44	HIS
17	G	87	GLN
17	G	127	GLN
20	J	40	HIS
21	K	3	GLN
21	K	29	HIS
22	L	38	GLN
22	L	54	GLN
23	M	13	HIS
24	N	3	HIS
24	N	18	GLN
24	N	81	ASN
25	O	34	HIS
27	Q	19	GLN
27	Q	58	GLN
28	R	6	GLN
28	R	82	HIS
28	R	89	HIS
30	T	70	HIS
31	U	65	GLN
32	W	44	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
11	A	112/118 (94%)	21 (18%)	3 (2%)
12	B	2902/2903 (99%)	540 (18%)	96 (3%)
All	All	3014/3021 (99%)	561 (18%)	99 (3%)

All (561) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
11	A	9	G
11	A	13	G
11	A	14	U
11	A	16	G
11	A	26	C
11	A	29	A
11	A	30	C
11	A	41	G
11	A	42	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	A	45	A
11	A	52	A
11	A	53	A
11	A	57	A
11	A	66	A
11	A	67	G
11	A	88	C
11	A	89	U
11	A	90	C
11	A	91	C
11	A	99	A
11	A	109	A
12	B	11	C
12	B	34	U
12	B	35	G
12	B	46	G
12	B	50	U
12	B	51	G
12	B	63	A
12	B	71	A
12	B	74	A
12	B	75	G
12	B	84	A
12	B	91	A
12	B	92	U
12	B	94	A
12	B	95	A
12	B	100	U
12	B	103	A
12	B	118	A
12	B	119	A
12	B	120	U
12	B	126	A
12	B	128	C
12	B	136	G
12	B	137	U
12	B	139	U
12	B	140	C
12	B	141	G
12	B	143	C
12	B	144	A
12	B	160	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	163	C
12	B	164	C
12	B	180	G
12	B	181	A
12	B	196	A
12	B	199	A
12	B	216	A
12	B	217	A
12	B	221	A
12	B	222	A
12	B	228	C
12	B	233	A
12	B	241	A
12	B	248	G
12	B	249	C
12	B	252	G
12	B	265	A
12	B	266	G
12	B	268	C
12	B	271	G
12	B	273	G
12	B	276	U
12	B	277	G
12	B	281	C
12	B	283	G
12	B	286	U
12	B	294	A
12	B	299	A
12	B	311	A
12	B	312	G
12	B	321	U
12	B	329	G
12	B	330	A
12	B	333	G
12	B	346	A
12	B	347	A
12	B	352	A
12	B	353	C
12	B	362	A
12	B	363	G
12	B	364	C
12	B	371	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	372	G
12	B	387	U
12	B	388	G
12	B	389	G
12	B	403	U
12	B	404	A
12	B	405	U
12	B	406	G
12	B	411	G
12	B	412	A
12	B	424	G
12	B	451	U
12	B	457	A
12	B	461	C
12	B	479	A
12	B	481	G
12	B	489	G
12	B	490	C
12	B	491	G
12	B	498	G
12	B	504	A
12	B	505	A
12	B	508	A
12	B	509	C
12	B	512	G
12	B	533	G
12	B	544	C
12	B	545	U
12	B	546	U
12	B	547	A
12	B	548	G
12	B	549	G
12	B	555	G
12	B	563	A
12	B	568	U
12	B	573	U
12	B	575	A
12	B	586	A
12	B	603	A
12	B	613	A
12	B	614	A
12	B	615	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	620	G
12	B	631	A
12	B	637	A
12	B	647	G
12	B	651	G
12	B	653	U
12	B	654	A
12	B	656	G
12	B	669	G
12	B	670	A
12	B	671	C
12	B	686	U
12	B	687	C
12	B	730	A
12	B	747	U
12	B	748	G
12	B	751	A
12	B	757	G
12	B	764	A
12	B	775	G
12	B	782	A
12	B	784	G
12	B	785	G
12	B	788	A
12	B	789	A
12	B	790	U
12	B	792	A
12	B	793	A
12	B	802	A
12	B	805	G
12	B	811	U
12	B	812	C
12	B	819	A
12	B	827	U
12	B	828	U
12	B	830	G
12	B	846	U
12	B	847	U
12	B	859	G
12	B	869	G
12	B	871	U
12	B	875	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	878	A
12	B	881	G
12	B	887	U
12	B	888	C
12	B	889	C
12	B	890	C
12	B	891	G
12	B	896	A
12	B	897	C
12	B	901	C
12	B	910	A
12	B	912	C
12	B	919	U
12	B	931	U
12	B	932	U
12	B	933	A
12	B	941	A
12	B	946	C
12	B	958	U
12	B	961	C
12	B	962	G
12	B	973	A
12	B	974	G
12	B	980	A
12	B	981	A
12	B	982	C
12	B	983	A
12	B	984	A
12	B	988	A
12	B	991	C
12	B	995	C
12	B	996	A
12	B	1005	C
12	B	1012	U
12	B	1013	C
12	B	1022	G
12	B	1025	G
12	B	1033	U
12	B	1046	A
12	B	1054	A
12	B	1056	G
12	B	1057	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	1061	U
12	B	1062	G
12	B	1070	A
12	B	1071	G
12	B	1077	A
12	B	1078	U
12	B	1083	U
12	B	1085	A
12	B	1088	A
12	B	1090	A
12	B	1095	A
12	B	1096	A
12	B	1104	C
12	B	1112	G
12	B	1116	G
12	B	1130	U
12	B	1132	U
12	B	1133	A
12	B	1134	A
12	B	1135	C
12	B	1136	G
12	B	1142	A
12	B	1171	G
12	B	1174	U
12	B	1175	A
12	B	1176	U
12	B	1205	A
12	B	1206	G
12	B	1211	C
12	B	1212	G
12	B	1237	A
12	B	1238	G
12	B	1241	A
12	B	1242	U
12	B	1248	G
12	B	1250	G
12	B	1253	A
12	B	1256	G
12	B	1266	G
12	B	1271	G
12	B	1272	A
12	B	1273	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	1275	A
12	B	1276	A
12	B	1284	A
12	B	1285	A
12	B	1300	G
12	B	1301	A
12	B	1312	U
12	B	1313	U
12	B	1321	A
12	B	1325	U
12	B	1332	G
12	B	1333	G
12	B	1337	G
12	B	1341	G
12	B	1352	U
12	B	1365	A
12	B	1368	G
12	B	1374	G
12	B	1379	U
12	B	1380	G
12	B	1383	A
12	B	1386	C
12	B	1392	A
12	B	1393	A
12	B	1394	U
12	B	1396	U
12	B	1416	G
12	B	1417	C
12	B	1419	A
12	B	1420	A
12	B	1421	G
12	B	1427	A
12	B	1428	C
12	B	1452	G
12	B	1453	A
12	B	1458	U
12	B	1459	G
12	B	1460	U
12	B	1461	C
12	B	1469	A
12	B	1476	U
12	B	1477	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	1478	G
12	B	1482	G
12	B	1490	A
12	B	1493	C
12	B	1496	A
12	B	1497	U
12	B	1498	C
12	B	1504	A
12	B	1505	A
12	B	1507	C
12	B	1509	A
12	B	1510	G
12	B	1523	U
12	B	1524	G
12	B	1532	A
12	B	1535	A
12	B	1536	C
12	B	1538	G
12	B	1552	A
12	B	1578	U
12	B	1585	C
12	B	1608	A
12	B	1610	A
12	B	1614	A
12	B	1617	C
12	B	1618	A
12	B	1634	A
12	B	1635	A
12	B	1640	A
12	B	1647	U
12	B	1648	U
12	B	1654	A
12	B	1671	U
12	B	1672	A
12	B	1674	G
12	B	1676	A
12	B	1700	A
12	B	1714	U
12	B	1715	G
12	B	1729	U
12	B	1731	G
12	B	1733	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	1738	G
12	B	1739	A
12	B	1756	G
12	B	1758	U
12	B	1759	A
12	B	1761	C
12	B	1763	G
12	B	1764	C
12	B	1773	A
12	B	1781	U
12	B	1784	A
12	B	1786	A
12	B	1787	A
12	B	1800	C
12	B	1801	A
12	B	1808	A
12	B	1809	A
12	B	1816	C
12	B	1828	G
12	B	1829	A
12	B	1847	A
12	B	1848	A
12	B	1870	C
12	B	1871	A
12	B	1884	G
12	B	1888	G
12	B	1889	A
12	B	1906	G
12	B	1913	A
12	B	1916	A
12	B	1917	U
12	B	1929	G
12	B	1930	G
12	B	1936	A
12	B	1938	A
12	B	1940	U
12	B	1941	C
12	B	1942	C
12	B	1944	U
12	B	1952	A
12	B	1955	U
12	B	1962	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	1963	U
12	B	1965	C
12	B	1966	A
12	B	1967	C
12	B	1970	A
12	B	1971	U
12	B	1972	G
12	B	1991	U
12	B	1993	U
12	B	1997	C
12	B	2020	A
12	B	2022	U
12	B	2023	C
12	B	2032	G
12	B	2043	C
12	B	2055	C
12	B	2056	G
12	B	2059	A
12	B	2060	A
12	B	2061	G
12	B	2062	A
12	B	2065	C
12	B	2069	G
12	B	2076	U
12	B	2077	A
12	B	2102	G
12	B	2104	C
12	B	2111	U
12	B	2112	G
12	B	2116	G
12	B	2117	A
12	B	2119	A
12	B	2120	G
12	B	2126	A
12	B	2128	G
12	B	2129	C
12	B	2131	U
12	B	2132	U
12	B	2133	G
12	B	2134	A
12	B	2135	A
12	B	2136	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	2137	U
12	B	2144	G
12	B	2145	C
12	B	2147	A
12	B	2148	G
12	B	2149	U
12	B	2153	C
12	B	2155	U
12	B	2158	A
12	B	2159	G
12	B	2160	C
12	B	2161	C
12	B	2164	C
12	B	2165	C
12	B	2166	U
12	B	2167	U
12	B	2172	U
12	B	2176	A
12	B	2178	C
12	B	2179	C
12	B	2181	U
12	B	2183	A
12	B	2187	U
12	B	2192	U
12	B	2198	A
12	B	2199	A
12	B	2203	U
12	B	2204	G
12	B	2210	U
12	B	2211	A
12	B	2212	A
12	B	2213	U
12	B	2214	C
12	B	2225	A
12	B	2238	G
12	B	2239	G
12	B	2251	G
12	B	2266	A
12	B	2278	A
12	B	2279	G
12	B	2283	C
12	B	2286	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	2287	A
12	B	2288	A
12	B	2297	A
12	B	2305	U
12	B	2307	G
12	B	2308	G
12	B	2310	C
12	B	2311	A
12	B	2320	U
12	B	2321	U
12	B	2322	A
12	B	2324	U
12	B	2325	G
12	B	2334	U
12	B	2335	A
12	B	2336	A
12	B	2337	G
12	B	2347	C
12	B	2383	G
12	B	2385	C
12	B	2396	G
12	B	2402	U
12	B	2406	A
12	B	2407	A
12	B	2423	U
12	B	2426	A
12	B	2429	G
12	B	2430	A
12	B	2434	A
12	B	2441	U
12	B	2447	G
12	B	2448	A
12	B	2449	U
12	B	2472	G
12	B	2474	U
12	B	2476	A
12	B	2478	A
12	B	2491	U
12	B	2498	C
12	B	2502	G
12	B	2503	A
12	B	2505	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	2506	U
12	B	2519	U
12	B	2520	C
12	B	2529	G
12	B	2535	G
12	B	2554	U
12	B	2566	A
12	B	2567	G
12	B	2573	C
12	B	2585	U
12	B	2586	U
12	B	2602	A
12	B	2609	U
12	B	2613	U
12	B	2629	U
12	B	2661	G
12	B	2682	A
12	B	2689	U
12	B	2690	U
12	B	2691	C
12	B	2714	G
12	B	2744	G
12	B	2748	A
12	B	2751	G
12	B	2757	A
12	B	2765	A
12	B	2778	A
12	B	2780	G
12	B	2791	G
12	B	2793	C
12	B	2797	U
12	B	2799	A
12	B	2800	A
12	B	2820	A
12	B	2821	A
12	B	2833	U
12	B	2834	G
12	B	2836	U
12	B	2849	U
12	B	2850	A
12	B	2867	G
12	B	2872	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	2873	A
12	B	2879	A
12	B	2883	A
12	B	2885	G
12	B	2893	A
12	B	2894	G

All (99) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
11	A	15	A
11	A	66	A
11	A	87	U
12	B	50	U
12	B	102	U
12	B	139	U
12	B	180	G
12	B	196	A
12	B	276	U
12	B	311	A
12	B	320	A
12	B	329	G
12	B	451	U
12	B	491	G
12	B	532	A
12	B	614	A
12	B	615	U
12	B	631	A
12	B	653	U
12	B	669	G
12	B	670	A
12	B	686	U
12	B	784	G
12	B	788	A
12	B	811	U
12	B	827	U
12	B	830	G
12	B	858	G
12	B	880	G
12	B	888	C
12	B	889	C
12	B	890	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	891	G
12	B	933	A
12	B	961	C
12	B	973	A
12	B	1008	A
12	B	1050	A
12	B	1133	A
12	B	1205	A
12	B	1248	G
12	B	1272	A
12	B	1275	A
12	B	1312	U
12	B	1332	G
12	B	1452	G
12	B	1497	U
12	B	1508	A
12	B	1608	A
12	B	1617	C
12	B	1633	G
12	B	1671	U
12	B	1677	A
12	B	1679	A
12	B	1730	C
12	B	1758	U
12	B	1763	G
12	B	1786	A
12	B	1801	A
12	B	1847	A
12	B	1888	G
12	B	1938	A
12	B	1940	U
12	B	1943	U
12	B	1963	U
12	B	2051	A
12	B	2058	A
12	B	2076	U
12	B	2111	U
12	B	2116	G
12	B	2118	U
12	B	2133	G
12	B	2134	A
12	B	2145	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	B	2147	A
12	B	2158	A
12	B	2160	C
12	B	2172	U
12	B	2198	A
12	B	2282	G
12	B	2286	G
12	B	2307	G
12	B	2308	G
12	B	2320	U
12	B	2324	U
12	B	2333	A
12	B	2336	A
12	B	2425	A
12	B	2430	A
12	B	2447	G
12	B	2502	G
12	B	2519	U
12	B	2585	U
12	B	2601	C
12	B	2660	A
12	B	2712	C
12	B	2713	U
12	B	2756	U
12	B	2893	A

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

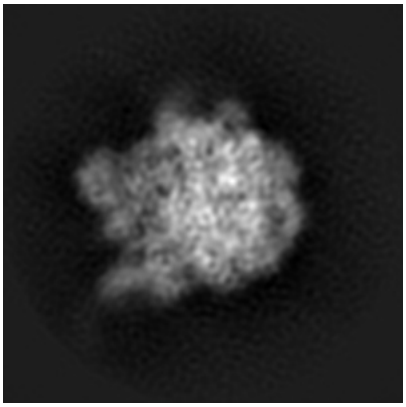
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-2605. These allow visual inspection of the internal detail of the map and identification of artifacts.

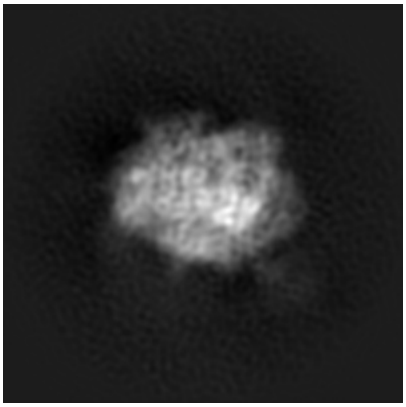
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

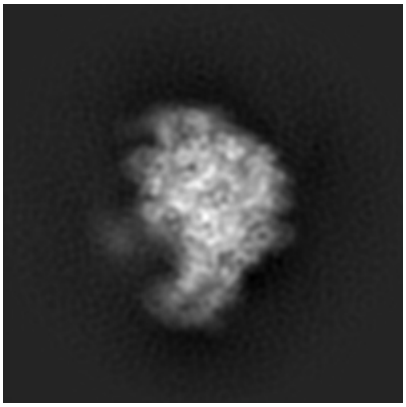
6.1.1 Primary map



X



Y

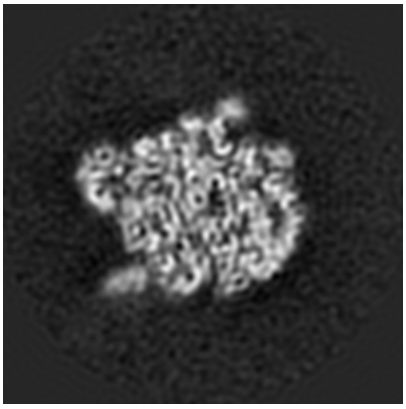


Z

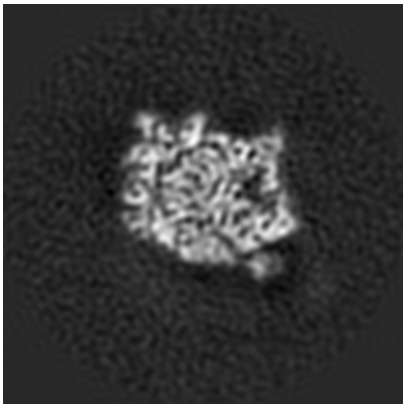
The images above show the map projected in three orthogonal directions.

6.2 Central slices

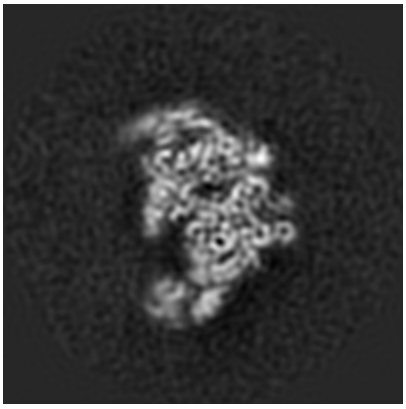
6.2.1 Primary map



X Index: 128



Y Index: 128

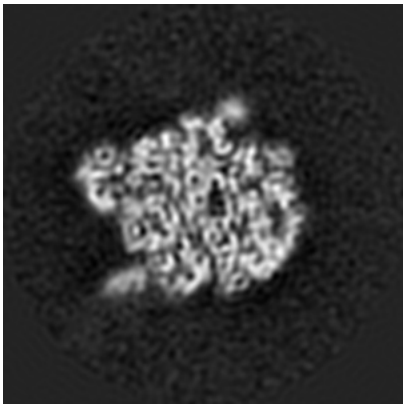


Z Index: 128

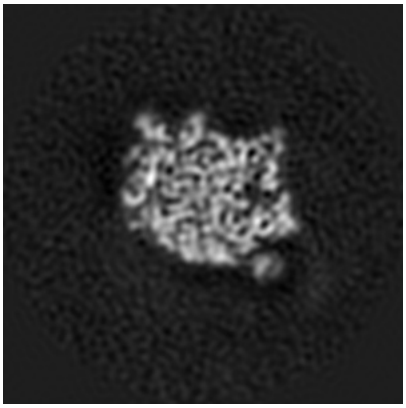
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

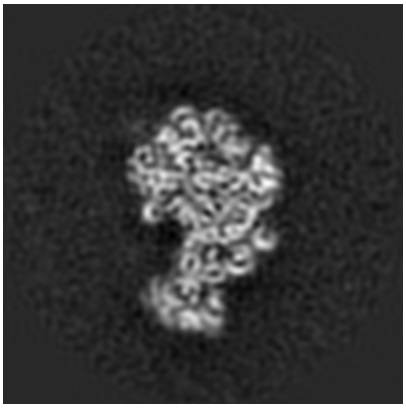
6.3.1 Primary map



X Index: 129



Y Index: 126

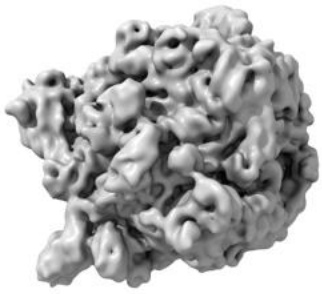


Z Index: 143

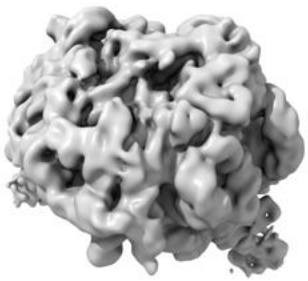
The images above show the largest variance slices of the map in three orthogonal directions.

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 0.045. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

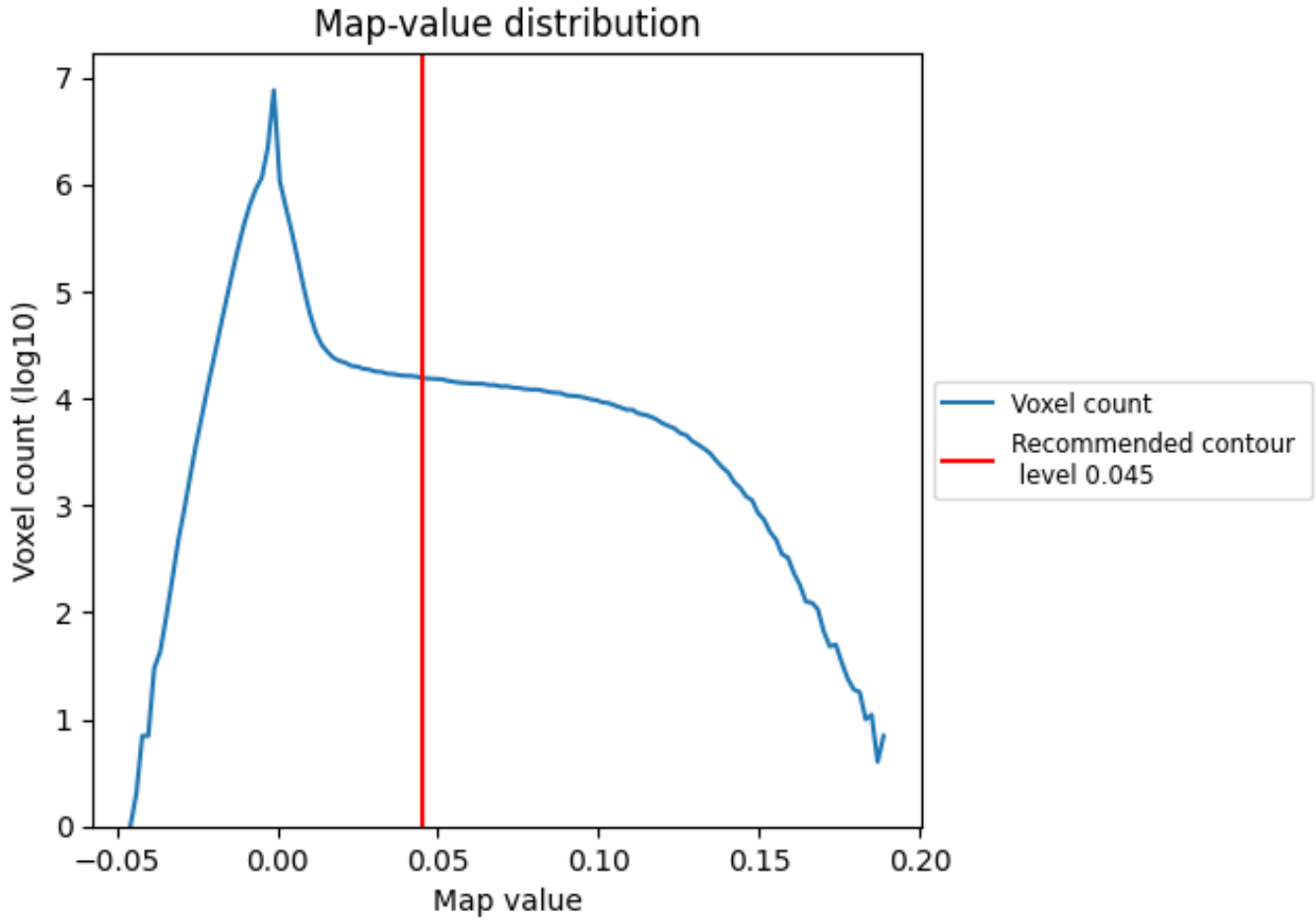
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

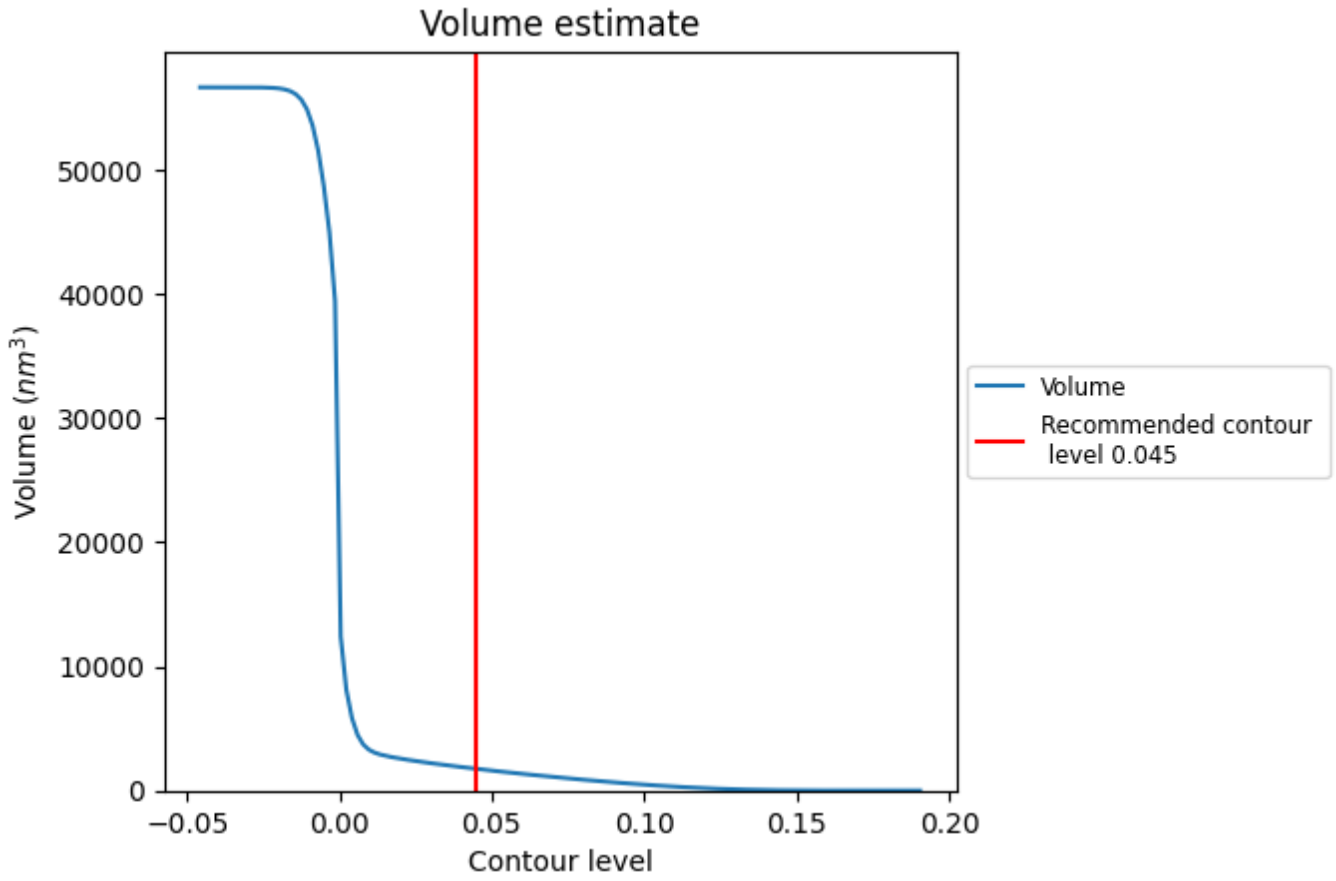
This section contains the results of statistical analysis of the map.

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.

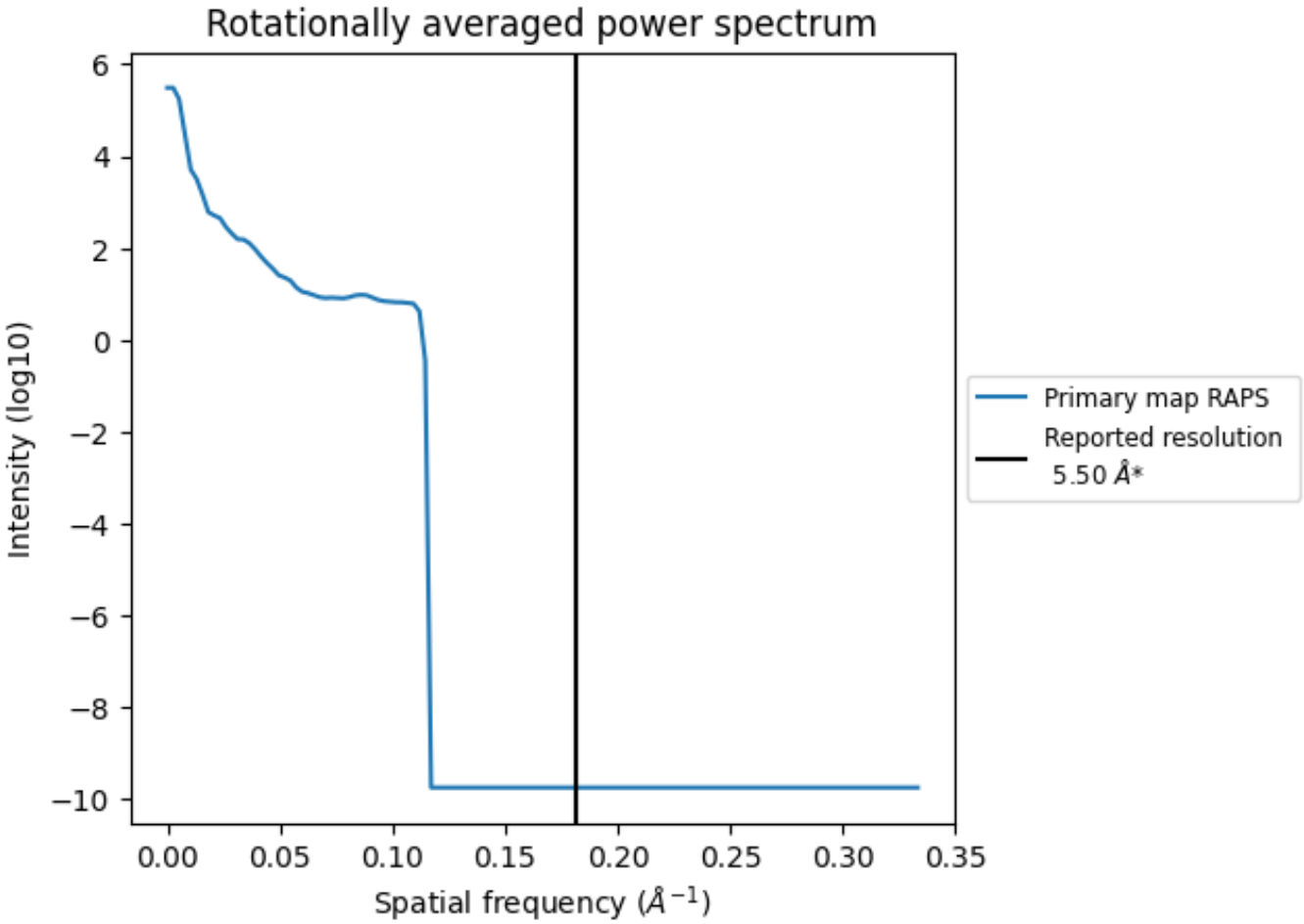
7.2 Volume estimate



The volume at the recommended contour level is 1748 nm^3; this corresponds to an approximate mass of 1579 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 0.182 Å^{-1}

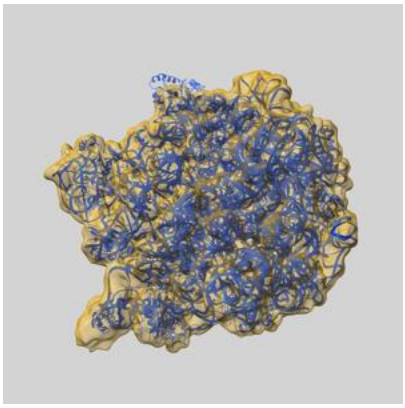
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

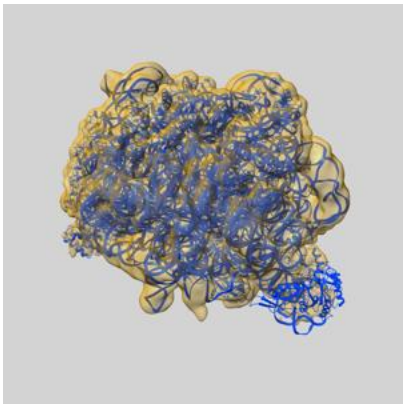
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-2605 and PDB model 4CSU. Per-residue inclusion information can be found in section 3 on page 10.

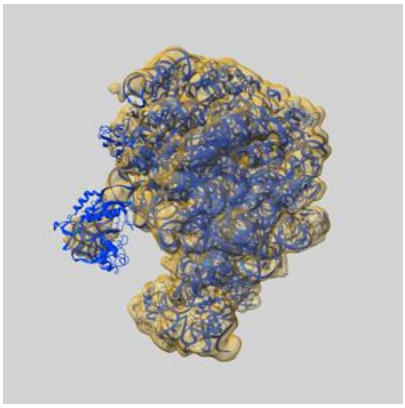
9.1 Map-model overlay



X



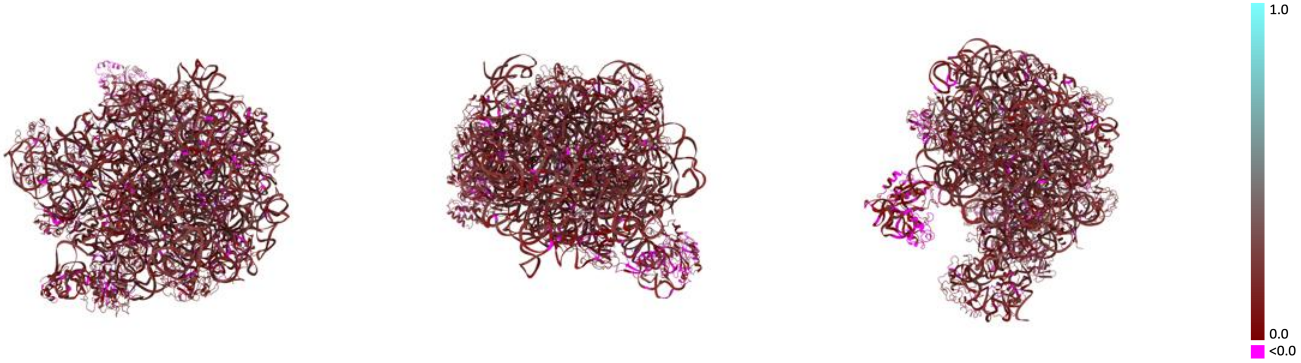
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.045 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

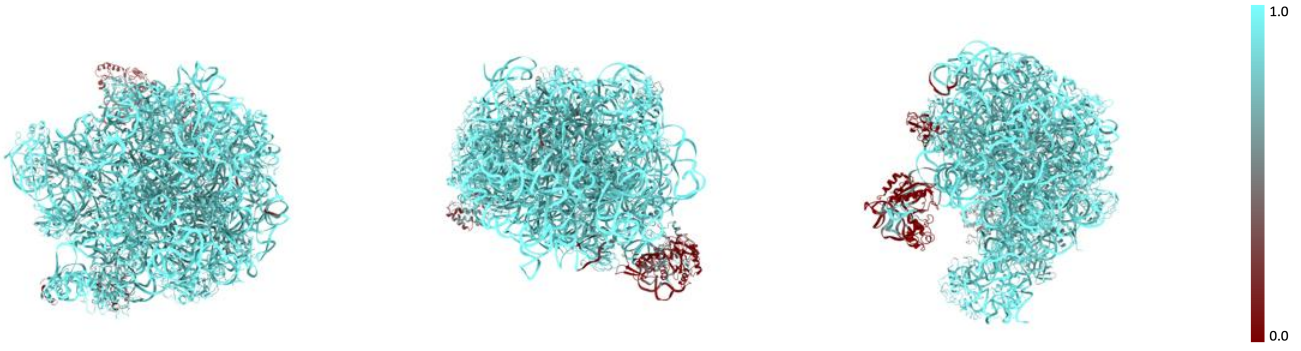
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

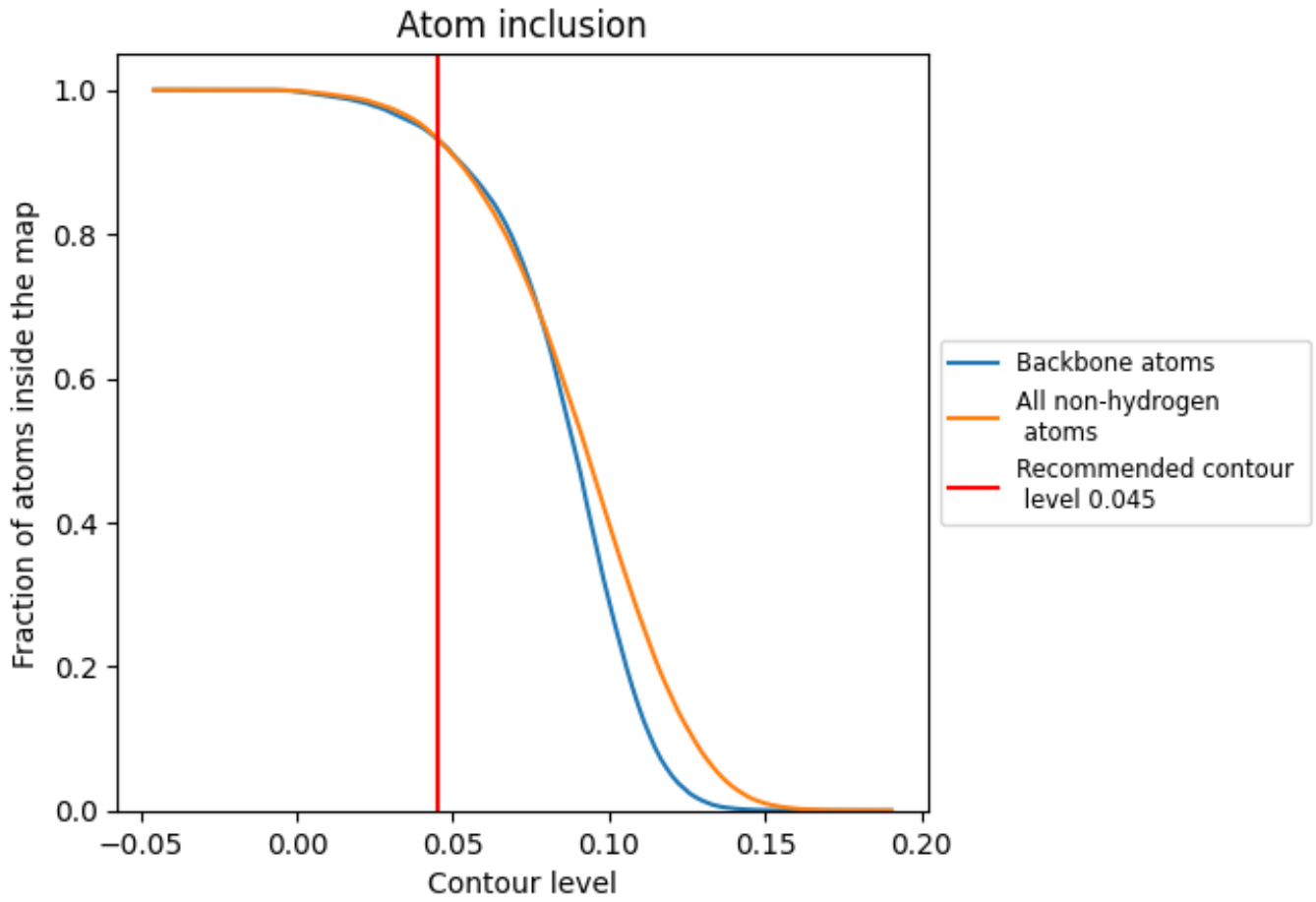
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.045).

9.4 Atom inclusion (i)



At the recommended contour level, 93% of all backbone atoms, 93% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.045) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9326	0.1580
0	0.9018	0.1240
1	0.9859	0.1510
2	0.9153	0.1450
3	0.8505	0.0740
4	0.7786	0.0940
5	0.0843	0.0310
6	0.9352	0.1170
7	0.9328	0.1150
8	0.9726	0.0750
9	0.6847	0.1020
A	0.9984	0.1940
B	0.9728	0.1770
C	0.9440	0.1260
D	0.9597	0.1280
E	0.9072	0.1380
F	0.9530	0.1170
G	0.9249	0.1390
H	0.3157	0.0780
I	0.8098	0.0820
J	0.9564	0.1520
K	0.9614	0.1330
L	0.9488	0.1220
M	0.9597	0.1390
N	0.9317	0.1200
O	0.9815	0.1260
P	0.9459	0.1390
Q	0.9394	0.1150
R	0.9435	0.1360
S	0.9222	0.1300
T	0.9544	0.1280
U	0.9559	0.1220
W	0.9255	0.1430
Y	0.9241	0.0970