



Full wwPDB/EMDatabank EM Map/Model Validation Report ⓘ

Mar 2, 2017 – 12:29 pm GMT

PDB ID : 4V69
EMDB ID: : EMD-5036
Title : Ternary complex-bound E.coli 70S ribosome.
Authors : Villa, E.; Sengupta, J.; Trabuco, L.G.; LeBarron, J.; Baxter, W.T.; Shaikh, T.R.; Grassucci, R.A.; Nissen, P.; Ehrenberg, M.; Schulten, K.; Frank, J.
Deposited on : 2008-12-11
Resolution : 6.70 Å(reported)
Based on PDB ID : 2i2u, 2i2v, 2j00, 1ob2

This is a Full wwPDB/EMDatabank EM Map/Model Validation Report
for a publicly released PDB/EMDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<http://wwpdb.org/validation/2016/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

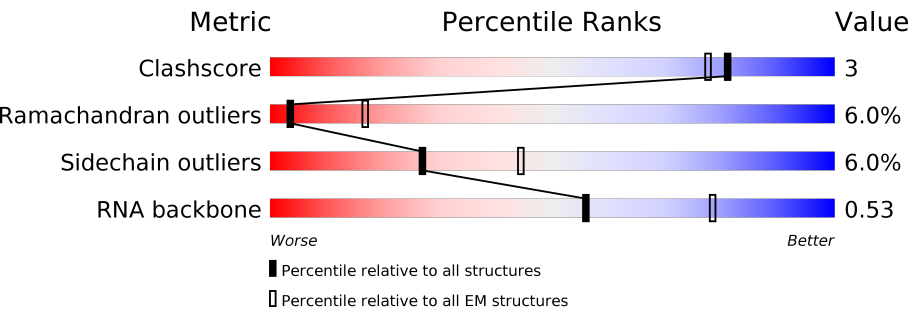
MolProbity : 4.02b-467
Mogul : 1.7.2 (RC1), CSD as538be (2017)
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : recalc29047

1 Overall quality at a glance i

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

The reported resolution of this entry is 6.70 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	125131	1336
Ramachandran outliers	121729	1120
Sidechain outliers	121581	1026
RNA backbone	3398	335

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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 $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	AJ	98	<div><div>66%</div><div>26%</div><div>7%</div><div>.</div></div>
2	AK	117	<div><div>69%</div><div>26%</div><div>.</div><div>.</div></div>
3	AL	123	<div><div>67%</div><div>26%</div><div>7%</div><div>.</div></div>
4	AM	113	<div><div>58%</div><div>28%</div><div>13%</div></div>
5	AN	96	<div><div>58%</div><div>28%</div><div>13%</div><div>.</div></div>
6	AO	88	<div><div>65%</div><div>27%</div><div>6%</div><div>.</div></div>
7	AP	80	<div><div>65%</div><div>29%</div><div>6%</div></div>
8	AQ	80	<div><div>74%</div><div>18%</div><div>9%</div></div>


























Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	AR	55	
10	AS	79	
11	AT	85	
12	AU	51	
13	AB	218	
14	AC	206	
15	AD	205	
16	AE	150	
17	AF	100	
18	AG	150	
19	AH	129	
20	AI	127	
21	AA	1530	
22	AY	76	
23	AW	76	
24	AX	11	
25	AZ	393	
26	AV	77	
27	B5	234	
28	BI	141	
29	BJ	142	
30	BK	121	
31	BL	143	
32	BM	136	
33	BN	120	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
34	BO	116	
35	BP	114	
36	BQ	117	
37	BR	103	
38	BS	110	
39	BT	93	
40	BU	102	
41	BV	94	
42	BW	79	
43	BX	77	
44	BY	63	
45	BC	271	
46	BZ	58	
47	B0	56	
48	B1	50	
49	B2	46	
50	B3	64	
51	B4	38	
52	BD	209	
53	BE	201	
54	BF	178	
55	BG	176	
56	BH	149	
57	BB	2903	
58	BA	117	

2 Entry composition [i](#)

There are 59 unique types of molecules in this entry. The entry contains 152250 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AJ	98	Total	C	N	O	S	0	0
			787	493	150	143	1		

- Molecule 2 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AK	117	Total	C	N	O	S	0	0
			877	540	174	160	3		

- Molecule 3 is a protein called 30S ribosomal protein S12.

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

- Molecule 4 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	AM	113	Total	C	N	O	S	0	0
			877	541	177	156	3		

- Molecule 5 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	AN	96	Total	C	N	O	S	0	0
			774	483	160	128	3		

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AN	?	-	SER	DELETION	UNP P0AG59
AN	?	-	ASP	DELETION	UNP P0AG59
AN	?	-	GLU	DELETION	UNP P0AG59

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
AN	?	-	ASP	DELETION	UNP P0AG59

- Molecule 6 is a protein called 30S ribosomal protein S15.

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

- Molecule 7 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AP	80	Total	C	N	O	S	0	0
			639	400	126	112	1		

- Molecule 8 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AQ	80	Total	C	N	O	S	0	0
			649	411	121	114	3		

- Molecule 9 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	AR	55	Total	C	N	O	0	0
			456	288	86	82		

- Molecule 10 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AS	79	Total	C	N	O	S	0	0
			638	408	120	108	2		

- Molecule 11 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AT	85	Total	C	N	O	S	0	0
			665	411	137	114	3		

- Molecule 12 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AU	51	Total	C	N	O	S	0	0
			426	265	86	74	1		

- Molecule 13 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AB	218	Total	C	N	O	S	0	0
			1705	1081	305	312	7		

- Molecule 14 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AC	206	Total	C	N	O	S	0	0
			1625	1028	305	289	3		

- Molecule 15 is a protein called 30S ribosomal protein S4.

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

- Molecule 16 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AE	150	Total	C	N	O	S	0	0
			1106	687	211	202	6		

- Molecule 17 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AF	100	Total	C	N	O	S	0	0
			818	515	148	149	6		

- Molecule 18 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AG	150	Total	C	N	O	S	0	0
			1175	730	226	215	4		

- Molecule 19 is a protein called 30S ribosomal protein S8.

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

- Molecule 20 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AI	127	Total	C	N	O	S	0	0
			1022	634	206	179	3		

- Molecule 21 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AA	1530	Total	C	N	O	P	0	0
			32832	14642	6024	10636	1530		

- Molecule 22 is a RNA chain called A/T-site tRNA Phe.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AY	76	Total	C	N	O	P	0	0
			1622	725	293	529	75		

- Molecule 23 is a RNA chain called P-site tRNA fMet (Unmodified bases except for Thymine 54).

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AW	76	Total	C	N	O	P	0	0
			1619	723	290	531	75		

- Molecule 24 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AX	11	Total	C	N	O	P	0	0
			232	106	44	72	10		

- Molecule 25 is a protein called Elongation factor Tu.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	AZ	393	Total	C	N	O	S	0	0
			3035	1918	523	581	13		

- Molecule 26 is a RNA chain called E-site tRNA Phe.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AV	77	Total	C	N	O	P	0	0
			1645	733	297	538	77		

- Molecule 27 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	B5	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 28 is a protein called 50S ribosomal protein L11.

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

- Molecule 29 is a protein called 50S ribosomal protein L13.

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

- Molecule 30 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	BK	121	Total	C	N	O	S	0	0
			931	582	179	165	5		

- Molecule 31 is a protein called 50S ribosomal protein L15.

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

- Molecule 32 is a protein called 50S ribosomal protein L16.

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

- Molecule 33 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	BN	120	Total	C	N	O	S	0	0
			961	593	196	167	5		

- Molecule 34 is a protein called 50S ribosomal protein L18.

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

- Molecule 35 is a protein called 50S ribosomal protein L19.

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

- Molecule 36 is a protein called 50S ribosomal protein L20.

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

- Molecule 37 is a protein called 50S ribosomal protein L21.

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

- Molecule 38 is a protein called 50S ribosomal protein L22.

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

- Molecule 39 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	BT	93	Total	C	N	O	S	0	0
			739	466	139	132	2		

- Molecule 40 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				AltConf	Trace
40	BU	102	Total	C	N	O		
			780	492	146	142	0	0

- Molecule 41 is a protein called 50S ribosomal protein L25.

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

- Molecule 42 is a protein called 50S ribosomal protein L27.

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

- Molecule 43 is a protein called 50S ribosomal protein L28.

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

- Molecule 44 is a protein called 50S ribosomal protein L29.

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

- Molecule 45 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	BC	271	Total	C	N	O	S		
			2083	1288	423	365	7	0	0

- Molecule 46 is a protein called 50S ribosomal protein L30.

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

- Molecule 47 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	B0	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 48 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	B1	50	Total	C	N	O	S	0	0
			410	263	75	72			

- Molecule 49 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	B2	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
50	B3	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 51 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	B4	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 52 is a protein called 50S ribosomal protein L3.

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

- Molecule 53 is a protein called 50S ribosomal protein L4.

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

- Molecule 54 is a protein called 50S ribosomal protein L5.

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

- Molecule 55 is a protein called 50S ribosomal protein L6.

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

- Molecule 56 is a protein called 50S ribosomal protein L9.

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

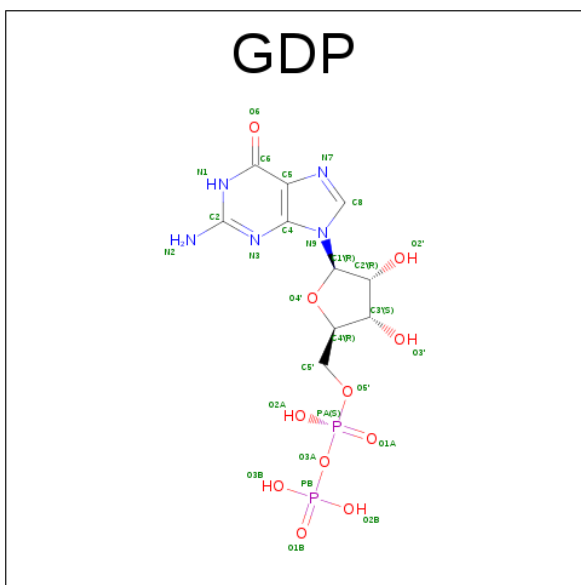
- Molecule 57 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	BB	2903	Total	C	N	O	P	0	0
			62321	27801	11467	20150	2903		

- Molecule 58 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	BA	117	Total	C	N	O	P	0	0
			2508	1116	459	816	117		

- Molecule 59 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula: C₁₀H₁₅N₅O₁₁P₂).

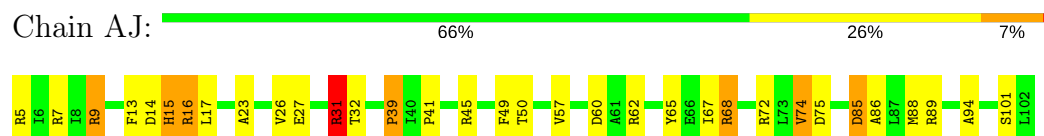


Mol	Chain	Residues	Atoms					AltConf
59	AZ	1	Total	C	N	O	P	0
			28	10	5	11	2	

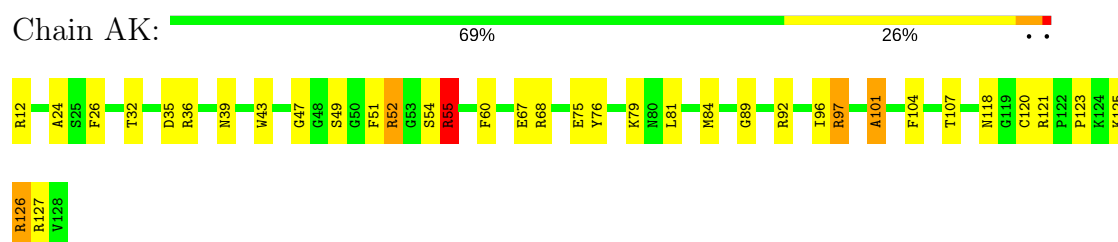
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA 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. 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. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

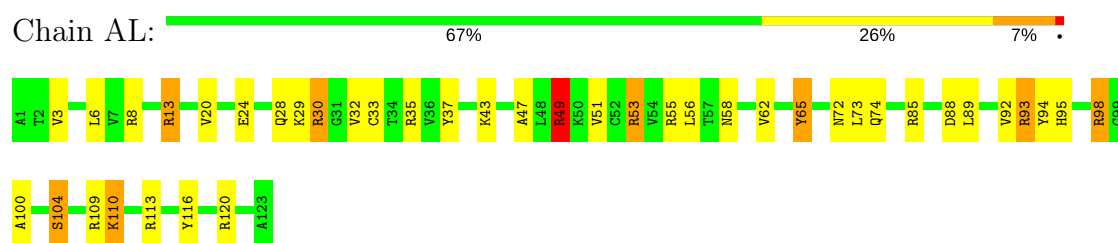
- Molecule 1: 30S ribosomal protein S10



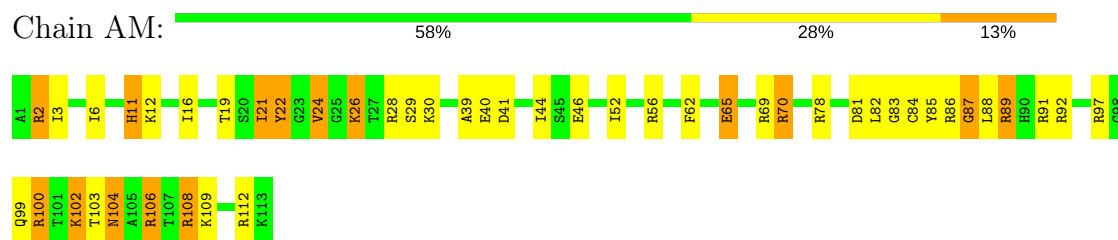
- Molecule 2: 30S ribosomal protein S11



- Molecule 3: 30S ribosomal protein S12

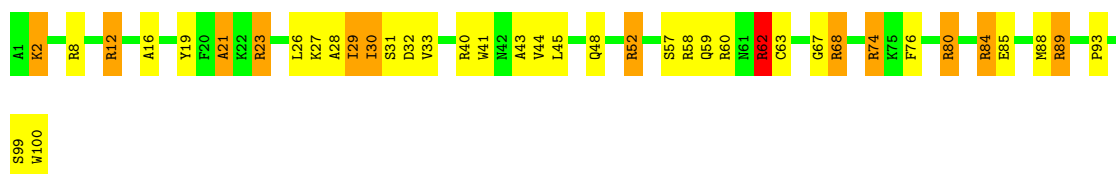


- Molecule 4: 30S ribosomal protein S13



- Molecule 5: 30S ribosomal protein S14





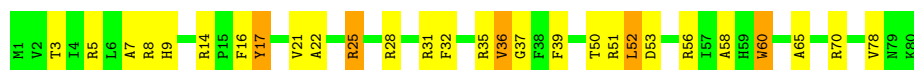
- Molecule 6: 30S ribosomal protein S15

Chain AO: 65% 27% 6% .



- Molecule 7: 30S ribosomal protein S16

Chain AP: 65% 29% 6%



- Molecule 8: 30S ribosomal protein S17

Chain AQ: 74% 18% 9%



- Molecule 9: 30S ribosomal protein S18

Chain AR: 67% 22% 11%



- Molecule 10: 30S ribosomal protein S19

Chain AS: 65% 27% 9%



- Molecule 11: 30S ribosomal protein S20

Chain AT: 76% 20%



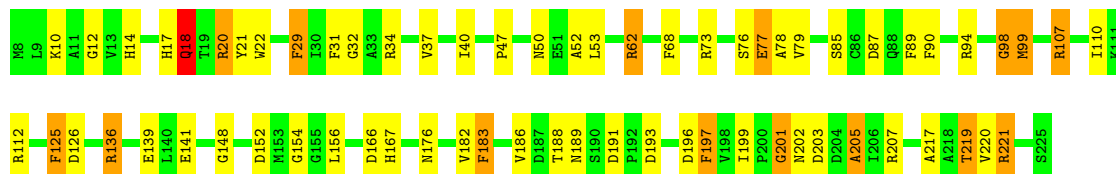
- Molecule 12: 30S ribosomal protein S21

Chain AU: 59% 29% 12%



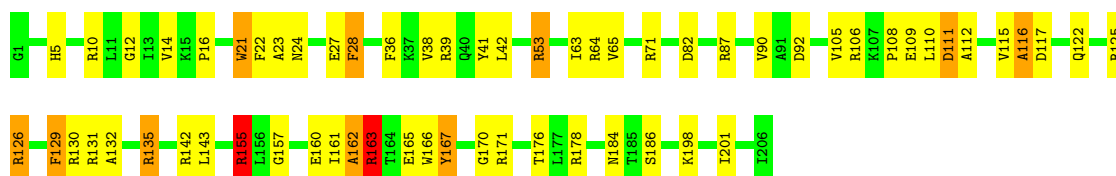
- Molecule 13: 30S ribosomal protein S2

Chain AB: 70% 23% 7%



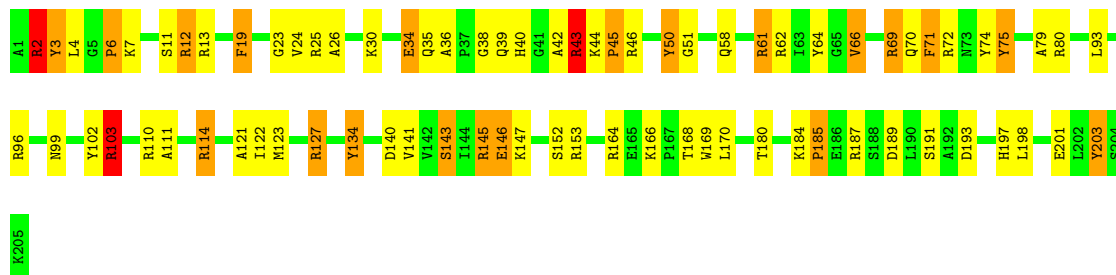
- Molecule 14: 30S ribosomal protein S3

Chain AC: 70% 24% 5%



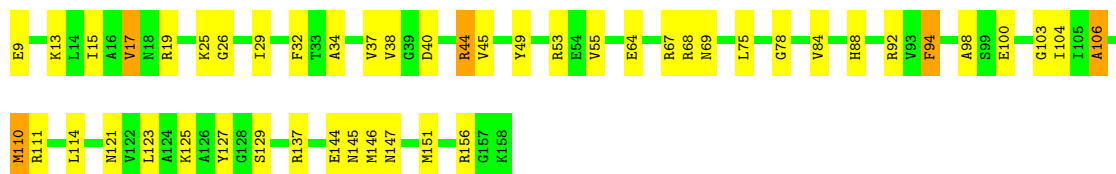
- Molecule 15: 30S ribosomal protein S4

Chain AD: 62% 26% 10%



- Molecule 16: 30S ribosomal protein S5

Chain AE: 68% 29% 3%



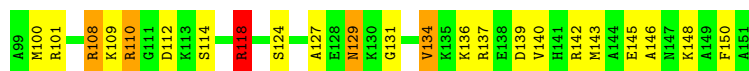
- Molecule 17: 30S ribosomal protein S6

Chain AF: 69% 25% 5%



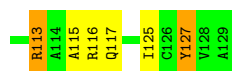
- Molecule 18: 30S ribosomal protein S7

Chain AG: 60% 33% 6%



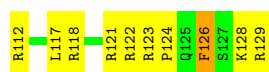
- Molecule 19: 30S ribosomal protein S8

Chain AH: 68% 27% 5%



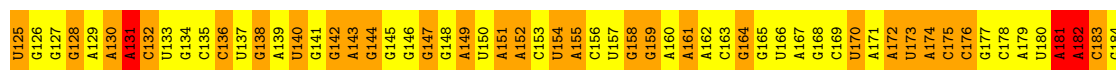
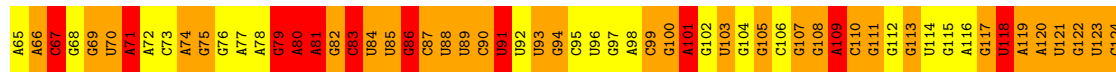
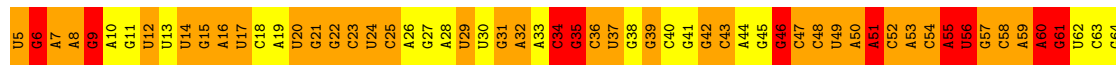
- Molecule 20: 30S ribosomal protein S9

Chain AI: 65% 28% 6%

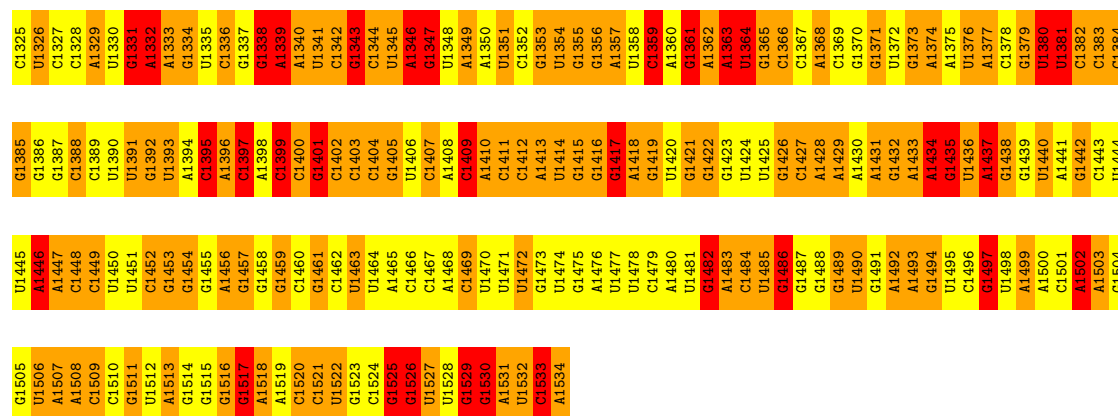


- Molecule 21: 16S rRNA

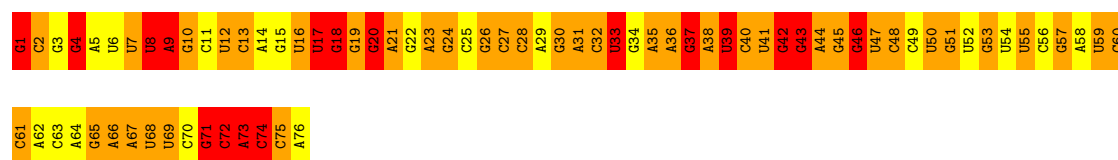
Chain AA: 36% 47% 16%



C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G725	A865	U605	C545	U485	G425	U365	G305
G1266	G1206	A1146	U1086	G1026	G966	A906	G846	G726	G866	G606	A546	U486	U426	A366	A306
C1267	C1207	U1147	G1087	C1027	G967	A907	G847	G727	G867	A607	A547	U487	U427	U367	C307
G1268	G1208	U1148	G1088	C1028	G968	A908	G848	A728	G868	A608	C548	C488	C428	U368	C308
A1269	A1209	C1149	G1089	U1029	G969	A909	G849	A729	G869	A609	C549	C489	U429	G369	A309
C1210	C1210	C1150	U1090	U1030	C970	C910	U850	G730	G670	U610	C550	C490	A430	C370	G310
A1211	A1211	A1151	U1091	C1031	G971	U911	G851	G731	G871	C611	U551	G491	A431	A371	C311
G1212	U1212	A1152	A1092	G1032	C972	C912	G852	G732	U872	C612	U552	C492	A432	C372	C312
C1213	C1213	G1153	A1093	G1033	G973	A913	C853	G733	U873	C613	A553	G493	A433	A373	A313
A1214	C1214	G1154	G1094	A1034	A974	A914	U854	G734	G874	C614	A554	G494	U434	A374	C314
G1215	G1215	A1155	U1095	A1035	A975	A915	U855	G735	G875	G615	U555	G495	U375	U375	A315
C1216	A1216	C1156	C1096	A1036	G976	U916	C856	G736	G876	G616	C556	A496	C436	G376	G316
G1217	G1217	A1157	C1097	C1037	G977	G917	C857	G737	U877	C617	U557	G497	U437	G377	U317
C1218	C1218	C1158	C1098	C1038	A978	A918	C858	G738	U878	C618	C558	A498	U438	G378	G318
A1219	A1219	U1159	G1099	G1039	C979	A919	G859	G739	C879	U619	A559	A499	U439	C379	G319
G1220	G1220	U1160	C1100	U1040	C980	U920	A860	U740	C880	U620	A560	G500	C440	G380	A320
C1221	C1221	C1161	A1101	G1041	U981	U921	G861	G741	A681	A621	U561	C501	A441	C381	A321
A1222	G1222	C1162	U982	A1042	G982	G922	C862	G742	A682	A622	U562	A502	G442	A382	C322
C1223	C1223	A1163	C1103	G1043	C983	A923	U863	A743	G883	C623	A563	C503	C443	A383	U323
A1224	U1224	G1164	G1104	A1044	C984	C924	A864	G744	U884	C624	C564	C504	G445	C384	G324
C1285	A1225	U1165	A1105	C1045	C985	G925	A865	G745	G885	U625	U565	G505	G445	C385	A325
U1286	C1226	G1166	G1106	A1046	U986	G926	C866	A746	U886	G626	C566	G506	G446	C386	G326
A1287	A1227	A1167	G1107	G1047	G987	G927	G867	A747	A687	G627	C567	C507	G447	U387	A327
C1288	C1228	U1168	G1108	G1048	G988	G928	C868	G748	G888	G628	C568	U508	A448	G388	C328
A1289	A1229	A1169	C1109	U1049	U989	G929	G869	A749	C889	A629	C569	A509	G449	A389	A329
G1290	C1230	A1170	A1110	G1050	C990	C930	U870	G750	G890	A630	C570	A510	G450	U390	C330
U1291	G1231	C1171	A1111	C1051	U991	C931	U871	G751	G891	C631	U571	C511	A451	G391	G331
C1292	U1232	C1172	U992	U1052	U992	C932	A872	G752	U892	U632	A572	U512	A452	C392	C332
G1293	C1233	U1173	C1113	G1053	G993	G933	A873	A753	G893	G633	A573	C513	G453	A393	U333
C1294	A1234	A1174	A994	C1174	C934	C934	G874	G754	A694	C634	A574	C514	G454	G394	C334
U1295	U1235	G1175	U1115	A1055	C995	A935	U875	G755	A695	A635	C575	G515	G455	C395	C335
C1296	A1236	A1176	U1116	U1056	A996	C936	C876	G756	A696	G636	C576	U516	A456	C396	A336
G1297	C1237	U1177	A1117	G1057	U997	A937	G877	G757	U897	C637	G577	C517	G457	A397	G337
A1298	A1238	G1178	G1118	G1058	C998	A938	A878	G758	C898	U638	C578	C518	U458	U398	A338
U1299	C1239	A1179	C1119	C1059	C999	G939	C879	A759	G899	A639	A579	C519	A459	G399	C339
G1300	U1240	A1180	C1120	U1060	A1000	C940	C880	G760	C900	A640	C580	A520	A460	C400	U340
U1301	G1241	G1181	U1121	G1061	C1001	G941	G881	G761	U821	U641	G581	G521	A461	C401	C341
C1302	G1242	G1182	U1122	U1062	G1002	G942	C882	U762	U822	A642	C582	C522	G462	G402	C342
C1243	C1243	U1183	U1123	C1063	G1003	U943	C883	G763	C823	C643	A583	A523	U463	C403	U343
G1244	A1244	G1184	G1124	G1064	A1004	G944	U884	G764	A704	U644	G584	G524	U464	G404	A344
C1245	C1245	G1185	U1125	U1065	A1005	G945	G885	G765	A825	G645	C585	C525	A465	U405	C345
A1306	A1246	G1186	U1126	C1066	G1006	A946	G886	A766	A706	G646	C586	C526	A466	G406	G346
U1307	U1247	G1187	G1127	A1067	U1007	G947	G887	A767	U707	C647	G587	C527	U467	U407	G347
U1308	C1248	A1188	C1128	G1068	U1008	C948	G888	A768	U828	A648	G588	C528	A468	A408	G348
G1309	C1249	U1189	C1129	C1069	U1009	A949	A889	G769	G829	A649	U589	G529	C469	U409	A349
C1310	A1250	G1190	A1130	U1070	U1010	U950	G890	C770	G830	G650	U590	G530	C470	G410	G350
A1311	A1251	A1191	G1131	C1071	C1011	G951	U891	G771	A831	C651	U591	U531	U471	A411	G351
G1312	C1312	C1192	C1132	G1072	A1012	U952	A892	U772	A712	U652	C592	A532	U472	A412	C352
U1313	G1253	G1193	G1133	U1073	G1013	G953	C893	G773	G833	U653	U593	A533	U473	G413	A353
C1314	A1254	U1194	G1134	G1074	A1014	G954	G894	G774	U834	G654	U594	U534	G474	A414	G354
U1315	G1255	C1195	U1135	U1075	G1015	U955	C895	G775	U835	A655	A595	A535	C475	A415	C355
A1256	A1256	A1196	C1136	U1076	A1016	U956	C896	G776	A716	G656	A596	C536	U476	A416	A356
C1317	C1257	U1197	C1137	G1077	U1017	U957	C897	A777	U717	U657	C597	G537	C477	G417	C357
A1318	G1258	G1198	G1138	U1078	G1018	A958	G898	G778	A718	C658	U598	G538	A478	C418	U358
U1319	C1259	U1199	C1139	G1079	C899	U959	G899	G779	C839	U659	C599	A539	U479	C419	G359
C1320	G1260	C1200	C1140	A1080	U1020	U960	A900	A780	C720	C660	A600	G540	U480	U420	G360
U1321	A1261	A1201	C1141	A1081	A1021	U961	A901	A781	G721	C661	G541	G541	G481	U421	G361
C1322	C1262	U1202	G1142	A1082	A1022	C962	G902	A782	G722	U662	A602	G542	A482	C422	G362
G1323	C1263	U1083	G1143	U1083	A1023	G963	G903	A783	U723	A663	U603	G543	C483	G423	A363
A1324	U1264	A1204	G1144	G1084	G1024	A964	U904	A784	G724	G664	G544	G544	G484	G424	A364



• Molecule 22: A/T-site tRNA Phe



• Molecule 23: P-site tRNA fMet (Unmodified bases except for Thymine 54)



• Molecule 24: mRNA

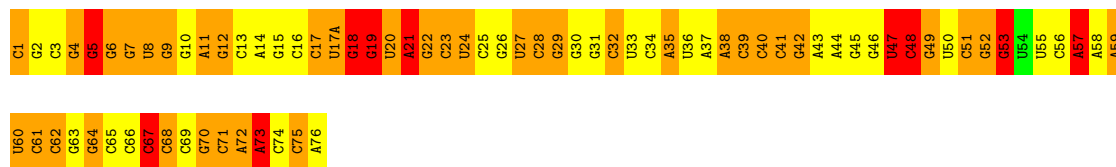


• Molecule 25: Elongation factor Tu

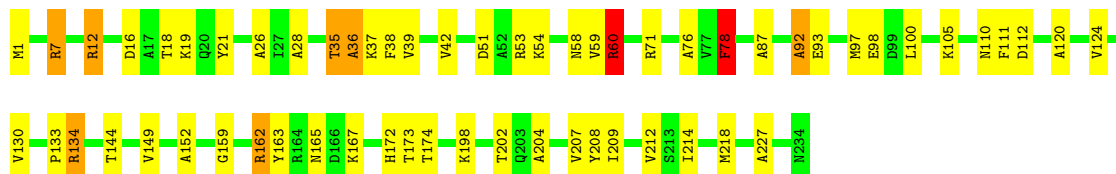
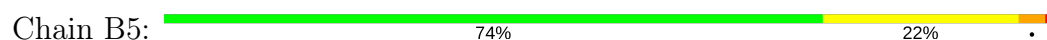




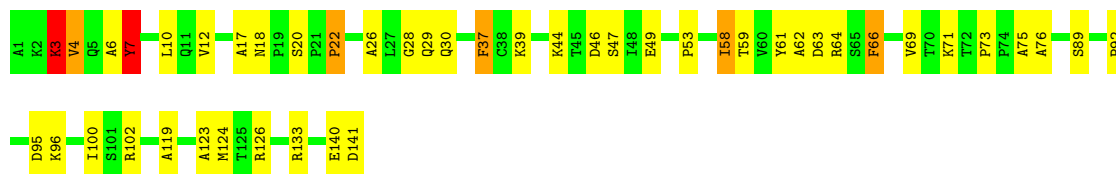
• Molecule 26: E-site tRNA Phe



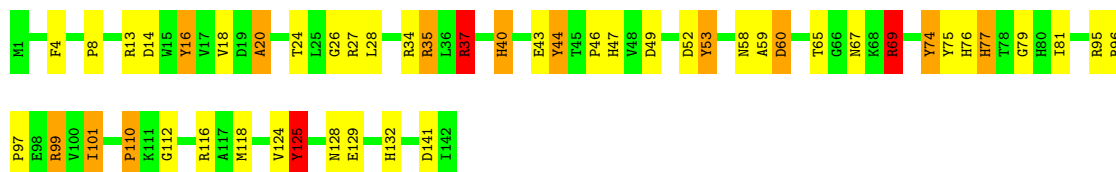
• Molecule 27: 50S ribosomal protein L1



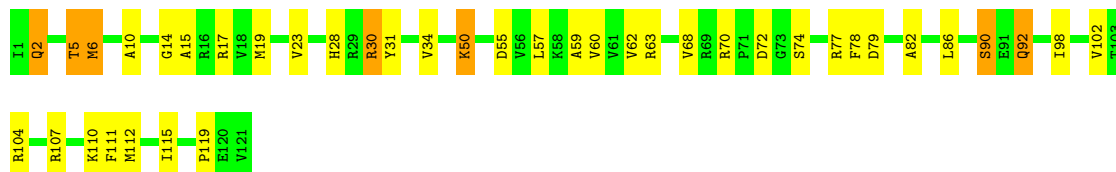
• Molecule 28: 50S ribosomal protein L11



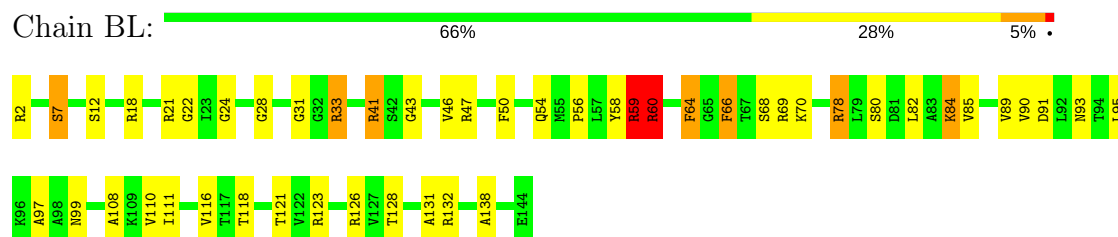
• Molecule 29: 50S ribosomal protein L13



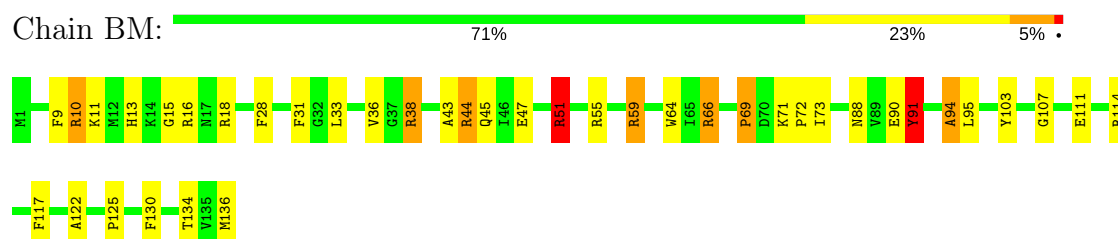
• Molecule 30: 50S ribosomal protein L14



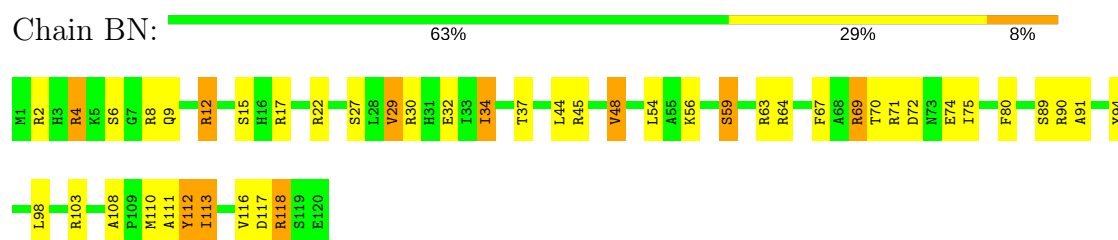
- Molecule 31: 50S ribosomal protein L15



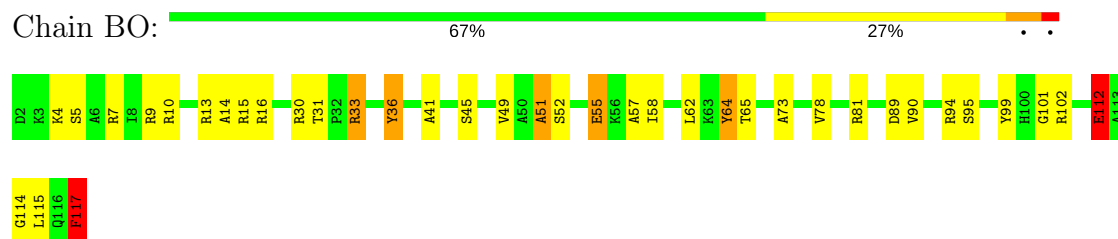
- Molecule 32: 50S ribosomal protein L16



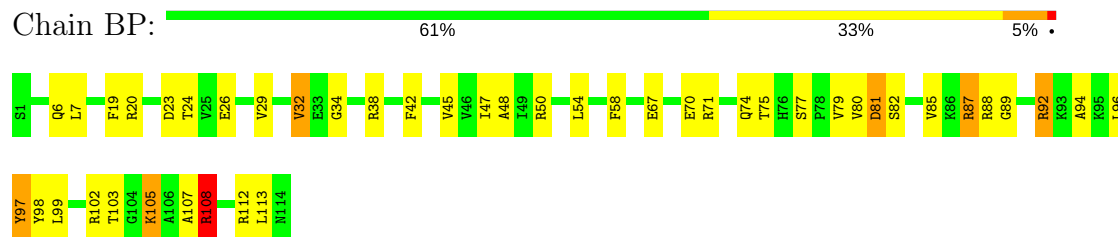
- Molecule 33: 50S ribosomal protein L17



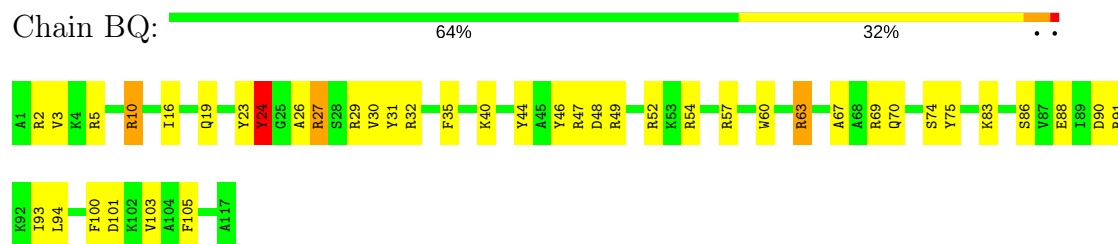
- Molecule 34: 50S ribosomal protein L18



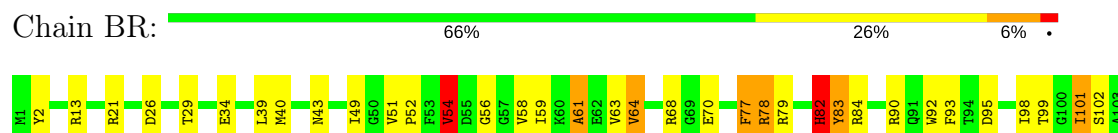
- Molecule 35: 50S ribosomal protein L19



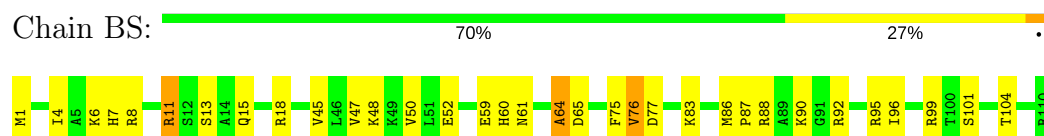
- Molecule 36: 50S ribosomal protein L20



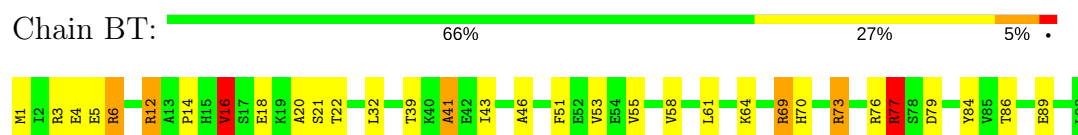
- Molecule 37: 50S ribosomal protein L21



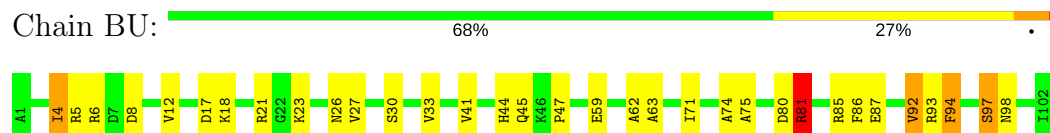
- Molecule 38: 50S ribosomal protein L22



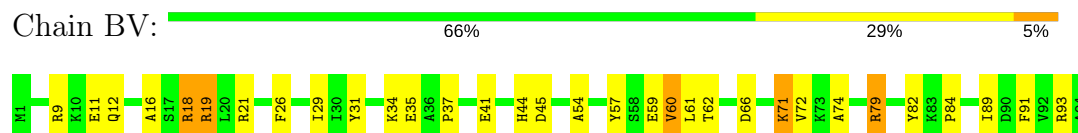
- Molecule 39: 50S ribosomal protein L23



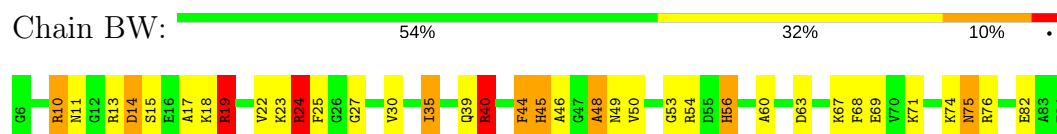
- Molecule 40: 50S ribosomal protein L24



- Molecule 41: 50S ribosomal protein L25

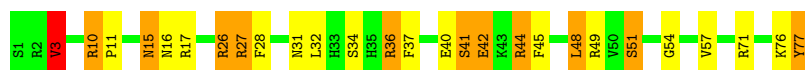


- Molecule 42: 50S ribosomal protein L27



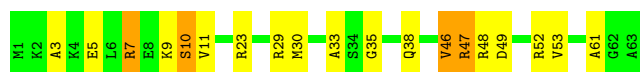
- Molecule 43: 50S ribosomal protein L28

Chain BX: 



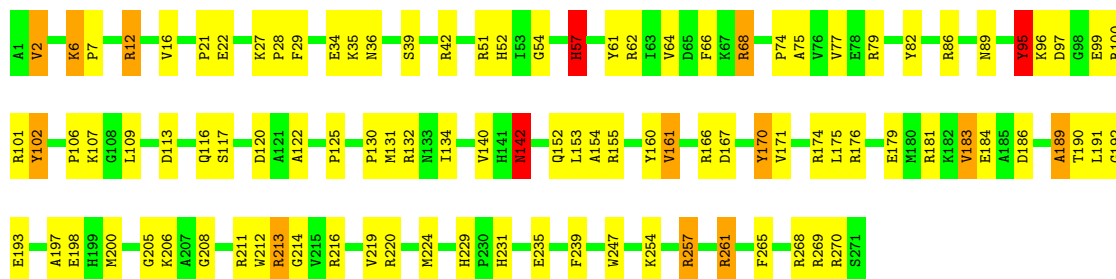
- Molecule 44: 50S ribosomal protein L29

Chain BY: 



- Molecule 45: 50S ribosomal protein L2

Chain BC: 



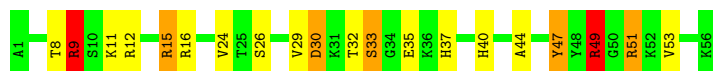
- Molecule 46: 50S ribosomal protein L30

Chain BZ: 



- Molecule 47: 50S ribosomal protein L32

Chain B0: 



- Molecule 48: 50S ribosomal protein L33

Chain B1: 

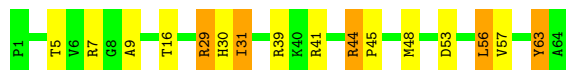
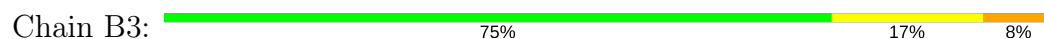


- Molecule 49: 50S ribosomal protein L34

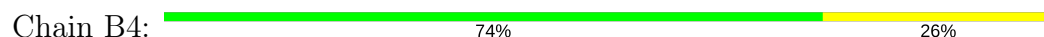
Chain B2: 



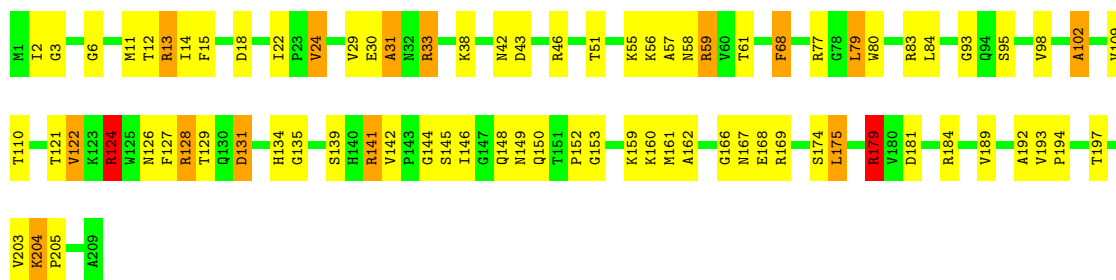
- Molecule 50: 50S ribosomal protein L35



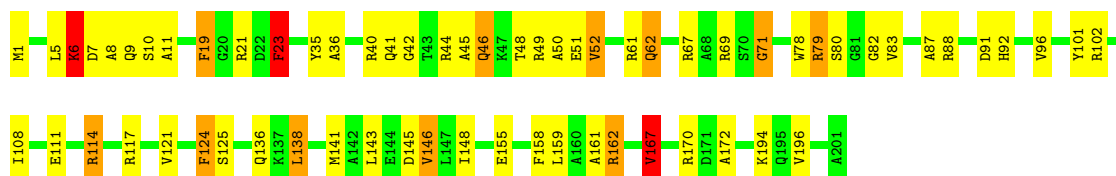
- Molecule 51: 50S ribosomal protein L36



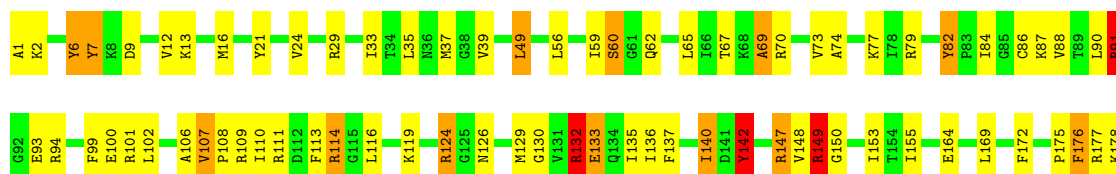
- Molecule 52: 50S ribosomal protein L3



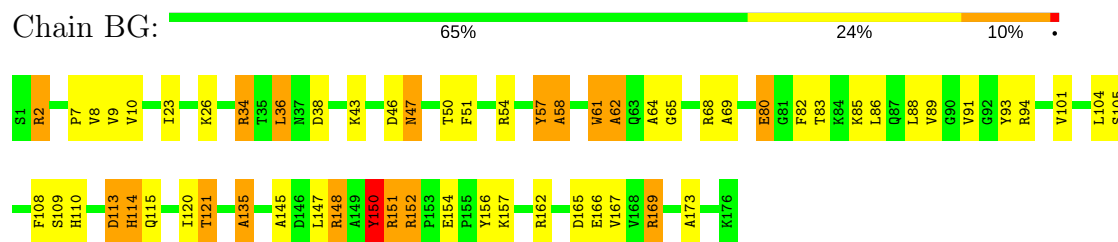
- Molecule 53: 50S ribosomal protein L4



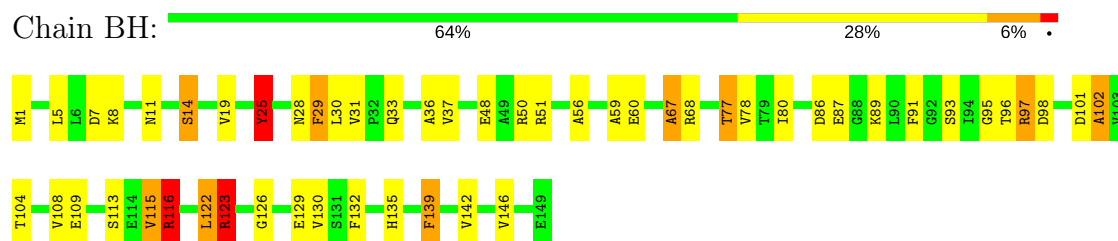
- Molecule 54: 50S ribosomal protein L5



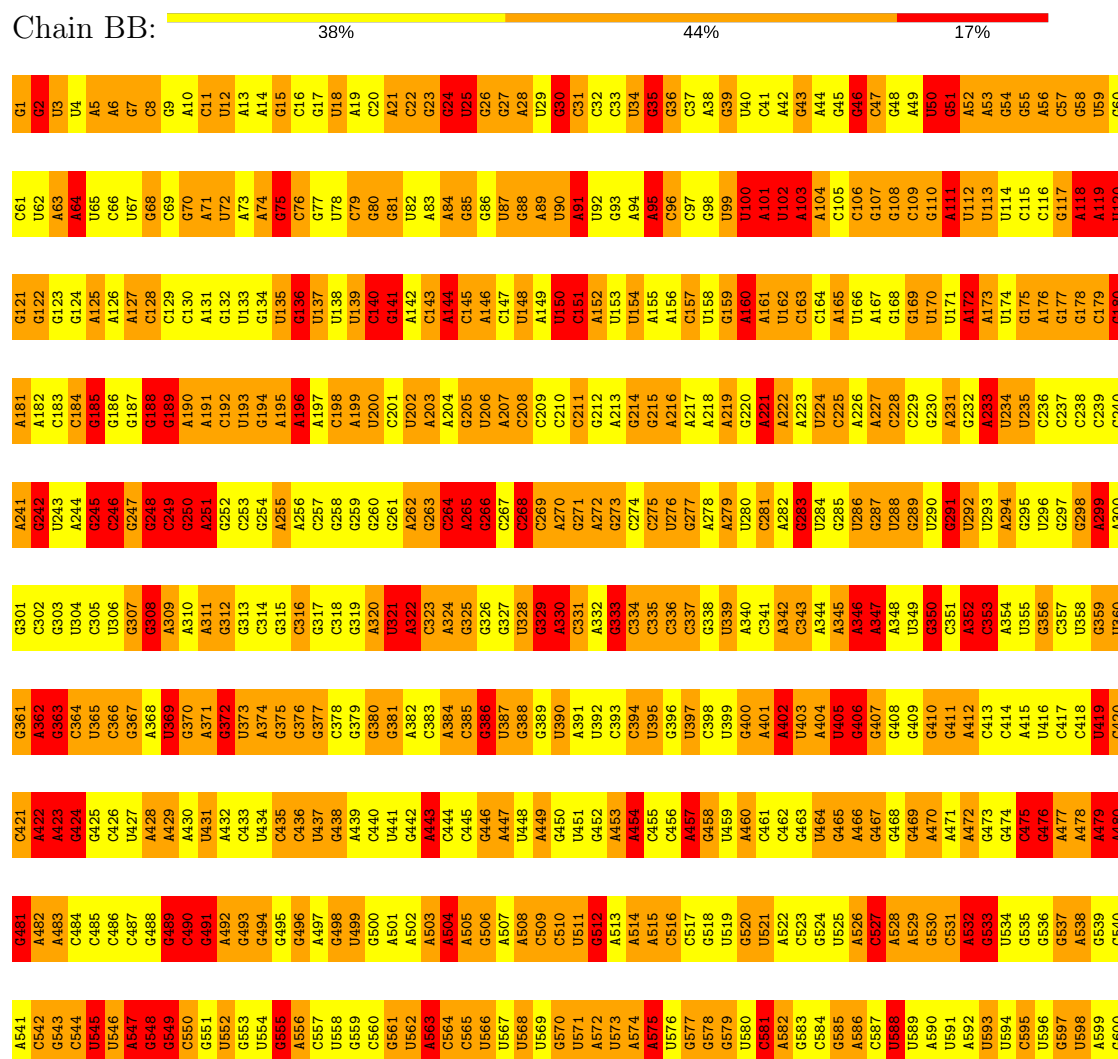
- Molecule 55: 50S ribosomal protein L6



• Molecule 56: 50S ribosomal protein L9



• Molecule 57: 23S ribosomal RNA



A1502	A1503	U1442	G1382	A1322	A1262	G1202	A1142	U1082	A1021	C961	C901	G841	A781	A721	A661	C601
A1504	A1505	G1444	A1383	C1323	U1263	U1203	A1143	U1083	G1022	G962	C902	U842	A782	A722	G662	A602
G1445	A1506	A1384	A1384	G1324	A1264	A1084	A1144	A1084	U1023	U963	C903	G843	A783	C723	G663	A603
G1446	U1507	U1386	A1385	A1325	A1265	A1085	C1145	A1085	G1024	G964	C904	A844	A784	G724	G664	A604
C1447	A1508	U1387	A1386	U1326	U1266	G1087	C1146	A1086	G1025	G965	A905	U845	G785	G725	U665	G605
G1448	A1509	A1327	A1388	C1327	U1267	A1088	U1147	A1088	G1026	G966	U906	U846	G786	G726	A666	U606
G1449	G1510	A1328	A1389	A1328	U1268	A1089	U1148	A1089	A1027	U967	C907	U847	C787	A727	U667	U607
G1450	G1511	U1329	U1390	C1329	A1269	A1090	G1149	A1090	A1028	C968	C908	C848	A788	G728	A668	A608
G1451	G1512	C1330	U1391	C1330	C1270	A1091	C1150	A1091	A1029	G969	A909	A849	A789	G729	G669	A609
G1452	U1513	G1331	A1392	G1332	G1271	G1091	A1151	G1091	C1030	U970	A910	U850	U790	A730	A670	C610
A1453	G1514	G1332	A1393	G1332	G1272	C1092	C1152	C1092	G1031	G971	A911	C851	C791	C731	C611	C611
A1454	A1515	G1333	U1394	A1334	A1213	G1093	G1153	G1093	A1032	A972	C912	U852	A792	C732	C672	G612
G1455	G1516	G1334	U1395	G1335	A1214	U1094	G1154	A1094	U1033	A973	U913	C853	A793	G733	C673	A613
U1456	G1517	A1335	A1396	C1335	G1215	A1095	A1155	A1095	G1034	G974	C914	C854	A794	A734	C674	A614
U1457	G1518	A1336	A1397	G1336	U1216	A1096	A1156	A1096	U1035	A975	C915	G855	C795	A735	A675	U615
U1458	G1519	U1337	U1398	G1337	U1217	U1097	G1157	A1097	U1036	G976	C916	C856	C796	C736	A676	A616
U1459	U1520	C1338	C1399	G1338	G1218	A1098	C1158	A1098	G1037	G977	A917	C857	G797	C737	G677	C617
U1460	G1521	G1339	U1400	U1340	U1219	G1099	U1159	A1099	G1038	G978	U918	G858	G798	G738	C678	G618
C1461	A1522	U1341	G1401	C1341	G1220	C1100	G1160	C1100	A1039	A979	U919	G859	G799	A739	C679	G619
U1462	U1523	G1342	G1402	G1342	C1221	U1101	C1161	U1101	A1040	A980	A920	U860	A800	C740	C680	G620
G1463	G1524	A1343	A1403	G1343	G1222	C1102	G1162	C1102	G1041	A981	C921	A861	A801	U741	G681	A621
G1464	A1525	A1344	C1404	A1284	G1223	A1103	G1163	C1103	G1042	C982	C922	C862	A802	A742	G682	C622
A1465	U1526	G1345	U1405	A1285	G1225	C1105	A1165	A1105	C1043	A983	G923	A863	U803	A743	C623	C623
U1466	G1527	C1346	U1406	A1286	A1226	G1106	G1166	U1106	C1044	A984	G924	G864	A804	U744	G624	G624
U1467	A1528	A1347	G1407	A1287	G1227	G1107	C1167	C1107	A1046	C986	G926	A866	C806	U746	A686	A626
U1468	G1529	U1348	U1408	G1288	G1228	U1108	G1168	U1108	G1047	C987	A927	C867	U807	U747	C687	A627
U1469	U1530	C1349	U1409	C1289	G1229	A1109	G1169	A1109	A1048	A988	C928	U868	G808	G748	U688	G628
G1470	C1531	G1350	A1410	C1290	A1230	G1110	C1170	A1110	C1049	G989	U929	C869	A809	A749	A689	G629
G1471	A1532	C1351	U1411	C1291	U1231	A1111	G1171	A1111	A1050	A990	G930	U870	U810	A750	G690	G630
G1472	G1473	U1352	U1412	C1292	G1232	G1112	C1172	G1112	G1051	G991	U931	U871	U811	A751	C691	A631
U1473	U1534	A1353	A1413	C1293	C1233	U1113	U1173	C992	C1052	C992	A932	U872	C812	A752	C692	A632
G1474	A1535	U1354	C1414	U1294	U1234	C1114	U1174	G993	C1053	G993	A933	C873	C813	A753	A693	A633
G1475	G1536	G1355	U1415	G1295	G1235	G1115	A1175	C994	A1054	C994	U934	C874	C814	U754	G694	C634
G1476	U1537	U1416	G1417	G1296	G1236	G1116	U1176	C995	G1055	C995	C935	G875	C815	U755	G695	C635
A1477	G1538	C1357	U1418	C1297	A1237	C1117	G1177	A996	G1056	A996	A936	C876	C816	A756	G696	G636
G1478	U1539	G1358	G1419	G1298	G1238	C1118	C1178	C997	A1057	G997	C937	A877	C817	G757	G697	A637
G1479	G1540	U1359	A1420	G1299	G1239	U1119	G1179	C998	U1058	C998	G938	A878	C818	C758	C698	G638
C1480	U1541	G1360	U1421	A1301	U1240	C1120	U1180	U999	G1059	U999	G939	G879	A819	G759	A699	U639
G1482	G1542	C1361	G1422	A1302	A1241	G1121	U1181	A1000	U1060	A1000	G940	G880	A820	G760	G700	C640
G1483	A1543	C1363	G1423	C1303	U1242	G1122	G1182	A1001	U1061	G941	A941	G881	A821	A761	G701	U641
U1484	A1544	G1364	G1424	A1304	C1243	C1123	U1183	G1002	G1062	G942	G942	G882	G822	U762	U702	U642
U1485	G1545	A1365	U1425	A1305	A1244	G1124	U1184	G1003	G1063	A943	G943	G883	C823	G763	G703	A643
U1486	G1546	C1366	G1426	C1306	G1245	G1125	G1185	U1004	C1064	C944	C944	U884	U824	A764	G704	A644
U1487	C1547	A1367	A1427	A1307	A1246	A1126	G1186	C1005	A1067	C945	A945	C885	A825	C765	A705	G645
U1488	A1548	G1368	C1428	A1308	G1248	G1128	G1187	C1006	G1068	C946	C946	A886	U826	U766	A706	G646
C1489	U1549	G1369	G1429	G1309	U1249	G1129	U1188	C1007	U1069	A947	U947	U887	U827	U767	G707	G647
A1490	G1550	C1370	G1430	G1310	G1250	U1130	A1189	A1008	A1070	G948	G948	C889	A828	G768	G708	G648
A1491	A1551	G1371	A1431	G1311	C1251	G1131	G1191	A1009	A1071	A1010	G950	C890	A829	U769	U709	A649
G1492	A1552	U1372	C1432	U1312	G1252	U1132	G1192	A1010	G1071	G951	C951	G891	G830	G770	U710	C650
A1493	U1553	A1373	A1433	U1313	A1253	C1073	G1193	U1012	C1072	G952	C952	A892	G831	G771	G711	G651
A1494	G1554	G1374	A1434	C1314	A1254	A1134	A1194	U1013	A1073	G953	C953	C893	U832	C772	G712	U652
A1495	G1555	U1375	G1435	C1315	U1255	G1074	G1195	C993	G1074	G954	C954	U894	A833	G773	G713	U653
A1496	U1556	G1376	A1436	U1316	G1256	C1075	C1196	A1014	C1075	U955	U955	U895	A834	U774	U714	A654
U1497	C1557	G1377	G1437	G1317	C1257	G1076	G1197	G1015	C1076	G956	G956	U896	C835	G775	A715	A655
U1498	G1558	U1378	U1438	U1318	U1258	A1077	G1198	G1016	A1077	C957	C957	A896	G836	G776	A716	G656
U1499	U1559	A1379	A1439	C1319	G1259	U1078	U1199	G1017	C1078	U958	U958	C897	C837	G777	C717	U657
G1500	G1560	C1320	U1440	C1320	G1260	C1079	U1199	U1018	C1079	U959	U959	C898	C838	G778	A718	U658
G1501		G1381	G1441	G1381	C1261	U1081	U1201	U1019	U1081	A1020	A1020	A900	C840	G780	C719	G659
																C660

C2462	U2402	C2342	G2282	C2222	G2162	G2102	A2042	U1982	G1922	G1862	A1802	U1742	G1682	G1622	U1562
C2463	C2403	U2343	C2283	G2223	A2163	C2103	C2043	G1983	U1923	G1863	A1803	G1743	U1683	G1623	U1563
G2464	U2404	U2344	A2284	G2224	C2164	C2104	C2044	G1984	C1924	U1864	A1804	G1744	G1684	C1624	C1564
G2465	G2405	G2345	C2285	A2225	C2165	U2105	C2045	G1985	C1925	U1865	A1805	U1745	G1685	C1625	C1565
C2466	A2406	A2346	G2286	C2226	U2166	U2106	G2046	U1986	U1926	A1866	C1806	A1746	G1686	A1626	C1566
C2467	C2407	C2347	A2287	A2227	U2167	G2107	C2047	G1987	A1927	U1867	A1807	U1747	G1687	G1627	G1567
A2468	U2408	U2348	G2288	G2228	G2168	A2108	G2048	G1988	A1928	C1868	A1808	U1748	U1688	G1628	G1568
A2469	G2409	C2349	G2289	U2229	A2169	G2109	G2049	G1989	G1929	C1869	A1809	A1749	A1689	U1629	A1569
G2470	G2410	C2350	G2290	G2230	U2170	G2110	C2050	G1990	G1930	C1870	A1810	A1750	A1690	A1630	A1570
A2471	A2411	A2351	U2291	U2231	A2171	U2111	A2051	U1991	U1931	A1871	A1811	U1751	C1691	G1631	A1571
C2472	A2412	A2352	U2292	C2232	U2172	G2112	A2052	G1992	A1932	A1872	U1812	C1752	A1692	A1632	A1572
G2473	G2413	G2353	G2293	U2233	A2173	U2113	G2053	U1993	G1933	G1873	G1813	U1753	C1693	G1633	G1573
U2474	G2414	C2354	G2294	G2234	C2174	A2114	A2054	C1994	G1934	C1874	G1814	A1754	C1694	G1634	G1574
C2475	G2415	G2355	C2295	G2235	C2175	G2115	C2055	U1995	G1935	A1875	A1815	A1755	G1695	A1635	C1575
A2476	C2416	U2356	U2296	U2236	A2176	G2116	G2056	U1996	A1936	G1876	A1816	G1756	G1696	U1636	U1576
U2477	G2417	G2357	G2297	G2237	C2177	G2117	G2057	C1997	A1937	A1877	G1817	U1757	G1697	C1637	C1577
A2478	A2418	A2358	A2298	G2238	C2178	U2118	A2058	U1998	A1938	G1878	U1818	U1758	A1698	C1638	U1578
U2479	U2419	C2359	G2299	G2239	G2179	A2119	A2059	C1999	U1939	A1879	A1819	A1759	G1699	C1639	U1579
C2480	C2420	G2360	C2300	U2240	U2180	G2120	A2060	C2000	U1940	U1880	U1820	C1760	A1700	A1640	A1580
G2481	G2421	G2361	C2301	A2241	U2181	G2121	G2061	C2001	C1941	C1881	A1821	C1761	A1701	A1641	G1581
A2482	A2422	C2362	U2302	G2242	U2182	U2122	A2062	G2002	C1942	U1882	G1822	C1762	A1702	G1642	G1582
C2483	U2423	G2363	G2303	U2243	A2183	G2123	C2063	A2003	U1943	G1883	G1823	G1763	G1703	G1643	A1583
G2484	C2424	C2364	G2304	U2244	A2184	G2124	C2064	G2004	U1944	G1884	G1824	C1764	C1704	C1644	U1584
A2485	A2425	U2365	U2305	U2245	U2185	G2125	C2065	A2005	G1945	A1885	U1825	U1765	A1705	C1645	C1585
C2486	A2426	A2366	C2306	G2246	G2186	A2126	C2066	C2006	U1946	U1886	G1826	G1766	C1706	G1646	A1586
G2487	C2427	G2367	G2307	A2247	U2187	G2127	G2067	U2007	C1947	C1887	U1827	G1767	G1707	U1647	G1587
U2488	G2428	C2368	G2308	U2248	U2188	G2128	G2068	C2008	G1948	U1888	G1828	C1768	C1708	U1648	U1588
G2489	A2429	A2369	A2309	U2249	U2189	C2129	G2069	A2009	G1949	A1889	A1829	U1769	A1709	G1649	U1589
C2490	A2430	G2370	C2310	G2250	G2190	U2130	A2070	G2010	G1950	A1890	C1830	G1770	G1710	A1650	A1590
U2491	U2431	C2371	A2311	G2251	A2191	U2131	A2071	U2011	G1951	A1891	G1831	C1771	A1711	G1651	A1591
U2492	A2432	G2372	U2312	G2252	U2192	U2132	C2072	G2012	A1952	C1892	G1832	A1772	G1712	A1652	C1592
G2493	C2433	G2373	C2313	G2253	G2193	U2133	C2073	A2013	A1953	C1893	C1833	A1773	A1713	G1653	A1593
U2494	A2434	C2374	A2314	G2254	U2194	G2134	C2074	A2014	G1954	U1894	U1834	C1774	U1714	A1654	A1594
G2495	A2435	G2375	G2315	G2255	U2195	A2135	U2075	A2015	U1955	C1895	G1835	U1775	G1715	A1655	C1595
C2496	G2436	A2376	C2316	G2256	C2196	U2136	U2076	U2016	U1956	G1896	C1836	G1776	U1716	C1656	A1596
A2497	G2437	U2377	A2317	U2257	U2197	U2137	A2077	C2017	C1957	U1897	C1837	U1777	A1717	U1657	A1597
C2498	U2438	C2378	G2318	G2258	A2198	G2138	C2078	G2018	C1958	U1898	C1838	U1778	G1718	C1658	A1598
U2499	A2439	G2379	G2319	U2259	A2199	U2139	U2079	A2019	G1959	A1899	G1839	U1779	G1719	G1659	U1599
U2500	C2440	C2380	U2320	C2260	C2200	G2140	U2080	A2020	A1960	A1900	G1840	U1780	U1720	G1660	C1600
C2501	U2441	A2381	U2321	C2261	G2201	C2141	U2081	C2021	C1961	A1901	U1841	U1781	G1721	G1661	G1601
C2502	C2442	G2382	A2322	U2262	U2202	A2142	A2082	U2022	C1962	U1842	G1842	U1782	A1722	U1662	U1602
A2503	C2443	C2383	G2323	C2263	U2203	C2143	G2083	C2023	U1963	G1903	C1843	U1783	G1723	G1663	A1603
U2504	G2444	U2384	U2324	C2264	G2204	G2144	C2084	G2024	G1964	A1784	G1844	A1784	G1724	A1664	C1604
G2505	G2445	C2385	G2325	U2265	A2205	G2145	U2085	C2025	C1965	C1905	G1845	U1785	U1725	A1665	C1605
U2506	G2446	A2386	C2326	A2266	C2206	C2146	U2086	U2026	A1966	G1906	G1846	U1786	C1726	G1666	C1606
C2507	G2447	U2387	A2327	A2267	C2207	A2147	G2087	G2027	C1967	G1907	A1847	U1787	C1727	G1667	C1607
G2508	A2448	A2388	A2328	A2268	C2208	G2148	A2088	U2028	G1968	C1908	A1848	C1788	C1728	A1668	A1608
U2509	U2449	G2389	U2329	G2269	G2209	U2149	C2089	G2029	A1969	C1909	G1849	U1789	U1729	A1669	A1609
C2510	A2450	U2390	G2330	A2270	U2210	C2150	A2090	A2030	A1970	G1910	G1850	C1790	C1730	G1670	A1610
U2511	A2451	G2391	G2331	G2271	A2211	U2151	C2091	A2031	U1971	U1911	U1851	A1791	G1731	U1671	C1611
C2512	C2452	A2392	C2332	U2272	A2212	G2152	U2092	G2032	G1972	A1912	U1852	C1792	C1732	A1672	C1612
A2513	A2453	U2393	A2333	C2273	U2213	C2153	G2093	A2033	G1973	A1913	A1853	C1793	G1733	G1673	G1613
U2514	G2454	C2394	A2334	A2274	C2214	A2154	A2094	U2034	C1974	A1914	A1854	U1794	G1734	G1674	A1614
C2515	G2455	C2395	C2335	C2275	C2215	U2155	A2095	G2035	G1975	U1915	U1855	A1795	A1735	C1675	C1615
G2516	C2456	G2396	A2336	G2276	G2216	C2156	C2096	U2036	U1976	A1916	U1856	U1796	G1736	A1676	A1616
U2517	U2457	G2397	G2337	G2277	G2217	G2157	A2097	A2037	A1977	G1917	G1857	U1797	G1737	G1677	C1617
A2518	G2458	U2398	C2338	A2278	G2218	A2158	U2098	G2038	A1978	A1918	A1858	U1798	G1738	A1678	A1618
U2519	A2459	C2399	A2339	G2279	U2219	C2159	U2099	G2039	U1979	A1919	U1859	G1799	A1739	A1679	G1619
C2520	U2460	G2400	C2340	G2280	G2160	G2100	G2100	G2040	G1980	U1919	U1860	C1740	G1740	G1620	G1620
C2521	A2461	U2401	G2341	A2281	G2221	C2161	A2101	U2041	A1981	G1921	G1861	A1801	C1741	G1681	U1621

- Molecule 58: 5S ribosomal RNA

4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	Not provided	Depositor
Resolution determination method	Not provided	Depositor
CTF correction method	Correction of reconstruction of each defocus group	Depositor
Microscope	FEI Polara 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	4520	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	58279	Depositor
Image detector	Kodak SO163 Film	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, GDP

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	$\# Z > 2$	RMSZ	$\# Z > 2$
1	AJ	1.80	12/797 (1.5%)	1.89	19/1077 (1.8%)
10	AS	1.77	6/653 (0.9%)	1.98	15/877 (1.7%)
11	AT	1.70	8/671 (1.2%)	1.88	12/888 (1.4%)
12	AU	1.95	8/431 (1.9%)	2.14	13/570 (2.3%)
13	AB	1.69	20/1736 (1.2%)	2.01	42/2338 (1.8%)
14	AC	1.76	18/1652 (1.1%)	1.95	34/2225 (1.5%)
15	AD	1.79	20/1665 (1.2%)	2.02	46/2227 (2.1%)
16	AE	1.75	12/1119 (1.1%)	2.03	28/1504 (1.9%)
17	AF	1.80	5/836 (0.6%)	1.98	19/1128 (1.7%)
18	AG	1.83	15/1188 (1.3%)	2.09	34/1591 (2.1%)
19	AH	1.72	10/989 (1.0%)	2.00	24/1326 (1.8%)
2	AK	1.83	17/893 (1.9%)	2.02	24/1205 (2.0%)
20	AI	1.77	10/1034 (1.0%)	2.01	29/1375 (2.1%)
21	AA	3.42	4975/36763 (13.5%)	3.74	8350/57350 (14.6%)
22	AY	4.00	354/1814 (19.5%)	4.28	526/2827 (18.6%)
23	AW	5.13	269/1809 (14.9%)	3.87	451/2819 (16.0%)
24	AX	3.54	39/260 (15.0%)	3.68	65/403 (16.1%)
25	AZ	1.79	30/3091 (1.0%)	2.04	97/4182 (2.3%)
26	AV	3.50	261/1814 (14.4%)	3.81	416/2825 (14.7%)
27	B5	1.66	6/1748 (0.3%)	2.01	42/2355 (1.8%)
28	BI	1.69	5/1046 (0.5%)	2.02	30/1410 (2.1%)
29	BJ	1.75	9/1152 (0.8%)	1.97	27/1551 (1.7%)
3	AL	1.73	7/969 (0.7%)	1.96	24/1300 (1.8%)
30	BK	1.76	6/940 (0.6%)	2.06	30/1258 (2.4%)
31	BL	1.85	17/1054 (1.6%)	2.05	30/1403 (2.1%)
32	BM	1.83	16/1093 (1.5%)	2.20	29/1460 (2.0%)
33	BN	1.87	16/974 (1.6%)	2.12	35/1301 (2.7%)
34	BO	1.87	15/902 (1.7%)	2.04	26/1209 (2.2%)
35	BP	1.78	6/929 (0.6%)	2.00	27/1242 (2.2%)
36	BQ	1.78	14/960 (1.5%)	2.16	38/1278 (3.0%)
37	BR	1.86	14/829 (1.7%)	2.09	25/1107 (2.3%)
38	BS	1.71	14/864 (1.6%)	1.97	19/1156 (1.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >2	RMSZ	# Z >2
39	BT	1.61	3/745 (0.4%)	2.03	23/994 (2.3%)
4	AM	1.83	12/885 (1.4%)	2.12	35/1181 (3.0%)
40	BU	1.72	5/788 (0.6%)	1.96	14/1051 (1.3%)
41	BV	1.70	7/766 (0.9%)	1.99	27/1025 (2.6%)
42	BW	1.85	15/603 (2.5%)	2.15	22/797 (2.8%)
43	BX	1.85	11/635 (1.7%)	1.98	18/848 (2.1%)
44	BY	1.67	5/510 (1.0%)	1.93	14/677 (2.1%)
45	BC	1.78	22/2122 (1.0%)	2.01	50/2852 (1.8%)
46	BZ	1.64	4/453 (0.9%)	1.99	11/605 (1.8%)
47	B0	1.78	2/450 (0.4%)	2.04	14/599 (2.3%)
48	B1	1.75	2/417 (0.5%)	1.91	8/554 (1.4%)
49	B2	1.87	7/380 (1.8%)	2.44	22/498 (4.4%)
5	AN	1.84	13/786 (1.7%)	2.19	27/1046 (2.6%)
50	B3	1.63	5/513 (1.0%)	1.85	10/676 (1.5%)
51	B4	1.88	3/303 (1.0%)	1.98	8/397 (2.0%)
52	BD	1.71	15/1586 (0.9%)	2.02	39/2134 (1.8%)
53	BE	1.71	13/1571 (0.8%)	1.99	42/2113 (2.0%)
54	BF	1.75	12/1444 (0.8%)	2.09	40/1937 (2.1%)
55	BG	1.76	21/1343 (1.6%)	2.07	37/1816 (2.0%)
56	BH	1.65	10/1122 (0.9%)	2.01	37/1515 (2.4%)
57	BB	3.38	9332/69800 (13.4%)	3.73	15942/108892 (14.6%)
58	BA	3.35	371/2804 (13.2%)	3.76	649/4371 (14.8%)
6	AO	1.75	9/724 (1.2%)	1.94	16/966 (1.7%)
7	AP	1.90	14/649 (2.2%)	2.07	22/870 (2.5%)
8	AQ	1.80	10/658 (1.5%)	1.95	11/881 (1.2%)
9	AR	1.81	5/463 (1.1%)	2.10	16/621 (2.6%)
All	All	3.03	16162/165195 (9.8%)	3.37	27780/246683 (11.3%)

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	AJ	0	3
10	AS	0	1
11	AT	0	3
12	AU	0	5
13	AB	0	4
14	AC	0	5
15	AD	0	9
16	AE	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
17	AF	0	2
18	AG	0	4
19	AH	0	4
2	AK	0	4
20	AI	0	6
21	AA	0	713
22	AY	0	40
23	AW	3	39
24	AX	0	3
25	AZ	0	8
26	AV	0	37
27	B5	1	7
28	BI	0	3
29	BJ	0	9
3	AL	0	7
30	BK	0	1
31	BL	0	8
32	BM	0	4
33	BN	0	3
34	BO	0	4
35	BP	0	2
36	BQ	0	4
37	BR	0	6
38	BS	0	1
39	BT	0	2
4	AM	0	5
40	BU	0	2
41	BV	0	4
42	BW	0	3
43	BX	0	3
44	BY	0	2
45	BC	0	9
46	BZ	0	3
47	B0	0	4
48	B1	0	2
49	B2	0	1
5	AN	0	5
50	B3	0	2
51	B4	0	1
52	BD	0	5
53	BE	0	7
54	BF	0	9

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
55	BG	0	5
56	BH	0	3
57	BB	0	1349
58	BA	0	56
6	AO	0	5
7	AP	0	3
8	AQ	0	1
9	AR	0	4
All	All	4	2445

All (16162) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	63	G	N9-C8	84.56	1.97	1.37
23	AW	63	G	N7-C5	78.06	1.86	1.39
23	AW	63	G	C5-C4	69.51	1.87	1.38
23	AW	63	G	N9-C4	65.35	1.90	1.38
23	AW	63	G	C8-N7	61.20	1.67	1.30
57	BB	2846	G	N7-C5	-20.78	1.26	1.39
57	BB	556	A	N9-C4	19.53	1.49	1.37
21	AA	1339	A	C8-N7	-19.41	1.18	1.31
57	BB	1977	A	N7-C5	-18.82	1.27	1.39
57	BB	537	G	N7-C5	-18.73	1.28	1.39
21	AA	344	A	N9-C4	-18.39	1.26	1.37
21	AA	383	A	N7-C5	-18.24	1.28	1.39
21	AA	495	A	N7-C5	-18.13	1.28	1.39
21	AA	251	G	N7-C5	-17.56	1.28	1.39
57	BB	618	G	C6-N1	17.41	1.51	1.39
21	AA	573	A	N7-C5	-17.30	1.28	1.39
57	BB	2706	A	N7-C5	-17.12	1.28	1.39
57	BB	949	G	N7-C5	-17.03	1.29	1.39
21	AA	34	C	N3-C4	17.00	1.45	1.33
21	AA	482	A	N7-C5	-17.00	1.29	1.39
57	BB	1154	G	N7-C5	-16.93	1.29	1.39
57	BB	2848	G	C2-N3	16.90	1.46	1.32
57	BB	428	A	N7-C5	-16.90	1.29	1.39
57	BB	628	G	C6-N1	16.79	1.51	1.39
21	AA	981	U	C2-N3	16.77	1.49	1.37
57	BB	2352	A	N7-C5	-16.75	1.29	1.39
57	BB	1342	A	N7-C5	-16.70	1.29	1.39
57	BB	2268	A	N7-C5	-16.61	1.29	1.39
21	AA	525	C	N1-C6	16.59	1.47	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	482	A	C8-N7	-16.45	1.20	1.31
57	BB	1090	A	N9-C4	-16.30	1.28	1.37
21	AA	1340	A	N7-C5	-16.29	1.29	1.39
57	BB	218	A	N9-C4	16.28	1.47	1.37
57	BB	2095	A	N7-C5	-16.20	1.29	1.39
57	BB	2198	A	C6-N6	16.20	1.47	1.33
57	BB	1876	A	N7-C5	-16.08	1.29	1.39
57	BB	1799	G	C6-N1	16.02	1.50	1.39
57	BB	2011	U	C2-N3	16.01	1.49	1.37
21	AA	771	G	C6-N1	15.95	1.50	1.39
57	BB	1872	A	N9-C4	15.90	1.47	1.37
57	BB	2598	A	N7-C5	-15.86	1.29	1.39
57	BB	310	A	N7-C5	-15.79	1.29	1.39
57	BB	2707	U	C2-N3	15.78	1.48	1.37
57	BB	1652	A	N7-C5	-15.78	1.29	1.39
57	BB	2012	G	N9-C8	15.72	1.48	1.37
21	AA	550	G	N7-C5	-15.68	1.29	1.39
21	AA	289	G	N7-C5	-15.66	1.29	1.39
21	AA	836	G	N7-C5	-15.57	1.29	1.39
58	BA	29	A	N7-C5	-15.48	1.29	1.39
21	AA	665	A	N7-C5	-15.46	1.29	1.39
22	AY	76	A	N7-C5	-15.41	1.30	1.39
22	AY	48	C	C4'-C3'	15.33	1.70	1.53
57	BB	260	G	C2-N3	15.28	1.45	1.32
21	AA	1055	A	N7-C5	-15.26	1.30	1.39
21	AA	247	G	N7-C5	-15.26	1.30	1.39
57	BB	269	C	N3-C4	15.21	1.44	1.33
57	BB	2523	G	C2'-C1'	-15.15	1.36	1.53
57	BB	1552	A	N7-C5	-15.14	1.30	1.39
21	AA	675	A	N7-C5	-15.09	1.30	1.39
26	AV	32	C	N3-C4	15.06	1.44	1.33
21	AA	1421	G	N7-C5	-14.93	1.30	1.39
57	BB	764	A	N7-C5	-14.86	1.30	1.39
21	AA	149	A	C6-N1	14.84	1.46	1.35
26	AV	15	G	N7-C5	-14.82	1.30	1.39
57	BB	2531	A	N7-C5	-14.77	1.30	1.39
57	BB	944	C	N1-C6	14.76	1.46	1.37
57	BB	1609	A	N7-C5	-14.76	1.30	1.39
57	BB	2444	G	N7-C5	-14.75	1.30	1.39
57	BB	513	A	N7-C5	-14.74	1.30	1.39
57	BB	2450	A	N7-C5	-14.73	1.30	1.39
21	AA	1365	G	N7-C5	-14.69	1.30	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	44	A	C2'-C1'	-14.69	1.37	1.53
57	BB	1705	A	N7-C5	-14.67	1.30	1.39
57	BB	2436	G	C6-N1	14.64	1.49	1.39
57	BB	2466	C	N1-C6	14.60	1.46	1.37
58	BA	31	C	N1-C6	14.59	1.46	1.37
57	BB	1698	A	N9-C4	14.56	1.46	1.37
57	BB	2589	A	C6-N6	14.56	1.45	1.33
21	AA	109	A	N3-C4	-14.55	1.26	1.34
57	BB	1706	C	C4-N4	14.55	1.47	1.33
57	BB	2429	G	C6-N1	14.52	1.49	1.39
57	BB	266	G	N7-C5	-14.50	1.30	1.39
22	AY	29	A	N7-C5	-14.46	1.30	1.39
57	BB	2043	C	N1-C6	14.45	1.45	1.37
57	BB	1244	A	N7-C5	-14.42	1.30	1.39
21	AA	1163	A	N7-C5	-14.38	1.30	1.39
57	BB	1361	G	C6-N1	14.38	1.49	1.39
21	AA	608	A	N7-C5	-14.34	1.30	1.39
21	AA	1452	C	N1-C6	14.34	1.45	1.37
57	BB	1165	A	N3-C4	-14.32	1.26	1.34
21	AA	958	A	N7-C5	-14.31	1.30	1.39
57	BB	1762	A	C6-N6	14.29	1.45	1.33
21	AA	1094	G	N7-C5	-14.29	1.30	1.39
21	AA	74	A	C5-C4	14.27	1.48	1.38
57	BB	2199	A	N9-C4	14.25	1.46	1.37
22	AY	58	A	C6-N6	14.23	1.45	1.33
21	AA	1101	A	N3-C4	-14.21	1.26	1.34
23	AW	61	C	N1-C6	14.22	1.45	1.37
23	AW	23	A	N7-C5	-14.21	1.30	1.39
21	AA	19	A	N7-C5	-14.21	1.30	1.39
21	AA	735	C	N1-C6	14.20	1.45	1.37
57	BB	1790	C	N1-C6	14.20	1.45	1.37
57	BB	247	G	C6-N1	14.18	1.49	1.39
57	BB	940	G	C5-C4	-14.18	1.28	1.38
57	BB	1981	A	C8-N7	-14.14	1.21	1.31
57	BB	52	A	N7-C5	-14.12	1.30	1.39
21	AA	257	G	C6-N1	14.11	1.49	1.39
57	BB	172	A	N3-C4	-14.11	1.26	1.34
21	AA	200	G	C6-N1	14.08	1.49	1.39
21	AA	681	A	N7-C5	-14.07	1.30	1.39
57	BB	1785	A	N7-C5	-14.06	1.30	1.39
21	AA	794	A	N7-C5	-14.06	1.30	1.39
57	BB	129	C	N1-C6	14.05	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	357	G	N7-C5	-14.03	1.30	1.39
57	BB	824	U	N1-C2	14.00	1.51	1.38
57	BB	2120	G	N7-C5	-14.00	1.30	1.39
26	AV	20	U	C2-N3	13.99	1.47	1.37
57	BB	751	A	N7-C5	-13.98	1.30	1.39
57	BB	892	A	N7-C5	-13.94	1.30	1.39
57	BB	973	A	N7-C5	-13.94	1.30	1.39
21	AA	80	A	N7-C5	-13.93	1.30	1.39
21	AA	546	A	C6-N1	13.93	1.45	1.35
57	BB	1697	G	C6-N1	13.91	1.49	1.39
21	AA	500	G	C2-N3	13.90	1.43	1.32
21	AA	996	A	N9-C4	13.90	1.46	1.37
21	AA	1257	A	N7-C5	-13.88	1.30	1.39
21	AA	858	G	N7-C5	-13.87	1.30	1.39
57	BB	222	A	N9-C4	-13.86	1.29	1.37
21	AA	1175	G	N7-C5	-13.84	1.30	1.39
58	BA	2	G	OP3-P	-13.82	1.44	1.61
21	AA	1438	G	N7-C5	-13.80	1.30	1.39
21	AA	873	A	N7-C5	-13.80	1.30	1.39
21	AA	144	G	C6-N1	13.79	1.49	1.39
21	AA	841	C	N1-C6	13.77	1.45	1.37
57	BB	2399	G	N7-C5	-13.77	1.30	1.39
21	AA	1201	A	N9-C4	13.76	1.46	1.37
26	AV	15	G	N1-C2	13.74	1.48	1.37
57	BB	2095	A	C5-C4	13.72	1.48	1.38
57	BB	1088	A	N7-C5	-13.71	1.31	1.39
21	AA	377	G	N7-C5	-13.71	1.31	1.39
21	AA	532	A	N9-C4	13.71	1.46	1.37
21	AA	1104	G	C6-N1	13.70	1.49	1.39
21	AA	656	G	N7-C5	-13.68	1.31	1.39
57	BB	260	G	N7-C5	-13.68	1.31	1.39
57	BB	1354	A	N9-C4	13.65	1.46	1.37
57	BB	1296	G	N7-C5	-13.65	1.31	1.39
57	BB	2837	A	N7-C5	-13.63	1.31	1.39
57	BB	2810	A	N3-C4	13.63	1.43	1.34
57	BB	1609	A	N9-C4	-13.62	1.29	1.37
57	BB	2661	G	C2'-C1'	-13.62	1.38	1.53
24	AX	14	A	N9-C4	13.62	1.46	1.37
21	AA	1083	U	C2-N3	13.62	1.47	1.37
21	AA	943	U	C2-N3	13.60	1.47	1.37
21	AA	704	A	C5-C4	13.58	1.48	1.38
57	BB	173	A	N3-C4	13.56	1.43	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2309	A	N7-C5	-13.56	1.31	1.39
57	BB	1637	A	C2'-C1'	-13.55	1.38	1.53
57	BB	822	G	C8-N7	13.55	1.39	1.30
57	BB	2675	A	N9-C4	-13.54	1.29	1.37
57	BB	2379	G	N3-C4	-13.50	1.26	1.35
21	AA	388	G	N7-C5	-13.48	1.31	1.39
21	AA	1024	G	N7-C5	-13.48	1.31	1.39
57	BB	577	G	N1-C2	13.42	1.48	1.37
57	BB	2541	A	N7-C5	-13.41	1.31	1.39
57	BB	1051	G	N7-C5	13.40	1.47	1.39
21	AA	5	U	OP3-P	-13.39	1.45	1.61
21	AA	1525	G	N9-C8	13.38	1.47	1.37
21	AA	752	G	C8-N7	-13.37	1.23	1.30
21	AA	1068	G	C5-C4	13.37	1.47	1.38
57	BB	1034	G	C2-N3	13.37	1.43	1.32
57	BB	2894	G	N7-C5	-13.36	1.31	1.39
21	AA	1346	A	N9-C4	-13.34	1.29	1.37
23	AW	66	U	N3-C4	13.29	1.50	1.38
57	BB	775	G	C8-N7	-13.29	1.23	1.30
57	BB	1151	A	C6-N6	13.27	1.44	1.33
21	AA	370	C	N3-C4	13.26	1.43	1.33
21	AA	861	G	N7-C5	-13.26	1.31	1.39
57	BB	1690	A	N9-C4	-13.24	1.29	1.37
57	BB	2446	G	N7-C5	-13.24	1.31	1.39
22	AY	29	A	C6-N1	13.23	1.44	1.35
57	BB	2378	A	N7-C5	-13.23	1.31	1.39
21	AA	425	G	N7-C5	-13.21	1.31	1.39
21	AA	210	C	C4-C5	13.21	1.53	1.43
57	BB	1028	A	N7-C5	-13.20	1.31	1.39
57	BB	2726	A	C6-N1	13.19	1.44	1.35
57	BB	732	C	N1-C6	13.17	1.45	1.37
21	AA	262	A	N7-C5	-13.16	1.31	1.39
57	BB	1661	G	C5-C4	-13.16	1.29	1.38
21	AA	1000	A	N7-C5	-13.15	1.31	1.39
57	BB	254	G	N9-C4	-13.14	1.27	1.38
57	BB	1628	G	N7-C5	-13.13	1.31	1.39
57	BB	436	C	N3-C4	13.13	1.43	1.33
57	BB	607	U	N1-C6	-13.12	1.26	1.38
57	BB	744	U	C2-N3	13.11	1.47	1.37
22	AY	57	G	C2-N3	13.11	1.43	1.32
21	AA	958	A	C5-C4	13.10	1.48	1.38
57	BB	2837	A	P-O5'	-13.10	1.46	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2498	C	N1-C6	13.08	1.45	1.37
21	AA	423	G	C8-N7	13.08	1.38	1.30
57	BB	2873	A	N3-C4	-13.08	1.27	1.34
57	BB	1032	A	C6-N6	13.06	1.44	1.33
57	BB	1807	G	N7-C5	-13.04	1.31	1.39
21	AA	1130	A	N7-C5	-13.03	1.31	1.39
57	BB	212	G	N7-C5	-13.02	1.31	1.39
57	BB	2770	G	N7-C5	-13.02	1.31	1.39
57	BB	1630	A	N3-C4	-13.01	1.27	1.34
21	AA	532	A	N3-C4	-13.01	1.27	1.34
57	BB	1445	G	C2-N3	13.00	1.43	1.32
21	AA	1219	A	N7-C5	12.99	1.47	1.39
57	BB	625	G	N9-C8	12.99	1.47	1.37
57	BB	93	G	C8-N7	-12.98	1.23	1.30
57	BB	2156	G	C6-N1	12.95	1.48	1.39
57	BB	214	G	N7-C5	-12.95	1.31	1.39
57	BB	282	A	N7-C5	-12.94	1.31	1.39
57	BB	1421	G	C6-N1	12.94	1.48	1.39
21	AA	953	G	C8-N7	-12.94	1.23	1.30
57	BB	1339	G	N1-C2	12.93	1.48	1.37
57	BB	2663	G	C8-N7	12.93	1.38	1.30
57	BB	330	A	C6-N1	12.92	1.44	1.35
57	BB	2729	G	N7-C5	-12.92	1.31	1.39
21	AA	1140	C	C2-N3	12.88	1.46	1.35
57	BB	2603	G	C2-N3	12.88	1.43	1.32
21	AA	1057	G	N7-C5	-12.86	1.31	1.39
57	BB	1053	C	N1-C6	12.84	1.44	1.37
57	BB	1155	A	N7-C5	-12.84	1.31	1.39
21	AA	454	G	N7-C5	-12.84	1.31	1.39
57	BB	2	G	C6-N1	12.84	1.48	1.39
57	BB	2469	A	N7-C5	-12.83	1.31	1.39
57	BB	2879	A	C6-N1	12.82	1.44	1.35
21	AA	246	A	N7-C5	-12.82	1.31	1.39
21	AA	281	G	C6-N1	12.81	1.48	1.39
21	AA	797	C	N3-C4	12.81	1.43	1.33
22	AY	19	G	C2-N3	12.79	1.43	1.32
57	BB	1375	U	N3-C4	12.79	1.50	1.38
57	BB	250	G	C6-N1	12.79	1.48	1.39
21	AA	484	G	C2-N3	12.78	1.43	1.32
21	AA	1519	A	N7-C5	-12.78	1.31	1.39
57	BB	1038	G	C2-N3	12.78	1.43	1.32
57	BB	2809	A	C6-N6	12.78	1.44	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1024	G	C2'-C1'	-12.77	1.39	1.53
57	BB	122	G	N9-C8	12.77	1.46	1.37
57	BB	2600	A	N7-C5	-12.75	1.31	1.39
57	BB	1713	A	C2'-C1'	-12.74	1.39	1.53
57	BB	1205	A	C8-N7	-12.73	1.22	1.31
57	BB	1904	G	P-O5'	-12.71	1.47	1.59
21	AA	104	G	C2'-C1'	-12.70	1.39	1.53
21	AA	442	G	N9-C4	12.70	1.48	1.38
57	BB	517	C	C4-N4	12.69	1.45	1.33
57	BB	1940	U	C2-N3	12.68	1.46	1.37
21	AA	656	G	C8-N7	12.67	1.38	1.30
57	BB	1848	A	N7-C5	-12.65	1.31	1.39
21	AA	523	A	C6-N1	12.65	1.44	1.35
21	AA	300	A	N9-C4	-12.65	1.30	1.37
57	BB	1900	A	N7-C5	-12.65	1.31	1.39
21	AA	994	A	N7-C5	-12.64	1.31	1.39
57	BB	2047	C	N3-C4	12.63	1.42	1.33
57	BB	1895	C	C2-N3	12.63	1.45	1.35
21	AA	837	U	C2-N3	12.62	1.46	1.37
22	AY	71	G	N7-C5	-12.61	1.31	1.39
57	BB	619	G	C5-C4	12.61	1.47	1.38
58	BA	117	G	N7-C5	-12.60	1.31	1.39
57	BB	2702	G	N7-C5	-12.60	1.31	1.39
21	AA	347	G	C2-N3	12.59	1.42	1.32
21	AA	710	G	N7-C5	-12.59	1.31	1.39
57	BB	1791	A	N7-C5	-12.59	1.31	1.39
21	AA	563	A	N9-C4	12.59	1.45	1.37
21	AA	1416	G	C8-N7	12.59	1.38	1.30
57	BB	1084	A	N7-C5	-12.58	1.31	1.39
21	AA	968	A	C6-N1	12.58	1.44	1.35
57	BB	410	G	C2-N3	12.58	1.42	1.32
21	AA	928	G	N7-C5	-12.57	1.31	1.39
21	AA	1513	A	N3-C4	-12.54	1.27	1.34
26	AV	46	G	C6-N1	12.54	1.48	1.39
57	BB	2124	G	C6-N1	12.54	1.48	1.39
57	BB	480	A	N9-C4	12.54	1.45	1.37
57	BB	1846	G	N9-C8	12.53	1.46	1.37
57	BB	2170	A	N7-C5	-12.53	1.31	1.39
21	AA	724	G	N7-C5	-12.52	1.31	1.39
57	BB	2290	G	N9-C8	12.52	1.46	1.37
21	AA	1274	A	N3-C4	-12.51	1.27	1.34
58	BA	86	G	N9-C8	-12.50	1.29	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	818	G	N7-C5	-12.50	1.31	1.39
57	BB	2175	C	N3-C4	12.49	1.42	1.33
21	AA	735	C	N3-C4	12.49	1.42	1.33
57	BB	621	A	C6-N1	12.48	1.44	1.35
57	BB	2734	A	N3-C4	-12.46	1.27	1.34
57	BB	2242	G	N1-C2	12.46	1.47	1.37
57	BB	2049	G	C2-N3	12.46	1.42	1.32
57	BB	521	U	C2-N3	12.45	1.46	1.37
57	BB	384	A	C6-N1	12.45	1.44	1.35
57	BB	1102	C	N1-C6	12.43	1.44	1.37
58	BA	88	C	C4-C5	12.43	1.52	1.43
21	AA	1008	U	C2-N3	12.42	1.46	1.37
57	BB	1164	C	N1-C6	12.39	1.44	1.37
57	BB	638	G	C5-C4	12.39	1.47	1.38
21	AA	175	C	C2-N3	12.39	1.45	1.35
57	BB	690	G	N1-C2	12.39	1.47	1.37
26	AV	74	C	N1-C6	-12.38	1.29	1.37
57	BB	2818	U	C2-N3	12.38	1.46	1.37
57	BB	698	C	N3-C4	12.38	1.42	1.33
24	AX	13	A	C6-N6	12.36	1.43	1.33
57	BB	117	G	N7-C5	-12.36	1.31	1.39
57	BB	1150	C	N1-C6	-12.36	1.29	1.37
57	BB	231	A	C6-N1	12.35	1.44	1.35
21	AA	786	G	C8-N7	-12.35	1.23	1.30
57	BB	1563	U	C2-N3	12.35	1.46	1.37
21	AA	1127	G	N7-C5	-12.35	1.31	1.39
57	BB	2415	G	N9-C8	-12.34	1.29	1.37
21	AA	933	G	C6-N1	12.34	1.48	1.39
22	AY	54	U	C2-N3	12.33	1.46	1.37
57	BB	1171	G	C2-N3	12.33	1.42	1.32
57	BB	1936	A	N7-C5	-12.31	1.31	1.39
26	AV	50	U	C2-N3	12.31	1.46	1.37
57	BB	547	A	N9-C4	12.30	1.45	1.37
57	BB	1581	G	C2-N3	12.28	1.42	1.32
57	BB	155	A	N3-C4	12.28	1.42	1.34
21	AA	1281	C	N1-C6	12.27	1.44	1.37
57	BB	649	G	N7-C5	-12.27	1.31	1.39
21	AA	151	A	C5-C4	12.27	1.47	1.38
21	AA	616	G	N7-C5	-12.27	1.31	1.39
22	AY	14	A	C8-N7	-12.27	1.23	1.31
57	BB	2604	U	C2-N3	12.27	1.46	1.37
21	AA	468	A	N7-C5	-12.26	1.31	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2669	G	N7-C5	-12.26	1.31	1.39
21	AA	669	G	C8-N7	-12.26	1.23	1.30
57	BB	1115	G	N1-C2	12.26	1.47	1.37
57	BB	2114	A	C6-N6	12.26	1.43	1.33
21	AA	1419	G	N9-C8	12.25	1.46	1.37
21	AA	969	A	P-O5'	-12.24	1.47	1.59
21	AA	497	G	C8-N7	12.23	1.38	1.30
57	BB	663	G	C2-N3	12.23	1.42	1.32
57	BB	543	G	N7-C5	-12.23	1.31	1.39
57	BB	2812	G	N7-C5	12.22	1.46	1.39
22	AY	8	U	C2-N3	12.22	1.46	1.37
57	BB	1569	A	C6-N6	12.22	1.43	1.33
57	BB	757	G	N9-C4	-12.21	1.28	1.38
21	AA	462	G	C6-N1	12.21	1.48	1.39
57	BB	182	A	C6-N1	12.19	1.44	1.35
21	AA	712	A	N9-C4	-12.19	1.30	1.37
21	AA	1437	A	N7-C5	-12.19	1.31	1.39
21	AA	260	G	N1-C2	12.18	1.47	1.37
21	AA	664	G	C5-C4	12.18	1.46	1.38
57	BB	1696	G	N9-C8	-12.18	1.29	1.37
57	BB	536	G	N9-C8	12.17	1.46	1.37
57	BB	2849	U	N3-C4	12.17	1.49	1.38
57	BB	637	A	C8-N7	-12.16	1.23	1.31
57	BB	326	G	C6-N1	12.15	1.48	1.39
21	AA	413	G	C8-N7	-12.15	1.23	1.30
21	AA	1350	A	N7-C5	-12.14	1.31	1.39
57	BB	1118	C	C4'-C3'	-12.14	1.39	1.53
57	BB	565	C	N1-C6	12.13	1.44	1.37
57	BB	803	U	N3-C4	12.13	1.49	1.38
57	BB	805	G	N9-C8	12.13	1.46	1.37
21	AA	1156	G	N9-C8	12.13	1.46	1.37
21	AA	460	A	C6-N1	12.12	1.44	1.35
21	AA	640	A	C6-N6	12.12	1.43	1.33
57	BB	251	A	C8-N7	-12.12	1.23	1.31
21	AA	1044	A	C8-N7	-12.11	1.23	1.31
57	BB	404	A	C6-N1	12.11	1.44	1.35
21	AA	1257	A	C6-N1	12.10	1.44	1.35
57	BB	1842	G	C8-N7	-12.10	1.23	1.30
57	BB	2054	A	N7-C5	-12.09	1.31	1.39
21	AA	1169	A	N7-C5	-12.08	1.32	1.39
21	AA	164	G	N7-C5	-12.08	1.32	1.39
21	AA	1005	A	N7-C5	-12.07	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2260	C	N1-C6	12.07	1.44	1.37
57	BB	1270	C	N3-C4	12.07	1.42	1.33
21	AA	1413	A	N7-C5	-12.06	1.32	1.39
21	AA	1167	A	C5-C4	12.04	1.47	1.38
57	BB	1291	C	N1-C6	-12.05	1.29	1.37
21	AA	870	U	C2-N3	12.04	1.46	1.37
58	BA	44	G	C2-N3	12.04	1.42	1.32
57	BB	1463	C	N3-C4	12.04	1.42	1.33
21	AA	1216	A	N9-C4	-12.03	1.30	1.37
57	BB	561	G	N7-C5	-12.03	1.32	1.39
21	AA	1453	G	N7-C5	-12.03	1.32	1.39
21	AA	1491	G	N1-C2	12.03	1.47	1.37
57	BB	110	G	C6-N1	12.03	1.48	1.39
57	BB	1564	C	N1-C6	12.03	1.44	1.37
57	BB	612	G	C8-N7	-12.02	1.23	1.30
57	BB	834	G	N7-C5	-12.02	1.32	1.39
57	BB	1682	G	C6-N1	12.02	1.48	1.39
57	BB	1653	G	C5-C4	12.01	1.46	1.38
57	BB	2421	G	C5-C4	-12.01	1.29	1.38
21	AA	624	C	C2'-C1'	-12.00	1.40	1.53
21	AA	635	A	C6-N6	11.99	1.43	1.33
57	BB	1904	G	N7-C5	-11.99	1.32	1.39
21	AA	747	A	N7-C5	-11.99	1.32	1.39
57	BB	580	U	C2-N3	11.99	1.46	1.37
23	AW	76	A	N7-C5	-11.98	1.32	1.39
57	BB	1290	C	P-O5'	-11.98	1.47	1.59
57	BB	2281	A	C5-C4	-11.98	1.30	1.38
21	AA	676	A	N9-C4	-11.98	1.30	1.37
58	BA	104	A	C8-N7	-11.98	1.23	1.31
57	BB	2597	G	C2-N3	11.97	1.42	1.32
21	AA	244	U	N3-C4	11.97	1.49	1.38
57	BB	1610	A	N9-C8	-11.97	1.28	1.37
57	BB	56	A	C6-N1	11.96	1.44	1.35
23	AW	57	G	N7-C5	-11.96	1.32	1.39
57	BB	1973	G	N7-C5	-11.96	1.32	1.39
57	BB	1029	A	N3-C4	11.95	1.42	1.34
21	AA	410	G	N7-C5	-11.95	1.32	1.39
57	BB	2495	G	N7-C5	-11.94	1.32	1.39
57	BB	472	A	N7-C5	-11.93	1.32	1.39
57	BB	193	U	C2-N3	11.91	1.46	1.37
57	BB	1484	U	C2-N3	11.91	1.46	1.37
21	AA	931	C	C4-C5	11.91	1.52	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	704	A	C6-N6	11.90	1.43	1.33
21	AA	771	G	N9-C8	11.90	1.46	1.37
57	BB	467	G	N7-C5	-11.89	1.32	1.39
21	AA	786	G	N7-C5	-11.89	1.32	1.39
57	BB	2407	A	N7-C5	-11.89	1.32	1.39
21	AA	1280	A	C6-N6	11.89	1.43	1.33
21	AA	1290	G	C2-N3	11.87	1.42	1.32
57	BB	801	G	N7-C5	-11.87	1.32	1.39
21	AA	116	A	N7-C5	-11.87	1.32	1.39
21	AA	1423	G	N9-C8	-11.87	1.29	1.37
21	AA	115	G	C5-C4	11.86	1.46	1.38
57	BB	2669	G	C2-N3	11.86	1.42	1.32
57	BB	328	U	C2-N3	11.86	1.46	1.37
26	AV	35	A	N7-C5	-11.85	1.32	1.39
57	BB	1791	A	N9-C4	11.85	1.45	1.37
21	AA	183	C	C4-N4	11.84	1.44	1.33
57	BB	873	C	N3-C4	11.84	1.42	1.33
21	AA	1016	A	N7-C5	-11.83	1.32	1.39
57	BB	311	A	N3-C4	-11.82	1.27	1.34
21	AA	47	C	N1-C6	-11.82	1.30	1.37
21	AA	1362	A	N7-C5	-11.82	1.32	1.39
57	BB	1020	A	N9-C4	11.81	1.45	1.37
57	BB	1287	A	C5-C4	11.81	1.47	1.38
57	BB	648	G	C2-N2	11.80	1.46	1.34
57	BB	578	G	N9-C8	-11.80	1.29	1.37
57	BB	1026	G	N7-C5	-11.80	1.32	1.39
57	BB	502	A	N7-C5	-11.80	1.32	1.39
57	BB	1160	G	C6-N1	11.80	1.47	1.39
21	AA	38	G	C6-N1	11.79	1.47	1.39
57	BB	980	A	N3-C4	-11.79	1.27	1.34
21	AA	1453	G	C8-N7	-11.78	1.23	1.30
21	AA	1406	U	N1-C6	11.78	1.48	1.38
57	BB	1477	A	N7-C5	-11.78	1.32	1.39
57	BB	875	G	C2-N3	11.77	1.42	1.32
57	BB	2822	G	N7-C5	-11.77	1.32	1.39
57	BB	997	G	N3-C4	11.77	1.43	1.35
57	BB	233	A	N7-C5	-11.76	1.32	1.39
21	AA	1297	G	N7-C5	-11.74	1.32	1.39
21	AA	1329	A	C6-N6	11.74	1.43	1.33
22	AY	10	G	P-O5'	-11.74	1.48	1.59
21	AA	495	A	N3-C4	-11.74	1.27	1.34
21	AA	1334	G	N7-C5	-11.73	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	484	G	N7-C5	-11.73	1.32	1.39
58	BA	91	C	N1-C6	11.73	1.44	1.37
57	BB	1491	G	C8-N7	11.72	1.38	1.30
57	BB	1195	G	C2-N3	11.71	1.42	1.32
57	BB	173	A	N7-C5	11.71	1.46	1.39
22	AY	22	G	N1-C2	11.71	1.47	1.37
21	AA	1435	G	C2-N3	11.70	1.42	1.32
57	BB	88	G	C6-N1	-11.70	1.31	1.39
57	BB	2379	G	C2'-C1'	-11.69	1.40	1.53
57	BB	885	C	C4-N4	11.69	1.44	1.33
57	BB	1084	A	C6-N1	11.68	1.43	1.35
57	BB	1591	A	P-O5'	-11.67	1.48	1.59
58	BA	64	G	C2-N3	11.66	1.42	1.32
21	AA	829	G	C2-N3	11.66	1.42	1.32
21	AA	691	G	N7-C5	-11.66	1.32	1.39
21	AA	903	G	N9-C8	11.65	1.46	1.37
57	BB	1293	C	N1-C6	11.64	1.44	1.37
57	BB	1977	A	N9-C4	-11.64	1.30	1.37
21	AA	926	G	C2-N3	11.64	1.42	1.32
22	AY	28	C	N1-C6	-11.63	1.30	1.37
26	AV	32	C	C4-C5	11.63	1.52	1.43
21	AA	1285	A	N7-C5	-11.62	1.32	1.39
57	BB	1377	G	N9-C4	11.61	1.47	1.38
21	AA	9	G	C2'-C1'	-11.61	1.40	1.53
21	AA	270	A	N9-C4	11.61	1.44	1.37
21	AA	819	A	N9-C4	11.60	1.44	1.37
57	BB	2386	A	N7-C5	-11.60	1.32	1.39
21	AA	603	U	N1-C6	-11.60	1.27	1.38
22	AY	57	G	C8-N7	11.60	1.38	1.30
57	BB	492	A	C5-C4	11.60	1.46	1.38
57	BB	2579	C	N3-C4	11.60	1.42	1.33
21	AA	809	G	N7-C5	-11.59	1.32	1.39
57	BB	933	A	N7-C5	-11.59	1.32	1.39
57	BB	2666	C	N3-C4	11.59	1.42	1.33
57	BB	427	U	C2-N3	11.59	1.45	1.37
57	BB	2437	G	N1-C2	11.59	1.47	1.37
57	BB	1118	C	N3-C4	11.59	1.42	1.33
57	BB	1193	G	C2-N3	11.59	1.42	1.32
58	BA	106	G	N7-C5	-11.58	1.32	1.39
57	BB	144	A	N3-C4	-11.58	1.27	1.34
21	AA	969	A	C6-N6	11.56	1.43	1.33
57	BB	1129	A	N7-C5	-11.56	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1256	A	C5-C4	11.56	1.46	1.38
57	BB	2876	G	N1-C2	11.56	1.47	1.37
21	AA	1512	U	C2-N3	11.56	1.45	1.37
57	BB	1280	G	N1-C2	11.55	1.47	1.37
57	BB	1763	G	N9-C8	-11.55	1.29	1.37
57	BB	15	G	C6-N1	11.55	1.47	1.39
57	BB	2655	G	N7-C5	-11.55	1.32	1.39
21	AA	416	G	C5-C4	11.54	1.46	1.38
21	AA	138	G	C8-N7	-11.53	1.24	1.30
21	AA	1126	U	N3-C4	11.53	1.48	1.38
57	BB	386	G	C6-N1	11.52	1.47	1.39
21	AA	1274	A	C6-N6	11.48	1.43	1.33
21	AA	700	G	C2-N3	11.48	1.42	1.32
22	AY	9	A	N7-C5	-11.48	1.32	1.39
57	BB	520	G	N7-C5	-11.47	1.32	1.39
57	BB	1223	G	C2'-C1'	-11.47	1.40	1.53
57	BB	2378	A	N9-C4	11.47	1.44	1.37
57	BB	2771	C	N1-C6	11.46	1.44	1.37
57	BB	1597	A	C6-N6	11.46	1.43	1.33
21	AA	173	U	N3-C4	11.46	1.48	1.38
21	AA	558	G	P-O5'	-11.46	1.48	1.59
21	AA	1020	G	C2-N3	11.46	1.42	1.32
21	AA	1044	A	N7-C5	-11.45	1.32	1.39
57	BB	218	A	N7-C5	-11.45	1.32	1.39
57	BB	2820	A	C6-N6	11.46	1.43	1.33
21	AA	77	A	N3-C4	-11.45	1.27	1.34
58	BA	79	G	C5-C4	-11.45	1.30	1.38
57	BB	1739	A	N9-C4	-11.45	1.30	1.37
57	BB	726	G	O4'-C1'	-11.44	1.26	1.41
57	BB	1102	C	N3-C4	11.44	1.42	1.33
57	BB	2200	C	C4-N4	11.44	1.44	1.33
21	AA	623	C	N1-C6	-11.43	1.30	1.37
57	BB	1829	A	C6-N1	11.43	1.43	1.35
57	BB	2433	A	C8-N7	-11.43	1.23	1.31
57	BB	2799	A	N9-C4	11.43	1.44	1.37
57	BB	387	U	C2-N3	11.43	1.45	1.37
21	AA	1492	A	C6-N6	11.43	1.43	1.33
57	BB	1836	C	N3-C4	11.43	1.42	1.33
21	AA	119	A	N7-C5	-11.42	1.32	1.39
26	AV	70	G	C8-N7	11.42	1.37	1.30
57	BB	1011	G	N7-C5	-11.41	1.32	1.39
21	AA	570	G	C6-N1	11.41	1.47	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1667	G	N7-C5	-11.41	1.32	1.39
57	BB	30	G	C2-N3	11.40	1.41	1.32
21	AA	54	C	N1-C6	11.40	1.44	1.37
21	AA	179	A	N3-C4	-11.40	1.28	1.34
57	BB	697	G	N7-C5	-11.39	1.32	1.39
21	AA	633	G	C2-N3	11.38	1.41	1.32
21	AA	1468	A	N7-C5	-11.39	1.32	1.39
57	BB	1138	G	C8-N7	-11.38	1.24	1.30
21	AA	142	G	N9-C8	11.38	1.45	1.37
57	BB	260	G	N3-C4	-11.38	1.27	1.35
21	AA	1338	G	N7-C5	-11.38	1.32	1.39
57	BB	441	U	C4'-O4'	11.38	1.60	1.45
21	AA	951	G	N1-C2	11.36	1.46	1.37
21	AA	1186	G	N7-C5	-11.34	1.32	1.39
57	BB	1972	G	N7-C5	-11.34	1.32	1.39
57	BB	1688	U	O3'-P	-11.34	1.47	1.61
57	BB	2029	G	C6-N1	11.34	1.47	1.39
57	BB	2471	A	N3-C4	-11.34	1.28	1.34
57	BB	2304	G	N7-C5	-11.33	1.32	1.39
26	AV	59	A	N7-C5	-11.33	1.32	1.39
57	BB	209	C	N1-C6	11.32	1.44	1.37
57	BB	1411	U	C2'-C1'	-11.32	1.40	1.53
57	BB	1896	G	C6-N1	11.31	1.47	1.39
21	AA	1117	A	N7-C5	-11.31	1.32	1.39
21	AA	951	G	N9-C8	11.31	1.45	1.37
57	BB	2163	A	P-O5'	-11.31	1.48	1.59
57	BB	2787	C	N3-C4	11.30	1.41	1.33
21	AA	128	G	N3-C4	-11.30	1.27	1.35
57	BB	231	A	C8-N7	-11.30	1.23	1.31
21	AA	944	G	C2-N3	11.29	1.41	1.32
57	BB	2373	G	C2-N3	11.29	1.41	1.32
57	BB	345	A	C6-N1	11.29	1.43	1.35
22	AY	71	G	C2-N3	11.28	1.41	1.32
21	AA	41	G	N1-C2	11.28	1.46	1.37
57	BB	1859	U	C2-N3	11.28	1.45	1.37
21	AA	184	G	N7-C5	-11.27	1.32	1.39
21	AA	592	G	N7-C5	-11.27	1.32	1.39
57	BB	433	C	N3-C4	11.26	1.41	1.33
58	BA	58	A	C6-N1	11.25	1.43	1.35
57	BB	2827	C	N1-C6	11.25	1.43	1.37
23	AW	72	C	C2-N3	11.25	1.44	1.35
57	BB	1916	A	C6-N6	11.25	1.43	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	297	G	N9-C4	-11.24	1.28	1.38
57	BB	969	G	C2-N3	11.24	1.41	1.32
57	BB	2573	C	N1-C6	11.24	1.43	1.37
57	BB	303	G	C6-N1	11.23	1.47	1.39
57	BB	1009	A	C6-N1	11.23	1.43	1.35
21	AA	656	G	C2'-C1'	-11.23	1.41	1.53
57	BB	1300	G	N7-C5	-11.23	1.32	1.39
21	AA	1318	A	N3-C4	11.22	1.41	1.34
57	BB	1501	G	N7-C5	-11.22	1.32	1.39
57	BB	2705	A	N7-C5	-11.22	1.32	1.39
21	AA	1256	A	N7-C5	-11.22	1.32	1.39
22	AY	25	C	C2'-C1'	-11.22	1.41	1.53
57	BB	1627	G	N7-C5	-11.21	1.32	1.39
57	BB	2801	G	C2-N3	11.21	1.41	1.32
21	AA	1255	G	N9-C8	-11.21	1.30	1.37
57	BB	425	G	C5-C6	11.21	1.53	1.42
57	BB	1331	G	N7-C5	-11.21	1.32	1.39
57	BB	2528	U	C4-C5	11.21	1.53	1.43
57	BB	2581	G	C2-N2	11.20	1.45	1.34
57	BB	309	A	C6-N1	11.20	1.43	1.35
21	AA	1514	G	N1-C2	11.19	1.46	1.37
21	AA	35	G	C6-N1	11.19	1.47	1.39
57	BB	465	G	N7-C5	-11.19	1.32	1.39
21	AA	1131	G	C2-N3	11.19	1.41	1.32
57	BB	2834	G	C2-N3	11.19	1.41	1.32
21	AA	944	G	N7-C5	-11.18	1.32	1.39
21	AA	338	A	N7-C5	-11.18	1.32	1.39
57	BB	1185	G	C6-N1	11.18	1.47	1.39
57	BB	1516	G	N7-C5	-11.17	1.32	1.39
21	AA	1337	G	C6-N1	11.17	1.47	1.39
57	BB	644	A	N9-C4	-11.17	1.31	1.37
57	BB	1322	A	C5-C4	11.16	1.46	1.38
21	AA	41	G	C8-N7	-11.16	1.24	1.30
26	AV	58	A	C6-N1	11.16	1.43	1.35
57	BB	1885	A	C4'-C3'	11.16	1.65	1.53
23	AW	35	A	N9-C4	-11.15	1.31	1.37
57	BB	959	A	N7-C5	-11.14	1.32	1.39
21	AA	390	U	C2-N3	11.14	1.45	1.37
57	BB	205	G	C5-C4	11.14	1.46	1.38
21	AA	297	G	C6-N1	11.13	1.47	1.39
21	AA	597	G	C8-N7	-11.13	1.24	1.30
57	BB	857	G	C2-N3	11.13	1.41	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	430	A	N9-C4	11.13	1.44	1.37
57	BB	2322	A	N7-C5	-11.13	1.32	1.39
58	BA	37	C	N1-C6	11.13	1.43	1.37
21	AA	1309	G	N7-C5	-11.13	1.32	1.39
58	BA	50	A	N3-C4	-11.12	1.28	1.34
21	AA	628	G	N7-C5	-11.12	1.32	1.39
57	BB	176	A	C6-N6	11.12	1.42	1.33
23	AW	58	A	N9-C8	-11.11	1.28	1.37
57	BB	1343	G	C6-N1	11.11	1.47	1.39
21	AA	625	U	C2-N3	11.11	1.45	1.37
21	AA	630	A	C5-C4	-11.10	1.30	1.38
57	BB	9	G	C5-C4	11.09	1.46	1.38
57	BB	920	A	N3-C4	11.09	1.41	1.34
57	BB	1144	A	N7-C5	-11.09	1.32	1.39
57	BB	2406	A	N9-C4	11.09	1.44	1.37
57	BB	596	U	C3'-C2'	-11.08	1.40	1.52
57	BB	2316	G	N1-C2	11.08	1.46	1.37
21	AA	914	A	C8-N7	-11.08	1.23	1.31
57	BB	265	A	C6-N1	11.08	1.43	1.35
57	BB	1717	A	N9-C8	11.07	1.46	1.37
57	BB	514	A	N9-C4	-11.07	1.31	1.37
21	AA	423	G	C6-N1	11.06	1.47	1.39
21	AA	616	G	N9-C8	-11.04	1.30	1.37
21	AA	473	U	C4-C5	11.04	1.53	1.43
21	AA	1447	A	N7-C5	-11.04	1.32	1.39
57	BB	916	G	C8-N7	-11.04	1.24	1.30
22	AY	64	A	C4'-C3'	-11.03	1.41	1.53
22	AY	5	A	P-O5'	-11.03	1.48	1.59
21	AA	667	G	N1-C2	11.03	1.46	1.37
26	AV	17	C	N1-C6	11.03	1.43	1.37
22	AY	13	C	C2'-C1'	-11.02	1.41	1.53
57	BB	911	A	N7-C5	-11.02	1.32	1.39
57	BB	549	G	N9-C8	11.02	1.45	1.37
21	AA	945	G	C2-N3	11.02	1.41	1.32
57	BB	2146	C	C2-N3	11.01	1.44	1.35
21	AA	572	A	N9-C4	11.01	1.44	1.37
26	AV	65	C	P-O5'	-11.01	1.48	1.59
21	AA	699	C	C4-N4	11.00	1.43	1.33
21	AA	1353	G	C6-N1	11.00	1.47	1.39
21	AA	559	A	N7-C5	-11.00	1.32	1.39
57	BB	35	G	N1-C2	10.99	1.46	1.37
57	BB	2454	G	N1-C2	10.99	1.46	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2576	G	N9-C4	10.99	1.46	1.38
57	BB	858	G	N7-C5	-10.99	1.32	1.39
58	BA	73	A	C8-N7	-10.99	1.23	1.31
57	BB	1732	C	N1-C6	10.99	1.43	1.37
57	BB	2057	G	N7-C5	-10.99	1.32	1.39
21	AA	844	G	C6-N1	10.98	1.47	1.39
57	BB	53	A	N9-C4	10.98	1.44	1.37
21	AA	521	G	C6-N1	10.98	1.47	1.39
21	AA	658	C	N1-C6	10.98	1.43	1.37
23	AW	35	A	N7-C5	-10.98	1.32	1.39
21	AA	128	G	N9-C4	-10.98	1.29	1.38
57	BB	9	G	N9-C8	10.98	1.45	1.37
57	BB	2738	A	C6-N6	10.98	1.42	1.33
26	AV	6	G	N7-C5	-10.98	1.32	1.39
57	BB	2370	G	N1-C2	10.97	1.46	1.37
57	BB	470	A	N7-C5	-10.97	1.32	1.39
57	BB	1504	A	N7-C5	-10.96	1.32	1.39
21	AA	533	A	C6-N1	10.95	1.43	1.35
21	AA	425	G	N9-C4	-10.95	1.29	1.38
21	AA	33	A	N7-C5	-10.95	1.32	1.39
26	AV	73	A	C6-N6	10.95	1.42	1.33
23	AW	31	A	C6-N6	10.94	1.42	1.33
22	AY	23	A	C8-N7	-10.94	1.23	1.31
57	BB	1586	A	C2'-C1'	-10.94	1.41	1.53
57	BB	770	G	N9-C8	-10.94	1.30	1.37
57	BB	2678	C	C4-N4	10.94	1.43	1.33
57	BB	1413	A	N7-C5	-10.93	1.32	1.39
21	AA	862	C	P-O5'	-10.93	1.48	1.59
57	BB	1881	C	N1-C6	10.93	1.43	1.37
21	AA	98	A	N3-C4	-10.92	1.28	1.34
21	AA	626	G	N1-C2	10.92	1.46	1.37
21	AA	1306	A	N3-C4	-10.92	1.28	1.34
57	BB	2195	U	C2-N3	10.92	1.45	1.37
21	AA	721	G	C2-N2	10.91	1.45	1.34
26	AV	47	U	C2-N3	10.91	1.45	1.37
57	BB	1052	C	N3-C4	10.91	1.41	1.33
57	BB	2540	C	N3-C4	10.91	1.41	1.33
21	AA	1066	C	N1-C6	10.90	1.43	1.37
57	BB	2671	G	N7-C5	-10.90	1.32	1.39
57	BB	608	A	N7-C5	-10.90	1.32	1.39
57	BB	629	G	N7-C5	-10.90	1.32	1.39
21	AA	301	G	C8-N7	-10.90	1.24	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	994	C	O3'-P	-10.90	1.48	1.61
57	BB	2852	G	C6-N1	10.90	1.47	1.39
57	BB	1810	A	N7-C5	-10.90	1.32	1.39
57	BB	2829	A	C6-N6	10.90	1.42	1.33
57	BB	1966	A	N9-C4	-10.89	1.31	1.37
23	AW	63	G	C5-C6	-10.89	1.31	1.42
57	BB	656	G	C6-N1	10.89	1.47	1.39
57	BB	2293	G	N9-C4	10.89	1.46	1.38
57	BB	849	A	N3-C4	-10.88	1.28	1.34
57	BB	1764	C	C4-N4	10.88	1.43	1.33
57	BB	2400	G	C6-N1	10.87	1.47	1.39
57	BB	2300	C	C4-N4	10.87	1.43	1.33
57	BB	1339	G	C6-N1	10.87	1.47	1.39
57	BB	2901	C	N3-C4	10.86	1.41	1.33
57	BB	2176	A	C6-N6	10.86	1.42	1.33
57	BB	1557	C	N1-C6	10.86	1.43	1.37
21	AA	927	G	N9-C8	10.86	1.45	1.37
57	BB	1168	G	N7-C5	10.86	1.45	1.39
57	BB	1678	A	N7-C5	-10.85	1.32	1.39
57	BB	984	A	C8-N7	-10.85	1.24	1.31
57	BB	1109	C	C4-C5	10.84	1.51	1.43
57	BB	1517	G	N1-C2	10.84	1.46	1.37
57	BB	1644	C	N3-C4	10.84	1.41	1.33
57	BB	278	A	N7-C5	-10.84	1.32	1.39
57	BB	910	A	N7-C5	-10.84	1.32	1.39
57	BB	1426	G	C6-N1	10.83	1.47	1.39
57	BB	2247	A	N9-C4	10.83	1.44	1.37
21	AA	76	G	C2'-C1'	-10.83	1.41	1.53
57	BB	1745	A	N3-C4	-10.83	1.28	1.34
57	BB	219	A	P-O5'	-10.83	1.49	1.59
21	AA	170	U	C4'-C3'	10.82	1.65	1.53
21	AA	1279	G	C8-N7	-10.82	1.24	1.30
57	BB	1719	G	N7-C5	-10.82	1.32	1.39
21	AA	466	A	N7-C5	-10.82	1.32	1.39
22	AY	23	A	C6-N1	10.82	1.43	1.35
57	BB	2383	G	C2'-C1'	-10.82	1.41	1.53
21	AA	362	G	C2-N3	10.80	1.41	1.32
21	AA	1386	G	C6-N1	10.80	1.47	1.39
26	AV	3	C	N1-C6	10.80	1.43	1.37
21	AA	1300	G	C5-C4	10.80	1.46	1.38
21	AA	357	G	N1-C2	10.80	1.46	1.37
22	AY	7	U	C2-N3	10.80	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1826	G	C2-N3	10.80	1.41	1.32
21	AA	786	G	N9-C4	-10.79	1.29	1.38
21	AA	1346	A	C2'-C1'	-10.79	1.41	1.53
57	BB	1	G	OP3-P	-10.79	1.48	1.61
57	BB	823	C	C2-N3	10.79	1.44	1.35
57	BB	1493	C	N1-C6	10.79	1.43	1.37
57	BB	2634	A	N3-C4	10.79	1.41	1.34
21	AA	847	G	N7-C5	-10.78	1.32	1.39
57	BB	2536	G	C2-N3	10.78	1.41	1.32
57	BB	2879	A	N7-C5	-10.78	1.32	1.39
21	AA	160	A	N7-C5	-10.78	1.32	1.39
21	AA	900	A	N7-C5	-10.78	1.32	1.39
57	BB	265	A	N3-C4	-10.78	1.28	1.34
21	AA	303	A	C6-N1	10.78	1.43	1.35
57	BB	181	A	N7-C5	-10.78	1.32	1.39
57	BB	2417	C	N1-C6	-10.77	1.30	1.37
21	AA	1103	C	C4-N4	10.77	1.43	1.33
21	AA	739	C	C5'-C4'	10.76	1.64	1.51
57	BB	761	A	N3-C4	-10.76	1.28	1.34
22	AY	45	G	N3-C4	10.76	1.43	1.35
57	BB	2103	C	O3'-P	-10.76	1.48	1.61
22	AY	5	A	N9-C4	10.76	1.44	1.37
57	BB	561	G	C5-C6	-10.76	1.31	1.42
57	BB	2395	C	C2-N3	10.76	1.44	1.35
21	AA	781	A	C6-N6	10.76	1.42	1.33
21	AA	1133	G	C6-N1	10.76	1.47	1.39
22	AY	59	U	P-O5'	-10.76	1.49	1.59
23	AW	72	C	C2'-C1'	-10.75	1.41	1.53
21	AA	384	G	C8-N7	10.75	1.37	1.30
57	BB	1690	A	N7-C5	-10.75	1.32	1.39
57	BB	786	C	C2'-C1'	-10.75	1.41	1.53
57	BB	2563	U	C2-N3	10.75	1.45	1.37
57	BB	2378	A	C6-N6	10.74	1.42	1.33
57	BB	2088	A	N3-C4	10.74	1.41	1.34
57	BB	2602	A	N3-C4	-10.74	1.28	1.34
57	BB	1299	G	N7-C5	-10.74	1.32	1.39
21	AA	60	A	C6-N6	10.73	1.42	1.33
57	BB	1161	C	N3-C4	10.73	1.41	1.33
23	AW	67	C	C4-C5	10.72	1.51	1.43
21	AA	107	G	N9-C8	-10.72	1.30	1.37
57	BB	1483	G	N7-C5	-10.72	1.32	1.39
57	BB	1444	G	N7-C5	-10.71	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2577	A	N7-C5	-10.71	1.32	1.39
21	AA	764	C	O3'-P	-10.71	1.48	1.61
57	BB	2805	C	N1-C6	-10.71	1.30	1.37
57	BB	270	A	N9-C4	-10.70	1.31	1.37
57	BB	1276	A	C6-N6	10.70	1.42	1.33
21	AA	457	G	C6-N1	10.70	1.47	1.39
57	BB	647	G	C6-N1	10.70	1.47	1.39
22	AY	34	G	P-O5'	-10.69	1.49	1.59
57	BB	2750	A	C3'-C2'	10.69	1.64	1.52
58	BA	72	G	N3-C4	-10.69	1.27	1.35
57	BB	1041	G	C2-N3	10.69	1.41	1.32
57	BB	1938	A	N3-C4	-10.69	1.28	1.34
57	BB	2553	G	C2-N3	10.69	1.41	1.32
57	BB	2631	G	C5'-C4'	10.69	1.64	1.51
57	BB	2722	G	C2-N3	10.68	1.41	1.32
23	AW	75	C	N3-C4	10.68	1.41	1.33
21	AA	738	C	N3-C4	10.67	1.41	1.33
21	AA	786	G	P-O5'	-10.67	1.49	1.59
57	BB	1429	G	N1-C2	10.67	1.46	1.37
57	BB	1507	C	C4-N4	10.67	1.43	1.33
21	AA	753	A	C6-N6	10.67	1.42	1.33
57	BB	2301	C	C2-N3	-10.67	1.27	1.35
57	BB	2803	G	N9-C8	10.67	1.45	1.37
22	AY	26	G	N9-C8	-10.66	1.30	1.37
57	BB	652	U	N3-C4	10.66	1.48	1.38
57	BB	1642	G	N7-C5	-10.66	1.32	1.39
57	BB	83	A	C6-N6	10.66	1.42	1.33
23	AW	10	G	C8-N7	10.66	1.37	1.30
26	AV	63	G	C6-N1	10.65	1.47	1.39
57	BB	2269	G	N7-C5	-10.65	1.32	1.39
21	AA	69	G	N9-C4	-10.64	1.29	1.38
21	AA	572	A	C6-N6	10.64	1.42	1.33
57	BB	2802	G	N7-C5	-10.64	1.32	1.39
57	BB	1317	G	C6-N1	10.64	1.47	1.39
57	BB	2256	G	C2-N3	10.63	1.41	1.32
57	BB	2043	C	N3-C4	10.63	1.41	1.33
57	BB	51	G	C3'-C2'	-10.63	1.41	1.52
57	BB	1695	G	P-O5'	10.63	1.70	1.59
58	BA	81	G	C8-N7	-10.63	1.24	1.30
57	BB	1289	C	N3-C4	10.62	1.41	1.33
57	BB	2645	G	C2-N3	10.62	1.41	1.32
21	AA	615	G	C2-N3	10.62	1.41	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	338	G	C6-N1	10.62	1.47	1.39
57	BB	439	A	N7-C5	-10.62	1.32	1.39
23	AW	70	G	C8-N7	-10.62	1.24	1.30
57	BB	2832	U	N1-C6	10.62	1.47	1.38
57	BB	2434	A	C8-N7	-10.61	1.24	1.31
21	AA	849	G	N9-C8	10.61	1.45	1.37
21	AA	817	C	N1-C6	10.61	1.43	1.37
21	AA	437	U	N3-C4	10.60	1.48	1.38
22	AY	30	G	N9-C4	10.60	1.46	1.38
57	BB	2250	G	C6-N1	10.60	1.47	1.39
58	BA	79	G	N3-C4	-10.60	1.28	1.35
57	BB	1275	A	N7-C5	-10.59	1.32	1.39
21	AA	1370	G	C2-N3	10.59	1.41	1.32
57	BB	362	A	C6-N1	10.59	1.43	1.35
57	BB	2590	A	C6-N6	10.59	1.42	1.33
57	BB	80	G	N7-C5	-10.59	1.32	1.39
57	BB	184	C	N3-C4	10.59	1.41	1.33
57	BB	507	A	C8-N7	-10.58	1.24	1.31
23	AW	1	G	N9-C8	10.58	1.45	1.37
57	BB	712	G	N7-C5	-10.58	1.32	1.39
57	BB	1205	A	C6-N6	10.58	1.42	1.33
57	BB	1803	A	N7-C5	-10.58	1.32	1.39
58	BA	92	C	C2'-C1'	-10.58	1.41	1.53
57	BB	1661	G	C2'-C1'	-10.57	1.41	1.53
21	AA	299	G	N1-C2	10.57	1.46	1.37
57	BB	878	A	C2'-C1'	-10.56	1.41	1.53
21	AA	1134	G	N1-C2	10.55	1.46	1.37
57	BB	184	C	N1-C6	-10.55	1.30	1.37
57	BB	945	A	N3-C4	-10.55	1.28	1.34
21	AA	1447	A	C5-C4	10.55	1.46	1.38
57	BB	578	G	C2'-C1'	-10.55	1.41	1.53
57	BB	1676	A	P-O5'	-10.55	1.49	1.59
57	BB	2633	G	N7-C5	-10.55	1.32	1.39
57	BB	1732	C	C4-N4	10.54	1.43	1.33
21	AA	977	A	C6-N6	10.54	1.42	1.33
57	BB	2382	G	N9-C4	10.54	1.46	1.38
22	AY	61	C	C4-C5	10.54	1.51	1.43
57	BB	2569	G	N1-C2	10.54	1.46	1.37
57	BB	2677	G	C8-N7	10.54	1.37	1.30
22	AY	26	G	C3'-C2'	-10.54	1.41	1.52
57	BB	681	G	C4'-C3'	10.53	1.64	1.53
21	AA	564	C	C2'-C1'	-10.53	1.41	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	845	A	N3-C4	-10.53	1.28	1.34
21	AA	221	C	N1-C6	10.53	1.43	1.37
57	BB	2192	U	N1-C2	10.52	1.48	1.38
21	AA	1396	A	N1-C2	10.52	1.43	1.34
24	AX	20	U	C2-N3	10.52	1.45	1.37
57	BB	2052	A	N7-C5	-10.52	1.32	1.39
21	AA	851	G	N1-C2	10.51	1.46	1.37
21	AA	58	C	N3-C4	10.51	1.41	1.33
22	AY	40	C	N1-C6	10.51	1.43	1.37
26	AV	35	A	C6-N6	10.51	1.42	1.33
57	BB	150	U	C2-N3	10.50	1.45	1.37
57	BB	1670	C	N1-C6	10.50	1.43	1.37
57	BB	221	A	N7-C5	-10.50	1.32	1.39
21	AA	192	A	C8-N7	-10.49	1.24	1.31
58	BA	81	G	C2-N2	10.49	1.45	1.34
57	BB	1627	G	N3-C4	-10.49	1.28	1.35
57	BB	1648	U	C2-N3	10.48	1.45	1.37
57	BB	2104	C	N1-C6	10.48	1.43	1.37
57	BB	2791	G	N3-C4	-10.48	1.28	1.35
57	BB	2453	A	N7-C5	-10.48	1.32	1.39
57	BB	879	G	N7-C5	-10.47	1.32	1.39
21	AA	681	A	N3-C4	10.47	1.41	1.34
57	BB	1808	A	N7-C5	-10.47	1.32	1.39
23	AW	19	G	C5'-C4'	10.47	1.64	1.51
57	BB	1	G	C6-N1	10.47	1.46	1.39
57	BB	89	A	N7-C5	-10.47	1.32	1.39
21	AA	447	G	N3-C4	-10.46	1.28	1.35
57	BB	2822	G	N1-C2	10.46	1.46	1.37
57	BB	1535	A	N9-C4	-10.46	1.31	1.37
57	BB	1819	A	N7-C5	-10.46	1.32	1.39
57	BB	2821	A	N7-C5	-10.46	1.32	1.39
57	BB	1968	G	N3-C4	-10.46	1.28	1.35
57	BB	1007	C	N1-C6	10.46	1.43	1.37
57	BB	1361	G	N7-C5	-10.45	1.32	1.39
57	BB	2013	A	N7-C5	-10.45	1.32	1.39
57	BB	2757	A	N7-C5	-10.46	1.32	1.39
57	BB	1516	G	N1-C2	10.45	1.46	1.37
21	AA	805	C	N1-C6	10.45	1.43	1.37
57	BB	843	G	C2-N3	10.45	1.41	1.32
21	AA	124	C	C4'-C3'	10.45	1.64	1.53
57	BB	1634	A	N7-C5	-10.45	1.32	1.39
57	BB	13	A	C6-N1	10.45	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1651	G	N1-C2	10.44	1.46	1.37
21	AA	1034	G	N9-C8	10.44	1.45	1.37
21	AA	1514	G	C5-C4	10.44	1.45	1.38
26	AV	35	A	N9-C4	-10.44	1.31	1.37
58	BA	22	U	N3-C4	10.44	1.47	1.38
57	BB	2237	G	N1-C2	10.44	1.46	1.37
57	BB	813	U	N3-C4	10.44	1.47	1.38
57	BB	2665	A	N9-C4	10.44	1.44	1.37
57	BB	299	A	N7-C5	-10.43	1.32	1.39
21	AA	260	G	C8-N7	-10.43	1.24	1.30
21	AA	1125	U	C2-N3	10.43	1.45	1.37
57	BB	1261	C	N3-C4	10.43	1.41	1.33
21	AA	415	A	C6-N6	10.43	1.42	1.33
57	BB	305	C	N3-C4	10.43	1.41	1.33
21	AA	760	G	N7-C5	-10.42	1.32	1.39
57	BB	2145	C	N1-C6	-10.42	1.30	1.37
57	BB	2258	C	C5'-C4'	10.42	1.63	1.51
57	BB	522	A	C2'-C1'	-10.42	1.41	1.53
57	BB	279	A	N7-C5	-10.42	1.33	1.39
57	BB	862	G	C6-N1	10.41	1.46	1.39
21	AA	1084	G	C4'-C3'	-10.41	1.41	1.53
57	BB	843	G	C5'-C4'	10.41	1.63	1.51
57	BB	2424	C	C2-N3	10.41	1.44	1.35
57	BB	2547	A	C6-N6	10.40	1.42	1.33
21	AA	907	A	N7-C5	-10.40	1.33	1.39
57	BB	763	G	C6-N1	10.40	1.46	1.39
57	BB	1301	A	N7-C5	-10.40	1.33	1.39
22	AY	13	C	N1-C6	10.40	1.43	1.37
57	BB	853	C	C4-N4	10.40	1.43	1.33
57	BB	1948	G	N9-C4	-10.39	1.29	1.38
21	AA	1108	G	C2-N3	10.38	1.41	1.32
57	BB	1494	A	C8-N7	10.38	1.38	1.31
57	BB	1569	A	N7-C5	-10.38	1.33	1.39
58	BA	66	A	N7-C5	-10.38	1.33	1.39
22	AY	11	C	N3-C4	10.38	1.41	1.33
57	BB	23	G	C6-N1	10.37	1.46	1.39
21	AA	547	A	N9-C4	-10.37	1.31	1.37
21	AA	1422	G	N7-C5	-10.37	1.33	1.39
57	BB	384	A	N9-C4	-10.37	1.31	1.37
23	AW	6	G	C6-N1	10.37	1.46	1.39
21	AA	343	U	C2-N3	10.37	1.45	1.37
21	AA	490	C	N1-C6	10.37	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	652	U	C2'-C1'	-10.36	1.42	1.53
57	BB	576	U	C2-N3	10.36	1.45	1.37
57	BB	2009	A	C8-N7	-10.36	1.24	1.31
57	BB	743	A	N9-C4	-10.36	1.31	1.37
21	AA	639	G	N7-C5	-10.35	1.33	1.39
57	BB	525	U	N3-C4	10.35	1.47	1.38
57	BB	1429	G	C5-C4	10.35	1.45	1.38
21	AA	1309	G	C2'-C1'	-10.34	1.42	1.53
57	BB	1390	U	C2'-C1'	-10.34	1.42	1.53
57	BB	2060	A	C4'-C3'	10.34	1.64	1.53
57	BB	1671	U	C2-N3	10.34	1.45	1.37
57	BB	1413	A	C6-N6	10.34	1.42	1.33
57	BB	2315	G	N7-C5	10.34	1.45	1.39
57	BB	1043	C	N1-C6	10.33	1.43	1.37
57	BB	2652	C	N1-C6	-10.33	1.30	1.37
21	AA	184	G	P-O5'	-10.33	1.49	1.59
57	BB	53	A	C6-N1	10.33	1.42	1.35
57	BB	2390	U	C2-N3	10.33	1.45	1.37
58	BA	14	U	C2-N3	10.33	1.45	1.37
23	AW	22	G	N3-C4	10.33	1.42	1.35
57	BB	537	G	N9-C4	-10.33	1.29	1.38
22	AY	24	G	C6-N1	10.32	1.46	1.39
57	BB	498	G	C3'-C2'	10.32	1.64	1.52
57	BB	1266	G	N7-C5	-10.32	1.33	1.39
21	AA	919	A	N7-C5	-10.32	1.33	1.39
21	AA	1486	G	N9-C8	-10.32	1.30	1.37
57	BB	190	A	N7-C5	-10.32	1.33	1.39
21	AA	830	G	C6-N1	10.31	1.46	1.39
21	AA	1223	C	N1-C6	10.31	1.43	1.37
57	BB	465	G	C2-N3	10.31	1.41	1.32
57	BB	431	U	C2-N3	10.31	1.45	1.37
57	BB	1582	C	C2'-C1'	-10.31	1.42	1.53
21	AA	932	C	N1-C6	10.30	1.43	1.37
57	BB	1757	A	C6-N6	10.30	1.42	1.33
57	BB	2211	A	C6-N1	10.30	1.42	1.35
21	AA	1039	G	C6-N1	10.30	1.46	1.39
57	BB	2050	C	N1-C6	10.30	1.43	1.37
57	BB	2456	C	C5'-C4'	10.30	1.63	1.51
57	BB	1261	C	N1-C6	10.30	1.43	1.37
57	BB	110	G	C5-C4	10.29	1.45	1.38
57	BB	1766	G	N9-C8	10.29	1.45	1.37
57	BB	1387	A	N7-C5	-10.29	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1327	A	C8-N7	-10.29	1.24	1.31
57	BB	2294	G	C8-N7	10.29	1.37	1.30
57	BB	2807	U	C2'-C1'	-10.29	1.42	1.53
57	BB	1722	A	N7-C5	-10.28	1.33	1.39
57	BB	1805	A	N7-C5	-10.28	1.33	1.39
57	BB	754	U	C2-N3	10.28	1.45	1.37
57	BB	1054	A	C8-N7	-10.28	1.24	1.31
57	BB	1599	U	N3-C4	10.27	1.47	1.38
21	AA	676	A	C6-N6	10.27	1.42	1.33
57	BB	703	U	C2-N3	10.27	1.45	1.37
21	AA	72	A	C6-N1	10.27	1.42	1.35
21	AA	523	A	C6-N6	10.27	1.42	1.33
21	AA	602	A	N7-C5	-10.27	1.33	1.39
57	BB	2777	G	N7-C5	-10.26	1.33	1.39
21	AA	275	G	N7-C5	-10.26	1.33	1.39
21	AA	1299	A	N7-C5	-10.26	1.33	1.39
57	BB	2051	A	N7-C5	10.26	1.45	1.39
21	AA	1534	A	N3-C4	-10.26	1.28	1.34
57	BB	930	G	N3-C4	10.26	1.42	1.35
57	BB	1580	A	N7-C5	-10.26	1.33	1.39
57	BB	2147	A	N7-C5	-10.26	1.33	1.39
57	BB	2211	A	N7-C5	-10.25	1.33	1.39
21	AA	913	A	N7-C5	-10.25	1.33	1.39
57	BB	1612	C	N1-C6	10.25	1.43	1.37
57	BB	2576	G	C6-N1	10.25	1.46	1.39
57	BB	199	A	C8-N7	-10.25	1.24	1.31
57	BB	2687	U	C3'-C2'	-10.25	1.41	1.52
21	AA	447	G	C8-N7	-10.24	1.24	1.30
21	AA	1042	A	N3-C4	-10.24	1.28	1.34
21	AA	1179	A	C8-N7	-10.24	1.24	1.31
22	AY	5	A	C6-N6	10.24	1.42	1.33
26	AV	64	G	C3'-C2'	-10.24	1.41	1.52
21	AA	252	U	C3'-C2'	10.24	1.64	1.52
22	AY	39	U	C2-N3	10.24	1.45	1.37
22	AY	40	C	P-O5'	-10.24	1.49	1.59
21	AA	901	A	N7-C5	-10.23	1.33	1.39
57	BB	769	U	N3-C4	10.23	1.47	1.38
57	BB	2700	A	C6-N6	10.23	1.42	1.33
57	BB	1907	G	N7-C5	-10.23	1.33	1.39
21	AA	629	A	N7-C5	-10.23	1.33	1.39
57	BB	1410	G	N9-C8	10.23	1.45	1.37
21	AA	764	C	C2-N3	10.23	1.44	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2396	G	C6-N1	10.23	1.46	1.39
21	AA	328	C	N3-C4	10.22	1.41	1.33
21	AA	890	G	C8-N7	10.22	1.37	1.30
57	BB	1399	C	N3-C4	10.22	1.41	1.33
57	BB	2001	C	P-O5'	-10.22	1.49	1.59
57	BB	2873	A	N7-C5	-10.22	1.33	1.39
21	AA	934	C	C4-N4	10.22	1.43	1.33
57	BB	1483	G	C8-N7	-10.22	1.24	1.30
21	AA	329	A	N9-C4	-10.21	1.31	1.37
21	AA	839	C	C2-N3	10.21	1.44	1.35
57	BB	405	U	C2-N3	10.21	1.44	1.37
57	BB	1510	G	O3'-P	-10.21	1.48	1.61
21	AA	1099	G	C6-N1	10.21	1.46	1.39
57	BB	1632	A	N7-C5	-10.21	1.33	1.39
57	BB	1983	G	C5'-C4'	10.21	1.63	1.51
57	BB	1867	G	C2'-C1'	-10.20	1.42	1.53
57	BB	1122	G	N7-C5	10.19	1.45	1.39
57	BB	1797	G	N1-C2	10.19	1.46	1.37
57	BB	2623	G	C2-N3	10.19	1.41	1.32
21	AA	727	G	N7-C5	-10.19	1.33	1.39
57	BB	458	G	N1-C2	10.19	1.45	1.37
57	BB	1286	A	C6-N6	10.19	1.42	1.33
21	AA	282	A	C6-N6	10.18	1.42	1.33
57	BB	2085	U	C2'-C1'	-10.18	1.42	1.53
57	BB	848	C	N3-C4	10.18	1.41	1.33
57	BB	2624	G	C4'-C3'	10.18	1.64	1.53
57	BB	2701	U	C2-N3	10.18	1.44	1.37
21	AA	763	G	N3-C4	-10.18	1.28	1.35
21	AA	773	G	C6-N1	10.18	1.46	1.39
58	BA	39	A	N7-C5	-10.18	1.33	1.39
57	BB	1133	A	C6-N6	10.17	1.42	1.33
57	BB	2336	A	C5-C6	-10.17	1.31	1.41
57	BB	1616	A	C6-N1	10.17	1.42	1.35
57	BB	2070	A	N9-C4	-10.17	1.31	1.37
21	AA	1201	A	N7-C5	-10.17	1.33	1.39
57	BB	863	A	N7-C5	-10.17	1.33	1.39
57	BB	962	G	N7-C5	10.16	1.45	1.39
58	BA	29	A	N9-C4	-10.16	1.31	1.37
57	BB	1375	U	C5'-C4'	10.15	1.63	1.51
57	BB	1529	G	N9-C8	10.15	1.45	1.37
21	AA	507	C	N3-C4	10.15	1.41	1.33
57	BB	1739	A	N7-C5	-10.15	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	323	C	N3-C4	10.15	1.41	1.33
57	BB	698	C	C4-N4	10.15	1.43	1.33
57	BB	1256	G	C8-N7	-10.15	1.24	1.30
57	BB	2887	A	C5-C4	10.15	1.45	1.38
21	AA	1312	G	N1-C2	10.15	1.45	1.37
21	AA	120	A	N9-C4	-10.14	1.31	1.37
22	AY	37	G	N7-C5	-10.14	1.33	1.39
57	BB	307	G	N9-C8	10.14	1.45	1.37
21	AA	262	A	N9-C4	-10.14	1.31	1.37
57	BB	72	U	C2-N3	10.14	1.44	1.37
57	BB	897	C	C5'-C4'	10.14	1.63	1.51
21	AA	1233	G	N7-C5	-10.13	1.33	1.39
21	AA	1407	C	N1-C6	10.13	1.43	1.37
21	AA	844	G	N7-C5	-10.13	1.33	1.39
21	AA	1374	A	C6-N6	10.12	1.42	1.33
57	BB	605	G	C5-C4	10.12	1.45	1.38
58	BA	76	G	C2-N3	10.12	1.40	1.32
21	AA	1394	A	C6-N6	10.12	1.42	1.33
57	BB	2782	G	C2-N3	10.12	1.40	1.32
21	AA	1214	C	P-O5'	-10.12	1.49	1.59
26	AV	31	G	N7-C5	-10.12	1.33	1.39
57	BB	1684	G	C6-N1	10.12	1.46	1.39
57	BB	244	A	N9-C4	10.12	1.44	1.37
57	BB	1446	C	N3-C4	10.12	1.41	1.33
57	BB	1453	A	C6-N6	10.11	1.42	1.33
57	BB	2852	G	C8-N7	-10.11	1.24	1.30
21	AA	918	A	N9-C4	-10.11	1.31	1.37
57	BB	500	G	N7-C5	-10.11	1.33	1.39
57	BB	1637	A	N7-C5	-10.11	1.33	1.39
57	BB	2762	C	N1-C6	10.11	1.43	1.37
58	BA	107	G	N7-C5	-10.11	1.33	1.39
57	BB	167	A	N7-C5	-10.11	1.33	1.39
21	AA	700	G	N7-C5	-10.11	1.33	1.39
21	AA	1046	A	C6-N1	10.11	1.42	1.35
21	AA	1355	G	N7-C5	-10.11	1.33	1.39
57	BB	757	G	C6-N1	10.11	1.46	1.39
57	BB	989	G	C2-N2	10.10	1.44	1.34
57	BB	2825	G	N7-C5	-10.10	1.33	1.39
26	AV	61	C	C5-C6	10.10	1.42	1.34
58	BA	59	A	C6-N6	10.10	1.42	1.33
57	BB	237	C	C4-C5	-10.10	1.34	1.43
21	AA	255	G	C6-N1	10.09	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	34	U	N3-C4	10.09	1.47	1.38
21	AA	1301	U	C3'-C2'	10.09	1.64	1.52
57	BB	864	G	C5-C4	10.09	1.45	1.38
57	BB	627	A	N3-C4	-10.09	1.28	1.34
57	BB	1829	A	N9-C4	-10.09	1.31	1.37
57	BB	2407	A	P-O5'	-10.09	1.49	1.59
57	BB	2471	A	C8-N7	-10.09	1.24	1.31
57	BB	2349	G	N3-C4	-10.08	1.28	1.35
57	BB	411	G	N7-C5	10.08	1.45	1.39
57	BB	2749	A	N9-C4	-10.08	1.31	1.37
57	BB	2509	G	C2'-C1'	-10.08	1.42	1.53
57	BB	46	G	C6-N1	10.07	1.46	1.39
57	BB	466	A	N3-C4	-10.07	1.28	1.34
57	BB	2030	A	C6-N6	10.07	1.42	1.33
26	AV	37	A	N7-C5	-10.07	1.33	1.39
21	AA	267	C	N1-C6	10.07	1.43	1.37
57	BB	467	G	C6-N1	10.07	1.46	1.39
57	BB	1236	G	C2-N3	10.07	1.40	1.32
57	BB	24	G	C2'-C1'	-10.07	1.42	1.53
57	BB	2017	U	P-O5'	10.07	1.69	1.59
57	BB	279	A	C6-N1	10.06	1.42	1.35
21	AA	163	C	P-O5'	-10.06	1.49	1.59
57	BB	663	G	N7-C5	-10.06	1.33	1.39
21	AA	622	A	N7-C5	-10.06	1.33	1.39
57	BB	1657	U	C4'-C3'	-10.06	1.42	1.53
57	BB	2158	A	N3-C4	-10.06	1.28	1.34
21	AA	1383	C	N1-C6	10.05	1.43	1.37
57	BB	407	G	C5-C4	-10.05	1.31	1.38
57	BB	2517	C	N3-C4	10.05	1.41	1.33
21	AA	609	A	C6-N6	10.05	1.42	1.33
21	AA	1270	G	N7-C5	-10.05	1.33	1.39
21	AA	602	A	C6-N6	10.05	1.42	1.33
57	BB	1280	G	N9-C4	10.05	1.46	1.38
57	BB	734	A	N7-C5	-10.04	1.33	1.39
58	BA	49	C	C2'-C1'	-10.04	1.42	1.53
57	BB	953	G	C2-N3	10.04	1.40	1.32
24	AX	16	A	C6-N1	10.04	1.42	1.35
57	BB	751	A	C8-N7	-10.04	1.24	1.31
57	BB	1765	U	C2-N3	10.04	1.44	1.37
21	AA	128	G	C8-N7	-10.03	1.25	1.30
57	BB	192	C	P-O5'	-10.03	1.49	1.59
21	AA	1460	C	N1-C6	10.03	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	494	G	N1-C2	10.03	1.45	1.37
57	BB	981	A	N3-C4	-10.03	1.28	1.34
57	BB	370	G	C4'-C3'	10.03	1.64	1.53
57	BB	622	G	C6-N1	10.03	1.46	1.39
21	AA	1143	G	C2-N3	10.02	1.40	1.32
22	AY	76	A	C8-N7	-10.02	1.24	1.31
57	BB	241	A	N7-C5	-10.02	1.33	1.39
57	BB	799	G	C8-N7	-10.02	1.25	1.30
57	BB	366	C	C3'-C2'	10.02	1.64	1.52
57	BB	1477	A	C6-N6	10.02	1.42	1.33
21	AA	253	A	N9-C4	-10.02	1.31	1.37
57	BB	2508	G	C4'-C3'	10.02	1.64	1.53
57	BB	2858	C	N3-C4	10.01	1.41	1.33
57	BB	624	C	N3-C4	10.01	1.41	1.33
57	BB	2759	G	N1-C2	10.01	1.45	1.37
57	BB	878	A	C3'-C2'	-10.00	1.41	1.52
57	BB	2735	G	C6-N1	10.00	1.46	1.39
21	AA	130	A	P-O5'	-10.00	1.49	1.59
57	BB	1462	C	C2-N3	-10.00	1.27	1.35
57	BB	366	C	C2'-C1'	-10.00	1.42	1.53
57	BB	1862	G	C8-N7	-10.00	1.25	1.30
21	AA	741	G	C2-N3	9.99	1.40	1.32
57	BB	926	G	N1-C2	9.99	1.45	1.37
57	BB	2211	A	C6-N6	9.99	1.42	1.33
57	BB	2413	G	C5-C4	9.99	1.45	1.38
21	AA	584	G	C5-C6	-9.99	1.32	1.42
21	AA	871	U	N3-C4	9.99	1.47	1.38
57	BB	392	U	C4-C5	9.98	1.52	1.43
57	BB	1321	A	N7-C5	-9.98	1.33	1.39
57	BB	246	C	C4-N4	9.98	1.43	1.33
21	AA	1489	G	C2'-C1'	-9.98	1.42	1.53
58	BA	70	C	N3-C4	9.98	1.41	1.33
57	BB	983	A	C6-N6	9.98	1.42	1.33
57	BB	430	A	P-O5'	-9.98	1.49	1.59
57	BB	2008	C	C4'-C3'	9.97	1.64	1.53
57	BB	136	G	N1-C2	9.97	1.45	1.37
21	AA	256	U	N3-C4	9.97	1.47	1.38
21	AA	121	U	N3-C4	9.97	1.47	1.38
21	AA	230	G	C6-N1	9.97	1.46	1.39
21	AA	683	G	N9-C8	9.96	1.44	1.37
21	AA	753	A	C4'-C3'	9.96	1.64	1.53
22	AY	53	G	N3-C4	9.96	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1026	G	C8-N7	-9.96	1.25	1.30
21	AA	301	G	N7-C5	9.96	1.45	1.39
58	BA	83	G	N9-C8	9.96	1.44	1.37
21	AA	925	G	N7-C5	-9.96	1.33	1.39
22	AY	70	C	C2-N3	9.96	1.43	1.35
57	BB	1786	A	N9-C8	9.96	1.45	1.37
57	BB	932	U	N3-C4	9.96	1.47	1.38
57	BB	993	G	N7-C5	-9.96	1.33	1.39
57	BB	2460	U	C2-N3	9.96	1.44	1.37
21	AA	931	C	N3-C4	9.96	1.41	1.33
57	BB	478	A	N3-C4	9.96	1.40	1.34
57	BB	1416	G	N7-C5	-9.96	1.33	1.39
57	BB	2093	G	C8-N7	9.96	1.36	1.30
26	AV	9	G	N1-C2	9.95	1.45	1.37
57	BB	1239	G	C2-N3	9.95	1.40	1.32
57	BB	1696	G	C5-C4	-9.95	1.31	1.38
21	AA	954	G	N7-C5	-9.95	1.33	1.39
57	BB	927	A	N3-C4	-9.95	1.28	1.34
26	AV	38	A	C6-N6	9.95	1.42	1.33
57	BB	1418	G	C8-N7	-9.95	1.25	1.30
57	BB	1654	A	N7-C5	-9.94	1.33	1.39
21	AA	444	G	N1-C2	9.94	1.45	1.37
22	AY	26	G	C2-N3	9.94	1.40	1.32
57	BB	2706	A	N9-C4	-9.94	1.31	1.37
57	BB	2686	G	C6-N1	9.94	1.46	1.39
21	AA	296	U	P-O5'	-9.94	1.49	1.59
21	AA	1009	U	C4-C5	-9.93	1.34	1.43
57	BB	272	A	C6-N1	9.93	1.42	1.35
57	BB	442	G	C2-N3	9.93	1.40	1.32
21	AA	629	A	N3-C4	-9.93	1.28	1.34
21	AA	1198	G	C5-C4	9.93	1.45	1.38
57	BB	1661	G	N1-C2	9.93	1.45	1.37
21	AA	1189	U	C2-N3	9.92	1.44	1.37
21	AA	995	C	N1-C6	-9.92	1.31	1.37
57	BB	927	A	N7-C5	-9.92	1.33	1.39
57	BB	114	U	C2-N3	9.91	1.44	1.37
57	BB	1539	U	C2-N3	9.91	1.44	1.37
57	BB	2562	U	C2-N3	9.91	1.44	1.37
21	AA	220	G	C6-N1	9.91	1.46	1.39
21	AA	1459	G	N3-C4	-9.91	1.28	1.35
21	AA	91	U	N1-C2	9.90	1.47	1.38
57	BB	1262	A	C6-N6	9.90	1.41	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1891	G	N9-C8	9.90	1.44	1.37
21	AA	782	A	P-O5'	-9.90	1.49	1.59
22	AY	26	G	N7-C5	-9.90	1.33	1.39
57	BB	19	A	C6-N6	9.90	1.41	1.33
57	BB	1691	C	C4-N4	9.90	1.42	1.33
57	BB	2639	A	N3-C4	-9.90	1.28	1.34
21	AA	546	A	N9-C4	-9.90	1.31	1.37
21	AA	864	A	C6-N1	9.90	1.42	1.35
57	BB	568	U	C2-N3	9.90	1.44	1.37
57	BB	750	A	C6-N6	9.90	1.41	1.33
57	BB	1849	G	C2-N3	9.90	1.40	1.32
57	BB	113	U	C2-N3	9.90	1.44	1.37
57	BB	2230	G	C2-N3	9.90	1.40	1.32
21	AA	1055	A	P-O5'	-9.89	1.49	1.59
57	BB	2193	G	N3-C4	-9.89	1.28	1.35
21	AA	406	G	N1-C2	9.89	1.45	1.37
57	BB	2859	G	C6-N1	9.89	1.46	1.39
21	AA	1053	G	C5-C4	9.88	1.45	1.38
57	BB	2711	A	N7-C5	-9.88	1.33	1.39
21	AA	51	A	N7-C5	-9.88	1.33	1.39
21	AA	849	G	C8-N7	-9.88	1.25	1.30
57	BB	289	G	N9-C4	9.88	1.45	1.38
57	BB	843	G	N7-C5	-9.88	1.33	1.39
57	BB	1883	U	C2-N3	9.88	1.44	1.37
57	BB	2087	G	C2-N2	9.88	1.44	1.34
57	BB	76	C	P-O5'	-9.88	1.49	1.59
58	BA	73	A	N9-C4	-9.88	1.31	1.37
23	AW	73	A	N3-C4	-9.87	1.28	1.34
57	BB	2002	G	N7-C5	-9.87	1.33	1.39
57	BB	2887	A	N7-C5	-9.87	1.33	1.39
57	BB	2695	U	N3-C4	9.87	1.47	1.38
26	AV	62	C	N1-C6	9.87	1.43	1.37
57	BB	340	A	C6-N6	9.86	1.41	1.33
57	BB	976	G	N3-C4	-9.86	1.28	1.35
57	BB	934	U	C4'-C3'	9.85	1.64	1.53
21	AA	230	G	C3'-C2'	-9.85	1.42	1.52
57	BB	1678	A	N3-C4	-9.85	1.28	1.34
57	BB	2388	A	P-O5'	-9.85	1.49	1.59
21	AA	1220	G	N1-C2	9.85	1.45	1.37
57	BB	862	G	C2-N3	9.85	1.40	1.32
57	BB	2617	U	N3-C4	9.85	1.47	1.38
21	AA	553	A	C2'-C1'	-9.85	1.42	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	830	G	C2-N3	9.85	1.40	1.32
21	AA	354	G	N9-C8	-9.84	1.30	1.37
57	BB	725	G	P-O5'	-9.84	1.50	1.59
57	BB	2623	G	N1-C2	9.84	1.45	1.37
57	BB	1699	G	C2-N3	9.84	1.40	1.32
21	AA	828	U	C2-N3	9.84	1.44	1.37
21	AA	1199	U	C1'-N1	9.84	1.63	1.48
57	BB	347	A	C5-C4	9.84	1.45	1.38
21	AA	765	G	N7-C5	9.83	1.45	1.39
57	BB	1345	C	C4-N4	9.83	1.42	1.33
57	BB	2544	G	C2-N3	9.83	1.40	1.32
57	BB	1373	A	C6-N1	9.83	1.42	1.35
21	AA	818	G	C8-N7	9.83	1.36	1.30
22	AY	42	G	N7-C5	-9.83	1.33	1.39
57	BB	1805	A	C6-N6	9.83	1.41	1.33
21	AA	818	G	C6-N1	9.83	1.46	1.39
21	AA	487	A	C5-C4	9.82	1.45	1.38
21	AA	1524	C	C2-N3	9.82	1.43	1.35
57	BB	2309	A	N9-C4	-9.82	1.31	1.37
58	BA	117	G	C2-N3	9.82	1.40	1.32
21	AA	1436	U	C2-N3	9.82	1.44	1.37
57	BB	2359	C	C2-N3	9.82	1.43	1.35
22	AY	19	G	N1-C2	9.82	1.45	1.37
57	BB	2224	G	N3-C4	-9.82	1.28	1.35
57	BB	2246	G	N9-C8	9.81	1.44	1.37
21	AA	537	G	N9-C8	9.81	1.44	1.37
21	AA	1225	A	N9-C4	9.81	1.43	1.37
21	AA	432	A	N9-C4	9.81	1.43	1.37
21	AA	1124	G	C6-N1	9.81	1.46	1.39
57	BB	1553	A	N7-C5	-9.81	1.33	1.39
21	AA	129	A	N9-C8	-9.80	1.29	1.37
21	AA	991	U	C2-N3	9.81	1.44	1.37
57	BB	528	A	N7-C5	9.81	1.45	1.39
21	AA	1443	C	C4-N4	9.80	1.42	1.33
22	AY	41	U	C4-C5	9.80	1.52	1.43
26	AV	63	G	N7-C5	-9.80	1.33	1.39
21	AA	918	A	N7-C5	-9.80	1.33	1.39
21	AA	477	C	C2-N3	9.80	1.43	1.35
21	AA	864	A	N3-C4	-9.80	1.28	1.34
57	BB	1210	G	C4'-C3'	9.80	1.64	1.53
21	AA	491	G	C6-N1	9.79	1.46	1.39
57	BB	735	A	N7-C5	-9.80	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	751	U	C2-N3	9.79	1.44	1.37
21	AA	435	A	C6-N6	9.79	1.41	1.33
57	BB	1365	A	C5-C4	9.79	1.45	1.38
57	BB	1671	U	N3-C4	9.79	1.47	1.38
57	BB	175	G	C2'-C1'	-9.79	1.42	1.53
23	AW	64	A	N7-C5	-9.79	1.33	1.39
57	BB	389	G	C5-C4	-9.79	1.31	1.38
58	BA	10	G	N9-C8	-9.79	1.30	1.37
57	BB	820	A	O3'-P	-9.79	1.49	1.61
57	BB	1677	A	C6-N6	9.78	1.41	1.33
21	AA	454	G	O3'-P	-9.78	1.49	1.61
21	AA	541	G	P-O5'	-9.78	1.50	1.59
57	BB	2121	G	C8-N7	-9.78	1.25	1.30
57	BB	2377	A	N3-C4	-9.78	1.28	1.34
57	BB	799	G	C6-N1	9.78	1.46	1.39
21	AA	1074	G	C8-N7	9.77	1.36	1.30
21	AA	126	G	C2-N3	9.77	1.40	1.32
21	AA	924	C	C4-N4	9.77	1.42	1.33
21	AA	1221	G	N9-C4	-9.77	1.30	1.38
21	AA	200	G	C5-C4	9.77	1.45	1.38
21	AA	1001	C	N1-C6	9.77	1.43	1.37
57	BB	1486	U	C2-N3	9.77	1.44	1.37
57	BB	1674	G	C6-N1	9.77	1.46	1.39
21	AA	1037	C	C4-N4	9.76	1.42	1.33
57	BB	102	U	N1-C6	9.76	1.46	1.38
57	BB	1009	A	N7-C5	-9.76	1.33	1.39
21	AA	295	C	N1-C6	9.76	1.43	1.37
21	AA	1329	A	N7-C5	-9.76	1.33	1.39
57	BB	2464	G	C6-N1	9.76	1.46	1.39
26	AV	16	C	N1-C6	9.75	1.43	1.37
57	BB	203	A	N9-C4	9.75	1.43	1.37
57	BB	711	G	C8-N7	-9.75	1.25	1.30
21	AA	61	G	N3-C4	-9.75	1.28	1.35
57	BB	2090	A	N9-C4	-9.75	1.32	1.37
57	BB	988	A	C6-N6	9.74	1.41	1.33
57	BB	1492	G	N1-C2	9.74	1.45	1.37
23	AW	46	G	C4'-C3'	9.74	1.63	1.53
21	AA	1418	A	C8-N7	-9.74	1.24	1.31
57	BB	1835	G	C6-N1	9.74	1.46	1.39
57	BB	2436	G	C2-N3	9.74	1.40	1.32
26	AV	26	G	N3-C4	-9.74	1.28	1.35
57	BB	487	C	C4-N4	9.74	1.42	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1238	G	C5'-C4'	9.74	1.63	1.51
21	AA	114	U	N3-C4	9.73	1.47	1.38
57	BB	2002	G	C6-N1	9.73	1.46	1.39
57	BB	1628	G	N9-C4	-9.73	1.30	1.38
57	BB	844	A	N7-C5	-9.73	1.33	1.39
21	AA	150	U	C2'-C1'	-9.73	1.42	1.53
21	AA	1442	G	N1-C2	9.73	1.45	1.37
26	AV	73	A	N3-C4	9.73	1.40	1.34
57	BB	214	G	N1-C2	9.73	1.45	1.37
21	AA	162	A	N3-C4	9.72	1.40	1.34
21	AA	761	G	C2-N3	9.72	1.40	1.32
21	AA	584	G	C8-N7	9.72	1.36	1.30
21	AA	1241	G	C2-N3	9.72	1.40	1.32
57	BB	1269	A	C3'-O3'	9.72	1.55	1.42
57	BB	2770	G	N9-C4	-9.72	1.30	1.38
57	BB	142	A	N7-C5	-9.72	1.33	1.39
57	BB	1888	G	C2-N3	9.72	1.40	1.32
57	BB	2235	G	C2-N3	9.72	1.40	1.32
57	BB	176	A	C6-N1	9.71	1.42	1.35
57	BB	1890	A	C6-N6	9.71	1.41	1.33
57	BB	2176	A	N7-C5	-9.71	1.33	1.39
57	BB	2669	G	N3-C4	9.71	1.42	1.35
57	BB	685	A	C5'-C4'	9.71	1.63	1.51
57	BB	2628	C	C4-N4	9.71	1.42	1.33
21	AA	1305	G	N7-C5	-9.71	1.33	1.39
57	BB	2612	C	N1-C6	-9.71	1.31	1.37
21	AA	959	A	N7-C5	-9.70	1.33	1.39
21	AA	586	C	N3-C4	9.70	1.40	1.33
22	AY	62	A	C6-N6	9.70	1.41	1.33
26	AV	52	G	C5-C4	9.70	1.45	1.38
57	BB	98	G	C6-N1	9.70	1.46	1.39
57	BB	821	A	N3-C4	9.70	1.40	1.34
57	BB	1392	A	C8-N7	-9.70	1.24	1.31
57	BB	2773	C	N3-C4	9.70	1.40	1.33
21	AA	81	A	C4'-C3'	-9.70	1.42	1.53
21	AA	711	G	C2'-C1'	-9.70	1.42	1.53
57	BB	160	A	N9-C4	9.70	1.43	1.37
57	BB	220	G	C2'-C1'	-9.70	1.42	1.53
57	BB	963	U	C2'-C1'	-9.70	1.42	1.53
57	BB	291	G	C2-N3	9.70	1.40	1.32
57	BB	2160	C	C4-N4	9.70	1.42	1.33
57	BB	2244	U	C2-N3	9.70	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	515	G	C8-N7	9.69	1.36	1.30
57	BB	1783	A	N7-C5	-9.69	1.33	1.39
57	BB	1977	A	P-O5'	-9.69	1.50	1.59
21	AA	1140	C	N3-C4	9.69	1.40	1.33
21	AA	1269	A	C6-N6	9.69	1.41	1.33
57	BB	1353	A	C6-N6	9.69	1.41	1.33
57	BB	1555	G	N1-C2	9.69	1.45	1.37
57	BB	1595	C	C4-C5	9.69	1.50	1.43
21	AA	245	U	C5'-C4'	9.69	1.62	1.51
57	BB	566	U	N3-C4	9.68	1.47	1.38
57	BB	1113	U	C2-N3	9.68	1.44	1.37
21	AA	406	G	N7-C5	-9.68	1.33	1.39
57	BB	168	G	C6-N1	9.68	1.46	1.39
57	BB	1763	G	C2-N3	9.68	1.40	1.32
58	BA	31	C	P-O5'	-9.68	1.50	1.59
21	AA	45	G	N3-C4	-9.68	1.28	1.35
21	AA	1176	A	N7-C5	-9.68	1.33	1.39
57	BB	618	G	C2-N3	9.68	1.40	1.32
57	BB	2107	G	C6-N1	-9.68	1.32	1.39
57	BB	2414	G	C6-N1	9.68	1.46	1.39
57	BB	2204	G	C6-N1	9.68	1.46	1.39
21	AA	332	G	C2-N2	9.68	1.44	1.34
57	BB	866	A	C6-N6	9.68	1.41	1.33
21	AA	1068	G	C8-N7	9.67	1.36	1.30
57	BB	359	G	N7-C5	-9.67	1.33	1.39
57	BB	2358	A	C2'-C1'	-9.67	1.42	1.53
57	BB	367	G	C6-N1	9.67	1.46	1.39
57	BB	1549	A	C6-N6	9.67	1.41	1.33
57	BB	2542	A	C6-N1	9.67	1.42	1.35
57	BB	377	G	N1-C2	9.67	1.45	1.37
21	AA	122	G	N7-C5	-9.66	1.33	1.39
21	AA	1199	U	C2-N3	9.66	1.44	1.37
22	AY	58	A	O3'-P	-9.66	1.49	1.61
57	BB	1287	A	N7-C5	-9.66	1.33	1.39
23	AW	57	G	C6-N1	9.66	1.46	1.39
57	BB	2287	A	N7-C5	-9.66	1.33	1.39
21	AA	1416	G	C2'-C1'	-9.65	1.42	1.53
57	BB	1640	A	C2'-C1'	-9.65	1.42	1.53
57	BB	1787	A	C5-C4	9.65	1.45	1.38
57	BB	1661	G	C2-N3	9.65	1.40	1.32
21	AA	336	A	N3-C4	-9.65	1.29	1.34
57	BB	2	G	N1-C2	9.65	1.45	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2895	G	N7-C5	-9.65	1.33	1.39
57	BB	878	A	N3-C4	-9.65	1.29	1.34
57	BB	2577	A	N9-C4	-9.64	1.32	1.37
21	AA	242	G	N7-C5	9.64	1.45	1.39
57	BB	421	C	N3-C4	9.64	1.40	1.33
57	BB	711	G	N7-C5	-9.64	1.33	1.39
57	BB	2710	C	N3-C4	9.64	1.40	1.33
21	AA	336	A	C5-C4	-9.64	1.32	1.38
57	BB	1493	C	C4-N4	9.64	1.42	1.33
22	AY	72	C	N3-C4	9.63	1.40	1.33
57	BB	1310	G	C6-N1	9.63	1.46	1.39
57	BB	2141	G	C2-N2	9.63	1.44	1.34
58	BA	108	A	C6-N1	9.63	1.42	1.35
57	BB	1681	G	C8-N7	-9.63	1.25	1.30
57	BB	2885	G	C8-N7	-9.63	1.25	1.30
21	AA	1356	G	N7-C5	-9.63	1.33	1.39
57	BB	2137	U	C2-N3	9.63	1.44	1.37
26	AV	52	G	N9-C8	9.63	1.44	1.37
57	BB	2810	A	P-O5'	-9.62	1.50	1.59
21	AA	1245	C	C2-N3	9.62	1.43	1.35
57	BB	371	A	N3-C4	-9.62	1.29	1.34
57	BB	1561	C	N1-C6	9.62	1.43	1.37
21	AA	945	G	N9-C4	-9.62	1.30	1.38
21	AA	1174	G	C2-N3	9.62	1.40	1.32
57	BB	192	C	C5'-C4'	9.62	1.62	1.51
21	AA	821	G	N7-C5	-9.61	1.33	1.39
57	BB	652	U	C2-O2	9.61	1.31	1.22
57	BB	2436	G	N7-C5	-9.61	1.33	1.39
21	AA	1417	G	N7-C5	-9.61	1.33	1.39
57	BB	642	U	C2-N3	9.61	1.44	1.37
21	AA	1534	A	N7-C5	-9.61	1.33	1.39
22	AY	24	G	C3'-C2'	9.61	1.63	1.52
57	BB	1241	A	N7-C5	-9.61	1.33	1.39
57	BB	440	C	N1-C6	9.60	1.43	1.37
57	BB	299	A	C6-N1	9.60	1.42	1.35
57	BB	742	A	N3-C4	-9.60	1.29	1.34
58	BA	117	G	N3-C4	-9.60	1.28	1.35
57	BB	2390	U	N3-C4	9.60	1.47	1.38
21	AA	691	G	N9-C8	9.59	1.44	1.37
57	BB	681	G	C6-N1	9.59	1.46	1.39
57	BB	1801	A	N3-C4	-9.59	1.29	1.34
57	BB	1909	C	O3'-P	-9.59	1.49	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1044	A	N9-C4	-9.59	1.32	1.37
57	BB	477	A	N9-C4	-9.59	1.32	1.37
57	BB	666	A	N7-C5	-9.59	1.33	1.39
57	BB	2333	A	N7-C5	-9.59	1.33	1.39
57	BB	1063	G	N1-C2	9.59	1.45	1.37
57	BB	1218	G	C2-N3	9.58	1.40	1.32
57	BB	2763	G	C2-N3	9.58	1.40	1.32
57	BB	454	A	N7-C5	-9.58	1.33	1.39
57	BB	174	U	C2-N3	9.57	1.44	1.37
57	BB	2323	G	C4'-C3'	9.57	1.63	1.53
21	AA	873	A	C6-N6	9.57	1.41	1.33
57	BB	2542	A	N7-C5	-9.57	1.33	1.39
57	BB	536	G	C6-N1	9.57	1.46	1.39
57	BB	1609	A	C8-N7	-9.57	1.24	1.31
57	BB	2538	C	N3-C4	9.57	1.40	1.33
57	BB	17	G	N3-C4	-9.57	1.28	1.35
57	BB	734	A	C8-N7	-9.57	1.24	1.31
21	AA	1172	C	C4-N4	9.56	1.42	1.33
23	AW	51	U	N1-C2	-9.56	1.29	1.38
57	BB	2285	C	N3-C4	9.56	1.40	1.33
21	AA	798	U	C2'-C1'	-9.56	1.42	1.53
23	AW	31	A	C4'-C3'	9.56	1.63	1.53
26	AV	19	G	C6-N1	9.56	1.46	1.39
57	BB	38	A	N7-C5	-9.56	1.33	1.39
57	BB	2119	A	N3-C4	9.56	1.40	1.34
21	AA	299	G	C8-N7	9.55	1.36	1.30
57	BB	986	C	N3-C4	9.55	1.40	1.33
57	BB	1907	G	C2-N2	9.55	1.44	1.34
57	BB	2826	A	N7-C5	-9.55	1.33	1.39
21	AA	1247	U	C2-N3	9.55	1.44	1.37
21	AA	1388	C	P-O5'	-9.54	1.50	1.59
21	AA	1487	G	C2-N3	9.54	1.40	1.32
23	AW	46	G	C8-N7	9.54	1.36	1.30
21	AA	1374	A	C6-N1	9.54	1.42	1.35
57	BB	215	G	C6-N1	9.54	1.46	1.39
21	AA	147	G	N1-C2	9.54	1.45	1.37
26	AV	1	C	OP3-P	-9.54	1.49	1.61
21	AA	368	U	C2'-C1'	-9.53	1.42	1.53
21	AA	364	A	N7-C5	-9.53	1.33	1.39
21	AA	465	A	O3'-P	-9.53	1.49	1.61
21	AA	1514	G	N9-C8	-9.53	1.31	1.37
57	BB	2517	C	C2-N3	9.53	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	294	A	N7-C5	-9.53	1.33	1.39
21	AA	701	U	C2-N3	9.53	1.44	1.37
21	AA	1499	A	C6-N6	9.53	1.41	1.33
57	BB	2005	A	N3-C4	9.53	1.40	1.34
57	BB	632	A	C2'-C1'	-9.53	1.42	1.53
57	BB	1724	G	N9-C8	9.53	1.44	1.37
57	BB	2386	A	C6-N6	9.53	1.41	1.33
21	AA	509	A	N9-C4	9.53	1.43	1.37
57	BB	1368	G	C6-N1	9.53	1.46	1.39
57	BB	2264	C	N3-C4	9.52	1.40	1.33
57	BB	2481	G	N3-C4	-9.52	1.28	1.35
57	BB	94	A	P-O5'	9.52	1.69	1.59
57	BB	2037	A	N9-C4	9.52	1.43	1.37
57	BB	1559	U	O3'-P	-9.52	1.49	1.61
57	BB	1678	A	C6-N6	9.52	1.41	1.33
57	BB	1720	U	C2-N3	9.52	1.44	1.37
57	BB	2250	G	N7-C5	-9.52	1.33	1.39
21	AA	827	U	C4-C5	9.51	1.52	1.43
21	AA	1192	C	N3-C4	9.51	1.40	1.33
57	BB	210	C	C2-N3	9.51	1.43	1.35
21	AA	1421	G	C2-N3	9.51	1.40	1.32
57	BB	142	A	C6-N6	9.50	1.41	1.33
21	AA	1377	A	C8-N7	9.50	1.38	1.31
57	BB	452	G	C2-N3	9.50	1.40	1.32
57	BB	1540	G	N1-C2	9.50	1.45	1.37
57	BB	2751	G	N1-C2	9.50	1.45	1.37
21	AA	792	A	C6-N6	9.49	1.41	1.33
57	BB	2772	C	N1-C6	-9.49	1.31	1.37
57	BB	2277	G	C6-N1	9.49	1.46	1.39
57	BB	34	U	N1-C2	9.49	1.47	1.38
57	BB	1147	A	N9-C4	-9.49	1.32	1.37
21	AA	176	C	P-O5'	-9.49	1.50	1.59
57	BB	12	U	C2-N3	9.48	1.44	1.37
57	BB	856	G	N7-C5	-9.48	1.33	1.39
57	BB	2104	C	P-O5'	-9.48	1.50	1.59
21	AA	908	A	N3-C4	-9.48	1.29	1.34
21	AA	57	G	C2-N3	9.48	1.40	1.32
21	AA	451	A	N7-C5	-9.48	1.33	1.39
57	BB	1511	G	C6-N1	9.48	1.46	1.39
21	AA	659	U	C5'-C4'	9.48	1.62	1.51
57	BB	1106	G	N9-C4	9.48	1.45	1.38
57	BB	2751	G	P-O5'	-9.48	1.50	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	665	A	C6-N1	9.47	1.42	1.35
57	BB	1612	C	C4'-C3'	9.47	1.63	1.53
21	AA	1101	A	C6-N6	9.47	1.41	1.33
57	BB	1460	U	C2-N3	9.47	1.44	1.37
57	BB	1989	G	C8-N7	9.47	1.36	1.30
21	AA	649	A	N9-C4	-9.46	1.32	1.37
21	AA	1500	A	C6-N6	9.46	1.41	1.33
24	AX	15	A	N3-C4	-9.46	1.29	1.34
57	BB	461	C	C5'-C4'	9.46	1.62	1.51
57	BB	1721	G	N1-C2	9.46	1.45	1.37
57	BB	1171	G	N3-C4	-9.46	1.28	1.35
57	BB	532	A	C6-N6	9.46	1.41	1.33
57	BB	2179	C	N3-C4	9.46	1.40	1.33
21	AA	639	G	C8-N7	-9.46	1.25	1.30
21	AA	573	A	N9-C4	-9.45	1.32	1.37
57	BB	470	A	C2'-C1'	-9.46	1.43	1.53
57	BB	1905	C	C4-N4	9.46	1.42	1.33
21	AA	14	U	C5'-C4'	9.45	1.62	1.51
21	AA	1256	A	N9-C8	9.45	1.45	1.37
22	AY	38	A	N7-C5	-9.45	1.33	1.39
57	BB	624	C	N1-C6	9.45	1.42	1.37
57	BB	1399	C	C4'-O4'	9.45	1.57	1.45
57	BB	1574	C	C4-N4	9.45	1.42	1.33
57	BB	17	G	C2'-C1'	-9.45	1.43	1.53
57	BB	1594	U	C2-N3	9.45	1.44	1.37
57	BB	396	G	C8-N7	9.45	1.36	1.30
57	BB	668	A	C6-N1	9.45	1.42	1.35
57	BB	2700	A	N7-C5	-9.44	1.33	1.39
21	AA	1116	U	N3-C4	9.44	1.47	1.38
21	AA	1282	C	N1-C6	9.44	1.42	1.37
21	AA	1394	A	N9-C4	9.44	1.43	1.37
57	BB	2371	G	C6-N1	9.44	1.46	1.39
21	AA	1032	G	N7-C5	-9.44	1.33	1.39
57	BB	2588	G	C2-N3	9.44	1.40	1.32
58	BA	42	C	C2'-C1'	-9.44	1.43	1.53
57	BB	2042	A	C6-N1	9.43	1.42	1.35
21	AA	500	G	C5-C4	9.43	1.45	1.38
57	BB	1840	G	C2-N3	9.43	1.40	1.32
21	AA	57	G	N1-C2	9.43	1.45	1.37
57	BB	1950	G	N1-C2	9.43	1.45	1.37
21	AA	912	C	N1-C6	-9.42	1.31	1.37
15	AD	50	TYR	CZ-OH	9.42	1.53	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	355	U	C4'-C3'	9.42	1.63	1.53
57	BB	1329	U	C2-N3	9.42	1.44	1.37
58	BA	8	C	C2-N3	-9.42	1.28	1.35
57	BB	1557	C	N3-C4	9.42	1.40	1.33
57	BB	2621	G	C2-N3	9.42	1.40	1.32
21	AA	325	A	C6-N1	9.41	1.42	1.35
21	AA	1236	A	C6-N6	9.41	1.41	1.33
21	AA	1524	C	N1-C6	-9.41	1.31	1.37
57	BB	379	G	C8-N7	-9.41	1.25	1.30
57	BB	892	A	C5'-C4'	9.41	1.62	1.51
57	BB	2028	U	C5'-C4'	9.41	1.62	1.51
21	AA	1035	A	C8-N7	-9.41	1.25	1.31
21	AA	1188	A	P-O5'	-9.41	1.50	1.59
57	BB	476	G	N9-C8	9.41	1.44	1.37
57	BB	1235	G	C5-C4	9.41	1.45	1.38
57	BB	1667	G	C5-C4	9.41	1.45	1.38
57	BB	1888	G	C5-C4	9.41	1.45	1.38
57	BB	1337	G	N7-C5	-9.41	1.33	1.39
21	AA	1222	G	N7-C5	9.40	1.44	1.39
57	BB	1094	U	C2-N3	9.40	1.44	1.37
57	BB	2148	G	N9-C8	9.40	1.44	1.37
21	AA	709	U	C2-N3	9.40	1.44	1.37
57	BB	623	C	C4-C5	9.40	1.50	1.43
57	BB	935	C	N1-C6	9.40	1.42	1.37
57	BB	1156	A	C6-N6	9.40	1.41	1.33
21	AA	774	G	C6-N1	9.40	1.46	1.39
57	BB	2093	G	C6-N1	9.40	1.46	1.39
21	AA	598	U	C2-N3	9.40	1.44	1.37
21	AA	93	U	N3-C4	9.39	1.47	1.38
23	AW	31	A	N7-C5	-9.39	1.33	1.39
57	BB	2087	G	N1-C2	9.39	1.45	1.37
57	BB	2276	G	C6-N1	9.39	1.46	1.39
21	AA	718	A	C6-N6	9.39	1.41	1.33
57	BB	223	A	N7-C5	-9.39	1.33	1.39
21	AA	126	G	C6-N1	9.39	1.46	1.39
21	AA	168	G	N7-C5	-9.39	1.33	1.39
21	AA	721	G	N1-C2	9.39	1.45	1.37
21	AA	814	A	N3-C4	-9.39	1.29	1.34
57	BB	1356	G	N7-C5	-9.39	1.33	1.39
57	BB	458	G	C8-N7	9.38	1.36	1.30
57	BB	1979	U	O3'-P	-9.38	1.49	1.61
57	BB	2170	A	N1-C2	-9.39	1.25	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	85	G	P-O5'	-9.38	1.50	1.59
57	BB	1551	A	C6-N6	9.38	1.41	1.33
57	BB	643	A	N7-C5	-9.38	1.33	1.39
57	BB	919	U	P-O5'	-9.38	1.50	1.59
21	AA	80	A	N3-C4	-9.37	1.29	1.34
21	AA	620	C	N1-C6	9.37	1.42	1.37
21	AA	78	A	N3-C4	-9.37	1.29	1.34
57	BB	392	U	C2-N3	9.37	1.44	1.37
57	BB	554	U	C4-C5	9.37	1.51	1.43
21	AA	897	C	C4'-C3'	9.36	1.63	1.53
57	BB	38	A	C6-N1	9.36	1.42	1.35
57	BB	231	A	N9-C4	-9.36	1.32	1.37
57	BB	1649	G	N1-C2	9.36	1.45	1.37
23	AW	7	A	N3-C4	-9.36	1.29	1.34
57	BB	1530	G	N7-C5	-9.36	1.33	1.39
57	BB	2224	G	C5-C4	9.36	1.45	1.38
21	AA	347	G	C8-N7	-9.36	1.25	1.30
21	AA	544	G	N7-C5	9.36	1.44	1.39
21	AA	1231	G	C2'-C1'	-9.36	1.43	1.53
57	BB	1003	G	C6-N1	9.36	1.46	1.39
57	BB	893	C	P-O5'	9.35	1.69	1.59
21	AA	213	G	C2-N3	9.35	1.40	1.32
57	BB	971	G	N7-C5	9.35	1.44	1.39
57	BB	1833	C	C4-C5	9.35	1.50	1.43
21	AA	1372	U	C2'-C1'	-9.35	1.43	1.53
57	BB	319	G	C2'-C1'	-9.35	1.43	1.53
57	BB	2861	U	C2'-C1'	-9.35	1.43	1.53
57	BB	1043	C	C4'-C3'	9.35	1.63	1.53
57	BB	1540	G	C2-N2	9.35	1.44	1.34
57	BB	2012	G	C2-N3	9.35	1.40	1.32
21	AA	1501	C	N1-C6	-9.35	1.31	1.37
21	AA	451	A	N1-C2	9.35	1.42	1.34
21	AA	1098	C	P-O5'	-9.35	1.50	1.59
22	AY	31	A	C6-N6	9.35	1.41	1.33
22	AY	42	G	N3-C4	9.35	1.42	1.35
57	BB	2033	A	N3-C4	9.35	1.40	1.34
57	BB	284	U	C2-N3	9.35	1.44	1.37
57	BB	2507	C	N1-C6	-9.35	1.31	1.37
21	AA	965	U	C2-N3	9.34	1.44	1.37
21	AA	852	G	C5-C4	-9.34	1.31	1.38
57	BB	532	A	N3-C4	-9.34	1.29	1.34
57	BB	814	C	C2'-C1'	-9.34	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2018	G	C6-N1	9.34	1.46	1.39
57	BB	1653	G	N1-C2	9.34	1.45	1.37
57	BB	1013	C	N1-C6	-9.33	1.31	1.37
57	BB	2867	G	N9-C8	-9.33	1.31	1.37
21	AA	1319	A	N3-C4	-9.33	1.29	1.34
26	AV	39	C	N1-C6	9.33	1.42	1.37
21	AA	868	C	N3-C4	9.33	1.40	1.33
57	BB	1747	U	N3-C4	9.33	1.46	1.38
21	AA	725	G	N3-C4	-9.33	1.28	1.35
57	BB	2756	U	C5'-C4'	9.33	1.62	1.51
21	AA	823	C	C2'-C1'	-9.32	1.43	1.53
57	BB	262	A	O3'-P	-9.32	1.50	1.61
57	BB	468	G	C2'-C1'	-9.32	1.43	1.53
57	BB	676	A	C6-N1	9.32	1.42	1.35
57	BB	2322	A	C6-N1	9.32	1.42	1.35
57	BB	1915	U	O3'-P	-9.32	1.50	1.61
57	BB	2370	G	O4'-C1'	-9.32	1.29	1.41
21	AA	849	G	C5-C4	9.32	1.44	1.38
23	AW	47	U	N1-C2	9.32	1.47	1.38
57	BB	1310	G	N1-C2	9.32	1.45	1.37
57	BB	2557	G	C6-N1	9.32	1.46	1.39
21	AA	1286	U	N3-C4	9.31	1.46	1.38
21	AA	553	A	C6-N1	9.31	1.42	1.35
58	BA	116	G	C2-N3	9.31	1.40	1.32
57	BB	1845	G	C2-N3	9.31	1.40	1.32
21	AA	67	C	C1'-N1	9.31	1.62	1.48
21	AA	1533	C	C4-N4	9.31	1.42	1.33
57	BB	143	C	N1-C6	-9.31	1.31	1.37
57	BB	825	A	N9-C4	-9.31	1.32	1.37
26	AV	16	C	C2'-C1'	-9.30	1.43	1.53
21	AA	83	C	N3-C4	9.30	1.40	1.33
57	BB	1335	C	C4-C5	-9.30	1.35	1.43
57	BB	1828	G	N1-C2	9.30	1.45	1.37
26	AV	19	G	N3-C4	-9.29	1.28	1.35
57	BB	2260	C	N3-C4	9.30	1.40	1.33
57	BB	508	A	C6-N6	9.29	1.41	1.33
21	AA	1476	A	N9-C8	9.29	1.45	1.37
57	BB	575	A	N7-C5	9.29	1.44	1.39
57	BB	1530	G	C2'-C1'	-9.29	1.43	1.53
57	BB	2349	G	C5-C4	9.29	1.44	1.38
21	AA	872	A	N7-C5	-9.29	1.33	1.39
57	BB	495	G	C6-N1	9.29	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1341	G	C2-N3	9.29	1.40	1.32
57	BB	1815	A	C8-N7	9.29	1.38	1.31
21	AA	937	A	N9-C4	9.28	1.43	1.37
57	BB	979	A	C5-C4	9.28	1.45	1.38
21	AA	861	G	C6-N1	9.28	1.46	1.39
26	AV	51	C	N3-C4	9.28	1.40	1.33
57	BB	1099	G	C2-N3	9.28	1.40	1.32
57	BB	2333	A	C6-N1	9.28	1.42	1.35
57	BB	2262	U	C2-N3	9.28	1.44	1.37
21	AA	375	U	C4'-C3'	-9.28	1.43	1.53
57	BB	222	A	N7-C5	-9.28	1.33	1.39
57	BB	1051	G	C8-N7	-9.28	1.25	1.30
57	BB	1662	U	N3-C4	9.28	1.46	1.38
21	AA	235	C	N1-C6	-9.27	1.31	1.37
57	BB	161	A	N9-C4	-9.27	1.32	1.37
57	BB	2657	A	N9-C4	-9.27	1.32	1.37
57	BB	1322	A	C6-N6	9.27	1.41	1.33
21	AA	711	G	C2-N3	9.27	1.40	1.32
57	BB	83	A	N7-C5	-9.27	1.33	1.39
58	BA	42	C	N1-C6	9.27	1.42	1.37
57	BB	45	G	C2-N3	9.27	1.40	1.32
57	BB	453	A	C8-N7	-9.27	1.25	1.31
57	BB	1051	G	N9-C8	9.27	1.44	1.37
57	BB	2616	C	N3-C4	9.27	1.40	1.33
21	AA	815	A	N7-C5	-9.26	1.33	1.39
57	BB	1969	A	C6-N6	9.26	1.41	1.33
21	AA	984	C	C2'-C1'	-9.26	1.43	1.53
21	AA	1025	U	C4'-C3'	9.26	1.63	1.53
57	BB	1695	G	C5-C6	-9.26	1.33	1.42
57	BB	2251	G	N7-C5	-9.26	1.33	1.39
21	AA	1139	G	N1-C2	9.26	1.45	1.37
21	AA	1238	A	O3'-P	-9.26	1.50	1.61
57	BB	49	A	C6-N1	9.26	1.42	1.35
57	BB	1297	C	C2-N3	9.26	1.43	1.35
57	BB	1751	U	C5'-C4'	9.26	1.62	1.51
57	BB	2228	G	C5-C4	9.26	1.44	1.38
57	BB	2250	G	C2-N2	9.26	1.43	1.34
21	AA	640	A	N3-C4	-9.25	1.29	1.34
21	AA	881	G	N7-C5	-9.25	1.33	1.39
21	AA	902	G	C6-N1	9.25	1.46	1.39
57	BB	1308	A	C6-N1	9.25	1.42	1.35
57	BB	2119	A	N9-C4	9.25	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	442	G	C2-N3	9.25	1.40	1.32
21	AA	493	A	C5'-C4'	9.25	1.62	1.51
21	AA	1110	A	C6-N6	9.25	1.41	1.33
57	BB	1000	A	C6-N1	9.25	1.42	1.35
21	AA	1058	G	C2-N3	9.25	1.40	1.32
21	AA	577	G	N7-C5	-9.25	1.33	1.39
21	AA	1191	A	N7-C5	-9.25	1.33	1.39
21	AA	1394	A	N7-C5	-9.25	1.33	1.39
21	AA	1467	C	C4-N4	9.25	1.42	1.33
57	BB	1688	U	C2'-C1'	-9.24	1.43	1.53
57	BB	2263	C	C2'-C1'	-9.24	1.43	1.53
21	AA	1357	A	N7-C5	-9.24	1.33	1.39
26	AV	42	G	C6-N1	9.24	1.46	1.39
57	BB	605	G	N7-C5	-9.24	1.33	1.39
57	BB	1269	A	P-O5'	-9.24	1.50	1.59
21	AA	338	A	C6-N6	9.24	1.41	1.33
21	AA	441	A	N9-C4	-9.24	1.32	1.37
24	AX	22	A	C6-N1	9.24	1.42	1.35
57	BB	677	A	C2'-C1'	-9.24	1.43	1.53
57	BB	1846	G	C6-N1	9.24	1.46	1.39
57	BB	2009	A	N9-C4	-9.24	1.32	1.37
21	AA	64	G	N1-C2	9.23	1.45	1.37
21	AA	844	G	C4'-O4'	-9.23	1.33	1.45
21	AA	1088	G	C2-N3	9.23	1.40	1.32
22	AY	34	G	N7-C5	-9.23	1.33	1.39
26	AV	55	U	C4-C5	9.23	1.51	1.43
57	BB	70	G	N1-C2	9.23	1.45	1.37
57	BB	1225	G	C2-N3	9.23	1.40	1.32
57	BB	1689	A	N7-C5	-9.23	1.33	1.39
57	BB	2364	C	N1-C6	9.23	1.42	1.37
21	AA	1355	G	N3-C4	9.22	1.42	1.35
57	BB	175	G	N3-C4	-9.22	1.28	1.35
57	BB	1271	G	N1-C2	9.22	1.45	1.37
57	BB	1733	G	C5-C4	-9.22	1.31	1.38
57	BB	1205	A	N9-C4	-9.22	1.32	1.37
57	BB	1635	A	C8-N7	-9.22	1.25	1.31
57	BB	1291	C	C4-C5	-9.22	1.35	1.43
57	BB	1721	G	C5-C4	9.21	1.44	1.38
57	BB	2107	G	C2-N3	9.21	1.40	1.32
57	BB	2831	G	C2-N3	9.21	1.40	1.32
21	AA	562	U	C5'-C4'	9.21	1.62	1.51
57	BB	2319	G	N7-C5	-9.21	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2774	C	C5'-C4'	9.21	1.62	1.51
57	BB	637	A	N9-C4	-9.21	1.32	1.37
57	BB	2409	G	N1-C2	9.21	1.45	1.37
58	BA	96	G	C2-N3	9.21	1.40	1.32
21	AA	1494	G	C5-C4	-9.21	1.31	1.38
57	BB	2148	G	C4'-C3'	9.21	1.63	1.53
21	AA	794	A	C6-N6	9.20	1.41	1.33
57	BB	2775	G	C5-C4	-9.21	1.31	1.38
21	AA	1024	G	C6-N1	9.20	1.46	1.39
21	AA	1156	G	C6-N1	9.20	1.46	1.39
57	BB	1859	U	P-O5'	-9.20	1.50	1.59
21	AA	574	A	N7-C5	-9.20	1.33	1.39
57	BB	2314	A	N9-C8	-9.20	1.30	1.37
21	AA	100	G	C4'-C3'	-9.20	1.43	1.53
23	AW	9	A	N9-C4	9.20	1.43	1.37
57	BB	2361	G	N7-C5	-9.20	1.33	1.39
21	AA	780	A	C6-N6	9.19	1.41	1.33
21	AA	831	A	C8-N7	-9.19	1.25	1.31
57	BB	694	U	N3-C4	9.19	1.46	1.38
57	BB	2069	G	N9-C8	9.19	1.44	1.37
21	AA	249	U	P-O5'	-9.19	1.50	1.59
21	AA	976	G	C8-N7	-9.19	1.25	1.30
21	AA	64	G	N9-C4	-9.19	1.30	1.38
21	AA	1254	A	C5-C4	9.19	1.45	1.38
21	AA	817	C	C5'-C4'	9.19	1.62	1.51
21	AA	1241	G	C2'-C1'	-9.19	1.43	1.53
57	BB	2278	A	N7-C5	-9.19	1.33	1.39
21	AA	51	A	C5-C4	9.18	1.45	1.38
21	AA	892	A	N7-C5	-9.18	1.33	1.39
57	BB	1387	A	P-O5'	-9.18	1.50	1.59
57	BB	1889	A	C6-N1	9.18	1.42	1.35
57	BB	248	G	N1-C2	9.18	1.45	1.37
57	BB	2123	G	N3-C4	-9.18	1.29	1.35
23	AW	30	G	C6-N1	9.18	1.46	1.39
57	BB	1075	C	N1-C6	-9.18	1.31	1.37
57	BB	2776	A	C2'-C1'	-9.18	1.43	1.53
22	AY	42	G	C2-N2	9.18	1.43	1.34
57	BB	640	C	C4-N4	9.18	1.42	1.33
57	BB	2442	C	N1-C6	-9.18	1.31	1.37
21	AA	89	U	C4-C5	9.17	1.51	1.43
57	BB	1583	A	C6-N1	-9.17	1.29	1.35
57	BB	1751	U	N1-C2	9.17	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2040	G	C2-N3	9.17	1.40	1.32
57	BB	2273	A	C6-N6	9.17	1.41	1.33
57	BB	894	U	C2-N3	9.17	1.44	1.37
21	AA	1068	G	N7-C5	-9.17	1.33	1.39
57	BB	1893	C	C4-N4	9.17	1.42	1.33
21	AA	21	G	N7-C5	-9.16	1.33	1.39
21	AA	300	A	N7-C5	-9.16	1.33	1.39
57	BB	197	A	N7-C5	-9.16	1.33	1.39
57	BB	1369	G	C8-N7	-9.16	1.25	1.30
21	AA	1260	G	N1-C2	9.16	1.45	1.37
22	AY	60	C	N1-C6	-9.16	1.31	1.37
57	BB	739	A	N7-C5	-9.16	1.33	1.39
57	BB	2495	G	N9-C8	-9.16	1.31	1.37
21	AA	424	G	C5'-C4'	9.16	1.62	1.51
21	AA	657	U	C2-N3	9.16	1.44	1.37
21	AA	947	G	N3-C4	-9.16	1.29	1.35
57	BB	2834	G	C2'-C1'	-9.16	1.43	1.53
21	AA	1448	C	C4-N4	9.16	1.42	1.33
57	BB	1547	C	C4-N4	9.16	1.42	1.33
57	BB	1926	U	C2'-C1'	-9.16	1.43	1.53
57	BB	2490	G	C8-N7	-9.16	1.25	1.30
21	AA	1104	G	C2-N3	9.15	1.40	1.32
57	BB	226	A	C5-C4	9.15	1.45	1.38
21	AA	288	A	N3-C4	9.15	1.40	1.34
21	AA	351	G	C2-N3	9.15	1.40	1.32
21	AA	1501	C	O3'-P	-9.15	1.50	1.61
57	BB	1601	G	N1-C2	9.15	1.45	1.37
57	BB	2379	G	N7-C5	-9.15	1.33	1.39
21	AA	698	G	N1-C2	9.15	1.45	1.37
57	BB	2694	G	N9-C8	9.15	1.44	1.37
21	AA	686	U	C2-N3	9.15	1.44	1.37
57	BB	1269	A	N9-C8	-9.15	1.30	1.37
57	BB	2491	U	C4'-C3'	9.14	1.63	1.53
21	AA	224	U	N3-C4	9.14	1.46	1.38
57	BB	2284	A	N3-C4	-9.14	1.29	1.34
57	BB	2623	G	N9-C8	-9.14	1.31	1.37
21	AA	431	A	C8-N7	-9.14	1.25	1.31
57	BB	1272	A	C6-N6	9.14	1.41	1.33
21	AA	240	G	N9-C8	-9.14	1.31	1.37
21	AA	1006	G	C2-N3	9.14	1.40	1.32
57	BB	745	G	C2-N3	9.14	1.40	1.32
23	AW	47	U	C4'-C3'	9.14	1.63	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	43	G	N9-C4	-9.13	1.30	1.38
22	AY	57	G	C5-C4	9.13	1.44	1.38
57	BB	75	G	C2-N2	9.13	1.43	1.34
21	AA	1243	C	C2-N3	9.13	1.43	1.35
57	BB	860	U	C2-N3	9.13	1.44	1.37
57	BB	1287	A	C6-N6	9.13	1.41	1.33
57	BB	2049	G	C6-N1	9.13	1.46	1.39
21	AA	322	C	N3-C4	9.13	1.40	1.33
21	AA	1181	G	C2-N3	9.13	1.40	1.32
57	BB	933	A	N3-C4	-9.13	1.29	1.34
57	BB	1421	G	N1-C2	9.13	1.45	1.37
58	BA	44	G	C8-N7	-9.13	1.25	1.30
57	BB	404	A	N7-C5	-9.13	1.33	1.39
57	BB	1608	A	N7-C5	-9.13	1.33	1.39
57	BB	924	G	P-O5'	-9.12	1.50	1.59
57	BB	2534	A	C6-N1	9.12	1.42	1.35
57	BB	2785	C	N1-C6	9.12	1.42	1.37
21	AA	228	A	C6-N6	9.12	1.41	1.33
21	AA	736	C	N1-C6	9.12	1.42	1.37
57	BB	619	G	N7-C5	-9.12	1.33	1.39
57	BB	1521	G	C8-N7	9.12	1.36	1.30
21	AA	1479	C	N1-C6	9.12	1.42	1.37
57	BB	2162	G	N9-C4	9.12	1.45	1.38
21	AA	1518	A	C6-N6	9.12	1.41	1.33
57	BB	1269	A	N7-C5	9.11	1.44	1.39
57	BB	2153	C	N1-C2	9.12	1.49	1.40
57	BB	2598	A	C8-N7	-9.12	1.25	1.31
21	AA	57	G	N3-C4	-9.11	1.29	1.35
21	AA	768	A	N7-C5	-9.11	1.33	1.39
21	AA	1171	A	N3-C4	9.11	1.40	1.34
57	BB	7	G	N9-C4	9.11	1.45	1.38
21	AA	884	U	N1-C2	-9.11	1.30	1.38
57	BB	457	A	C8-N7	-9.11	1.25	1.31
57	BB	1699	G	C5-C4	9.11	1.44	1.38
57	BB	1769	U	P-O5'	-9.11	1.50	1.59
57	BB	2592	G	P-O5'	-9.11	1.50	1.59
57	BB	2532	G	C8-N7	-9.11	1.25	1.30
57	BB	2820	A	N9-C4	-9.11	1.32	1.37
21	AA	125	U	C2'-C1'	-9.10	1.43	1.53
57	BB	197	A	C4'-O4'	9.10	1.57	1.45
57	BB	363	G	C2-N3	9.10	1.40	1.32
57	BB	1031	G	C3'-C2'	9.10	1.62	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	451	A	C6-N1	9.10	1.42	1.35
57	BB	1700	A	C2'-C1'	-9.10	1.43	1.53
57	BB	2841	C	N3-C4	9.10	1.40	1.33
57	BB	1123	C	C4-N4	9.09	1.42	1.33
57	BB	1780	A	N9-C4	-9.09	1.32	1.37
57	BB	2311	A	C6-N1	9.09	1.42	1.35
57	BB	2855	C	P-O5'	-9.09	1.50	1.59
57	BB	145	C	N3-C4	9.08	1.40	1.33
57	BB	254	G	N1-C2	9.08	1.45	1.37
57	BB	706	A	N7-C5	-9.08	1.33	1.39
57	BB	111	A	N7-C5	-9.08	1.33	1.39
57	BB	2582	G	N9-C8	-9.08	1.31	1.37
21	AA	718	A	N7-C5	-9.08	1.33	1.39
26	AV	10	G	C6-N1	9.08	1.46	1.39
57	BB	1331	G	C6-N1	9.08	1.46	1.39
21	AA	1392	G	N7-C5	-9.07	1.33	1.39
57	BB	101	A	C5-C4	-9.07	1.32	1.38
57	BB	111	A	C6-N6	9.07	1.41	1.33
21	AA	60	A	N7-C5	-9.07	1.33	1.39
21	AA	539	A	C6-N6	9.07	1.41	1.33
57	BB	715	A	C6-N1	9.07	1.42	1.35
57	BB	2167	U	C3'-C2'	-9.07	1.42	1.52
57	BB	1522	A	C2'-C1'	-9.07	1.43	1.53
58	BA	59	A	N1-C2	9.07	1.42	1.34
22	AY	1	G	N7-C5	9.07	1.44	1.39
51	B4	4	ARG	CZ-NH2	9.07	1.44	1.33
57	BB	950	G	C8-N7	-9.07	1.25	1.30
57	BB	2040	G	N1-C2	9.07	1.45	1.37
21	AA	1424	U	C4-C5	9.07	1.51	1.43
57	BB	2494	G	N3-C4	-9.07	1.29	1.35
57	BB	2676	C	C2'-C1'	-9.07	1.43	1.53
26	AV	28	C	N1-C6	9.06	1.42	1.37
57	BB	674	G	C2'-C1'	-9.06	1.43	1.53
57	BB	695	G	N9-C4	9.06	1.45	1.38
57	BB	330	A	N7-C5	-9.06	1.33	1.39
57	BB	1652	A	C6-N6	9.06	1.41	1.33
57	BB	2405	G	C2-N3	9.06	1.40	1.32
57	BB	2784	U	P-O5'	-9.06	1.50	1.59
21	AA	1003	G	C6-N1	9.06	1.45	1.39
57	BB	325	G	C6-N1	9.06	1.45	1.39
21	AA	465	A	N9-C4	-9.05	1.32	1.37
21	AA	545	C	N3-C4	9.06	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	66	C	N1-C6	9.06	1.42	1.37
57	BB	1323	C	C4-N4	9.06	1.42	1.33
57	BB	1888	G	P-O5'	-9.05	1.50	1.59
57	BB	2341	G	N1-C2	9.06	1.45	1.37
57	BB	820	A	N7-C5	-9.05	1.33	1.39
57	BB	1022	G	C8-N7	-9.05	1.25	1.30
58	BA	108	A	N7-C5	-9.05	1.33	1.39
57	BB	472	A	C3'-C2'	9.04	1.62	1.52
57	BB	964	C	C4-N4	9.05	1.42	1.33
57	BB	989	G	C8-N7	-9.04	1.25	1.30
57	BB	2019	A	N7-C5	-9.04	1.33	1.39
57	BB	2581	G	N1-C2	9.04	1.45	1.37
21	AA	7	A	N7-C5	9.04	1.44	1.39
22	AY	56	C	C2'-C1'	-9.04	1.43	1.53
57	BB	717	C	N1-C6	9.04	1.42	1.37
57	BB	1128	G	N1-C2	9.04	1.45	1.37
57	BB	2648	G	P-O5'	-9.04	1.50	1.59
21	AA	988	G	C6-N1	9.04	1.45	1.39
57	BB	1323	C	N3-C4	9.04	1.40	1.33
57	BB	1429	G	N7-C5	9.04	1.44	1.39
57	BB	2414	G	N7-C5	-9.04	1.33	1.39
21	AA	1020	G	C5-C4	-9.03	1.32	1.38
57	BB	393	C	C2'-C1'	-9.03	1.43	1.53
57	BB	1323	C	C2'-C1'	-9.03	1.43	1.53
21	AA	462	G	C8-N7	-9.03	1.25	1.30
21	AA	184	G	O3'-P	-9.03	1.50	1.61
57	BB	1461	C	N3-C4	9.03	1.40	1.33
21	AA	498	A	N3-C4	-9.03	1.29	1.34
57	BB	547	A	N7-C5	9.03	1.44	1.39
21	AA	689	C	C4'-C3'	-9.02	1.43	1.53
57	BB	411	G	C6-N1	9.02	1.45	1.39
57	BB	1308	A	P-O5'	-9.02	1.50	1.59
57	BB	1323	C	N1-C6	-9.02	1.31	1.37
57	BB	1898	U	C4-O4	-9.02	1.16	1.23
57	BB	2864	G	C4'-C3'	-9.02	1.43	1.53
21	AA	1321	U	C4-O4	9.02	1.30	1.23
21	AA	1401	G	C6-N1	9.02	1.45	1.39
57	BB	1031	G	N1-C2	9.02	1.45	1.37
57	BB	1228	G	N1-C2	9.02	1.45	1.37
57	BB	1420	A	N9-C4	9.02	1.43	1.37
57	BB	1858	A	N9-C4	9.02	1.43	1.37
57	BB	2778	A	N3-C4	-9.02	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2266	A	C8-N7	-9.02	1.25	1.31
57	BB	2284	A	C6-N6	9.02	1.41	1.33
57	BB	2425	A	N3-C4	-9.02	1.29	1.34
57	BB	2797	U	C2-N3	9.02	1.44	1.37
57	BB	2852	G	C2'-C1'	-9.01	1.43	1.53
57	BB	2850	A	N3-C4	-9.01	1.29	1.34
21	AA	1035	A	C6-N1	9.01	1.41	1.35
57	BB	2173	A	C6-N6	9.01	1.41	1.33
57	BB	2775	G	C8-N7	9.01	1.36	1.30
21	AA	131	A	C6-N6	9.01	1.41	1.33
21	AA	168	G	C4'-C3'	-9.01	1.43	1.53
21	AA	1313	U	C4-C5	9.01	1.51	1.43
57	BB	1332	G	N1-C2	9.01	1.45	1.37
21	AA	376	G	N7-C5	-9.01	1.33	1.39
22	AY	29	A	C8-N7	-9.01	1.25	1.31
57	BB	1247	A	N1-C2	9.01	1.42	1.34
21	AA	403	C	N1-C6	-9.00	1.31	1.37
21	AA	460	A	P-O5'	-9.00	1.50	1.59
57	BB	1556	C	C2'-C1'	-9.00	1.43	1.53
57	BB	2221	G	C5-C4	9.00	1.44	1.38
57	BB	2464	G	N9-C8	-9.00	1.31	1.37
21	AA	1462	C	N3-C4	9.00	1.40	1.33
57	BB	1074	G	N9-C8	9.00	1.44	1.37
57	BB	1322	A	N9-C4	-9.00	1.32	1.37
21	AA	106	C	C2-N3	9.00	1.43	1.35
21	AA	11	G	N1-C2	9.00	1.45	1.37
21	AA	448	A	N7-C5	-9.00	1.33	1.39
21	AA	1283	U	C4'-C3'	9.00	1.63	1.53
21	AA	1314	C	N3-C4	9.00	1.40	1.33
57	BB	942	G	C2-N3	9.00	1.40	1.32
21	AA	848	C	C4-N4	8.99	1.42	1.33
23	AW	34	G	N7-C5	-8.99	1.33	1.39
57	BB	281	C	C4-N4	8.99	1.42	1.33
57	BB	481	G	N9-C8	8.99	1.44	1.37
57	BB	1016	G	N9-C4	-8.99	1.30	1.38
21	AA	863	U	C4-C5	8.99	1.51	1.43
57	BB	756	A	N7-C5	-8.99	1.33	1.39
57	BB	1109	C	C2-N3	8.99	1.43	1.35
57	BB	2854	G	N7-C5	-8.99	1.33	1.39
21	AA	499	A	C5-C4	-8.98	1.32	1.38
21	AA	925	G	C2-N3	8.98	1.40	1.32
22	AY	6	U	N3-C4	8.98	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	65	G	N7-C5	-8.98	1.33	1.39
57	BB	26	G	N7-C5	-8.98	1.33	1.39
57	BB	273	G	N7-C5	-8.98	1.33	1.39
57	BB	1689	A	N9-C4	-8.98	1.32	1.37
57	BB	2466	C	C2'-C1'	-8.98	1.43	1.53
22	AY	51	G	N9-C8	-8.98	1.31	1.37
57	BB	274	C	N1-C6	8.98	1.42	1.37
57	BB	874	G	C2-N2	8.98	1.43	1.34
57	BB	2848	G	C6-N1	8.98	1.45	1.39
57	BB	1260	A	N7-C5	-8.98	1.33	1.39
21	AA	690	G	N9-C4	-8.98	1.30	1.38
57	BB	1864	U	C2'-C1'	-8.98	1.43	1.53
57	BB	2550	G	N7-C5	-8.98	1.33	1.39
57	BB	2835	A	N9-C4	8.98	1.43	1.37
57	BB	404	A	N3-C4	8.98	1.40	1.34
57	BB	718	A	N9-C4	8.98	1.43	1.37
21	AA	691	G	C2-N3	8.97	1.40	1.32
23	AW	69	G	N1-C2	8.97	1.45	1.37
57	BB	187	G	C2-N3	8.97	1.40	1.32
57	BB	577	G	C2'-C1'	-8.97	1.43	1.53
21	AA	425	G	C8-N7	-8.97	1.25	1.30
21	AA	792	A	N9-C8	-8.97	1.30	1.37
57	BB	783	A	N3-C4	8.97	1.40	1.34
21	AA	1227	A	C6-N6	8.97	1.41	1.33
57	BB	625	G	N7-C5	-8.97	1.33	1.39
21	AA	238	A	C6-N1	8.96	1.41	1.35
57	BB	168	G	P-O5'	-8.96	1.50	1.59
57	BB	321	U	C2-N3	8.96	1.44	1.37
57	BB	2282	G	C6-N1	8.96	1.45	1.39
21	AA	282	A	N7-C5	-8.96	1.33	1.39
21	AA	1425	U	C2-N3	8.96	1.44	1.37
22	AY	38	A	C6-N6	8.96	1.41	1.33
57	BB	217	A	O3'-P	-8.96	1.50	1.61
57	BB	251	A	C6-N6	8.96	1.41	1.33
57	BB	877	A	C2'-C1'	-8.96	1.43	1.53
57	BB	831	G	N7-C5	-8.96	1.33	1.39
57	BB	2867	G	C2-N3	8.96	1.40	1.32
21	AA	836	G	N9-C8	8.96	1.44	1.37
26	AV	1	C	P-OP2	8.96	1.64	1.49
57	BB	2082	A	C5-C4	8.96	1.45	1.38
21	AA	1035	A	N9-C4	-8.95	1.32	1.37
57	BB	2234	G	C8-N7	8.95	1.36	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1204	A	C6-N1	8.95	1.41	1.35
57	BB	1970	A	N7-C5	-8.95	1.33	1.39
57	BB	2840	C	C2-N3	8.95	1.43	1.35
21	AA	893	C	N3-C4	8.95	1.40	1.33
21	AA	1012	A	C6-N1	8.95	1.41	1.35
57	BB	445	C	C2-N3	8.95	1.43	1.35
57	BB	1753	G	C6-N1	8.95	1.45	1.39
57	BB	953	G	P-O5'	-8.95	1.50	1.59
57	BB	2430	A	N9-C4	-8.95	1.32	1.37
57	BB	2572	A	C6-N1	8.95	1.41	1.35
57	BB	534	U	N3-C4	8.94	1.46	1.38
57	BB	848	C	C2'-C1'	-8.94	1.43	1.53
22	AY	14	A	N9-C4	8.94	1.43	1.37
58	BA	106	G	C3'-C2'	8.94	1.62	1.52
21	AA	661	G	C2-N3	8.94	1.39	1.32
21	AA	1369	C	N3-C4	8.94	1.40	1.33
57	BB	1596	A	C5-C6	-8.94	1.33	1.41
57	BB	856	G	N9-C4	-8.94	1.30	1.38
21	AA	1190	G	C2-N2	8.93	1.43	1.34
57	BB	2418	A	C5'-C4'	8.93	1.62	1.51
57	BB	2625	G	C8-N7	-8.93	1.25	1.30
21	AA	85	U	C2-N3	8.93	1.44	1.37
21	AA	200	G	N9-C8	8.93	1.44	1.37
57	BB	215	G	O3'-P	-8.93	1.50	1.61
57	BB	273	G	N9-C8	8.93	1.44	1.37
57	BB	2448	A	N9-C4	8.93	1.43	1.37
22	AY	10	G	C8-N7	-8.93	1.25	1.30
57	BB	2042	A	C4'-O4'	-8.93	1.33	1.45
22	AY	44	A	C6-N6	8.92	1.41	1.33
21	AA	507	C	C4-N4	8.92	1.42	1.33
26	AV	45	G	C6-N1	8.92	1.45	1.39
57	BB	2440	C	C2'-C1'	-8.92	1.43	1.53
57	BB	2641	G	N1-C2	8.92	1.44	1.37
21	AA	93	U	C2-N3	8.92	1.44	1.37
22	AY	47	U	C4-C5	8.92	1.51	1.43
57	BB	2237	G	C5-C4	8.92	1.44	1.38
23	AW	52	G	C2-N3	8.92	1.39	1.32
57	BB	760	G	C2'-C1'	-8.92	1.43	1.53
22	AY	47	U	N3-C4	8.92	1.46	1.38
57	BB	2761	A	C5'-C4'	8.92	1.62	1.51
21	AA	44	A	C5-C4	8.91	1.45	1.38
21	AA	38	G	N9-C8	8.91	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	793	U	C2-N3	8.91	1.44	1.37
57	BB	2495	G	N1-C2	8.91	1.44	1.37
22	AY	66	A	C5'-C4'	8.91	1.62	1.51
57	BB	2885	G	N3-C4	-8.91	1.29	1.35
21	AA	69	G	O3'-P	-8.91	1.50	1.61
21	AA	875	U	P-O5'	-8.91	1.50	1.59
57	BB	1227	G	N9-C8	-8.91	1.31	1.37
57	BB	1789	A	N7-C5	-8.91	1.33	1.39
21	AA	649	A	C6-N1	8.91	1.41	1.35
57	BB	17	G	N7-C5	-8.91	1.33	1.39
57	BB	690	G	C5-C4	8.91	1.44	1.38
57	BB	1155	A	N3-C4	8.91	1.40	1.34
57	BB	2051	A	N9-C4	-8.91	1.32	1.37
57	BB	2283	C	N3-C4	8.91	1.40	1.33
57	BB	2713	U	C2-N3	8.91	1.44	1.37
57	BB	2016	U	C4-C5	8.90	1.51	1.43
21	AA	928	G	N1-C2	8.90	1.44	1.37
21	AA	1296	C	C3'-C2'	8.90	1.62	1.52
57	BB	482	A	C2-N3	8.90	1.41	1.33
57	BB	2532	G	C5-C6	-8.90	1.33	1.42
21	AA	1377	A	O3'-P	-8.90	1.50	1.61
57	BB	107	G	N1-C2	8.90	1.44	1.37
57	BB	804	A	N7-C5	-8.90	1.33	1.39
57	BB	2116	G	N1-C2	8.90	1.44	1.37
57	BB	2884	U	C4-C5	8.90	1.51	1.43
21	AA	349	A	C2'-C1'	-8.90	1.43	1.53
21	AA	1098	C	C3'-C2'	-8.90	1.43	1.52
57	BB	2670	A	N7-C5	-8.90	1.33	1.39
57	BB	2787	C	C4-N4	8.90	1.42	1.33
21	AA	596	A	N7-C5	-8.90	1.33	1.39
57	BB	2799	A	N7-C5	-8.90	1.33	1.39
21	AA	51	A	C2'-C1'	-8.89	1.43	1.53
21	AA	650	G	N9-C8	-8.89	1.31	1.37
21	AA	663	A	C6-N6	8.89	1.41	1.33
21	AA	1331	G	C6-N1	8.89	1.45	1.39
21	AA	428	G	C2-N3	8.89	1.39	1.32
21	AA	1494	G	C6-N1	8.89	1.45	1.39
21	AA	1516	G	N9-C8	8.89	1.44	1.37
57	BB	178	G	C6-N1	8.89	1.45	1.39
57	BB	991	C	C4-C5	8.89	1.50	1.43
57	BB	1498	C	C4-N4	8.89	1.42	1.33
57	BB	826	U	N3-C4	8.89	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	270	A	C2'-C1'	-8.89	1.43	1.53
57	BB	707	G	C2-N3	8.89	1.39	1.32
57	BB	1452	G	N1-C2	8.89	1.44	1.37
57	BB	230	G	N7-C5	-8.88	1.33	1.39
57	BB	1280	G	C5-C4	8.88	1.44	1.38
57	BB	1644	C	N1-C6	-8.88	1.31	1.37
57	BB	2567	G	C2-N3	8.88	1.39	1.32
57	BB	2800	A	C6-N1	8.88	1.41	1.35
57	BB	1731	G	N1-C2	8.88	1.44	1.37
57	BB	2217	G	N7-C5	-8.88	1.33	1.39
57	BB	2294	G	C5-C4	8.88	1.44	1.38
57	BB	2641	G	C5-C4	-8.88	1.32	1.38
57	BB	2780	G	C6-N1	8.88	1.45	1.39
57	BB	350	G	C6-N1	8.88	1.45	1.39
57	BB	2694	G	C4'-C3'	8.88	1.62	1.53
21	AA	499	A	N7-C5	-8.88	1.33	1.39
21	AA	608	A	N9-C4	-8.88	1.32	1.37
21	AA	1451	U	C2-N3	8.88	1.44	1.37
57	BB	282	A	C6-N1	8.88	1.41	1.35
57	BB	1633	G	C6-N1	8.88	1.45	1.39
57	BB	1960	A	C6-N1	8.88	1.41	1.35
21	AA	1272	G	N1-C2	8.88	1.44	1.37
57	BB	984	A	C6-N6	8.87	1.41	1.33
57	BB	804	A	N3-C4	-8.87	1.29	1.34
57	BB	869	G	C2-N3	8.87	1.39	1.32
57	BB	878	A	C6-N6	8.87	1.41	1.33
57	BB	2470	G	C6-N1	8.87	1.45	1.39
58	BA	21	G	N7-C5	-8.87	1.33	1.39
21	AA	131	A	O3'-P	-8.87	1.50	1.61
57	BB	6	A	C2'-C1'	-8.87	1.43	1.53
21	AA	615	G	C6-N1	8.86	1.45	1.39
58	BA	61	G	N1-C2	8.87	1.44	1.37
21	AA	1310	G	P-O5'	-8.86	1.50	1.59
22	AY	52	U	N3-C4	8.86	1.46	1.38
58	BA	91	C	N3-C4	8.86	1.40	1.33
21	AA	1460	C	C5'-C4'	8.86	1.61	1.51
21	AA	1513	A	C6-N6	8.86	1.41	1.33
21	AA	266	G	N9-C4	-8.86	1.30	1.38
21	AA	1240	U	C2-N3	8.85	1.44	1.37
21	AA	1455	G	C5-C4	8.85	1.44	1.38
23	AW	49	C	C3'-C2'	8.85	1.62	1.52
57	BB	23	G	C5-C4	8.85	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1104	C	P-O5'	8.85	1.68	1.59
57	BB	2583	G	N1-C2	8.85	1.44	1.37
57	BB	1230	A	C6-N6	8.85	1.41	1.33
57	BB	1244	A	C6-N1	8.85	1.41	1.35
57	BB	1867	G	C2-N3	8.85	1.39	1.32
57	BB	2348	U	C2-N3	8.85	1.44	1.37
57	BB	1804	C	N3-C4	8.85	1.40	1.33
57	BB	2557	G	N9-C4	8.85	1.45	1.38
57	BB	2022	U	C2'-C1'	-8.85	1.43	1.53
57	BB	1521	G	C5'-C4'	8.84	1.61	1.51
57	BB	463	G	C2-N3	8.84	1.39	1.32
21	AA	134	G	C6-N1	8.84	1.45	1.39
57	BB	68	G	C5-C4	8.84	1.44	1.38
21	AA	406	G	P-O5'	-8.84	1.50	1.59
57	BB	810	U	N1-C2	8.84	1.46	1.38
57	BB	1159	U	C2-N3	8.84	1.44	1.37
21	AA	1227	A	O3'-P	-8.84	1.50	1.61
23	AW	41	C	N1-C6	8.84	1.42	1.37
57	BB	1906	G	N9-C4	-8.84	1.30	1.38
21	AA	61	G	N1-C2	8.84	1.44	1.37
57	BB	1017	G	C2'-C1'	-8.83	1.43	1.53
21	AA	1288	A	C5-C4	8.83	1.45	1.38
57	BB	39	G	C2-N3	8.83	1.39	1.32
21	AA	822	U	P-O5'	-8.83	1.50	1.59
57	BB	1028	A	C6-N6	8.83	1.41	1.33
57	BB	2035	G	N3-C4	-8.83	1.29	1.35
21	AA	550	G	P-O5'	-8.83	1.50	1.59
21	AA	850	U	C4-C5	8.83	1.51	1.43
21	AA	670	G	N9-C8	8.83	1.44	1.37
21	AA	1101	A	C5-C4	-8.83	1.32	1.38
57	BB	909	A	N9-C4	-8.83	1.32	1.37
21	AA	533	A	P-O5'	-8.82	1.50	1.59
57	BB	1814	G	C2-N3	8.82	1.39	1.32
21	AA	380	G	N9-C8	8.82	1.44	1.37
57	BB	1723	G	N7-C5	-8.82	1.33	1.39
57	BB	2570	G	N1-C2	8.82	1.44	1.37
57	BB	2767	C	N1-C6	8.82	1.42	1.37
21	AA	140	U	C4-O4	8.82	1.30	1.23
57	BB	2170	A	N3-C4	8.82	1.40	1.34
21	AA	1524	C	N3-C4	8.82	1.40	1.33
57	BB	1407	G	C2-N3	8.82	1.39	1.32
57	BB	2574	G	N9-C8	-8.82	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	847	U	C2-N3	8.82	1.44	1.37
57	BB	961	C	C4-N4	8.82	1.41	1.33
21	AA	126	G	C3'-C2'	-8.81	1.43	1.52
26	AV	42	G	P-O5'	-8.81	1.50	1.59
57	BB	2697	G	N7-C5	-8.81	1.33	1.39
21	AA	771	G	C8-N7	8.81	1.36	1.30
57	BB	676	A	O3'-P	-8.81	1.50	1.61
57	BB	207	A	N7-C5	-8.81	1.33	1.39
57	BB	1418	G	N7-C5	-8.81	1.33	1.39
57	BB	1419	A	N9-C4	8.81	1.43	1.37
57	BB	1723	G	C2-N2	8.81	1.43	1.34
57	BB	2598	A	C6-N1	8.81	1.41	1.35
57	BB	2728	U	C2-N3	8.81	1.44	1.37
57	BB	2800	A	N3-C4	-8.81	1.29	1.34
21	AA	1251	A	C6-N6	8.81	1.41	1.33
57	BB	435	C	C4-N4	8.81	1.41	1.33
23	AW	44	G	N1-C2	8.81	1.44	1.37
57	BB	600	G	N1-C2	8.81	1.44	1.37
57	BB	1002	G	C2'-C1'	-8.81	1.43	1.53
21	AA	968	A	N9-C8	-8.80	1.30	1.37
57	BB	236	C	C2'-C1'	-8.80	1.43	1.53
57	BB	817	C	N1-C6	8.80	1.42	1.37
57	BB	156	A	N9-C4	8.80	1.43	1.37
22	AY	38	A	C6-N1	8.80	1.41	1.35
23	AW	49	C	N3-C4	8.80	1.40	1.33
26	AV	42	G	N9-C8	-8.80	1.31	1.37
57	BB	577	G	C2-N3	8.79	1.39	1.32
21	AA	908	A	N9-C4	8.79	1.43	1.37
57	BB	1968	G	N9-C8	8.79	1.44	1.37
21	AA	936	C	C4-N4	8.79	1.41	1.33
57	BB	28	A	C8-N7	-8.79	1.25	1.31
57	BB	2024	G	N9-C8	-8.79	1.31	1.37
57	BB	2696	U	C2-N3	-8.79	1.31	1.37
57	BB	2899	A	C6-N6	8.79	1.41	1.33
57	BB	1499	C	P-O5'	-8.79	1.50	1.59
57	BB	1803	A	C2'-C1'	-8.79	1.43	1.53
21	AA	122	G	C6-N1	8.79	1.45	1.39
21	AA	474	G	N1-C2	8.78	1.44	1.37
21	AA	497	G	C2'-C1'	-8.78	1.43	1.53
57	BB	282	A	N3-C4	-8.78	1.29	1.34
57	BB	1087	G	C2-N2	8.78	1.43	1.34
21	AA	575	G	C6-N1	8.78	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2271	G	C8-N7	-8.78	1.25	1.30
57	BB	258	G	N1-C2	8.78	1.44	1.37
57	BB	2516	A	C6-N6	8.78	1.41	1.33
57	BB	447	A	N9-C4	8.78	1.43	1.37
57	BB	738	G	N9-C8	8.78	1.44	1.37
57	BB	2010	G	N3-C4	-8.78	1.29	1.35
21	AA	906	A	C6-N1	8.77	1.41	1.35
57	BB	1769	U	C2-N3	8.77	1.43	1.37
21	AA	19	A	N9-C4	-8.77	1.32	1.37
57	BB	1977	A	O3'-P	-8.77	1.50	1.61
57	BB	1387	A	N3-C4	8.77	1.40	1.34
57	BB	1404	C	C2'-C1'	-8.77	1.43	1.53
21	AA	635	A	C2'-C1'	-8.77	1.43	1.53
57	BB	1088	A	N9-C4	8.77	1.43	1.37
57	BB	1696	G	C5-C6	-8.77	1.33	1.42
37	BR	83	TYR	CE2-CZ	8.77	1.50	1.38
21	AA	98	A	C6-N6	8.77	1.41	1.33
21	AA	315	A	C6-N6	8.77	1.41	1.33
21	AA	542	G	P-O5'	8.77	1.68	1.59
21	AA	988	G	C2-N3	8.77	1.39	1.32
57	BB	561	G	C6-N1	8.77	1.45	1.39
22	AY	9	A	P-O5'	-8.76	1.50	1.59
57	BB	785	G	N7-C5	-8.76	1.33	1.39
57	BB	1279	G	C6-N1	8.76	1.45	1.39
57	BB	205	G	N7-C5	-8.76	1.33	1.39
57	BB	1371	G	N9-C8	8.76	1.44	1.37
57	BB	1565	C	C4-N4	8.76	1.41	1.33
57	BB	2182	U	O3'-P	-8.76	1.50	1.61
21	AA	551	U	C2'-C1'	-8.76	1.43	1.53
21	AA	1105	A	N7-C5	-8.76	1.33	1.39
57	BB	846	U	C2-N3	8.76	1.43	1.37
57	BB	1800	C	P-O5'	-8.76	1.50	1.59
57	BB	2588	G	N7-C5	-8.76	1.33	1.39
58	BA	51	G	C5'-C4'	8.76	1.61	1.51
21	AA	616	G	C2-N3	8.76	1.39	1.32
57	BB	1536	C	N3-C4	8.76	1.40	1.33
57	BB	2480	C	N3-C4	8.76	1.40	1.33
21	AA	605	U	C2-N3	8.76	1.43	1.37
57	BB	962	G	C5-C4	8.75	1.44	1.38
57	BB	1464	G	N9-C8	8.75	1.44	1.37
21	AA	642	A	C6-N6	8.75	1.41	1.33
57	BB	2738	A	N9-C8	8.75	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	23	G	N9-C4	-8.75	1.30	1.38
57	BB	753	A	C2'-C1'	-8.75	1.43	1.53
57	BB	793	A	C6-N1	8.75	1.41	1.35
57	BB	2221	G	N1-C2	8.75	1.44	1.37
24	AX	13	A	C5'-C4'	8.75	1.61	1.51
26	AV	13	C	N1-C6	-8.75	1.31	1.37
57	BB	125	A	C6-N6	8.75	1.41	1.33
57	BB	818	G	N1-C2	8.75	1.44	1.37
57	BB	1188	U	C1'-N1	8.75	1.61	1.48
58	BA	109	A	C2'-C1'	-8.75	1.43	1.53
57	BB	1018	U	P-O5'	-8.74	1.51	1.59
57	BB	1213	A	C6-N6	8.74	1.41	1.33
21	AA	667	G	N7-C5	-8.74	1.34	1.39
57	BB	323	C	C5-C6	8.74	1.41	1.34
57	BB	2837	A	N3-C4	8.74	1.40	1.34
57	BB	1227	G	N1-C2	8.74	1.44	1.37
57	BB	2368	C	C4-C5	8.74	1.50	1.43
58	BA	102	G	N1-C2	8.74	1.44	1.37
57	BB	1740	G	N7-C5	-8.73	1.34	1.39
21	AA	240	G	N7-C5	-8.73	1.34	1.39
21	AA	987	G	C2'-C1'	-8.73	1.43	1.53
57	BB	1239	G	C5-C4	-8.73	1.32	1.38
57	BB	2208	C	N3-C4	8.73	1.40	1.33
57	BB	2541	A	N9-C4	-8.73	1.32	1.37
57	BB	119	A	C6-N1	8.73	1.41	1.35
57	BB	725	G	N7-C5	-8.73	1.34	1.39
57	BB	1886	U	C2-N3	8.73	1.43	1.37
57	BB	2065	C	C2'-C1'	-8.73	1.43	1.53
57	BB	2888	C	C2-N3	8.73	1.42	1.35
21	AA	917	G	C2-N3	8.73	1.39	1.32
21	AA	937	A	C6-N6	8.73	1.41	1.33
21	AA	1445	U	C2-N3	8.73	1.43	1.37
57	BB	1454	C	N3-C4	8.73	1.40	1.33
57	BB	2336	A	C6-N6	8.73	1.41	1.33
57	BB	957	C	C4-N4	8.72	1.41	1.33
57	BB	1074	G	N9-C4	8.72	1.45	1.38
57	BB	264	C	C4-N4	8.72	1.41	1.33
57	BB	401	A	C2-N3	8.72	1.41	1.33
21	AA	1159	U	C5-C6	8.72	1.42	1.34
57	BB	1187	G	N7-C5	-8.72	1.34	1.39
57	BB	1413	A	C8-N7	-8.72	1.25	1.31
57	BB	1422	G	C8-N7	8.72	1.36	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1456	G	N3-C4	-8.72	1.29	1.35
21	AA	413	G	C6-N1	8.72	1.45	1.39
21	AA	1166	G	N7-C5	-8.72	1.34	1.39
57	BB	896	A	C5'-C4'	8.72	1.61	1.51
57	BB	2120	G	N1-C2	8.72	1.44	1.37
57	BB	2250	G	C8-N7	-8.72	1.25	1.30
57	BB	2010	G	N1-C2	8.71	1.44	1.37
21	AA	632	U	C2-N3	8.71	1.43	1.37
57	BB	147	C	C4-N4	8.71	1.41	1.33
57	BB	970	U	C2'-C1'	-8.71	1.43	1.53
57	BB	1225	G	C6-N1	8.71	1.45	1.39
57	BB	2836	U	C2-N3	8.71	1.43	1.37
57	BB	2167	U	P-O5'	-8.71	1.51	1.59
21	AA	501	C	N3-C4	8.71	1.40	1.33
21	AA	1427	C	N1-C6	8.71	1.42	1.37
57	BB	2031	A	N7-C5	-8.71	1.34	1.39
57	BB	526	A	N7-C5	-8.71	1.34	1.39
57	BB	1162	G	C8-N7	-8.70	1.25	1.30
57	BB	1408	G	N9-C8	8.70	1.44	1.37
57	BB	2459	A	N3-C4	-8.71	1.29	1.34
21	AA	328	C	P-O5'	-8.70	1.51	1.59
57	BB	879	G	N1-C2	8.70	1.44	1.37
57	BB	997	G	C6-N1	8.70	1.45	1.39
21	AA	697	U	P-O5'	-8.70	1.51	1.59
57	BB	1130	U	C3'-C2'	-8.70	1.43	1.52
57	BB	2274	A	C5-C4	8.70	1.44	1.38
57	BB	2542	A	N3-C4	-8.70	1.29	1.34
58	BA	69	G	N3-C4	-8.70	1.29	1.35
57	BB	417	C	N1-C6	8.70	1.42	1.37
57	BB	2708	G	N7-C5	-8.70	1.34	1.39
57	BB	127	A	P-O5'	-8.69	1.51	1.59
57	BB	768	G	N3-C4	8.70	1.41	1.35
57	BB	1688	U	C2-N3	8.69	1.43	1.37
57	BB	1986	C	C2'-C1'	-8.69	1.43	1.53
57	BB	2456	C	N3-C4	8.70	1.40	1.33
57	BB	2862	G	N7-C5	-8.69	1.34	1.39
21	AA	546	A	N3-C4	-8.69	1.29	1.34
23	AW	31	A	C6-N1	8.69	1.41	1.35
57	BB	862	G	C4'-C3'	-8.69	1.43	1.53
57	BB	1032	A	N9-C4	-8.69	1.32	1.37
57	BB	2597	G	C5-C4	8.69	1.44	1.38
26	AV	11	A	N3-C4	-8.69	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	5	U	P-OP2	8.69	1.63	1.49
57	BB	1063	G	C8-N7	-8.69	1.25	1.30
57	BB	1490	A	N7-C5	-8.69	1.34	1.39
57	BB	1848	A	C8-N7	-8.69	1.25	1.31
21	AA	146	G	N7-C5	-8.69	1.34	1.39
21	AA	1511	G	N7-C5	-8.69	1.34	1.39
57	BB	2184	A	N1-C2	8.69	1.42	1.34
57	BB	2781	A	P-O5'	-8.69	1.51	1.59
21	AA	121	U	C2-N3	8.68	1.43	1.37
57	BB	952	G	N7-C5	-8.68	1.34	1.39
57	BB	1576	U	C2-N3	8.68	1.43	1.37
57	BB	2147	A	N3-C4	-8.68	1.29	1.34
57	BB	2318	G	C2-N3	8.68	1.39	1.32
57	BB	1027	A	C6-N6	8.68	1.40	1.33
21	AA	440	C	C4-C5	8.67	1.49	1.43
21	AA	816	A	N7-C5	-8.67	1.34	1.39
57	BB	629	G	C4'-O4'	8.67	1.56	1.45
57	BB	2256	G	N3-C4	-8.67	1.29	1.35
57	BB	2514	U	C2-N3	8.67	1.43	1.37
21	AA	771	G	N7-C5	-8.67	1.34	1.39
21	AA	1244	G	C5-C6	-8.67	1.33	1.42
21	AA	1365	G	N1-C2	8.67	1.44	1.37
57	BB	2783	U	C2-N3	8.67	1.43	1.37
57	BB	925	A	C6-N1	8.67	1.41	1.35
21	AA	274	A	C2'-C1'	-8.67	1.43	1.53
21	AA	626	G	C2'-C1'	-8.67	1.43	1.53
21	AA	1265	C	N3-C4	8.67	1.40	1.33
57	BB	1330	C	C2-N3	8.67	1.42	1.35
58	BA	41	G	N1-C2	8.66	1.44	1.37
21	AA	807	A	C6-N1	8.66	1.41	1.35
21	AA	848	C	N3-C4	8.66	1.40	1.33
57	BB	1256	G	N7-C5	8.66	1.44	1.39
57	BB	1701	A	C5-C4	8.66	1.44	1.38
57	BB	1212	G	C8-N7	-8.66	1.25	1.30
57	BB	2721	A	C6-N6	8.66	1.40	1.33
57	BB	1991	U	C2'-C1'	-8.66	1.43	1.53
21	AA	865	A	N9-C4	8.66	1.43	1.37
21	AA	1413	A	N9-C8	-8.66	1.30	1.37
21	AA	1500	A	P-O5'	-8.66	1.51	1.59
57	BB	687	C	C4-N4	8.66	1.41	1.33
57	BB	2218	G	N3-C4	-8.66	1.29	1.35
21	AA	751	U	C2'-C1'	-8.65	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	483	A	N7-C5	-8.65	1.34	1.39
57	BB	1386	C	N3-C4	8.65	1.40	1.33
57	BB	2241	A	C2'-C1'	-8.65	1.43	1.53
21	AA	763	G	N1-C2	8.65	1.44	1.37
21	AA	1276	G	N9-C8	8.65	1.44	1.37
57	BB	2632	A	O3'-P	-8.65	1.50	1.61
21	AA	619	U	N3-C4	8.65	1.46	1.38
21	AA	893	C	N1-C6	8.65	1.42	1.37
57	BB	723	C	N3-C4	8.65	1.40	1.33
57	BB	1121	C	N3-C4	8.65	1.40	1.33
57	BB	1514	G	N9-C4	-8.65	1.31	1.38
57	BB	590	A	N7-C5	-8.64	1.34	1.39
21	AA	259	G	N7-C5	8.64	1.44	1.39
22	AY	9	A	C2'-C1'	-8.64	1.43	1.53
57	BB	2277	G	N3-C4	-8.64	1.29	1.35
21	AA	101	A	C6-N1	8.64	1.41	1.35
24	AX	13	A	N3-C4	8.64	1.40	1.34
57	BB	502	A	C6-N6	8.64	1.40	1.33
57	BB	1320	C	C2'-C1'	-8.64	1.43	1.53
57	BB	2751	G	N7-C5	-8.64	1.34	1.39
21	AA	580	C	N3-C4	8.64	1.40	1.33
21	AA	1061	G	N1-C2	8.64	1.44	1.37
57	BB	2012	G	N7-C5	-8.64	1.34	1.39
57	BB	2706	A	C6-N6	8.64	1.40	1.33
57	BB	2745	C	N1-C6	-8.64	1.31	1.37
21	AA	637	C	N3-C4	8.64	1.40	1.33
21	AA	682	G	C6-N1	8.64	1.45	1.39
57	BB	2024	G	C6-N1	8.64	1.45	1.39
21	AA	1393	U	P-O5'	8.64	1.68	1.59
23	AW	47	U	N3-C4	8.64	1.46	1.38
23	AW	8	U	N1-C2	8.63	1.46	1.38
57	BB	1036	G	N1-C2	8.63	1.44	1.37
21	AA	625	U	N1-C6	8.63	1.45	1.38
57	BB	7	G	C2-N3	8.63	1.39	1.32
57	BB	905	A	C2'-C1'	-8.63	1.43	1.53
57	BB	273	G	C2'-C1'	-8.63	1.43	1.53
57	BB	1163	G	N3-C4	-8.63	1.29	1.35
57	BB	2181	U	C2-N3	8.63	1.43	1.37
57	BB	1341	G	N1-C2	8.63	1.44	1.37
57	BB	1794	A	C6-N6	8.63	1.40	1.33
57	BB	424	G	C8-N7	-8.63	1.25	1.30
21	AA	1220	G	C6-N1	8.63	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	895	U	N3-C4	8.63	1.46	1.38
57	BB	1420	A	N7-C5	-8.63	1.34	1.39
57	BB	1660	G	C5-C6	-8.63	1.33	1.42
57	BB	2532	G	C2'-C1'	-8.63	1.43	1.53
21	AA	188	C	N3-C4	8.62	1.40	1.33
26	AV	56	C	C4-N4	8.63	1.41	1.33
57	BB	1213	A	N7-C5	-8.62	1.34	1.39
57	BB	1254	A	C6-N1	8.63	1.41	1.35
57	BB	1465	G	C6-N1	8.62	1.45	1.39
21	AA	282	A	N3-C4	8.62	1.40	1.34
57	BB	383	C	N1-C6	8.62	1.42	1.37
57	BB	708	G	C5-C4	8.62	1.44	1.38
57	BB	1751	U	N3-C4	8.62	1.46	1.38
57	BB	2309	A	C6-N1	8.62	1.41	1.35
21	AA	165	G	C6-N1	8.62	1.45	1.39
21	AA	373	A	C5'-C4'	8.62	1.61	1.51
21	AA	602	A	P-O5'	-8.62	1.51	1.59
21	AA	1059	C	C2'-C1'	-8.62	1.43	1.53
21	AA	1080	A	N9-C4	-8.62	1.32	1.37
21	AA	1329	A	C5-C4	8.62	1.44	1.38
21	AA	1531	A	C5'-C4'	8.62	1.61	1.51
57	BB	891	G	C2-N3	8.62	1.39	1.32
57	BB	1499	C	C2'-C1'	-8.62	1.43	1.53
57	BB	2620	C	N1-C6	8.62	1.42	1.37
21	AA	218	U	N3-C4	8.61	1.46	1.38
21	AA	1339	A	C6-N6	8.62	1.40	1.33
57	BB	488	G	O3'-P	-8.62	1.50	1.61
57	BB	2246	G	C2-N3	8.62	1.39	1.32
57	BB	2325	G	C6-N1	8.62	1.45	1.39
57	BB	2365	G	N7-C5	-8.61	1.34	1.39
21	AA	13	U	C2'-C1'	-8.61	1.43	1.53
21	AA	195	A	C6-N1	8.61	1.41	1.35
21	AA	1277	C	N1-C6	8.61	1.42	1.37
57	BB	1076	C	C2'-C1'	-8.61	1.43	1.53
57	BB	2071	A	N7-C5	-8.61	1.34	1.39
57	BB	2833	U	C2-N3	8.61	1.43	1.37
21	AA	680	C	N3-C4	8.61	1.40	1.33
57	BB	1922	G	C2-N3	8.61	1.39	1.32
57	BB	2488	G	N9-C4	8.61	1.44	1.38
21	AA	1448	C	C4-C5	8.61	1.49	1.43
22	AY	51	G	C6-O6	-8.61	1.16	1.24
57	BB	63	A	P-O5'	-8.61	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	689	A	N3-C4	-8.61	1.29	1.34
57	BB	317	G	C5-C4	8.61	1.44	1.38
57	BB	808	G	C2-N3	8.61	1.39	1.32
57	BB	2767	C	N3-C4	8.61	1.40	1.33
57	BB	2879	A	C6-N6	8.61	1.40	1.33
21	AA	795	C	N3-C4	8.60	1.40	1.33
21	AA	1108	G	N1-C2	8.60	1.44	1.37
57	BB	2065	C	N1-C6	8.60	1.42	1.37
57	BB	2249	U	C2-N3	8.60	1.43	1.37
22	AY	22	G	C5-C6	-8.60	1.33	1.42
57	BB	2104	C	O3'-P	-8.60	1.50	1.61
21	AA	322	C	C2'-O2'	-8.60	1.30	1.41
21	AA	566	G	N7-C5	-8.60	1.34	1.39
21	AA	977	A	N7-C5	-8.60	1.34	1.39
57	BB	660	C	C2'-C1'	-8.60	1.43	1.53
21	AA	573	A	O4'-C1'	8.60	1.52	1.41
21	AA	1057	G	C4'-O4'	-8.60	1.34	1.45
21	AA	1248	A	C6-N1	8.60	1.41	1.35
21	AA	1251	A	N7-C5	-8.60	1.34	1.39
23	AW	65	G	P-O5'	-8.60	1.51	1.59
57	BB	943	A	C6-N6	8.60	1.40	1.33
57	BB	1905	C	C1'-N1	-8.60	1.34	1.46
57	BB	859	G	C5-C4	8.59	1.44	1.38
57	BB	169	G	N7-C5	-8.59	1.34	1.39
57	BB	728	G	N9-C4	-8.59	1.31	1.38
58	BA	72	G	C6-N1	8.59	1.45	1.39
21	AA	233	C	N3-C4	8.59	1.40	1.33
57	BB	1329	U	C4-C5	8.59	1.51	1.43
21	AA	76	G	N7-C5	-8.59	1.34	1.39
21	AA	952	U	N1-C2	-8.59	1.30	1.38
22	AY	49	C	O3'-P	-8.59	1.50	1.61
57	BB	705	A	N9-C4	-8.59	1.32	1.37
57	BB	919	U	C2-N3	8.59	1.43	1.37
57	BB	1617	C	N3-C4	8.59	1.40	1.33
57	BB	2738	A	C5-C4	8.59	1.44	1.38
58	BA	105	G	C2-N2	8.59	1.43	1.34
21	AA	1271	A	C6-N1	8.58	1.41	1.35
57	BB	2590	A	N7-C5	-8.58	1.34	1.39
57	BB	298	G	C2-N2	8.58	1.43	1.34
57	BB	545	U	N1-C2	8.58	1.46	1.38
57	BB	1520	U	N3-C4	8.58	1.46	1.38
57	BB	2504	U	C4-C5	8.58	1.51	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2727	A	C6-N6	8.58	1.40	1.33
57	BB	2838	G	O3'-P	-8.58	1.50	1.61
21	AA	1234	C	N3-C4	8.58	1.40	1.33
57	BB	856	G	C6-O6	-8.58	1.16	1.24
57	BB	1817	G	C2-N3	8.58	1.39	1.32
21	AA	769	G	C2-N3	8.58	1.39	1.32
21	AA	1506	U	C2'-C1'	-8.57	1.44	1.53
57	BB	1225	G	O3'-P	-8.57	1.50	1.61
57	BB	2422	C	C4'-C3'	8.57	1.62	1.53
57	BB	309	A	N7-C5	-8.57	1.34	1.39
57	BB	626	A	C6-N1	8.57	1.41	1.35
57	BB	2307	G	N9-C8	-8.57	1.31	1.37
57	BB	2862	G	N3-C4	8.57	1.41	1.35
21	AA	164	G	P-O5'	-8.57	1.51	1.59
57	BB	188	G	C5-C4	8.57	1.44	1.38
57	BB	311	A	C5-C6	8.57	1.48	1.41
57	BB	2470	G	N3-C4	-8.57	1.29	1.35
57	BB	2571	U	C2-N3	8.57	1.43	1.37
21	AA	435	A	N9-C4	-8.56	1.32	1.37
22	AY	18	G	C5'-C4'	8.56	1.61	1.51
57	BB	2479	U	P-O5'	-8.56	1.51	1.59
21	AA	1185	G	N9-C4	-8.56	1.31	1.38
57	BB	121	G	C5-C6	-8.56	1.33	1.42
22	AY	75	C	C2'-C1'	8.56	1.62	1.53
57	BB	293	U	C4-C5	-8.56	1.35	1.43
22	AY	18	G	C5-C6	-8.56	1.33	1.42
57	BB	2753	A	C6-N1	8.56	1.41	1.35
21	AA	383	A	N9-C4	-8.56	1.32	1.37
21	AA	911	U	C4-C5	-8.56	1.35	1.43
57	BB	2021	C	N1-C6	-8.56	1.32	1.37
57	BB	416	U	C2-N3	8.55	1.43	1.37
57	BB	1598	A	C6-N6	8.56	1.40	1.33
57	BB	1729	U	N1-C2	8.55	1.46	1.38
21	AA	719	C	C2-N3	8.55	1.42	1.35
21	AA	167	A	C6-N1	8.55	1.41	1.35
21	AA	1384	C	C4-N4	8.55	1.41	1.33
57	BB	4	U	C3'-C2'	8.55	1.62	1.52
57	BB	476	G	N3-C4	-8.55	1.29	1.35
57	BB	1467	U	C4-C5	8.55	1.51	1.43
21	AA	497	G	C2-N3	8.55	1.39	1.32
57	BB	798	G	N7-C5	-8.55	1.34	1.39
57	BB	2254	C	N3-C4	8.55	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	3	G	C4'-O4'	8.55	1.56	1.45
57	BB	482	A	N7-C5	-8.55	1.34	1.39
57	BB	1970	A	C6-N1	8.54	1.41	1.35
57	BB	2487	G	P-O5'	-8.54	1.51	1.59
57	BB	217	A	N9-C4	-8.54	1.32	1.37
57	BB	933	A	O3'-P	-8.54	1.50	1.61
57	BB	1058	U	N1-C2	8.54	1.46	1.38
57	BB	1339	G	N9-C8	8.54	1.43	1.37
58	BA	51	G	C5-C4	-8.54	1.32	1.38
21	AA	839	C	C4'-O4'	-8.54	1.34	1.45
57	BB	960	A	N3-C4	8.54	1.40	1.34
57	BB	1704	C	C4-C5	8.54	1.49	1.43
57	BB	2836	U	C3'-C2'	8.54	1.62	1.52
21	AA	1193	G	C2-N3	-8.54	1.25	1.32
22	AY	52	U	C4'-C3'	8.54	1.62	1.53
28	BI	47	SER	CA-CB	8.54	1.65	1.52
57	BB	902	C	O3'-P	-8.54	1.50	1.61
57	BB	2005	A	C8-N7	-8.54	1.25	1.31
57	BB	2607	G	N7-C5	-8.54	1.34	1.39
57	BB	2903	U	C2-N3	8.54	1.43	1.37
21	AA	159	G	C3'-C2'	-8.54	1.43	1.52
21	AA	1455	G	C6-N1	8.54	1.45	1.39
57	BB	2463	C	N3-C4	8.53	1.40	1.33
21	AA	416	G	C6-N1	8.53	1.45	1.39
21	AA	581	G	C2-N3	8.53	1.39	1.32
21	AA	888	G	C6-N1	8.53	1.45	1.39
57	BB	311	A	C4'-C3'	8.53	1.62	1.53
57	BB	1583	A	C8-N7	-8.53	1.25	1.31
57	BB	2276	G	C5-C6	-8.53	1.33	1.42
57	BB	2733	A	C6-N6	8.53	1.40	1.33
21	AA	358	U	N3-C4	8.53	1.46	1.38
21	AA	453	G	C8-N7	8.53	1.36	1.30
21	AA	645	G	C2-N3	8.53	1.39	1.32
57	BB	1723	G	N3-C4	-8.53	1.29	1.35
57	BB	2678	C	O3'-P	-8.53	1.50	1.61
57	BB	1418	G	C6-N1	8.53	1.45	1.39
21	AA	240	G	N3-C4	-8.53	1.29	1.35
21	AA	384	G	N9-C8	-8.53	1.31	1.37
57	BB	979	A	N7-C5	-8.53	1.34	1.39
57	BB	1869	G	C5-C4	8.53	1.44	1.38
21	AA	1149	C	O3'-P	-8.52	1.50	1.61
57	BB	1283	G	N7-C5	-8.52	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1445	U	C2'-C1'	-8.52	1.44	1.53
57	BB	1634	A	C5-C4	8.52	1.44	1.38
21	AA	1328	C	C2-N3	-8.52	1.28	1.35
57	BB	876	C	P-O5'	-8.52	1.51	1.59
57	BB	1667	G	N3-C4	-8.52	1.29	1.35
57	BB	2771	C	C2'-C1'	-8.52	1.44	1.53
21	AA	259	G	C2-N3	8.52	1.39	1.32
57	BB	560	C	P-O5'	-8.52	1.51	1.59
57	BB	1341	G	N7-C5	-8.52	1.34	1.39
57	BB	2734	A	N1-C2	8.52	1.42	1.34
57	BB	2782	G	C2-N2	8.52	1.43	1.34
22	AY	26	G	N9-C4	8.51	1.44	1.38
26	AV	49	G	C2-N2	-8.51	1.26	1.34
57	BB	1112	G	N9-C8	8.51	1.43	1.37
57	BB	1779	U	N1-C6	8.51	1.45	1.38
57	BB	2653	U	C2'-C1'	-8.51	1.44	1.53
23	AW	68	C	N1-C6	-8.51	1.32	1.37
21	AA	457	G	C2-N3	8.51	1.39	1.32
21	AA	1101	A	N7-C5	-8.51	1.34	1.39
21	AA	1219	A	C8-N7	-8.51	1.25	1.31
21	AA	446	G	N1-C2	8.51	1.44	1.37
21	AA	695	A	C5'-C4'	8.51	1.61	1.51
57	BB	394	C	C2-N3	8.51	1.42	1.35
57	BB	918	A	O3'-P	-8.51	1.50	1.61
57	BB	1064	C	C2-N3	8.51	1.42	1.35
21	AA	1200	C	C5'-C4'	8.50	1.61	1.51
57	BB	1738	G	O3'-P	-8.50	1.50	1.61
58	BA	39	A	C8-N7	-8.50	1.25	1.31
57	BB	287	G	C6-N1	8.50	1.45	1.39
57	BB	2206	C	N1-C6	-8.50	1.32	1.37
57	BB	2367	G	C6-N1	8.50	1.45	1.39
22	AY	2	C	N1-C6	8.50	1.42	1.37
21	AA	446	G	C6-N1	8.50	1.45	1.39
57	BB	1157	G	P-O5'	-8.50	1.51	1.59
57	BB	2486	C	C3'-C2'	-8.50	1.43	1.52
57	BB	2633	G	N1-C2	8.50	1.44	1.37
57	BB	2660	A	N7-C5	-8.50	1.34	1.39
57	BB	2806	C	C2'-C1'	-8.50	1.44	1.53
21	AA	1155	A	C2'-C1'	-8.50	1.44	1.53
57	BB	1098	A	N3-C4	-8.50	1.29	1.34
21	AA	106	C	C4'-C3'	8.49	1.62	1.53
21	AA	986	U	P-O5'	-8.49	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1566	A	O3'-P	-8.49	1.50	1.61
57	BB	1793	C	N3-C4	8.49	1.39	1.33
57	BB	1434	A	N9-C4	8.49	1.43	1.37
57	BB	1612	C	O3'-P	-8.49	1.50	1.61
21	AA	569	C	O3'-P	-8.49	1.50	1.61
21	AA	1481	U	C3'-C2'	-8.49	1.43	1.52
57	BB	955	U	N1-C2	-8.49	1.30	1.38
57	BB	1846	G	C5-C6	-8.49	1.33	1.42
57	BB	2329	U	N1-C2	8.49	1.46	1.38
57	BB	2723	C	C2'-C1'	8.49	1.62	1.53
21	AA	1144	G	N7-C5	-8.49	1.34	1.39
21	AA	1482	G	N7-C5	-8.49	1.34	1.39
57	BB	250	G	N9-C8	8.49	1.43	1.37
57	BB	2510	C	N3-C4	8.49	1.39	1.33
21	AA	166	U	C2-N3	8.48	1.43	1.37
21	AA	1271	A	C5-C4	8.48	1.44	1.38
21	AA	1405	G	N7-C5	-8.48	1.34	1.39
57	BB	1482	G	C2-N3	8.48	1.39	1.32
57	BB	2503	A	N3-C4	-8.48	1.29	1.34
23	AW	72	C	C4-N4	8.48	1.41	1.33
57	BB	310	A	C5'-C4'	8.48	1.61	1.51
57	BB	555	G	C2-N3	8.48	1.39	1.32
57	BB	726	G	C6-N1	8.48	1.45	1.39
57	BB	1180	U	C2-N3	8.48	1.43	1.37
57	BB	1700	A	N3-C4	-8.48	1.29	1.34
21	AA	436	C	C5'-C4'	8.47	1.61	1.51
57	BB	439	A	N1-C2	8.47	1.42	1.34
57	BB	1733	G	C2-N3	8.47	1.39	1.32
58	BA	7	G	P-O5'	-8.47	1.51	1.59
21	AA	1094	G	C6-N1	8.47	1.45	1.39
23	AW	15	G	C5-C4	8.47	1.44	1.38
57	BB	1706	C	N3-C4	8.47	1.39	1.33
22	AY	71	G	C8-N7	-8.47	1.25	1.30
57	BB	255	A	C6-N1	8.47	1.41	1.35
57	BB	2060	A	N3-C4	8.47	1.40	1.34
57	BB	1250	G	N1-C2	8.47	1.44	1.37
21	AA	1004	A	C6-N1	8.46	1.41	1.35
57	BB	1622	G	C2-N2	8.46	1.43	1.34
57	BB	2460	U	C2'-C1'	-8.47	1.44	1.53
57	BB	1871	A	N9-C4	8.46	1.43	1.37
57	BB	2673	G	N7-C5	-8.46	1.34	1.39
26	AV	6	G	C2-N3	8.46	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	114	U	N3-C4	8.46	1.46	1.38
57	BB	1549	A	N7-C5	-8.46	1.34	1.39
21	AA	21	G	C8-N7	-8.46	1.25	1.30
57	BB	584	C	N3-C4	8.46	1.39	1.33
57	BB	679	C	C4-N4	8.46	1.41	1.33
57	BB	2340	A	N9-C4	8.46	1.43	1.37
57	BB	862	G	C6-O6	-8.46	1.16	1.24
57	BB	1828	G	C6-N1	8.46	1.45	1.39
57	BB	2175	C	P-O5'	-8.46	1.51	1.59
21	AA	221	C	C2'-C1'	-8.46	1.44	1.53
57	BB	762	U	C2-N3	8.45	1.43	1.37
57	BB	1972	G	C8-N7	-8.45	1.25	1.30
22	AY	45	G	C5-C4	8.45	1.44	1.38
57	BB	487	C	O3'-P	-8.45	1.51	1.61
57	BB	1321	A	C6-N1	8.45	1.41	1.35
57	BB	2215	C	C4-C5	-8.45	1.36	1.43
21	AA	310	G	C2'-C1'	-8.45	1.44	1.53
21	AA	1067	A	N7-C5	-8.45	1.34	1.39
57	BB	732	C	N3-C4	8.45	1.39	1.33
21	AA	15	G	O3'-P	-8.45	1.51	1.61
21	AA	1429	A	N3-C4	8.45	1.40	1.34
57	BB	771	G	N1-C2	8.45	1.44	1.37
57	BB	1894	C	N3-C4	8.45	1.39	1.33
57	BB	735	A	P-O5'	-8.44	1.51	1.59
57	BB	2038	G	C2-N3	8.44	1.39	1.32
58	BA	7	G	C8-N7	8.44	1.36	1.30
21	AA	77	A	N7-C5	-8.44	1.34	1.39
57	BB	493	G	N7-C5	-8.44	1.34	1.39
21	AA	115	G	N7-C5	-8.44	1.34	1.39
21	AA	241	G	N1-C2	8.44	1.44	1.37
21	AA	1170	A	P-O5'	-8.44	1.51	1.59
21	AA	1411	C	C4-N4	8.44	1.41	1.33
57	BB	1358	G	C2-N3	-8.44	1.25	1.32
57	BB	2484	G	N1-C2	8.44	1.44	1.37
21	AA	1478	U	C2'-C1'	-8.44	1.44	1.53
57	BB	454	A	C6-N1	8.44	1.41	1.35
57	BB	1153	C	N3-C4	8.44	1.39	1.33
57	BB	133	U	C2-N3	8.44	1.43	1.37
57	BB	175	G	C2-N3	8.44	1.39	1.32
57	BB	2641	G	C8-N7	-8.44	1.25	1.30
21	AA	846	G	C2-N2	8.43	1.43	1.34
57	BB	2209	G	P-O5'	8.43	1.68	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2564	A	C6-N6	8.43	1.40	1.33
57	BB	1573	G	C6-N1	8.43	1.45	1.39
57	BB	2456	C	C4-C5	8.43	1.49	1.43
21	AA	34	C	C3'-O3'	8.43	1.53	1.42
21	AA	1163	A	C6-N1	8.43	1.41	1.35
57	BB	602	A	C6-N6	8.43	1.40	1.33
57	BB	2062	A	N7-C5	-8.43	1.34	1.39
21	AA	159	G	O3'-P	-8.43	1.51	1.61
21	AA	491	G	N9-C8	-8.42	1.31	1.37
21	AA	655	A	N3-C4	8.42	1.40	1.34
21	AA	812	G	N3-C4	-8.42	1.29	1.35
57	BB	1968	G	C6-N1	-8.42	1.33	1.39
57	BB	1969	A	N3-C4	8.42	1.40	1.34
21	AA	1096	C	C2'-C1'	-8.42	1.44	1.53
21	AA	1134	G	C2-N3	8.42	1.39	1.32
58	BA	13	G	N3-C4	8.42	1.41	1.35
57	BB	439	A	N9-C4	-8.42	1.32	1.37
57	BB	1497	U	C4'-C3'	8.42	1.62	1.53
57	BB	1722	A	N3-C4	-8.42	1.29	1.34
21	AA	122	G	N9-C8	-8.41	1.31	1.37
21	AA	812	G	N7-C5	-8.41	1.34	1.39
57	BB	858	G	N9-C4	-8.41	1.31	1.38
57	BB	2627	G	N9-C4	-8.41	1.31	1.38
57	BB	225	C	N1-C6	8.41	1.42	1.37
57	BB	2560	A	C6-N6	8.41	1.40	1.33
22	AY	21	A	C6-N6	8.41	1.40	1.33
57	BB	825	A	N7-C5	-8.41	1.34	1.39
57	BB	875	G	N9-C8	8.41	1.43	1.37
57	BB	1268	A	C6-N6	8.41	1.40	1.33
57	BB	1685	C	N3-C4	8.41	1.39	1.33
21	AA	354	G	N3-C4	-8.41	1.29	1.35
57	BB	1238	G	C3'-O3'	8.41	1.53	1.42
57	BB	1473	G	N7-C5	-8.41	1.34	1.39
34	BO	114	GLY	CA-C	-8.41	1.38	1.51
57	BB	482	A	C6-N6	8.40	1.40	1.33
21	AA	176	C	C2-N3	8.40	1.42	1.35
26	AV	69	C	C4-N4	8.40	1.41	1.33
57	BB	254	G	N7-C5	-8.40	1.34	1.39
57	BB	2609	U	C5'-C4'	8.40	1.61	1.51
57	BB	2831	G	C6-N1	8.40	1.45	1.39
21	AA	437	U	C2'-C1'	-8.40	1.44	1.53
21	AA	1330	U	N1-C6	8.40	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	34	G	C8-N7	-8.40	1.25	1.30
57	BB	830	G	C5-C4	8.40	1.44	1.38
57	BB	586	A	N7-C5	-8.40	1.34	1.39
57	BB	1543	G	N1-C2	8.40	1.44	1.37
57	BB	2882	A	P-O5'	-8.40	1.51	1.59
21	AA	1253	G	C8-N7	8.40	1.35	1.30
21	AA	1241	G	C8-N7	-8.40	1.25	1.30
21	AA	1317	C	N3-C4	8.40	1.39	1.33
57	BB	1742	U	C5-C6	8.40	1.41	1.34
57	BB	2897	U	O3'-P	-8.40	1.51	1.61
57	BB	1389	G	N3-C4	-8.39	1.29	1.35
57	BB	1552	A	C5-C4	8.39	1.44	1.38
57	BB	2712	C	O3'-P	-8.39	1.51	1.61
57	BB	2830	C	C5'-C4'	8.39	1.61	1.51
58	BA	112	G	N3-C4	8.39	1.41	1.35
21	AA	1012	A	C4'-C3'	8.39	1.62	1.53
58	BA	61	G	C6-N1	8.39	1.45	1.39
57	BB	449	A	C2'-C1'	-8.39	1.44	1.53
57	BB	612	G	N7-C5	-8.39	1.34	1.39
57	BB	2648	G	N9-C4	-8.39	1.31	1.38
57	BB	2747	G	N7-C5	8.38	1.44	1.39
57	BB	2815	C	N3-C4	8.38	1.39	1.33
21	AA	350	G	C6-N1	8.38	1.45	1.39
57	BB	2072	C	C4-N4	8.38	1.41	1.33
21	AA	990	C	N1-C6	-8.38	1.32	1.37
26	AV	53	G	C6-N1	8.38	1.45	1.39
57	BB	600	G	C2'-C1'	-8.38	1.44	1.53
57	BB	1297	C	C4-N4	8.38	1.41	1.33
57	BB	2154	A	C4'-O4'	-8.38	1.34	1.45
21	AA	568	G	C6-N1	8.38	1.45	1.39
57	BB	302	C	N3-C4	8.38	1.39	1.33
57	BB	2414	G	C4'-O4'	8.38	1.56	1.45
21	AA	351	G	N7-C5	-8.37	1.34	1.39
21	AA	908	A	N7-C5	-8.37	1.34	1.39
21	AA	1228	C	N3-C4	8.37	1.39	1.33
57	BB	1520	U	C4'-C3'	-8.38	1.44	1.53
21	AA	301	G	C2-N3	8.37	1.39	1.32
21	AA	879	C	C2-N3	8.37	1.42	1.35
21	AA	1115	U	C2-N3	8.37	1.43	1.37
26	AV	2	G	N1-C2	8.37	1.44	1.37
57	BB	10	A	C6-N1	8.37	1.41	1.35
57	BB	1192	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)
57	BB	2427	C	C4-C5	8.37	1.49	1.43
21	AA	461	A	C6-N6	8.37	1.40	1.33
22	AY	51	G	N9-C4	8.37	1.44	1.38
57	BB	2287	A	C5'-C4'	8.37	1.61	1.51
57	BB	2848	G	N7-C5	-8.37	1.34	1.39
57	BB	470	A	C4'-O4'	-8.37	1.34	1.45
57	BB	1285	A	C6-N6	8.37	1.40	1.33
57	BB	1331	G	N3-C4	8.37	1.41	1.35
57	BB	2184	A	C6-N6	8.37	1.40	1.33
21	AA	1178	G	N7-C5	-8.37	1.34	1.39
58	BA	79	G	C2-N3	8.37	1.39	1.32
57	BB	48	G	N7-C5	-8.36	1.34	1.39
57	BB	256	A	C6-N6	8.36	1.40	1.33
57	BB	1783	A	C4'-C3'	8.37	1.62	1.53
21	AA	887	G	N9-C8	8.36	1.43	1.37
57	BB	81	G	N7-C5	-8.36	1.34	1.39
57	BB	1182	G	N3-C4	-8.36	1.29	1.35
57	BB	1968	G	C2'-C1'	-8.36	1.44	1.53
57	BB	2625	G	N9-C8	8.36	1.43	1.37
21	AA	139	A	C6-N6	8.36	1.40	1.33
57	BB	705	A	C2'-C1'	-8.36	1.44	1.53
57	BB	2634	A	N9-C8	-8.36	1.31	1.37
57	BB	1964	G	N7-C5	-8.36	1.34	1.39
21	AA	41	G	N3-C4	-8.36	1.29	1.35
21	AA	240	G	C2-N3	8.36	1.39	1.32
21	AA	455	G	N9-C8	-8.36	1.32	1.37
21	AA	794	A	C5-C6	-8.36	1.33	1.41
57	BB	1626	A	C8-N7	-8.36	1.25	1.31
57	BB	1277	G	C5-C4	-8.35	1.32	1.38
21	AA	232	G	C2-N3	8.35	1.39	1.32
24	AX	16	A	C8-N7	8.35	1.37	1.31
57	BB	56	A	N7-C5	-8.35	1.34	1.39
57	BB	71	A	C6-N6	8.35	1.40	1.33
57	BB	2154	A	N9-C8	8.35	1.44	1.37
58	BA	43	C	C2'-C1'	8.35	1.62	1.53
21	AA	898	G	C8-N7	8.35	1.35	1.30
21	AA	811	C	N1-C6	8.35	1.42	1.37
57	BB	324	A	C3'-C2'	8.35	1.62	1.52
57	BB	380	G	N1-C2	8.35	1.44	1.37
57	BB	1136	G	C6-N1	8.35	1.45	1.39
57	BB	1496	A	C6-N6	8.35	1.40	1.33
21	AA	1069	C	N1-C6	-8.35	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2231	U	P-O5'	-8.35	1.51	1.59
21	AA	651	C	N3-C4	8.34	1.39	1.33
21	AA	1411	C	N1-C6	8.34	1.42	1.37
57	BB	466	A	N9-C8	-8.34	1.31	1.37
22	AY	26	G	C2'-O2'	-8.34	1.30	1.41
57	BB	1437	C	C4-N4	8.34	1.41	1.33
57	BB	2467	C	C4'-C3'	-8.34	1.44	1.53
57	BB	108	G	N7-C5	-8.34	1.34	1.39
57	BB	774	G	C5-C4	8.34	1.44	1.38
57	BB	1651	G	O3'-P	-8.34	1.51	1.61
57	BB	874	G	N1-C2	8.34	1.44	1.37
57	BB	2038	G	C3'-C2'	-8.34	1.43	1.52
21	AA	262	A	C5-C4	8.34	1.44	1.38
21	AA	860	A	C4'-C3'	8.34	1.62	1.53
21	AA	1324	A	N7-C5	-8.34	1.34	1.39
57	BB	727	A	C6-N6	8.34	1.40	1.33
57	BB	1868	C	C2-N3	-8.34	1.29	1.35
21	AA	292	G	C6-N1	8.33	1.45	1.39
21	AA	460	A	C6-N6	8.33	1.40	1.33
23	AW	68	C	C4-N4	8.33	1.41	1.33
57	BB	487	C	P-O5'	-8.33	1.51	1.59
57	BB	524	G	C6-N1	8.33	1.45	1.39
57	BB	965	C	N1-C6	8.33	1.42	1.37
57	BB	1822	C	N3-C4	8.33	1.39	1.33
21	AA	963	G	C6-N1	8.33	1.45	1.39
57	BB	772	C	C4-N4	8.33	1.41	1.33
21	AA	755	G	C2'-C1'	-8.33	1.44	1.53
57	BB	530	G	C2'-C1'	-8.33	1.44	1.53
57	BB	820	A	C6-N1	8.33	1.41	1.35
57	BB	1689	A	C5'-C4'	8.33	1.61	1.51
57	BB	2714	G	C6-N1	8.33	1.45	1.39
21	AA	1238	A	N7-C5	-8.32	1.34	1.39
57	BB	1701	A	C6-N6	8.32	1.40	1.33
57	BB	2741	A	N7-C5	-8.32	1.34	1.39
21	AA	156	C	N1-C6	8.32	1.42	1.37
21	AA	263	A	C8-N7	-8.32	1.25	1.31
21	AA	346	G	C2-N3	8.32	1.39	1.32
22	AY	25	C	N3-C4	8.32	1.39	1.33
57	BB	27	G	O4'-C1'	-8.32	1.30	1.41
57	BB	931	U	O3'-P	-8.32	1.51	1.61
57	BB	1586	A	C2-N3	8.32	1.41	1.33
21	AA	229	U	C2-N3	8.32	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	731	G	C6-N1	8.32	1.45	1.39
21	AA	1503	A	C6-N6	8.32	1.40	1.33
57	BB	1595	C	N3-C4	8.32	1.39	1.33
57	BB	222	A	C5-C4	8.32	1.44	1.38
57	BB	1661	G	N9-C4	8.32	1.44	1.38
57	BB	279	A	C8-N7	-8.31	1.25	1.31
57	BB	1650	A	P-O5'	8.31	1.68	1.59
21	AA	1107	C	C4'-C3'	-8.31	1.44	1.53
21	AA	1363	A	C2'-C1'	-8.31	1.44	1.53
57	BB	384	A	C5'-C4'	8.31	1.61	1.51
57	BB	1933	G	C8-N7	-8.31	1.25	1.30
22	AY	27	C	C2-N3	8.31	1.42	1.35
57	BB	2209	G	C4'-C3'	-8.30	1.44	1.53
57	BB	1487	U	N1-C6	-8.30	1.30	1.38
21	AA	587	G	N9-C8	8.30	1.43	1.37
57	BB	107	G	C5-C4	8.30	1.44	1.38
57	BB	399	U	N1-C2	8.30	1.46	1.38
57	BB	432	A	N7-C5	-8.30	1.34	1.39
57	BB	793	A	C8-N7	-8.30	1.25	1.31
57	BB	969	G	N1-C2	8.30	1.44	1.37
57	BB	2416	C	N3-C4	8.30	1.39	1.33
57	BB	2337	G	N1-C2	8.30	1.44	1.37
21	AA	476	U	C2'-C1'	-8.29	1.44	1.53
57	BB	578	G	N1-C2	8.30	1.44	1.37
57	BB	2709	G	O3'-P	-8.30	1.51	1.61
57	BB	2873	A	N9-C4	8.30	1.42	1.37
58	BA	118	C	C2'-C1'	-8.29	1.44	1.53
26	AV	13	C	C4-N4	8.29	1.41	1.33
57	BB	349	U	P-O5'	-8.29	1.51	1.59
57	BB	2107	G	C2'-C1'	-8.29	1.44	1.53
57	BB	2788	C	C2-N3	8.29	1.42	1.35
21	AA	186	C	C3'-C2'	-8.29	1.43	1.52
26	AV	63	G	C5-C6	-8.29	1.34	1.42
57	BB	2063	C	N1-C6	8.29	1.42	1.37
57	BB	2829	A	C8-N7	-8.29	1.25	1.31
57	BB	2832	U	C5'-C4'	8.29	1.61	1.51
57	BB	2847	U	C4'-O4'	-8.29	1.34	1.45
57	BB	1673	G	N7-C5	-8.29	1.34	1.39
21	AA	884	U	N3-C4	8.28	1.46	1.38
21	AA	1517	G	C2-N2	8.28	1.42	1.34
57	BB	1954	G	C6-N1	8.29	1.45	1.39
21	AA	982	U	C2'-C1'	-8.28	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1646	C	O3'-P	-8.28	1.51	1.61
57	BB	2250	G	C2-N3	8.28	1.39	1.32
57	BB	2437	G	N3-C4	-8.28	1.29	1.35
21	AA	266	G	N1-C2	8.28	1.44	1.37
57	BB	1620	G	C2'-C1'	-8.28	1.44	1.53
21	AA	1210	C	N3-C4	8.28	1.39	1.33
57	BB	105	C	N3-C4	8.28	1.39	1.33
57	BB	2422	C	N3-C4	8.28	1.39	1.33
57	BB	489	G	N1-C2	8.28	1.44	1.37
21	AA	765	G	C8-N7	-8.28	1.25	1.30
57	BB	810	U	C2-N3	8.28	1.43	1.37
57	BB	1733	G	C4'-C3'	-8.28	1.44	1.53
57	BB	2703	C	N3-C4	8.28	1.39	1.33
57	BB	2749	A	P-O5'	-8.28	1.51	1.59
21	AA	704	A	N7-C5	-8.27	1.34	1.39
57	BB	954	G	C5-C6	-8.27	1.34	1.42
57	BB	2416	C	P-O5'	-8.27	1.51	1.59
37	BR	83	TYR	CG-CD2	8.27	1.50	1.39
57	BB	270	A	N3-C4	-8.27	1.29	1.34
57	BB	954	G	C8-N7	-8.27	1.25	1.30
57	BB	1418	G	P-O5'	-8.27	1.51	1.59
21	AA	350	G	N1-C2	8.27	1.44	1.37
21	AA	764	C	C2'-C1'	-8.27	1.44	1.53
57	BB	208	C	C1'-N1	8.27	1.61	1.48
21	AA	461	A	C5-C4	8.27	1.44	1.38
57	BB	745	G	N7-C5	-8.27	1.34	1.39
57	BB	2207	C	N1-C6	8.27	1.42	1.37
57	BB	2601	C	C2'-C1'	-8.27	1.44	1.53
21	AA	890	G	N3-C4	8.27	1.41	1.35
57	BB	2630	G	N7-C5	-8.27	1.34	1.39
58	BA	2	G	P-O5'	-8.27	1.51	1.59
57	BB	517	C	C2-N3	8.26	1.42	1.35
21	AA	371	A	C5-C4	-8.26	1.32	1.38
21	AA	1070	U	C2-N3	8.26	1.43	1.37
57	BB	233	A	C6-N6	8.26	1.40	1.33
21	AA	768	A	P-O5'	-8.26	1.51	1.59
21	AA	1415	G	N9-C8	-8.26	1.32	1.37
57	BB	444	C	C4-N4	8.26	1.41	1.33
57	BB	2631	G	N9-C8	8.26	1.43	1.37
21	AA	1170	A	N7-C5	-8.26	1.34	1.39
57	BB	926	G	N7-C5	-8.26	1.34	1.39
57	BB	2518	A	C6-N1	8.26	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2583	G	N9-C8	8.26	1.43	1.37
57	BB	2608	G	C3'-O3'	8.26	1.53	1.42
57	BB	2800	A	P-O5'	-8.26	1.51	1.59
22	AY	58	A	C8-N7	-8.26	1.25	1.31
57	BB	542	C	N1-C6	8.26	1.42	1.37
57	BB	9	G	C6-N1	8.25	1.45	1.39
57	BB	622	G	N1-C2	8.25	1.44	1.37
57	BB	2492	U	N3-C4	8.25	1.45	1.38
57	BB	786	C	N3-C4	8.25	1.39	1.33
57	BB	1232	G	C6-N1	8.25	1.45	1.39
57	BB	2288	A	N9-C8	8.25	1.44	1.37
57	BB	2751	G	N3-C4	8.25	1.41	1.35
21	AA	1033	G	N7-C5	-8.24	1.34	1.39
22	AY	56	C	C5-C6	8.24	1.41	1.34
57	BB	51	G	C4'-C3'	-8.24	1.44	1.53
57	BB	1543	G	N3-C4	8.24	1.41	1.35
57	BB	2590	A	N3-C4	-8.24	1.29	1.34
21	AA	151	A	C6-N6	8.24	1.40	1.33
21	AA	1158	C	N3-C4	8.24	1.39	1.33
21	AA	1489	G	N9-C8	8.24	1.43	1.37
57	BB	893	C	N1-C6	8.24	1.42	1.37
57	BB	1218	G	C5-C4	-8.24	1.32	1.38
57	BB	1424	G	C5'-C4'	8.24	1.61	1.51
21	AA	1053	G	N3-C4	-8.24	1.29	1.35
21	AA	1184	G	C5-C4	-8.24	1.32	1.38
57	BB	1377	G	O3'-P	-8.24	1.51	1.61
57	BB	2582	G	C2-N3	8.24	1.39	1.32
57	BB	2676	C	N3-C4	8.24	1.39	1.33
9	AR	50	TYR	CG-CD2	8.23	1.49	1.39
57	BB	171	U	P-O5'	-8.23	1.51	1.59
57	BB	429	A	C6-N6	8.23	1.40	1.33
57	BB	794	A	C2'-C1'	-8.23	1.44	1.53
57	BB	987	C	C2'-C1'	-8.23	1.44	1.53
21	AA	579	A	C6-N6	8.23	1.40	1.33
21	AA	803	G	C2-N3	8.23	1.39	1.32
21	AA	1403	C	N3-C4	8.23	1.39	1.33
57	BB	8	C	C2-N3	8.23	1.42	1.35
57	BB	1623	G	C5-C4	8.23	1.44	1.38
57	BB	829	A	C6-N6	8.23	1.40	1.33
57	BB	1259	G	N7-C5	-8.23	1.34	1.39
57	BB	1656	C	C4-N4	8.23	1.41	1.33
21	AA	1018	G	N7-C5	-8.22	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1020	A	C6-N6	8.22	1.40	1.33
57	BB	1561	C	C4-N4	8.22	1.41	1.33
57	BB	1166	G	C2'-C1'	-8.22	1.44	1.53
57	BB	1666	G	C6-N1	8.22	1.45	1.39
57	BB	1734	G	N7-C5	-8.22	1.34	1.39
57	BB	2137	U	C4-O4	-8.22	1.17	1.23
21	AA	383	A	C6-N1	8.22	1.41	1.35
21	AA	1201	A	O3'-P	-8.22	1.51	1.61
57	BB	1699	G	N9-C4	8.22	1.44	1.38
57	BB	2488	G	C6-N1	8.22	1.45	1.39
57	BB	2697	G	N9-C8	-8.22	1.32	1.37
21	AA	200	G	N9-C4	-8.22	1.31	1.38
21	AA	885	G	N7-C5	-8.22	1.34	1.39
57	BB	1521	G	C5-C4	8.22	1.44	1.38
57	BB	798	G	N9-C4	-8.22	1.31	1.38
57	BB	1364	G	N3-C4	-8.22	1.29	1.35
57	BB	2670	A	C3'-C2'	-8.22	1.43	1.52
21	AA	97	G	C5-C4	8.22	1.44	1.38
21	AA	700	G	N3-C4	-8.21	1.29	1.35
26	AV	48	C	C5-C6	8.21	1.41	1.34
57	BB	1028	A	C3'-C2'	-8.22	1.43	1.52
57	BB	1169	A	N3-C4	8.22	1.39	1.34
57	BB	623	C	N3-C4	8.21	1.39	1.33
57	BB	1568	G	C6-N1	8.21	1.45	1.39
57	BB	1221	C	C2'-C1'	-8.21	1.44	1.53
21	AA	77	A	C2'-C1'	-8.21	1.44	1.53
21	AA	511	C	N3-C4	8.21	1.39	1.33
21	AA	942	G	N7-C5	-8.21	1.34	1.39
22	AY	31	A	N3-C4	-8.21	1.29	1.34
57	BB	107	G	P-O5'	-8.21	1.51	1.59
57	BB	180	G	C5'-C4'	8.21	1.61	1.51
57	BB	232	G	N7-C5	8.21	1.44	1.39
21	AA	505	G	N1-C2	8.21	1.44	1.37
26	AV	46	G	N9-C8	8.21	1.43	1.37
21	AA	195	A	N3-C4	-8.21	1.29	1.34
23	AW	52	G	C4'-C3'	8.21	1.62	1.53
57	BB	84	A	C6-N6	8.21	1.40	1.33
57	BB	2303	G	P-O5'	-8.21	1.51	1.59
21	AA	29	U	C5'-C4'	8.20	1.61	1.51
22	AY	2	C	C4-N4	8.20	1.41	1.33
57	BB	834	G	C2-N3	8.20	1.39	1.32
57	BB	1191	G	N9-C8	-8.20	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1619	G	N7-C5	-8.20	1.34	1.39
57	BB	1622	G	N9-C8	8.20	1.43	1.37
57	BB	1812	U	N3-C4	8.20	1.45	1.38
21	AA	859	G	C8-N7	-8.20	1.26	1.30
21	AA	1099	G	N7-C5	-8.20	1.34	1.39
26	AV	75	C	C2-N3	8.20	1.42	1.35
57	BB	689	A	N9-C4	8.20	1.42	1.37
57	BB	2103	C	N3-C4	8.20	1.39	1.33
21	AA	257	G	C2'-C1'	-8.20	1.44	1.53
21	AA	524	G	N9-C4	-8.20	1.31	1.38
21	AA	1151	A	N3-C4	-8.20	1.29	1.34
57	BB	976	G	C5-C4	8.20	1.44	1.38
57	BB	1862	G	P-O5'	-8.20	1.51	1.59
22	AY	64	A	C5'-C4'	8.20	1.61	1.51
21	AA	910	C	N3-C4	8.19	1.39	1.33
21	AA	356	A	N7-C5	-8.19	1.34	1.39
57	BB	367	G	N9-C4	-8.19	1.31	1.38
57	BB	1432	G	N1-C2	8.19	1.44	1.37
57	BB	1762	A	N7-C5	-8.19	1.34	1.39
57	BB	2433	A	C6-N6	8.19	1.40	1.33
57	BB	2674	G	P-O5'	-8.19	1.51	1.59
57	BB	1815	A	C6-N6	8.19	1.40	1.33
57	BB	2190	G	C2'-C1'	-8.19	1.44	1.53
57	BB	2596	U	N1-C6	-8.19	1.30	1.38
21	AA	456	A	C6-N6	8.19	1.40	1.33
57	BB	1483	G	C2'-C1'	-8.19	1.44	1.53
57	BB	2107	G	C4'-O4'	8.19	1.56	1.45
21	AA	753	A	C6-N1	8.19	1.41	1.35
21	AA	991	U	P-O5'	8.19	1.68	1.59
57	BB	2348	U	C2'-C1'	-8.19	1.44	1.53
21	AA	1000	A	C5-C4	8.19	1.44	1.38
57	BB	916	G	P-O5'	-8.19	1.51	1.59
57	BB	2318	G	C8-N7	-8.19	1.26	1.30
21	AA	94	G	C6-N1	8.18	1.45	1.39
57	BB	1556	C	N3-C4	8.18	1.39	1.33
57	BB	2062	A	C6-N1	8.18	1.41	1.35
57	BB	2302	U	C2-N3	8.18	1.43	1.37
57	BB	2431	U	C3'-O3'	8.18	1.53	1.42
21	AA	1174	G	C6-N1	8.18	1.45	1.39
57	BB	410	G	C3'-C2'	-8.18	1.43	1.52
57	BB	953	G	N7-C5	-8.18	1.34	1.39
21	AA	309	A	C8-N7	-8.18	1.25	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1090	U	C2-N3	8.18	1.43	1.37
57	BB	1462	C	C4-N4	8.18	1.41	1.33
57	BB	2286	G	C2-N3	8.18	1.39	1.32
21	AA	811	C	N3-C4	8.18	1.39	1.33
21	AA	1458	G	C2-N3	8.18	1.39	1.32
21	AA	1476	A	C6-N6	8.18	1.40	1.33
57	BB	234	U	N3-C4	8.18	1.45	1.38
57	BB	395	U	C3'-C2'	-8.18	1.43	1.52
57	BB	491	G	N1-C2	8.18	1.44	1.37
57	BB	2663	G	N9-C8	8.18	1.43	1.37
21	AA	446	G	C5-C4	8.17	1.44	1.38
57	BB	1845	G	N9-C8	-8.17	1.32	1.37
21	AA	714	G	C2'-C1'	-8.17	1.44	1.53
57	BB	21	A	C2'-C1'	-8.17	1.44	1.53
57	BB	640	C	N1-C6	8.17	1.42	1.37
57	BB	2308	G	C4'-C3'	8.17	1.62	1.53
57	BB	218	A	C6-N1	8.17	1.41	1.35
57	BB	1028	A	N9-C8	-8.17	1.31	1.37
57	BB	1966	A	C4'-C3'	8.17	1.62	1.53
57	BB	2152	G	O3'-P	-8.17	1.51	1.61
57	BB	2161	C	C4-N4	8.17	1.41	1.33
21	AA	1170	A	C6-N6	8.17	1.40	1.33
57	BB	312	G	C2-N3	8.17	1.39	1.32
57	BB	457	A	N3-C4	8.17	1.39	1.34
57	BB	1042	G	N9-C4	-8.17	1.31	1.38
57	BB	2363	G	C6-N1	8.17	1.45	1.39
21	AA	24	U	P-O5'	-8.16	1.51	1.59
21	AA	306	A	O3'-P	-8.16	1.51	1.61
21	AA	371	A	C6-N6	8.16	1.40	1.33
57	BB	2249	U	O3'-P	-8.16	1.51	1.61
57	BB	670	A	C5-C4	8.16	1.44	1.38
57	BB	713	G	N7-C5	-8.16	1.34	1.39
57	BB	1120	G	C2-N3	8.16	1.39	1.32
57	BB	1768	C	P-O5'	-8.16	1.51	1.59
21	AA	724	G	C6-N1	8.16	1.45	1.39
21	AA	1136	C	N3-C4	8.16	1.39	1.33
57	BB	2513	A	P-O5'	-8.16	1.51	1.59
33	BN	118	ARG	CZ-NH2	8.16	1.43	1.33
57	BB	1361	G	O3'-P	-8.16	1.51	1.61
57	BB	1413	A	N3-C4	-8.16	1.29	1.34
57	BB	1715	G	N9-C8	-8.16	1.32	1.37
57	BB	2267	A	N7-C5	-8.16	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1525	G	C2-N3	8.15	1.39	1.32
57	BB	2568	U	C2-N3	8.15	1.43	1.37
22	AY	34	G	N9-C4	-8.15	1.31	1.38
43	BX	51	SER	CA-CB	8.15	1.65	1.52
57	BB	183	C	C2'-C1'	-8.15	1.44	1.53
57	BB	2481	G	C6-N1	8.15	1.45	1.39
21	AA	268	U	C4'-C3'	8.15	1.62	1.53
21	AA	237	G	C6-N1	8.15	1.45	1.39
57	BB	1730	C	N1-C6	8.15	1.42	1.37
21	AA	609	A	N3-C4	-8.15	1.29	1.34
57	BB	1573	G	N3-C4	-8.15	1.29	1.35
57	BB	1784	A	P-O5'	-8.15	1.51	1.59
21	AA	875	U	N3-C4	8.15	1.45	1.38
21	AA	923	A	C4'-C3'	8.15	1.62	1.53
57	BB	1764	C	N1-C6	8.15	1.42	1.37
57	BB	1773	A	C6-N6	8.15	1.40	1.33
57	BB	182	A	C2'-C1'	-8.14	1.44	1.53
21	AA	322	C	N1-C6	8.14	1.42	1.37
21	AA	1369	C	C4-C5	8.14	1.49	1.43
57	BB	2777	G	O3'-P	-8.14	1.51	1.61
57	BB	2833	U	C4-O4	8.14	1.30	1.23
21	AA	135	C	C2-N3	8.14	1.42	1.35
21	AA	264	C	N1-C6	8.14	1.42	1.37
21	AA	412	A	C5-C4	8.14	1.44	1.38
57	BB	2003	A	C5-C4	8.14	1.44	1.38
21	AA	242	G	N1-C2	8.14	1.44	1.37
21	AA	1084	G	C8-N7	8.14	1.35	1.30
57	BB	195	A	C8-N7	-8.14	1.25	1.31
57	BB	473	G	N7-C5	-8.14	1.34	1.39
57	BB	1575	C	C2'-C1'	-8.14	1.44	1.53
57	BB	2605	U	C2-N3	8.14	1.43	1.37
21	AA	1272	G	N9-C8	8.14	1.43	1.37
22	AY	55	U	C1'-N1	8.13	1.60	1.48
57	BB	712	G	N3-C4	-8.14	1.29	1.35
57	BB	1899	A	C6-N1	8.14	1.41	1.35
21	AA	317	U	C2'-C1'	-8.13	1.44	1.53
21	AA	683	G	N1-C2	8.13	1.44	1.37
21	AA	840	C	C5'-C4'	8.13	1.61	1.51
57	BB	513	A	C6-N6	8.13	1.40	1.33
21	AA	324	G	N7-C5	-8.13	1.34	1.39
21	AA	1222	G	C6-N1	8.13	1.45	1.39
57	BB	2589	A	N9-C8	-8.13	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	111	G	C2-N3	8.13	1.39	1.32
21	AA	1104	G	N1-C2	8.13	1.44	1.37
57	BB	44	A	N7-C5	-8.13	1.34	1.39
57	BB	253	C	C3'-C2'	-8.13	1.43	1.52
57	BB	311	A	N9-C4	-8.13	1.32	1.37
57	BB	1252	G	C5-C4	8.13	1.44	1.38
57	BB	1515	A	N7-C5	-8.13	1.34	1.39
21	AA	68	G	C5'-C4'	8.13	1.61	1.51
21	AA	480	U	C1'-N1	8.12	1.60	1.48
21	AA	693	G	C2-N3	8.12	1.39	1.32
21	AA	1462	C	C2'-C1'	-8.12	1.44	1.53
57	BB	1443	U	C1'-N1	8.12	1.60	1.48
57	BB	1558	C	C4-C5	8.13	1.49	1.43
57	BB	2816	G	C5'-C4'	8.12	1.61	1.51
57	BB	2882	A	N9-C4	8.12	1.42	1.37
21	AA	398	U	C4-C5	8.12	1.50	1.43
21	AA	1193	G	N1-C2	8.12	1.44	1.37
21	AA	1428	A	C6-N6	8.12	1.40	1.33
57	BB	95	A	N3-C4	8.12	1.39	1.34
57	BB	2299	U	P-O5'	-8.12	1.51	1.59
57	BB	2386	A	N9-C4	8.12	1.42	1.37
58	BA	76	G	N3-C4	-8.12	1.29	1.35
57	BB	88	G	C2-N3	8.12	1.39	1.32
57	BB	836	G	N7-C5	8.12	1.44	1.39
57	BB	1941	C	C3'-O3'	8.12	1.53	1.42
21	AA	289	G	N1-C2	8.12	1.44	1.37
21	AA	517	G	N7-C5	-8.12	1.34	1.39
57	BB	367	G	C5-C6	-8.12	1.34	1.42
22	AY	56	C	O4'-C1'	8.12	1.52	1.41
23	AW	5	G	C2-N3	8.12	1.39	1.32
57	BB	66	C	P-O5'	-8.12	1.51	1.59
21	AA	1187	G	N9-C4	8.12	1.44	1.38
21	AA	1264	U	P-O5'	-8.12	1.51	1.59
57	BB	2353	G	C2'-C1'	-8.12	1.44	1.53
21	AA	725	G	N1-C2	8.11	1.44	1.37
57	BB	909	A	N7-C5	-8.12	1.34	1.39
57	BB	983	A	C2'-C1'	-8.11	1.44	1.53
57	BB	1019	U	C2-N3	8.12	1.43	1.37
57	BB	1254	A	N7-C5	-8.12	1.34	1.39
21	AA	195	A	N9-C4	8.11	1.42	1.37
21	AA	951	G	C8-N7	8.11	1.35	1.30
22	AY	67	A	N7-C5	-8.11	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	69	G	O3'-P	-8.11	1.51	1.61
21	AA	236	A	C6-N6	8.11	1.40	1.33
21	AA	459	A	N3-C4	8.11	1.39	1.34
26	AV	61	C	C4-N4	8.11	1.41	1.33
57	BB	1353	A	C6-N1	8.11	1.41	1.35
21	AA	20	U	C2-N3	8.11	1.43	1.37
21	AA	1057	G	C6-N1	8.11	1.45	1.39
57	BB	141	G	C8-N7	-8.11	1.26	1.30
57	BB	575	A	C6-N6	8.11	1.40	1.33
57	BB	1871	A	C5-C6	-8.11	1.33	1.41
57	BB	2144	G	N9-C8	-8.11	1.32	1.37
57	BB	1918	A	N7-C5	-8.11	1.34	1.39
57	BB	2084	C	N3-C4	8.11	1.39	1.33
57	BB	2726	A	N7-C5	-8.11	1.34	1.39
21	AA	576	C	N3-C4	8.11	1.39	1.33
57	BB	223	A	C6-N1	8.11	1.41	1.35
57	BB	1198	U	O3'-P	-8.11	1.51	1.61
21	AA	890	G	N1-C2	8.11	1.44	1.37
21	AA	939	G	N1-C2	8.11	1.44	1.37
57	BB	1400	U	C2'-C1'	-8.10	1.44	1.53
21	AA	1420	U	C2-N3	8.10	1.43	1.37
57	BB	1892	C	N1-C6	8.10	1.42	1.37
57	BB	2624	G	C2-N2	8.10	1.42	1.34
21	AA	69	G	N1-C2	8.10	1.44	1.37
21	AA	1285	A	O3'-P	-8.10	1.51	1.61
22	AY	30	G	C2-N3	8.10	1.39	1.32
57	BB	1726	C	C4-C5	8.10	1.49	1.43
57	BB	2595	G	C8-N7	-8.10	1.26	1.30
21	AA	404	G	C5-C6	-8.09	1.34	1.42
1	AJ	62	ARG	NE-CZ	8.09	1.43	1.33
21	AA	424	G	O3'-P	-8.09	1.51	1.61
21	AA	1051	C	N3-C4	8.09	1.39	1.33
57	BB	186	G	C3'-C2'	8.09	1.61	1.52
57	BB	463	G	N3-C4	-8.09	1.29	1.35
57	BB	629	G	C3'-O3'	8.09	1.53	1.42
57	BB	1388	G	N7-C5	-8.09	1.34	1.39
21	AA	571	U	N1-C6	-8.09	1.30	1.38
57	BB	2142	A	C6-N6	8.09	1.40	1.33
57	BB	2221	G	C5'-C4'	8.09	1.61	1.51
22	AY	29	A	C5-C4	8.09	1.44	1.38
57	BB	522	A	O3'-P	-8.09	1.51	1.61
21	AA	314	C	C4-N4	8.09	1.41	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1442	G	C3'-C2'	8.09	1.61	1.52
57	BB	972	A	C6-N6	8.09	1.40	1.33
57	BB	1102	C	C4'-O4'	-8.09	1.35	1.45
57	BB	1541	C	C4-N4	8.09	1.41	1.33
21	AA	1173	U	N3-C4	8.09	1.45	1.38
21	AA	1176	A	C2'-C1'	-8.09	1.44	1.53
57	BB	475	C	N3-C4	8.09	1.39	1.33
57	BB	621	A	C6-N6	8.09	1.40	1.33
57	BB	1040	A	N7-C5	-8.09	1.34	1.39
57	BB	1904	G	C2-N3	8.09	1.39	1.32
57	BB	1939	U	C2'-C1'	-8.09	1.44	1.53
21	AA	702	A	C5-C4	8.08	1.44	1.38
57	BB	992	C	C4-N4	8.08	1.41	1.33
57	BB	1804	C	N1-C6	-8.08	1.32	1.37
57	BB	2540	C	C4'-O4'	8.08	1.56	1.45
21	AA	772	U	O4'-C1'	8.08	1.52	1.41
21	AA	841	C	C4-N4	8.08	1.41	1.33
21	AA	995	C	C3'-C2'	-8.08	1.43	1.52
21	AA	1171	A	C6-N6	8.08	1.40	1.33
22	AY	16	U	N1-C2	8.08	1.45	1.38
57	BB	1824	G	C5-C4	-8.08	1.32	1.38
57	BB	2531	A	N9-C4	8.08	1.42	1.37
21	AA	421	U	C2'-C1'	-8.08	1.44	1.53
57	BB	1929	G	P-O5'	-8.08	1.51	1.59
21	AA	1021	A	C3'-C2'	-8.08	1.43	1.52
57	BB	101	A	C6-N1	8.08	1.41	1.35
57	BB	2326	C	O3'-P	-8.08	1.51	1.61
57	BB	2636	C	C4-N4	8.08	1.41	1.33
57	BB	2854	G	N1-C2	8.08	1.44	1.37
21	AA	424	G	N1-C2	8.07	1.44	1.37
57	BB	468	G	N3-C4	-8.07	1.29	1.35
57	BB	1333	G	C2'-C1'	-8.07	1.44	1.53
57	BB	1544	A	C6-N1	8.07	1.41	1.35
57	BB	2467	C	O3'-P	-8.07	1.51	1.61
57	BB	2156	G	N1-C2	8.07	1.44	1.37
57	BB	2183	A	C6-N1	8.07	1.41	1.35
57	BB	1847	A	C3'-C2'	8.07	1.61	1.52
57	BB	2732	G	C2-N3	8.07	1.39	1.32
57	BB	409	G	C2-N3	8.07	1.39	1.32
57	BB	1008	A	N7-C5	-8.07	1.34	1.39
22	AY	25	C	C4'-O4'	-8.06	1.35	1.45
57	BB	1418	G	C2'-C1'	-8.06	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2154	A	C8-N7	-8.06	1.25	1.31
26	AV	15	G	N9-C8	8.06	1.43	1.37
57	BB	485	C	C4-N4	8.06	1.41	1.33
57	BB	2885	G	C2-N3	8.06	1.39	1.32
57	BB	1365	A	C6-N1	8.06	1.41	1.35
57	BB	1761	C	P-O5'	-8.06	1.51	1.59
57	BB	737	C	N3-C4	8.06	1.39	1.33
57	BB	2590	A	C6-N1	8.06	1.41	1.35
21	AA	715	A	C6-N1	8.06	1.41	1.35
21	AA	1337	G	N7-C5	-8.05	1.34	1.39
57	BB	1643	G	C6-N1	8.06	1.45	1.39
57	BB	2328	A	C4'-C3'	8.06	1.62	1.53
57	BB	2742	G	C2-N3	8.06	1.39	1.32
21	AA	187	G	C5'-C4'	8.05	1.61	1.51
21	AA	250	A	N3-C4	-8.05	1.30	1.34
21	AA	1349	A	C5-C4	8.05	1.44	1.38
21	AA	1509	C	C5'-C4'	8.05	1.61	1.51
57	BB	2300	C	C2'-C1'	-8.05	1.44	1.53
21	AA	38	G	N7-C5	-8.05	1.34	1.39
21	AA	473	U	C5'-C4'	8.05	1.61	1.51
21	AA	1525	G	N1-C2	8.05	1.44	1.37
57	BB	1672	A	N7-C5	-8.05	1.34	1.39
57	BB	1974	C	P-O5'	-8.05	1.51	1.59
57	BB	103	A	C5-C6	8.05	1.48	1.41
21	AA	453	G	N9-C8	-8.05	1.32	1.37
21	AA	599	C	N3-C4	8.05	1.39	1.33
57	BB	764	A	C4'-C3'	8.05	1.62	1.53
21	AA	222	C	C2-N3	8.05	1.42	1.35
21	AA	373	A	N7-C5	-8.05	1.34	1.39
57	BB	165	A	C8-N7	-8.05	1.25	1.31
57	BB	1162	G	P-O5'	-8.05	1.51	1.59
21	AA	662	U	P-O5'	-8.05	1.51	1.59
21	AA	1283	U	C2'-C1'	-8.04	1.44	1.53
57	BB	2199	A	P-O5'	-8.04	1.51	1.59
57	BB	57	C	N3-C4	8.04	1.39	1.33
57	BB	894	U	C4'-O4'	-8.04	1.35	1.45
57	BB	2328	A	C6-N6	8.04	1.40	1.33
21	AA	1046	A	C6-N6	8.04	1.40	1.33
57	BB	863	A	C6-N1	8.04	1.41	1.35
57	BB	2351	G	P-O5'	8.04	1.67	1.59
57	BB	105	C	C2'-C1'	-8.04	1.44	1.53
57	BB	470	A	C5-C6	-8.04	1.33	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1216	G	O3'-P	-8.04	1.51	1.61
57	BB	1270	C	P-O5'	-8.04	1.51	1.59
22	AY	15	G	C5-C6	8.03	1.50	1.42
57	BB	1588	G	N1-C2	8.04	1.44	1.37
57	BB	2490	G	C5-C4	8.03	1.44	1.38
21	AA	1422	G	N1-C2	8.03	1.44	1.37
57	BB	181	A	C2'-C1'	-8.03	1.44	1.53
57	BB	578	G	N7-C5	-8.03	1.34	1.39
21	AA	366	A	N9-C4	8.03	1.42	1.37
21	AA	727	G	C2-N3	8.03	1.39	1.32
21	AA	1395	C	N3-C4	8.03	1.39	1.33
57	BB	605	G	C8-N7	8.03	1.35	1.30
57	BB	651	G	N3-C4	8.03	1.41	1.35
21	AA	399	G	C3'-O3'	8.03	1.53	1.42
57	BB	46	G	C2'-C1'	-8.03	1.44	1.53
57	BB	1363	C	O4'-C1'	8.03	1.52	1.41
57	BB	1632	A	C6-N1	8.03	1.41	1.35
57	BB	1999	C	C4-N4	8.03	1.41	1.33
10	AS	36	ARG	CZ-NH2	8.03	1.43	1.33
22	AY	20	G	N7-C5	8.03	1.44	1.39
57	BB	730	A	C8-N7	-8.03	1.25	1.31
57	BB	757	G	N7-C5	8.03	1.44	1.39
57	BB	977	G	C6-N1	8.03	1.45	1.39
57	BB	1142	A	N3-C4	-8.03	1.30	1.34
57	BB	1600	C	C3'-C2'	-8.03	1.44	1.52
57	BB	1623	G	C6-N1	8.03	1.45	1.39
21	AA	901	A	N1-C2	-8.02	1.27	1.34
21	AA	1515	G	C6-N1	8.02	1.45	1.39
57	BB	1188	U	C4-C5	-8.02	1.36	1.43
57	BB	2609	U	N3-C4	8.02	1.45	1.38
21	AA	402	G	C5-C4	-8.02	1.32	1.38
57	BB	1285	A	C2'-C1'	-8.02	1.44	1.53
57	BB	1357	C	N1-C6	8.02	1.42	1.37
57	BB	1664	A	N9-C8	8.02	1.44	1.37
21	AA	905	U	N1-C2	8.02	1.45	1.38
57	BB	695	G	C2'-C1'	-8.02	1.44	1.53
21	AA	1436	U	N1-C2	8.02	1.45	1.38
22	AY	67	A	N9-C8	-8.02	1.31	1.37
57	BB	1374	G	N9-C8	8.02	1.43	1.37
57	BB	1466	U	C2-N3	8.02	1.43	1.37
57	BB	1923	U	C2-N3	8.02	1.43	1.37
21	AA	478	A	N7-C5	-8.01	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1614	A	N1-C2	8.01	1.41	1.34
21	AA	876	C	N3-C4	8.01	1.39	1.33
57	BB	2461	A	N9-C4	8.01	1.42	1.37
21	AA	27	G	N7-C5	-8.01	1.34	1.39
57	BB	503	A	N7-C5	-8.01	1.34	1.39
21	AA	188	C	N1-C6	8.01	1.42	1.37
57	BB	1431	A	N3-C4	-8.01	1.30	1.34
57	BB	2643	G	C8-N7	8.01	1.35	1.30
57	BB	1547	C	N1-C6	8.01	1.42	1.37
57	BB	1911	U	C3'-C2'	8.01	1.61	1.52
21	AA	360	G	C6-N1	8.01	1.45	1.39
21	AA	795	C	N1-C6	-8.01	1.32	1.37
21	AA	495	A	N9-C8	8.01	1.44	1.37
21	AA	1229	A	N3-C4	8.01	1.39	1.34
57	BB	20	C	C4-C5	8.01	1.49	1.43
57	BB	2610	C	N3-C4	8.01	1.39	1.33
21	AA	177	G	C8-N7	-8.00	1.26	1.30
21	AA	537	G	C2'-C1'	-8.00	1.44	1.53
21	AA	790	A	C6-N1	8.00	1.41	1.35
57	BB	525	U	C4-C5	8.00	1.50	1.43
21	AA	700	G	C2-N2	8.00	1.42	1.34
21	AA	1204	A	C6-N1	8.00	1.41	1.35
21	AA	1343	G	C5'-C4'	8.00	1.60	1.51
22	AY	49	C	C4-N4	8.00	1.41	1.33
57	BB	2393	U	N1-C6	8.00	1.45	1.38
57	BB	2269	G	C8-N7	-8.00	1.26	1.30
58	BA	84	G	N9-C8	-8.00	1.32	1.37
57	BB	680	C	C5'-C4'	8.00	1.60	1.51
57	BB	803	U	C2-N3	8.00	1.43	1.37
21	AA	567	G	C5-C4	8.00	1.44	1.38
21	AA	674	G	C2'-C1'	-8.00	1.44	1.53
21	AA	1301	U	C1'-N1	8.00	1.60	1.48
57	BB	407	G	C2-N3	8.00	1.39	1.32
57	BB	2710	C	N1-C6	-8.00	1.32	1.37
21	AA	9	G	P-O5'	-8.00	1.51	1.59
21	AA	108	G	C2-N3	8.00	1.39	1.32
21	AA	742	G	P-O5'	-8.00	1.51	1.59
21	AA	394	G	N1-C2	8.00	1.44	1.37
57	BB	567	U	C2-N3	8.00	1.43	1.37
21	AA	1013	G	C2-N3	7.99	1.39	1.32
21	AA	1309	G	N9-C4	7.99	1.44	1.38
57	BB	20	C	C4-N4	7.99	1.41	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	27	G	C5'-C4'	7.99	1.60	1.51
21	AA	748	G	C2-N3	7.99	1.39	1.32
57	BB	548	G	N3-C4	7.99	1.41	1.35
57	BB	691	C	C3'-C2'	7.99	1.61	1.52
57	BB	950	G	C6-N1	7.99	1.45	1.39
57	BB	1186	G	C6-N1	7.99	1.45	1.39
57	BB	1731	G	N3-C4	-7.99	1.29	1.35
57	BB	2204	G	P-O5'	-7.99	1.51	1.59
57	BB	367	G	N1-C2	7.99	1.44	1.37
57	BB	1521	G	C5-C6	-7.99	1.34	1.42
21	AA	566	G	C2'-C1'	-7.99	1.44	1.53
21	AA	1329	A	C2-N3	7.99	1.40	1.33
57	BB	45	G	C6-N1	7.99	1.45	1.39
21	AA	912	C	C4-N4	7.99	1.41	1.33
23	AW	44	G	N3-C4	7.99	1.41	1.35
57	BB	794	A	C6-N6	7.99	1.40	1.33
57	BB	1664	A	P-O5'	-7.99	1.51	1.59
57	BB	2235	G	O3'-P	-7.99	1.51	1.61
57	BB	2364	C	N3-C4	7.99	1.39	1.33
57	BB	2386	A	C2-N3	7.99	1.40	1.33
57	BB	203	A	C6-N6	7.98	1.40	1.33
21	AA	968	A	C2-N3	7.98	1.40	1.33
57	BB	2360	G	C5'-C4'	7.98	1.60	1.51
26	AV	19	G	O4'-C1'	-7.98	1.31	1.41
57	BB	2708	G	C2'-C1'	-7.98	1.44	1.53
21	AA	625	U	C5'-C4'	7.98	1.60	1.51
57	BB	834	G	N1-C2	7.98	1.44	1.37
57	BB	1863	G	N9-C8	7.98	1.43	1.37
57	BB	2452	C	C5-C6	7.98	1.40	1.34
57	BB	2709	G	C5'-C4'	7.98	1.60	1.51
57	BB	2082	A	N7-C5	-7.98	1.34	1.39
57	BB	2802	G	C5-C4	7.98	1.44	1.38
57	BB	2840	C	P-O5'	-7.98	1.51	1.59
57	BB	540	C	C4-N4	7.97	1.41	1.33
57	BB	806	C	P-O5'	-7.97	1.51	1.59
57	BB	1334	G	C2-N3	7.97	1.39	1.32
21	AA	948	C	C5'-C4'	7.97	1.60	1.51
21	AA	1081	A	N3-C4	7.97	1.39	1.34
21	AA	1369	C	N1-C6	7.97	1.42	1.37
57	BB	2487	G	C5-C4	7.97	1.44	1.38
57	BB	2673	G	C8-N7	7.97	1.35	1.30
21	AA	948	C	N1-C6	7.97	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	824	G	C2'-C1'	-7.97	1.44	1.53
57	BB	498	G	N1-C2	7.97	1.44	1.37
57	BB	1326	U	C5'-C4'	7.97	1.60	1.51
22	AY	41	U	C3'-C2'	7.97	1.61	1.52
21	AA	289	G	C6-N1	7.97	1.45	1.39
21	AA	715	A	N9-C4	-7.97	1.33	1.37
21	AA	1523	G	C6-N1	7.97	1.45	1.39
23	AW	21	A	C5-C4	7.97	1.44	1.38
21	AA	490	C	P-O5'	-7.96	1.51	1.59
21	AA	748	G	N3-C4	7.96	1.41	1.35
57	BB	116	C	N3-C4	7.96	1.39	1.33
57	BB	1089	A	C6-N6	7.96	1.40	1.33
57	BB	1598	A	O3'-P	-7.96	1.51	1.61
57	BB	1697	G	N3-C4	7.96	1.41	1.35
58	BA	6	G	N1-C2	7.96	1.44	1.37
58	BA	13	G	N9-C4	7.96	1.44	1.38
21	AA	1488	G	N7-C5	-7.96	1.34	1.39
57	BB	1126	A	C5-C4	7.96	1.44	1.38
21	AA	730	G	P-O5'	-7.96	1.51	1.59
21	AA	1387	G	N9-C4	-7.96	1.31	1.38
21	AA	1410	A	N7-C5	-7.96	1.34	1.39
26	AV	59	A	C8-N7	-7.96	1.25	1.31
57	BB	1853	A	C5-C4	7.96	1.44	1.38
57	BB	2691	C	N1-C6	7.96	1.42	1.37
21	AA	86	G	N1-C2	7.96	1.44	1.37
21	AA	249	U	C2'-C1'	-7.96	1.44	1.53
21	AA	1089	G	C6-N1	7.96	1.45	1.39
21	AA	1489	G	C6-N1	7.96	1.45	1.39
57	BB	170	U	C2-N3	7.96	1.43	1.37
57	BB	465	G	N1-C2	7.96	1.44	1.37
57	BB	1048	A	N1-C2	-7.96	1.27	1.34
57	BB	657	U	C2-N3	7.96	1.43	1.37
57	BB	503	A	C6-N1	7.95	1.41	1.35
57	BB	2538	C	C4-N4	7.95	1.41	1.33
57	BB	1229	C	N1-C6	-7.95	1.32	1.37
57	BB	317	G	C6-N1	7.95	1.45	1.39
57	BB	1560	G	C5-C6	-7.95	1.34	1.42
57	BB	2582	G	C4'-C3'	-7.95	1.44	1.53
57	BB	2754	U	C2-N3	7.95	1.43	1.37
57	BB	664	G	N7-C5	-7.95	1.34	1.39
57	BB	2100	G	C2'-C1'	-7.95	1.44	1.53
21	AA	378	G	N9-C8	7.95	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	824	G	C2-N3	7.95	1.39	1.32
57	BB	256	A	N9-C4	7.95	1.42	1.37
57	BB	2564	A	C2'-C1'	-7.95	1.44	1.53
22	AY	39	U	C4-C5	7.95	1.50	1.43
57	BB	533	G	N3-C4	-7.95	1.29	1.35
57	BB	581	C	N1-C6	7.95	1.42	1.37
57	BB	1377	G	N7-C5	-7.95	1.34	1.39
57	BB	1810	A	C4'-C3'	-7.94	1.44	1.53
23	AW	26	A	C6-N6	7.94	1.40	1.33
57	BB	71	A	N1-C2	-7.94	1.27	1.34
57	BB	1998	A	C8-N7	7.94	1.37	1.31
57	BB	2866	U	O3'-P	-7.94	1.51	1.61
57	BB	789	A	P-O5'	-7.94	1.51	1.59
57	BB	1492	G	C5-C6	7.94	1.50	1.42
57	BB	2470	G	C5-C4	-7.94	1.32	1.38
21	AA	1506	U	C2-N3	7.94	1.43	1.37
24	AX	18	G	C2-N3	7.94	1.39	1.32
57	BB	161	A	C2'-C1'	-7.94	1.44	1.53
57	BB	1686	C	C2-N3	7.94	1.42	1.35
57	BB	2125	G	N9-C8	7.94	1.43	1.37
57	BB	2188	U	C2-N3	7.94	1.43	1.37
57	BB	2311	A	N3-C4	-7.94	1.30	1.34
58	BA	58	A	P-O5'	-7.94	1.51	1.59
21	AA	1332	A	C5-C4	7.93	1.44	1.38
57	BB	63	A	C5-C4	7.93	1.44	1.38
57	BB	1437	C	C4'-O4'	7.93	1.55	1.45
21	AA	339	C	N1-C2	7.93	1.48	1.40
21	AA	1234	C	P-O5'	-7.93	1.51	1.59
57	BB	1718	G	C3'-C2'	-7.93	1.44	1.52
57	BB	580	U	C2'-C1'	-7.93	1.44	1.53
57	BB	2416	C	C4-N4	7.93	1.41	1.33
21	AA	776	G	C2'-C1'	-7.93	1.44	1.53
40	BU	30	SER	CA-CB	7.93	1.64	1.52
57	BB	292	U	C4-C5	7.93	1.50	1.43
57	BB	1553	A	C6-N6	7.93	1.40	1.33
57	BB	1663	G	C4'-C3'	-7.93	1.44	1.53
21	AA	407	U	O3'-P	-7.93	1.51	1.61
21	AA	1029	U	C2-N3	7.93	1.43	1.37
23	AW	50	U	O3'-P	-7.93	1.51	1.61
57	BB	19	A	N9-C4	-7.93	1.33	1.37
57	BB	1718	G	N1-C2	7.93	1.44	1.37
57	BB	1992	G	C8-N7	7.93	1.35	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2017	U	C2-N3	7.93	1.43	1.37
21	AA	135	C	C4'-C3'	-7.92	1.44	1.53
21	AA	157	U	C3'-C2'	-7.92	1.44	1.52
57	BB	1494	A	N3-C4	7.92	1.39	1.34
57	BB	1903	G	C2-N3	7.92	1.39	1.32
57	BB	2064	C	O4'-C1'	7.92	1.51	1.41
21	AA	593	U	C2-N3	7.92	1.43	1.37
57	BB	2107	G	C8-N7	7.92	1.35	1.30
57	BB	2705	A	P-O5'	-7.92	1.51	1.59
21	AA	1103	C	C2-N3	7.92	1.42	1.35
21	AA	496	A	C6-N1	7.92	1.41	1.35
21	AA	637	C	N1-C6	7.92	1.42	1.37
21	AA	1093	A	C4'-C3'	7.92	1.61	1.53
57	BB	1583	A	C2'-C1'	-7.92	1.44	1.53
57	BB	2158	A	N7-C5	-7.92	1.34	1.39
21	AA	568	G	C8-N7	-7.92	1.26	1.30
57	BB	1322	A	N3-C4	-7.92	1.30	1.34
58	BA	79	G	N7-C5	7.92	1.44	1.39
21	AA	589	U	C4'-C3'	7.91	1.61	1.53
23	AW	2	C	P-O5'	-7.91	1.51	1.59
57	BB	940	G	C2-N2	7.91	1.42	1.34
57	BB	2409	G	C4'-C3'	7.91	1.61	1.53
21	AA	544	G	C2-N3	7.91	1.39	1.32
21	AA	1487	G	C5'-C4'	7.91	1.60	1.51
26	AV	49	G	C6-N1	7.91	1.45	1.39
21	AA	1506	U	N1-C6	7.91	1.45	1.38
57	BB	204	A	C6-N1	7.91	1.41	1.35
57	BB	1945	G	C6-N1	7.91	1.45	1.39
57	BB	2665	A	N7-C5	-7.91	1.34	1.39
21	AA	312	C	P-O5'	-7.91	1.51	1.59
21	AA	983	A	C6-N6	7.91	1.40	1.33
57	BB	1383	A	N7-C5	-7.91	1.34	1.39
57	BB	2404	U	C3'-C2'	-7.91	1.44	1.52
21	AA	314	C	N3-C4	7.91	1.39	1.33
57	BB	1858	A	N7-C5	7.91	1.44	1.39
57	BB	825	A	C6-N6	7.91	1.40	1.33
57	BB	1268	A	C5-C4	-7.90	1.33	1.38
21	AA	535	A	N7-C5	-7.90	1.34	1.39
21	AA	807	A	P-O5'	-7.90	1.51	1.59
21	AA	1456	A	C6-N1	7.90	1.41	1.35
57	BB	1787	A	C6-N6	7.90	1.40	1.33
57	BB	1977	A	C5-C6	7.90	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2357	G	N1-C2	7.90	1.44	1.37
21	AA	1341	U	C2-N3	7.90	1.43	1.37
57	BB	2617	U	C2'-C1'	-7.90	1.44	1.53
57	BB	2643	G	N1-C2	7.90	1.44	1.37
58	BA	21	G	C2-N3	7.90	1.39	1.32
21	AA	560	A	C6-N6	7.90	1.40	1.33
57	BB	289	G	C6-N1	7.90	1.45	1.39
57	BB	1055	G	N9-C4	-7.90	1.31	1.38
57	BB	1179	G	N7-C5	-7.90	1.34	1.39
57	BB	1585	C	N1-C6	7.90	1.41	1.37
57	BB	1717	A	C6-N1	7.90	1.41	1.35
21	AA	557	G	N1-C2	7.90	1.44	1.37
57	BB	204	A	O3'-P	-7.90	1.51	1.61
21	AA	138	G	C2-N3	7.89	1.39	1.32
21	AA	1048	G	C2-N3	7.89	1.39	1.32
57	BB	239	C	C4'-C3'	-7.89	1.44	1.53
57	BB	2792	A	C6-N6	7.89	1.40	1.33
21	AA	868	C	C5'-C4'	7.89	1.60	1.51
57	BB	967	U	C2-N3	7.89	1.43	1.37
21	AA	207	C	C4-N4	7.89	1.41	1.33
21	AA	907	A	N3-C4	7.89	1.39	1.34
57	BB	50	U	N1-C2	-7.89	1.31	1.38
57	BB	2258	C	C4'-C3'	-7.89	1.44	1.53
21	AA	250	A	C5-C4	7.89	1.44	1.38
21	AA	721	G	C6-N1	7.89	1.45	1.39
21	AA	963	G	N9-C8	7.89	1.43	1.37
57	BB	54	G	N1-C2	7.89	1.44	1.37
21	AA	288	A	N7-C5	-7.89	1.34	1.39
57	BB	719	C	C4-C5	-7.89	1.36	1.43
57	BB	2736	A	C5-C4	7.89	1.44	1.38
21	AA	143	A	N7-C5	7.88	1.44	1.39
21	AA	205	A	N9-C4	7.88	1.42	1.37
21	AA	326	G	N9-C8	7.88	1.43	1.37
57	BB	851	C	N3-C4	7.88	1.39	1.33
57	BB	956	G	N7-C5	-7.88	1.34	1.39
57	BB	1296	G	C2'-C1'	-7.88	1.44	1.53
57	BB	2557	G	C2-N2	7.88	1.42	1.34
57	BB	1912	A	C4'-C3'	-7.88	1.44	1.53
58	BA	105	G	C2'-C1'	-7.88	1.44	1.53
57	BB	147	C	P-O5'	-7.88	1.51	1.59
57	BB	1416	G	N1-C2	7.88	1.44	1.37
21	AA	363	A	N3-C4	-7.88	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1421	G	C5-C4	7.88	1.43	1.38
58	BA	38	C	C5'-C4'	7.88	1.60	1.51
21	AA	55	A	C6-N1	7.88	1.41	1.35
21	AA	1174	G	N3-C4	-7.88	1.29	1.35
57	BB	1896	G	N9-C4	-7.88	1.31	1.38
57	BB	2097	A	N3-C4	-7.88	1.30	1.34
57	BB	2294	G	N9-C8	7.88	1.43	1.37
21	AA	724	G	C2-N3	7.88	1.39	1.32
21	AA	741	G	C6-N1	7.88	1.45	1.39
21	AA	872	A	N9-C4	-7.88	1.33	1.37
26	AV	49	G	N3-C4	7.88	1.41	1.35
57	BB	288	U	C4'-C3'	7.88	1.61	1.53
57	BB	550	C	C4'-O4'	7.88	1.55	1.45
57	BB	1259	G	C2-N3	7.88	1.39	1.32
57	BB	2734	A	C6-N6	7.88	1.40	1.33
21	AA	960	U	C2-N3	7.87	1.43	1.37
22	AY	49	C	C4-C5	7.87	1.49	1.43
57	BB	389	G	N9-C4	7.87	1.44	1.38
57	BB	1187	G	N3-C4	-7.87	1.29	1.35
57	BB	2186	G	C6-N1	7.87	1.45	1.39
21	AA	294	U	N1-C2	7.87	1.45	1.38
21	AA	972	C	C4-N4	7.87	1.41	1.33
57	BB	77	G	N9-C4	7.87	1.44	1.38
21	AA	1229	A	N7-C5	-7.87	1.34	1.39
21	AA	367	U	C2-N3	7.87	1.43	1.37
21	AA	1262	C	P-O5'	-7.87	1.51	1.59
57	BB	161	A	C5'-C4'	7.87	1.60	1.51
57	BB	603	A	C6-N6	7.87	1.40	1.33
57	BB	750	A	N9-C4	7.87	1.42	1.37
57	BB	2819	G	N9-C8	-7.87	1.32	1.37
57	BB	1282	U	C2'-C1'	-7.87	1.44	1.53
57	BB	1548	A	P-O5'	-7.87	1.51	1.59
57	BB	820	A	N9-C4	7.86	1.42	1.37
21	AA	1367	C	C4-N4	7.86	1.41	1.33
57	BB	580	U	O3'-P	-7.86	1.51	1.61
57	BB	1210	G	C6-N1	7.86	1.45	1.39
21	AA	1392	G	C2-N3	7.86	1.39	1.32
57	BB	51	G	N1-C2	7.86	1.44	1.37
57	BB	448	U	C2-N3	7.86	1.43	1.37
58	BA	21	G	N9-C8	7.86	1.43	1.37
57	BB	342	A	C2'-C1'	-7.86	1.44	1.53
57	BB	1655	A	C2-N3	7.86	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	939	G	N9-C8	-7.86	1.32	1.37
21	AA	1038	C	N1-C6	7.86	1.41	1.37
21	AA	1144	G	C3'-C2'	-7.86	1.44	1.52
57	BB	1733	G	N9-C8	7.86	1.43	1.37
21	AA	1097	C	C2'-C1'	-7.86	1.44	1.53
57	BB	1666	G	P-O5'	-7.86	1.51	1.59
21	AA	925	G	N3-C4	7.85	1.41	1.35
57	BB	2003	A	C8-N7	-7.85	1.26	1.31
57	BB	2564	A	C5-C4	7.85	1.44	1.38
21	AA	896	C	N3-C4	7.85	1.39	1.33
57	BB	19	A	N9-C8	7.85	1.44	1.37
57	BB	452	G	N7-C5	-7.85	1.34	1.39
15	AD	12	ARG	CZ-NH1	7.85	1.43	1.33
57	BB	297	G	C8-N7	7.85	1.35	1.30
57	BB	696	G	C6-N1	7.85	1.45	1.39
57	BB	2423	U	C3'-C2'	7.85	1.61	1.52
21	AA	615	G	N9-C8	7.85	1.43	1.37
21	AA	1276	G	P-O5'	-7.85	1.51	1.59
57	BB	322	A	N7-C5	-7.85	1.34	1.39
57	BB	2844	G	O3'-P	-7.85	1.51	1.61
57	BB	1527	G	N9-C8	7.85	1.43	1.37
21	AA	279	A	N1-C2	7.84	1.41	1.34
21	AA	776	G	N7-C5	-7.84	1.34	1.39
57	BB	1179	G	N1-C2	7.84	1.44	1.37
57	BB	1976	U	N1-C2	-7.84	1.31	1.38
57	BB	2802	G	C2-N3	7.84	1.39	1.32
57	BB	2369	A	C6-N6	7.84	1.40	1.33
21	AA	85	U	O3'-P	-7.84	1.51	1.61
57	BB	537	G	C2-N3	7.84	1.39	1.32
57	BB	2830	C	C2-N3	7.84	1.42	1.35
21	AA	1145	A	C6-N1	7.84	1.41	1.35
22	AY	52	U	O4'-C1'	7.84	1.51	1.41
57	BB	293	U	C4-O4	7.84	1.29	1.23
21	AA	1458	G	C8-N7	-7.84	1.26	1.30
23	AW	44	G	C2-N2	7.84	1.42	1.34
57	BB	1746	A	N9-C4	7.84	1.42	1.37
57	BB	1874	C	N3-C4	7.84	1.39	1.33
57	BB	2453	A	C6-N6	7.84	1.40	1.33
21	AA	393	A	C1'-N9	7.83	1.60	1.48
57	BB	849	A	O3'-P	-7.83	1.51	1.61
21	AA	371	A	C8-N7	-7.83	1.26	1.31
22	AY	27	C	C2'-C1'	-7.83	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1029	A	N7-C5	-7.83	1.34	1.39
57	BB	1064	C	N3-C4	7.83	1.39	1.33
57	BB	2397	G	C2-N3	7.83	1.39	1.32
57	BB	772	C	N3-C4	7.83	1.39	1.33
57	BB	2069	G	C8-N7	-7.83	1.26	1.30
57	BB	2674	G	N9-C4	-7.83	1.31	1.38
21	AA	1454	G	N1-C2	7.83	1.44	1.37
57	BB	1972	G	C2-N3	7.83	1.39	1.32
57	BB	2463	C	C4'-C3'	7.83	1.61	1.53
21	AA	835	U	O4'-C1'	7.83	1.51	1.41
57	BB	188	G	N3-C4	-7.83	1.29	1.35
21	AA	109	A	C6-N1	7.83	1.41	1.35
21	AA	800	G	C4'-O4'	-7.83	1.35	1.45
21	AA	967	C	C5'-C4'	7.83	1.60	1.51
57	BB	1500	G	N1-C2	7.83	1.44	1.37
21	AA	298	A	C6-N1	7.82	1.41	1.35
57	BB	108	G	P-O5'	-7.82	1.51	1.59
57	BB	2200	C	N1-C6	7.82	1.41	1.37
57	BB	1957	C	C2-N3	7.82	1.42	1.35
21	AA	51	A	C2-N3	7.82	1.40	1.33
21	AA	457	G	N3-C4	-7.82	1.29	1.35
21	AA	1403	C	C5'-C4'	7.82	1.60	1.51
54	BF	60	SER	CA-CB	7.82	1.64	1.52
57	BB	907	G	O3'-P	-7.82	1.51	1.61
57	BB	2060	A	C6-N6	7.82	1.40	1.33
57	BB	2507	C	P-O5'	-7.82	1.51	1.59
57	BB	727	A	C2'-C1'	-7.82	1.44	1.53
21	AA	812	G	N1-C2	7.82	1.44	1.37
57	BB	858	G	C2-N3	7.82	1.39	1.32
57	BB	901	C	P-O5'	-7.82	1.51	1.59
57	BB	1464	G	N1-C2	7.82	1.44	1.37
57	BB	2107	G	P-O5'	7.82	1.67	1.59
57	BB	2153	C	N1-C6	7.82	1.41	1.37
57	BB	2770	G	C6-N1	7.82	1.45	1.39
22	AY	13	C	N3-C4	7.82	1.39	1.33
57	BB	365	U	C2-N3	7.82	1.43	1.37
57	BB	826	U	C2-N3	7.82	1.43	1.37
57	BB	337	C	N3-C4	7.81	1.39	1.33
57	BB	998	C	N1-C6	7.81	1.41	1.37
57	BB	1879	C	P-O5'	-7.81	1.51	1.59
21	AA	1279	G	C6-N1	7.81	1.45	1.39
57	BB	263	G	C2-N3	7.81	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1419	A	N7-C5	-7.81	1.34	1.39
57	BB	2161	C	C3'-C2'	-7.81	1.44	1.52
57	BB	2737	G	N7-C5	-7.81	1.34	1.39
21	AA	305	G	C6-N1	7.81	1.45	1.39
57	BB	746	U	P-O5'	-7.81	1.51	1.59
57	BB	2602	A	C6-N6	7.81	1.40	1.33
57	BB	557	C	C5'-C4'	7.81	1.60	1.51
57	BB	2766	A	C6-N6	7.81	1.40	1.33
21	AA	1421	G	N9-C8	-7.81	1.32	1.37
57	BB	14	A	C6-N6	7.81	1.40	1.33
57	BB	600	G	N9-C8	7.81	1.43	1.37
57	BB	1435	G	C8-N7	-7.81	1.26	1.30
57	BB	2269	G	C6-N1	7.81	1.45	1.39
21	AA	836	G	P-O5'	-7.81	1.51	1.59
57	BB	2734	A	O3'-P	-7.81	1.51	1.61
21	AA	332	G	C2-N3	7.80	1.39	1.32
57	BB	2437	G	C6-N1	7.80	1.45	1.39
57	BB	2825	G	C6-N1	7.80	1.45	1.39
26	AV	34	C	C5'-C4'	7.80	1.60	1.51
57	BB	1838	C	C2'-C1'	-7.80	1.44	1.53
57	BB	2327	A	C4'-C3'	7.80	1.61	1.53
21	AA	334	C	C2-N3	7.80	1.42	1.35
21	AA	1271	A	N3-C4	-7.80	1.30	1.34
26	AV	42	G	C8-N7	-7.80	1.26	1.30
57	BB	2011	U	N1-C2	7.80	1.45	1.38
57	BB	2705	A	C6-N6	7.80	1.40	1.33
21	AA	1518	A	O3'-P	-7.80	1.51	1.61
58	BA	85	G	C5-C4	-7.80	1.32	1.38
57	BB	760	G	N3-C4	7.80	1.41	1.35
21	AA	364	A	C6-N6	7.80	1.40	1.33
21	AA	880	C	C2-N3	7.80	1.42	1.35
21	AA	951	G	N7-C5	-7.80	1.34	1.39
21	AA	1405	G	C2-N3	7.80	1.39	1.32
57	BB	1916	A	N7-C5	-7.80	1.34	1.39
21	AA	336	A	C6-N1	7.79	1.41	1.35
57	BB	674	G	C5-C6	-7.79	1.34	1.42
57	BB	2732	G	C8-N7	7.79	1.35	1.30
21	AA	69	G	N7-C5	-7.79	1.34	1.39
22	AY	41	U	C2-N3	7.79	1.43	1.37
57	BB	1447	C	C4-N4	7.79	1.41	1.33
21	AA	133	U	C4-O4	-7.79	1.17	1.23
21	AA	1475	G	C5'-C4'	7.79	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	66	U	N1-C6	-7.79	1.30	1.38
57	BB	188	G	C8-N7	7.79	1.35	1.30
57	BB	1249	U	N3-C4	7.79	1.45	1.38
57	BB	1319	C	C3'-C2'	-7.79	1.44	1.52
57	BB	1633	G	N7-C5	-7.79	1.34	1.39
57	BB	2406	A	N3-C4	-7.79	1.30	1.34
57	BB	2409	G	C2'-C1'	-7.79	1.44	1.53
21	AA	687	A	C6-N6	7.79	1.40	1.33
57	BB	964	C	C2'-C1'	-7.79	1.44	1.53
57	BB	1946	U	N3-C4	7.79	1.45	1.38
21	AA	440	C	P-O5'	-7.79	1.51	1.59
57	BB	2240	U	C2-N3	7.79	1.43	1.37
21	AA	1142	G	C2'-C1'	-7.78	1.44	1.53
21	AA	1235	U	N3-C4	7.78	1.45	1.38
21	AA	1239	A	O3'-P	-7.78	1.51	1.61
21	AA	1385	G	C8-N7	7.78	1.35	1.30
57	BB	805	G	C6-N1	7.78	1.45	1.39
57	BB	2266	A	C2-N3	7.78	1.40	1.33
21	AA	702	A	N7-C5	-7.78	1.34	1.39
57	BB	1455	G	C2-N3	7.78	1.39	1.32
57	BB	1750	G	N1-C2	7.78	1.44	1.37
21	AA	22	G	N7-C5	-7.78	1.34	1.39
21	AA	399	G	C5'-C4'	7.78	1.60	1.51
21	AA	493	A	N7-C5	-7.78	1.34	1.39
21	AA	745	G	N3-C4	-7.78	1.30	1.35
57	BB	1076	C	C4-N4	7.78	1.41	1.33
57	BB	2124	G	C2-N3	7.78	1.39	1.32
57	BB	2828	G	C4'-O4'	-7.78	1.35	1.45
58	BA	78	A	N3-C4	-7.78	1.30	1.34
57	BB	252	G	C2-N3	7.78	1.39	1.32
57	BB	1116	G	C5-C4	7.78	1.43	1.38
57	BB	1425	G	C2'-C1'	-7.78	1.44	1.53
57	BB	2625	G	C2-N3	7.77	1.39	1.32
21	AA	394	G	N3-C4	-7.77	1.30	1.35
21	AA	844	G	N9-C8	-7.77	1.32	1.37
57	BB	303	G	N3-C4	-7.77	1.30	1.35
57	BB	1178	C	N1-C2	7.77	1.48	1.40
57	BB	1572	A	N9-C4	7.77	1.42	1.37
21	AA	234	C	C2'-C1'	-7.77	1.44	1.53
21	AA	311	C	C4-N4	7.77	1.41	1.33
21	AA	361	G	C8-N7	-7.77	1.26	1.30
21	AA	488	C	C4'-O4'	7.77	1.55	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	919	U	C4-C5	-7.77	1.36	1.43
57	BB	2578	G	C8-N7	7.77	1.35	1.30
57	BB	2793	C	N3-C4	7.77	1.39	1.33
21	AA	1119	C	P-O5'	-7.77	1.51	1.59
57	BB	862	G	C5-C4	7.77	1.43	1.38
57	BB	1852	U	N3-C4	7.77	1.45	1.38
57	BB	2053	G	N1-C2	7.77	1.44	1.37
58	BA	98	G	C6-N1	7.77	1.45	1.39
57	BB	332	A	N9-C8	7.77	1.44	1.37
57	BB	2413	G	C2-N3	7.77	1.39	1.32
21	AA	354	G	N1-C2	7.76	1.44	1.37
21	AA	680	C	N1-C6	-7.76	1.32	1.37
21	AA	894	G	C2-N3	7.76	1.39	1.32
32	BM	59	ARG	NE-CZ	7.76	1.43	1.33
57	BB	755	U	N1-C2	7.76	1.45	1.38
57	BB	1791	A	C6-N1	7.76	1.41	1.35
57	BB	2545	G	P-O5'	-7.76	1.51	1.59
21	AA	411	A	N9-C4	-7.76	1.33	1.37
21	AA	1102	A	C2'-C1'	-7.76	1.44	1.53
21	AA	1165	U	C2'-C1'	-7.76	1.44	1.53
21	AA	1173	U	O3'-P	-7.76	1.51	1.61
57	BB	960	A	N9-C4	7.76	1.42	1.37
57	BB	966	G	C8-N7	7.76	1.35	1.30
57	BB	1364	G	C2-N3	7.76	1.39	1.32
57	BB	1802	A	C2'-C1'	-7.76	1.44	1.53
21	AA	1129	C	N3-C4	7.76	1.39	1.33
57	BB	1190	G	C6-N1	7.76	1.45	1.39
57	BB	1465	G	C2-N3	7.76	1.39	1.32
57	BB	2332	C	C4'-C3'	7.76	1.61	1.53
58	BA	13	G	N7-C5	-7.76	1.34	1.39
21	AA	112	G	N3-C4	-7.76	1.30	1.35
57	BB	721	A	O3'-P	-7.76	1.51	1.61
21	AA	181	A	C4'-C3'	7.76	1.61	1.53
57	BB	1277	G	N7-C5	-7.76	1.34	1.39
57	BB	2738	A	P-O5'	-7.76	1.51	1.59
57	BB	2750	A	C6-N1	7.75	1.41	1.35
57	BB	299	A	C6-N6	7.75	1.40	1.33
57	BB	722	A	P-O5'	-7.75	1.51	1.59
57	BB	2610	C	N1-C6	7.75	1.41	1.37
21	AA	852	G	N7-C5	-7.75	1.34	1.39
57	BB	1459	G	C6-N1	7.75	1.45	1.39
57	BB	2317	A	C2'-C1'	-7.75	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2599	G	C3'-C2'	-7.75	1.44	1.52
57	BB	1436	G	C2-N2	-7.75	1.26	1.34
57	BB	2018	G	N3-C4	-7.75	1.30	1.35
57	BB	2182	U	C4-C5	7.75	1.50	1.43
21	AA	113	G	C6-N1	7.75	1.45	1.39
21	AA	1373	G	C2-N3	7.75	1.39	1.32
57	BB	1273	U	C4'-C3'	-7.75	1.44	1.53
57	BB	2581	G	N3-C4	-7.75	1.30	1.35
57	BB	2709	G	C2-N3	7.75	1.39	1.32
57	BB	2854	G	N3-C4	7.75	1.40	1.35
21	AA	1220	G	C6-O6	7.75	1.31	1.24
21	AA	1410	A	C2'-C1'	-7.75	1.44	1.53
21	AA	1484	C	C4-N4	7.75	1.41	1.33
21	AA	402	G	C5'-C4'	-7.75	1.42	1.51
57	BB	2875	C	C2'-C1'	-7.75	1.44	1.53
57	BB	1755	A	N3-C4	-7.74	1.30	1.34
57	BB	2628	C	P-O5'	-7.74	1.52	1.59
21	AA	810	C	N3-C4	7.74	1.39	1.33
21	AA	1337	G	N3-C4	-7.74	1.30	1.35
21	AA	1508	A	C5-C4	7.74	1.44	1.38
22	AY	64	A	N3-C4	7.74	1.39	1.34
57	BB	541	A	P-O5'	-7.74	1.52	1.59
57	BB	597	G	N7-C5	-7.74	1.34	1.39
57	BB	1707	G	N7-C5	-7.74	1.34	1.39
57	BB	1801	A	C6-N1	7.74	1.41	1.35
57	BB	2201	G	N1-C2	7.74	1.44	1.37
57	BB	2279	G	N9-C4	-7.74	1.31	1.38
57	BB	2513	A	C6-N6	7.74	1.40	1.33
57	BB	2566	A	N7-C5	-7.74	1.34	1.39
21	AA	227	G	N1-C2	7.74	1.44	1.37
21	AA	324	G	C5-C4	7.74	1.43	1.38
21	AA	1332	A	C4'-O4'	7.74	1.55	1.45
23	AW	32	U	N3-C4	7.74	1.45	1.38
57	BB	947	A	N7-C5	7.74	1.43	1.39
57	BB	1215	G	N3-C4	7.74	1.40	1.35
57	BB	1854	A	N7-C5	-7.74	1.34	1.39
57	BB	1992	G	C5-C6	-7.74	1.34	1.42
57	BB	1469	A	C5-C6	-7.74	1.34	1.41
57	BB	1811	G	C5-C6	-7.74	1.34	1.42
21	AA	147	G	C5'-C4'	7.74	1.60	1.51
21	AA	298	A	C8-N7	7.74	1.36	1.31
21	AA	1312	G	P-O5'	-7.74	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	733	G	C2-N3	7.74	1.39	1.32
57	BB	1233	C	P-O5'	-7.74	1.52	1.59
57	BB	1644	C	C4-N4	7.74	1.41	1.33
57	BB	1687	G	C4'-O4'	7.74	1.55	1.45
57	BB	2206	C	C4'-C3'	-7.74	1.44	1.53
57	BB	2214	C	C5'-C4'	7.74	1.60	1.51
57	BB	2228	G	N7-C5	-7.74	1.34	1.39
57	BB	2767	C	C4-C5	-7.74	1.36	1.43
21	AA	1156	G	C8-N7	-7.73	1.26	1.30
23	AW	10	G	C2-N3	7.73	1.39	1.32
57	BB	964	C	C2-N3	7.73	1.42	1.35
57	BB	1570	A	C2-N3	7.73	1.40	1.33
57	BB	2177	C	C3'-C2'	7.73	1.61	1.52
57	BB	2433	A	P-O5'	7.73	1.67	1.59
57	BB	1047	G	O3'-P	-7.73	1.51	1.61
57	BB	1643	G	N7-C5	-7.73	1.34	1.39
57	BB	1776	G	C6-N1	7.73	1.45	1.39
57	BB	2717	C	C2'-C1'	-7.73	1.44	1.53
21	AA	66	A	C4'-C3'	7.73	1.61	1.53
57	BB	107	G	C4'-C3'	7.73	1.61	1.53
57	BB	586	A	C2'-C1'	-7.73	1.44	1.53
57	BB	795	C	C4-C5	-7.73	1.36	1.43
57	BB	2034	U	C2'-C1'	-7.73	1.44	1.53
57	BB	2567	G	C6-O6	-7.73	1.17	1.24
57	BB	262	A	C4'-C3'	-7.73	1.44	1.53
57	BB	1686	C	C1'-N1	7.73	1.60	1.48
22	AY	14	A	N9-C8	7.72	1.44	1.37
43	BX	27	ARG	CZ-NH1	7.72	1.43	1.33
57	BB	599	A	N1-C2	-7.72	1.27	1.34
57	BB	858	G	N1-C2	7.72	1.44	1.37
57	BB	1089	A	N9-C4	7.72	1.42	1.37
21	AA	629	A	C5-C4	7.72	1.44	1.38
21	AA	997	U	C2-N3	7.72	1.43	1.37
57	BB	669	G	O4'-C1'	-7.72	1.31	1.41
57	BB	694	U	P-O5'	-7.72	1.52	1.59
57	BB	1798	U	O4'-C1'	7.72	1.51	1.41
21	AA	60	A	N9-C8	-7.72	1.31	1.37
21	AA	642	A	N3-C4	-7.72	1.30	1.34
26	AV	46	G	N3-C4	-7.72	1.30	1.35
57	BB	307	G	C6-N1	7.72	1.45	1.39
21	AA	775	G	P-O5'	-7.72	1.52	1.59
57	BB	5	A	N9-C8	7.72	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	655	A	N3-C4	7.72	1.39	1.34
57	BB	819	A	C6-N6	7.72	1.40	1.33
57	BB	1831	G	C8-N7	-7.72	1.26	1.30
57	BB	2359	C	C5'-C4'	7.72	1.60	1.51
21	AA	260	G	C6-N1	7.72	1.45	1.39
57	BB	985	C	N3-C4	7.72	1.39	1.33
57	BB	1127	A	N7-C5	-7.72	1.34	1.39
57	BB	1248	G	C3'-O3'	7.72	1.52	1.42
57	BB	1844	C	N1-C6	-7.72	1.32	1.37
21	AA	1185	G	N3-C4	7.71	1.40	1.35
23	AW	43	C	N1-C6	7.71	1.41	1.37
57	BB	14	A	N7-C5	-7.71	1.34	1.39
57	BB	1876	A	N3-C4	7.71	1.39	1.34
57	BB	2207	C	O4'-C1'	-7.71	1.31	1.41
57	BB	2823	A	C6-N1	7.71	1.41	1.35
58	BA	37	C	C4'-O4'	-7.71	1.35	1.45
57	BB	1017	G	N1-C2	7.71	1.44	1.37
57	BB	2780	G	C5-C4	7.71	1.43	1.38
21	AA	1077	G	C1'-N9	7.71	1.60	1.48
57	BB	1218	G	C6-N1	7.71	1.45	1.39
24	AX	22	A	N3-C4	-7.71	1.30	1.34
57	BB	1694	C	C2'-C1'	-7.71	1.44	1.53
57	BB	1837	C	C5-C6	7.71	1.40	1.34
21	AA	785	G	N7-C5	-7.71	1.34	1.39
26	AV	61	C	O4'-C1'	7.71	1.51	1.41
57	BB	51	G	C2-N3	7.71	1.39	1.32
57	BB	1391	U	C2-N3	7.71	1.43	1.37
57	BB	1844	C	C4-C5	7.71	1.49	1.43
57	BB	2021	C	C5'-C4'	7.71	1.60	1.51
57	BB	2065	C	C4-C5	-7.71	1.36	1.43
21	AA	315	A	C5'-C4'	7.71	1.60	1.51
21	AA	780	A	C2'-C1'	-7.71	1.44	1.53
57	BB	572	A	C8-N7	-7.71	1.26	1.31
21	AA	1003	G	N9-C4	-7.71	1.31	1.38
21	AA	1373	G	N7-C5	-7.71	1.34	1.39
57	BB	13	A	N9-C8	-7.71	1.31	1.37
57	BB	2602	A	N9-C4	-7.71	1.33	1.37
21	AA	1249	C	N1-C6	7.70	1.41	1.37
57	BB	1024	G	N7-C5	-7.70	1.34	1.39
57	BB	1254	A	C6-N6	7.70	1.40	1.33
57	BB	2749	A	N7-C5	-7.70	1.34	1.39
21	AA	1064	G	N1-C2	7.70	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	867	G	N7-C5	-7.70	1.34	1.39
21	AA	1112	C	C4-C5	7.70	1.49	1.43
22	AY	48	C	C2-N3	7.70	1.42	1.35
23	AW	34	G	C1'-N9	7.70	1.60	1.48
57	BB	1514	G	C2-N2	7.70	1.42	1.34
57	BB	1925	C	N3-C4	7.70	1.39	1.33
21	AA	132	C	C4-N4	7.70	1.40	1.33
21	AA	419	C	N3-C4	7.70	1.39	1.33
57	BB	748	G	N3-C4	7.70	1.40	1.35
57	BB	777	G	C2-N3	7.70	1.39	1.32
57	BB	2381	A	C8-N7	-7.70	1.26	1.31
57	BB	2576	G	N3-C4	-7.70	1.30	1.35
21	AA	1292	G	C2'-C1'	-7.70	1.44	1.53
57	BB	13	A	N9-C4	7.70	1.42	1.37
57	BB	2337	G	P-O5'	-7.70	1.52	1.59
57	BB	496	G	C2-N2	7.70	1.42	1.34
57	BB	658	U	C2'-C1'	-7.70	1.44	1.53
57	BB	1452	G	C2-N3	7.70	1.39	1.32
58	BA	84	G	N1-C2	7.70	1.44	1.37
57	BB	1807	G	N1-C2	7.69	1.44	1.37
57	BB	2033	A	P-O5'	-7.69	1.52	1.59
57	BB	2060	A	N9-C8	-7.69	1.31	1.37
38	BS	99	ARG	CZ-NH1	7.69	1.43	1.33
57	BB	357	C	C5-C6	-7.69	1.28	1.34
57	BB	1137	G	N9-C8	7.69	1.43	1.37
57	BB	2201	G	N7-C5	7.69	1.43	1.39
57	BB	2286	G	C2-N2	7.69	1.42	1.34
57	BB	2744	G	C2-N3	7.69	1.39	1.32
21	AA	292	G	O3'-P	-7.69	1.51	1.61
21	AA	1122	U	C2-N3	7.69	1.43	1.37
57	BB	525	U	C2-N3	7.69	1.43	1.37
57	BB	1012	U	C4-C5	7.69	1.50	1.43
57	BB	1781	U	O3'-P	-7.69	1.51	1.61
57	BB	2038	G	C8-N7	-7.69	1.26	1.30
58	BA	66	A	N3-C4	-7.69	1.30	1.34
31	BL	18	ARG	NE-CZ	7.69	1.43	1.33
57	BB	1135	C	C4'-C3'	-7.69	1.44	1.53
57	BB	1777	U	C5'-C4'	7.69	1.60	1.51
57	BB	2042	A	N7-C5	-7.69	1.34	1.39
57	BB	2141	G	N7-C5	-7.69	1.34	1.39
21	AA	86	G	C2-N3	7.68	1.38	1.32
21	AA	147	G	C8-N7	-7.68	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	74	C	C4-N4	7.68	1.40	1.33
57	BB	214	G	O3'-P	-7.68	1.51	1.61
57	BB	572	A	C4'-C3'	7.68	1.61	1.53
57	BB	712	G	N1-C2	7.68	1.43	1.37
21	AA	682	G	N9-C4	-7.68	1.31	1.38
57	BB	731	C	O3'-P	-7.68	1.51	1.61
57	BB	2366	A	N3-C4	-7.68	1.30	1.34
57	BB	2653	U	N1-C2	7.68	1.45	1.38
21	AA	190	A	N9-C8	7.68	1.43	1.37
57	BB	1221	C	N3-C4	7.68	1.39	1.33
57	BB	1832	C	N1-C6	7.68	1.41	1.37
21	AA	558	G	C8-N7	-7.68	1.26	1.30
21	AA	974	A	C6-N6	7.68	1.40	1.33
22	AY	10	G	O3'-P	-7.68	1.51	1.61
57	BB	400	G	C6-N1	7.68	1.45	1.39
21	AA	129	A	N7-C5	7.68	1.43	1.39
57	BB	1877	A	O4'-C1'	7.68	1.51	1.41
57	BB	2723	C	P-O5'	-7.68	1.52	1.59
22	AY	58	A	C5-C4	7.67	1.44	1.38
57	BB	1211	C	C4-N4	7.67	1.40	1.33
21	AA	280	C	C5-C6	-7.67	1.28	1.34
21	AA	292	G	N9-C4	7.67	1.44	1.38
57	BB	518	G	C5-C6	-7.67	1.34	1.42
57	BB	2412	A	N3-C4	7.67	1.39	1.34
21	AA	162	A	C6-N6	7.67	1.40	1.33
21	AA	1214	C	C3'-C2'	7.67	1.61	1.52
57	BB	943	A	C4'-C3'	7.67	1.61	1.53
57	BB	1912	A	C4'-O4'	-7.67	1.35	1.45
57	BB	2	G	C2-N2	7.67	1.42	1.34
57	BB	347	A	N9-C4	-7.67	1.33	1.37
57	BB	973	A	C4'-C3'	7.67	1.61	1.53
57	BB	2290	G	C2-N3	7.67	1.38	1.32
21	AA	1149	C	C4-N4	7.67	1.40	1.33
57	BB	356	G	N1-C2	7.67	1.43	1.37
57	BB	790	U	C4'-C3'	7.67	1.61	1.53
57	BB	1250	G	N3-C4	-7.67	1.30	1.35
57	BB	1860	G	C6-N1	7.67	1.45	1.39
21	AA	574	A	C6-N6	7.67	1.40	1.33
57	BB	239	C	P-O5'	-7.67	1.52	1.59
57	BB	1597	A	C8-N7	-7.67	1.26	1.31
57	BB	652	U	C2-N3	7.66	1.43	1.37
57	BB	963	U	N1-C2	7.66	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1816	C	C4-N4	7.66	1.40	1.33
57	BB	2408	U	N1-C6	7.66	1.44	1.38
58	BA	61	G	N9-C8	7.66	1.43	1.37
21	AA	84	U	N1-C6	-7.66	1.31	1.38
26	AV	30	G	O3'-P	-7.66	1.51	1.61
57	BB	929	U	C2'-C1'	-7.66	1.45	1.53
57	BB	2447	G	C2-N2	7.66	1.42	1.34
57	BB	2864	G	N7-C5	-7.66	1.34	1.39
22	AY	42	G	C6-N1	7.66	1.45	1.39
57	BB	1422	G	N1-C2	7.66	1.43	1.37
57	BB	1677	A	C6-N1	7.66	1.41	1.35
57	BB	2336	A	C5-C4	7.66	1.44	1.38
57	BB	2370	G	N7-C5	7.66	1.43	1.39
57	BB	2785	C	P-O5'	-7.66	1.52	1.59
21	AA	1005	A	N3-C4	7.66	1.39	1.34
57	BB	49	A	N7-C5	-7.66	1.34	1.39
57	BB	2037	A	N3-C4	7.66	1.39	1.34
57	BB	2255	G	C2-N2	7.66	1.42	1.34
57	BB	2332	C	P-O5'	-7.66	1.52	1.59
57	BB	2784	U	C5-C6	7.66	1.41	1.34
57	BB	1531	C	C2-N3	-7.66	1.29	1.35
57	BB	1564	C	C2-N3	-7.66	1.29	1.35
57	BB	1863	G	N7-C5	7.66	1.43	1.39
57	BB	2282	G	O3'-P	-7.66	1.51	1.61
21	AA	1525	G	N3-C4	-7.65	1.30	1.35
57	BB	126	A	P-O5'	-7.65	1.52	1.59
57	BB	2731	G	N1-C2	7.65	1.43	1.37
4	AM	78	ARG	NE-CZ	7.65	1.43	1.33
21	AA	1043	G	N1-C2	7.65	1.43	1.37
21	AA	1165	U	N1-C6	7.65	1.44	1.38
23	AW	9	A	C6-N6	7.65	1.40	1.33
57	BB	95	A	N9-C8	7.65	1.43	1.37
57	BB	1274	A	O3'-P	-7.65	1.51	1.61
57	BB	1138	G	N3-C4	-7.65	1.30	1.35
57	BB	2602	A	N9-C8	7.65	1.43	1.37
57	BB	2763	G	N1-C2	7.65	1.43	1.37
57	BB	2860	A	N3-C4	-7.65	1.30	1.34
21	AA	921	U	C5-C6	7.65	1.41	1.34
21	AA	964	A	C6-N6	7.65	1.40	1.33
57	BB	2119	A	C5-C4	7.65	1.44	1.38
21	AA	505	G	C5'-C4'	7.65	1.60	1.51
21	AA	632	U	N1-C2	7.65	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1494	G	N7-C5	-7.65	1.34	1.39
57	BB	2714	G	N9-C8	-7.64	1.32	1.37
21	AA	815	A	N9-C4	-7.64	1.33	1.37
21	AA	1229	A	C2-N3	7.64	1.40	1.33
57	BB	1791	A	O3'-P	-7.64	1.51	1.61
57	BB	1895	C	C5'-C4'	7.64	1.60	1.51
21	AA	624	C	N1-C6	7.64	1.41	1.37
57	BB	1074	G	P-O5'	7.64	1.67	1.59
57	BB	1786	A	N7-C5	-7.64	1.34	1.39
21	AA	538	G	N1-C2	7.64	1.43	1.37
21	AA	1327	C	O3'-P	-7.64	1.51	1.61
57	BB	1360	G	N7-C5	-7.64	1.34	1.39
57	BB	2495	G	N3-C4	-7.64	1.30	1.35
21	AA	198	G	C8-N7	7.64	1.35	1.30
21	AA	389	A	C6-N1	7.64	1.40	1.35
23	AW	69	G	N9-C8	-7.64	1.32	1.37
57	BB	1744	A	N9-C4	7.64	1.42	1.37
57	BB	2172	U	N3-C4	7.64	1.45	1.38
57	BB	801	G	C2-N3	7.64	1.38	1.32
57	BB	1041	G	N9-C4	-7.64	1.31	1.38
57	BB	2032	G	N7-C5	-7.64	1.34	1.39
57	BB	2190	G	N9-C4	-7.64	1.31	1.38
57	BB	2565	A	C8-N7	-7.64	1.26	1.31
58	BA	53	A	P-O5'	-7.64	1.52	1.59
57	BB	1532	A	N3-C4	-7.63	1.30	1.34
57	BB	2059	A	O3'-P	-7.63	1.51	1.61
57	BB	2722	G	C2-N2	7.63	1.42	1.34
21	AA	478	A	N1-C2	-7.63	1.27	1.34
21	AA	1180	A	N3-C4	-7.63	1.30	1.34
57	BB	11	C	O3'-P	-7.63	1.51	1.61
57	BB	751	A	C4'-C3'	7.63	1.61	1.53
21	AA	8	A	N7-C5	-7.63	1.34	1.39
21	AA	716	A	C5-C4	-7.63	1.33	1.38
22	AY	9	A	C6-N6	-7.63	1.27	1.33
57	BB	648	G	N1-C2	7.63	1.43	1.37
57	BB	1246	A	O3'-P	7.63	1.70	1.61
57	BB	1469	A	C5-C4	7.63	1.44	1.38
57	BB	1727	C	N3-C4	7.63	1.39	1.33
58	BA	57	A	C3'-C2'	-7.63	1.44	1.52
22	AY	5	A	O3'-P	7.63	1.70	1.61
57	BB	1287	A	C5-C6	-7.63	1.34	1.41
57	BB	1677	A	N7-C5	-7.63	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1824	G	N3-C4	7.63	1.40	1.35
21	AA	500	G	N7-C5	-7.62	1.34	1.39
57	BB	655	A	C6-N6	7.62	1.40	1.33
57	BB	2876	G	C2-N3	7.62	1.38	1.32
21	AA	1488	G	N1-C2	7.62	1.43	1.37
57	BB	1189	A	N9-C4	-7.62	1.33	1.37
58	BA	56	G	N9-C8	-7.62	1.32	1.37
21	AA	205	A	C5'-C4'	7.62	1.60	1.51
57	BB	697	G	N9-C8	-7.62	1.32	1.37
57	BB	1472	C	N1-C6	-7.62	1.32	1.37
57	BB	1567	G	O3'-P	-7.62	1.52	1.61
21	AA	13	U	P-O5'	-7.62	1.52	1.59
21	AA	147	G	C2'-C1'	-7.62	1.45	1.53
21	AA	617	G	C8-N7	-7.62	1.26	1.30
21	AA	1468	A	C6-N6	7.62	1.40	1.33
57	BB	1991	U	C4'-O4'	-7.62	1.35	1.45
57	BB	693	A	N7-C5	-7.62	1.34	1.39
21	AA	835	U	N1-C6	7.62	1.44	1.38
21	AA	1138	G	C6-N1	7.62	1.44	1.39
57	BB	384	A	C8-N7	-7.62	1.26	1.31
57	BB	2037	A	C4'-C3'	7.62	1.61	1.53
21	AA	479	U	N1-C6	7.61	1.44	1.38
21	AA	529	G	O3'-P	-7.61	1.52	1.61
57	BB	89	A	C2'-C1'	-7.61	1.45	1.53
57	BB	1622	G	C2'-C1'	-7.61	1.45	1.53
57	BB	1936	A	N9-C4	7.61	1.42	1.37
21	AA	593	U	C4'-C3'	7.61	1.61	1.53
21	AA	1073	U	C4-C5	-7.61	1.36	1.43
21	AA	1499	A	N7-C5	-7.61	1.34	1.39
57	BB	400	G	N7-C5	-7.61	1.34	1.39
57	BB	1284	A	C2-N3	7.61	1.40	1.33
57	BB	1394	U	C3'-O3'	7.61	1.52	1.42
57	BB	1896	G	C5-C4	7.61	1.43	1.38
57	BB	2331	G	C8-N7	-7.61	1.26	1.30
57	BB	2637	U	C1'-N1	7.61	1.60	1.48
57	BB	374	A	C3'-C2'	7.61	1.61	1.52
57	BB	742	A	N1-C2	7.61	1.41	1.34
57	BB	1863	G	C2-N3	7.61	1.38	1.32
57	BB	523	C	N3-C4	7.61	1.39	1.33
57	BB	1984	G	N9-C4	7.61	1.44	1.38
21	AA	843	U	N3-C4	7.61	1.45	1.38
23	AW	57	G	C5-C4	7.61	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	142	A	C6-N1	7.61	1.40	1.35
57	BB	515	A	N3-C4	7.61	1.39	1.34
57	BB	2148	G	N7-C5	-7.61	1.34	1.39
57	BB	2430	A	C3'-C2'	7.61	1.61	1.52
21	AA	1036	A	N3-C4	-7.60	1.30	1.34
57	BB	228	C	C4'-O4'	7.60	1.55	1.45
57	BB	1978	A	N9-C4	-7.60	1.33	1.37
21	AA	1239	A	C6-N6	7.60	1.40	1.33
22	AY	65	G	N1-C2	7.60	1.43	1.37
57	BB	362	A	C5-C4	7.60	1.44	1.38
57	BB	2587	A	N9-C4	7.60	1.42	1.37
57	BB	713	G	C3'-C2'	-7.60	1.44	1.52
57	BB	2273	A	C8-N7	-7.60	1.26	1.31
57	BB	2759	G	P-O5'	-7.60	1.52	1.59
21	AA	160	A	C6-N1	-7.60	1.30	1.35
21	AA	659	U	C4'-C3'	7.60	1.61	1.53
21	AA	1154	G	N9-C4	7.60	1.44	1.38
24	AX	21	C	N3-C4	7.60	1.39	1.33
57	BB	122	G	C8-N7	7.60	1.35	1.30
57	BB	752	A	N7-C5	-7.60	1.34	1.39
57	BB	1150	C	C2-N3	7.60	1.41	1.35
57	BB	1735	A	N3-C4	-7.60	1.30	1.34
57	BB	2794	C	N1-C6	7.60	1.41	1.37
57	BB	543	G	C2-N3	7.60	1.38	1.32
21	AA	852	G	N9-C8	-7.59	1.32	1.37
21	AA	1182	G	N3-C4	7.59	1.40	1.35
21	AA	776	G	C4'-O4'	-7.59	1.35	1.45
21	AA	165	G	N1-C2	7.59	1.43	1.37
57	BB	222	A	C2'-C1'	-7.59	1.45	1.53
57	BB	474	G	C5-C4	-7.59	1.33	1.38
57	BB	1071	G	O3'-P	-7.59	1.52	1.61
57	BB	1470	A	N9-C4	-7.59	1.33	1.37
57	BB	2811	G	N1-C2	7.59	1.43	1.37
21	AA	1243	C	N3-C4	7.59	1.39	1.33
21	AA	1279	G	N9-C8	-7.59	1.32	1.37
41	BV	35	GLU	CG-CD	7.59	1.63	1.51
57	BB	556	A	C6-N6	7.59	1.40	1.33
57	BB	948	C	N3-C4	7.59	1.39	1.33
57	BB	1828	G	N3-C4	7.59	1.40	1.35
57	BB	1853	A	C8-N7	7.59	1.36	1.31
21	AA	105	G	C2-N3	7.59	1.38	1.32
21	AA	1314	C	N1-C6	7.59	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	65	G	N3-C4	7.59	1.40	1.35
26	AV	12	G	N7-C5	-7.59	1.34	1.39
41	BV	19	ARG	CZ-NH1	7.59	1.43	1.33
57	BB	81	G	C2-N3	7.59	1.38	1.32
57	BB	1627	G	N1-C2	7.59	1.43	1.37
21	AA	1304	G	C5'-C4'	7.58	1.60	1.51
57	BB	466	A	N7-C5	-7.58	1.34	1.39
57	BB	525	U	C5'-C4'	7.58	1.60	1.51
57	BB	979	A	C2-N3	7.58	1.40	1.33
57	BB	1621	U	N1-C2	7.58	1.45	1.38
57	BB	2705	A	C2'-O2'	-7.58	1.31	1.41
57	BB	85	G	C2'-C1'	-7.58	1.45	1.53
57	BB	661	A	C6-N1	7.58	1.40	1.35
57	BB	1811	G	C2-N3	7.58	1.38	1.32
58	BA	34	A	C5-C4	7.58	1.44	1.38
21	AA	159	G	C2-N3	7.58	1.38	1.32
57	BB	2388	A	N7-C5	-7.58	1.34	1.39
34	BO	94	ARG	CD-NE	7.58	1.59	1.46
57	BB	1199	U	C2-N3	7.58	1.43	1.37
57	BB	1745	A	N7-C5	-7.58	1.34	1.39
57	BB	500	G	O3'-P	-7.58	1.52	1.61
57	BB	784	G	C2-N3	7.58	1.38	1.32
57	BB	1820	U	C2'-C1'	-7.58	1.45	1.53
21	AA	34	C	N1-C6	-7.58	1.32	1.37
26	AV	44	A	C8-N7	7.58	1.36	1.31
26	AV	50	U	P-O5'	7.58	1.67	1.59
57	BB	804	A	C6-N6	7.58	1.40	1.33
57	BB	1133	A	N7-C5	7.58	1.43	1.39
21	AA	59	A	N3-C4	-7.57	1.30	1.34
21	AA	1417	G	C5-C4	7.57	1.43	1.38
26	AV	31	G	C5-C6	-7.57	1.34	1.42
57	BB	454	A	N9-C4	7.57	1.42	1.37
57	BB	970	U	N3-C4	7.57	1.45	1.38
57	BB	1861	G	C5'-C4'	7.57	1.60	1.51
57	BB	2822	G	C6-N1	7.57	1.44	1.39
21	AA	1134	G	O3'-P	-7.57	1.52	1.61
57	BB	208	C	C2'-C1'	-7.57	1.45	1.53
57	BB	515	A	C2'-C1'	-7.57	1.45	1.53
57	BB	1367	A	N9-C8	7.57	1.43	1.37
57	BB	2569	G	C5-C6	-7.57	1.34	1.42
57	BB	2842	G	N9-C8	7.57	1.43	1.37
21	AA	753	A	N7-C5	-7.57	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1164	C	N3-C4	7.57	1.39	1.33
57	BB	2799	A	C5-C4	7.57	1.44	1.38
21	AA	258	G	N7-C5	-7.57	1.34	1.39
21	AA	573	A	O3'-P	-7.57	1.52	1.61
57	BB	343	C	P-O5'	-7.57	1.52	1.59
57	BB	655	A	C6-N1	7.57	1.40	1.35
57	BB	1617	C	C2'-C1'	-7.57	1.45	1.53
57	BB	127	A	N7-C5	-7.57	1.34	1.39
57	BB	216	A	C8-N7	-7.57	1.26	1.31
57	BB	730	A	C2'-C1'	-7.57	1.45	1.53
57	BB	1327	A	N7-C5	-7.57	1.34	1.39
57	BB	1877	A	P-O5'	-7.57	1.52	1.59
57	BB	835	C	C2'-C1'	-7.56	1.45	1.53
57	BB	618	G	C8-N7	-7.56	1.26	1.30
57	BB	748	G	N9-C8	-7.56	1.32	1.37
57	BB	1819	A	C2'-C1'	-7.56	1.45	1.53
57	BB	762	U	N3-C4	7.56	1.45	1.38
57	BB	2763	G	C4'-C3'	7.56	1.61	1.53
21	AA	222	C	C5-C6	7.56	1.40	1.34
21	AA	842	U	C2'-C1'	-7.56	1.45	1.53
57	BB	333	G	C2-N3	7.56	1.38	1.32
57	BB	501	A	C4'-C3'	7.56	1.61	1.53
21	AA	281	G	P-O5'	-7.56	1.52	1.59
22	AY	30	G	C3'-O3'	7.56	1.52	1.42
22	AY	72	C	N1-C6	7.56	1.41	1.37
57	BB	223	A	C4'-C3'	-7.56	1.44	1.53
57	BB	1873	G	C2-N3	7.56	1.38	1.32
21	AA	611	C	N3-C4	7.56	1.39	1.33
21	AA	951	G	C6-N1	7.56	1.44	1.39
57	BB	1571	A	N7-C5	-7.56	1.34	1.39
21	AA	958	A	P-O5'	-7.55	1.52	1.59
57	BB	529	A	N9-C4	-7.55	1.33	1.37
57	BB	548	G	C3'-C2'	-7.55	1.44	1.52
57	BB	899	A	C5-C4	7.55	1.44	1.38
57	BB	1101	U	N3-C4	7.55	1.45	1.38
57	BB	1718	G	N7-C5	-7.55	1.34	1.39
57	BB	2783	U	C3'-C2'	7.55	1.61	1.52
21	AA	1124	G	N7-C5	-7.55	1.34	1.39
57	BB	409	G	N9-C8	-7.55	1.32	1.37
57	BB	828	U	C4-C5	7.55	1.50	1.43
7	AP	31	ARG	CZ-NH1	7.55	1.42	1.33
21	AA	81	A	P-O5'	-7.55	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1935	G	C6-N1	7.55	1.44	1.39
21	AA	305	G	N1-C2	7.55	1.43	1.37
57	BB	1014	A	C6-N1	7.55	1.40	1.35
57	BB	1303	G	N1-C2	7.55	1.43	1.37
57	BB	2451	A	P-O5'	-7.55	1.52	1.59
57	BB	332	A	C5-C6	-7.55	1.34	1.41
57	BB	617	G	N7-C5	-7.54	1.34	1.39
57	BB	1568	G	N1-C2	7.54	1.43	1.37
57	BB	472	A	C5-C6	7.54	1.47	1.41
57	BB	2844	G	C2-N3	7.54	1.38	1.32
57	BB	1389	G	C6-N1	7.54	1.44	1.39
57	BB	1630	A	C3'-C2'	-7.54	1.44	1.52
57	BB	2062	A	C5-C4	7.54	1.44	1.38
57	BB	2505	G	C5-C4	-7.54	1.33	1.38
57	BB	1226	A	N7-C5	-7.54	1.34	1.39
21	AA	233	C	C5-C6	-7.54	1.28	1.34
21	AA	941	G	C6-N1	7.54	1.44	1.39
57	BB	1616	A	C6-N6	7.54	1.40	1.33
57	BB	2387	U	N1-C2	-7.54	1.31	1.38
21	AA	23	C	C4-N4	7.54	1.40	1.33
57	BB	501	A	N3-C4	-7.54	1.30	1.34
57	BB	636	G	C2'-C1'	-7.54	1.45	1.53
57	BB	2329	U	C3'-C2'	-7.54	1.44	1.52
21	AA	705	G	N1-C2	7.54	1.43	1.37
57	BB	212	G	C6-N1	7.54	1.44	1.39
57	BB	402	A	N3-C4	-7.54	1.30	1.34
57	BB	2828	G	N1-C2	7.54	1.43	1.37
21	AA	348	G	C8-N7	7.53	1.35	1.30
21	AA	647	C	C2-N3	7.53	1.41	1.35
21	AA	1084	G	N9-C8	-7.53	1.32	1.37
23	AW	10	G	C4'-C3'	-7.53	1.44	1.53
23	AW	16	U	C2-N3	7.53	1.43	1.37
57	BB	2636	C	N1-C6	7.53	1.41	1.37
57	BB	680	C	N1-C6	-7.53	1.32	1.37
21	AA	146	G	N9-C8	7.53	1.43	1.37
21	AA	1140	C	C4-N4	7.53	1.40	1.33
23	AW	28	G	C4'-C3'	7.53	1.61	1.53
57	BB	493	G	C2'-C1'	-7.53	1.45	1.53
57	BB	551	G	N9-C4	7.53	1.44	1.38
22	AY	58	A	N3-C4	-7.53	1.30	1.34
57	BB	2552	U	N1-C6	7.53	1.44	1.38
21	AA	77	A	C5-C4	7.53	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1309	G	C6-N1	-7.53	1.34	1.39
26	AV	24	U	P-O5'	-7.53	1.52	1.59
57	BB	1385	A	N9-C4	-7.53	1.33	1.37
57	BB	1780	A	N7-C5	-7.53	1.34	1.39
57	BB	60	G	C6-N1	7.53	1.44	1.39
57	BB	1766	G	C3'-C2'	7.53	1.61	1.52
21	AA	949	A	C8-N7	-7.52	1.26	1.31
21	AA	31	G	C6-N1	7.52	1.44	1.39
57	BB	209	C	N3-C4	7.52	1.39	1.33
57	BB	755	U	C5'-C4'	7.52	1.60	1.51
57	BB	1420	A	C4'-C3'	7.52	1.61	1.53
57	BB	2316	G	C5-C4	7.52	1.43	1.38
21	AA	1256	A	C6-N6	7.52	1.40	1.33
22	AY	48	C	N1-C6	-7.52	1.32	1.37
26	AV	46	G	N1-C2	7.52	1.43	1.37
57	BB	1558	C	C2-N3	-7.52	1.29	1.35
57	BB	2393	U	N1-C2	7.52	1.45	1.38
22	AY	7	U	N3-C4	7.52	1.45	1.38
57	BB	496	G	N9-C8	7.52	1.43	1.37
57	BB	1227	G	N3-C4	7.52	1.40	1.35
57	BB	1716	U	N3-C4	7.52	1.45	1.38
57	BB	2819	G	P-O5'	-7.52	1.52	1.59
21	AA	495	A	C5-C4	-7.52	1.33	1.38
21	AA	565	U	C2-N3	7.52	1.43	1.37
21	AA	1130	A	C8-N7	-7.52	1.26	1.31
57	BB	398	C	C5'-C4'	7.52	1.60	1.51
57	BB	912	C	N1-C6	7.52	1.41	1.37
21	AA	326	G	C6-N1	7.52	1.44	1.39
22	AY	64	A	C2'-C1'	-7.52	1.45	1.53
57	BB	2229	U	C4'-O4'	7.52	1.55	1.45
57	BB	2501	C	N1-C6	-7.52	1.32	1.37
21	AA	393	A	N7-C5	-7.51	1.34	1.39
21	AA	790	A	C1'-N9	-7.51	1.36	1.46
22	AY	67	A	C6-N6	7.51	1.40	1.33
23	AW	16	U	C2'-C1'	-7.51	1.45	1.53
57	BB	1442	U	C2'-C1'	-7.51	1.45	1.53
57	BB	1890	A	N9-C4	-7.51	1.33	1.37
57	BB	1983	G	N1-C2	7.51	1.43	1.37
21	AA	748	G	N7-C5	-7.51	1.34	1.39
21	AA	1443	C	N3-C4	7.51	1.39	1.33
57	BB	1353	A	C2'-C1'	-7.51	1.45	1.53
57	BB	1834	U	C2-N3	7.51	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1455	G	C2-N2	7.51	1.42	1.34
57	BB	272	A	O3'-P	-7.51	1.52	1.61
57	BB	1297	C	N3-C4	7.51	1.39	1.33
57	BB	2543	G	C2-N3	7.51	1.38	1.32
57	BB	2597	G	P-O5'	-7.51	1.52	1.59
21	AA	40	C	C4-N4	7.51	1.40	1.33
21	AA	414	A	C3'-O3'	7.51	1.52	1.42
21	AA	1342	C	N3-C4	7.51	1.39	1.33
21	AA	1389	C	N3-C4	7.51	1.39	1.33
57	BB	1515	A	N9-C4	7.51	1.42	1.37
57	BB	1722	A	C6-N6	7.51	1.40	1.33
57	BB	2293	G	C2-N3	7.51	1.38	1.32
21	AA	1323	G	C8-N7	-7.51	1.26	1.30
57	BB	530	G	C5-C6	-7.51	1.34	1.42
57	BB	1527	G	N7-C5	-7.51	1.34	1.39
57	BB	2168	G	O3'-P	-7.51	1.52	1.61
21	AA	173	U	C5-C6	-7.50	1.27	1.34
21	AA	660	C	C4-N4	7.50	1.40	1.33
57	BB	5	A	N3-C4	-7.50	1.30	1.34
57	BB	364	C	O3'-P	-7.50	1.52	1.61
57	BB	975	A	C8-N7	-7.50	1.26	1.31
57	BB	1248	G	C2-N2	7.50	1.42	1.34
21	AA	928	G	C2'-C1'	-7.50	1.45	1.53
21	AA	1125	U	C2'-C1'	-7.50	1.45	1.53
57	BB	23	G	C2-N3	7.50	1.38	1.32
57	BB	2508	G	C2-N2	7.50	1.42	1.34
57	BB	2725	A	C6-N1	7.50	1.40	1.35
57	BB	2820	A	C6-N1	7.50	1.40	1.35
7	AP	37	GLY	CA-C	-7.50	1.39	1.51
21	AA	179	A	C6-N6	7.50	1.40	1.33
21	AA	404	G	C2-N3	7.50	1.38	1.32
21	AA	608	A	C3'-C2'	-7.50	1.44	1.52
57	BB	530	G	N1-C2	7.50	1.43	1.37
57	BB	1971	U	C4-C5	7.50	1.50	1.43
21	AA	227	G	N9-C8	7.50	1.43	1.37
57	BB	805	G	N7-C5	-7.50	1.34	1.39
57	BB	583	G	C5-C4	7.50	1.43	1.38
57	BB	1604	C	P-O5'	-7.50	1.52	1.59
57	BB	1721	G	C6-N1	7.50	1.44	1.39
57	BB	1848	A	C6-N6	7.50	1.40	1.33
57	BB	2670	A	C6-N6	7.50	1.40	1.33
58	BA	109	A	P-O5'	-7.50	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	347	G	C6-O6	-7.49	1.17	1.24
21	AA	363	A	C8-N7	-7.49	1.26	1.31
57	BB	122	G	C5-C6	-7.49	1.34	1.42
57	BB	1441	G	N1-C2	7.49	1.43	1.37
57	BB	983	A	O4'-C1'	-7.49	1.31	1.41
57	BB	1972	G	C6-N1	7.49	1.44	1.39
22	AY	73	A	C3'-O3'	7.49	1.52	1.42
57	BB	149	A	C2'-C1'	-7.49	1.45	1.53
57	BB	1329	U	N1-C2	7.49	1.45	1.38
57	BB	2126	A	C6-N6	7.49	1.40	1.33
21	AA	629	A	C2'-C1'	-7.49	1.45	1.53
26	AV	2	G	C6-N1	7.49	1.44	1.39
57	BB	277	G	C2-N3	7.49	1.38	1.32
57	BB	288	U	C2-N3	7.49	1.43	1.37
57	BB	1250	G	N7-C5	-7.49	1.34	1.39
57	BB	2742	G	N9-C4	-7.49	1.31	1.38
21	AA	561	U	N3-C4	7.49	1.45	1.38
57	BB	274	C	C3'-C2'	7.49	1.61	1.52
57	BB	1061	U	C3'-C2'	-7.49	1.44	1.52
21	AA	1050	G	N7-C5	-7.49	1.34	1.39
22	AY	3	G	C5'-C4'	7.49	1.60	1.51
57	BB	90	U	C2-N3	7.49	1.43	1.37
57	BB	896	A	C6-N6	7.49	1.40	1.33
57	BB	1962	C	N3-C4	7.49	1.39	1.33
57	BB	625	G	C2-N3	7.48	1.38	1.32
57	BB	924	G	N1-C2	7.48	1.43	1.37
57	BB	1749	A	C5-C4	7.48	1.44	1.38
21	AA	102	G	C8-N7	-7.48	1.26	1.30
21	AA	190	A	P-O5'	-7.48	1.52	1.59
21	AA	456	A	N9-C4	-7.48	1.33	1.37
57	BB	1509	A	N3-C4	-7.48	1.30	1.34
21	AA	384	G	N9-C4	7.48	1.44	1.38
21	AA	862	C	N3-C4	7.48	1.39	1.33
57	BB	133	U	P-O5'	-7.48	1.52	1.59
57	BB	166	U	C4'-C3'	-7.48	1.45	1.53
57	BB	180	G	C8-N7	-7.48	1.26	1.30
57	BB	401	A	N9-C4	-7.48	1.33	1.37
57	BB	1251	C	N3-C4	7.48	1.39	1.33
57	BB	1757	A	N3-C4	7.48	1.39	1.34
57	BB	1838	C	C3'-C2'	7.48	1.61	1.52
57	BB	2377	A	N7-C5	-7.48	1.34	1.39
21	AA	1383	C	P-O5'	-7.48	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1900	A	P-O5'	7.48	1.67	1.59
21	AA	288	A	C2'-C1'	7.48	1.61	1.53
21	AA	442	G	C5-C4	7.48	1.43	1.38
26	AV	65	C	C5'-C4'	7.48	1.60	1.51
57	BB	68	G	O3'-P	-7.48	1.52	1.61
57	BB	1904	G	C5-C4	-7.48	1.33	1.38
57	BB	1210	G	C5-C6	-7.48	1.34	1.42
57	BB	2168	G	N7-C5	-7.48	1.34	1.39
21	AA	21	G	C3'-C2'	-7.47	1.44	1.52
21	AA	771	G	C2'-C1'	-7.47	1.45	1.53
22	AY	14	A	N7-C5	-7.47	1.34	1.39
57	BB	146	A	N9-C8	-7.47	1.31	1.37
57	BB	1432	G	P-O5'	-7.47	1.52	1.59
57	BB	1633	G	C5-C4	7.47	1.43	1.38
8	AQ	61	ARG	CZ-NH2	7.47	1.42	1.33
57	BB	1299	G	C2'-C1'	-7.47	1.45	1.53
21	AA	927	G	C2'-C1'	-7.47	1.45	1.53
57	BB	976	G	N1-C2	7.47	1.43	1.37
57	BB	1507	C	N3-C4	7.47	1.39	1.33
57	BB	2073	C	C4'-O4'	-7.47	1.35	1.45
21	AA	127	G	C8-N7	7.47	1.35	1.30
21	AA	412	A	O3'-P	-7.47	1.52	1.61
21	AA	836	G	C3'-C2'	-7.47	1.44	1.52
21	AA	1097	C	C2-N3	-7.47	1.29	1.35
21	AA	1157	A	C4'-C3'	7.47	1.61	1.53
57	BB	1787	A	C5'-C4'	7.47	1.60	1.51
21	AA	430	A	N7-C5	-7.47	1.34	1.39
21	AA	85	U	N3-C4	7.47	1.45	1.38
26	AV	38	A	N7-C5	7.47	1.43	1.39
57	BB	604	G	C8-N7	7.47	1.35	1.30
57	BB	633	A	C4'-C3'	-7.47	1.45	1.53
57	BB	2436	G	N9-C4	7.47	1.44	1.38
21	AA	70	U	N3-C4	7.46	1.45	1.38
21	AA	1101	A	O3'-P	-7.46	1.52	1.61
57	BB	232	G	C2-N3	7.46	1.38	1.32
57	BB	348	A	C8-N7	-7.46	1.26	1.31
57	BB	722	A	C5'-C4'	7.46	1.60	1.51
57	BB	2330	G	N9-C4	-7.46	1.31	1.38
58	BA	35	C	C4-C5	7.46	1.49	1.43
57	BB	231	A	C5'-C4'	7.46	1.60	1.51
57	BB	2238	G	C2-N3	7.46	1.38	1.32
58	BA	79	G	N9-C4	7.46	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	419	C	C4-N4	7.46	1.40	1.33
21	AA	530	G	C8-N7	-7.46	1.26	1.30
21	AA	1089	G	C2-N3	7.46	1.38	1.32
23	AW	50	U	C4-O4	7.46	1.29	1.23
57	BB	290	U	C2-N3	7.46	1.43	1.37
58	BA	41	G	C5-C4	7.46	1.43	1.38
7	AP	39	PHE	CG-CD2	7.46	1.50	1.38
21	AA	99	C	N3-C4	7.46	1.39	1.33
21	AA	145	G	N1-C2	7.46	1.43	1.37
57	BB	2752	C	C5'-C4'	7.46	1.60	1.51
21	AA	474	G	P-O5'	-7.45	1.52	1.59
21	AA	760	G	C3'-O3'	7.45	1.52	1.42
21	AA	833	G	N9-C8	7.45	1.43	1.37
21	AA	1262	C	C2'-C1'	-7.45	1.45	1.53
57	BB	1504	A	C2'-C1'	-7.45	1.45	1.53
57	BB	1572	A	C5'-C4'	7.45	1.60	1.51
21	AA	857	C	C4-C5	7.45	1.49	1.43
21	AA	1209	C	C4-N4	7.45	1.40	1.33
57	BB	1225	G	C5-C6	-7.45	1.34	1.42
57	BB	1720	U	C3'-O3'	7.45	1.52	1.42
21	AA	1298	U	O3'-P	-7.45	1.52	1.61
26	AV	70	G	P-O5'	7.45	1.67	1.59
57	BB	908	C	C4'-C3'	7.45	1.61	1.53
57	BB	2561	U	N1-C6	-7.45	1.31	1.38
57	BB	2848	G	C1'-N9	-7.45	1.36	1.46
58	BA	104	A	C5-C6	-7.45	1.34	1.41
13	AB	136	ARG	CD-NE	7.45	1.59	1.46
21	AA	45	G	C2-N2	7.45	1.42	1.34
57	BB	879	G	C2-N2	7.45	1.42	1.34
57	BB	1248	G	N9-C8	-7.45	1.32	1.37
57	BB	1610	A	N9-C4	7.45	1.42	1.37
57	BB	2600	A	N3-C4	-7.45	1.30	1.34
21	AA	199	A	N3-C4	-7.45	1.30	1.34
57	BB	355	U	C4-C5	7.45	1.50	1.43
57	BB	2813	A	C4'-C3'	7.45	1.61	1.53
26	AV	66	C	C2-N3	7.45	1.41	1.35
57	BB	1857	G	C3'-C2'	-7.45	1.44	1.52
57	BB	2444	G	C2-N2	7.45	1.42	1.34
57	BB	2642	G	N1-C2	7.45	1.43	1.37
58	BA	29	A	C8-N7	-7.45	1.26	1.31
21	AA	460	A	C2'-C1'	-7.44	1.45	1.53
21	AA	712	A	C6-N6	7.44	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1845	G	C8-N7	-7.44	1.26	1.30
22	AY	33	U	N3-C4	7.44	1.45	1.38
23	AW	29	G	C4'-C3'	7.44	1.61	1.53
57	BB	128	C	N1-C6	7.44	1.41	1.37
57	BB	1064	C	P-O5'	-7.44	1.52	1.59
57	BB	1784	A	N9-C4	-7.44	1.33	1.37
21	AA	1058	G	C6-O6	-7.44	1.17	1.24
57	BB	1311	G	C4'-C3'	-7.44	1.45	1.53
57	BB	1425	G	C2-N3	7.44	1.38	1.32
57	BB	2329	U	C4'-O4'	7.44	1.55	1.45
21	AA	623	C	N3-C4	7.44	1.39	1.33
21	AA	1500	A	C5-C4	7.44	1.44	1.38
57	BB	993	G	C2-N3	7.44	1.38	1.32
21	AA	752	G	C2'-C1'	-7.44	1.45	1.53
21	AA	888	G	C5-C6	-7.44	1.34	1.42
21	AA	1302	C	C4'-O4'	7.44	1.55	1.45
21	AA	1408	A	C8-N7	-7.44	1.26	1.31
57	BB	538	A	C2-N3	7.44	1.40	1.33
57	BB	1089	A	C8-N7	-7.44	1.26	1.31
57	BB	1422	G	N9-C8	-7.44	1.32	1.37
57	BB	1428	C	C4-C5	7.44	1.49	1.43
57	BB	2855	C	N3-C4	7.44	1.39	1.33
21	AA	41	G	C6-N1	7.44	1.44	1.39
57	BB	481	G	C5'-C4'	7.44	1.60	1.51
54	BF	79	ARG	CZ-NH2	7.43	1.42	1.33
57	BB	2287	A	C6-N1	7.43	1.40	1.35
57	BB	597	G	C6-N1	7.43	1.44	1.39
57	BB	1497	U	C4-C5	7.43	1.50	1.43
21	AA	72	A	C2'-C1'	-7.43	1.45	1.53
57	BB	176	A	C8-N7	-7.43	1.26	1.31
57	BB	295	G	C4'-C3'	7.43	1.61	1.53
57	BB	1782	U	C4'-O4'	-7.43	1.35	1.45
57	BB	2385	C	N3-C4	7.43	1.39	1.33
57	BB	2858	C	C2'-C1'	-7.43	1.45	1.53
57	BB	715	A	C6-N6	7.43	1.39	1.33
57	BB	1901	A	N9-C4	7.43	1.42	1.37
57	BB	2223	G	N1-C2	7.43	1.43	1.37
21	AA	823	C	N1-C6	7.42	1.41	1.37
21	AA	897	C	O3'-P	-7.42	1.52	1.61
21	AA	1134	G	N9-C4	-7.42	1.32	1.38
57	BB	467	G	N1-C2	7.42	1.43	1.37
57	BB	2798	U	C4'-C3'	7.42	1.61	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	641	U	N3-C4	7.42	1.45	1.38
26	AV	21	A	C6-N6	7.42	1.39	1.33
57	BB	774	G	N9-C8	7.42	1.43	1.37
57	BB	1125	G	P-O5'	-7.42	1.52	1.59
57	BB	1160	G	O3'-P	-7.42	1.52	1.61
57	BB	2085	U	C2-N3	7.42	1.43	1.37
22	AY	8	U	C3'-C2'	-7.42	1.44	1.52
21	AA	1039	G	C2'-C1'	-7.42	1.45	1.53
21	AA	1483	A	C5-C4	7.42	1.44	1.38
21	AA	1529	G	C8-N7	-7.42	1.26	1.30
57	BB	2218	G	C3'-O3'	7.42	1.52	1.42
21	AA	1297	G	C2-N3	7.42	1.38	1.32
26	AV	69	C	P-O5'	-7.42	1.52	1.59
57	BB	669	G	N3-C4	7.42	1.40	1.35
57	BB	933	A	C3'-C2'	-7.42	1.44	1.52
57	BB	2891	U	P-O5'	-7.42	1.52	1.59
57	BB	734	A	N3-C4	-7.42	1.30	1.34
57	BB	2077	A	N3-C4	7.42	1.39	1.34
58	BA	3	C	N3-C4	7.42	1.39	1.33
21	AA	69	G	C5-C4	7.41	1.43	1.38
21	AA	143	A	O3'-P	-7.41	1.52	1.61
21	AA	1352	C	N3-C4	7.41	1.39	1.33
26	AV	46	G	N7-C5	-7.41	1.34	1.39
57	BB	292	U	C2-N3	7.41	1.43	1.37
57	BB	1277	G	N9-C8	-7.41	1.32	1.37
57	BB	1291	C	P-O5'	-7.41	1.52	1.59
57	BB	1323	C	P-O5'	-7.41	1.52	1.59
57	BB	2513	A	N9-C8	7.41	1.43	1.37
57	BB	2753	A	N9-C4	-7.41	1.33	1.37
21	AA	1253	G	N1-C2	7.41	1.43	1.37
57	BB	549	G	N3-C4	7.41	1.40	1.35
57	BB	1484	U	N3-C4	7.41	1.45	1.38
21	AA	237	G	C5-C6	-7.41	1.34	1.42
21	AA	511	C	N1-C6	7.41	1.41	1.37
21	AA	779	C	C4-C5	7.41	1.48	1.43
21	AA	1015	G	N7-C5	-7.41	1.34	1.39
21	AA	1475	G	C5-C6	-7.41	1.34	1.42
21	AA	1516	G	C5-C4	-7.41	1.33	1.38
57	BB	867	C	C2-O2	7.41	1.31	1.24
21	AA	1087	G	C6-N1	7.41	1.44	1.39
57	BB	407	G	N9-C4	7.41	1.43	1.38
57	BB	1153	C	P-O5'	-7.41	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2897	U	O4'-C1'	7.41	1.51	1.41
21	AA	199	A	N7-C5	-7.41	1.34	1.39
57	BB	215	G	C2'-C1'	-7.41	1.45	1.53
57	BB	1780	A	C3'-C2'	7.41	1.61	1.52
57	BB	790	U	N1-C2	7.41	1.45	1.38
57	BB	1157	G	C2'-C1'	-7.41	1.45	1.53
57	BB	1260	A	C6-N6	7.40	1.39	1.33
57	BB	1571	A	C6-N6	7.40	1.39	1.33
21	AA	1215	G	C6-N1	7.40	1.44	1.39
21	AA	1302	C	C3'-O3'	7.40	1.52	1.42
26	AV	20	U	O3'-P	-7.40	1.52	1.61
33	BN	69	ARG	CZ-NH1	7.40	1.42	1.33
57	BB	1857	G	C6-N1	7.40	1.44	1.39
57	BB	2471	A	N9-C4	-7.40	1.33	1.37
57	BB	1660	G	C5-C4	7.40	1.43	1.38
58	BA	30	C	N1-C6	7.40	1.41	1.37
21	AA	151	A	N7-C5	-7.40	1.34	1.39
21	AA	280	C	N1-C2	7.40	1.47	1.40
21	AA	423	G	P-O5'	-7.40	1.52	1.59
21	AA	679	C	C4'-O4'	7.40	1.55	1.45
21	AA	1293	C	N3-C4	7.40	1.39	1.33
57	BB	170	U	C5'-C4'	7.40	1.60	1.51
57	BB	2425	A	C8-N7	-7.40	1.26	1.31
57	BB	2569	G	C6-N1	7.40	1.44	1.39
21	AA	1015	G	N1-C2	7.40	1.43	1.37
21	AA	1139	G	C6-N1	7.40	1.44	1.39
23	AW	73	A	C6-N1	7.40	1.40	1.35
26	AV	46	G	C2'-C1'	-7.40	1.45	1.53
57	BB	1622	G	C2-N3	7.40	1.38	1.32
57	BB	2332	C	C4-C5	7.40	1.48	1.43
21	AA	527	G	N1-C2	7.40	1.43	1.37
21	AA	249	U	C2-N3	7.39	1.43	1.37
22	AY	20	G	N3-C4	7.39	1.40	1.35
22	AY	23	A	C5-C4	7.39	1.44	1.38
26	AV	29	G	N9-C8	7.39	1.43	1.37
57	BB	627	A	N7-C5	-7.39	1.34	1.39
57	BB	1773	A	C6-N1	7.39	1.40	1.35
57	BB	2221	G	N9-C8	7.39	1.43	1.37
21	AA	399	G	P-O5'	-7.39	1.52	1.59
21	AA	500	G	C2-N2	7.39	1.42	1.34
21	AA	734	G	N3-C4	7.39	1.40	1.35
21	AA	765	G	C6-N1	7.39	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1033	G	O3'-P	-7.39	1.52	1.61
57	BB	301	G	N7-C5	-7.39	1.34	1.39
57	BB	774	G	P-O5'	-7.39	1.52	1.59
57	BB	1032	A	N7-C5	-7.39	1.34	1.39
57	BB	350	G	O3'-P	-7.39	1.52	1.61
57	BB	613	A	N3-C4	-7.39	1.30	1.34
57	BB	2550	G	C5-C4	7.39	1.43	1.38
57	BB	2830	C	C2'-C1'	-7.39	1.45	1.53
57	BB	2897	U	C4-C5	7.39	1.50	1.43
21	AA	308	C	N3-C4	7.39	1.39	1.33
21	AA	1247	U	C2'-C1'	-7.39	1.45	1.53
57	BB	95	A	O3'-P	-7.39	1.52	1.61
21	AA	772	U	C4'-C3'	7.39	1.61	1.53
21	AA	1348	U	P-O5'	-7.39	1.52	1.59
21	AA	1488	G	N9-C8	7.39	1.43	1.37
57	BB	1912	A	N9-C4	-7.39	1.33	1.37
57	BB	1936	A	N3-C4	7.39	1.39	1.34
57	BB	1953	A	C2'-C1'	-7.39	1.45	1.53
57	BB	2895	G	C6-N1	7.39	1.44	1.39
58	BA	34	A	C2'-C1'	-7.39	1.45	1.53
21	AA	397	A	C6-N6	7.38	1.39	1.33
21	AA	1449	C	C4-N4	7.38	1.40	1.33
23	AW	64	A	C4'-O4'	7.38	1.55	1.45
26	AV	18	G	N7-C5	-7.38	1.34	1.39
57	BB	1574	C	N3-C4	7.38	1.39	1.33
57	BB	2139	U	N3-C4	7.38	1.45	1.38
57	BB	2284	A	N9-C4	-7.38	1.33	1.37
21	AA	865	A	C2-N3	7.38	1.40	1.33
57	BB	1393	A	C4'-O4'	7.38	1.55	1.45
57	BB	1847	A	N3-C4	-7.38	1.30	1.34
21	AA	34	C	C3'-C2'	-7.38	1.44	1.52
21	AA	42	G	N9-C8	7.38	1.43	1.37
21	AA	831	A	C5'-C4'	7.38	1.60	1.51
23	AW	2	C	N3-C4	7.38	1.39	1.33
23	AW	53	G	C5-C6	-7.38	1.34	1.42
57	BB	2045	C	C4-N4	7.38	1.40	1.33
57	BB	2346	A	N9-C8	7.38	1.43	1.37
57	BB	2388	A	C6-N6	7.38	1.39	1.33
57	BB	2586	U	N1-C6	-7.38	1.31	1.38
21	AA	1118	U	C4-C5	7.38	1.50	1.43
57	BB	1620	G	C6-N1	7.38	1.44	1.39
21	AA	1113	C	C3'-C2'	-7.38	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	26	G	C2'-C1'	-7.38	1.45	1.53
57	BB	2072	C	N3-C4	7.38	1.39	1.33
57	BB	2108	A	C6-N1	-7.38	1.30	1.35
57	BB	2341	G	N7-C5	-7.38	1.34	1.39
57	BB	2610	C	C2-N3	7.38	1.41	1.35
57	BB	252	G	N7-C5	-7.38	1.34	1.39
57	BB	1142	A	C5-C6	-7.38	1.34	1.41
57	BB	1439	A	N7-C5	-7.38	1.34	1.39
21	AA	1428	A	N9-C4	7.37	1.42	1.37
57	BB	879	G	C5'-C4'	7.37	1.60	1.51
57	BB	1011	G	N1-C2	7.37	1.43	1.37
21	AA	429	U	O3'-P	-7.37	1.52	1.61
21	AA	1134	G	N7-C5	-7.37	1.34	1.39
22	AY	5	A	N9-C8	-7.37	1.31	1.37
57	BB	490	C	O3'-P	-7.37	1.52	1.61
57	BB	701	G	C2-N3	7.37	1.38	1.32
57	BB	1987	A	C2-N3	7.37	1.40	1.33
21	AA	229	U	C2'-C1'	-7.37	1.45	1.53
57	BB	821	A	C6-N6	7.37	1.39	1.33
57	BB	1532	A	C6-N1	7.37	1.40	1.35
21	AA	1047	G	C2-N3	7.37	1.38	1.32
57	BB	1177	G	C6-N1	7.37	1.44	1.39
57	BB	1260	A	N3-C4	7.37	1.39	1.34
57	BB	1715	G	C8-N7	7.37	1.35	1.30
57	BB	2374	C	C2-N3	7.37	1.41	1.35
21	AA	651	C	N1-C6	7.37	1.41	1.37
57	BB	591	U	O3'-P	-7.37	1.52	1.61
57	BB	1934	C	C4-N4	7.37	1.40	1.33
57	BB	2077	A	C4'-C3'	-7.37	1.45	1.53
57	BB	2124	G	N1-C2	7.37	1.43	1.37
21	AA	1113	C	N3-C4	7.36	1.39	1.33
21	AA	1335	U	C4'-C3'	7.36	1.61	1.53
26	AV	58	A	C5-C4	7.36	1.44	1.38
57	BB	904	G	P-O5'	-7.36	1.52	1.59
57	BB	1210	G	O3'-P	-7.36	1.52	1.61
57	BB	2093	G	P-O5'	-7.36	1.52	1.59
45	BC	68	ARG	CZ-NH1	7.36	1.42	1.33
21	AA	459	A	C6-N1	7.36	1.40	1.35
21	AA	521	G	C2'-C1'	-7.36	1.45	1.53
21	AA	851	G	O4'-C1'	7.36	1.51	1.41
22	AY	62	A	N7-C5	-7.36	1.34	1.39
57	BB	1193	G	C8-N7	-7.36	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1491	G	C2-N3	7.36	1.38	1.32
57	BB	2173	A	P-O5'	-7.36	1.52	1.59
6	AO	76	ARG	NE-CZ	7.36	1.42	1.33
21	AA	151	A	C6-N1	7.36	1.40	1.35
57	BB	847	U	N3-C4	7.36	1.45	1.38
57	BB	1219	U	C2-N3	7.36	1.43	1.37
1	AJ	101	SER	CA-CB	7.36	1.64	1.52
21	AA	951	G	C5-C4	7.36	1.43	1.38
57	BB	1264	A	N1-C2	7.36	1.41	1.34
57	BB	1293	C	C4-N4	7.36	1.40	1.33
57	BB	1697	G	N1-C2	7.36	1.43	1.37
57	BB	2425	A	C6-N6	7.36	1.39	1.33
57	BB	2814	A	C6-N6	7.36	1.39	1.33
21	AA	306	A	C5-C4	7.36	1.43	1.38
57	BB	1378	A	N3-C4	-7.36	1.30	1.34
57	BB	1514	G	C2-N3	7.36	1.38	1.32
57	BB	1888	G	C8-N7	-7.36	1.26	1.30
57	BB	2618	G	N9-C8	7.36	1.43	1.37
21	AA	834	U	N3-C4	7.35	1.45	1.38
57	BB	2208	C	N1-C6	-7.35	1.32	1.37
57	BB	2787	C	P-O5'	-7.35	1.52	1.59
21	AA	1312	G	N7-C5	7.35	1.43	1.39
23	AW	53	G	N9-C8	7.35	1.43	1.37
26	AV	11	A	O3'-P	-7.35	1.52	1.61
57	BB	1526	C	N3-C4	7.35	1.39	1.33
57	BB	2019	A	P-O5'	-7.35	1.52	1.59
57	BB	2454	G	N3-C4	-7.35	1.30	1.35
21	AA	330	C	P-O5'	-7.35	1.52	1.59
21	AA	391	G	C3'-C2'	7.35	1.61	1.52
57	BB	1149	G	C8-N7	-7.35	1.26	1.30
23	AW	13	C	C4-C5	7.35	1.48	1.43
57	BB	157	C	N3-C4	7.35	1.39	1.33
57	BB	1422	G	N3-C4	-7.35	1.30	1.35
57	BB	2825	G	O3'-P	-7.35	1.52	1.61
21	AA	162	A	C4'-O4'	7.35	1.55	1.45
57	BB	497	A	C6-N1	7.35	1.40	1.35
57	BB	1086	A	C4'-O4'	-7.35	1.36	1.45
57	BB	1345	C	N3-C4	7.35	1.39	1.33
57	BB	1725	U	N3-C4	7.35	1.45	1.38
21	AA	1254	A	C5'-C4'	7.34	1.60	1.51
57	BB	774	G	N3-C4	-7.34	1.30	1.35
57	BB	945	A	C6-N1	7.34	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2518	A	C6-N6	7.34	1.39	1.33
57	BB	2642	G	O3'-P	7.34	1.70	1.61
57	BB	2885	G	C6-N1	7.34	1.44	1.39
57	BB	2899	A	C6-N1	7.34	1.40	1.35
21	AA	39	G	C2-N2	7.34	1.41	1.34
57	BB	2280	G	N1-C2	7.34	1.43	1.37
57	BB	2837	A	C2'-C1'	-7.34	1.45	1.53
21	AA	470	C	C2-N3	7.34	1.41	1.35
21	AA	893	C	C2-N3	7.34	1.41	1.35
21	AA	1106	G	N1-C2	7.34	1.43	1.37
57	BB	274	C	N3-C4	7.34	1.39	1.33
57	BB	959	A	C6-N6	7.34	1.39	1.33
57	BB	983	A	N7-C5	-7.34	1.34	1.39
57	BB	1154	G	C5-C6	-7.34	1.35	1.42
57	BB	1194	A	C6-N6	7.34	1.39	1.33
57	BB	1415	U	N3-C4	7.34	1.45	1.38
57	BB	2742	G	C5'-C4'	7.34	1.60	1.51
57	BB	2769	U	C4'-O4'	-7.34	1.36	1.45
21	AA	171	A	O3'-P	-7.34	1.52	1.61
21	AA	738	C	N1-C6	7.34	1.41	1.37
57	BB	216	A	C6-N6	7.34	1.39	1.33
57	BB	2502	G	C2-N3	7.34	1.38	1.32
57	BB	2853	C	C2'-C1'	-7.34	1.45	1.53
21	AA	303	A	N9-C4	-7.34	1.33	1.37
27	B5	163	TYR	CE2-CZ	7.34	1.48	1.38
57	BB	117	G	C2-N2	7.34	1.41	1.34
57	BB	1322	A	C2'-C1'	-7.34	1.45	1.53
57	BB	2333	A	N3-C4	7.34	1.39	1.34
57	BB	2688	G	C8-N7	-7.34	1.26	1.30
58	BA	114	C	C4-C5	7.34	1.48	1.43
21	AA	738	C	C4-N4	7.34	1.40	1.33
21	AA	1285	A	C4'-C3'	-7.34	1.45	1.53
23	AW	29	G	C3'-C2'	7.34	1.61	1.52
57	BB	227	A	N7-C5	-7.34	1.34	1.39
57	BB	653	U	C4'-C3'	7.34	1.61	1.53
22	AY	10	G	C2'-O2'	7.33	1.51	1.41
57	BB	1363	C	C4-N4	7.33	1.40	1.33
57	BB	1846	G	N3-C4	-7.33	1.30	1.35
21	AA	979	C	C2'-C1'	-7.33	1.45	1.53
57	BB	1468	U	C2-N3	7.33	1.42	1.37
57	BB	1593	A	N9-C8	7.33	1.43	1.37
57	BB	2544	G	N9-C8	-7.33	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	338	A	C6-N1	7.33	1.40	1.35
57	BB	506	G	C5-C6	7.33	1.49	1.42
57	BB	518	G	N1-C2	7.33	1.43	1.37
57	BB	600	G	C8-N7	-7.33	1.26	1.30
57	BB	716	A	N3-C4	-7.33	1.30	1.34
57	BB	1281	G	N1-C2	7.33	1.43	1.37
57	BB	1303	G	N7-C5	-7.33	1.34	1.39
57	BB	1784	A	C5'-C4'	7.33	1.60	1.51
57	BB	2657	A	C8-N7	-7.33	1.26	1.31
21	AA	818	G	N7-C5	-7.33	1.34	1.39
22	AY	19	G	C4'-C3'	7.33	1.61	1.53
57	BB	1982	U	N1-C6	7.33	1.44	1.38
57	BB	2899	A	N9-C4	7.33	1.42	1.37
21	AA	110	C	C5-C6	-7.33	1.28	1.34
21	AA	211	G	C3'-C2'	7.33	1.61	1.52
21	AA	627	G	C5'-C4'	7.33	1.60	1.51
21	AA	641	U	C4'-O4'	-7.33	1.36	1.45
57	BB	2120	G	C8-N7	-7.33	1.26	1.30
57	BB	2309	A	C6-N6	7.33	1.39	1.33
21	AA	464	U	C2'-C1'	-7.33	1.45	1.53
57	BB	132	G	N3-C4	-7.33	1.30	1.35
57	BB	572	A	P-O5'	-7.33	1.52	1.59
57	BB	2563	U	C4'-C3'	-7.33	1.45	1.53
21	AA	318	G	N1-C2	7.33	1.43	1.37
57	BB	227	A	C2'-C1'	-7.33	1.45	1.53
57	BB	367	G	C2-N3	7.33	1.38	1.32
57	BB	375	G	N9-C8	-7.33	1.32	1.37
57	BB	1768	C	N3-C4	7.33	1.39	1.33
21	AA	392	C	C4-C5	-7.32	1.37	1.43
21	AA	1071	C	P-O5'	-7.32	1.52	1.59
22	AY	35	A	P-O5'	7.32	1.67	1.59
57	BB	113	U	P-O5'	-7.32	1.52	1.59
57	BB	416	U	N3-C4	7.32	1.45	1.38
57	BB	601	C	C4-N4	7.32	1.40	1.33
57	BB	655	A	O3'-P	-7.32	1.52	1.61
57	BB	755	U	O3'-P	-7.32	1.52	1.61
57	BB	901	C	C3'-C2'	-7.32	1.44	1.52
57	BB	1656	C	C2'-C1'	-7.32	1.45	1.53
57	BB	2839	G	N9-C4	-7.32	1.32	1.38
21	AA	22	G	C3'-C2'	-7.32	1.44	1.52
21	AA	631	C	N3-C4	7.32	1.39	1.33
21	AA	1419	G	C2'-C1'	-7.32	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2517	C	N1-C6	-7.32	1.32	1.37
21	AA	407	U	N3-C4	7.32	1.45	1.38
21	AA	672	U	N3-C4	7.32	1.45	1.38
57	BB	818	G	C8-N7	-7.32	1.26	1.30
57	BB	833	A	C8-N7	-7.32	1.26	1.31
57	BB	1952	A	C2'-C1'	-7.32	1.45	1.53
21	AA	53	A	C3'-C2'	7.32	1.61	1.52
57	BB	2621	G	C4'-O4'	-7.32	1.36	1.45
21	AA	223	A	C6-N1	7.32	1.40	1.35
21	AA	355	C	N3-C4	7.32	1.39	1.33
57	BB	1087	G	C6-N1	7.32	1.44	1.39
57	BB	1758	U	C4-O4	7.32	1.29	1.23
57	BB	1897	G	N7-C5	7.32	1.43	1.39
58	BA	60	C	C2'-C1'	-7.32	1.45	1.53
21	AA	31	G	C2-N3	7.32	1.38	1.32
21	AA	1136	C	N1-C6	7.32	1.41	1.37
57	BB	1189	A	C8-N7	-7.32	1.26	1.31
57	BB	1206	G	N9-C8	7.32	1.43	1.37
57	BB	1681	G	C2-N3	7.32	1.38	1.32
57	BB	2653	U	P-O5'	-7.32	1.52	1.59
21	AA	1018	G	N1-C2	7.31	1.43	1.37
37	BR	90	ARG	CZ-NH2	7.31	1.42	1.33
57	BB	356	G	N7-C5	-7.31	1.34	1.39
57	BB	2459	A	N7-C5	-7.31	1.34	1.39
21	AA	417	G	C5-C4	-7.31	1.33	1.38
23	AW	69	G	N7-C5	-7.31	1.34	1.39
57	BB	1427	A	C5-C4	7.31	1.43	1.38
21	AA	506	G	C4'-O4'	-7.31	1.36	1.45
57	BB	841	G	N9-C8	7.31	1.43	1.37
21	AA	455	G	N1-C2	7.31	1.43	1.37
21	AA	870	U	C2'-C1'	-7.31	1.45	1.53
23	AW	3	C	C1'-N1	7.31	1.59	1.48
57	BB	340	A	O3'-P	-7.31	1.52	1.61
57	BB	1001	A	N3-C4	-7.31	1.30	1.34
57	BB	1805	A	P-O5'	-7.31	1.52	1.59
57	BB	2272	U	N1-C2	7.31	1.45	1.38
21	AA	930	C	C5'-C4'	7.31	1.60	1.51
57	BB	169	G	C6-N1	7.31	1.44	1.39
57	BB	247	G	N9-C8	7.31	1.43	1.37
57	BB	1718	G	C2-N2	7.31	1.41	1.34
21	AA	327	A	N3-C4	-7.30	1.30	1.34
57	BB	25	U	O3'-P	-7.30	1.52	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	884	U	C2'-C1'	-7.30	1.45	1.53
57	BB	1288	G	N7-C5	-7.30	1.34	1.39
57	BB	1309	G	C4'-O4'	7.30	1.55	1.45
57	BB	2179	C	C4-N4	7.30	1.40	1.33
57	BB	2462	C	N3-C4	7.30	1.39	1.33
57	BB	2298	A	C2'-C1'	7.30	1.61	1.53
26	AV	9	G	N7-C5	-7.30	1.34	1.39
57	BB	276	U	N3-C4	7.30	1.45	1.38
57	BB	496	G	N9-C4	7.30	1.43	1.38
57	BB	919	U	N1-C6	7.30	1.44	1.38
57	BB	1705	A	N3-C4	-7.30	1.30	1.34
57	BB	1850	G	C5-C4	-7.30	1.33	1.38
21	AA	535	A	C6-N6	7.30	1.39	1.33
57	BB	940	G	C6-N1	7.30	1.44	1.39
57	BB	2138	G	P-O5'	-7.30	1.52	1.59
21	AA	371	A	C6-N1	7.30	1.40	1.35
57	BB	360	U	C4'-C3'	7.30	1.61	1.53
21	AA	672	U	C2'-C1'	-7.30	1.45	1.53
21	AA	966	G	C4'-O4'	-7.30	1.36	1.45
22	AY	7	U	C1'-N1	7.30	1.59	1.48
22	AY	22	G	P-O5'	-7.30	1.52	1.59
53	BE	162	ARG	CD-NE	7.30	1.58	1.46
57	BB	893	C	N3-C4	7.30	1.39	1.33
21	AA	678	U	C2-N3	7.29	1.42	1.37
57	BB	1299	G	C6-N1	7.29	1.44	1.39
57	BB	1631	G	C4'-C3'	7.29	1.61	1.53
21	AA	1044	A	C5'-C4'	7.29	1.60	1.51
57	BB	1935	G	N1-C2	7.29	1.43	1.37
21	AA	633	G	C5-C4	7.29	1.43	1.38
21	AA	1055	A	C6-N6	7.29	1.39	1.33
57	BB	221	A	C5-C4	7.29	1.43	1.38
57	BB	518	G	C6-N1	7.29	1.44	1.39
57	BB	2703	C	C4-N4	7.29	1.40	1.33
21	AA	1463	U	C4'-C3'	-7.29	1.45	1.53
57	BB	2418	A	C3'-O3'	7.29	1.52	1.42
21	AA	13	U	C2'-O2'	7.29	1.51	1.41
57	BB	2879	A	N1-C2	7.29	1.41	1.34
57	BB	2065	C	O3'-P	-7.29	1.52	1.61
21	AA	946	A	P-O5'	-7.28	1.52	1.59
22	AY	1	G	C8-N7	7.28	1.35	1.30
57	BB	313	G	C6-N1	7.28	1.44	1.39
21	AA	1128	C	C2-N3	-7.28	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	887	G	C2-N3	7.28	1.38	1.32
21	AA	935	A	C6-N6	7.28	1.39	1.33
21	AA	1074	G	P-O5'	-7.28	1.52	1.59
21	AA	543	U	C4-C5	7.28	1.50	1.43
57	BB	489	G	C6-N1	7.28	1.44	1.39
57	BB	1292	G	N9-C8	7.28	1.43	1.37
57	BB	1677	A	N3-C4	-7.28	1.30	1.34
57	BB	2758	A	N9-C8	-7.28	1.31	1.37
57	BB	2893	A	C6-N6	7.28	1.39	1.33
21	AA	592	G	N9-C8	7.28	1.43	1.37
21	AA	897	C	N1-C6	-7.28	1.32	1.37
57	BB	798	G	N3-C4	-7.28	1.30	1.35
57	BB	1106	G	N9-C8	7.28	1.43	1.37
57	BB	1421	G	P-O5'	-7.28	1.52	1.59
57	BB	1860	G	C2-N2	7.28	1.41	1.34
57	BB	2433	A	C5'-C4'	7.28	1.60	1.51
21	AA	1307	U	C2'-C1'	-7.28	1.45	1.53
57	BB	461	C	C4-N4	7.28	1.40	1.33
57	BB	695	G	C8-N7	7.28	1.35	1.30
32	BM	10	ARG	CZ-NH2	7.27	1.42	1.33
57	BB	1036	G	P-O5'	-7.27	1.52	1.59
57	BB	1523	U	C4'-O4'	7.27	1.55	1.45
57	BB	1884	G	N7-C5	-7.27	1.34	1.39
57	BB	156	A	N3-C4	-7.27	1.30	1.34
57	BB	469	G	C6-N1	7.27	1.44	1.39
58	BA	2	G	P-OP2	7.27	1.61	1.49
57	BB	520	G	P-O5'	-7.27	1.52	1.59
57	BB	822	G	C5-C4	7.27	1.43	1.38
57	BB	1219	U	C4-C5	7.27	1.50	1.43
57	BB	1251	C	C3'-C2'	7.27	1.60	1.52
57	BB	1311	G	C6-N1	7.27	1.44	1.39
57	BB	1811	G	C4'-C3'	7.27	1.61	1.53
57	BB	1841	U	C5-C6	7.27	1.40	1.34
58	BA	24	G	C5-C6	-7.27	1.35	1.42
21	AA	601	G	N9-C4	7.27	1.43	1.38
21	AA	1530	G	C6-N1	7.27	1.44	1.39
23	AW	74	C	N1-C6	7.27	1.41	1.37
57	BB	681	G	C2'-C1'	-7.27	1.45	1.53
57	BB	1408	G	C2-N3	7.27	1.38	1.32
57	BB	1661	G	C6-N1	7.27	1.44	1.39
57	BB	2550	G	N1-C2	7.27	1.43	1.37
57	BB	1971	U	N1-C2	7.27	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2282	G	N7-C5	-7.27	1.34	1.39
57	BB	2824	C	C2-O2	7.27	1.30	1.24
58	BA	117	G	C5-C6	-7.27	1.35	1.42
21	AA	781	A	C5-C4	7.26	1.43	1.38
21	AA	787	A	N9-C4	7.26	1.42	1.37
21	AA	1416	G	N7-C5	-7.26	1.34	1.39
57	BB	10	A	N7-C5	-7.26	1.34	1.39
57	BB	120	U	C3'-O3'	7.26	1.52	1.42
57	BB	153	U	C3'-C2'	-7.26	1.44	1.52
57	BB	622	G	C2-N2	7.26	1.41	1.34
57	BB	875	G	N1-C2	7.26	1.43	1.37
57	BB	2061	G	C5-C6	7.26	1.49	1.42
21	AA	1074	G	N9-C4	-7.26	1.32	1.38
57	BB	636	G	N9-C4	7.26	1.43	1.38
21	AA	656	G	C6-N1	7.26	1.44	1.39
57	BB	136	G	C2'-C1'	7.26	1.61	1.53
57	BB	600	G	C2-N3	7.26	1.38	1.32
21	AA	501	C	C3'-O3'	7.26	1.52	1.42
21	AA	805	C	N3-C4	7.26	1.39	1.33
21	AA	1222	G	C2-N2	7.26	1.41	1.34
22	AY	67	A	O3'-P	-7.26	1.52	1.61
57	BB	938	G	C6-N1	7.26	1.44	1.39
57	BB	1394	U	C2-N3	7.26	1.42	1.37
57	BB	1593	A	C6-N1	7.26	1.40	1.35
57	BB	1610	A	C4'-O4'	-7.26	1.36	1.45
57	BB	2231	U	C2-O2	7.26	1.28	1.22
21	AA	786	G	N1-C2	7.26	1.43	1.37
21	AA	902	G	N7-C5	-7.26	1.34	1.39
21	AA	1036	A	N9-C4	7.26	1.42	1.37
21	AA	1141	C	C5'-C4'	7.26	1.60	1.51
57	BB	1920	C	N1-C6	7.26	1.41	1.37
57	BB	2382	G	C6-N1	7.25	1.44	1.39
22	AY	36	A	C6-N1	7.25	1.40	1.35
21	AA	226	G	N9-C8	7.25	1.43	1.37
21	AA	1248	A	C8-N7	7.25	1.36	1.31
22	AY	17	U	N3-C4	7.25	1.45	1.38
57	BB	906	U	C5'-C4'	7.25	1.60	1.51
57	BB	1220	G	C5-C4	-7.25	1.33	1.38
57	BB	2265	U	C3'-C2'	7.25	1.60	1.52
57	BB	2661	G	C6-N1	7.25	1.44	1.39
57	BB	2772	C	N3-C4	7.25	1.39	1.33
21	AA	536	C	C4-N4	7.25	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	829	G	N3-C4	-7.25	1.30	1.35
21	AA	1174	G	N9-C8	7.25	1.43	1.37
32	BM	16	ARG	CZ-NH1	7.25	1.42	1.33
57	BB	1793	C	C4-N4	7.25	1.40	1.33
57	BB	2153	C	C2-N3	7.25	1.41	1.35
58	BA	27	C	N1-C6	7.25	1.41	1.37
21	AA	1531	A	C6-N6	7.25	1.39	1.33
57	BB	259	G	N3-C4	-7.25	1.30	1.35
21	AA	1043	G	O3'-P	-7.25	1.52	1.61
57	BB	1521	G	C2'-C1'	-7.25	1.45	1.53
57	BB	2011	U	C4'-C3'	7.25	1.61	1.53
57	BB	2319	G	C2-N2	7.25	1.41	1.34
21	AA	212	G	N1-C2	7.24	1.43	1.37
57	BB	238	C	N1-C6	7.24	1.41	1.37
57	BB	776	G	N3-C4	7.24	1.40	1.35
57	BB	1658	C	N3-C4	7.24	1.39	1.33
57	BB	2083	G	N3-C4	-7.24	1.30	1.35
58	BA	75	G	C6-N1	7.24	1.44	1.39
21	AA	867	G	C6-N1	7.24	1.44	1.39
57	BB	1477	A	C5-C4	-7.24	1.33	1.38
57	BB	2779	U	C2-N3	7.24	1.42	1.37
21	AA	524	G	C2-N3	7.24	1.38	1.32
57	BB	277	G	C8-N7	7.24	1.35	1.30
57	BB	1051	G	C5'-C4'	7.24	1.60	1.51
57	BB	1778	U	N3-C4	7.24	1.45	1.38
21	AA	878	A	N7-C5	-7.24	1.34	1.39
23	AW	55	U	N3-C4	7.24	1.45	1.38
57	BB	144	A	N1-C2	7.24	1.40	1.34
57	BB	1517	G	C5-C4	7.24	1.43	1.38
58	BA	51	G	C6-N1	7.24	1.44	1.39
21	AA	1105	A	N9-C8	-7.24	1.31	1.37
21	AA	1504	G	N9-C4	-7.24	1.32	1.38
21	AA	162	A	C5-C4	7.24	1.43	1.38
23	AW	53	G	C5-C4	7.24	1.43	1.38
57	BB	1206	G	N7-C5	-7.24	1.34	1.39
57	BB	1559	U	C2'-C1'	-7.24	1.45	1.53
57	BB	1587	G	C6-N1	-7.24	1.34	1.39
57	BB	1763	G	C4'-O4'	7.24	1.54	1.45
21	AA	366	A	N7-C5	-7.23	1.34	1.39
21	AA	612	C	C4-N4	7.23	1.40	1.33
21	AA	1073	U	C2'-C1'	-7.23	1.45	1.53
57	BB	530	G	N9-C8	7.23	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	711	G	C2-N3	7.23	1.38	1.32
57	BB	1717	A	C6-N6	7.23	1.39	1.33
57	BB	1835	G	C2-N3	7.23	1.38	1.32
21	AA	121	U	N1-C2	7.23	1.45	1.38
21	AA	194	C	C2'-C1'	-7.23	1.45	1.53
21	AA	506	G	C5'-C4'	7.23	1.60	1.51
21	AA	544	G	N1-C2	7.23	1.43	1.37
21	AA	546	A	N7-C5	-7.23	1.34	1.39
21	AA	671	G	N9-C8	7.23	1.43	1.37
22	AY	11	C	C5'-C4'	7.23	1.60	1.51
57	BB	6	A	N7-C5	-7.23	1.34	1.39
57	BB	155	A	C8-N7	7.23	1.36	1.31
57	BB	286	U	N1-C6	-7.23	1.31	1.38
57	BB	1193	G	C6-N1	7.23	1.44	1.39
57	BB	1384	A	O3'-P	-7.23	1.52	1.61
57	BB	1825	U	C2-N3	7.23	1.42	1.37
57	BB	2202	U	C2-N3	7.23	1.42	1.37
58	BA	82	U	C1'-N1	7.23	1.59	1.48
21	AA	68	G	N9-C8	-7.23	1.32	1.37
57	BB	444	C	C3'-O3'	7.23	1.52	1.42
57	BB	2000	C	N3-C4	7.23	1.39	1.33
57	BB	2825	G	N9-C4	7.23	1.43	1.38
21	AA	102	G	N9-C8	7.23	1.43	1.37
21	AA	505	G	O3'-P	-7.23	1.52	1.61
21	AA	1297	G	P-O5'	-7.23	1.52	1.59
22	AY	19	G	C6-N1	7.23	1.44	1.39
58	BA	94	A	N9-C8	-7.23	1.31	1.37
21	AA	9	G	C5-C6	-7.23	1.35	1.42
21	AA	102	G	C3'-C2'	-7.23	1.44	1.52
21	AA	757	U	C2'-C1'	-7.23	1.45	1.53
21	AA	813	U	C3'-C2'	-7.23	1.44	1.52
21	AA	1278	G	C5-C4	-7.23	1.33	1.38
21	AA	1526	G	N7-C5	-7.23	1.34	1.39
26	AV	7	G	C5-C6	-7.23	1.35	1.42
57	BB	648	G	N3-C4	7.23	1.40	1.35
57	BB	1585	C	N3-C4	7.23	1.39	1.33
57	BB	2472	G	N9-C4	7.23	1.43	1.38
58	BA	67	G	N7-C5	-7.23	1.34	1.39
57	BB	1524	G	C8-N7	-7.23	1.26	1.30
57	BB	2109	U	N3-C4	7.23	1.45	1.38
21	AA	984	C	C4-C5	7.22	1.48	1.43
21	AA	1365	G	C2'-C1'	-7.22	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	242	G	N7-C5	-7.22	1.34	1.39
57	BB	570	G	O3'-P	-7.22	1.52	1.61
57	BB	2124	G	C2'-C1'	-7.22	1.45	1.53
57	BB	2526	G	N7-C5	-7.22	1.34	1.39
57	BB	2770	G	N1-C2	7.22	1.43	1.37
57	BB	981	A	C6-N1	7.22	1.40	1.35
57	BB	2038	G	N9-C8	7.22	1.43	1.37
21	AA	155	A	N9-C4	-7.22	1.33	1.37
57	BB	2755	C	C4-C5	7.22	1.48	1.43
21	AA	530	G	C2-N3	7.22	1.38	1.32
21	AA	919	A	C5-C4	7.22	1.43	1.38
21	AA	1320	C	N1-C6	7.22	1.41	1.37
21	AA	347	G	C5-C6	7.22	1.49	1.42
21	AA	779	C	C3'-C2'	-7.22	1.44	1.52
21	AA	946	A	N7-C5	-7.22	1.34	1.39
57	BB	972	A	N7-C5	-7.22	1.34	1.39
57	BB	658	U	C4'-C3'	7.21	1.61	1.53
57	BB	2070	A	C6-N1	7.21	1.40	1.35
57	BB	2385	C	C2-N3	7.21	1.41	1.35
57	BB	1745	A	N9-C4	-7.21	1.33	1.37
21	AA	476	U	N3-C4	7.21	1.45	1.38
21	AA	741	G	C2'-C1'	-7.21	1.45	1.53
21	AA	807	A	C5-C4	-7.21	1.33	1.38
57	BB	195	A	C6-N6	7.21	1.39	1.33
57	BB	362	A	N9-C4	-7.21	1.33	1.37
57	BB	1531	C	O3'-P	-7.21	1.52	1.61
57	BB	1727	C	C2-O2	7.21	1.30	1.24
21	AA	925	G	C6-N1	7.21	1.44	1.39
21	AA	408	A	C5-C4	7.21	1.43	1.38
21	AA	865	A	C2'-C1'	-7.21	1.45	1.53
21	AA	1489	G	C2-N3	-7.21	1.26	1.32
57	BB	1690	A	N3-C4	-7.21	1.30	1.34
57	BB	2284	A	N7-C5	-7.21	1.34	1.39
57	BB	2702	G	O3'-P	-7.21	1.52	1.61
21	AA	27	G	C3'-C2'	-7.21	1.44	1.52
21	AA	537	G	N1-C2	7.21	1.43	1.37
21	AA	1408	A	C2'-C1'	-7.21	1.45	1.53
57	BB	294	A	C6-N1	7.21	1.40	1.35
57	BB	481	G	N9-C4	-7.21	1.32	1.38
57	BB	756	A	C6-N1	7.21	1.40	1.35
57	BB	1627	G	C2-N3	7.21	1.38	1.32
57	BB	2374	C	N3-C4	7.21	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2609	U	C3'-C2'	7.21	1.60	1.52
57	BB	9	G	N1-C2	7.21	1.43	1.37
57	BB	96	C	C4'-C3'	-7.21	1.45	1.53
57	BB	609	A	N7-C5	-7.21	1.34	1.39
21	AA	644	U	C2-N3	7.20	1.42	1.37
21	AA	1418	A	C6-N6	7.20	1.39	1.33
22	AY	9	A	N9-C4	-7.20	1.33	1.37
23	AW	22	G	N7-C5	-7.20	1.34	1.39
57	BB	2452	C	N1-C6	7.20	1.41	1.37
57	BB	2802	G	N3-C4	7.20	1.40	1.35
21	AA	665	A	N9-C8	-7.20	1.31	1.37
57	BB	465	G	C5-C4	7.20	1.43	1.38
57	BB	2441	U	C2-N3	7.20	1.42	1.37
57	BB	1501	G	C2-N3	7.20	1.38	1.32
57	BB	2281	A	C2'-C1'	-7.20	1.45	1.53
57	BB	2630	G	C5'-C4'	7.20	1.59	1.51
21	AA	644	U	P-O5'	-7.20	1.52	1.59
21	AA	677	U	C2-N3	7.20	1.42	1.37
21	AA	845	A	N3-C4	-7.20	1.30	1.34
21	AA	1289	A	C6-N6	7.20	1.39	1.33
57	BB	911	A	C6-N6	7.20	1.39	1.33
57	BB	1214	A	C6-N1	-7.20	1.30	1.35
57	BB	1424	G	C2-N2	7.20	1.41	1.34
57	BB	1746	A	N9-C8	7.20	1.43	1.37
57	BB	2406	A	C6-N6	7.20	1.39	1.33
57	BB	2599	G	O3'-P	-7.20	1.52	1.61
21	AA	504	C	N1-C6	7.20	1.41	1.37
57	BB	725	G	N9-C8	-7.20	1.32	1.37
57	BB	783	A	C5'-C4'	7.20	1.59	1.51
57	BB	2289	G	C2-N2	7.20	1.41	1.34
58	BA	46	A	C6-N1	7.20	1.40	1.35
22	AY	63	C	N3-C4	7.19	1.39	1.33
57	BB	2468	A	N7-C5	-7.19	1.34	1.39
21	AA	1074	G	N7-C5	-7.19	1.34	1.39
58	BA	62	C	C5'-C4'	7.19	1.59	1.51
57	BB	928	A	C2'-C1'	-7.19	1.45	1.53
57	BB	1033	U	C2-N3	7.19	1.42	1.37
21	AA	164	G	C2-N3	7.19	1.38	1.32
57	BB	242	G	N1-C2	7.19	1.43	1.37
57	BB	2349	G	C2-N3	7.19	1.38	1.32
21	AA	837	U	C5'-C4'	7.19	1.59	1.51
23	AW	31	A	C5'-C4'	7.19	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
42	BW	67	LYS	N-CA	-7.19	1.31	1.46
57	BB	874	G	N3-C4	-7.19	1.30	1.35
57	BB	1154	G	O3'-P	-7.19	1.52	1.61
57	BB	1833	C	C5-C6	-7.19	1.28	1.34
57	BB	2417	C	C2-N3	-7.19	1.29	1.35
21	AA	201	G	C2-N3	7.19	1.38	1.32
21	AA	1428	A	N7-C5	-7.19	1.34	1.39
24	AX	15	A	N9-C4	7.19	1.42	1.37
57	BB	610	C	C1'-N1	7.19	1.59	1.48
57	BB	2759	G	N7-C5	-7.19	1.34	1.39
11	AT	73	ARG	CD-NE	7.18	1.58	1.46
26	AV	6	G	O3'-P	-7.18	1.52	1.61
57	BB	779	U	C5'-C4'	7.18	1.59	1.51
57	BB	983	A	C6-N1	7.18	1.40	1.35
57	BB	1306	C	N1-C6	7.18	1.41	1.37
57	BB	2214	C	N1-C6	7.18	1.41	1.37
38	BS	95	ARG	NE-CZ	7.18	1.42	1.33
57	BB	67	U	C2-N3	7.18	1.42	1.37
57	BB	1506	U	N1-C6	7.18	1.44	1.38
21	AA	975	A	C8-N7	7.18	1.36	1.31
57	BB	1601	G	C2-N3	7.18	1.38	1.32
57	BB	1920	C	C4-N4	7.18	1.40	1.33
57	BB	630	G	C2-N3	7.18	1.38	1.32
57	BB	2340	A	C2'-C1'	-7.18	1.45	1.53
21	AA	601	G	C5-C4	-7.18	1.33	1.38
57	BB	662	G	C2-N3	7.18	1.38	1.32
57	BB	730	A	C6-N1	7.18	1.40	1.35
57	BB	1575	C	C2-O2	7.18	1.30	1.24
58	BA	110	C	N3-C4	7.18	1.39	1.33
21	AA	636	U	C4'-O4'	-7.18	1.36	1.45
21	AA	1277	C	N3-C4	7.18	1.39	1.33
57	BB	499	U	C3'-C2'	7.18	1.60	1.52
57	BB	919	U	N1-C2	-7.18	1.32	1.38
57	BB	1047	G	C2-N2	7.18	1.41	1.34
57	BB	2373	G	C4'-C3'	-7.18	1.45	1.53
21	AA	116	A	N9-C4	-7.17	1.33	1.37
21	AA	577	G	C5-C4	-7.17	1.33	1.38
21	AA	592	G	C5'-C4'	7.17	1.59	1.51
57	BB	341	C	P-O5'	-7.17	1.52	1.59
57	BB	429	A	C5-C4	7.17	1.43	1.38
57	BB	1493	C	C2-N3	-7.17	1.30	1.35
57	BB	2067	G	N9-C4	7.17	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	756	C	N1-C6	-7.17	1.32	1.37
21	AA	1255	G	C6-N1	7.17	1.44	1.39
57	BB	201	C	C2'-C1'	-7.17	1.45	1.53
57	BB	1580	A	P-O5'	-7.17	1.52	1.59
57	BB	1919	A	N9-C4	7.17	1.42	1.37
57	BB	2462	C	P-O5'	-7.17	1.52	1.59
21	AA	348	G	N1-C2	7.17	1.43	1.37
21	AA	663	A	N9-C8	7.17	1.43	1.37
21	AA	695	A	N3-C4	-7.17	1.30	1.34
21	AA	776	G	C2-N3	7.17	1.38	1.32
26	AV	31	G	C2-N3	7.17	1.38	1.32
57	BB	386	G	C2-N3	7.17	1.38	1.32
57	BB	831	G	C5'-C4'	7.17	1.59	1.51
21	AA	1122	U	P-O5'	-7.17	1.52	1.59
57	BB	1111	A	C6-N1	7.17	1.40	1.35
57	BB	1115	G	P-O5'	-7.17	1.52	1.59
57	BB	1810	A	N9-C8	7.17	1.43	1.37
21	AA	822	U	N1-C2	7.17	1.45	1.38
21	AA	995	C	P-O5'	-7.17	1.52	1.59
57	BB	94	A	C6-N1	7.17	1.40	1.35
57	BB	798	G	P-O5'	-7.17	1.52	1.59
57	BB	2885	G	C5-C4	-7.17	1.33	1.38
58	BA	48	U	C2-N3	7.17	1.42	1.37
21	AA	1238	A	N9-C4	-7.17	1.33	1.37
57	BB	1175	A	C5-C4	-7.17	1.33	1.38
57	BB	1511	G	C2'-C1'	-7.17	1.45	1.53
21	AA	119	A	N9-C8	-7.16	1.32	1.37
21	AA	471	U	C2'-C1'	-7.16	1.45	1.53
21	AA	1261	A	N7-C5	-7.16	1.34	1.39
57	BB	85	G	N7-C5	-7.16	1.34	1.39
57	BB	1973	G	C5-C4	7.16	1.43	1.38
57	BB	2168	G	N9-C8	7.16	1.42	1.37
57	BB	582	A	C6-N6	7.16	1.39	1.33
57	BB	611	C	C4'-O4'	7.16	1.54	1.45
21	AA	1128	C	N3-C4	7.16	1.39	1.33
57	BB	328	U	N1-C2	-7.16	1.32	1.38
57	BB	332	A	N3-C4	7.16	1.39	1.34
21	AA	1097	C	C4-C5	7.16	1.48	1.43
21	AA	1148	U	C4-C5	7.16	1.50	1.43
30	BK	31	TYR	CE1-CZ	7.16	1.47	1.38
44	BY	52	ARG	CD-NE	7.16	1.58	1.46
57	BB	844	A	C5-C4	7.16	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1046	A	C8-N7	-7.16	1.26	1.31
57	BB	1645	G	C8-N7	7.16	1.35	1.30
57	BB	2312	U	O3'-P	-7.16	1.52	1.61
57	BB	2714	G	N1-C2	7.16	1.43	1.37
57	BB	2846	G	C2-N3	7.16	1.38	1.32
58	BA	117	G	C8-N7	-7.16	1.26	1.30
19	AH	57	GLU	CG-CD	7.16	1.62	1.51
21	AA	536	C	C5-C6	-7.16	1.28	1.34
21	AA	734	G	P-O5'	-7.16	1.52	1.59
21	AA	1473	G	C5'-C4'	7.16	1.59	1.51
21	AA	1528	U	C2-O2	7.16	1.28	1.22
57	BB	359	G	C2'-C1'	-7.16	1.45	1.53
21	AA	756	C	C4-N4	7.15	1.40	1.33
21	AA	1006	G	C6-O6	-7.15	1.17	1.24
57	BB	662	G	N9-C8	7.15	1.42	1.37
57	BB	734	A	O3'-P	-7.15	1.52	1.61
57	BB	1219	U	N1-C6	-7.15	1.31	1.38
57	BB	2898	U	N1-C2	7.15	1.45	1.38
21	AA	396	C	N1-C6	7.15	1.41	1.37
21	AA	524	G	C6-N1	7.15	1.44	1.39
21	AA	780	A	N7-C5	-7.15	1.34	1.39
21	AA	1126	U	C4'-O4'	7.15	1.54	1.45
57	BB	396	G	N9-C4	7.15	1.43	1.38
57	BB	699	A	N7-C5	-7.15	1.34	1.39
57	BB	1022	G	C2-N3	7.15	1.38	1.32
57	BB	1905	C	C2-N3	7.15	1.41	1.35
57	BB	2798	U	C2-N3	7.15	1.42	1.37
21	AA	427	U	N1-C2	7.15	1.45	1.38
21	AA	1066	C	N3-C4	7.15	1.39	1.33
57	BB	260	G	N9-C8	-7.15	1.32	1.37
57	BB	512	G	N7-C5	-7.15	1.34	1.39
57	BB	979	A	O3'-P	-7.15	1.52	1.61
58	BA	45	A	C6-N6	7.15	1.39	1.33
21	AA	464	U	C5'-C4'	7.15	1.59	1.51
26	AV	61	C	C2'-C1'	-7.15	1.45	1.53
57	BB	1309	G	N7-C5	-7.15	1.34	1.39
57	BB	1419	A	C6-N6	7.15	1.39	1.33
57	BB	2294	G	C2'-C1'	-7.15	1.45	1.53
58	BA	106	G	C8-N7	-7.15	1.26	1.30
21	AA	184	G	C2-N3	7.14	1.38	1.32
26	AV	5	G	C2'-C1'	-7.14	1.45	1.53
57	BB	795	C	N1-C6	-7.14	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1002	G	N3-C4	7.14	1.40	1.35
57	BB	1215	G	N9-C8	7.14	1.42	1.37
57	BB	1528	A	N7-C5	-7.14	1.34	1.39
57	BB	1591	A	C2'-C1'	-7.14	1.45	1.53
21	AA	537	G	C6-N1	7.14	1.44	1.39
21	AA	957	U	C3'-O3'	7.14	1.52	1.42
21	AA	1440	U	N1-C6	-7.14	1.31	1.38
57	BB	1721	G	C8-N7	-7.14	1.26	1.30
57	BB	2083	G	C8-N7	7.14	1.35	1.30
57	BB	2337	G	C8-N7	-7.14	1.26	1.30
21	AA	995	C	C5'-C4'	7.14	1.59	1.51
57	BB	308	G	C2-N3	7.14	1.38	1.32
57	BB	849	A	C3'-C2'	7.14	1.60	1.52
57	BB	1420	A	C5-C4	7.14	1.43	1.38
57	BB	1900	A	C2'-C1'	-7.14	1.45	1.53
21	AA	376	G	C2-N3	7.14	1.38	1.32
21	AA	665	A	C5-C4	-7.14	1.33	1.38
57	BB	150	U	O3'-P	-7.14	1.52	1.61
21	AA	439	U	C1'-N1	7.14	1.59	1.48
57	BB	976	G	C2-N2	7.14	1.41	1.34
57	BB	2278	A	N3-C4	7.14	1.39	1.34
57	BB	2725	A	N7-C5	-7.14	1.34	1.39
57	BB	2815	C	N1-C6	-7.14	1.32	1.37
21	AA	1504	G	N1-C2	7.13	1.43	1.37
57	BB	99	U	C4-C5	7.13	1.50	1.43
57	BB	453	A	N9-C8	-7.13	1.32	1.37
57	BB	1617	C	C4-N4	7.13	1.40	1.33
57	BB	1870	C	P-O5'	-7.13	1.52	1.59
58	BA	112	G	N1-C2	7.13	1.43	1.37
21	AA	70	U	C2-N3	7.13	1.42	1.37
57	BB	2271	G	N1-C2	7.13	1.43	1.37
26	AV	48	C	C4'-C3'	7.13	1.60	1.53
57	BB	1008	A	O3'-P	-7.13	1.52	1.61
57	BB	1307	A	N9-C8	7.13	1.43	1.37
57	BB	1374	G	N3-C4	-7.13	1.30	1.35
57	BB	836	G	C2-N3	7.13	1.38	1.32
21	AA	764	C	N1-C6	7.13	1.41	1.37
21	AA	933	G	N9-C8	7.13	1.42	1.37
21	AA	1407	C	N3-C4	7.13	1.39	1.33
57	BB	460	A	N9-C4	7.13	1.42	1.37
57	BB	1193	G	C5-C4	-7.13	1.33	1.38
57	BB	1417	C	C4'-C3'	-7.13	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2603	G	C8-N7	7.13	1.35	1.30
21	AA	587	G	C2-N3	7.13	1.38	1.32
21	AA	1242	G	N7-C5	-7.13	1.34	1.39
22	AY	19	G	N9-C4	7.13	1.43	1.38
57	BB	497	A	N3-C4	-7.13	1.30	1.34
57	BB	538	A	N3-C4	-7.13	1.30	1.34
57	BB	561	G	C4'-C3'	7.13	1.60	1.53
57	BB	1263	U	C2'-C1'	7.13	1.61	1.53
57	BB	1635	A	C5'-C4'	-7.13	1.42	1.51
57	BB	1755	A	N9-C4	7.13	1.42	1.37
57	BB	2270	A	C2'-C1'	-7.13	1.45	1.53
57	BB	2351	G	C8-N7	-7.13	1.26	1.30
57	BB	2627	G	C5-C4	7.13	1.43	1.38
57	BB	438	G	C5'-C4'	7.12	1.59	1.51
57	BB	1155	A	C3'-C2'	7.12	1.60	1.52
57	BB	2735	G	C5-C4	7.12	1.43	1.38
21	AA	1317	C	C2-N3	7.12	1.41	1.35
21	AA	1418	A	N7-C5	-7.12	1.34	1.39
57	BB	315	G	C8-N7	-7.12	1.26	1.30
57	BB	570	G	C6-N1	7.12	1.44	1.39
57	BB	1479	G	C5-C4	7.12	1.43	1.38
57	BB	1538	G	P-O5'	-7.12	1.52	1.59
57	BB	1588	G	C5-C4	7.12	1.43	1.38
21	AA	1165	U	N1-C2	7.12	1.45	1.38
21	AA	1212	U	C4-C5	7.12	1.50	1.43
21	AA	1526	G	C6-N1	7.12	1.44	1.39
57	BB	179	C	N3-C4	7.12	1.39	1.33
57	BB	2741	A	C8-N7	-7.12	1.26	1.31
21	AA	1237	C	P-O5'	-7.12	1.52	1.59
21	AA	1274	A	C5-C4	7.12	1.43	1.38
57	BB	924	G	C8-N7	-7.12	1.26	1.30
21	AA	53	A	C6-N6	7.12	1.39	1.33
21	AA	925	G	C2'-C1'	-7.12	1.45	1.53
21	AA	1088	G	C5-C4	-7.12	1.33	1.38
57	BB	59	U	C2-N3	7.12	1.42	1.37
57	BB	1471	G	N9-C8	-7.12	1.32	1.37
57	BB	1668	A	C4'-C3'	7.12	1.60	1.53
57	BB	1860	G	N3-C4	7.12	1.40	1.35
57	BB	2547	A	N3-C4	7.12	1.39	1.34
57	BB	1314	C	C4-N4	7.12	1.40	1.33
57	BB	1381	G	C2-N2	7.12	1.41	1.34
21	AA	1184	G	C2-N2	7.12	1.41	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1349	A	C2'-C1'	-7.12	1.45	1.53
57	BB	139	U	P-O5'	-7.12	1.52	1.59
57	BB	633	A	N7-C5	-7.12	1.34	1.39
57	BB	1444	G	N1-C2	7.12	1.43	1.37
57	BB	1684	G	C5-C4	7.12	1.43	1.38
57	BB	1950	G	N7-C5	7.12	1.43	1.39
58	BA	85	G	C8-N7	-7.12	1.26	1.30
21	AA	116	A	C6-N1	7.11	1.40	1.35
57	BB	220	G	C6-N1	7.11	1.44	1.39
57	BB	559	G	C5-C4	7.11	1.43	1.38
57	BB	953	G	O3'-P	-7.11	1.52	1.61
57	BB	1936	A	N1-C2	-7.11	1.27	1.34
57	BB	2150	C	C2-N3	7.11	1.41	1.35
57	BB	2259	U	N3-C4	7.11	1.44	1.38
58	BA	17	C	C4-C5	7.11	1.48	1.43
58	BA	118	C	N3-C4	7.11	1.39	1.33
21	AA	273	U	P-O5'	-7.11	1.52	1.59
21	AA	555	U	C2-N3	7.11	1.42	1.37
57	BB	1544	A	N9-C4	-7.11	1.33	1.37
57	BB	2278	A	C5-C4	7.11	1.43	1.38
21	AA	337	G	C2-N3	7.11	1.38	1.32
21	AA	836	G	N3-C4	7.11	1.40	1.35
21	AA	903	G	C4'-O4'	-7.11	1.36	1.45
22	AY	13	C	C5-C6	-7.11	1.28	1.34
57	BB	87	U	C4-C5	7.11	1.50	1.43
57	BB	424	G	N1-C2	7.11	1.43	1.37
57	BB	2596	U	O3'-P	-7.11	1.52	1.61
57	BB	1870	C	C4-N4	7.11	1.40	1.33
57	BB	1873	G	C2-N2	7.11	1.41	1.34
58	BA	81	G	C5'-C4'	7.11	1.59	1.51
21	AA	195	A	C2-N3	7.11	1.40	1.33
21	AA	791	G	N1-C2	7.11	1.43	1.37
21	AA	821	G	N1-C2	7.11	1.43	1.37
21	AA	966	G	C5-C6	-7.11	1.35	1.42
57	BB	697	G	N9-C4	-7.11	1.32	1.38
57	BB	1643	G	C4'-O4'	-7.11	1.36	1.45
21	AA	1211	U	C4'-O4'	-7.11	1.36	1.45
21	AA	1359	C	N1-C6	7.11	1.41	1.37
26	AV	42	G	C2'-C1'	-7.11	1.45	1.53
29	BJ	53	TYR	CE2-CZ	7.11	1.47	1.38
57	BB	455	C	N3-C4	7.11	1.39	1.33
57	BB	1606	C	P-O5'	-7.11	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	724	G	P-O5'	-7.10	1.52	1.59
57	BB	1407	G	C5'-C4'	7.10	1.59	1.51
57	BB	2791	G	N7-C5	-7.10	1.34	1.39
57	BB	2813	A	C6-N6	7.10	1.39	1.33
21	AA	170	U	C4-C5	7.10	1.50	1.43
21	AA	190	A	C5-C4	7.10	1.43	1.38
21	AA	416	G	P-O5'	-7.10	1.52	1.59
21	AA	468	A	C5'-C4'	7.10	1.59	1.51
21	AA	906	A	O3'-P	-7.10	1.52	1.61
22	AY	39	U	C4-O4	-7.10	1.18	1.23
57	BB	2582	G	N7-C5	-7.10	1.34	1.39
57	BB	2809	A	P-O5'	-7.10	1.52	1.59
21	AA	208	U	C1'-N1	7.10	1.59	1.48
21	AA	559	A	N3-C4	-7.10	1.30	1.34
21	AA	1498	U	C5'-C4'	7.10	1.59	1.51
57	BB	604	G	C2-N2	7.10	1.41	1.34
57	BB	1930	G	P-O5'	-7.10	1.52	1.59
57	BB	2119	A	C8-N7	7.10	1.36	1.31
22	AY	50	U	C4'-C3'	-7.10	1.45	1.53
57	BB	1107	G	C8-N7	-7.10	1.26	1.30
57	BB	1601	G	N9-C8	7.10	1.42	1.37
21	AA	1119	C	N3-C4	7.10	1.39	1.33
57	BB	411	G	N9-C4	7.10	1.43	1.38
57	BB	743	A	C2'-C1'	-7.10	1.45	1.53
57	BB	1723	G	C5-C4	7.10	1.43	1.38
57	BB	2719	G	N7-C5	-7.10	1.34	1.39
57	BB	2851	A	N7-C5	-7.10	1.34	1.39
57	BB	931	U	N3-C4	7.10	1.44	1.38
57	BB	1031	G	C6-N1	7.10	1.44	1.39
21	AA	1303	C	N3-C4	7.09	1.39	1.33
21	AA	1505	G	C5-C4	7.09	1.43	1.38
24	AX	22	A	N7-C5	-7.09	1.34	1.39
26	AV	3	C	C5-C6	-7.09	1.28	1.34
57	BB	615	U	O3'-P	-7.09	1.52	1.61
57	BB	768	G	C3'-C2'	-7.09	1.45	1.52
57	BB	943	A	C2-N3	7.09	1.40	1.33
57	BB	1383	A	N9-C8	-7.09	1.32	1.37
57	BB	1517	G	N7-C5	-7.09	1.34	1.39
57	BB	2665	A	C6-N6	7.09	1.39	1.33
57	BB	1116	G	N1-C2	7.09	1.43	1.37
57	BB	1516	G	C6-N1	7.09	1.44	1.39
21	AA	184	G	C8-N7	-7.09	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	744	C	C3'-C2'	-7.09	1.45	1.52
21	AA	874	G	C2-N3	-7.09	1.27	1.32
21	AA	1195	C	C5'-C4'	7.09	1.59	1.51
57	BB	2297	A	C5-C4	7.09	1.43	1.38
57	BB	2323	G	N9-C4	7.09	1.43	1.38
57	BB	2805	C	C2-N3	7.09	1.41	1.35
21	AA	500	G	N3-C4	-7.09	1.30	1.35
21	AA	1518	A	N9-C4	7.09	1.42	1.37
57	BB	1878	G	C6-O6	-7.09	1.17	1.24
57	BB	2543	G	N1-C2	7.09	1.43	1.37
21	AA	1204	A	N9-C4	7.09	1.42	1.37
57	BB	140	C	N3-C4	7.09	1.39	1.33
57	BB	458	G	N7-C5	-7.09	1.34	1.39
57	BB	512	G	N1-C2	7.09	1.43	1.37
57	BB	595	C	C4'-C3'	7.09	1.60	1.53
57	BB	1538	G	N1-C2	7.09	1.43	1.37
57	BB	2367	G	C2'-C1'	-7.09	1.45	1.53
57	BB	2411	A	C6-N1	7.09	1.40	1.35
57	BB	2802	G	N9-C8	7.09	1.42	1.37
21	AA	409	U	C4-C5	7.08	1.50	1.43
57	BB	472	A	N9-C4	-7.08	1.33	1.37
57	BB	1261	C	C2'-C1'	-7.08	1.45	1.53
57	BB	1307	A	N3-C4	-7.08	1.30	1.34
57	BB	2714	G	N7-C5	-7.08	1.34	1.39
22	AY	34	G	N9-C8	7.08	1.42	1.37
57	BB	91	A	N9-C8	-7.08	1.32	1.37
57	BB	1127	A	C6-N6	7.08	1.39	1.33
57	BB	1668	A	N3-C4	-7.08	1.30	1.34
57	BB	2280	G	C2'-C1'	-7.08	1.45	1.53
57	BB	2402	U	P-O5'	-7.08	1.52	1.59
57	BB	2470	G	N7-C5	7.08	1.43	1.39
7	AP	51	ARG	CZ-NH1	7.08	1.42	1.33
21	AA	1064	G	C3'-C2'	7.08	1.60	1.52
21	AA	1164	G	C5-C4	-7.08	1.33	1.38
57	BB	1655	A	N7-C5	-7.08	1.35	1.39
57	BB	1904	G	N3-C4	-7.08	1.30	1.35
57	BB	2279	G	N7-C5	-7.08	1.35	1.39
21	AA	839	C	C5-C6	7.08	1.40	1.34
57	BB	1103	A	C6-N6	7.08	1.39	1.33
57	BB	1794	A	C2'-C1'	-7.08	1.45	1.53
21	AA	141	G	C5-C4	7.08	1.43	1.38
21	AA	815	A	C6-N1	7.08	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	253	C	N3-C4	7.08	1.39	1.33
57	BB	532	A	N7-C5	-7.08	1.35	1.39
57	BB	1433	A	P-O5'	-7.08	1.52	1.59
57	BB	1935	G	N7-C5	-7.08	1.35	1.39
58	BA	2	G	N1-C2	7.08	1.43	1.37
1	AJ	45	ARG	CZ-NH2	7.08	1.42	1.33
23	AW	23	A	C4'-C3'	7.08	1.60	1.53
21	AA	668	G	N3-C4	7.08	1.40	1.35
21	AA	1215	G	N7-C5	-7.08	1.35	1.39
26	AV	72	A	C2'-C1'	-7.08	1.45	1.53
57	BB	177	G	C5-C4	7.08	1.43	1.38
57	BB	2733	A	P-O5'	-7.08	1.52	1.59
21	AA	442	G	C8-N7	7.07	1.35	1.30
21	AA	461	A	N3-C4	-7.07	1.30	1.34
21	AA	672	U	C1'-N1	7.07	1.59	1.48
21	AA	724	G	N1-C2	7.07	1.43	1.37
57	BB	37	C	C4-N4	7.07	1.40	1.33
57	BB	1456	G	C8-N7	-7.07	1.26	1.30
57	BB	1730	C	P-O5'	-7.07	1.52	1.59
57	BB	2063	C	C4-N4	7.07	1.40	1.33
58	BA	70	C	C2-O2	7.07	1.30	1.24
58	BA	90	C	N3-C4	7.07	1.39	1.33
21	AA	495	A	O3'-P	-7.07	1.52	1.61
21	AA	790	A	C8-N7	-7.07	1.26	1.31
21	AA	1488	G	C4'-C3'	7.07	1.60	1.53
33	BN	30	ARG	NE-CZ	7.07	1.42	1.33
57	BB	1350	C	N3-C4	7.07	1.38	1.33
21	AA	682	G	N3-C4	-7.07	1.30	1.35
21	AA	1198	G	N7-C5	-7.07	1.35	1.39
57	BB	1486	U	P-O5'	-7.07	1.52	1.59
57	BB	1773	A	N9-C8	-7.07	1.32	1.37
57	BB	2209	G	C6-N1	7.07	1.44	1.39
57	BB	2689	U	C4'-C3'	7.07	1.60	1.53
57	BB	2741	A	N3-C4	-7.07	1.30	1.34
21	AA	12	U	C4'-O4'	7.07	1.54	1.45
57	BB	1217	U	C2-N3	7.07	1.42	1.37
58	BA	48	U	C4-C5	-7.07	1.37	1.43
21	AA	110	C	C5'-C4'	7.06	1.59	1.51
57	BB	351	C	C3'-C2'	-7.06	1.45	1.52
57	BB	915	C	N1-C2	7.06	1.47	1.40
57	BB	1829	A	N9-C8	-7.06	1.32	1.37
57	BB	1912	A	C3'-C2'	7.06	1.60	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2869	G	C3'-C2'	-7.06	1.45	1.52
21	AA	839	C	N1-C6	7.06	1.41	1.37
21	AA	1123	U	N1-C2	7.06	1.45	1.38
22	AY	56	C	C4-N4	7.06	1.40	1.33
57	BB	903	C	C2'-C1'	-7.06	1.45	1.53
57	BB	1071	G	N1-C2	7.06	1.43	1.37
57	BB	1173	U	N1-C2	7.06	1.45	1.38
57	BB	2153	C	C4-C5	-7.06	1.37	1.43
21	AA	158	G	O3'-P	-7.06	1.52	1.61
21	AA	442	G	P-O5'	-7.06	1.52	1.59
55	BG	162	ARG	NE-CZ	7.06	1.42	1.33
57	BB	878	A	C8-N7	7.06	1.36	1.31
57	BB	974	G	C2-N2	7.06	1.41	1.34
57	BB	2698	U	C4'-O4'	7.06	1.54	1.45
3	AL	98	ARG	CZ-NH2	7.06	1.42	1.33
21	AA	259	G	C2'-C1'	-7.06	1.45	1.53
22	AY	35	A	C6-N1	7.06	1.40	1.35
57	BB	84	A	N9-C4	7.06	1.42	1.37
57	BB	193	U	C4'-C3'	-7.06	1.45	1.53
57	BB	641	U	N1-C6	7.06	1.44	1.38
57	BB	1081	U	C4-C5	7.06	1.50	1.43
58	BA	77	U	P-O5'	7.06	1.66	1.59
57	BB	2569	G	N7-C5	7.06	1.43	1.39
21	AA	320	A	N7-C5	-7.05	1.35	1.39
21	AA	380	G	P-O5'	-7.05	1.52	1.59
21	AA	858	G	C8-N7	7.05	1.35	1.30
21	AA	1268	G	C6-N1	7.05	1.44	1.39
21	AA	1302	C	C5-C6	-7.05	1.28	1.34
23	AW	15	G	C2-N3	7.05	1.38	1.32
57	BB	1839	G	N1-C2	7.05	1.43	1.37
57	BB	2292	U	C4'-C3'	7.05	1.60	1.53
57	BB	2381	A	N3-C4	-7.05	1.30	1.34
57	BB	2442	C	C4-C5	-7.05	1.37	1.43
19	AH	79	ARG	C-N	-7.05	1.20	1.34
21	AA	981	U	N1-C2	7.05	1.44	1.38
21	AA	1488	G	C6-N1	7.05	1.44	1.39
57	BB	420	C	N3-C4	7.05	1.38	1.33
57	BB	827	U	C2-N3	7.05	1.42	1.37
57	BB	1360	G	N3-C4	-7.05	1.30	1.35
57	BB	1366	A	N7-C5	-7.05	1.35	1.39
57	BB	2453	A	P-O5'	7.05	1.66	1.59
21	AA	886	G	C6-N1	7.05	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	822	G	O3'-P	-7.05	1.52	1.61
57	BB	1119	U	N1-C2	7.05	1.44	1.38
57	BB	1121	C	N1-C6	7.05	1.41	1.37
21	AA	454	G	C2-N3	-7.05	1.27	1.32
21	AA	1425	U	P-O5'	-7.05	1.52	1.59
57	BB	352	A	N1-C2	7.05	1.40	1.34
57	BB	1160	G	C2'-C1'	-7.05	1.45	1.53
57	BB	2033	A	C6-N6	7.05	1.39	1.33
57	BB	2635	A	P-O5'	-7.05	1.52	1.59
21	AA	363	A	C2'-C1'	-7.05	1.45	1.53
21	AA	1099	G	C8-N7	-7.05	1.26	1.30
57	BB	664	G	O4'-C1'	-7.05	1.32	1.41
57	BB	1583	A	O3'-P	-7.05	1.52	1.61
58	BA	21	G	C3'-C2'	-7.05	1.45	1.52
21	AA	1143	G	N9-C4	-7.04	1.32	1.38
57	BB	2059	A	N9-C4	7.04	1.42	1.37
21	AA	1064	G	N3-C4	-7.04	1.30	1.35
21	AA	1083	U	N3-C4	7.04	1.44	1.38
21	AA	1484	C	O4'-C1'	-7.04	1.32	1.41
52	BD	128	ARG	CZ-NH1	7.04	1.42	1.33
57	BB	798	G	O3'-P	-7.04	1.52	1.61
57	BB	1945	G	N9-C4	7.04	1.43	1.38
57	BB	2639	A	N7-C5	-7.04	1.35	1.39
21	AA	1073	U	N3-C4	7.04	1.44	1.38
57	BB	673	C	C2-N3	7.04	1.41	1.35
57	BB	1958	C	N3-C4	7.04	1.38	1.33
57	BB	1981	A	P-O5'	-7.04	1.52	1.59
57	BB	2145	C	O3'-P	-7.04	1.52	1.61
21	AA	1111	A	N3-C4	-7.04	1.30	1.34
10	AS	80	ARG	CD-NE	7.04	1.58	1.46
21	AA	559	A	C2'-C1'	-7.04	1.45	1.53
21	AA	772	U	C2-N3	-7.04	1.32	1.37
21	AA	901	A	N3-C4	-7.04	1.30	1.34
57	BB	10	A	N9-C4	-7.04	1.33	1.37
57	BB	1106	G	N1-C2	7.04	1.43	1.37
57	BB	1646	C	N3-C4	7.04	1.38	1.33
57	BB	1671	U	O3'-P	-7.04	1.52	1.61
57	BB	1864	U	P-O5'	-7.04	1.52	1.59
57	BB	2090	A	C4'-C3'	7.04	1.60	1.53
58	BA	95	U	C5'-C4'	7.04	1.59	1.51
21	AA	978	A	C8-N7	-7.04	1.26	1.31
21	AA	1276	G	N1-C2	7.04	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AM	85	TYR	CE1-CZ	7.04	1.47	1.38
21	AA	105	G	N7-C5	-7.04	1.35	1.39
21	AA	844	G	C8-N7	7.04	1.35	1.30
21	AA	1428	A	C6-N1	7.04	1.40	1.35
23	AW	50	U	P-O5'	-7.04	1.52	1.59
57	BB	732	C	C4-N4	7.04	1.40	1.33
57	BB	2164	C	C4-N4	7.04	1.40	1.33
57	BB	2405	G	C6-N1	7.04	1.44	1.39
57	BB	2470	G	N9-C8	7.04	1.42	1.37
21	AA	1137	C	N1-C6	7.03	1.41	1.37
21	AA	1146	A	C2-N3	-7.03	1.27	1.33
57	BB	116	C	C2-N3	-7.03	1.30	1.35
57	BB	429	A	N7-C5	-7.03	1.35	1.39
57	BB	733	G	C4'-C3'	-7.03	1.45	1.53
57	BB	1098	A	C2'-C1'	-7.03	1.45	1.53
57	BB	1187	G	C5'-C4'	7.03	1.59	1.51
57	BB	1943	U	C5'-C4'	7.03	1.59	1.51
57	BB	2823	A	N7-C5	-7.03	1.35	1.39
57	BB	2237	G	C6-N1	7.03	1.44	1.39
21	AA	52	C	C2'-C1'	-7.03	1.45	1.53
21	AA	568	G	C2-N3	7.03	1.38	1.32
57	BB	261	G	N1-C2	7.03	1.43	1.37
57	BB	976	G	N7-C5	-7.03	1.35	1.39
57	BB	2179	C	C4-C5	7.03	1.48	1.43
57	BB	2517	C	C4-C5	7.03	1.48	1.43
21	AA	773	G	C4'-C3'	7.03	1.60	1.53
57	BB	294	A	C4'-C3'	-7.03	1.45	1.53
57	BB	390	U	C2-N3	7.03	1.42	1.37
57	BB	833	A	N3-C4	7.03	1.39	1.34
57	BB	1472	C	N3-C4	7.03	1.38	1.33
57	BB	1509	A	N9-C4	7.03	1.42	1.37
57	BB	2301	C	N1-C6	-7.03	1.32	1.37
57	BB	2315	G	C6-N1	7.03	1.44	1.39
57	BB	470	A	C6-N1	7.02	1.40	1.35
57	BB	926	G	P-O5'	-7.02	1.52	1.59
57	BB	1759	A	C4'-O4'	7.02	1.54	1.45
57	BB	2068	U	N3-C4	7.02	1.44	1.38
57	BB	2722	G	C4'-C3'	7.02	1.60	1.53
21	AA	661	G	C6-N1	7.02	1.44	1.39
21	AA	972	C	C2'-C1'	-7.02	1.45	1.53
21	AA	1319	A	C6-N6	7.02	1.39	1.33
57	BB	432	A	N3-C4	-7.02	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	639	U	P-O5'	-7.02	1.52	1.59
57	BB	1050	A	C6-N6	7.02	1.39	1.33
57	BB	2101	A	C5'-C4'	7.02	1.59	1.51
57	BB	2806	C	C4-N4	7.02	1.40	1.33
57	BB	1400	U	C2-N3	7.02	1.42	1.37
57	BB	911	A	N3-C4	-7.02	1.30	1.34
57	BB	1016	G	N7-C5	-7.02	1.35	1.39
21	AA	558	G	C6-N1	7.02	1.44	1.39
21	AA	1401	G	N7-C5	-7.02	1.35	1.39
57	BB	210	C	C4-N4	7.02	1.40	1.33
57	BB	862	G	C2'-C1'	-7.02	1.45	1.53
57	BB	1319	C	P-O5'	-7.02	1.52	1.59
57	BB	2421	G	C2-N3	7.02	1.38	1.32
21	AA	222	C	N1-C6	7.02	1.41	1.37
21	AA	1172	C	O3'-P	-7.02	1.52	1.61
21	AA	1410	A	C5-C4	7.02	1.43	1.38
21	AA	1436	U	P-O5'	-7.02	1.52	1.59
57	BB	661	A	N9-C4	-7.02	1.33	1.37
21	AA	747	A	C6-N1	7.01	1.40	1.35
21	AA	1313	U	C4'-C3'	7.01	1.60	1.53
21	AA	1493	A	C1'-N9	-7.01	1.37	1.46
57	BB	93	G	N7-C5	7.01	1.43	1.39
57	BB	748	G	C2-N3	7.01	1.38	1.32
57	BB	2586	U	N1-C2	7.01	1.44	1.38
57	BB	2831	G	N1-C2	7.01	1.43	1.37
58	BA	69	G	C5-C4	7.01	1.43	1.38
21	AA	791	G	C2-N2	7.01	1.41	1.34
21	AA	1001	C	C4-C5	7.01	1.48	1.43
57	BB	2747	G	C8-N7	7.01	1.35	1.30
21	AA	96	U	O3'-P	-7.01	1.52	1.61
21	AA	366	A	C8-N7	-7.01	1.26	1.31
21	AA	1180	A	N9-C4	7.01	1.42	1.37
57	BB	2888	C	C2'-C1'	-7.01	1.45	1.53
57	BB	188	G	C6-N1	7.01	1.44	1.39
57	BB	1445	G	C1'-N9	7.01	1.59	1.48
57	BB	2319	G	P-O5'	-7.01	1.52	1.59
21	AA	1221	G	N9-C8	7.01	1.42	1.37
57	BB	1061	U	C4'-O4'	-7.01	1.36	1.45
21	AA	548	G	O3'-P	-7.01	1.52	1.61
21	AA	1198	G	C2-N3	7.01	1.38	1.32
57	BB	477	A	N9-C8	7.01	1.43	1.37
57	BB	542	C	C4'-C3'	7.01	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1187	G	N9-C4	-7.01	1.32	1.38
57	BB	1268	A	O3'-P	-7.01	1.52	1.61
57	BB	2833	U	N3-C4	7.01	1.44	1.38
57	BB	1213	A	O3'-P	-7.00	1.52	1.61
57	BB	1761	C	C5-C6	-7.00	1.28	1.34
21	AA	919	A	C2'-C1'	-7.00	1.45	1.53
21	AA	1266	G	C6-N1	7.00	1.44	1.39
21	AA	1454	G	C3'-C2'	-7.00	1.45	1.52
57	BB	1254	A	N3-C4	-7.00	1.30	1.34
57	BB	1277	G	N1-C2	7.00	1.43	1.37
57	BB	1500	G	N9-C8	7.00	1.42	1.37
57	BB	1990	C	N1-C6	-7.00	1.32	1.37
57	BB	2161	C	N3-C4	7.00	1.38	1.33
57	BB	2404	U	C2-N3	7.00	1.42	1.37
58	BA	6	G	C2-N2	7.00	1.41	1.34
21	AA	50	A	N7-C5	-7.00	1.35	1.39
21	AA	402	G	O3'-P	7.00	1.69	1.61
21	AA	848	C	C5-C6	7.00	1.40	1.34
22	AY	74	C	N3-C4	7.00	1.38	1.33
34	BO	7	ARG	CD-NE	7.00	1.58	1.46
57	BB	553	G	C6-N1	7.00	1.44	1.39
57	BB	1393	A	N7-C5	-7.00	1.35	1.39
57	BB	1482	G	C2-N2	7.00	1.41	1.34
57	BB	2503	A	N7-C5	-7.00	1.35	1.39
21	AA	471	U	N3-C4	7.00	1.44	1.38
57	BB	681	G	N9-C8	7.00	1.42	1.37
57	BB	428	A	C4'-C3'	7.00	1.60	1.53
57	BB	1329	U	N3-C4	7.00	1.44	1.38
57	BB	1346	G	C2-N2	7.00	1.41	1.34
57	BB	1350	C	C2'-C1'	-7.00	1.45	1.53
57	BB	1379	U	P-O5'	-7.00	1.52	1.59
57	BB	2458	G	N7-C5	-7.00	1.35	1.39
21	AA	383	A	N3-C4	-7.00	1.30	1.34
57	BB	1051	G	N3-C4	-7.00	1.30	1.35
57	BB	2419	U	O3'-P	-7.00	1.52	1.61
57	BB	2670	A	N3-C4	-7.00	1.30	1.34
23	AW	53	G	N3-C4	-7.00	1.30	1.35
57	BB	13	A	N3-C4	-7.00	1.30	1.34
57	BB	870	U	C2-N3	7.00	1.42	1.37
58	BA	38	C	P-O5'	-7.00	1.52	1.59
21	AA	126	G	N7-C5	-6.99	1.35	1.39
57	BB	530	G	C2-N3	6.99	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	843	G	P-O5'	-6.99	1.52	1.59
57	BB	921	C	C3'-C2'	-6.99	1.45	1.52
57	BB	1332	G	C2'-C1'	-6.99	1.45	1.53
57	BB	1674	G	N7-C5	-6.99	1.35	1.39
57	BB	1805	A	C8-N7	6.99	1.36	1.31
57	BB	2100	G	N9-C8	6.99	1.42	1.37
21	AA	1102	A	N7-C5	-6.99	1.35	1.39
23	AW	33	U	N1-C2	6.99	1.44	1.38
57	BB	1185	G	C2-N3	6.99	1.38	1.32
21	AA	487	A	N7-C5	-6.99	1.35	1.39
22	AY	73	A	N9-C8	6.99	1.43	1.37
57	BB	268	C	C4-N4	-6.99	1.27	1.33
57	BB	1517	G	C4'-C3'	-6.99	1.45	1.53
57	BB	1845	G	C2'-C1'	-6.99	1.45	1.53
58	BA	52	A	N1-C2	6.99	1.40	1.34
2	AK	121	ARG	CZ-NH2	6.99	1.42	1.33
57	BB	875	G	N7-C5	6.99	1.43	1.39
57	BB	1209	U	C2-O2	6.99	1.28	1.22
57	BB	1566	A	C6-N1	6.99	1.40	1.35
57	BB	2364	C	C5'-C4'	6.99	1.59	1.51
57	BB	2820	A	C5-C4	-6.99	1.33	1.38
21	AA	1082	A	N3-C4	-6.99	1.30	1.34
21	AA	1368	A	N7-C5	-6.99	1.35	1.39
57	BB	28	A	C5'-C4'	6.99	1.59	1.51
57	BB	91	A	N3-C4	-6.99	1.30	1.34
57	BB	570	G	C2'-C1'	-6.99	1.45	1.53
57	BB	1044	C	C2-O2	6.99	1.30	1.24
57	BB	2857	G	C2'-C1'	-6.99	1.45	1.53
21	AA	268	U	O4'-C1'	6.98	1.50	1.41
21	AA	760	G	P-O5'	6.98	1.66	1.59
57	BB	185	G	C2'-C1'	-6.98	1.45	1.53
57	BB	1996	C	C4-N4	6.98	1.40	1.33
57	BB	2382	G	N1-C2	6.98	1.43	1.37
21	AA	480	U	C3'-O3'	6.98	1.51	1.42
21	AA	1409	C	N3-C4	6.98	1.38	1.33
57	BB	403	U	P-O5'	-6.98	1.52	1.59
57	BB	617	G	C6-N1	6.98	1.44	1.39
21	AA	454	G	N9-C8	6.98	1.42	1.37
21	AA	670	G	C8-N7	-6.98	1.26	1.30
21	AA	1360	A	C2'-C1'	-6.98	1.45	1.53
57	BB	470	A	C5-C4	6.98	1.43	1.38
57	BB	917	A	N9-C4	-6.98	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1400	U	C4-C5	6.98	1.49	1.43
21	AA	1339	A	N7-C5	-6.98	1.35	1.39
57	BB	1037	G	N9-C8	6.98	1.42	1.37
57	BB	1334	G	C4'-O4'	6.98	1.54	1.45
21	AA	295	C	C4'-C3'	6.98	1.60	1.53
21	AA	1460	C	N3-C4	6.98	1.38	1.33
57	BB	847	U	P-O5'	6.98	1.66	1.59
57	BB	1098	A	N7-C5	-6.98	1.35	1.39
57	BB	1303	G	C3'-C2'	-6.98	1.45	1.52
57	BB	1423	G	C2-N3	6.98	1.38	1.32
57	BB	1575	C	C2-N3	6.98	1.41	1.35
57	BB	1826	G	C2'-C1'	-6.98	1.45	1.53
57	BB	2732	G	N1-C2	6.98	1.43	1.37
21	AA	91	U	C2-N3	6.98	1.42	1.37
22	AY	53	G	C8-N7	6.98	1.35	1.30
57	BB	133	U	N3-C4	6.98	1.44	1.38
57	BB	477	A	C8-N7	-6.98	1.26	1.31
57	BB	1661	G	C8-N7	-6.98	1.26	1.30
57	BB	1906	G	C8-N7	6.98	1.35	1.30
57	BB	2383	G	C6-O6	-6.98	1.17	1.24
21	AA	622	A	N3-C4	-6.97	1.30	1.34
21	AA	1212	U	C2-N3	6.97	1.42	1.37
57	BB	707	G	C6-N1	6.97	1.44	1.39
57	BB	1001	A	N9-C4	6.97	1.42	1.37
57	BB	1173	U	P-O5'	-6.97	1.52	1.59
57	BB	1589	U	C2'-C1'	-6.97	1.45	1.53
57	BB	2468	A	P-O5'	-6.97	1.52	1.59
57	BB	2588	G	C5'-C4'	6.97	1.59	1.51
21	AA	202	G	N9-C8	6.97	1.42	1.37
21	AA	346	G	C5'-C4'	6.97	1.59	1.51
21	AA	573	A	C5-C4	6.97	1.43	1.38
21	AA	955	U	C2'-C1'	-6.97	1.45	1.53
23	AW	34	G	C8-N7	6.97	1.35	1.30
57	BB	222	A	C4'-C3'	6.97	1.60	1.53
57	BB	1161	C	C4-N4	6.97	1.40	1.33
58	BA	56	G	C6-N1	6.97	1.44	1.39
21	AA	1195	C	N3-C4	6.97	1.38	1.33
57	BB	120	U	O4'-C1'	6.97	1.50	1.41
57	BB	2897	U	P-O5'	-6.97	1.52	1.59
21	AA	874	G	N1-C2	6.97	1.43	1.37
57	BB	967	U	C5-C6	6.97	1.40	1.34
57	BB	1052	C	C4-N4	6.97	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2059	A	C6-N6	6.97	1.39	1.33
57	BB	2482	A	N3-C4	-6.97	1.30	1.34
21	AA	1061	G	C5-C6	-6.97	1.35	1.42
57	BB	1221	C	C2-N3	6.97	1.41	1.35
57	BB	2053	G	N9-C4	6.97	1.43	1.38
26	AV	11	A	C6-N1	6.97	1.40	1.35
57	BB	637	A	C6-N6	6.97	1.39	1.33
57	BB	949	G	C5-C4	6.97	1.43	1.38
57	BB	1944	U	C5'-C4'	6.97	1.59	1.51
57	BB	2508	G	N3-C4	-6.97	1.30	1.35
58	BA	44	G	C2-N2	6.97	1.41	1.34
23	AW	27	G	C2'-C1'	-6.96	1.45	1.53
26	AV	75	C	N1-C2	-6.96	1.33	1.40
57	BB	18	U	N3-C4	6.96	1.44	1.38
57	BB	514	A	C6-N1	-6.96	1.30	1.35
57	BB	2119	A	C6-N6	6.96	1.39	1.33
57	BB	2425	A	N7-C5	-6.96	1.35	1.39
57	BB	2466	C	N3-C4	6.96	1.38	1.33
21	AA	28	A	P-O5'	-6.96	1.52	1.59
21	AA	230	G	C2'-C1'	-6.96	1.45	1.53
21	AA	453	G	C2-N2	6.96	1.41	1.34
21	AA	1215	G	N9-C4	6.96	1.43	1.38
21	AA	1428	A	C8-N7	-6.96	1.26	1.31
55	BG	68	ARG	CZ-NH2	6.96	1.42	1.33
57	BB	424	G	N7-C5	-6.96	1.35	1.39
57	BB	659	G	C6-N1	-6.96	1.34	1.39
57	BB	828	U	O3'-P	-6.96	1.52	1.61
57	BB	923	G	C6-N1	-6.96	1.34	1.39
58	BA	4	C	C2-N3	6.96	1.41	1.35
58	BA	105	G	C8-N7	-6.96	1.26	1.30
21	AA	74	A	N9-C4	6.96	1.42	1.37
57	BB	32	C	C2-N3	6.96	1.41	1.35
57	BB	1275	A	C2-N3	-6.96	1.27	1.33
57	BB	2162	G	C5'-C4'	6.96	1.59	1.51
57	BB	2392	A	C5'-C4'	6.96	1.59	1.51
21	AA	1068	G	C6-O6	-6.96	1.17	1.24
57	BB	546	U	C3'-C2'	-6.96	1.45	1.52
57	BB	2198	A	C5-C4	6.96	1.43	1.38
57	BB	2278	A	C6-N1	6.96	1.40	1.35
21	AA	331	G	P-O5'	-6.96	1.52	1.59
21	AA	1063	C	N3-C4	6.96	1.38	1.33
57	BB	156	A	P-O5'	-6.96	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	788	A	N7-C5	-6.96	1.35	1.39
57	BB	838	C	P-O5'	-6.96	1.52	1.59
57	BB	853	C	N1-C6	-6.96	1.32	1.37
57	BB	1184	U	C4'-O4'	6.96	1.54	1.45
57	BB	2136	G	N1-C2	6.96	1.43	1.37
57	BB	2759	G	O3'-P	-6.96	1.52	1.61
21	AA	21	G	N1-C2	6.95	1.43	1.37
21	AA	362	G	C6-N1	6.95	1.44	1.39
21	AA	401	C	N1-C6	6.95	1.41	1.37
23	AW	69	G	C2-N3	6.95	1.38	1.32
57	BB	941	A	C6-N6	6.95	1.39	1.33
21	AA	162	A	N1-C2	6.95	1.40	1.34
21	AA	1306	A	P-O5'	-6.95	1.52	1.59
57	BB	178	G	C2-N3	6.95	1.38	1.32
57	BB	1526	C	P-O5'	-6.95	1.52	1.59
57	BB	1710	G	N1-C2	6.95	1.43	1.37
57	BB	2671	G	C5'-C4'	6.95	1.59	1.51
57	BB	2682	A	C2'-C1'	-6.95	1.45	1.53
57	BB	2700	A	C5'-C4'	6.95	1.59	1.51
21	AA	969	A	N3-C4	6.95	1.39	1.34
21	AA	1216	A	C6-N6	6.95	1.39	1.33
21	AA	1504	G	C8-N7	6.95	1.35	1.30
22	AY	36	A	N9-C4	6.95	1.42	1.37
57	BB	165	A	C6-N6	6.95	1.39	1.33
57	BB	804	A	C8-N7	-6.95	1.26	1.31
23	AW	12	U	C3'-C2'	-6.95	1.45	1.52
57	BB	1838	C	C5'-C4'	6.95	1.59	1.51
57	BB	2502	G	N7-C5	-6.95	1.35	1.39
21	AA	408	A	C6-N6	6.95	1.39	1.33
57	BB	360	U	C3'-C2'	6.95	1.60	1.52
57	BB	996	A	N7-C5	6.95	1.43	1.39
57	BB	1275	A	C8-N7	-6.95	1.26	1.31
57	BB	1945	G	C3'-C2'	-6.95	1.45	1.52
22	AY	62	A	C6-N1	6.94	1.40	1.35
57	BB	415	A	N9-C4	6.94	1.42	1.37
57	BB	1125	G	C2-N3	6.94	1.38	1.32
21	AA	763	G	C2-N3	6.94	1.38	1.32
21	AA	1417	G	N9-C4	6.94	1.43	1.38
21	AA	283	U	N1-C2	-6.94	1.32	1.38
21	AA	725	G	O3'-P	-6.94	1.52	1.61
21	AA	1297	G	C5-C4	6.94	1.43	1.38
21	AA	1310	G	C2-N3	6.94	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	742	G	C2-N2	6.94	1.41	1.34
21	AA	1113	C	C2-N3	6.94	1.41	1.35
57	BB	1319	C	C4-N4	6.94	1.40	1.33
57	BB	1615	C	C2'-C1'	-6.94	1.45	1.53
57	BB	2856	A	C4'-O4'	6.94	1.54	1.45
21	AA	279	A	N9-C4	-6.94	1.33	1.37
21	AA	382	A	N9-C4	6.94	1.42	1.37
21	AA	514	C	N3-C4	6.94	1.38	1.33
21	AA	1088	G	N7-C5	-6.94	1.35	1.39
57	BB	835	C	N3-C4	6.94	1.38	1.33
57	BB	929	U	N3-C4	6.94	1.44	1.38
57	BB	1287	A	C6-N1	6.94	1.40	1.35
57	BB	2350	C	C4-C5	-6.94	1.37	1.43
21	AA	266	G	N7-C5	-6.93	1.35	1.39
57	BB	1921	G	N9-C8	-6.93	1.32	1.37
57	BB	2587	A	C6-N1	-6.93	1.30	1.35
58	BA	13	G	C3'-C2'	-6.93	1.45	1.52
21	AA	330	C	N3-C4	6.93	1.38	1.33
22	AY	76	A	C6-N1	6.93	1.40	1.35
57	BB	74	A	N9-C4	6.93	1.42	1.37
57	BB	1414	C	C4'-C3'	-6.93	1.45	1.53
57	BB	672	C	N3-C4	6.93	1.38	1.33
57	BB	930	G	P-O5'	-6.93	1.52	1.59
57	BB	1651	G	C6-O6	-6.93	1.18	1.24
21	AA	604	G	N1-C2	6.93	1.43	1.37
21	AA	912	C	C2'-C1'	-6.93	1.45	1.53
23	AW	5	G	N3-C4	-6.93	1.30	1.35
57	BB	1367	A	O3'-P	-6.93	1.52	1.61
57	BB	1668	A	C3'-O3'	6.93	1.51	1.42
58	BA	38	C	C4'-C3'	-6.93	1.45	1.53
21	AA	1220	G	N9-C8	-6.93	1.33	1.37
26	AV	52	G	N3-C4	-6.93	1.30	1.35
57	BB	1088	A	C5'-C4'	6.93	1.59	1.51
58	BA	2	G	C5'-C4'	6.93	1.59	1.51
21	AA	384	G	N7-C5	-6.93	1.35	1.39
21	AA	533	A	N1-C2	6.93	1.40	1.34
21	AA	563	A	C2'-C1'	-6.93	1.45	1.53
21	AA	1297	G	C8-N7	6.93	1.35	1.30
21	AA	1526	G	N9-C8	6.93	1.42	1.37
57	BB	217	A	C5-C4	6.93	1.43	1.38
57	BB	570	G	C5-C4	6.93	1.43	1.38
57	BB	1498	C	C2'-C1'	-6.93	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1676	A	N7-C5	-6.93	1.35	1.39
57	BB	1981	A	C6-N6	6.93	1.39	1.33
57	BB	2125	G	C6-N1	6.93	1.44	1.39
21	AA	441	A	N1-C2	-6.92	1.28	1.34
21	AA	749	A	C6-N1	6.92	1.40	1.35
23	AW	54	U	C2-N3	6.92	1.42	1.37
57	BB	6	A	C6-N6	6.92	1.39	1.33
57	BB	178	G	C1'-N9	-6.92	1.37	1.46
57	BB	626	A	N9-C8	-6.92	1.32	1.37
57	BB	900	A	C4'-O4'	6.92	1.54	1.45
57	BB	506	G	N7-C5	-6.92	1.35	1.39
57	BB	2452	C	N1-C2	6.92	1.47	1.40
21	AA	1122	U	O4'-C1'	6.92	1.50	1.41
21	AA	1355	G	C6-N1	6.92	1.44	1.39
22	AY	38	A	O3'-P	-6.92	1.52	1.61
57	BB	1	G	P-OP2	6.92	1.60	1.49
57	BB	173	A	C6-N1	6.92	1.40	1.35
57	BB	264	C	C3'-O3'	6.92	1.51	1.42
57	BB	1216	G	C2-N3	6.92	1.38	1.32
57	BB	1334	G	C6-N1	6.92	1.44	1.39
57	BB	1635	A	N9-C4	-6.92	1.33	1.37
57	BB	1714	U	C5-C6	6.92	1.40	1.34
57	BB	2237	G	P-O5'	-6.92	1.52	1.59
57	BB	2458	G	C5-C6	-6.92	1.35	1.42
57	BB	2733	A	C5-C6	6.92	1.47	1.41
57	BB	2444	G	N1-C2	6.92	1.43	1.37
21	AA	149	A	N3-C4	6.92	1.39	1.34
21	AA	305	G	N3-C4	-6.92	1.30	1.35
21	AA	1087	G	C5-C4	6.92	1.43	1.38
57	BB	653	U	N3-C4	6.92	1.44	1.38
57	BB	653	U	N1-C6	6.92	1.44	1.38
57	BB	2726	A	C2'-C1'	-6.92	1.45	1.53
57	BB	2894	G	C2'-C1'	-6.92	1.45	1.53
21	AA	765	G	O4'-C1'	6.92	1.50	1.41
21	AA	912	C	O3'-P	-6.92	1.52	1.61
57	BB	936	A	O3'-P	-6.92	1.52	1.61
57	BB	1167	C	N3-C4	6.92	1.38	1.33
57	BB	1335	C	N1-C6	-6.92	1.32	1.37
21	AA	736	C	N3-C4	6.92	1.38	1.33
21	AA	292	G	C2-N3	6.91	1.38	1.32
21	AA	1199	U	C4-O4	6.91	1.29	1.23
22	AY	5	A	N7-C5	-6.91	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	271	G	C5'-C4'	6.91	1.59	1.51
57	BB	938	G	N9-C4	-6.91	1.32	1.38
57	BB	1945	G	C5'-C4'	6.91	1.59	1.51
57	BB	2169	A	P-O5'	-6.91	1.52	1.59
57	BB	2670	A	C5-C6	6.91	1.47	1.41
58	BA	11	C	C3'-C2'	-6.91	1.45	1.52
21	AA	775	G	N1-C2	6.91	1.43	1.37
57	BB	1428	C	N1-C2	6.91	1.47	1.40
21	AA	1306	A	C6-N6	6.91	1.39	1.33
57	BB	674	G	P-O5'	-6.91	1.52	1.59
57	BB	1251	C	N1-C6	6.91	1.41	1.37
57	BB	1304	A	N9-C4	-6.91	1.33	1.37
57	BB	1534	U	C2-N3	6.91	1.42	1.37
57	BB	1679	A	N9-C4	-6.91	1.33	1.37
57	BB	1842	G	C3'-C2'	6.91	1.60	1.52
58	BA	77	U	N1-C2	-6.91	1.32	1.38
21	AA	483	C	P-O5'	-6.91	1.52	1.59
21	AA	577	G	C8-N7	-6.91	1.26	1.30
21	AA	1137	C	C4-N4	6.91	1.40	1.33
57	BB	117	G	O3'-P	-6.91	1.52	1.61
57	BB	583	G	C8-N7	6.91	1.35	1.30
57	BB	989	G	C5'-C4'	6.91	1.59	1.51
57	BB	1785	A	N3-C4	-6.91	1.30	1.34
57	BB	2271	G	N7-C5	-6.91	1.35	1.39
57	BB	54	G	C8-N7	-6.91	1.26	1.30
57	BB	2850	A	O4'-C1'	6.91	1.50	1.41
21	AA	544	G	N9-C8	6.91	1.42	1.37
57	BB	633	A	C6-N1	6.91	1.40	1.35
57	BB	2357	G	N9-C8	6.91	1.42	1.37
57	BB	2742	G	C5-C4	6.91	1.43	1.38
21	AA	1319	A	C4'-O4'	-6.90	1.36	1.45
21	AA	337	G	P-O5'	-6.90	1.52	1.59
21	AA	431	A	N7-C5	-6.90	1.35	1.39
26	AV	76	A	N3-C4	6.90	1.39	1.34
57	BB	931	U	N1-C2	6.90	1.44	1.38
57	BB	1311	G	C3'-C2'	-6.90	1.45	1.52
57	BB	1340	U	O4'-C1'	6.90	1.50	1.41
57	BB	1439	A	C5-C4	6.90	1.43	1.38
57	BB	2441	U	C2'-C1'	-6.90	1.45	1.53
21	AA	461	A	C4'-C3'	6.90	1.60	1.53
21	AA	705	G	C2'-C1'	-6.90	1.45	1.53
21	AA	927	G	N1-C2	6.90	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1973	G	N3-C4	-6.90	1.30	1.35
57	BB	2369	A	C6-N1	6.90	1.40	1.35
21	AA	716	A	N9-C4	6.90	1.42	1.37
31	BL	43	GLY	N-CA	6.90	1.56	1.46
57	BB	2077	A	C6-N6	6.90	1.39	1.33
21	AA	658	C	C5'-C4'	6.90	1.59	1.51
21	AA	673	A	C8-N7	-6.90	1.26	1.31
21	AA	1067	A	C2'-O2'	-6.90	1.32	1.41
21	AA	1182	G	C5'-C4'	6.90	1.59	1.51
21	AA	1331	G	N9-C8	6.90	1.42	1.37
21	AA	1418	A	P-O5'	-6.90	1.52	1.59
21	AA	1469	C	C4-N4	6.90	1.40	1.33
53	BE	79	ARG	NE-CZ	6.90	1.42	1.33
57	BB	1813	G	C8-N7	-6.90	1.26	1.30
57	BB	1927	A	C6-N6	6.90	1.39	1.33
57	BB	2228	G	C2'-C1'	-6.90	1.45	1.53
57	BB	2575	C	N3-C4	6.90	1.38	1.33
58	BA	19	C	C3'-C2'	-6.90	1.45	1.52
58	BA	81	G	C5-C6	-6.90	1.35	1.42
21	AA	75	G	N7-C5	-6.90	1.35	1.39
57	BB	397	U	N3-C4	6.90	1.44	1.38
57	BB	2261	C	C3'-C2'	-6.90	1.45	1.52
21	AA	888	G	N7-C5	-6.89	1.35	1.39
21	AA	994	A	P-O5'	-6.89	1.52	1.59
23	AW	46	G	O3'-P	-6.89	1.52	1.61
57	BB	724	U	N3-C4	6.89	1.44	1.38
57	BB	866	A	N9-C8	6.89	1.43	1.37
57	BB	998	C	C5'-C4'	-6.89	1.43	1.51
57	BB	2341	G	N3-C4	-6.89	1.30	1.35
21	AA	7	A	P-O5'	-6.89	1.52	1.59
21	AA	1102	A	N9-C4	6.89	1.42	1.37
58	BA	5	U	C2'-C1'	-6.89	1.45	1.53
21	AA	731	G	N7-C5	-6.89	1.35	1.39
57	BB	508	A	C6-N1	6.89	1.40	1.35
57	BB	1087	G	C8-N7	6.89	1.35	1.30
21	AA	543	U	N3-C4	6.89	1.44	1.38
57	BB	435	C	C2-N3	6.89	1.41	1.35
57	BB	841	G	C2'-C1'	-6.89	1.45	1.53
57	BB	1133	A	C6-N1	6.89	1.40	1.35
57	BB	1147	A	C2-N3	6.89	1.39	1.33
57	BB	1596	A	C6-N1	6.89	1.40	1.35
57	BB	1897	G	N9-C8	6.89	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2485	G	C6-N1	6.89	1.44	1.39
57	BB	2634	A	C6-N6	6.89	1.39	1.33
21	AA	104	G	N1-C2	6.89	1.43	1.37
57	BB	456	C	C4-N4	6.89	1.40	1.33
57	BB	945	A	N7-C5	-6.89	1.35	1.39
57	BB	1026	G	P-O5'	-6.89	1.52	1.59
57	BB	1912	A	N1-C2	-6.89	1.28	1.34
57	BB	2533	U	C2'-C1'	-6.89	1.45	1.53
21	AA	356	A	N9-C4	6.89	1.42	1.37
21	AA	369	G	C6-N1	6.89	1.44	1.39
21	AA	803	G	N1-C2	6.89	1.43	1.37
21	AA	1154	G	C2'-C1'	-6.89	1.45	1.53
21	AA	1358	U	C3'-C2'	-6.89	1.45	1.52
21	AA	1461	G	N9-C4	6.89	1.43	1.38
57	BB	213	A	N7-C5	6.89	1.43	1.39
57	BB	386	G	N1-C2	6.89	1.43	1.37
57	BB	442	G	C5-C4	6.89	1.43	1.38
57	BB	2764	A	N9-C4	6.89	1.42	1.37
57	BB	2820	A	N3-C4	-6.89	1.30	1.34
21	AA	634	C	N1-C6	-6.88	1.33	1.37
21	AA	1332	A	N9-C4	-6.88	1.33	1.37
21	AA	1449	C	C2'-C1'	-6.88	1.45	1.53
57	BB	7	G	C6-N1	6.88	1.44	1.39
57	BB	303	G	N1-C2	6.88	1.43	1.37
57	BB	1540	G	N7-C5	-6.88	1.35	1.39
57	BB	1733	G	N7-C5	-6.88	1.35	1.39
57	BB	2244	U	C4-O4	6.88	1.29	1.23
58	BA	77	U	C4-O4	-6.88	1.18	1.23
34	BO	14	ALA	CA-CB	6.88	1.67	1.52
57	BB	763	G	C4'-C3'	6.88	1.60	1.53
57	BB	2063	C	C5'-C4'	6.88	1.59	1.51
21	AA	14	U	C2'-C1'	-6.88	1.45	1.53
21	AA	305	G	C4'-C3'	6.88	1.60	1.53
21	AA	515	G	C2-N3	6.88	1.38	1.32
21	AA	829	G	N9-C4	6.88	1.43	1.38
21	AA	1425	U	C2'-C1'	-6.88	1.45	1.53
22	AY	42	G	P-O5'	6.88	1.66	1.59
57	BB	473	G	C5-C6	6.88	1.49	1.42
57	BB	1311	G	C2-N3	6.88	1.38	1.32
57	BB	1446	C	O3'-P	-6.88	1.52	1.61
57	BB	1481	U	C4'-C3'	6.88	1.60	1.53
57	BB	1023	U	C5'-C4'	6.88	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1228	G	N7-C5	-6.88	1.35	1.39
57	BB	2653	U	C2-N3	6.88	1.42	1.37
21	AA	15	G	N9-C8	-6.88	1.33	1.37
21	AA	712	A	N7-C5	-6.88	1.35	1.39
22	AY	29	A	C5'-C4'	6.88	1.59	1.51
57	BB	380	G	N3-C4	-6.88	1.30	1.35
57	BB	2030	A	N3-C4	-6.88	1.30	1.34
21	AA	949	A	C5-C4	6.88	1.43	1.38
23	AW	64	A	C8-N7	-6.88	1.26	1.31
57	BB	269	C	C5'-C4'	6.88	1.59	1.51
57	BB	307	G	C8-N7	6.88	1.35	1.30
57	BB	1109	C	P-O5'	-6.88	1.52	1.59
57	BB	1326	U	N3-C4	6.88	1.44	1.38
57	BB	207	A	N9-C8	6.88	1.43	1.37
21	AA	320	A	N9-C4	-6.87	1.33	1.37
21	AA	1370	G	C4'-C3'	6.87	1.60	1.53
57	BB	70	G	C5-C4	6.87	1.43	1.38
57	BB	217	A	C6-N1	6.87	1.40	1.35
57	BB	484	C	N1-C6	-6.87	1.33	1.37
57	BB	1288	G	C8-N7	-6.87	1.26	1.30
57	BB	1655	A	C5'-C4'	6.87	1.59	1.51
21	AA	602	A	C8-N7	-6.87	1.26	1.31
21	AA	1072	G	C2'-C1'	-6.87	1.45	1.53
21	AA	1311	A	C6-N6	6.87	1.39	1.33
57	BB	652	U	N1-C6	6.87	1.44	1.38
57	BB	802	A	C3'-C2'	-6.87	1.45	1.52
57	BB	1359	A	C5'-C4'	-6.87	1.43	1.51
57	BB	1267	U	C3'-C2'	-6.87	1.45	1.52
21	AA	398	U	O4'-C1'	6.87	1.50	1.41
21	AA	1172	C	P-O5'	-6.87	1.52	1.59
22	AY	73	A	C8-N7	-6.87	1.26	1.31
57	BB	2154	A	C6-N1	6.87	1.40	1.35
21	AA	338	A	C2'-C1'	-6.87	1.45	1.53
21	AA	756	C	C5-C6	-6.87	1.28	1.34
21	AA	852	G	C2'-C1'	-6.87	1.45	1.53
21	AA	1388	C	C3'-C2'	6.87	1.60	1.52
57	BB	470	A	C4'-C3'	-6.87	1.45	1.53
57	BB	1014	A	C2'-C1'	-6.87	1.45	1.53
57	BB	1204	A	N9-C4	6.87	1.42	1.37
57	BB	1265	A	C5-C4	-6.87	1.33	1.38
57	BB	1844	C	P-O5'	-6.87	1.52	1.59
57	BB	1906	G	N1-C2	6.87	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2055	C	C4-N4	6.87	1.40	1.33
57	BB	75	G	O4'-C1'	6.86	1.50	1.41
57	BB	301	G	C2-N3	6.86	1.38	1.32
57	BB	641	U	C2-N3	6.86	1.42	1.37
21	AA	593	U	N1-C2	6.86	1.44	1.38
21	AA	800	G	O3'-P	-6.86	1.52	1.61
57	BB	913	U	P-O5'	-6.86	1.52	1.59
57	BB	1264	A	C6-N6	6.86	1.39	1.33
57	BB	2614	A	C6-N6	6.86	1.39	1.33
3	AL	55	ARG	NE-CZ	6.86	1.42	1.33
57	BB	1392	A	N7-C5	-6.86	1.35	1.39
21	AA	31	G	N3-C4	-6.86	1.30	1.35
21	AA	98	A	N9-C8	6.86	1.43	1.37
21	AA	786	G	C5-C4	6.86	1.43	1.38
53	BE	51	GLU	CG-CD	6.86	1.62	1.51
57	BB	981	A	C5'-C4'	6.86	1.59	1.51
57	BB	1258	U	C5'-C4'	6.86	1.59	1.51
57	BB	1331	G	P-O5'	-6.86	1.52	1.59
57	BB	2067	G	C2'-C1'	-6.86	1.45	1.53
57	BB	2220	U	C2-O2	6.86	1.28	1.22
57	BB	2642	G	C6-N1	6.86	1.44	1.39
22	AY	56	C	C4-C5	-6.86	1.37	1.43
57	BB	474	G	O4'-C1'	6.86	1.50	1.41
57	BB	1170	C	C2-N3	6.86	1.41	1.35
57	BB	2059	A	C2'-C1'	-6.86	1.45	1.53
57	BB	2810	A	C2'-C1'	-6.86	1.45	1.53
23	AW	40	C	C2'-C1'	-6.85	1.45	1.53
57	BB	1498	C	C4'-C3'	-6.85	1.45	1.53
21	AA	603	U	P-O5'	-6.85	1.52	1.59
21	AA	1138	G	N3-C4	-6.85	1.30	1.35
57	BB	33	C	O3'-P	-6.85	1.52	1.61
57	BB	149	A	N7-C5	-6.85	1.35	1.39
57	BB	877	A	P-O5'	-6.85	1.52	1.59
21	AA	900	A	C6-N1	6.85	1.40	1.35
57	BB	54	G	C6-N1	6.85	1.44	1.39
57	BB	1383	A	C5-C4	6.85	1.43	1.38
57	BB	2396	G	C2'-C1'	-6.85	1.45	1.53
57	BB	2700	A	O3'-P	-6.85	1.52	1.61
21	AA	23	C	O4'-C1'	-6.85	1.32	1.41
26	AV	75	C	O3'-P	-6.85	1.52	1.61
57	BB	15	G	C4'-C3'	-6.85	1.45	1.53
57	BB	455	C	C4-N4	6.85	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	456	C	N3-C4	6.85	1.38	1.33
57	BB	465	G	N9-C8	-6.85	1.33	1.37
57	BB	2061	G	C2-N3	6.85	1.38	1.32
21	AA	596	A	N3-C4	6.85	1.39	1.34
21	AA	708	C	C2-N3	6.85	1.41	1.35
21	AA	771	G	P-O5'	-6.85	1.52	1.59
21	AA	825	A	C6-N6	6.85	1.39	1.33
21	AA	1014	A	C2'-C1'	-6.85	1.45	1.53
21	AA	1057	G	C2'-C1'	-6.85	1.45	1.53
21	AA	1529	G	N1-C2	6.85	1.43	1.37
57	BB	7	G	O3'-P	-6.85	1.52	1.61
57	BB	1146	C	C2'-C1'	-6.85	1.45	1.53
21	AA	714	G	N7-C5	-6.85	1.35	1.39
57	BB	671	C	C2-N3	6.85	1.41	1.35
57	BB	905	A	C6-N6	6.85	1.39	1.33
57	BB	1694	C	C4-N4	6.85	1.40	1.33
21	AA	987	G	C6-N1	6.84	1.44	1.39
57	BB	627	A	C6-N1	6.84	1.40	1.35
57	BB	1581	G	N1-C2	6.84	1.43	1.37
57	BB	1618	A	N3-C4	-6.84	1.30	1.34
57	BB	2585	U	P-O5'	-6.84	1.52	1.59
21	AA	411	A	C4'-C3'	6.84	1.60	1.53
21	AA	1398	A	N3-C4	-6.84	1.30	1.34
21	AA	1529	G	C2-N3	6.84	1.38	1.32
57	BB	501	A	N9-C4	6.84	1.42	1.37
21	AA	174	A	N7-C5	-6.84	1.35	1.39
21	AA	175	C	O3'-P	-6.84	1.52	1.61
21	AA	578	C	C2-N3	6.84	1.41	1.35
21	AA	1102	A	C4'-C3'	-6.84	1.45	1.53
21	AA	1342	C	C4'-C3'	6.84	1.60	1.53
57	BB	655	A	N9-C4	-6.84	1.33	1.37
57	BB	1076	C	N3-C4	6.84	1.38	1.33
57	BB	1306	C	N3-C4	6.84	1.38	1.33
57	BB	1564	C	P-O5'	-6.84	1.52	1.59
57	BB	2035	G	C5-C6	-6.84	1.35	1.42
57	BB	2360	G	C6-N1	6.84	1.44	1.39
57	BB	2579	C	C4'-C3'	6.84	1.60	1.53
57	BB	363	G	N1-C2	6.84	1.43	1.37
57	BB	2886	A	C6-N6	-6.84	1.28	1.33
21	AA	727	G	C6-N1	6.84	1.44	1.39
21	AA	1342	C	C2-O2	6.84	1.30	1.24
45	BC	66	PHE	CG-CD2	6.84	1.49	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2757	A	C2'-C1'	6.84	1.60	1.53
11	AT	17	ARG	CZ-NH2	6.84	1.42	1.33
21	AA	43	C	C2-N3	6.84	1.41	1.35
21	AA	123	U	C5'-C4'	6.84	1.59	1.51
21	AA	352	C	C2-N3	-6.84	1.30	1.35
21	AA	1145	A	C5-C4	6.84	1.43	1.38
57	BB	937	C	N3-C4	6.84	1.38	1.33
57	BB	1303	G	C2'-C1'	-6.84	1.45	1.53
21	AA	1212	U	O3'-P	-6.83	1.52	1.61
21	AA	1228	C	C2-N3	6.83	1.41	1.35
21	AA	1413	A	C6-N6	6.83	1.39	1.33
57	BB	1346	G	P-O5'	-6.83	1.52	1.59
21	AA	144	G	N7-C5	-6.83	1.35	1.39
21	AA	161	A	C5-C4	-6.83	1.33	1.38
21	AA	715	A	C6-N6	6.83	1.39	1.33
21	AA	747	A	O3'-P	-6.83	1.52	1.61
57	BB	253	C	C4-N4	6.83	1.40	1.33
57	BB	344	A	C6-N1	6.83	1.40	1.35
57	BB	475	C	C4'-C3'	-6.83	1.45	1.53
57	BB	967	U	C2'-C1'	-6.83	1.45	1.53
57	BB	1522	A	C8-N7	-6.83	1.26	1.31
57	BB	1585	C	C4-N4	6.83	1.40	1.33
57	BB	1734	G	N1-C2	6.83	1.43	1.37
57	BB	1884	G	P-O5'	-6.83	1.52	1.59
57	BB	2285	C	C5'-C4'	6.83	1.59	1.51
57	BB	2562	U	N1-C6	6.83	1.44	1.38
7	AP	25	ARG	CD-NE	6.83	1.58	1.46
21	AA	663	A	N3-C4	-6.83	1.30	1.34
21	AA	841	C	P-O5'	-6.83	1.52	1.59
57	BB	300	A	N9-C4	-6.83	1.33	1.37
57	BB	315	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1016	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1432	G	N9-C8	-6.83	1.33	1.37
21	AA	108	G	N7-C5	-6.83	1.35	1.39
21	AA	850	U	C2'-C1'	-6.83	1.45	1.53
57	BB	947	A	C8-N7	-6.83	1.26	1.31
21	AA	571	U	C2'-C1'	-6.83	1.45	1.53
26	AV	21	A	C6-N1	6.83	1.40	1.35
57	BB	577	G	P-O5'	-6.83	1.52	1.59
57	BB	691	C	C2'-O2'	-6.83	1.32	1.41
57	BB	974	G	C6-N1	6.83	1.44	1.39
57	BB	1046	A	N9-C4	6.83	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1737	G	N3-C4	6.83	1.40	1.35
57	BB	1980	G	N1-C2	6.83	1.43	1.37
57	BB	2033	A	C6-N1	6.83	1.40	1.35
57	BB	2367	G	N7-C5	-6.83	1.35	1.39
21	AA	650	G	N1-C2	6.83	1.43	1.37
51	B4	38	GLY	CA-C	6.83	1.62	1.51
57	BB	175	G	C5'-C4'	6.83	1.59	1.51
57	BB	252	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1540	G	N9-C8	-6.83	1.33	1.37
58	BA	52	A	P-O5'	6.83	1.66	1.59
21	AA	1519	A	C6-N6	6.83	1.39	1.33
57	BB	1144	A	C6-N6	6.83	1.39	1.33
57	BB	1168	G	N1-C2	6.83	1.43	1.37
57	BB	2663	G	C2-N3	6.83	1.38	1.32
58	BA	26	C	N3-C4	6.83	1.38	1.33
58	BA	99	A	C4'-O4'	-6.83	1.36	1.45
21	AA	357	G	C5'-C4'	6.82	1.59	1.51
21	AA	497	G	C5-C4	6.82	1.43	1.38
21	AA	917	G	C6-N1	-6.82	1.34	1.39
21	AA	1151	A	C6-N1	6.82	1.40	1.35
26	AV	3	C	C4-C5	-6.82	1.37	1.43
57	BB	1314	C	C1'-N1	6.82	1.58	1.48
57	BB	2152	G	C5'-C4'	6.82	1.59	1.51
58	BA	101	A	C2'-C1'	-6.82	1.45	1.53
21	AA	945	G	N7-C5	-6.82	1.35	1.39
57	BB	1169	A	C6-N6	6.82	1.39	1.33
57	BB	2082	A	P-O5'	-6.82	1.52	1.59
21	AA	37	U	P-O5'	-6.82	1.52	1.59
21	AA	49	U	C2'-C1'	-6.82	1.45	1.53
21	AA	389	A	C8-N7	-6.82	1.26	1.31
21	AA	1310	G	N3-C4	-6.82	1.30	1.35
57	BB	647	G	C2-N3	6.82	1.38	1.32
57	BB	1744	A	N9-C8	6.82	1.43	1.37
57	BB	2154	A	C5'-C4'	6.82	1.59	1.51
57	BB	959	A	C5-C4	6.82	1.43	1.38
57	BB	1386	C	N1-C6	-6.82	1.33	1.37
57	BB	2553	G	C6-N1	6.82	1.44	1.39
57	BB	2667	C	N3-C4	6.82	1.38	1.33
58	BA	6	G	C2-N3	6.82	1.38	1.32
21	AA	432	A	O3'-P	-6.82	1.52	1.61
21	AA	894	G	C8-N7	-6.82	1.26	1.30
21	AA	1071	C	N1-C6	6.82	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	51	G	C2-N3	6.82	1.38	1.32
23	AW	47	U	P-O5'	-6.82	1.52	1.59
57	BB	2342	C	C5'-C4'	-6.82	1.43	1.51
57	BB	2709	G	N9-C8	6.82	1.42	1.37
21	AA	674	G	C6-N1	6.82	1.44	1.39
21	AA	950	U	C4-C5	-6.82	1.37	1.43
57	BB	188	G	C5-C6	-6.82	1.35	1.42
57	BB	350	G	C5-C6	-6.82	1.35	1.42
57	BB	2028	U	C4'-O4'	6.82	1.54	1.45
57	BB	2576	G	C5-C4	6.82	1.43	1.38
57	BB	9	G	N7-C5	-6.81	1.35	1.39
57	BB	2460	U	N3-C4	6.81	1.44	1.38
58	BA	55	U	C5'-C4'	6.81	1.59	1.51
57	BB	31	C	C5'-C4'	6.81	1.59	1.51
57	BB	306	U	P-O5'	-6.81	1.52	1.59
57	BB	1665	A	C2'-C1'	-6.81	1.45	1.53
57	BB	1923	U	C2'-C1'	-6.81	1.45	1.53
57	BB	2255	G	N9-C8	6.81	1.42	1.37
57	BB	2432	A	C1'-N9	6.81	1.58	1.48
57	BB	2523	G	N9-C4	6.81	1.43	1.38
57	BB	1861	G	C6-N1	6.81	1.44	1.39
57	BB	2808	G	N1-C2	6.81	1.43	1.37
21	AA	223	A	C5'-C4'	6.81	1.59	1.51
21	AA	232	G	N9-C8	-6.81	1.33	1.37
21	AA	1224	U	C4-O4	-6.81	1.18	1.23
21	AA	1267	C	C3'-C2'	-6.81	1.45	1.52
57	BB	1121	C	C3'-C2'	-6.81	1.45	1.52
57	BB	1143	A	N7-C5	-6.81	1.35	1.39
57	BB	1271	G	C5-C6	-6.81	1.35	1.42
57	BB	1922	G	C5-C4	-6.81	1.33	1.38
57	BB	2573	C	C4-N4	6.81	1.40	1.33
57	BB	2662	A	P-O5'	-6.81	1.52	1.59
21	AA	1137	C	P-O5'	-6.81	1.52	1.59
21	AA	1147	C	C2'-C1'	-6.81	1.45	1.53
25	AZ	318	ARG	NE-CZ	6.81	1.41	1.33
57	BB	18	U	C4-C5	6.81	1.49	1.43
57	BB	892	A	C2'-C1'	-6.81	1.45	1.53
57	BB	1407	G	C4'-C3'	6.81	1.60	1.53
57	BB	750	A	N3-C4	-6.81	1.30	1.34
57	BB	980	A	C8-N7	-6.81	1.26	1.31
57	BB	1302	A	N9-C4	-6.81	1.33	1.37
57	BB	1585	C	C5'-C4'	-6.81	1.43	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	939	G	C8-N7	6.80	1.35	1.30
21	AA	1322	C	C2'-C1'	-6.80	1.45	1.53
21	AA	1380	U	N3-C4	6.80	1.44	1.38
57	BB	338	G	N7-C5	-6.80	1.35	1.39
57	BB	1058	U	C5'-C4'	6.80	1.59	1.51
57	BB	2116	G	N7-C5	-6.80	1.35	1.39
57	BB	2416	C	C2-O2	6.80	1.30	1.24
21	AA	888	G	C2-N3	6.80	1.38	1.32
57	BB	212	G	N1-C2	6.80	1.43	1.37
57	BB	374	A	N9-C8	-6.80	1.32	1.37
57	BB	1664	A	N7-C5	-6.80	1.35	1.39
21	AA	113	G	P-O5'	-6.80	1.52	1.59
21	AA	498	A	O3'-P	-6.80	1.52	1.61
21	AA	1373	G	C5-C4	6.80	1.43	1.38
57	BB	2654	A	P-O5'	-6.80	1.52	1.59
22	AY	24	G	C4'-C3'	6.80	1.60	1.53
57	BB	181	A	C8-N7	-6.80	1.26	1.31
57	BB	778	G	N7-C5	-6.80	1.35	1.39
57	BB	1900	A	C3'-O3'	6.80	1.51	1.42
57	BB	2791	G	C5-C4	6.80	1.43	1.38
57	BB	2871	U	C2-N3	6.80	1.42	1.37
57	BB	2478	A	N3-C4	-6.80	1.30	1.34
12	AU	34	ARG	NE-CZ	6.80	1.41	1.33
21	AA	578	C	N1-C6	-6.80	1.33	1.37
21	AA	609	A	C4'-C3'	6.80	1.60	1.53
21	AA	800	G	N7-C5	-6.80	1.35	1.39
21	AA	912	C	C2-N3	6.80	1.41	1.35
21	AA	1268	G	C3'-C2'	-6.80	1.45	1.52
57	BB	522	A	N7-C5	-6.80	1.35	1.39
57	BB	1017	G	C8-N7	6.80	1.35	1.30
57	BB	2258	C	C4-C5	6.80	1.48	1.43
57	BB	2673	G	C6-N1	6.80	1.44	1.39
21	AA	396	C	C4-N4	6.79	1.40	1.33
21	AA	1258	G	C6-N1	6.79	1.44	1.39
21	AA	1448	C	N3-C4	6.79	1.38	1.33
57	BB	983	A	C5'-C4'	6.79	1.59	1.51
57	BB	1333	G	N9-C4	6.79	1.43	1.38
57	BB	105	C	C4-N4	6.79	1.40	1.33
57	BB	524	G	C2-N3	6.79	1.38	1.32
57	BB	2180	U	N1-C2	6.79	1.44	1.38
57	BB	2446	G	N1-C2	6.79	1.43	1.37
21	AA	318	G	C5-C4	-6.79	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	693	A	N1-C2	6.79	1.40	1.34
57	BB	1192	G	C8-N7	-6.79	1.26	1.30
57	BB	1681	G	N3-C4	-6.79	1.30	1.35
57	BB	1776	G	C8-N7	-6.79	1.26	1.30
58	BA	64	G	N3-C4	-6.79	1.30	1.35
21	AA	127	G	C2-N3	6.79	1.38	1.32
21	AA	191	G	C6-N1	6.79	1.44	1.39
21	AA	1358	U	O3'-P	-6.79	1.53	1.61
21	AA	1366	C	N3-C4	6.79	1.38	1.33
54	BF	101	ARG	CZ-NH2	6.79	1.41	1.33
57	BB	1138	G	N1-C2	6.79	1.43	1.37
57	BB	1210	G	N1-C2	6.79	1.43	1.37
58	BA	79	G	C8-N7	6.79	1.35	1.30
21	AA	1030	U	C2-N3	6.79	1.42	1.37
21	AA	1327	C	N1-C6	6.79	1.41	1.37
23	AW	16	U	N3-C4	6.79	1.44	1.38
21	AA	28	A	C6-N1	6.79	1.40	1.35
21	AA	59	A	N9-C4	6.79	1.42	1.37
57	BB	1850	G	C6-N1	-6.79	1.34	1.39
58	BA	23	G	C5'-C4'	6.79	1.59	1.51
21	AA	855	U	C2'-C1'	-6.78	1.45	1.53
57	BB	742	A	O4'-C1'	6.78	1.50	1.41
57	BB	1967	C	C2-N3	6.78	1.41	1.35
57	BB	2192	U	P-O5'	-6.78	1.52	1.59
21	AA	404	G	C2'-C1'	-6.78	1.45	1.53
57	BB	2214	C	O3'-P	-6.78	1.53	1.61
57	BB	148	U	C2-N3	6.78	1.42	1.37
57	BB	616	A	C4'-C3'	6.78	1.60	1.53
57	BB	677	A	C5-C6	-6.78	1.34	1.41
57	BB	2615	U	C2-N3	6.78	1.42	1.37
57	BB	2707	U	O4'-C1'	6.78	1.50	1.41
57	BB	1071	G	C5-C4	6.78	1.43	1.38
57	BB	2005	A	N9-C4	-6.78	1.33	1.37
21	AA	151	A	C5'-C4'	6.78	1.59	1.51
21	AA	1155	A	N7-C5	-6.78	1.35	1.39
57	BB	131	A	C6-N6	6.78	1.39	1.33
57	BB	225	C	C5-C6	-6.78	1.28	1.34
57	BB	380	G	C6-N1	6.78	1.44	1.39
57	BB	2173	A	N9-C8	6.78	1.43	1.37
57	BB	2174	C	N1-C6	6.78	1.41	1.37
21	AA	1196	A	C5-C4	-6.78	1.34	1.38
21	AA	1201	A	C8-N7	-6.78	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1471	U	C5-C6	-6.78	1.28	1.34
21	AA	1515	G	C2-N2	6.78	1.41	1.34
57	BB	1010	A	C2'-C1'	-6.78	1.45	1.53
57	BB	2020	A	C2'-C1'	-6.78	1.45	1.53
52	BD	139	SER	CA-CB	6.77	1.63	1.52
57	BB	2	G	C2-N3	6.77	1.38	1.32
57	BB	682	G	C4'-C3'	6.77	1.60	1.53
57	BB	707	G	N9-C4	6.77	1.43	1.38
57	BB	1469	A	N7-C5	-6.77	1.35	1.39
21	AA	690	G	C2-N3	6.77	1.38	1.32
21	AA	1171	A	C6-N1	6.77	1.40	1.35
21	AA	1187	G	N1-C2	6.77	1.43	1.37
21	AA	1408	A	N9-C4	-6.77	1.33	1.37
57	BB	94	A	N3-C4	6.77	1.39	1.34
57	BB	832	U	C2-N3	6.77	1.42	1.37
57	BB	1193	G	C4'-C3'	-6.77	1.45	1.53
57	BB	1317	G	C2'-C1'	-6.77	1.46	1.53
57	BB	2530	A	C2'-C1'	-6.77	1.45	1.53
57	BB	2696	U	C3'-C2'	-6.77	1.45	1.52
21	AA	189	A	C6-N6	6.77	1.39	1.33
21	AA	967	C	O3'-P	-6.77	1.53	1.61
57	BB	2060	A	C6-N1	6.77	1.40	1.35
57	BB	2816	G	N3-C4	-6.77	1.30	1.35
21	AA	1020	G	N7-C5	-6.77	1.35	1.39
57	BB	30	G	C8-N7	-6.77	1.26	1.30
57	BB	307	G	N7-C5	-6.77	1.35	1.39
57	BB	831	G	N1-C2	6.77	1.43	1.37
57	BB	1014	A	C5-C4	6.77	1.43	1.38
57	BB	1665	A	C6-N1	6.77	1.40	1.35
57	BB	2101	A	C8-N7	-6.77	1.26	1.31
57	BB	2541	A	O3'-P	-6.77	1.53	1.61
57	BB	2659	G	C5-C6	-6.77	1.35	1.42
57	BB	2663	G	N7-C5	-6.77	1.35	1.39
21	AA	1006	G	C6-N1	6.77	1.44	1.39
57	BB	634	C	O3'-P	-6.77	1.53	1.61
21	AA	38	G	C2-N3	6.76	1.38	1.32
21	AA	643	C	C2-N3	6.76	1.41	1.35
21	AA	1400	C	C2'-C1'	-6.76	1.46	1.53
57	BB	1555	G	C5-C6	-6.76	1.35	1.42
21	AA	274	A	C4'-C3'	6.76	1.60	1.53
21	AA	1040	U	C4-C5	-6.76	1.37	1.43
57	BB	202	U	C2'-C1'	-6.76	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1090	A	N3-C4	6.76	1.39	1.34
57	BB	2527	C	N3-C4	6.76	1.38	1.33
21	AA	192	A	N3-C4	6.76	1.39	1.34
21	AA	746	A	C6-N1	-6.76	1.30	1.35
21	AA	961	U	C2-N3	6.76	1.42	1.37
21	AA	1274	A	N9-C8	6.76	1.43	1.37
23	AW	63	G	C2'-C1'	-6.76	1.46	1.53
26	AV	52	G	N9-C4	-6.76	1.32	1.38
31	BL	47	ARG	CD-NE	6.76	1.57	1.46
57	BB	619	G	C2-N3	6.76	1.38	1.32
57	BB	1079	C	C4-N4	6.76	1.40	1.33
57	BB	1155	A	C5-C4	-6.76	1.34	1.38
57	BB	1489	C	N3-C4	6.76	1.38	1.33
57	BB	1782	U	P-O5'	-6.76	1.52	1.59
57	BB	2668	G	N7-C5	6.76	1.43	1.39
58	BA	103	U	C2-N3	6.76	1.42	1.37
21	AA	366	A	C4'-C3'	6.76	1.60	1.53
21	AA	925	G	C3'-C2'	-6.76	1.45	1.52
57	BB	239	C	O3'-P	-6.76	1.53	1.61
57	BB	362	A	O3'-P	-6.76	1.53	1.61
57	BB	1743	G	C5'-C4'	6.76	1.59	1.51
57	BB	1952	A	N7-C5	-6.76	1.35	1.39
21	AA	498	A	N9-C4	-6.76	1.33	1.37
21	AA	510	A	C4'-C3'	6.76	1.60	1.53
21	AA	513	C	C2-N3	6.76	1.41	1.35
21	AA	1485	U	C4'-O4'	-6.76	1.36	1.45
57	BB	778	G	P-O5'	-6.76	1.52	1.59
57	BB	1915	U	C3'-C2'	-6.76	1.45	1.52
57	BB	2308	G	C2-N3	6.76	1.38	1.32
21	AA	1107	C	O4'-C1'	6.75	1.50	1.41
21	AA	1198	G	O3'-P	-6.75	1.53	1.61
23	AW	32	U	C4-C5	6.75	1.49	1.43
57	BB	1682	G	N1-C2	6.75	1.43	1.37
21	AA	615	G	C5-C6	-6.75	1.35	1.42
57	BB	161	A	O3'-P	-6.75	1.53	1.61
57	BB	1762	A	O3'-P	-6.75	1.53	1.61
57	BB	1824	G	C6-N1	6.75	1.44	1.39
57	BB	1927	A	O4'-C1'	6.75	1.50	1.41
57	BB	2114	A	N7-C5	-6.75	1.35	1.39
58	BA	17	C	N3-C4	6.75	1.38	1.33
21	AA	87	C	C5'-C4'	6.75	1.59	1.51
21	AA	801	U	C4-C5	6.75	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	861	G	C2-N2	6.75	1.41	1.34
26	AV	44	A	C6-N1	6.75	1.40	1.35
57	BB	121	G	C5'-C4'	6.75	1.59	1.51
57	BB	531	C	N1-C6	6.75	1.41	1.37
57	BB	696	G	N9-C8	6.75	1.42	1.37
57	BB	169	G	N1-C2	6.75	1.43	1.37
57	BB	766	U	C4'-C3'	6.75	1.60	1.53
57	BB	1114	C	C5'-C4'	6.75	1.59	1.51
21	AA	621	A	N9-C4	-6.75	1.33	1.37
21	AA	1014	A	C5-C4	6.75	1.43	1.38
21	AA	1142	G	C5-C4	-6.75	1.33	1.38
26	AV	64	G	C2-N2	6.75	1.41	1.34
57	BB	318	C	C4'-C3'	6.75	1.60	1.53
57	BB	811	U	N3-C4	6.75	1.44	1.38
57	BB	911	A	C6-N1	6.75	1.40	1.35
57	BB	2595	G	C5-C4	6.75	1.43	1.38
15	AD	114	ARG	CZ-NH2	6.75	1.41	1.33
21	AA	309	A	C3'-C2'	6.75	1.60	1.52
22	AY	7	U	N1-C6	6.75	1.44	1.38
57	BB	35	G	N3-C4	-6.75	1.30	1.35
57	BB	944	C	C4-N4	6.75	1.40	1.33
57	BB	1473	G	C6-N1	6.75	1.44	1.39
57	BB	2041	U	C2-N3	6.75	1.42	1.37
21	AA	74	A	N7-C5	6.75	1.43	1.39
23	AW	19	G	C2-N2	6.75	1.41	1.34
57	BB	489	G	C2'-C1'	-6.75	1.46	1.53
57	BB	1382	G	N9-C4	-6.75	1.32	1.38
21	AA	1483	A	N3-C4	-6.74	1.30	1.34
24	AX	15	A	C2-N3	6.74	1.39	1.33
57	BB	727	A	P-O5'	-6.74	1.53	1.59
57	BB	914	G	O3'-P	6.74	1.69	1.61
57	BB	1469	A	N3-C4	-6.74	1.30	1.34
57	BB	2450	A	C1'-N9	-6.74	1.37	1.46
57	BB	2465	C	P-O5'	-6.74	1.53	1.59
21	AA	74	A	C3'-C2'	-6.74	1.45	1.52
21	AA	120	A	C2'-C1'	-6.74	1.46	1.53
21	AA	197	A	C3'-C2'	6.74	1.60	1.52
57	BB	151	C	C2'-C1'	-6.74	1.46	1.53
57	BB	289	G	N9-C8	6.74	1.42	1.37
57	BB	614	A	O3'-P	-6.74	1.53	1.61
57	BB	1638	C	O3'-P	-6.74	1.53	1.61
57	BB	1664	A	N3-C4	-6.74	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	236	A	N7-C5	-6.74	1.35	1.39
21	AA	362	G	C8-N7	-6.74	1.26	1.30
21	AA	755	G	N9-C8	-6.74	1.33	1.37
22	AY	7	U	O3'-P	6.74	1.69	1.61
31	BL	132	ARG	NE-CZ	6.74	1.41	1.33
57	BB	768	G	P-O5'	-6.74	1.53	1.59
57	BB	792	A	C6-N1	-6.74	1.30	1.35
57	BB	800	A	N7-C5	-6.74	1.35	1.39
57	BB	1422	G	C5-C4	-6.74	1.33	1.38
57	BB	2549	G	N1-C2	6.74	1.43	1.37
57	BB	2576	G	N7-C5	-6.74	1.35	1.39
57	BB	2678	C	C2-N3	6.74	1.41	1.35
21	AA	906	A	C6-N6	6.74	1.39	1.33
21	AA	959	A	O3'-P	-6.74	1.53	1.61
57	BB	345	A	C6-N6	6.74	1.39	1.33
57	BB	767	U	C2-N3	6.74	1.42	1.37
57	BB	1590	A	C6-N6	6.74	1.39	1.33
57	BB	2275	C	C5'-C4'	6.74	1.59	1.51
21	AA	1346	A	C6-N1	-6.74	1.30	1.35
57	BB	1416	G	C2-N3	6.74	1.38	1.32
21	AA	373	A	C6-N6	6.74	1.39	1.33
21	AA	437	U	O4'-C1'	-6.74	1.32	1.41
21	AA	1462	C	N1-C2	-6.74	1.33	1.40
26	AV	1	C	C2-N3	6.74	1.41	1.35
21	AA	58	C	C5'-C4'	6.73	1.59	1.51
21	AA	1295	U	C2'-C1'	-6.73	1.46	1.53
21	AA	1514	G	N9-C4	-6.73	1.32	1.38
57	BB	1630	A	C4'-C3'	6.73	1.60	1.53
21	AA	910	C	C3'-C2'	-6.73	1.45	1.52
21	AA	1003	G	N9-C8	6.73	1.42	1.37
57	BB	386	G	P-O5'	-6.73	1.53	1.59
57	BB	838	C	C3'-C2'	6.73	1.60	1.52
21	AA	311	C	N3-C4	6.73	1.38	1.33
21	AA	408	A	N7-C5	-6.73	1.35	1.39
21	AA	1408	A	N7-C5	-6.73	1.35	1.39
57	BB	208	C	N3-C4	6.73	1.38	1.33
57	BB	1626	A	C5'-C4'	6.73	1.59	1.51
57	BB	2193	G	N9-C4	-6.73	1.32	1.38
21	AA	254	G	C2-N3	6.73	1.38	1.32
21	AA	728	A	C6-N1	6.73	1.40	1.35
21	AA	769	G	N9-C4	6.73	1.43	1.38
57	BB	992	C	P-O5'	-6.73	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1541	C	C4'-O4'	6.73	1.54	1.45
57	BB	1717	A	C5-C4	6.73	1.43	1.38
57	BB	2334	U	O3'-P	-6.73	1.53	1.61
21	AA	1212	U	C2'-C1'	-6.73	1.46	1.53
21	AA	1276	G	C2-N2	6.73	1.41	1.34
57	BB	22	C	N3-C4	6.73	1.38	1.33
57	BB	1801	A	C2'-C1'	-6.73	1.46	1.53
21	AA	538	G	C2-N3	6.72	1.38	1.32
21	AA	1525	G	N7-C5	6.72	1.43	1.39
22	AY	10	G	O4'-C1'	6.72	1.50	1.41
22	AY	25	C	C1'-N1	6.72	1.58	1.48
57	BB	464	U	N3-C4	6.72	1.44	1.38
57	BB	643	A	N9-C4	-6.72	1.33	1.37
57	BB	1364	G	C3'-C2'	-6.72	1.45	1.52
57	BB	2155	U	N3-C4	6.72	1.44	1.38
57	BB	2192	U	C4-C5	6.72	1.49	1.43
21	AA	918	A	C5-C4	6.72	1.43	1.38
21	AA	920	U	C5-C6	6.72	1.40	1.34
21	AA	1249	C	P-O5'	-6.72	1.53	1.59
22	AY	58	A	C2'-C1'	-6.72	1.46	1.53
57	BB	23	G	C2'-C1'	-6.72	1.46	1.53
57	BB	596	U	N1-C6	6.72	1.44	1.38
57	BB	2217	G	C2-N3	6.72	1.38	1.32
57	BB	2890	G	C2-N3	6.72	1.38	1.32
58	BA	26	C	N1-C6	6.72	1.41	1.37
58	BA	64	G	N1-C2	6.72	1.43	1.37
21	AA	562	U	N1-C6	6.72	1.44	1.38
21	AA	1105	A	C2'-C1'	-6.72	1.46	1.53
57	BB	290	U	N1-C2	6.72	1.44	1.38
57	BB	783	A	N7-C5	-6.72	1.35	1.39
57	BB	1327	A	C5-C4	-6.72	1.34	1.38
21	AA	399	G	C4'-C3'	6.72	1.60	1.53
21	AA	890	G	C2-N3	6.72	1.38	1.32
21	AA	912	C	N3-C4	6.72	1.38	1.33
21	AA	1228	C	C3'-C2'	-6.72	1.45	1.52
21	AA	1463	U	P-O5'	-6.72	1.53	1.59
57	BB	267	C	C4-C5	6.72	1.48	1.43
57	BB	270	A	C3'-C2'	6.72	1.60	1.52
57	BB	1737	G	C2-N3	6.72	1.38	1.32
57	BB	2076	U	N1-C2	6.72	1.44	1.38
57	BB	2162	G	C5-C4	-6.72	1.33	1.38
57	BB	2190	G	C2-N2	6.72	1.41	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	896	C	C2-N3	6.72	1.41	1.35
21	AA	917	G	C2-N2	6.72	1.41	1.34
21	AA	1143	G	P-O5'	-6.72	1.53	1.59
57	BB	859	G	C4'-O4'	-6.72	1.36	1.45
57	BB	1540	G	C8-N7	-6.72	1.26	1.30
57	BB	1645	G	C5'-C4'	6.72	1.59	1.51
21	AA	766	A	N7-C5	-6.72	1.35	1.39
23	AW	54	U	C4-C5	6.72	1.49	1.43
49	B2	3	ARG	CZ-NH2	6.72	1.41	1.33
57	BB	1207	C	P-O5'	-6.72	1.53	1.59
57	BB	2205	A	N7-C5	-6.72	1.35	1.39
57	BB	2251	G	C8-N7	-6.72	1.26	1.30
2	AK	123	PRO	N-CD	-6.71	1.38	1.47
21	AA	768	A	C2'-C1'	-6.71	1.46	1.53
57	BB	702	U	C4-O4	-6.71	1.18	1.23
57	BB	1549	A	C8-N7	-6.71	1.26	1.31
57	BB	325	G	C2-N3	6.71	1.38	1.32
57	BB	2293	G	N9-C8	6.71	1.42	1.37
21	AA	362	G	C5-C4	6.71	1.43	1.38
57	BB	920	A	N7-C5	-6.71	1.35	1.39
57	BB	1018	U	C3'-C2'	6.71	1.60	1.52
57	BB	2301	C	C2'-C1'	-6.71	1.46	1.53
57	BB	2767	C	C4'-O4'	-6.71	1.36	1.45
21	AA	508	U	N1-C6	6.71	1.44	1.38
21	AA	954	G	C2'-C1'	-6.71	1.46	1.53
57	BB	145	C	C2-N3	6.71	1.41	1.35
57	BB	1419	A	C4'-C3'	6.71	1.60	1.53
57	BB	1700	A	C6-N6	6.71	1.39	1.33
21	AA	475	C	C2'-C1'	-6.71	1.46	1.53
21	AA	949	A	O3'-P	-6.71	1.53	1.61
21	AA	1369	C	P-O5'	-6.71	1.53	1.59
57	BB	551	G	C2-N3	6.71	1.38	1.32
57	BB	1245	G	N9-C8	6.71	1.42	1.37
57	BB	1274	A	C4'-C3'	6.71	1.60	1.53
57	BB	2420	C	C2'-C1'	-6.71	1.46	1.53
57	BB	2476	A	C6-N1	6.71	1.40	1.35
57	BB	2661	G	C8-N7	-6.71	1.26	1.30
58	BA	91	C	C2'-C1'	-6.71	1.46	1.53
21	AA	98	A	N7-C5	-6.71	1.35	1.39
57	BB	461	C	C4-C5	-6.71	1.37	1.43
57	BB	993	G	C6-N1	6.71	1.44	1.39
57	BB	1733	G	O3'-P	-6.71	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1857	G	C2-N3	6.71	1.38	1.32
57	BB	1861	G	N7-C5	-6.71	1.35	1.39
21	AA	404	G	N7-C5	-6.71	1.35	1.39
21	AA	812	G	C8-N7	-6.71	1.26	1.30
21	AA	1174	G	C4'-O4'	-6.71	1.36	1.45
22	AY	35	A	N3-C4	-6.71	1.30	1.34
57	BB	1304	A	C6-N1	6.71	1.40	1.35
57	BB	1874	C	C5-C6	6.71	1.39	1.34
21	AA	287	U	C2-O2	6.70	1.28	1.22
21	AA	378	G	N7-C5	-6.70	1.35	1.39
21	AA	633	G	C8-N7	-6.70	1.26	1.30
21	AA	1337	G	P-O5'	-6.70	1.53	1.59
57	BB	16	C	O4'-C1'	-6.70	1.32	1.41
57	BB	240	C	P-O5'	-6.70	1.53	1.59
57	BB	251	A	C6-N1	6.70	1.40	1.35
57	BB	305	C	N1-C6	6.70	1.41	1.37
57	BB	1038	G	N9-C8	-6.70	1.33	1.37
57	BB	1170	C	P-O5'	-6.70	1.53	1.59
57	BB	1286	A	C8-N7	-6.70	1.26	1.31
21	AA	287	U	C2-N3	6.70	1.42	1.37
21	AA	703	G	N7-C5	6.70	1.43	1.39
21	AA	357	G	N9-C8	6.70	1.42	1.37
21	AA	645	G	N7-C5	6.70	1.43	1.39
57	BB	823	C	N1-C6	6.70	1.41	1.37
57	BB	1733	G	C2'-C1'	-6.70	1.46	1.53
57	BB	2839	G	N7-C5	-6.70	1.35	1.39
21	AA	277	C	N3-C4	6.70	1.38	1.33
21	AA	1310	G	N1-C2	6.70	1.43	1.37
21	AA	1362	A	N9-C4	-6.70	1.33	1.37
57	BB	711	G	N1-C2	6.70	1.43	1.37
57	BB	802	A	N3-C4	-6.70	1.30	1.34
57	BB	1501	G	C2-N2	6.70	1.41	1.34
21	AA	145	G	N9-C8	6.70	1.42	1.37
21	AA	820	U	C5'-C4'	6.70	1.59	1.51
57	BB	797	G	N1-C2	6.70	1.43	1.37
57	BB	1000	A	N3-C4	-6.70	1.30	1.34
57	BB	2352	A	C5-C4	6.70	1.43	1.38
21	AA	1378	C	C4-C5	6.70	1.48	1.43
57	BB	86	G	N9-C8	6.70	1.42	1.37
57	BB	425	G	N7-C5	-6.70	1.35	1.39
57	BB	2603	G	N1-C2	6.70	1.43	1.37
58	BA	69	G	N1-C2	6.70	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	50	U	N1-C6	6.69	1.44	1.38
57	BB	168	G	C8-N7	6.69	1.34	1.30
57	BB	1704	C	C2'-C1'	-6.69	1.46	1.53
21	AA	456	A	N7-C5	-6.69	1.35	1.39
21	AA	616	G	C3'-O3'	6.69	1.51	1.42
57	BB	1407	G	N9-C8	6.69	1.42	1.37
57	BB	1871	A	C2'-C1'	-6.69	1.46	1.53
57	BB	2686	G	N9-C8	6.69	1.42	1.37
21	AA	23	C	C2-N3	6.69	1.41	1.35
21	AA	1009	U	C3'-C2'	-6.69	1.45	1.52
57	BB	1548	A	N9-C8	-6.69	1.32	1.37
57	BB	2227	A	N1-C2	-6.69	1.28	1.34
57	BB	337	C	C4'-C3'	-6.69	1.45	1.53
57	BB	2499	C	C4-N4	6.69	1.40	1.33
21	AA	417	G	N9-C8	6.69	1.42	1.37
21	AA	663	A	C2'-C1'	-6.69	1.46	1.53
21	AA	854	U	C2-N3	6.69	1.42	1.37
22	AY	59	U	C4-O4	-6.69	1.18	1.23
57	BB	933	A	C2'-C1'	-6.69	1.46	1.53
57	BB	1504	A	C5-C6	6.69	1.47	1.41
58	BA	46	A	C5-C4	6.69	1.43	1.38
21	AA	85	U	N1-C6	-6.69	1.31	1.38
57	BB	127	A	C3'-C2'	6.69	1.60	1.52
21	AA	460	A	N9-C4	-6.68	1.33	1.37
21	AA	1430	A	C6-N1	6.68	1.40	1.35
26	AV	47	U	N1-C2	6.68	1.44	1.38
57	BB	457	A	N7-C5	-6.68	1.35	1.39
57	BB	664	G	C2'-C1'	-6.68	1.46	1.53
57	BB	676	A	P-O5'	-6.68	1.53	1.59
57	BB	2231	U	O3'-P	-6.68	1.53	1.61
57	BB	2593	U	N3-C4	-6.68	1.32	1.38
57	BB	2651	C	C2-N3	-6.68	1.30	1.35
17	AF	24	ARG	CD-NE	6.68	1.57	1.46
21	AA	858	G	N1-C2	6.68	1.43	1.37
21	AA	962	C	N1-C6	6.68	1.41	1.37
21	AA	1487	G	C5-C6	6.68	1.49	1.42
57	BB	442	G	N3-C4	6.68	1.40	1.35
57	BB	1336	A	N9-C4	6.68	1.41	1.37
57	BB	1653	G	C6-N1	6.68	1.44	1.39
57	BB	1906	G	C2'-C1'	-6.68	1.46	1.53
57	BB	2333	A	C6-N6	6.68	1.39	1.33
57	BB	2539	C	C5-C6	6.68	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	20	C	C2'-C1'	-6.68	1.46	1.53
8	AQ	79	GLU	CG-CD	6.68	1.61	1.51
21	AA	728	A	N9-C4	6.68	1.41	1.37
21	AA	1176	A	C5-C6	-6.68	1.35	1.41
21	AA	1308	U	C5'-C4'	6.68	1.59	1.51
57	BB	1515	A	C4'-O4'	6.68	1.54	1.45
57	BB	1525	A	N9-C4	-6.68	1.33	1.37
57	BB	1999	C	C4'-C3'	6.68	1.60	1.53
57	BB	2054	A	C3'-C2'	-6.68	1.45	1.52
26	AV	47	U	C5'-C4'	6.68	1.59	1.51
57	BB	349	U	N3-C4	6.68	1.44	1.38
57	BB	405	U	N1-C6	6.68	1.44	1.38
57	BB	1023	U	N1-C6	-6.68	1.31	1.38
57	BB	1718	G	C8-N7	-6.68	1.26	1.30
57	BB	1990	C	C2-O2	6.68	1.30	1.24
57	BB	2599	G	N7-C5	-6.68	1.35	1.39
21	AA	1002	G	C2-N3	6.68	1.38	1.32
26	AV	32	C	N1-C6	6.68	1.41	1.37
55	BG	94	ARG	NE-CZ	6.68	1.41	1.33
57	BB	1151	A	C2'-C1'	-6.68	1.46	1.53
58	BA	8	C	N3-C4	6.68	1.38	1.33
58	BA	23	G	C2-N3	6.68	1.38	1.32
2	AK	52	ARG	NE-CZ	6.67	1.41	1.33
21	AA	34	C	C4-C5	-6.67	1.37	1.43
21	AA	645	G	N1-C2	6.67	1.43	1.37
21	AA	728	A	C6-N6	6.67	1.39	1.33
21	AA	1225	A	C8-N7	6.67	1.36	1.31
21	AA	1277	C	C2-O2	6.67	1.30	1.24
57	BB	1897	G	C8-N7	-6.67	1.26	1.30
57	BB	2187	U	C5'-C4'	6.67	1.59	1.51
57	BB	2590	A	C5'-C4'	6.67	1.59	1.51
57	BB	2901	C	N1-C2	6.67	1.46	1.40
21	AA	142	G	N7-C5	-6.67	1.35	1.39
21	AA	369	G	P-O5'	-6.67	1.53	1.59
57	BB	629	G	O3'-P	-6.67	1.53	1.61
57	BB	760	G	N9-C4	-6.67	1.32	1.38
21	AA	400	C	N3-C4	6.67	1.38	1.33
57	BB	293	U	N3-C4	6.67	1.44	1.38
57	BB	654	A	O3'-P	-6.67	1.53	1.61
57	BB	847	U	O3'-P	-6.67	1.53	1.61
57	BB	1216	G	C2'-C1'	-6.67	1.46	1.53
57	BB	2152	G	C5-C4	6.67	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2257	U	C2'-C1'	-6.67	1.46	1.53
58	BA	29	A	C4'-C3'	-6.67	1.45	1.53
21	AA	1035	A	C5-C6	-6.67	1.35	1.41
21	AA	1192	C	C2-N3	6.67	1.41	1.35
57	BB	962	G	C8-N7	-6.67	1.26	1.30
57	BB	1950	G	C1'-N9	-6.67	1.37	1.46
21	AA	802	A	C8-N7	6.67	1.36	1.31
57	BB	370	G	C6-O6	-6.67	1.18	1.24
57	BB	1620	G	C2-N2	6.67	1.41	1.34
57	BB	1929	G	C4'-C3'	-6.67	1.45	1.53
57	BB	2503	A	O3'-P	-6.67	1.53	1.61
12	AU	7	GLU	CG-CD	6.67	1.61	1.51
21	AA	1367	C	N3-C4	6.67	1.38	1.33
23	AW	5	G	N9-C8	6.67	1.42	1.37
57	BB	529	A	C3'-C2'	-6.67	1.45	1.52
57	BB	1288	G	N9-C8	-6.67	1.33	1.37
57	BB	1821	A	N3-C4	6.67	1.38	1.34
58	BA	90	C	C4-N4	6.67	1.40	1.33
21	AA	25	C	N3-C4	6.67	1.38	1.33
57	BB	648	G	C4'-C3'	6.67	1.60	1.53
21	AA	621	A	C4'-C3'	-6.66	1.45	1.53
21	AA	1138	G	C2'-C1'	-6.66	1.46	1.53
49	B2	21	ARG	NE-CZ	6.66	1.41	1.33
21	AA	172	A	C5-C4	6.66	1.43	1.38
21	AA	269	C	C4-N4	6.66	1.40	1.33
21	AA	544	G	C5'-C4'	6.66	1.59	1.51
21	AA	1278	G	P-O5'	-6.66	1.53	1.59
26	AV	67	C	C2-N3	-6.66	1.30	1.35
57	BB	47	C	C2'-C1'	-6.66	1.46	1.53
21	AA	185	U	N1-C2	6.66	1.44	1.38
21	AA	225	C	N3-C4	6.66	1.38	1.33
21	AA	834	U	C2-N3	6.66	1.42	1.37
21	AA	1004	A	N7-C5	-6.66	1.35	1.39
21	AA	1344	C	C2'-C1'	-6.66	1.46	1.53
26	AV	8	U	N1-C2	6.66	1.44	1.38
57	BB	1	G	C5'-C4'	6.66	1.59	1.51
57	BB	1295	C	N3-C4	6.66	1.38	1.33
57	BB	2635	A	C5-C4	6.66	1.43	1.38
57	BB	496	G	N7-C5	-6.66	1.35	1.39
57	BB	1195	G	C2'-C1'	-6.66	1.46	1.53
58	BA	77	U	C4'-C3'	-6.66	1.45	1.53
57	BB	864	G	N9-C8	6.66	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1453	A	C4'-C3'	6.66	1.60	1.53
57	BB	1878	G	N1-C2	6.66	1.43	1.37
57	BB	2310	C	C3'-C2'	-6.66	1.45	1.52
57	BB	764	A	P-O5'	-6.66	1.53	1.59
57	BB	1912	A	N7-C5	-6.66	1.35	1.39
57	BB	2872	A	N3-C4	-6.66	1.30	1.34
57	BB	713	G	C2'-C1'	-6.65	1.46	1.53
57	BB	1322	A	N9-C8	6.65	1.43	1.37
21	AA	266	G	C8-N7	-6.65	1.26	1.30
21	AA	325	A	N7-C5	-6.65	1.35	1.39
21	AA	816	A	C5-C6	6.65	1.47	1.41
57	BB	1718	G	N9-C4	-6.65	1.32	1.38
21	AA	1355	G	C5-C4	-6.65	1.33	1.38
57	BB	1098	A	O4'-C1'	-6.65	1.33	1.41
57	BB	2156	G	C2-N3	6.65	1.38	1.32
21	AA	728	A	P-O5'	-6.65	1.53	1.59
57	BB	262	A	C2-N3	6.65	1.39	1.33
57	BB	325	G	N9-C8	6.65	1.42	1.37
57	BB	1364	G	N9-C8	-6.65	1.33	1.37
57	BB	1854	A	C6-N1	6.65	1.40	1.35
21	AA	540	G	O3'-P	-6.65	1.53	1.61
21	AA	963	G	N3-C4	-6.65	1.30	1.35
21	AA	1145	A	N9-C8	6.65	1.43	1.37
32	BM	38	ARG	CD-NE	6.65	1.57	1.46
57	BB	41	C	C4-N4	6.65	1.40	1.33
57	BB	64	A	N3-C4	-6.65	1.30	1.34
57	BB	1037	G	N7-C5	-6.65	1.35	1.39
57	BB	1869	G	N3-C4	-6.65	1.30	1.35
57	BB	2018	G	C2-N3	6.65	1.38	1.32
57	BB	2617	U	N1-C6	6.65	1.44	1.38
57	BB	2686	G	C2-N2	6.65	1.41	1.34
57	BB	2809	A	N9-C4	6.65	1.41	1.37
21	AA	20	U	N3-C4	6.65	1.44	1.38
37	BR	102	SER	CB-OG	-6.65	1.33	1.42
57	BB	1364	G	N1-C2	6.65	1.43	1.37
57	BB	1654	A	N3-C4	-6.65	1.30	1.34
57	BB	2644	G	N9-C8	6.65	1.42	1.37
21	AA	388	G	C2'-C1'	-6.64	1.46	1.53
21	AA	1270	G	N9-C8	-6.64	1.33	1.37
22	AY	51	G	N1-C2	6.64	1.43	1.37
57	BB	163	C	N1-C6	6.64	1.41	1.37
57	BB	242	G	C5-C6	6.64	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1139	G	C5-C4	6.64	1.43	1.38
57	BB	1494	A	N9-C4	-6.64	1.33	1.37
57	BB	1954	G	C2'-C1'	-6.64	1.46	1.53
57	BB	2156	G	C5-C4	6.64	1.43	1.38
57	BB	2217	G	P-O5'	-6.64	1.53	1.59
21	AA	191	G	C2-N3	6.64	1.38	1.32
21	AA	571	U	C2-N3	6.64	1.42	1.37
21	AA	799	G	C6-N1	6.64	1.44	1.39
57	BB	683	U	C2'-C1'	-6.64	1.46	1.53
57	BB	1002	G	C3'-C2'	6.64	1.60	1.52
57	BB	2880	C	C2-O2	6.64	1.30	1.24
21	AA	982	U	C2-N3	6.64	1.42	1.37
21	AA	1050	G	C2-N3	6.64	1.38	1.32
21	AA	1221	G	N3-C4	-6.64	1.30	1.35
26	AV	17(A)	U	C3'-O3'	6.64	1.51	1.42
57	BB	394	C	C4-N4	6.64	1.40	1.33
57	BB	1267	U	N3-C4	6.64	1.44	1.38
57	BB	2124	G	C2-N2	6.64	1.41	1.34
21	AA	137	U	C3'-C2'	-6.64	1.45	1.52
21	AA	1008	U	N1-C6	6.64	1.44	1.38
21	AA	1191	A	C8-N7	-6.64	1.26	1.31
57	BB	585	G	N3-C4	6.64	1.40	1.35
57	BB	1309	G	C8-N7	6.64	1.34	1.30
57	BB	1811	G	C6-N1	6.64	1.44	1.39
57	BB	2257	U	C4-C5	6.64	1.49	1.43
57	BB	1397	U	C2'-C1'	-6.64	1.46	1.53
57	BB	2256	G	P-O5'	-6.64	1.53	1.59
57	BB	2326	C	C4'-O4'	-6.64	1.36	1.45
57	BB	2504	U	N3-C4	6.64	1.44	1.38
21	AA	536	C	C4-C5	6.64	1.48	1.43
21	AA	680	C	C4'-C3'	6.64	1.60	1.53
57	BB	119	A	N7-C5	-6.64	1.35	1.39
57	BB	763	G	C2'-C1'	-6.64	1.46	1.53
57	BB	1530	G	C8-N7	-6.64	1.26	1.30
57	BB	2775	G	N3-C4	-6.64	1.30	1.35
21	AA	450	G	O3'-P	-6.63	1.53	1.61
21	AA	485	U	N3-C4	6.63	1.44	1.38
21	AA	1037	C	N3-C4	6.63	1.38	1.33
21	AA	1092	A	C6-N6	6.63	1.39	1.33
21	AA	1194	U	C4'-O4'	-6.63	1.36	1.45
22	AY	26	G	C6-N1	6.63	1.44	1.39
57	BB	1410	G	C5-C4	6.63	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1491	G	C5-C4	-6.63	1.33	1.38
57	BB	1648	U	O4'-C1'	6.63	1.50	1.41
57	BB	1706	C	C2-N3	6.63	1.41	1.35
57	BB	1824	G	N1-C2	6.63	1.43	1.37
21	AA	484	G	N3-C4	-6.63	1.30	1.35
21	AA	594	U	N1-C6	-6.63	1.31	1.38
57	BB	668	A	N9-C4	6.63	1.41	1.37
57	BB	1698	A	C6-N6	6.63	1.39	1.33
21	AA	1420	U	N3-C4	6.63	1.44	1.38
57	BB	479	A	C4'-C3'	-6.63	1.45	1.53
57	BB	698	C	C2-N3	6.63	1.41	1.35
57	BB	2632	A	N1-C2	6.63	1.40	1.34
57	BB	2762	C	C5'-C4'	6.63	1.59	1.51
57	BB	2785	C	C5'-C4'	6.63	1.59	1.51
21	AA	311	C	C2'-C1'	-6.63	1.46	1.53
57	BB	492	A	C6-N1	6.63	1.40	1.35
57	BB	604	G	N3-C4	-6.63	1.30	1.35
57	BB	1535	A	N3-C4	6.63	1.38	1.34
57	BB	2671	G	N3-C4	-6.63	1.30	1.35
58	BA	86	G	C6-N1	6.63	1.44	1.39
49	B2	41	ARG	CZ-NH1	6.63	1.41	1.33
57	BB	370	G	N1-C2	6.63	1.43	1.37
57	BB	453	A	C2'-C1'	-6.63	1.46	1.53
57	BB	1242	U	N1-C2	6.63	1.44	1.38
57	BB	1503	A	N9-C4	-6.63	1.33	1.37
58	BA	41	G	C6-N1	6.63	1.44	1.39
21	AA	769	G	C6-N1	6.63	1.44	1.39
23	AW	4	C	C2-N3	-6.63	1.30	1.35
57	BB	62	U	N1-C6	6.63	1.44	1.38
57	BB	421	C	C5'-C4'	6.63	1.59	1.51
57	BB	1368	G	N1-C2	6.63	1.43	1.37
57	BB	1748	C	C4-N4	6.63	1.40	1.33
57	BB	1833	C	C2'-C1'	-6.63	1.46	1.53
57	BB	2209	G	C3'-C2'	-6.63	1.45	1.52
21	AA	1272	G	C5-C4	6.62	1.43	1.38
57	BB	1443	U	N3-C4	6.62	1.44	1.38
21	AA	1265	C	C5'-C4'	6.62	1.59	1.51
57	BB	359	G	N1-C2	6.62	1.43	1.37
57	BB	2152	G	P-O5'	-6.62	1.53	1.59
57	BB	2721	A	N9-C4	6.62	1.41	1.37
57	BB	2786	U	C2-N3	6.62	1.42	1.37
21	AA	225	C	C2-N3	6.62	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1393	U	C5'-C4'	6.62	1.59	1.51
57	BB	406	G	C6-N1	6.62	1.44	1.39
57	BB	2509	G	N7-C5	-6.62	1.35	1.39
57	BB	2634	A	N1-C2	6.62	1.40	1.34
58	BA	59	A	C8-N7	6.62	1.36	1.31
21	AA	717	U	N1-C2	6.62	1.44	1.38
57	BB	471	A	C2'-C1'	-6.62	1.46	1.53
57	BB	882	G	C2-N3	6.62	1.38	1.32
21	AA	935	A	N3-C4	-6.62	1.30	1.34
21	AA	1248	A	O3'-P	-6.62	1.53	1.61
21	AA	1331	G	O3'-P	-6.62	1.53	1.61
57	BB	287	G	C5-C6	-6.62	1.35	1.42
57	BB	683	U	N1-C6	6.62	1.44	1.38
57	BB	897	C	C4-C5	6.62	1.48	1.43
57	BB	1782	U	C2'-C1'	-6.62	1.46	1.53
21	AA	164	G	C2-N2	6.62	1.41	1.34
21	AA	461	A	C3'-O3'	6.62	1.51	1.42
57	BB	1268	A	N7-C5	-6.62	1.35	1.39
57	BB	1541	C	C4'-C3'	6.62	1.60	1.53
57	BB	1873	G	C4'-O4'	6.62	1.54	1.45
21	AA	216	U	C3'-C2'	-6.62	1.45	1.52
26	AV	43	A	N7-C5	-6.62	1.35	1.39
57	BB	219	A	C5'-C4'	6.62	1.59	1.51
57	BB	1378	A	P-O5'	6.62	1.66	1.59
57	BB	1591	A	C6-N6	6.62	1.39	1.33
21	AA	1177	G	C4'-C3'	-6.61	1.45	1.53
22	AY	3	G	C2-N2	6.61	1.41	1.34
23	AW	66	U	C2-O2	6.61	1.28	1.22
57	BB	938	G	N7-C5	-6.61	1.35	1.39
57	BB	1808	A	N3-C4	-6.61	1.30	1.34
57	BB	2324	U	C4-O4	6.61	1.28	1.23
57	BB	2496	C	N3-C4	6.61	1.38	1.33
57	BB	2711	A	C2-N3	6.61	1.39	1.33
21	AA	266	G	C4'-C3'	-6.61	1.45	1.53
21	AA	579	A	N9-C8	6.61	1.43	1.37
21	AA	713	G	N1-C2	6.61	1.43	1.37
21	AA	1483	A	N9-C4	-6.61	1.33	1.37
57	BB	1018	U	C4'-O4'	6.61	1.54	1.45
58	BA	99	A	C2'-C1'	-6.61	1.46	1.53
21	AA	39	G	N1-C2	6.61	1.43	1.37
21	AA	481	G	O3'-P	-6.61	1.53	1.61
21	AA	649	A	C2'-C1'	-6.61	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1260	G	C4'-C3'	6.61	1.60	1.53
21	AA	1517	G	C6-N1	-6.61	1.34	1.39
57	BB	191	A	C5-C4	6.61	1.43	1.38
57	BB	1348	C	C4-C5	-6.61	1.37	1.43
21	AA	170	U	N1-C6	-6.61	1.32	1.38
21	AA	1241	G	P-O5'	-6.61	1.53	1.59
57	BB	1736	U	N3-C4	6.61	1.44	1.38
57	BB	2343	U	C2'-C1'	6.61	1.60	1.53
57	BB	2543	G	N3-C4	-6.61	1.30	1.35
57	BB	2875	C	N3-C4	6.61	1.38	1.33
58	BA	12	C	N1-C6	6.61	1.41	1.37
21	AA	197	A	C4'-C3'	6.61	1.60	1.53
33	BN	74	GLU	CD-OE1	6.61	1.32	1.25
57	BB	1035	U	C2'-C1'	-6.61	1.46	1.53
57	BB	1078	U	O3'-P	-6.61	1.53	1.61
57	BB	1479	G	C8-N7	6.61	1.34	1.30
57	BB	1927	A	N7-C5	6.61	1.43	1.39
57	BB	2275	C	C1'-N1	6.61	1.58	1.48
58	BA	32	U	O3'-P	-6.61	1.53	1.61
21	AA	133	U	C3'-O3'	6.61	1.51	1.42
21	AA	183	C	C2'-C1'	6.61	1.60	1.53
21	AA	450	G	N1-C2	6.61	1.43	1.37
21	AA	527	G	C5-C6	-6.61	1.35	1.42
21	AA	1433	A	N7-C5	-6.61	1.35	1.39
22	AY	33	U	C2-O2	6.61	1.28	1.22
57	BB	317	G	C2'-C1'	-6.61	1.46	1.53
57	BB	673	C	N1-C6	6.61	1.41	1.37
57	BB	829	A	N9-C4	-6.61	1.33	1.37
57	BB	1438	U	C4-C5	6.61	1.49	1.43
57	BB	1555	G	C8-N7	-6.61	1.26	1.30
57	BB	2836	U	O3'-P	-6.61	1.53	1.61
57	BB	2525	G	N9-C8	6.60	1.42	1.37
21	AA	89	U	N1-C6	-6.60	1.32	1.38
21	AA	467	U	C2-N3	6.60	1.42	1.37
21	AA	731	G	C2'-C1'	-6.60	1.46	1.53
21	AA	985	C	C4-C5	6.60	1.48	1.43
21	AA	1156	G	C2-N3	6.60	1.38	1.32
23	AW	28	G	C8-N7	-6.60	1.26	1.30
26	AV	27	U	C4'-C3'	-6.60	1.45	1.53
57	BB	795	C	C2'-C1'	-6.60	1.46	1.53
57	BB	1965	C	N3-C4	-6.60	1.29	1.33
57	BB	2713	U	N1-C6	6.60	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2857	G	C8-N7	6.60	1.34	1.30
57	BB	1010	A	N9-C8	6.60	1.43	1.37
57	BB	1101	U	C2'-C1'	-6.60	1.46	1.53
57	BB	2218	G	N1-C2	6.60	1.43	1.37
57	BB	2685	G	N7-C5	-6.60	1.35	1.39
21	AA	251	G	C6-N1	6.60	1.44	1.39
21	AA	725	G	C2-N3	6.60	1.38	1.32
21	AA	1123	U	P-O5'	-6.60	1.53	1.59
21	AA	1454	G	C2-N3	6.60	1.38	1.32
57	BB	1786	A	C2'-C1'	-6.60	1.46	1.53
57	BB	1927	A	C5-C6	-6.60	1.35	1.41
21	AA	881	G	C8-N7	-6.60	1.26	1.30
45	BC	213	ARG	NE-CZ	6.60	1.41	1.33
57	BB	287	G	N9-C8	-6.60	1.33	1.37
57	BB	377	G	O4'-C1'	6.60	1.50	1.41
57	BB	987	C	N3-C4	6.60	1.38	1.33
57	BB	1147	A	C5-C4	6.60	1.43	1.38
57	BB	2565	A	C3'-C2'	6.60	1.60	1.52
21	AA	50	A	O4'-C1'	6.59	1.50	1.41
21	AA	113	G	C5-C4	-6.59	1.33	1.38
21	AA	861	G	N3-C4	6.59	1.40	1.35
57	BB	424	G	C6-N1	6.59	1.44	1.39
57	BB	1021	A	C5-C4	6.59	1.43	1.38
57	BB	1595	C	N1-C6	-6.59	1.33	1.37
57	BB	2235	G	C5-C6	-6.59	1.35	1.42
21	AA	782	A	C5-C4	6.59	1.43	1.38
21	AA	1517	G	C2-N3	6.59	1.38	1.32
23	AW	6	G	N1-C2	6.59	1.43	1.37
22	AY	5	A	N3-C4	6.59	1.38	1.34
57	BB	474	G	C4'-C3'	6.59	1.60	1.53
57	BB	1181	U	C2'-C1'	-6.59	1.46	1.53
57	BB	1303	G	N9-C4	-6.59	1.32	1.38
57	BB	2083	G	N9-C8	-6.59	1.33	1.37
57	BB	2290	G	C6-N1	-6.59	1.34	1.39
21	AA	612	C	C4'-O4'	-6.59	1.36	1.45
21	AA	1025	U	C4-C5	6.59	1.49	1.43
21	AA	1329	A	C3'-C2'	-6.59	1.45	1.52
57	BB	651	G	C8-N7	-6.59	1.26	1.30
57	BB	682	G	N7-C5	-6.59	1.35	1.39
57	BB	1236	G	C6-N1	-6.59	1.34	1.39
57	BB	1241	A	C6-N1	6.59	1.40	1.35
57	BB	1983	G	N7-C5	6.59	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2058	A	N9-C8	6.59	1.43	1.37
57	BB	2456	C	C3'-C2'	-6.59	1.45	1.52
57	BB	2689	U	C2-N3	6.59	1.42	1.37
57	BB	2863	C	C2'-C1'	-6.59	1.46	1.53
21	AA	1378	C	C4-N4	6.59	1.39	1.33
57	BB	2383	G	C5'-C4'	6.59	1.59	1.51
21	AA	165	G	C2'-C1'	-6.59	1.46	1.53
21	AA	1044	A	C6-N6	6.59	1.39	1.33
21	AA	1454	G	C8-N7	6.59	1.34	1.30
21	AA	1475	G	C4'-O4'	-6.59	1.36	1.45
57	BB	703	U	N3-C4	6.59	1.44	1.38
57	BB	1099	G	N7-C5	-6.59	1.35	1.39
21	AA	1157	A	O3'-P	-6.58	1.53	1.61
23	AW	40	C	C4'-C3'	6.58	1.60	1.53
57	BB	745	G	C4'-O4'	-6.58	1.36	1.45
57	BB	1332	G	C3'-O3'	6.58	1.51	1.42
57	BB	2038	G	C5-C4	-6.58	1.33	1.38
21	AA	278	G	C2-N3	6.58	1.38	1.32
57	BB	84	A	C5-C4	-6.58	1.34	1.38
57	BB	1222	U	O3'-P	-6.58	1.53	1.61
57	BB	1795	C	C4'-C3'	6.58	1.60	1.53
57	BB	2040	G	C5-C6	-6.58	1.35	1.42
13	AB	221	ARG	CZ-NH1	6.58	1.41	1.33
21	AA	711	G	N9-C8	-6.58	1.33	1.37
21	AA	925	G	O3'-P	-6.58	1.53	1.61
21	AA	1385	G	C6-N1	6.58	1.44	1.39
57	BB	668	A	N7-C5	6.58	1.43	1.39
57	BB	684	G	O4'-C1'	6.58	1.50	1.41
57	BB	1327	A	C6-N6	6.58	1.39	1.33
57	BB	1766	G	N1-C2	6.58	1.43	1.37
57	BB	2096	C	C2'-C1'	-6.58	1.46	1.53
57	BB	2581	G	N9-C8	-6.58	1.33	1.37
58	BA	18	G	N1-C2	6.58	1.43	1.37
57	BB	516	C	N3-C4	6.58	1.38	1.33
57	BB	1922	G	C2'-C1'	6.58	1.60	1.53
58	BA	87	U	C3'-C2'	-6.58	1.45	1.52
21	AA	818	G	C5-C4	-6.58	1.33	1.38
21	AA	984	C	C1'-N1	6.58	1.58	1.48
57	BB	1943	U	C2-N3	6.58	1.42	1.37
57	BB	2105	U	C2'-C1'	-6.58	1.46	1.53
57	BB	2655	G	O3'-P	-6.58	1.53	1.61
57	BB	2684	U	C2-N3	-6.58	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	924	C	N3-C4	6.58	1.38	1.33
57	BB	1326	U	C2'-C1'	6.58	1.60	1.53
57	BB	1878	G	C2-N3	6.58	1.38	1.32
57	BB	2782	G	C2'-C1'	-6.58	1.46	1.53
58	BA	21	G	C6-N1	6.58	1.44	1.39
21	AA	19	A	C6-N6	6.58	1.39	1.33
21	AA	252	U	O3'-P	-6.58	1.53	1.61
21	AA	897	C	N3-C4	6.58	1.38	1.33
21	AA	1041	G	C4'-C3'	6.58	1.60	1.53
22	AY	43	G	N7-C5	-6.58	1.35	1.39
57	BB	1337	G	N9-C8	6.58	1.42	1.37
57	BB	2490	G	N1-C2	6.58	1.43	1.37
57	BB	2568	U	N3-C4	6.58	1.44	1.38
21	AA	266	G	N9-C8	-6.57	1.33	1.37
21	AA	361	G	C2'-C1'	-6.57	1.46	1.53
57	BB	291	G	C2'-C1'	-6.57	1.46	1.53
57	BB	2578	G	C3'-C2'	-6.57	1.45	1.52
21	AA	206	C	C4-N4	6.57	1.39	1.33
21	AA	962	C	C2'-C1'	-6.57	1.46	1.53
22	AY	30	G	C6-N1	6.57	1.44	1.39
57	BB	2219	U	P-O5'	-6.57	1.53	1.59
21	AA	453	G	C5-C6	6.57	1.49	1.42
21	AA	1000	A	C2-N3	6.57	1.39	1.33
21	AA	1075	U	N3-C4	6.57	1.44	1.38
57	BB	126	A	C4'-C3'	6.57	1.60	1.53
57	BB	614	A	C6-N1	6.57	1.40	1.35
57	BB	2855	C	C4'-C3'	6.57	1.60	1.53
21	AA	323	U	C5'-C4'	6.57	1.59	1.51
57	BB	571	U	C2-N3	6.57	1.42	1.37
57	BB	783	A	C5-C6	-6.57	1.35	1.41
57	BB	902	C	C4-C5	-6.57	1.37	1.43
21	AA	821	G	N3-C4	-6.57	1.30	1.35
21	AA	1044	A	C5-C4	6.57	1.43	1.38
23	AW	6	G	N9-C4	-6.57	1.32	1.38
55	BG	34	ARG	CZ-NH1	6.57	1.41	1.33
57	BB	84	A	C2'-C1'	-6.57	1.46	1.53
57	BB	204	A	N7-C5	-6.57	1.35	1.39
57	BB	362	A	C4'-O4'	6.57	1.54	1.45
57	BB	492	A	O3'-P	-6.57	1.53	1.61
21	AA	15	G	N3-C4	-6.57	1.30	1.35
21	AA	1063	C	C2-N3	6.57	1.41	1.35
57	BB	66	C	C4-N4	6.57	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	94	A	C3'-O3'	6.57	1.51	1.42
57	BB	334	C	C4-N4	6.57	1.39	1.33
57	BB	435	C	C4-C5	6.57	1.48	1.43
57	BB	1004	U	C5-C6	6.57	1.40	1.34
57	BB	188	G	N9-C8	6.56	1.42	1.37
57	BB	189	G	N9-C8	-6.56	1.33	1.37
57	BB	348	A	C2'-C1'	-6.56	1.46	1.53
57	BB	1036	G	C2-N2	6.56	1.41	1.34
57	BB	2640	G	C2-N2	6.56	1.41	1.34
21	AA	1271	A	N7-C5	-6.56	1.35	1.39
57	BB	705	A	N9-C8	-6.56	1.32	1.37
57	BB	789	A	C5-C6	-6.56	1.35	1.41
57	BB	1044	C	C4'-O4'	-6.56	1.37	1.45
57	BB	1236	G	N7-C5	-6.56	1.35	1.39
57	BB	1384	A	C2'-C1'	6.56	1.60	1.53
57	BB	2584	U	C2'-C1'	-6.56	1.46	1.53
21	AA	885	G	C2'-C1'	-6.56	1.46	1.53
21	AA	1256	A	C6-N1	6.56	1.40	1.35
21	AA	1504	G	N7-C5	-6.56	1.35	1.39
57	BB	205	G	N9-C4	-6.56	1.32	1.38
57	BB	1537	G	C8-N7	6.56	1.34	1.30
57	BB	2238	G	N1-C2	6.56	1.43	1.37
21	AA	418	C	N1-C6	6.56	1.41	1.37
21	AA	949	A	P-O5'	-6.56	1.53	1.59
57	BB	1817	G	C5-C4	-6.56	1.33	1.38
57	BB	2019	A	C5'-C4'	6.56	1.59	1.51
57	BB	2249	U	C2'-C1'	-6.56	1.46	1.53
57	BB	2653	U	C4'-C3'	-6.56	1.46	1.53
21	AA	373	A	N3-C4	-6.56	1.30	1.34
21	AA	951	G	C2'-C1'	-6.56	1.46	1.53
21	AA	1006	G	N7-C5	-6.56	1.35	1.39
21	AA	1175	G	P-O5'	-6.56	1.53	1.59
57	BB	358	U	N3-C4	6.56	1.44	1.38
57	BB	389	G	C2-N3	6.56	1.38	1.32
57	BB	507	A	C2'-C1'	-6.56	1.46	1.53
57	BB	988	A	N9-C8	6.56	1.43	1.37
57	BB	2229	U	C2-N3	6.56	1.42	1.37
57	BB	2572	A	C2'-C1'	-6.56	1.46	1.53
58	BA	107	G	N9-C8	-6.56	1.33	1.37
21	AA	1295	U	C4-C5	6.56	1.49	1.43
57	BB	1917	U	C2-N3	6.56	1.42	1.37
57	BB	180	G	P-O5'	-6.55	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	948	C	C5'-C4'	6.55	1.59	1.51
57	BB	1308	A	N9-C4	6.55	1.41	1.37
57	BB	2283	C	C4'-C3'	6.55	1.60	1.53
21	AA	1006	G	N1-C2	6.55	1.43	1.37
21	AA	1087	G	O4'-C1'	6.55	1.50	1.41
57	BB	721	A	C6-N6	-6.55	1.28	1.33
57	BB	1323	C	N1-C2	6.55	1.46	1.40
57	BB	2556	C	C3'-O3'	6.55	1.51	1.42
1	AJ	72	ARG	CZ-NH2	6.55	1.41	1.33
21	AA	41	G	P-O5'	-6.55	1.53	1.59
21	AA	66	A	C5-C4	6.55	1.43	1.38
57	BB	430	A	N7-C5	6.55	1.43	1.39
57	BB	1256	G	C5'-C4'	6.55	1.59	1.51
57	BB	2310	C	O4'-C1'	6.55	1.50	1.41
21	AA	411	A	N3-C4	-6.55	1.30	1.34
21	AA	525	C	N1-C2	-6.55	1.33	1.40
21	AA	1031	C	C2'-C1'	-6.55	1.46	1.53
21	AA	1375	A	C5-C4	6.55	1.43	1.38
57	BB	45	G	C8-N7	-6.55	1.27	1.30
57	BB	341	C	C4-C5	-6.55	1.37	1.43
57	BB	501	A	C5-C4	6.55	1.43	1.38
57	BB	696	G	C5-C4	-6.55	1.33	1.38
57	BB	1004	U	C2'-C1'	-6.55	1.46	1.53
57	BB	1008	A	C3'-C2'	6.55	1.60	1.52
57	BB	1953	A	C6-N6	6.55	1.39	1.33
21	AA	268	U	C2-O2	6.55	1.28	1.22
21	AA	529	G	C2-N3	6.55	1.38	1.32
21	AA	695	A	C4'-C3'	-6.55	1.46	1.53
57	BB	605	G	N9-C4	-6.55	1.32	1.38
21	AA	465	A	C6-N6	6.55	1.39	1.33
21	AA	563	A	C4'-C3'	-6.55	1.46	1.53
21	AA	1153	G	C6-O6	-6.55	1.18	1.24
57	BB	338	G	N9-C4	-6.55	1.32	1.38
58	BA	28	C	C4-N4	6.55	1.39	1.33
25	AZ	306	SER	CA-CB	6.54	1.62	1.52
57	BB	239	C	N1-C2	6.54	1.46	1.40
57	BB	629	G	C4'-C3'	-6.54	1.46	1.53
57	BB	1596	A	C6-N6	6.54	1.39	1.33
57	BB	2260	C	C2-N3	6.54	1.41	1.35
21	AA	1252	A	N1-C2	6.54	1.40	1.34
21	AA	1336	C	C2-N3	-6.54	1.30	1.35
57	BB	99	U	N1-C2	6.54	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	266	G	C8-N7	6.54	1.34	1.30
57	BB	796	C	P-O5'	-6.54	1.53	1.59
57	BB	1363	C	N3-C4	6.54	1.38	1.33
57	BB	1671	U	P-O5'	-6.54	1.53	1.59
57	BB	2592	G	C2-N3	6.54	1.38	1.32
57	BB	2623	G	N3-C4	6.54	1.40	1.35
21	AA	171	A	N7-C5	-6.54	1.35	1.39
21	AA	1160	G	N7-C5	6.54	1.43	1.39
21	AA	1177	G	C2-N3	6.54	1.38	1.32
21	AA	1383	C	O3'-P	-6.54	1.53	1.61
22	AY	13	C	C4-N4	6.54	1.39	1.33
57	BB	980	A	N9-C4	6.54	1.41	1.37
57	BB	1038	G	C2-N2	6.54	1.41	1.34
57	BB	1142	A	P-O5'	6.54	1.66	1.59
57	BB	2136	G	C2-N3	6.54	1.38	1.32
22	AY	68	U	C2-N3	6.54	1.42	1.37
57	BB	627	A	N9-C4	-6.54	1.33	1.37
57	BB	777	G	C6-N1	6.54	1.44	1.39
57	BB	1250	G	C6-N1	6.54	1.44	1.39
57	BB	1410	G	N7-C5	-6.54	1.35	1.39
57	BB	2266	A	C6-N6	6.54	1.39	1.33
7	AP	8	ARG	NE-CZ	6.54	1.41	1.33
21	AA	1021	A	C8-N7	-6.54	1.26	1.31
57	BB	1226	A	O4'-C1'	-6.54	1.33	1.41
57	BB	1248	G	C2'-O2'	-6.54	1.33	1.41
57	BB	1851	U	N3-C4	6.54	1.44	1.38
57	BB	1908	C	C2'-C1'	-6.54	1.46	1.53
57	BB	2812	G	C5'-C4'	6.54	1.59	1.51
57	BB	2852	G	N9-C8	6.54	1.42	1.37
58	BA	93	C	C3'-C2'	-6.54	1.45	1.52
21	AA	1511	G	C4'-C3'	6.54	1.60	1.53
57	BB	866	A	C2'-C1'	-6.54	1.46	1.53
57	BB	1934	C	N3-C4	6.54	1.38	1.33
21	AA	425	G	N3-C4	-6.54	1.30	1.35
21	AA	663	A	N9-C4	6.54	1.41	1.37
57	BB	411	G	C4'-C3'	6.54	1.60	1.53
57	BB	490	C	C2-O2	6.54	1.30	1.24
57	BB	945	A	C8-N7	6.54	1.36	1.31
57	BB	1383	A	C6-N6	6.54	1.39	1.33
57	BB	1500	G	C5-C6	-6.54	1.35	1.42
57	BB	1586	A	N3-C4	6.54	1.38	1.34
57	BB	1813	G	O4'-C1'	-6.54	1.33	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1890	A	C2'-O2'	-6.54	1.33	1.41
57	BB	2247	A	P-O5'	-6.54	1.53	1.59
21	AA	109	A	N7-C5	-6.53	1.35	1.39
21	AA	978	A	N3-C4	-6.53	1.30	1.34
57	BB	483	A	N3-C4	-6.53	1.30	1.34
57	BB	1636	U	C4'-C3'	-6.53	1.46	1.53
57	BB	1654	A	C6-N6	6.53	1.39	1.33
57	BB	1875	G	C2'-C1'	-6.53	1.46	1.53
57	BB	2282	G	N9-C8	-6.53	1.33	1.37
10	AS	36	ARG	CD-NE	6.53	1.57	1.46
57	BB	528	A	C6-N6	6.53	1.39	1.33
57	BB	1286	A	N7-C5	-6.53	1.35	1.39
57	BB	1295	C	C4-C5	-6.53	1.37	1.43
21	AA	541	G	O3'-P	-6.53	1.53	1.61
21	AA	1062	U	N3-C4	6.53	1.44	1.38
57	BB	738	G	N7-C5	-6.53	1.35	1.39
57	BB	748	G	C4'-O4'	-6.53	1.37	1.45
57	BB	2801	G	C6-N1	6.53	1.44	1.39
21	AA	978	A	C5'-C4'	6.53	1.59	1.51
57	BB	2758	A	N7-C5	-6.53	1.35	1.39
58	BA	32	U	C4-O4	-6.53	1.18	1.23
21	AA	222	C	C2'-C1'	-6.53	1.46	1.53
21	AA	285	C	N3-C4	6.53	1.38	1.33
21	AA	682	G	C5-C4	6.53	1.43	1.38
57	BB	701	G	C3'-C2'	6.53	1.60	1.52
21	AA	728	A	C2'-C1'	-6.53	1.46	1.53
21	AA	1036	A	C6-N6	6.53	1.39	1.33
21	AA	1435	G	N1-C2	6.53	1.43	1.37
22	AY	9	A	C1'-N9	6.53	1.58	1.48
57	BB	498	G	C3'-O3'	6.53	1.51	1.42
57	BB	1270	C	N1-C6	6.53	1.41	1.37
57	BB	1517	G	O3'-P	-6.53	1.53	1.61
57	BB	2523	G	N1-C2	6.53	1.43	1.37
50	B3	63	TYR	CZ-OH	6.52	1.49	1.37
57	BB	189	G	N7-C5	-6.52	1.35	1.39
57	BB	1987	A	C6-N1	6.52	1.40	1.35
57	BB	2366	A	N9-C4	-6.52	1.33	1.37
31	BL	59	ARG	CD-NE	6.52	1.57	1.46
57	BB	233	A	C3'-O3'	6.52	1.51	1.42
57	BB	822	G	C6-N1	6.52	1.44	1.39
57	BB	987	C	C2-O2	6.52	1.30	1.24
57	BB	1093	G	C3'-O3'	6.52	1.51	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1586	A	P-O5'	-6.52	1.53	1.59
57	BB	2174	C	O3'-P	-6.52	1.53	1.61
57	BB	2314	A	C6-N6	6.52	1.39	1.33
57	BB	2389	G	C5-C6	-6.52	1.35	1.42
57	BB	242	G	C2-N2	6.52	1.41	1.34
57	BB	399	U	C4'-O4'	-6.52	1.37	1.45
57	BB	637	A	N3-C4	-6.52	1.30	1.34
57	BB	2845	U	C2'-C1'	6.52	1.60	1.53
7	AP	56	ARG	NE-CZ	6.52	1.41	1.33
57	BB	260	G	C5-C6	6.52	1.48	1.42
57	BB	2472	G	N3-C4	6.52	1.40	1.35
57	BB	2766	A	N3-C4	-6.52	1.30	1.34
24	AX	16	A	N9-C4	6.52	1.41	1.37
53	BE	69	ARG	CZ-NH2	6.52	1.41	1.33
57	BB	228	C	C2'-C1'	-6.52	1.46	1.53
57	BB	608	A	O3'-P	-6.52	1.53	1.61
57	BB	1349	C	C4'-O4'	6.52	1.54	1.45
21	AA	296	U	C2'-C1'	-6.52	1.46	1.53
57	BB	796	C	C2'-C1'	-6.52	1.46	1.53
57	BB	1567	G	N3-C4	6.52	1.40	1.35
21	AA	945	G	C8-N7	-6.51	1.27	1.30
21	AA	1132	C	C4-N4	-6.51	1.28	1.33
57	BB	986	C	C4'-C3'	6.51	1.60	1.53
57	BB	1689	A	N3-C4	6.51	1.38	1.34
57	BB	2344	U	N3-C4	6.51	1.44	1.38
58	BA	53	A	C8-N7	-6.51	1.26	1.31
21	AA	1477	U	O3'-P	-6.51	1.53	1.61
23	AW	47	U	C2-O2	-6.51	1.16	1.22
57	BB	261	G	C6-N1	6.51	1.44	1.39
57	BB	311	A	C6-N6	6.51	1.39	1.33
57	BB	404	A	C6-N6	6.51	1.39	1.33
57	BB	806	C	O3'-P	6.51	1.69	1.61
57	BB	1986	C	C2-N3	6.51	1.41	1.35
57	BB	2560	A	O4'-C1'	6.51	1.50	1.41
58	BA	98	G	N7-C5	-6.51	1.35	1.39
21	AA	100	G	O3'-P	-6.51	1.53	1.61
21	AA	1184	G	C2-N3	6.51	1.38	1.32
57	BB	60	G	C5-C4	-6.51	1.33	1.38
57	BB	755	U	C3'-O3'	6.51	1.51	1.42
21	AA	475	C	N1-C6	-6.51	1.33	1.37
21	AA	502	A	C6-N6	6.51	1.39	1.33
21	AA	1200	C	N3-C4	6.51	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1109	C	C4'-O4'	-6.51	1.37	1.45
57	BB	1555	G	N3-C4	6.51	1.40	1.35
21	AA	16	A	C5-C4	6.51	1.43	1.38
21	AA	506	G	C2-N3	6.51	1.38	1.32
21	AA	1183	U	C4-C5	-6.51	1.37	1.43
21	AA	1507	A	C6-N1	6.51	1.40	1.35
57	BB	1137	G	N1-C2	6.51	1.43	1.37
57	BB	2099	U	C4'-O4'	6.51	1.54	1.45
57	BB	2102	G	C2-N3	6.51	1.38	1.32
57	BB	2391	G	C6-N1	6.51	1.44	1.39
57	BB	2655	G	C6-N1	6.51	1.44	1.39
22	AY	61	C	N3-C4	6.50	1.38	1.33
21	AA	135	C	P-O5'	-6.50	1.53	1.59
21	AA	898	G	N3-C4	-6.50	1.30	1.35
57	BB	328	U	N3-C4	6.50	1.44	1.38
57	BB	946	C	C5'-C4'	6.50	1.59	1.51
57	BB	1263	U	C4'-O4'	6.50	1.54	1.45
57	BB	1509	A	C3'-C2'	6.50	1.60	1.52
57	BB	2001	C	O3'-P	-6.50	1.53	1.61
57	BB	2365	G	C6-N1	6.50	1.44	1.39
57	BB	2511	U	C4'-C3'	-6.50	1.46	1.53
57	BB	2643	G	C6-N1	6.50	1.44	1.39
57	BB	2878	U	P-O5'	-6.50	1.53	1.59
21	AA	553	A	N3-C4	6.50	1.38	1.34
21	AA	669	G	C6-N1	6.50	1.44	1.39
21	AA	1054	C	C2-N3	6.50	1.41	1.35
21	AA	1419	G	C5-C4	6.50	1.43	1.38
57	BB	644	A	C2'-C1'	-6.50	1.46	1.53
57	BB	1997	C	C4'-C3'	6.50	1.60	1.53
57	BB	2186	G	P-O5'	-6.50	1.53	1.59
57	BB	2812	G	C1'-N9	6.50	1.58	1.48
21	AA	1303	C	N1-C6	6.50	1.41	1.37
57	BB	689	A	C5'-C4'	6.50	1.59	1.51
20	AI	84	ARG	CZ-NH1	6.50	1.41	1.33
21	AA	1433	A	C5-C4	6.50	1.43	1.38
23	AW	60	U	C5-C6	6.50	1.40	1.34
57	BB	228	C	N3-C4	6.50	1.38	1.33
57	BB	1423	G	N1-C2	6.50	1.43	1.37
57	BB	1552	A	N9-C4	6.50	1.41	1.37
57	BB	2177	C	N1-C6	-6.50	1.33	1.37
57	BB	2379	G	N9-C8	6.50	1.42	1.37
57	BB	2597	G	C2'-C1'	-6.50	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	54	G	C2'-O2'	-6.50	1.33	1.41
21	AA	248	C	C5'-C4'	6.50	1.59	1.51
21	AA	1456	A	C6-N6	6.50	1.39	1.33
21	AA	1467	C	N3-C4	6.50	1.38	1.33
57	BB	620	G	C6-N1	6.50	1.44	1.39
57	BB	870	U	O3'-P	-6.50	1.53	1.61
57	BB	1678	A	C2'-C1'	-6.50	1.46	1.53
21	AA	303	A	N3-C4	6.50	1.38	1.34
21	AA	375	U	C5'-C4'	6.50	1.59	1.51
57	BB	107	G	C2-N2	6.50	1.41	1.34
57	BB	162	U	O3'-P	-6.50	1.53	1.61
57	BB	237	C	C4'-O4'	-6.50	1.37	1.45
57	BB	1426	G	C8-N7	6.50	1.34	1.30
57	BB	1613	G	P-O5'	6.50	1.66	1.59
57	BB	2415	G	N7-C5	-6.50	1.35	1.39
21	AA	196	A	C8-N7	-6.49	1.27	1.31
26	AV	35	A	C2-N3	-6.49	1.27	1.33
57	BB	1862	G	N1-C2	6.49	1.43	1.37
57	BB	2123	G	N1-C2	6.49	1.43	1.37
57	BB	2297	A	N9-C4	-6.49	1.33	1.37
57	BB	2349	G	N1-C2	6.49	1.43	1.37
57	BB	2627	G	C8-N7	-6.49	1.27	1.30
58	BA	82	U	C3'-C2'	-6.49	1.45	1.52
13	AB	34	ARG	NE-CZ	6.49	1.41	1.33
21	AA	741	G	C5-C4	6.49	1.42	1.38
21	AA	1502	A	O3'-P	-6.49	1.53	1.61
57	BB	396	G	C2'-C1'	-6.49	1.46	1.53
57	BB	774	G	C5'-C4'	6.49	1.59	1.51
57	BB	794	A	C4'-C3'	6.49	1.60	1.53
57	BB	1797	G	N3-C4	-6.49	1.30	1.35
21	AA	261	U	C2-N3	-6.49	1.33	1.37
37	BR	34	GLU	CD-OE2	6.49	1.32	1.25
44	BY	48	ARG	NE-CZ	6.49	1.41	1.33
57	BB	770	G	N3-C4	-6.49	1.30	1.35
21	AA	70	U	C2'-O2'	6.49	1.50	1.41
21	AA	729	A	N9-C8	-6.49	1.32	1.37
21	AA	874	G	P-O5'	-6.49	1.53	1.59
22	AY	53	G	N9-C4	6.49	1.43	1.38
57	BB	51	G	N3-C4	-6.49	1.30	1.35
57	BB	892	A	C6-N1	6.49	1.40	1.35
57	BB	915	C	P-O5'	-6.49	1.53	1.59
57	BB	1360	G	C3'-O3'	6.49	1.51	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1943	U	O3'-P	-6.49	1.53	1.61
57	BB	2574	G	N7-C5	-6.49	1.35	1.39
57	BB	2608	G	N9-C8	-6.49	1.33	1.37
57	BB	1273	U	C2-N3	6.49	1.42	1.37
57	BB	1432	G	C2-N3	6.49	1.38	1.32
57	BB	2382	G	N9-C8	-6.49	1.33	1.37
57	BB	2591	C	C2-N3	6.49	1.41	1.35
21	AA	733	G	N3-C4	-6.49	1.30	1.35
21	AA	1081	A	C6-N1	-6.49	1.31	1.35
23	AW	8	U	C2'-C1'	-6.49	1.46	1.53
57	BB	974	G	N7-C5	-6.49	1.35	1.39
57	BB	1582	C	N1-C6	-6.49	1.33	1.37
57	BB	1997	C	C3'-C2'	-6.49	1.45	1.52
21	AA	22	G	C6-N1	6.48	1.44	1.39
21	AA	170	U	C2'-C1'	-6.48	1.46	1.53
21	AA	1158	C	N1-C2	6.48	1.46	1.40
57	BB	822	G	N3-C4	-6.48	1.30	1.35
57	BB	1203	U	N3-C4	6.48	1.44	1.38
57	BB	1725	U	N1-C2	6.48	1.44	1.38
57	BB	2592	G	N1-C2	6.48	1.43	1.37
21	AA	148	G	N1-C2	6.48	1.43	1.37
21	AA	176	C	N1-C2	6.48	1.46	1.40
21	AA	892	A	C3'-O3'	6.48	1.51	1.42
21	AA	1515	G	N7-C5	-6.48	1.35	1.39
57	BB	661	A	C6-N6	6.48	1.39	1.33
57	BB	928	A	N9-C8	6.48	1.43	1.37
57	BB	1039	A	O4'-C1'	-6.48	1.33	1.41
57	BB	1279	G	C3'-C2'	-6.48	1.45	1.52
57	BB	1607	C	N1-C6	6.48	1.41	1.37
57	BB	1903	G	C5-C4	6.48	1.42	1.38
57	BB	1966	A	C6-N1	6.48	1.40	1.35
57	BB	2087	G	C6-N1	6.48	1.44	1.39
57	BB	2534	A	C2'-C1'	-6.48	1.46	1.53
21	AA	514	C	P-O5'	6.48	1.66	1.59
21	AA	655	A	O3'-P	-6.48	1.53	1.61
21	AA	733	G	N7-C5	-6.48	1.35	1.39
21	AA	1470	U	N3-C4	6.48	1.44	1.38
22	AY	50	U	N1-C2	6.48	1.44	1.38
57	BB	2059	A	C3'-C2'	6.48	1.60	1.52
57	BB	2739	U	C4-C5	6.48	1.49	1.43
21	AA	612	C	C2'-C1'	-6.48	1.46	1.53
26	AV	30	G	C5'-C4'	6.48	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	446	G	N1-C2	6.48	1.43	1.37
57	BB	1615	C	N3-C4	6.48	1.38	1.33
57	BB	1871	A	C8-N7	-6.48	1.27	1.31
21	AA	446	G	C2-N3	6.48	1.38	1.32
21	AA	462	G	C5'-C4'	6.48	1.59	1.51
21	AA	1042	A	C3'-O3'	6.48	1.51	1.42
57	BB	1412	U	C2-N3	6.48	1.42	1.37
21	AA	666	G	C2-N3	6.48	1.38	1.32
21	AA	1129	C	N1-C2	6.48	1.46	1.40
57	BB	1177	G	C2-N3	6.48	1.38	1.32
57	BB	1306	C	C4-N4	6.48	1.39	1.33
57	BB	1965	C	C2-N3	6.48	1.41	1.35
21	AA	782	A	N1-C2	6.47	1.40	1.34
23	AW	5	G	C5'-C4'	6.47	1.59	1.51
57	BB	667	U	C4-C5	-6.47	1.37	1.43
57	BB	1197	G	P-O5'	-6.47	1.53	1.59
57	BB	1515	A	C3'-O3'	-6.47	1.33	1.42
57	BB	2068	U	O3'-P	-6.47	1.53	1.61
57	BB	2806	C	C2-N3	6.47	1.41	1.35
21	AA	1422	G	N9-C4	-6.47	1.32	1.38
57	BB	1148	U	C4-C5	6.47	1.49	1.43
57	BB	1758	U	C3'-C2'	6.47	1.60	1.52
57	BB	1870	C	C3'-C2'	6.47	1.60	1.52
57	BB	2401	U	O3'-P	-6.47	1.53	1.61
5	AN	84	ARG	NE-CZ	6.47	1.41	1.33
22	AY	69	U	N1-C6	6.47	1.43	1.38
57	BB	258	G	C6-N1	6.47	1.44	1.39
57	BB	752	A	P-O5'	-6.47	1.53	1.59
57	BB	1749	A	N9-C4	-6.47	1.33	1.37
57	BB	1857	G	C8-N7	-6.47	1.27	1.30
21	AA	116	A	C6-N6	6.47	1.39	1.33
21	AA	1391	U	C4'-C3'	6.47	1.60	1.53
21	AA	1516	G	N7-C5	6.47	1.43	1.39
21	AA	1526	G	P-O5'	-6.47	1.53	1.59
57	BB	373	U	C2'-C1'	-6.47	1.46	1.53
57	BB	836	G	C5-C4	-6.47	1.33	1.38
57	BB	974	G	C3'-O3'	-6.47	1.33	1.42
57	BB	974	G	C5-C6	-6.47	1.35	1.42
57	BB	993	G	C6-O6	6.47	1.29	1.24
57	BB	1100	C	P-O5'	6.47	1.66	1.59
57	BB	1543	G	C8-N7	6.47	1.34	1.30
21	AA	610	U	C5-C6	6.47	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1259	C	C5-C6	6.47	1.39	1.34
21	AA	1131	G	C5-C4	-6.47	1.33	1.38
21	AA	1180	A	C6-N6	6.47	1.39	1.33
21	AA	1315	U	C2-N3	6.47	1.42	1.37
21	AA	1446	A	C6-N6	6.47	1.39	1.33
57	BB	31	C	C4'-C3'	6.47	1.60	1.53
57	BB	516	C	C5-C6	-6.47	1.29	1.34
57	BB	2288	A	C6-N6	6.47	1.39	1.33
57	BB	2317	A	N7-C5	-6.47	1.35	1.39
57	BB	2357	G	C5'-C4'	6.47	1.59	1.51
21	AA	1005	A	N9-C4	6.46	1.41	1.37
23	AW	14	A	N7-C5	-6.46	1.35	1.39
57	BB	81	G	C2'-C1'	-6.46	1.46	1.53
57	BB	213	A	C8-N7	-6.46	1.27	1.31
57	BB	1012	U	C4'-C3'	6.46	1.60	1.53
57	BB	1048	A	N7-C5	-6.46	1.35	1.39
57	BB	2627	G	N7-C5	-6.46	1.35	1.39
21	AA	790	A	C4'-O4'	-6.46	1.37	1.45
57	BB	93	G	C2-N3	6.46	1.38	1.32
57	BB	916	G	N3-C4	6.46	1.40	1.35
57	BB	1765	U	N1-C2	6.46	1.44	1.38
57	BB	2534	A	C6-N6	6.46	1.39	1.33
21	AA	1006	G	N3-C4	-6.46	1.30	1.35
21	AA	1352	C	C4-N4	6.46	1.39	1.33
57	BB	280	U	C3'-C2'	6.46	1.60	1.52
57	BB	468	G	C3'-O3'	6.46	1.51	1.42
57	BB	1163	G	C2'-C1'	-6.46	1.46	1.53
57	BB	2562	U	N3-C4	6.46	1.44	1.38
57	BB	863	A	C4'-O4'	6.46	1.53	1.45
57	BB	1033	U	C5'-C4'	6.46	1.59	1.51
57	BB	1253	A	C5-C4	-6.46	1.34	1.38
57	BB	2627	G	N1-C2	6.46	1.43	1.37
21	AA	20	U	C5'-C4'	6.46	1.59	1.51
21	AA	601	G	N1-C2	6.46	1.43	1.37
21	AA	627	G	C8-N7	-6.46	1.27	1.30
21	AA	918	A	P-O5'	-6.46	1.53	1.59
21	AA	983	A	C4'-C3'	-6.46	1.46	1.53
21	AA	1170	A	C2'-C1'	-6.46	1.46	1.53
21	AA	1346	A	N3-C4	6.46	1.38	1.34
21	AA	1484	C	C2'-C1'	-6.46	1.46	1.53
57	BB	1091	G	N3-C4	6.46	1.40	1.35
57	BB	2497	A	N1-C2	6.46	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	84	G	P-O5'	-6.46	1.53	1.59
57	BB	422	A	C6-N1	6.46	1.40	1.35
57	BB	749	A	C6-N6	6.46	1.39	1.33
57	BB	1049	C	C4'-C3'	6.46	1.60	1.53
21	AA	928	G	P-O5'	-6.46	1.53	1.59
21	AA	1316	G	C5-C4	6.46	1.42	1.38
26	AV	47	U	N3-C4	6.46	1.44	1.38
57	BB	494	G	C2-N2	6.46	1.41	1.34
57	BB	686	U	N1-C6	6.46	1.43	1.38
57	BB	1512	C	C2-N3	6.46	1.41	1.35
57	BB	1527	G	C2-N2	6.46	1.41	1.34
12	AU	32	ARG	NE-CZ	6.45	1.41	1.33
21	AA	175	C	C4'-C3'	6.45	1.60	1.53
21	AA	562	U	O3'-P	-6.45	1.53	1.61
21	AA	631	C	C4-N4	6.45	1.39	1.33
22	AY	32	C	C4-C5	6.45	1.48	1.43
52	BD	15	PHE	CG-CD2	6.45	1.48	1.38
57	BB	1081	U	N1-C6	6.45	1.43	1.38
57	BB	1392	A	C5'-C4'	6.45	1.59	1.51
21	AA	252	U	N1-C2	6.45	1.44	1.38
57	BB	513	A	N9-C8	-6.45	1.32	1.37
57	BB	681	G	C2-N3	6.45	1.38	1.32
57	BB	954	G	C5'-C4'	6.45	1.59	1.51
57	BB	2172	U	O3'-P	-6.45	1.53	1.61
21	AA	75	G	N9-C8	6.45	1.42	1.37
21	AA	747	A	C6-N6	6.45	1.39	1.33
57	BB	319	G	C3'-C2'	-6.45	1.45	1.52
57	BB	787	C	N3-C4	6.45	1.38	1.33
57	BB	1436	G	N9-C4	-6.45	1.32	1.38
57	BB	1911	U	O3'-P	-6.45	1.53	1.61
57	BB	2650	U	C2-N3	6.45	1.42	1.37
21	AA	1346	A	N7-C5	-6.45	1.35	1.39
26	AV	43	A	C6-N1	6.45	1.40	1.35
57	BB	508	A	N7-C5	-6.45	1.35	1.39
57	BB	710	U	C5'-C4'	6.45	1.59	1.51
57	BB	792	A	C6-N6	6.45	1.39	1.33
57	BB	1885	A	C2-N3	6.45	1.39	1.33
57	BB	2408	U	P-O5'	-6.45	1.53	1.59
57	BB	2836	U	C2'-C1'	-6.45	1.46	1.53
21	AA	185	U	C3'-O3'	6.45	1.51	1.42
21	AA	1062	U	C4-O4	-6.45	1.18	1.23
57	BB	724	U	C5-C6	6.45	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	825	A	C6-N1	6.45	1.40	1.35
58	BA	10	G	N7-C5	-6.45	1.35	1.39
21	AA	35	G	C2-N2	6.45	1.41	1.34
21	AA	611	C	N1-C6	6.45	1.41	1.37
21	AA	1086	U	C2-O2	6.45	1.28	1.22
21	AA	1093	A	C8-N7	6.45	1.36	1.31
21	AA	1137	C	C2-N3	6.45	1.41	1.35
57	BB	390	U	C4-C5	6.45	1.49	1.43
57	BB	514	A	N9-C8	-6.45	1.32	1.37
57	BB	1660	G	C5'-C4'	6.45	1.59	1.51
57	BB	1676	A	N9-C4	-6.45	1.33	1.37
57	BB	2715	C	C4-N4	6.45	1.39	1.33
21	AA	1514	G	N7-C5	-6.44	1.35	1.39
57	BB	865	C	N3-C4	6.44	1.38	1.33
57	BB	1540	G	C6-O6	-6.44	1.18	1.24
57	BB	1934	C	C4-C5	-6.44	1.37	1.43
57	BB	2687	U	C4-C5	6.44	1.49	1.43
21	AA	1041	G	C3'-C2'	-6.44	1.45	1.52
21	AA	1085	U	C2-N3	6.44	1.42	1.37
21	AA	1116	U	O3'-P	-6.44	1.53	1.61
21	AA	1276	G	C5-C4	6.44	1.42	1.38
26	AV	10	G	C1'-N9	-6.44	1.37	1.46
26	AV	11	A	P-O5'	6.44	1.66	1.59
57	BB	242	G	N3-C4	-6.44	1.30	1.35
57	BB	1436	G	N7-C5	-6.44	1.35	1.39
57	BB	1912	A	C6-N1	6.44	1.40	1.35
57	BB	2243	U	O3'-P	-6.44	1.53	1.61
57	BB	2520	C	N3-C4	6.44	1.38	1.33
57	BB	2561	U	C3'-C2'	6.44	1.60	1.52
21	AA	528	C	C4-N4	6.44	1.39	1.33
21	AA	570	G	N1-C2	6.44	1.43	1.37
21	AA	1004	A	C2'-C1'	-6.44	1.46	1.53
21	AA	1499	A	C5'-C4'	6.44	1.59	1.51
22	AY	4	G	N7-C5	-6.44	1.35	1.39
57	BB	441	U	C4-O4	-6.44	1.18	1.23
57	BB	647	G	C1'-N9	6.44	1.58	1.48
57	BB	794	A	O4'-C1'	6.44	1.50	1.41
57	BB	1838	C	C4-N4	6.44	1.39	1.33
57	BB	1897	G	C5-C4	-6.44	1.33	1.38
57	BB	1904	G	C2'-C1'	-6.44	1.46	1.53
57	BB	2232	C	N1-C6	6.44	1.41	1.37
21	AA	607	A	C6-N6	6.44	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	238	A	N7-C5	-6.44	1.35	1.39
21	AA	806	C	C2'-C1'	-6.44	1.46	1.53
21	AA	1364	U	C2-N3	6.44	1.42	1.37
21	AA	1432	G	C3'-C2'	6.44	1.60	1.52
57	BB	504	A	C6-N6	6.44	1.39	1.33
57	BB	699	A	N1-C2	6.44	1.40	1.34
57	BB	831	G	C2-N2	6.44	1.41	1.34
57	BB	1139	G	N7-C5	-6.44	1.35	1.39
57	BB	1448	G	C2'-C1'	-6.44	1.46	1.53
57	BB	2412	A	C8-N7	-6.44	1.27	1.31
57	BB	2574	G	C6-N1	6.44	1.44	1.39
21	AA	790	A	N7-C5	-6.44	1.35	1.39
57	BB	2293	G	C6-N1	6.44	1.44	1.39
57	BB	2337	G	C2-N3	6.44	1.37	1.32
57	BB	2399	G	O4'-C1'	-6.44	1.33	1.41
21	AA	1459	G	N1-C2	6.43	1.42	1.37
22	AY	43	G	C2'-C1'	-6.43	1.46	1.53
57	BB	635	C	C5-C6	6.43	1.39	1.34
57	BB	932	U	C2-N3	6.43	1.42	1.37
57	BB	1364	G	P-O5'	-6.43	1.53	1.59
57	BB	2028	U	N3-C4	6.43	1.44	1.38
57	BB	2484	G	N9-C8	-6.43	1.33	1.37
21	AA	650	G	C4'-O4'	-6.43	1.37	1.45
22	AY	67	A	C5-C4	-6.43	1.34	1.38
57	BB	66	C	C4'-O4'	-6.43	1.37	1.45
57	BB	310	A	C2-N3	6.43	1.39	1.33
57	BB	895	U	N1-C2	6.43	1.44	1.38
57	BB	1117	C	C4-N4	6.43	1.39	1.33
21	AA	483	C	C2-N3	-6.43	1.30	1.35
34	BO	102	ARG	CZ-NH2	6.43	1.41	1.33
38	BS	8	ARG	CD-NE	6.43	1.57	1.46
57	BB	272	A	N7-C5	-6.43	1.35	1.39
57	BB	1287	A	P-O5'	-6.43	1.53	1.59
57	BB	2082	A	C2'-C1'	-6.43	1.46	1.53
21	AA	453	G	C6-N1	6.43	1.44	1.39
21	AA	1216	A	C8-N7	-6.43	1.27	1.31
57	BB	899	A	C5-C6	-6.43	1.35	1.41
57	BB	2700	A	C1'-N9	-6.43	1.37	1.46
58	BA	88	C	O3'-P	-6.43	1.53	1.61
57	BB	722	A	C6-N1	6.43	1.40	1.35
57	BB	1194	A	C6-N1	-6.43	1.31	1.35
57	BB	2854	G	C2-N3	6.43	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2856	A	C6-N1	6.43	1.40	1.35
21	AA	510	A	O3'-P	-6.43	1.53	1.61
21	AA	1003	G	N1-C2	6.43	1.42	1.37
24	AX	21	C	P-O5'	-6.43	1.53	1.59
25	AZ	41	GLY	CA-C	-6.43	1.41	1.51
57	BB	1676	A	C5-C4	-6.43	1.34	1.38
57	BB	1789	A	C8-N7	-6.43	1.27	1.31
57	BB	2036	C	N3-C4	6.43	1.38	1.33
57	BB	2521	C	N3-C4	6.43	1.38	1.33
21	AA	787	A	C8-N7	6.42	1.36	1.31
21	AA	1266	G	P-O5'	-6.42	1.53	1.59
57	BB	1204	A	C4'-O4'	-6.42	1.37	1.45
21	AA	122	G	N1-C2	6.42	1.42	1.37
21	AA	1070	U	P-O5'	-6.42	1.53	1.59
57	BB	61	C	C4-N4	6.42	1.39	1.33
57	BB	1439	A	C6-N6	6.42	1.39	1.33
57	BB	2024	G	C6-O6	6.42	1.29	1.24
57	BB	288	U	C2'-C1'	-6.42	1.46	1.53
57	BB	781	A	C2'-C1'	-6.42	1.46	1.53
57	BB	2734	A	N9-C8	6.42	1.42	1.37
57	BB	2811	G	C8-N7	-6.42	1.27	1.30
21	AA	1011	C	N3-C4	6.42	1.38	1.33
57	BB	716	A	N9-C4	6.42	1.41	1.37
57	BB	2723	C	C4-N4	6.42	1.39	1.33
21	AA	645	G	C2'-C1'	-6.42	1.46	1.53
21	AA	650	G	C5'-C4'	6.42	1.59	1.51
26	AV	57	A	C5-C4	-6.42	1.34	1.38
31	BL	18	ARG	CZ-NH2	6.42	1.41	1.33
57	BB	196	A	C8-N7	-6.42	1.27	1.31
57	BB	2020	A	C6-N6	6.42	1.39	1.33
21	AA	258	G	C2-N2	6.42	1.41	1.34
21	AA	385	C	C5-C6	6.42	1.39	1.34
21	AA	527	G	C5-C4	6.42	1.42	1.38
21	AA	877	G	C5-C4	6.42	1.42	1.38
21	AA	1067	A	N9-C4	-6.42	1.33	1.37
21	AA	1393	U	C3'-C2'	6.42	1.60	1.52
57	BB	309	A	N1-C2	-6.42	1.28	1.34
57	BB	1712	U	C4-O4	-6.42	1.18	1.23
58	BA	54	G	N7-C5	6.42	1.43	1.39
21	AA	530	G	O4'-C1'	-6.42	1.33	1.41
21	AA	708	C	C4-N4	6.42	1.39	1.33
57	BB	520	G	C5-C6	-6.42	1.35	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1132	U	P-O5'	-6.42	1.53	1.59
57	BB	1354	A	C5-C6	6.42	1.46	1.41
21	AA	143	A	N9-C4	-6.41	1.34	1.37
21	AA	626	G	N7-C5	-6.41	1.35	1.39
21	AA	790	A	C6-N6	6.41	1.39	1.33
21	AA	1239	A	C5-C4	6.41	1.43	1.38
57	BB	648	G	C2-N3	6.41	1.37	1.32
57	BB	672	C	C4-N4	6.41	1.39	1.33
57	BB	709	U	C3'-O3'	6.41	1.51	1.42
57	BB	1430	G	N1-C2	6.41	1.42	1.37
22	AY	31	A	C6-N1	6.41	1.40	1.35
34	BO	81	ARG	NE-CZ	6.41	1.41	1.33
57	BB	1111	A	N9-C4	-6.41	1.34	1.37
57	BB	1300	G	N9-C4	-6.41	1.32	1.38
57	BB	1638	C	N1-C6	-6.41	1.33	1.37
21	AA	177	G	N7-C5	-6.41	1.35	1.39
21	AA	339	C	N3-C4	6.41	1.38	1.33
21	AA	1005	A	C8-N7	6.41	1.36	1.31
21	AA	1102	A	C5-C6	-6.41	1.35	1.41
21	AA	1378	C	N3-C4	6.41	1.38	1.33
23	AW	27	G	C2-N2	6.41	1.41	1.34
57	BB	26	G	N9-C8	6.41	1.42	1.37
57	BB	949	G	C2'-C1'	-6.41	1.46	1.53
57	BB	1225	G	C2-N2	6.41	1.41	1.34
57	BB	1395	A	C8-N7	-6.41	1.27	1.31
57	BB	2116	G	C5-C4	6.41	1.42	1.38
57	BB	2120	G	C5-C4	6.41	1.42	1.38
57	BB	2508	G	N7-C5	-6.41	1.35	1.39
57	BB	2668	G	C2'-C1'	-6.41	1.46	1.53
36	BQ	2	ARG	NE-CZ	6.41	1.41	1.33
57	BB	1122	G	C5-C4	-6.41	1.33	1.38
57	BB	1670	C	C2-N3	6.41	1.40	1.35
57	BB	2330	G	C4'-C3'	6.41	1.60	1.53
57	BB	2334	U	N3-C4	6.41	1.44	1.38
57	BB	1845	G	C6-N1	6.40	1.44	1.39
21	AA	442	G	N9-C8	-6.40	1.33	1.37
21	AA	697	U	C4-C5	6.40	1.49	1.43
21	AA	1241	G	N9-C8	-6.40	1.33	1.37
21	AA	1291	U	N3-C4	6.40	1.44	1.38
22	AY	49	C	C2-N3	6.40	1.40	1.35
57	BB	2654	A	N1-C2	6.40	1.40	1.34
57	BB	2858	C	N1-C6	-6.40	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	40	U	N3-C4	6.40	1.44	1.38
58	BA	40	U	C4-C5	-6.40	1.37	1.43
26	AV	63	G	N9-C8	6.40	1.42	1.37
57	BB	338	G	C5-C4	-6.40	1.33	1.38
57	BB	505	A	C5-C4	-6.40	1.34	1.38
57	BB	1893	C	C2-N3	6.40	1.40	1.35
57	BB	2694	G	N1-C2	6.40	1.42	1.37
21	AA	261	U	C4-C5	6.40	1.49	1.43
57	BB	2799	A	C8-N7	6.40	1.36	1.31
21	AA	160	A	N3-C4	-6.40	1.31	1.34
21	AA	613	C	P-O5'	-6.40	1.53	1.59
21	AA	961	U	C4-O4	6.40	1.28	1.23
21	AA	1058	G	N1-C2	6.40	1.42	1.37
57	BB	581	C	C4-C5	6.40	1.48	1.43
57	BB	1228	G	C5-C4	6.40	1.42	1.38
57	BB	2238	G	C5-C6	-6.40	1.35	1.42
57	BB	2751	G	C2-N3	6.40	1.37	1.32
58	BA	15	A	N9-C4	6.40	1.41	1.37
21	AA	484	G	C6-N1	6.40	1.44	1.39
57	BB	368	A	C5'-C4'	6.40	1.59	1.51
57	BB	1776	G	C2'-C1'	-6.40	1.46	1.53
57	BB	2440	C	C2-N3	6.40	1.40	1.35
57	BB	2673	G	N9-C4	-6.40	1.32	1.38
14	AC	10	ARG	NE-CZ	6.39	1.41	1.33
21	AA	115	G	C2-N3	6.39	1.37	1.32
21	AA	255	G	N7-C5	-6.39	1.35	1.39
21	AA	295	C	C4-C5	6.39	1.48	1.43
21	AA	1389	C	C1'-N1	6.39	1.58	1.48
57	BB	382	A	C4'-C3'	6.39	1.60	1.53
57	BB	804	A	C2'-C1'	-6.39	1.46	1.53
57	BB	1494	A	C6-N6	6.39	1.39	1.33
57	BB	1613	G	C4'-O4'	6.39	1.53	1.45
57	BB	1818	U	O3'-P	-6.39	1.53	1.61
57	BB	1941	C	O4'-C1'	6.39	1.50	1.41
57	BB	2729	G	N9-C4	-6.39	1.32	1.38
21	AA	1270	G	C8-N7	6.39	1.34	1.30
21	AA	1392	G	C2'-C1'	-6.39	1.46	1.53
21	AA	1526	G	C8-N7	-6.39	1.27	1.30
57	BB	469	G	N3-C4	-6.39	1.30	1.35
57	BB	476	G	C4'-C3'	6.39	1.60	1.53
57	BB	764	A	C8-N7	-6.39	1.27	1.31
57	BB	1022	G	N3-C4	-6.39	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1906	G	N3-C4	-6.39	1.30	1.35
57	BB	2021	C	O4'-C1'	6.39	1.50	1.41
57	BB	2060	A	C5-C4	6.39	1.43	1.38
58	BA	89	U	P-O5'	-6.39	1.53	1.59
21	AA	1283	U	N1-C6	-6.39	1.32	1.38
21	AA	245	U	N1-C6	6.39	1.43	1.38
21	AA	1085	U	C3'-C2'	6.39	1.59	1.52
21	AA	1390	U	C4-C5	6.39	1.49	1.43
57	BB	78	U	N3-C4	6.39	1.44	1.38
57	BB	396	G	C6-N1	6.39	1.44	1.39
57	BB	403	U	C5'-C4'	6.39	1.59	1.51
57	BB	697	G	O3'-P	-6.39	1.53	1.61
57	BB	733	G	N3-C4	6.39	1.40	1.35
57	BB	765	C	C3'-C2'	-6.39	1.45	1.52
57	BB	2288	A	N9-C4	-6.39	1.34	1.37
57	BB	2787	C	C2-N3	6.39	1.40	1.35
58	BA	41	G	C2'-O2'	6.39	1.50	1.41
21	AA	491	G	N7-C5	-6.39	1.35	1.39
21	AA	1123	U	O3'-P	-6.39	1.53	1.61
35	BP	97	TYR	CE1-CZ	6.39	1.46	1.38
57	BB	254	G	C8-N7	-6.39	1.27	1.30
57	BB	2842	G	C2-N3	6.39	1.37	1.32
21	AA	988	G	N1-C2	6.39	1.42	1.37
57	BB	70	G	C5-C6	-6.39	1.35	1.42
57	BB	670	A	N3-C4	-6.39	1.31	1.34
57	BB	1580	A	C2-N3	6.39	1.39	1.33
57	BB	1652	A	N1-C2	6.39	1.40	1.34
57	BB	1715	G	C6-N1	6.39	1.44	1.39
21	AA	21	G	C6-N1	6.38	1.44	1.39
21	AA	119	A	C3'-C2'	6.38	1.59	1.52
21	AA	131	A	C1'-N9	6.38	1.58	1.48
21	AA	286	C	C4-N4	6.38	1.39	1.33
21	AA	353	A	N9-C4	-6.38	1.34	1.37
57	BB	191	A	P-O5'	-6.38	1.53	1.59
57	BB	1042	G	C2'-C1'	-6.38	1.46	1.53
57	BB	1966	A	N7-C5	-6.38	1.35	1.39
57	BB	2777	G	C5-C6	-6.38	1.35	1.42
21	AA	1203	C	C4-C5	6.38	1.48	1.43
57	BB	255	A	N9-C8	-6.38	1.32	1.37
57	BB	1651	G	C2-N2	6.38	1.41	1.34
57	BB	2366	A	C5'-C4'	6.38	1.59	1.51
21	AA	487	A	C8-N7	-6.38	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1503	A	C6-N1	6.38	1.40	1.35
23	AW	5	G	O4'-C1'	6.38	1.50	1.41
57	BB	504	A	N9-C4	6.38	1.41	1.37
57	BB	2445	G	P-O5'	-6.38	1.53	1.59
21	AA	517	G	N3-C4	-6.38	1.30	1.35
57	BB	2270	A	C6-N1	6.38	1.40	1.35
57	BB	2502	G	N1-C2	6.38	1.42	1.37
26	AV	66	C	C2'-C1'	-6.38	1.46	1.53
57	BB	745	G	C6-N1	-6.38	1.35	1.39
57	BB	2902	C	C5'-C4'	6.38	1.59	1.51
21	AA	212	G	C8-N7	6.38	1.34	1.30
21	AA	397	A	N9-C8	6.38	1.42	1.37
21	AA	505	G	C8-N7	6.38	1.34	1.30
26	AV	70	G	C2-N3	6.38	1.37	1.32
57	BB	311	A	P-O5'	-6.38	1.53	1.59
57	BB	446	G	C8-N7	6.38	1.34	1.30
57	BB	1166	G	C8-N7	6.38	1.34	1.30
57	BB	1172	C	C2-N3	6.38	1.40	1.35
57	BB	1249	U	N1-C6	6.38	1.43	1.38
57	BB	1764	C	C5'-C4'	6.38	1.59	1.51
57	BB	2505	G	C5'-C4'	6.38	1.59	1.51
57	BB	2809	A	C5'-C4'	-6.38	1.43	1.51
21	AA	555	U	P-O5'	-6.38	1.53	1.59
57	BB	370	G	N9-C8	6.38	1.42	1.37
57	BB	589	U	P-O5'	-6.38	1.53	1.59
21	AA	1445	U	N3-C4	6.37	1.44	1.38
21	AA	1468	A	C2'-C1'	-6.37	1.46	1.53
22	AY	29	A	O3'-P	-6.37	1.53	1.61
22	AY	75	C	N1-C2	6.37	1.46	1.40
57	BB	925	A	N3-C4	6.37	1.38	1.34
57	BB	1308	A	N9-C8	6.37	1.42	1.37
57	BB	1447	C	C1'-N1	6.37	1.58	1.48
57	BB	2692	G	O4'-C1'	6.37	1.50	1.41
21	AA	362	G	N7-C5	6.37	1.43	1.39
21	AA	527	G	N7-C5	-6.37	1.35	1.39
21	AA	746	A	C5-C4	6.37	1.43	1.38
57	BB	822	G	C5'-C4'	6.37	1.58	1.51
57	BB	2013	A	C6-N1	6.37	1.40	1.35
57	BB	2442	C	C2-N3	-6.37	1.30	1.35
57	BB	682	G	P-O5'	-6.37	1.53	1.59
57	BB	869	G	N7-C5	-6.37	1.35	1.39
57	BB	948	C	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)
57	BB	2052	A	N3-C4	-6.37	1.31	1.34
57	BB	2711	A	N9-C8	-6.37	1.32	1.37
21	AA	54	C	N3-C4	6.37	1.38	1.33
21	AA	1123	U	N3-C4	6.37	1.44	1.38
21	AA	1296	C	C4-N4	-6.37	1.28	1.33
21	AA	1441	A	C3'-C2'	-6.37	1.45	1.52
23	AW	26	A	C6-N1	6.37	1.40	1.35
23	AW	67	C	C4-N4	6.37	1.39	1.33
45	BC	39	SER	CA-CB	6.37	1.62	1.52
16	AE	32	PHE	CG-CD1	6.37	1.48	1.38
21	AA	1014	A	N1-C2	6.37	1.40	1.34
23	AW	29	G	N9-C8	-6.37	1.33	1.37
57	BB	281	C	C2-O2	6.37	1.30	1.24
57	BB	1110	G	N1-C2	6.37	1.42	1.37
21	AA	866	C	C4-N4	6.37	1.39	1.33
21	AA	929	G	C4'-O4'	-6.37	1.37	1.45
21	AA	1448	C	C4'-O4'	6.37	1.53	1.45
57	BB	560	C	N1-C2	6.37	1.46	1.40
57	BB	1311	G	N9-C8	-6.37	1.33	1.37
57	BB	1436	G	C2'-C1'	-6.37	1.46	1.53
57	BB	2116	G	C5-C6	-6.37	1.35	1.42
57	BB	1110	G	C2'-C1'	-6.36	1.46	1.53
57	BB	1360	G	C4'-C3'	6.36	1.60	1.53
57	BB	1778	U	O3'-P	-6.36	1.53	1.61
57	BB	351	C	O4'-C1'	6.36	1.50	1.41
57	BB	1409	U	C2-O2	6.36	1.28	1.22
57	BB	2102	G	C1'-N9	6.36	1.58	1.48
21	AA	943	U	N1-C6	6.36	1.43	1.38
21	AA	1113	C	C4-N4	6.36	1.39	1.33
21	AA	1356	G	N1-C2	6.36	1.42	1.37
21	AA	1404	C	C2'-C1'	-6.36	1.46	1.53
24	AX	18	G	C5'-C4'	6.36	1.58	1.51
57	BB	379	G	C6-N1	-6.36	1.35	1.39
57	BB	1441	G	C8-N7	-6.36	1.27	1.30
57	BB	1602	U	C4-C5	6.36	1.49	1.43
57	BB	2472	G	N7-C5	-6.36	1.35	1.39
57	BB	1493	C	C3'-C2'	6.36	1.59	1.52
2	AK	127	ARG	NE-CZ	6.36	1.41	1.33
21	AA	620	C	C1'-N1	6.36	1.58	1.48
21	AA	1059	C	C2-N3	6.36	1.40	1.35
21	AA	1102	A	C6-N6	6.36	1.39	1.33
57	BB	289	G	C5-C4	6.36	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1551	A	C2'-C1'	-6.36	1.46	1.53
57	BB	2039	U	C5-C6	-6.36	1.28	1.34
57	BB	2189	U	C5'-C4'	6.36	1.58	1.51
21	AA	51	A	C4'-O4'	-6.36	1.37	1.45
21	AA	359	G	C8-N7	-6.36	1.27	1.30
57	BB	430	A	C4'-O4'	-6.36	1.37	1.45
57	BB	1407	G	N1-C2	6.36	1.42	1.37
21	AA	423	G	N3-C4	-6.35	1.31	1.35
57	BB	174	U	O3'-P	-6.35	1.53	1.61
57	BB	351	C	N3-C4	6.35	1.38	1.33
57	BB	1181	U	C5-C6	6.35	1.39	1.34
57	BB	1440	U	P-O5'	-6.35	1.53	1.59
6	AO	87	ARG	CZ-NH2	6.35	1.41	1.33
21	AA	14	U	C2-N3	6.35	1.42	1.37
21	AA	732	C	N1-C6	-6.35	1.33	1.37
21	AA	838	G	N1-C2	6.35	1.42	1.37
21	AA	1232	U	N1-C2	-6.35	1.32	1.38
57	BB	79	C	N1-C6	6.35	1.41	1.37
57	BB	517	C	C4'-C3'	6.35	1.60	1.53
57	BB	1864	U	C4-O4	6.35	1.28	1.23
21	AA	1228	C	N1-C6	6.35	1.41	1.37
21	AA	1395	C	P-O5'	-6.35	1.53	1.59
22	AY	33	U	C4'-O4'	-6.35	1.37	1.45
37	BR	79	ARG	CD-NE	6.35	1.57	1.46
57	BB	541	A	N9-C4	-6.35	1.34	1.37
57	BB	797	G	C2-N3	6.35	1.37	1.32
57	BB	1998	A	C2'-C1'	-6.35	1.46	1.53
21	AA	109	A	C2-N3	6.35	1.39	1.33
21	AA	194	C	N1-C6	6.35	1.41	1.37
21	AA	1106	G	N3-C4	6.35	1.39	1.35
21	AA	1187	G	P-O5'	-6.35	1.53	1.59
21	AA	1231	G	C6-N1	6.35	1.44	1.39
21	AA	1475	G	C8-N7	-6.35	1.27	1.30
45	BC	102	TYR	CD1-CE1	6.35	1.48	1.39
57	BB	344	A	C6-N6	6.35	1.39	1.33
57	BB	1307	A	N7-C5	6.35	1.43	1.39
57	BB	1419	A	C5-C4	-6.35	1.34	1.38
57	BB	2867	G	C4'-O4'	-6.35	1.37	1.45
57	BB	403	U	C2'-C1'	-6.35	1.46	1.53
57	BB	1147	A	N7-C5	-6.35	1.35	1.39
57	BB	1218	G	N7-C5	-6.35	1.35	1.39
57	BB	2642	G	C8-N7	6.35	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	56	U	C2'-C1'	-6.35	1.46	1.53
21	AA	773	G	N9-C8	-6.35	1.33	1.37
21	AA	1525	G	C2-N2	6.35	1.40	1.34
57	BB	35	G	C5-C4	6.35	1.42	1.38
57	BB	1240	U	N1-C2	6.35	1.44	1.38
16	AE	94	PHE	CB-CG	6.34	1.62	1.51
21	AA	48	C	N3-C4	-6.34	1.29	1.33
21	AA	400	C	C4-N4	6.34	1.39	1.33
21	AA	439	U	N1-C6	-6.34	1.32	1.38
21	AA	488	C	N3-C4	6.34	1.38	1.33
22	AY	54	U	C3'-C2'	6.34	1.59	1.52
57	BB	727	A	C5'-C4'	6.34	1.58	1.51
57	BB	2239	G	O3'-P	-6.34	1.53	1.61
57	BB	2559	C	C4-C5	6.34	1.48	1.43
21	AA	631	C	C2-N3	6.34	1.40	1.35
57	BB	1508	A	C6-N6	6.34	1.39	1.33
14	AC	171	ARG	CD-NE	6.34	1.57	1.46
21	AA	1055	A	N9-C4	-6.34	1.34	1.37
21	AA	1150	A	C8-N7	-6.34	1.27	1.31
21	AA	1516	G	N9-C4	6.34	1.43	1.38
21	AA	1523	G	N9-C4	-6.34	1.32	1.38
23	AW	17	C	C4-N4	6.34	1.39	1.33
57	BB	453	A	O5'-C5'	6.34	1.54	1.44
57	BB	570	G	N1-C2	6.34	1.42	1.37
57	BB	835	C	C4'-C3'	6.34	1.60	1.53
57	BB	1190	G	N3-C4	-6.34	1.31	1.35
57	BB	1205	A	N1-C2	6.34	1.40	1.34
57	BB	1406	U	C3'-C2'	-6.34	1.45	1.52
57	BB	1703	G	N1-C2	6.34	1.42	1.37
57	BB	1893	C	N3-C4	6.34	1.38	1.33
57	BB	2092	U	N1-C2	6.34	1.44	1.38
57	BB	2474	U	C4-C5	6.34	1.49	1.43
21	AA	714	G	N9-C8	6.34	1.42	1.37
21	AA	969	A	C5'-C4'	-6.34	1.43	1.51
57	BB	1252	G	N7-C5	-6.34	1.35	1.39
57	BB	1908	C	C4-N4	6.34	1.39	1.33
57	BB	1937	A	C6-N6	6.34	1.39	1.33
57	BB	2289	G	P-O5'	-6.34	1.53	1.59
57	BB	2596	U	C3'-C2'	-6.34	1.45	1.52
57	BB	2824	C	C4-N4	6.34	1.39	1.33
58	BA	37	C	N3-C4	6.34	1.38	1.33
21	AA	648	A	N1-C2	6.34	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1198	U	C4'-C3'	6.34	1.60	1.53
21	AA	503	C	C4'-C3'	-6.34	1.46	1.53
21	AA	596	A	C6-N6	6.34	1.39	1.33
21	AA	766	A	C6-N6	6.34	1.39	1.33
21	AA	1432	G	C4'-C3'	6.34	1.60	1.53
57	BB	753	A	C5-C4	6.34	1.43	1.38
57	BB	790	U	C4-O4	6.34	1.28	1.23
57	BB	1316	U	C4'-O4'	6.34	1.53	1.45
57	BB	2240	U	C4-C5	6.34	1.49	1.43
57	BB	2461	A	C6-N6	6.34	1.39	1.33
21	AA	1035	A	C5-C4	6.33	1.43	1.38
57	BB	1423	G	N9-C4	-6.33	1.32	1.38
21	AA	199	A	N1-C2	6.33	1.40	1.34
21	AA	509	A	C6-N1	6.33	1.40	1.35
22	AY	20	G	C5-C4	6.33	1.42	1.38
57	BB	73	A	C2'-C1'	-6.33	1.46	1.53
57	BB	701	G	C5-C6	-6.33	1.36	1.42
57	BB	1906	G	C2-N2	6.33	1.40	1.34
57	BB	1913	A	C5-C4	6.33	1.43	1.38
57	BB	2046	G	C8-N7	-6.33	1.27	1.30
57	BB	2629	U	N1-C6	-6.33	1.32	1.38
57	BB	2846	G	N9-C8	-6.33	1.33	1.37
58	BA	54	G	C2-N2	6.33	1.40	1.34
23	AW	16	U	C5'-C4'	6.33	1.58	1.51
23	AW	27	G	C6-N1	6.33	1.44	1.39
26	AV	70	G	N7-C5	6.33	1.43	1.39
57	BB	50	U	C1'-N1	6.33	1.58	1.48
57	BB	1003	G	N7-C5	-6.33	1.35	1.39
57	BB	1651	G	C4'-C3'	6.33	1.60	1.53
57	BB	2079	U	O4'-C1'	-6.33	1.33	1.41
21	AA	990	C	C4-N4	6.33	1.39	1.33
57	BB	1078	U	C2-N3	6.33	1.42	1.37
57	BB	2471	A	C4'-C3'	6.33	1.60	1.53
21	AA	122	G	P-O5'	-6.33	1.53	1.59
21	AA	1182	G	P-O5'	-6.33	1.53	1.59
23	AW	9	A	C5'-C4'	6.33	1.58	1.51
54	BF	114	ARG	CD-NE	6.33	1.57	1.46
57	BB	86	G	P-O5'	-6.33	1.53	1.59
57	BB	395	U	C4'-C3'	6.33	1.60	1.53
57	BB	1031	G	C2'-C1'	-6.33	1.46	1.53
57	BB	1200	C	C2'-C1'	-6.33	1.46	1.53
57	BB	1223	G	O4'-C1'	-6.33	1.33	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1237	A	C6-N6	6.33	1.39	1.33
57	BB	1950	G	C5-C4	6.33	1.42	1.38
25	AZ	223	ARG	CZ-NH2	6.33	1.41	1.33
57	BB	2722	G	C5'-C4'	6.33	1.58	1.51
21	AA	164	G	N3-C4	-6.33	1.31	1.35
21	AA	408	A	N9-C4	-6.33	1.34	1.37
21	AA	689	C	C2'-C1'	-6.33	1.46	1.53
21	AA	1206	G	C2-N3	6.33	1.37	1.32
23	AW	9	A	N3-C4	-6.33	1.31	1.34
57	BB	813	U	C4'-C3'	6.33	1.60	1.53
57	BB	1840	G	C5-C4	6.33	1.42	1.38
57	BB	2784	U	C2'-C1'	-6.33	1.46	1.53
20	AI	44	ARG	CZ-NH2	6.32	1.41	1.33
21	AA	971	G	C2-N2	6.32	1.40	1.34
57	BB	226	A	C4'-C3'	-6.32	1.46	1.53
57	BB	425	G	C8-N7	-6.32	1.27	1.30
57	BB	488	G	C4'-C3'	-6.32	1.46	1.53
57	BB	1637	A	C6-N1	6.32	1.40	1.35
57	BB	2253	G	C8-N7	6.32	1.34	1.30
57	BB	2682	A	O3'-P	-6.32	1.53	1.61
57	BB	2846	G	P-O5'	6.32	1.66	1.59
21	AA	1246	A	N7-C5	-6.32	1.35	1.39
23	AW	52	G	N3-C4	-6.32	1.31	1.35
57	BB	710	U	C2'-C1'	-6.32	1.46	1.53
21	AA	408	A	N1-C2	-6.32	1.28	1.34
21	AA	426	U	P-O5'	-6.32	1.53	1.59
21	AA	1474	U	C3'-C2'	-6.32	1.45	1.52
26	AV	76	A	C5'-C4'	6.32	1.58	1.51
45	BC	261	ARG	CD-NE	6.32	1.57	1.46
57	BB	1528	A	C2'-C1'	-6.32	1.46	1.53
57	BB	1550	C	N3-C4	-6.32	1.29	1.33
57	BB	2367	G	C2-N2	6.32	1.40	1.34
57	BB	2395	C	C4-N4	6.32	1.39	1.33
57	BB	2503	A	C6-N6	6.32	1.39	1.33
57	BB	2864	G	N1-C2	6.32	1.42	1.37
21	AA	347	G	N1-C2	6.32	1.42	1.37
21	AA	1041	G	O3'-P	-6.32	1.53	1.61
21	AA	1403	C	N1-C6	6.32	1.41	1.37
21	AA	1518	A	N7-C5	-6.32	1.35	1.39
57	BB	35	G	C2'-C1'	6.32	1.60	1.53
57	BB	781	A	N9-C8	6.32	1.42	1.37
57	BB	1117	C	C2'-C1'	-6.32	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1188	U	C4'-C3'	6.32	1.60	1.53
57	BB	1353	A	N3-C4	-6.32	1.31	1.34
57	BB	2443	C	P-O5'	-6.32	1.53	1.59
1	AJ	65	TYR	CZ-OH	6.32	1.48	1.37
21	AA	810	C	N1-C6	6.32	1.41	1.37
57	BB	335	C	C4-C5	6.32	1.48	1.43
57	BB	464	U	C4-C5	6.32	1.49	1.43
57	BB	1562	U	C2-N3	6.32	1.42	1.37
57	BB	1931	U	C5'-C4'	6.32	1.58	1.51
57	BB	2480	C	C4-N4	6.32	1.39	1.33
57	BB	2639	A	N9-C4	6.32	1.41	1.37
21	AA	620	C	C4-C5	6.32	1.48	1.43
21	AA	905	U	N3-C4	6.32	1.44	1.38
57	BB	71	A	C6-N1	6.32	1.40	1.35
57	BB	353	C	C2-O2	6.32	1.30	1.24
57	BB	657	U	O4'-C1'	-6.32	1.33	1.41
57	BB	811	U	N1-C6	-6.32	1.32	1.38
57	BB	1055	G	C6-N1	6.32	1.44	1.39
57	BB	2690	U	P-O5'	-6.32	1.53	1.59
10	AS	31	ARG	CZ-NH2	6.31	1.41	1.33
57	BB	2587	A	N1-C2	6.31	1.40	1.34
20	AI	112	ARG	CZ-NH1	6.31	1.41	1.33
21	AA	70	U	C4-O4	-6.31	1.18	1.23
21	AA	309	A	C4'-O4'	6.31	1.53	1.45
21	AA	1417	G	C2'-C1'	-6.31	1.46	1.53
21	AA	1482	G	O3'-P	-6.31	1.53	1.61
57	BB	402	A	O4'-C1'	-6.31	1.33	1.41
57	BB	974	G	C2-N3	6.31	1.37	1.32
57	BB	982	C	C4-N4	6.31	1.39	1.33
57	BB	1464	G	C2'-O2'	-6.31	1.33	1.41
57	BB	1700	A	N7-C5	-6.31	1.35	1.39
57	BB	2161	C	C4-C5	-6.31	1.38	1.43
57	BB	2901	C	C4-C5	6.31	1.48	1.43
21	AA	457	G	C5-C6	6.31	1.48	1.42
21	AA	779	C	C2-N3	6.31	1.40	1.35
21	AA	798	U	C4-O4	-6.31	1.18	1.23
57	BB	700	G	C8-N7	6.31	1.34	1.30
57	BB	1693	U	C5-C6	6.31	1.39	1.34
57	BB	1725	U	C4'-O4'	6.31	1.53	1.45
21	AA	407	U	C2-N3	6.31	1.42	1.37
21	AA	430	A	C4'-C3'	-6.31	1.46	1.53
23	AW	52	G	C5-C4	6.31	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	62	U	C2-N3	6.31	1.42	1.37
57	BB	203	A	C5-C4	-6.31	1.34	1.38
57	BB	1116	G	C8-N7	6.31	1.34	1.30
58	BA	66	A	C5-C4	6.31	1.43	1.38
15	AD	43	ARG	CZ-NH1	6.31	1.41	1.33
17	AF	40	GLU	CD-OE1	6.31	1.32	1.25
22	AY	45	G	C6-N1	-6.31	1.35	1.39
26	AV	37	A	C8-N7	-6.31	1.27	1.31
57	BB	1827	U	N3-C4	6.31	1.44	1.38
57	BB	2214	C	N1-C2	6.31	1.46	1.40
57	BB	2250	G	N3-C4	-6.31	1.31	1.35
21	AA	441	A	N9-C8	6.31	1.42	1.37
57	BB	451	U	N3-C4	-6.31	1.32	1.38
57	BB	1131	G	N7-C5	6.31	1.43	1.39
21	AA	475	C	C2-O2	6.30	1.30	1.24
21	AA	924	C	C2'-C1'	-6.30	1.46	1.53
21	AA	1364	U	N1-C2	6.30	1.44	1.38
57	BB	149	A	C4'-O4'	-6.30	1.37	1.45
57	BB	908	C	N1-C6	6.30	1.41	1.37
57	BB	2253	G	C2'-C1'	6.30	1.60	1.53
57	BB	2322	A	N9-C8	6.30	1.42	1.37
57	BB	2337	G	C5'-C4'	6.30	1.58	1.51
57	BB	2690	U	C5'-C4'	6.30	1.58	1.51
57	BB	1025	G	C4'-C3'	6.30	1.60	1.53
57	BB	1807	G	C2-N3	6.30	1.37	1.32
57	BB	2212	A	N7-C5	-6.30	1.35	1.39
21	AA	892	A	P-O5'	-6.30	1.53	1.59
57	BB	628	G	C8-N7	-6.30	1.27	1.30
57	BB	1442	U	P-O5'	-6.30	1.53	1.59
57	BB	1783	A	C8-N7	-6.30	1.27	1.31
15	AD	127	ARG	CZ-NH1	6.30	1.41	1.33
21	AA	715	A	C8-N7	-6.30	1.27	1.31
21	AA	1047	G	C2-N2	6.30	1.40	1.34
57	BB	742	A	C6-N6	6.30	1.39	1.33
57	BB	904	G	O3'-P	-6.30	1.53	1.61
57	BB	1547	C	O3'-P	-6.30	1.53	1.61
58	BA	98	G	C2-N2	6.30	1.40	1.34
57	BB	277	G	C2'-C1'	6.30	1.60	1.53
57	BB	1747	U	O3'-P	-6.30	1.53	1.61
21	AA	59	A	C6-N1	6.30	1.40	1.35
21	AA	413	G	C1'-N9	-6.30	1.38	1.46
21	AA	773	G	C5'-C4'	6.30	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	944	G	C8-N7	-6.30	1.27	1.30
21	AA	1305	G	C2'-C1'	-6.30	1.46	1.53
57	BB	1042	G	C4'-O4'	6.30	1.53	1.45
57	BB	2883	A	C8-N7	-6.30	1.27	1.31
21	AA	667	G	C4'-C3'	-6.29	1.46	1.53
57	BB	638	G	C3'-C2'	-6.29	1.45	1.52
57	BB	1883	U	C5'-C4'	6.29	1.58	1.51
57	BB	2899	A	C5-C6	-6.29	1.35	1.41
21	AA	310	G	C5-C4	6.29	1.42	1.38
21	AA	556	C	N3-C4	6.29	1.38	1.33
21	AA	865	A	C6-N6	6.29	1.39	1.33
21	AA	1450	U	O3'-P	-6.29	1.53	1.61
24	AX	21	C	C4-N4	6.29	1.39	1.33
57	BB	918	A	P-O5'	-6.29	1.53	1.59
57	BB	1054	A	C2'-C1'	-6.29	1.46	1.53
21	AA	109	A	P-O5'	-6.29	1.53	1.59
57	BB	278	A	C8-N7	-6.29	1.27	1.31
57	BB	1381	G	N1-C2	6.29	1.42	1.37
57	BB	2006	C	C3'-C2'	-6.29	1.45	1.52
58	BA	115	A	C4'-C3'	6.29	1.60	1.53
21	AA	296	U	O4'-C1'	-6.29	1.33	1.41
21	AA	346	G	N1-C2	6.29	1.42	1.37
21	AA	771	G	C4'-O4'	6.29	1.53	1.45
21	AA	1329	A	C4'-C3'	6.29	1.60	1.53
57	BB	618	G	N3-C4	6.29	1.39	1.35
57	BB	2231	U	C2'-C1'	-6.29	1.46	1.53
21	AA	1522	U	C2'-C1'	-6.29	1.46	1.53
23	AW	20	U	C4'-C3'	-6.29	1.46	1.53
57	BB	119	A	C4'-C3'	6.29	1.60	1.53
57	BB	1093	G	C2'-C1'	-6.29	1.46	1.53
57	BB	1220	G	P-O5'	-6.29	1.53	1.59
57	BB	1854	A	P-O5'	-6.29	1.53	1.59
21	AA	1260	G	C2-N3	6.29	1.37	1.32
23	AW	53	G	N9-C4	-6.29	1.32	1.38
57	BB	1776	G	N3-C4	-6.29	1.31	1.35
57	BB	2573	C	C1'-N1	6.29	1.58	1.48
57	BB	2773	C	O3'-P	6.29	1.68	1.61
21	AA	637	C	C4'-C3'	6.29	1.60	1.53
21	AA	973	G	N7-C5	-6.29	1.35	1.39
57	BB	515	A	C6-N6	6.29	1.39	1.33
57	BB	863	A	C6-N6	6.29	1.39	1.33
57	BB	1131	G	C5'-C4'	6.29	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1964	G	C5-C4	-6.29	1.33	1.38
57	BB	2294	G	C5-C6	-6.29	1.36	1.42
57	BB	2475	C	O4'-C1'	6.29	1.49	1.41
21	AA	32	A	N3-C4	-6.28	1.31	1.34
21	AA	123	U	C2-N3	6.28	1.42	1.37
21	AA	978	A	C6-N1	-6.28	1.31	1.35
57	BB	66	C	O4'-C1'	6.28	1.49	1.41
57	BB	418	C	C4-N4	6.28	1.39	1.33
57	BB	1166	G	N7-C5	-6.28	1.35	1.39
57	BB	1889	A	N7-C5	-6.28	1.35	1.39
57	BB	2245	U	N3-C4	6.28	1.44	1.38
57	BB	1182	G	N7-C5	-6.28	1.35	1.39
57	BB	1183	U	C3'-C2'	-6.28	1.45	1.52
57	BB	2529	G	O3'-P	-6.28	1.53	1.61
21	AA	1220	G	C2-N2	6.28	1.40	1.34
57	BB	118	A	N7-C5	-6.28	1.35	1.39
57	BB	918	A	N1-C2	6.28	1.40	1.34
57	BB	1763	G	C2-N2	6.28	1.40	1.34
57	BB	1924	C	C5-C6	6.28	1.39	1.34
57	BB	2437	G	P-O5'	-6.28	1.53	1.59
57	BB	2618	G	C6-N1	6.28	1.44	1.39
21	AA	252	U	N1-C6	6.28	1.43	1.38
57	BB	878	A	N9-C4	6.28	1.41	1.37
57	BB	2438	U	C4-C5	6.28	1.49	1.43
21	AA	88	U	C2'-C1'	-6.28	1.46	1.53
21	AA	367	U	C2'-C1'	-6.28	1.46	1.53
21	AA	386	C	N3-C4	6.28	1.38	1.33
21	AA	428	G	C1'-N9	-6.28	1.38	1.46
21	AA	526	C	N1-C6	6.28	1.41	1.37
21	AA	1500	A	C2'-C1'	-6.28	1.46	1.53
22	AY	42	G	N9-C8	6.28	1.42	1.37
26	AV	17	C	P-O5'	-6.28	1.53	1.59
57	BB	312	G	C2'-C1'	-6.28	1.46	1.53
57	BB	1173	U	C2'-C1'	-6.28	1.46	1.53
57	BB	1480	C	C2-N3	6.28	1.40	1.35
57	BB	1506	U	N3-C4	6.28	1.44	1.38
21	AA	1222	G	C5'-C4'	6.27	1.58	1.51
41	BV	9	ARG	NE-CZ	6.27	1.41	1.33
57	BB	189	G	C8-N7	-6.27	1.27	1.30
57	BB	837	C	C2'-C1'	-6.27	1.46	1.53
57	BB	969	G	N9-C8	6.27	1.42	1.37
57	BB	1216	G	N7-C5	-6.27	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1532	A	C2-N3	6.27	1.39	1.33
21	AA	374	A	C4'-O4'	6.27	1.53	1.45
57	BB	74	A	C6-N6	6.27	1.39	1.33
57	BB	535	G	P-O5'	-6.27	1.53	1.59
57	BB	1465	G	C8-N7	-6.27	1.27	1.30
57	BB	2280	G	N7-C5	-6.27	1.35	1.39
21	AA	335	C	C4'-O4'	-6.27	1.37	1.45
21	AA	934	C	N1-C6	6.27	1.41	1.37
21	AA	1160	G	C2-N2	6.27	1.40	1.34
57	BB	1213	A	P-O5'	-6.27	1.53	1.59
57	BB	1380	G	N1-C2	6.27	1.42	1.37
57	BB	1514	G	C2'-C1'	-6.27	1.46	1.53
21	AA	633	G	P-O5'	-6.27	1.53	1.59
57	BB	708	G	P-O5'	-6.27	1.53	1.59
57	BB	943	A	N9-C4	-6.27	1.34	1.37
57	BB	1433	A	N1-C2	6.27	1.40	1.34
57	BB	1513	U	N1-C2	6.27	1.44	1.38
57	BB	2618	G	C2-N3	6.27	1.37	1.32
57	BB	2620	C	C2-N3	6.27	1.40	1.35
58	BA	30	C	C5'-C4'	6.27	1.58	1.51
58	BA	117	G	C6-O6	6.27	1.29	1.24
21	AA	7	A	C5'-C4'	6.27	1.58	1.51
21	AA	361	G	N1-C2	6.27	1.42	1.37
21	AA	1171	A	C5-C4	6.27	1.43	1.38
21	AA	1286	U	O3'-P	-6.27	1.53	1.61
22	AY	32	C	C4'-C3'	-6.27	1.46	1.53
57	BB	1180	U	C5'-C4'	6.27	1.58	1.51
57	BB	1254	A	C5-C4	6.27	1.43	1.38
57	BB	2675	A	P-O5'	-6.27	1.53	1.59
21	AA	988	G	C4'-C3'	6.27	1.60	1.53
57	BB	223	A	C8-N7	-6.27	1.27	1.31
57	BB	323	C	C2-N3	-6.27	1.30	1.35
57	BB	511	U	C5-C6	6.27	1.39	1.34
57	BB	2218	G	C2'-C1'	-6.27	1.46	1.53
57	BB	2250	G	N9-C4	6.27	1.43	1.38
16	AE	103	GLY	N-CA	-6.26	1.36	1.46
21	AA	1002	G	C2'-C1'	-6.26	1.46	1.53
21	AA	1247	U	C4'-C3'	6.26	1.60	1.53
57	BB	1084	A	O3'-P	-6.26	1.53	1.61
57	BB	1346	G	C2-N3	6.26	1.37	1.32
57	BB	1486	U	C4-O4	6.26	1.28	1.23
57	BB	1920	C	N3-C4	6.26	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2147	A	C2-N3	6.26	1.39	1.33
57	BB	2675	A	N7-C5	-6.26	1.35	1.39
57	BB	2103	C	C2'-C1'	-6.26	1.46	1.53
57	BB	2383	G	N1-C2	6.26	1.42	1.37
21	AA	162	A	C5'-C4'	6.26	1.58	1.51
21	AA	259	G	O4'-C1'	-6.26	1.33	1.41
21	AA	397	A	C5-C4	6.26	1.43	1.38
25	AZ	81	CYS	CB-SG	6.26	1.92	1.82
57	BB	2549	G	N7-C5	-6.26	1.35	1.39
57	BB	2645	G	C8-N7	-6.26	1.27	1.30
21	AA	277	C	P-O5'	-6.26	1.53	1.59
21	AA	849	G	N9-C4	-6.26	1.32	1.38
21	AA	1124	G	C2'-C1'	-6.26	1.46	1.53
57	BB	785	G	C5-C4	6.26	1.42	1.38
57	BB	824	U	C4-C5	-6.26	1.38	1.43
57	BB	1140	C	O3'-P	-6.26	1.53	1.61
57	BB	1264	A	C3'-O3'	6.26	1.50	1.42
21	AA	1507	A	N9-C4	6.26	1.41	1.37
57	BB	22	C	O3'-P	-6.26	1.53	1.61
57	BB	2289	G	N9-C8	6.26	1.42	1.37
57	BB	2889	C	N3-C4	-6.26	1.29	1.33
21	AA	264	C	C4-N4	6.26	1.39	1.33
21	AA	724	G	N3-C4	-6.26	1.31	1.35
21	AA	1188	A	C2-N3	-6.26	1.27	1.33
56	BH	139	PHE	CD2-CE2	-6.26	1.26	1.39
57	BB	242	G	N9-C8	-6.26	1.33	1.37
57	BB	1425	G	N7-C5	-6.26	1.35	1.39
57	BB	1589	U	C4'-C3'	-6.26	1.46	1.53
57	BB	2361	G	C8-N7	-6.26	1.27	1.30
57	BB	2860	A	N7-C5	-6.26	1.35	1.39
58	BA	112	G	N9-C4	6.26	1.43	1.38
21	AA	1178	G	C5-C6	-6.25	1.36	1.42
26	AV	22	G	C2-N2	6.25	1.40	1.34
57	BB	116	C	C2'-C1'	-6.25	1.46	1.53
57	BB	449	A	N7-C5	-6.25	1.35	1.39
57	BB	648	G	C5-C4	-6.25	1.33	1.38
57	BB	1796	U	C4-C5	6.25	1.49	1.43
21	AA	443	C	N3-C4	6.25	1.38	1.33
21	AA	1247	U	C4-O4	6.25	1.28	1.23
57	BB	526	A	P-OP1	-6.25	1.38	1.49
57	BB	610	C	N3-C4	6.25	1.38	1.33
57	BB	636	G	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)
57	BB	1030	C	N3-C4	6.25	1.38	1.33
57	BB	2281	A	O3'-P	-6.25	1.53	1.61
21	AA	1294	G	N9-C8	-6.25	1.33	1.37
21	AA	1380	U	C4'-C3'	-6.25	1.46	1.53
21	AA	1447	A	C4'-C3'	-6.25	1.46	1.53
42	BW	53	GLY	N-CA	-6.25	1.36	1.46
42	BW	76	ARG	CZ-NH1	6.25	1.41	1.33
57	BB	671	C	N3-C4	6.25	1.38	1.33
57	BB	732	C	C5-C6	-6.25	1.29	1.34
57	BB	1214	A	N1-C2	6.25	1.40	1.34
57	BB	2216	G	P-O5'	6.25	1.66	1.59
57	BB	2235	G	C2'-C1'	-6.25	1.46	1.53
19	AH	14	ARG	CD-NE	6.25	1.57	1.46
21	AA	1246	A	C6-N6	6.25	1.39	1.33
21	AA	1288	A	N7-C5	-6.25	1.35	1.39
21	AA	1532	U	C3'-C2'	6.25	1.59	1.52
57	BB	666	A	C4'-O4'	6.25	1.53	1.45
57	BB	943	A	N7-C5	-6.25	1.35	1.39
57	BB	1039	A	C8-N7	-6.25	1.27	1.31
57	BB	1299	G	C5-C4	6.25	1.42	1.38
57	BB	1509	A	N9-C8	6.25	1.42	1.37
57	BB	2511	U	C5'-C4'	6.25	1.58	1.51
21	AA	187	G	N3-C4	6.25	1.39	1.35
21	AA	1048	G	N9-C8	6.25	1.42	1.37
21	AA	1263	C	N3-C4	6.25	1.38	1.33
57	BB	2401	U	N1-C6	-6.25	1.32	1.38
21	AA	444	G	C4'-C3'	6.25	1.60	1.53
21	AA	461	A	N7-C5	-6.25	1.35	1.39
21	AA	582	C	C4'-C3'	6.25	1.60	1.53
21	AA	1525	G	C2'-C1'	-6.25	1.46	1.53
25	AZ	164	GLY	N-CA	-6.25	1.36	1.46
57	BB	719	C	N1-C6	6.25	1.40	1.37
57	BB	892	A	C3'-C2'	-6.25	1.45	1.52
57	BB	1106	G	C2'-O2'	-6.25	1.33	1.41
57	BB	1868	C	C5'-C4'	6.25	1.58	1.51
57	BB	2314	A	N9-C4	6.25	1.41	1.37
57	BB	2340	A	C2-N3	6.25	1.39	1.33
21	AA	958	A	C6-N1	6.25	1.40	1.35
23	AW	28	G	N1-C2	6.25	1.42	1.37
57	BB	597	G	C2-N3	6.25	1.37	1.32
57	BB	1336	A	C8-N7	-6.25	1.27	1.31
57	BB	1792	G	N9-C4	-6.25	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1882	U	C3'-C2'	-6.25	1.45	1.52
57	BB	1939	U	C3'-C2'	-6.25	1.45	1.52
57	BB	2233	U	C4-C5	-6.25	1.38	1.43
21	AA	879	C	C3'-C2'	-6.24	1.45	1.52
21	AA	1355	G	C2'-C1'	-6.24	1.46	1.53
22	AY	73	A	P-O5'	6.24	1.66	1.59
26	AV	6	G	N3-C4	-6.24	1.31	1.35
57	BB	44	A	N9-C8	-6.24	1.32	1.37
57	BB	75	G	C8-N7	6.24	1.34	1.30
57	BB	730	A	N1-C2	-6.24	1.28	1.34
57	BB	1521	G	N9-C8	6.24	1.42	1.37
57	BB	1996	C	N3-C4	6.24	1.38	1.33
57	BB	2037	A	N9-C8	-6.24	1.32	1.37
57	BB	2097	A	N9-C8	-6.24	1.32	1.37
21	AA	37	U	C2'-C1'	-6.24	1.46	1.53
21	AA	357	G	N3-C4	6.24	1.39	1.35
21	AA	745	G	C2-N3	6.24	1.37	1.32
21	AA	1130	A	C6-N1	-6.24	1.31	1.35
21	AA	1133	G	C2-N3	6.24	1.37	1.32
21	AA	1473	G	N3-C4	6.24	1.39	1.35
57	BB	13	A	C8-N7	-6.24	1.27	1.31
57	BB	182	A	C8-N7	6.24	1.35	1.31
57	BB	232	G	N1-C2	6.24	1.42	1.37
57	BB	295	G	N9-C8	-6.24	1.33	1.37
57	BB	1552	A	C6-N6	6.24	1.39	1.33
57	BB	2006	C	N3-C4	6.24	1.38	1.33
57	BB	2506	U	C1'-N1	6.24	1.58	1.48
21	AA	1032	G	C6-N1	6.24	1.44	1.39
21	AA	1435	G	N9-C4	6.24	1.43	1.38
23	AW	65	G	N9-C8	6.24	1.42	1.37
57	BB	198	C	C1'-N1	6.24	1.58	1.48
57	BB	257	C	N3-C4	6.24	1.38	1.33
57	BB	821	A	C5-C6	6.24	1.46	1.41
57	BB	1143	A	N9-C4	-6.24	1.34	1.37
57	BB	1508	A	O3'-P	-6.24	1.53	1.61
57	BB	1853	A	N9-C8	6.24	1.42	1.37
57	BB	1886	U	C3'-C2'	-6.24	1.45	1.52
57	BB	2169	A	N7-C5	-6.24	1.35	1.39
57	BB	2712	C	N1-C6	6.24	1.40	1.37
21	AA	908	A	C3'-C2'	-6.24	1.45	1.52
36	BQ	54	ARG	CZ-NH1	6.24	1.41	1.33
57	BB	1861	G	N1-C2	6.24	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2102	G	C5-C6	-6.24	1.36	1.42
20	AI	118	ARG	CD-NE	6.24	1.57	1.46
21	AA	727	G	C2'-C1'	-6.24	1.46	1.53
21	AA	1034	G	C5-C4	-6.24	1.33	1.38
57	BB	409	G	C5'-C4'	6.23	1.58	1.51
57	BB	698	C	N1-C6	6.23	1.40	1.37
57	BB	1889	A	C1'-N9	6.23	1.58	1.48
57	BB	29	U	N3-C4	6.23	1.44	1.38
57	BB	450	G	P-O5'	-6.23	1.53	1.59
57	BB	1158	C	N3-C4	6.23	1.38	1.33
57	BB	1190	G	C5-C6	-6.23	1.36	1.42
57	BB	1471	G	N7-C5	-6.23	1.35	1.39
57	BB	2297	A	N9-C8	6.23	1.42	1.37
57	BB	2622	U	C2-O2	6.23	1.27	1.22
57	BB	2759	G	C5-C4	6.23	1.42	1.38
21	AA	321	A	C5-C4	6.23	1.43	1.38
21	AA	1217	C	C2'-C1'	6.23	1.60	1.53
21	AA	1339	A	C4'-C3'	6.23	1.60	1.53
57	BB	58	G	O3'-P	-6.23	1.53	1.61
57	BB	180	G	C6-N1	-6.23	1.35	1.39
57	BB	407	G	P-O5'	-6.23	1.53	1.59
57	BB	1725	U	C4-C5	6.23	1.49	1.43
57	BB	2239	G	N9-C8	-6.23	1.33	1.37
21	AA	247	G	C6-N1	6.23	1.44	1.39
57	BB	153	U	C4-O4	6.23	1.28	1.23
57	BB	2742	G	N3-C4	6.23	1.39	1.35
21	AA	235	C	P-O5'	-6.23	1.53	1.59
21	AA	790	A	N9-C4	6.23	1.41	1.37
21	AA	1014	A	C6-N1	6.23	1.40	1.35
25	AZ	332	PHE	CG-CD1	6.23	1.48	1.38
57	BB	132	G	C2-N3	6.23	1.37	1.32
57	BB	701	G	N9-C4	-6.23	1.32	1.38
57	BB	1332	G	N7-C5	-6.23	1.35	1.39
57	BB	1435	G	C2-N3	6.23	1.37	1.32
57	BB	2740	A	C1'-N9	-6.23	1.38	1.46
21	AA	816	A	N3-C4	-6.23	1.31	1.34
21	AA	852	G	C2-N2	-6.23	1.28	1.34
57	BB	1800	C	C2'-C1'	-6.23	1.46	1.53
57	BB	1887	C	C4'-C3'	6.23	1.59	1.53
57	BB	2511	U	N3-C4	6.23	1.44	1.38
21	AA	1499	A	C8-N7	-6.22	1.27	1.31
57	BB	205	G	O3'-P	-6.22	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	710	U	C2-O2	6.22	1.27	1.22
57	BB	718	A	C5-C4	-6.22	1.34	1.38
57	BB	1084	A	C6-N6	6.22	1.39	1.33
57	BB	1134	A	C6-N6	6.22	1.39	1.33
57	BB	1252	G	C8-N7	-6.22	1.27	1.30
57	BB	1959	G	N9-C8	6.22	1.42	1.37
57	BB	2018	G	C3'-O3'	6.22	1.50	1.42
57	BB	2624	G	N3-C4	-6.22	1.31	1.35
57	BB	2708	G	N1-C2	6.22	1.42	1.37
21	AA	720	C	C4-N4	6.22	1.39	1.33
21	AA	1276	G	N7-C5	-6.22	1.35	1.39
57	BB	703	U	C2'-C1'	-6.22	1.46	1.53
57	BB	1407	G	C6-N1	6.22	1.44	1.39
57	BB	1902	C	C4-C5	6.22	1.48	1.43
57	BB	1953	A	P-O5'	-6.22	1.53	1.59
21	AA	58	C	P-O5'	-6.22	1.53	1.59
21	AA	813	U	N3-C4	6.22	1.44	1.38
57	BB	1640	A	P-O5'	-6.22	1.53	1.59
12	AU	37	TYR	CG-CD2	6.22	1.47	1.39
21	AA	436	C	P-O5'	-6.22	1.53	1.59
21	AA	584	G	C2'-C1'	-6.22	1.46	1.53
21	AA	825	A	C2-N3	6.22	1.39	1.33
22	AY	5	A	C3'-C2'	-6.22	1.46	1.52
22	AY	76	A	C2-N3	-6.22	1.27	1.33
57	BB	2071	A	C6-N6	6.22	1.39	1.33
57	BB	2355	G	P-O5'	-6.22	1.53	1.59
57	BB	2487	G	C2'-C1'	-6.22	1.46	1.53
57	BB	2765	A	N9-C4	6.22	1.41	1.37
21	AA	1220	G	C5-C4	6.22	1.42	1.38
21	AA	1293	C	C4-N4	6.22	1.39	1.33
22	AY	57	G	C4'-O4'	6.22	1.53	1.45
57	BB	1142	A	C6-N6	6.22	1.39	1.33
57	BB	1745	A	C6-N6	6.22	1.39	1.33
57	BB	1968	G	C8-N7	6.22	1.34	1.30
21	AA	392	C	N3-C4	6.22	1.38	1.33
21	AA	473	U	N1-C2	6.22	1.44	1.38
21	AA	663	A	C6-N1	6.22	1.40	1.35
21	AA	769	G	C8-N7	-6.22	1.27	1.30
21	AA	886	G	N9-C8	6.22	1.42	1.37
22	AY	11	C	C4-C5	-6.22	1.38	1.43
22	AY	67	A	C2'-O2'	-6.22	1.33	1.41
57	BB	187	G	O3'-P	-6.22	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	829	A	N7-C5	-6.22	1.35	1.39
57	BB	1094	U	C2'-C1'	-6.22	1.46	1.53
57	BB	1228	G	C5-C6	-6.22	1.36	1.42
57	BB	1719	G	N3-C4	6.22	1.39	1.35
57	BB	1955	U	C1'-N1	6.22	1.58	1.48
57	BB	2202	U	C4-C5	6.22	1.49	1.43
58	BA	59	A	N9-C4	-6.22	1.34	1.37
21	AA	188	C	P-O5'	6.21	1.66	1.59
21	AA	223	A	C2'-C1'	-6.21	1.46	1.53
21	AA	336	A	C6-N6	6.21	1.39	1.33
21	AA	500	G	O3'-P	-6.21	1.53	1.61
21	AA	935	A	C4'-C3'	6.21	1.59	1.53
57	BB	1289	C	C4'-O4'	-6.21	1.37	1.45
57	BB	1508	A	C4'-O4'	-6.21	1.37	1.45
57	BB	1782	U	C2-N3	6.21	1.42	1.37
57	BB	2494	G	C2'-C1'	-6.21	1.46	1.53
57	BB	2631	G	N7-C5	-6.21	1.35	1.39
21	AA	139	A	N9-C4	6.21	1.41	1.37
57	BB	1549	A	C5-C4	-6.21	1.34	1.38
57	BB	2062	A	C5-C6	6.21	1.46	1.41
21	AA	61	G	C1'-N9	-6.21	1.38	1.46
21	AA	109	A	C8-N7	-6.21	1.27	1.31
21	AA	411	A	C5-C6	6.21	1.46	1.41
21	AA	752	G	C6-N1	6.21	1.43	1.39
21	AA	856	C	C4-N4	6.21	1.39	1.33
21	AA	882	C	N3-C4	6.21	1.38	1.33
21	AA	904	U	N3-C4	6.21	1.44	1.38
21	AA	1140	C	C3'-C2'	6.21	1.59	1.52
21	AA	1154	G	N7-C5	-6.21	1.35	1.39
26	AV	74	C	N3-C4	6.21	1.38	1.33
33	BN	4	ARG	CZ-NH1	6.21	1.41	1.33
57	BB	1122	G	C8-N7	-6.21	1.27	1.30
57	BB	1784	A	C6-N6	-6.21	1.28	1.33
57	BB	2753	A	N7-C5	-6.21	1.35	1.39
21	AA	501	C	C4'-O4'	6.21	1.53	1.45
21	AA	777	A	C6-N6	6.21	1.39	1.33
21	AA	1517	G	N9-C4	-6.21	1.32	1.38
57	BB	1628	G	N3-C4	-6.21	1.31	1.35
21	AA	18	C	C4-C5	6.21	1.48	1.43
21	AA	743	A	O3'-P	-6.21	1.53	1.61
21	AA	1286	U	C2-N3	6.21	1.42	1.37
21	AA	1292	G	C5-C4	6.21	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1448	C	C5-C6	-6.21	1.29	1.34
57	BB	704	G	C4'-C3'	-6.21	1.46	1.53
57	BB	1665	A	N7-C5	6.21	1.43	1.39
57	BB	2409	G	C8-N7	-6.21	1.27	1.30
57	BB	2676	C	P-O5'	-6.21	1.53	1.59
21	AA	215	C	C2-N3	6.21	1.40	1.35
21	AA	986	U	C2'-C1'	-6.21	1.46	1.53
21	AA	1212	U	N1-C6	6.21	1.43	1.38
45	BC	270	ARG	CZ-NH1	6.21	1.41	1.33
57	BB	916	G	C5-C4	-6.21	1.34	1.38
57	BB	1019	U	N1-C2	-6.21	1.32	1.38
57	BB	2306	C	N1-C6	6.21	1.40	1.37
21	AA	1457	G	N9-C8	-6.21	1.33	1.37
57	BB	2078	C	C5'-C4'	6.21	1.58	1.51
22	AY	76	A	C2'-C1'	-6.20	1.46	1.53
57	BB	494	G	P-O5'	-6.20	1.53	1.59
57	BB	1060	U	C4'-C3'	-6.20	1.46	1.53
57	BB	1237	A	C5-C6	-6.20	1.35	1.41
57	BB	1511	G	N7-C5	6.20	1.43	1.39
57	BB	1850	G	C4'-C3'	-6.20	1.46	1.53
57	BB	2227	A	N7-C5	6.20	1.43	1.39
57	BB	2510	C	N1-C2	6.20	1.46	1.40
57	BB	2588	G	N3-C4	6.20	1.39	1.35
57	BB	2856	A	C5'-C4'	6.20	1.58	1.51
58	BA	88	C	O4'-C1'	6.20	1.49	1.41
26	AV	67	C	C4'-C3'	-6.20	1.46	1.53
57	BB	43	G	N3-C4	-6.20	1.31	1.35
57	BB	152	A	C6-N1	6.20	1.39	1.35
57	BB	610	C	N1-C6	6.20	1.40	1.37
57	BB	1534	U	C4-C5	6.20	1.49	1.43
57	BB	2902	C	C2-N3	-6.20	1.30	1.35
21	AA	408	A	C6-N1	6.20	1.39	1.35
57	BB	1012	U	N1-C2	6.20	1.44	1.38
57	BB	1130	U	O3'-P	-6.20	1.53	1.61
57	BB	1590	A	N9-C8	-6.20	1.32	1.37
57	BB	1990	C	C4-N4	6.20	1.39	1.33
57	BB	2566	A	N3-C4	-6.20	1.31	1.34
21	AA	36	C	O3'-P	-6.20	1.53	1.61
21	AA	118	U	P-O5'	-6.20	1.53	1.59
21	AA	204	G	N7-C5	-6.20	1.35	1.39
21	AA	255	G	P-O5'	-6.20	1.53	1.59
21	AA	331	G	N1-C2	6.20	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	730	G	N3-C4	6.20	1.39	1.35
21	AA	849	G	O3'-P	-6.20	1.53	1.61
21	AA	973	G	C2'-O2'	-6.20	1.33	1.41
21	AA	996	A	N7-C5	6.20	1.43	1.39
21	AA	1091	U	C4'-C3'	6.20	1.59	1.53
26	AV	63	G	C2-N3	6.20	1.37	1.32
57	BB	895	U	C4'-C3'	6.20	1.59	1.53
57	BB	1355	G	C8-N7	6.20	1.34	1.30
57	BB	1697	G	C2-N3	6.20	1.37	1.32
57	BB	2640	G	O3'-P	-6.20	1.53	1.61
57	BB	2695	U	C5'-C4'	6.20	1.58	1.51
57	BB	2839	G	C2-N2	6.20	1.40	1.34
21	AA	650	G	N3-C4	-6.20	1.31	1.35
21	AA	821	G	C2'-C1'	-6.20	1.46	1.53
57	BB	741	U	C5-C6	6.20	1.39	1.34
57	BB	1501	G	P-O5'	-6.20	1.53	1.59
57	BB	2711	A	C5'-C4'	6.20	1.58	1.51
21	AA	432	A	N3-C4	-6.20	1.31	1.34
21	AA	897	C	C4-C5	6.20	1.48	1.43
21	AA	1359	C	N3-C4	6.20	1.38	1.33
23	AW	11	C	C3'-O3'	6.20	1.50	1.42
45	BC	214	GLY	N-CA	-6.20	1.36	1.46
57	BB	84	A	P-O5'	-6.20	1.53	1.59
57	BB	1396	U	C3'-C2'	-6.20	1.46	1.52
58	BA	32	U	N1-C6	-6.20	1.32	1.38
21	AA	1448	C	C2'-C1'	-6.19	1.46	1.53
21	AA	1453	G	O4'-C1'	6.19	1.49	1.41
57	BB	992	C	C2'-C1'	-6.19	1.46	1.53
57	BB	1308	A	C6-N6	6.19	1.39	1.33
15	AD	19	PHE	CG-CD2	6.19	1.48	1.38
22	AY	73	A	N9-C4	6.19	1.41	1.37
26	AV	38	A	C6-N1	6.19	1.39	1.35
57	BB	1118	C	C4-N4	6.19	1.39	1.33
57	BB	1355	G	C2-N3	6.19	1.37	1.32
57	BB	1761	C	O3'-P	-6.19	1.53	1.61
57	BB	2234	G	N7-C5	-6.19	1.35	1.39
57	BB	2369	A	C3'-O3'	6.19	1.50	1.42
57	BB	2399	G	C2-N2	6.19	1.40	1.34
21	AA	471	U	C5-C6	6.19	1.39	1.34
21	AA	491	G	C4'-C3'	-6.19	1.46	1.53
21	AA	669	G	N1-C2	-6.19	1.32	1.37
21	AA	722	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)
21	AA	941	G	N9-C4	-6.19	1.32	1.38
23	AW	35	A	C3'-C2'	-6.19	1.46	1.52
57	BB	314	C	N1-C6	6.19	1.40	1.37
57	BB	1640	A	C5-C6	6.19	1.46	1.41
57	BB	2231	U	C3'-O3'	6.19	1.50	1.42
11	AT	9	ARG	CZ-NH2	6.19	1.41	1.33
14	AC	155	ARG	CZ-NH1	6.19	1.41	1.33
37	BR	102	SER	CA-CB	6.19	1.62	1.52
57	BB	899	A	C3'-C2'	-6.19	1.46	1.52
57	BB	1290	C	C4-N4	6.19	1.39	1.33
57	BB	1369	G	N1-C2	6.19	1.42	1.37
57	BB	2189	U	O4'-C1'	-6.19	1.33	1.41
57	BB	2450	A	N9-C8	6.19	1.42	1.37
58	BA	27	C	C5'-C4'	6.19	1.58	1.51
58	BA	117	G	C5-C4	6.19	1.42	1.38
21	AA	71	A	C6-N1	6.19	1.39	1.35
21	AA	1378	C	C2-N3	6.19	1.40	1.35
57	BB	342	A	C4'-C3'	-6.19	1.46	1.53
57	BB	476	G	C2-N3	6.19	1.37	1.32
57	BB	2015	A	C5-C4	-6.19	1.34	1.38
22	AY	11	C	C1'-N1	6.19	1.58	1.48
23	AW	19	G	N9-C8	-6.19	1.33	1.37
21	AA	899	C	C2'-C1'	-6.18	1.46	1.53
21	AA	901	A	C8-N7	-6.18	1.27	1.31
57	BB	147	C	N1-C6	-6.18	1.33	1.37
57	BB	580	U	N1-C2	6.18	1.44	1.38
57	BB	701	G	C6-N1	6.18	1.43	1.39
58	BA	81	G	N3-C4	6.18	1.39	1.35
21	AA	37	U	C2-N3	6.18	1.42	1.37
21	AA	179	A	C2-N3	6.18	1.39	1.33
21	AA	276	G	N9-C8	6.18	1.42	1.37
21	AA	947	G	C3'-C2'	-6.18	1.46	1.52
21	AA	950	U	C2'-C1'	-6.18	1.46	1.53
21	AA	1066	C	C4-N4	6.18	1.39	1.33
23	AW	51	U	C5'-C4'	6.18	1.58	1.51
26	AV	67	C	C4'-O4'	-6.18	1.37	1.45
57	BB	68	G	C6-N1	6.18	1.43	1.39
57	BB	667	U	C5'-C4'	6.18	1.58	1.51
57	BB	1011	G	N3-C4	-6.18	1.31	1.35
57	BB	2031	A	C8-N7	6.18	1.35	1.31
57	BB	2224	G	N9-C4	-6.18	1.33	1.38
57	BB	2751	G	C6-N1	6.18	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	BD	59	ARG	CZ-NH2	6.18	1.41	1.33
57	BB	1301	A	N1-C2	6.18	1.40	1.34
57	BB	2521	C	C1'-N1	6.18	1.58	1.48
21	AA	47	C	C4-N4	6.18	1.39	1.33
21	AA	81	A	C3'-C2'	-6.18	1.46	1.52
21	AA	617	G	N7-C5	-6.18	1.35	1.39
21	AA	783	C	C2-N3	-6.18	1.30	1.35
21	AA	1493	A	N3-C4	6.18	1.38	1.34
23	AW	50	U	C5'-C4'	6.18	1.58	1.51
26	AV	26	G	C2'-C1'	-6.18	1.46	1.53
26	AV	64	G	C2-N3	6.18	1.37	1.32
33	BN	27	SER	CB-OG	6.18	1.50	1.42
55	BG	65	GLY	CA-C	-6.18	1.42	1.51
57	BB	910	A	C5-C4	6.18	1.43	1.38
57	BB	1641	A	N7-C5	-6.18	1.35	1.39
57	BB	2546	U	N1-C6	6.18	1.43	1.38
57	BB	2731	G	C2'-C1'	-6.18	1.46	1.53
21	AA	206	C	C5-C6	6.18	1.39	1.34
21	AA	1022	A	C4'-C3'	-6.18	1.46	1.53
57	BB	296	U	C2-O2	6.18	1.27	1.22
57	BB	1347	A	O3'-P	-6.18	1.53	1.61
57	BB	2661	G	N9-C4	-6.18	1.33	1.38
21	AA	1048	G	C3'-C2'	-6.18	1.46	1.52
21	AA	1109	C	C4-N4	6.18	1.39	1.33
22	AY	56	C	C2-N3	-6.18	1.30	1.35
57	BB	1221	C	C5-C6	6.18	1.39	1.34
57	BB	1728	C	C2'-C1'	-6.18	1.46	1.53
57	BB	1901	A	C5-C4	-6.18	1.34	1.38
57	BB	2136	G	C5-C4	6.18	1.42	1.38
57	BB	2524	G	C2'-O2'	-6.18	1.33	1.41
57	BB	2572	A	O4'-C1'	-6.18	1.33	1.41
21	AA	259	G	C2-N2	6.17	1.40	1.34
21	AA	1483	A	O3'-P	-6.17	1.53	1.61
57	BB	1041	G	N7-C5	-6.17	1.35	1.39
57	BB	1573	G	N9-C4	-6.17	1.33	1.38
57	BB	2035	G	N9-C8	-6.17	1.33	1.37
57	BB	2453	A	N9-C8	6.17	1.42	1.37
57	BB	2694	G	C2-N3	6.17	1.37	1.32
38	BS	92	ARG	CD-NE	6.17	1.56	1.46
57	BB	44	A	C8-N7	6.17	1.35	1.31
57	BB	177	G	N9-C8	6.17	1.42	1.37
57	BB	2325	G	N7-C5	-6.17	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2505	G	C6-N1	6.17	1.43	1.39
21	AA	87	C	C4-N4	6.17	1.39	1.33
21	AA	117	G	C2'-C1'	-6.17	1.46	1.53
21	AA	612	C	N1-C2	6.17	1.46	1.40
21	AA	727	G	C8-N7	-6.17	1.27	1.30
21	AA	1515	G	C2'-C1'	-6.17	1.46	1.53
23	AW	19	G	C8-N7	6.17	1.34	1.30
57	BB	418	C	N3-C4	6.17	1.38	1.33
57	BB	620	G	P-O5'	-6.17	1.53	1.59
57	BB	855	G	C2-N3	6.17	1.37	1.32
21	AA	383	A	O3'-P	6.17	1.68	1.61
21	AA	876	C	C2'-C1'	-6.17	1.46	1.53
30	BK	74	SER	CA-CB	6.17	1.62	1.52
57	BB	328	U	C4-C5	6.17	1.49	1.43
57	BB	401	A	N7-C5	-6.17	1.35	1.39
57	BB	1855	U	N1-C2	6.17	1.44	1.38
21	AA	622	A	C8-N7	-6.17	1.27	1.31
21	AA	886	G	N1-C2	6.17	1.42	1.37
21	AA	1000	A	N3-C4	-6.17	1.31	1.34
21	AA	1143	G	C8-N7	-6.17	1.27	1.30
21	AA	1526	G	C2-N3	6.17	1.37	1.32
22	AY	75	C	O3'-P	-6.17	1.53	1.61
57	BB	255	A	C2'-C1'	-6.17	1.46	1.53
57	BB	301	G	P-O5'	6.17	1.66	1.59
57	BB	1283	G	C5'-C4'	6.17	1.58	1.51
57	BB	1941	C	C2'-C1'	-6.17	1.46	1.53
57	BB	2233	U	C5'-C4'	6.17	1.58	1.51
21	AA	413	G	C2-N3	6.17	1.37	1.32
21	AA	598	U	C5'-C4'	6.17	1.58	1.51
21	AA	710	G	N9-C4	-6.17	1.33	1.38
21	AA	1153	G	N3-C4	-6.17	1.31	1.35
23	AW	33	U	C5'-C4'	6.17	1.58	1.51
57	BB	103	A	C8-N7	-6.17	1.27	1.31
57	BB	1771	C	C4-C5	6.17	1.47	1.43
57	BB	1798	U	C2'-C1'	-6.17	1.46	1.53
57	BB	1954	G	C5-C4	-6.17	1.34	1.38
57	BB	2508	G	C2-N3	6.17	1.37	1.32
57	BB	2510	C	C5-C6	-6.17	1.29	1.34
57	BB	2709	G	C5-C6	-6.17	1.36	1.42
57	BB	2803	G	C6-N1	6.17	1.43	1.39
57	BB	2808	G	P-O5'	-6.17	1.53	1.59
21	AA	207	C	N3-C4	6.17	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	618	G	P-O5'	-6.17	1.53	1.59
57	BB	1570	A	C8-N7	-6.17	1.27	1.31
58	BA	68	C	C5'-C4'	6.17	1.58	1.51
16	AE	144	GLU	CG-CD	6.16	1.61	1.51
21	AA	673	A	C3'-C2'	-6.16	1.46	1.52
21	AA	805	C	C2'-C1'	-6.16	1.46	1.53
21	AA	1287	A	O3'-P	-6.16	1.53	1.61
21	AA	1393	U	C2'-C1'	-6.16	1.46	1.53
22	AY	65	G	C8-N7	-6.16	1.27	1.30
57	BB	401	A	C6-N6	6.16	1.38	1.33
57	BB	567	U	N1-C2	6.16	1.44	1.38
57	BB	615	U	N1-C6	6.16	1.43	1.38
57	BB	707	G	N1-C2	6.16	1.42	1.37
57	BB	1018	U	N3-C4	6.16	1.44	1.38
57	BB	1322	A	C3'-O3'	6.16	1.50	1.42
57	BB	1421	G	C2-N2	6.16	1.40	1.34
57	BB	1232	G	N7-C5	-6.16	1.35	1.39
57	BB	1427	A	C2'-C1'	-6.16	1.46	1.53
57	BB	1540	G	C5-C4	6.16	1.42	1.38
57	BB	1938	A	C6-N6	6.16	1.38	1.33
57	BB	2357	G	N7-C5	-6.16	1.35	1.39
21	AA	247	G	N9-C4	6.16	1.42	1.38
21	AA	314	C	C5'-C4'	6.16	1.58	1.51
21	AA	1266	G	C5-C6	-6.16	1.36	1.42
57	BB	626	A	C3'-C2'	-6.16	1.46	1.52
57	BB	730	A	N7-C5	-6.16	1.35	1.39
57	BB	1219	U	N1-C2	6.16	1.44	1.38
58	BA	63	C	C2'-C1'	-6.16	1.46	1.53
21	AA	468	A	C2'-C1'	-6.16	1.46	1.53
21	AA	1236	A	N7-C5	6.16	1.43	1.39
21	AA	1494	G	C2'-C1'	-6.16	1.46	1.53
57	BB	911	A	C3'-C2'	-6.16	1.46	1.52
57	BB	2214	C	C2-O2	-6.16	1.19	1.24
14	AC	126	ARG	CZ-NH2	6.16	1.41	1.33
21	AA	970	C	P-O5'	-6.16	1.53	1.59
21	AA	1362	A	N1-C2	6.16	1.39	1.34
57	BB	387	U	C4'-O4'	-6.16	1.37	1.45
57	BB	1004	U	N1-C6	6.16	1.43	1.38
57	BB	1816	C	N1-C6	6.16	1.40	1.37
21	AA	378	G	N3-C4	-6.16	1.31	1.35
21	AA	597	G	N1-C2	6.16	1.42	1.37
21	AA	784	A	C6-N6	6.16	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1292	G	N3-C4	-6.16	1.31	1.35
22	AY	34	G	O3'-P	-6.16	1.53	1.61
57	BB	43	G	C2-N3	6.16	1.37	1.32
57	BB	454	A	C5'-C4'	6.16	1.58	1.51
57	BB	547	A	O3'-P	-6.16	1.53	1.61
57	BB	635	C	C4-C5	-6.16	1.38	1.43
57	BB	1387	A	C6-N6	6.16	1.38	1.33
57	BB	1706	C	C3'-C2'	-6.16	1.46	1.52
57	BB	1954	G	C2-N2	6.16	1.40	1.34
57	BB	2025	C	C4-C5	6.16	1.47	1.43
58	BA	55	U	P-O5'	-6.16	1.53	1.59
8	AQ	5	ARG	CD-NE	6.15	1.56	1.46
57	BB	277	G	N7-C5	-6.15	1.35	1.39
57	BB	960	A	C8-N7	6.15	1.35	1.31
57	BB	1542	U	C3'-C2'	-6.15	1.46	1.52
57	BB	2514	U	N1-C2	-6.15	1.33	1.38
21	AA	909	A	P-O5'	-6.15	1.53	1.59
21	AA	1025	U	C2'-C1'	-6.15	1.46	1.53
22	AY	21	A	C2-N3	-6.15	1.28	1.33
57	BB	1199	U	C4-C5	6.15	1.49	1.43
57	BB	2675	A	C4'-C3'	-6.15	1.46	1.53
21	AA	29	U	C2'-C1'	-6.15	1.46	1.53
21	AA	1082	A	C6-N1	6.15	1.39	1.35
21	AA	1154	G	C5-C6	-6.15	1.36	1.42
21	AA	1311	A	C8-N7	6.15	1.35	1.31
21	AA	1361	G	N9-C8	-6.15	1.33	1.37
22	AY	22	G	C1'-N9	-6.15	1.38	1.46
23	AW	65	G	C6-N1	6.15	1.43	1.39
57	BB	36	G	N9-C8	6.15	1.42	1.37
57	BB	398	C	C3'-C2'	-6.15	1.46	1.52
57	BB	402	A	O3'-P	-6.15	1.53	1.61
57	BB	695	G	N3-C4	-6.15	1.31	1.35
57	BB	794	A	C8-N7	-6.15	1.27	1.31
57	BB	1523	U	P-O5'	-6.15	1.53	1.59
57	BB	2106	U	N3-C4	6.15	1.44	1.38
57	BB	2724	U	O4'-C1'	-6.15	1.33	1.41
46	BZ	44	ARG	CZ-NH2	6.15	1.41	1.33
57	BB	2490	G	O3'-P	-6.15	1.53	1.61
57	BB	2596	U	C2-N3	6.15	1.42	1.37
21	AA	878	A	N9-C4	6.15	1.41	1.37
21	AA	1019	A	O3'-P	-6.15	1.53	1.61
23	AW	15	G	C4'-C3'	-6.15	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	45	G	C1'-N9	6.15	1.57	1.48
57	BB	316	C	C4'-C3'	6.15	1.59	1.53
57	BB	708	G	O3'-P	-6.15	1.53	1.61
57	BB	1106	G	C1'-N9	6.15	1.57	1.48
57	BB	1123	C	N1-C2	6.15	1.46	1.40
57	BB	1194	A	N3-C4	6.15	1.38	1.34
57	BB	1496	A	N3-C4	6.15	1.38	1.34
57	BB	1560	G	C3'-O3'	6.15	1.50	1.42
57	BB	2084	C	C4'-O4'	6.15	1.53	1.45
57	BB	2482	A	C6-N6	6.15	1.38	1.33
58	BA	10	G	O3'-P	-6.15	1.53	1.61
21	AA	129	A	P-O5'	-6.15	1.53	1.59
21	AA	526	C	N3-C4	6.15	1.38	1.33
21	AA	824	G	C2-N2	6.15	1.40	1.34
28	BI	7	TYR	CG-CD2	6.15	1.47	1.39
57	BB	1219	U	C4-O4	6.15	1.28	1.23
58	BA	19	C	C5-C6	-6.15	1.29	1.34
21	AA	63	C	C5-C6	6.14	1.39	1.34
21	AA	455	G	C5'-C4'	6.14	1.58	1.51
21	AA	853	C	N3-C4	6.14	1.38	1.33
21	AA	921	U	C2'-C1'	-6.14	1.46	1.53
21	AA	999	C	O4'-C1'	6.14	1.49	1.41
21	AA	1263	C	C2-N3	6.14	1.40	1.35
57	BB	397	U	C2'-C1'	-6.14	1.46	1.53
57	BB	1256	G	C2-N3	6.14	1.37	1.32
57	BB	1434	A	C2'-C1'	-6.14	1.46	1.53
57	BB	1586	A	C5-C4	6.14	1.43	1.38
21	AA	57	G	C5-C4	6.14	1.42	1.38
57	BB	124	G	O4'-C1'	-6.14	1.33	1.41
57	BB	1081	U	C2'-C1'	-6.14	1.46	1.53
57	BB	1893	C	C2'-C1'	-6.14	1.46	1.53
57	BB	2553	G	C5-C4	6.14	1.42	1.38
21	AA	231	U	C5-C6	-6.14	1.28	1.34
19	AH	87	ARG	CD-NE	6.14	1.56	1.46
21	AA	347	G	C4'-O4'	6.14	1.53	1.45
21	AA	488	C	N1-C2	6.14	1.46	1.40
21	AA	1288	A	N9-C4	-6.14	1.34	1.37
38	BS	59	GLU	CD-OE1	6.14	1.32	1.25
57	BB	248	G	N7-C5	-6.14	1.35	1.39
57	BB	400	G	C8-N7	-6.14	1.27	1.30
57	BB	726	G	C5'-C4'	6.14	1.58	1.51
57	BB	817	C	C3'-C2'	6.14	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1448	G	N7-C5	-6.14	1.35	1.39
57	BB	2413	G	P-O5'	-6.14	1.53	1.59
57	BB	2899	A	C8-N7	-6.14	1.27	1.31
57	BB	899	A	N9-C4	-6.14	1.34	1.37
57	BB	1497	U	N3-C4	6.14	1.44	1.38
21	AA	52	C	N1-C6	6.14	1.40	1.37
21	AA	82	G	C5'-C4'	6.14	1.58	1.51
21	AA	102	G	C6-N1	6.14	1.43	1.39
21	AA	138	G	N3-C4	-6.14	1.31	1.35
21	AA	532	A	C5-C4	6.14	1.43	1.38
21	AA	679	C	C4-N4	-6.14	1.28	1.33
21	AA	1047	G	N9-C4	6.14	1.42	1.38
23	AW	37	A	C2-N3	6.14	1.39	1.33
57	BB	150	U	C3'-O3'	6.14	1.50	1.42
57	BB	204	A	C5-C6	-6.14	1.35	1.41
57	BB	729	G	C6-O6	6.14	1.29	1.24
57	BB	789	A	N7-C5	-6.14	1.35	1.39
57	BB	801	G	C5-C4	6.14	1.42	1.38
57	BB	1926	U	N3-C4	6.14	1.44	1.38
57	BB	2190	G	C4'-C3'	6.14	1.59	1.53
57	BB	2470	G	N9-C4	-6.14	1.33	1.38
57	BB	2789	C	C4-C5	6.14	1.47	1.43
58	BA	38	C	C4-N4	6.14	1.39	1.33
21	AA	1186	G	C8-N7	6.13	1.34	1.30
21	AA	1338	G	O3'-P	-6.13	1.53	1.61
22	AY	16	U	N3-C4	-6.13	1.32	1.38
57	BB	40	U	N1-C6	6.13	1.43	1.38
57	BB	1278	C	C5-C6	6.13	1.39	1.34
57	BB	1370	C	N1-C6	6.13	1.40	1.37
57	BB	1895	C	C2'-C1'	-6.13	1.46	1.53
57	BB	1921	G	N7-C5	6.13	1.43	1.39
57	BB	2344	U	C1'-N1	6.13	1.57	1.48
57	BB	2389	G	C8-N7	-6.13	1.27	1.30
57	BB	2795	C	P-O5'	-6.13	1.53	1.59
57	BB	2823	A	C2'-C1'	-6.13	1.46	1.53
58	BA	63	C	C4-C5	6.13	1.47	1.43
21	AA	977	A	N1-C2	6.13	1.39	1.34
57	BB	646	U	C5'-C4'	6.13	1.58	1.51
57	BB	1110	G	C6-N1	6.13	1.43	1.39
21	AA	80	A	C6-N1	6.13	1.39	1.35
21	AA	582	C	C4-C5	6.13	1.47	1.43
21	AA	838	G	C5-C4	-6.13	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	967	C	C2'-C1'	-6.13	1.46	1.53
21	AA	1002	G	N1-C2	6.13	1.42	1.37
21	AA	1013	G	N9-C8	6.13	1.42	1.37
57	BB	98	G	C5-C6	-6.13	1.36	1.42
57	BB	116	C	O3'-P	-6.13	1.53	1.61
57	BB	119	A	N9-C8	-6.13	1.32	1.37
57	BB	158	U	N3-C4	6.13	1.44	1.38
57	BB	853	C	N3-C4	6.13	1.38	1.33
57	BB	1205	A	O4'-C1'	-6.13	1.33	1.41
57	BB	1458	U	C4'-O4'	-6.13	1.37	1.45
57	BB	1480	C	N3-C4	6.13	1.38	1.33
57	BB	1810	A	C5-C4	6.13	1.43	1.38
57	BB	1921	G	C5-C6	-6.13	1.36	1.42
57	BB	2044	C	C3'-O3'	6.13	1.50	1.42
57	BB	2109	U	N1-C2	6.13	1.44	1.38
57	BB	2715	C	C5'-C4'	6.13	1.58	1.51
57	BB	2747	G	N9-C8	6.13	1.42	1.37
57	BB	2866	U	C2'-C1'	-6.13	1.46	1.53
21	AA	298	A	C2-N3	-6.13	1.28	1.33
21	AA	1356	G	C8-N7	-6.13	1.27	1.30
21	AA	1500	A	N7-C5	-6.13	1.35	1.39
57	BB	930	G	C2-N2	6.13	1.40	1.34
57	BB	2168	G	C5'-C4'	6.13	1.58	1.51
57	BB	2616	C	N1-C6	6.13	1.40	1.37
21	AA	318	G	N7-C5	-6.13	1.35	1.39
57	BB	501	A	C6-N6	6.13	1.38	1.33
57	BB	1494	A	N7-C5	-6.13	1.35	1.39
57	BB	2045	C	C2'-C1'	-6.13	1.46	1.53
58	BA	16	G	C4'-O4'	6.13	1.53	1.45
21	AA	619	U	C5-C6	6.13	1.39	1.34
21	AA	669	G	C2-N3	6.13	1.37	1.32
21	AA	903	G	N1-C2	6.13	1.42	1.37
21	AA	1276	G	O3'-P	-6.13	1.53	1.61
26	AV	6	G	C2'-C1'	-6.13	1.46	1.53
57	BB	380	G	N9-C8	-6.13	1.33	1.37
57	BB	469	G	C2'-C1'	-6.13	1.46	1.53
57	BB	981	A	N9-C8	6.13	1.42	1.37
57	BB	2825	G	C5-C6	-6.13	1.36	1.42
21	AA	1023	U	N1-C6	-6.12	1.32	1.38
57	BB	654	A	C6-N1	6.12	1.39	1.35
57	BB	2449	U	O3'-P	-6.12	1.53	1.61
21	AA	265	G	C2-N3	6.12	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	865	A	C5'-C4'	6.12	1.58	1.51
21	AA	1142	G	O3'-P	-6.12	1.53	1.61
22	AY	43	G	N9-C8	6.12	1.42	1.37
55	BG	62	ALA	CA-CB	6.12	1.65	1.52
57	BB	450	G	O3'-P	-6.12	1.53	1.61
57	BB	541	A	C5'-C4'	6.12	1.58	1.51
57	BB	752	A	C8-N7	6.12	1.35	1.31
57	BB	1020	A	C6-N1	6.12	1.39	1.35
57	BB	2046	G	N9-C8	6.12	1.42	1.37
21	AA	237	G	N7-C5	6.12	1.43	1.39
21	AA	624	C	P-O5'	-6.12	1.53	1.59
21	AA	777	A	P-O5'	-6.12	1.53	1.59
21	AA	1019	A	C5-C4	-6.12	1.34	1.38
21	AA	1116	U	C3'-C2'	-6.12	1.46	1.52
52	BD	194	PRO	N-CD	-6.12	1.39	1.47
57	BB	38	A	C4'-C3'	6.12	1.59	1.53
57	BB	1138	G	C2'-C1'	-6.12	1.46	1.53
57	BB	1669	A	N9-C8	6.12	1.42	1.37
57	BB	2669	G	N1-C2	6.12	1.42	1.37
21	AA	1357	A	N9-C4	-6.12	1.34	1.37
57	BB	35	G	C1'-N9	6.12	1.57	1.48
57	BB	795	C	C4-N4	6.12	1.39	1.33
57	BB	924	G	C3'-O3'	6.12	1.50	1.42
57	BB	1831	G	C4'-C3'	-6.12	1.46	1.53
58	BA	41	G	N7-C5	-6.12	1.35	1.39
58	BA	83	G	C4'-C3'	-6.12	1.46	1.53
5	AN	12	ARG	CZ-NH2	6.12	1.41	1.33
21	AA	610	U	C5'-C4'	6.12	1.58	1.51
23	AW	34	G	N1-C2	6.12	1.42	1.37
23	AW	59	U	C4-C5	6.12	1.49	1.43
57	BB	488	G	C5'-C4'	6.12	1.58	1.51
57	BB	858	G	P-O5'	-6.12	1.53	1.59
57	BB	930	G	N9-C8	6.12	1.42	1.37
57	BB	946	C	C5-C6	6.12	1.39	1.34
57	BB	2551	C	N3-C4	6.12	1.38	1.33
57	BB	2676	C	C4-C5	6.12	1.47	1.43
57	BB	2733	A	C2'-C1'	-6.12	1.46	1.53
57	BB	745	G	N1-C2	6.12	1.42	1.37
57	BB	2546	U	C4-C5	6.12	1.49	1.43
57	BB	2704	C	N1-C6	-6.12	1.33	1.37
21	AA	110	C	C3'-C2'	-6.12	1.46	1.52
21	AA	391	G	N9-C4	-6.12	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	7	G	C3'-C2'	6.12	1.59	1.52
57	BB	151	C	O3'-P	-6.12	1.53	1.61
57	BB	1303	G	C2-N2	6.12	1.40	1.34
58	BA	76	G	C2'-C1'	-6.12	1.46	1.53
21	AA	271	C	C5-C6	-6.11	1.29	1.34
21	AA	1359	C	C2'-C1'	-6.11	1.46	1.53
22	AY	64	A	C4'-O4'	-6.11	1.37	1.45
57	BB	1343	G	N3-C4	6.11	1.39	1.35
57	BB	1408	G	N7-C5	6.11	1.43	1.39
57	BB	1847	A	C6-N6	6.11	1.38	1.33
57	BB	2547	A	N7-C5	-6.11	1.35	1.39
21	AA	204	G	C6-N1	6.11	1.43	1.39
57	BB	502	A	C4'-C3'	-6.11	1.46	1.53
57	BB	633	A	C8-N7	-6.11	1.27	1.31
57	BB	931	U	C4-C5	6.11	1.49	1.43
57	BB	2601	C	C2-N3	6.11	1.40	1.35
20	AI	41	GLU	N-CA	-6.11	1.34	1.46
21	AA	196	A	C6-N1	-6.11	1.31	1.35
21	AA	953	G	N9-C8	6.11	1.42	1.37
23	AW	9	A	C2'-C1'	-6.11	1.46	1.53
57	BB	191	A	C2'-C1'	-6.11	1.46	1.53
57	BB	202	U	C2-N3	6.11	1.42	1.37
57	BB	724	U	C2-N3	6.11	1.42	1.37
57	BB	1622	G	C5-C6	-6.11	1.36	1.42
57	BB	1968	G	N1-C2	6.11	1.42	1.37
57	BB	2155	U	C5'-C4'	6.11	1.58	1.51
57	BB	2568	U	C4'-C3'	-6.11	1.46	1.53
21	AA	259	G	N1-C2	6.11	1.42	1.37
57	BB	174	U	N1-C2	6.11	1.44	1.38
57	BB	491	G	P-O5'	-6.11	1.53	1.59
57	BB	1141	U	C2-N3	6.11	1.42	1.37
57	BB	1343	G	C2-N3	6.11	1.37	1.32
57	BB	1623	G	C8-N7	6.11	1.34	1.30
57	BB	1822	C	C2'-O2'	-6.11	1.33	1.41
57	BB	2310	C	O3'-P	-6.11	1.53	1.61
21	AA	384	G	C3'-O3'	6.11	1.50	1.42
26	AV	49	G	O4'-C1'	-6.11	1.33	1.41
57	BB	309	A	N9-C8	6.11	1.42	1.37
57	BB	505	A	C2'-C1'	-6.11	1.46	1.53
57	BB	569	U	P-O5'	-6.11	1.53	1.59
57	BB	587	C	N3-C4	6.11	1.38	1.33
57	BB	988	A	C4'-O4'	6.11	1.53	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1202	G	C8-N7	-6.11	1.27	1.30
57	BB	1453	A	N7-C5	-6.11	1.35	1.39
57	BB	1496	A	N7-C5	-6.11	1.35	1.39
57	BB	1678	A	C8-N7	-6.11	1.27	1.31
57	BB	2093	G	C5'-C4'	-6.11	1.44	1.51
13	AB	166	ASP	CA-CB	6.11	1.67	1.53
21	AA	1141	C	C2'-C1'	-6.11	1.46	1.53
21	AA	1147	C	C4-C5	6.11	1.47	1.43
21	AA	1176	A	P-O5'	-6.11	1.53	1.59
21	AA	1400	C	C3'-O3'	6.11	1.50	1.42
23	AW	34	G	C6-N1	6.11	1.43	1.39
57	BB	346	A	N7-C5	6.11	1.43	1.39
57	BB	366	C	N1-C6	6.11	1.40	1.37
57	BB	599	A	N9-C4	-6.11	1.34	1.37
57	BB	1269	A	N3-C4	-6.11	1.31	1.34
57	BB	2254	C	P-O5'	-6.11	1.53	1.59
57	BB	2315	G	N1-C2	6.11	1.42	1.37
57	BB	2481	G	C4'-C3'	-6.11	1.46	1.53
21	AA	59	A	C5-C4	-6.10	1.34	1.38
57	BB	2141	G	C2'-C1'	-6.10	1.46	1.53
57	BB	2265	U	O3'-P	-6.10	1.53	1.61
21	AA	204	G	C2'-C1'	-6.10	1.46	1.53
21	AA	432	A	C2-N3	6.10	1.39	1.33
21	AA	867	G	C2-N3	6.10	1.37	1.32
57	BB	707	G	C5-C4	6.10	1.42	1.38
57	BB	1533	C	P-O5'	-6.10	1.53	1.59
57	BB	2082	A	C5'-C4'	6.10	1.58	1.51
21	AA	1375	A	C2'-C1'	-6.10	1.46	1.53
57	BB	1081	U	N3-C4	6.10	1.44	1.38
57	BB	1224	U	P-O5'	-6.10	1.53	1.59
57	BB	1304	A	C8-N7	-6.10	1.27	1.31
57	BB	1729	U	C4-C5	-6.10	1.38	1.43
57	BB	2184	A	C5'-C4'	6.10	1.58	1.51
57	BB	2399	G	N9-C8	6.10	1.42	1.37
58	BA	66	A	C6-N6	6.10	1.38	1.33
21	AA	266	G	C2-N3	6.10	1.37	1.32
21	AA	1004	A	N9-C4	6.10	1.41	1.37
21	AA	1279	G	C3'-C2'	-6.10	1.46	1.52
21	AA	1345	U	C2'-C1'	-6.10	1.46	1.53
55	BG	151	ARG	NE-CZ	6.10	1.41	1.33
57	BB	905	A	N9-C4	6.10	1.41	1.37
57	BB	1185	G	C2'-C1'	-6.10	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2819	G	N7-C5	-6.10	1.35	1.39
57	BB	2824	C	N3-C4	6.10	1.38	1.33
21	AA	783	C	C5-C6	-6.10	1.29	1.34
21	AA	1002	G	N9-C4	-6.10	1.33	1.38
21	AA	1254	A	C5-C6	-6.10	1.35	1.41
57	BB	22	C	C2'-C1'	-6.10	1.46	1.53
57	BB	504	A	N3-C4	-6.10	1.31	1.34
57	BB	1120	G	N7-C5	-6.10	1.35	1.39
57	BB	1220	G	C3'-C2'	-6.10	1.46	1.52
57	BB	1392	A	N9-C8	-6.10	1.32	1.37
57	BB	1675	C	N1-C2	6.10	1.46	1.40
58	BA	16	G	C4'-C3'	-6.10	1.46	1.53
5	AN	93	PRO	N-CA	-6.10	1.36	1.47
21	AA	177	G	P-O5'	-6.10	1.53	1.59
21	AA	763	G	N9-C4	6.10	1.42	1.38
21	AA	1277	C	C2-N3	-6.10	1.30	1.35
57	BB	2144	G	C2-N3	6.10	1.37	1.32
21	AA	100	G	C6-N1	6.09	1.43	1.39
21	AA	303	A	C8-N7	-6.09	1.27	1.31
21	AA	712	A	C2'-C1'	-6.09	1.46	1.53
21	AA	819	A	N1-C2	6.09	1.39	1.34
21	AA	822	U	C4-C5	6.09	1.49	1.43
21	AA	1177	G	N1-C2	6.09	1.42	1.37
21	AA	1304	G	C6-N1	6.09	1.43	1.39
57	BB	351	C	P-O5'	-6.09	1.53	1.59
57	BB	1273	U	C4'-O4'	-6.09	1.37	1.45
57	BB	1345	C	C5-C6	-6.09	1.29	1.34
57	BB	2169	A	C5'-C4'	6.09	1.58	1.51
57	BB	2641	G	N9-C8	-6.09	1.33	1.37
57	BB	2744	G	N1-C2	6.09	1.42	1.37
57	BB	2752	C	P-O5'	-6.09	1.53	1.59
21	AA	110	C	C2'-C1'	-6.09	1.46	1.53
57	BB	1427	A	C6-N1	-6.09	1.31	1.35
57	BB	355	U	C5-C6	-6.09	1.28	1.34
57	BB	670	A	N7-C5	-6.09	1.35	1.39
57	BB	2209	G	O3'-P	-6.09	1.53	1.61
21	AA	96	U	N1-C2	6.09	1.44	1.38
21	AA	182	A	C5-C4	6.09	1.43	1.38
21	AA	455	G	N7-C5	-6.09	1.35	1.39
21	AA	530	G	C6-N1	6.09	1.43	1.39
21	AA	604	G	C5-C4	6.09	1.42	1.38
21	AA	728	A	C5-C6	-6.09	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1065	U	C5'-C4'	6.09	1.58	1.51
57	BB	425	G	C5-C4	-6.09	1.34	1.38
57	BB	1062	G	C3'-O3'	-6.09	1.33	1.42
57	BB	2681	C	C4'-C3'	6.09	1.59	1.53
57	BB	2831	G	O4'-C1'	-6.09	1.33	1.41
21	AA	190	A	N3-C4	-6.09	1.31	1.34
21	AA	254	G	N9-C4	-6.09	1.33	1.38
21	AA	953	G	C3'-O3'	6.09	1.50	1.42
21	AA	1419	G	C8-N7	6.09	1.34	1.30
57	BB	162	U	C2-N3	6.09	1.42	1.37
57	BB	2171	A	P-O5'	-6.09	1.53	1.59
57	BB	2292	U	C2-O2	6.09	1.27	1.22
21	AA	298	A	C6-N6	6.09	1.38	1.33
21	AA	1196	A	C6-N6	6.09	1.38	1.33
57	BB	369	U	N3-C4	6.09	1.44	1.38
57	BB	1113	U	O5'-C5'	6.09	1.54	1.44
57	BB	1433	A	N7-C5	-6.09	1.35	1.39
57	BB	2123	G	C8-N7	6.09	1.34	1.30
21	AA	101	A	C3'-O3'	6.08	1.50	1.42
21	AA	666	G	N9-C4	6.08	1.42	1.38
57	BB	967	U	C4'-O4'	6.08	1.53	1.45
57	BB	1089	A	N1-C2	-6.08	1.28	1.34
21	AA	1290	G	N9-C8	-6.08	1.33	1.37
22	AY	33	U	N1-C6	-6.08	1.32	1.38
22	AY	75	C	C5'-C4'	6.08	1.58	1.51
57	BB	700	G	C6-N1	6.08	1.43	1.39
57	BB	1007	C	C2-N3	6.08	1.40	1.35
57	BB	1322	A	P-O5'	6.08	1.65	1.59
57	BB	1422	G	C3'-C2'	-6.08	1.46	1.52
57	BB	2782	G	C5-C4	-6.08	1.34	1.38
21	AA	120	A	C8-N7	6.08	1.35	1.31
21	AA	131	A	C2'-C1'	-6.08	1.46	1.53
21	AA	605	U	O4'-C1'	-6.08	1.33	1.41
21	AA	768	A	O3'-P	6.08	1.68	1.61
57	BB	83	A	N9-C8	-6.08	1.32	1.37
57	BB	997	G	C2-N2	6.08	1.40	1.34
57	BB	1213	A	C8-N7	-6.08	1.27	1.31
57	BB	1685	C	N1-C6	6.08	1.40	1.37
57	BB	1863	G	C4'-O4'	6.08	1.53	1.45
57	BB	1872	A	C5-C4	-6.08	1.34	1.38
57	BB	2599	G	N9-C8	6.08	1.42	1.37
13	AB	85	SER	CA-CB	6.08	1.62	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	177	G	C6-O6	6.08	1.29	1.24
21	AA	568	G	C2'-C1'	-6.08	1.46	1.53
57	BB	219	A	C3'-C2'	-6.08	1.46	1.52
57	BB	2053	G	C3'-C2'	-6.08	1.46	1.52
21	AA	98	A	O4'-C1'	-6.08	1.33	1.41
21	AA	871	U	O4'-C1'	6.08	1.49	1.41
21	AA	1343	G	N9-C8	-6.08	1.33	1.37
57	BB	969	G	C2'-C1'	-6.08	1.46	1.53
57	BB	2053	G	C2-N3	6.08	1.37	1.32
57	BB	2179	C	C1'-N1	6.08	1.57	1.48
57	BB	2870	C	C4'-C3'	6.08	1.59	1.53
58	BA	65	U	C2-N3	6.08	1.42	1.37
21	AA	131	A	C8-N7	-6.08	1.27	1.31
21	AA	406	G	C8-N7	-6.08	1.27	1.30
21	AA	465	A	C8-N7	-6.08	1.27	1.31
21	AA	1151	A	C4'-O4'	-6.08	1.37	1.45
21	AA	92	U	C4'-O4'	6.08	1.53	1.45
21	AA	286	C	C2-N3	6.08	1.40	1.35
21	AA	508	U	N1-C2	6.08	1.44	1.38
21	AA	904	U	C2'-C1'	-6.08	1.46	1.53
21	AA	921	U	O3'-P	-6.08	1.53	1.61
57	BB	74	A	P-O5'	-6.08	1.53	1.59
57	BB	388	G	N7-C5	-6.08	1.35	1.39
57	BB	1540	G	N9-C4	-6.08	1.33	1.38
57	BB	2400	G	N9-C8	6.08	1.42	1.37
57	BB	2639	A	N1-C2	-6.08	1.28	1.34
21	AA	668	G	C5'-C4'	6.07	1.58	1.51
21	AA	1273	C	P-O5'	-6.07	1.53	1.59
23	AW	25	C	C2-N3	6.07	1.40	1.35
42	BW	54	ARG	CZ-NH2	6.07	1.41	1.33
50	B3	44	ARG	CZ-NH1	6.07	1.41	1.33
57	BB	458	G	C5-C4	6.07	1.42	1.38
57	BB	736	C	C3'-C2'	6.07	1.59	1.52
57	BB	1929	G	N3-C4	-6.07	1.31	1.35
57	BB	2225	A	N7-C5	-6.07	1.35	1.39
57	BB	2543	G	C2-N2	6.07	1.40	1.34
21	AA	549	C	C4-N4	6.07	1.39	1.33
21	AA	973	G	C8-N7	-6.07	1.27	1.30
57	BB	500	G	C6-N1	6.07	1.43	1.39
57	BB	1334	G	C2-N2	6.07	1.40	1.34
21	AA	97	G	C5'-C4'	6.07	1.58	1.51
21	AA	468	A	P-O5'	-6.07	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1086	U	C3'-O3'	6.07	1.50	1.42
21	AA	1223	C	C4-N4	6.07	1.39	1.33
21	AA	1272	G	N3-C4	6.07	1.39	1.35
22	AY	74	C	C4-C5	-6.07	1.38	1.43
26	AV	13	C	C4-C5	6.07	1.47	1.43
57	BB	849	A	C6-N6	6.07	1.38	1.33
57	BB	1083	U	C5-C6	6.07	1.39	1.34
57	BB	1389	G	C5-C6	-6.07	1.36	1.42
57	BB	1492	G	C6-N1	6.07	1.43	1.39
57	BB	1944	U	N1-C2	6.07	1.44	1.38
57	BB	2402	U	C3'-C2'	6.07	1.59	1.52
21	AA	534	U	P-O5'	-6.07	1.53	1.59
57	BB	280	U	O3'-P	-6.07	1.53	1.61
57	BB	368	A	C5-C6	-6.07	1.35	1.41
57	BB	959	A	C8-N7	-6.07	1.27	1.31
57	BB	2194	U	N1-C6	6.07	1.43	1.38
58	BA	10	G	C2'-C1'	-6.07	1.46	1.53
58	BA	25	U	C2-O2	6.07	1.27	1.22
58	BA	107	G	C2-N3	6.07	1.37	1.32
21	AA	506	G	P-O5'	-6.07	1.53	1.59
57	BB	125	A	N9-C4	6.07	1.41	1.37
57	BB	317	G	N1-C2	6.07	1.42	1.37
57	BB	468	G	C5-C6	6.07	1.48	1.42
57	BB	547	A	C6-N6	6.07	1.38	1.33
57	BB	1445	G	C2'-C1'	-6.07	1.46	1.53
57	BB	2047	C	C2'-C1'	-6.07	1.46	1.53
57	BB	2053	G	C8-N7	6.07	1.34	1.30
57	BB	2860	A	C5-C6	-6.07	1.35	1.41
21	AA	547	A	C4'-C3'	6.07	1.59	1.53
42	BW	15	SER	CA-CB	6.07	1.62	1.52
57	BB	168	G	N7-C5	-6.07	1.35	1.39
57	BB	355	U	C2-O2	6.07	1.27	1.22
57	BB	877	A	C2-N3	6.07	1.39	1.33
57	BB	1194	A	C3'-C2'	-6.07	1.46	1.52
57	BB	1224	U	C2'-C1'	-6.07	1.46	1.53
57	BB	1771	C	C4'-O4'	6.07	1.53	1.45
57	BB	1813	G	C6-O6	-6.07	1.18	1.24
57	BB	1823	G	C5-C4	-6.07	1.34	1.38
57	BB	2172	U	C4-O4	6.07	1.28	1.23
57	BB	2371	G	N1-C2	6.07	1.42	1.37
57	BB	2545	G	C8-N7	-6.07	1.27	1.30
57	BB	2678	C	C5'-C4'	6.07	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	43	C	C4-N4	6.07	1.39	1.33
21	AA	275	G	N1-C2	6.06	1.42	1.37
21	AA	693	G	C5-C4	6.06	1.42	1.38
21	AA	715	A	N7-C5	-6.06	1.35	1.39
21	AA	1230	C	N1-C6	6.06	1.40	1.37
21	AA	1265	C	C4-N4	6.06	1.39	1.33
21	AA	1504	G	C6-N1	6.06	1.43	1.39
57	BB	3	U	C4'-C3'	6.06	1.59	1.53
57	BB	364	C	C3'-C2'	-6.06	1.46	1.52
57	BB	1176	U	N3-C4	6.06	1.44	1.38
58	BA	55	U	C3'-C2'	-6.06	1.46	1.52
21	AA	7	A	N3-C4	-6.06	1.31	1.34
21	AA	442	G	C4'-O4'	6.06	1.53	1.45
21	AA	848	C	N1-C6	6.06	1.40	1.37
21	AA	933	G	N1-C2	6.06	1.42	1.37
23	AW	48	C	N3-C4	6.06	1.38	1.33
26	AV	76	A	C6-N6	6.06	1.38	1.33
57	BB	206	U	C4-C5	6.06	1.49	1.43
57	BB	1645	G	C2-N3	6.06	1.37	1.32
57	BB	1658	C	C4-C5	-6.06	1.38	1.43
57	BB	1988	G	C4'-C3'	6.06	1.59	1.53
57	BB	2149	U	C4'-O4'	-6.06	1.37	1.45
57	BB	2332	C	C5-C6	6.06	1.39	1.34
57	BB	2849	U	C5'-C4'	6.06	1.58	1.51
58	BA	16	G	N7-C5	-6.06	1.35	1.39
21	AA	463	U	C4'-O4'	-6.06	1.37	1.45
45	BC	211	ARG	NE-CZ	6.06	1.41	1.33
57	BB	1146	C	C4-N4	6.06	1.39	1.33
57	BB	1971	U	P-O5'	6.06	1.65	1.59
57	BB	2836	U	C4'-O4'	6.06	1.53	1.45
21	AA	1278	G	N7-C5	-6.06	1.35	1.39
21	AA	1517	G	N7-C5	-6.06	1.35	1.39
57	BB	1802	A	C5'-C4'	6.06	1.58	1.51
57	BB	2462	C	C4-N4	6.06	1.39	1.33
57	BB	2632	A	C8-N7	6.06	1.35	1.31
21	AA	566	G	N3-C4	-6.06	1.31	1.35
21	AA	895	G	C2-N2	6.06	1.40	1.34
21	AA	1099	G	C2'-C1'	6.06	1.60	1.53
23	AW	63	G	C4'-O4'	-6.06	1.37	1.45
57	BB	78	U	C4-C5	6.06	1.49	1.43
57	BB	1583	A	C5-C6	6.06	1.46	1.41
57	BB	1707	G	C2-N3	6.06	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	176	C	N1-C6	-6.06	1.33	1.37
21	AA	458	U	N3-C4	-6.06	1.32	1.38
57	BB	386	G	O3'-P	-6.06	1.53	1.61
57	BB	1915	U	C4-C5	6.06	1.49	1.43
9	AR	69	TYR	CE2-CZ	6.05	1.46	1.38
21	AA	214	C	C4-N4	6.05	1.39	1.33
21	AA	386	C	C4-N4	6.05	1.39	1.33
21	AA	595	A	N9-C8	6.05	1.42	1.37
21	AA	756	C	N1-C2	6.05	1.46	1.40
25	AZ	52	ALA	N-CA	-6.05	1.34	1.46
57	BB	6	A	N3-C4	-6.05	1.31	1.34
57	BB	100	U	C4'-O4'	6.05	1.53	1.45
57	BB	264	C	N1-C6	6.05	1.40	1.37
57	BB	977	G	N9-C4	6.05	1.42	1.38
57	BB	1159	U	C4-O4	6.05	1.28	1.23
57	BB	1282	U	N1-C2	-6.05	1.33	1.38
57	BB	1446	C	P-O5'	-6.05	1.53	1.59
57	BB	2406	A	C3'-O3'	6.05	1.50	1.42
57	BB	2645	G	C6-N1	6.05	1.43	1.39
57	BB	921	C	P-O5'	-6.05	1.53	1.59
21	AA	491	G	N1-C2	6.05	1.42	1.37
21	AA	825	A	C8-N7	-6.05	1.27	1.31
21	AA	1033	G	C4'-C3'	6.05	1.59	1.53
57	BB	859	G	C8-N7	6.05	1.34	1.30
57	BB	924	G	C6-N1	6.05	1.43	1.39
57	BB	1909	C	C4'-O4'	6.05	1.53	1.45
4	AM	100	ARG	CZ-NH2	6.05	1.41	1.33
14	AC	12	GLY	CA-C	-6.05	1.42	1.51
21	AA	476	U	C4-C5	6.05	1.49	1.43
21	AA	1073	U	N1-C2	-6.05	1.33	1.38
21	AA	1278	G	N3-C4	-6.05	1.31	1.35
22	AY	22	G	N9-C4	6.05	1.42	1.38
23	AW	25	C	O4'-C1'	-6.05	1.33	1.41
57	BB	265	A	C2'-C1'	-6.05	1.46	1.53
57	BB	1263	U	C4-O4	-6.05	1.18	1.23
57	BB	1437	C	P-O5'	-6.05	1.53	1.59
57	BB	1960	A	N9-C8	6.05	1.42	1.37
57	BB	2044	C	C4-N4	6.05	1.39	1.33
21	AA	952	U	O4'-C1'	6.05	1.49	1.41
57	BB	493	G	C4'-C3'	6.05	1.59	1.53
57	BB	904	G	C8-N7	6.05	1.34	1.30
57	BB	1100	C	C3'-O3'	6.05	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1106	G	C5-C6	-6.05	1.36	1.42
57	BB	1212	G	N3-C4	6.05	1.39	1.35
57	BB	1722	A	C8-N7	-6.05	1.27	1.31
57	BB	2217	G	C5-C6	-6.05	1.36	1.42
57	BB	2903	U	N3-C4	6.05	1.43	1.38
21	AA	945	G	N1-C2	6.05	1.42	1.37
57	BB	92	U	N3-C4	6.05	1.43	1.38
57	BB	733	G	N7-C5	-6.05	1.35	1.39
57	BB	1039	A	C4'-C3'	-6.05	1.46	1.53
57	BB	1535	A	C5'-C4'	6.05	1.58	1.51
57	BB	1681	G	C6-N1	6.05	1.43	1.39
57	BB	1726	C	C4'-C3'	-6.05	1.46	1.53
57	BB	2048	G	O3'-P	-6.05	1.53	1.61
57	BB	2903	U	C2-O2	6.05	1.27	1.22
21	AA	93	U	N1-C6	6.04	1.43	1.38
21	AA	1088	G	N9-C8	-6.04	1.33	1.37
57	BB	149	A	N3-C4	-6.04	1.31	1.34
57	BB	1055	G	O3'-P	-6.04	1.53	1.61
57	BB	1597	A	C4'-O4'	-6.04	1.37	1.45
21	AA	527	G	C6-N1	6.04	1.43	1.39
57	BB	141	G	N9-C8	6.04	1.42	1.37
57	BB	744	U	P-O5'	-6.04	1.53	1.59
57	BB	1537	G	P-O5'	-6.04	1.53	1.59
57	BB	1611	C	C4-C5	-6.04	1.38	1.43
57	BB	1625	C	C2-N3	-6.04	1.30	1.35
57	BB	1698	A	C5'-C4'	6.04	1.58	1.51
57	BB	2179	C	O3'-P	-6.04	1.53	1.61
21	AA	1472	U	N3-C4	6.04	1.43	1.38
57	BB	221	A	C8-N7	-6.04	1.27	1.31
57	BB	1707	G	C2-N2	6.04	1.40	1.34
57	BB	1891	G	N1-C2	6.04	1.42	1.37
58	BA	10	G	C8-N7	6.04	1.34	1.30
57	BB	2316	G	N9-C8	-6.04	1.33	1.37
57	BB	2411	A	C4'-O4'	6.04	1.53	1.45
21	AA	124	C	O4'-C1'	6.04	1.49	1.41
21	AA	589	U	N1-C6	-6.04	1.32	1.38
21	AA	619	U	N1-C2	6.04	1.44	1.38
21	AA	1500	A	C6-N1	6.04	1.39	1.35
57	BB	1205	A	N9-C8	-6.04	1.32	1.37
57	BB	2008	C	O4'-C1'	6.04	1.49	1.41
57	BB	2686	G	N1-C2	6.04	1.42	1.37
21	AA	255	G	C3'-C2'	-6.04	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1359	C	P-O5'	-6.04	1.53	1.59
29	BJ	96	ARG	CZ-NH2	6.04	1.40	1.33
57	BB	1465	G	N9-C4	6.04	1.42	1.38
57	BB	2238	G	O3'-P	-6.04	1.53	1.61
57	BB	2498	C	C4'-C3'	-6.04	1.46	1.53
58	BA	71	C	C4-N4	6.04	1.39	1.33
18	AG	101	ARG	NE-CZ	6.04	1.40	1.33
21	AA	15	G	C8-N7	6.04	1.34	1.30
21	AA	82	G	C3'-C2'	6.04	1.59	1.52
21	AA	302	G	C2-N3	6.04	1.37	1.32
21	AA	1119	C	C3'-C2'	6.04	1.59	1.52
21	AA	1328	C	C4-N4	6.04	1.39	1.33
57	BB	799	G	N9-C8	6.04	1.42	1.37
57	BB	1035	U	C4-C5	6.04	1.49	1.43
57	BB	1144	A	P-O5'	-6.04	1.53	1.59
57	BB	1590	A	C3'-O3'	6.04	1.50	1.42
57	BB	1809	A	C2'-C1'	-6.04	1.46	1.53
57	BB	2534	A	C8-N7	6.04	1.35	1.31
21	AA	685	G	C4'-O4'	-6.03	1.37	1.45
21	AA	840	C	C2'-C1'	-6.03	1.46	1.53
21	AA	1256	A	C3'-C2'	-6.03	1.46	1.52
21	AA	1279	G	P-O5'	-6.03	1.53	1.59
21	AA	1512	U	P-O5'	-6.03	1.53	1.59
22	AY	28	C	C4'-O4'	6.03	1.53	1.45
57	BB	426	C	N3-C4	6.03	1.38	1.33
57	BB	865	C	C4'-O4'	6.03	1.53	1.45
57	BB	972	A	N3-C4	-6.03	1.31	1.34
57	BB	1016	G	C3'-C2'	-6.03	1.46	1.52
57	BB	1544	A	C2-N3	6.03	1.39	1.33
57	BB	1704	C	C2-N3	6.03	1.40	1.35
57	BB	1735	A	C2'-C1'	-6.03	1.46	1.53
57	BB	2272	U	P-O5'	-6.03	1.53	1.59
21	AA	791	G	C5-C4	-6.03	1.34	1.38
57	BB	1503	A	O3'-P	-6.03	1.53	1.61
21	AA	372	C	C5-C6	6.03	1.39	1.34
21	AA	640	A	C5-C4	-6.03	1.34	1.38
21	AA	865	A	C4'-O4'	-6.03	1.37	1.45
23	AW	61	C	C4-N4	6.03	1.39	1.33
53	BE	167	VAL	CB-CG1	6.03	1.65	1.52
57	BB	173	A	N1-C2	6.03	1.39	1.34
57	BB	531	C	C4-C5	6.03	1.47	1.43
57	BB	1031	G	C8-N7	6.03	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1473	G	C1'-N9	-6.03	1.38	1.46
57	BB	2757	A	N3-C4	-6.03	1.31	1.34
57	BB	494	G	N9-C8	6.03	1.42	1.37
57	BB	679	C	P-O5'	-6.03	1.53	1.59
57	BB	1728	C	C4-N4	6.03	1.39	1.33
57	BB	70	G	N7-C5	-6.03	1.35	1.39
57	BB	1020	A	C8-N7	-6.03	1.27	1.31
57	BB	1627	G	C2'-C1'	-6.03	1.46	1.53
57	BB	2626	C	N3-C4	6.03	1.38	1.33
21	AA	140	U	C2'-C1'	-6.03	1.46	1.53
21	AA	610	U	O3'-P	-6.03	1.53	1.61
21	AA	1236	A	O3'-P	-6.03	1.53	1.61
21	AA	1388	C	C2-N3	6.03	1.40	1.35
21	AA	1441	A	N9-C4	6.03	1.41	1.37
57	BB	241	A	C3'-C2'	6.03	1.59	1.52
57	BB	628	G	C2'-C1'	-6.03	1.46	1.53
57	BB	1641	A	P-O5'	-6.03	1.53	1.59
57	BB	2075	U	C4'-O4'	-6.03	1.37	1.45
57	BB	2325	G	C5-C4	6.03	1.42	1.38
21	AA	210	C	N3-C4	6.02	1.38	1.33
57	BB	1714	U	C4'-C3'	-6.02	1.46	1.53
57	BB	2897	U	N1-C6	6.02	1.43	1.38
21	AA	164	G	C5-C6	-6.02	1.36	1.42
26	AV	19	G	P-O5'	-6.02	1.53	1.59
57	BB	361	G	N9-C8	-6.02	1.33	1.37
57	BB	1917	U	O3'-P	-6.02	1.53	1.61
57	BB	1943	U	N3-C4	6.02	1.43	1.38
57	BB	1980	G	O3'-P	-6.02	1.53	1.61
57	BB	2443	C	C2-O2	6.02	1.29	1.24
57	BB	2543	G	C6-N1	6.02	1.43	1.39
57	BB	2740	A	N1-C2	-6.02	1.28	1.34
21	AA	65	A	C4'-C3'	6.02	1.59	1.53
21	AA	1189	U	N1-C6	6.02	1.43	1.38
57	BB	88	G	P-O5'	6.02	1.65	1.59
57	BB	1910	G	C4'-C3'	6.02	1.59	1.53
57	BB	2305	U	C2-N3	6.02	1.42	1.37
21	AA	1047	G	C8-N7	6.02	1.34	1.30
21	AA	1118	U	C3'-C2'	-6.02	1.46	1.52
21	AA	1323	G	C4'-C3'	6.02	1.59	1.53
57	BB	542	C	P-O5'	-6.02	1.53	1.59
57	BB	1334	G	N7-C5	-6.02	1.35	1.39
57	BB	1775	U	C5-C6	-6.02	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2403	C	N3-C4	6.02	1.38	1.33
57	BB	2761	A	N9-C4	-6.02	1.34	1.37
57	BB	2768	U	O4'-C1'	6.02	1.49	1.41
21	AA	566	G	C5-C6	6.02	1.48	1.42
21	AA	813	U	C2-N3	6.02	1.42	1.37
21	AA	861	G	C4'-C3'	-6.02	1.46	1.53
21	AA	1198	G	N9-C4	-6.02	1.33	1.38
25	AZ	373	ARG	CZ-NH2	6.02	1.40	1.33
26	AV	41	C	O3'-P	-6.02	1.53	1.61
57	BB	57	C	P-O5'	-6.02	1.53	1.59
57	BB	1266	G	C2'-C1'	-6.02	1.46	1.53
57	BB	2374	C	C4-N4	6.02	1.39	1.33
58	BA	20	G	N3-C4	-6.02	1.31	1.35
21	AA	55	A	C2'-C1'	-6.02	1.46	1.53
21	AA	609	A	C8-N7	-6.02	1.27	1.31
21	AA	733	G	C6-N1	6.02	1.43	1.39
57	BB	2	G	P-O5'	-6.02	1.53	1.59
57	BB	532	A	C6-N1	6.02	1.39	1.35
57	BB	1071	G	N9-C8	-6.02	1.33	1.37
57	BB	1366	A	C2'-C1'	-6.02	1.46	1.53
57	BB	1404	C	C4-C5	6.02	1.47	1.43
57	BB	1738	G	C2-N3	6.02	1.37	1.32
57	BB	2810	A	C6-N1	6.02	1.39	1.35
10	AS	77	ARG	CZ-NH2	6.01	1.40	1.33
21	AA	495	A	P-O5'	6.01	1.65	1.59
21	AA	572	A	C8-N7	-6.01	1.27	1.31
21	AA	674	G	C2-N3	6.01	1.37	1.32
21	AA	798	U	P-O5'	-6.01	1.53	1.59
21	AA	1035	A	C2'-C1'	-6.01	1.46	1.53
21	AA	1133	G	N1-C2	6.01	1.42	1.37
23	AW	17	C	N3-C4	6.01	1.38	1.33
57	BB	746	U	N1-C2	6.01	1.44	1.38
57	BB	1116	G	N7-C5	6.01	1.42	1.39
57	BB	1615	C	C4'-O4'	-6.01	1.37	1.45
57	BB	76	C	C2-N3	6.01	1.40	1.35
57	BB	949	G	C2-N3	6.01	1.37	1.32
16	AE	100	GLU	CD-OE2	6.01	1.32	1.25
21	AA	953	G	P-O5'	-6.01	1.53	1.59
54	BF	86	CYS	CB-SG	6.01	1.92	1.82
57	BB	12	U	C5-C6	6.01	1.39	1.34
57	BB	235	U	N1-C2	6.01	1.44	1.38
57	BB	351	C	C2'-C1'	-6.01	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	594	U	P-O5'	-6.01	1.53	1.59
57	BB	746	U	N1-C6	6.01	1.43	1.38
57	BB	1226	A	N9-C4	6.01	1.41	1.37
57	BB	1289	C	C4-C5	-6.01	1.38	1.43
57	BB	1699	G	C5-C6	-6.01	1.36	1.42
57	BB	2383	G	C2-N3	6.01	1.37	1.32
8	AQ	26	ARG	CZ-NH2	6.01	1.40	1.33
21	AA	280	C	N3-C4	6.01	1.38	1.33
21	AA	759	A	O5'-C5'	-6.01	1.33	1.42
21	AA	890	G	P-O5'	-6.01	1.53	1.59
21	AA	1500	A	C8-N7	-6.01	1.27	1.31
57	BB	359	G	N9-C8	6.01	1.42	1.37
57	BB	576	U	N1-C6	-6.01	1.32	1.38
57	BB	785	G	N1-C2	6.01	1.42	1.37
57	BB	1610	A	C5-C6	6.01	1.46	1.41
57	BB	2160	C	C4-C5	-6.01	1.38	1.43
57	BB	2729	G	C1'-N9	-6.01	1.38	1.46
21	AA	690	G	C5'-C4'	6.01	1.58	1.51
57	BB	1692	U	O3'-P	-6.01	1.53	1.61
57	BB	2510	C	C2'-C1'	-6.01	1.46	1.53
57	BB	2675	A	C2'-C1'	-6.01	1.46	1.53
21	AA	438	U	C4-C5	6.01	1.49	1.43
21	AA	1434	A	C8-N7	-6.01	1.27	1.31
57	BB	512	G	C2'-C1'	6.01	1.59	1.53
57	BB	551	G	N7-C5	-6.01	1.35	1.39
57	BB	575	A	C5'-C4'	6.01	1.58	1.51
57	BB	721	A	N1-C2	6.01	1.39	1.34
57	BB	1074	G	C5-C4	6.01	1.42	1.38
57	BB	1362	C	N1-C2	6.01	1.46	1.40
57	BB	1493	C	N1-C2	6.01	1.46	1.40
57	BB	1567	G	C6-N1	6.01	1.43	1.39
57	BB	1985	C	C5-C6	-6.01	1.29	1.34
21	AA	351	G	N3-C4	6.00	1.39	1.35
25	AZ	7	ARG	CZ-NH2	6.00	1.40	1.33
26	AV	50	U	C5-C6	-6.00	1.28	1.34
27	B5	208	TYR	CG-CD2	6.00	1.47	1.39
57	BB	2536	G	O3'-P	-6.00	1.53	1.61
21	AA	254	G	N1-C2	6.00	1.42	1.37
21	AA	1016	A	N9-C4	6.00	1.41	1.37
22	AY	33	U	C4-C5	6.00	1.49	1.43
57	BB	600	G	N3-C4	-6.00	1.31	1.35
57	BB	726	G	N7-C5	-6.00	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1567	G	N1-C2	6.00	1.42	1.37
57	BB	1616	A	C1'-N9	6.00	1.57	1.48
57	BB	1743	G	N1-C2	6.00	1.42	1.37
57	BB	2539	C	N3-C4	6.00	1.38	1.33
58	BA	70	C	C5'-C4'	6.00	1.58	1.51
58	BA	80	U	N1-C2	6.00	1.44	1.38
21	AA	566	G	C5-C4	6.00	1.42	1.38
21	AA	884	U	C3'-C2'	-6.00	1.46	1.52
21	AA	1504	G	C2-N3	6.00	1.37	1.32
24	AX	18	G	N1-C2	6.00	1.42	1.37
27	B5	12	ARG	CZ-NH2	6.00	1.40	1.33
57	BB	36	G	C2'-C1'	-6.00	1.46	1.53
57	BB	552	U	C3'-C2'	-6.00	1.46	1.52
57	BB	756	A	N3-C4	-6.00	1.31	1.34
57	BB	794	A	N7-C5	-6.00	1.35	1.39
57	BB	1165	A	C8-N7	-6.00	1.27	1.31
57	BB	1243	C	N1-C6	6.00	1.40	1.37
57	BB	1511	G	O3'-P	-6.00	1.53	1.61
57	BB	2762	C	P-O5'	-6.00	1.53	1.59
57	BB	983	A	N1-C2	-6.00	1.28	1.34
57	BB	2340	A	N3-C4	-6.00	1.31	1.34
21	AA	693	G	O4'-C1'	6.00	1.49	1.41
21	AA	1155	A	N3-C4	-6.00	1.31	1.34
21	AA	1187	G	C5'-C4'	6.00	1.58	1.51
21	AA	1268	G	C5-C4	6.00	1.42	1.38
21	AA	1484	C	C4-C5	6.00	1.47	1.43
57	BB	212	G	C6-O6	-6.00	1.18	1.24
57	BB	1295	C	C4-N4	6.00	1.39	1.33
57	BB	1606	C	C2'-C1'	-6.00	1.46	1.53
57	BB	1847	A	N9-C8	-6.00	1.32	1.37
57	BB	2121	G	N1-C2	6.00	1.42	1.37
57	BB	2186	G	N1-C2	6.00	1.42	1.37
57	BB	2810	A	C8-N7	-6.00	1.27	1.31
57	BB	2860	A	C5'-C4'	6.00	1.58	1.51
21	AA	347	G	C6-N1	6.00	1.43	1.39
21	AA	723	U	C2-N3	-6.00	1.33	1.37
21	AA	739	C	C2'-C1'	-6.00	1.46	1.53
21	AA	1061	G	C2-N3	6.00	1.37	1.32
21	AA	1092	A	N1-C2	6.00	1.39	1.34
21	AA	1305	G	C5'-C4'	6.00	1.58	1.51
23	AW	40	C	C4-C5	6.00	1.47	1.43
57	BB	60	G	N7-C5	6.00	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	942	G	C4'-O4'	-6.00	1.37	1.45
57	BB	960	A	C5-C4	-6.00	1.34	1.38
57	BB	1882	U	O3'-P	-6.00	1.53	1.61
57	BB	2156	G	N7-C5	6.00	1.42	1.39
57	BB	2527	C	C1'-N1	6.00	1.57	1.48
57	BB	2753	A	N9-C8	-6.00	1.32	1.37
21	AA	1461	G	C5'-C4'	6.00	1.58	1.51
32	BM	64	TRP	CD2-CE3	-6.00	1.31	1.40
57	BB	119	A	P-O5'	-6.00	1.53	1.59
57	BB	142	A	C2'-C1'	-6.00	1.46	1.53
57	BB	757	G	C5'-C4'	6.00	1.58	1.51
57	BB	1126	A	N9-C8	6.00	1.42	1.37
57	BB	1254	A	C2-N3	6.00	1.39	1.33
21	AA	324	G	C8-N7	5.99	1.34	1.30
21	AA	389	A	N9-C4	5.99	1.41	1.37
21	AA	1508	A	C4'-C3'	-5.99	1.46	1.52
57	BB	183	C	C4-C5	5.99	1.47	1.43
57	BB	1369	G	N3-C4	-5.99	1.31	1.35
57	BB	1529	G	C4'-O4'	5.99	1.53	1.45
6	AO	45	HIS	CB-CG	5.99	1.60	1.50
21	AA	319	G	C6-N1	5.99	1.43	1.39
26	AV	72	A	C5-C4	-5.99	1.34	1.38
57	BB	2371	G	N9-C8	-5.99	1.33	1.37
21	AA	84	U	N3-C4	5.99	1.43	1.38
21	AA	158	G	C8-N7	5.99	1.34	1.30
21	AA	359	G	C4'-O4'	-5.99	1.37	1.45
21	AA	520	A	O4'-C1'	5.99	1.49	1.41
21	AA	850	U	C4'-C3'	5.99	1.59	1.53
21	AA	1008	U	P-O5'	-5.99	1.53	1.59
21	AA	1332	A	O3'-P	-5.99	1.53	1.61
57	BB	157	C	C2-N3	5.99	1.40	1.35
57	BB	296	U	N1-C2	5.99	1.44	1.38
57	BB	636	G	N3-C4	-5.99	1.31	1.35
57	BB	801	G	C2-N2	5.99	1.40	1.34
57	BB	2229	U	P-O5'	-5.99	1.53	1.59
57	BB	2594	C	P-O5'	-5.99	1.53	1.59
21	AA	458	U	C1'-N1	5.99	1.57	1.48
21	AA	1143	G	C5'-C4'	5.99	1.58	1.51
21	AA	1285	A	C2'-C1'	-5.99	1.46	1.53
26	AV	62	C	N3-C4	5.99	1.38	1.33
57	BB	52	A	N9-C4	5.99	1.41	1.37
57	BB	605	G	C2'-C1'	-5.99	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	697	G	N1-C2	5.99	1.42	1.37
57	BB	997	G	C3'-O3'	5.99	1.50	1.42
57	BB	2071	A	O3'-P	-5.99	1.53	1.61
58	BA	63	C	C5'-C4'	5.99	1.58	1.51
58	BA	83	G	C6-N1	5.99	1.43	1.39
21	AA	296	U	C2-N3	5.99	1.42	1.37
21	AA	996	A	N3-C4	-5.99	1.31	1.34
57	BB	233	A	C5'-C4'	5.99	1.58	1.51
57	BB	395	U	C2-N3	5.99	1.42	1.37
57	BB	1434	A	C6-N6	-5.99	1.29	1.33
57	BB	2053	G	C5-C4	-5.99	1.34	1.38
57	BB	2577	A	C2-N3	-5.99	1.28	1.33
21	AA	45	G	C5'-C4'	5.99	1.58	1.51
21	AA	156	C	C2-O2	5.99	1.29	1.24
21	AA	220	G	C8-N7	-5.99	1.27	1.30
21	AA	524	G	N7-C5	-5.99	1.35	1.39
21	AA	781	A	C2'-C1'	-5.99	1.46	1.53
21	AA	876	C	N1-C6	-5.99	1.33	1.37
21	AA	902	G	C4'-O4'	5.99	1.53	1.45
21	AA	1523	G	N7-C5	-5.99	1.35	1.39
57	BB	30	G	N7-C5	-5.99	1.35	1.39
57	BB	223	A	P-O5'	-5.99	1.53	1.59
57	BB	824	U	P-O5'	-5.99	1.53	1.59
57	BB	1043	C	C4-N4	5.99	1.39	1.33
57	BB	2092	U	C4-O4	-5.99	1.18	1.23
57	BB	2307	G	N1-C2	5.99	1.42	1.37
57	BB	2483	C	C2'-C1'	-5.99	1.46	1.53
21	AA	836	G	C5'-C4'	-5.98	1.44	1.51
21	AA	1435	G	N9-C8	-5.98	1.33	1.37
57	BB	1131	G	N3-C4	5.98	1.39	1.35
57	BB	1503	A	C5-C6	-5.98	1.35	1.41
46	BZ	29	ARG	NE-CZ	5.98	1.40	1.33
57	BB	805	G	C8-N7	5.98	1.34	1.30
57	BB	862	G	C5-C6	-5.98	1.36	1.42
57	BB	1114	C	C2'-C1'	-5.98	1.46	1.53
57	BB	1366	A	C6-N6	5.98	1.38	1.33
57	BB	2893	A	O3'-P	-5.98	1.53	1.61
58	BA	75	G	N1-C2	5.98	1.42	1.37
58	BA	86	G	C2'-C1'	-5.98	1.46	1.53
21	AA	343	U	C2'-C1'	-5.98	1.46	1.53
21	AA	410	G	C6-N1	5.98	1.43	1.39
21	AA	1180	A	N9-C8	5.98	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	41	C	C2'-C1'	-5.98	1.46	1.53
57	BB	654	A	N9-C4	5.98	1.41	1.37
57	BB	960	A	N7-C5	-5.98	1.35	1.39
57	BB	1564	C	C5-C6	5.98	1.39	1.34
57	BB	2453	A	C4'-C3'	5.98	1.59	1.53
57	BB	2654	A	C2'-C1'	-5.98	1.46	1.53
21	AA	552	U	C2-N3	5.98	1.42	1.37
21	AA	942	G	P-O5'	-5.98	1.53	1.59
57	BB	673	C	C4-N4	5.98	1.39	1.33
57	BB	861	A	C6-N1	5.98	1.39	1.35
57	BB	1829	A	P-O5'	-5.98	1.53	1.59
57	BB	2310	C	N1-C6	5.98	1.40	1.37
21	AA	417	G	N7-C5	-5.98	1.35	1.39
21	AA	729	A	C6-N1	5.98	1.39	1.35
21	AA	1041	G	N7-C5	5.98	1.42	1.39
21	AA	1250	A	C6-N6	5.98	1.38	1.33
21	AA	1350	A	C2'-C1'	-5.98	1.46	1.53
21	AA	1352	C	O3'-P	5.98	1.68	1.61
35	BP	20	ARG	CZ-NH1	5.98	1.40	1.33
39	BT	77	ARG	CD-NE	5.98	1.56	1.46
57	BB	262	A	C6-N6	5.98	1.38	1.33
57	BB	1765	U	P-O5'	-5.98	1.53	1.59
57	BB	2829	A	C5-C6	5.98	1.46	1.41
57	BB	2902	C	N3-C4	5.98	1.38	1.33
58	BA	66	A	O3'-P	-5.98	1.53	1.61
57	BB	1521	G	N3-C4	-5.98	1.31	1.35
57	BB	2183	A	N7-C5	-5.98	1.35	1.39
21	AA	802	A	O3'-P	-5.97	1.53	1.61
21	AA	829	G	C5-C4	5.97	1.42	1.38
23	AW	66	U	C2'-C1'	-5.97	1.46	1.53
57	BB	300	A	C5-C4	-5.97	1.34	1.38
57	BB	761	A	C5-C4	5.97	1.43	1.38
57	BB	1696	G	C6-N1	5.97	1.43	1.39
57	BB	2307	G	N7-C5	-5.97	1.35	1.39
57	BB	2646	C	N1-C6	5.97	1.40	1.37
57	BB	2679	A	C5'-C4'	5.97	1.58	1.51
57	BB	2761	A	C2'-C1'	5.97	1.59	1.53
18	AG	137	ARG	CD-NE	5.97	1.56	1.46
21	AA	129	A	C2'-C1'	-5.97	1.46	1.53
21	AA	725	G	C3'-C2'	5.97	1.59	1.52
21	AA	888	G	N3-C4	5.97	1.39	1.35
21	AA	1027	C	O3'-P	-5.97	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	353	C	N3-C4	5.97	1.38	1.33
57	BB	1230	A	P-O5'	-5.97	1.53	1.59
57	BB	1648	U	N1-C6	5.97	1.43	1.38
57	BB	1701	A	C5-C6	-5.97	1.35	1.41
57	BB	2680	U	N1-C6	5.97	1.43	1.38
21	AA	126	G	N9-C8	-5.97	1.33	1.37
21	AA	477	C	C5'-C4'	5.97	1.58	1.51
21	AA	590	U	N1-C2	5.97	1.44	1.38
21	AA	700	G	N9-C8	-5.97	1.33	1.37
24	AX	17	U	C4-C5	5.97	1.49	1.43
57	BB	762	U	C5'-C4'	5.97	1.58	1.51
57	BB	2693	G	N7-C5	-5.97	1.35	1.39
21	AA	72	A	N9-C4	5.97	1.41	1.37
21	AA	106	C	P-O5'	-5.97	1.53	1.59
21	AA	843	U	P-O5'	-5.97	1.53	1.59
21	AA	926	G	N9-C8	5.97	1.42	1.37
21	AA	1370	G	C5-C6	-5.97	1.36	1.42
21	AA	1435	G	O3'-P	-5.97	1.53	1.61
21	AA	1435	G	C5'-C4'	5.97	1.58	1.51
26	AV	21	A	O3'-P	-5.97	1.53	1.61
55	BG	26	LYS	C-N	5.97	1.43	1.33
57	BB	234	U	C4-C5	-5.97	1.38	1.43
57	BB	379	G	C5-C6	-5.97	1.36	1.42
57	BB	462	C	C5'-C4'	5.97	1.58	1.51
57	BB	808	G	P-O5'	-5.97	1.53	1.59
57	BB	986	C	O3'-P	-5.97	1.53	1.61
57	BB	1830	C	N3-C4	5.97	1.38	1.33
57	BB	2180	U	C5'-C4'	5.97	1.58	1.51
57	BB	2208	C	C4'-O4'	5.97	1.53	1.45
57	BB	2740	A	C2'-C1'	-5.97	1.46	1.53
57	BB	1640	A	C5'-C4'	-5.97	1.44	1.51
57	BB	1780	A	C6-N6	5.97	1.38	1.33
57	BB	2674	G	N7-C5	-5.97	1.35	1.39
21	AA	494	G	C4'-C3'	5.97	1.59	1.53
21	AA	1323	G	C4'-O4'	-5.97	1.37	1.45
57	BB	1618	A	C8-N7	-5.97	1.27	1.31
57	BB	1918	A	C2'-C1'	-5.97	1.46	1.53
57	BB	2543	G	O3'-P	-5.97	1.53	1.61
21	AA	89	U	N1-C2	5.96	1.44	1.38
21	AA	401	C	C4-N4	5.96	1.39	1.33
21	AA	766	A	N1-C2	-5.96	1.28	1.34
21	AA	1421	G	C6-N1	-5.96	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	109	C	C5-C6	5.96	1.39	1.34
58	BA	45	A	C1'-N9	5.96	1.57	1.48
21	AA	1416	G	O3'-P	-5.96	1.53	1.61
15	AD	80	ARG	CZ-NH2	5.96	1.40	1.33
21	AA	337	G	O3'-P	-5.96	1.53	1.61
21	AA	1077	G	C3'-C2'	5.96	1.59	1.52
26	AV	31	G	N1-C2	5.96	1.42	1.37
57	BB	1	G	N7-C5	-5.96	1.35	1.39
57	BB	649	G	C2'-C1'	-5.96	1.46	1.53
57	BB	1884	G	C2-N3	5.96	1.37	1.32
57	BB	2825	G	C8-N7	-5.96	1.27	1.30
21	AA	336	A	C2'-C1'	-5.96	1.46	1.53
21	AA	494	G	C8-N7	5.96	1.34	1.30
21	AA	1493	A	O3'-P	-5.96	1.53	1.61
36	BQ	75	TYR	CZ-OH	5.96	1.48	1.37
57	BB	285	G	N1-C2	5.96	1.42	1.37
57	BB	2366	A	C2'-C1'	-5.96	1.46	1.53
21	AA	1328	C	C2'-C1'	-5.96	1.46	1.53
23	AW	53	G	C2'-C1'	-5.96	1.46	1.53
28	BI	133	ARG	CZ-NH2	5.96	1.40	1.33
57	BB	750	A	C5-C4	5.96	1.43	1.38
57	BB	1069	A	O3'-P	-5.96	1.53	1.61
57	BB	1188	U	C2-N3	5.96	1.42	1.37
57	BB	1902	C	N3-C4	5.96	1.38	1.33
57	BB	1966	A	C5'-C4'	5.96	1.58	1.51
57	BB	2786	U	C4-C5	5.96	1.49	1.43
58	BA	67	G	N1-C2	5.96	1.42	1.37
21	AA	215	C	N3-C4	5.96	1.38	1.33
21	AA	847	G	N9-C8	-5.96	1.33	1.37
21	AA	889	A	C6-N1	5.96	1.39	1.35
21	AA	996	A	C6-N1	5.96	1.39	1.35
21	AA	1340	A	C6-N1	5.96	1.39	1.35
22	AY	45	G	O3'-P	-5.96	1.54	1.61
26	AV	9	G	C4'-C3'	5.96	1.59	1.53
57	BB	891	G	C2-N2	5.96	1.40	1.34
57	BB	993	G	C2-N2	5.96	1.40	1.34
57	BB	1958	C	C2-N3	5.96	1.40	1.35
57	BB	2377	A	C5-C4	5.96	1.43	1.38
21	AA	1487	G	N9-C4	5.96	1.42	1.38
21	AA	154	U	C2-N3	5.95	1.42	1.37
21	AA	604	G	C8-N7	-5.95	1.27	1.30
21	AA	1153	G	C3'-O3'	5.95	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1459	G	N9-C4	5.95	1.42	1.38
57	BB	2137	U	P-O5'	-5.95	1.53	1.59
57	BB	2479	U	C2'-C1'	-5.95	1.46	1.53
57	BB	2864	G	C6-N1	5.95	1.43	1.39
21	AA	1095	U	N3-C4	5.95	1.43	1.38
57	BB	183	C	C4-N4	5.95	1.39	1.33
57	BB	692	C	C4-C5	5.95	1.47	1.43
57	BB	1529	G	C2'-C1'	5.95	1.59	1.53
57	BB	2097	A	C6-N1	5.95	1.39	1.35
57	BB	2592	G	C8-N7	-5.95	1.27	1.30
8	AQ	71	SER	CA-CB	5.95	1.61	1.52
21	AA	674	G	N7-C5	-5.95	1.35	1.39
21	AA	1026	G	C5-C6	5.95	1.48	1.42
29	BJ	44	TYR	CZ-OH	5.95	1.48	1.37
57	BB	542	C	N3-C4	5.95	1.38	1.33
57	BB	1614	A	N9-C4	-5.95	1.34	1.37
57	BB	2330	G	N1-C2	5.95	1.42	1.37
21	AA	184	G	C2-N2	5.95	1.40	1.34
57	BB	347	A	C4'-C3'	5.95	1.59	1.53
57	BB	468	G	C5'-C4'	5.95	1.58	1.51
57	BB	596	U	O4'-C1'	5.95	1.49	1.41
57	BB	784	G	N1-C2	5.95	1.42	1.37
57	BB	798	G	C2'-C1'	-5.95	1.46	1.53
57	BB	861	A	O3'-P	5.95	1.68	1.61
57	BB	1607	C	C4-C5	5.95	1.47	1.43
57	BB	1761	C	N3-C4	5.95	1.38	1.33
21	AA	596	A	C4'-C3'	5.95	1.59	1.53
26	AV	18	G	C3'-C2'	5.95	1.59	1.52
57	BB	260	G	C2'-C1'	-5.95	1.46	1.53
57	BB	702	U	O3'-P	-5.95	1.54	1.61
58	BA	84	G	C2'-C1'	-5.95	1.46	1.53
21	AA	16	A	C2'-C1'	-5.95	1.46	1.53
21	AA	484	G	C4'-C3'	5.95	1.59	1.53
21	AA	933	G	N3-C4	5.95	1.39	1.35
21	AA	1160	G	C5-C4	-5.95	1.34	1.38
22	AY	64	A	N7-C5	-5.95	1.35	1.39
57	BB	761	A	C4'-C3'	-5.95	1.46	1.52
57	BB	1368	G	P-O5'	-5.95	1.53	1.59
57	BB	1598	A	P-O5'	-5.95	1.53	1.59
57	BB	1735	A	C5-C4	5.95	1.43	1.38
57	BB	1953	A	C6-N1	5.95	1.39	1.35
21	AA	67	C	N3-C4	5.94	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	860	A	N7-C5	-5.94	1.35	1.39
21	AA	987	G	C8-N7	5.94	1.34	1.30
21	AA	1013	G	O3'-P	-5.94	1.54	1.61
57	BB	1034	G	C5-C4	-5.94	1.34	1.38
57	BB	1102	C	C2'-C1'	-5.94	1.46	1.53
57	BB	1512	C	N1-C6	5.94	1.40	1.37
57	BB	1628	G	P-O5'	-5.94	1.53	1.59
57	BB	2346	A	C1'-N9	-5.94	1.38	1.46
21	AA	742	G	N1-C2	5.94	1.42	1.37
21	AA	1196	A	N9-C4	5.94	1.41	1.37
41	BV	93	ARG	NE-CZ	5.94	1.40	1.33
57	BB	436	C	C4'-C3'	-5.94	1.46	1.52
57	BB	491	G	N3-C4	-5.94	1.31	1.35
57	BB	1237	A	N1-C2	5.94	1.39	1.34
57	BB	1252	G	N1-C2	5.94	1.42	1.37
57	BB	1589	U	C2-N3	5.94	1.42	1.37
57	BB	1984	G	P-O5'	-5.94	1.53	1.59
57	BB	2522	U	C2-N3	5.94	1.42	1.37
21	AA	305	G	C8-N7	-5.94	1.27	1.30
21	AA	694	A	C8-N7	5.94	1.35	1.31
21	AA	1499	A	C5-C4	-5.94	1.34	1.38
57	BB	23	G	N9-C8	-5.94	1.33	1.37
57	BB	166	U	P-O5'	-5.94	1.53	1.59
57	BB	1168	G	C2-N3	5.94	1.37	1.32
57	BB	1910	G	N9-C4	-5.94	1.33	1.38
57	BB	2778	A	C6-N6	5.94	1.38	1.33
21	AA	504	C	O3'-P	-5.94	1.54	1.61
21	AA	668	G	N9-C8	-5.94	1.33	1.37
21	AA	1414	U	C5'-C4'	5.94	1.58	1.51
57	BB	1570	A	C6-N6	5.94	1.38	1.33
57	BB	1586	A	N7-C5	-5.94	1.35	1.39
57	BB	1587	G	N9-C4	5.94	1.42	1.38
57	BB	1749	A	P-O5'	-5.94	1.53	1.59
57	BB	1868	C	N3-C4	5.94	1.38	1.33
57	BB	2001	C	C4'-C3'	5.94	1.59	1.53
21	AA	724	G	C5-C4	5.94	1.42	1.38
21	AA	881	G	C6-N1	5.94	1.43	1.39
21	AA	1532	U	C4'-O4'	5.94	1.53	1.45
26	AV	7	G	N9-C4	5.94	1.42	1.38
27	B5	162	ARG	CZ-NH2	5.94	1.40	1.33
57	BB	96	C	N3-C4	5.94	1.38	1.33
57	BB	2572	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)
57	BB	2595	G	N1-C2	5.94	1.42	1.37
57	BB	2870	C	C2-O2	5.94	1.29	1.24
58	BA	91	C	C3'-O3'	5.94	1.50	1.42
21	AA	433	G	C5-C4	5.94	1.42	1.38
21	AA	1005	A	C5-C4	-5.94	1.34	1.38
57	BB	1	G	C5-C4	-5.94	1.34	1.38
57	BB	685	A	O3'-P	-5.94	1.54	1.61
57	BB	2209	G	N7-C5	-5.94	1.35	1.39
21	AA	135	C	C4-N4	5.93	1.39	1.33
22	AY	37	G	P-O5'	-5.93	1.53	1.59
23	AW	1	G	N1-C2	5.93	1.42	1.37
23	AW	10	G	N9-C4	-5.93	1.33	1.38
57	BB	74	A	N1-C2	-5.93	1.29	1.34
57	BB	346	A	C5-C4	5.93	1.43	1.38
57	BB	1294	U	P-O5'	-5.93	1.53	1.59
57	BB	1771	C	N3-C4	5.93	1.38	1.33
57	BB	2389	G	C2'-C1'	-5.93	1.46	1.53
57	BB	2428	G	N7-C5	-5.93	1.35	1.39
21	AA	785	G	C2'-C1'	5.93	1.59	1.53
21	AA	854	U	C2-O2	5.93	1.27	1.22
21	AA	1344	C	C4-N4	5.93	1.39	1.33
57	BB	201	C	C3'-O3'	5.93	1.50	1.42
57	BB	361	G	C4'-C3'	5.93	1.59	1.53
57	BB	1041	G	C5'-C4'	5.93	1.58	1.51
57	BB	1551	A	C6-N1	5.93	1.39	1.35
57	BB	1999	C	N3-C4	5.93	1.38	1.33
57	BB	2246	G	C2-N2	5.93	1.40	1.34
21	AA	971	G	C5'-C4'	5.93	1.58	1.51
57	BB	303	G	C5'-C4'	-5.93	1.44	1.51
57	BB	536	G	N7-C5	-5.93	1.35	1.39
57	BB	1310	G	N9-C8	5.93	1.42	1.37
21	AA	486	U	C4-C5	5.93	1.48	1.43
21	AA	1230	C	C5'-C4'	5.93	1.58	1.51
57	BB	638	G	P-O5'	-5.93	1.53	1.59
57	BB	1582	C	O3'-P	-5.93	1.54	1.61
57	BB	2729	G	C4'-C3'	5.93	1.59	1.53
57	BB	2749	A	C3'-C2'	-5.93	1.46	1.52
57	BB	2842	G	C5-C4	5.93	1.42	1.38
58	BA	117	G	N9-C8	5.93	1.42	1.37
21	AA	15	G	C2'-C1'	-5.93	1.46	1.53
21	AA	430	A	P-O5'	-5.93	1.53	1.59
21	AA	987	G	O3'-P	5.93	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
40	BU	81	ARG	CZ-NH1	5.93	1.40	1.33
57	BB	2215	C	C2-N3	5.93	1.40	1.35
57	BB	2280	G	C2-N3	5.93	1.37	1.32
57	BB	2352	A	N3-C4	-5.93	1.31	1.34
11	AT	44	ALA	N-CA	-5.93	1.34	1.46
21	AA	203	G	N7-C5	-5.93	1.35	1.39
21	AA	391	G	C8-N7	5.93	1.34	1.30
21	AA	676	A	C8-N7	-5.93	1.27	1.31
21	AA	1076	U	O4'-C1'	5.93	1.49	1.41
21	AA	1084	G	N9-C4	5.93	1.42	1.38
26	AV	2	G	C4'-C3'	5.93	1.59	1.53
57	BB	1116	G	C6-N1	5.93	1.43	1.39
57	BB	2822	G	C5-C6	-5.93	1.36	1.42
21	AA	125	U	C2-N3	5.92	1.41	1.37
21	AA	351	G	C5'-C4'	5.92	1.58	1.51
21	AA	1073	U	C3'-C2'	5.92	1.59	1.52
21	AA	1302	C	C1'-N1	5.92	1.57	1.48
57	BB	215	G	C5-C6	-5.92	1.36	1.42
57	BB	654	A	C6-N6	5.92	1.38	1.33
57	BB	1747	U	N1-C6	-5.92	1.32	1.38
57	BB	2047	C	C1'-N1	5.92	1.57	1.48
57	BB	2138	G	N3-C4	5.92	1.39	1.35
57	BB	2151	U	P-O5'	-5.92	1.53	1.59
57	BB	2277	G	C5'-C4'	5.92	1.58	1.51
21	AA	766	A	C5-C4	5.92	1.42	1.38
23	AW	64	A	C6-N6	5.92	1.38	1.33
25	AZ	288	ARG	CZ-NH1	5.92	1.40	1.33
57	BB	900	A	C6-N1	5.92	1.39	1.35
57	BB	1112	G	N9-C4	5.92	1.42	1.38
57	BB	1339	G	N7-C5	5.92	1.42	1.39
57	BB	2369	A	C8-N7	-5.92	1.27	1.31
20	AI	38	PHE	CG-CD1	5.92	1.47	1.38
21	AA	574	A	C5'-C4'	5.92	1.58	1.51
21	AA	1239	A	C6-N1	5.92	1.39	1.35
57	BB	228	C	C4'-C3'	5.92	1.59	1.53
57	BB	604	G	N9-C4	-5.92	1.33	1.38
57	BB	924	G	C2-N2	5.92	1.40	1.34
57	BB	940	G	N9-C8	-5.92	1.33	1.37
57	BB	1016	G	O4'-C1'	5.92	1.49	1.41
57	BB	1381	G	C3'-C2'	-5.92	1.46	1.52
57	BB	1511	G	C2-N2	5.92	1.40	1.34
57	BB	1649	G	C2-N3	5.92	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	743	A	C6-N1	5.92	1.39	1.35
21	AA	195	A	N7-C5	5.92	1.42	1.39
21	AA	563	A	N1-C2	-5.92	1.29	1.34
57	BB	20	C	C4'-O4'	5.92	1.53	1.45
57	BB	852	U	C2'-C1'	-5.92	1.46	1.53
57	BB	1157	G	C1'-N9	5.92	1.57	1.48
57	BB	1239	G	P-O5'	-5.92	1.53	1.59
57	BB	1692	U	C2-N3	5.92	1.41	1.37
57	BB	2353	G	N9-C8	5.92	1.42	1.37
21	AA	488	C	N1-C6	5.92	1.40	1.37
21	AA	555	U	C3'-C2'	5.92	1.59	1.52
21	AA	770	C	N3-C4	5.92	1.38	1.33
21	AA	785	G	C6-N1	-5.92	1.35	1.39
21	AA	1442	G	N9-C4	5.92	1.42	1.38
23	AW	58	A	C6-N1	5.92	1.39	1.35
31	BL	69	ARG	NE-CZ	5.92	1.40	1.33
45	BC	166	ARG	CD-NE	5.92	1.56	1.46
57	BB	506	G	N3-C4	5.92	1.39	1.35
57	BB	614	A	C2'-C1'	-5.92	1.46	1.53
57	BB	972	A	C4'-C3'	5.92	1.59	1.53
57	BB	1736	U	C2-N3	5.92	1.41	1.37
57	BB	2135	A	N9-C4	-5.92	1.34	1.37
57	BB	2536	G	N3-C4	-5.92	1.31	1.35
58	BA	57	A	C8-N7	-5.92	1.27	1.31
21	AA	1060	U	N3-C4	5.92	1.43	1.38
23	AW	35	A	O4'-C1'	5.92	1.49	1.41
57	BB	64	A	P-O5'	-5.92	1.53	1.59
57	BB	482	A	C5'-C4'	5.92	1.58	1.51
57	BB	2860	A	O5'-C5'	-5.92	1.33	1.42
57	BB	2861	U	N3-C4	5.92	1.43	1.38
21	AA	111	G	N1-C2	5.91	1.42	1.37
21	AA	765	G	C2'-C1'	-5.91	1.46	1.53
21	AA	1462	C	C5'-C4'	5.91	1.58	1.51
57	BB	131	A	C8-N7	-5.91	1.27	1.31
57	BB	735	A	C2'-C1'	-5.91	1.46	1.53
57	BB	853	C	C5-C6	5.91	1.39	1.34
57	BB	1152	C	C4'-C3'	5.91	1.59	1.53
57	BB	1744	A	O4'-C1'	5.91	1.49	1.41
57	BB	1773	A	N7-C5	-5.91	1.35	1.39
57	BB	2253	G	N9-C8	-5.91	1.33	1.37
57	BB	2796	U	P-O5'	-5.91	1.53	1.59
21	AA	441	A	C6-N1	5.91	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	960	U	C4-O4	5.91	1.28	1.23
22	AY	70	C	N1-C2	-5.91	1.34	1.40
57	BB	2335	A	N7-C5	-5.91	1.35	1.39
57	BB	2349	G	C2'-C1'	-5.91	1.46	1.53
58	BA	77	U	O3'-P	-5.91	1.54	1.61
21	AA	677	U	O3'-P	-5.91	1.54	1.61
21	AA	869	G	N9-C4	-5.91	1.33	1.38
21	AA	1320	C	C2'-C1'	-5.91	1.46	1.53
21	AA	1382	C	C4'-C3'	5.91	1.59	1.53
57	BB	512	G	C6-N1	5.91	1.43	1.39
57	BB	877	A	C6-N6	5.91	1.38	1.33
57	BB	902	C	C2-N3	5.91	1.40	1.35
57	BB	1946	U	C4-C5	5.91	1.48	1.43
57	BB	2108	A	C5-C4	-5.91	1.34	1.38
13	AB	107	ARG	NE-CZ	5.91	1.40	1.33
21	AA	666	G	C5-C6	-5.91	1.36	1.42
21	AA	1004	A	C5-C4	5.91	1.42	1.38
21	AA	1099	G	C5-C4	-5.91	1.34	1.38
21	AA	1128	C	C2-O2	5.91	1.29	1.24
37	BR	84	ARG	CD-NE	5.91	1.56	1.46
57	BB	450	G	N3-C4	5.91	1.39	1.35
57	BB	698	C	P-O5'	-5.91	1.53	1.59
57	BB	1367	A	C6-N1	5.91	1.39	1.35
57	BB	2101	A	N3-C4	5.91	1.38	1.34
57	BB	2303	G	N7-C5	-5.91	1.35	1.39
2	AK	52	ARG	CZ-NH2	5.91	1.40	1.33
21	AA	931	C	C5'-C4'	-5.91	1.44	1.51
21	AA	1277	C	O3'-P	-5.91	1.54	1.61
58	BA	28	C	C5'-C4'	5.91	1.58	1.51
21	AA	154	U	C4-O4	-5.91	1.19	1.23
21	AA	370	C	C5'-C4'	5.91	1.58	1.51
21	AA	877	G	C8-N7	5.91	1.34	1.30
57	BB	1226	A	C8-N7	-5.91	1.27	1.31
57	BB	1560	G	C5'-C4'	5.91	1.58	1.51
57	BB	1930	G	C2'-C1'	-5.91	1.46	1.53
57	BB	1993	U	C4-O4	5.91	1.28	1.23
57	BB	2380	C	C5-C6	-5.91	1.29	1.34
57	BB	2446	G	N3-C4	5.91	1.39	1.35
21	AA	559	A	C6-N1	5.90	1.39	1.35
21	AA	851	G	O3'-P	-5.90	1.54	1.61
21	AA	911	U	N1-C6	5.90	1.43	1.38
21	AA	1188	A	N7-C5	5.90	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1426	G	C3'-C2'	-5.90	1.46	1.52
57	BB	461	C	C2-O2	5.90	1.29	1.24
21	AA	885	G	O3'-P	-5.90	1.54	1.61
21	AA	929	G	C2'-C1'	-5.90	1.46	1.53
21	AA	1182	G	C2-N2	5.90	1.40	1.34
21	AA	1281	C	C2'-C1'	-5.90	1.46	1.53
22	AY	19	G	P-O5'	5.90	1.65	1.59
23	AW	53	G	C4'-C3'	5.90	1.59	1.53
57	BB	1673	G	N1-C2	5.90	1.42	1.37
57	BB	1711	A	C2'-C1'	-5.90	1.46	1.53
57	BB	2883	A	P-O5'	-5.90	1.53	1.59
21	AA	791	G	C6-N1	5.90	1.43	1.39
21	AA	971	G	O4'-C1'	-5.90	1.33	1.41
21	AA	1337	G	C2'-C1'	-5.90	1.46	1.53
21	AA	1461	G	O3'-P	-5.90	1.54	1.61
57	BB	34	U	C2-N3	5.90	1.41	1.37
57	BB	784	G	C2-N2	5.90	1.40	1.34
57	BB	1128	G	N9-C8	5.90	1.42	1.37
57	BB	1186	G	C8-N7	-5.90	1.27	1.30
57	BB	1604	C	C3'-O3'	5.90	1.50	1.42
57	BB	1808	A	C8-N7	5.90	1.35	1.31
21	AA	66	A	C5'-C4'	5.90	1.58	1.51
21	AA	800	G	N9-C4	5.90	1.42	1.38
26	AV	27	U	C4'-O4'	5.90	1.53	1.45
57	BB	1194	A	C5-C4	5.90	1.42	1.38
57	BB	2544	G	C6-N1	5.90	1.43	1.39
4	AM	89	ARG	CD-NE	5.90	1.56	1.46
21	AA	1494	G	O4'-C1'	5.90	1.49	1.41
57	BB	372	G	C2'-C1'	-5.90	1.46	1.53
57	BB	1651	G	N9-C4	-5.90	1.33	1.38
57	BB	1660	G	C6-O6	-5.90	1.18	1.24
57	BB	2365	G	O4'-C1'	-5.90	1.33	1.41
57	BB	2741	A	C6-N6	5.90	1.38	1.33
58	BA	28	C	C4'-O4'	5.90	1.53	1.45
21	AA	1042	A	C2'-C1'	-5.90	1.46	1.53
57	BB	1574	C	C4-C5	-5.90	1.38	1.43
57	BB	2688	G	N1-C2	5.90	1.42	1.37
21	AA	723	U	C4'-C3'	5.89	1.59	1.53
21	AA	993	G	N1-C2	5.89	1.42	1.37
21	AA	1241	G	C6-N1	-5.89	1.35	1.39
26	AV	43	A	N1-C2	-5.89	1.29	1.34
32	BM	91	TYR	CG-CD2	5.89	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2	G	C5'-C4'	5.89	1.58	1.51
57	BB	1554	U	N3-C4	5.89	1.43	1.38
57	BB	1925	C	C2'-C1'	-5.89	1.46	1.53
57	BB	1945	G	N9-C8	5.89	1.42	1.37
57	BB	2025	C	P-O5'	-5.89	1.53	1.59
57	BB	2563	U	C2'-C1'	-5.89	1.46	1.53
21	AA	777	A	C8-N7	5.89	1.35	1.31
26	AV	45	G	N7-C5	-5.89	1.35	1.39
57	BB	27	G	N7-C5	5.89	1.42	1.39
57	BB	707	G	N7-C5	-5.89	1.35	1.39
57	BB	776	G	C2-N3	5.89	1.37	1.32
57	BB	1106	G	C2-N3	5.89	1.37	1.32
57	BB	1249	U	C2'-C1'	-5.89	1.46	1.53
57	BB	1826	G	C4'-C3'	5.89	1.59	1.53
57	BB	1856	U	C2'-C1'	-5.89	1.46	1.53
57	BB	2164	C	C5-C6	5.89	1.39	1.34
57	BB	2380	C	C2-N3	5.89	1.40	1.35
21	AA	422	C	C4-C5	5.89	1.47	1.43
23	AW	18	G	N7-C5	-5.89	1.35	1.39
57	BB	124	G	C6-N1	5.89	1.43	1.39
57	BB	745	G	C8-N7	-5.89	1.27	1.30
21	AA	261	U	O3'-P	-5.89	1.54	1.61
21	AA	1486	G	N1-C2	5.89	1.42	1.37
57	BB	345	A	N3-C4	-5.89	1.31	1.34
57	BB	715	A	N9-C4	-5.89	1.34	1.37
57	BB	1024	G	N9-C4	5.89	1.42	1.38
57	BB	2005	A	N7-C5	-5.89	1.35	1.39
57	BB	2234	G	P-O5'	-5.89	1.53	1.59
57	BB	2811	G	N3-C4	-5.89	1.31	1.35
21	AA	35	G	C8-N7	-5.89	1.27	1.30
21	AA	1205	U	C5-C6	5.89	1.39	1.34
23	AW	18	G	N1-C2	5.89	1.42	1.37
57	BB	384	A	N9-C8	-5.89	1.33	1.37
57	BB	2308	G	C2'-C1'	-5.89	1.46	1.53
21	AA	569	C	N1-C6	5.89	1.40	1.37
26	AV	37	A	C6-N1	5.89	1.39	1.35
42	BW	27	GLY	CA-C	-5.89	1.42	1.51
57	BB	47	C	C4-C5	5.89	1.47	1.43
57	BB	95	A	C2'-C1'	-5.89	1.46	1.53
57	BB	1021	A	C8-N7	-5.89	1.27	1.31
57	BB	1739	A	C5-C4	5.89	1.42	1.38
57	BB	2496	C	C2-N3	5.89	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2520	C	C3'-C2'	5.89	1.59	1.52
21	AA	200	G	C5-C6	-5.88	1.36	1.42
21	AA	254	G	C5-C4	5.88	1.42	1.38
21	AA	503	C	N1-C2	-5.88	1.34	1.40
21	AA	535	A	C5'-C4'	5.88	1.58	1.51
21	AA	1386	G	N9-C8	5.88	1.42	1.37
57	BB	579	G	C2'-C1'	-5.88	1.46	1.53
57	BB	599	A	N9-C8	-5.88	1.33	1.37
57	BB	630	G	C5-C4	-5.88	1.34	1.38
57	BB	1179	G	C6-N1	5.88	1.43	1.39
57	BB	1278	C	C4-C5	-5.88	1.38	1.43
57	BB	1939	U	C4'-C3'	-5.88	1.46	1.52
57	BB	2376	A	C8-N7	5.88	1.35	1.31
57	BB	2602	A	N7-C5	-5.88	1.35	1.39
21	AA	909	A	C6-N1	5.88	1.39	1.35
57	BB	1218	G	C2'-C1'	-5.88	1.46	1.53
57	BB	1504	A	C5-C4	5.88	1.42	1.38
57	BB	1814	G	C2'-C1'	-5.88	1.46	1.53
57	BB	2220	U	C5'-C4'	5.88	1.58	1.51
7	AP	70	ARG	NE-CZ	5.88	1.40	1.33
21	AA	710	G	C2-N3	5.88	1.37	1.32
21	AA	743	A	N7-C5	-5.88	1.35	1.39
21	AA	1524	C	C2'-C1'	-5.88	1.46	1.53
23	AW	52	G	C6-N1	5.88	1.43	1.39
24	AX	22	A	N9-C4	-5.88	1.34	1.37
57	BB	564	C	C3'-O3'	5.88	1.50	1.42
57	BB	1045	C	P-O5'	-5.88	1.53	1.59
57	BB	1148	U	N1-C6	5.88	1.43	1.38
57	BB	1226	A	N3-C4	-5.88	1.31	1.34
57	BB	1438	U	C2-N3	5.88	1.41	1.37
57	BB	2501	C	C3'-C2'	5.88	1.59	1.52
33	BN	12	ARG	NE-CZ	5.88	1.40	1.33
57	BB	85	G	O3'-P	-5.88	1.54	1.61
57	BB	819	A	N9-C4	5.88	1.41	1.37
57	BB	2001	C	N1-C2	5.88	1.46	1.40
21	AA	831	A	C5-C6	5.88	1.46	1.41
21	AA	1230	C	C5-C6	5.88	1.39	1.34
21	AA	1371	G	N9-C8	5.88	1.42	1.37
32	BM	15	GLY	N-CA	-5.88	1.37	1.46
33	BN	59	SER	CA-CB	5.88	1.61	1.52
57	BB	1	G	P-O5'	-5.88	1.53	1.59
57	BB	1047	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)
57	BB	1130	U	C5'-C4'	5.88	1.58	1.51
57	BB	1277	G	C5'-C4'	5.88	1.58	1.51
57	BB	1734	G	N3-C4	-5.88	1.31	1.35
57	BB	1767	G	C2'-C1'	-5.88	1.46	1.53
57	BB	2152	G	C6-N1	5.88	1.43	1.39
57	BB	2212	A	C3'-C2'	5.88	1.59	1.52
57	BB	2649	C	C2'-C1'	-5.88	1.46	1.53
57	BB	2674	G	C6-N1	5.88	1.43	1.39
21	AA	896	C	N1-C6	5.88	1.40	1.37
23	AW	9	A	C8-N7	5.88	1.35	1.31
26	AV	4	G	N9-C8	-5.88	1.33	1.37
57	BB	51	G	C6-N1	5.88	1.43	1.39
21	AA	902	G	N1-C2	5.88	1.42	1.37
21	AA	1211	U	C3'-C2'	5.88	1.59	1.52
21	AA	1366	C	C2'-C1'	-5.88	1.46	1.53
57	BB	707	G	C8-N7	-5.88	1.27	1.30
57	BB	1227	G	C2-N2	5.88	1.40	1.34
57	BB	2138	G	C5-C4	5.88	1.42	1.38
57	BB	2651	C	N3-C4	5.88	1.38	1.33
21	AA	45	G	C8-N7	5.87	1.34	1.30
21	AA	375	U	C2'-C1'	5.87	1.59	1.53
21	AA	575	G	C8-N7	5.87	1.34	1.30
21	AA	839	C	C3'-C2'	-5.87	1.46	1.52
21	AA	1321	U	O3'-P	-5.87	1.54	1.61
57	BB	2509	G	O3'-P	-5.87	1.54	1.61
57	BB	2562	U	C4'-C3'	-5.87	1.46	1.52
57	BB	2587	A	C1'-N9	5.87	1.57	1.48
57	BB	2641	G	C2'-C1'	-5.87	1.46	1.53
58	BA	99	A	C6-N1	-5.87	1.31	1.35
21	AA	94	G	N9-C4	5.87	1.42	1.38
21	AA	216	U	N3-C4	5.87	1.43	1.38
21	AA	326	G	O5'-C5'	5.87	1.53	1.44
21	AA	544	G	C6-N1	5.87	1.43	1.39
21	AA	1236	A	C6-N1	5.87	1.39	1.35
23	AW	38	A	N3-C4	5.87	1.38	1.34
57	BB	1163	G	C5-C4	5.87	1.42	1.38
57	BB	1319	C	C4-C5	5.87	1.47	1.43
57	BB	1522	A	N9-C8	-5.87	1.33	1.37
21	AA	1269	A	N7-C5	-5.87	1.35	1.39
25	AZ	69	TYR	CZ-OH	5.87	1.47	1.37
57	BB	1693	U	C2-N3	-5.87	1.33	1.37
21	AA	307	C	C4'-C3'	5.87	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	852	G	C5'-C4'	5.87	1.58	1.51
21	AA	1282	C	C5-C6	5.87	1.39	1.34
22	AY	55	U	C2'-C1'	-5.87	1.46	1.53
22	AY	65	G	N9-C4	5.87	1.42	1.38
26	AV	42	G	C5-C4	-5.87	1.34	1.38
53	BE	117	ARG	NE-CZ	5.87	1.40	1.33
57	BB	4	U	N3-C4	5.87	1.43	1.38
57	BB	896	A	O4'-C1'	5.87	1.49	1.41
57	BB	1042	G	N3-C4	-5.87	1.31	1.35
57	BB	1758	U	O3'-P	-5.87	1.54	1.61
57	BB	1789	A	N3-C4	-5.87	1.31	1.34
57	BB	2146	C	O3'-P	5.87	1.68	1.61
57	BB	2549	G	C6-N1	5.87	1.43	1.39
57	BB	2600	A	C6-N1	5.87	1.39	1.35
57	BB	361	G	N9-C4	-5.87	1.33	1.38
57	BB	1290	C	C5-C6	5.87	1.39	1.34
57	BB	2677	G	C4'-C3'	5.87	1.59	1.53
57	BB	2741	A	N1-C2	-5.87	1.29	1.34
21	AA	127	G	N1-C2	-5.87	1.33	1.37
21	AA	538	G	C2'-C1'	-5.87	1.46	1.53
21	AA	837	U	N1-C6	-5.87	1.32	1.38
21	AA	1126	U	C4-C5	5.87	1.48	1.43
57	BB	388	G	C8-N7	-5.87	1.27	1.30
57	BB	628	G	O3'-P	-5.87	1.54	1.61
57	BB	750	A	N7-C5	-5.87	1.35	1.39
57	BB	974	G	P-O5'	-5.87	1.53	1.59
57	BB	1215	G	O3'-P	-5.87	1.54	1.61
57	BB	1598	A	N9-C4	5.87	1.41	1.37
57	BB	2023	C	N1-C6	5.87	1.40	1.37
21	AA	153	C	O4'-C1'	5.86	1.49	1.41
23	AW	7	A	C5'-C4'	5.86	1.58	1.51
57	BB	60	G	P-O5'	-5.86	1.53	1.59
57	BB	270	A	C5-C6	-5.86	1.35	1.41
57	BB	282	A	C6-N6	5.86	1.38	1.33
57	BB	287	G	C8-N7	-5.86	1.27	1.30
57	BB	459	U	P-O5'	-5.86	1.53	1.59
57	BB	746	U	C4-O4	5.86	1.28	1.23
57	BB	1444	G	C3'-O3'	5.86	1.50	1.42
58	BA	95	U	N3-C4	5.86	1.43	1.38
21	AA	64	G	N3-C4	-5.86	1.31	1.35
21	AA	1288	A	P-O5'	-5.86	1.53	1.59
57	BB	1514	G	N9-C8	5.86	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1755	A	C2'-C1'	-5.86	1.47	1.53
57	BB	1989	G	N1-C2	5.86	1.42	1.37
58	BA	18	G	C6-N1	5.86	1.43	1.39
21	AA	153	C	O3'-P	-5.86	1.54	1.61
21	AA	350	G	C6-O6	-5.86	1.18	1.24
21	AA	573	A	P-O5'	-5.86	1.53	1.59
21	AA	1403	C	P-O5'	-5.86	1.53	1.59
23	AW	42	C	O4'-C1'	5.86	1.49	1.41
26	AV	14	A	C5'-C4'	5.86	1.58	1.51
57	BB	627	A	C4'-C3'	5.86	1.59	1.53
57	BB	1107	G	C6-N1	5.86	1.43	1.39
57	BB	2587	A	C2-N3	5.86	1.38	1.33
57	BB	2783	U	C5-C6	5.86	1.39	1.34
57	BB	2861	U	O4'-C1'	5.86	1.49	1.41
21	AA	712	A	P-O5'	-5.86	1.53	1.59
23	AW	28	G	C5'-C4'	5.86	1.58	1.51
21	AA	561	U	N1-C2	5.86	1.43	1.38
21	AA	643	C	C4-N4	5.86	1.39	1.33
21	AA	905	U	C5-C6	5.86	1.39	1.34
21	AA	1107	C	N1-C2	5.86	1.46	1.40
22	AY	66	A	C4'-O4'	-5.86	1.38	1.45
57	BB	393	C	C4'-C3'	-5.86	1.46	1.52
57	BB	708	G	C2'-C1'	-5.86	1.47	1.53
57	BB	2163	A	C6-N1	5.86	1.39	1.35
4	AM	70	ARG	CD-NE	5.86	1.56	1.46
21	AA	162	A	P-O5'	-5.86	1.53	1.59
22	AY	52	U	O3'-P	-5.86	1.54	1.61
23	AW	49	C	C4'-O4'	5.86	1.53	1.45
57	BB	28	A	C2'-C1'	-5.86	1.47	1.53
57	BB	252	G	O4'-C1'	-5.86	1.34	1.41
57	BB	883	G	N9-C4	5.86	1.42	1.38
57	BB	1753	G	C2-N3	5.86	1.37	1.32
57	BB	2083	G	P-O5'	-5.86	1.53	1.59
57	BB	2143	C	N3-C4	5.86	1.38	1.33
57	BB	2263	C	C5-C6	-5.86	1.29	1.34
21	AA	410	G	C2-N3	5.85	1.37	1.32
21	AA	1284	C	N1-C6	5.85	1.40	1.37
21	AA	1304	G	O3'-P	-5.85	1.54	1.61
57	BB	310	A	C2'-C1'	-5.85	1.47	1.53
57	BB	876	C	N1-C2	5.85	1.46	1.40
3	AL	120	ARG	CZ-NH2	5.85	1.40	1.33
21	AA	91	U	C4'-C3'	-5.85	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1164	G	C2'-C1'	-5.85	1.47	1.53
21	AA	1173	U	C4-C5	5.85	1.48	1.43
21	AA	1399	C	C3'-C2'	5.85	1.59	1.52
21	AA	1428	A	O4'-C1'	5.85	1.49	1.41
57	BB	891	G	C4'-C3'	-5.85	1.46	1.52
57	BB	1344	U	P-O5'	-5.85	1.53	1.59
57	BB	2226	C	N1-C6	5.85	1.40	1.37
57	BB	2483	C	C4'-C3'	5.85	1.59	1.53
58	BA	34	A	N9-C4	-5.85	1.34	1.37
21	AA	1242	G	N3-C4	-5.85	1.31	1.35
57	BB	62	U	C4'-C3'	-5.85	1.46	1.52
57	BB	2404	U	P-O5'	5.85	1.65	1.59
57	BB	2583	G	P-O5'	-5.85	1.53	1.59
58	BA	39	A	C2'-C1'	5.85	1.59	1.53
21	AA	214	C	O4'-C1'	5.85	1.49	1.41
21	AA	1139	G	C3'-C2'	-5.85	1.46	1.52
21	AA	1275	A	C1'-N9	-5.85	1.38	1.46
26	AV	67	C	N1-C2	5.85	1.46	1.40
57	BB	1770	G	C6-N1	5.85	1.43	1.39
57	BB	2756	U	C2'-C1'	-5.85	1.47	1.53
21	AA	528	C	C4'-C3'	5.85	1.59	1.53
21	AA	573	A	C8-N7	5.85	1.35	1.31
21	AA	636	U	C5'-C4'	5.85	1.58	1.51
21	AA	647	C	P-O5'	-5.85	1.53	1.59
21	AA	1279	G	O3'-P	-5.85	1.54	1.61
21	AA	1372	U	O3'-P	-5.85	1.54	1.61
57	BB	217	A	O4'-C1'	5.85	1.49	1.41
57	BB	350	G	N1-C2	5.85	1.42	1.37
57	BB	484	C	N3-C4	5.85	1.38	1.33
57	BB	614	A	C3'-O3'	-5.85	1.33	1.42
57	BB	696	G	N7-C5	5.85	1.42	1.39
21	AA	1306	A	N9-C4	5.85	1.41	1.37
57	BB	1048	A	C3'-C2'	-5.85	1.46	1.52
21	AA	26	A	C3'-C2'	-5.84	1.46	1.52
21	AA	1292	G	C8-N7	5.84	1.34	1.30
57	BB	1210	G	O4'-C1'	-5.84	1.34	1.41
57	BB	1795	C	N3-C4	5.84	1.38	1.33
57	BB	2096	C	O3'-P	-5.84	1.54	1.61
57	BB	2316	G	C6-N1	5.84	1.43	1.39
57	BB	2869	G	C6-N1	5.84	1.43	1.39
21	AA	716	A	C5-C6	-5.84	1.35	1.41
21	AA	1315	U	C5-C6	5.84	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	7	U	C5'-C4'	5.84	1.58	1.51
23	AW	21	A	C6-N6	5.84	1.38	1.33
57	BB	1292	G	O3'-P	-5.84	1.54	1.61
57	BB	1623	G	N3-C4	5.84	1.39	1.35
57	BB	2323	G	C8-N7	-5.84	1.27	1.30
21	AA	59	A	C5'-C4'	5.84	1.58	1.51
21	AA	127	G	C3'-C2'	-5.84	1.46	1.52
21	AA	824	G	P-O5'	-5.84	1.53	1.59
24	AX	18	G	C8-N7	-5.84	1.27	1.30
26	AV	74	C	C5-C6	5.84	1.39	1.34
57	BB	71	A	C4'-O4'	-5.84	1.38	1.45
57	BB	98	G	N3-C4	-5.84	1.31	1.35
57	BB	291	G	C5'-C4'	5.84	1.58	1.51
57	BB	374	A	N9-C4	5.84	1.41	1.37
57	BB	609	A	C2-N3	5.84	1.38	1.33
57	BB	789	A	C5-C4	5.84	1.42	1.38
57	BB	1674	G	C8-N7	5.84	1.34	1.30
57	BB	1785	A	C3'-C2'	5.84	1.59	1.52
57	BB	2747	G	C5-C4	5.84	1.42	1.38
21	AA	1030	U	N1-C2	5.84	1.43	1.38
21	AA	1458	G	C6-N1	5.84	1.43	1.39
57	BB	140	C	O5'-C5'	-5.84	1.33	1.42
57	BB	630	G	C6-N1	5.84	1.43	1.39
57	BB	883	G	C5'-C4'	-5.84	1.44	1.51
57	BB	980	A	P-O5'	-5.84	1.53	1.59
21	AA	497	G	N9-C8	5.84	1.42	1.37
21	AA	732	C	P-O5'	-5.84	1.53	1.59
23	AW	64	A	C5-C4	5.84	1.42	1.38
57	BB	158	U	N1-C6	5.84	1.43	1.38
57	BB	465	G	O3'-P	-5.84	1.54	1.61
57	BB	1721	G	N7-C5	5.84	1.42	1.39
21	AA	189	A	C2'-O2'	-5.84	1.34	1.41
21	AA	799	G	C2-N3	5.84	1.37	1.32
21	AA	885	G	P-O5'	-5.84	1.53	1.59
57	BB	99	U	N3-C4	-5.84	1.33	1.38
57	BB	656	G	C3'-C2'	-5.84	1.46	1.52
57	BB	1815	A	O3'-P	-5.84	1.54	1.61
57	BB	1821	A	C5-C4	-5.84	1.34	1.38
57	BB	2397	G	C6-O6	5.84	1.29	1.24
21	AA	1246	A	O3'-P	-5.83	1.54	1.61
23	AW	38	A	O4'-C1'	5.83	1.49	1.41
57	BB	1127	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)
57	BB	1569	A	C2'-C1'	5.83	1.59	1.53
57	BB	1791	A	C6-N6	5.83	1.38	1.33
58	BA	43	C	C1'-N1	5.83	1.57	1.48
21	AA	277	C	C2-N3	-5.83	1.31	1.35
21	AA	373	A	C4'-O4'	5.83	1.53	1.45
21	AA	413	G	O4'-C1'	-5.83	1.34	1.41
21	AA	677	U	C3'-O3'	5.83	1.50	1.42
57	BB	551	G	N9-C8	-5.83	1.33	1.37
57	BB	1352	U	C4'-O4'	-5.83	1.38	1.45
57	BB	1400	U	O4'-C1'	5.83	1.49	1.41
57	BB	2126	A	C2'-C1'	-5.83	1.47	1.53
58	BA	28	C	N1-C6	5.83	1.40	1.37
16	AE	129	SER	CA-CB	5.83	1.61	1.52
21	AA	313	A	N7-C5	-5.83	1.35	1.39
21	AA	478	A	C2'-C1'	-5.83	1.47	1.53
21	AA	777	A	C5'-C4'	5.83	1.58	1.51
21	AA	1023	U	C4-C5	-5.83	1.38	1.43
21	AA	1465	A	C6-N1	5.83	1.39	1.35
57	BB	44	A	O3'-P	-5.83	1.54	1.61
57	BB	372	G	N1-C2	5.83	1.42	1.37
57	BB	808	G	C4'-C3'	-5.83	1.46	1.52
57	BB	818	G	C3'-C2'	-5.83	1.46	1.52
57	BB	897	C	O3'-P	5.83	1.68	1.61
57	BB	1378	A	C5'-C4'	5.83	1.58	1.51
57	BB	1412	U	P-O5'	5.83	1.65	1.59
57	BB	1484	U	N1-C6	5.83	1.43	1.38
57	BB	2172	U	C1'-N1	5.83	1.57	1.48
57	BB	2286	G	C6-N1	-5.83	1.35	1.39
57	BB	2773	C	C4-C5	5.83	1.47	1.43
57	BB	2839	G	N1-C2	5.83	1.42	1.37
21	AA	98	A	C2'-C1'	-5.83	1.47	1.53
21	AA	608	A	C8-N7	-5.83	1.27	1.31
21	AA	926	G	O5'-C5'	-5.83	1.33	1.42
21	AA	1058	G	N7-C5	-5.83	1.35	1.39
21	AA	1469	C	N1-C6	5.83	1.40	1.37
21	AA	382	A	C8-N7	5.83	1.35	1.31
21	AA	909	A	C6-N6	5.83	1.38	1.33
21	AA	1276	G	C8-N7	-5.83	1.27	1.30
57	BB	248	G	O3'-P	-5.83	1.54	1.61
57	BB	559	G	C4'-O4'	5.83	1.53	1.45
57	BB	1232	G	N3-C4	5.83	1.39	1.35
57	BB	1438	U	C4'-C3'	5.83	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2543	G	N9-C8	-5.83	1.33	1.37
21	AA	673	A	N3-C4	5.83	1.38	1.34
21	AA	1529	G	N3-C4	-5.83	1.31	1.35
57	BB	5	A	C5-C6	-5.83	1.35	1.41
57	BB	426	C	P-O5'	-5.83	1.53	1.59
57	BB	663	G	N9-C4	-5.83	1.33	1.38
57	BB	2392	A	C4'-C3'	-5.83	1.46	1.52
21	AA	275	G	C4'-C3'	-5.83	1.46	1.52
21	AA	1307	U	P-O5'	5.83	1.65	1.59
26	AV	71	C	C4-N4	5.83	1.39	1.33
57	BB	332	A	N9-C4	-5.83	1.34	1.37
57	BB	1459	G	O3'-P	-5.83	1.54	1.61
57	BB	2088	A	C4'-C3'	-5.83	1.46	1.52
57	BB	2700	A	C8-N7	-5.83	1.27	1.31
21	AA	21	G	N9-C4	-5.82	1.33	1.38
21	AA	229	U	C4-C5	-5.82	1.38	1.43
21	AA	306	A	P-O5'	-5.82	1.53	1.59
21	AA	382	A	C4'-C3'	-5.82	1.46	1.52
21	AA	958	A	C3'-C2'	5.82	1.59	1.52
21	AA	1511	G	C2'-C1'	-5.82	1.47	1.53
22	AY	42	G	C3'-C2'	5.82	1.59	1.52
57	BB	1866	A	N9-C4	5.82	1.41	1.37
57	BB	2106	U	C5-C6	5.82	1.39	1.34
57	BB	2449	U	C2'-C1'	-5.82	1.47	1.53
22	AY	44	A	C5-C6	5.82	1.46	1.41
45	BC	100	ARG	NE-CZ	5.82	1.40	1.33
57	BB	990	A	N7-C5	-5.82	1.35	1.39
57	BB	1017	G	N9-C8	-5.82	1.33	1.37
57	BB	2647	U	C2-N3	5.82	1.41	1.37
57	BB	2736	A	N9-C4	5.82	1.41	1.37
3	AL	94	TYR	CE2-CZ	5.82	1.46	1.38
12	AU	17	ARG	CZ-NH1	5.82	1.40	1.33
57	BB	315	G	P-O5'	-5.82	1.53	1.59
57	BB	583	G	N1-C2	5.82	1.42	1.37
57	BB	1823	G	C6-N1	5.82	1.43	1.39
57	BB	1829	A	O4'-C1'	-5.82	1.34	1.41
57	BB	1912	A	P-O5'	-5.82	1.53	1.59
57	BB	2052	A	N1-C2	5.82	1.39	1.34
57	BB	2267	A	P-O5'	-5.82	1.53	1.59
57	BB	2280	G	C3'-O3'	5.82	1.50	1.42
57	BB	2641	G	C6-N1	-5.82	1.35	1.39
57	BB	2783	U	C1'-N1	5.82	1.57	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	AC	163	ARG	CD-NE	5.82	1.56	1.46
21	AA	197	A	C2'-C1'	-5.82	1.47	1.53
57	BB	748	G	O4'-C1'	-5.82	1.34	1.41
58	BA	84	G	C8-N7	5.82	1.34	1.30
18	AG	9	ARG	CZ-NH2	5.82	1.40	1.33
21	AA	288	A	C6-N6	5.82	1.38	1.33
21	AA	496	A	N3-C4	5.82	1.38	1.34
21	AA	896	C	O3'-P	-5.82	1.54	1.61
21	AA	1518	A	C4'-C3'	5.82	1.59	1.53
57	BB	505	A	C5-C6	5.82	1.46	1.41
57	BB	634	C	C2-O2	5.82	1.29	1.24
57	BB	920	A	C3'-C2'	5.82	1.59	1.52
57	BB	1105	U	C4-O4	5.82	1.28	1.23
57	BB	2143	C	C3'-C2'	-5.82	1.46	1.52
57	BB	2197	U	C4-O4	-5.82	1.19	1.23
57	BB	2228	G	N9-C4	5.82	1.42	1.38
5	AN	8	ARG	CZ-NH1	5.82	1.40	1.33
21	AA	90	C	P-O5'	5.82	1.65	1.59
21	AA	1220	G	O3'-P	-5.82	1.54	1.61
26	AV	33	U	C5'-C4'	5.82	1.58	1.51
53	BE	71	GLY	CA-C	-5.82	1.42	1.51
56	BH	25	TYR	CB-CG	5.82	1.60	1.51
57	BB	688	U	C4-C5	5.82	1.48	1.43
57	BB	1562	U	N3-C4	5.82	1.43	1.38
57	BB	1918	A	N9-C4	-5.82	1.34	1.37
57	BB	2033	A	C8-N7	-5.82	1.27	1.31
57	BB	2552	U	P-O5'	-5.82	1.53	1.59
21	AA	420	U	C4'-C3'	-5.81	1.46	1.52
57	BB	13	A	P-O5'	-5.81	1.53	1.59
57	BB	2199	A	C4'-O4'	-5.81	1.38	1.45
21	AA	180	U	C4'-C3'	5.81	1.59	1.53
21	AA	435	A	C8-N7	-5.81	1.27	1.31
21	AA	908	A	C6-N6	5.81	1.38	1.33
21	AA	1032	G	C2-N2	5.81	1.40	1.34
23	AW	28	G	C1'-N9	-5.81	1.38	1.46
26	AV	28	C	C2-N3	-5.81	1.31	1.35
57	BB	257	C	C4-C5	-5.81	1.38	1.43
57	BB	491	G	C5-C4	-5.81	1.34	1.38
57	BB	1476	U	C2-N3	5.81	1.41	1.37
57	BB	1972	G	N9-C4	-5.81	1.33	1.38
57	BB	380	G	C2'-C1'	-5.81	1.47	1.53
57	BB	937	C	C2'-C1'	-5.81	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1383	A	N1-C2	-5.81	1.29	1.34
21	AA	304	U	C5-C6	5.81	1.39	1.34
22	AY	36	A	N9-C8	5.81	1.42	1.37
42	BW	10	ARG	NE-CZ	5.81	1.40	1.33
57	BB	1251	C	C4-C5	5.81	1.47	1.43
57	BB	1342	A	N1-C2	5.81	1.39	1.34
57	BB	1525	A	O5'-C5'	5.81	1.53	1.44
57	BB	1703	G	C5'-C4'	5.81	1.58	1.51
9	AR	56	ARG	NE-CZ	5.81	1.40	1.33
21	AA	44	A	N1-C2	5.81	1.39	1.34
21	AA	351	G	C5-C6	-5.81	1.36	1.42
21	AA	459	A	O3'-P	-5.81	1.54	1.61
21	AA	504	C	C3'-O3'	5.81	1.50	1.42
21	AA	630	A	N9-C8	-5.81	1.33	1.37
21	AA	753	A	N3-C4	5.81	1.38	1.34
21	AA	903	G	C5-C4	5.81	1.42	1.38
21	AA	1052	U	C2-N3	5.81	1.41	1.37
21	AA	1232	U	C4'-C3'	5.81	1.59	1.53
21	AA	1276	G	C2-N3	5.81	1.37	1.32
21	AA	1452	C	C5'-C4'	5.81	1.58	1.51
57	BB	24	G	N9-C8	-5.81	1.33	1.37
57	BB	609	A	C2'-C1'	-5.81	1.47	1.53
57	BB	1255	U	C2-N3	5.81	1.41	1.37
57	BB	2100	G	O3'-P	-5.81	1.54	1.61
57	BB	2574	G	C8-N7	-5.81	1.27	1.30
21	AA	459	A	C2'-C1'	-5.81	1.47	1.53
23	AW	33	U	C4'-C3'	5.81	1.59	1.53
57	BB	1781	U	C3'-C2'	5.81	1.59	1.52
21	AA	1340	A	C6-N6	5.80	1.38	1.33
21	AA	1445	U	C4'-C3'	-5.80	1.46	1.52
57	BB	63	A	C6-N6	5.80	1.38	1.33
57	BB	312	G	C8-N7	5.80	1.34	1.30
57	BB	735	A	C8-N7	-5.80	1.27	1.31
57	BB	1142	A	N9-C4	-5.80	1.34	1.37
57	BB	1307	A	N9-C4	5.80	1.41	1.37
57	BB	1332	G	C4'-C3'	5.80	1.59	1.53
57	BB	2504	U	C5-C6	5.80	1.39	1.34
21	AA	502	A	N7-C5	-5.80	1.35	1.39
57	BB	258	G	N3-C4	-5.80	1.31	1.35
57	BB	640	C	C5'-C4'	5.80	1.58	1.51
57	BB	894	U	C2'-C1'	-5.80	1.47	1.53
57	BB	1250	G	N9-C8	-5.80	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1405	U	C4'-O4'	5.80	1.53	1.45
21	AA	173	U	C4-C5	5.80	1.48	1.43
21	AA	274	A	N9-C4	-5.80	1.34	1.37
57	BB	2044	C	N1-C6	5.80	1.40	1.37
57	BB	2827	C	N3-C4	5.80	1.38	1.33
21	AA	44	A	C5'-C4'	5.80	1.58	1.51
21	AA	359	G	C4'-C3'	5.80	1.59	1.53
21	AA	441	A	P-O5'	-5.80	1.53	1.59
21	AA	761	G	N1-C2	5.80	1.42	1.37
57	BB	141	G	N1-C2	5.80	1.42	1.37
57	BB	503	A	N9-C4	5.80	1.41	1.37
57	BB	564	C	C2'-C1'	-5.80	1.47	1.53
57	BB	726	G	C2-N3	5.80	1.37	1.32
57	BB	1130	U	C2'-C1'	-5.80	1.47	1.53
57	BB	2104	C	C4'-C3'	5.80	1.59	1.53
57	BB	2170	A	C5-C4	5.80	1.42	1.38
21	AA	138	G	C6-N1	-5.80	1.35	1.39
21	AA	547	A	C8-N7	-5.80	1.27	1.31
57	BB	124	G	P-O5'	5.80	1.65	1.59
57	BB	851	C	C5-C6	-5.80	1.29	1.34
57	BB	2000	C	C2-O2	5.80	1.29	1.24
57	BB	2268	A	C2'-C1'	-5.80	1.47	1.53
57	BB	2467	C	C2'-C1'	-5.80	1.47	1.53
57	BB	2848	G	P-O5'	-5.80	1.53	1.59
22	AY	66	A	C5-C6	-5.80	1.35	1.41
23	AW	29	G	N3-C4	-5.80	1.31	1.35
23	AW	65	G	C5-C6	5.80	1.48	1.42
57	BB	465	G	C5-C6	-5.80	1.36	1.42
57	BB	953	G	N3-C4	5.80	1.39	1.35
57	BB	1077	A	O3'-P	-5.80	1.54	1.61
57	BB	1278	C	C4-N4	5.80	1.39	1.33
57	BB	1500	G	C2'-C1'	-5.80	1.47	1.53
57	BB	2782	G	C8-N7	-5.80	1.27	1.30
2	AK	68	ARG	NE-CZ	5.79	1.40	1.33
13	AB	32	GLY	N-CA	-5.79	1.37	1.46
21	AA	95	C	C1'-N1	5.79	1.57	1.48
21	AA	1339	A	P-O5'	-5.79	1.53	1.59
22	AY	21	A	N3-C4	5.79	1.38	1.34
57	BB	24	G	N7-C5	-5.79	1.35	1.39
57	BB	2362	C	N1-C6	5.79	1.40	1.37
57	BB	2398	U	C2-N3	5.79	1.41	1.37
21	AA	566	G	C1'-N9	5.79	1.57	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	734	G	O3'-P	-5.79	1.54	1.61
21	AA	827	U	C5'-C4'	5.79	1.58	1.51
21	AA	1457	G	C8-N7	-5.79	1.27	1.30
21	AA	1463	U	C2-N3	5.79	1.41	1.37
57	BB	1305	C	C4'-O4'	-5.79	1.38	1.45
57	BB	1947	C	C2-N3	5.79	1.40	1.35
57	BB	2421	G	C8-N7	-5.79	1.27	1.30
57	BB	2507	C	C4-C5	-5.79	1.38	1.43
21	AA	743	A	C3'-O3'	5.79	1.50	1.42
21	AA	1203	C	N3-C4	5.79	1.38	1.33
32	BM	107	GLY	CA-C	-5.79	1.42	1.51
57	BB	465	G	O4'-C1'	-5.79	1.34	1.41
57	BB	493	G	C2-N3	5.79	1.37	1.32
57	BB	560	C	N3-C4	5.79	1.38	1.33
57	BB	809	G	N7-C5	5.79	1.42	1.39
57	BB	905	A	C3'-C2'	5.79	1.59	1.52
57	BB	1586	A	C4'-C3'	-5.79	1.46	1.52
57	BB	1604	C	C5'-C4'	5.79	1.58	1.51
57	BB	2037	A	C5-C4	-5.79	1.34	1.38
57	BB	2661	G	N1-C2	5.79	1.42	1.37
16	AE	9	GLU	N-CA	5.79	1.57	1.46
21	AA	751	U	C5'-C4'	5.79	1.58	1.51
21	AA	1035	A	C4'-C3'	5.79	1.59	1.53
21	AA	1104	G	N9-C8	-5.79	1.33	1.37
26	AV	64	G	P-O5'	-5.79	1.53	1.59
57	BB	805	G	C4'-C3'	5.79	1.59	1.53
57	BB	2059	A	C4'-O4'	5.79	1.53	1.45
57	BB	2676	C	C3'-C2'	-5.79	1.46	1.52
21	AA	179	A	C6-N1	5.79	1.39	1.35
21	AA	749	A	N3-C4	5.79	1.38	1.34
57	BB	1192	G	N1-C2	5.79	1.42	1.37
57	BB	1565	C	N1-C6	5.79	1.40	1.37
57	BB	1756	G	C2'-C1'	-5.79	1.47	1.53
57	BB	2162	G	N9-C8	-5.79	1.33	1.37
57	BB	2868	A	C8-N7	-5.79	1.27	1.31
21	AA	1153	G	N7-C5	-5.79	1.35	1.39
21	AA	1488	G	C4'-O4'	5.79	1.53	1.45
57	BB	1136	G	C4'-C3'	5.79	1.59	1.53
21	AA	328	C	C4'-C3'	5.79	1.59	1.53
21	AA	449	G	N1-C2	5.79	1.42	1.37
21	AA	1041	G	P-O5'	-5.79	1.53	1.59
57	BB	415	A	N1-C2	5.79	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1502	A	C4'-O4'	5.79	1.53	1.45
57	BB	1512	C	N3-C4	5.79	1.38	1.33
57	BB	2287	A	N9-C4	5.79	1.41	1.37
57	BB	2781	A	N9-C8	-5.79	1.33	1.37
57	BB	2868	A	C4'-O4'	5.79	1.53	1.45
58	BA	27	C	C2'-C1'	-5.79	1.47	1.53
58	BA	61	G	N9-C4	5.79	1.42	1.38
21	AA	872	A	C2'-C1'	-5.78	1.47	1.53
21	AA	877	G	C5-C6	-5.78	1.36	1.42
21	AA	1145	A	C5'-C4'	5.78	1.58	1.51
57	BB	1206	G	C5-C4	5.78	1.42	1.38
57	BB	1649	G	N3-C4	5.78	1.39	1.35
57	BB	2780	G	N7-C5	-5.78	1.35	1.39
19	AH	76	ARG	CZ-NH2	5.78	1.40	1.33
21	AA	709	U	N1-C2	5.78	1.43	1.38
57	BB	379	G	N3-C4	-5.78	1.31	1.35
21	AA	209	U	C1'-N1	5.78	1.57	1.48
21	AA	815	A	C6-N6	-5.78	1.29	1.33
21	AA	1172	C	C4-C5	5.78	1.47	1.43
21	AA	1313	U	C2'-C1'	-5.78	1.47	1.53
21	AA	1436	U	N3-C4	5.78	1.43	1.38
21	AA	1447	A	C2'-C1'	-5.78	1.47	1.53
22	AY	56	C	N1-C6	5.78	1.40	1.37
57	BB	40	U	P-O5'	-5.78	1.53	1.59
57	BB	42	A	C6-N1	5.78	1.39	1.35
57	BB	181	A	C5'-C4'	5.78	1.58	1.51
57	BB	555	G	N1-C2	5.78	1.42	1.37
57	BB	1193	G	P-O5'	-5.78	1.53	1.59
57	BB	2012	G	C2'-C1'	-5.78	1.47	1.53
57	BB	2405	G	C2'-C1'	-5.78	1.47	1.53
58	BA	45	A	P-O5'	5.78	1.65	1.59
21	AA	1115	U	C5'-C4'	5.78	1.58	1.51
57	BB	510	C	C2'-C1'	-5.78	1.47	1.53
57	BB	712	G	C2-N2	5.78	1.40	1.34
21	AA	676	A	N1-C2	5.78	1.39	1.34
21	AA	806	C	O3'-P	-5.78	1.54	1.61
21	AA	1127	G	C4'-O4'	5.78	1.53	1.45
21	AA	1496	C	C3'-C2'	-5.78	1.46	1.52
57	BB	548	G	N1-C2	5.78	1.42	1.37
57	BB	1708	C	C4-N4	5.78	1.39	1.33
57	BB	2293	G	N3-C4	-5.78	1.31	1.35
4	AM	69	ARG	NE-CZ	5.78	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	887	G	N7-C5	-5.78	1.35	1.39
21	AA	1054	C	O3'-P	-5.78	1.54	1.61
21	AA	1067	A	O3'-P	-5.78	1.54	1.61
32	BM	66	ARG	CD-NE	5.78	1.56	1.46
57	BB	726	G	N3-C4	-5.78	1.31	1.35
57	BB	1187	G	C3'-C2'	5.78	1.59	1.52
57	BB	1266	G	C4'-C3'	-5.78	1.46	1.52
57	BB	1609	A	C4'-C3'	5.78	1.59	1.53
57	BB	2506	U	C4'-O4'	-5.78	1.38	1.45
58	BA	10	G	C2-N3	5.78	1.37	1.32
21	AA	1168	U	O4'-C1'	5.77	1.49	1.41
57	BB	487	C	N1-C6	-5.77	1.33	1.37
57	BB	966	G	C5-C4	-5.77	1.34	1.38
57	BB	1039	A	O5'-C5'	-5.77	1.33	1.42
57	BB	2775	G	C6-O6	-5.77	1.19	1.24
21	AA	388	G	N1-C2	5.77	1.42	1.37
21	AA	1211	U	C5-C6	-5.77	1.28	1.34
21	AA	1232	U	N3-C4	5.77	1.43	1.38
26	AV	62	C	C3'-C2'	-5.77	1.46	1.52
45	BC	270	ARG	NE-CZ	5.77	1.40	1.33
57	BB	178	G	N9-C4	-5.77	1.33	1.38
57	BB	502	A	C8-N7	-5.77	1.27	1.31
57	BB	765	C	O3'-P	-5.77	1.54	1.61
57	BB	2068	U	C5-C6	5.77	1.39	1.34
57	BB	896	A	C8-N7	-5.77	1.27	1.31
57	BB	1347	A	C5'-C4'	5.77	1.58	1.51
57	BB	1510	G	C5-C6	-5.77	1.36	1.42
57	BB	1779	U	C2-N3	5.77	1.41	1.37
57	BB	2429	G	C2'-C1'	5.77	1.59	1.53
57	BB	2892	G	P-O5'	-5.77	1.53	1.59
21	AA	729	A	C2'-O2'	5.77	1.49	1.41
21	AA	1178	G	C2'-C1'	-5.77	1.47	1.53
21	AA	1246	A	C5-C6	-5.77	1.35	1.41
21	AA	1503	A	N7-C5	-5.77	1.35	1.39
57	BB	63	A	C3'-C2'	-5.77	1.46	1.52
57	BB	328	U	C3'-O3'	5.77	1.50	1.42
57	BB	1055	G	N7-C5	-5.77	1.35	1.39
57	BB	1071	G	C6-N1	5.77	1.43	1.39
57	BB	1369	G	N9-C8	5.77	1.41	1.37
21	AA	404	G	N1-C2	5.77	1.42	1.37
21	AA	617	G	C5-C4	5.77	1.42	1.38
21	AA	629	A	C6-N1	5.77	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1221	G	P-O5'	5.77	1.65	1.59
21	AA	1245	C	C2'-O2'	5.77	1.49	1.41
21	AA	1335	U	O3'-P	-5.77	1.54	1.61
57	BB	86	G	C2-N3	5.77	1.37	1.32
57	BB	111	A	N9-C4	5.77	1.41	1.37
57	BB	132	G	C2-N2	5.77	1.40	1.34
57	BB	871	U	C3'-C2'	-5.77	1.46	1.52
57	BB	1268	A	O4'-C1'	-5.77	1.34	1.41
57	BB	1379	U	O4'-C1'	5.77	1.49	1.41
57	BB	1464	G	N7-C5	5.77	1.42	1.39
57	BB	1744	A	C5'-C4'	5.77	1.58	1.51
57	BB	2212	A	N9-C4	5.77	1.41	1.37
57	BB	2510	C	C2-N3	-5.77	1.31	1.35
17	AF	44	ARG	CZ-NH1	5.77	1.40	1.33
57	BB	6	A	C1'-N9	-5.77	1.38	1.46
57	BB	39	G	N9-C4	5.77	1.42	1.38
57	BB	559	G	N9-C4	-5.77	1.33	1.38
57	BB	865	C	C2'-C1'	-5.77	1.47	1.53
57	BB	1144	A	C4'-C3'	-5.77	1.46	1.52
57	BB	1715	G	N1-C2	5.77	1.42	1.37
58	BA	44	G	C3'-C2'	-5.77	1.46	1.52
21	AA	438	U	C2'-C1'	-5.76	1.47	1.53
21	AA	699	C	N3-C4	5.76	1.38	1.33
21	AA	1356	G	N9-C4	5.76	1.42	1.38
26	AV	58	A	P-O5'	-5.76	1.53	1.59
57	BB	298	G	C6-N1	5.76	1.43	1.39
57	BB	705	A	C3'-C2'	5.76	1.59	1.52
57	BB	1219	U	N3-C4	5.76	1.43	1.38
57	BB	1310	G	N9-C4	-5.76	1.33	1.38
57	BB	1390	U	N3-C4	5.76	1.43	1.38
57	BB	1826	G	C2-N2	5.76	1.40	1.34
57	BB	2077	A	N7-C5	-5.76	1.35	1.39
57	BB	2214	C	N3-C4	5.76	1.38	1.33
21	AA	528	C	O3'-P	-5.76	1.54	1.61
21	AA	802	A	C5-C4	5.76	1.42	1.38
22	AY	18	G	C6-N1	-5.76	1.35	1.39
57	BB	53	A	O3'-P	-5.76	1.54	1.61
57	BB	1300	G	C6-N1	5.76	1.43	1.39
2	AK	92	ARG	NE-CZ	5.76	1.40	1.33
21	AA	455	G	C2'-C1'	-5.76	1.47	1.53
21	AA	613	C	C5-C6	-5.76	1.29	1.34
21	AA	1024	G	C2-N3	5.76	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1131	G	N9-C4	-5.76	1.33	1.38
21	AA	1340	A	C8-N7	-5.76	1.27	1.31
21	AA	1382	C	O4'-C1'	5.76	1.49	1.41
21	AA	1530	G	C2-N3	5.76	1.37	1.32
22	AY	47	U	O3'-P	-5.76	1.54	1.61
57	BB	146	A	C6-N6	5.76	1.38	1.33
57	BB	377	G	N9-C4	-5.76	1.33	1.38
57	BB	448	U	P-O5'	5.76	1.65	1.59
57	BB	935	C	N3-C4	5.76	1.38	1.33
57	BB	1435	G	N3-C4	-5.76	1.31	1.35
57	BB	1500	G	C6-N1	5.76	1.43	1.39
57	BB	1543	G	N9-C8	5.76	1.41	1.37
21	AA	156	C	C3'-C2'	5.76	1.59	1.52
21	AA	337	G	C5-C4	5.76	1.42	1.38
21	AA	1029	U	O3'-P	-5.76	1.54	1.61
21	AA	1076	U	C2-N3	5.76	1.41	1.37
23	AW	40	C	C5'-C4'	5.76	1.58	1.51
26	AV	73	A	C6-N1	5.76	1.39	1.35
41	BV	79	ARG	CZ-NH1	5.76	1.40	1.33
57	BB	304	U	C2-N3	5.76	1.41	1.37
57	BB	572	A	C5-C4	5.76	1.42	1.38
57	BB	1493	C	O3'-P	-5.76	1.54	1.61
57	BB	1929	G	C2-N3	5.76	1.37	1.32
57	BB	2020	A	C4'-C3'	5.76	1.59	1.53
57	BB	2038	G	P-O5'	-5.76	1.53	1.59
57	BB	2270	A	O3'-P	-5.76	1.54	1.61
21	AA	54	C	C5-C6	5.76	1.39	1.34
21	AA	390	U	C2-O2	5.76	1.27	1.22
21	AA	1042	A	C8-N7	-5.76	1.27	1.31
21	AA	1216	A	N3-C4	5.76	1.38	1.34
57	BB	1456	G	O4'-C1'	-5.76	1.34	1.41
57	BB	1631	G	C2'-C1'	-5.76	1.47	1.53
57	BB	2638	G	N9-C8	-5.76	1.33	1.37
21	AA	587	G	C3'-C2'	5.76	1.59	1.52
21	AA	838	G	O3'-P	-5.76	1.54	1.61
21	AA	848	C	O3'-P	-5.76	1.54	1.61
21	AA	1119	C	C5-C6	5.76	1.39	1.34
21	AA	1468	A	C6-N1	5.76	1.39	1.35
57	BB	536	G	C2-N3	5.76	1.37	1.32
57	BB	864	G	C6-N1	5.76	1.43	1.39
57	BB	1309	G	C2-N2	-5.76	1.28	1.34
57	BB	2140	G	C2'-C1'	-5.76	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2434	A	C4'-C3'	5.76	1.59	1.53
21	AA	1150	A	C6-N6	5.75	1.38	1.33
57	BB	599	A	N3-C4	-5.75	1.31	1.34
57	BB	729	G	N1-C2	5.75	1.42	1.37
57	BB	2247	A	C5-C4	-5.75	1.34	1.38
13	AB	29	PHE	CB-CG	5.75	1.61	1.51
21	AA	859	G	C6-N1	5.75	1.43	1.39
21	AA	893	C	P-O5'	-5.75	1.53	1.59
21	AA	1485	U	C4-C5	5.75	1.48	1.43
23	AW	7	A	C4'-C3'	-5.75	1.46	1.52
33	BN	8	ARG	CZ-NH1	5.75	1.40	1.33
38	BS	60	HIS	CB-CG	5.75	1.60	1.50
54	BF	7	TYR	CE2-CZ	5.75	1.46	1.38
57	BB	454	A	C4'-C3'	5.75	1.59	1.53
57	BB	858	G	C3'-O3'	5.75	1.50	1.42
57	BB	1238	G	O5'-C5'	5.75	1.53	1.44
57	BB	2102	G	N9-C4	-5.75	1.33	1.38
57	BB	2848	G	C4'-C3'	5.75	1.59	1.53
21	AA	727	G	P-O5'	-5.75	1.53	1.59
21	AA	916	U	C2-N3	5.75	1.41	1.37
21	AA	949	A	C2-N3	5.75	1.38	1.33
21	AA	1044	A	C2-N3	5.75	1.38	1.33
21	AA	1139	G	N7-C5	-5.75	1.35	1.39
21	AA	1468	A	N9-C8	-5.75	1.33	1.37
21	AA	1474	U	P-O5'	-5.75	1.53	1.59
57	BB	377	G	C3'-C2'	-5.75	1.46	1.52
57	BB	612	G	N9-C8	5.75	1.41	1.37
57	BB	1648	U	C2'-C1'	-5.75	1.47	1.53
57	BB	1996	C	P-O5'	-5.75	1.53	1.59
57	BB	2893	A	N9-C4	-5.75	1.34	1.37
57	BB	2899	A	N3-C4	-5.75	1.31	1.34
21	AA	437	U	O3'-P	-5.75	1.54	1.61
21	AA	975	A	O3'-P	-5.75	1.54	1.61
22	AY	12	U	C2-N3	-5.75	1.33	1.37
26	AV	12	G	C6-N1	5.75	1.43	1.39
57	BB	1651	G	C2-N3	5.75	1.37	1.32
57	BB	1942	C	C2-O2	-5.75	1.19	1.24
4	AM	112	ARG	CZ-NH1	5.75	1.40	1.33
21	AA	655	A	C6-N6	5.75	1.38	1.33
21	AA	1266	G	C4'-C3'	-5.75	1.46	1.52
57	BB	615	U	C2-N3	5.75	1.41	1.37
57	BB	900	A	C3'-C2'	5.75	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1122	G	C6-O6	-5.75	1.19	1.24
57	BB	1870	C	N3-C4	5.75	1.38	1.33
57	BB	2382	G	C2-N3	5.75	1.37	1.32
57	BB	2505	G	C4'-C3'	5.75	1.59	1.53
21	AA	36	C	C4-N4	5.75	1.39	1.33
21	AA	1231	G	C3'-O3'	5.75	1.50	1.42
57	BB	329	G	C5'-C4'	5.75	1.58	1.51
57	BB	336	C	C5'-C4'	-5.75	1.44	1.51
57	BB	617	G	P-O5'	-5.75	1.54	1.59
57	BB	926	G	C5-C6	-5.75	1.36	1.42
57	BB	980	A	C3'-C2'	5.75	1.59	1.52
57	BB	1891	G	N9-C4	-5.75	1.33	1.38
21	AA	125	U	C4'-C3'	5.75	1.59	1.53
21	AA	1515	G	C5'-C4'	5.75	1.58	1.51
26	AV	58	A	C3'-O3'	5.75	1.50	1.42
57	BB	371	A	N7-C5	5.75	1.42	1.39
57	BB	382	A	N9-C8	5.75	1.42	1.37
57	BB	962	G	C2'-C1'	-5.75	1.47	1.53
57	BB	1462	C	C2'-C1'	-5.75	1.47	1.53
57	BB	1741	C	N1-C6	5.75	1.40	1.37
21	AA	215	C	C2-O2	5.74	1.29	1.24
21	AA	600	A	P-O5'	-5.74	1.54	1.59
21	AA	657	U	N1-C6	5.74	1.43	1.38
57	BB	862	G	N1-C2	5.74	1.42	1.37
57	BB	1120	G	C5-C4	5.74	1.42	1.38
57	BB	1146	C	O3'-P	-5.74	1.54	1.61
57	BB	1162	G	N7-C5	-5.74	1.35	1.39
57	BB	1788	C	C4'-C3'	5.74	1.59	1.53
57	BB	2058	A	C3'-O3'	5.74	1.50	1.42
57	BB	2415	G	C6-O6	-5.74	1.19	1.24
57	BB	1011	G	C5-C6	5.74	1.48	1.42
57	BB	1260	A	N9-C8	-5.74	1.33	1.37
57	BB	1384	A	N7-C5	-5.74	1.35	1.39
57	BB	1622	G	O4'-C1'	5.74	1.49	1.41
57	BB	1661	G	C4'-O4'	5.74	1.53	1.45
5	AN	58	ARG	NE-CZ	5.74	1.40	1.33
18	AG	31	VAL	CB-CG2	5.74	1.65	1.52
21	AA	324	G	N3-C4	-5.74	1.31	1.35
21	AA	337	G	O4'-C1'	5.74	1.49	1.41
21	AA	463	U	N1-C6	5.74	1.43	1.38
21	AA	1426	G	C5-C4	-5.74	1.34	1.38
57	BB	103	A	O3'-P	-5.74	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	321	U	C4-C5	5.74	1.48	1.43
57	BB	1771	C	C2'-C1'	-5.74	1.47	1.53
58	BA	112	G	C2-N3	5.74	1.37	1.32
21	AA	471	U	C2-N3	5.74	1.41	1.37
21	AA	851	G	C2-N2	5.74	1.40	1.34
21	AA	901	A	C5-C4	5.74	1.42	1.38
21	AA	1130	A	C5-C6	5.74	1.46	1.41
21	AA	1218	C	C4'-O4'	5.74	1.53	1.45
26	AV	52	G	O3'-P	5.74	1.68	1.61
57	BB	445	C	N1-C2	-5.74	1.34	1.40
57	BB	625	G	N1-C2	5.74	1.42	1.37
57	BB	949	G	P-O5'	-5.74	1.54	1.59
57	BB	1153	C	C4-N4	5.74	1.39	1.33
57	BB	1832	C	P-O5'	-5.74	1.54	1.59
57	BB	2087	G	N9-C8	-5.74	1.33	1.37
57	BB	2235	G	N1-C2	5.74	1.42	1.37
57	BB	2582	G	C8-N7	5.74	1.34	1.30
57	BB	2597	G	N7-C5	-5.74	1.35	1.39
58	BA	18	G	C2-N3	5.74	1.37	1.32
21	AA	645	G	O4'-C1'	5.74	1.49	1.41
40	BU	8	ASP	CB-CG	5.74	1.63	1.51
57	BB	785	G	C2-N3	5.74	1.37	1.32
57	BB	1290	C	C2'-C1'	-5.74	1.47	1.53
21	AA	14	U	C1'-N1	5.74	1.57	1.48
21	AA	316	C	C4'-O4'	5.74	1.53	1.45
21	AA	392	C	N1-C6	-5.74	1.33	1.37
21	AA	734	G	C2'-C1'	-5.74	1.47	1.53
26	AV	47	U	N1-C6	-5.74	1.32	1.38
57	BB	339	U	C5'-C4'	5.74	1.58	1.51
57	BB	1454	C	P-O5'	-5.74	1.54	1.59
57	BB	1680	U	C2'-C1'	-5.74	1.47	1.53
57	BB	1726	C	C2'-C1'	-5.74	1.47	1.53
57	BB	2632	A	C2'-C1'	-5.74	1.47	1.53
21	AA	149	A	C2'-O2'	-5.73	1.34	1.41
21	AA	161	A	C5'-C4'	5.73	1.58	1.51
21	AA	397	A	N7-C5	-5.73	1.35	1.39
21	AA	789	U	C5'-C4'	5.73	1.58	1.51
21	AA	1056	U	C4-O4	5.73	1.28	1.23
21	AA	1190	G	N7-C5	-5.73	1.35	1.39
25	AZ	381	ARG	CZ-NH1	5.73	1.40	1.33
26	AV	24	U	C2-N3	5.73	1.41	1.37
57	BB	177	G	N7-C5	-5.73	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	328	C	C5'-C4'	5.73	1.58	1.51
21	AA	966	G	N9-C4	5.73	1.42	1.38
23	AW	24	G	C5-C4	5.73	1.42	1.38
54	BF	133	GLU	CD-OE1	5.73	1.31	1.25
57	BB	483	A	O3'-P	-5.73	1.54	1.61
57	BB	610	C	C4-N4	5.73	1.39	1.33
57	BB	953	G	C3'-C2'	5.73	1.59	1.52
57	BB	2115	G	N7-C5	-5.73	1.35	1.39
57	BB	2222	C	C4'-C3'	-5.73	1.46	1.52
57	BB	2498	C	N1-C2	5.73	1.45	1.40
58	BA	94	A	C6-N6	5.73	1.38	1.33
21	AA	1205	U	C3'-O3'	5.73	1.50	1.42
21	AA	1471	U	P-O5'	-5.73	1.54	1.59
22	AY	19	G	C2'-C1'	-5.73	1.47	1.53
23	AW	46	G	C3'-C2'	-5.73	1.46	1.52
26	AV	28	C	O4'-C1'	5.73	1.49	1.41
38	BS	11	ARG	CZ-NH2	5.73	1.40	1.33
57	BB	726	G	C8-N7	-5.73	1.27	1.30
57	BB	981	A	N7-C5	-5.73	1.35	1.39
57	BB	2437	G	C8-N7	5.73	1.34	1.30
57	BB	2718	G	C5-C6	-5.73	1.36	1.42
18	AG	69	ARG	NE-CZ	5.73	1.40	1.33
21	AA	1280	A	P-O5'	-5.73	1.54	1.59
57	BB	650	C	N1-C2	5.73	1.45	1.40
57	BB	1810	A	C6-N1	5.73	1.39	1.35
57	BB	2090	A	C2-N3	-5.73	1.28	1.33
21	AA	1307	U	N3-C4	5.73	1.43	1.38
22	AY	55	U	C2-N3	5.73	1.41	1.37
31	BL	33	ARG	CZ-NH2	5.73	1.40	1.33
57	BB	322	A	C5'-C4'	5.73	1.58	1.51
57	BB	438	G	C4'-C3'	5.73	1.59	1.53
57	BB	1741	C	C1'-N1	5.73	1.57	1.48
57	BB	2036	C	C4'-O4'	-5.73	1.38	1.45
57	BB	2578	G	N9-C4	5.73	1.42	1.38
57	BB	2753	A	C6-N6	5.73	1.38	1.33
21	AA	405	U	C4'-C3'	-5.73	1.46	1.52
21	AA	619	U	C2-O2	5.73	1.27	1.22
21	AA	852	G	O4'-C1'	5.73	1.49	1.41
57	BB	211	C	C2-N3	5.73	1.40	1.35
57	BB	1416	G	P-O5'	5.73	1.65	1.59
57	BB	2141	G	C6-N1	5.73	1.43	1.39
15	AD	51	GLY	CA-C	-5.72	1.42	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	193	C	C3'-O3'	5.72	1.50	1.42
26	AV	20	U	P-O5'	-5.72	1.54	1.59
57	BB	1083	U	C4-C5	5.72	1.48	1.43
57	BB	1160	G	C2-N3	5.72	1.37	1.32
57	BB	1473	G	C8-N7	-5.72	1.27	1.30
57	BB	1710	G	C8-N7	-5.72	1.27	1.30
57	BB	2204	G	N1-C2	5.72	1.42	1.37
57	BB	2488	G	C8-N7	5.72	1.34	1.30
21	AA	285	C	C4-C5	5.72	1.47	1.43
43	BX	36	ARG	CZ-NH1	5.72	1.40	1.33
43	BX	77	TYR	CE1-CZ	5.72	1.46	1.38
55	BG	54	ARG	CD-NE	5.72	1.56	1.46
57	BB	2775	G	C4'-C3'	-5.72	1.46	1.52
57	BB	194	G	C6-N1	5.72	1.43	1.39
57	BB	638	G	N7-C5	-5.72	1.35	1.39
57	BB	659	G	N1-C2	5.72	1.42	1.37
21	AA	455	G	C2-N3	5.72	1.37	1.32
21	AA	481	G	C6-N1	5.72	1.43	1.39
21	AA	568	G	N9-C8	5.72	1.41	1.37
21	AA	1203	C	C5-C6	5.72	1.39	1.34
21	AA	1406	U	C2-N3	5.72	1.41	1.37
21	AA	1434	A	P-O5'	-5.72	1.54	1.59
22	AY	20	G	C5'-C4'	5.72	1.58	1.51
22	AY	26	G	C2'-C1'	-5.72	1.47	1.53
22	AY	51	G	C5-C6	-5.72	1.36	1.42
23	AW	57	G	C8-N7	5.72	1.34	1.30
57	BB	352	A	C5-C4	-5.72	1.34	1.38
57	BB	1518	C	C4'-C3'	5.72	1.59	1.53
57	BB	1583	A	C5-C4	5.72	1.42	1.38
57	BB	2370	G	C8-N7	5.72	1.34	1.30
57	BB	2661	G	C5-C4	-5.72	1.34	1.38
21	AA	1089	G	N1-C2	5.72	1.42	1.37
21	AA	1094	G	N9-C8	5.72	1.41	1.37
21	AA	1384	C	P-O5'	-5.72	1.54	1.59
23	AW	6	G	C5'-C4'	5.72	1.58	1.51
57	BB	456	C	C5'-C4'	5.72	1.58	1.51
57	BB	1024	G	C4'-O4'	-5.72	1.38	1.45
57	BB	1633	G	C4'-C3'	5.72	1.59	1.53
57	BB	2397	G	N9-C4	-5.72	1.33	1.38
58	BA	29	A	C4'-O4'	-5.72	1.38	1.45
15	AD	191	SER	CA-CB	5.72	1.61	1.52
21	AA	678	U	P-O5'	-5.72	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1144	G	O3'-P	-5.72	1.54	1.61
21	AA	1234	C	C2'-C1'	-5.72	1.47	1.53
21	AA	1507	A	C5-C4	-5.72	1.34	1.38
57	BB	574	A	C6-N6	5.72	1.38	1.33
57	BB	586	A	C3'-O3'	5.72	1.50	1.42
57	BB	904	G	N9-C4	5.72	1.42	1.38
57	BB	1445	G	N7-C5	-5.72	1.35	1.39
57	BB	1519	G	C6-N1	5.72	1.43	1.39
57	BB	1695	G	C8-N7	-5.72	1.27	1.30
57	BB	1811	G	P-O5'	-5.72	1.54	1.59
57	BB	2869	G	C8-N7	-5.72	1.27	1.30
22	AY	23	A	N7-C5	-5.71	1.35	1.39
48	B1	48	TYR	CG-CD2	5.71	1.46	1.39
57	BB	683	U	C2-N3	5.71	1.41	1.37
57	BB	1174	U	C4-O4	5.71	1.28	1.23
57	BB	1724	G	C2-N2	5.71	1.40	1.34
57	BB	1878	G	C2'-C1'	-5.71	1.47	1.53
57	BB	2311	A	C5-C4	5.71	1.42	1.38
57	BB	2394	C	C5'-C4'	5.71	1.58	1.51
57	BB	2600	A	C5-C4	5.71	1.42	1.38
57	BB	2797	U	C2'-C1'	-5.71	1.47	1.53
57	BB	2813	A	N9-C4	-5.71	1.34	1.37
58	BA	116	G	C2'-C1'	-5.71	1.47	1.53
13	AB	76	SER	CA-CB	5.71	1.61	1.52
21	AA	85	U	O4'-C1'	5.71	1.49	1.41
21	AA	230	G	N1-C2	5.71	1.42	1.37
21	AA	466	A	C4'-O4'	5.71	1.52	1.45
57	BB	84	A	C3'-O3'	-5.71	1.34	1.42
57	BB	587	C	C2'-C1'	-5.71	1.47	1.53
57	BB	748	G	C6-N1	5.71	1.43	1.39
57	BB	1900	A	N3-C4	-5.71	1.31	1.34
57	BB	2049	G	C2'-C1'	-5.71	1.47	1.53
57	BB	2461	A	O3'-P	5.71	1.68	1.61
58	BA	3	C	C4-N4	5.71	1.39	1.33
14	AC	142	ARG	CZ-NH2	5.71	1.40	1.33
21	AA	1048	G	C4'-C3'	5.71	1.59	1.53
23	AW	49	C	P-O5'	-5.71	1.54	1.59
57	BB	316	C	C4'-O4'	5.71	1.52	1.45
57	BB	400	G	C2'-C1'	-5.71	1.47	1.53
57	BB	642	U	N1-C6	5.71	1.43	1.38
57	BB	1138	G	N9-C8	5.71	1.41	1.37
57	BB	1169	A	N1-C2	-5.71	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1336	A	O3'-P	-5.71	1.54	1.61
57	BB	1667	G	P-O5'	-5.71	1.54	1.59
57	BB	1806	C	C2'-C1'	-5.71	1.47	1.53
57	BB	322	A	C2-N3	5.71	1.38	1.33
57	BB	425	G	C6-N1	5.71	1.43	1.39
57	BB	1663	G	N1-C2	5.71	1.42	1.37
57	BB	2442	C	N3-C4	5.71	1.38	1.33
21	AA	587	G	C3'-O3'	5.71	1.50	1.42
21	AA	644	U	C2'-C1'	-5.71	1.47	1.53
21	AA	858	G	C3'-C2'	-5.71	1.46	1.52
21	AA	887	G	N9-C4	-5.71	1.33	1.38
21	AA	1021	A	C2'-C1'	-5.71	1.47	1.53
22	AY	10	G	N7-C5	-5.71	1.35	1.39
57	BB	809	G	C2'-C1'	-5.71	1.47	1.53
57	BB	1715	G	N3-C4	-5.71	1.31	1.35
57	BB	1982	U	C2-N3	5.71	1.41	1.37
57	BB	2094	A	C3'-C2'	-5.71	1.46	1.52
21	AA	820	U	C3'-C2'	5.71	1.59	1.52
21	AA	1527	U	C3'-C2'	-5.71	1.46	1.52
57	BB	104	A	N3-C4	5.71	1.38	1.34
57	BB	130	C	C5'-C4'	5.71	1.58	1.51
57	BB	858	G	C5-C4	5.71	1.42	1.38
57	BB	1078	U	N1-C6	-5.71	1.32	1.38
57	BB	1147	A	P-O5'	-5.71	1.54	1.59
57	BB	1606	C	O4'-C1'	5.71	1.49	1.41
57	BB	1814	G	C3'-C2'	-5.71	1.46	1.52
57	BB	1866	A	P-O5'	-5.71	1.54	1.59
57	BB	2076	U	N3-C4	5.71	1.43	1.38
21	AA	759	A	N1-C2	5.71	1.39	1.34
57	BB	174	U	C3'-O3'	5.71	1.50	1.42
57	BB	654	A	N9-C8	5.71	1.42	1.37
57	BB	1384	A	C4'-C3'	5.71	1.59	1.53
57	BB	1412	U	N1-C2	5.71	1.43	1.38
57	BB	1462	C	C4'-C3'	5.71	1.59	1.53
58	BA	113	C	N3-C4	5.71	1.38	1.33
16	AE	67	ARG	NE-CZ	5.70	1.40	1.33
57	BB	321	U	N3-C4	5.70	1.43	1.38
57	BB	1151	A	C6-N1	5.70	1.39	1.35
57	BB	1484	U	P-O5'	-5.70	1.54	1.59
57	BB	1890	A	P-O5'	-5.70	1.54	1.59
57	BB	2021	C	N3-C4	5.70	1.38	1.33
57	BB	2437	G	C2'-O2'	-5.70	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2781	A	C8-N7	5.70	1.35	1.31
58	BA	83	G	C2-N3	5.70	1.37	1.32
6	AO	87	ARG	CD-NE	5.70	1.56	1.46
21	AA	853	C	C4'-C3'	-5.70	1.46	1.52
21	AA	887	G	C5-C6	5.70	1.48	1.42
57	BB	1060	U	N1-C2	-5.70	1.33	1.38
57	BB	1809	A	C4'-O4'	-5.70	1.38	1.45
57	BB	2172	U	P-O5'	-5.70	1.54	1.59
57	BB	2185	U	P-O5'	5.70	1.65	1.59
13	AB	148	GLY	N-CA	-5.70	1.37	1.46
15	AD	13	ARG	NE-CZ	5.70	1.40	1.33
21	AA	494	G	N9-C4	-5.70	1.33	1.38
22	AY	63	C	N1-C6	5.70	1.40	1.37
22	AY	63	C	P-O5'	-5.70	1.54	1.59
57	BB	578	G	C5'-C4'	5.70	1.58	1.51
57	BB	590	A	C5-C6	5.70	1.46	1.41
57	BB	1770	G	C2-N3	5.70	1.37	1.32
57	BB	2191	A	N9-C8	-5.70	1.33	1.37
57	BB	2391	G	N3-C4	-5.70	1.31	1.35
57	BB	2677	G	N9-C8	-5.70	1.33	1.37
58	BA	113	C	N1-C6	-5.70	1.33	1.37
21	AA	110	C	C4-N4	5.70	1.39	1.33
21	AA	208	U	C3'-C2'	-5.70	1.46	1.52
21	AA	394	G	C2'-C1'	-5.70	1.47	1.53
21	AA	936	C	C2-N3	-5.70	1.31	1.35
57	BB	23	G	C8-N7	-5.70	1.27	1.30
57	BB	69	C	C4'-C3'	5.70	1.59	1.53
57	BB	196	A	P-O5'	-5.70	1.54	1.59
57	BB	719	C	C4-N4	5.70	1.39	1.33
57	BB	993	G	C5-C4	-5.70	1.34	1.38
57	BB	1071	G	C2-N3	5.70	1.37	1.32
57	BB	1510	G	C2-N3	5.70	1.37	1.32
57	BB	2173	A	N1-C2	5.70	1.39	1.34
57	BB	2190	G	O4'-C1'	-5.70	1.34	1.41
58	BA	15	A	N9-C8	5.70	1.42	1.37
21	AA	653	U	N1-C6	-5.70	1.32	1.38
57	BB	2346	A	C5-C4	5.70	1.42	1.38
7	AP	36	VAL	C-N	5.70	1.43	1.33
21	AA	301	G	C2-N2	-5.70	1.28	1.34
21	AA	1050	G	O4'-C1'	5.70	1.49	1.41
21	AA	1303	C	C4-N4	5.70	1.39	1.33
21	AA	1438	G	C2'-C1'	-5.70	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	BM	38	ARG	CZ-NH2	5.70	1.40	1.33
32	BM	55	ARG	CZ-NH1	5.70	1.40	1.33
57	BB	574	A	C6-N1	5.70	1.39	1.35
57	BB	910	A	N1-C2	-5.70	1.29	1.34
57	BB	1544	A	N7-C5	-5.70	1.35	1.39
57	BB	1548	A	C2-N3	-5.70	1.28	1.33
57	BB	1954	G	C5'-C4'	5.70	1.58	1.51
57	BB	2173	A	N9-C4	5.70	1.41	1.37
21	AA	390	U	O4'-C1'	-5.69	1.34	1.41
21	AA	503	C	O3'-P	-5.69	1.54	1.61
21	AA	778	G	C5'-C4'	5.69	1.58	1.51
57	BB	1648	U	O3'-P	-5.69	1.54	1.61
57	BB	1756	G	N7-C5	-5.69	1.35	1.39
57	BB	1772	A	N3-C4	5.69	1.38	1.34
57	BB	2556	C	C1'-N1	5.69	1.57	1.48
21	AA	618	C	C2'-C1'	-5.69	1.47	1.53
22	AY	62	A	C5-C4	-5.69	1.34	1.38
57	BB	377	G	N3-C4	-5.69	1.31	1.35
57	BB	460	A	N3-C4	-5.69	1.31	1.34
57	BB	2436	G	N3-C4	-5.69	1.31	1.35
57	BB	2452	C	P-O5'	-5.69	1.54	1.59
57	BB	2567	G	C2-N2	-5.69	1.28	1.34
21	AA	567	G	C3'-C2'	-5.69	1.46	1.52
21	AA	604	G	C4'-C3'	5.69	1.59	1.53
21	AA	1087	G	C2-N2	5.69	1.40	1.34
21	AA	1105	A	N3-C4	5.69	1.38	1.34
21	AA	1190	G	N3-C4	5.69	1.39	1.35
57	BB	531	C	C5-C6	-5.69	1.29	1.34
57	BB	780	G	N1-C2	5.69	1.42	1.37
57	BB	977	G	N1-C2	5.69	1.42	1.37
57	BB	1623	G	P-O5'	-5.69	1.54	1.59
57	BB	1941	C	N3-C4	5.69	1.38	1.33
57	BB	2451	A	C5'-C4'	5.69	1.58	1.51
57	BB	2794	C	C4-N4	5.69	1.39	1.33
57	BB	2879	A	C2'-C1'	-5.69	1.47	1.53
21	AA	212	G	C6-O6	-5.69	1.19	1.24
21	AA	452	A	C6-N6	5.69	1.38	1.33
21	AA	1079	G	N7-C5	-5.69	1.35	1.39
57	BB	91	A	C4'-O4'	-5.69	1.38	1.45
57	BB	1242	U	C2-N3	5.69	1.41	1.37
57	BB	1563	U	P-O5'	-5.69	1.54	1.59
57	BB	2381	A	N9-C8	5.69	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	92	U	N1-C6	-5.69	1.32	1.38
21	AA	470	C	C1'-N1	5.69	1.57	1.48
21	AA	608	A	C4'-C3'	5.69	1.59	1.53
21	AA	669	G	C2'-C1'	-5.69	1.47	1.53
21	AA	1493	A	C6-N1	5.69	1.39	1.35
45	BC	12	ARG	NE-CZ	5.69	1.40	1.33
57	BB	875	G	C5-C6	-5.69	1.36	1.42
57	BB	1059	G	C2-N3	5.69	1.37	1.32
57	BB	1111	A	P-O5'	-5.69	1.54	1.59
57	BB	1774	C	O4'-C1'	-5.69	1.34	1.41
57	BB	1878	G	C5'-C4'	5.69	1.58	1.51
57	BB	2796	U	N3-C4	5.69	1.43	1.38
8	AQ	10	ARG	CZ-NH1	5.69	1.40	1.33
21	AA	626	G	C8-N7	5.69	1.34	1.30
21	AA	1521	C	N3-C4	5.69	1.38	1.33
57	BB	689	A	N9-C8	-5.69	1.33	1.37
57	BB	1387	A	C5-C6	5.69	1.46	1.41
57	BB	1941	C	P-O5'	5.69	1.65	1.59
57	BB	2054	A	C5-C4	5.69	1.42	1.38
21	AA	364	A	C5-C6	5.68	1.46	1.41
21	AA	1425	U	C3'-C2'	-5.68	1.46	1.52
26	AV	68	C	C2-N3	5.68	1.40	1.35
57	BB	28	A	O4'-C1'	5.68	1.49	1.41
57	BB	46	G	N9-C4	5.68	1.42	1.38
57	BB	179	C	C5'-C4'	5.68	1.58	1.51
57	BB	900	A	C6-N6	5.68	1.38	1.33
57	BB	1165	A	C5'-C4'	5.68	1.58	1.51
57	BB	2115	G	O3'-P	-5.68	1.54	1.61
57	BB	2356	U	C3'-C2'	-5.68	1.46	1.52
57	BB	2387	U	C2-N3	5.68	1.41	1.37
57	BB	2618	G	C4'-C3'	5.68	1.59	1.53
57	BB	2778	A	N9-C4	5.68	1.41	1.37
21	AA	64	G	C8-N7	-5.68	1.27	1.30
21	AA	190	A	C2-N3	5.68	1.38	1.33
21	AA	363	A	N7-C5	5.68	1.42	1.39
21	AA	695	A	C2'-C1'	-5.68	1.47	1.53
21	AA	1016	A	C4'-O4'	-5.68	1.38	1.45
21	AA	1195	C	C4-N4	5.68	1.39	1.33
24	AX	12	A	C6-N6	5.68	1.38	1.33
57	BB	923	G	C2'-C1'	-5.68	1.47	1.53
57	BB	1033	U	C1'-N1	5.68	1.57	1.48
57	BB	1186	G	C5-C6	-5.68	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1525	A	O3'-P	-5.68	1.54	1.61
57	BB	1687	G	N9-C8	5.68	1.41	1.37
57	BB	2299	U	C2-N3	5.68	1.41	1.37
57	BB	2745	C	N3-C4	5.68	1.38	1.33
21	AA	690	G	C5-C6	-5.68	1.36	1.42
21	AA	713	G	P-O5'	5.68	1.65	1.59
21	AA	1482	G	C8-N7	-5.68	1.27	1.30
26	AV	28	C	C2'-C1'	-5.68	1.47	1.53
57	BB	413	C	C2-N3	5.68	1.40	1.35
57	BB	482	A	N9-C8	5.68	1.42	1.37
57	BB	1241	A	C5-C4	5.68	1.42	1.38
57	BB	2487	G	C5'-C4'	5.68	1.58	1.51
58	BA	13	G	N9-C8	5.68	1.41	1.37
21	AA	45	G	C6-N1	5.68	1.43	1.39
21	AA	559	A	C5-C4	5.68	1.42	1.38
23	AW	54	U	C5-C6	-5.68	1.29	1.34
55	BG	148	ARG	NE-CZ	5.68	1.40	1.33
57	BB	144	A	C5'-C4'	5.68	1.58	1.51
57	BB	470	A	C6-N6	5.68	1.38	1.33
57	BB	723	C	C4-C5	5.68	1.47	1.43
57	BB	2017	U	C4'-O4'	5.68	1.52	1.45
57	BB	2502	G	C5-C6	-5.68	1.36	1.42
57	BB	2741	A	C5-C6	5.68	1.46	1.41
21	AA	81	A	C8-N7	-5.68	1.27	1.31
21	AA	554	A	C8-N7	5.68	1.35	1.31
22	AY	44	A	N3-C4	-5.68	1.31	1.34
57	BB	36	G	N7-C5	-5.68	1.35	1.39
57	BB	144	A	N7-C5	-5.68	1.35	1.39
57	BB	1558	C	N3-C4	5.68	1.38	1.33
21	AA	487	A	N3-C4	-5.68	1.31	1.34
23	AW	33	U	C4'-O4'	-5.68	1.38	1.45
27	B5	12	ARG	NE-CZ	5.68	1.40	1.33
56	BH	50	ARG	NE-CZ	5.68	1.40	1.33
57	BB	1664	A	C5'-C4'	5.68	1.58	1.51
57	BB	1666	G	C2-N3	5.68	1.37	1.32
57	BB	1916	A	C4'-C3'	5.68	1.59	1.53
22	AY	4	G	C2'-C1'	-5.67	1.47	1.53
23	AW	14	A	C6-N6	5.67	1.38	1.33
24	AX	14	A	C5-C6	5.67	1.46	1.41
57	BB	180	G	N3-C4	5.67	1.39	1.35
57	BB	649	G	C2-N3	5.67	1.37	1.32
57	BB	673	C	C4'-O4'	-5.67	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1053	C	C4-N4	5.67	1.39	1.33
57	BB	1148	U	C3'-C2'	-5.67	1.46	1.52
57	BB	1797	G	C5-C6	-5.67	1.36	1.42
57	BB	2138	G	N1-C2	5.67	1.42	1.37
57	BB	2551	C	P-O5'	-5.67	1.54	1.59
57	BB	2763	G	N9-C4	5.67	1.42	1.38
21	AA	968	A	C6-N6	5.67	1.38	1.33
57	BB	239	C	C5-C6	5.67	1.38	1.34
57	BB	498	G	C5-C4	-5.67	1.34	1.38
57	BB	2120	G	C2-N3	5.67	1.37	1.32
57	BB	2526	G	N1-C2	5.67	1.42	1.37
58	BA	83	G	N3-C4	5.67	1.39	1.35
21	AA	168	G	C8-N7	-5.67	1.27	1.30
21	AA	1190	G	C3'-C2'	-5.67	1.46	1.52
21	AA	1234	C	N1-C6	5.67	1.40	1.37
22	AY	25	C	C4-N4	-5.67	1.28	1.33
23	AW	18	G	P-O5'	5.67	1.65	1.59
54	BF	6	TYR	CB-CG	5.67	1.60	1.51
57	BB	1	G	C2-N3	5.67	1.37	1.32
57	BB	591	U	N1-C6	5.67	1.43	1.38
57	BB	768	G	C2'-C1'	-5.67	1.47	1.53
57	BB	871	U	C2-N3	5.67	1.41	1.37
57	BB	917	A	N7-C5	-5.67	1.35	1.39
57	BB	991	C	C2-N3	5.67	1.40	1.35
57	BB	2019	A	N3-C4	5.67	1.38	1.34
21	AA	1289	A	C4'-C3'	5.67	1.59	1.53
26	AV	58	A	N9-C4	5.67	1.41	1.37
57	BB	679	C	N1-C6	5.67	1.40	1.37
57	BB	880	G	C2-N3	5.67	1.37	1.32
57	BB	1812	U	O3'-P	-5.67	1.54	1.61
21	AA	107	G	N1-C2	5.67	1.42	1.37
21	AA	1517	G	P-O5'	-5.67	1.54	1.59
22	AY	15	G	C2-N3	5.67	1.37	1.32
55	BG	89	VAL	C-N	5.67	1.43	1.33
57	BB	194	G	C5-C6	5.67	1.48	1.42
57	BB	242	G	C5'-C4'	5.67	1.58	1.51
57	BB	273	G	C8-N7	-5.67	1.27	1.30
57	BB	470	A	C8-N7	-5.67	1.27	1.31
57	BB	1218	G	C8-N7	-5.67	1.27	1.30
57	BB	1389	G	N1-C2	5.67	1.42	1.37
57	BB	2530	A	N3-C4	-5.67	1.31	1.34
21	AA	735	C	C5-C6	5.67	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	886	G	P-O5'	-5.67	1.54	1.59
21	AA	955	U	C2-O2	5.67	1.27	1.22
21	AA	1216	A	C5-C6	5.67	1.46	1.41
24	AX	16	A	P-O5'	-5.67	1.54	1.59
29	BJ	35	ARG	NE-CZ	5.67	1.40	1.33
57	BB	144	A	C5-C4	5.67	1.42	1.38
57	BB	1517	G	C2-N3	5.67	1.37	1.32
57	BB	1775	U	C3'-C2'	5.67	1.59	1.52
57	BB	1842	G	C5-C4	5.67	1.42	1.38
57	BB	1916	A	N1-C2	5.67	1.39	1.34
57	BB	2472	G	C5'-C4'	5.67	1.58	1.51
57	BB	2867	G	C2'-C1'	-5.67	1.47	1.53
5	AN	62	ARG	CZ-NH1	5.67	1.40	1.33
21	AA	565	U	O3'-P	-5.67	1.54	1.61
21	AA	1308	U	C2-N3	5.67	1.41	1.37
22	AY	29	A	C5-C6	-5.67	1.35	1.41
57	BB	1808	A	P-O5'	-5.67	1.54	1.59
57	BB	1929	G	N9-C4	-5.67	1.33	1.38
21	AA	1369	C	O3'-P	-5.66	1.54	1.61
34	BO	5	SER	CA-CB	5.66	1.61	1.52
57	BB	394	C	N3-C4	5.66	1.38	1.33
57	BB	475	C	C4-N4	5.66	1.39	1.33
57	BB	1702	G	C2-N2	5.66	1.40	1.34
57	BB	2638	G	C3'-O3'	5.66	1.50	1.42
21	AA	156	C	N3-C4	5.66	1.38	1.33
21	AA	161	A	C8-N7	5.66	1.35	1.31
21	AA	669	G	N9-C4	-5.66	1.33	1.38
21	AA	696	A	N7-C5	-5.66	1.35	1.39
21	AA	915	A	N9-C8	5.66	1.42	1.37
21	AA	1121	U	N3-C4	5.66	1.43	1.38
21	AA	1503	A	C3'-O3'	-5.66	1.34	1.42
22	AY	32	C	N3-C4	5.66	1.38	1.33
57	BB	130	C	N3-C4	5.66	1.38	1.33
57	BB	937	C	N1-C6	5.66	1.40	1.37
57	BB	942	G	C3'-C2'	5.66	1.59	1.52
57	BB	981	A	C8-N7	-5.66	1.27	1.31
57	BB	1502	A	O3'-P	-5.66	1.54	1.61
57	BB	1719	G	C6-N1	5.66	1.43	1.39
57	BB	2586	U	C2-N3	-5.66	1.33	1.37
21	AA	452	A	C8-N7	-5.66	1.27	1.31
21	AA	1292	G	C5-C6	5.66	1.48	1.42
25	AZ	379	GLY	N-CA	-5.66	1.37	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	BL	22	GLY	CA-C	-5.66	1.42	1.51
57	BB	131	A	O4'-C1'	5.66	1.49	1.41
57	BB	1212	G	C6-O6	5.66	1.29	1.24
57	BB	2822	G	C5-C4	-5.66	1.34	1.38
21	AA	872	A	C4'-O4'	-5.66	1.38	1.45
21	AA	1533	C	C5-C6	5.66	1.38	1.34
28	BI	28	GLY	N-CA	-5.66	1.37	1.46
29	BJ	14	ASP	N-CA	-5.66	1.35	1.46
57	BB	223	A	C3'-C2'	-5.66	1.46	1.52
57	BB	1315	C	C4'-C3'	5.66	1.59	1.53
57	BB	1614	A	C4'-O4'	-5.66	1.38	1.45
57	BB	1795	C	N1-C6	5.66	1.40	1.37
57	BB	2471	A	N7-C5	-5.66	1.35	1.39
57	BB	2778	A	C5-C4	5.66	1.42	1.38
21	AA	57	G	P-O5'	-5.66	1.54	1.59
21	AA	243	A	C4'-C3'	5.66	1.59	1.53
57	BB	617	G	C8-N7	5.66	1.34	1.30
57	BB	987	C	C4-N4	5.66	1.39	1.33
57	BB	1135	C	P-O5'	-5.66	1.54	1.59
57	BB	1285	A	N9-C8	5.66	1.42	1.37
57	BB	1568	G	O5'-C5'	5.66	1.53	1.44
57	BB	1882	U	O4'-C1'	5.66	1.49	1.41
57	BB	1915	U	N3-C4	5.66	1.43	1.38
57	BB	2123	G	C1'-N9	5.66	1.57	1.48
21	AA	42	G	N1-C2	5.66	1.42	1.37
21	AA	89	U	N3-C4	5.66	1.43	1.38
21	AA	449	G	C2'-C1'	-5.66	1.47	1.53
21	AA	1322	C	O3'-P	-5.66	1.54	1.61
21	AA	1380	U	P-O5'	5.66	1.65	1.59
21	AA	1501	C	C4-N4	5.66	1.39	1.33
23	AW	57	G	N3-C4	5.66	1.39	1.35
57	BB	504	A	O3'-P	-5.66	1.54	1.61
57	BB	1833	C	C5'-C4'	5.66	1.58	1.51
57	BB	1867	G	N1-C2	5.66	1.42	1.37
57	BB	2162	G	C3'-C2'	-5.66	1.46	1.52
57	BB	2755	C	C4'-C3'	-5.66	1.46	1.52
22	AY	33	U	C5-C6	-5.65	1.29	1.34
22	AY	61	C	O3'-P	-5.65	1.54	1.61
36	BQ	23	TYR	CE2-CZ	5.65	1.45	1.38
57	BB	212	G	N3-C4	-5.65	1.31	1.35
57	BB	532	A	C4'-C3'	5.65	1.59	1.53
57	BB	895	U	C2-N3	5.65	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2026	U	C5'-C4'	5.65	1.58	1.51
57	BB	2881	U	N1-C2	5.65	1.43	1.38
21	AA	184	G	N9-C8	-5.65	1.33	1.37
21	AA	908	A	C8-N7	-5.65	1.27	1.31
21	AA	953	G	N1-C2	5.65	1.42	1.37
57	BB	667	U	O3'-P	-5.65	1.54	1.61
57	BB	1652	A	N9-C8	-5.65	1.33	1.37
57	BB	1709	U	C2'-C1'	-5.65	1.47	1.53
57	BB	1772	A	C4'-C3'	5.65	1.59	1.53
57	BB	2821	A	C5-C4	5.65	1.42	1.38
21	AA	1044	A	N3-C4	-5.65	1.31	1.34
21	AA	1405	G	P-O5'	-5.65	1.54	1.59
21	AA	1503	A	C5'-C4'	5.65	1.58	1.51
26	AV	12	G	P-O5'	-5.65	1.54	1.59
26	AV	19	G	N1-C2	5.65	1.42	1.37
36	BQ	2	ARG	CZ-NH2	5.65	1.40	1.33
57	BB	257	C	C2'-C1'	-5.65	1.47	1.53
57	BB	633	A	C6-N6	5.65	1.38	1.33
57	BB	674	G	C6-N1	5.65	1.43	1.39
57	BB	1403	A	P-O5'	5.65	1.65	1.59
57	BB	1597	A	C2'-C1'	-5.65	1.47	1.53
57	BB	2344	U	C2'-C1'	5.65	1.59	1.53
57	BB	2759	G	C8-N7	-5.65	1.27	1.30
57	BB	2785	C	C4-N4	5.65	1.39	1.33
57	BB	2789	C	C2'-C1'	-5.65	1.47	1.53
21	AA	327	A	C6-N1	5.65	1.39	1.35
21	AA	656	G	C5-C6	-5.65	1.36	1.42
57	BB	188	G	C2-N3	5.65	1.37	1.32
57	BB	368	A	C2'-C1'	-5.65	1.47	1.53
57	BB	1803	A	N3-C4	5.65	1.38	1.34
57	BB	2459	A	C8-N7	-5.65	1.27	1.31
21	AA	90	C	N3-C4	5.65	1.38	1.33
21	AA	200	G	C8-N7	-5.65	1.27	1.30
21	AA	683	G	N7-C5	-5.65	1.35	1.39
21	AA	935	A	C2'-C1'	-5.65	1.47	1.53
21	AA	1185	G	N9-C8	5.65	1.41	1.37
21	AA	1226	C	C2-N3	5.65	1.40	1.35
23	AW	17	C	O3'-P	5.65	1.68	1.61
57	BB	424	G	C2-N3	5.65	1.37	1.32
57	BB	1372	U	C3'-C2'	-5.65	1.46	1.52
57	BB	2840	C	C4-N4	5.65	1.39	1.33
21	AA	408	A	N3-C4	5.65	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	181	A	C5-C4	-5.65	1.34	1.38
57	BB	761	A	N1-C2	5.65	1.39	1.34
57	BB	2007	U	C2'-C1'	5.65	1.59	1.53
57	BB	2419	U	N3-C4	5.65	1.43	1.38
57	BB	2856	A	O3'-P	-5.65	1.54	1.61
57	BB	2863	C	C2-O2	5.65	1.29	1.24
21	AA	188	C	C4-C5	-5.64	1.38	1.43
21	AA	588	G	C5'-C4'	5.64	1.58	1.51
21	AA	849	G	C2'-C1'	-5.64	1.47	1.53
21	AA	1361	G	C2-N3	5.64	1.37	1.32
22	AY	54	U	C5-C6	-5.64	1.29	1.34
57	BB	560	C	C4-N4	5.64	1.39	1.33
57	BB	739	A	C4'-C3'	-5.64	1.47	1.52
57	BB	1165	A	N9-C4	-5.64	1.34	1.37
57	BB	1254	A	P-O5'	5.64	1.65	1.59
57	BB	1280	G	C3'-C2'	-5.64	1.46	1.52
57	BB	1361	G	C8-N7	5.64	1.34	1.30
57	BB	1368	G	C3'-C2'	-5.64	1.46	1.52
57	BB	1743	G	O3'-P	-5.64	1.54	1.61
57	BB	2098	U	C3'-O3'	5.64	1.50	1.42
57	BB	2446	G	C6-N1	-5.64	1.35	1.39
57	BB	2584	U	O3'-P	-5.64	1.54	1.61
57	BB	2838	G	N3-C4	-5.64	1.31	1.35
57	BB	2877	G	C2-N2	5.64	1.40	1.34
58	BA	81	G	N1-C2	5.64	1.42	1.37
21	AA	499	A	C3'-C2'	-5.64	1.46	1.52
21	AA	631	C	N1-C2	-5.64	1.34	1.40
21	AA	795	C	C2'-C1'	-5.64	1.47	1.53
21	AA	1196	A	C6-N1	5.64	1.39	1.35
22	AY	57	G	C6-N1	-5.64	1.35	1.39
23	AW	51	U	C2'-C1'	-5.64	1.47	1.53
57	BB	447	A	C4'-C3'	5.64	1.59	1.53
57	BB	964	C	N3-C4	5.64	1.37	1.33
57	BB	973	A	C2'-C1'	-5.64	1.47	1.53
57	BB	2330	G	C2-N3	5.64	1.37	1.32
57	BB	2398	U	C2'-C1'	-5.64	1.47	1.53
57	BB	2501	C	C2-O2	-5.64	1.19	1.24
4	AM	70	ARG	NE-CZ	5.64	1.40	1.33
21	AA	196	A	C1'-N9	-5.64	1.39	1.46
57	BB	625	G	C2-N2	5.64	1.40	1.34
57	BB	1627	G	C4'-C3'	-5.64	1.47	1.52
57	BB	2206	C	C2'-C1'	-5.64	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2692	G	P-O5'	-5.64	1.54	1.59
21	AA	667	G	C4'-O4'	-5.64	1.38	1.45
21	AA	1082	A	P-O5'	-5.64	1.54	1.59
57	BB	64	A	N7-C5	5.64	1.42	1.39
57	BB	176	A	N9-C4	5.64	1.41	1.37
57	BB	224	U	C5-C6	5.64	1.39	1.34
57	BB	795	C	P-O5'	-5.64	1.54	1.59
57	BB	962	G	O3'-P	-5.64	1.54	1.61
57	BB	1426	G	C2-N3	5.64	1.37	1.32
57	BB	1614	A	C6-N6	5.64	1.38	1.33
57	BB	1801	A	C6-N6	5.64	1.38	1.33
57	BB	2145	C	C4'-C3'	-5.64	1.47	1.52
57	BB	2869	G	C4'-O4'	5.64	1.52	1.45
21	AA	95	C	C5-C6	5.64	1.38	1.34
21	AA	856	C	N1-C6	-5.64	1.33	1.37
21	AA	1427	C	C2-N3	5.64	1.40	1.35
57	BB	968	C	O4'-C1'	-5.64	1.34	1.41
21	AA	161	A	C6-N6	5.64	1.38	1.33
21	AA	1445	U	N1-C2	-5.64	1.33	1.38
57	BB	88	G	C8-N7	5.64	1.34	1.30
57	BB	197	A	C8-N7	5.64	1.35	1.31
57	BB	2121	G	C2-N2	5.64	1.40	1.34
57	BB	2302	U	C3'-O3'	5.64	1.50	1.42
57	BB	2525	G	P-O5'	5.64	1.65	1.59
57	BB	2679	A	N9-C8	5.64	1.42	1.37
21	AA	1150	A	N9-C8	5.63	1.42	1.37
22	AY	6	U	O4'-C1'	-5.63	1.34	1.41
47	B0	33	SER	CA-CB	5.63	1.61	1.52
57	BB	331	C	P-O5'	-5.63	1.54	1.59
57	BB	393	C	C4-N4	5.63	1.39	1.33
57	BB	515	A	N7-C5	-5.63	1.35	1.39
57	BB	1501	G	C8-N7	5.63	1.34	1.30
57	BB	1879	C	N3-C4	5.63	1.37	1.33
57	BB	1909	C	C4-C5	5.63	1.47	1.43
57	BB	2147	A	C6-N6	5.63	1.38	1.33
58	BA	36	C	O3'-P	-5.63	1.54	1.61
21	AA	53	A	O4'-C1'	-5.63	1.34	1.41
21	AA	196	A	O3'-P	-5.63	1.54	1.61
21	AA	693	G	C2-N2	5.63	1.40	1.34
21	AA	961	U	C2'-C1'	-5.63	1.47	1.53
57	BB	775	G	N9-C8	-5.63	1.33	1.37
57	BB	931	U	C5'-C4'	5.63	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1195	G	C8-N7	5.63	1.34	1.30
57	BB	2231	U	C3'-C2'	5.63	1.59	1.52
21	AA	1367	C	C4-C5	-5.63	1.38	1.43
26	AV	16	C	C3'-C2'	5.63	1.59	1.52
57	BB	420	C	C4-C5	-5.63	1.38	1.43
57	BB	736	C	N3-C4	5.63	1.37	1.33
57	BB	1489	C	C4'-C3'	5.63	1.59	1.53
57	BB	1498	C	C4'-O4'	-5.63	1.38	1.45
57	BB	2016	U	C5'-C4'	5.63	1.58	1.51
58	BA	52	A	N7-C5	5.63	1.42	1.39
21	AA	41	G	N9-C4	5.63	1.42	1.38
21	AA	152	A	C2-N3	5.63	1.38	1.33
57	BB	1013	C	C3'-C2'	-5.63	1.46	1.52
57	BB	2282	G	P-O5'	-5.63	1.54	1.59
57	BB	2431	U	C4'-C3'	-5.63	1.47	1.52
21	AA	115	G	C4'-O4'	5.63	1.52	1.45
21	AA	214	C	P-O5'	-5.63	1.54	1.59
21	AA	1077	G	C4'-O4'	-5.63	1.38	1.45
25	AZ	377	ARG	CD-NE	5.63	1.56	1.46
26	AV	8	U	C2-N3	5.63	1.41	1.37
57	BB	135	U	N1-C6	-5.63	1.32	1.38
57	BB	1831	G	C5-C6	-5.63	1.36	1.42
58	BA	104	A	C6-N6	5.63	1.38	1.33
1	AJ	13	PHE	CG-CD2	5.63	1.47	1.38
14	AC	130	ARG	NE-CZ	5.63	1.40	1.33
21	AA	43	C	C4-N4	5.63	1.39	1.33
21	AA	160	A	C5-C6	5.63	1.46	1.41
21	AA	228	A	C2-N3	5.63	1.38	1.33
21	AA	838	G	N3-C4	5.63	1.39	1.35
21	AA	1429	A	C6-N6	5.63	1.38	1.33
26	AV	15	G	P-O5'	-5.63	1.54	1.59
57	BB	348	A	P-O5'	-5.63	1.54	1.59
57	BB	800	A	C8-N7	5.63	1.35	1.31
57	BB	1099	G	N1-C2	5.63	1.42	1.37
57	BB	1433	A	O4'-C1'	-5.63	1.34	1.41
57	BB	2264	C	C4'-O4'	5.63	1.52	1.45
57	BB	2303	G	C5-C6	-5.63	1.36	1.42
57	BB	2365	G	N3-C4	-5.63	1.31	1.35
57	BB	2613	U	P-O5'	-5.63	1.54	1.59
21	AA	104	G	N9-C8	-5.62	1.33	1.37
21	AA	518	C	C5-C6	5.62	1.38	1.34
21	AA	733	G	C2'-C1'	-5.62	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	745	G	C3'-C2'	-5.62	1.46	1.52
21	AA	886	G	C2-N3	5.62	1.37	1.32
26	AV	27	U	P-O5'	-5.62	1.54	1.59
57	BB	2532	G	C2-N3	5.62	1.37	1.32
21	AA	266	G	C6-O6	-5.62	1.19	1.24
21	AA	327	A	C6-N6	5.62	1.38	1.33
21	AA	542	G	N1-C2	5.62	1.42	1.37
21	AA	580	C	C4'-O4'	5.62	1.52	1.45
21	AA	1268	G	C8-N7	-5.62	1.27	1.30
21	AA	1484	C	C3'-C2'	-5.62	1.46	1.52
57	BB	57	C	N1-C6	5.62	1.40	1.37
57	BB	77	G	C8-N7	5.62	1.34	1.30
57	BB	133	U	C4'-C3'	-5.62	1.47	1.52
57	BB	1328	A	C5-C4	-5.62	1.34	1.38
57	BB	1986	C	O3'-P	-5.62	1.54	1.61
57	BB	2311	A	C6-N6	5.62	1.38	1.33
57	BB	2424	C	C4-N4	5.62	1.39	1.33
21	AA	187	G	C4'-O4'	-5.62	1.38	1.45
21	AA	758	C	O3'-P	-5.62	1.54	1.61
21	AA	824	G	N7-C5	-5.62	1.35	1.39
26	AV	76	A	C6-N1	5.62	1.39	1.35
57	BB	864	G	P-O5'	-5.62	1.54	1.59
57	BB	905	A	C5'-C4'	5.62	1.58	1.51
57	BB	1146	C	C2-N3	5.62	1.40	1.35
57	BB	1451	C	N1-C6	5.62	1.40	1.37
57	BB	1470	A	N3-C4	-5.62	1.31	1.34
57	BB	2355	G	C8-N7	5.62	1.34	1.30
57	BB	2530	A	N7-C5	-5.62	1.35	1.39
57	BB	2830	C	N1-C6	5.62	1.40	1.37
58	BA	84	G	N3-C4	-5.62	1.31	1.35
21	AA	356	A	C8-N7	-5.62	1.27	1.31
21	AA	450	G	N3-C4	5.62	1.39	1.35
21	AA	1431	A	N9-C4	5.62	1.41	1.37
57	BB	839	U	N1-C6	5.62	1.43	1.38
57	BB	2185	U	C2-N3	5.62	1.41	1.37
2	AK	47	GLY	CA-C	-5.62	1.42	1.51
21	AA	561	U	C5'-C4'	5.62	1.58	1.51
21	AA	770	C	C4-N4	5.62	1.39	1.33
21	AA	922	G	C5'-C4'	5.62	1.58	1.51
21	AA	956	U	C5-C6	5.62	1.39	1.34
21	AA	962	C	P-O5'	-5.62	1.54	1.59
21	AA	1160	G	C6-N1	5.62	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1371	G	C2-N3	5.62	1.37	1.32
23	AW	73	A	C2'-C1'	-5.62	1.47	1.53
38	BS	95	ARG	CD-NE	5.62	1.55	1.46
43	BX	49	ARG	CZ-NH2	5.62	1.40	1.33
57	BB	233	A	C2-N3	5.62	1.38	1.33
57	BB	1220	G	N9-C8	-5.62	1.33	1.37
19	AH	90	GLU	CG-CD	5.62	1.60	1.51
21	AA	465	A	C4'-C3'	5.62	1.59	1.53
21	AA	865	A	P-O5'	5.62	1.65	1.59
57	BB	146	A	N1-C2	-5.62	1.29	1.34
57	BB	246	C	N3-C4	5.62	1.37	1.33
57	BB	418	C	O4'-C1'	5.62	1.49	1.41
57	BB	1491	G	N9-C4	5.62	1.42	1.38
21	AA	254	G	C4'-C3'	5.62	1.59	1.53
21	AA	345	C	C1'-N1	5.62	1.57	1.48
24	AX	18	G	C2'-C1'	-5.62	1.47	1.53
57	BB	480	A	C5-C4	5.62	1.42	1.38
57	BB	789	A	N3-C4	-5.62	1.31	1.34
57	BB	1658	C	C4-N4	5.62	1.39	1.33
57	BB	1836	C	C2-N3	-5.62	1.31	1.35
57	BB	2050	C	C2-O2	5.62	1.29	1.24
57	BB	2349	G	C3'-C2'	5.62	1.59	1.52
57	BB	2415	G	C8-N7	-5.62	1.27	1.30
57	BB	2539	C	C4-C5	-5.62	1.38	1.43
2	AK	67	GLU	CD-OE2	5.61	1.31	1.25
21	AA	246	A	C6-N1	5.61	1.39	1.35
21	AA	447	G	N1-C2	5.61	1.42	1.37
21	AA	1063	C	C4-C5	5.61	1.47	1.43
21	AA	1315	U	C4'-C3'	-5.61	1.47	1.52
25	AZ	287	GLU	CD-OE2	5.61	1.31	1.25
47	B0	12	ARG	CZ-NH2	5.61	1.40	1.33
55	BG	58	ALA	CA-CB	5.61	1.64	1.52
57	BB	362	A	P-O5'	5.61	1.65	1.59
57	BB	1199	U	C4'-C3'	-5.61	1.47	1.52
57	BB	2833	U	C2'-C1'	5.61	1.59	1.53
57	BB	2880	C	N3-C4	5.61	1.37	1.33
21	AA	817	C	C4-C5	5.61	1.47	1.43
57	BB	808	G	N1-C2	5.61	1.42	1.37
57	BB	2432	A	C8-N7	-5.61	1.27	1.31
21	AA	223	A	C2'-O2'	5.61	1.49	1.41
21	AA	289	G	P-O5'	-5.61	1.54	1.59
21	AA	646	G	N7-C5	-5.61	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	650	G	P-O5'	-5.61	1.54	1.59
57	BB	142	A	N1-C2	-5.61	1.29	1.34
57	BB	1025	G	P-O5'	5.61	1.65	1.59
57	BB	1697	G	C2'-C1'	-5.61	1.47	1.53
57	BB	2053	G	C4'-C3'	5.61	1.59	1.53
57	BB	2352	A	C8-N7	-5.61	1.27	1.31
57	BB	2390	U	C2'-O2'	-5.61	1.34	1.41
57	BB	2550	G	C3'-C2'	-5.61	1.46	1.52
58	BA	50	A	O4'-C1'	5.61	1.49	1.41
21	AA	1080	A	C4'-C3'	-5.61	1.47	1.52
24	AX	21	C	N1-C6	5.61	1.40	1.37
57	BB	590	A	N3-C4	5.61	1.38	1.34
57	BB	1143	A	C4'-C3'	5.61	1.59	1.53
57	BB	1854	A	C4'-C3'	5.61	1.59	1.53
57	BB	2585	U	C4'-O4'	-5.61	1.38	1.45
58	BA	79	G	C2'-O2'	5.61	1.49	1.41
21	AA	195	A	C3'-O3'	5.61	1.50	1.42
21	AA	1435	G	C5-C4	-5.61	1.34	1.38
23	AW	21	A	C4'-C3'	5.61	1.59	1.53
57	BB	654	A	C1'-N9	5.61	1.57	1.48
57	BB	807	U	C5'-C4'	5.61	1.58	1.51
57	BB	1166	G	C5'-C4'	5.61	1.58	1.51
57	BB	1550	C	C3'-O3'	5.61	1.50	1.42
57	BB	2326	C	C2'-C1'	5.61	1.59	1.53
57	BB	2579	C	C3'-C2'	-5.61	1.46	1.52
57	BB	2707	U	N1-C6	5.61	1.43	1.38
57	BB	2742	G	C2'-C1'	-5.61	1.47	1.53
58	BA	2	G	C2-N3	5.61	1.37	1.32
21	AA	1206	G	C5'-C4'	5.61	1.58	1.51
22	AY	20	G	C6-N1	5.61	1.43	1.39
57	BB	926	G	C2'-C1'	-5.61	1.47	1.53
57	BB	971	G	C5'-C4'	5.61	1.58	1.51
57	BB	1274	A	C5'-C4'	5.61	1.58	1.51
57	BB	2088	A	N7-C5	-5.61	1.35	1.39
57	BB	2736	A	N9-C8	5.61	1.42	1.37
20	AI	10	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	806	C	C5'-C4'	5.60	1.58	1.51
57	BB	1136	G	N9-C8	5.60	1.41	1.37
57	BB	1345	C	C4'-O4'	5.60	1.52	1.45
57	BB	2038	G	C2-N2	-5.60	1.28	1.34
21	AA	121	U	P-O5'	5.60	1.65	1.59
21	AA	278	G	C5-C6	-5.60	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1081	A	N9-C4	-5.60	1.34	1.37
22	AY	55	U	N3-C4	5.60	1.43	1.38
57	BB	337	C	N1-C6	-5.60	1.33	1.37
57	BB	995	C	C4-C5	5.60	1.47	1.43
57	BB	1326	U	N1-C6	5.60	1.43	1.38
57	BB	1430	G	C8-N7	5.60	1.34	1.30
57	BB	1535	A	C6-N1	5.60	1.39	1.35
57	BB	1587	G	N9-C8	5.60	1.41	1.37
57	BB	1703	G	C3'-C2'	-5.60	1.46	1.52
57	BB	2150	C	N1-C6	5.60	1.40	1.37
57	BB	2877	G	N3-C4	5.60	1.39	1.35
21	AA	313	A	N3-C4	-5.60	1.31	1.34
22	AY	70	C	C4-C5	5.60	1.47	1.43
50	B3	7	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	2182	U	C5-C6	5.60	1.39	1.34
57	BB	2799	A	C2-N3	5.60	1.38	1.33
21	AA	569	C	C3'-C2'	5.60	1.59	1.52
21	AA	654	G	P-O5'	5.60	1.65	1.59
21	AA	966	G	C6-N1	5.60	1.43	1.39
21	AA	1375	A	C6-N6	5.60	1.38	1.33
21	AA	1402	C	C2'-C1'	-5.60	1.47	1.53
22	AY	28	C	C5-C6	5.60	1.38	1.34
23	AW	34	G	N9-C4	5.60	1.42	1.38
35	BP	87	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	172	A	C6-N6	5.60	1.38	1.33
57	BB	181	A	N3-C4	-5.60	1.31	1.34
57	BB	1202	G	C2-N2	5.60	1.40	1.34
57	BB	1471	G	C5-C4	5.60	1.42	1.38
57	BB	2058	A	C5-C4	-5.60	1.34	1.38
57	BB	2497	A	C5'-C4'	5.60	1.58	1.51
57	BB	2723	C	N3-C4	5.60	1.37	1.33
21	AA	357	G	C8-N7	-5.60	1.27	1.30
21	AA	1033	G	C2'-C1'	-5.60	1.47	1.53
21	AA	1094	G	C2-N3	5.60	1.37	1.32
21	AA	1304	G	C2-N3	5.60	1.37	1.32
25	AZ	233	ARG	NE-CZ	5.60	1.40	1.33
29	BJ	34	ARG	NE-CZ	5.60	1.40	1.33
40	BU	93	ARG	NE-CZ	5.60	1.40	1.33
55	BG	135	ALA	CA-CB	5.60	1.64	1.52
57	BB	133	U	C2'-C1'	-5.60	1.47	1.53
57	BB	308	G	N7-C5	5.60	1.42	1.39
57	BB	1456	G	N9-C8	-5.60	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1509	A	C6-N6	5.60	1.38	1.33
57	BB	1609	A	C5-C4	-5.60	1.34	1.38
57	BB	2069	G	C6-N1	5.60	1.43	1.39
57	BB	2695	U	C5-C6	5.60	1.39	1.34
58	BA	44	G	N9-C4	-5.60	1.33	1.38
21	AA	528	C	C2-O2	5.60	1.29	1.24
21	AA	1473	G	N7-C5	-5.60	1.35	1.39
52	BD	124	ARG	NE-CZ	5.60	1.40	1.33
57	BB	2014	A	P-O5'	-5.60	1.54	1.59
21	AA	676	A	O4'-C1'	-5.59	1.34	1.41
21	AA	1297	G	C2'-C1'	-5.59	1.47	1.53
23	AW	6	G	C3'-C2'	5.59	1.59	1.52
46	BZ	29	ARG	CZ-NH1	5.59	1.40	1.33
57	BB	119	A	C5-C6	-5.59	1.36	1.41
57	BB	355	U	C1'-N1	5.59	1.57	1.48
57	BB	658	U	C4-O4	5.59	1.28	1.23
57	BB	1461	C	P-O5'	5.59	1.65	1.59
57	BB	1468	U	N1-C6	5.59	1.43	1.38
57	BB	1989	G	O4'-C1'	-5.59	1.34	1.41
57	BB	2174	C	C5-C6	5.59	1.38	1.34
57	BB	2392	A	N7-C5	-5.59	1.35	1.39
57	BB	2606	C	C2'-C1'	-5.59	1.47	1.53
57	BB	646	U	C3'-C2'	5.59	1.59	1.52
57	BB	2221	G	N3-C4	-5.59	1.31	1.35
57	BB	2407	A	N9-C8	5.59	1.42	1.37
57	BB	2544	G	N7-C5	-5.59	1.35	1.39
21	AA	46	G	N9-C8	-5.59	1.33	1.37
21	AA	55	A	C8-N7	-5.59	1.27	1.31
21	AA	957	U	C2'-C1'	-5.59	1.47	1.53
21	AA	1219	A	C2'-C1'	-5.59	1.47	1.53
22	AY	9	A	N1-C2	5.59	1.39	1.34
57	BB	27	G	C2-N2	-5.59	1.28	1.34
57	BB	73	A	N7-C5	-5.59	1.35	1.39
57	BB	226	A	N3-C4	-5.59	1.31	1.34
57	BB	435	C	N1-C2	5.59	1.45	1.40
57	BB	846	U	N1-C6	5.59	1.43	1.38
57	BB	1497	U	C2-N3	5.59	1.41	1.37
57	BB	1837	C	N3-C4	5.59	1.37	1.33
57	BB	2092	U	C4-C5	5.59	1.48	1.43
57	BB	2155	U	O5'-C5'	5.59	1.53	1.44
57	BB	2201	G	C2-N3	5.59	1.37	1.32
57	BB	140	C	C4-C5	5.59	1.47	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	933	A	C6-N1	5.59	1.39	1.35
57	BB	1149	G	C2'-O2'	-5.59	1.34	1.41
57	BB	2023	C	N1-C2	-5.59	1.34	1.40
57	BB	2407	A	N9-C4	5.59	1.41	1.37
57	BB	2424	C	C5-C6	-5.59	1.29	1.34
57	BB	2615	U	O3'-P	-5.59	1.54	1.61
23	AW	4	C	N3-C4	5.59	1.37	1.33
30	BK	70	ARG	CZ-NH2	5.59	1.40	1.33
57	BB	158	U	C2'-O2'	5.59	1.49	1.41
57	BB	205	G	C2-N3	5.59	1.37	1.32
57	BB	1194	A	P-O5'	5.59	1.65	1.59
57	BB	1636	U	C4-C5	-5.59	1.38	1.43
57	BB	1756	G	C5'-C4'	5.59	1.58	1.51
57	BB	2082	A	C4'-C3'	5.59	1.59	1.53
57	BB	2183	A	C6-N6	5.59	1.38	1.33
57	BB	2767	C	O3'-P	-5.59	1.54	1.61
21	AA	352	C	N1-C6	5.59	1.40	1.37
21	AA	706	A	C4'-C3'	-5.59	1.47	1.52
21	AA	1175	G	C2-N3	5.59	1.37	1.32
21	AA	1243	C	N1-C6	5.59	1.40	1.37
21	AA	1381	U	C5-C6	5.59	1.39	1.34
21	AA	1383	C	N3-C4	5.59	1.37	1.33
57	BB	196	A	C2'-O2'	-5.59	1.34	1.41
57	BB	329	G	N7-C5	-5.59	1.35	1.39
57	BB	489	G	C2-N3	5.59	1.37	1.32
57	BB	2102	G	C4'-O4'	5.59	1.52	1.45
57	BB	2233	U	C2'-C1'	-5.59	1.47	1.53
57	BB	2313	C	C3'-C2'	5.59	1.59	1.52
21	AA	66	A	C5-C6	-5.58	1.36	1.41
21	AA	1290	G	C5-C6	-5.58	1.36	1.42
21	AA	1502	A	N3-C4	-5.58	1.31	1.34
25	AZ	171	ARG	NE-CZ	5.58	1.40	1.33
31	BL	21	ARG	NE-CZ	5.58	1.40	1.33
57	BB	880	G	O3'-P	-5.58	1.54	1.61
57	BB	1876	A	C4'-C3'	5.58	1.59	1.53
58	BA	15	A	C5-C4	5.58	1.42	1.38
21	AA	304	U	N3-C4	5.58	1.43	1.38
21	AA	398	U	N3-C4	5.58	1.43	1.38
57	BB	43	G	C8-N7	-5.58	1.27	1.30
57	BB	85	G	C8-N7	-5.58	1.27	1.30
57	BB	396	G	N3-C4	5.58	1.39	1.35
57	BB	786	C	C4-N4	5.58	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	960	A	O3'-P	-5.58	1.54	1.61
57	BB	1102	C	N1-C2	5.58	1.45	1.40
57	BB	1563	U	C2'-C1'	-5.58	1.47	1.53
57	BB	1585	C	C1'-N1	5.58	1.57	1.48
57	BB	1979	U	N1-C2	5.58	1.43	1.38
57	BB	2096	C	C4-N4	5.58	1.39	1.33
57	BB	2169	A	C4'-O4'	5.58	1.52	1.45
58	BA	51	G	C2-N3	5.58	1.37	1.32
21	AA	347	G	N9-C4	5.58	1.42	1.38
21	AA	473	U	C4-O4	5.58	1.28	1.23
21	AA	679	C	C4'-C3'	5.58	1.59	1.53
21	AA	1195	C	C4-C5	-5.58	1.38	1.43
21	AA	1245	C	C4-N4	5.58	1.39	1.33
21	AA	1265	C	C3'-C2'	-5.58	1.46	1.52
57	BB	566	U	N1-C6	-5.58	1.32	1.38
57	BB	699	A	C5'-C4'	5.58	1.58	1.51
57	BB	902	C	P-O5'	-5.58	1.54	1.59
57	BB	1357	C	C2-O2	5.58	1.29	1.24
57	BB	2064	C	N1-C2	5.58	1.45	1.40
57	BB	2535	G	C5-C6	-5.58	1.36	1.42
2	AK	121	ARG	CD-NE	5.58	1.55	1.46
21	AA	933	G	C2-N3	5.58	1.37	1.32
57	BB	1273	U	C4-O4	5.58	1.28	1.23
58	BA	104	A	C4'-O4'	5.58	1.52	1.45
21	AA	1050	G	C5-C4	5.58	1.42	1.38
21	AA	1502	A	C8-N7	-5.58	1.27	1.31
38	BS	7	HIS	CB-CG	5.58	1.60	1.50
54	BF	33	ILE	CA-C	-5.58	1.38	1.52
57	BB	385	C	C4-N4	5.58	1.39	1.33
57	BB	792	A	C5-C6	5.58	1.46	1.41
57	BB	2183	A	C5-C4	5.58	1.42	1.38
57	BB	2890	G	N3-C4	-5.58	1.31	1.35
58	BA	90	C	C4-C5	5.58	1.47	1.43
21	AA	706	A	O3'-P	-5.58	1.54	1.61
21	AA	1152	A	C2-N3	5.58	1.38	1.33
35	BP	47	ILE	CA-CB	-5.58	1.42	1.54
57	BB	355	U	C5'-C4'	5.58	1.58	1.51
57	BB	1619	G	N1-C2	-5.58	1.33	1.37
57	BB	1855	U	C4'-C3'	-5.58	1.47	1.52
57	BB	1855	U	P-O5'	-5.58	1.54	1.59
18	AG	150	PHE	CE1-CZ	5.58	1.48	1.37
21	AA	704	A	C3'-O3'	5.58	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1487	G	C2-N2	5.58	1.40	1.34
30	BK	90	SER	CA-CB	5.58	1.61	1.52
57	BB	177	G	P-O5'	-5.58	1.54	1.59
57	BB	578	G	C5-C4	-5.58	1.34	1.38
57	BB	1847	A	C2'-C1'	-5.58	1.47	1.53
57	BB	2190	G	C5'-C4'	5.58	1.58	1.51
57	BB	2249	U	P-O5'	-5.58	1.54	1.59
57	BB	2362	C	P-O5'	-5.58	1.54	1.59
21	AA	244	U	O3'-P	-5.57	1.54	1.61
21	AA	653	U	C4'-C3'	5.57	1.59	1.53
21	AA	954	G	N3-C4	5.57	1.39	1.35
21	AA	1262	C	O3'-P	-5.57	1.54	1.61
21	AA	1423	G	C2-N3	5.57	1.37	1.32
25	AZ	58	ARG	CZ-NH1	5.57	1.40	1.33
57	BB	729	G	C5-C6	-5.57	1.36	1.42
57	BB	1026	G	C6-N1	5.57	1.43	1.39
57	BB	1039	A	N3-C4	5.57	1.38	1.34
57	BB	2888	C	O3'-P	5.57	1.67	1.61
58	BA	62	C	N1-C6	5.57	1.40	1.37
57	BB	1403	A	C5'-C4'	5.57	1.58	1.51
57	BB	2277	G	N7-C5	-5.57	1.35	1.39
21	AA	303	A	C5-C6	-5.57	1.36	1.41
21	AA	1170	A	N1-C2	5.57	1.39	1.34
23	AW	47	U	C5'-C4'	5.57	1.58	1.51
57	BB	648	G	P-O5'	-5.57	1.54	1.59
57	BB	744	U	N1-C2	5.57	1.43	1.38
57	BB	997	G	C4'-C3'	5.57	1.59	1.53
57	BB	1666	G	C2'-C1'	-5.57	1.47	1.53
57	BB	2349	G	N7-C5	-5.57	1.35	1.39
57	BB	2475	C	N3-C4	5.57	1.37	1.33
57	BB	2672	U	P-O5'	-5.57	1.54	1.59
21	AA	328	C	C2-N3	5.57	1.40	1.35
21	AA	585	G	C2-N3	5.57	1.37	1.32
21	AA	950	U	C2-N3	5.57	1.41	1.37
21	AA	983	A	N9-C4	5.57	1.41	1.37
57	BB	1341	G	N3-C4	-5.57	1.31	1.35
57	BB	1395	A	N9-C4	-5.57	1.34	1.37
21	AA	60	A	C5-C6	-5.57	1.36	1.41
21	AA	70	U	P-O5'	-5.57	1.54	1.59
21	AA	124	C	C2'-C1'	-5.57	1.47	1.53
21	AA	368	U	C2-N3	5.57	1.41	1.37
21	AA	779	C	N1-C6	5.57	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1039	G	C4'-O4'	5.57	1.52	1.45
21	AA	1330	U	N3-C4	5.57	1.43	1.38
21	AA	1405	G	C6-N1	5.57	1.43	1.39
21	AA	1441	A	N7-C5	-5.57	1.35	1.39
57	BB	2	G	C2'-C1'	-5.57	1.47	1.53
57	BB	1334	G	P-O5'	-5.57	1.54	1.59
57	BB	1492	G	C4'-O4'	5.57	1.52	1.45
57	BB	2220	U	N1-C2	-5.57	1.33	1.38
21	AA	41	G	N9-C8	5.57	1.41	1.37
21	AA	1001	C	N3-C4	5.57	1.37	1.33
57	BB	6	A	C6-N1	5.57	1.39	1.35
57	BB	952	G	N9-C8	5.57	1.41	1.37
57	BB	1717	A	C8-N7	-5.57	1.27	1.31
21	AA	399	G	C2'-C1'	-5.56	1.47	1.53
57	BB	1351	C	C2'-C1'	-5.56	1.47	1.53
21	AA	509	A	N7-C5	-5.56	1.35	1.39
21	AA	758	C	C2'-C1'	-5.56	1.47	1.53
21	AA	922	G	C5-C4	-5.56	1.34	1.38
21	AA	1078	U	P-O5'	5.56	1.65	1.59
21	AA	1410	A	C8-N7	-5.56	1.27	1.31
21	AA	1479	C	C3'-C2'	-5.56	1.46	1.52
57	BB	950	G	P-O5'	-5.56	1.54	1.59
57	BB	2072	C	P-O5'	-5.56	1.54	1.59
21	AA	875	U	C2-O2	5.56	1.27	1.22
21	AA	1294	G	N1-C2	5.56	1.42	1.37
31	BL	50	PHE	CG-CD1	5.56	1.47	1.38
57	BB	505	A	C4'-O4'	5.56	1.52	1.45
57	BB	1269	A	C5'-C4'	5.56	1.58	1.51
57	BB	1595	C	C5'-C4'	5.56	1.58	1.51
57	BB	1792	G	C2'-C1'	-5.56	1.47	1.53
57	BB	2089	C	P-O5'	-5.56	1.54	1.59
57	BB	2272	U	C4'-C3'	5.56	1.59	1.53
58	BA	52	A	C8-N7	-5.56	1.27	1.31
21	AA	226	G	C2-N3	5.56	1.37	1.32
21	AA	382	A	P-O5'	-5.56	1.54	1.59
21	AA	1197	A	C5-C6	5.56	1.46	1.41
57	BB	219	A	C2'-C1'	-5.56	1.47	1.53
57	BB	843	G	C2'-C1'	-5.56	1.47	1.53
57	BB	1085	A	N1-C2	5.56	1.39	1.34
57	BB	1481	U	C1'-N1	5.56	1.57	1.48
58	BA	94	A	C5-C6	-5.56	1.36	1.41
11	AT	73	ARG	CZ-NH1	5.56	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	385	C	N1-C6	5.56	1.40	1.37
21	AA	427	U	C2-N3	5.56	1.41	1.37
21	AA	1054	C	N3-C4	5.56	1.37	1.33
21	AA	1123	U	C4'-C3'	5.56	1.59	1.53
26	AV	68	C	N1-C6	5.56	1.40	1.37
52	BD	179	ARG	CZ-NH2	5.56	1.40	1.33
57	BB	7	G	C4'-O4'	5.56	1.52	1.45
57	BB	37	C	C2'-C1'	-5.56	1.47	1.53
57	BB	127	A	C5-C4	5.56	1.42	1.38
57	BB	319	G	N1-C2	5.56	1.42	1.37
57	BB	510	C	C2-N3	5.56	1.40	1.35
57	BB	562	U	C4'-C3'	-5.56	1.47	1.52
57	BB	867	C	N3-C4	5.56	1.37	1.33
57	BB	1115	G	C8-N7	-5.56	1.27	1.30
57	BB	1337	G	C8-N7	-5.56	1.27	1.30
57	BB	1947	C	C4-N4	5.56	1.39	1.33
57	BB	2282	G	O4'-C1'	-5.56	1.34	1.41
58	BA	23	G	N1-C2	5.56	1.42	1.37
21	AA	43	C	N1-C2	5.56	1.45	1.40
21	AA	235	C	O3'-P	-5.56	1.54	1.61
21	AA	590	U	N1-C6	5.56	1.43	1.38
57	BB	1823	G	C2'-O2'	-5.56	1.34	1.41
57	BB	2063	C	C4'-O4'	-5.56	1.38	1.45
5	AN	60	ARG	CZ-NH2	5.55	1.40	1.33
21	AA	40	C	C5'-C4'	5.55	1.58	1.51
21	AA	421	U	C4'-C3'	5.55	1.59	1.53
21	AA	486	U	N1-C6	5.55	1.43	1.38
21	AA	741	G	N9-C8	5.55	1.41	1.37
21	AA	1250	A	N9-C4	5.55	1.41	1.37
57	BB	31	C	O3'-P	5.55	1.67	1.61
57	BB	110	G	C4'-C3'	-5.55	1.47	1.52
57	BB	174	U	C5-C6	5.55	1.39	1.34
57	BB	411	G	C5-C4	5.55	1.42	1.38
57	BB	672	C	O4'-C1'	5.55	1.48	1.41
57	BB	908	C	C4-C5	5.55	1.47	1.43
57	BB	1473	G	C2'-C1'	-5.55	1.47	1.53
57	BB	1650	A	C5-C6	5.55	1.46	1.41
57	BB	1851	U	N1-C2	5.55	1.43	1.38
57	BB	1949	G	C5-C6	-5.55	1.36	1.42
57	BB	2213	U	C2-N3	5.55	1.41	1.37
57	BB	2424	C	N1-C2	5.55	1.45	1.40
57	BB	2633	G	C4'-O4'	-5.55	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2674	G	N3-C4	-5.55	1.31	1.35
21	AA	22	G	C2'-C1'	-5.55	1.47	1.53
21	AA	278	G	C3'-C2'	-5.55	1.46	1.52
21	AA	370	C	N1-C6	5.55	1.40	1.37
21	AA	455	G	P-O5'	-5.55	1.54	1.59
21	AA	523	A	N7-C5	-5.55	1.35	1.39
21	AA	746	A	C4'-C3'	-5.55	1.47	1.52
23	AW	19	G	O3'-P	-5.55	1.54	1.61
57	BB	1061	U	O3'-P	-5.55	1.54	1.61
57	BB	2279	G	N9-C8	-5.55	1.33	1.37
57	BB	2813	A	C3'-C2'	5.55	1.59	1.52
21	AA	579	A	N7-C5	5.55	1.42	1.39
21	AA	711	G	C8-N7	-5.55	1.27	1.30
21	AA	1158	C	C5'-C4'	5.55	1.58	1.51
21	AA	1295	U	C2-N3	5.55	1.41	1.37
22	AY	44	A	C5'-C4'	5.55	1.58	1.51
57	BB	1336	A	C2-N3	5.55	1.38	1.33
57	BB	1448	G	C5'-C4'	5.55	1.58	1.51
57	BB	1789	A	C4'-O4'	5.55	1.52	1.45
21	AA	80	A	C5-C4	5.55	1.42	1.38
21	AA	365	U	P-O5'	-5.55	1.54	1.59
21	AA	410	G	C8-N7	-5.55	1.27	1.30
21	AA	1266	G	C3'-C2'	-5.55	1.46	1.52
21	AA	1275	A	C5-C4	-5.55	1.34	1.38
34	BO	112	GLU	CG-CD	5.55	1.60	1.51
57	BB	2772	C	C4-C5	-5.55	1.38	1.43
57	BB	2868	A	N3-C4	-5.55	1.31	1.34
57	BB	2898	U	C2-N3	5.55	1.41	1.37
13	AB	201	GLY	CA-C	-5.55	1.43	1.51
21	AA	124	C	C2-N3	5.55	1.40	1.35
21	AA	412	A	C4'-C3'	5.55	1.59	1.53
22	AY	20	G	N9-C4	5.55	1.42	1.38
57	BB	1142	A	C2'-C1'	-5.55	1.47	1.53
57	BB	1945	G	P-O5'	5.55	1.65	1.59
2	AK	55	ARG	CZ-NH1	5.55	1.40	1.33
21	AA	381	C	C2'-O2'	-5.55	1.34	1.41
21	AA	921	U	C2-N3	5.55	1.41	1.37
21	AA	1045	C	N3-C4	5.55	1.37	1.33
26	AV	9	G	C6-N1	5.55	1.43	1.39
57	BB	55	G	C6-N1	5.55	1.43	1.39
57	BB	617	G	C5'-C4'	5.55	1.58	1.51
57	BB	1104	C	C4-C5	5.55	1.47	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1356	G	C5-C6	5.55	1.47	1.42
57	BB	1644	C	O3'-P	-5.55	1.54	1.61
57	BB	1863	G	C8-N7	-5.55	1.27	1.30
57	BB	2522	U	C5-C6	5.55	1.39	1.34
57	BB	2560	A	C6-N1	5.55	1.39	1.35
57	BB	2826	A	C5'-C4'	5.55	1.58	1.51
21	AA	600	A	C5-C4	-5.54	1.34	1.38
25	AZ	133	PHE	CG-CD2	5.54	1.47	1.38
51	B4	4	ARG	NE-CZ	5.54	1.40	1.33
57	BB	388	G	P-O5'	-5.54	1.54	1.59
57	BB	524	G	N9-C4	-5.54	1.33	1.38
57	BB	880	G	N1-C2	5.54	1.42	1.37
57	BB	2086	U	C2'-C1'	-5.54	1.47	1.53
57	BB	2388	A	C8-N7	5.54	1.35	1.31
57	BB	2577	A	N9-C8	-5.54	1.33	1.37
40	BU	94	PHE	CG-CD1	5.54	1.47	1.38
57	BB	473	G	C8-N7	-5.54	1.27	1.30
57	BB	485	C	C5'-C4'	5.54	1.58	1.51
57	BB	793	A	C5'-C4'	5.54	1.58	1.51
57	BB	1415	U	C4-C5	5.54	1.48	1.43
57	BB	1614	A	N9-C8	5.54	1.42	1.37
57	BB	1814	G	O3'-P	-5.54	1.54	1.61
57	BB	1989	G	N3-C4	-5.54	1.31	1.35
57	BB	2357	G	C8-N7	-5.54	1.27	1.30
21	AA	62	U	C1'-N1	5.54	1.57	1.48
21	AA	1208	C	C1'-N1	5.54	1.57	1.48
22	AY	60	C	C2'-C1'	-5.54	1.47	1.53
30	BK	14	GLY	CA-C	-5.54	1.43	1.51
57	BB	74	A	C2-N3	5.54	1.38	1.33
57	BB	410	G	C2'-C1'	-5.54	1.47	1.53
57	BB	788	A	C6-N1	5.54	1.39	1.35
57	BB	946	C	C2'-C1'	-5.54	1.47	1.53
57	BB	991	C	N3-C4	5.54	1.37	1.33
21	AA	535	A	N3-C4	5.54	1.38	1.34
21	AA	764	C	C4-N4	5.54	1.39	1.33
21	AA	858	G	C5-C6	-5.54	1.36	1.42
57	BB	1574	C	N1-C6	5.54	1.40	1.37
57	BB	1641	A	N9-C4	-5.54	1.34	1.37
57	BB	2692	G	C2'-C1'	-5.54	1.47	1.53
58	BA	84	G	C2-N3	5.54	1.37	1.32
21	AA	152	A	C8-N7	-5.54	1.27	1.31
21	AA	221	C	N3-C4	5.54	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	611	C	C2-N3	5.54	1.40	1.35
21	AA	626	G	N9-C4	-5.54	1.33	1.38
21	AA	833	G	N1-C2	5.54	1.42	1.37
21	AA	969	A	N9-C8	-5.54	1.33	1.37
21	AA	1141	C	C4-N4	5.54	1.39	1.33
57	BB	88	G	C2-N2	5.54	1.40	1.34
57	BB	659	G	C8-N7	-5.54	1.27	1.30
57	BB	792	A	N9-C4	-5.54	1.34	1.37
57	BB	899	A	P-O5'	-5.54	1.54	1.59
57	BB	900	A	C1'-N9	5.54	1.57	1.48
57	BB	1329	U	O3'-P	-5.54	1.54	1.61
57	BB	1367	A	N9-C4	5.54	1.41	1.37
57	BB	1721	G	C6-O6	-5.54	1.19	1.24
57	BB	1874	C	C2'-O2'	5.54	1.48	1.41
57	BB	1997	C	C4-C5	5.54	1.47	1.43
57	BB	2216	G	C6-N1	5.54	1.43	1.39
57	BB	2526	G	C3'-C2'	-5.54	1.46	1.52
57	BB	2563	U	O3'-P	-5.54	1.54	1.61
57	BB	2759	G	C2-N3	5.54	1.37	1.32
21	AA	1365	G	O3'-P	-5.54	1.54	1.61
21	AA	1474	U	N3-C4	5.54	1.43	1.38
57	BB	1167	C	C3'-C2'	-5.54	1.46	1.52
57	BB	1247	A	C6-N1	5.54	1.39	1.35
57	BB	1930	G	N1-C2	5.54	1.42	1.37
57	BB	2286	G	C4'-O4'	-5.54	1.38	1.45
21	AA	51	A	N9-C8	-5.54	1.33	1.37
21	AA	975	A	C4'-C3'	-5.54	1.47	1.52
21	AA	1329	A	N3-C4	5.54	1.38	1.34
21	AA	1396	A	C6-N6	5.54	1.38	1.33
26	AV	30	G	C2-N3	5.54	1.37	1.32
57	BB	199	A	C4'-O4'	5.54	1.52	1.45
57	BB	629	G	C6-N1	5.54	1.43	1.39
57	BB	1649	G	C2'-C1'	-5.54	1.47	1.53
57	BB	1936	A	N9-C8	-5.54	1.33	1.37
57	BB	2044	C	N1-C2	5.54	1.45	1.40
57	BB	2314	A	C2'-C1'	-5.54	1.47	1.53
57	BB	2612	C	C3'-C2'	-5.54	1.46	1.52
57	BB	2677	G	C1'-N9	5.54	1.57	1.48
21	AA	168	G	C5-C6	-5.53	1.36	1.42
21	AA	476	U	C2-N3	5.53	1.41	1.37
21	AA	591	U	C5-C6	5.53	1.39	1.34
21	AA	1479	C	C4-C5	5.53	1.47	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1495	U	C5'-C4'	5.53	1.57	1.51
57	BB	465	G	C2'-O2'	5.53	1.48	1.41
57	BB	1389	G	C2-N2	5.53	1.40	1.34
57	BB	1545	A	N7-C5	-5.53	1.35	1.39
57	BB	2384	U	C4-O4	-5.53	1.19	1.23
57	BB	2881	U	C2'-C1'	-5.53	1.47	1.53
21	AA	515	G	C6-N1	5.53	1.43	1.39
21	AA	683	G	C5-C6	-5.53	1.36	1.42
21	AA	1421	G	C5'-C4'	5.53	1.57	1.51
57	BB	411	G	C3'-C2'	5.53	1.59	1.52
57	BB	831	G	N9-C8	5.53	1.41	1.37
57	BB	1560	G	C8-N7	-5.53	1.27	1.30
15	AD	72	ARG	CZ-NH2	5.53	1.40	1.33
21	AA	424	G	C2-N3	5.53	1.37	1.32
21	AA	673	A	C2'-C1'	-5.53	1.47	1.53
21	AA	1047	G	C2'-C1'	-5.53	1.47	1.53
26	AV	71	C	C2'-C1'	-5.53	1.47	1.53
57	BB	314	C	O3'-P	-5.53	1.54	1.61
57	BB	1290	C	N3-C4	5.53	1.37	1.33
57	BB	1700	A	C6-N1	5.53	1.39	1.35
57	BB	1797	G	C2'-C1'	-5.53	1.47	1.53
57	BB	2064	C	C5-C6	5.53	1.38	1.34
57	BB	2238	G	C3'-O3'	5.53	1.49	1.42
21	AA	121	U	O3'-P	-5.53	1.54	1.61
21	AA	552	U	C3'-O3'	5.53	1.49	1.42
21	AA	867	G	C4'-O4'	-5.53	1.38	1.45
57	BB	1453	A	C5-C6	-5.53	1.36	1.41
58	BA	10	G	P-O5'	-5.53	1.54	1.59
21	AA	533	A	N9-C4	5.53	1.41	1.37
21	AA	1513	A	C5-C4	-5.53	1.34	1.38
23	AW	10	G	C5'-C4'	-5.53	1.44	1.51
57	BB	144	A	C3'-O3'	5.53	1.49	1.42
57	BB	239	C	N3-C4	5.53	1.37	1.33
57	BB	428	A	C6-N1	5.53	1.39	1.35
57	BB	849	A	N7-C5	-5.53	1.35	1.39
57	BB	1207	C	C4-C5	5.53	1.47	1.43
57	BB	1815	A	N7-C5	-5.53	1.35	1.39
57	BB	1849	G	N9-C4	5.53	1.42	1.38
2	AK	76	TYR	CZ-OH	5.53	1.47	1.37
21	AA	560	A	C2-N3	5.53	1.38	1.33
26	AV	7	G	N1-C2	5.53	1.42	1.37
57	BB	85	G	C2-N3	5.53	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	304	U	P-O5'	-5.53	1.54	1.59
57	BB	1381	G	O3'-P	-5.53	1.54	1.61
57	BB	1567	G	C5-C6	-5.53	1.36	1.42
57	BB	2396	G	N3-C4	-5.53	1.31	1.35
57	BB	2891	U	N3-C4	5.53	1.43	1.38
23	AW	12	U	N1-C2	5.52	1.43	1.38
26	AV	28	C	N1-C2	5.52	1.45	1.40
42	BW	19	ARG	CZ-NH2	5.52	1.40	1.33
57	BB	901	C	C4-N4	5.52	1.39	1.33
57	BB	2579	C	C4-N4	5.52	1.39	1.33
57	BB	2592	G	C4'-C3'	5.52	1.59	1.53
12	AU	33	ARG	CZ-NH1	5.52	1.40	1.33
18	AG	77	ARG	NE-CZ	5.52	1.40	1.33
21	AA	782	A	O3'-P	-5.52	1.54	1.61
57	BB	817	C	N3-C4	5.52	1.37	1.33
57	BB	880	G	C4'-C3'	5.52	1.59	1.53
57	BB	984	A	N9-C8	-5.52	1.33	1.37
57	BB	1465	G	O4'-C1'	-5.52	1.34	1.41
57	BB	2507	C	C4'-C3'	5.52	1.59	1.53
57	BB	2792	A	C8-N7	-5.52	1.27	1.31
18	AG	19	SER	CA-CB	5.52	1.61	1.52
57	BB	140	C	C2-N3	5.52	1.40	1.35
57	BB	496	G	C2-N3	5.52	1.37	1.32
57	BB	768	G	N1-C2	5.52	1.42	1.37
57	BB	927	A	C3'-C2'	5.52	1.59	1.52
57	BB	1237	A	O4'-C1'	-5.52	1.34	1.41
21	AA	1076	U	P-O5'	-5.52	1.54	1.59
21	AA	1279	G	C5'-C4'	5.52	1.57	1.51
21	AA	1436	U	C2'-C1'	-5.52	1.47	1.53
21	AA	1439	G	C4'-O4'	-5.52	1.38	1.45
21	AA	1475	G	O3'-P	-5.52	1.54	1.61
21	AA	1481	U	O3'-P	-5.52	1.54	1.61
57	BB	684	G	N1-C2	5.52	1.42	1.37
57	BB	850	U	O4'-C1'	5.52	1.48	1.41
57	BB	1034	G	C5'-C4'	5.52	1.57	1.51
57	BB	1163	G	C1'-N9	-5.52	1.39	1.46
57	BB	2068	U	C3'-C2'	-5.52	1.46	1.52
57	BB	2365	G	N1-C2	5.52	1.42	1.37
21	AA	212	G	N9-C8	5.52	1.41	1.37
21	AA	294	U	P-O5'	5.52	1.65	1.59
21	AA	1254	A	N9-C8	5.52	1.42	1.37
21	AA	1465	A	N9-C8	-5.52	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	16	U	C2'-O2'	5.52	1.48	1.41
57	BB	13	A	C5'-C4'	5.52	1.57	1.51
57	BB	83	A	C5-C4	-5.52	1.34	1.38
57	BB	387	U	O4'-C1'	-5.52	1.34	1.41
57	BB	430	A	C6-N6	5.52	1.38	1.33
57	BB	1128	G	C2-N3	5.52	1.37	1.32
57	BB	1555	G	C3'-C2'	5.52	1.59	1.52
57	BB	1710	G	C2'-C1'	-5.52	1.47	1.53
57	BB	1841	U	C2-N3	5.52	1.41	1.37
57	BB	1989	G	C5-C4	5.52	1.42	1.38
57	BB	2608	G	C5'-C4'	5.52	1.57	1.51
58	BA	55	U	C4-C5	5.52	1.48	1.43
57	BB	1522	A	O3'-P	-5.52	1.54	1.61
57	BB	2177	C	O4'-C1'	5.52	1.48	1.41
57	BB	2380	C	C1'-N1	5.52	1.57	1.48
21	AA	130	A	O3'-P	-5.51	1.54	1.61
21	AA	246	A	N9-C4	5.51	1.41	1.37
21	AA	843	U	C4'-C3'	-5.51	1.47	1.52
50	B3	45	PRO	N-CA	-5.51	1.37	1.47
57	BB	1175	A	N9-C4	5.51	1.41	1.37
57	BB	1328	A	C2-N3	5.51	1.38	1.33
57	BB	1597	A	O4'-C1'	5.51	1.48	1.41
57	BB	1665	A	C6-N6	5.51	1.38	1.33
57	BB	1999	C	P-O5'	-5.51	1.54	1.59
57	BB	2064	C	P-O5'	-5.51	1.54	1.59
57	BB	2550	G	P-O5'	-5.51	1.54	1.59
57	BB	2835	A	N3-C4	5.51	1.38	1.34
21	AA	205	A	O3'-P	-5.51	1.54	1.61
57	BB	1555	G	C2-N3	5.51	1.37	1.32
21	AA	40	C	C2'-C1'	-5.51	1.47	1.53
21	AA	102	G	C2-N3	5.51	1.37	1.32
21	AA	418	C	P-O5'	-5.51	1.54	1.59
21	AA	522	C	P-O5'	-5.51	1.54	1.59
21	AA	551	U	N1-C6	-5.51	1.32	1.38
21	AA	983	A	O3'-P	-5.51	1.54	1.61
21	AA	1167	A	C2-N3	5.51	1.38	1.33
21	AA	1279	G	C3'-O3'	5.51	1.49	1.42
26	AV	67	C	N3-C4	5.51	1.37	1.33
44	BY	29	ARG	CZ-NH1	5.51	1.40	1.33
57	BB	453	A	C5-C6	5.51	1.46	1.41
57	BB	598	U	C2'-C1'	-5.51	1.47	1.53
57	BB	795	C	C4'-C3'	-5.51	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	866	A	O4'-C1'	-5.51	1.34	1.41
57	BB	1645	G	O3'-P	-5.51	1.54	1.61
57	BB	1655	A	C3'-C2'	-5.51	1.46	1.52
57	BB	2010	G	C6-O6	-5.51	1.19	1.24
57	BB	2033	A	C5-C4	-5.51	1.34	1.38
58	BA	44	G	C6-N1	-5.51	1.35	1.39
21	AA	46	G	C2-N3	5.51	1.37	1.32
21	AA	310	G	N1-C2	5.51	1.42	1.37
21	AA	626	G	C6-N1	-5.51	1.35	1.39
21	AA	727	G	C4'-C3'	-5.51	1.47	1.52
21	AA	1019	A	N9-C8	-5.51	1.33	1.37
21	AA	1216	A	N7-C5	-5.51	1.35	1.39
52	BD	83	ARG	CD-NE	5.51	1.55	1.46
57	BB	62	U	C4-C5	5.51	1.48	1.43
57	BB	89	A	C4'-C3'	5.51	1.59	1.53
57	BB	947	A	N9-C8	-5.51	1.33	1.37
57	BB	1282	U	N1-C6	5.51	1.43	1.38
57	BB	1444	G	C5-C6	-5.51	1.36	1.42
57	BB	2045	C	N3-C4	5.51	1.37	1.33
57	BB	2323	G	C5'-C4'	5.51	1.57	1.51
21	AA	403	C	C4-C5	5.51	1.47	1.43
23	AW	45	U	C4'-O4'	-5.51	1.38	1.45
57	BB	689	A	C6-N1	5.51	1.39	1.35
57	BB	789	A	N9-C4	5.51	1.41	1.37
57	BB	1301	A	N9-C4	-5.51	1.34	1.37
57	BB	2680	U	C5'-C4'	5.51	1.57	1.51
58	BA	13	G	C8-N7	5.51	1.34	1.30
14	AC	125	ARG	CZ-NH2	5.51	1.40	1.33
21	AA	60	A	C2'-C1'	-5.51	1.47	1.53
21	AA	983	A	N7-C5	-5.51	1.35	1.39
26	AV	53	G	N9-C8	-5.51	1.33	1.37
57	BB	30	G	N1-C2	5.51	1.42	1.37
57	BB	349	U	C1'-N1	5.51	1.57	1.48
57	BB	1171	G	O3'-P	5.51	1.67	1.61
57	BB	1317	G	N9-C8	5.51	1.41	1.37
57	BB	2365	G	C4'-O4'	5.51	1.52	1.45
57	BB	2575	C	C2-O2	-5.51	1.19	1.24
58	BA	43	C	P-O5'	5.51	1.65	1.59
21	AA	185	U	N3-C4	5.50	1.43	1.38
21	AA	300	A	C4'-C3'	5.50	1.59	1.53
25	AZ	373	ARG	CG-CD	5.50	1.65	1.51
57	BB	497	A	C3'-C2'	-5.50	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	602	A	C8-N7	-5.50	1.27	1.31
57	BB	2166	U	C5'-C4'	5.50	1.57	1.51
21	AA	507	C	P-O5'	-5.50	1.54	1.59
21	AA	951	G	N3-C4	-5.50	1.31	1.35
31	BL	33	ARG	CD-NE	5.50	1.55	1.46
56	BH	50	ARG	CZ-NH2	5.50	1.40	1.33
57	BB	2330	G	C6-N1	-5.50	1.35	1.39
57	BB	2768	U	P-O5'	-5.50	1.54	1.59
21	AA	426	U	O3'-P	-5.50	1.54	1.61
21	AA	755	G	C6-N1	5.50	1.43	1.39
25	AZ	283	ARG	CZ-NH2	5.50	1.40	1.33
57	BB	44	A	C6-N6	5.50	1.38	1.33
57	BB	954	G	C5-C4	-5.50	1.34	1.38
57	BB	1453	A	C5'-C4'	5.50	1.57	1.51
57	BB	1500	G	C5-C4	-5.50	1.34	1.38
57	BB	1950	G	N3-C4	-5.50	1.31	1.35
57	BB	2175	C	O3'-P	-5.50	1.54	1.61
57	BB	2827	C	C2'-C1'	-5.50	1.47	1.53
21	AA	238	A	C4'-C3'	-5.50	1.47	1.52
21	AA	242	G	C3'-C2'	5.50	1.59	1.52
21	AA	345	C	C2-N3	5.50	1.40	1.35
21	AA	607	A	N3-C4	-5.50	1.31	1.34
21	AA	1003	G	C5-C4	5.50	1.42	1.38
21	AA	1067	A	C5-C6	-5.50	1.36	1.41
21	AA	1534	A	C2'-O2'	5.50	1.48	1.41
57	BB	531	C	N3-C4	5.50	1.37	1.33
57	BB	872	U	C4-C5	-5.50	1.38	1.43
57	BB	1010	A	C5-C4	5.50	1.42	1.38
57	BB	1156	A	C6-N1	5.50	1.39	1.35
57	BB	2714	G	P-O5'	-5.50	1.54	1.59
57	BB	2875	C	P-O5'	-5.50	1.54	1.59
3	AL	93	ARG	CZ-NH1	5.50	1.40	1.33
21	AA	329	A	C1'-N9	5.50	1.56	1.48
21	AA	464	U	C2-O2	5.50	1.27	1.22
21	AA	660	C	O3'-P	5.50	1.67	1.61
21	AA	959	A	C5'-C4'	-5.50	1.44	1.51
21	AA	1222	G	C8-N7	5.50	1.34	1.30
21	AA	1388	C	N3-C4	5.50	1.37	1.33
23	AW	73	A	O3'-P	-5.50	1.54	1.61
26	AV	41	C	C2'-C1'	-5.50	1.47	1.53
57	BB	854	C	C5-C6	-5.50	1.29	1.34
57	BB	902	C	C4'-O4'	5.50	1.52	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	977	G	N9-C8	5.50	1.41	1.37
57	BB	1075	C	C2-N3	5.50	1.40	1.35
57	BB	1577	C	N3-C4	5.50	1.37	1.33
58	BA	71	C	N3-C4	5.50	1.37	1.33
21	AA	130	A	N9-C8	5.50	1.42	1.37
21	AA	220	G	N3-C4	5.50	1.39	1.35
21	AA	592	G	N3-C4	5.50	1.39	1.35
21	AA	1045	C	C3'-C2'	-5.50	1.46	1.52
21	AA	1342	C	N1-C6	5.50	1.40	1.37
22	AY	51	G	C5-C4	-5.50	1.34	1.38
57	BB	592	A	O3'-P	-5.50	1.54	1.61
57	BB	1087	G	O4'-C1'	-5.50	1.34	1.41
57	BB	1860	G	N9-C8	-5.50	1.34	1.37
57	BB	2056	G	C6-N1	5.50	1.43	1.39
57	BB	2267	A	N1-C2	5.50	1.39	1.34
57	BB	2604	U	C4'-C3'	5.50	1.59	1.53
21	AA	734	G	N7-C5	-5.50	1.35	1.39
21	AA	1508	A	C5-C6	5.50	1.46	1.41
57	BB	806	C	C4-N4	5.50	1.38	1.33
57	BB	1158	C	C3'-O3'	5.50	1.49	1.42
57	BB	1517	G	C3'-O3'	5.50	1.49	1.42
57	BB	2639	A	O3'-P	-5.50	1.54	1.61
57	BB	2793	C	O4'-C1'	5.50	1.48	1.41
21	AA	68	G	N7-C5	-5.49	1.35	1.39
21	AA	115	G	N9-C8	5.49	1.41	1.37
21	AA	129	A	C6-N6	5.49	1.38	1.33
21	AA	587	G	C4'-C3'	-5.49	1.47	1.52
21	AA	1127	G	C2'-C1'	-5.49	1.47	1.53
21	AA	1149	C	C1'-N1	5.49	1.56	1.48
37	BR	56	GLY	N-CA	-5.49	1.37	1.46
57	BB	409	G	C2'-C1'	-5.49	1.47	1.53
57	BB	757	G	C2-N3	5.49	1.37	1.32
57	BB	1020	A	C2'-C1'	-5.49	1.47	1.53
57	BB	1034	G	N1-C2	5.49	1.42	1.37
57	BB	1141	U	C4-C5	5.49	1.48	1.43
57	BB	2050	C	O3'-P	-5.49	1.54	1.61
57	BB	2416	C	O4'-C1'	5.49	1.48	1.41
21	AA	542	G	C5-C4	5.49	1.42	1.38
21	AA	633	G	C2-N2	5.49	1.40	1.34
21	AA	1220	G	C2-N3	5.49	1.37	1.32
57	BB	527	C	C2-O2	5.49	1.29	1.24
57	BB	1984	G	N1-C2	-5.49	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2315	G	O3'-P	-5.49	1.54	1.61
57	BB	2737	G	N1-C2	5.49	1.42	1.37
21	AA	149	A	C2-N3	-5.49	1.28	1.33
21	AA	379	C	C4-N4	5.49	1.38	1.33
21	AA	1160	G	C4'-C3'	5.49	1.59	1.53
21	AA	1447	A	C6-N1	5.49	1.39	1.35
45	BC	208	GLY	N-CA	-5.49	1.37	1.46
57	BB	303	G	C4'-O4'	5.49	1.52	1.45
57	BB	513	A	C8-N7	5.49	1.35	1.31
57	BB	636	G	C2-N3	5.49	1.37	1.32
57	BB	893	C	C4-N4	5.49	1.38	1.33
57	BB	1195	G	C4'-O4'	5.49	1.52	1.45
57	BB	1525	A	N7-C5	-5.49	1.35	1.39
57	BB	1702	G	C8-N7	5.49	1.34	1.30
57	BB	2183	A	N3-C4	-5.49	1.31	1.34
57	BB	2391	G	N1-C2	5.49	1.42	1.37
21	AA	482	A	N9-C8	-5.49	1.33	1.37
21	AA	812	G	N9-C8	5.49	1.41	1.37
21	AA	821	G	C2-N3	5.49	1.37	1.32
45	BC	39	SER	C-N	5.49	1.43	1.33
57	BB	288	U	C5-C6	5.49	1.39	1.34
57	BB	319	G	C4'-O4'	-5.49	1.38	1.45
57	BB	1411	U	C2-N3	5.49	1.41	1.37
57	BB	1489	C	C3'-O3'	5.49	1.49	1.42
57	BB	2203	U	C2-O2	5.49	1.27	1.22
58	BA	108	A	C5-C4	-5.49	1.34	1.38
21	AA	513	C	C5'-C4'	5.49	1.57	1.51
21	AA	743	A	N3-C4	-5.49	1.31	1.34
21	AA	1111	A	C6-N6	5.49	1.38	1.33
57	BB	36	G	C1'-N9	5.49	1.56	1.48
57	BB	187	G	N7-C5	-5.49	1.35	1.39
57	BB	292	U	C3'-C2'	5.49	1.58	1.52
21	AA	270	A	C6-N6	5.49	1.38	1.33
21	AA	1332	A	C5'-C4'	5.49	1.57	1.51
57	BB	1080	A	N3-C4	5.49	1.38	1.34
57	BB	1381	G	N7-C5	-5.49	1.35	1.39
57	BB	2366	A	N7-C5	-5.49	1.35	1.39
57	BB	2572	A	C5-C6	5.49	1.46	1.41
58	BA	58	A	N9-C4	-5.49	1.34	1.37
58	BA	86	G	C8-N7	-5.49	1.27	1.30
21	AA	104	G	C5-C4	5.48	1.42	1.38
21	AA	1133	G	P-O5'	5.48	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	12	U	P-O5'	-5.48	1.54	1.59
57	BB	684	G	C6-O6	5.48	1.29	1.24
57	BB	752	A	C6-N1	5.48	1.39	1.35
57	BB	808	G	C5-C6	-5.48	1.36	1.42
57	BB	858	G	C2'-O2'	-5.48	1.34	1.41
57	BB	1003	G	C2'-C1'	-5.48	1.47	1.53
57	BB	2309	A	N1-C2	5.48	1.39	1.34
57	BB	2377	A	C5'-C4'	5.48	1.57	1.51
21	AA	547	A	N9-C8	5.48	1.42	1.37
21	AA	699	C	C4-C5	-5.48	1.38	1.43
21	AA	795	C	O3'-P	-5.48	1.54	1.61
21	AA	805	C	P-O5'	-5.48	1.54	1.59
21	AA	1276	G	C5'-C4'	5.48	1.57	1.51
21	AA	1426	G	N3-C4	-5.48	1.31	1.35
21	AA	1516	G	C6-N1	5.48	1.43	1.39
57	BB	123	G	N1-C2	5.48	1.42	1.37
57	BB	738	G	C5-C6	-5.48	1.36	1.42
57	BB	1558	C	C3'-C2'	5.48	1.58	1.52
57	BB	1964	G	C2-N2	-5.48	1.29	1.34
57	BB	2065	C	O4'-C1'	5.48	1.48	1.41
57	BB	2844	G	C2'-C1'	-5.48	1.47	1.53
6	AO	1	SER	CA-CB	-5.48	1.44	1.52
21	AA	146	G	C2'-C1'	-5.48	1.47	1.53
21	AA	842	U	C2-N3	5.48	1.41	1.37
21	AA	1016	A	P-O5'	-5.48	1.54	1.59
22	AY	67	A	C6-N1	5.48	1.39	1.35
57	BB	189	G	C2-N3	5.48	1.37	1.32
57	BB	220	G	C5-C4	-5.48	1.34	1.38
57	BB	1089	A	N7-C5	-5.48	1.35	1.39
57	BB	1170	C	C4-N4	5.48	1.38	1.33
57	BB	1258	U	O4'-C1'	5.48	1.48	1.41
57	BB	1450	G	C6-N1	5.48	1.43	1.39
57	BB	1490	A	C5-C6	5.48	1.46	1.41
57	BB	1702	G	N1-C2	5.48	1.42	1.37
57	BB	2617	U	C3'-C2'	-5.48	1.46	1.52
57	BB	2691	C	C4-N4	5.48	1.38	1.33
57	BB	2790	U	C4-C5	5.48	1.48	1.43
21	AA	189	A	N7-C5	-5.48	1.35	1.39
21	AA	389	A	N3-C4	5.48	1.38	1.34
57	BB	191	A	N1-C2	5.48	1.39	1.34
57	BB	295	G	C2-N2	5.48	1.40	1.34
57	BB	1392	A	C6-N6	5.48	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1751	U	C4-O4	5.48	1.28	1.23
57	BB	2497	A	C1'-N9	-5.48	1.39	1.46
21	AA	330	C	C3'-C2'	-5.48	1.46	1.52
21	AA	809	G	C2'-C1'	-5.48	1.47	1.53
21	AA	1208	C	C3'-O3'	5.48	1.49	1.42
21	AA	1396	A	C5-C4	5.48	1.42	1.38
57	BB	142	A	C8-N7	-5.48	1.27	1.31
57	BB	629	G	C2'-C1'	-5.48	1.47	1.53
57	BB	1003	G	C2-N3	5.48	1.37	1.32
57	BB	1164	C	C4-N4	5.48	1.38	1.33
57	BB	1336	A	C6-N1	5.48	1.39	1.35
57	BB	1715	G	O3'-P	-5.48	1.54	1.61
57	BB	2025	C	C5-C6	-5.48	1.29	1.34
57	BB	2501	C	N1-C2	5.48	1.45	1.40
58	BA	10	G	N1-C2	5.48	1.42	1.37
58	BA	110	C	O4'-C1'	5.48	1.48	1.41
21	AA	82	G	C6-N1	5.48	1.43	1.39
21	AA	873	A	C3'-C2'	5.48	1.58	1.52
21	AA	1159	U	C4-C5	-5.48	1.38	1.43
21	AA	1433	A	C5'-C4'	5.48	1.57	1.51
57	BB	725	G	C6-N1	5.48	1.43	1.39
57	BB	1796	U	N1-C6	5.48	1.42	1.38
21	AA	996	A	C3'-C2'	-5.47	1.46	1.52
21	AA	1325	C	C4-N4	5.47	1.38	1.33
26	AV	30	G	C2'-C1'	-5.47	1.47	1.53
57	BB	42	A	C8-N7	-5.47	1.27	1.31
57	BB	63	A	C2-N3	5.47	1.38	1.33
57	BB	1498	C	C2-N3	-5.47	1.31	1.35
57	BB	1651	G	C8-N7	-5.47	1.27	1.30
57	BB	2197	U	O3'-P	-5.47	1.54	1.61
57	BB	2197	U	C2-O2	5.47	1.27	1.22
20	AI	75	ALA	C-N	5.47	1.42	1.33
43	BX	41	SER	CA-CB	5.47	1.61	1.52
57	BB	122	G	C5-C4	5.47	1.42	1.38
57	BB	491	G	C2-N3	5.47	1.37	1.32
57	BB	1932	A	N7-C5	-5.47	1.35	1.39
57	BB	2481	G	N7-C5	-5.47	1.35	1.39
21	AA	1434	A	C5-C4	5.47	1.42	1.38
57	BB	409	G	C4'-C3'	-5.47	1.47	1.52
57	BB	1442	U	C3'-C2'	5.47	1.58	1.52
57	BB	1958	C	O4'-C1'	-5.47	1.34	1.41
57	BB	2304	G	C2-N3	5.47	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2323	G	C2-N2	5.47	1.40	1.34
57	BB	2517	C	P-O5'	-5.47	1.54	1.59
21	AA	907	A	N9-C8	-5.47	1.33	1.37
32	BM	31	PHE	CG-CD1	5.47	1.47	1.38
57	BB	73	A	C8-N7	5.47	1.35	1.31
57	BB	917	A	C2'-C1'	-5.47	1.47	1.53
57	BB	1173	U	N3-C4	5.47	1.43	1.38
57	BB	1207	C	C5-C6	-5.47	1.29	1.34
57	BB	1331	G	O3'-P	-5.47	1.54	1.61
57	BB	1348	C	N3-C4	5.47	1.37	1.33
57	BB	1628	G	C6-O6	-5.47	1.19	1.24
57	BB	1681	G	C2-N2	5.47	1.40	1.34
57	BB	2067	G	C3'-C2'	5.47	1.58	1.52
57	BB	2527	C	C5-C6	5.47	1.38	1.34
57	BB	2581	G	C2-N3	-5.47	1.28	1.32
57	BB	2802	G	C6-N1	5.47	1.43	1.39
21	AA	73	C	N1-C6	5.47	1.40	1.37
21	AA	217	C	C2'-C1'	5.47	1.59	1.53
48	B1	20	TYR	CG-CD1	5.47	1.46	1.39
57	BB	73	A	N9-C4	-5.47	1.34	1.37
57	BB	1525	A	N1-C2	5.47	1.39	1.34
57	BB	1836	C	C4-N4	5.47	1.38	1.33
57	BB	2233	U	N1-C2	-5.47	1.33	1.38
21	AA	180	U	C4-C5	-5.47	1.38	1.43
21	AA	631	C	N1-C6	5.47	1.40	1.37
21	AA	1068	G	C3'-C2'	-5.47	1.46	1.52
21	AA	1149	C	C3'-O3'	5.47	1.49	1.42
23	AW	55	U	O3'-P	-5.47	1.54	1.61
57	BB	486	C	N3-C4	5.47	1.37	1.33
57	BB	745	G	N9-C4	5.47	1.42	1.38
57	BB	836	G	C6-N1	-5.47	1.35	1.39
57	BB	1060	U	N1-C6	-5.47	1.33	1.38
57	BB	1402	U	N3-C4	5.47	1.43	1.38
57	BB	1463	C	C4-C5	-5.47	1.38	1.43
57	BB	1812	U	N1-C6	-5.47	1.33	1.38
57	BB	1835	G	N9-C8	5.47	1.41	1.37
57	BB	2366	A	N1-C2	5.47	1.39	1.34
57	BB	2884	U	C5'-C4'	5.47	1.57	1.51
15	AD	69	ARG	CZ-NH1	5.46	1.40	1.33
21	AA	309	A	C2-N3	5.46	1.38	1.33
21	AA	718	A	C2'-C1'	-5.46	1.47	1.53
21	AA	1227	A	O4'-C1'	5.46	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1503	A	P-O5'	5.46	1.65	1.59
24	AX	20	U	P-O5'	-5.46	1.54	1.59
57	BB	535	G	O3'-P	5.46	1.67	1.61
57	BB	965	C	C4'-O4'	5.46	1.52	1.45
21	AA	18	C	N1-C6	5.46	1.40	1.37
21	AA	117	G	C8-N7	-5.46	1.27	1.30
45	BC	193	GLU	CD-OE1	5.46	1.31	1.25
57	BB	300	A	N7-C5	-5.46	1.35	1.39
57	BB	682	G	C2-N2	5.46	1.40	1.34
57	BB	1321	A	C6-N6	5.46	1.38	1.33
57	BB	1995	U	N3-C4	5.46	1.43	1.38
57	BB	2067	G	C4'-C3'	5.46	1.59	1.53
21	AA	189	A	O3'-P	-5.46	1.54	1.61
21	AA	501	C	P-O5'	-5.46	1.54	1.59
21	AA	662	U	C4-C5	5.46	1.48	1.43
21	AA	691	G	N3-C4	-5.46	1.31	1.35
21	AA	716	A	N7-C5	-5.46	1.35	1.39
21	AA	840	C	C2-N3	-5.46	1.31	1.35
21	AA	1213	A	P-O5'	-5.46	1.54	1.59
34	BO	55	GLU	CD-OE2	-5.46	1.19	1.25
57	BB	279	A	C5'-C4'	5.46	1.57	1.51
57	BB	411	G	C2-N2	5.46	1.40	1.34
57	BB	436	C	C5'-C4'	5.46	1.57	1.51
57	BB	871	U	C2'-C1'	-5.46	1.47	1.53
57	BB	1171	G	P-O5'	-5.46	1.54	1.59
57	BB	2355	G	N1-C2	5.46	1.42	1.37
57	BB	2564	A	O4'-C1'	5.46	1.48	1.41
21	AA	1445	U	C5-C6	-5.46	1.29	1.34
57	BB	619	G	C6-N1	-5.46	1.35	1.39
57	BB	695	G	O3'-P	-5.46	1.54	1.61
57	BB	1238	G	O3'-P	-5.46	1.54	1.61
57	BB	2114	A	P-O5'	-5.46	1.54	1.59
58	BA	53	A	C4'-C3'	5.46	1.59	1.53
58	BA	98	G	C2'-C1'	-5.46	1.47	1.53
16	AE	111	ARG	NE-CZ	5.46	1.40	1.33
21	AA	289	G	C2-N2	5.46	1.40	1.34
21	AA	648	A	C4'-C3'	-5.46	1.47	1.52
21	AA	1208	C	N3-C4	5.46	1.37	1.33
21	AA	1329	A	O3'-P	-5.46	1.54	1.61
21	AA	1439	G	C5-C4	5.46	1.42	1.38
36	BQ	5	ARG	CZ-NH2	5.46	1.40	1.33
43	BX	26	ARG	NE-CZ	5.46	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	138	U	O4'-C1'	5.46	1.48	1.41
57	BB	310	A	C6-N6	5.46	1.38	1.33
57	BB	484	C	O4'-C1'	5.46	1.48	1.41
57	BB	1859	U	C3'-C2'	-5.46	1.46	1.52
57	BB	2439	A	N9-C4	-5.46	1.34	1.37
21	AA	725	G	O4'-C1'	5.46	1.48	1.41
21	AA	1051	C	C4-C5	5.46	1.47	1.43
21	AA	1097	C	N3-C4	5.46	1.37	1.33
22	AY	53	G	C2'-C1'	-5.46	1.47	1.53
57	BB	916	G	C6-N1	5.46	1.43	1.39
57	BB	1337	G	C5'-C4'	5.46	1.57	1.51
57	BB	1734	G	C8-N7	5.46	1.34	1.30
57	BB	2410	G	C2'-C1'	-5.46	1.47	1.53
57	BB	2844	G	N7-C5	5.46	1.42	1.39
21	AA	498	A	P-O5'	-5.46	1.54	1.59
21	AA	712	A	N1-C2	-5.46	1.29	1.34
21	AA	770	C	N1-C6	5.46	1.40	1.37
57	BB	707	G	C2'-C1'	-5.46	1.47	1.53
57	BB	1237	A	N7-C5	-5.46	1.35	1.39
57	BB	1333	G	O3'-P	-5.46	1.54	1.61
57	BB	1927	A	C5-C4	-5.46	1.34	1.38
57	BB	2025	C	C4'-O4'	-5.46	1.38	1.45
21	AA	241	G	C5-C6	-5.45	1.36	1.42
21	AA	695	A	N7-C5	-5.45	1.35	1.39
21	AA	894	G	N7-C5	-5.45	1.35	1.39
21	AA	1335	U	N3-C4	5.45	1.43	1.38
21	AA	1387	G	N1-C2	5.45	1.42	1.37
43	BX	36	ARG	CD-NE	5.45	1.55	1.46
57	BB	1285	A	N9-C4	-5.45	1.34	1.37
57	BB	1956	U	C2-N3	5.45	1.41	1.37
57	BB	2427	C	N1-C6	5.45	1.40	1.37
57	BB	2432	A	C5-C4	5.45	1.42	1.38
57	BB	2870	C	N1-C6	5.45	1.40	1.37
21	AA	578	C	C4-N4	5.45	1.38	1.33
21	AA	1464	U	P-O5'	-5.45	1.54	1.59
57	BB	119	A	O3'-P	-5.45	1.54	1.61
57	BB	583	G	N9-C8	5.45	1.41	1.37
57	BB	1183	U	C5'-C4'	5.45	1.57	1.51
57	BB	2801	G	N9-C4	-5.45	1.33	1.38
21	AA	192	A	N7-C5	5.45	1.42	1.39
21	AA	606	G	O5'-C5'	-5.45	1.34	1.42
21	AA	656	G	N9-C4	-5.45	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	825	A	N3-C4	-5.45	1.31	1.34
57	BB	212	G	P-O5'	-5.45	1.54	1.59
57	BB	461	C	C4'-C3'	-5.45	1.47	1.52
57	BB	1878	G	C4'-C3'	-5.45	1.47	1.52
57	BB	2235	G	C8-N7	-5.45	1.27	1.30
57	BB	2645	G	O3'-P	-5.45	1.54	1.61
57	BB	2764	A	P-O5'	-5.45	1.54	1.59
21	AA	453	G	C5-C4	-5.45	1.34	1.38
21	AA	576	C	N1-C6	5.45	1.40	1.37
21	AA	629	A	O3'-P	-5.45	1.54	1.61
21	AA	771	G	N3-C4	-5.45	1.31	1.35
21	AA	1385	G	C4'-O4'	5.45	1.52	1.45
21	AA	1483	A	C6-N6	5.45	1.38	1.33
57	BB	209	C	C4'-C3'	-5.45	1.47	1.52
57	BB	261	G	N9-C8	5.45	1.41	1.37
57	BB	681	G	C4'-O4'	-5.45	1.38	1.45
57	BB	1131	G	C6-N1	5.45	1.43	1.39
57	BB	2841	C	P-O5'	-5.45	1.54	1.59
2	AK	68	ARG	CD-NE	5.45	1.55	1.46
21	AA	776	G	P-O5'	-5.45	1.54	1.59
21	AA	1321	U	N3-C4	5.45	1.43	1.38
57	BB	177	G	C4'-O4'	5.45	1.52	1.45
57	BB	1384	A	C4'-O4'	-5.45	1.38	1.45
58	BA	16	G	C2-N3	-5.45	1.28	1.32
21	AA	152	A	N9-C8	5.45	1.42	1.37
21	AA	257	G	N1-C2	5.45	1.42	1.37
21	AA	1227	A	C3'-C2'	-5.45	1.46	1.52
21	AA	1262	C	N1-C2	5.45	1.45	1.40
22	AY	34	G	C5-C6	-5.45	1.36	1.42
25	AZ	1	SER	CA-CB	5.45	1.61	1.52
57	BB	443	A	O5'-C5'	-5.45	1.34	1.42
57	BB	450	G	C2-N3	5.45	1.37	1.32
57	BB	606	U	N1-C6	-5.45	1.33	1.38
57	BB	659	G	C2'-O2'	-5.45	1.34	1.41
57	BB	794	A	C3'-C2'	5.45	1.58	1.52
57	BB	944	C	C4-C5	5.45	1.47	1.43
57	BB	1170	C	C4-C5	5.45	1.47	1.43
57	BB	2079	U	C3'-C2'	-5.45	1.46	1.52
57	BB	2084	C	C4-N4	5.45	1.38	1.33
57	BB	2750	A	N3-C4	-5.45	1.31	1.34
21	AA	383	A	C6-N6	5.44	1.38	1.33
57	BB	155	A	N9-C8	5.44	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	211	C	N3-C4	5.44	1.37	1.33
57	BB	254	G	C4'-C3'	5.44	1.59	1.53
57	BB	517	C	N1-C6	5.44	1.40	1.37
57	BB	953	G	C5-C6	5.44	1.47	1.42
57	BB	2347	C	C4-C5	5.44	1.47	1.43
57	BB	2683	C	C5-C6	-5.44	1.29	1.34
21	AA	321	A	C6-N6	5.44	1.38	1.33
21	AA	577	G	C3'-O3'	5.44	1.49	1.42
21	AA	671	G	C6-N1	5.44	1.43	1.39
21	AA	895	G	C8-N7	5.44	1.34	1.30
21	AA	388	G	N9-C4	-5.44	1.33	1.38
21	AA	590	U	C5'-C4'	5.44	1.57	1.51
21	AA	1432	G	O4'-C1'	-5.44	1.34	1.41
57	BB	87	U	C5'-C4'	5.44	1.57	1.51
57	BB	249	C	N3-C4	5.44	1.37	1.33
57	BB	488	G	N1-C2	5.44	1.42	1.37
57	BB	575	A	N9-C8	5.44	1.42	1.37
57	BB	1150	C	N3-C4	5.44	1.37	1.33
57	BB	1151	A	P-O5'	5.44	1.65	1.59
57	BB	1245	G	C8-N7	-5.44	1.27	1.30
57	BB	1922	G	C6-N1	-5.44	1.35	1.39
57	BB	2264	C	C1'-N1	5.44	1.56	1.48
58	BA	26	C	C5'-C4'	5.44	1.57	1.51
58	BA	69	G	C2-N2	-5.44	1.29	1.34
21	AA	1163	A	C2-N3	5.44	1.38	1.33
21	AA	1206	G	C2'-C1'	-5.44	1.47	1.53
23	AW	42	C	N3-C4	5.44	1.37	1.33
57	BB	1311	G	N7-C5	-5.44	1.35	1.39
57	BB	1835	G	C3'-C2'	5.44	1.58	1.52
57	BB	2281	A	C6-N1	5.44	1.39	1.35
6	AO	77	TYR	CE2-CZ	5.44	1.45	1.38
21	AA	120	A	C6-N6	5.44	1.38	1.33
57	BB	27	G	N1-C2	5.44	1.42	1.37
57	BB	42	A	C2'-C1'	-5.44	1.47	1.53
57	BB	948	C	C5-C6	5.44	1.38	1.34
57	BB	1216	G	C6-N1	5.44	1.43	1.39
57	BB	1377	G	C6-N1	5.44	1.43	1.39
57	BB	1668	A	C2-N3	-5.44	1.28	1.33
57	BB	2787	C	C1'-N1	5.44	1.56	1.48
14	AC	10	ARG	CD-NE	5.44	1.55	1.46
21	AA	62	U	N1-C6	-5.44	1.33	1.38
57	BB	190	A	C2-N3	5.44	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1515	A	C6-N6	5.44	1.38	1.33
57	BB	2415	G	C2'-C1'	-5.44	1.47	1.53
57	BB	2896	C	C4-C5	-5.44	1.38	1.43
21	AA	988	G	C5'-C4'	5.43	1.57	1.51
21	AA	989	U	N3-C4	5.43	1.43	1.38
26	AV	71	C	N1-C6	-5.43	1.33	1.37
28	BI	126	ARG	CZ-NH1	5.43	1.40	1.33
57	BB	43	G	C6-N1	5.43	1.43	1.39
57	BB	116	C	N1-C2	5.43	1.45	1.40
57	BB	121	G	C8-N7	5.43	1.34	1.30
57	BB	329	G	C5-C4	-5.43	1.34	1.38
57	BB	467	G	C8-N7	5.43	1.34	1.30
57	BB	615	U	C3'-C2'	5.43	1.58	1.52
57	BB	1074	G	O3'-P	5.43	1.67	1.61
57	BB	2337	G	C6-N1	-5.43	1.35	1.39
57	BB	2583	G	C8-N7	-5.43	1.27	1.30
57	BB	2748	A	C5-C4	5.43	1.42	1.38
57	BB	2770	G	C4'-C3'	5.43	1.59	1.53
21	AA	887	G	P-O5'	-5.43	1.54	1.59
21	AA	1038	C	C5'-C4'	5.43	1.57	1.51
21	AA	1179	A	N3-C4	5.43	1.38	1.34
21	AA	1185	G	C2'-C1'	-5.43	1.47	1.53
57	BB	87	U	C3'-O3'	5.43	1.49	1.42
57	BB	1360	G	C2'-C1'	-5.43	1.47	1.53
57	BB	1845	G	N7-C5	-5.43	1.35	1.39
57	BB	2282	G	C6-O6	-5.43	1.19	1.24
57	BB	2419	U	C5'-C4'	5.43	1.57	1.51
57	BB	1892	C	P-O5'	-5.43	1.54	1.59
21	AA	23	C	C2-O2	5.43	1.29	1.24
21	AA	127	G	C6-N1	5.43	1.43	1.39
21	AA	1118	U	C4-O4	-5.43	1.19	1.23
21	AA	1471	U	O3'-P	5.43	1.67	1.61
21	AA	1507	A	C3'-C2'	5.43	1.58	1.52
36	BQ	57	ARG	CD-NE	5.43	1.55	1.46
50	B3	39	ARG	CZ-NH2	5.43	1.40	1.33
57	BB	9	G	C2-N3	5.43	1.37	1.32
57	BB	139	U	C4-C5	5.43	1.48	1.43
57	BB	192	C	C5-C6	-5.43	1.30	1.34
57	BB	313	G	C5'-C4'	5.43	1.57	1.51
57	BB	432	A	C4'-C3'	5.43	1.59	1.53
57	BB	563	A	C3'-C2'	-5.43	1.46	1.52
57	BB	758	C	N1-C2	5.43	1.45	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	935	C	C4'-C3'	5.43	1.59	1.53
57	BB	1035	U	C4'-C3'	-5.43	1.47	1.52
57	BB	1208	C	C3'-C2'	-5.43	1.46	1.52
57	BB	1687	G	C8-N7	-5.43	1.27	1.30
21	AA	544	G	O4'-C1'	-5.43	1.34	1.41
21	AA	737	C	N1-C6	5.43	1.40	1.37
21	AA	1106	G	C6-N1	5.43	1.43	1.39
22	AY	6	U	C4'-O4'	5.43	1.52	1.45
22	AY	31	A	C5-C4	-5.43	1.34	1.38
57	BB	377	G	N9-C8	-5.43	1.34	1.37
57	BB	536	G	N1-C2	5.43	1.42	1.37
57	BB	682	G	O3'-P	-5.43	1.54	1.61
57	BB	1543	G	N7-C5	-5.43	1.35	1.39
57	BB	2061	G	C5-C4	-5.43	1.34	1.38
57	BB	2167	U	C4'-C3'	5.43	1.59	1.53
58	BA	82	U	C4'-C3'	5.43	1.59	1.53
21	AA	383	A	C4'-C3'	-5.43	1.47	1.52
21	AA	422	C	C5-C6	-5.43	1.30	1.34
21	AA	1076	U	C3'-O3'	5.43	1.49	1.42
22	AY	10	G	C2-N2	5.43	1.40	1.34
57	BB	1203	U	C4'-O4'	-5.43	1.38	1.45
57	BB	1328	A	N9-C8	5.43	1.42	1.37
57	BB	1362	C	C2-N3	5.43	1.40	1.35
57	BB	1777	U	P-O5'	-5.43	1.54	1.59
57	BB	1615	C	C4-N4	5.42	1.38	1.33
57	BB	2314	A	N7-C5	-5.42	1.35	1.39
57	BB	2374	C	N1-C6	-5.42	1.33	1.37
58	BA	118	C	C2'-O2'	-5.42	1.34	1.41
21	AA	1293	C	N1-C6	-5.42	1.33	1.37
31	BL	31	GLY	CA-C	-5.42	1.43	1.51
57	BB	1123	C	C2'-C1'	-5.42	1.47	1.53
57	BB	1633	G	N3-C4	-5.42	1.31	1.35
57	BB	1746	A	O3'-P	-5.42	1.54	1.61
57	BB	1764	C	N3-C4	5.42	1.37	1.33
57	BB	2635	A	C5-C6	-5.42	1.36	1.41
57	BB	2660	A	C3'-C2'	-5.42	1.46	1.52
57	BB	2662	A	C5-C6	-5.42	1.36	1.41
57	BB	2716	C	N3-C4	5.42	1.37	1.33
21	AA	189	A	C6-N1	5.42	1.39	1.35
21	AA	810	C	C5'-C4'	5.42	1.57	1.51
21	AA	1486	G	C2-N3	5.42	1.37	1.32
57	BB	458	G	O3'-P	-5.42	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	982	C	N1-C6	-5.42	1.33	1.37
57	BB	1176	U	C2-N3	5.42	1.41	1.37
57	BB	1275	A	N1-C2	-5.42	1.29	1.34
21	AA	706	A	C8-N7	-5.42	1.27	1.31
21	AA	1284	C	P-O5'	-5.42	1.54	1.59
57	BB	892	A	N1-C2	-5.42	1.29	1.34
57	BB	1531	C	C5-C6	-5.42	1.30	1.34
57	BB	1940	U	C3'-C2'	-5.42	1.46	1.52
21	AA	39	G	O3'-P	-5.42	1.54	1.61
21	AA	232	G	N1-C2	5.42	1.42	1.37
21	AA	359	G	C2-N2	5.42	1.40	1.34
21	AA	675	A	O3'-P	-5.42	1.54	1.61
22	AY	64	A	N9-C8	-5.42	1.33	1.37
53	BE	42	GLY	N-CA	-5.42	1.38	1.46
57	BB	49	A	C2'-C1'	-5.42	1.47	1.53
57	BB	160	A	C6-N1	5.42	1.39	1.35
57	BB	686	U	C2-N3	5.42	1.41	1.37
57	BB	727	A	C6-N1	-5.42	1.31	1.35
57	BB	1330	C	O3'-P	-5.42	1.54	1.61
57	BB	1750	G	C6-N1	5.42	1.43	1.39
57	BB	1873	G	N9-C4	5.42	1.42	1.38
57	BB	2048	G	N3-C4	5.42	1.39	1.35
21	AA	156	C	C2-N3	-5.42	1.31	1.35
21	AA	746	A	N7-C5	-5.42	1.35	1.39
21	AA	1490	U	C1'-N1	5.42	1.56	1.48
26	AV	64	G	C1'-N9	5.42	1.56	1.48
34	BO	16	ARG	CZ-NH2	5.42	1.40	1.33
57	BB	417	C	N3-C4	5.42	1.37	1.33
57	BB	900	A	C5-C4	5.42	1.42	1.38
57	BB	1719	G	N9-C8	5.42	1.41	1.37
57	BB	2400	G	C8-N7	5.42	1.34	1.30
57	BB	2729	G	O3'-P	-5.42	1.54	1.61
21	AA	97	G	C6-N1	5.42	1.43	1.39
57	BB	1481	U	N3-C4	-5.42	1.33	1.38
57	BB	1833	C	C4'-O4'	-5.42	1.38	1.45
57	BB	2237	G	N3-C4	-5.42	1.31	1.35
33	BN	6	SER	CA-CB	5.41	1.61	1.52
45	BC	86	ARG	NE-CZ	5.41	1.40	1.33
57	BB	1437	C	N1-C6	5.41	1.40	1.37
57	BB	1800	C	C5'-C4'	5.41	1.57	1.51
57	BB	2350	C	N3-C4	5.41	1.37	1.33
58	BA	72	G	C5-C6	-5.41	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	524	G	C8-N7	-5.41	1.27	1.30
22	AY	17	U	P-O5'	-5.41	1.54	1.59
26	AV	48	C	C4-N4	5.41	1.38	1.33
45	BC	155	ARG	CG-CD	5.41	1.65	1.51
57	BB	512	G	O3'-P	-5.41	1.54	1.61
57	BB	634	C	N3-C4	5.41	1.37	1.33
57	BB	958	U	N1-C2	5.41	1.43	1.38
57	BB	1650	A	N9-C4	-5.41	1.34	1.37
57	BB	1838	C	N1-C6	5.41	1.40	1.37
57	BB	2170	A	P-O5'	-5.41	1.54	1.59
1	AJ	89	ARG	NE-CZ	5.41	1.40	1.33
16	AE	127	TYR	CD1-CE1	5.41	1.47	1.39
21	AA	276	G	N3-C4	-5.41	1.31	1.35
57	BB	332	A	N1-C2	5.41	1.39	1.34
57	BB	559	G	C3'-C2'	5.41	1.58	1.52
57	BB	2121	G	C3'-C2'	-5.41	1.46	1.52
21	AA	440	C	N1-C6	5.41	1.40	1.37
21	AA	793	U	C3'-C2'	5.41	1.58	1.52
53	BE	44	ARG	CD-NE	5.41	1.55	1.46
57	BB	331	C	N1-C6	-5.41	1.33	1.37
57	BB	373	U	C1'-N1	5.41	1.56	1.48
57	BB	527	C	C5'-C4'	5.41	1.57	1.51
57	BB	1144	A	C2-N3	5.41	1.38	1.33
57	BB	1354	A	N3-C4	-5.41	1.31	1.34
57	BB	1614	A	C5'-C4'	5.41	1.57	1.51
57	BB	2540	C	C4'-C3'	5.41	1.59	1.53
57	BB	2577	A	C5-C4	5.41	1.42	1.38
57	BB	2753	A	N3-C4	5.41	1.38	1.34
21	AA	694	A	C4'-O4'	-5.41	1.38	1.45
21	AA	1273	C	C5'-C4'	5.41	1.57	1.51
57	BB	1656	C	C5-C6	5.41	1.38	1.34
57	BB	2051	A	C3'-C2'	-5.41	1.46	1.52
14	AC	165	GLU	CG-CD	5.41	1.60	1.51
21	AA	830	G	C5-C4	-5.41	1.34	1.38
21	AA	902	G	C4'-C3'	-5.41	1.47	1.52
21	AA	1089	G	P-O5'	-5.41	1.54	1.59
21	AA	1532	U	O3'-P	-5.41	1.54	1.61
57	BB	127	A	C2'-C1'	-5.41	1.47	1.53
57	BB	132	G	O3'-P	-5.41	1.54	1.61
57	BB	206	U	C1'-N1	5.41	1.56	1.48
57	BB	356	G	C5-C6	-5.41	1.36	1.42
57	BB	479	A	C5'-C4'	5.41	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1434	A	C5-C4	-5.41	1.34	1.38
57	BB	1467	U	C1'-N1	5.41	1.56	1.48
57	BB	1624	U	N3-C4	5.41	1.43	1.38
57	BB	1779	U	C5-C6	5.41	1.39	1.34
57	BB	1880	U	C4'-O4'	5.41	1.52	1.45
57	BB	2816	G	C2'-O2'	-5.41	1.34	1.41
21	AA	193	C	C5'-C4'	5.40	1.57	1.51
21	AA	487	A	O3'-P	-5.40	1.54	1.61
21	AA	1266	G	C2-N3	-5.40	1.28	1.32
21	AA	1324	A	C6-N1	5.40	1.39	1.35
57	BB	1093	G	C8-N7	5.40	1.34	1.30
57	BB	1317	G	N9-C4	5.40	1.42	1.38
21	AA	75	G	C5-C4	5.40	1.42	1.38
21	AA	567	G	C6-O6	5.40	1.29	1.24
21	AA	606	G	C3'-O3'	5.40	1.49	1.42
21	AA	797	C	C4'-O4'	5.40	1.52	1.45
21	AA	1100	C	N1-C6	5.40	1.40	1.37
21	AA	1459	G	C5-C4	5.40	1.42	1.38
21	AA	1520	C	C3'-C2'	-5.40	1.46	1.52
29	BJ	110	PRO	CA-CB	-5.40	1.42	1.53
34	BO	16	ARG	NE-CZ	5.40	1.40	1.33
35	BP	108	ARG	CZ-NH1	5.40	1.40	1.33
57	BB	44	A	C3'-C2'	-5.40	1.46	1.52
57	BB	191	A	C5-C6	-5.40	1.36	1.41
57	BB	333	G	C4'-C3'	5.40	1.59	1.53
57	BB	2204	G	C5-C6	-5.40	1.36	1.42
21	AA	905	U	N1-C6	5.40	1.42	1.38
21	AA	1510	C	C5-C6	-5.40	1.30	1.34
22	AY	19	G	C5-C6	-5.40	1.36	1.42
57	BB	659	G	O3'-P	-5.40	1.54	1.61
57	BB	1055	G	C3'-C2'	-5.40	1.46	1.52
57	BB	2062	A	N9-C8	5.40	1.42	1.37
57	BB	2344	U	N1-C2	5.40	1.43	1.38
14	AC	90	VAL	CB-CG1	5.40	1.64	1.52
57	BB	159	G	N1-C2	5.40	1.42	1.37
57	BB	1804	C	N1-C2	5.40	1.45	1.40
57	BB	2288	A	C3'-O3'	5.40	1.49	1.42
57	BB	2827	C	C5'-C4'	5.40	1.57	1.51
58	BA	89	U	C4'-C3'	5.40	1.59	1.53
14	AC	135	ARG	CZ-NH2	5.40	1.40	1.33
15	AD	74	TYR	CG-CD1	5.40	1.46	1.39
21	AA	340	U	N3-C4	5.40	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	443	C	O3'-P	-5.40	1.54	1.61
21	AA	741	G	C5'-C4'	5.40	1.57	1.51
21	AA	1111	A	C5-C4	5.40	1.42	1.38
21	AA	1168	U	N1-C6	5.40	1.42	1.38
30	BK	30	ARG	NE-CZ	5.40	1.40	1.33
57	BB	980	A	C5'-C4'	5.40	1.57	1.51
57	BB	1398	C	C5-C6	5.40	1.38	1.34
57	BB	2715	C	C2'-C1'	-5.40	1.47	1.53
13	AB	20	ARG	CZ-NH1	5.40	1.40	1.33
21	AA	488	C	C2-O2	5.40	1.29	1.24
21	AA	1105	A	O4'-C1'	5.40	1.48	1.41
21	AA	1397	C	C4-C5	-5.40	1.38	1.43
57	BB	232	G	N9-C8	5.40	1.41	1.37
57	BB	476	G	N1-C2	5.40	1.42	1.37
57	BB	668	A	C4'-C3'	5.40	1.59	1.53
57	BB	1111	A	C2'-C1'	-5.40	1.47	1.53
57	BB	1152	C	C2'-C1'	-5.40	1.47	1.53
57	BB	1528	A	N3-C4	5.40	1.38	1.34
57	BB	1899	A	C5-C4	-5.40	1.34	1.38
3	AL	104	SER	CB-OG	5.39	1.49	1.42
13	AB	154	GLY	CA-C	-5.39	1.43	1.51
21	AA	101	A	N7-C5	-5.39	1.36	1.39
21	AA	485	U	C2-N3	5.39	1.41	1.37
21	AA	1220	G	N7-C5	-5.39	1.36	1.39
23	AW	72	C	C4'-C3'	-5.39	1.47	1.52
57	BB	94	A	C2'-C1'	-5.39	1.47	1.53
57	BB	439	A	N3-C4	-5.39	1.31	1.34
57	BB	454	A	C6-N6	5.39	1.38	1.33
57	BB	1034	G	C2'-C1'	-5.39	1.47	1.53
57	BB	1108	U	N1-C2	-5.39	1.33	1.38
57	BB	1354	A	C6-N6	5.39	1.38	1.33
57	BB	1498	C	O4'-C1'	-5.39	1.34	1.41
57	BB	1850	G	C3'-O3'	5.39	1.49	1.42
57	BB	1993	U	C2'-C1'	-5.39	1.47	1.53
57	BB	2185	U	N1-C2	5.39	1.43	1.38
57	BB	2479	U	C2-N3	5.39	1.41	1.37
58	BA	33	G	C8-N7	5.39	1.34	1.30
21	AA	241	G	C4'-C3'	5.39	1.59	1.53
21	AA	910	C	N1-C6	-5.39	1.33	1.37
21	AA	1111	A	C5'-C4'	5.39	1.57	1.51
21	AA	1149	C	C2-O2	-5.39	1.19	1.24
21	AA	1291	U	C2-N3	5.39	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	48	C	P-O5'	-5.39	1.54	1.59
56	BH	116	ARG	NE-CZ	5.39	1.40	1.33
57	BB	392	U	C4-O4	5.39	1.27	1.23
57	BB	855	G	O3'-P	-5.39	1.54	1.61
57	BB	954	G	C4'-C3'	-5.39	1.47	1.52
57	BB	1225	G	N1-C2	5.39	1.42	1.37
57	BB	1301	A	C6-N6	5.39	1.38	1.33
57	BB	1957	C	P-O5'	-5.39	1.54	1.59
57	BB	2168	G	C2'-C1'	-5.39	1.47	1.53
57	BB	2299	U	O3'-P	5.39	1.67	1.61
57	BB	2308	G	N1-C2	5.39	1.42	1.37
57	BB	2360	G	C2-N3	5.39	1.37	1.32
13	AB	34	ARG	CZ-NH2	5.39	1.40	1.33
21	AA	558	G	N7-C5	-5.39	1.36	1.39
21	AA	1297	G	C6-N1	5.39	1.43	1.39
57	BB	557	C	C2'-C1'	-5.39	1.47	1.53
57	BB	1970	A	C4'-O4'	-5.39	1.38	1.45
57	BB	2802	G	C8-N7	-5.39	1.27	1.30
21	AA	281	G	C5'-C4'	5.39	1.57	1.51
21	AA	307	C	P-O5'	-5.39	1.54	1.59
21	AA	686	U	C4'-C3'	5.39	1.59	1.53
21	AA	1294	G	C8-N7	5.39	1.34	1.30
21	AA	1480	A	C6-N6	5.39	1.38	1.33
26	AV	69	C	C3'-C2'	-5.39	1.46	1.52
57	BB	58	G	C5-C4	5.39	1.42	1.38
57	BB	129	C	O3'-P	-5.39	1.54	1.61
57	BB	208	C	C4-N4	5.39	1.38	1.33
57	BB	420	C	N1-C2	5.39	1.45	1.40
57	BB	762	U	C4-C5	5.39	1.48	1.43
57	BB	1792	G	C6-O6	-5.39	1.19	1.24
57	BB	1814	G	C6-N1	5.39	1.43	1.39
57	BB	2064	C	N1-C6	5.39	1.40	1.37
57	BB	2476	A	C4'-O4'	5.39	1.52	1.45
57	BB	2526	G	C6-N1	5.39	1.43	1.39
57	BB	2563	U	N1-C6	5.39	1.42	1.38
57	BB	2692	G	N9-C4	5.39	1.42	1.38
57	BB	2762	C	C4'-C3'	-5.39	1.47	1.52
58	BA	27	C	C3'-C2'	-5.39	1.46	1.52
58	BA	49	C	N1-C6	-5.39	1.33	1.37
21	AA	1274	A	C8-N7	5.39	1.35	1.31
21	AA	1491	G	C5'-C4'	5.39	1.57	1.51
57	BB	408	G	P-O5'	-5.39	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2550	G	C6-N1	5.39	1.43	1.39
21	AA	423	G	N9-C8	-5.39	1.34	1.37
21	AA	530	G	O3'-P	-5.39	1.54	1.61
21	AA	564	C	C4-N4	5.39	1.38	1.33
21	AA	894	G	C2'-O2'	5.39	1.48	1.41
21	AA	1256	A	C5-C6	-5.39	1.36	1.41
22	AY	57	G	O5'-C5'	5.39	1.53	1.44
57	BB	124	G	N7-C5	-5.39	1.36	1.39
57	BB	334	C	C2'-C1'	-5.39	1.47	1.53
57	BB	372	G	N3-C4	5.39	1.39	1.35
57	BB	820	A	P-O5'	-5.39	1.54	1.59
57	BB	1162	G	C2-N2	-5.39	1.29	1.34
57	BB	1195	G	C6-N1	5.39	1.43	1.39
57	BB	1526	C	C3'-C2'	5.39	1.58	1.52
57	BB	1567	G	C3'-C2'	5.39	1.58	1.52
57	BB	1983	G	C2-N3	5.39	1.37	1.32
57	BB	2135	A	N7-C5	-5.39	1.36	1.39
57	BB	2292	U	N1-C2	-5.39	1.33	1.38
57	BB	2713	U	C4-O4	5.39	1.27	1.23
57	BB	2784	U	C2-N3	-5.39	1.33	1.37
21	AA	580	C	C4-N4	5.38	1.38	1.33
57	BB	183	C	N3-C4	5.38	1.37	1.33
57	BB	633	A	C5-C4	5.38	1.42	1.38
57	BB	852	U	C5'-C4'	5.38	1.57	1.51
57	BB	1284	A	N9-C4	5.38	1.41	1.37
57	BB	1315	C	C4-N4	5.38	1.38	1.33
57	BB	1455	G	N1-C2	5.38	1.42	1.37
57	BB	2126	A	N9-C4	5.38	1.41	1.37
21	AA	39	G	N9-C4	5.38	1.42	1.38
21	AA	153	C	C4'-C3'	5.38	1.59	1.53
21	AA	1051	C	C4-N4	5.38	1.38	1.33
21	AA	1257	A	C2-N3	5.38	1.38	1.33
23	AW	28	G	N7-C5	5.38	1.42	1.39
57	BB	705	A	C8-N7	-5.38	1.27	1.31
57	BB	2455	G	C5-C6	-5.38	1.36	1.42
57	BB	2704	C	N3-C4	5.38	1.37	1.33
58	BA	110	C	N1-C6	-5.38	1.33	1.37
21	AA	1105	A	P-O5'	5.38	1.65	1.59
24	AX	15	A	C2'-C1'	-5.38	1.47	1.53
57	BB	407	G	C3'-O3'	5.38	1.49	1.42
57	BB	996	A	C5-C4	5.38	1.42	1.38
57	BB	1070	A	O3'-P	-5.38	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1363	C	C2-N3	5.38	1.40	1.35
57	BB	1390	U	C4'-C3'	-5.38	1.47	1.52
57	BB	1874	C	C2-N3	-5.38	1.31	1.35
57	BB	1876	A	C5-C4	5.38	1.42	1.38
57	BB	2170	A	C4'-C3'	5.38	1.59	1.53
21	AA	151	A	O3'-P	-5.38	1.54	1.61
21	AA	783	C	C4'-C3'	-5.38	1.47	1.52
21	AA	1014	A	N3-C4	-5.38	1.31	1.34
23	AW	65	G	C4'-C3'	-5.38	1.47	1.52
57	BB	1031	G	C5'-C4'	5.38	1.57	1.51
57	BB	1796	U	N1-C2	-5.38	1.33	1.38
21	AA	157	U	C5'-C4'	5.38	1.57	1.51
21	AA	572	A	N1-C2	5.38	1.39	1.34
21	AA	1130	A	N9-C8	-5.38	1.33	1.37
22	AY	23	A	O3'-P	-5.38	1.54	1.61
22	AY	41	U	C4'-O4'	5.38	1.52	1.45
23	AW	6	G	C2-N2	5.38	1.40	1.34
23	AW	37	A	C5-C6	-5.38	1.36	1.41
24	AX	18	G	O3'-P	-5.38	1.54	1.61
57	BB	136	G	C3'-O3'	5.38	1.49	1.42
57	BB	770	G	C5-C4	-5.38	1.34	1.38
57	BB	1120	G	C2'-C1'	-5.38	1.47	1.53
57	BB	1468	U	N3-C4	5.38	1.43	1.38
57	BB	1533	C	C3'-O3'	5.38	1.49	1.42
57	BB	1633	G	C8-N7	5.38	1.34	1.30
57	BB	2135	A	C5'-C4'	5.38	1.57	1.51
57	BB	2661	G	P-O5'	5.38	1.65	1.59
57	BB	2730	C	C4-C5	5.38	1.47	1.43
57	BB	2737	G	C5-C4	5.38	1.42	1.38
21	AA	375	U	P-O5'	-5.38	1.54	1.59
21	AA	754	C	N1-C6	5.38	1.40	1.37
23	AW	56	C	C3'-O3'	5.38	1.49	1.42
26	AV	25	C	C4-C5	5.38	1.47	1.43
32	BM	114	ARG	CZ-NH1	5.38	1.40	1.33
57	BB	224	U	C2-N3	5.38	1.41	1.37
57	BB	502	A	O3'-P	5.38	1.67	1.61
57	BB	936	A	C2'-C1'	-5.38	1.47	1.53
57	BB	951	C	C4'-O4'	5.38	1.52	1.45
57	BB	2274	A	C6-N6	-5.38	1.29	1.33
57	BB	2320	U	C1'-N1	5.38	1.56	1.48
57	BB	2621	G	N1-C2	5.38	1.42	1.37
21	AA	198	G	C6-N1	5.38	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	690	G	N7-C5	-5.38	1.36	1.39
44	BY	5	GLU	CD-OE1	5.38	1.31	1.25
56	BH	48	GLU	CB-CG	5.38	1.62	1.52
57	BB	1135	C	N1-C6	-5.38	1.33	1.37
57	BB	1419	A	P-O5'	-5.38	1.54	1.59
21	AA	201	G	N3-C4	-5.37	1.31	1.35
21	AA	482	A	C3'-C2'	5.37	1.58	1.52
21	AA	494	G	O3'-P	-5.37	1.54	1.61
21	AA	515	G	O4'-C1'	5.37	1.48	1.41
21	AA	749	A	N1-C2	-5.37	1.29	1.34
23	AW	46	G	N7-C5	-5.37	1.36	1.39
26	AV	17(A)	U	C4'-O4'	-5.37	1.38	1.45
45	BC	174	ARG	CD-NE	5.37	1.55	1.46
57	BB	82	U	N1-C6	5.37	1.42	1.38
57	BB	322	A	C5-C6	5.37	1.45	1.41
57	BB	802	A	C5-C4	5.37	1.42	1.38
57	BB	819	A	C1'-N9	5.37	1.56	1.48
57	BB	980	A	C6-N1	5.37	1.39	1.35
57	BB	1434	A	C8-N7	5.37	1.35	1.31
57	BB	1700	A	C2-N3	-5.37	1.28	1.33
57	BB	2215	C	C4'-C3'	-5.37	1.47	1.52
57	BB	2893	A	C2-N3	5.37	1.38	1.33
7	AP	14	ARG	CD-NE	5.37	1.55	1.46
21	AA	225	C	C4-N4	5.37	1.38	1.33
21	AA	819	A	N7-C5	-5.37	1.36	1.39
21	AA	861	G	C8-N7	5.37	1.34	1.30
21	AA	884	U	P-O5'	-5.37	1.54	1.59
21	AA	889	A	C5-C4	5.37	1.42	1.38
21	AA	934	C	N3-C4	5.37	1.37	1.33
21	AA	1038	C	C3'-O3'	-5.37	1.34	1.42
21	AA	1234	C	C2-O2	5.37	1.29	1.24
23	AW	6	G	N3-C4	5.37	1.39	1.35
23	AW	43	C	O3'-P	-5.37	1.54	1.61
57	BB	91	A	N9-C4	-5.37	1.34	1.37
57	BB	361	G	C6-N1	5.37	1.43	1.39
57	BB	530	G	C4'-C3'	5.37	1.59	1.53
57	BB	1112	G	C6-N1	5.37	1.43	1.39
57	BB	1128	G	C6-O6	5.37	1.28	1.24
57	BB	1146	C	N3-C4	5.37	1.37	1.33
57	BB	1183	U	O3'-P	-5.37	1.54	1.61
57	BB	1204	A	C5-C6	5.37	1.45	1.41
57	BB	1260	A	N1-C2	-5.37	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1910	G	C6-N1	5.37	1.43	1.39
21	AA	444	G	N3-C4	-5.37	1.31	1.35
21	AA	978	A	N9-C4	-5.37	1.34	1.37
21	AA	1032	G	P-O5'	5.37	1.65	1.59
57	BB	79	C	O4'-C1'	5.37	1.48	1.41
57	BB	183	C	C4'-C3'	-5.37	1.47	1.52
21	AA	193	C	C3'-C2'	-5.37	1.46	1.52
21	AA	1104	G	C5-C4	5.37	1.42	1.38
21	AA	1213	A	N7-C5	-5.37	1.36	1.39
21	AA	1322	C	N1-C2	5.37	1.45	1.40
26	AV	42	G	N1-C2	5.37	1.42	1.37
26	AV	64	G	C4'-C3'	5.37	1.59	1.53
42	BW	24	ARG	NE-CZ	5.37	1.40	1.33
57	BB	227	A	O3'-P	-5.37	1.54	1.61
57	BB	480	A	C1'-N9	5.37	1.56	1.48
57	BB	2547	A	C5-C4	5.37	1.42	1.38
57	BB	2721	A	C8-N7	-5.37	1.27	1.31
21	AA	875	U	O3'-P	-5.37	1.54	1.61
57	BB	676	A	N3-C4	5.37	1.38	1.34
21	AA	278	G	N9-C8	5.37	1.41	1.37
21	AA	967	C	N3-C4	5.37	1.37	1.33
26	AV	10	G	C2-N2	-5.37	1.29	1.34
26	AV	37	A	C2'-C1'	-5.37	1.47	1.53
38	BS	8	ARG	NE-CZ	5.37	1.40	1.33
57	BB	902	C	N1-C2	5.37	1.45	1.40
57	BB	956	G	C8-N7	5.37	1.34	1.30
57	BB	1093	G	N9-C4	5.37	1.42	1.38
57	BB	1124	G	C6-N1	5.37	1.43	1.39
57	BB	2094	A	C5-C4	5.37	1.42	1.38
57	BB	2571	U	P-O5'	-5.37	1.54	1.59
57	BB	2759	G	C3'-C2'	5.37	1.58	1.52
21	AA	110	C	N3-C4	5.36	1.37	1.33
21	AA	730	G	N1-C2	5.36	1.42	1.37
21	AA	991	U	N1-C6	5.36	1.42	1.38
57	BB	826	U	N1-C6	5.36	1.42	1.38
57	BB	1170	C	N3-C4	-5.36	1.30	1.33
57	BB	1374	G	C2-N3	5.36	1.37	1.32
57	BB	1626	A	O4'-C1'	5.36	1.48	1.41
57	BB	1627	G	C5-C6	-5.36	1.36	1.42
57	BB	1809	A	N9-C4	5.36	1.41	1.37
57	BB	2024	G	N9-C4	5.36	1.42	1.38
57	BB	2643	G	O4'-C1'	5.36	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	65	A	O3'-P	-5.36	1.54	1.61
21	AA	96	U	C3'-C2'	-5.36	1.46	1.52
57	BB	61	C	C4'-O4'	5.36	1.52	1.45
57	BB	738	G	C5-C4	5.36	1.42	1.38
57	BB	2169	A	C6-N6	5.36	1.38	1.33
57	BB	2606	C	C2-O2	5.36	1.29	1.24
57	BB	2704	C	C5'-C4'	5.36	1.57	1.51
18	AG	108	ARG	CZ-NH2	5.36	1.40	1.33
21	AA	634	C	N3-C4	5.36	1.37	1.33
21	AA	866	C	C5'-C4'	5.36	1.57	1.51
21	AA	873	A	N3-C4	5.36	1.38	1.34
21	AA	912	C	C3'-C2'	5.36	1.58	1.52
21	AA	1134	G	C2'-C1'	5.36	1.59	1.53
25	AZ	283	ARG	NE-CZ	5.36	1.40	1.33
26	AV	67	C	C5-C6	-5.36	1.30	1.34
57	BB	295	G	N1-C2	5.36	1.42	1.37
57	BB	549	G	C8-N7	5.36	1.34	1.30
57	BB	687	C	O3'-P	-5.36	1.54	1.61
57	BB	925	A	C2'-C1'	-5.36	1.47	1.53
57	BB	965	C	C2'-C1'	-5.36	1.47	1.53
57	BB	1196	C	C2-N3	5.36	1.40	1.35
57	BB	1571	A	C1'-N9	5.36	1.56	1.48
57	BB	1732	C	C2'-C1'	-5.36	1.47	1.53
57	BB	2396	G	C2-N2	5.36	1.40	1.34
57	BB	2418	A	C2'-C1'	-5.36	1.47	1.53
57	BB	2487	G	C8-N7	5.36	1.34	1.30
21	AA	300	A	C2'-C1'	-5.36	1.47	1.53
21	AA	1268	G	N3-C4	5.36	1.39	1.35
57	BB	557	C	P-O5'	-5.36	1.54	1.59
57	BB	604	G	C5-C4	-5.36	1.34	1.38
57	BB	1464	G	C2-N3	5.36	1.37	1.32
21	AA	219	U	C1'-N1	5.36	1.56	1.48
21	AA	449	G	N9-C8	-5.36	1.34	1.37
21	AA	1168	U	P-O5'	-5.36	1.54	1.59
21	AA	1437	A	O3'-P	-5.36	1.54	1.61
23	AW	27	G	C5-C6	-5.36	1.36	1.42
57	BB	98	G	O4'-C1'	5.36	1.48	1.41
57	BB	150	U	C2'-C1'	-5.36	1.47	1.53
57	BB	467	G	C2-N3	5.36	1.37	1.32
57	BB	934	U	C4'-O4'	-5.36	1.38	1.45
57	BB	1838	C	C2-N3	-5.36	1.31	1.35
57	BB	1875	G	P-O5'	-5.36	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2051	A	C4'-O4'	-5.36	1.38	1.45
57	BB	2153	C	P-O5'	-5.36	1.54	1.59
57	BB	2237	G	C1'-N9	5.36	1.56	1.48
58	BA	91	C	C1'-N1	5.36	1.56	1.48
58	BA	107	G	C5-C4	-5.36	1.34	1.38
14	AC	166	TRP	CB-CG	5.36	1.59	1.50
21	AA	167	A	N3-C4	-5.36	1.31	1.34
21	AA	393	A	N3-C4	-5.36	1.31	1.34
21	AA	1027	C	C2'-C1'	5.36	1.59	1.53
21	AA	1113	C	N1-C6	5.36	1.40	1.37
26	AV	56	C	C5'-C4'	-5.36	1.45	1.51
33	BN	116	VAL	CB-CG2	5.36	1.64	1.52
38	BS	88	ARG	CZ-NH2	5.36	1.40	1.33
57	BB	43	G	N1-C2	5.36	1.42	1.37
57	BB	458	G	C2'-O2'	-5.36	1.34	1.41
57	BB	473	G	C6-N1	5.36	1.43	1.39
57	BB	640	C	O3'-P	-5.36	1.54	1.61
57	BB	1088	A	N9-C8	-5.36	1.33	1.37
57	BB	1233	C	N1-C6	-5.36	1.33	1.37
57	BB	1382	G	N7-C5	-5.36	1.36	1.39
57	BB	1689	A	N1-C2	5.36	1.39	1.34
57	BB	2170	A	C6-N6	5.36	1.38	1.33
58	BA	24	G	N7-C5	-5.36	1.36	1.39
58	BA	81	G	C5-C4	-5.36	1.34	1.38
58	BA	86	G	C1'-N9	5.36	1.56	1.48
21	AA	201	G	C6-N1	5.35	1.43	1.39
21	AA	282	A	C6-N1	5.35	1.39	1.35
57	BB	594	U	C4-C5	5.35	1.48	1.43
57	BB	1092	C	N3-C4	5.35	1.37	1.33
57	BB	1419	A	O3'-P	-5.35	1.54	1.61
9	AR	31	TYR	CZ-OH	5.35	1.47	1.37
21	AA	178	C	C2'-C1'	-5.35	1.47	1.53
21	AA	637	C	P-O5'	-5.35	1.54	1.59
21	AA	729	A	C2-N3	5.35	1.38	1.33
21	AA	1311	A	O3'-P	-5.35	1.54	1.61
57	BB	191	A	C4'-O4'	5.35	1.52	1.45
57	BB	737	C	N1-C2	5.35	1.45	1.40
57	BB	995	C	N3-C4	5.35	1.37	1.33
57	BB	1527	G	C6-N1	5.35	1.43	1.39
57	BB	2177	C	O3'-P	-5.35	1.54	1.61
57	BB	2753	A	C5'-C4'	5.35	1.57	1.51
21	AA	200	G	O4'-C1'	5.35	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1121	U	C2'-C1'	-5.35	1.47	1.53
57	BB	408	G	N3-C4	5.35	1.39	1.35
57	BB	1625	C	N1-C6	5.35	1.40	1.37
57	BB	2209	G	N3-C4	-5.35	1.31	1.35
7	AP	17	TYR	CB-CG	5.35	1.59	1.51
21	AA	353	A	C6-N6	5.35	1.38	1.33
21	AA	587	G	C5-C6	5.35	1.47	1.42
21	AA	695	A	N9-C4	-5.35	1.34	1.37
21	AA	1157	A	N9-C4	5.35	1.41	1.37
21	AA	1197	A	N9-C8	-5.35	1.33	1.37
21	AA	1211	U	C4-C5	5.35	1.48	1.43
21	AA	1374	A	C2'-C1'	-5.35	1.47	1.53
22	AY	30	G	C2'-C1'	-5.35	1.47	1.53
22	AY	38	A	C3'-C2'	5.35	1.58	1.52
26	AV	46	G	C2-N2	5.35	1.40	1.34
26	AV	52	G	C8-N7	-5.35	1.27	1.30
46	BZ	10	ARG	NE-CZ	5.35	1.40	1.33
57	BB	620	G	N7-C5	-5.35	1.36	1.39
57	BB	771	G	C6-N1	5.35	1.43	1.39
57	BB	826	U	O3'-P	-5.35	1.54	1.61
57	BB	1143	A	C5'-C4'	5.35	1.57	1.51
57	BB	1597	A	C2-N3	-5.35	1.28	1.33
57	BB	1960	A	C2'-C1'	-5.35	1.47	1.53
57	BB	1978	A	C6-N6	5.35	1.38	1.33
5	AN	100	TRP	CG-CD1	5.35	1.44	1.36
21	AA	1000	A	C3'-C2'	-5.35	1.46	1.52
21	AA	1477	U	C4-O4	-5.35	1.19	1.23
22	AY	16	U	O3'-P	-5.35	1.54	1.61
26	AV	5	G	N7-C5	-5.35	1.36	1.39
57	BB	122	G	N1-C2	5.35	1.42	1.37
57	BB	140	C	N1-C6	5.35	1.40	1.37
57	BB	164	C	C2-N3	5.35	1.40	1.35
57	BB	450	G	C4'-C3'	5.35	1.59	1.53
57	BB	1076	C	C4'-O4'	-5.35	1.38	1.45
57	BB	1149	G	O3'-P	5.35	1.67	1.61
57	BB	1421	G	C3'-C2'	-5.35	1.46	1.52
57	BB	1789	A	C6-N6	5.35	1.38	1.33
57	BB	2700	A	C2'-C1'	-5.35	1.47	1.53
21	AA	728	A	C3'-C2'	5.35	1.58	1.52
21	AA	730	G	C2-N3	5.35	1.37	1.32
55	BG	152	ARG	NE-CZ	5.35	1.40	1.33
57	BB	1501	G	N3-C4	-5.35	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2028	U	C2'-C1'	-5.35	1.47	1.53
57	BB	2625	G	P-O5'	-5.35	1.54	1.59
21	AA	529	G	C6-O6	5.34	1.28	1.24
21	AA	659	U	C2-O2	5.34	1.27	1.22
21	AA	929	G	P-O5'	-5.34	1.54	1.59
21	AA	998	C	C2'-O2'	-5.34	1.34	1.41
21	AA	1318	A	N7-C5	-5.34	1.36	1.39
21	AA	1531	A	C6-N1	5.34	1.39	1.35
57	BB	413	C	O3'-P	-5.34	1.54	1.61
57	BB	960	A	N9-C8	-5.34	1.33	1.37
57	BB	1561	C	P-O5'	-5.34	1.54	1.59
57	BB	1566	A	N7-C5	-5.34	1.36	1.39
57	BB	2074	U	C2'-C1'	5.34	1.59	1.53
57	BB	2367	G	N1-C2	5.34	1.42	1.37
57	BB	2400	G	C3'-C2'	5.34	1.58	1.52
57	BB	2530	A	C8-N7	5.34	1.35	1.31
21	AA	206	C	P-O5'	-5.34	1.54	1.59
21	AA	446	G	N9-C8	5.34	1.41	1.37
21	AA	483	C	N1-C6	5.34	1.40	1.37
21	AA	587	G	C2'-C1'	-5.34	1.47	1.53
21	AA	713	G	C4'-C3'	5.34	1.59	1.53
21	AA	1172	C	C3'-O3'	5.34	1.49	1.42
21	AA	1194	U	C2-N3	5.34	1.41	1.37
21	AA	1348	U	C5-C6	5.34	1.39	1.34
57	BB	533	G	C2-N2	5.34	1.39	1.34
57	BB	1679	A	C6-N6	5.34	1.38	1.33
57	BB	2204	G	C2'-C1'	-5.34	1.47	1.53
21	AA	441	A	N7-C5	-5.34	1.36	1.39
21	AA	582	C	N1-C6	5.34	1.40	1.37
21	AA	690	G	C2-N2	5.34	1.39	1.34
21	AA	763	G	C4'-C3'	5.34	1.59	1.53
21	AA	1129	C	N1-C6	5.34	1.40	1.37
21	AA	1182	G	C2'-C1'	-5.34	1.47	1.53
21	AA	1217	C	N1-C2	-5.34	1.34	1.40
52	BD	174	SER	CA-CB	5.34	1.60	1.52
57	BB	423	A	C5-C4	-5.34	1.35	1.38
57	BB	1389	G	N9-C4	-5.34	1.33	1.38
57	BB	1847	A	C1'-N9	-5.34	1.39	1.46
57	BB	2413	G	C6-N1	5.34	1.43	1.39
57	BB	2467	C	P-O5'	-5.34	1.54	1.59
21	AA	295	C	N3-C4	5.34	1.37	1.33
21	AA	419	C	C1'-N1	5.34	1.56	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	651	C	C4'-O4'	5.34	1.52	1.45
57	BB	1143	A	N9-C8	5.34	1.42	1.37
57	BB	1843	C	C5'-C4'	5.34	1.57	1.51
57	BB	2147	A	C5-C4	5.34	1.42	1.38
57	BB	2255	G	C6-O6	5.34	1.28	1.24
57	BB	2373	G	N1-C2	5.34	1.42	1.37
58	BA	2	G	C8-N7	5.34	1.34	1.30
21	AA	259	G	C3'-C2'	-5.34	1.46	1.52
21	AA	765	G	C5-C6	-5.34	1.37	1.42
57	BB	36	G	N1-C2	5.34	1.42	1.37
57	BB	439	A	C5'-C4'	5.34	1.57	1.51
57	BB	1680	U	N3-C4	5.34	1.43	1.38
57	BB	2763	G	O3'-P	-5.34	1.54	1.61
7	AP	28	ARG	CD-NE	5.34	1.55	1.46
21	AA	167	A	C2'-C1'	-5.34	1.47	1.53
21	AA	175	C	C4-C5	-5.34	1.38	1.43
21	AA	462	G	C2'-O2'	5.34	1.48	1.41
57	BB	355	U	C4'-O4'	5.34	1.52	1.45
57	BB	410	G	N9-C8	5.34	1.41	1.37
57	BB	978	G	C4'-C3'	-5.34	1.47	1.52
57	BB	1472	C	C4-C5	-5.34	1.38	1.43
57	BB	1677	A	C5'-C4'	5.34	1.57	1.51
57	BB	2705	A	C3'-C2'	-5.34	1.46	1.52
57	BB	2896	C	C2-N3	5.34	1.40	1.35
21	AA	610	U	O4'-C1'	5.33	1.48	1.41
26	AV	50	U	N1-C6	-5.33	1.33	1.38
57	BB	276	U	C2-N3	5.33	1.41	1.37
57	BB	1269	A	C5-C4	-5.33	1.35	1.38
57	BB	1398	C	N1-C2	5.33	1.45	1.40
57	BB	2056	G	N9-C4	-5.33	1.33	1.38
57	BB	2175	C	C4-N4	5.33	1.38	1.33
57	BB	2589	A	O3'-P	-5.33	1.54	1.61
58	BA	5	U	C3'-O3'	5.33	1.49	1.42
58	BA	22	U	C3'-O3'	5.33	1.49	1.42
21	AA	1174	G	P-O5'	5.33	1.65	1.59
21	AA	1240	U	O3'-P	-5.33	1.54	1.61
21	AA	1421	G	O3'-P	-5.33	1.54	1.61
24	AX	15	A	C6-N6	5.33	1.38	1.33
57	BB	298	G	N7-C5	-5.33	1.36	1.39
57	BB	434	U	C2-N3	5.33	1.41	1.37
57	BB	925	A	N1-C2	5.33	1.39	1.34
57	BB	1526	C	N1-C6	5.33	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1548	A	C2'-C1'	-5.33	1.47	1.53
57	BB	1551	A	C8-N7	-5.33	1.27	1.31
57	BB	1628	G	C2'-C1'	5.33	1.59	1.53
57	BB	1783	A	C5-C4	5.33	1.42	1.38
57	BB	2658	C	C5-C6	5.33	1.38	1.34
57	BB	2876	G	C2'-C1'	-5.33	1.47	1.53
21	AA	1451	U	O4'-C1'	5.33	1.48	1.41
22	AY	51	G	C4'-O4'	-5.33	1.38	1.45
23	AW	42	C	C4'-C3'	5.33	1.59	1.53
26	AV	19	G	C5-C4	5.33	1.42	1.38
45	BC	265	PHE	CE2-CZ	5.33	1.47	1.37
57	BB	667	U	N3-C4	5.33	1.43	1.38
57	BB	821	A	C6-N1	5.33	1.39	1.35
57	BB	833	A	C2'-C1'	-5.33	1.47	1.53
57	BB	1054	A	C6-N6	5.33	1.38	1.33
57	BB	1345	C	O3'-P	-5.33	1.54	1.61
57	BB	2254	C	N1-C6	5.33	1.40	1.37
57	BB	2309	A	C5-C4	5.33	1.42	1.38
21	AA	145	G	N7-C5	-5.33	1.36	1.39
57	BB	1274	A	P-O5'	-5.33	1.54	1.59
57	BB	1538	G	N3-C4	5.33	1.39	1.35
57	BB	1837	C	C1'-N1	5.33	1.56	1.48
57	BB	1941	C	C4-N4	5.33	1.38	1.33
57	BB	2407	A	O4'-C1'	-5.33	1.34	1.41
57	BB	2490	G	N7-C5	-5.33	1.36	1.39
21	AA	93	U	N1-C2	-5.33	1.33	1.38
21	AA	936	C	C5-C6	5.33	1.38	1.34
21	AA	1258	G	P-O5'	-5.33	1.54	1.59
21	AA	1383	C	C5'-C4'	5.33	1.57	1.51
22	AY	4	G	C4'-O4'	-5.33	1.38	1.45
24	AX	22	A	C5'-C4'	5.33	1.57	1.51
57	BB	594	U	C2-O2	5.33	1.27	1.22
57	BB	841	G	C5-C6	5.33	1.47	1.42
57	BB	865	C	N1-C6	5.33	1.40	1.37
57	BB	972	A	C5-C4	5.33	1.42	1.38
57	BB	1017	G	N7-C5	5.33	1.42	1.39
57	BB	1499	C	N3-C4	5.33	1.37	1.33
57	BB	1764	C	C4'-O4'	-5.33	1.38	1.45
57	BB	2182	U	C2-N3	5.33	1.41	1.37
57	BB	2860	A	C5-C4	5.33	1.42	1.38
57	BB	2886	A	N9-C8	5.33	1.42	1.37
21	AA	108	G	C2'-C1'	5.33	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	761	G	C5'-C4'	5.33	1.57	1.51
21	AA	1226	C	C4-N4	5.33	1.38	1.33
57	BB	1982	U	C3'-C2'	-5.33	1.46	1.52
57	BB	2450	A	C6-N6	-5.33	1.29	1.33
21	AA	641	U	C3'-C2'	-5.33	1.46	1.52
21	AA	1326	U	C3'-C2'	5.33	1.58	1.52
23	AW	21	A	C4'-O4'	5.33	1.52	1.45
39	BT	12	ARG	NE-CZ	5.33	1.40	1.33
57	BB	297	G	P-O5'	-5.33	1.54	1.59
57	BB	1056	G	C8-N7	-5.33	1.27	1.30
57	BB	1476	U	N1-C6	-5.33	1.33	1.38
57	BB	1974	C	N3-C4	5.33	1.37	1.33
57	BB	2063	C	C3'-O3'	5.33	1.49	1.42
57	BB	2325	G	O3'-P	-5.33	1.54	1.61
57	BB	2527	C	N1-C2	5.33	1.45	1.40
57	BB	2635	A	C2'-C1'	-5.33	1.47	1.53
21	AA	664	G	P-O5'	5.32	1.65	1.59
21	AA	1234	C	C2-N3	5.32	1.40	1.35
22	AY	45	G	C4'-C3'	-5.32	1.47	1.52
42	BW	24	ARG	CD-NE	5.32	1.55	1.46
57	BB	202	U	N3-C4	5.32	1.43	1.38
57	BB	682	G	C6-N1	5.32	1.43	1.39
57	BB	782	A	C3'-C2'	5.32	1.58	1.52
57	BB	883	G	C2-N2	5.32	1.39	1.34
57	BB	1075	C	C1'-N1	5.32	1.56	1.48
57	BB	1574	C	O3'-P	-5.32	1.54	1.61
57	BB	2089	C	C5'-C4'	-5.32	1.45	1.51
57	BB	2342	C	C3'-C2'	-5.32	1.46	1.52
58	BA	102	G	C2'-C1'	-5.32	1.47	1.53
21	AA	264	C	N3-C4	5.32	1.37	1.33
21	AA	703	G	C8-N7	-5.32	1.27	1.30
21	AA	1202	U	C4'-C3'	5.32	1.59	1.53
22	AY	30	G	C1'-N9	5.32	1.56	1.48
57	BB	535	G	N1-C2	5.32	1.42	1.37
57	BB	661	A	C5'-C4'	5.32	1.57	1.51
58	BA	108	A	C4'-C3'	5.32	1.59	1.53
21	AA	50	A	N1-C2	-5.32	1.29	1.34
21	AA	307	C	N1-C6	5.32	1.40	1.37
21	AA	432	A	N7-C5	-5.32	1.36	1.39
21	AA	448	A	C5-C4	-5.32	1.35	1.38
23	AW	17	C	C5-C6	5.32	1.38	1.34
57	BB	695	G	C5'-C4'	5.32	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	704	G	C5-C4	5.32	1.42	1.38
57	BB	804	A	P-O5'	-5.32	1.54	1.59
57	BB	1627	G	C6-N1	5.32	1.43	1.39
57	BB	2378	A	P-O5'	-5.32	1.54	1.59
57	BB	2380	C	C2-O2	-5.32	1.19	1.24
57	BB	2651	C	C4-N4	5.32	1.38	1.33
58	BA	39	A	C5'-C4'	5.32	1.57	1.51
21	AA	779	C	N3-C4	5.32	1.37	1.33
21	AA	1527	U	O3'-P	-5.32	1.54	1.61
33	BN	56	LYS	N-CA	-5.32	1.35	1.46
57	BB	270	A	N7-C5	-5.32	1.36	1.39
57	BB	2085	U	N3-C4	5.32	1.43	1.38
17	AF	86	ARG	NE-CZ	5.32	1.40	1.33
21	AA	331	G	N9-C4	5.32	1.42	1.38
21	AA	457	G	O3'-P	-5.32	1.54	1.61
21	AA	512	U	N1-C2	-5.32	1.33	1.38
21	AA	644	U	C4-C5	5.32	1.48	1.43
21	AA	990	C	N3-C4	5.32	1.37	1.33
21	AA	1135	U	C2'-C1'	5.32	1.59	1.53
21	AA	1342	C	C3'-C2'	5.32	1.58	1.52
26	AV	72	A	N3-C4	-5.32	1.31	1.34
42	BW	76	ARG	CZ-NH2	5.32	1.40	1.33
57	BB	858	G	C6-N1	5.32	1.43	1.39
57	BB	1361	G	C2-N3	5.32	1.37	1.32
57	BB	2062	A	C6-N6	5.32	1.38	1.33
57	BB	2501	C	N3-C4	5.32	1.37	1.33
58	BA	10	G	C4'-C3'	5.32	1.59	1.53
21	AA	1042	A	N7-C5	5.32	1.42	1.39
21	AA	1088	G	N1-C2	5.32	1.42	1.37
21	AA	1098	C	C5-C6	-5.32	1.30	1.34
21	AA	1156	G	C5'-C4'	5.32	1.57	1.51
23	AW	46	G	C5-C4	5.32	1.42	1.38
57	BB	109	C	C1'-N1	5.32	1.56	1.48
57	BB	541	A	C2-N3	5.32	1.38	1.33
57	BB	996	A	C5'-C4'	5.32	1.57	1.51
57	BB	1356	G	C2-N2	5.32	1.39	1.34
57	BB	1760	C	C5-C6	-5.32	1.30	1.34
57	BB	1896	G	C8-N7	5.32	1.34	1.30
57	BB	1926	U	C5'-C4'	5.32	1.57	1.51
57	BB	2199	A	C3'-O3'	5.32	1.49	1.42
57	BB	2304	G	C2'-C1'	-5.32	1.47	1.53
21	AA	493	A	C1'-N9	5.31	1.56	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	932	C	C1'-N1	5.31	1.56	1.48
21	AA	953	G	C6-N1	5.31	1.43	1.39
21	AA	1244	G	P-O5'	-5.31	1.54	1.59
23	AW	67	C	C2-N3	-5.31	1.31	1.35
57	BB	2428	G	C2-N3	5.31	1.37	1.32
21	AA	51	A	C6-N1	5.31	1.39	1.35
21	AA	342	C	C5-C6	-5.31	1.30	1.34
21	AA	964	A	C2'-C1'	-5.31	1.47	1.53
21	AA	1100	C	N3-C4	5.31	1.37	1.33
23	AW	10	G	C6-O6	-5.31	1.19	1.24
57	BB	106	C	C2-N3	5.31	1.40	1.35
57	BB	210	C	O3'-P	-5.31	1.54	1.61
57	BB	851	C	O4'-C1'	5.31	1.48	1.41
57	BB	1287	A	C2-N3	5.31	1.38	1.33
57	BB	1839	G	C5'-C4'	5.31	1.57	1.51
57	BB	2432	A	N1-C2	5.31	1.39	1.34
57	BB	2531	A	C5-C4	5.31	1.42	1.38
21	AA	1196	A	C2'-C1'	-5.31	1.47	1.53
21	AA	1323	G	C2-N3	5.31	1.36	1.32
57	BB	1717	A	O3'-P	-5.31	1.54	1.61
11	AT	34	VAL	CB-CG2	5.31	1.64	1.52
21	AA	446	G	C6-O6	-5.31	1.19	1.24
21	AA	572	A	C3'-O3'	5.31	1.49	1.42
21	AA	577	G	P-O5'	-5.31	1.54	1.59
57	BB	126	A	C5'-C4'	5.31	1.57	1.51
57	BB	303	G	C2-N3	5.31	1.36	1.32
57	BB	492	A	N7-C5	5.31	1.42	1.39
57	BB	1033	U	C2'-C1'	-5.31	1.47	1.53
57	BB	1042	G	C2-N3	5.31	1.36	1.32
57	BB	1818	U	C1'-N1	5.31	1.56	1.48
57	BB	1963	U	C3'-C2'	-5.31	1.47	1.52
57	BB	2653	U	C5'-C4'	5.31	1.57	1.51
15	AD	143	SER	CA-CB	5.31	1.60	1.52
21	AA	1191	A	N9-C4	-5.31	1.34	1.37
21	AA	1319	A	N7-C5	-5.31	1.36	1.39
22	AY	20	G	C3'-O3'	5.31	1.49	1.42
57	BB	176	A	C2'-O2'	-5.31	1.34	1.41
57	BB	560	C	C2'-C1'	-5.31	1.47	1.53
57	BB	1047	G	N9-C8	-5.31	1.34	1.37
57	BB	1057	A	C8-N7	-5.31	1.27	1.31
57	BB	1354	A	N9-C8	-5.31	1.33	1.37
57	BB	1608	A	O3'-P	-5.31	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1754	A	N3-C4	5.31	1.38	1.34
57	BB	1875	G	N9-C8	5.31	1.41	1.37
57	BB	1939	U	C2-N3	5.31	1.41	1.37
57	BB	2110	G	C5'-C4'	5.31	1.57	1.51
57	BB	2185	U	C4'-C3'	-5.31	1.47	1.52
57	BB	2708	G	C5-C6	-5.31	1.37	1.42
21	AA	937	A	C4'-C3'	-5.31	1.47	1.52
26	AV	7	G	P-O5'	-5.31	1.54	1.59
31	BL	64	PHE	CA-CB	5.31	1.65	1.53
57	BB	1597	A	N3-C4	-5.31	1.31	1.34
57	BB	1683	U	O3'-P	-5.31	1.54	1.61
58	BA	11	C	C4-N4	5.31	1.38	1.33
21	AA	977	A	C3'-O3'	5.30	1.49	1.42
21	AA	1002	G	C4'-C3'	-5.30	1.47	1.52
21	AA	1126	U	C4'-C3'	5.30	1.58	1.53
21	AA	1252	A	C5'-C4'	5.30	1.57	1.51
22	AY	12	U	C1'-N1	5.30	1.56	1.48
57	BB	254	G	C2-N2	5.30	1.39	1.34
57	BB	441	U	C4-C5	-5.30	1.38	1.43
57	BB	1362	C	C5-C6	-5.30	1.30	1.34
57	BB	1679	A	N9-C8	5.30	1.42	1.37
57	BB	1769	U	C3'-C2'	-5.30	1.47	1.52
57	BB	2229	U	C1'-N1	5.30	1.56	1.48
57	BB	2519	U	C4'-O4'	-5.30	1.38	1.45
58	BA	39	A	N3-C4	5.30	1.38	1.34
21	AA	146	G	N3-C4	5.30	1.39	1.35
21	AA	381	C	N1-C6	-5.30	1.33	1.37
21	AA	1348	U	C5'-C4'	5.30	1.57	1.51
57	BB	1307	A	C8-N7	-5.30	1.27	1.31
57	BB	1358	G	C6-N1	5.30	1.43	1.39
58	BA	91	C	C5'-C4'	5.30	1.57	1.51
21	AA	523	A	N3-C4	-5.30	1.31	1.34
21	AA	1150	A	C5-C4	-5.30	1.35	1.38
26	AV	27	U	C2-N3	5.30	1.41	1.37
49	B2	12	ARG	NE-CZ	5.30	1.40	1.33
57	BB	856	G	C6-N1	5.30	1.43	1.39
57	BB	1050	A	N3-C4	-5.30	1.31	1.34
57	BB	1360	G	C2-N2	5.30	1.39	1.34
57	BB	1827	U	C5'-C4'	5.30	1.57	1.51
57	BB	1991	U	C3'-O3'	5.30	1.49	1.42
57	BB	2340	A	C6-N6	5.30	1.38	1.33
57	BB	2420	C	N3-C4	5.30	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2679	A	O3'-P	-5.30	1.54	1.61
21	AA	442	G	N3-C4	-5.30	1.31	1.35
21	AA	645	G	N9-C4	-5.30	1.33	1.38
21	AA	647	C	N1-C6	5.30	1.40	1.37
21	AA	746	A	N9-C8	5.30	1.42	1.37
21	AA	1178	G	C4'-O4'	-5.30	1.38	1.45
23	AW	57	G	C2-N3	-5.30	1.28	1.32
57	BB	535	G	C4'-O4'	5.30	1.52	1.45
57	BB	864	G	C8-N7	-5.30	1.27	1.30
57	BB	1220	G	C3'-O3'	5.30	1.49	1.42
57	BB	1510	G	C4'-O4'	5.30	1.52	1.45
57	BB	1751	U	C4-C5	5.30	1.48	1.43
57	BB	2277	G	C2'-O2'	5.30	1.48	1.41
58	BA	94	A	N7-C5	-5.30	1.36	1.39
21	AA	360	G	N9-C8	5.30	1.41	1.37
57	BB	24	G	C3'-C2'	-5.30	1.47	1.52
57	BB	105	C	C4'-O4'	-5.30	1.38	1.45
57	BB	1242	U	P-O5'	-5.30	1.54	1.59
57	BB	1531	C	P-O5'	-5.30	1.54	1.59
21	AA	46	G	C4'-O4'	5.30	1.52	1.45
21	AA	442	G	N7-C5	-5.30	1.36	1.39
21	AA	474	G	C4'-C3'	5.30	1.58	1.53
21	AA	522	C	C4-C5	5.30	1.47	1.43
21	AA	536	C	N1-C2	5.30	1.45	1.40
21	AA	902	G	N9-C8	-5.30	1.34	1.37
21	AA	1349	A	N9-C8	5.30	1.42	1.37
31	BL	2	ARG	CZ-NH2	5.30	1.40	1.33
57	BB	821	A	N9-C4	-5.30	1.34	1.37
57	BB	871	U	C5-C6	5.30	1.39	1.34
57	BB	1083	U	C2-N3	5.30	1.41	1.37
57	BB	1123	C	C4-C5	-5.30	1.38	1.43
57	BB	1479	G	C2'-C1'	5.30	1.59	1.53
57	BB	1756	G	P-O5'	-5.30	1.54	1.59
57	BB	2605	U	C4-C5	5.30	1.48	1.43
21	AA	35	G	N9-C8	5.29	1.41	1.37
57	BB	914	G	C6-O6	-5.29	1.19	1.24
57	BB	1378	A	N9-C4	5.29	1.41	1.37
57	BB	1747	U	C2-N3	-5.29	1.34	1.37
57	BB	1995	U	C4-O4	5.29	1.27	1.23
57	BB	2057	G	C5-C6	-5.29	1.37	1.42
21	AA	314	C	C4'-C3'	5.29	1.58	1.53
21	AA	503	C	C2'-C1'	-5.29	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	690	G	C4'-O4'	5.29	1.52	1.45
21	AA	778	G	C3'-C2'	-5.29	1.47	1.52
21	AA	911	U	O4'-C1'	-5.29	1.34	1.41
21	AA	1219	A	C5'-C4'	5.29	1.57	1.51
21	AA	1311	A	C2-N3	5.29	1.38	1.33
22	AY	18	G	C5-C4	5.29	1.42	1.38
23	AW	13	C	C3'-O3'	5.29	1.49	1.42
57	BB	48	G	N9-C8	5.29	1.41	1.37
57	BB	264	C	C2-O2	5.29	1.29	1.24
57	BB	318	C	N1-C6	5.29	1.40	1.37
57	BB	930	G	C4'-O4'	-5.29	1.38	1.45
57	BB	1441	G	C2-N2	5.29	1.39	1.34
57	BB	1670	C	N3-C4	5.29	1.37	1.33
57	BB	2739	U	C3'-C2'	-5.29	1.47	1.52
57	BB	2778	A	C3'-C2'	-5.29	1.47	1.52
21	AA	157	U	P-O5'	5.29	1.65	1.59
21	AA	1144	G	C6-N1	5.29	1.43	1.39
21	AA	1232	U	C4-C5	5.29	1.48	1.43
21	AA	1380	U	C5-C6	5.29	1.39	1.34
57	BB	71	A	C2'-C1'	-5.29	1.47	1.53
57	BB	144	A	C6-N6	5.29	1.38	1.33
57	BB	246	C	C3'-C2'	5.29	1.58	1.52
57	BB	812	C	C4'-O4'	5.29	1.52	1.45
57	BB	1688	U	C3'-O3'	5.29	1.49	1.42
57	BB	2155	U	N1-C6	5.29	1.42	1.38
57	BB	2168	G	C8-N7	-5.29	1.27	1.30
57	BB	2725	A	C8-N7	-5.29	1.27	1.31
57	BB	2727	A	C8-N7	-5.29	1.27	1.31
58	BA	40	U	O3'-P	-5.29	1.54	1.61
21	AA	623	C	C4-N4	5.29	1.38	1.33
21	AA	628	G	C2-N3	5.29	1.36	1.32
57	BB	630	G	C8-N7	-5.29	1.27	1.30
57	BB	786	C	C4'-C3'	-5.29	1.47	1.52
1	AJ	16	ARG	NE-CZ	5.29	1.40	1.33
21	AA	794	A	N1-C2	5.29	1.39	1.34
21	AA	1071	C	C4'-C3'	5.29	1.58	1.53
21	AA	1127	G	C8-N7	5.29	1.34	1.30
57	BB	367	G	C5-C4	5.29	1.42	1.38
57	BB	493	G	C6-N1	5.29	1.43	1.39
57	BB	604	G	C6-N1	-5.29	1.35	1.39
57	BB	919	U	C4'-C3'	5.29	1.58	1.53
57	BB	1463	C	O5'-C5'	-5.29	1.34	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1569	A	C4'-C3'	-5.29	1.47	1.52
57	BB	1630	A	N9-C8	-5.29	1.33	1.37
58	BA	85	G	C2-N2	5.29	1.39	1.34
21	AA	754	C	P-O5'	5.29	1.65	1.59
21	AA	929	G	N7-C5	-5.29	1.36	1.39
21	AA	1456	A	C5-C4	5.29	1.42	1.38
22	AY	39	U	C2-O2	5.29	1.27	1.22
57	BB	997	G	C6-O6	-5.29	1.19	1.24
57	BB	1245	G	C3'-O3'	-5.29	1.34	1.42
57	BB	2145	C	P-O5'	-5.29	1.54	1.59
57	BB	2303	G	C2-N2	5.29	1.39	1.34
21	AA	221	C	P-O5'	-5.29	1.54	1.59
21	AA	1018	G	N3-C4	-5.29	1.31	1.35
21	AA	1084	G	C4'-O4'	-5.29	1.38	1.45
21	AA	1288	A	C4'-C3'	5.29	1.58	1.53
57	BB	116	C	C1'-N1	5.29	1.56	1.48
57	BB	326	G	N1-C2	5.29	1.42	1.37
57	BB	360	U	C2-N3	5.29	1.41	1.37
57	BB	577	G	C5-C4	5.29	1.42	1.38
57	BB	881	G	N1-C2	5.29	1.42	1.37
57	BB	1613	G	N9-C4	-5.29	1.33	1.38
21	AA	31	G	N1-C2	5.28	1.42	1.37
21	AA	417	G	N1-C2	5.28	1.42	1.37
21	AA	670	G	C2-N3	5.28	1.36	1.32
21	AA	759	A	C3'-O3'	5.28	1.49	1.42
57	BB	220	G	C2-N3	5.28	1.36	1.32
57	BB	268	C	N1-C6	5.28	1.40	1.37
57	BB	910	A	C3'-O3'	5.28	1.49	1.42
57	BB	922	C	C2-O2	-5.28	1.19	1.24
57	BB	1060	U	C1'-N1	5.28	1.56	1.48
57	BB	1763	G	N3-C4	5.28	1.39	1.35
57	BB	1979	U	O4'-C1'	-5.28	1.34	1.41
57	BB	2288	A	O4'-C1'	5.28	1.48	1.41
57	BB	2301	C	N3-C4	5.28	1.37	1.33
57	BB	2317	A	N9-C4	-5.28	1.34	1.37
57	BB	2523	G	C2-N3	5.28	1.36	1.32
57	BB	2674	G	C4'-C3'	5.28	1.58	1.53
21	AA	492	C	P-O5'	-5.28	1.54	1.59
21	AA	627	G	C6-N1	5.28	1.43	1.39
21	AA	1118	U	C2-N3	5.28	1.41	1.37
26	AV	40	C	O3'-P	-5.28	1.54	1.61
57	BB	577	G	C6-N1	5.28	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2609	U	C3'-O3'	5.28	1.49	1.42
8	AQ	9	GLY	N-CA	-5.28	1.38	1.46
21	AA	63	C	C4'-C3'	-5.28	1.47	1.52
21	AA	280	C	C4-N4	5.28	1.38	1.33
21	AA	1164	G	N1-C2	5.28	1.42	1.37
21	AA	1488	G	O3'-P	-5.28	1.54	1.61
22	AY	18	G	C4'-C3'	5.28	1.58	1.53
57	BB	54	G	C5'-C4'	5.28	1.57	1.51
57	BB	93	G	C6-N1	5.28	1.43	1.39
57	BB	1259	G	C2'-C1'	-5.28	1.47	1.53
57	BB	1344	U	N1-C6	5.28	1.42	1.38
57	BB	1946	U	O3'-P	-5.28	1.54	1.61
57	BB	1976	U	C1'-N1	5.28	1.56	1.48
57	BB	2400	G	N1-C2	5.28	1.42	1.37
57	BB	2588	G	N1-C2	5.28	1.42	1.37
57	BB	2693	G	C5-C6	-5.28	1.37	1.42
57	BB	2749	A	O3'-P	-5.28	1.54	1.61
57	BB	2770	G	N9-C8	5.28	1.41	1.37
57	BB	2890	G	C1'-N9	5.28	1.56	1.48
21	AA	612	C	N3-C4	5.28	1.37	1.33
21	AA	693	G	C1'-N9	-5.28	1.39	1.46
21	AA	1075	U	C3'-C2'	-5.28	1.47	1.52
22	AY	14	A	N3-C4	-5.28	1.31	1.34
57	BB	883	G	N1-C2	5.28	1.42	1.37
57	BB	1193	G	N3-C4	-5.28	1.31	1.35
57	BB	1881	C	C2-O2	5.28	1.29	1.24
57	BB	2252	G	P-O5'	5.28	1.65	1.59
21	AA	883	C	C5-C6	-5.28	1.30	1.34
21	AA	916	U	N3-C4	5.28	1.43	1.38
21	AA	1236	A	N9-C4	5.28	1.41	1.37
21	AA	1438	G	N9-C8	5.28	1.41	1.37
22	AY	37	G	N9-C8	-5.28	1.34	1.37
23	AW	58	A	C6-N6	5.28	1.38	1.33
38	BS	75	PHE	CA-CB	5.28	1.65	1.53
52	BD	175	LEU	CA-C	-5.28	1.39	1.52
57	BB	170	U	C2'-C1'	-5.28	1.47	1.53
57	BB	277	G	C6-N1	5.28	1.43	1.39
57	BB	1089	A	C3'-C2'	-5.28	1.47	1.52
57	BB	1584	U	C5'-C4'	5.28	1.57	1.51
57	BB	1608	A	C2-N3	5.28	1.38	1.33
57	BB	1726	C	P-O5'	-5.28	1.54	1.59
57	BB	2283	C	C3'-O3'	5.28	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2606	C	C4-N4	5.28	1.38	1.33
57	BB	2645	G	N7-C5	5.28	1.42	1.39
21	AA	11	G	C6-N1	5.28	1.43	1.39
21	AA	70	U	C5-C6	5.28	1.38	1.34
21	AA	262	A	N3-C4	-5.28	1.31	1.34
21	AA	301	G	N9-C8	5.28	1.41	1.37
21	AA	927	G	O4'-C1'	-5.28	1.34	1.41
21	AA	1048	G	N1-C2	5.28	1.42	1.37
57	BB	332	A	C6-N1	5.28	1.39	1.35
57	BB	765	C	C4'-O4'	5.28	1.52	1.45
57	BB	771	G	C5'-C4'	5.28	1.57	1.51
57	BB	802	A	N1-C2	-5.28	1.29	1.34
57	BB	1044	C	N1-C6	5.28	1.40	1.37
57	BB	1056	G	N9-C4	5.28	1.42	1.38
57	BB	1572	A	N9-C8	5.28	1.42	1.37
57	BB	1816	C	P-O5'	5.28	1.65	1.59
57	BB	2528	U	C2-N3	5.28	1.41	1.37
21	AA	1054	C	C3'-C2'	5.27	1.58	1.52
57	BB	1944	U	C3'-O3'	5.27	1.49	1.42
57	BB	2010	G	C6-N1	5.27	1.43	1.39
58	BA	67	G	C6-N1	5.27	1.43	1.39
21	AA	591	U	C3'-O3'	5.27	1.49	1.42
21	AA	992	U	N1-C6	5.27	1.42	1.38
21	AA	1153	G	C2'-C1'	-5.27	1.47	1.53
21	AA	1315	U	C4-O4	-5.27	1.19	1.23
33	BN	2	ARG	CZ-NH1	5.27	1.40	1.33
57	BB	197	A	N1-C2	5.27	1.39	1.34
57	BB	798	G	N1-C2	5.27	1.42	1.37
57	BB	1331	G	C5'-C4'	5.27	1.57	1.51
57	BB	1394	U	N1-C2	5.27	1.43	1.38
57	BB	1742	U	N3-C4	5.27	1.43	1.38
57	BB	2208	C	C2-N3	5.27	1.40	1.35
57	BB	2298	A	N7-C5	5.27	1.42	1.39
57	BB	2748	A	N7-C5	-5.27	1.36	1.39
57	BB	2754	U	C5-C6	5.27	1.38	1.34
58	BA	70	C	C2'-C1'	-5.27	1.47	1.53
34	BO	64	TYR	CE2-CZ	5.27	1.45	1.38
57	BB	1188	U	O4'-C1'	5.27	1.48	1.41
21	AA	20	U	C4'-O4'	5.27	1.52	1.45
21	AA	154	U	N1-C6	-5.27	1.33	1.38
21	AA	554	A	P-O5'	-5.27	1.54	1.59
21	AA	621	A	P-O5'	-5.27	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	898	G	N9-C4	5.27	1.42	1.38
22	AY	9	A	C8-N7	-5.27	1.27	1.31
23	AW	47	U	C4-C5	-5.27	1.38	1.43
24	AX	21	C	C4-C5	5.27	1.47	1.43
26	AV	34	C	N3-C4	5.27	1.37	1.33
57	BB	268	C	N3-C4	5.27	1.37	1.33
57	BB	473	G	C2-N3	5.27	1.36	1.32
57	BB	619	G	C5-C6	-5.27	1.37	1.42
57	BB	1903	G	C4'-O4'	5.27	1.52	1.45
57	BB	2474	U	P-O5'	5.27	1.65	1.59
57	BB	2625	G	N1-C2	5.27	1.42	1.37
57	BB	2782	G	N1-C2	5.27	1.42	1.37
57	BB	2839	G	C6-N1	5.27	1.43	1.39
5	AN	57	SER	CB-OG	5.27	1.49	1.42
18	AG	59	GLU	CG-CD	5.27	1.59	1.51
21	AA	30	U	C3'-C2'	5.27	1.58	1.52
21	AA	217	C	C2-N3	5.27	1.40	1.35
21	AA	582	C	C2-N3	-5.27	1.31	1.35
21	AA	604	G	C6-N1	5.27	1.43	1.39
21	AA	705	G	C5-C4	5.27	1.42	1.38
21	AA	954	G	P-O5'	-5.27	1.54	1.59
21	AA	1473	G	C8-N7	-5.27	1.27	1.30
52	BD	30	GLU	CG-CD	5.27	1.59	1.51
56	BH	51	ARG	NE-CZ	5.27	1.39	1.33
57	BB	77	G	C2'-C1'	-5.27	1.47	1.53
57	BB	92	U	O3'-P	-5.27	1.54	1.61
57	BB	207	A	N1-C2	-5.27	1.29	1.34
57	BB	582	A	N3-C4	-5.27	1.31	1.34
57	BB	1423	G	C8-N7	-5.27	1.27	1.30
57	BB	1530	G	C5'-C4'	5.27	1.57	1.51
57	BB	1704	C	C4'-C3'	5.27	1.58	1.53
57	BB	2751	G	N9-C8	-5.27	1.34	1.37
57	BB	2864	G	C5-C4	5.27	1.42	1.38
57	BB	2877	G	C3'-C2'	5.27	1.58	1.52
57	BB	2903	U	C2'-C1'	-5.27	1.47	1.53
5	AN	8	ARG	NE-CZ	5.27	1.39	1.33
21	AA	117	G	C5-C6	-5.27	1.37	1.42
21	AA	313	A	C5'-C4'	5.27	1.57	1.51
21	AA	1381	U	N3-C4	5.27	1.43	1.38
22	AY	7	U	C4'-O4'	-5.27	1.38	1.45
57	BB	374	A	C3'-O3'	5.27	1.49	1.42
57	BB	433	C	C4'-C3'	5.27	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2623	G	O3'-P	-5.27	1.54	1.61
21	AA	568	G	C2'-O2'	-5.26	1.34	1.41
21	AA	583	A	C4'-O4'	-5.26	1.38	1.45
21	AA	816	A	P-O5'	-5.26	1.54	1.59
21	AA	894	G	C5-C4	-5.26	1.34	1.38
21	AA	1028	C	N3-C4	5.26	1.37	1.33
21	AA	1050	G	C8-N7	-5.26	1.27	1.30
21	AA	1119	C	N1-C2	5.26	1.45	1.40
21	AA	1187	G	N7-C5	-5.26	1.36	1.39
21	AA	1192	C	C2'-C1'	-5.26	1.47	1.53
22	AY	32	C	C3'-C2'	-5.26	1.47	1.52
57	BB	322	A	O3'-P	-5.26	1.54	1.61
57	BB	408	G	C2-N3	5.26	1.36	1.32
57	BB	1118	C	P-O5'	-5.26	1.54	1.59
57	BB	1549	A	C2-N3	5.26	1.38	1.33
57	BB	1761	C	N1-C6	5.26	1.40	1.37
57	BB	1875	G	C1'-N9	-5.26	1.39	1.46
57	BB	1907	G	C2'-O2'	-5.26	1.34	1.41
57	BB	2695	U	O3'-P	-5.26	1.54	1.61
15	AD	153	ARG	CZ-NH1	5.26	1.39	1.33
21	AA	846	G	C4'-C3'	5.26	1.58	1.53
26	AV	49	G	C5-C6	-5.26	1.37	1.42
57	BB	420	C	C4-N4	5.26	1.38	1.33
57	BB	1482	G	C3'-O3'	5.26	1.49	1.42
21	AA	429	U	C5-C6	5.26	1.38	1.34
21	AA	490	C	N3-C4	5.26	1.37	1.33
21	AA	785	G	N3-C4	5.26	1.39	1.35
21	AA	1401	G	O3'-P	-5.26	1.54	1.61
21	AA	1441	A	C6-N6	5.26	1.38	1.33
21	AA	1469	C	N3-C4	5.26	1.37	1.33
23	AW	72	C	C5'-C4'	5.26	1.57	1.51
25	AZ	344	PRO	N-CD	5.26	1.55	1.47
57	BB	227	A	N9-C4	-5.26	1.34	1.37
57	BB	626	A	C5'-C4'	5.26	1.57	1.51
57	BB	675	A	N7-C5	-5.26	1.36	1.39
57	BB	742	A	C5-C6	-5.26	1.36	1.41
57	BB	1300	G	N3-C4	-5.26	1.31	1.35
57	BB	2586	U	N3-C4	5.26	1.43	1.38
57	BB	2808	G	N7-C5	5.26	1.42	1.39
58	BA	16	G	C5-C4	5.26	1.42	1.38
21	AA	970	C	C5'-C4'	5.26	1.57	1.51
21	AA	1168	U	N3-C4	5.26	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1310	G	C3'-C2'	-5.26	1.47	1.52
21	AA	1389	C	P-O5'	-5.26	1.54	1.59
21	AA	1477	U	C3'-O3'	5.26	1.49	1.42
21	AA	1478	U	N3-C4	5.26	1.43	1.38
57	BB	299	A	O3'-P	5.26	1.67	1.61
57	BB	857	G	N9-C8	5.26	1.41	1.37
57	BB	2750	A	C2'-C1'	-5.26	1.47	1.53
57	BB	2868	A	N9-C4	5.26	1.41	1.37
21	AA	1222	G	O4'-C1'	5.26	1.48	1.41
26	AV	66	C	P-O5'	-5.26	1.54	1.59
57	BB	1141	U	N3-C4	5.26	1.43	1.38
57	BB	1563	U	C4-C5	5.26	1.48	1.43
57	BB	1898	U	N1-C2	-5.26	1.33	1.38
15	AD	164	ARG	CZ-NH2	5.26	1.39	1.33
21	AA	59	A	O3'-P	-5.26	1.54	1.61
21	AA	326	G	C4'-C3'	-5.26	1.47	1.52
21	AA	1370	G	O3'-P	5.26	1.67	1.61
21	AA	1480	A	C4'-C3'	5.26	1.58	1.53
57	BB	646	U	C2'-C1'	5.26	1.59	1.53
57	BB	1029	A	O4'-C1'	-5.26	1.34	1.41
57	BB	1585	C	N1-C2	-5.26	1.34	1.40
57	BB	1607	C	C5'-C4'	5.26	1.57	1.51
57	BB	1865	U	N1-C2	5.26	1.43	1.38
57	BB	2031	A	C5-C4	5.26	1.42	1.38
21	AA	994	A	C8-N7	-5.25	1.27	1.31
21	AA	1104	G	C5'-C4'	5.25	1.57	1.51
57	BB	384	A	C6-N6	5.25	1.38	1.33
21	AA	230	G	C5-C6	-5.25	1.37	1.42
21	AA	469	C	C2'-C1'	-5.25	1.47	1.53
21	AA	540	G	C6-N1	5.25	1.43	1.39
21	AA	718	A	C4'-C3'	5.25	1.58	1.53
21	AA	867	G	C3'-C2'	5.25	1.58	1.52
21	AA	968	A	P-O5'	-5.25	1.54	1.59
26	AV	55	U	O3'-P	-5.25	1.54	1.61
57	BB	35	G	N7-C5	5.25	1.42	1.39
57	BB	296	U	O3'-P	-5.25	1.54	1.61
57	BB	350	G	C8-N7	-5.25	1.27	1.30
57	BB	358	U	N1-C2	-5.25	1.33	1.38
57	BB	666	A	C8-N7	5.25	1.35	1.31
57	BB	830	G	C2'-O2'	-5.25	1.34	1.41
57	BB	962	G	C5'-C4'	5.25	1.57	1.51
57	BB	1344	U	N3-C4	5.25	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1727	C	C4'-C3'	-5.25	1.47	1.52
57	BB	1909	C	C4-N4	5.25	1.38	1.33
57	BB	2247	A	N9-C8	-5.25	1.33	1.37
57	BB	2551	C	C5-C6	5.25	1.38	1.34
21	AA	211	G	O4'-C1'	-5.25	1.34	1.41
21	AA	333	U	O5'-C5'	-5.25	1.34	1.42
21	AA	744	C	N1-C2	5.25	1.45	1.40
21	AA	1524	C	C4'-C3'	-5.25	1.47	1.52
26	AV	27	U	N3-C4	5.25	1.43	1.38
57	BB	249	C	N1-C6	5.25	1.40	1.37
57	BB	446	G	C2-N3	5.25	1.36	1.32
57	BB	451	U	O3'-P	-5.25	1.54	1.61
57	BB	1022	G	C2'-C1'	-5.25	1.47	1.53
57	BB	1047	G	C5-C6	-5.25	1.37	1.42
57	BB	1522	A	N3-C4	-5.25	1.31	1.34
57	BB	2790	U	O4'-C1'	5.25	1.48	1.41
57	BB	2812	G	N9-C4	5.25	1.42	1.38
21	AA	860	A	C6-N6	5.25	1.38	1.33
21	AA	1114	C	O4'-C1'	-5.25	1.34	1.41
21	AA	1252	A	C3'-O3'	5.25	1.49	1.42
21	AA	1398	A	C8-N7	5.25	1.35	1.31
57	BB	1105	U	C4-C5	5.25	1.48	1.43
57	BB	1524	G	C5-C4	-5.25	1.34	1.38
57	BB	2454	G	C8-N7	-5.25	1.27	1.30
21	AA	248	C	N1-C6	5.25	1.40	1.37
21	AA	420	U	O3'-P	-5.25	1.54	1.61
21	AA	468	A	C3'-O3'	5.25	1.49	1.42
21	AA	502	A	C2'-C1'	-5.25	1.47	1.53
21	AA	839	C	C2'-C1'	-5.25	1.47	1.53
52	BD	79	LEU	CA-C	-5.25	1.39	1.52
55	BG	80	GLU	CD-OE2	5.25	1.31	1.25
57	BB	54	G	C5-C6	-5.25	1.37	1.42
57	BB	386	G	C4'-C3'	5.25	1.58	1.53
57	BB	719	C	C2-N3	5.25	1.40	1.35
57	BB	835	C	N1-C6	-5.25	1.34	1.37
57	BB	1028	A	N9-C4	-5.25	1.34	1.37
57	BB	1228	G	C6-N1	5.25	1.43	1.39
57	BB	2137	U	O3'-P	-5.25	1.54	1.61
57	BB	2190	G	C6-O6	-5.25	1.19	1.24
21	AA	331	G	C2'-C1'	-5.25	1.47	1.53
21	AA	442	G	C3'-O3'	5.25	1.49	1.42
21	AA	613	C	O3'-P	5.25	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1236	A	C8-N7	-5.25	1.27	1.31
21	AA	1423	G	C2'-C1'	-5.25	1.47	1.53
53	BE	92	HIS	CB-CG	5.25	1.59	1.50
57	BB	627	A	C6-N6	5.25	1.38	1.33
57	BB	817	C	C4'-C3'	5.25	1.58	1.53
57	BB	1140	C	N1-C6	5.25	1.40	1.37
57	BB	1277	G	N3-C4	5.25	1.39	1.35
57	BB	1715	G	C2'-C1'	-5.25	1.47	1.53
57	BB	1781	U	C4-O4	-5.25	1.19	1.23
57	BB	1793	C	C2'-C1'	-5.25	1.47	1.53
57	BB	1871	A	C2-N3	5.25	1.38	1.33
57	BB	1900	A	C5-C4	5.25	1.42	1.38
57	BB	2065	C	N1-C2	-5.25	1.34	1.40
57	BB	2287	A	C6-N6	5.25	1.38	1.33
13	AB	62	ARG	NE-CZ	5.25	1.39	1.33
14	AC	157	GLY	N-CA	-5.25	1.38	1.46
21	AA	257	G	C5-C4	-5.25	1.34	1.38
21	AA	626	G	C2-N3	5.25	1.36	1.32
21	AA	1038	C	C2'-C1'	5.25	1.59	1.53
21	AA	1438	G	O3'-P	-5.25	1.54	1.61
57	BB	132	G	C5-C4	5.25	1.42	1.38
6	AO	57	ARG	NE-CZ	5.24	1.39	1.33
19	AH	59	GLU	CG-CD	5.24	1.59	1.51
21	AA	194	C	C2-N3	-5.24	1.31	1.35
21	AA	324	G	C2-N3	5.24	1.36	1.32
21	AA	827	U	N3-C4	5.24	1.43	1.38
22	AY	10	G	C5'-C4'	-5.24	1.45	1.51
36	BQ	27	ARG	CD-NE	5.24	1.55	1.46
57	BB	262	A	P-O5'	-5.24	1.54	1.59
57	BB	419	U	N3-C4	5.24	1.43	1.38
57	BB	439	A	N9-C8	-5.24	1.33	1.37
57	BB	633	A	P-O5'	-5.24	1.54	1.59
57	BB	719	C	P-O5'	-5.24	1.54	1.59
57	BB	782	A	N7-C5	-5.24	1.36	1.39
57	BB	831	G	C5-C4	-5.24	1.34	1.38
57	BB	845	A	C3'-C2'	5.24	1.58	1.52
57	BB	891	G	C6-N1	5.24	1.43	1.39
57	BB	1571	A	C2-N3	-5.24	1.28	1.33
21	AA	5	U	P-O5'	5.24	1.65	1.59
21	AA	545	C	C1'-N1	5.24	1.56	1.48
23	AW	58	A	P-O5'	5.24	1.65	1.59
57	BB	983	A	N9-C8	-5.24	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1192	G	C6-N1	5.24	1.43	1.39
57	BB	1538	G	C2-N2	5.24	1.39	1.34
57	BB	1572	A	C3'-C2'	5.24	1.58	1.52
21	AA	33	A	N3-C4	-5.24	1.31	1.34
21	AA	79	G	C4'-C3'	5.24	1.58	1.53
21	AA	217	C	C5'-C4'	5.24	1.57	1.51
21	AA	348	G	C2-N3	5.24	1.36	1.32
21	AA	614	C	C2-N3	5.24	1.40	1.35
21	AA	753	A	C8-N7	5.24	1.35	1.31
21	AA	1075	U	C4-O4	-5.24	1.19	1.23
21	AA	1124	G	C5-C6	-5.24	1.37	1.42
23	AW	76	A	N9-C4	-5.24	1.34	1.37
36	BQ	57	ARG	CZ-NH1	5.24	1.39	1.33
57	BB	291	G	C5-C4	5.24	1.42	1.38
57	BB	1627	G	C5'-C4'	5.24	1.57	1.51
57	BB	1858	A	C8-N7	-5.24	1.27	1.31
57	BB	2174	C	C5'-C4'	5.24	1.57	1.51
57	BB	2295	C	C1'-N1	5.24	1.56	1.48
57	BB	2891	U	C2'-C1'	-5.24	1.47	1.53
58	BA	96	G	C2'-C1'	-5.24	1.47	1.53
21	AA	193	C	C2'-C1'	-5.24	1.47	1.53
21	AA	1030	U	C5-C6	5.24	1.38	1.34
22	AY	11	C	C4-N4	5.24	1.38	1.33
23	AW	8	U	C5-C6	-5.24	1.29	1.34
57	BB	77	G	C5'-C4'	5.24	1.57	1.51
57	BB	1737	G	O4'-C1'	-5.24	1.34	1.41
57	BB	2124	G	C3'-C2'	-5.24	1.47	1.52
57	BB	2359	C	C4-C5	5.24	1.47	1.43
57	BB	2535	G	C5'-C4'	5.24	1.57	1.51
57	BB	2579	C	C2'-C1'	-5.24	1.47	1.53
21	AA	294	U	C2-N3	5.24	1.41	1.37
21	AA	1316	G	N7-C5	-5.24	1.36	1.39
57	BB	375	G	C2-N3	5.24	1.36	1.32
57	BB	409	G	C8-N7	5.24	1.34	1.30
57	BB	415	A	C5-C4	5.24	1.42	1.38
57	BB	959	A	C6-N1	5.24	1.39	1.35
15	AD	3	TYR	CB-CG	-5.24	1.43	1.51
21	AA	90	C	C4-N4	5.24	1.38	1.33
21	AA	262	A	C3'-C2'	-5.24	1.47	1.52
21	AA	983	A	C2'-C1'	-5.24	1.47	1.53
32	BM	44	ARG	NE-CZ	5.24	1.39	1.33
57	BB	178	G	C2'-C1'	-5.24	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1103	A	N9-C8	5.24	1.42	1.37
57	BB	1725	U	N1-C6	5.24	1.42	1.38
57	BB	1753	G	N7-C5	5.24	1.42	1.39
57	BB	2405	G	O4'-C1'	-5.24	1.34	1.41
57	BB	2482	A	C2'-O2'	5.24	1.48	1.41
21	AA	380	G	C5'-C4'	5.23	1.57	1.51
21	AA	460	A	N9-C8	5.23	1.42	1.37
21	AA	952	U	C2'-C1'	-5.23	1.47	1.53
21	AA	980	C	C4-N4	5.23	1.38	1.33
21	AA	1204	A	C6-N6	-5.23	1.29	1.33
21	AA	1311	A	C2'-C1'	-5.23	1.47	1.53
26	AV	38	A	N9-C8	5.23	1.42	1.37
57	BB	715	A	P-O5'	5.23	1.65	1.59
57	BB	797	G	C8-N7	-5.23	1.27	1.30
57	BB	816	C	N3-C4	5.23	1.37	1.33
57	BB	1929	G	N1-C2	5.23	1.42	1.37
57	BB	2587	A	C4'-C3'	5.23	1.58	1.53
57	BB	2822	G	C2-N3	5.23	1.36	1.32
20	AI	88	GLU	CD-OE2	5.23	1.31	1.25
21	AA	709	U	C5'-C4'	5.23	1.57	1.51
21	AA	1004	A	C6-N6	5.23	1.38	1.33
21	AA	1482	G	N9-C8	-5.23	1.34	1.37
57	BB	256	A	C3'-C2'	-5.23	1.47	1.52
57	BB	484	C	C2'-O2'	5.23	1.48	1.41
57	BB	650	C	C5-C6	-5.23	1.30	1.34
57	BB	999	U	C3'-C2'	5.23	1.58	1.52
57	BB	1419	A	N9-C8	-5.23	1.33	1.37
57	BB	1437	C	O3'-P	-5.23	1.54	1.61
57	BB	1518	C	N3-C4	5.23	1.37	1.33
57	BB	2256	G	C6-N1	5.23	1.43	1.39
57	BB	2348	U	C5-C6	5.23	1.38	1.34
57	BB	2615	U	C4'-O4'	5.23	1.52	1.45
57	BB	2777	G	C3'-C2'	-5.23	1.47	1.52
58	BA	96	G	C2'-O2'	5.23	1.48	1.41
16	AE	156	ARG	CD-NE	5.23	1.55	1.46
21	AA	212	G	C5'-C4'	5.23	1.57	1.51
21	AA	364	A	C1'-N9	5.23	1.56	1.48
21	AA	422	C	O3'-P	-5.23	1.54	1.61
21	AA	1215	G	C2-N3	5.23	1.36	1.32
57	BB	212	G	C5-C4	5.23	1.42	1.38
57	BB	348	A	N9-C4	5.23	1.41	1.37
57	BB	363	G	P-O5'	-5.23	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	503	A	C6-N6	5.23	1.38	1.33
57	BB	519	U	C4'-O4'	5.23	1.52	1.45
57	BB	2362	C	C2-O2	5.23	1.29	1.24
57	BB	2696	U	N3-C4	5.23	1.43	1.38
58	BA	111	U	C2-O2	5.23	1.27	1.22
57	BB	451	U	N1-C2	5.23	1.43	1.38
57	BB	1091	G	C5'-C4'	5.23	1.57	1.51
57	BB	1149	G	C2'-C1'	-5.23	1.47	1.53
57	BB	2063	C	C3'-C2'	-5.23	1.47	1.52
57	BB	2260	C	P-O5'	-5.23	1.54	1.59
57	BB	2302	U	C4'-C3'	5.23	1.58	1.53
57	BB	2460	U	N1-C6	5.23	1.42	1.38
57	BB	2732	G	N9-C4	-5.23	1.33	1.38
13	AB	183	PHE	CG-CD2	5.23	1.46	1.38
21	AA	62	U	O3'-P	-5.23	1.54	1.61
21	AA	155	A	C6-N6	5.23	1.38	1.33
21	AA	953	G	C2'-C1'	-5.23	1.47	1.53
21	AA	1200	C	C2-N3	5.23	1.40	1.35
21	AA	1426	G	C2'-C1'	-5.23	1.47	1.53
22	AY	2	C	C2'-C1'	-5.23	1.47	1.53
57	BB	993	G	C8-N7	5.23	1.34	1.30
57	BB	1134	A	C5-C4	5.23	1.42	1.38
57	BB	1335	C	C2'-C1'	-5.23	1.47	1.53
57	BB	1613	G	C3'-C2'	5.23	1.58	1.52
57	BB	1821	A	C2'-C1'	-5.23	1.47	1.53
57	BB	2056	G	N1-C2	5.23	1.42	1.37
57	BB	2637	U	C2-N3	5.23	1.41	1.37
57	BB	2664	G	P-O5'	-5.23	1.54	1.59
57	BB	2770	G	C3'-O3'	5.23	1.49	1.42
14	AC	130	ARG	CZ-NH2	5.23	1.39	1.33
21	AA	435	A	C6-N1	5.23	1.39	1.35
43	BX	10	ARG	CD-NE	5.23	1.55	1.46
57	BB	21	A	C8-N7	-5.23	1.27	1.31
57	BB	74	A	C3'-O3'	5.23	1.49	1.42
57	BB	116	C	C4'-C3'	5.23	1.58	1.53
57	BB	272	A	C2'-C1'	-5.23	1.47	1.53
57	BB	1570	A	N3-C4	-5.23	1.31	1.34
21	AA	833	G	C5-C6	-5.22	1.37	1.42
21	AA	938	A	O5'-C5'	5.22	1.52	1.44
22	AY	8	U	N1-C2	5.22	1.43	1.38
22	AY	56	C	C5'-C4'	5.22	1.57	1.51
57	BB	274	C	C5-C6	-5.22	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	553	G	N7-C5	-5.22	1.36	1.39
57	BB	1341	G	C2'-C1'	-5.22	1.47	1.53
57	BB	1346	G	C4'-O4'	5.22	1.52	1.45
57	BB	2138	G	C6-N1	5.22	1.43	1.39
57	BB	2716	C	C4-N4	5.22	1.38	1.33
21	AA	32	A	N7-C5	-5.22	1.36	1.39
21	AA	343	U	C5-C6	-5.22	1.29	1.34
21	AA	706	A	P-O5'	-5.22	1.54	1.59
21	AA	1310	G	N9-C8	5.22	1.41	1.37
22	AY	53	G	O5'-C5'	5.22	1.52	1.44
34	BO	10	ARG	CD-NE	5.22	1.55	1.46
42	BW	44	PHE	CG-CD1	5.22	1.46	1.38
57	BB	274	C	C2-O2	5.22	1.29	1.24
57	BB	381	G	O4'-C1'	-5.22	1.34	1.41
57	BB	430	A	C5'-C4'	5.22	1.57	1.51
57	BB	855	G	N7-C5	-5.22	1.36	1.39
57	BB	1188	U	C4'-O4'	5.22	1.52	1.45
57	BB	1335	C	O3'-P	-5.22	1.54	1.61
57	BB	1953	A	N7-C5	-5.22	1.36	1.39
57	BB	2268	A	P-O5'	-5.22	1.54	1.59
21	AA	174	A	C5-C6	5.22	1.45	1.41
21	AA	861	G	C6-O6	5.22	1.28	1.24
21	AA	1215	G	P-O5'	-5.22	1.54	1.59
57	BB	243	U	C4-O4	-5.22	1.19	1.23
57	BB	811	U	C4'-O4'	5.22	1.52	1.45
57	BB	1692	U	C2'-C1'	-5.22	1.47	1.53
57	BB	1854	A	N3-C4	-5.22	1.31	1.34
57	BB	1967	C	C5'-C4'	5.22	1.57	1.51
21	AA	379	C	C2-N3	5.22	1.40	1.35
21	AA	408	A	O3'-P	-5.22	1.54	1.61
21	AA	447	G	C1'-N9	-5.22	1.39	1.46
21	AA	533	A	C5'-C4'	5.22	1.57	1.51
21	AA	603	U	N1-C2	5.22	1.43	1.38
21	AA	799	G	N1-C2	5.22	1.42	1.37
21	AA	819	A	C3'-C2'	5.22	1.58	1.52
21	AA	1187	G	C2'-C1'	5.22	1.59	1.53
21	AA	1401	G	C5-C6	-5.22	1.37	1.42
23	AW	37	A	N1-C2	5.22	1.39	1.34
23	AW	71	G	P-O5'	-5.22	1.54	1.59
57	BB	206	U	O3'-P	-5.22	1.54	1.61
57	BB	582	A	C4'-O4'	5.22	1.52	1.45
57	BB	989	G	N3-C4	-5.22	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1220	G	C6-N1	5.22	1.43	1.39
57	BB	1257	C	C2-O2	-5.22	1.19	1.24
57	BB	1857	G	C4'-C3'	5.22	1.58	1.53
57	BB	2796	U	N1-C6	-5.22	1.33	1.38
36	BQ	24	TYR	CZ-OH	5.22	1.46	1.37
57	BB	1080	A	P-O5'	-5.22	1.54	1.59
57	BB	1082	U	O3'-P	-5.22	1.54	1.61
57	BB	2591	C	C5-C6	-5.22	1.30	1.34
57	BB	2631	G	C2'-C1'	-5.22	1.47	1.53
57	BB	2820	A	C8-N7	-5.22	1.27	1.31
4	AM	82	LEU	N-CA	-5.22	1.35	1.46
18	AG	142	ARG	CD-NE	5.22	1.55	1.46
21	AA	211	G	C4'-C3'	5.22	1.58	1.53
21	AA	618	C	P-O5'	5.22	1.65	1.59
21	AA	935	A	O3'-P	-5.22	1.54	1.61
21	AA	1533	C	O4'-C1'	-5.22	1.34	1.41
39	BT	89	GLU	C-N	5.22	1.42	1.33
57	BB	356	G	C2'-O2'	5.22	1.48	1.41
57	BB	373	U	C4-O4	5.22	1.27	1.23
57	BB	523	C	N1-C6	5.22	1.40	1.37
57	BB	771	G	C1'-N9	-5.22	1.39	1.46
57	BB	831	G	N3-C4	5.22	1.39	1.35
57	BB	913	U	O4'-C1'	5.22	1.48	1.41
57	BB	999	U	P-O5'	-5.22	1.54	1.59
57	BB	1727	C	C3'-C2'	5.22	1.58	1.52
57	BB	1759	A	N3-C4	5.22	1.38	1.34
57	BB	2019	A	C8-N7	-5.22	1.27	1.31
57	BB	2207	C	C4'-O4'	5.22	1.52	1.45
57	BB	2527	C	C3'-O3'	5.22	1.49	1.42
21	AA	785	G	P-O5'	5.21	1.65	1.59
53	BE	170	ARG	CZ-NH2	5.21	1.39	1.33
57	BB	27	G	C2'-C1'	-5.21	1.47	1.53
57	BB	832	U	C5'-C4'	5.21	1.57	1.51
57	BB	1724	G	P-O5'	-5.21	1.54	1.59
57	BB	1981	A	C4'-C3'	5.21	1.58	1.53
57	BB	2363	G	O3'-P	-5.21	1.54	1.61
57	BB	2843	G	C6-N1	-5.21	1.35	1.39
21	AA	1391	U	C4-C5	-5.21	1.38	1.43
21	AA	1423	G	N1-C2	5.21	1.42	1.37
24	AX	16	A	C5'-C4'	5.21	1.57	1.51
57	BB	1203	U	C2-O2	5.21	1.27	1.22
57	BB	1245	G	C6-N1	5.21	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AK	43	TRP	CA-CB	5.21	1.65	1.53
21	AA	25	C	C4'-C3'	5.21	1.58	1.53
21	AA	449	G	N9-C4	-5.21	1.33	1.38
21	AA	535	A	C5-C6	-5.21	1.36	1.41
57	BB	19	A	C5-C4	5.21	1.42	1.38
57	BB	238	C	C2'-C1'	-5.21	1.47	1.53
57	BB	675	A	N9-C4	5.21	1.41	1.37
57	BB	765	C	C1'-N1	5.21	1.56	1.48
57	BB	1356	G	N3-C4	-5.21	1.31	1.35
57	BB	2263	C	O5'-C5'	5.21	1.52	1.44
58	BA	114	C	N1-C6	-5.21	1.34	1.37
21	AA	1012	A	C3'-C2'	5.21	1.58	1.52
21	AA	1464	U	C3'-O3'	5.21	1.49	1.42
57	BB	1823	G	C1'-N9	5.21	1.56	1.48
57	BB	2482	A	C6-N1	5.21	1.39	1.35
6	AO	77	TYR	CG-CD2	5.21	1.46	1.39
21	AA	62	U	C4'-O4'	-5.21	1.38	1.45
21	AA	154	U	C2'-O2'	-5.21	1.34	1.41
21	AA	586	C	C5-C6	5.21	1.38	1.34
21	AA	590	U	P-O5'	-5.21	1.54	1.59
21	AA	802	A	C2'-C1'	-5.21	1.47	1.53
21	AA	1186	G	C2-N3	-5.21	1.28	1.32
23	AW	28	G	N3-C4	-5.21	1.31	1.35
26	AV	18	G	O3'-P	-5.21	1.54	1.61
57	BB	119	A	N3-C4	5.21	1.38	1.34
57	BB	316	C	C2'-C1'	-5.21	1.47	1.53
57	BB	738	G	C6-O6	-5.21	1.19	1.24
57	BB	869	G	N9-C8	-5.21	1.34	1.37
57	BB	1009	A	C6-N6	5.21	1.38	1.33
57	BB	1177	G	C4'-C3'	-5.21	1.47	1.52
57	BB	1408	G	C3'-C2'	-5.21	1.47	1.52
57	BB	2066	C	N1-C6	-5.21	1.34	1.37
57	BB	2770	G	P-O5'	-5.21	1.54	1.59
57	BB	2881	U	N1-C6	-5.21	1.33	1.38
7	AP	31	ARG	NE-CZ	5.21	1.39	1.33
19	AH	113	ARG	CZ-NH1	5.21	1.39	1.33
21	AA	509	A	C5-C6	5.21	1.45	1.41
21	AA	1214	C	C2-N3	-5.21	1.31	1.35
21	AA	1280	A	N1-C2	5.21	1.39	1.34
57	BB	240	C	N1-C6	5.21	1.40	1.37
57	BB	468	G	C4'-C3'	-5.21	1.47	1.52
57	BB	863	A	C5-C6	-5.21	1.36	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	969	G	N3-C4	-5.21	1.31	1.35
57	BB	977	G	C5-C6	-5.21	1.37	1.42
57	BB	1276	A	N1-C2	5.21	1.39	1.34
57	BB	1395	A	C4'-O4'	-5.21	1.38	1.45
57	BB	1603	A	C6-N1	-5.21	1.31	1.35
57	BB	1821	A	N9-C4	-5.21	1.34	1.37
57	BB	2234	G	N9-C8	-5.21	1.34	1.37
57	BB	2252	G	C6-N1	5.21	1.43	1.39
57	BB	2754	U	C4-O4	-5.21	1.19	1.23
21	AA	1009	U	C2-N3	5.21	1.41	1.37
36	BQ	91	ARG	NE-CZ	5.21	1.39	1.33
57	BB	2056	G	N9-C8	5.21	1.41	1.37
57	BB	2091	C	N3-C4	5.21	1.37	1.33
57	BB	2537	U	P-O5'	-5.21	1.54	1.59
21	AA	711	G	C5-C4	-5.20	1.34	1.38
22	AY	67	A	C3'-C2'	5.20	1.58	1.52
23	AW	65	G	C5-C4	-5.20	1.34	1.38
26	AV	9	G	O4'-C1'	-5.20	1.34	1.41
57	BB	1183	U	O4'-C1'	5.20	1.48	1.41
57	BB	1403	A	N9-C4	5.20	1.41	1.37
57	BB	2498	C	C2'-C1'	-5.20	1.47	1.53
57	BB	2869	G	C2'-C1'	-5.20	1.47	1.53
21	AA	191	G	C1'-N9	5.20	1.56	1.48
26	AV	58	A	N3-C4	-5.20	1.31	1.34
36	BQ	32	ARG	CZ-NH1	5.20	1.39	1.33
57	BB	79	C	C2'-O2'	-5.20	1.34	1.41
57	BB	217	A	N1-C2	5.20	1.39	1.34
57	BB	1895	C	C4'-O4'	-5.20	1.38	1.45
21	AA	335	C	P-O5'	-5.20	1.54	1.59
21	AA	463	U	C2-N3	5.20	1.41	1.37
21	AA	570	G	C2-N3	5.20	1.36	1.32
21	AA	830	G	N7-C5	-5.20	1.36	1.39
21	AA	943	U	C4'-C3'	5.20	1.58	1.53
21	AA	1177	G	C5'-C4'	5.20	1.57	1.51
26	AV	59	A	C2'-C1'	-5.20	1.47	1.53
57	BB	796	C	N3-C4	5.20	1.37	1.33
57	BB	1248	G	C5'-C4'	5.20	1.57	1.51
57	BB	1619	G	N9-C8	5.20	1.41	1.37
57	BB	2800	A	C4'-C3'	5.20	1.58	1.53
21	AA	377	G	C5-C4	-5.20	1.34	1.38
21	AA	475	C	N3-C4	5.20	1.37	1.33
21	AA	482	A	C4'-C3'	5.20	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	521	G	C2-N3	5.20	1.36	1.32
21	AA	851	G	C2'-C1'	-5.20	1.47	1.53
21	AA	1491	G	C2-N2	-5.20	1.29	1.34
57	BB	79	C	C1'-N1	5.20	1.56	1.48
57	BB	202	U	C5'-C4'	5.20	1.57	1.51
57	BB	1448	G	C4'-C3'	-5.20	1.47	1.52
57	BB	1836	C	C2'-C1'	-5.20	1.47	1.53
57	BB	2034	U	C2-N3	5.20	1.41	1.37
57	BB	2592	G	C6-N1	5.20	1.43	1.39
57	BB	2603	G	C6-N1	5.20	1.43	1.39
21	AA	1305	G	C1'-N9	-5.20	1.39	1.46
57	BB	46	G	N3-C4	-5.20	1.31	1.35
57	BB	285	G	C4'-O4'	-5.20	1.38	1.45
57	BB	486	C	O3'-P	-5.20	1.54	1.61
57	BB	782	A	N9-C4	5.20	1.41	1.37
57	BB	1300	G	O3'-P	-5.20	1.54	1.61
57	BB	1388	G	N1-C2	5.20	1.42	1.37
57	BB	2239	G	C3'-O3'	5.20	1.49	1.42
57	BB	2702	G	C8-N7	5.20	1.34	1.30
21	AA	64	G	C5-C6	-5.20	1.37	1.42
21	AA	309	A	C5'-C4'	5.20	1.57	1.51
21	AA	560	A	C5-C4	-5.20	1.35	1.38
21	AA	930	C	N1-C2	5.20	1.45	1.40
23	AW	42	C	C3'-C2'	5.20	1.58	1.52
57	BB	255	A	N7-C5	-5.20	1.36	1.39
57	BB	2833	U	N1-C2	5.20	1.43	1.38
21	AA	467	U	N1-C2	5.19	1.43	1.38
21	AA	1005	A	O3'-P	-5.19	1.54	1.61
21	AA	1259	C	N1-C6	5.19	1.40	1.37
26	AV	71	C	C2-N3	5.19	1.40	1.35
57	BB	1246	A	C6-N6	5.19	1.38	1.33
57	BB	1331	G	C6-O6	-5.19	1.19	1.24
21	AA	169	C	N1-C6	5.19	1.40	1.37
21	AA	371	A	N3-C4	-5.19	1.31	1.34
21	AA	915	A	C6-N1	5.19	1.39	1.35
21	AA	996	A	C8-N7	-5.19	1.27	1.31
21	AA	1344	C	P-O5'	-5.19	1.54	1.59
21	AA	1454	G	N9-C4	-5.19	1.33	1.38
57	BB	234	U	C2'-C1'	-5.19	1.47	1.53
57	BB	741	U	C2-N3	5.19	1.41	1.37
57	BB	798	G	C3'-O3'	5.19	1.49	1.42
57	BB	826	U	P-O5'	-5.19	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1006	C	N1-C6	5.19	1.40	1.37
57	BB	1646	C	C3'-O3'	-5.19	1.34	1.42
57	BB	1648	U	N3-C4	5.19	1.43	1.38
57	BB	2069	G	C2'-C1'	-5.19	1.47	1.53
57	BB	2108	A	P-O5'	-5.19	1.54	1.59
57	BB	2308	G	O3'-P	-5.19	1.54	1.61
57	BB	2529	G	C2-N3	5.19	1.36	1.32
57	BB	2863	C	C4'-O4'	-5.19	1.38	1.45
58	BA	74	U	C4'-C3'	5.19	1.58	1.53
5	AN	33	VAL	CA-CB	-5.19	1.43	1.54
21	AA	86	G	C6-N1	5.19	1.43	1.39
21	AA	925	G	C2-N2	5.19	1.39	1.34
21	AA	1093	A	C6-N1	5.19	1.39	1.35
49	B2	33	ARG	NE-CZ	5.19	1.39	1.33
57	BB	468	G	O5'-C5'	-5.19	1.34	1.42
57	BB	859	G	C6-N1	5.19	1.43	1.39
57	BB	1603	A	N7-C5	-5.19	1.36	1.39
57	BB	1640	A	C8-N7	-5.19	1.27	1.31
57	BB	1853	A	C4'-O4'	5.19	1.52	1.45
57	BB	1947	C	C2'-C1'	-5.19	1.47	1.53
57	BB	2187	U	N3-C4	5.19	1.43	1.38
57	BB	2325	G	N9-C4	5.19	1.42	1.38
21	AA	133	U	C2-O2	5.19	1.27	1.22
21	AA	573	A	C3'-C2'	5.19	1.58	1.52
57	BB	141	G	N3-C4	5.19	1.39	1.35
57	BB	271	G	N1-C2	5.19	1.42	1.37
57	BB	555	G	N7-C5	-5.19	1.36	1.39
57	BB	668	A	C4'-O4'	-5.19	1.38	1.45
57	BB	1240	U	N1-C6	-5.19	1.33	1.38
58	BA	104	A	N7-C5	-5.19	1.36	1.39
21	AA	235	C	C5-C6	-5.19	1.30	1.34
21	AA	339	C	N1-C6	5.19	1.40	1.37
21	AA	451	A	O4'-C1'	5.19	1.48	1.41
21	AA	496	A	C6-N6	5.19	1.38	1.33
21	AA	857	C	C5'-C4'	5.19	1.57	1.51
21	AA	1437	A	C5'-C4'	5.19	1.57	1.51
57	BB	97	C	C2-N3	5.19	1.39	1.35
57	BB	170	U	N3-C4	5.19	1.43	1.38
57	BB	532	A	P-O5'	-5.19	1.54	1.59
57	BB	799	G	P-O5'	-5.19	1.54	1.59
57	BB	1108	U	C2'-C1'	-5.19	1.47	1.53
57	BB	2500	U	N1-C2	5.19	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2701	U	P-O5'	-5.19	1.54	1.59
57	BB	2718	G	P-O5'	-5.19	1.54	1.59
23	AW	15	G	O3'-P	-5.19	1.54	1.61
57	BB	816	C	N1-C2	-5.19	1.34	1.40
57	BB	1079	C	C2-N3	-5.19	1.31	1.35
57	BB	1984	G	C2-N3	5.19	1.36	1.32
21	AA	33	A	P-O5'	-5.18	1.54	1.59
21	AA	1068	G	N1-C2	5.18	1.41	1.37
57	BB	590	A	C5-C4	-5.18	1.35	1.38
57	BB	1109	C	C2-O2	5.18	1.29	1.24
57	BB	1218	G	N1-C2	5.18	1.41	1.37
57	BB	1715	G	O4'-C1'	5.18	1.48	1.41
57	BB	2437	G	C3'-O3'	5.18	1.49	1.42
21	AA	39	G	C2'-C1'	-5.18	1.47	1.53
21	AA	448	A	C6-N6	5.18	1.38	1.33
21	AA	491	G	C3'-O3'	5.18	1.49	1.42
21	AA	966	G	N7-C5	-5.18	1.36	1.39
22	AY	8	U	O4'-C1'	5.18	1.48	1.41
22	AY	41	U	C4'-C3'	-5.18	1.47	1.52
53	BE	102	ARG	NE-CZ	5.18	1.39	1.33
57	BB	437	U	C2'-C1'	-5.18	1.47	1.53
57	BB	689	A	C5-C4	5.18	1.42	1.38
57	BB	727	A	N3-C4	5.18	1.38	1.34
57	BB	1781	U	C5-C6	5.18	1.38	1.34
57	BB	2075	U	O3'-P	-5.18	1.54	1.61
57	BB	2786	U	C2'-C1'	-5.18	1.47	1.53
21	AA	187	G	C8-N7	-5.18	1.27	1.30
21	AA	1497	G	C5'-C4'	5.18	1.57	1.51
57	BB	336	C	N1-C2	5.18	1.45	1.40
57	BB	2272	U	C4-O4	5.18	1.27	1.23
2	AK	97	ARG	CZ-NH1	5.18	1.39	1.33
18	AG	9	ARG	CD-NE	5.18	1.55	1.46
26	AV	17(A)	U	O3'-P	-5.18	1.54	1.61
36	BQ	49	ARG	CZ-NH1	5.18	1.39	1.33
57	BB	278	A	C2'-O2'	-5.18	1.34	1.41
57	BB	291	G	N7-C5	-5.18	1.36	1.39
57	BB	472	A	C2'-C1'	-5.18	1.47	1.53
57	BB	496	G	N1-C2	5.18	1.41	1.37
57	BB	1084	A	N3-C4	5.18	1.38	1.34
57	BB	1102	C	C4-C5	-5.18	1.38	1.43
57	BB	1626	A	N3-C4	-5.18	1.31	1.34
57	BB	1969	A	N9-C8	-5.18	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2113	U	C4'-C3'	5.18	1.58	1.53
57	BB	2162	G	C2'-C1'	-5.18	1.47	1.53
57	BB	2895	G	N1-C2	5.18	1.41	1.37
21	AA	127	G	N7-C5	5.18	1.42	1.39
57	BB	295	G	C3'-O3'	-5.18	1.34	1.42
57	BB	600	G	C2'-O2'	-5.18	1.34	1.41
57	BB	1695	G	C6-N1	-5.18	1.35	1.39
57	BB	2447	G	C5-C6	-5.18	1.37	1.42
57	BB	2458	G	C8-N7	-5.18	1.27	1.30
57	BB	2883	A	C3'-C2'	5.18	1.58	1.52
1	AJ	7	ARG	NE-CZ	5.18	1.39	1.33
21	AA	413	G	C2-N2	5.18	1.39	1.34
21	AA	1375	A	N9-C4	5.18	1.41	1.37
21	AA	1496	C	O3'-P	-5.18	1.54	1.61
25	AZ	381	ARG	CZ-NH2	5.18	1.39	1.33
57	BB	79	C	C4'-C3'	5.18	1.58	1.53
57	BB	693	A	C5-C4	5.18	1.42	1.38
57	BB	747	U	P-O5'	-5.18	1.54	1.59
57	BB	1280	G	C2-N2	5.18	1.39	1.34
57	BB	1434	A	C4'-C3'	-5.18	1.47	1.52
57	BB	1618	A	N7-C5	-5.18	1.36	1.39
57	BB	2073	C	C4-N4	5.18	1.38	1.33
57	BB	2606	C	N3-C4	5.18	1.37	1.33
57	BB	2659	G	O3'-P	-5.18	1.54	1.61
57	BB	2737	G	C6-N1	5.18	1.43	1.39
57	BB	2782	G	N9-C8	5.18	1.41	1.37
57	BB	2811	G	C2'-C1'	-5.18	1.47	1.53
21	AA	561	U	P-O5'	5.17	1.65	1.59
22	AY	65	G	C6-N1	5.17	1.43	1.39
23	AW	24	G	C6-N1	5.17	1.43	1.39
57	BB	130	C	C4-C5	-5.17	1.38	1.43
57	BB	312	G	N3-C4	5.17	1.39	1.35
57	BB	849	A	N9-C8	-5.17	1.33	1.37
57	BB	1528	A	C8-N7	-5.17	1.27	1.31
57	BB	1797	G	C1'-N9	5.17	1.56	1.48
57	BB	1815	A	C4'-O4'	5.17	1.52	1.45
57	BB	2010	G	N7-C5	-5.17	1.36	1.39
57	BB	2279	G	C6-N1	5.17	1.43	1.39
57	BB	2302	U	C2-O2	5.17	1.27	1.22
57	BB	2331	G	P-O5'	-5.17	1.54	1.59
21	AA	372	C	C2-N3	5.17	1.39	1.35
57	BB	715	A	N7-C5	-5.17	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	799	G	C2'-C1'	-5.17	1.47	1.53
57	BB	878	A	C3'-O3'	5.17	1.49	1.42
57	BB	1481	U	C2'-C1'	-5.17	1.47	1.53
57	BB	1608	A	C5-C4	5.17	1.42	1.38
57	BB	1966	A	C2'-C1'	-5.17	1.47	1.53
57	BB	1998	A	C3'-C2'	-5.17	1.47	1.52
21	AA	31	G	C5-C4	5.17	1.42	1.38
21	AA	182	A	C4'-C3'	5.17	1.58	1.53
21	AA	326	G	C3'-C2'	-5.17	1.47	1.52
21	AA	665	A	N9-C4	-5.17	1.34	1.37
21	AA	750	C	C4-N4	5.17	1.38	1.33
26	AV	15	G	C2-N3	5.17	1.36	1.32
57	BB	617	G	N1-C2	5.17	1.41	1.37
57	BB	821	A	C5'-C4'	5.17	1.57	1.51
57	BB	1111	A	C4'-C3'	5.17	1.58	1.53
57	BB	1198	U	C4-C5	5.17	1.48	1.43
57	BB	2222	C	C1'-N1	5.17	1.56	1.48
57	BB	2536	G	C8-N7	-5.17	1.27	1.30
21	AA	154	U	P-O5'	-5.17	1.54	1.59
21	AA	179	A	N9-C8	-5.17	1.33	1.37
21	AA	287	U	N3-C4	5.17	1.43	1.38
21	AA	312	C	C4-N4	5.17	1.38	1.33
21	AA	355	C	C5'-C4'	5.17	1.57	1.51
21	AA	664	G	C8-N7	5.17	1.34	1.30
21	AA	725	G	C2'-C1'	-5.17	1.47	1.53
52	BD	128	ARG	CZ-NH2	5.17	1.39	1.33
57	BB	1	G	N1-C2	5.17	1.41	1.37
57	BB	253	C	O4'-C1'	5.17	1.48	1.41
57	BB	999	U	C2'-O2'	5.17	1.48	1.41
57	BB	1369	G	C3'-C2'	-5.17	1.47	1.52
57	BB	1498	C	N1-C6	5.17	1.40	1.37
57	BB	1706	C	C2'-C1'	-5.17	1.47	1.53
57	BB	1733	G	N3-C4	-5.17	1.31	1.35
57	BB	2335	A	C8-N7	-5.17	1.27	1.31
57	BB	2625	G	N7-C5	-5.17	1.36	1.39
57	BB	2877	G	P-OP1	-5.17	1.40	1.49
21	AA	271	C	O3'-P	-5.17	1.54	1.61
21	AA	339	C	C5'-C4'	5.17	1.57	1.51
21	AA	353	A	N3-C4	-5.17	1.31	1.34
21	AA	1224	U	N3-C4	5.17	1.43	1.38
21	AA	1251	A	P-O5'	-5.17	1.54	1.59
26	AV	49	G	C8-N7	-5.17	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	BF	93	GLU	CG-CD	5.17	1.59	1.51
57	BB	157	C	C4-C5	5.17	1.47	1.43
57	BB	245	G	C4'-C3'	5.17	1.58	1.53
57	BB	440	C	C2-N3	5.17	1.39	1.35
57	BB	629	G	N1-C2	5.17	1.41	1.37
57	BB	1050	A	N7-C5	-5.17	1.36	1.39
57	BB	1577	C	C4'-O4'	5.17	1.52	1.45
57	BB	1609	A	O3'-P	-5.17	1.54	1.61
57	BB	1844	C	N3-C4	5.17	1.37	1.33
57	BB	2241	A	C6-N6	5.17	1.38	1.33
57	BB	2418	A	C5-C6	5.17	1.45	1.41
57	BB	2674	G	C3'-C2'	5.17	1.58	1.52
58	BA	64	G	C2'-C1'	-5.17	1.47	1.53
3	AL	35	ARG	NE-CZ	5.17	1.39	1.33
21	AA	470	C	C4-N4	5.17	1.38	1.33
21	AA	503	C	C4-N4	5.17	1.38	1.33
21	AA	592	G	O3'-P	-5.17	1.54	1.61
21	AA	616	G	C4'-C3'	-5.17	1.47	1.52
21	AA	851	G	P-O5'	-5.17	1.54	1.59
26	AV	39	C	N3-C4	5.17	1.37	1.33
57	BB	352	A	C6-N1	5.17	1.39	1.35
57	BB	603	A	C2-N3	5.17	1.38	1.33
57	BB	1019	U	C4'-C3'	-5.17	1.47	1.52
57	BB	1157	G	C6-N1	5.17	1.43	1.39
57	BB	1589	U	P-O5'	-5.17	1.54	1.59
57	BB	1620	G	C4'-O4'	-5.17	1.38	1.45
57	BB	1810	A	C6-N6	5.17	1.38	1.33
57	BB	2406	A	C5-C4	5.17	1.42	1.38
57	BB	2893	A	C2'-C1'	-5.17	1.47	1.53
58	BA	84	G	O3'-P	5.17	1.67	1.61
21	AA	390	U	C3'-O3'	5.17	1.49	1.42
57	BB	264	C	C4'-O4'	-5.17	1.38	1.45
57	BB	348	A	O3'-P	-5.17	1.54	1.61
57	BB	504	A	C4'-C3'	5.17	1.58	1.53
57	BB	721	A	C6-N1	5.17	1.39	1.35
57	BB	920	A	C8-N7	5.17	1.35	1.31
57	BB	1052	C	C5'-C4'	5.17	1.57	1.51
57	BB	1125	G	C5-C4	5.17	1.42	1.38
57	BB	2162	G	C8-N7	5.17	1.34	1.30
21	AA	715	A	P-O5'	-5.16	1.54	1.59
21	AA	742	G	C6-N1	5.16	1.43	1.39
21	AA	777	A	C6-N1	-5.16	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1016	A	C5-C6	-5.16	1.36	1.41
21	AA	1300	G	C3'-O3'	5.16	1.49	1.42
37	BR	70	GLU	CB-CG	5.16	1.61	1.52
55	BG	61	TRP	NE1-CE2	5.16	1.44	1.37
57	BB	41	C	C4'-C3'	5.16	1.58	1.53
57	BB	456	C	C2'-C1'	5.16	1.59	1.53
57	BB	2042	A	N9-C8	5.16	1.41	1.37
57	BB	2051	A	C2'-C1'	5.16	1.59	1.53
57	BB	2284	A	C6-N1	5.16	1.39	1.35
21	AA	114	U	C5-C6	5.16	1.38	1.34
21	AA	924	C	C4'-C3'	5.16	1.58	1.53
57	BB	1691	C	N3-C4	5.16	1.37	1.33
57	BB	1891	G	C6-N1	5.16	1.43	1.39
57	BB	2544	G	N9-C4	-5.16	1.33	1.38
57	BB	2770	G	O3'-P	-5.16	1.54	1.61
5	AN	76	PHE	CG-CD2	5.16	1.46	1.38
21	AA	124	C	N3-C4	5.16	1.37	1.33
21	AA	320	A	C5-C4	5.16	1.42	1.38
21	AA	421	U	N3-C4	5.16	1.43	1.38
21	AA	549	C	C5-C6	5.16	1.38	1.34
21	AA	1058	G	C8-N7	-5.16	1.27	1.30
21	AA	1072	G	N3-C4	5.16	1.39	1.35
21	AA	1332	A	C8-N7	-5.16	1.27	1.31
21	AA	1361	G	C5'-C4'	5.16	1.57	1.51
21	AA	1421	G	C6-O6	5.16	1.28	1.24
22	AY	65	G	N3-C4	-5.16	1.31	1.35
56	BH	60	GLU	CG-CD	5.16	1.59	1.51
57	BB	882	G	O3'-P	-5.16	1.54	1.61
57	BB	1148	U	C5'-C4'	5.16	1.57	1.51
57	BB	1327	A	N3-C4	-5.16	1.31	1.34
57	BB	2681	C	C4-C5	5.16	1.47	1.43
21	AA	427	U	P-O5'	-5.16	1.54	1.59
21	AA	625	U	C5-C6	-5.16	1.29	1.34
21	AA	956	U	O4'-C1'	5.16	1.48	1.41
21	AA	1262	C	C2-N3	5.16	1.39	1.35
23	AW	38	A	N9-C4	-5.16	1.34	1.37
24	AX	13	A	N7-C5	-5.16	1.36	1.39
57	BB	15	G	N9-C8	-5.16	1.34	1.37
57	BB	817	C	C1'-N1	5.16	1.56	1.48
57	BB	1386	C	C4'-O4'	5.16	1.52	1.45
57	BB	1930	G	N3-C4	5.16	1.39	1.35
57	BB	2341	G	C6-N1	5.16	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2740	A	N7-C5	-5.16	1.36	1.39
57	BB	2772	C	C1'-N1	5.16	1.56	1.48
57	BB	2829	A	N3-C4	5.16	1.38	1.34
21	AA	1155	A	C6-N6	5.16	1.38	1.33
57	BB	469	G	C2-N2	5.16	1.39	1.34
57	BB	1036	G	N7-C5	-5.16	1.36	1.39
57	BB	1150	C	C2'-C1'	-5.16	1.47	1.53
57	BB	1386	C	C4'-C3'	5.16	1.58	1.53
57	BB	1743	G	O5'-C5'	-5.16	1.34	1.42
21	AA	300	A	N9-C8	5.16	1.41	1.37
21	AA	433	G	C8-N7	5.16	1.34	1.30
21	AA	764	C	P-O5'	-5.16	1.54	1.59
21	AA	1049	U	C5'-C4'	5.16	1.57	1.51
21	AA	1467	C	P-O5'	-5.16	1.54	1.59
22	AY	46	G	N3-C4	5.16	1.39	1.35
26	AV	22	G	C2'-C1'	-5.16	1.47	1.53
26	AV	44	A	N9-C4	5.16	1.41	1.37
57	BB	762	U	C5-C6	5.16	1.38	1.34
57	BB	783	A	C8-N7	-5.16	1.27	1.31
57	BB	1616	A	N3-C4	-5.16	1.31	1.34
57	BB	1835	G	C8-N7	5.16	1.34	1.30
57	BB	2088	A	P-O5'	-5.16	1.54	1.59
57	BB	2289	G	C1'-N9	-5.16	1.39	1.46
57	BB	2499	C	N3-C4	5.16	1.37	1.33
57	BB	2524	G	N3-C4	-5.16	1.31	1.35
21	AA	447	G	C5-C6	-5.15	1.37	1.42
21	AA	510	A	C5-C6	5.15	1.45	1.41
21	AA	763	G	C3'-C2'	-5.15	1.47	1.52
57	BB	274	C	C4-N4	5.15	1.38	1.33
57	BB	491	G	O3'-P	5.15	1.67	1.61
57	BB	2168	G	C2-N3	5.15	1.36	1.32
57	BB	2237	G	C8-N7	-5.15	1.27	1.30
57	BB	2680	U	N1-C2	5.15	1.43	1.38
4	AM	92	ARG	CZ-NH1	5.15	1.39	1.33
21	AA	199	A	C4'-O4'	-5.15	1.38	1.45
21	AA	326	G	C2-N3	5.15	1.36	1.32
21	AA	1074	G	C1'-N9	5.15	1.56	1.48
21	AA	1480	A	C8-N7	-5.15	1.27	1.31
23	AW	28	G	O4'-C1'	5.15	1.48	1.41
23	AW	35	A	C6-N6	5.15	1.38	1.33
57	BB	133	U	N1-C6	5.15	1.42	1.38
57	BB	764	A	C5'-C4'	5.15	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1093	G	N1-C2	5.15	1.41	1.37
57	BB	2228	G	N3-C4	-5.15	1.31	1.35
57	BB	2664	G	C3'-O3'	5.15	1.49	1.42
57	BB	2795	C	C5-C6	5.15	1.38	1.34
57	BB	2900	A	C8-N7	5.15	1.35	1.31
58	BA	105	G	N1-C2	5.15	1.41	1.37
21	AA	191	G	C5'-C4'	5.15	1.57	1.51
21	AA	284	C	P-O5'	-5.15	1.54	1.59
21	AA	833	G	C5'-C4'	5.15	1.57	1.51
21	AA	1318	A	N1-C2	5.15	1.39	1.34
21	AA	1380	U	N1-C6	5.15	1.42	1.38
26	AV	26	G	N1-C2	5.15	1.41	1.37
57	BB	311	A	C5'-C4'	5.15	1.57	1.51
57	BB	420	C	C3'-C2'	5.15	1.58	1.52
57	BB	1474	U	C3'-O3'	5.15	1.49	1.42
57	BB	1964	G	C6-N1	5.15	1.43	1.39
57	BB	2054	A	N1-C2	5.15	1.39	1.34
57	BB	2243	U	C2-N3	5.15	1.41	1.37
58	BA	76	G	P-O5'	-5.15	1.54	1.59
21	AA	9	G	N7-C5	-5.15	1.36	1.39
55	BG	2	ARG	CD-NE	5.15	1.55	1.46
57	BB	126	A	N7-C5	-5.15	1.36	1.39
57	BB	809	G	C3'-C2'	-5.15	1.47	1.52
57	BB	1022	G	N1-C2	5.15	1.41	1.37
57	BB	1631	G	C6-N1	5.15	1.43	1.39
57	BB	2582	G	C3'-O3'	-5.15	1.34	1.42
12	AU	46	ARG	NE-CZ	5.15	1.39	1.33
21	AA	691	G	O4'-C1'	5.15	1.48	1.41
21	AA	1029	U	C4'-C3'	5.15	1.58	1.53
21	AA	1039	G	N3-C4	5.15	1.39	1.35
21	AA	1043	G	C2-N3	5.15	1.36	1.32
21	AA	1240	U	P-O5'	-5.15	1.54	1.59
22	AY	31	A	C4'-C3'	5.15	1.58	1.53
26	AV	12	G	C5'-C4'	-5.15	1.45	1.51
57	BB	78	U	C1'-N1	5.15	1.56	1.48
57	BB	269	C	C4'-O4'	5.15	1.52	1.45
57	BB	424	G	N9-C8	5.15	1.41	1.37
57	BB	486	C	C4'-O4'	-5.15	1.38	1.45
57	BB	566	U	O4'-C1'	-5.15	1.34	1.41
57	BB	833	A	N9-C8	5.15	1.41	1.37
57	BB	990	A	P-O5'	-5.15	1.54	1.59
57	BB	1235	G	N3-C4	-5.15	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1612	C	C3'-O3'	5.15	1.49	1.42
10	AS	45	GLY	CA-C	-5.15	1.43	1.51
21	AA	1167	A	N3-C4	-5.15	1.31	1.34
21	AA	1344	C	C4-C5	5.15	1.47	1.43
57	BB	738	G	N1-C2	5.15	1.41	1.37
57	BB	1683	U	N3-C4	5.15	1.43	1.38
57	BB	1879	C	C4'-C3'	-5.15	1.47	1.52
57	BB	2016	U	N3-C4	5.15	1.43	1.38
21	AA	533	A	C6-N6	5.14	1.38	1.33
21	AA	1344	C	N1-C6	-5.14	1.34	1.37
37	BR	78	ARG	NE-CZ	5.14	1.39	1.33
57	BB	37	C	P-O5'	-5.14	1.54	1.59
57	BB	327	G	C5-C4	-5.14	1.34	1.38
57	BB	538	A	C6-N6	5.14	1.38	1.33
57	BB	1027	A	N9-C4	5.14	1.41	1.37
57	BB	1315	C	C2'-C1'	-5.14	1.47	1.53
57	BB	2242	G	C2-N2	-5.14	1.29	1.34
57	BB	2326	C	C5'-C4'	5.14	1.57	1.51
57	BB	2759	G	C5'-C4'	5.14	1.57	1.51
21	AA	96	U	N3-C4	5.14	1.43	1.38
21	AA	185	U	C2-N3	5.14	1.41	1.37
21	AA	227	G	O3'-P	-5.14	1.54	1.61
21	AA	590	U	C4'-C3'	5.14	1.58	1.53
21	AA	616	G	C8-N7	-5.14	1.27	1.30
21	AA	1083	U	C4'-C3'	-5.14	1.47	1.52
21	AA	1377	A	C5-C6	5.14	1.45	1.41
44	BY	49	ASP	N-CA	-5.14	1.36	1.46
57	BB	770	G	N1-C2	5.14	1.41	1.37
57	BB	807	U	C4-O4	5.14	1.27	1.23
57	BB	1325	U	N1-C6	5.14	1.42	1.38
57	BB	1472	C	P-O5'	-5.14	1.54	1.59
57	BB	2597	G	C6-N1	-5.14	1.35	1.39
57	BB	2796	U	C1'-N1	5.14	1.56	1.48
58	BA	4	C	C4-C5	5.14	1.47	1.43
21	AA	327	A	N9-C8	-5.14	1.33	1.37
22	AY	23	A	N3-C4	-5.14	1.31	1.34
23	AW	52	G	C3'-C2'	-5.14	1.47	1.52
57	BB	468	G	C8-N7	5.14	1.34	1.30
57	BB	1284	A	N3-C4	-5.14	1.31	1.34
57	BB	2258	C	C2'-C1'	-5.14	1.47	1.53
57	BB	2706	A	C5'-C4'	5.14	1.57	1.51
14	AC	53	ARG	CZ-NH1	5.14	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	48	C	C2-N3	5.14	1.39	1.35
21	AA	702	A	C5'-C4'	5.14	1.57	1.51
24	AX	18	G	C3'-O3'	5.14	1.49	1.42
57	BB	312	G	C2-N2	5.14	1.39	1.34
57	BB	693	A	P-O5'	-5.14	1.54	1.59
57	BB	700	G	C4'-C3'	-5.14	1.47	1.52
57	BB	1098	A	N1-C2	5.14	1.39	1.34
57	BB	1135	C	C5'-C4'	5.14	1.57	1.51
57	BB	1175	A	N3-C4	5.14	1.38	1.34
57	BB	1612	C	C5-C6	-5.14	1.30	1.34
57	BB	1843	C	C4-N4	5.14	1.38	1.33
57	BB	1851	U	C2-N3	5.14	1.41	1.37
57	BB	2114	A	C5'-C4'	5.14	1.57	1.51
21	AA	675	A	C6-N6	5.14	1.38	1.33
49	B2	15	SER	CB-OG	5.14	1.49	1.42
57	BB	218	A	C5-C4	5.14	1.42	1.38
57	BB	455	C	C5-C6	-5.14	1.30	1.34
57	BB	2380	C	C4'-O4'	5.14	1.52	1.45
21	AA	942	G	O3'-P	-5.14	1.54	1.61
21	AA	1277	C	P-O5'	-5.14	1.54	1.59
36	BQ	63	ARG	NE-CZ	5.14	1.39	1.33
38	BS	52	GLU	CD-OE1	-5.14	1.20	1.25
57	BB	39	G	P-O5'	-5.14	1.54	1.59
57	BB	443	A	C6-N1	5.14	1.39	1.35
57	BB	495	G	C2'-C1'	-5.14	1.47	1.53
57	BB	913	U	N3-C4	5.14	1.43	1.38
57	BB	2421	G	N1-C2	5.14	1.41	1.37
21	AA	734	G	N1-C2	5.13	1.41	1.37
21	AA	1330	U	C4'-C3'	5.13	1.58	1.53
21	AA	1469	C	C2'-C1'	-5.13	1.47	1.53
42	BW	27	GLY	N-CA	-5.13	1.38	1.46
52	BD	145	SER	CA-CB	5.13	1.60	1.52
57	BB	234	U	C2-N3	5.13	1.41	1.37
57	BB	389	G	O4'-C1'	5.13	1.48	1.41
57	BB	709	U	O3'-P	-5.13	1.54	1.61
57	BB	1050	A	C6-N1	5.13	1.39	1.35
57	BB	1314	C	C5-C6	5.13	1.38	1.34
57	BB	1636	U	C2-N3	5.13	1.41	1.37
57	BB	2121	G	C2'-C1'	-5.13	1.47	1.53
57	BB	2653	U	N3-C4	5.13	1.43	1.38
57	BB	2662	A	N9-C4	-5.13	1.34	1.37
57	BB	2710	C	C2'-C1'	-5.13	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2753	A	O3'-P	-5.13	1.54	1.61
21	AA	770	C	C4-C5	-5.13	1.38	1.43
57	BB	64	A	C5-C4	-5.13	1.35	1.38
57	BB	453	A	N7-C5	-5.13	1.36	1.39
57	BB	756	A	C2'-C1'	-5.13	1.47	1.53
57	BB	1937	A	C5'-C4'	5.13	1.57	1.51
57	BB	1945	G	N3-C4	-5.13	1.31	1.35
21	AA	1072	G	N9-C4	-5.13	1.33	1.38
21	AA	1430	A	O3'-P	5.13	1.67	1.61
55	BG	109	SER	CA-CB	-5.13	1.45	1.52
57	BB	426	C	N1-C6	5.13	1.40	1.37
57	BB	454	A	N9-C8	-5.13	1.33	1.37
57	BB	718	A	C6-N6	-5.13	1.29	1.33
57	BB	1023	U	N3-C4	5.13	1.43	1.38
57	BB	2116	G	C8-N7	5.13	1.34	1.30
57	BB	2313	C	O3'-P	5.13	1.67	1.61
21	AA	616	G	N9-C4	-5.13	1.33	1.38
43	BX	28	PHE	CG-CD1	5.13	1.46	1.38
57	BB	1123	C	N3-C4	5.13	1.37	1.33
57	BB	2116	G	C1'-N9	5.13	1.56	1.48
57	BB	2162	G	N7-C5	5.13	1.42	1.39
57	BB	2454	G	N9-C8	-5.13	1.34	1.37
6	AO	53	ARG	CZ-NH1	5.13	1.39	1.33
21	AA	83	C	C5'-C4'	5.13	1.57	1.51
21	AA	411	A	O3'-P	5.13	1.67	1.61
21	AA	1118	U	C1'-N1	5.13	1.56	1.48
26	AV	38	A	C8-N7	5.13	1.35	1.31
38	BS	83	LYS	N-CA	-5.13	1.36	1.46
57	BB	921	C	N3-C4	5.13	1.37	1.33
57	BB	1570	A	C5-C4	-5.13	1.35	1.38
57	BB	1926	U	C5-C6	-5.13	1.29	1.34
57	BB	1933	G	N9-C8	5.13	1.41	1.37
21	AA	281	G	C2-N2	5.13	1.39	1.34
21	AA	531	U	P-O5'	-5.13	1.54	1.59
21	AA	688	G	N7-C5	-5.13	1.36	1.39
21	AA	1088	G	N9-C4	-5.13	1.33	1.38
21	AA	1238	A	N3-C4	5.13	1.38	1.34
21	AA	1241	G	C3'-C2'	-5.13	1.47	1.52
21	AA	1255	G	C2'-C1'	-5.13	1.47	1.53
26	AV	21	A	C3'-O3'	5.13	1.49	1.42
57	BB	538	A	C2'-C1'	-5.13	1.47	1.53
57	BB	1889	A	C6-N6	5.13	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1933	G	C2'-C1'	-5.13	1.47	1.53
57	BB	2599	G	N1-C2	5.13	1.41	1.37
57	BB	2665	A	C1'-N9	-5.13	1.39	1.46
57	BB	2755	C	C2'-C1'	-5.13	1.47	1.53
57	BB	543	G	C2-N2	5.12	1.39	1.34
57	BB	2536	G	N7-C5	5.12	1.42	1.39
57	BB	2819	G	N1-C2	5.12	1.41	1.37
21	AA	12	U	N1-C6	-5.12	1.33	1.38
21	AA	281	G	C5-C6	5.12	1.47	1.42
21	AA	880	C	N3-C4	5.12	1.37	1.33
21	AA	987	G	O4'-C1'	5.12	1.48	1.41
21	AA	1230	C	C2-O2	-5.12	1.19	1.24
24	AX	17	U	P-O5'	5.12	1.64	1.59
57	BB	508	A	N9-C4	5.12	1.41	1.37
57	BB	793	A	N3-C4	5.12	1.38	1.34
57	BB	1041	G	C4'-O4'	5.12	1.52	1.45
57	BB	1469	A	C5'-C4'	5.12	1.57	1.51
57	BB	1484	U	C2'-C1'	-5.12	1.47	1.53
57	BB	1528	A	C3'-O3'	5.12	1.49	1.42
57	BB	1994	C	C4'-C3'	-5.12	1.47	1.52
57	BB	2067	G	O3'-P	-5.12	1.55	1.61
57	BB	2248	C	O4'-C1'	-5.12	1.34	1.41
57	BB	2263	C	C4-N4	5.12	1.38	1.33
57	BB	2305	U	P-O5'	-5.12	1.54	1.59
57	BB	2782	G	O3'-P	-5.12	1.55	1.61
58	BA	28	C	C2'-C1'	-5.12	1.47	1.53
13	AB	112	ARG	NE-CZ	5.12	1.39	1.33
21	AA	325	A	C4'-C3'	-5.12	1.47	1.52
21	AA	747	A	C5'-C4'	5.12	1.57	1.51
21	AA	906	A	N9-C8	-5.12	1.33	1.37
23	AW	26	A	C2'-C1'	-5.12	1.47	1.53
33	BN	8	ARG	NE-CZ	5.12	1.39	1.33
57	BB	16	C	O3'-P	-5.12	1.55	1.61
57	BB	381	G	C5'-C4'	5.12	1.57	1.51
57	BB	388	G	N1-C2	5.12	1.41	1.37
57	BB	1320	C	C3'-C2'	5.12	1.58	1.52
57	BB	1766	G	C5-C4	-5.12	1.34	1.38
57	BB	2528	U	N1-C6	-5.12	1.33	1.38
57	BB	2877	G	N9-C8	-5.12	1.34	1.37
26	AV	73	A	N9-C4	5.12	1.41	1.37
57	BB	4	U	C2-O2	5.12	1.26	1.22
57	BB	179	C	N1-C6	5.12	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	684	G	C8-N7	-5.12	1.27	1.30
57	BB	1549	A	P-O5'	-5.12	1.54	1.59
57	BB	1669	A	O4'-C1'	-5.12	1.34	1.41
57	BB	1889	A	N9-C8	-5.12	1.33	1.37
57	BB	2099	U	N1-C6	5.12	1.42	1.38
57	BB	2403	C	P-O5'	-5.12	1.54	1.59
57	BB	2588	G	N9-C8	5.12	1.41	1.37
57	BB	2614	A	N3-C4	5.12	1.38	1.34
21	AA	88	U	C5-C6	5.12	1.38	1.34
21	AA	785	G	C5-C4	-5.12	1.34	1.38
21	AA	1087	G	C2'-C1'	-5.12	1.47	1.53
57	BB	531	C	C4'-O4'	-5.12	1.38	1.45
57	BB	1304	A	C6-N6	5.12	1.38	1.33
57	BB	1628	G	C8-N7	-5.12	1.27	1.30
57	BB	2166	U	O3'-P	-5.12	1.55	1.61
57	BB	2340	A	C8-N7	-5.12	1.27	1.31
57	BB	2616	C	C2'-C1'	5.12	1.58	1.53
57	BB	2862	G	N9-C8	-5.12	1.34	1.37
21	AA	659	U	C2-N3	5.12	1.41	1.37
21	AA	703	G	C2-N2	5.12	1.39	1.34
21	AA	736	C	P-O5'	-5.12	1.54	1.59
21	AA	1403	C	N1-C2	-5.12	1.35	1.40
22	AY	35	A	N9-C4	5.12	1.41	1.37
37	BR	77	PHE	N-CA	-5.12	1.36	1.46
52	BD	68	PHE	CG-CD2	5.12	1.46	1.38
57	BB	1074	G	C2-N2	-5.12	1.29	1.34
57	BB	2095	A	C8-N7	-5.12	1.27	1.31
57	BB	2450	A	C8-N7	-5.12	1.27	1.31
58	BA	54	G	C2-N3	5.12	1.36	1.32
21	AA	213	G	C5-C6	-5.12	1.37	1.42
21	AA	617	G	O4'-C1'	-5.12	1.34	1.41
21	AA	639	G	P-O5'	-5.12	1.54	1.59
21	AA	916	U	C5'-C4'	-5.12	1.45	1.51
57	BB	276	U	C5'-C4'	5.12	1.57	1.51
57	BB	430	A	N9-C4	5.12	1.41	1.37
57	BB	783	A	P-O5'	-5.12	1.54	1.59
57	BB	1278	C	C2-N3	5.12	1.39	1.35
57	BB	1694	C	C2-N3	5.12	1.39	1.35
57	BB	1840	G	C5'-C4'	5.12	1.57	1.51
57	BB	1949	G	N9-C4	-5.12	1.33	1.38
57	BB	1995	U	C2-O2	5.12	1.26	1.22
58	BA	57	A	O3'-P	-5.12	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	240	G	O3'-P	-5.11	1.55	1.61
21	AA	423	G	C6-O6	5.11	1.28	1.24
21	AA	454	G	N3-C4	-5.11	1.31	1.35
21	AA	519	C	C2-N3	5.11	1.39	1.35
21	AA	794	A	C3'-C2'	-5.11	1.47	1.52
21	AA	1294	G	C5'-C4'	5.11	1.57	1.51
21	AA	1532	U	C2-N3	5.11	1.41	1.37
57	BB	134	G	C2'-O2'	-5.11	1.35	1.41
57	BB	156	A	C6-N6	5.11	1.38	1.33
57	BB	1352	U	C2'-C1'	-5.11	1.47	1.53
57	BB	1637	A	N3-C4	-5.11	1.31	1.34
57	BB	1760	C	O4'-C1'	5.11	1.48	1.41
57	BB	2067	G	C4'-O4'	5.11	1.52	1.45
21	AA	125	U	O3'-P	-5.11	1.55	1.61
21	AA	307	C	O3'-P	-5.11	1.55	1.61
37	BR	58	VAL	N-CA	-5.11	1.36	1.46
57	BB	1552	A	N3-C4	-5.11	1.31	1.34
57	BB	2075	U	C2'-C1'	-5.11	1.47	1.53
21	AA	261	U	P-O5'	-5.11	1.54	1.59
21	AA	531	U	C4'-C3'	5.11	1.58	1.53
21	AA	944	G	N1-C2	5.11	1.41	1.37
21	AA	991	U	C2'-C1'	-5.11	1.47	1.53
22	AY	52	U	C5-C6	-5.11	1.29	1.34
26	AV	43	A	C5'-C4'	5.11	1.57	1.51
29	BJ	13	ARG	NE-CZ	5.11	1.39	1.33
32	BM	94	ALA	CA-CB	5.11	1.63	1.52
57	BB	1208	C	N1-C6	-5.11	1.34	1.37
57	BB	1466	U	C2'-O2'	-5.11	1.35	1.41
57	BB	1648	U	C4-C5	-5.11	1.39	1.43
57	BB	1914	C	C4-N4	5.11	1.38	1.33
57	BB	1938	A	C1'-N9	5.11	1.56	1.48
57	BB	2418	A	C6-N6	5.11	1.38	1.33
57	BB	2572	A	N9-C8	5.11	1.41	1.37
57	BB	2592	G	N3-C4	-5.11	1.31	1.35
57	BB	2622	U	C3'-C2'	-5.11	1.47	1.52
21	AA	412	A	C6-N1	5.11	1.39	1.35
21	AA	536	C	C3'-C2'	-5.11	1.47	1.52
21	AA	599	C	C2-N3	5.11	1.39	1.35
21	AA	1392	G	C5'-C4'	5.11	1.57	1.51
22	AY	37	G	N1-C2	5.11	1.41	1.37
57	BB	73	A	C5-C4	5.11	1.42	1.38
57	BB	433	C	C3'-O3'	5.11	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	907	G	C5-C4	5.11	1.42	1.38
57	BB	918	A	N7-C5	-5.11	1.36	1.39
57	BB	2503	A	C6-N1	-5.11	1.31	1.35
21	AA	79	G	N1-C2	5.11	1.41	1.37
21	AA	807	A	C5'-C4'	5.11	1.57	1.51
21	AA	1147	C	C4'-O4'	-5.11	1.39	1.45
21	AA	1208	C	C5'-C4'	5.11	1.57	1.51
22	AY	2	C	P-O5'	5.11	1.64	1.59
23	AW	59	U	N3-C4	5.11	1.43	1.38
45	BC	96	LYS	CA-CB	5.11	1.65	1.53
57	BB	3	U	N1-C6	-5.11	1.33	1.38
57	BB	274	C	C2-N3	5.11	1.39	1.35
57	BB	326	G	N9-C8	5.11	1.41	1.37
57	BB	600	G	C4'-C3'	-5.11	1.47	1.52
57	BB	999	U	C4-O4	-5.11	1.19	1.23
57	BB	1063	G	C6-N1	5.11	1.43	1.39
57	BB	1412	U	O4'-C1'	5.11	1.48	1.41
57	BB	1805	A	C5-C4	-5.11	1.35	1.38
57	BB	1966	A	C5-C4	5.11	1.42	1.38
57	BB	2078	C	O4'-C1'	5.11	1.48	1.41
57	BB	2164	C	C4-C5	-5.11	1.38	1.43
57	BB	2412	A	N9-C4	-5.11	1.34	1.37
57	BB	2556	C	O3'-P	-5.11	1.55	1.61
57	BB	2558	C	C4-N4	5.11	1.38	1.33
21	AA	607	A	C6-N1	5.11	1.39	1.35
21	AA	1306	A	N7-C5	-5.11	1.36	1.39
22	AY	36	A	P-OP2	5.11	1.57	1.49
23	AW	57	G	C2'-C1'	-5.11	1.47	1.53
35	BP	71	ARG	NE-CZ	5.11	1.39	1.33
57	BB	540	C	N1-C6	5.11	1.40	1.37
57	BB	779	U	C2'-C1'	-5.11	1.47	1.53
57	BB	1160	G	C3'-C2'	5.11	1.58	1.52
57	BB	1300	G	C3'-C2'	5.11	1.58	1.52
57	BB	1511	G	C3'-C2'	-5.11	1.47	1.52
57	BB	1798	U	C5'-C4'	5.11	1.57	1.51
57	BB	2250	G	P-O5'	-5.11	1.54	1.59
57	BB	2645	G	C2'-C1'	-5.11	1.47	1.53
57	BB	2836	U	N1-C2	-5.11	1.33	1.38
21	AA	54	C	N1-C2	5.10	1.45	1.40
21	AA	835	U	N3-C4	5.10	1.43	1.38
21	AA	1042	A	C2-N3	5.10	1.38	1.33
21	AA	1430	A	N1-C2	5.10	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	75	C	C4'-C3'	-5.10	1.47	1.52
57	BB	778	G	C5-C4	5.10	1.42	1.38
57	BB	2161	C	C5-C6	5.10	1.38	1.34
57	BB	2481	G	C2-N2	5.10	1.39	1.34
57	BB	2688	G	C2-N2	5.10	1.39	1.34
57	BB	2740	A	C6-N1	5.10	1.39	1.35
57	BB	2816	G	C8-N7	-5.10	1.27	1.30
21	AA	116	A	N1-C2	5.10	1.39	1.34
21	AA	538	G	C6-N1	5.10	1.43	1.39
21	AA	825	A	C5-C4	-5.10	1.35	1.38
21	AA	1386	G	P-O5'	-5.10	1.54	1.59
21	AA	1506	U	N3-C4	5.10	1.43	1.38
23	AW	34	G	C3'-C2'	5.10	1.58	1.52
26	AV	13	C	O4'-C1'	5.10	1.48	1.41
57	BB	190	A	N9-C8	-5.10	1.33	1.37
57	BB	1252	G	C2-N3	5.10	1.36	1.32
57	BB	1551	A	C4'-C3'	5.10	1.58	1.53
57	BB	1984	G	N7-C5	5.10	1.42	1.39
57	BB	2315	G	C8-N7	5.10	1.34	1.30
57	BB	2770	G	C2-N2	-5.10	1.29	1.34
58	BA	13	G	C5-C4	5.10	1.42	1.38
58	BA	74	U	N1-C2	5.10	1.43	1.38
17	AF	86	ARG	CD-NE	5.10	1.55	1.46
21	AA	539	A	C4'-C3'	5.10	1.58	1.53
21	AA	769	G	O4'-C1'	5.10	1.48	1.41
57	BB	339	U	C4'-C3'	-5.10	1.47	1.52
57	BB	406	G	C8-N7	-5.10	1.27	1.30
21	AA	20	U	P-O5'	-5.10	1.54	1.59
21	AA	293	G	N9-C8	-5.10	1.34	1.37
21	AA	1431	A	C5'-C4'	5.10	1.57	1.51
26	AV	44	A	P-O5'	-5.10	1.54	1.59
57	BB	963	U	C2-O2	5.10	1.26	1.22
57	BB	1100	C	C2-N3	5.10	1.39	1.35
57	BB	1264	A	N9-C4	5.10	1.41	1.37
57	BB	1563	U	C4'-O4'	5.10	1.52	1.45
57	BB	1975	G	C4'-C3'	5.10	1.58	1.53
57	BB	2321	U	C5'-C4'	5.10	1.57	1.51
57	BB	2521	C	P-O5'	-5.10	1.54	1.59
57	BB	2578	G	N3-C4	-5.10	1.31	1.35
57	BB	2725	A	C6-N6	5.10	1.38	1.33
21	AA	18	C	N3-C4	5.10	1.37	1.33
21	AA	35	G	N3-C4	5.10	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	228	A	C5'-C4'	5.10	1.57	1.51
21	AA	655	A	C2'-C1'	-5.10	1.47	1.53
21	AA	676	A	N9-C8	5.10	1.41	1.37
21	AA	976	G	N7-C5	-5.10	1.36	1.39
31	BL	33	ARG	CZ-NH1	5.10	1.39	1.33
54	BF	73	VAL	CA-C	-5.10	1.39	1.52
57	BB	312	G	N1-C2	5.10	1.41	1.37
57	BB	996	A	C6-N6	5.10	1.38	1.33
57	BB	1026	G	C5'-C4'	5.10	1.57	1.51
57	BB	1223	G	O3'-P	-5.10	1.55	1.61
57	BB	1592	C	P-O5'	-5.10	1.54	1.59
57	BB	1664	A	N9-C4	5.10	1.41	1.37
57	BB	1710	G	N7-C5	5.10	1.42	1.39
57	BB	1865	U	C5'-C4'	5.10	1.57	1.51
57	BB	1902	C	P-O5'	-5.10	1.54	1.59
57	BB	2318	G	C5-C6	-5.10	1.37	1.42
57	BB	2337	G	N9-C8	5.10	1.41	1.37
57	BB	2688	G	C6-N1	-5.10	1.35	1.39
21	AA	462	G	C2-N2	5.10	1.39	1.34
23	AW	59	U	C2-N3	5.10	1.41	1.37
57	BB	203	A	N3-C4	-5.10	1.31	1.34
57	BB	314	C	C5-C6	-5.10	1.30	1.34
57	BB	1623	G	O3'-P	-5.10	1.55	1.61
57	BB	1681	G	C3'-C2'	-5.10	1.47	1.52
57	BB	1842	G	C2-N3	-5.10	1.28	1.32
57	BB	2318	G	C5-C4	5.10	1.42	1.38
11	AT	24	ARG	CZ-NH1	5.09	1.39	1.33
21	AA	197	A	C5'-C4'	5.09	1.57	1.51
21	AA	241	G	P-O5'	-5.09	1.54	1.59
21	AA	924	C	C2'-O2'	-5.09	1.35	1.41
21	AA	1148	U	C1'-N1	5.09	1.56	1.48
21	AA	1171	A	N1-C2	-5.09	1.29	1.34
23	AW	42	C	O3'-P	-5.09	1.55	1.61
57	BB	192	C	C2-O2	5.09	1.29	1.24
57	BB	197	A	C5-C4	5.09	1.42	1.38
57	BB	458	G	C3'-O3'	-5.09	1.35	1.42
57	BB	796	C	N1-C6	5.09	1.40	1.37
57	BB	1226	A	O3'-P	-5.09	1.55	1.61
57	BB	1238	G	N9-C8	5.09	1.41	1.37
57	BB	1361	G	N3-C4	-5.09	1.31	1.35
57	BB	1737	G	C3'-O3'	5.09	1.49	1.42
57	BB	1828	G	C2-N3	5.09	1.36	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2008	C	C2'-C1'	-5.09	1.47	1.53
57	BB	2175	C	C3'-C2'	-5.09	1.47	1.52
57	BB	2349	G	N9-C8	-5.09	1.34	1.37
21	AA	395	C	C4'-C3'	5.09	1.58	1.53
22	AY	56	C	C1'-N1	5.09	1.56	1.48
57	BB	215	G	N9-C4	5.09	1.42	1.38
57	BB	1305	C	C2-N3	-5.09	1.31	1.35
57	BB	1505	A	C4'-C3'	5.09	1.58	1.53
57	BB	1740	G	C2-N3	5.09	1.36	1.32
57	BB	1748	C	C3'-C2'	5.09	1.58	1.52
58	BA	30	C	C4'-C3'	-5.09	1.47	1.52
1	AJ	27	GLU	CB-CG	5.09	1.61	1.52
4	AM	40	GLU	CG-CD	-5.09	1.44	1.51
21	AA	263	A	C4'-C3'	5.09	1.58	1.53
21	AA	301	G	C2'-C1'	-5.09	1.47	1.53
21	AA	361	G	N3-C4	5.09	1.39	1.35
21	AA	592	G	C2'-C1'	-5.09	1.47	1.53
21	AA	833	G	C6-N1	5.09	1.43	1.39
21	AA	1267	C	N1-C2	5.09	1.45	1.40
21	AA	1303	C	N1-C2	5.09	1.45	1.40
22	AY	56	C	O3'-P	-5.09	1.55	1.61
57	BB	110	G	N9-C8	5.09	1.41	1.37
57	BB	235	U	N3-C4	5.09	1.43	1.38
57	BB	731	C	C3'-C2'	-5.09	1.47	1.52
57	BB	775	G	C5'-C4'	5.09	1.57	1.51
57	BB	864	G	C2-N2	5.09	1.39	1.34
57	BB	960	A	C3'-C2'	-5.09	1.47	1.52
57	BB	971	G	P-O5'	-5.09	1.54	1.59
57	BB	1025	G	N9-C8	5.09	1.41	1.37
57	BB	1167	C	N1-C6	-5.09	1.34	1.37
57	BB	1485	U	O3'-P	-5.09	1.55	1.61
57	BB	1696	G	O4'-C1'	-5.09	1.35	1.41
57	BB	2608	G	C4'-C3'	5.09	1.58	1.53
57	BB	2812	G	N3-C4	-5.09	1.31	1.35
58	BA	8	C	O5'-C5'	-5.09	1.34	1.42
21	AA	629	A	C8-N7	-5.09	1.27	1.31
21	AA	704	A	N1-C2	5.09	1.39	1.34
21	AA	1198	G	P-O5'	-5.09	1.54	1.59
23	AW	13	C	C5-C6	-5.09	1.30	1.34
57	BB	39	G	C5-C6	-5.09	1.37	1.42
57	BB	609	A	C6-N1	5.09	1.39	1.35
57	BB	858	G	C8-N7	5.09	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1451	C	C4-N4	5.09	1.38	1.33
57	BB	1457	U	N3-C4	5.09	1.43	1.38
57	BB	1668	A	N7-C5	-5.09	1.36	1.39
57	BB	1751	U	O4'-C1'	5.09	1.48	1.41
57	BB	2213	U	O3'-P	-5.09	1.55	1.61
57	BB	2814	A	N7-C5	5.09	1.42	1.39
21	AA	555	U	C2'-C1'	-5.09	1.47	1.53
21	AA	722	G	C8-N7	5.09	1.34	1.30
26	AV	57	A	N3-C4	5.09	1.38	1.34
57	BB	225	C	C4-C5	5.09	1.47	1.43
57	BB	962	G	C5-C6	5.09	1.47	1.42
57	BB	1125	G	C4'-C3'	5.09	1.58	1.53
57	BB	1810	A	C2-N3	5.09	1.38	1.33
57	BB	2693	G	O3'-P	-5.09	1.55	1.61
58	BA	16	G	C6-N1	5.09	1.43	1.39
21	AA	7	A	C2-N3	-5.09	1.28	1.33
21	AA	215	C	C4-C5	-5.09	1.38	1.43
21	AA	415	A	P-O5'	-5.09	1.54	1.59
21	AA	639	G	C3'-C2'	5.09	1.58	1.52
21	AA	745	G	C5'-C4'	5.09	1.57	1.51
21	AA	782	A	C8-N7	-5.09	1.27	1.31
21	AA	783	C	N1-C6	5.09	1.40	1.37
25	AZ	100	GLY	CA-C	-5.09	1.43	1.51
55	BG	46	ASP	CB-CG	5.09	1.62	1.51
57	BB	163	C	C4-C5	5.09	1.47	1.43
57	BB	300	A	C6-N6	5.09	1.38	1.33
57	BB	710	U	C1'-N1	5.09	1.56	1.48
57	BB	947	A	O3'-P	-5.09	1.55	1.61
57	BB	1443	U	C2-N3	-5.09	1.34	1.37
57	BB	1497	U	N1-C2	-5.09	1.33	1.38
57	BB	1546	G	N1-C2	5.09	1.41	1.37
57	BB	1647	U	N1-C6	5.09	1.42	1.38
57	BB	2140	G	N1-C2	5.09	1.41	1.37
57	BB	2190	G	C8-N7	-5.09	1.27	1.30
57	BB	2583	G	C2-N2	5.09	1.39	1.34
21	AA	711	G	N3-C4	5.08	1.39	1.35
21	AA	1054	C	C5'-C4'	5.08	1.57	1.51
57	BB	493	G	N9-C8	5.08	1.41	1.37
57	BB	833	A	O3'-P	5.08	1.67	1.61
57	BB	1573	G	C3'-C2'	-5.08	1.47	1.52
57	BB	2230	G	C5'-C4'	-5.08	1.45	1.51
57	BB	2242	G	C4'-C3'	-5.08	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	247	G	O4'-C1'	5.08	1.48	1.41
21	AA	622	A	C2-N3	-5.08	1.28	1.33
21	AA	699	C	C4'-C3'	-5.08	1.47	1.52
21	AA	944	G	C5-C4	-5.08	1.34	1.38
21	AA	1001	C	C4-N4	5.08	1.38	1.33
21	AA	1068	G	N9-C4	5.08	1.42	1.38
21	AA	1287	A	C6-N6	5.08	1.38	1.33
21	AA	1426	G	N7-C5	-5.08	1.36	1.39
22	AY	29	A	C2'-C1'	-5.08	1.47	1.53
26	AV	28	C	C3'-O3'	-5.08	1.35	1.42
57	BB	377	G	C2-N2	5.08	1.39	1.34
57	BB	1115	G	N7-C5	-5.08	1.36	1.39
57	BB	1260	A	C2-N3	5.08	1.38	1.33
57	BB	1350	C	O3'-P	5.08	1.67	1.61
57	BB	2058	A	C5-C6	-5.08	1.36	1.41
57	BB	2078	C	P-O5'	-5.08	1.54	1.59
57	BB	2095	A	C6-N6	5.08	1.38	1.33
58	BA	8	C	C5-C6	5.08	1.38	1.34
19	AH	73	SER	CB-OG	5.08	1.48	1.42
21	AA	542	G	C3'-O3'	5.08	1.49	1.42
21	AA	670	G	C2'-C1'	-5.08	1.47	1.53
57	BB	318	C	C2-O2	-5.08	1.19	1.24
57	BB	523	C	O3'-P	5.08	1.67	1.61
57	BB	733	G	C6-N1	5.08	1.43	1.39
57	BB	802	A	C6-N6	5.08	1.38	1.33
57	BB	985	C	N1-C6	-5.08	1.34	1.37
57	BB	1093	G	O4'-C1'	5.08	1.48	1.41
57	BB	1687	G	C2-N3	5.08	1.36	1.32
57	BB	2738	A	N9-C4	5.08	1.40	1.37
21	AA	377	G	N1-C2	5.08	1.41	1.37
21	AA	786	G	C2-N3	5.08	1.36	1.32
26	AV	44	A	C2-N3	5.08	1.38	1.33
57	BB	471	A	N9-C8	-5.08	1.33	1.37
57	BB	687	C	N1-C2	5.08	1.45	1.40
57	BB	1850	G	C2-N3	5.08	1.36	1.32
57	BB	2056	G	C2'-C1'	-5.08	1.47	1.53
21	AA	749	A	C5'-C4'	5.08	1.57	1.51
21	AA	758	C	C5-C6	-5.08	1.30	1.34
57	BB	782	A	C2'-C1'	-5.08	1.47	1.53
57	BB	937	C	C5-C6	5.08	1.38	1.34
57	BB	1080	A	C6-N1	5.08	1.39	1.35
57	BB	1283	G	C2'-C1'	-5.08	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1930	G	O3'-P	-5.08	1.55	1.61
57	BB	1945	G	C2-N3	5.08	1.36	1.32
57	BB	2022	U	P-O5'	-5.08	1.54	1.59
57	BB	2331	G	C2'-C1'	-5.08	1.47	1.53
57	BB	2593	U	C2'-O2'	-5.08	1.35	1.41
21	AA	695	A	C6-N1	5.08	1.39	1.35
21	AA	1425	U	C1'-N1	5.08	1.56	1.48
57	BB	188	G	C2-N2	5.08	1.39	1.34
57	BB	1046	A	C3'-C2'	5.08	1.58	1.52
57	BB	1562	U	N1-C2	-5.08	1.33	1.38
57	BB	2215	C	C2'-C1'	5.08	1.58	1.53
58	BA	41	G	C2'-C1'	5.08	1.58	1.53
58	BA	84	G	C3'-C2'	-5.08	1.47	1.52
15	AD	69	ARG	CZ-NH2	5.08	1.39	1.33
21	AA	734	G	C4'-O4'	-5.08	1.39	1.45
21	AA	1252	A	P-O5'	-5.08	1.54	1.59
23	AW	3	C	N1-C2	5.08	1.45	1.40
57	BB	37	C	C4'-O4'	5.08	1.52	1.45
57	BB	84	A	O4'-C1'	5.08	1.48	1.41
57	BB	127	A	N1-C2	-5.08	1.29	1.34
57	BB	309	A	N9-C4	5.08	1.40	1.37
57	BB	444	C	N1-C6	5.08	1.40	1.37
57	BB	1399	C	C2-O2	5.08	1.29	1.24
57	BB	1815	A	N9-C4	-5.08	1.34	1.37
57	BB	1918	A	C2-N3	5.08	1.38	1.33
57	BB	2115	G	C2-N3	5.08	1.36	1.32
57	BB	2145	C	N3-C4	5.08	1.37	1.33
57	BB	2178	C	C4-N4	-5.08	1.29	1.33
57	BB	2522	U	C4'-C3'	-5.08	1.47	1.52
57	BB	2703	C	C2-N3	5.08	1.39	1.35
57	BB	2761	A	C5-C4	5.08	1.42	1.38
8	AQ	26	ARG	CD-NE	5.07	1.55	1.46
21	AA	323	U	N3-C4	5.07	1.43	1.38
21	AA	466	A	N3-C4	5.07	1.37	1.34
21	AA	700	G	C2'-O2'	5.07	1.48	1.41
21	AA	859	G	N1-C2	5.07	1.41	1.37
21	AA	1305	G	C3'-C2'	-5.07	1.47	1.52
23	AW	51	U	N3-C4	5.07	1.43	1.38
57	BB	57	C	C2'-C1'	-5.07	1.47	1.53
57	BB	166	U	C1'-N1	5.07	1.56	1.48
57	BB	966	G	P-O5'	-5.07	1.54	1.59
57	BB	1119	U	O3'-P	-5.07	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1136	G	C4'-O4'	5.07	1.52	1.45
57	BB	1233	C	C4'-O4'	5.07	1.52	1.45
57	BB	1364	G	C2-N2	5.07	1.39	1.34
57	BB	1457	U	C4'-C3'	5.07	1.58	1.53
57	BB	1677	A	P-O5'	5.07	1.64	1.59
57	BB	1787	A	N3-C4	-5.07	1.31	1.34
57	BB	2291	U	N3-C4	5.07	1.43	1.38
12	AU	20	ARG	CZ-NH1	5.07	1.39	1.33
21	AA	326	G	O4'-C1'	-5.07	1.35	1.41
21	AA	520	A	C5-C4	5.07	1.42	1.38
57	BB	314	C	C4-C5	5.07	1.47	1.43
57	BB	1047	G	C5'-C4'	5.07	1.57	1.51
57	BB	1094	U	C1'-N1	5.07	1.56	1.48
57	BB	2425	A	C4'-O4'	-5.07	1.39	1.45
57	BB	2832	U	N3-C4	5.07	1.43	1.38
21	AA	44	A	C8-N7	5.07	1.35	1.31
21	AA	1015	G	N3-C4	-5.07	1.31	1.35
21	AA	1081	A	O4'-C1'	-5.07	1.35	1.41
21	AA	1143	G	N3-C4	5.07	1.39	1.35
21	AA	1275	A	C8-N7	-5.07	1.28	1.31
57	BB	338	G	N1-C2	5.07	1.41	1.37
57	BB	432	A	C2-N3	-5.07	1.28	1.33
57	BB	809	G	N9-C8	-5.07	1.34	1.37
57	BB	2025	C	C2'-C1'	-5.07	1.47	1.53
57	BB	2517	C	C4-N4	5.07	1.38	1.33
57	BB	2521	C	C3'-C2'	-5.07	1.47	1.52
57	BB	2783	U	N1-C6	5.07	1.42	1.38
21	AA	44	A	C2-N3	5.07	1.38	1.33
21	AA	271	C	N1-C2	5.07	1.45	1.40
21	AA	567	G	C6-N1	5.07	1.43	1.39
22	AY	18	G	O4'-C1'	-5.07	1.35	1.41
57	BB	719	C	O4'-C1'	-5.07	1.35	1.41
57	BB	2079	U	P-O5'	-5.07	1.54	1.59
57	BB	2627	G	C2-N3	-5.07	1.28	1.32
21	AA	27	G	C2-N3	5.07	1.36	1.32
21	AA	619	U	C4'-C3'	5.07	1.58	1.53
21	AA	678	U	N3-C4	5.07	1.43	1.38
21	AA	1348	U	C2-O2	5.07	1.26	1.22
22	AY	48	C	C4-N4	-5.07	1.29	1.33
23	AW	56	C	C4'-C3'	5.07	1.58	1.53
34	BO	102	ARG	CD-NE	5.07	1.55	1.46
57	BB	192	C	C4-N4	-5.07	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	194	G	C5-C4	-5.07	1.34	1.38
57	BB	513	A	C5-C4	5.07	1.42	1.38
57	BB	537	G	C2'-C1'	-5.07	1.47	1.53
57	BB	902	C	C5-C6	5.07	1.38	1.34
57	BB	1147	A	C6-N6	5.07	1.38	1.33
57	BB	1393	A	C6-N6	5.07	1.38	1.33
57	BB	1695	G	C5-C4	5.07	1.41	1.38
57	BB	1927	A	N3-C4	-5.07	1.31	1.34
57	BB	2053	G	N7-C5	5.07	1.42	1.39
57	BB	2278	A	O3'-P	-5.07	1.55	1.61
57	BB	2397	G	C5-C4	5.07	1.41	1.38
58	BA	41	G	N9-C8	-5.07	1.34	1.37
19	AH	59	GLU	N-CA	-5.07	1.36	1.46
21	AA	107	G	N7-C5	-5.07	1.36	1.39
21	AA	557	G	C8-N7	5.07	1.33	1.30
21	AA	1029	U	N1-C6	5.07	1.42	1.38
26	AV	64	G	N9-C4	5.07	1.42	1.38
56	BH	87	GLU	CA-CB	5.07	1.65	1.53
57	BB	787	C	C3'-C2'	5.07	1.58	1.52
57	BB	1004	U	N1-C2	-5.07	1.33	1.38
57	BB	1218	G	P-O5'	-5.07	1.54	1.59
57	BB	1762	A	N3-C4	-5.07	1.31	1.34
57	BB	1915	U	C2-N3	5.07	1.41	1.37
57	BB	2032	G	C2-N3	5.07	1.36	1.32
57	BB	2137	U	C5-C6	-5.07	1.29	1.34
58	BA	86	G	C4'-C3'	5.07	1.58	1.53
5	AN	60	ARG	NE-CZ	5.06	1.39	1.33
21	AA	299	G	N3-C4	-5.06	1.31	1.35
57	BB	507	A	C1'-N9	-5.06	1.39	1.46
57	BB	850	U	C2-N3	5.06	1.41	1.37
57	BB	1411	U	C2-O2	5.06	1.26	1.22
57	BB	1778	U	C4-O4	5.06	1.27	1.23
21	AA	263	A	C2'-C1'	-5.06	1.47	1.53
21	AA	471	U	C4'-O4'	5.06	1.52	1.45
21	AA	653	U	C5'-C4'	-5.06	1.45	1.51
21	AA	682	G	N9-C8	5.06	1.41	1.37
21	AA	973	G	C5-C4	-5.06	1.34	1.38
55	BG	162	ARG	CZ-NH1	5.06	1.39	1.33
57	BB	305	C	C4-C5	5.06	1.47	1.43
57	BB	641	U	N3-C4	5.06	1.43	1.38
57	BB	709	U	C2'-C1'	-5.06	1.47	1.53
57	BB	916	G	C3'-C2'	-5.06	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1040	A	C2'-C1'	-5.06	1.47	1.53
57	BB	1100	C	C1'-N1	5.06	1.56	1.48
57	BB	1167	C	C4-N4	5.06	1.38	1.33
57	BB	1189	A	O3'-P	-5.06	1.55	1.61
57	BB	1775	U	C4-C5	5.06	1.48	1.43
57	BB	1787	A	C4'-O4'	-5.06	1.39	1.45
57	BB	2126	A	C5-C6	5.06	1.45	1.41
58	BA	73	A	N7-C5	-5.06	1.36	1.39
58	BA	73	A	C3'-O3'	5.06	1.49	1.42
21	AA	116	A	C5-C4	5.06	1.42	1.38
21	AA	679	C	C4-C5	5.06	1.47	1.43
21	AA	1124	G	N9-C8	-5.06	1.34	1.37
22	AY	70	C	O3'-P	-5.06	1.55	1.61
54	BF	111	ARG	CD-NE	5.06	1.55	1.46
56	BH	95	GLY	CA-C	-5.06	1.43	1.51
57	BB	49	A	C2-N3	5.06	1.38	1.33
57	BB	497	A	O3'-P	5.06	1.67	1.61
57	BB	790	U	C2-N3	5.06	1.41	1.37
57	BB	1133	A	C8-N7	-5.06	1.28	1.31
57	BB	1570	A	C6-N1	-5.06	1.32	1.35
57	BB	2351	G	N3-C4	5.06	1.39	1.35
21	AA	31	G	C5'-C4'	5.06	1.57	1.51
21	AA	277	C	N1-C6	-5.06	1.34	1.37
21	AA	306	A	C6-N1	5.06	1.39	1.35
21	AA	346	G	N3-C4	5.06	1.39	1.35
55	BG	69	ALA	N-CA	-5.06	1.36	1.46
57	BB	143	C	C4'-O4'	-5.06	1.39	1.45
57	BB	587	C	P-O5'	-5.06	1.54	1.59
57	BB	860	U	C3'-C2'	5.06	1.58	1.52
57	BB	974	G	C5-C4	5.06	1.41	1.38
57	BB	1214	A	C2'-C1'	-5.06	1.47	1.53
57	BB	1399	C	C1'-N1	5.06	1.56	1.48
57	BB	1987	A	C4'-O4'	5.06	1.52	1.45
57	BB	2047	C	C4'-O4'	-5.06	1.39	1.45
57	BB	2515	C	C2'-C1'	-5.06	1.47	1.53
57	BB	2520	C	C4-N4	5.06	1.38	1.33
21	AA	600	A	N7-C5	-5.06	1.36	1.39
43	BX	71	ARG	CZ-NH1	5.06	1.39	1.33
57	BB	697	G	C2-N3	5.06	1.36	1.32
57	BB	759	G	N1-C2	5.06	1.41	1.37
57	BB	811	U	C3'-O3'	5.06	1.49	1.42
57	BB	1052	C	C3'-O3'	5.06	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1776	G	N7-C5	-5.06	1.36	1.39
57	BB	2044	C	N3-C4	5.06	1.37	1.33
57	BB	2147	A	C4'-O4'	5.06	1.52	1.45
57	BB	2202	U	C5-C6	5.06	1.38	1.34
57	BB	2264	C	C2'-C1'	-5.06	1.47	1.53
57	BB	2794	C	O3'-P	-5.06	1.55	1.61
57	BB	2808	G	C5'-C4'	5.06	1.57	1.51
57	BB	2817	U	C2-N3	5.06	1.41	1.37
57	BB	275	C	N3-C4	5.06	1.37	1.33
57	BB	918	A	C3'-O3'	5.06	1.49	1.42
57	BB	2726	A	C2'-O2'	5.06	1.48	1.41
21	AA	279	A	C3'-O3'	-5.05	1.35	1.42
21	AA	599	C	C2'-C1'	-5.05	1.47	1.53
21	AA	881	G	N9-C8	5.05	1.41	1.37
21	AA	964	A	C8-N7	-5.05	1.28	1.31
21	AA	1270	G	C3'-C2'	-5.05	1.47	1.52
22	AY	14	A	C5-C6	5.05	1.45	1.41
41	BV	71	LYS	CA-C	-5.05	1.39	1.52
49	B2	18	PHE	CG-CD1	5.05	1.46	1.38
57	BB	137	U	N3-C4	5.05	1.43	1.38
57	BB	440	C	P-O5'	-5.05	1.54	1.59
57	BB	586	A	C8-N7	5.05	1.35	1.31
57	BB	881	G	N9-C4	5.05	1.42	1.38
57	BB	1251	C	C2'-C1'	-5.05	1.47	1.53
57	BB	1399	C	O4'-C1'	5.05	1.48	1.41
57	BB	2249	U	C4-C5	5.05	1.48	1.43
57	BB	2298	A	C6-N1	5.05	1.39	1.35
57	BB	2566	A	C5-C6	-5.05	1.36	1.41
57	BB	2750	A	C5'-C4'	5.05	1.57	1.51
57	BB	2850	A	C6-N1	5.05	1.39	1.35
21	AA	607	A	C5'-C4'	5.05	1.57	1.51
21	AA	784	A	N9-C4	5.05	1.40	1.37
57	BB	1872	A	N3-C4	-5.05	1.31	1.34
57	BB	2021	C	P-O5'	-5.05	1.54	1.59
57	BB	2349	G	C6-N1	5.05	1.43	1.39
57	BB	2620	C	C4'-C3'	5.05	1.58	1.53
57	BB	2878	U	C5-C6	-5.05	1.29	1.34
21	AA	156	C	P-O5'	-5.05	1.54	1.59
21	AA	223	A	N9-C8	-5.05	1.33	1.37
21	AA	279	A	P-O5'	-5.05	1.54	1.59
21	AA	710	G	C5-C4	5.05	1.41	1.38
21	AA	739	C	C1'-N1	-5.05	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	882	C	P-O5'	-5.05	1.54	1.59
21	AA	1325	C	C3'-C2'	-5.05	1.47	1.52
22	AY	68	U	N3-C4	5.05	1.43	1.38
33	BN	103	ARG	CZ-NH1	5.05	1.39	1.33
57	BB	215	G	P-O5'	5.05	1.64	1.59
57	BB	416	U	P-O5'	5.05	1.64	1.59
57	BB	582	A	N7-C5	-5.05	1.36	1.39
57	BB	1174	U	N1-C2	5.05	1.43	1.38
57	BB	1264	A	C1'-N9	5.05	1.56	1.48
57	BB	1460	U	N1-C2	-5.05	1.34	1.38
57	BB	1743	G	N9-C4	-5.05	1.33	1.38
57	BB	1910	G	N7-C5	-5.05	1.36	1.39
57	BB	2727	A	C6-N1	5.05	1.39	1.35
57	BB	2884	U	N1-C2	5.05	1.43	1.38
21	AA	278	G	P-O5'	-5.05	1.54	1.59
21	AA	482	A	C5-C4	5.05	1.42	1.38
21	AA	1345	U	N1-C6	5.05	1.42	1.38
22	AY	7	U	P-O5'	-5.05	1.54	1.59
23	AW	47	U	N1-C6	5.05	1.42	1.38
34	BO	101	GLY	CA-C	-5.05	1.43	1.51
57	BB	8	C	N1-C6	-5.05	1.34	1.37
57	BB	401	A	N1-C2	-5.05	1.29	1.34
57	BB	748	G	N1-C2	5.05	1.41	1.37
57	BB	802	A	C2-N3	5.05	1.38	1.33
57	BB	1145	C	C5'-C4'	-5.05	1.45	1.51
57	BB	1235	G	N9-C4	-5.05	1.33	1.38
57	BB	2096	C	C3'-O3'	5.05	1.49	1.42
57	BB	2301	C	C4'-O4'	5.05	1.52	1.45
57	BB	2488	G	N7-C5	-5.05	1.36	1.39
57	BB	2621	G	C2-N2	5.05	1.39	1.34
57	BB	2693	G	C2-N2	5.05	1.39	1.34
7	AP	25	ARG	NE-CZ	5.05	1.39	1.33
8	AQ	25	GLU	CB-CG	5.05	1.61	1.52
20	AI	92	SER	CA-CB	5.05	1.60	1.52
21	AA	998	C	C5'-C4'	5.05	1.57	1.51
21	AA	1370	G	N7-C5	-5.05	1.36	1.39
25	AZ	384	GLY	N-CA	-5.05	1.38	1.46
57	BB	415	A	C2-N3	-5.05	1.29	1.33
57	BB	517	C	O5'-C5'	-5.05	1.34	1.42
57	BB	564	C	N1-C6	5.05	1.40	1.37
57	BB	1028	A	C2'-C1'	-5.05	1.47	1.53
57	BB	2305	U	C5'-C4'	5.05	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	122	G	C2-N2	5.05	1.39	1.34
21	AA	308	C	C4-C5	5.05	1.47	1.43
21	AA	349	A	C3'-C2'	5.05	1.58	1.52
21	AA	360	G	C5'-C4'	5.05	1.57	1.51
21	AA	389	A	N1-C2	5.05	1.38	1.34
21	AA	778	G	N7-C5	-5.05	1.36	1.39
21	AA	1152	A	C6-N1	5.05	1.39	1.35
22	AY	33	U	N1-C2	5.05	1.43	1.38
25	AZ	313	LYS	CA-C	-5.05	1.39	1.52
26	AV	42	G	N7-C5	-5.05	1.36	1.39
57	BB	117	G	N3-C4	-5.05	1.31	1.35
57	BB	177	G	C6-N1	-5.05	1.36	1.39
57	BB	1467	U	C5'-C4'	5.05	1.57	1.51
57	BB	1602	U	C2-N3	5.05	1.41	1.37
57	BB	1661	G	P-O5'	-5.05	1.54	1.59
57	BB	1829	A	C2'-C1'	-5.05	1.47	1.53
57	BB	2140	G	N7-C5	-5.05	1.36	1.39
57	BB	2459	A	N1-C2	5.05	1.38	1.34
57	BB	2518	A	N7-C5	-5.05	1.36	1.39
2	AK	49	SER	CB-OG	-5.04	1.35	1.42
18	AG	56	SER	N-CA	-5.04	1.36	1.46
21	AA	47	C	O4'-C1'	5.04	1.48	1.41
21	AA	467	U	C3'-O3'	5.04	1.49	1.42
21	AA	783	C	C2'-C1'	5.04	1.58	1.53
57	BB	569	U	C4'-C3'	-5.04	1.47	1.52
57	BB	663	G	C3'-C2'	-5.04	1.47	1.52
57	BB	731	C	N3-C4	5.04	1.37	1.33
57	BB	1502	A	N9-C8	5.04	1.41	1.37
57	BB	2435	A	N7-C5	-5.04	1.36	1.39
21	AA	197	A	N7-C5	5.04	1.42	1.39
21	AA	203	G	C5-C4	-5.04	1.34	1.38
21	AA	380	G	C2-N2	5.04	1.39	1.34
22	AY	68	U	C5-C6	5.04	1.38	1.34
25	AZ	50	ASP	CB-CG	5.04	1.62	1.51
57	BB	3	U	P-O5'	5.04	1.64	1.59
57	BB	11	C	C4'-C3'	5.04	1.58	1.53
57	BB	118	A	N1-C2	5.04	1.38	1.34
57	BB	462	C	C4'-O4'	-5.04	1.39	1.45
57	BB	509	C	P-O5'	-5.04	1.54	1.59
57	BB	1424	G	C6-N1	5.04	1.43	1.39
57	BB	1596	A	C5'-C4'	5.04	1.57	1.51
58	BA	50	A	C2'-C1'	-5.04	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AJ	72	ARG	NE-CZ	5.04	1.39	1.33
21	AA	229	U	N1-C2	-5.04	1.34	1.38
21	AA	547	A	C3'-O3'	5.04	1.49	1.42
21	AA	616	G	C2'-O2'	-5.04	1.35	1.41
21	AA	958	A	O4'-C1'	5.04	1.48	1.41
21	AA	1167	A	N7-C5	-5.04	1.36	1.39
21	AA	1278	G	C6-N1	5.04	1.43	1.39
24	AX	19	U	C2'-C1'	-5.04	1.47	1.53
57	BB	152	A	P-O5'	-5.04	1.54	1.59
57	BB	210	C	N3-C4	5.04	1.37	1.33
57	BB	1009	A	C5'-C4'	5.04	1.57	1.51
57	BB	1034	G	N9-C4	5.04	1.42	1.38
57	BB	1536	C	O3'-P	-5.04	1.55	1.61
57	BB	2561	U	O3'-P	-5.04	1.55	1.61
57	BB	2621	G	P-O5'	-5.04	1.54	1.59
57	BB	2672	U	C2-N3	5.04	1.41	1.37
21	AA	1270	G	C5'-C4'	5.04	1.57	1.51
57	BB	85	G	N3-C4	5.04	1.39	1.35
57	BB	107	G	N9-C4	-5.04	1.33	1.38
57	BB	218	A	N3-C4	-5.04	1.31	1.34
57	BB	436	C	P-O5'	-5.04	1.54	1.59
57	BB	1536	C	C5'-C4'	5.04	1.57	1.51
57	BB	1842	G	N9-C4	-5.04	1.33	1.38
57	BB	1985	C	N3-C4	5.04	1.37	1.33
9	AR	23	LYS	CA-CB	5.04	1.65	1.53
21	AA	284	C	C4-C5	5.04	1.47	1.43
21	AA	620	C	C2-N3	5.04	1.39	1.35
21	AA	639	G	C2'-C1'	-5.04	1.47	1.53
21	AA	1478	U	C4'-C3'	5.04	1.58	1.53
31	BL	2	ARG	CA-C	-5.04	1.39	1.52
41	BV	59	GLU	CD-OE2	5.04	1.31	1.25
57	BB	124	G	C3'-C2'	-5.04	1.47	1.52
57	BB	189	G	C3'-C2'	5.04	1.58	1.52
57	BB	202	U	C4-C5	5.04	1.48	1.43
57	BB	319	G	C8-N7	-5.04	1.27	1.30
57	BB	691	C	N1-C6	5.04	1.40	1.37
57	BB	857	G	C2-N2	5.04	1.39	1.34
57	BB	1023	U	C1'-N1	-5.04	1.39	1.46
57	BB	1388	G	C5-C4	5.04	1.41	1.38
57	BB	1461	C	N1-C6	5.04	1.40	1.37
57	BB	1718	G	O4'-C1'	5.04	1.48	1.41
57	BB	2110	G	C4'-C3'	5.04	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2872	A	N9-C8	-5.04	1.33	1.37
58	BA	2	G	C6-N1	5.04	1.43	1.39
21	AA	439	U	O4'-C1'	5.04	1.48	1.41
21	AA	860	A	C5-C4	-5.04	1.35	1.38
21	AA	1084	G	C2'-C1'	-5.04	1.47	1.53
23	AW	52	G	P-O5'	-5.04	1.54	1.59
57	BB	1265	A	C4'-O4'	-5.04	1.39	1.45
15	AD	80	ARG	CD-NE	5.04	1.55	1.46
21	AA	140	U	N1-C2	5.04	1.43	1.38
21	AA	997	U	N3-C4	5.04	1.43	1.38
21	AA	1246	A	N9-C8	-5.04	1.33	1.37
21	AA	1401	G	C2'-C1'	-5.04	1.47	1.53
37	BR	21	ARG	NE-CZ	5.04	1.39	1.33
42	BW	25	PHE	C-N	5.04	1.42	1.33
45	BC	99	GLU	CD-OE2	-5.04	1.20	1.25
57	BB	82	U	C4-C5	5.04	1.48	1.43
57	BB	277	G	N9-C8	-5.04	1.34	1.37
57	BB	734	A	C3'-C2'	5.04	1.58	1.52
57	BB	759	G	C5-C4	5.04	1.41	1.38
57	BB	924	G	C3'-C2'	5.04	1.58	1.52
57	BB	1792	G	C8-N7	-5.04	1.27	1.30
57	BB	2070	A	C5'-C4'	-5.04	1.45	1.51
57	BB	2075	U	N3-C4	5.04	1.43	1.38
57	BB	2281	A	N3-C4	-5.04	1.31	1.34
57	BB	2603	G	C5-C4	5.04	1.41	1.38
57	BB	2834	G	N9-C8	-5.04	1.34	1.37
58	BA	69	G	C2-N3	5.04	1.36	1.32
21	AA	273	U	C2-O2	5.03	1.26	1.22
21	AA	600	A	C2-N3	5.03	1.38	1.33
21	AA	803	G	C2'-O2'	5.03	1.48	1.41
21	AA	1233	G	C2'-C1'	-5.03	1.47	1.53
27	B5	21	TYR	CE1-CZ	-5.03	1.32	1.38
32	BM	66	ARG	NE-CZ	5.03	1.39	1.33
57	BB	185	G	P-O5'	5.03	1.64	1.59
57	BB	711	G	P-O5'	-5.03	1.54	1.59
57	BB	952	G	C2'-C1'	-5.03	1.47	1.53
57	BB	1197	G	N9-C8	5.03	1.41	1.37
57	BB	1666	G	O3'-P	-5.03	1.55	1.61
57	BB	2301	C	O3'-P	-5.03	1.55	1.61
57	BB	2581	G	C2'-C1'	-5.03	1.47	1.53
57	BB	2750	A	P-O5'	-5.03	1.54	1.59
58	BA	60	C	N1-C6	5.03	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	AD	38	GLY	CA-C	-5.03	1.43	1.51
21	AA	350	G	C2-N3	5.03	1.36	1.32
21	AA	733	G	N9-C8	5.03	1.41	1.37
26	AV	34	C	N1-C6	5.03	1.40	1.37
57	BB	1046	A	C6-N1	5.03	1.39	1.35
57	BB	1224	U	C3'-O3'	-5.03	1.35	1.42
57	BB	1289	C	O4'-C1'	5.03	1.48	1.41
57	BB	1539	U	N3-C4	5.03	1.43	1.38
57	BB	2020	A	C8-N7	5.03	1.35	1.31
57	BB	2600	A	C1'-N9	5.03	1.56	1.48
57	BB	2802	G	N9-C4	-5.03	1.33	1.38
4	AM	56	ARG	CD-NE	5.03	1.55	1.46
21	AA	126	G	C5'-C4'	5.03	1.57	1.51
21	AA	787	A	C3'-C2'	-5.03	1.47	1.52
21	AA	1138	G	N9-C8	5.03	1.41	1.37
21	AA	1202	U	C2-N3	5.03	1.41	1.37
21	AA	1465	A	O3'-P	-5.03	1.55	1.61
21	AA	1497	G	C2-N3	5.03	1.36	1.32
23	AW	44	G	N7-C5	-5.03	1.36	1.39
57	BB	165	A	C2'-C1'	-5.03	1.47	1.53
57	BB	807	U	O5'-C5'	5.03	1.52	1.44
57	BB	894	U	C4-C5	5.03	1.48	1.43
57	BB	2245	U	N1-C2	5.03	1.43	1.38
57	BB	2311	A	N7-C5	5.03	1.42	1.39
57	BB	2375	G	C4'-O4'	5.03	1.52	1.45
58	BA	89	U	C2'-C1'	-5.03	1.47	1.53
21	AA	453	G	N7-C5	5.03	1.42	1.39
21	AA	1459	G	C6-O6	-5.03	1.19	1.24
57	BB	1544	A	O3'-P	-5.03	1.55	1.61
57	BB	1741	C	C2'-C1'	-5.03	1.47	1.53
1	AJ	31	ARG	CZ-NH2	5.03	1.39	1.33
21	AA	671	G	C4'-C3'	-5.03	1.47	1.52
21	AA	1508	A	C2-N3	-5.03	1.29	1.33
22	AY	2	C	C1'-N1	5.03	1.56	1.48
23	AW	24	G	N7-C5	-5.03	1.36	1.39
26	AV	35	A	N9-C8	-5.03	1.33	1.37
57	BB	329	G	P-O5'	5.03	1.64	1.59
57	BB	655	A	C2'-C1'	-5.03	1.47	1.53
57	BB	985	C	C4-N4	5.03	1.38	1.33
57	BB	1081	U	P-O5'	-5.03	1.54	1.59
57	BB	1684	G	N7-C5	-5.03	1.36	1.39
57	BB	2307	G	C2-N3	5.03	1.36	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2735	G	N3-C4	5.03	1.39	1.35
16	AE	67	ARG	CZ-NH2	5.03	1.39	1.33
21	AA	71	A	C5'-C4'	5.03	1.57	1.51
21	AA	289	G	C4'-O4'	-5.03	1.39	1.45
21	AA	796	C	N1-C2	5.03	1.45	1.40
21	AA	949	A	N7-C5	-5.03	1.36	1.39
21	AA	1366	C	P-O5'	-5.03	1.54	1.59
21	AA	1507	A	N7-C5	-5.03	1.36	1.39
21	AA	1526	G	N3-C4	5.03	1.39	1.35
57	BB	337	C	P-O5'	-5.03	1.54	1.59
57	BB	672	C	C3'-C2'	-5.03	1.47	1.52
57	BB	674	G	C5'-C4'	5.03	1.57	1.51
57	BB	1059	G	C6-N1	5.03	1.43	1.39
57	BB	1596	A	N7-C5	5.03	1.42	1.39
57	BB	2204	G	C2-N3	5.03	1.36	1.32
57	BB	2604	U	C4-C5	5.03	1.48	1.43
21	AA	143	A	N3-C4	5.02	1.37	1.34
21	AA	1360	A	N3-C4	-5.02	1.31	1.34
29	BJ	97	PRO	N-CD	-5.02	1.40	1.47
57	BB	98	G	N9-C4	5.02	1.42	1.38
57	BB	543	G	C4'-C3'	5.02	1.58	1.53
57	BB	644	A	N7-C5	-5.02	1.36	1.39
57	BB	1921	G	N9-C4	-5.02	1.33	1.38
57	BB	2103	C	N1-C6	5.02	1.40	1.37
57	BB	2363	G	C3'-C2'	-5.02	1.47	1.52
21	AA	602	A	O4'-C1'	5.02	1.48	1.41
21	AA	654	G	C4'-O4'	5.02	1.52	1.45
21	AA	939	G	C2-N3	5.02	1.36	1.32
21	AA	1024	G	C8-N7	5.02	1.33	1.30
21	AA	1074	G	C3'-O3'	5.02	1.49	1.42
21	AA	1169	A	C2-N3	5.02	1.38	1.33
21	AA	1345	U	P-O5'	-5.02	1.54	1.59
26	AV	30	G	C5-C6	-5.02	1.37	1.42
57	BB	534	U	O3'-P	-5.02	1.55	1.61
57	BB	551	G	N3-C4	5.02	1.39	1.35
57	BB	1036	G	C2'-O2'	-5.02	1.35	1.41
57	BB	1284	A	C5-C6	5.02	1.45	1.41
57	BB	1525	A	C8-N7	-5.02	1.28	1.31
57	BB	2123	G	C6-N1	5.02	1.43	1.39
58	BA	88	C	C5'-C4'	5.02	1.57	1.51
21	AA	827	U	O4'-C1'	5.02	1.48	1.41
21	AA	1010	U	C2-N3	5.02	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1094	G	N9-C4	5.02	1.42	1.38
21	AA	1223	C	N1-C2	-5.02	1.35	1.40
22	AY	36	A	C5-C4	5.02	1.42	1.38
57	BB	361	G	C6-O6	5.02	1.28	1.24
57	BB	513	A	C2'-C1'	-5.02	1.47	1.53
57	BB	665	U	C2'-O2'	-5.02	1.35	1.41
57	BB	1722	A	C5-C4	5.02	1.42	1.38
57	BB	1752	C	C2-N3	5.02	1.39	1.35
57	BB	1803	A	P-O5'	-5.02	1.54	1.59
2	AK	36	ARG	NE-CZ	5.02	1.39	1.33
18	AG	84	TYR	CZ-OH	5.02	1.46	1.37
21	AA	566	G	C6-N1	-5.02	1.36	1.39
21	AA	814	A	N9-C4	-5.02	1.34	1.37
21	AA	841	C	C2-N3	5.02	1.39	1.35
57	BB	63	A	N3-C4	-5.02	1.31	1.34
57	BB	385	C	C2-N3	5.02	1.39	1.35
57	BB	521	U	N1-C2	-5.02	1.34	1.38
57	BB	1574	C	P-O5'	5.02	1.64	1.59
57	BB	2083	G	C2'-C1'	-5.02	1.47	1.53
57	BB	2163	A	N3-C4	-5.02	1.31	1.34
57	BB	2310	C	P-O5'	5.02	1.64	1.59
57	BB	2686	G	O3'-P	-5.02	1.55	1.61
57	BB	2800	A	C8-N7	5.02	1.35	1.31
57	BB	2851	A	C2-N3	5.02	1.38	1.33
57	BB	2866	U	C4-C5	5.02	1.48	1.43
21	AA	548	G	N7-C5	-5.02	1.36	1.39
21	AA	1048	G	C8-N7	5.02	1.33	1.30
21	AA	1238	A	C5-C4	5.02	1.42	1.38
23	AW	25	C	C5-C6	5.02	1.38	1.34
23	AW	50	U	N3-C4	5.02	1.43	1.38
57	BB	186	G	C8-N7	5.02	1.33	1.30
57	BB	468	G	P-O5'	-5.02	1.54	1.59
57	BB	553	G	C4'-C3'	5.02	1.58	1.53
57	BB	843	G	N9-C4	-5.02	1.33	1.38
57	BB	1205	A	O3'-P	-5.02	1.55	1.61
57	BB	1359	A	N3-C4	-5.02	1.31	1.34
57	BB	1482	G	N9-C8	-5.02	1.34	1.37
57	BB	1810	A	N9-C4	-5.02	1.34	1.37
57	BB	2322	A	N3-C4	-5.02	1.31	1.34
57	BB	2794	C	C1'-N1	5.02	1.56	1.48
21	AA	941	G	O4'-C1'	-5.02	1.35	1.41
21	AA	1268	G	N9-C4	5.02	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1505	G	C4'-C3'	5.02	1.58	1.53
57	BB	1784	A	C4'-C3'	5.02	1.58	1.53
57	BB	2602	A	P-O5'	-5.02	1.54	1.59
13	AB	136	ARG	CA-CB	5.01	1.65	1.53
21	AA	433	G	P-O5'	-5.01	1.54	1.59
21	AA	698	G	C2-N3	5.01	1.36	1.32
57	BB	487	C	C4-C5	5.01	1.47	1.43
57	BB	515	A	P-O5'	-5.01	1.54	1.59
57	BB	591	U	C4-C5	5.01	1.48	1.43
57	BB	823	C	C3'-O3'	-5.01	1.35	1.42
57	BB	1008	A	C2'-O2'	-5.01	1.35	1.41
57	BB	1284	A	C4'-O4'	5.01	1.52	1.45
57	BB	1373	A	C6-N6	5.01	1.38	1.33
57	BB	1734	G	O3'-P	5.01	1.67	1.61
57	BB	2016	U	N1-C2	5.01	1.43	1.38
57	BB	2044	C	C2-N3	5.01	1.39	1.35
57	BB	2103	C	P-O5'	5.01	1.64	1.59
57	BB	2278	A	C6-N6	5.01	1.38	1.33
21	AA	427	U	N3-C4	5.01	1.43	1.38
57	BB	438	G	N1-C2	5.01	1.41	1.37
57	BB	1014	A	P-O5'	-5.01	1.54	1.59
57	BB	1319	C	N1-C2	5.01	1.45	1.40
57	BB	1753	G	N9-C4	5.01	1.42	1.38
57	BB	1941	C	C5-C6	5.01	1.38	1.34
58	BA	67	G	C2-N3	5.01	1.36	1.32
21	AA	7	A	C6-N1	5.01	1.39	1.35
21	AA	288	A	C3'-C2'	-5.01	1.47	1.52
21	AA	579	A	C2'-C1'	-5.01	1.47	1.53
21	AA	794	A	N9-C4	5.01	1.40	1.37
21	AA	1132	C	C5'-C4'	5.01	1.57	1.51
21	AA	1385	G	C5-C4	-5.01	1.34	1.38
22	AY	5	A	O5'-C5'	5.01	1.52	1.44
33	BN	89	SER	CA-CB	5.01	1.60	1.52
57	BB	740	C	C3'-C2'	5.01	1.58	1.52
57	BB	987	C	O3'-P	-5.01	1.55	1.61
57	BB	1217	U	O4'-C1'	5.01	1.48	1.41
57	BB	1404	C	C4-N4	5.01	1.38	1.33
57	BB	1530	G	N3-C4	5.01	1.39	1.35
57	BB	1623	G	N9-C4	-5.01	1.33	1.38
57	BB	1826	G	C3'-O3'	5.01	1.49	1.42
57	BB	1886	U	C4-C5	5.01	1.48	1.43
57	BB	1974	C	C4-N4	5.01	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2059	A	N7-C5	5.01	1.42	1.39
57	BB	2073	C	C5'-C4'	5.01	1.57	1.51
57	BB	2254	C	C3'-C2'	5.01	1.58	1.52
57	BB	2427	C	C4'-O4'	-5.01	1.39	1.45
57	BB	2492	U	C2-N3	5.01	1.41	1.37
57	BB	2549	G	C2'-C1'	-5.01	1.47	1.53
57	BB	2843	G	N9-C8	-5.01	1.34	1.37
58	BA	98	G	C1'-N9	-5.01	1.39	1.46
13	AB	90	PHE	CG-CD2	5.01	1.46	1.38
18	AG	118	ARG	CZ-NH2	5.01	1.39	1.33
21	AA	46	G	C2'-C1'	-5.01	1.47	1.53
21	AA	236	A	C5-C6	-5.01	1.36	1.41
21	AA	512	U	P-O5'	-5.01	1.54	1.59
21	AA	1181	G	C3'-C2'	-5.01	1.47	1.52
21	AA	1280	A	C2'-O2'	-5.01	1.35	1.41
22	AY	1	G	C5-C6	-5.01	1.37	1.42
23	AW	60	U	P-O5'	-5.01	1.54	1.59
57	BB	559	G	C6-N1	5.01	1.43	1.39
57	BB	954	G	N9-C8	5.01	1.41	1.37
57	BB	1346	G	N7-C5	5.01	1.42	1.39
57	BB	1512	C	P-O5'	-5.01	1.54	1.59
57	BB	1652	A	C3'-C2'	-5.01	1.47	1.52
57	BB	2257	U	C2'-O2'	5.01	1.48	1.41
57	BB	2500	U	N3-C4	5.01	1.43	1.38
57	BB	2577	A	N3-C4	5.01	1.37	1.34
58	BA	66	A	C3'-C2'	5.01	1.58	1.52
13	AB	220	VAL	CA-C	-5.01	1.40	1.52
21	AA	318	G	C2-N3	5.01	1.36	1.32
21	AA	417	G	C2-N2	5.01	1.39	1.34
21	AA	657	U	C2'-C1'	-5.01	1.47	1.53
22	AY	21	A	C5'-C4'	5.01	1.57	1.51
23	AW	69	G	C4'-C3'	5.01	1.58	1.53
53	BE	40	ARG	NE-CZ	5.01	1.39	1.33
57	BB	114	U	C4'-C3'	-5.01	1.47	1.52
57	BB	311	A	C6-N1	5.01	1.39	1.35
57	BB	553	G	C8-N7	-5.01	1.27	1.30
57	BB	2894	G	N1-C2	5.01	1.41	1.37
21	AA	307	C	C1'-N1	5.01	1.56	1.48
21	AA	784	A	C2'-C1'	-5.01	1.47	1.53
21	AA	818	G	C3'-C2'	5.01	1.58	1.52
21	AA	1255	G	C8-N7	-5.01	1.27	1.30
21	AA	1293	C	C5-C6	-5.01	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	5	G	C2'-C1'	-5.01	1.47	1.53
26	AV	12	G	C8-N7	-5.01	1.27	1.30
57	BB	150	U	N1-C6	-5.01	1.33	1.38
57	BB	310	A	C5-C4	5.01	1.42	1.38
57	BB	457	A	C6-N6	5.01	1.38	1.33
57	BB	907	G	C6-N1	5.01	1.43	1.39
57	BB	1106	G	C6-N1	-5.01	1.36	1.39
57	BB	1327	A	C6-N1	5.01	1.39	1.35
57	BB	2050	C	C2-N3	5.01	1.39	1.35
21	AA	418	C	C4-N4	5.00	1.38	1.33
21	AA	1027	C	C3'-C2'	-5.00	1.47	1.52
21	AA	1121	U	C4'-O4'	-5.00	1.39	1.45
21	AA	1178	G	N3-C4	5.00	1.39	1.35
57	BB	971	G	N1-C2	5.00	1.41	1.37
57	BB	2293	G	P-O5'	-5.00	1.54	1.59
57	BB	2699	C	C4-N4	5.00	1.38	1.33
8	AQ	61	ARG	NE-CZ	5.00	1.39	1.33
14	AC	198	LYS	CA-C	-5.00	1.40	1.52
21	AA	175	C	N3-C4	5.00	1.37	1.33
21	AA	537	G	C2-N2	5.00	1.39	1.34
42	BW	18	LYS	C-N	5.00	1.45	1.34
57	BB	408	G	C4'-C3'	5.00	1.58	1.53
57	BB	1038	G	N9-C4	-5.00	1.33	1.38
57	BB	1063	G	O4'-C1'	-5.00	1.35	1.41
57	BB	1254	A	N9-C8	5.00	1.41	1.37
57	BB	1368	G	C8-N7	-5.00	1.27	1.30
57	BB	2045	C	N1-C6	5.00	1.40	1.37
58	BA	100	G	N7-C5	-5.00	1.36	1.39
11	AT	81	GLN	N-CA	-5.00	1.36	1.46
21	AA	100	G	N9-C8	5.00	1.41	1.37
21	AA	726	C	P-O5'	-5.00	1.54	1.59
21	AA	790	A	C4'-C3'	-5.00	1.47	1.52
21	AA	1160	G	N9-C8	5.00	1.41	1.37
21	AA	1409	C	N1-C6	-5.00	1.34	1.37
22	AY	47	U	N1-C2	5.00	1.43	1.38
57	BB	37	C	C2-O2	5.00	1.28	1.24
57	BB	680	C	O3'-P	-5.00	1.55	1.61
57	BB	751	A	N3-C4	5.00	1.37	1.34
57	BB	880	G	C6-N1	5.00	1.43	1.39
57	BB	1110	G	C5'-C4'	5.00	1.57	1.51
57	BB	1460	U	C5-C6	5.00	1.38	1.34
57	BB	1589	U	O3'-P	-5.00	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1774	C	N3-C4	5.00	1.37	1.33
57	BB	2445	G	C2-N3	5.00	1.36	1.32
57	BB	2489	U	N3-C4	5.00	1.43	1.38
57	BB	2506	U	P-O5'	-5.00	1.54	1.59
57	BB	2865	U	N1-C2	-5.00	1.34	1.38

All (27780) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	523	A	N1-C6-N6	27.08	134.85	118.60
57	BB	2097	A	N1-C6-N6	26.55	134.53	118.60
57	BB	725	G	N1-C6-O6	26.46	135.78	119.90
57	BB	2274	A	N1-C6-N6	26.21	134.33	118.60
58	BA	9	G	N1-C6-O6	25.88	135.43	119.90
21	AA	1375	A	N1-C6-N6	25.69	134.01	118.60
57	BB	1090	A	N1-C6-N6	25.63	133.98	118.60
21	AA	968	A	N1-C6-N6	25.38	133.83	118.60
57	BB	628	G	N1-C6-O6	25.11	134.97	119.90
21	AA	15	G	N1-C6-O6	24.76	134.76	119.90
21	AA	59	A	N1-C6-N6	24.34	133.21	118.60
57	BB	1698	A	N1-C6-N6	24.27	133.16	118.60
57	BB	1853	A	N1-C6-N6	24.23	133.13	118.60
57	BB	1202	G	N1-C6-O6	23.99	134.29	119.90
21	AA	1188	A	N1-C6-N6	23.96	132.98	118.60
21	AA	1405	G	C5-C6-O6	-23.91	114.26	128.60
57	BB	1122	G	N1-C6-O6	23.73	134.14	119.90
57	BB	2389	G	C5-C6-O6	-23.72	114.37	128.60
22	AY	76	A	N1-C6-N6	23.45	132.67	118.60
57	BB	528	A	N1-C6-N6	23.45	132.67	118.60
57	BB	1276	A	N1-C6-N6	23.42	132.65	118.60
21	AA	574	A	N1-C6-N6	23.36	132.62	118.60
58	BA	56	G	N1-C6-O6	23.31	133.89	119.90
57	BB	330	A	N1-C6-N6	23.26	132.56	118.60
57	BB	2101	A	N1-C6-N6	23.23	132.54	118.60
57	BB	2009	A	N1-C6-N6	23.17	132.50	118.60
21	AA	1405	G	N1-C6-O6	23.12	133.78	119.90
21	AA	608	A	N1-C6-N6	23.05	132.43	118.60
57	BB	1649	G	C5-C6-O6	-22.94	114.84	128.60
57	BB	156	A	N1-C6-N6	22.93	132.36	118.60
57	BB	1848	A	N1-C6-N6	22.92	132.35	118.60
57	BB	864	G	N1-C6-O6	22.89	133.63	119.90
57	BB	322	A	N1-C6-N6	22.82	132.29	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2670	A	N1-C6-N6	22.82	132.29	118.60
22	AY	23	A	N1-C6-N6	22.73	132.24	118.60
21	AA	1453	G	N1-C6-O6	22.67	133.50	119.90
21	AA	15	G	C5-C6-O6	-22.63	115.02	128.60
21	AA	1398	A	N1-C6-N6	22.62	132.17	118.60
57	BB	602	A	N1-C6-N6	22.59	132.15	118.60
21	AA	713	G	N1-C6-O6	22.52	133.41	119.90
57	BB	259	G	N1-C6-O6	22.50	133.40	119.90
57	BB	1133	A	N1-C6-N6	22.31	131.98	118.60
23	AW	36	A	N1-C6-N6	22.30	131.98	118.60
57	BB	2705	A	N1-C6-N6	22.29	131.97	118.60
57	BB	1553	A	N1-C6-N6	22.27	131.96	118.60
26	AV	52	G	N1-C6-O6	22.25	133.25	119.90
57	BB	1193	G	N1-C6-O6	22.16	133.19	119.90
21	AA	10	A	N1-C6-N6	22.12	131.88	118.60
57	BB	362	A	N1-C6-N6	22.09	131.86	118.60
21	AA	1426	G	N1-C6-O6	22.03	133.12	119.90
21	AA	1012	A	N1-C6-N6	22.02	131.81	118.60
21	AA	77	A	N1-C6-N6	21.98	131.79	118.60
21	AA	116	A	N1-C6-N6	21.92	131.75	118.60
21	AA	450	G	N1-C6-O6	21.90	133.04	119.90
57	BB	2287	A	N1-C6-N6	21.79	131.68	118.60
57	BB	1262	A	N1-C6-N6	21.75	131.65	118.60
57	BB	2869	G	N1-C6-O6	21.62	132.87	119.90
26	AV	35	A	N1-C6-N6	21.55	131.53	118.60
26	AV	43	A	N1-C6-N6	21.51	131.51	118.60
21	AA	931	C	N3-C4-C5	-21.51	113.30	121.90
57	BB	1640	A	N1-C6-N6	21.51	131.50	118.60
21	AA	1473	G	N1-C6-O6	21.46	132.78	119.90
57	BB	53	A	N1-C6-N6	21.42	131.45	118.60
21	AA	1164	G	N1-C6-O6	21.40	132.74	119.90
21	AA	1318	A	N1-C6-N6	21.34	131.41	118.60
21	AA	1435	G	N1-C6-O6	21.32	132.69	119.90
23	AW	58	A	N1-C6-N6	21.23	131.34	118.60
57	BB	1842	G	N1-C6-O6	21.21	132.62	119.90
21	AA	353	A	N1-C6-N6	21.19	131.31	118.60
21	AA	568	G	N1-C6-O6	21.17	132.60	119.90
57	BB	2894	G	C5-C6-O6	-21.14	115.92	128.60
57	BB	1696	G	C5-C6-O6	-21.13	115.92	128.60
57	BB	2867	G	N1-C6-O6	21.06	132.53	119.90
57	BB	1817	G	C5-C6-O6	-21.04	115.97	128.60
21	AA	491	G	N1-C6-O6	20.97	132.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	978	G	N1-C6-O6	20.91	132.45	119.90
21	AA	924	C	N3-C4-C5	-20.91	113.54	121.90
22	AY	57	G	N1-C6-O6	20.89	132.43	119.90
21	AA	460	A	N1-C6-N6	20.82	131.09	118.60
57	BB	689	A	N1-C6-N6	20.76	131.06	118.60
57	BB	1122	G	C5-C6-O6	-20.72	116.17	128.60
57	BB	1191	G	N1-C6-O6	20.72	132.33	119.90
21	AA	830	G	N1-C6-O6	20.70	132.32	119.90
21	AA	994	A	N1-C6-N6	20.68	131.01	118.60
57	BB	1347	A	N1-C6-N6	20.68	131.01	118.60
21	AA	963	G	N1-C6-O6	20.64	132.28	119.90
57	BB	492	A	N1-C6-N6	20.55	130.93	118.60
57	BB	1588	G	N1-C6-O6	20.53	132.22	119.90
57	BB	488	G	N1-C6-O6	20.48	132.19	119.90
57	BB	897	C	N3-C4-C5	-20.43	113.73	121.90
21	AA	442	G	C5-C6-O6	-20.42	116.35	128.60
21	AA	1413	A	N1-C6-N6	20.39	130.84	118.60
57	BB	855	G	C5-C6-O6	-20.35	116.39	128.60
22	AY	4	G	N1-C6-O6	20.35	132.11	119.90
57	BB	1435	G	C5-C6-O6	-20.34	116.40	128.60
21	AA	546	A	N1-C6-N6	20.33	130.80	118.60
21	AA	450	G	C5-C6-O6	-20.31	116.41	128.60
57	BB	1193	G	C5-C6-O6	-20.27	116.44	128.60
21	AA	1306	A	N1-C6-N6	20.27	130.76	118.60
57	BB	453	A	N1-C6-N6	20.26	130.76	118.60
57	BB	1479	G	N1-C6-O6	20.26	132.05	119.90
57	BB	2059	A	N1-C6-N6	20.22	130.73	118.60
57	BB	1715	G	N1-C6-O6	20.16	132.00	119.90
57	BB	1145	C	C6-N1-C2	-20.04	112.29	120.30
26	AV	38	A	N1-C6-N6	20.03	130.62	118.60
21	AA	77	A	C8-N9-C4	-20.02	97.79	105.80
57	BB	2747	G	C5-C6-O6	-20.01	116.59	128.60
57	BB	880	G	P-O3'-C3'	19.98	143.67	119.70
57	BB	730	A	N1-C6-N6	19.97	130.58	118.60
21	AA	968	A	C5-C6-N6	-19.96	107.73	123.70
57	BB	83	A	N1-C6-N6	19.96	130.58	118.60
57	BB	1968	G	N1-C6-O6	19.96	131.88	119.90
21	AA	1072	G	N1-C6-O6	19.95	131.87	119.90
21	AA	1256	A	P-O3'-C3'	19.94	143.63	119.70
23	AW	65	G	N1-C6-O6	19.93	131.85	119.90
57	BB	2848	G	N1-C6-O6	19.92	131.85	119.90
21	AA	362	G	N1-C6-O6	19.88	131.83	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	847	G	N1-C6-O6	19.87	131.82	119.90
21	AA	382	A	N1-C6-N6	19.87	130.52	118.60
21	AA	663	A	N1-C6-N6	19.86	130.51	118.60
58	BA	109	A	N1-C6-N6	19.85	130.51	118.60
21	AA	31	G	N1-C6-O6	19.81	131.79	119.90
57	BB	628	G	C5-C6-O6	-19.77	116.74	128.60
57	BB	2369	A	N1-C6-N6	19.77	130.46	118.60
57	BB	1653	G	N1-C6-O6	19.77	131.76	119.90
57	BB	299	A	N1-C6-N6	19.72	130.43	118.60
57	BB	1588	G	C5-C6-O6	-19.70	116.78	128.60
21	AA	362	G	C5-C6-O6	-19.69	116.79	128.60
21	AA	1072	G	C5-C6-O6	-19.69	116.79	128.60
21	AA	1435	G	C5-C6-O6	-19.69	116.79	128.60
26	AV	73	A	N1-C6-N6	19.67	130.40	118.60
57	BB	1353	A	N1-C6-N6	19.67	130.40	118.60
21	AA	243	A	N1-C6-N6	19.66	130.40	118.60
57	BB	582	A	N1-C6-N6	19.59	130.36	118.60
57	BB	1528	A	N1-C6-N6	19.58	130.35	118.60
57	BB	7	G	C5-C6-O6	-19.57	116.86	128.60
57	BB	1111	A	N1-C6-N6	19.57	130.34	118.60
57	BB	2013	A	N1-C6-N6	19.56	130.34	118.60
57	BB	2323	G	N1-C6-O6	19.56	131.63	119.90
57	BB	196	A	N1-C6-N6	19.55	130.33	118.60
21	AA	412	A	P-O3'-C3'	19.54	143.15	119.70
21	AA	1438	G	C5-C6-O6	-19.54	116.88	128.60
57	BB	1649	G	N1-C6-O6	19.53	131.62	119.90
57	BB	1272	A	N1-C6-N6	19.52	130.31	118.60
57	BB	1202	G	C5-C6-O6	-19.51	116.89	128.60
57	BB	879	G	N1-C6-O6	19.51	131.61	119.90
57	BB	627	A	N1-C6-N6	19.47	130.28	118.60
58	BA	56	G	C5-C6-O6	-19.44	116.93	128.60
57	BB	347	A	N1-C6-N6	19.43	130.26	118.60
57	BB	1786	A	N1-C6-N6	19.43	130.26	118.60
21	AA	301	G	C5-C6-O6	-19.40	116.96	128.60
21	AA	517	G	N1-C6-O6	19.38	131.53	119.90
57	BB	2729	G	N1-C6-O6	19.38	131.53	119.90
22	AY	44	A	N1-C6-N6	19.37	130.22	118.60
57	BB	319	G	N1-C6-O6	19.35	131.51	119.90
21	AA	1508	A	N1-C6-N6	19.32	130.19	118.60
21	AA	939	G	N1-C6-O6	19.31	131.49	119.90
57	BB	141	G	N1-C6-O6	19.29	131.47	119.90
21	AA	1201	A	N1-C6-N6	19.29	130.17	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	265	A	N1-C6-N6	19.24	130.15	118.60
21	AA	148	G	N1-C6-O6	19.24	131.44	119.90
57	BB	2848	G	C5-C6-O6	-19.24	117.06	128.60
21	AA	80	A	N1-C6-N6	19.23	130.14	118.60
21	AA	685	G	N1-C6-O6	19.23	131.44	119.90
21	AA	895	G	N1-C6-O6	19.22	131.43	119.90
23	AW	27	G	N1-C6-O6	19.20	131.42	119.90
57	BB	1385	A	N1-C6-N6	19.19	130.11	118.60
57	BB	1701	A	N1-C6-N6	19.19	130.11	118.60
21	AA	1255	G	N1-C6-O6	19.17	131.40	119.90
21	AA	388	G	N1-C6-O6	19.16	131.39	119.90
57	BB	1204	A	N1-C6-N6	19.15	130.09	118.60
21	AA	1138	G	N1-C6-O6	19.09	131.35	119.90
57	BB	1968	G	C5-C6-O6	-19.09	117.15	128.60
21	AA	1473	G	C5-C6-O6	-19.07	117.16	128.60
57	BB	165	A	N1-C6-N6	19.07	130.04	118.60
21	AA	1164	G	C5-C6-O6	-19.06	117.16	128.60
57	BB	7	G	N1-C6-O6	19.06	131.34	119.90
57	BB	1021	A	N1-C6-N6	19.02	130.01	118.60
21	AA	1374	A	N1-C6-N6	18.99	129.99	118.60
57	BB	763	G	N1-C6-O6	18.95	131.27	119.90
21	AA	1433	A	N1-C6-N6	18.94	129.97	118.60
21	AA	749	A	N1-C6-N6	18.94	129.96	118.60
57	BB	1579	A	N1-C6-N6	18.91	129.94	118.60
57	BB	1590	A	N1-C6-N6	18.90	129.94	118.60
21	AA	1507	A	N1-C6-N6	18.88	129.93	118.60
21	AA	301	G	N1-C6-O6	18.86	131.21	119.90
21	AA	790	A	N1-C6-N6	18.84	129.90	118.60
21	AA	415	A	N1-C6-N6	18.84	129.90	118.60
57	BB	845	A	N1-C6-N6	18.83	129.90	118.60
21	AA	122	G	N1-C6-O6	18.82	131.19	119.90
57	BB	242	G	N1-C6-O6	18.82	131.19	119.90
21	AA	713	G	C5-C6-O6	-18.80	117.32	128.60
57	BB	938	G	N1-C6-O6	18.80	131.18	119.90
57	BB	655	A	N1-C6-N6	18.78	129.87	118.60
57	BB	1620	G	N1-C6-O6	18.77	131.16	119.90
57	BB	1524	G	N1-C6-O6	18.77	131.16	119.90
21	AA	306	A	N1-C6-N6	18.76	129.85	118.60
21	AA	475	C	N3-C4-C5	-18.74	114.40	121.90
21	AA	572	A	N1-C6-N6	18.72	129.83	118.60
26	AV	23	C	N3-C4-C5	-18.70	114.42	121.90
57	BB	2565	A	N1-C6-N6	18.70	129.82	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2717	C	C6-N1-C2	-18.69	112.82	120.30
22	AY	3	G	P-O3'-C3'	18.69	142.13	119.70
57	BB	472	A	N1-C6-N6	18.68	129.81	118.60
57	BB	408	G	N1-C6-O6	18.67	131.10	119.90
57	BB	1540	G	N1-C6-O6	18.66	131.10	119.90
57	BB	2750	A	N1-C6-N6	18.66	129.79	118.60
58	BA	9	G	C5-C6-O6	-18.65	117.41	128.60
22	AY	57	G	C5-C6-O6	-18.64	117.42	128.60
21	AA	432	A	N1-C6-N6	18.62	129.78	118.60
57	BB	241	A	N1-C6-N6	18.61	129.77	118.60
57	BB	629	G	C5-C6-O6	-18.60	117.44	128.60
21	AA	59	A	C5-C6-N6	-18.59	108.83	123.70
22	AY	14	A	N1-C6-N6	18.58	129.75	118.60
57	BB	1286	A	N1-C6-N6	18.57	129.74	118.60
57	BB	2879	A	N1-C6-N6	18.56	129.74	118.60
30	BK	70	ARG	NE-CZ-NH2	-18.53	111.03	120.30
22	AY	34	G	P-O3'-C3'	18.52	141.92	119.70
21	AA	425	G	N1-C6-O6	18.47	130.98	119.90
21	AA	710	G	N1-C6-O6	18.44	130.96	119.90
21	AA	964	A	N1-C6-N6	18.42	129.65	118.60
57	BB	2600	A	N1-C6-N6	18.41	129.65	118.60
57	BB	1452	G	N1-C6-O6	18.39	130.93	119.90
57	BB	1696	G	N1-C6-O6	18.38	130.93	119.90
57	BB	1509	A	N1-C6-N6	18.38	129.62	118.60
57	BB	2742	G	N1-C6-O6	18.37	130.92	119.90
57	BB	1928	A	N1-C6-N6	18.36	129.62	118.60
57	BB	1998	A	N1-C6-N6	18.36	129.61	118.60
57	BB	168	G	N1-C6-O6	18.34	130.91	119.90
57	BB	984	A	N1-C6-N6	18.33	129.60	118.60
57	BB	2736	A	N1-C6-N6	18.33	129.60	118.60
57	BB	1727	C	C5-C6-N1	18.30	130.15	121.00
21	AA	1131	G	C5-C6-O6	-18.29	117.62	128.60
21	AA	82	G	N1-C6-O6	18.27	130.86	119.90
21	AA	1271	A	N1-C6-N6	18.27	129.56	118.60
21	AA	1021	A	N1-C6-N6	18.27	129.56	118.60
57	BB	532	A	N1-C6-N6	18.27	129.56	118.60
57	BB	1717	A	N1-C6-N6	18.26	129.56	118.60
57	BB	1617	C	C4-C5-C6	18.25	126.53	117.40
23	AW	14	A	N1-C6-N6	18.25	129.55	118.60
21	AA	1276	G	N1-C6-O6	18.25	130.85	119.90
57	BB	1317	G	N1-C6-O6	18.25	130.85	119.90
21	AA	1287	A	N1-C6-N6	18.24	129.54	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	101	A	N1-C6-N6	18.22	129.53	118.60
57	BB	1204	A	C5-C6-N1	-18.21	108.59	117.70
21	AA	1143	G	C5-C6-O6	-18.21	117.67	128.60
21	AA	691	G	N1-C6-O6	18.21	130.82	119.90
57	BB	2669	G	C5-C6-O6	-18.18	117.69	128.60
57	BB	1031	G	N1-C6-O6	18.13	130.78	119.90
21	AA	1133	G	N1-C6-O6	18.13	130.78	119.90
57	BB	1535	A	N1-C6-N6	18.12	129.47	118.60
21	AA	478	A	N1-C6-N6	18.10	129.46	118.60
21	AA	923	A	N1-C6-N6	18.10	129.46	118.60
23	AW	30	G	N1-C6-O6	18.09	130.75	119.90
21	AA	847	G	C5-C6-O6	-18.09	117.75	128.60
21	AA	549	C	N3-C4-C5	-18.09	114.67	121.90
57	BB	1050	A	N1-C6-N6	18.08	129.45	118.60
21	AA	1106	G	C5-C6-O6	-18.06	117.76	128.60
22	AY	38	A	N1-C6-N6	18.06	129.44	118.60
57	BB	2841	C	N3-C4-N4	18.06	130.64	118.00
26	AV	44	A	N1-C6-N6	18.05	129.43	118.60
57	BB	203	A	N1-C6-N6	18.03	129.42	118.60
57	BB	2867	G	C5-C6-O6	-18.01	117.79	128.60
57	BB	547	A	N1-C6-N6	18.01	129.40	118.60
57	BB	1246	A	N1-C6-N6	17.99	129.40	118.60
21	AA	335	C	N3-C4-C5	-17.96	114.72	121.90
57	BB	2412	A	N1-C6-N6	17.96	129.38	118.60
21	AA	298	A	N1-C6-N6	17.96	129.38	118.60
57	BB	2057	G	C5-C6-O6	-17.96	117.83	128.60
57	BB	908	C	N3-C4-C5	-17.94	114.72	121.90
57	BB	822	G	N1-C6-O6	17.93	130.66	119.90
57	BB	644	A	N1-C6-N6	17.92	129.35	118.60
21	AA	465	A	N1-C6-N6	17.90	129.34	118.60
22	AY	58	A	N1-C6-N6	17.89	129.33	118.60
57	BB	2747	G	N1-C6-O6	17.87	130.62	119.90
57	BB	831	G	N1-C6-O6	17.87	130.62	119.90
57	BB	1361	G	N1-C6-O6	17.87	130.62	119.90
57	BB	2183	A	N1-C6-N6	17.86	129.32	118.60
57	BB	1269	A	N1-C6-N6	17.84	129.30	118.60
57	BB	463	G	N1-C6-O6	17.84	130.60	119.90
57	BB	980	A	C4-C5-C6	17.84	125.92	117.00
23	AW	63	G	N1-C6-O6	17.83	130.60	119.90
57	BB	1761	C	N3-C4-C5	-17.81	114.78	121.90
21	AA	416	G	N1-C6-O6	17.80	130.58	119.90
57	BB	1992	G	N1-C6-O6	17.80	130.58	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1457	G	N1-C6-O6	17.79	130.57	119.90
57	BB	1787	A	N1-C6-N6	17.79	129.28	118.60
21	AA	292	G	N1-C6-O6	17.76	130.56	119.90
21	AA	548	G	N1-C6-O6	17.76	130.56	119.90
21	AA	349	A	N1-C6-N6	17.75	129.25	118.60
57	BB	2123	G	N1-C6-O6	17.74	130.54	119.90
57	BB	1435	G	N1-C6-O6	17.73	130.54	119.90
21	AA	1487	G	N1-C6-O6	17.73	130.54	119.90
57	BB	168	G	C5-C6-O6	-17.72	117.97	128.60
21	AA	548	G	C5-C6-O6	-17.68	117.99	128.60
57	BB	2297	A	N1-C6-N6	17.68	129.21	118.60
57	BB	2853	C	O4'-C1'-N1	17.68	122.34	108.20
57	BB	2379	G	N1-C6-O6	17.67	130.50	119.90
57	BB	2702	G	N1-C6-O6	17.67	130.50	119.90
57	BB	2409	G	C5-C6-O6	-17.66	118.00	128.60
57	BB	1617	C	N3-C4-C5	-17.65	114.84	121.90
21	AA	927	G	C5-C6-O6	-17.63	118.02	128.60
57	BB	1998	A	C4-C5-C6	17.62	125.81	117.00
57	BB	500	G	N1-C6-O6	17.58	130.45	119.90
58	BA	18	G	C5-C6-O6	-17.57	118.06	128.60
57	BB	831	G	C5-C6-O6	-17.56	118.06	128.60
21	AA	1529	G	N1-C6-O6	17.56	130.44	119.90
21	AA	344	A	N1-C6-N6	17.53	129.12	118.60
57	BB	637	A	N1-C6-N6	17.52	129.11	118.60
57	BB	1256	G	N1-C6-O6	17.51	130.41	119.90
57	BB	1722	A	N1-C6-N6	17.48	129.09	118.60
22	AY	35	A	N1-C6-N6	17.48	129.09	118.60
57	BB	1322	A	N1-C6-N6	17.47	129.08	118.60
58	BA	105	G	O4'-C1'-N9	17.47	122.18	108.20
57	BB	283	G	C5-C6-O6	-17.42	118.15	128.60
21	AA	1188	A	O4'-C1'-N9	17.41	122.13	108.20
57	BB	2723	C	C6-N1-C2	-17.41	113.33	120.30
57	BB	722	A	N1-C6-N6	17.41	129.05	118.60
57	BB	495	G	N1-C6-O6	17.41	130.34	119.90
21	AA	521	G	N1-C6-O6	17.40	130.34	119.90
21	AA	1143	G	N1-C6-O6	17.37	130.32	119.90
57	BB	1365	A	N1-C6-N6	17.36	129.02	118.60
57	BB	1256	G	C5-C6-O6	-17.36	118.19	128.60
57	BB	2688	G	N1-C6-O6	17.34	130.30	119.90
22	AY	65	G	N1-C6-O6	17.34	130.30	119.90
57	BB	676	A	N1-C6-N6	17.32	128.99	118.60
21	AA	162	A	N1-C6-N6	17.32	128.99	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2247	A	N1-C6-N6	17.30	128.98	118.60
21	AA	741	G	N1-C6-O6	17.30	130.28	119.90
57	BB	71	A	N1-C6-N6	17.29	128.98	118.60
21	AA	977	A	N1-C6-N6	17.29	128.97	118.60
21	AA	1184	G	C6-C5-N7	-17.29	120.03	130.40
21	AA	1202	U	O4'-C1'-N1	17.28	122.02	108.20
57	BB	1920	C	N3-C4-C5	-17.26	115.00	121.90
57	BB	1430	G	N1-C6-O6	17.26	130.25	119.90
57	BB	2842	G	N1-C6-O6	17.24	130.24	119.90
21	AA	1182	G	N1-C6-O6	17.24	130.24	119.90
57	BB	2518	A	N1-C6-N6	17.20	128.92	118.60
57	BB	1945	G	N1-C6-O6	17.16	130.20	119.90
57	BB	181	A	N1-C6-N6	17.16	128.90	118.60
58	BA	83	G	C5-C6-O6	-17.16	118.30	128.60
57	BB	660	C	N3-C4-C5	-17.16	115.04	121.90
21	AA	1437	A	N1-C6-N6	17.15	128.89	118.60
21	AA	1138	G	C5-C6-O6	-17.15	118.31	128.60
21	AA	155	A	N1-C6-N6	17.12	128.87	118.60
21	AA	759	A	C4-C5-C6	17.11	125.55	117.00
21	AA	1453	G	C5-C6-O6	-17.11	118.34	128.60
57	BB	1419	A	N1-C6-N6	17.11	128.86	118.60
57	BB	1630	A	N1-C6-N6	17.10	128.86	118.60
22	AY	27	C	C6-N1-C2	-17.10	113.46	120.30
57	BB	1733	G	C5-C6-O6	-17.08	118.35	128.60
57	BB	1343	G	N1-C6-O6	17.08	130.15	119.90
57	BB	1619	G	C5-C6-O6	-17.07	118.36	128.60
57	BB	725	G	C5-C6-O6	-17.05	118.37	128.60
57	BB	1346	G	C5-C6-O6	-17.04	118.38	128.60
58	BA	101	A	N1-C6-N6	17.04	128.82	118.60
21	AA	1531	A	N1-C6-N6	17.04	128.82	118.60
21	AA	1275	A	N1-C6-N6	17.03	128.82	118.60
21	AA	302	G	N1-C6-O6	17.03	130.12	119.90
57	BB	2444	G	C8-N9-C4	-17.01	99.59	106.40
57	BB	834	G	C5-C6-O6	-16.99	118.41	128.60
21	AA	1410	A	N1-C6-N6	16.98	128.79	118.60
57	BB	1698	A	C5-C6-N6	-16.98	110.11	123.70
57	BB	1165	A	N1-C6-N6	16.98	128.79	118.60
57	BB	2660	A	N1-C6-N6	16.97	128.78	118.60
57	BB	2829	A	N1-C6-N6	16.97	128.78	118.60
57	BB	1381	G	O4'-C1'-N9	16.96	121.77	108.20
5	AN	58	ARG	NE-CZ-NH2	-16.95	111.82	120.30
57	BB	1260	A	N1-C6-N6	16.95	128.77	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1645	G	N1-C6-O6	16.95	130.07	119.90
21	AA	1206	G	C5-C6-O6	-16.94	118.43	128.60
24	AX	14	A	N1-C6-N6	16.93	128.76	118.60
21	AA	812	G	N1-C6-O6	16.92	130.05	119.90
21	AA	1438	G	N1-C6-O6	16.92	130.05	119.90
57	BB	866	A	N1-C6-N6	16.92	128.75	118.60
57	BB	1761	C	C2-N3-C4	16.91	128.36	119.90
57	BB	423	A	N1-C6-N6	16.90	128.74	118.60
21	AA	359	G	N1-C6-O6	16.88	130.03	119.90
57	BB	2765	A	C8-N9-C4	-16.88	99.05	105.80
21	AA	223	A	N1-C6-N6	16.86	128.71	118.60
21	AA	182	A	N1-C6-N6	16.85	128.71	118.60
57	BB	986	C	O4'-C1'-N1	16.85	121.68	108.20
57	BB	2093	G	C5-C6-O6	-16.83	118.50	128.60
26	AV	29	G	N1-C6-O6	16.82	129.99	119.90
57	BB	1078	U	C5-C6-N1	16.81	131.10	122.70
57	BB	1002	G	N1-C6-O6	16.80	129.98	119.90
57	BB	2810	A	N1-C6-N6	16.80	128.68	118.60
57	BB	1735	A	N1-C6-N6	16.79	128.67	118.60
21	AA	1206	G	N1-C6-O6	16.78	129.97	119.90
57	BB	377	G	N1-C6-O6	16.78	129.97	119.90
57	BB	1328	A	N1-C6-N6	16.77	128.66	118.60
57	BB	2581	G	N1-C6-O6	16.76	129.96	119.90
57	BB	86	G	N1-C6-O6	16.74	129.94	119.90
57	BB	1549	A	N1-C6-N6	16.74	128.65	118.60
58	BA	6	G	N1-C6-O6	16.74	129.94	119.90
57	BB	2323	G	C5-C6-O6	-16.73	118.56	128.60
57	BB	1002	G	C5-C6-O6	-16.72	118.57	128.60
57	BB	504	A	N1-C6-N6	16.71	128.63	118.60
58	BA	57	A	C4-C5-C6	16.71	125.36	117.00
57	BB	2471	A	N1-C6-N6	16.69	128.61	118.60
57	BB	2598	A	N1-C6-N6	16.68	128.61	118.60
57	BB	2669	G	N1-C6-O6	16.68	129.91	119.90
21	AA	914	A	N1-C6-N6	16.67	128.60	118.60
21	AA	441	A	C4-C5-C6	16.63	125.32	117.00
57	BB	1977	A	N1-C6-N6	16.63	128.58	118.60
57	BB	1098	A	N1-C6-N6	16.63	128.58	118.60
21	AA	75	G	C5-C6-O6	-16.62	118.63	128.60
57	BB	938	G	C5-C6-O6	-16.62	118.63	128.60
22	AY	24	G	N1-C6-O6	16.61	129.86	119.90
57	BB	2043	C	C6-N1-C2	-16.60	113.66	120.30
57	BB	1424	G	C5-C6-O6	-16.59	118.65	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1518	C	C6-N1-C2	-16.59	113.66	120.30
57	BB	1288	G	N1-C6-O6	16.58	129.85	119.90
57	BB	2778	A	N1-C6-N6	16.57	128.54	118.60
21	AA	356	A	N1-C6-N6	16.57	128.54	118.60
21	AA	1258	G	N1-C6-O6	16.55	129.83	119.90
37	BR	68	ARG	NE-CZ-NH2	16.55	128.57	120.30
57	BB	730	A	C5-C6-N6	-16.55	110.46	123.70
57	BB	2551	C	N3-C4-C5	-16.54	115.28	121.90
57	BB	2733	A	N1-C6-N6	16.54	128.52	118.60
57	BB	146	A	N1-C6-N6	16.52	128.51	118.60
21	AA	712	A	N1-C6-N6	16.52	128.51	118.60
57	BB	2883	A	N1-C6-N6	16.52	128.51	118.60
22	AY	21	A	N1-C6-N6	16.51	128.51	118.60
21	AA	718	A	N1-C6-N6	16.51	128.50	118.60
21	AA	1093	A	N1-C6-N6	16.50	128.50	118.60
57	BB	1449	G	N1-C6-O6	16.50	129.80	119.90
21	AA	942	G	N1-C6-O6	16.49	129.80	119.90
57	BB	1194	A	N1-C6-N6	16.49	128.50	118.60
57	BB	799	G	C5-C6-O6	-16.48	118.71	128.60
57	BB	526	A	N1-C6-N6	16.48	128.49	118.60
22	AY	36	A	N1-C6-N6	16.47	128.48	118.60
57	BB	2623	G	N1-C6-O6	16.47	129.78	119.90
57	BB	2675	A	N1-C6-N6	16.47	128.48	118.60
21	AA	958	A	N1-C6-N6	16.46	128.48	118.60
57	BB	2623	G	N3-C2-N2	16.46	131.42	119.90
21	AA	104	G	N1-C6-O6	16.46	129.78	119.90
57	BB	488	G	C5-C6-O6	-16.45	118.73	128.60
57	BB	49	A	N1-C6-N6	16.45	128.47	118.60
36	BQ	32	ARG	NE-CZ-NH2	16.44	128.52	120.30
21	AA	1398	A	C5-C6-N6	-16.43	110.55	123.70
52	BD	128	ARG	NE-CZ-NH1	16.43	128.52	120.30
21	AA	211	G	N1-C6-O6	16.43	129.76	119.90
57	BB	2154	A	O4'-C1'-N9	16.43	121.34	108.20
57	BB	2536	G	C5-C6-O6	-16.43	118.74	128.60
22	AY	62	A	N1-C6-N6	16.42	128.45	118.60
22	AY	25	C	N3-C4-C5	-16.42	115.33	121.90
57	BB	259	G	C5-C6-O6	-16.42	118.75	128.60
57	BB	74	A	C5-C6-N1	-16.41	109.49	117.70
57	BB	2378	A	N1-C6-N6	16.41	128.45	118.60
57	BB	1153	C	C6-N1-C2	-16.41	113.73	120.30
57	BB	940	G	C5-C6-O6	-16.41	118.75	128.60
57	BB	1452	G	C5-C6-O6	-16.41	118.75	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	197	A	N1-C6-N6	16.41	128.44	118.60
21	AA	932	C	C6-N1-C2	-16.40	113.74	120.30
57	BB	449	A	N1-C6-N6	16.39	128.44	118.60
57	BB	2212	A	N1-C6-N6	16.39	128.43	118.60
57	BB	775	G	N1-C6-O6	16.39	129.73	119.90
57	BB	1878	G	C8-N9-C4	-16.38	99.85	106.40
57	BB	2810	A	C5-C6-N1	-16.37	109.51	117.70
57	BB	822	G	C5-C6-O6	-16.37	118.78	128.60
23	AW	27	G	C5-C6-O6	-16.34	118.79	128.60
26	AV	9	G	C5-C6-O6	-16.33	118.80	128.60
57	BB	2635	A	N1-C6-N6	16.33	128.40	118.60
57	BB	1645	G	C5-C6-O6	-16.33	118.80	128.60
57	BB	2816	G	N1-C6-O6	16.32	129.69	119.90
57	BB	1479	G	C5-C6-O6	-16.32	118.81	128.60
21	AA	1050	G	C5-C6-O6	-16.32	118.81	128.60
57	BB	792	A	N1-C6-N6	16.32	128.39	118.60
21	AA	1229	A	N1-C6-N6	16.31	128.39	118.60
57	BB	68	G	N1-C6-O6	16.31	129.69	119.90
21	AA	627	G	N1-C6-O6	16.31	129.69	119.90
57	BB	2020	A	C4-C5-C6	16.31	125.15	117.00
21	AA	1503	A	N1-C6-N6	16.29	128.38	118.60
57	BB	188	G	N1-C6-O6	16.29	129.68	119.90
57	BB	319	G	C5-C6-O6	-16.29	118.83	128.60
57	BB	429	A	N1-C6-N6	16.28	128.37	118.60
58	BA	59	A	N1-C6-N6	16.28	128.37	118.60
57	BB	1715	G	C5-C6-N1	-16.27	103.36	111.50
57	BB	774	G	N1-C6-O6	16.26	129.66	119.90
57	BB	285	G	N1-C6-O6	16.26	129.66	119.90
57	BB	283	G	N1-C6-O6	16.26	129.66	119.90
23	AW	26	A	N1-C6-N6	16.26	128.35	118.60
57	BB	1960	A	N1-C6-N6	16.26	128.35	118.60
57	BB	2753	A	N9-C4-C5	16.25	112.30	105.80
57	BB	1992	G	C5-C6-O6	-16.25	118.85	128.60
57	BB	2314	A	N1-C6-N6	16.25	128.35	118.60
21	AA	171	A	N1-C6-N6	16.24	128.35	118.60
57	BB	2080	A	N1-C6-N6	16.24	128.34	118.60
21	AA	523	A	C5-C6-N6	-16.23	110.72	123.70
22	AY	22	G	C5-C6-O6	-16.22	118.87	128.60
21	AA	1186	G	C5-C6-O6	-16.22	118.87	128.60
21	AA	499	A	N1-C6-N6	16.21	128.33	118.60
57	BB	176	A	N1-C6-N6	16.21	128.32	118.60
57	BB	774	G	C5-C6-O6	-16.21	118.88	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2148	G	N1-C6-O6	16.20	129.62	119.90
57	BB	2042	A	N1-C6-N6	16.19	128.32	118.60
57	BB	2417	C	N3-C4-C5	-16.18	115.43	121.90
57	BB	1107	G	N1-C6-O6	16.18	129.61	119.90
26	AV	73	A	C2-N3-C4	-16.18	102.51	110.60
21	AA	620	C	O4'-C1'-N1	16.16	121.13	108.20
52	BD	184	ARG	NE-CZ-NH1	-16.14	112.23	120.30
57	BB	1635	A	N1-C6-N6	16.14	128.29	118.60
57	BB	1608	A	N1-C6-N6	16.14	128.28	118.60
57	BB	190	A	N1-C6-N6	16.14	128.28	118.60
57	BB	1001	A	N1-C6-N6	16.13	128.28	118.60
57	BB	23	G	N1-C6-O6	16.12	129.57	119.90
57	BB	1677	A	N1-C6-N6	16.12	128.27	118.60
58	BA	108	A	N1-C6-N6	16.12	128.27	118.60
57	BB	1772	A	N1-C6-N6	16.11	128.27	118.60
57	BB	1288	G	C5-C6-N1	-16.11	103.44	111.50
57	BB	564	C	C6-N1-C2	-16.10	113.86	120.30
23	AW	63	G	C5-C6-O6	-16.09	118.94	128.60
21	AA	1236	A	N1-C6-N6	16.09	128.25	118.60
21	AA	277	C	N3-C4-C5	-16.08	115.47	121.90
57	BB	1914	C	C6-N1-C2	-16.08	113.87	120.30
57	BB	2456	C	N3-C4-C5	-16.08	115.47	121.90
57	BB	266	G	C5-C6-O6	-16.08	118.95	128.60
21	AA	532	A	N1-C6-N6	16.08	128.25	118.60
57	BB	1960	A	C8-N9-C4	-16.07	99.37	105.80
21	AA	417	G	C5-C6-O6	-16.06	118.97	128.60
21	AA	890	G	N1-C6-O6	16.05	129.53	119.90
57	BB	1591	A	N1-C6-N6	16.05	128.23	118.60
21	AA	1278	G	C5-C6-O6	-16.05	118.97	128.60
57	BB	855	G	N1-C6-O6	16.05	129.53	119.90
21	AA	792	A	C8-N9-C4	16.04	112.22	105.80
21	AA	303	A	N1-C6-N6	16.03	128.22	118.60
21	AA	1133	G	C5-C6-O6	-16.03	118.98	128.60
58	BA	29	A	N1-C6-N6	16.03	128.22	118.60
57	BB	2076	U	P-O3'-C3'	16.02	138.93	119.70
57	BB	1806	C	N3-C4-N4	16.00	129.20	118.00
21	AA	568	G	C5-C6-O6	-15.99	119.00	128.60
21	AA	1287	A	C4-C5-C6	15.99	125.00	117.00
21	AA	1366	C	C6-N1-C2	-15.99	113.90	120.30
32	BM	91	TYR	CB-CG-CD1	15.99	130.59	121.00
57	BB	2702	G	C5-C6-O6	-15.98	119.01	128.60
57	BB	2054	A	C8-N9-C4	-15.97	99.41	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2162	G	N1-C6-O6	15.97	129.48	119.90
57	BB	2538	C	O4'-C1'-N1	15.96	120.97	108.20
21	AA	786	G	C5-C6-O6	-15.96	119.03	128.60
57	BB	896	A	N1-C2-N3	15.96	137.28	129.30
57	BB	1337	G	N1-C6-O6	15.95	129.47	119.90
57	BB	2468	A	N1-C6-N6	15.95	128.17	118.60
57	BB	825	A	N1-C6-N6	15.94	128.16	118.60
57	BB	2484	G	N1-C6-O6	15.94	129.46	119.90
21	AA	203	G	C5-C6-O6	-15.93	119.05	128.60
57	BB	613	A	N1-C6-N6	15.92	128.15	118.60
57	BB	1156	A	N1-C6-N6	15.92	128.15	118.60
57	BB	733	G	N1-C6-O6	15.91	129.45	119.90
57	BB	1661	G	N1-C6-O6	15.91	129.45	119.90
57	BB	1519	G	N1-C6-O6	15.90	129.44	119.90
57	BB	2014	A	N1-C6-N6	15.90	128.14	118.60
21	AA	360	G	N1-C6-O6	15.89	129.44	119.90
57	BB	221	A	N1-C6-N6	15.89	128.14	118.60
21	AA	128	G	N1-C6-O6	15.89	129.43	119.90
57	BB	2136	G	N1-C6-O6	15.89	129.43	119.90
58	BA	46	A	N1-C6-N6	15.88	128.13	118.60
21	AA	535	A	N1-C6-N6	15.87	128.12	118.60
21	AA	621	A	N1-C6-N6	15.87	128.12	118.60
57	BB	2448	A	N1-C6-N6	15.87	128.12	118.60
21	AA	1278	G	N1-C6-O6	15.87	129.42	119.90
57	BB	1810	A	N1-C6-N6	15.86	128.12	118.60
57	BB	1462	C	C2-N3-C4	15.86	127.83	119.90
57	BB	2753	A	C4-C5-C6	15.86	124.93	117.00
57	BB	1728	C	O4'-C1'-N1	15.85	120.88	108.20
57	BB	1799	G	N1-C6-O6	15.84	129.41	119.90
21	AA	533	A	C4-C5-C6	15.84	124.92	117.00
21	AA	859	G	N1-C6-O6	15.84	129.40	119.90
57	BB	2057	G	N1-C6-O6	15.84	129.40	119.90
57	BB	175	G	C5-C6-O6	-15.83	119.10	128.60
21	AA	691	G	C5-C6-O6	-15.83	119.10	128.60
21	AA	1502	A	N1-C6-N6	15.82	128.09	118.60
21	AA	1468	A	N1-C6-N6	15.82	128.09	118.60
57	BB	2534	A	N1-C6-N6	15.82	128.09	118.60
57	BB	603	A	N1-C6-N6	15.82	128.09	118.60
26	AV	52	G	C5-C6-O6	-15.81	119.11	128.60
58	BA	109	A	C5-C6-N6	-15.81	111.05	123.70
57	BB	361	G	N1-C6-O6	15.81	129.39	119.90
57	BB	2376	A	N1-C6-N6	15.81	128.09	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1650	A	N1-C6-N6	15.81	128.08	118.60
58	BA	6	G	C5-C6-O6	-15.79	119.13	128.60
57	BB	233	A	N1-C6-N6	15.78	128.07	118.60
26	AV	70	G	N1-C6-O6	15.78	129.37	119.90
57	BB	925	A	N1-C6-N6	15.78	128.07	118.60
57	BB	342	A	N1-C6-N6	15.77	128.06	118.60
57	BB	1863	G	N1-C6-O6	15.77	129.36	119.90
21	AA	607	A	N1-C6-N6	15.77	128.06	118.60
57	BB	1424	G	N1-C6-O6	15.77	129.36	119.90
57	BB	264	C	C6-N1-C2	-15.76	114.00	120.30
21	AA	890	G	C5-C6-O6	-15.75	119.15	128.60
57	BB	1701	A	C4-C5-C6	15.75	124.87	117.00
21	AA	669	G	N1-C6-O6	15.74	129.35	119.90
57	BB	413	C	N3-C4-C5	-15.74	115.61	121.90
57	BB	1011	G	N1-C6-O6	15.73	129.34	119.90
21	AA	674	G	N1-C6-O6	15.73	129.34	119.90
57	BB	1789	A	N1-C6-N6	15.73	128.04	118.60
21	AA	752	G	C5-C6-O6	-15.73	119.16	128.60
57	BB	2010	G	N1-C6-O6	15.72	129.34	119.90
57	BB	2162	G	C5-C6-O6	-15.72	119.17	128.60
32	BM	55	ARG	NE-CZ-NH1	-15.72	112.44	120.30
57	BB	677	A	N1-C6-N6	15.71	128.03	118.60
57	BB	2289	G	N3-C2-N2	15.71	130.90	119.90
21	AA	1002	G	C4-C5-N7	-15.71	104.52	110.80
57	BB	1246	A	C5-C6-N1	-15.71	109.85	117.70
57	BB	1930	G	O4'-C1'-N9	15.70	120.76	108.20
57	BB	2547	A	N1-C6-N6	15.70	128.02	118.60
57	BB	188	G	C5-C6-O6	-15.70	119.18	128.60
57	BB	553	G	N1-C6-O6	15.70	129.32	119.90
21	AA	532	A	C5-C6-N1	-15.67	109.87	117.70
21	AA	1058	G	C5-C6-O6	-15.67	119.20	128.60
21	AA	510	A	N1-C6-N6	15.65	127.99	118.60
57	BB	1482	G	N1-C6-O6	15.65	129.29	119.90
58	BA	17	C	N3-C4-C5	-15.65	115.64	121.90
57	BB	1957	C	C6-N1-C2	-15.62	114.05	120.30
54	BF	109	ARG	NE-CZ-NH1	-15.62	112.49	120.30
21	AA	179	A	N1-C6-N6	15.61	127.97	118.60
57	BB	1614	A	N1-C6-N6	15.62	127.97	118.60
57	BB	2717	C	N3-C4-C5	-15.61	115.66	121.90
21	AA	502	A	N1-C6-N6	15.61	127.96	118.60
57	BB	617	G	N1-C6-O6	15.61	129.26	119.90
57	BB	810	U	O4'-C1'-N1	15.60	120.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2020	A	N1-C6-N6	15.60	127.96	118.60
58	BA	43	C	O4'-C1'-N1	15.60	120.68	108.20
21	AA	626	G	C5-C6-O6	-15.59	119.25	128.60
26	AV	75	C	N3-C4-C5	-15.59	115.66	121.90
21	AA	262	A	C4-C5-C6	15.58	124.79	117.00
57	BB	535	G	N1-C6-O6	15.58	129.25	119.90
57	BB	2093	G	N1-C6-O6	15.58	129.25	119.90
57	BB	2494	G	N1-C6-O6	15.57	129.24	119.90
21	AA	1287	A	C5-C6-N1	-15.57	109.91	117.70
57	BB	1803	A	N1-C6-N6	15.57	127.94	118.60
57	BB	2266	A	N1-C6-N6	15.57	127.94	118.60
57	BB	1678	A	N1-C6-N6	15.56	127.94	118.60
22	AY	26	G	N3-C2-N2	15.56	130.79	119.90
57	BB	2126	A	C5-C6-N1	-15.56	109.92	117.70
57	BB	897	C	C2-N3-C4	15.55	127.68	119.90
21	AA	127	G	C5-C6-O6	-15.55	119.27	128.60
57	BB	352	A	N1-C6-N6	15.55	127.93	118.60
57	BB	735	A	N1-C6-N6	15.55	127.93	118.60
21	AA	303	A	C4-C5-C6	15.54	124.77	117.00
57	BB	1810	A	C8-N9-C4	-15.54	99.58	105.80
57	BB	2050	C	C6-N1-C2	-15.53	114.09	120.30
57	BB	199	A	N1-C6-N6	15.53	127.92	118.60
21	AA	915	A	N1-C6-N6	15.52	127.91	118.60
57	BB	2661	G	N1-C6-O6	15.52	129.21	119.90
21	AA	1386	G	N1-C6-O6	15.52	129.21	119.90
21	AA	8	A	N1-C6-N6	15.51	127.91	118.60
57	BB	2516	A	N1-C6-N6	15.51	127.91	118.60
21	AA	203	G	N1-C6-O6	15.51	129.21	119.90
57	BB	675	A	N1-C6-N6	15.51	127.91	118.60
21	AA	481	G	N1-C6-O6	15.49	129.19	119.90
57	BB	1794	A	N1-C6-N6	15.49	127.89	118.60
57	BB	2358	A	N1-C6-N6	15.49	127.89	118.60
23	AW	17	C	N3-C4-C5	-15.49	115.70	121.90
21	AA	814	A	N1-C6-N6	15.48	127.89	118.60
57	BB	2583	G	N1-C6-O6	15.48	129.19	119.90
57	BB	2454	G	C5-C6-O6	-15.47	119.32	128.60
21	AA	327	A	N1-C6-N6	15.47	127.88	118.60
57	BB	1784	A	N1-C6-N6	15.47	127.88	118.60
57	BB	1245	G	N1-C6-O6	15.47	129.18	119.90
57	BB	2379	G	C5-C6-O6	-15.46	119.32	128.60
21	AA	134	G	N1-C6-O6	15.46	129.17	119.90
57	BB	2821	A	N1-C6-N6	15.45	127.87	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	289	G	C5-N7-C8	15.45	112.03	104.30
21	AA	1310	G	N1-C6-O6	15.45	129.17	119.90
21	AA	77	A	N9-C4-C5	15.44	111.98	105.80
57	BB	1205	A	N1-C6-N6	15.44	127.86	118.60
21	AA	360	G	C5-C6-O6	-15.44	119.34	128.60
57	BB	2506	U	O4'-C1'-N1	15.44	120.55	108.20
21	AA	444	G	N1-C6-O6	15.44	129.16	119.90
57	BB	2392	A	N1-C6-N6	15.43	127.86	118.60
21	AA	474	G	N1-C6-O6	15.43	129.16	119.90
21	AA	1433	A	C5-C6-N6	-15.43	111.36	123.70
57	BB	548	G	C5-C6-O6	-15.43	119.34	128.60
57	BB	661	A	N1-C6-N6	15.43	127.86	118.60
57	BB	1079	C	O4'-C1'-N1	15.42	120.53	108.20
57	BB	2456	C	N3-C4-N4	15.42	128.79	118.00
57	BB	2024	G	N1-C6-O6	15.42	129.15	119.90
21	AA	1487	G	C5-C6-O6	-15.41	119.35	128.60
57	BB	707	G	N1-C6-O6	15.40	129.14	119.90
21	AA	579	A	N1-C6-N6	15.39	127.84	118.60
57	BB	408	G	C5-C6-O6	-15.39	119.36	128.60
57	BB	854	C	O4'-C1'-N1	15.39	120.51	108.20
57	BB	185	G	N1-C6-O6	15.39	129.13	119.90
57	BB	1260	A	C5-C6-N6	-15.39	111.39	123.70
57	BB	1384	A	N1-C6-N6	15.38	127.83	118.60
21	AA	71	A	N1-C6-N6	15.38	127.83	118.60
21	AA	627	G	C5-C6-O6	-15.38	119.37	128.60
57	BB	2824	C	N3-C4-C5	-15.38	115.75	121.90
57	BB	1637	A	C5-C6-N1	-15.37	110.02	117.70
57	BB	2594	C	O4'-C1'-N1	15.37	120.50	108.20
57	BB	921	C	N3-C4-C5	-15.36	115.76	121.90
57	BB	1448	G	C8-N9-C4	-15.36	100.25	106.40
21	AA	127	G	N1-C6-O6	15.36	129.12	119.90
25	AZ	204	ARG	NE-CZ-NH1	15.36	127.98	120.30
57	BB	175	G	N1-C6-O6	15.36	129.12	119.90
57	BB	2250	G	N1-C6-O6	15.36	129.12	119.90
21	AA	109	A	N1-C6-N6	15.35	127.81	118.60
21	AA	918	A	N1-C6-N6	15.35	127.81	118.60
57	BB	2177	C	N3-C4-C5	-15.35	115.76	121.90
57	BB	251	A	N1-C6-N6	15.34	127.81	118.60
21	AA	411	A	O4'-C1'-N9	15.34	120.47	108.20
21	AA	1439	G	N1-C6-O6	15.34	129.10	119.90
57	BB	592	A	N1-C6-N6	15.34	127.80	118.60
57	BB	1920	C	N3-C4-N4	15.34	128.74	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2699	C	O4'-C1'-N1	15.33	120.47	108.20
21	AA	325	A	N1-C6-N6	15.33	127.80	118.60
57	BB	983	A	N1-C6-N6	15.33	127.80	118.60
21	AA	695	A	N1-C6-N6	15.33	127.80	118.60
57	BB	491	G	N3-C2-N2	15.33	130.63	119.90
57	BB	851	C	O4'-C1'-N1	15.33	120.46	108.20
26	AV	9	G	N1-C6-O6	15.33	129.10	119.90
22	AY	31	A	O4'-C1'-N9	15.32	120.46	108.20
57	BB	2882	A	N1-C6-N6	15.32	127.80	118.60
21	AA	1525	G	N1-C6-O6	15.32	129.09	119.90
57	BB	753	A	N1-C6-N6	15.32	127.79	118.60
57	BB	409	G	C5-C6-O6	-15.32	119.41	128.60
57	BB	1661	G	N3-C4-C5	15.32	136.26	128.60
21	AA	937	A	C5-N7-C8	15.31	111.56	103.90
21	AA	748	G	N1-C6-O6	15.31	129.09	119.90
57	BB	108	G	N1-C6-O6	15.31	129.09	119.90
22	AY	18	G	N7-C8-N9	15.30	120.75	113.10
57	BB	1861	G	N1-C6-O6	15.31	129.08	119.90
57	BB	2841	C	N3-C4-C5	-15.31	115.78	121.90
26	AV	11	A	N1-C6-N6	15.30	127.78	118.60
57	BB	2719	G	N1-C6-O6	15.30	129.08	119.90
57	BB	1317	G	C5-C6-N1	-15.29	103.85	111.50
57	BB	1945	G	C5-C6-O6	-15.29	119.42	128.60
57	BB	1301	A	N1-C6-N6	15.28	127.77	118.60
21	AA	1426	G	C5-C6-O6	-15.28	119.43	128.60
57	BB	1433	A	N1-C6-N6	15.28	127.77	118.60
57	BB	1545	A	N1-C6-N6	15.27	127.77	118.60
57	BB	191	A	N1-C6-N6	15.27	127.76	118.60
21	AA	1294	G	C5-C6-O6	-15.27	119.44	128.60
57	BB	218	A	N1-C6-N6	15.27	127.76	118.60
22	AY	44	A	C5-C6-N6	-15.27	111.49	123.70
57	BB	2119	A	N1-C6-N6	15.27	127.76	118.60
57	BB	2282	G	N1-C6-O6	15.27	129.06	119.90
57	BB	2409	G	N1-C6-O6	15.26	129.06	119.90
57	BB	2052	A	N1-C6-N6	15.26	127.75	118.60
57	BB	1872	A	C8-N9-C4	-15.26	99.70	105.80
57	BB	2190	G	O4'-C1'-N9	15.26	120.40	108.20
57	BB	2894	G	N1-C6-O6	15.25	129.05	119.90
57	BB	849	A	N1-C6-N6	15.24	127.74	118.60
57	BB	2279	G	N1-C6-O6	15.24	129.04	119.90
57	BB	950	G	N1-C6-O6	15.23	129.04	119.90
57	BB	443	A	N1-C6-N6	15.22	127.73	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2602	A	N1-C6-N6	15.20	127.72	118.60
57	BB	2451	A	N1-C6-N6	15.20	127.72	118.60
57	BB	215	G	N1-C6-O6	15.19	129.02	119.90
57	BB	2142	A	N1-C6-N6	15.19	127.72	118.60
57	BB	2033	A	N1-C6-N6	15.19	127.71	118.60
57	BB	2425	A	P-O3'-C3'	15.19	137.93	119.70
57	BB	1008	A	N1-C6-N6	15.19	127.71	118.60
57	BB	345	A	N1-C6-N6	15.18	127.71	118.60
23	AW	63	G	N3-C4-C5	-15.18	121.01	128.60
57	BB	882	G	N1-C2-N3	-15.18	114.79	123.90
57	BB	2543	G	N1-C6-O6	15.18	129.01	119.90
57	BB	1253	A	N1-C6-N6	15.18	127.71	118.60
57	BB	1422	G	O4'-C1'-N9	15.17	120.34	108.20
57	BB	2363	G	N1-C6-O6	15.17	129.00	119.90
57	BB	1191	G	C5-C6-O6	-15.17	119.50	128.60
16	AE	67	ARG	NE-CZ-NH1	15.16	127.88	120.30
57	BB	193	U	O4'-C1'-N1	15.16	120.33	108.20
57	BB	583	G	C5-C6-O6	-15.15	119.51	128.60
57	BB	980	A	C5-C6-N1	-15.15	110.12	117.70
21	AA	608	A	C5-C6-N6	-15.15	111.58	123.70
57	BB	74	A	C4-C5-C6	15.15	124.57	117.00
57	BB	1381	G	N1-C6-O6	15.14	128.99	119.90
22	AY	36	A	O4'-C1'-N9	15.14	120.31	108.20
57	BB	2337	G	C5-C6-O6	-15.14	119.52	128.60
57	BB	1620	G	C5-C6-O6	-15.13	119.52	128.60
57	BB	2464	G	N1-C6-O6	15.13	128.98	119.90
21	AA	685	G	C5-C6-O6	-15.13	119.52	128.60
57	BB	1346	G	N1-C6-O6	15.13	128.98	119.90
22	AY	2	C	N3-C4-C5	-15.12	115.85	121.90
57	BB	41	C	N3-C4-C5	-15.12	115.85	121.90
57	BB	2453	A	N1-C6-N6	15.12	127.67	118.60
58	BA	30	C	N3-C4-C5	-15.11	115.86	121.90
57	BB	375	G	N1-C6-O6	15.11	128.96	119.90
21	AA	1041	G	N1-C6-O6	15.10	128.96	119.90
57	BB	1268	A	N1-C6-N6	15.10	127.66	118.60
57	BB	1972	G	N1-C6-O6	15.10	128.96	119.90
57	BB	2742	G	C5-C6-O6	-15.10	119.54	128.60
57	BB	422	A	N1-C6-N6	15.09	127.66	118.60
21	AA	868	C	O4'-C1'-N1	15.09	120.27	108.20
57	BB	2308	G	C5-C6-O6	-15.09	119.55	128.60
57	BB	902	C	N3-C4-C5	-15.08	115.87	121.90
57	BB	1088	A	N1-C6-N6	15.08	127.65	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	53	A	C5-C6-N6	-15.08	111.64	123.70
21	AA	1054	C	C5-C6-N1	15.08	128.54	121.00
57	BB	272	A	N1-C6-N6	15.07	127.64	118.60
58	BA	92	C	N3-C4-N4	15.07	128.55	118.00
22	AY	65	G	C5-C6-O6	-15.07	119.56	128.60
21	AA	1024	G	N1-C6-O6	15.06	128.94	119.90
21	AA	428	G	N1-C6-O6	15.06	128.93	119.90
21	AA	750	C	O4'-C1'-N1	15.05	120.24	108.20
57	BB	645	C	N3-C4-N4	15.05	128.53	118.00
58	BA	2	G	N1-C6-O6	15.04	128.93	119.90
57	BB	799	G	N1-C6-O6	15.03	128.92	119.90
57	BB	914	G	N1-C6-O6	15.03	128.92	119.90
57	BB	2568	U	O4'-C1'-N1	15.03	120.23	108.20
21	AA	1513	A	N1-C6-N6	15.03	127.62	118.60
21	AA	262	A	N1-C6-N6	15.02	127.61	118.60
57	BB	1573	G	C5-C6-O6	-15.02	119.59	128.60
57	BB	389	G	C6-C5-N7	-15.02	121.39	130.40
57	BB	2280	G	N1-C6-O6	15.02	128.91	119.90
57	BB	1677	A	C8-N9-C4	-15.02	99.79	105.80
54	BF	149	ARG	NE-CZ-NH2	-15.01	112.79	120.30
57	BB	841	G	C5-C6-O6	-15.01	119.59	128.60
21	AA	428	G	C5-C6-O6	-15.00	119.60	128.60
58	BA	67	G	N1-C6-O6	15.00	128.90	119.90
57	BB	2351	G	C5-C6-O6	-14.99	119.61	128.60
21	AA	1258	G	C5-C6-O6	-14.97	119.61	128.60
57	BB	1213	A	N1-C6-N6	14.97	127.58	118.60
23	AW	65	G	C5-C6-O6	-14.97	119.62	128.60
57	BB	176	A	C4-C5-C6	14.97	124.48	117.00
58	BA	106	G	N1-C6-O6	14.97	128.88	119.90
57	BB	1089	A	N1-C6-N6	14.96	127.58	118.60
57	BB	695	G	N1-C6-O6	14.96	128.88	119.90
21	AA	74	A	N1-C6-N6	14.96	127.57	118.60
21	AA	946	A	C5-C6-N1	-14.96	110.22	117.70
57	BB	831	G	C5-N7-C8	14.95	111.78	104.30
57	BB	503	A	N1-C6-N6	14.95	127.57	118.60
57	BB	1890	A	N1-C6-N6	14.95	127.57	118.60
21	AA	416	G	C5-C6-N1	-14.94	104.03	111.50
57	BB	63	A	N1-C6-N6	14.94	127.56	118.60
57	BB	1670	C	C6-N1-C2	-14.94	114.32	120.30
57	BB	1235	G	N1-C6-O6	14.94	128.86	119.90
21	AA	1046	A	N1-C6-N6	14.93	127.56	118.60
21	AA	1311	A	N1-C6-N6	14.93	127.56	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	831	G	N7-C8-N9	-14.93	105.64	113.10
57	BB	1380	G	N1-C6-O6	14.92	128.85	119.90
21	AA	446	G	N1-C6-O6	14.91	128.85	119.90
57	BB	583	G	N1-C6-O6	14.91	128.85	119.90
57	BB	1612	C	O4'-C1'-N1	14.91	120.13	108.20
57	BB	176	A	C5-C6-N1	-14.90	110.25	117.70
21	AA	1106	G	N1-C6-O6	14.89	128.84	119.90
57	BB	155	A	N1-C6-N6	14.89	127.54	118.60
57	BB	2353	G	N1-C6-O6	14.89	128.83	119.90
21	AA	300	A	O4'-C1'-N9	14.88	120.11	108.20
57	BB	621	A	N1-C6-N6	14.88	127.53	118.60
21	AA	158	G	N1-C6-O6	14.88	128.82	119.90
21	AA	1063	C	N3-C4-C5	-14.88	115.95	121.90
57	BB	2824	C	C2-N3-C4	14.87	127.33	119.90
57	BB	278	A	N1-C6-N6	14.87	127.52	118.60
57	BB	1734	G	N1-C6-O6	14.86	128.82	119.90
21	AA	726	C	C5-C6-N1	14.86	128.43	121.00
22	AY	28	C	O4'-C1'-N1	14.86	120.09	108.20
57	BB	384	A	N1-C6-N6	14.86	127.51	118.60
21	AA	1089	G	N1-C6-O6	14.86	128.81	119.90
57	BB	389	G	N1-C6-O6	14.85	128.81	119.90
21	AA	191	G	N9-C4-C5	14.85	111.34	105.40
6	AO	76	ARG	NE-CZ-NH2	-14.84	112.88	120.30
22	AY	9	A	N1-C6-N6	14.83	127.50	118.60
21	AA	655	A	N1-C6-N6	14.83	127.50	118.60
57	BB	1289	C	C6-N1-C2	-14.83	114.37	120.30
13	AB	73	ARG	NE-CZ-NH2	-14.83	112.89	120.30
57	BB	270	A	N1-C6-N6	14.82	127.49	118.60
57	BB	687	C	C6-N1-C2	-14.81	114.38	120.30
57	BB	2854	G	N1-C6-O6	14.81	128.78	119.90
21	AA	485	U	O4'-C1'-N1	14.80	120.04	108.20
57	BB	1162	G	N1-C6-O6	14.79	128.78	119.90
21	AA	1014	A	C5-C6-N1	-14.79	110.31	117.70
57	BB	551	G	N1-C6-O6	14.78	128.77	119.90
22	AY	21	A	N1-C2-N3	14.78	136.69	129.30
57	BB	1845	G	N1-C6-O6	14.78	128.77	119.90
21	AA	726	C	C6-N1-C2	-14.78	114.39	120.30
57	BB	2564	A	N1-C6-N6	14.78	127.47	118.60
57	BB	2844	G	C5-C6-O6	-14.78	119.73	128.60
21	AA	936	C	O4'-C1'-N1	14.77	120.02	108.20
23	AW	22	G	N1-C6-O6	14.76	128.76	119.90
57	BB	2729	G	C5-C6-O6	-14.76	119.74	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	298	A	C5-C6-N6	-14.76	111.89	123.70
22	AY	54	U	C5-C6-N1	14.75	130.07	122.70
21	AA	546	A	C5-C6-N1	-14.74	110.33	117.70
21	AA	946	A	N1-C6-N6	14.74	127.45	118.60
57	BB	2020	A	C5-C6-N1	-14.73	110.33	117.70
21	AA	364	A	N1-C6-N6	14.73	127.44	118.60
57	BB	2154	A	N1-C6-N6	14.73	127.44	118.60
57	BB	2045	C	O4'-C1'-N1	14.72	119.98	108.20
57	BB	1259	G	C5-C6-O6	-14.71	119.77	128.60
57	BB	380	G	C8-N9-C4	14.71	112.28	106.40
57	BB	742	A	N1-C6-N6	14.71	127.42	118.60
57	BB	1085	A	O4'-C1'-N9	14.70	119.96	108.20
57	BB	1430	G	C5-C6-O6	-14.70	119.78	128.60
57	BB	134	G	N1-C6-O6	14.70	128.72	119.90
21	AA	1111	A	N1-C6-N6	14.70	127.42	118.60
57	BB	1587	G	C4-C5-N7	14.69	116.68	110.80
21	AA	1334	G	C8-N9-C4	-14.69	100.52	106.40
24	AX	20	U	C5-C4-O4	-14.69	117.09	125.90
57	BB	309	A	N1-C6-N6	14.69	127.41	118.60
57	BB	2325	G	N1-C6-O6	14.69	128.71	119.90
21	AA	780	A	N1-C6-N6	14.69	127.41	118.60
57	BB	226	A	N1-C6-N6	14.69	127.41	118.60
22	AY	24	G	C5-C6-O6	-14.66	119.80	128.60
57	BB	2101	A	C5-C6-N6	-14.66	111.97	123.70
21	AA	361	G	C5-C6-O6	-14.66	119.80	128.60
21	AA	830	G	C5-C6-N1	-14.66	104.17	111.50
27	B5	36	ALA	O-C-N	-14.66	99.25	122.70
21	AA	1467	C	O4'-C1'-N1	14.66	119.93	108.20
57	BB	844	A	N1-C6-N6	14.66	127.39	118.60
21	AA	587	G	N1-C6-O6	14.65	128.69	119.90
21	AA	98	A	N1-C6-N6	14.65	127.39	118.60
57	BB	1876	A	C8-N9-C4	-14.64	99.94	105.80
21	AA	792	A	N1-C6-N6	14.64	127.38	118.60
57	BB	1054	A	N1-C6-N6	14.64	127.38	118.60
57	BB	1084	A	N1-C6-N6	14.64	127.38	118.60
57	BB	2594	C	N3-C4-C5	-14.63	116.05	121.90
21	AA	160	A	N1-C6-N6	14.62	127.37	118.60
21	AA	297	G	N1-C2-N3	-14.62	115.13	123.90
57	BB	912	C	C6-N1-C2	-14.62	114.45	120.30
57	BB	462	C	N3-C4-C5	-14.62	116.05	121.90
21	AA	609	A	N1-C6-N6	14.61	127.37	118.60
57	BB	2130	U	P-O3'-C3'	14.61	137.23	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2250	G	C5-C6-O6	-14.61	119.83	128.60
21	AA	626	G	N1-C6-O6	14.60	128.66	119.90
57	BB	374	A	N1-C6-N6	14.60	127.36	118.60
57	BB	94	A	N1-C6-N6	14.60	127.36	118.60
57	BB	379	G	C5-C6-O6	-14.60	119.84	128.60
21	AA	1014	A	C4-C5-C6	14.59	124.30	117.00
57	BB	185	G	C5-C6-O6	-14.59	119.84	128.60
57	BB	2175	C	N3-C4-C5	-14.59	116.06	121.90
57	BB	332	A	N1-C6-N6	14.58	127.35	118.60
57	BB	682	G	N1-C6-O6	14.58	128.65	119.90
21	AA	189	A	C5-C6-N1	-14.58	110.41	117.70
21	AA	927	G	N1-C6-O6	14.58	128.65	119.90
57	BB	1090	A	C5-C6-N1	-14.58	110.41	117.70
21	AA	254	G	C5-C6-O6	-14.57	119.86	128.60
57	BB	2670	A	C5-C6-N1	-14.57	110.41	117.70
57	BB	2841	C	O4'-C1'-N1	14.56	119.85	108.20
57	BB	2234	G	N1-C6-O6	14.56	128.64	119.90
57	BB	878	A	N1-C6-N6	14.56	127.34	118.60
21	AA	937	A	C4-C5-N7	-14.56	103.42	110.70
21	AA	31	G	C5-C6-O6	-14.55	119.87	128.60
21	AA	487	A	N7-C8-N9	14.55	121.08	113.80
57	BB	1936	A	C4-C5-C6	14.54	124.27	117.00
57	BB	2331	G	N1-C6-O6	14.54	128.63	119.90
57	BB	297	G	C5-C6-O6	-14.54	119.88	128.60
21	AA	264	C	O4'-C1'-N1	14.54	119.83	108.20
21	AA	1297	G	N1-C6-O6	14.54	128.62	119.90
57	BB	707	G	C8-N9-C4	-14.54	100.58	106.40
21	AA	939	G	C5-C6-O6	-14.54	119.88	128.60
57	BB	1535	A	C4-C5-C6	14.54	124.27	117.00
57	BB	655	A	C5-C6-N6	-14.53	112.07	123.70
57	BB	477	A	C5-C6-N1	-14.53	110.43	117.70
22	AY	15	G	C2-N3-C4	-14.53	104.64	111.90
21	AA	452	A	N1-C6-N6	14.53	127.32	118.60
21	AA	1279	G	N1-C6-O6	14.52	128.61	119.90
57	BB	1808	A	N1-C6-N6	14.52	127.31	118.60
57	BB	2889	C	O4'-C1'-N1	14.52	119.82	108.20
21	AA	533	A	N1-C6-N6	14.51	127.31	118.60
57	BB	2652	C	O4'-C1'-N1	14.51	119.81	108.20
57	BB	265	A	C5-C6-N6	-14.51	112.09	123.70
57	BB	2442	C	N3-C4-C5	-14.51	116.10	121.90
58	BA	54	G	N1-C6-O6	14.50	128.60	119.90
21	AA	690	G	C5-C6-O6	-14.50	119.90	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1661	G	C5-C6-O6	-14.50	119.90	128.60
26	AV	49	G	N1-C6-O6	14.48	128.59	119.90
57	BB	2484	G	C2-N3-C4	14.48	119.14	111.90
21	AA	138	G	O4'-C1'-N9	14.47	119.78	108.20
57	BB	2623	G	C5-C6-O6	-14.47	119.92	128.60
10	AS	2	ARG	NE-CZ-NH2	-14.46	113.07	120.30
22	AY	15	G	N1-C6-O6	14.46	128.58	119.90
28	BI	7	TYR	CB-CG-CD2	-14.46	112.32	121.00
57	BB	52	A	C5-N7-C8	14.46	111.13	103.90
21	AA	297	G	N1-C6-O6	14.45	128.57	119.90
57	BB	1746	A	C2-N3-C4	-14.45	103.38	110.60
57	BB	30	G	C5-C6-O6	-14.44	119.94	128.60
57	BB	2454	G	N1-C6-O6	14.43	128.56	119.90
57	BB	1711	A	N1-C6-N6	14.43	127.26	118.60
57	BB	690	G	C5-C6-O6	-14.43	119.94	128.60
57	BB	1137	G	N1-C6-O6	14.42	128.55	119.90
57	BB	1637	A	N1-C6-N6	14.42	127.25	118.60
57	BB	1488	C	O4'-C1'-N1	14.42	119.73	108.20
57	BB	1691	C	O4'-C1'-N1	14.42	119.73	108.20
21	AA	441	A	C5-C6-N1	-14.41	110.49	117.70
21	AA	1277	C	N3-C4-N4	14.41	128.09	118.00
57	BB	2104	C	P-O3'-C3'	14.41	137.00	119.70
57	BB	2171	A	N1-C6-N6	14.41	127.25	118.60
57	BB	1524	G	C5-C6-O6	-14.40	119.96	128.60
21	AA	156	C	O4'-C1'-N1	14.40	119.72	108.20
21	AA	1105	A	N1-C6-N6	14.40	127.24	118.60
57	BB	233	A	C5-C6-N6	-14.40	112.18	123.70
57	BB	2123	G	C5-C6-O6	-14.40	119.96	128.60
57	BB	1048	A	N1-C6-N6	14.39	127.24	118.60
57	BB	981	A	C5-N7-C8	14.39	111.09	103.90
21	AA	1042	A	N1-C6-N6	14.38	127.23	118.60
21	AA	201	G	N1-C6-O6	14.38	128.53	119.90
21	AA	595	A	N1-C6-N6	14.38	127.23	118.60
21	AA	782	A	O4'-C1'-N9	14.38	119.70	108.20
57	BB	1080	A	N1-C6-N6	14.38	127.23	118.60
21	AA	6	G	C5-C6-O6	-14.38	119.97	128.60
21	AA	104	G	C5-C6-O6	-14.37	119.98	128.60
55	BG	169	ARG	NE-CZ-NH2	14.37	127.49	120.30
57	BB	1618	A	N1-C6-N6	14.37	127.22	118.60
57	BB	2725	A	N1-C6-N6	14.37	127.22	118.60
21	AA	277	C	O4'-C1'-N1	14.36	119.69	108.20
57	BB	372	G	C5-C6-O6	-14.36	119.98	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1585	C	O4'-C1'-N1	14.36	119.69	108.20
21	AA	1356	G	C5-C6-O6	-14.35	119.99	128.60
57	BB	325	G	C5-C6-O6	-14.35	119.99	128.60
57	BB	1948	G	C2-N3-C4	14.35	119.07	111.90
21	AA	1257	A	N1-C6-N6	14.34	127.20	118.60
57	BB	231	A	N1-C6-N6	14.34	127.20	118.60
21	AA	1146	A	N1-C6-N6	14.34	127.20	118.60
21	AA	611	C	N3-C4-N4	14.33	128.03	118.00
57	BB	759	G	N1-C6-O6	14.33	128.50	119.90
57	BB	846	U	O4'-C1'-N1	14.33	119.66	108.20
21	AA	609	A	C4-C5-C6	14.32	124.16	117.00
57	BB	1842	G	C5-C6-O6	-14.32	120.01	128.60
57	BB	745	G	C5-C6-O6	-14.32	120.01	128.60
57	BB	896	A	N1-C6-N6	14.32	127.19	118.60
57	BB	716	A	N1-C6-N6	14.31	127.19	118.60
57	BB	2898	U	O4'-C1'-N1	14.31	119.65	108.20
57	BB	1422	G	C5-C6-O6	-14.31	120.02	128.60
57	BB	2844	G	N1-C6-O6	14.31	128.49	119.90
57	BB	1867	G	C5-C6-O6	-14.30	120.02	128.60
57	BB	2396	G	N1-C6-O6	14.30	128.48	119.90
21	AA	254	G	N1-C6-O6	14.30	128.48	119.90
57	BB	2149	U	O4'-C1'-N1	14.30	119.64	108.20
21	AA	212	G	C5-C6-O6	-14.29	120.02	128.60
21	AA	220	G	N1-C6-O6	14.29	128.48	119.90
21	AA	424	G	N1-C6-O6	14.29	128.48	119.90
57	BB	841	G	O4'-C1'-N9	14.29	119.64	108.20
57	BB	713	G	N1-C6-O6	14.29	128.47	119.90
26	AV	34	C	O4'-C1'-N1	14.29	119.63	108.20
57	BB	964	C	N3-C4-C5	-14.28	116.19	121.90
57	BB	1949	G	C5-C6-O6	-14.28	120.03	128.60
21	AA	586	C	O4'-C1'-N1	14.28	119.62	108.20
21	AA	1246	A	N1-C6-N6	14.28	127.17	118.60
27	B5	60	ARG	NE-CZ-NH2	-14.28	113.16	120.30
57	BB	36	G	C5-C6-O6	-14.27	120.04	128.60
57	BB	2495	G	N1-C6-O6	14.27	128.46	119.90
14	AC	87	ARG	NE-CZ-NH2	-14.27	113.17	120.30
26	AV	19	G	N1-C6-O6	14.27	128.46	119.90
14	AC	135	ARG	NE-CZ-NH2	-14.27	113.17	120.30
21	AA	262	A	C5-C6-N1	-14.27	110.57	117.70
57	BB	788	A	N1-C6-N6	14.26	127.16	118.60
58	BA	57	A	C4-C5-N7	-14.26	103.57	110.70
45	BC	216	ARG	NE-CZ-NH2	-14.26	113.17	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	75	G	N1-C6-O6	14.26	128.45	119.90
21	AA	1142	G	N1-C6-O6	14.25	128.45	119.90
57	BB	1666	G	N1-C6-O6	14.25	128.45	119.90
21	AA	655	A	C5-C6-N6	-14.25	112.30	123.70
21	AA	869	G	N1-C6-O6	14.24	128.45	119.90
57	BB	1446	C	N3-C4-C5	-14.24	116.20	121.90
57	BB	2624	G	N1-C6-O6	14.24	128.44	119.90
57	BB	548	G	N1-C6-O6	14.24	128.44	119.90
57	BB	1371	G	C5-C6-O6	-14.24	120.06	128.60
21	AA	321	A	N1-C6-N6	14.23	127.14	118.60
21	AA	1280	A	N1-C6-N6	14.22	127.13	118.60
57	BB	195	A	C4-C5-C6	14.22	124.11	117.00
21	AA	425	G	C5-C6-O6	-14.22	120.07	128.60
57	BB	2226	C	N3-C4-C5	-14.22	116.21	121.90
21	AA	223	A	C8-N9-C4	-14.22	100.11	105.80
57	BB	1845	G	C5-C6-O6	-14.21	120.07	128.60
21	AA	1360	A	N1-C6-N6	14.21	127.12	118.60
26	AV	71	C	O4'-C1'-N1	14.21	119.57	108.20
58	BA	88	C	N3-C4-C5	-14.21	116.22	121.90
21	AA	1215	G	N1-C6-O6	14.20	128.42	119.90
57	BB	2472	G	N1-C6-O6	14.21	128.42	119.90
57	BB	236	C	N3-C4-N4	14.20	127.94	118.00
57	BB	1593	A	N7-C8-N9	-14.20	106.70	113.80
57	BB	2791	G	N1-C6-O6	14.20	128.42	119.90
21	AA	374	A	N1-C6-N6	14.20	127.12	118.60
57	BB	2711	A	N1-C6-N6	14.20	127.12	118.60
57	BB	1322	A	C5-C6-N1	-14.19	110.60	117.70
57	BB	415	A	C5-C6-N1	-14.19	110.61	117.70
21	AA	385	C	O4'-C1'-N1	14.19	119.55	108.20
58	BA	23	G	C5-C6-O6	-14.19	120.09	128.60
21	AA	435	A	N1-C6-N6	14.18	127.11	118.60
57	BB	1503	A	N1-C6-N6	14.18	127.11	118.60
21	AA	635	A	N1-C6-N6	14.17	127.10	118.60
21	AA	268	U	O4'-C1'-N1	14.17	119.54	108.20
21	AA	809	G	C5-C6-O6	-14.17	120.10	128.60
57	BB	2073	C	N3-C4-C5	-14.17	116.23	121.90
57	BB	689	A	C5-C6-N1	-14.17	110.62	117.70
57	BB	745	G	N1-C6-O6	14.17	128.40	119.90
21	AA	669	G	C5-C6-O6	-14.16	120.10	128.60
21	AA	814	A	C4-C5-C6	14.15	124.08	117.00
57	BB	841	G	N1-C6-O6	14.15	128.39	119.90
57	BB	1954	G	N1-C6-O6	14.15	128.39	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1131	G	N1-C6-O6	14.14	128.39	119.90
57	BB	8	C	N3-C4-N4	14.14	127.90	118.00
57	BB	2666	C	N3-C4-N4	14.14	127.90	118.00
21	AA	528	C	C6-N1-C2	-14.14	114.64	120.30
21	AA	1014	A	N1-C6-N6	14.14	127.08	118.60
21	AA	259	G	N1-C6-O6	14.12	128.38	119.90
21	AA	520	A	N1-C6-N6	14.12	127.08	118.60
57	BB	750	A	N1-C6-N6	14.12	127.07	118.60
57	BB	2012	G	N1-C2-N3	-14.12	115.43	123.90
57	BB	2834	G	N1-C2-N3	-14.12	115.43	123.90
13	AB	107	ARG	NE-CZ-NH2	-14.11	113.24	120.30
57	BB	1387	A	N1-C6-N6	14.11	127.07	118.60
21	AA	483	C	N3-C4-N4	14.11	127.88	118.00
21	AA	1004	A	N1-C6-N6	14.11	127.06	118.60
21	AA	1276	G	C5-C6-O6	-14.10	120.14	128.60
21	AA	155	A	C4-C5-C6	14.09	124.05	117.00
21	AA	976	G	N1-C6-O6	14.09	128.35	119.90
21	AA	1018	G	N1-C6-O6	14.09	128.35	119.90
57	BB	219	A	N1-C6-N6	14.09	127.05	118.60
21	AA	1201	A	C8-N9-C4	-14.09	100.17	105.80
57	BB	2126	A	C4-C5-C6	14.08	124.04	117.00
55	BG	169	ARG	NE-CZ-NH1	-14.08	113.26	120.30
57	BB	58	G	C2-N3-C4	14.08	118.94	111.90
57	BB	2283	C	O4'-C1'-N1	14.08	119.46	108.20
21	AA	292	G	C5-C6-N1	-14.07	104.47	111.50
21	AA	869	G	C5-C6-O6	-14.07	120.16	128.60
22	AY	66	A	C4-C5-C6	14.07	124.03	117.00
21	AA	1318	A	C5-C6-N1	-14.06	110.67	117.70
57	BB	255	A	N1-C6-N6	14.06	127.04	118.60
21	AA	69	G	N1-C6-O6	14.06	128.34	119.90
57	BB	62	U	P-O5'-C5'	14.06	143.40	120.90
57	BB	1551	A	N1-C6-N6	14.05	127.03	118.60
57	BB	1803	A	C4-C5-C6	14.06	124.03	117.00
21	AA	6	G	N1-C6-O6	14.05	128.33	119.90
57	BB	812	C	C4-C5-C6	14.05	124.42	117.40
57	BB	1743	G	O4'-C1'-N9	14.05	119.44	108.20
57	BB	1593	A	C4-C5-C6	14.05	124.02	117.00
21	AA	862	C	N3-C4-C5	-14.04	116.28	121.90
57	BB	979	A	N1-C6-N6	14.04	127.03	118.60
57	BB	213	A	N1-C6-N6	14.04	127.03	118.60
21	AA	359	G	C5-C6-O6	-14.04	120.17	128.60
57	BB	2860	A	N1-C6-N6	14.04	127.03	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2263	C	O4'-C1'-N1	14.04	119.43	108.20
21	AA	960	U	P-O3'-C3'	14.04	136.54	119.70
57	BB	1560	G	N1-C6-O6	14.04	128.32	119.90
57	BB	1652	A	N1-C6-N6	14.04	127.02	118.60
57	BB	2620	C	O4'-C1'-N1	14.04	119.43	108.20
21	AA	943	U	O4'-C1'-N1	14.03	119.43	108.20
57	BB	351	C	N3-C4-N4	14.03	127.82	118.00
57	BB	1041	G	C5-C6-O6	-14.03	120.18	128.60
22	AY	27	C	N3-C4-N4	14.03	127.82	118.00
57	BB	2726	A	C5-C6-N1	-14.03	110.69	117.70
57	BB	14	A	N1-C6-N6	14.02	127.01	118.60
57	BB	800	A	N1-C6-N6	14.02	127.01	118.60
57	BB	1125	G	N1-C6-O6	14.02	128.31	119.90
57	BB	1200	C	O4'-C1'-N1	14.02	119.42	108.20
57	BB	1244	A	N1-C6-N6	14.02	127.01	118.60
57	BB	1705	A	N1-C6-N6	14.02	127.01	118.60
21	AA	718	A	C5-C6-N1	-14.01	110.70	117.70
57	BB	1986	C	C4-C5-C6	14.00	124.40	117.40
52	BD	184	ARG	NE-CZ-NH2	14.00	127.30	120.30
57	BB	1164	C	C6-N1-C2	-14.00	114.70	120.30
22	AY	18	G	C8-N9-C4	-13.99	100.80	106.40
21	AA	797	C	O4'-C1'-N1	13.99	119.39	108.20
57	BB	2331	G	C5-C6-O6	-13.99	120.21	128.60
21	AA	878	A	N1-C6-N6	13.99	126.99	118.60
26	AV	70	G	C5-C6-O6	-13.99	120.21	128.60
21	AA	60	A	N1-C6-N6	13.98	126.99	118.60
57	BB	1285	A	N1-C6-N6	13.98	126.99	118.60
57	BB	270	A	C4-C5-C6	13.98	123.99	117.00
21	AA	442	G	N1-C6-O6	13.97	128.28	119.90
57	BB	1030	C	N3-C4-C5	-13.97	116.31	121.90
57	BB	2535	G	N1-C6-O6	13.97	128.28	119.90
21	AA	490	C	O4'-C1'-N1	13.97	119.38	108.20
21	AA	765	G	C4-C5-N7	-13.97	105.21	110.80
21	AA	859	G	C5-C6-O6	-13.96	120.22	128.60
57	BB	515	A	N1-C6-N6	13.96	126.98	118.60
21	AA	190	A	N1-C6-N6	13.96	126.98	118.60
57	BB	2091	C	C6-N1-C2	-13.96	114.72	120.30
21	AA	227	G	C8-N9-C4	-13.95	100.82	106.40
57	BB	1262	A	C5-C6-N1	-13.95	110.72	117.70
57	BB	1613	G	N1-C6-O6	13.95	128.27	119.90
21	AA	746	A	N1-C6-N6	13.94	126.97	118.60
57	BB	344	A	O4'-C1'-N9	13.94	119.36	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2708	G	N3-C2-N2	13.95	129.66	119.90
21	AA	474	G	C5-C6-O6	-13.94	120.23	128.60
57	BB	2070	A	N1-C6-N6	13.94	126.97	118.60
21	AA	482	A	N1-C6-N6	13.94	126.96	118.60
22	AY	4	G	C5-C6-N1	-13.94	104.53	111.50
57	BB	1413	A	C5-C6-N1	-13.94	110.73	117.70
21	AA	832	G	N1-C6-O6	13.93	128.26	119.90
57	BB	1010	A	N9-C4-C5	-13.93	100.23	105.80
57	BB	1477	A	N1-C6-N6	13.93	126.96	118.60
57	BB	2805	C	N3-C4-C5	-13.93	116.33	121.90
57	BB	261	G	C5-C6-O6	-13.93	120.25	128.60
21	AA	1058	G	N1-C6-O6	13.92	128.25	119.90
21	AA	124	C	N3-C4-N4	13.92	127.75	118.00
21	AA	987	G	C5-C6-O6	-13.92	120.25	128.60
57	BB	2446	G	C5-C6-O6	-13.92	120.25	128.60
57	BB	772	C	N3-C4-C5	-13.91	116.33	121.90
57	BB	1630	A	C5-C6-N6	-13.91	112.57	123.70
21	AA	130	A	N1-C6-N6	13.91	126.95	118.60
21	AA	1355	G	C5-C6-O6	-13.91	120.26	128.60
21	AA	776	G	N3-C2-N2	13.90	129.63	119.90
57	BB	2685	G	N1-C6-O6	13.90	128.24	119.90
21	AA	89	U	O4'-C1'-N1	13.89	119.32	108.20
21	AA	749	A	C5-C6-N6	-13.89	112.58	123.70
21	AA	1401	G	N1-C6-O6	13.89	128.24	119.90
22	AY	70	C	O4'-C1'-N1	13.89	119.31	108.20
57	BB	2097	A	N9-C4-C5	13.89	111.36	105.80
57	BB	1023	U	O4'-C1'-N1	13.89	119.31	108.20
33	BN	90	ARG	NE-CZ-NH2	-13.88	113.36	120.30
57	BB	771	G	C5-C6-O6	-13.88	120.27	128.60
21	AA	1355	G	N1-C6-O6	13.88	128.23	119.90
57	BB	1357	C	O4'-C1'-N1	13.88	119.30	108.20
57	BB	2507	C	O4'-C1'-N1	13.88	119.31	108.20
21	AA	84	U	N3-C4-O4	13.88	129.11	119.40
57	BB	2124	G	N1-C6-O6	13.88	128.22	119.90
57	BB	2239	G	N1-C6-O6	13.87	128.22	119.90
57	BB	1806	C	N3-C4-C5	-13.87	116.35	121.90
57	BB	2391	G	N1-C6-O6	13.87	128.22	119.90
57	BB	2174	C	P-O3'-C3'	13.87	136.34	119.70
57	BB	2721	A	C4-C5-C6	13.87	123.93	117.00
57	BB	1031	G	C5-C6-O6	-13.86	120.28	128.60
57	BB	1276	A	C5-C6-N1	-13.86	110.77	117.70
57	BB	1667	G	C5-C6-N1	-13.86	104.57	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	818	G	N1-C6-O6	13.86	128.21	119.90
57	BB	89	A	N1-C6-N6	13.86	126.91	118.60
57	BB	1528	A	C5-C6-N6	-13.85	112.62	123.70
21	AA	1369	C	N3-C4-N4	13.85	127.69	118.00
57	BB	324	A	N1-C6-N6	13.85	126.91	118.60
57	BB	2751	G	N1-C6-O6	13.85	128.21	119.90
21	AA	1269	A	N1-C6-N6	13.85	126.91	118.60
7	AP	5	ARG	NE-CZ-NH2	-13.84	113.38	120.30
57	BB	1226	A	N1-C6-N6	13.84	126.91	118.60
21	AA	52	C	N3-C4-C5	-13.83	116.37	121.90
57	BB	2169	A	O4'-C1'-N9	13.83	119.26	108.20
58	BA	79	G	C6-C5-N7	-13.83	122.10	130.40
57	BB	1006	C	O4'-C1'-N1	13.82	119.26	108.20
57	BB	1948	G	N3-C4-C5	-13.82	121.69	128.60
57	BB	250	G	N1-C6-O6	13.81	128.19	119.90
23	AW	35	A	N1-C6-N6	13.81	126.89	118.60
57	BB	1985	C	O4'-C1'-N1	13.81	119.25	108.20
58	BA	81	G	N1-C6-O6	13.81	128.18	119.90
23	AW	70	G	C8-N9-C4	-13.80	100.88	106.40
57	BB	253	C	C6-N1-C2	-13.80	114.78	120.30
57	BB	2411	A	C4-C5-C6	13.80	123.90	117.00
57	BB	327	G	N1-C6-O6	13.80	128.18	119.90
57	BB	866	A	C5-C6-N1	-13.80	110.80	117.70
57	BB	2311	A	N1-C6-N6	13.80	126.88	118.60
57	BB	1381	G	C5-C6-O6	-13.79	120.32	128.60
21	AA	1529	G	C5-C6-O6	-13.79	120.33	128.60
26	AV	27	U	O4'-C1'-N1	13.79	119.23	108.20
57	BB	698	C	O4'-C1'-N1	13.78	119.22	108.20
22	AY	23	A	C5-C6-N1	-13.78	110.81	117.70
29	BJ	74	TYR	CB-CG-CD1	-13.78	112.73	121.00
57	BB	1884	G	N1-C6-O6	13.77	128.16	119.90
57	BB	951	C	O4'-C1'-N1	13.77	119.22	108.20
57	BB	2058	A	N9-C4-C5	13.77	111.31	105.80
21	AA	131	A	N1-C6-N6	13.76	126.86	118.60
21	AA	988	G	N1-C6-O6	13.76	128.16	119.90
21	AA	493	A	N1-C6-N6	13.76	126.85	118.60
57	BB	95	A	C6-C5-N7	-13.75	122.67	132.30
21	AA	122	G	C5-C6-N1	-13.75	104.62	111.50
23	AW	64	A	N1-C6-N6	13.73	126.84	118.60
40	BU	93	ARG	NE-CZ-NH1	-13.73	113.43	120.30
57	BB	1919	A	C5-C6-N6	-13.73	112.71	123.70
21	AA	1250	A	N1-C6-N6	13.73	126.84	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1289	A	N1-C6-N6	13.73	126.84	118.60
21	AA	295	C	C5-C6-N1	13.73	127.86	121.00
21	AA	784	A	N1-C6-N6	13.72	126.83	118.60
26	AV	61	C	N3-C4-C5	-13.72	116.41	121.90
21	AA	1244	G	C5-C6-O6	-13.72	120.37	128.60
21	AA	1319	A	N1-C6-N6	13.72	126.83	118.60
57	BB	641	U	N3-C2-O2	13.72	131.81	122.20
57	BB	1296	G	N1-C2-N3	-13.72	115.67	123.90
57	BB	1320	C	N3-C4-C5	-13.72	116.41	121.90
57	BB	2583	G	C5-C6-O6	-13.72	120.37	128.60
57	BB	1413	A	N1-C6-N6	13.71	126.83	118.60
57	BB	2332	C	O4'-C1'-N1	13.71	119.17	108.20
21	AA	563	A	N1-C6-N6	13.71	126.83	118.60
21	AA	690	G	N1-C6-O6	13.71	128.13	119.90
57	BB	1677	A	C4-C5-C6	13.71	123.86	117.00
21	AA	752	G	N1-C6-O6	13.71	128.12	119.90
57	BB	2530	A	N1-C6-N6	13.71	126.83	118.60
57	BB	795	C	C6-N1-C2	-13.70	114.82	120.30
57	BB	2082	A	N1-C6-N6	13.70	126.82	118.60
57	BB	2834	G	N1-C6-O6	13.70	128.12	119.90
57	BB	1334	G	C5-C6-O6	-13.70	120.38	128.60
57	BB	1668	A	N1-C6-N6	13.70	126.82	118.60
57	BB	1247	A	C4-C5-C6	13.70	123.85	117.00
57	BB	528	A	C5-C6-N6	-13.69	112.75	123.70
21	AA	1252	A	N1-C6-N6	13.69	126.81	118.60
58	BA	112	G	C5-C6-O6	-13.69	120.39	128.60
21	AA	900	A	N1-C6-N6	13.69	126.81	118.60
57	BB	91	A	N1-C6-N6	13.69	126.81	118.60
57	BB	2803	G	N1-C6-O6	13.69	128.11	119.90
21	AA	111	G	O4'-C1'-N9	13.68	119.15	108.20
21	AA	456	A	N1-C6-N6	13.68	126.81	118.60
21	AA	755	G	C5-C6-O6	-13.68	120.39	128.60
57	BB	197	A	N1-C6-N6	13.68	126.81	118.60
57	BB	415	A	C4-C5-C6	13.68	123.84	117.00
57	BB	460	A	N1-C6-N6	13.68	126.81	118.60
57	BB	1038	G	N1-C6-O6	13.68	128.11	119.90
57	BB	1427	A	N1-C6-N6	13.68	126.81	118.60
57	BB	2097	A	C4-C5-N7	-13.68	103.86	110.70
34	BO	30	ARG	NE-CZ-NH1	13.67	127.14	120.30
57	BB	141	G	C5-C6-N1	-13.67	104.66	111.50
57	BB	862	G	N1-C6-O6	13.67	128.10	119.90
57	BB	2662	A	N1-C6-N6	13.67	126.80	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	425	G	N1-C6-O6	13.67	128.10	119.90
57	BB	1822	C	N3-C4-C5	-13.67	116.43	121.90
57	BB	1848	A	C5-C6-N6	-13.67	112.77	123.70
57	BB	2377	A	N1-C6-N6	13.67	126.80	118.60
24	AX	13	A	C4-C5-C6	13.66	123.83	117.00
57	BB	2536	G	N1-C6-O6	13.66	128.10	119.90
57	BB	752	A	N1-C6-N6	13.66	126.80	118.60
57	BB	864	G	C5-C6-O6	-13.65	120.41	128.60
57	BB	415	A	N1-C6-N6	13.65	126.79	118.60
57	BB	804	A	N1-C6-N6	13.65	126.79	118.60
58	BA	57	A	N1-C6-N6	13.65	126.79	118.60
21	AA	41	G	N1-C6-O6	13.65	128.09	119.90
21	AA	794	A	N1-C6-N6	13.64	126.79	118.60
22	AY	20	G	C5-C6-O6	-13.64	120.41	128.60
21	AA	1353	G	N1-C6-O6	13.64	128.09	119.90
57	BB	2743	U	O4'-C1'-N1	13.64	119.11	108.20
57	BB	629	G	N1-C6-O6	13.64	128.08	119.90
57	BB	2107	G	N1-C6-O6	13.63	128.08	119.90
27	B5	162	ARG	NE-CZ-NH2	-13.62	113.49	120.30
57	BB	656	G	N1-C6-O6	13.62	128.07	119.90
57	BB	1246	A	C4-C5-C6	13.62	123.81	117.00
21	AA	303	A	C5-C6-N1	-13.62	110.89	117.70
57	BB	281	C	O4'-C1'-N1	13.62	119.09	108.20
57	BB	207	A	N1-C6-N6	13.61	126.77	118.60
57	BB	1021	A	C5-C6-N6	-13.62	112.81	123.70
21	AA	80	A	C5-C6-N6	-13.61	112.81	123.70
57	BB	1641	A	N1-C6-N6	13.61	126.77	118.60
21	AA	959	A	N1-C6-N6	13.61	126.77	118.60
21	AA	533	A	C5-C6-N1	-13.61	110.90	117.70
57	BB	1234	U	O4'-C1'-N1	13.61	119.09	108.20
57	BB	2062	A	C5-C6-N1	-13.60	110.90	117.70
21	AA	797	C	N3-C4-C5	-13.60	116.46	121.90
57	BB	1809	A	N1-C6-N6	13.60	126.76	118.60
22	AY	3	G	C5-C6-O6	-13.59	120.45	128.60
57	BB	27	G	N1-C2-N3	-13.59	115.75	123.90
57	BB	477	A	C4-C5-C6	13.59	123.79	117.00
57	BB	1965	C	C6-N1-C2	-13.58	114.87	120.30
21	AA	823	C	N3-C4-C5	-13.57	116.47	121.90
57	BB	21	A	N1-C6-N6	13.57	126.74	118.60
57	BB	2069	G	N1-C6-O6	13.57	128.04	119.90
21	AA	1179	A	N1-C6-N6	13.57	126.74	118.60
57	BB	299	A	C5-N7-C8	13.57	110.68	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	173	A	C4-C5-C6	13.56	123.78	117.00
57	BB	1052	C	N3-C4-C5	-13.56	116.47	121.90
21	AA	1036	A	N1-C6-N6	13.56	126.74	118.60
57	BB	1342	A	N1-C6-N6	13.56	126.74	118.60
57	BB	2411	A	C8-N9-C4	-13.55	100.38	105.80
21	AA	175	C	C6-N1-C2	-13.55	114.88	120.30
21	AA	706	A	N1-C6-N6	13.54	126.73	118.60
21	AA	879	C	O4'-C1'-N1	13.54	119.03	108.20
57	BB	1958	C	N3-C4-C5	-13.54	116.48	121.90
21	AA	1132	C	O4'-C1'-N1	13.54	119.03	108.20
23	AW	38	A	C4-C5-C6	13.54	123.77	117.00
57	BB	82	U	O4'-C1'-N1	13.54	119.03	108.20
57	BB	584	C	N3-C4-N4	13.54	127.48	118.00
57	BB	1780	A	N1-C6-N6	13.54	126.72	118.60
57	BB	2073	C	O4'-C1'-N1	13.54	119.03	108.20
57	BB	1746	A	N1-C2-N3	13.53	136.06	129.30
57	BB	55	G	C2-N3-C4	13.52	118.66	111.90
57	BB	354	A	O4'-C1'-N9	13.52	119.02	108.20
21	AA	1219	A	N1-C6-N6	13.52	126.71	118.60
57	BB	1802	A	N1-C6-N6	13.52	126.71	118.60
21	AA	963	G	C5-C6-O6	-13.52	120.49	128.60
32	BM	10	ARG	NE-CZ-NH1	-13.51	113.54	120.30
57	BB	918	A	C5-C6-N1	-13.51	110.94	117.70
21	AA	1333	A	N1-C6-N6	13.51	126.71	118.60
57	BB	1601	G	N1-C6-O6	13.51	128.00	119.90
21	AA	330	C	O4'-C1'-N1	13.51	119.01	108.20
23	AW	21	A	N1-C6-N6	13.51	126.70	118.60
57	BB	1494	A	N1-C6-N6	13.51	126.70	118.60
57	BB	1550	C	O4'-C1'-N1	13.50	119.00	108.20
57	BB	2867	G	N7-C8-N9	13.50	119.85	113.10
57	BB	1386	C	N3-C4-C5	-13.50	116.50	121.90
57	BB	1557	C	N3-C4-N4	13.50	127.45	118.00
57	BB	2389	G	N1-C6-O6	13.50	128.00	119.90
21	AA	1408	A	N1-C6-N6	13.50	126.70	118.60
22	AY	57	G	O4'-C1'-N9	13.50	119.00	108.20
21	AA	1186	G	N1-C6-O6	13.49	128.00	119.90
57	BB	379	G	N1-C6-O6	13.49	128.00	119.90
57	BB	1109	C	N3-C4-C5	-13.49	116.50	121.90
57	BB	771	G	N1-C6-O6	13.48	127.99	119.90
23	AW	4	C	N3-C4-C5	-13.48	116.51	121.90
57	BB	2271	G	N1-C6-O6	13.48	127.99	119.90
57	BB	2286	G	C5-C6-O6	-13.48	120.51	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1142	G	C5-C6-O6	-13.47	120.52	128.60
57	BB	1938	A	N1-C6-N6	13.47	126.69	118.60
58	BA	26	C	C6-N1-C2	-13.46	114.91	120.30
21	AA	139	A	C8-N9-C4	-13.46	100.42	105.80
22	AY	48	C	P-O5'-C5'	13.46	142.44	120.90
57	BB	879	G	C5-C6-O6	-13.46	120.52	128.60
57	BB	2335	A	N1-C6-N6	13.46	126.68	118.60
57	BB	2816	G	C5-C6-O6	-13.46	120.52	128.60
21	AA	949	A	N1-C6-N6	13.46	126.68	118.60
57	BB	1541	C	O4'-C1'-N1	13.46	118.97	108.20
57	BB	1677	A	N9-C4-C5	13.45	111.18	105.80
57	BB	670	A	P-O3'-C3'	13.45	135.84	119.70
57	BB	1540	G	C5-C6-O6	-13.45	120.53	128.60
57	BB	173	A	N1-C6-N6	13.44	126.67	118.60
21	AA	1320	C	O4'-C1'-N1	13.44	118.95	108.20
57	BB	1792	G	C5-C6-O6	-13.44	120.54	128.60
57	BB	2201	G	N1-C6-O6	13.44	127.96	119.90
57	BB	83	A	C5-C6-N6	-13.44	112.95	123.70
57	BB	1560	G	C5-C6-O6	-13.44	120.54	128.60
57	BB	2799	A	N1-C6-N6	13.44	126.66	118.60
21	AA	64	G	C5-C6-O6	-13.43	120.54	128.60
21	AA	313	A	N1-C6-N6	13.43	126.66	118.60
57	BB	2428	G	P-O3'-C3'	13.43	135.82	119.70
21	AA	81	A	N1-C6-N6	13.43	126.66	118.60
21	AA	646	G	N1-C6-O6	13.43	127.96	119.90
21	AA	710	G	O4'-C1'-N9	13.43	118.94	108.20
57	BB	1905	C	O4'-C1'-N1	13.43	118.94	108.20
57	BB	1919	A	N1-C6-N6	13.43	126.66	118.60
21	AA	1034	G	N1-C6-O6	13.42	127.95	119.90
57	BB	2199	A	N1-C6-N6	13.42	126.65	118.60
21	AA	865	A	C8-N9-C4	-13.42	100.43	105.80
57	BB	661	A	C5-C6-N1	-13.42	110.99	117.70
57	BB	346	A	C8-N9-C4	13.42	111.17	105.80
57	BB	2285	C	O4'-C1'-N1	13.41	118.93	108.20
57	BB	1228	G	C5-C6-O6	-13.41	120.55	128.60
21	AA	38	G	C8-N9-C4	-13.41	101.04	106.40
57	BB	1171	G	N3-C2-N2	13.41	129.28	119.90
58	BA	23	G	N1-C6-O6	13.40	127.94	119.90
24	AX	14	A	C5-C6-N1	-13.40	111.00	117.70
57	BB	1086	A	N1-C6-N6	13.40	126.64	118.60
58	BA	30	C	O4'-C1'-N1	13.40	118.92	108.20
57	BB	205	G	N1-C6-O6	13.39	127.94	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	539	G	C5-C6-O6	-13.39	120.56	128.60
57	BB	1960	A	N9-C4-C5	13.39	111.16	105.80
22	AY	64	A	N1-C6-N6	13.39	126.64	118.60
57	BB	2874	C	N3-C4-C5	-13.39	116.54	121.90
26	AV	73	A	N1-C2-N3	13.39	135.99	129.30
57	BB	1766	G	N1-C2-N3	-13.39	115.87	123.90
26	AV	38	A	C4-C5-C6	13.38	123.69	117.00
55	BG	51	PHE	CB-CG-CD2	-13.38	111.43	120.80
57	BB	1899	A	N1-C6-N6	13.38	126.63	118.60
58	BA	7	G	C5-C6-O6	-13.38	120.57	128.60
22	AY	76	A	C5-C6-N6	-13.38	113.00	123.70
57	BB	2799	A	C5-C6-N1	-13.37	111.01	117.70
21	AA	555	U	O4'-C1'-N1	13.37	118.90	108.20
21	AA	1117	A	N1-C6-N6	13.37	126.62	118.60
57	BB	513	A	N1-C6-N6	13.37	126.62	118.60
57	BB	762	U	N3-C4-C5	-13.37	106.58	114.60
21	AA	156	C	C4-C5-C6	13.36	124.08	117.40
57	BB	2812	G	C5-C6-O6	-13.36	120.58	128.60
21	AA	587	G	C5-C6-O6	-13.36	120.58	128.60
57	BB	960	A	N9-C4-C5	13.36	111.14	105.80
58	BA	67	G	C5-C6-O6	-13.36	120.58	128.60
57	BB	2281	A	N9-C4-C5	13.36	111.14	105.80
57	BB	2443	C	O4'-C1'-N1	13.36	118.88	108.20
22	AY	4	G	C6-N1-C2	13.35	133.11	125.10
57	BB	2466	C	N3-C4-N4	13.35	127.35	118.00
21	AA	1141	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	565	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	1238	G	C5-C6-O6	-13.35	120.59	128.60
57	BB	1626	A	N1-C6-N6	13.35	126.61	118.60
21	AA	489	C	O4'-C1'-N1	13.35	118.88	108.20
21	AA	1457	G	C5-C6-O6	-13.35	120.59	128.60
26	AV	17	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	974	G	C5-C6-N1	-13.35	104.83	111.50
57	BB	1640	A	N1-C2-N3	13.35	135.97	129.30
21	AA	866	C	O4'-C1'-N1	13.34	118.88	108.20
57	BB	151	C	O4'-C1'-N1	13.34	118.87	108.20
26	AV	48	C	N3-C4-C5	-13.34	116.56	121.90
57	BB	1884	G	C5-C6-O6	-13.34	120.60	128.60
57	BB	547	A	C5-C6-N6	-13.34	113.03	123.70
58	BA	16	G	N1-C6-O6	13.33	127.90	119.90
57	BB	964	C	C2-N3-C4	13.33	126.56	119.90
21	AA	951	G	N7-C8-N9	-13.32	106.44	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	BM	91	TYR	CB-CG-CD2	-13.32	113.01	121.00
36	BQ	32	ARG	NE-CZ-NH1	-13.32	113.64	120.30
57	BB	2145	C	O4'-C1'-N1	13.32	118.86	108.20
57	BB	2803	G	O4'-C1'-N9	13.32	118.86	108.20
57	BB	559	G	N1-C6-O6	13.32	127.89	119.90
21	AA	860	A	N1-C6-N6	13.31	126.59	118.60
57	BB	2019	A	N1-C6-N6	13.31	126.59	118.60
57	BB	1867	G	N1-C6-O6	13.31	127.89	119.90
57	BB	553	G	N7-C8-N9	13.31	119.75	113.10
21	AA	1156	G	N1-C6-O6	13.31	127.88	119.90
23	AW	19	G	O4'-C1'-N9	13.31	118.84	108.20
57	BB	2148	G	C5-N7-C8	13.31	110.95	104.30
57	BB	2560	A	N1-C6-N6	13.31	126.58	118.60
57	BB	2771	C	C6-N1-C2	-13.30	114.98	120.30
57	BB	2551	C	O4'-C1'-N1	13.30	118.84	108.20
21	AA	116	A	C5-C6-N6	-13.30	113.06	123.70
57	BB	1969	A	N1-C2-N3	13.30	135.95	129.30
21	AA	1469	C	O4'-C1'-N1	13.30	118.84	108.20
57	BB	1074	G	N1-C6-O6	13.29	127.88	119.90
21	AA	1041	G	C5-C6-O6	-13.28	120.63	128.60
21	AA	1395	C	N3-C4-C5	-13.28	116.59	121.90
57	BB	140	C	O4'-C1'-N1	13.28	118.83	108.20
21	AA	1290	G	N1-C6-O6	13.28	127.86	119.90
57	BB	1854	A	O4'-C1'-N9	13.28	118.82	108.20
15	AD	114	ARG	NE-CZ-NH2	-13.27	113.66	120.30
54	BF	109	ARG	NE-CZ-NH2	13.27	126.94	120.30
57	BB	2030	A	N1-C6-N6	13.27	126.56	118.60
21	AA	138	G	C5-C6-O6	-13.27	120.64	128.60
57	BB	1504	A	C5-C6-N1	-13.27	111.06	117.70
21	AA	1182	G	C5-C6-O6	-13.27	120.64	128.60
57	BB	294	A	N1-C6-N6	13.27	126.56	118.60
21	AA	913	A	N1-C6-N6	13.26	126.56	118.60
21	AA	633	G	N1-C6-O6	13.26	127.86	119.90
57	BB	380	G	N9-C4-C5	-13.26	100.10	105.40
57	BB	2116	G	N1-C6-O6	13.26	127.86	119.90
57	BB	391	A	N1-C6-N6	13.26	126.55	118.60
57	BB	2630	G	N1-C6-O6	13.26	127.85	119.90
21	AA	253	A	C4-C5-C6	13.25	123.62	117.00
21	AA	483	C	N3-C4-C5	-13.25	116.60	121.90
21	AA	656	G	N1-C6-O6	13.25	127.85	119.90
21	AA	731	G	N1-C6-O6	13.25	127.85	119.90
23	AW	49	C	N3-C4-C5	-13.25	116.60	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1373	G	N1-C6-O6	13.25	127.85	119.90
57	BB	1449	G	C5-C6-O6	-13.24	120.65	128.60
57	BB	73	A	N1-C6-N6	13.24	126.54	118.60
57	BB	152	A	N1-C6-N6	13.24	126.54	118.60
57	BB	758	C	O4'-C1'-N1	13.23	118.78	108.20
57	BB	1137	G	C8-N9-C4	-13.23	101.11	106.40
57	BB	2808	G	N9-C4-C5	-13.23	100.11	105.40
21	AA	1363	A	N1-C6-N6	13.22	126.53	118.60
57	BB	471	A	N1-C6-N6	13.22	126.53	118.60
57	BB	911	A	N1-C6-N6	13.22	126.53	118.60
57	BB	858	G	N1-C6-O6	13.22	127.83	119.90
57	BB	952	G	C5-C6-O6	-13.22	120.67	128.60
57	BB	2900	A	N1-C6-N6	13.22	126.53	118.60
57	BB	104	A	N1-C6-N6	13.21	126.53	118.60
57	BB	902	C	C2-N3-C4	13.21	126.51	119.90
21	AA	1465	A	N1-C6-N6	13.21	126.53	118.60
21	AA	609	A	C5-C6-N1	-13.20	111.10	117.70
57	BB	668	A	N1-C6-N6	13.21	126.52	118.60
21	AA	729	A	N1-C6-N6	13.20	126.52	118.60
57	BB	1324	G	N1-C6-O6	13.19	127.82	119.90
57	BB	1107	G	C5-C6-O6	-13.19	120.69	128.60
57	BB	2196	C	N3-C4-N4	13.19	127.23	118.00
23	AW	31	A	O4'-C1'-N9	13.19	118.75	108.20
21	AA	214	C	N3-C4-N4	13.18	127.23	118.00
21	AA	589	U	C5-C6-N1	13.18	129.29	122.70
57	BB	1306	C	O4'-C1'-N1	13.17	118.74	108.20
21	AA	63	C	N3-C4-N4	13.17	127.22	118.00
21	AA	840	C	N3-C4-N4	13.17	127.22	118.00
21	AA	1423	G	N9-C4-C5	-13.17	100.13	105.40
57	BB	1571	A	N1-C6-N6	13.16	126.50	118.60
57	BB	2379	G	C8-N9-C4	-13.16	101.13	106.40
57	BB	43	G	C5-C6-O6	-13.16	120.70	128.60
57	BB	988	A	N9-C4-C5	13.16	111.06	105.80
57	BB	1247	A	C5-C6-N1	-13.16	111.12	117.70
21	AA	139	A	N1-C6-N6	13.15	126.49	118.60
57	BB	1247	A	N1-C6-N6	13.15	126.49	118.60
57	BB	1515	A	O4'-C1'-N9	13.15	118.72	108.20
21	AA	1434	A	O4'-C1'-N9	13.15	118.72	108.20
31	BL	50	PHE	CB-CG-CD1	-13.15	111.60	120.80
57	BB	66	C	O4'-C1'-N1	13.15	118.72	108.20
21	AA	55	A	N1-C6-N6	13.15	126.49	118.60
21	AA	468	A	N1-C6-N6	13.15	126.49	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1210	C	N3-C4-C5	-13.15	116.64	121.90
57	BB	413	C	C4-C5-C6	13.15	123.97	117.40
57	BB	2410	G	N1-C6-O6	13.15	127.79	119.90
57	BB	53	A	O4'-C1'-N9	13.14	118.72	108.20
27	B5	36	ALA	C-N-CA	13.14	154.55	121.70
57	BB	2353	G	C5-C6-O6	-13.14	120.72	128.60
21	AA	942	G	C5-C6-O6	-13.14	120.72	128.60
57	BB	1337	G	C5-C6-O6	-13.14	120.72	128.60
21	AA	1339	A	C8-N9-C4	-13.13	100.55	105.80
21	AA	64	G	N1-C6-O6	13.13	127.78	119.90
57	BB	261	G	N1-C6-O6	13.13	127.78	119.90
57	BB	1450	G	N1-C6-O6	13.13	127.78	119.90
57	BB	2525	G	C5-C6-O6	-13.13	120.72	128.60
21	AA	433	G	N1-C6-O6	13.12	127.77	119.90
21	AA	1048	G	N1-C6-O6	13.12	127.77	119.90
21	AA	1048	G	O4'-C1'-N9	13.12	118.69	108.20
57	BB	165	A	C8-N9-C4	-13.12	100.55	105.80
21	AA	448	A	N1-C6-N6	13.11	126.47	118.60
23	AW	3	C	C6-N1-C2	-13.11	115.06	120.30
57	BB	214	G	N1-C6-O6	13.11	127.77	119.90
57	BB	2638	G	N1-C6-O6	13.11	127.77	119.90
58	BA	18	G	N1-C6-O6	13.11	127.76	119.90
21	AA	629	A	C5-C6-N1	-13.11	111.15	117.70
57	BB	1752	C	N3-C4-N4	13.11	127.17	118.00
21	AA	1170	A	N1-C6-N6	13.10	126.46	118.60
57	BB	1482	G	C5-C6-O6	-13.10	120.74	128.60
57	BB	30	G	N1-C6-O6	13.09	127.75	119.90
57	BB	1506	U	O4'-C1'-N1	13.09	118.67	108.20
26	AV	37	A	C8-N9-C4	-13.09	100.56	105.80
57	BB	453	A	C5-C6-N1	-13.09	111.16	117.70
57	BB	1274	A	N1-C6-N6	13.09	126.45	118.60
57	BB	918	A	C4-C5-C6	13.09	123.54	117.00
57	BB	1698	A	C5-N7-C8	13.09	110.44	103.90
57	BB	2248	C	C6-N1-C2	-13.09	115.07	120.30
57	BB	311	A	N1-C6-N6	13.08	126.45	118.60
21	AA	52	C	C6-N1-C2	-13.08	115.07	120.30
21	AA	38	G	O4'-C1'-N9	13.07	118.66	108.20
57	BB	1343	G	C5-C6-O6	-13.07	120.76	128.60
57	BB	2090	A	O4'-C1'-N9	13.07	118.66	108.20
21	AA	223	A	C5-C6-N1	-13.07	111.17	117.70
57	BB	548	G	N3-C2-N2	13.07	129.05	119.90
57	BB	626	A	N1-C6-N6	13.07	126.44	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1208	C	O4'-C1'-N1	13.07	118.65	108.20
21	AA	86	G	C4-C5-N7	-13.07	105.57	110.80
21	AA	18	C	O4'-C1'-N1	13.06	118.65	108.20
57	BB	257	C	C6-N1-C2	-13.06	115.08	120.30
57	BB	834	G	N1-C6-O6	13.06	127.73	119.90
57	BB	1752	C	C5-C4-N4	-13.06	111.06	120.20
57	BB	2149	U	C4-C5-C6	13.06	127.53	119.70
57	BB	1434	A	O4'-C1'-N9	13.05	118.64	108.20
57	BB	1994	C	C5-C4-N4	-13.05	111.06	120.20
57	BB	2799	A	C4-C5-C6	13.05	123.53	117.00
57	BB	2268	A	C8-N9-C4	-13.05	100.58	105.80
26	AV	56	C	O4'-C1'-N1	13.05	118.64	108.20
57	BB	867	C	O4'-C1'-N1	13.05	118.64	108.20
54	BF	70	ARG	NE-CZ-NH1	-13.05	113.78	120.30
57	BB	679	C	N3-C4-N4	13.04	127.13	118.00
57	BB	711	G	N1-C6-O6	13.04	127.73	119.90
23	AW	70	G	C5-C6-O6	-13.04	120.78	128.60
57	BB	426	C	O4'-C1'-N1	13.04	118.63	108.20
57	BB	1665	A	N1-C6-N6	13.04	126.42	118.60
28	BI	7	TYR	CB-CG-CD1	13.03	128.82	121.00
57	BB	22	C	O4'-C1'-N1	13.03	118.63	108.20
57	BB	2264	C	N3-C4-N4	13.04	127.12	118.00
21	AA	417	G	N1-C6-O6	13.03	127.72	119.90
57	BB	654	A	C6-N1-C2	-13.03	110.78	118.60
57	BB	1853	A	C5-C6-N1	-13.03	111.19	117.70
57	BB	2418	A	N1-C6-N6	13.03	126.42	118.60
57	BB	1829	A	C4-C5-C6	13.03	123.51	117.00
57	BB	1631	G	N1-C6-O6	13.02	127.71	119.90
21	AA	1466	C	C6-N1-C2	-13.02	115.09	120.30
57	BB	6	A	N1-C6-N6	13.02	126.41	118.60
57	BB	1667	G	C4-C5-N7	-13.02	105.59	110.80
57	BB	692	C	O4'-C1'-N1	13.01	118.61	108.20
57	BB	2388	A	C5-C6-N1	-13.01	111.19	117.70
57	BB	48	G	N1-C6-O6	13.01	127.70	119.90
57	BB	1465	G	N1-C6-O6	13.01	127.70	119.90
57	BB	435	C	N3-C4-N4	13.01	127.10	118.00
21	AA	165	G	N7-C8-N9	-13.00	106.60	113.10
57	BB	2787	C	N3-C4-C5	-13.00	116.70	121.90
21	AA	148	G	C5-C6-O6	-13.00	120.80	128.60
57	BB	1564	C	C2-N3-C4	13.00	126.40	119.90
21	AA	82	G	C5-C6-O6	-12.99	120.80	128.60
21	AA	1046	A	C5-C6-N1	-12.99	111.20	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	BJ	74	TYR	CB-CG-CD2	12.99	128.80	121.00
57	BB	1199	U	O4'-C1'-N1	12.99	118.60	108.20
57	BB	2024	G	C5-C6-O6	-12.99	120.80	128.60
57	BB	2856	A	N1-C6-N6	12.99	126.39	118.60
21	AA	1050	G	N1-C6-O6	12.99	127.69	119.90
57	BB	10	A	C5-C6-N1	-12.99	111.20	117.70
21	AA	1215	G	C4-C5-C6	12.99	126.59	118.80
23	AW	14	A	N1-C2-N3	12.99	135.79	129.30
21	AA	273	U	C5-C4-O4	-12.98	118.11	125.90
57	BB	1291	C	N3-C4-C5	-12.98	116.71	121.90
21	AA	226	G	N1-C6-O6	12.98	127.69	119.90
57	BB	2808	G	C5-C6-O6	-12.98	120.81	128.60
57	BB	2837	A	N1-C6-N6	12.98	126.39	118.60
21	AA	60	A	P-O3'-C3'	12.98	135.27	119.70
21	AA	77	A	C5-C6-N6	-12.98	113.32	123.70
47	B0	12	ARG	NE-CZ-NH2	-12.98	113.81	120.30
57	BB	1117	C	N3-C4-C5	-12.98	116.71	121.90
57	BB	1653	G	C5-C6-N1	-12.98	105.01	111.50
57	BB	1229	C	N3-C4-N4	12.97	127.08	118.00
57	BB	2902	C	O4'-C1'-N1	12.97	118.58	108.20
57	BB	375	G	C5-C6-O6	-12.97	120.82	128.60
21	AA	606	G	C6-N1-C2	12.97	132.88	125.10
57	BB	1872	A	N1-C6-N6	12.97	126.38	118.60
21	AA	674	G	C5-C6-O6	-12.97	120.82	128.60
57	BB	2880	C	O4'-C1'-N1	12.97	118.57	108.20
22	AY	71	G	C5-C6-O6	-12.96	120.82	128.60
57	BB	260	G	C5-C6-O6	-12.96	120.82	128.60
58	BA	114	C	N3-C4-C5	-12.96	116.72	121.90
57	BB	945	A	N1-C6-N6	12.96	126.38	118.60
57	BB	1611	C	C6-N1-C2	-12.96	115.12	120.30
57	BB	2822	G	C6-C5-N7	-12.95	122.63	130.40
57	BB	2201	G	C5-C6-O6	-12.95	120.83	128.60
58	BA	106	G	C5-C6-O6	-12.95	120.83	128.60
57	BB	539	G	N1-C6-O6	12.95	127.67	119.90
57	BB	1365	A	C5-C6-N1	-12.95	111.22	117.70
21	AA	501	C	N3-C4-C5	-12.95	116.72	121.90
21	AA	1203	C	O4'-C1'-N1	12.95	118.56	108.20
57	BB	2723	C	C5-C6-N1	12.94	127.47	121.00
21	AA	53	A	N1-C6-N6	12.94	126.36	118.60
57	BB	2662	A	C5-C6-N6	-12.94	113.35	123.70
21	AA	753	A	N1-C6-N6	12.94	126.36	118.60
23	AW	36	A	C4-C5-C6	12.94	123.47	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	179	C	N3-C4-N4	12.94	127.06	118.00
57	BB	1030	C	N3-C4-N4	12.94	127.06	118.00
21	AA	1155	A	N1-C6-N6	12.93	126.36	118.60
57	BB	604	G	N1-C6-O6	12.93	127.66	119.90
57	BB	358	U	C5-C6-N1	12.93	129.16	122.70
57	BB	952	G	N1-C6-O6	12.93	127.66	119.90
57	BB	1518	C	C5-C4-N4	-12.93	111.15	120.20
21	AA	189	A	N1-C6-N6	12.93	126.36	118.60
21	AA	1119	C	N3-C4-N4	12.93	127.05	118.00
21	AA	1369	C	N3-C4-C5	-12.93	116.73	121.90
57	BB	644	A	C4-C5-C6	12.92	123.46	117.00
31	BL	47	ARG	NE-CZ-NH1	-12.92	113.84	120.30
57	BB	2373	G	O4'-C1'-N9	12.92	118.54	108.20
57	BB	302	C	O4'-C1'-N1	12.92	118.54	108.20
58	BA	27	C	O4'-C1'-N1	12.92	118.54	108.20
26	AV	12	G	C5-C6-O6	-12.91	120.85	128.60
21	AA	1508	A	C5-C6-N1	-12.91	111.24	117.70
57	BB	310	A	N1-C6-N6	12.91	126.35	118.60
57	BB	602	A	C5-C6-N1	-12.91	111.24	117.70
21	AA	1492	A	C5-C6-N6	-12.91	113.37	123.70
21	AA	1439	G	C5-C6-O6	-12.91	120.86	128.60
57	BB	2149	U	C5-C6-N1	-12.91	116.25	122.70
57	BB	370	G	C8-N9-C4	-12.91	101.24	106.40
57	BB	2193	G	N1-C6-O6	12.90	127.64	119.90
57	BB	2435	A	N1-C6-N6	12.90	126.34	118.60
21	AA	985	C	N3-C4-C5	-12.90	116.74	121.90
57	BB	1792	G	N1-C6-O6	12.90	127.64	119.90
57	BB	505	A	C5-C6-N1	-12.90	111.25	117.70
57	BB	2025	C	O4'-C1'-N1	12.90	118.52	108.20
23	AW	58	A	C5-C6-N6	-12.90	113.38	123.70
57	BB	446	G	C5-C6-O6	-12.90	120.86	128.60
57	BB	244	A	N1-C6-N6	12.89	126.34	118.60
57	BB	262	A	N1-C6-N6	12.89	126.34	118.60
57	BB	1557	C	N3-C4-C5	-12.89	116.74	121.90
57	BB	2388	A	C4-C5-C6	12.89	123.45	117.00
57	BB	1713	A	N1-C6-N6	12.89	126.33	118.60
23	AW	43	C	C6-N1-C2	-12.88	115.15	120.30
57	BB	377	G	C5-C6-O6	-12.88	120.87	128.60
57	BB	793	A	N1-C6-N6	12.88	126.33	118.60
57	BB	1465	G	C5-C6-N1	-12.88	105.06	111.50
58	BA	20	G	N9-C4-C5	-12.88	100.25	105.40
58	BA	51	G	N1-C6-O6	12.88	127.63	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1010	A	N1-C6-N6	12.88	126.33	118.60
57	BB	1906	G	N9-C4-C5	12.88	110.55	105.40
57	BB	2734	A	N1-C6-N6	12.88	126.33	118.60
57	BB	492	A	C5-C6-N6	-12.88	113.40	123.70
21	AA	1035	A	C4-C5-C6	12.88	123.44	117.00
57	BB	2363	G	C5-C6-O6	-12.88	120.88	128.60
21	AA	1340	A	N1-C6-N6	12.87	126.32	118.60
57	BB	2559	C	O4'-C1'-N1	12.88	118.50	108.20
57	BB	2810	A	C4-C5-C6	12.88	123.44	117.00
57	BB	633	A	C5-C6-N1	-12.87	111.26	117.70
57	BB	991	C	O4'-C1'-N1	12.87	118.50	108.20
57	BB	2280	G	C5-C6-O6	-12.87	120.88	128.60
57	BB	2874	C	O4'-C1'-N1	12.87	118.50	108.20
57	BB	2337	G	N1-C6-O6	12.87	127.62	119.90
57	BB	2286	G	N1-C6-O6	12.87	127.62	119.90
21	AA	194	C	C2-N3-C4	12.87	126.33	119.90
57	BB	2740	A	N1-C6-N6	12.86	126.32	118.60
58	BA	58	A	N1-C6-N6	12.86	126.32	118.60
21	AA	198	G	C5-C6-O6	-12.86	120.88	128.60
57	BB	1262	A	C4-C5-C6	12.86	123.43	117.00
21	AA	22	G	C8-N9-C4	-12.86	101.26	106.40
57	BB	2438	U	O4'-C1'-N1	12.86	118.49	108.20
57	BB	926	G	C5-C6-O6	-12.86	120.89	128.60
21	AA	996	A	N1-C6-N6	12.85	126.31	118.60
57	BB	1309	G	N1-C6-O6	12.85	127.61	119.90
57	BB	1969	A	C4-C5-C6	12.85	123.43	117.00
21	AA	233	C	O4'-C1'-N1	12.85	118.48	108.20
21	AA	447	G	O4'-C1'-N9	12.85	118.48	108.20
21	AA	877	G	C5-C6-O6	-12.85	120.89	128.60
57	BB	2148	G	C5-C6-O6	-12.85	120.89	128.60
21	AA	637	C	O4'-C1'-N1	12.84	118.47	108.20
21	AA	865	A	C4-C5-C6	12.84	123.42	117.00
21	AA	1400	C	N3-C4-C5	-12.84	116.77	121.90
26	AV	37	A	N1-C6-N6	12.84	126.30	118.60
21	AA	788	U	O4'-C1'-N1	12.83	118.46	108.20
57	BB	1339	G	N1-C6-O6	12.83	127.60	119.90
57	BB	1983	G	N3-C2-N2	12.83	128.88	119.90
57	BB	536	G	O4'-C1'-N9	12.83	118.46	108.20
57	BB	2860	A	C4-C5-C6	12.83	123.41	117.00
21	AA	1217	C	O4'-C1'-N1	12.82	118.46	108.20
21	AA	337	G	C5-C6-O6	-12.82	120.91	128.60
57	BB	108	G	C5-C6-O6	-12.82	120.91	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	780	A	O4'-C1'-N9	12.81	118.45	108.20
21	AA	210	C	N3-C4-C5	-12.81	116.78	121.90
21	AA	1082	A	C5-C6-N1	-12.81	111.30	117.70
58	BA	20	G	C4-C5-N7	12.81	115.92	110.80
57	BB	1651	G	N1-C6-O6	12.81	127.58	119.90
21	AA	361	G	N1-C6-O6	12.80	127.58	119.90
21	AA	1255	G	C5-C6-O6	-12.80	120.92	128.60
21	AA	1148	U	O4'-C1'-N1	12.80	118.44	108.20
22	AY	3	G	N1-C6-O6	12.80	127.58	119.90
57	BB	1505	A	O4'-C1'-N9	12.80	118.44	108.20
57	BB	417	C	O4'-C1'-N1	12.80	118.44	108.20
57	BB	1837	C	N3-C4-N4	12.80	126.96	118.00
21	AA	78	A	N1-C6-N6	12.79	126.28	118.60
21	AA	380	G	C5-C6-O6	-12.80	120.92	128.60
21	AA	1016	A	C8-N9-C4	-12.79	100.68	105.80
57	BB	1142	A	C5-C6-N1	-12.79	111.30	117.70
57	BB	1817	G	N1-C6-O6	12.80	127.58	119.90
57	BB	2881	U	O4'-C1'-N1	12.79	118.44	108.20
21	AA	1032	G	C8-N9-C4	-12.79	101.28	106.40
57	BB	399	U	O4'-C1'-N1	12.79	118.43	108.20
57	BB	1462	C	N3-C4-C5	-12.79	116.79	121.90
57	BB	1003	G	C5-C6-O6	-12.78	120.93	128.60
57	BB	1646	C	C6-N1-C2	-12.78	115.19	120.30
57	BB	2512	C	N3-C4-C5	-12.78	116.79	121.90
57	BB	2503	A	C8-N9-C4	-12.78	100.69	105.80
21	AA	643	C	O4'-C1'-N1	12.78	118.42	108.20
49	B2	19	ARG	NE-CZ-NH2	12.78	126.69	120.30
21	AA	466	A	N1-C6-N6	12.78	126.27	118.60
57	BB	425	G	C5-C6-O6	-12.78	120.93	128.60
57	BB	2170	A	C8-N9-C4	-12.78	100.69	105.80
38	BS	99	ARG	NE-CZ-NH1	12.77	126.69	120.30
57	BB	1145	C	N3-C4-C5	-12.77	116.79	121.90
57	BB	2020	A	C6-C5-N7	-12.77	123.36	132.30
57	BB	2842	G	C5-C6-O6	-12.77	120.94	128.60
21	AA	993	G	C5-C6-O6	-12.77	120.94	128.60
21	AA	1176	A	C5-N7-C8	12.76	110.28	103.90
23	AW	30	G	C5-C6-O6	-12.76	120.94	128.60
57	BB	244	A	N1-C2-N3	12.76	135.68	129.30
57	BB	2791	G	C5-C6-O6	-12.76	120.94	128.60
2	AK	121	ARG	NE-CZ-NH1	12.76	126.68	120.30
57	BB	121	G	C5-C6-O6	-12.76	120.94	128.60
57	BB	2726	A	O4'-C1'-N9	12.76	118.41	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	988	G	C5-C6-O6	-12.76	120.95	128.60
21	AA	1108	G	N1-C6-O6	12.76	127.55	119.90
15	AD	13	ARG	NE-CZ-NH2	-12.75	113.92	120.30
57	BB	5	A	N1-C2-N3	-12.75	122.93	129.30
21	AA	517	G	C5-C6-O6	-12.74	120.95	128.60
57	BB	2860	A	C5-C6-N1	-12.74	111.33	117.70
57	BB	1533	C	C5-C4-N4	-12.74	111.28	120.20
57	BB	497	A	N1-C6-N6	12.74	126.24	118.60
57	BB	933	A	N1-C6-N6	12.74	126.24	118.60
57	BB	865	C	N3-C4-N4	12.74	126.92	118.00
57	BB	2271	G	C5-C6-O6	-12.74	120.96	128.60
21	AA	1256	A	C8-N9-C4	-12.73	100.71	105.80
57	BB	2755	C	C2-N3-C4	12.73	126.27	119.90
57	BB	2886	A	N1-C6-N6	12.73	126.24	118.60
21	AA	831	A	N1-C6-N6	12.73	126.24	118.60
26	AV	64	G	N1-C6-O6	12.73	127.54	119.90
21	AA	432	A	C8-N9-C4	-12.72	100.71	105.80
57	BB	995	C	C6-N1-C2	12.72	125.39	120.30
57	BB	1664	A	N1-C6-N6	12.72	126.23	118.60
57	BB	1685	C	O4'-C1'-N1	12.72	118.38	108.20
57	BB	2078	C	O4'-C1'-N1	12.72	118.38	108.20
21	AA	1314	C	N3-C4-C5	-12.72	116.81	121.90
26	AV	49	G	C5-C6-O6	-12.72	120.97	128.60
57	BB	777	G	N1-C6-O6	12.72	127.53	119.90
57	BB	1181	U	O4'-C1'-N1	12.72	118.37	108.20
57	BB	2490	G	C5-C6-O6	-12.72	120.97	128.60
57	BB	2544	G	C5-C6-O6	-12.71	120.97	128.60
21	AA	1069	C	C6-N1-C2	12.71	125.39	120.30
57	BB	2752	C	O4'-C1'-N1	12.71	118.37	108.20
57	BB	1551	A	O4'-C1'-N9	12.71	118.37	108.20
57	BB	2006	C	N3-C4-C5	-12.71	116.82	121.90
57	BB	1755	A	N1-C6-N6	12.71	126.22	118.60
57	BB	907	G	N1-C6-O6	12.70	127.52	119.90
23	AW	25	C	N3-C4-C5	-12.70	116.82	121.90
21	AA	852	G	N9-C4-C5	12.69	110.48	105.40
21	AA	503	C	O4'-C1'-N1	12.69	118.35	108.20
57	BB	1555	G	C4-C5-C6	12.69	126.41	118.80
57	BB	52	A	N1-C6-N6	12.69	126.21	118.60
21	AA	1227	A	C8-N9-C4	-12.69	100.72	105.80
57	BB	1414	C	N3-C4-C5	-12.69	116.83	121.90
57	BB	2617	U	N3-C4-C5	-12.69	106.99	114.60
57	BB	1384	A	C5-C6-N1	-12.68	111.36	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2048	G	C5-C6-O6	-12.68	120.99	128.60
57	BB	1733	G	N1-C6-O6	12.68	127.51	119.90
57	BB	2156	G	N1-C6-O6	12.68	127.51	119.90
57	BB	1173	U	C5-C6-N1	12.68	129.04	122.70
57	BB	2599	G	C8-N9-C4	-12.68	101.33	106.40
57	BB	2799	A	C8-N9-C4	-12.67	100.73	105.80
57	BB	23	G	C5-C6-O6	-12.67	121.00	128.60
57	BB	2683	C	O4'-C1'-N1	12.67	118.33	108.20
57	BB	407	G	N1-C6-O6	12.67	127.50	119.90
21	AA	196	A	C8-N9-C4	-12.66	100.74	105.80
57	BB	213	A	O4'-C1'-N9	12.66	118.33	108.20
57	BB	1061	U	P-O3'-C3'	12.65	134.89	119.70
57	BB	2482	A	C4-C5-C6	12.65	123.33	117.00
58	BA	88	C	N3-C4-N4	12.65	126.86	118.00
23	AW	62	C	N3-C4-C5	-12.65	116.84	121.90
57	BB	260	G	N1-C6-O6	12.65	127.49	119.90
35	BP	112	ARG	NE-CZ-NH2	-12.65	113.97	120.30
57	BB	430	A	N1-C6-N6	12.65	126.19	118.60
57	BB	661	A	C4-C5-C6	12.64	123.32	117.00
57	BB	1643	G	C5-C6-O6	-12.64	121.01	128.60
57	BB	2106	U	O4'-C1'-N1	12.64	118.31	108.20
57	BB	179	C	C5-C4-N4	-12.64	111.35	120.20
57	BB	1092	C	O4'-C1'-N1	12.64	118.31	108.20
13	AB	221	ARG	NE-CZ-NH1	12.64	126.62	120.30
21	AA	491	G	C5-C6-O6	-12.64	121.02	128.60
22	AY	38	A	C5-C6-N6	-12.64	113.59	123.70
21	AA	1042	A	C5-C6-N1	-12.63	111.38	117.70
57	BB	1969	A	C2-N3-C4	-12.63	104.28	110.60
21	AA	760	G	N1-C6-O6	12.63	127.48	119.90
57	BB	1229	C	N3-C4-C5	-12.63	116.85	121.90
57	BB	2730	C	O4'-C1'-N1	12.63	118.30	108.20
21	AA	784	A	C5-C6-N6	-12.62	113.61	123.70
57	BB	2138	G	N1-C6-O6	12.62	127.47	119.90
57	BB	2719	G	C5-C6-O6	-12.62	121.03	128.60
21	AA	979	C	O4'-C1'-N1	12.61	118.29	108.20
21	AA	1044	A	N1-C6-N6	12.61	126.17	118.60
57	BB	2823	A	C8-N9-C4	-12.61	100.76	105.80
57	BB	2851	A	C8-N9-C4	-12.61	100.76	105.80
21	AA	833	G	C5-C6-O6	-12.61	121.03	128.60
57	BB	2675	A	C5-C6-N6	-12.61	113.61	123.70
21	AA	973	G	N1-C6-O6	12.61	127.46	119.90
21	AA	651	C	O4'-C1'-N1	12.60	118.28	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	712	A	C5-C6-N6	-12.60	113.62	123.70
57	BB	2381	A	N1-C6-N6	12.60	126.16	118.60
57	BB	2038	G	C6-C5-N7	-12.60	122.84	130.40
21	AA	286	C	C5-C6-N1	12.60	127.30	121.00
57	BB	282	A	N1-C6-N6	12.60	126.16	118.60
21	AA	1272	G	C5-C6-O6	-12.60	121.04	128.60
57	BB	216	A	N1-C6-N6	12.60	126.16	118.60
57	BB	2097	A	C5-C6-N1	-12.60	111.40	117.70
57	BB	1763	G	N1-C6-O6	12.59	127.46	119.90
21	AA	475	C	N3-C4-N4	12.59	126.81	118.00
57	BB	386	G	N1-C6-O6	12.59	127.45	119.90
26	AV	12	G	N1-C6-O6	12.59	127.45	119.90
21	AA	582	C	N3-C4-N4	12.59	126.81	118.00
57	BB	1470	A	N1-C6-N6	12.59	126.15	118.60
57	BB	2869	G	C5-C6-O6	-12.59	121.05	128.60
57	BB	2722	G	N1-C2-N3	-12.59	116.35	123.90
21	AA	1482	G	N9-C4-C5	-12.59	100.36	105.40
58	BA	81	G	N3-C2-N2	12.59	128.71	119.90
57	BB	265	A	O4'-C1'-N9	12.58	118.27	108.20
57	BB	285	G	C4-C5-C6	12.58	126.35	118.80
57	BB	2266	A	C5-C6-N6	-12.58	113.64	123.70
57	BB	2359	C	O4'-C1'-N1	12.58	118.26	108.20
57	BB	847	U	C5-C6-N1	12.58	128.99	122.70
57	BB	1508	A	N1-C6-N6	12.57	126.14	118.60
57	BB	2618	G	N1-C2-N3	-12.57	116.36	123.90
57	BB	2115	G	O4'-C1'-N9	12.57	118.26	108.20
57	BB	1744	A	N1-C6-N6	12.57	126.14	118.60
58	BA	75	G	N1-C6-O6	12.57	127.44	119.90
21	AA	388	G	C5'-C4'-O4'	12.57	124.18	109.10
21	AA	338	A	C5-C6-N1	-12.57	111.42	117.70
21	AA	1277	C	O4'-C1'-N1	12.57	118.25	108.20
57	BB	2153	C	C4-C5-C6	12.57	123.68	117.40
21	AA	541	G	N1-C6-O6	12.56	127.44	119.90
57	BB	1907	G	N1-C6-O6	12.56	127.44	119.90
57	BB	1445	G	C5-C6-O6	-12.56	121.06	128.60
57	BB	1030	C	O4'-C1'-N1	12.56	118.25	108.20
57	BB	2107	G	C5-C6-O6	-12.56	121.07	128.60
21	AA	1162	C	O4'-C1'-N1	12.56	118.25	108.20
57	BB	1871	A	C4-C5-C6	12.55	123.28	117.00
58	BA	83	G	N1-C6-O6	12.55	127.43	119.90
23	AW	36	A	C5-C6-N6	-12.55	113.66	123.70
57	BB	325	G	N1-C6-O6	12.55	127.43	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	177	G	N3-C4-C5	-12.55	122.33	128.60
57	BB	1182	G	N9-C4-C5	-12.55	100.38	105.40
57	BB	1669	A	C4-C5-C6	12.55	123.28	117.00
57	BB	682	G	C5-C6-O6	-12.55	121.07	128.60
57	BB	689	A	C6-N1-C2	12.54	126.13	118.60
57	BB	949	G	N1-C6-O6	12.54	127.42	119.90
21	AA	680	C	N3-C4-C5	-12.53	116.89	121.90
57	BB	1827	U	C5-C6-N1	12.53	128.96	122.70
21	AA	710	G	C5-C6-O6	-12.52	121.09	128.60
57	BB	2668	G	N1-C6-O6	12.52	127.41	119.90
57	BB	1991	U	O4'-C1'-N1	12.52	118.21	108.20
21	AA	1061	G	N1-C6-O6	12.51	127.41	119.90
57	BB	782	A	N1-C6-N6	12.51	126.11	118.60
57	BB	362	A	O4'-C1'-N9	12.51	118.21	108.20
21	AA	1028	C	N3-C4-C5	-12.51	116.90	121.90
57	BB	1218	G	O4'-C1'-N9	12.51	118.21	108.20
21	AA	831	A	C5-C6-N1	-12.51	111.45	117.70
21	AA	1362	A	N1-C6-N6	12.51	126.10	118.60
57	BB	855	G	N3-C2-N2	12.51	128.65	119.90
57	BB	2010	G	C5-C6-O6	-12.51	121.10	128.60
21	AA	113	G	N1-C6-O6	12.50	127.40	119.90
57	BB	2453	A	C5-C6-N6	-12.50	113.70	123.70
57	BB	1284	A	N1-C6-N6	12.50	126.10	118.60
57	BB	1799	G	O4'-C1'-N9	12.50	118.20	108.20
57	BB	365	U	O4'-C1'-N1	12.50	118.20	108.20
21	AA	162	A	C5-C6-N6	-12.50	113.70	123.70
21	AA	63	C	C5-C4-N4	-12.49	111.45	120.20
57	BB	2375	G	N1-C6-O6	12.49	127.40	119.90
21	AA	449	G	C5-C6-O6	-12.49	121.11	128.60
21	AA	1257	A	O4'-C1'-N9	12.49	118.19	108.20
57	BB	330	A	C5-C6-N1	-12.49	111.46	117.70
57	BB	734	A	C5-C6-N1	-12.49	111.46	117.70
26	AV	64	G	C5-N7-C8	12.48	110.54	104.30
21	AA	80	A	C5-N7-C8	12.48	110.14	103.90
21	AA	536	C	O4'-C1'-N1	12.48	118.19	108.20
57	BB	2772	C	N3-C4-N4	12.48	126.74	118.00
21	AA	470	C	N3-C4-N4	12.48	126.73	118.00
57	BB	2404	U	O4'-C1'-N1	12.48	118.18	108.20
57	BB	2525	G	N1-C6-O6	12.47	127.38	119.90
57	BB	2717	C	O4'-C1'-N1	12.47	118.18	108.20
23	AW	47	U	O4'-C1'-N1	12.47	118.18	108.20
26	AV	57	A	N1-C6-N6	12.47	126.08	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	452	G	N1-C6-O6	12.47	127.38	119.90
57	BB	2341	G	N1-C6-O6	12.47	127.38	119.90
57	BB	502	A	C5-N7-C8	12.47	110.13	103.90
57	BB	1502	A	N1-C6-N6	12.47	126.08	118.60
57	BB	845	A	C5-C6-N1	-12.47	111.47	117.70
21	AA	814	A	C5-C6-N1	-12.46	111.47	117.70
57	BB	1535	A	C5-C6-N1	-12.46	111.47	117.70
21	AA	223	A	C4-C5-C6	12.46	123.23	117.00
21	AA	987	G	N1-C6-O6	12.46	127.38	119.90
21	AA	1033	G	C5-C6-O6	-12.46	121.12	128.60
57	BB	743	A	N1-C6-N6	12.46	126.08	118.60
57	BB	2204	G	N1-C6-O6	12.46	127.38	119.90
57	BB	1958	C	N3-C4-N4	12.46	126.72	118.00
57	BB	389	G	C4-C5-C6	12.46	126.27	118.80
57	BB	2578	G	N1-C6-O6	12.46	127.37	119.90
21	AA	1525	G	N1-C2-N3	-12.45	116.43	123.90
57	BB	1085	A	N1-C6-N6	12.45	126.07	118.60
57	BB	2012	G	N3-C2-N2	12.45	128.61	119.90
57	BB	2444	G	N1-C6-O6	12.45	127.37	119.90
57	BB	2523	G	N1-C6-O6	12.45	127.37	119.90
36	BQ	69	ARG	NE-CZ-NH1	-12.45	114.08	120.30
21	AA	498	A	C4-C5-C6	12.44	123.22	117.00
57	BB	530	G	N1-C2-N3	-12.44	116.44	123.90
57	BB	2287	A	C5-C6-N6	-12.44	113.75	123.70
26	AV	43	A	C8-N9-C4	-12.44	100.82	105.80
21	AA	844	G	N3-C2-N2	12.44	128.60	119.90
23	AW	17	C	O4'-C1'-N1	12.44	118.15	108.20
57	BB	2631	G	C5-C6-O6	-12.44	121.14	128.60
22	AY	14	A	C5-C6-N1	-12.44	111.48	117.70
57	BB	71	A	C5-C6-N1	-12.43	111.48	117.70
21	AA	1347	G	N1-C6-O6	12.43	127.36	119.90
57	BB	1410	G	C4-C5-N7	12.43	115.77	110.80
57	BB	1619	G	N1-C6-O6	12.43	127.36	119.90
57	BB	2744	G	C5-C6-O6	-12.43	121.14	128.60
21	AA	1375	A	C5-C6-N6	-12.43	113.76	123.70
26	AV	21	A	N1-C6-N6	12.43	126.06	118.60
57	BB	275	C	N3-C4-N4	12.43	126.70	118.00
57	BB	1925	C	N3-C4-C5	-12.43	116.93	121.90
57	BB	2831	G	C5-C6-O6	-12.43	121.14	128.60
21	AA	10	A	C5-C6-N6	-12.42	113.76	123.70
21	AA	818	G	C5-C6-O6	-12.42	121.15	128.60
21	AA	1374	A	C5-C6-N6	-12.42	113.76	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	137	U	O4'-C1'-N1	12.42	118.14	108.20
21	AA	946	A	C4-C5-C6	12.42	123.21	117.00
23	AW	35	A	O4'-C1'-N9	12.42	118.13	108.20
57	BB	1117	C	N3-C4-N4	12.42	126.69	118.00
57	BB	2862	G	O4'-C1'-N9	12.42	118.13	108.20
57	BB	753	A	C5-C6-N1	-12.41	111.49	117.70
57	BB	209	C	C6-N1-C2	-12.41	115.34	120.30
21	AA	1379	G	O4'-C1'-N9	12.41	118.13	108.20
23	AW	74	C	C6-N1-C2	-12.41	115.34	120.30
57	BB	1735	A	C5-C6-N6	-12.41	113.78	123.70
57	BB	44	A	C4-C5-C6	12.40	123.20	117.00
57	BB	2670	A	O4'-C1'-N9	12.40	118.12	108.20
57	BB	1233	C	C6-N1-C2	-12.40	115.34	120.30
57	BB	2327	A	N1-C6-N6	12.40	126.04	118.60
58	BA	57	A	N9-C4-C5	12.40	110.76	105.80
57	BB	2833	U	O4'-C1'-N1	12.39	118.12	108.20
21	AA	440	C	O4'-C1'-N1	12.39	118.11	108.20
57	BB	1216	G	N9-C4-C5	12.39	110.36	105.40
57	BB	1685	C	C6-N1-C2	-12.39	115.34	120.30
57	BB	2732	G	N1-C6-O6	12.39	127.33	119.90
57	BB	2887	A	N1-C6-N6	12.39	126.03	118.60
21	AA	777	A	O4'-C1'-N9	12.39	118.11	108.20
21	AA	897	C	N3-C4-N4	12.39	126.67	118.00
57	BB	408	G	O4'-C1'-N9	12.39	118.11	108.20
57	BB	2487	G	N1-C6-O6	12.38	127.33	119.90
57	BB	2827	C	N3-C4-N4	12.38	126.67	118.00
22	AY	70	C	C6-N1-C2	12.38	125.25	120.30
21	AA	765	G	N1-C6-O6	12.37	127.32	119.90
21	AA	1188	A	C5-C6-N6	-12.38	113.80	123.70
22	AY	47	U	C5-C6-N1	12.37	128.88	122.70
57	BB	2540	C	N3-C4-C5	-12.37	116.95	121.90
57	BB	270	A	C5-C6-N1	-12.37	111.52	117.70
57	BB	361	G	C5-C6-O6	-12.37	121.18	128.60
23	AW	2	C	N3-C4-C5	-12.37	116.95	121.90
57	BB	737	C	O4'-C1'-N1	12.37	118.09	108.20
57	BB	1577	C	O4'-C1'-N1	12.37	118.09	108.20
57	BB	2196	C	O4'-C1'-N1	12.37	118.09	108.20
21	AA	1317	C	O4'-C1'-N1	12.36	118.09	108.20
57	BB	340	A	N1-C6-N6	12.36	126.02	118.60
57	BB	679	C	C6-N1-C2	-12.36	115.36	120.30
21	AA	607	A	C4-C5-C6	12.36	123.18	117.00
57	BB	1261	C	O4'-C1'-N1	12.36	118.08	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1384	A	C4-C5-C6	12.35	123.18	117.00
57	BB	2884	U	N3-C4-O4	12.35	128.04	119.40
57	BB	2175	C	O4'-C1'-N1	12.35	118.08	108.20
57	BB	1637	A	C4-C5-C6	12.34	123.17	117.00
57	BB	1573	G	N1-C6-O6	12.34	127.31	119.90
57	BB	2391	G	C5-C6-O6	-12.34	121.20	128.60
57	BB	602	A	C4-C5-C6	12.33	123.17	117.00
57	BB	1833	C	N3-C4-C5	-12.33	116.97	121.90
57	BB	146	A	C5-C6-N6	-12.33	113.84	123.70
57	BB	885	C	O4'-C1'-N1	12.33	118.06	108.20
57	BB	2614	A	N1-C6-N6	12.33	126.00	118.60
21	AA	144	G	O4'-C1'-N9	12.33	118.06	108.20
21	AA	1310	G	O4'-C1'-N9	12.33	118.06	108.20
57	BB	1137	G	C5-C6-O6	-12.33	121.20	128.60
57	BB	2274	A	C5-C6-N6	-12.33	113.84	123.70
57	BB	1512	C	N3-C4-C5	-12.32	116.97	121.90
21	AA	816	A	C8-N9-C4	-12.32	100.87	105.80
21	AA	1383	C	O4'-C1'-N1	12.32	118.06	108.20
57	BB	2481	G	C2-N3-C4	12.32	118.06	111.90
21	AA	778	G	N1-C6-O6	12.32	127.29	119.90
21	AA	1080	A	N1-C6-N6	12.32	125.99	118.60
57	BB	1593	A	C5-N7-C8	12.32	110.06	103.90
57	BB	2086	U	O4'-C1'-N1	12.32	118.06	108.20
21	AA	1434	A	N1-C6-N6	12.32	125.99	118.60
57	BB	715	A	N7-C8-N9	12.32	119.96	113.80
57	BB	2208	C	O4'-C1'-N1	12.32	118.05	108.20
21	AA	284	C	N3-C4-C5	-12.31	116.97	121.90
21	AA	1230	C	C6-N1-C2	-12.31	115.37	120.30
22	AY	20	G	N1-C6-O6	12.31	127.29	119.90
23	AW	11	C	N3-C4-C5	-12.31	116.97	121.90
57	BB	67	U	N1-C2-N3	-12.31	107.51	114.90
57	BB	1150	C	C5-C6-N1	12.31	127.16	121.00
57	BB	1361	G	C5-C6-O6	-12.31	121.21	128.60
57	BB	1803	A	N1-C2-N3	12.31	135.46	129.30
22	AY	4	G	C5-C6-O6	-12.31	121.21	128.60
57	BB	1448	G	N1-C6-O6	12.31	127.28	119.90
57	BB	2248	C	C5-C6-N1	12.31	127.15	121.00
21	AA	337	G	N1-C6-O6	12.31	127.28	119.90
21	AA	541	G	O4'-C1'-N9	12.31	118.05	108.20
21	AA	606	G	N1-C2-N3	-12.31	116.52	123.90
21	AA	635	A	C2-N3-C4	12.30	116.75	110.60
57	BB	1037	G	C5-C6-O6	-12.30	121.22	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1508	A	C8-N9-C4	-12.30	100.88	105.80
58	BA	84	G	N1-C6-O6	12.30	127.28	119.90
21	AA	1318	A	C2-N3-C4	-12.29	104.45	110.60
54	BF	94	ARG	NE-CZ-NH1	12.29	126.45	120.30
57	BB	1788	C	O4'-C1'-N1	12.29	118.04	108.20
13	AB	29	PHE	CB-CG-CD1	-12.29	112.20	120.80
57	BB	1099	G	C5-C6-O6	-12.29	121.23	128.60
21	AA	312	C	N3-C4-N4	12.29	126.60	118.00
57	BB	2205	A	N1-C6-N6	12.28	125.97	118.60
21	AA	331	G	C5-C6-O6	-12.28	121.23	128.60
45	BC	216	ARG	NE-CZ-NH1	12.28	126.44	120.30
57	BB	1238	G	N1-C6-O6	12.28	127.27	119.90
57	BB	1239	G	C8-N9-C4	-12.28	101.49	106.40
57	BB	1483	G	C5-C6-O6	-12.28	121.23	128.60
21	AA	777	A	N1-C6-N6	12.28	125.97	118.60
57	BB	331	C	C5-C6-N1	12.28	127.14	121.00
57	BB	2541	A	C5-C6-N1	-12.27	111.56	117.70
21	AA	453	G	C5-C6-O6	-12.27	121.24	128.60
57	BB	2823	A	N1-C6-N6	12.27	125.96	118.60
57	BB	1048	A	O4'-C1'-N9	12.27	118.01	108.20
57	BB	257	C	C5-C6-N1	12.26	127.13	121.00
57	BB	1673	G	N1-C6-O6	12.26	127.26	119.90
21	AA	675	A	N1-C6-N6	12.26	125.96	118.60
57	BB	2420	C	N3-C4-N4	12.26	126.58	118.00
21	AA	1339	A	C5-C6-N1	-12.26	111.57	117.70
30	BK	70	ARG	NE-CZ-NH1	12.26	126.43	120.30
57	BB	1772	A	C5-C6-N6	-12.26	113.89	123.70
21	AA	973	G	C5-C6-O6	-12.26	121.25	128.60
57	BB	1296	G	C8-N9-C4	-12.26	101.50	106.40
21	AA	992	U	O4'-C1'-N1	12.26	118.00	108.20
57	BB	670	A	N1-C6-N6	12.26	125.95	118.60
21	AA	1187	G	N1-C6-O6	12.25	127.25	119.90
57	BB	332	A	C4-C5-C6	12.25	123.13	117.00
57	BB	1041	G	N1-C6-O6	12.25	127.25	119.90
21	AA	1120	C	N3-C4-C5	-12.25	117.00	121.90
57	BB	77	G	C5-N7-C8	12.25	110.43	104.30
57	BB	172	A	N1-C6-N6	12.25	125.95	118.60
21	AA	1496	C	N3-C4-N4	12.25	126.57	118.00
57	BB	817	C	O4'-C1'-N1	12.25	118.00	108.20
57	BB	2713	U	O4'-C1'-N1	12.25	118.00	108.20
21	AA	298	A	N1-C2-N3	12.24	135.42	129.30
21	AA	627	G	O4'-C1'-N9	12.24	118.00	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	584	C	N3-C4-C5	-12.24	117.00	121.90
21	AA	238	A	N1-C2-N3	12.23	135.42	129.30
57	BB	382	A	N1-C6-N6	12.23	125.94	118.60
57	BB	2447	G	C5-C6-O6	-12.23	121.26	128.60
21	AA	956	U	O4'-C1'-N1	12.23	117.99	108.20
21	AA	1244	G	N1-C6-O6	12.23	127.24	119.90
57	BB	2378	A	C8-N9-C4	-12.23	100.91	105.80
21	AA	223	A	N7-C8-N9	12.23	119.92	113.80
21	AA	453	G	C4-C5-N7	12.23	115.69	110.80
57	BB	2255	G	N1-C6-O6	12.23	127.24	119.90
57	BB	70	G	N3-C2-N2	12.22	128.46	119.90
57	BB	1164	C	N3-C4-C5	-12.22	117.01	121.90
21	AA	613	C	O4'-C1'-N1	12.22	117.98	108.20
21	AA	1316	G	N3-C2-N2	12.22	128.46	119.90
21	AA	263	A	N1-C6-N6	12.22	125.93	118.60
21	AA	1534	A	N1-C6-N6	12.22	125.93	118.60
57	BB	2150	C	O4'-C1'-N1	12.22	117.97	108.20
21	AA	91	U	O4'-C1'-N1	12.21	117.97	108.20
57	BB	194	G	N1-C6-O6	12.21	127.23	119.90
57	BB	2039	U	O4'-C1'-N1	12.21	117.97	108.20
57	BB	2896	C	N3-C4-N4	12.21	126.55	118.00
21	AA	22	G	C5-C6-O6	-12.21	121.28	128.60
57	BB	950	G	C5-C6-O6	-12.21	121.27	128.60
57	BB	1232	G	N1-C6-O6	12.21	127.22	119.90
58	BA	110	C	O4'-C1'-N1	12.21	117.96	108.20
57	BB	1893	C	O4'-C1'-N1	12.20	117.96	108.20
57	BB	2758	A	N1-C6-N6	12.20	125.92	118.60
57	BB	2397	G	C6-N1-C2	12.20	132.42	125.10
57	BB	2466	C	N3-C4-C5	-12.20	117.02	121.90
57	BB	1406	U	C5-C6-N1	12.20	128.80	122.70
21	AA	1367	C	O4'-C1'-N1	12.19	117.95	108.20
57	BB	2261	C	C6-N1-C2	-12.19	115.42	120.30
57	BB	1504	A	N1-C6-N6	12.19	125.91	118.60
57	BB	2896	C	C6-N1-C2	-12.19	115.42	120.30
21	AA	728	A	C5-C6-N6	-12.19	113.95	123.70
57	BB	172	A	O4'-C1'-N9	12.19	117.95	108.20
57	BB	262	A	C5-C6-N1	-12.19	111.61	117.70
57	BB	1471	G	C6-N1-C2	12.19	132.41	125.10
21	AA	631	C	N3-C4-C5	-12.18	117.03	121.90
23	AW	63	G	N3-C4-N9	12.18	133.31	126.00
57	BB	2351	G	N1-C6-O6	12.18	127.21	119.90
57	BB	555	G	N3-C2-N2	12.18	128.43	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1273	U	N1-C2-N3	-12.18	107.59	114.90
57	BB	2025	C	N3-C4-C5	-12.18	117.03	121.90
21	AA	386	C	O4'-C1'-N1	12.18	117.94	108.20
57	BB	545	U	C5-C4-O4	-12.18	118.59	125.90
57	BB	2097	A	C5-C6-N6	-12.18	113.96	123.70
21	AA	602	A	N1-C6-N6	12.17	125.91	118.60
57	BB	1471	G	C5-C6-N1	-12.17	105.41	111.50
57	BB	1509	A	C8-N9-C4	-12.17	100.93	105.80
21	AA	1394	A	C2-N3-C4	-12.17	104.52	110.60
23	AW	33	U	C5-C4-O4	-12.17	118.60	125.90
57	BB	176	A	C6-C5-N7	-12.17	123.78	132.30
57	BB	784	G	O4'-C1'-N9	12.17	117.93	108.20
57	BB	1738	G	N1-C6-O6	12.17	127.20	119.90
21	AA	444	G	C5-C6-O6	-12.16	121.30	128.60
57	BB	2366	A	C6-N1-C2	-12.16	111.30	118.60
57	BB	549	G	C5-C6-O6	-12.16	121.30	128.60
21	AA	1227	A	N1-C6-N6	12.16	125.89	118.60
57	BB	127	A	N3-C4-N9	12.16	137.13	127.40
57	BB	2463	C	O4'-C1'-N1	12.16	117.93	108.20
57	BB	2411	A	N7-C8-N9	12.15	119.88	113.80
21	AA	1533	C	N3-C4-N4	12.15	126.51	118.00
57	BB	323	C	N3-C4-N4	12.15	126.51	118.00
21	AA	465	A	C5-C6-N1	-12.15	111.62	117.70
21	AA	602	A	C5-C6-N6	-12.15	113.98	123.70
57	BB	1245	G	C5-C6-O6	-12.15	121.31	128.60
52	BD	46	ARG	NE-CZ-NH2	-12.15	114.23	120.30
57	BB	798	G	N1-C6-O6	12.15	127.19	119.90
57	BB	2694	G	N1-C6-O6	12.15	127.19	119.90
57	BB	2762	C	O4'-C1'-N1	12.15	117.92	108.20
57	BB	1362	C	O4'-C1'-N1	12.14	117.92	108.20
57	BB	2701	U	O4'-C1'-N1	12.14	117.92	108.20
57	BB	160	A	N1-C6-N6	12.14	125.89	118.60
57	BB	1613	G	C5-C6-O6	-12.14	121.31	128.60
21	AA	1289	A	C5-C6-N6	-12.14	113.99	123.70
21	AA	1428	A	N1-C6-N6	12.14	125.88	118.60
21	AA	496	A	N1-C6-N6	12.13	125.88	118.60
21	AA	582	C	N3-C4-C5	-12.14	117.05	121.90
21	AA	1513	A	C5-C6-N1	-12.13	111.63	117.70
57	BB	1989	G	N1-C6-O6	12.14	127.18	119.90
57	BB	1037	G	N1-C6-O6	12.13	127.18	119.90
21	AA	1331	G	C5-C6-N1	-12.13	105.44	111.50
32	BM	51	ARG	NE-CZ-NH2	-12.13	114.23	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	994	A	C5-N7-C8	12.13	109.96	103.90
21	AA	1533	C	C2-N3-C4	12.13	125.97	119.90
57	BB	517	C	O4'-C1'-N1	12.13	117.90	108.20
57	BB	1272	A	C5-C6-N6	-12.13	114.00	123.70
57	BB	2228	G	N1-C6-O6	12.12	127.17	119.90
21	AA	1352	C	N3-C4-C5	-12.12	117.05	121.90
57	BB	2271	G	N1-C2-N3	-12.12	116.63	123.90
2	AK	126	ARG	NE-CZ-NH2	-12.12	114.24	120.30
57	BB	344	A	N1-C6-N6	12.12	125.87	118.60
57	BB	923	G	C5-C6-O6	-12.12	121.33	128.60
21	AA	521	G	C5-C6-O6	-12.11	121.33	128.60
57	BB	2309	A	N1-C2-N3	12.11	135.36	129.30
58	BA	37	C	C4-C5-C6	12.11	123.46	117.40
21	AA	43	C	O4'-C1'-N1	12.11	117.89	108.20
21	AA	1231	G	N1-C6-O6	12.11	127.17	119.90
21	AA	193	C	O4'-C1'-N1	12.11	117.89	108.20
21	AA	324	G	C5-C6-O6	-12.11	121.34	128.60
21	AA	631	C	O4'-C1'-N1	12.11	117.89	108.20
57	BB	2207	C	N3-C4-N4	12.11	126.47	118.00
57	BB	58	G	N1-C2-N3	-12.10	116.64	123.90
21	AA	1244	G	N9-C4-C5	12.10	110.24	105.40
21	AA	1258	G	N3-C2-N2	12.10	128.37	119.90
57	BB	2828	G	N1-C2-N3	-12.10	116.64	123.90
21	AA	881	G	N1-C6-O6	12.10	127.16	119.90
57	BB	1855	U	O4'-C1'-N1	12.10	117.88	108.20
21	AA	824	G	C5-C6-O6	-12.09	121.34	128.60
57	BB	436	C	O4'-C1'-N1	12.09	117.87	108.20
57	BB	885	C	N3-C4-C5	-12.09	117.06	121.90
21	AA	109	A	N7-C8-N9	-12.09	107.75	113.80
21	AA	350	G	N3-C2-N2	12.09	128.36	119.90
21	AA	1110	A	O4'-C1'-N9	12.09	117.87	108.20
21	AA	1222	G	O4'-C1'-N9	12.09	117.87	108.20
57	BB	1221	C	O4'-C1'-N1	12.09	117.87	108.20
57	BB	2710	C	N3-C4-C5	-12.09	117.06	121.90
57	BB	2741	A	N1-C6-N6	12.09	125.85	118.60
21	AA	129	A	N1-C6-N6	12.09	125.85	118.60
21	AA	771	G	N1-C6-O6	12.08	127.15	119.90
21	AA	1319	A	C4-C5-C6	12.08	123.04	117.00
21	AA	134	G	C5-C6-O6	-12.08	121.35	128.60
57	BB	347	A	C4-C5-C6	12.08	123.04	117.00
57	BB	2493	U	O4'-C1'-N1	12.08	117.86	108.20
21	AA	179	A	C4-C5-C6	12.08	123.04	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1959	G	N1-C6-O6	12.07	127.14	119.90
21	AA	152	A	O4'-C1'-N9	12.07	117.86	108.20
21	AA	167	A	C5-C6-N6	-12.07	114.04	123.70
21	AA	873	A	N1-C6-N6	12.07	125.84	118.60
57	BB	1448	G	C5-C6-O6	-12.07	121.36	128.60
57	BB	2452	C	O4'-C1'-N1	12.07	117.85	108.20
21	AA	532	A	C8-N9-C4	-12.07	100.97	105.80
57	BB	2821	A	O4'-C1'-N9	12.07	117.85	108.20
21	AA	441	A	C6-C5-N7	-12.06	123.86	132.30
57	BB	1214	A	N1-C2-N3	-12.06	123.27	129.30
21	AA	748	G	C5-C6-O6	-12.06	121.36	128.60
4	AM	86	ARG	NE-CZ-NH2	-12.06	114.27	120.30
21	AA	919	A	C4-C5-C6	12.06	123.03	117.00
57	BB	2899	A	N1-C6-N6	12.05	125.83	118.60
21	AA	1107	C	C4-C5-C6	12.05	123.42	117.40
57	BB	305	C	N3-C4-C5	-12.05	117.08	121.90
57	BB	891	G	C1'-O4'-C4'	-12.04	100.27	109.90
57	BB	1532	A	N1-C6-N6	12.04	125.83	118.60
21	AA	745	G	C5-C6-O6	-12.04	121.38	128.60
36	BQ	27	ARG	NE-CZ-NH1	12.04	126.32	120.30
21	AA	363	A	N1-C6-N6	12.04	125.82	118.60
57	BB	1264	A	C4-C5-C6	12.04	123.02	117.00
22	AY	3	G	O4'-C1'-N9	12.03	117.83	108.20
57	BB	679	C	N3-C4-C5	-12.03	117.09	121.90
57	BB	1452	G	P-O3'-C3'	12.03	134.14	119.70
57	BB	2829	A	C4-C5-C6	12.03	123.02	117.00
57	BB	1342	A	C5-N7-C8	12.03	109.92	103.90
57	BB	212	G	C5-C6-O6	-12.03	121.38	128.60
57	BB	2748	A	C5-C6-N1	-12.03	111.69	117.70
21	AA	68	G	C5-C6-O6	-12.03	121.38	128.60
21	AA	895	G	C5-C6-O6	-12.03	121.38	128.60
26	AV	70	G	N9-C4-C5	12.03	110.21	105.40
57	BB	1371	G	N1-C6-O6	12.02	127.11	119.90
21	AA	191	G	C8-N9-C4	-12.02	101.59	106.40
57	BB	828	U	N3-C4-O4	12.02	127.81	119.40
57	BB	2523	G	C5-C6-O6	-12.02	121.39	128.60
21	AA	113	G	O4'-C1'-N9	12.02	117.81	108.20
57	BB	1450	G	C5-C6-O6	-12.02	121.39	128.60
57	BB	2851	A	N9-C4-C5	12.02	110.61	105.80
57	BB	1608	A	C4-C5-C6	12.01	123.01	117.00
21	AA	595	A	C5-C6-N6	-12.01	114.09	123.70
57	BB	742	A	C4-C5-C6	12.01	123.01	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1615	C	N3-C4-C5	-12.01	117.09	121.90
57	BB	2207	C	C5-C4-N4	-12.01	111.79	120.20
57	BB	2642	G	C5-C6-O6	-12.01	121.39	128.60
21	AA	590	U	O4'-C1'-N1	12.01	117.81	108.20
21	AA	1310	G	C5-C6-O6	-12.01	121.39	128.60
21	AA	1021	A	C4-C5-C6	12.01	123.00	117.00
57	BB	1483	G	N1-C6-O6	12.01	127.10	119.90
57	BB	339	U	O4'-C1'-N1	12.00	117.80	108.20
21	AA	1375	A	C5-N7-C8	12.00	109.90	103.90
57	BB	398	C	O4'-C1'-N1	12.00	117.80	108.20
57	BB	681	G	N1-C6-O6	12.00	127.10	119.90
57	BB	2471	A	O4'-C1'-N9	12.00	117.80	108.20
21	AA	6	G	C2-N3-C4	11.99	117.90	111.90
57	BB	978	G	C5-C6-O6	-11.99	121.40	128.60
21	AA	159	G	N1-C6-O6	11.99	127.09	119.90
58	BA	8	C	C5-C4-N4	-11.99	111.81	120.20
57	BB	335	C	N3-C4-N4	11.99	126.39	118.00
57	BB	1518	C	N3-C4-N4	11.99	126.39	118.00
57	BB	1171	G	N1-C2-N3	-11.99	116.71	123.90
57	BB	1163	G	C8-N9-C4	11.98	111.19	106.40
57	BB	1259	G	N1-C6-O6	11.98	127.09	119.90
57	BB	1949	G	C5-C6-N1	11.98	117.49	111.50
21	AA	978	A	N1-C6-N6	11.98	125.79	118.60
57	BB	1745	A	N1-C6-N6	11.98	125.79	118.60
21	AA	1492	A	N1-C6-N6	11.98	125.79	118.60
57	BB	821	A	N1-C6-N6	11.97	125.78	118.60
21	AA	190	A	C5-C6-N1	-11.97	111.72	117.70
57	BB	634	C	O4'-C1'-N1	11.97	117.77	108.20
21	AA	1516	G	N1-C6-O6	11.97	127.08	119.90
57	BB	2153	C	C6-N1-C2	-11.96	115.51	120.30
57	BB	2212	A	O4'-C1'-N9	11.97	117.77	108.20
57	BB	2318	G	N3-C2-N2	11.96	128.28	119.90
57	BB	2776	A	N1-C6-N6	11.97	125.78	118.60
21	AA	1294	G	N1-C6-O6	11.96	127.08	119.90
57	BB	1514	G	N1-C6-O6	11.96	127.08	119.90
21	AA	353	A	C5-C6-N1	-11.96	111.72	117.70
57	BB	227	A	C4-C5-C6	11.96	122.98	117.00
21	AA	1217	C	N3-C4-N4	11.95	126.37	118.00
57	BB	1759	A	C4-C5-C6	11.96	122.98	117.00
26	AV	23	C	C4-C5-C6	11.95	123.38	117.40
57	BB	1231	U	O4'-C1'-N1	11.95	117.76	108.20
57	BB	1606	C	N3-C4-C5	-11.95	117.12	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	702	A	C4-C5-N7	-11.95	104.72	110.70
22	AY	56	C	C2-N3-C4	11.95	125.87	119.90
21	AA	958	A	C5-N7-C8	11.95	109.87	103.90
57	BB	916	G	N1-C6-O6	11.95	127.07	119.90
57	BB	2532	G	C6-C5-N7	-11.95	123.23	130.40
57	BB	1233	C	C5-C6-N1	11.95	126.97	121.00
21	AA	597	G	O4'-C1'-N9	11.94	117.75	108.20
57	BB	1920	C	O4'-C1'-N1	11.94	117.75	108.20
57	BB	2532	G	C4-C5-C6	11.94	125.97	118.80
21	AA	99	C	O4'-C1'-N1	11.94	117.75	108.20
21	AA	1404	C	C6-N1-C2	-11.94	115.52	120.30
57	BB	465	G	N3-C2-N2	11.94	128.26	119.90
57	BB	1469	A	C5-N7-C8	11.94	109.87	103.90
57	BB	804	A	C5-C6-N1	-11.94	111.73	117.70
57	BB	1703	G	O4'-C1'-N9	11.94	117.75	108.20
57	BB	1726	C	N3-C4-C5	-11.94	117.12	121.90
22	AY	3	G	N3-C4-C5	-11.93	122.63	128.60
57	BB	1870	C	O4'-C1'-N1	11.93	117.75	108.20
57	BB	2664	G	C5-C6-O6	-11.93	121.44	128.60
21	AA	342	C	N3-C4-C5	-11.93	117.13	121.90
57	BB	1453	A	N1-C6-N6	11.93	125.76	118.60
21	AA	1278	G	P-O3'-C3'	11.93	134.01	119.70
21	AA	130	A	C5-C6-N6	-11.93	114.16	123.70
57	BB	452	G	C5-C6-O6	-11.92	121.44	128.60
21	AA	1361	G	O4'-C1'-N9	11.92	117.74	108.20
57	BB	816	C	O4'-C1'-N1	11.92	117.74	108.20
57	BB	2744	G	N1-C6-O6	11.92	127.05	119.90
20	AI	40	ARG	NE-CZ-NH2	-11.92	114.34	120.30
21	AA	1053	G	C5-C6-O6	-11.92	121.45	128.60
57	BB	266	G	N1-C6-O6	11.92	127.05	119.90
57	BB	558	U	O4'-C1'-N1	11.92	117.74	108.20
57	BB	1154	G	C8-N9-C4	-11.92	101.63	106.40
21	AA	1197	A	N1-C6-N6	11.92	125.75	118.60
21	AA	1416	G	C5-C6-O6	-11.92	121.45	128.60
57	BB	157	C	N3-C4-C5	-11.92	117.13	121.90
57	BB	1305	C	O4'-C1'-N1	11.92	117.73	108.20
56	BH	68	ARG	NE-CZ-NH2	11.91	126.26	120.30
57	BB	1414	C	C6-N1-C2	-11.91	115.53	120.30
57	BB	1656	C	O4'-C1'-N1	11.91	117.73	108.20
21	AA	877	G	N1-C6-O6	11.91	127.04	119.90
57	BB	2614	A	C5-C6-N6	-11.91	114.17	123.70
21	AA	854	U	C5-C4-O4	-11.90	118.76	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1364	U	O4'-C1'-N1	11.90	117.72	108.20
19	AH	79	ARG	NE-CZ-NH2	-11.90	114.35	120.30
21	AA	1514	G	N1-C6-O6	11.90	127.04	119.90
21	AA	1042	A	C4-C5-C6	11.90	122.95	117.00
55	BG	68	ARG	NE-CZ-NH2	-11.90	114.35	120.30
57	BB	2015	A	N1-C6-N6	11.90	125.74	118.60
57	BB	2759	G	N1-C6-O6	11.89	127.04	119.90
58	BA	37	C	N3-C4-C5	-11.89	117.14	121.90
57	BB	574	A	C4-C5-C6	11.89	122.95	117.00
21	AA	676	A	N1-C6-N6	11.89	125.73	118.60
57	BB	77	G	N1-C6-O6	11.89	127.03	119.90
57	BB	2648	G	N1-C2-N3	-11.89	116.77	123.90
57	BB	190	A	C5-C6-N6	-11.89	114.19	123.70
57	BB	2499	C	N3-C4-C5	-11.89	117.14	121.90
57	BB	2228	G	C5-C6-O6	-11.89	121.47	128.60
21	AA	1354	U	O4'-C1'-N1	11.88	117.71	108.20
57	BB	1445	G	C4-C5-N7	11.88	115.55	110.80
21	AA	436	C	O4'-C1'-N1	11.88	117.70	108.20
57	BB	1477	A	C5-C6-N6	-11.88	114.19	123.70
57	BB	2397	G	N1-C6-O6	11.88	127.03	119.90
22	AY	8	U	O4'-C1'-N1	11.88	117.70	108.20
21	AA	25	C	O4'-C1'-N1	11.88	117.70	108.20
21	AA	1248	A	N1-C6-N6	11.88	125.73	118.60
57	BB	362	A	C5-C6-N6	-11.88	114.20	123.70
58	BA	44	G	C5-C6-O6	-11.88	121.47	128.60
21	AA	1089	G	C5-C6-O6	-11.88	121.47	128.60
21	AA	889	A	N1-C6-N6	11.87	125.72	118.60
26	AV	26	G	O4'-C1'-N9	11.87	117.70	108.20
57	BB	1800	C	C6-N1-C2	-11.87	115.55	120.30
57	BB	753	A	C4-C5-C6	11.87	122.94	117.00
21	AA	169	C	O4'-C1'-N1	11.87	117.69	108.20
57	BB	2347	C	O4'-C1'-N1	11.87	117.69	108.20
57	BB	2828	G	N3-C2-N2	11.87	128.21	119.90
57	BB	195	A	N1-C6-N6	11.87	125.72	118.60
57	BB	729	G	N1-C6-O6	11.87	127.02	119.90
57	BB	2632	A	N1-C6-N6	11.87	125.72	118.60
21	AA	98	A	C5-C6-N6	-11.86	114.21	123.70
21	AA	937	A	N1-C6-N6	11.86	125.72	118.60
21	AA	1012	A	C5-C6-N6	-11.86	114.21	123.70
57	BB	495	G	C5-C6-O6	-11.86	121.48	128.60
57	BB	1296	G	C4-C5-N7	11.86	115.54	110.80
57	BB	2178	C	O4'-C1'-N1	11.86	117.69	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	75	G	C8-N9-C4	-11.86	101.66	106.40
57	BB	2603	G	N1-C6-O6	11.86	127.01	119.90
21	AA	1255	G	C4-C5-N7	-11.85	106.06	110.80
21	AA	862	C	C5-C4-N4	11.85	128.50	120.20
21	AA	9	G	C5-C6-O6	-11.85	121.49	128.60
57	BB	2097	A	C4-C5-C6	11.85	122.92	117.00
58	BA	2	G	C6-C5-N7	-11.85	123.29	130.40
21	AA	673	A	N1-C6-N6	11.84	125.71	118.60
57	BB	170	U	O4'-C1'-N1	11.84	117.67	108.20
57	BB	532	A	C4-C5-C6	11.84	122.92	117.00
57	BB	997	G	C2-N3-C4	11.84	117.82	111.90
57	BB	2588	G	C4-C5-N7	11.84	115.54	110.80
57	BB	2736	A	C5-C6-N6	-11.84	114.23	123.70
21	AA	417	G	C8-N9-C4	-11.84	101.66	106.40
21	AA	1069	C	C5-C6-N1	-11.84	115.08	121.00
57	BB	1237	A	N1-C6-N6	11.84	125.70	118.60
57	BB	296	U	C5-C4-O4	-11.84	118.80	125.90
58	BA	47	C	O4'-C1'-N1	11.84	117.67	108.20
21	AA	1401	G	C5-C6-O6	-11.84	121.50	128.60
21	AA	527	G	C5-C6-O6	-11.84	121.50	128.60
57	BB	731	C	N3-C4-C5	-11.84	117.17	121.90
57	BB	1595	C	N3-C4-C5	-11.84	117.17	121.90
57	BB	2274	A	C5-C6-N1	-11.83	111.78	117.70
57	BB	2532	G	N1-C6-O6	11.83	127.00	119.90
21	AA	728	A	N1-C6-N6	11.83	125.70	118.60
57	BB	2090	A	N1-C6-N6	11.83	125.70	118.60
57	BB	2706	A	N1-C6-N6	11.83	125.70	118.60
57	BB	156	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	1640	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	861	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	1216	G	C4-C5-C6	11.82	125.89	118.80
21	AA	840	C	C5-C4-N4	-11.82	111.93	120.20
21	AA	1257	A	C5-N7-C8	11.82	109.81	103.90
21	AA	1396	A	N9-C4-C5	-11.82	101.07	105.80
57	BB	372	G	N1-C6-O6	11.82	126.99	119.90
57	BB	2147	A	C5-C6-N1	-11.82	111.79	117.70
23	AW	71	G	N1-C6-O6	11.82	126.99	119.90
57	BB	192	C	O4'-C1'-N1	11.82	117.66	108.20
58	BA	51	G	C5-C6-O6	-11.82	121.51	128.60
57	BB	1277	G	N1-C6-O6	11.81	126.99	119.90
57	BB	1429	G	O4'-C1'-N9	11.81	117.65	108.20
57	BB	1593	A	O4'-C1'-N9	11.81	117.65	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	AS	31	ARG	NE-CZ-NH1	11.81	126.20	120.30
57	BB	1986	C	N3-C4-C5	-11.81	117.18	121.90
2	AK	121	ARG	NE-CZ-NH2	-11.81	114.40	120.30
21	AA	479	U	O4'-C1'-N1	11.81	117.65	108.20
21	AA	1338	G	C2-N3-C4	11.81	117.80	111.90
21	AA	1045	C	O4'-C1'-N1	11.81	117.64	108.20
57	BB	1209	U	O4'-C1'-N1	11.81	117.64	108.20
57	BB	2284	A	C6-N1-C2	-11.81	111.52	118.60
21	AA	490	C	C6-N1-C2	-11.80	115.58	120.30
21	AA	307	C	N3-C4-C5	-11.80	117.18	121.90
21	AA	923	A	C5-C6-N6	-11.80	114.26	123.70
21	AA	1113	C	O4'-C1'-N1	11.80	117.64	108.20
57	BB	556	A	N1-C6-N6	11.80	125.68	118.60
57	BB	2120	G	N7-C8-N9	11.80	119.00	113.10
21	AA	501	C	N3-C4-N4	11.80	126.26	118.00
57	BB	250	G	C6-C5-N7	-11.80	123.32	130.40
57	BB	1129	A	N1-C6-N6	11.80	125.68	118.60
57	BB	1289	C	N3-C4-N4	11.80	126.26	118.00
57	BB	2047	C	O4'-C1'-N1	11.80	117.64	108.20
57	BB	975	A	N1-C6-N6	11.80	125.68	118.60
57	BB	2073	C	C2-N3-C4	11.80	125.80	119.90
21	AA	128	G	C5-C6-O6	-11.79	121.52	128.60
21	AA	388	G	C5-C6-N1	-11.79	105.60	111.50
57	BB	2434	A	N1-C6-N6	11.79	125.68	118.60
57	BB	36	G	N1-C6-O6	11.79	126.97	119.90
57	BB	866	A	C4-C5-C6	11.79	122.89	117.00
57	BB	327	G	C5-C6-O6	-11.79	121.53	128.60
21	AA	84	U	N3-C4-C5	-11.79	107.53	114.60
57	BB	196	A	O4'-C1'-N9	11.79	117.63	108.20
57	BB	592	A	C5-C6-N1	-11.79	111.81	117.70
57	BB	1780	A	C4-C5-C6	11.78	122.89	117.00
57	BB	1909	C	O4'-C1'-N1	11.79	117.63	108.20
57	BB	2178	C	P-O3'-C3'	11.78	133.84	119.70
57	BB	2737	G	N1-C6-O6	11.79	126.97	119.90
57	BB	278	A	C4-C5-C6	11.78	122.89	117.00
57	BB	1518	C	C5-C6-N1	11.78	126.89	121.00
21	AA	1087	G	N1-C6-O6	11.78	126.97	119.90
21	AA	934	C	N3-C4-C5	-11.78	117.19	121.90
57	BB	2087	G	N1-C6-O6	11.78	126.97	119.90
58	BA	49	C	O4'-C1'-N1	11.78	117.62	108.20
21	AA	63	C	C6-N1-C2	-11.78	115.59	120.30
21	AA	1053	G	N1-C6-O6	11.78	126.97	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1366	C	C5-C6-N1	11.78	126.89	121.00
57	BB	1773	A	N1-C6-N6	11.78	125.67	118.60
21	AA	454	G	N1-C6-O6	11.77	126.96	119.90
57	BB	364	C	C5-C6-N1	11.77	126.89	121.00
57	BB	595	C	N3-C4-N4	11.77	126.24	118.00
57	BB	1711	A	C5-C6-N1	-11.77	111.81	117.70
21	AA	534	U	O4'-C1'-N1	11.77	117.61	108.20
57	BB	544	C	O4'-C1'-N1	11.77	117.62	108.20
57	BB	2035	G	C5-C6-N1	-11.77	105.61	111.50
57	BB	891	G	O4'-C1'-N9	11.77	117.61	108.20
57	BB	1864	U	O4'-C1'-N1	11.77	117.61	108.20
21	AA	451	A	N1-C6-N6	11.76	125.66	118.60
21	AA	1254	A	N1-C6-N6	11.76	125.66	118.60
49	B2	21	ARG	NE-CZ-NH1	-11.76	114.42	120.30
57	BB	1886	U	O4'-C1'-N1	11.76	117.61	108.20
21	AA	649	A	N1-C6-N6	11.76	125.66	118.60
22	AY	19	G	C5-C6-O6	-11.76	121.55	128.60
57	BB	1927	A	C4-C5-C6	11.76	122.88	117.00
11	AT	17	ARG	NE-CZ-NH2	-11.75	114.42	120.30
21	AA	1339	A	N1-C6-N6	11.75	125.65	118.60
57	BB	42	A	N1-C6-N6	11.75	125.65	118.60
57	BB	1386	C	O4'-C1'-N1	11.75	117.60	108.20
21	AA	424	G	N7-C8-N9	11.75	118.98	113.10
21	AA	622	A	N1-C6-N6	11.75	125.65	118.60
57	BB	638	G	N7-C8-N9	11.75	118.97	113.10
57	BB	1120	G	C5-C6-O6	-11.75	121.55	128.60
57	BB	1339	G	C5-C6-O6	-11.75	121.55	128.60
21	AA	453	G	N1-C6-O6	11.75	126.95	119.90
57	BB	216	A	C4-C5-C6	11.75	122.87	117.00
57	BB	989	G	N1-C6-O6	11.75	126.95	119.90
57	BB	681	G	O4'-C1'-N9	11.74	117.59	108.20
57	BB	1016	G	C2-N3-C4	11.74	117.77	111.90
57	BB	1492	G	N3-C2-N2	11.74	128.12	119.90
21	AA	607	A	O4'-C1'-N9	11.74	117.59	108.20
57	BB	1275	A	N1-C6-N6	11.74	125.64	118.60
57	BB	2417	C	N3-C4-N4	11.74	126.22	118.00
57	BB	2755	C	N3-C4-C5	-11.74	117.20	121.90
21	AA	320	A	N1-C6-N6	11.74	125.64	118.60
21	AA	1038	C	O4'-C1'-N1	11.74	117.59	108.20
23	AW	19	G	C5-C6-O6	-11.74	121.56	128.60
57	BB	2850	A	N1-C6-N6	11.74	125.64	118.60
21	AA	616	G	N1-C2-N3	-11.73	116.86	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	720	C	O4'-C1'-N1	11.73	117.59	108.20
22	AY	25	C	N3-C4-N4	11.73	126.21	118.00
57	BB	1275	A	O4'-C1'-N9	11.73	117.59	108.20
57	BB	223	A	N1-C6-N6	11.73	125.64	118.60
57	BB	304	U	O4'-C1'-N1	11.73	117.59	108.20
57	BB	225	C	O4'-C1'-N1	11.73	117.58	108.20
57	BB	1194	A	C5-C6-N6	-11.73	114.31	123.70
57	BB	2869	G	C5-C6-N1	-11.73	105.63	111.50
57	BB	262	A	C4-C5-C6	11.73	122.86	117.00
57	BB	1134	A	N1-C6-N6	11.73	125.64	118.60
57	BB	1297	C	C5-C6-N1	11.73	126.86	121.00
21	AA	1465	A	N1-C2-N3	11.72	135.16	129.30
57	BB	219	A	C4-C5-C6	11.72	122.86	117.00
57	BB	407	G	C5-C6-O6	-11.72	121.56	128.60
57	BB	1813	G	O4'-C1'-N9	11.72	117.58	108.20
22	AY	45	G	N1-C6-O6	11.72	126.93	119.90
58	BA	7	G	N1-C6-O6	11.72	126.93	119.90
58	BA	8	C	N3-C4-N4	11.72	126.20	118.00
57	BB	1158	C	O4'-C1'-N1	11.72	117.57	108.20
21	AA	524	G	C4-C5-C6	11.72	125.83	118.80
21	AA	1156	G	C5-C6-O6	-11.71	121.57	128.60
57	BB	432	A	O4'-C1'-N9	11.72	117.57	108.20
31	BL	60	ARG	NE-CZ-NH2	11.71	126.16	120.30
57	BB	1239	G	N9-C4-C5	11.71	110.09	105.40
57	BB	2778	A	C5-C6-N6	-11.71	114.33	123.70
21	AA	550	G	O4'-C1'-N9	11.71	117.57	108.20
21	AA	920	U	O4'-C1'-N1	11.71	117.57	108.20
57	BB	1200	C	N3-C4-C5	-11.71	117.22	121.90
57	BB	66	C	N3-C4-C5	-11.71	117.22	121.90
57	BB	1287	A	C5-N7-C8	11.71	109.75	103.90
21	AA	1140	C	O4'-C1'-N1	11.71	117.56	108.20
21	AA	1356	G	N1-C6-O6	11.71	126.92	119.90
57	BB	10	A	N1-C6-N6	11.70	125.62	118.60
57	BB	505	A	N1-C6-N6	11.70	125.62	118.60
57	BB	1403	A	C4-C5-C6	11.70	122.85	117.00
57	BB	262	A	O4'-C1'-N9	11.70	117.56	108.20
21	AA	1465	A	C4-C5-C6	11.70	122.85	117.00
57	BB	295	G	N1-C6-O6	11.70	126.92	119.90
21	AA	135	C	N3-C4-C5	-11.70	117.22	121.90
21	AA	196	A	N7-C8-N9	11.70	119.65	113.80
57	BB	1769	U	N3-C4-C5	-11.70	107.58	114.60
21	AA	519	C	O4'-C1'-N1	11.69	117.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1701	A	O4'-C1'-N9	11.70	117.56	108.20
57	BB	2589	A	O4'-C1'-N9	11.69	117.56	108.20
22	AY	41	U	O4'-C1'-N1	11.69	117.55	108.20
22	AY	46	G	C5-C6-O6	-11.69	121.58	128.60
57	BB	337	C	N3-C4-C5	-11.69	117.22	121.90
57	BB	402	A	N1-C2-N3	11.69	135.15	129.30
21	AA	1334	G	N1-C6-O6	11.69	126.91	119.90
23	AW	67	C	O4'-C1'-N1	11.69	117.55	108.20
57	BB	190	A	O4'-C1'-N9	11.69	117.55	108.20
57	BB	957	C	N3-C4-C5	-11.69	117.22	121.90
57	BB	1484	U	O4'-C1'-N1	11.69	117.55	108.20
57	BB	2371	G	N1-C6-O6	11.69	126.91	119.90
21	AA	601	G	N1-C6-O6	11.69	126.91	119.90
21	AA	1314	C	C6-N1-C2	-11.69	115.62	120.30
49	B2	3	ARG	NE-CZ-NH1	11.68	126.14	120.30
57	BB	163	C	C2-N1-C1'	11.68	131.65	118.80
57	BB	240	C	O4'-C1'-N1	11.68	117.55	108.20
57	BB	2468	A	C5-C6-N1	-11.68	111.86	117.70
58	BA	20	G	C5-C6-O6	-11.68	121.59	128.60
21	AA	1000	A	C8-N9-C4	-11.68	101.13	105.80
57	BB	1161	C	N3-C4-C5	-11.68	117.23	121.90
57	BB	1776	G	N3-C2-N2	11.68	128.07	119.90
57	BB	2114	A	C8-N9-C4	-11.67	101.13	105.80
21	AA	833	G	N1-C6-O6	11.67	126.90	119.90
26	AV	62	C	O4'-C1'-N1	11.67	117.54	108.20
57	BB	1151	A	N1-C6-N6	11.67	125.60	118.60
57	BB	2161	C	O4'-C1'-N1	11.67	117.53	108.20
21	AA	535	A	C4-C5-C6	11.67	122.83	117.00
21	AA	132	C	N3-C4-C5	-11.66	117.23	121.90
21	AA	461	A	N1-C6-N6	11.66	125.60	118.60
57	BB	2543	G	C5-C6-O6	-11.66	121.60	128.60
21	AA	226	G	N1-C2-N3	-11.66	116.90	123.90
21	AA	928	G	C5-C6-O6	-11.66	121.60	128.60
21	AA	539	A	N1-C6-N6	11.66	125.60	118.60
22	AY	5	A	C5-C6-N1	-11.66	111.87	117.70
57	BB	631	A	N1-C6-N6	11.66	125.60	118.60
57	BB	1760	C	C5-C6-N1	11.66	126.83	121.00
57	BB	905	A	N1-C6-N6	11.66	125.59	118.60
57	BB	1491	G	N1-C2-N3	-11.65	116.91	123.90
57	BB	2364	C	C5-C6-N1	-11.65	115.17	121.00
57	BB	2679	A	N1-C6-N6	11.65	125.59	118.60
58	BA	59	A	N9-C4-C5	11.65	110.46	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	794	A	N1-C6-N6	11.65	125.59	118.60
57	BB	130	C	O4'-C1'-N1	11.65	117.52	108.20
57	BB	204	A	C4-C5-C6	11.65	122.82	117.00
57	BB	407	G	O4'-C1'-N9	11.65	117.52	108.20
57	BB	855	G	N1-C2-N3	-11.65	116.91	123.90
57	BB	1635	A	C4-C5-C6	11.65	122.82	117.00
57	BB	184	C	N3-C4-C5	-11.64	117.24	121.90
21	AA	388	G	C6-C5-N7	-11.64	123.42	130.40
57	BB	2027	G	C5-C6-O6	-11.64	121.61	128.60
57	BB	2528	U	N3-C4-C5	-11.64	107.62	114.60
21	AA	1234	C	O4'-C1'-N1	11.63	117.51	108.20
57	BB	1874	C	N3-C4-C5	-11.64	117.25	121.90
57	BB	908	C	O4'-C1'-N1	11.63	117.51	108.20
21	AA	853	C	C6-N1-C2	-11.63	115.65	120.30
21	AA	189	A	C4-C5-C6	11.63	122.81	117.00
21	AA	1329	A	O4'-C1'-N9	11.63	117.50	108.20
57	BB	1527	G	C8-N9-C4	-11.63	101.75	106.40
57	BB	2789	C	O4'-C1'-N1	11.63	117.50	108.20
21	AA	984	C	N3-C4-C5	-11.63	117.25	121.90
21	AA	806	C	O4'-C1'-N1	11.63	117.50	108.20
57	BB	2635	A	C5-C6-N1	-11.63	111.89	117.70
57	BB	2853	C	N3-C4-N4	11.63	126.14	118.00
21	AA	338	A	C4-C5-C6	11.62	122.81	117.00
21	AA	388	G	C4-C5-C6	11.62	125.78	118.80
21	AA	1322	C	N3-C4-C5	-11.62	117.25	121.90
57	BB	298	G	N3-C2-N2	11.62	128.03	119.90
57	BB	429	A	C5-C6-N1	-11.62	111.89	117.70
57	BB	926	G	N1-C6-O6	11.62	126.87	119.90
57	BB	2213	U	P-O3'-C3'	11.62	133.64	119.70
57	BB	1849	G	N1-C6-O6	11.62	126.87	119.90
21	AA	202	G	C8-N9-C4	-11.62	101.75	106.40
21	AA	684	U	O4'-C1'-N1	11.62	117.49	108.20
57	BB	1878	G	N9-C4-C5	11.62	110.05	105.40
57	BB	2810	A	C2-N3-C4	-11.62	104.79	110.60
57	BB	2893	A	N1-C6-N6	11.62	125.57	118.60
21	AA	657	U	C2-N3-C4	-11.61	120.03	127.00
57	BB	302	C	N3-C4-N4	11.61	126.13	118.00
57	BB	1895	C	O4'-C1'-N1	11.62	117.49	108.20
21	AA	1181	G	C5-C6-O6	-11.61	121.63	128.60
57	BB	148	U	O4'-C1'-N1	11.61	117.49	108.20
57	BB	410	G	C5-C6-O6	-11.61	121.63	128.60
32	BM	38	ARG	NE-CZ-NH1	11.61	126.11	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AX	16	A	C4-C5-C6	11.61	122.80	117.00
57	BB	228	C	N3-C4-N4	11.61	126.13	118.00
58	BA	14	U	C4-C5-C6	11.61	126.66	119.70
57	BB	1229	C	O4'-C1'-N1	11.60	117.48	108.20
57	BB	2589	A	N1-C6-N6	11.60	125.56	118.60
58	BA	58	A	C8-N9-C4	-11.60	101.16	105.80
57	BB	1425	G	O4'-C1'-N9	11.60	117.48	108.20
22	AY	4	G	C6-C5-N7	-11.60	123.44	130.40
21	AA	28	A	N1-C6-N6	11.60	125.56	118.60
21	AA	532	A	C4-C5-N7	-11.60	104.90	110.70
57	BB	2763	G	C5-C6-O6	-11.60	121.64	128.60
21	AA	1308	U	O4'-C1'-N1	11.59	117.47	108.20
23	AW	36	A	N9-C4-C5	11.59	110.44	105.80
57	BB	63	A	C5-C6-N6	-11.59	114.43	123.70
23	AW	30	G	C5-N7-C8	11.59	110.09	104.30
21	AA	1482	G	C5-C6-O6	-11.58	121.65	128.60
57	BB	1719	G	C8-N9-C4	-11.58	101.77	106.40
57	BB	1833	C	C2-N3-C4	11.58	125.69	119.90
57	BB	1653	G	C4-C5-N7	-11.58	106.17	110.80
57	BB	1753	G	O4'-C1'-N9	11.58	117.46	108.20
57	BB	2485	G	N1-C6-O6	11.58	126.85	119.90
21	AA	492	C	C2-N3-C4	11.57	125.69	119.90
22	AY	60	C	C6-N1-C2	-11.57	115.67	120.30
57	BB	791	C	C3'-C2'-C1'	-11.57	92.24	101.50
57	BB	1836	C	N3-C4-C5	-11.57	117.27	121.90
22	AY	1	G	C5-C6-O6	-11.57	121.66	128.60
57	BB	879	G	C4-C5-C6	11.57	125.74	118.80
57	BB	1721	G	N3-C2-N2	11.57	128.00	119.90
21	AA	1186	G	C2-N3-C4	11.57	117.68	111.90
4	AM	91	ARG	NE-CZ-NH1	11.56	126.08	120.30
57	BB	2666	C	C5-C4-N4	-11.56	112.11	120.20
21	AA	447	G	C5-C6-O6	-11.56	121.67	128.60
21	AA	1391	U	O4'-C1'-N1	11.56	117.45	108.20
57	BB	936	A	N1-C6-N6	11.56	125.53	118.60
57	BB	2053	G	N1-C6-O6	11.56	126.83	119.90
57	BB	997	G	O4'-C1'-N9	11.55	117.44	108.20
57	BB	1336	A	C5-C6-N1	-11.55	111.93	117.70
57	BB	2041	U	O4'-C1'-N1	11.55	117.44	108.20
21	AA	929	G	N1-C6-O6	11.54	126.83	119.90
21	AA	1055	A	C5-N7-C8	11.54	109.67	103.90
21	AA	1370	G	N3-C2-N2	11.54	127.98	119.90
33	BN	45	ARG	NE-CZ-NH1	-11.54	114.53	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1155	A	C8-N9-C4	-11.54	101.18	105.80
57	BB	1844	C	C2-N3-C4	-11.54	114.13	119.90
21	AA	941	G	C8-N9-C4	-11.54	101.78	106.40
21	AA	996	A	C5-C6-N1	-11.54	111.93	117.70
21	AA	1474	U	O4'-C1'-N1	11.54	117.43	108.20
57	BB	923	G	N1-C6-O6	11.54	126.83	119.90
57	BB	1205	A	C4-C5-C6	11.54	122.77	117.00
21	AA	1035	A	N3-C4-C5	-11.54	118.72	126.80
57	BB	1846	G	C5-C6-O6	-11.54	121.68	128.60
57	BB	177	G	C5-C6-N1	-11.54	105.73	111.50
57	BB	282	A	C4-C5-C6	11.54	122.77	117.00
57	BB	474	G	C5-C6-O6	-11.54	121.68	128.60
58	BA	35	C	N3-C4-C5	-11.54	117.28	121.90
21	AA	412	A	N1-C6-N6	11.54	125.52	118.60
21	AA	607	A	C5-C6-N1	-11.54	111.93	117.70
57	BB	1125	G	C5-C6-O6	-11.54	121.68	128.60
57	BB	2872	A	N1-C6-N6	11.54	125.52	118.60
21	AA	1458	G	N1-C6-O6	11.53	126.82	119.90
57	BB	2490	G	N1-C6-O6	11.53	126.82	119.90
26	AV	65	C	O4'-C1'-N1	11.53	117.43	108.20
21	AA	526	C	N3-C4-N4	11.53	126.07	118.00
57	BB	627	A	C5-C6-N6	-11.53	114.48	123.70
57	BB	777	G	C5-C6-O6	-11.53	121.68	128.60
21	AA	1274	A	N1-C6-N6	11.53	125.52	118.60
57	BB	2731	G	N1-C6-O6	11.53	126.82	119.90
21	AA	331	G	N1-C6-O6	11.52	126.81	119.90
21	AA	8	A	C5-C6-N6	-11.52	114.48	123.70
21	AA	398	U	O4'-C1'-N1	11.52	117.41	108.20
21	AA	1155	A	C5-N7-C8	11.52	109.66	103.90
57	BB	551	G	C2-N3-C4	-11.52	106.14	111.90
57	BB	1188	U	O4'-C1'-N1	11.52	117.42	108.20
36	BQ	100	PHE	CB-CG-CD1	-11.52	112.74	120.80
45	BC	213	ARG	NE-CZ-NH2	-11.52	114.54	120.30
57	BB	730	A	C5-N7-C8	11.52	109.66	103.90
57	BB	2726	A	N1-C6-N6	11.52	125.51	118.60
57	BB	918	A	N1-C6-N6	11.52	125.51	118.60
57	BB	281	C	N1-C2-O2	11.51	125.81	118.90
57	BB	2050	C	C5-C6-N1	11.51	126.76	121.00
21	AA	146	G	C5-C6-O6	-11.51	121.69	128.60
57	BB	1668	A	C5-C6-N6	-11.51	114.49	123.70
21	AA	459	A	C4-C5-C6	11.51	122.75	117.00
21	AA	1497	G	C5-C6-O6	-11.51	121.69	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	227	G	C5-C6-O6	-11.51	121.70	128.60
32	BM	55	ARG	NE-CZ-NH2	11.51	126.05	120.30
57	BB	1846	G	N1-C6-O6	11.51	126.81	119.90
57	BB	2145	C	P-O3'-C3'	11.51	133.51	119.70
21	AA	1211	U	N3-C4-O4	11.51	127.45	119.40
57	BB	57	C	O4'-C1'-N1	11.50	117.40	108.20
21	AA	207	C	C6-N1-C2	-11.50	115.70	120.30
55	BG	150	TYR	CB-CG-CD2	11.50	127.90	121.00
57	BB	249	C	N3-C4-N4	11.50	126.05	118.00
57	BB	735	A	C5-C6-N6	-11.50	114.50	123.70
21	AA	574	A	C5-C6-N6	-11.50	114.50	123.70
16	AE	44	ARG	NE-CZ-NH2	-11.50	114.55	120.30
21	AA	1482	G	N1-C2-N3	-11.50	117.00	123.90
21	AA	289	G	C6-C5-N7	-11.49	123.50	130.40
57	BB	1014	A	N1-C6-N6	11.49	125.50	118.60
57	BB	89	A	C5-C6-N1	-11.49	111.95	117.70
57	BB	2499	C	N3-C4-N4	11.49	126.04	118.00
22	AY	13	C	C5-C4-N4	-11.49	112.16	120.20
57	BB	1525	A	N1-C6-N6	11.49	125.49	118.60
21	AA	953	G	N1-C6-O6	11.48	126.79	119.90
21	AA	706	A	C5-C6-N1	-11.48	111.96	117.70
21	AA	709	U	O4'-C1'-N1	11.48	117.39	108.20
57	BB	101	A	C4-C5-C6	11.48	122.74	117.00
57	BB	504	A	C5-C6-N1	-11.48	111.96	117.70
21	AA	27	G	N1-C6-O6	11.48	126.79	119.90
57	BB	76	C	N3-C4-N4	11.48	126.03	118.00
57	BB	2055	C	O4'-C1'-N1	11.48	117.38	108.20
21	AA	1416	G	N1-C6-O6	11.47	126.78	119.90
57	BB	142	A	N1-C6-N6	11.47	125.48	118.60
57	BB	607	U	O4'-C1'-N1	11.47	117.38	108.20
21	AA	108	G	N1-C6-O6	11.47	126.78	119.90
21	AA	167	A	C6-N1-C2	-11.47	111.72	118.60
57	BB	992	C	O4'-C1'-N1	11.47	117.38	108.20
21	AA	1413	A	C5-C6-N1	-11.47	111.97	117.70
57	BB	219	A	C5-C6-N1	-11.47	111.97	117.70
57	BB	1564	C	O4'-C1'-N1	11.47	117.38	108.20
21	AA	201	G	C5-C6-O6	-11.47	121.72	128.60
21	AA	1175	G	C5-C6-O6	-11.47	121.72	128.60
55	BG	156	TYR	CB-CG-CD1	-11.47	114.12	121.00
21	AA	1032	G	N1-C6-O6	11.47	126.78	119.90
57	BB	718	A	N1-C6-N6	11.46	125.48	118.60
57	BB	1296	G	N3-C2-N2	11.46	127.92	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	351	C	O4'-C1'-N1	11.46	117.37	108.20
21	AA	389	A	N1-C6-N6	11.46	125.47	118.60
15	AD	12	ARG	NE-CZ-NH2	11.45	126.03	120.30
21	AA	300	A	N1-C6-N6	11.45	125.47	118.60
21	AA	423	G	N1-C6-O6	11.45	126.77	119.90
21	AA	1480	A	N1-C6-N6	11.45	125.47	118.60
57	BB	103	A	N1-C6-N6	11.45	125.47	118.60
57	BB	813	U	O4'-C1'-N1	11.45	117.36	108.20
57	BB	1854	A	N1-C6-N6	11.45	125.47	118.60
21	AA	681	A	N1-C6-N6	11.45	125.47	118.60
21	AA	1105	A	C4-C5-C6	11.45	122.72	117.00
21	AA	1248	A	C6-C5-N7	-11.45	124.29	132.30
57	BB	2315	G	N1-C6-O6	11.45	126.77	119.90
21	AA	1134	G	N1-C6-O6	11.45	126.77	119.90
26	AV	46	G	N1-C6-O6	11.44	126.77	119.90
40	BU	6	ARG	NE-CZ-NH1	-11.45	114.58	120.30
57	BB	2402	U	O4'-C1'-N1	11.45	117.36	108.20
21	AA	1423	G	N1-C6-O6	11.44	126.77	119.90
57	BB	297	G	N1-C6-O6	11.44	126.77	119.90
21	AA	718	A	C4-C5-C6	11.44	122.72	117.00
21	AA	866	C	N3-C4-N4	11.44	126.01	118.00
22	AY	60	C	C5-C6-N1	11.44	126.72	121.00
57	BB	2134	A	P-O3'-C3'	11.44	133.43	119.70
57	BB	2250	G	C5-N7-C8	11.44	110.02	104.30
21	AA	1423	G	C5-C6-O6	-11.44	121.74	128.60
21	AA	1441	A	N1-C6-N6	11.44	125.46	118.60
58	BA	2	G	OP1-P-OP2	-11.44	102.44	119.60
21	AA	477	C	O4'-C1'-N1	11.44	117.35	108.20
57	BB	2606	C	N3-C4-N4	11.44	126.00	118.00
57	BB	2751	G	C4-C5-N7	-11.44	106.23	110.80
57	BB	526	A	C5-C6-N6	-11.43	114.55	123.70
57	BB	70	G	C2-N3-C4	11.43	117.62	111.90
21	AA	171	A	C5-C6-N6	-11.43	114.56	123.70
57	BB	2478	A	C4-C5-C6	11.43	122.72	117.00
57	BB	927	A	C4-C5-C6	11.43	122.71	117.00
21	AA	52	C	N1-C2-O2	-11.43	112.04	118.90
57	BB	619	G	C4-C5-N7	-11.43	106.23	110.80
57	BB	125	A	N1-C6-N6	11.42	125.45	118.60
57	BB	1366	A	O4'-C1'-N9	11.42	117.34	108.20
21	AA	1043	G	N1-C6-O6	11.42	126.75	119.90
21	AA	856	C	O4'-C1'-N1	11.42	117.34	108.20
57	BB	776	G	O4'-C1'-N9	11.42	117.34	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1333	G	C5-C6-O6	-11.42	121.75	128.60
57	BB	1583	A	C5-C6-N1	-11.42	111.99	117.70
21	AA	573	A	C5-C6-N1	-11.42	111.99	117.70
21	AA	715	A	C4-C5-C6	11.42	122.71	117.00
57	BB	2400	G	C4-C5-N7	11.42	115.37	110.80
57	BB	2617	U	N3-C4-O4	11.42	127.39	119.40
57	BB	734	A	N1-C6-N6	11.41	125.45	118.60
57	BB	978	G	C5-C6-N1	-11.41	105.79	111.50
57	BB	1010	A	C8-N9-C4	11.41	110.36	105.80
57	BB	1568	G	O4'-C1'-N9	11.41	117.33	108.20
57	BB	2641	G	N1-C6-O6	11.41	126.75	119.90
21	AA	341	C	N3-C4-N4	11.41	125.99	118.00
21	AA	1463	U	C5-C4-O4	-11.41	119.06	125.90
57	BB	1085	A	C4-C5-C6	11.41	122.70	117.00
21	AA	248	C	C5-C6-N1	-11.40	115.30	121.00
57	BB	1862	G	C5-C6-O6	-11.40	121.76	128.60
57	BB	1676	A	N1-C6-N6	11.40	125.44	118.60
57	BB	1801	A	C6-N1-C2	-11.40	111.76	118.60
57	BB	1816	C	C5-C4-N4	-11.40	112.22	120.20
57	BB	2052	A	C5-N7-C8	11.40	109.60	103.90
23	AW	3	C	C5-C6-N1	11.40	126.70	121.00
23	AW	70	G	N7-C8-N9	11.40	118.80	113.10
57	BB	2046	G	C5-C6-O6	-11.40	121.76	128.60
57	BB	2850	A	O4'-C1'-N9	11.40	117.32	108.20
21	AA	456	A	O4'-C1'-N9	11.39	117.31	108.20
21	AA	1288	A	O4'-C1'-N9	11.39	117.32	108.20
21	AA	1496	C	C5-C4-N4	-11.39	112.22	120.20
57	BB	209	C	N3-C4-C5	-11.39	117.34	121.90
57	BB	2484	G	N1-C2-N3	-11.39	117.06	123.90
57	BB	2757	A	C4-C5-C6	11.39	122.70	117.00
21	AA	961	U	C2-N3-C4	-11.39	120.17	127.00
57	BB	1336	A	N1-C6-N6	11.39	125.43	118.60
57	BB	880	G	C6-C5-N7	-11.39	123.57	130.40
57	BB	1338	G	O4'-C1'-N9	11.39	117.31	108.20
57	BB	2509	G	C4-C5-N7	11.39	115.36	110.80
57	BB	2541	A	C8-N9-C4	-11.39	101.25	105.80
26	AV	69	C	O4'-C1'-N1	11.38	117.31	108.20
57	BB	313	G	N1-C6-O6	11.38	126.73	119.90
57	BB	1220	G	N1-C6-O6	11.38	126.73	119.90
21	AA	1002	G	C5-N7-C8	11.38	109.99	104.30
57	BB	1437	C	O4'-C1'-N1	11.38	117.30	108.20
21	AA	525	C	N3-C4-N4	11.38	125.96	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1929	G	C5-C6-O6	-11.38	121.77	128.60
57	BB	2345	G	N3-C4-C5	-11.38	122.91	128.60
21	AA	51	A	N1-C6-N6	11.37	125.42	118.60
57	BB	241	A	C5-C6-N1	-11.38	112.01	117.70
57	BB	1040	A	N1-C6-N6	11.37	125.42	118.60
57	BB	2038	G	C5-C6-O6	-11.37	121.78	128.60
57	BB	2863	C	N3-C4-N4	11.38	125.96	118.00
21	AA	156	C	N3-C4-C5	-11.37	117.35	121.90
21	AA	1246	A	O4'-C1'-N9	11.37	117.30	108.20
57	BB	2531	A	N1-C6-N6	11.37	125.42	118.60
57	BB	2626	C	O4'-C1'-N1	11.37	117.30	108.20
21	AA	770	C	O4'-C1'-N1	11.37	117.30	108.20
24	AX	12	A	N1-C6-N6	11.37	125.42	118.60
57	BB	770	G	C5-C6-O6	-11.37	121.78	128.60
57	BB	1334	G	N1-C6-O6	11.37	126.72	119.90
21	AA	79	G	N1-C6-O6	11.37	126.72	119.90
21	AA	109	A	C5-C6-N1	-11.37	112.02	117.70
21	AA	514	C	N3-C4-C5	-11.37	117.35	121.90
57	BB	2893	A	C4-C5-N7	-11.37	105.02	110.70
57	BB	2896	C	N3-C4-C5	-11.37	117.35	121.90
21	AA	704	A	C5-N7-C8	11.37	109.58	103.90
26	AV	14	A	C4-C5-C6	11.37	122.68	117.00
58	BA	84	G	C5-C6-O6	-11.37	121.78	128.60
21	AA	106	C	C6-N1-C2	-11.36	115.76	120.30
57	BB	551	G	C8-N9-C4	-11.36	101.86	106.40
22	AY	13	C	N3-C4-N4	11.36	125.95	118.00
21	AA	578	C	C5-C6-N1	11.36	126.68	121.00
26	AV	37	A	N1-C2-N3	11.36	134.98	129.30
57	BB	2753	A	C5-C6-N1	-11.36	112.02	117.70
57	BB	520	G	N7-C8-N9	-11.36	107.42	113.10
57	BB	725	G	C5-C6-N1	-11.35	105.82	111.50
57	BB	930	G	C5-C6-O6	-11.35	121.79	128.60
57	BB	2411	A	C6-C5-N7	-11.35	124.35	132.30
21	AA	339	C	C6-N1-C2	-11.35	115.76	120.30
21	AA	1172	C	O4'-C1'-N1	11.35	117.28	108.20
57	BB	1650	A	N1-C2-N3	11.35	134.98	129.30
57	BB	2772	C	O4'-C1'-N1	11.35	117.28	108.20
26	AV	67	C	O4'-C1'-N1	11.35	117.28	108.20
21	AA	622	A	N1-C2-N3	11.34	134.97	129.30
23	AW	75	C	N3-C4-C5	-11.34	117.36	121.90
57	BB	484	C	C6-N1-C2	11.34	124.83	120.30
57	BB	1220	G	O4'-C1'-N9	11.34	117.27	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	28	A	C5-C6-N1	-11.34	112.03	117.70
21	AA	48	C	C2-N3-C4	11.34	125.57	119.90
21	AA	468	A	C8-N9-C4	-11.34	101.27	105.80
57	BB	2560	A	O4'-C1'-N9	11.33	117.27	108.20
22	AY	17	U	N1-C2-N3	-11.33	108.10	114.90
57	BB	1652	A	C5-C6-N1	-11.33	112.03	117.70
53	BE	67	ARG	NE-CZ-NH2	-11.33	114.63	120.30
57	BB	308	G	C5-C6-O6	-11.33	121.80	128.60
57	BB	322	A	C5-C6-N6	-11.33	114.64	123.70
21	AA	1378	C	N3-C4-N4	11.33	125.93	118.00
57	BB	1027	A	N1-C6-N6	11.33	125.40	118.60
57	BB	2508	G	N1-C6-O6	11.33	126.70	119.90
21	AA	319	G	C5-C6-O6	-11.32	121.81	128.60
21	AA	617	G	N1-C6-O6	11.32	126.69	119.90
57	BB	500	G	C5-C6-O6	-11.32	121.81	128.60
57	BB	1393	A	C4-C5-C6	11.32	122.66	117.00
57	BB	1869	G	N1-C6-O6	11.32	126.69	119.90
22	AY	29	A	C8-N9-C4	-11.32	101.27	105.80
57	BB	644	A	C5-C6-N1	-11.32	112.04	117.70
57	BB	1332	G	N1-C6-O6	11.32	126.69	119.90
58	BA	3	C	C6-N1-C2	-11.32	115.77	120.30
57	BB	2792	A	N1-C6-N6	11.32	125.39	118.60
21	AA	777	A	C4-C5-C6	11.32	122.66	117.00
57	BB	862	G	C5-C6-O6	-11.32	121.81	128.60
57	BB	912	C	N3-C4-C5	-11.32	117.37	121.90
57	BB	2441	U	C5-C6-N1	11.32	128.36	122.70
21	AA	944	G	N1-C2-N3	-11.32	117.11	123.90
57	BB	2491	U	C5-C4-O4	-11.32	119.11	125.90
57	BB	239	C	N3-C4-N4	11.32	125.92	118.00
57	BB	955	U	O4'-C1'-N1	11.32	117.25	108.20
57	BB	1317	G	C5-N7-C8	11.32	109.96	104.30
21	AA	549	C	C2-N3-C4	11.32	125.56	119.90
57	BB	2470	G	N1-C6-O6	11.32	126.69	119.90
57	BB	1422	G	N1-C6-O6	11.31	126.69	119.90
57	BB	2894	G	P-O5'-C5'	11.31	139.00	120.90
21	AA	265	G	C5-C6-O6	-11.31	121.81	128.60
57	BB	1225	G	N1-C6-O6	11.31	126.68	119.90
57	BB	644	A	P-O3'-C3'	11.30	133.26	119.70
57	BB	645	C	O4'-C1'-N1	11.30	117.24	108.20
57	BB	1261	C	C2-N3-C4	11.30	125.55	119.90
57	BB	1678	A	C5-C6-N6	-11.30	114.66	123.70
21	AA	1519	A	N1-C6-N6	11.30	125.38	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2207	C	O4'-C1'-N1	11.30	117.24	108.20
21	AA	68	G	N1-C6-O6	11.30	126.68	119.90
57	BB	1163	G	C5-C6-N1	-11.30	105.85	111.50
57	BB	2309	A	C4-C5-C6	11.30	122.65	117.00
57	BB	453	A	O4'-C1'-N9	11.30	117.24	108.20
57	BB	916	G	C5-C6-O6	-11.30	121.82	128.60
21	AA	1033	G	N1-C6-O6	11.29	126.68	119.90
57	BB	617	G	C5-C6-O6	-11.29	121.82	128.60
57	BB	865	C	N3-C4-C5	-11.30	117.38	121.90
21	AA	158	G	C5-C6-O6	-11.29	121.83	128.60
57	BB	1603	A	N1-C2-N3	11.29	134.95	129.30
57	BB	1961	C	C5-C4-N4	-11.29	112.30	120.20
57	BB	1074	G	C5-C6-O6	-11.29	121.83	128.60
57	BB	1498	C	C2-N3-C4	11.29	125.55	119.90
21	AA	654	G	C5-C6-O6	-11.29	121.83	128.60
21	AA	227	G	N1-C6-O6	11.29	126.67	119.90
16	AE	127	TYR	CB-CG-CD1	-11.28	114.23	121.00
21	AA	877	G	O4'-C1'-N9	11.29	117.23	108.20
57	BB	531	C	O4'-C1'-N1	11.29	117.23	108.20
21	AA	924	C	C4-C5-C6	11.28	123.04	117.40
21	AA	1418	A	N1-C6-N6	11.28	125.37	118.60
57	BB	2472	G	C5-C6-O6	-11.28	121.83	128.60
57	BB	2335	A	C5-C6-N6	-11.28	114.67	123.70
21	AA	1326	U	O4'-C1'-N1	11.28	117.22	108.20
57	BB	777	G	C8-N9-C4	-11.28	101.89	106.40
21	AA	286	C	C4-C5-C6	-11.28	111.76	117.40
21	AA	1318	A	C4-C5-C6	11.28	122.64	117.00
23	AW	9	A	C6-C5-N7	-11.27	124.41	132.30
57	BB	2531	A	C5-N7-C8	11.27	109.54	103.90
57	BB	2124	G	C5-C6-O6	-11.27	121.84	128.60
34	BO	13	ARG	NE-CZ-NH2	11.27	125.93	120.30
57	BB	2060	A	N7-C8-N9	11.27	119.43	113.80
58	BA	73	A	C4-C5-C6	11.27	122.63	117.00
57	BB	1643	G	N1-C6-O6	11.27	126.66	119.90
21	AA	196	A	N1-C6-N6	11.26	125.36	118.60
21	AA	622	A	C5-C6-N1	-11.26	112.07	117.70
57	BB	787	C	O4'-C1'-N1	11.26	117.21	108.20
57	BB	1025	G	N1-C6-O6	11.26	126.66	119.90
57	BB	1343	G	O4'-C1'-N9	11.26	117.21	108.20
57	BB	2822	G	C4-C5-C6	11.26	125.56	118.80
58	BA	45	A	N1-C6-N6	11.26	125.36	118.60
21	AA	767	A	N1-C6-N6	11.26	125.35	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	622	G	N1-C6-O6	11.26	126.65	119.90
57	BB	770	G	N1-C6-O6	11.26	126.65	119.90
57	BB	1548	A	N1-C2-N3	11.26	134.93	129.30
23	AW	54	U	O4'-C1'-N1	11.26	117.20	108.20
57	BB	2389	G	C5-C6-N1	11.26	117.13	111.50
57	BB	2747	G	O4'-C1'-N9	11.25	117.20	108.20
57	BB	1994	C	N3-C4-N4	11.25	125.88	118.00
57	BB	1120	G	O4'-C1'-N9	11.25	117.20	108.20
57	BB	1974	C	N3-C4-N4	11.25	125.88	118.00
57	BB	2600	A	C5-C6-N6	-11.25	114.70	123.70
21	AA	1304	G	N1-C6-O6	11.25	126.65	119.90
57	BB	960	A	C8-N9-C4	-11.25	101.30	105.80
26	AV	6	G	N3-C2-N2	11.24	127.77	119.90
21	AA	279	A	N9-C4-C5	11.24	110.30	105.80
58	BA	27	C	C2-N3-C4	11.24	125.52	119.90
21	AA	279	A	P-O3'-C3'	11.24	133.19	119.70
22	AY	72	C	N3-C4-C5	-11.24	117.40	121.90
57	BB	243	U	O4'-C1'-N1	11.24	117.19	108.20
21	AA	616	G	N1-C6-O6	11.24	126.64	119.90
21	AA	1352	C	N3-C4-N4	11.24	125.87	118.00
57	BB	2231	U	O4'-C1'-N1	11.24	117.19	108.20
57	BB	774	G	N9-C4-C5	-11.23	100.91	105.40
57	BB	1462	C	O4'-C1'-N1	11.23	117.19	108.20
58	BA	39	A	N1-C6-N6	11.23	125.34	118.60
21	AA	199	A	N1-C6-N6	11.23	125.34	118.60
21	AA	109	A	C8-N9-C4	11.23	110.29	105.80
21	AA	494	G	C5-N7-C8	-11.22	98.69	104.30
57	BB	111	A	N1-C6-N6	11.22	125.33	118.60
21	AA	583	A	N1-C2-N3	11.22	134.91	129.30
57	BB	704	G	N1-C6-O6	11.22	126.63	119.90
21	AA	1139	G	C8-N9-C4	-11.22	101.91	106.40
57	BB	2100	G	N1-C6-O6	11.22	126.63	119.90
57	BB	848	C	N3-C4-N4	11.22	125.85	118.00
57	BB	1519	G	C5-C6-O6	-11.22	121.87	128.60
57	BB	2484	G	C5-C6-O6	-11.22	121.87	128.60
21	AA	40	C	N3-C4-C5	-11.22	117.41	121.90
57	BB	1616	A	C4-C5-C6	11.22	122.61	117.00
21	AA	702	A	C8-N9-C4	-11.21	101.31	105.80
57	BB	1677	A	C5-C6-N1	-11.21	112.09	117.70
57	BB	1776	G	C5-C6-O6	-11.21	121.87	128.60
21	AA	481	G	C5-C6-N1	-11.21	105.89	111.50
21	AA	487	A	C8-N9-C4	-11.21	101.32	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1327	A	C5-C6-N1	-11.21	112.09	117.70
21	AA	399	G	N7-C8-N9	-11.21	107.50	113.10
57	BB	1088	A	C5-C6-N1	-11.21	112.10	117.70
57	BB	496	G	N3-C4-C5	11.21	134.20	128.60
57	BB	1819	A	N1-C6-N6	11.20	125.32	118.60
21	AA	200	G	N1-C6-O6	11.20	126.62	119.90
21	AA	220	G	C8-N9-C4	-11.20	101.92	106.40
21	AA	765	G	C5-C6-O6	-11.20	121.88	128.60
57	BB	279	A	C8-N9-C4	-11.20	101.32	105.80
57	BB	44	A	N1-C6-N6	11.20	125.32	118.60
21	AA	37	U	O4'-C1'-N1	11.20	117.16	108.20
21	AA	934	C	N3-C4-N4	11.20	125.84	118.00
57	BB	890	C	P-O3'-C3'	11.20	133.13	119.70
11	AT	35	TYR	CB-CG-CD2	-11.19	114.28	121.00
57	BB	2748	A	N1-C6-N6	11.19	125.32	118.60
21	AA	1526	G	N7-C8-N9	-11.19	107.50	113.10
57	BB	2565	A	C5-C6-N6	-11.19	114.75	123.70
21	AA	247	G	C8-N9-C4	-11.19	101.92	106.40
57	BB	1	G	C2-N3-C4	11.19	117.50	111.90
57	BB	1909	C	N3-C4-N4	11.19	125.83	118.00
57	BB	2859	G	N1-C6-O6	11.19	126.61	119.90
21	AA	52	C	C2-N3-C4	11.19	125.49	119.90
57	BB	1564	C	N3-C4-N4	11.19	125.83	118.00
57	BB	1760	C	C2-N3-C4	11.19	125.49	119.90
57	BB	1966	A	C5-C6-N1	-11.19	112.11	117.70
57	BB	2526	G	N1-C6-O6	11.19	126.61	119.90
57	BB	2388	A	N1-C6-N6	11.19	125.31	118.60
21	AA	924	C	O4'-C1'-N1	11.18	117.15	108.20
21	AA	1065	U	C5-C4-O4	-11.18	119.19	125.90
57	BB	23	G	O4'-C1'-N9	11.18	117.15	108.20
57	BB	2544	G	N1-C6-O6	11.18	126.61	119.90
21	AA	634	C	C5-C4-N4	-11.18	112.37	120.20
21	AA	1146	A	N9-C4-C5	11.18	110.27	105.80
57	BB	2009	A	C5-C6-N1	-11.18	112.11	117.70
55	BG	108	PHE	CB-CG-CD1	-11.18	112.97	120.80
57	BB	657	U	N3-C4-O4	11.18	127.23	119.40
11	AT	28	ARG	NE-CZ-NH2	-11.18	114.71	120.30
21	AA	1105	A	C5-C6-N1	-11.18	112.11	117.70
57	BB	1321	A	C4-C5-C6	11.18	122.59	117.00
57	BB	2884	U	C5-C4-O4	-11.18	119.19	125.90
21	AA	453	G	C5-N7-C8	-11.18	98.71	104.30
26	AV	17(A)	U	N3-C2-O2	11.18	130.02	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2232	C	N3-C4-C5	-11.18	117.43	121.90
57	BB	864	G	C5-C6-N1	-11.18	105.91	111.50
57	BB	2236	U	O4'-C1'-N1	11.18	117.14	108.20
21	AA	532	A	C4-C5-C6	11.17	122.59	117.00
23	AW	26	A	C4-C5-C6	11.17	122.59	117.00
31	BL	126	ARG	NE-CZ-NH1	-11.17	114.71	120.30
57	BB	1026	G	O4'-C1'-N9	11.17	117.14	108.20
57	BB	1623	G	O4'-C1'-N9	11.17	117.14	108.20
58	BA	64	G	N1-C6-O6	11.17	126.60	119.90
57	BB	1867	G	N1-C2-N3	-11.17	117.20	123.90
57	BB	2053	G	C5-C6-O6	-11.17	121.90	128.60
57	BB	2755	C	N3-C4-N4	11.17	125.82	118.00
57	BB	89	A	C2-N3-C4	-11.16	105.02	110.60
57	BB	1404	C	O4'-C1'-N1	11.16	117.13	108.20
57	BB	1586	A	N1-C6-N6	11.16	125.30	118.60
57	BB	1680	U	O4'-C1'-N1	11.16	117.13	108.20
57	BB	2516	A	C5-C6-N6	-11.16	114.77	123.70
21	AA	233	C	N3-C4-C5	-11.16	117.44	121.90
21	AA	539	A	O4'-C1'-N9	11.16	117.13	108.20
21	AA	1069	C	O4'-C1'-N1	11.16	117.13	108.20
21	AA	1096	C	N3-C4-N4	11.16	125.81	118.00
57	BB	797	G	O4'-C1'-N9	11.16	117.13	108.20
57	BB	1109	C	O4'-C1'-N1	11.16	117.13	108.20
57	BB	2309	A	N1-C6-N6	11.16	125.30	118.60
57	BB	2503	A	N9-C4-C5	11.16	110.26	105.80
58	BA	21	G	C8-N9-C4	-11.16	101.94	106.40
5	AN	40	ARG	NE-CZ-NH1	11.16	125.88	120.30
21	AA	23	C	C5-C6-N1	11.16	126.58	121.00
21	AA	1020	G	C4-C5-N7	11.15	115.26	110.80
57	BB	471	A	C5-C6-N6	-11.15	114.78	123.70
57	BB	937	C	N1-C2-O2	-11.15	112.21	118.90
21	AA	1026	G	C5-C6-O6	-11.15	121.91	128.60
21	AA	1102	A	C8-N9-C4	-11.15	101.34	105.80
57	BB	622	G	C6-C5-N7	-11.15	123.71	130.40
57	BB	1553	A	C5-C6-N6	-11.15	114.78	123.70
57	BB	1745	A	C4-C5-C6	11.15	122.58	117.00
21	AA	382	A	C4-C5-C6	11.15	122.57	117.00
21	AA	993	G	N1-C6-O6	11.15	126.59	119.90
21	AA	1098	C	O4'-C1'-N1	11.15	117.12	108.20
22	AY	12	U	O4'-C1'-N1	11.15	117.12	108.20
23	AW	13	C	O4'-C1'-N1	11.15	117.12	108.20
57	BB	2143	C	O4'-C1'-N1	11.15	117.12	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	92	C	C5-C4-N4	-11.15	112.40	120.20
57	BB	2343	U	O4'-C1'-N1	11.15	117.12	108.20
21	AA	668	G	C4-C5-N7	-11.14	106.34	110.80
21	AA	1269	A	C5-C6-N6	-11.14	114.78	123.70
57	BB	175	G	O4'-C1'-N9	11.14	117.12	108.20
57	BB	643	A	O4'-C1'-N9	11.14	117.11	108.20
57	BB	466	A	N1-C6-N6	11.14	125.28	118.60
57	BB	1983	G	N1-C6-O6	11.14	126.58	119.90
12	AU	18	PHE	CB-CG-CD1	-11.14	113.00	120.80
21	AA	238	A	N1-C6-N6	11.14	125.28	118.60
43	BX	44	ARG	NE-CZ-NH1	11.14	125.87	120.30
21	AA	203	G	N3-C2-N2	11.14	127.69	119.90
57	BB	2119	A	C5-C6-N6	-11.14	114.79	123.70
57	BB	1266	G	C5-C6-O6	-11.13	121.92	128.60
57	BB	2787	C	O4'-C1'-N1	11.13	117.11	108.20
57	BB	1322	A	C4-C5-C6	11.13	122.57	117.00
21	AA	205	A	C5-N7-C8	11.13	109.47	103.90
21	AA	1028	C	N3-C4-N4	11.13	125.79	118.00
57	BB	898	C	N1-C2-O2	-11.13	112.22	118.90
57	BB	2044	C	O4'-C1'-N1	11.13	117.10	108.20
57	BB	2660	A	C5-C6-N6	-11.13	114.80	123.70
22	AY	20	G	N7-C8-N9	11.13	118.67	113.10
26	AV	75	C	N3-C4-N4	11.13	125.79	118.00
57	BB	2512	C	N3-C4-N4	11.13	125.79	118.00
57	BB	2470	G	C2-N3-C4	11.13	117.46	111.90
21	AA	1104	G	N1-C2-N3	-11.12	117.23	123.90
21	AA	1378	C	N3-C4-C5	-11.12	117.45	121.90
21	AA	767	A	N9-C4-C5	11.12	110.25	105.80
21	AA	1446	A	N1-C6-N6	11.12	125.27	118.60
22	AY	74	C	C2-N3-C4	-11.12	114.34	119.90
57	BB	541	A	N1-C6-N6	11.12	125.27	118.60
57	BB	1395	A	C5-C6-N1	-11.12	112.14	117.70
21	AA	341	C	N3-C4-C5	-11.12	117.45	121.90
57	BB	282	A	C5-C6-N1	-11.12	112.14	117.70
57	BB	644	A	N3-C4-C5	-11.12	119.02	126.80
57	BB	1370	C	N3-C4-N4	11.12	125.78	118.00
57	BB	2596	U	C2-N3-C4	-11.12	120.33	127.00
21	AA	18	C	C4-C5-C6	11.11	122.96	117.40
21	AA	76	G	N1-C6-O6	11.11	126.57	119.90
21	AA	1228	C	C5-C6-N1	11.12	126.56	121.00
26	AV	19	G	C4-C5-N7	-11.12	106.35	110.80
57	BB	722	A	C5-C6-N6	-11.12	114.81	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	705	A	O4'-C1'-N9	11.11	117.09	108.20
57	BB	1164	C	C4-C5-C6	11.11	122.95	117.40
57	BB	1509	A	C5-C6-N6	-11.11	114.81	123.70
57	BB	2002	G	N1-C6-O6	11.11	126.57	119.90
21	AA	188	C	O4'-C1'-N1	11.11	117.09	108.20
21	AA	623	C	O4'-C1'-N1	11.11	117.09	108.20
57	BB	1998	A	N3-C4-C5	-11.11	119.02	126.80
21	AA	121	U	O4'-C1'-N1	11.11	117.09	108.20
57	BB	165	A	C5-C6-N6	-11.11	114.82	123.70
57	BB	972	A	O4'-C1'-N9	11.11	117.08	108.20
57	BB	1171	G	N1-C6-O6	11.11	126.56	119.90
23	AW	60	U	N3-C4-O4	11.10	127.17	119.40
32	BM	51	ARG	NE-CZ-NH1	11.10	125.85	120.30
57	BB	1036	G	N1-C2-N3	-11.10	117.24	123.90
21	AA	465	A	P-O3'-C3'	11.10	133.02	119.70
57	BB	1572	A	C8-N9-C4	-11.10	101.36	105.80
57	BB	1882	U	O4'-C1'-N1	11.10	117.08	108.20
58	BA	84	G	N1-C2-N3	-11.10	117.24	123.90
21	AA	163	C	O4'-C1'-N1	11.10	117.08	108.20
25	AZ	204	ARG	NE-CZ-NH2	-11.10	114.75	120.30
57	BB	998	C	O4'-C1'-N1	11.10	117.08	108.20
57	BB	2615	U	O4'-C1'-N1	11.10	117.08	108.20
22	AY	51	G	C5-C6-O6	-11.09	121.94	128.60
37	BR	90	ARG	NE-CZ-NH1	11.09	125.85	120.30
21	AA	678	U	N3-C4-O4	11.09	127.16	119.40
21	AA	1158	C	N3-C4-C5	-11.09	117.46	121.90
57	BB	1091	G	O4'-C1'-N9	11.09	117.07	108.20
57	BB	1145	C	C5-C6-N1	11.09	126.55	121.00
57	BB	1088	A	C5-N7-C8	11.09	109.44	103.90
57	BB	1395	A	N1-C6-N6	11.09	125.25	118.60
57	BB	2661	G	C5-C6-O6	-11.09	121.95	128.60
57	BB	877	A	O4'-C1'-N9	11.09	117.07	108.20
57	BB	1162	G	C5-C6-O6	-11.08	121.95	128.60
21	AA	192	A	N1-C6-N6	11.08	125.25	118.60
21	AA	1361	G	N1-C6-O6	11.08	126.55	119.90
21	AA	566	G	N1-C6-O6	11.08	126.55	119.90
23	AW	36	A	C4-C5-N7	-11.08	105.16	110.70
49	B2	3	ARG	NE-CZ-NH2	-11.08	114.76	120.30
57	BB	1403	A	N1-C6-N6	11.08	125.25	118.60
58	BA	57	A	C5-C6-N1	-11.08	112.16	117.70
57	BB	402	A	C8-N9-C4	-11.08	101.37	105.80
57	BB	1627	G	C8-N9-C4	-11.08	101.97	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1100	C	N3-C4-C5	-11.07	117.47	121.90
57	BB	1448	G	N9-C4-C5	11.07	109.83	105.40
21	AA	101	A	N1-C6-N6	11.07	125.24	118.60
21	AA	144	G	C6-N1-C2	-11.07	118.46	125.10
57	BB	246	C	N3-C4-N4	11.07	125.75	118.00
57	BB	2365	G	O4'-C1'-N9	11.07	117.06	108.20
21	AA	584	G	C5-C6-O6	-11.07	121.96	128.60
57	BB	1032	A	N1-C6-N6	11.07	125.24	118.60
57	BB	1624	U	O4'-C1'-N1	11.07	117.06	108.20
57	BB	2575	C	N3-C4-N4	11.07	125.75	118.00
58	BA	4	C	O4'-C1'-N1	11.07	117.06	108.20
58	BA	59	A	C4-C5-C6	11.07	122.53	117.00
57	BB	690	G	O4'-C1'-N9	11.07	117.05	108.20
21	AA	165	G	C5-N7-C8	11.06	109.83	104.30
57	BB	974	G	C4-C5-C6	11.06	125.44	118.80
57	BB	1496	A	C8-N9-C4	-11.06	101.38	105.80
57	BB	1999	C	C5-C4-N4	-11.06	112.46	120.20
58	BA	29	A	O4'-C1'-N9	11.06	117.05	108.20
57	BB	2025	C	N3-C4-N4	11.06	125.74	118.00
57	BB	1104	C	C5-C4-N4	-11.06	112.46	120.20
57	BB	1887	C	O4'-C1'-N1	11.06	117.05	108.20
21	AA	776	G	O4'-C1'-N9	11.05	117.04	108.20
57	BB	716	A	C8-N9-C4	-11.06	101.38	105.80
43	BX	49	ARG	NE-CZ-NH1	11.05	125.83	120.30
57	BB	1501	G	N1-C6-O6	11.05	126.53	119.90
57	BB	859	G	C2-N3-C4	11.05	117.43	111.90
21	AA	338	A	N1-C2-N3	11.05	134.82	129.30
26	AV	29	G	C5-C6-O6	-11.05	121.97	128.60
21	AA	1214	C	N3-C4-N4	11.05	125.73	118.00
21	AA	1507	A	C2-N3-C4	-11.05	105.07	110.60
57	BB	1745	A	C5-C6-N1	-11.05	112.17	117.70
57	BB	2150	C	C6-N1-C2	-11.05	115.88	120.30
57	BB	1431	A	O4'-C1'-N9	11.05	117.04	108.20
57	BB	1742	U	N3-C4-O4	11.05	127.13	119.40
57	BB	2763	G	N1-C6-O6	11.05	126.53	119.90
21	AA	198	G	N1-C6-O6	11.04	126.53	119.90
21	AA	772	U	O4'-C1'-N1	11.04	117.04	108.20
21	AA	1358	U	C5-C4-O4	-11.05	119.27	125.90
57	BB	515	A	N7-C8-N9	-11.04	108.28	113.80
57	BB	983	A	C5-C6-N6	-11.04	114.86	123.70
57	BB	189	G	C5-C6-O6	-11.04	121.97	128.60
57	BB	1920	C	C4-C5-C6	11.04	122.92	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2053	G	N3-C2-N2	11.04	127.63	119.90
58	BA	41	G	N1-C6-O6	11.04	126.53	119.90
57	BB	609	A	C4-C5-C6	11.04	122.52	117.00
58	BA	35	C	C2-N3-C4	11.04	125.42	119.90
21	AA	597	G	C5-C6-O6	-11.04	121.98	128.60
22	AY	15	G	N9-C4-C5	-11.04	100.98	105.40
57	BB	1764	C	N3-C4-N4	11.04	125.73	118.00
57	BB	2226	C	N3-C4-N4	11.04	125.73	118.00
57	BB	473	G	N1-C6-O6	11.04	126.52	119.90
57	BB	763	G	C5-C6-N1	-11.04	105.98	111.50
57	BB	925	A	C5-C6-N6	-11.04	114.87	123.70
57	BB	1421	G	C2-N3-C4	11.04	117.42	111.90
57	BB	1644	C	N3-C4-C5	-11.04	117.49	121.90
57	BB	2289	G	N1-C6-O6	11.03	126.52	119.90
57	BB	2390	U	O4'-C1'-N1	11.03	117.03	108.20
21	AA	1285	A	C5-C6-N6	-11.03	114.87	123.70
57	BB	2753	A	C8-N9-C4	-11.03	101.39	105.80
33	BN	4	ARG	NE-CZ-NH1	11.03	125.81	120.30
57	BB	272	A	C5-C6-N1	-11.03	112.19	117.70
57	BB	614	A	N1-C2-N3	11.03	134.81	129.30
57	BB	2084	C	C6-N1-C2	-11.03	115.89	120.30
21	AA	865	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1042	G	O4'-C1'-N9	11.02	117.02	108.20
57	BB	2270	A	N1-C6-N6	11.02	125.21	118.60
21	AA	781	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1388	G	C6-C5-N7	-11.02	123.79	130.40
21	AA	1103	C	N3-C4-N4	11.02	125.71	118.00
57	BB	897	C	O4'-C1'-N1	11.02	117.02	108.20
57	BB	2342	C	C6-N1-C2	-11.02	115.89	120.30
57	BB	1264	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1273	U	C5-C6-N1	-11.01	117.19	122.70
57	BB	1464	G	C6-C5-N7	-11.01	123.79	130.40
57	BB	2549	G	C5-C6-O6	-11.01	121.99	128.60
21	AA	265	G	N1-C6-O6	11.01	126.50	119.90
21	AA	329	A	N1-C6-N6	11.01	125.21	118.60
21	AA	369	G	N1-C6-O6	11.01	126.51	119.90
57	BB	2619	C	C2-N3-C4	11.01	125.41	119.90
21	AA	629	A	C4-C5-C6	11.01	122.50	117.00
21	AA	1265	C	O4'-C1'-N1	11.01	117.00	108.20
57	BB	447	A	C8-N9-C4	-11.01	101.40	105.80
57	BB	2433	A	C5-C6-N1	-11.01	112.20	117.70
58	BA	98	G	C5-C6-O6	-11.01	122.00	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	12	C	N3-C4-N4	11.01	125.70	118.00
21	AA	650	G	N1-C6-O6	11.00	126.50	119.90
57	BB	2753	A	C4-C5-N7	-11.00	105.20	110.70
21	AA	432	A	C4-C5-C6	11.00	122.50	117.00
57	BB	236	C	C5-C4-N4	-11.00	112.50	120.20
57	BB	607	U	N1-C2-N3	11.00	121.50	114.90
57	BB	640	C	O4'-C1'-N1	11.00	117.00	108.20
57	BB	1187	G	C6-C5-N7	-11.00	123.80	130.40
21	AA	1530	G	C5-C6-O6	-11.00	122.00	128.60
21	AA	1435	G	N1-C2-N3	-11.00	117.30	123.90
57	BB	568	U	C5-C4-O4	-11.00	119.30	125.90
57	BB	1702	G	N1-C6-O6	11.00	126.50	119.90
21	AA	81	A	C4-C5-C6	10.99	122.50	117.00
21	AA	424	G	C5-C6-O6	-10.99	122.00	128.60
25	AZ	262	ARG	NE-CZ-NH1	10.99	125.80	120.30
57	BB	354	A	N1-C6-N6	10.99	125.20	118.60
57	BB	1307	A	N9-C4-C5	-10.99	101.40	105.80
57	BB	1614	A	C5-C6-N6	-10.99	114.90	123.70
57	BB	2641	G	C4-C5-C6	10.99	125.40	118.80
57	BB	2772	C	N3-C4-C5	-10.99	117.50	121.90
21	AA	1215	G	C8-N9-C4	-10.99	102.00	106.40
57	BB	240	C	N3-C4-N4	10.99	125.69	118.00
57	BB	2691	C	N3-C4-C5	10.99	126.30	121.90
21	AA	1455	G	N1-C6-O6	10.98	126.49	119.90
57	BB	1886	U	N3-C4-O4	10.98	127.09	119.40
58	BA	20	G	N1-C6-O6	10.98	126.49	119.90
23	AW	25	C	N3-C4-N4	10.98	125.69	118.00
57	BB	265	A	N3-C4-C5	10.98	134.49	126.80
57	BB	877	A	C4-C5-C6	10.98	122.49	117.00
57	BB	235	U	O4'-C1'-N1	10.98	116.99	108.20
21	AA	43	C	C6-N1-C2	-10.98	115.91	120.30
21	AA	1093	A	O4'-C1'-N9	10.98	116.98	108.20
21	AA	1166	G	N3-C2-N2	10.98	127.58	119.90
21	AA	1187	G	C5-C6-O6	-10.98	122.01	128.60
57	BB	899	A	N1-C6-N6	10.98	125.19	118.60
21	AA	7	A	N7-C8-N9	10.97	119.29	113.80
21	AA	532	A	C5-N7-C8	10.97	109.39	103.90
22	AY	1	G	N1-C6-O6	10.97	126.48	119.90
57	BB	1655	A	C5-C6-N1	-10.97	112.21	117.70
57	BB	2650	U	C5-C6-N1	10.97	128.19	122.70
57	BB	23	G	N7-C8-N9	10.97	118.58	113.10
57	BB	196	A	C5-C6-N1	-10.97	112.21	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	211	C	O4'-C1'-N1	10.97	116.98	108.20
57	BB	2509	G	C5-C6-O6	-10.97	122.02	128.60
57	BB	347	A	N3-C4-C5	-10.97	119.12	126.80
21	AA	471	U	O4'-C1'-N1	10.97	116.97	108.20
26	AV	32	C	N3-C4-C5	-10.96	117.51	121.90
57	BB	2809	A	N1-C6-N6	10.97	125.18	118.60
57	BB	379	G	O4'-C1'-N9	10.96	116.97	108.20
57	BB	1133	A	C5-C6-N1	-10.96	112.22	117.70
21	AA	1375	A	C5-C6-N1	-10.96	112.22	117.70
22	AY	45	G	C5-C6-O6	-10.96	122.02	128.60
57	BB	1367	A	N1-C2-N3	10.96	134.78	129.30
21	AA	691	G	N3-C2-N2	10.96	127.57	119.90
57	BB	553	G	C5-C6-O6	-10.96	122.03	128.60
21	AA	1051	C	O4'-C1'-N1	10.95	116.96	108.20
57	BB	330	A	C4-C5-C6	10.95	122.48	117.00
57	BB	767	U	N3-C2-O2	10.96	129.87	122.20
57	BB	2853	C	C2-N3-C4	10.96	125.38	119.90
58	BA	13	G	O4'-C1'-N9	10.95	116.96	108.20
21	AA	161	A	N1-C6-N6	10.95	125.17	118.60
57	BB	1706	C	C6-N1-C2	-10.95	115.92	120.30
57	BB	2461	A	N1-C6-N6	10.95	125.17	118.60
57	BB	2477	U	O4'-C1'-N1	10.95	116.96	108.20
21	AA	334	C	C5-C6-N1	10.95	126.47	121.00
26	AV	20	U	N3-C4-O4	10.95	127.06	119.40
57	BB	299	A	C5-C6-N1	-10.95	112.23	117.70
57	BB	2466	C	C4-C5-C6	10.95	122.87	117.40
57	BB	2839	G	N1-C2-N3	-10.95	117.33	123.90
57	BB	1727	C	C4-C5-C6	-10.95	111.93	117.40
21	AA	949	A	C5-N7-C8	10.95	109.37	103.90
21	AA	1417	G	C5-N7-C8	10.95	109.77	104.30
57	BB	1309	G	O4'-C1'-N9	10.95	116.96	108.20
57	BB	2188	U	O4'-C1'-N1	10.95	116.96	108.20
21	AA	286	C	N1-C2-O2	-10.94	112.33	118.90
57	BB	1463	C	O4'-C1'-N1	10.94	116.95	108.20
21	AA	1011	C	O4'-C1'-N1	10.94	116.95	108.20
57	BB	409	G	N1-C6-O6	10.94	126.47	119.90
57	BB	2139	U	C5-C4-O4	-10.94	119.34	125.90
22	AY	66	A	N1-C2-N3	10.94	134.77	129.30
57	BB	1496	A	N1-C6-N6	10.94	125.16	118.60
57	BB	2364	C	C4-C5-C6	10.94	122.87	117.40
21	AA	1531	A	C5-C6-N6	-10.94	114.95	123.70
57	BB	2625	G	N1-C6-O6	10.94	126.46	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	18	G	O4'-C1'-N9	10.93	116.95	108.20
21	AA	834	U	O4'-C1'-N1	10.93	116.94	108.20
57	BB	1413	A	C4-C5-C6	10.93	122.47	117.00
57	BB	1727	C	C6-N1-C2	-10.93	115.93	120.30
57	BB	1746	A	N1-C6-N6	10.93	125.16	118.60
21	AA	384	G	N1-C6-O6	10.93	126.45	119.90
57	BB	1440	U	O4'-C1'-N1	10.93	116.94	108.20
57	BB	1789	A	N9-C4-C5	-10.93	101.43	105.80
57	BB	2333	A	P-O3'-C3'	10.93	132.81	119.70
58	BA	45	A	C2-N3-C4	-10.93	105.14	110.60
21	AA	847	G	N1-C2-N3	-10.92	117.34	123.90
21	AA	1152	A	C5-C6-N1	-10.92	112.24	117.70
57	BB	435	C	C5-C4-N4	-10.92	112.55	120.20
57	BB	2608	G	C4-C5-N7	-10.92	106.43	110.80
21	AA	1001	C	C2-N3-C4	10.92	125.36	119.90
57	BB	32	C	O4'-C1'-N1	10.92	116.94	108.20
21	AA	667	G	O4'-C1'-N9	10.92	116.94	108.20
21	AA	783	C	N3-C4-C5	-10.92	117.53	121.90
57	BB	1369	G	C5-C6-O6	-10.92	122.05	128.60
57	BB	1928	A	C4-C5-C6	10.92	122.46	117.00
21	AA	178	C	C6-N1-C2	10.92	124.67	120.30
57	BB	905	A	C4-C5-C6	10.92	122.46	117.00
57	BB	2450	A	C8-N9-C4	-10.92	101.43	105.80
21	AA	149	A	C4-C5-C6	10.91	122.46	117.00
57	BB	2436	G	N1-C2-N3	-10.91	117.35	123.90
21	AA	578	C	N3-C4-N4	10.91	125.64	118.00
21	AA	1209	C	N3-C4-N4	10.91	125.64	118.00
21	AA	1392	G	C5-C6-O6	-10.91	122.06	128.60
57	BB	132	G	N1-C6-O6	10.91	126.44	119.90
57	BB	597	G	C5-C6-N1	-10.91	106.05	111.50
57	BB	2380	C	O4'-C1'-N1	10.91	116.93	108.20
57	BB	246	C	N3-C4-C5	-10.90	117.54	121.90
57	BB	549	G	N1-C6-O6	10.90	126.44	119.90
57	BB	1087	G	N1-C6-O6	10.90	126.44	119.90
57	BB	2369	A	C4-C5-C6	10.90	122.45	117.00
58	BA	47	C	C6-N1-C2	-10.90	115.94	120.30
22	AY	22	G	N1-C6-O6	10.90	126.44	119.90
57	BB	393	C	O4'-C1'-N1	10.90	116.92	108.20
57	BB	2649	C	O4'-C1'-N1	10.90	116.92	108.20
21	AA	1510	C	O4'-C1'-N1	10.89	116.92	108.20
57	BB	2631	G	N1-C6-O6	10.89	126.44	119.90
57	BB	1128	G	O4'-C1'-N9	10.89	116.91	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1236	G	N1-C2-N3	-10.89	117.36	123.90
57	BB	881	G	N3-C2-N2	10.89	127.52	119.90
57	BB	1906	G	C8-N9-C4	-10.89	102.04	106.40
57	BB	2021	C	N3-C4-C5	-10.89	117.55	121.90
21	AA	1016	A	C4-C5-C6	10.88	122.44	117.00
57	BB	2466	C	C6-N1-C2	-10.89	115.95	120.30
57	BB	2668	G	C4-C5-C6	10.89	125.33	118.80
57	BB	92	U	O4'-C1'-N1	10.88	116.91	108.20
57	BB	2049	G	O4'-C1'-N9	10.88	116.91	108.20
57	BB	2352	A	N9-C4-C5	-10.88	101.45	105.80
57	BB	2412	A	C5-C6-N6	-10.88	114.99	123.70
57	BB	1592	C	N3-C4-N4	10.88	125.62	118.00
57	BB	1706	C	C5-C6-N1	10.88	126.44	121.00
57	BB	2754	U	O4'-C1'-N1	10.88	116.90	108.20
57	BB	714	U	N3-C4-C5	-10.88	108.07	114.60
57	BB	726	G	C5-C6-O6	-10.88	122.07	128.60
57	BB	1211	C	P-O3'-C3'	10.88	132.75	119.70
57	BB	1783	A	C5-C6-N1	-10.88	112.26	117.70
57	BB	1998	A	C5-C6-N1	-10.88	112.26	117.70
21	AA	615	G	N1-C6-O6	10.88	126.42	119.90
26	AV	42	G	C6-N1-C2	-10.88	118.57	125.10
57	BB	910	A	N1-C6-N6	10.88	125.12	118.60
20	AI	48	ARG	NE-CZ-NH1	10.87	125.74	120.30
21	AA	230	G	O4'-C1'-N9	10.87	116.90	108.20
57	BB	2008	C	N3-C4-C5	-10.87	117.55	121.90
57	BB	2233	U	N3-C4-O4	10.88	127.01	119.40
57	BB	2582	G	C3'-C2'-C1'	-10.88	92.80	101.50
21	AA	1082	A	C4-C5-C6	10.87	122.44	117.00
21	AA	1249	C	N3-C4-C5	10.87	126.25	121.90
57	BB	6	A	O4'-C1'-N9	10.87	116.90	108.20
57	BB	946	C	N3-C4-C5	-10.87	117.55	121.90
21	AA	969	A	N1-C6-N6	10.87	125.12	118.60
26	AV	13	C	O4'-C1'-N1	10.87	116.90	108.20
21	AA	1105	A	O4'-C1'-N9	10.87	116.89	108.20
57	BB	2489	U	O4'-C1'-N1	10.87	116.89	108.20
21	AA	583	A	N1-C6-N6	10.86	125.12	118.60
57	BB	1701	A	C5-C6-N1	-10.86	112.27	117.70
57	BB	2414	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	2759	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	2808	G	C8-N9-C4	10.86	110.75	106.40
21	AA	433	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	1579	A	C5-C6-N6	-10.86	115.01	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	643	C	C6-N1-C2	-10.86	115.96	120.30
21	AA	922	G	N1-C6-O6	10.86	126.41	119.90
21	AA	542	G	C4-C5-N7	-10.85	106.46	110.80
57	BB	1146	C	O4'-C1'-N1	10.85	116.88	108.20
57	BB	2322	A	C4-C5-N7	10.85	116.13	110.70
18	AG	118	ARG	NE-CZ-NH1	10.85	125.72	120.30
57	BB	178	G	C5-C6-O6	-10.85	122.09	128.60
57	BB	1206	G	N1-C6-O6	10.85	126.41	119.90
57	BB	1669	A	C8-N9-C4	-10.85	101.46	105.80
21	AA	678	U	O4'-C1'-N1	10.85	116.88	108.20
57	BB	1453	A	C5-C6-N1	-10.85	112.28	117.70
57	BB	2876	G	C6-C5-N7	-10.85	123.89	130.40
21	AA	319	G	O4'-C1'-N9	10.84	116.88	108.20
57	BB	213	A	C4-C5-N7	-10.84	105.28	110.70
57	BB	1239	G	C4-C5-C6	10.84	125.31	118.80
57	BB	43	G	N1-C6-O6	10.84	126.41	119.90
42	BW	54	ARG	NE-CZ-NH2	-10.84	114.88	120.30
57	BB	615	U	O4'-C1'-N1	10.84	116.87	108.20
57	BB	2540	C	O4'-C1'-N1	10.84	116.87	108.20
57	BB	2700	A	O4'-C1'-N9	10.84	116.87	108.20
21	AA	1186	G	C4-C5-N7	10.83	115.13	110.80
57	BB	616	A	N1-C6-N6	10.83	125.10	118.60
57	BB	2882	A	O4'-C1'-N9	10.83	116.87	108.20
21	AA	159	G	C5-C6-O6	-10.83	122.10	128.60
57	BB	640	C	C5-C4-N4	-10.83	112.62	120.20
57	BB	724	U	O4'-C1'-N1	10.83	116.86	108.20
21	AA	1131	G	N1-C2-N3	-10.83	117.40	123.90
39	BT	69	ARG	NE-CZ-NH1	10.83	125.71	120.30
57	BB	69	C	O4'-C1'-N1	10.83	116.86	108.20
57	BB	1369	G	N1-C6-O6	10.83	126.40	119.90
57	BB	181	A	C8-N9-C4	-10.83	101.47	105.80
57	BB	66	C	C2-N3-C4	10.82	125.31	119.90
57	BB	654	A	N1-C2-N3	10.82	134.71	129.30
57	BB	1776	G	N1-C6-O6	10.82	126.39	119.90
21	AA	197	A	C5-C6-N6	-10.82	115.04	123.70
21	AA	203	G	N1-C2-N3	-10.82	117.41	123.90
57	BB	412	A	N1-C6-N6	10.82	125.09	118.60
21	AA	492	C	N3-C4-C5	-10.82	117.57	121.90
21	AA	751	U	O4'-C1'-N1	10.82	116.86	108.20
21	AA	1151	A	C5-C6-N1	-10.82	112.29	117.70
21	AA	971	G	C5-C6-O6	-10.82	122.11	128.60
22	AY	12	U	C4'-C3'-C2'	-10.82	91.78	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	14	A	C8-N9-C4	-10.82	101.47	105.80
23	AW	10	G	C6-C5-N7	-10.82	123.91	130.40
57	BB	776	G	C5-C6-O6	-10.82	122.11	128.60
21	AA	18	C	N3-C4-C5	-10.82	117.57	121.90
57	BB	2324	U	C5-C6-N1	10.82	128.11	122.70
21	AA	563	A	C5-N7-C8	10.81	109.31	103.90
21	AA	1019	A	C8-N9-C4	-10.81	101.47	105.80
21	AA	1040	U	O4'-C1'-N1	10.81	116.85	108.20
21	AA	1117	A	C4-C5-C6	10.81	122.41	117.00
57	BB	1572	A	N1-C6-N6	10.81	125.09	118.60
21	AA	366	A	P-O3'-C3'	10.81	132.68	119.70
21	AA	1475	G	C5-C6-O6	-10.81	122.11	128.60
57	BB	401	A	N1-C6-N6	10.81	125.09	118.60
57	BB	2733	A	C5-C6-N1	-10.81	112.29	117.70
57	BB	1883	U	N3-C4-O4	10.81	126.97	119.40
21	AA	6	G	N3-C4-C5	-10.81	123.20	128.60
21	AA	308	C	N3-C4-N4	10.81	125.57	118.00
21	AA	815	A	N1-C6-N6	10.81	125.09	118.60
21	AA	1136	C	N3-C4-N4	10.81	125.56	118.00
57	BB	2668	G	C5-C6-N1	-10.81	106.10	111.50
57	BB	1625	C	N3-C4-N4	10.80	125.56	118.00
57	BB	1775	U	N3-C2-O2	10.80	129.76	122.20
57	BB	2009	A	C5-C6-N6	-10.80	115.06	123.70
57	BB	2247	A	C4-C5-C6	10.80	122.40	117.00
57	BB	1209	U	P-O3'-C3'	10.80	132.66	119.70
57	BB	1042	G	N1-C6-O6	10.80	126.38	119.90
21	AA	234	C	N3-C4-N4	10.80	125.56	118.00
21	AA	509	A	N1-C6-N6	10.80	125.08	118.60
22	AY	47	U	O4'-C1'-N1	10.80	116.84	108.20
57	BB	442	G	C5-C6-O6	-10.80	122.12	128.60
57	BB	1662	U	O4'-C1'-N1	10.80	116.84	108.20
58	BA	81	G	C5-C6-O6	-10.80	122.12	128.60
5	AN	60	ARG	NE-CZ-NH1	10.80	125.70	120.30
21	AA	12	U	O4'-C1'-N1	10.79	116.84	108.20
57	BB	91	A	C5-C6-N6	-10.80	115.06	123.70
57	BB	1098	A	C5-C6-N1	-10.80	112.30	117.70
57	BB	2377	A	C5-C6-N1	-10.79	112.30	117.70
58	BA	96	G	N1-C6-O6	10.80	126.38	119.90
57	BB	2638	G	C5-C6-O6	-10.79	122.12	128.60
21	AA	1277	C	C5-C4-N4	-10.79	112.65	120.20
57	BB	77	G	C5-C6-N1	-10.79	106.11	111.50
57	BB	128	C	O4'-C1'-N1	10.79	116.83	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	281	C	N3-C4-N4	10.79	125.55	118.00
57	BB	729	G	C5-C6-O6	-10.79	122.13	128.60
57	BB	433	C	O4'-C1'-N1	10.78	116.83	108.20
57	BB	2364	C	O4'-C1'-N1	10.78	116.83	108.20
57	BB	1981	A	N1-C6-N6	10.78	125.07	118.60
54	BF	113	PHE	CB-CG-CD2	-10.78	113.25	120.80
57	BB	182	A	N1-C6-N6	10.78	125.07	118.60
57	BB	2308	G	O4'-C1'-N9	10.78	116.83	108.20
21	AA	1279	G	C5-C6-N1	-10.78	106.11	111.50
26	AV	17(A)	U	N1-C2-N3	-10.78	108.43	114.90
21	AA	1082	A	C6-C5-N7	-10.78	124.76	132.30
21	AA	1225	A	N1-C6-N6	10.78	125.07	118.60
57	BB	210	C	N3-C4-C5	-10.78	117.59	121.90
57	BB	794	A	C5-N7-C8	10.78	109.29	103.90
57	BB	857	G	N1-C6-O6	10.78	126.36	119.90
21	AA	507	C	N3-C4-N4	10.77	125.54	118.00
21	AA	1357	A	N1-C6-N6	10.77	125.06	118.60
21	AA	1509	C	O4'-C1'-N1	10.77	116.82	108.20
57	BB	1403	A	O4'-C1'-N9	10.77	116.82	108.20
57	BB	900	A	P-O3'-C3'	-10.77	106.78	119.70
57	BB	1999	C	C6-N1-C2	-10.77	115.99	120.30
57	BB	2092	U	C2-N3-C4	-10.77	120.54	127.00
21	AA	1414	U	C4-C5-C6	-10.77	113.24	119.70
26	AV	48	C	N3-C4-N4	10.77	125.54	118.00
57	BB	1547	C	O4'-C1'-N1	10.77	116.81	108.20
57	BB	2518	A	C5-C6-N6	-10.77	115.09	123.70
57	BB	1897	G	C5-C6-O6	-10.76	122.14	128.60
19	AH	79	ARG	NE-CZ-NH1	10.76	125.68	120.30
21	AA	1217	C	C5-C4-N4	-10.76	112.67	120.20
57	BB	2087	G	C5-C6-O6	-10.76	122.14	128.60
57	BB	2282	G	C5-C6-O6	-10.76	122.14	128.60
4	AM	69	ARG	NE-CZ-NH2	-10.76	114.92	120.30
21	AA	155	A	C6-C5-N7	-10.76	124.77	132.30
21	AA	1171	A	C5-C6-N1	-10.76	112.32	117.70
57	BB	819	A	N1-C6-N6	10.76	125.05	118.60
57	BB	2144	G	C5-C6-O6	-10.76	122.15	128.60
4	AM	78	ARG	NE-CZ-NH2	-10.75	114.92	120.30
23	AW	60	U	O4'-C1'-N1	10.75	116.80	108.20
57	BB	2413	G	N1-C6-O6	10.75	126.35	119.90
25	AZ	57	ALA	CB-CA-C	-10.75	93.97	110.10
57	BB	1333	G	N1-C6-O6	10.75	126.35	119.90
57	BB	2466	C	O4'-C1'-N1	10.75	116.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	792	A	C5-C6-N6	-10.75	115.10	123.70
57	BB	942	G	C4-C5-N7	10.75	115.10	110.80
57	BB	882	G	N3-C2-N2	10.75	127.42	119.90
57	BB	2592	G	C5-C6-O6	-10.75	122.15	128.60
21	AA	22	G	N1-C6-O6	10.75	126.35	119.90
21	AA	68	G	N3-C2-N2	10.75	127.42	119.90
26	AV	76	A	N1-C2-N3	10.75	134.67	129.30
57	BB	1529	G	C5-C6-O6	-10.75	122.15	128.60
57	BB	740	C	O4'-C1'-N1	10.75	116.80	108.20
57	BB	942	G	C5-N7-C8	-10.75	98.93	104.30
57	BB	1004	U	O4'-C1'-N1	10.75	116.80	108.20
57	BB	1591	A	O4'-C1'-N9	10.75	116.80	108.20
57	BB	1651	G	C5-C6-O6	-10.75	122.15	128.60
21	AA	234	C	O4'-C1'-N1	10.74	116.80	108.20
21	AA	977	A	C5-C6-N6	-10.74	115.10	123.70
23	AW	69	G	O4'-C1'-N9	10.74	116.80	108.20
57	BB	275	C	C5-C4-N4	-10.74	112.68	120.20
21	AA	754	C	N3-C4-N4	10.74	125.52	118.00
21	AA	572	A	C5-C6-N6	-10.74	115.11	123.70
21	AA	1299	A	C4-C5-C6	10.74	122.37	117.00
57	BB	312	G	N9-C4-C5	10.74	109.69	105.40
57	BB	1861	G	C5-C6-O6	-10.74	122.16	128.60
21	AA	506	G	N1-C6-O6	10.73	126.34	119.90
21	AA	1169	A	N1-C6-N6	10.73	125.04	118.60
57	BB	203	A	C5-C6-N6	-10.73	115.11	123.70
57	BB	291	G	N1-C6-O6	10.73	126.34	119.90
57	BB	532	A	C8-N9-C4	-10.73	101.51	105.80
57	BB	2508	G	O4'-C1'-N9	10.73	116.79	108.20
21	AA	308	C	C5-C4-N4	-10.73	112.69	120.20
21	AA	563	A	C2-N3-C4	10.73	115.97	110.60
21	AA	1460	C	O4'-C1'-N1	10.73	116.78	108.20
57	BB	2298	A	C2-N3-C4	-10.73	105.23	110.60
21	AA	672	U	O4'-C1'-N1	10.73	116.78	108.20
21	AA	975	A	N1-C6-N6	10.73	125.04	118.60
57	BB	74	A	N1-C6-N6	10.73	125.04	118.60
21	AA	1154	G	C5-C6-O6	-10.73	122.16	128.60
57	BB	1154	G	C5-C6-O6	-10.73	122.17	128.60
57	BB	2841	C	C4-C5-C6	10.73	122.76	117.40
21	AA	147	G	N1-C6-O6	10.72	126.33	119.90
57	BB	1206	G	C5-C6-O6	-10.72	122.17	128.60
8	AQ	26	ARG	NE-CZ-NH1	10.72	125.66	120.30
21	AA	511	C	N3-C4-N4	10.72	125.50	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	702	A	C4-C5-C6	10.72	122.36	117.00
57	BB	537	G	C8-N9-C4	-10.72	102.11	106.40
57	BB	2666	C	O4'-C1'-N1	10.72	116.78	108.20
21	AA	755	G	N1-C6-O6	10.72	126.33	119.90
22	AY	2	C	O4'-C1'-N1	10.72	116.77	108.20
57	BB	575	A	N1-C6-N6	10.72	125.03	118.60
57	BB	2474	U	O4'-C1'-N1	10.72	116.77	108.20
57	BB	2844	G	N7-C8-N9	10.72	118.46	113.10
26	AV	57	A	O4'-C1'-N9	10.71	116.77	108.20
57	BB	1110	G	N1-C2-N3	-10.71	117.47	123.90
57	BB	1699	G	C1'-O4'-C4'	-10.71	101.33	109.90
21	AA	812	G	C6-C5-N7	-10.71	123.97	130.40
21	AA	1483	A	C5-C6-N1	-10.71	112.34	117.70
57	BB	1299	G	N1-C6-O6	10.71	126.33	119.90
26	AV	15	G	C8-N9-C4	-10.71	102.12	106.40
57	BB	680	C	O4'-C1'-N1	10.71	116.77	108.20
57	BB	2148	G	N7-C8-N9	-10.71	107.75	113.10
57	BB	916	G	N3-C2-N2	10.70	127.39	119.90
21	AA	71	A	O4'-C1'-N9	10.70	116.76	108.20
21	AA	395	C	C6-N1-C2	-10.70	116.02	120.30
57	BB	310	A	C5-C6-N6	-10.70	115.14	123.70
57	BB	1527	G	N3-C4-C5	-10.70	123.25	128.60
57	BB	2497	A	N1-C6-N6	10.70	125.02	118.60
57	BB	621	A	C5-C6-N1	-10.70	112.35	117.70
57	BB	1669	A	C5-C6-N1	-10.70	112.35	117.70
21	AA	682	G	C8-N9-C4	10.70	110.68	106.40
21	AA	1241	G	O4'-C1'-N9	10.70	116.76	108.20
57	BB	690	G	N1-C6-O6	10.70	126.32	119.90
21	AA	113	G	C6-C5-N7	-10.70	123.98	130.40
21	AA	736	C	O4'-C1'-N1	10.70	116.76	108.20
57	BB	726	G	N3-C4-C5	10.70	133.95	128.60
57	BB	1557	C	O4'-C1'-N1	10.70	116.76	108.20
21	AA	509	A	C8-N9-C4	-10.69	101.52	105.80
57	BB	404	A	N1-C6-N6	10.69	125.02	118.60
21	AA	507	C	O4'-C1'-N1	10.69	116.75	108.20
21	AA	1342	C	O4'-C1'-N1	10.69	116.75	108.20
57	BB	550	C	C5-C4-N4	-10.69	112.72	120.20
21	AA	895	G	C5-C6-N1	-10.69	106.16	111.50
57	BB	143	C	O4'-C1'-N1	10.69	116.75	108.20
57	BB	1451	C	O4'-C1'-N1	10.69	116.75	108.20
21	AA	190	A	C4-C5-C6	10.69	122.34	117.00
57	BB	1936	A	N1-C6-N6	10.69	125.01	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	548	G	C4-C5-N7	10.68	115.07	110.80
57	BB	498	G	N1-C2-N3	-10.68	117.49	123.90
21	AA	903	G	N1-C6-O6	10.68	126.31	119.90
21	AA	1482	G	N1-C6-O6	10.68	126.31	119.90
57	BB	86	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	2064	C	N3-C2-O2	10.68	129.38	121.90
57	BB	2828	G	N1-C6-O6	10.68	126.31	119.90
57	BB	1763	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	2115	G	C5-C6-N1	-10.68	106.16	111.50
26	AV	11	A	C5-C6-N1	-10.68	112.36	117.70
58	BA	101	A	C5-C6-N6	-10.68	115.16	123.70
21	AA	1043	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	132	G	O4'-C1'-N9	10.68	116.74	108.20
57	BB	2285	C	N1-C2-O2	10.68	125.31	118.90
21	AA	513	C	O4'-C1'-N1	10.67	116.74	108.20
26	AV	75	C	C2-N3-C4	10.67	125.24	119.90
21	AA	403	C	O4'-C1'-N1	10.67	116.74	108.20
57	BB	1285	A	C5-C6-N6	-10.67	115.17	123.70
57	BB	2204	G	C6-C5-N7	-10.67	124.00	130.40
21	AA	1270	G	N1-C6-O6	10.67	126.30	119.90
23	AW	60	U	N3-C4-C5	-10.67	108.20	114.60
23	AW	64	A	N1-C2-N3	10.67	134.63	129.30
26	AV	38	A	N9-C4-C5	10.67	110.07	105.80
57	BB	1670	C	O4'-C1'-N1	10.67	116.73	108.20
57	BB	2028	U	O4'-C1'-N1	10.67	116.73	108.20
21	AA	372	C	O4'-C1'-N1	10.66	116.73	108.20
57	BB	2538	C	N3-C4-C5	-10.66	117.63	121.90
57	BB	149	A	N1-C6-N6	10.66	125.00	118.60
57	BB	2016	U	N3-C4-C5	-10.66	108.20	114.60
57	BB	1300	G	N3-C2-N2	10.66	127.36	119.90
57	BB	1807	G	N1-C6-O6	10.66	126.30	119.90
21	AA	579	A	C5-C6-N6	-10.66	115.17	123.70
21	AA	867	G	N1-C6-O6	10.66	126.30	119.90
26	AV	44	A	C5-C6-N6	-10.66	115.17	123.70
57	BB	1764	C	C5-C4-N4	-10.66	112.74	120.20
58	BA	15	A	C5-C6-N1	-10.66	112.37	117.70
21	AA	1359	C	N3-C4-N4	10.66	125.46	118.00
23	AW	14	A	C2-N3-C4	-10.66	105.27	110.60
57	BB	475	C	N3-C4-C5	-10.66	117.64	121.90
57	BB	753	A	C3'-C2'-C1'	10.66	110.03	101.50
57	BB	1216	G	C8-N9-C4	-10.66	102.14	106.40
57	BB	2200	C	O4'-C1'-N1	10.66	116.72	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1386	G	C5-C6-O6	-10.65	122.21	128.60
57	BB	177	G	C4-C5-C6	10.65	125.19	118.80
57	BB	580	U	N1-C2-N3	-10.65	108.51	114.90
21	AA	925	G	N1-C6-O6	10.65	126.29	119.90
21	AA	1361	G	C5-C6-N1	-10.65	106.17	111.50
21	AA	1108	G	C5-C6-O6	-10.65	122.21	128.60
21	AA	1285	A	N1-C6-N6	10.65	124.99	118.60
23	AW	15	G	N1-C6-O6	10.65	126.29	119.90
57	BB	2339	C	O4'-C1'-N1	10.65	116.72	108.20
57	BB	2250	G	N9-C4-C5	-10.65	101.14	105.40
21	AA	349	A	C5-C6-N6	-10.64	115.19	123.70
21	AA	809	G	N1-C6-O6	10.64	126.29	119.90
57	BB	577	G	C5-C6-O6	-10.64	122.21	128.60
57	BB	1999	C	C5-C6-N1	10.64	126.32	121.00
57	BB	2247	A	C8-N9-C4	-10.64	101.54	105.80
57	BB	1592	C	C5-C4-N4	-10.64	112.75	120.20
57	BB	2414	G	N1-C6-O6	10.64	126.28	119.90
21	AA	741	G	C5-C6-O6	-10.64	122.22	128.60
21	AA	483	C	C2-N3-C4	10.63	125.22	119.90
21	AA	743	A	C5-C6-N1	-10.63	112.38	117.70
57	BB	1808	A	C4-C5-C6	10.63	122.32	117.00
21	AA	244	U	N3-C4-C5	-10.63	108.22	114.60
57	BB	529	A	C4-C5-C6	10.63	122.31	117.00
21	AA	1362	A	C4-C5-C6	10.63	122.31	117.00
21	AA	574	A	C5-C6-N1	-10.63	112.39	117.70
57	BB	917	A	N1-C6-N6	10.63	124.98	118.60
57	BB	2158	A	N1-C6-N6	10.63	124.98	118.60
58	BA	73	A	N1-C6-N6	10.63	124.98	118.60
21	AA	259	G	P-O3'-C3'	-10.62	106.95	119.70
57	BB	506	G	C8-N9-C4	-10.63	102.15	106.40
21	AA	819	A	C8-N9-C4	-10.62	101.55	105.80
24	AX	15	A	N1-C6-N6	10.62	124.97	118.60
57	BB	2016	U	O4'-C1'-N1	10.63	116.70	108.20
57	BB	2413	G	N7-C8-N9	10.63	118.41	113.10
57	BB	988	A	C8-N9-C4	-10.62	101.55	105.80
57	BB	1442	U	C5-C4-O4	-10.62	119.53	125.90
21	AA	220	G	N7-C8-N9	10.62	118.41	113.10
21	AA	747	A	N1-C6-N6	10.62	124.97	118.60
21	AA	829	G	N7-C8-N9	10.62	118.41	113.10
21	AA	896	C	N3-C4-N4	10.62	125.44	118.00
57	BB	733	G	C4-C5-C6	10.62	125.17	118.80
57	BB	1571	A	O4'-C1'-N9	10.62	116.70	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2717	C	C5-C6-N1	10.62	126.31	121.00
57	BB	2867	G	C5-N7-C8	-10.62	98.99	104.30
57	BB	2589	A	C5-C6-N1	-10.62	112.39	117.70
21	AA	913	A	C5-C6-N1	-10.62	112.39	117.70
57	BB	2761	A	O4'-C1'-N9	10.62	116.69	108.20
36	BQ	69	ARG	NE-CZ-NH2	10.62	125.61	120.30
57	BB	892	A	C8-N9-C4	-10.62	101.55	105.80
57	BB	975	A	C8-N9-C4	-10.61	101.56	105.80
21	AA	546	A	C4-C5-C6	10.61	122.31	117.00
21	AA	567	G	O4'-C1'-N9	10.61	116.69	108.20
57	BB	633	A	N1-C6-N6	10.61	124.97	118.60
57	BB	2541	A	N1-C6-N6	10.61	124.97	118.60
15	AD	103	ARG	NE-CZ-NH2	-10.61	115.00	120.30
21	AA	312	C	C6-N1-C2	-10.61	116.06	120.30
21	AA	731	G	C5-C6-O6	-10.61	122.24	128.60
57	BB	1359	A	N1-C6-N6	10.61	124.96	118.60
21	AA	770	C	N3-C4-C5	-10.61	117.66	121.90
57	BB	238	C	O4'-C1'-N1	10.61	116.68	108.20
21	AA	864	A	N1-C6-N6	10.60	124.96	118.60
21	AA	933	G	N1-C6-O6	10.60	126.26	119.90
57	BB	1313	U	C2-N1-C1'	10.60	130.42	117.70
57	BB	68	G	C5-C6-N1	-10.60	106.20	111.50
57	BB	1593	A	N3-C4-C5	-10.60	119.38	126.80
57	BB	1615	C	C4-C5-C6	10.60	122.70	117.40
57	BB	2410	G	C5-C6-N1	-10.60	106.20	111.50
57	BB	2539	C	O4'-C1'-N1	10.60	116.68	108.20
21	AA	251	G	N1-C6-O6	10.60	126.26	119.90
21	AA	550	G	N3-C2-N2	10.60	127.32	119.90
57	BB	1511	G	N1-C6-O6	10.60	126.26	119.90
21	AA	835	U	O4'-C1'-N1	10.60	116.68	108.20
21	AA	931	C	O4'-C1'-N1	10.60	116.68	108.20
57	BB	1733	G	O4'-C1'-N9	10.60	116.68	108.20
57	BB	2770	G	N9-C4-C5	10.60	109.64	105.40
21	AA	616	G	C2-N3-C4	10.59	117.20	111.90
21	AA	1249	C	O4'-C1'-N1	10.59	116.67	108.20
21	AA	1279	G	C8-N9-C4	-10.59	102.16	106.40
57	BB	381	G	N3-C2-N2	10.59	127.31	119.90
33	BN	64	ARG	NE-CZ-NH2	10.59	125.60	120.30
57	BB	385	C	O4'-C1'-N1	10.59	116.67	108.20
57	BB	64	A	C8-N9-C4	10.59	110.04	105.80
57	BB	1788	C	C2-N3-C4	10.59	125.19	119.90
57	BB	2483	C	C6-N1-C2	-10.59	116.06	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	795	C	O4'-C1'-N1	10.59	116.67	108.20
21	AA	195	A	C5-C6-N1	-10.59	112.41	117.70
21	AA	266	G	O4'-C1'-N9	10.59	116.67	108.20
21	AA	563	A	C5-C6-N6	-10.59	115.23	123.70
21	AA	1033	G	C8-N9-C4	-10.59	102.17	106.40
57	BB	707	G	C4-C5-C6	10.59	125.15	118.80
57	BB	2302	U	O4'-C1'-N1	10.59	116.67	108.20
58	BA	24	G	P-O3'-C3'	10.59	132.40	119.70
21	AA	759	A	C5-C6-N1	-10.58	112.41	117.70
21	AA	763	G	C8-N9-C4	-10.58	102.17	106.40
21	AA	1143	G	O4'-C1'-N9	10.58	116.67	108.20
21	AA	1503	A	C5-C6-N6	-10.58	115.23	123.70
57	BB	1453	A	C4-C5-C6	10.58	122.29	117.00
57	BB	1300	G	C2-N3-C4	10.58	117.19	111.90
21	AA	1393	U	O4'-C1'-N1	10.58	116.66	108.20
57	BB	640	C	N3-C4-N4	10.58	125.41	118.00
57	BB	1987	A	N1-C2-N3	-10.58	124.01	129.30
22	AY	40	C	C2-N3-C4	10.58	125.19	119.90
21	AA	334	C	O4'-C1'-N1	10.58	116.66	108.20
22	AY	62	A	O4'-C1'-N9	10.58	116.66	108.20
57	BB	1641	A	C5-C6-N1	-10.58	112.41	117.70
57	BB	2153	C	O4'-C1'-N1	10.57	116.66	108.20
21	AA	617	G	C5-C6-O6	-10.57	122.26	128.60
21	AA	865	A	N1-C2-N3	10.57	134.59	129.30
26	AV	41	C	O4'-C1'-N1	10.57	116.66	108.20
57	BB	2839	G	N3-C2-N2	10.57	127.30	119.90
21	AA	454	G	C4-C5-N7	10.57	115.03	110.80
14	AC	87	ARG	NE-CZ-NH1	10.57	125.58	120.30
57	BB	1267	U	C6-N1-C2	10.56	127.34	121.00
21	AA	71	A	C5-C6-N6	-10.56	115.25	123.70
57	BB	1535	A	N3-C4-C5	-10.56	119.41	126.80
21	AA	185	U	O4'-C1'-N1	10.56	116.65	108.20
57	BB	141	G	C4-C5-C6	10.56	125.14	118.80
57	BB	2705	A	C5-C6-N1	-10.56	112.42	117.70
58	BA	68	C	N3-C4-C5	-10.56	117.68	121.90
21	AA	933	G	C5-C6-O6	-10.56	122.27	128.60
21	AA	49	U	N3-C4-O4	10.55	126.79	119.40
21	AA	817	C	C4-C5-C6	10.55	122.68	117.40
21	AA	482	A	C4-C5-C6	10.55	122.28	117.00
21	AA	594	U	C5-C6-N1	10.55	127.98	122.70
57	BB	2478	A	N1-C6-N6	10.55	124.93	118.60
21	AA	1060	U	N3-C4-C5	-10.55	108.27	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2681	C	N3-C4-C5	-10.55	117.68	121.90
21	AA	272	C	N3-C4-N4	10.55	125.38	118.00
57	BB	2745	C	C6-N1-C2	10.55	124.52	120.30
21	AA	1357	A	C5-C6-N1	-10.55	112.43	117.70
23	AW	15	G	P-O3'-C3'	10.55	132.36	119.70
57	BB	754	U	C6-N1-C2	-10.55	114.67	121.00
57	BB	2097	A	N1-C2-N3	10.55	134.57	129.30
57	BB	1673	G	N9-C4-C5	-10.55	101.18	105.40
57	BB	2840	C	N3-C4-C5	-10.55	117.68	121.90
58	BA	30	C	C2-N3-C4	10.55	125.17	119.90
21	AA	804	U	C6-N1-C2	10.55	127.33	121.00
21	AA	1150	A	N1-C6-N6	10.54	124.93	118.60
57	BB	582	A	C5-C6-N6	-10.54	115.27	123.70
57	BB	1974	C	C5-C4-N4	-10.54	112.82	120.20
57	BB	2054	A	N7-C8-N9	10.54	119.07	113.80
57	BB	2785	C	O4'-C1'-N1	10.54	116.64	108.20
22	AY	65	G	O4'-C1'-N9	10.54	116.63	108.20
57	BB	695	G	C5-C6-N1	-10.54	106.23	111.50
21	AA	366	A	C4-C5-C6	10.54	122.27	117.00
57	BB	1185	G	C5-C6-O6	-10.54	122.28	128.60
21	AA	811	C	N3-C4-C5	-10.54	117.69	121.90
21	AA	1215	G	N3-C4-C5	-10.54	123.33	128.60
57	BB	406	G	N1-C6-O6	10.53	126.22	119.90
57	BB	1204	A	C4-C5-C6	10.53	122.27	117.00
58	BA	116	G	C5-C6-O6	-10.53	122.28	128.60
21	AA	347	G	N9-C4-C5	-10.53	101.19	105.40
21	AA	1036	A	C5-C6-N1	-10.53	112.44	117.70
22	AY	71	G	N1-C6-O6	10.53	126.22	119.90
57	BB	425	G	N3-C4-C5	10.53	133.86	128.60
57	BB	2151	U	O4'-C1'-N1	10.53	116.62	108.20
21	AA	382	A	C5-C6-N1	-10.52	112.44	117.70
21	AA	658	C	C6-N1-C2	-10.52	116.09	120.30
23	AW	73	A	C5-C6-N1	-10.52	112.44	117.70
57	BB	77	G	C4-C5-C6	10.52	125.11	118.80
57	BB	912	C	C5-C6-N1	10.52	126.26	121.00
57	BB	1338	G	C5-C6-O6	-10.52	122.28	128.60
57	BB	1774	C	C5-C6-N1	10.52	126.26	121.00
57	BB	1872	A	N1-C2-N3	10.52	134.56	129.30
21	AA	324	G	N1-C6-O6	10.52	126.21	119.90
21	AA	1018	G	C5-C6-O6	-10.52	122.29	128.60
21	AA	1116	U	O4'-C1'-N1	10.52	116.61	108.20
57	BB	751	A	C5-N7-C8	10.52	109.16	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2141	G	C5-C6-O6	-10.52	122.29	128.60
57	BB	2635	A	C4-C5-C6	10.52	122.26	117.00
21	AA	1375	A	C4-C5-N7	-10.52	105.44	110.70
57	BB	1738	G	P-O3'-C3'	10.52	132.32	119.70
57	BB	1063	G	O4'-C1'-N9	10.52	116.61	108.20
57	BB	2357	G	C6-C5-N7	-10.52	124.09	130.40
21	AA	235	C	C6-N1-C2	-10.51	116.09	120.30
21	AA	502	A	C4-C5-C6	10.51	122.26	117.00
57	BB	584	C	C6-N1-C2	-10.51	116.09	120.30
57	BB	1028	A	N1-C6-N6	10.51	124.91	118.60
21	AA	255	G	N1-C6-O6	10.51	126.21	119.90
21	AA	538	G	C8-N9-C4	-10.51	102.20	106.40
21	AA	650	G	C4-C5-N7	-10.51	106.60	110.80
21	AA	181	A	N1-C6-N6	10.51	124.90	118.60
21	AA	571	U	O4'-C1'-N1	10.51	116.61	108.20
21	AA	1388	C	N3-C4-N4	10.51	125.36	118.00
57	BB	480	A	N1-C6-N6	10.51	124.90	118.60
57	BB	681	G	N3-C2-N2	10.51	127.25	119.90
57	BB	1475	G	N1-C6-O6	10.51	126.20	119.90
57	BB	1976	U	O4'-C1'-N1	10.51	116.60	108.20
21	AA	1185	G	N3-C2-N2	10.50	127.25	119.90
57	BB	536	G	N1-C6-O6	10.50	126.20	119.90
57	BB	2048	G	N1-C6-O6	10.50	126.20	119.90
57	BB	259	G	O4'-C1'-N9	10.50	116.60	108.20
57	BB	2090	A	C4-C5-C6	10.50	122.25	117.00
57	BB	2221	G	N1-C6-O6	10.50	126.20	119.90
21	AA	182	A	P-O3'-C3'	10.50	132.30	119.70
21	AA	874	G	N1-C6-O6	10.50	126.20	119.90
21	AA	1160	G	C5-C6-O6	-10.50	122.30	128.60
57	BB	76	C	N3-C4-C5	-10.50	117.70	121.90
21	AA	1249	C	C4-C5-C6	-10.50	112.15	117.40
57	BB	496	G	N3-C4-N9	-10.49	119.70	126.00
57	BB	1046	A	C4-C5-C6	10.49	122.25	117.00
57	BB	2650	U	N3-C4-O4	10.49	126.75	119.40
22	AY	6	U	O4'-C1'-N1	10.49	116.59	108.20
57	BB	759	G	C5-C6-O6	-10.49	122.31	128.60
57	BB	1254	A	N1-C6-N6	10.49	124.90	118.60
21	AA	190	A	C8-N9-C4	-10.49	101.60	105.80
21	AA	401	C	O4'-C1'-N1	10.49	116.59	108.20
57	BB	614	A	C6-N1-C2	-10.49	112.31	118.60
57	BB	1667	G	C5-N7-C8	10.49	109.54	104.30
57	BB	1743	G	N1-C6-O6	10.49	126.19	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1290	G	C4-C5-C6	10.49	125.09	118.80
22	AY	5	A	N9-C4-C5	-10.49	101.61	105.80
26	AV	8	U	C4-C5-C6	10.49	125.99	119.70
57	BB	61	C	O4'-C1'-N1	10.49	116.59	108.20
57	BB	1800	C	C5-C6-N1	10.49	126.24	121.00
57	BB	1952	A	N1-C6-N6	10.49	124.89	118.60
21	AA	164	G	N1-C2-N3	-10.48	117.61	123.90
21	AA	624	C	O4'-C1'-N1	10.48	116.58	108.20
26	AV	43	A	C5-C6-N1	-10.48	112.46	117.70
57	BB	41	C	O4'-C1'-N1	10.48	116.58	108.20
21	AA	702	A	N1-C6-N6	10.48	124.89	118.60
57	BB	232	G	N1-C6-O6	10.48	126.19	119.90
57	BB	442	G	N1-C6-O6	10.48	126.19	119.90
57	BB	2486	C	O4'-C1'-N1	10.48	116.58	108.20
57	BB	2057	G	O4'-C1'-N9	10.48	116.58	108.20
57	BB	199	A	C5-N7-C8	10.47	109.14	103.90
21	AA	455	G	N1-C6-O6	10.47	126.18	119.90
57	BB	739	A	O5'-P-OP1	-10.47	96.27	105.70
57	BB	960	A	N1-C6-N6	10.47	124.88	118.60
21	AA	500	G	N3-C2-N2	10.47	127.23	119.90
21	AA	1311	A	C4-C5-C6	10.47	122.24	117.00
21	AA	1482	G	O4'-C1'-N9	10.47	116.58	108.20
57	BB	157	C	N3-C4-N4	10.47	125.33	118.00
57	BB	87	U	N3-C2-O2	-10.47	114.87	122.20
57	BB	1573	G	C2-N3-C4	10.47	117.14	111.90
21	AA	295	C	C4-C5-C6	-10.47	112.17	117.40
21	AA	606	G	O4'-C1'-N9	10.47	116.57	108.20
23	AW	72	C	N3-C4-C5	-10.47	117.71	121.90
57	BB	1801	A	O4'-C1'-N9	10.47	116.58	108.20
21	AA	1158	C	C4-C5-C6	10.47	122.63	117.40
57	BB	1475	G	C5-C6-O6	-10.47	122.32	128.60
57	BB	1590	A	C5-C6-N6	-10.47	115.33	123.70
21	AA	1484	C	O4'-C1'-N1	10.46	116.57	108.20
57	BB	689	A	N1-C2-N3	-10.46	124.07	129.30
57	BB	2278	A	N1-C6-N6	10.46	124.88	118.60
21	AA	840	C	O4'-C1'-N1	10.46	116.57	108.20
57	BB	982	C	N3-C4-C5	-10.46	117.72	121.90
21	AA	1280	A	N1-C2-N3	10.46	134.53	129.30
57	BB	2185	U	C5-C4-O4	-10.46	119.62	125.90
57	BB	613	A	C5-C6-N6	-10.46	115.33	123.70
21	AA	111	G	C5-C6-O6	-10.46	122.33	128.60
21	AA	743	A	C4-C5-C6	10.46	122.23	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	12	U	C6-N1-C2	-10.46	114.72	121.00
21	AA	1108	G	O4'-C1'-N9	10.46	116.57	108.20
21	AA	273	U	O4'-C1'-N1	10.45	116.56	108.20
21	AA	307	C	N3-C4-N4	10.45	125.32	118.00
25	AZ	44	ARG	NE-CZ-NH2	-10.45	115.07	120.30
57	BB	462	C	C2-N3-C4	10.45	125.13	119.90
57	BB	1854	A	C5-C6-N1	-10.45	112.47	117.70
58	BA	74	U	O4'-C1'-N1	10.45	116.56	108.20
57	BB	559	G	C5-C6-O6	-10.45	122.33	128.60
21	AA	236	A	N1-C6-N6	10.45	124.87	118.60
21	AA	763	G	N1-C2-N3	-10.45	117.63	123.90
57	BB	1565	C	N3-C4-N4	10.45	125.31	118.00
58	BA	91	C	N3-C4-N4	10.45	125.31	118.00
58	BA	2	G	C5-C6-O6	-10.45	122.33	128.60
21	AA	676	A	C5-C6-N6	-10.45	115.34	123.70
21	AA	889	A	C5-C6-N1	-10.45	112.48	117.70
57	BB	501	A	N1-C6-N6	10.45	124.87	118.60
57	BB	541	A	C4-C5-C6	10.45	122.22	117.00
57	BB	2338	C	C6-N1-C2	-10.45	116.12	120.30
57	BB	2354	C	N3-C4-N4	10.45	125.31	118.00
21	AA	493	A	C5-C6-N6	-10.44	115.35	123.70
21	AA	1394	A	N1-C2-N3	10.44	134.52	129.30
57	BB	146	A	O4'-C1'-N9	10.44	116.55	108.20
57	BB	1889	A	N1-C6-N6	10.44	124.86	118.60
21	AA	980	C	O4'-C1'-N1	10.44	116.55	108.20
57	BB	1389	G	C6-C5-N7	-10.44	124.14	130.40
21	AA	1396	A	C5-C6-N6	-10.44	115.35	123.70
21	AA	1160	G	N3-C2-N2	10.44	127.20	119.90
21	AA	1181	G	N1-C6-O6	10.44	126.16	119.90
21	AA	172	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1155	A	O4'-C1'-N9	10.43	116.55	108.20
21	AA	1475	G	N1-C6-O6	10.43	126.16	119.90
21	AA	1493	A	N1-C6-N6	10.43	124.86	118.60
57	BB	1214	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1483	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1503	A	N1-C2-N3	10.43	134.51	129.30
26	AV	6	G	C5-C6-O6	-10.43	122.34	128.60
57	BB	550	C	N3-C4-N4	10.43	125.30	118.00
57	BB	1785	A	N1-C6-N6	10.43	124.86	118.60
57	BB	2603	G	C5-C6-O6	-10.43	122.34	128.60
57	BB	2080	A	C5-C6-N6	-10.43	115.36	123.70
21	AA	728	A	O4'-C1'-N9	10.42	116.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1936	A	C8-N9-C4	-10.42	101.63	105.80
21	AA	306	A	C5-C6-N6	-10.42	115.36	123.70
57	BB	1006	C	N3-C4-C5	-10.42	117.73	121.90
57	BB	87	U	N3-C4-O4	10.42	126.69	119.40
57	BB	163	C	C6-N1-C1'	-10.42	108.30	120.80
57	BB	2022	U	O4'-C1'-N1	10.42	116.53	108.20
57	BB	1160	G	O4'-C1'-N9	10.42	116.53	108.20
57	BB	1793	C	N3-C4-N4	10.42	125.29	118.00
26	AV	45	G	C5-C6-O6	10.42	134.85	128.60
57	BB	2083	G	C2-N3-C4	10.42	117.11	111.90
21	AA	1088	G	C5-C6-O6	-10.41	122.35	128.60
21	AA	613	C	N3-C4-C5	-10.41	117.73	121.90
21	AA	1442	G	O4'-C1'-N9	10.41	116.53	108.20
57	BB	474	G	N1-C6-O6	10.41	126.15	119.90
57	BB	1317	G	C4-C5-C6	10.41	125.05	118.80
57	BB	1389	G	N1-C6-O6	10.41	126.15	119.90
57	BB	2062	A	N1-C6-N6	10.41	124.85	118.60
21	AA	1520	C	O4'-C1'-N1	10.41	116.53	108.20
57	BB	1583	A	N1-C6-N6	10.41	124.85	118.60
57	BB	2282	G	P-O3'-C3'	10.41	132.19	119.70
21	AA	681	A	C4-C5-C6	10.41	122.20	117.00
21	AA	175	C	C5-C6-N1	10.41	126.20	121.00
21	AA	1095	U	O4'-C1'-N1	10.41	116.53	108.20
57	BB	299	A	N7-C8-N9	-10.41	108.60	113.80
57	BB	631	A	O4'-C1'-N9	10.41	116.53	108.20
57	BB	2594	C	C6-N1-C2	-10.41	116.14	120.30
21	AA	243	A	C5-C6-N1	-10.40	112.50	117.70
57	BB	1483	G	C5-N7-C8	10.40	109.50	104.30
57	BB	2012	G	C4-C5-N7	10.40	114.96	110.80
23	AW	31	A	N9-C4-C5	-10.40	101.64	105.80
21	AA	787	A	N1-C6-N6	10.40	124.84	118.60
21	AA	1306	A	C5-C6-N6	-10.40	115.38	123.70
21	AA	178	C	O4'-C1'-N1	10.40	116.52	108.20
21	AA	173	U	N3-C4-O4	10.40	126.68	119.40
21	AA	860	A	C4-C5-C6	10.40	122.20	117.00
21	AA	1131	G	N3-C2-N2	10.40	127.18	119.90
57	BB	109	C	N3-C4-N4	10.40	125.28	118.00
57	BB	2436	G	C5-C6-O6	-10.40	122.36	128.60
21	AA	339	C	C5-C6-N1	10.39	126.20	121.00
21	AA	302	G	C5-C6-O6	-10.39	122.36	128.60
21	AA	1158	C	C6-N1-C2	-10.39	116.14	120.30
21	AA	1410	A	C5-C6-N1	-10.39	112.50	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1790	C	C2-N3-C4	10.39	125.10	119.90
57	BB	1804	C	C5-C4-N4	-10.39	112.92	120.20
21	AA	1443	C	O4'-C1'-N1	10.39	116.51	108.20
57	BB	657	U	O4'-C1'-N1	10.39	116.51	108.20
57	BB	2596	U	O4'-C1'-N1	10.39	116.52	108.20
21	AA	253	A	N1-C2-N3	10.39	134.50	129.30
57	BB	351	C	N3-C4-C5	-10.39	117.74	121.90
57	BB	572	A	N1-C6-N6	10.39	124.83	118.60
57	BB	2174	C	N1-C2-O2	-10.39	112.67	118.90
57	BB	2672	U	O4'-C1'-N1	10.39	116.51	108.20
21	AA	832	G	N3-C2-N2	10.39	127.17	119.90
22	AY	67	A	N1-C6-N6	10.39	124.83	118.60
57	BB	616	A	N9-C4-C5	10.39	109.96	105.80
21	AA	1250	A	O4'-C1'-N9	10.39	116.51	108.20
22	AY	51	G	N1-C6-O6	10.39	126.13	119.90
45	BC	220	ARG	NE-CZ-NH1	-10.39	115.11	120.30
57	BB	1013	C	O4'-C1'-N1	10.39	116.51	108.20
21	AA	397	A	C5-C6-N1	-10.38	112.51	117.70
21	AA	1404	C	N3-C4-C5	-10.39	117.75	121.90
57	BB	2682	A	C6-C5-N7	-10.39	125.03	132.30
57	BB	2901	C	N3-C4-N4	10.38	125.27	118.00
21	AA	968	A	C4-C5-N7	-10.38	105.51	110.70
57	BB	186	G	N1-C2-N3	-10.38	117.67	123.90
57	BB	1641	A	C4-C5-C6	10.38	122.19	117.00
57	BB	1332	G	C5-C6-O6	-10.38	122.37	128.60
57	BB	2665	A	N1-C6-N6	10.38	124.83	118.60
21	AA	511	C	N3-C4-C5	-10.38	117.75	121.90
21	AA	1171	A	C6-N1-C2	10.38	124.83	118.60
57	BB	1291	C	C4-C5-C6	10.38	122.59	117.40
15	AD	74	TYR	CB-CG-CD1	-10.37	114.78	121.00
57	BB	1084	A	C5-C6-N6	-10.38	115.40	123.70
57	BB	2084	C	N3-C4-C5	-10.38	117.75	121.90
57	BB	242	G	C5-C6-O6	-10.37	122.38	128.60
57	BB	870	U	N1-C2-O2	-10.37	115.54	122.80
21	AA	607	A	N9-C4-C5	10.37	109.95	105.80
21	AA	925	G	C2-N3-C4	-10.37	106.72	111.90
21	AA	1339	A	C4-C5-C6	10.37	122.19	117.00
57	BB	375	G	C8-N9-C4	10.37	110.55	106.40
57	BB	715	A	C8-N9-C4	-10.37	101.65	105.80
21	AA	1211	U	C5-C4-O4	-10.37	119.68	125.90
21	AA	1248	A	C4-C5-C6	10.37	122.18	117.00
23	AW	28	G	C5-C6-N1	-10.37	106.32	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2006	C	O4'-C1'-N1	10.37	116.49	108.20
21	AA	211	G	C5-C6-O6	-10.36	122.38	128.60
21	AA	615	G	N3-C2-N2	10.36	127.15	119.90
57	BB	38	A	N1-C6-N6	10.36	124.82	118.60
57	BB	362	A	N1-C2-N3	10.36	134.48	129.30
57	BB	441	U	O4'-C1'-N1	10.36	116.49	108.20
57	BB	2294	G	C4-C5-N7	-10.36	106.66	110.80
57	BB	2688	G	C5-C6-O6	-10.36	122.38	128.60
57	BB	1303	G	N1-C6-O6	10.36	126.12	119.90
57	BB	2567	G	N1-C6-O6	10.36	126.12	119.90
21	AA	77	A	N7-C8-N9	10.36	118.98	113.80
57	BB	870	U	N1-C2-N3	10.36	121.11	114.90
57	BB	1187	G	O4'-C1'-N9	10.36	116.48	108.20
57	BB	2136	G	C5-C6-O6	-10.36	122.39	128.60
57	BB	2492	U	O4'-C1'-N1	10.36	116.48	108.20
21	AA	165	G	C5-C6-O6	-10.35	122.39	128.60
21	AA	297	G	C2-N3-C4	10.35	117.08	111.90
21	AA	812	G	C5-C6-O6	-10.35	122.39	128.60
21	AA	824	G	N1-C6-O6	10.35	126.11	119.90
57	BB	1711	A	C4-C5-C6	10.35	122.18	117.00
57	BB	2460	U	O4'-C1'-N1	10.35	116.48	108.20
57	BB	2519	U	O4'-C1'-N1	10.35	116.48	108.20
57	BB	2834	G	C5-C6-O6	-10.35	122.39	128.60
58	BA	18	G	N1-C2-N3	-10.35	117.69	123.90
21	AA	1293	C	C5-C6-N1	10.35	126.17	121.00
57	BB	1853	A	C5-C6-N6	-10.34	115.42	123.70
16	AE	19	ARG	NE-CZ-NH1	10.34	125.47	120.30
58	BA	111	U	O4'-C1'-N1	10.34	116.47	108.20
21	AA	334	C	C4-C5-C6	-10.34	112.23	117.40
57	BB	381	G	C5-C6-O6	-10.34	122.39	128.60
57	BB	638	G	C8-N9-C4	-10.34	102.26	106.40
57	BB	2289	G	N1-C2-N3	-10.34	117.69	123.90
57	BB	1771	C	N3-C4-C5	-10.34	117.76	121.90
21	AA	32	A	O4'-C1'-N9	10.34	116.47	108.20
21	AA	128	G	C8-N9-C4	10.34	110.53	106.40
21	AA	328	C	P-O3'-C3'	10.34	132.11	119.70
21	AA	1480	A	N1-C2-N3	10.34	134.47	129.30
23	AW	56	C	C6-N1-C1'	-10.34	108.40	120.80
22	AY	63	C	C5-C6-N1	10.34	126.17	121.00
57	BB	1516	G	N1-C2-N3	-10.34	117.70	123.90
57	BB	1570	A	C4-C5-C6	10.34	122.17	117.00
57	BB	2840	C	C4-C5-C6	10.34	122.57	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2865	U	N3-C4-O4	10.34	126.64	119.40
26	AV	51	C	C6-N1-C2	-10.33	116.17	120.30
26	AV	73	A	C5-C6-N6	-10.33	115.43	123.70
57	BB	1410	G	O4'-C1'-N9	10.33	116.47	108.20
57	BB	2159	G	O4'-C1'-N9	10.33	116.47	108.20
21	AA	721	G	N1-C6-O6	10.33	126.10	119.90
57	BB	1359	A	C5-N7-C8	10.33	109.06	103.90
57	BB	1635	A	O4'-C1'-N9	10.33	116.47	108.20
57	BB	2424	C	O4'-C1'-N1	10.33	116.46	108.20
57	BB	2218	G	C5-C6-O6	-10.33	122.40	128.60
57	BB	551	G	O4'-C1'-N9	10.33	116.46	108.20
57	BB	701	G	N9-C1'-C2'	-10.33	100.58	114.00
57	BB	1133	A	C5-C6-N6	-10.32	115.44	123.70
57	BB	2542	A	N1-C6-N6	10.32	124.80	118.60
21	AA	535	A	C5-C6-N1	-10.32	112.54	117.70
57	BB	904	G	N1-C6-O6	10.32	126.09	119.90
57	BB	1859	U	N1-C2-N3	-10.32	108.71	114.90
21	AA	29	U	O4'-C1'-N1	10.32	116.46	108.20
21	AA	1415	G	N3-C4-C5	-10.32	123.44	128.60
26	AV	53	G	N9-C4-C5	-10.32	101.27	105.40
57	BB	2434	A	C4-C5-C6	10.32	122.16	117.00
57	BB	2632	A	C4-C5-C6	10.32	122.16	117.00
57	BB	77	G	O4'-C1'-N9	10.32	116.45	108.20
57	BB	751	A	N1-C6-N6	10.32	124.79	118.60
57	BB	2126	A	N1-C6-N6	10.32	124.79	118.60
9	AR	50	TYR	CB-CG-CD1	10.32	127.19	121.00
21	AA	220	G	P-O3'-C3'	-10.32	107.32	119.70
21	AA	1062	U	N3-C4-O4	10.32	126.62	119.40
57	BB	99	U	O4'-C1'-N1	10.32	116.45	108.20
57	BB	1789	A	C5-C6-N6	-10.32	115.45	123.70
21	AA	128	G	O4'-C1'-N9	10.32	116.45	108.20
55	BG	51	PHE	CB-CG-CD1	10.32	128.02	120.80
57	BB	144	A	N1-C6-N6	10.32	124.79	118.60
57	BB	625	G	C8-N9-C4	-10.32	102.27	106.40
57	BB	1270	C	N3-C4-C5	-10.32	117.77	121.90
57	BB	1511	G	C5-C6-N1	-10.32	106.34	111.50
57	BB	2705	A	C5-C6-N6	-10.32	115.45	123.70
57	BB	1	G	N3-C2-N2	10.31	127.12	119.90
57	BB	645	C	N3-C4-C5	-10.31	117.77	121.90
57	BB	907	G	C5-C6-O6	-10.31	122.41	128.60
57	BB	1304	A	N1-C6-N6	10.31	124.79	118.60
21	AA	140	U	O4'-C1'-N1	10.31	116.45	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1144	G	N1-C2-N3	-10.31	117.71	123.90
57	BB	1604	C	N3-C4-C5	-10.31	117.78	121.90
57	BB	2147	A	C4-C5-C6	10.31	122.16	117.00
57	BB	2879	A	C8-N9-C4	-10.31	101.67	105.80
58	BA	69	G	C5-C6-N1	-10.31	106.34	111.50
21	AA	215	C	N3-C4-C5	-10.31	117.78	121.90
21	AA	1482	G	N3-C2-N2	10.31	127.12	119.90
57	BB	1300	G	N1-C2-N3	-10.31	117.72	123.90
57	BB	208	C	N3-C4-N4	10.30	125.21	118.00
57	BB	2685	G	C5-C6-O6	-10.30	122.42	128.60
57	BB	544	C	C2-N1-C1'	10.30	130.13	118.80
57	BB	836	G	N9-C4-C5	10.30	109.52	105.40
9	AR	50	TYR	CB-CG-CD2	-10.30	114.82	121.00
21	AA	810	C	O4'-C1'-N1	10.30	116.44	108.20
57	BB	1285	A	P-O3'-C3'	10.30	132.06	119.70
57	BB	914	G	C5-C6-O6	-10.30	122.42	128.60
57	BB	980	A	N1-C6-N6	10.30	124.78	118.60
57	BB	1835	G	N1-C6-O6	10.30	126.08	119.90
57	BB	2857	G	N3-C2-N2	10.30	127.11	119.90
21	AA	546	A	N9-C4-C5	10.30	109.92	105.80
57	BB	2528	U	N3-C4-O4	10.30	126.61	119.40
21	AA	1161	C	C6-N1-C2	-10.29	116.18	120.30
21	AA	1433	A	C5-N7-C8	10.29	109.05	103.90
22	AY	31	A	C5-N7-C8	-10.30	98.75	103.90
34	BO	10	ARG	NE-CZ-NH2	10.29	125.45	120.30
57	BB	4	U	O4'-C1'-N1	10.29	116.44	108.20
57	BB	400	G	C5-C6-O6	-10.29	122.42	128.60
57	BB	717	C	C6-N1-C2	-10.29	116.18	120.30
57	BB	1970	A	N1-C6-N6	10.29	124.78	118.60
58	BA	16	G	C5-C6-O6	-10.29	122.42	128.60
21	AA	653	U	N3-C2-O2	-10.29	115.00	122.20
21	AA	727	G	C5-C6-O6	-10.29	122.42	128.60
57	BB	1950	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	2013	A	C5-C6-N6	-10.29	115.47	123.70
21	AA	424	G	N1-C2-N3	-10.29	117.73	123.90
21	AA	1244	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	1235	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	659	G	N1-C6-O6	10.29	126.07	119.90
57	BB	962	G	N1-C6-O6	10.29	126.07	119.90
57	BB	2426	A	C5-C6-N1	-10.29	112.56	117.70
21	AA	716	A	C4-C5-C6	10.29	122.14	117.00
57	BB	1908	C	C2-N3-C4	10.29	125.04	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1170	A	C5-C6-N6	-10.28	115.47	123.70
57	BB	856	G	C5-C6-O6	-10.29	122.43	128.60
21	AA	7	A	O4'-C1'-N9	10.28	116.43	108.20
21	AA	525	C	O4'-C1'-N1	10.28	116.42	108.20
22	AY	39	U	C2-N1-C1'	10.28	130.04	117.70
57	BB	2215	C	O4'-C1'-N1	10.28	116.43	108.20
57	BB	2584	U	P-O3'-C3'	10.28	132.04	119.70
58	BA	107	G	C8-N9-C4	-10.28	102.29	106.40
21	AA	206	C	O4'-C1'-N1	10.28	116.42	108.20
26	AV	2	G	N1-C6-O6	10.28	126.07	119.90
57	BB	660	C	O4'-C1'-N1	10.28	116.42	108.20
57	BB	762	U	N3-C4-O4	10.28	126.60	119.40
57	BB	2202	U	O4'-C1'-N1	10.28	116.42	108.20
57	BB	2679	A	O4'-C1'-N9	10.28	116.42	108.20
21	AA	449	G	N1-C6-O6	10.28	126.07	119.90
26	AV	6	G	N1-C6-O6	10.28	126.07	119.90
57	BB	925	A	O4'-C1'-N9	10.28	116.42	108.20
57	BB	835	C	N3-C4-N4	10.28	125.19	118.00
18	AG	77	ARG	NE-CZ-NH2	10.28	125.44	120.30
39	BT	73	ARG	NE-CZ-NH2	10.28	125.44	120.30
57	BB	227	A	N1-C6-N6	10.28	124.77	118.60
57	BB	1627	G	C6-C5-N7	-10.28	124.23	130.40
57	BB	2232	C	O4'-C1'-N1	10.28	116.42	108.20
21	AA	1016	A	N1-C6-N6	10.27	124.76	118.60
57	BB	2681	C	N3-C4-N4	10.27	125.19	118.00
21	AA	1192	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	564	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	739	A	O4'-C1'-N9	10.27	116.42	108.20
21	AA	1121	U	O4'-C1'-N1	10.27	116.42	108.20
58	BA	11	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	1153	C	C5-C6-N1	10.27	126.13	121.00
58	BA	113	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	492	A	N7-C8-N9	10.27	118.93	113.80
57	BB	539	G	N9-C4-C5	-10.27	101.29	105.40
57	BB	1161	C	N3-C4-N4	10.27	125.19	118.00
21	AA	159	G	N3-C2-N2	10.26	127.08	119.90
57	BB	1815	A	O4'-C1'-N9	10.26	116.41	108.20
57	BB	1832	C	N3-C4-N4	10.26	125.18	118.00
57	BB	2619	C	N3-C4-C5	-10.26	117.80	121.90
57	BB	2895	G	O4'-C1'-N9	10.26	116.41	108.20
22	AY	63	C	N3-C4-C5	-10.26	117.80	121.90
57	BB	1618	A	C4-C5-C6	10.26	122.13	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	602	A	C8-N9-C4	-10.26	101.70	105.80
57	BB	1427	A	C5-C6-N6	-10.26	115.49	123.70
57	BB	2154	A	N1-C2-N3	10.26	134.43	129.30
57	BB	2495	G	O4'-C1'-N9	10.26	116.41	108.20
26	AV	65	C	N3-C4-N4	10.26	125.18	118.00
22	AY	43	G	O4'-C1'-N9	10.25	116.40	108.20
57	BB	850	U	C6-N1-C2	-10.25	114.85	121.00
57	BB	1371	G	O4'-C1'-N9	10.25	116.40	108.20
21	AA	457	G	N1-C6-O6	10.25	126.05	119.90
57	BB	127	A	N3-C4-C5	-10.25	119.62	126.80
57	BB	278	A	C5-C6-N1	-10.25	112.58	117.70
57	BB	1296	G	C5-C6-O6	-10.25	122.45	128.60
57	BB	1397	U	O4'-C1'-N1	10.25	116.40	108.20
57	BB	1091	G	N3-C2-N2	10.25	127.07	119.90
57	BB	1303	G	C5-C6-O6	-10.25	122.45	128.60
57	BB	1649	G	O4'-C1'-N9	10.25	116.40	108.20
57	BB	1948	G	N1-C2-N3	-10.25	117.75	123.90
57	BB	2374	C	N3-C4-C5	-10.25	117.80	121.90
57	BB	232	G	C5-C6-O6	-10.25	122.45	128.60
16	AE	68	ARG	NE-CZ-NH2	-10.24	115.18	120.30
57	BB	463	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	2777	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	1551	A	C5-C6-N6	-10.24	115.51	123.70
57	BB	2250	G	O4'-C1'-N9	10.24	116.39	108.20
57	BB	2535	G	C4-C5-C6	10.24	124.94	118.80
21	AA	305	G	N1-C6-O6	10.24	126.04	119.90
57	BB	134	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	242	G	C5-C6-N1	-10.24	106.38	111.50
57	BB	981	A	N7-C8-N9	-10.24	108.68	113.80
57	BB	2058	A	N1-C6-N6	10.24	124.75	118.60
21	AA	205	A	C5-C6-N6	-10.24	115.51	123.70
57	BB	252	G	O4'-C1'-N9	10.24	116.39	108.20
57	BB	246	C	O4'-C1'-N1	10.24	116.39	108.20
21	AA	909	A	C4-C5-C6	10.23	122.12	117.00
57	BB	1991	U	C2-N3-C4	-10.23	120.86	127.00
58	BA	65	U	O4'-C1'-N1	10.23	116.39	108.20
57	BB	1300	G	C5-C6-N1	10.23	116.62	111.50
57	BB	2143	C	N3-C4-N4	10.23	125.16	118.00
57	BB	2244	U	O4'-C1'-N1	10.23	116.39	108.20
57	BB	2420	C	C5-C4-N4	-10.23	113.04	120.20
57	BB	2757	A	C5-C6-N1	-10.23	112.58	117.70
21	AA	460	A	C5-C6-N1	-10.23	112.58	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1099	G	N1-C6-O6	10.23	126.04	119.90
57	BB	1844	C	O4'-C1'-N1	10.23	116.39	108.20
57	BB	2831	G	N1-C6-O6	10.23	126.04	119.90
57	BB	593	U	O4'-C1'-N1	10.23	116.38	108.20
3	AL	113	ARG	NE-CZ-NH2	-10.23	115.19	120.30
21	AA	665	A	C2-N3-C4	10.23	115.71	110.60
57	BB	775	G	C5-C6-O6	-10.23	122.46	128.60
57	BB	1223	G	O4'-C1'-N9	10.23	116.38	108.20
21	AA	1507	A	C4-C5-C6	10.23	122.11	117.00
57	BB	2682	A	C5-C6-N1	-10.23	112.59	117.70
21	AA	1246	A	C4-C5-C6	10.22	122.11	117.00
22	AY	42	G	N1-C6-O6	10.22	126.03	119.90
57	BB	812	C	N3-C4-C5	-10.22	117.81	121.90
57	BB	2384	U	C5-C4-O4	-10.22	119.77	125.90
57	BB	1020	A	N1-C6-N6	10.22	124.73	118.60
21	AA	1014	A	C4-C5-N7	-10.22	105.59	110.70
57	BB	1629	U	C2-N3-C4	-10.22	120.87	127.00
57	BB	2432	A	C5-N7-C8	10.22	109.01	103.90
21	AA	1316	G	C5-C6-O6	-10.22	122.47	128.60
22	AY	27	C	C5-C4-N4	-10.22	113.05	120.20
28	BI	102	ARG	NE-CZ-NH2	10.22	125.41	120.30
57	BB	10	A	O4'-C1'-N9	10.22	116.38	108.20
57	BB	1655	A	N1-C6-N6	10.22	124.73	118.60
57	BB	2862	G	N1-C6-O6	10.22	126.03	119.90
21	AA	358	U	O4'-C1'-N1	10.22	116.37	108.20
57	BB	927	A	C6-C5-N7	-10.21	125.15	132.30
57	BB	2171	A	C4-C5-N7	-10.21	105.59	110.70
57	BB	366	C	O4'-C1'-N1	10.21	116.37	108.20
57	BB	493	G	C5-C6-N1	-10.21	106.39	111.50
57	BB	2771	C	N3-C4-C5	-10.21	117.81	121.90
21	AA	964	A	C5-C6-N6	-10.21	115.53	123.70
57	BB	1124	G	C5-C6-O6	-10.21	122.47	128.60
57	BB	2043	C	C5-C6-N1	10.21	126.11	121.00
57	BB	1301	A	C5-C6-N6	-10.21	115.53	123.70
57	BB	959	A	C5-C6-N1	-10.21	112.60	117.70
57	BB	1288	G	C6-C5-N7	-10.21	124.28	130.40
21	AA	286	C	N3-C2-O2	10.21	129.04	121.90
21	AA	953	G	C5-C6-O6	-10.21	122.48	128.60
57	BB	1822	C	O4'-C1'-N1	10.21	116.36	108.20
21	AA	694	A	C4-C5-C6	10.20	122.10	117.00
57	BB	159	G	O4'-C1'-N9	10.20	116.36	108.20
57	BB	713	G	C5-C6-N1	-10.20	106.40	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2362	C	N3-C4-N4	10.20	125.14	118.00
57	BB	677	A	C2-N3-C4	-10.20	105.50	110.60
57	BB	1419	A	C5-C6-N1	-10.20	112.60	117.70
57	BB	984	A	C4-C5-C6	10.20	122.10	117.00
57	BB	1614	A	C4-C5-C6	10.20	122.10	117.00
57	BB	2265	U	O4'-C1'-N1	10.20	116.36	108.20
21	AA	415	A	C5-C6-N6	-10.20	115.54	123.70
21	AA	829	G	C8-N9-C4	-10.20	102.32	106.40
57	BB	331	C	C6-N1-C2	-10.20	116.22	120.30
57	BB	716	A	C4-C5-N7	-10.20	105.60	110.70
57	BB	1064	C	C2-N3-C4	-10.20	114.80	119.90
57	BB	1706	C	O4'-C1'-N1	10.20	116.36	108.20
57	BB	2757	A	N1-C6-N6	10.19	124.72	118.60
21	AA	904	U	O4'-C1'-N1	10.19	116.35	108.20
57	BB	370	G	C5-C6-O6	-10.19	122.48	128.60
57	BB	1241	A	O4'-C1'-N9	10.19	116.35	108.20
57	BB	1655	A	C4-C5-C6	10.19	122.09	117.00
57	BB	2211	A	N1-C6-N6	10.19	124.71	118.60
57	BB	186	G	C2-N3-C4	10.19	116.99	111.90
57	BB	1221	C	N3-C4-C5	-10.19	117.82	121.90
57	BB	1050	A	C5-C6-N6	-10.19	115.55	123.70
21	AA	1265	C	N3-C4-C5	-10.19	117.83	121.90
21	AA	1413	A	C5-C6-N6	-10.19	115.55	123.70
57	BB	86	G	O4'-C1'-N9	10.19	116.35	108.20
57	BB	733	G	C5-C6-N1	-10.19	106.41	111.50
57	BB	1561	C	O4'-C1'-N1	10.19	116.35	108.20
57	BB	2152	G	P-O3'-C3'	10.19	131.92	119.70
21	AA	628	G	N3-C2-N2	10.18	127.03	119.90
57	BB	335	C	C5-C4-N4	-10.18	113.07	120.20
57	BB	2636	C	N3-C4-N4	10.18	125.13	118.00
21	AA	1226	C	P-O3'-C3'	10.18	131.92	119.70
21	AA	1328	C	O4'-C1'-N1	10.18	116.34	108.20
23	AW	12	U	O4'-C1'-N1	10.18	116.34	108.20
57	BB	984	A	C5-C6-N6	-10.18	115.56	123.70
57	BB	590	A	C4-C5-C6	10.18	122.09	117.00
57	BB	1433	A	C4-C5-C6	10.18	122.09	117.00
57	BB	2109	U	O4'-C1'-N1	10.18	116.34	108.20
57	BB	2352	A	N1-C6-N6	10.18	124.71	118.60
57	BB	1368	G	C6-N1-C2	-10.18	118.99	125.10
57	BB	1947	C	N3-C4-N4	10.18	125.12	118.00
21	AA	901	A	C8-N9-C4	-10.17	101.73	105.80
21	AA	1386	G	C2-N3-C4	10.17	116.99	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	839	U	O4'-C1'-N1	10.17	116.34	108.20
57	BB	1216	G	C4-C5-N7	-10.17	106.73	110.80
57	BB	2802	G	N1-C6-O6	10.17	126.00	119.90
57	BB	241	A	C4-C5-C6	10.17	122.09	117.00
57	BB	1906	G	N7-C8-N9	10.17	118.19	113.10
57	BB	2464	G	C5-C6-O6	-10.17	122.50	128.60
58	BA	91	C	C5-C4-N4	-10.17	113.08	120.20
57	BB	106	C	C6-N1-C2	-10.17	116.23	120.30
57	BB	1972	G	C5-C6-N1	-10.17	106.41	111.50
21	AA	28	A	C4-C5-C6	10.17	122.08	117.00
21	AA	151	A	C5-C6-N1	-10.17	112.61	117.70
21	AA	597	G	N1-C6-O6	10.17	126.00	119.90
21	AA	1421	G	N7-C8-N9	10.17	118.19	113.10
57	BB	655	A	C2-N3-C4	10.17	115.69	110.60
21	AA	725	G	N1-C6-O6	10.17	126.00	119.90
21	AA	1297	G	C5-C6-O6	-10.17	122.50	128.60
53	BE	49	ARG	NE-CZ-NH1	-10.17	115.22	120.30
57	BB	301	G	N1-C6-O6	10.17	126.00	119.90
57	BB	1090	A	C5-C6-N6	-10.17	115.57	123.70
57	BB	1874	C	C6-N1-C2	-10.17	116.23	120.30
57	BB	2540	C	N3-C4-N4	10.17	125.12	118.00
21	AA	825	A	O4'-C1'-N9	10.16	116.33	108.20
21	AA	235	C	C5-C6-N1	10.16	126.08	121.00
21	AA	635	A	N3-C4-C5	-10.16	119.69	126.80
57	BB	1543	G	N1-C6-O6	10.16	126.00	119.90
57	BB	1724	G	C6-C5-N7	-10.16	124.30	130.40
5	AN	19	TYR	CB-CG-CD2	10.16	127.10	121.00
21	AA	83	C	N3-C4-N4	10.16	125.11	118.00
21	AA	1134	G	C5-C6-O6	-10.16	122.50	128.60
21	AA	1422	G	N1-C2-N3	-10.16	117.80	123.90
22	AY	27	C	C5-C6-N1	10.16	126.08	121.00
57	BB	8	C	C5-C4-N4	-10.16	113.09	120.20
57	BB	2481	G	N1-C6-O6	10.16	126.00	119.90
57	BB	786	C	N3-C4-N4	10.16	125.11	118.00
57	BB	812	C	N3-C4-N4	10.16	125.11	118.00
57	BB	2007	U	O4'-C1'-N1	10.16	116.33	108.20
57	BB	2336	A	P-O3'-C3'	10.16	131.89	119.70
57	BB	341	C	O4'-C1'-N1	10.16	116.33	108.20
57	BB	872	U	N3-C4-O4	10.16	126.51	119.40
57	BB	1041	G	N3-C2-N2	10.16	127.01	119.90
57	BB	2195	U	O4'-C1'-N1	10.16	116.33	108.20
21	AA	7	A	C5-N7-C8	-10.15	98.82	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	101	A	C5-C6-N1	-10.15	112.62	117.70
57	BB	1286	A	C5-C6-N6	-10.15	115.58	123.70
57	BB	1465	G	C4-C5-C6	10.15	124.89	118.80
57	BB	249	C	C5-C4-N4	-10.15	113.09	120.20
58	BA	60	C	O4'-C1'-N1	10.15	116.32	108.20
58	BA	99	A	C8-N9-C4	10.15	109.86	105.80
3	AL	65	TYR	CB-CG-CD1	-10.15	114.91	121.00
21	AA	914	A	N1-C2-N3	-10.15	124.23	129.30
57	BB	106	C	O4'-C1'-N1	10.15	116.32	108.20
57	BB	307	G	C6-C5-N7	-10.15	124.31	130.40
57	BB	626	A	O4'-C1'-N9	10.15	116.32	108.20
57	BB	89	A	N1-C2-N3	10.14	134.37	129.30
57	BB	503	A	C5-N7-C8	10.14	108.97	103.90
57	BB	161	A	C4-C5-C6	10.14	122.07	117.00
21	AA	1144	G	C5-C6-N1	-10.14	106.43	111.50
57	BB	695	G	C4-C5-N7	10.14	114.86	110.80
21	AA	711	G	N1-C6-O6	10.14	125.98	119.90
21	AA	740	U	N3-C4-C5	-10.14	108.52	114.60
57	BB	2078	C	N3-C4-C5	-10.14	117.84	121.90
21	AA	549	C	O4'-C1'-N1	10.14	116.31	108.20
21	AA	798	U	C5-C6-N1	10.14	127.77	122.70
21	AA	1248	A	C5-C6-N1	-10.14	112.63	117.70
57	BB	507	A	N1-C6-N6	10.14	124.68	118.60
57	BB	1980	G	N1-C6-O6	10.14	125.98	119.90
57	BB	2224	G	C5-C6-N1	-10.14	106.43	111.50
57	BB	2194	U	O4'-C1'-N1	10.14	116.31	108.20
57	BB	2257	U	O4'-C1'-N1	10.14	116.31	108.20
21	AA	77	A	O4'-C1'-N9	10.13	116.31	108.20
57	BB	1783	A	N1-C6-N6	10.13	124.68	118.60
57	BB	2269	G	C8-N9-C4	-10.14	102.34	106.40
57	BB	2465	C	C2-N3-C4	10.14	124.97	119.90
21	AA	687	A	C4-C5-C6	10.13	122.07	117.00
57	BB	1710	G	O4'-C1'-N9	10.13	116.31	108.20
57	BB	1896	G	N1-C6-O6	10.13	125.98	119.90
57	BB	1578	U	C5-C4-O4	10.13	131.98	125.90
57	BB	1658	C	N3-C4-N4	10.13	125.09	118.00
57	BB	2471	A	C5-C6-N1	-10.13	112.63	117.70
57	BB	791	C	N3-C4-N4	10.13	125.09	118.00
57	BB	1837	C	C5-C4-N4	-10.13	113.11	120.20
21	AA	1464	U	O4'-C1'-N1	10.13	116.30	108.20
35	BP	92	ARG	NE-CZ-NH2	-10.13	115.24	120.30
57	BB	1563	U	N3-C4-C5	-10.13	108.52	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	186	C	O4'-C1'-N1	10.12	116.30	108.20
25	AZ	99	ASP	CB-CG-OD1	10.12	127.41	118.30
57	BB	480	A	N9-C4-C5	-10.13	101.75	105.80
57	BB	1108	U	C5-C6-N1	10.13	127.76	122.70
57	BB	315	G	O4'-C1'-N9	10.12	116.30	108.20
57	BB	556	A	C8-N9-C4	-10.12	101.75	105.80
57	BB	1268	A	C5-C6-N6	-10.13	115.60	123.70
57	BB	1284	A	C5-C6-N6	-10.13	115.60	123.70
57	BB	2734	A	C2-N3-C4	10.12	115.66	110.60
21	AA	827	U	O4'-C1'-N1	10.12	116.30	108.20
57	BB	2417	C	O4'-C1'-N1	10.12	116.30	108.20
21	AA	299	G	C5-C6-O6	-10.12	122.53	128.60
57	BB	528	A	O4'-C1'-N9	10.12	116.30	108.20
57	BB	1916	A	N1-C6-N6	10.12	124.67	118.60
21	AA	1195	C	P-O3'-C3'	10.12	131.84	119.70
57	BB	2059	A	C5-C6-N6	-10.12	115.61	123.70
57	BB	26	G	C5-C6-N1	-10.12	106.44	111.50
57	BB	1218	G	N7-C8-N9	-10.12	108.04	113.10
15	AD	61	ARG	NE-CZ-NH1	10.11	125.36	120.30
21	AA	344	A	C4-C5-C6	10.11	122.06	117.00
21	AA	1268	G	C5-C6-O6	-10.12	122.53	128.60
57	BB	576	U	N3-C4-O4	10.12	126.48	119.40
57	BB	613	A	O4'-C1'-N9	10.12	116.29	108.20
57	BB	1951	U	O4'-C1'-N1	10.12	116.29	108.20
57	BB	2403	C	O4'-C1'-N1	10.11	116.29	108.20
57	BB	524	G	N1-C6-O6	10.11	125.97	119.90
57	BB	750	A	C5-C6-N1	-10.11	112.64	117.70
57	BB	675	A	C5-C6-N6	-10.11	115.61	123.70
57	BB	1098	A	C5'-C4'-C3'	10.11	132.18	116.00
21	AA	999	C	N3-C4-N4	10.11	125.08	118.00
57	BB	1426	G	N3-C2-N2	10.11	126.98	119.90
57	BB	2205	A	C5-C6-N6	-10.11	115.61	123.70
57	BB	2852	G	N7-C8-N9	-10.11	108.05	113.10
21	AA	368	U	C4-C5-C6	-10.11	113.64	119.70
57	BB	198	C	O4'-C1'-N1	10.11	116.28	108.20
57	BB	1061	U	O4'-C1'-N1	10.11	116.28	108.20
57	BB	1555	G	C6-C5-N7	-10.11	124.34	130.40
21	AA	1296	C	C4-C5-C6	10.10	122.45	117.40
23	AW	24	G	O4'-C1'-N9	10.10	116.28	108.20
57	BB	2485	G	C5-C6-O6	-10.10	122.54	128.60
57	BB	1646	C	C5-C6-N1	10.10	126.05	121.00
21	AA	78	A	N1-C2-N3	10.10	134.35	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	543	U	O4'-C1'-N1	10.10	116.28	108.20
21	AA	1329	A	N1-C6-N6	10.10	124.66	118.60
23	AW	57	G	O4'-C1'-N9	10.10	116.28	108.20
26	AV	35	A	C5-C6-N6	-10.10	115.62	123.70
21	AA	181	A	C2-N3-C4	10.10	115.65	110.60
21	AA	1220	G	C8-N9-C4	10.10	110.44	106.40
21	AA	255	G	N9-C4-C5	-10.10	101.36	105.40
21	AA	702	A	N9-C4-C5	10.10	109.84	105.80
22	AY	49	C	O4'-C1'-N1	10.10	116.28	108.20
57	BB	553	G	C8-N9-C4	-10.10	102.36	106.40
57	BB	1084	A	C5-N7-C8	10.10	108.95	103.90
57	BB	2441	U	O4'-C1'-N1	10.10	116.28	108.20
57	BB	1752	C	O4'-C1'-N1	10.09	116.28	108.20
18	AG	2	ARG	NE-CZ-NH2	-10.09	115.25	120.30
21	AA	447	G	N1-C6-O6	10.09	125.95	119.90
21	AA	1019	A	N1-C6-N6	10.09	124.66	118.60
57	BB	2407	A	N1-C6-N6	10.09	124.66	118.60
27	B5	111	PHE	CB-CG-CD1	10.09	127.86	120.80
30	BK	30	ARG	NE-CZ-NH2	-10.09	115.25	120.30
57	BB	312	G	C8-N9-C4	-10.09	102.36	106.40
57	BB	553	G	C6-C5-N7	-10.09	124.34	130.40
21	AA	1026	G	N1-C6-O6	10.09	125.95	119.90
57	BB	1327	A	N1-C6-N6	10.09	124.65	118.60
57	BB	1388	G	C8-N9-C4	-10.09	102.37	106.40
57	BB	1445	G	N9-C4-C5	-10.09	101.36	105.40
57	BB	1830	C	C5-C6-N1	10.09	126.04	121.00
57	BB	2029	G	C8-N9-C4	10.09	110.44	106.40
57	BB	1418	G	C6-C5-N7	-10.09	124.35	130.40
58	BA	40	U	N3-C4-O4	10.09	126.46	119.40
57	BB	500	G	C5-N7-C8	10.08	109.34	104.30
57	BB	1185	G	C5-N7-C8	10.08	109.34	104.30
57	BB	2030	A	O4'-C1'-N9	10.08	116.27	108.20
21	AA	492	C	O4'-C1'-N1	10.08	116.27	108.20
21	AA	1502	A	C5-C6-N6	-10.08	115.64	123.70
23	AW	38	A	C6-C5-N7	-10.08	125.24	132.30
23	AW	62	C	N3-C4-N4	10.08	125.06	118.00
30	BK	17	ARG	NE-CZ-NH2	-10.08	115.26	120.30
57	BB	174	U	C2-N3-C4	-10.08	120.95	127.00
57	BB	515	A	C5-C6-N6	-10.08	115.64	123.70
57	BB	2002	G	C5-C6-N1	-10.08	106.46	111.50
21	AA	179	A	C4-C5-N7	-10.08	105.66	110.70
57	BB	1464	G	N1-C6-O6	10.08	125.95	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1605	C	O4'-C1'-N1	10.08	116.26	108.20
57	BB	2602	A	N9-C4-C5	10.08	109.83	105.80
57	BB	390	U	O4'-C1'-N1	10.07	116.26	108.20
21	AA	69	G	C5-C6-O6	-10.07	122.56	128.60
17	AF	2	ARG	NE-CZ-NH2	-10.07	115.27	120.30
21	AA	335	C	C2-N3-C4	10.07	124.94	119.90
21	AA	491	G	C4-C5-N7	-10.07	106.77	110.80
21	AA	1525	G	C6-C5-N7	-10.07	124.36	130.40
57	BB	1213	A	C5-C6-N6	-10.07	115.64	123.70
57	BB	1266	G	N1-C6-O6	10.07	125.94	119.90
21	AA	1201	A	C5-C6-N6	-10.07	115.64	123.70
21	AA	1450	U	N1-C2-O2	-10.07	115.75	122.80
57	BB	1523	U	C5-C4-O4	10.07	131.94	125.90
57	BB	335	C	O4'-C1'-N1	10.07	116.25	108.20
57	BB	705	A	C4-C5-C6	10.07	122.03	117.00
57	BB	2702	G	C8-N9-C4	-10.07	102.37	106.40
57	BB	493	G	N1-C6-O6	10.06	125.94	119.90
57	BB	1904	G	C8-N9-C4	-10.06	102.38	106.40
57	BB	1912	A	N1-C6-N6	10.06	124.64	118.60
21	AA	954	G	N3-C4-N9	10.06	132.04	126.00
31	BL	41	ARG	NE-CZ-NH1	-10.06	115.27	120.30
57	BB	6	A	C2-N3-C4	10.06	115.63	110.60
57	BB	1527	G	N1-C6-O6	10.06	125.94	119.90
57	BB	2715	C	O4'-C1'-N1	10.06	116.25	108.20
57	BB	2877	G	O4'-C1'-N9	10.06	116.25	108.20
21	AA	932	C	O4'-C1'-N1	10.06	116.25	108.20
22	AY	40	C	C1'-O4'-C4'	-10.06	101.85	109.90
57	BB	2446	G	N1-C6-O6	10.06	125.94	119.90
21	AA	695	A	C4-C5-C6	10.05	122.03	117.00
21	AA	970	C	N3-C4-C5	-10.05	117.88	121.90
57	BB	1745	A	N9-C4-C5	10.05	109.82	105.80
22	AY	18	G	N1-C2-N3	-10.05	117.87	123.90
22	AY	23	A	O4'-C1'-N9	10.05	116.24	108.20
24	AX	20	U	P-O3'-C3'	-10.05	107.64	119.70
57	BB	1016	G	N9-C4-C5	10.05	109.42	105.40
57	BB	1522	A	N1-C6-N6	10.05	124.63	118.60
21	AA	1172	C	C2-N3-C4	10.05	124.93	119.90
57	BB	645	C	C5-C4-N4	-10.05	113.16	120.20
57	BB	2001	C	C6-N1-C2	-10.05	116.28	120.30
57	BB	86	G	C6-C5-N7	-10.05	124.37	130.40
57	BB	1673	G	C5-C6-O6	-10.05	122.57	128.60
57	BB	2576	G	N9-C4-C5	-10.05	101.38	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2659	G	C5-C6-O6	-10.05	122.57	128.60
21	AA	88	U	O4'-C1'-N1	10.04	116.23	108.20
21	AA	1006	G	N1-C2-N3	-10.04	117.87	123.90
21	AA	1231	G	N9-C4-C5	10.04	109.42	105.40
57	BB	1965	C	O4'-C1'-N1	10.04	116.23	108.20
21	AA	75	G	C8-N9-C4	-10.04	102.38	106.40
21	AA	489	C	N3-C4-N4	10.04	125.03	118.00
21	AA	918	A	C5-C6-N6	-10.04	115.67	123.70
21	AA	1073	U	C4'-C3'-C2'	-10.04	92.56	102.60
21	AA	1525	G	C5-C6-O6	-10.04	122.58	128.60
57	BB	545	U	C2-N1-C1'	10.04	129.75	117.70
58	BA	50	A	C4-C5-C6	10.04	122.02	117.00
15	AD	74	TYR	CB-CG-CD2	10.04	127.02	121.00
57	BB	795	C	O4'-C1'-N1	10.04	116.23	108.20
57	BB	2279	G	C5-C6-O6	-10.04	122.58	128.60
21	AA	426	U	O4'-C1'-N1	10.03	116.23	108.20
55	BG	108	PHE	CB-CG-CD2	10.03	127.82	120.80
57	BB	1785	A	C5-C6-N1	-10.03	112.68	117.70
21	AA	493	A	C8-N9-C4	-10.03	101.79	105.80
57	BB	1549	A	C5-C6-N6	-10.03	115.67	123.70
57	BB	551	G	C5-C6-O6	-10.03	122.58	128.60
22	AY	32	C	O4'-C1'-N1	10.03	116.22	108.20
57	BB	1111	A	C5-C6-N6	-10.03	115.68	123.70
21	AA	1310	G	N3-C4-C5	10.03	133.61	128.60
23	AW	20	U	P-O3'-C3'	10.03	131.73	119.70
57	BB	1505	A	N1-C6-N6	10.03	124.61	118.60
57	BB	2381	A	N7-C8-N9	-10.03	108.79	113.80
57	BB	95	A	C4-C5-C6	10.02	122.01	117.00
21	AA	317	U	O4'-C1'-N1	10.02	116.22	108.20
57	BB	31	C	N3-C4-C5	-10.02	117.89	121.90
57	BB	2171	A	C5-C6-N6	-10.02	115.68	123.70
57	BB	428	A	C2-N3-C4	-10.02	105.59	110.60
57	BB	537	G	O4'-C1'-N9	10.02	116.22	108.20
57	BB	1102	C	C6-N1-C2	-10.02	116.29	120.30
21	AA	766	A	N9-C4-C5	-10.02	101.79	105.80
21	AA	1054	C	C6-N1-C2	-10.02	116.29	120.30
57	BB	2710	C	O4'-C1'-N1	10.02	116.22	108.20
21	AA	458	U	O4'-C1'-N1	10.02	116.21	108.20
22	AY	59	U	N3-C4-O4	10.02	126.41	119.40
22	AY	65	G	N1-C2-N3	-10.02	117.89	123.90
21	AA	483	C	C6-N1-C2	-10.02	116.29	120.30
57	BB	570	G	N7-C8-N9	-10.02	108.09	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	938	A	C8-N9-C4	-10.01	101.79	105.80
21	AA	305	G	C5-C6-N1	-10.01	106.49	111.50
57	BB	228	C	N1-C2-O2	10.01	124.91	118.90
57	BB	1979	U	O4'-C1'-N1	10.01	116.21	108.20
57	BB	2091	C	N3-C4-C5	-10.01	117.89	121.90
57	BB	2291	U	O4'-C1'-N1	10.01	116.21	108.20
21	AA	838	G	N1-C6-O6	10.01	125.91	119.90
57	BB	1601	G	C5-C6-O6	-10.01	122.59	128.60
57	BB	2655	G	N1-C6-O6	10.01	125.91	119.90
22	AY	48	C	C4-C5-C6	10.01	122.40	117.40
23	AW	70	G	O4'-C1'-N9	10.01	116.21	108.20
57	BB	817	C	C5-C6-N1	10.01	126.00	121.00
57	BB	1399	C	N3-C4-C5	-10.01	117.90	121.90
21	AA	435	A	N7-C8-N9	10.01	118.80	113.80
57	BB	1276	A	C4-C5-C6	10.01	122.00	117.00
21	AA	1235	U	C5-C4-O4	-10.01	119.90	125.90
21	AA	1453	G	O4'-C1'-N9	10.01	116.20	108.20
57	BB	77	G	C4-C5-N7	-10.01	106.80	110.80
57	BB	820	A	N1-C6-N6	10.01	124.60	118.60
57	BB	1280	G	O4'-C1'-N9	10.01	116.20	108.20
18	AG	94	ARG	NE-CZ-NH1	10.00	125.30	120.30
21	AA	237	G	N1-C2-N3	-10.00	117.90	123.90
21	AA	1458	G	N1-C2-N3	-10.00	117.90	123.90
23	AW	2	C	N3-C4-N4	10.00	125.00	118.00
57	BB	849	A	C4-C5-C6	10.00	122.00	117.00
57	BB	2566	A	N1-C6-N6	10.00	124.60	118.60
21	AA	9	G	N1-C6-O6	10.00	125.90	119.90
21	AA	297	G	C6-N1-C2	10.00	131.10	125.10
21	AA	1242	G	O4'-C1'-N9	10.00	116.20	108.20
21	AA	1392	G	N1-C6-O6	10.00	125.90	119.90
57	BB	236	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	1168	G	C8-N9-C4	10.00	110.40	106.40
57	BB	2507	C	N3-C4-N4	10.00	125.00	118.00
21	AA	491	G	C5-C6-N1	-10.00	106.50	111.50
21	AA	732	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	673	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	2289	G	O4'-C1'-N9	10.00	116.20	108.20
57	BB	117	G	N1-C6-O6	10.00	125.90	119.90
57	BB	494	G	C4-C5-N7	10.00	114.80	110.80
57	BB	1328	A	N7-C8-N9	-10.00	108.80	113.80
57	BB	1937	A	C4-C5-C6	10.00	122.00	117.00
57	BB	2809	A	C8-N9-C4	-10.00	101.80	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	183	C	P-O3'-C3'	9.99	131.69	119.70
57	BB	523	C	O4'-C1'-N1	9.99	116.20	108.20
21	AA	1067	A	C2-N3-C4	-9.99	105.60	110.60
23	AW	69	G	C5-C6-N1	-9.99	106.50	111.50
57	BB	1655	A	O4'-C1'-N9	9.99	116.19	108.20
21	AA	17	U	O4'-C1'-N1	9.99	116.19	108.20
21	AA	1305	G	N1-C6-O6	9.99	125.89	119.90
26	AV	18	G	C5-C6-O6	-9.99	122.61	128.60
57	BB	1011	G	C5-C6-N1	-9.99	106.50	111.50
57	BB	2381	A	C4-C5-C6	9.99	121.99	117.00
57	BB	2763	G	N1-C2-N3	-9.99	117.91	123.90
21	AA	449	G	O4'-C1'-N9	9.99	116.19	108.20
21	AA	1456	A	N7-C8-N9	9.99	118.79	113.80
57	BB	875	G	N1-C2-N3	-9.99	117.91	123.90
57	BB	1372	U	O4'-C1'-N1	9.99	116.19	108.20
57	BB	1818	U	O4'-C1'-N1	9.99	116.19	108.20
57	BB	530	G	C5-C6-O6	-9.98	122.61	128.60
57	BB	805	G	C8-N9-C4	-9.98	102.41	106.40
21	AA	466	A	C5-C6-N6	-9.98	115.71	123.70
22	AY	63	C	C6-N1-C2	-9.98	116.31	120.30
57	BB	2882	A	C5-C6-N1	-9.98	112.71	117.70
57	BB	827	U	O4'-C1'-N1	9.98	116.19	108.20
57	BB	2602	A	O4'-C1'-N9	9.98	116.19	108.20
57	BB	1348	C	N3-C4-C5	-9.98	117.91	121.90
14	AC	53	ARG	NE-CZ-NH1	9.98	125.29	120.30
21	AA	968	A	C6-N1-C2	-9.98	112.61	118.60
21	AA	1252	A	C5-C6-N6	-9.98	115.72	123.70
57	BB	167	A	N1-C6-N6	9.98	124.59	118.60
57	BB	1269	A	C5-C6-N6	-9.98	115.72	123.70
21	AA	124	C	C5-C4-N4	-9.98	113.22	120.20
57	BB	1421	G	N1-C2-N3	-9.98	117.91	123.90
57	BB	1861	G	C4-C5-N7	9.98	114.79	110.80
21	AA	499	A	C5-C6-N6	-9.97	115.72	123.70
57	BB	1927	A	N1-C6-N6	9.97	124.58	118.60
21	AA	1373	G	C5-C6-O6	-9.97	122.62	128.60
28	BI	133	ARG	NE-CZ-NH1	9.97	125.29	120.30
57	BB	1124	G	N3-C2-N2	9.97	126.88	119.90
57	BB	2588	G	O4'-C1'-N9	9.97	116.18	108.20
58	BA	66	A	P-O3'-C3'	9.97	131.67	119.70
21	AA	970	C	O4'-C1'-N1	9.97	116.18	108.20
57	BB	768	G	O4'-C1'-N9	9.97	116.18	108.20
57	BB	1445	G	N3-C2-N2	9.97	126.88	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1915	U	O4'-C1'-N1	9.97	116.18	108.20
57	BB	2534	A	C5-C6-N6	-9.97	115.72	123.70
21	AA	121	U	C2-N3-C4	-9.97	121.02	127.00
21	AA	489	C	N3-C4-C5	-9.97	117.91	121.90
21	AA	1408	A	N9-C4-C5	9.97	109.79	105.80
57	BB	250	G	C4-C5-C6	9.97	124.78	118.80
57	BB	894	U	O4'-C1'-N1	9.97	116.17	108.20
57	BB	897	C	N3-C4-N4	9.97	124.98	118.00
57	BB	1348	C	C2-N3-C4	9.97	124.88	119.90
57	BB	1494	A	C6-C5-N7	-9.97	125.32	132.30
57	BB	1526	C	C6-N1-C2	9.97	124.29	120.30
57	BB	2294	G	N9-C4-C5	9.97	109.39	105.40
57	BB	302	C	N3-C4-C5	-9.97	117.91	121.90
21	AA	635	A	C4-C5-C6	9.96	121.98	117.00
21	AA	654	G	N7-C8-N9	9.96	118.08	113.10
57	BB	41	C	C2-N3-C4	9.96	124.88	119.90
57	BB	676	A	C5-C6-N6	-9.96	115.73	123.70
57	BB	1462	C	N3-C4-N4	9.96	124.97	118.00
57	BB	2189	U	C5-C6-N1	9.96	127.68	122.70
21	AA	530	G	C8-N9-C4	-9.96	102.42	106.40
57	BB	167	A	C5-C6-N1	-9.96	112.72	117.70
57	BB	485	C	N3-C4-C5	-9.96	117.92	121.90
57	BB	1919	A	O4'-C1'-N9	9.96	116.17	108.20
21	AA	267	C	C5-C4-N4	-9.96	113.23	120.20
57	BB	1281	G	N1-C6-O6	9.96	125.88	119.90
57	BB	1321	A	C5-C6-N1	-9.96	112.72	117.70
57	BB	1668	A	N9-C4-C5	-9.96	101.81	105.80
21	AA	696	A	N1-C6-N6	9.96	124.57	118.60
21	AA	951	G	N1-C6-O6	9.96	125.88	119.90
57	BB	388	G	C6-C5-N7	-9.96	124.42	130.40
57	BB	2902	C	C5-C6-N1	-9.96	116.02	121.00
21	AA	328	C	O4'-C1'-N1	9.96	116.16	108.20
57	BB	2072	C	C5-C4-N4	-9.96	113.23	120.20
21	AA	1333	A	C8-N9-C4	-9.95	101.82	105.80
57	BB	2864	G	N1-C6-O6	9.95	125.87	119.90
57	BB	2880	C	N3-C4-C5	-9.95	117.92	121.90
21	AA	703	G	C5-C6-O6	-9.95	122.63	128.60
57	BB	464	U	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1408	G	N1-C6-O6	9.95	125.87	119.90
21	AA	1193	G	C2-N3-C4	9.95	116.88	111.90
57	BB	1277	G	C8-N9-C4	-9.95	102.42	106.40
57	BB	2081	U	O4'-C1'-N1	9.95	116.16	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2809	A	C5-C6-N6	-9.95	115.74	123.70
21	AA	1358	U	N3-C4-O4	9.95	126.36	119.40
21	AA	1372	U	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1733	G	C2-N3-C4	9.95	116.87	111.90
21	AA	1055	A	N7-C8-N9	-9.95	108.83	113.80
57	BB	590	A	C5-C6-N1	-9.95	112.73	117.70
57	BB	696	G	O4'-C1'-N9	9.95	116.16	108.20
57	BB	1439	A	N1-C6-N6	9.95	124.57	118.60
57	BB	1806	C	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1976	U	N1-C2-N3	9.95	120.87	114.90
57	BB	2893	A	N9-C4-C5	9.95	109.78	105.80
3	AL	85	ARG	NE-CZ-NH1	9.94	125.27	120.30
22	AY	58	A	C4-C5-C6	9.94	121.97	117.00
25	AZ	76	TYR	CB-CG-CD2	-9.94	115.03	121.00
26	AV	35	A	C5-C6-N1	-9.95	112.73	117.70
57	BB	222	A	N3-C4-C5	-9.94	119.84	126.80
58	BA	46	A	C5-C6-N1	-9.95	112.73	117.70
21	AA	1311	A	C5-C6-N6	-9.94	115.75	123.70
57	BB	881	G	N1-C2-N2	-9.94	107.25	116.20
57	BB	1986	C	O4'-C1'-N1	9.94	116.15	108.20
57	BB	233	A	N7-C8-N9	-9.94	108.83	113.80
57	BB	1737	G	P-O3'-C3'	9.94	131.63	119.70
21	AA	1485	U	O4'-C1'-N1	9.94	116.15	108.20
57	BB	1631	G	C5-C6-O6	-9.94	122.64	128.60
57	BB	2529	G	N1-C6-O6	9.94	125.86	119.90
57	BB	2737	G	C5-C6-O6	-9.94	122.64	128.60
58	BA	28	C	N3-C4-N4	9.94	124.96	118.00
21	AA	227	G	N9-C4-C5	9.94	109.37	105.40
57	BB	440	C	O4'-C1'-N1	9.94	116.15	108.20
57	BB	2834	G	C6-N1-C2	9.94	131.06	125.10
21	AA	695	A	C5-C6-N1	-9.93	112.73	117.70
57	BB	1862	G	N1-C6-O6	9.93	125.86	119.90
21	AA	446	G	N1-C2-N3	-9.93	117.94	123.90
21	AA	939	G	N1-C2-N3	-9.93	117.94	123.90
57	BB	1628	G	N7-C8-N9	-9.93	108.13	113.10
57	BB	2787	C	N3-C4-N4	9.93	124.95	118.00
18	AG	43	TYR	CB-CG-CD1	9.93	126.96	121.00
57	BB	26	G	N1-C6-O6	9.93	125.86	119.90
57	BB	1828	G	O4'-C1'-N9	9.93	116.14	108.20
57	BB	99	U	N3-C4-O4	9.93	126.35	119.40
57	BB	1414	C	O4'-C1'-N1	9.93	116.14	108.20
57	BB	2189	U	N3-C4-O4	9.93	126.35	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1025	G	C5-C6-O6	-9.93	122.64	128.60
21	AA	702	A	C5-N7-C8	9.92	108.86	103.90
21	AA	1279	G	C4-C5-C6	9.92	124.75	118.80
57	BB	2095	A	N9-C4-C5	-9.92	101.83	105.80
57	BB	2290	G	N1-C6-O6	9.92	125.85	119.90
58	BA	58	A	N9-C4-C5	9.92	109.77	105.80
21	AA	1344	C	O4'-C1'-N1	9.92	116.14	108.20
21	AA	279	A	C4-C5-C6	9.92	121.96	117.00
21	AA	351	G	N1-C6-O6	9.92	125.85	119.90
26	AV	72	A	N1-C6-N6	9.92	124.55	118.60
57	BB	109	C	C5-C4-N4	-9.92	113.25	120.20
57	BB	155	A	O4'-C1'-N9	9.92	116.14	108.20
57	BB	2401	U	N1-C2-N3	9.92	120.85	114.90
21	AA	1120	C	O4'-C1'-N1	9.92	116.13	108.20
57	BB	974	G	C3'-C2'-C1'	-9.92	93.57	101.50
57	BB	1906	G	C5-N7-C8	-9.92	99.34	104.30
57	BB	2677	G	O4'-C1'-N9	9.92	116.13	108.20
57	BB	2712	C	O4'-C1'-N1	9.92	116.13	108.20
21	AA	953	G	O4'-C1'-N9	9.91	116.13	108.20
57	BB	347	A	C5-C6-N6	-9.91	115.77	123.70
57	BB	1100	C	C4-C5-C6	9.91	122.36	117.40
57	BB	1868	C	O4'-C1'-N1	9.91	116.13	108.20
21	AA	973	G	O4'-C1'-N9	9.91	116.13	108.20
21	AA	1022	A	C4-C5-C6	9.91	121.95	117.00
57	BB	2443	C	C2-N3-C4	9.91	124.86	119.90
57	BB	2676	C	N3-C4-C5	-9.91	117.94	121.90
21	AA	1468	A	O4'-C1'-N9	9.91	116.13	108.20
57	BB	2857	G	N1-C6-O6	9.91	125.84	119.90
25	AZ	261	PHE	CB-CG-CD1	9.91	127.74	120.80
21	AA	270	A	N9-C4-C5	-9.91	101.84	105.80
22	AY	49	C	N3-C4-C5	-9.91	117.94	121.90
57	BB	253	C	C5-C6-N1	9.91	125.95	121.00
27	B5	37	LYS	N-CA-CB	9.90	128.43	110.60
57	BB	6	A	C5-C6-N6	-9.90	115.78	123.70
57	BB	344	A	C5-C6-N1	-9.90	112.75	117.70
57	BB	430	A	C5-C6-N1	-9.90	112.75	117.70
57	BB	1243	C	O4'-C1'-N1	9.90	116.12	108.20
57	BB	1157	G	C6-C5-N7	-9.90	124.46	130.40
10	AS	60	PHE	CB-CG-CD1	-9.90	113.87	120.80
57	BB	576	U	O4'-C1'-N1	9.90	116.12	108.20
57	BB	1160	G	N1-C6-O6	9.90	125.84	119.90
58	BA	75	G	C5-C6-N1	-9.90	106.55	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	408	A	O4'-C1'-N9	9.89	116.12	108.20
57	BB	1977	A	C5-C6-N6	-9.89	115.78	123.70
21	AA	790	A	C8-N9-C4	-9.89	101.84	105.80
57	BB	2396	G	C5-C6-O6	-9.89	122.66	128.60
57	BB	2630	G	O4'-C1'-N9	9.89	116.11	108.20
57	BB	2854	G	C6-N1-C2	9.89	131.04	125.10
58	BA	69	G	N1-C6-O6	9.89	125.84	119.90
21	AA	341	C	C2-N3-C4	9.89	124.85	119.90
21	AA	498	A	C6-C5-N7	-9.89	125.38	132.30
21	AA	635	A	N3-C4-N9	9.89	135.31	127.40
57	BB	147	C	O4'-C1'-N1	9.89	116.11	108.20
21	AA	659	U	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1195	C	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1395	C	N3-C4-N4	9.89	124.92	118.00
21	AA	905	U	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1494	G	C5-C6-O6	-9.89	122.67	128.60
23	AW	38	A	O4'-C1'-N9	9.89	116.11	108.20
57	BB	1360	G	C4-C5-C6	9.89	124.73	118.80
21	AA	599	C	O4'-C1'-N1	9.88	116.11	108.20
21	AA	792	A	C5-C6-N6	-9.89	115.79	123.70
57	BB	1453	A	O4'-C1'-N9	9.89	116.11	108.20
57	BB	696	G	N3-C2-N2	9.88	126.82	119.90
57	BB	1820	U	N3-C2-O2	9.88	129.12	122.20
57	BB	2092	U	C2-N1-C1'	9.88	129.56	117.70
57	BB	2186	G	C5-C6-N1	-9.88	106.56	111.50
21	AA	227	G	C2-N3-C4	9.88	116.84	111.90
21	AA	241	G	N1-C6-O6	9.88	125.83	119.90
21	AA	398	U	N3-C4-C5	-9.88	108.67	114.60
21	AA	1069	C	C4-C5-C6	9.88	122.34	117.40
21	AA	1238	A	N1-C6-N6	9.88	124.53	118.60
22	AY	17	U	C6-N1-C2	9.88	126.93	121.00
57	BB	2579	C	O4'-C1'-N1	9.88	116.11	108.20
58	BA	83	G	C4-C5-N7	9.88	114.75	110.80
21	AA	1422	G	O4'-C1'-N9	9.88	116.10	108.20
57	BB	815	C	O4'-C1'-N1	9.88	116.10	108.20
57	BB	1950	G	N1-C6-O6	9.88	125.83	119.90
1	AJ	65	TYR	CB-CG-CD1	-9.88	115.07	121.00
21	AA	941	G	N9-C4-C5	9.88	109.35	105.40
21	AA	1214	C	C5-C4-N4	-9.88	113.29	120.20
21	AA	1513	A	C4-C5-C6	9.88	121.94	117.00
26	AV	76	A	C4-C5-C6	9.87	121.94	117.00
57	BB	1816	C	O4'-C1'-N1	9.88	116.10	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2121	G	N1-C6-O6	9.88	125.83	119.90
57	BB	2570	G	N9-C4-C5	-9.88	101.45	105.40
21	AA	370	C	O4'-C1'-N1	9.87	116.10	108.20
57	BB	279	A	P-O5'-C5'	9.87	136.69	120.90
57	BB	2298	A	N1-C6-N6	9.87	124.52	118.60
21	AA	309	A	N1-C6-N6	9.87	124.52	118.60
57	BB	683	U	O4'-C1'-N1	9.87	116.10	108.20
57	BB	2137	U	O4'-C1'-N1	9.87	116.10	108.20
3	AL	109	ARG	NE-CZ-NH1	9.87	125.23	120.30
21	AA	886	G	C5-C6-O6	-9.87	122.68	128.60
21	AA	1024	G	C5-C6-O6	-9.87	122.68	128.60
57	BB	951	C	C6-N1-C2	9.87	124.25	120.30
21	AA	1171	A	N1-C6-N6	9.87	124.52	118.60
57	BB	1490	A	C5-N7-C8	9.87	108.83	103.90
21	AA	232	G	C5-C6-O6	-9.87	122.68	128.60
21	AA	1508	A	C4-C5-N7	-9.87	105.77	110.70
26	AV	68	C	C4-C5-C6	9.87	122.33	117.40
57	BB	2215	C	C6-N1-C2	-9.86	116.36	120.30
57	BB	2369	A	C5-C6-N6	-9.87	115.81	123.70
57	BB	2590	A	C5-N7-C8	9.87	108.83	103.90
14	AC	64	ARG	NE-CZ-NH1	9.86	125.23	120.30
57	BB	1469	A	C4-C5-N7	-9.86	105.77	110.70
57	BB	2413	G	C6-N1-C2	9.86	131.02	125.10
44	BY	47	ARG	NE-CZ-NH2	-9.86	115.37	120.30
21	AA	167	A	N1-C6-N6	9.86	124.52	118.60
21	AA	976	G	C5-C6-O6	-9.86	122.68	128.60
57	BB	1382	G	O4'-C1'-N9	9.86	116.09	108.20
57	BB	1891	G	C5-C6-O6	-9.86	122.68	128.60
57	BB	483	A	N1-C6-N6	9.86	124.51	118.60
57	BB	789	A	N3-C4-N9	9.86	135.28	127.40
57	BB	1268	A	C8-N9-C4	-9.86	101.86	105.80
21	AA	394	G	C5-C6-O6	-9.85	122.69	128.60
21	AA	789	U	O4'-C1'-N1	9.85	116.08	108.20
21	AA	821	G	C6-C5-N7	-9.85	124.49	130.40
22	AY	73	A	N1-C6-N6	9.85	124.51	118.60
36	BQ	27	ARG	NE-CZ-NH2	-9.85	115.37	120.30
36	BQ	49	ARG	NE-CZ-NH1	9.85	125.23	120.30
57	BB	2091	C	C5-C6-N1	9.85	125.93	121.00
21	AA	467	U	O4'-C1'-N1	9.85	116.08	108.20
21	AA	484	G	N1-C2-N3	-9.85	117.99	123.90
21	AA	826	C	N3-C2-O2	-9.85	115.00	121.90
26	AV	8	U	C5-C6-N1	-9.85	117.77	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2187	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	2261	C	N3-C4-N4	9.85	124.90	118.00
21	AA	72	A	O4'-C1'-N9	9.85	116.08	108.20
21	AA	180	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	1090	A	N7-C8-N9	9.85	118.72	113.80
57	BB	2058	A	C4-C5-C6	9.85	121.92	117.00
57	BB	2517	C	N3-C4-C5	-9.85	117.96	121.90
57	BB	296	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	1220	G	C5-C6-O6	-9.85	122.69	128.60
57	BB	1289	C	C5-C6-N1	9.85	125.92	121.00
57	BB	2777	G	C8-N9-C4	-9.85	102.46	106.40
21	AA	1000	A	O4'-C1'-N9	9.84	116.07	108.20
21	AA	1176	A	N1-C6-N6	9.84	124.51	118.60
26	AV	64	G	N7-C8-N9	-9.84	108.18	113.10
57	BB	221	A	C5-C6-N6	-9.84	115.83	123.70
57	BB	561	G	N1-C2-N3	-9.84	117.99	123.90
57	BB	936	A	C4-C5-C6	9.84	121.92	117.00
57	BB	361	G	O4'-C1'-N9	9.84	116.07	108.20
57	BB	2488	G	O4'-C1'-N9	9.84	116.07	108.20
4	AM	97	ARG	NE-CZ-NH2	-9.84	115.38	120.30
21	AA	109	A	C5-N7-C8	9.84	108.82	103.90
21	AA	109	A	O4'-C1'-N9	9.84	116.07	108.20
21	AA	1104	G	N3-C2-N2	9.84	126.79	119.90
27	B5	36	ALA	CA-C-N	9.84	138.85	117.20
57	BB	162	U	O4'-C1'-N1	9.84	116.07	108.20
57	BB	501	A	C8-N9-C4	-9.84	101.86	105.80
21	AA	262	A	C6-C5-N7	-9.84	125.41	132.30
26	AV	38	A	O4'-C1'-N9	9.84	116.07	108.20
57	BB	16	C	O4'-C1'-N1	9.84	116.07	108.20
57	BB	195	A	C5-C6-N1	-9.84	112.78	117.70
57	BB	1763	G	C2-N3-C4	-9.84	106.98	111.90
21	AA	164	G	N9-C4-C5	-9.84	101.47	105.40
21	AA	1482	G	C2-N3-C4	9.84	116.82	111.90
22	AY	23	A	N1-C2-N3	-9.84	124.38	129.30
57	BB	195	A	C6-C5-N7	-9.84	125.42	132.30
57	BB	2864	G	O4'-C1'-N9	9.84	116.07	108.20
21	AA	1365	G	N1-C6-O6	9.83	125.80	119.90
57	BB	949	G	C5-C6-O6	-9.83	122.70	128.60
57	BB	1133	A	C4-C5-C6	9.83	121.92	117.00
57	BB	1700	A	N1-C6-N6	9.83	124.50	118.60
57	BB	2639	A	N1-C6-N6	9.83	124.50	118.60
21	AA	57	G	N1-C6-O6	9.83	125.80	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	564	C	N3-C4-C5	-9.83	117.97	121.90
21	AA	1319	A	C5-C6-N1	-9.83	112.79	117.70
22	AY	56	C	N3-C4-N4	9.83	124.88	118.00
57	BB	1569	A	N1-C2-N3	9.83	134.21	129.30
57	BB	2399	G	C5-N7-C8	9.83	109.22	104.30
57	BB	2764	A	C4-C5-C6	9.83	121.92	117.00
58	BA	53	A	O4'-C1'-N9	9.83	116.06	108.20
57	BB	834	G	O4'-C1'-N9	9.83	116.06	108.20
58	BA	46	A	C4-C5-C6	9.83	121.91	117.00
57	BB	1279	G	O4'-C1'-N9	9.83	116.06	108.20
57	BB	2598	A	N9-C4-C5	-9.82	101.87	105.80
21	AA	1143	G	C8-N9-C4	-9.82	102.47	106.40
21	AA	1484	C	N3-C4-N4	9.82	124.88	118.00
57	BB	2283	C	P-O5'-C5'	9.82	136.62	120.90
21	AA	832	G	C5-C6-O6	-9.82	122.71	128.60
26	AV	30	G	C5-C6-O6	-9.82	122.71	128.60
57	BB	2168	G	N1-C2-N3	-9.82	118.01	123.90
57	BB	2332	C	C6-N1-C2	-9.82	116.37	120.30
57	BB	2748	A	C6-N1-C2	9.82	124.49	118.60
21	AA	419	C	C6-N1-C2	-9.82	116.37	120.30
21	AA	882	C	C6-N1-C2	-9.82	116.37	120.30
23	AW	56	C	C2-N1-C1'	9.82	129.60	118.80
25	AZ	262	ARG	NE-CZ-NH2	-9.82	115.39	120.30
57	BB	1507	C	N3-C4-C5	-9.82	117.97	121.90
57	BB	2158	A	C2-N3-C4	9.82	115.51	110.60
57	BB	2183	A	N9-C4-C5	-9.82	101.87	105.80
57	BB	2350	C	C6-N1-C2	-9.82	116.37	120.30
57	BB	2738	A	C8-N9-C4	-9.82	101.87	105.80
21	AA	1229	A	C5-N7-C8	9.81	108.81	103.90
57	BB	1216	G	N1-C6-O6	9.81	125.79	119.90
57	BB	1326	U	N3-C4-O4	9.81	126.27	119.40
58	BA	50	A	N1-C6-N6	9.81	124.49	118.60
21	AA	1365	G	C5-C6-O6	-9.81	122.71	128.60
57	BB	815	C	N3-C4-N4	9.81	124.87	118.00
57	BB	768	G	N1-C6-O6	9.81	125.79	119.90
57	BB	935	C	N3-C4-C5	-9.81	117.98	121.90
57	BB	1701	A	N3-C4-C5	-9.81	119.93	126.80
21	AA	145	G	N1-C2-N3	-9.81	118.02	123.90
21	AA	759	A	C6-C5-N7	-9.81	125.43	132.30
57	BB	800	A	C5-C6-N6	-9.81	115.85	123.70
57	BB	996	A	N1-C6-N6	9.81	124.49	118.60
57	BB	1218	G	N1-C6-O6	9.81	125.78	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2606	C	N3-C4-C5	-9.81	117.98	121.90
21	AA	814	A	N9-C4-C5	9.81	109.72	105.80
57	BB	1287	A	N1-C6-N6	9.80	124.48	118.60
57	BB	1315	C	N3-C4-C5	-9.80	117.98	121.90
57	BB	2018	G	N1-C6-O6	9.80	125.78	119.90
57	BB	2051	A	N1-C6-N6	9.80	124.48	118.60
57	BB	2868	A	O4'-C1'-N9	9.80	116.04	108.20
57	BB	50	U	N3-C4-C5	-9.80	108.72	114.60
57	BB	169	G	C6-C5-N7	-9.80	124.52	130.40
57	BB	477	A	C6-N1-C2	9.80	124.48	118.60
57	BB	763	G	C5-C6-O6	-9.80	122.72	128.60
57	BB	837	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	1314	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	2008	C	N1-C2-O2	-9.80	113.02	118.90
57	BB	2901	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	523	C	N3-C4-C5	-9.80	117.98	121.90
21	AA	48	C	C4-C5-C6	9.80	122.30	117.40
57	BB	324	A	O4'-C1'-N9	9.80	116.04	108.20
57	BB	711	G	O4'-C1'-N9	9.80	116.04	108.20
57	BB	1326	U	N3-C4-C5	-9.80	108.72	114.60
57	BB	1501	G	C5-C6-O6	-9.80	122.72	128.60
57	BB	2315	G	N9-C4-C5	9.80	109.32	105.40
58	BA	29	A	C5-C6-N6	-9.80	115.86	123.70
21	AA	922	G	C5-C6-O6	-9.80	122.72	128.60
21	AA	1175	G	N1-C2-N3	-9.80	118.02	123.90
57	BB	193	U	N3-C4-O4	9.80	126.26	119.40
57	BB	1152	C	C2-N3-C4	9.79	124.80	119.90
57	BB	2303	G	O4'-C1'-N9	9.79	116.03	108.20
21	AA	860	A	C5-C6-N1	-9.79	112.80	117.70
21	AA	901	A	N7-C8-N9	9.79	118.70	113.80
26	AV	64	G	C5-C6-O6	-9.79	122.72	128.60
57	BB	1058	U	O4'-C1'-N1	9.79	116.03	108.20
57	BB	2176	A	N1-C6-N6	9.79	124.47	118.60
57	BB	1049	C	C6-N1-C2	-9.79	116.38	120.30
57	BB	2333	A	C5-N7-C8	9.79	108.80	103.90
57	BB	2595	G	N9-C4-C5	-9.79	101.48	105.40
58	BA	63	C	O4'-C1'-N1	9.79	116.03	108.20
21	AA	207	C	N3-C2-O2	-9.79	115.05	121.90
23	AW	69	G	C4-C5-C6	9.79	124.67	118.80
57	BB	780	G	O4'-C1'-N9	9.79	116.03	108.20
57	BB	1069	A	P-O3'-C3'	9.79	131.44	119.70
58	BA	117	G	C8-N9-C4	-9.79	102.48	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	484	G	P-O3'-C3'	9.79	131.44	119.70
21	AA	805	C	C4-C5-C6	-9.78	112.51	117.40
21	AA	1054	C	O4'-C1'-N1	9.78	116.03	108.20
21	AA	1144	G	C2-N3-C4	9.79	116.79	111.90
21	AA	1482	G	N3-C4-N9	9.79	131.87	126.00
57	BB	954	G	O4'-C1'-N9	9.79	116.03	108.20
57	BB	959	A	C4-C5-C6	9.78	121.89	117.00
57	BB	2635	A	C6-N1-C2	9.79	124.47	118.60
57	BB	2802	G	C5-C6-O6	-9.78	122.73	128.60
57	BB	1046	A	O4'-C1'-N9	9.78	116.03	108.20
57	BB	984	A	N7-C8-N9	9.78	118.69	113.80
57	BB	2594	C	N3-C4-N4	9.78	124.85	118.00
21	AA	476	U	O4'-C1'-N1	9.78	116.02	108.20
57	BB	529	A	C5-C6-N1	-9.78	112.81	117.70
57	BB	1059	G	C2-N3-C4	-9.78	107.01	111.90
57	BB	1767	G	O4'-C1'-N9	9.78	116.02	108.20
21	AA	1170	A	N9-C4-C5	-9.78	101.89	105.80
57	BB	1090	A	C2-N3-C4	-9.78	105.71	110.60
21	AA	962	C	O4'-C1'-N1	9.78	116.02	108.20
23	AW	63	G	N1-C2-N3	9.78	129.76	123.90
57	BB	1766	G	C2-N3-C4	9.78	116.79	111.90
21	AA	429	U	C4-C5-C6	-9.77	113.84	119.70
57	BB	2156	G	C5-C6-O6	-9.77	122.74	128.60
21	AA	1400	C	C6-N1-C2	-9.77	116.39	120.30
57	BB	1154	G	O4'-C1'-N9	9.77	116.02	108.20
22	AY	46	G	N1-C6-O6	9.77	125.76	119.90
57	BB	526	A	N7-C8-N9	-9.77	108.91	113.80
57	BB	2614	A	N9-C4-C5	9.77	109.71	105.80
21	AA	616	G	N3-C4-C5	-9.77	123.72	128.60
21	AA	734	G	C5-C6-O6	-9.77	122.74	128.60
57	BB	951	C	N3-C4-N4	9.77	124.84	118.00
57	BB	1696	G	N1-C2-N3	-9.77	118.04	123.90
57	BB	2090	A	N3-C4-C5	-9.77	119.96	126.80
57	BB	2297	A	C5-C6-N1	-9.77	112.81	117.70
57	BB	2685	G	N3-C2-N2	9.77	126.74	119.90
21	AA	953	G	C8-N9-C4	-9.77	102.49	106.40
46	BZ	29	ARG	NE-CZ-NH2	9.77	125.18	120.30
57	BB	45	G	P-O3'-C3'	9.77	131.42	119.70
57	BB	597	G	N1-C6-O6	9.77	125.76	119.90
57	BB	863	A	C4-C5-C6	9.77	121.88	117.00
57	BB	1187	G	N1-C6-O6	9.77	125.76	119.90
57	BB	2588	G	C5-C6-O6	-9.77	122.74	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1087	G	C5-C6-O6	-9.77	122.74	128.60
58	BA	11	C	N3-C4-C5	-9.77	117.99	121.90
21	AA	743	A	C4-C5-N7	-9.76	105.82	110.70
57	BB	2852	G	C5-N7-C8	9.76	109.18	104.30
21	AA	592	G	O4'-C1'-N9	9.76	116.01	108.20
21	AA	1069	C	N3-C4-N4	9.76	124.83	118.00
21	AA	1350	A	C8-N9-C4	-9.76	101.90	105.80
21	AA	194	C	O4'-C1'-N1	9.76	116.01	108.20
21	AA	944	G	C8-N9-C4	-9.76	102.50	106.40
57	BB	48	G	C5-C6-O6	-9.76	122.74	128.60
57	BB	358	U	O4'-C1'-N1	9.76	116.01	108.20
57	BB	2074	U	N3-C4-O4	9.76	126.23	119.40
57	BB	2237	G	N9-C4-C5	-9.76	101.50	105.40
57	BB	2702	G	O4'-C1'-N9	9.76	116.01	108.20
21	AA	716	A	N1-C6-N6	9.76	124.45	118.60
21	AA	719	C	O4'-C1'-N1	9.76	116.01	108.20
57	BB	972	A	N1-C6-N6	9.76	124.45	118.60
57	BB	2667	C	N3-C4-N4	9.76	124.83	118.00
57	BB	336	C	N3-C4-N4	9.76	124.83	118.00
57	BB	1433	A	C5-C6-N6	-9.76	115.89	123.70
57	BB	1847	A	N1-C6-N6	9.76	124.45	118.60
57	BB	2274	A	O4'-C1'-N9	9.76	116.01	108.20
21	AA	406	G	C8-N9-C4	-9.75	102.50	106.40
57	BB	468	G	C5-C6-O6	-9.75	122.75	128.60
57	BB	2412	A	C8-N9-C4	-9.75	101.90	105.80
58	BA	61	G	N1-C2-N3	-9.75	118.05	123.90
57	BB	2298	A	C5-C6-N1	-9.75	112.82	117.70
21	AA	473	U	O4'-C1'-N1	9.75	116.00	108.20
57	BB	21	A	C4-C5-C6	9.75	121.88	117.00
57	BB	659	G	C5-C6-O6	-9.75	122.75	128.60
21	AA	739	C	C5-C6-N1	9.75	125.87	121.00
57	BB	1872	A	N7-C8-N9	9.75	118.67	113.80
21	AA	400	C	O4'-C1'-N1	9.75	116.00	108.20
57	BB	697	G	C5-C6-O6	-9.75	122.75	128.60
57	BB	1593	A	N1-C6-N6	9.75	124.45	118.60
57	BB	1765	U	O4'-C1'-N1	9.75	116.00	108.20
58	BA	30	C	N3-C4-N4	9.75	124.82	118.00
22	AY	26	G	N9-C4-C5	-9.74	101.50	105.40
49	B2	33	ARG	NE-CZ-NH1	-9.74	115.43	120.30
57	BB	2046	G	N1-C6-O6	9.74	125.75	119.90
21	AA	332	G	C5-C6-O6	-9.74	122.75	128.60
57	BB	1810	A	N9-C4-C5	9.74	109.70	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	87	U	C5-C6-N1	-9.74	117.83	122.70
21	AA	214	C	N3-C4-C5	-9.74	118.00	121.90
21	AA	1276	G	C8-N9-C4	-9.74	102.50	106.40
26	AV	43	A	C5-C6-N6	-9.74	115.91	123.70
57	BB	2773	C	O4'-C1'-N1	9.74	115.99	108.20
58	BA	61	G	N3-C2-N2	9.74	126.72	119.90
57	BB	110	G	C5-C6-O6	-9.74	122.76	128.60
57	BB	2648	G	N1-C6-O6	9.74	125.74	119.90
57	BB	1235	G	C5-C6-O6	-9.74	122.76	128.60
57	BB	1866	A	N1-C6-N6	9.74	124.44	118.60
57	BB	1875	G	C5-C6-N1	-9.74	106.63	111.50
21	AA	124	C	N3-C4-C5	-9.73	118.01	121.90
21	AA	927	G	N3-C2-N2	9.73	126.71	119.90
38	BS	92	ARG	NE-CZ-NH2	9.73	125.17	120.30
57	BB	1257	C	O4'-C1'-N1	9.73	115.99	108.20
57	BB	2218	G	C4-C5-N7	9.73	114.69	110.80
57	BB	2367	G	C5-C6-O6	-9.73	122.76	128.60
57	BB	2688	G	C5-C6-N1	-9.73	106.63	111.50
21	AA	601	G	C6-C5-N7	-9.73	124.56	130.40
21	AA	1335	U	N3-C4-O4	9.73	126.21	119.40
57	BB	1606	C	C6-N1-C2	-9.73	116.41	120.30
21	AA	837	U	O4'-C1'-N1	9.73	115.98	108.20
57	BB	1153	C	N3-C4-C5	-9.73	118.01	121.90
57	BB	1261	C	N3-C4-C5	-9.73	118.01	121.90
58	BA	7	G	C2-N3-C4	9.73	116.77	111.90
21	AA	1532	U	O4'-C1'-N1	9.73	115.98	108.20
57	BB	345	A	C5-C6-N1	-9.73	112.83	117.70
57	BB	1771	C	O4'-C1'-N1	9.73	115.98	108.20
57	BB	1161	C	C5-C6-N1	9.73	125.86	121.00
57	BB	2828	G	C5-C6-O6	-9.73	122.76	128.60
21	AA	1423	G	C8-N9-C4	9.72	110.29	106.40
57	BB	343	C	O4'-C1'-N1	9.72	115.98	108.20
57	BB	910	A	C5-N7-C8	9.72	108.76	103.90
57	BB	912	C	C2-N3-C4	9.72	124.76	119.90
57	BB	1294	U	O4'-C1'-N1	9.72	115.98	108.20
57	BB	1672	A	N1-C6-N6	9.72	124.43	118.60
23	AW	55	U	C2-N1-C1'	9.72	129.37	117.70
57	BB	912	C	N3-C4-N4	9.72	124.81	118.00
57	BB	2230	G	C5-C6-O6	-9.72	122.77	128.60
21	AA	306	A	C4-C5-N7	-9.72	105.84	110.70
21	AA	1460	C	C2-N3-C4	9.72	124.76	119.90
21	AA	1038	C	C2-N3-C4	9.72	124.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	228	C	N3-C4-C5	-9.72	118.01	121.90
57	BB	2183	A	C5-C6-N6	-9.72	115.93	123.70
57	BB	2367	G	C5-N7-C8	9.72	109.16	104.30
57	BB	963	U	N3-C4-O4	9.72	126.20	119.40
57	BB	554	U	C5-C6-N1	9.71	127.56	122.70
57	BB	686	U	C5-C4-O4	-9.71	120.07	125.90
57	BB	826	U	P-O3'-C3'	9.71	131.36	119.70
57	BB	1954	G	C5-C6-O6	-9.71	122.77	128.60
1	AJ	65	TYR	CG-CD2-CE2	-9.71	113.53	121.30
21	AA	272	C	C5-C4-N4	-9.71	113.40	120.20
23	AW	69	G	N1-C2-N3	-9.71	118.07	123.90
57	BB	1695	G	C5-N7-C8	9.71	109.16	104.30
57	BB	353	C	C5-C4-N4	-9.71	113.40	120.20
57	BB	459	U	O4'-C1'-N1	9.71	115.97	108.20
57	BB	1017	G	N1-C6-O6	9.71	125.73	119.90
57	BB	1764	C	O4'-C1'-N1	9.71	115.97	108.20
57	BB	2637	U	O4'-C1'-N1	9.71	115.97	108.20
57	BB	789	A	N1-C6-N6	9.71	124.42	118.60
21	AA	286	C	O4'-C1'-N1	9.71	115.97	108.20
21	AA	994	A	C5-C6-N6	-9.71	115.93	123.70
57	BB	916	G	N1-C2-N3	-9.71	118.08	123.90
57	BB	1817	G	C5-C6-N1	9.71	116.35	111.50
57	BB	1871	A	O4'-C1'-N9	9.71	115.97	108.20
57	BB	1906	G	N1-C2-N3	-9.71	118.08	123.90
57	BB	2358	A	C5-C6-N6	-9.71	115.93	123.70
57	BB	2656	U	O4'-C1'-N1	9.71	115.97	108.20
21	AA	67	C	N3-C4-C5	-9.71	118.02	121.90
21	AA	346	G	C5-C6-O6	-9.71	122.78	128.60
21	AA	861	G	C5-C6-O6	-9.71	122.78	128.60
57	BB	861	A	N1-C6-N6	9.71	124.42	118.60
57	BB	1114	C	N3-C4-N4	9.71	124.80	118.00
57	BB	1481	U	O4'-C1'-N1	9.71	115.97	108.20
57	BB	1347	A	C5-C6-N6	-9.70	115.94	123.70
21	AA	117	G	C5-C6-O6	-9.70	122.78	128.60
53	BE	79	ARG	NE-CZ-NH2	-9.70	115.45	120.30
57	BB	1441	G	N1-C6-O6	9.70	125.72	119.90
57	BB	2300	C	O4'-C1'-N1	9.70	115.96	108.20
21	AA	1388	C	C5-C4-N4	-9.70	113.41	120.20
55	BG	162	ARG	NE-CZ-NH1	-9.70	115.45	120.30
57	BB	422	A	C5-C6-N1	-9.70	112.85	117.70
57	BB	1795	C	N3-C4-N4	9.70	124.79	118.00
57	BB	2894	G	C4-C5-N7	9.70	114.68	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	646	U	N3-C4-O4	9.70	126.19	119.40
57	BB	660	C	N3-C4-N4	9.70	124.79	118.00
57	BB	1136	G	N1-C6-O6	9.70	125.72	119.90
57	BB	1767	G	C2-N3-C4	9.70	116.75	111.90
21	AA	944	G	O4'-C1'-N9	9.70	115.96	108.20
21	AA	1006	G	N3-C2-N2	9.70	126.69	119.90
57	BB	423	A	C5-C6-N1	-9.70	112.85	117.70
57	BB	1946	U	C5-C4-O4	-9.70	120.08	125.90
57	BB	2398	U	C5-C6-N1	9.70	127.55	122.70
57	BB	1446	C	C6-N1-C2	-9.70	116.42	120.30
21	AA	712	A	O4'-C1'-N9	9.70	115.96	108.20
21	AA	1022	A	C5-C6-N1	-9.70	112.85	117.70
21	AA	1323	G	O4'-C1'-N9	9.70	115.96	108.20
57	BB	693	A	N1-C6-N6	9.70	124.42	118.60
57	BB	1052	C	C6-N1-C2	-9.70	116.42	120.30
21	AA	319	G	N1-C6-O6	9.69	125.72	119.90
21	AA	646	G	N3-C2-N2	9.69	126.69	119.90
57	BB	1740	G	N1-C6-O6	9.69	125.72	119.90
57	BB	1901	A	C4-C5-C6	9.70	121.85	117.00
57	BB	1947	C	O4'-C1'-N1	9.70	115.96	108.20
57	BB	2053	G	N1-C2-N3	-9.69	118.08	123.90
21	AA	241	G	C5-C6-N1	-9.69	106.65	111.50
21	AA	442	G	C8-N9-C4	-9.69	102.52	106.40
21	AA	997	U	O4'-C1'-N1	9.69	115.95	108.20
21	AA	1325	C	N3-C4-N4	9.69	124.78	118.00
57	BB	277	G	N1-C6-O6	9.69	125.72	119.90
57	BB	386	G	C5-C6-N1	-9.69	106.65	111.50
57	BB	669	G	N9-C4-C5	9.69	109.28	105.40
57	BB	814	C	O4'-C1'-N1	9.69	115.95	108.20
57	BB	2049	G	C6-C5-N7	-9.69	124.58	130.40
57	BB	1984	G	C5-C6-O6	-9.69	122.79	128.60
57	BB	2842	G	P-O3'-C3'	-9.69	108.07	119.70
21	AA	611	C	C5-C4-N4	-9.69	113.42	120.20
57	BB	322	A	C5-C6-N1	-9.69	112.86	117.70
57	BB	1398	C	O4'-C1'-N1	9.69	115.95	108.20
14	AC	92	ASP	CB-CG-OD1	-9.69	109.58	118.30
21	AA	160	A	C8-N9-C4	-9.69	101.92	105.80
21	AA	616	G	C5-C6-O6	-9.69	122.79	128.60
21	AA	857	C	O4'-C1'-N1	9.69	115.95	108.20
57	BB	1590	A	C4-C5-C6	9.69	121.84	117.00
21	AA	874	G	C5-C6-O6	-9.69	122.79	128.60
57	BB	1705	A	C5-C6-N6	-9.69	115.95	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2577	A	O4'-C1'-N9	9.69	115.95	108.20
57	BB	1888	G	N1-C6-O6	9.69	125.71	119.90
57	BB	2378	A	C5-C6-N6	-9.69	115.95	123.70
21	AA	764	C	O4'-C1'-N1	9.68	115.95	108.20
57	BB	1020	A	C8-N9-C4	-9.68	101.93	105.80
57	BB	1642	G	O4'-C1'-N9	9.68	115.95	108.20
21	AA	484	G	N1-C6-O6	9.68	125.71	119.90
57	BB	340	A	C5-C6-N6	-9.68	115.95	123.70
57	BB	928	A	N1-C6-N6	9.68	124.41	118.60
57	BB	2196	C	C5-C4-N4	-9.68	113.42	120.20
58	BA	41	G	N7-C8-N9	9.68	117.94	113.10
21	AA	925	G	N7-C8-N9	-9.68	108.26	113.10
57	BB	382	A	C5-N7-C8	9.68	108.74	103.90
57	BB	1788	C	N3-C4-C5	-9.68	118.03	121.90
21	AA	581	G	O4'-C1'-N9	9.68	115.94	108.20
21	AA	535	A	C6-C5-N7	-9.68	125.53	132.30
23	AW	40	C	N3-C4-C5	-9.68	118.03	121.90
23	AW	49	C	N3-C4-N4	9.68	124.77	118.00
57	BB	1524	G	O4'-C1'-N9	9.68	115.94	108.20
57	BB	1650	A	C4-C5-C6	9.68	121.84	117.00
21	AA	199	A	O4'-C1'-N9	9.67	115.94	108.20
21	AA	359	G	N9-C4-C5	-9.67	101.53	105.40
57	BB	1215	G	C8-N9-C4	-9.67	102.53	106.40
22	AY	20	G	C3'-C2'-C1'	-9.67	93.76	101.50
57	BB	2296	U	C5-C6-N1	9.67	127.54	122.70
57	BB	541	A	C5-C6-N1	-9.67	112.86	117.70
21	AA	1035	A	C2-N3-C4	9.67	115.43	110.60
57	BB	56	A	C5-N7-C8	9.67	108.73	103.90
57	BB	520	G	C5-N7-C8	9.67	109.13	104.30
57	BB	2606	C	O4'-C1'-N1	9.67	115.94	108.20
57	BB	320	A	N1-C2-N3	9.67	134.13	129.30
57	BB	1227	G	C5-C6-O6	-9.67	122.80	128.60
57	BB	1987	A	N1-C6-N6	9.67	124.40	118.60
57	BB	2508	G	C5-C6-O6	-9.67	122.80	128.60
57	BB	2640	G	O4'-C1'-N9	9.67	115.93	108.20
21	AA	1290	G	C6-C5-N7	-9.66	124.60	130.40
26	AV	68	C	O4'-C1'-N1	9.66	115.93	108.20
57	BB	70	G	N1-C2-N3	-9.66	118.10	123.90
22	AY	76	A	O4'-C1'-N9	9.66	115.93	108.20
57	BB	460	A	C5-C6-N6	-9.66	115.97	123.70
57	BB	1273	U	C6-N1-C2	9.66	126.80	121.00
57	BB	2862	G	C5-C6-O6	-9.66	122.80	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	61	C	C5-C6-N1	9.66	125.83	121.00
57	BB	266	G	N7-C8-N9	-9.66	108.27	113.10
57	BB	902	C	N3-C4-N4	9.66	124.76	118.00
57	BB	312	G	C4-C5-C6	9.66	124.60	118.80
57	BB	392	U	N3-C4-O4	9.66	126.16	119.40
57	BB	2077	A	O4'-C1'-N9	9.66	115.93	108.20
15	AD	69	ARG	NE-CZ-NH2	9.66	125.13	120.30
18	AG	137	ARG	NE-CZ-NH2	-9.66	115.47	120.30
21	AA	364	A	C5-C6-N6	-9.66	115.97	123.70
21	AA	457	G	C2-N3-C4	9.66	116.73	111.90
21	AA	1099	G	O4'-C1'-N9	9.66	115.93	108.20
57	BB	161	A	C5-C6-N1	-9.66	112.87	117.70
57	BB	472	A	C5-C6-N6	-9.66	115.97	123.70
57	BB	996	A	N1-C2-N3	-9.66	124.47	129.30
57	BB	1157	G	N1-C6-O6	9.66	125.69	119.90
57	BB	1227	G	C8-N9-C4	9.66	110.26	106.40
57	BB	1949	G	C5-N7-C8	-9.66	99.47	104.30
57	BB	2361	G	C5-C6-N1	-9.66	106.67	111.50
57	BB	2383	G	C5-C6-O6	-9.66	122.81	128.60
57	BB	2815	C	C5-C6-N1	9.66	125.83	121.00
21	AA	155	A	C2-N3-C4	9.65	115.43	110.60
21	AA	632	U	O4'-C1'-N1	9.65	115.92	108.20
21	AA	814	A	C4-C5-N7	-9.65	105.87	110.70
22	AY	20	G	C4'-C3'-C2'	9.65	112.25	102.60
57	BB	330	A	C5-C6-N6	-9.65	115.98	123.70
57	BB	718	A	N1-C2-N3	9.65	134.13	129.30
57	BB	2263	C	C6-N1-C2	-9.65	116.44	120.30
57	BB	2281	A	C8-N9-C4	-9.65	101.94	105.80
57	BB	2865	U	N3-C4-C5	-9.65	108.81	114.60
57	BB	2893	A	C5-N7-C8	9.65	108.73	103.90
22	AY	18	G	P-O3'-C3'	9.65	131.28	119.70
57	BB	577	G	N1-C6-O6	9.65	125.69	119.90
57	BB	872	U	C2-N3-C4	9.65	132.79	127.00
57	BB	1575	C	N3-C4-N4	9.65	124.75	118.00
57	BB	2483	C	C4-C5-C6	9.65	122.22	117.40
57	BB	2826	A	N1-C6-N6	9.65	124.39	118.60
21	AA	1499	A	O4'-C1'-N9	9.65	115.92	108.20
57	BB	313	G	N3-C2-N2	9.65	126.65	119.90
57	BB	402	A	C2-N3-C4	-9.65	105.78	110.60
57	BB	891	G	N1-C2-N3	-9.65	118.11	123.90
57	BB	1892	C	N3-C4-N4	9.65	124.75	118.00
57	BB	2633	G	O4'-C1'-N9	9.64	115.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	72	G	O4'-C1'-N9	9.64	115.91	108.20
57	BB	1399	C	O4'-C1'-N1	9.64	115.91	108.20
21	AA	240	G	C5-C6-O6	-9.64	122.82	128.60
57	BB	456	C	O4'-C1'-N1	9.64	115.91	108.20
57	BB	539	G	C8-N9-C4	9.64	110.25	106.40
57	BB	557	C	O4'-C1'-N1	9.64	115.91	108.20
57	BB	2186	G	C4-C5-C6	9.64	124.58	118.80
5	AN	68	ARG	NE-CZ-NH1	-9.64	115.48	120.30
21	AA	135	C	C2-N3-C4	9.64	124.72	119.90
57	BB	181	A	C5-C6-N6	-9.64	115.99	123.70
57	BB	1909	C	C1'-O4'-C4'	-9.64	102.19	109.90
57	BB	2864	G	N3-C2-N2	9.64	126.64	119.90
57	BB	648	G	N9-C4-C5	9.63	109.25	105.40
57	BB	2058	A	O4'-C1'-N9	9.63	115.91	108.20
57	BB	2240	U	O4'-C1'-N1	9.63	115.91	108.20
21	AA	520	A	C4-C5-N7	-9.63	105.88	110.70
21	AA	944	G	C6-C5-N7	-9.63	124.62	130.40
21	AA	1005	A	N1-C6-N6	9.63	124.38	118.60
21	AA	1392	G	C5-N7-C8	9.63	109.11	104.30
21	AA	1483	A	C4-C5-C6	9.63	121.81	117.00
26	AV	67	C	N1-C2-O2	9.63	124.68	118.90
57	BB	91	A	N9-C4-C5	-9.63	101.95	105.80
57	BB	154	U	N1-C2-O2	9.63	129.54	122.80
57	BB	1717	A	C5-C6-N6	-9.63	116.00	123.70
57	BB	1896	G	C5-C6-N1	-9.63	106.68	111.50
57	BB	2813	A	O4'-C1'-N9	9.63	115.91	108.20
57	BB	654	A	C5-C6-N6	-9.63	116.00	123.70
21	AA	1418	A	C5-C6-N1	-9.63	112.89	117.70
22	AY	23	A	C8-N9-C4	-9.63	101.95	105.80
22	AY	42	G	C5-C6-N1	-9.63	106.69	111.50
57	BB	2113	U	O4'-C1'-N1	9.63	115.90	108.20
57	BB	2233	U	C5-C4-O4	-9.63	120.12	125.90
57	BB	2587	A	C5-C6-N6	-9.63	116.00	123.70
21	AA	1519	A	C5-C6-N6	-9.62	116.00	123.70
23	AW	7	A	N7-C8-N9	-9.62	108.99	113.80
57	BB	440	C	C6-N1-C2	-9.63	116.45	120.30
57	BB	2021	C	O4'-C1'-N1	9.63	115.90	108.20
57	BB	1038	G	C5-C6-O6	-9.62	122.83	128.60
57	BB	1281	G	C5-C6-N1	-9.62	106.69	111.50
57	BB	2895	G	N1-C6-O6	9.62	125.67	119.90
22	AY	15	G	C4-C5-N7	9.62	114.65	110.80
21	AA	1392	G	C4-C5-N7	-9.62	106.95	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	984	A	C4-C5-N7	-9.62	105.89	110.70
22	AY	15	G	N3-C4-C5	9.62	133.41	128.60
57	BB	2103	C	P-O3'-C3'	9.62	131.24	119.70
21	AA	445	G	O4'-C1'-N9	9.62	115.89	108.20
21	AA	1272	G	N1-C6-O6	9.62	125.67	119.90
26	AV	26	G	N1-C6-O6	9.62	125.67	119.90
7	AP	28	ARG	NE-CZ-NH1	9.62	125.11	120.30
22	AY	15	G	C5-C6-N1	-9.62	106.69	111.50
23	AW	46	G	P-O3'-C3'	9.62	131.24	119.70
57	BB	20	C	N3-C4-N4	9.62	124.73	118.00
57	BB	1304	A	O4'-C1'-N9	9.62	115.89	108.20
57	BB	2712	C	C4-C5-C6	9.62	122.21	117.40
57	BB	300	A	C4-C5-C6	9.61	121.81	117.00
21	AA	651	C	N3-C4-C5	-9.61	118.06	121.90
21	AA	1112	C	N3-C4-C5	-9.61	118.06	121.90
21	AA	1305	G	C5-C6-O6	-9.61	122.83	128.60
57	BB	209	C	N3-C4-N4	9.61	124.73	118.00
57	BB	1420	A	C5-C6-N1	-9.61	112.89	117.70
57	BB	1158	C	N3-C4-C5	-9.61	118.06	121.90
57	BB	1696	G	N3-C2-N2	9.61	126.63	119.90
57	BB	285	G	C4-C5-N7	-9.61	106.96	110.80
57	BB	1238	G	N3-C2-N2	9.61	126.63	119.90
57	BB	2808	G	N1-C6-O6	9.61	125.67	119.90
21	AA	511	C	P-O3'-C3'	9.61	131.23	119.70
21	AA	121	U	C5-C4-O4	-9.61	120.14	125.90
21	AA	1139	G	N1-C6-O6	9.61	125.66	119.90
45	BC	181	ARG	NE-CZ-NH2	9.61	125.10	120.30
58	BA	5	U	O4'-C1'-N1	9.61	115.88	108.20
21	AA	914	A	O4'-C1'-N9	9.60	115.88	108.20
21	AA	1212	U	P-O3'-C3'	9.60	131.22	119.70
21	AA	1494	G	O4'-C1'-N9	9.60	115.88	108.20
57	BB	497	A	N1-C2-N3	9.60	134.10	129.30
57	BB	592	A	O4'-C1'-N9	9.60	115.88	108.20
57	BB	1998	A	C4-C5-N7	-9.60	105.90	110.70
57	BB	2857	G	C5-N7-C8	-9.60	99.50	104.30
57	BB	921	C	C6-N1-C2	-9.60	116.46	120.30
21	AA	939	G	N1-C2-N2	9.60	124.84	116.20
21	AA	1295	U	O4'-C1'-N1	9.60	115.88	108.20
21	AA	1375	A	C4-C5-C6	9.60	121.80	117.00
23	AW	49	C	P-O5'-C5'	9.60	136.26	120.90
57	BB	212	G	O4'-C1'-N9	9.60	115.88	108.20
57	BB	1804	C	C5-C6-N1	9.60	125.80	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2583	G	N3-C2-N2	9.60	126.62	119.90
22	AY	44	A	C6-N1-C2	-9.60	112.84	118.60
57	BB	1251	C	P-O3'-C3'	9.60	131.22	119.70
23	AW	5	G	N1-C6-O6	9.60	125.66	119.90
57	BB	1311	G	O4'-C1'-N9	9.60	115.88	108.20
21	AA	27	G	C5-C6-O6	-9.59	122.84	128.60
21	AA	342	C	N3-C4-N4	9.59	124.72	118.00
21	AA	951	G	C5-C6-O6	-9.59	122.84	128.60
21	AA	1340	A	C5-C6-N1	-9.59	112.90	117.70
57	BB	182	A	C2-N3-C4	-9.59	105.80	110.60
57	BB	2313	C	O4'-C1'-N1	9.59	115.88	108.20
57	BB	959	A	N1-C6-N6	9.59	124.36	118.60
57	BB	1169	A	N1-C6-N6	9.59	124.36	118.60
57	BB	2360	G	N1-C6-O6	9.59	125.66	119.90
57	BB	2411	A	C5-C6-N1	-9.59	112.90	117.70
21	AA	250	A	C8-N9-C4	-9.59	101.96	105.80
21	AA	320	A	C5-C6-N1	-9.59	112.90	117.70
21	AA	949	A	C5-C6-N1	-9.59	112.90	117.70
57	BB	603	A	C4-C5-C6	9.59	121.79	117.00
57	BB	853	C	O4'-C1'-N1	9.59	115.87	108.20
57	BB	1936	A	N9-C4-C5	9.59	109.64	105.80
57	BB	1439	A	C5-C6-N6	-9.59	116.03	123.70
21	AA	6	G	C8-N9-C4	-9.59	102.57	106.40
21	AA	1445	U	O4'-C1'-N1	9.59	115.87	108.20
24	AX	16	A	N1-C6-N6	9.59	124.35	118.60
57	BB	1682	G	C5-N7-C8	9.59	109.09	104.30
21	AA	738	C	N3-C4-N4	9.58	124.71	118.00
21	AA	908	A	N1-C6-N6	9.58	124.35	118.60
21	AA	1210	C	C4-C5-C6	9.58	122.19	117.40
57	BB	1444	G	C5-C6-O6	-9.58	122.85	128.60
57	BB	2418	A	C5-C6-N6	-9.58	116.03	123.70
57	BB	1628	G	C5-N7-C8	9.58	109.09	104.30
57	BB	2354	C	C4-C5-C6	9.58	122.19	117.40
57	BB	2520	C	N3-C4-C5	-9.58	118.07	121.90
57	BB	2883	A	C5-C6-N6	-9.58	116.03	123.70
21	AA	1032	G	N3-C2-N2	9.58	126.61	119.90
21	AA	1172	C	N3-C4-N4	9.58	124.71	118.00
57	BB	46	G	O4'-C1'-N9	9.58	115.86	108.20
57	BB	733	G	C8-N9-C4	-9.58	102.57	106.40
57	BB	2315	G	N1-C2-N3	-9.58	118.15	123.90
57	BB	2549	G	N1-C6-O6	9.58	125.65	119.90
57	BB	2806	C	N3-C4-N4	9.58	124.70	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	946	A	C6-C5-N7	-9.58	125.60	132.30
21	AA	1002	G	N9-C4-C5	9.58	109.23	105.40
21	AA	1057	G	C8-N9-C4	-9.58	102.57	106.40
57	BB	308	G	N1-C6-O6	9.58	125.65	119.90
57	BB	1119	U	O4'-C1'-N1	9.58	115.86	108.20
57	BB	2783	U	O4'-C1'-N1	9.58	115.86	108.20
21	AA	607	A	C8-N9-C4	-9.57	101.97	105.80
57	BB	73	A	N9-C4-C5	9.57	109.63	105.80
57	BB	891	G	C2-N3-C4	9.57	116.69	111.90
57	BB	1042	G	C5-C6-O6	-9.57	122.86	128.60
57	BB	1822	C	N3-C4-N4	9.57	124.70	118.00
57	BB	1017	G	C2-N3-C4	-9.57	107.11	111.90
57	BB	1389	G	C5-N7-C8	-9.57	99.51	104.30
21	AA	825	A	N1-C6-N6	9.57	124.34	118.60
21	AA	958	A	C5-C6-N6	-9.57	116.05	123.70
22	AY	17	U	O4'-C1'-N1	9.57	115.86	108.20
57	BB	1252	G	N9-C4-C5	-9.57	101.57	105.40
57	BB	1527	G	N9-C4-C5	9.57	109.23	105.40
57	BB	2224	G	N1-C6-O6	9.57	125.64	119.90
57	BB	2311	A	C5-C6-N6	-9.57	116.04	123.70
57	BB	2329	U	C5-C4-O4	-9.57	120.16	125.90
21	AA	931	C	N3-C4-N4	9.57	124.70	118.00
21	AA	1462	C	O4'-C1'-N1	9.57	115.85	108.20
21	AA	520	A	C5-N7-C8	9.57	108.68	103.90
21	AA	730	G	N1-C6-O6	9.57	125.64	119.90
21	AA	1509	C	C4'-C3'-C2'	-9.57	93.03	102.60
57	BB	2165	C	O4'-C1'-N1	9.57	115.85	108.20
21	AA	811	C	C4-C5-C6	9.56	122.18	117.40
57	BB	178	G	N1-C6-O6	9.56	125.64	119.90
57	BB	1761	C	C5-C6-N1	9.56	125.78	121.00
57	BB	2433	A	C5-N7-C8	9.56	108.68	103.90
57	BB	58	G	N3-C2-N2	9.56	126.59	119.90
57	BB	877	A	N9-C4-C5	9.56	109.62	105.80
57	BB	1727	C	N3-C4-N4	9.56	124.69	118.00
57	BB	2255	G	C5-C6-O6	-9.56	122.86	128.60
57	BB	2598	A	C5-C6-N1	-9.56	112.92	117.70
58	BA	47	C	C5-C6-N1	9.56	125.78	121.00
21	AA	800	G	C4-C5-N7	9.56	114.62	110.80
57	BB	1366	A	C4-C5-C6	9.56	121.78	117.00
57	BB	1392	A	O4'-C1'-N9	9.56	115.85	108.20
57	BB	2205	A	C8-N9-C4	-9.56	101.98	105.80
21	AA	708	C	O4'-C1'-N1	9.56	115.84	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	407	G	N1-C2-N3	-9.56	118.17	123.90
21	AA	1258	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	1786	A	C8-N9-C4	-9.55	101.98	105.80
57	BB	215	G	C5-C6-O6	-9.55	122.87	128.60
57	BB	669	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	870	U	C2-N3-C4	-9.55	121.27	127.00
57	BB	1969	A	C6-C5-N7	-9.55	125.61	132.30
57	BB	908	C	C6-N1-C2	-9.55	116.48	120.30
57	BB	2661	G	N1-C2-N3	-9.55	118.17	123.90
57	BB	2840	C	N3-C4-N4	9.55	124.69	118.00
21	AA	534	U	C6-N1-C2	9.55	126.73	121.00
38	BS	95	ARG	NE-CZ-NH2	-9.55	115.52	120.30
57	BB	1535	A	O4'-C1'-C2'	-9.55	96.25	105.80
57	BB	1149	G	C1'-O4'-C4'	-9.55	102.26	109.90
57	BB	1667	G	N1-C6-O6	9.55	125.63	119.90
57	BB	1964	G	N1-C6-O6	9.55	125.63	119.90
57	BB	2281	A	O4'-C1'-N9	9.55	115.84	108.20
57	BB	2381	A	C5-N7-C8	9.55	108.67	103.90
21	AA	541	G	C5-C6-O6	-9.55	122.87	128.60
21	AA	1410	A	C4-C5-C6	9.55	121.77	117.00
50	B3	63	TYR	CB-CG-CD1	-9.55	115.27	121.00
21	AA	663	A	C5-C6-N1	-9.55	112.93	117.70
57	BB	900	A	C3'-C2'-C1'	-9.55	93.86	101.50
57	BB	1538	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	2029	G	P-O3'-C3'	9.55	131.16	119.70
57	BB	2030	A	C5-C6-N6	-9.55	116.06	123.70
57	BB	2336	A	C2-N3-C4	-9.55	105.83	110.60
21	AA	262	A	O4'-C1'-N9	9.54	115.83	108.20
21	AA	612	C	N3-C4-N4	9.54	124.68	118.00
21	AA	1332	A	O4'-C1'-N9	9.54	115.84	108.20
57	BB	151	C	C6-N1-C2	-9.54	116.48	120.30
57	BB	1694	C	N3-C4-N4	9.54	124.68	118.00
57	BB	2830	C	N3-C4-N4	9.54	124.68	118.00
21	AA	221	C	O4'-C1'-N1	9.54	115.83	108.20
21	AA	298	A	C6-N1-C2	-9.54	112.88	118.60
21	AA	401	C	C2-N3-C4	9.54	124.67	119.90
21	AA	1337	G	C2-N3-C4	9.54	116.67	111.90
57	BB	56	A	O4'-C1'-N9	9.54	115.83	108.20
57	BB	217	A	N1-C6-N6	9.54	124.32	118.60
57	BB	993	G	C8-N9-C4	-9.54	102.58	106.40
57	BB	1112	G	O4'-C1'-N9	9.54	115.83	108.20
57	BB	2009	A	C4-C5-C6	9.54	121.77	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1155	A	N7-C8-N9	-9.54	109.03	113.80
57	BB	629	G	C4-C5-N7	9.54	114.62	110.80
57	BB	2281	A	C4-C5-C6	9.54	121.77	117.00
57	BB	2761	A	C2-N3-C4	-9.54	105.83	110.60
21	AA	846	G	P-O3'-C3'	-9.54	108.25	119.70
23	AW	7	A	C5-N7-C8	9.54	108.67	103.90
49	B2	41	ARG	NE-CZ-NH2	9.54	125.07	120.30
57	BB	508	A	N1-C6-N6	9.54	124.32	118.60
58	BA	44	G	N1-C6-O6	9.54	125.62	119.90
57	BB	2870	C	N3-C4-N4	9.54	124.68	118.00
21	AA	412	A	O4'-C1'-N9	9.54	115.83	108.20
21	AA	726	C	O4'-C1'-N1	9.54	115.83	108.20
21	AA	921	U	O4'-C1'-N1	9.54	115.83	108.20
21	AA	1020	G	C6-C5-N7	-9.54	124.68	130.40
57	BB	1384	A	N9-C4-C5	9.53	109.61	105.80
21	AA	299	G	O4'-C1'-N9	9.53	115.83	108.20
21	AA	741	G	O4'-C1'-N9	9.53	115.83	108.20
57	BB	1715	G	C6-N1-C2	9.53	130.82	125.10
57	BB	2841	C	C5-C4-N4	-9.53	113.53	120.20
33	BN	112	TYR	CB-CG-CD2	-9.53	115.28	121.00
57	BB	2027	G	N1-C6-O6	9.53	125.62	119.90
57	BB	2114	A	N9-C4-C5	9.53	109.61	105.80
57	BB	2546	U	N3-C4-O4	9.53	126.07	119.40
57	BB	2261	C	C5-C6-N1	9.53	125.76	121.00
21	AA	600	A	C4-C5-C6	9.53	121.76	117.00
22	AY	23	A	C6-N1-C2	9.53	124.31	118.60
57	BB	451	U	O4'-C1'-N1	9.53	115.82	108.20
57	BB	1118	C	N3-C4-C5	-9.53	118.09	121.90
57	BB	1965	C	C5-C6-N1	9.53	125.76	121.00
21	AA	928	G	N1-C6-O6	9.52	125.61	119.90
21	AA	1087	G	C5-C6-O6	-9.52	122.89	128.60
21	AA	497	G	N1-C6-O6	9.52	125.61	119.90
57	BB	1618	A	C5-C6-N6	-9.52	116.08	123.70
57	BB	2813	A	N1-C6-N6	9.52	124.31	118.60
57	BB	295	G	C2-N3-C4	-9.52	107.14	111.90
57	BB	2035	G	C5-C6-O6	9.52	134.31	128.60
21	AA	505	G	O4'-C1'-N9	9.52	115.81	108.20
57	BB	1035	U	N3-C4-C5	-9.52	108.89	114.60
57	BB	2218	G	N1-C6-O6	9.52	125.61	119.90
21	AA	143	A	N1-C6-N6	9.52	124.31	118.60
21	AA	461	A	C8-N9-C4	-9.52	101.99	105.80
21	AA	799	G	N1-C6-O6	9.52	125.61	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2855	C	N3-C4-N4	9.52	124.66	118.00
21	AA	1103	C	C5-C4-N4	-9.52	113.54	120.20
18	AG	108	ARG	NE-CZ-NH1	-9.51	115.54	120.30
21	AA	287	U	O4'-C1'-N1	9.51	115.81	108.20
21	AA	354	G	N9-C4-C5	-9.51	101.59	105.40
21	AA	670	G	C5-C6-O6	-9.51	122.89	128.60
57	BB	872	U	O4'-C1'-N1	9.51	115.81	108.20
57	BB	962	G	N9-C4-C5	-9.51	101.59	105.40
57	BB	1773	A	C5-C6-N6	-9.51	116.09	123.70
21	AA	1165	U	C5-C4-O4	-9.51	120.19	125.90
57	BB	1328	A	C5-C6-N6	-9.51	116.09	123.70
21	AA	761	G	O4'-C1'-N9	9.51	115.81	108.20
42	BW	40	ARG	NE-CZ-NH1	-9.51	115.55	120.30
57	BB	351	C	C2-N3-C4	9.51	124.66	119.90
57	BB	733	G	N3-C2-N2	9.51	126.56	119.90
57	BB	1386	C	C4-C5-C6	9.51	122.16	117.40
57	BB	1584	U	N3-C2-O2	9.51	128.86	122.20
58	BA	91	C	O4'-C1'-N1	9.51	115.81	108.20
57	BB	2815	C	O4'-C1'-N1	9.51	115.81	108.20
7	AP	8	ARG	NE-CZ-NH1	9.51	125.05	120.30
23	AW	36	A	C8-N9-C4	-9.51	102.00	105.80
21	AA	371	A	O4'-C1'-N9	9.51	115.80	108.20
21	AA	1290	G	O4'-C1'-N9	9.51	115.80	108.20
57	BB	105	C	O4'-C1'-N1	9.51	115.80	108.20
57	BB	227	A	N3-C4-C5	-9.51	120.15	126.80
57	BB	316	C	N3-C4-C5	-9.50	118.10	121.90
57	BB	885	C	C2-N3-C4	9.50	124.65	119.90
57	BB	997	G	C4'-C3'-C2'	-9.50	93.10	102.60
57	BB	2266	A	C4-C5-C6	9.50	121.75	117.00
58	BA	116	G	N1-C6-O6	9.50	125.60	119.90
57	BB	585	G	O4'-C1'-N9	9.50	115.80	108.20
21	AA	205	A	N1-C6-N6	9.50	124.30	118.60
21	AA	544	G	C5-C6-O6	-9.50	122.90	128.60
22	AY	64	A	C5-C6-N6	-9.50	116.10	123.70
57	BB	1137	G	C6-C5-N7	-9.50	124.70	130.40
57	BB	2136	G	O4'-C1'-N9	9.50	115.80	108.20
21	AA	1125	U	P-O3'-C3'	9.50	131.10	119.70
23	AW	15	G	C8-N9-C4	-9.50	102.60	106.40
21	AA	436	C	N3-C4-N4	9.50	124.65	118.00
26	AV	38	A	C5-C6-N6	-9.50	116.10	123.70
57	BB	255	A	C4-C5-C6	9.50	121.75	117.00
57	BB	267	C	O4'-C1'-N1	9.50	115.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	496	G	C5-C6-O6	-9.50	122.90	128.60
57	BB	1504	A	C4-C5-C6	9.50	121.75	117.00
57	BB	2599	G	N9-C4-C5	9.50	109.20	105.40
57	BB	1937	A	C6-C5-N7	-9.49	125.65	132.30
57	BB	2547	A	C5-C6-N6	-9.49	116.11	123.70
57	BB	2097	A	C5-N7-C8	9.49	108.65	103.90
57	BB	2722	G	C5-C6-O6	-9.49	122.91	128.60
57	BB	2794	C	O4'-C1'-N1	9.49	115.79	108.20
21	AA	941	G	N7-C8-N9	9.49	117.84	113.10
26	AV	46	G	C6-C5-N7	-9.49	124.70	130.40
57	BB	723	C	O4'-C1'-N1	9.49	115.79	108.20
57	BB	1488	C	C5-C4-N4	-9.49	113.56	120.20
21	AA	1231	G	C4-C5-N7	-9.49	107.00	110.80
57	BB	1795	C	N3-C4-C5	-9.49	118.11	121.90
57	BB	2106	U	N3-C4-C5	-9.49	108.91	114.60
57	BB	2388	A	N9-C4-C5	9.49	109.60	105.80
21	AA	129	A	C4-C5-C6	9.49	121.74	117.00
21	AA	278	G	C5-C6-O6	-9.49	122.91	128.60
57	BB	481	G	C6-C5-N7	-9.49	124.71	130.40
57	BB	532	A	N9-C4-C5	9.49	109.59	105.80
57	BB	614	A	N1-C6-N6	9.49	124.29	118.60
57	BB	1627	G	C4-C5-C6	9.49	124.49	118.80
57	BB	64	A	N1-C6-N6	9.48	124.29	118.60
57	BB	286	U	C2-N3-C4	-9.48	121.31	127.00
57	BB	578	G	C6-C5-N7	-9.48	124.71	130.40
57	BB	2777	G	N1-C2-N3	-9.48	118.21	123.90
21	AA	1167	A	O4'-C1'-N9	9.48	115.78	108.20
21	AA	1251	A	N1-C6-N6	9.48	124.29	118.60
57	BB	2494	G	C4-C5-C6	9.48	124.49	118.80
21	AA	1397	C	N1-C2-O2	9.48	124.59	118.90
57	BB	2900	A	C5-C6-N6	-9.48	116.11	123.70
57	BB	1271	G	O4'-C1'-N9	9.48	115.78	108.20
21	AA	136	C	O4'-C1'-N1	9.48	115.78	108.20
57	BB	2234	G	C5-C6-O6	-9.48	122.91	128.60
21	AA	275	G	O4'-C1'-N9	9.48	115.78	108.20
57	BB	768	G	C5-C6-O6	-9.48	122.91	128.60
57	BB	908	C	C2-N3-C4	9.48	124.64	119.90
57	BB	2290	G	C5-C6-O6	-9.48	122.92	128.60
21	AA	129	A	O4'-C1'-N9	9.47	115.78	108.20
57	BB	1818	U	N1-C2-N3	-9.47	109.22	114.90
57	BB	1897	G	O4'-C1'-N9	9.47	115.78	108.20
57	BB	2038	G	N1-C6-O6	9.47	125.58	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	753	A	C4-C5-C6	9.47	121.74	117.00
57	BB	548	G	O4'-C1'-N9	9.47	115.78	108.20
57	BB	595	C	N1-C2-O2	9.47	124.58	118.90
21	AA	1507	A	C5-C6-N1	-9.47	112.97	117.70
26	AV	59	A	C5-C6-N1	-9.47	112.97	117.70
21	AA	718	A	C5-N7-C8	9.47	108.64	103.90
21	AA	1323	G	N1-C6-O6	9.47	125.58	119.90
57	BB	274	C	C5-C6-N1	9.47	125.73	121.00
57	BB	1354	A	O4'-C1'-N9	9.47	115.77	108.20
57	BB	2021	C	N3-C4-N4	9.47	124.63	118.00
57	BB	2653	U	N1-C2-N3	-9.47	109.22	114.90
21	AA	916	U	O4'-C1'-N1	9.47	115.77	108.20
57	BB	1105	U	O4'-C1'-N1	9.47	115.77	108.20
21	AA	284	C	O4'-C1'-N1	9.46	115.77	108.20
21	AA	1135	U	O4'-C1'-N1	9.46	115.77	108.20
21	AA	1322	C	N3-C4-N4	9.46	124.62	118.00
57	BB	825	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1360	G	C6-C5-N7	-9.46	124.72	130.40
21	AA	388	G	C5-C6-O6	-9.46	122.92	128.60
57	BB	803	U	C2-N3-C4	-9.46	121.32	127.00
21	AA	377	G	C2-N3-C4	9.46	116.63	111.90
57	BB	34	U	N1-C2-O2	9.46	129.42	122.80
57	BB	479	A	N1-C6-N6	9.46	124.28	118.60
57	BB	1508	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1734	G	C5-C6-O6	-9.46	122.92	128.60
57	BB	2893	A	C4-C5-C6	9.46	121.73	117.00
21	AA	356	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1437	C	N3-C4-N4	9.46	124.62	118.00
57	BB	2318	G	C6-N1-C2	9.46	130.77	125.10
21	AA	745	G	O4'-C1'-N9	9.46	115.76	108.20
57	BB	42	A	O4'-C1'-N9	9.45	115.76	108.20
57	BB	824	U	N1-C2-N3	-9.46	109.23	114.90
57	BB	1289	C	N3-C4-C5	-9.46	118.12	121.90
57	BB	1595	C	O4'-C1'-N1	9.46	115.76	108.20
57	BB	2764	A	C5-N7-C8	9.45	108.63	103.90
21	AA	134	G	C1'-O4'-C4'	-9.45	102.34	109.90
57	BB	1684	G	N1-C6-O6	9.45	125.57	119.90
57	BB	2165	C	C5-C4-N4	-9.45	113.58	120.20
57	BB	2577	A	N1-C6-N6	9.45	124.27	118.60
21	AA	187	G	N1-C6-O6	9.45	125.57	119.90
21	AA	1229	A	C2-N3-C4	-9.45	105.88	110.60
57	BB	312	G	N1-C6-O6	9.45	125.57	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	677	A	N7-C8-N9	-9.45	109.08	113.80
57	BB	1091	G	N1-C6-O6	9.45	125.57	119.90
57	BB	1298	C	C6-N1-C2	-9.45	116.52	120.30
21	AA	12	U	N1-C2-O2	-9.44	116.19	122.80
21	AA	167	A	C4'-C3'-C2'	-9.45	93.16	102.60
21	AA	242	G	N1-C6-O6	9.45	125.57	119.90
21	AA	353	A	C6-N1-C2	9.45	124.27	118.60
21	AA	612	C	C5-C6-N1	9.45	125.72	121.00
21	AA	1027	C	O4'-C1'-N1	9.45	115.76	108.20
57	BB	1969	A	O4'-C1'-N9	9.45	115.76	108.20
57	BB	2787	C	C4-C5-C6	9.45	122.12	117.40
21	AA	826	C	N1-C2-O2	9.44	124.57	118.90
21	AA	1358	U	O4'-C1'-N1	9.44	115.75	108.20
57	BB	721	A	C5-C6-N6	-9.44	116.15	123.70
57	BB	1366	A	C6-C5-N7	-9.44	125.69	132.30
57	BB	1490	A	N1-C6-N6	9.44	124.27	118.60
57	BB	2367	G	N1-C6-O6	9.44	125.57	119.90
57	BB	1643	G	O4'-C1'-N9	9.44	115.75	108.20
21	AA	432	A	C5-C6-N6	-9.44	116.15	123.70
57	BB	1541	C	C2-N3-C4	9.44	124.62	119.90
57	BB	2155	U	O4'-C1'-N1	9.44	115.75	108.20
57	BB	2335	A	C5-N7-C8	9.44	108.62	103.90
26	AV	58	A	N1-C2-N3	9.44	134.02	129.30
57	BB	738	G	O4'-C1'-N9	9.44	115.75	108.20
57	BB	1676	A	C4-C5-C6	9.44	121.72	117.00
21	AA	454	G	C6-C5-N7	-9.44	124.74	130.40
21	AA	893	C	O4'-C1'-N1	9.44	115.75	108.20
21	AA	1353	G	C5-C6-N1	-9.44	106.78	111.50
57	BB	307	G	N1-C6-O6	9.44	125.56	119.90
21	AA	711	G	C5-C6-O6	-9.43	122.94	128.60
21	AA	1516	G	O4'-C1'-N9	9.43	115.75	108.20
57	BB	1142	A	C6-C5-N7	-9.43	125.70	132.30
57	BB	1598	A	C4-C5-C6	9.43	121.72	117.00
57	BB	1661	G	C4-C5-N7	9.43	114.57	110.80
57	BB	1918	A	O4'-C1'-N9	9.43	115.75	108.20
57	BB	1734	G	O4'-C1'-N9	9.43	115.75	108.20
21	AA	212	G	C5-C6-N1	9.43	116.22	111.50
21	AA	253	A	C4-C5-N7	-9.43	105.98	110.70
21	AA	446	G	C5-C6-N1	-9.43	106.78	111.50
57	BB	31	C	N3-C4-N4	9.43	124.60	118.00
57	BB	436	C	C5-C6-N1	9.43	125.72	121.00
57	BB	2264	C	N3-C4-C5	-9.43	118.13	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	40	C	N3-C4-N4	9.43	124.60	118.00
57	BB	192	C	C5-C4-N4	-9.43	113.60	120.20
57	BB	1592	C	C4-C5-C6	-9.43	112.69	117.40
21	AA	399	G	N1-C6-O6	9.43	125.56	119.90
57	BB	731	C	C6-N1-C2	-9.43	116.53	120.30
21	AA	526	C	C5-C4-N4	-9.43	113.60	120.20
21	AA	1469	C	N1-C2-O2	-9.43	113.24	118.90
26	AV	23	C	C2-N3-C4	9.43	124.61	119.90
57	BB	287	G	N1-C2-N3	-9.43	118.24	123.90
57	BB	686	U	N3-C4-O4	9.43	126.00	119.40
57	BB	882	G	C5-C6-O6	-9.43	122.94	128.60
57	BB	1090	A	C5-N7-C8	-9.43	99.19	103.90
57	BB	2725	A	C8-N9-C4	-9.43	102.03	105.80
21	AA	592	G	C6-C5-N7	-9.42	124.75	130.40
21	AA	1296	C	C5-C6-N1	-9.42	116.29	121.00
57	BB	187	G	O4'-C1'-N9	9.42	115.74	108.20
57	BB	502	A	N7-C8-N9	-9.42	109.09	113.80
57	BB	535	G	C5-C6-O6	-9.42	122.95	128.60
57	BB	1502	A	O4'-C1'-N9	9.42	115.74	108.20
21	AA	1404	C	N3-C4-N4	9.42	124.59	118.00
57	BB	1040	A	O4'-C1'-N9	9.42	115.74	108.20
57	BB	2487	G	N3-C2-N2	9.42	126.49	119.90
21	AA	1361	G	C6-N1-C2	9.42	130.75	125.10
57	BB	931	U	N1-C2-N3	-9.42	109.25	114.90
57	BB	2508	G	N3-C2-N2	9.42	126.49	119.90
21	AA	652	U	O4'-C1'-N1	9.42	115.73	108.20
57	BB	527	C	C2-N1-C1'	9.42	129.16	118.80
57	BB	1423	G	C4-C5-C6	9.42	124.45	118.80
57	BB	428	A	N1-C2-N3	9.42	134.01	129.30
57	BB	1548	A	O4'-C1'-N9	9.42	115.73	108.20
57	BB	2017	U	C5-C6-N1	9.42	127.41	122.70
21	AA	915	A	C5-C6-N1	-9.41	112.99	117.70
21	AA	945	G	N3-C2-N2	9.41	126.49	119.90
21	AA	1338	G	N1-C2-N3	-9.41	118.25	123.90
23	AW	68	C	O4'-C1'-N1	9.41	115.73	108.20
57	BB	878	A	C8-N9-C4	-9.41	102.03	105.80
57	BB	1881	C	N3-C4-N4	9.41	124.59	118.00
57	BB	2879	A	C5-C6-N6	-9.41	116.17	123.70
21	AA	1251	A	C4-C5-C6	9.41	121.71	117.00
57	BB	618	G	C6-C5-N7	-9.41	124.75	130.40
21	AA	78	A	O4'-C1'-N9	9.41	115.73	108.20
57	BB	812	C	O4'-C1'-N1	9.41	115.73	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2256	G	C5-C6-O6	-9.41	122.95	128.60
21	AA	232	G	C6-N1-C2	-9.41	119.45	125.10
57	BB	2542	A	C8-N9-C4	-9.41	102.04	105.80
57	BB	1	G	OP1-P-OP2	-9.41	105.49	119.60
21	AA	63	C	C5-C6-N1	9.41	125.70	121.00
26	AV	23	C	C5-C6-N1	-9.41	116.30	121.00
57	BB	2100	G	C6-N1-C2	9.41	130.74	125.10
57	BB	2450	A	C5-C6-N1	-9.41	113.00	117.70
21	AA	38	G	C2-N3-C4	9.40	116.60	111.90
57	BB	158	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1182	G	C5-C6-O6	-9.40	122.96	128.60
58	BA	79	G	C4-C5-C6	9.40	124.44	118.80
57	BB	1267	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1365	A	C4-C5-C6	9.40	121.70	117.00
57	BB	1418	G	N3-C2-N2	9.40	126.48	119.90
57	BB	2827	C	C5-C4-N4	-9.40	113.62	120.20
25	AZ	210	PHE	CB-CG-CD2	9.40	127.38	120.80
58	BA	31	C	C2-N3-C4	9.40	124.60	119.90
21	AA	1387	G	O4'-C1'-N9	9.40	115.72	108.20
21	AA	1396	A	N1-C6-N6	9.40	124.24	118.60
23	AW	72	C	C4-C5-C6	9.40	122.10	117.40
40	BU	85	ARG	NE-CZ-NH2	9.40	125.00	120.30
57	BB	789	A	C2-N3-C4	9.40	115.30	110.60
57	BB	1859	U	C6-N1-C2	9.40	126.64	121.00
21	AA	496	A	O4'-C1'-N9	9.40	115.72	108.20
21	AA	7	A	N1-C6-N6	9.40	124.24	118.60
21	AA	125	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	224	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1929	G	N1-C6-O6	9.40	125.54	119.90
21	AA	220	G	C5-C6-O6	-9.40	122.96	128.60
57	BB	564	C	N3-C4-N4	9.40	124.58	118.00
57	BB	1471	G	O4'-C1'-N9	9.40	115.72	108.20
57	BB	1948	G	C4-C5-N7	-9.40	107.04	110.80
21	AA	48	C	N3-C4-C5	-9.39	118.14	121.90
21	AA	182	A	C5-C6-N6	-9.39	116.18	123.70
21	AA	401	C	N1-C2-O2	9.39	124.54	118.90
21	AA	1313	U	O4'-C1'-N1	9.39	115.72	108.20
57	BB	2806	C	O4'-C1'-N1	9.39	115.72	108.20
22	AY	76	A	C8-N9-C4	-9.39	102.04	105.80
33	BN	8	ARG	NE-CZ-NH1	-9.39	115.60	120.30
57	BB	85	G	N1-C6-O6	9.39	125.53	119.90
57	BB	214	G	C6-C5-N7	-9.39	124.77	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1419	A	C4-C5-C6	9.39	121.69	117.00
21	AA	878	A	C5-C6-N6	-9.39	116.19	123.70
25	AZ	288	ARG	NE-CZ-NH2	9.39	124.99	120.30
57	BB	20	C	N3-C4-C5	-9.39	118.14	121.90
57	BB	1223	G	N9-C4-C5	9.39	109.16	105.40
58	BA	38	C	O4'-C1'-N1	9.39	115.71	108.20
42	BW	63	ASP	CB-CG-OD1	-9.39	109.85	118.30
21	AA	42	G	N1-C6-O6	9.39	125.53	119.90
21	AA	925	G	P-O3'-C3'	9.38	130.96	119.70
21	AA	1049	U	P-O3'-C3'	9.38	130.96	119.70
57	BB	1957	C	C5-C6-N1	9.39	125.69	121.00
57	BB	1155	A	N9-C4-C5	9.38	109.55	105.80
57	BB	1389	G	N1-C2-N3	-9.38	118.27	123.90
57	BB	2220	U	O4'-C1'-N1	9.38	115.71	108.20
21	AA	897	C	C5-C4-N4	-9.38	113.63	120.20
57	BB	1166	G	C6-C5-N7	-9.38	124.77	130.40
57	BB	1615	C	N3-C4-N4	9.38	124.57	118.00
57	BB	1715	G	C4-C5-C6	9.38	124.43	118.80
57	BB	2538	C	C4-C5-C6	9.38	122.09	117.40
21	AA	139	A	C5-C6-N6	-9.38	116.20	123.70
57	BB	639	U	O4'-C1'-N1	9.38	115.70	108.20
57	BB	1225	G	C5-C6-O6	-9.38	122.97	128.60
57	BB	1499	C	N3-C4-N4	9.38	124.56	118.00
57	BB	1998	A	N7-C8-N9	-9.38	109.11	113.80
57	BB	2883	A	C4-C5-C6	9.38	121.69	117.00
13	AB	193	ASP	CB-CG-OD2	-9.37	109.86	118.30
21	AA	23	C	C5-C4-N4	-9.37	113.64	120.20
21	AA	1063	C	N3-C4-N4	9.37	124.56	118.00
57	BB	1335	C	C5-C4-N4	-9.37	113.64	120.20
57	BB	2221	G	C5-C6-N1	-9.37	106.81	111.50
15	AD	61	ARG	NE-CZ-NH2	-9.37	115.61	120.30
21	AA	138	G	N1-C6-O6	9.37	125.52	119.90
21	AA	818	G	N7-C8-N9	-9.37	108.41	113.10
21	AA	1334	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	1353	A	C5-C6-N1	-9.37	113.02	117.70
57	BB	1388	G	N7-C8-N9	9.37	117.79	113.10
57	BB	1990	C	O4'-C1'-N1	9.37	115.70	108.20
57	BB	2165	C	N3-C4-N4	9.37	124.56	118.00
57	BB	2706	A	C5-C6-N6	-9.37	116.20	123.70
57	BB	2741	A	C5-C6-N1	-9.37	113.01	117.70
57	BB	2419	U	O4'-C1'-N1	9.37	115.70	108.20
21	AA	255	G	C5-C6-O6	-9.37	122.98	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	BO	57	ALA	N-CA-CB	9.37	123.22	110.10
57	BB	332	A	N9-C4-C5	9.37	109.55	105.80
57	BB	1007	C	O4'-C1'-N1	9.37	115.69	108.20
57	BB	1473	G	O4'-C1'-N9	9.37	115.69	108.20
57	BB	1521	G	N3-C2-N2	9.37	126.46	119.90
57	BB	2495	G	C4-C5-C6	9.37	124.42	118.80
21	AA	545	C	O4'-C1'-N1	9.37	115.69	108.20
21	AA	846	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	20	C	O4'-C1'-N1	9.37	115.69	108.20
57	BB	684	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	1013	C	N3-C4-C5	-9.37	118.15	121.90
57	BB	2425	A	C4-C5-C6	9.37	121.68	117.00
57	BB	1831	G	C5-C6-O6	-9.36	122.98	128.60
57	BB	2229	U	O4'-C1'-N1	9.36	115.69	108.20
57	BB	2557	G	N1-C6-O6	9.36	125.52	119.90
21	AA	157	U	C1'-O4'-C4'	-9.36	102.41	109.90
21	AA	257	G	C6-N1-C2	-9.36	119.48	125.10
21	AA	654	G	C4-C5-N7	9.36	114.54	110.80
21	AA	966	G	O4'-C1'-N9	9.36	115.69	108.20
21	AA	1437	A	C5-C6-N1	-9.36	113.02	117.70
57	BB	379	G	C5-N7-C8	9.36	108.98	104.30
57	BB	682	G	C6-C5-N7	-9.36	124.78	130.40
57	BB	2115	G	N1-C6-O6	9.36	125.52	119.90
21	AA	23	C	C6-N1-C2	-9.36	116.56	120.30
21	AA	312	C	C5-C4-N4	-9.36	113.65	120.20
57	BB	2805	C	P-O3'-C3'	-9.36	108.47	119.70
17	AF	79	ARG	NE-CZ-NH1	9.36	124.98	120.30
21	AA	363	A	C5-C6-N6	-9.36	116.22	123.70
21	AA	642	A	N1-C6-N6	9.36	124.21	118.60
57	BB	896	A	C5-C6-N6	-9.36	116.21	123.70
23	AW	56	C	P-O3'-C3'	9.36	130.93	119.70
57	BB	1787	A	C5-C6-N6	-9.36	116.22	123.70
15	AD	62	ARG	NE-CZ-NH1	9.35	124.98	120.30
21	AA	240	G	N1-C6-O6	9.35	125.51	119.90
23	AW	24	G	C5-C6-O6	-9.35	122.99	128.60
57	BB	9	G	C5-C6-O6	-9.35	122.99	128.60
21	AA	237	G	N3-C2-N2	9.35	126.45	119.90
23	AW	58	A	N1-C2-N3	9.35	133.98	129.30
26	AV	18	G	P-O3'-C3'	9.35	130.92	119.70
57	BB	1931	U	O4'-C1'-N1	9.35	115.68	108.20
57	BB	728	G	N1-C6-O6	9.35	125.51	119.90
57	BB	1339	G	O4'-C1'-N9	9.35	115.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	794	A	C8-N9-C4	-9.35	102.06	105.80
21	AA	1299	A	C5-C6-N1	-9.35	113.03	117.70
21	AA	1039	G	N1-C6-O6	9.35	125.51	119.90
23	AW	63	G	C4-N9-C1'	9.35	138.65	126.50
57	BB	117	G	C6-C5-N7	-9.35	124.79	130.40
57	BB	463	G	C5-C6-N1	-9.35	106.83	111.50
21	AA	283	U	N3-C4-C5	-9.35	108.99	114.60
21	AA	693	G	N1-C6-O6	9.35	125.51	119.90
57	BB	1367	A	N1-C6-N6	9.35	124.21	118.60
57	BB	2478	A	C5-C6-N1	-9.35	113.03	117.70
57	BB	2685	G	C2-N3-C4	9.35	116.57	111.90
21	AA	580	C	O4'-C1'-N1	9.35	115.68	108.20
21	AA	821	G	N1-C6-O6	9.35	125.51	119.90
21	AA	1220	G	N9-C4-C5	-9.35	101.66	105.40
57	BB	1743	G	C6-C5-N7	-9.35	124.79	130.40
57	BB	2222	C	N3-C4-N4	9.35	124.54	118.00
21	AA	119	A	N1-C6-N6	9.34	124.20	118.60
21	AA	975	A	N9-C4-C5	9.34	109.54	105.80
57	BB	189	G	N1-C6-O6	9.34	125.51	119.90
57	BB	1635	A	C5-C6-N6	-9.34	116.22	123.70
57	BB	2469	A	C4-C5-C6	9.34	121.67	117.00
57	BB	785	G	N1-C6-O6	9.34	125.50	119.90
21	AA	1228	C	O4'-C1'-N1	9.34	115.67	108.20
21	AA	1280	A	C2-N3-C4	-9.34	105.93	110.60
57	BB	706	A	O4'-C1'-N9	9.34	115.67	108.20
57	BB	1631	G	O4'-C1'-N9	9.34	115.67	108.20
58	BA	10	G	C5-C6-O6	-9.34	123.00	128.60
21	AA	45	G	N1-C6-O6	9.34	125.50	119.90
21	AA	89	U	C5-C6-N1	9.34	127.37	122.70
21	AA	220	G	N3-C2-N2	9.34	126.44	119.90
57	BB	227	A	C5-C6-N1	-9.34	113.03	117.70
57	BB	289	G	N7-C8-N9	-9.34	108.43	113.10
21	AA	285	C	C5-C6-N1	9.34	125.67	121.00
21	AA	524	G	C5-C6-N1	-9.34	106.83	111.50
21	AA	1312	G	N1-C6-O6	9.34	125.50	119.90
21	AA	1530	G	N1-C6-O6	9.34	125.50	119.90
57	BB	136	G	O4'-C1'-N9	9.34	115.67	108.20
57	BB	1891	G	N1-C6-O6	9.34	125.50	119.90
57	BB	2611	C	N3-C4-C5	-9.34	118.17	121.90
57	BB	2817	U	O4'-C1'-N1	9.34	115.67	108.20
57	BB	1922	G	N1-C2-N3	-9.34	118.30	123.90
57	BB	2469	A	C5-N7-C8	9.34	108.57	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2898	U	N1-C2-N3	-9.34	109.30	114.90
21	AA	309	A	C5-C6-N6	-9.33	116.23	123.70
23	AW	56	C	C4-C5-C6	9.33	122.07	117.40
57	BB	413	C	O4'-C1'-N1	9.33	115.67	108.20
57	BB	1347	A	C5-C6-N1	-9.33	113.03	117.70
57	BB	1473	G	C5-N7-C8	9.33	108.97	104.30
57	BB	2887	A	C5-C6-N6	-9.33	116.23	123.70
13	AB	152	ASP	CB-CG-OD2	9.32	126.69	118.30
21	AA	1500	A	N1-C6-N6	9.32	124.19	118.60
57	BB	1517	G	O4'-C1'-N9	9.32	115.66	108.20
57	BB	1616	A	C5-C6-N1	-9.32	113.04	117.70
57	BB	2353	G	O4'-C1'-N9	9.32	115.66	108.20
57	BB	2454	G	C8-N9-C4	9.32	110.13	106.40
57	BB	309	A	N1-C2-N3	9.32	133.96	129.30
58	BA	19	C	C5-C4-N4	-9.32	113.67	120.20
21	AA	994	A	C5-C6-N1	-9.32	113.04	117.70
21	AA	1034	G	C4-C5-N7	9.32	114.53	110.80
21	AA	1245	C	O4'-C1'-N1	9.32	115.66	108.20
21	AA	33	A	C4-C5-C6	9.32	121.66	117.00
21	AA	1228	C	C4-C5-C6	-9.32	112.74	117.40
57	BB	2581	G	C5-C6-N1	-9.32	106.84	111.50
21	AA	346	G	O4'-C1'-N9	9.32	115.65	108.20
21	AA	778	G	O4'-C1'-N9	9.32	115.65	108.20
21	AA	498	A	C5-C6-N1	-9.32	113.04	117.70
57	BB	103	A	C5-C6-N6	-9.32	116.25	123.70
57	BB	504	A	C4-C5-C6	9.32	121.66	117.00
57	BB	694	U	O4'-C1'-N1	9.32	115.65	108.20
57	BB	896	A	P-O3'-C3'	-9.32	108.52	119.70
21	AA	1111	A	P-O3'-C3'	9.31	130.88	119.70
57	BB	47	C	O4'-C1'-N1	9.31	115.65	108.20
21	AA	546	A	C8-N9-C4	-9.31	102.08	105.80
21	AA	639	G	N1-C6-O6	9.31	125.49	119.90
23	AW	62	C	O4'-C1'-N1	9.31	115.65	108.20
57	BB	1843	C	N3-C4-C5	-9.31	118.17	121.90
57	BB	2727	A	N1-C6-N6	9.31	124.19	118.60
57	BB	621	A	O4'-C1'-N9	9.31	115.65	108.20
57	BB	460	A	N9-C4-C5	-9.31	102.08	105.80
57	BB	1791	A	C8-N9-C4	-9.31	102.08	105.80
57	BB	2548	U	O4'-C1'-N1	9.31	115.65	108.20
21	AA	819	A	C4-C5-C6	9.30	121.65	117.00
22	AY	18	G	C3'-C2'-C1'	-9.30	94.06	101.50
57	BB	165	A	N7-C8-N9	9.30	118.45	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	950	U	C5-C4-O4	-9.30	120.32	125.90
57	BB	1763	G	N3-C4-C5	9.30	133.25	128.60
57	BB	2045	C	N3-C4-C5	-9.30	118.18	121.90
57	BB	2614	A	C4-C5-N7	-9.30	106.05	110.70
21	AA	470	C	C5-C4-N4	-9.30	113.69	120.20
21	AA	701	U	N1-C2-O2	-9.30	116.29	122.80
21	AA	858	G	C5-C6-O6	-9.30	123.02	128.60
57	BB	669	G	C4-N9-C1'	9.30	138.59	126.50
21	AA	60	A	C5-C6-N6	-9.30	116.26	123.70
21	AA	424	G	C5-N7-C8	-9.30	99.65	104.30
57	BB	466	A	C5-C6-N1	-9.30	113.05	117.70
57	BB	1032	A	C4-C5-C6	9.30	121.65	117.00
57	BB	1261	C	N3-C4-N4	9.30	124.51	118.00
57	BB	1852	U	O4'-C1'-N1	9.30	115.64	108.20
57	BB	2691	C	O4'-C1'-N1	9.30	115.64	108.20
21	AA	825	A	C8-N9-C4	-9.30	102.08	105.80
57	BB	2073	C	C4'-C3'-C2'	-9.30	93.30	102.60
57	BB	2482	A	C6-C5-N7	-9.30	125.79	132.30
21	AA	1327	C	C5-C4-N4	-9.29	113.69	120.20
52	BD	181	ASP	CB-CG-OD1	9.29	126.67	118.30
57	BB	466	A	C8-N9-C4	-9.29	102.08	105.80
58	BA	114	C	C6-N1-C2	-9.29	116.58	120.30
21	AA	582	C	C6-N1-C2	-9.29	116.58	120.30
21	AA	1507	A	O4'-C1'-N9	9.29	115.63	108.20
26	AV	10	G	N1-C2-N3	-9.29	118.32	123.90
57	BB	988	A	O4'-C1'-N9	9.29	115.63	108.20
57	BB	1809	A	C5-C6-N6	-9.29	116.27	123.70
58	BA	18	G	C2-N3-C4	9.29	116.55	111.90
57	BB	709	U	C5-C4-O4	-9.29	120.33	125.90
21	AA	308	C	O4'-C1'-N1	9.29	115.63	108.20
21	AA	802	A	N1-C6-N6	9.29	124.17	118.60
57	BB	439	A	N1-C6-N6	9.29	124.17	118.60
58	BA	64	G	O4'-C1'-N9	9.29	115.63	108.20
21	AA	780	A	N1-C2-N3	9.29	133.94	129.30
21	AA	1140	C	N3-C4-N4	9.29	124.50	118.00
57	BB	1080	A	C5-C6-N6	-9.29	116.27	123.70
57	BB	1626	A	C8-N9-C4	-9.29	102.08	105.80
21	AA	378	G	C8-N9-C4	-9.29	102.69	106.40
21	AA	478	A	C5-C6-N6	-9.29	116.27	123.70
21	AA	1506	U	N3-C2-O2	9.29	128.70	122.20
57	BB	130	C	N3-C4-C5	9.29	125.61	121.90
21	AA	661	G	N1-C2-N3	-9.28	118.33	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	719	C	N3-C4-N4	9.29	124.50	118.00
57	BB	1367	A	C2-N3-C4	-9.29	105.96	110.60
57	BB	1553	A	C5-C6-N1	-9.29	113.06	117.70
21	AA	195	A	N9-C4-C5	-9.28	102.09	105.80
21	AA	964	A	C4-C5-C6	9.28	121.64	117.00
57	BB	930	G	N1-C6-O6	9.28	125.47	119.90
57	BB	1237	A	C4-C5-C6	9.28	121.64	117.00
57	BB	1811	G	C4-C5-N7	-9.28	107.09	110.80
57	BB	1770	G	N1-C6-O6	9.28	125.47	119.90
57	BB	2177	C	C2-N3-C4	9.28	124.54	119.90
57	BB	2294	G	N1-C6-O6	9.28	125.47	119.90
21	AA	73	C	C2-N3-C4	9.28	124.54	119.90
21	AA	348	G	N3-C2-N2	9.28	126.39	119.90
21	AA	921	U	C2-N3-C4	9.28	132.57	127.00
57	BB	91	A	C8-N9-C4	9.28	109.51	105.80
57	BB	1269	A	C4-C5-N7	-9.28	106.06	110.70
57	BB	1481	U	C4'-C3'-C2'	-9.28	93.32	102.60
57	BB	1604	C	N3-C4-N4	9.28	124.50	118.00
21	AA	155	A	N3-C4-C5	-9.28	120.31	126.80
21	AA	803	G	N1-C6-O6	9.28	125.47	119.90
21	AA	858	G	N1-C6-O6	9.28	125.47	119.90
21	AA	1466	C	C5-C6-N1	9.28	125.64	121.00
57	BB	18	U	N3-C4-O4	9.28	125.89	119.40
57	BB	256	A	O4'-C1'-N9	9.28	115.62	108.20
57	BB	700	G	O4'-C1'-N9	9.28	115.62	108.20
57	BB	2170	A	N1-C2-N3	9.28	133.94	129.30
57	BB	1661	G	O4'-C1'-N9	9.27	115.62	108.20
57	BB	2383	G	N1-C6-O6	9.27	125.46	119.90
21	AA	495	A	C8-N9-C4	-9.27	102.09	105.80
57	BB	2052	A	C4-C5-C6	9.27	121.64	117.00
57	BB	2455	G	C5-C6-O6	-9.27	123.04	128.60
57	BB	2465	C	O4'-C1'-N1	9.27	115.62	108.20
21	AA	781	A	C4-C5-C6	9.27	121.64	117.00
21	AA	1414	U	C5-C4-O4	-9.27	120.34	125.90
22	AY	8	U	N3-C4-O4	9.27	125.89	119.40
57	BB	740	C	N3-C4-N4	9.27	124.49	118.00
57	BB	1354	A	N9-C4-C5	-9.27	102.09	105.80
57	BB	1874	C	N3-C4-N4	9.27	124.49	118.00
21	AA	912	C	N3-C4-C5	-9.27	118.19	121.90
57	BB	1085	A	N9-C4-C5	9.27	109.51	105.80
21	AA	912	C	N3-C4-N4	9.27	124.48	118.00
21	AA	930	C	N3-C4-N4	9.27	124.49	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	46	G	C5'-C4'-O4'	9.27	120.22	109.10
57	BB	444	C	N1-C2-O2	-9.27	113.34	118.90
57	BB	1286	A	C8-N9-C4	-9.27	102.09	105.80
23	AW	35	A	C5-C6-N1	-9.26	113.07	117.70
21	AA	1188	A	C5-C6-N1	-9.26	113.07	117.70
26	AV	53	G	O4'-C1'-N9	9.26	115.61	108.20
57	BB	1626	A	C4-C5-C6	9.26	121.63	117.00
22	AY	72	C	C4-C5-C6	9.26	122.03	117.40
57	BB	896	A	C8-N9-C4	-9.26	102.10	105.80
57	BB	2006	C	C2-N3-C4	9.26	124.53	119.90
21	AA	26	A	N1-C6-N6	9.26	124.16	118.60
21	AA	615	G	O4'-C1'-N9	9.26	115.60	108.20
21	AA	830	G	C5-C6-O6	-9.26	123.05	128.60
57	BB	1394	U	O4'-C1'-N1	9.26	115.60	108.20
57	BB	1621	U	O4'-C1'-N1	9.26	115.61	108.20
57	BB	2342	C	N3-C4-N4	9.26	124.48	118.00
21	AA	1418	A	C4-C5-C6	9.25	121.63	117.00
57	BB	531	C	N3-C4-N4	9.25	124.48	118.00
57	BB	603	A	C5-C6-N6	-9.25	116.30	123.70
57	BB	1543	G	N3-C4-N9	-9.25	120.45	126.00
57	BB	2708	G	N1-C6-O6	9.25	125.45	119.90
58	BA	3	C	O4'-C1'-N1	9.25	115.60	108.20
21	AA	283	U	O4'-C1'-N1	9.25	115.60	108.20
21	AA	656	G	C5-C6-N1	-9.25	106.87	111.50
57	BB	973	A	N1-C6-N6	9.25	124.15	118.60
57	BB	2694	G	C1'-O4'-C4'	9.25	117.30	109.90
57	BB	1057	A	N1-C6-N6	9.25	124.15	118.60
57	BB	1829	A	N1-C6-N6	9.25	124.15	118.60
57	BB	1928	A	C5-C6-N6	-9.25	116.30	123.70
57	BB	2432	A	N1-C6-N6	9.25	124.15	118.60
58	BA	60	C	N3-C4-C5	-9.25	118.20	121.90
21	AA	435	A	C5-C6-N1	-9.25	113.08	117.70
21	AA	475	C	O4'-C1'-N1	9.25	115.60	108.20
57	BB	1488	C	N3-C4-N4	9.25	124.47	118.00
57	BB	1678	A	C8-N9-C4	-9.25	102.10	105.80
57	BB	2069	G	C5-C6-O6	-9.25	123.05	128.60
21	AA	1456	A	C5-C6-N1	-9.24	113.08	117.70
22	AY	55	U	N3-C4-O4	9.24	125.87	119.40
21	AA	1048	G	N3-C2-N2	9.24	126.37	119.90
57	BB	76	C	C2-N3-C4	9.24	124.52	119.90
57	BB	1546	G	N1-C6-O6	9.24	125.45	119.90
57	BB	2226	C	C2-N3-C4	9.24	124.52	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2598	A	C5-N7-C8	9.24	108.52	103.90
21	AA	585	G	C5-C6-O6	-9.24	123.06	128.60
57	BB	239	C	C5-C4-N4	-9.24	113.73	120.20
21	AA	683	G	N1-C6-O6	9.24	125.44	119.90
53	BE	88	ARG	NE-CZ-NH2	9.24	124.92	120.30
57	BB	906	U	O4'-C1'-N1	9.24	115.59	108.20
57	BB	1256	G	O4'-C1'-N9	9.24	115.59	108.20
57	BB	2204	G	C4-C5-C6	9.24	124.34	118.80
21	AA	429	U	C5-C4-O4	-9.24	120.36	125.90
21	AA	1034	G	C5-C6-O6	-9.24	123.06	128.60
57	BB	399	U	N1-C2-N3	-9.24	109.36	114.90
57	BB	604	G	C6-C5-N7	-9.24	124.86	130.40
57	BB	526	A	C5-N7-C8	9.24	108.52	103.90
57	BB	2369	A	C5-C6-N1	-9.24	113.08	117.70
21	AA	205	A	N7-C8-N9	-9.23	109.18	113.80
21	AA	1426	G	C5-C6-N1	-9.23	106.88	111.50
57	BB	173	A	C5-C6-N1	-9.23	113.08	117.70
57	BB	192	C	N3-C4-N4	9.23	124.46	118.00
21	AA	760	G	O4'-C1'-N9	9.23	115.58	108.20
21	AA	430	A	C4-C5-C6	9.23	121.61	117.00
21	AA	604	G	N7-C8-N9	9.23	117.72	113.10
23	AW	14	A	C4-C5-C6	9.23	121.61	117.00
57	BB	951	C	C5-C4-N4	-9.23	113.74	120.20
57	BB	1533	C	N3-C4-N4	9.23	124.46	118.00
57	BB	2437	G	C6-N1-C2	-9.23	119.56	125.10
57	BB	8	C	O4'-C1'-N1	9.23	115.58	108.20
57	BB	2209	G	N1-C6-O6	9.23	125.44	119.90
21	AA	460	A	C5-C6-N6	-9.23	116.32	123.70
21	AA	784	A	N1-C2-N3	9.23	133.91	129.30
57	BB	155	A	C4-C5-C6	9.23	121.61	117.00
57	BB	550	C	O4'-C1'-N1	9.23	115.58	108.20
57	BB	726	G	N9-C4-C5	-9.23	101.71	105.40
57	BB	1104	C	N3-C4-N4	9.23	124.46	118.00
21	AA	292	G	C2-N3-C4	-9.22	107.29	111.90
21	AA	598	U	N3-C4-O4	9.22	125.86	119.40
21	AA	792	A	N9-C4-C5	-9.22	102.11	105.80
21	AA	1530	G	O4'-C1'-N9	9.22	115.58	108.20
57	BB	695	G	C6-C5-N7	-9.22	124.87	130.40
57	BB	1344	U	O4'-C1'-N1	9.22	115.58	108.20
57	BB	2801	G	C5-C6-O6	-9.22	123.06	128.60
57	BB	981	A	C4-C5-C6	9.22	121.61	117.00
57	BB	1044	C	N3-C4-C5	-9.22	118.21	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1148	U	C5-C4-O4	-9.22	120.37	125.90
57	BB	2591	C	O4'-C1'-N1	9.22	115.58	108.20
21	AA	729	A	C5-C6-N6	-9.22	116.32	123.70
26	AV	48	C	O4'-C1'-N1	9.22	115.58	108.20
57	BB	1849	G	C5-C6-O6	-9.22	123.07	128.60
57	BB	2435	A	O4'-C1'-N9	9.22	115.58	108.20
57	BB	1730	C	C6-N1-C2	-9.22	116.61	120.30
58	BA	70	C	O4'-C1'-N1	9.22	115.58	108.20
57	BB	1527	G	C4-C5-C6	9.22	124.33	118.80
57	BB	1598	A	C5-C6-N1	-9.22	113.09	117.70
57	BB	2571	U	O4'-C1'-N1	9.22	115.58	108.20
57	BB	636	G	C5-C6-N1	-9.22	106.89	111.50
57	BB	1203	U	O4'-C1'-N1	9.22	115.57	108.20
57	BB	2303	G	C5-C6-O6	-9.22	123.07	128.60
57	BB	2704	C	N3-C4-N4	9.22	124.45	118.00
57	BB	2886	A	C4-C5-C6	9.22	121.61	117.00
21	AA	110	C	O4'-C1'-N1	9.22	115.57	108.20
21	AA	257	G	O4'-C1'-N9	9.22	115.57	108.20
57	BB	651	G	P-O3'-C3'	9.22	130.76	119.70
57	BB	2495	G	C2-N3-C4	9.22	116.51	111.90
57	BB	1999	C	N3-C4-N4	9.21	124.45	118.00
57	BB	2078	C	C4-C5-C6	9.21	122.01	117.40
21	AA	235	C	N3-C4-N4	9.21	124.45	118.00
21	AA	585	G	O4'-C1'-N9	9.21	115.57	108.20
21	AA	1201	A	C4-C5-C6	9.21	121.61	117.00
57	BB	528	A	C4-C5-N7	-9.21	106.09	110.70
22	AY	19	G	N9-C4-C5	-9.21	101.72	105.40
57	BB	1890	A	N9-C4-C5	9.21	109.48	105.80
57	BB	2756	U	P-O3'-C3'	9.21	130.75	119.70
21	AA	1287	A	C6-C5-N7	-9.21	125.85	132.30
57	BB	789	A	C5-C6-N6	-9.21	116.33	123.70
21	AA	997	U	N3-C4-O4	9.21	125.84	119.40
45	BC	270	ARG	NE-CZ-NH1	9.21	124.90	120.30
57	BB	1099	G	N3-C2-N2	9.21	126.34	119.90
21	AA	1166	G	N1-C2-N3	-9.20	118.38	123.90
21	AA	1332	A	C5'-C4'-C3'	9.20	130.72	116.00
57	BB	367	G	O4'-C1'-N9	9.20	115.56	108.20
21	AA	243	A	C2'-C3'-O3'	9.20	129.74	109.50
21	AA	769	G	N1-C2-N3	-9.20	118.38	123.90
57	BB	788	A	N1-C2-N3	9.20	133.90	129.30
57	BB	811	U	N1-C2-O2	-9.20	116.36	122.80
57	BB	1863	G	C5-C6-O6	-9.20	123.08	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2307	G	C8-N9-C1'	-9.20	115.04	127.00
57	BB	2470	G	C6-C5-N7	-9.20	124.88	130.40
57	BB	1094	U	C2-N3-C4	-9.20	121.48	127.00
21	AA	114	U	P-O3'-C3'	-9.20	108.66	119.70
22	AY	36	A	C4-C5-C6	9.20	121.60	117.00
57	BB	209	C	C2-N3-C4	9.20	124.50	119.90
57	BB	545	U	N3-C4-O4	9.20	125.84	119.40
57	BB	1046	A	O4'-C1'-C2'	-9.20	96.60	105.80
57	BB	2238	G	C6-C5-N7	-9.20	124.88	130.40
57	BB	805	G	N1-C6-O6	9.20	125.42	119.90
57	BB	1005	C	O4'-C1'-N1	9.20	115.56	108.20
21	AA	179	A	C5-C6-N1	-9.20	113.10	117.70
21	AA	1081	A	N3-C4-C5	-9.20	120.36	126.80
56	BH	25	TYR	CB-CG-CD2	-9.20	115.48	121.00
57	BB	656	G	C5-C6-O6	-9.20	123.08	128.60
21	AA	1480	A	C2-N3-C4	-9.19	106.00	110.60
21	AA	1518	A	O4'-C1'-N9	9.19	115.55	108.20
57	BB	285	G	C5-C6-O6	-9.19	123.08	128.60
57	BB	2416	C	C5-C4-N4	-9.19	113.77	120.20
57	BB	1085	A	C5-C6-N1	-9.19	113.10	117.70
57	BB	1619	G	C8-N9-C4	-9.19	102.72	106.40
57	BB	2389	G	N3-C2-N2	9.19	126.33	119.90
23	AW	30	G	N7-C8-N9	-9.19	108.50	113.10
57	BB	110	G	O4'-C1'-N9	9.19	115.55	108.20
57	BB	516	C	O4'-C1'-N1	9.19	115.55	108.20
57	BB	1281	G	N3-C2-N2	9.19	126.33	119.90
21	AA	1511	G	C5-C6-O6	-9.19	123.09	128.60
57	BB	1317	G	N7-C8-N9	-9.19	108.51	113.10
21	AA	61	G	O4'-C1'-N9	9.18	115.55	108.20
57	BB	940	G	N1-C6-O6	9.18	125.41	119.90
21	AA	885	G	O4'-C1'-N9	9.18	115.55	108.20
21	AA	1521	C	O4'-C1'-N1	9.18	115.55	108.20
57	BB	1575	C	N3-C4-C5	-9.18	118.23	121.90
57	BB	1829	A	C5-C6-N1	-9.18	113.11	117.70
57	BB	2010	G	C2-N3-C4	9.18	116.49	111.90
34	BO	15	ARG	NE-CZ-NH1	-9.18	115.71	120.30
57	BB	95	A	C4-C5-N7	9.18	115.29	110.70
57	BB	1774	C	C4-C5-C6	-9.18	112.81	117.40
57	BB	2283	C	N3-C4-N4	9.18	124.42	118.00
21	AA	474	G	C6-C5-N7	-9.18	124.89	130.40
21	AA	1107	C	N3-C4-C5	-9.18	118.23	121.90
21	AA	1175	G	N1-C6-O6	9.18	125.41	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1311	G	N1-C6-O6	9.18	125.41	119.90
21	AA	971	G	C3'-C2'-C1'	-9.18	94.16	101.50
21	AA	1273	C	N3-C4-C5	9.18	125.57	121.90
21	AA	1372	U	P-O3'-C3'	9.18	130.71	119.70
26	AV	18	G	N1-C6-O6	9.18	125.41	119.90
45	BC	166	ARG	NE-CZ-NH1	-9.18	115.71	120.30
57	BB	255	A	C5-N7-C8	9.18	108.49	103.90
57	BB	2475	C	C6-N1-C2	-9.18	116.63	120.30
21	AA	1505	G	C5-C6-O6	-9.17	123.09	128.60
57	BB	176	A	O4'-C1'-N9	9.17	115.54	108.20
57	BB	777	G	N9-C4-C5	9.17	109.07	105.40
21	AA	1448	C	N3-C4-N4	9.17	124.42	118.00
57	BB	660	C	C2-N3-C4	9.17	124.49	119.90
57	BB	980	A	C6-C5-N7	-9.17	125.88	132.30
57	BB	1653	G	C5-C6-O6	-9.17	123.10	128.60
21	AA	267	C	N3-C4-N4	9.17	124.42	118.00
21	AA	309	A	C4'-C3'-C2'	-9.17	93.43	102.60
57	BB	769	U	O4'-C1'-N1	9.17	115.54	108.20
57	BB	859	G	N3-C4-C5	-9.17	124.02	128.60
58	BA	114	C	O4'-C1'-N1	9.17	115.54	108.20
21	AA	670	G	O4'-C1'-N9	9.17	115.53	108.20
21	AA	1100	C	C4-C5-C6	9.17	121.98	117.40
21	AA	1300	G	N1-C6-O6	9.17	125.40	119.90
57	BB	88	G	C6-C5-N7	-9.17	124.90	130.40
21	AA	817	C	N3-C4-C5	-9.16	118.23	121.90
57	BB	1402	U	O4'-C1'-N1	9.16	115.53	108.20
21	AA	91	U	N3-C4-O4	9.16	125.81	119.40
21	AA	1184	G	N1-C6-O6	9.16	125.40	119.90
57	BB	1971	U	O4'-C1'-N1	9.16	115.53	108.20
14	AC	39	ARG	NE-CZ-NH2	-9.16	115.72	120.30
21	AA	983	A	C6-C5-N7	-9.16	125.89	132.30
57	BB	555	G	C4-C5-C6	9.16	124.30	118.80
57	BB	1630	A	O4'-C1'-N9	9.16	115.53	108.20
57	BB	1802	A	O4'-C1'-N9	9.16	115.53	108.20
57	BB	1957	C	N3-C4-C5	-9.16	118.24	121.90
21	AA	655	A	O4'-C1'-N9	9.16	115.53	108.20
22	AY	11	C	C5-C6-N1	9.16	125.58	121.00
57	BB	793	A	C5-C6-N1	-9.16	113.12	117.70
57	BB	2602	A	C5-C6-N6	-9.16	116.37	123.70
57	BB	49	A	C4-C5-C6	9.16	121.58	117.00
57	BB	2685	G	N1-C2-N3	-9.16	118.41	123.90
57	BB	2725	A	C5-C6-N1	-9.16	113.12	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1429	A	N1-C6-N6	9.15	124.09	118.60
57	BB	73	A	C4-C5-C6	9.15	121.58	117.00
57	BB	924	G	N3-C2-N2	9.15	126.31	119.90
57	BB	1027	A	O4'-C1'-N9	9.15	115.52	108.20
57	BB	1098	A	C4-C5-C6	9.15	121.58	117.00
57	BB	2642	G	N1-C6-O6	9.15	125.39	119.90
21	AA	1458	G	N3-C2-N2	9.15	126.31	119.90
57	BB	104	A	O4'-C1'-N9	9.15	115.52	108.20
57	BB	891	G	C5-C6-O6	-9.15	123.11	128.60
57	BB	2567	G	C5-C6-O6	-9.15	123.11	128.60
21	AA	746	A	C5-N7-C8	9.15	108.47	103.90
21	AA	924	C	C6-N1-C2	-9.15	116.64	120.30
22	AY	30	G	C5-N7-C8	9.15	108.87	104.30
57	BB	248	G	P-O3'-C3'	9.15	130.68	119.70
57	BB	703	U	P-O3'-C3'	9.15	130.68	119.70
21	AA	617	G	N3-C4-N9	9.15	131.49	126.00
57	BB	895	U	C2-N3-C4	-9.15	121.51	127.00
57	BB	1385	A	C5-C6-N1	-9.15	113.13	117.70
57	BB	1873	G	N1-C6-O6	9.15	125.39	119.90
57	BB	2214	C	N3-C4-C5	9.15	125.56	121.90
21	AA	1209	C	C5-C4-N4	-9.14	113.80	120.20
26	AV	47	U	C5-C6-N1	9.14	127.27	122.70
21	AA	879	C	C1'-O4'-C4'	-9.14	102.58	109.90
57	BB	347	A	C5-C6-N1	-9.14	113.13	117.70
57	BB	822	G	O4'-C1'-N9	9.14	115.52	108.20
57	BB	2322	A	N9-C4-C5	-9.14	102.14	105.80
21	AA	151	A	C4-C5-C6	9.14	121.57	117.00
21	AA	1241	G	N1-C6-O6	9.14	125.39	119.90
21	AA	1413	A	C4-C5-C6	9.14	121.57	117.00
21	AA	656	G	C4-C5-C6	9.14	124.28	118.80
57	BB	201	C	O4'-C1'-N1	9.14	115.51	108.20
57	BB	2574	G	N1-C6-O6	9.14	125.39	119.90
57	BB	2623	G	C4-C5-C6	9.14	124.28	118.80
21	AA	224	U	N3-C4-O4	9.14	125.80	119.40
57	BB	2251	G	C6-C5-N7	-9.14	124.92	130.40
21	AA	1094	G	N9-C4-C5	-9.14	101.75	105.40
57	BB	482	A	C6-C5-N7	-9.14	125.90	132.30
57	BB	1360	G	C5-C6-N1	-9.14	106.93	111.50
57	BB	2037	A	C4-C5-C6	9.14	121.57	117.00
57	BB	2071	A	N1-C6-N6	9.14	124.08	118.60
57	BB	2585	U	O4'-C1'-N1	9.14	115.51	108.20
57	BB	2602	A	C5-N7-C8	9.14	108.47	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1722	A	C5-C6-N1	-9.14	113.13	117.70
57	BB	1786	A	C5-C6-N6	-9.14	116.39	123.70
21	AA	1265	C	N3-C4-N4	9.13	124.39	118.00
57	BB	180	G	C5-C6-O6	-9.13	123.12	128.60
58	BA	115	A	N1-C6-N6	9.13	124.08	118.60
21	AA	1530	G	C2-N3-C4	9.13	116.47	111.90
57	BB	492	A	C4-C5-C6	9.13	121.57	117.00
57	BB	509	C	C6-N1-C2	-9.13	116.65	120.30
57	BB	1109	C	N3-C4-N4	9.13	124.39	118.00
57	BB	2108	A	C4-C5-C6	9.13	121.57	117.00
57	BB	2376	A	C5-C6-N6	-9.13	116.39	123.70
57	BB	2534	A	O4'-C1'-N9	9.13	115.50	108.20
21	AA	605	U	N3-C2-O2	9.13	128.59	122.20
21	AA	1254	A	C4-C5-C6	9.13	121.56	117.00
23	AW	43	C	N3-C4-C5	-9.13	118.25	121.90
57	BB	218	A	N1-C2-N3	9.13	133.87	129.30
57	BB	1782	U	N3-C4-O4	9.13	125.79	119.40
58	BA	62	C	O4'-C1'-N1	9.13	115.50	108.20
57	BB	956	G	N1-C6-O6	9.13	125.38	119.90
57	BB	620	G	C4-C5-N7	9.13	114.45	110.80
57	BB	1541	C	N3-C2-O2	9.13	128.29	121.90
57	BB	2721	A	N1-C6-N6	9.13	124.08	118.60
21	AA	893	C	C5-C6-N1	9.13	125.56	121.00
21	AA	1389	C	N3-C4-C5	-9.12	118.25	121.90
57	BB	1265	A	C6-C5-N7	-9.12	125.91	132.30
21	AA	187	G	N3-C2-N2	9.12	126.28	119.90
21	AA	782	A	N1-C6-N6	9.12	124.07	118.60
21	AA	858	G	O4'-C1'-N9	9.12	115.50	108.20
21	AA	954	G	C5-C6-O6	-9.12	123.13	128.60
22	AY	57	G	C6-N1-C2	9.12	130.57	125.10
22	AY	47	U	N3-C2-O2	-9.12	115.81	122.20
57	BB	272	A	C4-C5-C6	9.12	121.56	117.00
57	BB	597	G	C6-C5-N7	-9.12	124.93	130.40
57	BB	1461	C	C6-N1-C2	-9.12	116.65	120.30
57	BB	1523	U	C6-N1-C2	9.12	126.47	121.00
57	BB	2171	A	N9-C4-C5	9.12	109.45	105.80
21	AA	1168	U	O4'-C1'-N1	9.12	115.50	108.20
21	AA	1417	G	N1-C6-O6	9.12	125.37	119.90
57	BB	202	U	O4'-C1'-N1	9.12	115.50	108.20
57	BB	259	G	N1-C2-N3	-9.12	118.43	123.90
57	BB	1878	G	N7-C8-N9	9.12	117.66	113.10
21	AA	773	G	C2-N3-C4	9.12	116.46	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1312	G	C4-C5-N7	-9.12	107.15	110.80
57	BB	669	G	C8-N9-C4	-9.12	102.75	106.40
57	BB	708	G	O4'-C1'-N9	9.12	115.50	108.20
57	BB	1244	A	C5-C6-N6	-9.12	116.40	123.70
57	BB	1322	A	C4-C5-N7	-9.12	106.14	110.70
21	AA	598	U	O4'-C1'-N1	9.12	115.49	108.20
21	AA	841	C	N3-C4-N4	9.12	124.38	118.00
21	AA	1034	G	C6-C5-N7	-9.12	124.93	130.40
21	AA	1137	C	O4'-C1'-N1	9.12	115.49	108.20
21	AA	1495	U	O4'-C1'-N1	9.12	115.49	108.20
57	BB	802	A	N1-C6-N6	9.12	124.07	118.60
57	BB	94	A	O4'-C1'-N9	9.11	115.49	108.20
21	AA	1027	C	N1-C2-O2	9.11	124.37	118.90
21	AA	1272	G	O4'-C1'-N9	9.11	115.49	108.20
21	AA	1443	C	C6-N1-C2	9.11	123.94	120.30
57	BB	879	G	C6-C5-N7	-9.11	124.93	130.40
57	BB	1667	G	C6-N1-C2	9.11	130.57	125.10
57	BB	1816	C	N3-C4-C5	9.11	125.55	121.90
21	AA	1458	G	O4'-C1'-N9	9.11	115.49	108.20
57	BB	482	A	C4-C5-C6	9.11	121.55	117.00
57	BB	1174	U	O4'-C1'-N1	9.11	115.49	108.20
57	BB	1436	G	N1-C6-O6	9.11	125.36	119.90
57	BB	1801	A	N1-C2-N3	9.11	133.85	129.30
21	AA	49	U	C5-C4-O4	-9.11	120.44	125.90
21	AA	52	C	N3-C2-O2	9.11	128.27	121.90
57	BB	253	C	O4'-C1'-N1	9.11	115.48	108.20
57	BB	495	G	C5-C6-N1	-9.11	106.95	111.50
57	BB	1245	G	O4'-C1'-N9	9.11	115.48	108.20
57	BB	809	G	N9-C4-C5	-9.11	101.76	105.40
57	BB	1879	C	C5-C6-N1	9.11	125.55	121.00
21	AA	122	G	O4'-C1'-N9	9.10	115.48	108.20
21	AA	318	G	N1-C6-O6	9.10	125.36	119.90
43	BX	77	TYR	CB-CG-CD1	-9.10	115.54	121.00
57	BB	145	C	N3-C4-C5	-9.10	118.26	121.90
57	BB	1363	C	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1948	G	N9-C4-C5	9.10	109.04	105.40
21	AA	1111	A	O4'-C1'-N9	9.10	115.48	108.20
21	AA	1498	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1835	G	N1-C2-N3	-9.10	118.44	123.90
57	BB	2611	C	O4'-C1'-N1	9.10	115.48	108.20
21	AA	74	A	N1-C2-N3	9.10	133.85	129.30
57	BB	292	U	N3-C2-O2	9.10	128.57	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	662	G	O4'-C1'-N9	9.10	115.48	108.20
57	BB	653	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1269	A	C4-C5-C6	9.10	121.55	117.00
57	BB	1273	U	C2-N3-C4	9.10	132.46	127.00
57	BB	1307	A	C8-N9-C4	9.10	109.44	105.80
57	BB	1902	C	P-O3'-C3'	-9.10	108.78	119.70
57	BB	2067	G	C5-N7-C8	9.10	108.85	104.30
57	BB	2531	A	C5-C6-N6	-9.10	116.42	123.70
57	BB	2641	G	C4-C5-N7	-9.10	107.16	110.80
21	AA	484	G	C5-C6-O6	-9.10	123.14	128.60
57	BB	1380	G	C5-C6-N1	-9.10	106.95	111.50
57	BB	1785	A	C4-C5-C6	9.10	121.55	117.00
57	BB	374	A	N1-C2-N3	-9.10	124.75	129.30
57	BB	866	A	C6-C5-N7	-9.10	125.93	132.30
57	BB	2079	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1077	A	N1-C2-N3	9.09	133.85	129.30
57	BB	1580	A	N1-C6-N6	9.09	124.06	118.60
26	AV	45	G	O4'-C1'-N9	9.09	115.47	108.20
57	BB	324	A	C2-N3-C4	-9.09	106.05	110.60
57	BB	1603	A	C2-N3-C4	-9.09	106.05	110.60
57	BB	2175	C	C4-C5-C6	9.09	121.95	117.40
57	BB	2326	C	C3'-C2'-C1'	-9.09	94.23	101.50
21	AA	401	C	N3-C4-C5	-9.09	118.26	121.90
57	BB	496	G	C8-N9-C4	-9.09	102.76	106.40
21	AA	771	G	N7-C8-N9	-9.09	108.56	113.10
57	BB	712	G	N1-C6-O6	9.09	125.35	119.90
57	BB	2005	A	N1-C6-N6	9.09	124.05	118.60
57	BB	2600	A	O4'-C1'-N9	9.09	115.47	108.20
57	BB	2455	G	N1-C6-O6	9.09	125.35	119.90
21	AA	560	A	N1-C6-N6	9.09	124.05	118.60
21	AA	1327	C	C4-C5-C6	-9.09	112.86	117.40
21	AA	1458	G	C5-C6-O6	-9.09	123.15	128.60
21	AA	1503	A	C8-N9-C4	-9.09	102.17	105.80
21	AA	128	G	N3-C2-N2	9.09	126.26	119.90
57	BB	97	C	N3-C4-C5	-9.09	118.27	121.90
57	BB	1429	G	N1-C6-O6	9.09	125.35	119.90
57	BB	602	A	N1-C2-N3	9.09	133.84	129.30
57	BB	928	A	O4'-C1'-N9	9.09	115.47	108.20
57	BB	1959	G	C5-C6-O6	-9.09	123.15	128.60
21	AA	1098	C	C6-N1-C2	9.08	123.93	120.30
21	AA	1300	G	C2-N3-C4	-9.08	107.36	111.90
57	BB	1	G	N1-C2-N3	-9.08	118.45	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	443	A	C5-C6-N6	-9.08	116.43	123.70
57	BB	1170	C	O4'-C1'-N1	9.08	115.47	108.20
57	BB	2750	A	C5-C6-N6	-9.08	116.43	123.70
42	BW	68	PHE	CB-CG-CD1	-9.08	114.44	120.80
57	BB	589	U	C5-C6-N1	9.08	127.24	122.70
57	BB	2181	U	C5-C6-N1	9.08	127.24	122.70
57	BB	2237	G	C5-C6-O6	-9.08	123.15	128.60
57	BB	231	A	O4'-C1'-N9	9.08	115.46	108.20
57	BB	1587	G	N9-C4-C5	-9.08	101.77	105.40
21	AA	583	A	C5-C6-N6	-9.08	116.44	123.70
21	AA	635	A	C6-C5-N7	-9.08	125.94	132.30
22	AY	9	A	C2-N3-C4	-9.08	106.06	110.60
57	BB	521	U	O4'-C1'-N1	9.08	115.46	108.20
57	BB	2825	G	C5-N7-C8	9.08	108.84	104.30
21	AA	45	G	O4'-C1'-N9	9.08	115.46	108.20
57	BB	576	U	N3-C2-O2	9.08	128.56	122.20
57	BB	1408	G	C5-C6-O6	-9.08	123.15	128.60
57	BB	2509	G	N1-C6-O6	9.08	125.35	119.90
57	BB	2901	C	N3-C4-C5	-9.08	118.27	121.90
57	BB	1127	A	O4'-C1'-N9	9.07	115.46	108.20
21	AA	927	G	C4-C5-N7	9.07	114.43	110.80
57	BB	1545	A	C5-C6-N6	-9.07	116.44	123.70
57	BB	2810	A	C6-C5-N7	-9.07	125.95	132.30
21	AA	262	A	N3-C4-C5	-9.07	120.45	126.80
21	AA	1468	A	C5-C6-N6	-9.07	116.44	123.70
57	BB	376	G	O4'-C1'-N9	9.07	115.46	108.20
57	BB	1720	U	C5-C6-N1	9.07	127.24	122.70
57	BB	1774	C	O4'-C1'-N1	9.07	115.46	108.20
21	AA	254	G	N9-C4-C5	9.07	109.03	105.40
21	AA	1119	C	C5-C4-N4	-9.07	113.85	120.20
26	AV	45	G	C5-C6-N1	-9.07	106.97	111.50
57	BB	2474	U	C2-N1-C1'	9.07	128.58	117.70
21	AA	561	U	C5-C4-O4	-9.07	120.46	125.90
21	AA	394	G	N1-C6-O6	9.07	125.34	119.90
21	AA	1114	C	O4'-C1'-N1	9.07	115.45	108.20
21	AA	1323	G	C5-C6-O6	-9.07	123.16	128.60
55	BG	162	ARG	NE-CZ-NH2	9.07	124.83	120.30
57	BB	1769	U	C4-C5-C6	9.07	125.14	119.70
57	BB	1836	C	N3-C4-N4	9.07	124.35	118.00
57	BB	1875	G	C6-C5-N7	-9.07	124.96	130.40
57	BB	1504	A	C6-N1-C2	9.07	124.04	118.60
57	BB	2198	A	N3-C4-C5	-9.07	120.45	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	832	G	C6-N1-C2	9.06	130.54	125.10
23	AW	38	A	P-O3'-C3'	9.06	130.58	119.70
57	BB	556	A	C5-C6-N6	-9.06	116.45	123.70
57	BB	1650	A	C5-C6-N1	-9.06	113.17	117.70
21	AA	250	A	N9-C4-C5	9.06	109.42	105.80
21	AA	1280	A	N7-C8-N9	-9.06	109.27	113.80
21	AA	1463	U	O4'-C1'-N1	9.06	115.45	108.20
57	BB	604	G	N7-C8-N9	-9.06	108.57	113.10
57	BB	1521	G	N3-C4-C5	-9.06	124.07	128.60
57	BB	1946	U	C6-N1-C2	9.06	126.44	121.00
57	BB	2373	G	N7-C8-N9	-9.06	108.57	113.10
57	BB	1113	U	O4'-C1'-N1	9.06	115.45	108.20
57	BB	1343	G	N1-C2-N3	-9.06	118.46	123.90
21	AA	38	G	N1-C2-N3	-9.06	118.47	123.90
26	AV	39	C	N3-C4-N4	9.06	124.34	118.00
21	AA	65	A	N1-C6-N6	9.06	124.03	118.60
21	AA	653	U	O4'-C1'-N1	9.06	115.45	108.20
21	AA	994	A	C4-C5-C6	9.06	121.53	117.00
21	AA	1011	C	N3-C4-C5	-9.06	118.28	121.90
57	BB	123	G	C6-C5-N7	-9.06	124.97	130.40
57	BB	244	A	C5-C6-N6	-9.06	116.45	123.70
57	BB	664	G	N1-C6-O6	9.06	125.33	119.90
57	BB	979	A	O4'-C1'-N9	9.06	115.45	108.20
57	BB	1493	C	C2-N1-C1'	9.06	128.76	118.80
57	BB	2111	U	P-O3'-C3'	-9.06	108.83	119.70
21	AA	40	C	N3-C4-N4	9.05	124.34	118.00
57	BB	214	G	C5-C6-N1	-9.05	106.97	111.50
57	BB	688	U	O4'-C1'-N1	9.06	115.44	108.20
57	BB	2397	G	C5-C6-N1	-9.06	106.97	111.50
21	AA	1408	A	C5-C6-N6	-9.05	116.46	123.70
57	BB	503	A	C5-C6-N6	-9.05	116.46	123.70
57	BB	1140	C	N3-C4-C5	-9.05	118.28	121.90
21	AA	589	U	C6-N1-C2	-9.05	115.57	121.00
21	AA	930	C	O4'-C1'-N1	9.05	115.44	108.20
21	AA	994	A	O4'-C1'-N9	9.05	115.44	108.20
21	AA	1456	A	N1-C6-N6	9.05	124.03	118.60
57	BB	489	G	C5-C6-O6	-9.05	123.17	128.60
57	BB	527	C	C6-N1-C1'	-9.05	109.94	120.80
57	BB	2538	C	N3-C4-N4	9.05	124.33	118.00
57	BB	2859	G	C5-C6-N1	-9.05	106.97	111.50
58	BA	114	C	N1-C2-O2	-9.05	113.47	118.90
57	BB	43	G	C2-N3-C4	9.05	116.42	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	74	A	C6-N1-C2	9.05	124.03	118.60
57	BB	944	C	O4'-C1'-N1	9.05	115.44	108.20
57	BB	2388	A	C8-N9-C4	-9.05	102.18	105.80
21	AA	41	G	C5-C6-O6	-9.04	123.17	128.60
21	AA	808	C	O4'-C1'-N1	9.04	115.44	108.20
57	BB	391	A	C4-C5-C6	9.05	121.52	117.00
57	BB	744	U	N3-C4-O4	9.04	125.73	119.40
57	BB	765	C	C6-N1-C2	-9.05	116.68	120.30
57	BB	1303	G	N7-C8-N9	-9.05	108.58	113.10
57	BB	1704	C	N3-C4-N4	9.04	124.33	118.00
57	BB	1925	C	O4'-C1'-N1	9.04	115.43	108.20
57	BB	1239	G	C6-C5-N7	-9.04	124.97	130.40
57	BB	2457	U	C5-C4-O4	9.04	131.32	125.90
57	BB	383	C	C2-N3-C4	9.04	124.42	119.90
57	BB	703	U	N1-C2-N3	-9.04	109.48	114.90
57	BB	2376	A	N1-C2-N3	9.04	133.82	129.30
21	AA	634	C	N3-C4-N4	9.04	124.33	118.00
21	AA	1347	G	C5-C6-N1	-9.04	106.98	111.50
57	BB	212	G	C5-N7-C8	9.04	108.82	104.30
57	BB	285	G	C5-C6-N1	-9.04	106.98	111.50
57	BB	721	A	N1-C6-N6	9.04	124.02	118.60
57	BB	1271	G	C5-C6-O6	-9.04	123.18	128.60
57	BB	2550	G	C5-C6-O6	-9.04	123.18	128.60
57	BB	356	G	N3-C2-N2	9.04	126.22	119.90
57	BB	2630	G	C5-C6-O6	-9.04	123.18	128.60
21	AA	654	G	N1-C6-O6	9.03	125.32	119.90
21	AA	776	G	N1-C2-N3	-9.03	118.48	123.90
21	AA	862	C	O4'-C1'-N1	9.03	115.43	108.20
21	AA	968	A	C8-N9-C4	-9.04	102.19	105.80
21	AA	1023	U	O4'-C1'-N1	9.04	115.43	108.20
21	AA	1083	U	N3-C4-C5	-9.04	109.18	114.60
23	AW	39	U	P-O3'-C3'	9.03	130.54	119.70
57	BB	1943	U	O4'-C1'-N1	9.04	115.43	108.20
21	AA	1036	A	C8-N9-C4	-9.03	102.19	105.80
57	BB	374	A	N7-C8-N9	9.03	118.32	113.80
57	BB	1194	A	O4'-C1'-N9	9.03	115.43	108.20
57	BB	2108	A	N1-C6-N6	9.03	124.02	118.60
57	BB	605	G	N1-C6-O6	9.03	125.32	119.90
57	BB	624	C	O4'-C1'-N1	9.03	115.43	108.20
57	BB	2090	A	C5-C6-N1	-9.03	113.18	117.70
58	BA	9	G	C5-C6-N1	-9.03	106.98	111.50
21	AA	90	C	O4'-C1'-N1	9.03	115.42	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1153	G	C5-C6-N1	-9.03	106.98	111.50
57	BB	1212	G	C4-C5-C6	9.03	124.22	118.80
57	BB	2189	U	C6-N1-C2	-9.03	115.58	121.00
57	BB	2843	G	N1-C2-N3	-9.03	118.48	123.90
21	AA	312	C	C2-N3-C4	9.03	124.41	119.90
22	AY	53	G	N7-C8-N9	-9.03	108.59	113.10
21	AA	714	G	C5-C6-O6	-9.03	123.19	128.60
21	AA	753	A	C5-N7-C8	9.03	108.41	103.90
57	BB	35	G	N1-C6-O6	9.03	125.31	119.90
57	BB	134	G	C8-N9-C4	-9.03	102.79	106.40
57	BB	2012	G	C2-N3-C4	9.03	116.41	111.90
58	BA	86	G	N1-C6-O6	9.03	125.31	119.90
21	AA	541	G	N1-C2-N3	-9.02	118.49	123.90
21	AA	1466	C	O4'-C1'-N1	9.02	115.42	108.20
57	BB	343	C	N3-C4-N4	9.02	124.32	118.00
21	AA	1280	A	C5-C6-N6	-9.02	116.48	123.70
22	AY	21	A	C4-C5-C6	9.02	121.51	117.00
57	BB	850	U	N1-C2-N3	9.02	120.31	114.90
57	BB	1064	C	P-O3'-C3'	9.02	130.53	119.70
57	BB	1273	U	N3-C4-C5	-9.02	109.19	114.60
57	BB	1369	G	O4'-C1'-N9	9.02	115.42	108.20
57	BB	2154	A	C5-N7-C8	9.02	108.41	103.90
57	BB	1387	A	C4-C5-C6	9.02	121.51	117.00
57	BB	1604	C	O4'-C1'-N1	9.02	115.42	108.20
57	BB	2121	G	N9-C4-C5	-9.02	101.79	105.40
21	AA	452	A	O4'-C1'-N9	9.02	115.42	108.20
57	BB	1177	G	N1-C6-O6	9.02	125.31	119.90
57	BB	2247	A	C5-C6-N1	-9.02	113.19	117.70
21	AA	935	A	N1-C6-N6	9.02	124.01	118.60
21	AA	1191	A	N1-C6-N6	9.02	124.01	118.60
26	AV	22	G	C3'-C2'-C1'	-9.02	94.29	101.50
57	BB	561	G	N3-C2-N2	9.02	126.21	119.90
57	BB	1331	G	C8-N9-C4	-9.02	102.79	106.40
57	BB	2102	G	N1-C2-N3	-9.02	118.49	123.90
57	BB	2377	A	C4-C5-C6	9.02	121.51	117.00
8	AQ	26	ARG	NE-CZ-NH2	-9.02	115.79	120.30
21	AA	601	G	C5-C6-O6	-9.02	123.19	128.60
41	BV	93	ARG	NE-CZ-NH1	9.02	124.81	120.30
57	BB	1446	C	N3-C4-N4	9.02	124.31	118.00
57	BB	1592	C	C5-C6-N1	9.02	125.51	121.00
57	BB	1604	C	C4-C5-C6	9.02	121.91	117.40
57	BB	2354	C	N1-C2-O2	9.02	124.31	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	150	U	O4'-C1'-N1	9.01	115.41	108.20
21	AA	855	U	C5-C4-O4	-9.01	120.49	125.90
57	BB	55	G	N3-C4-C5	-9.01	124.09	128.60
57	BB	485	C	O4'-C1'-N1	9.01	115.41	108.20
21	AA	409	U	C6-N1-C2	9.01	126.41	121.00
21	AA	527	G	N1-C6-O6	9.01	125.31	119.90
57	BB	308	G	N3-C2-N2	9.01	126.21	119.90
57	BB	655	A	N1-C2-N3	-9.01	124.79	129.30
57	BB	780	G	C5-C6-O6	-9.01	123.19	128.60
57	BB	860	U	C5-C6-N1	9.01	127.21	122.70
57	BB	866	A	N1-C2-N3	9.01	133.81	129.30
57	BB	2146	C	N3-C4-N4	9.01	124.31	118.00
57	BB	2683	C	N3-C4-C5	-9.01	118.30	121.90
21	AA	389	A	C5-C6-N1	-9.01	113.19	117.70
21	AA	658	C	O4'-C1'-N1	9.01	115.41	108.20
57	BB	2581	G	C5-C6-O6	-9.01	123.19	128.60
21	AA	295	C	C2-N3-C4	9.01	124.41	119.90
21	AA	1363	A	C8-N9-C4	-9.01	102.20	105.80
57	BB	1208	C	N3-C4-C5	-9.01	118.30	121.90
57	BB	2541	A	C4-C5-C6	9.01	121.50	117.00
21	AA	399	G	C5-C6-O6	-9.01	123.19	128.60
21	AA	647	C	O4'-C1'-N1	9.01	115.41	108.20
57	BB	543	G	C5-C6-O6	-9.01	123.19	128.60
57	BB	700	G	N1-C6-O6	9.01	125.30	119.90
57	BB	2076	U	N3-C4-O4	9.01	125.70	119.40
21	AA	238	A	O4'-C1'-N9	9.01	115.40	108.20
21	AA	491	G	P-O3'-C3'	-9.01	108.89	119.70
21	AA	653	U	N3-C4-O4	9.01	125.70	119.40
57	BB	2012	G	O4'-C1'-N9	9.01	115.41	108.20
26	AV	18	G	N9-C4-C5	-9.01	101.80	105.40
57	BB	1867	G	N3-C2-N2	9.01	126.20	119.90
57	BB	2361	G	N1-C6-O6	9.01	125.30	119.90
58	BA	102	G	C4-C5-C6	9.01	124.20	118.80
22	AY	47	U	C4-C5-C6	-9.00	114.30	119.70
54	BF	172	PHE	CB-CG-CD2	-9.00	114.50	120.80
21	AA	685	G	C6-C5-N7	-9.00	125.00	130.40
23	AW	23	A	C5-N7-C8	9.00	108.40	103.90
57	BB	1521	G	N1-C6-O6	9.00	125.30	119.90
57	BB	2835	A	O4'-C1'-N9	9.00	115.40	108.20
21	AA	97	G	C5-C6-N1	-9.00	107.00	111.50
21	AA	1229	A	O4'-C1'-N9	9.00	115.40	108.20
57	BB	857	G	C6-N1-C2	9.00	130.50	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1541	C	N3-C4-C5	-9.00	118.30	121.90
57	BB	2224	G	C5-N7-C8	-9.00	99.80	104.30
21	AA	117	G	N1-C6-O6	9.00	125.30	119.90
21	AA	848	C	O4'-C1'-N1	9.00	115.40	108.20
57	BB	1001	A	C8-N9-C4	-9.00	102.20	105.80
21	AA	752	G	C5-N7-C8	9.00	108.80	104.30
21	AA	966	G	N3-C2-N2	9.00	126.20	119.90
57	BB	1265	A	C4-C5-C6	9.00	121.50	117.00
57	BB	1418	G	C4-C5-N7	9.00	114.40	110.80
22	AY	61	C	N3-C4-C5	-9.00	118.30	121.90
57	BB	2381	A	C5-C6-N1	-9.00	113.20	117.70
57	BB	2607	G	O4'-C1'-N9	9.00	115.40	108.20
57	BB	2693	G	C5-C6-O6	-9.00	123.20	128.60
57	BB	2806	C	N3-C4-C5	-9.00	118.30	121.90
58	BA	20	G	C3'-C2'-C1'	-9.00	94.30	101.50
21	AA	28	A	N9-C4-C5	8.99	109.40	105.80
21	AA	142	G	N1-C6-O6	8.99	125.30	119.90
40	BU	94	PHE	CB-CG-CD1	-8.99	114.50	120.80
21	AA	346	G	C6-C5-N7	-8.99	125.00	130.40
21	AA	941	G	C2-N3-C4	8.99	116.40	111.90
57	BB	1140	C	O4'-C1'-N1	8.99	115.40	108.20
57	BB	1226	A	C5-C6-N6	-8.99	116.50	123.70
57	BB	1237	A	C5-C6-N6	-8.99	116.50	123.70
57	BB	1900	A	C4-C5-C6	8.99	121.50	117.00
57	BB	2593	U	O4'-C1'-N1	8.99	115.40	108.20
57	BB	1338	G	C6-C5-N7	-8.99	125.00	130.40
57	BB	2510	C	C6-N1-C2	-8.99	116.70	120.30
57	BB	2769	U	N1-C2-N3	-8.99	109.50	114.90
21	AA	626	G	N3-C2-N2	8.99	126.19	119.90
57	BB	314	C	N3-C4-C5	-8.99	118.30	121.90
57	BB	388	G	N3-C2-N2	8.99	126.19	119.90
57	BB	493	G	C6-C5-N7	-8.99	125.01	130.40
57	BB	774	G	N3-C4-C5	8.99	133.09	128.60
57	BB	1155	A	O4'-C1'-N9	8.99	115.39	108.20
57	BB	1548	A	C5-C6-N1	-8.99	113.21	117.70
57	BB	1587	G	C5-N7-C8	-8.99	99.81	104.30
57	BB	1873	G	C5-C6-O6	-8.99	123.21	128.60
57	BB	2182	U	P-O3'-C3'	8.99	130.49	119.70
57	BB	2533	U	N3-C4-O4	8.99	125.69	119.40
21	AA	246	A	N1-C6-N6	8.99	123.99	118.60
57	BB	2618	G	N3-C2-N2	8.99	126.19	119.90
21	AA	1268	G	N1-C6-O6	8.99	125.29	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	110	G	N1-C6-O6	8.99	125.29	119.90
57	BB	507	A	O4'-C1'-N9	8.99	115.39	108.20
57	BB	923	G	C8-N9-C4	8.99	110.00	106.40
57	BB	2481	G	N1-C2-N3	-8.98	118.51	123.90
23	AW	63	G	C5-N7-C8	8.98	108.79	104.30
57	BB	372	G	P-O3'-C3'	8.98	130.48	119.70
57	BB	1508	A	N7-C8-N9	8.98	118.29	113.80
57	BB	1799	G	C5-C6-O6	-8.98	123.21	128.60
26	AV	32	C	O4'-C1'-N1	8.98	115.39	108.20
57	BB	1783	A	C6-N1-C2	8.98	123.99	118.60
21	AA	113	G	C5-C6-O6	-8.98	123.21	128.60
22	AY	63	C	O4'-C1'-N1	8.98	115.38	108.20
44	BY	30	MET	CG-SD-CE	-8.98	85.83	100.20
57	BB	2186	G	C6-C5-N7	-8.98	125.01	130.40
21	AA	767	A	C8-N9-C4	-8.98	102.21	105.80
57	BB	104	A	C5-C6-N6	-8.98	116.52	123.70
57	BB	150	U	O4'-C1'-N1	8.98	115.38	108.20
57	BB	609	A	N1-C6-N6	8.98	123.99	118.60
57	BB	2024	G	N9-C4-C5	-8.98	101.81	105.40
57	BB	2566	A	C5-N7-C8	8.98	108.39	103.90
21	AA	1020	G	N1-C2-N3	-8.98	118.52	123.90
57	BB	102	U	C5-C4-O4	-8.98	120.52	125.90
57	BB	1464	G	C4-C5-C6	8.98	124.19	118.80
57	BB	1661	G	O4'-C4'-C3'	-8.98	95.02	104.00
57	BB	1791	A	N1-C2-N3	8.98	133.79	129.30
57	BB	2083	G	C5-N7-C8	-8.98	99.81	104.30
57	BB	2299	U	O4'-C1'-N1	8.98	115.38	108.20
57	BB	425	G	C4-C5-N7	8.97	114.39	110.80
57	BB	1315	C	N3-C4-N4	8.97	124.28	118.00
57	BB	244	A	N9-C4-C5	8.97	109.39	105.80
57	BB	1090	A	C4-C5-C6	8.97	121.49	117.00
21	AA	771	G	C6-C5-N7	-8.97	125.02	130.40
21	AA	828	U	O4'-C1'-N1	8.97	115.38	108.20
21	AA	956	U	C2-N3-C4	8.97	132.38	127.00
21	AA	1097	C	N3-C4-C5	-8.97	118.31	121.90
21	AA	1262	C	N1-C2-N3	-8.97	112.92	119.20
26	AV	61	C	C2-N3-C4	8.97	124.39	119.90
57	BB	137	U	O4'-C1'-N1	8.97	115.38	108.20
57	BB	524	G	C5-C6-O6	-8.97	123.22	128.60
57	BB	761	A	C4-C5-C6	8.97	121.48	117.00
57	BB	1556	C	N3-C4-C5	-8.97	118.31	121.90
57	BB	935	C	C2-N3-C4	8.97	124.39	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1071	G	N1-C6-O6	8.97	125.28	119.90
57	BB	1570	A	O4'-C1'-N9	8.97	115.38	108.20
23	AW	72	C	O4'-C1'-N1	8.97	115.38	108.20
57	BB	420	C	C4-C5-C6	8.97	121.88	117.40
21	AA	187	G	O4'-C1'-N9	8.97	115.37	108.20
21	AA	242	G	C5-C6-O6	-8.97	123.22	128.60
21	AA	392	C	N3-C4-N4	8.97	124.28	118.00
57	BB	721	A	C2-N3-C4	8.97	115.08	110.60
57	BB	1591	A	C5-C6-N6	-8.97	116.53	123.70
57	BB	2733	A	C5-N7-C8	8.97	108.39	103.90
57	BB	2771	C	C4-C5-C6	8.97	121.88	117.40
25	AZ	323	PHE	CB-CG-CD1	-8.96	114.52	120.80
57	BB	700	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	1386	C	N3-C4-N4	8.96	124.28	118.00
57	BB	2401	U	N1-C2-O2	-8.96	116.53	122.80
20	AI	40	ARG	NE-CZ-NH1	8.96	124.78	120.30
20	AI	98	ARG	NE-CZ-NH1	8.96	124.78	120.30
21	AA	633	G	C5-C6-O6	-8.96	123.22	128.60
21	AA	1489	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	1072	C	C6-N1-C2	8.96	123.89	120.30
57	BB	2558	C	O4'-C1'-N1	8.96	115.37	108.20
21	AA	1190	G	O4'-C1'-N9	8.96	115.37	108.20
57	BB	337	C	C2-N3-C4	8.96	124.38	119.90
21	AA	592	G	C8-N9-C4	-8.96	102.82	106.40
57	BB	387	U	P-O3'-C3'	8.96	130.45	119.70
57	BB	427	U	N1-C2-O2	8.96	129.07	122.80
57	BB	502	A	C4-C5-C6	8.96	121.48	117.00
57	BB	866	A	C8-N9-C4	-8.96	102.22	105.80
57	BB	1464	G	N3-C4-C5	-8.96	124.12	128.60
57	BB	731	C	O4'-C1'-N1	8.96	115.37	108.20
57	BB	1084	A	O4'-C1'-N9	8.96	115.37	108.20
57	BB	1425	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	2751	G	C5-C6-O6	-8.96	123.23	128.60
57	BB	2762	C	N3-C4-N4	8.96	124.27	118.00
57	BB	2900	A	O4'-C1'-N9	8.96	115.37	108.20
21	AA	318	G	C5-C6-O6	-8.96	123.23	128.60
21	AA	510	A	C5-C6-N6	-8.96	116.53	123.70
21	AA	1397	C	O4'-C1'-N1	8.96	115.36	108.20
21	AA	1404	C	C5-C6-N1	8.96	125.48	121.00
57	BB	1663	G	N1-C6-O6	8.96	125.27	119.90
31	BL	132	ARG	NE-CZ-NH1	-8.95	115.82	120.30
57	BB	749	A	N1-C6-N6	8.95	123.97	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1103	A	P-O3'-C3'	8.95	130.44	119.70
57	BB	1276	A	C5-C6-N6	-8.96	116.54	123.70
57	BB	1389	G	N1-C2-N2	8.95	124.26	116.20
21	AA	109	A	N9-C4-C5	-8.95	102.22	105.80
21	AA	1273	C	O4'-C1'-N1	8.95	115.36	108.20
21	AA	1337	G	N1-C2-N3	-8.95	118.53	123.90
57	BB	1370	C	C6-N1-C2	-8.95	116.72	120.30
57	BB	517	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	557	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	572	A	C5-N7-C8	8.95	108.38	103.90
57	BB	2682	A	N1-C6-N6	8.95	123.97	118.60
21	AA	289	G	N1-C6-O6	8.95	125.27	119.90
21	AA	683	G	C5-N7-C8	8.95	108.78	104.30
21	AA	1079	G	C6-C5-N7	-8.95	125.03	130.40
26	AV	53	G	C4-C5-N7	8.95	114.38	110.80
57	BB	564	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	1787	A	C4-C5-N7	-8.95	106.23	110.70
21	AA	546	A	O4'-C1'-N9	8.95	115.36	108.20
21	AA	1378	C	O4'-C1'-N1	8.95	115.36	108.20
57	BB	220	G	C5-C6-O6	-8.95	123.23	128.60
57	BB	359	G	C4-C5-N7	8.95	114.38	110.80
57	BB	1597	A	C8-N9-C4	-8.95	102.22	105.80
57	BB	2607	G	C5-N7-C8	-8.95	99.83	104.30
21	AA	1260	G	N1-C2-N3	-8.94	118.53	123.90
57	BB	747	U	O4'-C1'-N1	8.94	115.36	108.20
57	BB	1409	U	N3-C4-O4	8.95	125.66	119.40
57	BB	1702	G	C5-C6-O6	-8.95	123.23	128.60
57	BB	244	A	C8-N9-C4	-8.94	102.22	105.80
21	AA	16	A	C5-C6-N1	-8.94	113.23	117.70
21	AA	225	C	N3-C4-N4	8.94	124.26	118.00
21	AA	597	G	N7-C8-N9	8.94	117.57	113.10
21	AA	1280	A	C5-N7-C8	8.94	108.37	103.90
57	BB	234	U	O4'-C1'-N1	8.94	115.35	108.20
57	BB	838	C	C2-N3-C4	8.94	124.37	119.90
57	BB	1004	U	N3-C4-O4	8.94	125.66	119.40
57	BB	1250	G	O4'-C1'-N9	8.94	115.35	108.20
57	BB	2407	A	C5-N7-C8	8.94	108.37	103.90
58	BA	82	U	O4'-C1'-N1	8.94	115.35	108.20
21	AA	693	G	N1-C2-N3	-8.94	118.54	123.90
57	BB	186	G	O4'-C1'-N9	8.94	115.35	108.20
21	AA	632	U	N3-C2-O2	8.94	128.46	122.20
21	AA	831	A	O4'-C1'-N9	8.94	115.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1517	G	C8-N9-C4	-8.94	102.82	106.40
57	BB	741	U	C4-C5-C6	-8.94	114.34	119.70
21	AA	1084	G	N1-C6-O6	8.94	125.26	119.90
22	AY	40	C	C2-N1-C1'	-8.94	108.97	118.80
57	BB	901	C	P-O5'-C5'	8.94	135.20	120.90
57	BB	1127	A	N1-C6-N6	8.94	123.96	118.60
21	AA	103	U	O4'-C1'-N1	8.94	115.35	108.20
21	AA	108	G	O4'-C1'-N9	8.94	115.35	108.20
21	AA	401	C	N3-C4-N4	8.94	124.25	118.00
21	AA	663	A	C5-C6-N6	-8.94	116.55	123.70
57	BB	21	A	C5-C6-N1	-8.94	113.23	117.70
57	BB	801	G	C5-N7-C8	8.94	108.77	104.30
57	BB	1537	G	O4'-C1'-N9	8.94	115.35	108.20
57	BB	2234	G	C6-C5-N7	-8.94	125.04	130.40
10	AS	9	PHE	CB-CG-CD2	-8.93	114.55	120.80
57	BB	1786	A	C5-C6-N1	-8.93	113.23	117.70
21	AA	687	A	N9-C4-C5	8.93	109.37	105.80
57	BB	1505	A	N1-C2-N3	8.93	133.77	129.30
57	BB	2266	A	C4-C5-N7	-8.93	106.23	110.70
57	BB	2755	C	N1-C2-O2	-8.93	113.54	118.90
15	AD	134	TYR	CG-CD1-CE1	-8.93	114.16	121.30
57	BB	670	A	C4-C5-N7	-8.93	106.23	110.70
57	BB	701	G	N1-C6-O6	8.93	125.26	119.90
57	BB	2324	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	2690	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	401	A	O4'-C1'-N9	8.93	115.34	108.20
57	BB	2251	G	N1-C6-O6	8.93	125.26	119.90
57	BB	2341	G	N3-C4-C5	8.93	133.06	128.60
21	AA	19	A	N1-C6-N6	8.93	123.96	118.60
21	AA	994	A	C4-C5-N7	-8.93	106.24	110.70
21	AA	662	U	C3'-C2'-C1'	-8.93	94.36	101.50
21	AA	1004	A	C8-N9-C4	-8.93	102.23	105.80
57	BB	746	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	882	G	C6-N1-C2	8.93	130.46	125.10
21	AA	132	C	C2-N3-C4	8.92	124.36	119.90
21	AA	244	U	N3-C4-O4	8.92	125.65	119.40
21	AA	790	A	C5-C6-N1	-8.92	113.24	117.70
22	AY	73	A	N1-C2-N3	8.92	133.76	129.30
57	BB	832	U	O4'-C1'-N1	8.92	115.34	108.20
57	BB	1319	C	O4'-C1'-N1	8.92	115.34	108.20
57	BB	415	A	O4'-C1'-N9	8.92	115.34	108.20
57	BB	1003	G	N1-C6-O6	8.92	125.25	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1255	U	O4'-C1'-N1	8.92	115.34	108.20
57	BB	2724	U	C5-C4-O4	-8.92	120.55	125.90
57	BB	2840	C	O4'-C1'-N1	8.92	115.34	108.20
51	B4	4	ARG	NE-CZ-NH2	-8.92	115.84	120.30
57	BB	1032	A	O4'-C1'-N9	8.92	115.33	108.20
21	AA	431	A	C6-N1-C2	-8.92	113.25	118.60
21	AA	668	G	N1-C6-O6	8.92	125.25	119.90
21	AA	1275	A	C5-C6-N6	-8.92	116.57	123.70
21	AA	1290	G	C5-C6-N1	-8.92	107.04	111.50
21	AA	1355	G	C8-N9-C4	-8.92	102.83	106.40
57	BB	987	C	N3-C4-N4	8.92	124.24	118.00
57	BB	2271	G	N3-C2-N2	8.92	126.14	119.90
57	BB	2537	U	N3-C2-O2	8.92	128.44	122.20
21	AA	794	A	O4'-C1'-N9	8.91	115.33	108.20
21	AA	1279	G	N7-C8-N9	8.91	117.56	113.10
21	AA	1036	A	C4-C5-C6	8.91	121.46	117.00
22	AY	46	G	C4-C5-N7	8.91	114.37	110.80
57	BB	462	C	N3-C4-N4	8.91	124.24	118.00
57	BB	2509	G	N9-C4-C5	-8.91	101.83	105.40
57	BB	2607	G	N7-C8-N9	8.91	117.56	113.10
57	BB	2892	G	C5-C6-O6	-8.91	123.25	128.60
57	BB	1139	G	C2-N3-C4	-8.91	107.44	111.90
57	BB	1152	C	O4'-C1'-N1	8.91	115.33	108.20
57	BB	1431	A	N1-C6-N6	8.91	123.95	118.60
57	BB	1854	A	C4-C5-C6	8.91	121.45	117.00
21	AA	606	G	C5-C6-N1	-8.91	107.05	111.50
57	BB	2142	A	C5-C6-N6	-8.91	116.57	123.70
58	BA	20	G	O4'-C1'-N9	8.91	115.33	108.20
21	AA	243	A	C5-C6-N6	-8.91	116.57	123.70
21	AA	253	A	N7-C8-N9	-8.91	109.35	113.80
21	AA	389	A	P-O3'-C3'	8.91	130.39	119.70
21	AA	397	A	N1-C6-N6	8.91	123.94	118.60
21	AA	727	G	N1-C6-O6	8.91	125.24	119.90
57	BB	1727	C	C5-C4-N4	-8.91	113.96	120.20
26	AV	4	G	O4'-C1'-N9	8.91	115.33	108.20
57	BB	1093	G	N1-C6-O6	8.91	125.24	119.90
57	BB	2310	C	O4'-C1'-N1	8.91	115.33	108.20
57	BB	608	A	N1-C2-N3	8.90	133.75	129.30
57	BB	972	A	C5-C6-N1	-8.90	113.25	117.70
57	BB	1443	U	O4'-C1'-N1	8.90	115.32	108.20
57	BB	2454	G	N9-C4-C5	-8.90	101.84	105.40
21	AA	183	C	O4'-C1'-N1	8.90	115.32	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1513	A	C6-C5-N7	-8.90	126.07	132.30
57	BB	1404	C	N3-C4-N4	8.90	124.23	118.00
57	BB	152	A	C5-C6-N1	-8.90	113.25	117.70
57	BB	197	A	C5-C6-N6	-8.90	116.58	123.70
57	BB	347	A	C4-C5-N7	-8.90	106.25	110.70
57	BB	1904	G	N1-C2-N3	-8.90	118.56	123.90
57	BB	2383	G	C4-C5-N7	-8.90	107.24	110.80
21	AA	152	A	N1-C6-N6	8.90	123.94	118.60
57	BB	1232	G	O4'-C1'-N9	8.90	115.32	108.20
21	AA	34	C	C2-N3-C4	-8.90	115.45	119.90
21	AA	975	A	C4-C5-C6	8.90	121.45	117.00
33	BN	29	VAL	CG1-CB-CG2	8.90	125.14	110.90
57	BB	337	C	O4'-C1'-N1	8.90	115.32	108.20
57	BB	1702	G	C4-C5-N7	-8.90	107.24	110.80
57	BB	55	G	O4'-C1'-N9	8.90	115.32	108.20
57	BB	608	A	C2-N3-C4	-8.90	106.15	110.60
57	BB	975	A	N9-C4-C5	8.90	109.36	105.80
57	BB	1235	G	N9-C4-C5	8.90	108.96	105.40
21	AA	259	G	C5-C6-O6	-8.89	123.26	128.60
21	AA	1439	G	O4'-C1'-N9	8.89	115.32	108.20
57	BB	273	G	C5-C6-O6	-8.89	123.26	128.60
57	BB	177	G	C6-N1-C2	8.89	130.44	125.10
57	BB	386	G	C6-C5-N7	-8.89	125.06	130.40
57	BB	1353	A	C5-C6-N6	-8.89	116.58	123.70
57	BB	1645	G	P-O3'-C3'	8.89	130.37	119.70
57	BB	2313	C	C5-C6-N1	8.89	125.45	121.00
57	BB	1652	A	O4'-C1'-N9	8.89	115.31	108.20
21	AA	963	G	O4'-C1'-N9	8.89	115.31	108.20
26	AV	18	G	C1'-O4'-C4'	8.89	117.01	109.90
57	BB	639	U	N3-C4-O4	8.89	125.62	119.40
58	BA	54	G	C5-C6-N1	-8.89	107.05	111.50
21	AA	1236	A	C5-C6-N6	-8.89	116.59	123.70
23	AW	63	G	C6-N1-C2	8.89	130.43	125.10
21	AA	793	U	N3-C2-O2	-8.89	115.98	122.20
57	BB	249	C	O4'-C1'-N1	8.89	115.31	108.20
57	BB	353	C	C5-C6-N1	8.89	125.44	121.00
57	BB	498	G	C5-C6-O6	-8.89	123.27	128.60
57	BB	970	U	C5-C6-N1	8.89	127.14	122.70
57	BB	1572	A	C5-C6-N6	-8.89	116.59	123.70
10	AS	79	TYR	CG-CD1-CE1	-8.89	114.19	121.30
21	AA	327	A	C4-C5-C6	8.89	121.44	117.00
21	AA	946	A	C6-N1-C2	8.89	123.93	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	21	G	P-O3'-C3'	-8.88	109.04	119.70
21	AA	348	G	C5-C6-O6	-8.88	123.27	128.60
21	AA	1516	G	C5-C6-O6	-8.89	123.27	128.60
57	BB	1318	U	C5'-C4'-C3'	-8.89	101.78	116.00
57	BB	2242	G	N1-C6-O6	8.88	125.23	119.90
57	BB	2357	G	C2-N3-C4	-8.88	107.46	111.90
21	AA	471	U	O4'-C4'-C3'	-8.88	95.12	104.00
21	AA	520	A	N9-C4-C5	8.88	109.35	105.80
57	BB	946	C	O4'-C1'-N1	8.88	115.31	108.20
57	BB	1558	C	N3-C4-C5	-8.88	118.35	121.90
57	BB	2195	U	N1-C2-N3	-8.88	109.57	114.90
57	BB	2362	C	C2-N3-C4	8.88	124.34	119.90
57	BB	2757	A	C6-C5-N7	-8.88	126.08	132.30
57	BB	2790	U	O4'-C1'-N1	8.88	115.31	108.20
58	BA	34	A	O4'-C1'-N9	8.88	115.31	108.20
21	AA	600	A	N1-C6-N6	8.88	123.93	118.60
37	BR	2	TYR	CB-CG-CD1	8.88	126.33	121.00
57	BB	1223	G	C8-N9-C4	-8.88	102.85	106.40
21	AA	41	G	N3-C4-C5	8.88	133.04	128.60
21	AA	549	C	C4-C5-C6	8.88	121.84	117.40
21	AA	622	A	C4-C5-C6	8.88	121.44	117.00
57	BB	79	C	N3-C4-C5	-8.88	118.35	121.90
57	BB	182	A	C5-C6-N1	-8.88	113.26	117.70
57	BB	2057	G	C8-N9-C4	-8.88	102.85	106.40
57	BB	1967	C	O4'-C1'-N1	8.88	115.30	108.20
57	BB	1029	A	P-O5'-C5'	8.88	135.10	120.90
21	AA	533	A	C5-N7-C8	8.87	108.34	103.90
57	BB	602	A	C5-C6-N6	-8.88	116.60	123.70
57	BB	849	A	C5-C6-N1	-8.88	113.26	117.70
57	BB	1336	A	C2-N3-C4	-8.87	106.16	110.60
57	BB	1869	G	C4-C5-N7	-8.87	107.25	110.80
57	BB	1896	G	O4'-C1'-N9	8.88	115.30	108.20
57	BB	2490	G	N1-C2-N3	-8.88	118.58	123.90
21	AA	672	U	C5-C6-N1	8.87	127.14	122.70
21	AA	1422	G	N3-C2-N2	8.87	126.11	119.90
57	BB	883	G	C4-C5-N7	-8.87	107.25	110.80
57	BB	1536	C	N3-C4-C5	-8.87	118.35	121.90
57	BB	2797	U	N3-C4-O4	8.87	125.61	119.40
58	BA	103	U	O4'-C1'-N1	8.87	115.30	108.20
57	BB	1900	A	C5-N7-C8	8.87	108.33	103.90
21	AA	344	A	C5-C6-N1	-8.87	113.27	117.70
21	AA	705	G	N1-C2-N3	-8.87	118.58	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1227	A	N9-C4-C5	8.87	109.35	105.80
57	BB	476	G	C5-C6-O6	-8.87	123.28	128.60
57	BB	1535	A	N9-C4-C5	8.87	109.35	105.80
57	BB	820	A	C8-N9-C4	-8.87	102.25	105.80
57	BB	1076	C	O4'-C1'-N1	8.87	115.30	108.20
57	BB	1250	G	C5-C6-N1	-8.87	107.07	111.50
21	AA	9	G	O4'-C1'-N9	8.87	115.29	108.20
21	AA	836	G	C8-N9-C4	-8.87	102.85	106.40
21	AA	1357	A	C4-C5-C6	8.87	121.43	117.00
57	BB	1280	G	C5-C6-O6	-8.86	123.28	128.60
57	BB	2592	G	N1-C2-N3	-8.86	118.58	123.90
21	AA	346	G	N1-C6-O6	8.86	125.22	119.90
21	AA	761	G	C6-C5-N7	-8.86	125.08	130.40
21	AA	1302	C	O4'-C1'-N1	8.86	115.29	108.20
23	AW	4	C	C6-N1-C2	-8.86	116.75	120.30
26	AV	74	C	O4'-C1'-N1	8.86	115.29	108.20
57	BB	935	C	N3-C4-N4	8.86	124.20	118.00
57	BB	1482	G	C4-C5-N7	-8.86	107.25	110.80
57	BB	2314	A	C5-C6-N6	-8.86	116.61	123.70
57	BB	1279	G	N1-C6-O6	8.86	125.22	119.90
21	AA	48	C	O4'-C1'-N1	8.86	115.29	108.20
21	AA	111	G	N1-C6-O6	8.86	125.22	119.90
21	AA	128	G	N1-C2-N3	-8.86	118.58	123.90
21	AA	607	A	C6-C5-N7	-8.86	126.10	132.30
24	AX	16	A	C6-C5-N7	-8.86	126.10	132.30
57	BB	1730	C	N3-C4-C5	-8.86	118.36	121.90
57	BB	2860	A	C6-C5-N7	-8.86	126.10	132.30
21	AA	870	U	C5-C4-O4	-8.86	120.59	125.90
57	BB	409	G	O4'-C1'-N9	8.86	115.28	108.20
57	BB	1107	G	N3-C4-C5	-8.86	124.17	128.60
57	BB	1892	C	O4'-C1'-N1	8.86	115.28	108.20
21	AA	646	G	C6-N1-C2	8.86	130.41	125.10
44	BY	23	ARG	NE-CZ-NH1	8.86	124.73	120.30
57	BB	413	C	C2-N3-C4	8.86	124.33	119.90
57	BB	1498	C	N3-C4-N4	8.86	124.20	118.00
57	BB	2184	A	N1-C6-N6	8.86	123.91	118.60
57	BB	2211	A	C4-C5-C6	8.86	121.43	117.00
58	BA	112	G	N1-C2-N3	-8.86	118.59	123.90
57	BB	2013	A	C5-C6-N1	-8.85	113.27	117.70
21	AA	640	A	C6-N1-C2	-8.85	113.29	118.60
21	AA	867	G	C5-C6-N1	-8.85	107.07	111.50
23	AW	19	G	N1-C6-O6	8.85	125.21	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	164	C	C5-C6-N1	8.85	125.43	121.00
57	BB	520	G	N1-C6-O6	8.85	125.21	119.90
57	BB	685	A	C4-C5-C6	8.85	121.43	117.00
57	BB	940	G	C6-N1-C2	-8.85	119.79	125.10
57	BB	957	C	C2-N3-C4	8.85	124.33	119.90
57	BB	2076	U	O4'-C1'-N1	8.85	115.28	108.20
21	AA	1395	C	C2-N3-C4	8.85	124.33	119.90
57	BB	1190	G	O4'-C1'-N9	8.85	115.28	108.20
57	BB	1509	A	N9-C4-C5	8.85	109.34	105.80
57	BB	2799	A	C6-N1-C2	8.85	123.91	118.60
21	AA	1100	C	O4'-C1'-N1	8.85	115.28	108.20
21	AA	1124	G	C6-N1-C2	-8.85	119.79	125.10
57	BB	574	A	N1-C2-N3	8.85	133.72	129.30
57	BB	2642	G	N1-C2-N3	-8.85	118.59	123.90
21	AA	90	C	C5-C4-N4	-8.85	114.01	120.20
21	AA	603	U	C2-N3-C4	-8.85	121.69	127.00
21	AA	1160	G	O4'-C1'-N9	8.85	115.28	108.20
26	AV	38	A	C5-C6-N1	-8.85	113.28	117.70
57	BB	1024	G	C6-C5-N7	-8.85	125.09	130.40
21	AA	468	A	C5-C6-N1	-8.84	113.28	117.70
21	AA	763	G	N3-C4-C5	8.84	133.02	128.60
57	BB	1552	A	P-O3'-C3'	-8.84	109.09	119.70
21	AA	1033	G	N7-C8-N9	8.84	117.52	113.10
22	AY	35	A	C5-C6-N1	-8.84	113.28	117.70
57	BB	1293	C	N3-C4-N4	8.84	124.19	118.00
52	BD	129	THR	CA-CB-CG2	-8.84	100.02	112.40
57	BB	1225	G	O4'-C1'-N9	8.84	115.27	108.20
21	AA	6	G	O4'-C1'-N9	8.84	115.27	108.20
21	AA	85	U	C5-C6-N1	8.84	127.12	122.70
21	AA	806	C	C6-N1-C2	-8.84	116.76	120.30
21	AA	906	A	C8-N9-C4	8.84	109.34	105.80
57	BB	1933	G	C5-C6-O6	-8.84	123.30	128.60
57	BB	2607	G	C8-N9-C4	-8.84	102.86	106.40
26	AV	76	A	N1-C6-N6	8.84	123.90	118.60
57	BB	1456	G	N9-C4-C5	-8.84	101.86	105.40
57	BB	2659	G	N9-C4-C5	-8.84	101.86	105.40
57	BB	112	U	O4'-C1'-N1	8.84	115.27	108.20
57	BB	1804	C	N3-C4-N4	8.84	124.19	118.00
57	BB	1821	A	N9-C4-C5	8.84	109.33	105.80
21	AA	1416	G	N9-C4-C5	8.84	108.93	105.40
57	BB	2406	A	N9-C4-C5	-8.84	102.27	105.80
57	BB	2487	G	N7-C8-N9	8.84	117.52	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2632	A	O4'-C1'-N9	8.84	115.27	108.20
57	BB	330	A	C5-N7-C8	8.84	108.32	103.90
57	BB	638	G	N3-C4-C5	-8.84	124.18	128.60
57	BB	1139	G	N1-C6-O6	8.84	125.20	119.90
57	BB	1516	G	N1-C6-O6	8.83	125.20	119.90
21	AA	612	C	C5-C4-N4	-8.83	114.02	120.20
21	AA	753	A	C5-C6-N6	-8.83	116.63	123.70
21	AA	1289	A	N9-C4-C5	8.83	109.33	105.80
21	AA	1351	U	O4'-C1'-N1	8.83	115.27	108.20
57	BB	370	G	N1-C6-O6	8.83	125.20	119.90
57	BB	2340	A	N9-C4-C5	-8.83	102.27	105.80
21	AA	24	U	O4'-C1'-N1	8.83	115.26	108.20
21	AA	223	A	N9-C4-C5	8.83	109.33	105.80
24	AX	16	A	P-O3'-C3'	8.83	130.30	119.70
57	BB	75	G	N3-C2-N2	8.83	126.08	119.90
57	BB	1658	C	O4'-C1'-N1	8.83	115.27	108.20
57	BB	708	G	N1-C6-O6	8.83	125.20	119.90
57	BB	1370	C	N3-C4-C5	-8.83	118.37	121.90
57	BB	1811	G	C5-C6-O6	-8.83	123.30	128.60
57	BB	2076	U	C5-C4-O4	-8.83	120.60	125.90
57	BB	2617	U	C2-N3-C4	8.83	132.30	127.00
21	AA	1369	C	O4'-C1'-N1	8.83	115.26	108.20
22	AY	29	A	N1-C6-N6	8.83	123.90	118.60
57	BB	1139	G	C6-C5-N7	-8.83	125.10	130.40
21	AA	1083	U	N3-C4-O4	8.83	125.58	119.40
42	BW	24	ARG	NE-CZ-NH2	-8.83	115.89	120.30
57	BB	1283	G	C5-C6-O6	-8.83	123.30	128.60
57	BB	2199	A	C4-C5-C6	8.83	121.41	117.00
21	AA	819	A	O4'-C1'-N9	8.82	115.26	108.20
21	AA	899	C	O4'-C1'-N1	8.82	115.26	108.20
22	AY	21	A	C2-N3-C4	-8.82	106.19	110.60
57	BB	2068	U	N3-C4-C5	-8.82	109.31	114.60
57	BB	233	A	O4'-C1'-N9	8.82	115.26	108.20
57	BB	702	U	O4'-C1'-N1	8.82	115.26	108.20
57	BB	1601	G	N3-C4-C5	8.82	133.01	128.60
57	BB	2328	A	C4'-C3'-C2'	-8.82	93.78	102.60
21	AA	306	A	C4-C5-C6	8.82	121.41	117.00
21	AA	1339	A	C4-C5-N7	-8.82	106.29	110.70
22	AY	58	A	C5-C6-N1	-8.82	113.29	117.70
57	BB	627	A	C5-N7-C8	8.82	108.31	103.90
57	BB	727	A	N1-C6-N6	8.82	123.89	118.60
57	BB	992	C	C5-C4-N4	8.82	126.37	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1823	G	N1-C6-O6	8.82	125.19	119.90
57	BB	1998	A	C5-N7-C8	8.82	108.31	103.90
21	AA	39	G	C5-C6-O6	-8.82	123.31	128.60
21	AA	92	U	O4'-C1'-N1	8.82	115.25	108.20
21	AA	1212	U	C4-C5-C6	8.82	124.99	119.70
21	AA	1271	A	C5-C6-N6	-8.82	116.65	123.70
21	AA	1394	A	N1-C6-N6	8.82	123.89	118.60
21	AA	1408	A	C5-N7-C8	8.82	108.31	103.90
57	BB	164	C	N3-C4-N4	8.82	124.17	118.00
57	BB	170	U	N3-C4-O4	8.82	125.57	119.40
57	BB	718	A	C2-N3-C4	-8.82	106.19	110.60
57	BB	1157	G	C4-C5-N7	8.82	114.33	110.80
57	BB	2271	G	C8-N9-C4	-8.82	102.87	106.40
21	AA	22	G	N7-C8-N9	8.81	117.51	113.10
57	BB	2252	G	N3-C2-N2	8.81	126.07	119.90
22	AY	62	A	C5-C6-N6	-8.81	116.65	123.70
57	BB	594	U	N3-C4-C5	-8.81	109.31	114.60
57	BB	1163	G	C6-N1-C2	8.81	130.39	125.10
57	BB	2110	G	P-O3'-C3'	8.81	130.28	119.70
57	BB	2676	C	O4'-C1'-N1	8.81	115.25	108.20
17	AF	25	TYR	CB-CG-CD1	-8.81	115.71	121.00
21	AA	996	A	O4'-C1'-N9	8.81	115.25	108.20
21	AA	1237	C	O4'-C1'-N1	8.81	115.25	108.20
57	BB	384	A	C5-C6-N6	-8.81	116.65	123.70
57	BB	747	U	C5-C4-O4	-8.81	120.61	125.90
57	BB	1558	C	N3-C4-N4	8.81	124.17	118.00
57	BB	2048	G	C8-N9-C4	-8.81	102.88	106.40
57	BB	2628	C	C2-N3-C4	8.81	124.31	119.90
21	AA	611	C	N3-C4-C5	-8.81	118.38	121.90
21	AA	1405	G	N1-C2-N3	-8.81	118.62	123.90
21	AA	1514	G	C5-C6-N1	-8.81	107.10	111.50
42	BW	54	ARG	NE-CZ-NH1	8.81	124.70	120.30
57	BB	544	C	C4'-C3'-C2'	-8.81	93.79	102.60
57	BB	752	A	O4'-C1'-N9	8.81	115.25	108.20
57	BB	1090	A	C6-N1-C2	8.81	123.89	118.60
57	BB	2352	A	C5-C6-N6	-8.81	116.66	123.70
21	AA	1019	A	O4'-C1'-N9	8.80	115.24	108.20
57	BB	31	C	C4-C5-C6	8.80	121.80	117.40
57	BB	877	A	N3-C4-C5	-8.80	120.64	126.80
21	AA	254	G	O4'-C1'-N9	8.80	115.24	108.20
57	BB	131	A	C4-C5-C6	8.80	121.40	117.00
57	BB	455	C	N3-C4-C5	-8.80	118.38	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1173	U	C6-N1-C2	-8.80	115.72	121.00
21	AA	1255	G	O4'-C1'-N9	8.80	115.24	108.20
57	BB	298	G	N1-C6-O6	8.80	125.18	119.90
57	BB	969	G	C5-C6-O6	-8.80	123.32	128.60
57	BB	1036	G	N3-C2-N2	8.80	126.06	119.90
57	BB	1385	A	C5-C6-N6	-8.80	116.66	123.70
57	BB	1395	A	C4-C5-C6	8.80	121.40	117.00
57	BB	2879	A	C4-C5-C6	8.80	121.40	117.00
22	AY	21	A	C5-C6-N1	-8.80	113.30	117.70
57	BB	270	A	N9-C4-C5	8.80	109.32	105.80
57	BB	323	C	N3-C4-C5	-8.80	118.38	121.90
57	BB	619	G	N1-C6-O6	8.80	125.18	119.90
57	BB	623	C	O4'-C1'-N1	8.80	115.24	108.20
57	BB	1124	G	N1-C6-O6	8.80	125.18	119.90
21	AA	517	G	C5-C6-N1	-8.80	107.10	111.50
21	AA	611	C	C6-N1-C2	-8.80	116.78	120.30
21	AA	743	A	C5-N7-C8	8.79	108.30	103.90
57	BB	348	A	N9-C4-C5	-8.79	102.28	105.80
57	BB	574	A	N1-C6-N6	8.79	123.88	118.60
57	BB	2643	G	N3-C2-N2	8.79	126.06	119.90
57	BB	2691	C	P-O3'-C3'	-8.79	109.15	119.70
21	AA	945	G	C6-C5-N7	-8.79	125.12	130.40
57	BB	402	A	N1-C6-N6	8.79	123.88	118.60
57	BB	2102	G	N3-C4-C5	-8.79	124.20	128.60
57	BB	489	G	N3-C2-N2	8.79	126.05	119.90
57	BB	1404	C	N3-C4-C5	-8.79	118.38	121.90
21	AA	79	G	C5-C6-O6	-8.79	123.33	128.60
21	AA	911	U	O4'-C1'-N1	8.79	115.23	108.20
26	AV	70	G	C4-C5-N7	-8.79	107.28	110.80
57	BB	425	G	O4'-C1'-N9	8.79	115.23	108.20
57	BB	555	G	N1-C6-O6	8.79	125.17	119.90
57	BB	949	G	C5-N7-C8	8.79	108.69	104.30
57	BB	1175	A	C4-C5-C6	8.79	121.39	117.00
57	BB	2527	C	N3-C4-N4	8.79	124.15	118.00
21	AA	86	G	C4-C5-C6	8.79	124.07	118.80
21	AA	1021	A	C5-C6-N6	-8.79	116.67	123.70
57	BB	68	G	C6-C5-N7	-8.79	125.13	130.40
57	BB	383	C	N1-C1'-C2'	-8.79	102.33	112.00
57	BB	1496	A	C4-C5-C6	8.79	121.39	117.00
57	BB	2554	U	O4'-C1'-N1	8.79	115.23	108.20
58	BA	22	U	C5-C4-O4	-8.79	120.63	125.90
57	BB	778	G	C4-C5-C6	8.79	124.07	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	562	U	O4'-C1'-N1	8.78	115.23	108.20
21	AA	836	G	N1-C6-O6	8.79	125.17	119.90
21	AA	861	G	O4'-C1'-N9	8.78	115.23	108.20
57	BB	383	C	N3-C4-N4	8.79	124.15	118.00
57	BB	1617	C	C5-C6-N1	-8.78	116.61	121.00
57	BB	1769	U	O4'-C1'-N1	8.79	115.23	108.20
57	BB	1961	C	N3-C4-N4	8.79	124.15	118.00
57	BB	2687	U	O4'-C1'-N1	8.78	115.23	108.20
16	AE	67	ARG	NE-CZ-NH2	-8.78	115.91	120.30
22	AY	50	U	O4'-C1'-N1	8.78	115.23	108.20
23	AW	35	A	C3'-C2'-C1'	-8.78	94.47	101.50
58	BA	90	C	N3-C4-C5	-8.78	118.39	121.90
21	AA	423	G	N3-C2-N2	8.78	126.05	119.90
21	AA	1019	A	N7-C8-N9	8.78	118.19	113.80
23	AW	75	C	N3-C4-N4	8.78	124.15	118.00
57	BB	529	A	C8-N9-C4	8.78	109.31	105.80
57	BB	579	G	C4-C5-N7	8.78	114.31	110.80
57	BB	761	A	C5-C6-N1	-8.78	113.31	117.70
57	BB	1588	G	N7-C8-N9	8.78	117.49	113.10
21	AA	105	G	C5-C6-O6	-8.78	123.33	128.60
21	AA	812	G	C5-C6-N1	-8.78	107.11	111.50
21	AA	841	C	P-O3'-C3'	8.78	130.23	119.70
21	AA	1325	C	C5-C4-N4	-8.78	114.05	120.20
21	AA	1461	G	O4'-C1'-N9	8.78	115.22	108.20
57	BB	2004	G	N1-C6-O6	8.78	125.17	119.90
57	BB	2064	C	N1-C2-O2	-8.78	113.63	118.90
21	AA	427	U	N3-C2-O2	8.78	128.34	122.20
21	AA	954	G	N1-C6-O6	8.78	125.17	119.90
57	BB	643	A	N1-C6-N6	8.78	123.87	118.60
57	BB	2120	G	C8-N9-C4	-8.78	102.89	106.40
21	AA	1128	C	C6-N1-C2	-8.78	116.79	120.30
21	AA	1256	A	O4'-C1'-N9	8.78	115.22	108.20
21	AA	1301	U	O4'-C1'-N1	8.78	115.22	108.20
57	BB	633	A	C2-N3-C4	-8.78	106.21	110.60
57	BB	998	C	C6-N1-C2	-8.78	116.79	120.30
57	BB	2794	C	N3-C4-N4	8.78	124.14	118.00
57	BB	1465	G	O4'-C1'-N9	8.77	115.22	108.20
57	BB	2082	A	C5-C6-N1	-8.77	113.31	117.70
21	AA	139	A	N7-C8-N9	8.77	118.19	113.80
21	AA	753	A	O4'-C1'-N9	8.77	115.22	108.20
21	AA	913	A	C4-C5-C6	8.77	121.39	117.00
57	BB	918	A	C6-C5-N7	-8.77	126.16	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1004	U	C5-C4-O4	-8.77	120.64	125.90
21	AA	240	G	C8-N9-C4	8.77	109.91	106.40
21	AA	560	A	C4-C5-C6	8.77	121.39	117.00
57	BB	527	C	N3-C4-C5	-8.77	118.39	121.90
57	BB	1124	G	N1-C2-N3	-8.77	118.64	123.90
57	BB	2627	G	C5-C6-N1	-8.77	107.11	111.50
57	BB	1513	U	N3-C2-O2	8.77	128.34	122.20
57	BB	2636	C	C5-C4-N4	-8.77	114.06	120.20
57	BB	2733	A	C6-N1-C2	8.77	123.86	118.60
57	BB	2728	U	O4'-C1'-N1	8.77	115.22	108.20
21	AA	954	G	C6-C5-N7	-8.77	125.14	130.40
57	BB	2206	C	N3-C2-O2	8.77	128.04	121.90
21	AA	23	C	N3-C4-N4	8.77	124.14	118.00
21	AA	480	U	O4'-C1'-N1	8.77	115.21	108.20
21	AA	925	G	C8-N9-C4	8.77	109.91	106.40
57	BB	704	G	C6-N1-C2	8.77	130.36	125.10
57	BB	797	G	N7-C8-N9	8.77	117.48	113.10
57	BB	1106	G	N1-C2-N3	-8.77	118.64	123.90
57	BB	1116	G	C2-N3-C4	8.77	116.28	111.90
57	BB	1266	G	C1'-O4'-C4'	-8.77	102.89	109.90
57	BB	1479	G	C6-N1-C2	8.77	130.36	125.10
57	BB	2238	G	O4'-C1'-N9	8.77	115.21	108.20
57	BB	2777	G	N1-C6-O6	8.77	125.16	119.90
21	AA	884	U	O4'-C1'-N1	8.76	115.21	108.20
21	AA	468	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	486	U	O4'-C1'-N1	8.76	115.21	108.20
21	AA	1080	A	C4-C5-C6	8.76	121.38	117.00
23	AW	26	A	C5-C6-N6	-8.76	116.69	123.70
26	AV	51	C	N3-C4-N4	8.76	124.13	118.00
26	AV	72	A	C5-C6-N6	-8.76	116.69	123.70
57	BB	730	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	255	G	N3-C2-N2	8.76	126.03	119.90
37	BR	2	TYR	CB-CG-CD2	-8.76	115.74	121.00
57	BB	91	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	380	G	C5-C6-N1	8.76	115.88	111.50
21	AA	394	G	N1-C2-N3	-8.76	118.64	123.90
21	AA	744	C	C2-N3-C4	8.76	124.28	119.90
25	AZ	80	ASP	CB-CG-OD2	-8.76	110.42	118.30
57	BB	1682	G	N7-C8-N9	-8.76	108.72	113.10
57	BB	502	A	N1-C6-N6	8.76	123.85	118.60
57	BB	828	U	C5-C4-O4	-8.76	120.65	125.90
57	BB	1052	C	N3-C4-N4	8.76	124.13	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1890	A	C5-C6-N6	-8.76	116.69	123.70
57	BB	1873	G	O4'-C1'-N9	8.76	115.20	108.20
21	AA	155	A	N3-C4-N9	8.75	134.40	127.40
21	AA	997	U	C5-C4-O4	-8.75	120.65	125.90
21	AA	1430	A	C4-C5-C6	8.75	121.38	117.00
52	BD	167	ASN	N-CA-CB	8.75	126.35	110.60
57	BB	218	A	N9-C4-C5	-8.75	102.30	105.80
57	BB	1596	A	C8-N9-C4	8.75	109.30	105.80
57	BB	1636	U	O4'-C1'-N1	8.75	115.20	108.20
58	BA	68	C	C2-N3-C4	8.75	124.28	119.90
57	BB	2481	G	O4'-C1'-N9	8.75	115.20	108.20
57	BB	2753	A	N3-C4-C5	-8.75	120.67	126.80
57	BB	2776	A	C5-C6-N1	-8.75	113.32	117.70
57	BB	1910	G	N1-C2-N3	-8.75	118.65	123.90
21	AA	207	C	O4'-C1'-N1	8.75	115.20	108.20
21	AA	452	A	C5-C6-N1	-8.75	113.33	117.70
57	BB	607	U	C2-N3-C4	-8.75	121.75	127.00
57	BB	1068	G	O4'-C1'-N9	8.75	115.20	108.20
21	AA	119	A	C8-N9-C4	-8.75	102.30	105.80
21	AA	455	G	O4'-C1'-N9	8.75	115.20	108.20
21	AA	654	G	C8-N9-C4	-8.75	102.90	106.40
21	AA	1287	A	O4'-C1'-N9	8.75	115.20	108.20
21	AA	1310	G	C2-N3-C4	-8.75	107.53	111.90
26	AV	37	A	C5-C6-N6	-8.75	116.70	123.70
57	BB	916	G	C2-N3-C4	8.75	116.27	111.90
57	BB	1126	A	N1-C6-N6	8.75	123.85	118.60
57	BB	1265	A	N1-C6-N6	8.75	123.85	118.60
57	BB	2716	C	O4'-C1'-N1	8.75	115.20	108.20
57	BB	2757	A	N1-C2-N3	-8.75	124.93	129.30
21	AA	1380	U	O4'-C1'-N1	8.74	115.20	108.20
21	AA	1507	A	C6-C5-N7	-8.74	126.18	132.30
57	BB	74	A	C5-N7-C8	8.74	108.27	103.90
57	BB	155	A	C5-C6-N6	-8.74	116.70	123.70
57	BB	663	G	C4-C5-N7	8.74	114.30	110.80
57	BB	731	C	C2-N3-C4	8.74	124.27	119.90
57	BB	904	G	C4-C5-N7	8.74	114.30	110.80
57	BB	1054	A	C5-C6-N1	-8.74	113.33	117.70
57	BB	1521	G	C6-C5-N7	-8.74	125.15	130.40
21	AA	611	C	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1082	U	C2-N3-C4	-8.74	121.76	127.00
57	BB	2266	A	C5-N7-C8	8.74	108.27	103.90
21	AA	933	G	O4'-C1'-N9	8.74	115.19	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	940	C	O4'-C1'-N1	8.74	115.19	108.20
21	AA	1416	G	C8-N9-C4	-8.74	102.91	106.40
57	BB	492	A	C4-C5-N7	-8.74	106.33	110.70
57	BB	524	G	P-O3'-C3'	-8.74	109.22	119.70
57	BB	662	G	N7-C8-N9	-8.74	108.73	113.10
57	BB	884	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1983	G	C5-C6-O6	-8.74	123.36	128.60
57	BB	1347	A	O4'-C1'-N9	8.74	115.19	108.20
57	BB	1720	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1797	G	O4'-C1'-N9	8.74	115.19	108.20
57	BB	1995	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	2105	U	C3'-C2'-C1'	8.74	108.49	101.50
57	BB	2750	A	C5-C6-N1	-8.74	113.33	117.70
57	BB	223	A	C8-N9-C4	-8.73	102.31	105.80
21	AA	178	C	N3-C4-C5	-8.73	118.41	121.90
21	AA	901	A	N1-C6-N6	8.73	123.84	118.60
21	AA	1032	G	C5-C6-O6	-8.73	123.36	128.60
57	BB	636	G	P-O3'-C3'	8.73	130.18	119.70
57	BB	2318	G	C5-C6-N1	-8.73	107.13	111.50
57	BB	37	C	O4'-C1'-N1	8.73	115.19	108.20
57	BB	471	A	O4'-C1'-N9	8.73	115.19	108.20
57	BB	1671	U	O4'-C1'-N1	8.73	115.19	108.20
21	AA	453	G	N9-C4-C5	-8.73	101.91	105.40
21	AA	971	G	N1-C6-O6	8.73	125.14	119.90
22	AY	17	U	C2-N3-C4	8.73	132.24	127.00
57	BB	797	G	N1-C2-N3	-8.73	118.66	123.90
57	BB	1953	A	N1-C6-N6	8.73	123.84	118.60
57	BB	2368	C	C4-C5-C6	-8.73	113.03	117.40
21	AA	104	G	N7-C8-N9	8.73	117.47	113.10
21	AA	608	A	O4'-C1'-N9	8.73	115.18	108.20
21	AA	645	G	O4'-C1'-N9	8.73	115.18	108.20
57	BB	30	G	N1-C2-N3	-8.73	118.66	123.90
21	AA	115	G	N1-C2-N3	-8.73	118.67	123.90
21	AA	278	G	O4'-C1'-N9	8.73	115.18	108.20
26	AV	58	A	C6-N1-C2	-8.73	113.36	118.60
57	BB	219	A	O4'-C1'-N9	8.73	115.18	108.20
57	BB	1309	G	C5-C6-O6	-8.73	123.36	128.60
57	BB	1908	C	N3-C4-C5	-8.73	118.41	121.90
57	BB	2774	C	N3-C4-C5	-8.73	118.41	121.90
57	BB	2789	C	C5-C4-N4	-8.73	114.09	120.20
57	BB	2801	G	N1-C6-O6	8.73	125.14	119.90
21	AA	144	G	C5-C6-O6	-8.72	123.37	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1177	G	C4-C5-C6	8.72	124.03	118.80
22	AY	26	G	O4'-C1'-N9	8.72	115.18	108.20
55	BG	54	ARG	NE-CZ-NH2	-8.72	115.94	120.30
57	BB	637	A	C2-N3-C4	8.72	114.96	110.60
57	BB	2056	G	N1-C6-O6	8.72	125.14	119.90
57	BB	2308	G	N1-C6-O6	8.72	125.13	119.90
21	AA	39	G	C8-N9-C4	-8.72	102.91	106.40
21	AA	1215	G	N9-C4-C5	8.72	108.89	105.40
21	AA	45	G	N1-C2-N3	-8.72	118.67	123.90
21	AA	372	C	C5-C4-N4	-8.72	114.10	120.20
21	AA	952	U	O4'-C1'-N1	8.72	115.18	108.20
26	AV	17(A)	U	C2-N3-C4	8.72	132.23	127.00
57	BB	637	A	C5-C6-N6	-8.72	116.72	123.70
57	BB	1303	G	C5-N7-C8	8.72	108.66	104.30
57	BB	1904	G	C5-C6-O6	-8.72	123.37	128.60
57	BB	14	A	C4-C5-C6	8.72	121.36	117.00
57	BB	130	C	C2-N3-C4	-8.72	115.54	119.90
21	AA	394	G	N3-C2-N2	8.72	126.00	119.90
21	AA	695	A	O4'-C1'-N9	8.72	115.17	108.20
57	BB	1202	G	C6-C5-N7	-8.72	125.17	130.40
57	BB	1387	A	C5-C6-N6	-8.72	116.72	123.70
57	BB	1420	A	N1-C2-N3	8.72	133.66	129.30
57	BB	2366	A	N1-C2-N3	8.72	133.66	129.30
57	BB	2578	G	N7-C8-N9	-8.72	108.74	113.10
26	AV	1	C	O4'-C1'-N1	8.72	115.17	108.20
57	BB	776	G	N1-C6-O6	8.72	125.13	119.90
57	BB	704	G	C5-C6-O6	-8.71	123.37	128.60
57	BB	960	A	P-O3'-C3'	8.71	130.16	119.70
57	BB	1357	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	601	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	624	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	2723	C	C5-C4-N4	-8.71	114.10	120.20
26	AV	25	C	O4'-C1'-N1	8.71	115.17	108.20
57	BB	1492	G	O4'-C1'-N9	8.71	115.17	108.20
21	AA	1470	U	O4'-C1'-N1	8.71	115.17	108.20
57	BB	2558	C	C6-N1-C2	-8.71	116.82	120.30
57	BB	264	C	N3-C4-N4	8.71	124.09	118.00
57	BB	1158	C	C4-C5-C6	8.71	121.75	117.40
57	BB	131	A	O4'-C1'-N9	8.71	115.17	108.20
21	AA	560	A	C2-N3-C4	-8.70	106.25	110.60
21	AA	860	A	C2-N3-C4	-8.70	106.25	110.60
21	AA	895	G	N3-C2-N2	8.70	125.99	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2090	A	P-O3'-C3'	-8.71	109.25	119.70
57	BB	2792	A	C4-C5-N7	-8.71	106.35	110.70
21	AA	631	C	C5-C6-N1	8.70	125.35	121.00
57	BB	1201	U	O4'-C1'-N1	8.70	115.16	108.20
57	BB	1395	A	P-O3'-C3'	8.70	130.14	119.70
57	BB	2146	C	O4'-C1'-N1	8.70	115.16	108.20
21	AA	1460	C	C5-C6-N1	8.70	125.35	121.00
21	AA	1514	G	N1-C2-N3	-8.70	118.68	123.90
57	BB	1416	G	N3-C2-N2	8.70	125.99	119.90
21	AA	204	G	C8-N9-C4	-8.70	102.92	106.40
21	AA	1235	U	C2-N3-C4	-8.70	121.78	127.00
57	BB	2494	G	C5-C6-O6	-8.70	123.38	128.60
21	AA	416	G	O4'-C1'-N9	8.70	115.16	108.20
57	BB	1859	U	C5-C4-O4	-8.70	120.68	125.90
21	AA	459	A	N1-C6-N6	8.70	123.82	118.60
57	BB	2812	G	O4'-C1'-N9	8.70	115.16	108.20
12	AU	6	ARG	NE-CZ-NH1	8.69	124.65	120.30
21	AA	532	A	N9-C4-C5	8.70	109.28	105.80
57	BB	200	U	C2-N3-C4	8.70	132.22	127.00
57	BB	726	G	N1-C6-O6	8.69	125.12	119.90
21	AA	376	G	C5-C6-O6	-8.69	123.39	128.60
21	AA	1339	A	C5-N7-C8	8.69	108.25	103.90
57	BB	1034	G	N1-C2-N3	-8.69	118.68	123.90
57	BB	580	U	N1-C2-O2	8.69	128.88	122.80
57	BB	1403	A	N3-C4-C5	-8.69	120.72	126.80
21	AA	963	G	C5-C6-N1	-8.69	107.16	111.50
21	AA	1379	G	N3-C4-N9	-8.69	120.79	126.00
21	AA	1397	C	N3-C4-N4	8.69	124.08	118.00
57	BB	2288	A	O4'-C1'-N9	8.69	115.15	108.20
21	AA	1154	G	C5-N7-C8	8.69	108.64	104.30
57	BB	422	A	O4'-C1'-N9	8.69	115.15	108.20
57	BB	677	A	C5-N7-C8	8.69	108.25	103.90
57	BB	2198	A	C5-C6-N6	-8.69	116.75	123.70
57	BB	2239	G	C5-C6-O6	-8.69	123.39	128.60
57	BB	2881	U	N3-C4-C5	-8.69	109.39	114.60
21	AA	795	C	N3-C4-C5	-8.69	118.42	121.90
21	AA	1430	A	C3'-C2'-C1'	-8.69	94.55	101.50
50	B3	31	ILE	CB-CA-C	8.69	128.97	111.60
57	BB	713	G	N3-C2-N2	8.69	125.98	119.90
57	BB	833	A	N9-C4-C5	8.69	109.27	105.80
57	BB	1106	G	N1-C6-O6	8.69	125.11	119.90
21	AA	1029	U	O4'-C1'-N1	8.68	115.15	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1611	C	C5-C6-N1	8.68	125.34	121.00
57	BB	2269	G	N1-C6-O6	8.68	125.11	119.90
58	BA	63	C	N3-C4-C5	-8.68	118.43	121.90
21	AA	803	G	O4'-C1'-N9	8.68	115.15	108.20
23	AW	6	G	C5-C6-O6	-8.68	123.39	128.60
57	BB	2179	C	O4'-C1'-N1	8.68	115.15	108.20
57	BB	2812	G	N1-C6-O6	8.68	125.11	119.90
21	AA	16	A	N1-C6-N6	8.68	123.81	118.60
21	AA	662	U	O4'-C1'-N1	8.68	115.14	108.20
57	BB	953	G	N7-C8-N9	-8.68	108.76	113.10
57	BB	1835	G	C5-C6-O6	-8.68	123.39	128.60
57	BB	1296	G	N3-C4-C5	8.68	132.94	128.60
57	BB	2627	G	C2-N3-C4	8.68	116.24	111.90
21	AA	253	A	N9-C4-C5	8.68	109.27	105.80
21	AA	1158	C	O4'-C1'-N1	8.68	115.14	108.20
21	AA	1318	A	P-O3'-C3'	8.68	130.11	119.70
57	BB	1543	G	N3-C4-C5	8.68	132.94	128.60
57	BB	1074	G	C5-N7-C8	8.68	108.64	104.30
57	BB	1669	A	C6-C5-N7	-8.68	126.23	132.30
21	AA	1212	U	C5-C6-N1	-8.67	118.36	122.70
21	AA	482	A	C5-C6-N1	-8.67	113.36	117.70
57	BB	1039	A	C4-C5-C6	8.67	121.34	117.00
57	BB	1278	C	O4'-C1'-N1	8.67	115.14	108.20
57	BB	2354	C	N3-C4-C5	-8.67	118.43	121.90
57	BB	1438	U	N3-C4-C5	-8.67	109.40	114.60
21	AA	609	A	C4-C5-N7	-8.67	106.36	110.70
23	AW	64	A	C5-C6-N6	-8.67	116.76	123.70
58	BA	99	A	C4-C5-C6	8.67	121.33	117.00
21	AA	1252	A	O4'-C1'-N9	8.67	115.14	108.20
57	BB	963	U	N3-C2-O2	8.67	128.27	122.20
21	AA	187	G	N9-C1'-C2'	-8.67	102.47	112.00
21	AA	876	C	C5-C6-N1	8.67	125.33	121.00
21	AA	1257	A	N7-C8-N9	-8.67	109.47	113.80
57	BB	1179	G	O4'-C1'-N9	8.67	115.13	108.20
21	AA	1473	G	C5-N7-C8	8.67	108.63	104.30
23	AW	73	A	N1-C6-N6	8.67	123.80	118.60
57	BB	73	A	C4-C5-N7	-8.67	106.37	110.70
57	BB	987	C	N3-C4-C5	-8.67	118.43	121.90
21	AA	243	A	C4-C5-C6	8.66	121.33	117.00
21	AA	423	G	N1-C2-N3	-8.66	118.70	123.90
21	AA	869	G	C8-N9-C4	8.66	109.87	106.40
21	AA	1220	G	N1-C6-O6	8.66	125.10	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BR	79	ARG	NE-CZ-NH1	-8.66	115.97	120.30
57	BB	181	A	C4-C5-C6	8.66	121.33	117.00
57	BB	205	G	C5-C6-O6	-8.66	123.40	128.60
57	BB	248	G	C6-C5-N7	-8.66	125.20	130.40
57	BB	882	G	N1-C6-O6	8.66	125.10	119.90
58	BA	75	G	N3-C2-N2	8.66	125.97	119.90
57	BB	291	G	C5-C6-O6	-8.66	123.40	128.60
57	BB	333	G	C6-C5-N7	-8.66	125.20	130.40
57	BB	1139	G	N9-C4-C5	-8.66	101.94	105.40
58	BA	19	C	C5-C6-N1	8.66	125.33	121.00
21	AA	5	U	O4'-C1'-N1	8.66	115.13	108.20
57	BB	256	A	C8-N9-C4	-8.66	102.34	105.80
57	BB	711	G	C4-C5-C6	8.66	124.00	118.80
21	AA	838	G	C5-C6-O6	-8.66	123.41	128.60
21	AA	1437	A	C4-C5-C6	8.66	121.33	117.00
57	BB	2772	C	C4-C5-C6	8.66	121.73	117.40
21	AA	1454	G	C6-C5-N7	-8.66	125.21	130.40
57	BB	216	A	C6-C5-N7	-8.66	126.24	132.30
57	BB	559	G	O4'-C1'-N9	8.66	115.12	108.20
57	BB	1497	U	O4'-C1'-N1	8.66	115.12	108.20
57	BB	2667	C	C5-C4-N4	-8.66	114.14	120.20
57	BB	616	A	C8-N9-C4	-8.65	102.34	105.80
57	BB	1027	A	N1-C2-N3	8.65	133.63	129.30
57	BB	1491	G	C6-C5-N7	-8.65	125.21	130.40
57	BB	1677	A	N3-C4-C5	-8.65	120.74	126.80
57	BB	1795	C	C2-N3-C4	8.65	124.23	119.90
57	BB	2761	A	N1-C6-N6	8.65	123.79	118.60
57	BB	1865	U	O4'-C1'-N1	8.65	115.12	108.20
21	AA	307	C	O4'-C1'-N1	8.65	115.12	108.20
57	BB	207	A	C8-N9-C4	-8.65	102.34	105.80
57	BB	290	U	C5-C6-N1	8.65	127.03	122.70
57	BB	789	A	N3-C4-C5	-8.65	120.74	126.80
21	AA	392	C	C5-C4-N4	-8.65	114.14	120.20
21	AA	739	C	C6-N1-C2	-8.65	116.84	120.30
21	AA	52	C	C5-C6-N1	8.65	125.32	121.00
21	AA	925	G	C5-N7-C8	8.65	108.62	104.30
21	AA	1224	U	P-O3'-C3'	8.65	130.08	119.70
21	AA	1300	G	C5-C6-O6	-8.65	123.41	128.60
57	BB	1573	G	C6-N1-C2	-8.65	119.91	125.10
57	BB	2501	C	N3-C4-C5	-8.65	118.44	121.90
57	BB	1849	G	C8-N9-C4	-8.65	102.94	106.40
57	BB	2775	G	O4'-C1'-N9	8.65	115.12	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	113	G	C4-C5-C6	8.64	123.99	118.80
57	BB	1328	A	C4-C5-C6	8.64	121.32	117.00
57	BB	1581	G	C8-N9-C4	-8.64	102.94	106.40
57	BB	1321	A	C8-N9-C4	-8.64	102.34	105.80
57	BB	1563	U	N3-C4-O4	8.64	125.45	119.40
57	BB	2014	A	O4'-C1'-N9	8.64	115.11	108.20
57	BB	2179	C	N1-C2-O2	-8.64	113.71	118.90
57	BB	2104	C	O4'-C1'-N1	8.64	115.11	108.20
57	BB	2483	C	N3-C4-C5	-8.64	118.44	121.90
21	AA	968	A	N9-C4-C5	8.64	109.26	105.80
57	BB	38	A	C5-C6-N6	-8.64	116.79	123.70
57	BB	788	A	C5'-C4'-O4'	8.64	119.47	109.10
57	BB	1386	C	C6-N1-C2	8.64	123.76	120.30
57	BB	2042	A	C5-C6-N6	-8.64	116.79	123.70
21	AA	321	A	C4-C5-C6	8.64	121.32	117.00
21	AA	746	A	C4-C5-C6	8.64	121.32	117.00
21	AA	1000	A	N1-C6-N6	8.64	123.78	118.60
57	BB	85	G	N7-C8-N9	-8.64	108.78	113.10
57	BB	1479	G	N1-C2-N3	-8.64	118.72	123.90
21	AA	774	G	N1-C6-O6	8.64	125.08	119.90
57	BB	566	U	C1'-O4'-C4'	8.64	116.81	109.90
57	BB	1328	A	N9-C4-C5	8.64	109.25	105.80
57	BB	1598	A	N1-C6-N6	8.64	123.78	118.60
57	BB	585	G	C5-C6-O6	-8.64	123.42	128.60
57	BB	1287	A	C4-C5-N7	-8.64	106.38	110.70
21	AA	1363	A	N9-C4-C5	8.63	109.25	105.80
57	BB	716	A	C5-C6-N1	-8.63	113.38	117.70
57	BB	804	A	C3'-C2'-C1'	8.64	108.41	101.50
58	BA	71	C	N3-C4-C5	8.63	125.35	121.90
21	AA	395	C	O4'-C1'-N1	8.63	115.11	108.20
57	BB	518	G	O4'-C1'-N9	8.63	115.11	108.20
21	AA	693	G	C5-C6-O6	-8.63	123.42	128.60
57	BB	975	A	C4-C5-N7	-8.63	106.39	110.70
57	BB	2242	G	N3-C4-C5	8.63	132.92	128.60
57	BB	2344	U	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2766	A	N1-C6-N6	8.63	123.78	118.60
22	AY	40	C	O4'-C4'-C3'	8.63	113.00	106.10
21	AA	1444	U	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2520	C	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2562	U	C5-C6-N1	8.63	127.01	122.70
21	AA	530	G	C5-C6-O6	-8.62	123.43	128.60
22	AY	5	A	O4'-C1'-N9	8.62	115.10	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	40	U	C5-C6-N1	8.62	127.01	122.70
57	BB	193	U	N3-C4-C5	-8.62	109.43	114.60
57	BB	2448	A	C5-C6-N6	-8.62	116.80	123.70
21	AA	1333	A	C5-C6-N6	-8.62	116.80	123.70
22	AY	4	G	C8-N9-C4	-8.62	102.95	106.40
57	BB	458	G	N1-C6-O6	8.62	125.07	119.90
57	BB	582	A	O4'-C1'-N9	8.62	115.10	108.20
21	AA	1219	A	C5-C6-N6	-8.62	116.80	123.70
21	AA	1489	G	N3-C2-N2	-8.62	113.86	119.90
23	AW	14	A	C5-C6-N6	-8.62	116.80	123.70
57	BB	733	G	O4'-C1'-N9	8.62	115.10	108.20
21	AA	468	A	C4-C5-C6	8.62	121.31	117.00
57	BB	346	A	N7-C8-N9	-8.62	109.49	113.80
57	BB	627	A	N7-C8-N9	-8.62	109.49	113.80
57	BB	1724	G	C4-C5-N7	8.62	114.25	110.80
57	BB	1918	A	C2-N3-C4	-8.62	106.29	110.60
57	BB	2217	G	C5-C6-O6	-8.62	123.43	128.60
57	BB	1165	A	C5-C6-N1	-8.62	113.39	117.70
57	BB	1658	C	N3-C4-C5	-8.62	118.45	121.90
21	AA	186	C	C6-N1-C2	-8.62	116.85	120.30
21	AA	233	C	C6-N1-C2	-8.62	116.85	120.30
57	BB	1430	G	N9-C4-C5	8.62	108.85	105.40
23	AW	9	A	C8-N9-C4	-8.61	102.36	105.80
57	BB	156	A	C5-C6-N1	-8.62	113.39	117.70
57	BB	1456	G	C6-C5-N7	-8.62	125.23	130.40
57	BB	1913	A	N9-C4-C5	8.61	109.25	105.80
21	AA	937	A	C4-C5-C6	8.61	121.31	117.00
52	BD	46	ARG	NE-CZ-NH1	8.61	124.61	120.30
57	BB	389	G	C5-C6-N1	-8.61	107.19	111.50
57	BB	572	A	C4-C5-C6	8.61	121.31	117.00
57	BB	1432	G	C5-C6-O6	-8.61	123.43	128.60
57	BB	1587	G	C6-C5-N7	-8.61	125.23	130.40
57	BB	1599	U	C5-C4-O4	8.61	131.07	125.90
57	BB	1991	U	N3-C4-C5	8.61	119.77	114.60
57	BB	2144	G	N1-C2-N3	-8.61	118.73	123.90
21	AA	142	G	C5-C6-O6	-8.61	123.44	128.60
21	AA	262	A	C8-N9-C4	-8.61	102.36	105.80
21	AA	1098	C	N1-C2-N3	-8.61	113.17	119.20
21	AA	1185	G	N7-C8-N9	-8.61	108.80	113.10
21	AA	1261	A	C8-N9-C4	-8.61	102.36	105.80
57	BB	1246	A	C6-N1-C2	8.61	123.77	118.60
57	BB	2228	G	O4'-C1'-N9	8.61	115.09	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2869	G	N3-C2-N2	8.61	125.93	119.90
20	AI	5	TYR	CB-CG-CD2	-8.61	115.84	121.00
23	AW	31	A	N1-C6-N6	8.61	123.76	118.60
57	BB	1349	C	N3-C4-N4	8.61	124.03	118.00
57	BB	2806	C	C4-C5-C6	8.61	121.70	117.40
57	BB	604	G	C5-C6-O6	-8.61	123.44	128.60
57	BB	757	G	C2-N3-C4	8.61	116.20	111.90
57	BB	1300	G	N9-C4-C5	8.61	108.84	105.40
57	BB	1300	G	O4'-C1'-N9	8.61	115.08	108.20
57	BB	2187	U	C3'-C2'-C1'	-8.61	94.62	101.50
57	BB	2402	U	C1'-O4'-C4'	-8.61	103.02	109.90
21	AA	449	G	N3-C4-N9	-8.60	120.84	126.00
21	AA	763	G	N3-C4-N9	-8.60	120.84	126.00
57	BB	466	A	C2-N3-C4	8.60	114.90	110.60
57	BB	1315	C	O4'-C1'-N1	8.60	115.08	108.20
21	AA	453	G	C5'-C4'-O4'	8.60	119.42	109.10
21	AA	777	A	C6-C5-N7	-8.60	126.28	132.30
24	AX	14	A	C8-N9-C4	-8.60	102.36	105.80
57	BB	707	G	N7-C8-N9	8.60	117.40	113.10
57	BB	756	A	C6-C5-N7	-8.60	126.28	132.30
57	BB	1078	U	C6-N1-C2	-8.60	115.84	121.00
57	BB	1740	G	N1-C2-N3	-8.60	118.74	123.90
57	BB	1760	C	N1-C2-N3	-8.60	113.18	119.20
57	BB	2447	G	N1-C6-O6	8.60	125.06	119.90
21	AA	790	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	2101	A	N3-C4-N9	8.60	134.28	127.40
21	AA	240	G	N9-C4-C5	-8.60	101.96	105.40
21	AA	1185	G	C8-N9-C4	8.60	109.84	106.40
57	BB	298	G	O4'-C1'-N9	8.60	115.08	108.20
57	BB	829	A	C5-C6-N1	-8.60	113.40	117.70
57	BB	916	G	N7-C8-N9	8.60	117.40	113.10
57	BB	1544	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	2410	G	C5-C6-O6	-8.60	123.44	128.60
57	BB	2792	A	C5-C6-N6	-8.60	116.82	123.70
58	BA	59	A	O4'-C1'-N9	8.60	115.08	108.20
21	AA	393	A	N1-C6-N6	8.60	123.76	118.60
21	AA	416	G	C6-N1-C2	8.60	130.26	125.10
21	AA	637	C	N3-C2-O2	8.60	127.92	121.90
57	BB	211	C	N3-C4-N4	8.60	124.02	118.00
57	BB	279	A	C4-C5-C6	8.60	121.30	117.00
57	BB	172	A	N1-C2-N3	8.60	133.60	129.30
57	BB	404	A	N7-C8-N9	-8.60	109.50	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1086	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	1277	G	C5-C6-O6	-8.60	123.44	128.60
57	BB	1395	A	O4'-C1'-N9	8.60	115.08	108.20
57	BB	1861	G	N9-C4-C5	-8.60	101.96	105.40
57	BB	1533	C	C2-N3-C4	-8.59	115.60	119.90
57	BB	2684	U	O4'-C1'-N1	8.59	115.08	108.20
57	BB	1112	G	O4'-C4'-C3'	-8.59	95.41	104.00
57	BB	1478	G	C5-C6-N1	-8.59	107.20	111.50
15	AD	71	PHE	CB-CG-CD2	8.59	126.81	120.80
23	AW	3	C	O4'-C1'-N1	8.59	115.07	108.20
57	BB	128	C	C2-N3-C4	8.59	124.19	119.90
57	BB	332	A	C5-C6-N6	-8.59	116.83	123.70
57	BB	729	G	C4-C5-N7	-8.59	107.36	110.80
57	BB	124	G	N1-C6-O6	8.59	125.05	119.90
57	BB	368	A	C8-N9-C4	-8.59	102.36	105.80
57	BB	1100	C	C2-N1-C1'	8.59	128.25	118.80
57	BB	2686	G	N1-C6-O6	8.59	125.05	119.90
57	BB	1165	A	C6-C5-N7	-8.59	126.29	132.30
57	BB	1338	G	N1-C6-O6	8.59	125.05	119.90
25	AZ	123	ARG	NE-CZ-NH1	-8.59	116.01	120.30
57	BB	380	G	N1-C6-O6	8.59	125.05	119.90
57	BB	458	G	P-O3'-C3'	8.59	130.01	119.70
57	BB	667	U	P-O3'-C3'	8.59	130.01	119.70
57	BB	1140	C	C6-N1-C2	-8.59	116.86	120.30
21	AA	15	G	O4'-C1'-N9	8.59	115.07	108.20
21	AA	325	A	C5-C6-N6	-8.59	116.83	123.70
21	AA	933	G	C8-N9-C4	-8.59	102.97	106.40
21	AA	1038	C	N3-C4-C5	-8.59	118.47	121.90
26	AV	46	G	C4-C5-C6	8.59	123.95	118.80
57	BB	2247	A	C6-C5-N7	-8.59	126.29	132.30
57	BB	2309	A	C5-C6-N1	-8.59	113.41	117.70
21	AA	462	G	C5'-C4'-O4'	8.58	119.40	109.10
21	AA	1415	G	O4'-C1'-N9	8.58	115.07	108.20
57	BB	1723	G	C5-C6-O6	-8.58	123.45	128.60
57	BB	2121	G	C5-C6-N1	-8.58	107.21	111.50
57	BB	2356	U	C5-C4-O4	-8.58	120.75	125.90
57	BB	2705	A	C8-N9-C4	-8.58	102.37	105.80
57	BB	2776	A	C4-C5-C6	8.58	121.29	117.00
57	BB	2830	C	O4'-C1'-N1	8.58	115.07	108.20
57	BB	184	C	C5-C6-N1	8.58	125.29	121.00
57	BB	1676	A	C6-C5-N7	-8.58	126.29	132.30
57	BB	24	G	N7-C8-N9	8.58	117.39	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	723	C	C4-C5-C6	-8.58	113.11	117.40
57	BB	750	A	C4-C5-C6	8.58	121.29	117.00
57	BB	1187	G	C4-C5-C6	8.58	123.95	118.80
57	BB	1273	U	O4'-C1'-N1	8.58	115.06	108.20
57	BB	1498	C	O4'-C1'-N1	8.58	115.06	108.20
21	AA	276	G	C5-C6-N1	-8.58	107.21	111.50
57	BB	2624	G	C5-C6-N1	-8.58	107.21	111.50
21	AA	493	A	N9-C4-C5	8.58	109.23	105.80
21	AA	1339	A	C2-N3-C4	-8.58	106.31	110.60
57	BB	43	G	N1-C2-N3	-8.58	118.75	123.90
57	BB	109	C	C6-N1-C2	-8.58	116.87	120.30
57	BB	247	G	N3-C2-N2	8.58	125.91	119.90
57	BB	526	A	C6-N1-C2	-8.58	113.45	118.60
57	BB	621	A	C4-C5-C6	8.58	121.29	117.00
57	BB	2424	C	N3-C4-C5	-8.58	118.47	121.90
57	BB	2619	C	N3-C4-N4	8.58	124.00	118.00
57	BB	2732	G	C8-N9-C1'	-8.58	115.85	127.00
57	BB	2879	A	N1-C2-N3	8.58	133.59	129.30
58	BA	104	A	C2-N3-C4	-8.58	106.31	110.60
21	AA	374	A	C4-C5-N7	-8.57	106.41	110.70
21	AA	1421	G	C8-N9-C4	-8.57	102.97	106.40
26	AV	59	A	C8-N9-C4	-8.57	102.37	105.80
57	BB	67	U	O4'-C1'-N1	8.57	115.06	108.20
57	BB	237	C	C6-N1-C2	-8.57	116.87	120.30
57	BB	450	G	N3-C2-N2	8.57	125.90	119.90
57	BB	1419	A	C5-N7-C8	8.57	108.19	103.90
21	AA	629	A	C8-N9-C4	-8.57	102.37	105.80
21	AA	1318	A	N1-C2-N3	8.57	133.59	129.30
23	AW	22	G	C5-C6-O6	-8.57	123.46	128.60
57	BB	701	G	C5-C6-O6	-8.57	123.46	128.60
57	BB	959	A	C8-N9-C4	-8.57	102.37	105.80
21	AA	257	G	C8-N9-C4	-8.57	102.97	106.40
21	AA	1189	U	O4'-C1'-N1	8.57	115.06	108.20
57	BB	428	A	C5-N7-C8	8.57	108.19	103.90
57	BB	994	C	N3-C4-N4	8.57	124.00	118.00
57	BB	1094	U	P-O3'-C3'	8.57	129.99	119.70
21	AA	366	A	C5-C6-N1	-8.57	113.42	117.70
21	AA	1220	G	N3-C2-N2	8.57	125.90	119.90
21	AA	1417	G	N1-C2-N2	-8.57	108.49	116.20
22	AY	39	U	O4'-C1'-N1	8.57	115.05	108.20
39	BT	6	ARG	NE-CZ-NH1	8.57	124.58	120.30
57	BB	1548	A	N1-C6-N6	8.57	123.74	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2166	U	N3-C4-C5	-8.57	109.46	114.60
57	BB	1293	C	C5-C4-N4	-8.57	114.20	120.20
57	BB	1352	U	N1-C2-N3	-8.57	109.76	114.90
57	BB	2679	A	N9-C4-C5	-8.57	102.37	105.80
57	BB	2721	A	C5-C6-N1	-8.57	113.42	117.70
57	BB	2900	A	N7-C8-N9	-8.57	109.52	113.80
27	B5	71	ARG	CD-NE-CZ	8.56	135.59	123.60
21	AA	250	A	O4'-C1'-N9	8.56	115.05	108.20
57	BB	685	A	C8-N9-C4	-8.56	102.38	105.80
57	BB	2648	G	C2-N3-C4	8.56	116.18	111.90
57	BB	1420	A	N1-C6-N6	8.56	123.74	118.60
57	BB	2855	C	O4'-C1'-N1	8.56	115.05	108.20
26	AV	3	C	C6-N1-C2	-8.56	116.88	120.30
57	BB	2314	A	N1-C2-N3	8.56	133.58	129.30
57	BB	2427	C	C1'-O4'-C4'	8.56	116.75	109.90
21	AA	962	C	N3-C4-N4	8.56	123.99	118.00
57	BB	1464	G	C5-C6-O6	-8.56	123.46	128.60
57	BB	1942	C	N3-C4-C5	-8.56	118.48	121.90
57	BB	369	U	P-O5'-C5'	8.56	134.59	120.90
57	BB	780	G	N1-C6-O6	8.56	125.04	119.90
21	AA	253	A	C5-N7-C8	8.56	108.18	103.90
21	AA	291	U	O4'-C1'-N1	8.56	115.05	108.20
21	AA	612	C	O4'-C1'-N1	8.56	115.05	108.20
57	BB	1786	A	N9-C4-C5	8.56	109.22	105.80
21	AA	1024	G	O4'-C1'-N9	8.56	115.05	108.20
57	BB	2733	A	O4'-C1'-N9	8.56	115.05	108.20
21	AA	382	A	C5-C6-N6	-8.55	116.86	123.70
21	AA	1350	A	N1-C6-N6	8.55	123.73	118.60
57	BB	408	G	C5-N7-C8	-8.55	100.02	104.30
57	BB	490	C	P-O3'-C3'	8.55	129.96	119.70
57	BB	589	U	O4'-C1'-N1	8.55	115.04	108.20
57	BB	909	A	N1-C6-N6	8.55	123.73	118.60
57	BB	1295	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	1406	U	C6-N1-C2	-8.55	115.87	121.00
57	BB	1690	A	C5-N7-C8	-8.55	99.62	103.90
57	BB	1384	A	C8-N9-C4	-8.55	102.38	105.80
57	BB	1666	G	C5-C6-O6	-8.55	123.47	128.60
57	BB	1807	G	N7-C8-N9	-8.55	108.82	113.10
21	AA	1229	A	C5-C6-N1	-8.55	113.42	117.70
23	AW	70	G	N1-C6-O6	8.55	125.03	119.90
57	BB	203	A	O4'-C1'-N9	8.55	115.04	108.20
57	BB	1237	A	O4'-C1'-N9	8.55	115.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	232	G	C8-N9-C4	8.55	109.82	106.40
57	BB	724	U	N3-C2-O2	8.55	128.19	122.20
57	BB	870	U	C4'-C3'-C2'	-8.55	94.05	102.60
57	BB	1217	U	C5-C6-N1	8.55	126.97	122.70
57	BB	1557	C	C2-N1-C1'	8.55	128.21	118.80
57	BB	1793	C	C5-C4-N4	-8.55	114.21	120.20
57	BB	1293	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	2722	G	N1-C6-O6	8.55	125.03	119.90
58	BA	103	U	C5-C6-N1	8.55	126.97	122.70
21	AA	1408	A	C4-C5-N7	-8.55	106.42	110.70
57	BB	73	A	O4'-C1'-N9	8.55	115.04	108.20
57	BB	252	G	N1-C2-N3	-8.55	118.77	123.90
57	BB	893	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	1565	C	N3-C4-C5	-8.55	118.48	121.90
21	AA	448	A	C5-C6-N6	-8.55	116.86	123.70
57	BB	33	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	817	C	N3-C4-C5	-8.55	118.48	121.90
57	BB	2282	G	N7-C8-N9	8.55	117.37	113.10
21	AA	597	G	N9-C4-C5	-8.54	101.98	105.40
21	AA	1013	G	N3-C2-N2	8.54	125.88	119.90
57	BB	1193	G	N3-C4-C5	8.54	132.87	128.60
57	BB	1403	A	C4-C5-N7	-8.54	106.43	110.70
21	AA	288	A	O4'-C1'-N9	8.54	115.03	108.20
21	AA	47	C	C6-N1-C2	8.54	123.72	120.30
21	AA	102	G	N1-C6-O6	8.54	125.03	119.90
25	AZ	279	ARG	NE-CZ-NH2	8.54	124.57	120.30
57	BB	1700	A	O4'-C1'-N9	8.54	115.03	108.20
23	AW	40	C	P-O5'-C5'	-8.54	107.24	120.90
57	BB	122	G	C5-C6-N1	8.54	115.77	111.50
57	BB	307	G	N7-C8-N9	-8.54	108.83	113.10
57	BB	432	A	C5-N7-C8	8.54	108.17	103.90
57	BB	532	A	C5-C6-N6	-8.54	116.87	123.70
57	BB	669	G	N3-C4-C5	-8.54	124.33	128.60
57	BB	1613	G	N1-C2-N3	-8.54	118.78	123.90
21	AA	614	C	O4'-C1'-N1	8.54	115.03	108.20
23	AW	55	U	O4'-C1'-N1	8.54	115.03	108.20
57	BB	117	G	N3-C4-N9	8.54	131.12	126.00
57	BB	1260	A	O4'-C1'-N9	8.54	115.03	108.20
57	BB	1656	C	C2-N3-C4	8.54	124.17	119.90
57	BB	2526	G	N1-C2-N3	-8.54	118.78	123.90
57	BB	2821	A	C5-C6-N1	-8.54	113.43	117.70
21	AA	687	A	C8-N9-C4	-8.54	102.39	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	995	C	O4'-C1'-N1	8.54	115.03	108.20
21	AA	907	A	N1-C6-N6	8.53	123.72	118.60
21	AA	1533	C	N3-C4-C5	-8.54	118.49	121.90
57	BB	124	G	C2-N3-C4	8.54	116.17	111.90
57	BB	600	G	N1-C6-O6	8.54	125.02	119.90
57	BB	2830	C	C2-N3-C4	8.54	124.17	119.90
57	BB	276	U	C4-C5-C6	8.53	124.82	119.70
57	BB	813	U	C5-C4-O4	-8.53	120.78	125.90
57	BB	2902	C	N3-C4-N4	8.53	123.97	118.00
21	AA	242	G	N1-C2-N3	-8.53	118.78	123.90
57	BB	294	A	C5-C6-N6	-8.53	116.87	123.70
21	AA	173	U	N3-C4-C5	-8.53	109.48	114.60
21	AA	656	G	O4'-C1'-N9	8.53	115.03	108.20
21	AA	1065	U	P-O3'-C3'	8.53	129.94	119.70
57	BB	2889	C	C6-N1-C2	-8.53	116.89	120.30
58	BA	51	G	O4'-C1'-N9	8.53	115.03	108.20
21	AA	430	A	C8-N9-C4	-8.53	102.39	105.80
57	BB	1509	A	P-O3'-C3'	8.53	129.94	119.70
21	AA	784	A	C2-N3-C4	-8.53	106.34	110.60
21	AA	957	U	N3-C4-C5	-8.53	109.48	114.60
21	AA	1022	A	C6-C5-N7	-8.53	126.33	132.30
21	AA	1088	G	O4'-C1'-N9	8.53	115.02	108.20
57	BB	127	A	C2-N3-C4	8.53	114.86	110.60
57	BB	2045	C	N3-C4-N4	8.53	123.97	118.00
57	BB	2843	G	N3-C2-N2	8.53	125.87	119.90
57	BB	1605	C	N3-C4-C5	-8.53	118.49	121.90
57	BB	2819	G	N1-C6-O6	8.53	125.02	119.90
57	BB	1211	C	O4'-C1'-N1	8.53	115.02	108.20
21	AA	200	G	C5-C6-O6	-8.53	123.48	128.60
21	AA	540	G	C5-C6-O6	-8.53	123.48	128.60
57	BB	1150	C	O4'-C1'-N1	8.53	115.02	108.20
57	BB	1336	A	C5-N7-C8	8.53	108.16	103.90
57	BB	2503	A	C4-C5-C6	8.53	121.26	117.00
21	AA	157	U	O4'-C1'-N1	8.52	115.02	108.20
21	AA	234	C	N3-C4-C5	-8.52	118.49	121.90
57	BB	211	C	C5-C6-N1	8.52	125.26	121.00
57	BB	388	G	C4-C5-C6	8.52	123.91	118.80
57	BB	525	U	N1-C2-O2	-8.52	116.83	122.80
57	BB	2811	G	N7-C8-N9	8.52	117.36	113.10
21	AA	988	G	C5-N7-C8	8.52	108.56	104.30
57	BB	940	G	C5-C6-N1	8.52	115.76	111.50
57	BB	1110	G	C2-N3-C4	8.52	116.16	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2012	G	C8-N9-C4	-8.52	102.99	106.40
57	BB	2411	A	N1-C6-N6	8.52	123.71	118.60
57	BB	2736	A	N1-C2-N3	8.52	133.56	129.30
57	BB	2721	A	O4'-C1'-N9	8.52	115.02	108.20
57	BB	2760	C	O4'-C1'-N1	8.52	115.02	108.20
21	AA	18	C	N3-C4-N4	8.52	123.96	118.00
21	AA	116	A	C8-N9-C4	-8.52	102.39	105.80
57	BB	663	G	C5-C6-O6	-8.52	123.49	128.60
57	BB	1674	G	C3'-C2'-C1'	8.52	108.32	101.50
57	BB	2498	C	C4-C5-C6	8.52	121.66	117.40
22	AY	18	G	N3-C2-N2	8.52	125.86	119.90
57	BB	2578	G	C5-C6-N1	-8.52	107.24	111.50
21	AA	151	A	C4-C5-N7	-8.52	106.44	110.70
57	BB	2100	G	C5-C6-N1	-8.52	107.24	111.50
21	AA	716	A	C5-N7-C8	8.52	108.16	103.90
21	AA	802	A	O4'-C1'-N9	8.52	115.01	108.20
21	AA	1384	C	C6-N1-C2	-8.52	116.89	120.30
57	BB	731	C	C5-C6-N1	8.52	125.26	121.00
57	BB	2200	C	C6-N1-C2	-8.52	116.89	120.30
21	AA	662	U	N3-C4-O4	8.51	125.36	119.40
57	BB	707	G	C5-C6-N1	-8.51	107.24	111.50
21	AA	552	U	N1-C2-O2	8.51	128.76	122.80
21	AA	1179	A	C8-N9-C4	-8.51	102.39	105.80
21	AA	1224	U	O5'-P-OP1	-8.51	98.04	105.70
21	AA	1356	G	C8-N9-C4	-8.51	103.00	106.40
57	BB	98	G	O4'-C1'-N9	8.51	115.01	108.20
57	BB	241	A	O4'-C1'-C2'	-8.51	97.29	105.80
57	BB	436	C	C4-C5-C6	-8.51	113.14	117.40
57	BB	1585	C	N3-C4-N4	8.51	123.96	118.00
57	BB	1300	G	C8-N9-C4	-8.51	103.00	106.40
57	BB	2185	U	O4'-C1'-N1	8.51	115.01	108.20
57	BB	2397	G	N1-C2-N3	-8.51	118.79	123.90
21	AA	416	G	C4-C5-C6	8.51	123.91	118.80
22	AY	66	A	O4'-C1'-N9	8.51	115.01	108.20
23	AW	17	C	C2-N3-C4	8.51	124.15	119.90
32	BM	18	ARG	NE-CZ-NH1	-8.51	116.05	120.30
57	BB	122	G	N1-C6-O6	-8.51	114.79	119.90
57	BB	468	G	O4'-C1'-N9	8.51	115.01	108.20
57	BB	2399	G	N7-C8-N9	-8.51	108.84	113.10
21	AA	210	C	C2-N1-C1'	8.51	128.16	118.80
17	AF	45	ARG	NE-CZ-NH2	-8.51	116.05	120.30
21	AA	147	G	C6-C5-N7	-8.51	125.30	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	156	C	C5-C6-N1	-8.51	116.75	121.00
21	AA	488	C	O4'-C1'-N1	8.51	115.01	108.20
21	AA	1128	C	O4'-C1'-N1	8.51	115.01	108.20
57	BB	2498	C	C5-C6-N1	-8.51	116.75	121.00
57	BB	2839	G	C5-C6-O6	-8.51	123.50	128.60
22	AY	35	A	N1-C2-N3	8.51	133.55	129.30
26	AV	28	C	O4'-C1'-N1	8.51	115.00	108.20
57	BB	2495	G	C6-C5-N7	-8.51	125.30	130.40
57	BB	809	G	N3-C4-N9	8.51	131.10	126.00
57	BB	2307	G	N1-C6-O6	8.51	125.00	119.90
21	AA	569	C	O4'-C1'-N1	8.50	115.00	108.20
21	AA	1423	G	N3-C4-C5	8.50	132.85	128.60
57	BB	383	C	N3-C4-C5	-8.50	118.50	121.90
57	BB	1381	G	P-O3'-C3'	-8.50	109.50	119.70
57	BB	2244	U	C5-C4-O4	8.50	131.00	125.90
57	BB	2882	A	C2-N3-C4	-8.50	106.35	110.60
21	AA	738	C	C5-C4-N4	-8.50	114.25	120.20
21	AA	814	A	O4'-C1'-N9	8.50	115.00	108.20
21	AA	1423	G	C5-N7-C8	-8.50	100.05	104.30
57	BB	1476	U	C2-N3-C4	-8.50	121.90	127.00
57	BB	1653	G	O4'-C1'-N9	8.50	115.00	108.20
58	BA	79	G	N1-C6-O6	8.50	125.00	119.90
21	AA	122	G	C4-C5-C6	8.50	123.90	118.80
57	BB	1565	C	C2-N3-C4	8.50	124.15	119.90
21	AA	221	C	N3-C4-N4	8.50	123.95	118.00
21	AA	279	A	N1-C6-N6	8.50	123.70	118.60
21	AA	463	U	O4'-C1'-N1	8.50	115.00	108.20
21	AA	792	A	N7-C8-N9	-8.50	109.55	113.80
57	BB	540	C	N3-C4-N4	8.50	123.95	118.00
57	BB	786	C	C5-C6-N1	8.50	125.25	121.00
57	BB	1637	A	C8-N9-C4	-8.50	102.40	105.80
57	BB	1831	G	C6-C5-N7	-8.50	125.30	130.40
57	BB	2765	A	N9-C4-C5	8.50	109.20	105.80
21	AA	629	A	N1-C6-N6	8.49	123.70	118.60
21	AA	1104	G	C5-C6-N1	-8.49	107.25	111.50
21	AA	1212	U	C5-C4-O4	8.49	131.00	125.90
22	AY	73	A	C1'-O4'-C4'	-8.49	103.11	109.90
54	BF	60	SER	N-CA-CB	8.49	123.24	110.50
57	BB	2045	C	C4-C5-C6	8.49	121.65	117.40
57	BB	2416	C	O4'-C1'-N1	8.49	115.00	108.20
58	BA	59	A	C5-C6-N6	-8.49	116.91	123.70
57	BB	108	G	P-O3'-C3'	-8.49	109.51	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1899	A	C5-C6-N6	-8.49	116.91	123.70
57	BB	1987	A	O4'-C1'-N9	8.49	114.99	108.20
57	BB	2628	C	N3-C4-C5	-8.49	118.50	121.90
21	AA	1012	A	C5-C6-N1	-8.49	113.45	117.70
57	BB	369	U	O4'-C1'-N1	8.49	114.99	108.20
57	BB	1360	G	N3-C2-N2	8.49	125.84	119.90
57	BB	1683	U	N3-C4-O4	8.49	125.34	119.40
58	BA	43	C	C5-C6-N1	-8.49	116.75	121.00
57	BB	1799	G	C5-C6-N1	-8.49	107.26	111.50
21	AA	628	G	N1-C6-O6	8.49	124.99	119.90
21	AA	852	G	N3-C4-N9	-8.49	120.91	126.00
22	AY	20	G	O4'-C1'-N9	8.49	114.99	108.20
21	AA	1219	A	O4'-C1'-N9	8.49	114.99	108.20
57	BB	121	G	N1-C6-O6	8.49	124.99	119.90
57	BB	1643	G	N3-C2-N2	8.49	125.84	119.90
57	BB	2579	C	N1-C2-O2	-8.49	113.81	118.90
21	AA	149	A	N1-C6-N6	8.48	123.69	118.60
21	AA	1500	A	N7-C8-N9	8.48	118.04	113.80
57	BB	1761	C	O4'-C1'-N1	8.48	114.99	108.20
21	AA	247	G	O4'-C1'-N9	8.48	114.99	108.20
21	AA	708	C	C5-C6-N1	8.48	125.24	121.00
21	AA	985	C	N3-C4-N4	8.48	123.94	118.00
57	BB	1886	U	C2-N3-C4	8.48	132.09	127.00
57	BB	1926	U	O4'-C1'-N1	8.48	114.99	108.20
21	AA	1157	A	N1-C6-N6	8.48	123.69	118.60
21	AA	1194	U	O4'-C1'-N1	8.48	114.98	108.20
21	AA	1307	U	O4'-C1'-N1	8.48	114.98	108.20
57	BB	982	C	C4-C5-C6	8.48	121.64	117.40
57	BB	1012	U	P-O3'-C3'	8.48	129.88	119.70
57	BB	2126	A	C6-N1-C2	8.48	123.69	118.60
57	BB	2468	A	O4'-C1'-N9	8.48	114.98	108.20
57	BB	2563	U	O4'-C1'-N1	8.48	114.99	108.20
57	BB	2607	G	C4-C5-N7	8.48	114.19	110.80
22	AY	23	A	C5-C6-N6	-8.48	116.92	123.70
57	BB	754	U	C2-N3-C4	-8.48	121.91	127.00
21	AA	414	A	N1-C6-N6	8.48	123.69	118.60
23	AW	55	U	C5-C4-O4	-8.48	120.81	125.90
57	BB	188	G	N3-C2-N2	8.48	125.83	119.90
57	BB	1163	G	N3-C2-N2	8.48	125.83	119.90
57	BB	2679	A	C5-C6-N6	-8.48	116.92	123.70
21	AA	238	A	C4-C5-C6	8.47	121.24	117.00
6	AO	79	ARG	NE-CZ-NH2	8.47	124.54	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	146	G	N1-C6-O6	8.47	124.98	119.90
21	AA	803	G	C5-C6-O6	-8.47	123.52	128.60
21	AA	1436	U	N3-C2-O2	8.47	128.13	122.20
23	AW	71	G	C5-C6-O6	-8.47	123.52	128.60
57	BB	241	A	C3'-C2'-C1'	-8.47	94.72	101.50
57	BB	1754	A	N1-C6-N6	8.47	123.69	118.60
57	BB	2115	G	C4-C5-C6	8.47	123.89	118.80
11	AT	35	TYR	CB-CG-CD1	8.47	126.08	121.00
21	AA	85	U	N3-C4-O4	8.47	125.33	119.40
21	AA	613	C	P-O5'-C5'	8.47	134.45	120.90
21	AA	1070	U	O4'-C1'-N1	8.47	114.98	108.20
25	AZ	30	ALA	N-CA-CB	8.47	121.96	110.10
57	BB	314	C	O4'-C1'-N1	8.47	114.98	108.20
57	BB	540	C	C5-C4-N4	-8.47	114.27	120.20
57	BB	946	C	C2-N3-C4	8.47	124.14	119.90
57	BB	1742	U	O4'-C1'-N1	8.47	114.98	108.20
57	BB	2144	G	N1-C6-O6	8.47	124.98	119.90
57	BB	2406	A	N1-C2-N3	-8.47	125.06	129.30
21	AA	22	G	O4'-C1'-N9	8.47	114.97	108.20
21	AA	612	C	C6-N1-C2	-8.47	116.91	120.30
57	BB	1168	G	C2-N3-C4	-8.47	107.67	111.90
57	BB	1455	G	O4'-C1'-N9	8.47	114.97	108.20
58	BA	108	A	C5-C6-N6	-8.47	116.93	123.70
21	AA	250	A	C2-N3-C4	8.46	114.83	110.60
21	AA	282	A	C5-C6-N6	8.46	130.47	123.70
26	AV	10	G	N1-C6-O6	8.47	124.98	119.90
26	AV	34	C	N3-C4-N4	8.47	123.93	118.00
57	BB	738	G	N1-C6-O6	8.47	124.98	119.90
57	BB	1111	A	C5-C6-N1	-8.47	113.47	117.70
57	BB	2145	C	C6-N1-C1'	-8.46	110.64	120.80
57	BB	2690	U	C5-C4-O4	-8.47	120.82	125.90
21	AA	611	C	C5-C6-N1	8.46	125.23	121.00
21	AA	1499	A	N7-C8-N9	-8.46	109.57	113.80
42	BW	40	ARG	NE-CZ-NH2	8.46	124.53	120.30
57	BB	67	U	N1-C2-O2	8.46	128.72	122.80
57	BB	1115	G	N9-C4-C5	-8.46	102.02	105.40
57	BB	1791	A	C6-C5-N7	-8.46	126.38	132.30
57	BB	1878	G	N3-C4-N9	-8.46	120.92	126.00
57	BB	2354	C	C2-N3-C4	8.46	124.13	119.90
57	BB	2514	U	O4'-C1'-N1	8.46	114.97	108.20
57	BB	2107	G	N9-C4-C5	8.46	108.78	105.40
57	BB	2297	A	C5-C6-N6	-8.46	116.93	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	106	C	C5-C6-N1	8.46	125.23	121.00
21	AA	186	C	C5-C6-N1	8.46	125.23	121.00
21	AA	845	A	C4-C5-C6	8.46	121.23	117.00
21	AA	1171	A	O4'-C1'-N9	8.46	114.97	108.20
57	BB	90	U	N3-C4-O4	8.46	125.32	119.40
57	BB	485	C	C4-C5-C6	8.46	121.63	117.40
57	BB	513	A	C5-C6-N6	-8.46	116.93	123.70
57	BB	1169	A	C8-N9-C4	-8.46	102.42	105.80
57	BB	1819	A	C4-C5-C6	8.46	121.23	117.00
57	BB	1879	C	C6-N1-C2	-8.46	116.92	120.30
57	BB	2149	U	N3-C4-C5	-8.46	109.53	114.60
57	BB	2208	C	N3-C4-C5	-8.46	118.52	121.90
57	BB	2270	A	C4-C5-C6	8.46	121.23	117.00
57	BB	2333	A	N7-C8-N9	-8.46	109.57	113.80
21	AA	537	G	C6-N1-C2	-8.45	120.03	125.10
21	AA	1338	G	O4'-C1'-N9	8.45	114.96	108.20
57	BB	152	A	C4-C5-C6	8.45	121.23	117.00
57	BB	677	A	C5-C6-N1	-8.45	113.47	117.70
57	BB	1352	U	N1-C2-O2	8.46	128.72	122.80
57	BB	2392	A	C5-C6-N6	-8.46	116.94	123.70
57	BB	2430	A	N1-C6-N6	8.45	123.67	118.60
57	BB	2597	G	N7-C8-N9	8.45	117.33	113.10
21	AA	752	G	C4-C5-N7	-8.45	107.42	110.80
21	AA	1255	G	C5-C6-N1	-8.45	107.27	111.50
57	BB	554	U	O4'-C1'-N1	8.45	114.96	108.20
21	AA	1129	C	C6-N1-C2	-8.45	116.92	120.30
57	BB	1287	A	C5-C6-N6	-8.45	116.94	123.70
57	BB	1332	G	O4'-C1'-N9	8.45	114.96	108.20
57	BB	2085	U	N3-C4-C5	-8.45	109.53	114.60
1	AJ	5	ARG	NE-CZ-NH2	-8.45	116.08	120.30
21	AA	195	A	C6-C5-N7	-8.45	126.39	132.30
21	AA	1507	A	C5-C6-N6	-8.45	116.94	123.70
23	AW	74	C	C2-N1-C1'	8.45	128.09	118.80
57	BB	364	C	N3-C4-N4	8.45	123.92	118.00
21	AA	275	G	N1-C6-O6	8.45	124.97	119.90
21	AA	292	G	C5-N7-C8	8.45	108.52	104.30
25	AZ	39	TYR	CB-CG-CD2	8.45	126.07	121.00
57	BB	531	C	C6-N1-C2	8.45	123.68	120.30
57	BB	644	A	N9-C4-C5	8.45	109.18	105.80
57	BB	908	C	N1-C2-O2	-8.45	113.83	118.90
21	AA	164	G	C5-C6-N1	8.44	115.72	111.50
21	AA	767	A	C4-C5-C6	8.44	121.22	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BI	61	TYR	CB-CG-CD1	8.45	126.07	121.00
57	BB	1197	G	C5-C6-O6	-8.45	123.53	128.60
57	BB	1907	G	C5-C6-N1	-8.45	107.28	111.50
57	BB	1957	C	N3-C2-O2	-8.44	115.99	121.90
57	BB	2051	A	C4-C5-N7	-8.44	106.48	110.70
57	BB	2144	G	N9-C4-C5	-8.44	102.02	105.40
57	BB	2853	C	C5-C4-N4	-8.44	114.29	120.20
57	BB	562	U	O4'-C1'-N1	8.44	114.95	108.20
57	BB	663	G	C5-N7-C8	-8.44	100.08	104.30
57	BB	752	A	C4-C5-C6	8.44	121.22	117.00
57	BB	2404	U	N3-C2-O2	8.44	128.11	122.20
57	BB	2830	C	N1-C2-N3	-8.44	113.29	119.20
58	BA	35	C	O4'-C1'-N1	8.44	114.95	108.20
21	AA	244	U	C5-C6-N1	8.44	126.92	122.70
21	AA	359	G	C2-N3-C4	-8.44	107.68	111.90
21	AA	369	G	C5-C6-O6	-8.44	123.54	128.60
21	AA	378	G	O4'-C1'-N9	8.44	114.95	108.20
21	AA	1463	U	N3-C4-O4	8.44	125.31	119.40
57	BB	2800	A	O4'-C1'-N9	8.44	114.95	108.20
57	BB	484	C	O4'-C1'-N1	8.44	114.95	108.20
57	BB	695	G	N9-C4-C5	-8.44	102.02	105.40
57	BB	2444	G	N9-C4-C5	8.44	108.78	105.40
57	BB	1351	C	O4'-C1'-N1	8.44	114.95	108.20
57	BB	2582	G	C4-C5-N7	-8.44	107.42	110.80
58	BA	99	A	N7-C8-N9	-8.44	109.58	113.80
21	AA	108	G	C8-N9-C4	-8.44	103.03	106.40
57	BB	1586	A	C5-C6-N1	-8.44	113.48	117.70
57	BB	1938	A	C4-C5-C6	8.44	121.22	117.00
21	AA	663	A	O4'-C1'-N9	8.44	114.95	108.20
57	BB	220	G	N3-C4-N9	-8.44	120.94	126.00
57	BB	1409	U	O4'-C1'-N1	8.44	114.95	108.20
57	BB	2889	C	P-O3'-C3'	8.44	129.82	119.70
24	AX	21	C	O4'-C1'-N1	8.43	114.95	108.20
57	BB	1503	A	C4-C5-C6	8.43	121.22	117.00
57	BB	1122	G	O4'-C1'-N9	8.43	114.95	108.20
57	BB	1529	G	N1-C6-O6	8.43	124.96	119.90
57	BB	1571	A	C5-C6-N1	-8.43	113.48	117.70
57	BB	1803	A	C2-N3-C4	-8.43	106.38	110.60
21	AA	131	A	C5-C6-N6	-8.43	116.96	123.70
21	AA	210	C	O4'-C1'-N1	8.43	114.94	108.20
57	BB	1028	A	C4-C5-N7	-8.43	106.48	110.70
21	AA	251	G	C8-N9-C4	-8.43	103.03	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	355	C	N3-C4-N4	8.43	123.90	118.00
57	BB	595	C	C6-N1-C2	-8.43	116.93	120.30
57	BB	1806	C	C5-C4-N4	-8.43	114.30	120.20
57	BB	1855	U	C2-N3-C4	8.43	132.06	127.00
21	AA	1297	G	N3-C2-N2	8.43	125.80	119.90
57	BB	1401	G	N3-C4-C5	-8.43	124.39	128.60
57	BB	1409	U	C4-C5-C6	8.43	124.76	119.70
57	BB	1449	G	O4'-C1'-N9	8.43	114.94	108.20
57	BB	1904	G	C6-C5-N7	-8.43	125.34	130.40
57	BB	2146	C	N3-C4-C5	-8.43	118.53	121.90
13	AB	31	PHE	CB-CG-CD2	8.43	126.70	120.80
21	AA	353	A	C5-C6-N6	-8.43	116.96	123.70
21	AA	564	C	O4'-C1'-N1	8.43	114.94	108.20
21	AA	583	A	O4'-C1'-N9	8.43	114.94	108.20
21	AA	1012	A	O4'-C1'-N9	8.43	114.94	108.20
21	AA	1100	C	C1'-O4'-C4'	-8.43	103.16	109.90
21	AA	1452	C	C5'-C4'-O4'	8.43	119.21	109.10
21	AA	1490	U	C5-C4-O4	-8.43	120.84	125.90
22	AY	19	G	N3-C4-C5	8.43	132.81	128.60
54	BF	172	PHE	CB-CG-CD1	8.43	126.70	120.80
56	BH	123	ARG	NE-CZ-NH2	-8.43	116.09	120.30
57	BB	489	G	N1-C6-O6	8.43	124.96	119.90
57	BB	510	C	O4'-C1'-N1	8.43	114.94	108.20
57	BB	555	G	N9-C4-C5	8.43	108.77	105.40
57	BB	1341	G	O4'-C1'-N9	8.43	114.94	108.20
57	BB	1191	G	C4-N9-C1'	-8.43	115.55	126.50
57	BB	1340	U	N3-C4-O4	8.43	125.30	119.40
57	BB	1603	A	N1-C6-N6	8.43	123.66	118.60
57	BB	2703	C	O4'-C1'-N1	8.43	114.94	108.20
10	AS	37	SER	N-CA-CB	8.42	123.14	110.50
21	AA	165	G	N1-C6-O6	8.42	124.95	119.90
21	AA	1316	G	O4'-C1'-N9	8.42	114.94	108.20
57	BB	592	A	C4-C5-C6	8.42	121.21	117.00
57	BB	919	U	O4'-C1'-N1	8.42	114.94	108.20
21	AA	558	G	C6-C5-N7	-8.42	125.35	130.40
21	AA	1514	G	C2-N3-C4	8.42	116.11	111.90
57	BB	105	C	N3-C4-C5	-8.42	118.53	121.90
57	BB	272	A	C8-N9-C4	-8.42	102.43	105.80
57	BB	1398	C	C4-C5-C6	8.42	121.61	117.40
57	BB	766	U	N1-C2-O2	-8.42	116.91	122.80
57	BB	2854	G	C5-C6-N1	-8.42	107.29	111.50
21	AA	356	A	C8-N9-C4	-8.42	102.43	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	422	C	O4'-C1'-N1	8.42	114.93	108.20
21	AA	499	A	O4'-C1'-N9	8.42	114.93	108.20
21	AA	665	A	N1-C2-N3	-8.42	125.09	129.30
21	AA	852	G	N1-C6-O6	8.42	124.95	119.90
21	AA	890	G	C8-N9-C4	-8.42	103.03	106.40
21	AA	890	G	N9-C4-C5	8.42	108.77	105.40
22	AY	48	C	N3-C4-C5	-8.42	118.53	121.90
57	BB	1138	G	C6-C5-N7	-8.42	125.35	130.40
57	BB	1165	A	O4'-C1'-N9	8.42	114.93	108.20
57	BB	2446	G	N9-C4-C5	-8.42	102.03	105.40
21	AA	1018	G	O4'-C1'-N9	8.41	114.93	108.20
57	BB	976	G	N3-C2-N2	8.41	125.79	119.90
57	BB	2318	G	N1-C2-N3	-8.41	118.85	123.90
23	AW	8	U	O4'-C1'-N1	8.41	114.93	108.20
57	BB	1307	A	N7-C8-N9	-8.41	109.59	113.80
57	BB	31	C	O4'-C1'-N1	8.41	114.93	108.20
57	BB	431	U	N3-C2-O2	8.41	128.09	122.20
21	AA	86	G	C5-N7-C8	8.41	108.50	104.30
21	AA	558	G	N1-C6-O6	8.41	124.94	119.90
57	BB	193	U	C4-C5-C6	8.41	124.75	119.70
57	BB	1000	A	O4'-C1'-N9	8.41	114.93	108.20
57	BB	1009	A	O4'-C1'-N9	8.41	114.93	108.20
57	BB	1048	A	C5-C6-N1	-8.41	113.50	117.70
57	BB	1305	C	N3-C4-C5	-8.41	118.54	121.90
57	BB	1879	C	O4'-C1'-N1	8.41	114.93	108.20
57	BB	2578	G	C5-N7-C8	8.41	108.50	104.30
57	BB	2803	G	C5-C6-N1	-8.41	107.29	111.50
58	BA	77	U	N1-C2-O2	-8.41	116.91	122.80
57	BB	534	U	N3-C4-C5	-8.41	109.56	114.60
57	BB	2211	A	C5-C6-N1	-8.41	113.50	117.70
21	AA	275	G	N3-C2-N2	8.41	125.78	119.90
21	AA	421	U	N3-C4-C5	-8.41	109.56	114.60
57	BB	791	C	C5-C4-N4	-8.41	114.32	120.20
57	BB	1496	A	N3-C4-C5	-8.41	120.92	126.80
17	AF	86	ARG	NE-CZ-NH2	-8.40	116.10	120.30
57	BB	212	G	N1-C6-O6	8.40	124.94	119.90
57	BB	605	G	C5-C6-O6	-8.40	123.56	128.60
21	AA	989	U	O4'-C1'-N1	8.40	114.92	108.20
57	BB	620	G	C6-C5-N7	-8.40	125.36	130.40
57	BB	786	C	C5-C4-N4	-8.40	114.32	120.20
57	BB	1106	G	C5-N7-C8	8.40	108.50	104.30
57	BB	2124	G	N1-C2-N3	-8.40	118.86	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AL	109	ARG	NE-CZ-NH2	-8.40	116.10	120.30
57	BB	2081	U	C5'-C4'-C3'	8.40	129.44	116.00
21	AA	478	A	N7-C8-N9	-8.40	109.60	113.80
21	AA	653	U	P-O5'-C5'	8.40	134.34	120.90
21	AA	609	A	N3-C4-C5	-8.40	120.92	126.80
21	AA	1493	A	P-O3'-C3'	8.40	129.78	119.70
21	AA	354	G	N7-C8-N9	8.40	117.30	113.10
57	BB	142	A	C5-N7-C8	8.40	108.10	103.90
57	BB	1046	A	C6-C5-N7	-8.40	126.42	132.30
57	BB	1162	G	O4'-C1'-N9	8.40	114.92	108.20
57	BB	788	A	C5-C6-N6	-8.40	116.98	123.70
57	BB	2568	U	C5-C6-N1	8.40	126.90	122.70
21	AA	39	G	N1-C6-O6	8.39	124.94	119.90
21	AA	1431	A	O4'-C1'-N9	8.39	114.92	108.20
57	BB	2627	G	C5-C6-O6	8.39	133.64	128.60
21	AA	1395	C	O4'-C1'-N1	8.39	114.92	108.20
57	BB	937	C	N3-C4-N4	8.39	123.88	118.00
57	BB	1011	G	N1-C2-N3	-8.39	118.86	123.90
57	BB	2018	G	C8-N9-C4	-8.39	103.04	106.40
57	BB	2056	G	C5-C6-O6	-8.39	123.56	128.60
57	BB	2587	A	N1-C6-N6	8.39	123.64	118.60
57	BB	2710	C	N3-C4-N4	8.39	123.88	118.00
58	BA	104	A	C8-N9-C4	-8.39	102.44	105.80
21	AA	353	A	O4'-C1'-N9	8.39	114.91	108.20
21	AA	450	G	C4-C5-N7	-8.39	107.44	110.80
57	BB	177	G	N3-C4-N9	8.39	131.03	126.00
57	BB	2227	A	N1-C6-N6	8.39	123.64	118.60
21	AA	1079	G	C4-C5-N7	8.39	114.16	110.80
57	BB	49	A	C5-C6-N6	-8.39	116.99	123.70
58	BA	98	G	N1-C6-O6	8.39	124.93	119.90
21	AA	214	C	C5-C6-N1	8.39	125.19	121.00
21	AA	497	G	C2-N3-C4	-8.39	107.71	111.90
21	AA	655	A	N1-C2-N3	8.39	133.49	129.30
21	AA	1336	C	C5-C4-N4	-8.39	114.33	120.20
24	AX	18	G	N1-C2-N3	-8.39	118.87	123.90
57	BB	297	G	O4'-C1'-N9	8.39	114.91	108.20
57	BB	885	C	N3-C4-N4	8.39	123.87	118.00
57	BB	902	C	C4-C5-C6	8.39	121.59	117.40
57	BB	1206	G	O5'-P-OP2	-8.39	98.15	105.70
57	BB	2646	C	O4'-C1'-N1	8.39	114.91	108.20
57	BB	2864	G	N1-C2-N2	-8.39	108.65	116.20
21	AA	504	C	O4'-C1'-N1	8.39	114.91	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1205	U	N1-C2-N3	8.39	119.93	114.90
57	BB	752	A	C5-C6-N1	-8.39	113.51	117.70
21	AA	237	G	C2-N3-C4	8.38	116.09	111.90
21	AA	405	U	O4'-C1'-N1	8.38	114.91	108.20
57	BB	26	G	C8-N9-C4	-8.39	103.05	106.40
57	BB	2018	G	C3'-C2'-C1'	-8.38	94.79	101.50
57	BB	2147	A	N1-C6-N6	8.38	123.63	118.60
57	BB	2451	A	C5-C6-N6	-8.39	116.99	123.70
57	BB	2667	C	O4'-C1'-N1	8.38	114.91	108.20
57	BB	2837	A	C8-N9-C4	-8.38	102.45	105.80
26	AV	63	G	C6-C5-N7	-8.38	125.37	130.40
21	AA	500	G	N1-C6-O6	8.38	124.93	119.90
57	BB	1839	G	C4-C5-N7	-8.38	107.45	110.80
21	AA	658	C	C5-C6-N1	8.38	125.19	121.00
22	AY	52	U	P-O3'-C3'	8.38	129.76	119.70
57	BB	1802	A	C1'-O4'-C4'	8.38	116.61	109.90
57	BB	2007	U	N1-C2-N3	-8.38	109.87	114.90
57	BB	2038	G	C4-C5-N7	8.38	114.15	110.80
58	BA	28	C	O4'-C1'-N1	8.38	114.91	108.20
57	BB	299	A	C5-C6-N6	-8.38	117.00	123.70
57	BB	881	G	C2-N3-C4	-8.38	107.71	111.90
57	BB	1936	A	N3-C4-C5	-8.38	120.93	126.80
57	BB	2349	G	O4'-C1'-N9	8.38	114.90	108.20
57	BB	2820	A	C2-N3-C4	-8.38	106.41	110.60
57	BB	2825	G	N1-C6-O6	8.38	124.93	119.90
57	BB	2852	G	O4'-C1'-N9	8.38	114.90	108.20
21	AA	254	G	C4-C5-C6	8.38	123.83	118.80
21	AA	461	A	P-O3'-C3'	-8.38	109.64	119.70
21	AA	428	G	P-O3'-C3'	8.38	129.75	119.70
21	AA	811	C	N3-C4-N4	8.38	123.86	118.00
21	AA	919	A	C6-C5-N7	-8.38	126.44	132.30
21	AA	1147	C	C6-N1-C2	-8.38	116.95	120.30
57	BB	382	A	N7-C8-N9	-8.38	109.61	113.80
57	BB	654	A	N1-C6-N6	8.38	123.63	118.60
57	BB	991	C	N3-C4-C5	-8.38	118.55	121.90
57	BB	1456	G	N1-C6-O6	8.38	124.93	119.90
21	AA	258	G	N3-C2-N2	8.38	125.76	119.90
21	AA	550	G	N1-C2-N3	-8.38	118.87	123.90
21	AA	914	A	C5-C6-N6	-8.38	117.00	123.70
21	AA	1147	C	N3-C4-C5	-8.38	118.55	121.90
57	BB	52	A	O4'-C1'-N9	8.38	114.90	108.20
57	BB	922	C	O4'-C1'-N1	8.38	114.90	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2860	A	C8-N9-C4	-8.38	102.45	105.80
21	AA	1214	C	C6-N1-C1'	-8.37	110.75	120.80
26	AV	67	C	N3-C4-N4	8.37	123.86	118.00
57	BB	1422	G	C8-N9-C4	8.38	109.75	106.40
57	BB	1878	G	O4'-C1'-N9	8.38	114.90	108.20
21	AA	683	G	O4'-C1'-N9	8.37	114.90	108.20
57	BB	1969	A	C5-C6-N1	-8.37	113.51	117.70
57	BB	2721	A	C6-C5-N7	-8.37	126.44	132.30
57	BB	2803	G	C3'-C2'-C1'	-8.37	94.80	101.50
58	BA	77	U	O4'-C1'-N1	8.37	114.90	108.20
21	AA	861	G	N1-C6-O6	8.37	124.92	119.90
57	BB	904	G	C5-C6-O6	-8.37	123.58	128.60
21	AA	93	U	O4'-C1'-N1	8.37	114.89	108.20
21	AA	124	C	O4'-C1'-N1	8.37	114.89	108.20
21	AA	451	A	C5-C6-N1	-8.37	113.52	117.70
21	AA	981	U	C5-C6-N1	8.37	126.88	122.70
23	AW	26	A	O4'-C1'-N9	8.37	114.89	108.20
57	BB	974	G	C6-N1-C2	8.37	130.12	125.10
57	BB	1242	U	N1-C2-N3	-8.37	109.88	114.90
57	BB	362	A	C4-C5-C6	8.37	121.18	117.00
57	BB	1538	G	N1-C6-O6	8.37	124.92	119.90
21	AA	704	A	N1-C6-N6	8.37	123.62	118.60
21	AA	1063	C	C4-C5-C6	8.37	121.58	117.40
21	AA	1270	G	C4-C5-C6	8.37	123.82	118.80
57	BB	77	G	N3-C4-C5	-8.37	124.42	128.60
57	BB	457	A	P-O3'-C3'	8.37	129.74	119.70
57	BB	2043	C	O4'-C1'-N1	8.37	114.89	108.20
57	BB	728	G	N3-C2-N2	8.36	125.75	119.90
57	BB	1219	U	C5-C6-N1	8.37	126.88	122.70
57	BB	2032	G	N3-C2-N2	8.36	125.75	119.90
21	AA	518	C	C3'-C2'-C1'	-8.36	94.81	101.50
21	AA	937	A	C5-C6-N1	-8.36	113.52	117.70
57	BB	859	G	C8-N9-C4	8.36	109.75	106.40
57	BB	1875	G	N1-C6-O6	8.36	124.92	119.90
21	AA	986	U	C5-C4-O4	-8.36	120.88	125.90
25	AZ	123	ARG	NE-CZ-NH2	8.36	124.48	120.30
57	BB	803	U	N1-C2-N3	8.36	119.92	114.90
57	BB	1564	C	N3-C4-C5	-8.36	118.56	121.90
21	AA	881	G	C8-N9-C4	-8.36	103.06	106.40
57	BB	2751	G	C5-N7-C8	8.36	108.48	104.30
21	AA	174	A	N1-C6-N6	8.36	123.61	118.60
22	AY	28	C	O4'-C4'-C3'	-8.36	95.64	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	BM	117	PHE	CB-CG-CD1	8.36	126.65	120.80
57	BB	585	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2083	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2399	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2415	G	N1-C6-O6	8.36	124.92	119.90
21	AA	50	A	O4'-C1'-N9	8.36	114.89	108.20
57	BB	2127	G	O4'-C1'-N9	8.36	114.89	108.20
21	AA	1484	C	C5-C4-N4	-8.36	114.35	120.20
57	BB	2755	C	C6-N1-C2	-8.36	116.96	120.30
57	BB	985	C	N3-C4-N4	8.35	123.85	118.00
21	AA	126	G	C4-N9-C1'	-8.35	115.64	126.50
21	AA	397	A	C4-C5-C6	8.35	121.18	117.00
21	AA	1048	G	C5-C6-O6	-8.35	123.59	128.60
57	BB	237	C	C1'-O4'-C4'	8.35	116.58	109.90
21	AA	734	G	N3-C2-N2	8.35	125.75	119.90
21	AA	1246	A	C5-C6-N6	-8.35	117.02	123.70
26	AV	40	C	C4'-C3'-C2'	-8.35	94.25	102.60
57	BB	756	A	N1-C6-N6	8.35	123.61	118.60
57	BB	850	U	O4'-C1'-N1	8.35	114.88	108.20
57	BB	1561	C	C5-C6-N1	8.35	125.18	121.00
57	BB	2120	G	C4-C5-N7	8.35	114.14	110.80
57	BB	2360	G	C5-C6-O6	-8.35	123.59	128.60
21	AA	350	G	N7-C8-N9	8.35	117.28	113.10
22	AY	37	G	N1-C2-N3	-8.35	118.89	123.90
57	BB	58	G	N1-C6-O6	8.35	124.91	119.90
30	BK	17	ARG	NE-CZ-NH1	8.35	124.47	120.30
57	BB	254	G	C2-N3-C4	8.35	116.07	111.90
57	BB	430	A	O4'-C1'-N9	8.35	114.88	108.20
57	BB	537	G	N9-C4-C5	8.35	108.74	105.40
57	BB	2074	U	C2-N3-C4	8.35	132.01	127.00
57	BB	2146	C	C4-C5-C6	8.35	121.58	117.40
57	BB	698	C	O5'-P-OP2	-8.35	98.19	105.70
57	BB	1167	C	C6-N1-C2	8.35	123.64	120.30
57	BB	1228	G	N1-C6-O6	8.35	124.91	119.90
57	BB	1338	G	N7-C8-N9	8.35	117.27	113.10
57	BB	2463	C	C6-N1-C2	8.35	123.64	120.30
58	BA	24	G	C8-N9-C4	-8.35	103.06	106.40
21	AA	681	A	C5-C6-N1	-8.35	113.53	117.70
21	AA	1016	A	C5-C6-N1	-8.35	113.53	117.70
21	AA	1434	A	C5-C6-N6	-8.35	117.02	123.70
57	BB	7	G	O4'-C1'-N9	8.35	114.88	108.20
21	AA	1447	A	P-O3'-C3'	8.35	129.71	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1476	A	C4-C5-N7	8.35	114.87	110.70
23	AW	38	A	C5-C6-N1	-8.35	113.53	117.70
57	BB	141	G	N3-C2-N2	8.35	125.74	119.90
57	BB	265	A	C4-C5-C6	-8.35	112.83	117.00
57	BB	578	G	O5'-P-OP2	-8.35	98.19	105.70
57	BB	1471	G	N1-C6-O6	8.35	124.91	119.90
57	BB	1556	C	O4'-C1'-N1	8.35	114.88	108.20
57	BB	1572	A	O4'-C1'-N9	8.35	114.88	108.20
57	BB	2264	C	O4'-C1'-N1	8.35	114.88	108.20
57	BB	2700	A	C6-N1-C2	-8.35	113.59	118.60
57	BB	963	U	N1-C2-O2	-8.34	116.96	122.80
57	BB	2177	C	O4'-C1'-N1	8.34	114.88	108.20
21	AA	585	G	C4-C5-N7	-8.34	107.46	110.80
21	AA	734	G	N1-C2-N3	-8.34	118.89	123.90
57	BB	707	G	C5-C6-O6	-8.34	123.59	128.60
57	BB	1038	G	C6-C5-N7	-8.34	125.39	130.40
57	BB	1842	G	C5-C6-N1	-8.34	107.33	111.50
57	BB	2138	G	C5-C6-O6	-8.34	123.59	128.60
58	BA	57	A	N3-C4-C5	-8.34	120.96	126.80
57	BB	651	G	O4'-C1'-N9	8.34	114.87	108.20
57	BB	1185	G	N1-C2-N3	-8.34	118.89	123.90
57	BB	1227	G	N3-C2-N2	8.34	125.74	119.90
57	BB	1511	G	C8-N9-C4	-8.34	103.06	106.40
57	BB	1803	A	C4-C5-N7	-8.34	106.53	110.70
57	BB	2753	A	O4'-C1'-N9	8.34	114.87	108.20
57	BB	1346	G	N1-C2-N3	-8.34	118.90	123.90
57	BB	1790	C	O4'-C1'-N1	8.34	114.87	108.20
57	BB	1794	A	C5-C6-N6	-8.34	117.03	123.70
57	BB	2634	A	O4'-C1'-N9	8.34	114.87	108.20
57	BB	1992	G	C6-C5-N7	-8.34	125.40	130.40
57	BB	2643	G	C5-C6-O6	-8.34	123.60	128.60
58	BA	37	C	C2-N3-C4	8.34	124.07	119.90
21	AA	568	G	C6-C5-N7	-8.34	125.40	130.40
21	AA	648	A	N1-C6-N6	8.34	123.60	118.60
57	BB	476	G	N3-C2-N2	-8.34	114.06	119.90
57	BB	1578	U	N3-C4-C5	-8.34	109.60	114.60
21	AA	51	A	C5-C6-N1	-8.34	113.53	117.70
21	AA	281	G	N1-C6-O6	8.34	124.90	119.90
21	AA	756	C	O4'-C1'-N1	8.34	114.87	108.20
21	AA	1003	G	N1-C6-O6	8.34	124.90	119.90
23	AW	40	C	C6-N1-C2	-8.34	116.97	120.30
57	BB	357	C	N3-C4-N4	8.34	123.83	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1103	A	C2-N3-C4	8.34	114.77	110.60
57	BB	1383	A	N7-C8-N9	8.34	117.97	113.80
57	BB	1710	G	N1-C6-O6	8.34	124.90	119.90
57	BB	2762	C	C2-N3-C4	8.34	124.07	119.90
58	BA	72	G	N1-C6-O6	8.34	124.90	119.90
21	AA	941	G	C4-C5-C6	8.33	123.80	118.80
57	BB	472	A	C5-C6-N1	-8.33	113.53	117.70
57	BB	523	C	N3-C4-N4	8.33	123.83	118.00
57	BB	2810	A	N1-C2-N3	8.33	133.47	129.30
57	BB	412	A	C5-C6-N6	-8.33	117.03	123.70
57	BB	570	G	O4'-C1'-N9	8.33	114.87	108.20
57	BB	690	G	N1-C2-N3	-8.33	118.90	123.90
57	BB	2121	G	C8-N9-C4	8.33	109.73	106.40
57	BB	1079	C	C5-C4-N4	-8.33	114.37	120.20
57	BB	1089	A	C5-C6-N1	-8.33	113.53	117.70
57	BB	2125	G	C8-N9-C4	-8.33	103.07	106.40
57	BB	2829	A	C5-C6-N6	-8.33	117.03	123.70
57	BB	2465	C	N3-C4-N4	8.33	123.83	118.00
57	BB	2592	G	N3-C2-N2	8.33	125.73	119.90
58	BA	28	C	N3-C4-C5	-8.33	118.57	121.90
21	AA	25	C	C5-C4-N4	-8.33	114.37	120.20
21	AA	805	C	C5-C6-N1	8.33	125.17	121.00
57	BB	1937	A	N1-C6-N6	8.33	123.60	118.60
21	AA	745	G	N1-C6-O6	8.33	124.90	119.90
21	AA	1055	A	O4'-C1'-N9	8.33	114.86	108.20
47	B0	15	ARG	NE-CZ-NH2	8.33	124.47	120.30
57	BB	1391	U	N3-C4-C5	-8.33	109.60	114.60
57	BB	1897	G	N1-C6-O6	8.33	124.90	119.90
57	BB	2101	A	N9-C4-C5	-8.33	102.47	105.80
21	AA	615	G	P-O3'-C3'	-8.33	109.71	119.70
22	AY	27	C	O3'-P-O5'	-8.33	88.18	104.00
26	AV	17	C	C4'-C3'-C2'	-8.33	94.27	102.60
26	AV	31	G	C5-C6-O6	-8.33	123.60	128.60
57	BB	1644	C	N3-C4-N4	8.33	123.83	118.00
57	BB	2623	G	N1-C2-N2	-8.33	108.70	116.20
57	BB	2661	G	C2-N3-C4	8.33	116.06	111.90
57	BB	2665	A	C5-C6-N6	-8.33	117.04	123.70
57	BB	2804	U	C2-N3-C4	-8.33	122.00	127.00
21	AA	254	G	C4-C5-N7	-8.32	107.47	110.80
21	AA	1324	A	N1-C6-N6	8.32	123.59	118.60
57	BB	753	A	N3-C4-C5	-8.32	120.97	126.80
21	AA	1231	G	C5-C6-O6	-8.32	123.61	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1248	A	O4'-C1'-N9	8.32	114.86	108.20
21	AA	1448	C	O4'-C1'-N1	8.32	114.86	108.20
57	BB	295	G	C5-C6-N1	-8.32	107.34	111.50
57	BB	1107	G	C4-C5-N7	-8.32	107.47	110.80
57	BB	2071	A	C5-N7-C8	-8.32	99.74	103.90
57	BB	1899	A	N9-C4-C5	8.32	109.13	105.80
57	BB	2232	C	N3-C4-N4	8.32	123.83	118.00
2	AK	68	ARG	NE-CZ-NH1	8.32	124.46	120.30
21	AA	634	C	C5-C6-N1	8.32	125.16	121.00
21	AA	784	A	N9-C4-C5	8.32	109.13	105.80
26	AV	40	C	O4'-C1'-N1	8.32	114.86	108.20
21	AA	112	G	N9-C4-C5	-8.32	102.07	105.40
57	BB	584	C	C4-C5-C6	8.32	121.56	117.40
57	BB	1142	A	C4-C5-C6	8.32	121.16	117.00
57	BB	1638	C	O4'-C1'-N1	8.32	114.85	108.20
57	BB	1787	A	C4-C5-C6	8.32	121.16	117.00
57	BB	1927	A	O4'-C1'-N9	8.32	114.85	108.20
57	BB	2726	A	C4-C5-C6	8.32	121.16	117.00
21	AA	191	G	C2-N3-C4	8.32	116.06	111.90
21	AA	445	G	N1-C2-N3	-8.32	118.91	123.90
21	AA	654	G	C5-N7-C8	-8.32	100.14	104.30
57	BB	1232	G	C2-N3-C4	8.32	116.06	111.90
58	BA	90	C	P-O3'-C3'	-8.32	109.72	119.70
19	AH	61	THR	CA-CB-CG2	-8.31	100.76	112.40
21	AA	716	A	N7-C8-N9	-8.31	109.64	113.80
21	AA	184	G	N1-C2-N3	-8.31	118.91	123.90
21	AA	354	G	C5-C6-N1	-8.31	107.34	111.50
21	AA	1501	C	O4'-C1'-N1	8.31	114.85	108.20
57	BB	290	U	C6-N1-C2	-8.31	116.01	121.00
57	BB	1320	C	C4-C5-C6	8.31	121.56	117.40
57	BB	1503	A	C5-C6-N6	-8.31	117.05	123.70
17	AF	24	ARG	NE-CZ-NH1	8.31	124.46	120.30
21	AA	689	C	P-O5'-C5'	8.31	134.20	120.90
21	AA	1264	U	C5-C6-N1	8.31	126.86	122.70
23	AW	55	U	N3-C4-O4	8.31	125.22	119.40
23	AW	56	C	N3-C4-C5	-8.31	118.58	121.90
57	BB	292	U	O4'-C1'-N1	8.31	114.85	108.20
57	BB	528	A	C4-C5-C6	8.31	121.16	117.00
57	BB	1970	A	C5-C6-N1	-8.31	113.55	117.70
57	BB	2071	A	C6-C5-N7	-8.31	126.48	132.30
21	AA	200	G	N1-C2-N3	-8.31	118.92	123.90
21	AA	823	C	C4-C5-C6	8.31	121.56	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1462	C	N3-C4-N4	8.31	123.81	118.00
57	BB	338	G	N7-C8-N9	-8.31	108.95	113.10
57	BB	1143	A	C2-N3-C4	8.31	114.75	110.60
57	BB	1477	A	O4'-C1'-N9	8.31	114.85	108.20
57	BB	1504	A	C6-C5-N7	-8.31	126.48	132.30
21	AA	81	A	C8-N9-C4	-8.31	102.48	105.80
21	AA	186	C	N3-C4-C5	-8.31	118.58	121.90
21	AA	314	C	O4'-C1'-N1	8.30	114.84	108.20
57	BB	52	A	N7-C8-N9	-8.31	109.65	113.80
57	BB	641	U	N1-C2-N3	-8.30	109.92	114.90
57	BB	1719	G	N1-C6-O6	8.31	124.88	119.90
57	BB	2093	G	C4-N9-C1'	-8.30	115.70	126.50
57	BB	2332	C	N3-C4-C5	-8.31	118.58	121.90
57	BB	2719	G	C5'-C4'-O4'	8.31	119.07	109.10
25	AZ	381	ARG	NE-CZ-NH2	8.30	124.45	120.30
57	BB	868	U	N3-C4-O4	8.30	125.21	119.40
57	BB	1182	G	C4-C5-N7	8.30	114.12	110.80
57	BB	1313	U	C6-N1-C1'	-8.30	109.57	121.20
57	BB	2755	C	P-O3'-C3'	8.30	129.67	119.70
58	BA	117	G	N3-C2-N2	8.30	125.71	119.90
21	AA	1047	G	C6-C5-N7	-8.30	125.42	130.40
57	BB	866	A	N9-C4-C5	8.30	109.12	105.80
57	BB	2722	G	N3-C2-N2	8.30	125.71	119.90
57	BB	963	U	C5-C4-O4	-8.30	120.92	125.90
57	BB	2425	A	N1-C6-N6	8.30	123.58	118.60
21	AA	800	G	O4'-C1'-N9	8.30	114.84	108.20
21	AA	949	A	C4-C5-C6	8.30	121.15	117.00
57	BB	872	U	N1-C2-N3	-8.30	109.92	114.90
57	BB	1581	G	N9-C4-C5	8.30	108.72	105.40
57	BB	1918	A	C8-N9-C4	-8.30	102.48	105.80
57	BB	2206	C	O4'-C1'-N1	8.30	114.84	108.20
24	AX	12	A	C2-N3-C4	-8.30	106.45	110.60
21	AA	289	G	N1-C2-N3	-8.29	118.92	123.90
57	BB	251	A	C5-C6-N6	-8.29	117.06	123.70
57	BB	668	A	C5-C6-N6	-8.29	117.06	123.70
57	BB	1891	G	N7-C8-N9	-8.29	108.95	113.10
58	BA	45	A	N9-C4-C5	-8.29	102.48	105.80
21	AA	585	G	C5'-C4'-O4'	8.29	119.05	109.10
21	AA	1218	C	N3-C4-C5	-8.29	118.58	121.90
57	BB	355	U	O4'-C1'-N1	8.29	114.83	108.20
57	BB	45	G	O4'-C1'-N9	8.29	114.83	108.20
57	BB	766	U	O4'-C1'-N1	8.29	114.83	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	810	U	C4-C5-C6	8.29	124.67	119.70
57	BB	1085	A	C4-C5-N7	-8.29	106.56	110.70
57	BB	1989	G	C5-C6-O6	-8.29	123.62	128.60
21	AA	122	G	C5-C6-O6	-8.29	123.63	128.60
21	AA	501	C	C4-C5-C6	8.29	121.55	117.40
21	AA	1267	C	O4'-C1'-N1	8.29	114.83	108.20
23	AW	20	U	P-O5'-C5'	8.29	134.16	120.90
57	BB	2052	A	C4-C5-N7	-8.29	106.56	110.70
57	BB	80	G	C5-C6-O6	-8.29	123.63	128.60
57	BB	121	G	C4-C5-N7	8.29	114.11	110.80
57	BB	920	A	C4-C5-C6	8.29	121.14	117.00
57	BB	1352	U	C2-N3-C4	8.29	131.97	127.00
57	BB	1303	G	N3-C2-N2	8.29	125.70	119.90
57	BB	1666	G	N3-C2-N2	8.29	125.70	119.90
57	BB	1819	A	C5-C6-N1	-8.29	113.56	117.70
57	BB	1954	G	N1-C2-N3	-8.29	118.93	123.90
57	BB	2167	U	P-O5'-C5'	8.29	134.16	120.90
57	BB	2527	C	C5-C4-N4	-8.29	114.40	120.20
57	BB	2535	G	C5-C6-N1	-8.29	107.36	111.50
57	BB	2373	G	C5-N7-C8	8.29	108.44	104.30
21	AA	63	C	O4'-C1'-N1	8.28	114.83	108.20
21	AA	213	G	N1-C2-N3	-8.28	118.93	123.90
21	AA	1093	A	C5-C6-N1	-8.28	113.56	117.70
57	BB	254	G	N3-C2-N2	8.28	125.70	119.90
57	BB	669	G	N1-C6-O6	8.28	124.87	119.90
21	AA	1489	G	O4'-C1'-N9	8.28	114.83	108.20
57	BB	364	C	C6-N1-C2	-8.28	116.99	120.30
57	BB	1829	A	N1-C2-N3	8.28	133.44	129.30
57	BB	1898	U	O4'-C1'-N1	8.28	114.83	108.20
57	BB	2116	G	C5-C6-O6	-8.28	123.63	128.60
57	BB	2578	G	O4'-C1'-N9	8.28	114.83	108.20
57	BB	2863	C	C5-C4-N4	-8.28	114.40	120.20
57	BB	2874	C	N3-C4-N4	8.28	123.80	118.00
21	AA	292	G	N7-C8-N9	-8.28	108.96	113.10
21	AA	785	G	C5-C6-O6	-8.28	123.63	128.60
21	AA	1015	G	O4'-C1'-N9	8.28	114.82	108.20
21	AA	1412	C	C5-C4-N4	-8.28	114.40	120.20
57	BB	1233	C	O4'-C1'-N1	8.28	114.82	108.20
57	BB	1494	A	N1-C2-N3	8.28	133.44	129.30
57	BB	1666	G	C5-C6-N1	-8.28	107.36	111.50
57	BB	1017	G	C5-C6-N1	-8.28	107.36	111.50
57	BB	1280	G	N1-C6-O6	8.28	124.87	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1689	A	C4-C5-C6	8.28	121.14	117.00
57	BB	2472	G	O4'-C1'-N9	8.28	114.82	108.20
7	AP	51	ARG	NE-CZ-NH1	8.28	124.44	120.30
57	BB	254	G	N1-C2-N3	-8.28	118.94	123.90
57	BB	635	C	C6-N1-C2	-8.28	116.99	120.30
57	BB	1806	C	C2-N3-C4	8.28	124.04	119.90
57	BB	2797	U	C4-C5-C6	8.28	124.67	119.70
57	BB	663	G	C3'-C2'-C1'	-8.28	94.88	101.50
57	BB	1773	A	N9-C1'-C2'	-8.28	102.90	112.00
21	AA	525	C	C2-N3-C4	8.27	124.04	119.90
57	BB	839	U	C5-C6-N1	8.27	126.84	122.70
21	AA	324	G	N3-C2-N2	8.27	125.69	119.90
57	BB	945	A	N1-C2-N3	8.27	133.44	129.30
57	BB	1161	C	O4'-C1'-N1	8.27	114.82	108.20
57	BB	1557	C	C2-N3-C4	8.27	124.04	119.90
57	BB	1959	G	C8-N9-C4	-8.27	103.09	106.40
57	BB	417	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1605	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1821	A	C8-N9-C4	-8.27	102.49	105.80
57	BB	2325	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	2740	A	O4'-C1'-N9	8.27	114.82	108.20
21	AA	410	G	O4'-C1'-N9	8.27	114.81	108.20
21	AA	663	A	C6-C5-N7	-8.27	126.51	132.30
57	BB	50	U	N3-C4-O4	8.27	125.19	119.40
57	BB	324	A	C5-C6-N6	-8.27	117.08	123.70
57	BB	427	U	C5-C6-N1	8.27	126.83	122.70
57	BB	1106	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	1125	G	O4'-C1'-N9	8.27	114.82	108.20
57	BB	449	A	C5-C6-N1	-8.27	113.57	117.70
57	BB	1527	G	O4'-C1'-N9	8.27	114.81	108.20
57	BB	1807	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	2543	G	C4-C5-N7	-8.27	107.49	110.80
21	AA	71	A	C4-C5-C6	8.27	121.13	117.00
21	AA	1389	C	O4'-C1'-N1	8.27	114.81	108.20
21	AA	1412	C	O4'-C1'-N1	8.27	114.81	108.20
21	AA	452	A	N9-C1'-C2'	-8.27	102.91	112.00
22	AY	14	A	C2-N3-C4	-8.27	106.47	110.60
57	BB	771	G	N1-C2-N2	8.27	123.64	116.20
57	BB	988	A	C5-N7-C8	8.27	108.03	103.90
57	BB	1112	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	353	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1558	C	C6-N1-C2	-8.27	116.99	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1829	A	O4'-C1'-N9	8.27	114.81	108.20
57	BB	2269	G	C5-N7-C8	8.27	108.43	104.30
57	BB	2854	G	N1-C2-N3	-8.27	118.94	123.90
21	AA	254	G	N3-C4-C5	-8.26	124.47	128.60
21	AA	352	C	O4'-C1'-N1	8.26	114.81	108.20
21	AA	410	G	N3-C2-N2	8.26	125.68	119.90
21	AA	606	G	C4-C5-N7	-8.26	107.50	110.80
23	AW	15	G	C5-C6-N1	-8.26	107.37	111.50
23	AW	15	G	C4-C5-C6	8.26	123.76	118.80
57	BB	869	G	C6-N1-C2	-8.26	120.14	125.10
57	BB	525	U	O4'-C1'-N1	8.26	114.81	108.20
57	BB	541	A	C6-C5-N7	-8.26	126.52	132.30
57	BB	1958	C	C2-N3-C4	8.26	124.03	119.90
57	BB	2568	U	N3-C4-O4	8.26	125.18	119.40
58	BA	57	A	C8-N9-C4	-8.26	102.50	105.80
21	AA	178	C	N3-C4-N4	8.26	123.78	118.00
21	AA	281	G	C5-C6-N1	-8.26	107.37	111.50
21	AA	484	G	C8-N9-C4	-8.26	103.10	106.40
57	BB	1330	C	C5-C6-N1	8.26	125.13	121.00
57	BB	532	A	C5-C6-N1	-8.26	113.57	117.70
57	BB	1505	A	C5-C6-N6	-8.26	117.09	123.70
21	AA	1157	A	C5-C6-N6	-8.26	117.09	123.70
57	BB	1043	C	C6-N1-C2	-8.26	117.00	120.30
22	AY	43	G	N3-C4-C5	-8.26	124.47	128.60
57	BB	404	A	C5-C6-N1	-8.26	113.57	117.70
57	BB	551	G	N7-C8-N9	8.26	117.23	113.10
57	BB	1566	A	N1-C6-N6	8.26	123.55	118.60
57	BB	2569	G	C4'-C3'-C2'	-8.26	94.34	102.60
21	AA	222	C	O4'-C1'-N1	8.25	114.80	108.20
21	AA	846	G	N1-C6-O6	8.25	124.85	119.90
25	AZ	76	TYR	CG-CD2-CE2	-8.25	114.70	121.30
57	BB	265	A	N9-C4-C5	-8.25	102.50	105.80
57	BB	1821	A	N1-C6-N6	8.25	123.55	118.60
57	BB	1821	A	O4'-C1'-N9	8.25	114.80	108.20
21	AA	794	A	C5-C6-N6	-8.25	117.10	123.70
57	BB	1401	G	O4'-C1'-N9	8.25	114.80	108.20
57	BB	7	G	N1-C2-N3	-8.25	118.95	123.90
57	BB	59	U	C5-C6-N1	8.25	126.83	122.70
21	AA	1275	A	C5-C6-N1	-8.25	113.58	117.70
57	BB	2267	A	N1-C6-N6	8.25	123.55	118.60
57	BB	2494	G	C5-C6-N1	-8.25	107.38	111.50
58	BA	112	G	N1-C6-O6	8.25	124.85	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	300	A	N7-C8-N9	-8.25	109.68	113.80
21	AA	432	A	C1'-O4'-C4'	-8.25	103.30	109.90
21	AA	646	G	C6-C5-N7	-8.25	125.45	130.40
26	AV	20	U	C5-C4-O4	-8.25	120.95	125.90
57	BB	1046	A	N1-C6-N6	8.25	123.55	118.60
57	BB	1491	G	C4-C5-N7	8.25	114.10	110.80
57	BB	2071	A	C4-C5-N7	8.25	114.82	110.70
57	BB	520	G	N1-C2-N3	-8.24	118.95	123.90
21	AA	418	C	O4'-C1'-N1	8.24	114.80	108.20
57	BB	2214	C	C4-C5-C6	-8.24	113.28	117.40
21	AA	505	G	P-O3'-C3'	8.24	129.59	119.70
21	AA	1055	A	C5'-C4'-O4'	8.24	118.99	109.10
21	AA	1483	A	O4'-C1'-N9	8.24	114.79	108.20
57	BB	580	U	C6-N1-C2	8.24	125.94	121.00
21	AA	202	G	N9-C4-C5	8.24	108.70	105.40
21	AA	272	C	O4'-C1'-N1	8.24	114.79	108.20
21	AA	487	A	N1-C6-N6	8.24	123.54	118.60
21	AA	841	C	C5-C4-N4	-8.24	114.43	120.20
57	BB	43	G	N3-C2-N2	8.24	125.67	119.90
57	BB	1906	G	O4'-C1'-N9	8.24	114.79	108.20
57	BB	142	A	O4'-C1'-N9	8.24	114.79	108.20
57	BB	351	C	C5-C4-N4	-8.24	114.43	120.20
57	BB	2574	G	C4-C5-C6	8.24	123.74	118.80
58	BA	26	C	N3-C4-C5	-8.24	118.60	121.90
21	AA	782	A	N9-C4-C5	-8.24	102.51	105.80
22	AY	37	G	N3-C2-N2	8.24	125.67	119.90
57	BB	1938	A	C5-C6-N1	-8.24	113.58	117.70
57	BB	910	A	C5-C6-N1	-8.24	113.58	117.70
57	BB	968	C	O4'-C1'-N1	8.24	114.79	108.20
57	BB	1532	A	N9-C4-C5	-8.24	102.50	105.80
57	BB	1551	A	C3'-C2'-C1'	-8.24	94.91	101.50
57	BB	1554	U	O4'-C1'-N1	8.24	114.79	108.20
57	BB	2357	G	C4-C5-N7	8.24	114.09	110.80
57	BB	2603	G	N1-C2-N3	-8.24	118.96	123.90
21	AA	338	A	C6-C5-N7	-8.23	126.54	132.30
57	BB	400	G	N1-C6-O6	8.23	124.84	119.90
21	AA	226	G	C5-C6-O6	-8.23	123.66	128.60
21	AA	408	A	N1-C6-N6	8.23	123.54	118.60
21	AA	531	U	O4'-C1'-N1	8.23	114.79	108.20
57	BB	320	A	C6-N1-C2	-8.23	113.66	118.60
57	BB	2224	G	N3-C2-N2	8.23	125.66	119.90
57	BB	2670	A	C5-C6-N6	-8.23	117.11	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1414	U	C5-C6-N1	8.23	126.82	122.70
24	AX	20	U	O4'-C1'-N1	8.23	114.79	108.20
57	BB	637	A	N1-C2-N3	-8.23	125.18	129.30
21	AA	413	G	C5-C6-N1	-8.23	107.38	111.50
21	AA	928	G	N1-C2-N3	-8.23	118.96	123.90
21	AA	1284	C	P-O3'-C3'	8.23	129.58	119.70
57	BB	540	C	O4'-C1'-N1	8.23	114.78	108.20
57	BB	677	A	C8-N9-C4	8.23	109.09	105.80
57	BB	964	C	N1-C2-N3	-8.23	113.44	119.20
13	AB	21	TYR	CB-CG-CD2	8.23	125.94	121.00
21	AA	767	A	C4-C5-N7	-8.23	106.58	110.70
57	BB	905	A	N3-C4-C5	-8.23	121.04	126.80
57	BB	2699	C	C5-C4-N4	-8.23	114.44	120.20
21	AA	127	G	O4'-C1'-N9	8.23	114.78	108.20
21	AA	238	A	C5-C6-N1	-8.23	113.59	117.70
21	AA	241	G	C4-C5-N7	-8.23	107.51	110.80
57	BB	1326	U	C2-N3-C4	8.23	131.94	127.00
57	BB	1364	G	C6-C5-N7	-8.23	125.46	130.40
57	BB	1781	U	C1'-O4'-C4'	8.23	116.48	109.90
57	BB	2714	G	C6-C5-N7	-8.23	125.46	130.40
58	BA	14	U	C5-C6-N1	-8.23	118.59	122.70
21	AA	1453	G	C8-N9-C4	-8.23	103.11	106.40
57	BB	1531	C	O4'-C1'-N1	8.23	114.78	108.20
57	BB	1933	G	N1-C6-O6	8.23	124.83	119.90
21	AA	66	A	C4-C5-C6	8.22	121.11	117.00
21	AA	1468	A	C3'-C2'-C1'	-8.22	94.92	101.50
57	BB	184	C	O4'-C1'-N1	8.22	114.78	108.20
57	BB	2512	C	C2-N3-C4	8.22	124.01	119.90
21	AA	616	G	O4'-C1'-N9	8.22	114.78	108.20
57	BB	447	A	N1-C6-N6	8.22	123.53	118.60
57	BB	1011	G	C6-C5-N7	-8.22	125.47	130.40
57	BB	1080	A	N1-C2-N3	-8.22	125.19	129.30
57	BB	2142	A	N1-C2-N3	8.22	133.41	129.30
57	BB	2704	C	C6-N1-C2	8.22	123.59	120.30
57	BB	2742	G	C2-N3-C4	-8.22	107.79	111.90
21	AA	155	A	C5-C6-N6	-8.22	117.12	123.70
21	AA	442	G	N7-C8-N9	8.22	117.21	113.10
21	AA	510	A	C5-N7-C8	8.22	108.01	103.90
21	AA	1175	G	O4'-C1'-N9	8.22	114.78	108.20
22	AY	19	G	C8-N9-C4	8.22	109.69	106.40
26	AV	65	C	N3-C4-C5	-8.22	118.61	121.90
57	BB	1862	G	N1-C2-N3	-8.22	118.97	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	31	G	C8-N9-C4	-8.22	103.11	106.40
57	BB	406	G	O4'-C1'-N9	8.22	114.78	108.20
57	BB	2236	U	C6-N1-C2	-8.22	116.07	121.00
57	BB	2397	G	N3-C2-N2	8.22	125.65	119.90
58	BA	60	C	C2-N3-C4	8.22	124.01	119.90
21	AA	687	A	C5-N7-C8	8.22	108.01	103.90
21	AA	80	A	O4'-C1'-N9	8.22	114.77	108.20
21	AA	441	A	N3-C4-C5	-8.22	121.05	126.80
21	AA	1329	A	C4-C5-C6	8.22	121.11	117.00
22	AY	2	C	C2-N3-C4	8.22	124.01	119.90
57	BB	1264	A	C8-N9-C4	-8.22	102.51	105.80
57	BB	1334	G	N9-C4-C5	-8.22	102.11	105.40
57	BB	1801	A	N1-C6-N6	8.22	123.53	118.60
57	BB	1927	A	C6-C5-N7	-8.22	126.55	132.30
57	BB	2013	A	C8-N9-C4	-8.22	102.51	105.80
57	BB	2475	C	O4'-C1'-N1	8.22	114.78	108.20
21	AA	77	A	C4-C5-N7	-8.22	106.59	110.70
21	AA	734	G	N1-C6-O6	8.22	124.83	119.90
57	BB	2213	U	O4'-C1'-N1	8.22	114.77	108.20
21	AA	129	A	N7-C8-N9	8.21	117.91	113.80
23	AW	8	U	C2-N3-C4	-8.21	122.07	127.00
57	BB	1722	A	C5-C6-N6	-8.22	117.13	123.70
57	BB	1978	A	N1-C2-N3	8.21	133.41	129.30
57	BB	2758	A	O4'-C1'-N9	8.21	114.77	108.20
21	AA	836	G	N3-C2-N2	8.21	125.65	119.90
21	AA	1205	U	C5-C6-N1	8.21	126.81	122.70
26	AV	15	G	C6-N1-C2	-8.21	120.17	125.10
21	AA	1443	C	N1-C2-N3	-8.21	113.45	119.20
57	BB	1437	C	C5-C4-N4	-8.21	114.45	120.20
57	BB	1577	C	C6-N1-C2	-8.21	117.02	120.30
57	BB	1573	G	O4'-C1'-N9	8.21	114.77	108.20
57	BB	1665	A	C5-C6-N6	-8.21	117.13	123.70
57	BB	2597	G	N3-C4-C5	-8.21	124.49	128.60
57	BB	2803	G	C5-C6-O6	-8.21	123.67	128.60
57	BB	2626	C	N3-C4-N4	8.21	123.75	118.00
57	BB	2713	U	C6-N1-C2	-8.21	116.07	121.00
21	AA	177	G	O4'-C1'-N9	8.21	114.77	108.20
21	AA	765	G	C4-N9-C1'	8.21	137.17	126.50
21	AA	889	A	C4-C5-C6	8.21	121.10	117.00
57	BB	264	C	N1-C2-O2	8.21	123.83	118.90
57	BB	1634	A	N1-C6-N6	8.21	123.52	118.60
57	BB	1705	A	C4-C5-N7	8.21	114.80	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2511	U	N3-C2-O2	8.21	127.94	122.20
57	BB	2511	U	O4'-C1'-N1	8.21	114.77	108.20
57	BB	2774	C	C2-N3-C4	8.21	124.00	119.90
21	AA	1262	C	C5-C4-N4	-8.21	114.46	120.20
23	AW	33	U	O4'-C1'-N1	8.21	114.76	108.20
57	BB	1093	G	C5-C6-O6	-8.21	123.68	128.60
57	BB	328	U	C5-C4-O4	-8.20	120.98	125.90
21	AA	16	A	O4'-C1'-N9	8.20	114.76	108.20
21	AA	141	G	C4-C5-N7	-8.20	107.52	110.80
21	AA	640	A	N1-C6-N6	8.20	123.52	118.60
57	BB	1163	G	N9-C4-C5	-8.20	102.12	105.40
21	AA	646	G	C5-C6-O6	-8.20	123.68	128.60
21	AA	1160	G	N1-C6-O6	8.20	124.82	119.90
22	AY	31	A	N7-C8-N9	8.20	117.90	113.80
57	BB	1700	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	2030	A	C4-C5-C6	8.20	121.10	117.00
57	BB	2734	A	N1-C2-N3	-8.20	125.20	129.30
57	BB	2763	G	O4'-C1'-N9	8.20	114.76	108.20
21	AA	1251	A	C5-N7-C8	8.20	108.00	103.90
23	AW	28	G	N9-C4-C5	-8.20	102.12	105.40
38	BS	95	ARG	NE-CZ-NH1	-8.20	116.20	120.30
57	BB	655	A	O4'-C1'-N9	8.20	114.76	108.20
57	BB	683	U	C5-C6-N1	8.20	126.80	122.70
21	AA	362	G	N9-C4-C5	-8.20	102.12	105.40
57	BB	192	C	C6-N1-C2	-8.20	117.02	120.30
57	BB	350	G	N1-C6-O6	8.20	124.82	119.90
57	BB	1978	A	O4'-C1'-N9	8.20	114.76	108.20
57	BB	2414	G	O4'-C1'-N9	8.20	114.76	108.20
58	BA	68	C	C5-C6-N1	8.20	125.10	121.00
21	AA	206	C	N3-C4-C5	-8.20	118.62	121.90
21	AA	441	A	N1-C2-N3	8.20	133.40	129.30
21	AA	758	C	O4'-C1'-N1	8.20	114.76	108.20
57	BB	1205	A	N1-C2-N3	8.20	133.40	129.30
57	BB	1354	A	N1-C6-N6	8.20	123.52	118.60
21	AA	929	G	C5-C6-O6	-8.19	123.68	128.60
21	AA	1028	C	O4'-C1'-N1	8.20	114.76	108.20
57	BB	1403	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	1702	G	N9-C4-C5	8.20	108.68	105.40
57	BB	2100	G	N3-C2-N2	8.20	125.64	119.90
57	BB	2154	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	2328	A	N1-C6-N6	8.20	123.52	118.60
57	BB	2444	G	C5-C6-O6	-8.20	123.68	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1167	A	N1-C6-N6	8.19	123.52	118.60
57	BB	2282	G	C8-N9-C4	-8.19	103.12	106.40
21	AA	227	G	O4'-C1'-N9	8.19	114.75	108.20
21	AA	350	G	N1-C2-N2	-8.19	108.83	116.20
57	BB	840	C	C6-N1-C2	-8.19	117.02	120.30
57	BB	1382	G	C5-C6-O6	-8.19	123.68	128.60
21	AA	681	A	C5-N7-C8	8.19	108.00	103.90
21	AA	906	A	C4-C5-C6	8.19	121.10	117.00
21	AA	1407	C	C5-C4-N4	-8.19	114.47	120.20
57	BB	163	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	1330	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	1953	A	C2-N3-C4	8.19	114.70	110.60
57	BB	2106	U	N3-C4-O4	8.19	125.13	119.40
21	AA	191	G	N1-C2-N3	-8.19	118.99	123.90
21	AA	472	U	C3'-C2'-C1'	-8.19	94.95	101.50
21	AA	247	G	C5-C6-O6	-8.19	123.69	128.60
21	AA	1136	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	126	A	N7-C8-N9	-8.19	109.70	113.80
57	BB	804	A	C6-N1-C2	8.19	123.51	118.60
57	BB	1514	G	C5-C6-O6	-8.19	123.69	128.60
57	BB	1909	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	2135	A	P-O5'-C5'	8.19	134.00	120.90
58	BA	66	A	N1-C6-N6	8.19	123.51	118.60
21	AA	470	C	O4'-C1'-N1	8.19	114.75	108.20
21	AA	1263	C	O4'-C1'-N1	8.19	114.75	108.20
23	AW	37	A	C4-C5-C6	8.19	121.09	117.00
57	BB	67	U	C5-C4-O4	-8.19	120.99	125.90
57	BB	447	A	N7-C8-N9	8.19	117.89	113.80
57	BB	1300	G	N3-C4-N9	-8.19	121.09	126.00
57	BB	1725	U	N1-C2-O2	-8.19	117.07	122.80
57	BB	2020	A	P-O3'-C3'	8.19	129.52	119.70
57	BB	2092	U	C5'-C4'-C3'	-8.19	102.90	116.00
57	BB	2375	G	C5-C6-O6	-8.19	123.69	128.60
57	BB	2539	C	N3-C4-N4	8.19	123.73	118.00
57	BB	2700	A	N1-C2-N3	8.19	133.39	129.30
57	BB	2720	U	C6-N1-C2	-8.19	116.09	121.00
7	AP	32	PHE	CB-CG-CD1	-8.18	115.07	120.80
22	AY	40	C	N3-C4-N4	8.18	123.73	118.00
57	BB	124	G	O4'-C1'-N9	8.18	114.75	108.20
57	BB	1099	G	C8-N9-C4	-8.18	103.13	106.40
57	BB	2324	U	C6-N1-C2	-8.18	116.09	121.00
21	AA	941	G	N1-C2-N3	-8.18	118.99	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1074	G	C5-C6-O6	-8.18	123.69	128.60
21	AA	1220	G	N1-C2-N3	-8.18	118.99	123.90
57	BB	1010	A	O4'-C1'-N9	8.18	114.75	108.20
57	BB	1154	G	N1-C6-O6	8.18	124.81	119.90
57	BB	1504	A	C8-N9-C4	-8.18	102.53	105.80
57	BB	1952	A	C4-C5-C6	8.18	121.09	117.00
57	BB	1967	C	C5-C4-N4	-8.18	114.47	120.20
57	BB	2333	A	C4-C5-C6	8.18	121.09	117.00
57	BB	2804	U	O4'-C1'-N1	8.18	114.75	108.20
21	AA	322	C	N3-C4-C5	-8.18	118.63	121.90
21	AA	635	A	C4'-C3'-C2'	-8.18	94.42	102.60
21	AA	1035	A	C4-C5-N7	-8.18	106.61	110.70
57	BB	38	A	C8-N9-C4	-8.18	102.53	105.80
57	BB	155	A	C6-C5-N7	-8.18	126.57	132.30
57	BB	245	G	N1-C6-O6	8.18	124.81	119.90
57	BB	910	A	N7-C8-N9	-8.18	109.71	113.80
57	BB	953	G	C5-N7-C8	8.18	108.39	104.30
57	BB	1049	C	C5-C6-N1	8.18	125.09	121.00
57	BB	1198	U	C5-C4-O4	-8.18	120.99	125.90
57	BB	1405	U	O4'-C1'-N1	8.18	114.74	108.20
57	BB	2018	G	O4'-C1'-N9	8.18	114.75	108.20
57	BB	2895	G	C8-N9-C4	-8.18	103.13	106.40
21	AA	689	C	C4-C5-C6	8.18	121.49	117.40
23	AW	48	C	C2-N3-C4	-8.18	115.81	119.90
57	BB	128	C	N3-C4-C5	-8.18	118.63	121.90
57	BB	2214	C	O4'-C1'-N1	8.18	114.74	108.20
57	BB	2581	G	C8-N9-C4	8.18	109.67	106.40
21	AA	538	G	N7-C8-N9	8.18	117.19	113.10
21	AA	760	G	C6-N1-C2	8.18	130.01	125.10
57	BB	917	A	N7-C8-N9	8.18	117.89	113.80
57	BB	1098	A	P-O3'-C3'	8.18	129.51	119.70
57	BB	1872	A	C4-C5-C6	8.18	121.09	117.00
57	BB	757	G	C5-C6-O6	-8.18	123.69	128.60
57	BB	1182	G	O4'-C1'-N9	8.18	114.74	108.20
57	BB	1337	G	N1-C2-N3	-8.18	119.00	123.90
57	BB	1942	C	C2-N3-C4	8.18	123.99	119.90
57	BB	2065	C	C5-C6-N1	-8.18	116.91	121.00
57	BB	2745	C	N3-C4-C5	-8.18	118.63	121.90
21	AA	316	C	O4'-C1'-N1	8.17	114.74	108.20
21	AA	365	U	P-O3'-C3'	-8.17	109.89	119.70
21	AA	768	A	O4'-C1'-N9	8.17	114.74	108.20
21	AA	1304	G	O4'-C1'-N9	8.17	114.74	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	28	A	N1-C6-N6	8.17	123.50	118.60
58	BA	22	U	C5-C6-N1	8.17	126.79	122.70
57	BB	704	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	1063	G	C4-C5-C6	8.17	123.70	118.80
57	BB	1246	A	O4'-C1'-N9	8.17	114.74	108.20
57	BB	1360	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	2027	G	O4'-C1'-N9	8.17	114.74	108.20
57	BB	2753	A	N1-C6-N6	8.17	123.50	118.60
57	BB	2820	A	N1-C6-N6	8.17	123.50	118.60
21	AA	59	A	O4'-C1'-N9	8.17	114.74	108.20
21	AA	408	A	C5-C6-N6	-8.17	117.16	123.70
21	AA	517	G	C6-C5-N7	-8.17	125.50	130.40
21	AA	975	A	N7-C8-N9	-8.17	109.71	113.80
23	AW	64	A	O4'-C1'-N9	8.17	114.74	108.20
57	BB	943	A	C4-C5-C6	8.17	121.08	117.00
57	BB	997	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	1275	A	N1-C2-N3	8.17	133.39	129.30
57	BB	1490	A	N3-C4-C5	-8.17	121.08	126.80
57	BB	2435	A	C5-C6-N6	-8.17	117.16	123.70
23	AW	14	A	C5-C6-N1	-8.17	113.62	117.70
57	BB	228	C	C4-C5-C6	8.17	121.48	117.40
57	BB	2075	U	N1-C2-N3	-8.17	110.00	114.90
57	BB	2434	A	C5-C6-N1	-8.17	113.61	117.70
57	BB	2456	C	N1-C2-O2	-8.17	114.00	118.90
58	BA	2	G	C4-C5-C6	8.17	123.70	118.80
21	AA	310	G	O4'-C1'-N9	8.17	114.73	108.20
21	AA	698	G	N1-C2-N3	-8.17	119.00	123.90
21	AA	894	G	N3-C2-N2	8.17	125.62	119.90
57	BB	1872	A	C6-C5-N7	-8.17	126.58	132.30
21	AA	303	A	N9-C4-C5	8.16	109.07	105.80
21	AA	768	A	N1-C6-N6	8.16	123.50	118.60
21	AA	1343	G	N7-C8-N9	8.16	117.18	113.10
22	AY	20	G	C8-N9-C4	-8.16	103.13	106.40
57	BB	1	G	N1-C6-O6	8.16	124.80	119.90
57	BB	1372	U	N3-C4-O4	8.16	125.12	119.40
31	BL	50	PHE	CB-CG-CD2	8.16	126.51	120.80
32	BM	130	PHE	CB-CG-CD2	-8.16	115.09	120.80
57	BB	515	A	C8-N9-C4	8.16	109.07	105.80
57	BB	2126	A	N1-C2-N3	-8.16	125.22	129.30
57	BB	410	G	C8-N9-C4	-8.16	103.14	106.40
57	BB	1717	A	C4-C5-C6	8.16	121.08	117.00
21	AA	303	A	C4-C5-N7	-8.16	106.62	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	64	G	N3-C2-N2	8.16	125.61	119.90
21	AA	562	U	C5'-C4'-O4'	8.16	118.89	109.10
21	AA	1069	C	C5-C4-N4	-8.16	114.49	120.20
26	AV	34	C	N3-C4-C5	-8.16	118.64	121.90
57	BB	1452	G	C6-C5-N7	-8.16	125.50	130.40
57	BB	775	G	C4-C5-N7	-8.16	107.54	110.80
57	BB	843	G	N1-C6-O6	8.16	124.80	119.90
57	BB	1112	G	N1-C6-O6	8.16	124.80	119.90
58	BA	10	G	N7-C8-N9	-8.16	109.02	113.10
21	AA	172	A	C5-C6-N1	-8.16	113.62	117.70
21	AA	1466	C	N3-C4-C5	-8.16	118.64	121.90
23	AW	18	G	N7-C8-N9	8.16	117.18	113.10
57	BB	152	A	C2-N3-C4	8.16	114.68	110.60
57	BB	1232	G	N1-C2-N3	-8.16	119.00	123.90
57	BB	2126	A	C2-N3-C4	8.16	114.68	110.60
57	BB	2729	G	O4'-C1'-N9	8.16	114.73	108.20
57	BB	553	G	O4'-C1'-N9	8.16	114.72	108.20
57	BB	763	G	C8-N9-C4	8.16	109.66	106.40
57	BB	2348	U	O4'-C1'-N1	8.16	114.73	108.20
58	BA	7	G	N3-C4-C5	-8.16	124.52	128.60
15	AD	46	ARG	NE-CZ-NH2	-8.15	116.22	120.30
21	AA	833	G	N7-C8-N9	-8.15	109.02	113.10
21	AA	925	G	C4'-C3'-C2'	8.15	110.75	102.60
23	AW	17	C	C2-N1-C1'	8.15	127.77	118.80
57	BB	191	A	C5-C6-N6	-8.15	117.18	123.70
57	BB	753	A	N3-C4-N9	8.15	133.92	127.40
26	AV	57	A	C5-C6-N6	-8.15	117.18	123.70
57	BB	937	C	N3-C2-O2	8.15	127.61	121.90
57	BB	1137	G	C8-N9-C1'	8.15	137.60	127.00
57	BB	1950	G	N3-C4-N9	-8.15	121.11	126.00
57	BB	2120	G	C6-C5-N7	-8.15	125.51	130.40
57	BB	2742	G	C4-C5-N7	-8.15	107.54	110.80
57	BB	2829	A	N3-C4-C5	-8.15	121.09	126.80
21	AA	182	A	N1-C2-N3	8.15	133.38	129.30
21	AA	1055	A	N1-C6-N6	8.15	123.49	118.60
25	AZ	354	ASP	CB-CG-OD1	8.15	125.64	118.30
57	BB	277	G	C4-C5-N7	-8.15	107.54	110.80
57	BB	453	A	C4-C5-C6	8.15	121.08	117.00
57	BB	1600	C	O4'-C1'-N1	8.15	114.72	108.20
57	BB	1773	A	C2-N3-C4	8.15	114.68	110.60
57	BB	2326	C	O4'-C1'-N1	8.15	114.72	108.20
57	BB	2541	A	C6-N1-C2	8.15	123.49	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2781	A	C3'-C2'-C1'	-8.15	94.98	101.50
21	AA	989	U	C5-C6-N1	8.15	126.77	122.70
21	AA	1005	A	N7-C8-N9	-8.15	109.72	113.80
22	AY	39	U	C5-C6-N1	8.15	126.78	122.70
21	AA	1102	A	C5-N7-C8	8.15	107.97	103.90
55	BG	156	TYR	CB-CG-CD2	8.15	125.89	121.00
57	BB	1790	C	N3-C4-C5	-8.15	118.64	121.90
57	BB	2093	G	C8-N9-C1'	8.15	137.59	127.00
57	BB	2526	G	C5-C6-N1	-8.15	107.43	111.50
21	AA	778	G	C5-C6-O6	-8.14	123.71	128.60
21	AA	887	G	N7-C8-N9	-8.14	109.03	113.10
21	AA	484	G	N3-C2-N2	8.14	125.60	119.90
23	AW	65	G	O4'-C1'-N9	8.14	114.71	108.20
57	BB	445	C	O4'-C1'-N1	8.14	114.72	108.20
57	BB	1084	A	C2-N3-C4	8.14	114.67	110.60
57	BB	1105	U	N3-C4-O4	8.14	125.10	119.40
57	BB	1713	A	C5-C6-N1	-8.14	113.63	117.70
57	BB	2665	A	C8-N9-C4	-8.14	102.54	105.80
58	BA	101	A	C5'-C4'-O4'	8.14	118.87	109.10
21	AA	57	G	C5-C6-O6	-8.14	123.72	128.60
21	AA	346	G	C4-C5-C6	8.14	123.69	118.80
21	AA	482	A	C8-N9-C4	-8.14	102.54	105.80
21	AA	798	U	O4'-C1'-N1	8.14	114.71	108.20
21	AA	875	U	O4'-C1'-N1	8.14	114.71	108.20
57	BB	321	U	N3-C2-O2	8.14	127.90	122.20
57	BB	1138	G	C5-C6-N1	-8.14	107.43	111.50
57	BB	1390	U	O4'-C1'-N1	8.14	114.71	108.20
57	BB	1934	C	O4'-C1'-N1	8.14	114.71	108.20
21	AA	375	U	O4'-C1'-N1	8.14	114.71	108.20
21	AA	388	G	N7-C8-N9	-8.14	109.03	113.10
21	AA	1061	G	C6-N1-C2	8.14	129.98	125.10
21	AA	1417	G	C5-C6-O6	-8.14	123.72	128.60
23	AW	26	A	C5-C6-N1	-8.14	113.63	117.70
57	BB	811	U	N3-C2-O2	8.14	127.90	122.20
57	BB	2001	C	O4'-C1'-N1	8.14	114.71	108.20
57	BB	940	G	N7-C8-N9	-8.14	109.03	113.10
57	BB	1308	A	C2-N3-C4	8.14	114.67	110.60
57	BB	2635	A	N1-C2-N3	-8.14	125.23	129.30
57	BB	1378	A	P-O5'-C5'	-8.14	107.88	120.90
57	BB	2202	U	C2-N3-C4	8.14	131.88	127.00
57	BB	2327	A	C5-C6-N6	-8.14	117.19	123.70
57	BB	2433	A	P-O5'-C5'	-8.14	107.88	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2830	C	N3-C4-C5	-8.14	118.64	121.90
58	BA	79	G	C5-C6-N1	-8.14	107.43	111.50
19	AH	76	ARG	NE-CZ-NH2	-8.13	116.23	120.30
21	AA	382	A	N1-C2-N3	-8.14	125.23	129.30
22	AY	35	A	C4-C5-C6	8.14	121.07	117.00
57	BB	2574	G	C5-C6-O6	-8.14	123.72	128.60
22	AY	56	C	N3-C4-C5	-8.13	118.65	121.90
26	AV	47	U	C2-N1-C1'	8.13	127.46	117.70
57	BB	208	C	C5-C4-N4	-8.13	114.51	120.20
57	BB	1516	G	C5-N7-C8	8.13	108.37	104.30
57	BB	1797	G	C5-C6-O6	-8.13	123.72	128.60
57	BB	2330	G	N1-C2-N3	-8.13	119.02	123.90
21	AA	10	A	C4-C5-C6	8.13	121.07	117.00
21	AA	155	A	N1-C2-N3	-8.13	125.23	129.30
21	AA	780	A	C8-N9-C4	-8.13	102.55	105.80
21	AA	1215	G	C5-C6-N1	-8.13	107.43	111.50
45	BC	62	ARG	NE-CZ-NH1	-8.13	116.23	120.30
57	BB	8	C	N3-C4-C5	-8.13	118.65	121.90
57	BB	163	C	N3-C4-N4	8.13	123.69	118.00
57	BB	511	U	N1-C2-O2	-8.13	117.11	122.80
57	BB	816	C	N3-C2-O2	-8.13	116.21	121.90
57	BB	1168	G	O4'-C1'-N9	8.13	114.71	108.20
57	BB	1928	A	C6-C5-N7	-8.13	126.61	132.30
21	AA	53	A	C5-C6-N1	-8.13	113.64	117.70
21	AA	188	C	N3-C4-N4	8.13	123.69	118.00
21	AA	203	G	C8-N9-C4	-8.13	103.15	106.40
57	BB	1124	G	C3'-C2'-C1'	-8.13	95.00	101.50
57	BB	2623	G	O4'-C1'-N9	8.13	114.70	108.20
21	AA	289	G	N9-C4-C5	-8.13	102.15	105.40
21	AA	646	G	N3-C4-N9	8.13	130.88	126.00
57	BB	1717	A	C8-N9-C4	-8.13	102.55	105.80
21	AA	299	G	C5-N7-C8	-8.13	100.24	104.30
57	BB	576	U	C5-C4-O4	-8.13	121.02	125.90
57	BB	1801	A	C5-N7-C8	8.13	107.96	103.90
57	BB	2814	A	C4-C5-C6	8.13	121.06	117.00
21	AA	1117	A	C8-N9-C4	-8.13	102.55	105.80
57	BB	1768	C	O4'-C1'-N1	8.13	114.70	108.20
57	BB	2342	C	N1-C2-O2	-8.13	114.02	118.90
57	BB	2565	A	N1-C2-N3	8.13	133.36	129.30
57	BB	2750	A	C4-C5-N7	-8.13	106.64	110.70
21	AA	297	G	C5-C6-O6	-8.12	123.72	128.60
21	AA	413	G	C6-C5-N7	-8.12	125.53	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2415	G	C8-N9-C4	8.12	109.65	106.40
58	BA	59	A	C4-C5-N7	-8.12	106.64	110.70
16	AE	92	ARG	NE-CZ-NH2	-8.12	116.24	120.30
21	AA	714	G	O4'-C1'-N9	8.12	114.70	108.20
21	AA	739	C	N3-C4-C5	-8.12	118.65	121.90
57	BB	529	A	N7-C8-N9	-8.12	109.74	113.80
57	BB	764	A	C5-C6-N1	-8.12	113.64	117.70
57	BB	2564	A	C4-C5-N7	-8.12	106.64	110.70
57	BB	2627	G	N1-C2-N3	-8.12	119.03	123.90
21	AA	1244	G	O4'-C1'-N9	8.12	114.70	108.20
57	BB	1	G	C5-C6-O6	-8.12	123.73	128.60
57	BB	374	A	C5-C6-N6	-8.12	117.20	123.70
57	BB	626	A	C5-C6-N6	-8.12	117.20	123.70
57	BB	971	G	O4'-C1'-N9	8.12	114.70	108.20
57	BB	1824	G	C5-C6-O6	-8.12	123.73	128.60
57	BB	2072	C	N3-C4-N4	8.12	123.69	118.00
57	BB	2765	A	N1-C6-N6	8.12	123.47	118.60
57	BB	2833	U	N1-C2-N3	-8.12	110.03	114.90
21	AA	36	C	O4'-C1'-N1	8.12	114.70	108.20
21	AA	266	G	N1-C2-N3	-8.12	119.03	123.90
57	BB	2850	A	P-O3'-C3'	8.12	129.44	119.70
57	BB	85	G	C5-N7-C8	8.12	108.36	104.30
57	BB	289	G	C5-C6-N1	-8.12	107.44	111.50
57	BB	1789	A	N1-C2-N3	-8.12	125.24	129.30
58	BA	78	A	C5'-C4'-O4'	8.12	118.84	109.10
21	AA	578	C	C5-C4-N4	-8.12	114.52	120.20
21	AA	1412	C	N3-C4-N4	8.12	123.68	118.00
22	AY	17	U	C5'-C4'-O4'	8.12	118.84	109.10
21	AA	917	G	C6-N1-C2	8.11	129.97	125.10
21	AA	1487	G	C4-N9-C1'	-8.12	115.95	126.50
21	AA	1520	C	C5-C6-N1	-8.12	116.94	121.00
57	BB	239	C	C2-N3-C4	8.12	123.96	119.90
57	BB	348	A	C2-N3-C4	-8.12	106.54	110.60
57	BB	2151	U	N1-C2-N3	8.12	119.77	114.90
22	AY	58	A	C5-C6-N6	-8.11	117.21	123.70
57	BB	474	G	C4-C5-N7	8.12	114.05	110.80
57	BB	911	A	O4'-C1'-N9	8.12	114.69	108.20
57	BB	1008	A	C5-C6-N6	-8.11	117.21	123.70
57	BB	1186	G	O4'-C1'-N9	8.11	114.69	108.20
57	BB	1784	A	C5-C6-N1	-8.11	113.64	117.70
57	BB	2242	G	O4'-C1'-N9	8.11	114.69	108.20
57	BB	2432	A	C4-C5-C6	8.11	121.06	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2732	G	C5-C6-O6	-8.12	123.73	128.60
21	AA	964	A	C5-C6-N1	-8.11	113.64	117.70
57	BB	1156	A	C5-C6-N6	-8.11	117.21	123.70
21	AA	40	C	O4'-C1'-N1	8.11	114.69	108.20
21	AA	1162	C	C5-C6-N1	8.11	125.06	121.00
23	AW	30	G	C4-C5-N7	-8.11	107.56	110.80
57	BB	489	G	N1-C2-N3	-8.11	119.03	123.90
21	AA	1456	A	O4'-C1'-N9	8.11	114.69	108.20
57	BB	402	A	C4-C5-C6	8.11	121.06	117.00
57	BB	473	G	N3-C4-C5	8.11	132.66	128.60
57	BB	578	G	C4-C5-N7	8.11	114.05	110.80
57	BB	1057	A	C4-C5-C6	8.11	121.06	117.00
57	BB	1107	G	C8-N9-C4	-8.11	103.16	106.40
57	BB	1571	A	C5-N7-C8	8.11	107.96	103.90
57	BB	2334	U	N3-C4-C5	-8.11	109.73	114.60
57	BB	1789	A	C8-N9-C4	8.11	109.04	105.80
57	BB	1876	A	N9-C4-C5	8.11	109.05	105.80
57	BB	2014	A	C5-C6-N6	-8.11	117.21	123.70
21	AA	176	C	O4'-C1'-N1	8.11	114.69	108.20
21	AA	220	G	N1-C2-N3	-8.11	119.03	123.90
21	AA	413	G	C4-C5-C6	8.11	123.67	118.80
57	BB	315	G	N7-C8-N9	8.11	117.16	113.10
57	BB	1350	C	O4'-C1'-N1	8.11	114.69	108.20
57	BB	2587	A	C5-N7-C8	8.11	107.95	103.90
21	AA	462	G	O4'-C1'-N9	8.11	114.68	108.20
21	AA	1071	C	O4'-C1'-N1	8.11	114.68	108.20
52	BD	83	ARG	NE-CZ-NH2	8.11	124.35	120.30
57	BB	342	A	C5-C6-N6	-8.11	117.22	123.70
57	BB	1590	A	C5-C6-N1	-8.11	113.65	117.70
57	BB	1843	C	N3-C4-N4	8.11	123.67	118.00
57	BB	2588	G	C6-C5-N7	-8.11	125.54	130.40
21	AA	942	G	C6-C5-N7	-8.10	125.54	130.40
57	BB	675	A	C5-N7-C8	8.10	107.95	103.90
57	BB	891	G	P-O5'-C5'	8.10	133.87	120.90
57	BB	1257	C	N3-C4-N4	8.10	123.67	118.00
57	BB	1661	G	C2-N3-C4	-8.10	107.85	111.90
57	BB	1760	C	O4'-C1'-N1	8.10	114.68	108.20
21	AA	681	A	N7-C8-N9	-8.10	109.75	113.80
21	AA	1022	A	N3-C4-N9	8.10	133.88	127.40
21	AA	1142	G	N9-C4-C5	8.10	108.64	105.40
21	AA	1152	A	C6-C5-N7	-8.10	126.63	132.30
26	AV	24	U	N3-C2-O2	-8.10	116.53	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	811	U	N3-C4-C5	-8.10	109.74	114.60
57	BB	938	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1700	A	C6-C5-N7	-8.10	126.63	132.30
26	AV	68	C	N3-C4-C5	-8.10	118.66	121.90
57	BB	1266	G	C3'-C2'-C1'	-8.10	95.02	101.50
57	BB	1016	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1975	G	N9-C4-C5	-8.10	102.16	105.40
57	BB	2375	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1729	U	N1-C2-N3	-8.09	110.04	114.90
21	AA	116	A	C4-C5-C6	8.09	121.05	117.00
21	AA	710	G	C2-N3-C4	-8.09	107.85	111.90
21	AA	753	A	N7-C8-N9	-8.09	109.75	113.80
52	BD	141	ARG	NE-CZ-NH1	-8.09	116.25	120.30
57	BB	1599	U	O4'-C1'-N1	8.09	114.67	108.20
57	BB	1900	A	N3-C4-C5	-8.09	121.14	126.80
57	BB	2427	C	O4'-C1'-N1	8.09	114.67	108.20
57	BB	2438	U	N3-C4-C5	-8.09	109.75	114.60
21	AA	646	G	N3-C4-C5	-8.09	124.56	128.60
21	AA	780	A	C5-C6-N6	-8.09	117.23	123.70
21	AA	1021	A	C5-C6-N1	-8.09	113.66	117.70
57	BB	2	G	N3-C4-C5	8.09	132.65	128.60
57	BB	1242	U	C5-C6-N1	8.09	126.75	122.70
21	AA	1076	U	O4'-C1'-N1	8.09	114.67	108.20
21	AA	1192	C	C2-N3-C4	-8.09	115.86	119.90
22	AY	10	G	C8-N9-C4	-8.09	103.16	106.40
57	BB	1141	U	C6-N1-C2	8.09	125.85	121.00
57	BB	1799	G	N7-C8-N9	-8.09	109.06	113.10
57	BB	2468	A	C4-C5-C6	8.09	121.05	117.00
57	BB	2856	A	C5-C6-N6	-8.09	117.23	123.70
21	AA	800	G	C6-C5-N7	-8.09	125.55	130.40
21	AA	917	G	N1-C6-O6	8.09	124.75	119.90
21	AA	1032	G	N1-C2-N3	-8.09	119.05	123.90
21	AA	1439	G	C8-N9-C4	-8.09	103.17	106.40
39	BT	51	PHE	N-CA-CB	8.09	125.16	110.60
57	BB	244	A	C2-N3-C4	-8.09	106.56	110.60
58	BA	57	A	C5-N7-C8	8.09	107.94	103.90
21	AA	899	C	C6-N1-C2	-8.09	117.07	120.30
22	AY	31	A	C6-C5-N7	-8.09	126.64	132.30
57	BB	1102	C	O4'-C1'-N1	8.09	114.67	108.20
57	BB	1830	C	C6-N1-C2	-8.09	117.07	120.30
57	BB	2083	G	N3-C2-N2	8.09	125.56	119.90
13	AB	31	PHE	CB-CG-CD1	-8.08	115.14	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	895	G	C6-C5-N7	-8.08	125.55	130.40
21	AA	930	C	N3-C4-C5	-8.08	118.67	121.90
21	AA	510	A	N9-C4-C5	8.08	109.03	105.80
21	AA	696	A	C5-C6-N1	-8.08	113.66	117.70
57	BB	26	G	N1-C2-N3	-8.08	119.05	123.90
57	BB	293	U	C5-C6-N1	-8.08	118.66	122.70
57	BB	425	G	C4-C5-C6	-8.08	113.95	118.80
57	BB	1091	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	1110	G	N1-C6-O6	8.08	124.75	119.90
57	BB	1364	G	C4-C5-C6	8.08	123.65	118.80
57	BB	1933	G	C8-N9-C1'	8.08	137.51	127.00
57	BB	2092	U	C6-N1-C1'	-8.08	109.89	121.20
57	BB	2663	G	N9-C4-C5	8.08	108.63	105.40
57	BB	213	A	C5-N7-C8	8.08	107.94	103.90
57	BB	2417	C	C2-N3-C4	8.08	123.94	119.90
57	BB	2015	A	C2-N3-C4	8.08	114.64	110.60
57	BB	2175	C	N3-C4-N4	8.08	123.66	118.00
57	BB	2251	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	2589	A	C4-C5-C6	8.08	121.04	117.00
21	AA	480	U	N3-C4-O4	8.08	125.06	119.40
21	AA	1373	G	C2-N3-C4	-8.08	107.86	111.90
57	BB	730	A	C4-C5-N7	-8.08	106.66	110.70
21	AA	1296	C	N3-C4-N4	8.08	123.65	118.00
57	BB	308	G	O4'-C1'-N9	8.08	114.66	108.20
57	BB	835	C	N3-C4-C5	-8.08	118.67	121.90
57	BB	1888	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	2089	C	O4'-C1'-N1	8.08	114.66	108.20
58	BA	106	G	C5-N7-C8	8.08	108.34	104.30
57	BB	88	G	C4-C5-C6	8.07	123.64	118.80
57	BB	1358	G	N3-C2-N2	8.07	125.55	119.90
21	AA	64	G	C2-N3-C4	8.07	115.94	111.90
21	AA	299	G	C8-N9-C4	-8.07	103.17	106.40
21	AA	447	G	N3-C2-N2	8.07	125.55	119.90
21	AA	1082	A	C5-N7-C8	8.07	107.94	103.90
21	AA	1318	A	C6-C5-N7	-8.07	126.65	132.30
57	BB	12	U	N3-C4-O4	8.07	125.05	119.40
57	BB	1949	G	C2-N3-C4	8.07	115.94	111.90
57	BB	2059	A	C5-C6-N1	-8.07	113.66	117.70
57	BB	2241	A	O4'-C1'-N9	8.07	114.66	108.20
58	BA	105	G	N1-C6-O6	8.07	124.74	119.90
21	AA	823	C	C2-N3-C4	8.07	123.94	119.90
32	BM	59	ARG	NE-CZ-NH1	-8.07	116.26	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	807	U	P-O5'-C5'	-8.07	107.98	120.90
21	AA	82	G	C8-N9-C4	-8.07	103.17	106.40
21	AA	181	A	N9-C4-C5	8.07	109.03	105.80
21	AA	457	G	N1-C2-N3	-8.07	119.06	123.90
21	AA	584	G	N1-C6-O6	8.07	124.74	119.90
21	AA	737	C	C5-C6-N1	8.07	125.03	121.00
23	AW	76	A	O4'-C1'-N9	8.07	114.66	108.20
57	BB	905	A	N1-C2-N3	8.07	133.34	129.30
57	BB	643	A	C5-C6-N1	-8.07	113.67	117.70
21	AA	1275	A	C4-C5-C6	8.07	121.03	117.00
21	AA	1493	A	C2-N3-C4	-8.07	106.57	110.60
26	AV	56	C	C2-N3-C4	-8.07	115.87	119.90
48	B1	20	TYR	CB-CG-CD2	8.07	125.84	121.00
57	BB	670	A	C5-C6-N6	-8.07	117.25	123.70
57	BB	2482	A	N1-C6-N6	8.07	123.44	118.60
57	BB	2793	C	N3-C4-N4	8.07	123.65	118.00
57	BB	471	A	N3-C4-N9	8.07	133.85	127.40
57	BB	669	G	C5-C6-O6	-8.07	123.76	128.60
21	AA	691	G	C4-C5-N7	8.06	114.03	110.80
21	AA	730	G	C6-C5-N7	-8.06	125.56	130.40
26	AV	13	C	N3-C4-C5	-8.06	118.67	121.90
21	AA	115	G	C6-N1-C2	8.06	129.94	125.10
21	AA	851	G	C5'-C4'-C3'	-8.06	103.10	116.00
57	BB	329	G	N1-C2-N3	-8.06	119.06	123.90
21	AA	1382	C	C5-C6-N1	8.06	125.03	121.00
57	BB	196	A	C6-C5-N7	-8.06	126.66	132.30
57	BB	316	C	N3-C4-N4	8.06	123.64	118.00
57	BB	855	G	C2-N3-C4	8.06	115.93	111.90
57	BB	1446	C	C5-C6-N1	8.06	125.03	121.00
57	BB	1811	G	N1-C6-O6	8.06	124.74	119.90
57	BB	2495	G	C5-C6-O6	-8.06	123.76	128.60
21	AA	181	A	N1-C2-N3	-8.06	125.27	129.30
21	AA	1099	G	N1-C2-N3	-8.06	119.06	123.90
26	AV	19	G	C5-C6-O6	-8.06	123.76	128.60
57	BB	1726	C	C2-N3-C4	8.06	123.93	119.90
21	AA	889	A	C8-N9-C4	-8.06	102.58	105.80
57	BB	829	A	O4'-C1'-N9	8.06	114.65	108.20
57	BB	1937	A	C5-C6-N1	-8.06	113.67	117.70
57	BB	2081	U	N3-C2-O2	8.06	127.84	122.20
57	BB	2092	U	N1-C2-N3	8.06	119.74	114.90
57	BB	2789	C	C5-C6-N1	8.06	125.03	121.00
21	AA	782	A	C8-N9-C4	8.06	109.02	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	358	U	C4-C5-C6	-8.06	114.86	119.70
57	BB	913	U	C2-N3-C4	-8.06	122.17	127.00
57	BB	1657	U	O4'-C1'-N1	8.06	114.65	108.20
57	BB	2036	C	C5-C4-N4	-8.06	114.56	120.20
21	AA	549	C	N3-C4-N4	8.06	123.64	118.00
21	AA	1215	G	C4-C5-N7	-8.05	107.58	110.80
21	AA	1223	C	C6-N1-C2	-8.06	117.08	120.30
26	AV	5	G	N3-C4-C5	-8.05	124.57	128.60
31	BL	18	ARG	NE-CZ-NH1	8.05	124.33	120.30
57	BB	1157	G	C5-C6-O6	-8.05	123.77	128.60
57	BB	1173	U	N1-C2-O2	-8.05	117.16	122.80
57	BB	1283	G	N1-C6-O6	8.05	124.73	119.90
57	BB	2201	G	N1-C2-N3	-8.06	119.07	123.90
57	BB	2645	G	N3-C2-N2	8.05	125.54	119.90
57	BB	2663	G	N3-C4-C5	-8.06	124.57	128.60
57	BB	2823	A	C5-C6-N1	-8.06	113.67	117.70
22	AY	28	C	N3-C4-N4	8.05	123.64	118.00
57	BB	1717	A	C2-N3-C4	8.05	114.63	110.60
57	BB	2214	C	C5-C4-N4	-8.05	114.56	120.20
57	BB	2611	C	N3-C4-N4	8.05	123.64	118.00
21	AA	1360	A	C3'-C2'-C1'	8.05	107.94	101.50
22	AY	66	A	C6-C5-N7	-8.05	126.66	132.30
26	AV	67	C	C2-N3-C4	8.05	123.93	119.90
57	BB	810	U	P-O5'-C5'	8.05	133.78	120.90
57	BB	966	G	N3-C2-N2	8.05	125.54	119.90
21	AA	50	A	N1-C6-N6	8.05	123.43	118.60
21	AA	251	G	C5-N7-C8	8.05	108.33	104.30
21	AA	404	G	C5-N7-C8	8.05	108.33	104.30
21	AA	473	U	C5-C4-O4	-8.05	121.07	125.90
21	AA	525	C	N3-C4-C5	-8.05	118.68	121.90
21	AA	903	G	N3-C2-N2	8.05	125.54	119.90
21	AA	1088	G	N1-C2-N3	-8.05	119.07	123.90
21	AA	1383	C	N3-C2-O2	8.05	127.54	121.90
21	AA	1435	G	C8-N9-C4	-8.05	103.18	106.40
57	BB	134	G	O4'-C1'-N9	8.05	114.64	108.20
57	BB	1117	C	O4'-C4'-C3'	-8.05	95.95	104.00
57	BB	1759	A	N3-C4-C5	-8.05	121.16	126.80
57	BB	1976	U	C2-N3-C4	-8.05	122.17	127.00
57	BB	2034	U	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2256	G	N1-C6-O6	8.05	124.73	119.90
21	AA	290	C	N3-C4-N4	8.05	123.63	118.00
21	AA	302	G	C5-C6-N1	-8.05	107.48	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	312	C	C5-C6-N1	8.05	125.02	121.00
21	AA	552	U	N3-C2-O2	-8.05	116.57	122.20
21	AA	563	A	N1-C2-N3	-8.05	125.28	129.30
21	AA	1455	G	C5-C6-O6	-8.05	123.77	128.60
57	BB	300	A	N9-C4-C5	8.05	109.02	105.80
57	BB	470	A	N1-C6-N6	8.05	123.43	118.60
57	BB	919	U	N3-C4-O4	8.05	125.03	119.40
57	BB	1175	A	N1-C6-N6	8.05	123.43	118.60
57	BB	2023	C	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2054	A	C4-C5-C6	8.05	121.02	117.00
57	BB	2151	U	C6-N1-C2	-8.05	116.17	121.00
57	BB	2420	C	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2635	A	C4-C5-N7	-8.05	106.68	110.70
57	BB	2714	G	N3-C2-N2	8.05	125.53	119.90
13	AB	87	ASP	CB-CG-OD2	8.04	125.54	118.30
21	AA	26	A	O4'-C1'-N9	8.05	114.64	108.20
21	AA	84	U	C2-N3-C4	8.05	131.83	127.00
21	AA	299	G	N1-C6-O6	8.05	124.73	119.90
21	AA	744	C	O4'-C1'-N1	8.04	114.64	108.20
57	BB	782	A	C5-C6-N1	-8.05	113.68	117.70
57	BB	959	A	P-O3'-C3'	-8.04	110.05	119.70
57	BB	2183	A	O4'-C1'-N9	8.05	114.64	108.20
57	BB	2052	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	2322	A	N1-C6-N6	8.04	123.43	118.60
21	AA	1225	A	O4'-C1'-N9	8.04	114.63	108.20
24	AX	16	A	N1-C2-N3	8.04	133.32	129.30
57	BB	177	G	C6-C5-N7	-8.04	125.58	130.40
57	BB	862	G	C8-N9-C4	-8.04	103.18	106.40
57	BB	2230	G	N1-C6-O6	8.04	124.73	119.90
57	BB	2033	A	C2-N3-C4	-8.04	106.58	110.60
21	AA	653	U	C5-C4-O4	-8.04	121.08	125.90
57	BB	932	U	C4-C5-C6	-8.04	114.88	119.70
57	BB	155	A	C8-N9-C4	-8.04	102.58	105.80
57	BB	227	A	C5-N7-C8	8.04	107.92	103.90
57	BB	371	A	N1-C2-N3	-8.04	125.28	129.30
57	BB	430	A	C6-N1-C2	8.04	123.42	118.60
57	BB	705	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	810	U	C5-C6-N1	-8.04	118.68	122.70
57	BB	973	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	1250	G	C6-C5-N7	-8.04	125.58	130.40
57	BB	2846	G	N1-C6-O6	8.04	124.72	119.90
57	BB	2902	C	C4-C5-C6	8.04	121.42	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1961	C	O4'-C1'-N1	8.04	114.63	108.20
21	AA	71	A	N9-C4-C5	8.04	109.01	105.80
21	AA	85	U	N3-C4-C5	-8.04	109.78	114.60
21	AA	289	G	C4-C5-N7	8.04	114.01	110.80
21	AA	398	U	N3-C4-O4	8.04	125.03	119.40
21	AA	741	G	C5-C6-N1	-8.04	107.48	111.50
57	BB	956	G	N3-C2-N2	8.04	125.53	119.90
57	BB	1048	A	C8-N9-C4	-8.04	102.59	105.80
21	AA	687	A	C4-C5-N7	-8.03	106.68	110.70
21	AA	1039	G	C5-C6-O6	-8.03	123.78	128.60
57	BB	1810	A	C5-C6-N6	-8.04	117.27	123.70
57	BB	2340	A	N1-C2-N3	-8.04	125.28	129.30
21	AA	190	A	C6-C5-N7	-8.03	126.68	132.30
21	AA	493	A	C4-C5-N7	-8.03	106.68	110.70
57	BB	2031	A	O4'-C1'-N9	8.03	114.63	108.20
21	AA	865	A	O4'-C1'-N9	8.03	114.62	108.20
57	BB	1148	U	O4'-C1'-N1	8.03	114.62	108.20
57	BB	1892	C	C6-N1-C2	-8.03	117.09	120.30
57	BB	2656	U	C2-N3-C4	8.03	131.82	127.00
57	BB	1906	G	N3-C2-N2	8.03	125.52	119.90
57	BB	2725	A	C4-C5-C6	8.03	121.02	117.00
11	AT	26	MET	CG-SD-CE	-8.03	87.35	100.20
21	AA	52	C	N3-C4-N4	8.03	123.62	118.00
21	AA	922	G	N7-C8-N9	-8.03	109.08	113.10
57	BB	1479	G	N3-C2-N2	8.03	125.52	119.90
57	BB	2092	U	C5-C4-O4	-8.03	121.08	125.90
57	BB	326	G	C6-C5-N7	-8.03	125.58	130.40
57	BB	2505	G	C3'-C2'-C1'	8.03	107.92	101.50
21	AA	447	G	C6-C5-N7	-8.03	125.58	130.40
21	AA	630	A	N1-C6-N6	8.03	123.42	118.60
21	AA	1338	G	C5-C6-O6	-8.03	123.78	128.60
21	AA	141	G	N3-C2-N2	-8.03	114.28	119.90
22	AY	26	G	N1-C2-N3	-8.03	119.08	123.90
57	BB	311	A	C5-N7-C8	-8.03	99.89	103.90
57	BB	483	A	O4'-C1'-N9	8.03	114.62	108.20
57	BB	1949	G	O4'-C1'-N9	8.03	114.62	108.20
57	BB	2549	G	N3-C2-N2	8.03	125.52	119.90
58	BA	6	G	N1-C2-N3	-8.03	119.08	123.90
21	AA	689	C	N3-C4-C5	-8.02	118.69	121.90
21	AA	900	A	C5-C6-N6	-8.02	117.28	123.70
24	AX	20	U	C2-N3-C4	-8.02	122.19	127.00
57	BB	1236	G	N7-C8-N9	-8.02	109.09	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2238	G	C4-C5-N7	8.02	114.01	110.80
22	AY	4	G	O4'-C4'-C3'	8.02	112.52	106.10
57	BB	207	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	689	A	N7-C8-N9	8.02	117.81	113.80
57	BB	856	G	P-O3'-C3'	8.02	129.33	119.70
57	BB	2087	G	C2-N3-C4	8.02	115.91	111.90
57	BB	2877	G	C4'-C3'-C2'	-8.02	94.58	102.60
58	BA	102	G	N1-C6-O6	8.02	124.71	119.90
21	AA	998	C	N1-C2-O2	8.02	123.71	118.90
21	AA	1518	A	N1-C6-N6	8.02	123.41	118.60
24	AX	13	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	71	A	C4-C5-N7	-8.02	106.69	110.70
57	BB	84	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	734	A	C2-N3-C4	-8.02	106.59	110.60
57	BB	430	A	C4-C5-C6	8.02	121.01	117.00
57	BB	581	C	O4'-C1'-N1	8.02	114.61	108.20
57	BB	2119	A	O4'-C1'-N9	8.02	114.61	108.20
57	BB	2744	G	N1-C2-N3	-8.02	119.09	123.90
18	AG	3	ARG	NE-CZ-NH2	-8.02	116.29	120.30
57	BB	106	C	N3-C4-C5	-8.02	118.69	121.90
57	BB	690	G	C4-C5-N7	-8.02	107.59	110.80
57	BB	808	G	O4'-C1'-N9	8.02	114.61	108.20
57	BB	1353	A	C6-C5-N7	-8.02	126.69	132.30
57	BB	1674	G	O4'-C1'-N9	8.02	114.61	108.20
57	BB	2240	U	C5-C4-O4	-8.02	121.09	125.90
57	BB	1697	G	C6-C5-N7	-8.02	125.59	130.40
57	BB	2481	G	C5-C6-N1	-8.02	107.49	111.50
21	AA	1300	G	P-O5'-C5'	8.01	133.72	120.90
22	AY	19	G	C5-C6-N1	8.01	115.51	111.50
57	BB	1358	G	C2-N3-C4	8.01	115.91	111.90
24	AX	20	U	C5-C6-N1	8.01	126.71	122.70
57	BB	88	G	N1-C6-O6	8.01	124.71	119.90
57	BB	803	U	O4'-C1'-N1	8.01	114.61	108.20
57	BB	1001	A	C5-C6-N1	-8.01	113.69	117.70
57	BB	2539	C	N3-C4-C5	-8.01	118.69	121.90
57	BB	463	G	N1-C2-N3	-8.01	119.09	123.90
57	BB	1387	A	N1-C2-N3	8.01	133.31	129.30
21	AA	226	G	C8-N9-C4	-8.01	103.20	106.40
57	BB	163	C	O4'-C1'-N1	8.01	114.61	108.20
57	BB	2144	G	C8-N9-C4	8.01	109.60	106.40
21	AA	866	C	C5-C4-N4	-8.01	114.60	120.20
57	BB	240	C	C5-C4-N4	-8.01	114.59	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1701	A	C5-C6-N6	-8.01	117.29	123.70
57	BB	2305	U	O4'-C1'-N1	8.01	114.61	108.20
21	AA	1084	G	C4-C5-C6	8.01	123.60	118.80
21	AA	1261	A	N1-C6-N6	8.01	123.40	118.60
26	AV	59	A	N1-C6-N6	8.01	123.40	118.60
57	BB	328	U	N3-C4-O4	8.01	125.00	119.40
57	BB	538	A	C1'-O4'-C4'	-8.01	103.50	109.90
57	BB	721	A	O4'-C1'-N9	8.01	114.60	108.20
57	BB	857	G	C6-C5-N7	-8.01	125.60	130.40
57	BB	1577	C	C5-C6-N1	8.01	125.00	121.00
21	AA	697	U	N1-C2-O2	-8.00	117.20	122.80
57	BB	132	G	C4-C5-N7	-8.00	107.60	110.80
21	AA	1264	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	1321	U	O4'-C1'-N1	8.00	114.60	108.20
57	BB	984	A	O4'-C1'-N9	8.00	114.60	108.20
57	BB	1541	C	C6-N1-C2	8.00	123.50	120.30
57	BB	1651	G	C4-C5-C6	8.00	123.60	118.80
21	AA	561	U	N3-C4-O4	8.00	125.00	119.40
57	BB	525	U	N3-C4-C5	-8.00	109.80	114.60
57	BB	856	G	N1-C6-O6	8.00	124.70	119.90
57	BB	904	G	C2-N3-C4	8.00	115.90	111.90
57	BB	1823	G	N7-C8-N9	-8.00	109.10	113.10
57	BB	2556	C	N3-C4-C5	-8.00	118.70	121.90
57	BB	2786	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	1415	G	C4-C5-C6	8.00	123.60	118.80
21	AA	1486	G	N1-C6-O6	8.00	124.70	119.90
26	AV	13	C	C5-C6-N1	8.00	125.00	121.00
57	BB	2528	U	C2-N3-C4	8.00	131.80	127.00
57	BB	2884	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	218	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	343	U	C5-C6-N1	8.00	126.70	122.70
21	AA	1178	G	C5-C6-O6	-8.00	123.80	128.60
26	AV	29	G	C5-C6-N1	-8.00	107.50	111.50
57	BB	309	A	C5-C6-N6	-8.00	117.30	123.70
57	BB	1243	C	P-O3'-C3'	-8.00	110.10	119.70
57	BB	1532	A	N1-C2-N3	8.00	133.30	129.30
57	BB	783	A	N1-C6-N6	8.00	123.40	118.60
57	BB	1946	U	N3-C4-O4	8.00	125.00	119.40
26	AV	2	G	C5-C6-O6	-7.99	123.80	128.60
57	BB	902	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	1407	G	N1-C2-N3	-7.99	119.10	123.90
57	BB	2764	A	C4-C5-N7	-7.99	106.70	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	7	G	C3'-C2'-C1'	-7.99	95.11	101.50
57	BB	2002	G	C6-C5-N7	-7.99	125.61	130.40
21	AA	1218	C	N3-C4-N4	7.99	123.59	118.00
57	BB	160	A	C5-N7-C8	7.99	107.89	103.90
57	BB	318	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	1007	C	N3-C4-N4	7.99	123.59	118.00
21	AA	336	A	C5-C6-N1	-7.99	113.71	117.70
21	AA	619	U	C5-C6-N1	7.99	126.69	122.70
21	AA	1187	G	C5-N7-C8	7.99	108.29	104.30
22	AY	40	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	2648	G	C6-C5-N7	-7.99	125.61	130.40
57	BB	2706	A	O4'-C1'-N9	7.99	114.59	108.20
58	BA	108	A	C6-C5-N7	-7.99	126.71	132.30
57	BB	456	C	C5'-C4'-O4'	7.99	118.68	109.10
21	AA	635	A	C5-C6-N6	-7.99	117.31	123.70
21	AA	1293	C	C5-C4-N4	-7.99	114.61	120.20
23	AW	17	C	N3-C4-N4	7.99	123.59	118.00
57	BB	55	G	N3-C2-N2	7.99	125.49	119.90
57	BB	1879	C	N3-C4-C5	-7.99	118.71	121.90
49	B2	34	ARG	NE-CZ-NH2	-7.98	116.31	120.30
57	BB	896	A	C6-N1-C2	-7.98	113.81	118.60
21	AA	11	G	C5-C6-O6	-7.98	123.81	128.60
21	AA	126	G	C5-C6-O6	7.98	133.39	128.60
21	AA	513	C	N1-C2-N3	-7.98	113.61	119.20
21	AA	1143	G	N9-C4-C5	7.98	108.59	105.40
57	BB	498	G	C4-C5-N7	7.98	113.99	110.80
57	BB	1443	U	C1'-O4'-C4'	7.98	116.29	109.90
57	BB	2235	G	O4'-C1'-N9	7.98	114.59	108.20
57	BB	2641	G	N9-C4-C5	7.98	108.59	105.40
57	BB	2694	G	C5-C6-O6	-7.98	123.81	128.60
58	BA	92	C	O4'-C1'-N1	7.98	114.58	108.20
17	AF	41	ASP	CB-CG-OD2	7.98	125.48	118.30
21	AA	844	G	C6-C5-N7	-7.98	125.61	130.40
25	AZ	309	TYR	CB-CG-CD2	7.98	125.79	121.00
57	BB	465	G	N1-C2-N3	-7.98	119.11	123.90
57	BB	1273	U	C4-C5-C6	7.98	124.49	119.70
57	BB	1897	G	N3-C2-N2	7.98	125.49	119.90
57	BB	2379	G	C6-C5-N7	-7.98	125.61	130.40
41	BV	21	ARG	NE-CZ-NH2	-7.98	116.31	120.30
57	BB	2467	C	N3-C4-C5	-7.98	118.71	121.90
57	BB	2484	G	N3-C4-C5	-7.98	124.61	128.60
21	AA	473	U	N3-C4-O4	7.98	124.98	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	633	G	N9-C4-C5	-7.98	102.21	105.40
57	BB	544	C	C6-N1-C2	-7.98	117.11	120.30
57	BB	667	U	N3-C4-O4	7.98	124.98	119.40
57	BB	776	G	C8-N9-C4	-7.98	103.21	106.40
58	BA	56	G	O4'-C1'-N9	7.98	114.58	108.20
21	AA	985	C	O4'-C1'-N1	7.98	114.58	108.20
21	AA	1104	G	N1-C6-O6	7.98	124.69	119.90
21	AA	1376	U	O4'-C1'-N1	7.98	114.58	108.20
57	BB	1913	A	C4-C5-N7	-7.98	106.71	110.70
57	BB	2244	U	C3'-C2'-C1'	7.98	107.88	101.50
23	AW	39	U	C6-N1-C1'	-7.97	110.04	121.20
45	BC	102	TYR	CG-CD2-CE2	7.97	127.68	121.30
57	BB	134	G	C4-C5-C6	7.97	123.58	118.80
57	BB	515	A	C5-N7-C8	7.97	107.89	103.90
57	BB	727	A	C2-N3-C4	-7.97	106.61	110.60
57	BB	764	A	C8-N9-C4	-7.97	102.61	105.80
57	BB	783	A	C4-C5-C6	7.97	120.99	117.00
57	BB	1276	A	C6-N1-C2	7.97	123.39	118.60
21	AA	1414	U	N3-C4-C5	7.97	119.38	114.60
26	AV	1	C	OP1-P-OP2	-7.97	107.64	119.60
57	BB	141	G	C5-C6-O6	-7.97	123.82	128.60
57	BB	995	C	N1-C2-O2	7.97	123.68	118.90
57	BB	1159	U	O4'-C1'-N1	7.97	114.58	108.20
57	BB	2507	C	N3-C4-C5	-7.97	118.71	121.90
57	BB	2770	G	N1-C6-O6	7.97	124.68	119.90
58	BA	108	A	C4-C5-C6	7.97	120.99	117.00
21	AA	17	U	N3-C4-C5	-7.97	109.82	114.60
21	AA	225	C	N3-C4-C5	-7.97	118.71	121.90
26	AV	70	G	O4'-C1'-N9	7.97	114.58	108.20
57	BB	2003	A	O4'-C1'-N9	7.97	114.58	108.20
57	BB	2469	A	N7-C8-N9	-7.97	109.81	113.80
21	AA	297	G	O4'-C1'-N9	7.97	114.58	108.20
21	AA	733	G	C5-N7-C8	7.97	108.28	104.30
21	AA	1147	C	O4'-C1'-N1	7.97	114.58	108.20
22	AY	3	G	C2-N3-C4	7.97	115.89	111.90
23	AW	55	U	C6-N1-C1'	-7.97	110.04	121.20
57	BB	1305	C	N3-C4-N4	7.97	123.58	118.00
57	BB	1310	G	N9-C4-C5	7.97	108.59	105.40
57	BB	1612	C	N3-C4-C5	7.97	125.09	121.90
21	AA	1328	C	C2-N3-C4	7.97	123.88	119.90
25	AZ	326	TYR	CB-CG-CD1	-7.97	116.22	121.00
57	BB	1215	G	O4'-C1'-N9	7.97	114.57	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	557	G	N1-C6-O6	7.97	124.68	119.90
21	AA	923	A	O4'-C1'-N9	7.97	114.57	108.20
21	AA	1330	U	N3-C4-O4	7.97	124.98	119.40
21	AA	1403	C	N3-C4-C5	-7.97	118.71	121.90
54	BF	106	ALA	CB-CA-C	-7.97	98.15	110.10
57	BB	250	G	C5-C6-O6	-7.97	123.82	128.60
57	BB	848	C	N3-C4-C5	-7.97	118.71	121.90
57	BB	1698	A	N7-C8-N9	-7.97	109.82	113.80
57	BB	2071	A	N9-C4-C5	-7.97	102.61	105.80
57	BB	2525	G	P-O5'-C5'	-7.97	108.15	120.90
21	AA	435	A	C3'-C2'-C1'	7.96	107.87	101.50
21	AA	454	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	1060	U	O4'-C1'-N1	7.96	114.57	108.20
22	AY	71	G	N3-C4-N9	7.96	130.78	126.00
23	AW	6	G	N9-C4-C5	7.96	108.59	105.40
23	AW	72	C	C5'-C4'-C3'	7.96	128.74	116.00
57	BB	900	A	O4'-C1'-N9	7.96	114.57	108.20
57	BB	2272	U	C4-C5-C6	-7.96	114.92	119.70
20	AI	37	TYR	CB-CG-CD1	7.96	125.78	121.00
20	AI	89	TYR	CB-CG-CD2	-7.96	116.22	121.00
21	AA	26	A	C5-C6-N1	-7.96	113.72	117.70
21	AA	31	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	76	G	C4-C5-C6	7.96	123.58	118.80
21	AA	155	A	C5-C6-N1	-7.96	113.72	117.70
21	AA	932	C	C5-C6-N1	7.96	124.98	121.00
21	AA	1294	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	1362	A	C6-C5-N7	-7.96	126.73	132.30
30	BK	63	ARG	NE-CZ-NH2	7.96	124.28	120.30
57	BB	729	G	O4'-C1'-N9	7.96	114.57	108.20
57	BB	932	U	N3-C4-C5	7.96	119.38	114.60
57	BB	1505	A	C6-N1-C2	-7.96	113.82	118.60
57	BB	2038	G	C6-N1-C2	-7.96	120.32	125.10
57	BB	2070	A	N9-C4-C5	7.96	108.98	105.80
57	BB	2180	U	C5-C6-N1	7.96	126.68	122.70
57	BB	2266	A	N9-C4-C5	7.96	108.98	105.80
58	BA	17	C	C2-N3-C4	7.96	123.88	119.90
57	BB	683	U	C6-N1-C2	-7.96	116.22	121.00
57	BB	1490	A	C4-C5-C6	7.96	120.98	117.00
57	BB	2036	C	C4-C5-C6	-7.96	113.42	117.40
21	AA	694	A	N1-C6-N6	7.96	123.38	118.60
56	BH	139	PHE	CB-CG-CD1	-7.96	115.23	120.80
57	BB	180	G	N1-C6-O6	7.96	124.68	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	797	G	C6-N1-C2	7.96	129.88	125.10
57	BB	1279	G	C5-C6-O6	-7.96	123.82	128.60
57	BB	1757	A	C4-C5-N7	-7.96	106.72	110.70
21	AA	398	U	N1-C2-O2	7.96	128.37	122.80
21	AA	791	G	N9-C4-C5	7.96	108.58	105.40
21	AA	1489	G	C5-N7-C8	7.96	108.28	104.30
57	BB	278	A	C6-C5-N7	-7.96	126.73	132.30
57	BB	1746	A	C5-C6-N6	-7.96	117.34	123.70
57	BB	1884	G	N1-C2-N3	-7.96	119.13	123.90
21	AA	214	C	C5-C4-N4	-7.96	114.63	120.20
57	BB	106	C	C5-C6-N1	7.96	124.98	121.00
57	BB	620	G	N9-C4-C5	-7.96	102.22	105.40
21	AA	299	G	N7-C8-N9	7.95	117.08	113.10
21	AA	1130	A	C5-N7-C8	7.95	107.88	103.90
57	BB	865	C	C2-N3-C4	7.95	123.88	119.90
57	BB	1149	G	N9-C4-C5	-7.95	102.22	105.40
17	AF	41	ASP	CB-CG-OD1	-7.95	111.14	118.30
57	BB	793	A	C5-N7-C8	7.95	107.88	103.90
57	BB	2512	C	O4'-C1'-N1	7.95	114.56	108.20
15	AD	12	ARG	NE-CZ-NH1	-7.95	116.32	120.30
21	AA	740	U	O4'-C1'-N1	7.95	114.56	108.20
21	AA	1403	C	N3-C4-N4	7.95	123.57	118.00
22	AY	21	A	O4'-C1'-N9	7.95	114.56	108.20
53	BE	91	ASP	CB-CG-OD2	-7.95	111.14	118.30
57	BB	572	A	N3-C4-C5	-7.95	121.23	126.80
57	BB	1021	A	N1-C2-N3	7.95	133.28	129.30
57	BB	2101	A	O4'-C1'-N9	7.95	114.56	108.20
57	BB	2311	A	C6-N1-C2	-7.95	113.83	118.60
21	AA	496	A	C5-C6-N6	-7.95	117.34	123.70
21	AA	1172	C	N3-C4-C5	-7.95	118.72	121.90
57	BB	674	G	N9-C4-C5	7.95	108.58	105.40
57	BB	2746	U	O4'-C1'-N1	7.95	114.56	108.20
57	BB	2852	G	P-O3'-C3'	-7.95	110.16	119.70
58	BA	38	C	C5-C6-N1	7.95	124.97	121.00
21	AA	654	G	O4'-C1'-N9	7.95	114.56	108.20
21	AA	697	U	N3-C4-O4	7.95	124.96	119.40
21	AA	1196	A	C6-N1-C2	-7.95	113.83	118.60
21	AA	1326	U	N3-C4-O4	7.95	124.96	119.40
57	BB	175	G	N1-C2-N3	-7.95	119.13	123.90
57	BB	1122	G	C6-C5-N7	-7.95	125.63	130.40
57	BB	1274	A	C5-C6-N6	-7.95	117.34	123.70
57	BB	2818	U	O4'-C1'-N1	7.95	114.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2899	A	C5-C6-N6	-7.95	117.34	123.70
58	BA	38	C	C4-C5-C6	-7.95	113.43	117.40
58	BA	42	C	P-O3'-C3'	7.95	129.23	119.70
18	AG	52	ARG	NE-CZ-NH1	7.94	124.27	120.30
21	AA	581	G	N9-C4-C5	-7.94	102.22	105.40
21	AA	880	C	O4'-C1'-N1	7.94	114.56	108.20
57	BB	1317	G	C6-C5-N7	-7.94	125.63	130.40
21	AA	674	G	O4'-C1'-N9	7.94	114.56	108.20
21	AA	961	U	N1-C2-N3	7.94	119.67	114.90
21	AA	1180	A	N9-C4-C5	7.94	108.98	105.80
21	AA	1400	C	C5-C6-N1	7.94	124.97	121.00
21	AA	1500	A	N1-C2-N3	-7.94	125.33	129.30
23	AW	15	G	N7-C8-N9	7.94	117.07	113.10
29	BJ	53	TYR	CB-CG-CD1	-7.94	116.23	121.00
57	BB	800	A	C8-N9-C4	7.94	108.98	105.80
57	BB	1041	G	O4'-C1'-N9	7.94	114.55	108.20
57	BB	2102	G	C4-C5-C6	7.94	123.57	118.80
57	BB	2798	U	O4'-C1'-N1	7.94	114.56	108.20
21	AA	86	G	N9-C4-C5	7.94	108.58	105.40
21	AA	147	G	C4-C5-C6	7.94	123.56	118.80
21	AA	158	G	C4-C5-N7	-7.94	107.62	110.80
57	BB	173	A	C6-C5-N7	-7.94	126.74	132.30
57	BB	637	A	C4-C5-C6	7.94	120.97	117.00
57	BB	1802	A	C5-C6-N6	-7.94	117.35	123.70
57	BB	2295	C	O4'-C1'-N1	7.94	114.55	108.20
19	AH	44	PHE	CB-CG-CD1	-7.94	115.24	120.80
21	AA	599	C	N3-C4-C5	-7.94	118.72	121.90
57	BB	1533	C	P-O3'-C3'	-7.94	110.17	119.70
21	AA	289	G	O4'-C1'-N9	7.94	114.55	108.20
21	AA	1152	A	N9-C4-C5	-7.94	102.62	105.80
57	BB	89	A	O4'-C4'-C3'	-7.94	96.06	104.00
57	BB	991	C	C5-C6-N1	7.94	124.97	121.00
21	AA	165	G	C2-N3-C4	7.94	115.87	111.90
21	AA	441	A	N1-C6-N6	7.94	123.36	118.60
21	AA	1080	A	C5-C6-N1	-7.94	113.73	117.70
57	BB	2171	A	C4-C5-C6	7.94	120.97	117.00
57	BB	2617	U	P-O5'-C5'	-7.94	108.20	120.90
57	BB	2789	C	C4-C5-C6	-7.94	113.43	117.40
15	AD	71	PHE	CB-CG-CD1	-7.93	115.25	120.80
21	AA	889	A	N1-C2-N3	7.93	133.27	129.30
21	AA	1225	A	C4-C5-C6	7.93	120.97	117.00
57	BB	153	U	O4'-C1'-N1	7.93	114.55	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	191	A	C4-C5-C6	7.93	120.97	117.00
21	AA	694	A	OP1-P-OP2	-7.93	107.70	119.60
21	AA	873	A	C8-N9-C4	-7.93	102.63	105.80
21	AA	986	U	N3-C4-O4	7.93	124.95	119.40
29	BJ	69	ARG	NE-CZ-NH1	7.93	124.27	120.30
57	BB	212	G	N3-C2-N2	7.93	125.45	119.90
57	BB	2212	A	C5-C6-N1	-7.93	113.73	117.70
57	BB	2707	U	C5-C4-O4	-7.93	121.14	125.90
21	AA	430	A	N1-C6-N6	7.93	123.36	118.60
22	AY	65	G	C5-N7-C8	7.93	108.27	104.30
57	BB	1339	G	N7-C8-N9	-7.93	109.14	113.10
57	BB	1803	A	C5-C6-N6	-7.93	117.36	123.70
57	BB	13	A	C6-N1-C2	-7.93	113.84	118.60
57	BB	1791	A	N1-C6-N6	7.93	123.36	118.60
21	AA	38	G	C6-C5-N7	-7.93	125.64	130.40
21	AA	83	C	N3-C4-C5	-7.93	118.73	121.90
21	AA	338	A	N1-C6-N6	7.93	123.36	118.60
21	AA	1444	U	C5-C4-O4	-7.93	121.14	125.90
57	BB	259	G	N7-C8-N9	-7.93	109.14	113.10
57	BB	492	A	N1-C2-N3	7.93	133.26	129.30
57	BB	1128	G	C8-N9-C4	-7.93	103.23	106.40
57	BB	1341	G	N9-C4-C5	-7.93	102.23	105.40
5	AN	62	ARG	NE-CZ-NH1	7.92	124.26	120.30
6	AO	58	MET	CG-SD-CE	-7.92	87.52	100.20
21	AA	628	G	C8-N9-C4	-7.92	103.23	106.40
26	AV	44	A	N1-C2-N3	-7.92	125.34	129.30
57	BB	835	C	O4'-C1'-N1	7.92	114.54	108.20
57	BB	1003	G	C6-C5-N7	-7.92	125.64	130.40
57	BB	1027	A	C4-C5-C6	7.92	120.96	117.00
57	BB	1291	C	O4'-C1'-N1	7.92	114.54	108.20
57	BB	2731	G	O4'-C1'-N9	7.92	114.54	108.20
57	BB	2794	C	C2-N3-C4	7.92	123.86	119.90
21	AA	454	G	C5-C6-O6	-7.92	123.85	128.60
57	BB	619	G	C5-C6-O6	-7.92	123.85	128.60
57	BB	1429	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	227	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	255	G	C1'-O4'-C4'	-7.92	103.56	109.90
21	AA	518	C	N3-C4-N4	7.92	123.54	118.00
21	AA	1239	A	C2-N3-C4	-7.92	106.64	110.60
57	BB	209	C	C1'-O4'-C4'	-7.92	103.56	109.90
57	BB	2147	A	C6-C5-N7	-7.92	126.75	132.30
21	AA	204	G	O4'-C1'-N9	7.92	114.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	610	U	C2-N1-C1'	7.92	127.20	117.70
57	BB	1072	C	N3-C4-N4	7.92	123.54	118.00
57	BB	1968	G	N3-C2-N2	7.92	125.44	119.90
58	BA	72	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	618	C	C4-C5-C6	7.92	121.36	117.40
56	BH	25	TYR	CB-CG-CD1	7.92	125.75	121.00
57	BB	382	A	N9-C4-C5	7.92	108.97	105.80
57	BB	1441	G	C8-N9-C4	7.92	109.57	106.40
57	BB	1609	A	O4'-C1'-N9	7.92	114.53	108.20
57	BB	1651	G	P-O3'-C3'	7.92	129.20	119.70
57	BB	1661	G	C6-C5-N7	-7.92	125.65	130.40
57	BB	2124	G	N3-C2-N2	7.92	125.44	119.90
57	BB	2517	C	C6-N1-C2	7.92	123.47	120.30
21	AA	76	G	C5-C6-O6	-7.92	123.85	128.60
21	AA	465	A	C4-C5-C6	7.92	120.96	117.00
23	AW	26	A	N3-C4-C5	-7.92	121.26	126.80
23	AW	69	G	N3-C2-N2	7.92	125.44	119.90
57	BB	423	A	O4'-C1'-N9	7.92	114.53	108.20
57	BB	1012	U	N3-C2-O2	7.92	127.74	122.20
57	BB	1046	A	C5-C6-N1	-7.92	113.74	117.70
57	BB	1385	A	N9-C4-C5	7.92	108.97	105.80
57	BB	1993	U	C5-C6-N1	7.92	126.66	122.70
57	BB	2086	U	N3-C2-O2	7.92	127.74	122.20
57	BB	2488	G	C8-N9-C4	-7.92	103.23	106.40
21	AA	1134	G	O4'-C1'-N9	7.92	114.53	108.20
57	BB	2396	G	O4'-C1'-N9	7.92	114.53	108.20
21	AA	771	G	N3-C2-N2	7.91	125.44	119.90
21	AA	990	C	C2-N3-C4	-7.91	115.94	119.90
21	AA	1499	A	C5-N7-C8	7.91	107.86	103.90
57	BB	181	A	N9-C4-C5	7.91	108.97	105.80
57	BB	292	U	C5-C6-N1	7.91	126.66	122.70
57	BB	595	C	N3-C4-C5	-7.91	118.73	121.90
57	BB	701	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	857	G	C5-C6-N1	-7.91	107.54	111.50
57	BB	1494	A	C5-N7-C8	-7.91	99.94	103.90
57	BB	1916	A	C6-C5-N7	-7.91	126.76	132.30
57	BB	2008	C	N3-C2-O2	7.91	127.44	121.90
57	BB	2119	A	N3-C4-C5	-7.91	121.26	126.80
57	BB	2782	G	C8-N9-C4	-7.91	103.23	106.40
57	BB	2876	G	N7-C8-N9	7.91	117.06	113.10
21	AA	722	G	C5-C6-O6	7.91	133.35	128.60
57	BB	373	U	N3-C2-O2	7.91	127.74	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	662	G	C8-N9-C4	7.91	109.56	106.40
57	BB	1733	G	C8-N9-C4	-7.91	103.23	106.40
57	BB	2162	G	N3-C2-N2	7.91	125.44	119.90
21	AA	99	C	N3-C4-C5	-7.91	118.74	121.90
57	BB	446	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	501	A	C4'-C3'-C2'	-7.91	94.69	102.60
57	BB	547	A	O4'-C1'-N9	7.91	114.53	108.20
57	BB	644	A	C4-C5-N7	-7.91	106.75	110.70
57	BB	662	G	N1-C6-O6	7.91	124.65	119.90
57	BB	756	A	C8-N9-C4	-7.91	102.64	105.80
57	BB	1052	C	O4'-C1'-N1	7.91	114.53	108.20
57	BB	1367	A	C4-C5-C6	7.91	120.95	117.00
57	BB	1652	A	C4-C5-C6	7.91	120.96	117.00
57	BB	1993	U	C4-C5-C6	-7.91	114.95	119.70
57	BB	2072	C	O4'-C1'-N1	7.91	114.53	108.20
21	AA	358	U	C5-C6-N1	7.91	126.65	122.70
21	AA	588	G	C2-N3-C4	7.91	115.85	111.90
21	AA	661	G	N1-C6-O6	7.91	124.64	119.90
21	AA	1271	A	O4'-C1'-N9	7.91	114.53	108.20
57	BB	1878	G	N3-C2-N2	7.91	125.44	119.90
57	BB	2170	A	N3-C4-C5	-7.91	121.27	126.80
58	BA	9	G	C5'-C4'-O4'	7.91	118.59	109.10
22	AY	61	C	C2-N3-C4	7.91	123.85	119.90
23	AW	12	U	C4'-C3'-C2'	7.91	110.51	102.60
23	AW	31	A	P-O3'-C3'	-7.91	110.21	119.70
57	BB	1196	C	N3-C4-C5	-7.91	118.74	121.90
57	BB	1348	C	N1-C2-N3	-7.91	113.67	119.20
21	AA	1034	G	N3-C4-C5	7.91	132.55	128.60
21	AA	1175	G	N9-C4-C5	-7.91	102.24	105.40
57	BB	401	A	C5-C6-N6	-7.91	117.38	123.70
57	BB	1229	C	C2-N3-C4	7.91	123.85	119.90
57	BB	1780	A	C5-C6-N1	-7.91	113.75	117.70
57	BB	2107	G	N3-C4-C5	-7.91	124.65	128.60
57	BB	2370	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	2758	A	C4-C5-C6	7.91	120.95	117.00
57	BB	2881	U	C4-C5-C6	7.91	124.44	119.70
21	AA	144	G	N1-C6-O6	7.90	124.64	119.90
21	AA	532	A	C6-N1-C2	7.90	123.34	118.60
57	BB	1459	G	N1-C6-O6	7.90	124.64	119.90
58	BA	52	A	C4-C5-C6	7.90	120.95	117.00
13	AB	221	ARG	NE-CZ-NH2	-7.90	116.35	120.30
21	AA	142	G	N7-C8-N9	-7.90	109.15	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	501	C	O4'-C1'-N1	7.90	114.52	108.20
22	AY	31	A	C2-N3-C4	-7.90	106.65	110.60
57	BB	1422	G	N7-C8-N9	-7.90	109.15	113.10
57	BB	1463	C	C6-N1-C2	-7.90	117.14	120.30
57	BB	1694	C	C5-C4-N4	-7.90	114.67	120.20
57	BB	1735	A	O4'-C1'-N9	7.90	114.52	108.20
57	BB	1827	U	C4-C5-C6	-7.90	114.96	119.70
57	BB	2090	A	N3-C4-N9	7.90	133.72	127.40
21	AA	726	C	N3-C4-C5	-7.90	118.74	121.90
21	AA	808	C	N1-C2-O2	-7.90	114.16	118.90
21	AA	1017	U	C5'-C4'-C3'	-7.90	103.36	116.00
21	AA	1028	C	C4-C5-C6	7.90	121.35	117.40
21	AA	1241	G	P-O5'-C5'	7.90	133.54	120.90
57	BB	170	U	C5-C6-N1	7.90	126.65	122.70
57	BB	1492	G	C2-N3-C4	7.90	115.85	111.90
57	BB	2385	C	N3-C4-N4	7.90	123.53	118.00
57	BB	2509	G	C6-C5-N7	-7.90	125.66	130.40
57	BB	2767	C	N3-C4-N4	7.90	123.53	118.00
10	AS	80	ARG	NE-CZ-NH1	7.90	124.25	120.30
21	AA	998	C	N3-C4-C5	-7.90	118.74	121.90
21	AA	1396	A	C5-N7-C8	-7.90	99.95	103.90
57	BB	1035	U	O4'-C1'-N1	7.90	114.52	108.20
57	BB	1182	G	C8-N9-C4	7.90	109.56	106.40
57	BB	1232	G	C5-C6-O6	-7.90	123.86	128.60
22	AY	14	A	N1-C2-N3	7.90	133.25	129.30
22	AY	66	A	C5-C6-N6	7.90	130.02	123.70
57	BB	1056	G	O4'-C1'-N9	7.90	114.52	108.20
57	BB	1570	A	N9-C4-C5	7.90	108.96	105.80
21	AA	909	A	O4'-C1'-N9	7.89	114.52	108.20
21	AA	1301	U	N1-C2-O2	-7.89	117.27	122.80
57	BB	172	A	C5-C6-N1	-7.89	113.75	117.70
57	BB	1598	A	O4'-C1'-N9	7.89	114.52	108.20
57	BB	2316	G	O4'-C1'-N9	7.89	114.52	108.20
57	BB	2597	G	C8-N9-C4	-7.89	103.24	106.40
58	BA	22	U	C4-C5-C6	-7.89	114.96	119.70
21	AA	511	C	O4'-C1'-N1	7.89	114.51	108.20
21	AA	697	U	N1-C2-N3	7.89	119.64	114.90
26	AV	7	G	P-O3'-C3'	7.89	129.17	119.70
57	BB	111	A	C5-C6-N6	-7.89	117.39	123.70
57	BB	502	A	O4'-C1'-N9	7.89	114.51	108.20
57	BB	510	C	P-O5'-C5'	7.89	133.53	120.90
57	BB	1470	A	C5-C6-N6	-7.89	117.39	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2362	C	N3-C4-C5	-7.89	118.74	121.90
21	AA	413	G	N1-C6-O6	7.89	124.63	119.90
21	AA	852	G	C4-C5-N7	-7.89	107.64	110.80
57	BB	331	C	O4'-C1'-N1	7.89	114.51	108.20
57	BB	2315	G	C2-N3-C4	7.89	115.84	111.90
57	BB	491	G	C6-C5-N7	-7.89	125.67	130.40
57	BB	772	C	C4-C5-C6	7.89	121.34	117.40
21	AA	538	G	N1-C2-N3	-7.89	119.17	123.90
57	BB	2614	A	C8-N9-C4	-7.89	102.64	105.80
57	BB	2723	C	N3-C4-N4	7.89	123.52	118.00
23	AW	58	A	C4-C5-N7	-7.88	106.76	110.70
57	BB	2264	C	C5-C4-N4	-7.88	114.68	120.20
21	AA	707	U	O4'-C1'-N1	7.88	114.51	108.20
21	AA	1534	A	O4'-C1'-N9	7.88	114.51	108.20
57	BB	497	A	C4-C5-C6	7.88	120.94	117.00
57	BB	1204	A	C6-C5-N7	-7.88	126.78	132.30
57	BB	1863	G	C5-C6-N1	-7.88	107.56	111.50
58	BA	69	G	N1-C2-N3	-7.88	119.17	123.90
21	AA	15	G	C2-N3-C4	7.88	115.84	111.90
21	AA	52	C	C4'-C3'-C2'	-7.88	94.72	102.60
21	AA	548	G	N3-C2-N2	7.88	125.42	119.90
21	AA	1089	G	O4'-C1'-N9	7.88	114.51	108.20
21	AA	1146	A	C4-C5-C6	7.88	120.94	117.00
31	BL	41	ARG	NE-CZ-NH2	7.88	124.24	120.30
57	BB	788	A	C4-C5-C6	7.88	120.94	117.00
57	BB	1612	C	C5-C4-N4	-7.88	114.68	120.20
57	BB	2114	A	N1-C6-N6	7.88	123.33	118.60
21	AA	1020	G	N3-C2-N2	7.88	125.42	119.90
57	BB	715	A	C5-C6-N1	-7.88	113.76	117.70
57	BB	1865	U	N3-C4-C5	7.88	119.33	114.60
21	AA	91	U	N3-C4-C5	-7.88	109.87	114.60
21	AA	898	G	N1-C6-O6	7.88	124.63	119.90
21	AA	1205	U	C6-N1-C2	-7.88	116.27	121.00
22	AY	24	G	C4-C5-N7	-7.88	107.65	110.80
57	BB	1416	G	N1-C2-N3	-7.88	119.17	123.90
57	BB	2854	G	C5-C6-O6	-7.88	123.87	128.60
22	AY	40	C	N1-C2-N3	-7.88	113.69	119.20
49	B2	18	PHE	CB-CG-CD1	-7.88	115.29	120.80
57	BB	483	A	C8-N9-C4	-7.88	102.65	105.80
57	BB	715	A	C5-N7-C8	-7.88	99.96	103.90
57	BB	1124	G	C2-N3-C4	7.88	115.84	111.90
57	BB	2391	G	C2-N3-C4	7.88	115.84	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2770	G	C4-C5-C6	7.88	123.53	118.80
12	AU	33	ARG	NE-CZ-NH1	-7.88	116.36	120.30
21	AA	1428	A	C5-C6-N1	-7.88	113.76	117.70
29	BJ	75	TYR	CB-CG-CD2	-7.88	116.28	121.00
57	BB	9	G	O4'-C1'-N9	7.88	114.50	108.20
57	BB	198	C	N3-C4-N4	7.88	123.51	118.00
21	AA	435	A	C4-C5-C6	7.87	120.94	117.00
21	AA	1306	A	C5-C6-N1	-7.87	113.76	117.70
57	BB	2654	A	N1-C2-N3	7.87	133.24	129.30
21	AA	115	G	N1-C6-O6	7.87	124.62	119.90
21	AA	191	G	C4-C5-N7	-7.87	107.65	110.80
57	BB	394	C	N3-C4-N4	7.87	123.51	118.00
57	BB	844	A	O4'-C1'-N9	7.87	114.50	108.20
57	BB	1129	A	C5-C6-N1	-7.87	113.76	117.70
21	AA	64	G	N1-C2-N3	-7.87	119.18	123.90
57	BB	259	G	C5-C6-N1	-7.87	107.56	111.50
57	BB	427	U	N1-C2-N3	-7.87	110.18	114.90
57	BB	1137	G	N7-C8-N9	7.87	117.03	113.10
21	AA	31	G	P-O5'-C5'	7.87	133.49	120.90
21	AA	55	A	O4'-C1'-N9	7.87	114.49	108.20
57	BB	802	A	C4-C5-C6	7.87	120.93	117.00
57	BB	2400	G	C6-C5-N7	-7.87	125.68	130.40
21	AA	268	U	N3-C2-O2	7.87	127.71	122.20
57	BB	1761	C	C6-N1-C2	-7.87	117.15	120.30
57	BB	1819	A	C5-N7-C8	7.87	107.83	103.90
57	BB	1962	C	N3-C4-C5	-7.87	118.75	121.90
21	AA	593	U	O4'-C1'-N1	7.87	114.49	108.20
21	AA	1048	G	N1-C2-N3	-7.87	119.18	123.90
21	AA	1437	A	C6-C5-N7	-7.87	126.79	132.30
57	BB	234	U	C4'-C3'-C2'	-7.87	94.73	102.60
57	BB	276	U	O4'-C1'-N1	7.87	114.49	108.20
57	BB	879	G	C5-C6-N1	-7.87	107.57	111.50
57	BB	1250	G	N1-C6-O6	7.87	124.62	119.90
57	BB	1450	G	O4'-C1'-N9	7.87	114.49	108.20
57	BB	1484	U	P-O5'-C5'	7.87	133.49	120.90
57	BB	1831	G	C8-N9-C4	-7.87	103.25	106.40
21	AA	1046	A	O4'-C1'-N9	7.86	114.49	108.20
21	AA	1243	C	N3-C4-N4	7.86	123.50	118.00
57	BB	538	A	O4'-C1'-N9	7.86	114.49	108.20
57	BB	947	A	N1-C6-N6	7.86	123.32	118.60
57	BB	1398	C	N3-C4-N4	7.86	123.50	118.00
57	BB	1635	A	N1-C2-N3	7.86	133.23	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2451	A	O4'-C1'-N9	7.86	114.49	108.20
57	BB	1744	A	C4-C5-C6	7.86	120.93	117.00
57	BB	2481	G	N3-C2-N2	7.86	125.40	119.90
21	AA	188	C	N3-C4-C5	-7.86	118.76	121.90
21	AA	1379	G	C6-N1-C2	-7.86	120.38	125.10
25	AZ	80	ASP	CB-CG-OD1	7.86	125.37	118.30
57	BB	165	A	C4-C5-C6	7.86	120.93	117.00
57	BB	408	G	C4-C5-N7	7.86	113.94	110.80
57	BB	911	A	C5-C6-N6	-7.86	117.41	123.70
57	BB	1200	C	N3-C4-N4	7.86	123.50	118.00
57	BB	1338	G	C5-N7-C8	-7.86	100.37	104.30
57	BB	2251	G	N9-C4-C5	-7.86	102.25	105.40
57	BB	2324	U	C5-C4-O4	7.86	130.62	125.90
21	AA	1223	C	O4'-C1'-N1	7.86	114.49	108.20
40	BU	94	PHE	CB-CG-CD2	7.86	126.30	120.80
57	BB	238	C	C2-N3-C4	7.86	123.83	119.90
57	BB	407	G	C8-N9-C4	-7.86	103.26	106.40
57	BB	523	C	C2-N3-C4	7.86	123.83	119.90
21	AA	704	A	C2-N3-C4	-7.86	106.67	110.60
21	AA	833	G	N9-C4-C5	7.86	108.54	105.40
21	AA	1057	G	N1-C2-N3	-7.86	119.19	123.90
21	AA	1338	G	N3-C2-N2	7.86	125.40	119.90
21	AA	1375	A	C4'-C3'-C2'	-7.86	94.74	102.60
57	BB	662	G	C5-C6-O6	-7.86	123.89	128.60
57	BB	688	U	N1-C2-O2	-7.86	117.30	122.80
57	BB	700	G	C5-C6-O6	-7.86	123.89	128.60
57	BB	718	A	C5-C6-N1	-7.86	113.77	117.70
57	BB	2035	G	C6-C5-N7	-7.86	125.69	130.40
57	BB	2628	C	O4'-C1'-N1	7.86	114.49	108.20
21	AA	465	A	O4'-C1'-N9	7.86	114.48	108.20
21	AA	655	A	C6-N1-C2	-7.86	113.89	118.60
21	AA	765	G	N7-C8-N9	7.86	117.03	113.10
23	AW	65	G	C5-C6-N1	-7.86	107.57	111.50
57	BB	725	G	C6-C5-N7	-7.86	125.69	130.40
57	BB	880	G	C4-C5-C6	7.86	123.51	118.80
57	BB	1531	C	C5-C6-N1	7.86	124.93	121.00
57	BB	994	C	C4-C5-C6	7.85	121.33	117.40
57	BB	1053	C	O4'-C1'-N1	7.85	114.48	108.20
57	BB	1278	C	N3-C4-N4	7.85	123.50	118.00
57	BB	1707	G	C5-C6-O6	-7.85	123.89	128.60
57	BB	2435	A	C4-C5-C6	7.85	120.93	117.00
21	AA	105	G	C5-N7-C8	-7.85	100.37	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1484	C	C6-N1-C2	7.85	123.44	120.30
23	AW	73	A	C2-N3-C4	7.85	114.53	110.60
57	BB	2246	G	N1-C6-O6	7.85	124.61	119.90
57	BB	2399	G	N3-C2-N2	7.85	125.40	119.90
57	BB	2828	G	N9-C4-C5	-7.85	102.26	105.40
57	BB	2331	G	O4'-C1'-N9	7.85	114.48	108.20
57	BB	2474	U	C6-N1-C1'	-7.85	110.21	121.20
36	BQ	23	TYR	CB-CG-CD1	-7.85	116.29	121.00
57	BB	191	A	C6-C5-N7	-7.85	126.81	132.30
57	BB	337	C	C3'-C2'-C1'	-7.85	95.22	101.50
57	BB	1760	C	N3-C4-C5	-7.85	118.76	121.90
21	AA	452	A	C5-C6-N6	-7.85	117.42	123.70
21	AA	491	G	C4-C5-C6	7.85	123.51	118.80
21	AA	671	G	C8-N9-C4	-7.85	103.26	106.40
21	AA	1061	G	C2-N3-C4	-7.85	107.98	111.90
23	AW	61	C	P-O3'-C3'	7.85	129.12	119.70
57	BB	196	A	C5-C6-N6	-7.85	117.42	123.70
57	BB	468	G	N1-C6-O6	7.85	124.61	119.90
57	BB	926	G	C8-N9-C4	-7.85	103.26	106.40
57	BB	1342	A	N7-C8-N9	-7.85	109.88	113.80
57	BB	1648	U	N3-C2-O2	7.85	127.69	122.20
57	BB	2061	G	C8-N9-C4	-7.85	103.26	106.40
21	AA	1534	A	C4-C5-C6	7.85	120.92	117.00
57	BB	98	G	C6-C5-N7	-7.85	125.69	130.40
57	BB	1956	U	O4'-C1'-N1	7.85	114.48	108.20
57	BB	2475	C	C2-N3-C4	7.85	123.82	119.90
58	BA	57	A	O4'-C1'-N9	7.85	114.48	108.20
21	AA	1094	G	N7-C8-N9	-7.84	109.18	113.10
57	BB	411	G	C4-C5-N7	-7.84	107.66	110.80
57	BB	1791	A	C4-C5-N7	7.84	114.62	110.70
57	BB	2035	G	C4-C5-C6	7.84	123.51	118.80
57	BB	2260	C	O4'-C1'-N1	7.84	114.47	108.20
57	BB	2262	U	C2-N3-C4	-7.84	122.29	127.00
21	AA	1271	A	C5-C6-N1	-7.84	113.78	117.70
57	BB	555	G	P-O3'-C3'	-7.84	110.29	119.70
58	BA	77	U	N3-C4-O4	7.84	124.89	119.40
21	AA	471	U	P-O5'-C5'	7.84	133.45	120.90
21	AA	1503	A	C4-C5-C6	7.84	120.92	117.00
57	BB	568	U	N3-C4-O4	7.84	124.89	119.40
5	AN	12	ARG	NE-CZ-NH1	7.84	124.22	120.30
21	AA	325	A	N7-C8-N9	-7.84	109.88	113.80
21	AA	1196	A	N1-C6-N6	7.84	123.30	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1496	C	C5-C6-N1	7.84	124.92	121.00
57	BB	480	A	C5-C6-N6	-7.84	117.43	123.70
57	BB	1805	A	C4-C5-C6	7.84	120.92	117.00
57	BB	2000	C	O4'-C1'-N1	7.84	114.47	108.20
14	AC	131	ARG	NE-CZ-NH2	-7.84	116.38	120.30
21	AA	160	A	N9-C4-C5	7.84	108.94	105.80
21	AA	1306	A	C4-C5-C6	7.84	120.92	117.00
21	AA	1411	C	O4'-C1'-N1	7.84	114.47	108.20
23	AW	50	U	N3-C4-O4	7.84	124.89	119.40
57	BB	1463	C	C2-N3-C4	-7.84	115.98	119.90
57	BB	1614	A	N9-C4-C5	7.84	108.94	105.80
21	AA	1397	C	C5-C4-N4	-7.84	114.72	120.20
57	BB	172	A	C4-C5-C6	7.84	120.92	117.00
57	BB	449	A	C5-C6-N6	-7.84	117.43	123.70
57	BB	878	A	N9-C4-C5	7.84	108.94	105.80
57	BB	1439	A	N1-C2-N3	7.84	133.22	129.30
36	BQ	52	ARG	NE-CZ-NH1	7.83	124.22	120.30
21	AA	33	A	N1-C6-N6	7.83	123.30	118.60
21	AA	510	A	C4-C5-N7	-7.83	106.78	110.70
21	AA	1030	U	C5-C4-O4	-7.83	121.20	125.90
21	AA	1248	A	C8-N9-C4	7.83	108.93	105.80
57	BB	465	G	N3-C4-C5	-7.83	124.68	128.60
57	BB	522	A	C5-C6-N6	-7.83	117.43	123.70
57	BB	1129	A	C4-C5-C6	7.83	120.92	117.00
58	BA	102	G	C6-C5-N7	-7.83	125.70	130.40
21	AA	617	G	N9-C4-C5	-7.83	102.27	105.40
21	AA	983	A	C5-C6-N1	-7.83	113.78	117.70
21	AA	1180	A	C8-N9-C4	-7.83	102.67	105.80
57	BB	437	U	O4'-C1'-N1	7.83	114.47	108.20
57	BB	917	A	C5-C6-N6	-7.83	117.44	123.70
57	BB	977	G	C6-C5-N7	-7.83	125.70	130.40
57	BB	1392	A	P-O3'-C3'	-7.83	110.30	119.70
57	BB	1725	U	N3-C2-O2	7.83	127.68	122.20
57	BB	1750	G	N1-C2-N3	-7.83	119.20	123.90
57	BB	2293	G	O4'-C1'-N9	7.83	114.47	108.20
57	BB	2399	G	O4'-C1'-N9	7.83	114.47	108.20
57	BB	2404	U	C4'-C3'-C2'	7.83	110.43	102.60
21	AA	191	G	N1-C6-O6	7.83	124.60	119.90
21	AA	300	A	C5-C6-N1	-7.83	113.78	117.70
21	AA	674	G	N7-C8-N9	-7.83	109.19	113.10
57	BB	330	A	N7-C8-N9	-7.83	109.89	113.80
57	BB	1163	G	O4'-C1'-N9	7.83	114.46	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1245	G	N1-C2-N3	-7.83	119.20	123.90
57	BB	2751	G	C4-C5-C6	7.83	123.50	118.80
21	AA	537	G	C3'-C2'-C1'	-7.83	95.24	101.50
21	AA	1042	A	N1-C2-N3	7.83	133.21	129.30
21	AA	1180	A	N1-C6-N6	7.83	123.30	118.60
21	AA	1493	A	C4-C5-N7	7.83	114.61	110.70
57	BB	566	U	N3-C4-O4	7.83	124.88	119.40
57	BB	588	U	O4'-C1'-N1	7.83	114.46	108.20
57	BB	1001	A	O4'-C1'-N9	7.83	114.46	108.20
57	BB	2322	A	C6-C5-N7	-7.83	126.82	132.30
21	AA	705	G	C5-C6-O6	-7.83	123.90	128.60
21	AA	1021	A	C6-C5-N7	-7.83	126.82	132.30
24	AX	12	A	N1-C2-N3	7.83	133.21	129.30
57	BB	585	G	C4-C5-N7	-7.83	107.67	110.80
57	BB	765	C	N3-C4-N4	7.83	123.48	118.00
57	BB	1383	A	N3-C4-C5	-7.83	121.32	126.80
21	AA	128	G	N9-C4-C5	-7.83	102.27	105.40
21	AA	668	G	C3'-C2'-C1'	-7.83	95.24	101.50
21	AA	740	U	C2-N3-C4	7.83	131.69	127.00
22	AY	47	U	N1-C2-O2	7.83	128.28	122.80
57	BB	419	U	O4'-C1'-N1	7.83	114.46	108.20
57	BB	927	A	C5-C6-N1	-7.83	113.79	117.70
57	BB	930	G	N3-C2-N2	7.83	125.38	119.90
57	BB	1185	G	N1-C6-O6	7.83	124.59	119.90
57	BB	1429	G	C5-C6-O6	-7.83	123.90	128.60
57	BB	2058	A	C8-N9-C4	-7.83	102.67	105.80
57	BB	2220	U	C5-C4-O4	-7.83	121.20	125.90
57	BB	2413	G	C5-N7-C8	-7.83	100.39	104.30
21	AA	515	G	N7-C8-N9	-7.82	109.19	113.10
21	AA	812	G	C4-C5-C6	7.82	123.49	118.80
21	AA	1306	A	O4'-C1'-N9	7.82	114.46	108.20
57	BB	580	U	C5-C4-O4	-7.82	121.21	125.90
57	BB	981	A	C4-C5-N7	-7.82	106.79	110.70
57	BB	1198	U	C5-C6-N1	7.82	126.61	122.70
57	BB	1290	C	N3-C4-C5	-7.82	118.77	121.90
57	BB	2773	C	N3-C4-N4	7.82	123.48	118.00
57	BB	2855	C	N3-C4-C5	-7.82	118.77	121.90
21	AA	476	U	C5-C6-N1	7.82	126.61	122.70
23	AW	53	G	C4'-C3'-C2'	-7.82	94.78	102.60
57	BB	858	G	C5-C6-O6	-7.82	123.91	128.60
57	BB	1978	A	P-O5'-C5'	7.82	133.42	120.90
57	BB	2356	U	O4'-C1'-N1	7.82	114.46	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	33	A	C5-C6-N1	-7.82	113.79	117.70
21	AA	306	A	N9-C4-C5	7.82	108.93	105.80
21	AA	615	G	C4-C5-C6	7.82	123.49	118.80
21	AA	759	A	N1-C6-N6	7.82	123.29	118.60
23	AW	31	A	N9-C1'-C2'	-7.82	103.40	112.00
52	BD	181	ASP	CB-CG-OD2	-7.82	111.26	118.30
56	BH	132	PHE	CB-CG-CD2	-7.82	115.33	120.80
57	BB	1450	G	P-O3'-C3'	7.82	129.08	119.70
57	BB	1863	G	C6-N1-C2	7.82	129.79	125.10
57	BB	1989	G	C6-C5-N7	-7.82	125.71	130.40
57	BB	2261	C	C3'-C2'-C1'	-7.82	95.24	101.50
57	BB	2595	G	C5-N7-C8	7.82	108.21	104.30
57	BB	2608	G	N1-C2-N2	-7.82	109.16	116.20
57	BB	2870	C	C5-C4-N4	-7.82	114.73	120.20
21	AA	689	C	N3-C4-N4	7.82	123.47	118.00
21	AA	1061	G	C5-C6-O6	-7.82	123.91	128.60
23	AW	61	C	N3-C4-N4	7.82	123.47	118.00
57	BB	510	C	N3-C4-C5	-7.82	118.77	121.90
57	BB	2796	U	C5-C4-O4	7.82	130.59	125.90
21	AA	424	G	O4'-C1'-N9	7.82	114.45	108.20
21	AA	808	C	P-O3'-C3'	-7.82	110.32	119.70
23	AW	34	G	N3-C4-C5	-7.82	124.69	128.60
57	BB	1326	U	O4'-C1'-N1	7.82	114.45	108.20
57	BB	2386	A	N1-C6-N6	7.82	123.29	118.60
21	AA	116	A	O4'-C1'-N9	7.82	114.45	108.20
57	BB	244	A	O4'-C1'-N9	7.82	114.45	108.20
57	BB	311	A	C5-C6-N1	-7.82	113.79	117.70
57	BB	1135	C	C6-N1-C2	-7.82	117.17	120.30
57	BB	2167	U	P-O3'-C3'	7.82	129.08	119.70
57	BB	2258	C	O4'-C1'-N1	7.82	114.45	108.20
21	AA	409	U	C5-C6-N1	-7.81	118.79	122.70
21	AA	1009	U	C5'-C4'-C3'	-7.81	103.50	116.00
57	BB	870	U	C6-N1-C2	-7.81	116.31	121.00
57	BB	1626	A	N9-C4-C5	7.81	108.92	105.80
57	BB	2008	C	C6-N1-C2	-7.81	117.17	120.30
21	AA	429	U	O4'-C1'-N1	7.81	114.45	108.20
21	AA	567	G	N7-C8-N9	7.81	117.01	113.10
21	AA	629	A	O4'-C1'-N9	7.81	114.45	108.20
21	AA	702	A	N3-C4-C5	-7.81	121.33	126.80
57	BB	88	G	N3-C4-C5	-7.81	124.69	128.60
57	BB	614	A	C5-C6-N6	-7.81	117.45	123.70
57	BB	750	A	C2-N3-C4	7.81	114.51	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2386	A	O4'-C1'-N9	7.81	114.45	108.20
57	BB	171	U	P-O3'-C3'	-7.81	110.33	119.70
57	BB	1982	U	O4'-C1'-N1	7.81	114.45	108.20
21	AA	883	C	N3-C4-N4	7.81	123.47	118.00
26	AV	43	A	N7-C8-N9	7.81	117.70	113.80
57	BB	218	A	C5-N7-C8	7.81	107.81	103.90
57	BB	325	G	O4'-C1'-N9	7.81	114.45	108.20
57	BB	475	C	C4-C5-C6	7.81	121.30	117.40
21	AA	764	C	C5-C6-N1	7.81	124.90	121.00
21	AA	1229	A	C6-N1-C2	7.81	123.28	118.60
57	BB	796	C	C5-C6-N1	7.81	124.90	121.00
57	BB	838	C	N1-C2-O2	7.81	123.58	118.90
57	BB	1467	U	O4'-C1'-N1	7.81	114.45	108.20
57	BB	2428	G	N1-C2-N3	-7.81	119.22	123.90
57	BB	2615	U	C5-C4-O4	-7.81	121.22	125.90
57	BB	2829	A	C5-C6-N1	-7.81	113.80	117.70
57	BB	389	G	C5-C6-O6	-7.81	123.92	128.60
57	BB	636	G	C6-C5-N7	-7.81	125.72	130.40
57	BB	2750	A	N9-C4-C5	7.81	108.92	105.80
18	AG	25	PHE	CB-CG-CD2	7.80	126.26	120.80
21	AA	1522	U	C5-C4-O4	-7.80	121.22	125.90
57	BB	160	A	C4-C5-C6	7.80	120.90	117.00
57	BB	778	G	C6-C5-N7	-7.80	125.72	130.40
57	BB	1117	C	O4'-C1'-N1	7.80	114.44	108.20
57	BB	1490	A	C4-C5-N7	-7.80	106.80	110.70
57	BB	2503	A	C4-C5-N7	-7.80	106.80	110.70
21	AA	689	C	O4'-C1'-N1	7.80	114.44	108.20
21	AA	1526	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	481	G	C5-N7-C8	-7.80	100.40	104.30
21	AA	313	A	C5-N7-C8	7.80	107.80	103.90
57	BB	379	G	C4-C5-N7	-7.80	107.68	110.80
57	BB	1360	G	C4'-C3'-C2'	-7.80	94.80	102.60
57	BB	1608	A	C5-C6-N6	-7.80	117.46	123.70
57	BB	1623	G	C6-N1-C2	7.80	129.78	125.10
21	AA	81	A	N1-C2-N3	7.80	133.20	129.30
21	AA	209	U	O4'-C1'-N1	7.80	114.44	108.20
57	BB	164	C	N3-C4-C5	-7.80	118.78	121.90
57	BB	733	G	N9-C4-C5	7.80	108.52	105.40
57	BB	822	G	N3-C4-N9	-7.80	121.32	126.00
57	BB	878	A	C5-C6-N6	-7.80	117.46	123.70
57	BB	1511	G	N7-C8-N9	7.80	117.00	113.10
57	BB	2309	A	C2-N3-C4	-7.80	106.70	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	359	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	2769	U	C2-N3-C4	7.80	131.68	127.00
57	BB	1025	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	1177	G	N1-C2-N3	-7.80	119.22	123.90
57	BB	1358	G	N1-C6-O6	7.80	124.58	119.90
57	BB	2717	C	N3-C4-N4	7.80	123.46	118.00
21	AA	399	G	C8-N9-C4	7.79	109.52	106.40
21	AA	852	G	N1-C2-N3	-7.79	119.22	123.90
21	AA	1199	U	C5-C6-N1	7.79	126.60	122.70
57	BB	917	A	C8-N9-C4	-7.79	102.68	105.80
21	AA	691	G	N7-C8-N9	-7.79	109.20	113.10
21	AA	1044	A	C5-N7-C8	7.79	107.80	103.90
21	AA	1099	G	C5-C6-N1	-7.79	107.60	111.50
21	AA	1205	U	N3-C2-O2	-7.79	116.75	122.20
26	AV	52	G	C5-C6-N1	-7.79	107.60	111.50
57	BB	462	C	C4-C5-C6	7.79	121.30	117.40
57	BB	622	G	C4-C5-N7	7.79	113.92	110.80
57	BB	1661	G	N3-C4-N9	-7.79	121.32	126.00
57	BB	2402	U	N3-C4-O4	7.79	124.86	119.40
21	AA	1048	G	C6-C5-N7	-7.79	125.72	130.40
21	AA	1145	A	C4-C5-C6	7.79	120.90	117.00
29	BJ	34	ARG	NE-CZ-NH1	7.79	124.20	120.30
21	AA	812	G	O4'-C1'-N9	7.79	114.43	108.20
23	AW	47	U	N3-C4-O4	7.79	124.85	119.40
39	BT	73	ARG	NE-CZ-NH1	-7.79	116.41	120.30
57	BB	985	C	O4'-C1'-N1	7.79	114.43	108.20
57	BB	1028	A	C5-C6-N6	-7.79	117.47	123.70
57	BB	1762	A	C6-C5-N7	-7.79	126.85	132.30
58	BA	23	G	O4'-C1'-N9	7.79	114.43	108.20
21	AA	135	C	N3-C2-O2	7.79	127.35	121.90
21	AA	1185	G	N1-C2-N2	-7.79	109.19	116.20
55	BG	150	TYR	CB-CG-CD1	-7.79	116.33	121.00
57	BB	511	U	N1-C2-N3	7.79	119.57	114.90
57	BB	904	G	C6-C5-N7	-7.79	125.73	130.40
57	BB	1275	A	C8-N9-C4	-7.79	102.69	105.80
57	BB	2778	A	N1-C2-N3	7.79	133.19	129.30
21	AA	161	A	N7-C8-N9	-7.79	109.91	113.80
21	AA	467	U	N3-C4-O4	7.79	124.85	119.40
21	AA	726	C	N3-C4-N4	7.79	123.45	118.00
57	BB	2261	C	N3-C4-C5	-7.79	118.78	121.90
57	BB	2625	G	C6-C5-N7	-7.79	125.73	130.40
21	AA	1044	A	C5-C6-N6	-7.79	117.47	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	9	G	C4-C5-N7	7.79	113.91	110.80
57	BB	533	G	C2-N3-C4	7.79	115.79	111.90
57	BB	1058	U	N3-C2-O2	7.79	127.65	122.20
57	BB	2133	G	O4'-C1'-N9	7.79	114.43	108.20
21	AA	12	U	C1'-O4'-C4'	-7.78	103.67	109.90
21	AA	103	U	C5-C4-O4	-7.78	121.23	125.90
21	AA	189	A	N1-C2-N3	7.78	133.19	129.30
21	AA	328	C	C2-N3-C4	7.78	123.79	119.90
45	BC	269	ARG	NE-CZ-NH2	-7.78	116.41	120.30
57	BB	524	G	O4'-C1'-N9	7.78	114.43	108.20
57	BB	982	C	P-O3'-C3'	7.78	129.04	119.70
57	BB	1433	A	C5-N7-C8	7.78	107.79	103.90
57	BB	1574	C	C4'-C3'-C2'	-7.78	94.82	102.60
21	AA	1016	A	N9-C4-C5	7.78	108.91	105.80
57	BB	435	C	O4'-C1'-N1	7.78	114.42	108.20
57	BB	1869	G	N1-C2-N2	-7.78	109.20	116.20
21	AA	1024	G	N3-C2-N2	7.78	125.35	119.90
21	AA	1153	G	C8-N9-C4	-7.78	103.29	106.40
21	AA	1370	G	N1-C2-N2	-7.78	109.20	116.20
21	AA	1430	A	C5-C6-N1	-7.78	113.81	117.70
57	BB	842	U	O4'-C1'-N1	7.78	114.42	108.20
57	BB	936	A	C6-C5-N7	-7.78	126.85	132.30
57	BB	1477	A	C5-N7-C8	7.78	107.79	103.90
57	BB	1805	A	C6-C5-N7	-7.78	126.85	132.30
57	BB	1903	G	C4-C5-N7	-7.78	107.69	110.80
57	BB	2267	A	C4-C5-C6	7.78	120.89	117.00
58	BA	96	G	C4-C5-C6	7.78	123.47	118.80
21	AA	53	A	C4'-C3'-C2'	-7.78	94.82	102.60
21	AA	1419	G	N3-C4-N9	-7.78	121.33	126.00
57	BB	49	A	N1-C2-N3	-7.78	125.41	129.30
57	BB	189	G	N3-C2-N2	7.78	125.34	119.90
13	AB	112	ARG	NE-CZ-NH2	-7.78	116.41	120.30
21	AA	281	G	O4'-C1'-N9	7.78	114.42	108.20
23	AW	14	A	C6-C5-N7	-7.78	126.86	132.30
57	BB	326	G	N1-C6-O6	7.78	124.57	119.90
57	BB	695	G	C6-N1-C2	7.78	129.77	125.10
57	BB	2455	G	C2-N3-C4	-7.78	108.01	111.90
57	BB	2471	A	C5-N7-C8	7.78	107.79	103.90
57	BB	2695	U	O4'-C1'-N1	7.78	114.42	108.20
21	AA	17	U	N3-C4-O4	7.78	124.84	119.40
21	AA	144	G	C5-N7-C8	7.78	108.19	104.30
21	AA	421	U	N3-C4-O4	7.78	124.84	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	71	G	N9-C4-C5	-7.78	102.29	105.40
26	AV	25	C	N3-C4-N4	7.78	123.44	118.00
57	BB	1241	A	C8-N9-C4	-7.78	102.69	105.80
57	BB	1477	A	C4-C5-C6	7.78	120.89	117.00
21	AA	131	A	C2-N3-C4	-7.77	106.71	110.60
21	AA	1096	C	C5-C4-N4	-7.77	114.76	120.20
21	AA	302	G	N1-C2-N3	-7.77	119.24	123.90
21	AA	327	A	C5-C6-N6	-7.77	117.48	123.70
21	AA	329	A	C5-C6-N6	-7.77	117.48	123.70
21	AA	1242	G	N3-C2-N2	7.77	125.34	119.90
21	AA	1405	G	O4'-C1'-N9	7.77	114.42	108.20
57	BB	506	G	N1-C2-N3	-7.77	119.24	123.90
57	BB	1000	A	C8-N9-C4	-7.77	102.69	105.80
57	BB	1160	G	C5-C6-N1	-7.77	107.61	111.50
57	BB	1608	A	C6-C5-N7	-7.77	126.86	132.30
57	BB	1806	C	C4-C5-C6	7.77	121.29	117.40
57	BB	2057	G	N1-C2-N3	-7.77	119.24	123.90
21	AA	724	G	C8-N9-C4	-7.77	103.29	106.40
21	AA	1156	G	O4'-C1'-N9	7.77	114.42	108.20
57	BB	1837	C	O4'-C1'-N1	7.77	114.42	108.20
57	BB	2885	G	C5-C6-N1	-7.77	107.61	111.50
58	BA	81	G	O4'-C1'-N9	7.77	114.42	108.20
21	AA	683	G	N7-C8-N9	-7.77	109.22	113.10
21	AA	1312	G	N9-C4-C5	7.77	108.51	105.40
23	AW	23	A	C5'-C4'-C3'	-7.77	103.57	116.00
57	BB	834	G	C8-N9-C4	-7.77	103.29	106.40
57	BB	1351	C	C5-C6-N1	-7.77	117.12	121.00
57	BB	1960	A	C5-C6-N1	-7.77	113.82	117.70
57	BB	2467	C	C1'-O4'-C4'	-7.77	103.69	109.90
21	AA	69	G	C6-C5-N7	-7.77	125.74	130.40
21	AA	524	G	N3-C4-C5	-7.77	124.72	128.60
57	BB	994	C	N3-C4-C5	-7.77	118.79	121.90
7	AP	35	ARG	NE-CZ-NH2	7.76	124.18	120.30
21	AA	295	C	C6-N1-C2	-7.76	117.19	120.30
21	AA	318	G	N1-C2-N3	-7.76	119.24	123.90
21	AA	761	G	C4-C5-C6	7.76	123.46	118.80
21	AA	822	U	O4'-C1'-N1	7.76	114.41	108.20
26	AV	40	C	N3-C4-C5	-7.76	118.79	121.90
57	BB	1181	U	N3-C4-C5	-7.76	109.94	114.60
57	BB	1258	U	N3-C2-O2	7.76	127.63	122.20
57	BB	1321	A	N1-C6-N6	7.76	123.26	118.60
57	BB	1776	G	O4'-C1'-N9	7.76	114.41	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1886	U	N3-C4-C5	-7.76	109.94	114.60
57	BB	2339	C	C6-N1-C2	-7.76	117.19	120.30
57	BB	2418	A	N7-C8-N9	-7.76	109.92	113.80
57	BB	2544	G	O4'-C1'-N9	7.76	114.41	108.20
21	AA	785	G	N7-C8-N9	-7.76	109.22	113.10
23	AW	10	G	C4-C5-N7	7.76	113.91	110.80
57	BB	473	G	O4'-C1'-N9	7.76	114.41	108.20
57	BB	1138	G	C4-C5-C6	7.76	123.46	118.80
57	BB	1285	A	C5-N7-C8	7.76	107.78	103.90
57	BB	2089	C	P-O5'-C5'	7.76	133.32	120.90
21	AA	404	G	C5-C6-O6	-7.76	123.94	128.60
26	AV	12	G	O4'-C1'-N9	7.76	114.41	108.20
57	BB	708	G	C5-C6-O6	-7.76	123.94	128.60
57	BB	650	C	C5-C4-N4	-7.76	114.77	120.20
57	BB	1221	C	N3-C4-N4	7.76	123.43	118.00
57	BB	2199	A	C5-C6-N1	-7.76	113.82	117.70
21	AA	16	A	N1-C2-N3	-7.76	125.42	129.30
26	AV	59	A	C4-C5-C6	7.76	120.88	117.00
57	BB	545	U	O4'-C1'-N1	7.76	114.41	108.20
57	BB	687	C	C2-N1-C1'	7.76	127.33	118.80
57	BB	779	U	O4'-C1'-N1	7.76	114.41	108.20
57	BB	2102	G	N3-C2-N2	7.76	125.33	119.90
21	AA	528	C	N3-C4-C5	-7.75	118.80	121.90
57	BB	491	G	O4'-C1'-N9	7.75	114.40	108.20
57	BB	1151	A	C8-N9-C4	-7.75	102.70	105.80
57	BB	2808	G	O4'-C1'-N9	7.75	114.40	108.20
57	BB	904	G	N1-C2-N3	-7.75	119.25	123.90
57	BB	2704	C	O4'-C1'-N1	7.75	114.40	108.20
21	AA	254	G	C4'-C3'-C2'	-7.75	94.85	102.60
21	AA	471	U	C2-N3-C4	7.75	131.65	127.00
21	AA	1146	A	C2-N3-C4	7.75	114.48	110.60
21	AA	1147	C	C5-C6-N1	7.75	124.88	121.00
21	AA	1163	A	C5-N7-C8	7.75	107.78	103.90
57	BB	1742	U	C5-C4-O4	-7.75	121.25	125.90
58	BA	92	C	N3-C4-C5	-7.75	118.80	121.90
21	AA	550	G	N9-C4-C5	-7.75	102.30	105.40
21	AA	977	A	C8-N9-C4	-7.75	102.70	105.80
57	BB	307	G	C4-C5-C6	7.75	123.45	118.80
57	BB	1343	G	N9-C4-C5	-7.75	102.30	105.40
57	BB	2734	A	C4-C5-C6	7.75	120.88	117.00
21	AA	226	G	C6-C5-N7	-7.75	125.75	130.40
21	AA	1443	C	C2-N3-C4	7.75	123.77	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	59	U	C5-C4-O4	-7.75	121.25	125.90
57	BB	587	C	N3-C4-C5	-7.75	118.80	121.90
57	BB	967	U	O4'-C1'-N1	7.75	114.40	108.20
57	BB	2083	G	N1-C2-N3	-7.75	119.25	123.90
57	BB	2496	C	O4'-C1'-N1	7.75	114.40	108.20
58	BA	22	U	C2-N3-C4	-7.75	122.35	127.00
21	AA	1040	U	C5-C4-O4	-7.75	121.25	125.90
57	BB	534	U	N3-C2-O2	7.75	127.62	122.20
57	BB	1608	A	C4'-C3'-C2'	7.75	110.35	102.60
57	BB	470	A	C5-C6-N6	-7.75	117.50	123.70
57	BB	1994	C	O4'-C1'-N1	7.75	114.40	108.20
57	BB	2325	G	C5-C6-N1	-7.75	107.63	111.50
21	AA	42	G	N3-C2-N2	7.74	125.32	119.90
21	AA	675	A	C5-C6-N6	-7.74	117.51	123.70
57	BB	978	G	N3-C2-N2	7.74	125.32	119.90
57	BB	1389	G	C4-C5-N7	7.74	113.90	110.80
57	BB	1567	G	N1-C6-O6	7.74	124.55	119.90
57	BB	2198	A	N1-C6-N6	7.74	123.25	118.60
57	BB	2784	U	C6-N1-C2	-7.74	116.35	121.00
9	AR	22	TYR	CB-CG-CD1	7.74	125.64	121.00
21	AA	500	G	C5-C6-O6	-7.74	123.95	128.60
57	BB	429	A	C6-N1-C2	7.74	123.25	118.60
58	BA	93	C	O4'-C1'-N1	7.74	114.39	108.20
21	AA	864	A	C5-C6-N1	-7.74	113.83	117.70
22	AY	36	A	C5-C6-N1	-7.74	113.83	117.70
57	BB	38	A	C1'-O4'-C4'	7.74	116.09	109.90
57	BB	802	A	C5-C6-N1	-7.74	113.83	117.70
57	BB	1998	A	C5-C6-N6	-7.74	117.51	123.70
57	BB	2773	C	C5-C6-N1	7.74	124.87	121.00
21	AA	1190	G	N1-C6-O6	7.74	124.54	119.90
21	AA	1210	C	N3-C4-N4	7.74	123.42	118.00
57	BB	313	G	C5-C6-N1	-7.74	107.63	111.50
57	BB	575	A	C5-C6-N6	-7.74	117.51	123.70
21	AA	281	G	C4-C5-N7	-7.74	107.71	110.80
21	AA	622	A	C8-N9-C4	-7.74	102.71	105.80
57	BB	446	G	N1-C6-O6	7.74	124.54	119.90
57	BB	1321	A	O4'-C1'-N9	7.74	114.39	108.20
57	BB	1535	A	C4'-C3'-C2'	-7.74	94.86	102.60
57	BB	2749	A	N1-C6-N6	7.74	123.24	118.60
58	BA	45	A	N1-C2-N3	7.74	133.17	129.30
57	BB	2276	G	N1-C6-O6	7.73	124.54	119.90
57	BB	2433	A	C4-C5-C6	7.73	120.87	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	975	A	C5-C6-N1	-7.73	113.83	117.70
21	AA	1019	A	N1-C2-N3	7.73	133.17	129.30
21	AA	1144	G	C6-C5-N7	-7.73	125.76	130.40
57	BB	1334	G	C4-C5-N7	7.73	113.89	110.80
57	BB	1386	C	C5-C6-N1	-7.73	117.13	121.00
57	BB	1904	G	C4-C5-N7	7.73	113.89	110.80
21	AA	106	C	N3-C4-C5	-7.73	118.81	121.90
21	AA	438	U	O4'-C1'-N1	7.73	114.39	108.20
57	BB	51	G	N1-C6-O6	7.73	124.54	119.90
57	BB	220	G	N3-C4-C5	7.73	132.47	128.60
57	BB	954	G	N1-C6-O6	7.73	124.54	119.90
57	BB	1198	U	N3-C4-O4	7.73	124.81	119.40
21	AA	76	G	C8-N9-C4	-7.73	103.31	106.40
57	BB	253	C	C1'-O4'-C4'	-7.73	103.72	109.90
21	AA	48	C	N1-C2-N3	-7.73	113.79	119.20
21	AA	502	A	C5-N7-C8	7.73	107.76	103.90
21	AA	1304	G	C5-C6-O6	-7.73	123.96	128.60
21	AA	1428	A	C6-N1-C2	7.73	123.24	118.60
57	BB	1383	A	C4-C5-C6	7.73	120.86	117.00
57	BB	1860	G	P-O3'-C3'	-7.73	110.43	119.70
57	BB	2033	A	C5-C6-N6	-7.73	117.52	123.70
57	BB	2618	G	O4'-C1'-N9	7.73	114.38	108.20
57	BB	943	A	C2-N3-C4	-7.73	106.74	110.60
57	BB	1443	U	C5-C4-O4	-7.73	121.26	125.90
57	BB	1861	G	C6-C5-N7	-7.73	125.77	130.40
21	AA	144	G	C4-C5-C6	7.72	123.44	118.80
57	BB	1854	A	C8-N9-C4	-7.72	102.71	105.80
21	AA	784	A	C8-N9-C4	-7.72	102.71	105.80
21	AA	923	A	C4-C5-C6	7.72	120.86	117.00
57	BB	326	G	C5-C6-O6	-7.72	123.97	128.60
57	BB	342	A	O4'-C1'-N9	7.72	114.38	108.20
57	BB	1744	A	C5-N7-C8	7.72	107.76	103.90
57	BB	1979	U	N1-C2-N3	-7.72	110.27	114.90
57	BB	2193	G	C5-C6-O6	-7.72	123.97	128.60
21	AA	1470	U	N3-C4-C5	-7.72	109.97	114.60
21	AA	1475	G	N3-C2-N2	7.72	125.31	119.90
57	BB	19	A	C4-C5-C6	7.72	120.86	117.00
57	BB	40	U	C4-C5-C6	-7.72	115.07	119.70
57	BB	820	A	N1-C2-N3	-7.72	125.44	129.30
57	BB	1048	A	P-O3'-C3'	-7.72	110.44	119.70
21	AA	569	C	N3-C2-O2	7.72	127.30	121.90
21	AA	588	G	N3-C4-C5	-7.72	124.74	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	794	A	C4-C5-C6	7.72	120.86	117.00
21	AA	1118	U	C2-N1-C1'	7.72	126.96	117.70
57	BB	199	A	C5-C6-N6	-7.72	117.53	123.70
57	BB	2168	G	C6-N1-C2	7.72	129.73	125.10
21	AA	529	G	N1-C2-N3	-7.72	119.27	123.90
57	BB	733	G	C5-C6-O6	-7.72	123.97	128.60
21	AA	143	A	C5-C6-N6	-7.72	117.53	123.70
57	BB	167	A	C4-C5-C6	7.72	120.86	117.00
19	AH	113	ARG	NE-CZ-NH2	-7.71	116.44	120.30
21	AA	326	G	O4'-C1'-N9	7.71	114.37	108.20
21	AA	1334	G	N7-C8-N9	7.71	116.96	113.10
21	AA	1360	A	N7-C8-N9	-7.71	109.94	113.80
21	AA	1396	A	C4-C5-N7	7.71	114.56	110.70
57	BB	387	U	N3-C4-O4	7.71	124.80	119.40
57	BB	494	G	O4'-C1'-N9	7.71	114.37	108.20
57	BB	1521	G	C5-C6-O6	-7.71	123.97	128.60
57	BB	1940	U	O4'-C1'-N1	7.71	114.37	108.20
57	BB	2134	A	O4'-C1'-N9	7.71	114.37	108.20
57	BB	2252	G	C4-C5-N7	-7.71	107.71	110.80
57	BB	2838	G	C5'-C4'-O4'	7.71	118.36	109.10
58	BA	15	A	P-O3'-C3'	7.71	128.96	119.70
21	AA	906	A	C5-N7-C8	7.71	107.76	103.90
57	BB	926	G	C6-C5-N7	-7.71	125.77	130.40
57	BB	1836	C	O4'-C1'-N1	7.71	114.37	108.20
21	AA	93	U	N3-C4-C5	-7.71	109.97	114.60
21	AA	665	A	C8-N9-C4	-7.71	102.72	105.80
21	AA	1523	G	N3-C2-N2	7.71	125.30	119.90
22	AY	66	A	P-O5'-C5'	7.71	133.24	120.90
21	AA	144	G	N1-C2-N3	7.71	128.53	123.90
57	BB	1981	A	C5-C6-N6	-7.71	117.53	123.70
58	BA	34	A	N1-C6-N6	7.71	123.23	118.60
22	AY	34	G	O4'-C1'-N9	7.71	114.37	108.20
57	BB	761	A	O4'-C1'-N9	7.71	114.37	108.20
57	BB	1798	U	O4'-C1'-N1	7.71	114.37	108.20
57	BB	2098	U	O4'-C1'-N1	7.71	114.37	108.20
21	AA	1077	G	C4-C5-N7	7.71	113.88	110.80
21	AA	1316	G	N1-C6-O6	7.71	124.52	119.90
57	BB	718	A	C5-N7-C8	7.71	107.75	103.90
57	BB	925	A	N9-C4-C5	-7.71	102.72	105.80
57	BB	1770	G	C5-C6-O6	-7.71	123.98	128.60
57	BB	2426	A	O4'-C1'-N9	7.71	114.36	108.20
21	AA	262	A	N9-C4-C5	7.71	108.88	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	924	C	N1-C2-O2	-7.71	114.28	118.90
23	AW	6	G	P-O5'-C5'	7.71	133.23	120.90
57	BB	1569	A	C2-N3-C4	-7.71	106.75	110.60
57	BB	2218	G	C5-N7-C8	-7.71	100.45	104.30
21	AA	552	U	C5-C4-O4	-7.70	121.28	125.90
21	AA	1277	C	C2-N3-C4	7.70	123.75	119.90
30	BK	112	MET	CG-SD-CE	-7.70	87.88	100.20
57	BB	517	C	C2-N3-C4	7.70	123.75	119.90
57	BB	984	A	C8-N9-C4	-7.70	102.72	105.80
57	BB	988	A	C4-C5-N7	-7.70	106.85	110.70
57	BB	1031	G	N3-C2-N2	7.70	125.29	119.90
57	BB	1543	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	592	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	1215	G	C6-C5-N7	-7.70	125.78	130.40
57	BB	141	G	C6-C5-N7	-7.70	125.78	130.40
21	AA	64	G	O4'-C1'-N9	7.70	114.36	108.20
21	AA	320	A	N1-C2-N3	7.70	133.15	129.30
21	AA	1377	A	O4'-C1'-N9	7.70	114.36	108.20
57	BB	733	G	C4-C5-N7	-7.70	107.72	110.80
57	BB	1559	U	O4'-C1'-N1	7.70	114.36	108.20
57	BB	1720	U	C6-N1-C2	-7.70	116.38	121.00
57	BB	2231	U	C6-N1-C2	-7.70	116.38	121.00
57	BB	2802	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	9	G	C8-N9-C4	-7.70	103.32	106.40
21	AA	50	A	N3-C4-C5	-7.70	121.41	126.80
21	AA	451	A	N1-C2-N3	-7.70	125.45	129.30
21	AA	574	A	C6-N1-C2	7.70	123.22	118.60
21	AA	836	G	C5-C6-O6	-7.70	123.98	128.60
57	BB	711	G	C8-N9-C4	-7.70	103.32	106.40
57	BB	1004	U	N1-C2-N3	7.70	119.52	114.90
21	AA	783	C	P-O3'-C3'	-7.70	110.46	119.70
57	BB	2205	A	O4'-C1'-N9	7.70	114.36	108.20
57	BB	2329	U	N3-C4-O4	7.70	124.79	119.40
57	BB	2766	A	C2-N3-C4	-7.70	106.75	110.60
33	BN	111	ALA	CB-CA-C	-7.70	98.56	110.10
57	BB	1352	U	O4'-C1'-N1	7.70	114.36	108.20
57	BB	2014	A	C8-N9-C4	-7.70	102.72	105.80
21	AA	193	C	N3-C4-N4	7.69	123.39	118.00
21	AA	524	G	N1-C6-O6	7.69	124.52	119.90
21	AA	564	C	N3-C4-N4	7.69	123.39	118.00
21	AA	703	G	C2-N3-C4	7.69	115.75	111.90
23	AW	34	G	C6-C5-N7	-7.69	125.78	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1794	A	N1-C2-N3	7.69	133.15	129.30
21	AA	881	G	C5-C6-N1	-7.69	107.65	111.50
23	AW	31	A	C6-N1-C2	-7.69	113.98	118.60
57	BB	310	A	C5-N7-C8	7.69	107.75	103.90
57	BB	2528	U	O4'-C1'-N1	7.69	114.35	108.20
21	AA	1139	G	N3-C4-N9	-7.69	121.39	126.00
57	BB	1376	C	O4'-C1'-N1	7.69	114.35	108.20
57	BB	2091	C	N3-C4-N4	7.69	123.38	118.00
57	BB	2458	G	N1-C6-O6	7.69	124.51	119.90
21	AA	1301	U	C6-N1-C2	-7.69	116.39	121.00
57	BB	24	G	N1-C6-O6	7.69	124.51	119.90
57	BB	681	G	C5-C6-O6	-7.69	123.99	128.60
57	BB	845	A	O4'-C1'-N9	7.69	114.35	108.20
57	BB	1107	G	C4-C5-C6	7.69	123.41	118.80
57	BB	2854	G	N3-C2-N2	7.69	125.28	119.90
21	AA	126	G	C5-C6-N1	-7.69	107.66	111.50
21	AA	351	G	C5-C6-O6	-7.69	123.99	128.60
21	AA	419	C	C5-C6-N1	7.69	124.84	121.00
57	BB	404	A	C2-N3-C4	-7.69	106.76	110.60
57	BB	421	C	C5-C6-N1	7.69	124.84	121.00
57	BB	1155	A	N1-C6-N6	7.69	123.21	118.60
57	BB	1324	G	C5-C6-O6	-7.69	123.99	128.60
57	BB	1429	G	N7-C8-N9	7.69	116.94	113.10
57	BB	2252	G	N1-C2-N3	-7.69	119.29	123.90
57	BB	2823	A	C4-C5-C6	7.69	120.84	117.00
21	AA	296	U	C6-N1-C2	-7.69	116.39	121.00
21	AA	1481	U	N3-C4-O4	7.69	124.78	119.40
22	AY	44	A	C1'-O4'-C4'	-7.69	103.75	109.90
21	AA	148	G	C5-C6-N1	-7.68	107.66	111.50
21	AA	1130	A	C4-C5-C6	7.68	120.84	117.00
57	BB	402	A	C6-N1-C2	-7.68	113.99	118.60
57	BB	790	U	N3-C2-O2	7.68	127.58	122.20
57	BB	2651	C	C2-N1-C1'	-7.68	110.35	118.80
57	BB	2668	G	C4-C5-N7	-7.68	107.73	110.80
21	AA	297	G	C5-C6-N1	-7.68	107.66	111.50
21	AA	1363	A	C4-C5-C6	7.68	120.84	117.00
57	BB	24	G	C8-N9-C4	-7.68	103.33	106.40
57	BB	209	C	O4'-C1'-N1	7.68	114.35	108.20
57	BB	1337	G	C6-N1-C2	7.68	129.71	125.10
21	AA	344	A	C5-C6-N6	-7.68	117.56	123.70
21	AA	733	G	N1-C6-O6	7.68	124.51	119.90
23	AW	29	G	C8-N9-C4	7.68	109.47	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BI	124	MET	CG-SD-CE	-7.68	87.91	100.20
57	BB	1430	G	N1-C2-N3	-7.68	119.29	123.90
21	AA	962	C	N3-C4-C5	-7.68	118.83	121.90
21	AA	1515	G	N1-C2-N3	-7.68	119.29	123.90
23	AW	34	G	C5-C6-N1	-7.68	107.66	111.50
57	BB	194	G	C5-C6-N1	-7.68	107.66	111.50
57	BB	370	G	N1-C2-N3	-7.68	119.29	123.90
57	BB	751	A	C5-C6-N1	-7.68	113.86	117.70
57	BB	1353	A	C4-C5-C6	7.68	120.84	117.00
57	BB	1632	A	O4'-C1'-N9	7.68	114.34	108.20
57	BB	1803	A	C5-N7-C8	7.68	107.74	103.90
57	BB	1987	A	P-O5'-C5'	-7.68	108.61	120.90
57	BB	168	G	P-O5'-C5'	7.68	133.19	120.90
26	AV	26	G	C5-C6-O6	-7.68	123.99	128.60
32	BM	66	ARG	NE-CZ-NH2	-7.68	116.46	120.30
57	BB	714	U	P-O3'-C3'	7.68	128.91	119.70
57	BB	901	C	N3-C4-N4	7.68	123.37	118.00
21	AA	847	G	O4'-C1'-N9	7.67	114.34	108.20
21	AA	929	G	O4'-C1'-N9	7.67	114.34	108.20
21	AA	950	U	C5-C6-N1	-7.67	118.86	122.70
21	AA	1204	A	C2-N3-C4	-7.67	106.76	110.60
57	BB	61	C	C6-N1-C2	-7.67	117.23	120.30
57	BB	279	A	O4'-C1'-N9	7.67	114.34	108.20
57	BB	670	A	C5-N7-C8	7.67	107.74	103.90
57	BB	1743	G	C5-C6-O6	-7.67	124.00	128.60
57	BB	1960	A	C4-C5-C6	7.67	120.84	117.00
57	BB	2116	G	C5-C6-N1	-7.67	107.66	111.50
58	BA	10	G	C5-N7-C8	7.67	108.14	104.30
58	BA	13	G	N1-C6-O6	7.67	124.50	119.90
21	AA	1081	A	C4-C5-C6	7.67	120.84	117.00
57	BB	501	A	C5-C6-N1	-7.67	113.86	117.70
57	BB	2040	G	N1-C2-N3	-7.67	119.30	123.90
21	AA	1523	G	C8-N9-C4	-7.67	103.33	106.40
22	AY	3	G	C8-N9-C4	-7.67	103.33	106.40
22	AY	71	G	C5-N7-C8	7.67	108.14	104.30
26	AV	4	G	C5-C6-N1	-7.67	107.66	111.50
57	BB	308	G	N1-C2-N3	-7.67	119.30	123.90
57	BB	382	A	C4-C5-C6	7.67	120.83	117.00
57	BB	1016	G	N3-C2-N2	7.67	125.27	119.90
57	BB	2751	G	N1-C2-N3	-7.67	119.30	123.90
57	BB	2883	A	C5-N7-C8	7.67	107.73	103.90
21	AA	534	U	N1-C2-N3	-7.67	110.30	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	828	U	C2-N3-C4	-7.67	122.40	127.00
21	AA	1096	C	O4'-C1'-N1	7.67	114.33	108.20
21	AA	1150	A	C5-C6-N6	-7.67	117.57	123.70
21	AA	1304	G	N1-C2-N3	-7.67	119.30	123.90
22	AY	76	A	N1-C2-N3	7.67	133.13	129.30
57	BB	1157	G	N9-C4-C5	-7.67	102.33	105.40
57	BB	1535	A	P-O5'-C5'	7.67	133.17	120.90
57	BB	1637	A	N9-C4-C5	7.67	108.87	105.80
57	BB	1780	A	N7-C8-N9	-7.67	109.97	113.80
57	BB	2209	G	C5-C6-N1	-7.67	107.67	111.50
21	AA	440	C	N1-C1'-C2'	-7.67	103.57	112.00
21	AA	897	C	N3-C4-C5	-7.67	118.83	121.90
21	AA	1111	A	C4-C5-C6	7.67	120.83	117.00
21	AA	1136	C	C2-N3-C4	7.67	123.73	119.90
57	BB	2570	G	C4-C5-N7	7.67	113.87	110.80
57	BB	2767	C	C2-N3-C4	7.67	123.73	119.90
57	BB	2893	A	N7-C8-N9	-7.67	109.97	113.80
57	BB	1767	G	N3-C4-C5	-7.67	124.77	128.60
57	BB	2570	G	C8-N9-C4	7.67	109.47	106.40
57	BB	2586	U	O4'-C1'-N1	7.67	114.33	108.20
21	AA	344	A	N1-C2-N3	7.66	133.13	129.30
21	AA	1446	A	O4'-C1'-N9	7.66	114.33	108.20
23	AW	18	G	C8-N9-C4	-7.66	103.33	106.40
57	BB	712	G	C8-N9-C4	-7.66	103.33	106.40
57	BB	1059	G	C4-C5-C6	7.66	123.40	118.80
57	BB	1348	C	N3-C4-N4	7.66	123.36	118.00
57	BB	1728	C	C5-C4-N4	-7.66	114.84	120.20
57	BB	2277	G	N3-C2-N2	7.66	125.26	119.90
57	BB	2843	G	C5-C6-O6	-7.66	124.00	128.60
21	AA	1262	C	N3-C4-N4	7.66	123.36	118.00
57	BB	828	U	N3-C2-O2	-7.66	116.84	122.20
57	BB	1543	G	C5-C6-O6	-7.66	124.00	128.60
58	BA	76	G	C6-C5-N7	-7.66	125.80	130.40
19	AH	23	ALA	N-CA-CB	7.66	120.83	110.10
21	AA	1139	G	C6-C5-N7	-7.66	125.80	130.40
22	AY	40	C	C4'-C3'-C2'	-7.66	94.94	102.60
57	BB	13	A	C1'-O4'-C4'	7.66	116.03	109.90
57	BB	266	G	N9-C4-C5	-7.66	102.34	105.40
57	BB	1300	G	C4-C5-C6	-7.66	114.20	118.80
57	BB	2536	G	N1-C2-N3	-7.66	119.30	123.90
21	AA	691	G	O4'-C1'-N9	7.66	114.33	108.20
21	AA	1201	A	C5-C6-N1	-7.66	113.87	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	87	U	O4'-C1'-N1	7.66	114.33	108.20
57	BB	884	U	C6-N1-C2	-7.66	116.41	121.00
57	BB	1635	A	C6-C5-N7	-7.66	126.94	132.30
57	BB	2121	G	C4'-C3'-C2'	-7.66	94.94	102.60
57	BB	2623	G	N7-C8-N9	7.66	116.93	113.10
21	AA	134	G	N9-C4-C5	7.66	108.46	105.40
21	AA	446	G	C6-N1-C2	7.66	129.69	125.10
57	BB	411	G	N1-C6-O6	7.66	124.49	119.90
57	BB	548	G	N1-C2-N2	-7.66	109.31	116.20
57	BB	590	A	C6-C5-N7	-7.66	126.94	132.30
57	BB	709	U	N1-C2-N3	7.66	119.49	114.90
57	BB	714	U	OP1-P-OP2	-7.66	108.12	119.60
57	BB	1964	G	N1-C2-N3	-7.66	119.31	123.90
58	BA	15	A	O4'-C1'-N9	7.66	114.33	108.20
21	AA	781	A	C5-C6-N1	-7.65	113.87	117.70
57	BB	86	G	C5-C6-N1	-7.65	107.67	111.50
57	BB	1006	C	P-O3'-C3'	-7.65	110.52	119.70
21	AA	548	G	N9-C4-C5	-7.65	102.34	105.40
21	AA	700	G	N1-C6-O6	7.65	124.49	119.90
38	BS	95	ARG	NH1-CZ-NH2	7.65	127.82	119.40
57	BB	595	C	C5-C4-N4	-7.65	114.84	120.20
57	BB	1167	C	C4-C5-C6	7.65	121.23	117.40
57	BB	2331	G	C8-N9-C4	-7.65	103.34	106.40
57	BB	2462	C	O4'-C1'-N1	7.65	114.32	108.20
57	BB	2713	U	C5-C4-O4	-7.65	121.31	125.90
21	AA	487	A	C4-C5-C6	7.65	120.83	117.00
57	BB	960	A	C4-C5-N7	-7.65	106.88	110.70
57	BB	1699	G	N7-C8-N9	7.65	116.93	113.10
57	BB	1722	A	O4'-C1'-N9	7.65	114.32	108.20
21	AA	491	G	N3-C4-N9	-7.65	121.41	126.00
21	AA	966	G	C6-C5-N7	-7.65	125.81	130.40
21	AA	1348	U	O4'-C1'-N1	7.65	114.32	108.20
57	BB	903	C	N3-C4-C5	-7.65	118.84	121.90
58	BA	96	G	C6-C5-N7	-7.65	125.81	130.40
23	AW	56	C	C5-C6-N1	-7.65	117.18	121.00
24	AX	19	U	O4'-C1'-N1	7.65	114.32	108.20
26	AV	31	G	N1-C2-N3	-7.65	119.31	123.90
57	BB	187	G	C4-C5-C6	7.65	123.39	118.80
57	BB	619	G	O4'-C1'-N9	7.65	114.32	108.20
57	BB	1072	C	O4'-C1'-N1	7.65	114.32	108.20
57	BB	1163	G	N3-C4-N9	7.65	130.59	126.00
57	BB	1385	A	C4-C5-C6	7.65	120.82	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2564	A	O4'-C1'-N9	7.65	114.32	108.20
57	BB	1731	G	C4-C5-N7	7.65	113.86	110.80
26	AV	14	A	N3-C4-C5	-7.64	121.45	126.80
57	BB	427	U	O4'-C1'-N1	7.64	114.32	108.20
57	BB	1269	A	N9-C4-C5	7.64	108.86	105.80
57	BB	1946	U	C5-C6-N1	-7.64	118.88	122.70
57	BB	2283	C	C5-C4-N4	-7.64	114.85	120.20
21	AA	136	C	N3-C4-N4	7.64	123.35	118.00
21	AA	292	G	N9-C4-C5	-7.64	102.34	105.40
21	AA	1518	A	C8-N9-C4	-7.64	102.74	105.80
57	BB	623	C	C2-N3-C4	-7.64	116.08	119.90
57	BB	995	C	O4'-C1'-N1	7.64	114.31	108.20
57	BB	2469	A	N9-C4-C5	7.64	108.86	105.80
21	AA	842	U	C5-C4-O4	-7.64	121.31	125.90
57	BB	59	U	C4-C5-C6	-7.64	115.12	119.70
57	BB	1238	G	O4'-C1'-N9	7.64	114.31	108.20
57	BB	1205	A	C5-C6-N6	-7.64	117.59	123.70
57	BB	1631	G	P-O3'-C3'	-7.64	110.53	119.70
57	BB	1676	A	O4'-C1'-N9	7.64	114.31	108.20
57	BB	1777	U	O4'-C1'-N1	7.64	114.31	108.20
57	BB	2224	G	N7-C8-N9	7.64	116.92	113.10
57	BB	2643	G	C4-C5-N7	7.64	113.86	110.80
57	BB	862	G	C4-C5-C6	7.64	123.38	118.80
57	BB	2373	G	N1-C2-N3	-7.64	119.32	123.90
21	AA	338	A	C2-N3-C4	-7.64	106.78	110.60
57	BB	473	G	C5-C6-O6	-7.64	124.02	128.60
57	BB	711	G	C6-C5-N7	-7.64	125.82	130.40
57	BB	1847	A	P-O3'-C3'	7.64	128.86	119.70
57	BB	2373	G	C4-C5-N7	-7.64	107.75	110.80
21	AA	779	C	O4'-C1'-N1	7.63	114.31	108.20
26	AV	37	A	C6-N1-C2	-7.63	114.02	118.60
26	AV	71	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	522	A	N1-C6-N6	7.63	123.18	118.60
57	BB	558	U	C2-N3-C4	7.63	131.58	127.00
57	BB	1812	U	C6-N1-C2	7.63	125.58	121.00
57	BB	2579	C	N3-C4-C5	-7.63	118.85	121.90
57	BB	2820	A	C5-C6-N1	-7.63	113.88	117.70
21	AA	781	A	C6-C5-N7	-7.63	126.96	132.30
57	BB	765	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	993	G	O4'-C1'-N9	7.63	114.31	108.20
57	BB	1289	C	C2-N1-C1'	7.63	127.20	118.80
21	AA	124	C	N1-C2-O2	7.63	123.48	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	998	C	C5-C6-N1	7.63	124.81	121.00
21	AA	1246	A	C4'-C3'-C2'	-7.63	94.97	102.60
30	BK	63	ARG	NE-CZ-NH1	-7.63	116.48	120.30
57	BB	393	C	N3-C4-C5	-7.63	118.85	121.90
57	BB	631	A	C5-C6-N6	-7.63	117.60	123.70
57	BB	1342	A	C5-C6-N6	-7.63	117.60	123.70
21	AA	437	U	O4'-C1'-N1	7.63	114.30	108.20
21	AA	722	G	O4'-C1'-N9	7.63	114.30	108.20
21	AA	1221	G	O4'-C4'-C3'	-7.63	96.37	104.00
57	BB	1114	C	C6-N1-C2	-7.63	117.25	120.30
57	BB	1653	G	C4-C5-C6	7.63	123.38	118.80
57	BB	1879	C	N3-C4-N4	7.63	123.34	118.00
57	BB	1957	C	O4'-C1'-N1	7.63	114.30	108.20
57	BB	2258	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	2317	A	C6-N1-C2	-7.63	114.02	118.60
21	AA	152	A	C4-C5-C6	7.63	120.81	117.00
21	AA	597	G	C2-N3-C4	-7.63	108.09	111.90
21	AA	944	G	C6-N1-C2	7.63	129.68	125.10
21	AA	1102	A	O4'-C1'-N9	7.63	114.30	108.20
21	AA	1443	C	N3-C4-N4	7.63	123.34	118.00
57	BB	131	A	C5-C6-N1	-7.63	113.89	117.70
57	BB	1527	G	C6-C5-N7	-7.63	125.82	130.40
57	BB	2583	G	C2-N3-C4	-7.63	108.09	111.90
57	BB	2796	U	O4'-C1'-N1	7.63	114.30	108.20
21	AA	57	G	N7-C8-N9	7.62	116.91	113.10
21	AA	1501	C	N3-C4-N4	7.62	123.34	118.00
57	BB	352	A	C5-C6-N1	-7.62	113.89	117.70
57	BB	1262	A	C5-C6-N6	-7.62	117.60	123.70
57	BB	255	A	C4-C5-N7	-7.62	106.89	110.70
57	BB	2217	G	C8-N9-C1'	7.62	136.91	127.00
57	BB	2272	U	C5-C6-N1	7.62	126.51	122.70
21	AA	126	G	C8-N9-C4	7.62	109.45	106.40
21	AA	989	U	C6-N1-C2	-7.62	116.43	121.00
21	AA	1167	A	C2-N3-C4	-7.62	106.79	110.60
23	AW	52	G	O4'-C1'-N9	7.62	114.30	108.20
57	BB	470	A	N9-C4-C5	-7.62	102.75	105.80
57	BB	614	A	C4-C5-C6	7.62	120.81	117.00
57	BB	1865	U	C5-C4-O4	-7.62	121.33	125.90
57	BB	2411	A	N3-C4-C5	-7.62	121.47	126.80
57	BB	2898	U	C5'-C4'-C3'	-7.62	103.81	116.00
21	AA	1327	C	C6-N1-C2	-7.62	117.25	120.30
21	AA	1450	U	O4'-C1'-N1	7.62	114.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	663	G	N7-C8-N9	7.62	116.91	113.10
57	BB	1833	C	C5-C6-N1	7.62	124.81	121.00
57	BB	1938	A	C2-N3-C4	7.62	114.41	110.60
57	BB	2513	A	C6-C5-N7	-7.62	126.97	132.30
57	BB	2564	A	C5-C6-N1	-7.62	113.89	117.70
57	BB	2763	G	N3-C2-N2	7.62	125.23	119.90
21	AA	340	U	O4'-C1'-N1	7.62	114.29	108.20
57	BB	1230	A	N1-C6-N6	7.62	123.17	118.60
57	BB	2190	G	P-O3'-C3'	-7.62	110.56	119.70
57	BB	2345	G	C2-N3-C4	7.62	115.71	111.90
57	BB	2396	G	N1-C2-N3	-7.62	119.33	123.90
57	BB	2735	G	N1-C6-O6	7.62	124.47	119.90
58	BA	100	G	C5-C6-O6	-7.62	124.03	128.60
57	BB	1154	G	N3-C2-N2	7.62	125.23	119.90
21	AA	588	G	C8-N9-C4	-7.62	103.35	106.40
21	AA	675	A	O4'-C1'-N9	7.62	114.29	108.20
21	AA	1327	C	C5-C6-N1	7.62	124.81	121.00
57	BB	267	C	N3-C4-C5	-7.62	118.85	121.90
57	BB	553	G	C8-N9-C1'	7.62	136.90	127.00
57	BB	1645	G	N3-C2-N2	7.62	125.23	119.90
57	BB	2275	C	N1-C2-O2	-7.62	114.33	118.90
21	AA	1250	A	P-O5'-C5'	-7.61	108.72	120.90
21	AA	1324	A	C5-C6-N6	-7.61	117.61	123.70
26	AV	22	G	C8-N9-C4	-7.61	103.35	106.40
57	BB	481	G	C4-C5-N7	7.61	113.84	110.80
57	BB	962	G	C5-C6-O6	-7.61	124.03	128.60
57	BB	1429	G	N3-C2-N2	7.61	125.23	119.90
57	BB	362	A	C5-C6-N1	-7.61	113.89	117.70
57	BB	368	A	O4'-C1'-N9	7.61	114.29	108.20
57	BB	968	C	N3-C4-C5	-7.61	118.86	121.90
57	BB	2711	A	C5-C6-N6	-7.61	117.61	123.70
21	AA	572	A	C5-N7-C8	7.61	107.70	103.90
21	AA	1449	C	O4'-C1'-N1	7.61	114.29	108.20
57	BB	252	G	N9-C4-C5	7.61	108.44	105.40
57	BB	374	A	C2-N3-C4	7.61	114.41	110.60
57	BB	2036	C	C5-C6-N1	7.61	124.81	121.00
57	BB	2602	A	N7-C8-N9	-7.61	109.99	113.80
57	BB	2900	A	N9-C4-C5	-7.61	102.76	105.80
18	AG	114	SER	C-N-CA	7.61	140.72	121.70
21	AA	11	G	N3-C4-N9	-7.61	121.44	126.00
21	AA	1203	C	N3-C4-N4	7.61	123.33	118.00
21	AA	1428	A	N9-C4-C5	-7.61	102.76	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1012	U	N3-C4-C5	7.61	119.17	114.60
58	BA	107	G	C5-C6-O6	-7.61	124.03	128.60
21	AA	5	U	OP1-P-OP2	-7.61	108.19	119.60
27	B5	7	ARG	NE-CZ-NH2	-7.61	116.50	120.30
57	BB	1044	C	N3-C4-N4	7.61	123.33	118.00
57	BB	1120	G	C8-N9-C4	-7.61	103.36	106.40
57	BB	1656	C	N3-C4-N4	7.61	123.33	118.00
57	BB	1679	A	C5-N7-C8	7.61	107.70	103.90
57	BB	2151	U	C5-C4-O4	-7.61	121.34	125.90
57	BB	2623	G	N3-C4-C5	-7.61	124.80	128.60
21	AA	725	G	N9-C4-C5	7.61	108.44	105.40
21	AA	1439	G	N7-C8-N9	7.61	116.90	113.10
57	BB	659	G	N1-C2-N3	-7.61	119.34	123.90
57	BB	705	A	N1-C6-N6	7.61	123.16	118.60
57	BB	921	C	C5-C6-N1	7.61	124.80	121.00
57	BB	1296	G	O4'-C1'-N9	7.61	114.28	108.20
57	BB	1840	G	N3-C2-N2	7.61	125.22	119.90
21	AA	285	C	N3-C4-C5	-7.60	118.86	121.90
21	AA	980	C	C4'-C3'-C2'	-7.60	95.00	102.60
21	AA	311	C	O4'-C1'-N1	7.60	114.28	108.20
21	AA	1231	G	C8-N9-C4	-7.60	103.36	106.40
21	AA	1256	A	C5-C6-N1	-7.60	113.90	117.70
21	AA	1261	A	C5-C6-N6	-7.60	117.62	123.70
57	BB	97	C	N3-C4-N4	7.60	123.32	118.00
57	BB	1232	G	N3-C4-C5	-7.60	124.80	128.60
57	BB	1673	G	C4-C5-N7	7.60	113.84	110.80
57	BB	2003	A	C5-N7-C8	7.60	107.70	103.90
57	BB	2029	G	N3-C2-N2	7.60	125.22	119.90
21	AA	328	C	N1-C2-N3	-7.60	113.88	119.20
21	AA	776	G	N1-C6-O6	7.60	124.46	119.90
21	AA	1324	A	O4'-C1'-N9	7.60	114.28	108.20
57	BB	181	A	C5-N7-C8	7.60	107.70	103.90
57	BB	218	A	C5-C6-N6	-7.60	117.62	123.70
57	BB	1674	G	N1-C6-O6	7.60	124.46	119.90
57	BB	2016	U	N3-C4-O4	7.60	124.72	119.40
21	AA	377	G	C8-N9-C4	-7.60	103.36	106.40
21	AA	925	G	N9-C4-C5	-7.60	102.36	105.40
21	AA	1328	C	N3-C4-C5	-7.60	118.86	121.90
57	BB	807	U	O4'-C1'-N1	7.60	114.28	108.20
57	BB	1567	G	C5-C6-O6	-7.60	124.04	128.60
57	BB	1955	U	O4'-C1'-N1	7.60	114.28	108.20
57	BB	2541	A	C6-C5-N7	-7.60	126.98	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2682	A	C4-C5-C6	7.60	120.80	117.00
57	BB	141	G	O4'-C1'-N9	7.60	114.28	108.20
57	BB	229	C	O4'-C1'-N1	7.60	114.28	108.20
57	BB	2641	G	C5-C6-N1	-7.60	107.70	111.50
21	AA	380	G	O4'-C1'-N9	7.59	114.28	108.20
21	AA	1318	A	C5-C6-N6	-7.59	117.62	123.70
36	BQ	103	VAL	CG1-CB-CG2	7.59	123.05	110.90
57	BB	496	G	O4'-C1'-N9	7.59	114.28	108.20
57	BB	1917	U	O4'-C1'-N1	7.59	114.28	108.20
57	BB	2713	U	P-O3'-C3'	7.59	128.81	119.70
57	BB	2833	U	P-O3'-C3'	7.59	128.81	119.70
21	AA	203	G	O4'-C1'-N9	7.59	114.27	108.20
21	AA	566	G	C5-C6-O6	-7.59	124.05	128.60
21	AA	1105	A	C5-N7-C8	7.59	107.70	103.90
24	AX	22	A	C5-C6-N1	-7.59	113.91	117.70
57	BB	669	G	P-O3'-C3'	7.59	128.81	119.70
57	BB	704	G	O4'-C1'-N9	7.59	114.27	108.20
57	BB	867	C	N3-C4-C5	-7.59	118.86	121.90
57	BB	1924	C	O4'-C1'-N1	7.59	114.27	108.20
21	AA	1066	C	N3-C4-C5	-7.59	118.86	121.90
21	AA	1120	C	C2-N3-C4	7.59	123.69	119.90
21	AA	1327	C	O4'-C1'-N1	7.59	114.27	108.20
21	AA	1533	C	O4'-C1'-N1	7.59	114.27	108.20
57	BB	2	G	C6-C5-N7	-7.59	125.85	130.40
57	BB	518	G	N1-C2-N3	-7.59	119.35	123.90
57	BB	94	A	C5-C6-N6	-7.59	117.63	123.70
57	BB	101	A	C5-C6-N6	-7.59	117.63	123.70
57	BB	750	A	N3-C4-C5	-7.59	121.49	126.80
21	AA	941	G	C5-C6-N1	-7.59	107.71	111.50
21	AA	1511	G	P-O3'-C3'	-7.59	110.60	119.70
26	AV	19	G	C5-C6-N1	-7.59	107.71	111.50
57	BB	274	C	O4'-C1'-N1	7.59	114.27	108.20
57	BB	643	A	N1-C2-N3	-7.59	125.51	129.30
57	BB	1484	U	N1-C2-O2	-7.59	117.49	122.80
57	BB	1913	A	C8-N9-C4	-7.59	102.77	105.80
57	BB	2148	G	C4'-C3'-C2'	-7.59	95.01	102.60
57	BB	2867	G	N3-C2-N2	7.59	125.21	119.90
21	AA	846	G	O4'-C1'-N9	7.58	114.27	108.20
22	AY	35	A	C5-C6-N6	-7.58	117.63	123.70
57	BB	216	A	N3-C4-C5	-7.58	121.49	126.80
57	BB	1445	G	N3-C4-C5	7.58	132.39	128.60
57	BB	1460	U	O5'-P-OP2	-7.58	98.87	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	366	A	C8-N9-C4	-7.58	102.77	105.80
21	AA	774	G	N3-C2-N2	7.58	125.21	119.90
21	AA	922	G	C5-N7-C8	7.58	108.09	104.30
21	AA	1092	A	C4-C5-C6	7.58	120.79	117.00
22	AY	75	C	N3-C4-N4	7.58	123.31	118.00
57	BB	82	U	C3'-C2'-C1'	-7.58	95.43	101.50
21	AA	108	G	C5-C6-O6	-7.58	124.05	128.60
21	AA	225	C	O4'-C1'-N1	7.58	114.27	108.20
21	AA	1270	G	C5-C6-N1	-7.58	107.71	111.50
21	AA	1487	G	C8-N9-C1'	7.58	136.86	127.00
28	BI	133	ARG	NE-CZ-NH2	-7.58	116.51	120.30
57	BB	387	U	C5-C4-O4	-7.58	121.35	125.90
57	BB	825	A	C4-C5-C6	7.58	120.79	117.00
57	BB	1261	C	C5-C6-N1	7.58	124.79	121.00
57	BB	1911	U	C6-N1-C2	-7.58	116.45	121.00
57	BB	2207	C	C4-C5-C6	7.58	121.19	117.40
57	BB	2566	A	C4-C5-C6	7.58	120.79	117.00
15	AD	102	TYR	CB-CG-CD1	7.58	125.55	121.00
21	AA	1132	C	N3-C4-C5	-7.58	118.87	121.90
57	BB	373	U	N1-C2-O2	-7.58	117.50	122.80
57	BB	664	G	C6-C5-N7	-7.58	125.85	130.40
57	BB	684	G	N1-C2-N3	-7.58	119.35	123.90
57	BB	985	C	N3-C4-C5	-7.58	118.87	121.90
57	BB	2823	A	N7-C8-N9	7.58	117.59	113.80
21	AA	353	A	P-O3'-C3'	7.58	128.79	119.70
57	BB	1181	U	C5-C6-N1	-7.58	118.91	122.70
57	BB	2413	G	C5-C6-N1	-7.58	107.71	111.50
57	BB	2616	C	N3-C4-C5	-7.58	118.87	121.90
21	AA	123	U	O4'-C1'-N1	7.58	114.26	108.20
21	AA	455	G	N9-C4-C5	-7.58	102.37	105.40
21	AA	1155	A	C4-C5-N7	-7.58	106.91	110.70
21	AA	1213	A	N9-C4-C5	-7.58	102.77	105.80
27	B5	92	ALA	N-CA-CB	7.58	120.70	110.10
57	BB	1129	A	C5'-C4'-O4'	7.58	118.19	109.10
57	BB	1758	U	O4'-C1'-N1	7.58	114.26	108.20
57	BB	1826	G	N1-C2-N3	-7.58	119.35	123.90
21	AA	35	G	N1-C6-O6	7.57	124.44	119.90
21	AA	831	A	C4-C5-C6	7.57	120.79	117.00
21	AA	1284	C	C6-N1-C2	-7.57	117.27	120.30
21	AA	1406	U	O4'-C1'-N1	7.57	114.26	108.20
57	BB	218	A	O4'-C1'-N9	7.57	114.26	108.20
57	BB	630	G	O4'-C1'-N9	7.57	114.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	71	A	C5-N7-C8	7.57	107.69	103.90
57	BB	2498	C	C5-C4-N4	-7.57	114.90	120.20
21	AA	1526	G	C5-N7-C8	7.57	108.09	104.30
23	AW	70	G	N3-C2-N2	7.57	125.20	119.90
57	BB	450	G	C6-C5-N7	-7.57	125.86	130.40
57	BB	1047	G	N3-C4-C5	-7.57	124.81	128.60
57	BB	1285	A	N7-C8-N9	-7.57	110.02	113.80
57	BB	1391	U	C2-N3-C4	7.57	131.54	127.00
57	BB	1947	C	C5-C6-N1	7.57	124.78	121.00
57	BB	2534	A	N9-C4-C5	7.57	108.83	105.80
57	BB	2566	A	N7-C8-N9	-7.57	110.02	113.80
57	BB	2829	A	N9-C4-C5	7.57	108.83	105.80
21	AA	332	G	N1-C6-O6	7.57	124.44	119.90
57	BB	465	G	C4-C5-C6	7.57	123.34	118.80
57	BB	648	G	N1-C2-N3	-7.57	119.36	123.90
57	BB	1016	G	C8-N9-C4	-7.57	103.37	106.40
57	BB	1755	A	C5-C6-N6	-7.57	117.64	123.70
57	BB	1843	C	O4'-C1'-N1	7.57	114.26	108.20
57	BB	2532	G	N3-C4-C5	-7.57	124.81	128.60
57	BB	2669	G	C4-C5-C6	7.57	123.34	118.80
57	BB	2792	A	C2-N3-C4	-7.57	106.81	110.60
21	AA	126	G	N7-C8-N9	-7.57	109.32	113.10
21	AA	592	G	N1-C6-O6	7.57	124.44	119.90
21	AA	1208	C	N3-C4-C5	-7.57	118.87	121.90
52	BD	197	THR	N-CA-CB	7.57	124.68	110.30
57	BB	275	C	C6-N1-C2	-7.57	117.27	120.30
57	BB	428	A	C5-C6-N1	-7.57	113.92	117.70
57	BB	473	G	C5-N7-C8	7.57	108.08	104.30
57	BB	959	A	O4'-C1'-N9	7.57	114.25	108.20
57	BB	1748	C	N3-C4-C5	-7.57	118.87	121.90
57	BB	1770	G	N7-C8-N9	7.57	116.88	113.10
57	BB	2115	G	C4-C5-N7	-7.57	107.77	110.80
21	AA	107	G	C4-C5-N7	-7.57	107.77	110.80
21	AA	1322	C	C2-N3-C4	7.57	123.68	119.90
21	AA	1493	A	N9-C4-C5	-7.57	102.77	105.80
57	BB	1418	G	N9-C4-C5	-7.57	102.37	105.40
57	BB	1661	G	N9-C4-C5	-7.57	102.37	105.40
57	BB	1745	A	C4-C5-N7	-7.57	106.92	110.70
57	BB	1762	A	N1-C6-N6	7.57	123.14	118.60
57	BB	1981	A	N9-C4-C5	-7.57	102.77	105.80
57	BB	2795	C	O4'-C1'-N1	7.57	114.25	108.20
21	AA	23	C	C3'-C2'-C1'	-7.56	95.45	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	58	A	N1-C6-N6	7.56	123.14	118.60
57	BB	114	U	N3-C4-O4	7.56	124.69	119.40
57	BB	1416	G	N3-C4-N9	-7.56	121.46	126.00
57	BB	1730	C	N3-C4-N4	7.56	123.30	118.00
57	BB	2108	A	O4'-C1'-N9	7.56	114.25	108.20
21	AA	25	C	N1-C1'-C2'	-7.56	103.68	112.00
21	AA	52	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	152	A	C5-N7-C8	7.56	107.68	103.90
21	AA	934	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	1074	G	N3-C2-N2	7.56	125.19	119.90
57	BB	898	C	O4'-C1'-N1	7.56	114.25	108.20
57	BB	1504	A	O4'-C1'-N9	7.56	114.25	108.20
58	BA	76	G	C4-C5-C6	7.56	123.34	118.80
21	AA	167	A	N1-C2-N3	7.56	133.08	129.30
28	BI	61	TYR	CB-CG-CD2	-7.56	116.46	121.00
57	BB	127	A	C6-C5-N7	-7.56	127.01	132.30
21	AA	389	A	C4-C5-C6	7.56	120.78	117.00
21	AA	502	A	C5-C6-N6	-7.56	117.65	123.70
21	AA	912	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	1164	G	C6-C5-N7	-7.56	125.86	130.40
57	BB	18	U	N3-C4-C5	-7.56	110.06	114.60
57	BB	185	G	O4'-C1'-N9	7.56	114.25	108.20
57	BB	414	C	C5'-C4'-C3'	7.56	128.10	116.00
57	BB	817	C	C6-N1-C2	-7.56	117.28	120.30
57	BB	2198	A	N3-C4-N9	7.56	133.45	127.40
57	BB	2389	G	N1-C2-N3	-7.56	119.36	123.90
21	AA	179	A	N9-C4-C5	7.56	108.82	105.80
21	AA	199	A	N9-C4-C5	-7.56	102.78	105.80
21	AA	338	A	C8-N9-C4	-7.56	102.78	105.80
26	AV	40	C	C2-N3-C4	7.56	123.68	119.90
57	BB	649	G	N3-C4-C5	-7.56	124.82	128.60
57	BB	1512	C	C6-N1-C2	-7.56	117.28	120.30
57	BB	2043	C	N3-C4-N4	7.56	123.29	118.00
57	BB	2640	G	N1-C6-O6	7.56	124.44	119.90
21	AA	590	U	N3-C2-O2	7.56	127.49	122.20
21	AA	1094	G	C5-N7-C8	7.56	108.08	104.30
21	AA	1465	A	C2-N3-C4	-7.56	106.82	110.60
57	BB	244	A	C4-C5-C6	7.56	120.78	117.00
57	BB	2345	G	C4-C5-C6	7.56	123.33	118.80
21	AA	507	C	N3-C4-C5	-7.55	118.88	121.90
21	AA	1513	A	O4'-C1'-N9	7.55	114.24	108.20
22	AY	27	C	N1-C2-O2	-7.55	114.37	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	350	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	512	G	P-O3'-C3'	7.55	128.77	119.70
57	BB	2169	A	C4-C5-C6	7.55	120.78	117.00
57	BB	2315	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	2648	G	C6-N1-C2	7.55	129.63	125.10
21	AA	767	A	O4'-C1'-N9	7.55	114.24	108.20
22	AY	62	A	C8-N9-C4	-7.55	102.78	105.80
57	BB	216	A	N1-C2-N3	7.55	133.08	129.30
57	BB	327	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	389	G	P-O5'-C5'	-7.55	108.82	120.90
57	BB	472	A	N7-C8-N9	-7.55	110.02	113.80
57	BB	795	C	C5-C6-N1	7.55	124.78	121.00
57	BB	1717	A	N3-C4-C5	-7.55	121.51	126.80
57	BB	2664	G	N1-C6-O6	7.55	124.43	119.90
21	AA	55	A	N1-C2-N3	7.55	133.08	129.30
21	AA	1040	U	N1-C2-O2	-7.55	117.51	122.80
21	AA	1508	A	C5-C6-N6	-7.55	117.66	123.70
57	BB	307	G	P-O5'-C5'	7.55	132.98	120.90
57	BB	1394	U	P-O3'-C3'	-7.55	110.64	119.70
57	BB	2458	G	C5-C6-O6	-7.55	124.07	128.60
21	AA	560	A	C6-C5-N7	-7.55	127.02	132.30
21	AA	681	A	C6-C5-N7	-7.55	127.02	132.30
21	AA	1457	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	227	A	C2-N3-C4	7.55	114.37	110.60
57	BB	1060	U	C5-C4-O4	7.55	130.43	125.90
57	BB	1738	G	C6-C5-N7	-7.55	125.87	130.40
57	BB	2760	C	N3-C4-N4	7.55	123.28	118.00
21	AA	1369	C	C2-N3-C4	7.55	123.67	119.90
21	AA	1533	C	C5-C4-N4	-7.55	114.92	120.20
57	BB	142	A	C5-C6-N6	-7.55	117.66	123.70
57	BB	1171	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1784	A	C3'-C2'-C1'	7.55	107.54	101.50
57	BB	2220	U	N3-C4-O4	7.55	124.68	119.40
57	BB	2412	A	C4-N9-C1'	7.55	139.89	126.30
21	AA	1034	G	N3-C2-N2	7.55	125.18	119.90
21	AA	1389	C	C2-N3-C4	7.55	123.67	119.90
23	AW	29	G	C4'-C3'-C2'	-7.55	95.05	102.60
26	AV	49	G	C3'-C2'-C1'	7.55	107.54	101.50
57	BB	301	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	449	A	C2-N3-C4	-7.55	106.83	110.60
57	BB	668	A	C4-C5-C6	7.55	120.77	117.00
57	BB	820	A	C5-N7-C8	7.55	107.67	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1102	C	C4'-C3'-C2'	-7.55	95.05	102.60
57	BB	1299	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1626	A	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1726	C	C5-C6-N1	7.55	124.77	121.00
57	BB	2145	C	N3-C2-O2	7.55	127.18	121.90
57	BB	2625	G	N1-C2-N3	-7.55	119.37	123.90
21	AA	83	C	O4'-C1'-N1	7.54	114.24	108.20
57	BB	41	C	N3-C4-N4	7.54	123.28	118.00
57	BB	683	U	N1-C2-O2	-7.54	117.52	122.80
57	BB	1156	A	C4-C5-C6	7.54	120.77	117.00
21	AA	382	A	P-O3'-C3'	7.54	128.75	119.70
21	AA	1154	G	N1-C6-O6	7.54	124.43	119.90
21	AA	1359	C	C2-N3-C4	7.54	123.67	119.90
57	BB	1357	C	N1-C2-O2	-7.54	114.37	118.90
57	BB	1585	C	N3-C4-C5	-7.54	118.88	121.90
57	BB	1586	A	C6-N1-C2	7.54	123.13	118.60
57	BB	1906	G	N3-C4-N9	-7.54	121.47	126.00
57	BB	2478	A	N9-C4-C5	7.54	108.82	105.80
57	BB	2712	C	N3-C4-C5	-7.54	118.88	121.90
57	BB	2892	G	O4'-C1'-N9	7.54	114.23	108.20
21	AA	506	G	C5-C6-O6	-7.54	124.08	128.60
21	AA	1097	C	N3-C4-N4	7.54	123.28	118.00
57	BB	1502	A	C5-C6-N1	-7.54	113.93	117.70
58	BA	13	G	C5-C6-O6	-7.54	124.08	128.60
57	BB	282	A	N1-C2-N3	7.54	133.07	129.30
5	AN	23	ARG	NE-CZ-NH1	7.54	124.07	120.30
21	AA	102	G	C8-N9-C4	-7.54	103.38	106.40
21	AA	666	G	N1-C2-N3	-7.54	119.38	123.90
26	AV	57	A	C8-N9-C4	-7.54	102.78	105.80
57	BB	633	A	N7-C8-N9	7.54	117.57	113.80
57	BB	1393	A	N1-C6-N6	7.54	123.12	118.60
41	BV	21	ARG	NE-CZ-NH1	7.54	124.07	120.30
57	BB	78	U	C1'-O4'-C4'	-7.54	103.87	109.90
21	AA	87	C	C5'-C4'-C3'	7.54	128.06	116.00
21	AA	999	C	C5-C4-N4	-7.54	114.92	120.20
21	AA	1120	C	N3-C4-N4	7.54	123.28	118.00
22	AY	42	G	C2-N3-C4	-7.54	108.13	111.90
57	BB	321	U	P-O3'-C3'	7.54	128.74	119.70
57	BB	336	C	C2-N3-C4	7.54	123.67	119.90
57	BB	1144	A	N1-C6-N6	7.54	123.12	118.60
21	AA	458	U	P-O3'-C3'	7.53	128.74	119.70
21	AA	674	G	N1-C2-N3	-7.53	119.38	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1362	A	C5-C6-N6	-7.53	117.67	123.70
22	AY	8	U	C6-N1-C2	-7.53	116.48	121.00
57	BB	188	G	N1-C2-N3	-7.53	119.38	123.90
57	BB	491	G	N1-C2-N2	-7.53	109.42	116.20
57	BB	908	C	P-O3'-C3'	7.53	128.74	119.70
57	BB	1552	A	N3-C4-N9	7.53	133.43	127.40
57	BB	1648	U	N1-C2-N3	-7.53	110.38	114.90
57	BB	2049	G	C4-C5-N7	7.53	113.81	110.80
57	BB	2109	U	N3-C4-O4	7.53	124.67	119.40
57	BB	2608	G	C4-C5-C6	7.53	123.32	118.80
21	AA	79	G	C6-C5-N7	-7.53	125.88	130.40
21	AA	313	A	C5-C6-N1	-7.53	113.93	117.70
21	AA	472	U	C5-C4-O4	-7.53	121.38	125.90
22	AY	36	A	C5-C6-N6	-7.53	117.67	123.70
57	BB	255	A	C5-C6-N1	-7.53	113.93	117.70
57	BB	512	G	N1-C2-N3	-7.53	119.38	123.90
57	BB	1510	G	N3-C2-N2	7.53	125.17	119.90
21	AA	305	G	O4'-C1'-N9	7.53	114.22	108.20
21	AA	529	G	N7-C8-N9	-7.53	109.33	113.10
21	AA	698	G	N1-C6-O6	7.53	124.42	119.90
21	AA	874	G	N3-C2-N2	7.53	125.17	119.90
21	AA	1360	A	C5-N7-C8	7.53	107.67	103.90
57	BB	98	G	N1-C6-O6	7.53	124.42	119.90
57	BB	1358	G	O4'-C1'-N9	7.53	114.22	108.20
57	BB	1911	U	C2-N3-C4	-7.53	122.48	127.00
57	BB	2845	U	O4'-C1'-N1	7.53	114.22	108.20
21	AA	545	C	C5-C4-N4	-7.53	114.93	120.20
21	AA	842	U	P-O3'-C3'	7.53	128.73	119.70
57	BB	560	C	C5-C4-N4	-7.53	114.93	120.20
57	BB	995	C	N1-C2-N3	-7.53	113.93	119.20
57	BB	1300	G	P-O3'-C3'	7.53	128.73	119.70
57	BB	1687	G	N1-C6-O6	7.53	124.42	119.90
57	BB	2056	G	N7-C8-N9	-7.53	109.34	113.10
57	BB	2410	G	C4-C5-C6	7.53	123.32	118.80
21	AA	1514	G	C6-N1-C2	7.53	129.62	125.10
36	BQ	35	PHE	CB-CG-CD1	7.53	126.07	120.80
57	BB	196	A	C4-C5-C6	7.53	120.76	117.00
57	BB	691	C	N1-C2-O2	7.53	123.42	118.90
57	BB	742	A	C5-C6-N6	-7.53	117.68	123.70
21	AA	773	G	O4'-C1'-N9	7.52	114.22	108.20
57	BB	1107	G	O4'-C1'-N9	7.52	114.22	108.20
57	BB	2211	A	C8-N9-C4	-7.52	102.79	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	115	G	C8-N9-C4	-7.52	103.39	106.40
21	AA	446	G	C5-C6-O6	-7.52	124.09	128.60
21	AA	649	A	C4-C5-C6	7.52	120.76	117.00
21	AA	716	A	C5-C6-N1	-7.52	113.94	117.70
21	AA	942	G	C4-C5-N7	7.52	113.81	110.80
57	BB	1162	G	C4-C5-C6	7.52	123.31	118.80
57	BB	2689	U	N3-C4-O4	-7.52	114.13	119.40
57	BB	2863	C	O4'-C1'-N1	7.52	114.22	108.20
22	AY	4	G	C1'-O4'-C4'	-7.52	103.88	109.90
57	BB	447	A	C4-C5-C6	7.52	120.76	117.00
57	BB	500	G	C5-C6-N1	-7.52	107.74	111.50
21	AA	1034	G	N3-C4-N9	-7.52	121.49	126.00
57	BB	534	U	N3-C4-O4	7.52	124.66	119.40
57	BB	1613	G	N3-C2-N2	7.52	125.16	119.90
57	BB	1970	A	C8-N9-C4	-7.52	102.79	105.80
58	BA	41	G	C5-C6-N1	-7.52	107.74	111.50
13	AB	126	ASP	CB-CG-OD2	-7.52	111.53	118.30
21	AA	7	A	C5-C6-N1	-7.52	113.94	117.70
21	AA	105	G	N7-C8-N9	7.52	116.86	113.10
45	BC	120	ASP	CB-CG-OD1	-7.52	111.53	118.30
57	BB	1430	G	N3-C2-N2	7.52	125.16	119.90
22	AY	18	G	C5-N7-C8	-7.52	100.54	104.30
57	BB	874	G	C6-C5-N7	-7.52	125.89	130.40
57	BB	1766	G	N7-C8-N9	-7.52	109.34	113.10
57	BB	2036	C	N3-C4-N4	7.52	123.26	118.00
57	BB	2807	U	O5'-P-OP1	-7.52	98.94	105.70
21	AA	442	G	P-O3'-C3'	-7.51	110.68	119.70
21	AA	586	C	N3-C4-C5	-7.51	118.89	121.90
21	AA	996	A	C5-N7-C8	7.51	107.66	103.90
57	BB	546	U	C6-N1-C2	-7.51	116.49	121.00
57	BB	568	U	O4'-C1'-N1	7.51	114.21	108.20
57	BB	575	A	N1-C2-N3	7.51	133.06	129.30
57	BB	896	A	O4'-C1'-N9	7.51	114.21	108.20
57	BB	1023	U	C5-C4-O4	7.51	130.41	125.90
57	BB	1335	C	N3-C4-N4	7.51	123.26	118.00
57	BB	1935	G	N1-C2-N3	-7.51	119.39	123.90
57	BB	2183	A	C4-C5-N7	7.51	114.46	110.70
57	BB	204	A	P-O3'-C3'	7.51	128.72	119.70
57	BB	561	G	C2-N3-C4	7.51	115.66	111.90
21	AA	1002	G	N7-C8-N9	-7.51	109.34	113.10
21	AA	1281	C	C6-N1-C2	7.51	123.31	120.30
21	AA	1501	C	N3-C4-C5	-7.51	118.89	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	125	A	C5-N7-C8	7.51	107.66	103.90
57	BB	604	G	C4-C5-C6	7.51	123.31	118.80
57	BB	1011	G	C5-C6-O6	-7.51	124.09	128.60
57	BB	1523	U	O4'-C1'-N1	7.51	114.21	108.20
57	BB	1736	U	C2-N3-C4	-7.51	122.49	127.00
57	BB	2023	C	N3-C4-N4	7.51	123.26	118.00
57	BB	2677	G	N1-C6-O6	7.51	124.41	119.90
58	BA	32	U	N3-C4-O4	7.51	124.66	119.40
21	AA	1514	G	N7-C8-N9	7.51	116.86	113.10
57	BB	194	G	O4'-C1'-N9	7.51	114.21	108.20
57	BB	2051	A	C8-N9-C4	7.51	108.80	105.80
57	BB	2470	G	C5-C6-N1	-7.51	107.75	111.50
58	BA	58	A	C4-C5-C6	7.51	120.75	117.00
11	AT	17	ARG	NE-CZ-NH1	7.51	124.05	120.30
21	AA	915	A	C3'-C2'-C1'	-7.51	95.49	101.50
57	BB	506	G	N1-C6-O6	7.51	124.41	119.90
57	BB	734	A	C4-C5-C6	7.51	120.75	117.00
16	AE	106	ALA	N-CA-CB	7.51	120.61	110.10
21	AA	113	G	N1-C2-N3	-7.51	119.40	123.90
21	AA	693	G	N3-C2-N2	7.51	125.15	119.90
21	AA	920	U	P-O5'-C5'	7.51	132.91	120.90
21	AA	1022	A	N1-C6-N6	7.51	123.10	118.60
23	AW	18	G	N1-C6-O6	7.51	124.40	119.90
26	AV	73	A	O4'-C1'-N9	7.51	114.21	108.20
40	BU	17	ASP	CB-CG-OD2	7.51	125.06	118.30
57	BB	559	G	C8-N9-C4	7.51	109.40	106.40
57	BB	654	A	C8-N9-C4	-7.51	102.80	105.80
57	BB	671	C	N3-C4-N4	7.51	123.25	118.00
57	BB	877	A	C8-N9-C4	-7.51	102.80	105.80
57	BB	879	G	C5'-C4'-O4'	7.51	118.11	109.10
57	BB	2237	G	C8-N9-C4	7.51	109.40	106.40
57	BB	2292	U	O4'-C1'-N1	7.51	114.20	108.20
57	BB	2560	A	C5-C6-N6	-7.51	117.69	123.70
21	AA	1148	U	C4'-C3'-C2'	-7.50	95.09	102.60
57	BB	1721	G	N7-C8-N9	7.50	116.85	113.10
57	BB	1840	G	C2-N3-C4	-7.50	108.15	111.90
57	BB	2592	G	C2-N3-C4	7.50	115.65	111.90
21	AA	74	A	C5-C6-N1	-7.50	113.95	117.70
57	BB	124	G	C5-C6-O6	-7.50	124.10	128.60
57	BB	625	G	N1-C6-O6	7.50	124.40	119.90
57	BB	772	C	O4'-C1'-N1	7.50	114.20	108.20
57	BB	1042	G	C1'-O4'-C4'	-7.50	103.90	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2075	U	O4'-C1'-N1	7.50	114.20	108.20
57	BB	2158	A	P-O3'-C3'	7.50	128.70	119.70
57	BB	2513	A	C5-C6-N1	-7.50	113.95	117.70
21	AA	1174	G	N1-C6-O6	7.50	124.40	119.90
23	AW	22	G	C5-C6-N1	-7.50	107.75	111.50
26	AV	22	G	C4-C5-C6	7.50	123.30	118.80
29	BJ	16	TYR	CB-CG-CD1	-7.50	116.50	121.00
57	BB	348	A	N1-C6-N6	7.50	123.10	118.60
57	BB	609	A	C6-C5-N7	-7.50	127.05	132.30
57	BB	772	C	N1-C2-O2	7.50	123.40	118.90
57	BB	809	G	N3-C2-N2	7.50	125.15	119.90
57	BB	1162	G	C5-N7-C8	7.50	108.05	104.30
57	BB	1433	A	O4'-C1'-N9	7.50	114.20	108.20
57	BB	1484	U	N3-C2-O2	7.50	127.45	122.20
57	BB	1526	C	N1-C2-N3	-7.50	113.95	119.20
57	BB	1545	A	O4'-C1'-N9	7.50	114.20	108.20
57	BB	2320	U	O4'-C1'-N1	7.50	114.20	108.20
57	BB	2642	G	C8-N9-C4	7.50	109.40	106.40
57	BB	51	G	C4'-C3'-C2'	7.50	110.10	102.60
57	BB	535	G	C5-C6-N1	-7.50	107.75	111.50
57	BB	1187	G	C5-C6-N1	-7.50	107.75	111.50
57	BB	2095	A	C5-N7-C8	7.50	107.65	103.90
21	AA	207	C	N3-C4-C5	-7.50	118.90	121.90
57	BB	285	G	N3-C4-C5	-7.50	124.85	128.60
57	BB	765	C	O4'-C1'-N1	7.50	114.20	108.20
57	BB	990	A	N1-C6-N6	7.50	123.10	118.60
57	BB	1911	U	N1-C2-N3	7.50	119.40	114.90
57	BB	1959	G	N3-C4-N9	-7.50	121.50	126.00
58	BA	71	C	C2-N3-C4	-7.50	116.15	119.90
10	AS	80	ARG	NE-CZ-NH2	-7.50	116.55	120.30
21	AA	1042	A	C4-C5-N7	-7.50	106.95	110.70
21	AA	1300	G	N1-C2-N3	7.50	128.40	123.90
28	BI	63	ASP	CB-CG-OD1	-7.50	111.55	118.30
57	BB	49	A	C5-C6-N1	-7.50	113.95	117.70
57	BB	693	A	C5'-C4'-C3'	7.50	128.00	116.00
57	BB	2513	A	C4-C5-C6	7.50	120.75	117.00
57	BB	2575	C	C5-C4-N4	-7.50	114.95	120.20
57	BB	2900	A	C8-N9-C4	7.50	108.80	105.80
58	BA	43	C	P-O5'-C5'	-7.50	108.91	120.90
58	BA	75	G	C4-C5-C6	7.50	123.30	118.80
4	AM	108	ARG	NE-CZ-NH2	7.50	124.05	120.30
21	AA	688	G	C5-C6-N1	-7.50	107.75	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	724	G	N1-C2-N3	-7.50	119.40	123.90
21	AA	1215	G	C5-C6-O6	-7.50	124.10	128.60
21	AA	1285	A	C6-N1-C2	-7.50	114.10	118.60
21	AA	1511	G	N1-C6-O6	7.50	124.40	119.90
57	BB	177	G	C4-N9-C1'	7.50	136.24	126.50
57	BB	978	G	C4-C5-C6	7.50	123.30	118.80
57	BB	2212	A	C8-N9-C4	-7.50	102.80	105.80
57	BB	2857	G	C5-C6-O6	-7.50	124.10	128.60
21	AA	195	A	C4-C5-C6	7.49	120.75	117.00
57	BB	856	G	N7-C8-N9	-7.49	109.35	113.10
57	BB	876	C	P-O5'-C5'	7.49	132.89	120.90
57	BB	1475	G	O4'-C1'-N9	7.49	114.19	108.20
57	BB	1912	A	C5-C6-N1	-7.49	113.95	117.70
58	BA	64	G	C6-C5-N7	-7.49	125.90	130.40
26	AV	55	U	O4'-C1'-N1	7.49	114.19	108.20
21	AA	710	G	C5-C6-N1	-7.49	107.75	111.50
21	AA	894	G	O4'-C1'-N9	7.49	114.19	108.20
21	AA	1117	A	C6-C5-N7	-7.49	127.06	132.30
21	AA	1174	G	O4'-C1'-N9	7.49	114.19	108.20
22	AY	22	G	C6-C5-N7	-7.49	125.91	130.40
57	BB	43	G	C3'-C2'-C1'	-7.49	95.51	101.50
57	BB	189	G	O4'-C1'-N9	7.49	114.19	108.20
57	BB	572	A	C4-C5-N7	-7.49	106.95	110.70
57	BB	599	A	N3-C4-N9	7.49	133.39	127.40
57	BB	811	U	N3-C4-O4	7.49	124.64	119.40
57	BB	1197	G	C6-N1-C2	-7.49	120.61	125.10
57	BB	1232	G	C6-N1-C2	7.49	129.59	125.10
17	AF	59	TYR	CB-CG-CD2	-7.49	116.51	121.00
21	AA	34	C	O4'-C1'-N1	7.49	114.19	108.20
21	AA	1383	C	N1-C2-O2	-7.49	114.41	118.90
22	AY	64	A	C2-N3-C4	-7.49	106.86	110.60
57	BB	129	C	C4-C5-C6	7.49	121.14	117.40
57	BB	133	U	O4'-C1'-N1	7.49	114.19	108.20
57	BB	336	C	N1-C2-N3	-7.49	113.96	119.20
57	BB	1185	G	C4-C5-N7	-7.49	107.81	110.80
57	BB	1465	G	N3-C2-N2	7.49	125.14	119.90
57	BB	1869	G	N3-C2-N2	7.49	125.14	119.90
57	BB	2328	A	C4-C5-C6	7.49	120.74	117.00
21	AA	435	A	N9-C4-C5	7.49	108.80	105.80
21	AA	885	G	C5-C6-N1	-7.49	107.76	111.50
20	AI	11	ARG	NE-CZ-NH2	7.49	124.04	120.30
21	AA	321	A	C8-N9-C4	-7.49	102.81	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	615	G	N3-C4-N9	-7.49	121.51	126.00
21	AA	1078	U	N3-C4-C5	-7.49	110.11	114.60
35	BP	32	VAL	CA-CB-CG2	-7.49	99.67	110.90
57	BB	942	G	C5-C6-O6	-7.49	124.11	128.60
57	BB	1493	C	C6-N1-C1'	-7.49	111.82	120.80
57	BB	1960	A	C5-C6-N6	-7.49	117.71	123.70
57	BB	2367	G	C4-C5-N7	-7.49	107.81	110.80
57	BB	2400	G	N1-C2-N3	-7.49	119.41	123.90
58	BA	69	G	C6-N1-C2	7.49	129.59	125.10
57	BB	2770	G	C8-N9-C4	-7.48	103.41	106.40
21	AA	320	A	O4'-C1'-N9	7.48	114.19	108.20
21	AA	895	G	C4-C5-C6	7.48	123.29	118.80
21	AA	1410	A	O4'-C1'-N9	7.48	114.19	108.20
26	AV	41	C	C6-N1-C2	-7.48	117.31	120.30
26	AV	58	A	O4'-C1'-N9	7.48	114.19	108.20
57	BB	353	C	O4'-C1'-N1	7.48	114.19	108.20
57	BB	1049	C	N1-C2-O2	-7.48	114.41	118.90
57	BB	2218	G	P-O3'-C3'	-7.48	110.72	119.70
21	AA	843	U	O4'-C1'-N1	7.48	114.18	108.20
21	AA	1139	G	C4-C5-C6	7.48	123.29	118.80
57	BB	68	G	C5-C6-O6	-7.48	124.11	128.60
57	BB	548	G	N3-C4-N9	7.48	130.49	126.00
57	BB	607	U	N3-C2-O2	-7.48	116.96	122.20
57	BB	1640	A	C4-C5-C6	7.48	120.74	117.00
57	BB	2215	C	C5-C6-N1	7.48	124.74	121.00
21	AA	1434	A	C2-N3-C4	-7.48	106.86	110.60
21	AA	425	G	O4'-C1'-N9	7.48	114.18	108.20
21	AA	661	G	C6-C5-N7	-7.48	125.91	130.40
21	AA	1063	C	O4'-C1'-N1	7.48	114.18	108.20
57	BB	260	G	O4'-C1'-N9	7.48	114.18	108.20
57	BB	439	A	O4'-C1'-N9	7.48	114.18	108.20
57	BB	2689	U	C4-C5-C6	-7.48	115.21	119.70
21	AA	951	G	C8-N9-C4	7.48	109.39	106.40
57	BB	817	C	N3-C4-N4	7.48	123.23	118.00
57	BB	1419	A	C1'-O4'-C4'	7.48	115.88	109.90
57	BB	737	C	N3-C2-O2	7.47	127.13	121.90
57	BB	1286	A	N7-C8-N9	7.47	117.54	113.80
57	BB	1355	G	C4-N9-C1'	-7.47	116.78	126.50
57	BB	1544	A	N1-C6-N6	7.47	123.08	118.60
58	BA	25	U	N3-C4-C5	-7.47	110.11	114.60
21	AA	167	A	C5-C6-N1	7.47	121.44	117.70
21	AA	677	U	C5-C6-N1	7.47	126.44	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1419	G	C8-N9-C4	-7.47	103.41	106.40
57	BB	68	G	O4'-C1'-N9	7.47	114.18	108.20
57	BB	363	G	C5'-C4'-C3'	-7.47	104.04	116.00
57	BB	2247	A	C5-C6-N6	-7.47	117.72	123.70
7	AP	31	ARG	NE-CZ-NH1	-7.47	116.56	120.30
21	AA	120	A	N1-C6-N6	7.47	123.08	118.60
21	AA	137	U	C3'-C2'-C1'	7.47	107.48	101.50
21	AA	230	G	O4'-C4'-C3'	-7.47	96.53	104.00
21	AA	1454	G	C4-C5-C6	7.47	123.28	118.80
57	BB	710	U	O4'-C1'-N1	7.47	114.18	108.20
21	AA	1310	G	C6-C5-N7	-7.47	125.92	130.40
52	BD	102	ALA	CB-CA-C	-7.47	98.90	110.10
57	BB	52	A	C5-C6-N6	-7.47	117.72	123.70
57	BB	376	G	N1-C2-N3	-7.47	119.42	123.90
57	BB	1089	A	C8-N9-C4	-7.47	102.81	105.80
57	BB	2136	G	C5-C6-N1	-7.47	107.77	111.50
57	BB	2299	U	C5-C4-O4	7.47	130.38	125.90
58	BA	67	G	C6-C5-N7	-7.47	125.92	130.40
57	BB	50	U	O4'-C1'-N1	7.47	114.17	108.20
57	BB	969	G	N1-C6-O6	7.47	124.38	119.90
57	BB	1218	G	C6-C5-N7	-7.47	125.92	130.40
57	BB	1221	C	C2-N3-C4	7.47	123.63	119.90
57	BB	2083	G	N7-C8-N9	7.47	116.83	113.10
21	AA	164	G	N3-C2-N2	7.47	125.13	119.90
21	AA	350	G	C8-N9-C4	-7.47	103.41	106.40
21	AA	731	G	C1'-O4'-C4'	7.47	115.87	109.90
21	AA	998	C	C6-N1-C2	-7.47	117.31	120.30
21	AA	1316	G	N1-C2-N2	-7.47	109.48	116.20
57	BB	199	A	C2-N3-C4	-7.47	106.87	110.60
57	BB	414	C	O4'-C1'-N1	7.47	114.17	108.20
57	BB	879	G	N3-C2-N2	7.47	125.13	119.90
57	BB	1359	A	C5-C6-N1	-7.47	113.97	117.70
21	AA	260	G	N9-C4-C5	-7.46	102.41	105.40
21	AA	953	G	N7-C8-N9	7.46	116.83	113.10
26	AV	76	A	O4'-C1'-N9	7.46	114.17	108.20
49	B2	28	ARG	NE-CZ-NH2	7.46	124.03	120.30
57	BB	345	A	C4-C5-N7	-7.46	106.97	110.70
57	BB	417	C	N3-C4-C5	-7.46	118.91	121.90
57	BB	525	U	N3-C2-O2	7.46	127.42	122.20
57	BB	775	G	C5-C6-N1	-7.46	107.77	111.50
57	BB	2356	U	N3-C4-O4	7.46	124.63	119.40
57	BB	2546	U	N3-C4-C5	-7.46	110.12	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	444	G	N1-C2-N3	-7.46	119.42	123.90
21	AA	754	C	C5-C4-N4	-7.46	114.98	120.20
21	AA	898	G	O4'-C1'-N9	7.46	114.17	108.20
21	AA	1205	U	C4-C5-C6	-7.46	115.22	119.70
57	BB	584	C	O4'-C1'-N1	7.46	114.17	108.20
57	BB	1139	G	C4-C5-N7	7.46	113.78	110.80
57	BB	1422	G	N3-C2-N2	7.46	125.12	119.90
21	AA	690	G	N3-C2-N2	7.46	125.12	119.90
21	AA	754	C	P-O3'-C3'	-7.46	110.75	119.70
57	BB	769	U	C2-N3-C4	-7.46	122.52	127.00
57	BB	1153	C	P-O5'-C5'	7.46	132.84	120.90
57	BB	1505	A	C3'-C2'-C1'	-7.46	95.53	101.50
57	BB	2057	G	N3-C2-N2	7.46	125.12	119.90
57	BB	2346	A	C2-N3-C4	7.46	114.33	110.60
57	BB	2572	A	O4'-C1'-N9	7.46	114.17	108.20
57	BB	580	U	O4'-C1'-N1	7.46	114.17	108.20
57	BB	1865	U	C4-C5-C6	-7.46	115.22	119.70
57	BB	2852	G	N1-C6-O6	7.46	124.38	119.90
26	AV	36	U	N1-C2-O2	-7.46	117.58	122.80
57	BB	545	U	C6-N1-C1'	-7.46	110.76	121.20
57	BB	1625	C	N3-C4-C5	-7.46	118.92	121.90
58	BA	99	A	N3-C4-N9	7.46	133.37	127.40
21	AA	795	C	N3-C4-N4	7.46	123.22	118.00
26	AV	51	C	O4'-C1'-N1	7.46	114.17	108.20
57	BB	495	G	C8-N9-C4	-7.46	103.42	106.40
57	BB	1518	C	C2-N1-C1'	7.46	127.00	118.80
21	AA	978	A	C1'-O4'-C4'	7.46	115.86	109.90
57	BB	1105	U	C5-C4-O4	-7.46	121.43	125.90
57	BB	66	C	N3-C4-N4	7.45	123.22	118.00
57	BB	1191	G	C8-N9-C1'	7.45	136.69	127.00
57	BB	1637	A	C6-C5-N7	-7.45	127.08	132.30
57	BB	2228	G	C8-N9-C4	-7.45	103.42	106.40
57	BB	2495	G	C5-C6-N1	-7.45	107.77	111.50
57	BB	2148	G	C4-C5-N7	-7.45	107.82	110.80
21	AA	787	A	OP1-P-OP2	-7.45	108.42	119.60
26	AV	38	A	P-O3'-C3'	-7.45	110.76	119.70
57	BB	1406	U	O4'-C1'-N1	7.45	114.16	108.20
57	BB	1447	C	N3-C4-C5	-7.45	118.92	121.90
57	BB	1775	U	N1-C2-O2	-7.45	117.58	122.80
57	BB	2019	A	C8-N9-C4	-7.45	102.82	105.80
57	BB	2686	G	C5-C6-N1	-7.45	107.78	111.50
57	BB	2813	A	C5-C6-N1	-7.45	113.97	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	148	G	N1-C2-N3	-7.45	119.43	123.90
57	BB	365	U	N3-C4-O4	7.45	124.61	119.40
57	BB	415	A	C6-C5-N7	-7.45	127.09	132.30
57	BB	417	C	P-O3'-C3'	-7.45	110.76	119.70
57	BB	600	G	N1-C2-N3	-7.45	119.43	123.90
57	BB	754	U	C5-C6-N1	7.45	126.42	122.70
21	AA	325	A	O4'-C1'-N9	7.45	114.16	108.20
21	AA	475	C	C4-C5-C6	7.45	121.12	117.40
21	AA	685	G	O4'-C1'-N9	7.45	114.16	108.20
57	BB	659	G	C8-N9-C4	-7.45	103.42	106.40
6	AO	52	ARG	NE-CZ-NH2	-7.45	116.58	120.30
21	AA	1151	A	C4-C5-C6	7.45	120.72	117.00
21	AA	1220	G	C5-C6-O6	-7.45	124.13	128.60
23	AW	73	A	N1-C2-N3	-7.45	125.58	129.30
57	BB	10	A	N7-C8-N9	-7.45	110.08	113.80
57	BB	102	U	C4-C5-C6	-7.45	115.23	119.70
57	BB	982	C	O4'-C1'-N1	7.45	114.16	108.20
57	BB	1054	A	C5-N7-C8	7.45	107.62	103.90
57	BB	1382	G	N1-C6-O6	7.45	124.37	119.90
57	BB	1627	G	N3-C2-N2	7.45	125.11	119.90
57	BB	1702	G	O4'-C1'-N9	7.45	114.16	108.20
57	BB	1973	G	N3-C2-N2	7.45	125.11	119.90
57	BB	2043	C	N3-C4-C5	-7.45	118.92	121.90
57	BB	2686	G	C6-C5-N7	-7.45	125.93	130.40
21	AA	1017	U	N3-C4-C5	-7.44	110.13	114.60
57	BB	211	C	C5-C4-N4	-7.44	114.99	120.20
57	BB	261	G	N7-C8-N9	-7.44	109.38	113.10
57	BB	410	G	N1-C2-N3	-7.44	119.43	123.90
57	BB	1622	G	N1-C2-N3	-7.44	119.43	123.90
21	AA	362	G	C8-N9-C4	7.44	109.38	106.40
21	AA	471	U	N3-C4-C5	-7.44	110.13	114.60
21	AA	1274	A	C5-C6-N6	-7.44	117.75	123.70
21	AA	1291	U	N3-C4-C5	-7.44	110.13	114.60
21	AA	1357	A	C6-C5-N7	-7.44	127.09	132.30
57	BB	1992	G	C4-C5-C6	7.44	123.27	118.80
58	BA	12	C	C5-C4-N4	-7.44	114.99	120.20
21	AA	457	G	C5-N7-C8	7.44	108.02	104.30
21	AA	553	A	C8-N9-C4	-7.44	102.82	105.80
21	AA	800	G	C1'-O4'-C4'	7.44	115.85	109.90
21	AA	1432	G	N3-C2-N2	7.44	125.11	119.90
22	AY	73	A	N9-C4-C5	-7.44	102.82	105.80
26	AV	53	G	N1-C2-N3	-7.44	119.44	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	334	C	O4'-C1'-N1	7.44	114.15	108.20
57	BB	1633	G	N1-C6-O6	7.44	124.36	119.90
21	AA	85	U	C2-N1-C1'	7.44	126.62	117.70
21	AA	261	U	C5-C4-O4	-7.44	121.44	125.90
21	AA	516	U	O4'-C1'-N1	7.44	114.15	108.20
21	AA	617	G	C2-N3-C4	7.44	115.62	111.90
21	AA	832	G	O4'-C1'-N9	7.44	114.15	108.20
21	AA	915	A	O4'-C1'-N9	7.44	114.15	108.20
21	AA	979	C	N3-C4-N4	7.44	123.21	118.00
21	AA	1325	C	O4'-C1'-N1	7.44	114.15	108.20
57	BB	264	C	C5-C6-N1	7.44	124.72	121.00
57	BB	1360	G	N9-C4-C5	7.44	108.38	105.40
57	BB	1494	A	C4-C5-C6	7.44	120.72	117.00
57	BB	1496	A	N9-C4-C5	7.44	108.78	105.80
57	BB	1847	A	C1'-O4'-C4'	-7.44	103.95	109.90
57	BB	2851	A	O4'-C1'-N9	7.44	114.15	108.20
57	BB	2894	G	C3'-C2'-C1'	7.44	107.45	101.50
51	B4	20	ASP	CB-CG-OD1	-7.44	111.61	118.30
57	BB	527	C	C2-N3-C4	7.44	123.62	119.90
57	BB	1407	G	C8-N9-C4	-7.44	103.42	106.40
12	AU	40	PRO	N-CA-CB	7.43	112.22	103.30
21	AA	419	C	N3-C4-N4	7.43	123.20	118.00
57	BB	136	G	C5-C6-O6	-7.43	124.14	128.60
57	BB	147	C	N3-C4-N4	7.43	123.20	118.00
58	BA	10	G	C8-N9-C4	7.43	109.37	106.40
21	AA	816	A	N1-C6-N6	7.43	123.06	118.60
21	AA	854	U	C4-C5-C6	-7.43	115.24	119.70
57	BB	1219	U	O4'-C1'-N1	7.43	114.15	108.20
57	BB	1234	U	N3-C4-O4	7.43	124.60	119.40
57	BB	1911	U	O4'-C1'-N1	7.43	114.15	108.20
57	BB	2037	A	C5-C6-N1	-7.43	113.98	117.70
21	AA	78	A	C5-C6-N1	-7.43	113.98	117.70
57	BB	455	C	N3-C4-N4	7.43	123.20	118.00
57	BB	1998	A	N3-C4-N9	7.43	133.34	127.40
57	BB	2515	C	C5-C6-N1	7.43	124.72	121.00
21	AA	544	G	N7-C8-N9	-7.43	109.39	113.10
21	AA	894	G	C5-C6-O6	-7.43	124.14	128.60
21	AA	1035	A	O4'-C1'-N9	7.43	114.14	108.20
57	BB	521	U	N3-C2-O2	7.43	127.40	122.20
57	BB	1302	A	C4-C5-C6	7.43	120.72	117.00
57	BB	1594	U	C5-C4-O4	-7.43	121.44	125.90
57	BB	2071	A	C5'-C4'-C3'	-7.43	104.11	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2330	G	O4'-C1'-N9	7.43	114.14	108.20
57	BB	2473	U	P-O3'-C3'	7.43	132.79	120.90
57	BB	2658	C	N3-C4-N4	7.43	123.20	118.00
21	AA	74	A	C4-C5-C6	7.43	120.71	117.00
22	AY	35	A	P-O3'-C3'	-7.43	110.79	119.70
23	AW	68	C	C4-C5-C6	-7.43	113.69	117.40
57	BB	681	G	N1-C2-N3	-7.43	119.44	123.90
57	BB	2226	C	C6-N1-C2	-7.43	117.33	120.30
57	BB	2857	G	N1-C2-N3	-7.43	119.44	123.90
21	AA	885	G	C6-C5-N7	-7.43	125.94	130.40
21	AA	1007	U	N1-C2-N3	-7.43	110.44	114.90
57	BB	2169	A	N3-C4-N9	7.43	133.34	127.40
57	BB	2325	G	C8-N9-C4	-7.43	103.43	106.40
17	AF	25	TYR	CB-CG-CD2	7.42	125.45	121.00
21	AA	139	A	N9-C4-C5	7.42	108.77	105.80
21	AA	865	A	N7-C8-N9	7.42	117.51	113.80
21	AA	1435	G	N7-C8-N9	7.42	116.81	113.10
57	BB	44	A	C5'-C4'-O4'	7.42	118.01	109.10
57	BB	300	A	N1-C2-N3	7.42	133.01	129.30
57	BB	396	G	N9-C4-C5	-7.42	102.43	105.40
57	BB	857	G	O4'-C1'-N9	7.42	114.14	108.20
57	BB	1463	C	C5-C6-N1	7.42	124.71	121.00
57	BB	1522	A	N7-C8-N9	7.42	117.51	113.80
57	BB	1666	G	C4-N9-C1'	-7.42	116.85	126.50
57	BB	2748	A	C2-N3-C4	-7.42	106.89	110.60
21	AA	482	A	O4'-C1'-N9	7.42	114.14	108.20
21	AA	1309	G	C5-N7-C8	7.42	108.01	104.30
57	BB	1269	A	O4'-C1'-N9	7.42	114.14	108.20
21	AA	232	G	C5-N7-C8	-7.42	100.59	104.30
21	AA	807	A	C1'-O4'-C4'	-7.42	103.96	109.90
26	AV	15	G	C5-N7-C8	7.42	108.01	104.30
57	BB	933	A	C5-C6-N6	-7.42	117.76	123.70
57	BB	2006	C	N3-C4-N4	7.42	123.19	118.00
57	BB	2177	C	N3-C4-N4	7.42	123.19	118.00
57	BB	2434	A	C5-N7-C8	7.42	107.61	103.90
21	AA	897	C	O4'-C1'-N1	7.42	114.14	108.20
21	AA	1041	G	O4'-C1'-N9	7.42	114.14	108.20
57	BB	586	A	C8-N9-C4	-7.42	102.83	105.80
57	BB	614	A	P-O3'-C3'	7.42	128.60	119.70
57	BB	718	A	C4-C5-C6	7.42	120.71	117.00
57	BB	1639	C	N3-C4-N4	7.42	123.19	118.00
57	BB	1955	U	C6-N1-C2	7.42	125.45	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2747	G	N3-C2-N2	7.42	125.09	119.90
21	AA	138	G	N9-C4-C5	-7.42	102.43	105.40
21	AA	309	A	C5-N7-C8	7.42	107.61	103.90
21	AA	938	A	N1-C6-N6	7.42	123.05	118.60
57	BB	421	C	C5-C4-N4	-7.42	115.01	120.20
57	BB	1608	A	O4'-C1'-N9	7.42	114.14	108.20
57	BB	1639	C	C5-C4-N4	-7.42	115.01	120.20
57	BB	1655	A	C6-C5-N7	-7.42	127.11	132.30
57	BB	1807	G	P-O5'-C5'	-7.42	109.03	120.90
57	BB	2062	A	C8-N9-C4	-7.42	102.83	105.80
57	BB	2232	C	C4-C5-C6	7.42	121.11	117.40
57	BB	320	A	O4'-C1'-N9	7.42	114.13	108.20
57	BB	1401	G	N1-C6-O6	7.42	124.35	119.90
57	BB	1933	G	C5-N7-C8	7.42	108.01	104.30
57	BB	2070	A	C4-C5-N7	-7.42	106.99	110.70
57	BB	2148	G	C5'-C4'-O4'	7.42	118.00	109.10
57	BB	2475	C	C5-C6-N1	7.42	124.71	121.00
57	BB	2674	G	C2-N3-C4	7.42	115.61	111.90
57	BB	2792	A	C5-N7-C8	7.42	107.61	103.90
57	BB	2901	C	C5-C6-N1	7.42	124.71	121.00
58	BA	97	C	P-O3'-C3'	-7.42	110.80	119.70
57	BB	288	U	O4'-C1'-N1	7.42	114.13	108.20
57	BB	2275	C	P-O5'-C5'	7.42	132.76	120.90
21	AA	226	G	C6-N1-C2	7.41	129.55	125.10
21	AA	495	A	C6-C5-N7	-7.41	127.11	132.30
41	BV	57	TYR	CB-CG-CD2	-7.41	116.55	121.00
57	BB	940	G	C4-N9-C1'	-7.41	116.86	126.50
57	BB	1380	G	C5-C6-O6	-7.41	124.15	128.60
57	BB	1936	A	C5-C6-N1	-7.41	113.99	117.70
57	BB	2222	C	C5-C4-N4	-7.41	115.01	120.20
57	BB	2493	U	N1-C2-N3	-7.41	110.45	114.90
57	BB	2774	C	N3-C4-N4	7.41	123.19	118.00
58	BA	20	G	C6-C5-N7	-7.41	125.95	130.40
21	AA	520	A	C5-C6-N6	-7.41	117.77	123.70
57	BB	114	U	C5-C6-N1	7.41	126.41	122.70
57	BB	521	U	N1-C2-O2	-7.41	117.61	122.80
57	BB	1296	G	C4-C5-C6	-7.41	114.35	118.80
57	BB	2347	C	N3-C4-N4	7.41	123.19	118.00
21	AA	1406	U	N3-C2-O2	7.41	127.39	122.20
57	BB	159	G	C8-N9-C4	-7.41	103.44	106.40
57	BB	229	C	C4-C5-C6	7.41	121.11	117.40
57	BB	828	U	N1-C2-O2	7.41	127.99	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	858	G	N3-C2-N2	7.41	125.09	119.90
57	BB	974	G	C6-C5-N7	-7.41	125.95	130.40
57	BB	2311	A	C4-C5-C6	7.41	120.70	117.00
21	AA	464	U	N3-C4-O4	-7.41	114.21	119.40
22	AY	28	C	C3'-C2'-C1'	7.41	107.43	101.50
57	BB	205	G	C1'-O4'-C4'	-7.41	103.97	109.90
57	BB	398	C	N3-C4-C5	-7.41	118.94	121.90
57	BB	494	G	N3-C4-C5	7.41	132.30	128.60
57	BB	1135	C	C5-C6-N1	7.41	124.70	121.00
57	BB	2193	G	C4'-C3'-C2'	-7.41	95.19	102.60
57	BB	2895	G	C5-C6-O6	-7.41	124.16	128.60
21	AA	585	G	C1'-O4'-C4'	7.41	115.83	109.90
21	AA	1180	A	C4-C5-C6	7.41	120.70	117.00
21	AA	1394	A	O4'-C1'-N9	7.41	114.12	108.20
57	BB	309	A	C5-C6-N1	-7.41	114.00	117.70
57	BB	2141	G	C1'-O4'-C4'	-7.41	103.97	109.90
21	AA	601	G	C4-C5-C6	7.41	123.24	118.80
57	BB	323	C	C5-C4-N4	-7.41	115.02	120.20
57	BB	757	G	C8-N9-C4	7.41	109.36	106.40
57	BB	1120	G	N1-C6-O6	7.41	124.34	119.90
57	BB	2385	C	N1-C2-O2	-7.41	114.46	118.90
57	BB	2481	G	C4-C5-N7	-7.41	107.84	110.80
57	BB	2808	G	C4-C5-N7	7.41	113.76	110.80
21	AA	520	A	O4'-C1'-N9	7.40	114.12	108.20
57	BB	56	A	C4-C5-C6	7.40	120.70	117.00
57	BB	713	G	C6-N1-C2	7.40	129.54	125.10
57	BB	1227	G	N1-C6-O6	7.40	124.34	119.90
57	BB	1526	C	C2-N3-C4	7.40	123.60	119.90
57	BB	1720	U	N1-C2-O2	-7.40	117.62	122.80
21	AA	399	G	C5-N7-C8	7.40	108.00	104.30
21	AA	621	A	C5-C6-N1	-7.40	114.00	117.70
57	BB	745	G	O4'-C1'-N9	7.40	114.12	108.20
57	BB	1045	C	C2-N3-C4	7.40	123.60	119.90
57	BB	1593	A	C2-N3-C4	7.40	114.30	110.60
57	BB	1657	U	C5-C6-N1	7.40	126.40	122.70
57	BB	2466	C	C5-C4-N4	-7.40	115.02	120.20
21	AA	421	U	C6-N1-C1'	-7.40	110.84	121.20
21	AA	725	G	C4-C5-C6	7.40	123.24	118.80
21	AA	909	A	N9-C4-C5	7.40	108.76	105.80
21	AA	1463	U	N1-C2-O2	-7.40	117.62	122.80
58	BA	28	C	C4-C5-C6	7.40	121.10	117.40
57	BB	823	C	C5-C4-N4	-7.40	115.02	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	920	A	C5'-C4'-C3'	7.40	127.84	116.00
57	BB	1549	A	C6-C5-N7	-7.40	127.12	132.30
21	AA	296	U	O4'-C1'-N1	7.40	114.12	108.20
57	BB	154	U	C2-N3-C4	7.40	131.44	127.00
57	BB	2120	G	C5-N7-C8	-7.40	100.60	104.30
57	BB	2641	G	O4'-C1'-N9	7.40	114.12	108.20
21	AA	797	C	C6-N1-C2	7.40	123.26	120.30
18	AG	142	ARG	NE-CZ-NH2	-7.39	116.60	120.30
21	AA	697	U	N3-C4-C5	-7.39	110.16	114.60
21	AA	1482	G	P-O3'-C3'	7.39	128.57	119.70
23	AW	31	A	C6-C5-N7	-7.39	127.12	132.30
57	BB	666	A	N1-C6-N6	7.39	123.04	118.60
57	BB	1187	G	N1-C2-N2	-7.39	109.54	116.20
57	BB	1519	G	N3-C2-N2	-7.39	114.72	119.90
20	AI	17	ARG	NE-CZ-NH2	7.39	124.00	120.30
21	AA	807	A	N1-C6-N6	7.39	123.03	118.60
21	AA	1268	G	N9-C4-C5	-7.39	102.44	105.40
57	BB	154	U	N1-C2-N3	-7.39	110.46	114.90
57	BB	178	G	N7-C8-N9	7.39	116.80	113.10
57	BB	693	A	C5-C6-N6	-7.39	117.79	123.70
57	BB	1181	U	N1-C2-O2	-7.39	117.62	122.80
57	BB	1232	G	N3-C2-N2	7.39	125.08	119.90
57	BB	2047	C	N3-C4-N4	7.39	123.17	118.00
57	BB	2168	G	N1-C6-O6	7.39	124.34	119.90
57	BB	2832	U	C2-N3-C4	7.39	131.44	127.00
21	AA	432	A	C5-C6-N1	-7.39	114.00	117.70
22	AY	3	G	P-O5'-C5'	-7.39	109.07	120.90
23	AW	23	A	O4'-C1'-N9	7.39	114.11	108.20
57	BB	476	G	N1-C6-O6	7.39	124.33	119.90
57	BB	2565	A	C2-N3-C4	-7.39	106.90	110.60
57	BB	2886	A	C5-C6-N1	-7.39	114.00	117.70
57	BB	122	G	N7-C8-N9	-7.39	109.41	113.10
57	BB	418	C	O4'-C1'-N1	7.39	114.11	108.20
57	BB	491	G	C4-C5-C6	7.39	123.23	118.80
57	BB	536	G	C5-C6-O6	-7.39	124.17	128.60
21	AA	711	G	C4-C5-N7	-7.39	107.84	110.80
21	AA	229	U	C5-C6-N1	7.39	126.39	122.70
57	BB	377	G	N1-C2-N3	-7.39	119.47	123.90
57	BB	552	U	N1-C2-O2	-7.39	117.63	122.80
57	BB	1781	U	O4'-C1'-N1	7.39	114.11	108.20
57	BB	2114	A	O4'-C4'-C3'	-7.39	96.61	104.00
14	AC	39	ARG	NE-CZ-NH1	7.38	123.99	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	171	A	O4'-C1'-N9	7.38	114.11	108.20
21	AA	1130	A	N1-C2-N3	7.38	132.99	129.30
21	AA	1151	A	N1-C6-N6	7.38	123.03	118.60
57	BB	1537	G	C5-C6-O6	-7.38	124.17	128.60
57	BB	1936	A	C5-N7-C8	7.38	107.59	103.90
57	BB	2795	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	26	A	C4-C5-C6	7.38	120.69	117.00
21	AA	882	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	744	C	N3-C4-N4	7.38	123.17	118.00
21	AA	1077	G	C6-C5-N7	-7.38	125.97	130.40
23	AW	9	A	C4-C5-N7	7.38	114.39	110.70
27	B5	111	PHE	CB-CG-CD2	-7.38	115.63	120.80
57	BB	354	A	C5-C6-N1	-7.38	114.01	117.70
57	BB	711	G	C5-C6-N1	-7.38	107.81	111.50
57	BB	844	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	932	U	C5-C6-N1	7.38	126.39	122.70
57	BB	1288	G	C4-C5-C6	7.38	123.23	118.80
57	BB	2426	A	C6-N1-C2	7.38	123.03	118.60
57	BB	2653	U	N3-C2-O2	7.38	127.37	122.20
58	BA	94	A	C5-C6-N6	-7.38	117.80	123.70
21	AA	1047	G	O4'-C1'-N9	7.38	114.10	108.20
26	AV	21	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	187	G	C6-C5-N7	-7.38	125.97	130.40
57	BB	2199	A	N3-C4-N9	7.38	133.30	127.40
57	BB	2471	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	2858	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	913	A	C5'-C4'-O4'	7.38	117.95	109.10
57	BB	750	A	N3-C4-N9	7.38	133.30	127.40
57	BB	1053	C	C5-C6-N1	-7.38	117.31	121.00
57	BB	1831	G	C4-C5-N7	7.38	113.75	110.80
57	BB	1935	G	O4'-C1'-N9	7.38	114.10	108.20
57	BB	2184	A	C5-N7-C8	7.38	107.59	103.90
21	AA	841	C	C2-N1-C1'	7.38	126.91	118.80
21	AA	954	G	C4-N9-C1'	-7.38	116.91	126.50
57	BB	25	U	C5-C4-O4	-7.38	121.47	125.90
57	BB	262	A	C6-C5-N7	-7.38	127.14	132.30
57	BB	1407	G	N7-C8-N9	7.38	116.79	113.10
57	BB	1800	C	N3-C4-N4	7.38	123.16	118.00
21	AA	583	A	C2-N3-C4	-7.38	106.91	110.60
26	AV	10	G	C2-N3-C4	7.38	115.59	111.90
57	BB	352	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	756	A	C4-C5-C6	7.38	120.69	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1151	A	N9-C4-C5	7.38	108.75	105.80
21	AA	679	C	O4'-C1'-N1	7.37	114.10	108.20
21	AA	721	G	C4-C5-C6	7.37	123.22	118.80
21	AA	1222	G	C1'-O4'-C4'	-7.37	104.00	109.90
57	BB	210	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	485	C	C6-N1-C2	-7.37	117.35	120.30
57	BB	815	C	C5-C4-N4	-7.37	115.04	120.20
57	BB	1115	G	C6-C5-N7	-7.37	125.98	130.40
21	AA	178	C	N1-C2-N3	-7.37	114.04	119.20
21	AA	363	A	N7-C8-N9	7.37	117.49	113.80
21	AA	765	G	C3'-C2'-C1'	-7.37	95.60	101.50
21	AA	1015	G	C5-C6-O6	7.37	133.02	128.60
21	AA	1017	U	O4'-C1'-N1	7.37	114.10	108.20
22	AY	21	A	C6-C5-N7	-7.37	127.14	132.30
57	BB	295	G	C4-C5-C6	7.37	123.22	118.80
57	BB	1289	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	1562	U	O4'-C1'-N1	7.37	114.10	108.20
57	BB	1650	A	O4'-C1'-N9	7.37	114.10	108.20
57	BB	2383	G	N3-C2-N2	7.37	125.06	119.90
57	BB	179	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	313	G	N9-C4-C5	-7.37	102.45	105.40
57	BB	809	G	C2-N3-C4	7.37	115.58	111.90
57	BB	1322	A	N9-C4-C5	7.37	108.75	105.80
57	BB	2179	C	N3-C2-O2	7.37	127.06	121.90
57	BB	19	A	N3-C4-C5	-7.37	121.64	126.80
57	BB	294	A	C5-N7-C8	7.37	107.58	103.90
57	BB	574	A	C5-C6-N1	-7.37	114.02	117.70
57	BB	1016	G	C5-C6-O6	-7.37	124.18	128.60
57	BB	1088	A	C2-N3-C4	-7.37	106.92	110.60
57	BB	1272	A	O4'-C1'-N9	7.37	114.09	108.20
57	BB	2342	C	N3-C4-C5	-7.37	118.95	121.90
57	BB	2459	A	C6-C5-N7	-7.37	127.14	132.30
58	BA	10	G	C6-N1-C2	-7.37	120.68	125.10
58	BA	23	G	C5-N7-C8	-7.37	100.62	104.30
58	BA	115	A	C4-C5-C6	7.37	120.68	117.00
57	BB	404	A	N1-C2-N3	7.37	132.98	129.30
57	BB	444	C	N3-C2-O2	7.37	127.06	121.90
57	BB	2312	U	O4'-C1'-N1	7.37	114.09	108.20
57	BB	2755	C	N3-C2-O2	7.37	127.06	121.90
21	AA	897	C	C1'-O4'-C4'	-7.37	104.01	109.90
57	BB	11	C	N3-C4-C5	-7.37	118.95	121.90
57	BB	680	C	C5-C4-N4	7.37	125.36	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2062	A	C4-C5-C6	7.37	120.68	117.00
57	BB	2813	A	P-O3'-C3'	7.37	128.54	119.70
21	AA	288	A	N1-C6-N6	7.36	123.02	118.60
21	AA	670	G	C6-N1-C2	-7.36	120.68	125.10
21	AA	760	G	C5-C6-O6	-7.36	124.18	128.60
21	AA	912	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	990	C	O4'-C1'-N1	7.36	114.09	108.20
21	AA	1340	A	C6-N1-C2	7.36	123.02	118.60
57	BB	524	G	N7-C8-N9	-7.36	109.42	113.10
57	BB	1598	A	C6-C5-N7	-7.36	127.14	132.30
57	BB	1881	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	2621	G	N1-C2-N2	7.36	122.83	116.20
22	AY	46	G	N9-C4-C5	-7.36	102.45	105.40
57	BB	137	U	C5-C4-O4	7.36	130.32	125.90
57	BB	1165	A	C5-C6-N6	-7.36	117.81	123.70
57	BB	1973	G	N9-C4-C5	-7.36	102.45	105.40
57	BB	2385	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	1418	A	C6-C5-N7	-7.36	127.15	132.30
21	AA	1470	U	C5-C4-O4	7.36	130.32	125.90
57	BB	123	G	C4-C5-N7	7.36	113.74	110.80
57	BB	624	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	1182	G	N3-C2-N2	7.36	125.05	119.90
57	BB	1397	U	P-O3'-C3'	-7.36	110.87	119.70
57	BB	1786	A	C1'-O4'-C4'	-7.36	104.01	109.90
57	BB	1933	G	C4-N9-C1'	-7.36	116.93	126.50
57	BB	2122	U	N3-C4-C5	-7.36	110.18	114.60
57	BB	2479	U	O4'-C1'-N1	7.36	114.09	108.20
57	BB	2550	G	C6-N1-C2	-7.36	120.68	125.10
23	AW	39	U	O4'-C1'-N1	7.36	114.09	108.20
57	BB	2877	G	N1-C6-O6	7.36	124.31	119.90
21	AA	146	G	N3-C2-N2	7.36	125.05	119.90
21	AA	161	A	C5-C6-N6	-7.36	117.81	123.70
21	AA	266	G	C8-N9-C4	7.36	109.34	106.40
21	AA	1260	G	N1-C6-O6	7.36	124.31	119.90
21	AA	1326	U	N3-C2-O2	-7.36	117.05	122.20
21	AA	1369	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	1452	C	N3-C4-C5	7.36	124.84	121.90
24	AX	22	A	O4'-C1'-N9	7.36	114.09	108.20
57	BB	277	G	C5-N7-C8	7.36	107.98	104.30
57	BB	277	G	O4'-C1'-N9	7.36	114.09	108.20
57	BB	458	G	N1-C2-N3	-7.36	119.49	123.90
57	BB	2393	U	C6-N1-C2	-7.36	116.58	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	73	A	C5-C6-N1	-7.36	114.02	117.70
58	BA	94	A	N1-C6-N6	7.36	123.01	118.60
58	BA	98	G	O4'-C1'-N9	7.36	114.08	108.20
21	AA	398	U	C6-N1-C2	7.36	125.41	121.00
21	AA	1107	C	O4'-C1'-N1	7.36	114.08	108.20
57	BB	647	G	N1-C6-O6	7.36	124.31	119.90
57	BB	800	A	P-O3'-C3'	7.36	128.53	119.70
57	BB	859	G	C4'-C3'-C2'	-7.36	95.24	102.60
57	BB	859	G	O4'-C1'-N9	7.36	114.08	108.20
57	BB	1498	C	N1-C2-O2	7.36	123.31	118.90
57	BB	1625	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	1748	C	C5'-C4'-O4'	7.36	117.92	109.10
57	BB	2524	G	N1-C6-O6	7.36	124.31	119.90
57	BB	2648	G	O4'-C1'-N9	7.36	114.08	108.20
21	AA	1266	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	74	A	C6-C5-N7	-7.35	127.15	132.30
57	BB	532	A	C4-C5-N7	-7.35	107.02	110.70
57	BB	580	U	N3-C4-O4	7.35	124.55	119.40
57	BB	741	U	N1-C2-N3	-7.35	110.49	114.90
57	BB	2402	U	C5-C4-O4	-7.35	121.49	125.90
57	BB	2623	G	C6-C5-N7	-7.35	125.99	130.40
21	AA	346	G	N3-C4-C5	-7.35	124.92	128.60
21	AA	410	G	C4-C5-N7	7.35	113.74	110.80
21	AA	487	A	C5-C6-N1	-7.35	114.02	117.70
23	AW	15	G	C4-C5-N7	-7.35	107.86	110.80
23	AW	20	U	C5'-C4'-O4'	7.35	117.92	109.10
57	BB	141	G	N1-C2-N2	-7.35	109.58	116.20
57	BB	425	G	N3-C4-N9	-7.35	121.59	126.00
57	BB	1950	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	2212	A	C5-C6-N6	-7.35	117.82	123.70
58	BA	40	U	C5-C4-O4	-7.35	121.49	125.90
57	BB	257	C	P-O3'-C3'	-7.35	110.88	119.70
57	BB	1829	A	N9-C4-C5	7.35	108.74	105.80
21	AA	152	A	C1'-O4'-C4'	7.35	115.78	109.90
21	AA	629	A	C5-N7-C8	7.35	107.58	103.90
21	AA	1072	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	100	U	C5-C6-N1	7.35	126.38	122.70
57	BB	467	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	1481	U	C3'-C2'-C1'	7.35	107.38	101.50
57	BB	2743	U	C5-C6-N1	7.35	126.38	122.70
58	BA	5	U	C2-N3-C4	7.35	131.41	127.00
58	BA	12	C	C4-C5-C6	7.35	121.08	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	89	U	N3-C4-C5	-7.35	110.19	114.60
21	AA	273	U	N3-C4-O4	7.35	124.54	119.40
21	AA	1209	C	C5-C6-N1	7.35	124.67	121.00
21	AA	1255	G	C2-N3-C4	7.35	115.57	111.90
57	BB	55	G	N1-C2-N3	-7.35	119.49	123.90
57	BB	1877	A	N1-C6-N6	7.35	123.01	118.60
57	BB	2405	G	C6-C5-N7	-7.35	125.99	130.40
21	AA	449	G	C4-C5-N7	-7.35	107.86	110.80
32	BM	9	PHE	CB-CG-CD2	-7.35	115.66	120.80
57	BB	614	A	C1'-O4'-C4'	7.35	115.78	109.90
57	BB	2844	G	C5-N7-C8	-7.35	100.63	104.30
21	AA	1167	A	P-O3'-C3'	7.34	128.51	119.70
57	BB	697	G	OP1-P-O3'	7.34	121.36	105.20
57	BB	924	G	N1-C2-N3	-7.34	119.49	123.90
57	BB	2630	G	N1-C2-N2	7.34	122.81	116.20
21	AA	459	A	C5-C6-N1	-7.34	114.03	117.70
21	AA	763	G	C5-C6-O6	-7.34	124.19	128.60
37	BR	92	TRP	CE2-CD2-CG	-7.34	101.43	107.30
57	BB	134	G	C4-C5-N7	-7.34	107.86	110.80
57	BB	929	U	O4'-C1'-N1	7.34	114.07	108.20
57	BB	2049	G	N1-C6-O6	7.34	124.31	119.90
57	BB	2566	A	P-O3'-C3'	7.34	128.51	119.70
22	AY	59	U	N3-C2-O2	7.34	127.34	122.20
57	BB	127	A	C4-C5-C6	7.34	120.67	117.00
57	BB	151	C	N3-C4-N4	7.34	123.14	118.00
57	BB	594	U	C4-C5-C6	7.34	124.10	119.70
57	BB	644	A	C5-C6-N6	-7.34	117.83	123.70
57	BB	823	C	C5-C6-N1	7.34	124.67	121.00
57	BB	1216	G	N3-C4-C5	-7.34	124.93	128.60
57	BB	1378	A	C6-N1-C2	-7.34	114.20	118.60
21	AA	621	A	C5-C6-N6	-7.34	117.83	123.70
57	BB	282	A	C6-C5-N7	-7.34	127.16	132.30
57	BB	344	A	C4-C5-C6	7.34	120.67	117.00
57	BB	1521	G	C4-C5-C6	7.34	123.20	118.80
57	BB	1532	A	O4'-C1'-N9	7.34	114.07	108.20
57	BB	2064	C	N3-C4-N4	7.34	123.14	118.00
57	BB	2065	C	N3-C4-C5	-7.34	118.97	121.90
57	BB	2278	A	C4-C5-N7	-7.34	107.03	110.70
57	BB	2325	G	C6-N1-C2	7.34	129.50	125.10
57	BB	2487	G	C6-C5-N7	-7.34	126.00	130.40
21	AA	813	U	O4'-C1'-N1	7.34	114.07	108.20
57	BB	1044	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(°)	Ideal(°)
57	BB	1407	G	O4'-C4'-C3'	-7.34	96.66	104.00
57	BB	248	G	N1-C2-N3	-7.33	119.50	123.90
57	BB	2238	G	C5-N7-C8	-7.33	100.63	104.30
57	BB	2689	U	N1-C2-N3	-7.33	110.50	114.90
21	AA	249	U	N3-C2-O2	7.33	127.33	122.20
21	AA	763	G	O4'-C1'-N9	7.33	114.07	108.20
21	AA	885	G	C2-N3-C4	-7.33	108.23	111.90
21	AA	1139	G	C5-C6-N1	-7.33	107.83	111.50
21	AA	1145	A	N3-C4-C5	-7.33	121.67	126.80
57	BB	1519	G	N7-C8-N9	7.33	116.77	113.10
57	BB	1838	C	O4'-C1'-N1	7.33	114.07	108.20
57	BB	2066	C	C5-C6-N1	-7.33	117.33	121.00
57	BB	2590	A	C4-C5-C6	7.33	120.67	117.00
21	AA	1239	A	N1-C6-N6	7.33	123.00	118.60
23	AW	54	U	N3-C4-O4	7.33	124.53	119.40
26	AV	73	A	C5-C6-N1	-7.33	114.03	117.70
57	BB	543	G	P-O3'-C3'	7.33	128.50	119.70
57	BB	709	U	O4'-C1'-N1	7.33	114.06	108.20
57	BB	2416	C	N3-C4-N4	7.33	123.13	118.00
57	BB	2493	U	N3-C2-O2	7.33	127.33	122.20
58	BA	116	G	O4'-C1'-N9	7.33	114.07	108.20
26	AV	45	G	C4-N9-C1'	-7.33	116.97	126.50
57	BB	31	C	P-O3'-C3'	-7.33	110.90	119.70
57	BB	530	G	O4'-C1'-N9	7.33	114.06	108.20
21	AA	719	C	C5-C4-N4	-7.33	115.07	120.20
21	AA	1322	C	C6-N1-C1'	-7.33	112.00	120.80
22	AY	63	C	C2-N3-C4	7.33	123.56	119.90
23	AW	69	G	C4-C5-N7	-7.33	107.87	110.80
57	BB	161	A	N9-C4-C5	7.33	108.73	105.80
57	BB	423	A	N1-C2-N3	-7.33	125.64	129.30
57	BB	1629	U	C5-C6-N1	-7.33	119.03	122.70
57	BB	2480	C	O4'-C1'-N1	7.33	114.06	108.20
57	BB	2732	G	C4-N9-C1'	7.33	136.03	126.50
21	AA	227	G	N7-C8-N9	7.33	116.76	113.10
21	AA	363	A	N1-C2-N3	7.33	132.96	129.30
21	AA	915	A	C4-C5-C6	7.33	120.66	117.00
21	AA	1032	G	O4'-C1'-N9	7.33	114.06	108.20
57	BB	1143	A	N3-C4-C5	-7.33	121.67	126.80
57	BB	1253	A	C5-C6-N1	-7.33	114.04	117.70
21	AA	715	A	C6-C5-N7	-7.33	127.17	132.30
21	AA	982	U	N3-C4-C5	-7.33	110.20	114.60
57	BB	124	G	N1-C2-N3	-7.33	119.50	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	507	A	C4-C5-C6	7.33	120.66	117.00
57	BB	1409	U	N3-C4-C5	-7.33	110.20	114.60
57	BB	1523	U	N3-C4-O4	-7.33	114.27	119.40
57	BB	1646	C	O4'-C1'-N1	7.33	114.06	108.20
57	BB	1768	C	N3-C4-N4	7.33	123.13	118.00
57	BB	2595	G	C8-N9-C4	7.33	109.33	106.40
19	AH	65	PHE	CB-CG-CD2	-7.32	115.67	120.80
21	AA	280	C	N3-C4-N4	7.32	123.13	118.00
21	AA	1417	G	O4'-C1'-N9	7.32	114.06	108.20
57	BB	1875	G	P-O5'-C5'	7.32	132.62	120.90
21	AA	763	G	N7-C8-N9	7.32	116.76	113.10
21	AA	1032	G	C2-N3-C4	7.32	115.56	111.90
21	AA	158	G	N9-C4-C5	7.32	108.33	105.40
21	AA	357	G	O4'-C1'-C2'	-7.32	98.48	105.80
21	AA	494	G	N7-C8-N9	7.32	116.76	113.10
21	AA	738	C	O4'-C1'-N1	7.32	114.06	108.20
21	AA	895	G	C6-N1-C2	7.32	129.49	125.10
34	BO	9	ARG	NE-CZ-NH2	-7.32	116.64	120.30
57	BB	250	G	C5-C6-N1	-7.32	107.84	111.50
57	BB	444	C	P-O3'-C3'	-7.32	110.92	119.70
57	BB	632	A	O4'-C1'-N9	7.32	114.06	108.20
57	BB	957	C	N3-C4-N4	7.32	123.12	118.00
57	BB	1042	G	C3'-C2'-C1'	-7.32	95.64	101.50
57	BB	1910	G	C2-N3-C4	7.32	115.56	111.90
57	BB	2108	A	C5-C6-N1	-7.32	114.04	117.70
21	AA	1037	C	O4'-C1'-N1	7.32	114.06	108.20
21	AA	1254	A	C5-C6-N6	-7.32	117.84	123.70
57	BB	471	A	N9-C4-C5	-7.32	102.87	105.80
21	AA	247	G	C2-N3-C4	7.32	115.56	111.90
21	AA	1160	G	N7-C8-N9	-7.32	109.44	113.10
21	AA	1437	A	C5-C6-N6	-7.32	117.85	123.70
23	AW	28	G	O4'-C1'-N9	7.32	114.05	108.20
57	BB	39	G	N1-C2-N3	-7.32	119.51	123.90
57	BB	1690	A	O4'-C1'-N9	7.32	114.05	108.20
58	BA	68	C	O4'-C1'-N1	7.32	114.05	108.20
21	AA	31	G	C5-C6-N1	-7.32	107.84	111.50
21	AA	646	G	N1-C2-N3	-7.32	119.51	123.90
21	AA	849	G	C8-N9-C4	-7.32	103.47	106.40
22	AY	30	G	O4'-C1'-N9	7.32	114.05	108.20
23	AW	28	G	C8-N9-C4	7.32	109.33	106.40
56	BH	98	ASP	CB-CG-OD1	7.32	124.88	118.30
57	BB	11	C	N3-C4-N4	7.32	123.12	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	98	G	C4-C5-C6	7.32	123.19	118.80
57	BB	155	A	N9-C4-C5	7.32	108.73	105.80
57	BB	797	G	N3-C2-N2	7.32	125.02	119.90
57	BB	1017	G	O4'-C1'-N9	7.32	114.05	108.20
57	BB	1349	C	C6-N1-C2	-7.32	117.37	120.30
57	BB	1534	U	O4'-C1'-N1	7.32	114.05	108.20
57	BB	1786	A	C5-N7-C8	7.32	107.56	103.90
57	BB	2400	G	N9-C4-C5	-7.32	102.47	105.40
57	BB	2627	G	C6-N1-C2	7.32	129.49	125.10
21	AA	807	A	O4'-C1'-N9	7.31	114.05	108.20
57	BB	1777	U	N3-C2-O2	7.31	127.32	122.20
21	AA	133	U	O4'-C1'-N1	7.31	114.05	108.20
21	AA	189	A	C6-C5-N7	-7.31	127.18	132.30
57	BB	750	A	C8-N9-C4	-7.31	102.88	105.80
57	BB	1660	G	C6-N1-C2	7.31	129.49	125.10
57	BB	1753	G	C4-C5-N7	-7.31	107.88	110.80
57	BB	1885	A	C4-C5-C6	7.31	120.66	117.00
58	BA	7	G	O4'-C1'-N9	7.31	114.05	108.20
58	BA	72	G	C2-N3-C4	7.31	115.56	111.90
57	BB	1642	G	N3-C4-C5	7.31	132.25	128.60
57	BB	1885	A	C8-N9-C4	-7.31	102.88	105.80
57	BB	2326	C	N3-C4-N4	7.31	123.12	118.00
21	AA	851	G	C5-C6-N1	7.31	115.15	111.50
21	AA	1120	C	C5-C6-N1	7.31	124.66	121.00
57	BB	177	G	O4'-C1'-N9	7.31	114.05	108.20
57	BB	836	G	C5-C6-O6	-7.31	124.21	128.60
57	BB	872	U	N3-C4-C5	-7.31	110.21	114.60
21	AA	570	G	N1-C6-O6	7.31	124.28	119.90
21	AA	1422	G	N1-C6-O6	7.31	124.28	119.90
26	AV	11	A	C6-C5-N7	-7.31	127.18	132.30
57	BB	293	U	N1-C2-N3	-7.31	110.52	114.90
57	BB	353	C	C5'-C4'-O4'	7.31	117.87	109.10
57	BB	847	U	O4'-C1'-N1	7.31	114.05	108.20
57	BB	1148	U	P-O3'-C3'	-7.31	110.93	119.70
57	BB	1565	C	C5-C4-N4	-7.31	115.08	120.20
57	BB	1626	A	C5-C6-N6	-7.31	117.85	123.70
57	BB	2271	G	N7-C8-N9	7.31	116.75	113.10
57	BB	2705	A	O4'-C1'-N9	7.31	114.05	108.20
57	BB	1616	A	C6-C5-N7	-7.31	127.19	132.30
57	BB	1637	A	C5-N7-C8	7.31	107.55	103.90
57	BB	2566	A	O4'-C1'-N9	7.31	114.04	108.20
21	AA	247	G	N1-C2-N3	-7.30	119.52	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	674	G	C5-N7-C8	7.30	107.95	104.30
21	AA	763	G	C4-C5-N7	7.30	113.72	110.80
21	AA	941	G	C5-N7-C8	-7.30	100.65	104.30
21	AA	1008	U	C2-N3-C4	-7.30	122.62	127.00
21	AA	1012	A	N7-C8-N9	-7.30	110.15	113.80
57	BB	248	G	C5-C6-N1	-7.30	107.85	111.50
57	BB	2005	A	C5-C6-N6	-7.30	117.86	123.70
57	BB	2406	A	C5'-C4'-O4'	7.30	117.87	109.10
57	BB	2663	G	C6-C5-N7	-7.30	126.02	130.40
57	BB	2701	U	C4-C5-C6	7.30	124.08	119.70
21	AA	1082	A	N7-C8-N9	-7.30	110.15	113.80
57	BB	836	G	C8-N9-C4	-7.30	103.48	106.40
21	AA	533	A	C3'-C2'-C1'	-7.30	95.66	101.50
21	AA	1002	G	C4-C5-C6	7.30	123.18	118.80
21	AA	1107	C	N3-C4-N4	7.30	123.11	118.00
21	AA	1231	G	P-O3'-C3'	-7.30	110.94	119.70
57	BB	627	A	C2-N3-C4	7.30	114.25	110.60
57	BB	1264	A	C5-C6-N1	-7.30	114.05	117.70
57	BB	1543	G	N3-C2-N2	7.30	125.01	119.90
21	AA	108	G	C6-C5-N7	-7.30	126.02	130.40
57	BB	309	A	C2-N3-C4	-7.30	106.95	110.60
57	BB	382	A	C4-C5-N7	-7.30	107.05	110.70
57	BB	506	G	N3-C2-N2	7.30	125.01	119.90
57	BB	1139	G	O4'-C1'-N9	7.30	114.04	108.20
57	BB	1221	C	C5-C6-N1	7.30	124.65	121.00
57	BB	1625	C	N1-C2-O2	-7.30	114.52	118.90
57	BB	2003	A	N1-C6-N6	7.30	122.98	118.60
57	BB	2482	A	C8-N9-C4	-7.30	102.88	105.80
21	AA	511	C	C4-C5-C6	7.30	121.05	117.40
21	AA	1468	A	C4-C5-C6	7.30	120.65	117.00
57	BB	444	C	O4'-C1'-N1	7.30	114.04	108.20
57	BB	744	U	O4'-C1'-N1	7.30	114.04	108.20
57	BB	749	A	C4-C5-C6	7.30	120.65	117.00
57	BB	859	G	N1-C2-N3	-7.30	119.52	123.90
57	BB	2386	A	C8-N9-C4	-7.30	102.88	105.80
21	AA	537	G	N9-C4-C5	-7.30	102.48	105.40
21	AA	816	A	C5-C6-N6	-7.30	117.86	123.70
21	AA	865	A	C5-C6-N6	-7.30	117.86	123.70
21	AA	1099	G	N3-C2-N2	7.30	125.01	119.90
22	AY	10	G	C5-C6-O6	7.30	132.98	128.60
57	BB	39	G	N3-C2-N2	7.30	125.01	119.90
57	BB	272	A	O4'-C1'-N9	7.30	114.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	374	A	C6-C5-N7	-7.30	127.19	132.30
57	BB	969	G	N1-C2-N3	-7.30	119.52	123.90
57	BB	1202	G	N3-C2-N2	7.30	125.01	119.90
58	BA	78	A	C3'-C2'-C1'	-7.30	95.66	101.50
58	BA	88	C	O4'-C1'-N1	7.30	114.04	108.20
21	AA	607	A	N1-C2-N3	-7.29	125.65	129.30
21	AA	1342	C	N3-C4-N4	7.29	123.11	118.00
21	AA	1489	G	N1-C2-N3	7.29	128.28	123.90
57	BB	102	U	N1-C2-N3	-7.29	110.52	114.90
57	BB	1835	G	C8-N9-C4	-7.29	103.48	106.40
21	AA	136	C	C4'-C3'-C2'	-7.29	95.31	102.60
21	AA	276	G	N3-C4-C5	-7.29	124.95	128.60
21	AA	558	G	N1-C2-N2	-7.29	109.64	116.20
21	AA	1393	U	N3-C4-C5	-7.29	110.22	114.60
57	BB	169	G	O4'-C1'-N9	7.29	114.04	108.20
57	BB	371	A	C5-C6-N1	-7.29	114.05	117.70
57	BB	825	A	N9-C4-C5	7.29	108.72	105.80
57	BB	959	A	C5'-C4'-C3'	-7.29	104.33	116.00
57	BB	1113	U	N1-C2-O2	7.29	127.91	122.80
57	BB	1507	C	N3-C4-N4	7.29	123.11	118.00
57	BB	1967	C	N3-C4-N4	7.29	123.11	118.00
57	BB	2237	G	N1-C6-O6	7.29	124.28	119.90
21	AA	1120	C	C6-N1-C2	-7.29	117.38	120.30
57	BB	723	C	C5-C6-N1	7.29	124.65	121.00
57	BB	734	A	O4'-C1'-N9	7.29	114.03	108.20
57	BB	2340	A	O4'-C1'-N9	7.29	114.03	108.20
21	AA	282	A	C5-C6-N1	-7.29	114.06	117.70
21	AA	573	A	N1-C6-N6	7.29	122.97	118.60
23	AW	29	G	C6-C5-N7	-7.29	126.03	130.40
57	BB	1051	G	N1-C6-O6	7.29	124.27	119.90
57	BB	1535	A	C2-N3-C4	7.29	114.25	110.60
57	BB	2245	U	O4'-C1'-N1	7.29	114.03	108.20
57	BB	2875	C	O4'-C1'-N1	7.29	114.03	108.20
21	AA	100	G	N7-C8-N9	-7.29	109.46	113.10
21	AA	833	G	C8-N9-C1'	7.29	136.47	127.00
21	AA	856	C	N1-C1'-C2'	-7.29	103.98	112.00
21	AA	857	C	N3-C4-C5	-7.29	118.98	121.90
21	AA	882	C	C5-C4-N4	7.29	125.30	120.20
57	BB	1346	G	C2-N3-C4	7.29	115.55	111.90
57	BB	1549	A	C4-C5-C6	7.29	120.64	117.00
57	BB	1812	U	C2-N3-C4	-7.29	122.63	127.00
57	BB	1928	A	C5-C6-N1	-7.29	114.06	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	BC	95	TYR	CG-CD1-CE1	-7.29	115.47	121.30
57	BB	426	C	C4-C5-C6	7.29	121.04	117.40
57	BB	1552	A	C5-N7-C8	7.29	107.54	103.90
57	BB	1758	U	C5-C6-N1	7.29	126.34	122.70
21	AA	400	C	C5-C4-N4	-7.29	115.10	120.20
21	AA	1022	A	N3-C4-C5	-7.29	121.70	126.80
22	AY	28	C	C5-C4-N4	-7.29	115.10	120.20
54	BF	94	ARG	NE-CZ-NH2	-7.29	116.66	120.30
57	BB	59	U	O4'-C1'-N1	7.29	114.03	108.20
57	BB	492	A	C8-N9-C4	-7.29	102.89	105.80
21	AA	211	G	C5-C6-N1	-7.28	107.86	111.50
21	AA	711	G	O4'-C1'-N9	7.28	114.03	108.20
21	AA	948	C	O4'-C1'-N1	7.28	114.03	108.20
21	AA	1258	G	P-O5'-C5'	7.28	132.55	120.90
57	BB	777	G	C4-C5-C6	7.28	123.17	118.80
57	BB	1561	C	C6-N1-C2	-7.28	117.39	120.30
57	BB	1582	C	O4'-C1'-N1	7.28	114.03	108.20
57	BB	1835	G	C2-N3-C4	7.28	115.54	111.90
21	AA	970	C	N3-C4-N4	7.28	123.10	118.00
57	BB	2002	G	N1-C2-N3	-7.28	119.53	123.90
21	AA	245	U	O4'-C1'-N1	7.28	114.02	108.20
21	AA	385	C	C5-C4-N4	-7.28	115.10	120.20
21	AA	794	A	C2-N3-C4	-7.28	106.96	110.60
21	AA	1081	A	N3-C4-N9	7.28	133.22	127.40
21	AA	1201	A	P-O3'-C3'	7.28	128.44	119.70
23	AW	34	G	C4-C5-C6	7.28	123.17	118.80
57	BB	1164	C	O4'-C1'-N1	7.28	114.03	108.20
57	BB	1495	A	O4'-C1'-N9	7.28	114.02	108.20
57	BB	1839	G	N3-C4-N9	-7.28	121.63	126.00
26	AV	75	C	O4'-C1'-N1	7.28	114.02	108.20
57	BB	2481	G	C5-N7-C8	7.28	107.94	104.30
21	AA	456	A	C5-C6-N1	-7.28	114.06	117.70
22	AY	20	G	N3-C2-N2	7.28	124.99	119.90
57	BB	1415	U	C6-N1-C2	7.28	125.37	121.00
57	BB	2656	U	N3-C4-C5	-7.28	110.23	114.60
57	BB	2790	U	N3-C4-C5	-7.28	110.23	114.60
21	AA	792	A	O4'-C1'-C2'	-7.28	98.53	105.80
57	BB	1168	G	N3-C4-C5	7.28	132.24	128.60
57	BB	1646	C	N1-C2-O2	-7.28	114.53	118.90
57	BB	1949	G	C6-N1-C2	-7.28	120.73	125.10
57	BB	2352	A	O4'-C1'-N9	7.28	114.02	108.20
57	BB	2648	G	N1-C2-N2	7.28	122.75	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	424	G	N3-C2-N2	7.27	124.99	119.90
21	AA	792	A	P-O5'-C5'	-7.27	109.26	120.90
21	AA	854	U	N3-C4-O4	7.27	124.49	119.40
57	BB	2204	G	C5-C6-O6	-7.27	124.24	128.60
21	AA	177	G	C2-N3-C4	7.27	115.54	111.90
21	AA	941	G	C6-C5-N7	-7.27	126.04	130.40
21	AA	1256	A	N1-C6-N6	7.27	122.96	118.60
21	AA	1455	G	C2-N3-C4	7.27	115.54	111.90
21	AA	1466	C	N1-C2-O2	-7.27	114.54	118.90
57	BB	221	A	P-O3'-C3'	7.27	128.43	119.70
57	BB	1314	C	N1-C2-O2	-7.27	114.54	118.90
57	BB	1643	G	C8-N9-C4	-7.27	103.49	106.40
57	BB	421	C	N3-C4-N4	7.27	123.09	118.00
57	BB	1234	U	C5-C4-O4	-7.27	121.54	125.90
57	BB	1873	G	C6-C5-N7	-7.27	126.04	130.40
57	BB	2613	U	C5-C6-N1	7.27	126.33	122.70
21	AA	96	U	O4'-C1'-N1	7.27	114.02	108.20
26	AV	74	C	C2-N3-C4	-7.27	116.27	119.90
57	BB	264	C	C5-C4-N4	-7.27	115.11	120.20
57	BB	1024	G	C3'-C2'-C1'	-7.27	95.69	101.50
57	BB	2151	U	N3-C4-O4	7.27	124.49	119.40
57	BB	2321	U	C2-N1-C1'	7.27	126.42	117.70
57	BB	2771	C	O4'-C1'-N1	7.27	114.02	108.20
21	AA	277	C	N3-C2-O2	-7.27	116.81	121.90
21	AA	588	G	N7-C8-N9	7.27	116.73	113.10
57	BB	141	G	P-O5'-C5'	7.27	132.53	120.90
57	BB	154	U	C4'-C3'-C2'	-7.27	95.33	102.60
57	BB	360	U	N3-C4-C5	-7.27	110.24	114.60
57	BB	798	G	C5-C6-O6	-7.27	124.24	128.60
57	BB	1001	A	C5-C6-N6	-7.27	117.89	123.70
57	BB	1801	A	C5-C6-N6	-7.27	117.89	123.70
57	BB	1853	A	N7-C8-N9	-7.27	110.17	113.80
21	AA	441	A	N9-C4-C5	7.27	108.71	105.80
57	BB	6	A	N1-C2-N3	-7.27	125.67	129.30
57	BB	311	A	C4-C5-N7	7.27	114.33	110.70
57	BB	912	C	P-O3'-C3'	-7.27	110.98	119.70
57	BB	1426	G	N7-C8-N9	-7.27	109.47	113.10
21	AA	842	U	O4'-C1'-N1	7.26	114.01	108.20
35	BP	81	ASP	CB-CG-OD1	-7.26	111.76	118.30
57	BB	383	C	O4'-C1'-N1	7.26	114.01	108.20
57	BB	653	U	C2-N1-C1'	7.26	126.42	117.70
57	BB	1419	A	C4'-C3'-C2'	7.26	109.86	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2329	U	N1-C2-N3	-7.26	110.54	114.90
57	BB	2609	U	C2-N3-C4	-7.26	122.64	127.00
18	AG	69	ARG	NE-CZ-NH2	-7.26	116.67	120.30
57	BB	1470	A	N1-C2-N3	7.26	132.93	129.30
57	BB	2069	G	C6-C5-N7	-7.26	126.04	130.40
57	BB	2602	A	C4-C5-N7	-7.26	107.07	110.70
57	BB	2837	A	C5-C6-N6	-7.26	117.89	123.70
21	AA	1440	U	O4'-C1'-N1	7.26	114.01	108.20
43	BX	37	PHE	CB-CG-CD1	7.26	125.88	120.80
57	BB	93	G	C5-C6-O6	-7.26	124.24	128.60
57	BB	345	A	C5-N7-C8	7.26	107.53	103.90
57	BB	818	G	N1-C2-N3	-7.26	119.54	123.90
57	BB	2268	A	N1-C2-N3	7.26	132.93	129.30
21	AA	854	U	O4'-C1'-N1	7.26	114.01	108.20
57	BB	63	A	C1'-O4'-C4'	-7.26	104.09	109.90
57	BB	76	C	N3-C2-O2	7.26	126.98	121.90
57	BB	87	U	C5-C4-O4	-7.26	121.54	125.90
57	BB	187	G	C5-C6-N1	-7.26	107.87	111.50
57	BB	403	U	N1-C2-N3	7.26	119.26	114.90
57	BB	2010	G	C4-C5-N7	-7.26	107.90	110.80
57	BB	2307	G	C5-C6-O6	-7.26	124.25	128.60
57	BB	2498	C	O4'-C1'-N1	7.26	114.01	108.20
26	AV	75	C	C3'-C2'-C1'	7.26	107.31	101.50
57	BB	237	C	O4'-C1'-N1	7.26	114.01	108.20
57	BB	2874	C	C2-N3-C4	7.26	123.53	119.90
21	AA	1141	C	N3-C4-C5	-7.26	119.00	121.90
23	AW	4	C	N3-C4-N4	7.26	123.08	118.00
36	BQ	24	TYR	CG-CD2-CE2	-7.26	115.49	121.30
57	BB	381	G	N1-C6-O6	7.26	124.25	119.90
57	BB	504	A	O4'-C1'-N9	7.26	114.00	108.20
57	BB	687	C	C5-C6-N1	7.26	124.63	121.00
57	BB	1364	G	O4'-C1'-N9	7.26	114.00	108.20
57	BB	1701	A	C6-C5-N7	-7.26	127.22	132.30
57	BB	2298	A	C4-C5-C6	7.26	120.63	117.00
57	BB	2613	U	N1-C2-O2	7.26	127.88	122.80
57	BB	2800	A	C6-N1-C2	-7.26	114.25	118.60
21	AA	521	G	C5-C6-N1	-7.25	107.87	111.50
57	BB	794	A	C5-C6-N6	-7.25	117.90	123.70
9	AR	62	ARG	NE-CZ-NH2	-7.25	116.67	120.30
21	AA	537	G	C4-C5-N7	7.25	113.70	110.80
23	AW	22	G	C4-C5-C6	7.25	123.15	118.80
23	AW	63	G	C8-N9-C1'	-7.25	117.57	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	398	C	P-O3'-C3'	7.25	128.41	119.70
57	BB	1351	C	C4-C5-C6	7.25	121.03	117.40
57	BB	1563	U	C2-N3-C4	7.25	131.35	127.00
57	BB	2479	U	C5-C6-N1	-7.25	119.07	122.70
57	BB	2522	U	C4-C5-C6	7.25	124.05	119.70
57	BB	2731	G	C5-C6-O6	-7.25	124.25	128.60
57	BB	2822	G	N1-C6-O6	7.25	124.25	119.90
21	AA	69	G	C4-C5-C6	7.25	123.15	118.80
21	AA	544	G	N1-C6-O6	7.25	124.25	119.90
21	AA	715	A	C5-C6-N1	-7.25	114.07	117.70
21	AA	853	C	O4'-C1'-N1	7.25	114.00	108.20
21	AA	1289	A	C4-C5-N7	-7.25	107.07	110.70
21	AA	1363	A	C5-C6-N6	-7.25	117.90	123.70
57	BB	1548	A	C4-C5-C6	7.25	120.62	117.00
57	BB	1674	G	N3-C2-N2	7.25	124.97	119.90
57	BB	2033	A	C6-C5-N7	-7.25	127.22	132.30
57	BB	2588	G	N9-C4-C5	-7.25	102.50	105.40
22	AY	67	A	C5-C6-N6	-7.25	117.90	123.70
57	BB	1750	G	N1-C6-O6	7.25	124.25	119.90
21	AA	267	C	C2-N3-C4	7.25	123.52	119.90
21	AA	374	A	P-O5'-C5'	7.25	132.50	120.90
21	AA	459	A	N1-C2-N3	7.25	132.93	129.30
21	AA	540	G	O4'-C1'-N9	7.25	114.00	108.20
21	AA	956	U	N3-C2-O2	7.25	127.28	122.20
21	AA	1088	G	N1-C2-N2	7.25	122.72	116.20
23	AW	66	U	O4'-C1'-N1	7.25	114.00	108.20
57	BB	649	G	N1-C2-N3	-7.25	119.55	123.90
57	BB	1287	A	C2-N3-C4	-7.25	106.98	110.60
57	BB	1537	G	N1-C6-O6	7.25	124.25	119.90
57	BB	1726	C	C6-N1-C2	-7.25	117.40	120.30
57	BB	2730	C	P-O3'-C3'	-7.25	111.00	119.70
21	AA	282	A	C4-C5-C6	7.25	120.62	117.00
21	AA	461	A	O4'-C1'-N9	7.25	114.00	108.20
21	AA	549	C	C6-N1-C2	-7.25	117.40	120.30
21	AA	557	G	O4'-C1'-N9	7.25	114.00	108.20
57	BB	486	C	C5-C6-N1	7.25	124.62	121.00
57	BB	1116	G	N3-C2-N2	7.25	124.97	119.90
57	BB	1387	A	C2-N3-C4	-7.25	106.98	110.60
57	BB	2185	U	P-O3'-C3'	-7.25	111.00	119.70
21	AA	300	A	C4-C5-C6	7.25	120.62	117.00
23	AW	75	C	P-O3'-C3'	-7.25	111.01	119.70
57	BB	2518	A	C4-C5-C6	7.25	120.62	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1027	C	N3-C4-C5	-7.24	119.00	121.90
21	AA	1227	A	C4-C5-C6	7.24	120.62	117.00
22	AY	29	A	C5'-C4'-C3'	-7.24	104.41	116.00
23	AW	70	G	N3-C4-N9	-7.24	121.65	126.00
57	BB	190	A	N7-C8-N9	-7.24	110.18	113.80
57	BB	410	G	N1-C6-O6	7.24	124.25	119.90
57	BB	1136	G	C5-C6-N1	-7.24	107.88	111.50
57	BB	1168	G	N1-C6-O6	7.24	124.25	119.90
57	BB	2074	U	O4'-C1'-N1	7.24	114.00	108.20
58	BA	40	U	P-O3'-C3'	7.24	128.39	119.70
57	BB	1583	A	C6-N1-C2	7.24	122.94	118.60
21	AA	1010	U	O4'-C1'-N1	7.24	113.99	108.20
21	AA	1143	G	C3'-C2'-C1'	-7.24	95.71	101.50
57	BB	1866	A	O4'-C1'-N9	7.24	113.99	108.20
57	BB	1872	A	C5-C6-N6	-7.24	117.91	123.70
57	BB	1894	C	O4'-C1'-N1	7.24	113.99	108.20
58	BA	98	G	N3-C2-N2	7.24	124.97	119.90
58	BA	107	G	N1-C6-O6	7.24	124.24	119.90
21	AA	118	U	O3'-P-O5'	-7.24	90.25	104.00
21	AA	631	C	C6-N1-C2	-7.24	117.41	120.30
21	AA	1303	C	C5-C6-N1	7.24	124.62	121.00
21	AA	1482	G	C8-N9-C4	7.24	109.30	106.40
57	BB	281	C	C5-C4-N4	-7.24	115.13	120.20
57	BB	436	C	C5-C4-N4	-7.24	115.13	120.20
57	BB	987	C	C4-C5-C6	7.24	121.02	117.40
57	BB	2200	C	N1-C2-O2	-7.24	114.56	118.90
57	BB	2410	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	2606	C	C2-N3-C4	7.24	123.52	119.90
57	BB	2658	C	P-O3'-C3'	-7.24	111.01	119.70
57	BB	2723	C	N1-C2-N3	7.24	124.27	119.20
58	BA	54	G	C5-C6-O6	-7.24	124.26	128.60
21	AA	128	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	678	C	C6-N1-C2	-7.24	117.41	120.30
57	BB	1901	A	N1-C2-N3	-7.24	125.68	129.30
57	BB	2855	C	C6-N1-C2	-7.24	117.41	120.30
21	AA	86	G	N1-C2-N3	-7.24	119.56	123.90
21	AA	199	A	C8-N9-C4	7.24	108.69	105.80
21	AA	357	G	C8-N9-C4	-7.24	103.51	106.40
21	AA	364	A	N1-C2-N3	7.24	132.92	129.30
21	AA	1191	A	C5-C6-N1	-7.24	114.08	117.70
21	AA	1230	C	C3'-C2'-C1'	-7.24	95.71	101.50
21	AA	1258	G	C2-N3-C4	7.24	115.52	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1341	U	O4'-C1'-N1	7.24	113.99	108.20
21	AA	1370	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	312	G	C4-C5-N7	-7.24	107.91	110.80
57	BB	343	C	N3-C4-C5	-7.24	119.01	121.90
57	BB	1728	C	C5-C6-N1	7.24	124.62	121.00
58	BA	9	G	C2-N3-C4	-7.24	108.28	111.90
58	BA	12	C	P-O5'-C5'	7.24	132.48	120.90
57	BB	70	G	N3-C4-C5	-7.23	124.98	128.60
57	BB	2597	G	C4-C5-C6	7.23	123.14	118.80
21	AA	678	U	C5-C6-N1	7.23	126.32	122.70
57	BB	745	G	C2-N3-C4	-7.23	108.28	111.90
57	BB	1243	C	N3-C4-N4	7.23	123.06	118.00
21	AA	167	A	C1'-O4'-C4'	-7.23	104.12	109.90
21	AA	1094	G	N3-C2-N2	7.23	124.96	119.90
21	AA	1169	A	C5-C6-N1	-7.23	114.08	117.70
21	AA	1493	A	C6-C5-N7	-7.23	127.24	132.30
23	AW	26	A	N1-C2-N3	7.23	132.91	129.30
57	BB	649	G	C6-C5-N7	-7.23	126.06	130.40
57	BB	1340	U	C2-N1-C1'	7.23	126.38	117.70
57	BB	1659	G	C4-C5-N7	-7.23	107.91	110.80
57	BB	1984	G	N3-C4-C5	7.23	132.22	128.60
57	BB	2295	C	N3-C4-C5	-7.23	119.01	121.90
21	AA	404	G	C5-C6-N1	7.23	115.11	111.50
57	BB	178	G	N1-C2-N3	-7.23	119.56	123.90
57	BB	948	C	N3-C4-N4	7.23	123.06	118.00
57	BB	1660	G	C5-C6-N1	-7.23	107.89	111.50
57	BB	2250	G	N3-C2-N2	7.23	124.96	119.90
21	AA	25	C	N3-C4-N4	7.23	123.06	118.00
21	AA	55	A	C4-C5-C6	7.23	120.61	117.00
21	AA	305	G	C8-N9-C4	-7.23	103.51	106.40
21	AA	589	U	N1-C2-O2	-7.23	117.74	122.80
57	BB	14	A	C5-C6-N6	-7.23	117.92	123.70
57	BB	831	G	C4-C5-N7	-7.23	107.91	110.80
57	BB	2341	G	C5-C6-O6	-7.23	124.26	128.60
21	AA	1289	A	N7-C8-N9	-7.23	110.19	113.80
57	BB	1308	A	N1-C2-N3	-7.23	125.69	129.30
57	BB	1383	A	N3-C4-N9	7.23	133.18	127.40
21	AA	67	C	N3-C4-N4	7.22	123.06	118.00
21	AA	1524	C	N3-C4-C5	-7.22	119.01	121.90
23	AW	5	G	O4'-C1'-N9	7.22	113.98	108.20
29	BJ	27	ARG	NE-CZ-NH1	7.22	123.91	120.30
57	BB	107	G	C4'-C3'-C2'	-7.22	95.38	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	496	G	C5-N7-C8	7.22	107.91	104.30
57	BB	636	G	C4-C5-N7	7.22	113.69	110.80
57	BB	842	U	C6-N1-C2	-7.22	116.67	121.00
57	BB	1010	A	C6-N1-C2	7.22	122.94	118.60
57	BB	1642	G	C5-C6-O6	-7.22	124.27	128.60
57	BB	1774	C	N3-C4-C5	7.22	124.79	121.90
57	BB	2190	G	C4'-C3'-C2'	-7.22	95.38	102.60
57	BB	2539	C	C6-N1-C2	7.22	123.19	120.30
57	BB	2556	C	N3-C4-N4	7.22	123.06	118.00
57	BB	2613	U	C2-N3-C4	7.22	131.34	127.00
21	AA	1410	A	N3-C4-C5	-7.22	121.74	126.80
57	BB	188	G	C4-C5-N7	-7.22	107.91	110.80
57	BB	1275	A	N3-C4-C5	-7.22	121.74	126.80
57	BB	2566	A	C5-C6-N1	-7.22	114.09	117.70
58	BA	93	C	N3-C4-C5	-7.22	119.01	121.90
57	BB	383	C	P-O3'-C3'	-7.22	111.03	119.70
57	BB	879	G	N3-C4-C5	-7.22	124.99	128.60
57	BB	974	G	N1-C2-N3	-7.22	119.57	123.90
57	BB	1072	C	C2-N3-C4	7.22	123.51	119.90
21	AA	103	U	C4-C5-C6	-7.22	115.37	119.70
21	AA	954	G	N9-C4-C5	-7.22	102.51	105.40
21	AA	1425	U	O4'-C1'-N1	7.22	113.97	108.20
21	AA	1433	A	N7-C8-N9	-7.22	110.19	113.80
22	AY	67	A	C4-C5-C6	7.22	120.61	117.00
57	BB	204	A	N1-C6-N6	7.22	122.93	118.60
57	BB	1167	C	O4'-C1'-N1	7.22	113.97	108.20
57	BB	1216	G	C5-C6-N1	-7.22	107.89	111.50
57	BB	1663	G	O4'-C1'-N9	7.22	113.97	108.20
57	BB	1690	A	C6-C5-N7	-7.22	127.25	132.30
57	BB	2432	A	C4-C5-N7	-7.22	107.09	110.70
57	BB	2500	U	N1-C2-N3	-7.22	110.57	114.90
21	AA	1215	G	C5-N7-C8	7.22	107.91	104.30
21	AA	1260	G	C4-C5-N7	-7.22	107.91	110.80
57	BB	1478	G	C6-C5-N7	-7.22	126.07	130.40
57	BB	2237	G	C5'-C4'-O4'	7.22	117.76	109.10
57	BB	2636	C	C3'-C2'-C1'	7.22	107.28	101.50
21	AA	1349	A	N1-C6-N6	7.22	122.93	118.60
57	BB	1038	G	O4'-C1'-N9	7.22	113.97	108.20
57	BB	2202	U	N3-C4-C5	-7.22	110.27	114.60
57	BB	2476	A	N1-C6-N6	7.22	122.93	118.60
21	AA	1155	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	1391	U	C1'-O4'-C4'	7.21	115.67	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	25	C	C4-C5-C6	7.21	121.01	117.40
57	BB	1871	A	C6-C5-N7	-7.21	127.25	132.30
57	BB	2295	C	C6-N1-C2	7.21	123.19	120.30
57	BB	2598	A	P-O5'-C5'	-7.21	109.36	120.90
58	BA	3	C	N3-C4-N4	7.21	123.05	118.00
58	BA	30	C	C6-N1-C2	-7.21	117.41	120.30
21	AA	478	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	1006	G	C4-C5-C6	7.21	123.13	118.80
23	AW	13	C	P-O3'-C3'	7.21	128.36	119.70
57	BB	2057	G	N3-C4-C5	-7.21	124.99	128.60
58	BA	37	C	O4'-C1'-N1	7.21	113.97	108.20
57	BB	12	U	C4-C5-C6	7.21	124.03	119.70
57	BB	23	G	C4-C5-N7	-7.21	107.92	110.80
57	BB	1019	U	O4'-C1'-N1	7.21	113.97	108.20
57	BB	2325	G	N1-C2-N3	-7.21	119.57	123.90
57	BB	2379	G	C4-C5-N7	7.21	113.68	110.80
57	BB	2648	G	C5-N7-C8	-7.21	100.69	104.30
57	BB	2879	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	661	G	O4'-C1'-N9	7.21	113.97	108.20
57	BB	1078	U	C5-C4-O4	7.21	130.23	125.90
57	BB	1601	G	N7-C8-N9	-7.21	109.50	113.10
21	AA	51	A	C4-C5-C6	7.21	120.60	117.00
21	AA	261	U	O4'-C1'-N1	7.21	113.97	108.20
21	AA	887	G	O4'-C1'-N9	7.21	113.97	108.20
21	AA	1330	U	C5-C4-O4	-7.21	121.58	125.90
22	AY	25	C	N1-C2-O2	-7.21	114.58	118.90
57	BB	196	A	C6-N1-C2	7.21	122.92	118.60
57	BB	322	A	C4-C5-C6	7.21	120.60	117.00
57	BB	1715	G	C5-C6-O6	-7.21	124.28	128.60
57	BB	1841	U	O4'-C1'-N1	7.21	113.97	108.20
57	BB	2631	G	C4-C5-N7	7.21	113.68	110.80
21	AA	253	A	C5-C6-N1	-7.21	114.10	117.70
21	AA	1293	C	C5'-C4'-C3'	-7.21	104.47	116.00
21	AA	1442	G	N1-C6-O6	7.21	124.22	119.90
57	BB	378	C	P-O3'-C3'	-7.21	111.05	119.70
57	BB	465	G	N3-C4-N9	7.21	130.32	126.00
57	BB	848	C	C4-C5-C6	7.21	121.00	117.40
57	BB	2502	G	C5-C6-O6	-7.21	124.28	128.60
57	BB	2717	C	C2-N1-C1'	7.21	126.73	118.80
21	AA	109	A	C4-C5-C6	7.21	120.60	117.00
44	BY	61	ALA	N-CA-CB	7.21	120.19	110.10
57	BB	423	A	C5-C6-N6	-7.21	117.94	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2883	A	C4-C5-N7	-7.21	107.10	110.70
21	AA	581	G	C5-C6-O6	-7.20	124.28	128.60
21	AA	817	C	C5-C6-N1	-7.20	117.40	121.00
21	AA	1093	A	C5-C6-N6	-7.20	117.94	123.70
57	BB	557	C	C2-N3-C4	7.20	123.50	119.90
57	BB	2150	C	N1-C1'-C2'	-7.20	104.08	112.00
57	BB	2592	G	N1-C6-O6	7.20	124.22	119.90
21	AA	374	A	C5-C6-N1	-7.20	114.10	117.70
21	AA	965	U	N1-C2-O2	7.20	127.84	122.80
21	AA	1347	G	C6-N1-C2	7.20	129.42	125.10
21	AA	1419	G	N9-C4-C5	7.20	108.28	105.40
57	BB	237	C	N3-C4-N4	7.20	123.04	118.00
57	BB	2243	U	O4'-C1'-N1	7.20	113.96	108.20
57	BB	2278	A	C5-C6-N6	-7.20	117.94	123.70
58	BA	109	A	C8-N9-C4	7.20	108.68	105.80
21	AA	801	U	O4'-C1'-N1	7.20	113.96	108.20
21	AA	1098	C	C2-N3-C4	7.20	123.50	119.90
21	AA	1514	G	O4'-C1'-N9	7.20	113.96	108.20
57	BB	572	A	P-O3'-C3'	7.20	128.34	119.70
57	BB	995	C	N3-C4-N4	7.20	123.04	118.00
57	BB	1763	G	N3-C2-N2	7.20	124.94	119.90
57	BB	1947	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	2824	C	N3-C2-O2	7.20	126.94	121.90
57	BB	794	A	C4-C5-N7	-7.20	107.10	110.70
57	BB	2369	A	C4-C5-N7	-7.20	107.10	110.70
57	BB	2475	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	2509	G	C8-N9-C4	7.20	109.28	106.40
57	BB	2802	G	C4-N9-C1'	-7.20	117.14	126.50
21	AA	253	A	N1-C6-N6	7.20	122.92	118.60
57	BB	711	G	C5-C6-O6	-7.20	124.28	128.60
57	BB	1729	U	O4'-C1'-N1	7.20	113.96	108.20
21	AA	302	G	C6-N1-C2	7.20	129.42	125.10
21	AA	896	C	C5-C4-N4	-7.20	115.16	120.20
21	AA	1364	U	C4-C5-C6	7.20	124.02	119.70
45	BC	142	ASN	N-CA-CB	7.20	123.55	110.60
57	BB	35	G	C4-C5-C6	7.20	123.12	118.80
57	BB	228	C	C5-C6-N1	-7.20	117.40	121.00
57	BB	289	G	N9-C4-C5	-7.20	102.52	105.40
57	BB	356	G	C6-C5-N7	-7.20	126.08	130.40
57	BB	482	A	N1-C6-N6	7.20	122.92	118.60
57	BB	680	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	1555	G	N3-C4-C5	-7.20	125.00	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2333	A	C5-C6-N1	-7.20	114.10	117.70
57	BB	2424	C	C4-C5-C6	7.20	121.00	117.40
57	BB	2688	G	N3-C2-N2	7.20	124.94	119.90
57	BB	2891	U	N3-C4-C5	-7.20	110.28	114.60
21	AA	329	A	C5-N7-C8	-7.19	100.30	103.90
21	AA	1016	A	C5-N7-C8	7.19	107.50	103.90
57	BB	403	U	P-O3'-C3'	7.19	128.33	119.70
57	BB	1182	G	N1-C6-O6	7.19	124.22	119.90
57	BB	2572	A	N9-C4-C5	-7.19	102.92	105.80
21	AA	414	A	P-O3'-C3'	7.19	128.33	119.70
57	BB	386	G	C4-C5-C6	7.19	123.11	118.80
57	BB	1038	G	C4-C5-C6	7.19	123.12	118.80
57	BB	1281	G	N1-C2-N3	-7.19	119.58	123.90
57	BB	2226	C	P-O5'-C5'	7.19	132.41	120.90
21	AA	236	A	C8-N9-C4	-7.19	102.92	105.80
21	AA	857	C	C6-N1-C2	7.19	123.18	120.30
57	BB	574	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	633	A	C4-C5-C6	7.19	120.59	117.00
57	BB	905	A	C5-C6-N1	-7.19	114.11	117.70
57	BB	1355	G	C5-C6-O6	-7.19	124.29	128.60
57	BB	2109	U	C4-C5-C6	7.19	124.01	119.70
57	BB	2171	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	2487	G	C8-N9-C4	-7.19	103.52	106.40
21	AA	1082	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	1508	A	N9-C4-C5	7.19	108.68	105.80
57	BB	1388	G	C4-C5-C6	7.19	123.11	118.80
57	BB	2362	C	O4'-C1'-N1	7.19	113.95	108.20
21	AA	846	G	N3-C2-N2	7.19	124.93	119.90
21	AA	1213	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	1363	A	C5'-C4'-O4'	7.19	117.73	109.10
21	AA	1454	G	P-O5'-C5'	7.19	132.40	120.90
57	BB	1077	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	1579	A	C1'-O4'-C4'	-7.19	104.15	109.90
57	BB	1863	G	O4'-C1'-N9	7.19	113.95	108.20
57	BB	2116	G	C6-C5-N7	-7.19	126.09	130.40
57	BB	2645	G	N1-C2-N3	-7.19	119.59	123.90
57	BB	2823	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	524	G	C4-C5-N7	-7.19	107.93	110.80
21	AA	1026	G	O4'-C1'-N9	7.19	113.95	108.20
57	BB	131	A	C8-N9-C4	-7.19	102.93	105.80
21	AA	200	G	C2-N3-C4	7.18	115.49	111.90
21	AA	911	U	C5-C4-O4	-7.18	121.59	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	165	A	N9-C4-C5	7.18	108.67	105.80
57	BB	200	U	N3-C4-C5	-7.18	110.29	114.60
57	BB	643	A	C6-N1-C2	7.18	122.91	118.60
57	BB	708	G	C5-N7-C8	7.18	107.89	104.30
57	BB	1177	G	O4'-C1'-N9	7.18	113.95	108.20
57	BB	1807	G	O4'-C1'-N9	7.18	113.95	108.20
57	BB	303	G	C5-C6-N1	-7.18	107.91	111.50
57	BB	408	G	C6-N1-C2	7.18	129.41	125.10
57	BB	1547	C	N3-C4-C5	-7.18	119.03	121.90
57	BB	2327	A	N7-C8-N9	7.18	117.39	113.80
57	BB	2388	A	C6-C5-N7	-7.18	127.27	132.30
57	BB	2553	G	O4'-C1'-N9	7.18	113.94	108.20
57	BB	962	G	C8-N9-C4	7.18	109.27	106.40
57	BB	1319	C	C2-N3-C4	7.18	123.49	119.90
57	BB	1457	U	O4'-C1'-N1	7.18	113.94	108.20
57	BB	2751	G	N9-C4-C5	7.18	108.27	105.40
21	AA	241	G	C4-C5-C6	7.18	123.11	118.80
23	AW	9	A	C4-C5-C6	7.18	120.59	117.00
23	AW	31	A	N3-C4-N9	7.18	133.14	127.40
57	BB	1621	U	P-O3'-C3'	7.18	128.32	119.70
57	BB	1668	A	C8-N9-C4	7.18	108.67	105.80
57	BB	2635	A	O4'-C1'-N9	7.18	113.94	108.20
21	AA	55	A	C5-C6-N1	-7.18	114.11	117.70
57	BB	2696	U	O4'-C1'-N1	7.18	113.94	108.20
8	AQ	40	THR	CA-CB-CG2	-7.18	102.35	112.40
21	AA	533	A	C6-C5-N7	-7.18	127.28	132.30
57	BB	764	A	O4'-C1'-N9	7.18	113.94	108.20
57	BB	1907	G	C5'-C4'-C3'	-7.18	104.52	116.00
57	BB	1934	C	C5-C4-N4	-7.18	115.18	120.20
57	BB	2624	G	C5-C6-O6	-7.18	124.29	128.60
57	BB	2784	U	O4'-C1'-N1	7.18	113.94	108.20
21	AA	108	G	N3-C4-C5	-7.17	125.01	128.60
21	AA	789	U	O4'-C4'-C3'	-7.17	96.83	104.00
57	BB	205	G	C6-N1-C2	7.17	129.41	125.10
57	BB	281	C	P-O3'-C3'	7.17	128.31	119.70
57	BB	591	U	O4'-C1'-N1	7.17	113.94	108.20
57	BB	1171	G	C6-N1-C2	7.17	129.41	125.10
57	BB	1292	G	C4-C5-N7	7.17	113.67	110.80
21	AA	628	G	C5-C6-O6	-7.17	124.30	128.60
21	AA	1241	G	C5-C6-O6	-7.17	124.30	128.60
21	AA	1258	G	C8-N9-C4	-7.17	103.53	106.40
57	BB	266	G	C8-N9-C4	7.17	109.27	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1281	G	C4-C5-C6	7.17	123.10	118.80
57	BB	1324	G	C5-C6-N1	-7.17	107.91	111.50
13	AB	21	TYR	CB-CG-CD1	-7.17	116.70	121.00
21	AA	423	G	C5-C6-N1	-7.17	107.91	111.50
21	AA	684	U	N3-C4-O4	7.17	124.42	119.40
21	AA	844	G	C4-C5-C6	7.17	123.10	118.80
23	AW	12	U	N3-C4-C5	-7.17	110.30	114.60
57	BB	35	G	C4-C5-N7	-7.17	107.93	110.80
57	BB	976	G	C5-C6-O6	-7.17	124.30	128.60
57	BB	1230	A	C5-C6-N6	-7.17	117.96	123.70
57	BB	2115	G	C4-N9-C1'	7.17	135.82	126.50
57	BB	2558	C	N3-C4-N4	7.17	123.02	118.00
21	AA	160	A	C5-C6-N6	-7.17	117.96	123.70
26	AV	11	A	C4-C5-C6	7.17	120.58	117.00
57	BB	405	U	N3-C4-C5	7.17	118.90	114.60
21	AA	218	U	C5-C6-N1	7.17	126.28	122.70
21	AA	507	C	C5-C4-N4	-7.17	115.18	120.20
21	AA	656	G	N9-C4-C5	7.17	108.27	105.40
21	AA	971	G	N1-C2-N3	-7.17	119.60	123.90
21	AA	1007	U	C6-N1-C2	7.17	125.30	121.00
21	AA	1285	A	C2-N3-C4	-7.17	107.02	110.60
25	AZ	91	MET	CG-SD-CE	-7.17	88.73	100.20
26	AV	72	A	C2-N3-C4	7.17	114.18	110.60
57	BB	282	A	O4'-C4'-C3'	-7.17	96.83	104.00
57	BB	979	A	C4-C5-C6	7.17	120.58	117.00
57	BB	1344	U	C5-C6-N1	-7.17	119.12	122.70
57	BB	1692	U	O4'-C1'-N1	7.17	113.93	108.20
57	BB	2025	C	C2-N3-C4	7.17	123.48	119.90
57	BB	2073	C	C1'-O4'-C4'	7.17	115.64	109.90
58	BA	98	G	C2-N3-C4	7.17	115.48	111.90
21	AA	216	U	O4'-C1'-N1	7.17	113.93	108.20
21	AA	1350	A	C5-C6-N6	-7.17	117.97	123.70
21	AA	1478	U	C2-N3-C4	-7.17	122.70	127.00
22	AY	27	C	N3-C4-C5	-7.17	119.03	121.90
57	BB	241	A	C5-C6-N6	-7.17	117.97	123.70
57	BB	997	G	N3-C4-C5	-7.17	125.02	128.60
57	BB	1300	G	C1'-O4'-C4'	-7.17	104.17	109.90
57	BB	2410	G	O4'-C1'-N9	7.17	113.93	108.20
58	BA	55	U	N3-C4-O4	7.17	124.42	119.40
23	AW	17	C	C6-N1-C1'	-7.17	112.20	120.80
26	AV	50	U	C2-N3-C4	-7.17	122.70	127.00
19	AH	64	TYR	CG-CD1-CE1	7.16	127.03	121.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	819	A	C5-N7-C8	7.16	107.48	103.90
21	AA	1285	A	N7-C8-N9	7.16	117.38	113.80
21	AA	1335	U	N3-C4-C5	-7.16	110.30	114.60
57	BB	1883	U	N1-C2-N3	-7.16	110.60	114.90
57	BB	1974	C	O4'-C1'-N1	7.16	113.93	108.20
57	BB	2209	G	C8-N9-C4	-7.16	103.53	106.40
57	BB	2222	C	O4'-C1'-N1	7.16	113.93	108.20
21	AA	1093	A	C4-C5-C6	7.16	120.58	117.00
21	AA	1446	A	P-O5'-C5'	-7.16	109.44	120.90
57	BB	1537	G	C2-N3-C4	7.16	115.48	111.90
21	AA	145	G	N3-C2-N2	7.16	124.91	119.90
21	AA	1019	A	C2-N3-C4	-7.16	107.02	110.60
21	AA	1299	A	N1-C6-N6	7.16	122.90	118.60
21	AA	1480	A	C8-N9-C4	-7.16	102.94	105.80
32	BM	44	ARG	NE-CZ-NH2	7.16	123.88	120.30
57	BB	426	C	N3-C4-C5	-7.16	119.04	121.90
57	BB	742	A	C8-N9-C4	-7.16	102.94	105.80
57	BB	773	U	C6-N1-C2	-7.16	116.70	121.00
57	BB	1465	G	C6-C5-N7	-7.16	126.10	130.40
57	BB	2071	A	O4'-C1'-N9	7.16	113.93	108.20
57	BB	2902	C	N3-C4-C5	-7.16	119.04	121.90
21	AA	370	C	N3-C4-C5	-7.16	119.04	121.90
21	AA	962	C	C6-N1-C2	-7.16	117.44	120.30
36	BQ	29	ARG	NE-CZ-NH1	-7.16	116.72	120.30
57	BB	226	A	C5-C6-N1	-7.16	114.12	117.70
57	BB	838	C	N1-C2-N3	-7.16	114.19	119.20
57	BB	1006	C	O4'-C4'-C3'	-7.16	96.84	104.00
57	BB	1361	G	C6-C5-N7	-7.16	126.11	130.40
57	BB	1667	G	C4-C5-C6	7.16	123.09	118.80
57	BB	2530	A	C5-C6-N1	-7.16	114.12	117.70
57	BB	2727	A	C4-C5-C6	7.16	120.58	117.00
21	AA	1049	U	N1-C2-N3	-7.16	110.61	114.90
55	BG	68	ARG	NE-CZ-NH1	7.16	123.88	120.30
57	BB	662	G	N9-C4-C5	-7.16	102.54	105.40
57	BB	1434	A	C4-C5-C6	7.16	120.58	117.00
57	BB	1727	C	O4'-C1'-N1	7.16	113.93	108.20
57	BB	2255	G	C4-C5-C6	7.16	123.09	118.80
21	AA	786	G	N1-C6-O6	7.16	124.19	119.90
22	AY	49	C	N1-C2-O2	-7.16	114.61	118.90
49	B2	19	ARG	NH1-CZ-NH2	-7.16	111.53	119.40
56	BH	102	ALA	N-CA-CB	7.16	120.12	110.10
57	BB	531	C	N3-C4-C5	-7.16	119.04	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	533	G	N3-C2-N2	7.16	124.91	119.90
57	BB	1116	G	N1-C2-N3	-7.16	119.61	123.90
57	BB	1217	U	O4'-C1'-N1	7.16	113.92	108.20
57	BB	1387	A	O4'-C1'-N9	7.16	113.92	108.20
57	BB	2145	C	C2-N1-C1'	7.16	126.67	118.80
57	BB	2206	C	N1-C2-N3	-7.16	114.19	119.20
57	BB	2228	G	N7-C8-N9	7.16	116.68	113.10
21	AA	737	C	C5-C4-N4	-7.15	115.19	120.20
21	AA	1346	A	O4'-C1'-N9	7.15	113.92	108.20
26	AV	65	C	C4-C5-C6	7.15	120.98	117.40
57	BB	385	C	N3-C4-N4	7.15	123.01	118.00
57	BB	1749	A	O4'-C1'-N9	7.15	113.92	108.20
57	BB	1780	A	C6-C5-N7	-7.15	127.29	132.30
57	BB	2831	G	O4'-C1'-N9	7.15	113.92	108.20
9	AR	72	ARG	NE-CZ-NH1	7.15	123.88	120.30
21	AA	6	G	N1-C2-N3	-7.15	119.61	123.90
21	AA	239	U	N1-C2-N3	-7.15	110.61	114.90
21	AA	873	A	N1-C2-N3	7.15	132.88	129.30
26	AV	31	G	N1-C6-O6	7.15	124.19	119.90
57	BB	993	G	N9-C4-C5	7.15	108.26	105.40
57	BB	1344	U	N3-C4-O4	7.15	124.41	119.40
57	BB	1392	A	C5-N7-C8	7.15	107.48	103.90
57	BB	1984	G	P-O3'-C3'	-7.15	111.12	119.70
57	BB	2861	U	N3-C4-O4	7.15	124.41	119.40
21	AA	1031	C	N3-C4-C5	-7.15	119.04	121.90
21	AA	1361	G	C4-C5-N7	-7.15	107.94	110.80
23	AW	21	A	C6-N1-C2	7.15	122.89	118.60
57	BB	981	A	C2-N3-C4	7.15	114.17	110.60
57	BB	1104	C	O4'-C1'-N1	7.15	113.92	108.20
57	BB	1971	U	N3-C2-O2	7.15	127.21	122.20
58	BA	66	A	N9-C4-C5	-7.15	102.94	105.80
57	BB	2126	A	N9-C4-C5	7.15	108.66	105.80
14	AC	22	PHE	CB-CG-CD2	7.15	125.80	120.80
21	AA	649	A	N3-C4-C5	-7.15	121.80	126.80
21	AA	976	G	C8-N9-C4	-7.15	103.54	106.40
21	AA	1191	A	C4-C5-C6	7.15	120.57	117.00
21	AA	1401	G	N3-C4-C5	7.15	132.17	128.60
21	AA	1442	G	N3-C2-N2	7.15	124.90	119.90
57	BB	18	U	O4'-C1'-N1	7.15	113.92	108.20
57	BB	532	A	C2-N3-C4	7.15	114.17	110.60
57	BB	720	U	N3-C4-O4	7.15	124.40	119.40
57	BB	2102	G	O4'-C4'-C3'	-7.15	96.85	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2686	G	O4'-C1'-N9	7.15	113.92	108.20
21	AA	37	U	N3-C4-C5	-7.15	110.31	114.60
26	AV	63	G	C4-C5-C6	7.15	123.09	118.80
57	BB	1332	G	C6-C5-N7	-7.15	126.11	130.40
21	AA	207	C	P-O5'-C5'	-7.14	109.47	120.90
21	AA	542	G	N3-C4-C5	-7.14	125.03	128.60
21	AA	968	A	C3'-C2'-C1'	7.14	107.22	101.50
22	AY	31	A	C4-C5-N7	7.14	114.27	110.70
43	BX	17	ARG	NE-CZ-NH1	-7.14	116.73	120.30
57	BB	970	U	N1-C2-N3	-7.14	110.61	114.90
57	BB	2346	A	N1-C6-N6	7.14	122.89	118.60
57	BB	2775	G	N1-C6-O6	7.14	124.19	119.90
21	AA	453	G	C8-N9-C4	7.14	109.26	106.40
21	AA	524	G	C6-C5-N7	-7.14	126.11	130.40
21	AA	1006	G	C5-C6-N1	-7.14	107.93	111.50
21	AA	1392	G	N3-C4-C5	-7.14	125.03	128.60
57	BB	1161	C	C6-N1-C2	-7.14	117.44	120.30
57	BB	1268	A	N9-C4-C5	7.14	108.66	105.80
57	BB	1734	G	N9-C4-C5	7.14	108.26	105.40
57	BB	1853	A	O4'-C1'-N9	7.14	113.91	108.20
57	BB	2234	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	2307	G	C4-N9-C1'	7.14	135.78	126.50
58	BA	19	C	O4'-C1'-N1	7.14	113.91	108.20
21	AA	552	U	O4'-C1'-N1	7.14	113.91	108.20
23	AW	21	A	P-O3'-C3'	7.14	128.27	119.70
57	BB	636	G	N9-C4-C5	-7.14	102.54	105.40
57	BB	1733	G	C6-C5-N7	-7.14	126.11	130.40
58	BA	17	C	O4'-C1'-N1	7.14	113.91	108.20
13	AB	62	ARG	NE-CZ-NH2	-7.14	116.73	120.30
21	AA	768	A	C5-N7-C8	7.14	107.47	103.90
21	AA	952	U	N3-C4-C5	-7.14	110.32	114.60
57	BB	199	A	N1-C2-N3	7.14	132.87	129.30
57	BB	682	G	C3'-C2'-C1'	-7.14	95.79	101.50
57	BB	1517	G	N7-C8-N9	7.14	116.67	113.10
57	BB	1583	A	N7-C8-N9	7.14	117.37	113.80
57	BB	2265	U	C4-C5-C6	-7.14	115.42	119.70
57	BB	2594	C	C2-N3-C4	7.14	123.47	119.90
58	BA	30	C	O4'-C1'-C2'	-7.14	98.66	105.80
21	AA	82	G	C5-N7-C8	-7.14	100.73	104.30
21	AA	1368	A	N1-C6-N6	7.14	122.88	118.60
21	AA	1488	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	1296	G	N3-C4-N9	-7.14	121.72	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1632	A	C2-N3-C4	7.14	114.17	110.60
57	BB	1815	A	C1'-O4'-C4'	7.14	115.61	109.90
57	BB	2076	U	O4'-C4'-C3'	-7.14	96.86	104.00
21	AA	1131	G	N9-C4-C5	7.14	108.25	105.40
26	AV	10	G	N3-C2-N2	7.14	124.90	119.90
57	BB	1950	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	2659	G	C4-C5-N7	7.14	113.66	110.80
58	BA	109	A	N9-C4-C5	-7.14	102.95	105.80
21	AA	276	G	C6-C5-N7	-7.13	126.12	130.40
21	AA	1019	A	C5-N7-C8	-7.13	100.33	103.90
21	AA	1084	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	139	U	O4'-C1'-N1	7.13	113.91	108.20
57	BB	1145	C	C2-N3-C4	7.13	123.47	119.90
57	BB	1652	A	C1'-O4'-C4'	-7.13	104.19	109.90
14	AC	131	ARG	NE-CZ-NH1	7.13	123.87	120.30
21	AA	219	U	N3-C4-O4	7.13	124.39	119.40
21	AA	1173	U	N1-C2-O2	7.13	127.79	122.80
57	BB	1845	G	O4'-C1'-N9	7.13	113.91	108.20
58	BA	82	U	C2-N3-C4	7.13	131.28	127.00
21	AA	227	G	N3-C2-N2	7.13	124.89	119.90
21	AA	1392	G	O4'-C1'-N9	7.13	113.91	108.20
57	BB	35	G	C5-C6-N1	-7.13	107.93	111.50
57	BB	336	C	C5-C4-N4	-7.13	115.21	120.20
57	BB	875	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	939	G	O4'-C1'-N9	7.13	113.91	108.20
57	BB	1010	A	O4'-C4'-C3'	-7.13	96.87	104.00
57	BB	2332	C	C5-C6-N1	7.13	124.56	121.00
57	BB	2642	G	O4'-C1'-N9	7.13	113.91	108.20
21	AA	347	G	N1-C6-O6	7.13	124.18	119.90
24	AX	20	U	N3-C4-O4	7.13	124.39	119.40
57	BB	75	G	N9-C4-C5	7.13	108.25	105.40
57	BB	92	U	P-O5'-C5'	7.13	132.31	120.90
57	BB	502	A	C5-C6-N1	-7.13	114.14	117.70
57	BB	939	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	2899	A	C5-N7-C8	7.13	107.47	103.90
21	AA	276	G	C4-C5-C6	7.13	123.08	118.80
21	AA	553	A	C5-C6-N6	-7.13	118.00	123.70
21	AA	825	A	C5-C6-N6	-7.13	118.00	123.70
21	AA	948	C	C5-C4-N4	-7.13	115.21	120.20
57	BB	51	G	N1-C2-N3	-7.13	119.62	123.90
57	BB	58	G	C6-N1-C2	7.13	129.38	125.10
57	BB	1888	G	C6-N1-C2	7.13	129.38	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1972	G	C5-C6-O6	-7.13	124.32	128.60
57	BB	2166	U	C2-N3-C4	7.13	131.28	127.00
57	BB	980	A	C5-N7-C8	7.13	107.46	103.90
57	BB	2026	U	O4'-C1'-N1	7.13	113.90	108.20
57	BB	2605	U	O4'-C1'-N1	7.13	113.90	108.20
21	AA	48	C	N1-C2-O2	7.12	123.17	118.90
21	AA	229	U	C5-C4-O4	-7.12	121.62	125.90
22	AY	23	A	C4-C5-N7	-7.12	107.14	110.70
57	BB	265	A	O5'-P-OP1	7.12	119.25	110.70
57	BB	411	G	C5-C6-N1	-7.12	107.94	111.50
57	BB	2162	G	N3-C4-C5	-7.12	125.04	128.60
57	BB	2352	A	N3-C4-N9	7.12	133.10	127.40
23	AW	47	U	N1-C2-N3	-7.12	110.63	114.90
57	BB	1479	G	C3'-C2'-C1'	-7.12	95.80	101.50
57	BB	2578	G	C4-C5-C6	7.12	123.07	118.80
21	AA	951	G	C5-N7-C8	7.12	107.86	104.30
53	BE	79	ARG	NE-CZ-NH1	7.12	123.86	120.30
57	BB	161	A	N1-C6-N6	7.12	122.87	118.60
57	BB	2412	A	N3-C4-C5	-7.12	121.82	126.80
21	AA	802	A	N1-C2-N3	7.12	132.86	129.30
21	AA	1497	G	C5-N7-C8	7.12	107.86	104.30
57	BB	960	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1100	C	C2-N3-C4	-7.12	116.34	119.90
57	BB	1151	A	C5-C6-N6	-7.12	118.00	123.70
21	AA	32	A	C6-N1-C2	-7.12	114.33	118.60
21	AA	1410	A	OP1-P-OP2	-7.12	108.92	119.60
57	BB	453	A	C5-C6-N6	-7.12	118.00	123.70
57	BB	777	G	O4'-C1'-N9	7.12	113.89	108.20
57	BB	1088	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1349	C	C5-C6-N1	7.12	124.56	121.00
57	BB	2412	A	C4-C5-C6	7.12	120.56	117.00
57	BB	2710	C	C5'-C4'-O4'	7.12	117.64	109.10
58	BA	61	G	C5-N7-C8	7.12	107.86	104.30
21	AA	941	G	N3-C2-N2	7.12	124.88	119.90
41	BV	44	HIS	CA-CB-CG	7.12	125.70	113.60
57	BB	1609	A	N1-C2-N3	7.12	132.86	129.30
57	BB	1861	G	N7-C8-N9	7.12	116.66	113.10
15	AD	103	ARG	NE-CZ-NH1	7.12	123.86	120.30
21	AA	190	A	N9-C4-C5	7.12	108.65	105.80
21	AA	645	G	N1-C6-O6	7.12	124.17	119.90
21	AA	746	A	C5-C6-N6	-7.12	118.01	123.70
21	AA	769	G	C5-N7-C8	7.12	107.86	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	847	G	C4'-C3'-C2'	-7.12	95.48	102.60
21	AA	1360	A	C5-C6-N1	-7.12	114.14	117.70
23	AW	22	G	C6-N1-C2	7.12	129.37	125.10
23	AW	66	U	C5-C6-N1	7.12	126.26	122.70
57	BB	327	G	C4'-C3'-C2'	-7.12	95.48	102.60
57	BB	484	C	N1-C2-N3	-7.12	114.22	119.20
57	BB	1029	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1552	A	C4'-C3'-C2'	-7.12	95.48	102.60
57	BB	1843	C	C4-C5-C6	7.12	120.96	117.40
57	BB	2019	A	O4'-C1'-N9	7.12	113.89	108.20
58	BA	54	G	C6-N1-C2	7.12	129.37	125.10
21	AA	217	C	O4'-C1'-N1	7.11	113.89	108.20
21	AA	453	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	731	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	1293	C	N3-C4-N4	7.11	122.98	118.00
21	AA	1461	G	C5-C6-O6	-7.11	124.33	128.60
22	AY	8	U	N3-C4-C5	-7.11	110.33	114.60
22	AY	24	G	O4'-C1'-N9	7.11	113.89	108.20
34	BO	10	ARG	NE-CZ-NH1	-7.11	116.74	120.30
57	BB	305	C	O4'-C1'-N1	7.11	113.89	108.20
57	BB	403	U	O4'-C1'-N1	7.11	113.89	108.20
57	BB	791	C	O4'-C1'-C2'	7.11	114.00	107.60
57	BB	1377	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	1546	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	2137	U	C2-N1-C1'	7.11	126.24	117.70
21	AA	1115	U	O4'-C1'-N1	7.11	113.89	108.20
57	BB	1847	A	C4-C5-N7	-7.11	107.14	110.70
57	BB	1857	G	N1-C6-O6	7.11	124.17	119.90
21	AA	402	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	699	C	N1-C2-O2	-7.11	114.63	118.90
21	AA	921	U	N3-C4-C5	-7.11	110.33	114.60
21	AA	1289	A	C5-N7-C8	7.11	107.45	103.90
42	BW	11	ASN	CB-CA-C	-7.11	96.18	110.40
57	BB	58	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	515	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	1236	G	C5-N7-C8	7.11	107.86	104.30
57	BB	1711	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	2288	A	N1-C6-N6	7.11	122.87	118.60
21	AA	129	A	C4-C5-N7	-7.11	107.14	110.70
21	AA	442	G	C5-C6-N1	7.11	115.06	111.50
21	AA	1237	C	N3-C4-N4	7.11	122.98	118.00
21	AA	1447	A	N3-C4-C5	-7.11	121.82	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1596	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	1667	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	925	G	C5-C6-O6	-7.11	124.33	128.60
21	AA	975	A	C5-N7-C8	7.11	107.45	103.90
21	AA	1437	A	O4'-C1'-N9	7.11	113.89	108.20
22	AY	70	C	N3-C4-C5	-7.11	119.06	121.90
23	AW	34	G	P-O3'-C3'	-7.11	111.17	119.70
57	BB	1896	G	C5'-C4'-C3'	-7.11	104.63	116.00
57	BB	1980	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	2416	C	C5-C6-N1	7.11	124.55	121.00
57	BB	2535	G	C5-C6-O6	-7.11	124.34	128.60
57	BB	2804	U	N1-C2-N3	7.11	119.16	114.90
57	BB	2822	G	N3-C4-C5	-7.11	125.05	128.60
21	AA	64	G	N7-C8-N9	-7.11	109.55	113.10
21	AA	141	G	O4'-C1'-N9	7.11	113.88	108.20
57	BB	531	C	C4-C5-C6	7.11	120.95	117.40
57	BB	806	C	N3-C4-C5	-7.11	119.06	121.90
57	BB	984	A	N3-C4-C5	-7.11	121.83	126.80
57	BB	1413	A	C5-N7-C8	7.11	107.45	103.90
57	BB	1676	A	C5-C6-N1	-7.11	114.15	117.70
57	BB	2274	A	C4-C5-C6	7.11	120.55	117.00
57	BB	2635	A	N9-C4-C5	7.11	108.64	105.80
57	BB	194	G	N3-C4-N9	-7.10	121.74	126.00
57	BB	254	G	N1-C6-O6	7.10	124.16	119.90
57	BB	702	U	C5-C4-O4	-7.10	121.64	125.90
57	BB	753	A	C2-N3-C4	7.10	114.15	110.60
57	BB	1435	G	N3-C4-N9	7.10	130.26	126.00
57	BB	2250	G	N7-C8-N9	-7.10	109.55	113.10
57	BB	2888	C	N3-C2-O2	7.10	126.87	121.90
21	AA	457	G	O4'-C1'-N9	7.10	113.88	108.20
21	AA	896	C	O4'-C1'-N1	7.10	113.88	108.20
21	AA	1003	G	C4-C5-C6	7.10	123.06	118.80
57	BB	36	G	N1-C2-N3	-7.10	119.64	123.90
57	BB	82	U	C5-C4-O4	-7.10	121.64	125.90
57	BB	175	G	C8-N9-C4	-7.10	103.56	106.40
57	BB	506	G	C5-C6-O6	-7.10	124.34	128.60
57	BB	1393	A	C5-C6-N1	-7.10	114.15	117.70
57	BB	2033	A	C4-C5-C6	7.10	120.55	117.00
57	BB	2459	A	C4-C5-N7	7.10	114.25	110.70
57	BB	2849	U	C3'-C2'-C1'	7.10	107.18	101.50
57	BB	5	A	N1-C6-N6	7.10	122.86	118.60
57	BB	286	U	O4'-C1'-N1	7.10	113.88	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2246	G	C4-C5-N7	7.10	113.64	110.80
21	AA	1262	C	C2-N3-C4	7.10	123.45	119.90
57	BB	68	G	N9-C4-C5	-7.10	102.56	105.40
57	BB	396	G	C4-C5-N7	7.10	113.64	110.80
57	BB	1214	A	C6-N1-C2	7.10	122.86	118.60
57	BB	1369	G	N1-C2-N3	-7.10	119.64	123.90
57	BB	1880	U	O4'-C1'-N1	7.10	113.88	108.20
57	BB	2075	U	C2-N3-C4	7.10	131.26	127.00
57	BB	2385	C	O4'-C1'-N1	7.10	113.88	108.20
58	BA	72	G	C5-C6-N1	-7.10	107.95	111.50
57	BB	97	C	N1-C2-O2	-7.10	114.64	118.90
57	BB	439	A	C4-C5-C6	7.10	120.55	117.00
57	BB	762	U	C2-N3-C4	7.10	131.26	127.00
57	BB	1452	G	C4-C5-C6	7.10	123.06	118.80
57	BB	1980	G	O4'-C1'-N9	7.10	113.88	108.20
57	BB	2663	G	C2-N3-C4	7.10	115.45	111.90
57	BB	2790	U	C2-N3-C4	7.10	131.26	127.00
21	AA	203	G	P-O3'-C3'	-7.10	111.19	119.70
23	AW	76	A	N1-C6-N6	7.10	122.86	118.60
36	BQ	91	ARG	NE-CZ-NH2	-7.10	116.75	120.30
57	BB	167	A	C6-C5-N7	-7.10	127.33	132.30
57	BB	864	G	O4'-C1'-N9	7.10	113.88	108.20
57	BB	2217	G	N1-C6-O6	7.10	124.16	119.90
57	BB	2319	G	C5-C6-O6	-7.10	124.34	128.60
21	AA	149	A	N3-C4-C5	-7.09	121.83	126.80
21	AA	388	G	C5-N7-C8	7.09	107.85	104.30
21	AA	937	A	N9-C4-C5	7.09	108.64	105.80
21	AA	1197	A	O4'-C1'-N9	7.09	113.88	108.20
21	AA	1296	C	N3-C4-C5	-7.09	119.06	121.90
23	AW	61	C	C5-C4-N4	-7.09	115.23	120.20
57	BB	1900	A	O4'-C1'-N9	7.09	113.88	108.20
57	BB	1081	U	C5-C4-O4	-7.09	121.64	125.90
57	BB	1165	A	C4-C5-C6	7.09	120.55	117.00
21	AA	660	C	N3-C4-N4	7.09	122.97	118.00
21	AA	1332	A	O4'-C4'-C3'	-7.09	96.91	104.00
57	BB	181	A	O4'-C1'-N9	7.09	113.87	108.20
57	BB	468	G	N3-C2-N2	-7.09	114.94	119.90
57	BB	1218	G	C5-C6-O6	-7.09	124.34	128.60
57	BB	1492	G	N1-C2-N2	-7.09	109.82	116.20
57	BB	2330	G	C6-N1-C2	7.09	129.35	125.10
58	BA	78	A	N9-C4-C5	-7.09	102.96	105.80
21	AA	126	G	N9-C4-C5	-7.09	102.56	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	376	G	N1-C6-O6	7.09	124.15	119.90
21	AA	1183	U	O4'-C1'-N1	7.09	113.87	108.20
21	AA	1393	U	C4-C5-C6	7.09	123.95	119.70
21	AA	1501	C	C6-N1-C2	7.09	123.14	120.30
57	BB	716	A	C4-C5-C6	7.09	120.54	117.00
57	BB	1445	G	C5-C6-N1	7.09	115.05	111.50
57	BB	1934	C	N1-C2-O2	7.09	123.15	118.90
57	BB	1988	G	N1-C2-N3	-7.09	119.65	123.90
57	BB	2595	G	C5-C6-O6	-7.09	124.35	128.60
58	BA	32	U	O4'-C1'-N1	7.09	113.87	108.20
21	AA	665	A	N9-C4-C5	7.09	108.64	105.80
21	AA	711	G	N1-C2-N3	-7.09	119.65	123.90
57	BB	11	C	O4'-C1'-N1	7.09	113.87	108.20
57	BB	1177	G	C6-C5-N7	-7.09	126.15	130.40
57	BB	1353	A	C8-N9-C4	-7.09	102.97	105.80
21	AA	507	C	C6-N1-C2	-7.09	117.47	120.30
21	AA	725	G	C5-C6-O6	-7.09	124.35	128.60
35	BP	88	ARG	NE-CZ-NH1	-7.09	116.76	120.30
57	BB	362	A	C8-N9-C4	-7.09	102.97	105.80
57	BB	574	A	C2-N3-C4	-7.09	107.06	110.60
57	BB	674	G	N3-C4-C5	-7.09	125.06	128.60
57	BB	1007	C	C5-C4-N4	-7.09	115.24	120.20
57	BB	2276	G	O4'-C1'-N9	7.09	113.87	108.20
57	BB	2278	A	C5-N7-C8	7.09	107.44	103.90
57	BB	2389	G	O4'-C1'-N9	7.09	113.87	108.20
57	BB	2657	A	N9-C4-C5	-7.09	102.97	105.80
21	AA	113	G	C2-N3-C4	7.08	115.44	111.90
21	AA	534	U	C5'-C4'-O4'	7.08	117.60	109.10
47	B0	32	THR	CA-CB-CG2	-7.08	102.48	112.40
57	BB	1056	G	P-O5'-C5'	7.08	132.24	120.90
57	BB	1835	G	O4'-C1'-N9	7.08	113.87	108.20
57	BB	2681	C	O4'-C1'-N1	7.08	113.87	108.20
3	AL	116	TYR	CZ-CE2-CD2	7.08	126.17	119.80
16	AE	137	ARG	NE-CZ-NH2	7.08	123.84	120.30
21	AA	13	U	O4'-C1'-N1	7.08	113.87	108.20
21	AA	76	G	N9-C4-C5	7.08	108.23	105.40
21	AA	956	U	N1-C2-N3	-7.08	110.65	114.90
21	AA	1066	C	C2-N3-C4	7.08	123.44	119.90
21	AA	1533	C	C5'-C4'-O4'	7.08	117.60	109.10
23	AW	1	G	C8-N9-C4	-7.08	103.57	106.40
57	BB	403	U	C4-C5-C6	7.08	123.95	119.70
57	BB	647	G	C5-C6-O6	-7.08	124.35	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	796	C	C6-N1-C2	-7.08	117.47	120.30
57	BB	1307	A	O4'-C1'-N9	7.08	113.87	108.20
57	BB	1755	A	C8-N9-C4	-7.08	102.97	105.80
57	BB	1834	U	C5-C4-O4	-7.08	121.65	125.90
57	BB	2733	A	C4-C5-N7	-7.08	107.16	110.70
21	AA	305	G	N7-C8-N9	7.08	116.64	113.10
21	AA	480	U	O5'-P-OP2	-7.08	99.33	105.70
21	AA	1088	G	C5-N7-C8	-7.08	100.76	104.30
25	AZ	233	ARG	NE-CZ-NH1	-7.08	116.76	120.30
57	BB	293	U	N1-C2-O2	7.08	127.76	122.80
57	BB	1350	C	N3-C4-N4	7.08	122.96	118.00
57	BB	1703	G	N1-C6-O6	7.08	124.15	119.90
57	BB	2126	A	N3-C4-C5	-7.08	121.84	126.80
57	BB	2583	G	N3-C4-N9	-7.08	121.75	126.00
57	BB	2795	C	C6-N1-C2	-7.08	117.47	120.30
21	AA	135	C	O4'-C1'-N1	7.08	113.86	108.20
23	AW	12	U	C5-C4-O4	7.08	130.15	125.90
57	BB	243	U	C4'-C3'-C2'	-7.08	95.52	102.60
57	BB	357	C	C5-C4-N4	-7.08	115.24	120.20
57	BB	637	A	C5-C6-N1	-7.08	114.16	117.70
57	BB	955	U	P-O3'-C3'	-7.08	111.20	119.70
57	BB	2141	G	C4-C5-N7	7.08	113.63	110.80
57	BB	2270	A	C5-C6-N6	-7.08	118.04	123.70
57	BB	2767	C	N1-C2-N3	-7.08	114.24	119.20
21	AA	137	U	N3-C2-O2	7.08	127.15	122.20
21	AA	178	C	C2-N3-C4	7.08	123.44	119.90
21	AA	682	G	N1-C6-O6	7.08	124.15	119.90
57	BB	75	G	N1-C2-N2	-7.08	109.83	116.20
57	BB	194	G	N3-C4-C5	7.08	132.14	128.60
57	BB	1003	G	C4'-C3'-C2'	-7.08	95.52	102.60
57	BB	1799	G	N3-C2-N2	7.08	124.86	119.90
57	BB	1834	U	N3-C4-O4	7.08	124.36	119.40
58	BA	28	C	C4'-C3'-C2'	-7.08	95.52	102.60
21	AA	431	A	C4-C5-C6	7.08	120.54	117.00
50	B3	48	MET	CG-SD-CE	-7.08	88.88	100.20
57	BB	790	U	O4'-C1'-N1	7.08	113.86	108.20
57	BB	1360	G	N3-C4-C5	-7.08	125.06	128.60
57	BB	2666	C	C2-N1-C1'	7.08	126.58	118.80
16	AE	19	ARG	NE-CZ-NH2	-7.08	116.76	120.30
21	AA	305	G	N3-C2-N2	7.08	124.85	119.90
26	AV	14	A	C5-N7-C8	7.08	107.44	103.90
56	BH	146	VAL	CA-CB-CG1	-7.08	100.29	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	877	A	C4-C5-N7	-7.08	107.16	110.70
57	BB	1118	C	N3-C4-N4	7.08	122.95	118.00
57	BB	2073	C	N1-C2-N3	-7.08	114.25	119.20
57	BB	2271	G	C6-N1-C2	7.08	129.34	125.10
21	AA	671	G	O4'-C1'-N9	7.07	113.86	108.20
21	AA	788	U	N1-C2-N3	-7.07	110.66	114.90
23	AW	36	A	C5-N7-C8	7.07	107.44	103.90
57	BB	2382	G	C5-N7-C8	7.07	107.84	104.30
57	BB	2461	A	C4-C5-C6	7.07	120.54	117.00
21	AA	383	A	C8-N9-C4	-7.07	102.97	105.80
24	AX	18	G	N1-C6-O6	7.07	124.14	119.90
57	BB	511	U	O4'-C1'-N1	7.07	113.86	108.20
57	BB	1509	A	C5-N7-C8	7.07	107.44	103.90
57	BB	1761	C	N1-C2-N3	-7.07	114.25	119.20
57	BB	1789	A	C5-N7-C8	7.07	107.44	103.90
21	AA	263	A	C5-C6-N1	-7.07	114.16	117.70
21	AA	950	U	C5'-C4'-C3'	7.07	127.31	116.00
22	AY	19	G	O4'-C1'-N9	7.07	113.86	108.20
57	BB	5	A	C5-C6-N6	-7.07	118.04	123.70
57	BB	1847	A	O4'-C1'-N9	7.07	113.86	108.20
57	BB	2425	A	C5-N7-C8	7.07	107.44	103.90
57	BB	2681	C	C4-C5-C6	7.07	120.94	117.40
57	BB	362	A	P-O5'-C5'	7.07	132.21	120.90
57	BB	624	C	C4'-C3'-C2'	-7.07	95.53	102.60
57	BB	2396	G	C6-C5-N7	-7.07	126.16	130.40
21	AA	186	C	N3-C4-N4	7.07	122.95	118.00
21	AA	493	A	N3-C4-C5	-7.07	121.85	126.80
23	AW	47	U	C4'-C3'-C2'	-7.07	95.53	102.60
57	BB	767	U	N1-C2-O2	-7.07	117.85	122.80
57	BB	780	G	N1-C2-N2	7.07	122.56	116.20
57	BB	901	C	N3-C4-C5	-7.07	119.07	121.90
57	BB	1180	U	N3-C4-O4	7.07	124.35	119.40
57	BB	1296	G	N1-C6-O6	7.07	124.14	119.90
57	BB	1383	A	N1-C6-N6	7.07	122.84	118.60
57	BB	2814	A	C3'-C2'-C1'	7.07	107.15	101.50
21	AA	444	G	O4'-C1'-N9	7.07	113.85	108.20
21	AA	621	A	N9-C4-C5	7.07	108.63	105.80
21	AA	1152	A	C6-N1-C2	7.07	122.84	118.60
57	BB	456	C	C6-N1-C2	7.07	123.13	120.30
57	BB	2479	U	C4-C5-C6	7.07	123.94	119.70
21	AA	255	G	C4-C5-N7	7.06	113.62	110.80
57	BB	2492	U	P-O3'-C3'	-7.06	111.22	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	821	G	C5-C6-O6	-7.06	124.36	128.60
22	AY	2	C	N3-C4-N4	7.06	122.94	118.00
57	BB	84	A	C4-C5-C6	7.06	120.53	117.00
57	BB	553	G	C5-N7-C8	-7.06	100.77	104.30
57	BB	595	C	N3-C2-O2	-7.06	116.96	121.90
57	BB	912	C	O4'-C1'-N1	7.06	113.85	108.20
57	BB	1610	A	N7-C8-N9	7.06	117.33	113.80
57	BB	2112	G	C5-C6-O6	-7.06	124.36	128.60
57	BB	2345	G	N9-C4-C5	7.06	108.22	105.40
57	BB	2534	A	C4-C5-C6	7.06	120.53	117.00
57	BB	2551	C	C2-N1-C1'	7.06	126.57	118.80
57	BB	2632	A	C6-C5-N7	-7.06	127.36	132.30
21	AA	321	A	O4'-C1'-N9	7.06	113.85	108.20
21	AA	1019	A	C6-C5-N7	-7.06	127.36	132.30
57	BB	904	G	O4'-C1'-N9	7.06	113.85	108.20
21	AA	51	A	C2-N3-C4	-7.06	107.07	110.60
21	AA	816	A	C6-N1-C2	-7.06	114.36	118.60
21	AA	1031	C	N1-C2-O2	7.06	123.14	118.90
21	AA	1256	A	N9-C4-C5	7.06	108.62	105.80
21	AA	1279	G	N3-C4-C5	-7.06	125.07	128.60
21	AA	1446	A	N9-C4-C5	-7.06	102.98	105.80
57	BB	287	G	N9-C4-C5	-7.06	102.58	105.40
57	BB	359	G	OP1-P-OP2	-7.06	109.01	119.60
57	BB	1853	A	C6-N1-C2	7.06	122.84	118.60
57	BB	1993	U	C3'-C2'-C1'	7.06	107.15	101.50
57	BB	2561	U	C4'-C3'-C2'	-7.06	95.54	102.60
57	BB	2661	G	C6-C5-N7	-7.06	126.17	130.40
57	BB	2856	A	O4'-C1'-N9	7.06	113.85	108.20
21	AA	416	G	C6-C5-N7	-7.06	126.17	130.40
21	AA	1097	C	O4'-C1'-N1	7.06	113.85	108.20
44	BY	23	ARG	NE-CZ-NH2	-7.06	116.77	120.30
57	BB	624	C	N3-C2-O2	-7.06	116.96	121.90
57	BB	624	C	C5-C6-N1	7.06	124.53	121.00
57	BB	1366	A	N1-C6-N6	7.06	122.83	118.60
57	BB	2246	G	C6-C5-N7	-7.06	126.17	130.40
57	BB	2262	U	O4'-C1'-N1	7.06	113.85	108.20
21	AA	280	C	C4-C5-C6	7.06	120.93	117.40
21	AA	944	G	C4-C5-C6	7.06	123.03	118.80
57	BB	1965	C	C2-N1-C1'	7.06	126.56	118.80
58	BA	40	U	N3-C2-O2	7.06	127.14	122.20
21	AA	472	U	O4'-C1'-N1	7.05	113.84	108.20
22	AY	39	U	C2-N3-C4	-7.05	122.77	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	638	G	C4-C5-N7	-7.05	107.98	110.80
57	BB	751	A	N1-C2-N3	7.05	132.83	129.30
57	BB	1115	G	C8-N9-C4	7.05	109.22	106.40
57	BB	1953	A	C5-C6-N1	-7.05	114.17	117.70
57	BB	2025	C	C1'-O4'-C4'	7.05	115.54	109.90
57	BB	2234	G	C4-C5-C6	7.05	123.03	118.80
21	AA	495	A	N7-C8-N9	-7.05	110.27	113.80
21	AA	703	G	N1-C6-O6	7.05	124.13	119.90
21	AA	1153	G	N1-C6-O6	7.05	124.13	119.90
57	BB	351	C	N3-C2-O2	7.05	126.84	121.90
57	BB	731	C	N3-C4-N4	7.05	122.94	118.00
57	BB	1181	U	N3-C2-O2	7.05	127.14	122.20
57	BB	1638	C	N3-C4-N4	7.05	122.94	118.00
58	BA	94	A	N3-C4-N9	7.05	133.04	127.40
21	AA	1214	C	C2-N1-C1'	7.05	126.56	118.80
23	AW	63	G	N1-C2-N2	-7.05	109.85	116.20
57	BB	433	C	N3-C4-N4	7.05	122.94	118.00
57	BB	790	U	C2-N1-C1'	7.05	126.16	117.70
57	BB	1683	U	N3-C4-C5	-7.05	110.37	114.60
57	BB	1791	A	P-O5'-C5'	7.05	132.18	120.90
57	BB	2342	C	O4'-C1'-N1	7.05	113.84	108.20
57	BB	2877	G	N1-C2-N3	-7.05	119.67	123.90
21	AA	100	G	C8-N9-C4	7.05	109.22	106.40
21	AA	174	A	O4'-C1'-N9	7.05	113.84	108.20
21	AA	1131	G	C4'-C3'-C2'	-7.05	95.55	102.60
21	AA	1227	A	O4'-C1'-N9	7.05	113.84	108.20
23	AW	36	A	C5-C6-N1	-7.05	114.18	117.70
57	BB	293	U	C5-C4-O4	-7.05	121.67	125.90
57	BB	527	C	N3-C4-N4	7.05	122.93	118.00
57	BB	712	G	N1-C2-N3	-7.05	119.67	123.90
57	BB	1398	C	C5-C6-N1	-7.05	117.47	121.00
57	BB	2721	A	N3-C4-C5	-7.05	121.86	126.80
57	BB	2037	A	O4'-C1'-N9	7.05	113.84	108.20
57	BB	2882	A	C4'-C3'-C2'	-7.05	95.55	102.60
16	AE	98	ALA	N-CA-CB	7.05	119.97	110.10
21	AA	700	G	N9-C4-C5	-7.05	102.58	105.40
21	AA	722	G	N1-C6-O6	-7.05	115.67	119.90
21	AA	1204	A	C5-N7-C8	7.05	107.42	103.90
21	AA	1235	U	N3-C4-C5	7.05	118.83	114.60
24	AX	18	G	C6-C5-N7	-7.05	126.17	130.40
57	BB	498	G	N9-C4-C5	-7.05	102.58	105.40
57	BB	790	U	N1-C2-N3	-7.05	110.67	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1876	A	C5-C6-N1	-7.05	114.18	117.70
57	BB	2063	C	P-O3'-C3'	-7.05	111.24	119.70
57	BB	2516	A	P-O5'-C5'	-7.05	109.62	120.90
21	AA	108	G	N1-C2-N3	-7.04	119.67	123.90
21	AA	1048	G	P-O3'-C3'	-7.04	111.25	119.70
22	AY	15	G	N1-C2-N2	-7.04	109.86	116.20
57	BB	1639	C	O4'-C1'-N1	7.04	113.84	108.20
58	BA	52	A	OP1-P-OP2	-7.04	109.03	119.60
21	AA	235	C	C5-C4-N4	-7.04	115.27	120.20
21	AA	1004	A	C5-C6-N6	-7.04	118.07	123.70
21	AA	1223	C	P-O3'-C3'	7.04	128.15	119.70
21	AA	1227	A	C5-C6-N6	-7.04	118.06	123.70
22	AY	39	U	N1-C2-N3	7.04	119.13	114.90
26	AV	14	A	C5-C6-N1	-7.04	114.18	117.70
57	BB	891	G	C5'-C4'-O4'	7.04	117.55	109.10
57	BB	1652	A	P-O3'-C3'	7.04	128.15	119.70
57	BB	2053	G	N9-C4-C5	7.04	108.22	105.40
18	AG	61	PHE	CB-CG-CD1	7.04	125.73	120.80
21	AA	710	G	C4-C5-N7	-7.04	107.98	110.80
21	AA	909	A	C1'-O4'-C4'	-7.04	104.27	109.90
21	AA	1179	A	C5-C6-N1	-7.04	114.18	117.70
23	AW	24	G	N1-C6-O6	7.04	124.12	119.90
57	BB	180	G	N9-C4-C5	-7.04	102.58	105.40
57	BB	257	C	O4'-C1'-N1	7.04	113.83	108.20
57	BB	513	A	C2-N3-C4	-7.04	107.08	110.60
57	BB	538	A	N7-C8-N9	-7.04	110.28	113.80
57	BB	850	U	C2-N3-C4	-7.04	122.78	127.00
57	BB	1248	G	C4'-C3'-C2'	7.04	109.64	102.60
57	BB	1489	C	O4'-C1'-N1	7.04	113.83	108.20
57	BB	1600	C	C4-C5-C6	-7.04	113.88	117.40
57	BB	1743	G	C4-C5-C6	7.04	123.03	118.80
57	BB	1793	C	O5'-P-OP2	-7.04	99.36	105.70
57	BB	1848	A	C8-N9-C4	-7.04	102.98	105.80
57	BB	2046	G	N9-C4-C5	7.04	108.22	105.40
57	BB	2068	U	C2-N3-C4	7.04	131.22	127.00
57	BB	2387	U	O4'-C1'-N1	7.04	113.83	108.20
57	BB	2525	G	C2-N3-C4	7.04	115.42	111.90
21	AA	567	G	N3-C4-C5	-7.04	125.08	128.60
57	BB	56	A	C4'-C3'-C2'	-7.04	95.56	102.60
57	BB	628	G	C5-C6-N1	-7.04	107.98	111.50
57	BB	1100	C	C6-N1-C1'	-7.04	112.35	120.80
57	BB	1421	G	N1-C6-O6	7.04	124.12	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	72	A	N7-C8-N9	-7.04	110.28	113.80
21	AA	106	C	O4'-C1'-N1	7.04	113.83	108.20
21	AA	1257	A	C5-C6-N1	-7.04	114.18	117.70
23	AW	76	A	C5-C6-N1	-7.04	114.18	117.70
41	BV	9	ARG	NE-CZ-NH2	-7.04	116.78	120.30
57	BB	5	A	C2-N3-C4	7.04	114.12	110.60
57	BB	1084	A	C8-N9-C4	-7.04	102.98	105.80
57	BB	1546	G	N9-C4-C5	-7.04	102.58	105.40
57	BB	2436	G	N3-C4-C5	7.04	132.12	128.60
57	BB	408	G	N3-C4-C5	7.04	132.12	128.60
57	BB	560	C	N3-C4-N4	7.04	122.93	118.00
57	BB	2065	C	C4-C5-C6	7.04	120.92	117.40
57	BB	2178	C	C6-N1-C2	7.04	123.11	120.30
21	AA	344	A	C5'-C4'-O4'	7.04	117.54	109.10
57	BB	34	U	N3-C4-O4	7.04	124.32	119.40
57	BB	1649	G	N1-C2-N3	-7.04	119.68	123.90
21	AA	308	C	P-O5'-C5'	7.03	132.15	120.90
21	AA	333	U	N1-C2-O2	7.03	127.72	122.80
21	AA	1124	G	C5-C6-O6	-7.03	124.38	128.60
21	AA	1193	G	O4'-C1'-N9	7.03	113.83	108.20
26	AV	59	A	N1-C2-N3	-7.03	125.78	129.30
57	BB	303	G	O4'-C1'-N9	7.03	113.83	108.20
57	BB	663	G	N1-C2-N3	-7.03	119.68	123.90
57	BB	1869	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	2203	U	N3-C4-O4	7.03	124.32	119.40
21	AA	1261	A	O4'-C1'-N9	7.03	113.83	108.20
21	AA	184	G	N1-C6-O6	7.03	124.12	119.90
21	AA	765	G	N1-C2-N3	-7.03	119.68	123.90
21	AA	1111	A	C5-C6-N6	-7.03	118.08	123.70
21	AA	1418	A	O4'-C1'-N9	7.03	113.83	108.20
26	AV	38	A	C6-C5-N7	-7.03	127.38	132.30
27	B5	144	THR	CA-CB-CG2	7.03	122.24	112.40
57	BB	1684	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	2368	C	N3-C4-C5	7.03	124.71	121.90
58	BA	59	A	C5-C6-N1	-7.03	114.19	117.70
21	AA	481	G	N3-C2-N2	7.03	124.82	119.90
21	AA	1297	G	C5'-C4'-O4'	7.03	117.53	109.10
21	AA	1424	U	C2-N3-C4	-7.03	122.78	127.00
57	BB	1755	A	C6-C5-N7	-7.03	127.38	132.30
57	BB	2491	U	N3-C2-O2	-7.03	117.28	122.20
57	BB	2560	A	C8-N9-C4	-7.03	102.99	105.80
21	AA	784	A	C4-C5-N7	-7.03	107.19	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	39	U	O3'-P-O5'	7.03	117.35	104.00
54	BF	37	MET	N-CA-CB	7.03	123.25	110.60
57	BB	570	G	C8-N9-C4	7.03	109.21	106.40
57	BB	793	A	P-O3'-C3'	7.03	128.13	119.70
57	BB	1764	C	C6-N1-C2	7.03	123.11	120.30
57	BB	2662	A	O4'-C1'-N9	7.03	113.82	108.20
57	BB	2861	U	O4'-C1'-N1	7.03	113.82	108.20
5	AN	21	ALA	N-CA-CB	7.03	119.94	110.10
21	AA	1301	U	O4'-C1'-C2'	-7.03	98.78	105.80
21	AA	1425	U	C5-C4-O4	-7.03	121.69	125.90
21	AA	1426	G	N9-C4-C5	7.03	108.21	105.40
57	BB	50	U	P-O3'-C3'	7.03	128.13	119.70
57	BB	136	G	N1-C6-O6	7.03	124.12	119.90
57	BB	625	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	1057	A	C6-C5-N7	-7.03	127.38	132.30
57	BB	1832	C	C5-C4-N4	-7.03	115.28	120.20
57	BB	2210	U	N3-C2-O2	7.03	127.12	122.20
57	BB	2799	A	N9-C4-C5	7.03	108.61	105.80
57	BB	14	A	O4'-C1'-N9	7.02	113.82	108.20
57	BB	1244	A	N1-C2-N3	7.02	132.81	129.30
57	BB	1389	G	C5-C6-O6	-7.02	124.39	128.60
57	BB	1535	A	C5'-C4'-O4'	7.02	117.53	109.10
57	BB	2196	C	N3-C4-C5	-7.02	119.09	121.90
21	AA	1217	C	N1-C2-O2	7.02	123.11	118.90
21	AA	1410	A	N3-C4-N9	7.02	133.02	127.40
52	BD	77	ARG	NE-CZ-NH2	7.02	123.81	120.30
57	BB	212	G	C2-N3-C4	7.02	115.41	111.90
57	BB	762	U	O4'-C1'-N1	7.02	113.82	108.20
57	BB	1554	U	N1-C2-N3	-7.02	110.69	114.90
57	BB	2524	G	N9-C4-C5	-7.02	102.59	105.40
21	AA	1446	A	C4-C5-C6	7.02	120.51	117.00
57	BB	790	U	C6-N1-C1'	-7.02	111.37	121.20
21	AA	1146	A	O4'-C1'-N9	7.02	113.82	108.20
21	AA	1178	G	P-O3'-C3'	7.02	128.12	119.70
57	BB	2460	U	N3-C4-O4	7.02	124.31	119.40
57	BB	2462	C	N3-C4-C5	-7.02	119.09	121.90
21	AA	226	G	N3-C2-N2	7.02	124.81	119.90
21	AA	523	A	N1-C2-N3	7.02	132.81	129.30
21	AA	1460	C	N1-C2-O2	7.02	123.11	118.90
57	BB	226	A	O4'-C1'-N9	7.02	113.81	108.20
57	BB	258	G	N7-C8-N9	-7.02	109.59	113.10
57	BB	486	C	C6-N1-C2	-7.02	117.49	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1247	A	P-O3'-C3'	7.02	128.12	119.70
57	BB	1463	C	N3-C4-C5	7.02	124.71	121.90
57	BB	1741	C	N3-C4-C5	-7.02	119.09	121.90
57	BB	2071	A	N7-C8-N9	7.02	117.31	113.80
57	BB	2754	U	C6-N1-C2	-7.02	116.79	121.00
21	AA	267	C	N3-C2-O2	7.02	126.81	121.90
21	AA	269	C	O4'-C1'-N1	7.02	113.81	108.20
57	BB	1064	C	O4'-C1'-N1	7.02	113.81	108.20
21	AA	80	A	C4-C5-N7	-7.01	107.19	110.70
21	AA	272	C	C3'-C2'-C1'	-7.01	95.89	101.50
21	AA	501	C	N3-C2-O2	7.01	126.81	121.90
22	AY	23	A	C3'-C2'-C1'	-7.01	95.89	101.50
22	AY	33	U	C2-N1-C1'	-7.01	109.28	117.70
26	AV	67	C	N3-C4-C5	-7.01	119.09	121.90
57	BB	1732	C	C3'-C2'-C1'	-7.01	95.89	101.50
57	BB	26	G	C6-N1-C2	7.01	129.31	125.10
57	BB	190	A	C4-C5-C6	7.01	120.51	117.00
57	BB	329	G	N1-C6-O6	7.01	124.11	119.90
57	BB	1966	A	C6-N1-C2	7.01	122.81	118.60
57	BB	2495	G	N1-C2-N3	-7.01	119.69	123.90
5	AN	44	VAL	CA-CB-CG1	-7.01	100.38	110.90
21	AA	1144	G	N1-C6-O6	7.01	124.11	119.90
57	BB	1118	C	P-O3'-C3'	-7.01	111.29	119.70
57	BB	1803	A	C8-N9-C4	-7.01	103.00	105.80
57	BB	2718	G	C4-C5-N7	7.01	113.61	110.80
58	BA	64	G	C4-C5-C6	7.01	123.01	118.80
20	AI	28	VAL	CA-CB-CG1	-7.01	100.39	110.90
21	AA	1067	A	N1-C6-N6	7.01	122.81	118.60
21	AA	1094	G	C4-C5-N7	7.01	113.60	110.80
21	AA	1176	A	N7-C8-N9	-7.01	110.30	113.80
21	AA	1419	G	N1-C6-O6	7.01	124.11	119.90
21	AA	1491	G	N3-C2-N2	7.01	124.81	119.90
22	AY	60	C	P-O3'-C3'	-7.01	111.29	119.70
24	AX	14	A	C4-C5-C6	7.01	120.50	117.00
26	AV	48	C	C4-C5-C6	7.01	120.91	117.40
57	BB	114	U	O4'-C1'-N1	7.01	113.81	108.20
57	BB	750	A	C6-C5-N7	-7.01	127.39	132.30
57	BB	969	G	N3-C2-N2	7.01	124.81	119.90
57	BB	1783	A	N1-C2-N3	-7.01	125.80	129.30
57	BB	2503	A	N3-C4-C5	-7.01	121.89	126.80
57	BB	2546	U	C2-N3-C4	7.01	131.21	127.00
57	BB	2625	G	C5-C6-O6	-7.01	124.39	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1088	G	N1-C6-O6	7.01	124.11	119.90
57	BB	2058	A	N3-C4-C5	-7.01	121.89	126.80
21	AA	1170	A	C4'-C3'-C2'	-7.01	95.59	102.60
21	AA	1373	G	C6-C5-N7	-7.01	126.20	130.40
57	BB	560	C	C2-N3-C4	7.01	123.40	119.90
57	BB	795	C	C2-N3-C4	7.01	123.40	119.90
57	BB	1476	U	N1-C2-N3	7.01	119.10	114.90
57	BB	1979	U	C2-N3-C4	7.01	131.20	127.00
57	BB	2144	G	N3-C4-N9	7.01	130.20	126.00
57	BB	2368	C	O4'-C1'-N1	7.01	113.81	108.20
57	BB	2649	C	N3-C4-C5	-7.01	119.10	121.90
58	BA	41	G	C8-N9-C4	-7.01	103.60	106.40
21	AA	444	G	C6-C5-N7	-7.00	126.20	130.40
21	AA	993	G	C4-C5-N7	-7.00	108.00	110.80
57	BB	1264	A	N9-C4-C5	7.00	108.60	105.80
57	BB	1359	A	N7-C8-N9	-7.00	110.30	113.80
21	AA	16	A	C6-N1-C2	7.00	122.80	118.60
21	AA	102	G	N1-C2-N3	-7.00	119.70	123.90
21	AA	1504	G	C6-C5-N7	-7.00	126.20	130.40
57	BB	982	C	C6-N1-C1'	-7.00	112.40	120.80
57	BB	1153	C	O4'-C1'-N1	7.00	113.80	108.20
57	BB	1583	A	C4-C5-N7	-7.00	107.20	110.70
57	BB	2438	U	N3-C4-O4	7.00	124.30	119.40
21	AA	48	C	C5'-C4'-C3'	-7.00	104.80	116.00
21	AA	98	A	C6-N1-C2	-7.00	114.40	118.60
21	AA	1119	C	N3-C4-C5	-7.00	119.10	121.90
27	B5	97	MET	CG-SD-CE	-7.00	89.00	100.20
57	BB	243	U	N3-C4-C5	-7.00	110.40	114.60
57	BB	252	G	C5-C6-O6	-7.00	124.40	128.60
57	BB	509	C	C2-N1-C1'	7.00	126.50	118.80
57	BB	1130	U	P-O3'-C3'	7.00	128.10	119.70
57	BB	1666	G	C8-N9-C1'	7.00	136.10	127.00
57	BB	1740	G	C6-N1-C2	7.00	129.30	125.10
57	BB	2003	A	C5-C6-N6	-7.00	118.10	123.70
57	BB	2325	G	C5-N7-C8	7.00	107.80	104.30
57	BB	2381	A	C1'-O4'-C4'	-7.00	104.30	109.90
58	BA	64	G	C5-C6-O6	-7.00	124.40	128.60
21	AA	1004	A	C4-C5-C6	7.00	120.50	117.00
26	AV	44	A	C4-C5-C6	7.00	120.50	117.00
57	BB	657	U	N3-C4-C5	-7.00	110.40	114.60
22	AY	53	G	C5-N7-C8	7.00	107.80	104.30
57	BB	532	A	P-O3'-C3'	7.00	128.10	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	571	U	C2-N3-C4	-7.00	122.80	127.00
57	BB	766	U	C5-C4-O4	-7.00	121.70	125.90
57	BB	1353	A	N1-C2-N3	-7.00	125.80	129.30
57	BB	1587	G	N3-C2-N2	7.00	124.80	119.90
57	BB	2052	A	C5-C6-N6	-7.00	118.10	123.70
21	AA	439	U	N3-C4-C5	-7.00	110.40	114.60
23	AW	50	U	C6-N1-C2	-7.00	116.80	121.00
57	BB	486	C	O4'-C1'-N1	7.00	113.80	108.20
57	BB	735	A	O5'-P-OP1	-7.00	99.40	105.70
57	BB	1338	G	N3-C4-N9	7.00	130.20	126.00
57	BB	2090	A	C6-C5-N7	-7.00	127.40	132.30
58	BA	84	G	N3-C2-N2	7.00	124.80	119.90
18	AG	35	LYS	O-C-N	-7.00	111.51	122.70
21	AA	327	A	C5-C6-N1	-7.00	114.20	117.70
21	AA	1071	C	C2-N3-C4	7.00	123.40	119.90
57	BB	134	G	N9-C4-C5	7.00	108.20	105.40
57	BB	1413	A	C6-C5-N7	-7.00	127.40	132.30
57	BB	1731	G	N9-C4-C5	-7.00	102.60	105.40
57	BB	1916	A	C4-C5-N7	7.00	114.20	110.70
57	BB	1984	G	N1-C6-O6	7.00	124.10	119.90
21	AA	91	U	C4-C5-C6	6.99	123.90	119.70
21	AA	111	G	C6-C5-N7	-6.99	126.20	130.40
21	AA	1207	G	N1-C2-N2	-6.99	109.91	116.20
21	AA	1250	A	C5-C6-N1	-6.99	114.20	117.70
21	AA	1453	G	C5-C6-N1	-6.99	108.00	111.50
57	BB	215	G	C6-C5-N7	-6.99	126.20	130.40
57	BB	1047	G	N3-C2-N2	6.99	124.80	119.90
57	BB	1416	G	C5-N7-C8	6.99	107.80	104.30
57	BB	1575	C	C4-C5-C6	6.99	120.90	117.40
57	BB	2294	G	N3-C4-C5	-6.99	125.10	128.60
57	BB	2573	C	O4'-C1'-N1	6.99	113.80	108.20
57	BB	2699	C	C2-N3-C4	-6.99	116.40	119.90
57	BB	2807	U	O4'-C1'-N1	6.99	113.80	108.20
58	BA	4	C	N1-C2-O2	-6.99	114.70	118.90
21	AA	724	G	C5-C6-O6	-6.99	124.41	128.60
21	AA	770	C	C6-N1-C2	-6.99	117.50	120.30
21	AA	1260	G	C4-C5-C6	6.99	123.00	118.80
57	BB	1871	A	C5-C6-N1	-6.99	114.20	117.70
57	BB	2308	G	C5-C6-N1	6.99	115.00	111.50
57	BB	2411	A	C5-N7-C8	-6.99	100.40	103.90
21	AA	8	A	C8-N9-C4	-6.99	103.00	105.80
21	AA	74	A	O4'-C1'-N9	6.99	113.79	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	600	A	O4'-C1'-N9	6.99	113.79	108.20
21	AA	1264	U	C6-N1-C2	-6.99	116.81	121.00
21	AA	1343	G	C8-N9-C4	-6.99	103.60	106.40
21	AA	1519	A	C5-N7-C8	6.99	107.40	103.90
22	AY	12	U	O5'-C5'-C4'	6.99	124.98	111.70
57	BB	880	G	N1-C6-O6	6.99	124.09	119.90
57	BB	1267	U	C5-C6-N1	-6.99	119.20	122.70
21	AA	851	G	O4'-C1'-N9	6.99	113.79	108.20
21	AA	1333	A	N7-C8-N9	6.99	117.29	113.80
23	AW	1	G	O4'-C1'-N9	6.99	113.79	108.20
57	BB	188	G	C5-N7-C8	6.99	107.79	104.30
57	BB	413	C	N3-C4-N4	6.99	122.89	118.00
57	BB	841	G	C1'-O4'-C4'	-6.99	104.31	109.90
57	BB	1140	C	N1-C2-O2	-6.99	114.71	118.90
57	BB	1503	A	N1-C2-N3	6.99	132.79	129.30
57	BB	1914	C	C5-C6-N1	6.99	124.50	121.00
57	BB	2425	A	C5-C6-N1	-6.99	114.21	117.70
21	AA	341	C	O4'-C1'-N1	6.99	113.79	108.20
21	AA	775	G	C8-N9-C1'	6.99	136.08	127.00
57	BB	679	C	O4'-C1'-N1	6.99	113.79	108.20
57	BB	1058	U	C5-C4-O4	-6.99	121.71	125.90
57	BB	1803	A	C6-C5-N7	-6.99	127.41	132.30
57	BB	2900	A	N3-C4-N9	6.99	132.99	127.40
14	AC	135	ARG	NE-CZ-NH1	6.99	123.79	120.30
21	AA	1127	G	C4-C5-N7	6.99	113.59	110.80
23	AW	7	A	C8-N9-C4	6.99	108.59	105.80
48	B1	20	TYR	CB-CG-CD1	-6.99	116.81	121.00
57	BB	332	A	P-O3'-C3'	6.99	128.08	119.70
57	BB	346	A	N9-C4-C5	-6.99	103.00	105.80
57	BB	1676	A	N7-C8-N9	-6.99	110.31	113.80
57	BB	1714	U	C2-N3-C4	6.99	131.19	127.00
21	AA	216	U	C1'-O4'-C4'	-6.98	104.31	109.90
21	AA	1242	G	N9-C4-C5	-6.98	102.61	105.40
21	AA	1438	G	O4'-C1'-N9	6.98	113.79	108.20
57	BB	878	A	C5'-C4'-C3'	6.98	127.17	116.00
57	BB	1184	U	O4'-C1'-N1	6.98	113.79	108.20
24	AX	14	A	P-O3'-C3'	6.98	128.08	119.70
57	BB	682	G	C4-C5-C6	6.98	122.99	118.80
57	BB	1291	C	N3-C4-N4	6.98	122.89	118.00
57	BB	2204	G	O4'-C1'-N9	6.98	113.79	108.20
57	BB	2791	G	O4'-C1'-N9	6.98	113.79	108.20
21	AA	263	A	C5-C6-N6	-6.98	118.12	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1510	C	N3-C4-N4	6.98	122.89	118.00
57	BB	81	G	C6-C5-N7	-6.98	126.21	130.40
57	BB	199	A	O4'-C1'-N9	6.98	113.78	108.20
57	BB	453	A	C6-C5-N7	-6.98	127.41	132.30
57	BB	1202	G	N9-C4-C5	-6.98	102.61	105.40
57	BB	1949	G	N3-C2-N2	6.98	124.79	119.90
57	BB	2064	C	C2-N3-C4	6.98	123.39	119.90
57	BB	2574	G	C4-C5-N7	-6.98	108.01	110.80
57	BB	2651	C	N1-C2-O2	6.98	123.09	118.90
57	BB	2885	G	C6-C5-N7	-6.98	126.21	130.40
57	BB	2886	A	O4'-C1'-N9	6.98	113.78	108.20
21	AA	120	A	C5-N7-C8	-6.98	100.41	103.90
21	AA	924	C	N3-C4-N4	6.98	122.89	118.00
24	AX	16	A	C3'-C2'-C1'	-6.98	95.92	101.50
57	BB	1196	C	O4'-C1'-N1	6.98	113.78	108.20
57	BB	1653	G	N3-C2-N2	6.98	124.78	119.90
57	BB	2672	U	N1-C2-N3	-6.98	110.71	114.90
57	BB	810	U	C3'-C2'-C1'	-6.98	95.92	101.50
57	BB	832	U	C4-C5-C6	6.98	123.89	119.70
57	BB	2450	A	C4-C5-C6	6.98	120.49	117.00
21	AA	1487	G	C2-N3-C4	-6.98	108.41	111.90
28	BI	89	SER	N-CA-CB	6.98	120.96	110.50
34	BO	33	ARG	NE-CZ-NH1	6.98	123.79	120.30
57	BB	1053	C	C4-C5-C6	6.98	120.89	117.40
57	BB	1320	C	N3-C4-N4	6.98	122.88	118.00
57	BB	1856	U	C4'-C3'-C2'	-6.98	95.62	102.60
57	BB	2208	C	C6-N1-C2	6.98	123.09	120.30
57	BB	2589	A	C4-C5-N7	-6.98	107.21	110.70
21	AA	1334	G	N3-C2-N2	6.97	124.78	119.90
26	AV	23	C	N3-C4-N4	6.97	122.88	118.00
57	BB	863	A	C6-C5-N7	-6.97	127.42	132.30
57	BB	1113	U	N3-C2-O2	-6.97	117.32	122.20
57	BB	1152	C	N1-C2-N3	-6.97	114.32	119.20
57	BB	2259	U	P-O3'-C3'	-6.97	111.33	119.70
21	AA	467	U	C1'-O4'-C4'	-6.97	104.32	109.90
21	AA	1464	U	C3'-C2'-C1'	-6.97	95.92	101.50
57	BB	125	A	C4-C5-C6	6.97	120.49	117.00
57	BB	896	A	C5'-C4'-C3'	6.97	127.16	116.00
57	BB	1361	G	C4-C5-C6	6.97	122.98	118.80
57	BB	1383	A	O4'-C1'-N9	6.97	113.78	108.20
57	BB	1444	G	C3'-C2'-C1'	-6.97	95.92	101.50
57	BB	1967	C	C6-N1-C2	-6.97	117.51	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2231	U	N3-C4-C5	-6.97	110.42	114.60
21	AA	730	G	C5-C6-N1	-6.97	108.01	111.50
22	AY	5	A	N7-C8-N9	-6.97	110.31	113.80
57	BB	827	U	N3-C2-O2	6.97	127.08	122.20
57	BB	2579	C	N3-C4-N4	6.97	122.88	118.00
57	BB	2623	G	N1-C2-N3	-6.97	119.72	123.90
57	BB	2780	G	N1-C6-O6	6.97	124.08	119.90
57	BB	2799	A	O4'-C1'-N9	6.97	113.78	108.20
21	AA	935	A	C5-C6-N6	-6.97	118.12	123.70
23	AW	53	G	N3-C2-N2	6.97	124.78	119.90
24	AX	22	A	N1-C6-N6	6.97	122.78	118.60
57	BB	374	A	N3-C4-N9	6.97	132.97	127.40
57	BB	579	G	C5-N7-C8	-6.97	100.81	104.30
57	BB	635	C	N3-C4-C5	-6.97	119.11	121.90
57	BB	1160	G	C6-C5-N7	-6.97	126.22	130.40
57	BB	2060	A	C8-N9-C4	-6.97	103.01	105.80
58	BA	89	U	P-O5'-C5'	6.97	132.05	120.90
57	BB	465	G	C4-C5-N7	-6.97	108.01	110.80
57	BB	475	C	O5'-P-OP2	6.97	119.06	110.70
57	BB	752	A	P-O3'-C3'	6.97	128.06	119.70
57	BB	1375	U	P-O5'-C5'	-6.97	109.75	120.90
57	BB	1677	A	C2-N3-C4	6.97	114.08	110.60
57	BB	1721	G	O4'-C1'-N9	6.97	113.77	108.20
57	BB	2469	A	N3-C4-C5	-6.97	121.92	126.80
21	AA	148	G	C4-C5-C6	6.97	122.98	118.80
21	AA	1144	G	N3-C4-C5	-6.97	125.12	128.60
57	BB	10	A	C8-N9-C4	6.97	108.59	105.80
57	BB	98	G	N7-C8-N9	6.97	116.58	113.10
57	BB	365	U	N1-C2-N3	-6.97	110.72	114.90
57	BB	989	G	N3-C2-N2	6.97	124.78	119.90
57	BB	1145	C	N3-C4-N4	6.97	122.88	118.00
57	BB	2010	G	C3'-C2'-C1'	-6.97	95.93	101.50
57	BB	2107	G	C6-N1-C2	6.97	129.28	125.10
57	BB	2403	C	N1-C2-O2	-6.97	114.72	118.90
57	BB	2485	G	N7-C8-N9	6.97	116.58	113.10
2	AK	84	MET	CG-SD-CE	-6.96	89.06	100.20
18	AG	2	ARG	NE-CZ-NH1	6.96	123.78	120.30
21	AA	1305	G	N3-C2-N2	6.96	124.78	119.90
57	BB	299	A	C4-C5-C6	6.96	120.48	117.00
57	BB	1651	G	N1-C2-N3	-6.96	119.72	123.90
21	AA	1283	U	O4'-C1'-N1	6.96	113.77	108.20
26	AV	45	G	C5-N7-C8	6.96	107.78	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2145	C	C4'-C3'-C2'	6.96	109.56	102.60
57	BB	2272	U	O4'-C1'-N1	6.96	113.77	108.20
57	BB	2475	C	C2-N1-C1'	6.96	126.46	118.80
21	AA	883	C	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1040	U	C2-N3-C4	-6.96	122.82	127.00
21	AA	1137	C	C6-N1-C2	-6.96	117.52	120.30
21	AA	1461	G	P-O3'-C3'	6.96	128.05	119.70
26	AV	57	A	N9-C4-C5	6.96	108.58	105.80
57	BB	60	G	N1-C6-O6	6.96	124.08	119.90
57	BB	128	C	N3-C4-N4	6.96	122.87	118.00
57	BB	360	U	N3-C4-O4	6.96	124.27	119.40
57	BB	1432	G	O4'-C1'-N9	6.96	113.77	108.20
57	BB	2269	G	C5-C6-O6	-6.96	124.42	128.60
57	BB	2731	G	C4-C5-N7	-6.96	108.02	110.80
57	BB	2825	G	C4-C5-C6	6.96	122.98	118.80
57	BB	2851	A	C4-C5-N7	-6.96	107.22	110.70
57	BB	1842	G	C6-N1-C2	6.96	129.28	125.10
21	AA	149	A	N1-C2-N3	6.96	132.78	129.30
21	AA	238	A	C5-N7-C8	6.96	107.38	103.90
21	AA	1123	U	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1523	G	N9-C1'-C2'	-6.96	104.35	112.00
26	AV	28	C	C6-N1-C2	-6.96	117.52	120.30
57	BB	376	G	N1-C6-O6	6.96	124.08	119.90
57	BB	1528	A	P-O3'-C3'	-6.96	111.35	119.70
57	BB	2301	C	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1109	C	C4-C5-C6	6.96	120.88	117.40
57	BB	312	G	P-O5'-C5'	6.96	132.03	120.90
57	BB	757	G	C1'-O4'-C4'	-6.96	104.33	109.90
57	BB	894	U	C4'-C3'-C2'	-6.96	95.64	102.60
57	BB	909	A	O4'-C1'-N9	6.96	113.77	108.20
57	BB	1029	A	N3-C4-C5	-6.96	121.93	126.80
57	BB	1748	C	C4-C5-C6	6.96	120.88	117.40
21	AA	1465	A	O4'-C1'-N9	6.96	113.76	108.20
57	BB	1834	U	O4'-C1'-N1	6.96	113.76	108.20
57	BB	2654	A	C2-N3-C4	-6.96	107.12	110.60
21	AA	497	G	C4-C5-C6	6.95	122.97	118.80
21	AA	1090	U	O4'-C1'-N1	6.95	113.76	108.20
21	AA	1282	C	O4'-C1'-N1	6.95	113.76	108.20
57	BB	51	G	C8-N9-C4	-6.95	103.62	106.40
57	BB	117	G	N9-C4-C5	-6.95	102.62	105.40
57	BB	853	C	C6-N1-C2	6.95	123.08	120.30
57	BB	1335	C	O4'-C1'-N1	6.95	113.76	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1458	U	P-O5'-C5'	-6.95	109.78	120.90
57	BB	1950	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	221	C	C5-C4-N4	-6.95	115.33	120.20
21	AA	1026	G	P-O3'-C3'	-6.95	111.36	119.70
21	AA	1359	C	C5-C4-N4	-6.95	115.33	120.20
57	BB	563	A	O4'-C1'-N9	6.95	113.76	108.20
57	BB	781	A	C5-C6-N1	-6.95	114.22	117.70
57	BB	1414	C	N3-C4-N4	6.95	122.87	118.00
57	BB	1420	A	C2-N3-C4	-6.95	107.12	110.60
57	BB	1885	A	O4'-C1'-N9	6.95	113.76	108.20
57	BB	2487	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	860	A	O4'-C1'-N9	6.95	113.76	108.20
21	AA	865	A	C6-N1-C2	-6.95	114.43	118.60
27	B5	112	ASP	CB-CG-OD2	-6.95	112.05	118.30
57	BB	190	A	C5-N7-C8	6.95	107.38	103.90
57	BB	1017	G	N3-C4-N9	-6.95	121.83	126.00
57	BB	1749	A	N1-C6-N6	6.95	122.77	118.60
57	BB	1950	G	N9-C4-C5	6.95	108.18	105.40
57	BB	2205	A	C4-C5-C6	6.95	120.47	117.00
58	BA	86	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	508	U	O4'-C1'-N1	6.95	113.76	108.20
21	AA	870	U	N1-C2-O2	6.95	127.66	122.80
21	AA	1179	A	C5-C6-N6	-6.95	118.14	123.70
57	BB	118	A	C2-N3-C4	-6.95	107.13	110.60
57	BB	446	G	C4-C5-N7	6.95	113.58	110.80
57	BB	464	U	C4-C5-C6	-6.95	115.53	119.70
57	BB	1875	G	N9-C4-C5	-6.95	102.62	105.40
57	BB	1941	C	N3-C4-C5	-6.95	119.12	121.90
57	BB	2537	U	O4'-C1'-N1	6.95	113.76	108.20
57	BB	2822	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	1508	A	C1'-O4'-C4'	6.95	115.46	109.90
57	BB	446	G	C6-C5-N7	-6.95	126.23	130.40
57	BB	599	A	C1'-O4'-C4'	-6.95	104.34	109.90
57	BB	701	G	C6-C5-N7	-6.95	126.23	130.40
57	BB	1568	G	C5-C6-O6	-6.95	124.43	128.60
57	BB	1614	A	C2-N3-C4	6.95	114.07	110.60
21	AA	393	A	N7-C8-N9	6.95	117.27	113.80
21	AA	456	A	N9-C4-C5	6.95	108.58	105.80
21	AA	1225	A	N9-C4-C5	6.95	108.58	105.80
21	AA	1351	U	C6-N1-C2	-6.95	116.83	121.00
22	AY	7	U	C3'-C2'-C1'	-6.95	95.94	101.50
57	BB	1721	G	C5-C6-N1	-6.95	108.03	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1840	G	C4-C5-C6	6.95	122.97	118.80
57	BB	1986	C	N3-C4-N4	6.95	122.86	118.00
57	BB	2040	G	C5-N7-C8	-6.95	100.83	104.30
57	BB	2740	A	N1-C2-N3	6.95	132.77	129.30
21	AA	42	G	C5-C6-O6	-6.94	124.43	128.60
57	BB	64	A	N9-C4-C5	-6.94	103.02	105.80
57	BB	511	U	C1'-O4'-C4'	6.94	115.45	109.90
57	BB	1926	U	C2-N3-C4	6.94	131.17	127.00
21	AA	724	G	O4'-C1'-N9	6.94	113.75	108.20
21	AA	1100	C	C5'-C4'-O4'	-6.94	100.77	109.10
57	BB	547	A	N1-C2-N3	-6.94	125.83	129.30
57	BB	1171	G	C5-C6-N1	-6.94	108.03	111.50
57	BB	1557	C	C6-N1-C2	-6.94	117.52	120.30
57	BB	2385	C	C2-N3-C4	-6.94	116.43	119.90
58	BA	105	G	C8-N9-C4	-6.94	103.62	106.40
58	BA	114	C	C5-C6-N1	6.94	124.47	121.00
21	AA	58	C	O4'-C1'-N1	6.94	113.75	108.20
21	AA	366	A	O4'-C1'-C2'	6.94	113.85	107.60
21	AA	676	A	C4-C5-C6	6.94	120.47	117.00
21	AA	737	C	N3-C4-N4	6.94	122.86	118.00
21	AA	839	C	N3-C4-C5	-6.94	119.12	121.90
26	AV	7	G	C6-C5-N7	-6.94	126.24	130.40
57	BB	77	G	N7-C8-N9	-6.94	109.63	113.10
57	BB	936	A	C5-C6-N1	-6.94	114.23	117.70
57	BB	1319	C	N3-C4-N4	6.94	122.86	118.00
57	BB	1401	G	C4-C5-N7	-6.94	108.02	110.80
57	BB	1734	G	C5-C6-N1	-6.94	108.03	111.50
57	BB	2282	G	C2'-C3'-O3'	6.94	124.80	113.70
57	BB	2484	G	N3-C2-N2	6.94	124.76	119.90
57	BB	2602	A	C2-N3-C4	6.94	114.07	110.60
57	BB	646	U	O4'-C1'-N1	6.94	113.75	108.20
57	BB	811	U	C5-C6-N1	6.94	126.17	122.70
57	BB	1407	G	C4-C5-N7	6.94	113.58	110.80
57	BB	2764	A	O4'-C1'-N9	6.94	113.75	108.20
21	AA	301	G	N7-C8-N9	6.94	116.57	113.10
21	AA	424	G	C6-C5-N7	-6.94	126.24	130.40
21	AA	776	G	C5-C6-O6	-6.94	124.44	128.60
57	BB	171	U	C1'-O4'-C4'	-6.94	104.35	109.90
57	BB	736	C	O4'-C1'-N1	6.94	113.75	108.20
57	BB	748	G	O4'-C1'-N9	6.94	113.75	108.20
57	BB	1206	G	O4'-C1'-N9	6.94	113.75	108.20
57	BB	1807	G	N1-C2-N3	-6.94	119.74	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2083	G	C6-C5-N7	-6.94	126.24	130.40
57	BB	2331	G	N7-C8-N9	6.94	116.57	113.10
21	AA	123	U	C5-C4-O4	6.94	130.06	125.90
39	BT	20	ALA	N-CA-CB	6.94	119.81	110.10
57	BB	256	A	N7-C8-N9	6.94	117.27	113.80
57	BB	1526	C	N1-C2-O2	6.94	123.06	118.90
57	BB	2532	G	C5-C6-O6	-6.94	124.44	128.60
21	AA	279	A	O4'-C1'-N9	6.93	113.75	108.20
21	AA	839	C	C4-C5-C6	6.93	120.87	117.40
21	AA	1235	U	C6-N1-C2	6.93	125.16	121.00
22	AY	25	C	C4-C5-C6	6.93	120.87	117.40
23	AW	44	G	P-O3'-C3'	6.93	128.02	119.70
35	BP	108	ARG	NE-CZ-NH2	6.93	123.77	120.30
57	BB	891	G	N1-C6-O6	6.93	124.06	119.90
57	BB	1259	G	P-O3'-C3'	-6.93	111.38	119.70
57	BB	1494	A	C2-N3-C4	-6.93	107.13	110.60
57	BB	1714	U	O4'-C1'-N1	6.93	113.75	108.20
21	AA	1179	A	N7-C8-N9	6.93	117.27	113.80
21	AA	1364	U	C5'-C4'-C3'	-6.93	104.91	116.00
22	AY	30	G	N1-C6-O6	6.93	124.06	119.90
22	AY	37	G	C2-N3-C4	6.93	115.37	111.90
57	BB	189	G	N3-C4-C5	-6.93	125.13	128.60
57	BB	1733	G	N3-C4-C5	-6.93	125.13	128.60
57	BB	1770	G	O4'-C1'-N9	6.93	113.75	108.20
58	BA	81	G	N1-C2-N3	-6.93	119.74	123.90
58	BA	109	A	C6-C5-N7	-6.93	127.45	132.30
57	BB	1248	G	C6-C5-N7	-6.93	126.24	130.40
57	BB	1865	U	P-O3'-C3'	6.93	128.02	119.70
57	BB	2254	C	C5-C6-N1	6.93	124.47	121.00
57	BB	2411	A	N9-C4-C5	6.93	108.57	105.80
57	BB	2421	G	N1-C6-O6	-6.93	115.74	119.90
57	BB	2535	G	C6-C5-N7	-6.93	126.24	130.40
6	AO	14	PHE	CB-CG-CD1	-6.93	115.95	120.80
21	AA	299	G	N1-C2-N3	-6.93	119.74	123.90
21	AA	759	A	N3-C4-C5	-6.93	121.95	126.80
21	AA	958	A	C4-C5-N7	-6.93	107.23	110.70
21	AA	1015	G	C8-N9-C4	-6.93	103.63	106.40
21	AA	1042	A	C2-N3-C4	-6.93	107.14	110.60
21	AA	1146	A	C5-C6-N6	-6.93	118.16	123.70
22	AY	9	A	C5-C6-N1	-6.93	114.24	117.70
57	BB	184	C	N3-C4-N4	6.93	122.85	118.00
57	BB	272	A	C2-N3-C4	6.93	114.06	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	391	A	C5-C6-N1	-6.93	114.23	117.70
57	BB	1010	A	P-O5'-C5'	6.93	131.99	120.90
57	BB	1175	A	C8-N9-C4	-6.93	103.03	105.80
57	BB	1318	U	C3'-C2'-C1'	-6.93	95.96	101.50
57	BB	1356	G	O4'-C1'-N9	6.93	113.74	108.20
57	BB	2263	C	C5-C6-N1	6.93	124.47	121.00
21	AA	455	G	C8-N9-C4	6.93	109.17	106.40
21	AA	1279	G	C5-C6-O6	-6.93	124.44	128.60
57	BB	7	G	C5-N7-C8	6.93	107.76	104.30
57	BB	15	G	O4'-C1'-N9	6.93	113.74	108.20
57	BB	347	A	C6-N1-C2	6.93	122.76	118.60
57	BB	1773	A	N9-C4-C5	6.93	108.57	105.80
57	BB	1782	U	C6-N1-C2	-6.93	116.84	121.00
57	BB	2665	A	N1-C2-N3	6.93	132.76	129.30
21	AA	1234	C	N3-C2-O2	6.93	126.75	121.90
22	AY	20	G	N3-C4-C5	-6.93	125.14	128.60
57	BB	128	C	C6-N1-C2	-6.93	117.53	120.30
57	BB	1218	G	C8-N9-C4	6.93	109.17	106.40
57	BB	1813	G	O5'-C5'-C4'	-6.93	98.54	111.70
57	BB	1899	A	C8-N9-C4	-6.93	103.03	105.80
57	BB	2428	G	C2-N3-C4	6.93	115.36	111.90
57	BB	2521	C	N1-C2-O2	6.93	123.06	118.90
57	BB	2803	G	C6-C5-N7	-6.93	126.24	130.40
21	AA	112	G	C5-C6-N1	-6.92	108.04	111.50
21	AA	525	C	C5-C4-N4	-6.92	115.35	120.20
21	AA	663	A	N1-C2-N3	6.92	132.76	129.30
21	AA	1025	U	N3-C4-C5	-6.92	110.44	114.60
21	AA	1093	A	C6-C5-N7	-6.92	127.45	132.30
21	AA	1145	A	C2-N3-C4	6.92	114.06	110.60
21	AA	1301	U	N1-C2-N3	6.92	119.06	114.90
30	BK	55	ASP	CB-CG-OD1	6.92	124.53	118.30
57	BB	29	U	O4'-C1'-N1	6.92	113.74	108.20
57	BB	1519	G	C5-N7-C8	-6.92	100.84	104.30
57	BB	1627	G	P-O3'-C3'	-6.92	111.39	119.70
57	BB	2619	C	C5'-C4'-C3'	-6.92	104.92	116.00
57	BB	2737	G	C2-N3-C4	6.92	115.36	111.90
58	BA	16	G	P-O5'-C5'	6.92	131.98	120.90
22	AY	5	A	C6-N1-C2	6.92	122.75	118.60
24	AX	15	A	C5-C6-N1	-6.92	114.24	117.70
57	BB	992	C	N3-C4-N4	-6.92	113.15	118.00
57	BB	1373	A	N7-C8-N9	6.92	117.26	113.80
58	BA	82	U	O4'-C4'-C3'	-6.92	97.08	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	5	U	N1-C2-N3	6.92	119.05	114.90
21	AA	255	G	N1-C2-N3	-6.92	119.75	123.90
21	AA	258	G	N1-C2-N3	-6.92	119.75	123.90
21	AA	432	A	O4'-C1'-N9	6.92	113.74	108.20
21	AA	568	G	C5-C6-N1	-6.92	108.04	111.50
21	AA	930	C	C4-C5-C6	6.92	120.86	117.40
22	AY	19	G	C6-N1-C2	-6.92	120.95	125.10
23	AW	42	C	O4'-C1'-N1	6.92	113.74	108.20
57	BB	381	G	C4-C5-N7	6.92	113.57	110.80
57	BB	713	G	C6-C5-N7	-6.92	126.25	130.40
57	BB	1871	A	C2-N3-C4	-6.92	107.14	110.60
57	BB	2032	G	O4'-C1'-N9	6.92	113.74	108.20
57	BB	2060	A	C2-N3-C4	-6.92	107.14	110.60
58	BA	52	A	C4-C5-N7	-6.92	107.24	110.70
7	AP	14	ARG	NE-CZ-NH2	-6.92	116.84	120.30
57	BB	242	G	C3'-C2'-C1'	-6.92	95.96	101.50
57	BB	860	U	O4'-C1'-N1	6.92	113.74	108.20
57	BB	1213	A	N1-C2-N3	6.92	132.76	129.30
21	AA	168	G	O4'-C1'-N9	6.92	113.73	108.20
21	AA	1163	A	O4'-C1'-N9	6.92	113.73	108.20
22	AY	29	A	C3'-C2'-C1'	-6.92	95.97	101.50
57	BB	273	G	C5-N7-C8	6.92	107.76	104.30
57	BB	374	A	N9-C4-C5	-6.92	103.03	105.80
57	BB	809	G	C8-N9-C4	6.92	109.17	106.40
57	BB	1207	C	C5-C6-N1	6.92	124.46	121.00
57	BB	2830	C	P-O3'-C3'	-6.92	111.40	119.70
21	AA	1178	G	C2-N3-C4	-6.92	108.44	111.90
57	BB	214	G	C4-C5-N7	6.92	113.57	110.80
57	BB	1176	U	C5-C6-N1	6.92	126.16	122.70
57	BB	1702	G	N3-C2-N2	6.92	124.74	119.90
57	BB	1844	C	P-O3'-C3'	-6.92	111.40	119.70
57	BB	1873	G	N9-C1'-C2'	-6.92	104.39	112.00
57	BB	1998	A	C8-N9-C4	6.92	108.57	105.80
58	BA	114	C	N3-C4-N4	6.92	122.84	118.00
21	AA	768	A	P-O5'-C5'	6.92	131.96	120.90
21	AA	1462	C	C6-N1-C1'	-6.92	112.50	120.80
57	BB	297	G	C8-N9-C4	6.92	109.17	106.40
57	BB	359	G	N1-C2-N3	-6.92	119.75	123.90
57	BB	2428	G	O4'-C1'-N9	6.92	113.73	108.20
13	AB	22	TRP	CB-CG-CD1	6.91	135.99	127.00
21	AA	1244	G	C4'-C3'-C2'	-6.91	95.69	102.60
21	AA	1415	G	C6-N1-C2	-6.91	120.95	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	18	G	C4-C5-N7	6.91	113.57	110.80
57	BB	183	C	O4'-C1'-N1	6.91	113.73	108.20
57	BB	795	C	N3-C4-C5	-6.91	119.14	121.90
57	BB	1072	C	C1'-O4'-C4'	-6.91	104.37	109.90
57	BB	1075	C	N3-C4-N4	6.91	122.84	118.00
57	BB	2087	G	N1-C2-N3	-6.91	119.75	123.90
57	BB	2156	G	N1-C2-N3	-6.91	119.75	123.90
57	BB	2307	G	C8-N9-C4	6.91	109.17	106.40
57	BB	2370	G	C5-N7-C8	-6.91	100.84	104.30
57	BB	2421	G	N1-C2-N3	-6.91	119.75	123.90
21	AA	761	G	N1-C6-O6	6.91	124.05	119.90
21	AA	1074	G	C6-N1-C2	-6.91	120.95	125.10
21	AA	1392	G	N9-C4-C5	6.91	108.17	105.40
21	AA	1432	G	O4'-C1'-N9	6.91	113.73	108.20
21	AA	530	G	N1-C6-O6	6.91	124.05	119.90
21	AA	907	A	C8-N9-C4	-6.91	103.04	105.80
21	AA	1161	C	C5-C4-N4	-6.91	115.36	120.20
21	AA	1213	A	C5'-C4'-O4'	6.91	117.39	109.10
22	AY	76	A	C5-C6-N1	-6.91	114.25	117.70
23	AW	24	G	N3-C2-N2	6.91	124.74	119.90
57	BB	809	G	O4'-C1'-N9	6.91	113.73	108.20
57	BB	1327	A	C4-C5-C6	6.91	120.46	117.00
57	BB	1606	C	C2-N3-C4	6.91	123.36	119.90
57	BB	2491	U	N3-C4-O4	6.91	124.24	119.40
57	BB	2788	C	O4'-C1'-N1	6.91	113.73	108.20
21	AA	242	G	C4-C5-N7	-6.91	108.04	110.80
21	AA	432	A	N9-C4-C5	6.91	108.56	105.80
21	AA	1523	G	N3-C4-N9	-6.91	121.86	126.00
57	BB	75	G	C6-C5-N7	-6.91	126.25	130.40
57	BB	229	C	C5-C6-N1	-6.91	117.55	121.00
57	BB	663	G	C5-C6-N1	6.91	114.95	111.50
57	BB	1285	A	N3-C4-C5	-6.91	121.96	126.80
57	BB	1608	A	C5-C6-N1	-6.91	114.25	117.70
57	BB	2722	G	C6-C5-N7	-6.91	126.25	130.40
58	BA	82	U	N3-C4-C5	-6.91	110.45	114.60
21	AA	201	G	N3-C2-N2	6.91	124.73	119.90
21	AA	410	G	N9-C4-C5	-6.91	102.64	105.40
21	AA	1050	G	C8-N9-C4	-6.91	103.64	106.40
57	BB	582	A	C5-C6-N1	-6.91	114.25	117.70
57	BB	727	A	C5-C6-N6	-6.91	118.17	123.70
21	AA	109	A	C2-N3-C4	-6.91	107.15	110.60
21	AA	219	U	C5-C4-O4	-6.91	121.76	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	964	A	C2-N3-C4	-6.91	107.15	110.60
57	BB	101	A	C6-C5-N7	-6.91	127.47	132.30
57	BB	579	G	C5-C6-O6	-6.91	124.46	128.60
57	BB	1852	U	P-O3'-C3'	-6.91	111.41	119.70
57	BB	2292	U	N3-C4-O4	6.91	124.23	119.40
57	BB	2810	A	C6-N1-C2	6.91	122.74	118.60
58	BA	72	G	C4-C5-C6	6.91	122.94	118.80
21	AA	251	G	C4-C5-C6	6.90	122.94	118.80
21	AA	742	G	N9-C4-C5	-6.90	102.64	105.40
22	AY	1	G	O4'-C1'-N9	6.90	113.72	108.20
26	AV	32	C	C5-C6-N1	6.90	124.45	121.00
57	BB	73	A	N1-C2-N3	6.90	132.75	129.30
57	BB	2190	G	C5-C6-N1	-6.90	108.05	111.50
21	AA	860	A	C8-N9-C4	-6.90	103.04	105.80
21	AA	1223	C	C5-C6-N1	6.90	124.45	121.00
21	AA	1386	G	O4'-C1'-N9	6.90	113.72	108.20
57	BB	169	G	N1-C2-N3	-6.90	119.76	123.90
57	BB	1217	U	C4-C5-C6	-6.90	115.56	119.70
57	BB	2181	U	C6-N1-C2	-6.90	116.86	121.00
57	BB	2311	A	C5'-C4'-O4'	6.90	117.38	109.10
57	BB	2338	C	N3-C4-N4	6.90	122.83	118.00
4	AM	106	ARG	NE-CZ-NH1	6.90	123.75	120.30
21	AA	382	A	C6-N1-C2	6.90	122.74	118.60
21	AA	1139	G	N9-C4-C5	6.90	108.16	105.40
21	AA	1217	C	N3-C2-O2	-6.90	117.07	121.90
21	AA	1408	A	C8-N9-C4	-6.90	103.04	105.80
26	AV	1	C	O5'-P-OP2	-6.90	99.49	105.70
57	BB	13	A	C4-C5-C6	6.90	120.45	117.00
57	BB	689	A	C8-N9-C4	-6.90	103.04	105.80
57	BB	899	A	C6-N1-C2	6.90	122.74	118.60
57	BB	1092	C	C4'-C3'-C2'	-6.90	95.70	102.60
57	BB	1163	G	N1-C6-O6	6.90	124.04	119.90
57	BB	1297	C	C6-N1-C2	-6.90	117.54	120.30
57	BB	1734	G	C4-C5-C6	6.90	122.94	118.80
57	BB	2172	U	O4'-C1'-N1	6.90	113.72	108.20
57	BB	2482	A	N3-C4-C5	-6.90	121.97	126.80
58	BA	83	G	C6-C5-N7	-6.90	126.26	130.40
21	AA	855	U	N1-C2-O2	6.90	127.63	122.80
21	AA	863	U	O4'-C1'-N1	6.90	113.72	108.20
57	BB	1558	C	C2-N1-C1'	6.90	126.39	118.80
57	BB	1610	A	C8-N9-C4	-6.90	103.04	105.80
57	BB	1682	G	C5-C6-N1	-6.90	108.05	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2815	C	C4-C5-C6	-6.90	113.95	117.40
57	BB	2883	A	C5-C6-N1	-6.90	114.25	117.70
21	AA	319	G	C6-C5-N7	-6.90	126.26	130.40
21	AA	959	A	N1-C2-N3	-6.90	125.85	129.30
21	AA	1359	C	N1-C2-O2	6.90	123.04	118.90
57	BB	599	A	O4'-C1'-N9	6.90	113.72	108.20
57	BB	648	G	C8-N9-C4	-6.90	103.64	106.40
57	BB	673	C	N3-C4-N4	6.90	122.83	118.00
57	BB	1160	G	N3-C2-N2	6.90	124.73	119.90
57	BB	1298	C	N3-C2-O2	-6.90	117.07	121.90
57	BB	1611	C	C5-C4-N4	-6.90	115.37	120.20
57	BB	1640	A	C5-C6-N1	-6.90	114.25	117.70
57	BB	2551	C	N1-C2-O2	-6.90	114.76	118.90
57	BB	2708	G	O4'-C1'-N9	6.90	113.72	108.20
58	BA	66	A	C2-N3-C4	-6.90	107.15	110.60
21	AA	1175	G	N3-C4-C5	6.90	132.05	128.60
57	BB	1955	U	N1-C2-N3	-6.90	110.76	114.90
57	BB	2369	A	N9-C4-C5	6.90	108.56	105.80
4	AM	78	ARG	NH1-CZ-NH2	6.89	126.98	119.40
21	AA	1229	A	C5-C6-N6	-6.89	118.18	123.70
57	BB	563	A	C8-N9-C4	6.89	108.56	105.80
57	BB	755	U	C2-N3-C4	6.89	131.14	127.00
57	BB	899	A	N7-C8-N9	6.89	117.25	113.80
57	BB	1922	G	O4'-C1'-N9	6.89	113.72	108.20
57	BB	2053	G	P-O3'-C3'	-6.89	111.43	119.70
21	AA	211	G	C6-C5-N7	-6.89	126.27	130.40
21	AA	380	G	P-O3'-C3'	-6.89	111.43	119.70
21	AA	400	C	N1-C2-O2	6.89	123.04	118.90
21	AA	929	G	C1'-O4'-C4'	6.89	115.41	109.90
57	BB	44	A	C5-N7-C8	6.89	107.35	103.90
57	BB	860	U	C6-N1-C2	-6.89	116.86	121.00
57	BB	2769	U	N3-C2-O2	6.89	127.03	122.20
18	AG	52	ARG	NE-CZ-NH2	-6.89	116.86	120.30
21	AA	74	A	C2-N3-C4	-6.89	107.16	110.60
21	AA	345	C	N1-C2-O2	6.89	123.03	118.90
57	BB	97	C	C6-N1-C2	-6.89	117.54	120.30
57	BB	750	A	N7-C8-N9	6.89	117.25	113.80
57	BB	1883	U	N3-C4-C5	-6.89	110.47	114.60
21	AA	1204	A	N9-C1'-C2'	-6.89	104.42	112.00
21	AA	1349	A	N1-C2-N3	6.89	132.75	129.30
21	AA	1390	U	N3-C4-C5	-6.89	110.47	114.60
22	AY	21	A	C5-C6-N6	-6.89	118.19	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1098	A	C6-C5-N7	-6.89	127.48	132.30
57	BB	1193	G	N3-C2-N2	6.89	124.72	119.90
57	BB	1542	U	N1-C2-O2	-6.89	117.98	122.80
57	BB	1773	A	C8-N9-C4	-6.89	103.04	105.80
21	AA	651	C	C2-N3-C4	6.89	123.34	119.90
21	AA	775	G	C8-N9-C4	-6.89	103.64	106.40
21	AA	1332	A	N1-C6-N6	6.89	122.73	118.60
22	AY	5	A	C5-N7-C8	6.89	107.34	103.90
57	BB	1599	U	C5-C6-N1	6.89	126.14	122.70
57	BB	2479	U	N3-C4-C5	-6.89	110.47	114.60
21	AA	52	C	C3'-C2'-C1'	6.89	107.01	101.50
21	AA	1347	G	C6-C5-N7	-6.89	126.27	130.40
57	BB	19	A	C4'-C3'-C2'	-6.89	95.71	102.60
57	BB	466	A	N7-C8-N9	6.89	117.24	113.80
57	BB	809	G	N1-C6-O6	6.89	124.03	119.90
57	BB	1196	C	C4-C5-C6	6.89	120.84	117.40
57	BB	1477	A	N9-C4-C5	6.89	108.56	105.80
57	BB	1685	C	N3-C4-C5	-6.89	119.14	121.90
57	BB	2502	G	N1-C6-O6	6.89	124.03	119.90
57	BB	2585	U	N1-C2-N3	-6.89	110.77	114.90
57	BB	2610	C	P-O3'-C3'	6.89	127.96	119.70
57	BB	2821	A	C5-N7-C8	6.89	107.34	103.90
57	BB	2842	G	C6-C5-N7	-6.89	126.27	130.40
21	AA	398	U	C3'-C2'-C1'	6.88	107.01	101.50
21	AA	1122	U	N3-C4-O4	-6.88	114.58	119.40
23	AW	76	A	C4-C5-C6	6.88	120.44	117.00
57	BB	549	G	C2-N3-C4	6.88	115.34	111.90
57	BB	564	C	C5-C6-N1	6.88	124.44	121.00
57	BB	1875	G	C6-N1-C2	6.88	129.23	125.10
57	BB	2046	G	C8-N9-C4	-6.88	103.65	106.40
21	AA	557	G	N7-C8-N9	-6.88	109.66	113.10
21	AA	606	G	N9-C4-C5	6.88	108.15	105.40
21	AA	1278	G	N3-C4-N9	-6.88	121.87	126.00
23	AW	27	G	C6-C5-N7	-6.88	126.27	130.40
57	BB	930	G	O4'-C1'-N9	6.88	113.71	108.20
21	AA	167	A	O4'-C1'-N9	6.88	113.70	108.20
21	AA	518	C	N3-C4-C5	-6.88	119.15	121.90
21	AA	831	A	N1-C2-N3	6.88	132.74	129.30
21	AA	864	A	N9-C4-C5	-6.88	103.05	105.80
21	AA	1160	G	C2-N3-C4	6.88	115.34	111.90
57	BB	27	G	C6-N1-C2	6.88	129.23	125.10
57	BB	115	C	O4'-C1'-N1	6.88	113.70	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1521	G	C2-N3-C4	6.88	115.34	111.90
57	BB	1762	A	C5-C6-N1	-6.88	114.26	117.70
57	BB	2734	A	C5-C6-N6	-6.88	118.19	123.70
57	BB	345	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	1130	U	P-O5'-C5'	-6.88	109.89	120.90
57	BB	2321	U	C6-N1-C1'	-6.88	111.57	121.20
21	AA	949	A	C4-C5-N7	-6.88	107.26	110.70
21	AA	1453	G	C5-N7-C8	6.88	107.74	104.30
22	AY	26	G	N1-C2-N2	-6.88	110.01	116.20
57	BB	1837	C	C2-N3-C4	6.88	123.34	119.90
57	BB	2090	A	N1-C2-N3	6.88	132.74	129.30
57	BB	2289	G	C5-C6-O6	-6.88	124.47	128.60
57	BB	2497	A	C4-C5-C6	6.88	120.44	117.00
57	BB	2893	A	C5-C6-N1	-6.88	114.26	117.70
21	AA	499	A	N7-C8-N9	-6.88	110.36	113.80
21	AA	681	A	C5'-C4'-O4'	6.88	117.35	109.10
21	AA	984	C	N3-C4-N4	6.88	122.81	118.00
21	AA	1433	A	C4-C5-N7	-6.88	107.26	110.70
21	AA	1497	G	N1-C6-O6	6.88	124.03	119.90
22	AY	9	A	C5-C6-N6	-6.88	118.20	123.70
22	AY	22	G	N3-C2-N2	6.88	124.71	119.90
53	BE	44	ARG	NE-CZ-NH1	-6.88	116.86	120.30
57	BB	268	C	N3-C4-N4	6.88	122.81	118.00
57	BB	660	C	P-O5'-C5'	-6.88	109.90	120.90
57	BB	1821	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	2019	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	2311	A	N3-C4-N9	6.88	132.90	127.40
57	BB	2436	G	N9-C4-C5	-6.88	102.65	105.40
57	BB	2517	C	C6-N1-C1'	-6.88	112.55	120.80
14	AC	171	ARG	NE-CZ-NH2	-6.88	116.86	120.30
21	AA	166	U	O4'-C1'-N1	6.88	113.70	108.20
21	AA	944	G	N1-C6-O6	6.87	124.02	119.90
21	AA	1225	A	C8-N9-C4	-6.87	103.05	105.80
21	AA	1448	C	C5-C4-N4	-6.87	115.39	120.20
21	AA	1454	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	1462	C	C6-N1-C2	6.87	123.05	120.30
27	B5	208	TYR	CA-CB-CG	-6.87	100.34	113.40
57	BB	819	A	C8-N9-C4	-6.87	103.05	105.80
57	BB	894	U	C5'-C4'-O4'	6.87	117.35	109.10
57	BB	1145	C	C6-N1-C1'	6.87	129.05	120.80
57	BB	2068	U	N3-C2-O2	6.87	127.01	122.20
57	BB	2598	A	C5-C6-N6	-6.87	118.20	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	54	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	121	U	N1-C2-O2	-6.87	117.99	122.80
21	AA	906	A	P-O5'-C5'	6.87	131.90	120.90
21	AA	1019	A	C4-C5-C6	6.87	120.44	117.00
21	AA	1388	C	O4'-C1'-N1	6.87	113.70	108.20
21	AA	1517	G	N1-C2-N3	-6.87	119.78	123.90
57	BB	99	U	N3-C4-C5	-6.87	110.48	114.60
57	BB	370	G	N9-C4-C5	6.87	108.15	105.40
57	BB	677	A	C4-C5-C6	6.87	120.44	117.00
57	BB	875	G	N3-C2-N2	6.87	124.71	119.90
57	BB	977	G	C4-C5-N7	6.87	113.55	110.80
57	BB	1564	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1699	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	630	A	C5-C6-N6	-6.87	118.20	123.70
57	BB	1312	U	N3-C4-O4	6.87	124.21	119.40
57	BB	1803	A	N9-C4-C5	6.87	108.55	105.80
57	BB	1892	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	2673	G	C5-C6-O6	-6.87	124.48	128.60
21	AA	515	G	N1-C6-O6	6.87	124.02	119.90
21	AA	551	U	P-O3'-C3'	-6.87	111.46	119.70
21	AA	575	G	C5-C6-N1	-6.87	108.07	111.50
21	AA	854	U	C5-C6-N1	6.87	126.14	122.70
21	AA	1338	G	N1-C6-O6	6.87	124.02	119.90
27	B5	78	PHE	CB-CG-CD2	6.87	125.61	120.80
57	BB	794	A	C1'-O4'-C4'	6.87	115.39	109.90
57	BB	1399	C	N3-C4-N4	6.87	122.81	118.00
57	BB	1715	G	C4-C5-N7	-6.87	108.05	110.80
57	BB	1849	G	N3-C4-N9	-6.87	121.88	126.00
57	BB	2655	G	C5-C6-O6	-6.87	124.48	128.60
21	AA	335	C	N3-C4-N4	6.87	122.81	118.00
21	AA	453	G	C6-C5-N7	-6.87	126.28	130.40
22	AY	41	U	C6-N1-C2	6.87	125.12	121.00
26	AV	25	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1257	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1529	G	O4'-C1'-N9	6.87	113.69	108.20
57	BB	2868	A	N9-C4-C5	-6.87	103.05	105.80
21	AA	373	A	N9-C4-C5	6.87	108.55	105.80
21	AA	466	A	C2-N3-C4	-6.87	107.17	110.60
21	AA	615	G	C6-C5-N7	-6.87	126.28	130.40
21	AA	766	A	C8-N9-C4	6.87	108.55	105.80
21	AA	1199	U	O4'-C1'-N1	6.87	113.69	108.20
57	BB	313	G	C6-N1-C2	6.87	129.22	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	382	A	C5-C6-N1	-6.87	114.27	117.70
57	BB	424	G	N9-C1'-C2'	-6.87	104.45	112.00
57	BB	1003	G	C4-C5-N7	6.87	113.55	110.80
57	BB	1169	A	N7-C8-N9	6.87	117.23	113.80
57	BB	2489	U	N3-C4-O4	6.87	124.21	119.40
2	AK	55	ARG	NE-CZ-NH1	6.86	123.73	120.30
21	AA	774	G	C5-C6-N1	-6.86	108.07	111.50
57	BB	1889	A	C2-N3-C4	6.86	114.03	110.60
57	BB	2052	A	C8-N9-C4	-6.86	103.06	105.80
57	BB	2281	A	C6-C5-N7	-6.86	127.50	132.30
57	BB	2560	A	N9-C4-C5	6.86	108.55	105.80
57	BB	2763	G	C2-N3-C4	6.86	115.33	111.90
21	AA	961	U	O5'-P-OP1	-6.86	99.52	105.70
57	BB	11	C	C2-N3-C4	6.86	123.33	119.90
57	BB	86	G	C4-C5-C6	6.86	122.92	118.80
57	BB	925	A	C2-N3-C4	-6.86	107.17	110.60
57	BB	2848	G	C3'-C2'-C1'	-6.86	96.01	101.50
21	AA	413	G	C2-N3-C4	-6.86	108.47	111.90
21	AA	853	C	N3-C4-C5	-6.86	119.16	121.90
21	AA	1039	G	C4-C5-N7	6.86	113.54	110.80
21	AA	1291	U	C4-C5-C6	6.86	123.82	119.70
21	AA	1460	C	C4'-C3'-C2'	-6.86	95.74	102.60
57	BB	197	A	C3'-C2'-C1'	6.86	106.99	101.50
57	BB	439	A	P-O3'-C3'	-6.86	111.47	119.70
57	BB	601	C	N3-C2-O2	-6.86	117.10	121.90
57	BB	1984	G	C2-N3-C4	-6.86	108.47	111.90
57	BB	2199	A	C5-N7-C8	6.86	107.33	103.90
57	BB	2315	G	C5-C6-N1	-6.86	108.07	111.50
57	BB	2339	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	2592	G	O4'-C1'-N9	6.86	113.69	108.20
8	AQ	64	ARG	NE-CZ-NH1	6.86	123.73	120.30
57	BB	222	A	C2-N3-C4	6.86	114.03	110.60
57	BB	879	G	N1-C2-N3	-6.86	119.78	123.90
57	BB	1420	A	C5-N7-C8	6.86	107.33	103.90
21	AA	46	G	N7-C8-N9	6.86	116.53	113.10
21	AA	164	G	C5-N7-C8	6.86	107.73	104.30
21	AA	640	A	C5-C6-N6	-6.86	118.21	123.70
21	AA	664	G	C6-N1-C2	6.86	129.21	125.10
21	AA	729	A	C4'-C3'-C2'	-6.86	95.74	102.60
21	AA	775	G	N1-C6-O6	6.86	124.02	119.90
21	AA	884	U	C6-N1-C2	6.86	125.11	121.00
21	AA	1292	G	C5-C6-N1	-6.86	108.07	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	216	A	N3-C4-N9	6.86	132.88	127.40
57	BB	948	C	C2-N3-C4	6.86	123.33	119.90
57	BB	1275	A	P-O3'-C3'	6.86	127.93	119.70
57	BB	1463	C	C5-C4-N4	-6.86	115.40	120.20
57	BB	2260	C	N3-C4-N4	6.86	122.80	118.00
57	BB	2663	G	C4-C5-C6	6.86	122.92	118.80
21	AA	895	G	N9-C4-C5	6.86	108.14	105.40
21	AA	990	C	N3-C2-O2	-6.86	117.10	121.90
21	AA	1111	A	OP1-P-OP2	-6.86	109.32	119.60
21	AA	1285	A	C8-N9-C4	-6.86	103.06	105.80
22	AY	58	A	C3'-C2'-C1'	6.86	106.98	101.50
57	BB	75	G	O4'-C1'-N9	6.86	113.69	108.20
57	BB	179	C	O4'-C4'-C3'	-6.86	97.14	104.00
57	BB	334	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	440	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	1392	A	N1-C6-N6	6.86	122.71	118.60
57	BB	2382	G	C5-C6-O6	-6.86	124.49	128.60
57	BB	2617	U	C4-C5-C6	6.86	123.81	119.70
21	AA	619	U	N3-C4-O4	6.85	124.20	119.40
57	BB	80	G	O4'-C1'-N9	6.85	113.68	108.20
57	BB	316	C	O4'-C1'-N1	6.85	113.68	108.20
57	BB	703	U	C6-N1-C2	6.85	125.11	121.00
19	AH	42	GLU	CB-CA-C	-6.85	96.70	110.40
21	AA	793	U	N1-C2-O2	6.85	127.60	122.80
21	AA	843	U	N3-C2-O2	-6.85	117.40	122.20
57	BB	39	G	O4'-C1'-N9	6.85	113.68	108.20
57	BB	833	A	N1-C2-N3	6.85	132.73	129.30
57	BB	1285	A	C4-C5-N7	-6.85	107.27	110.70
57	BB	1908	C	O4'-C1'-N1	6.85	113.68	108.20
58	BA	26	C	P-O3'-C3'	6.85	127.92	119.70
21	AA	81	A	N3-C4-C5	-6.85	122.00	126.80
30	BK	6	MET	CG-SD-CE	-6.85	89.24	100.20
21	AA	191	G	C5-C6-O6	-6.85	124.49	128.60
21	AA	1426	G	C4-C5-C6	6.85	122.91	118.80
21	AA	1530	G	N1-C2-N3	-6.85	119.79	123.90
23	AW	57	G	C5-C6-O6	6.85	132.71	128.60
57	BB	561	G	C8-N9-C4	-6.85	103.66	106.40
57	BB	1001	A	C6-C5-N7	-6.85	127.50	132.30
57	BB	1142	A	C2-N3-C4	-6.85	107.17	110.60
57	BB	1822	C	C4-C5-C6	6.85	120.82	117.40
57	BB	2794	C	C5-C4-N4	-6.85	115.41	120.20
57	BB	2834	G	O4'-C1'-N9	6.85	113.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2881	U	N1-C2-O2	-6.85	118.01	122.80
58	BA	50	A	O4'-C1'-N9	6.85	113.68	108.20
21	AA	161	A	O4'-C1'-N9	6.85	113.68	108.20
21	AA	484	G	N7-C8-N9	6.85	116.52	113.10
21	AA	818	G	N9-C4-C5	6.85	108.14	105.40
21	AA	1024	G	N1-C2-N3	-6.85	119.79	123.90
21	AA	1032	G	C4-N9-C1'	6.85	135.40	126.50
21	AA	1187	G	C8-N9-C4	-6.85	103.66	106.40
57	BB	980	A	C8-N9-C4	-6.85	103.06	105.80
57	BB	1144	A	C4-C5-C6	6.85	120.42	117.00
57	BB	1410	G	C4-C5-C6	-6.85	114.69	118.80
57	BB	2415	G	N9-C4-C5	-6.85	102.66	105.40
57	BB	2436	G	C4-C5-N7	6.85	113.54	110.80
57	BB	2463	C	P-O3'-C3'	-6.85	111.48	119.70
58	BA	58	A	C5-C6-N6	-6.85	118.22	123.70
21	AA	762	U	C5-C6-N1	6.85	126.12	122.70
21	AA	1076	U	N3-C4-O4	6.85	124.19	119.40
57	BB	1316	U	N3-C2-O2	-6.85	117.41	122.20
57	BB	1988	G	C2-N3-C4	6.85	115.32	111.90
57	BB	2334	U	P-O3'-C3'	6.85	127.92	119.70
21	AA	1299	A	C1'-O4'-C4'	6.84	115.38	109.90
21	AA	1423	G	N1-C2-N3	-6.84	119.79	123.90
57	BB	848	C	C5-C4-N4	-6.84	115.41	120.20
57	BB	1496	A	C5-C6-N6	-6.84	118.22	123.70
2	AK	24	ALA	N-CA-CB	6.84	119.68	110.10
21	AA	1178	G	C5'-C4'-C3'	-6.84	105.05	116.00
57	BB	613	A	C8-N9-C1'	-6.84	115.38	127.70
57	BB	1652	A	C6-C5-N7	-6.84	127.51	132.30
57	BB	2458	G	P-O5'-C5'	-6.84	109.95	120.90
57	BB	303	G	N3-C2-N2	6.84	124.69	119.90
57	BB	892	A	C5-C6-N1	-6.84	114.28	117.70
57	BB	1212	G	C6-C5-N7	-6.84	126.30	130.40
57	BB	2126	A	C8-N9-C4	-6.84	103.06	105.80
57	BB	2280	G	C4-C5-C6	6.84	122.91	118.80
57	BB	2720	U	N1-C2-O2	-6.84	118.01	122.80
57	BB	2765	A	N7-C8-N9	6.84	117.22	113.80
57	BB	2898	U	C5-C6-N1	6.84	126.12	122.70
21	AA	187	G	C6-N1-C2	6.84	129.20	125.10
21	AA	1068	G	N3-C2-N2	6.84	124.69	119.90
21	AA	1454	G	N1-C6-O6	6.84	124.00	119.90
22	AY	4	G	N1-C2-N3	-6.84	119.80	123.90
57	BB	158	U	C5-C6-N1	-6.84	119.28	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1282	U	O4'-C1'-N1	6.84	113.67	108.20
57	BB	1607	C	N3-C4-C5	-6.84	119.16	121.90
57	BB	2037	A	C4'-C3'-C2'	-6.84	95.76	102.60
57	BB	2100	G	O4'-C1'-N9	6.84	113.67	108.20
23	AW	50	U	C5-C4-O4	-6.84	121.80	125.90
57	BB	218	A	C2-N3-C4	-6.84	107.18	110.60
57	BB	1015	U	C5-C6-N1	-6.84	119.28	122.70
21	AA	1196	A	C5-C6-N6	-6.84	118.23	123.70
21	AA	1483	A	C6-C5-N7	-6.84	127.51	132.30
24	AX	12	A	C5-C6-N6	-6.84	118.23	123.70
57	BB	1277	G	N9-C4-C5	6.84	108.14	105.40
57	BB	1300	G	C6-C5-N7	6.84	134.50	130.40
57	BB	1361	G	C5-C6-N1	-6.84	108.08	111.50
57	BB	1492	G	C5-N7-C8	-6.84	100.88	104.30
57	BB	2349	G	C5-C6-O6	6.84	132.70	128.60
57	BB	2351	G	N1-C2-N3	-6.84	119.80	123.90
23	AW	9	A	C5-N7-C8	-6.83	100.48	103.90
57	BB	562	U	P-O5'-C5'	-6.83	109.96	120.90
57	BB	949	G	C8-N9-C4	-6.83	103.67	106.40
57	BB	1337	G	C4-C5-N7	6.83	113.53	110.80
57	BB	2396	G	C5'-C4'-O4'	6.83	117.30	109.10
21	AA	896	C	N3-C4-C5	-6.83	119.17	121.90
21	AA	1465	A	C6-C5-N7	-6.83	127.52	132.30
26	AV	40	C	N3-C4-N4	6.83	122.78	118.00
57	BB	728	G	C5-C6-O6	-6.83	124.50	128.60
57	BB	1171	G	C6-C5-N7	-6.83	126.30	130.40
57	BB	1540	G	N7-C8-N9	6.83	116.52	113.10
57	BB	1584	U	O4'-C1'-N1	6.83	113.67	108.20
57	BB	2812	G	C6-N1-C2	-6.83	121.00	125.10
57	BB	2819	G	N1-C2-N3	-6.83	119.80	123.90
21	AA	657	U	O4'-C1'-N1	6.83	113.67	108.20
21	AA	670	G	C5-C6-N1	6.83	114.92	111.50
21	AA	815	A	C5-C6-N6	-6.83	118.23	123.70
23	AW	57	G	N3-C2-N2	6.83	124.68	119.90
57	BB	2535	G	N3-C2-N2	6.83	124.68	119.90
57	BB	649	G	C2-N3-C4	6.83	115.31	111.90
57	BB	661	A	O4'-C1'-N9	6.83	113.66	108.20
57	BB	688	U	N3-C2-O2	6.83	126.98	122.20
57	BB	2523	G	N3-C4-N9	6.83	130.10	126.00
21	AA	19	A	O4'-C1'-N9	6.83	113.66	108.20
21	AA	923	A	P-O3'-C3'	-6.83	111.50	119.70
21	AA	1137	C	C4-C5-C6	6.83	120.81	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B5	16	ASP	CB-CG-OD2	-6.83	112.16	118.30
57	BB	279	A	C5-C6-N1	-6.83	114.29	117.70
57	BB	518	G	N3-C4-N9	-6.83	121.90	126.00
57	BB	1160	G	C4-C5-C6	6.83	122.90	118.80
57	BB	1586	A	C4-C5-C6	6.83	120.42	117.00
57	BB	2792	A	N1-C2-N3	6.83	132.72	129.30
44	BY	11	VAL	O-C-N	-6.83	111.78	122.70
57	BB	30	G	O4'-C1'-N9	6.83	113.66	108.20
57	BB	237	C	C5-C4-N4	-6.83	115.42	120.20
57	BB	646	U	C5-C4-O4	-6.83	121.80	125.90
21	AA	256	U	C5-C4-O4	-6.83	121.80	125.90
21	AA	935	A	P-O5'-C5'	6.83	131.82	120.90
21	AA	1040	U	C1'-O4'-C4'	6.83	115.36	109.90
21	AA	1207	G	C4-C5-C6	6.83	122.89	118.80
57	BB	49	A	O4'-C1'-N9	6.83	113.66	108.20
57	BB	286	U	C5-C6-N1	6.83	126.11	122.70
57	BB	477	A	N3-C4-C5	-6.83	122.02	126.80
57	BB	1594	U	N1-C2-O2	-6.83	118.02	122.80
57	BB	2341	G	N3-C4-N9	-6.83	121.91	126.00
57	BB	2423	U	C5-C4-O4	6.83	130.00	125.90
57	BB	2557	G	C5-N7-C8	6.83	107.71	104.30
57	BB	2714	G	C5-C6-N1	-6.83	108.09	111.50
21	AA	129	A	P-O3'-C3'	6.82	127.89	119.70
21	AA	618	C	O4'-C1'-N1	6.82	113.66	108.20
21	AA	949	A	C6-N1-C2	6.82	122.69	118.60
21	AA	1056	U	C2-N3-C4	6.82	131.09	127.00
21	AA	1251	A	C4-C5-N7	-6.82	107.29	110.70
21	AA	1347	G	O4'-C1'-N9	6.82	113.66	108.20
57	BB	664	G	C5-C6-O6	-6.82	124.51	128.60
57	BB	672	C	O4'-C1'-N1	6.82	113.66	108.20
57	BB	2663	G	N7-C8-N9	-6.82	109.69	113.10
21	AA	1491	G	C6-C5-N7	-6.82	126.31	130.40
21	AA	1496	C	C4-C5-C6	-6.82	113.99	117.40
57	BB	286	U	N1-C2-N3	6.82	118.99	114.90
57	BB	623	C	N1-C2-O2	-6.82	114.81	118.90
21	AA	991	U	C2-N3-C4	-6.82	122.91	127.00
21	AA	1136	C	C5-C4-N4	-6.82	115.43	120.20
21	AA	1520	C	C4-C5-C6	6.82	120.81	117.40
22	AY	73	A	C5-C6-N6	-6.82	118.24	123.70
28	BI	64	ARG	NE-CZ-NH1	6.82	123.71	120.30
57	BB	843	G	C8-N9-C4	-6.82	103.67	106.40
57	BB	1220	G	N9-C4-C5	6.82	108.13	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1712	U	O4'-C1'-N1	6.82	113.66	108.20
57	BB	1870	C	C3'-C2'-C1'	6.82	106.96	101.50
57	BB	2740	A	C4'-C3'-C2'	-6.82	95.78	102.60
57	BB	2846	G	C6-C5-N7	-6.82	126.31	130.40
58	BA	102	G	O4'-C1'-N9	6.82	113.66	108.20
21	AA	182	A	O4'-C1'-N9	6.82	113.66	108.20
21	AA	972	C	C1'-O4'-C4'	-6.82	104.44	109.90
26	AV	39	C	C4-C5-C6	6.82	120.81	117.40
57	BB	626	A	N1-C2-N3	-6.82	125.89	129.30
57	BB	898	C	C2-N3-C4	-6.82	116.49	119.90
57	BB	1253	A	C5-C6-N6	-6.82	118.25	123.70
57	BB	1403	A	C5-N7-C8	6.82	107.31	103.90
57	BB	2473	U	O4'-C1'-N1	6.82	113.66	108.20
21	AA	78	A	C4-C5-C6	6.82	120.41	117.00
21	AA	239	U	N1-C1'-C2'	-6.82	104.50	112.00
21	AA	615	G	C5-C6-O6	-6.82	124.51	128.60
21	AA	873	A	C2-N3-C4	-6.82	107.19	110.60
21	AA	1137	C	N3-C4-N4	6.82	122.77	118.00
21	AA	1260	G	O4'-C1'-N9	6.82	113.65	108.20
21	AA	1382	C	N3-C4-C5	-6.82	119.17	121.90
23	AW	29	G	N1-C6-O6	6.82	123.99	119.90
57	BB	1682	G	C8-N9-C4	6.82	109.13	106.40
21	AA	234	C	C5-C4-N4	-6.82	115.43	120.20
21	AA	412	A	C1'-O4'-C4'	-6.82	104.45	109.90
21	AA	465	A	C8-N9-C4	-6.82	103.07	105.80
21	AA	865	A	N9-C4-C5	6.82	108.53	105.80
56	BH	59	ALA	N-CA-CB	6.82	119.64	110.10
57	BB	114	U	N1-C2-O2	6.82	127.57	122.80
57	BB	200	U	O4'-C1'-N1	6.82	113.65	108.20
57	BB	347	A	P-O5'-C5'	-6.82	110.00	120.90
58	BA	112	G	C8-N9-C4	-6.82	103.67	106.40
21	AA	295	C	O4'-C1'-N1	6.81	113.65	108.20
21	AA	701	U	O4'-C4'-C3'	6.81	111.55	106.10
21	AA	1257	A	C5-C6-N6	-6.81	118.25	123.70
22	AY	6	U	C2'-C3'-O3'	6.81	124.60	113.70
57	BB	753	A	C6-C5-N7	-6.81	127.53	132.30
57	BB	920	A	N3-C4-C5	-6.81	122.03	126.80
57	BB	937	C	O4'-C1'-N1	6.81	113.65	108.20
57	BB	1055	G	C5-C6-O6	-6.81	124.51	128.60
57	BB	2705	A	C4-C5-C6	6.81	120.41	117.00
21	AA	799	G	C5-C6-N1	-6.81	108.09	111.50
21	AA	1124	G	N1-C2-N3	6.81	127.99	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	914	G	N1-C2-N3	-6.81	119.81	123.90
57	BB	1095	A	O4'-C1'-N9	6.81	113.65	108.20
57	BB	2066	C	C4-C5-C6	6.81	120.81	117.40
57	BB	2281	A	N1-C6-N6	6.81	122.69	118.60
57	BB	2404	U	N1-C2-O2	-6.81	118.03	122.80
57	BB	2725	A	C5-N7-C8	6.81	107.31	103.90
58	BA	94	A	P-O3'-C3'	-6.81	111.52	119.70
19	AH	14	ARG	NE-CZ-NH1	6.81	123.70	120.30
57	BB	792	A	C5'-C4'-O4'	6.81	117.27	109.10
57	BB	1181	U	C4-C5-C6	6.81	123.79	119.70
57	BB	1897	G	C8-N9-C4	-6.81	103.68	106.40
21	AA	824	G	C8-N9-C4	-6.81	103.68	106.40
21	AA	1133	G	N1-C2-N3	-6.81	119.81	123.90
21	AA	1471	U	C5-C4-O4	6.81	129.99	125.90
57	BB	530	G	N1-C2-N2	6.81	122.33	116.20
57	BB	580	U	C4-C5-C6	6.81	123.79	119.70
57	BB	938	G	N1-C2-N3	-6.81	119.81	123.90
57	BB	962	G	C3'-C2'-C1'	6.81	106.95	101.50
57	BB	1309	G	C6-C5-N7	-6.81	126.31	130.40
57	BB	1341	G	C6-C5-N7	-6.81	126.31	130.40
57	BB	2731	G	C4-C5-C6	6.81	122.89	118.80
21	AA	486	U	C1'-O4'-C4'	6.81	115.35	109.90
21	AA	1410	A	C3'-C2'-C1'	6.81	106.95	101.50
21	AA	1418	A	C2-N3-C4	-6.81	107.20	110.60
57	BB	804	A	C5-N7-C8	6.81	107.30	103.90
57	BB	1525	A	C4-C5-C6	6.81	120.40	117.00
57	BB	1668	A	N3-C4-N9	6.81	132.85	127.40
21	AA	148	G	O4'-C1'-N9	6.81	113.64	108.20
21	AA	287	U	C3'-C2'-C1'	-6.81	96.06	101.50
21	AA	668	G	C6-N1-C2	6.81	129.18	125.10
21	AA	1112	C	N3-C4-N4	6.81	122.76	118.00
57	BB	1968	G	O4'-C1'-N9	6.81	113.64	108.20
57	BB	2409	G	N1-C2-N2	-6.81	110.08	116.20
57	BB	2709	G	N7-C8-N9	-6.81	109.70	113.10
21	AA	220	G	C6-N1-C2	6.80	129.18	125.10
21	AA	381	C	C6-N1-C2	6.80	123.02	120.30
21	AA	1013	G	N1-C6-O6	6.80	123.98	119.90
23	AW	18	G	O4'-C1'-N9	6.80	113.64	108.20
57	BB	272	A	C4'-C3'-C2'	-6.80	95.80	102.60
57	BB	573	U	O4'-C1'-N1	6.80	113.64	108.20
57	BB	1909	C	C5-C4-N4	-6.80	115.44	120.20
57	BB	2273	A	C5-C6-N1	-6.80	114.30	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2328	A	N1-C2-N3	6.80	132.70	129.30
57	BB	2740	A	C5-C6-N6	-6.80	118.26	123.70
58	BA	51	G	C6-C5-N7	-6.80	126.32	130.40
21	AA	430	A	C5-C6-N1	-6.80	114.30	117.70
57	BB	1754	A	C4-C5-C6	6.80	120.40	117.00
58	BA	6	G	O4'-C1'-N9	6.80	113.64	108.20
57	BB	555	G	C8-N9-C4	-6.80	103.68	106.40
57	BB	1317	G	N3-C4-N9	6.80	130.08	126.00
57	BB	2236	U	C5-C6-N1	6.80	126.10	122.70
57	BB	2814	A	N9-C4-C5	6.80	108.52	105.80
21	AA	28	A	C2-N3-C4	6.80	114.00	110.60
21	AA	978	A	C5-C6-N6	-6.80	118.26	123.70
21	AA	1182	G	C4-C5-C6	6.80	122.88	118.80
21	AA	1184	G	C5-C6-N1	-6.80	108.10	111.50
21	AA	1197	A	C5-C6-N1	-6.80	114.30	117.70
57	BB	34	U	N1-C2-N3	-6.80	110.82	114.90
57	BB	621	A	C6-C5-N7	-6.80	127.54	132.30
57	BB	1167	C	C5-C6-N1	-6.80	117.60	121.00
57	BB	1176	U	C3'-C2'-C1'	6.80	106.94	101.50
57	BB	1719	G	C5-C6-O6	-6.80	124.52	128.60
57	BB	1787	A	N1-C2-N3	6.80	132.70	129.30
57	BB	1823	G	C8-N9-C4	6.80	109.12	106.40
57	BB	2389	G	C2-N3-C4	6.80	115.30	111.90
57	BB	2886	A	N7-C8-N9	-6.80	110.40	113.80
21	AA	538	G	C5-N7-C8	-6.80	100.90	104.30
21	AA	682	G	N7-C8-N9	-6.80	109.70	113.10
21	AA	809	G	C2-N3-C4	6.80	115.30	111.90
57	BB	483	A	C2-N3-C4	6.80	114.00	110.60
57	BB	728	G	C8-N9-C4	6.80	109.12	106.40
57	BB	1587	G	C5-C6-O6	-6.80	124.52	128.60
57	BB	1787	A	C5-C6-N1	-6.80	114.30	117.70
21	AA	741	G	C6-N1-C2	6.80	129.18	125.10
21	AA	1022	A	N9-C4-C5	-6.80	103.08	105.80
23	AW	68	C	N1-C2-O2	6.80	122.98	118.90
56	BH	123	ARG	NE-CZ-NH1	6.80	123.70	120.30
57	BB	173	A	O4'-C1'-N9	6.80	113.64	108.20
57	BB	1006	C	C2-N3-C4	6.80	123.30	119.90
57	BB	1133	A	C4'-C3'-C2'	6.80	109.40	102.60
57	BB	1150	C	N3-C4-C5	-6.80	119.18	121.90
57	BB	1305	C	C2-N3-C4	6.80	123.30	119.90
57	BB	1438	U	O4'-C1'-N1	6.80	113.64	108.20
57	BB	1613	G	C5'-C4'-C3'	6.80	126.87	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1853	A	C1'-O4'-C4'	-6.80	104.46	109.90
57	BB	2247	A	N7-C8-N9	6.80	117.20	113.80
57	BB	2566	A	C4'-C3'-C2'	6.80	109.40	102.60
57	BB	2625	G	C5'-C4'-C3'	-6.80	105.12	116.00
57	BB	2789	C	N3-C4-N4	6.80	122.76	118.00
21	AA	158	G	C6-N1-C2	6.79	129.18	125.10
57	BB	350	G	C5'-C4'-O4'	6.79	117.25	109.10
57	BB	2770	G	P-O5'-C5'	6.79	131.77	120.90
58	BA	108	A	C8-N9-C4	-6.79	103.08	105.80
21	AA	224	U	C5-C4-O4	-6.79	121.82	125.90
21	AA	226	G	C2-N3-C4	6.79	115.30	111.90
21	AA	791	G	C5-N7-C8	6.79	107.70	104.30
21	AA	1281	C	N1-C2-N3	-6.79	114.44	119.20
21	AA	1286	U	C5-C4-O4	6.79	129.98	125.90
21	AA	1316	G	C5-N7-C8	6.79	107.70	104.30
57	BB	1553	A	C5-N7-C8	6.79	107.30	103.90
57	BB	2561	U	N3-C4-C5	-6.79	110.52	114.60
21	AA	99	C	C4-C5-C6	6.79	120.80	117.40
21	AA	695	A	C5-C6-N6	-6.79	118.27	123.70
21	AA	791	G	N3-C4-N9	-6.79	121.92	126.00
21	AA	1101	A	C4-C5-N7	6.79	114.10	110.70
57	BB	577	G	C2-N3-C4	-6.79	108.50	111.90
57	BB	2326	C	C6-N1-C2	-6.79	117.58	120.30
21	AA	171	A	C4-C5-C6	6.79	120.39	117.00
22	AY	34	G	C4'-C3'-C2'	-6.79	95.81	102.60
57	BB	2580	U	O4'-C1'-N1	6.79	113.63	108.20
2	AK	32	THR	N-CA-CB	6.79	123.20	110.30
21	AA	809	G	N7-C8-N9	-6.79	109.71	113.10
21	AA	1343	G	O4'-C1'-N9	6.79	113.63	108.20
57	BB	661	A	C4-C5-N7	-6.79	107.31	110.70
57	BB	1736	U	O4'-C1'-N1	6.79	113.63	108.20
57	BB	1744	A	N7-C8-N9	-6.79	110.41	113.80
57	BB	2285	C	C6-N1-C2	6.79	123.02	120.30
57	BB	2799	A	C4-C5-N7	-6.79	107.31	110.70
21	AA	293	G	N1-C6-O6	6.79	123.97	119.90
21	AA	896	C	N1-C2-O2	6.79	122.97	118.90
21	AA	1494	G	C6-N1-C2	-6.79	121.03	125.10
26	AV	71	C	N3-C4-N4	6.79	122.75	118.00
57	BB	629	G	C1'-O4'-C4'	-6.79	104.47	109.90
57	BB	1526	C	N3-C4-C5	-6.79	119.19	121.90
57	BB	1876	A	N1-C6-N6	6.79	122.67	118.60
57	BB	2042	A	C8-N9-C4	-6.79	103.08	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2633	G	C8-N9-C4	-6.79	103.69	106.40
21	AA	8	A	O4'-C1'-C2'	-6.79	99.02	105.80
21	AA	21	G	N3-C2-N2	6.79	124.65	119.90
21	AA	494	G	C5-C6-O6	-6.79	124.53	128.60
21	AA	561	U	O4'-C1'-N1	6.79	113.63	108.20
21	AA	872	A	C2-N3-C4	-6.79	107.21	110.60
21	AA	1144	G	C6-N1-C2	6.79	129.17	125.10
57	BB	620	G	N1-C6-O6	6.79	123.97	119.90
57	BB	738	G	C5-N7-C8	6.79	107.69	104.30
57	BB	1167	C	N3-C4-N4	6.79	122.75	118.00
57	BB	1743	G	N3-C2-N2	6.79	124.65	119.90
57	BB	2564	A	C5-N7-C8	6.79	107.29	103.90
57	BB	2693	G	N7-C8-N9	-6.79	109.71	113.10
57	BB	2730	C	C5-C4-N4	-6.79	115.45	120.20
4	AM	56	ARG	NE-CZ-NH2	6.78	123.69	120.30
21	AA	144	G	C3'-C2'-C1'	-6.78	96.07	101.50
21	AA	1086	U	N3-C2-O2	6.78	126.95	122.20
26	AV	7	G	O4'-C1'-N9	6.78	113.63	108.20
57	BB	196	A	N1-C2-N3	-6.78	125.91	129.30
57	BB	295	G	O4'-C1'-N9	6.78	113.63	108.20
57	BB	772	C	C2-N3-C4	6.78	123.29	119.90
57	BB	945	A	C6-N1-C2	-6.78	114.53	118.60
57	BB	1060	U	C5-C6-N1	6.78	126.09	122.70
57	BB	1166	G	C4-C5-N7	6.78	113.51	110.80
57	BB	1301	A	N9-C4-C5	-6.78	103.09	105.80
57	BB	2041	U	N1-C2-O2	-6.78	118.05	122.80
57	BB	2660	A	N1-C2-N3	6.78	132.69	129.30
57	BB	2751	G	C5-C6-N1	-6.78	108.11	111.50
21	AA	1174	G	C5-C6-O6	-6.78	124.53	128.60
21	AA	1421	G	C5-C6-N1	6.78	114.89	111.50
57	BB	683	U	N3-C2-O2	6.78	126.95	122.20
57	BB	1311	G	N9-C4-C5	-6.78	102.69	105.40
57	BB	1808	A	C5-C6-N6	-6.78	118.28	123.70
21	AA	1144	G	N3-C4-N9	6.78	130.07	126.00
22	AY	15	G	N1-C2-N3	6.78	127.97	123.90
22	AY	61	C	C4-C5-C6	-6.78	114.01	117.40
34	BO	99	TYR	CB-CG-CD2	-6.78	116.93	121.00
57	BB	518	G	C8-N9-C4	-6.78	103.69	106.40
57	BB	530	G	C4-C5-N7	6.78	113.51	110.80
57	BB	584	C	C5-C4-N4	-6.78	115.45	120.20
57	BB	862	G	N7-C8-N9	6.78	116.49	113.10
57	BB	1238	G	N7-C8-N9	-6.78	109.71	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1583	A	C8-N9-C4	-6.78	103.09	105.80
57	BB	1874	C	O4'-C1'-N1	6.78	113.62	108.20
57	BB	2551	C	C4-C5-C6	6.78	120.79	117.40
57	BB	2604	U	N3-C4-O4	6.78	124.15	119.40
21	AA	1241	G	N1-C2-N3	-6.78	119.83	123.90
21	AA	1382	C	C6-N1-C2	-6.78	117.59	120.30
56	BH	97	ARG	NE-CZ-NH1	6.78	123.69	120.30
57	BB	1407	G	C3'-C2'-C1'	-6.78	96.08	101.50
57	BB	2685	G	O4'-C1'-N9	6.78	113.62	108.20
58	BA	35	C	O3'-P-O5'	-6.78	91.12	104.00
21	AA	315	A	C4-C5-C6	6.78	120.39	117.00
21	AA	1304	G	C6-C5-N7	-6.78	126.33	130.40
23	AW	23	A	N1-C2-N3	6.78	132.69	129.30
47	B0	9	ARG	NE-CZ-NH1	-6.78	116.91	120.30
57	BB	297	G	N7-C8-N9	-6.78	109.71	113.10
57	BB	596	U	N3-C2-O2	-6.78	117.46	122.20
57	BB	690	G	N3-C2-N2	6.78	124.64	119.90
57	BB	1444	G	O4'-C1'-N9	6.78	113.62	108.20
57	BB	2405	G	O4'-C1'-N9	6.78	113.62	108.20
57	BB	2431	U	C5-C4-O4	-6.78	121.83	125.90
21	AA	251	G	C5-C6-O6	-6.78	124.53	128.60
21	AA	448	A	N7-C8-N9	-6.78	110.41	113.80
21	AA	497	G	O4'-C1'-N9	6.78	113.62	108.20
21	AA	663	A	C4-C5-C6	6.78	120.39	117.00
22	AY	17	U	N1-C2-O2	6.78	127.54	122.80
57	BB	1332	G	N9-C4-C5	-6.78	102.69	105.40
57	BB	1641	A	C4'-C3'-C2'	-6.78	95.83	102.60
57	BB	1821	A	P-O3'-C3'	-6.78	111.57	119.70
57	BB	2606	C	O4'-C4'-C3'	-6.78	97.22	104.00
21	AA	1080	A	O4'-C1'-N9	6.77	113.62	108.20
23	AW	6	G	N7-C8-N9	6.77	116.49	113.10
25	AZ	74	ARG	NE-CZ-NH1	6.77	123.69	120.30
57	BB	47	C	N3-C4-C5	-6.77	119.19	121.90
57	BB	453	A	C6-N1-C2	6.77	122.66	118.60
57	BB	774	G	C2-N3-C4	-6.77	108.51	111.90
57	BB	1828	G	N1-C2-N3	-6.77	119.84	123.90
57	BB	2683	C	C2-N3-C4	6.77	123.29	119.90
57	BB	2782	G	N1-C2-N3	-6.77	119.83	123.90
21	AA	190	A	C2-N3-C4	-6.77	107.21	110.60
21	AA	276	G	N1-C6-O6	6.77	123.96	119.90
57	BB	2329	U	O4'-C1'-N1	6.77	113.62	108.20
58	BA	48	U	O4'-C1'-N1	6.77	113.62	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	229	U	C6-N1-C2	-6.77	116.94	121.00
21	AA	1032	G	N9-C4-C5	6.77	108.11	105.40
21	AA	1507	A	P-O5'-C5'	-6.77	110.07	120.90
57	BB	1233	C	N3-C4-C5	-6.77	119.19	121.90
57	BB	1296	G	C6-N1-C2	6.77	129.16	125.10
57	BB	2280	G	C6-C5-N7	-6.77	126.34	130.40
57	BB	2814	A	C4-C5-N7	-6.77	107.31	110.70
6	AO	66	LEU	CB-CA-C	-6.77	97.34	110.20
21	AA	74	A	C5-C6-N6	-6.77	118.28	123.70
57	BB	61	C	P-O3'-C3'	6.77	127.82	119.70
57	BB	215	G	C5-C6-N1	-6.77	108.12	111.50
57	BB	656	G	O4'-C1'-N9	6.77	113.62	108.20
57	BB	1524	G	N1-C2-N3	-6.77	119.84	123.90
57	BB	1694	C	C4-C5-C6	6.77	120.78	117.40
57	BB	2700	A	C5-N7-C8	6.77	107.28	103.90
11	AT	29	THR	CA-CB-CG2	-6.77	102.92	112.40
57	BB	512	G	O4'-C1'-N9	6.77	113.61	108.20
57	BB	1300	G	C5-C6-O6	-6.77	124.54	128.60
57	BB	1796	U	P-O3'-C3'	-6.77	111.58	119.70
57	BB	1831	G	N7-C8-N9	6.77	116.48	113.10
57	BB	2073	C	N3-C4-N4	6.77	122.74	118.00
57	BB	2249	U	C5-C4-O4	-6.77	121.84	125.90
57	BB	2738	A	O4'-C1'-N9	6.77	113.61	108.20
21	AA	128	G	N7-C8-N9	-6.77	109.72	113.10
21	AA	568	G	N9-C4-C5	-6.77	102.69	105.40
21	AA	608	A	C2-N3-C4	-6.77	107.22	110.60
21	AA	1201	A	C5-N7-C8	6.77	107.28	103.90
57	BB	1515	A	C5-N7-C8	6.77	107.28	103.90
57	BB	2616	C	N3-C4-N4	6.77	122.74	118.00
57	BB	2732	G	C6-C5-N7	-6.77	126.34	130.40
58	BA	83	G	N1-C2-N3	-6.77	119.84	123.90
21	AA	15	G	N1-C2-N3	-6.76	119.84	123.90
21	AA	1169	A	C4-C5-C6	6.76	120.38	117.00
21	AA	1304	G	C5-N7-C8	-6.76	100.92	104.30
22	AY	39	U	P-O5'-C5'	6.76	131.72	120.90
57	BB	524	G	C4-C5-N7	-6.76	108.09	110.80
57	BB	886	A	O4'-C1'-N9	6.76	113.61	108.20
57	BB	1812	U	O4'-C1'-N1	6.76	113.61	108.20
57	BB	2202	U	C6-N1-C2	6.76	125.06	121.00
57	BB	2334	U	O4'-C1'-N1	6.76	113.61	108.20
57	BB	2659	G	C4'-C3'-C2'	-6.76	95.83	102.60
21	AA	325	A	C5-N7-C8	6.76	107.28	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	892	A	C6-C5-N7	-6.76	127.57	132.30
26	AV	38	A	N3-C4-C5	-6.76	122.07	126.80
57	BB	231	A	C5-C6-N6	-6.76	118.29	123.70
57	BB	654	A	C4-C5-N7	6.76	114.08	110.70
57	BB	1969	A	N9-C4-C5	-6.76	103.09	105.80
57	BB	2510	C	C2-N3-C4	-6.76	116.52	119.90
58	BA	27	C	N3-C4-C5	-6.76	119.19	121.90
5	AN	58	ARG	NE-CZ-NH1	6.76	123.68	120.30
9	AR	46	THR	CA-CB-CG2	-6.76	102.94	112.40
21	AA	656	G	N7-C8-N9	-6.76	109.72	113.10
21	AA	1289	A	C4-C5-C6	6.76	120.38	117.00
21	AA	1350	A	C2-N3-C4	-6.76	107.22	110.60
53	BE	124	PHE	N-CA-CB	6.76	122.77	110.60
57	BB	628	G	C4-C5-N7	-6.76	108.09	110.80
57	BB	809	G	C5-C6-O6	-6.76	124.54	128.60
57	BB	1840	G	C6-C5-N7	-6.76	126.34	130.40
57	BB	2456	C	N1-C2-N3	6.76	123.93	119.20
57	BB	2500	U	N3-C2-O2	6.76	126.93	122.20
21	AA	481	G	N7-C8-N9	-6.76	109.72	113.10
21	AA	589	U	N3-C4-C5	-6.76	110.55	114.60
21	AA	654	G	N3-C4-C5	6.76	131.98	128.60
57	BB	850	U	C5-C6-N1	6.76	126.08	122.70
57	BB	1676	A	N1-C2-N3	6.76	132.68	129.30
57	BB	1738	G	C5-C6-O6	-6.76	124.54	128.60
57	BB	2046	G	O4'-C1'-N9	6.76	113.61	108.20
21	AA	87	C	C6-N1-C2	-6.76	117.60	120.30
21	AA	463	U	N3-C4-O4	6.76	124.13	119.40
56	BH	7	ASP	CB-CG-OD2	-6.76	112.22	118.30
57	BB	898	C	C6-N1-C2	-6.76	117.60	120.30
57	BB	978	G	C4-C5-N7	-6.76	108.10	110.80
57	BB	2608	G	N9-C4-C5	6.76	108.10	105.40
57	BB	2643	G	N1-C6-O6	6.76	123.95	119.90
21	AA	624	C	N3-C4-C5	-6.76	119.20	121.90
21	AA	1015	G	N1-C2-N3	-6.76	119.85	123.90
21	AA	1279	G	C4-N9-C1'	6.76	135.28	126.50
57	BB	861	A	C5-C6-N1	6.76	121.08	117.70
57	BB	1030	C	C4-C5-C6	6.76	120.78	117.40
57	BB	1080	A	C4-C5-C6	6.76	120.38	117.00
57	BB	1877	A	O4'-C1'-N9	6.76	113.61	108.20
57	BB	2047	C	C6-N1-C2	6.76	123.00	120.30
57	BB	2107	G	C4-C5-N7	-6.76	108.10	110.80
58	BA	21	G	C8-N9-C1'	6.76	135.78	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	31	G	C6-C5-N7	-6.75	126.35	130.40
54	BF	1	ALA	CB-CA-C	6.75	120.23	110.10
57	BB	1224	U	C5-C6-N1	-6.75	119.32	122.70
57	BB	2082	A	C5-N7-C8	6.75	107.28	103.90
21	AA	179	A	C2-N3-C4	6.75	113.98	110.60
21	AA	609	A	P-O5'-C5'	6.75	131.71	120.90
21	AA	718	A	C6-C5-N7	-6.75	127.57	132.30
21	AA	906	A	N7-C8-N9	-6.75	110.42	113.80
21	AA	941	G	N3-C4-C5	-6.75	125.22	128.60
21	AA	1203	C	C5-C4-N4	-6.75	115.47	120.20
21	AA	1457	G	C2-N3-C4	6.75	115.28	111.90
57	BB	737	C	C4'-C3'-C2'	-6.75	95.85	102.60
57	BB	797	G	C8-N9-C4	-6.75	103.70	106.40
57	BB	857	G	C2-N3-C4	-6.75	108.52	111.90
57	BB	1219	U	P-O3'-C3'	-6.75	111.60	119.70
57	BB	1916	A	O4'-C1'-N9	6.75	113.60	108.20
57	BB	2356	U	N1-C2-O2	-6.75	118.07	122.80
57	BB	2643	G	C5-N7-C8	-6.75	100.92	104.30
21	AA	290	C	C2-N3-C4	6.75	123.28	119.90
21	AA	409	U	O4'-C1'-N1	6.75	113.60	108.20
21	AA	915	A	C2-N3-C4	-6.75	107.22	110.60
21	AA	983	A	C4-C5-N7	6.75	114.08	110.70
23	AW	1	G	N1-C2-N3	-6.75	119.85	123.90
24	AX	19	U	C2-N3-C4	-6.75	122.95	127.00
57	BB	329	G	C5-C6-O6	-6.75	124.55	128.60
57	BB	580	U	C5-C6-N1	-6.75	119.33	122.70
57	BB	1392	A	C4-C5-C6	6.75	120.38	117.00
57	BB	1394	U	C6-N1-C2	-6.75	116.95	121.00
57	BB	1552	A	O4'-C1'-N9	6.75	113.60	108.20
21	AA	10	A	C5-C6-N1	-6.75	114.33	117.70
21	AA	338	A	O4'-C1'-N9	6.75	113.60	108.20
26	AV	46	G	C5-C6-N1	-6.75	108.12	111.50
57	BB	1795	C	N1-C2-O2	6.75	122.95	118.90
21	AA	103	U	P-O3'-C3'	-6.75	111.60	119.70
21	AA	374	A	C5-C6-N6	-6.75	118.30	123.70
21	AA	1013	G	O4'-C1'-N9	6.75	113.60	108.20
57	BB	1156	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	1208	C	C4-C5-C6	6.75	120.77	117.40
57	BB	1380	G	C4-C5-C6	6.75	122.85	118.80
57	BB	2469	A	P-O3'-C3'	-6.75	111.60	119.70
57	BB	2801	G	N3-C4-C5	-6.75	125.22	128.60
14	AC	162	ALA	N-CA-CB	6.75	119.55	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	359	G	C5-N7-C8	6.75	107.67	104.30
21	AA	715	A	N1-C6-N6	6.75	122.65	118.60
21	AA	885	G	C3'-C2'-C1'	-6.75	96.10	101.50
22	AY	17	U	P-O5'-C5'	6.75	131.69	120.90
24	AX	17	U	N1-C1'-C2'	-6.75	104.58	112.00
57	BB	439	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	1086	A	C5'-C4'-O4'	6.75	117.20	109.10
57	BB	2033	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	2152	G	C6-C5-N7	-6.75	126.35	130.40
57	BB	2199	A	N9-C4-C5	-6.75	103.10	105.80
57	BB	2324	U	P-O5'-C5'	6.75	131.70	120.90
57	BB	2694	G	O4'-C4'-C3'	-6.75	97.25	104.00
57	BB	1535	A	C4-C5-N7	-6.75	107.33	110.70
57	BB	1750	G	C4'-C3'-C2'	-6.75	95.86	102.60
20	AI	126	PHE	CB-CG-CD1	-6.74	116.08	120.80
21	AA	956	U	N3-C4-O4	6.74	124.12	119.40
21	AA	1525	G	C6-N1-C2	6.74	129.15	125.10
24	AX	18	G	N7-C8-N9	6.74	116.47	113.10
25	AZ	194	PHE	CB-CG-CD2	6.74	125.52	120.80
57	BB	500	G	C5'-C4'-O4'	6.74	117.19	109.10
57	BB	544	C	C6-N1-C1'	-6.74	112.71	120.80
57	BB	767	U	C5-C6-N1	6.74	126.07	122.70
58	BA	52	A	P-O3'-C3'	6.74	127.79	119.70
37	BR	68	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
57	BB	1191	G	C5-C6-N1	-6.74	108.13	111.50
57	BB	1459	G	C5-C6-N1	-6.74	108.13	111.50
58	BA	62	C	C2-N3-C4	6.74	123.27	119.90
21	AA	192	A	C5-C6-N6	-6.74	118.31	123.70
21	AA	292	G	C4-C5-C6	6.74	122.84	118.80
21	AA	321	A	C5-C6-N6	-6.74	118.31	123.70
21	AA	496	A	C5-N7-C8	6.74	107.27	103.90
21	AA	1100	C	C5-C6-N1	-6.74	117.63	121.00
21	AA	1111	A	N1-C2-N3	6.74	132.67	129.30
21	AA	1379	G	N9-C4-C5	6.74	108.10	105.40
21	AA	1427	C	N3-C2-O2	-6.74	117.18	121.90
22	AY	40	C	C5-C4-N4	-6.74	115.48	120.20
22	AY	52	U	C5'-C4'-O4'	6.74	117.19	109.10
31	BL	99	ASN	N-CA-CB	6.74	122.73	110.60
57	BB	94	A	N9-C4-C5	6.74	108.50	105.80
57	BB	138	U	C5'-C4'-C3'	-6.74	105.21	116.00
57	BB	540	C	C6-N1-C2	-6.74	117.60	120.30
57	BB	776	G	C4-N9-C1'	6.74	135.26	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1926	U	N3-C4-C5	-6.74	110.56	114.60
57	BB	1975	G	C8-N9-C4	6.74	109.10	106.40
57	BB	2635	A	C5-N7-C8	6.74	107.27	103.90
57	BB	2761	A	N1-C2-N3	6.74	132.67	129.30
57	BB	2766	A	N1-C2-N3	6.74	132.67	129.30
57	BB	2862	G	C6-N1-C2	6.74	129.14	125.10
21	AA	1401	G	N1-C2-N3	-6.74	119.86	123.90
21	AA	1521	C	C5-C4-N4	-6.74	115.48	120.20
22	AY	39	U	C6-N1-C2	-6.74	116.96	121.00
41	BV	79	ARG	NE-CZ-NH2	6.74	123.67	120.30
57	BB	1144	A	C5-C6-N1	-6.74	114.33	117.70
57	BB	1627	G	C4-N9-C1'	6.74	135.26	126.50
57	BB	1922	G	C8-N9-C4	-6.74	103.70	106.40
57	BB	2552	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	2639	A	C5-C6-N1	-6.74	114.33	117.70
57	BB	2731	G	N7-C8-N9	-6.74	109.73	113.10
58	BA	88	C	C5-C4-N4	-6.74	115.48	120.20
57	BB	2219	U	C5-C6-N1	6.74	126.07	122.70
57	BB	2618	G	C2-N3-C4	6.74	115.27	111.90
21	AA	566	G	N3-C2-N2	6.74	124.61	119.90
21	AA	1046	A	C4-C5-C6	6.74	120.37	117.00
21	AA	1060	U	N3-C4-O4	6.74	124.11	119.40
21	AA	1359	C	N3-C4-C5	-6.74	119.21	121.90
22	AY	15	G	C6-C5-N7	-6.74	126.36	130.40
42	BW	48	ALA	N-CA-CB	6.74	119.53	110.10
57	BB	3	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	253	C	N3-C4-N4	6.74	122.72	118.00
57	BB	345	A	C4-C5-C6	6.74	120.37	117.00
57	BB	370	G	C2-N3-C4	6.74	115.27	111.90
57	BB	601	C	O4'-C1'-N1	6.74	113.59	108.20
57	BB	1122	G	N3-C2-N2	6.74	124.61	119.90
57	BB	1258	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	2353	G	N3-C2-N2	6.74	124.61	119.90
57	BB	2371	G	N3-C4-N9	-6.74	121.96	126.00
21	AA	5	U	N3-C2-O2	-6.73	117.49	122.20
21	AA	1254	A	N3-C4-C5	-6.73	122.09	126.80
21	AA	1527	U	O4'-C1'-N1	6.73	113.59	108.20
43	BX	44	ARG	CD-NE-CZ	-6.73	114.17	123.60
57	BB	2	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	708	G	C4-C5-N7	-6.73	108.11	110.80
57	BB	1561	C	C2-N3-C4	6.73	123.27	119.90
18	AG	43	TYR	CG-CD2-CE2	6.73	126.69	121.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	189	A	O4'-C1'-N9	6.73	113.59	108.20
21	AA	1371	G	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	40	U	O4'-C1'-N1	6.73	113.59	108.20
57	BB	485	C	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	684	G	N1-C6-O6	6.73	123.94	119.90
57	BB	2689	U	N3-C4-C5	6.73	118.64	114.60
21	AA	141	G	N1-C6-O6	6.73	123.94	119.90
21	AA	333	U	N3-C2-O2	-6.73	117.49	122.20
21	AA	524	G	N9-C4-C5	6.73	108.09	105.40
21	AA	1070	U	C5-C6-N1	6.73	126.06	122.70
57	BB	707	G	C6-C5-N7	-6.73	126.36	130.40
57	BB	1018	U	C5-C6-N1	6.73	126.06	122.70
57	BB	1120	G	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	1187	G	N3-C2-N2	6.73	124.61	119.90
57	BB	1330	C	C2-N3-C4	6.73	123.27	119.90
21	AA	149	A	C5-C6-N1	-6.73	114.33	117.70
21	AA	397	A	C6-C5-N7	-6.73	127.59	132.30
21	AA	904	U	C1'-O4'-C4'	-6.73	104.52	109.90
21	AA	1115	U	N1-C2-N3	-6.73	110.86	114.90
57	BB	579	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	1664	A	C5-C6-N6	-6.73	118.32	123.70
57	BB	1920	C	C2-N3-C4	6.73	123.27	119.90
58	BA	21	G	N1-C2-N3	-6.73	119.86	123.90
57	BB	231	A	C5-C6-N1	-6.73	114.34	117.70
57	BB	274	C	C6-N1-C2	-6.73	117.61	120.30
57	BB	510	C	C2-N3-C4	6.73	123.26	119.90
57	BB	859	G	N1-C6-O6	6.73	123.94	119.90
57	BB	899	A	O4'-C1'-N9	6.73	113.58	108.20
57	BB	1494	A	O4'-C1'-N9	6.73	113.58	108.20
57	BB	1587	G	N3-C4-N9	6.73	130.04	126.00
57	BB	1668	A	O3'-P-O5'	-6.73	91.22	104.00
57	BB	1674	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	2804	U	C5-C4-O4	-6.73	121.86	125.90
22	AY	72	C	N3-C4-N4	6.73	122.71	118.00
57	BB	2076	U	C5-C6-N1	6.73	126.06	122.70
57	BB	2707	U	C5'-C4'-O4'	6.73	117.17	109.10
57	BB	2796	U	C6-N1-C2	6.73	125.03	121.00
21	AA	111	G	P-O5'-C5'	6.72	131.66	120.90
21	AA	276	G	N3-C4-N9	6.72	130.03	126.00
21	AA	707	U	C1'-O4'-C4'	6.72	115.28	109.90
57	BB	475	C	O4'-C1'-N1	6.72	113.58	108.20
57	BB	579	G	O4'-C1'-N9	6.72	113.58	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1557	C	C5-C6-N1	6.72	124.36	121.00
57	BB	1669	A	C4-N9-C1'	6.72	138.41	126.30
57	BB	1685	C	C5-C6-N1	6.72	124.36	121.00
57	BB	1858	A	N1-C6-N6	6.72	122.64	118.60
57	BB	2604	U	C4-C5-C6	6.72	123.73	119.70
21	AA	165	G	C6-N1-C2	-6.72	121.07	125.10
21	AA	202	G	C6-C5-N7	-6.72	126.37	130.40
21	AA	288	A	C5'-C4'-O4'	6.72	117.17	109.10
21	AA	776	G	C2-N3-C4	6.72	115.26	111.90
21	AA	855	U	N3-C4-C5	6.72	118.63	114.60
21	AA	1382	C	P-O3'-C3'	-6.72	111.63	119.70
57	BB	689	A	C5-C6-N6	-6.72	118.32	123.70
57	BB	853	C	N3-C4-N4	6.72	122.71	118.00
57	BB	1338	G	N3-C4-C5	-6.72	125.24	128.60
57	BB	1407	G	N3-C4-C5	6.72	131.96	128.60
57	BB	1424	G	O4'-C1'-N9	6.72	113.58	108.20
57	BB	1426	G	N1-C2-N2	-6.72	110.15	116.20
57	BB	1825	U	C6-N1-C2	6.72	125.03	121.00
57	BB	2838	G	C5-C6-O6	-6.72	124.57	128.60
21	AA	379	C	N3-C4-C5	-6.72	119.21	121.90
21	AA	906	A	O4'-C1'-N9	6.72	113.58	108.20
57	BB	775	G	N7-C8-N9	6.72	116.46	113.10
21	AA	197	A	N9-C4-C5	-6.72	103.11	105.80
21	AA	495	A	C5-N7-C8	6.72	107.26	103.90
21	AA	1001	C	N3-C4-C5	-6.72	119.21	121.90
21	AA	1203	C	C4-C5-C6	-6.72	114.04	117.40
21	AA	1218	C	C1'-O4'-C4'	-6.72	104.53	109.90
21	AA	1444	U	O5'-P-OP2	-6.72	99.65	105.70
57	BB	586	A	OP1-P-OP2	-6.72	109.52	119.60
57	BB	664	G	N9-C1'-C2'	-6.72	104.61	112.00
57	BB	690	G	C2-N3-C4	6.72	115.26	111.90
57	BB	842	U	N3-C2-O2	-6.72	117.50	122.20
57	BB	879	G	C8-N9-C4	-6.72	103.71	106.40
57	BB	1478	G	C4-C5-C6	6.72	122.83	118.80
57	BB	1520	U	C5-C4-O4	6.72	129.93	125.90
57	BB	1663	G	C5-C6-O6	-6.72	124.57	128.60
57	BB	2276	G	C4-C5-C6	6.72	122.83	118.80
57	BB	2647	U	N3-C4-O4	6.72	124.10	119.40
28	BI	96	LYS	N-CA-CB	6.72	122.69	110.60
57	BB	867	C	C3'-C2'-C1'	6.72	106.87	101.50
57	BB	2532	G	N3-C4-N9	6.72	130.03	126.00
57	BB	2899	A	O4'-C1'-N9	6.72	113.58	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	34	C	N3-C4-N4	6.72	122.70	118.00
21	AA	347	G	C5-C6-O6	-6.72	124.57	128.60
21	AA	581	G	N1-C6-O6	6.72	123.93	119.90
25	AZ	74	ARG	NE-CZ-NH2	-6.72	116.94	120.30
57	BB	952	G	N7-C8-N9	-6.72	109.74	113.10
57	BB	1222	U	O4'-C1'-N1	6.72	113.57	108.20
57	BB	1901	A	N1-C6-N6	6.72	122.63	118.60
57	BB	1959	G	O4'-C1'-N9	6.72	113.57	108.20
57	BB	2218	G	C6-C5-N7	-6.72	126.37	130.40
57	BB	2315	G	C4-C5-N7	-6.72	108.11	110.80
57	BB	2673	G	N1-C2-N2	6.72	122.25	116.20
15	AD	110	ARG	NE-CZ-NH2	-6.71	116.94	120.30
21	AA	143	A	N3-C4-C5	-6.71	122.10	126.80
21	AA	279	A	N1-C2-N3	-6.71	125.94	129.30
21	AA	371	A	N9-C4-C5	-6.71	103.11	105.80
57	BB	849	A	C6-C5-N7	-6.71	127.60	132.30
57	BB	1623	G	N1-C2-N3	-6.71	119.87	123.90
57	BB	2625	G	O4'-C1'-N9	6.71	113.57	108.20
21	AA	357	G	C4-C5-N7	6.71	113.48	110.80
21	AA	1236	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	80	G	N1-C6-O6	6.71	123.93	119.90
57	BB	592	A	C2-N3-C4	-6.71	107.24	110.60
57	BB	1173	U	O4'-C1'-N1	6.71	113.57	108.20
57	BB	1829	A	C4-C5-N7	-6.71	107.34	110.70
57	BB	1888	G	C4-C5-N7	-6.71	108.11	110.80
57	BB	2092	U	O5'-P-OP2	-6.71	99.66	105.70
57	BB	2463	C	C3'-C2'-C1'	6.71	106.87	101.50
21	AA	1046	A	N1-C2-N3	6.71	132.66	129.30
28	BI	26	ALA	N-CA-CB	6.71	119.50	110.10
57	BB	125	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	833	A	C5-C6-N6	-6.71	118.33	123.70
57	BB	1689	A	C5-C6-N1	-6.71	114.34	117.70
57	BB	1696	G	N9-C4-C5	6.71	108.08	105.40
57	BB	2820	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	1303	G	C8-N9-C4	6.71	109.08	106.40
57	BB	2616	C	O4'-C1'-N1	6.71	113.57	108.20
21	AA	184	G	C5-C6-O6	-6.71	124.58	128.60
21	AA	558	G	N3-C2-N2	6.71	124.60	119.90
21	AA	1314	C	N3-C4-N4	6.71	122.70	118.00
22	AY	49	C	C6-N1-C2	6.71	122.98	120.30
44	BY	3	ALA	N-CA-CB	6.71	119.49	110.10
57	BB	726	G	C4-N9-C1'	-6.71	117.78	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1278	C	C5-C4-N4	-6.71	115.50	120.20
57	BB	1651	G	N3-C2-N2	6.71	124.59	119.90
57	BB	2141	G	N9-C4-C5	-6.71	102.72	105.40
57	BB	2143	C	C5-C4-N4	-6.71	115.50	120.20
21	AA	421	U	C2-N1-C1'	6.71	125.75	117.70
21	AA	725	G	N3-C4-N9	-6.71	121.98	126.00
21	AA	832	G	N1-C2-N3	-6.71	119.88	123.90
21	AA	1229	A	C4-C5-N7	-6.71	107.35	110.70
21	AA	1293	C	C4'-C3'-C2'	-6.71	95.89	102.60
57	BB	296	U	N3-C4-O4	6.71	124.09	119.40
57	BB	327	G	C6-C5-N7	-6.71	126.38	130.40
57	BB	902	C	N1-C2-N3	-6.71	114.50	119.20
57	BB	932	U	N3-C4-O4	-6.71	114.71	119.40
57	BB	981	A	O4'-C1'-N9	6.71	113.56	108.20
57	BB	1733	G	N7-C8-N9	-6.71	109.75	113.10
57	BB	1761	C	N3-C4-N4	6.71	122.69	118.00
57	BB	2354	C	N1-C2-N3	-6.71	114.50	119.20
57	BB	2476	A	C8-N9-C4	-6.71	103.12	105.80
57	BB	2601	C	N3-C4-N4	6.71	122.69	118.00
21	AA	303	A	C4'-C3'-C2'	-6.71	95.89	102.60
26	AV	53	G	N3-C2-N2	6.71	124.59	119.90
57	BB	649	G	N3-C4-N9	6.71	130.02	126.00
57	BB	1220	G	C4-C5-N7	-6.71	108.12	110.80
57	BB	1408	G	O4'-C1'-N9	6.71	113.56	108.20
57	BB	2016	U	C4-C5-C6	6.71	123.72	119.70
21	AA	836	G	N3-C4-C5	-6.70	125.25	128.60
21	AA	1035	A	N3-C4-N9	6.70	132.76	127.40
21	AA	1157	A	C6-N1-C2	-6.70	114.58	118.60
57	BB	223	A	C5-C6-N1	-6.70	114.35	117.70
57	BB	996	A	P-O5'-C5'	6.70	131.62	120.90
57	BB	1241	A	C4-C5-N7	-6.70	107.35	110.70
57	BB	1567	G	C4'-C3'-C2'	-6.70	95.90	102.60
57	BB	1660	G	N1-C6-O6	6.70	123.92	119.90
57	BB	1984	G	C6-C5-N7	6.70	134.42	130.40
57	BB	2235	G	N9-C4-C5	-6.70	102.72	105.40
57	BB	2656	U	N3-C4-O4	6.70	124.09	119.40
21	AA	721	G	C5-C6-O6	-6.70	124.58	128.60
57	BB	45	G	C6-N1-C2	-6.70	121.08	125.10
57	BB	854	C	C4'-C3'-C2'	-6.70	95.90	102.60
21	AA	1108	G	N1-C2-N3	-6.70	119.88	123.90
22	AY	42	G	C5-N7-C8	6.70	107.65	104.30
28	BI	123	ALA	CB-CA-C	-6.70	100.05	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	BJ	35	ARG	CB-CA-C	-6.70	97.00	110.40
57	BB	14	A	C6-C5-N7	-6.70	127.61	132.30
57	BB	769	U	N1-C2-N3	6.70	118.92	114.90
57	BB	1214	A	O4'-C1'-N9	6.70	113.56	108.20
57	BB	1543	G	O4'-C1'-N9	6.70	113.56	108.20
57	BB	1827	U	N3-C2-O2	6.70	126.89	122.20
57	BB	2487	G	C5-C6-N1	-6.70	108.15	111.50
21	AA	833	G	C5-N7-C8	6.70	107.65	104.30
36	BQ	57	ARG	NE-CZ-NH2	6.70	123.65	120.30
57	BB	182	A	N1-C2-N3	6.70	132.65	129.30
57	BB	315	G	C6-C5-N7	-6.70	126.38	130.40
57	BB	619	G	C5-N7-C8	6.70	107.65	104.30
57	BB	1181	U	N3-C4-O4	6.70	124.09	119.40
57	BB	1288	G	O4'-C1'-N9	6.70	113.56	108.20
21	AA	109	A	N3-C4-C5	6.70	131.49	126.80
21	AA	496	A	C4-C5-N7	-6.70	107.35	110.70
21	AA	874	G	N9-C4-C5	-6.70	102.72	105.40
25	AZ	132	VAL	CA-CB-CG1	6.70	120.94	110.90
53	BE	125	SER	N-CA-CB	6.70	120.55	110.50
57	BB	324	A	N3-C4-C5	6.70	131.49	126.80
57	BB	501	A	C3'-C2'-C1'	6.70	106.86	101.50
57	BB	1237	A	C3'-C2'-C1'	6.70	106.86	101.50
21	AA	272	C	C5-C6-N1	6.70	124.35	121.00
21	AA	1074	G	O4'-C1'-N9	6.70	113.56	108.20
21	AA	1174	G	C8-N9-C4	-6.70	103.72	106.40
23	AW	50	U	O4'-C1'-N1	6.70	113.56	108.20
26	AV	17	C	O4'-C4'-C3'	-6.70	97.31	104.00
57	BB	16	C	C5-C4-N4	-6.70	115.51	120.20
57	BB	798	G	C8-N9-C4	6.70	109.08	106.40
57	BB	1757	A	N1-C6-N6	6.70	122.62	118.60
58	BA	23	G	C6-C5-N7	-6.70	126.38	130.40
21	AA	1346	A	C2-N3-C4	-6.69	107.25	110.60
23	AW	62	C	C4-C5-C6	6.69	120.75	117.40
57	BB	1802	A	P-O3'-C3'	-6.69	111.67	119.70
21	AA	156	C	N3-C4-N4	6.69	122.69	118.00
21	AA	548	G	C4-C5-C6	-6.69	114.78	118.80
21	AA	751	U	N1-C2-O2	6.69	127.48	122.80
22	AY	49	C	C1'-O4'-C4'	6.69	115.25	109.90
26	AV	55	U	N3-C4-C5	-6.69	110.58	114.60
57	BB	219	A	C4-C5-N7	-6.69	107.35	110.70
57	BB	265	A	C4-C5-N7	6.69	114.05	110.70
57	BB	533	G	O4'-C1'-N9	6.69	113.55	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	666	A	C5-C6-N6	-6.69	118.35	123.70
57	BB	1063	G	N3-C4-C5	-6.69	125.25	128.60
57	BB	1194	A	N1-C2-N3	-6.69	125.95	129.30
57	BB	1922	G	N1-C6-O6	6.69	123.92	119.90
57	BB	2155	U	N3-C2-O2	6.69	126.89	122.20
57	BB	2354	C	C5-C6-N1	-6.69	117.65	121.00
21	AA	230	G	N1-C6-O6	6.69	123.91	119.90
21	AA	613	C	P-O3'-C3'	-6.69	111.67	119.70
57	BB	56	A	C4-C5-N7	-6.69	107.36	110.70
57	BB	201	C	C4'-C3'-C2'	-6.69	95.91	102.60
57	BB	507	A	C6-C5-N7	-6.69	127.62	132.30
57	BB	1177	G	OP1-P-OP2	-6.69	109.57	119.60
57	BB	1228	G	C4-C5-N7	6.69	113.48	110.80
57	BB	1239	G	N1-C6-O6	6.69	123.91	119.90
57	BB	1947	C	C5-C4-N4	-6.69	115.52	120.20
57	BB	2738	A	N1-C6-N6	6.69	122.61	118.60
57	BB	12	U	N3-C4-C5	-6.69	110.59	114.60
57	BB	146	A	C4-C5-N7	-6.69	107.36	110.70
57	BB	642	U	N3-C4-C5	6.69	118.61	114.60
57	BB	766	U	N3-C2-O2	6.69	126.88	122.20
57	BB	923	G	N7-C8-N9	-6.69	109.75	113.10
57	BB	1695	G	C4-C5-C6	6.69	122.81	118.80
57	BB	1791	A	N9-C4-C5	-6.69	103.12	105.80
57	BB	2678	C	O4'-C1'-N1	6.69	113.55	108.20
57	BB	2888	C	N1-C2-N3	-6.69	114.52	119.20
21	AA	429	U	N1-C2-N3	-6.69	110.89	114.90
21	AA	1366	C	O4'-C1'-N1	6.69	113.55	108.20
57	BB	363	G	C4-C5-C6	6.69	122.81	118.80
57	BB	1145	C	P-O3'-C3'	-6.69	111.68	119.70
57	BB	1210	G	N1-C2-N3	-6.69	119.89	123.90
57	BB	1900	A	N1-C6-N6	6.69	122.61	118.60
57	BB	1977	A	C6-C5-N7	-6.69	127.62	132.30
57	BB	2341	G	N1-C2-N3	-6.69	119.89	123.90
57	BB	2537	U	N1-C2-O2	-6.69	118.12	122.80
57	BB	2792	A	C8-N9-C4	-6.69	103.12	105.80
15	AD	75	TYR	CG-CD1-CE1	-6.69	115.95	121.30
21	AA	939	G	P-O5'-C5'	-6.69	110.20	120.90
57	BB	1223	G	C4-C5-C6	6.69	122.81	118.80
57	BB	2787	C	N1-C2-O2	-6.69	114.89	118.90
21	AA	673	A	C5-N7-C8	6.68	107.24	103.90
21	AA	694	A	C5-C6-N1	-6.68	114.36	117.70
21	AA	745	G	C4-N9-C1'	-6.68	117.81	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	30	G	C5-C6-O6	-6.68	124.59	128.60
57	BB	84	A	C5-N7-C8	6.68	107.24	103.90
57	BB	118	A	C6-C5-N7	-6.68	127.62	132.30
57	BB	408	G	C8-N9-C4	6.68	109.07	106.40
57	BB	1010	A	C5-C6-N1	-6.68	114.36	117.70
57	BB	1537	G	N1-C2-N3	-6.68	119.89	123.90
57	BB	2206	C	P-O3'-C3'	-6.68	111.68	119.70
57	BB	2829	A	C4-C5-N7	-6.68	107.36	110.70
21	AA	996	A	C4-C5-N7	-6.68	107.36	110.70
21	AA	1255	G	C4-C5-C6	6.68	122.81	118.80
21	AA	1510	C	N3-C2-O2	6.68	126.58	121.90
57	BB	966	G	C6-C5-N7	-6.68	126.39	130.40
57	BB	1242	U	O4'-C1'-N1	6.68	113.55	108.20
57	BB	1434	A	N1-C6-N6	6.68	122.61	118.60
57	BB	1729	U	C5-C4-O4	-6.68	121.89	125.90
57	BB	1944	U	O4'-C1'-N1	6.68	113.55	108.20
57	BB	2268	A	P-O3'-C3'	-6.68	111.68	119.70
22	AY	61	C	O4'-C1'-N1	6.68	113.55	108.20
57	BB	344	A	P-O3'-C3'	-6.68	111.68	119.70
57	BB	464	U	C3'-C2'-C1'	6.68	106.84	101.50
57	BB	549	G	N3-C2-N2	6.68	124.58	119.90
57	BB	1802	A	C8-N9-C4	-6.68	103.13	105.80
57	BB	2325	G	O4'-C4'-C3'	-6.68	97.32	104.00
57	BB	2608	G	C5-C6-N1	-6.68	108.16	111.50
21	AA	436	C	C5-C4-N4	-6.68	115.53	120.20
21	AA	502	A	C5-C6-N1	-6.68	114.36	117.70
21	AA	1221	G	C1'-O4'-C4'	6.68	115.24	109.90
57	BB	40	U	C6-N1-C2	-6.68	116.99	121.00
57	BB	356	G	N1-C2-N3	-6.68	119.89	123.90
57	BB	423	A	C6-N1-C2	6.68	122.61	118.60
57	BB	678	C	C2-N3-C4	-6.68	116.56	119.90
57	BB	2058	A	C4-C5-N7	-6.68	107.36	110.70
57	BB	2494	G	C6-C5-N7	-6.68	126.39	130.40
57	BB	2780	G	O4'-C1'-N9	6.68	113.54	108.20
21	AA	172	A	O4'-C1'-N9	6.68	113.54	108.20
21	AA	483	C	C5-C4-N4	-6.68	115.53	120.20
21	AA	501	C	P-O3'-C3'	-6.68	111.69	119.70
57	BB	370	G	N3-C2-N2	6.68	124.57	119.90
57	BB	732	C	C5-C4-N4	-6.68	115.53	120.20
57	BB	1111	A	P-O5'-C5'	6.68	131.59	120.90
57	BB	1887	C	C6-N1-C2	-6.68	117.63	120.30
57	BB	2412	A	C5-C6-N1	-6.68	114.36	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	126	G	C5-N7-C8	6.68	107.64	104.30
21	AA	552	U	N3-C4-O4	6.68	124.07	119.40
21	AA	629	A	C3'-C2'-C1'	-6.68	96.16	101.50
21	AA	798	U	C4-C5-C6	-6.68	115.69	119.70
21	AA	865	A	N3-C4-C5	-6.68	122.13	126.80
57	BB	1731	G	N3-C4-C5	6.68	131.94	128.60
57	BB	2150	C	C5'-C4'-O4'	6.68	117.11	109.10
57	BB	2261	C	N1-C2-O2	-6.68	114.89	118.90
21	AA	972	C	O4'-C1'-N1	6.67	113.54	108.20
21	AA	1034	G	C8-N9-C4	-6.67	103.73	106.40
21	AA	1035	A	N1-C6-N6	6.67	122.60	118.60
21	AA	1346	A	P-O5'-C5'	-6.67	110.22	120.90
23	AW	32	U	N3-C4-O4	6.67	124.07	119.40
45	BC	100	ARG	NE-CZ-NH1	6.67	123.64	120.30
57	BB	520	G	C5-C6-O6	-6.67	124.59	128.60
57	BB	977	G	N1-C6-O6	6.67	123.91	119.90
57	BB	2258	C	N3-C4-N4	6.67	122.67	118.00
57	BB	2628	C	C6-N1-C2	-6.67	117.63	120.30
21	AA	62	U	N3-C2-O2	6.67	126.87	122.20
21	AA	1299	A	C4'-C3'-C2'	6.67	109.27	102.60
23	AW	34	G	C3'-C2'-C1'	6.67	106.84	101.50
57	BB	368	A	N9-C4-C5	6.67	108.47	105.80
57	BB	1302	A	N1-C2-N3	6.67	132.64	129.30
21	AA	460	A	P-O5'-C5'	6.67	131.57	120.90
21	AA	586	C	N3-C4-N4	6.67	122.67	118.00
21	AA	750	C	N3-C2-O2	-6.67	117.23	121.90
21	AA	1012	A	P-O5'-C5'	-6.67	110.23	120.90
21	AA	1397	C	C5-C6-N1	6.67	124.33	121.00
57	BB	728	G	C6-C5-N7	-6.67	126.40	130.40
57	BB	820	A	C5-C6-N1	-6.67	114.36	117.70
57	BB	908	C	C4-C5-C6	6.67	120.74	117.40
57	BB	1264	A	C4-C5-N7	-6.67	107.36	110.70
57	BB	1714	U	N3-C4-C5	-6.67	110.60	114.60
57	BB	1764	C	C2-N3-C4	6.67	123.24	119.90
57	BB	1997	C	O4'-C1'-N1	6.67	113.54	108.20
57	BB	2382	G	O4'-C1'-N9	6.67	113.54	108.20
57	BB	2405	G	C5'-C4'-O4'	6.67	117.11	109.10
57	BB	2595	G	O4'-C1'-N9	6.67	113.54	108.20
21	AA	568	G	C4-C5-C6	6.67	122.80	118.80
23	AW	74	C	N3-C4-C5	-6.67	119.23	121.90
57	BB	1275	A	N3-C4-N9	6.67	132.74	127.40
21	AA	618	C	N3-C4-C5	-6.67	119.23	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	840	C	N3-C4-C5	-6.67	119.23	121.90
21	AA	1534	A	C5-C6-N6	-6.67	118.36	123.70
22	AY	20	G	N1-C2-N2	-6.67	110.20	116.20
23	AW	37	A	C5-C6-N1	-6.67	114.37	117.70
41	BV	61	LEU	CB-CG-CD2	6.67	122.33	111.00
57	BB	112	U	N3-C4-O4	-6.67	114.73	119.40
57	BB	119	A	N7-C8-N9	6.67	117.13	113.80
57	BB	491	G	N1-C2-N3	-6.67	119.90	123.90
57	BB	633	A	C8-N9-C4	-6.67	103.13	105.80
57	BB	1166	G	O4'-C4'-C3'	-6.67	97.33	104.00
57	BB	1491	G	N3-C2-N2	6.67	124.57	119.90
57	BB	2122	U	C6-N1-C2	-6.67	117.00	121.00
57	BB	2520	C	C6-N1-C2	-6.67	117.63	120.30
57	BB	2685	G	C4-C5-N7	-6.67	108.13	110.80
21	AA	181	A	O4'-C1'-N9	6.67	113.53	108.20
21	AA	388	G	O5'-P-OP2	-6.67	99.70	105.70
21	AA	978	A	C5-N7-C8	6.67	107.23	103.90
22	AY	49	C	C5'-C4'-C3'	-6.67	105.33	116.00
23	AW	23	A	P-O3'-C3'	6.67	127.70	119.70
53	BE	170	ARG	NE-CZ-NH1	-6.67	116.97	120.30
57	BB	519	U	P-O3'-C3'	-6.67	111.70	119.70
57	BB	578	G	N9-C4-C5	-6.67	102.73	105.40
57	BB	742	A	C4-C5-N7	-6.67	107.37	110.70
57	BB	1106	G	C4-C5-C6	6.67	122.80	118.80
57	BB	1867	G	C2-N3-C4	6.67	115.23	111.90
57	BB	2401	U	C2-N3-C4	-6.67	123.00	127.00
21	AA	642	A	C5-N7-C8	-6.67	100.57	103.90
57	BB	1541	C	N1-C2-N3	-6.67	114.53	119.20
21	AA	797	C	C4-C5-C6	6.66	120.73	117.40
21	AA	1355	G	N9-C4-C5	6.66	108.06	105.40
23	AW	27	G	C4-C5-C6	6.66	122.80	118.80
49	B2	17	GLY	O-C-N	-6.66	112.04	122.70
57	BB	716	A	C5-N7-C8	6.66	107.23	103.90
57	BB	1244	A	O4'-C1'-N9	6.66	113.53	108.20
57	BB	1393	A	P-O3'-C3'	6.66	127.70	119.70
57	BB	1401	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	1840	G	C8-N9-C4	-6.66	103.73	106.40
57	BB	2180	U	N1-C2-N3	-6.66	110.90	114.90
57	BB	2213	U	C6-N1-C1'	-6.66	111.87	121.20
21	AA	379	C	O4'-C1'-N1	6.66	113.53	108.20
57	BB	805	G	N9-C4-C5	6.66	108.06	105.40
57	BB	1593	A	C5-C6-N1	-6.66	114.37	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1750	G	C6-C5-N7	-6.66	126.40	130.40
57	BB	2425	A	C6-C5-N7	-6.66	127.64	132.30
21	AA	71	A	C2-N3-C4	6.66	113.93	110.60
21	AA	1105	A	N1-C2-N3	6.66	132.63	129.30
21	AA	1290	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	367	G	N3-C2-N2	6.66	124.56	119.90
57	BB	1205	A	C4-C5-N7	-6.66	107.37	110.70
57	BB	2444	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	2843	G	N9-C4-C5	-6.66	102.74	105.40
58	BA	33	G	N1-C6-O6	6.66	123.90	119.90
13	AB	197	PHE	CB-CG-CD2	-6.66	116.14	120.80
20	AI	10	ARG	NE-CZ-NH2	6.66	123.63	120.30
21	AA	1062	U	C5'-C4'-O4'	6.66	117.09	109.10
21	AA	1207	G	N3-C2-N2	6.66	124.56	119.90
21	AA	1508	A	C6-N1-C2	6.66	122.59	118.60
22	AY	23	A	N7-C8-N9	6.66	117.13	113.80
26	AV	6	G	N1-C2-N3	-6.66	119.91	123.90
57	BB	513	A	C3'-C2'-C1'	6.66	106.83	101.50
57	BB	814	C	C6-N1-C2	6.66	122.96	120.30
57	BB	1576	U	O4'-C1'-N1	6.66	113.53	108.20
58	BA	86	G	N9-C4-C5	-6.66	102.74	105.40
21	AA	53	A	N1-C2-N3	6.66	132.63	129.30
21	AA	166	U	N1-C2-N3	-6.66	110.91	114.90
21	AA	643	C	C5-C6-N1	6.66	124.33	121.00
21	AA	1236	A	N9-C4-C5	-6.66	103.14	105.80
26	AV	73	A	C5'-C4'-O4'	6.66	117.09	109.10
45	BC	86	ARG	NE-CZ-NH2	-6.66	116.97	120.30
21	AA	162	A	O4'-C1'-N9	6.66	113.52	108.20
21	AA	196	A	C5-C6-N1	-6.66	114.37	117.70
21	AA	624	C	C6-N1-C2	-6.66	117.64	120.30
21	AA	1119	C	O4'-C1'-N1	6.66	113.53	108.20
57	BB	813	U	N3-C2-O2	6.66	126.86	122.20
57	BB	2838	G	N1-C6-O6	6.66	123.89	119.90
57	BB	2878	U	P-O5'-C5'	6.66	131.55	120.90
57	BB	2882	A	N9-C4-C5	-6.66	103.14	105.80
21	AA	341	C	N3-C2-O2	6.65	126.56	121.90
21	AA	683	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	1355	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2625	G	C3'-C2'-C1'	6.65	106.82	101.50
21	AA	57	G	P-O5'-C5'	6.65	131.54	120.90
21	AA	82	G	C6-C5-N7	-6.65	126.41	130.40
21	AA	688	G	N1-C6-O6	6.65	123.89	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	917	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	1082	A	N1-C6-N6	6.65	122.59	118.60
57	BB	263	G	C4-C5-N7	-6.65	108.14	110.80
57	BB	998	C	C2-N3-C4	-6.65	116.57	119.90
57	BB	1275	A	C5-C6-N1	-6.65	114.37	117.70
57	BB	1673	G	N3-C2-N2	6.65	124.56	119.90
57	BB	1715	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2018	G	C5-C6-O6	-6.65	124.61	128.60
57	BB	2120	G	N1-C6-O6	6.65	123.89	119.90
57	BB	2627	G	N7-C8-N9	6.65	116.43	113.10
57	BB	2647	U	O4'-C1'-N1	6.65	113.52	108.20
57	BB	2708	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2843	G	N1-C6-O6	6.65	123.89	119.90
21	AA	393	A	O4'-C1'-N9	6.65	113.52	108.20
21	AA	511	C	N3-C2-O2	-6.65	117.25	121.90
21	AA	900	A	N1-C2-N3	6.65	132.63	129.30
57	BB	1059	G	N1-C2-N3	6.65	127.89	123.90
57	BB	1494	A	C5-C6-N6	-6.65	118.38	123.70
57	BB	2246	G	N7-C8-N9	-6.65	109.77	113.10
57	BB	2788	C	C6-N1-C2	6.65	122.96	120.30
58	BA	21	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	275	G	N1-C2-N3	-6.65	119.91	123.90
21	AA	1129	C	O4'-C1'-N1	6.65	113.52	108.20
21	AA	1480	A	C4'-C3'-C2'	-6.65	95.95	102.60
57	BB	102	U	N3-C2-O2	6.65	126.85	122.20
57	BB	361	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	381	G	C6-C5-N7	-6.65	126.41	130.40
57	BB	1568	G	P-O3'-C3'	-6.65	111.72	119.70
57	BB	1587	G	N7-C8-N9	6.65	116.42	113.10
57	BB	1773	A	N7-C8-N9	6.65	117.12	113.80
21	AA	140	U	C5-C4-O4	6.65	129.89	125.90
21	AA	1003	G	C4-C5-N7	-6.65	108.14	110.80
21	AA	1038	C	N3-C4-N4	6.65	122.65	118.00
21	AA	1250	A	C1'-O4'-C4'	-6.65	104.58	109.90
21	AA	1468	A	C8-N9-C4	-6.65	103.14	105.80
57	BB	1808	A	C5-C6-N1	-6.65	114.38	117.70
57	BB	1943	U	N3-C4-O4	6.65	124.05	119.40
57	BB	2224	G	O4'-C1'-N9	6.65	113.52	108.20
18	AG	78	ARG	NE-CZ-NH1	-6.65	116.98	120.30
21	AA	469	C	N3-C4-C5	-6.65	119.24	121.90
57	BB	222	A	O4'-C1'-N9	6.65	113.52	108.20
57	BB	2366	A	C4-C5-C6	6.65	120.32	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	160	A	C4-C5-C6	6.64	120.32	117.00
21	AA	706	A	C4-C5-C6	6.64	120.32	117.00
21	AA	1049	U	O4'-C1'-N1	6.64	113.52	108.20
21	AA	1277	C	N3-C4-C5	-6.64	119.24	121.90
57	BB	986	C	C5-C6-N1	6.64	124.32	121.00
57	BB	1938	A	O4'-C1'-N9	6.64	113.52	108.20
21	AA	668	G	N9-C4-C5	6.64	108.06	105.40
21	AA	694	A	P-O3'-C3'	6.64	127.67	119.70
21	AA	1240	U	O4'-C1'-N1	6.64	113.51	108.20
21	AA	1407	C	O4'-C1'-N1	6.64	113.51	108.20
21	AA	1523	G	O5'-P-OP1	-6.64	99.72	105.70
22	AY	6	U	C5-C4-O4	6.64	129.89	125.90
57	BB	1178	C	O4'-C1'-N1	6.64	113.51	108.20
57	BB	2333	A	C8-N9-C4	6.64	108.46	105.80
57	BB	2362	C	C5-C4-N4	-6.64	115.55	120.20
57	BB	2780	G	C5'-C4'-O4'	-6.64	101.13	109.10
21	AA	682	G	N9-C4-C5	-6.64	102.74	105.40
21	AA	1172	C	N1-C2-N3	-6.64	114.55	119.20
21	AA	1508	A	C5-N7-C8	6.64	107.22	103.90
57	BB	150	U	N3-C4-O4	6.64	124.05	119.40
21	AA	1134	G	P-O3'-C3'	6.64	127.67	119.70
22	AY	29	A	C1'-O4'-C4'	-6.64	104.59	109.90
22	AY	30	G	C5'-C4'-O4'	6.64	117.07	109.10
22	AY	34	G	C2-N3-C4	-6.64	108.58	111.90
57	BB	27	G	C4-N9-C1'	-6.64	117.87	126.50
57	BB	254	G	C5-C6-O6	-6.64	124.62	128.60
57	BB	553	G	C4-C5-N7	6.64	113.46	110.80
57	BB	646	U	N3-C2-O2	-6.64	117.55	122.20
57	BB	1072	C	N1-C2-O2	6.64	122.88	118.90
57	BB	1584	U	N1-C2-O2	-6.64	118.15	122.80
57	BB	1721	G	N1-C2-N2	-6.64	110.22	116.20
57	BB	2437	G	C8-N9-C4	6.64	109.06	106.40
57	BB	2844	G	C6-N1-C2	6.64	129.08	125.10
15	AD	140	ASP	CB-CG-OD1	6.64	124.27	118.30
21	AA	373	A	C5-C6-N1	-6.64	114.38	117.70
43	BX	44	ARG	NE-CZ-NH2	-6.64	116.98	120.30
21	AA	251	G	C6-C5-N7	-6.64	126.42	130.40
21	AA	293	G	C6-C5-N7	-6.64	126.42	130.40
21	AA	912	C	N1-C2-N3	-6.64	114.55	119.20
57	BB	534	U	O4'-C1'-N1	6.64	113.51	108.20
57	BB	830	G	O4'-C1'-N9	6.64	113.51	108.20
57	BB	893	C	N3-C4-N4	6.64	122.64	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	899	A	N1-C2-N3	-6.64	125.98	129.30
57	BB	1429	G	C2-N3-C4	6.64	115.22	111.90
57	BB	1566	A	C3'-C2'-C1'	-6.64	96.19	101.50
57	BB	1952	A	C5-C6-N1	-6.64	114.38	117.70
57	BB	2482	A	C5-C6-N1	-6.64	114.38	117.70
21	AA	764	C	C2-N3-C4	6.63	123.22	119.90
21	AA	1004	A	C5-C6-N1	-6.63	114.38	117.70
26	AV	72	A	C6-N1-C2	-6.63	114.62	118.60
45	BC	74	PRO	N-CD-CG	6.63	113.15	103.20
57	BB	336	C	O4'-C1'-N1	6.63	113.51	108.20
57	BB	585	G	N3-C2-N2	6.63	124.54	119.90
57	BB	1123	C	C2-N3-C4	-6.63	116.58	119.90
57	BB	1447	C	C2-N3-C4	6.63	123.22	119.90
57	BB	1747	U	N3-C4-O4	6.63	124.05	119.40
57	BB	2244	U	N3-C4-O4	-6.63	114.76	119.40
57	BB	2269	G	N3-C2-N2	6.63	124.54	119.90
57	BB	2437	G	N7-C8-N9	-6.63	109.78	113.10
57	BB	2781	A	C5'-C4'-C3'	-6.63	105.38	116.00
57	BB	243	U	N3-C4-O4	6.63	124.04	119.40
57	BB	642	U	C2-N3-C4	-6.63	123.02	127.00
57	BB	2613	U	C4-C5-C6	-6.63	115.72	119.70
15	AD	145	ARG	NE-CZ-NH1	-6.63	116.98	120.30
21	AA	513	C	N1-C2-O2	6.63	122.88	118.90
21	AA	721	G	C8-N9-C4	6.63	109.05	106.40
21	AA	1237	C	C5'-C4'-C3'	6.63	126.61	116.00
21	AA	1487	G	O4'-C1'-N9	6.63	113.50	108.20
57	BB	1144	A	P-O3'-C3'	6.63	127.66	119.70
57	BB	1304	A	C5-C6-N6	-6.63	118.40	123.70
57	BB	2026	U	N1-C2-N3	6.63	118.88	114.90
57	BB	2587	A	O4'-C1'-N9	6.63	113.50	108.20
57	BB	2650	U	C2-N3-C4	6.63	130.98	127.00
21	AA	437	U	N1-C2-N3	-6.63	110.92	114.90
21	AA	913	A	N7-C8-N9	-6.63	110.48	113.80
21	AA	1467	C	C5-C4-N4	-6.63	115.56	120.20
57	BB	95	A	C5-N7-C8	-6.63	100.58	103.90
57	BB	311	A	N9-C4-C5	-6.63	103.15	105.80
57	BB	771	G	N1-C2-N3	-6.63	119.92	123.90
57	BB	2068	U	N1-C2-O2	-6.63	118.16	122.80
21	AA	31	G	C4-C5-C6	6.63	122.78	118.80
21	AA	345	C	P-O5'-C5'	-6.63	110.30	120.90
57	BB	109	C	C5-C6-N1	6.63	124.31	121.00
57	BB	539	G	N3-C4-C5	6.63	131.91	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	600	G	C1'-O4'-C4'	-6.63	104.60	109.90
57	BB	751	A	C2-N3-C4	-6.63	107.29	110.60
57	BB	1272	A	C2-N3-C4	-6.63	107.29	110.60
57	BB	1961	C	C2-N3-C4	-6.63	116.59	119.90
21	AA	66	A	N3-C4-C5	-6.63	122.16	126.80
21	AA	194	C	N3-C4-N4	6.63	122.64	118.00
21	AA	412	A	C4-C5-C6	6.63	120.31	117.00
21	AA	480	U	C5-C4-O4	-6.63	121.92	125.90
21	AA	1258	G	N1-C2-N2	-6.63	110.24	116.20
22	AY	49	C	N3-C4-N4	6.63	122.64	118.00
57	BB	329	G	C8-N9-C4	-6.63	103.75	106.40
57	BB	668	A	C4'-C3'-C2'	-6.63	95.97	102.60
57	BB	858	G	C6-N1-C2	6.63	129.08	125.10
57	BB	1225	G	N1-C2-N3	-6.63	119.92	123.90
57	BB	1400	U	O4'-C1'-N1	6.63	113.50	108.20
57	BB	1941	C	C6-N1-C2	-6.63	117.65	120.30
57	BB	2034	U	N1-C2-N3	-6.63	110.92	114.90
57	BB	2682	A	C4-C5-N7	6.63	114.01	110.70
58	BA	69	G	C4-C5-C6	6.63	122.78	118.80
58	BA	94	A	N3-C4-C5	-6.63	122.16	126.80
57	BB	140	C	C2-N3-C4	-6.62	116.59	119.90
57	BB	446	G	C6-N1-C2	-6.62	121.12	125.10
57	BB	664	G	O4'-C1'-N9	6.62	113.50	108.20
57	BB	677	A	C5-C6-N6	-6.62	118.40	123.70
57	BB	1300	G	C5'-C4'-O4'	6.62	117.05	109.10
57	BB	1713	A	C6-C5-N7	-6.62	127.66	132.30
57	BB	2004	G	C6-C5-N7	-6.62	126.42	130.40
57	BB	2472	G	C6-N1-C2	6.62	129.07	125.10
58	BA	13	G	C5-N7-C8	6.62	107.61	104.30
21	AA	678	U	C5-C4-O4	-6.62	121.93	125.90
21	AA	1104	G	C6-N1-C2	6.62	129.07	125.10
21	AA	1219	A	N7-C8-N9	6.62	117.11	113.80
26	AV	15	G	N9-C4-C5	6.62	108.05	105.40
27	B5	51	ASP	CB-CG-OD1	-6.62	112.34	118.30
57	BB	1744	A	C5-C6-N6	-6.62	118.40	123.70
57	BB	2156	G	P-O5'-C5'	-6.62	110.30	120.90
57	BB	2611	C	C4-C5-C6	6.62	120.71	117.40
57	BB	2724	U	C1'-O4'-C4'	6.62	115.20	109.90
58	BA	52	A	N1-C6-N6	6.62	122.58	118.60
21	AA	12	U	C5-C4-O4	-6.62	121.93	125.90
21	AA	341	C	N1-C2-N3	-6.62	114.56	119.20
21	AA	621	A	O4'-C1'-N9	6.62	113.50	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	726	C	C2-N3-C4	6.62	123.21	119.90
21	AA	976	G	O4'-C4'-C3'	-6.62	97.38	104.00
57	BB	55	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	629	G	N7-C8-N9	6.62	116.41	113.10
57	BB	1210	G	C2-N3-C4	6.62	115.21	111.90
57	BB	1892	C	C4'-C3'-C2'	-6.62	95.98	102.60
57	BB	2803	G	C8-N9-C1'	6.62	135.61	127.00
9	AR	60	ARG	NE-CZ-NH2	6.62	123.61	120.30
21	AA	240	G	O4'-C1'-N9	6.62	113.50	108.20
21	AA	771	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	679	C	N1-C2-O2	-6.62	114.93	118.90
57	BB	1454	C	C6-N1-C2	6.62	122.95	120.30
57	BB	1739	A	N3-C4-C5	-6.62	122.17	126.80
57	BB	2453	A	N3-C4-C5	-6.62	122.17	126.80
57	BB	2745	C	N3-C4-N4	6.62	122.63	118.00
21	AA	199	A	N1-C2-N3	-6.62	125.99	129.30
21	AA	500	G	N3-C4-N9	6.62	129.97	126.00
21	AA	910	C	C2-N3-C4	-6.62	116.59	119.90
21	AA	1166	G	C6-C5-N7	-6.62	126.43	130.40
57	BB	348	A	C6-C5-N7	-6.62	127.67	132.30
57	BB	505	A	O4'-C1'-N9	6.62	113.49	108.20
57	BB	555	G	N3-C4-C5	-6.62	125.29	128.60
57	BB	2004	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	2554	U	C5-C4-O4	-6.62	121.93	125.90
57	BB	2585	U	N3-C4-O4	6.62	124.03	119.40
21	AA	183	C	N3-C4-C5	-6.62	119.25	121.90
21	AA	864	A	C6-C5-N7	-6.62	127.67	132.30
57	BB	353	C	C1'-O4'-C4'	6.62	115.19	109.90
57	BB	942	G	C4-N9-C1'	-6.62	117.90	126.50
57	BB	2529	G	C6-N1-C2	6.62	129.07	125.10
21	AA	208	U	O4'-C1'-N1	6.62	113.49	108.20
21	AA	246	A	C5'-C4'-O4'	6.62	117.04	109.10
21	AA	1437	A	C8-N9-C4	-6.62	103.15	105.80
26	AV	14	A	C4-C5-N7	-6.62	107.39	110.70
57	BB	207	A	N9-C4-C5	6.62	108.45	105.80
57	BB	497	A	C5-C6-N1	-6.62	114.39	117.70
57	BB	948	C	N3-C4-C5	-6.62	119.25	121.90
57	BB	1305	C	C3'-C2'-C1'	-6.62	96.21	101.50
57	BB	1561	C	C4-C5-C6	-6.62	114.09	117.40
6	AO	57	ARG	NE-CZ-NH2	-6.61	116.99	120.30
6	AO	83	ARG	NE-CZ-NH1	6.61	123.61	120.30
21	AA	1112	C	N3-C2-O2	-6.61	117.27	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	48	C	C6-N1-C2	-6.61	117.66	120.30
57	BB	703	U	O4'-C1'-N1	6.61	113.49	108.20
57	BB	805	G	C6-C5-N7	-6.61	126.43	130.40
57	BB	1063	G	C4-C5-N7	-6.61	108.15	110.80
57	BB	1850	G	N1-C2-N3	-6.61	119.93	123.90
57	BB	1938	A	C6-C5-N7	-6.61	127.67	132.30
57	BB	8	C	C2-N3-C4	6.61	123.21	119.90
57	BB	1906	G	N1-C6-O6	6.61	123.87	119.90
57	BB	2887	A	P-O3'-C3'	-6.61	111.77	119.70
21	AA	71	A	N3-C4-C5	-6.61	122.17	126.80
21	AA	695	A	C5-N7-C8	6.61	107.21	103.90
21	AA	1215	G	C2-N3-C4	6.61	115.20	111.90
21	AA	1271	A	C4-C5-C6	6.61	120.31	117.00
21	AA	1373	G	C4-C5-C6	6.61	122.77	118.80
23	AW	42	C	N3-C4-C5	-6.61	119.26	121.90
57	BB	1241	A	N9-C4-C5	6.61	108.44	105.80
57	BB	1674	G	C5-C6-N1	-6.61	108.19	111.50
57	BB	2629	U	C3'-C2'-C1'	-6.61	96.21	101.50
1	AJ	65	TYR	CD1-CG-CD2	6.61	125.17	117.90
21	AA	741	G	C5'-C4'-C3'	6.61	126.57	116.00
21	AA	812	G	C5-N7-C8	6.61	107.61	104.30
57	BB	1401	G	C2-N3-C4	6.61	115.20	111.90
57	BB	2289	G	C2-N3-C4	6.61	115.20	111.90
57	BB	2400	G	O4'-C1'-N9	6.61	113.49	108.20
57	BB	2762	C	C5-C4-N4	-6.61	115.57	120.20
21	AA	7	A	N9-C4-C5	-6.61	103.16	105.80
21	AA	914	A	C5-C6-N1	-6.61	114.40	117.70
26	AV	41	C	P-O3'-C3'	6.61	127.63	119.70
57	BB	209	C	C5-C6-N1	6.61	124.30	121.00
57	BB	551	G	C6-C5-N7	-6.61	126.44	130.40
57	BB	813	U	P-O3'-C3'	-6.61	111.77	119.70
57	BB	882	G	C2-N3-C4	6.61	115.20	111.90
57	BB	1544	A	C4-C5-N7	-6.61	107.40	110.70
57	BB	1745	A	C5-N7-C8	6.61	107.20	103.90
57	BB	2485	G	O4'-C1'-N9	6.61	113.49	108.20
20	AI	79	ARG	NE-CZ-NH2	-6.61	117.00	120.30
21	AA	116	A	N9-C4-C5	6.61	108.44	105.80
21	AA	372	C	C2-N3-C4	-6.61	116.60	119.90
21	AA	1491	G	N9-C1'-C2'	-6.61	104.73	112.00
35	BP	38	ARG	NE-CZ-NH1	-6.61	117.00	120.30
57	BB	539	G	C4-C5-N7	6.61	113.44	110.80
57	BB	667	U	N3-C4-C5	-6.61	110.64	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	927	A	N1-C6-N6	6.61	122.56	118.60
57	BB	1277	G	O4'-C1'-N9	6.61	113.48	108.20
57	BB	1296	G	N7-C8-N9	6.61	116.40	113.10
57	BB	1545	A	N7-C8-N9	6.61	117.10	113.80
57	BB	2158	A	C5-C6-N6	-6.61	118.42	123.70
57	BB	2495	G	N3-C2-N2	6.61	124.52	119.90
57	BB	2615	U	C3'-C2'-C1'	6.61	106.78	101.50
21	AA	455	G	O3'-P-O5'	-6.60	91.45	104.00
21	AA	1306	A	C2-N3-C4	-6.60	107.30	110.60
57	BB	714	U	C2-N3-C4	6.60	130.96	127.00
57	BB	2258	C	C6-N1-C2	-6.60	117.66	120.30
58	BA	96	G	C5-C6-O6	-6.60	124.64	128.60
21	AA	522	C	O4'-C1'-N1	6.60	113.48	108.20
21	AA	691	G	C6-C5-N7	-6.60	126.44	130.40
21	AA	1139	G	O4'-C1'-N9	6.60	113.48	108.20
21	AA	1312	G	C5-C6-O6	-6.60	124.64	128.60
22	AY	64	A	C3'-C2'-C1'	-6.60	96.22	101.50
33	BN	91	ALA	N-CA-CB	6.60	119.34	110.10
57	BB	376	G	C2-N3-C4	6.60	115.20	111.90
57	BB	438	G	C5-C6-O6	-6.60	124.64	128.60
57	BB	563	A	C4-C5-C6	6.60	120.30	117.00
57	BB	625	G	N1-C2-N3	-6.60	119.94	123.90
57	BB	1053	C	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	2068	U	N3-C4-O4	6.60	124.02	119.40
57	BB	2624	G	C6-C5-N7	-6.60	126.44	130.40
1	AJ	9	ARG	NE-CZ-NH1	6.60	123.60	120.30
21	AA	398	U	C2-N3-C4	6.60	130.96	127.00
21	AA	495	A	P-O3'-C3'	6.60	127.62	119.70
57	BB	463	G	N7-C8-N9	-6.60	109.80	113.10
57	BB	470	A	C4'-C3'-C2'	-6.60	96.00	102.60
57	BB	1482	G	N3-C4-C5	-6.60	125.30	128.60
57	BB	2070	A	C5-C6-N6	-6.60	118.42	123.70
57	BB	2294	G	C5-N7-C8	6.60	107.60	104.30
21	AA	16	A	N7-C8-N9	6.60	117.10	113.80
21	AA	267	C	N1-C2-N3	-6.60	114.58	119.20
21	AA	578	C	O4'-C1'-N1	6.60	113.48	108.20
57	BB	187	G	N1-C2-N3	-6.60	119.94	123.90
57	BB	397	U	O4'-C1'-N1	6.60	113.48	108.20
57	BB	604	G	C8-N9-C4	6.60	109.04	106.40
57	BB	849	A	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	852	U	N1-C2-N3	-6.60	110.94	114.90
57	BB	910	A	C6-N1-C2	6.60	122.56	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1910	G	C6-C5-N7	-6.60	126.44	130.40
57	BB	2142	A	C6-C5-N7	-6.60	127.68	132.30
57	BB	2278	A	N9-C4-C5	6.60	108.44	105.80
21	AA	478	A	C6-N1-C2	6.60	122.56	118.60
21	AA	512	U	N3-C4-O4	6.60	124.02	119.40
22	AY	30	G	C4-C5-N7	-6.60	108.16	110.80
57	BB	170	U	C5-C4-O4	-6.60	121.94	125.90
57	BB	343	C	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	903	C	N3-C4-N4	6.60	122.62	118.00
57	BB	979	A	C5-C6-N6	-6.60	118.42	123.70
57	BB	1430	G	O4'-C1'-N9	6.60	113.48	108.20
57	BB	1678	A	C6-N1-C2	-6.60	114.64	118.60
21	AA	21	G	C8-N9-C4	-6.59	103.76	106.40
23	AW	22	G	C3'-C2'-C1'	-6.59	96.22	101.50
57	BB	424	G	N1-C2-N3	-6.59	119.94	123.90
57	BB	1149	G	C5-C6-O6	-6.59	124.64	128.60
57	BB	1372	U	N3-C4-C5	-6.59	110.64	114.60
57	BB	1980	G	C4-C5-N7	-6.59	108.16	110.80
57	BB	2568	U	C5-C4-O4	-6.59	121.94	125.90
58	BA	20	G	P-O3'-C3'	-6.59	111.79	119.70
58	BA	41	G	C4-C5-C6	6.59	122.76	118.80
21	AA	977	A	O4'-C1'-N9	6.59	113.47	108.20
27	B5	51	ASP	CB-CG-OD2	6.59	124.23	118.30
57	BB	114	U	C2-N1-C1'	6.59	125.61	117.70
57	BB	1017	G	C8-N9-C4	6.59	109.04	106.40
57	BB	1552	A	N9-C4-C5	-6.59	103.16	105.80
57	BB	1690	A	C4-C5-N7	6.59	114.00	110.70
21	AA	108	G	C3'-C2'-C1'	-6.59	96.23	101.50
21	AA	631	C	N3-C4-N4	6.59	122.61	118.00
21	AA	807	A	C2-N3-C4	-6.59	107.30	110.60
45	BC	134	ILE	N-CA-C	-6.59	93.20	111.00
57	BB	1991	U	C5-C4-O4	-6.59	121.94	125.90
57	BB	2230	G	O4'-C1'-N9	6.59	113.47	108.20
57	BB	2488	G	N1-C2-N3	-6.59	119.94	123.90
57	BB	2749	A	P-O3'-C3'	6.59	127.61	119.70
58	BA	73	A	C6-C5-N7	-6.59	127.69	132.30
20	AI	90	ASP	CB-CG-OD2	-6.59	112.37	118.30
21	AA	1280	A	O4'-C1'-N9	6.59	113.47	108.20
21	AA	1501	C	C4-C5-C6	6.59	120.69	117.40
26	AV	63	G	C5-C6-N1	-6.59	108.20	111.50
33	BN	94	TYR	CB-CG-CD2	-6.59	117.05	121.00
57	BB	177	G	C5-N7-C8	6.59	107.59	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	519	U	O4'-C1'-N1	6.59	113.47	108.20
57	BB	847	U	C5'-C4'-O4'	6.59	117.01	109.10
57	BB	1651	G	C6-C5-N7	-6.59	126.45	130.40
57	BB	1721	G	C4-C5-N7	-6.59	108.16	110.80
57	BB	1955	U	N3-C4-C5	-6.59	110.65	114.60
57	BB	2392	A	C5-N7-C8	6.59	107.19	103.90
57	BB	2741	A	O4'-C1'-N9	6.59	113.47	108.20
21	AA	642	A	N7-C8-N9	6.59	117.09	113.80
21	AA	1204	A	N1-C6-N6	6.59	122.55	118.60
21	AA	1390	U	O4'-C1'-N1	6.59	113.47	108.20
29	BJ	52	ASP	N-CA-CB	6.59	122.46	110.60
57	BB	983	A	C5-N7-C8	6.59	107.19	103.90
3	AL	8	ARG	NE-CZ-NH1	6.59	123.59	120.30
4	AM	22	TYR	CG-CD2-CE2	-6.59	116.03	121.30
21	AA	385	C	C4-C5-C6	-6.59	114.11	117.40
21	AA	920	U	C2-N3-C4	6.59	130.95	127.00
26	AV	75	C	N1-C2-N3	-6.59	114.59	119.20
29	BJ	132	HIS	N-CA-CB	-6.59	98.75	110.60
57	BB	132	G	C5-C6-O6	-6.59	124.65	128.60
57	BB	497	A	C6-C5-N7	-6.59	127.69	132.30
57	BB	651	G	C4-C5-N7	-6.59	108.17	110.80
57	BB	672	C	C1'-O4'-C4'	-6.59	104.63	109.90
57	BB	675	A	C4-C5-C6	6.59	120.29	117.00
57	BB	1540	G	C4-C5-N7	-6.59	108.17	110.80
57	BB	2265	U	C5-C4-O4	-6.59	121.95	125.90
57	BB	2323	G	C5-N7-C8	6.59	107.59	104.30
57	BB	485	C	N3-C4-N4	6.58	122.61	118.00
57	BB	759	G	N3-C2-N2	6.58	124.51	119.90
57	BB	2318	G	C3'-C2'-C1'	6.58	106.77	101.50
57	BB	2839	G	N3-C4-C5	6.58	131.89	128.60
58	BA	33	G	N7-C8-N9	-6.58	109.81	113.10
21	AA	154	U	C5-C6-N1	6.58	125.99	122.70
21	AA	760	G	C5-N7-C8	6.58	107.59	104.30
57	BB	307	G	N3-C4-C5	-6.58	125.31	128.60
57	BB	1372	U	C2-N3-C4	6.58	130.95	127.00
21	AA	27	G	C6-C5-N7	-6.58	126.45	130.40
21	AA	701	U	N3-C2-O2	6.58	126.81	122.20
21	AA	992	U	P-O3'-C3'	6.58	127.60	119.70
22	AY	57	G	C4'-C3'-C2'	6.58	109.18	102.60
57	BB	350	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	1102	C	N3-C4-C5	-6.58	119.27	121.90
57	BB	2478	A	C4-C5-N7	-6.58	107.41	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2857	G	C6-N1-C2	6.58	129.05	125.10
58	BA	106	G	C3'-C2'-C1'	-6.58	96.23	101.50
21	AA	494	G	C8-N9-C4	-6.58	103.77	106.40
21	AA	1184	G	C5-C6-O6	-6.58	124.65	128.60
57	BB	889	C	O4'-C1'-N1	6.58	113.46	108.20
57	BB	1080	A	C2-N3-C4	6.58	113.89	110.60
57	BB	2444	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	2530	A	C5-C6-N6	-6.58	118.44	123.70
21	AA	787	A	C4-C5-C6	6.58	120.29	117.00
56	BH	96	THR	CA-CB-CG2	-6.58	103.19	112.40
57	BB	119	A	N1-C6-N6	6.58	122.55	118.60
57	BB	456	C	C5'-C4'-C3'	-6.58	105.48	116.00
57	BB	1188	U	C5-C4-O4	-6.58	121.95	125.90
57	BB	1276	A	C6-C5-N7	-6.58	127.70	132.30
57	BB	1695	G	C6-N1-C2	6.58	129.05	125.10
57	BB	1888	G	O4'-C1'-N9	6.58	113.46	108.20
57	BB	2084	C	C4-C5-C6	6.58	120.69	117.40
57	BB	2100	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	2801	G	O4'-C1'-N9	6.58	113.46	108.20
57	BB	459	U	C5-C6-N1	6.58	125.99	122.70
57	BB	2126	A	C4-C5-N7	-6.58	107.41	110.70
58	BA	43	C	C2-N3-C4	-6.58	116.61	119.90
21	AA	39	G	N3-C2-N2	6.58	124.50	119.90
21	AA	183	C	C6-N1-C1'	-6.58	112.91	120.80
21	AA	354	G	C6-C5-N7	-6.58	126.45	130.40
21	AA	523	A	C5-C6-N1	-6.58	114.41	117.70
21	AA	666	G	C5-C6-N1	6.58	114.79	111.50
21	AA	1078	U	P-O5'-C5'	-6.58	110.38	120.90
57	BB	481	G	N3-C2-N2	6.58	124.50	119.90
57	BB	684	G	P-O3'-C3'	-6.58	111.81	119.70
21	AA	458	U	C5-C4-O4	-6.57	121.96	125.90
23	AW	72	C	N3-C4-N4	6.57	122.60	118.00
26	AV	61	C	C2-N1-C1'	-6.57	111.57	118.80
55	BG	82	PHE	C-N-CA	6.57	138.13	121.70
57	BB	78	U	N1-C2-O2	-6.57	118.20	122.80
57	BB	455	C	C2-N3-C4	6.57	123.19	119.90
57	BB	856	G	C6-C5-N7	-6.57	126.46	130.40
57	BB	868	U	N3-C4-C5	-6.57	110.66	114.60
57	BB	1897	G	C2-N3-C4	6.57	115.19	111.90
57	BB	2178	C	N3-C4-C5	-6.57	119.27	121.90
57	BB	2488	G	P-O5'-C5'	6.57	131.42	120.90
58	BA	27	C	O4'-C4'-C3'	-6.57	97.43	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	153	C	C1'-O4'-C4'	-6.57	104.64	109.90
23	AW	67	C	C3'-C2'-C1'	-6.57	96.24	101.50
21	AA	289	G	C5-C6-N1	-6.57	108.22	111.50
21	AA	298	A	C8-N9-C4	6.57	108.43	105.80
21	AA	641	U	C2-N3-C4	-6.57	123.06	127.00
57	BB	72	U	O4'-C1'-N1	6.57	113.46	108.20
57	BB	136	G	P-O3'-C3'	-6.57	111.82	119.70
57	BB	362	A	N9-C4-C5	6.57	108.43	105.80
57	BB	396	G	N3-C2-N2	6.57	124.50	119.90
57	BB	476	G	C2-N3-C4	-6.57	108.61	111.90
57	BB	747	U	P-O5'-C5'	6.57	131.41	120.90
57	BB	1289	C	C5-C4-N4	-6.57	115.60	120.20
57	BB	1370	C	C5-C4-N4	-6.57	115.60	120.20
57	BB	1508	A	C1'-O4'-C4'	-6.57	104.64	109.90
57	BB	2388	A	O4'-C1'-N9	6.57	113.46	108.20
57	BB	2496	C	N3-C4-N4	6.57	122.60	118.00
21	AA	147	G	O4'-C1'-N9	6.57	113.45	108.20
21	AA	645	G	C4-C5-N7	-6.57	108.17	110.80
22	AY	2	C	C4-C5-C6	6.57	120.69	117.40
34	BO	7	ARG	NE-CZ-NH2	-6.57	117.02	120.30
57	BB	1068	G	C5'-C4'-O4'	6.57	116.98	109.10
57	BB	1689	A	N1-C6-N6	6.57	122.54	118.60
2	AK	126	ARG	NH1-CZ-NH2	6.57	126.62	119.40
21	AA	48	C	C5-C6-N1	-6.57	117.72	121.00
21	AA	183	C	C2-N3-C4	6.57	123.18	119.90
21	AA	909	A	C8-N9-C4	-6.57	103.17	105.80
21	AA	1422	G	C5-C6-O6	-6.57	124.66	128.60
21	AA	1518	A	C5-N7-C8	6.57	107.18	103.90
21	AA	1521	C	N3-C4-N4	6.57	122.60	118.00
22	AY	10	G	C4-C5-C6	6.57	122.74	118.80
26	AV	75	C	C5-C6-N1	6.57	124.28	121.00
57	BB	1009	A	C4-C5-C6	6.57	120.28	117.00
57	BB	1744	A	N1-C2-N3	6.57	132.58	129.30
57	BB	2006	C	N1-C2-N3	-6.57	114.60	119.20
57	BB	2101	A	C5-N7-C8	6.57	107.18	103.90
57	BB	2135	A	O4'-C1'-N9	6.57	113.45	108.20
57	BB	2310	C	C5-C6-N1	-6.57	117.72	121.00
57	BB	2805	C	C4-C5-C6	6.57	120.68	117.40
21	AA	47	C	N3-C4-N4	6.57	122.60	118.00
21	AA	86	G	C5'-C4'-O4'	6.57	116.98	109.10
21	AA	186	C	C2-N3-C4	6.57	123.18	119.90
21	AA	210	C	N1-C2-N3	6.57	123.80	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1022	A	C8-N9-C4	6.57	108.43	105.80
21	AA	1075	U	C2-N1-C1'	-6.57	109.82	117.70
26	AV	45	G	C1'-O4'-C4'	6.57	115.15	109.90
57	BB	1812	U	C5-C4-O4	-6.57	121.96	125.90
57	BB	1925	C	C4-C5-C6	6.57	120.68	117.40
57	BB	2650	U	C5-C4-O4	-6.57	121.96	125.90
21	AA	841	C	C4'-C3'-C2'	-6.56	96.04	102.60
21	AA	1446	A	C6-C5-N7	-6.56	127.70	132.30
57	BB	1682	G	C4-C5-N7	-6.56	108.17	110.80
57	BB	1900	A	N3-C4-N9	6.56	132.65	127.40
57	BB	2154	A	C5-C6-N6	-6.56	118.45	123.70
21	AA	115	G	C5-C6-O6	-6.56	124.66	128.60
21	AA	121	U	C2-N1-C1'	6.56	125.57	117.70
21	AA	571	U	N1-C2-N3	-6.56	110.96	114.90
21	AA	771	G	C5-C6-N1	-6.56	108.22	111.50
21	AA	833	G	C4-N9-C1'	-6.56	117.97	126.50
21	AA	1379	G	C4-C5-N7	-6.56	108.17	110.80
22	AY	66	A	N1-C6-N6	-6.56	114.66	118.60
23	AW	63	G	C8-N9-C4	-6.56	103.78	106.40
57	BB	7	G	N1-C2-N2	6.56	122.11	116.20
57	BB	73	A	C5-C6-N6	-6.56	118.45	123.70
57	BB	147	C	N3-C4-C5	-6.56	119.28	121.90
57	BB	1204	A	N9-C4-C5	-6.56	103.17	105.80
57	BB	1419	A	C5-C6-N6	-6.56	118.45	123.70
57	BB	1531	C	C6-N1-C2	-6.56	117.67	120.30
57	BB	1572	A	N7-C8-N9	6.56	117.08	113.80
57	BB	1700	A	N9-C4-C5	-6.56	103.17	105.80
57	BB	1717	A	C5-C6-N1	-6.56	114.42	117.70
57	BB	2193	G	C5-C6-N1	-6.56	108.22	111.50
57	BB	2221	G	C6-C5-N7	-6.56	126.46	130.40
57	BB	2524	G	C6-N1-C2	6.56	129.04	125.10
21	AA	703	G	N1-C2-N2	6.56	122.11	116.20
21	AA	1161	C	C5-C6-N1	6.56	124.28	121.00
21	AA	1394	A	C5-N7-C8	6.56	107.18	103.90
57	BB	265	A	C2-N3-C4	-6.56	107.32	110.60
57	BB	1083	U	C2-N3-C4	-6.56	123.06	127.00
57	BB	1597	A	N1-C2-N3	6.56	132.58	129.30
57	BB	2670	A	C4-C5-C6	6.56	120.28	117.00
57	BB	2814	A	N1-C6-N6	6.56	122.54	118.60
57	BB	2822	G	N1-C2-N3	-6.56	119.96	123.90
21	AA	511	C	P-O5'-C5'	-6.56	110.41	120.90
21	AA	786	G	O4'-C1'-N9	6.56	113.45	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1086	U	N1-C2-N3	-6.56	110.96	114.90
21	AA	1165	U	C1'-O4'-C4'	6.56	115.15	109.90
21	AA	1179	A	C4-C5-C6	6.56	120.28	117.00
57	BB	495	G	C6-C5-N7	-6.56	126.46	130.40
57	BB	520	G	C2-N3-C4	6.56	115.18	111.90
57	BB	735	A	C3'-C2'-C1'	6.56	106.75	101.50
57	BB	943	A	N1-C2-N3	6.56	132.58	129.30
57	BB	2124	G	N3-C4-C5	6.56	131.88	128.60
1	AJ	9	ARG	NE-CZ-NH2	-6.56	117.02	120.30
21	AA	427	U	O4'-C1'-N1	6.56	113.45	108.20
21	AA	604	G	C4'-C3'-C2'	-6.56	96.04	102.60
21	AA	1259	C	C2-N3-C4	6.56	123.18	119.90
21	AA	1450	U	N3-C4-O4	6.56	123.99	119.40
22	AY	70	C	N1-C2-O2	6.56	122.83	118.90
24	AX	13	A	C4-C5-N7	-6.56	107.42	110.70
57	BB	618	G	N1-C6-O6	6.56	123.83	119.90
57	BB	789	A	C6-C5-N7	-6.56	127.71	132.30
57	BB	964	C	O4'-C1'-N1	6.56	113.45	108.20
57	BB	1052	C	C2-N3-C4	6.56	123.18	119.90
57	BB	1988	G	N1-C6-O6	6.56	123.83	119.90
57	BB	2383	G	C5-N7-C8	6.56	107.58	104.30
57	BB	2708	G	C5-N7-C8	6.56	107.58	104.30
21	AA	1279	G	N3-C2-N2	6.56	124.49	119.90
54	BF	90	LEU	N-CA-CB	6.56	123.51	110.40
57	BB	629	G	N3-C4-C5	6.56	131.88	128.60
57	BB	655	A	C5-N7-C8	-6.56	100.62	103.90
57	BB	778	G	N7-C8-N9	-6.56	109.82	113.10
57	BB	1581	G	C5-C6-O6	-6.56	124.67	128.60
21	AA	739	C	C1'-O4'-C4'	-6.55	104.66	109.90
21	AA	1220	G	C5'-C4'-C3'	-6.55	105.51	116.00
21	AA	1449	C	C6-N1-C2	-6.55	117.68	120.30
34	BO	102	ARG	CB-CA-C	-6.55	97.29	110.40
57	BB	2105	U	C4'-C3'-C2'	-6.55	96.05	102.60
57	BB	2570	G	N3-C4-C5	6.55	131.88	128.60
21	AA	188	C	C2-N3-C4	6.55	123.18	119.90
21	AA	502	A	O4'-C1'-N9	6.55	113.44	108.20
21	AA	650	G	C5-C6-O6	-6.55	124.67	128.60
21	AA	802	A	C5-C6-N6	-6.55	118.46	123.70
21	AA	1311	A	C5-C6-N1	-6.55	114.42	117.70
57	BB	99	U	C6-N1-C2	-6.55	117.07	121.00
57	BB	1932	A	C2-N3-C4	-6.55	107.32	110.60
57	BB	2330	G	N3-C4-C5	-6.55	125.32	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1166	G	N3-C4-C5	-6.55	125.32	128.60
57	BB	248	G	C4-C5-N7	6.55	113.42	110.80
57	BB	354	A	C4-C5-C6	6.55	120.28	117.00
57	BB	381	G	N1-C2-N2	-6.55	110.30	116.20
57	BB	1114	C	C5-C4-N4	-6.55	115.61	120.20
57	BB	1310	G	O4'-C1'-N9	6.55	113.44	108.20
57	BB	2356	U	N1-C2-N3	6.55	118.83	114.90
57	BB	2575	C	N3-C4-C5	-6.55	119.28	121.90
21	AA	84	U	C5-C6-N1	6.55	125.97	122.70
21	AA	91	U	N3-C2-O2	6.55	126.78	122.20
21	AA	344	A	O4'-C1'-N9	-6.55	102.96	108.20
21	AA	1225	A	N3-C4-C5	-6.55	122.22	126.80
21	AA	1467	C	N3-C4-N4	6.55	122.58	118.00
22	AY	55	U	C5-C4-O4	-6.55	121.97	125.90
57	BB	35	G	N1-C2-N3	-6.55	119.97	123.90
57	BB	205	G	C5-C6-N1	-6.55	108.22	111.50
57	BB	858	G	C5-C6-N1	-6.55	108.22	111.50
57	BB	1171	G	C8-N9-C4	-6.55	103.78	106.40
57	BB	1334	G	N3-C4-C5	6.55	131.88	128.60
21	AA	27	G	N7-C8-N9	6.55	116.37	113.10
21	AA	840	C	C3'-C2'-C1'	6.55	106.74	101.50
57	BB	383	C	C4-C5-C6	6.55	120.67	117.40
57	BB	1262	A	C6-N1-C2	6.55	122.53	118.60
57	BB	1287	A	N1-C2-N3	6.55	132.57	129.30
57	BB	1909	C	C5-C6-N1	-6.55	117.73	121.00
3	AL	13	ARG	NE-CZ-NH1	-6.55	117.03	120.30
21	AA	1067	A	N9-C4-C5	-6.55	103.18	105.80
21	AA	1505	G	N1-C6-O6	6.55	123.83	119.90
57	BB	226	A	C5-C6-N6	-6.55	118.46	123.70
57	BB	1711	A	N7-C8-N9	-6.55	110.53	113.80
57	BB	2162	G	C6-C5-N7	-6.55	126.47	130.40
57	BB	2272	U	C5-C4-O4	-6.55	121.97	125.90
21	AA	402	G	N7-C8-N9	-6.54	109.83	113.10
21	AA	540	G	N9-C1'-C2'	-6.54	104.80	112.00
21	AA	832	G	C4'-C3'-C2'	-6.54	96.06	102.60
57	BB	274	C	N3-C4-N4	6.54	122.58	118.00
57	BB	679	C	C5-C4-N4	-6.54	115.62	120.20
57	BB	1232	G	C8-N9-C4	-6.54	103.78	106.40
57	BB	1704	C	O4'-C1'-N1	6.54	113.44	108.20
21	AA	936	C	N1-C2-N3	6.54	123.78	119.20
57	BB	362	A	N9-C1'-C2'	-6.54	104.80	112.00
57	BB	536	G	N3-C4-C5	6.54	131.87	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1673	G	C6-C5-N7	-6.54	126.47	130.40
57	BB	1759	A	C8-N9-C4	-6.54	103.18	105.80
57	BB	2775	G	C5-C6-O6	-6.54	124.67	128.60
57	BB	2820	A	N3-C4-C5	6.54	131.38	126.80
21	AA	40	C	C5'-C4'-C3'	-6.54	105.53	116.00
21	AA	112	G	C6-C5-N7	-6.54	126.47	130.40
21	AA	347	G	N9-C1'-C2'	-6.54	104.80	112.00
21	AA	538	G	N9-C4-C5	6.54	108.02	105.40
21	AA	1314	C	O4'-C1'-N1	6.54	113.43	108.20
57	BB	95	A	N1-C6-N6	6.54	122.52	118.60
57	BB	168	G	N3-C2-N2	6.54	124.48	119.90
57	BB	189	G	C4-C5-N7	-6.54	108.18	110.80
57	BB	316	C	O4'-C4'-C3'	-6.54	97.46	104.00
57	BB	458	G	C3'-C2'-C1'	-6.54	96.27	101.50
57	BB	742	A	C1'-O4'-C4'	-6.54	104.67	109.90
57	BB	1107	G	C8-N9-C1'	6.54	135.50	127.00
57	BB	1278	C	C5-C6-N1	6.54	124.27	121.00
57	BB	1415	U	C1'-O4'-C4'	6.54	115.13	109.90
57	BB	1576	U	C5-C4-O4	-6.54	121.97	125.90
57	BB	2135	A	N9-C4-C5	6.54	108.42	105.80
57	BB	2161	C	C5-C4-N4	-6.54	115.62	120.20
57	BB	2364	C	N3-C4-N4	6.54	122.58	118.00
57	BB	2499	C	C2-N3-C4	6.54	123.17	119.90
57	BB	2613	U	N1-C2-N3	-6.54	110.98	114.90
21	AA	495	A	C4-C5-C6	6.54	120.27	117.00
21	AA	901	A	C4'-C3'-C2'	6.54	109.14	102.60
57	BB	286	U	N1-C2-O2	-6.54	118.22	122.80
57	BB	531	C	N1-C2-N3	-6.54	114.62	119.20
57	BB	964	C	C5-C6-N1	6.54	124.27	121.00
57	BB	1532	A	C5-C6-N1	-6.54	114.43	117.70
57	BB	1619	G	O4'-C1'-N9	6.54	113.43	108.20
57	BB	2115	G	C6-N1-C2	6.54	129.02	125.10
57	BB	2143	C	N3-C4-C5	-6.54	119.28	121.90
57	BB	2303	G	N1-C6-O6	6.54	123.82	119.90
4	AM	28	ARG	NE-CZ-NH2	-6.54	117.03	120.30
15	AD	193	ASP	CB-CG-OD1	6.54	124.19	118.30
21	AA	714	G	C5-C6-N1	6.54	114.77	111.50
21	AA	1001	C	C4-C5-C6	-6.54	114.13	117.40
21	AA	1405	G	C4-C5-N7	6.54	113.42	110.80
57	BB	347	A	N3-C4-N9	6.54	132.63	127.40
57	BB	495	G	C4-C5-C6	6.54	122.72	118.80
57	BB	1132	U	P-O3'-C3'	6.54	127.55	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1490	A	C5-C6-N6	-6.54	118.47	123.70
57	BB	2315	G	N3-C4-N9	-6.54	122.08	126.00
57	BB	990	A	C5-N7-C8	6.54	107.17	103.90
26	AV	34	C	C2-N3-C4	6.54	123.17	119.90
26	AV	51	C	C5-C4-N4	-6.54	115.63	120.20
52	BD	141	ARG	NE-CZ-NH2	6.54	123.57	120.30
57	BB	563	A	C6-C5-N7	-6.54	127.72	132.30
57	BB	594	U	C5-C6-N1	-6.54	119.43	122.70
57	BB	926	G	C8-N9-C1'	6.54	135.50	127.00
57	BB	2804	U	N3-C4-C5	6.54	118.52	114.60
57	BB	2894	G	C8-N9-C4	-6.54	103.78	106.40
21	AA	221	C	P-O3'-C3'	6.53	127.54	119.70
21	AA	596	A	C4-C5-C6	6.53	120.27	117.00
21	AA	782	A	C5-C6-N1	-6.53	114.43	117.70
21	AA	916	U	C5'-C4'-O4'	6.53	116.94	109.10
21	AA	1365	G	C8-N9-C4	-6.53	103.79	106.40
23	AW	26	A	C6-C5-N7	-6.53	127.73	132.30
34	BO	49	VAL	CG1-CB-CG2	-6.53	100.45	110.90
57	BB	213	A	N9-C4-C5	6.53	108.41	105.80
57	BB	365	U	C2-N3-C4	6.53	130.92	127.00
57	BB	979	A	C5-C6-N1	-6.53	114.43	117.70
57	BB	1003	G	O4'-C1'-N9	6.53	113.43	108.20
57	BB	1237	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1745	A	O4'-C1'-N9	6.53	113.43	108.20
57	BB	2035	G	N3-C2-N2	6.53	124.47	119.90
57	BB	2754	U	N1-C2-O2	-6.53	118.23	122.80
21	AA	44	A	O4'-C1'-N9	6.53	113.43	108.20
21	AA	405	U	P-O3'-C3'	6.53	127.54	119.70
57	BB	1784	A	C5-C6-N6	-6.53	118.47	123.70
57	BB	1942	C	N3-C4-N4	6.53	122.57	118.00
57	BB	2287	A	C5-C6-N1	-6.53	114.43	117.70
57	BB	2658	C	O4'-C1'-N1	6.53	113.43	108.20
16	AE	88	HIS	N-CA-CB	6.53	122.36	110.60
21	AA	9	G	N3-C4-N9	-6.53	122.08	126.00
21	AA	707	U	C3'-C2'-C1'	6.53	106.72	101.50
21	AA	1027	C	C6-N1-C2	-6.53	117.69	120.30
21	AA	1302	C	N1-C2-O2	6.53	122.82	118.90
57	BB	134	G	N3-C4-C5	-6.53	125.33	128.60
57	BB	213	A	C4-C5-C6	6.53	120.27	117.00
57	BB	1189	A	N1-C6-N6	-6.53	114.68	118.60
57	BB	1382	G	N3-C4-C5	-6.53	125.33	128.60
57	BB	1808	A	C6-C5-N7	-6.53	127.73	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2165	C	C2-N1-C1'	6.53	125.98	118.80
57	BB	2179	C	C5-C6-N1	6.53	124.27	121.00
57	BB	2401	U	O4'-C1'-N1	6.53	113.42	108.20
57	BB	2655	G	C8-N9-C4	-6.53	103.79	106.40
58	BA	28	C	C5-C4-N4	-6.53	115.63	120.20
21	AA	81	A	C5-C6-N6	-6.53	118.48	123.70
21	AA	246	A	C8-N9-C4	-6.53	103.19	105.80
57	BB	574	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1972	G	C4-C5-C6	6.53	122.72	118.80
21	AA	94	G	N1-C2-N3	-6.53	119.98	123.90
21	AA	500	G	C4-C5-C6	6.53	122.72	118.80
21	AA	787	A	C5-C6-N1	-6.53	114.44	117.70
21	AA	860	A	C6-C5-N7	-6.53	127.73	132.30
23	AW	28	G	C6-N1-C2	6.53	129.02	125.10
57	BB	514	A	N1-C6-N6	6.53	122.52	118.60
57	BB	1027	A	C5-C6-N1	-6.53	114.44	117.70
57	BB	1393	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1559	U	N1-C2-N3	-6.53	110.98	114.90
57	BB	1729	U	C2-N3-C4	6.53	130.92	127.00
57	BB	1768	C	N3-C4-C5	-6.53	119.29	121.90
12	AU	16	ARG	NE-CZ-NH2	-6.53	117.04	120.30
21	AA	462	G	C2-N3-C4	6.53	115.16	111.90
21	AA	469	C	O4'-C1'-N1	6.53	113.42	108.20
21	AA	1435	G	C6-C5-N7	-6.53	126.48	130.40
57	BB	74	A	N3-C4-C5	-6.53	122.23	126.80
57	BB	75	G	C5-N7-C8	-6.53	101.04	104.30
57	BB	77	G	N9-C4-C5	6.53	108.01	105.40
57	BB	281	C	N3-C4-C5	-6.53	119.29	121.90
57	BB	2110	G	O4'-C1'-N9	6.53	113.42	108.20
57	BB	2315	G	O4'-C1'-N9	6.53	113.42	108.20
57	BB	2413	G	N9-C4-C5	-6.53	102.79	105.40
57	BB	346	A	C3'-C2'-C1'	-6.52	96.28	101.50
57	BB	749	A	N1-C2-N3	6.52	132.56	129.30
57	BB	1781	U	C5-C4-O4	-6.52	121.98	125.90
21	AA	122	G	C6-N1-C2	6.52	129.01	125.10
21	AA	160	A	OP1-P-OP2	-6.52	109.81	119.60
21	AA	260	G	N7-C8-N9	6.52	116.36	113.10
21	AA	447	G	N3-C4-N9	6.52	129.91	126.00
21	AA	1094	G	O4'-C1'-N9	6.52	113.42	108.20
46	BZ	15	ARG	NE-CZ-NH1	6.52	123.56	120.30
57	BB	526	A	N9-C4-C5	6.52	108.41	105.80
57	BB	940	G	C8-N9-C4	6.52	109.01	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2048	G	N9-C4-C5	6.52	108.01	105.40
21	AA	120	A	C5-C6-N6	-6.52	118.48	123.70
21	AA	351	G	C4-C5-C6	6.52	122.71	118.80
21	AA	415	A	C5-C6-N1	-6.52	114.44	117.70
21	AA	776	G	P-O3'-C3'	6.52	127.53	119.70
21	AA	1117	A	C5-C6-N6	-6.52	118.48	123.70
57	BB	2793	C	N3-C4-C5	-6.52	119.29	121.90
21	AA	328	C	C2'-C3'-O3'	6.52	124.13	113.70
57	BB	445	C	N1-C2-O2	-6.52	114.99	118.90
57	BB	717	C	C5'-C4'-O4'	6.52	116.92	109.10
57	BB	803	U	C5-C6-N1	6.52	125.96	122.70
57	BB	1551	A	C5-N7-C8	6.52	107.16	103.90
57	BB	1557	C	C5-C4-N4	-6.52	115.64	120.20
57	BB	1793	C	O4'-C1'-N1	6.52	113.42	108.20
57	BB	1906	G	C4'-C3'-C2'	-6.52	96.08	102.60
57	BB	2780	G	N1-C2-N3	-6.52	119.99	123.90
57	BB	2803	G	C4-N9-C1'	-6.52	118.03	126.50
58	BA	11	C	C6-N1-C2	-6.52	117.69	120.30
21	AA	177	G	N7-C8-N9	6.52	116.36	113.10
21	AA	335	C	O4'-C1'-N1	6.52	113.41	108.20
21	AA	649	A	O4'-C1'-N9	6.52	113.41	108.20
57	BB	727	A	N9-C4-C5	-6.52	103.19	105.80
57	BB	1244	A	C4'-C3'-C2'	-6.52	96.08	102.60
57	BB	2197	U	P-O3'-C3'	6.52	127.52	119.70
57	BB	2266	A	C5'-C4'-O4'	6.52	116.92	109.10
57	BB	2365	G	N1-C6-O6	6.52	123.81	119.90
57	BB	2371	G	C5-C6-O6	-6.52	124.69	128.60
57	BB	2435	A	N9-C4-C5	6.52	108.41	105.80
21	AA	113	G	N3-C2-N2	6.52	124.46	119.90
21	AA	1169	A	O4'-C1'-N9	6.52	113.41	108.20
57	BB	1090	A	N9-C1'-C2'	-6.52	104.83	112.00
57	BB	2865	U	C2-N3-C4	6.52	130.91	127.00
21	AA	97	G	C6-N1-C2	6.51	129.01	125.10
21	AA	376	G	O4'-C1'-N9	6.51	113.41	108.20
50	B3	63	TYR	CB-CG-CD2	6.51	124.91	121.00
55	BG	93	TYR	CB-CG-CD2	-6.51	117.09	121.00
57	BB	199	A	C5-C6-N1	-6.51	114.44	117.70
57	BB	755	U	N3-C4-O4	6.51	123.96	119.40
57	BB	1055	G	N1-C6-O6	6.51	123.81	119.90
57	BB	1274	A	C4-C5-C6	6.51	120.26	117.00
57	BB	1553	A	N9-C4-C5	-6.51	103.19	105.80
57	BB	1885	A	C5-C6-N1	-6.51	114.44	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2136	G	C6-C5-N7	-6.51	126.49	130.40
57	BB	2456	C	C4-C5-C6	6.51	120.66	117.40
57	BB	2693	G	N1-C6-O6	6.51	123.81	119.90
57	BB	2751	G	C5'-C4'-C3'	-6.51	105.58	116.00
21	AA	880	C	C6-N1-C2	6.51	122.91	120.30
57	BB	26	G	N3-C2-N2	6.51	124.46	119.90
57	BB	213	A	C5-C6-N6	-6.51	118.49	123.70
57	BB	418	C	C4'-C3'-C2'	-6.51	96.09	102.60
57	BB	2174	C	N3-C2-O2	6.51	126.46	121.90
57	BB	2176	A	C5-C6-N6	-6.51	118.49	123.70
14	AC	53	ARG	NE-CZ-NH2	-6.51	117.04	120.30
21	AA	1055	A	C4-C5-N7	-6.51	107.44	110.70
21	AA	1465	A	C5-C6-N6	-6.51	118.49	123.70
57	BB	160	A	C5-C6-N1	-6.51	114.44	117.70
57	BB	374	A	C5-N7-C8	-6.51	100.64	103.90
57	BB	394	C	C5-C6-N1	6.51	124.25	121.00
57	BB	436	C	N1-C2-O2	6.51	122.81	118.90
57	BB	1257	C	C6-N1-C2	-6.51	117.70	120.30
57	BB	2273	A	N7-C8-N9	6.51	117.06	113.80
58	BA	36	C	N3-C2-O2	-6.51	117.34	121.90
21	AA	367	U	C5-C6-N1	6.51	125.95	122.70
21	AA	578	C	N3-C4-C5	-6.51	119.30	121.90
21	AA	766	A	N3-C4-N9	6.51	132.61	127.40
21	AA	890	G	O4'-C1'-C2'	-6.51	99.29	105.80
21	AA	1131	G	OP1-P-OP2	-6.51	109.83	119.60
23	AW	30	G	C4-C5-C6	6.51	122.71	118.80
57	BB	641	U	N1-C2-O2	-6.51	118.24	122.80
57	BB	899	A	C4-C5-C6	6.51	120.25	117.00
57	BB	2066	C	C6-N1-C2	6.51	122.90	120.30
21	AA	134	G	O4'-C1'-N9	6.51	113.41	108.20
21	AA	1450	U	C6-N1-C2	-6.51	117.09	121.00
57	BB	16	C	N3-C4-N4	6.51	122.56	118.00
57	BB	397	U	P-O5'-C5'	6.51	131.31	120.90
57	BB	1171	G	C2-N3-C4	6.51	115.15	111.90
57	BB	1713	A	C4-C5-C6	6.51	120.25	117.00
57	BB	1859	U	C5-C6-N1	-6.51	119.45	122.70
58	BA	30	C	C4-C5-C6	6.51	120.65	117.40
58	BA	104	A	O4'-C1'-N9	6.51	113.41	108.20
21	AA	502	A	C2-N3-C4	-6.51	107.35	110.60
21	AA	1277	C	C1'-O4'-C4'	-6.51	104.69	109.90
21	AA	1287	A	C6-N1-C2	6.51	122.50	118.60
21	AA	1363	A	C5-N7-C8	6.51	107.15	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1132	U	C4-C5-C6	6.51	123.60	119.70
57	BB	1622	G	C5-N7-C8	6.51	107.55	104.30
57	BB	1954	G	C5-C6-N1	-6.51	108.25	111.50
57	BB	2656	U	C6-N1-C2	-6.51	117.10	121.00
57	BB	2675	A	P-O3'-C3'	-6.51	111.89	119.70
57	BB	2737	G	C5'-C4'-C3'	-6.51	105.59	116.00
57	BB	2902	C	C6-N1-C2	6.51	122.90	120.30
6	AO	4	THR	CA-CB-CG2	6.50	121.50	112.40
21	AA	71	A	C4-C5-N7	-6.50	107.45	110.70
21	AA	302	G	C5-N7-C8	6.50	107.55	104.30
21	AA	890	G	C4'-C3'-C2'	-6.50	96.10	102.60
21	AA	1202	U	C5-C6-N1	6.50	125.95	122.70
57	BB	44	A	C5-C6-N1	-6.50	114.45	117.70
57	BB	629	G	C8-N9-C4	-6.50	103.80	106.40
57	BB	855	G	O4'-C1'-N9	6.50	113.40	108.20
57	BB	923	G	O5'-P-OP1	6.50	118.50	110.70
57	BB	1108	U	O4'-C1'-N1	6.50	113.40	108.20
57	BB	1544	A	O4'-C1'-N9	6.50	113.40	108.20
57	BB	1743	G	N3-C4-C5	-6.50	125.35	128.60
57	BB	1910	G	C5-C6-O6	-6.50	124.70	128.60
21	AA	431	A	O4'-C1'-N9	6.50	113.40	108.20
21	AA	1066	C	N3-C4-N4	6.50	122.55	118.00
21	AA	1079	G	N3-C4-N9	6.50	129.90	126.00
57	BB	195	A	C8-N9-C4	-6.50	103.20	105.80
57	BB	1967	C	C2-N3-C4	-6.50	116.65	119.90
57	BB	1972	G	C8-N9-C4	-6.50	103.80	106.40
57	BB	2506	U	C5-C6-N1	6.50	125.95	122.70
4	AM	2	ARG	NE-CZ-NH1	-6.50	117.05	120.30
57	BB	333	G	N1-C6-O6	6.50	123.80	119.90
57	BB	616	A	C5-C6-N6	-6.50	118.50	123.70
57	BB	685	A	N3-C4-C5	-6.50	122.25	126.80
57	BB	883	G	O4'-C1'-N9	6.50	113.40	108.20
57	BB	1330	C	P-O5'-C5'	-6.50	110.50	120.90
57	BB	1724	G	N3-C4-C5	-6.50	125.35	128.60
57	BB	1744	A	C6-C5-N7	-6.50	127.75	132.30
57	BB	2070	A	C5-C6-N1	-6.50	114.45	117.70
57	BB	2485	G	C5-N7-C8	-6.50	101.05	104.30
57	BB	2690	U	C6-N1-C1'	-6.50	112.10	121.20
21	AA	1187	G	C4-C5-N7	-6.50	108.20	110.80
21	AA	1279	G	C4-C5-N7	-6.50	108.20	110.80
22	AY	24	G	N9-C4-C5	6.50	108.00	105.40
57	BB	170	U	N1-C1'-C2'	-6.50	104.85	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	262	A	C5'-C4'-C3'	-6.50	105.60	116.00
57	BB	1110	G	N1-C2-N2	6.50	122.05	116.20
57	BB	1777	U	N1-C2-O2	-6.50	118.25	122.80
57	BB	2826	A	C4'-C3'-C2'	-6.50	96.10	102.60
21	AA	565	U	O4'-C1'-N1	6.50	113.40	108.20
21	AA	568	G	P-O5'-C5'	-6.50	110.50	120.90
21	AA	649	A	C5-C6-N6	-6.50	118.50	123.70
21	AA	777	A	C5-C6-N6	-6.50	118.50	123.70
57	BB	724	U	C6-N1-C2	6.50	124.90	121.00
57	BB	1068	G	C1'-O4'-C4'	-6.50	104.70	109.90
57	BB	1307	A	C6-C5-N7	-6.50	127.75	132.30
21	AA	653	U	N1-C2-N3	6.50	118.80	114.90
57	BB	846	U	O4'-C1'-C2'	-6.50	99.31	105.80
21	AA	92	U	N3-C4-O4	6.49	123.94	119.40
21	AA	709	U	C5-C4-O4	-6.49	122.00	125.90
21	AA	1471	U	P-O3'-C3'	-6.49	111.91	119.70
38	BS	13	SER	N-CA-CB	6.49	120.24	110.50
57	BB	477	A	C6-C5-N7	-6.49	127.75	132.30
57	BB	1142	A	N1-C6-N6	6.49	122.50	118.60
57	BB	1799	G	C6-C5-N7	-6.49	126.50	130.40
57	BB	2722	G	C2-N3-C4	6.49	115.15	111.90
57	BB	2890	G	P-O5'-C5'	6.49	131.29	120.90
57	BB	2892	G	N1-C6-O6	6.49	123.80	119.90
21	AA	579	A	C4-C5-C6	6.49	120.25	117.00
23	AW	30	G	C5-C6-N1	-6.49	108.25	111.50
26	AV	36	U	O4'-C1'-N1	6.49	113.39	108.20
57	BB	64	A	C6-C5-N7	-6.49	127.76	132.30
57	BB	634	C	N3-C4-N4	6.49	122.54	118.00
57	BB	784	G	N1-C2-N3	-6.49	120.00	123.90
57	BB	1954	G	N1-C2-N2	6.49	122.04	116.20
57	BB	2023	C	C6-N1-C2	6.49	122.90	120.30
57	BB	2189	U	C5-C4-O4	-6.49	122.00	125.90
57	BB	2231	U	C4'-C3'-C2'	-6.49	96.11	102.60
58	BA	39	A	C5-C6-N6	-6.49	118.51	123.70
5	AN	80	ARG	NE-CZ-NH1	6.49	123.55	120.30
21	AA	556	C	P-O3'-C3'	-6.49	111.91	119.70
21	AA	882	C	O4'-C1'-N1	6.49	113.39	108.20
21	AA	1315	U	C6-N1-C2	-6.49	117.11	121.00
21	AA	1442	G	C5-C6-O6	-6.49	124.71	128.60
21	AA	1498	U	N3-C4-C5	-6.49	110.71	114.60
22	AY	55	U	C2-N3-C4	-6.49	123.11	127.00
57	BB	374	A	C4-C5-C6	6.49	120.25	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1738	G	C5-C6-N1	-6.49	108.25	111.50
57	BB	1766	G	C1'-O4'-C4'	6.49	115.09	109.90
57	BB	2046	G	C3'-C2'-C1'	6.49	106.69	101.50
57	BB	2218	G	C8-N9-C4	-6.49	103.80	106.40
57	BB	2430	A	C4-C5-C6	6.49	120.25	117.00
21	AA	944	G	N3-C2-N2	6.49	124.44	119.90
21	AA	1045	C	C6-N1-C2	6.49	122.90	120.30
21	AA	1529	G	O4'-C1'-N9	6.49	113.39	108.20
57	BB	977	G	C4'-C3'-C2'	-6.49	96.11	102.60
57	BB	983	A	N9-C4-C5	-6.49	103.20	105.80
57	BB	1526	C	O5'-P-OP2	-6.49	99.86	105.70
57	BB	1774	C	C1'-O4'-C4'	6.49	115.09	109.90
57	BB	1863	G	C8-N9-C4	-6.49	103.81	106.40
57	BB	2135	A	C5-C6-N1	-6.49	114.46	117.70
57	BB	2235	G	N1-C2-N3	-6.49	120.01	123.90
57	BB	2802	G	C8-N9-C1'	6.49	135.44	127.00
58	BA	12	C	N3-C4-C5	-6.49	119.31	121.90
58	BA	68	C	N3-C4-N4	6.49	122.54	118.00
21	AA	640	A	C8-N9-C4	-6.49	103.20	105.80
21	AA	1512	U	N3-C2-O2	6.49	126.74	122.20
57	BB	707	G	C8-N9-C1'	6.49	135.43	127.00
57	BB	1183	U	O4'-C1'-N1	6.49	113.39	108.20
57	BB	1417	C	P-O3'-C3'	-6.49	111.92	119.70
57	BB	1983	G	N1-C2-N2	-6.49	110.36	116.20
21	AA	155	A	O4'-C1'-N9	6.49	113.39	108.20
21	AA	272	C	C4-C5-C6	-6.49	114.16	117.40
21	AA	345	C	O4'-C1'-N1	6.49	113.39	108.20
21	AA	821	G	C8-N9-C4	-6.49	103.81	106.40
21	AA	917	G	N1-C2-N3	-6.49	120.01	123.90
21	AA	1002	G	N3-C4-C5	-6.49	125.36	128.60
57	BB	2	G	C5'-C4'-C3'	-6.49	105.62	116.00
57	BB	185	G	P-O3'-C3'	-6.49	111.92	119.70
57	BB	1162	G	C8-N9-C4	-6.49	103.81	106.40
57	BB	1205	A	C2-N3-C4	-6.49	107.36	110.60
57	BB	1416	G	C6-N1-C2	6.49	128.99	125.10
57	BB	1562	U	C2-N3-C4	-6.49	123.11	127.00
57	BB	1608	A	N3-C4-C5	-6.49	122.26	126.80
57	BB	1704	C	C5-C4-N4	-6.49	115.66	120.20
57	BB	1991	U	C4'-C3'-C2'	-6.49	96.11	102.60
57	BB	2456	C	O4'-C1'-N1	6.49	113.39	108.20
57	BB	2705	A	C6-C5-N7	-6.49	127.76	132.30
57	BB	2859	G	C6-C5-N7	-6.49	126.51	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	368	U	O4'-C1'-N1	6.48	113.39	108.20
21	AA	451	A	C4-C5-C6	6.48	120.24	117.00
57	BB	740	C	C5-C4-N4	-6.48	115.66	120.20
57	BB	1135	C	C4-C5-C6	-6.48	114.16	117.40
21	AA	773	G	C4-N9-C1'	-6.48	118.07	126.50
21	AA	774	G	C6-C5-N7	-6.48	126.51	130.40
21	AA	809	G	O4'-C1'-N9	6.48	113.39	108.20
21	AA	850	U	C6-N1-C2	-6.48	117.11	121.00
57	BB	285	G	C6-C5-N7	-6.48	126.51	130.40
57	BB	543	G	N1-C6-O6	6.48	123.79	119.90
57	BB	548	G	C6-C5-N7	-6.48	126.51	130.40
57	BB	1593	A	C4-C5-N7	-6.48	107.46	110.70
57	BB	1988	G	N3-C2-N2	6.48	124.44	119.90
57	BB	2590	A	N1-C6-N6	6.48	122.49	118.60
58	BA	79	G	N1-C2-N3	-6.48	120.01	123.90
7	AP	31	ARG	NE-CZ-NH2	6.48	123.54	120.30
21	AA	412	A	C5-C6-N1	-6.48	114.46	117.70
21	AA	437	U	N3-C2-O2	6.48	126.74	122.20
21	AA	555	U	C5-C6-N1	6.48	125.94	122.70
21	AA	584	G	O4'-C1'-N9	6.48	113.38	108.20
21	AA	1021	A	N3-C4-N9	6.48	132.59	127.40
21	AA	1316	G	N3-C4-N9	6.48	129.89	126.00
21	AA	1378	C	C2-N3-C4	6.48	123.14	119.90
21	AA	1532	U	C5'-C4'-C3'	-6.48	105.63	116.00
21	AA	1534	A	C2-N3-C4	6.48	113.84	110.60
23	AW	44	G	C2-N3-C4	-6.48	108.66	111.90
25	AZ	320	THR	N-CA-CB	6.48	122.61	110.30
53	BE	162	ARG	NE-CZ-NH1	-6.48	117.06	120.30
57	BB	277	G	C5-C6-N1	-6.48	108.26	111.50
57	BB	484	C	OP1-P-OP2	-6.48	109.88	119.60
57	BB	1048	A	N3-C4-C5	-6.48	122.26	126.80
57	BB	1850	G	N1-C6-O6	6.48	123.79	119.90
57	BB	1897	G	N1-C2-N3	-6.48	120.01	123.90
57	BB	2541	A	O4'-C1'-N9	6.48	113.38	108.20
57	BB	2721	A	C8-N9-C4	-6.48	103.21	105.80
57	BB	2765	A	C5-C6-N1	-6.48	114.46	117.70
21	AA	36	C	N3-C4-C5	-6.48	119.31	121.90
21	AA	1140	C	N1-C2-O2	6.48	122.79	118.90
47	B0	16	ARG	NE-CZ-NH1	6.48	123.54	120.30
57	BB	1395	A	C2-N3-C4	-6.48	107.36	110.60
21	AA	356	A	O4'-C1'-N9	6.48	113.38	108.20
37	BR	83	TYR	CZ-CE2-CD2	-6.48	113.97	119.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	287	G	C5-C6-O6	-6.48	124.71	128.60
57	BB	934	U	O4'-C1'-N1	6.48	113.38	108.20
57	BB	1578	U	P-O3'-C3'	-6.48	111.93	119.70
57	BB	1659	G	C8-N9-C1'	6.48	135.42	127.00
57	BB	2246	G	C5-C6-O6	-6.48	124.71	128.60
21	AA	514	C	C6-N1-C2	-6.48	117.71	120.30
21	AA	893	C	N3-C4-C5	-6.48	119.31	121.90
21	AA	914	A	C2-N3-C4	6.48	113.84	110.60
25	AZ	47	ASP	CB-CG-OD2	-6.48	112.47	118.30
57	BB	159	G	N9-C4-C5	6.48	107.99	105.40
21	AA	429	U	N3-C2-O2	6.47	126.73	122.20
21	AA	463	U	C6-N1-C2	-6.47	117.12	121.00
21	AA	600	A	C6-C5-N7	-6.47	127.77	132.30
21	AA	878	A	O4'-C1'-N9	6.47	113.38	108.20
57	BB	1004	U	N3-C2-O2	-6.47	117.67	122.20
57	BB	2078	C	N3-C4-N4	6.47	122.53	118.00
57	BB	2084	C	N1-C2-O2	-6.47	115.02	118.90
57	BB	2474	U	C3'-C2'-C1'	-6.47	96.32	101.50
57	BB	2876	G	C4-C5-C6	6.47	122.69	118.80
21	AA	554	A	O4'-C1'-N9	6.47	113.38	108.20
21	AA	954	G	N3-C4-C5	-6.47	125.36	128.60
23	AW	21	A	C5-C6-N6	-6.47	118.52	123.70
23	AW	76	A	C5-N7-C8	6.47	107.14	103.90
45	BC	132	ARG	NE-CZ-NH2	-6.47	117.06	120.30
57	BB	1061	U	N1-C2-O2	-6.47	118.27	122.80
57	BB	2436	G	N1-C6-O6	6.47	123.78	119.90
21	AA	1016	A	C1'-O4'-C4'	6.47	115.08	109.90
57	BB	1983	G	N1-C2-N3	-6.47	120.02	123.90
21	AA	137	U	N1-C1'-C2'	-6.47	104.88	112.00
21	AA	596	A	N1-C6-N6	6.47	122.48	118.60
21	AA	713	G	C2-N3-C4	-6.47	108.67	111.90
21	AA	793	U	C6-N1-C2	-6.47	117.12	121.00
21	AA	872	A	N1-C6-N6	6.47	122.48	118.60
21	AA	990	C	N1-C2-N3	6.47	123.73	119.20
21	AA	1340	A	C8-N9-C4	-6.47	103.21	105.80
21	AA	1441	A	C8-N9-C4	-6.47	103.21	105.80
21	AA	1486	G	C5-C6-O6	-6.47	124.72	128.60
23	AW	17	C	C4-C5-C6	6.47	120.64	117.40
23	AW	64	A	C5-N7-C8	6.47	107.14	103.90
57	BB	615	U	N3-C2-O2	6.47	126.73	122.20
57	BB	639	U	N3-C4-C5	-6.47	110.72	114.60
57	BB	989	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(°)	Ideal(°)
57	BB	1246	A	C6-C5-N7	-6.47	127.77	132.30
57	BB	1724	G	N7-C8-N9	-6.47	109.86	113.10
57	BB	2042	A	N1-C2-N3	6.47	132.53	129.30
57	BB	2306	C	C6-N1-C2	-6.47	117.71	120.30
57	BB	2399	G	C5-C6-O6	-6.47	124.72	128.60
57	BB	2851	A	C4-C5-C6	6.47	120.23	117.00
21	AA	362	G	O4'-C1'-N9	6.47	113.38	108.20
21	AA	468	A	N9-C4-C5	6.47	108.39	105.80
21	AA	649	A	N9-C4-C5	6.47	108.39	105.80
57	BB	180	G	C2-N3-C4	-6.47	108.67	111.90
57	BB	2333	A	N9-C1'-C2'	-6.47	104.89	112.00
21	AA	492	C	P-O3'-C3'	6.47	127.46	119.70
21	AA	847	G	C2-N3-C4	6.47	115.13	111.90
21	AA	890	G	N3-C4-N9	-6.47	122.12	126.00
21	AA	943	U	C5-C4-O4	-6.47	122.02	125.90
25	AZ	109	ASP	CB-CG-OD1	-6.47	112.48	118.30
57	BB	5	A	C1'-O4'-C4'	-6.47	104.73	109.90
57	BB	194	G	C2-N3-C4	-6.47	108.67	111.90
57	BB	450	G	C4-C5-C6	6.47	122.68	118.80
57	BB	483	A	N1-C2-N3	-6.47	126.07	129.30
57	BB	2623	G	C8-N9-C4	-6.47	103.81	106.40
58	BA	34	A	C5-C6-N6	-6.47	118.53	123.70
21	AA	816	A	C2-N3-C4	6.46	113.83	110.60
21	AA	1186	G	C8-N9-C4	-6.46	103.81	106.40
21	AA	1523	G	O4'-C1'-N9	6.46	113.37	108.20
22	AY	5	A	C2-N3-C4	-6.46	107.37	110.60
57	BB	154	U	O4'-C1'-N1	6.46	113.37	108.20
57	BB	233	A	C5-N7-C8	6.46	107.13	103.90
57	BB	312	G	C5-C6-N1	-6.46	108.27	111.50
57	BB	1031	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	1695	G	P-O5'-C5'	-6.46	110.56	120.90
57	BB	2024	G	N9-C1'-C2'	-6.46	104.89	112.00
57	BB	2591	C	C6-N1-C2	-6.46	117.71	120.30
58	BA	103	U	C4'-C3'-C2'	-6.46	96.14	102.60
18	AG	112	ASP	CB-CG-OD2	-6.46	112.48	118.30
21	AA	1251	A	C5-C6-N1	-6.46	114.47	117.70
57	BB	425	G	C8-N9-C4	-6.46	103.81	106.40
57	BB	622	G	N1-C2-N3	-6.46	120.02	123.90
21	AA	939	G	C5-C6-N1	-6.46	108.27	111.50
21	AA	963	G	C6-C5-N7	-6.46	126.52	130.40
21	AA	1075	U	C5-C4-O4	-6.46	122.02	125.90
21	AA	1296	C	C6-N1-C2	6.46	122.88	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	15	G	C5-C6-O6	-6.46	124.72	128.60
26	AV	61	C	N3-C4-N4	6.46	122.52	118.00
57	BB	169	G	C2-N3-C4	6.46	115.13	111.90
57	BB	1133	A	C4-C5-N7	-6.46	107.47	110.70
57	BB	1286	A	C6-C5-N7	-6.46	127.78	132.30
57	BB	1350	C	C5-C6-N1	6.46	124.23	121.00
57	BB	1483	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	1801	A	N7-C8-N9	-6.46	110.57	113.80
57	BB	2518	A	C4'-C3'-C2'	-6.46	96.14	102.60
57	BB	734	A	N1-C2-N3	6.46	132.53	129.30
57	BB	916	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	2636	C	C5'-C4'-O4'	-6.46	101.35	109.10
21	AA	230	G	N1-C2-N3	-6.46	120.03	123.90
21	AA	360	G	C4'-C3'-C2'	-6.46	96.14	102.60
21	AA	679	C	O4'-C4'-C3'	-6.46	97.54	104.00
21	AA	721	G	N7-C8-N9	-6.46	109.87	113.10
21	AA	952	U	N3-C4-O4	6.46	123.92	119.40
21	AA	1395	C	C5'-C4'-C3'	-6.46	105.67	116.00
26	AV	16	C	O5'-P-OP1	6.46	118.45	110.70
57	BB	570	G	N9-C4-C5	-6.46	102.82	105.40
57	BB	970	U	N3-C4-O4	6.46	123.92	119.40
57	BB	1360	G	N1-C6-O6	6.46	123.78	119.90
57	BB	1772	A	C4-C5-N7	-6.46	107.47	110.70
57	BB	2198	A	C6-N1-C2	-6.46	114.72	118.60
57	BB	2622	U	O4'-C1'-N1	6.46	113.37	108.20
58	BA	26	C	O4'-C1'-N1	6.46	113.37	108.20
13	AB	205	ALA	N-CA-CB	6.46	119.14	110.10
21	AA	50	A	C4-C5-C6	6.46	120.23	117.00
21	AA	98	A	C4'-C3'-C2'	-6.46	96.14	102.60
21	AA	676	A	C8-N9-C4	-6.46	103.22	105.80
21	AA	888	G	C2-N3-C4	-6.46	108.67	111.90
57	BB	945	A	C5-C6-N6	-6.46	118.53	123.70
57	BB	953	G	O4'-C1'-N9	6.46	113.36	108.20
57	BB	972	A	C3'-C2'-C1'	-6.46	96.33	101.50
57	BB	1277	G	N3-C4-N9	-6.46	122.13	126.00
57	BB	1645	G	N9-C4-C5	6.46	107.98	105.40
57	BB	1872	A	C6-N1-C2	-6.46	114.73	118.60
57	BB	1901	A	C6-C5-N7	-6.46	127.78	132.30
57	BB	2005	A	N7-C8-N9	6.46	117.03	113.80
57	BB	2187	U	N1-C2-O2	-6.46	118.28	122.80
58	BA	8	C	O4'-C1'-N1	6.46	113.37	108.20
21	AA	1409	C	C4'-C3'-C2'	-6.46	96.14	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	159	G	N1-C6-O6	6.46	123.77	119.90
57	BB	727	A	N7-C8-N9	-6.46	110.57	113.80
57	BB	781	A	N1-C6-N6	6.46	122.47	118.60
57	BB	819	A	C4-C5-C6	6.46	120.23	117.00
57	BB	986	C	C4'-C3'-C2'	-6.46	96.14	102.60
57	BB	1361	G	N7-C8-N9	-6.46	109.87	113.10
57	BB	1932	A	C4-C5-C6	6.46	120.23	117.00
58	BA	76	G	N1-C6-O6	6.46	123.77	119.90
12	AU	32	ARG	NE-CZ-NH1	-6.45	117.07	120.30
21	AA	321	A	C5-C6-N1	-6.45	114.47	117.70
21	AA	455	G	C4'-C3'-C2'	-6.45	96.15	102.60
21	AA	582	C	C6-N1-C1'	6.45	128.54	120.80
21	AA	1486	G	N1-C2-N3	-6.45	120.03	123.90
30	BK	102	VAL	CA-CB-CG1	-6.45	101.22	110.90
33	BN	103	ARG	NE-CZ-NH2	6.45	123.53	120.30
57	BB	380	G	O4'-C1'-N9	6.45	113.36	108.20
57	BB	469	G	C8-N9-C4	-6.45	103.82	106.40
57	BB	509	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	805	G	OP1-P-OP2	-6.45	109.92	119.60
57	BB	1498	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	1784	A	C4-C5-C6	6.45	120.23	117.00
57	BB	1862	G	C1'-O4'-C4'	-6.45	104.74	109.90
57	BB	2630	G	N3-C2-N2	-6.45	115.38	119.90
21	AA	153	C	C6-N1-C2	-6.45	117.72	120.30
21	AA	1415	G	C4-C5-N7	-6.45	108.22	110.80
57	BB	1137	G	O4'-C1'-N9	6.45	113.36	108.20
57	BB	1563	U	O4'-C1'-N1	6.45	113.36	108.20
57	BB	2564	A	C5-C6-N6	-6.45	118.54	123.70
57	BB	2852	G	C5-C6-O6	-6.45	124.73	128.60
10	AS	30	LEU	CB-CG-CD2	6.45	121.97	111.00
21	AA	559	A	N1-C6-N6	6.45	122.47	118.60
57	BB	778	G	N3-C4-N9	6.45	129.87	126.00
57	BB	1288	G	N9-C4-C5	-6.45	102.82	105.40
57	BB	2217	G	C5-N7-C8	6.45	107.53	104.30
57	BB	2273	A	C2-N3-C4	-6.45	107.38	110.60
2	AK	97	ARG	NE-CZ-NH2	6.45	123.52	120.30
21	AA	825	A	N9-C1'-C2'	-6.45	104.91	112.00
21	AA	918	A	N9-C4-C5	6.45	108.38	105.80
21	AA	1064	G	N1-C2-N3	-6.45	120.03	123.90
22	AY	13	C	C5-C6-N1	6.45	124.22	121.00
57	BB	85	G	C4-C5-C6	6.45	122.67	118.80
57	BB	186	G	N1-C6-O6	6.45	123.77	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	226	A	N3-C4-C5	-6.45	122.29	126.80
57	BB	552	U	C5-C4-O4	6.45	129.77	125.90
57	BB	989	G	C4-C5-N7	-6.45	108.22	110.80
57	BB	1274	A	C6-N1-C2	-6.45	114.73	118.60
57	BB	1518	C	C4-C5-C6	-6.45	114.17	117.40
57	BB	1793	C	C5-C6-N1	6.45	124.22	121.00
57	BB	2224	G	P-O5'-C5'	6.45	131.22	120.90
57	BB	2255	G	N9-C4-C5	6.45	107.98	105.40
57	BB	2625	G	N3-C2-N2	6.45	124.41	119.90
58	BA	3	C	C5-C6-N1	6.45	124.22	121.00
58	BA	99	A	C5-N7-C8	6.45	107.12	103.90
13	AB	197	PHE	CB-CG-CD1	6.45	125.31	120.80
21	AA	450	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	1340	A	N1-C2-N3	-6.45	126.08	129.30
22	AY	52	U	OP2-P-O3'	6.45	119.38	105.20
57	BB	2436	G	C2-N3-C4	6.45	115.12	111.90
57	BB	2708	G	N1-C2-N2	-6.45	110.40	116.20
21	AA	46	G	C4'-C3'-C2'	-6.45	96.15	102.60
21	AA	170	U	C2-N3-C4	6.45	130.87	127.00
21	AA	527	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	541	G	C6-N1-C2	6.45	128.97	125.10
21	AA	690	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	950	U	O4'-C1'-N1	6.45	113.36	108.20
21	AA	959	A	C5-C6-N6	-6.45	118.54	123.70
21	AA	1246	A	N3-C4-C5	-6.45	122.29	126.80
22	AY	28	C	C1'-O4'-C4'	6.45	115.06	109.90
57	BB	226	A	C4-C5-C6	6.45	120.22	117.00
57	BB	343	C	C4-C5-C6	6.45	120.62	117.40
57	BB	743	A	C5-C6-N6	-6.45	118.54	123.70
57	BB	920	A	C6-C5-N7	-6.45	127.79	132.30
57	BB	1297	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	1618	A	C8-N9-C4	-6.45	103.22	105.80
57	BB	1862	G	N9-C4-C5	-6.45	102.82	105.40
57	BB	2220	U	N3-C2-O2	6.45	126.71	122.20
57	BB	2852	G	C2-N3-C4	6.45	115.12	111.90
21	AA	1306	A	C5-N7-C8	6.44	107.12	103.90
25	AZ	16	THR	CA-CB-CG2	-6.44	103.38	112.40
57	BB	903	C	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	1220	G	C4-N9-C1'	-6.44	118.12	126.50
57	BB	1826	G	N3-C2-N2	6.44	124.41	119.90
58	BA	76	G	N9-C1'-C2'	-6.44	104.91	112.00
21	AA	331	G	N3-C2-N2	6.44	124.41	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	749	A	C5-N7-C8	6.44	107.12	103.90
21	AA	1119	C	P-O5'-C5'	6.44	131.21	120.90
57	BB	34	U	C6-N1-C1'	-6.44	112.18	121.20
57	BB	213	A	C5-C6-N1	-6.44	114.48	117.70
57	BB	1653	G	C5-N7-C8	6.44	107.52	104.30
57	BB	1813	G	P-O3'-C3'	-6.44	111.97	119.70
57	BB	2101	A	C4-C5-C6	6.44	120.22	117.00
58	BA	67	G	O4'-C1'-N9	6.44	113.35	108.20
14	AC	117	ASP	CB-CG-OD2	6.44	124.10	118.30
21	AA	90	C	N3-C4-C5	6.44	124.48	121.90
21	AA	159	G	C8-N9-C4	-6.44	103.82	106.40
21	AA	602	A	C6-N1-C2	-6.44	114.74	118.60
21	AA	1238	A	C5-C6-N6	-6.44	118.55	123.70
57	BB	1350	C	P-O3'-C3'	-6.44	111.97	119.70
57	BB	1442	U	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	1536	C	N3-C4-N4	6.44	122.51	118.00
57	BB	1769	U	C2-N3-C4	6.44	130.87	127.00
57	BB	1860	G	C5-C6-O6	-6.44	124.73	128.60
57	BB	2008	C	N3-C4-N4	6.44	122.51	118.00
21	AA	349	A	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	44	A	C4-C5-N7	-6.44	107.48	110.70
57	BB	2705	A	C4'-C3'-C2'	6.44	109.04	102.60
21	AA	509	A	N1-C2-N3	6.44	132.52	129.30
21	AA	790	A	N7-C8-N9	6.44	117.02	113.80
21	AA	889	A	C3'-C2'-C1'	-6.44	96.35	101.50
21	AA	993	G	C5-N7-C8	6.44	107.52	104.30
21	AA	1144	G	O4'-C1'-N9	6.44	113.35	108.20
21	AA	1214	C	O4'-C1'-N1	6.44	113.35	108.20
26	AV	15	G	O4'-C1'-N9	6.44	113.35	108.20
37	BR	84	ARG	NE-CZ-NH1	-6.44	117.08	120.30
57	BB	149	A	C4-C5-C6	6.44	120.22	117.00
57	BB	315	G	N1-C2-N3	-6.44	120.04	123.90
57	BB	426	C	N3-C2-O2	-6.44	117.39	121.90
57	BB	532	A	N3-C4-C5	-6.44	122.29	126.80
57	BB	1003	G	N9-C4-C5	-6.44	102.83	105.40
57	BB	1017	G	N3-C4-C5	6.44	131.82	128.60
57	BB	1728	C	N1-C1'-C2'	-6.44	104.92	112.00
57	BB	1783	A	C4-C5-C6	6.44	120.22	117.00
57	BB	1842	G	N3-C4-N9	6.44	129.86	126.00
57	BB	2621	G	N1-C2-N3	-6.44	120.04	123.90
57	BB	2832	U	N1-C2-N3	-6.44	111.04	114.90
21	AA	489	C	C2-N3-C4	6.44	123.12	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	891	G	N7-C8-N9	6.44	116.32	113.10
57	BB	939	G	C5-N7-C8	-6.44	101.08	104.30
57	BB	1207	C	N3-C4-N4	6.44	122.50	118.00
57	BB	1321	A	C6-C5-N7	-6.44	127.80	132.30
57	BB	1682	G	C4-C5-C6	6.44	122.66	118.80
2	AK	36	ARG	NE-CZ-NH2	-6.43	117.08	120.30
21	AA	1083	U	C4-C5-C6	6.43	123.56	119.70
21	AA	1427	C	N1-C2-O2	6.43	122.76	118.90
23	AW	74	C	N3-C2-O2	-6.43	117.40	121.90
57	BB	1011	G	C6-N1-C2	6.43	128.96	125.10
57	BB	1364	G	C6-N1-C2	-6.43	121.24	125.10
57	BB	1489	C	N3-C4-C5	-6.43	119.33	121.90
57	BB	1888	G	C8-N9-C4	-6.43	103.83	106.40
58	BA	109	A	N7-C8-N9	-6.43	110.58	113.80
21	AA	94	G	C4-C5-N7	6.43	113.37	110.80
21	AA	493	A	O4'-C1'-N9	6.43	113.35	108.20
21	AA	751	U	C4'-C3'-C2'	-6.43	96.17	102.60
21	AA	1347	G	C4-C5-C6	6.43	122.66	118.80
57	BB	176	A	N3-C4-N9	6.43	132.55	127.40
57	BB	344	A	C5-N7-C8	6.43	107.12	103.90
57	BB	670	A	O4'-C1'-N9	6.43	113.35	108.20
57	BB	2010	G	C4-C5-C6	6.43	122.66	118.80
57	BB	2138	G	C5'-C4'-C3'	-6.43	105.71	116.00
57	BB	2456	C	C5-C4-N4	-6.43	115.70	120.20
58	BA	107	G	N1-C2-N3	-6.43	120.04	123.90
21	AA	1305	G	C6-C5-N7	-6.43	126.54	130.40
22	AY	62	A	C5-N7-C8	-6.43	100.68	103.90
31	BL	110	VAL	CA-CB-CG1	-6.43	101.25	110.90
58	BA	61	G	C8-N9-C4	-6.43	103.83	106.40
3	AL	35	ARG	NE-CZ-NH2	-6.43	117.09	120.30
21	AA	10	A	C5-N7-C8	6.43	107.11	103.90
21	AA	69	G	O4'-C1'-N9	6.43	113.34	108.20
21	AA	238	A	P-O3'-C3'	6.43	127.42	119.70
21	AA	372	C	N3-C4-N4	6.43	122.50	118.00
21	AA	1168	U	C5-C4-O4	-6.43	122.04	125.90
21	AA	1431	A	N9-C4-C5	-6.43	103.23	105.80
57	BB	842	U	P-O5'-C5'	6.43	131.19	120.90
57	BB	1245	G	N7-C8-N9	-6.43	109.89	113.10
57	BB	1456	G	C5-C6-N1	-6.43	108.29	111.50
57	BB	2294	G	C4-C5-C6	6.43	122.66	118.80
57	BB	2772	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	2248	C	N3-C4-C5	-6.43	119.33	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	121	U	P-O5'-C5'	-6.43	110.62	120.90
21	AA	554	A	N9-C4-C5	6.43	108.37	105.80
21	AA	602	A	O4'-C1'-N9	6.43	113.34	108.20
21	AA	1351	U	C5-C6-N1	6.43	125.91	122.70
21	AA	1457	G	N3-C2-N2	6.43	124.40	119.90
22	AY	5	A	C4-C5-C6	6.43	120.21	117.00
22	AY	14	A	C3'-C2'-C1'	-6.43	96.36	101.50
26	AV	74	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	522	A	O4'-C4'-C3'	-6.43	97.57	104.00
57	BB	549	G	N1-C2-N3	-6.43	120.04	123.90
57	BB	764	A	N1-C6-N6	6.43	122.46	118.60
57	BB	865	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	1407	G	O4'-C1'-N9	6.43	113.34	108.20
57	BB	2075	U	N3-C4-O4	6.43	123.90	119.40
57	BB	2491	U	N1-C2-N3	6.43	118.76	114.90
12	AU	7	GLU	N-CA-CB	6.42	122.17	110.60
21	AA	391	G	O4'-C1'-N9	6.42	113.34	108.20
21	AA	459	A	N9-C4-C5	6.42	108.37	105.80
21	AA	758	C	C2-N1-C1'	6.42	125.87	118.80
21	AA	1189	U	C6-N1-C2	-6.42	117.14	121.00
57	BB	455	C	P-O3'-C3'	-6.42	111.99	119.70
57	BB	971	G	C5-N7-C8	-6.42	101.09	104.30
57	BB	1024	G	C4-C5-C6	6.42	122.66	118.80
57	BB	1041	G	N9-C4-C5	6.42	107.97	105.40
57	BB	1590	A	O4'-C1'-N9	6.42	113.34	108.20
57	BB	2045	C	OP2-P-O3'	6.42	119.33	105.20
57	BB	2394	C	O4'-C1'-N1	6.42	113.34	108.20
57	BB	2847	U	C5-C4-O4	6.42	129.75	125.90
21	AA	85	U	C6-N1-C2	-6.42	117.15	121.00
21	AA	1094	G	N3-C4-C5	6.42	131.81	128.60
22	AY	14	A	C5-N7-C8	6.42	107.11	103.90
57	BB	2020	A	N3-C4-C5	-6.42	122.30	126.80
57	BB	2367	G	C6-N1-C2	-6.42	121.25	125.10
21	AA	639	G	C8-N9-C4	-6.42	103.83	106.40
21	AA	1097	C	C2-N3-C4	6.42	123.11	119.90
21	AA	1430	A	N7-C8-N9	-6.42	110.59	113.80
26	AV	64	G	C4-C5-N7	-6.42	108.23	110.80
57	BB	29	U	C5-C6-N1	6.42	125.91	122.70
57	BB	1504	A	C5'-C4'-C3'	-6.42	105.72	116.00
57	BB	2529	G	C5-C6-N1	-6.42	108.29	111.50
57	BB	2623	G	N9-C4-C5	6.42	107.97	105.40
16	AE	68	ARG	NE-CZ-NH1	6.42	123.51	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	34	C	P-O3'-C3'	-6.42	112.00	119.70
21	AA	696	A	O4'-C1'-N9	6.42	113.34	108.20
21	AA	927	G	N1-C2-N3	-6.42	120.05	123.90
49	B2	14	ARG	NE-CZ-NH2	6.42	123.51	120.30
57	BB	490	C	C3'-C2'-C1'	6.42	106.64	101.50
57	BB	838	C	C5-C6-N1	6.42	124.21	121.00
57	BB	1195	G	O4'-C1'-N9	6.42	113.34	108.20
57	BB	1315	C	C4-C5-C6	6.42	120.61	117.40
57	BB	2548	U	C5-C4-O4	6.42	129.75	125.90
57	BB	2858	C	C6-N1-C2	6.42	122.87	120.30
21	AA	86	G	P-O3'-C3'	6.42	127.40	119.70
21	AA	249	U	O4'-C1'-N1	6.42	113.34	108.20
21	AA	735	C	O4'-C1'-N1	6.42	113.33	108.20
21	AA	762	U	C4'-C3'-C2'	-6.42	96.18	102.60
21	AA	1309	G	N3-C4-N9	6.42	129.85	126.00
21	AA	1529	G	N3-C4-C5	6.42	131.81	128.60
22	AY	49	C	N3-C2-O2	6.42	126.39	121.90
25	AZ	86	ASP	CB-CG-OD2	-6.42	112.52	118.30
57	BB	279	A	N1-C6-N6	6.42	122.45	118.60
57	BB	460	A	C6-C5-N7	-6.42	127.81	132.30
57	BB	869	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1131	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1296	G	C5-N7-C8	-6.42	101.09	104.30
57	BB	1365	A	C6-N1-C2	6.42	122.45	118.60
57	BB	1681	G	N9-C4-C5	-6.42	102.83	105.40
57	BB	1909	C	N1-C2-O2	6.42	122.75	118.90
57	BB	1978	A	C6-N1-C2	-6.42	114.75	118.60
57	BB	2459	A	N1-C2-N3	-6.42	126.09	129.30
21	AA	173	U	C4-C5-C6	6.42	123.55	119.70
21	AA	1359	C	P-O3'-C3'	6.42	127.40	119.70
21	AA	1417	G	C4-C5-N7	-6.42	108.23	110.80
23	AW	16	U	P-O3'-C3'	6.42	127.40	119.70
57	BB	64	A	C3'-C2'-C1'	-6.42	96.37	101.50
57	BB	331	C	C4-C5-C6	-6.42	114.19	117.40
57	BB	391	A	C6-C5-N7	-6.42	127.81	132.30
57	BB	669	G	C8-N9-C1'	-6.42	118.66	127.00
57	BB	719	C	C6-N1-C2	-6.42	117.73	120.30
57	BB	763	G	C4-C5-C6	6.42	122.65	118.80
57	BB	1273	U	N1-C2-O2	6.42	127.29	122.80
57	BB	1280	G	C5'-C4'-C3'	-6.42	105.73	116.00
57	BB	1464	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1494	A	C4-C5-N7	6.42	113.91	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1513	U	O4'-C1'-N1	6.42	113.33	108.20
57	BB	2176	A	C8-N9-C4	-6.42	103.23	105.80
57	BB	977	G	C8-N9-C4	-6.42	103.83	106.40
57	BB	2710	C	C4-C5-C6	6.42	120.61	117.40
21	AA	919	A	C4'-C3'-C2'	-6.41	96.19	102.60
21	AA	1006	G	C5-N7-C8	6.41	107.51	104.30
21	AA	1329	A	N3-C4-C5	-6.41	122.31	126.80
26	AV	74	C	N3-C4-N4	6.41	122.49	118.00
57	BB	60	G	N7-C8-N9	-6.41	109.89	113.10
57	BB	186	G	C3'-C2'-C1'	-6.41	96.37	101.50
57	BB	349	U	O4'-C1'-N1	6.41	113.33	108.20
57	BB	838	C	N3-C4-C5	-6.41	119.33	121.90
57	BB	1174	U	C1'-O4'-C4'	-6.41	104.77	109.90
57	BB	1819	A	C4-C5-N7	-6.41	107.49	110.70
57	BB	2268	A	C4-C5-C6	6.41	120.21	117.00
57	BB	2654	A	C4-C5-C6	6.41	120.21	117.00
21	AA	639	G	O4'-C1'-N9	6.41	113.33	108.20
21	AA	923	A	N1-C2-N3	-6.41	126.09	129.30
57	BB	2423	U	C2-N3-C4	6.41	130.85	127.00
21	AA	38	G	C4-C5-N7	6.41	113.36	110.80
21	AA	103	U	C4'-C3'-C2'	-6.41	96.19	102.60
26	AV	3	C	C2-N1-C1'	6.41	125.85	118.80
57	BB	460	A	O4'-C1'-N9	6.41	113.33	108.20
57	BB	947	A	O4'-C1'-N9	6.41	113.33	108.20
57	BB	1417	C	O4'-C1'-N1	6.41	113.33	108.20
57	BB	1635	A	N3-C4-C5	-6.41	122.31	126.80
57	BB	1669	A	N9-C4-C5	6.41	108.36	105.80
57	BB	2891	U	C5-C6-N1	6.41	125.91	122.70
21	AA	275	G	C8-N9-C4	-6.41	103.84	106.40
21	AA	651	C	N3-C4-N4	6.41	122.49	118.00
21	AA	1160	G	N1-C2-N3	-6.41	120.06	123.90
21	AA	1454	G	O5'-C5'-C4'	6.41	123.88	111.70
57	BB	214	G	C8-N9-C4	-6.41	103.84	106.40
57	BB	494	G	C8-N9-C1'	6.41	135.33	127.00
57	BB	800	A	N9-C4-C5	-6.41	103.24	105.80
57	BB	1728	C	N3-C4-N4	6.41	122.49	118.00
57	BB	2037	A	N1-C6-N6	6.41	122.45	118.60
57	BB	2365	G	C6-N1-C2	-6.41	121.25	125.10
57	BB	2678	C	P-O3'-C3'	6.41	127.39	119.70
57	BB	1054	A	C8-N9-C4	-6.41	103.24	105.80
57	BB	2685	G	C6-N1-C2	6.41	128.94	125.10
13	AB	94	ARG	NE-CZ-NH2	-6.41	117.10	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	AB	152	ASP	CB-CG-OD1	-6.41	112.53	118.30
21	AA	301	G	C5-N7-C8	-6.41	101.10	104.30
21	AA	736	C	C6-N1-C2	6.41	122.86	120.30
21	AA	1201	A	C6-C5-N7	-6.41	127.82	132.30
21	AA	1500	A	O4'-C1'-N9	6.41	113.32	108.20
22	AY	43	G	C6-C5-N7	-6.41	126.56	130.40
28	BI	141	ASP	CB-CG-OD2	6.41	124.06	118.30
57	BB	289	G	N1-C6-O6	6.41	123.74	119.90
57	BB	386	G	C3'-C2'-C1'	-6.41	96.38	101.50
57	BB	824	U	C2-N3-C4	6.41	130.84	127.00
57	BB	1509	A	C5'-C4'-C3'	-6.41	105.75	116.00
57	BB	1820	U	N1-C2-O2	-6.41	118.31	122.80
57	BB	1957	C	N1-C2-O2	6.41	122.74	118.90
57	BB	1998	A	C6-C5-N7	-6.41	127.82	132.30
57	BB	2014	A	C5-C6-N1	-6.41	114.50	117.70
57	BB	2543	G	C4-C5-C6	6.41	122.64	118.80
57	BB	2770	G	C4-C5-N7	-6.41	108.24	110.80
21	AA	1096	C	N3-C4-C5	-6.40	119.34	121.90
25	AZ	160	TYR	CB-CG-CD1	6.40	124.84	121.00
57	BB	1373	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	56	U	C4-C5-C6	6.40	123.54	119.70
21	AA	159	G	N7-C8-N9	6.40	116.30	113.10
21	AA	280	C	C5-C4-N4	-6.40	115.72	120.20
21	AA	287	U	N3-C4-C5	6.40	118.44	114.60
21	AA	292	G	C8-N9-C4	6.40	108.96	106.40
21	AA	399	G	O4'-C1'-N9	6.40	113.32	108.20
57	BB	999	U	O4'-C1'-N1	6.40	113.32	108.20
57	BB	1881	C	O4'-C1'-N1	6.40	113.32	108.20
57	BB	1925	C	C6-N1-C2	6.40	122.86	120.30
57	BB	2382	G	C5-C6-N1	6.40	114.70	111.50
57	BB	2515	C	N3-C2-O2	-6.40	117.42	121.90
57	BB	2730	C	N3-C4-N4	6.40	122.48	118.00
57	BB	2792	A	C6-N1-C2	-6.40	114.76	118.60
58	BA	45	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	866	C	C6-N1-C2	-6.40	117.74	120.30
21	AA	1416	G	P-O3'-C3'	-6.40	112.02	119.70
21	AA	1460	C	C6-N1-C2	-6.40	117.74	120.30
22	AY	46	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	555	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	1233	C	N3-C4-N4	6.40	122.48	118.00
57	BB	1788	C	N3-C4-N4	6.40	122.48	118.00
57	BB	2762	C	C5-C6-N1	6.40	124.20	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	250	A	C6-N1-C2	-6.40	114.76	118.60
21	AA	942	G	C3'-C2'-C1'	-6.40	96.38	101.50
21	AA	1238	A	O4'-C1'-N9	6.40	113.32	108.20
57	BB	554	U	C6-N1-C2	-6.40	117.16	121.00
57	BB	1056	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	1210	G	O4'-C1'-N9	6.40	113.32	108.20
57	BB	1410	G	C5-N7-C8	-6.40	101.10	104.30
57	BB	2461	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	250	A	C4-C5-N7	-6.40	107.50	110.70
21	AA	375	U	N3-C4-O4	6.40	123.88	119.40
21	AA	1455	G	N1-C2-N3	-6.40	120.06	123.90
21	AA	1522	U	N3-C4-O4	6.40	123.88	119.40
36	BQ	35	PHE	CB-CG-CD2	-6.40	116.32	120.80
57	BB	120	U	N1-C2-O2	-6.40	118.32	122.80
57	BB	179	C	P-O3'-C3'	-6.40	112.02	119.70
57	BB	1139	G	N1-C2-N3	6.40	127.74	123.90
57	BB	2154	A	C2-N3-C4	-6.40	107.40	110.60
57	BB	2196	C	P-O5'-C5'	-6.40	110.66	120.90
58	BA	29	A	P-O3'-C3'	6.40	127.38	119.70
21	AA	306	A	N3-C4-C5	-6.40	122.32	126.80
21	AA	688	G	C4-C5-C6	6.40	122.64	118.80
21	AA	959	A	C4-C5-C6	6.40	120.20	117.00
21	AA	1523	G	N1-C6-O6	6.40	123.74	119.90
22	AY	32	C	P-O3'-C3'	6.40	127.38	119.70
37	BR	77	PHE	CB-CG-CD2	-6.40	116.32	120.80
57	BB	102	U	N3-C4-O4	6.40	123.88	119.40
57	BB	190	A	N9-C4-C5	-6.40	103.24	105.80
57	BB	447	A	N1-C2-N3	6.40	132.50	129.30
23	AW	32	U	C5-C4-O4	-6.39	122.06	125.90
57	BB	117	G	N3-C2-N2	6.39	124.38	119.90
57	BB	169	G	C4-C5-N7	6.39	113.36	110.80
57	BB	1434	A	N9-C4-C5	6.39	108.36	105.80
57	BB	1475	G	N7-C8-N9	6.39	116.30	113.10
57	BB	1876	A	N7-C8-N9	6.39	117.00	113.80
57	BB	2051	A	C5-C6-N1	-6.39	114.50	117.70
57	BB	2285	C	P-O5'-C5'	-6.39	110.67	120.90
57	BB	2445	G	N3-C4-C5	6.39	131.80	128.60
57	BB	2532	G	N3-C2-N2	6.39	124.38	119.90
58	BA	43	C	C6-N1-C2	6.39	122.86	120.30
21	AA	784	A	C1'-O4'-C4'	-6.39	104.79	109.90
21	AA	950	U	N3-C4-O4	6.39	123.88	119.40
21	AA	1089	G	N1-C2-N3	-6.39	120.06	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1516	G	C6-C5-N7	-6.39	126.56	130.40
26	AV	18	G	N3-C4-C5	6.39	131.80	128.60
49	B2	12	ARG	NE-CZ-NH2	-6.39	117.10	120.30
57	BB	364	C	N3-C4-C5	-6.39	119.34	121.90
57	BB	966	G	C4-C5-N7	6.39	113.36	110.80
57	BB	1482	G	C4-C5-C6	6.39	122.64	118.80
57	BB	2277	G	C6-C5-N7	-6.39	126.56	130.40
57	BB	2459	A	N7-C8-N9	6.39	117.00	113.80
21	AA	481	G	C8-N9-C4	6.39	108.96	106.40
57	BB	815	C	C3'-C2'-C1'	-6.39	96.39	101.50
57	BB	1525	A	C4'-C3'-C2'	-6.39	96.21	102.60
21	AA	435	A	C5-N7-C8	-6.39	100.70	103.90
21	AA	1147	C	N1-C2-O2	-6.39	115.07	118.90
57	BB	284	U	C6-N1-C2	-6.39	117.17	121.00
57	BB	333	G	N1-C2-N3	-6.39	120.07	123.90
57	BB	381	G	O4'-C1'-N9	6.39	113.31	108.20
57	BB	1365	A	N7-C8-N9	6.39	117.00	113.80
57	BB	1596	A	C4-C5-C6	6.39	120.19	117.00
57	BB	1851	U	N1-C2-N3	-6.39	111.07	114.90
21	AA	560	A	O4'-C1'-N9	6.39	113.31	108.20
22	AY	33	U	P-O5'-C5'	6.39	131.12	120.90
44	BY	47	ARG	NH1-CZ-NH2	6.39	126.43	119.40
57	BB	594	U	C5-C4-O4	6.39	129.73	125.90
57	BB	1088	A	N1-C2-N3	6.39	132.49	129.30
57	BB	1871	A	C5-N7-C8	6.39	107.09	103.90
13	AB	191	ASP	CB-CG-OD2	-6.39	112.55	118.30
21	AA	1037	C	N3-C4-C5	-6.39	119.34	121.90
21	AA	1111	A	C5-C6-N1	-6.39	114.51	117.70
22	AY	7	U	C5-C4-O4	-6.39	122.07	125.90
57	BB	109	C	O4'-C1'-N1	6.39	113.31	108.20
57	BB	450	G	N1-C2-N3	-6.39	120.07	123.90
57	BB	2279	G	C5-C6-N1	-6.39	108.31	111.50
57	BB	2780	G	C5-N7-C8	6.39	107.49	104.30
21	AA	621	A	C6-N1-C2	6.38	122.43	118.60
21	AA	1337	G	C5-C6-N1	-6.38	108.31	111.50
21	AA	1371	G	C5-C6-O6	-6.38	124.77	128.60
36	BQ	74	SER	CB-CA-C	6.38	122.23	110.10
57	BB	394	C	C5-C4-N4	-6.38	115.73	120.20
57	BB	2715	C	P-O3'-C3'	-6.38	112.04	119.70
20	AI	48	ARG	NE-CZ-NH2	-6.38	117.11	120.30
21	AA	1403	C	P-O5'-C5'	6.38	131.11	120.90
22	AY	8	U	C4-C5-C6	6.38	123.53	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	12	U	C5'-C4'-O4'	6.38	116.76	109.10
57	BB	2663	G	O4'-C1'-N9	6.38	113.31	108.20
21	AA	51	A	P-O3'-C3'	6.38	127.36	119.70
21	AA	935	A	P-O3'-C3'	-6.38	112.04	119.70
26	AV	66	C	C6-N1-C2	-6.38	117.75	120.30
45	BC	206	LYS	CB-CA-C	6.38	123.16	110.40
57	BB	127	A	N9-C4-C5	-6.38	103.25	105.80
57	BB	227	A	N7-C8-N9	-6.38	110.61	113.80
57	BB	1793	C	N3-C2-O2	6.38	126.37	121.90
57	BB	2572	A	C4-C5-N7	6.38	113.89	110.70
58	BA	104	A	P-O5'-C5'	-6.38	110.69	120.90
58	BA	106	G	O4'-C1'-N9	6.38	113.30	108.20
21	AA	722	G	C8-N9-C4	-6.38	103.85	106.40
21	AA	892	A	C4-C5-C6	6.38	120.19	117.00
21	AA	1255	G	N3-C4-C5	-6.38	125.41	128.60
21	AA	1447	A	C3'-C2'-C1'	6.38	106.60	101.50
41	BV	74	ALA	N-CA-CB	6.38	119.03	110.10
57	BB	1263	U	C1'-O4'-C4'	-6.38	104.80	109.90
57	BB	2861	U	N3-C2-O2	6.38	126.67	122.20
21	AA	73	C	O4'-C1'-N1	6.38	113.30	108.20
21	AA	148	G	C6-N1-C2	6.38	128.93	125.10
21	AA	454	G	N3-C2-N2	6.38	124.36	119.90
21	AA	1117	A	C5-C6-N1	-6.38	114.51	117.70
21	AA	1225	A	C5-C6-N6	-6.38	118.60	123.70
57	BB	312	G	C6-C5-N7	-6.38	126.57	130.40
57	BB	1040	A	N9-C4-C5	6.38	108.35	105.80
57	BB	1307	A	C3'-C2'-C1'	6.38	106.60	101.50
57	BB	1314	C	C6-N1-C2	-6.38	117.75	120.30
57	BB	1920	C	C5-C4-N4	-6.38	115.73	120.20
57	BB	2805	C	O4'-C1'-N1	6.38	113.30	108.20
21	AA	260	G	O4'-C1'-N9	6.38	113.30	108.20
21	AA	1186	G	N3-C4-N9	6.38	129.83	126.00
57	BB	319	G	O4'-C1'-N9	6.38	113.30	108.20
57	BB	847	U	C4-C5-C6	-6.38	115.87	119.70
57	BB	1168	G	N3-C2-N2	6.38	124.36	119.90
57	BB	1272	A	N9-C4-C5	6.38	108.35	105.80
57	BB	1720	U	N1-C2-N3	6.38	118.73	114.90
57	BB	1934	C	N3-C4-N4	6.38	122.46	118.00
57	BB	1969	A	C8-N9-C4	6.38	108.35	105.80
57	BB	2234	G	O4'-C1'-N9	6.38	113.30	108.20
57	BB	2431	U	O4'-C1'-N1	6.38	113.30	108.20
57	BB	2674	G	N3-C2-N2	6.38	124.36	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2844	G	P-O3'-C3'	6.38	127.35	119.70
21	AA	519	C	N3-C4-N4	6.38	122.46	118.00
21	AA	1375	A	N3-C4-C5	-6.38	122.34	126.80
57	BB	2065	C	P-O5'-C5'	6.38	131.10	120.90
21	AA	409	U	C5-C4-O4	-6.37	122.08	125.90
21	AA	866	C	C1'-O4'-C4'	6.37	115.00	109.90
21	AA	1219	A	C4-C5-N7	-6.37	107.51	110.70
25	AZ	288	ARG	NE-CZ-NH1	-6.37	117.11	120.30
57	BB	149	A	C6-C5-N7	-6.37	127.84	132.30
57	BB	266	G	N1-C2-N3	-6.37	120.08	123.90
57	BB	284	U	N1-C2-N3	6.37	118.72	114.90
57	BB	468	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	1011	G	C2-N3-C4	6.37	115.09	111.90
57	BB	1040	A	C5'-C4'-O4'	6.37	116.75	109.10
57	BB	1093	G	C4-C5-N7	-6.37	108.25	110.80
57	BB	1194	A	C6-N1-C2	6.37	122.42	118.60
57	BB	1411	U	C5-C4-O4	6.37	129.72	125.90
57	BB	2048	G	C4-C5-N7	-6.37	108.25	110.80
57	BB	2287	A	C5-N7-C8	6.37	107.09	103.90
57	BB	2567	G	N1-C2-N3	-6.37	120.08	123.90
21	AA	337	G	C6-N1-C2	6.37	128.92	125.10
21	AA	1410	A	C5-C6-N6	-6.37	118.60	123.70
23	AW	62	C	C2-N3-C4	6.37	123.09	119.90
35	BP	75	THR	CA-CB-CG2	-6.37	103.48	112.40
57	BB	428	A	O4'-C1'-N9	6.37	113.30	108.20
57	BB	947	A	C1'-O4'-C4'	-6.37	104.80	109.90
57	BB	1634	A	C5-N7-C8	6.37	107.09	103.90
57	BB	1814	G	C5-C6-O6	-6.37	124.78	128.60
57	BB	2152	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	2690	U	N3-C4-C5	6.37	118.42	114.60
21	AA	201	G	C4-C5-C6	6.37	122.62	118.80
22	AY	74	C	C5-C6-N1	-6.37	117.81	121.00
57	BB	1997	C	N3-C4-C5	-6.37	119.35	121.90
57	BB	2584	U	O4'-C1'-N1	6.37	113.30	108.20
7	AP	16	PHE	CB-CG-CD1	-6.37	116.34	120.80
21	AA	90	C	P-O5'-C5'	-6.37	110.71	120.90
21	AA	119	A	C4-C5-N7	-6.37	107.52	110.70
21	AA	130	A	C5-N7-C8	6.37	107.08	103.90
21	AA	237	G	O4'-C1'-N9	6.37	113.29	108.20
21	AA	383	A	N1-C6-N6	6.37	122.42	118.60
21	AA	1394	A	N9-C1'-C2'	-6.37	105.00	112.00
21	AA	1495	U	N1-C2-N3	6.37	118.72	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1498	U	N3-C4-O4	6.37	123.86	119.40
23	AW	11	C	O4'-C1'-N1	6.37	113.30	108.20
57	BB	13	A	C5-N7-C8	6.37	107.08	103.90
57	BB	1679	A	C5-C6-N1	-6.37	114.52	117.70
57	BB	2268	A	O4'-C1'-N9	6.37	113.30	108.20
21	AA	461	A	N7-C8-N9	6.37	116.98	113.80
4	AM	69	ARG	NE-CZ-NH1	6.37	123.48	120.30
21	AA	978	A	O4'-C4'-C3'	-6.37	97.63	104.00
26	AV	45	G	N7-C8-N9	-6.37	109.92	113.10
57	BB	833	A	O4'-C1'-N9	6.37	113.29	108.20
57	BB	1250	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	1875	G	N3-C4-N9	6.37	129.82	126.00
57	BB	2219	U	O4'-C1'-N1	6.37	113.29	108.20
57	BB	2326	C	C5'-C4'-O4'	-6.37	101.46	109.10
57	BB	2758	A	C5-C6-N6	-6.37	118.61	123.70
58	BA	47	C	N1-C2-O2	-6.37	115.08	118.90
58	BA	67	G	C8-N9-C4	-6.37	103.85	106.40
21	AA	960	U	N1-C2-N3	-6.36	111.08	114.90
21	AA	1030	U	C2'-C3'-O3'	6.36	123.88	113.70
21	AA	1429	A	N1-C2-N3	-6.36	126.12	129.30
33	BN	12	ARG	NE-CZ-NH1	-6.36	117.12	120.30
47	B0	24	VAL	CG1-CB-CG2	-6.36	100.72	110.90
57	BB	164	C	O4'-C1'-N1	6.36	113.29	108.20
57	BB	610	C	N1-C2-O2	-6.36	115.08	118.90
57	BB	653	U	C6-N1-C1'	-6.36	112.29	121.20
57	BB	836	G	N1-C6-O6	6.36	123.72	119.90
57	BB	982	C	C5-C6-N1	-6.36	117.82	121.00
57	BB	1641	A	C5-C6-N6	-6.36	118.61	123.70
57	BB	2361	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	2529	G	C8-N9-C4	6.36	108.94	106.40
57	BB	2631	G	N7-C8-N9	-6.36	109.92	113.10
57	BB	2657	A	C4-C5-N7	6.36	113.88	110.70
21	AA	646	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	1152	A	N1-C6-N6	6.36	122.42	118.60
21	AA	1403	C	C6-N1-C2	-6.36	117.75	120.30
21	AA	1496	C	C6-N1-C2	-6.36	117.75	120.30
57	BB	1340	U	C5'-C4'-O4'	6.36	116.73	109.10
57	BB	1377	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	2146	C	N1-C2-N3	-6.36	114.75	119.20
57	BB	2297	A	C6-N1-C2	6.36	122.42	118.60
21	AA	770	C	P-O5'-C5'	6.36	131.08	120.90
21	AA	1162	C	C2-N3-C4	6.36	123.08	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1518	A	C4-C5-C6	6.36	120.18	117.00
57	BB	218	A	C5-C6-N1	-6.36	114.52	117.70
57	BB	989	G	C5-C6-O6	-6.36	124.78	128.60
57	BB	1152	C	N3-C4-C5	-6.36	119.36	121.90
57	BB	1515	A	C4'-C3'-C2'	-6.36	96.24	102.60
57	BB	1581	G	N1-C6-O6	6.36	123.72	119.90
57	BB	1989	G	O4'-C4'-C3'	-6.36	97.64	104.00
21	AA	90	C	C2-N3-C4	-6.36	116.72	119.90
21	AA	226	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	369	G	N1-C2-N3	-6.36	120.08	123.90
21	AA	381	C	N3-C4-N4	6.36	122.45	118.00
21	AA	415	A	C2-N3-C4	6.36	113.78	110.60
21	AA	714	G	C8-N9-C4	-6.36	103.86	106.40
21	AA	732	C	N3-C4-C5	-6.36	119.36	121.90
21	AA	969	A	C5-C6-N1	-6.36	114.52	117.70
21	AA	970	C	C2-N3-C4	6.36	123.08	119.90
21	AA	1061	G	N1-C2-N3	-6.36	120.09	123.90
57	BB	326	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	894	U	C5'-C4'-C3'	-6.36	105.83	116.00
57	BB	979	A	C6-C5-N7	-6.36	127.85	132.30
57	BB	1225	G	C6-C5-N7	-6.36	126.59	130.40
57	BB	1317	G	N9-C4-C5	-6.36	102.86	105.40
57	BB	1592	C	C6-N1-C2	-6.36	117.76	120.30
21	AA	384	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	1525	G	C5-C6-N1	-6.36	108.32	111.50
57	BB	367	G	C5-C6-O6	-6.36	124.79	128.60
57	BB	375	G	N9-C4-C5	-6.36	102.86	105.40
57	BB	701	G	P-O3'-C3'	-6.36	112.07	119.70
57	BB	1245	G	C5-N7-C8	6.36	107.48	104.30
57	BB	2002	G	N3-C2-N2	6.36	124.35	119.90
57	BB	2166	U	N3-C2-O2	6.36	126.65	122.20
58	BA	34	A	C4-C5-N7	-6.36	107.52	110.70
29	BJ	16	TYR	CZ-CE2-CD2	-6.35	114.08	119.80
57	BB	907	G	C8-N9-C1'	6.35	135.26	127.00
57	BB	2362	C	C4'-C3'-C2'	-6.35	96.25	102.60
21	AA	209	U	P-O5'-C5'	6.35	131.06	120.90
21	AA	573	A	O4'-C1'-N9	6.35	113.28	108.20
21	AA	749	A	O4'-C1'-N9	6.35	113.28	108.20
21	AA	976	G	C4-C5-C6	6.35	122.61	118.80
57	BB	721	A	N1-C2-N3	-6.35	126.12	129.30
57	BB	874	G	OP2-P-O3'	6.35	119.17	105.20
57	BB	1034	G	C6-C5-N7	-6.35	126.59	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1943	U	N3-C4-C5	-6.35	110.79	114.60
57	BB	2011	U	C6-N1-C2	-6.35	117.19	121.00
57	BB	2209	G	C4-C5-C6	6.35	122.61	118.80
57	BB	2433	A	N1-C6-N6	6.35	122.41	118.60
57	BB	2819	G	C5-C6-O6	-6.35	124.79	128.60
58	BA	104	A	N1-C6-N6	6.35	122.41	118.60
58	BA	112	G	C5-C6-N1	6.35	114.68	111.50
1	AJ	49	PHE	CB-CG-CD2	-6.35	116.35	120.80
21	AA	222	C	C6-N1-C2	-6.35	117.76	120.30
21	AA	1176	A	C4-C5-C6	6.35	120.17	117.00
21	AA	1400	C	C2-N3-C4	6.35	123.08	119.90
57	BB	479	A	C6-C5-N7	-6.35	127.85	132.30
57	BB	1960	A	N7-C8-N9	6.35	116.97	113.80
57	BB	2278	A	N9-C1'-C2'	-6.35	105.01	112.00
21	AA	389	A	C8-N9-C4	-6.35	103.26	105.80
21	AA	906	A	N1-C6-N6	6.35	122.41	118.60
23	AW	9	A	N1-C6-N6	6.35	122.41	118.60
34	BO	89	ASP	CB-CG-OD2	6.35	124.02	118.30
57	BB	85	G	C4-N9-C1'	-6.35	118.25	126.50
57	BB	453	A	C4'-C3'-C2'	-6.35	96.25	102.60
57	BB	459	U	P-O5'-C5'	6.35	131.06	120.90
57	BB	616	A	C4-C5-C6	6.35	120.17	117.00
57	BB	1790	C	N3-C4-N4	6.35	122.44	118.00
57	BB	1794	A	C8-N9-C4	6.35	108.34	105.80
57	BB	2015	A	N1-C2-N3	-6.35	126.13	129.30
57	BB	2582	G	C5-C6-O6	-6.35	124.79	128.60
5	AN	100	TRP	CH2-CZ2-CE2	6.35	123.75	117.40
21	AA	82	G	C5-C6-N1	-6.35	108.33	111.50
21	AA	416	G	C5-C6-O6	-6.35	124.79	128.60
21	AA	739	C	O4'-C1'-N1	6.35	113.28	108.20
21	AA	866	C	N3-C4-C5	-6.35	119.36	121.90
21	AA	1208	C	O4'-C1'-N1	6.35	113.28	108.20
21	AA	1237	C	P-O3'-C3'	6.35	127.32	119.70
21	AA	1279	G	O4'-C1'-N9	6.35	113.28	108.20
57	BB	632	A	C5-C6-N6	-6.35	118.62	123.70
57	BB	928	A	N1-C2-N3	6.35	132.47	129.30
57	BB	1079	C	N3-C4-N4	6.35	122.44	118.00
57	BB	1778	U	C2-N1-C1'	-6.35	110.08	117.70
57	BB	1941	C	O4'-C1'-N1	6.35	113.28	108.20
57	BB	2631	G	C6-C5-N7	-6.35	126.59	130.40
57	BB	2869	G	C6-N1-C2	6.35	128.91	125.10
21	AA	210	C	C6-N1-C1'	-6.35	113.19	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	862	C	C2-N3-C4	6.35	123.07	119.90
57	BB	989	G	C2-N3-C4	6.35	115.07	111.90
57	BB	1040	A	C5-C6-N1	-6.35	114.53	117.70
21	AA	304	U	C5-C4-O4	-6.34	122.09	125.90
21	AA	467	U	P-O3'-C3'	-6.34	112.09	119.70
21	AA	553	A	C6-N1-C2	-6.34	114.79	118.60
21	AA	780	A	C2-N3-C4	-6.34	107.43	110.60
21	AA	908	A	C5-C6-N6	-6.34	118.62	123.70
21	AA	1101	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	413	C	N1-C2-O2	6.34	122.71	118.90
57	BB	635	C	C4-C5-C6	6.34	120.57	117.40
57	BB	663	G	O4'-C1'-N9	6.34	113.28	108.20
57	BB	731	C	C2-N1-C1'	6.34	125.78	118.80
57	BB	808	G	C6-C5-N7	-6.34	126.59	130.40
57	BB	2081	U	C5-C6-N1	6.34	125.87	122.70
57	BB	2264	C	O4'-C4'-C3'	-6.34	97.66	104.00
21	AA	1293	C	C1'-O4'-C4'	-6.34	104.83	109.90
22	AY	9	A	C5-N7-C8	6.34	107.07	103.90
57	BB	618	G	C4-C5-C6	6.34	122.61	118.80
57	BB	1571	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	1642	G	N1-C6-O6	6.34	123.71	119.90
57	BB	2023	C	C2-N3-C4	6.34	123.07	119.90
57	BB	2896	C	C5-C6-N1	6.34	124.17	121.00
21	AA	727	G	N9-C4-C5	-6.34	102.86	105.40
21	AA	1079	G	N1-C6-O6	6.34	123.70	119.90
21	AA	1155	A	C5-C6-N6	-6.34	118.63	123.70
23	AW	27	G	N3-C2-N2	6.34	124.34	119.90
57	BB	2708	G	C4-C5-C6	6.34	122.61	118.80
57	BB	2854	G	C6-C5-N7	-6.34	126.60	130.40
21	AA	206	C	C6-N1-C2	-6.34	117.76	120.30
21	AA	879	C	N3-C4-N4	6.34	122.44	118.00
21	AA	903	G	C5-C6-O6	-6.34	124.80	128.60
21	AA	1102	A	N9-C4-C5	6.34	108.34	105.80
57	BB	1564	C	C3'-C2'-C1'	6.34	106.57	101.50
57	BB	1668	A	C6-C5-N7	-6.34	127.86	132.30
57	BB	2581	G	N9-C4-C5	-6.34	102.86	105.40
57	BB	348	A	P-O3'-C3'	6.34	127.31	119.70
57	BB	699	A	C4-C5-C6	6.34	120.17	117.00
57	BB	730	A	P-O3'-C3'	-6.34	112.09	119.70
57	BB	820	A	C2-N3-C4	6.34	113.77	110.60
57	BB	953	G	C5-C6-O6	-6.34	124.80	128.60
57	BB	1509	A	O3'-P-O5'	6.34	116.04	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1651	G	C2-N3-C4	6.34	115.07	111.90
57	BB	1679	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	1800	C	C2-N3-C4	6.34	123.07	119.90
57	BB	2418	A	C8-N9-C4	6.34	108.33	105.80
58	BA	29	A	C4-C5-C6	6.34	120.17	117.00
21	AA	274	A	N1-C6-N6	6.34	122.40	118.60
21	AA	601	G	O4'-C1'-N9	6.34	113.27	108.20
21	AA	792	A	C4'-C3'-C2'	-6.34	96.26	102.60
21	AA	906	A	C4'-C3'-C2'	-6.34	96.26	102.60
21	AA	1008	U	O4'-C1'-N1	6.34	113.27	108.20
21	AA	1275	A	O4'-C1'-N9	6.34	113.27	108.20
21	AA	1444	U	P-O5'-C5'	6.34	131.04	120.90
26	AV	28	C	P-O3'-C3'	6.34	127.30	119.70
57	BB	49	A	C5-N7-C8	6.34	107.07	103.90
57	BB	466	A	C4-C5-N7	-6.34	107.53	110.70
57	BB	974	G	C5-N7-C8	6.34	107.47	104.30
57	BB	1250	G	C1'-O4'-C4'	6.34	114.97	109.90
57	BB	1673	G	O4'-C1'-N9	6.34	113.27	108.20
57	BB	1684	G	C4-C5-N7	-6.34	108.27	110.80
57	BB	2479	U	P-O5'-C5'	6.34	131.04	120.90
20	AI	5	TYR	CB-CG-CD1	6.33	124.80	121.00
21	AA	629	A	C4-C5-N7	-6.33	107.53	110.70
57	BB	528	A	C5-C6-N1	-6.33	114.53	117.70
57	BB	1138	G	N1-C6-O6	6.33	123.70	119.90
57	BB	1401	G	N3-C2-N2	6.33	124.33	119.90
57	BB	1521	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	1654	A	N1-C6-N6	-6.33	114.80	118.60
58	BA	36	C	C1'-O4'-C4'	6.33	114.97	109.90
21	AA	284	C	P-O5'-C5'	6.33	131.03	120.90
21	AA	676	A	N9-C4-C5	6.33	108.33	105.80
21	AA	981	U	N1-C2-N3	-6.33	111.10	114.90
21	AA	991	U	O4'-C1'-N1	6.33	113.27	108.20
57	BB	10	A	C4-C5-C6	6.33	120.17	117.00
57	BB	71	A	C5-C6-N6	-6.33	118.63	123.70
57	BB	611	C	O4'-C1'-N1	6.33	113.27	108.20
57	BB	648	G	C4-C5-N7	-6.33	108.27	110.80
57	BB	808	G	C8-N9-C4	-6.33	103.87	106.40
57	BB	845	A	C5-C6-N6	-6.33	118.63	123.70
57	BB	900	A	O4'-C4'-C3'	-6.33	97.67	104.00
57	BB	1136	G	O4'-C1'-N9	6.33	113.27	108.20
57	BB	1728	C	P-O3'-C3'	-6.33	112.10	119.70
57	BB	1774	C	N1-C2-O2	-6.33	115.10	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2121	G	C5-N7-C8	6.33	107.47	104.30
21	AA	158	G	N3-C4-N9	-6.33	122.20	126.00
21	AA	367	U	C2-N1-C1'	6.33	125.30	117.70
21	AA	825	A	N1-C2-N3	-6.33	126.13	129.30
21	AA	991	U	C6-N1-C2	-6.33	117.20	121.00
21	AA	1099	G	C4-C5-N7	6.33	113.33	110.80
22	AY	46	G	C6-C5-N7	-6.33	126.60	130.40
24	AX	20	U	N3-C4-C5	6.33	118.40	114.60
57	BB	166	U	C6-N1-C2	-6.33	117.20	121.00
57	BB	212	G	N7-C8-N9	-6.33	109.94	113.10
57	BB	1120	G	N7-C8-N9	6.33	116.27	113.10
57	BB	1648	U	O4'-C1'-N1	6.33	113.27	108.20
57	BB	2450	A	C6-C5-N7	-6.33	127.87	132.30
57	BB	2588	G	N1-C6-O6	6.33	123.70	119.90
21	AA	473	U	P-O5'-C5'	-6.33	110.77	120.90
21	AA	902	G	O4'-C1'-N9	6.33	113.26	108.20
57	BB	664	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	1306	C	P-O5'-C5'	-6.33	110.77	120.90
57	BB	2109	U	N3-C4-C5	-6.33	110.80	114.60
57	BB	2269	G	N1-C2-N3	-6.33	120.10	123.90
21	AA	259	G	C5-C6-N1	-6.33	108.33	111.50
21	AA	514	C	N3-C4-N4	6.33	122.43	118.00
21	AA	855	U	C4'-C3'-C2'	6.33	108.93	102.60
51	B4	33	HIS	CB-CA-C	-6.33	97.75	110.40
57	BB	203	A	P-O3'-C3'	6.33	127.29	119.70
57	BB	468	G	C4-C5-N7	6.33	113.33	110.80
57	BB	1134	A	C4-C5-C6	6.33	120.16	117.00
57	BB	1434	A	N7-C8-N9	-6.33	110.64	113.80
57	BB	1474	U	O4'-C1'-N1	6.33	113.26	108.20
57	BB	1678	A	O4'-C1'-N9	6.33	113.26	108.20
57	BB	2216	G	C5-C6-O6	-6.33	124.80	128.60
21	AA	159	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	308	G	C2-N3-C4	6.33	115.06	111.90
57	BB	1364	G	C5-N7-C8	-6.33	101.14	104.30
57	BB	1439	A	C6-N1-C2	-6.33	114.80	118.60
57	BB	1677	A	C6-C5-N7	-6.33	127.87	132.30
57	BB	1914	C	C2-N3-C4	-6.33	116.74	119.90
57	BB	2872	A	C8-N9-C4	-6.33	103.27	105.80
21	AA	102	G	N3-C4-N9	-6.33	122.20	126.00
21	AA	126	G	N3-C2-N2	6.33	124.33	119.90
21	AA	237	G	C4-N9-C1'	-6.33	118.28	126.50
21	AA	511	C	C6-N1-C2	-6.33	117.77	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	760	G	C5-C6-N1	-6.33	108.34	111.50
21	AA	803	G	N1-C2-N3	-6.33	120.11	123.90
21	AA	891	U	N3-C4-C5	-6.33	110.81	114.60
21	AA	959	A	C5-C6-N1	-6.33	114.54	117.70
21	AA	975	A	O4'-C1'-N9	6.33	113.26	108.20
21	AA	1351	U	N3-C4-O4	6.33	123.83	119.40
38	BS	1	MET	CG-SD-CE	-6.33	90.08	100.20
45	BC	102	TYR	CD1-CG-CD2	-6.33	110.94	117.90
57	BB	376	G	C5-C6-O6	-6.33	124.80	128.60
57	BB	380	G	C4'-C3'-C2'	-6.33	96.28	102.60
57	BB	456	C	N1-C2-N3	-6.33	114.77	119.20
57	BB	516	C	C5-C6-N1	6.33	124.16	121.00
57	BB	1388	G	N3-C4-C5	-6.33	125.44	128.60
57	BB	1840	G	C5-C6-N1	-6.33	108.34	111.50
57	BB	2235	G	C4-C5-C6	6.33	122.60	118.80
58	BA	95	U	N1-C2-O2	6.33	127.23	122.80
58	BA	108	A	C5-C6-N1	-6.33	114.54	117.70
21	AA	251	G	C4-N9-C1'	6.32	134.72	126.50
21	AA	459	A	C5-N7-C8	6.32	107.06	103.90
21	AA	547	A	C4-C5-C6	6.32	120.16	117.00
21	AA	1278	G	N7-C8-N9	-6.32	109.94	113.10
21	AA	1436	U	N1-C2-O2	-6.32	118.37	122.80
57	BB	1168	G	N9-C4-C5	-6.32	102.87	105.40
57	BB	1311	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	1481	U	C5-C6-N1	6.32	125.86	122.70
57	BB	2828	G	C6-N1-C2	6.32	128.89	125.10
57	BB	2834	G	N3-C2-N2	6.32	124.33	119.90
58	BA	51	G	C4-C5-N7	6.32	113.33	110.80
57	BB	76	C	C5-C4-N4	-6.32	115.77	120.20
57	BB	665	U	N3-C4-O4	6.32	123.83	119.40
21	AA	436	C	P-O3'-C3'	-6.32	112.12	119.70
21	AA	585	G	N1-C6-O6	6.32	123.69	119.90
26	AV	66	C	C5-C4-N4	-6.32	115.78	120.20
57	BB	102	U	C5-C6-N1	6.32	125.86	122.70
57	BB	249	C	C2-N1-C1'	6.32	125.75	118.80
57	BB	292	U	C4-C5-C6	-6.32	115.91	119.70
57	BB	379	G	N1-C2-N3	-6.32	120.11	123.90
57	BB	504	A	C5-N7-C8	6.32	107.06	103.90
57	BB	961	C	O5'-C5'-C4'	-6.32	99.69	111.70
57	BB	963	U	O4'-C1'-N1	6.32	113.26	108.20
21	AA	377	G	N1-C6-O6	-6.32	116.11	119.90
21	AA	394	G	C2-N3-C4	6.32	115.06	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1061	G	O4'-C1'-N9	6.32	113.25	108.20
21	AA	1342	C	C5-C4-N4	-6.32	115.78	120.20
21	AA	1452	C	O4'-C1'-N1	6.32	113.25	108.20
57	BB	1928	A	N3-C4-C5	-6.32	122.38	126.80
57	BB	2317	A	C6-C5-N7	-6.32	127.88	132.30
21	AA	128	G	C5-C6-N1	-6.32	108.34	111.50
21	AA	676	A	O4'-C1'-N9	6.32	113.25	108.20
21	AA	724	G	C2-N3-C4	6.32	115.06	111.90
21	AA	981	U	O4'-C1'-N1	6.32	113.25	108.20
21	AA	1233	G	N1-C6-O6	6.32	123.69	119.90
21	AA	1514	G	C4-C5-N7	-6.32	108.27	110.80
26	AV	29	G	N3-C4-N9	-6.32	122.21	126.00
26	AV	65	C	C5-C4-N4	-6.32	115.78	120.20
57	BB	931	U	N3-C2-O2	6.32	126.62	122.20
57	BB	1214	A	C2-N3-C4	6.32	113.76	110.60
57	BB	1367	A	C6-C5-N7	-6.32	127.88	132.30
57	BB	2397	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	2484	G	C4-C5-C6	6.32	122.59	118.80
57	BB	2569	G	C8-N9-C4	6.32	108.93	106.40
57	BB	2776	A	N1-C2-N3	6.32	132.46	129.30
57	BB	2823	A	C4'-C3'-C2'	-6.32	96.28	102.60
57	BB	2824	C	N1-C2-N3	-6.32	114.78	119.20
21	AA	999	C	O4'-C1'-N1	6.32	113.25	108.20
21	AA	1119	C	C3'-C2'-C1'	-6.32	96.45	101.50
57	BB	558	U	N3-C4-C5	-6.32	110.81	114.60
57	BB	881	G	N9-C1'-C2'	-6.32	105.05	112.00
57	BB	1029	A	C6-C5-N7	-6.32	127.88	132.30
57	BB	1220	G	C8-N9-C1'	6.32	135.21	127.00
57	BB	1594	U	C5-C6-N1	6.32	125.86	122.70
57	BB	2168	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	2217	G	C4-N9-C1'	-6.32	118.29	126.50
57	BB	2297	A	C4-C5-C6	6.32	120.16	117.00
57	BB	2415	G	N1-C2-N3	-6.32	120.11	123.90
58	BA	9	G	O4'-C1'-N9	6.32	113.25	108.20
58	BA	81	G	C6-C5-N7	-6.32	126.61	130.40
21	AA	58	C	C6-N1-C2	-6.31	117.77	120.30
26	AV	10	G	C4-C5-N7	-6.31	108.28	110.80
57	BB	858	G	N1-C2-N3	-6.31	120.11	123.90
21	AA	605	U	N1-C2-O2	-6.31	118.38	122.80
21	AA	1190	G	C8-N9-C1'	-6.31	118.79	127.00
21	AA	1394	A	O4'-C1'-C2'	-6.31	99.49	105.80
26	AV	58	A	C5-C6-N6	-6.31	118.65	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	820	A	O4'-C1'-N9	6.31	113.25	108.20
57	BB	1299	G	N1-C2-N3	-6.31	120.11	123.90
57	BB	1646	C	P-O5'-C5'	6.31	131.00	120.90
57	BB	1982	U	C5-C4-O4	-6.31	122.11	125.90
57	BB	2459	A	C5-N7-C8	-6.31	100.74	103.90
21	AA	471	U	N3-C2-O2	6.31	126.62	122.20
21	AA	831	A	P-O3'-C3'	-6.31	112.13	119.70
21	AA	974	A	O4'-C1'-N9	6.31	113.25	108.20
23	AW	69	G	C6-C5-N7	-6.31	126.61	130.40
26	AV	21	A	O3'-P-O5'	-6.31	92.01	104.00
45	BC	102	TYR	CB-CG-CD2	6.31	124.79	121.00
57	BB	134	G	N7-C8-N9	6.31	116.25	113.10
57	BB	259	G	C6-N1-C2	6.31	128.89	125.10
57	BB	286	U	N3-C4-C5	6.31	118.39	114.60
57	BB	1423	G	C6-C5-N7	-6.31	126.61	130.40
57	BB	1475	G	C5-N7-C8	-6.31	101.14	104.30
57	BB	1555	G	C5-N7-C8	6.31	107.46	104.30
57	BB	2335	A	P-O3'-C3'	6.31	127.27	119.70
57	BB	2368	C	C4'-C3'-C2'	-6.31	96.29	102.60
57	BB	2859	G	C5'-C4'-O4'	6.31	116.67	109.10
21	AA	101	A	C5-C6-N6	-6.31	118.65	123.70
21	AA	545	C	C2-N3-C4	-6.31	116.75	119.90
21	AA	1385	G	N1-C2-N3	-6.31	120.11	123.90
25	AZ	195	LEU	CB-CG-CD2	6.31	121.72	111.00
26	AV	12	G	C4'-C3'-C2'	-6.31	96.29	102.60
57	BB	28	A	C4-C5-C6	6.31	120.16	117.00
57	BB	939	G	N3-C2-N2	6.31	124.32	119.90
57	BB	1205	A	C5-C6-N1	-6.31	114.55	117.70
57	BB	1936	A	C4-C5-N7	-6.31	107.55	110.70
57	BB	2608	G	C5-N7-C8	6.31	107.45	104.30
57	BB	2813	A	C4'-C3'-C2'	-6.31	96.29	102.60
58	BA	24	G	C6-N1-C2	-6.31	121.31	125.10
58	BA	39	A	O4'-C1'-N9	6.31	113.25	108.20
58	BA	99	A	N9-C4-C5	-6.31	103.28	105.80
10	AS	77	ARG	NE-CZ-NH1	6.31	123.45	120.30
21	AA	582	C	C5-C4-N4	-6.31	115.78	120.20
21	AA	893	C	P-O3'-C3'	-6.31	112.13	119.70
57	BB	71	A	C4-C5-C6	6.31	120.15	117.00
57	BB	600	G	C5-C6-O6	-6.31	124.82	128.60
57	BB	692	C	N3-C4-N4	6.31	122.42	118.00
57	BB	809	G	N1-C2-N3	-6.31	120.12	123.90
21	AA	1450	U	C5-C4-O4	-6.31	122.12	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	20	G	N3-C4-N9	6.31	129.78	126.00
57	BB	1499	C	C5-C4-N4	-6.31	115.79	120.20
57	BB	1628	G	O4'-C1'-N9	6.31	113.25	108.20
57	BB	1644	C	O4'-C1'-N1	6.31	113.25	108.20
57	BB	1701	A	C6-N1-C2	6.31	122.38	118.60
57	BB	1765	U	C4-C5-C6	6.31	123.48	119.70
57	BB	2155	U	N1-C2-O2	-6.31	118.39	122.80
57	BB	2656	U	C5-C6-N1	6.31	125.85	122.70
57	BB	2842	G	C5-C6-N1	-6.31	108.35	111.50
58	BA	33	G	C8-N9-C4	6.31	108.92	106.40
21	AA	82	G	N7-C8-N9	6.30	116.25	113.10
21	AA	765	G	C8-N9-C4	-6.30	103.88	106.40
21	AA	771	G	C2-N3-C4	6.30	115.05	111.90
21	AA	886	G	N1-C6-O6	6.30	123.68	119.90
56	BH	37	VAL	CA-CB-CG2	-6.30	101.44	110.90
57	BB	10	A	C6-C5-N7	-6.30	127.89	132.30
57	BB	115	C	C5-C6-N1	6.30	124.15	121.00
57	BB	1127	A	C5-N7-C8	6.30	107.05	103.90
57	BB	1740	G	N3-C2-N2	6.30	124.31	119.90
57	BB	2594	C	C3'-C2'-C1'	-6.30	96.46	101.50
57	BB	155	A	N3-C4-C5	-6.30	122.39	126.80
57	BB	2067	G	P-O3'-C3'	6.30	127.26	119.70
21	AA	759	A	C8-N9-C4	-6.30	103.28	105.80
21	AA	1496	C	C1'-O4'-C4'	-6.30	104.86	109.90
21	AA	1526	G	C8-N9-C4	6.30	108.92	106.40
53	BE	80	SER	N-CA-CB	6.30	119.95	110.50
57	BB	207	A	C5-N7-C8	6.30	107.05	103.90
57	BB	427	U	C4-C5-C6	-6.30	115.92	119.70
57	BB	926	G	N3-C2-N2	6.30	124.31	119.90
57	BB	1000	A	C5-C6-N1	-6.30	114.55	117.70
57	BB	2015	A	N9-C4-C5	6.30	108.32	105.80
57	BB	2109	U	C5'-C4'-O4'	6.30	116.66	109.10
57	BB	2665	A	C4'-C3'-C2'	-6.30	96.30	102.60
21	AA	743	A	N1-C6-N6	6.30	122.38	118.60
21	AA	757	U	O4'-C1'-N1	6.30	113.24	108.20
21	AA	1303	C	C6-N1-C2	-6.30	117.78	120.30
21	AA	1333	A	N9-C4-C5	6.30	108.32	105.80
57	BB	808	G	C4-C5-C6	6.30	122.58	118.80
57	BB	864	G	C8-N9-C4	-6.30	103.88	106.40
57	BB	1235	G	C5-C6-N1	-6.30	108.35	111.50
57	BB	1430	G	C6-N1-C2	6.30	128.88	125.10
57	BB	1918	A	N7-C8-N9	6.30	116.95	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2666	C	C6-N1-C1'	-6.30	113.24	120.80
57	BB	2794	C	C5-C6-N1	6.30	124.15	121.00
15	AD	164	ARG	NE-CZ-NH1	6.30	123.45	120.30
21	AA	1364	U	N3-C4-C5	-6.30	110.82	114.60
57	BB	1428	C	N1-C2-O2	-6.30	115.12	118.90
57	BB	1785	A	C8-N9-C4	-6.30	103.28	105.80
57	BB	2709	G	N1-C2-N3	-6.30	120.12	123.90
57	BB	2822	G	C2-N3-C4	6.30	115.05	111.90
21	AA	436	C	N3-C4-C5	-6.30	119.38	121.90
21	AA	558	G	C4-C5-C6	6.30	122.58	118.80
21	AA	919	A	N3-C4-C5	-6.30	122.39	126.80
21	AA	1527	U	N3-C4-C5	-6.30	110.82	114.60
57	BB	152	A	C8-N9-C4	-6.30	103.28	105.80
57	BB	535	G	N9-C4-C5	-6.30	102.88	105.40
57	BB	2061	G	N1-C2-N2	-6.30	110.53	116.20
21	AA	49	U	C4'-C3'-C2'	-6.29	96.31	102.60
21	AA	400	C	N3-C4-N4	6.29	122.41	118.00
21	AA	1190	G	C3'-C2'-C1'	-6.29	96.46	101.50
23	AW	37	A	O4'-C1'-N9	6.29	113.24	108.20
57	BB	452	G	C5-N7-C8	6.29	107.45	104.30
57	BB	1151	A	C4-C5-N7	-6.29	107.55	110.70
57	BB	2034	U	N3-C4-C5	-6.29	110.82	114.60
57	BB	2341	G	C5-C6-N1	-6.29	108.35	111.50
57	BB	2377	A	C8-N9-C4	-6.29	103.28	105.80
21	AA	310	G	N7-C8-N9	6.29	116.25	113.10
56	BH	115	VAL	C-N-CA	6.29	137.43	121.70
57	BB	235	U	N3-C2-O2	-6.29	117.80	122.20
57	BB	551	G	C4-C5-C6	6.29	122.58	118.80
57	BB	978	G	C5'-C4'-C3'	6.29	126.07	116.00
57	BB	1150	C	N3-C4-N4	6.29	122.41	118.00
57	BB	1430	G	C8-N9-C4	-6.29	103.88	106.40
57	BB	2092	U	N3-C4-O4	6.29	123.81	119.40
57	BB	2615	U	C5-C6-N1	6.29	125.85	122.70
21	AA	74	A	N9-C4-C5	-6.29	103.28	105.80
21	AA	342	C	O4'-C1'-N1	6.29	113.23	108.20
21	AA	959	A	C6-C5-N7	-6.29	127.90	132.30
21	AA	1290	G	C5-C6-O6	-6.29	124.83	128.60
49	B2	14	ARG	NE-CZ-NH1	-6.29	117.16	120.30
57	BB	754	U	C4'-C3'-C2'	-6.29	96.31	102.60
57	BB	1001	A	C4-C5-C6	6.29	120.15	117.00
57	BB	1392	A	C2-N3-C4	-6.29	107.45	110.60
57	BB	1964	G	C6-C5-N7	-6.29	126.62	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2369	A	C4'-C3'-C2'	-6.29	96.31	102.60
57	BB	2612	C	O4'-C1'-N1	6.29	113.23	108.20
57	BB	2199	A	C6-C5-N7	-6.29	127.90	132.30
57	BB	2293	G	C8-N9-C4	-6.29	103.88	106.40
21	AA	423	G	N3-C4-N9	-6.29	122.23	126.00
21	AA	435	A	C8-N9-C4	-6.29	103.28	105.80
21	AA	872	A	C4-C5-N7	-6.29	107.56	110.70
21	AA	873	A	C5-C6-N1	-6.29	114.56	117.70
21	AA	1273	C	C4-C5-C6	-6.29	114.25	117.40
57	BB	111	A	C2-N3-C4	-6.29	107.46	110.60
57	BB	537	G	N3-C4-N9	-6.29	122.23	126.00
57	BB	674	G	C4-C5-N7	-6.29	108.28	110.80
57	BB	1009	A	N1-C2-N3	6.29	132.44	129.30
57	BB	1261	C	N1-C2-N3	-6.29	114.80	119.20
57	BB	1314	C	N3-C2-O2	6.29	126.30	121.90
57	BB	1541	C	C4-C5-C6	6.29	120.54	117.40
57	BB	1776	G	N1-C2-N2	-6.29	110.54	116.20
57	BB	2817	U	N3-C4-O4	6.29	123.80	119.40
57	BB	2876	G	C5-N7-C8	-6.29	101.16	104.30
21	AA	1186	G	N1-C2-N3	-6.29	120.13	123.90
57	BB	479	A	C4-C5-C6	6.29	120.14	117.00
57	BB	606	U	N3-C4-C5	-6.29	110.83	114.60
57	BB	1281	G	C6-C5-N7	-6.29	126.63	130.40
57	BB	1537	G	N3-C2-N2	6.29	124.30	119.90
57	BB	1926	U	C5-C6-N1	6.29	125.84	122.70
57	BB	2704	C	N3-C4-C5	-6.29	119.39	121.90
23	AW	73	A	C4-C5-C6	6.29	120.14	117.00
24	AX	16	A	C5-C6-N1	-6.29	114.56	117.70
51	B4	20	ASP	CB-CG-OD2	6.29	123.96	118.30
57	BB	247	G	C6-C5-N7	-6.29	126.63	130.40
57	BB	729	G	C5-N7-C8	6.29	107.44	104.30
57	BB	1855	U	N1-C2-N3	-6.29	111.13	114.90
57	BB	2204	G	C5-C6-N1	-6.29	108.36	111.50
57	BB	2292	U	N1-C2-O2	-6.29	118.40	122.80
57	BB	2820	A	P-O3'-C3'	6.29	127.24	119.70
57	BB	2821	A	C5-C6-N6	-6.29	118.67	123.70
58	BA	19	C	N3-C4-N4	6.29	122.40	118.00
21	AA	393	A	C8-N9-C4	-6.28	103.29	105.80
21	AA	823	C	N3-C4-N4	6.28	122.40	118.00
21	AA	974	A	C5'-C4'-C3'	-6.28	105.94	116.00
21	AA	1441	A	O4'-C1'-N9	6.28	113.23	108.20
21	AA	1461	G	C8-N9-C4	-6.28	103.89	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1507	A	C8-N9-C4	-6.28	103.29	105.80
57	BB	403	U	N3-C2-O2	-6.28	117.80	122.20
57	BB	420	C	C4'-C3'-C2'	-6.28	96.32	102.60
57	BB	759	G	P-O3'-C3'	6.28	127.24	119.70
57	BB	818	G	C3'-C2'-C1'	-6.28	96.47	101.50
57	BB	1251	C	N3-C4-N4	6.28	122.40	118.00
57	BB	1828	G	N3-C4-N9	-6.28	122.23	126.00
57	BB	1890	A	N3-C4-N9	-6.28	122.37	127.40
57	BB	2047	C	C6-N1-C1'	-6.28	113.26	120.80
57	BB	2391	G	N9-C4-C5	6.28	107.91	105.40
57	BB	2643	G	O4'-C1'-N9	6.28	113.23	108.20
58	BA	85	G	C8-N9-C4	-6.28	103.89	106.40
21	AA	604	G	N3-C2-N2	-6.28	115.50	119.90
57	BB	1074	G	N3-C2-N2	6.28	124.30	119.90
57	BB	1270	C	N3-C4-N4	6.28	122.40	118.00
57	BB	1671	U	C4-C5-C6	6.28	123.47	119.70
57	BB	2126	A	C5-N7-C8	6.28	107.04	103.90
21	AA	110	C	N3-C4-C5	-6.28	119.39	121.90
21	AA	1177	G	C6-C5-N7	-6.28	126.63	130.40
21	AA	1284	C	O4'-C1'-N1	6.28	113.22	108.20
21	AA	1288	A	C4-C5-C6	6.28	120.14	117.00
57	BB	223	A	O4'-C1'-N9	6.28	113.22	108.20
57	BB	487	C	O4'-C1'-N1	6.28	113.22	108.20
57	BB	622	G	C5-C6-O6	-6.28	124.83	128.60
57	BB	1023	U	N3-C4-C5	-6.28	110.83	114.60
57	BB	1037	G	C8-N9-C4	-6.28	103.89	106.40
57	BB	1414	C	N1-C2-O2	-6.28	115.13	118.90
57	BB	1432	G	N7-C8-N9	6.28	116.24	113.10
57	BB	1497	U	N1-C2-O2	-6.28	118.40	122.80
57	BB	1531	C	C4-C5-C6	-6.28	114.26	117.40
57	BB	2115	G	N3-C2-N2	6.28	124.30	119.90
57	BB	2139	U	C2-N3-C4	-6.28	123.23	127.00
57	BB	2276	G	C5-N7-C8	6.28	107.44	104.30
57	BB	2643	G	N1-C2-N3	-6.28	120.13	123.90
57	BB	2871	U	O4'-C4'-C3'	-6.28	97.72	104.00
58	BA	52	A	O4'-C1'-N9	6.28	113.22	108.20
21	AA	1144	G	P-O3'-C3'	6.28	127.23	119.70
21	AA	1206	G	N3-C2-N2	6.28	124.30	119.90
57	BB	820	A	C6-N1-C2	6.28	122.37	118.60
57	BB	1445	G	C6-C5-N7	-6.28	126.63	130.40
57	BB	1791	A	C4'-C3'-C2'	-6.28	96.32	102.60
57	BB	2048	G	N3-C4-N9	-6.28	122.23	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	821	G	C4-C5-N7	6.28	113.31	110.80
21	AA	1245	C	N3-C4-N4	6.28	122.39	118.00
23	AW	11	C	C4-C5-C6	6.28	120.54	117.40
57	BB	94	A	C4-C5-C6	6.28	120.14	117.00
57	BB	392	U	N3-C4-C5	-6.28	110.83	114.60
57	BB	625	G	N9-C1'-C2'	-6.28	105.10	112.00
57	BB	1012	U	C4-C5-C6	-6.28	115.93	119.70
57	BB	1530	G	N9-C4-C5	-6.28	102.89	105.40
57	BB	1603	A	C5-C6-N6	-6.28	118.68	123.70
57	BB	1795	C	O4'-C1'-N1	6.28	113.22	108.20
57	BB	1849	G	N7-C8-N9	6.28	116.24	113.10
57	BB	1883	U	C6-N1-C2	6.28	124.77	121.00
21	AA	582	C	C2-N3-C4	6.28	123.04	119.90
21	AA	616	G	C4-C5-C6	6.28	122.57	118.80
21	AA	1363	A	N9-C1'-C2'	6.28	122.16	114.00
22	AY	58	A	N3-C4-N9	6.28	132.42	127.40
22	AY	65	G	P-O5'-C5'	-6.28	110.86	120.90
26	AV	64	G	C8-N9-C4	6.28	108.91	106.40
57	BB	198	C	C5-C4-N4	-6.28	115.81	120.20
57	BB	413	C	C5-C6-N1	-6.28	117.86	121.00
57	BB	956	G	N1-C2-N3	-6.28	120.13	123.90
57	BB	2727	A	C5-N7-C8	6.28	107.04	103.90
57	BB	2769	U	N3-C4-O4	6.28	123.79	119.40
57	BB	2810	A	P-O5'-C5'	6.28	130.94	120.90
21	AA	779	C	N3-C4-N4	6.27	122.39	118.00
21	AA	982	U	O4'-C1'-N1	6.27	113.22	108.20
21	AA	985	C	C2-N3-C4	6.27	123.04	119.90
21	AA	1360	A	C4'-C3'-C2'	-6.27	96.33	102.60
21	AA	1457	G	N1-C2-N3	-6.27	120.14	123.90
26	AV	72	A	C4-C5-C6	6.27	120.14	117.00
57	BB	249	C	C6-N1-C1'	-6.27	113.27	120.80
57	BB	559	G	N3-C2-N2	6.27	124.29	119.90
57	BB	1536	C	C4-C5-C6	6.27	120.54	117.40
21	AA	122	G	C6-C5-N7	-6.27	126.64	130.40
21	AA	262	A	C6-N1-C2	6.27	122.36	118.60
21	AA	558	G	O4'-C1'-N9	6.27	113.22	108.20
57	BB	569	U	O4'-C1'-N1	6.27	113.22	108.20
57	BB	1594	U	C2-N3-C4	-6.27	123.24	127.00
57	BB	1679	A	C4-C5-N7	-6.27	107.56	110.70
57	BB	2900	A	C6-C5-N7	-6.27	127.91	132.30
57	BB	350	G	N9-C4-C5	-6.27	102.89	105.40
57	BB	944	C	N3-C4-N4	6.27	122.39	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2082	A	C4-C5-C6	6.27	120.14	117.00
57	BB	2144	G	C8-N9-C1'	-6.27	118.85	127.00
57	BB	2317	A	C4-C5-C6	6.27	120.14	117.00
13	AB	17	HIS	N-CA-CB	6.27	121.89	110.60
21	AA	253	A	O4'-C1'-N9	6.27	113.22	108.20
57	BB	549	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	818	G	N7-C8-N9	6.27	116.23	113.10
57	BB	1050	A	C5-C6-N1	-6.27	114.56	117.70
57	BB	1233	C	C4'-C3'-C2'	-6.27	96.33	102.60
57	BB	1260	A	C8-N9-C4	-6.27	103.29	105.80
57	BB	1299	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	1651	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	1727	C	C2-N3-C4	6.27	123.03	119.90
57	BB	1755	A	N7-C8-N9	6.27	116.94	113.80
57	BB	2033	A	N1-C2-N3	6.27	132.43	129.30
57	BB	2107	G	N3-C2-N2	6.27	124.29	119.90
57	BB	2722	G	O4'-C1'-N9	6.27	113.22	108.20
21	AA	609	A	C8-N9-C4	-6.27	103.29	105.80
21	AA	657	U	C5-C4-O4	-6.27	122.14	125.90
21	AA	951	G	C6-N1-C2	-6.27	121.34	125.10
21	AA	1385	G	C6-C5-N7	-6.27	126.64	130.40
49	B2	39	ARG	NE-CZ-NH1	-6.27	117.17	120.30
57	BB	406	G	C5-C6-N1	-6.27	108.37	111.50
57	BB	778	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	980	A	C4-C5-N7	-6.27	107.57	110.70
57	BB	1459	G	O4'-C1'-N9	6.27	113.21	108.20
57	BB	1935	G	P-O3'-C3'	-6.27	112.18	119.70
57	BB	2059	A	C4-C5-C6	6.27	120.13	117.00
57	BB	2477	U	N3-C4-O4	6.27	123.79	119.40
57	BB	2642	G	C4'-C3'-C2'	-6.27	96.33	102.60
57	BB	2852	G	N3-C2-N2	6.27	124.29	119.90
12	AU	10	PRO	N-CA-CB	6.27	110.82	103.30
21	AA	93	U	C5-C6-N1	6.27	125.83	122.70
21	AA	874	G	N1-C2-N2	-6.27	110.56	116.20
21	AA	1146	A	C8-N9-C4	-6.27	103.29	105.80
57	BB	463	G	C6-N1-C2	6.27	128.86	125.10
57	BB	2040	G	C4-C5-N7	6.27	113.31	110.80
57	BB	2671	G	N1-C6-O6	6.27	123.66	119.90
58	BA	111	U	C5-C4-O4	-6.27	122.14	125.90
21	AA	6	G	N7-C8-N9	6.26	116.23	113.10
21	AA	214	C	C6-N1-C2	-6.26	117.79	120.30
21	AA	456	A	O5'-P-OP2	6.26	118.22	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	763	G	C5-N7-C8	-6.26	101.17	104.30
22	AY	7	U	P-O3'-C3'	6.26	127.22	119.70
22	AY	30	G	C2-N3-C4	6.26	115.03	111.90
33	BN	75	ILE	CA-CB-CG2	-6.26	98.37	110.90
57	BB	313	G	C4-C5-N7	6.26	113.31	110.80
57	BB	2286	G	N7-C8-N9	6.26	116.23	113.10
57	BB	2449	U	O4'-C1'-N1	6.26	113.21	108.20
57	BB	2480	C	C3'-C2'-C1'	-6.26	96.49	101.50
57	BB	2521	C	C4-C5-C6	6.26	120.53	117.40
21	AA	1128	C	N1-C2-N3	6.26	123.58	119.20
21	AA	1386	G	N1-C2-N3	-6.26	120.14	123.90
55	BG	152	ARG	NE-CZ-NH1	-6.26	117.17	120.30
57	BB	628	G	C5-N7-C8	6.26	107.43	104.30
57	BB	638	G	C4-C5-C6	6.26	122.56	118.80
57	BB	1965	C	C5-C4-N4	-6.26	115.82	120.20
57	BB	2161	C	C6-N1-C2	-6.26	117.80	120.30
57	BB	2435	A	C8-N9-C4	-6.26	103.30	105.80
57	BB	2599	G	N3-C2-N2	6.26	124.28	119.90
21	AA	285	C	O4'-C1'-N1	6.26	113.21	108.20
21	AA	384	G	N3-C2-N2	6.26	124.28	119.90
21	AA	434	U	O4'-C1'-N1	6.26	113.21	108.20
21	AA	548	G	N1-C2-N3	-6.26	120.14	123.90
21	AA	821	G	C8-N9-C1'	6.26	135.14	127.00
21	AA	858	G	P-O3'-C3'	6.26	127.21	119.70
21	AA	1301	U	C2-N1-C1'	6.26	125.21	117.70
57	BB	402	A	C6-C5-N7	-6.26	127.92	132.30
57	BB	1366	A	C5-C6-N1	-6.26	114.57	117.70
57	BB	1713	A	C1'-O4'-C4'	-6.26	104.89	109.90
57	BB	2330	G	C4-C5-C6	6.26	122.56	118.80
58	BA	53	A	C4-C5-C6	6.26	120.13	117.00
18	AG	71	THR	CA-CB-CG2	-6.26	103.64	112.40
21	AA	715	A	C2-N3-C4	6.26	113.73	110.60
21	AA	1257	A	N9-C4-C5	-6.26	103.30	105.80
57	BB	226	A	N3-C4-N9	6.26	132.41	127.40
57	BB	228	C	C5-C4-N4	-6.26	115.82	120.20
57	BB	422	A	C4'-C3'-C2'	-6.26	96.34	102.60
57	BB	1157	G	N3-C4-N9	6.26	129.76	126.00
57	BB	1540	G	C5-C6-N1	-6.26	108.37	111.50
57	BB	1629	U	C2-N1-C1'	-6.26	110.19	117.70
57	BB	2284	A	N1-C2-N3	6.26	132.43	129.30
57	BB	2533	U	O4'-C1'-N1	6.26	113.21	108.20
57	BB	2578	G	C4-C5-N7	-6.26	108.30	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2702	G	N3-C2-N2	6.26	124.28	119.90
21	AA	400	C	N3-C2-O2	-6.26	117.52	121.90
57	BB	715	A	C4-C5-C6	6.26	120.13	117.00
57	BB	1373	A	N9-C4-C5	6.26	108.30	105.80
57	BB	1996	C	C6-N1-C2	-6.26	117.80	120.30
57	BB	2676	C	C5-C6-N1	6.26	124.13	121.00
21	AA	282	A	N1-C6-N6	-6.26	114.85	118.60
21	AA	588	G	C6-C5-N7	-6.26	126.65	130.40
21	AA	1066	C	N1-C2-O2	6.26	122.65	118.90
21	AA	1328	C	N3-C2-O2	6.26	126.28	121.90
57	BB	220	G	N1-C6-O6	6.26	123.65	119.90
57	BB	713	G	N9-C4-C5	-6.26	102.90	105.40
57	BB	966	G	N1-C2-N3	-6.26	120.15	123.90
57	BB	1077	A	C2-N3-C4	-6.26	107.47	110.60
57	BB	2825	G	P-O3'-C3'	-6.26	112.19	119.70
58	BA	77	U	OP1-P-OP2	-6.26	110.22	119.60
15	AD	35	GLN	N-CA-CB	6.25	121.86	110.60
26	AV	28	C	N3-C4-C5	-6.25	119.40	121.90
31	BL	108	ALA	CB-CA-C	-6.25	100.72	110.10
53	BE	172	ALA	O-C-N	6.25	132.71	122.70
57	BB	1014	A	C5-C6-N6	-6.25	118.70	123.70
57	BB	1106	G	C6-C5-N7	-6.25	126.65	130.40
57	BB	2704	C	N1-C2-O2	6.25	122.65	118.90
58	BA	88	C	C4-C5-C6	6.25	120.53	117.40
21	AA	137	U	C5-C6-N1	6.25	125.83	122.70
21	AA	221	C	C6-N1-C2	-6.25	117.80	120.30
21	AA	243	A	OP1-P-OP2	-6.25	110.22	119.60
21	AA	518	C	O4'-C1'-N1	6.25	113.20	108.20
21	AA	721	G	C1'-O4'-C4'	-6.25	104.90	109.90
21	AA	1463	U	C1'-O4'-C4'	-6.25	104.90	109.90
23	AW	12	U	C4-C5-C6	6.25	123.45	119.70
25	AZ	354	ASP	CB-CG-OD2	-6.25	112.67	118.30
28	BI	46	ASP	CB-CG-OD1	-6.25	112.67	118.30
33	BN	64	ARG	NE-CZ-NH1	-6.25	117.17	120.30
57	BB	513	A	N9-C4-C5	-6.25	103.30	105.80
57	BB	798	G	N3-C4-C5	6.25	131.73	128.60
57	BB	1128	G	N9-C4-C5	6.25	107.90	105.40
57	BB	1183	U	C5-C6-N1	6.25	125.83	122.70
57	BB	1593	A	C6-C5-N7	-6.25	127.92	132.30
57	BB	1684	G	C5-N7-C8	6.25	107.43	104.30
57	BB	1726	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	1747	U	N3-C4-C5	-6.25	110.85	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2112	G	N1-C6-O6	6.25	123.65	119.90
57	BB	2263	C	O4'-C4'-C3'	-6.25	97.75	104.00
58	BA	31	C	N1-C2-O2	6.25	122.65	118.90
21	AA	72	A	C5-N7-C8	6.25	107.03	103.90
21	AA	212	G	N1-C6-O6	6.25	123.65	119.90
21	AA	286	C	C5-C4-N4	-6.25	115.82	120.20
21	AA	953	G	N3-C2-N2	6.25	124.28	119.90
21	AA	1060	U	C3'-C2'-C1'	-6.25	96.50	101.50
26	AV	28	C	C2-N3-C4	6.25	123.03	119.90
26	AV	30	G	N1-C6-O6	6.25	123.65	119.90
57	BB	178	G	C5-N7-C8	-6.25	101.17	104.30
57	BB	576	U	N1-C2-O2	-6.25	118.42	122.80
57	BB	1192	G	C5-C6-N1	6.25	114.62	111.50
57	BB	1501	G	C4-C5-N7	6.25	113.30	110.80
57	BB	2247	A	O4'-C1'-N9	6.25	113.20	108.20
57	BB	2368	C	C2-N1-C1'	-6.25	111.92	118.80
58	BA	46	A	O4'-C1'-N9	6.25	113.20	108.20
21	AA	257	G	O4'-C4'-C3'	-6.25	97.75	104.00
21	AA	737	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	976	G	N1-C2-N3	-6.25	120.15	123.90
57	BB	1028	A	O4'-C1'-N9	6.25	113.20	108.20
57	BB	1453	A	C6-N1-C2	6.25	122.35	118.60
57	BB	1902	C	C6-N1-C1'	-6.25	113.30	120.80
57	BB	2685	G	N9-C4-C5	6.25	107.90	105.40
14	AC	126	ARG	NE-CZ-NH2	-6.25	117.18	120.30
21	AA	145	G	O4'-C1'-N9	6.25	113.20	108.20
21	AA	244	U	N3-C2-O2	6.25	126.57	122.20
21	AA	369	G	O4'-C1'-N9	6.25	113.20	108.20
21	AA	553	A	N1-C6-N6	6.25	122.35	118.60
21	AA	566	G	C4-N9-C1'	-6.25	118.38	126.50
21	AA	783	C	C4-C5-C6	6.25	120.52	117.40
21	AA	969	A	C4-C5-N7	-6.25	107.58	110.70
21	AA	1014	A	N9-C4-C5	6.25	108.30	105.80
21	AA	1359	C	O4'-C1'-N1	6.25	113.20	108.20
21	AA	1488	G	C8-N9-C4	-6.25	103.90	106.40
26	AV	16	C	C5-C6-N1	-6.25	117.88	121.00
33	BN	17	ARG	NE-CZ-NH1	6.25	123.42	120.30
37	BR	13	ARG	NE-CZ-NH2	6.25	123.42	120.30
57	BB	47	C	P-O3'-C3'	-6.25	112.20	119.70
57	BB	303	G	C6-C5-N7	-6.25	126.65	130.40
57	BB	572	A	N3-C4-N9	6.25	132.40	127.40
57	BB	833	A	C6-N1-C2	-6.25	114.85	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1345	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	1525	A	C5-C6-N6	-6.25	118.70	123.70
57	BB	1549	A	C8-N9-C4	-6.25	103.30	105.80
57	BB	1769	U	P-O5'-C5'	6.25	130.90	120.90
57	BB	1807	G	P-O3'-C3'	-6.25	112.20	119.70
21	AA	522	C	P-O3'-C3'	6.25	127.20	119.70
21	AA	563	A	N3-C4-C5	-6.25	122.43	126.80
21	AA	1353	G	C5-C6-O6	-6.25	124.85	128.60
57	BB	99	U	C2-N3-C4	6.25	130.75	127.00
57	BB	101	A	C1'-O4'-C4'	-6.25	104.90	109.90
57	BB	776	G	C5'-C4'-O4'	-6.25	101.60	109.10
57	BB	1281	G	O4'-C1'-N9	6.25	113.20	108.20
57	BB	2192	U	C5-C6-N1	6.25	125.82	122.70
57	BB	2433	A	C4-C5-N7	-6.25	107.58	110.70
58	BA	54	G	C4-C5-C6	6.25	122.55	118.80
21	AA	389	A	C6-C5-N7	-6.25	127.93	132.30
57	BB	854	C	O4'-C1'-C2'	-6.25	99.56	105.80
57	BB	2597	G	N3-C4-N9	6.25	129.75	126.00
57	BB	2699	C	N1-C1'-C2'	-6.25	105.13	112.00
21	AA	64	G	O4'-C1'-C2'	6.24	113.22	107.60
21	AA	174	A	C5-C6-N6	-6.24	118.70	123.70
21	AA	215	C	C4-C5-C6	6.24	120.52	117.40
21	AA	455	G	N3-C2-N2	6.24	124.27	119.90
21	AA	694	A	N9-C4-C5	6.24	108.30	105.80
21	AA	821	G	O4'-C4'-C3'	-6.24	97.76	104.00
21	AA	1192	C	C2-N1-C1'	6.24	125.67	118.80
57	BB	637	A	C4'-C3'-C2'	6.24	108.84	102.60
57	BB	785	G	C4-C5-C6	6.24	122.55	118.80
57	BB	1038	G	C8-N9-C4	6.24	108.90	106.40
57	BB	1090	A	C6-C5-N7	-6.24	127.93	132.30
57	BB	1759	A	C6-C5-N7	-6.24	127.93	132.30
57	BB	1863	G	C6-C5-N7	-6.24	126.65	130.40
57	BB	2011	U	C4'-C3'-C2'	-6.24	96.36	102.60
57	BB	2433	A	O4'-C1'-N9	6.24	113.19	108.20
57	BB	343	C	P-O3'-C3'	-6.24	112.21	119.70
57	BB	2539	C	C2-N3-C4	6.24	123.02	119.90
21	AA	380	G	C4-C5-C6	-6.24	115.06	118.80
21	AA	392	C	O4'-C1'-N1	6.24	113.19	108.20
21	AA	616	G	C4-C5-N7	-6.24	108.30	110.80
21	AA	636	U	O4'-C1'-N1	6.24	113.19	108.20
21	AA	759	A	N9-C4-C5	6.24	108.30	105.80
57	BB	118	A	C4-C5-N7	6.24	113.82	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	518	G	N3-C2-N2	6.24	124.27	119.90
57	BB	970	U	C5-C4-O4	-6.24	122.16	125.90
57	BB	996	A	C5-C6-N6	-6.24	118.71	123.70
57	BB	1327	A	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	1965	C	N3-C4-N4	6.24	122.37	118.00
57	BB	2349	G	O5'-P-OP2	6.24	118.19	110.70
57	BB	2661	G	C4-C5-C6	6.24	122.55	118.80
21	AA	248	C	C6-N1-C2	6.24	122.80	120.30
21	AA	356	A	C2-N3-C4	-6.24	107.48	110.60
21	AA	533	A	N7-C8-N9	-6.24	110.68	113.80
21	AA	1152	A	C4-C5-C6	6.24	120.12	117.00
21	AA	1494	G	C5-C6-N1	6.24	114.62	111.50
57	BB	381	G	C5-N7-C8	-6.24	101.18	104.30
57	BB	1579	A	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	1853	A	C4-C5-C6	6.24	120.12	117.00
57	BB	1918	A	C4-C5-C6	6.24	120.12	117.00
57	BB	2879	A	C6-C5-N7	-6.24	127.93	132.30
21	AA	147	G	C5-C6-N1	-6.24	108.38	111.50
53	BE	7	ASP	CB-CG-OD2	6.24	123.91	118.30
57	BB	463	G	C6-C5-N7	-6.24	126.66	130.40
57	BB	1098	A	C5-C6-N6	-6.24	118.71	123.70
57	BB	2050	C	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	2135	A	C8-N9-C4	-6.24	103.31	105.80
21	AA	138	G	N3-C4-C5	6.24	131.72	128.60
21	AA	443	C	O4'-C1'-N1	6.24	113.19	108.20
21	AA	521	G	C8-N9-C1'	6.24	135.11	127.00
21	AA	1135	U	C6-N1-C2	-6.24	117.26	121.00
22	AY	37	G	C5'-C4'-C3'	-6.24	106.02	116.00
57	BB	506	G	O4'-C1'-N9	6.24	113.19	108.20
57	BB	1048	A	N1-C2-N3	6.24	132.42	129.30
57	BB	2064	C	O4'-C1'-N1	6.24	113.19	108.20
57	BB	2493	U	C5-C4-O4	6.24	129.64	125.90
57	BB	2591	C	C5-C6-N1	6.24	124.12	121.00
21	AA	582	C	N3-C2-O2	-6.23	117.54	121.90
21	AA	633	G	P-O5'-C5'	6.23	130.87	120.90
24	AX	13	A	N9-C4-C5	6.23	108.29	105.80
24	AX	16	A	O4'-C1'-C2'	6.23	113.21	107.60
26	AV	60	U	C6-N1-C2	-6.23	117.26	121.00
57	BB	1077	A	N1-C6-N6	6.23	122.34	118.60
57	BB	1171	G	C4-C5-C6	6.23	122.54	118.80
21	AA	1215	G	N3-C2-N2	6.23	124.26	119.90
21	AA	1440	U	C5-C6-N1	6.23	125.82	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	10	G	C4-N9-C1'	6.23	134.60	126.50
26	AV	59	A	C6-N1-C2	6.23	122.34	118.60
57	BB	685	A	C6-C5-N7	-6.23	127.94	132.30
57	BB	1142	A	C5'-C4'-O4'	6.23	116.58	109.10
57	BB	1799	G	C4-C5-C6	6.23	122.54	118.80
57	BB	2169	A	N9-C4-C5	-6.23	103.31	105.80
57	BB	2266	A	C8-N9-C4	-6.23	103.31	105.80
57	BB	2625	G	C4-C5-N7	6.23	113.29	110.80
57	BB	2718	G	C5-N7-C8	-6.23	101.18	104.30
58	BA	40	U	N1-C2-O2	-6.23	118.44	122.80
12	AU	46	ARG	NE-CZ-NH1	6.23	123.42	120.30
21	AA	664	G	O4'-C1'-N9	6.23	113.19	108.20
21	AA	671	G	C5-C6-O6	-6.23	124.86	128.60
21	AA	1024	G	C5-C6-N1	-6.23	108.38	111.50
21	AA	1391	U	C5-C4-O4	-6.23	122.16	125.90
57	BB	548	G	N7-C8-N9	6.23	116.22	113.10
57	BB	1041	G	N3-C4-C5	-6.23	125.48	128.60
57	BB	1903	G	P-O3'-C3'	-6.23	112.22	119.70
57	BB	2028	U	N3-C4-O4	6.23	123.76	119.40
57	BB	2371	G	C5-C6-N1	-6.23	108.39	111.50
57	BB	2823	A	N9-C4-C5	6.23	108.29	105.80
52	BD	110	THR	CA-CB-CG2	-6.23	103.68	112.40
57	BB	763	G	N1-C2-N3	-6.23	120.16	123.90
20	AI	129	ARG	NE-CZ-NH2	6.23	123.41	120.30
21	AA	238	A	C6-N1-C2	-6.23	114.86	118.60
21	AA	441	A	C1'-O4'-C4'	-6.23	104.92	109.90
21	AA	592	G	C4-C5-C6	6.23	122.54	118.80
21	AA	1100	C	P-O3'-C3'	6.23	127.17	119.70
21	AA	1204	A	C4-C5-C6	6.23	120.11	117.00
21	AA	1456	A	C4-C5-C6	6.23	120.11	117.00
21	AA	1525	G	C2-N3-C4	6.23	115.01	111.90
22	AY	32	C	N1-C2-O2	-6.23	115.16	118.90
23	AW	53	G	N7-C8-N9	-6.23	109.99	113.10
23	AW	68	C	C5-C6-N1	6.23	124.11	121.00
26	AV	56	C	N1-C2-N3	6.23	123.56	119.20
57	BB	1905	C	N3-C4-C5	-6.23	119.41	121.90
57	BB	1913	A	C5'-C4'-O4'	6.23	116.57	109.10
57	BB	2239	G	C5-C6-N1	-6.23	108.39	111.50
57	BB	2529	G	C4'-C3'-C2'	6.23	108.83	102.60
57	BB	2532	G	OP1-P-OP2	-6.23	110.26	119.60
57	BB	2777	G	C6-C5-N7	-6.23	126.66	130.40
21	AA	382	A	P-O5'-C5'	6.23	130.86	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2023	C	N3-C4-C5	-6.23	119.41	121.90
57	BB	2171	A	N3-C4-C5	-6.23	122.44	126.80
21	AA	1265	C	N1-C1'-C2'	-6.22	105.15	112.00
23	AW	24	G	N9-C4-C5	-6.22	102.91	105.40
26	AV	47	U	C5'-C4'-O4'	6.22	116.57	109.10
57	BB	28	A	C5-C6-N6	-6.22	118.72	123.70
57	BB	726	G	O4'-C1'-N9	6.22	113.18	108.20
57	BB	741	U	C5-C6-N1	6.22	125.81	122.70
57	BB	2531	A	N1-C2-N3	-6.22	126.19	129.30
57	BB	2760	C	C5'-C4'-O4'	6.22	116.57	109.10
21	AA	335	C	C4-C5-C6	6.22	120.51	117.40
21	AA	737	C	C6-N1-C2	-6.22	117.81	120.30
23	AW	5	G	C6-C5-N7	-6.22	126.67	130.40
26	AV	33	U	O4'-C1'-N1	6.22	113.18	108.20
56	BH	132	PHE	CB-CG-CD1	6.22	125.16	120.80
57	BB	164	C	C2-N3-C4	6.22	123.01	119.90
57	BB	700	G	C4-C5-C6	6.22	122.53	118.80
57	BB	959	A	N3-C4-C5	-6.22	122.44	126.80
57	BB	1140	C	C2-N3-C4	6.22	123.01	119.90
57	BB	1288	G	C2-N3-C4	-6.22	108.79	111.90
57	BB	2482	A	O4'-C1'-N9	6.22	113.18	108.20
57	BB	2692	G	N3-C2-N2	6.22	124.26	119.90
21	AA	152	A	C8-N9-C4	-6.22	103.31	105.80
21	AA	537	G	O4'-C1'-N9	6.22	113.18	108.20
21	AA	954	G	O4'-C1'-N9	6.22	113.18	108.20
22	AY	59	U	P-O5'-C5'	6.22	130.85	120.90
57	BB	188	G	N7-C8-N9	-6.22	109.99	113.10
57	BB	249	C	O4'-C4'-C3'	6.22	111.08	106.10
57	BB	363	G	C4-C5-N7	-6.22	108.31	110.80
57	BB	385	C	C5-C4-N4	-6.22	115.84	120.20
57	BB	627	A	O4'-C1'-C2'	-6.22	99.58	105.80
57	BB	1079	C	C5-C6-N1	-6.22	117.89	121.00
14	AC	105	VAL	CA-CB-CG2	-6.22	101.57	110.90
21	AA	133	U	C5-C6-N1	6.22	125.81	122.70
21	AA	200	G	C1'-O4'-C4'	-6.22	104.92	109.90
21	AA	587	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	945	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	960	U	N3-C2-O2	6.22	126.55	122.20
21	AA	1030	U	P-O3'-C3'	6.22	127.16	119.70
21	AA	1109	C	O4'-C1'-N1	6.22	113.18	108.20
22	AY	31	A	N3-C4-C5	6.22	131.15	126.80
25	AZ	349	MET	CG-SD-CE	-6.22	90.25	100.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B5	149	VAL	CA-CB-CG1	-6.22	101.57	110.90
57	BB	125	A	N1-C2-N3	6.22	132.41	129.30
57	BB	247	G	N1-C6-O6	6.22	123.63	119.90
57	BB	526	A	C4-C5-C6	6.22	120.11	117.00
57	BB	833	A	C4-C5-N7	-6.22	107.59	110.70
57	BB	1715	G	C5'-C4'-C3'	6.22	125.95	116.00
57	BB	2325	G	C2-N3-C4	6.22	115.01	111.90
57	BB	2360	G	N3-C4-C5	-6.22	125.49	128.60
57	BB	2376	A	C2-N3-C4	-6.22	107.49	110.60
58	BA	9	G	N9-C4-C5	-6.22	102.91	105.40
21	AA	656	G	C6-C5-N7	-6.22	126.67	130.40
21	AA	1155	A	C4-C5-C6	6.22	120.11	117.00
21	AA	1245	C	N3-C4-C5	-6.22	119.41	121.90
23	AW	17	C	P-O3'-C3'	6.22	127.16	119.70
56	BH	98	ASP	CB-CG-OD2	-6.22	112.70	118.30
57	BB	261	G	C2-N3-C4	6.22	115.01	111.90
57	BB	1492	G	C5-C6-N1	-6.22	108.39	111.50
57	BB	1507	C	C4-C5-C6	6.22	120.51	117.40
57	BB	2129	C	O4'-C1'-N1	6.22	113.17	108.20
57	BB	2419	U	C6-N1-C2	6.22	124.73	121.00
58	BA	118	C	O4'-C1'-N1	6.22	113.17	108.20
21	AA	160	A	C4'-C3'-C2'	-6.22	96.38	102.60
21	AA	442	G	C8-N9-C1'	6.22	135.08	127.00
21	AA	855	U	O4'-C4'-C3'	-6.22	97.78	104.00
21	AA	863	U	N3-C4-O4	6.22	123.75	119.40
21	AA	907	A	C6-N1-C2	6.22	122.33	118.60
21	AA	1084	G	O4'-C1'-N9	6.22	113.17	108.20
57	BB	1615	C	N1-C2-N3	6.22	123.55	119.20
57	BB	1900	A	C2-N3-C4	6.22	113.71	110.60
57	BB	1993	U	N3-C4-C5	6.22	118.33	114.60
57	BB	2141	G	N1-C6-O6	6.22	123.63	119.90
57	BB	2333	A	P-O5'-C5'	6.22	130.85	120.90
57	BB	2361	G	C6-N1-C2	6.22	128.83	125.10
57	BB	2694	G	C6-N1-C2	6.22	128.83	125.10
57	BB	2803	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	61	G	C5-C6-O6	-6.21	124.87	128.60
21	AA	119	A	C5-N7-C8	6.21	107.01	103.90
21	AA	617	G	N3-C4-C5	-6.21	125.49	128.60
21	AA	765	G	C8-N9-C1'	-6.21	118.92	127.00
21	AA	1392	G	C4-C5-C6	6.21	122.53	118.80
26	AV	26	G	C8-N9-C4	6.21	108.89	106.40
57	BB	281	C	C4'-C3'-C2'	6.21	108.81	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	328	U	O4'-C1'-N1	6.21	113.17	108.20
57	BB	394	C	C6-N1-C2	-6.21	117.81	120.30
57	BB	526	A	N1-C2-N3	6.21	132.41	129.30
57	BB	874	G	C4-C5-N7	6.21	113.29	110.80
57	BB	1282	U	N3-C4-C5	-6.21	110.87	114.60
57	BB	1833	C	N1-C2-N3	-6.21	114.85	119.20
57	BB	1960	A	C4-C5-N7	-6.21	107.59	110.70
57	BB	2405	G	C5'-C4'-C3'	-6.21	106.06	116.00
21	AA	51	A	O4'-C1'-N9	6.21	113.17	108.20
21	AA	297	G	N3-C2-N2	6.21	124.25	119.90
21	AA	374	A	N9-C4-C5	6.21	108.28	105.80
21	AA	438	U	N3-C4-C5	-6.21	110.87	114.60
28	BI	58	ILE	CA-CB-CG1	6.21	122.81	111.00
57	BB	658	U	O4'-C1'-N1	6.21	113.17	108.20
57	BB	1210	G	C4'-C3'-C2'	-6.21	96.39	102.60
57	BB	1507	C	N3-C2-O2	6.21	126.25	121.90
57	BB	2037	A	C2-N3-C4	-6.21	107.49	110.60
57	BB	2706	A	C5'-C4'-C3'	6.21	125.94	116.00
57	BB	2887	A	N1-C2-N3	6.21	132.41	129.30
14	AC	21	TRP	CA-CB-CG	6.21	125.50	113.70
21	AA	91	U	C2-N3-C4	6.21	130.73	127.00
21	AA	275	G	C5-C6-O6	-6.21	124.87	128.60
21	AA	276	G	N3-C2-N2	6.21	124.25	119.90
21	AA	343	U	P-O3'-C3'	6.21	127.15	119.70
21	AA	633	G	O4'-C1'-N9	6.21	113.17	108.20
21	AA	813	U	OP1-P-OP2	-6.21	110.28	119.60
21	AA	1285	A	N1-C2-N3	6.21	132.41	129.30
21	AA	1455	G	C8-N9-C4	6.21	108.88	106.40
22	AY	3	G	N9-C4-C5	6.21	107.89	105.40
22	AY	32	C	C2-N1-C1'	6.21	125.63	118.80
22	AY	42	G	C6-N1-C2	6.21	128.83	125.10
26	AV	38	A	N1-C2-N3	6.21	132.41	129.30
57	BB	166	U	C5-C6-N1	6.21	125.81	122.70
57	BB	1565	C	N3-C2-O2	6.21	126.25	121.90
57	BB	1776	G	C4'-C3'-C2'	-6.21	96.39	102.60
57	BB	1991	U	C5-C6-N1	-6.21	119.59	122.70
18	AG	25	PHE	CB-CG-CD1	-6.21	116.45	120.80
21	AA	95	C	N3-C4-N4	6.21	122.35	118.00
21	AA	465	A	N7-C8-N9	6.21	116.91	113.80
21	AA	1457	G	N3-C4-N9	6.21	129.73	126.00
29	BJ	4	PHE	CB-CG-CD2	-6.21	116.45	120.80
32	BM	134	THR	N-CA-CB	6.21	122.10	110.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	524	G	C5-N7-C8	6.21	107.41	104.30
57	BB	849	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	1207	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	1299	G	C5-C6-O6	-6.21	124.87	128.60
57	BB	1732	C	C4'-C3'-C2'	6.21	108.81	102.60
21	AA	326	G	C5-C6-O6	-6.21	124.88	128.60
21	AA	445	G	C2-N3-C4	6.21	115.00	111.90
21	AA	694	A	N7-C8-N9	-6.21	110.70	113.80
21	AA	813	U	P-O3'-C3'	6.21	127.15	119.70
21	AA	1360	A	C5-C6-N6	-6.21	118.73	123.70
22	AY	73	A	C2-N3-C4	-6.21	107.50	110.60
22	AY	75	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	284	U	C5'-C4'-C3'	-6.21	106.06	116.00
57	BB	819	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	975	A	N7-C8-N9	6.21	116.90	113.80
57	BB	1900	A	C5-C6-N1	-6.21	114.59	117.70
57	BB	2283	C	P-O3'-C3'	-6.21	112.25	119.70
57	BB	2632	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	2651	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	2824	C	C5-C4-N4	6.21	124.55	120.20
57	BB	2851	A	N1-C2-N3	6.21	132.40	129.30
21	AA	28	A	C4-C5-N7	-6.21	107.60	110.70
21	AA	227	G	N3-C4-N9	-6.21	122.28	126.00
21	AA	324	G	C4-C5-N7	-6.21	108.32	110.80
21	AA	747	A	C5-C6-N6	-6.21	118.73	123.70
21	AA	843	U	OP2-P-O3'	6.21	118.85	105.20
22	AY	74	C	C3'-C2'-C1'	-6.21	96.53	101.50
24	AX	12	A	C4-N9-C1'	6.21	137.47	126.30
33	BN	72	ASP	CB-CG-OD1	6.21	123.89	118.30
57	BB	26	G	C2-N3-C4	6.21	115.00	111.90
57	BB	712	G	C6-C5-N7	-6.21	126.68	130.40
57	BB	1043	C	P-O3'-C3'	-6.21	112.25	119.70
57	BB	1701	A	C5'-C4'-C3'	-6.21	106.07	116.00
57	BB	1822	C	C3'-C2'-C1'	-6.21	96.53	101.50
57	BB	2470	G	N1-C2-N3	-6.21	120.18	123.90
58	BA	109	A	C3'-C2'-C1'	6.21	106.46	101.50
21	AA	505	G	N3-C2-N2	6.21	124.24	119.90
22	AY	5	A	C6-C5-N7	-6.21	127.96	132.30
25	AZ	210	PHE	CB-CG-CD1	-6.21	116.46	120.80
35	BP	87	ARG	NE-CZ-NH2	-6.21	117.20	120.30
57	BB	1427	A	O4'-C1'-N9	6.21	113.16	108.20
3	AL	13	ARG	NE-CZ-NH2	6.20	123.40	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AL	49	ARG	CB-CG-CD	6.20	127.73	111.60
21	AA	262	A	C2-N3-C4	6.20	113.70	110.60
21	AA	424	G	C1'-O4'-C4'	6.20	114.86	109.90
21	AA	767	A	N7-C8-N9	6.20	116.90	113.80
21	AA	906	A	C6-N1-C2	-6.20	114.88	118.60
21	AA	957	U	C5-C4-O4	6.20	129.62	125.90
22	AY	30	G	N1-C2-N3	-6.20	120.18	123.90
25	AZ	343	LEU	CB-CG-CD1	6.20	121.55	111.00
29	BJ	16	TYR	CB-CG-CD2	6.20	124.72	121.00
57	BB	44	A	N3-C4-C5	-6.20	122.46	126.80
57	BB	1310	G	C2-N3-C4	6.20	115.00	111.90
57	BB	1317	G	C5-C6-O6	-6.20	124.88	128.60
57	BB	1697	G	C4-C5-N7	6.20	113.28	110.80
57	BB	1883	U	O4'-C1'-N1	6.20	113.16	108.20
57	BB	2472	G	C5'-C4'-C3'	6.20	125.93	116.00
57	BB	932	U	C3'-C2'-C1'	-6.20	96.54	101.50
57	BB	1722	A	C4-C5-C6	6.20	120.10	117.00
57	BB	2459	A	N9-C4-C5	-6.20	103.32	105.80
57	BB	2699	C	N3-C4-N4	6.20	122.34	118.00
58	BA	110	C	N1-C2-O2	-6.20	115.18	118.90
21	AA	255	G	C4'-C3'-C2'	-6.20	96.40	102.60
21	AA	622	A	O4'-C1'-N9	6.20	113.16	108.20
21	AA	711	G	C4'-C3'-C2'	-6.20	96.40	102.60
21	AA	942	G	N1-C2-N3	-6.20	120.18	123.90
21	AA	1140	C	C5-C4-N4	-6.20	115.86	120.20
21	AA	1243	C	C5-C4-N4	-6.20	115.86	120.20
23	AW	53	G	O4'-C1'-N9	6.20	113.16	108.20
57	BB	580	U	C4'-C3'-C2'	-6.20	96.40	102.60
57	BB	742	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	1028	A	C5-N7-C8	6.20	107.00	103.90
57	BB	1371	G	C5-N7-C8	6.20	107.40	104.30
57	BB	1503	A	N9-C4-C5	6.20	108.28	105.80
57	BB	2808	G	N3-C4-N9	6.20	129.72	126.00
57	BB	2829	A	N1-C2-N3	6.20	132.40	129.30
21	AA	483	C	C4'-C3'-C2'	6.20	108.80	102.60
21	AA	693	G	C6-N1-C2	6.20	128.82	125.10
23	AW	65	G	C2-N3-C4	6.20	115.00	111.90
57	BB	127	A	O4'-C1'-N9	6.20	113.16	108.20
57	BB	565	C	C4-C5-C6	6.20	120.50	117.40
57	BB	754	U	N1-C2-N3	6.20	118.62	114.90
57	BB	1186	G	C5-C6-N1	6.20	114.60	111.50
57	BB	1186	G	C6-N1-C2	-6.20	121.38	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1395	A	C4-C5-N7	-6.20	107.60	110.70
57	BB	1759	A	N1-C6-N6	6.20	122.32	118.60
57	BB	1770	G	C5-N7-C8	-6.20	101.20	104.30
57	BB	1901	A	C5-N7-C8	6.20	107.00	103.90
57	BB	2129	C	C2-N1-C1'	6.20	125.62	118.80
57	BB	2453	A	C2-N3-C4	6.20	113.70	110.60
21	AA	578	C	C6-N1-C2	-6.20	117.82	120.30
21	AA	609	A	C5-N7-C8	6.20	107.00	103.90
57	BB	34	U	C5-C4-O4	-6.20	122.18	125.90
57	BB	1435	G	O4'-C1'-N9	6.20	113.16	108.20
57	BB	1570	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	1757	A	C4-C5-C6	6.20	120.10	117.00
57	BB	2370	G	N1-C6-O6	6.20	123.62	119.90
21	AA	15	G	C1'-O4'-C4'	6.20	114.86	109.90
21	AA	1308	U	C6-N1-C2	-6.20	117.28	121.00
22	AY	36	A	C5-N7-C8	6.20	107.00	103.90
57	BB	751	A	P-O3'-C3'	-6.20	112.27	119.70
57	BB	938	G	N3-C2-N2	6.20	124.24	119.90
57	BB	1418	G	N1-C2-N2	-6.20	110.62	116.20
57	BB	1835	G	N3-C2-N2	6.20	124.24	119.90
57	BB	1839	G	C8-N9-C1'	6.20	135.06	127.00
57	BB	1949	G	C4'-C3'-C2'	-6.20	96.41	102.60
57	BB	1987	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	2590	A	C4-C5-N7	-6.20	107.60	110.70
58	BA	50	A	N9-C4-C5	6.20	108.28	105.80
21	AA	351	G	N3-C2-N2	6.19	124.24	119.90
21	AA	408	A	N1-C2-N3	6.19	132.40	129.30
57	BB	1060	U	O4'-C1'-N1	6.19	113.16	108.20
21	AA	112	G	N3-C4-N9	6.19	129.72	126.00
21	AA	303	A	C6-C5-N7	-6.19	127.97	132.30
21	AA	669	G	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1042	A	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1250	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	514	A	C8-N9-C4	6.19	108.28	105.80
57	BB	1091	G	N1-C2-N3	-6.19	120.19	123.90
57	BB	1650	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	1963	U	C6-N1-C1'	-6.19	112.53	121.20
21	AA	164	G	C4-C5-C6	-6.19	115.09	118.80
21	AA	244	U	C2-N3-C4	6.19	130.72	127.00
23	AW	10	G	C5-N7-C8	-6.19	101.20	104.30
32	BM	38	ARG	NE-CZ-NH2	-6.19	117.20	120.30
57	BB	94	A	N3-C4-C5	-6.19	122.47	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1491	G	C4'-C3'-C2'	-6.19	96.41	102.60
57	BB	2143	C	C5-C6-N1	6.19	124.09	121.00
57	BB	2330	G	OP1-P-OP2	-6.19	110.31	119.60
57	BB	2731	G	C5-C6-N1	-6.19	108.41	111.50
57	BB	2857	G	N7-C8-N9	6.19	116.19	113.10
58	BA	9	G	C6-N1-C2	6.19	128.81	125.10
21	AA	873	A	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1096	C	C6-N1-C2	-6.19	117.82	120.30
33	BN	117	ASP	N-CA-CB	6.19	121.74	110.60
57	BB	1032	A	N9-C4-C5	6.19	108.28	105.80
57	BB	1163	G	N1-C2-N3	-6.19	120.19	123.90
57	BB	1839	G	N9-C4-C5	6.19	107.88	105.40
57	BB	2176	A	P-O3'-C3'	-6.19	112.27	119.70
58	BA	67	G	C4-C5-N7	6.19	113.28	110.80
19	AH	65	PHE	CB-CG-CD1	6.19	125.13	120.80
21	AA	455	G	C5-C6-O6	-6.19	124.89	128.60
21	AA	576	C	O4'-C1'-N1	6.19	113.15	108.20
21	AA	733	G	N7-C8-N9	-6.19	110.01	113.10
57	BB	115	C	P-O3'-C3'	-6.19	112.28	119.70
57	BB	745	G	C5-N7-C8	6.19	107.39	104.30
57	BB	790	U	C5-C4-O4	-6.19	122.19	125.90
57	BB	931	U	N3-C4-C5	-6.19	110.89	114.60
57	BB	1059	G	O4'-C1'-N9	6.19	113.15	108.20
57	BB	1256	G	N3-C2-N2	6.19	124.23	119.90
57	BB	1711	A	N9-C4-C5	6.19	108.28	105.80
57	BB	1781	U	C2-N3-C4	-6.19	123.29	127.00
57	BB	2305	U	N3-C2-O2	6.19	126.53	122.20
21	AA	1135	U	C5-C6-N1	6.19	125.79	122.70
21	AA	1441	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	117	G	C1'-O4'-C4'	-6.19	104.95	109.90
57	BB	503	A	N7-C8-N9	-6.19	110.71	113.80
57	BB	2859	G	C4-C5-C6	6.19	122.51	118.80
58	BA	14	U	C2-N3-C4	-6.19	123.29	127.00
21	AA	784	A	C5-N7-C8	6.18	106.99	103.90
21	AA	998	C	C2-N3-C4	6.18	122.99	119.90
52	BD	175	LEU	N-CA-CB	6.18	122.77	110.40
53	BE	62	GLN	CA-CB-CG	6.18	127.01	113.40
57	BB	315	G	N9-C4-C5	-6.18	102.93	105.40
57	BB	473	G	N3-C4-N9	-6.18	122.29	126.00
57	BB	907	G	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1249	U	C5-C6-N1	6.18	125.79	122.70
57	BB	1307	A	C4-C5-N7	6.18	113.79	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1856	U	C4-C5-C6	-6.18	115.99	119.70
57	BB	2198	A	C4-C5-N7	-6.18	107.61	110.70
57	BB	2608	G	P-O3'-C3'	-6.18	112.28	119.70
21	AA	102	G	N3-C4-C5	6.18	131.69	128.60
21	AA	512	U	C5'-C4'-C3'	-6.18	106.11	116.00
21	AA	648	A	C5-C6-N1	-6.18	114.61	117.70
21	AA	683	G	N1-C2-N3	-6.18	120.19	123.90
21	AA	840	C	C6-N1-C2	-6.18	117.83	120.30
21	AA	867	G	N1-C2-N3	-6.18	120.19	123.90
21	AA	938	A	N7-C8-N9	6.18	116.89	113.80
57	BB	44	A	C5-C6-N6	-6.18	118.75	123.70
57	BB	242	G	N9-C4-C5	-6.18	102.93	105.40
57	BB	340	A	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1316	U	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1344	U	C5-C4-O4	-6.18	122.19	125.90
57	BB	1601	G	C5-C6-N1	-6.18	108.41	111.50
57	BB	1644	C	C4-C5-C6	6.18	120.49	117.40
57	BB	1885	A	N9-C4-C5	6.18	108.27	105.80
57	BB	2811	G	N1-C6-O6	6.18	123.61	119.90
21	AA	1456	A	C6-C5-N7	-6.18	127.97	132.30
57	BB	81	G	C4-C5-N7	6.18	113.27	110.80
57	BB	227	A	P-O3'-C3'	6.18	127.12	119.70
57	BB	1695	G	N7-C8-N9	-6.18	110.01	113.10
57	BB	2346	A	N1-C2-N3	-6.18	126.21	129.30
21	AA	260	G	C4-N9-C1'	-6.18	118.47	126.50
21	AA	715	A	N3-C4-C5	-6.18	122.47	126.80
21	AA	1472	U	O4'-C1'-N1	6.18	113.14	108.20
26	AV	45	G	P-O5'-C5'	-6.18	111.01	120.90
35	BP	20	ARG	NE-CZ-NH1	6.18	123.39	120.30
57	BB	266	G	C4-C5-N7	6.18	113.27	110.80
57	BB	775	G	C8-N9-C1'	6.18	135.03	127.00
57	BB	1091	G	C1'-O4'-C4'	6.18	114.84	109.90
57	BB	1399	C	C3'-C2'-C1'	6.18	106.44	101.50
57	BB	2582	G	C5-N7-C8	6.18	107.39	104.30
57	BB	2664	G	P-O5'-C5'	6.18	130.79	120.90
21	AA	382	A	N9-C4-C5	6.18	108.27	105.80
21	AA	616	G	N3-C2-N2	6.18	124.22	119.90
21	AA	1104	G	O4'-C1'-N9	6.18	113.14	108.20
57	BB	1705	A	O4'-C1'-N9	6.18	113.14	108.20
57	BB	2035	G	C5'-C4'-C3'	6.18	125.89	116.00
57	BB	2440	C	C6-N1-C2	-6.18	117.83	120.30
2	AK	51	PHE	CB-CG-CD2	-6.18	116.48	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	271	C	P-O3'-C3'	6.18	127.11	119.70
21	AA	319	G	N3-C2-N2	-6.18	115.58	119.90
21	AA	1118	U	C3'-C2'-C1'	-6.18	96.56	101.50
21	AA	1165	U	N3-C4-O4	6.18	123.72	119.40
21	AA	1177	G	N3-C4-C5	-6.18	125.51	128.60
21	AA	1310	G	N3-C4-N9	-6.18	122.29	126.00
21	AA	1414	U	O4'-C1'-N1	6.18	113.14	108.20
21	AA	1417	G	N3-C2-N2	6.18	124.22	119.90
48	B1	20	TYR	CG-CD2-CE2	6.18	126.24	121.30
57	BB	391	A	C5-C6-N6	-6.18	118.76	123.70
57	BB	695	G	C5-C6-O6	-6.18	124.89	128.60
57	BB	1810	A	C5-C6-N1	-6.18	114.61	117.70
57	BB	1968	G	P-O5'-C5'	-6.18	111.02	120.90
57	BB	1999	C	O4'-C1'-N1	6.18	113.14	108.20
57	BB	2521	C	N3-C4-C5	-6.18	119.43	121.90
57	BB	2644	G	O4'-C1'-N9	6.18	113.14	108.20
57	BB	2850	A	C5-C6-N1	-6.18	114.61	117.70
5	AN	52	ARG	NE-CZ-NH2	6.17	123.39	120.30
21	AA	722	G	C4-N9-C1'	6.17	134.53	126.50
21	AA	1012	A	C8-N9-C4	6.17	108.27	105.80
23	AW	31	A	C4-C5-N7	6.17	113.79	110.70
45	BC	181	ARG	NE-CZ-NH1	-6.17	117.21	120.30
57	BB	375	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	907	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	1285	A	C8-N9-C4	6.17	108.27	105.80
57	BB	1582	C	N3-C4-C5	-6.17	119.43	121.90
57	BB	2186	G	N3-C4-C5	-6.17	125.51	128.60
58	BA	74	U	N3-C4-O4	6.17	123.72	119.40
21	AA	778	G	P-O5'-C5'	6.17	130.78	120.90
21	AA	1136	C	N3-C2-O2	6.17	126.22	121.90
57	BB	1219	U	C2-N3-C4	-6.17	123.30	127.00
57	BB	1924	C	N3-C4-N4	6.17	122.32	118.00
57	BB	2273	A	O4'-C1'-N9	6.17	113.14	108.20
57	BB	2699	C	P-O3'-C3'	-6.17	112.29	119.70
57	BB	2725	A	O4'-C1'-N9	6.17	113.14	108.20
21	AA	154	U	C1'-O4'-C4'	-6.17	104.96	109.90
21	AA	457	G	C5-C6-N1	-6.17	108.41	111.50
21	AA	1036	A	N9-C4-C5	6.17	108.27	105.80
21	AA	1468	A	P-O3'-C3'	-6.17	112.29	119.70
22	AY	25	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	210	C	N3-C2-O2	6.17	126.22	121.90
57	BB	235	U	C6-N1-C2	-6.17	117.30	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	327	G	C8-N9-C4	-6.17	103.93	106.40
57	BB	839	U	C4-C5-C6	-6.17	116.00	119.70
57	BB	1002	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	1516	G	C6-N1-C2	6.17	128.80	125.10
57	BB	1797	G	N3-C4-C5	6.17	131.69	128.60
57	BB	2170	A	P-O3'-C3'	-6.17	112.30	119.70
57	BB	2498	C	C4'-C3'-C2'	-6.17	96.43	102.60
58	BA	67	G	N1-C2-N3	-6.17	120.20	123.90
21	AA	232	G	N7-C8-N9	6.17	116.19	113.10
21	AA	729	A	C8-N9-C4	6.17	108.27	105.80
21	AA	1189	U	C2-N1-C1'	6.17	125.11	117.70
57	BB	1151	A	N1-C2-N3	6.17	132.38	129.30
57	BB	1767	G	C3'-C2'-C1'	-6.17	96.56	101.50
57	BB	1917	U	C4'-C3'-C2'	-6.17	96.43	102.60
57	BB	2723	C	P-O3'-C3'	-6.17	112.30	119.70
57	BB	2748	A	C8-N9-C4	-6.17	103.33	105.80
21	AA	568	G	N3-C4-N9	6.17	129.70	126.00
21	AA	1336	C	C4'-C3'-C2'	6.17	108.77	102.60
26	AV	46	G	C8-N9-C4	-6.17	103.93	106.40
56	BH	36	ALA	CB-CA-C	6.17	119.35	110.10
57	BB	31	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	542	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	758	C	P-O3'-C3'	-6.17	112.30	119.70
57	BB	1206	G	N9-C1'-C2'	-6.17	105.21	112.00
57	BB	1412	U	C2-N3-C4	-6.17	123.30	127.00
57	BB	1749	A	C3'-C2'-C1'	-6.17	96.56	101.50
57	BB	1779	U	C3'-C2'-C1'	6.17	106.43	101.50
57	BB	1912	A	O4'-C1'-N9	6.17	113.14	108.20
57	BB	2008	C	O4'-C1'-N1	6.17	113.14	108.20
57	BB	2770	G	O4'-C1'-N9	6.17	113.14	108.20
21	AA	301	G	N9-C4-C5	-6.17	102.93	105.40
21	AA	384	G	P-O5'-C5'	6.17	130.77	120.90
21	AA	844	G	O4'-C4'-C3'	6.17	111.03	106.10
43	BX	27	ARG	NE-CZ-NH2	-6.17	117.22	120.30
57	BB	593	U	C6-N1-C2	-6.17	117.30	121.00
57	BB	669	G	N1-C2-N3	-6.17	120.20	123.90
57	BB	1265	A	C8-N9-C4	-6.17	103.33	105.80
57	BB	1276	A	N1-C2-N3	-6.17	126.22	129.30
57	BB	1603	A	C5-N7-C8	6.17	106.98	103.90
57	BB	2121	G	N7-C8-N9	-6.17	110.02	113.10
57	BB	2202	U	N1-C2-N3	-6.17	111.20	114.90
21	AA	605	U	C3'-C2'-C1'	-6.17	96.57	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1289	A	N3-C4-C5	-6.17	122.48	126.80
21	AA	1330	U	P-O3'-C3'	6.17	127.10	119.70
21	AA	1518	A	N9-C4-C5	6.17	108.27	105.80
22	AY	22	G	C4-C5-C6	6.17	122.50	118.80
23	AW	60	U	C4-C5-C6	6.17	123.40	119.70
57	BB	11	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	299	A	C4-C5-N7	-6.17	107.62	110.70
57	BB	404	A	P-O5'-C5'	6.17	130.76	120.90
57	BB	1552	A	C6-N1-C2	-6.17	114.90	118.60
57	BB	1970	A	N1-C2-N3	-6.17	126.22	129.30
21	AA	50	A	C5-C6-N6	-6.16	118.77	123.70
21	AA	969	A	N3-C4-C5	-6.16	122.49	126.80
21	AA	1029	U	C4'-C3'-C2'	-6.16	96.44	102.60
21	AA	1092	A	C5-C6-N1	-6.16	114.62	117.70
21	AA	1251	A	O4'-C1'-N9	6.16	113.13	108.20
21	AA	1395	C	N1-C2-O2	6.16	122.60	118.90
22	AY	14	A	C5-C6-N6	-6.16	118.77	123.70
57	BB	341	C	C4-C5-C6	6.16	120.48	117.40
57	BB	1223	G	C5'-C4'-O4'	6.16	116.50	109.10
57	BB	1338	G	C4-C5-N7	6.16	113.27	110.80
57	BB	1618	A	C4-C5-N7	-6.16	107.62	110.70
57	BB	1632	A	O4'-C4'-C3'	-6.16	97.84	104.00
57	BB	1670	C	C2-N1-C1'	6.16	125.58	118.80
57	BB	1815	A	C5-N7-C8	-6.16	100.82	103.90
57	BB	2042	A	C5-C6-N1	-6.16	114.62	117.70
57	BB	2165	C	P-O3'-C3'	6.16	127.10	119.70
21	AA	1097	C	P-O3'-C3'	-6.16	112.31	119.70
57	BB	88	G	N7-C8-N9	-6.16	110.02	113.10
57	BB	443	A	C5-C6-N1	-6.16	114.62	117.70
57	BB	916	G	C5-N7-C8	-6.16	101.22	104.30
57	BB	1000	A	N7-C8-N9	6.16	116.88	113.80
57	BB	1195	G	C4-C5-C6	6.16	122.50	118.80
57	BB	1827	U	O4'-C1'-N1	6.16	113.13	108.20
57	BB	1979	U	O4'-C4'-C3'	-6.16	97.84	104.00
57	BB	2256	G	N1-C2-N2	6.16	121.75	116.20
21	AA	663	A	C2-N3-C4	-6.16	107.52	110.60
26	AV	9	G	O4'-C1'-N9	6.16	113.13	108.20
30	BK	107	ARG	NE-CZ-NH1	6.16	123.38	120.30
57	BB	937	C	N3-C4-C5	-6.16	119.44	121.90
57	BB	1374	G	C6-C5-N7	-6.16	126.70	130.40
57	BB	1774	C	N3-C2-O2	6.16	126.21	121.90
57	BB	2357	G	N1-C2-N2	-6.16	110.66	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2491	U	C1'-O4'-C4'	6.16	114.83	109.90
58	BA	84	G	C2-N3-C4	6.16	114.98	111.90
21	AA	319	G	N1-C2-N2	6.16	121.74	116.20
21	AA	365	U	N3-C4-C5	-6.16	110.91	114.60
21	AA	1309	G	C5-C6-O6	-6.16	124.91	128.60
22	AY	57	G	C4-C5-N7	-6.16	108.34	110.80
23	AW	46	G	C3'-C2'-C1'	6.16	106.43	101.50
31	BL	78	ARG	NE-CZ-NH2	-6.16	117.22	120.30
57	BB	316	C	C4-C5-C6	6.16	120.48	117.40
57	BB	960	A	C5-C6-N6	-6.16	118.77	123.70
57	BB	1139	G	C5-C6-N1	-6.16	108.42	111.50
57	BB	2164	C	O4'-C1'-N1	6.16	113.13	108.20
57	BB	2166	U	C4'-C3'-C2'	-6.16	96.44	102.60
57	BB	2224	G	C3'-C2'-C1'	-6.16	96.57	101.50
57	BB	2498	C	N3-C4-N4	6.16	122.31	118.00
57	BB	2606	C	C5-C4-N4	-6.16	115.89	120.20
57	BB	2625	G	O4'-C4'-C3'	6.16	111.03	106.10
58	BA	3	C	C5-C4-N4	-6.16	115.89	120.20
21	AA	11	G	N1-C6-O6	6.16	123.59	119.90
21	AA	277	C	N1-C2-O2	6.16	122.59	118.90
21	AA	386	C	C4-C5-C6	6.16	120.48	117.40
21	AA	465	A	C5-C6-N6	-6.16	118.77	123.70
21	AA	1101	A	C4'-C3'-C2'	-6.16	96.44	102.60
57	BB	603	A	N3-C4-C5	-6.16	122.49	126.80
57	BB	1527	G	C5-C6-O6	-6.16	124.91	128.60
57	BB	1989	G	C4-C5-C6	6.16	122.49	118.80
57	BB	2100	G	N1-C2-N3	-6.16	120.21	123.90
21	AA	632	U	P-O5'-C5'	6.16	130.75	120.90
21	AA	1229	A	C8-N9-C4	-6.16	103.34	105.80
21	AA	1419	G	C5-C6-O6	-6.16	124.91	128.60
57	BB	933	A	C6-N1-C2	-6.16	114.91	118.60
57	BB	1432	G	C5'-C4'-C3'	-6.16	106.15	116.00
57	BB	1772	A	C2-N3-C4	6.16	113.68	110.60
57	BB	1810	A	N7-C8-N9	6.16	116.88	113.80
57	BB	1921	G	C4-C5-N7	-6.16	108.34	110.80
57	BB	2068	U	O4'-C1'-N1	6.16	113.12	108.20
58	BA	70	C	N3-C4-C5	-6.16	119.44	121.90
21	AA	1051	C	P-O3'-C3'	-6.15	112.32	119.70
57	BB	307	G	C5-C6-N1	-6.15	108.42	111.50
57	BB	587	C	C4-C5-C6	6.15	120.48	117.40
57	BB	1160	G	C4'-C3'-C2'	-6.15	96.45	102.60
57	BB	1196	C	N3-C4-N4	6.15	122.31	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2771	C	N3-C2-O2	-6.15	117.59	121.90
4	AM	78	ARG	N-CA-CB	6.15	121.68	110.60
17	AF	4	TYR	CB-CG-CD2	6.15	124.69	121.00
21	AA	60	A	O4'-C1'-N9	6.15	113.12	108.20
21	AA	290	C	N3-C4-C5	-6.15	119.44	121.90
21	AA	522	C	N3-C4-C5	-6.15	119.44	121.90
21	AA	1014	A	N7-C8-N9	6.15	116.88	113.80
21	AA	1119	C	O4'-C4'-C3'	-6.15	97.85	104.00
57	BB	710	U	C3'-C2'-C1'	6.15	106.42	101.50
57	BB	2895	G	N3-C2-N2	6.15	124.21	119.90
21	AA	804	U	N1-C2-N3	-6.15	111.21	114.90
21	AA	1361	G	C4'-C3'-C2'	-6.15	96.45	102.60
21	AA	1465	A	C6-N1-C2	-6.15	114.91	118.60
23	AW	3	C	C3'-C2'-C1'	-6.15	96.58	101.50
57	BB	2690	U	C4-C5-C6	-6.15	116.01	119.70
21	AA	678	U	N3-C4-C5	-6.15	110.91	114.60
21	AA	921	U	N3-C4-O4	6.15	123.70	119.40
25	AZ	84	HIS	O-C-N	6.15	132.54	122.70
50	B3	16	THR	CA-CB-CG2	-6.15	103.79	112.40
57	BB	81	G	N9-C4-C5	-6.15	102.94	105.40
57	BB	256	A	N1-C6-N6	6.15	122.29	118.60
57	BB	2032	G	N1-C2-N2	-6.15	110.67	116.20
57	BB	2073	C	N1-C1'-C2'	-6.15	105.24	112.00
57	BB	2671	G	C5-C6-O6	-6.15	124.91	128.60
58	BA	62	C	N3-C2-O2	6.15	126.20	121.90
21	AA	255	G	N3-C4-N9	6.15	129.69	126.00
21	AA	442	G	C6-N1-C2	-6.15	121.41	125.10
21	AA	1333	A	C4-C5-N7	-6.15	107.63	110.70
57	BB	450	G	C6-N1-C2	6.15	128.79	125.10
57	BB	1189	A	O4'-C1'-N9	6.15	113.12	108.20
57	BB	2820	A	O4'-C1'-C2'	-6.15	99.65	105.80
21	AA	926	G	C6-C5-N7	-6.15	126.71	130.40
57	BB	777	G	N1-C2-N3	-6.15	120.21	123.90
57	BB	1166	G	N1-C6-O6	6.15	123.59	119.90
57	BB	1926	U	N1-C2-N3	-6.15	111.21	114.90
57	BB	2044	C	C5-C6-N1	6.15	124.07	121.00
57	BB	2051	A	O4'-C1'-N9	6.15	113.12	108.20
57	BB	2895	G	C4-N9-C1'	6.15	134.49	126.50
21	AA	231	U	O4'-C1'-N1	6.14	113.12	108.20
21	AA	481	G	C5-C6-O6	-6.14	124.91	128.60
21	AA	976	G	N1-C2-N3	-6.14	120.21	123.90
21	AA	1161	C	O4'-C1'-N1	6.14	113.11	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1406	U	N1-C2-N3	-6.14	111.21	114.90
57	BB	781	A	N9-C4-C5	6.14	108.26	105.80
57	BB	817	C	C3'-C2'-C1'	-6.14	96.58	101.50
57	BB	1011	G	O4'-C1'-N9	6.14	113.11	108.20
57	BB	1794	A	C5-C6-N1	-6.14	114.63	117.70
57	BB	2491	U	O4'-C1'-N1	6.14	113.11	108.20
57	BB	2837	A	C5-N7-C8	6.14	106.97	103.90
21	AA	176	C	C2-N3-C4	-6.14	116.83	119.90
21	AA	505	G	C8-N9-C4	6.14	108.86	106.40
21	AA	923	A	C1'-O4'-C4'	6.14	114.81	109.90
21	AA	1077	G	C5-C6-O6	-6.14	124.92	128.60
21	AA	1149	C	N3-C4-N4	6.14	122.30	118.00
57	BB	295	G	C8-N9-C4	6.14	108.86	106.40
57	BB	1054	A	C4-C5-C6	6.14	120.07	117.00
57	BB	1398	C	C5-C4-N4	-6.14	115.90	120.20
57	BB	1840	G	P-O5'-C5'	6.14	130.73	120.90
21	AA	342	C	N1-C2-O2	6.14	122.58	118.90
21	AA	450	G	N9-C4-C5	6.14	107.86	105.40
21	AA	1473	G	C6-N1-C2	6.14	128.78	125.10
57	BB	310	A	P-O3'-C3'	6.14	127.07	119.70
57	BB	416	U	C5-C6-N1	6.14	125.77	122.70
57	BB	1583	A	C2-N3-C4	-6.14	107.53	110.60
57	BB	1691	C	C4'-C3'-C2'	-6.14	96.46	102.60
57	BB	1831	G	N1-C6-O6	6.14	123.58	119.90
57	BB	2577	A	P-O3'-C3'	6.14	127.07	119.70
21	AA	49	U	C3'-C2'-C1'	6.14	106.41	101.50
21	AA	65	A	C5-C6-N6	-6.14	118.79	123.70
21	AA	465	A	N9-C4-C5	6.14	108.26	105.80
21	AA	872	A	C5-N7-C8	6.14	106.97	103.90
21	AA	1062	U	C5-C4-O4	-6.14	122.22	125.90
21	AA	1249	C	C5-C4-N4	-6.14	115.90	120.20
26	AV	2	G	O4'-C1'-N9	6.14	113.11	108.20
33	BN	112	TYR	CB-CG-CD1	6.14	124.68	121.00
57	BB	493	G	C6-N1-C2	6.14	128.78	125.10
57	BB	723	C	C5-C4-N4	-6.14	115.90	120.20
57	BB	1454	C	C5-C6-N1	-6.14	117.93	121.00
57	BB	2186	G	N3-C2-N2	6.14	124.20	119.90
57	BB	2879	A	C6-N1-C2	-6.14	114.92	118.60
21	AA	1271	A	C4-C5-N7	-6.14	107.63	110.70
21	AA	1285	A	C5'-C4'-O4'	6.14	116.47	109.10
57	BB	508	A	N1-C2-N3	6.14	132.37	129.30
57	BB	2531	A	O4'-C1'-N9	6.14	113.11	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2779	U	N1-C2-O2	6.14	127.10	122.80
21	AA	149	A	C3'-C2'-C1'	6.14	106.41	101.50
21	AA	387	U	P-O5'-C5'	-6.14	111.08	120.90
21	AA	914	A	C4-C5-C6	6.14	120.07	117.00
21	AA	1212	U	O4'-C1'-N1	6.14	113.11	108.20
21	AA	1415	G	N3-C4-N9	6.14	129.68	126.00
26	AV	56	C	N1-C2-O2	-6.14	115.22	118.90
57	BB	175	G	N7-C8-N9	6.14	116.17	113.10
57	BB	177	G	C8-N9-C1'	-6.14	119.02	127.00
57	BB	875	G	C4-C5-C6	6.14	122.48	118.80
57	BB	1489	C	C2-N1-C1'	6.14	125.55	118.80
57	BB	2212	A	C4-C5-C6	6.14	120.07	117.00
57	BB	2303	G	N1-C2-N3	-6.14	120.22	123.90
57	BB	2428	G	C6-C5-N7	-6.14	126.72	130.40
57	BB	2759	G	C5-N7-C8	6.14	107.37	104.30
57	BB	2879	A	C2-N3-C4	-6.14	107.53	110.60
21	AA	166	U	N1-C2-O2	6.13	127.09	122.80
21	AA	536	C	C6-N1-C2	6.13	122.75	120.30
21	AA	1300	G	N3-C2-N2	-6.13	115.61	119.90
23	AW	5	G	C5-C6-O6	-6.13	124.92	128.60
57	BB	263	G	C5-C6-O6	-6.13	124.92	128.60
57	BB	1200	C	C2-N3-C4	6.13	122.97	119.90
57	BB	1380	G	C6-N1-C2	6.13	128.78	125.10
57	BB	2274	A	P-O5'-C5'	6.13	130.71	120.90
57	BB	2694	G	C5-N7-C8	6.13	107.37	104.30
57	BB	2774	C	C5-C6-N1	6.13	124.07	121.00
58	BA	96	G	C8-N9-C4	-6.13	103.95	106.40
21	AA	1205	U	O4'-C1'-N1	6.13	113.11	108.20
26	AV	41	C	C2-N3-C4	6.13	122.97	119.90
57	BB	1363	C	C5-C4-N4	-6.13	115.91	120.20
21	AA	106	C	N3-C4-N4	6.13	122.29	118.00
21	AA	645	G	C4-C5-C6	6.13	122.48	118.80
21	AA	851	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	1414	U	N1-C2-N3	-6.13	111.22	114.90
30	BK	119	PRO	N-CA-C	-6.13	96.16	112.10
34	BO	7	ARG	NE-CZ-NH1	6.13	123.37	120.30
57	BB	477	A	N9-C4-C5	6.13	108.25	105.80
57	BB	698	C	N3-C4-C5	-6.13	119.45	121.90
57	BB	1914	C	N1-C2-N3	6.13	123.49	119.20
57	BB	2015	A	O4'-C1'-N9	6.13	113.11	108.20
57	BB	2361	G	C8-N9-C4	-6.13	103.95	106.40
57	BB	2465	C	C5-C6-N1	6.13	124.06	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2880	C	N3-C4-N4	6.13	122.29	118.00
21	AA	45	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	538	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	833	G	C6-N1-C2	-6.13	121.42	125.10
21	AA	919	A	N1-C6-N6	6.13	122.28	118.60
21	AA	1061	G	N7-C8-N9	6.13	116.17	113.10
57	BB	283	G	N1-C2-N3	-6.13	120.22	123.90
57	BB	388	G	C5-C6-N1	-6.13	108.44	111.50
57	BB	1660	G	P-O5'-C5'	-6.13	111.09	120.90
6	AO	84	LEU	CB-CA-C	-6.13	98.56	110.20
21	AA	179	A	C5-C6-N6	-6.13	118.80	123.70
21	AA	491	G	N9-C4-C5	6.13	107.85	105.40
21	AA	567	G	C8-N9-C4	-6.13	103.95	106.40
21	AA	623	C	C5-C6-N1	6.13	124.06	121.00
21	AA	1373	G	C4'-C3'-C2'	-6.13	96.47	102.60
57	BB	184	C	OP1-P-OP2	-6.13	110.41	119.60
57	BB	1218	G	C4-C5-C6	6.13	122.48	118.80
57	BB	1581	G	C4-C5-C6	6.13	122.48	118.80
57	BB	2029	G	C5-C6-N1	-6.13	108.44	111.50
57	BB	2046	G	OP1-P-OP2	-6.13	110.41	119.60
57	BB	2731	G	C5-N7-C8	6.13	107.36	104.30
21	AA	782	A	C5-N7-C8	6.13	106.96	103.90
21	AA	1002	G	O4'-C1'-N9	6.13	113.10	108.20
21	AA	1322	C	C2-N1-C1'	6.13	125.54	118.80
21	AA	1362	A	C5'-C4'-C3'	6.13	125.80	116.00
26	AV	45	G	C8-N9-C1'	6.13	134.97	127.00
57	BB	1009	A	C8-N9-C4	-6.13	103.35	105.80
57	BB	1150	C	P-O3'-C3'	-6.13	112.35	119.70
57	BB	1239	G	N3-C4-N9	-6.13	122.32	126.00
57	BB	1773	A	N3-C4-C5	-6.13	122.51	126.80
57	BB	1819	A	N9-C4-C5	6.13	108.25	105.80
57	BB	1859	U	N3-C4-O4	6.13	123.69	119.40
57	BB	1980	G	C5-N7-C8	6.13	107.36	104.30
57	BB	2480	C	C1'-O4'-C4'	-6.13	105.00	109.90
57	BB	2568	U	C2-N1-C1'	6.13	125.05	117.70
57	BB	2724	U	N3-C2-O2	-6.13	117.91	122.20
57	BB	2894	G	C5-C6-N1	6.13	114.56	111.50
21	AA	780	A	N9-C4-C5	6.12	108.25	105.80
21	AA	784	A	O4'-C1'-N9	6.12	113.10	108.20
21	AA	968	A	N7-C8-N9	6.12	116.86	113.80
21	AA	1026	G	C6-C5-N7	6.12	134.07	130.40
57	BB	336	C	C5-C6-N1	6.12	124.06	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	939	G	C4-C5-N7	6.12	113.25	110.80
21	AA	865	A	C4-C5-N7	-6.12	107.64	110.70
21	AA	1146	A	C5-C6-N1	-6.12	114.64	117.70
22	AY	8	U	OP1-P-OP2	-6.12	110.42	119.60
25	AZ	226	VAL	CA-CB-CG1	6.12	120.08	110.90
57	BB	1337	G	C2-N3-C4	6.12	114.96	111.90
57	BB	1496	A	N1-C2-N3	6.12	132.36	129.30
21	AA	388	G	C1'-O4'-C4'	6.12	114.80	109.90
21	AA	444	G	N3-C4-C5	6.12	131.66	128.60
21	AA	604	G	N1-C2-N2	6.12	121.71	116.20
21	AA	609	A	O4'-C1'-N9	6.12	113.10	108.20
21	AA	886	G	C6-N1-C2	-6.12	121.43	125.10
21	AA	945	G	N1-C6-O6	6.12	123.57	119.90
21	AA	1122	U	C6-N1-C2	6.12	124.67	121.00
21	AA	1410	A	C6-C5-N7	-6.12	128.01	132.30
57	BB	25	U	N3-C4-O4	6.12	123.68	119.40
57	BB	75	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	82	U	C1'-O4'-C4'	-6.12	105.00	109.90
57	BB	1530	G	P-O3'-C3'	6.12	127.05	119.70
57	BB	1798	U	C5-C4-O4	-6.12	122.23	125.90
57	BB	2080	A	C2-N3-C4	6.12	113.66	110.60
57	BB	9	G	C5'-C4'-O4'	6.12	116.44	109.10
57	BB	551	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	757	G	N1-C2-N3	-6.12	120.23	123.90
57	BB	769	U	N1-C2-O2	-6.12	118.52	122.80
57	BB	1184	U	N1-C1'-C2'	-6.12	105.27	112.00
57	BB	1647	U	C5'-C4'-C3'	6.12	125.79	116.00
57	BB	2576	G	N1-C6-O6	6.12	123.57	119.90
21	AA	282	A	C3'-C2'-C1'	-6.12	96.61	101.50
21	AA	1474	U	C5-C4-O4	-6.12	122.23	125.90
21	AA	1532	U	N1-C2-N3	-6.12	111.23	114.90
57	BB	221	A	C5-N7-C8	6.12	106.96	103.90
57	BB	902	C	C5'-C4'-C3'	6.12	125.79	116.00
57	BB	1627	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	2532	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	2891	U	O4'-C1'-N1	6.12	113.09	108.20
21	AA	910	C	O4'-C1'-N1	6.12	113.09	108.20
56	BH	101	ASP	CB-CA-C	-6.12	98.17	110.40
57	BB	54	G	O4'-C1'-N9	6.12	113.09	108.20
57	BB	368	A	C4-C5-C6	6.12	120.06	117.00
57	BB	795	C	C2-N1-C1'	6.12	125.53	118.80
57	BB	1560	G	C4-C5-N7	-6.12	108.35	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2233	U	O4'-C1'-N1	6.12	113.09	108.20
57	BB	2276	G	N3-C2-N2	6.12	124.18	119.90
57	BB	2400	G	C2-N3-C4	6.12	114.96	111.90
57	BB	2797	U	O4'-C1'-N1	6.12	113.09	108.20
21	AA	192	A	O4'-C1'-N9	6.12	113.09	108.20
21	AA	1065	U	C2-N3-C4	-6.12	123.33	127.00
22	AY	28	C	C6-N1-C2	6.12	122.75	120.30
26	AV	76	A	C5-N7-C8	6.12	106.96	103.90
57	BB	176	A	C8-N9-C1'	6.12	138.71	127.70
57	BB	954	G	C8-N9-C4	-6.12	103.95	106.40
57	BB	1103	A	N3-C4-C5	-6.12	122.52	126.80
57	BB	1423	G	N9-C4-C5	6.12	107.85	105.40
57	BB	1926	U	C3'-C2'-C1'	-6.12	96.61	101.50
57	BB	2465	C	C6-N1-C2	-6.12	117.85	120.30
57	BB	2586	U	C4'-C3'-C2'	-6.12	96.48	102.60
57	BB	2802	G	C5-N7-C8	6.12	107.36	104.30
57	BB	2867	G	C4-C5-N7	6.12	113.25	110.80
58	BA	73	A	OP1-P-OP2	-6.12	110.42	119.60
21	AA	1054	C	N3-C4-C5	-6.11	119.45	121.90
22	AY	33	U	C6-N1-C2	6.11	124.67	121.00
57	BB	355	U	C5-C6-N1	6.11	125.76	122.70
57	BB	399	U	N1-C2-O2	6.11	127.08	122.80
57	BB	465	G	C5-N7-C8	6.11	107.36	104.30
57	BB	937	C	C6-N1-C1'	-6.11	113.46	120.80
57	BB	1191	G	C4-C5-C6	6.11	122.47	118.80
57	BB	1701	A	C8-N9-C4	-6.11	103.35	105.80
57	BB	2142	A	P-O5'-C5'	-6.11	111.12	120.90
57	BB	2365	G	C5-C6-O6	-6.11	124.93	128.60
57	BB	2369	A	C5-N7-C8	6.11	106.96	103.90
58	BA	50	A	P-O3'-C3'	-6.11	112.36	119.70
58	BA	101	A	C3'-C2'-C1'	6.11	106.39	101.50
21	AA	41	G	C8-N9-C4	-6.11	103.95	106.40
21	AA	43	C	C4-C5-C6	6.11	120.46	117.40
21	AA	199	A	N7-C8-N9	-6.11	110.74	113.80
26	AV	48	C	C5-C6-N1	-6.11	117.94	121.00
36	BQ	90	ASP	CB-CG-OD1	6.11	123.80	118.30
57	BB	294	A	O4'-C4'-C3'	6.11	110.99	106.10
57	BB	408	G	N9-C4-C5	-6.11	102.95	105.40
57	BB	962	G	O4'-C1'-N9	6.11	113.09	108.20
57	BB	1356	G	N1-C2-N3	-6.11	120.23	123.90
57	BB	1421	G	O4'-C1'-N9	6.11	113.09	108.20
57	BB	1435	G	O5'-C5'-C4'	-6.11	100.09	111.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1592	C	C2-N3-C4	6.11	122.96	119.90
57	BB	2444	G	P-O3'-C3'	-6.11	112.37	119.70
21	AA	668	G	C5-C6-N1	-6.11	108.44	111.50
22	AY	42	G	O4'-C1'-N9	6.11	113.09	108.20
23	AW	39	U	C2-N1-C1'	6.11	125.03	117.70
55	BG	57	TYR	CB-CG-CD1	-6.11	117.33	121.00
57	BB	304	U	C2-N3-C4	-6.11	123.33	127.00
57	BB	1123	C	C4-C5-C6	6.11	120.45	117.40
57	BB	1670	C	N3-C4-C5	-6.11	119.46	121.90
57	BB	1773	A	C5'-C4'-C3'	6.11	125.78	116.00
57	BB	2172	U	OP1-P-OP2	-6.11	110.43	119.60
7	AP	51	ARG	NE-CZ-NH2	-6.11	117.25	120.30
21	AA	1333	A	C4-C5-C6	6.11	120.05	117.00
57	BB	461	C	O4'-C1'-N1	6.11	113.09	108.20
57	BB	974	G	C4-C5-N7	-6.11	108.36	110.80
57	BB	1830	C	N3-C4-N4	6.11	122.28	118.00
57	BB	1833	C	N1-C2-O2	6.11	122.56	118.90
21	AA	886	G	N3-C2-N2	6.11	124.18	119.90
21	AA	1184	G	C4-C5-N7	6.11	113.24	110.80
21	AA	1305	G	C8-N9-C1'	6.11	134.94	127.00
22	AY	15	G	C2'-C3'-O3'	6.11	123.47	113.70
23	AW	9	A	C5-C6-N1	-6.11	114.65	117.70
57	BB	293	U	N3-C4-O4	6.11	123.67	119.40
57	BB	483	A	N9-C4-C5	6.11	108.24	105.80
57	BB	500	G	N7-C8-N9	-6.11	110.05	113.10
57	BB	582	A	C4-C5-C6	6.11	120.05	117.00
57	BB	2504	U	N3-C4-C5	-6.11	110.94	114.60
21	AA	1000	A	C4-C5-C6	6.11	120.05	117.00
22	AY	39	U	C4'-C3'-C2'	-6.11	96.50	102.60
45	BC	155	ARG	NE-CZ-NH1	6.11	123.35	120.30
56	BH	67	ALA	C-N-CA	6.11	136.97	121.70
57	BB	833	A	C8-N9-C4	-6.11	103.36	105.80
57	BB	897	C	C4-C5-C6	6.11	120.45	117.40
57	BB	1870	C	N3-C4-N4	6.11	122.27	118.00
57	BB	2526	G	C6-N1-C2	6.11	128.76	125.10
57	BB	2850	A	C4-C5-N7	-6.11	107.65	110.70
58	BA	85	G	N9-C4-C5	6.11	107.84	105.40
21	AA	327	A	C4-C5-N7	-6.10	107.65	110.70
21	AA	367	U	N1-C2-O2	-6.10	118.53	122.80
21	AA	754	C	C2-N1-C1'	6.10	125.51	118.80
21	AA	922	G	N1-C2-N2	-6.10	110.71	116.20
21	AA	1021	A	C1'-O4'-C4'	-6.10	105.02	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	252	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	1142	A	C4-N9-C1'	-6.10	115.31	126.30
57	BB	1957	C	N3-C4-N4	6.10	122.27	118.00
57	BB	1992	G	C2-N3-C4	-6.10	108.85	111.90
57	BB	2869	G	C8-N9-C4	-6.10	103.96	106.40
21	AA	51	A	N9-C4-C5	-6.10	103.36	105.80
21	AA	462	G	N7-C8-N9	-6.10	110.05	113.10
21	AA	1083	U	C2-N1-C1'	-6.10	110.38	117.70
23	AW	60	U	C2-N3-C4	6.10	130.66	127.00
57	BB	467	G	N1-C2-N3	-6.10	120.24	123.90
57	BB	721	A	N3-C4-C5	-6.10	122.53	126.80
57	BB	1496	A	O4'-C1'-N9	6.10	113.08	108.20
57	BB	1554	U	C4-C5-C6	-6.10	116.04	119.70
57	BB	1610	A	OP1-P-O3'	6.10	118.63	105.20
57	BB	2628	C	C5-C6-N1	6.10	124.05	121.00
57	BB	2676	C	N3-C4-N4	6.10	122.27	118.00
57	BB	2898	U	C4'-C3'-C2'	-6.10	96.50	102.60
21	AA	23	C	O4'-C1'-N1	6.10	113.08	108.20
21	AA	509	A	C5-N7-C8	6.10	106.95	103.90
57	BB	838	C	C4'-C3'-C2'	-6.10	96.50	102.60
57	BB	952	G	C5-N7-C8	6.10	107.35	104.30
57	BB	2550	G	N9-C4-C5	-6.10	102.96	105.40
21	AA	124	C	C4-C5-C6	6.10	120.45	117.40
21	AA	591	U	O4'-C1'-N1	6.10	113.08	108.20
21	AA	713	G	O4'-C1'-N9	6.10	113.08	108.20
26	AV	51	C	C5-C6-N1	6.10	124.05	121.00
56	BH	101	ASP	CB-CG-OD2	-6.10	112.81	118.30
57	BB	852	U	C3'-C2'-C1'	-6.10	96.62	101.50
57	BB	1056	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	1499	C	N3-C4-C5	-6.10	119.46	121.90
57	BB	2092	U	C5'-C4'-O4'	6.10	116.42	109.10
57	BB	2513	A	C3'-C2'-C1'	6.10	106.38	101.50
57	BB	2759	G	OP1-P-O3'	6.10	118.62	105.20
21	AA	172	A	C5-C6-N6	-6.10	118.82	123.70
21	AA	256	U	N3-C4-O4	6.10	123.67	119.40
21	AA	391	G	C5-N7-C8	-6.10	101.25	104.30
21	AA	478	A	C5-N7-C8	6.10	106.95	103.90
21	AA	830	G	C6-N1-C2	6.10	128.76	125.10
21	AA	836	G	C5-N7-C8	6.10	107.35	104.30
21	AA	1279	G	C5'-C4'-C3'	-6.10	106.24	116.00
21	AA	1293	C	O4'-C1'-N1	6.10	113.08	108.20
21	AA	1356	G	C5-N7-C8	6.10	107.35	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	BF	147	ARG	NE-CZ-NH2	-6.10	117.25	120.30
57	BB	98	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	152	A	N1-C2-N3	-6.10	126.25	129.30
57	BB	295	G	N1-C2-N3	6.10	127.56	123.90
57	BB	485	C	C5'-C4'-O4'	6.10	116.42	109.10
57	BB	601	C	N1-C2-O2	6.10	122.56	118.90
57	BB	1140	C	N3-C4-N4	6.10	122.27	118.00
57	BB	1497	U	C2-N3-C4	-6.10	123.34	127.00
57	BB	1515	A	N1-C6-N6	6.10	122.26	118.60
57	BB	1628	G	C6-N1-C2	-6.10	121.44	125.10
57	BB	1966	A	N1-C6-N6	6.10	122.26	118.60
57	BB	2673	G	N9-C4-C5	6.10	107.84	105.40
57	BB	2700	A	N1-C6-N6	6.10	122.26	118.60
21	AA	607	A	P-O3'-C3'	-6.10	112.39	119.70
21	AA	626	G	C6-C5-N7	-6.10	126.74	130.40
57	BB	1163	G	C4-C5-C6	6.10	122.46	118.80
57	BB	1939	U	O4'-C4'-C3'	-6.10	97.90	104.00
21	AA	164	G	N7-C8-N9	-6.09	110.05	113.10
21	AA	232	G	C5-C6-N1	6.09	114.55	111.50
21	AA	520	A	C5-C6-N1	-6.09	114.65	117.70
21	AA	835	U	C6-N1-C2	-6.09	117.34	121.00
22	AY	40	C	C6-N1-C1'	6.09	128.11	120.80
31	BL	126	ARG	NE-CZ-NH2	6.09	123.35	120.30
57	BB	362	A	N7-C8-N9	6.09	116.85	113.80
57	BB	961	C	C5-C4-N4	-6.09	115.93	120.20
57	BB	1075	C	P-O3'-C3'	-6.09	112.39	119.70
57	BB	1248	G	N1-C6-O6	6.09	123.56	119.90
57	BB	1286	A	C5-C6-N1	-6.09	114.65	117.70
57	BB	1358	G	N3-C4-C5	-6.09	125.55	128.60
57	BB	1759	A	N9-C4-C5	6.09	108.24	105.80
57	BB	1975	G	N1-C6-O6	6.09	123.56	119.90
57	BB	2458	G	C3'-C2'-C1'	-6.09	96.62	101.50
57	BB	2698	U	O4'-C1'-N1	6.09	113.08	108.20
57	BB	2775	G	N1-C2-N3	-6.09	120.24	123.90
21	AA	419	C	C5-C4-N4	-6.09	115.94	120.20
21	AA	639	G	C5-C6-N1	-6.09	108.45	111.50
21	AA	743	A	C3'-C2'-C1'	-6.09	96.62	101.50
22	AY	39	U	N1-C2-O2	-6.09	118.53	122.80
57	BB	523	C	C3'-C2'-C1'	-6.09	96.62	101.50
57	BB	570	G	N3-C2-N2	6.09	124.17	119.90
57	BB	708	G	C8-N9-C4	6.09	108.84	106.40
57	BB	836	G	C4-C5-C6	6.09	122.46	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1136	G	P-O5'-C5'	-6.09	111.15	120.90
57	BB	2468	A	C2-N3-C4	-6.09	107.55	110.60
21	AA	342	C	N3-C2-O2	-6.09	117.64	121.90
21	AA	387	U	C5-C6-N1	6.09	125.75	122.70
21	AA	812	G	C2-N3-C4	6.09	114.95	111.90
21	AA	1493	A	C4'-C3'-C2'	6.09	108.69	102.60
22	AY	52	U	N1-C2-O2	6.09	127.06	122.80
26	AV	39	C	N3-C4-C5	-6.09	119.46	121.90
26	AV	47	U	C6-N1-C1'	-6.09	112.67	121.20
57	BB	85	G	C2-N3-C4	-6.09	108.85	111.90
57	BB	265	A	C1'-O4'-C4'	-6.09	105.03	109.90
57	BB	302	C	C5-C4-N4	-6.09	115.94	120.20
57	BB	380	G	C4-C5-N7	6.09	113.24	110.80
57	BB	560	C	N1-C2-N3	-6.09	114.94	119.20
57	BB	1253	A	C6-C5-N7	-6.09	128.04	132.30
57	BB	1748	C	O4'-C1'-N1	6.09	113.07	108.20
57	BB	2407	A	N7-C8-N9	-6.09	110.75	113.80
57	BB	2772	C	C6-N1-C2	6.09	122.74	120.30
21	AA	382	A	C4-C5-N7	-6.09	107.66	110.70
21	AA	687	A	C5-C6-N1	-6.09	114.66	117.70
21	AA	828	U	C1'-O4'-C4'	6.09	114.77	109.90
23	AW	43	C	C2-N3-C4	6.09	122.94	119.90
26	AV	64	G	P-O3'-C3'	-6.09	112.39	119.70
47	B0	30	ASP	CB-CG-OD2	-6.09	112.82	118.30
57	BB	244	A	C4-C5-N7	-6.09	107.66	110.70
57	BB	365	U	N3-C2-O2	6.09	126.46	122.20
57	BB	462	C	C6-N1-C2	6.09	122.74	120.30
57	BB	1045	C	N3-C4-N4	6.09	122.26	118.00
57	BB	1093	G	P-O5'-C5'	6.09	130.64	120.90
57	BB	1124	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	1247	A	C6-C5-N7	-6.09	128.04	132.30
57	BB	1638	C	C4'-C3'-C2'	-6.09	96.51	102.60
57	BB	1790	C	N3-C2-O2	6.09	126.16	121.90
57	BB	2193	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	2491	U	C5'-C4'-O4'	6.09	116.41	109.10
57	BB	2624	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	2758	A	N7-C8-N9	-6.09	110.75	113.80
58	BA	41	G	N1-C2-N3	-6.09	120.25	123.90
21	AA	277	C	C4-C5-C6	6.09	120.44	117.40
21	AA	713	G	N3-C4-C5	6.09	131.64	128.60
21	AA	948	C	N3-C4-C5	6.09	124.33	121.90
21	AA	1377	A	C5-N7-C8	-6.09	100.86	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2619	C	C4-C5-C6	6.09	120.44	117.40
57	BB	2777	G	C1'-O4'-C4'	6.09	114.77	109.90
58	BA	11	C	C2-N1-C1'	6.09	125.50	118.80
21	AA	129	A	C5-C6-N1	-6.09	114.66	117.70
21	AA	322	C	O4'-C1'-N1	6.09	113.07	108.20
21	AA	550	G	C4-C5-C6	-6.09	115.15	118.80
21	AA	567	G	C6-N1-C2	-6.09	121.45	125.10
22	AY	43	G	N3-C4-N9	6.09	129.65	126.00
28	BI	53	PRO	O-C-N	6.09	132.44	122.70
36	BQ	105	PHE	CB-CG-CD2	6.09	125.06	120.80
48	B1	12	SER	N-CA-CB	6.09	119.63	110.50
57	BB	232	G	N7-C8-N9	-6.09	110.06	113.10
57	BB	450	G	C4'-C3'-C2'	-6.09	96.51	102.60
57	BB	859	G	N7-C8-N9	-6.09	110.06	113.10
57	BB	1244	A	C5-N7-C8	6.09	106.94	103.90
57	BB	1420	A	C3'-C2'-C1'	-6.09	96.63	101.50
57	BB	2000	C	C3'-C2'-C1'	-6.09	96.63	101.50
57	BB	2678	C	N1-C2-O2	-6.09	115.25	118.90
57	BB	2742	G	O4'-C1'-N9	6.09	113.07	108.20
21	AA	87	C	N3-C4-N4	6.08	122.26	118.00
21	AA	1122	U	O4'-C1'-N1	6.08	113.07	108.20
23	AW	36	A	N3-C4-C5	-6.08	122.54	126.80
57	BB	683	U	C2-N1-C1'	6.08	125.00	117.70
57	BB	2891	U	N3-C4-O4	6.08	123.66	119.40
21	AA	355	C	O4'-C4'-C3'	-6.08	97.92	104.00
21	AA	462	G	C5-C6-O6	-6.08	124.95	128.60
21	AA	743	A	N9-C4-C5	6.08	108.23	105.80
21	AA	908	A	C6-N1-C2	-6.08	114.95	118.60
54	BF	148	VAL	C-N-CA	6.08	136.91	121.70
57	BB	390	U	N1-C2-N3	-6.08	111.25	114.90
57	BB	905	A	C8-N9-C4	-6.08	103.37	105.80
57	BB	945	A	N9-C4-C5	6.08	108.23	105.80
57	BB	1087	G	O4'-C1'-N9	6.08	113.07	108.20
57	BB	1382	G	P-O5'-C5'	-6.08	111.17	120.90
57	BB	1578	U	O4'-C1'-N1	6.08	113.07	108.20
57	BB	2034	U	N3-C4-O4	6.08	123.66	119.40
57	BB	2182	U	C5-C4-O4	-6.08	122.25	125.90
57	BB	2601	C	O4'-C1'-N1	6.08	113.07	108.20
58	BA	2	G	C5-C6-N1	-6.08	108.46	111.50
58	BA	2	G	C8-N9-C4	-6.08	103.97	106.40
21	AA	374	A	C5-N7-C8	6.08	106.94	103.90
21	AA	781	A	O4'-C1'-N9	6.08	113.07	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1446	A	C5-C6-N6	-6.08	118.83	123.70
22	AY	64	A	C4-C5-N7	-6.08	107.66	110.70
57	BB	1415	U	O4'-C1'-N1	6.08	113.06	108.20
57	BB	1861	G	O4'-C1'-N9	6.08	113.06	108.20
57	BB	2379	G	C2-N3-C4	6.08	114.94	111.90
57	BB	2478	A	C5-N7-C8	6.08	106.94	103.90
57	BB	2882	A	N3-C4-C5	6.08	131.06	126.80
58	BA	77	U	C6-N1-C2	-6.08	117.35	121.00
21	AA	160	A	C5-C6-N1	-6.08	114.66	117.70
21	AA	851	G	C4-C5-N7	6.08	113.23	110.80
21	AA	1070	U	C5-C4-O4	-6.08	122.25	125.90
26	AV	63	G	C8-N9-C4	-6.08	103.97	106.40
57	BB	1207	C	N3-C4-C5	-6.08	119.47	121.90
57	BB	1278	C	C6-N1-C2	-6.08	117.87	120.30
57	BB	1323	C	N3-C4-N4	6.08	122.26	118.00
57	BB	1359	A	C4-C5-C6	6.08	120.04	117.00
57	BB	2714	G	O4'-C1'-N9	6.08	113.06	108.20
14	AC	16	PRO	O-C-N	6.08	132.43	122.70
21	AA	28	A	C5-N7-C8	6.08	106.94	103.90
21	AA	33	A	C6-C5-N7	-6.08	128.04	132.30
21	AA	288	A	C5-C6-N6	-6.08	118.84	123.70
21	AA	1457	G	N9-C4-C5	-6.08	102.97	105.40
57	BB	109	C	C2-N3-C4	6.08	122.94	119.90
57	BB	176	A	C4-N9-C1'	-6.08	115.36	126.30
57	BB	901	C	C1'-O4'-C4'	-6.08	105.04	109.90
57	BB	1988	G	C1'-O4'-C4'	6.08	114.76	109.90
57	BB	2489	U	N3-C4-C5	-6.08	110.95	114.60
57	BB	2632	A	P-O5'-C5'	-6.08	111.17	120.90
57	BB	2804	U	C6-N1-C2	-6.08	117.35	121.00
57	BB	2832	U	N1-C2-O2	6.08	127.05	122.80
57	BB	2850	A	C4-C5-C6	6.08	120.04	117.00
57	BB	533	G	N1-C6-O6	6.08	123.55	119.90
57	BB	1026	G	N7-C8-N9	6.08	116.14	113.10
57	BB	1520	U	N3-C4-C5	-6.08	110.95	114.60
57	BB	2557	G	N3-C4-C5	6.08	131.64	128.60
58	BA	102	G	C5-C6-O6	-6.08	124.95	128.60
21	AA	409	U	N3-C4-O4	6.08	123.65	119.40
21	AA	804	U	N3-C4-O4	-6.08	115.15	119.40
21	AA	915	A	C6-C5-N7	-6.08	128.05	132.30
21	AA	1045	C	C6-N1-C1'	-6.08	113.51	120.80
21	AA	1265	C	C5-C6-N1	6.08	124.04	121.00
21	AA	1499	A	N1-C6-N6	6.08	122.25	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	66	A	C2-N3-C4	-6.08	107.56	110.60
36	BQ	86	SER	N-CA-CB	6.08	119.61	110.50
57	BB	836	G	N3-C4-C5	-6.08	125.56	128.60
57	BB	1125	G	P-O3'-C3'	6.08	126.99	119.70
58	BA	79	G	C4-C5-N7	6.08	113.23	110.80
58	BA	85	G	P-O3'-C3'	-6.08	112.41	119.70
21	AA	385	C	N3-C4-N4	6.07	122.25	118.00
21	AA	457	G	N7-C8-N9	-6.07	110.06	113.10
21	AA	580	C	O5'-P-OP1	-6.07	100.23	105.70
21	AA	1132	C	C2-N3-C4	6.07	122.94	119.90
21	AA	1498	U	C2-N3-C4	6.07	130.64	127.00
23	AW	6	G	C8-N9-C4	-6.07	103.97	106.40
57	BB	301	G	O4'-C1'-N9	6.07	113.06	108.20
57	BB	558	U	C5-C6-N1	6.07	125.74	122.70
57	BB	668	A	P-O3'-C3'	6.07	126.99	119.70
57	BB	813	U	C3'-C2'-C1'	6.07	106.36	101.50
57	BB	878	A	O4'-C1'-N9	6.07	113.06	108.20
57	BB	1237	A	P-O3'-C3'	6.07	126.99	119.70
57	BB	1348	C	N1-C2-O2	6.07	122.54	118.90
57	BB	1378	A	C6-C5-N7	-6.07	128.05	132.30
57	BB	1709	U	N1-C2-O2	6.07	127.05	122.80
57	BB	1814	G	N1-C2-N3	-6.07	120.26	123.90
57	BB	2174	C	C4'-C3'-C2'	-6.07	96.53	102.60
21	AA	199	A	C5-N7-C8	6.07	106.94	103.90
21	AA	736	C	C3'-C2'-C1'	-6.07	96.64	101.50
21	AA	853	C	C5-C6-N1	6.07	124.04	121.00
23	AW	53	G	C8-N9-C4	6.07	108.83	106.40
24	AX	13	A	P-O3'-C3'	-6.07	112.41	119.70
57	BB	315	G	C5-N7-C8	-6.07	101.26	104.30
57	BB	1944	U	O4'-C1'-C2'	-6.07	99.73	105.80
21	AA	546	A	C5-C6-N6	-6.07	118.84	123.70
21	AA	731	G	N9-C4-C5	-6.07	102.97	105.40
21	AA	766	A	O4'-C1'-N9	6.07	113.06	108.20
21	AA	1177	G	C8-N9-C4	-6.07	103.97	106.40
21	AA	1407	C	N3-C4-N4	6.07	122.25	118.00
21	AA	1476	A	C1'-O4'-C4'	-6.07	105.04	109.90
25	AZ	366	ILE	N-CA-C	-6.07	94.61	111.00
28	BI	17	ALA	CB-CA-C	-6.07	101.00	110.10
32	BM	95	LEU	N-CA-CB	6.07	122.54	110.40
57	BB	104	A	C8-N9-C4	-6.07	103.37	105.80
57	BB	311	A	C6-C5-N7	-6.07	128.05	132.30
57	BB	563	A	C3'-C2'-C1'	-6.07	96.64	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	833	A	N1-C6-N6	6.07	122.24	118.60
57	BB	881	G	O4'-C1'-N9	6.07	113.06	108.20
57	BB	1480	C	N3-C4-N4	6.07	122.25	118.00
57	BB	1740	G	C5-C6-N1	-6.07	108.47	111.50
57	BB	2084	C	P-O3'-C3'	-6.07	112.42	119.70
57	BB	2347	C	N3-C4-C5	-6.07	119.47	121.90
23	AW	6	G	N3-C4-N9	-6.07	122.36	126.00
25	AZ	381	ARG	NH1-CZ-NH2	-6.07	112.72	119.40
57	BB	990	A	C4-C5-C6	6.07	120.03	117.00
57	BB	1124	G	P-O5'-C5'	-6.07	111.19	120.90
57	BB	1876	A	C2-N3-C4	-6.07	107.56	110.60
57	BB	2217	G	N1-C2-N3	-6.07	120.26	123.90
57	BB	2315	G	C5-N7-C8	-6.07	101.27	104.30
21	AA	233	C	C5-C6-N1	6.07	124.03	121.00
21	AA	253	A	C6-N1-C2	-6.07	114.96	118.60
21	AA	615	G	N9-C4-C5	6.07	107.83	105.40
21	AA	1062	U	O4'-C1'-N1	6.07	113.05	108.20
21	AA	1197	A	C2-N3-C4	-6.07	107.57	110.60
21	AA	1526	G	C6-C5-N7	-6.07	126.76	130.40
23	AW	15	G	O5'-P-OP1	6.07	117.98	110.70
57	BB	32	C	C6-N1-C2	6.07	122.73	120.30
57	BB	309	A	O4'-C1'-N9	6.07	113.06	108.20
57	BB	512	G	C5-C6-N1	-6.07	108.47	111.50
57	BB	1288	G	C5-C6-O6	-6.07	124.96	128.60
57	BB	1546	G	N3-C2-N2	6.07	124.15	119.90
57	BB	1729	U	P-O3'-C3'	6.07	126.98	119.70
57	BB	2491	U	C2-N3-C4	-6.07	123.36	127.00
21	AA	170	U	O4'-C4'-C3'	-6.07	97.94	104.00
21	AA	456	A	C5-C6-N6	-6.07	118.85	123.70
57	BB	149	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	446	G	C5-C6-N1	6.07	114.53	111.50
57	BB	638	G	N1-C6-O6	6.07	123.54	119.90
57	BB	899	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	920	A	C3'-C2'-C1'	-6.07	96.65	101.50
57	BB	968	C	C2-N3-C4	6.07	122.93	119.90
57	BB	1175	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	2257	U	C5-C6-N1	6.07	125.73	122.70
57	BB	2345	G	C6-C5-N7	-6.07	126.76	130.40
21	AA	1354	U	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	12	U	N3-C4-O4	6.06	123.64	119.40
21	AA	470	C	N3-C4-C5	-6.06	119.47	121.90
21	AA	509	A	C5-C6-N1	-6.06	114.67	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	533	A	C8-N9-C4	6.06	108.22	105.80
21	AA	705	G	N3-C2-N2	6.06	124.14	119.90
21	AA	753	A	OP2-P-O3'	6.06	118.54	105.20
21	AA	1255	G	C4-N9-C1'	-6.06	118.62	126.50
39	BT	69	ARG	NE-CZ-NH2	-6.06	117.27	120.30
57	BB	600	G	C6-C5-N7	-6.06	126.76	130.40
57	BB	674	G	N1-C2-N3	-6.06	120.26	123.90
57	BB	759	G	N1-C2-N3	-6.06	120.26	123.90
57	BB	1739	A	C4-C5-C6	6.06	120.03	117.00
57	BB	2047	C	P-O5'-C5'	-6.06	111.20	120.90
21	AA	505	G	N1-C2-N3	-6.06	120.26	123.90
21	AA	513	C	C4-C5-C6	-6.06	114.37	117.40
21	AA	695	A	N7-C8-N9	-6.06	110.77	113.80
21	AA	1430	A	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1724	G	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1802	A	O4'-C1'-C2'	-6.06	99.74	105.80
57	BB	2286	G	C8-N9-C4	-6.06	103.97	106.40
57	BB	2538	C	C6-N1-C2	-6.06	117.88	120.30
21	AA	859	G	C6-C5-N7	-6.06	126.76	130.40
21	AA	1378	C	C6-N1-C2	6.06	122.72	120.30
24	AX	13	A	N1-C2-N3	6.06	132.33	129.30
57	BB	204	A	C6-C5-N7	-6.06	128.06	132.30
57	BB	246	C	C6-N1-C2	-6.06	117.88	120.30
57	BB	835	C	C5-C6-N1	6.06	124.03	121.00
57	BB	1839	G	C6-C5-N7	6.06	134.03	130.40
57	BB	1840	G	C6-N1-C2	6.06	128.74	125.10
57	BB	1910	G	C4-C5-N7	6.06	113.22	110.80
57	BB	1911	U	C5-C4-O4	-6.06	122.26	125.90
57	BB	2523	G	C5-N7-C8	6.06	107.33	104.30
57	BB	2622	U	O5'-C5'-C4'	-6.06	100.19	111.70
58	BA	10	G	N3-C2-N2	-6.06	115.66	119.90
58	BA	30	C	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	107	G	C2-N3-C4	-6.06	108.87	111.90
21	AA	292	G	C5-C6-O6	-6.06	124.97	128.60
21	AA	459	A	N3-C4-C5	-6.06	122.56	126.80
21	AA	1046	A	C4'-C3'-C2'	-6.06	96.54	102.60
22	AY	76	A	P-O5'-C5'	-6.06	111.21	120.90
26	AV	53	G	C5-N7-C8	-6.06	101.27	104.30
57	BB	211	C	C6-N1-C2	-6.06	117.88	120.30
57	BB	1174	U	C5-C6-N1	6.06	125.73	122.70
57	BB	1652	A	C6-N1-C2	6.06	122.23	118.60
57	BB	2183	A	C5-C6-N1	-6.06	114.67	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2522	U	N3-C4-C5	-6.06	110.97	114.60
57	BB	2700	A	P-O3'-C3'	6.06	126.97	119.70
5	AN	12	ARG	NE-CZ-NH2	-6.06	117.27	120.30
21	AA	115	G	N3-C4-C5	-6.06	125.57	128.60
21	AA	137	U	C5-C4-O4	6.06	129.53	125.90
21	AA	411	A	N9-C4-C5	6.06	108.22	105.80
21	AA	872	A	P-O5'-C5'	6.06	130.59	120.90
21	AA	915	A	C5-C6-N6	-6.06	118.86	123.70
57	BB	412	A	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1153	C	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	319	G	C4-C5-C6	6.05	122.43	118.80
21	AA	351	G	O4'-C1'-N9	6.05	113.04	108.20
21	AA	1255	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	1320	C	N1-C2-N3	6.05	123.44	119.20
22	AY	36	A	C4'-C3'-C2'	-6.05	96.55	102.60
57	BB	586	A	N1-C6-N6	6.05	122.23	118.60
57	BB	743	A	O4'-C1'-N9	6.05	113.04	108.20
57	BB	787	C	N3-C4-C5	-6.05	119.48	121.90
57	BB	864	G	C4-C5-C6	6.05	122.43	118.80
57	BB	1593	A	N3-C4-N9	6.05	132.24	127.40
57	BB	1755	A	C4-C5-C6	6.05	120.03	117.00
57	BB	2062	A	N9-C4-C5	6.05	108.22	105.80
57	BB	2362	C	N3-C2-O2	6.05	126.14	121.90
57	BB	2413	G	N3-C2-N2	6.05	124.14	119.90
57	BB	2422	C	N3-C4-N4	6.05	122.24	118.00
57	BB	2446	G	O4'-C1'-N9	6.05	113.04	108.20
57	BB	2447	G	O5'-C5'-C4'	-6.05	100.20	111.70
57	BB	2452	C	P-O3'-C3'	-6.05	112.43	119.70
49	B2	33	ARG	CG-CD-NE	-6.05	99.09	111.80
57	BB	68	G	C6-N1-C2	6.05	128.73	125.10
57	BB	228	C	N3-C2-O2	-6.05	117.66	121.90
57	BB	416	U	N3-C4-O4	6.05	123.64	119.40
57	BB	457	A	C2-N3-C4	-6.05	107.57	110.60
57	BB	854	C	P-O3'-C3'	-6.05	112.44	119.70
57	BB	871	U	C5-C4-O4	6.05	129.53	125.90
57	BB	1089	A	C5-C6-N6	-6.05	118.86	123.70
57	BB	1414	C	C4-C5-C6	6.05	120.43	117.40
57	BB	1622	G	N1-C6-O6	6.05	123.53	119.90
57	BB	1964	G	C4-C5-C6	6.05	122.43	118.80
57	BB	2085	U	C4-C5-C6	6.05	123.33	119.70
57	BB	2305	U	C5'-C4'-O4'	6.05	116.36	109.10
57	BB	2329	U	C1'-O4'-C4'	-6.05	105.06	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2445	G	C8-N9-C4	6.05	108.82	106.40
21	AA	517	G	C4-C5-C6	6.05	122.43	118.80
21	AA	1046	A	C6-C5-N7	-6.05	128.06	132.30
21	AA	1099	G	N1-C6-O6	6.05	123.53	119.90
31	BL	69	ARG	NE-CZ-NH1	6.05	123.33	120.30
34	BO	51	ALA	N-CA-CB	6.05	118.57	110.10
54	BF	56	LEU	CB-CA-C	-6.05	98.70	110.20
57	BB	602	A	C8-N9-C4	-6.05	103.38	105.80
57	BB	622	G	C5-N7-C8	-6.05	101.27	104.30
57	BB	1831	G	C2-N3-C4	-6.05	108.87	111.90
57	BB	1869	G	C5-N7-C8	6.05	107.33	104.30
57	BB	2378	A	C4-C5-C6	6.05	120.03	117.00
57	BB	2386	A	N1-C2-N3	-6.05	126.27	129.30
15	AD	110	ARG	NE-CZ-NH1	6.05	123.33	120.30
21	AA	1167	A	N9-C4-C5	-6.05	103.38	105.80
21	AA	1219	A	C6-N1-C2	-6.05	114.97	118.60
53	BE	46	GLN	N-CA-CB	6.05	121.49	110.60
54	BF	9	ASP	CB-CG-OD1	-6.05	112.86	118.30
57	BB	467	G	N9-C4-C5	-6.05	102.98	105.40
57	BB	815	C	C6-N1-C2	-6.05	117.88	120.30
57	BB	1486	U	C5-C6-N1	6.05	125.72	122.70
57	BB	1625	C	N3-C2-O2	6.05	126.14	121.90
57	BB	1781	U	C3'-C2'-C1'	-6.05	96.66	101.50
57	BB	1962	C	C2-N3-C4	6.05	122.92	119.90
21	AA	385	C	C6-N1-C2	-6.05	117.88	120.30
21	AA	1439	G	N9-C4-C5	6.05	107.82	105.40
57	BB	4	U	C2-N1-C1'	-6.05	110.44	117.70
57	BB	1031	G	N3-C4-C5	6.05	131.62	128.60
57	BB	2570	G	O4'-C4'-C3'	-6.05	97.95	104.00
21	AA	87	C	O4'-C1'-N1	6.05	113.04	108.20
21	AA	447	G	O5'-P-OP2	-6.05	100.26	105.70
21	AA	500	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	836	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	1413	A	N9-C1'-C2'	-6.05	105.35	112.00
26	AV	37	A	N7-C8-N9	6.05	116.82	113.80
33	BN	22	ARG	NE-CZ-NH2	6.05	123.32	120.30
57	BB	70	G	O4'-C1'-N9	6.05	113.04	108.20
57	BB	480	A	O4'-C1'-N9	6.05	113.04	108.20
57	BB	859	G	OP1-P-OP2	-6.05	110.53	119.60
57	BB	980	A	N3-C4-C5	-6.05	122.57	126.80
57	BB	1476	U	O4'-C1'-N1	6.05	113.04	108.20
57	BB	1655	A	C6-N1-C2	6.05	122.23	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2028	U	C5-C4-O4	-6.05	122.27	125.90
57	BB	2139	U	C5'-C4'-O4'	6.05	116.36	109.10
57	BB	2482	A	N9-C4-C5	6.05	108.22	105.80
57	BB	2488	G	N3-C2-N2	6.05	124.13	119.90
57	BB	2704	C	C5-C4-N4	-6.05	115.97	120.20
58	BA	74	U	C6-N1-C2	-6.05	117.37	121.00
21	AA	1230	C	C5-C6-N1	6.04	124.02	121.00
22	AY	55	U	O4'-C1'-N1	6.04	113.04	108.20
57	BB	303	G	N9-C1'-C2'	-6.04	105.35	112.00
57	BB	1568	G	P-O5'-C5'	-6.04	111.23	120.90
57	BB	1771	C	C4-C5-C6	6.04	120.42	117.40
57	BB	2396	G	C5'-C4'-C3'	-6.04	106.33	116.00
57	BB	2396	G	N3-C2-N2	6.04	124.13	119.90
57	BB	2767	C	O4'-C1'-N1	6.04	113.04	108.20
21	AA	211	G	C1'-O4'-C4'	6.04	114.73	109.90
21	AA	766	A	N1-C6-N6	6.04	122.23	118.60
21	AA	1270	G	C6-C5-N7	-6.04	126.77	130.40
22	AY	25	C	P-O3'-C3'	-6.04	112.45	119.70
23	AW	30	G	P-O3'-C3'	-6.04	112.45	119.70
23	AW	50	U	P-O3'-C3'	6.04	126.95	119.70
45	BC	89	ASN	CA-CB-CG	-6.04	100.10	113.40
56	BH	19	VAL	CG1-CB-CG2	6.04	120.57	110.90
57	BB	835	C	C5-C4-N4	-6.04	115.97	120.20
57	BB	2872	A	N7-C8-N9	6.04	116.82	113.80
2	AK	12	ARG	NE-CZ-NH1	6.04	123.32	120.30
21	AA	77	A	N9-C1'-C2'	-6.04	105.35	112.00
21	AA	281	G	C5-N7-C8	6.04	107.32	104.30
21	AA	506	G	N9-C4-C5	6.04	107.82	105.40
21	AA	538	G	C2-N3-C4	6.04	114.92	111.90
21	AA	779	C	C6-N1-C2	6.04	122.72	120.30
21	AA	1200	C	O4'-C1'-N1	6.04	113.03	108.20
21	AA	1469	C	N3-C2-O2	6.04	126.13	121.90
21	AA	1507	A	N1-C2-N3	6.04	132.32	129.30
26	AV	72	A	N3-C4-C5	-6.04	122.57	126.80
57	BB	583	G	N3-C2-N2	6.04	124.13	119.90
57	BB	978	G	C6-N1-C2	6.04	128.72	125.10
57	BB	1473	G	N7-C8-N9	-6.04	110.08	113.10
57	BB	2464	G	C5-C6-N1	-6.04	108.48	111.50
57	BB	2558	C	N3-C4-C5	-6.04	119.48	121.90
57	BB	2776	A	C5-N7-C8	6.04	106.92	103.90
21	AA	754	C	N3-C4-C5	-6.04	119.48	121.90
21	AA	1504	G	C4-C5-C6	6.04	122.42	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	724	U	C4-C5-C6	-6.04	116.08	119.70
57	BB	2004	G	C4-C5-N7	6.04	113.22	110.80
57	BB	2155	U	P-O5'-C5'	-6.04	111.24	120.90
12	AU	25	ALA	N-CA-CB	6.04	118.55	110.10
21	AA	350	G	N1-C6-O6	6.04	123.52	119.90
21	AA	446	G	N3-C2-N2	6.04	124.13	119.90
21	AA	1020	G	N9-C4-C5	-6.04	102.98	105.40
21	AA	1266	G	N3-C2-N2	-6.04	115.67	119.90
21	AA	1379	G	C5-C6-O6	-6.04	124.98	128.60
22	AY	61	C	C5'-C4'-O4'	-6.04	101.86	109.10
26	AV	40	C	C5-C6-N1	6.04	124.02	121.00
26	AV	40	C	C6-N1-C2	-6.04	117.88	120.30
54	BF	142	TYR	CB-CG-CD2	-6.04	117.38	121.00
57	BB	270	A	C4-C5-N7	-6.04	107.68	110.70
57	BB	1373	A	C5-N7-C8	-6.04	100.88	103.90
57	BB	1391	U	N1-C2-N3	-6.04	111.28	114.90
57	BB	1532	A	C6-C5-N7	-6.04	128.07	132.30
57	BB	1807	G	C6-C5-N7	-6.04	126.78	130.40
57	BB	1848	A	C6-C5-N7	-6.04	128.07	132.30
57	BB	2100	G	P-O5'-C5'	-6.04	111.24	120.90
57	BB	2144	G	C2-N3-C4	6.04	114.92	111.90
57	BB	2339	C	C5-C6-N1	6.04	124.02	121.00
57	BB	2640	G	C5-N7-C8	6.04	107.32	104.30
21	AA	423	G	C5-C6-O6	-6.04	124.98	128.60
21	AA	1166	G	O4'-C1'-N9	6.04	113.03	108.20
57	BB	778	G	C5-N7-C8	6.04	107.32	104.30
57	BB	785	G	C5-C6-O6	-6.04	124.98	128.60
57	BB	821	A	C5-C6-N1	-6.04	114.68	117.70
57	BB	1570	A	C8-N9-C4	-6.04	103.39	105.80
13	AB	139	GLU	O-C-N	-6.04	113.04	122.70
21	AA	119	A	N9-C4-C5	6.04	108.21	105.80
21	AA	350	G	N3-C4-C5	6.04	131.62	128.60
21	AA	1276	G	O4'-C4'-C3'	-6.04	97.96	104.00
22	AY	22	G	P-O3'-C3'	-6.04	112.46	119.70
30	BK	15	ALA	N-CA-CB	6.04	118.55	110.10
55	BG	165	ASP	N-CA-CB	6.04	121.47	110.60
57	BB	227	A	N3-C4-N9	6.04	132.23	127.40
57	BB	252	G	C4-C5-N7	-6.04	108.39	110.80
57	BB	346	A	O4'-C1'-N9	6.04	113.03	108.20
57	BB	500	G	N3-C4-N9	6.04	129.62	126.00
57	BB	578	G	C5-N7-C8	-6.04	101.28	104.30
57	BB	590	A	N1-C6-N6	6.04	122.22	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2058	A	C5-C6-N1	-6.04	114.68	117.70
57	BB	2884	U	C2-N3-C4	6.04	130.62	127.00
58	BA	15	A	C6-N1-C2	6.04	122.22	118.60
21	AA	725	G	C6-C5-N7	-6.03	126.78	130.40
21	AA	1079	G	C5-C6-O6	-6.03	124.98	128.60
21	AA	1186	G	N3-C2-N2	6.03	124.12	119.90
57	BB	845	A	C4-C5-C6	6.03	120.02	117.00
57	BB	942	G	C8-N9-C1'	6.03	134.84	127.00
57	BB	1317	G	C8-N9-C4	6.03	108.81	106.40
57	BB	1569	A	C4-C5-C6	6.03	120.02	117.00
57	BB	2777	G	C5'-C4'-O4'	6.03	116.34	109.10
58	BA	117	G	P-O3'-C3'	-6.03	112.46	119.70
18	AG	85	GLN	CA-CB-CG	6.03	126.67	113.40
21	AA	725	G	C8-N9-C4	-6.03	103.99	106.40
22	AY	44	A	O4'-C1'-C2'	6.03	113.03	107.60
28	BI	4	VAL	CA-CB-CG1	6.03	119.95	110.90
57	BB	159	G	C5-C6-O6	-6.03	124.98	128.60
57	BB	1124	G	P-O3'-C3'	6.03	126.94	119.70
57	BB	2058	A	O4'-C1'-C2'	6.03	113.03	107.60
57	BB	2384	U	C5'-C4'-C3'	-6.03	106.35	116.00
21	AA	49	U	N1-C2-O2	-6.03	118.58	122.80
21	AA	627	G	C5-N7-C8	6.03	107.31	104.30
21	AA	673	A	C5-C6-N6	-6.03	118.88	123.70
21	AA	921	U	N1-C2-N3	-6.03	111.28	114.90
21	AA	1360	A	O4'-C1'-N9	6.03	113.02	108.20
21	AA	1374	A	C4-C5-C6	6.03	120.02	117.00
21	AA	1497	G	P-O3'-C3'	6.03	126.94	119.70
57	BB	478	A	C5-C6-N1	6.03	120.72	117.70
57	BB	713	G	C4-C5-N7	6.03	113.21	110.80
57	BB	1587	G	N1-C2-N2	-6.03	110.77	116.20
57	BB	2314	A	C4-C5-C6	6.03	120.02	117.00
57	BB	2593	U	C1'-O4'-C4'	-6.03	105.08	109.90
58	BA	52	A	C5-N7-C8	6.03	106.92	103.90
21	AA	133	U	OP1-P-O3'	6.03	118.46	105.20
21	AA	286	C	C6-N1-C2	-6.03	117.89	120.30
21	AA	456	A	C4-C5-C6	6.03	120.01	117.00
21	AA	767	A	C5-C6-N6	-6.03	118.88	123.70
21	AA	843	U	C2-N3-C4	-6.03	123.38	127.00
21	AA	1088	G	C4-C5-N7	6.03	113.21	110.80
57	BB	197	A	O4'-C1'-N9	6.03	113.02	108.20
57	BB	775	G	C8-N9-C4	-6.03	103.99	106.40
57	BB	1813	G	C6-N1-C2	6.03	128.72	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	207	C	N1-C2-N3	6.03	123.42	119.20
21	AA	402	G	N3-C2-N2	6.03	124.12	119.90
21	AA	615	G	N1-C2-N2	-6.03	110.78	116.20
21	AA	892	A	N1-C6-N6	6.03	122.22	118.60
21	AA	902	G	N3-C4-C5	6.03	131.61	128.60
21	AA	1054	C	P-O3'-C3'	6.03	126.93	119.70
21	AA	1250	A	C4'-C3'-C2'	-6.03	96.57	102.60
25	AZ	154	ARG	NE-CZ-NH1	6.03	123.31	120.30
57	BB	132	G	N9-C4-C5	6.03	107.81	105.40
57	BB	428	A	N1-C6-N6	6.03	122.22	118.60
57	BB	946	C	C5'-C4'-O4'	-6.03	101.87	109.10
57	BB	1259	G	C1'-O4'-C4'	6.03	114.72	109.90
57	BB	1325	U	N3-C4-O4	6.03	123.62	119.40
57	BB	1703	G	C8-N9-C4	-6.03	103.99	106.40
57	BB	1772	A	N3-C4-C5	-6.03	122.58	126.80
57	BB	1896	G	C4-C5-C6	6.03	122.42	118.80
57	BB	1908	C	N3-C2-O2	6.03	126.12	121.90
57	BB	2430	A	C6-C5-N7	-6.03	128.08	132.30
21	AA	98	A	C8-N9-C4	-6.03	103.39	105.80
21	AA	188	C	C2-N1-C1'	6.03	125.43	118.80
21	AA	258	G	C5'-C4'-O4'	-6.03	101.87	109.10
21	AA	481	G	C4-C5-C6	6.03	122.42	118.80
21	AA	1162	C	C6-N1-C2	-6.03	117.89	120.30
21	AA	1429	A	C5-C6-N1	-6.03	114.69	117.70
21	AA	1492	A	P-O3'-C3'	-6.03	112.47	119.70
57	BB	738	G	C5-C6-O6	-6.03	124.98	128.60
57	BB	792	A	N9-C4-C5	-6.03	103.39	105.80
57	BB	1245	G	C1'-O4'-C4'	-6.03	105.08	109.90
57	BB	1490	A	N7-C8-N9	-6.03	110.79	113.80
57	BB	1568	G	C4-C5-N7	6.03	113.21	110.80
21	AA	553	A	N9-C4-C5	6.02	108.21	105.80
21	AA	1014	A	C8-N9-C4	-6.02	103.39	105.80
57	BB	1279	G	N3-C2-N2	6.02	124.12	119.90
57	BB	2121	G	N3-C2-N2	6.02	124.12	119.90
3	AL	30	ARG	NE-CZ-NH2	-6.02	117.29	120.30
12	AU	52	VAL	CG1-CB-CG2	6.02	120.54	110.90
21	AA	1063	C	C6-N1-C1'	-6.02	113.57	120.80
21	AA	1425	U	N3-C2-O2	6.02	126.42	122.20
34	BO	36	TYR	CG-CD2-CE2	-6.02	116.48	121.30
57	BB	491	G	C5'-C4'-C3'	6.02	125.64	116.00
57	BB	818	G	C2-N3-C4	6.02	114.91	111.90
57	BB	1175	A	C6-C5-N7	-6.02	128.09	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1718	G	C5-C6-O6	-6.02	124.99	128.60
57	BB	1803	A	C5-C6-N1	-6.02	114.69	117.70
57	BB	2314	A	C2-N3-C4	-6.02	107.59	110.60
58	BA	27	C	N1-C1'-C2'	-6.02	105.37	112.00
21	AA	597	G	N3-C4-C5	6.02	131.61	128.60
21	AA	703	G	N1-C2-N3	-6.02	120.29	123.90
21	AA	872	A	N1-C2-N3	6.02	132.31	129.30
41	BV	26	PHE	CB-CG-CD1	6.02	125.02	120.80
57	BB	738	G	C5-C6-N1	-6.02	108.49	111.50
57	BB	1567	G	O4'-C1'-N9	6.02	113.02	108.20
10	AS	56	HIS	N-CA-C	-6.02	94.75	111.00
21	AA	448	A	O4'-C1'-N9	6.02	113.02	108.20
21	AA	767	A	N3-C4-C5	-6.02	122.59	126.80
21	AA	1063	C	C2-N1-C1'	6.02	125.42	118.80
36	BQ	3	VAL	CA-CB-CG1	-6.02	101.87	110.90
57	BB	93	G	N1-C2-N3	-6.02	120.29	123.90
57	BB	252	G	N1-C6-O6	6.02	123.51	119.90
57	BB	403	U	C6-N1-C2	-6.02	117.39	121.00
57	BB	822	G	C5-N7-C8	-6.02	101.29	104.30
57	BB	905	A	N3-C4-N9	6.02	132.22	127.40
57	BB	1110	G	C5-N7-C8	6.02	107.31	104.30
57	BB	1413	A	C6-N1-C2	6.02	122.21	118.60
57	BB	1781	U	O4'-C4'-C3'	-6.02	97.98	104.00
57	BB	2029	G	O4'-C1'-N9	6.02	113.02	108.20
57	BB	2484	G	N3-C4-N9	6.02	129.61	126.00
57	BB	2740	A	C4-C5-C6	6.02	120.01	117.00
21	AA	644	U	C3'-C2'-C1'	-6.02	96.69	101.50
21	AA	712	A	C8-N9-C4	-6.02	103.39	105.80
21	AA	740	U	C5-C4-O4	6.02	129.51	125.90
21	AA	1283	U	C5-C6-N1	6.02	125.71	122.70
45	BC	189	ALA	N-CA-CB	6.02	118.53	110.10
52	BD	128	ARG	NE-CZ-NH2	-6.02	117.29	120.30
57	BB	101	A	C5'-C4'-C3'	-6.02	106.37	116.00
57	BB	1348	C	C5'-C4'-O4'	6.02	116.32	109.10
57	BB	1426	G	N1-C6-O6	6.02	123.51	119.90
57	BB	1917	U	C5-C6-N1	6.02	125.71	122.70
57	BB	2080	A	N1-C2-N3	-6.02	126.29	129.30
57	BB	2351	G	N3-C2-N2	6.02	124.11	119.90
37	BR	92	TRP	CB-CG-CD2	-6.02	118.78	126.60
43	BX	77	TYR	CG-CD1-CE1	-6.02	116.49	121.30
47	B0	12	ARG	NE-CZ-NH1	6.02	123.31	120.30
57	BB	346	A	C8-N9-C1'	-6.02	116.87	127.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	505	A	C6-C5-N7	-6.02	128.09	132.30
57	BB	778	G	P-O3'-C3'	-6.02	112.48	119.70
57	BB	1731	G	N1-C2-N3	-6.02	120.29	123.90
21	AA	70	U	O4'-C1'-N1	6.01	113.01	108.20
21	AA	327	A	O4'-C1'-N9	6.01	113.01	108.20
21	AA	467	U	C5-C6-N1	6.01	125.71	122.70
21	AA	723	U	O4'-C1'-N1	6.01	113.01	108.20
21	AA	951	G	N9-C4-C5	-6.01	102.99	105.40
57	BB	246	C	P-O5'-C5'	6.01	130.52	120.90
57	BB	322	A	P-O5'-C5'	-6.01	111.28	120.90
57	BB	677	A	P-O5'-C5'	-6.01	111.28	120.90
57	BB	1894	C	C4-C5-C6	6.01	120.41	117.40
57	BB	2245	U	N1-C2-N3	-6.01	111.29	114.90
57	BB	2262	U	O4'-C4'-C3'	-6.01	97.99	104.00
57	BB	2618	G	C8-N9-C4	-6.01	103.99	106.40
4	AM	46	GLU	CB-CA-C	-6.01	98.37	110.40
21	AA	152	A	C5-C6-N6	-6.01	118.89	123.70
21	AA	840	C	C1'-O4'-C4'	6.01	114.71	109.90
21	AA	901	A	O4'-C1'-N9	6.01	113.01	108.20
57	BB	726	G	OP1-P-O3'	6.01	118.43	105.20
57	BB	1108	U	C6-N1-C2	-6.01	117.39	121.00
57	BB	2564	A	C6-N1-C2	6.01	122.21	118.60
21	AA	315	A	C5-C6-N1	-6.01	114.69	117.70
21	AA	473	U	C5-C6-N1	6.01	125.71	122.70
21	AA	474	G	O4'-C1'-N9	6.01	113.01	108.20
21	AA	580	C	O4'-C4'-C3'	-6.01	97.99	104.00
21	AA	1006	G	C4-C5-N7	-6.01	108.39	110.80
21	AA	1276	G	N3-C2-N2	6.01	124.11	119.90
21	AA	1525	G	C4-C5-N7	6.01	113.20	110.80
57	BB	42	A	C5-C6-N6	-6.01	118.89	123.70
57	BB	190	A	C8-N9-C4	6.01	108.20	105.80
57	BB	548	G	C1'-O4'-C4'	-6.01	105.09	109.90
57	BB	787	C	N3-C4-N4	6.01	122.21	118.00
57	BB	1259	G	N3-C2-N2	6.01	124.11	119.90
57	BB	1302	A	C6-C5-N7	-6.01	128.09	132.30
57	BB	1423	G	C2-N3-C4	-6.01	108.89	111.90
57	BB	1902	C	N1-C2-O2	-6.01	115.29	118.90
57	BB	2481	G	N3-C4-C5	-6.01	125.59	128.60
21	AA	784	A	P-O5'-C5'	-6.01	111.28	120.90
21	AA	895	G	C8-N9-C4	-6.01	104.00	106.40
21	AA	919	A	C5-C6-N1	-6.01	114.70	117.70
21	AA	923	A	C5-N7-C8	6.01	106.91	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	B0	49	ARG	NE-CZ-NH1	6.01	123.30	120.30
57	BB	555	G	C6-C5-N7	-6.01	126.79	130.40
57	BB	1322	A	C6-N1-C2	6.01	122.21	118.60
57	BB	1731	G	N7-C8-N9	6.01	116.10	113.10
57	BB	2207	C	C5-C6-N1	-6.01	118.00	121.00
57	BB	2520	C	N3-C4-N4	6.01	122.21	118.00
57	BB	2763	G	C8-N9-C4	-6.01	104.00	106.40
57	BB	2829	A	C8-N9-C4	-6.01	103.40	105.80
21	AA	880	C	N3-C4-C5	-6.01	119.50	121.90
27	B5	60	ARG	NH1-CZ-NH2	6.01	126.01	119.40
57	BB	74	A	N1-C2-N3	-6.01	126.30	129.30
57	BB	734	A	C5-N7-C8	6.01	106.90	103.90
57	BB	1299	G	C5-C6-N1	-6.01	108.50	111.50
57	BB	1378	A	C5-C6-N6	-6.01	118.89	123.70
57	BB	2759	G	C3'-C2'-C1'	-6.01	96.69	101.50
3	AL	85	ARG	NE-CZ-NH2	-6.01	117.30	120.30
16	AE	114	LEU	CB-CG-CD2	6.01	121.21	111.00
21	AA	103	U	C3'-C2'-C1'	-6.01	96.69	101.50
21	AA	132	C	N3-C4-N4	6.01	122.20	118.00
21	AA	948	C	C2-N3-C4	-6.01	116.90	119.90
44	BY	35	GLY	N-CA-C	-6.01	98.09	113.10
57	BB	191	A	N3-C4-N9	6.01	132.21	127.40
57	BB	363	G	C8-N9-C1'	6.01	134.81	127.00
57	BB	1501	G	O4'-C1'-N9	6.01	113.01	108.20
57	BB	1569	A	O4'-C1'-N9	6.01	113.00	108.20
57	BB	1608	A	N3-C4-N9	6.01	132.21	127.40
57	BB	1682	G	N1-C2-N3	-6.01	120.30	123.90
57	BB	1829	A	C2-N3-C4	-6.01	107.60	110.60
14	AC	24	ASN	CA-CB-CG	-6.00	100.19	113.40
20	AI	122	ARG	NE-CZ-NH2	-6.00	117.30	120.30
21	AA	62	U	O4'-C1'-N1	6.00	113.00	108.20
21	AA	195	A	N1-C6-N6	6.00	122.20	118.60
21	AA	1244	G	C4-C5-C6	6.00	122.40	118.80
57	BB	509	C	O4'-C1'-N1	6.00	113.00	108.20
57	BB	1009	A	C2-N3-C4	-6.00	107.60	110.60
21	AA	326	G	N3-C4-N9	-6.00	122.40	126.00
21	AA	488	C	N3-C4-C5	-6.00	119.50	121.90
21	AA	529	G	C5-N7-C8	6.00	107.30	104.30
21	AA	825	A	P-O3'-C3'	-6.00	112.50	119.70
21	AA	1427	C	C6-N1-C2	-6.00	117.90	120.30
57	BB	455	C	C2-N1-C1'	6.00	125.41	118.80
57	BB	523	C	C6-N1-C2	-6.00	117.90	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	883	G	C5-N7-C8	6.00	107.30	104.30
57	BB	1685	C	C3'-C2'-C1'	-6.00	96.70	101.50
57	BB	2198	A	O4'-C1'-C2'	-6.00	99.80	105.80
58	BA	37	C	C1'-O4'-C4'	6.00	114.70	109.90
21	AA	1020	G	C3'-C2'-C1'	-6.00	96.70	101.50
21	AA	1224	U	C5-C4-O4	-6.00	122.30	125.90
21	AA	1315	U	OP1-P-OP2	-6.00	110.60	119.60
21	AA	1379	G	C5-C6-N1	6.00	114.50	111.50
21	AA	1402	C	C3'-C2'-C1'	6.00	106.30	101.50
21	AA	1428	A	N1-C2-N3	-6.00	126.30	129.30
21	AA	1430	A	N9-C4-C5	6.00	108.20	105.80
38	BS	64	ALA	C-N-CA	6.00	136.70	121.70
57	BB	777	G	N3-C4-C5	-6.00	125.60	128.60
57	BB	1084	A	N1-C2-N3	-6.00	126.30	129.30
57	BB	1611	C	C4-C5-C6	-6.00	114.40	117.40
57	BB	1706	C	N3-C4-C5	-6.00	119.50	121.90
57	BB	2205	A	N9-C4-C5	6.00	108.20	105.80
57	BB	2775	G	N3-C2-N2	6.00	124.10	119.90
21	AA	181	A	C5-C6-N6	-6.00	118.90	123.70
21	AA	189	A	C8-N9-C4	-6.00	103.40	105.80
21	AA	632	U	N1-C2-N3	-6.00	111.30	114.90
21	AA	820	U	OP1-P-OP2	-6.00	110.60	119.60
21	AA	1251	A	N9-C4-C5	6.00	108.20	105.80
57	BB	1687	G	C5-C6-O6	-6.00	125.00	128.60
57	BB	1802	A	C4-C5-C6	6.00	120.00	117.00
57	BB	2465	C	N3-C4-C5	-6.00	119.50	121.90
57	BB	2685	G	N3-C4-C5	-6.00	125.60	128.60
21	AA	139	A	N3-C4-C5	-6.00	122.60	126.80
21	AA	605	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	1044	C	C6-N1-C2	-6.00	117.90	120.30
57	BB	1312	U	C3'-C2'-C1'	-6.00	96.70	101.50
57	BB	1366	A	N9-C4-C5	-6.00	103.40	105.80
57	BB	2461	A	O4'-C1'-N9	6.00	113.00	108.20
57	BB	2536	G	N3-C4-C5	6.00	131.60	128.60
57	BB	2759	G	P-O3'-C3'	6.00	126.90	119.70
21	AA	350	G	O4'-C1'-N9	6.00	113.00	108.20
21	AA	465	A	N1-C2-N3	6.00	132.30	129.30
21	AA	588	G	N1-C6-O6	6.00	123.50	119.90
21	AA	774	G	N9-C4-C5	-6.00	103.00	105.40
21	AA	1090	U	C2-N3-C4	-6.00	123.40	127.00
21	AA	1206	G	C8-N9-C4	6.00	108.80	106.40
32	BM	36	VAL	CA-CB-CG2	-6.00	101.91	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	BV	12	GLN	N-CA-CB	6.00	121.39	110.60
57	BB	432	A	C4-C5-N7	-6.00	107.70	110.70
57	BB	479	A	C2-N3-C4	-6.00	107.60	110.60
57	BB	1667	G	N3-C2-N2	6.00	124.10	119.90
57	BB	1979	U	C5-C6-N1	6.00	125.70	122.70
57	BB	2500	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	2831	G	N1-C2-N3	-6.00	120.30	123.90
21	AA	238	A	C3'-C2'-C1'	-6.00	96.70	101.50
21	AA	720	C	N3-C4-C5	-6.00	119.50	121.90
21	AA	1532	U	C5-C4-O4	-6.00	122.30	125.90
57	BB	559	G	N7-C8-N9	-6.00	110.10	113.10
57	BB	606	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	630	G	N7-C8-N9	-6.00	110.10	113.10
57	BB	1268	A	C5'-C4'-C3'	-6.00	106.41	116.00
57	BB	2102	G	C2-N3-C4	6.00	114.90	111.90
58	BA	12	C	C6-N1-C2	-6.00	117.90	120.30
2	AK	107	THR	CA-CB-CG2	-5.99	104.01	112.40
5	AN	29	ILE	C-N-CA	5.99	136.68	121.70
21	AA	320	A	C6-C5-N7	-5.99	128.10	132.30
21	AA	532	A	C4'-C3'-C2'	5.99	108.59	102.60
21	AA	873	A	C6-C5-N7	-5.99	128.10	132.30
21	AA	976	G	C5-C6-N1	-5.99	108.50	111.50
21	AA	1475	G	N3-C4-N9	5.99	129.60	126.00
22	AY	52	U	N1-C2-N3	-5.99	111.30	114.90
23	AW	40	C	O4'-C1'-N1	5.99	113.00	108.20
57	BB	87	U	N1-C2-N3	5.99	118.50	114.90
57	BB	333	G	O4'-C4'-C3'	-5.99	98.01	104.00
57	BB	781	A	O4'-C1'-N9	5.99	112.99	108.20
57	BB	1134	A	C8-N9-C4	-5.99	103.40	105.80
57	BB	1607	C	C5-C6-N1	5.99	124.00	121.00
57	BB	2057	G	C6-C5-N7	-5.99	126.80	130.40
57	BB	2600	A	C5-C6-N1	-5.99	114.70	117.70
57	BB	2754	U	N1-C2-N3	5.99	118.50	114.90
45	BC	6	LYS	N-CA-CB	5.99	121.39	110.60
57	BB	409	G	N3-C2-N2	5.99	124.09	119.90
57	BB	798	G	C5-C6-N1	-5.99	108.50	111.50
57	BB	2228	G	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	2725	A	N9-C4-C5	5.99	108.20	105.80
21	AA	1221	G	N3-C2-N2	5.99	124.09	119.90
21	AA	1404	C	O4'-C1'-N1	5.99	112.99	108.20
24	AX	13	A	N1-C6-N6	5.99	122.19	118.60
57	BB	935	C	O4'-C1'-N1	5.99	112.99	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1577	C	C5-C4-N4	-5.99	116.01	120.20
57	BB	1763	G	P-O3'-C3'	5.99	126.89	119.70
57	BB	2031	A	N1-C6-N6	5.99	122.19	118.60
57	BB	2113	U	C5'-C4'-O4'	5.99	116.29	109.10
57	BB	2183	A	P-O3'-C3'	5.99	126.89	119.70
57	BB	2429	G	C4'-C3'-C2'	5.99	108.59	102.60
57	BB	2526	G	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	2693	G	C5-N7-C8	5.99	107.30	104.30
57	BB	2745	C	C1'-O4'-C4'	5.99	114.69	109.90
58	BA	15	A	N1-C6-N6	5.99	122.19	118.60
58	BA	67	G	N7-C8-N9	5.99	116.09	113.10
3	AL	116	TYR	CG-CD2-CE2	-5.99	116.51	121.30
17	AF	34	GLY	N-CA-C	-5.99	98.13	113.10
21	AA	340	U	OP1-P-OP2	-5.99	110.62	119.60
21	AA	941	G	O4'-C4'-C3'	-5.99	98.01	104.00
21	AA	1036	A	C4'-C3'-C2'	-5.99	96.61	102.60
21	AA	1375	A	O4'-C1'-N9	5.99	112.99	108.20
57	BB	284	U	C5-C6-N1	5.99	125.69	122.70
57	BB	505	A	C6-N1-C2	5.99	122.19	118.60
57	BB	656	G	N3-C2-N2	5.99	124.09	119.90
57	BB	1310	G	C4-C5-N7	-5.99	108.40	110.80
57	BB	1406	U	C4-C5-C6	-5.99	116.11	119.70
57	BB	1538	G	C6-C5-N7	-5.99	126.81	130.40
57	BB	1567	G	O4'-C1'-C2'	-5.99	99.81	105.80
57	BB	1778	U	N1-C2-N3	-5.99	111.31	114.90
57	BB	2029	G	N7-C8-N9	-5.99	110.11	113.10
57	BB	2218	G	N7-C8-N9	5.99	116.09	113.10
57	BB	2270	A	C6-C5-N7	-5.99	128.11	132.30
57	BB	2857	G	C8-N9-C4	-5.99	104.00	106.40
21	AA	824	G	N1-C2-N3	-5.99	120.31	123.90
21	AA	1228	C	C5-C4-N4	-5.99	116.01	120.20
21	AA	1459	G	N9-C4-C5	-5.99	103.00	105.40
46	BZ	46	MET	CG-SD-CE	-5.99	90.62	100.20
57	BB	589	U	C5'-C4'-C3'	5.99	125.58	116.00
57	BB	596	U	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	1816	C	N3-C4-N4	5.99	122.19	118.00
57	BB	2310	C	N3-C2-O2	-5.99	117.71	121.90
57	BB	2547	A	N7-C8-N9	5.99	116.79	113.80
57	BB	2641	G	C5-C6-O6	-5.99	125.01	128.60
58	BA	118	C	O4'-C4'-C3'	-5.99	98.01	104.00
21	AA	770	C	P-O3'-C3'	-5.99	112.52	119.70
21	AA	1210	C	O4'-C1'-N1	5.99	112.99	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	4	G	O4'-C1'-N9	5.99	112.99	108.20
23	AW	30	G	N1-C2-N3	-5.99	120.31	123.90
38	BS	75	PHE	CB-CG-CD2	-5.99	116.61	120.80
57	BB	461	C	C5-C4-N4	-5.99	116.01	120.20
57	BB	1074	G	O4'-C1'-N9	5.99	112.99	108.20
57	BB	1552	A	C2-N3-C4	5.99	113.59	110.60
57	BB	2248	C	C6-N1-C1'	5.99	127.98	120.80
57	BB	2577	A	N1-C2-N3	5.99	132.29	129.30
57	BB	2732	G	C5'-C4'-C3'	-5.99	106.42	116.00
57	BB	2876	G	C4-C5-N7	5.99	113.19	110.80
57	BB	2877	G	OP1-P-OP2	-5.99	110.62	119.60
58	BA	39	A	C6-C5-N7	-5.99	128.11	132.30
21	AA	177	G	C5-C6-O6	-5.98	125.01	128.60
21	AA	245	U	C5-C6-N1	-5.98	119.71	122.70
21	AA	626	G	C4-C5-N7	5.98	113.19	110.80
57	BB	943	A	N1-C6-N6	5.98	122.19	118.60
57	BB	1371	G	N7-C8-N9	-5.98	110.11	113.10
21	AA	61	G	N1-C6-O6	5.98	123.49	119.90
21	AA	537	G	C1'-O4'-C4'	-5.98	105.11	109.90
21	AA	630	A	C6-C5-N7	-5.98	128.11	132.30
21	AA	1182	G	P-O3'-C3'	5.98	126.88	119.70
21	AA	1326	U	N1-C2-O2	5.98	126.99	122.80
22	AY	31	A	C4'-C3'-C2'	-5.98	96.62	102.60
57	BB	174	U	N3-C4-C5	5.98	118.19	114.60
57	BB	187	G	N3-C2-N2	5.98	124.09	119.90
57	BB	277	G	N7-C8-N9	-5.98	110.11	113.10
57	BB	303	G	N1-C6-O6	5.98	123.49	119.90
57	BB	890	C	O4'-C1'-N1	5.98	112.99	108.20
57	BB	1008	A	C3'-C2'-C1'	-5.98	96.71	101.50
57	BB	1516	G	C5-C6-N1	-5.98	108.51	111.50
57	BB	1961	C	N3-C2-O2	-5.98	117.71	121.90
57	BB	2475	C	C5-C4-N4	5.98	124.39	120.20
57	BB	2686	G	N9-C4-C5	-5.98	103.01	105.40
57	BB	2811	G	C8-N9-C1'	5.98	134.78	127.00
21	AA	404	G	O4'-C1'-N9	5.98	112.98	108.20
21	AA	1241	G	P-O3'-C3'	-5.98	112.52	119.70
21	AA	1436	U	O4'-C1'-N1	5.98	112.98	108.20
21	AA	1455	G	N9-C4-C5	-5.98	103.01	105.40
26	AV	15	G	C6-C5-N7	-5.98	126.81	130.40
39	BT	77	ARG	CD-NE-CZ	-5.98	115.23	123.60
57	BB	360	U	P-O3'-C3'	5.98	126.88	119.70
57	BB	496	G	C4-C5-C6	-5.98	115.21	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	722	A	N1-C2-N3	5.98	132.29	129.30
57	BB	818	G	N9-C4-C5	-5.98	103.01	105.40
57	BB	888	C	O4'-C1'-N1	5.98	112.98	108.20
57	BB	1051	G	C8-N9-C4	-5.98	104.01	106.40
57	BB	1543	G	C6-N1-C2	5.98	128.69	125.10
57	BB	2267	A	C6-C5-N7	-5.98	128.11	132.30
57	BB	2274	A	N7-C8-N9	5.98	116.79	113.80
57	BB	2739	U	C5-C4-O4	5.98	129.49	125.90
57	BB	2743	U	N1-C2-N3	-5.98	111.31	114.90
15	AD	12	ARG	CB-CA-C	-5.98	98.44	110.40
21	AA	377	G	N1-C2-N3	-5.98	120.31	123.90
21	AA	907	A	P-O3'-C3'	-5.98	112.53	119.70
21	AA	1520	C	C5-C4-N4	-5.98	116.02	120.20
57	BB	1076	C	C4'-C3'-C2'	-5.98	96.62	102.60
57	BB	1954	G	C2-N3-C4	5.98	114.89	111.90
57	BB	2470	G	C4-C5-C6	5.98	122.39	118.80
58	BA	116	G	C6-C5-N7	-5.98	126.81	130.40
21	AA	1041	G	C5'-C4'-C3'	-5.98	106.44	116.00
21	AA	1224	U	N3-C4-O4	5.98	123.58	119.40
21	AA	1363	A	C3'-C2'-C1'	5.98	106.28	101.50
23	AW	5	G	C4-C5-C6	5.98	122.39	118.80
49	B2	39	ARG	NE-CZ-NH2	5.98	123.29	120.30
57	BB	535	G	C4-N9-C1'	-5.98	118.73	126.50
57	BB	931	U	C2-N3-C4	5.98	130.59	127.00
57	BB	1403	A	C3'-C2'-C1'	-5.98	96.72	101.50
57	BB	1422	G	C6-N1-C2	-5.98	121.51	125.10
57	BB	2868	A	N3-C4-N9	5.98	132.18	127.40
58	BA	31	C	N1-C2-N3	-5.98	115.02	119.20
21	AA	108	G	C5-C6-N1	-5.98	108.51	111.50
21	AA	257	G	C4-C5-C6	5.98	122.39	118.80
21	AA	637	C	N1-C2-O2	-5.98	115.31	118.90
21	AA	647	C	N3-C4-N4	5.98	122.18	118.00
21	AA	1048	G	C4-C5-C6	5.98	122.39	118.80
26	AV	29	G	N7-C8-N9	-5.98	110.11	113.10
57	BB	366	C	N1-C2-O2	5.98	122.48	118.90
57	BB	622	G	C5-C6-N1	-5.98	108.51	111.50
57	BB	2013	A	C4-C5-C6	5.98	119.99	117.00
57	BB	2601	C	C5-C4-N4	-5.98	116.02	120.20
57	BB	2780	G	C4-C5-N7	-5.98	108.41	110.80
21	AA	73	C	N1-C2-N3	-5.97	115.02	119.20
21	AA	291	U	N1-C2-N3	-5.97	111.31	114.90
57	BB	47	C	C6-N1-C2	5.97	122.69	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	51	G	C4-C5-C6	5.97	122.39	118.80
57	BB	264	C	O4'-C1'-N1	5.97	112.98	108.20
57	BB	673	C	C5-C4-N4	-5.97	116.02	120.20
57	BB	737	C	C2-N3-C4	5.97	122.89	119.90
57	BB	782	A	C5'-C4'-O4'	5.97	116.27	109.10
57	BB	861	A	P-O3'-C3'	-5.97	112.53	119.70
57	BB	936	A	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	1041	G	C4-C5-N7	-5.97	108.41	110.80
57	BB	1711	A	C5-N7-C8	5.97	106.89	103.90
57	BB	1989	G	N1-C2-N3	-5.97	120.31	123.90
57	BB	2668	G	C6-C5-N7	-5.97	126.81	130.40
57	BB	2687	U	N1-C2-O2	-5.97	118.62	122.80
21	AA	41	G	C5-C6-N1	-5.97	108.51	111.50
21	AA	751	U	N1-C2-N3	-5.97	111.32	114.90
57	BB	382	A	O4'-C1'-N9	5.97	112.98	108.20
57	BB	720	U	N3-C4-C5	-5.97	111.02	114.60
57	BB	760	G	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	856	G	C6-N1-C2	-5.97	121.52	125.10
57	BB	1510	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	1647	U	C2-N1-C1'	5.97	124.87	117.70
57	BB	1855	U	C1'-O4'-C4'	-5.97	105.12	109.90
15	AD	140	ASP	CB-CG-OD2	-5.97	112.93	118.30
21	AA	57	G	C8-N9-C4	-5.97	104.01	106.40
21	AA	1031	C	C2-N1-C1'	-5.97	112.23	118.80
21	AA	1493	A	C5-C6-N6	-5.97	118.92	123.70
57	BB	257	C	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	832	U	N3-C4-C5	-5.97	111.02	114.60
57	BB	1854	A	P-O5'-C5'	5.97	130.45	120.90
57	BB	1888	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	2044	C	C6-N1-C2	-5.97	117.91	120.30
57	BB	2409	G	N3-C2-N2	5.97	124.08	119.90
57	BB	2864	G	C5-C6-N1	-5.97	108.51	111.50
21	AA	175	C	N1-C2-O2	-5.97	115.32	118.90
21	AA	758	C	C6-N1-C1'	-5.97	113.64	120.80
21	AA	1374	A	C4'-C3'-C2'	-5.97	96.63	102.60
23	AW	65	G	C8-N9-C4	-5.97	104.01	106.40
57	BB	767	U	C2-N3-C4	5.97	130.58	127.00
57	BB	908	C	C5-C4-N4	5.97	124.38	120.20
57	BB	1425	G	C5'-C4'-O4'	5.97	116.26	109.10
57	BB	1471	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	1857	G	C6-C5-N7	-5.97	126.82	130.40
57	BB	2294	G	N7-C8-N9	-5.97	110.11	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2578	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	2884	U	C6-N1-C1'	-5.97	112.84	121.20
21	AA	570	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	27	G	C2-N3-C4	5.97	114.88	111.90
57	BB	2518	A	N1-C2-N3	5.97	132.28	129.30
1	AJ	5	ARG	CD-NE-CZ	5.97	131.95	123.60
21	AA	229	U	O4'-C1'-N1	5.97	112.97	108.20
21	AA	254	G	C8-N9-C4	-5.97	104.01	106.40
21	AA	848	C	P-O3'-C3'	5.97	126.86	119.70
45	BC	113	ASP	CB-CA-C	-5.97	98.47	110.40
52	BD	43	ASP	CB-CA-C	5.97	122.33	110.40
57	BB	342	A	C5-C6-N1	-5.97	114.72	117.70
57	BB	555	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	871	U	O4'-C1'-N1	5.97	112.97	108.20
57	BB	1182	G	N1-C2-N2	-5.97	110.83	116.20
57	BB	1314	C	C2-N3-C4	5.97	122.88	119.90
57	BB	1336	A	C4-C5-C6	5.97	119.98	117.00
57	BB	1433	A	C4-C5-N7	-5.97	107.72	110.70
57	BB	1850	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	1911	U	C1'-O4'-C4'	5.97	114.67	109.90
57	BB	2109	U	P-O3'-C3'	-5.97	112.54	119.70
57	BB	2452	C	C6-N1-C2	-5.97	117.91	120.30
21	AA	710	G	C5-N7-C8	5.96	107.28	104.30
21	AA	1146	A	C4-C5-N7	-5.96	107.72	110.70
21	AA	1339	A	C4'-C3'-C2'	-5.96	96.64	102.60
22	AY	6	U	C4'-C3'-C2'	-5.96	96.64	102.60
36	BQ	16	ILE	CB-CA-C	-5.96	99.67	111.60
57	BB	268	C	C5-C4-N4	-5.96	116.03	120.20
57	BB	1340	U	C6-N1-C1'	-5.96	112.85	121.20
57	BB	1521	G	N3-C4-N9	5.96	129.58	126.00
57	BB	2070	A	O4'-C4'-C3'	-5.96	98.03	104.00
57	BB	2082	A	N9-C4-C5	-5.96	103.41	105.80
57	BB	2245	U	N3-C2-O2	5.96	126.38	122.20
21	AA	773	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	775	G	C5-C6-N1	-5.96	108.52	111.50
21	AA	978	A	C4-C5-N7	-5.96	107.72	110.70
21	AA	1426	G	C5-N7-C8	5.96	107.28	104.30
42	BW	76	ARG	NE-CZ-NH1	5.96	123.28	120.30
57	BB	361	G	N9-C4-C5	5.96	107.78	105.40
57	BB	536	G	N3-C4-N9	-5.96	122.42	126.00
57	BB	1426	G	C8-N9-C4	5.96	108.78	106.40
57	BB	1918	A	C6-C5-N7	-5.96	128.13	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2185	U	N3-C4-O4	5.96	123.57	119.40
57	BB	2448	A	C4-C5-C6	5.96	119.98	117.00
21	AA	87	C	O4'-C4'-C3'	-5.96	98.04	104.00
21	AA	482	A	C5-N7-C8	5.96	106.88	103.90
21	AA	796	C	O4'-C1'-N1	5.96	112.97	108.20
21	AA	861	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	873	A	N9-C4-C5	5.96	108.18	105.80
21	AA	1136	C	O4'-C1'-N1	5.96	112.97	108.20
22	AY	10	G	N3-C4-C5	-5.96	125.62	128.60
47	B0	29	VAL	CA-CB-CG1	5.96	119.84	110.90
57	BB	125	A	C1'-O4'-C4'	-5.96	105.13	109.90
57	BB	555	G	C4-C5-N7	-5.96	108.42	110.80
57	BB	599	A	N1-C6-N6	5.96	122.18	118.60
57	BB	737	C	N3-C4-C5	-5.96	119.52	121.90
57	BB	1086	A	C4-C5-C6	5.96	119.98	117.00
57	BB	1319	C	N3-C4-C5	-5.96	119.52	121.90
57	BB	1416	G	O4'-C1'-N9	5.96	112.97	108.20
57	BB	1534	U	C4-C5-C6	-5.96	116.12	119.70
57	BB	1746	A	N3-C4-C5	5.96	130.97	126.80
57	BB	1939	U	N3-C4-O4	5.96	123.57	119.40
57	BB	2326	C	C5-C4-N4	-5.96	116.03	120.20
57	BB	2379	G	N7-C8-N9	5.96	116.08	113.10
57	BB	2844	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	730	G	C4-C5-C6	5.96	122.38	118.80
57	BB	969	G	O4'-C1'-N9	5.96	112.97	108.20
57	BB	1072	C	C5-C6-N1	-5.96	118.02	121.00
21	AA	57	G	C4-C5-C6	5.96	122.38	118.80
21	AA	115	G	N3-C2-N2	5.96	124.07	119.90
21	AA	258	G	N1-C6-O6	5.96	123.47	119.90
21	AA	384	G	C5'-C4'-C3'	-5.96	106.47	116.00
21	AA	421	U	O4'-C1'-N1	5.96	112.97	108.20
21	AA	619	U	C6-N1-C2	-5.96	117.42	121.00
21	AA	707	U	C4-C5-C6	-5.96	116.12	119.70
21	AA	1493	A	N1-C2-N3	5.96	132.28	129.30
25	AZ	278	LEU	CB-CA-C	-5.96	98.88	110.20
37	BR	92	TRP	CE2-CD2-CE3	5.96	125.85	118.70
53	BE	196	VAL	CG1-CB-CG2	5.96	120.44	110.90
57	BB	117	G	C5-C6-N1	-5.96	108.52	111.50
57	BB	262	A	P-O3'-C3'	5.96	126.85	119.70
57	BB	501	A	N7-C8-N9	5.96	116.78	113.80
57	BB	1122	G	C4-C5-C6	5.96	122.38	118.80
57	BB	1229	C	C5-C4-N4	-5.96	116.03	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1602	U	N3-C4-O4	-5.96	115.23	119.40
57	BB	1954	G	C4-C5-C6	5.96	122.38	118.80
57	BB	2670	A	C6-N1-C2	5.96	122.18	118.60
57	BB	2708	G	C6-C5-N7	-5.96	126.82	130.40
58	BA	75	G	N1-C2-N3	-5.96	120.33	123.90
21	AA	712	A	N9-C4-C5	5.96	108.18	105.80
21	AA	724	G	N1-C6-O6	5.96	123.47	119.90
21	AA	942	G	N3-C2-N2	5.96	124.07	119.90
21	AA	1426	G	O4'-C1'-N9	5.96	112.97	108.20
55	BG	113	ASP	N-CA-CB	5.96	121.32	110.60
57	BB	579	G	N7-C8-N9	5.96	116.08	113.10
57	BB	602	A	C4-C5-N7	-5.96	107.72	110.70
57	BB	902	C	N3-C2-O2	5.96	126.07	121.90
57	BB	1907	G	N3-C2-N2	5.96	124.07	119.90
57	BB	2102	G	C6-C5-N7	-5.96	126.83	130.40
57	BB	2668	G	N3-C4-C5	-5.96	125.62	128.60
21	AA	270	A	P-O5'-C5'	-5.96	111.37	120.90
21	AA	737	C	C4-C5-C6	-5.96	114.42	117.40
21	AA	1085	U	C5-C6-N1	5.96	125.68	122.70
57	BB	1668	A	P-O5'-C5'	-5.96	111.37	120.90
57	BB	1780	A	C5-N7-C8	5.96	106.88	103.90
57	BB	2175	C	C6-N1-C2	-5.96	117.92	120.30
57	BB	2811	G	O4'-C1'-N9	5.96	112.96	108.20
21	AA	717	U	C6-N1-C2	-5.95	117.43	121.00
21	AA	844	G	C2-N3-C4	5.95	114.88	111.90
21	AA	1210	C	C6-N1-C2	-5.95	117.92	120.30
21	AA	1290	G	C8-N9-C4	-5.95	104.02	106.40
21	AA	1351	U	N1-C2-N3	5.95	118.47	114.90
57	BB	422	A	C6-C5-N7	-5.95	128.13	132.30
57	BB	838	C	P-O5'-C5'	5.95	130.42	120.90
57	BB	1853	A	C5-N7-C8	5.95	106.88	103.90
57	BB	2309	A	P-O3'-C3'	5.95	126.84	119.70
57	BB	2476	A	C6-C5-N7	-5.95	128.13	132.30
57	BB	2563	U	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	2837	A	C6-N1-C2	5.95	122.17	118.60
57	BB	2873	A	C6-N1-C2	-5.95	115.03	118.60
58	BA	15	A	C1'-O4'-C4'	-5.95	105.14	109.90
58	BA	75	G	C2-N3-C4	5.95	114.88	111.90
58	BA	112	G	N7-C8-N9	5.95	116.08	113.10
21	AA	543	U	C1'-O4'-C4'	5.95	114.66	109.90
21	AA	1372	U	C5-C4-O4	5.95	129.47	125.90
57	BB	1114	C	N3-C4-C5	-5.95	119.52	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2551	C	C6-N1-C1'	-5.95	113.66	120.80
57	BB	2886	A	C5-N7-C8	5.95	106.88	103.90
21	AA	136	C	C4-C5-C6	5.95	120.38	117.40
21	AA	303	A	C8-N9-C4	-5.95	103.42	105.80
21	AA	424	G	P-O5'-C5'	5.95	130.42	120.90
21	AA	459	A	N7-C8-N9	-5.95	110.83	113.80
21	AA	602	A	C2-N3-C4	5.95	113.58	110.60
21	AA	1198	G	C5-C6-O6	-5.95	125.03	128.60
21	AA	1361	G	N1-C2-N3	-5.95	120.33	123.90
21	AA	1368	A	P-O5'-C5'	-5.95	111.38	120.90
57	BB	475	C	N3-C4-N4	5.95	122.17	118.00
57	BB	671	C	N3-C4-C5	-5.95	119.52	121.90
57	BB	778	G	C3'-C2'-C1'	5.95	106.26	101.50
57	BB	1039	A	N1-C6-N6	5.95	122.17	118.60
57	BB	1107	G	P-O5'-C5'	5.95	130.42	120.90
57	BB	1191	G	N1-C2-N3	-5.95	120.33	123.90
57	BB	1206	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	2065	C	O4'-C1'-N1	5.95	112.96	108.20
57	BB	2566	A	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	2650	U	N3-C4-C5	-5.95	111.03	114.60
21	AA	28	A	N7-C8-N9	-5.95	110.83	113.80
21	AA	941	G	N1-C6-O6	5.95	123.47	119.90
57	BB	377	G	C4-C5-C6	5.95	122.37	118.80
57	BB	666	A	O4'-C1'-N9	5.95	112.96	108.20
57	BB	716	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	1254	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	1262	A	C5-N7-C8	5.95	106.87	103.90
57	BB	1493	C	N3-C4-N4	5.95	122.16	118.00
57	BB	1821	A	C4-C5-C6	5.95	119.97	117.00
57	BB	1860	G	N1-C6-O6	5.95	123.47	119.90
57	BB	2094	A	N1-C6-N6	5.95	122.17	118.60
57	BB	2235	G	C4'-C3'-C2'	-5.95	96.65	102.60
57	BB	2252	G	C5-N7-C8	5.95	107.27	104.30
57	BB	2391	G	C6-C5-N7	-5.95	126.83	130.40
57	BB	2711	A	O4'-C1'-N9	5.95	112.96	108.20
9	AR	70	THR	CA-CB-CG2	-5.95	104.07	112.40
21	AA	269	C	C4-C5-C6	5.95	120.37	117.40
21	AA	1190	G	C6-N1-C2	5.95	128.67	125.10
53	BE	23	PHE	CB-CG-CD1	5.95	124.96	120.80
57	BB	492	A	O4'-C1'-N9	5.95	112.96	108.20
57	BB	857	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	1199	U	C3'-C2'-C1'	-5.95	96.74	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1253	A	C4-C5-C6	5.95	119.97	117.00
57	BB	1453	A	N9-C4-C5	5.95	108.18	105.80
57	BB	1839	G	N3-C2-N2	5.95	124.06	119.90
57	BB	1875	G	C4-C5-N7	5.95	113.18	110.80
57	BB	2530	A	C6-C5-N7	-5.95	128.14	132.30
57	BB	2724	U	C2-N3-C4	-5.95	123.43	127.00
21	AA	487	A	C5'-C4'-C3'	-5.95	106.49	116.00
22	AY	23	A	C5-N7-C8	5.95	106.87	103.90
26	AV	42	G	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	298	G	N1-C2-N2	-5.95	110.85	116.20
57	BB	586	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	618	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	1019	U	P-O3'-C3'	5.95	126.83	119.70
57	BB	1099	G	N1-C2-N3	-5.95	120.33	123.90
57	BB	1474	U	P-O3'-C3'	-5.95	112.57	119.70
57	BB	1540	G	C4-C5-C6	5.95	122.37	118.80
57	BB	2480	C	N1-C1'-C2'	-5.95	105.46	112.00
21	AA	1348	U	N3-C2-O2	-5.94	118.04	122.20
22	AY	42	G	C1'-O4'-C4'	5.94	114.66	109.90
57	BB	1445	G	O4'-C1'-N9	5.94	112.95	108.20
57	BB	1851	U	C2-N3-C4	5.94	130.57	127.00
57	BB	2842	G	C2-N3-C4	-5.94	108.93	111.90
1	AJ	88	MET	CG-SD-CE	-5.94	90.69	100.20
21	AA	587	G	C2-N3-C4	5.94	114.87	111.90
21	AA	741	G	N1-C2-N3	-5.94	120.33	123.90
21	AA	1102	A	C4-C5-N7	-5.94	107.73	110.70
21	AA	1174	G	C3'-C2'-C1'	-5.94	96.75	101.50
21	AA	1476	A	O4'-C1'-N9	5.94	112.95	108.20
57	BB	306	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	476	G	C6-N1-C2	-5.94	121.53	125.10
57	BB	641	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	1377	G	N9-C4-C5	-5.94	103.02	105.40
57	BB	1848	A	C5-C6-N1	-5.94	114.73	117.70
57	BB	2459	A	C1'-O4'-C4'	5.94	114.66	109.90
57	BB	2796	U	O4'-C4'-C3'	-5.94	98.06	104.00
6	AO	87	ARG	NE-CZ-NH2	5.94	123.27	120.30
21	AA	201	G	N1-C2-N3	-5.94	120.34	123.90
21	AA	264	C	N3-C4-C5	-5.94	119.52	121.90
21	AA	397	A	O4'-C1'-N9	5.94	112.95	108.20
21	AA	432	A	C6-C5-N7	-5.94	128.14	132.30
21	AA	598	U	N3-C4-C5	-5.94	111.03	114.60
21	AA	650	G	C5-N7-C8	5.94	107.27	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	852	G	C8-N9-C4	-5.94	104.02	106.40
21	AA	957	U	C2-N3-C4	5.94	130.56	127.00
21	AA	1098	C	N3-C4-C5	-5.94	119.52	121.90
21	AA	1209	C	O4'-C1'-N1	5.94	112.95	108.20
22	AY	46	G	C5-N7-C8	-5.94	101.33	104.30
57	BB	7	G	N7-C8-N9	-5.94	110.13	113.10
57	BB	538	A	C5'-C4'-O4'	5.94	116.23	109.10
57	BB	1116	G	O4'-C1'-N9	5.94	112.95	108.20
57	BB	1658	C	C6-N1-C2	-5.94	117.92	120.30
57	BB	1716	U	N1-C2-O2	-5.94	118.64	122.80
57	BB	1936	A	C6-C5-N7	-5.94	128.14	132.30
57	BB	1988	G	C6-C5-N7	-5.94	126.84	130.40
57	BB	2552	U	N1-C2-N3	5.94	118.47	114.90
57	BB	2768	U	N3-C2-O2	-5.94	118.04	122.20
57	BB	2801	G	C4-C5-C6	5.94	122.36	118.80
26	AV	70	G	C4-C5-C6	5.94	122.36	118.80
57	BB	546	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	900	A	C4'-C3'-C2'	-5.94	96.66	102.60
57	BB	2321	U	O4'-C1'-N1	5.94	112.95	108.20
21	AA	486	U	O4'-C4'-C3'	-5.94	98.06	104.00
21	AA	1152	A	O4'-C1'-N9	5.94	112.95	108.20
57	BB	100	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	594	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	807	U	O5'-P-OP2	-5.94	100.36	105.70
57	BB	878	A	O4'-C4'-C3'	-5.94	98.06	104.00
57	BB	1519	G	C8-N9-C4	-5.94	104.03	106.40
57	BB	2221	G	N3-C2-N2	5.94	124.06	119.90
57	BB	2616	C	N1-C2-O2	-5.94	115.34	118.90
57	BB	2640	G	C4-C5-N7	-5.94	108.42	110.80
16	AE	69	ASN	N-CA-CB	5.94	121.28	110.60
21	AA	361	G	N3-C2-N2	5.94	124.06	119.90
21	AA	733	G	C5-C6-O6	-5.94	125.04	128.60
21	AA	1372	U	C5-C6-N1	5.94	125.67	122.70
21	AA	1413	A	C4'-C3'-C2'	-5.94	96.66	102.60
24	AX	19	U	C5'-C4'-C3'	-5.94	106.50	116.00
57	BB	20	C	C4'-C3'-C2'	-5.94	96.66	102.60
57	BB	896	A	N7-C8-N9	5.94	116.77	113.80
57	BB	1381	G	C8-N9-C4	-5.94	104.03	106.40
57	BB	1671	U	N3-C4-C5	-5.94	111.04	114.60
57	BB	2152	G	N3-C4-N9	5.94	129.56	126.00
57	BB	2654	A	C6-N1-C2	-5.94	115.04	118.60
18	AG	134	VAL	CA-CB-CG1	-5.93	102.00	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	681	A	C2-N3-C4	-5.93	107.63	110.60
21	AA	775	G	O4'-C1'-N9	5.93	112.95	108.20
21	AA	844	G	N1-C2-N3	-5.93	120.34	123.90
21	AA	1140	C	N3-C4-C5	-5.93	119.53	121.90
21	AA	1171	A	C4-C5-C6	5.93	119.97	117.00
27	B5	71	ARG	NE-CZ-NH1	5.93	123.27	120.30
29	BJ	95	ARG	NE-CZ-NH1	5.93	123.27	120.30
57	BB	248	G	O4'-C4'-C3'	-5.93	98.06	104.00
57	BB	493	G	C8-N9-C1'	5.93	134.72	127.00
57	BB	553	G	C5-C6-N1	-5.93	108.53	111.50
57	BB	604	G	C5-C6-N1	-5.93	108.53	111.50
57	BB	869	G	N1-C2-N3	5.93	127.46	123.90
57	BB	1086	A	O4'-C1'-N9	5.93	112.95	108.20
57	BB	1391	U	P-O5'-C5'	-5.93	111.40	120.90
57	BB	1705	A	N3-C4-C5	5.93	130.96	126.80
57	BB	2047	C	C5-C4-N4	-5.93	116.05	120.20
57	BB	2062	A	C3'-C2'-C1'	-5.93	96.75	101.50
57	BB	2548	U	N1-C2-N3	-5.93	111.34	114.90
57	BB	2729	G	C8-N9-C4	-5.93	104.03	106.40
15	AD	43	ARG	CB-CA-C	5.93	122.27	110.40
15	AD	79	ALA	CB-CA-C	-5.93	101.20	110.10
21	AA	137	U	N1-C2-O2	-5.93	118.65	122.80
21	AA	600	A	C5-C6-N1	-5.93	114.73	117.70
21	AA	1003	G	O4'-C1'-N9	5.93	112.95	108.20
21	AA	1016	A	O4'-C1'-N9	5.93	112.94	108.20
21	AA	1083	U	N1-C2-N3	-5.93	111.34	114.90
21	AA	1247	U	O4'-C1'-N1	5.93	112.95	108.20
23	AW	48	C	C4-C5-C6	5.93	120.37	117.40
24	AX	13	A	N3-C4-C5	-5.93	122.65	126.80
26	AV	3	C	C4-C5-C6	5.93	120.37	117.40
57	BB	39	G	C4-C5-N7	5.93	113.17	110.80
57	BB	236	C	N3-C4-C5	-5.93	119.53	121.90
57	BB	1312	U	N3-C4-C5	-5.93	111.04	114.60
57	BB	1328	A	C5-N7-C8	5.93	106.87	103.90
58	BA	7	G	N1-C2-N3	-5.93	120.34	123.90
21	AA	159	G	N3-C4-C5	-5.93	125.64	128.60
21	AA	765	G	N9-C4-C5	5.93	107.77	105.40
21	AA	1316	G	N7-C8-N9	-5.93	110.14	113.10
21	AA	1365	G	O4'-C1'-N9	5.93	112.94	108.20
57	BB	168	G	N9-C4-C5	5.93	107.77	105.40
57	BB	506	G	C2-N3-C4	5.93	114.87	111.90
57	BB	2669	G	C5-N7-C8	5.93	107.27	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	542	G	P-O3'-C3'	-5.93	112.58	119.70
21	AA	551	U	O4'-C1'-N1	5.93	112.94	108.20
21	AA	595	A	OP1-P-OP2	-5.93	110.71	119.60
21	AA	742	G	N3-C4-N9	5.93	129.56	126.00
21	AA	1279	G	C6-C5-N7	-5.93	126.84	130.40
23	AW	21	A	C5-C6-N1	-5.93	114.73	117.70
24	AX	14	A	O4'-C1'-N9	5.93	112.94	108.20
28	BI	71	LYS	N-CA-C	-5.93	94.99	111.00
57	BB	157	C	C4-C5-C6	5.93	120.36	117.40
57	BB	756	A	C2-N3-C4	5.93	113.56	110.60
57	BB	1137	G	C4-C5-C6	5.93	122.36	118.80
57	BB	2669	G	N3-C4-C5	-5.93	125.64	128.60
21	AA	100	G	C2-N3-C4	5.93	114.86	111.90
21	AA	914	A	C6-C5-N7	-5.93	128.15	132.30
57	BB	293	U	O4'-C1'-N1	5.93	112.94	108.20
57	BB	1695	G	C4-C5-N7	-5.93	108.43	110.80
57	BB	2733	A	OP1-P-OP2	-5.93	110.71	119.60
21	AA	241	G	C5-C6-O6	-5.93	125.05	128.60
21	AA	306	A	C5-N7-C8	5.93	106.86	103.90
21	AA	396	C	C4-C5-C6	-5.93	114.44	117.40
21	AA	909	A	C5-C6-N1	-5.93	114.74	117.70
21	AA	954	G	C8-N9-C1'	5.93	134.70	127.00
33	BN	8	ARG	NE-CZ-NH2	5.93	123.26	120.30
57	BB	138	U	C1'-O4'-C4'	-5.93	105.16	109.90
57	BB	397	U	N1-C2-N3	-5.93	111.34	114.90
57	BB	510	C	N3-C4-N4	5.93	122.15	118.00
57	BB	632	A	C6-N1-C2	-5.93	115.04	118.60
57	BB	1355	G	O4'-C1'-N9	5.93	112.94	108.20
57	BB	2355	G	N9-C4-C5	5.93	107.77	105.40
58	BA	112	G	C4'-C3'-C2'	-5.93	96.67	102.60
5	AN	2	LYS	N-CA-CB	5.92	121.26	110.60
21	AA	25	C	C6-N1-C1'	-5.92	113.69	120.80
21	AA	164	G	C2-N3-C4	5.92	114.86	111.90
21	AA	458	U	C3'-C2'-C1'	5.92	106.24	101.50
21	AA	731	G	O4'-C4'-C3'	-5.92	98.08	104.00
57	BB	975	A	C5-C6-N6	-5.92	118.96	123.70
57	BB	1195	G	N7-C8-N9	-5.92	110.14	113.10
57	BB	1706	C	C3'-C2'-C1'	5.92	106.24	101.50
57	BB	1839	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	1913	A	N7-C8-N9	5.92	116.76	113.80
57	BB	1942	C	C5-C6-N1	5.92	123.96	121.00
57	BB	2853	C	N1-C2-N3	-5.92	115.05	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	79	G	N3-C2-N2	5.92	124.05	119.90
21	AA	93	U	C5'-C4'-C3'	-5.92	106.52	116.00
21	AA	329	A	N1-C2-N3	-5.92	126.34	129.30
21	AA	1270	G	N3-C4-C5	-5.92	125.64	128.60
57	BB	67	U	C4-C5-C6	-5.92	116.15	119.70
57	BB	255	A	C5-C6-N6	-5.92	118.96	123.70
57	BB	397	U	C2-N1-C1'	-5.92	110.59	117.70
57	BB	830	G	N7-C8-N9	5.92	116.06	113.10
57	BB	1733	G	C6-N1-C2	-5.92	121.55	125.10
57	BB	2145	C	O4'-C4'-C3'	-5.92	98.08	104.00
57	BB	2353	G	N1-C2-N3	-5.92	120.35	123.90
57	BB	2629	U	N3-C4-C5	-5.92	111.05	114.60
21	AA	220	G	C5-C6-N1	-5.92	108.54	111.50
21	AA	508	U	C6-N1-C2	-5.92	117.45	121.00
21	AA	773	G	C4-C5-N7	-5.92	108.43	110.80
21	AA	844	G	P-O3'-C3'	-5.92	112.59	119.70
23	AW	42	C	N1-C2-N3	5.92	123.34	119.20
44	BY	46	VAL	N-CA-CB	5.92	124.53	111.50
57	BB	545	U	N1-C2-O2	-5.92	118.66	122.80
57	BB	843	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	914	G	N7-C8-N9	5.92	116.06	113.10
57	BB	1016	G	N1-C2-N3	-5.92	120.35	123.90
57	BB	1167	C	N3-C4-C5	-5.92	119.53	121.90
57	BB	1266	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	1659	G	C4-N9-C1'	-5.92	118.80	126.50
57	BB	2856	A	C8-N9-C4	-5.92	103.43	105.80
21	AA	1118	U	O4'-C1'-N1	5.92	112.94	108.20
57	BB	764	A	C4-C5-C6	5.92	119.96	117.00
57	BB	811	U	O4'-C1'-C2'	-5.92	99.88	105.80
57	BB	1643	G	N3-C4-N9	-5.92	122.45	126.00
57	BB	1695	G	C5-C6-N1	-5.92	108.54	111.50
57	BB	1894	C	C2-N3-C4	-5.92	116.94	119.90
57	BB	2294	G	C5-C6-O6	-5.92	125.05	128.60
57	BB	2606	C	C5-C6-N1	5.92	123.96	121.00
21	AA	344	A	C6-C5-N7	-5.92	128.16	132.30
21	AA	353	A	N1-C2-N3	-5.92	126.34	129.30
21	AA	530	G	N7-C8-N9	5.92	116.06	113.10
21	AA	871	U	C2-N3-C4	-5.92	123.45	127.00
21	AA	1035	A	C5-C6-N1	-5.92	114.74	117.70
21	AA	1236	A	C5-C6-N1	-5.92	114.74	117.70
23	AW	26	A	N3-C4-N9	5.92	132.13	127.40
35	BP	67	GLU	OE1-CD-OE2	5.92	130.40	123.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	B0	51	ARG	NE-CZ-NH2	5.92	123.26	120.30
57	BB	463	G	P-O3'-C3'	-5.92	112.60	119.70
57	BB	1321	A	N3-C4-C5	-5.92	122.66	126.80
57	BB	2032	G	C5-C6-O6	-5.92	125.05	128.60
57	BB	2704	C	C4'-C3'-C2'	-5.92	96.68	102.60
21	AA	284	C	C4-C5-C6	5.92	120.36	117.40
21	AA	295	C	O5'-C5'-C4'	-5.92	100.46	111.70
21	AA	307	C	C2-N3-C4	5.92	122.86	119.90
21	AA	1311	A	C6-C5-N7	-5.92	128.16	132.30
23	AW	22	G	C8-N9-C4	-5.92	104.03	106.40
23	AW	28	G	N3-C4-C5	5.92	131.56	128.60
23	AW	33	U	N3-C4-O4	5.92	123.54	119.40
23	AW	52	G	C2'-C3'-O3'	5.92	123.17	113.70
57	BB	224	U	N3-C4-C5	-5.92	111.05	114.60
57	BB	237	C	C4-C5-C6	5.92	120.36	117.40
57	BB	777	G	C2-N3-C4	5.92	114.86	111.90
57	BB	1374	G	C8-N9-C4	-5.92	104.03	106.40
57	BB	1706	C	C5'-C4'-C3'	-5.92	106.53	116.00
57	BB	1782	U	C5-C4-O4	-5.92	122.35	125.90
57	BB	1812	U	P-O3'-C3'	5.92	126.80	119.70
57	BB	1832	C	N3-C4-C5	-5.92	119.53	121.90
57	BB	2599	G	N1-C6-O6	5.92	123.45	119.90
21	AA	107	G	O4'-C1'-N9	5.92	112.93	108.20
21	AA	550	G	C4-C5-N7	5.92	113.17	110.80
21	AA	1074	G	N1-C2-N2	-5.92	110.88	116.20
57	BB	126	A	C4'-C3'-C2'	-5.92	96.69	102.60
57	BB	543	G	N3-C4-N9	5.92	129.55	126.00
57	BB	1015	U	N3-C4-O4	5.92	123.54	119.40
57	BB	2476	A	O4'-C1'-N9	5.92	112.93	108.20
58	BA	5	U	N3-C4-C5	-5.92	111.05	114.60
21	AA	194	C	N1-C2-N3	-5.91	115.06	119.20
21	AA	499	A	O5'-P-OP1	5.91	117.80	110.70
21	AA	1047	G	N1-C6-O6	5.91	123.45	119.90
21	AA	1207	G	N3-C4-C5	-5.91	125.64	128.60
38	BS	11	ARG	NE-CZ-NH1	5.91	123.26	120.30
42	BW	50	VAL	CA-CB-CG1	-5.91	102.03	110.90
57	BB	324	A	C3'-C2'-C1'	-5.91	96.77	101.50
57	BB	747	U	N3-C4-C5	5.91	118.15	114.60
57	BB	1368	G	C4-N9-C1'	-5.91	118.81	126.50
57	BB	1379	U	N3-C2-O2	5.91	126.34	122.20
57	BB	1466	U	O4'-C1'-N1	5.91	112.93	108.20
57	BB	2197	U	O4'-C1'-N1	5.91	112.93	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	390	U	N3-C4-O4	5.91	123.54	119.40
21	AA	626	G	C5-N7-C8	-5.91	101.34	104.30
21	AA	1219	A	C4-C5-C6	5.91	119.96	117.00
57	BB	1535	A	C6-C5-N7	-5.91	128.16	132.30
57	BB	1740	G	C5'-C4'-O4'	5.91	116.19	109.10
57	BB	1925	C	C2-N3-C4	5.91	122.86	119.90
57	BB	2258	C	P-O3'-C3'	5.91	126.79	119.70
57	BB	2315	G	N1-C2-N2	5.91	121.52	116.20
21	AA	233	C	C4-C5-C6	5.91	120.36	117.40
21	AA	861	G	N3-C2-N2	5.91	124.04	119.90
21	AA	915	A	N1-C2-N3	5.91	132.25	129.30
21	AA	1358	U	C1'-O4'-C4'	-5.91	105.17	109.90
37	BR	21	ARG	NE-CZ-NH2	-5.91	117.34	120.30
49	B2	40	ALA	CB-CA-C	-5.91	101.23	110.10
57	BB	91	A	N1-C2-N3	-5.91	126.34	129.30
57	BB	215	G	C4-C5-C6	5.91	122.35	118.80
57	BB	1409	U	P-O3'-C3'	-5.91	112.61	119.70
57	BB	1824	G	N1-C2-N2	5.91	121.52	116.20
57	BB	1972	G	C6-C5-N7	-5.91	126.85	130.40
57	BB	2262	U	N3-C4-C5	5.91	118.15	114.60
57	BB	2390	U	N1-C2-O2	5.91	126.94	122.80
57	BB	2603	G	P-O3'-C3'	-5.91	112.61	119.70
21	AA	215	C	N3-C4-N4	5.91	122.14	118.00
21	AA	447	G	N1-C2-N2	-5.91	110.88	116.20
21	AA	619	U	O4'-C4'-C3'	-5.91	98.09	104.00
21	AA	847	G	C6-N1-C2	5.91	128.65	125.10
21	AA	864	A	C3'-C2'-C1'	-5.91	96.77	101.50
26	AV	14	A	O4'-C1'-N9	5.91	112.93	108.20
49	B2	35	ARG	NE-CZ-NH2	5.91	123.25	120.30
57	BB	314	C	C4'-C3'-C2'	-5.91	96.69	102.60
57	BB	441	U	C4-C5-C6	5.91	123.25	119.70
57	BB	1241	A	C1'-O4'-C4'	-5.91	105.17	109.90
57	BB	1516	G	C2-N3-C4	5.91	114.86	111.90
57	BB	1900	A	C8-N9-C4	-5.91	103.44	105.80
57	BB	2289	G	C6-C5-N7	-5.91	126.86	130.40
57	BB	2799	A	C5-N7-C8	5.91	106.85	103.90
21	AA	298	A	O4'-C1'-C2'	5.91	112.92	107.60
21	AA	851	G	C5'-C4'-O4'	5.91	116.19	109.10
21	AA	1395	C	C4'-C3'-C2'	-5.91	96.69	102.60
41	BV	19	ARG	NE-CZ-NH2	-5.91	117.35	120.30
57	BB	582	A	C8-N9-C4	-5.91	103.44	105.80
57	BB	772	C	N3-C4-N4	5.91	122.14	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1433	A	N9-C4-C5	5.91	108.16	105.80
57	BB	2701	U	N3-C2-O2	5.91	126.33	122.20
57	BB	2748	A	O4'-C1'-N9	5.91	112.93	108.20
21	AA	550	G	C5-C6-O6	-5.91	125.06	128.60
21	AA	931	C	C4-C5-C6	5.91	120.35	117.40
21	AA	1059	C	P-O3'-C3'	-5.91	112.61	119.70
21	AA	1518	A	C5-C6-N1	-5.91	114.75	117.70
22	AY	53	G	N3-C4-C5	-5.91	125.65	128.60
23	AW	47	U	C5-C4-O4	-5.91	122.36	125.90
26	AV	67	C	N1-C1'-C2'	-5.91	105.50	112.00
45	BC	257	ARG	CB-CG-CD	5.91	126.95	111.60
57	BB	370	G	N7-C8-N9	5.91	116.05	113.10
57	BB	1343	G	N3-C2-N2	5.91	124.03	119.90
57	BB	1352	U	C6-N1-C2	5.91	124.54	121.00
57	BB	1405	U	C1'-O4'-C4'	-5.91	105.18	109.90
57	BB	1811	G	N1-C2-N3	-5.91	120.36	123.90
57	BB	2018	G	C6-C5-N7	-5.91	126.86	130.40
57	BB	2243	U	N3-C4-O4	5.91	123.53	119.40
21	AA	263	A	P-O3'-C3'	-5.90	112.61	119.70
21	AA	533	A	C4-C5-N7	-5.90	107.75	110.70
21	AA	913	A	C6-C5-N7	-5.90	128.17	132.30
21	AA	1462	C	C5-C4-N4	-5.90	116.07	120.20
57	BB	317	G	P-O3'-C3'	-5.90	112.61	119.70
57	BB	395	U	C1'-O4'-C4'	-5.90	105.18	109.90
57	BB	1414	C	N1-C1'-C2'	-5.90	105.51	112.00
57	BB	1968	G	N9-C4-C5	5.90	107.76	105.40
57	BB	2297	A	O4'-C1'-N9	5.90	112.92	108.20
21	AA	513	C	C5-C4-N4	-5.90	116.07	120.20
21	AA	853	C	N3-C4-N4	5.90	122.13	118.00
21	AA	1048	G	N7-C8-N9	-5.90	110.15	113.10
21	AA	1315	U	N1-C2-N3	5.90	118.44	114.90
21	AA	1502	A	P-O3'-C3'	5.90	126.78	119.70
26	AV	15	G	C4-C5-C6	5.90	122.34	118.80
57	BB	157	C	P-O5'-C5'	5.90	130.34	120.90
57	BB	199	A	C3'-C2'-C1'	5.90	106.22	101.50
57	BB	825	A	O4'-C1'-N9	5.90	112.92	108.20
57	BB	1349	C	C5-C4-N4	-5.90	116.07	120.20
57	BB	1579	A	C2-N3-C4	-5.90	107.65	110.60
57	BB	1738	G	C4-C5-C6	5.90	122.34	118.80
57	BB	2557	G	N3-C4-N9	-5.90	122.46	126.00
21	AA	60	A	C4-C5-N7	-5.90	107.75	110.70
21	AA	347	G	N1-C2-N3	-5.90	120.36	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1102	A	C4-C5-C6	5.90	119.95	117.00
21	AA	1506	U	N1-C2-O2	-5.90	118.67	122.80
26	AV	46	G	C2-N3-C4	5.90	114.85	111.90
37	BR	2	TYR	CZ-CE2-CD2	5.90	125.11	119.80
57	BB	664	G	C8-N9-C4	-5.90	104.04	106.40
57	BB	1627	G	N1-C2-N3	-5.90	120.36	123.90
57	BB	2182	U	N3-C4-O4	5.90	123.53	119.40
57	BB	2688	G	C4-C5-C6	5.90	122.34	118.80
21	AA	108	G	C4-C5-C6	5.90	122.34	118.80
21	AA	390	U	C5-C4-O4	-5.90	122.36	125.90
21	AA	1228	C	N3-C4-C5	5.90	124.26	121.90
22	AY	13	C	O4'-C1'-N1	5.90	112.92	108.20
57	BB	75	G	N7-C8-N9	5.90	116.05	113.10
57	BB	613	A	C4-N9-C1'	5.90	136.92	126.30
57	BB	657	U	C5-C4-O4	-5.90	122.36	125.90
57	BB	700	G	N3-C4-C5	-5.90	125.65	128.60
57	BB	1344	U	C5'-C4'-O4'	5.90	116.18	109.10
57	BB	2530	A	C4-C5-C6	5.90	119.95	117.00
57	BB	2773	C	N3-C4-C5	-5.90	119.54	121.90
21	AA	270	A	N1-C6-N6	5.90	122.14	118.60
21	AA	1386	G	C5-C6-N1	-5.90	108.55	111.50
21	AA	1392	G	N3-C2-N2	5.90	124.03	119.90
57	BB	531	C	C5'-C4'-O4'	5.90	116.18	109.10
57	BB	1253	A	C8-N9-C4	-5.90	103.44	105.80
57	BB	1562	U	N3-C2-O2	-5.90	118.07	122.20
57	BB	1672	A	N9-C4-C5	-5.90	103.44	105.80
57	BB	1935	G	N3-C2-N2	5.90	124.03	119.90
57	BB	2836	U	N3-C4-O4	5.90	123.53	119.40
58	BA	56	G	N3-C2-N2	5.90	124.03	119.90
21	AA	381	C	C5-C6-N1	-5.90	118.05	121.00
21	AA	431	A	N1-C2-N3	5.90	132.25	129.30
21	AA	447	G	C4-C5-C6	5.90	122.34	118.80
21	AA	589	U	N3-C2-O2	5.90	126.33	122.20
21	AA	930	C	C5-C4-N4	-5.90	116.07	120.20
21	AA	1525	G	C4-C5-C6	5.90	122.34	118.80
57	BB	462	C	O4'-C1'-N1	5.90	112.92	108.20
57	BB	1480	C	N3-C4-C5	-5.90	119.54	121.90
57	BB	1581	G	N3-C4-N9	-5.90	122.46	126.00
21	AA	42	G	N1-C2-N3	-5.89	120.36	123.90
21	AA	121	U	C5-C6-N1	5.89	125.65	122.70
21	AA	143	A	N9-C4-C5	5.89	108.16	105.80
21	AA	364	A	C8-N9-C4	-5.89	103.44	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	384	G	C6-N1-C2	5.89	128.64	125.10
21	AA	455	G	C2-N3-C4	-5.89	108.95	111.90
21	AA	776	G	C8-N9-C4	-5.89	104.04	106.40
21	AA	834	U	N3-C4-O4	5.89	123.53	119.40
21	AA	852	G	C1'-O4'-C4'	-5.89	105.18	109.90
26	AV	65	C	P-O3'-C3'	-5.89	112.63	119.70
57	BB	278	A	O4'-C1'-N9	5.89	112.92	108.20
57	BB	404	A	O4'-C1'-N9	5.89	112.92	108.20
57	BB	736	C	N3-C4-C5	-5.89	119.54	121.90
57	BB	1387	A	C5-C6-N1	-5.89	114.75	117.70
57	BB	2749	A	C5-C6-N1	-5.89	114.75	117.70
58	BA	27	C	C6-N1-C2	-5.89	117.94	120.30
21	AA	28	A	C4'-C3'-C2'	-5.89	96.71	102.60
21	AA	65	A	N9-C4-C5	5.89	108.16	105.80
21	AA	506	G	C5-N7-C8	5.89	107.25	104.30
21	AA	1413	A	O4'-C1'-N9	5.89	112.91	108.20
21	AA	1446	A	C3'-C2'-C1'	-5.89	96.78	101.50
22	AY	19	G	C4-C5-N7	5.89	113.16	110.80
57	BB	507	A	N9-C4-C5	-5.89	103.44	105.80
57	BB	602	A	N9-C4-C5	5.89	108.16	105.80
57	BB	653	U	P-O3'-C3'	5.89	126.77	119.70
57	BB	742	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	768	G	C3'-C2'-C1'	5.89	106.21	101.50
57	BB	1527	G	C2-N3-C4	5.89	114.85	111.90
57	BB	1696	G	C2-N3-C4	5.89	114.85	111.90
57	BB	1737	G	C1'-O4'-C4'	5.89	114.61	109.90
57	BB	2080	A	C8-N9-C4	-5.89	103.44	105.80
57	BB	2113	U	C4-C5-C6	5.89	123.23	119.70
57	BB	2668	G	N9-C4-C5	5.89	107.76	105.40
21	AA	142	G	C4-C5-N7	5.89	113.16	110.80
21	AA	438	U	C4-C5-C6	5.89	123.23	119.70
21	AA	755	G	O4'-C1'-N9	5.89	112.91	108.20
21	AA	844	G	N1-C2-N2	-5.89	110.90	116.20
21	AA	1101	A	N1-C2-N3	-5.89	126.35	129.30
22	AY	54	U	C2-N3-C4	-5.89	123.47	127.00
31	BL	90	VAL	CG1-CB-CG2	-5.89	101.47	110.90
57	BB	178	G	N3-C2-N2	5.89	124.02	119.90
57	BB	497	A	C6-N1-C2	-5.89	115.07	118.60
57	BB	1440	U	C6-N1-C2	-5.89	117.47	121.00
21	AA	559	A	N7-C8-N9	5.89	116.75	113.80
26	AV	29	G	N9-C4-C5	5.89	107.76	105.40
33	BN	69	ARG	NE-CZ-NH2	-5.89	117.36	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	572	A	C5-C6-N6	-5.89	118.99	123.70
57	BB	970	U	C3'-C2'-C1'	5.89	106.21	101.50
57	BB	2054	A	N1-C6-N6	5.89	122.13	118.60
57	BB	2262	U	C5-C6-N1	5.89	125.64	122.70
57	BB	2273	A	N9-C4-C5	-5.89	103.44	105.80
57	BB	2453	A	C8-N9-C4	-5.89	103.44	105.80
57	BB	2620	C	C2-N3-C4	5.89	122.84	119.90
57	BB	2842	G	C3'-C2'-C1'	-5.89	96.79	101.50
57	BB	1497	U	N1-C2-N3	5.89	118.43	114.90
21	AA	151	A	C3'-C2'-C1'	-5.89	96.79	101.50
21	AA	831	A	N9-C4-C5	-5.89	103.44	105.80
21	AA	1277	C	C5'-C4'-O4'	5.89	116.17	109.10
26	AV	42	G	N9-C4-C5	-5.89	103.05	105.40
57	BB	364	C	O4'-C1'-N1	5.89	112.91	108.20
57	BB	964	C	C4'-C3'-C2'	-5.89	96.71	102.60
57	BB	1129	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1251	C	C5-C4-N4	-5.89	116.08	120.20
57	BB	1322	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1537	G	N3-C4-C5	-5.89	125.66	128.60
57	BB	1645	G	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1856	U	C5-C6-N1	5.89	125.64	122.70
57	BB	1949	G	N1-C2-N3	-5.89	120.37	123.90
57	BB	2295	C	N3-C4-N4	5.89	122.12	118.00
58	BA	61	G	C4'-C3'-C2'	-5.89	96.71	102.60
21	AA	6	G	C4-N9-C1'	5.88	134.15	126.50
21	AA	63	C	C4-C5-C6	-5.88	114.46	117.40
21	AA	435	A	C5-C6-N6	-5.88	118.99	123.70
21	AA	899	C	N3-C4-C5	-5.88	119.55	121.90
21	AA	1147	C	C4'-C3'-C2'	-5.88	96.72	102.60
21	AA	1429	A	C6-N1-C2	5.88	122.13	118.60
23	AW	4	C	P-O5'-C5'	-5.88	111.48	120.90
57	BB	113	U	C5'-C4'-O4'	5.88	116.16	109.10
57	BB	128	C	C1'-O4'-C4'	5.88	114.61	109.90
57	BB	1725	U	O4'-C1'-N1	5.88	112.91	108.20
57	BB	2543	G	C5'-C4'-C3'	-5.88	106.58	116.00
57	BB	2758	A	C5-C6-N1	-5.88	114.76	117.70
58	BA	11	C	N3-C4-N4	5.88	122.12	118.00
58	BA	75	G	P-O3'-C3'	-5.88	112.64	119.70
21	AA	640	A	C4-C5-C6	5.88	119.94	117.00
21	AA	685	G	C5-C6-N1	-5.88	108.56	111.50
21	AA	800	G	N9-C4-C5	-5.88	103.05	105.40
21	AA	1106	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(°)	Ideal(°)
22	AY	1	G	C5-N7-C8	-5.88	101.36	104.30
57	BB	632	A	C5'-C4'-O4'	5.88	116.16	109.10
21	AA	293	G	N3-C2-N2	5.88	124.02	119.90
21	AA	306	A	C5-C6-N1	-5.88	114.76	117.70
21	AA	683	G	N3-C2-N2	5.88	124.02	119.90
21	AA	688	G	C1'-O4'-C4'	5.88	114.61	109.90
21	AA	1336	C	O4'-C1'-N1	5.88	112.91	108.20
26	AV	46	G	C5-C6-O6	-5.88	125.07	128.60
57	BB	122	G	C6-N1-C2	-5.88	121.57	125.10
57	BB	587	C	OP1-P-OP2	-5.88	110.78	119.60
57	BB	1427	A	P-O5'-C5'	-5.88	111.49	120.90
57	BB	1652	A	C8-N9-C4	-5.88	103.45	105.80
57	BB	1893	C	N3-C4-C5	-5.88	119.55	121.90
57	BB	2818	U	N1-C2-N3	-5.88	111.37	114.90
4	AM	81	ASP	CB-CG-OD1	5.88	123.59	118.30
21	AA	894	G	C8-N9-C4	-5.88	104.05	106.40
21	AA	1384	C	C5-C4-N4	-5.88	116.08	120.20
57	BB	784	G	C4-C5-N7	-5.88	108.45	110.80
57	BB	1097	U	P-O3'-C3'	5.88	126.75	119.70
57	BB	1269	A	C5-C6-N1	-5.88	114.76	117.70
57	BB	2366	A	C5-C6-N6	-5.88	119.00	123.70
57	BB	2780	G	C8-N9-C4	5.88	108.75	106.40
58	BA	69	G	C2-N3-C4	5.88	114.84	111.90
5	AN	89	ARG	CD-NE-CZ	-5.88	115.37	123.60
21	AA	340	U	C5-C6-N1	-5.88	119.76	122.70
21	AA	476	U	C4-C5-C6	-5.88	116.17	119.70
21	AA	1256	A	C4-N9-C1'	5.88	136.88	126.30
23	AW	10	G	O4'-C4'-C3'	5.88	110.80	106.10
57	BB	712	G	O4'-C1'-N9	5.88	112.90	108.20
57	BB	1156	A	C5'-C4'-O4'	5.88	116.15	109.10
57	BB	1216	G	C6-C5-N7	-5.88	126.87	130.40
57	BB	1734	G	C8-N9-C4	-5.88	104.05	106.40
57	BB	1905	C	C4-C5-C6	5.88	120.34	117.40
57	BB	2057	G	C2-N3-C4	5.88	114.84	111.90
57	BB	2121	G	O4'-C1'-N9	5.88	112.90	108.20
57	BB	2225	A	N1-C6-N6	5.88	122.13	118.60
57	BB	2552	U	N3-C4-O4	-5.88	115.28	119.40
57	BB	2775	G	N7-C8-N9	-5.88	110.16	113.10
57	BB	2801	G	O4'-C4'-C3'	-5.88	98.12	104.00
57	BB	2828	G	C2-N3-C4	5.88	114.84	111.90
21	AA	69	G	N3-C4-C5	-5.88	125.66	128.60
21	AA	525	C	C1'-O4'-C4'	5.88	114.60	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1279	G	C4'-C3'-C2'	5.88	108.48	102.60
21	AA	1405	G	N3-C4-C5	5.88	131.54	128.60
22	AY	32	C	C6-N1-C1'	-5.88	113.75	120.80
29	BJ	24	THR	CA-CB-CG2	-5.88	104.17	112.40
57	BB	9	G	N1-C6-O6	5.88	123.42	119.90
57	BB	852	U	O4'-C1'-N1	5.88	112.90	108.20
57	BB	1011	G	N1-C2-N2	5.88	121.49	116.20
57	BB	1059	G	C5-N7-C8	5.88	107.24	104.30
57	BB	1733	G	C5-N7-C8	5.88	107.24	104.30
57	BB	2377	A	C1'-O4'-C4'	5.88	114.60	109.90
21	AA	326	G	N3-C2-N2	5.88	124.01	119.90
21	AA	487	A	C6-C5-N7	-5.88	128.19	132.30
22	AY	70	C	C5-C6-N1	-5.88	118.06	121.00
57	BB	725	G	C4-C5-C6	5.88	122.33	118.80
57	BB	1089	A	C5-N7-C8	5.88	106.84	103.90
57	BB	2506	U	N3-C2-O2	5.88	126.31	122.20
57	BB	2544	G	C6-N1-C2	-5.88	121.58	125.10
57	BB	2609	U	C5-C4-O4	-5.88	122.38	125.90
57	BB	2641	G	N3-C4-C5	-5.88	125.66	128.60
57	BB	2847	U	O4'-C1'-N1	5.88	112.90	108.20
21	AA	1022	A	OP1-P-OP2	-5.87	110.79	119.60
21	AA	1304	G	C6-N1-C2	5.87	128.62	125.10
23	AW	28	G	N1-C6-O6	5.87	123.42	119.90
57	BB	213	A	C4'-C3'-C2'	-5.87	96.73	102.60
57	BB	882	G	C1'-O4'-C4'	-5.87	105.20	109.90
57	BB	924	G	N1-C6-O6	5.87	123.42	119.90
57	BB	1051	G	N9-C4-C5	5.87	107.75	105.40
57	BB	1075	C	O4'-C1'-N1	5.87	112.90	108.20
57	BB	1407	G	C5-N7-C8	-5.87	101.36	104.30
57	BB	1704	C	C6-N1-C2	-5.87	117.95	120.30
57	BB	1900	A	C1'-O4'-C4'	5.87	114.60	109.90
57	BB	2115	G	N9-C4-C5	5.87	107.75	105.40
57	BB	2495	G	N3-C4-C5	-5.87	125.66	128.60
57	BB	2641	G	C8-N9-C4	-5.87	104.05	106.40
57	BB	2860	A	C2-N3-C4	-5.87	107.66	110.60
57	BB	2898	U	C2-N3-C4	5.87	130.52	127.00
58	BA	12	C	O4'-C1'-N1	5.87	112.90	108.20
21	AA	86	G	N3-C4-C5	-5.87	125.66	128.60
21	AA	358	U	C5-C4-O4	-5.87	122.38	125.90
21	AA	927	G	O4'-C1'-N9	5.87	112.90	108.20
57	BB	1780	A	O4'-C1'-N9	5.87	112.90	108.20
57	BB	2832	U	O4'-C1'-N1	5.87	112.90	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2837	A	N1-C2-N3	-5.87	126.36	129.30
57	BB	2843	G	P-O3'-C3'	5.87	126.75	119.70
21	AA	657	U	N1-C2-N3	5.87	118.42	114.90
21	AA	720	C	C2-N1-C1'	5.87	125.26	118.80
26	AV	63	G	O5'-P-OP1	5.87	117.74	110.70
57	BB	1872	A	C2-N3-C4	-5.87	107.67	110.60
21	AA	988	G	N7-C8-N9	-5.87	110.17	113.10
21	AA	1146	A	N3-C4-C5	-5.87	122.69	126.80
57	BB	725	G	C6-N1-C2	5.87	128.62	125.10
57	BB	916	G	C6-C5-N7	-5.87	126.88	130.40
57	BB	1357	C	N3-C2-O2	5.87	126.01	121.90
57	BB	1394	U	N3-C2-O2	-5.87	118.09	122.20
57	BB	2038	G	C4-C5-C6	5.87	122.32	118.80
57	BB	2563	U	C2-N3-C4	-5.87	123.48	127.00
57	BB	2624	G	C4-C5-C6	5.87	122.32	118.80
57	BB	2890	G	P-O3'-C3'	5.87	126.74	119.70
21	AA	81	A	C5-C6-N1	-5.87	114.77	117.70
21	AA	250	A	N3-C4-C5	-5.87	122.69	126.80
21	AA	447	G	N7-C8-N9	5.87	116.03	113.10
21	AA	1301	U	C2-N3-C4	-5.87	123.48	127.00
23	AW	2	C	C2-N3-C4	5.87	122.83	119.90
23	AW	29	G	N9-C4-C5	-5.87	103.05	105.40
23	AW	73	A	O4'-C4'-C3'	-5.87	98.13	104.00
57	BB	388	G	N3-C4-C5	-5.87	125.67	128.60
57	BB	788	A	N9-C4-C5	5.87	108.15	105.80
57	BB	885	C	N3-C2-O2	5.87	126.01	121.90
57	BB	1177	G	C2-N3-C4	5.87	114.83	111.90
57	BB	1759	A	C6-N1-C2	-5.87	115.08	118.60
21	AA	404	G	C4-C5-N7	-5.87	108.45	110.80
57	BB	15	G	N1-C2-N2	-5.87	110.92	116.20
57	BB	195	A	C5'-C4'-O4'	5.87	116.14	109.10
57	BB	434	U	N3-C4-O4	-5.87	115.29	119.40
57	BB	808	G	O4'-C4'-C3'	5.87	110.79	106.10
57	BB	836	G	C4-C5-N7	-5.87	108.45	110.80
57	BB	1132	U	N1-C2-O2	-5.87	118.69	122.80
21	AA	256	U	O4'-C1'-N1	5.86	112.89	108.20
57	BB	196	A	C5'-C4'-C3'	-5.86	106.62	116.00
57	BB	535	G	C6-C5-N7	-5.86	126.88	130.40
57	BB	621	A	C8-N9-C4	-5.86	103.45	105.80
57	BB	905	A	C4'-C3'-C2'	-5.86	96.74	102.60
57	BB	1665	A	O5'-C5'-C4'	-5.86	100.56	111.70
57	BB	1891	G	N1-C2-N3	-5.86	120.38	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2648	G	C5-C6-O6	-5.86	125.08	128.60
57	BB	2679	A	C8-N9-C4	5.86	108.14	105.80
21	AA	450	G	N1-C2-N3	-5.86	120.38	123.90
21	AA	1056	U	P-O3'-C3'	-5.86	112.67	119.70
21	AA	1241	G	C6-N1-C2	5.86	128.62	125.10
57	BB	555	G	C4-N9-C1'	5.86	134.12	126.50
57	BB	1769	U	P-O3'-C3'	-5.86	112.67	119.70
57	BB	2125	G	C5'-C4'-O4'	5.86	116.14	109.10
57	BB	2433	A	C6-N1-C2	5.86	122.12	118.60
21	AA	279	A	C5-C6-N1	-5.86	114.77	117.70
21	AA	345	C	N3-C4-N4	5.86	122.10	118.00
21	AA	681	A	O4'-C4'-C3'	-5.86	98.14	104.00
21	AA	1094	G	C6-C5-N7	-5.86	126.88	130.40
21	AA	1107	C	C5-C6-N1	-5.86	118.07	121.00
57	BB	12	U	O4'-C1'-N1	5.86	112.89	108.20
57	BB	1739	A	N9-C4-C5	5.86	108.14	105.80
57	BB	1823	G	O4'-C4'-C3'	-5.86	98.14	104.00
57	BB	2000	C	N3-C4-C5	-5.86	119.56	121.90
57	BB	2050	C	C6-N1-C1'	5.86	127.83	120.80
57	BB	2206	C	C5-C4-N4	-5.86	116.10	120.20
57	BB	2242	G	C2-N3-C4	-5.86	108.97	111.90
9	AR	60	ARG	NE-CZ-NH1	5.86	123.23	120.30
19	AH	92	PRO	C-N-CA	5.86	136.35	121.70
21	AA	105	G	C6-C5-N7	-5.86	126.88	130.40
21	AA	1313	U	C5'-C4'-O4'	5.86	116.13	109.10
57	BB	747	U	C4-C5-C6	-5.86	116.19	119.70
57	BB	848	C	O4'-C1'-N1	5.86	112.89	108.20
57	BB	2183	A	C4'-C3'-C2'	-5.86	96.74	102.60
21	AA	317	U	C4'-C3'-C2'	-5.86	96.74	102.60
21	AA	1314	C	C4-C5-C6	5.86	120.33	117.40
21	AA	1355	G	O4'-C1'-N9	5.86	112.89	108.20
22	AY	54	U	N3-C4-C5	5.86	118.11	114.60
57	BB	24	G	C3'-C2'-C1'	5.86	106.19	101.50
57	BB	578	G	P-O3'-C3'	5.86	126.73	119.70
57	BB	667	U	C4-C5-C6	5.86	123.22	119.70
57	BB	763	G	N7-C8-N9	-5.86	110.17	113.10
57	BB	919	U	P-O3'-C3'	-5.86	112.67	119.70
57	BB	992	C	C4'-C3'-C2'	-5.86	96.74	102.60
57	BB	1225	G	C4-C5-C6	5.86	122.31	118.80
57	BB	1443	U	C6-N1-C2	5.86	124.51	121.00
57	BB	1764	C	N1-C2-N3	-5.86	115.10	119.20
57	BB	2396	G	C5-C6-N1	-5.86	108.57	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2896	C	C5-C4-N4	-5.86	116.10	120.20
21	AA	135	C	C5-C4-N4	5.86	124.30	120.20
21	AA	220	G	N9-C4-C5	5.86	107.74	105.40
21	AA	977	A	N9-C4-C5	5.86	108.14	105.80
22	AY	39	U	C6-N1-C1'	-5.86	113.00	121.20
25	AZ	116	ARG	NE-CZ-NH2	5.86	123.23	120.30
26	AV	46	G	C5'-C4'-C3'	5.86	125.37	116.00
57	BB	456	C	C6-N1-C1'	-5.86	113.77	120.80
57	BB	514	A	O4'-C1'-N9	5.86	112.88	108.20
57	BB	857	G	N1-C2-N3	-5.86	120.39	123.90
57	BB	956	G	C5-C6-O6	-5.86	125.09	128.60
57	BB	1855	U	C2-N1-C1'	5.86	124.73	117.70
57	BB	1930	G	C8-N9-C4	5.86	108.74	106.40
57	BB	2307	G	N7-C8-N9	-5.86	110.17	113.10
57	BB	2309	A	C6-C5-N7	-5.86	128.20	132.30
58	BA	112	G	O4'-C1'-N9	5.86	112.88	108.20
21	AA	1216	A	O4'-C1'-N9	5.85	112.88	108.20
57	BB	2187	U	N3-C4-O4	5.85	123.50	119.40
57	BB	2871	U	O4'-C1'-N1	5.85	112.88	108.20
15	AD	2	ARG	NE-CZ-NH2	-5.85	117.37	120.30
21	AA	984	C	C4-C5-C6	5.85	120.33	117.40
21	AA	1104	G	C4-C5-C6	5.85	122.31	118.80
57	BB	67	U	C6-N1-C2	5.85	124.51	121.00
57	BB	173	A	C1'-O4'-C4'	-5.85	105.22	109.90
57	BB	359	G	C6-C5-N7	-5.85	126.89	130.40
57	BB	512	G	C6-C5-N7	-5.85	126.89	130.40
57	BB	778	G	N1-C6-O6	5.85	123.41	119.90
57	BB	858	G	C5'-C4'-O4'	5.85	116.12	109.10
57	BB	982	C	C2-N1-C1'	5.85	125.24	118.80
57	BB	1242	U	N3-C2-O2	5.85	126.30	122.20
57	BB	2106	U	C4'-C3'-C2'	-5.85	96.75	102.60
21	AA	244	U	O4'-C1'-N1	5.85	112.88	108.20
21	AA	466	A	C5-N7-C8	5.85	106.83	103.90
22	AY	26	G	O4'-C4'-C3'	-5.85	98.15	104.00
30	BK	57	LEU	N-CA-CB	5.85	122.10	110.40
57	BB	10	A	C5'-C4'-O4'	5.85	116.12	109.10
57	BB	263	G	C8-N9-C4	-5.85	104.06	106.40
57	BB	896	A	C4-C5-C6	5.85	119.93	117.00
57	BB	1165	A	N9-C4-C5	-5.85	103.46	105.80
57	BB	1325	U	C5'-C4'-C3'	-5.85	106.64	116.00
57	BB	2290	G	N1-C2-N3	-5.85	120.39	123.90
57	BB	2758	A	C5-N7-C8	5.85	106.83	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	101	A	C1'-O4'-C4'	5.85	114.58	109.90
21	AA	394	G	O4'-C1'-N9	5.85	112.88	108.20
21	AA	533	A	P-O5'-C5'	5.85	130.26	120.90
21	AA	1285	A	C5-N7-C8	-5.85	100.97	103.90
21	AA	1395	C	C4-C5-C6	5.85	120.32	117.40
57	BB	21	A	C2-N3-C4	-5.85	107.67	110.60
57	BB	214	G	C5-C6-O6	-5.85	125.09	128.60
57	BB	281	C	C2-N3-C4	5.85	122.82	119.90
57	BB	446	G	C8-N9-C4	5.85	108.74	106.40
57	BB	597	G	C4-C5-N7	5.85	113.14	110.80
57	BB	616	A	C5'-C4'-C3'	-5.85	106.64	116.00
57	BB	1465	G	C5-N7-C8	5.85	107.22	104.30
57	BB	1543	G	N7-C8-N9	-5.85	110.17	113.10
57	BB	1700	A	C5-C6-N6	-5.85	119.02	123.70
57	BB	2189	U	O4'-C1'-N1	5.85	112.88	108.20
21	AA	437	U	N3-C4-C5	-5.85	111.09	114.60
21	AA	880	C	C3'-C2'-C1'	5.85	106.18	101.50
21	AA	1246	A	C6-C5-N7	-5.85	128.21	132.30
23	AW	37	A	C2-N3-C4	-5.85	107.68	110.60
25	AZ	171	ARG	NE-CZ-NH1	-5.85	117.38	120.30
57	BB	216	A	C5-C6-N6	-5.85	119.02	123.70
57	BB	1274	A	O4'-C1'-N9	5.85	112.88	108.20
57	BB	1412	U	O4'-C1'-N1	5.85	112.88	108.20
57	BB	1433	A	C6-N1-C2	-5.85	115.09	118.60
57	BB	1984	G	C4-C5-C6	-5.85	115.29	118.80
57	BB	2361	G	C4-C5-N7	-5.85	108.46	110.80
57	BB	2690	U	N1-C2-O2	5.85	126.89	122.80
58	BA	47	C	C2-N1-C1'	5.85	125.23	118.80
58	BA	104	A	C5-N7-C8	5.85	106.82	103.90
15	AD	193	ASP	CB-CG-OD2	-5.85	113.04	118.30
21	AA	144	G	C4-C5-N7	-5.85	108.46	110.80
21	AA	199	A	C5-C6-N6	-5.85	119.02	123.70
21	AA	1308	U	N3-C4-O4	5.85	123.49	119.40
57	BB	2569	G	C5-C6-O6	-5.85	125.09	128.60
58	BA	39	A	C8-N9-C4	-5.85	103.46	105.80
21	AA	688	G	C6-N1-C2	5.84	128.61	125.10
21	AA	979	C	C2-N3-C4	5.84	122.82	119.90
21	AA	1006	G	N1-C6-O6	5.84	123.41	119.90
21	AA	1181	G	N1-C2-N3	-5.84	120.39	123.90
22	AY	64	A	N9-C4-C5	5.84	108.14	105.80
57	BB	199	A	C4-C5-N7	-5.84	107.78	110.70
57	BB	504	A	C5-C6-N6	-5.84	119.02	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1315	C	N1-C2-O2	-5.84	115.39	118.90
57	BB	1881	C	C4-C5-C6	5.84	120.32	117.40
57	BB	1908	C	C4'-C3'-C2'	-5.84	96.75	102.60
57	BB	2849	U	O4'-C1'-N1	5.84	112.88	108.20
21	AA	512	U	N3-C4-C5	-5.84	111.09	114.60
26	AV	16	C	C4-C5-C6	5.84	120.32	117.40
52	BD	169	ARG	NE-CZ-NH1	5.84	123.22	120.30
57	BB	977	G	C8-N9-C1'	5.84	134.60	127.00
57	BB	1658	C	C2-N3-C4	5.84	122.82	119.90
57	BB	2687	U	P-O3'-C3'	5.84	126.71	119.70
21	AA	14	U	C5-C4-O4	-5.84	122.39	125.90
21	AA	315	A	C6-C5-N7	-5.84	128.21	132.30
21	AA	588	G	C4-C5-C6	5.84	122.31	118.80
21	AA	1329	A	C5-C6-N6	-5.84	119.03	123.70
22	AY	75	C	C5-C4-N4	-5.84	116.11	120.20
39	BT	53	VAL	CA-CB-CG1	-5.84	102.14	110.90
57	BB	883	G	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	1079	C	C6-N1-C2	5.84	122.64	120.30
57	BB	1225	G	N3-C2-N2	5.84	123.99	119.90
57	BB	1388	G	N3-C4-N9	5.84	129.50	126.00
57	BB	1477	A	N3-C4-C5	-5.84	122.71	126.80
57	BB	1805	A	N9-C4-C5	5.84	108.14	105.80
57	BB	1918	A	C5-C6-N1	-5.84	114.78	117.70
57	BB	2151	U	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	2231	U	N1-C2-N3	5.84	118.41	114.90
57	BB	2282	G	N1-C2-N2	-5.84	110.94	116.20
57	BB	2439	A	O4'-C1'-N9	5.84	112.87	108.20
57	BB	2671	G	O4'-C1'-N9	5.84	112.87	108.20
14	AC	23	ALA	N-CA-CB	5.84	118.28	110.10
21	AA	298	A	N7-C8-N9	-5.84	110.88	113.80
21	AA	666	G	C5-C6-O6	-5.84	125.10	128.60
21	AA	974	A	N1-C2-N3	5.84	132.22	129.30
21	AA	1487	G	N9-C4-C5	-5.84	103.06	105.40
21	AA	1524	C	N1-C1'-C2'	-5.84	105.58	112.00
45	BC	170	TYR	CB-CG-CD1	5.84	124.50	121.00
57	BB	21	A	C3'-C2'-C1'	-5.84	96.83	101.50
57	BB	285	G	N9-C4-C5	5.84	107.74	105.40
57	BB	686	U	N1-C2-N3	-5.84	111.40	114.90
57	BB	710	U	C4-C5-C6	-5.84	116.20	119.70
57	BB	712	G	C1'-O4'-C4'	5.84	114.57	109.90
57	BB	744	U	N3-C4-C5	-5.84	111.10	114.60
57	BB	1110	G	C6-N1-C2	5.84	128.60	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1763	G	N3-C4-N9	-5.84	122.50	126.00
57	BB	2300	C	P-O3'-C3'	-5.84	112.69	119.70
57	BB	2493	U	C2-N3-C4	5.84	130.50	127.00
57	BB	2697	G	N7-C8-N9	5.84	116.02	113.10
57	BB	2797	U	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	2846	G	C5-C6-O6	-5.84	125.10	128.60
58	BA	46	A	C6-C5-N7	-5.84	128.21	132.30
58	BA	73	A	N3-C4-C5	-5.84	122.71	126.80
58	BA	105	G	C5-C6-N1	-5.84	108.58	111.50
21	AA	380	G	C4-C5-N7	5.84	113.14	110.80
23	AW	65	G	N3-C4-C5	-5.84	125.68	128.60
57	BB	222	A	N3-C4-N9	5.84	132.07	127.40
57	BB	743	A	O5'-P-OP1	-5.84	100.45	105.70
57	BB	943	A	C4'-C3'-C2'	-5.84	96.76	102.60
57	BB	1132	U	N3-C4-C5	-5.84	111.10	114.60
57	BB	1173	U	N3-C2-O2	5.84	126.29	122.20
57	BB	1303	G	C4-C5-N7	-5.84	108.47	110.80
57	BB	2355	G	C6-C5-N7	-5.84	126.90	130.40
57	BB	2440	C	O4'-C1'-N1	5.84	112.87	108.20
3	AL	88	ASP	CB-CG-OD2	5.84	123.55	118.30
21	AA	571	U	N3-C4-C5	-5.84	111.10	114.60
21	AA	584	G	P-O3'-C3'	5.84	126.70	119.70
21	AA	699	C	C6-N1-C2	-5.84	117.97	120.30
21	AA	1267	C	C2-N1-C1'	5.84	125.22	118.80
21	AA	1395	C	C6-N1-C2	-5.84	117.97	120.30
21	AA	1515	G	C2-N3-C4	5.84	114.82	111.90
26	AV	67	C	N1-C2-N3	-5.84	115.11	119.20
57	BB	447	A	C6-C5-N7	-5.84	128.22	132.30
57	BB	776	G	N7-C8-N9	5.84	116.02	113.10
57	BB	1364	G	N3-C2-N2	-5.84	115.81	119.90
57	BB	2266	A	N1-C2-N3	5.84	132.22	129.30
57	BB	2646	C	N3-C4-N4	5.84	122.08	118.00
57	BB	2821	A	C4-C5-N7	-5.84	107.78	110.70
57	BB	2860	A	N1-C2-N3	5.84	132.22	129.30
21	AA	839	C	N1-C2-O2	-5.83	115.40	118.90
21	AA	933	G	N9-C4-C5	5.83	107.73	105.40
22	AY	53	G	C3'-C2'-C1'	-5.83	96.83	101.50
52	BD	193	VAL	N-CA-CB	5.83	124.34	111.50
58	BA	10	G	O4'-C1'-N9	5.83	112.87	108.20
21	AA	60	A	N1-C2-N3	-5.83	126.38	129.30
23	AW	59	U	C6-N1-C2	5.83	124.50	121.00
35	BP	24	THR	N-CA-C	-5.83	95.25	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	219	A	C8-N9-C4	-5.83	103.47	105.80
57	BB	612	G	C5-N7-C8	5.83	107.22	104.30
57	BB	614	A	C4-C5-N7	-5.83	107.78	110.70
57	BB	909	A	C4-C5-C6	5.83	119.92	117.00
57	BB	1017	G	C5-N7-C8	-5.83	101.38	104.30
57	BB	1274	A	N1-C2-N3	5.83	132.22	129.30
57	BB	1613	G	C5-C6-N1	-5.83	108.58	111.50
57	BB	2061	G	C4-C5-C6	5.83	122.30	118.80
57	BB	2400	G	C4-N9-C1'	-5.83	118.92	126.50
57	BB	2472	G	C5-N7-C8	5.83	107.22	104.30
21	AA	97	G	N1-C6-O6	5.83	123.40	119.90
21	AA	141	G	C4-C5-C6	5.83	122.30	118.80
21	AA	650	G	C8-N9-C4	5.83	108.73	106.40
21	AA	968	A	O4'-C1'-N9	5.83	112.87	108.20
45	BC	131	MET	CG-SD-CE	5.83	109.53	100.20
57	BB	161	A	C6-C5-N7	-5.83	128.22	132.30
57	BB	326	G	C6-N1-C2	-5.83	121.60	125.10
57	BB	989	G	P-O3'-C3'	-5.83	112.70	119.70
57	BB	990	A	C5-C6-N6	-5.83	119.03	123.70
57	BB	1459	G	N1-C2-N3	-5.83	120.40	123.90
57	BB	2119	A	C8-N9-C4	-5.83	103.47	105.80
57	BB	2585	U	N3-C2-O2	5.83	126.28	122.20
21	AA	781	A	N3-C4-C5	-5.83	122.72	126.80
26	AV	5	G	O4'-C1'-N9	5.83	112.86	108.20
26	AV	58	A	C5-N7-C8	5.83	106.81	103.90
56	BH	116	ARG	NE-CZ-NH2	5.83	123.22	120.30
57	BB	471	A	C2-N3-C4	5.83	113.52	110.60
57	BB	1569	A	C5-C6-N1	-5.83	114.78	117.70
57	BB	1898	U	N1-C2-N3	5.83	118.40	114.90
57	BB	2614	A	C5-N7-C8	5.83	106.81	103.90
57	BB	2678	C	N3-C4-N4	5.83	122.08	118.00
21	AA	13	U	N3-C4-O4	-5.83	115.32	119.40
21	AA	69	G	P-O3'-C3'	5.83	126.69	119.70
21	AA	1046	A	P-O5'-C5'	-5.83	111.57	120.90
21	AA	1288	A	C6-C5-N7	-5.83	128.22	132.30
57	BB	118	A	N9-C4-C5	-5.83	103.47	105.80
57	BB	129	C	C5-C6-N1	-5.83	118.08	121.00
57	BB	281	C	C6-N1-C2	5.83	122.63	120.30
57	BB	882	G	O4'-C1'-N9	5.83	112.86	108.20
57	BB	1010	A	P-O3'-C3'	-5.83	112.71	119.70
57	BB	1842	G	N9-C4-C5	-5.83	103.07	105.40
57	BB	1900	A	C4-C5-N7	-5.83	107.79	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2520	C	P-O3'-C3'	-5.83	112.71	119.70
57	BB	2679	A	C6-C5-N7	-5.83	128.22	132.30
21	AA	693	G	P-O3'-C3'	-5.83	112.71	119.70
23	AW	46	G	N7-C8-N9	-5.83	110.19	113.10
52	BD	58	ASN	CB-CA-C	-5.83	98.75	110.40
57	BB	313	G	C6-C5-N7	-5.83	126.90	130.40
57	BB	393	C	C6-N1-C2	-5.83	117.97	120.30
57	BB	970	U	O4'-C1'-N1	5.83	112.86	108.20
57	BB	1533	C	N3-C4-C5	5.83	124.23	121.90
57	BB	2143	C	OP1-P-OP2	-5.83	110.86	119.60
57	BB	2167	U	C5'-C4'-C3'	5.83	125.32	116.00
57	BB	2718	G	C2-N3-C4	-5.83	108.99	111.90
57	BB	2867	G	C4-N9-C1'	5.83	134.07	126.50
21	AA	6	G	C4-C5-C6	5.83	122.30	118.80
21	AA	188	C	C6-N1-C1'	-5.83	113.81	120.80
21	AA	379	C	C6-N1-C2	-5.83	117.97	120.30
21	AA	939	G	N7-C8-N9	5.83	116.01	113.10
21	AA	1488	G	C6-C5-N7	-5.83	126.91	130.40
21	AA	1503	A	C6-N1-C2	-5.83	115.10	118.60
22	AY	33	U	N1-C2-O2	5.83	126.88	122.80
53	BE	145	ASP	CB-CG-OD1	5.83	123.54	118.30
57	BB	4	U	N1-C2-O2	5.83	126.88	122.80
57	BB	37	C	C1'-O4'-C4'	-5.83	105.24	109.90
57	BB	73	A	C5-C6-N1	-5.83	114.79	117.70
57	BB	652	U	C5-C6-N1	5.83	125.61	122.70
57	BB	713	G	C5-C6-O6	-5.83	125.10	128.60
57	BB	741	U	N3-C4-C5	5.83	118.09	114.60
57	BB	1039	A	N3-C4-C5	-5.83	122.72	126.80
57	BB	1295	C	C3'-C2'-C1'	-5.83	96.84	101.50
57	BB	1445	G	N1-C6-O6	5.83	123.40	119.90
57	BB	1487	U	C2-N3-C4	-5.83	123.50	127.00
57	BB	1578	U	C6-N1-C2	-5.83	117.50	121.00
57	BB	2169	A	C8-N9-C4	5.83	108.13	105.80
57	BB	2358	A	C4-C5-C6	5.83	119.91	117.00
58	BA	41	G	C6-C5-N7	-5.83	126.91	130.40
58	BA	115	A	C4'-C3'-C2'	-5.83	96.78	102.60
21	AA	34	C	C5-C4-N4	-5.82	116.12	120.20
21	AA	179	A	P-O5'-C5'	5.82	130.22	120.90
21	AA	325	A	P-O5'-C5'	-5.82	111.58	120.90
21	AA	452	A	C6-N1-C2	5.82	122.09	118.60
21	AA	650	G	N1-C2-N3	-5.82	120.41	123.90
21	AA	754	C	C2-N3-C4	5.82	122.81	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1137	C	N3-C4-C5	-5.82	119.57	121.90
23	AW	3	C	C2-N1-C1'	5.82	125.21	118.80
56	BH	56	ALA	CB-CA-C	5.82	118.83	110.10
57	BB	667	U	C5'-C4'-C3'	-5.82	106.68	116.00
57	BB	844	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	1218	G	C5-N7-C8	5.82	107.21	104.30
57	BB	1252	G	N1-C6-O6	5.82	123.39	119.90
57	BB	1532	A	N7-C8-N9	5.82	116.71	113.80
57	BB	2610	C	OP1-P-OP2	-5.82	110.86	119.60
21	AA	135	C	N1-C2-N3	-5.82	115.12	119.20
21	AA	445	G	N3-C2-N2	5.82	123.98	119.90
21	AA	815	A	N1-C2-N3	5.82	132.21	129.30
21	AA	934	C	C2-N3-C4	5.82	122.81	119.90
22	AY	59	U	N3-C4-C5	-5.82	111.11	114.60
57	BB	707	G	C4-C5-N7	-5.82	108.47	110.80
57	BB	915	C	N3-C4-N4	5.82	122.08	118.00
57	BB	2538	C	C2-N1-C1'	5.82	125.20	118.80
58	BA	107	G	C4'-C3'-C2'	-5.82	96.78	102.60
21	AA	1056	U	N1-C2-N3	-5.82	111.41	114.90
21	AA	1198	G	N1-C6-O6	5.82	123.39	119.90
21	AA	1384	C	O4'-C1'-N1	5.82	112.86	108.20
25	AZ	47	ASP	CB-CA-C	-5.82	98.76	110.40
45	BC	42	ARG	CG-CD-NE	-5.82	99.58	111.80
54	BF	116	LEU	CB-CG-CD1	5.82	120.89	111.00
57	BB	429	A	C1'-O4'-C4'	5.82	114.56	109.90
57	BB	432	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	570	G	C5-N7-C8	5.82	107.21	104.30
57	BB	883	G	N1-C6-O6	5.82	123.39	119.90
57	BB	931	U	P-O3'-C3'	5.82	126.68	119.70
57	BB	1436	G	P-O3'-C3'	-5.82	112.72	119.70
57	BB	1697	G	P-O3'-C3'	-5.82	112.71	119.70
57	BB	2853	C	N3-C4-C5	-5.82	119.57	121.90
58	BA	78	A	N1-C6-N6	5.82	122.09	118.60
16	AE	127	TYR	CB-CG-CD2	5.82	124.49	121.00
21	AA	149	A	C4'-C3'-C2'	-5.82	96.78	102.60
21	AA	506	G	C4-C5-N7	-5.82	108.47	110.80
57	BB	407	G	N3-C4-C5	5.82	131.51	128.60
57	BB	612	G	C4'-C3'-C2'	5.82	108.42	102.60
57	BB	793	A	C4-C5-N7	-5.82	107.79	110.70
57	BB	942	G	N9-C4-C5	-5.82	103.07	105.40
57	BB	1617	C	N3-C4-N4	5.82	122.07	118.00
57	BB	2037	A	C5-N7-C8	5.82	106.81	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2373	G	N9-C4-C5	5.82	107.73	105.40
58	BA	105	G	N1-C2-N3	-5.82	120.41	123.90
18	AG	61	PHE	CB-CG-CD2	-5.82	116.73	120.80
21	AA	95	C	C5-C4-N4	-5.82	116.13	120.20
21	AA	126	G	N1-C2-N3	-5.82	120.41	123.90
27	B5	152	ALA	N-CA-CB	5.82	118.24	110.10
29	BJ	47	HIS	CA-CB-CG	5.82	123.49	113.60
41	BV	9	ARG	NE-CZ-NH1	-5.82	117.39	120.30
57	BB	194	G	C5-C6-O6	-5.82	125.11	128.60
57	BB	326	G	C4-C5-N7	5.82	113.13	110.80
57	BB	1849	G	O4'-C1'-N9	5.82	112.85	108.20
57	BB	1889	A	C5-N7-C8	5.82	106.81	103.90
57	BB	1943	U	C1'-O4'-C4'	5.82	114.55	109.90
57	BB	2445	G	N9-C4-C5	-5.82	103.07	105.40
58	BA	117	G	C1'-O4'-C4'	-5.82	105.25	109.90
5	AN	23	ARG	N-CA-C	-5.82	95.30	111.00
7	AP	60	TRP	N-CA-CB	5.82	121.07	110.60
21	AA	42	G	O4'-C1'-N9	5.82	112.85	108.20
21	AA	126	G	O4'-C1'-N9	5.82	112.85	108.20
21	AA	603	U	P-O5'-C5'	5.82	130.20	120.90
21	AA	836	G	C6-N1-C2	5.82	128.59	125.10
21	AA	1020	G	C2-N3-C4	5.82	114.81	111.90
21	AA	1190	G	C4-N9-C1'	5.82	134.06	126.50
21	AA	1303	C	C2-N3-C4	5.82	122.81	119.90
21	AA	1319	A	C6-C5-N7	-5.82	128.23	132.30
21	AA	1500	A	C5-C6-N6	-5.82	119.05	123.70
21	AA	1511	G	C8-N9-C4	-5.82	104.07	106.40
22	AY	47	U	C6-N1-C2	-5.82	117.51	121.00
26	AV	58	A	N9-C4-C5	-5.82	103.47	105.80
57	BB	2	G	C4-N9-C1'	-5.82	118.94	126.50
57	BB	460	A	C4-C5-N7	5.82	113.61	110.70
57	BB	688	U	C5-C4-O4	-5.82	122.41	125.90
57	BB	789	A	O4'-C1'-N9	5.82	112.85	108.20
57	BB	1170	C	P-O3'-C3'	-5.82	112.72	119.70
57	BB	1407	G	N3-C2-N2	5.82	123.97	119.90
57	BB	2015	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	2256	G	C4'-C3'-C2'	-5.82	96.78	102.60
57	BB	2276	G	N7-C8-N9	-5.82	110.19	113.10
57	BB	2279	G	C6-N1-C2	5.82	128.59	125.10
57	BB	2444	G	C4-C5-C6	5.82	122.29	118.80
57	BB	2752	C	C5'-C4'-C3'	-5.82	106.70	116.00
14	AC	82	ASP	CB-CG-OD1	-5.81	113.07	118.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	202	G	C4-C5-C6	5.81	122.29	118.80
57	BB	312	G	N3-C2-N2	5.81	123.97	119.90
57	BB	356	G	C8-N9-C4	-5.81	104.08	106.40
57	BB	871	U	C5-C6-N1	5.81	125.61	122.70
57	BB	1430	G	N3-C4-N9	-5.81	122.51	126.00
57	BB	2576	G	N3-C2-N2	5.81	123.97	119.90
13	AB	77	GLU	CG-CD-OE1	-5.81	106.67	118.30
21	AA	836	G	O4'-C1'-N9	5.81	112.85	108.20
21	AA	1248	A	N7-C8-N9	-5.81	110.89	113.80
26	AV	5	G	N3-C4-N9	5.81	129.49	126.00
57	BB	27	G	C4'-C3'-C2'	-5.81	96.79	102.60
57	BB	284	U	N1-C2-O2	-5.81	118.73	122.80
57	BB	543	G	N9-C4-C5	-5.81	103.08	105.40
57	BB	548	G	N3-C4-C5	-5.81	125.69	128.60
57	BB	715	A	N1-C6-N6	5.81	122.09	118.60
57	BB	752	A	N1-C2-N3	5.81	132.21	129.30
57	BB	1162	G	N1-C2-N3	-5.81	120.41	123.90
57	BB	1489	C	P-O3'-C3'	5.81	126.67	119.70
57	BB	1819	A	N3-C4-C5	-5.81	122.73	126.80
18	AG	37	THR	CA-CB-CG2	-5.81	104.27	112.40
21	AA	105	G	C4-C5-N7	5.81	113.12	110.80
22	AY	60	C	N3-C4-C5	-5.81	119.58	121.90
57	BB	701	G	C8-N9-C4	5.81	108.72	106.40
57	BB	1870	C	N3-C2-O2	-5.81	117.83	121.90
57	BB	2823	A	C3'-C2'-C1'	5.81	106.15	101.50
57	BB	2894	G	N3-C4-C5	5.81	131.51	128.60
21	AA	287	U	C4-C5-C6	-5.81	116.21	119.70
21	AA	640	A	O4'-C1'-N9	5.81	112.85	108.20
21	AA	1111	A	C8-N9-C4	-5.81	103.48	105.80
29	BJ	59	ALA	CB-CA-C	-5.81	101.39	110.10
57	BB	119	A	C3'-C2'-C1'	-5.81	96.85	101.50
57	BB	187	G	C3'-C2'-C1'	-5.81	96.85	101.50
57	BB	216	A	C5-C6-N1	-5.81	114.80	117.70
57	BB	331	C	P-O3'-C3'	5.81	126.67	119.70
57	BB	386	G	C5-C6-O6	-5.81	125.11	128.60
57	BB	1322	A	C5-N7-C8	5.81	106.81	103.90
57	BB	2374	C	N3-C4-N4	5.81	122.07	118.00
57	BB	2478	A	C6-C5-N7	-5.81	128.23	132.30
57	BB	2612	C	C5-C6-N1	5.81	123.91	121.00
57	BB	2755	C	C5-C4-N4	-5.81	116.13	120.20
15	AD	66	VAL	CA-CB-CG1	5.81	119.61	110.90
21	AA	1092	A	N1-C2-N3	-5.81	126.40	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	15	G	C5-C6-O6	-5.81	125.12	128.60
57	BB	288	U	C5-C6-N1	5.81	125.60	122.70
57	BB	1216	G	N1-C2-N3	-5.81	120.42	123.90
57	BB	1453	A	C5'-C4'-O4'	5.81	116.07	109.10
57	BB	1498	C	C5-C4-N4	-5.81	116.14	120.20
57	BB	2223	G	C5'-C4'-C3'	5.81	125.29	116.00
57	BB	2837	A	O4'-C1'-N9	5.81	112.84	108.20
21	AA	193	C	C6-N1-C2	5.81	122.62	120.30
57	BB	266	G	N3-C4-N9	5.81	129.48	126.00
57	BB	1313	U	C5-C6-N1	5.81	125.60	122.70
57	BB	1535	A	C5-C6-N6	-5.81	119.06	123.70
15	AD	111	ALA	N-CA-CB	5.80	118.22	110.10
21	AA	941	G	O4'-C1'-N9	5.80	112.84	108.20
21	AA	1175	G	C4-C5-N7	5.80	113.12	110.80
23	AW	71	G	O4'-C1'-N9	5.80	112.84	108.20
26	AV	39	C	C6-N1-C2	-5.80	117.98	120.30
57	BB	1017	G	C6-C5-N7	-5.80	126.92	130.40
57	BB	1031	G	P-O5'-C5'	-5.80	111.61	120.90
57	BB	1282	U	C5-C4-O4	5.80	129.38	125.90
57	BB	1292	G	OP1-P-OP2	-5.80	110.89	119.60
57	BB	2052	A	C2-N3-C4	5.80	113.50	110.60
57	BB	2103	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	2589	A	C8-N9-C4	5.80	108.12	105.80
57	BB	2839	G	C2-N3-C4	5.80	114.80	111.90
21	AA	281	G	N3-C2-N2	5.80	123.96	119.90
21	AA	375	U	C5-C6-N1	5.80	125.60	122.70
21	AA	482	A	C5-C6-N6	-5.80	119.06	123.70
21	AA	523	A	P-O3'-C3'	5.80	126.66	119.70
21	AA	835	U	N1-C2-O2	-5.80	118.74	122.80
21	AA	979	C	C4'-C3'-C2'	-5.80	96.80	102.60
26	AV	47	U	N3-C2-O2	5.80	126.26	122.20
57	BB	867	C	C4'-C3'-C2'	-5.80	96.80	102.60
57	BB	1566	A	C5-N7-C8	5.80	106.80	103.90
57	BB	1811	G	N9-C4-C5	5.80	107.72	105.40
57	BB	2527	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	2598	A	N7-C8-N9	-5.80	110.90	113.80
57	BB	2648	G	N3-C4-N9	5.80	129.48	126.00
57	BB	2758	A	C1'-O4'-C4'	-5.80	105.26	109.90
57	BB	2793	C	C2-N3-C4	5.80	122.80	119.90
19	AH	59	GLU	N-CA-CB	5.80	121.04	110.60
21	AA	260	G	C8-N9-C1'	5.80	134.54	127.00
23	AW	57	G	C4'-C3'-C2'	-5.80	96.80	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AZ	96	ALA	N-CA-CB	5.80	118.22	110.10
57	BB	101	A	N9-C4-C5	5.80	108.12	105.80
57	BB	592	A	C5-C6-N6	-5.80	119.06	123.70
57	BB	716	A	N9-C4-C5	5.80	108.12	105.80
57	BB	1185	G	N7-C8-N9	-5.80	110.20	113.10
57	BB	1491	G	O4'-C1'-N9	5.80	112.84	108.20
57	BB	1523	U	C5-C6-N1	-5.80	119.80	122.70
57	BB	1602	U	C2-N3-C4	-5.80	123.52	127.00
57	BB	1724	G	N1-C6-O6	5.80	123.38	119.90
57	BB	2073	C	O4'-C1'-C2'	-5.80	100.00	105.80
57	BB	2241	A	N1-C6-N6	5.80	122.08	118.60
57	BB	2499	C	C4'-C3'-C2'	5.80	108.40	102.60
57	BB	2650	U	C6-N1-C2	-5.80	117.52	121.00
57	BB	2673	G	N3-C4-N9	-5.80	122.52	126.00
11	AT	22	SER	CB-CA-C	-5.80	99.08	110.10
17	AF	76	THR	CA-CB-CG2	-5.80	104.28	112.40
21	AA	219	U	O4'-C1'-N1	5.80	112.84	108.20
21	AA	1059	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	28	A	C5-C6-N1	-5.80	114.80	117.70
57	BB	728	G	P-O3'-C3'	5.80	126.66	119.70
57	BB	1487	U	C5-C6-N1	5.80	125.60	122.70
57	BB	1591	A	N7-C8-N9	-5.80	110.90	113.80
57	BB	1902	C	C4-C5-C6	-5.80	114.50	117.40
57	BB	2019	A	C5-C6-N1	-5.80	114.80	117.70
57	BB	2266	A	C6-N1-C2	-5.80	115.12	118.60
57	BB	2289	G	C8-N9-C4	-5.80	104.08	106.40
21	AA	281	G	C4-C5-C6	5.80	122.28	118.80
21	AA	497	G	N1-C2-N2	-5.80	110.98	116.20
21	AA	640	A	C6-C5-N7	-5.80	128.24	132.30
21	AA	901	A	N1-C2-N3	5.80	132.20	129.30
21	AA	939	G	C6-N1-C2	5.80	128.58	125.10
21	AA	1370	G	C4'-C3'-C2'	-5.80	96.80	102.60
26	AV	30	G	C8-N9-C1'	5.80	134.54	127.00
56	BH	101	ASP	CA-CB-CG	-5.80	100.64	113.40
57	BB	309	A	C5-N7-C8	5.80	106.80	103.90
57	BB	970	U	N3-C2-O2	5.80	126.26	122.20
58	BA	42	C	C4'-C3'-C2'	-5.80	96.80	102.60
21	AA	77	A	C5-C6-N1	-5.80	114.80	117.70
21	AA	139	A	C4-C5-C6	5.80	119.90	117.00
21	AA	878	A	C6-C5-N7	-5.80	128.24	132.30
21	AA	1130	A	C5-C6-N1	-5.80	114.80	117.70
36	BQ	63	ARG	NE-CZ-NH2	5.80	123.20	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	344	A	C5'-C4'-C3'	-5.80	106.72	116.00
57	BB	555	G	O4'-C1'-N9	5.80	112.84	108.20
57	BB	648	G	N3-C4-N9	-5.80	122.52	126.00
57	BB	1072	C	N3-C4-C5	-5.80	119.58	121.90
57	BB	1114	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	1171	G	C5-C6-O6	-5.80	125.12	128.60
57	BB	1206	G	O5'-P-OP1	5.80	117.66	110.70
57	BB	1823	G	C6-C5-N7	-5.80	126.92	130.40
57	BB	2086	U	C5'-C4'-O4'	5.80	116.06	109.10
57	BB	2452	C	O4'-C1'-C2'	5.80	112.82	107.60
57	BB	2490	G	C6-N1-C2	5.80	128.58	125.10
58	BA	20	G	O4'-C4'-C3'	-5.80	98.20	104.00
21	AA	461	A	C5'-C4'-C3'	5.79	125.27	116.00
21	AA	539	A	C5-C6-N6	-5.79	119.06	123.70
21	AA	561	U	N3-C2-O2	5.79	126.26	122.20
21	AA	587	G	N7-C8-N9	-5.79	110.20	113.10
21	AA	1353	G	N1-C2-N3	-5.79	120.42	123.90
21	AA	1517	G	N9-C4-C5	5.79	107.72	105.40
57	BB	215	G	P-O3'-C3'	5.79	126.65	119.70
57	BB	516	C	N1-C2-N3	-5.79	115.14	119.20
57	BB	692	C	C6-N1-C2	-5.79	117.98	120.30
57	BB	1568	G	C6-N1-C2	-5.79	121.62	125.10
58	BA	62	C	P-O3'-C3'	-5.79	112.75	119.70
58	BA	88	C	C2-N3-C4	5.79	122.80	119.90
20	AI	16	ALA	N-CA-CB	5.79	118.21	110.10
20	AI	117	LEU	CB-CG-CD2	5.79	120.85	111.00
21	AA	205	A	O4'-C1'-N9	5.79	112.83	108.20
21	AA	1110	A	O4'-C4'-C3'	-5.79	98.21	104.00
23	AW	4	C	C4-C5-C6	5.79	120.30	117.40
47	B0	35	GLU	CA-CB-CG	-5.79	100.66	113.40
57	BB	1	G	C6-C5-N7	-5.79	126.92	130.40
57	BB	300	A	C5-C6-N1	-5.79	114.80	117.70
57	BB	315	G	C4-C5-N7	5.79	113.12	110.80
57	BB	1510	G	C1'-O4'-C4'	-5.79	105.27	109.90
57	BB	1816	C	C4-C5-C6	-5.79	114.50	117.40
57	BB	1861	G	C5-N7-C8	-5.79	101.40	104.30
57	BB	2086	U	N1-C2-N3	-5.79	111.42	114.90
57	BB	2446	G	C4-C5-N7	5.79	113.12	110.80
57	BB	2838	G	O4'-C1'-N9	5.79	112.83	108.20
21	AA	1013	G	C5-C6-O6	-5.79	125.12	128.60
21	AA	1177	G	C5-C6-N1	-5.79	108.60	111.50
21	AA	1184	G	C5-N7-C8	-5.79	101.40	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1188	A	C6-C5-N7	-5.79	128.25	132.30
21	AA	1258	G	N9-C1'-C2'	-5.79	105.63	112.00
52	BD	79	LEU	N-CA-CB	5.79	121.98	110.40
54	BF	91	ARG	NE-CZ-NH2	5.79	123.19	120.30
57	BB	260	G	C8-N9-C4	-5.79	104.08	106.40
57	BB	650	C	C6-N1-C1'	5.79	127.75	120.80
57	BB	855	G	C4-C5-N7	5.79	113.12	110.80
57	BB	944	C	C1'-O4'-C4'	5.79	114.53	109.90
57	BB	991	C	P-O5'-C5'	-5.79	111.64	120.90
57	BB	1270	C	C4-C5-C6	5.79	120.30	117.40
57	BB	1335	C	O4'-C4'-C3'	-5.79	98.21	104.00
57	BB	1891	G	N3-C2-N2	5.79	123.95	119.90
57	BB	1899	A	N3-C4-N9	-5.79	122.77	127.40
57	BB	2429	G	N3-C4-N9	-5.79	122.53	126.00
57	BB	2551	C	N3-C4-N4	5.79	122.06	118.00
58	BA	66	A	C8-N9-C4	5.79	108.12	105.80
58	BA	85	G	C2-N3-C4	5.79	114.80	111.90
8	AQ	61	ARG	NE-CZ-NH2	5.79	123.19	120.30
21	AA	1037	C	N3-C2-O2	5.79	125.95	121.90
52	BD	13	ARG	NE-CZ-NH2	-5.79	117.41	120.30
57	BB	774	G	C5'-C4'-O4'	5.79	116.05	109.10
57	BB	1193	G	N1-C2-N3	-5.79	120.43	123.90
57	BB	1789	A	N7-C8-N9	-5.79	110.91	113.80
57	BB	2669	G	C6-C5-N7	-5.79	126.93	130.40
58	BA	36	C	C3'-C2'-C1'	5.79	106.13	101.50
4	AM	112	ARG	NE-CZ-NH2	5.79	123.19	120.30
21	AA	145	G	C8-N9-C4	-5.79	104.08	106.40
21	AA	786	G	OP1-P-OP2	-5.79	110.92	119.60
21	AA	872	A	C3'-C2'-C1'	-5.79	96.87	101.50
21	AA	983	A	C4-C5-C6	5.79	119.89	117.00
57	BB	212	G	C4-C5-N7	-5.79	108.48	110.80
57	BB	244	A	C6-N1-C2	-5.79	115.13	118.60
57	BB	418	C	N3-C4-C5	-5.79	119.58	121.90
57	BB	705	A	C6-C5-N7	-5.79	128.25	132.30
57	BB	711	G	C4'-C3'-C2'	-5.79	96.81	102.60
57	BB	981	A	C5-C6-N1	-5.79	114.81	117.70
57	BB	1258	U	N1-C2-O2	-5.79	118.75	122.80
57	BB	1799	G	C8-N9-C4	5.79	108.72	106.40
57	BB	1861	G	P-O3'-C3'	-5.79	112.75	119.70
57	BB	1878	G	C4-C5-N7	-5.79	108.48	110.80
57	BB	2010	G	N1-C2-N2	5.79	121.41	116.20
57	BB	2162	G	N3-C4-N9	5.79	129.47	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2259	U	O4'-C1'-N1	5.79	112.83	108.20
57	BB	2508	G	N1-C2-N2	-5.79	110.99	116.20
57	BB	2713	U	N3-C4-O4	5.79	123.45	119.40
57	BB	2783	U	C5-C4-O4	-5.79	122.43	125.90
57	BB	2849	U	OP1-P-OP2	-5.79	110.92	119.60
58	BA	23	G	C4-C5-C6	5.79	122.27	118.80
21	AA	255	G	O4'-C1'-N9	5.79	112.83	108.20
21	AA	721	G	C6-C5-N7	-5.79	126.93	130.40
21	AA	1028	C	C2-N3-C4	5.79	122.79	119.90
21	AA	1109	C	P-O5'-C5'	-5.79	111.64	120.90
57	BB	914	G	C5-C6-N1	-5.79	108.61	111.50
57	BB	1188	U	N3-C4-O4	5.79	123.45	119.40
19	AH	115	ALA	N-CA-CB	5.79	118.20	110.10
21	AA	27	G	C8-N9-C4	-5.79	104.08	106.40
21	AA	252	U	C4'-C3'-C2'	-5.79	96.81	102.60
21	AA	281	G	C2-N3-C4	5.79	114.79	111.90
21	AA	515	G	C5-N7-C8	5.79	107.19	104.30
21	AA	1207	G	C4-C5-N7	-5.79	108.49	110.80
57	BB	896	A	C3'-C2'-C1'	-5.79	96.87	101.50
57	BB	1006	C	C3'-C2'-C1'	-5.79	96.87	101.50
57	BB	1025	G	C5'-C4'-C3'	-5.79	106.74	116.00
57	BB	1149	G	O4'-C1'-C2'	5.79	112.81	107.60
57	BB	1640	A	N3-C4-C5	-5.79	122.75	126.80
57	BB	2261	C	O4'-C1'-N1	5.79	112.83	108.20
57	BB	2680	U	C6-N1-C2	-5.79	117.53	121.00
57	BB	2788	C	P-O3'-C3'	-5.79	112.76	119.70
21	AA	303	A	N3-C4-C5	-5.78	122.75	126.80
21	AA	881	G	C5-C6-O6	-5.78	125.13	128.60
21	AA	937	A	C8-N9-C4	-5.78	103.49	105.80
26	AV	23	C	O4'-C1'-N1	5.78	112.83	108.20
26	AV	39	C	C5-C4-N4	-5.78	116.15	120.20
57	BB	280	U	O4'-C1'-N1	5.78	112.83	108.20
57	BB	984	A	C5-C6-N1	-5.78	114.81	117.70
57	BB	1176	U	N3-C4-O4	5.78	123.45	119.40
57	BB	1512	C	O4'-C1'-N1	5.78	112.83	108.20
57	BB	1732	C	N3-C4-N4	5.78	122.05	118.00
57	BB	1891	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1933	G	O4'-C1'-N9	5.78	112.83	108.20
57	BB	1937	A	O4'-C1'-N9	5.78	112.83	108.20
57	BB	2475	C	C5'-C4'-C3'	-5.78	106.75	116.00
57	BB	2583	G	N3-C4-C5	5.78	131.49	128.60
57	BB	2782	G	N3-C2-N2	5.78	123.95	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	116	G	C4-C5-C6	5.78	122.27	118.80
21	AA	855	U	O4'-C1'-N1	5.78	112.83	108.20
25	AZ	39	TYR	CB-CG-CD1	-5.78	117.53	121.00
57	BB	565	C	P-O5'-C5'	-5.78	111.65	120.90
57	BB	967	U	C4'-C3'-C2'	-5.78	96.82	102.60
57	BB	1611	C	N3-C4-N4	5.78	122.05	118.00
21	AA	773	G	C8-N9-C1'	5.78	134.51	127.00
21	AA	1206	G	N1-C2-N3	-5.78	120.43	123.90
21	AA	1293	C	C4-C5-C6	-5.78	114.51	117.40
21	AA	1396	A	C2-N3-C4	-5.78	107.71	110.60
56	BH	30	LEU	N-CA-C	-5.78	95.39	111.00
57	BB	270	A	C6-C5-N7	-5.78	128.25	132.30
57	BB	316	C	C4'-C3'-C2'	-5.78	96.82	102.60
57	BB	788	A	C8-N9-C4	-5.78	103.49	105.80
57	BB	1638	C	N3-C4-C5	-5.78	119.59	121.90
57	BB	1804	C	C4-C5-C6	-5.78	114.51	117.40
57	BB	2191	A	C4-C5-C6	5.78	119.89	117.00
57	BB	2410	G	N9-C1'-C2'	-5.78	105.64	112.00
58	BA	77	U	N3-C4-C5	-5.78	111.13	114.60
21	AA	179	A	N1-C2-N3	-5.78	126.41	129.30
21	AA	1084	G	C5-C6-N1	-5.78	108.61	111.50
21	AA	1297	G	C5-C6-N1	-5.78	108.61	111.50
57	BB	290	U	P-O5'-C5'	5.78	130.15	120.90
57	BB	649	G	N1-C6-O6	5.78	123.37	119.90
57	BB	763	G	C3'-C2'-C1'	5.78	106.12	101.50
57	BB	921	C	P-O5'-C5'	5.78	130.15	120.90
57	BB	1294	U	N3-C4-O4	5.78	123.44	119.40
57	BB	1575	C	O4'-C1'-C2'	5.78	112.80	107.60
57	BB	1609	A	C3'-C2'-C1'	-5.78	96.88	101.50
57	BB	2096	C	C4'-C3'-C2'	-5.78	96.82	102.60
21	AA	138	G	N1-C2-N3	-5.78	120.43	123.90
21	AA	1088	G	N7-C8-N9	5.78	115.99	113.10
22	AY	46	G	C8-N9-C4	5.78	108.71	106.40
57	BB	76	C	N1-C2-N3	-5.78	115.16	119.20
57	BB	789	A	C4-C5-C6	5.78	119.89	117.00
57	BB	933	A	C6-C5-N7	-5.78	128.26	132.30
57	BB	1131	G	N9-C4-C5	-5.78	103.09	105.40
57	BB	1177	G	C4-C5-C6	5.78	122.27	118.80
57	BB	1419	A	O3'-P-O5'	-5.78	93.02	104.00
57	BB	1780	A	C5-C6-N6	-5.78	119.08	123.70
57	BB	1890	A	O4'-C1'-N9	5.78	112.82	108.20
57	BB	1975	G	N7-C8-N9	-5.78	110.21	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2557	G	C5-C6-O6	-5.78	125.13	128.60
57	BB	2718	G	C6-C5-N7	-5.78	126.93	130.40
21	AA	817	C	O4'-C1'-N1	5.78	112.82	108.20
21	AA	1315	U	O4'-C1'-N1	5.78	112.82	108.20
21	AA	1336	C	N3-C4-C5	5.78	124.21	121.90
21	AA	1385	G	O4'-C1'-N9	5.78	112.82	108.20
22	AY	41	U	N1-C2-O2	5.78	126.84	122.80
54	BF	164	GLU	OE1-CD-OE2	-5.78	116.37	123.30
57	BB	174	U	C5-C4-O4	-5.78	122.44	125.90
57	BB	332	A	C3'-C2'-C1'	-5.78	96.88	101.50
57	BB	767	U	N1-C1'-C2'	-5.78	105.65	112.00
57	BB	989	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1117	C	C4-C5-C6	5.78	120.29	117.40
57	BB	1250	G	N3-C2-N2	5.78	123.94	119.90
57	BB	1510	G	N1-C6-O6	5.78	123.37	119.90
57	BB	1601	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1722	A	O5'-P-OP2	-5.78	100.50	105.70
57	BB	1965	C	C5'-C4'-O4'	5.78	116.03	109.10
57	BB	2190	G	C6-N1-C2	5.78	128.56	125.10
21	AA	902	G	N1-C2-N3	-5.77	120.44	123.90
21	AA	988	G	C6-N1-C2	-5.77	121.64	125.10
57	BB	34	U	C3'-C2'-C1'	-5.77	96.88	101.50
57	BB	280	U	C4'-C3'-C2'	-5.77	96.83	102.60
57	BB	452	G	O4'-C1'-N9	5.77	112.82	108.20
57	BB	618	G	C8-N9-C4	5.77	108.71	106.40
57	BB	1128	G	N3-C4-N9	-5.77	122.54	126.00
57	BB	1129	A	C8-N9-C4	-5.77	103.49	105.80
57	BB	1566	A	C4-C5-C6	5.77	119.89	117.00
57	BB	1607	C	C2-N3-C4	5.77	122.79	119.90
57	BB	1755	A	C3'-C2'-C1'	5.77	106.12	101.50
57	BB	2069	G	C8-N9-C4	-5.77	104.09	106.40
57	BB	2125	G	N3-C4-C5	-5.77	125.71	128.60
57	BB	2375	G	C5-C6-N1	-5.77	108.61	111.50
57	BB	2659	G	OP1-P-O3'	5.77	117.90	105.20
57	BB	2815	C	C3'-C2'-C1'	5.77	106.12	101.50
14	AC	111	ASP	N-CA-CB	5.77	120.99	110.60
21	AA	83	C	C5-C4-N4	-5.77	116.16	120.20
21	AA	278	G	C5-C6-N1	5.77	114.39	111.50
21	AA	384	G	C8-N9-C1'	5.77	134.50	127.00
21	AA	435	A	P-O3'-C3'	-5.77	112.77	119.70
21	AA	550	G	C5-C6-N1	5.77	114.39	111.50
21	AA	724	G	N7-C8-N9	5.77	115.99	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	963	G	C5'-C4'-O4'	-5.77	102.17	109.10
22	AY	59	U	C5-C4-O4	-5.77	122.44	125.90
23	AW	59	U	O4'-C1'-N1	5.77	112.82	108.20
57	BB	40	U	N3-C4-O4	-5.77	115.36	119.40
57	BB	599	A	C6-C5-N7	-5.77	128.26	132.30
57	BB	1308	A	N9-C4-C5	5.77	108.11	105.80
57	BB	1477	A	C4-N9-C1'	5.77	136.69	126.30
57	BB	1691	C	N1-C2-O2	5.77	122.36	118.90
57	BB	1762	A	C4-C5-C6	5.77	119.89	117.00
57	BB	2017	U	N3-C2-O2	5.77	126.24	122.20
57	BB	2330	G	C6-C5-N7	-5.77	126.94	130.40
58	BA	38	C	P-O3'-C3'	-5.77	112.77	119.70
58	BA	46	A	C5-C6-N6	-5.77	119.08	123.70
21	AA	316	C	N3-C4-N4	5.77	122.04	118.00
25	AZ	38	THR	CA-CB-CG2	-5.77	104.32	112.40
57	BB	529	A	N3-C4-C5	-5.77	122.76	126.80
57	BB	956	G	P-O5'-C5'	-5.77	111.67	120.90
57	BB	1340	U	P-O3'-C3'	5.77	126.63	119.70
57	BB	1363	C	N3-C4-N4	5.77	122.04	118.00
57	BB	1914	C	N1-C2-O2	-5.77	115.44	118.90
21	AA	277	C	N3-C4-N4	5.77	122.04	118.00
21	AA	380	G	C4'-C3'-C2'	-5.77	96.83	102.60
21	AA	1043	G	C8-N9-C4	5.77	108.71	106.40
21	AA	1356	G	N1-C2-N3	-5.77	120.44	123.90
21	AA	1440	U	C6-N1-C2	-5.77	117.54	121.00
26	AV	65	C	C6-N1-C2	-5.77	117.99	120.30
35	BP	50	ARG	NE-CZ-NH2	-5.77	117.42	120.30
53	BE	114	ARG	NE-CZ-NH2	-5.77	117.42	120.30
57	BB	93	G	N9-C4-C5	-5.77	103.09	105.40
57	BB	241	A	O4'-C1'-N9	5.77	112.81	108.20
57	BB	501	A	P-O5'-C5'	5.77	130.13	120.90
57	BB	514	A	C5'-C4'-C3'	5.77	125.23	116.00
57	BB	640	C	C1'-O4'-C4'	5.77	114.52	109.90
57	BB	831	G	C4-C5-C6	5.77	122.26	118.80
57	BB	875	G	O4'-C1'-N9	5.77	112.82	108.20
57	BB	1317	G	C6-N1-C2	5.77	128.56	125.10
57	BB	1326	U	C4-C5-C6	5.77	123.16	119.70
57	BB	1524	G	C3'-C2'-C1'	-5.77	96.89	101.50
57	BB	1591	A	C5'-C4'-C3'	-5.77	106.77	116.00
57	BB	1689	A	C5-N7-C8	5.77	106.78	103.90
57	BB	2083	G	O4'-C1'-N9	5.77	112.81	108.20
57	BB	2400	G	C5'-C4'-C3'	-5.77	106.77	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	AR	69	TYR	CB-CG-CD2	-5.77	117.54	121.00
21	AA	131	A	N1-C2-N3	5.77	132.18	129.30
21	AA	187	G	C5-C6-N1	-5.77	108.62	111.50
21	AA	300	A	C2-N3-C4	5.77	113.48	110.60
21	AA	604	G	C8-N9-C4	-5.77	104.09	106.40
21	AA	1196	A	N1-C2-N3	5.77	132.18	129.30
57	BB	244	A	P-O3'-C3'	-5.77	112.78	119.70
57	BB	277	G	C4-N9-C1'	-5.77	119.00	126.50
57	BB	1700	A	C4-C5-C6	5.77	119.88	117.00
57	BB	1791	A	C5-C6-N1	-5.77	114.82	117.70
57	BB	1948	G	C4-C5-C6	5.77	122.26	118.80
57	BB	2052	A	N1-C2-N3	-5.77	126.42	129.30
57	BB	2166	U	O4'-C1'-N1	5.77	112.81	108.20
57	BB	2496	C	C5-C4-N4	-5.77	116.16	120.20
57	BB	2615	U	C2-N1-C1'	5.77	124.62	117.70
57	BB	2858	C	N3-C4-N4	5.77	122.04	118.00
21	AA	632	U	P-O3'-C3'	5.77	126.62	119.70
21	AA	908	A	C5-N7-C8	5.77	106.78	103.90
21	AA	1233	G	C4-C5-N7	5.77	113.11	110.80
57	BB	563	A	N9-C4-C5	-5.77	103.49	105.80
57	BB	1226	A	C5-N7-C8	5.77	106.78	103.90
57	BB	1434	A	C5-N7-C8	5.77	106.78	103.90
57	BB	1906	G	C2-N3-C4	5.77	114.78	111.90
57	BB	1963	U	O4'-C1'-N1	5.77	112.81	108.20
57	BB	2792	A	N9-C4-C5	5.77	108.11	105.80
57	BB	2826	A	C5-C6-N1	-5.77	114.82	117.70
21	AA	120	A	C6-C5-N7	-5.76	128.26	132.30
21	AA	253	A	N3-C4-C5	-5.76	122.76	126.80
21	AA	727	G	C1'-O4'-C4'	-5.76	105.29	109.90
21	AA	1255	G	C8-N9-C4	5.76	108.71	106.40
57	BB	287	G	C2-N3-C4	5.76	114.78	111.90
57	BB	958	U	O4'-C1'-N1	5.76	112.81	108.20
57	BB	1010	A	N7-C8-N9	-5.76	110.92	113.80
57	BB	1418	G	N3-C4-N9	5.76	129.46	126.00
57	BB	1615	C	C5-C6-N1	-5.76	118.12	121.00
57	BB	1839	G	C8-N9-C4	-5.76	104.09	106.40
57	BB	1889	A	C5-C6-N6	-5.76	119.09	123.70
57	BB	2119	A	O5'-P-OP2	-5.76	100.51	105.70
57	BB	2202	U	N3-C2-O2	5.76	126.24	122.20
57	BB	2319	G	N1-C6-O6	5.76	123.36	119.90
57	BB	2429	G	N3-C4-C5	5.76	131.48	128.60
57	BB	2693	G	N3-C2-N2	5.76	123.94	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	AR	60	ARG	NH1-CZ-NH2	-5.76	113.06	119.40
21	AA	1355	G	C1'-O4'-C4'	5.76	114.51	109.90
57	BB	38	A	O4'-C1'-N9	5.76	112.81	108.20
57	BB	371	A	C6-N1-C2	5.76	122.06	118.60
57	BB	1601	G	C6-C5-N7	-5.76	126.94	130.40
57	BB	1737	G	C4-C5-N7	-5.76	108.50	110.80
57	BB	2096	C	O4'-C1'-N1	5.76	112.81	108.20
21	AA	73	C	N3-C2-O2	5.76	125.93	121.90
21	AA	239	U	C6-N1-C2	5.76	124.46	121.00
21	AA	746	A	C4-C5-N7	-5.76	107.82	110.70
21	AA	1243	C	C5-C6-N1	5.76	123.88	121.00
57	BB	363	G	C6-N1-C2	-5.76	121.64	125.10
57	BB	822	G	P-O5'-C5'	-5.76	111.68	120.90
57	BB	877	A	N1-C6-N6	5.76	122.06	118.60
57	BB	935	C	O4'-C4'-C3'	-5.76	98.24	104.00
57	BB	1115	G	C6-N1-C2	-5.76	121.64	125.10
57	BB	1180	U	C5-C6-N1	5.76	125.58	122.70
57	BB	1538	G	C4-C5-C6	5.76	122.26	118.80
57	BB	1922	G	C4-C5-C6	5.76	122.26	118.80
57	BB	1925	C	N3-C4-N4	5.76	122.03	118.00
57	BB	2590	A	N7-C8-N9	-5.76	110.92	113.80
57	BB	2706	A	N9-C4-C5	-5.76	103.50	105.80
58	BA	105	G	N3-C2-N2	5.76	123.93	119.90
21	AA	347	G	O4'-C1'-N9	5.76	112.81	108.20
21	AA	384	G	C4-N9-C1'	-5.76	119.01	126.50
21	AA	1066	C	O4'-C1'-N1	5.76	112.81	108.20
21	AA	1155	A	N9-C4-C5	5.76	108.10	105.80
21	AA	1512	U	N3-C4-O4	5.76	123.43	119.40
22	AY	64	A	N1-C2-N3	5.76	132.18	129.30
26	AV	43	A	N9-C4-C5	5.76	108.10	105.80
57	BB	577	G	O4'-C4'-C3'	-5.76	98.24	104.00
57	BB	597	G	P-O3'-C3'	-5.76	112.79	119.70
57	BB	1038	G	C3'-C2'-C1'	-5.76	96.89	101.50
57	BB	2082	A	C6-N1-C2	5.76	122.06	118.60
57	BB	2123	G	P-O5'-C5'	5.76	130.12	120.90
57	BB	2337	G	C4-C5-N7	5.76	113.10	110.80
57	BB	2455	G	C6-C5-N7	-5.76	126.94	130.40
21	AA	506	G	N3-C4-N9	-5.76	122.55	126.00
21	AA	1255	G	N3-C4-N9	5.76	129.46	126.00
21	AA	1268	G	C8-N9-C1'	5.76	134.49	127.00
57	BB	1374	G	O4'-C1'-N9	5.76	112.81	108.20
4	AM	2	ARG	NE-CZ-NH2	-5.76	117.42	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	453	G	C3'-C2'-C1'	-5.76	96.90	101.50
21	AA	799	G	C4-C5-C6	5.76	122.25	118.80
21	AA	925	G	N3-C2-N2	-5.76	115.87	119.90
21	AA	1253	G	C2-N3-C4	5.76	114.78	111.90
57	BB	125	A	C5-C6-N1	-5.76	114.82	117.70
57	BB	846	U	C1'-O4'-C4'	-5.76	105.29	109.90
57	BB	938	G	C3'-C2'-C1'	5.76	106.10	101.50
57	BB	1208	C	P-O5'-C5'	-5.76	111.69	120.90
57	BB	1691	C	N1-C2-N3	-5.76	115.17	119.20
57	BB	2021	C	C2-N1-C1'	5.76	125.13	118.80
57	BB	2090	A	C5'-C4'-C3'	-5.76	106.79	116.00
57	BB	2499	C	P-O3'-C3'	-5.76	112.79	119.70
57	BB	2705	A	C6-N1-C2	5.76	122.05	118.60
26	AV	47	U	C2-N3-C4	-5.75	123.55	127.00
33	BN	48	VAL	CA-CB-CG2	-5.75	102.27	110.90
57	BB	648	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	1495	A	N1-C6-N6	5.75	122.05	118.60
57	BB	2749	A	P-O5'-C5'	5.75	130.11	120.90
58	BA	58	A	C1'-O4'-C4'	-5.75	105.30	109.90
21	AA	119	A	C4'-C3'-C2'	-5.75	96.85	102.60
21	AA	685	G	C3'-C2'-C1'	-5.75	96.90	101.50
41	BV	9	ARG	NH1-CZ-NH2	5.75	125.73	119.40
57	BB	175	G	C2-N3-C4	5.75	114.78	111.90
57	BB	1010	A	C4-C5-N7	5.75	113.58	110.70
57	BB	1420	A	C8-N9-C4	-5.75	103.50	105.80
57	BB	1516	G	N7-C8-N9	-5.75	110.22	113.10
57	BB	2064	C	C5-C4-N4	-5.75	116.17	120.20
57	BB	2076	U	C2-N1-C1'	5.75	124.61	117.70
57	BB	2081	U	N1-C2-O2	-5.75	118.77	122.80
21	AA	306	A	P-O3'-C3'	5.75	126.60	119.70
21	AA	475	C	C2-N3-C4	5.75	122.78	119.90
21	AA	786	G	C5-C6-N1	5.75	114.38	111.50
21	AA	1062	U	N3-C4-C5	-5.75	111.15	114.60
21	AA	1157	A	C1'-O4'-C4'	5.75	114.50	109.90
23	AW	53	G	N1-C6-O6	5.75	123.35	119.90
53	BE	121	VAL	CA-CB-CG2	5.75	119.53	110.90
57	BB	307	G	N3-C4-N9	5.75	129.45	126.00
57	BB	404	A	C5-N7-C8	5.75	106.78	103.90
57	BB	433	C	C5-C6-N1	5.75	123.88	121.00
57	BB	1011	G	C4-C5-N7	5.75	113.10	110.80
57	BB	1028	A	OP1-P-OP2	-5.75	110.97	119.60
57	BB	1298	C	N1-C2-N3	5.75	123.23	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1629	U	C5-C4-O4	-5.75	122.45	125.90
57	BB	1975	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	2172	U	C5'-C4'-O4'	5.75	116.00	109.10
21	AA	563	A	P-O3'-C3'	5.75	126.60	119.70
23	AW	17	C	N1-C2-O2	5.75	122.35	118.90
23	AW	54	U	C4'-C3'-C2'	-5.75	96.85	102.60
26	AV	5	G	C5-N7-C8	5.75	107.17	104.30
31	BL	95	LEU	CB-CA-C	-5.75	99.28	110.20
57	BB	610	C	C1'-O4'-C4'	5.75	114.50	109.90
57	BB	1000	A	N1-C2-N3	5.75	132.18	129.30
57	BB	2272	U	P-O5'-C5'	5.75	130.10	120.90
21	AA	67	C	P-O3'-C3'	5.75	126.60	119.70
21	AA	519	C	C5-C4-N4	-5.75	116.18	120.20
21	AA	945	G	C5-N7-C8	-5.75	101.43	104.30
21	AA	1463	U	C5-C6-N1	5.75	125.57	122.70
22	AY	47	U	C3'-C2'-C1'	5.75	106.10	101.50
23	AW	69	G	C8-N9-C4	5.75	108.70	106.40
57	BB	230	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	617	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	674	G	C4-C5-C6	5.75	122.25	118.80
57	BB	953	G	N1-C6-O6	5.75	123.35	119.90
57	BB	1244	A	C2-N3-C4	-5.75	107.73	110.60
57	BB	1481	U	C4-C5-C6	-5.75	116.25	119.70
57	BB	1487	U	N1-C2-O2	-5.75	118.78	122.80
57	BB	1716	U	N3-C4-O4	5.75	123.42	119.40
57	BB	2325	G	C4-C5-N7	-5.75	108.50	110.80
57	BB	2357	G	N1-C6-O6	5.75	123.35	119.90
13	AB	18	GLN	CG-CD-OE1	-5.75	110.11	121.60
21	AA	61	G	N1-C2-N3	-5.75	120.45	123.90
21	AA	177	G	C4-C5-C6	-5.75	115.35	118.80
21	AA	459	A	O4'-C1'-N9	5.75	112.80	108.20
21	AA	728	A	N1-C2-N3	-5.75	126.43	129.30
21	AA	746	A	C5-C6-N1	-5.75	114.83	117.70
21	AA	1048	G	C5-C6-N1	-5.75	108.63	111.50
21	AA	1452	C	C4-C5-C6	-5.75	114.53	117.40
23	AW	70	G	N9-C4-C5	5.75	107.70	105.40
57	BB	240	C	C1'-O4'-C4'	5.75	114.50	109.90
57	BB	333	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	746	U	P-O5'-C5'	5.75	130.09	120.90
57	BB	942	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	1246	A	N3-C4-C5	-5.75	122.78	126.80
57	BB	1539	U	C1'-O4'-C4'	5.75	114.50	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2903	U	C4'-C3'-C2'	-5.75	96.85	102.60
21	AA	304	U	C2-N3-C4	-5.75	123.55	127.00
21	AA	1047	G	C5-C6-O6	-5.75	125.15	128.60
24	AX	15	A	O4'-C1'-N9	5.75	112.80	108.20
54	BF	1	ALA	C-N-CA	5.75	136.06	121.70
57	BB	936	A	O4'-C1'-N9	5.75	112.80	108.20
57	BB	2208	C	N1-C2-N3	-5.75	115.18	119.20
57	BB	2296	U	N3-C2-O2	5.75	126.22	122.20
57	BB	2754	U	N3-C4-C5	-5.75	111.15	114.60
13	AB	189	ASN	N-CA-CB	5.74	120.94	110.60
21	AA	183	C	N3-C4-N4	5.74	122.02	118.00
21	AA	292	G	C6-C5-N7	-5.74	126.95	130.40
21	AA	546	A	C6-C5-N7	-5.74	128.28	132.30
21	AA	573	A	C2-N3-C4	-5.74	107.73	110.60
21	AA	658	C	N1-C2-O2	-5.74	115.45	118.90
21	AA	832	G	P-O3'-C3'	-5.74	112.81	119.70
21	AA	1392	G	N7-C8-N9	-5.74	110.23	113.10
21	AA	1423	G	O4'-C1'-N9	5.74	112.80	108.20
21	AA	1482	G	C5-N7-C8	5.74	107.17	104.30
26	AV	62	C	P-O3'-C3'	-5.74	112.81	119.70
37	BR	26	ASP	CB-CG-OD1	-5.74	113.13	118.30
45	BC	61	TYR	CB-CG-CD2	5.74	124.45	121.00
57	BB	104	A	C2-N3-C4	-5.74	107.73	110.60
57	BB	2152	G	C2'-C3'-O3'	5.74	122.89	113.70
57	BB	2742	G	OP2-P-O3'	5.74	117.83	105.20
19	AH	127	TYR	CZ-CE2-CD2	5.74	124.97	119.80
57	BB	145	C	C2-N1-C1'	-5.74	112.48	118.80
57	BB	200	U	C3'-C2'-C1'	-5.74	96.91	101.50
57	BB	1672	A	C5-C6-N1	-5.74	114.83	117.70
57	BB	2541	A	N7-C8-N9	5.74	116.67	113.80
57	BB	2743	U	C4-C5-C6	-5.74	116.25	119.70
7	AP	60	TRP	CB-CG-CD1	5.74	134.46	127.00
21	AA	134	G	C4-C5-C6	5.74	122.25	118.80
21	AA	142	G	C5-N7-C8	5.74	107.17	104.30
21	AA	386	C	C6-N1-C2	-5.74	118.00	120.30
21	AA	521	G	N3-C4-N9	-5.74	122.56	126.00
21	AA	573	A	C6-N1-C2	5.74	122.04	118.60
21	AA	596	A	O4'-C1'-N9	5.74	112.79	108.20
21	AA	1044	A	C4-C5-N7	-5.74	107.83	110.70
21	AA	1196	A	N9-C4-C5	5.74	108.10	105.80
21	AA	1228	C	C5'-C4'-C3'	-5.74	106.82	116.00
21	AA	1513	A	C8-N9-C4	5.74	108.10	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	46	G	C5'-C4'-O4'	5.74	115.99	109.10
57	BB	80	G	C2-N3-C4	-5.74	109.03	111.90
57	BB	942	G	N3-C4-C5	5.74	131.47	128.60
57	BB	1430	G	C4-C5-N7	-5.74	108.50	110.80
57	BB	2065	C	C1'-O4'-C4'	-5.74	105.31	109.90
57	BB	2637	U	N3-C4-C5	5.74	118.05	114.60
4	AM	46	GLU	N-CA-CB	5.74	120.93	110.60
21	AA	967	C	N3-C4-N4	5.74	122.02	118.00
21	AA	1161	C	N3-C2-O2	-5.74	117.88	121.90
21	AA	1516	G	N7-C8-N9	-5.74	110.23	113.10
23	AW	51	U	C6-N1-C2	5.74	124.44	121.00
52	BD	142	VAL	CA-CB-CG1	5.74	119.51	110.90
57	BB	770	G	P-O5'-C5'	-5.74	111.72	120.90
57	BB	819	A	P-O3'-C3'	-5.74	112.81	119.70
58	BA	66	A	N7-C8-N9	-5.74	110.93	113.80
21	AA	656	G	C5-C6-O6	-5.74	125.16	128.60
21	AA	967	C	C2-N3-C4	5.74	122.77	119.90
21	AA	1105	A	C4-C5-N7	-5.74	107.83	110.70
21	AA	1414	U	C5'-C4'-C3'	5.74	125.18	116.00
21	AA	1470	U	C4-C5-C6	5.74	123.14	119.70
57	BB	1644	C	C1'-O4'-C4'	-5.74	105.31	109.90
58	BA	13	G	O4'-C4'-C3'	-5.74	98.26	104.00
13	AB	188	THR	CA-CB-CG2	-5.74	104.37	112.40
21	AA	103	U	C5-C6-N1	5.74	125.57	122.70
21	AA	403	C	N3-C4-C5	-5.74	119.61	121.90
21	AA	417	G	C4-C5-N7	5.74	113.09	110.80
21	AA	755	G	C6-N1-C2	-5.74	121.66	125.10
21	AA	790	A	C4-C5-C6	5.74	119.87	117.00
21	AA	1071	C	N3-C4-C5	-5.74	119.61	121.90
21	AA	1325	C	C6-N1-C2	-5.74	118.01	120.30
21	AA	1408	A	C1'-O4'-C4'	-5.74	105.31	109.90
21	AA	1497	G	N7-C8-N9	-5.74	110.23	113.10
41	BV	26	PHE	CB-CG-CD2	-5.74	116.78	120.80
57	BB	32	C	C6-N1-C1'	-5.74	113.92	120.80
57	BB	140	C	N1-C2-O2	-5.74	115.46	118.90
57	BB	309	A	N7-C8-N9	-5.74	110.93	113.80
57	BB	310	A	C6-N1-C2	-5.74	115.16	118.60
57	BB	590	A	N3-C4-C5	-5.74	122.78	126.80
57	BB	697	G	C6-N1-C2	-5.74	121.66	125.10
57	BB	952	G	O4'-C1'-N9	5.74	112.79	108.20
57	BB	1273	U	C3'-C2'-C1'	5.74	106.09	101.50
57	BB	1504	A	N3-C4-C5	-5.74	122.78	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2511	U	N3-C4-C5	-5.74	111.16	114.60
57	BB	2731	G	N9-C4-C5	5.74	107.69	105.40
57	BB	2736	A	C3'-C2'-C1'	-5.74	96.91	101.50
21	AA	403	C	N3-C4-N4	5.73	122.01	118.00
21	AA	621	A	N1-C2-N3	-5.73	126.43	129.30
21	AA	1362	A	O4'-C1'-N9	5.73	112.79	108.20
21	AA	1482	G	C6-N1-C2	5.73	128.54	125.10
57	BB	596	U	P-O3'-C3'	-5.73	112.82	119.70
57	BB	713	G	N3-C4-C5	5.73	131.47	128.60
57	BB	733	G	C6-C5-N7	-5.73	126.96	130.40
17	AF	49	TYR	CB-CG-CD1	-5.73	117.56	121.00
21	AA	102	G	C6-N1-C2	5.73	128.54	125.10
21	AA	126	G	C6-N1-C2	5.73	128.54	125.10
21	AA	595	A	C4'-C3'-C2'	5.73	108.33	102.60
21	AA	1058	G	N1-C2-N3	-5.73	120.46	123.90
21	AA	1119	C	C2-N3-C4	5.73	122.77	119.90
21	AA	1131	G	P-O3'-C3'	-5.73	112.82	119.70
21	AA	1262	C	C4-C5-C6	-5.73	114.53	117.40
23	AW	14	A	C4-N9-C1'	5.73	136.62	126.30
25	AZ	100	GLY	N-CA-C	-5.73	98.77	113.10
57	BB	560	C	O4'-C1'-N1	5.73	112.79	108.20
57	BB	991	C	N3-C4-N4	5.73	122.01	118.00
57	BB	995	C	C2-N3-C4	5.73	122.77	119.90
57	BB	1500	G	N1-C2-N3	-5.73	120.46	123.90
57	BB	2012	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2859	G	N1-C2-N3	-5.73	120.46	123.90
21	AA	573	A	N1-C2-N3	5.73	132.16	129.30
21	AA	575	G	C2-N3-C4	-5.73	109.03	111.90
21	AA	910	C	C6-N1-C2	5.73	122.59	120.30
21	AA	1189	U	P-O3'-C3'	5.73	126.58	119.70
25	AZ	216	ASP	N-CA-CB	5.73	120.92	110.60
35	BP	29	VAL	CA-CB-CG1	-5.73	102.31	110.90
57	BB	670	A	C4-C5-C6	5.73	119.86	117.00
57	BB	1049	C	P-O3'-C3'	-5.73	112.82	119.70
57	BB	1421	G	N3-C2-N2	5.73	123.91	119.90
57	BB	1689	A	C4'-C3'-C2'	-5.73	96.87	102.60
57	BB	1810	A	N3-C4-N9	-5.73	122.82	127.40
57	BB	1826	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2415	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2620	C	N3-C4-N4	5.73	122.01	118.00
21	AA	729	A	O4'-C1'-N9	5.73	112.78	108.20
57	BB	1305	C	P-O3'-C3'	-5.73	112.83	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1781	U	P-O3'-C3'	5.73	126.57	119.70
57	BB	2484	G	O5'-C5'-C4'	-5.73	100.81	111.70
21	AA	500	G	N3-C4-C5	-5.73	125.74	128.60
21	AA	674	G	C4-C5-N7	-5.73	108.51	110.80
21	AA	805	C	OP1-P-O3'	5.73	117.80	105.20
21	AA	1015	G	N3-C4-N9	-5.73	122.56	126.00
22	AY	44	A	P-O5'-C5'	-5.73	111.74	120.90
24	AX	12	A	C8-N9-C1'	-5.73	117.39	127.70
57	BB	396	G	C6-C5-N7	-5.73	126.96	130.40
57	BB	1106	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1444	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1545	A	C8-N9-C4	-5.73	103.51	105.80
57	BB	1945	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1992	G	O4'-C1'-N9	5.73	112.78	108.20
57	BB	2075	U	C6-N1-C2	5.73	124.44	121.00
57	BB	2260	C	C5-C6-N1	5.73	123.86	121.00
57	BB	2271	G	C3'-C2'-C1'	-5.73	96.92	101.50
57	BB	2897	U	N3-C4-O4	5.73	123.41	119.40
21	AA	111	G	C1'-O4'-C4'	-5.73	105.32	109.90
21	AA	149	A	C5-N7-C8	5.73	106.76	103.90
21	AA	838	G	N3-C2-N2	5.73	123.91	119.90
21	AA	1114	C	N3-C4-N4	5.73	122.01	118.00
52	BD	15	PHE	CB-CG-CD1	-5.73	116.79	120.80
57	BB	457	A	C5-N7-C8	5.73	106.76	103.90
57	BB	879	G	C5-N7-C8	5.73	107.16	104.30
57	BB	2865	U	O4'-C1'-N1	5.73	112.78	108.20
21	AA	136	C	N3-C4-C5	-5.72	119.61	121.90
21	AA	324	G	N9-C4-C5	5.72	107.69	105.40
21	AA	391	G	N9-C4-C5	5.72	107.69	105.40
21	AA	571	U	C5-C6-N1	5.72	125.56	122.70
21	AA	1169	A	C5-N7-C8	5.72	106.76	103.90
30	BK	59	ALA	N-CA-CB	5.72	118.11	110.10
43	BX	3	VAL	CA-CB-CG1	-5.72	102.31	110.90
57	BB	407	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1524	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1920	C	C6-N1-C2	-5.72	118.01	120.30
57	BB	2186	G	C4-N9-C1'	-5.72	119.06	126.50
57	BB	2741	A	C4-C5-C6	5.72	119.86	117.00
58	BA	79	G	O4'-C1'-N9	5.72	112.78	108.20
21	AA	119	A	C5-C6-N1	-5.72	114.84	117.70
21	AA	619	U	C5-C4-O4	-5.72	122.47	125.90
23	AW	29	G	O4'-C1'-N9	5.72	112.78	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	222	A	N9-C4-C5	5.72	108.09	105.80
57	BB	499	U	O4'-C1'-N1	5.72	112.78	108.20
57	BB	530	G	C5-C6-N1	5.72	114.36	111.50
57	BB	625	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	995	C	OP1-P-OP2	-5.72	111.02	119.60
57	BB	1279	G	C3'-C2'-C1'	-5.72	96.92	101.50
57	BB	1410	G	N9-C4-C5	-5.72	103.11	105.40
57	BB	1691	C	N3-C4-N4	5.72	122.01	118.00
57	BB	1828	G	C5-C6-O6	-5.72	125.17	128.60
57	BB	2074	U	N3-C4-C5	-5.72	111.17	114.60
21	AA	1119	C	C4-C5-C6	5.72	120.26	117.40
57	BB	40	U	N3-C4-C5	5.72	118.03	114.60
57	BB	749	A	C6-C5-N7	-5.72	128.29	132.30
57	BB	1503	A	C2-N3-C4	-5.72	107.74	110.60
57	BB	1665	A	C6-N1-C2	-5.72	115.17	118.60
57	BB	2608	G	N3-C2-N2	5.72	123.91	119.90
57	BB	2771	C	O4'-C4'-C3'	-5.72	98.28	104.00
21	AA	347	G	N3-C4-N9	5.72	129.43	126.00
21	AA	348	G	N1-C2-N2	-5.72	111.05	116.20
21	AA	404	G	N1-C2-N3	-5.72	120.47	123.90
21	AA	607	A	C6-N1-C2	5.72	122.03	118.60
21	AA	822	U	C6-N1-C2	-5.72	117.57	121.00
21	AA	919	A	C8-N9-C4	-5.72	103.51	105.80
21	AA	1326	U	N3-C4-C5	-5.72	111.17	114.60
21	AA	1518	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	AV	13	C	C2-N3-C4	5.72	122.76	119.90
26	AV	60	U	C5'-C4'-C3'	-5.72	106.85	116.00
57	BB	152	A	C5-C6-N6	-5.72	119.12	123.70
57	BB	1931	U	C6-N1-C2	-5.72	117.57	121.00
57	BB	2576	G	C6-C5-N7	-5.72	126.97	130.40
21	AA	911	U	C5-C6-N1	5.72	125.56	122.70
21	AA	1100	C	C2-N3-C4	5.72	122.76	119.90
21	AA	1529	G	N9-C4-C5	-5.72	103.11	105.40
57	BB	492	A	C5-C6-N1	-5.72	114.84	117.70
57	BB	1997	C	C5'-C4'-O4'	5.72	115.96	109.10
21	AA	764	C	N3-C2-O2	5.72	125.90	121.90
21	AA	944	G	C5-C6-N1	-5.72	108.64	111.50
21	AA	1073	U	C4-C5-C6	-5.72	116.27	119.70
21	AA	1362	A	C5'-C4'-O4'	-5.72	102.24	109.10
23	AW	45	U	C2-N3-C4	-5.72	123.57	127.00
25	AZ	391	VAL	CG1-CB-CG2	-5.72	101.75	110.90
57	BB	131	A	N9-C4-C5	5.72	108.09	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	188	G	C4-N9-C1'	-5.72	119.07	126.50
57	BB	494	G	P-O3'-C3'	-5.72	112.84	119.70
57	BB	1775	U	N3-C4-C5	-5.72	111.17	114.60
57	BB	1884	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1974	C	P-O5'-C5'	5.72	130.05	120.90
57	BB	2046	G	N3-C2-N2	5.72	123.90	119.90
57	BB	2237	G	OP1-P-OP2	-5.72	111.03	119.60
57	BB	2528	U	OP1-P-OP2	-5.72	111.03	119.60
58	BA	68	C	C6-N1-C2	-5.72	118.01	120.30
14	AC	170	GLY	N-CA-C	-5.71	98.81	113.10
21	AA	253	A	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	386	C	C2-N3-C4	-5.71	117.04	119.90
21	AA	1170	A	O4'-C1'-N9	5.71	112.77	108.20
22	AY	16	U	N1-C1'-C2'	5.71	121.43	114.00
57	BB	9	G	C3'-C2'-C1'	-5.71	96.93	101.50
57	BB	619	G	P-O3'-C3'	-5.71	112.84	119.70
57	BB	742	A	N9-C4-C5	5.71	108.09	105.80
57	BB	1988	G	C5-C6-O6	-5.71	125.17	128.60
57	BB	2341	G	O4'-C1'-N9	5.71	112.77	108.20
21	AA	173	U	O5'-C5'-C4'	-5.71	100.84	111.70
21	AA	936	C	C6-N1-C2	-5.71	118.02	120.30
21	AA	1389	C	N3-C4-N4	5.71	122.00	118.00
35	BP	23	ASP	CB-CG-OD2	-5.71	113.16	118.30
57	BB	770	G	C4'-C3'-C2'	-5.71	96.89	102.60
57	BB	914	G	C6-C5-N7	-5.71	126.97	130.40
57	BB	2035	G	C6-N1-C2	5.71	128.53	125.10
57	BB	2561	U	C4-C5-C6	5.71	123.13	119.70
14	AC	36	PHE	CB-CG-CD2	-5.71	116.80	120.80
17	AF	61	LEU	CB-CG-CD1	5.71	120.71	111.00
21	AA	321	A	N1-C2-N3	5.71	132.16	129.30
21	AA	524	G	C8-N9-C4	-5.71	104.11	106.40
21	AA	542	G	C4-C5-C6	5.71	122.23	118.80
21	AA	1026	G	N3-C4-N9	-5.71	122.57	126.00
21	AA	1114	C	OP1-P-OP2	-5.71	111.03	119.60
21	AA	1192	C	C6-N1-C1'	-5.71	113.95	120.80
21	AA	1353	G	C4-C5-C6	5.71	122.23	118.80
21	AA	1397	C	C6-N1-C2	-5.71	118.02	120.30
21	AA	1471	U	C5-C6-N1	5.71	125.56	122.70
24	AX	18	G	C8-N9-C4	-5.71	104.12	106.40
45	BC	160	TYR	CB-CG-CD1	-5.71	117.57	121.00
57	BB	817	C	C2-N3-C4	5.71	122.76	119.90
57	BB	1126	A	C5-C6-N1	-5.71	114.84	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1228	G	C5-C6-N1	5.71	114.36	111.50
57	BB	1440	U	P-O5'-C5'	5.71	130.04	120.90
57	BB	1466	U	C5-C6-N1	5.71	125.56	122.70
57	BB	1626	A	C4-C5-N7	-5.71	107.84	110.70
57	BB	2103	C	O4'-C4'-C3'	-5.71	98.29	104.00
57	BB	2113	U	C5-C6-N1	-5.71	119.84	122.70
57	BB	2253	G	C1'-O4'-C4'	5.71	114.47	109.90
57	BB	2501	C	C5'-C4'-O4'	-5.71	102.25	109.10
58	BA	72	G	N9-C4-C5	5.71	107.69	105.40
3	AL	49	ARG	NE-CZ-NH2	-5.71	117.44	120.30
17	AF	91	ARG	NE-CZ-NH2	5.71	123.16	120.30
21	AA	1259	C	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	1521	C	P-O5'-C5'	5.71	130.03	120.90
28	BI	66	PHE	N-CA-CB	5.71	120.88	110.60
54	BF	99	PHE	O-C-N	-5.71	113.56	122.70
57	BB	431	U	N1-C2-O2	-5.71	118.80	122.80
57	BB	1660	G	C4-C5-C6	5.71	122.23	118.80
57	BB	2093	G	C4'-C3'-C2'	-5.71	96.89	102.60
57	BB	2694	G	C5-C6-N1	-5.71	108.64	111.50
2	AK	81	LEU	CB-CA-C	-5.71	99.35	110.20
21	AA	748	G	N9-C4-C5	-5.71	103.12	105.40
21	AA	1011	C	P-O3'-C3'	-5.71	112.85	119.70
21	AA	1400	C	O4'-C1'-N1	5.71	112.77	108.20
22	AY	51	G	N1-C2-N3	-5.71	120.47	123.90
29	BJ	141	ASP	CB-CG-OD1	5.71	123.44	118.30
57	BB	1410	G	C5-C6-O6	-5.71	125.17	128.60
57	BB	1858	A	C1'-O4'-C4'	-5.71	105.33	109.90
57	BB	1959	G	C6-N1-C2	5.71	128.53	125.10
57	BB	2158	A	O4'-C1'-N9	5.71	112.77	108.20
13	AB	136	ARG	NE-CZ-NH1	-5.71	117.45	120.30
21	AA	704	A	N1-C2-N3	5.71	132.15	129.30
21	AA	768	A	N7-C8-N9	-5.71	110.95	113.80
21	AA	846	G	C2-N3-C4	5.71	114.75	111.90
57	BB	361	G	P-O5'-C5'	5.71	130.03	120.90
57	BB	469	G	O4'-C1'-N9	5.71	112.77	108.20
57	BB	511	U	C6-N1-C2	-5.71	117.58	121.00
57	BB	569	U	N1-C2-N3	5.71	118.32	114.90
57	BB	1063	G	C5-N7-C8	5.71	107.15	104.30
57	BB	1083	U	N1-C2-N3	5.71	118.32	114.90
57	BB	1350	C	C5-C4-N4	-5.71	116.21	120.20
57	BB	1510	G	O4'-C1'-N9	5.71	112.77	108.20
21	AA	232	G	C6-C5-N7	-5.71	126.98	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	263	A	C8-N9-C4	-5.71	103.52	105.80
57	BB	227	A	C4-C5-N7	-5.71	107.85	110.70
57	BB	822	G	N3-C4-C5	5.71	131.45	128.60
57	BB	849	A	C2-N3-C4	5.71	113.45	110.60
57	BB	891	G	C5-N7-C8	-5.71	101.45	104.30
57	BB	1145	C	O4'-C1'-N1	5.71	112.76	108.20
57	BB	1670	C	C4-C5-C6	5.71	120.25	117.40
57	BB	1999	C	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	37	U	C1'-O4'-C4'	-5.70	105.34	109.90
21	AA	242	G	N9-C4-C5	5.70	107.68	105.40
21	AA	452	A	C4-C5-C6	5.70	119.85	117.00
21	AA	481	G	C5-N7-C8	5.70	107.15	104.30
21	AA	730	G	C8-N9-C4	-5.70	104.12	106.40
21	AA	868	C	N3-C4-C5	-5.70	119.62	121.90
21	AA	879	C	N3-C4-C5	-5.70	119.62	121.90
21	AA	898	G	C5-C6-O6	-5.70	125.18	128.60
21	AA	1398	A	O4'-C1'-N9	5.70	112.76	108.20
57	BB	185	G	N9-C4-C5	5.70	107.68	105.40
57	BB	313	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	434	U	C5-C4-O4	5.70	129.32	125.90
57	BB	771	G	N3-C2-N2	-5.70	115.91	119.90
57	BB	892	A	C5'-C4'-C3'	-5.70	106.87	116.00
57	BB	1441	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	1855	U	N3-C4-C5	-5.70	111.18	114.60
57	BB	1938	A	C1'-O4'-C4'	-5.70	105.34	109.90
57	BB	2182	U	N1-C2-N3	-5.70	111.48	114.90
57	BB	2898	U	N3-C2-O2	5.70	126.19	122.20
4	AM	89	ARG	N-CA-CB	-5.70	100.34	110.60
21	AA	1385	G	N7-C8-N9	-5.70	110.25	113.10
57	BB	45	G	N3-C4-C5	5.70	131.45	128.60
57	BB	1223	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	1295	C	P-O5'-C5'	5.70	130.02	120.90
57	BB	2353	G	C2-N3-C4	5.70	114.75	111.90
58	BA	77	U	N1-C2-N3	5.70	118.32	114.90
21	AA	78	A	C2-N3-C4	-5.70	107.75	110.60
21	AA	1096	C	N1-C2-O2	-5.70	115.48	118.90
21	AA	1218	C	C2-N3-C4	5.70	122.75	119.90
57	BB	231	A	N9-C4-C5	-5.70	103.52	105.80
57	BB	357	C	C4'-C3'-C2'	-5.70	96.90	102.60
57	BB	520	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	892	A	C1'-O4'-C4'	-5.70	105.34	109.90
57	BB	1368	G	N1-C2-N3	5.70	127.32	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1478	G	N3-C4-C5	-5.70	125.75	128.60
57	BB	1760	C	N3-C2-O2	5.70	125.89	121.90
57	BB	2084	C	O4'-C1'-N1	5.70	112.76	108.20
57	BB	2274	A	C6-N1-C2	5.70	122.02	118.60
57	BB	2335	A	C4-C5-N7	-5.70	107.85	110.70
57	BB	2474	U	N3-C4-O4	5.70	123.39	119.40
58	BA	21	G	O4'-C1'-N9	5.70	112.76	108.20
21	AA	747	A	N1-C2-N3	-5.70	126.45	129.30
21	AA	761	G	O4'-C4'-C3'	-5.70	98.30	104.00
21	AA	1166	G	C8-N9-C4	-5.70	104.12	106.40
21	AA	1173	U	C2-N1-C1'	-5.70	110.86	117.70
21	AA	1285	A	C4-C5-N7	5.70	113.55	110.70
23	AW	74	C	C3'-C2'-C1'	-5.70	96.94	101.50
57	BB	130	C	C5-C4-N4	-5.70	116.21	120.20
57	BB	268	C	C5-C6-N1	5.70	123.85	121.00
57	BB	332	A	C2-N3-C4	-5.70	107.75	110.60
57	BB	780	G	N3-C4-N9	-5.70	122.58	126.00
57	BB	1436	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	2346	A	C5'-C4'-C3'	-5.70	106.88	116.00
57	BB	2484	G	C5-C6-N1	-5.70	108.65	111.50
21	AA	979	C	N3-C4-C5	-5.70	119.62	121.90
26	AV	28	C	N3-C4-N4	5.70	121.99	118.00
57	BB	264	C	N3-C2-O2	-5.70	117.91	121.90
57	BB	679	C	C2-N3-C4	5.70	122.75	119.90
57	BB	1047	G	N3-C4-N9	5.70	129.42	126.00
57	BB	2048	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	2319	G	N7-C8-N9	-5.70	110.25	113.10
57	BB	2587	A	C8-N9-C4	-5.70	103.52	105.80
21	AA	57	G	N3-C2-N2	5.70	123.89	119.90
21	AA	68	G	N1-C2-N2	-5.70	111.07	116.20
21	AA	746	A	N3-C4-C5	-5.70	122.81	126.80
22	AY	22	G	C5'-C4'-C3'	-5.70	106.89	116.00
53	BE	148	ILE	N-CA-C	-5.70	95.62	111.00
57	BB	60	G	C8-N9-C4	5.70	108.68	106.40
57	BB	361	G	C6-N1-C2	5.70	128.52	125.10
57	BB	841	G	O4'-C1'-C2'	5.70	112.73	107.60
57	BB	1025	G	C6-C5-N7	-5.70	126.98	130.40
57	BB	1062	G	N9-C1'-C2'	-5.70	105.73	112.00
57	BB	1870	C	C5'-C4'-C3'	-5.70	106.89	116.00
57	BB	1883	U	C5-C4-O4	-5.70	122.48	125.90
57	BB	1913	A	C4-C5-C6	5.70	119.85	117.00
58	BA	51	G	C5'-C4'-C3'	5.70	125.11	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	38	A	O4'-C4'-C3'	-5.69	98.31	104.00
57	BB	57	C	C5-C6-N1	5.69	123.85	121.00
57	BB	346	A	C5-N7-C8	5.69	106.75	103.90
57	BB	1377	G	P-O3'-C3'	5.69	126.53	119.70
57	BB	1922	G	C5-C6-O6	-5.69	125.18	128.60
21	AA	60	A	C5-N7-C8	5.69	106.75	103.90
21	AA	833	G	N3-C2-N2	5.69	123.88	119.90
21	AA	851	G	C6-N1-C2	-5.69	121.69	125.10
21	AA	1244	G	N3-C4-N9	-5.69	122.58	126.00
21	AA	1523	G	N9-C4-C5	5.69	107.68	105.40
22	AY	36	A	N1-C2-N3	5.69	132.15	129.30
57	BB	1228	G	C8-N9-C1'	5.69	134.40	127.00
57	BB	1914	C	N3-C4-C5	5.69	124.18	121.90
57	BB	2108	A	C6-C5-N7	-5.69	128.32	132.30
57	BB	2235	G	N3-C2-N2	5.69	123.89	119.90
57	BB	2547	A	N3-C4-N9	5.69	131.95	127.40
57	BB	2603	G	O4'-C1'-N9	5.69	112.75	108.20
58	BA	46	A	N3-C4-N9	5.69	131.95	127.40
9	AR	22	TYR	CZ-CE2-CD2	-5.69	114.68	119.80
21	AA	845	A	C2-N3-C4	5.69	113.44	110.60
21	AA	1078	U	O4'-C1'-N1	5.69	112.75	108.20
21	AA	1149	C	O4'-C1'-N1	5.69	112.75	108.20
21	AA	1525	G	N3-C2-N2	5.69	123.88	119.90
22	AY	16	U	P-O3'-C3'	5.69	126.53	119.70
25	AZ	22	HIS	N-CA-CB	5.69	120.84	110.60
26	AV	65	C	C5'-C4'-O4'	5.69	115.93	109.10
57	BB	464	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	629	G	C5-C6-N1	5.69	114.34	111.50
57	BB	947	A	C5-C6-N6	-5.69	119.15	123.70
57	BB	1204	A	C5-N7-C8	5.69	106.75	103.90
57	BB	1206	G	C5-N7-C8	5.69	107.14	104.30
57	BB	1258	U	C3'-C2'-C1'	-5.69	96.95	101.50
57	BB	1382	G	C6-C5-N7	-5.69	126.99	130.40
57	BB	1401	G	N9-C1'-C2'	-5.69	105.74	112.00
57	BB	1580	A	C2-N3-C4	-5.69	107.75	110.60
57	BB	2080	A	C4-C5-C6	5.69	119.84	117.00
57	BB	2363	G	O4'-C1'-N9	5.69	112.75	108.20
57	BB	2827	C	N3-C4-C5	-5.69	119.62	121.90
58	BA	64	G	N1-C2-N3	-5.69	120.48	123.90
21	AA	671	G	N3-C4-N9	-5.69	122.59	126.00
21	AA	856	C	C4-C5-C6	-5.69	114.56	117.40
21	AA	1132	C	C3'-C2'-C1'	5.69	106.05	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	60	U	O4'-C1'-N1	5.69	112.75	108.20
57	BB	98	G	C4'-C3'-C2'	-5.69	96.91	102.60
57	BB	735	A	N1-C2-N3	-5.69	126.46	129.30
57	BB	1299	G	C2-N3-C4	5.69	114.75	111.90
57	BB	2074	U	C5-C4-O4	-5.69	122.49	125.90
57	BB	2723	C	N3-C2-O2	-5.69	117.92	121.90
57	BB	2862	G	N9-C4-C5	-5.69	103.12	105.40
21	AA	17	U	O4'-C4'-C3'	-5.69	98.31	104.00
21	AA	542	G	N9-C4-C5	5.69	107.67	105.40
21	AA	844	G	OP1-P-OP2	-5.69	111.07	119.60
21	AA	1122	U	C2-N3-C4	-5.69	123.59	127.00
25	AZ	231	VAL	CA-CB-CG1	-5.69	102.37	110.90
57	BB	238	C	N3-C4-N4	5.69	121.98	118.00
57	BB	341	C	N3-C4-N4	5.69	121.98	118.00
57	BB	615	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	833	A	C5-N7-C8	5.69	106.74	103.90
57	BB	1394	U	P-O5'-C5'	5.69	130.00	120.90
57	BB	1554	U	C6-N1-C2	5.69	124.41	121.00
57	BB	1932	A	C4'-C3'-C2'	-5.69	96.91	102.60
57	BB	2075	U	P-O3'-C3'	5.69	126.52	119.70
57	BB	2099	U	C5-C6-N1	-5.69	119.86	122.70
57	BB	2293	G	P-O3'-C3'	-5.69	112.87	119.70
57	BB	2357	G	N3-C2-N2	5.69	123.88	119.90
57	BB	2671	G	N1-C2-N3	-5.69	120.49	123.90
21	AA	1203	C	O4'-C4'-C3'	-5.69	98.31	104.00
57	BB	387	U	O4'-C1'-N1	5.69	112.75	108.20
57	BB	399	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	625	G	N3-C4-N9	-5.69	122.59	126.00
57	BB	783	A	C5-N7-C8	5.69	106.74	103.90
57	BB	1428	C	C1'-O4'-C4'	-5.69	105.35	109.90
57	BB	2318	G	O4'-C1'-N9	5.69	112.75	108.20
57	BB	2508	G	C3'-C2'-C1'	-5.69	96.95	101.50
21	AA	146	G	C5'-C4'-O4'	5.68	115.92	109.10
21	AA	202	G	N3-C2-N2	5.68	123.88	119.90
21	AA	741	G	C8-N9-C4	-5.68	104.13	106.40
21	AA	875	U	C2-N3-C4	-5.68	123.59	127.00
21	AA	1374	A	N1-C2-N3	5.68	132.14	129.30
57	BB	596	U	C5-C6-N1	-5.68	119.86	122.70
57	BB	914	G	C6-N1-C2	5.68	128.51	125.10
57	BB	1308	A	O4'-C1'-N9	5.68	112.75	108.20
57	BB	1383	A	C8-N9-C4	-5.68	103.53	105.80
57	BB	1919	A	C6-N1-C2	-5.68	115.19	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2221	G	N1-C2-N3	-5.68	120.49	123.90
57	BB	2701	U	C5-C4-O4	5.68	129.31	125.90
57	BB	2793	C	C2'-C3'-O3'	5.68	122.80	113.70
58	BA	77	U	O4'-C4'-C3'	-5.68	98.31	104.00
58	BA	110	C	C5-C6-N1	5.68	123.84	121.00
21	AA	357	G	N1-C2-N3	-5.68	120.49	123.90
21	AA	463	U	OP2-P-O3'	5.68	117.70	105.20
21	AA	628	G	N7-C8-N9	5.68	115.94	113.10
21	AA	1126	U	C6-N1-C2	5.68	124.41	121.00
53	BE	79	ARG	N-CA-CB	5.68	120.83	110.60
57	BB	348	A	C5-C6-N1	-5.68	114.86	117.70
57	BB	351	C	P-O5'-C5'	5.68	129.99	120.90
57	BB	389	G	N3-C4-C5	-5.68	125.76	128.60
57	BB	1707	G	N1-C6-O6	5.68	123.31	119.90
57	BB	2171	A	OP2-P-O3'	5.68	117.70	105.20
57	BB	2578	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	2825	G	N3-C4-N9	5.68	129.41	126.00
58	BA	36	C	N1-C2-O2	5.68	122.31	118.90
58	BA	76	G	C2-N3-C4	-5.68	109.06	111.90
21	AA	1471	U	O4'-C1'-N1	5.68	112.75	108.20
57	BB	21	A	C8-N9-C1'	5.68	137.93	127.70
57	BB	1120	G	N3-C2-N2	-5.68	115.92	119.90
57	BB	1220	G	C5'-C4'-C3'	-5.68	106.91	116.00
57	BB	2354	C	C5-C4-N4	-5.68	116.22	120.20
57	BB	2587	A	C6-N1-C2	-5.68	115.19	118.60
21	AA	51	A	C4'-C3'-C2'	5.68	108.28	102.60
21	AA	840	C	C2-N1-C1'	5.68	125.05	118.80
21	AA	883	C	C5-C4-N4	-5.68	116.22	120.20
21	AA	891	U	C5-C4-O4	5.68	129.31	125.90
21	AA	988	G	O4'-C1'-N9	5.68	112.74	108.20
21	AA	1330	U	N1-C2-O2	-5.68	118.83	122.80
21	AA	1431	A	C4-C5-N7	5.68	113.54	110.70
26	AV	52	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	171	U	C6-N1-C2	-5.68	117.59	121.00
57	BB	252	G	C2-N3-C4	5.68	114.74	111.90
57	BB	476	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	1103	A	C5'-C4'-O4'	5.68	115.92	109.10
57	BB	1158	C	P-O3'-C3'	-5.68	112.89	119.70
57	BB	2297	A	O5'-P-OP2	5.68	117.52	110.70
57	BB	2314	A	OP1-P-OP2	-5.68	111.08	119.60
57	BB	2467	C	C5'-C4'-O4'	5.68	115.91	109.10
57	BB	2515	C	N1-C2-O2	5.68	122.31	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2733	A	C5-C6-N6	-5.68	119.16	123.70
57	BB	2864	G	N9-C1'-C2'	-5.68	105.75	112.00
21	AA	1081	A	P-O3'-C3'	-5.68	112.89	119.70
23	AW	34	G	C2-N3-C4	5.68	114.74	111.90
30	BK	92	GLN	N-CA-CB	5.68	120.82	110.60
57	BB	395	U	O4'-C1'-N1	5.68	112.74	108.20
57	BB	1301	A	C2-N3-C4	5.68	113.44	110.60
57	BB	1924	C	C6-N1-C2	-5.68	118.03	120.30
57	BB	1973	G	C5-C6-N1	-5.68	108.66	111.50
57	BB	2122	U	C5-C4-O4	5.68	129.31	125.90
57	BB	2142	A	C4-C5-C6	5.68	119.84	117.00
57	BB	2674	G	N1-C2-N3	-5.68	120.49	123.90
21	AA	40	C	N1-C2-O2	-5.68	115.49	118.90
21	AA	366	A	N1-C6-N6	5.68	122.01	118.60
21	AA	934	C	C6-N1-C2	-5.68	118.03	120.30
21	AA	1450	U	N1-C2-N3	5.68	118.31	114.90
21	AA	1527	U	C5-C4-O4	5.68	129.31	125.90
22	AY	33	U	P-O3'-C3'	5.68	126.51	119.70
31	BL	80	SER	N-CA-CB	5.68	119.01	110.50
54	BF	29	ARG	NE-CZ-NH1	5.68	123.14	120.30
57	BB	359	G	C8-N9-C4	-5.68	104.13	106.40
57	BB	392	U	C5-C4-O4	-5.68	122.49	125.90
57	BB	913	U	N1-C2-O2	-5.68	118.83	122.80
57	BB	1602	U	N3-C4-C5	5.68	118.01	114.60
57	BB	1776	G	C5'-C4'-O4'	5.68	115.91	109.10
57	BB	1848	A	C4-C5-C6	5.68	119.84	117.00
57	BB	2273	A	C8-N9-C4	-5.68	103.53	105.80
57	BB	2863	C	N3-C4-C5	-5.68	119.63	121.90
21	AA	449	G	N9-C4-C5	5.67	107.67	105.40
21	AA	623	C	N3-C4-N4	5.67	121.97	118.00
51	B4	5	ALA	N-CA-CB	5.67	118.04	110.10
57	BB	146	A	P-O3'-C3'	-5.67	112.89	119.70
57	BB	252	G	C4-C5-C6	5.67	122.20	118.80
57	BB	503	A	O4'-C1'-N9	5.67	112.74	108.20
57	BB	929	U	C5-C6-N1	5.67	125.54	122.70
57	BB	1198	U	C1'-O4'-C4'	5.67	114.44	109.90
57	BB	1314	C	C5-C6-N1	5.67	123.84	121.00
57	BB	1701	A	N9-C4-C5	5.67	108.07	105.80
57	BB	1903	G	C6-C5-N7	5.67	133.81	130.40
57	BB	2366	A	C1'-O4'-C4'	-5.67	105.36	109.90
57	BB	2502	G	C6-C5-N7	-5.67	127.00	130.40
57	BB	2552	U	C2-N3-C4	-5.67	123.59	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	258	G	C5-N7-C8	5.67	107.14	104.30
21	AA	326	G	C4-N9-C1'	5.67	133.88	126.50
21	AA	1408	A	C4-C5-C6	5.67	119.84	117.00
57	BB	416	U	C5-C4-O4	-5.67	122.50	125.90
57	BB	1445	G	N1-C2-N2	-5.67	111.09	116.20
57	BB	2507	C	C4'-C3'-C2'	-5.67	96.93	102.60
57	BB	2580	U	C3'-C2'-C1'	5.67	106.04	101.50
21	AA	148	G	C6-C5-N7	-5.67	127.00	130.40
21	AA	183	C	N1-C2-O2	5.67	122.30	118.90
21	AA	417	G	N3-C4-N9	-5.67	122.60	126.00
21	AA	1534	A	C5-N7-C8	5.67	106.74	103.90
57	BB	154	U	N3-C4-C5	-5.67	111.20	114.60
57	BB	572	A	OP2-P-O3'	5.67	117.68	105.20
57	BB	787	C	C1'-O4'-C4'	5.67	114.44	109.90
57	BB	1382	G	N3-C2-N2	5.67	123.87	119.90
57	BB	1435	G	N9-C4-C5	-5.67	103.13	105.40
57	BB	1478	G	OP1-P-OP2	-5.67	111.09	119.60
57	BB	1706	C	N3-C4-N4	5.67	121.97	118.00
57	BB	1831	G	OP1-P-OP2	-5.67	111.09	119.60
57	BB	1976	U	C2-N1-C1'	5.67	124.50	117.70
57	BB	2052	A	N9-C4-C5	5.67	108.07	105.80
57	BB	2363	G	N9-C4-C5	5.67	107.67	105.40
57	BB	2793	C	P-O5'-C5'	-5.67	111.83	120.90
21	AA	497	G	C5-C6-O6	-5.67	125.20	128.60
21	AA	769	G	C6-N1-C2	5.67	128.50	125.10
21	AA	1274	A	P-O3'-C3'	-5.67	112.90	119.70
25	AZ	322	PHE	CB-CG-CD2	5.67	124.77	120.80
45	BC	2	VAL	CA-CB-CG1	5.67	119.41	110.90
57	BB	37	C	P-O5'-C5'	5.67	129.97	120.90
57	BB	236	C	O4'-C4'-C3'	-5.67	98.33	104.00
57	BB	1519	G	C5-C6-N1	-5.67	108.67	111.50
19	AH	3	GLN	N-CA-C	-5.67	95.69	111.00
21	AA	97	G	C4-C5-C6	5.67	122.20	118.80
21	AA	306	A	C8-N9-C4	-5.67	103.53	105.80
21	AA	768	A	C2-N3-C4	-5.67	107.77	110.60
21	AA	1023	U	C5-C6-N1	5.67	125.53	122.70
21	AA	1409	C	O4'-C1'-N1	5.67	112.73	108.20
21	AA	1493	A	N7-C8-N9	-5.67	110.97	113.80
45	BC	166	ARG	N-CA-CB	5.67	120.80	110.60
57	BB	199	A	C4-C5-C6	5.67	119.83	117.00
57	BB	259	G	C5-N7-C8	5.67	107.13	104.30
57	BB	455	C	C6-N1-C1'	-5.67	114.00	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	634	C	C4'-C3'-C2'	-5.67	96.93	102.60
57	BB	661	A	N3-C4-C5	-5.67	122.83	126.80
57	BB	877	A	C3'-C2'-C1'	-5.67	96.97	101.50
57	BB	1248	G	C3'-C2'-C1'	-5.67	96.97	101.50
57	BB	1297	C	N3-C2-O2	5.67	125.87	121.90
57	BB	1459	G	C2-N3-C4	5.67	114.73	111.90
57	BB	1729	U	O4'-C4'-C3'	-5.67	98.33	104.00
57	BB	1739	A	N1-C2-N3	5.67	132.13	129.30
57	BB	1998	A	C2-N3-C4	5.67	113.43	110.60
21	AA	110	C	C5-C6-N1	5.67	123.83	121.00
21	AA	642	A	C5-C6-N6	-5.67	119.17	123.70
21	AA	1123	U	C2-N3-C4	-5.67	123.60	127.00
21	AA	1141	C	N3-C4-N4	5.67	121.97	118.00
22	AY	19	G	C5'-C4'-O4'	5.67	115.90	109.10
23	AW	28	G	N1-C2-N3	-5.67	120.50	123.90
23	AW	67	C	C6-N1-C2	5.67	122.57	120.30
57	BB	305	C	C6-N1-C2	-5.67	118.03	120.30
57	BB	443	A	P-O5'-C5'	5.67	129.97	120.90
57	BB	609	A	C8-N9-C4	-5.67	103.53	105.80
57	BB	751	A	C4-C5-C6	5.67	119.83	117.00
57	BB	804	A	C4-C5-C6	5.67	119.83	117.00
57	BB	843	G	N9-C4-C5	5.67	107.67	105.40
57	BB	914	G	N3-C2-N2	5.67	123.87	119.90
57	BB	1294	U	C2-N3-C4	5.67	130.40	127.00
57	BB	2401	U	O3'-P-O5'	-5.67	93.23	104.00
1	AJ	94	ALA	CB-CA-C	-5.67	101.60	110.10
21	AA	1510	C	C5-C4-N4	-5.67	116.23	120.20
23	AW	60	U	O4'-C1'-C2'	-5.67	100.14	105.80
35	BP	105	LYS	CD-CE-NZ	5.67	124.73	111.70
57	BB	377	G	P-O3'-C3'	-5.67	112.90	119.70
57	BB	715	A	P-O3'-C3'	-5.67	112.90	119.70
58	BA	80	U	C4'-C3'-C2'	5.67	108.27	102.60
21	AA	603	U	P-O3'-C3'	5.66	126.50	119.70
21	AA	640	A	N9-C4-C5	5.66	108.07	105.80
21	AA	640	A	C3'-C2'-C1'	-5.66	96.97	101.50
21	AA	680	C	C4-C5-C6	5.66	120.23	117.40
21	AA	756	C	C5-C4-N4	-5.66	116.24	120.20
21	AA	969	A	P-O5'-C5'	5.66	129.96	120.90
21	AA	1078	U	N3-C4-O4	5.66	123.36	119.40
26	AV	76	A	C2-N3-C4	-5.66	107.77	110.60
57	BB	298	G	C4-N9-C1'	5.66	133.86	126.50
57	BB	305	C	N1-C2-N3	5.66	123.16	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	477	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	821	A	C5-C6-N6	-5.66	119.17	123.70
57	BB	2075	U	N3-C4-C5	-5.66	111.20	114.60
57	BB	2285	C	N1-C2-N3	-5.66	115.24	119.20
57	BB	2384	U	N3-C4-C5	5.66	118.00	114.60
57	BB	2669	G	O4'-C1'-N9	5.66	112.73	108.20
57	BB	2690	U	P-O3'-C3'	5.66	126.50	119.70
21	AA	32	A	P-O3'-C3'	5.66	126.50	119.70
21	AA	191	G	N3-C4-C5	-5.66	125.77	128.60
25	AZ	332	PHE	N-CA-CB	5.66	120.79	110.60
57	BB	1054	A	C5-C6-N6	-5.66	119.17	123.70
57	BB	1448	G	N7-C8-N9	5.66	115.93	113.10
21	AA	231	U	N1-C1'-C2'	-5.66	105.77	112.00
21	AA	1162	C	C5'-C4'-C3'	-5.66	106.94	116.00
24	AX	17	U	O4'-C1'-N1	5.66	112.73	108.20
57	BB	624	C	N3-C4-N4	5.66	121.96	118.00
57	BB	637	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	813	U	N1-C2-O2	-5.66	118.84	122.80
57	BB	838	C	O4'-C1'-N1	5.66	112.73	108.20
57	BB	1088	A	O4'-C1'-N9	5.66	112.73	108.20
57	BB	1415	U	N1-C2-N3	-5.66	111.50	114.90
57	BB	1431	A	C5-C6-N1	-5.66	114.87	117.70
57	BB	1496	A	C4'-C3'-C2'	-5.66	96.94	102.60
57	BB	1929	G	P-O3'-C3'	5.66	126.49	119.70
21	AA	785	G	N1-C6-O6	5.66	123.30	119.90
21	AA	963	G	O4'-C4'-C3'	-5.66	98.34	104.00
21	AA	1347	G	C5-C6-O6	-5.66	125.20	128.60
21	AA	1488	G	O4'-C4'-C3'	-5.66	98.34	104.00
21	AA	1532	U	N3-C4-O4	5.66	123.36	119.40
57	BB	605	G	C4'-C3'-C2'	-5.66	96.94	102.60
57	BB	1021	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	1360	G	C8-N9-C4	-5.66	104.14	106.40
57	BB	1605	C	C2-N3-C4	5.66	122.73	119.90
57	BB	1788	C	N1-C1'-C2'	-5.66	105.78	112.00
57	BB	2491	U	C2-N1-C1'	5.66	124.49	117.70
57	BB	2494	G	O4'-C1'-N9	5.66	112.73	108.20
57	BB	2560	A	C4-C5-C6	5.66	119.83	117.00
57	BB	2784	U	N1-C2-N3	5.66	118.30	114.90
57	BB	2889	C	C1'-O4'-C4'	-5.66	105.37	109.90
21	AA	119	A	C4-C5-C6	5.66	119.83	117.00
21	AA	122	G	P-O3'-C3'	-5.66	112.91	119.70
21	AA	909	A	C4-C5-N7	-5.66	107.87	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	379	G	N7-C8-N9	-5.66	110.27	113.10
57	BB	599	A	N3-C4-C5	-5.66	122.84	126.80
21	AA	170	U	C4-C5-C6	-5.66	116.31	119.70
21	AA	355	C	N3-C4-C5	-5.66	119.64	121.90
21	AA	610	U	N3-C2-O2	-5.66	118.24	122.20
21	AA	1393	U	N3-C4-O4	5.66	123.36	119.40
21	AA	1517	G	C1'-O4'-C4'	5.66	114.42	109.90
25	AZ	88	VAL	CG1-CB-CG2	5.66	119.95	110.90
26	AV	57	A	C4-C5-C6	5.66	119.83	117.00
36	BQ	52	ARG	NH1-CZ-NH2	-5.66	113.18	119.40
57	BB	7	G	C3'-C2'-C1'	5.66	106.03	101.50
57	BB	13	A	C3'-C2'-C1'	-5.66	96.98	101.50
57	BB	1360	G	P-O3'-C3'	-5.66	112.91	119.70
57	BB	1436	G	C5-C6-O6	-5.66	125.21	128.60
57	BB	1681	G	C6-C5-N7	-5.66	127.01	130.40
57	BB	2154	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	2314	A	C5-C6-N1	-5.66	114.87	117.70
57	BB	2487	G	C5-N7-C8	-5.66	101.47	104.30
57	BB	2583	G	N1-C2-N2	-5.66	111.11	116.20
20	AI	28	VAL	CG1-CB-CG2	5.65	119.95	110.90
21	AA	1403	C	C4'-C3'-C2'	5.65	108.25	102.60
26	AV	37	A	C4-C5-C6	5.65	119.83	117.00
57	BB	247	G	P-O5'-C5'	-5.65	111.85	120.90
57	BB	291	G	C8-N9-C4	-5.65	104.14	106.40
57	BB	328	U	C6-N1-C2	5.65	124.39	121.00
57	BB	355	U	O4'-C4'-C3'	-5.65	98.35	104.00
57	BB	778	G	C1'-O4'-C4'	5.65	114.42	109.90
57	BB	1492	G	C4-C5-N7	5.65	113.06	110.80
57	BB	1813	G	N1-C2-N3	-5.65	120.51	123.90
57	BB	1928	A	C8-N9-C4	-5.65	103.54	105.80
57	BB	2182	U	C2-N3-C4	5.65	130.39	127.00
58	BA	87	U	C4-C5-C6	5.65	123.09	119.70
9	AR	62	ARG	NE-CZ-NH1	5.65	123.13	120.30
21	AA	169	C	C6-N1-C2	5.65	122.56	120.30
21	AA	1522	U	O4'-C1'-N1	5.65	112.72	108.20
26	AV	9	G	P-O3'-C3'	-5.65	112.92	119.70
50	B3	9	ALA	N-CA-CB	5.65	118.01	110.10
55	BG	93	TYR	CG-CD2-CE2	-5.65	116.78	121.30
57	BB	60	G	C6-N1-C2	-5.65	121.71	125.10
57	BB	69	C	P-O3'-C3'	-5.65	112.92	119.70
57	BB	591	U	C5-C4-O4	-5.65	122.51	125.90
57	BB	635	C	N3-C4-N4	5.65	121.96	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	845	A	C5-N7-C8	5.65	106.73	103.90
57	BB	1110	G	C5-C6-O6	-5.65	125.21	128.60
57	BB	1491	G	C2-N3-C4	5.65	114.73	111.90
57	BB	1949	G	N7-C8-N9	5.65	115.93	113.10
57	BB	2003	A	N3-C4-N9	5.65	131.92	127.40
57	BB	2041	U	C6-N1-C2	-5.65	117.61	121.00
57	BB	2313	C	C4'-C3'-C2'	-5.65	96.95	102.60
57	BB	2458	G	C6-C5-N7	-5.65	127.01	130.40
57	BB	2751	G	C6-N1-C2	5.65	128.49	125.10
57	BB	2758	A	C4-C5-N7	-5.65	107.87	110.70
15	AD	62	ARG	NH1-CZ-NH2	-5.65	113.18	119.40
21	AA	56	U	O4'-C1'-N1	5.65	112.72	108.20
21	AA	225	C	C4-C5-C6	5.65	120.22	117.40
21	AA	1057	G	N1-C6-O6	5.65	123.29	119.90
21	AA	1502	A	N7-C8-N9	-5.65	110.97	113.80
57	BB	239	C	O4'-C1'-N1	5.65	112.72	108.20
57	BB	249	C	C1'-O4'-C4'	-5.65	105.38	109.90
57	BB	461	C	N3-C4-N4	5.65	121.96	118.00
57	BB	990	A	O4'-C1'-N9	5.65	112.72	108.20
57	BB	1048	A	C5-C6-N6	-5.65	119.18	123.70
57	BB	1512	C	C4-C5-C6	5.65	120.22	117.40
57	BB	1941	C	N3-C2-O2	-5.65	117.94	121.90
57	BB	1980	G	C5-C6-N1	-5.65	108.67	111.50
57	BB	2152	G	C8-N9-C4	5.65	108.66	106.40
57	BB	2246	G	P-O3'-C3'	-5.65	112.92	119.70
21	AA	160	A	N3-C4-C5	-5.65	122.85	126.80
21	AA	180	U	P-O3'-C3'	-5.65	112.92	119.70
21	AA	602	A	N3-C4-C5	-5.65	122.85	126.80
21	AA	1393	U	C5-C6-N1	-5.65	119.88	122.70
22	AY	62	A	C5-C6-N1	-5.65	114.88	117.70
57	BB	2750	A	O4'-C1'-N9	5.65	112.72	108.20
21	AA	193	C	C5-C4-N4	-5.65	116.25	120.20
21	AA	248	C	C4-C5-C6	5.65	120.22	117.40
21	AA	389	A	C1'-O4'-C4'	5.65	114.42	109.90
21	AA	493	A	C2-N3-C4	5.65	113.42	110.60
21	AA	691	G	N1-C2-N2	-5.65	111.12	116.20
21	AA	969	A	C1'-O4'-C4'	-5.65	105.38	109.90
21	AA	1133	G	C5'-C4'-O4'	5.65	115.88	109.10
21	AA	1466	C	N3-C4-N4	5.65	121.95	118.00
57	BB	75	G	C5'-C4'-C3'	-5.65	106.96	116.00
57	BB	461	C	C2-N3-C4	5.65	122.72	119.90
57	BB	553	G	C4-C5-C6	5.65	122.19	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1878	G	C5-C6-N1	-5.65	108.68	111.50
57	BB	2227	A	C5-C6-N6	-5.65	119.18	123.70
57	BB	2276	G	C5-C6-O6	-5.65	125.21	128.60
57	BB	2800	A	O4'-C4'-C3'	-5.65	98.35	104.00
57	BB	2853	C	N1-C2-O2	5.65	122.29	118.90
58	BA	114	C	N3-C2-O2	5.65	125.85	121.90
21	AA	1067	A	P-O5'-C5'	5.65	129.93	120.90
21	AA	1315	U	C1'-O4'-C4'	-5.65	105.38	109.90
21	AA	1489	G	N1-C6-O6	5.65	123.29	119.90
57	BB	1012	U	N1-C2-O2	-5.65	118.85	122.80
57	BB	1902	C	C2-N1-C1'	5.65	125.01	118.80
57	BB	1922	G	N9-C4-C5	5.65	107.66	105.40
57	BB	2007	U	P-O3'-C3'	-5.65	112.92	119.70
57	BB	2121	G	N1-C2-N3	-5.65	120.51	123.90
18	AG	94	ARG	NH1-CZ-NH2	-5.64	113.19	119.40
21	AA	492	C	O5'-P-OP2	-5.64	100.62	105.70
21	AA	912	C	C5-C6-N1	5.64	123.82	121.00
25	AZ	198	TYR	CB-CG-CD2	5.64	124.39	121.00
26	AV	5	G	P-O5'-C5'	-5.64	111.87	120.90
57	BB	687	C	N1-C2-O2	-5.64	115.51	118.90
57	BB	771	G	C1'-O4'-C4'	5.64	114.42	109.90
57	BB	1123	C	C5-C4-N4	-5.64	116.25	120.20
57	BB	1474	U	N3-C2-O2	5.64	126.15	122.20
57	BB	1738	G	C4-N9-C1'	-5.64	119.16	126.50
57	BB	1825	U	C2-N3-C4	-5.64	123.61	127.00
57	BB	2224	G	C6-C5-N7	-5.64	127.01	130.40
57	BB	2415	G	C6-N1-C2	5.64	128.49	125.10
57	BB	2684	U	C3'-C2'-C1'	5.64	106.02	101.50
13	AB	29	PHE	CB-CG-CD2	5.64	124.75	120.80
18	AG	110	ARG	NE-CZ-NH1	5.64	123.12	120.30
21	AA	274	A	C8-N9-C4	5.64	108.06	105.80
21	AA	462	G	N9-C4-C5	-5.64	103.14	105.40
21	AA	470	C	C2-N3-C4	5.64	122.72	119.90
21	AA	661	G	C4-C5-C6	5.64	122.19	118.80
21	AA	929	G	O4'-C4'-C3'	-5.64	98.36	104.00
54	BF	126	ASN	CB-CG-OD1	-5.64	110.31	121.60
57	BB	39	G	N9-C4-C5	-5.64	103.14	105.40
57	BB	1514	G	C6-C5-N7	-5.64	127.02	130.40
57	BB	1521	G	P-O3'-C3'	5.64	126.47	119.70
57	BB	1563	U	N3-C2-O2	5.64	126.15	122.20
57	BB	2003	A	C3'-C2'-C1'	-5.64	96.99	101.50
57	BB	2090	A	C4'-C3'-C2'	-5.64	96.96	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2336	A	C4-C5-C6	5.64	119.82	117.00
57	BB	2899	A	C4-C5-C6	5.64	119.82	117.00
21	AA	256	U	C2-N3-C4	-5.64	123.61	127.00
24	AX	14	A	N7-C8-N9	5.64	116.62	113.80
52	BD	11	MET	CG-SD-CE	-5.64	91.17	100.20
57	BB	1140	C	C6-N1-C1'	5.64	127.57	120.80
57	BB	1479	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	1733	G	N1-C2-N3	-5.64	120.52	123.90
57	BB	2887	A	C8-N9-C4	-5.64	103.54	105.80
21	AA	313	A	C4-C5-N7	-5.64	107.88	110.70
21	AA	382	A	C5-N7-C8	5.64	106.72	103.90
21	AA	430	A	C5-N7-C8	5.64	106.72	103.90
21	AA	990	C	C1'-O4'-C4'	-5.64	105.39	109.90
21	AA	1016	A	C4-C5-N7	-5.64	107.88	110.70
21	AA	1029	U	C4-C5-C6	5.64	123.08	119.70
21	AA	1079	G	N3-C4-C5	-5.64	125.78	128.60
21	AA	1380	U	N3-C4-O4	5.64	123.35	119.40
21	AA	1482	G	N7-C8-N9	-5.64	110.28	113.10
21	AA	1515	G	C1'-O4'-C4'	-5.64	105.39	109.90
23	AW	65	G	C8-N9-C1'	5.64	134.33	127.00
57	BB	113	U	C4'-C3'-C2'	5.64	108.24	102.60
57	BB	310	A	N1-C2-N3	5.64	132.12	129.30
57	BB	372	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	892	A	N7-C8-N9	5.64	116.62	113.80
57	BB	2220	U	C6-N1-C2	5.64	124.38	121.00
57	BB	2327	A	O4'-C1'-N9	5.64	112.71	108.20
21	AA	384	G	C5-C6-O6	-5.64	125.22	128.60
21	AA	502	A	N9-C4-C5	5.64	108.06	105.80
21	AA	540	G	C5'-C4'-C3'	5.64	125.02	116.00
21	AA	1480	A	C5-C6-N1	-5.64	114.88	117.70
57	BB	121	G	N1-C2-N3	-5.64	120.52	123.90
57	BB	580	U	C2-N1-C1'	-5.64	110.93	117.70
57	BB	604	G	C4-N9-C1'	-5.64	119.17	126.50
57	BB	810	U	N3-C2-O2	5.64	126.15	122.20
57	BB	961	C	N3-C4-N4	5.64	121.95	118.00
57	BB	1562	U	P-O5'-C5'	5.64	129.92	120.90
57	BB	1783	A	C2-N3-C4	5.64	113.42	110.60
57	BB	2824	C	OP1-P-OP2	-5.64	111.14	119.60
5	AN	85	GLU	N-CA-CB	5.64	120.74	110.60
21	AA	341	C	C5-C4-N4	-5.64	116.25	120.20
21	AA	769	G	O4'-C1'-N9	5.64	112.71	108.20
21	AA	838	G	C5'-C4'-O4'	5.64	115.86	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1339	A	N7-C8-N9	5.64	116.62	113.80
21	AA	1413	A	C8-N9-C4	-5.64	103.55	105.80
21	AA	1434	A	C5-N7-C8	5.64	106.72	103.90
22	AY	39	U	C5'-C4'-C3'	-5.64	106.98	116.00
24	AX	18	G	N3-C2-N2	5.64	123.85	119.90
26	AV	6	G	O4'-C4'-C3'	-5.64	98.36	104.00
26	AV	46	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	269	C	C1'-O4'-C4'	-5.64	105.39	109.90
57	BB	605	G	N3-C4-C5	-5.64	125.78	128.60
57	BB	1032	A	P-O5'-C5'	-5.64	111.88	120.90
57	BB	1384	A	O5'-P-OP2	5.64	117.46	110.70
57	BB	1564	C	C6-N1-C2	-5.64	118.05	120.30
57	BB	1766	G	P-O3'-C3'	-5.64	112.94	119.70
57	BB	2053	G	N9-C1'-C2'	-5.64	105.80	112.00
57	BB	2115	G	C8-N9-C1'	-5.64	119.67	127.00
57	BB	2371	G	C4-C5-N7	-5.64	108.55	110.80
57	BB	2472	G	C2-N3-C4	-5.64	109.08	111.90
57	BB	2844	G	O4'-C1'-N9	5.64	112.71	108.20
21	AA	12	U	C2-N3-C4	-5.63	123.62	127.00
35	BP	89	GLY	N-CA-C	-5.63	99.02	113.10
57	BB	206	U	N1-C2-O2	5.63	126.74	122.80
57	BB	281	C	N3-C2-O2	-5.63	117.96	121.90
57	BB	442	G	C6-N1-C2	5.63	128.48	125.10
57	BB	532	A	P-O5'-C5'	5.63	129.91	120.90
57	BB	629	G	N9-C4-C5	-5.63	103.15	105.40
57	BB	1456	G	N3-C4-N9	5.63	129.38	126.00
57	BB	1597	A	N7-C8-N9	5.63	116.62	113.80
57	BB	1785	A	C5-N7-C8	5.63	106.72	103.90
57	BB	2547	A	P-O5'-C5'	-5.63	111.88	120.90
57	BB	2574	G	C1'-O4'-C4'	-5.63	105.39	109.90
57	BB	2741	A	C6-C5-N7	-5.63	128.36	132.30
57	BB	2747	G	C8-N9-C1'	-5.63	119.68	127.00
57	BB	2749	A	O4'-C1'-N9	5.63	112.71	108.20
21	AA	9	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	451	A	C5-N7-C8	5.63	106.72	103.90
21	AA	903	G	C5-C6-N1	-5.63	108.68	111.50
21	AA	1006	G	O4'-C1'-N9	5.63	112.71	108.20
21	AA	1061	G	C6-C5-N7	-5.63	127.02	130.40
21	AA	1142	G	C4-C5-N7	-5.63	108.55	110.80
21	AA	1204	A	C5-C6-N1	-5.63	114.88	117.70
23	AW	6	G	N1-C6-O6	5.63	123.28	119.90
57	BB	456	C	C2-N3-C4	5.63	122.72	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	824	U	C6-N1-C1'	5.63	129.09	121.20
57	BB	2374	C	C4-C5-C6	5.63	120.22	117.40
57	BB	2661	G	P-O5'-C5'	-5.63	111.89	120.90
8	AQ	39	ARG	NE-CZ-NH2	-5.63	117.48	120.30
21	AA	139	A	C2-N3-C4	5.63	113.42	110.60
21	AA	535	A	C3'-C2'-C1'	-5.63	96.99	101.50
21	AA	1061	G	C5-C6-N1	-5.63	108.68	111.50
21	AA	1093	A	C5'-C4'-C3'	5.63	125.01	116.00
21	AA	1450	U	P-O3'-C3'	5.63	126.46	119.70
22	AY	60	C	P-O5'-C5'	5.63	129.91	120.90
49	B2	28	ARG	NH1-CZ-NH2	-5.63	113.20	119.40
57	BB	850	U	C5-C4-O4	-5.63	122.52	125.90
57	BB	1370	C	C4'-C3'-C2'	-5.63	96.97	102.60
57	BB	1445	G	C2-N3-C4	-5.63	109.08	111.90
57	BB	2075	U	C1'-O4'-C4'	5.63	114.41	109.90
57	BB	2597	G	C6-C5-N7	-5.63	127.02	130.40
57	BB	2849	U	O4'-C1'-C2'	-5.63	100.17	105.80
58	BA	26	C	C5-C6-N1	5.63	123.82	121.00
21	AA	362	G	N3-C4-N9	5.63	129.38	126.00
25	AZ	314	ASP	CB-CG-OD1	5.63	123.37	118.30
53	BE	69	ARG	NE-CZ-NH2	-5.63	117.48	120.30
57	BB	2379	G	C5-C6-N1	-5.63	108.69	111.50
21	AA	637	C	P-O5'-C5'	5.63	129.91	120.90
21	AA	805	C	C6-N1-C2	-5.63	118.05	120.30
21	AA	1166	G	C2-N3-C4	5.63	114.71	111.90
21	AA	1392	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	1422	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	1479	C	C5-C4-N4	-5.63	116.26	120.20
24	AX	18	G	C5'-C4'-C3'	-5.63	106.99	116.00
57	BB	83	A	C3'-C2'-C1'	5.63	106.00	101.50
57	BB	371	A	N1-C6-N6	5.63	121.98	118.60
57	BB	394	C	OP1-P-OP2	-5.63	111.16	119.60
57	BB	488	G	N3-C4-N9	-5.63	122.62	126.00
57	BB	537	G	N1-C6-O6	5.63	123.28	119.90
57	BB	646	U	C3'-C2'-C1'	5.63	106.00	101.50
57	BB	1432	G	N1-C6-O6	5.63	123.28	119.90
57	BB	2685	G	O5'-P-OP1	-5.63	100.64	105.70
57	BB	2876	G	C2-N3-C4	-5.63	109.09	111.90
57	BB	2889	C	C5-C6-N1	5.63	123.81	121.00
58	BA	60	C	N3-C2-O2	5.63	125.84	121.90
9	AR	72	ARG	NH1-CZ-NH2	-5.63	113.21	119.40
21	AA	222	C	C3'-C2'-C1'	-5.63	97.00	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	298	A	N9-C1'-C2'	-5.63	105.81	112.00
21	AA	299	G	P-O3'-C3'	5.63	126.45	119.70
21	AA	1388	C	C6-N1-C2	-5.63	118.05	120.30
26	AV	37	A	N9-C4-C5	5.63	108.05	105.80
55	BG	151	ARG	NE-CZ-NH1	5.63	123.11	120.30
57	BB	663	G	N3-C2-N2	5.63	123.84	119.90
57	BB	1208	C	C2-N1-C1'	-5.63	112.61	118.80
57	BB	1441	G	N9-C4-C5	-5.63	103.15	105.40
57	BB	2496	C	C5-C6-N1	5.63	123.81	121.00
57	BB	2663	G	C4'-C3'-C2'	-5.63	96.97	102.60
5	AN	19	TYR	CG-CD2-CE2	5.62	125.80	121.30
53	BE	87	ALA	CB-CA-C	-5.62	101.66	110.10
57	BB	114	U	C5-C4-O4	-5.62	122.53	125.90
57	BB	293	U	C4-C5-C6	5.62	123.08	119.70
57	BB	595	C	C2-N3-C4	5.62	122.71	119.90
57	BB	1063	G	C8-N9-C4	-5.62	104.15	106.40
57	BB	1218	G	N3-C2-N2	5.62	123.84	119.90
57	BB	1262	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	1681	G	N1-C6-O6	5.62	123.28	119.90
57	BB	2218	G	O5'-C5'-C4'	-5.62	101.01	111.70
57	BB	2771	C	C2-N1-C1'	5.62	124.99	118.80
57	BB	2811	G	C5-N7-C8	-5.62	101.49	104.30
21	AA	171	A	N3-C4-C5	-5.62	122.86	126.80
21	AA	307	C	C6-N1-C2	-5.62	118.05	120.30
21	AA	674	G	P-O3'-C3'	-5.62	112.95	119.70
21	AA	1077	G	C4'-C3'-C2'	-5.62	96.98	102.60
21	AA	1157	A	C8-N9-C4	-5.62	103.55	105.80
22	AY	29	A	C4-C5-C6	5.62	119.81	117.00
23	AW	28	G	N3-C2-N2	5.62	123.84	119.90
43	BX	48	LEU	N-CA-C	-5.62	95.81	111.00
52	BD	61	THR	CA-CB-CG2	-5.62	104.53	112.40
57	BB	54	G	N3-C4-C5	5.62	131.41	128.60
57	BB	98	G	C5-C6-N1	-5.62	108.69	111.50
57	BB	332	A	C6-C5-N7	-5.62	128.36	132.30
57	BB	482	A	C8-N9-C4	-5.62	103.55	105.80
57	BB	882	G	N9-C4-C5	-5.62	103.15	105.40
57	BB	1268	A	C4-C5-C6	5.62	119.81	117.00
57	BB	1537	G	C8-N9-C4	-5.62	104.15	106.40
57	BB	2139	U	N3-C4-C5	5.62	117.97	114.60
57	BB	2174	C	P-O5'-C5'	-5.62	111.90	120.90
57	BB	2694	G	N7-C8-N9	-5.62	110.29	113.10
57	BB	2712	C	P-O3'-C3'	5.62	126.45	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2743	U	C5'-C4'-O4'	5.62	115.85	109.10
21	AA	353	A	C5'-C4'-C3'	5.62	124.99	116.00
21	AA	458	U	C2-N3-C4	-5.62	123.63	127.00
21	AA	1131	G	C2-N3-C4	5.62	114.71	111.90
21	AA	1353	G	C6-N1-C2	5.62	128.47	125.10
21	AA	1453	G	C6-N1-C2	5.62	128.47	125.10
21	AA	1468	A	C4-N9-C1'	5.62	136.42	126.30
22	AY	33	U	N1-C2-N3	-5.62	111.53	114.90
56	BH	108	VAL	CA-CB-CG1	-5.62	102.47	110.90
57	BB	55	G	C4'-C3'-C2'	-5.62	96.98	102.60
57	BB	257	C	N3-C4-C5	-5.62	119.65	121.90
57	BB	329	G	C3'-C2'-C1'	-5.62	97.00	101.50
57	BB	393	C	N1-C2-O2	-5.62	115.53	118.90
57	BB	718	A	O4'-C1'-N9	5.62	112.70	108.20
57	BB	739	A	N1-C6-N6	5.62	121.97	118.60
57	BB	747	U	C3'-C2'-C1'	5.62	106.00	101.50
57	BB	1364	G	N1-C6-O6	5.62	123.27	119.90
57	BB	1447	C	N3-C4-N4	5.62	121.94	118.00
57	BB	1509	A	P-O5'-C5'	-5.62	111.91	120.90
57	BB	2864	G	C5-N7-C8	5.62	107.11	104.30
57	BB	2901	C	C5-C4-N4	-5.62	116.27	120.20
21	AA	1040	U	N3-C4-O4	5.62	123.33	119.40
21	AA	1226	C	C2-N3-C4	-5.62	117.09	119.90
33	BN	110	MET	CG-SD-CE	-5.62	91.21	100.20
57	BB	629	G	C4-C5-C6	-5.62	115.43	118.80
57	BB	1453	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	2238	G	C3'-C2'-C1'	5.62	106.00	101.50
57	BB	2298	A	C6-C5-N7	-5.62	128.37	132.30
57	BB	2737	G	N1-C2-N3	-5.62	120.53	123.90
15	AD	168	THR	CA-CB-CG2	-5.62	104.53	112.40
21	AA	741	G	N3-C4-N9	-5.62	122.63	126.00
57	BB	109	C	P-O3'-C3'	-5.62	112.96	119.70
57	BB	605	G	C1'-O4'-C4'	-5.62	105.40	109.90
57	BB	1359	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	1451	C	N1-C1'-C2'	-5.62	105.82	112.00
57	BB	1481	U	N1-C2-N3	-5.62	111.53	114.90
57	BB	1718	G	N1-C6-O6	5.62	123.27	119.90
57	BB	2268	A	C5'-C4'-C3'	-5.62	107.01	116.00
57	BB	2488	G	N1-C6-O6	5.62	123.27	119.90
21	AA	233	C	N1-C2-O2	-5.62	115.53	118.90
21	AA	243	A	C4'-C3'-C2'	5.62	108.22	102.60
57	BB	689	A	C4-C5-N7	-5.62	107.89	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1483	G	O5'-C5'-C4'	-5.62	101.03	111.70
57	BB	1508	A	N3-C4-C5	-5.62	122.87	126.80
57	BB	1850	G	P-O5'-C5'	5.62	129.89	120.90
4	AM	65	GLU	C-N-CA	5.62	134.09	122.30
5	AN	41	TRP	N-CA-CB	5.62	120.71	110.60
21	AA	1022	A	O4'-C1'-N9	5.62	112.69	108.20
21	AA	1099	G	N3-C4-C5	5.62	131.41	128.60
56	BH	139	PHE	CB-CG-CD2	5.62	124.73	120.80
57	BB	541	A	P-O3'-C3'	-5.62	112.96	119.70
57	BB	788	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	878	A	N1-C2-N3	5.62	132.11	129.30
57	BB	1031	G	C5-C6-N1	-5.62	108.69	111.50
57	BB	1488	C	C3'-C2'-C1'	-5.62	97.01	101.50
57	BB	1494	A	C5-C6-N1	-5.62	114.89	117.70
57	BB	1500	G	C6-C5-N7	-5.62	127.03	130.40
57	BB	1931	U	O4'-C4'-C3'	-5.62	98.39	104.00
57	BB	2027	G	P-O3'-C3'	-5.62	112.96	119.70
57	BB	2145	C	OP1-P-OP2	-5.62	111.18	119.60
57	BB	2851	A	C3'-C2'-C1'	5.62	105.99	101.50
23	AW	27	G	P-O5'-C5'	-5.61	111.92	120.90
39	BT	46	ALA	N-CA-CB	5.61	117.96	110.10
57	BB	363	G	C4-N9-C1'	-5.61	119.20	126.50
57	BB	536	G	N7-C8-N9	-5.61	110.29	113.10
57	BB	811	U	O4'-C1'-N1	5.61	112.69	108.20
57	BB	814	C	C5-C6-N1	-5.61	118.19	121.00
57	BB	1489	C	C5-C6-N1	5.61	123.81	121.00
57	BB	1800	C	C6-N1-C1'	5.61	127.54	120.80
57	BB	2512	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	2576	G	P-O3'-C3'	-5.61	112.96	119.70
57	BB	2654	A	O4'-C1'-N9	5.61	112.69	108.20
1	AJ	14	ASP	CB-CG-OD2	5.61	123.35	118.30
21	AA	331	G	C6-C5-N7	-5.61	127.03	130.40
21	AA	367	U	C2-N3-C4	-5.61	123.63	127.00
21	AA	456	A	C5'-C4'-C3'	-5.61	107.02	116.00
26	AV	76	A	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	399	U	O4'-C1'-C2'	-5.61	100.19	105.80
57	BB	1043	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	1381	G	N9-C1'-C2'	-5.61	105.83	112.00
57	BB	2426	A	C8-N9-C4	-5.61	103.56	105.80
57	BB	2546	U	O4'-C1'-N1	5.61	112.69	108.20
21	AA	460	A	N7-C8-N9	-5.61	111.00	113.80
21	AA	1057	G	C2-N3-C4	5.61	114.71	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1385	G	O4'-C4'-C3'	-5.61	98.39	104.00
22	AY	66	A	C6-N1-C2	-5.61	115.23	118.60
26	AV	53	G	C8-N9-C4	5.61	108.64	106.40
57	BB	8	C	N1-C2-N3	-5.61	115.27	119.20
57	BB	668	A	C6-C5-N7	-5.61	128.37	132.30
57	BB	1653	G	C6-N1-C2	5.61	128.47	125.10
57	BB	2065	C	N1-C2-O2	5.61	122.27	118.90
57	BB	2387	U	N1-C2-O2	-5.61	118.87	122.80
57	BB	2757	A	C6-N1-C2	5.61	121.97	118.60
58	BA	61	G	C2-N3-C4	5.61	114.70	111.90
18	AG	53	SER	N-CA-CB	5.61	118.91	110.50
21	AA	464	U	C4-C5-C6	-5.61	116.33	119.70
57	BB	1750	G	O4'-C1'-N9	5.61	112.69	108.20
57	BB	1796	U	N1-C2-O2	-5.61	118.87	122.80
57	BB	2095	A	C2-N3-C4	-5.61	107.80	110.60
57	BB	2509	G	N3-C4-N9	5.61	129.37	126.00
21	AA	387	U	N1-C2-N3	5.61	118.26	114.90
21	AA	501	C	C4'-C3'-C2'	-5.61	96.99	102.60
21	AA	709	U	C2-N3-C4	-5.61	123.64	127.00
21	AA	1212	U	C1'-O4'-C4'	-5.61	105.41	109.90
57	BB	96	C	O4'-C1'-C2'	-5.61	100.19	105.80
57	BB	380	G	C5-C6-O6	-5.61	125.23	128.60
57	BB	446	G	C3'-C2'-C1'	5.61	105.99	101.50
57	BB	573	U	C1'-O4'-C4'	5.61	114.39	109.90
57	BB	733	G	C6-N1-C2	5.61	128.47	125.10
57	BB	1252	G	C6-C5-N7	-5.61	127.03	130.40
57	BB	2120	G	C5-C6-O6	-5.61	125.23	128.60
57	BB	2507	C	C5-C4-N4	-5.61	116.27	120.20
57	BB	2565	A	C4-C5-N7	-5.61	107.90	110.70
57	BB	2879	A	N7-C8-N9	5.61	116.60	113.80
58	BA	94	A	C4-C5-C6	5.61	119.80	117.00
21	AA	761	G	N1-C2-N3	-5.61	120.54	123.90
21	AA	796	C	N3-C2-O2	5.61	125.82	121.90
21	AA	1018	G	P-O5'-C5'	5.61	129.87	120.90
21	AA	1143	G	N3-C2-N2	5.61	123.82	119.90
21	AA	1158	C	O4'-C4'-C3'	-5.61	98.39	104.00
22	AY	17	U	N3-C4-C5	-5.61	111.24	114.60
26	AV	61	C	C6-N1-C1'	5.61	127.53	120.80
57	BB	119	A	C1'-O4'-C4'	-5.61	105.42	109.90
57	BB	251	A	C4-C5-N7	-5.61	107.90	110.70
57	BB	301	G	C5'-C4'-O4'	5.61	115.83	109.10
57	BB	447	A	C5-C6-N1	-5.61	114.90	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	644	A	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	708	G	N7-C8-N9	-5.61	110.30	113.10
57	BB	735	A	C1'-O4'-C4'	5.61	114.39	109.90
57	BB	1278	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	1444	G	C5-C6-N1	5.61	114.30	111.50
57	BB	1986	C	N3-C2-O2	-5.61	117.98	121.90
57	BB	2099	U	C4-C5-C6	5.61	123.06	119.70
57	BB	2116	G	C4-C5-C6	5.61	122.16	118.80
57	BB	2183	A	C6-C5-N7	-5.61	128.38	132.30
58	BA	38	C	C5-C4-N4	-5.61	116.28	120.20
21	AA	169	C	N1-C2-O2	5.60	122.26	118.90
21	AA	392	C	P-O5'-C5'	5.60	129.87	120.90
21	AA	1003	G	C4-N9-C1'	-5.60	119.21	126.50
21	AA	1027	C	N3-C2-O2	-5.60	117.98	121.90
21	AA	1148	U	P-O3'-C3'	-5.60	112.98	119.70
21	AA	1227	A	N7-C8-N9	5.60	116.60	113.80
21	AA	1238	A	C8-N9-C4	-5.60	103.56	105.80
24	AX	16	A	N3-C4-C5	-5.60	122.88	126.80
27	B5	19	LYS	CB-CA-C	-5.60	99.19	110.40
41	BV	37	PRO	N-CA-CB	5.60	110.02	103.30
57	BB	554	U	N3-C4-C5	-5.60	111.24	114.60
57	BB	891	G	N9-C1'-C2'	-5.60	105.84	112.00
57	BB	998	C	C5-C4-N4	-5.60	116.28	120.20
57	BB	1634	A	C5-C6-N6	-5.60	119.22	123.70
57	BB	2161	C	N3-C4-N4	5.60	121.92	118.00
57	BB	2244	U	N1-C2-N3	-5.60	111.54	114.90
58	BA	97	C	C3'-C2'-C1'	-5.60	97.02	101.50
21	AA	39	G	O4'-C1'-N9	5.60	112.68	108.20
21	AA	452	A	C4-C5-N7	-5.60	107.90	110.70
21	AA	875	U	C5-C4-O4	-5.60	122.54	125.90
21	AA	952	U	N3-C2-O2	-5.60	118.28	122.20
21	AA	1274	A	O4'-C1'-N9	5.60	112.68	108.20
23	AW	34	G	N1-C2-N3	-5.60	120.54	123.90
35	BP	79	VAL	CA-CB-CG1	-5.60	102.50	110.90
55	BG	54	ARG	N-CA-C	-5.60	95.87	111.00
57	BB	745	G	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1198	U	O4'-C4'-C3'	-5.60	98.40	104.00
57	BB	1446	C	C2-N3-C4	5.60	122.70	119.90
57	BB	1630	A	C4-C5-C6	-5.60	114.20	117.00
57	BB	1797	G	N3-C2-N2	-5.60	115.98	119.90
57	BB	1870	C	C5-C4-N4	-5.60	116.28	120.20
57	BB	2451	A	C4-C5-N7	-5.60	107.90	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	74	A	N3-C4-N9	5.60	131.88	127.40
21	AA	164	G	N3-C4-N9	5.60	129.36	126.00
21	AA	231	U	C1'-O4'-C4'	-5.60	105.42	109.90
21	AA	616	G	N3-C4-N9	5.60	129.36	126.00
25	AZ	190	GLU	CB-CA-C	-5.60	99.20	110.40
57	BB	4	U	N1-C2-N3	-5.60	111.54	114.90
57	BB	488	G	N3-C4-C5	5.60	131.40	128.60
57	BB	1145	C	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1359	A	C6-N1-C2	5.60	121.96	118.60
57	BB	1401	G	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1403	A	N3-C4-N9	5.60	131.88	127.40
57	BB	1940	U	C5-C4-O4	-5.60	122.54	125.90
57	BB	2221	G	C6-N1-C2	5.60	128.46	125.10
57	BB	2488	G	C4-C5-N7	5.60	113.04	110.80
21	AA	35	G	C6-C5-N7	-5.60	127.04	130.40
21	AA	46	G	C1'-O4'-C4'	-5.60	105.42	109.90
21	AA	200	G	C8-N9-C4	5.60	108.64	106.40
21	AA	779	C	C5-C4-N4	-5.60	116.28	120.20
21	AA	1125	U	C2-N3-C4	-5.60	123.64	127.00
21	AA	1401	G	N3-C2-N2	5.60	123.82	119.90
57	BB	89	A	N7-C8-N9	-5.60	111.00	113.80
57	BB	123	G	N9-C4-C5	-5.60	103.16	105.40
57	BB	607	U	P-O3'-C3'	-5.60	112.98	119.70
57	BB	728	G	O4'-C4'-C3'	5.60	110.58	106.10
57	BB	1478	G	O4'-C1'-N9	5.60	112.68	108.20
57	BB	2162	G	C4-C5-C6	5.60	122.16	118.80
57	BB	2238	G	C5-C6-O6	-5.60	125.24	128.60
57	BB	2255	G	C6-C5-N7	-5.60	127.04	130.40
57	BB	2394	C	C1'-O4'-C4'	5.60	114.38	109.90
57	BB	2483	C	N1-C2-O2	-5.60	115.54	118.90
57	BB	2553	G	N1-C6-O6	5.60	123.26	119.90
57	BB	2809	A	O4'-C4'-C3'	-5.60	98.40	104.00
57	BB	2845	U	P-O3'-C3'	-5.60	112.98	119.70
58	BA	15	A	C2-N3-C4	-5.60	107.80	110.60
21	AA	487	A	N1-C2-N3	-5.60	126.50	129.30
21	AA	531	U	P-O3'-C3'	5.60	126.42	119.70
21	AA	554	A	C4'-C3'-C2'	-5.60	97.00	102.60
21	AA	650	G	C5-C6-N1	-5.60	108.70	111.50
27	B5	16	ASP	N-CA-CB	5.60	120.67	110.60
57	BB	411	G	P-O5'-C5'	5.60	129.85	120.90
57	BB	906	U	C2-N3-C4	-5.60	123.64	127.00
57	BB	1429	G	C5-N7-C8	-5.60	101.50	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1524	G	C8-N9-C4	-5.60	104.16	106.40
57	BB	1932	A	O4'-C1'-N9	5.60	112.68	108.20
57	BB	2156	G	O4'-C1'-N9	5.60	112.68	108.20
21	AA	51	A	N1-C2-N3	5.60	132.10	129.30
21	AA	245	U	C6-N1-C2	5.60	124.36	121.00
21	AA	545	C	O5'-C5'-C4'	-5.60	101.07	111.70
41	BV	41	GLU	N-CA-CB	5.60	120.67	110.60
57	BB	774	G	C8-N9-C4	5.60	108.64	106.40
57	BB	1182	G	N7-C8-N9	-5.60	110.30	113.10
57	BB	2311	A	C6-C5-N7	-5.60	128.38	132.30
21	AA	200	G	C6-C5-N7	-5.59	127.04	130.40
21	AA	293	G	C5-N7-C8	5.59	107.10	104.30
21	AA	344	A	N9-C4-C5	5.59	108.04	105.80
21	AA	649	A	N1-C2-N3	5.59	132.10	129.30
21	AA	1005	A	C5-C6-N6	-5.59	119.22	123.70
26	AV	35	A	C1'-O4'-C4'	-5.59	105.42	109.90
57	BB	94	A	C8-N9-C4	-5.59	103.56	105.80
57	BB	353	C	C4-C5-C6	-5.59	114.60	117.40
57	BB	636	G	O4'-C1'-N9	5.59	112.68	108.20
57	BB	837	C	N3-C4-N4	5.59	121.92	118.00
57	BB	982	C	C2-N3-C4	5.59	122.70	119.90
57	BB	984	A	N9-C4-C5	5.59	108.04	105.80
57	BB	1005	C	N3-C4-N4	5.59	121.92	118.00
57	BB	1601	G	N3-C4-N9	-5.59	122.64	126.00
57	BB	2359	C	N3-C4-C5	-5.59	119.66	121.90
57	BB	2422	C	P-O5'-C5'	-5.59	111.95	120.90
58	BA	81	G	C4-C5-C6	5.59	122.16	118.80
21	AA	1037	C	P-O5'-C5'	-5.59	111.95	120.90
45	BC	235	GLU	CB-CA-C	-5.59	99.21	110.40
57	BB	1835	G	C6-C5-N7	-5.59	127.04	130.40
57	BB	2819	G	C5-N7-C8	-5.59	101.50	104.30
21	AA	26	A	C3'-C2'-C1'	-5.59	97.03	101.50
21	AA	1139	G	N3-C2-N2	5.59	123.81	119.90
22	AY	56	C	C6-N1-C2	-5.59	118.06	120.30
22	AY	74	C	P-O5'-C5'	5.59	129.85	120.90
57	BB	494	G	C5-N7-C8	-5.59	101.50	104.30
57	BB	507	A	C5-C6-N1	-5.59	114.91	117.70
57	BB	530	G	C6-C5-N7	-5.59	127.05	130.40
57	BB	570	G	N1-C2-N2	-5.59	111.17	116.20
57	BB	662	G	C4-C5-N7	5.59	113.04	110.80
57	BB	1106	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	1279	G	C4-C5-N7	-5.59	108.56	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2481	G	C5-C6-O6	-5.59	125.25	128.60
57	BB	2582	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	2717	C	C2-N3-C4	5.59	122.69	119.90
21	AA	44	A	C5-C6-N6	-5.59	119.23	123.70
21	AA	92	U	N1-C1'-C2'	-5.59	105.85	112.00
21	AA	127	G	N1-C2-N3	-5.59	120.55	123.90
21	AA	438	U	C3'-C2'-C1'	5.59	105.97	101.50
21	AA	827	U	O5'-P-OP2	5.59	117.41	110.70
21	AA	872	A	C4-C5-C6	5.59	119.80	117.00
21	AA	936	C	N1-C2-O2	-5.59	115.55	118.90
21	AA	1046	A	C8-N9-C4	5.59	108.04	105.80
21	AA	1137	C	C2-N1-C1'	5.59	124.95	118.80
21	AA	1177	G	O4'-C1'-N9	5.59	112.67	108.20
21	AA	1417	G	P-O5'-C5'	5.59	129.84	120.90
33	BN	118	ARG	NE-CZ-NH1	-5.59	117.50	120.30
46	BZ	52	PHE	CB-CG-CD2	-5.59	116.89	120.80
57	BB	418	C	N3-C4-N4	5.59	121.91	118.00
57	BB	654	A	C6-C5-N7	-5.59	128.39	132.30
57	BB	1036	G	C2-N3-C4	5.59	114.69	111.90
57	BB	1161	C	C4'-C3'-C2'	-5.59	97.01	102.60
57	BB	1307	A	N3-C4-N9	5.59	131.87	127.40
57	BB	1351	C	N3-C4-N4	5.59	121.91	118.00
57	BB	1682	G	N1-C6-O6	5.59	123.25	119.90
57	BB	1701	A	C4-C5-N7	-5.59	107.91	110.70
57	BB	1826	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	1958	C	C1'-O4'-C4'	5.59	114.37	109.90
57	BB	2391	G	C8-N9-C4	-5.59	104.16	106.40
57	BB	2803	G	N3-C2-N2	5.59	123.81	119.90
57	BB	2856	A	C6-C5-N7	-5.59	128.39	132.30
57	BB	2870	C	O4'-C1'-N1	5.59	112.67	108.20
21	AA	383	A	C2-N3-C4	5.59	113.39	110.60
21	AA	808	C	C5-C4-N4	5.59	124.11	120.20
21	AA	849	G	C1'-O4'-C4'	-5.59	105.43	109.90
21	AA	1408	A	N3-C4-N9	-5.59	122.93	127.40
22	AY	3	G	N3-C4-N9	5.59	129.35	126.00
57	BB	1	G	C8-N9-C4	-5.59	104.17	106.40
57	BB	1116	G	C8-N9-C4	5.59	108.64	106.40
57	BB	1139	G	C5-C6-O6	-5.59	125.25	128.60
57	BB	2281	A	N1-C2-N3	-5.59	126.51	129.30
57	BB	2285	C	N3-C4-C5	-5.59	119.67	121.90
57	BB	2633	G	C8-N9-C1'	5.59	134.26	127.00
57	BB	2742	G	C5-N7-C8	5.59	107.09	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	107	G	N7-C8-N9	5.59	115.89	113.10
21	AA	17	U	C2-N1-C1'	-5.59	111.00	117.70
21	AA	741	G	N3-C4-C5	5.59	131.39	128.60
21	AA	903	G	N3-C4-C5	5.59	131.39	128.60
21	AA	925	G	O4'-C1'-N9	5.59	112.67	108.20
21	AA	1456	A	C8-N9-C4	-5.59	103.56	105.80
26	AV	4	G	C4-C5-C6	5.59	122.15	118.80
28	BI	18	ASN	CB-CG-OD1	-5.59	110.43	121.60
57	BB	94	A	C5-C6-N1	-5.59	114.91	117.70
57	BB	99	U	C5'-C4'-O4'	5.59	115.80	109.10
57	BB	151	C	C5-C4-N4	-5.59	116.29	120.20
57	BB	561	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	2345	G	C5-C6-O6	5.59	131.95	128.60
57	BB	2677	G	N9-C4-C5	5.59	107.64	105.40
57	BB	2854	G	O4'-C1'-N9	5.59	112.67	108.20
58	BA	64	G	C3'-C2'-C1'	5.59	105.97	101.50
21	AA	821	G	C4-C5-C6	5.58	122.15	118.80
21	AA	1373	G	P-O3'-C3'	-5.58	113.00	119.70
22	AY	29	A	N7-C8-N9	5.58	116.59	113.80
57	BB	420	C	O4'-C1'-N1	5.58	112.67	108.20
57	BB	1280	G	C6-N1-C2	-5.58	121.75	125.10
57	BB	1705	A	C4-C5-C6	-5.58	114.21	117.00
58	BA	23	G	N1-C2-N3	-5.58	120.55	123.90
21	AA	471	U	N1-C2-N3	-5.58	111.55	114.90
21	AA	572	A	C4-C5-C6	5.58	119.79	117.00
21	AA	707	U	O4'-C4'-C3'	-5.58	98.42	104.00
21	AA	823	C	OP1-P-OP2	-5.58	111.22	119.60
21	AA	1018	G	C4-C5-C6	5.58	122.15	118.80
22	AY	54	U	C6-N1-C2	-5.58	117.65	121.00
57	BB	150	U	C5-C4-O4	-5.58	122.55	125.90
57	BB	492	A	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	618	G	C5-C6-O6	-5.58	125.25	128.60
57	BB	1098	A	C1'-O4'-C4'	5.58	114.37	109.90
57	BB	1662	U	N3-C2-O2	5.58	126.11	122.20
57	BB	1880	U	N1-C2-O2	-5.58	118.89	122.80
57	BB	2379	G	N1-C2-N3	-5.58	120.55	123.90
11	AT	74	HIS	N-CA-CB	5.58	120.65	110.60
21	AA	24	U	C5-C6-N1	-5.58	119.91	122.70
21	AA	149	A	C6-N1-C2	-5.58	115.25	118.60
21	AA	182	A	C4-C5-C6	5.58	119.79	117.00
21	AA	411	A	N1-C6-N6	-5.58	115.25	118.60
21	AA	476	U	C2-N1-C1'	-5.58	111.00	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	580	C	C5-C6-N1	5.58	123.79	121.00
21	AA	886	G	C4-C5-N7	5.58	113.03	110.80
21	AA	980	C	C2'-C3'-O3'	5.58	122.63	113.70
21	AA	1098	C	C5'-C4'-O4'	5.58	115.80	109.10
21	AA	1182	G	C6-C5-N7	-5.58	127.05	130.40
21	AA	1382	C	C2-N3-C4	5.58	122.69	119.90
55	BG	88	LEU	CB-CA-C	5.58	120.81	110.20
57	BB	223	A	C5-N7-C8	5.58	106.69	103.90
57	BB	541	A	C6-N1-C2	5.58	121.95	118.60
57	BB	616	A	P-O3'-C3'	-5.58	113.00	119.70
57	BB	1320	C	O4'-C1'-N1	5.58	112.67	108.20
57	BB	1512	C	C2-N3-C4	5.58	122.69	119.90
57	BB	1520	U	C5-C6-N1	5.58	125.49	122.70
57	BB	1907	G	C5-C6-O6	-5.58	125.25	128.60
57	BB	2368	C	C5-C4-N4	-5.58	116.29	120.20
21	AA	662	U	N3-C4-C5	-5.58	111.25	114.60
21	AA	936	C	N3-C4-C5	-5.58	119.67	121.90
21	AA	1056	U	N3-C4-C5	-5.58	111.25	114.60
22	AY	62	A	N9-C4-C5	5.58	108.03	105.80
27	B5	78	PHE	CB-CG-CD1	-5.58	116.89	120.80
57	BB	603	A	C6-C5-N7	-5.58	128.39	132.30
57	BB	1024	G	O4'-C1'-N9	5.58	112.66	108.20
57	BB	2777	G	N9-C4-C5	5.58	107.63	105.40
23	AW	14	A	C5-N7-C8	5.58	106.69	103.90
57	BB	177	G	C5-C6-O6	5.58	131.95	128.60
57	BB	361	G	C4-C5-N7	-5.58	108.57	110.80
57	BB	1046	A	N7-C8-N9	5.58	116.59	113.80
57	BB	1742	U	N3-C4-C5	-5.58	111.25	114.60
57	BB	2084	C	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	2169	A	C5-N7-C8	5.58	106.69	103.90
57	BB	2690	U	N1-C2-N3	-5.58	111.55	114.90
57	BB	2729	G	C5-C6-N1	-5.58	108.71	111.50
21	AA	654	G	N3-C4-N9	-5.58	122.65	126.00
21	AA	1457	G	C5-C6-N1	-5.58	108.71	111.50
40	BU	17	ASP	CB-CG-OD1	-5.58	113.28	118.30
57	BB	846	U	C5-C6-N1	5.58	125.49	122.70
57	BB	937	C	C2-N1-C1'	5.58	124.94	118.80
57	BB	2626	C	C5-C4-N4	-5.58	116.30	120.20
17	AF	59	TYR	CB-CG-CD1	5.58	124.34	121.00
21	AA	81	A	N7-C8-N9	5.58	116.59	113.80
21	AA	166	U	C2-N3-C4	5.58	130.35	127.00
21	AA	1054	C	C2-N1-C1'	5.58	124.93	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1065	U	N3-C4-O4	5.58	123.30	119.40
21	AA	1239	A	C5-C6-N1	-5.58	114.91	117.70
21	AA	1445	U	C5-C6-N1	5.58	125.49	122.70
23	AW	2	C	O4'-C1'-N1	5.58	112.66	108.20
23	AW	6	G	C5-N7-C8	-5.58	101.51	104.30
57	BB	43	G	N7-C8-N9	5.58	115.89	113.10
57	BB	135	U	O4'-C1'-N1	5.58	112.66	108.20
57	BB	493	G	C4-C5-C6	5.58	122.15	118.80
57	BB	1514	G	N3-C4-N9	-5.58	122.66	126.00
57	BB	1603	A	N7-C8-N9	-5.58	111.01	113.80
57	BB	1646	C	N1-C2-N3	5.58	123.10	119.20
57	BB	2011	U	C2-N3-C4	-5.58	123.66	127.00
57	BB	2164	C	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	2744	G	C6-C5-N7	-5.58	127.05	130.40
57	BB	2787	C	N3-C2-O2	5.58	125.80	121.90
21	AA	562	U	C3'-C2'-C1'	-5.57	97.04	101.50
21	AA	1133	G	O4'-C1'-N9	5.57	112.66	108.20
21	AA	1390	U	N3-C2-O2	5.57	126.10	122.20
23	AW	10	G	O4'-C1'-N9	5.57	112.66	108.20
35	BP	85	VAL	CG1-CB-CG2	5.57	119.82	110.90
57	BB	89	A	P-O3'-C3'	-5.57	113.01	119.70
57	BB	322	A	P-O3'-C3'	5.57	126.39	119.70
57	BB	788	A	C2-N3-C4	-5.57	107.81	110.60
57	BB	1332	G	P-O3'-C3'	-5.57	113.01	119.70
57	BB	1661	G	P-O5'-C5'	5.57	129.82	120.90
57	BB	2625	G	C8-N9-C4	-5.57	104.17	106.40
57	BB	2711	A	C4-C5-C6	5.57	119.79	117.00
58	BA	75	G	OP1-P-OP2	-5.57	111.24	119.60
58	BA	96	G	C2-N3-C4	-5.57	109.11	111.90
21	AA	85	U	N3-C2-O2	-5.57	118.30	122.20
21	AA	804	U	C5-C4-O4	5.57	129.24	125.90
57	BB	436	C	N3-C4-C5	5.57	124.13	121.90
57	BB	584	C	P-O5'-C5'	-5.57	111.98	120.90
57	BB	1026	G	N9-C4-C5	-5.57	103.17	105.40
57	BB	2465	C	C5-C4-N4	-5.57	116.30	120.20
21	AA	337	G	N3-C2-N2	5.57	123.80	119.90
21	AA	572	A	C5-C6-N1	-5.57	114.92	117.70
21	AA	675	A	N9-C4-C5	-5.57	103.57	105.80
21	AA	692	U	O4'-C1'-N1	5.57	112.66	108.20
21	AA	762	U	C6-N1-C2	-5.57	117.66	121.00
21	AA	1189	U	C4-C5-C6	5.57	123.04	119.70
57	BB	130	C	C5'-C4'-O4'	5.57	115.78	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	191	A	O4'-C1'-N9	5.57	112.66	108.20
57	BB	323	C	O4'-C1'-N1	5.57	112.66	108.20
57	BB	841	G	C4-C5-N7	5.57	113.03	110.80
57	BB	869	G	C2-N3-C4	-5.57	109.11	111.90
57	BB	1197	G	C4'-C3'-C2'	-5.57	97.03	102.60
57	BB	2029	G	C1'-O4'-C4'	5.57	114.36	109.90
57	BB	2151	U	C2-N3-C4	-5.57	123.66	127.00
57	BB	2203	U	P-O3'-C3'	-5.57	113.02	119.70
57	BB	2212	A	C6-C5-N7	-5.57	128.40	132.30
57	BB	2324	U	C4'-C3'-C2'	5.57	108.17	102.60
57	BB	2821	A	C4-C5-C6	5.57	119.78	117.00
58	BA	58	A	C8-N9-C1'	5.57	137.73	127.70
21	AA	1163	A	C8-N9-C4	-5.57	103.57	105.80
57	BB	1492	G	C6-C5-N7	-5.57	127.06	130.40
58	BA	115	A	C4-C5-N7	-5.57	107.92	110.70
6	AO	77	TYR	CZ-CE2-CD2	5.57	124.81	119.80
21	AA	660	C	O4'-C1'-N1	5.57	112.65	108.20
57	BB	344	A	C3'-C2'-C1'	5.57	105.95	101.50
57	BB	454	A	C5-N7-C8	5.57	106.68	103.90
57	BB	538	A	C5-N7-C8	5.57	106.68	103.90
57	BB	571	U	N3-C4-O4	5.57	123.30	119.40
57	BB	678	C	N1-C2-N3	5.57	123.10	119.20
57	BB	752	A	C5-C6-N6	-5.57	119.25	123.70
57	BB	795	C	C4'-C3'-C2'	-5.57	97.03	102.60
57	BB	1045	C	N3-C4-C5	-5.57	119.67	121.90
57	BB	1383	A	OP1-P-OP2	-5.57	111.25	119.60
57	BB	1497	U	O4'-C1'-C2'	-5.57	100.23	105.80
57	BB	2184	A	C4-C5-C6	5.57	119.78	117.00
57	BB	2281	A	C2-N3-C4	5.57	113.38	110.60
57	BB	2311	A	N3-C4-C5	-5.57	122.90	126.80
58	BA	14	U	P-O3'-C3'	5.57	126.38	119.70
21	AA	236	A	C4-C5-C6	5.57	119.78	117.00
21	AA	300	A	C6-C5-N7	-5.57	128.41	132.30
21	AA	734	G	C4'-C3'-C2'	-5.57	97.03	102.60
21	AA	782	A	C4'-C3'-C2'	-5.57	97.03	102.60
21	AA	816	A	O4'-C1'-N9	5.57	112.65	108.20
21	AA	1016	A	C6-N1-C2	5.57	121.94	118.60
21	AA	1384	C	N1-C1'-C2'	-5.57	105.88	112.00
21	AA	1430	A	C2-N3-C4	5.57	113.38	110.60
21	AA	1520	C	N3-C4-N4	5.57	121.90	118.00
30	BK	104	ARG	NE-CZ-NH1	-5.57	117.52	120.30
52	BD	204	LYS	CB-CA-C	-5.57	99.27	110.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	249	C	N1-C1'-C2'	-5.57	105.88	112.00
57	BB	1355	G	N1-C6-O6	5.57	123.24	119.90
57	BB	1623	G	N3-C2-N2	5.57	123.80	119.90
57	BB	2479	U	C5-C4-O4	5.57	129.24	125.90
57	BB	2835	A	N1-C6-N6	5.57	121.94	118.60
57	BB	2836	U	O4'-C1'-N1	5.57	112.65	108.20
58	BA	89	U	N1-C2-O2	-5.57	118.91	122.80
21	AA	190	A	C5'-C4'-C3'	-5.56	107.10	116.00
21	AA	609	A	C2-N3-C4	5.56	113.38	110.60
21	AA	1447	A	C8-N9-C4	-5.56	103.57	105.80
57	BB	1024	G	C5-N7-C8	5.56	107.08	104.30
57	BB	1228	G	C4-N9-C1'	-5.56	119.27	126.50
57	BB	1542	U	O4'-C1'-N1	5.56	112.65	108.20
57	BB	1974	C	C1'-O4'-C4'	5.56	114.35	109.90
21	AA	163	C	N3-C4-C5	-5.56	119.67	121.90
21	AA	237	G	C8-N9-C1'	5.56	134.23	127.00
21	AA	427	U	N3-C4-O4	5.56	123.29	119.40
21	AA	804	U	C2-N1-C1'	-5.56	111.03	117.70
21	AA	1426	G	N7-C8-N9	-5.56	110.32	113.10
21	AA	1510	C	C2-N3-C4	5.56	122.68	119.90
22	AY	6	U	C4-C5-C6	5.56	123.04	119.70
22	AY	13	C	C3'-C2'-C1'	-5.56	97.05	101.50
23	AW	71	G	C3'-C2'-C1'	5.56	105.95	101.50
25	AZ	368	MET	CG-SD-CE	-5.56	91.30	100.20
26	AV	30	G	C4-N9-C1'	-5.56	119.27	126.50
57	BB	208	C	C2-N3-C4	5.56	122.68	119.90
57	BB	671	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	883	G	C5-C6-O6	-5.56	125.26	128.60
57	BB	997	G	N3-C2-N2	5.56	123.79	119.90
57	BB	1000	A	N1-C6-N6	5.56	121.94	118.60
57	BB	1010	A	C5-C6-N6	-5.56	119.25	123.70
57	BB	1062	G	P-O3'-C3'	5.56	126.38	119.70
57	BB	1781	U	N1-C2-N3	5.56	118.24	114.90
57	BB	2009	A	C6-N1-C2	5.56	121.94	118.60
57	BB	2534	A	C2-N3-C4	5.56	113.38	110.60
57	BB	2536	G	C8-N9-C1'	5.56	134.23	127.00
57	BB	2576	G	C5-C6-N1	-5.56	108.72	111.50
57	BB	2658	C	C6-N1-C2	-5.56	118.08	120.30
58	BA	24	G	N9-C4-C5	5.56	107.62	105.40
2	AK	68	ARG	NE-CZ-NH2	-5.56	117.52	120.30
8	AQ	10	ARG	NE-CZ-NH1	5.56	123.08	120.30
21	AA	668	G	O4'-C1'-N9	5.56	112.65	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	919	A	C5'-C4'-O4'	-5.56	102.43	109.10
57	BB	311	A	P-O3'-C3'	-5.56	113.03	119.70
57	BB	963	U	C5-C6-N1	-5.56	119.92	122.70
57	BB	1362	C	C4-C5-C6	5.56	120.18	117.40
57	BB	2391	G	O4'-C1'-N9	5.56	112.65	108.20
57	BB	2429	G	C5-C6-N1	-5.56	108.72	111.50
57	BB	2775	G	N9-C4-C5	5.56	107.62	105.40
21	AA	653	U	C2-N3-C4	-5.56	123.66	127.00
21	AA	809	G	N1-C2-N3	-5.56	120.56	123.90
21	AA	1319	A	N9-C4-C5	5.56	108.02	105.80
35	BP	94	ALA	N-CA-CB	5.56	117.88	110.10
57	BB	88	G	N3-C4-N9	5.56	129.34	126.00
57	BB	662	G	C6-C5-N7	-5.56	127.06	130.40
57	BB	908	C	C3'-C2'-C1'	-5.56	97.05	101.50
57	BB	1052	C	C5-C6-N1	5.56	123.78	121.00
57	BB	1618	A	C5-N7-C8	5.56	106.68	103.90
57	BB	1757	A	P-O3'-C3'	5.56	126.37	119.70
57	BB	1896	G	C2-N3-C4	5.56	114.68	111.90
57	BB	1942	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	2091	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	2443	C	N3-C4-C5	-5.56	119.68	121.90
57	BB	2557	G	C5'-C4'-O4'	5.56	115.77	109.10
57	BB	2577	A	C5-C6-N6	-5.56	119.25	123.70
57	BB	2615	U	N3-C4-O4	5.56	123.29	119.40
21	AA	241	G	C1'-O4'-C4'	-5.56	105.45	109.90
21	AA	501	C	C2-N3-C4	5.56	122.68	119.90
21	AA	681	A	C1'-O4'-C4'	5.56	114.35	109.90
21	AA	1358	U	O4'-C1'-C2'	5.56	112.60	107.60
23	AW	20	U	N1-C2-O2	-5.56	118.91	122.80
56	BH	77	THR	CA-CB-OG1	5.56	120.67	109.00
57	BB	407	G	C4-C5-N7	5.56	113.02	110.80
57	BB	444	C	C4'-C3'-C2'	-5.56	97.04	102.60
57	BB	704	G	N9-C4-C5	5.56	107.62	105.40
57	BB	806	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	1082	U	N1-C2-N3	5.56	118.23	114.90
57	BB	1250	G	C4-C5-C6	5.56	122.14	118.80
57	BB	1382	G	P-O3'-C3'	-5.56	113.03	119.70
57	BB	1477	A	C4-C5-N7	-5.56	107.92	110.70
57	BB	1904	G	N3-C4-N9	-5.56	122.67	126.00
57	BB	2060	A	O4'-C1'-N9	5.56	112.64	108.20
21	AA	78	A	C5-C6-N6	-5.56	119.25	123.70
21	AA	143	A	C4-C5-N7	-5.56	107.92	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	371	A	C6-N1-C2	-5.56	115.27	118.60
21	AA	1331	G	C6-C5-N7	-5.56	127.07	130.40
39	BT	84	TYR	CZ-CE2-CD2	-5.56	114.80	119.80
57	BB	217	A	N9-C4-C5	5.56	108.02	105.80
57	BB	984	A	C2-N3-C4	5.56	113.38	110.60
57	BB	1225	G	P-O5'-C5'	-5.56	112.01	120.90
57	BB	2524	G	C4-N9-C1'	-5.56	119.28	126.50
57	BB	2679	A	C4-C5-N7	5.56	113.48	110.70
16	AE	92	ARG	CB-CA-C	-5.55	99.29	110.40
21	AA	234	C	C2-N3-C4	5.55	122.68	119.90
21	AA	488	C	C6-N1-C2	-5.55	118.08	120.30
21	AA	721	G	P-O5'-C5'	5.55	129.79	120.90
21	AA	1261	A	C6-N1-C2	-5.55	115.27	118.60
21	AA	1295	U	N1-C2-N3	5.55	118.23	114.90
21	AA	1531	A	C2-N3-C4	-5.55	107.82	110.60
57	BB	281	C	N1-C2-N3	-5.55	115.31	119.20
57	BB	348	A	C4-C5-C6	5.55	119.78	117.00
57	BB	574	A	C8-N9-C4	-5.55	103.58	105.80
57	BB	619	G	C6-N1-C2	5.55	128.43	125.10
57	BB	939	G	C5-C6-O6	-5.55	125.27	128.60
57	BB	1134	A	C5-C6-N1	-5.55	114.92	117.70
57	BB	1280	G	C2-N3-C4	-5.55	109.12	111.90
57	BB	1929	G	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	1970	A	C2-N3-C4	5.55	113.38	110.60
57	BB	2261	C	C5-C4-N4	-5.55	116.31	120.20
57	BB	2292	U	C5-C4-O4	-5.55	122.57	125.90
57	BB	2345	G	O4'-C1'-N9	5.55	112.64	108.20
57	BB	2361	G	C2-N3-C4	-5.55	109.12	111.90
21	AA	85	U	C5'-C4'-O4'	5.55	115.76	109.10
21	AA	1237	C	N3-C4-C5	-5.55	119.68	121.90
21	AA	1350	A	P-O3'-C3'	5.55	126.36	119.70
21	AA	1356	G	N3-C2-N2	5.55	123.79	119.90
22	AY	34	G	N1-C6-O6	5.55	123.23	119.90
24	AX	13	A	C6-C5-N7	-5.55	128.41	132.30
56	BH	91	PHE	CB-CG-CD2	5.55	124.69	120.80
57	BB	23	G	C8-N9-C4	-5.55	104.18	106.40
57	BB	1336	A	C4'-C3'-C2'	-5.55	97.05	102.60
57	BB	2813	A	C4-C5-C6	5.55	119.78	117.00
21	AA	191	G	N3-C4-N9	-5.55	122.67	126.00
21	AA	879	C	C6-N1-C1'	-5.55	114.14	120.80
21	AA	1383	C	C6-N1-C1'	-5.55	114.14	120.80
21	AA	1498	U	P-O3'-C3'	-5.55	113.04	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	53	G	P-O3'-C3'	-5.55	113.04	119.70
35	BP	82	SER	N-CA-CB	-5.55	102.17	110.50
37	BR	61	ALA	CB-CA-C	-5.55	101.77	110.10
57	BB	240	C	N3-C4-C5	-5.55	119.68	121.90
57	BB	535	G	C4'-C3'-C2'	-5.55	97.05	102.60
57	BB	603	A	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	716	A	N7-C8-N9	5.55	116.58	113.80
57	BB	1025	G	N1-C2-N3	-5.55	120.57	123.90
57	BB	1602	U	P-O3'-C3'	5.55	126.36	119.70
57	BB	1800	C	OP1-P-OP2	-5.55	111.27	119.60
57	BB	2201	G	C8-N9-C1'	5.55	134.22	127.00
57	BB	2624	G	C8-N9-C4	-5.55	104.18	106.40
57	BB	2671	G	C2-N3-C4	5.55	114.67	111.90
21	AA	461	A	C5-C6-N1	-5.55	114.93	117.70
21	AA	702	A	C4'-C3'-C2'	5.55	108.15	102.60
21	AA	966	G	N1-C2-N3	-5.55	120.57	123.90
21	AA	1057	G	O4'-C4'-C3'	5.55	110.54	106.10
52	BD	80	TRP	CB-CG-CD1	5.55	134.22	127.00
57	BB	62	U	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	103	A	N3-C4-N9	5.55	131.84	127.40
57	BB	613	A	C6-N1-C2	-5.55	115.27	118.60
57	BB	650	C	C6-N1-C2	-5.55	118.08	120.30
57	BB	1172	C	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	1416	G	N7-C8-N9	-5.55	110.33	113.10
57	BB	1541	C	C5-C6-N1	-5.55	118.22	121.00
57	BB	2088	A	C5-C6-N6	-5.55	119.26	123.70
57	BB	2193	G	C5'-C4'-C3'	-5.55	107.12	116.00
57	BB	2386	A	C6-C5-N7	-5.55	128.42	132.30
57	BB	2514	U	N3-C4-C5	-5.55	111.27	114.60
57	BB	2608	G	O4'-C1'-N9	5.55	112.64	108.20
58	BA	99	A	O5'-P-OP1	-5.55	100.70	105.70
21	AA	329	A	P-O3'-C3'	5.55	126.36	119.70
21	AA	610	U	C6-N1-C1'	-5.55	113.43	121.20
57	BB	39	G	C5-C6-N1	5.55	114.27	111.50
57	BB	126	A	C8-N9-C4	5.55	108.02	105.80
57	BB	311	A	N1-C2-N3	5.55	132.07	129.30
57	BB	400	G	N7-C8-N9	5.55	115.87	113.10
57	BB	1356	G	C2-N3-C4	5.55	114.67	111.90
57	BB	1600	C	C5'-C4'-O4'	5.55	115.76	109.10
21	AA	147	G	C5-C6-O6	-5.55	125.27	128.60
21	AA	522	C	N1-C2-O2	5.55	122.23	118.90
21	AA	1176	A	O4'-C1'-N9	5.55	112.64	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1275	A	C6-C5-N7	-5.55	128.42	132.30
25	AZ	258	VAL	N-CA-C	-5.55	96.02	111.00
36	BQ	31	TYR	CD1-CE1-CZ	-5.55	114.81	119.80
36	BQ	100	PHE	CB-CG-CD2	5.55	124.68	120.80
55	BG	54	ARG	NE-CZ-NH1	5.55	123.07	120.30
57	BB	117	G	C4-C5-C6	5.55	122.13	118.80
57	BB	2362	C	P-O3'-C3'	-5.55	113.05	119.70
57	BB	2765	A	C4-C5-C6	5.55	119.77	117.00
57	BB	2825	G	C6-C5-N7	-5.55	127.07	130.40
21	AA	252	U	C6-N1-C2	-5.54	117.67	121.00
21	AA	421	U	C4'-C3'-C2'	-5.54	97.06	102.60
53	BE	145	ASP	CB-CG-OD2	-5.54	113.31	118.30
57	BB	90	U	O4'-C1'-N1	5.54	112.64	108.20
57	BB	131	A	N1-C6-N6	5.54	121.93	118.60
57	BB	2296	U	O4'-C1'-N1	5.54	112.64	108.20
57	BB	2511	U	N1-C2-N3	-5.54	111.57	114.90
57	BB	2549	G	C6-C5-N7	-5.54	127.07	130.40
57	BB	2873	A	C5-N7-C8	5.54	106.67	103.90
58	BA	112	G	C8-N9-C1'	5.54	134.21	127.00
4	AM	11	HIS	N-CA-CB	5.54	120.58	110.60
21	AA	115	G	C4'-C3'-C2'	5.54	108.14	102.60
21	AA	537	G	C5-C6-N1	5.54	114.27	111.50
21	AA	700	G	C5-C6-O6	-5.54	125.27	128.60
21	AA	807	A	N3-C4-N9	-5.54	122.97	127.40
26	AV	66	C	N3-C4-C5	5.54	124.12	121.90
57	BB	283	G	O4'-C1'-N9	5.54	112.63	108.20
57	BB	528	A	N9-C4-C5	5.54	108.02	105.80
57	BB	792	A	C8-N9-C4	5.54	108.02	105.80
57	BB	997	G	C5-N7-C8	5.54	107.07	104.30
57	BB	1041	G	N7-C8-N9	-5.54	110.33	113.10
57	BB	1156	A	C3'-C2'-C1'	-5.54	97.06	101.50
57	BB	1544	A	O4'-C4'-C3'	-5.54	98.46	104.00
57	BB	1787	A	N3-C4-C5	-5.54	122.92	126.80
57	BB	1802	A	N9-C4-C5	5.54	108.02	105.80
57	BB	1866	A	C5-C6-N6	-5.54	119.27	123.70
57	BB	2885	G	C4-C5-C6	5.54	122.13	118.80
7	AP	56	ARG	NE-CZ-NH2	-5.54	117.53	120.30
21	AA	100	G	N3-C2-N2	5.54	123.78	119.90
21	AA	197	A	P-O5'-C5'	-5.54	112.03	120.90
21	AA	652	U	N3-C4-C5	-5.54	111.28	114.60
21	AA	765	G	P-O3'-C3'	-5.54	113.05	119.70
21	AA	1073	U	C5-C6-N1	5.54	125.47	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1412	C	P-O3'-C3'	-5.54	113.05	119.70
22	AY	5	A	C8-N9-C4	5.54	108.02	105.80
57	BB	279	A	N7-C8-N9	5.54	116.57	113.80
57	BB	337	C	C5-C6-N1	5.54	123.77	121.00
57	BB	364	C	C5'-C4'-C3'	-5.54	107.13	116.00
57	BB	482	A	C2-N3-C4	-5.54	107.83	110.60
57	BB	1576	U	C2-N3-C4	-5.54	123.67	127.00
57	BB	1989	G	C5'-C4'-O4'	5.54	115.75	109.10
57	BB	2046	G	N1-C2-N3	-5.54	120.58	123.90
57	BB	2067	G	N1-C2-N3	-5.54	120.58	123.90
57	BB	2103	C	C5-C4-N4	-5.54	116.32	120.20
57	BB	2253	G	O4'-C1'-C2'	-5.54	100.26	105.80
57	BB	2733	A	N9-C4-C5	5.54	108.02	105.80
21	AA	241	G	N1-C2-N3	-5.54	120.58	123.90
21	AA	345	C	C5-C6-N1	5.54	123.77	121.00
21	AA	1118	U	C6-N1-C1'	-5.54	113.44	121.20
21	AA	1184	G	N1-C2-N3	-5.54	120.58	123.90
21	AA	1207	G	C4'-C3'-C2'	-5.54	97.06	102.60
21	AA	1396	A	C8-N9-C4	5.54	108.02	105.80
35	BP	112	ARG	NE-CZ-NH1	5.54	123.07	120.30
57	BB	500	G	C6-N1-C2	5.54	128.42	125.10
57	BB	1223	G	C4-C5-N7	-5.54	108.58	110.80
57	BB	1626	A	N3-C4-C5	-5.54	122.92	126.80
57	BB	2896	C	C4-C5-C6	5.54	120.17	117.40
21	AA	1485	U	N3-C2-O2	5.54	126.08	122.20
21	AA	1512	U	N1-C2-N3	-5.54	111.58	114.90
27	B5	42	VAL	CA-CB-CG1	-5.54	102.59	110.90
40	BU	80	ASP	CB-CG-OD2	-5.54	113.31	118.30
55	BG	114	HIS	CA-CB-CG	5.54	123.02	113.60
57	BB	74	A	C4-C5-N7	-5.54	107.93	110.70
57	BB	217	A	C5-C6-N1	-5.54	114.93	117.70
57	BB	362	A	P-O3'-C3'	5.54	126.35	119.70
57	BB	488	G	O4'-C1'-N9	5.54	112.63	108.20
57	BB	907	G	C4-N9-C1'	-5.54	119.30	126.50
57	BB	1091	G	C6-N1-C2	5.54	128.42	125.10
57	BB	1223	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	1308	A	P-O5'-C5'	5.54	129.76	120.90
57	BB	1433	A	N1-C2-N3	5.54	132.07	129.30
57	BB	1483	G	C4-C5-N7	-5.54	108.58	110.80
57	BB	1663	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	1849	G	N9-C4-C5	5.54	107.61	105.40
57	BB	1902	C	O4'-C1'-N1	5.54	112.63	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1966	A	C4-C5-C6	5.54	119.77	117.00
57	BB	2276	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	2378	A	OP1-P-OP2	-5.54	111.29	119.60
57	BB	2809	A	N9-C4-C5	5.54	108.02	105.80
21	AA	861	G	O5'-P-OP2	-5.54	100.72	105.70
22	AY	68	U	C5'-C4'-O4'	5.54	115.74	109.10
57	BB	857	G	N3-C2-N2	5.54	123.78	119.90
57	BB	1580	A	C8-N9-C4	-5.54	103.58	105.80
14	AC	41	TYR	CG-CD1-CE1	-5.54	116.87	121.30
21	AA	956	U	C5-C4-O4	-5.54	122.58	125.90
21	AA	1005	A	C8-N9-C4	-5.54	103.59	105.80
21	AA	1110	A	N1-C2-N3	-5.54	126.53	129.30
21	AA	1181	G	O4'-C1'-N9	-5.54	103.77	108.20
21	AA	1468	A	O4'-C4'-C3'	-5.54	98.46	104.00
21	AA	1492	A	O4'-C1'-N9	5.54	112.63	108.20
22	AY	28	C	P-O5'-C5'	5.54	129.76	120.90
23	AW	2	C	C4-C5-C6	5.54	120.17	117.40
25	AZ	87	TYR	CG-CD2-CE2	-5.54	116.87	121.30
25	AZ	377	ARG	NE-CZ-NH1	-5.54	117.53	120.30
57	BB	623	C	C6-N1-C1'	-5.54	114.16	120.80
57	BB	887	U	O4'-C1'-N1	5.54	112.63	108.20
57	BB	1193	G	N3-C4-N9	-5.54	122.68	126.00
57	BB	1614	A	C6-C5-N7	-5.54	128.43	132.30
57	BB	2569	G	C3'-C2'-C1'	5.54	105.93	101.50
57	BB	2884	U	C2-N1-C1'	5.54	124.34	117.70
21	AA	1005	A	O4'-C1'-N9	5.53	112.63	108.20
21	AA	1069	C	C2-N3-C4	-5.53	117.13	119.90
21	AA	1191	A	N1-C2-N3	5.53	132.07	129.30
21	AA	1262	C	C5-C6-N1	5.53	123.77	121.00
21	AA	1466	C	N1-C2-N3	5.53	123.07	119.20
21	AA	1473	G	N7-C8-N9	-5.53	110.33	113.10
26	AV	63	G	N3-C2-N2	5.53	123.77	119.90
42	BW	24	ARG	CB-CA-C	5.53	121.47	110.40
57	BB	1410	G	C4'-C3'-C2'	-5.53	97.07	102.60
57	BB	1642	G	P-O3'-C3'	-5.53	113.06	119.70
57	BB	1873	G	C8-N9-C4	-5.53	104.19	106.40
57	BB	2169	A	P-O5'-C5'	5.53	129.75	120.90
57	BB	2462	C	C2-N3-C4	5.53	122.67	119.90
21	AA	1316	G	N3-C4-C5	-5.53	125.83	128.60
21	AA	1381	U	O4'-C1'-N1	5.53	112.63	108.20
30	BK	60	VAL	CA-CB-CG1	-5.53	102.60	110.90
46	BZ	32	GLY	N-CA-C	-5.53	99.27	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	770	G	O4'-C1'-N9	5.53	112.62	108.20
57	BB	1729	U	O4'-C1'-C2'	-5.53	100.27	105.80
57	BB	1769	U	C5-C4-O4	5.53	129.22	125.90
57	BB	1959	G	N9-C4-C5	5.53	107.61	105.40
57	BB	2694	G	N3-C2-N2	5.53	123.77	119.90
21	AA	150	U	C2-N3-C4	5.53	130.32	127.00
21	AA	707	U	N3-C4-C5	5.53	117.92	114.60
21	AA	882	C	P-O3'-C3'	-5.53	113.06	119.70
21	AA	1026	G	N3-C2-N2	5.53	123.77	119.90
21	AA	1085	U	O4'-C1'-N1	5.53	112.62	108.20
57	BB	302	C	C4-C5-C6	5.53	120.17	117.40
57	BB	361	G	C1'-O4'-C4'	5.53	114.33	109.90
57	BB	656	G	C5-C6-N1	-5.53	108.73	111.50
57	BB	918	A	C6-N1-C2	5.53	121.92	118.60
57	BB	1004	U	C1'-O4'-C4'	5.53	114.33	109.90
57	BB	1139	G	N3-C2-N2	-5.53	116.03	119.90
57	BB	2223	G	N1-C2-N3	-5.53	120.58	123.90
57	BB	2370	G	N1-C2-N3	-5.53	120.58	123.90
57	BB	2873	A	C2'-C3'-O3'	5.53	122.55	113.70
58	BA	86	G	N7-C8-N9	5.53	115.86	113.10
58	BA	117	G	C6-C5-N7	-5.53	127.08	130.40
21	AA	333	U	C5-C4-O4	-5.53	122.58	125.90
21	AA	485	U	C6-N1-C2	5.53	124.32	121.00
21	AA	608	A	C8-N9-C4	-5.53	103.59	105.80
21	AA	668	G	N3-C2-N2	5.53	123.77	119.90
21	AA	1361	G	C4-C5-C6	5.53	122.12	118.80
38	BS	64	ALA	N-CA-CB	5.53	117.84	110.10
57	BB	116	C	C4-C5-C6	5.53	120.17	117.40
57	BB	468	G	C5-N7-C8	-5.53	101.53	104.30
57	BB	1170	C	C1'-O4'-C4'	5.53	114.32	109.90
57	BB	1593	A	C8-N9-C4	5.53	108.01	105.80
2	AK	60	PHE	CB-CG-CD1	-5.53	116.93	120.80
21	AA	14	U	N3-C4-O4	5.53	123.27	119.40
21	AA	70	U	O3'-P-O5'	-5.53	93.50	104.00
22	AY	51	G	C4-C5-N7	-5.53	108.59	110.80
29	BJ	128	ASN	N-CA-CB	5.53	120.55	110.60
35	BP	58	PHE	N-CA-C	-5.53	96.07	111.00
42	BW	75	ASN	N-CA-CB	5.53	120.55	110.60
57	BB	53	A	C5-N7-C8	5.53	106.66	103.90
57	BB	508	A	C5-C6-N1	-5.53	114.94	117.70
57	BB	740	C	C2-N3-C4	5.53	122.66	119.90
57	BB	1665	A	N9-C4-C5	5.53	108.01	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2053	G	O4'-C1'-N9	5.53	112.62	108.20
21	AA	361	G	N7-C8-N9	5.53	115.86	113.10
21	AA	629	A	N1-C2-N3	5.53	132.06	129.30
21	AA	748	G	C6-N1-C2	5.53	128.41	125.10
21	AA	856	C	C6-N1-C2	5.53	122.51	120.30
21	AA	905	U	N1-C2-O2	-5.53	118.93	122.80
21	AA	960	U	C2'-C3'-O3'	5.53	122.54	113.70
21	AA	1241	G	N9-C4-C5	-5.53	103.19	105.40
21	AA	1427	C	C5-C6-N1	5.53	123.76	121.00
22	AY	23	A	O4'-C4'-C3'	-5.53	98.47	104.00
34	BO	52	SER	N-CA-CB	5.53	118.79	110.50
57	BB	386	G	N3-C2-N2	5.53	123.77	119.90
57	BB	852	U	N3-C2-O2	5.53	126.07	122.20
57	BB	1659	G	C5-N7-C8	5.53	107.06	104.30
57	BB	1867	G	O4'-C1'-N9	5.53	112.62	108.20
57	BB	1920	C	C2-N1-C1'	5.53	124.88	118.80
57	BB	2075	U	N3-C2-O2	5.53	126.07	122.20
57	BB	2183	A	N3-C4-N9	5.53	131.82	127.40
57	BB	2431	U	N1-C2-N3	-5.53	111.58	114.90
57	BB	2623	G	C5-N7-C8	-5.53	101.54	104.30
58	BA	80	U	C6-N1-C2	-5.53	117.68	121.00
25	AZ	46	PHE	C-N-CA	5.52	135.51	121.70
57	BB	219	A	N9-C4-C5	5.52	108.01	105.80
57	BB	388	G	C1'-O4'-C4'	-5.52	105.48	109.90
57	BB	927	A	N3-C4-N9	5.52	131.82	127.40
57	BB	1468	U	O4'-C1'-N1	5.52	112.62	108.20
57	BB	2267	A	P-O3'-C3'	-5.52	113.07	119.70
20	AI	16	ALA	CB-CA-C	-5.52	101.81	110.10
21	AA	366	A	C6-C5-N7	-5.52	128.44	132.30
21	AA	467	U	C5-C4-O4	-5.52	122.59	125.90
21	AA	627	G	P-O3'-C3'	-5.52	113.07	119.70
21	AA	752	G	P-O3'-C3'	5.52	126.33	119.70
21	AA	863	U	C5-C4-O4	-5.52	122.59	125.90
21	AA	926	G	N7-C8-N9	-5.52	110.34	113.10
21	AA	1342	C	C6-N1-C2	-5.52	118.09	120.30
22	AY	68	U	P-O5'-C5'	-5.52	112.06	120.90
25	AZ	66	HIS	CA-CB-CG	-5.52	104.21	113.60
26	AV	24	U	O4'-C1'-N1	5.52	112.62	108.20
37	BR	21	ARG	NE-CZ-NH1	-5.52	117.54	120.30
54	BF	67	THR	CA-CB-CG2	-5.52	104.67	112.40
57	BB	17	G	N1-C6-O6	5.52	123.21	119.90
57	BB	64	A	C4-C5-N7	5.52	113.46	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	273	G	N1-C6-O6	5.52	123.21	119.90
57	BB	303	G	C4-C5-C6	5.52	122.11	118.80
57	BB	880	G	C5'-C4'-O4'	5.52	115.73	109.10
57	BB	1127	A	C1'-O4'-C4'	5.52	114.32	109.90
57	BB	1275	A	N7-C8-N9	5.52	116.56	113.80
57	BB	1432	G	C2-N3-C4	5.52	114.66	111.90
57	BB	1493	C	C2-N3-C4	5.52	122.66	119.90
57	BB	1995	U	OP1-P-OP2	-5.52	111.31	119.60
57	BB	2334	U	C4-C5-C6	5.52	123.01	119.70
57	BB	2455	G	N9-C4-C5	-5.52	103.19	105.40
57	BB	2804	U	C5-C6-N1	5.52	125.46	122.70
58	BA	58	A	C4-C5-N7	-5.52	107.94	110.70
21	AA	37	U	C4-C5-C6	5.52	123.01	119.70
21	AA	1364	U	N1-C2-N3	-5.52	111.59	114.90
57	BB	1024	G	N9-C4-C5	-5.52	103.19	105.40
57	BB	2169	A	P-O3'-C3'	5.52	126.33	119.70
57	BB	2548	U	N1-C2-O2	5.52	126.67	122.80
57	BB	2707	U	C2-N3-C4	-5.52	123.69	127.00
57	BB	2819	G	O4'-C1'-N9	5.52	112.62	108.20
21	AA	830	G	N3-C4-N9	-5.52	122.69	126.00
23	AW	35	A	C2-N3-C4	-5.52	107.84	110.60
26	AV	64	G	C4-C5-C6	5.52	122.11	118.80
57	BB	482	A	C5-C6-N1	-5.52	114.94	117.70
57	BB	483	A	P-O3'-C3'	-5.52	113.08	119.70
57	BB	608	A	O4'-C4'-C3'	-5.52	98.48	104.00
57	BB	712	G	C5-C6-O6	-5.52	125.29	128.60
57	BB	741	U	C2-N1-C1'	-5.52	111.08	117.70
57	BB	1189	A	C5-C6-N6	5.52	128.12	123.70
57	BB	1204	A	C6-N1-C2	5.52	121.91	118.60
57	BB	2671	G	C6-C5-N7	-5.52	127.09	130.40
58	BA	102	G	N3-C4-C5	-5.52	125.84	128.60
58	BA	104	A	OP1-P-OP2	-5.52	111.32	119.60
15	AD	80	ARG	NE-CZ-NH2	5.52	123.06	120.30
18	AG	52	ARG	O-C-N	-5.52	113.87	122.70
21	AA	137	U	O4'-C1'-C2'	-5.52	100.28	105.80
21	AA	313	A	C5-C6-N6	-5.52	119.28	123.70
21	AA	535	A	C5-C6-N6	-5.52	119.29	123.70
21	AA	1366	C	N3-C4-C5	-5.52	119.69	121.90
45	BC	160	TYR	CB-CA-C	-5.52	99.36	110.40
57	BB	508	A	O4'-C1'-N9	5.52	112.61	108.20
57	BB	629	G	C5-N7-C8	-5.52	101.54	104.30
57	BB	1123	C	O4'-C1'-N1	5.52	112.61	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1328	A	C2-N3-C4	-5.52	107.84	110.60
57	BB	1347	A	C5-N7-C8	5.52	106.66	103.90
57	BB	1382	G	N1-C2-N2	-5.52	111.23	116.20
57	BB	1820	U	O4'-C1'-N1	5.52	112.61	108.20
57	BB	2101	A	C6-C5-N7	-5.52	128.44	132.30
57	BB	2408	U	C3'-C2'-C1'	5.52	105.91	101.50
21	AA	798	U	C2-N3-C4	5.52	130.31	127.00
21	AA	880	C	P-O5'-C5'	-5.52	112.07	120.90
21	AA	885	G	O4'-C4'-C3'	-5.52	98.48	104.00
57	BB	126	A	N1-C2-N3	-5.52	126.54	129.30
57	BB	901	C	C2-N3-C4	5.52	122.66	119.90
57	BB	942	G	C4-C5-C6	-5.52	115.49	118.80
57	BB	1338	G	C6-N1-C2	-5.52	121.79	125.10
21	AA	193	C	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	407	U	C5-C6-N1	5.51	125.46	122.70
21	AA	563	A	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	574	A	C4'-C3'-C2'	5.51	108.11	102.60
21	AA	892	A	C1'-O4'-C4'	-5.51	105.49	109.90
21	AA	928	G	C5-N7-C8	5.51	107.06	104.30
21	AA	1423	G	N7-C8-N9	5.51	115.86	113.10
25	AZ	67	VAL	CG1-CB-CG2	5.51	119.72	110.90
57	BB	139	U	C5-C4-O4	-5.51	122.59	125.90
57	BB	500	G	C4-C5-C6	5.51	122.11	118.80
57	BB	1579	A	C5-C6-N1	-5.51	114.94	117.70
57	BB	1822	C	C2-N3-C4	5.51	122.66	119.90
57	BB	2270	A	N1-C2-N3	5.51	132.06	129.30
57	BB	2305	U	C4'-C3'-C2'	-5.51	97.08	102.60
57	BB	2805	C	C5-C4-N4	5.51	124.06	120.20
57	BB	2893	A	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	1001	C	N1-C2-N3	-5.51	115.34	119.20
25	AZ	361	THR	N-CA-C	-5.51	96.11	111.00
26	AV	76	A	C5'-C4'-O4'	5.51	115.72	109.10
53	BE	7	ASP	CB-CG-OD1	-5.51	113.34	118.30
57	BB	280	U	N3-C4-C5	5.51	117.91	114.60
57	BB	702	U	P-O3'-C3'	5.51	126.32	119.70
57	BB	1824	G	N1-C6-O6	5.51	123.21	119.90
57	BB	2277	G	C8-N9-C4	5.51	108.61	106.40
58	BA	58	A	N7-C8-N9	5.51	116.56	113.80
19	AH	84	ILE	CA-CB-CG1	5.51	121.47	111.00
21	AA	49	U	O4'-C1'-N1	5.51	112.61	108.20
21	AA	50	A	N9-C4-C5	5.51	108.00	105.80
21	AA	266	G	C2-N3-C4	5.51	114.66	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	355	C	C5-C4-N4	-5.51	116.34	120.20
21	AA	650	G	N3-C2-N2	5.51	123.76	119.90
21	AA	1273	C	C1'-O4'-C4'	-5.51	105.49	109.90
22	AY	19	G	C3'-C2'-C1'	5.51	105.91	101.50
23	AW	52	G	N1-C2-N3	-5.51	120.59	123.90
51	B4	14	CYS	N-CA-C	-5.51	96.12	111.00
57	BB	338	G	C5-C6-O6	5.51	131.91	128.60
57	BB	709	U	C2-N3-C4	-5.51	123.69	127.00
57	BB	972	A	C8-N9-C4	-5.51	103.60	105.80
57	BB	1016	G	N3-C4-C5	-5.51	125.84	128.60
57	BB	1827	U	OP1-P-OP2	-5.51	111.33	119.60
57	BB	2215	C	OP2-P-O3'	5.51	117.33	105.20
57	BB	2581	G	P-O5'-C5'	-5.51	112.08	120.90
57	BB	2877	G	C5-C6-O6	-5.51	125.29	128.60
15	AD	11	SER	N-CA-CB	5.51	118.76	110.50
21	AA	65	A	C8-N9-C4	-5.51	103.60	105.80
21	AA	115	G	C2-N3-C4	5.51	114.66	111.90
21	AA	177	G	N1-C2-N3	-5.51	120.59	123.90
21	AA	215	C	C6-N1-C2	-5.51	118.10	120.30
21	AA	312	C	N3-C4-C5	-5.51	119.70	121.90
21	AA	369	G	C4-C5-C6	5.51	122.11	118.80
21	AA	745	G	C8-N9-C1'	5.51	134.16	127.00
21	AA	825	A	C4-N9-C1'	5.51	136.22	126.30
21	AA	974	A	C5'-C4'-O4'	5.51	115.71	109.10
25	AZ	76	TYR	N-CA-CB	5.51	120.52	110.60
26	AV	5	G	N7-C8-N9	-5.51	110.35	113.10
57	BB	564	C	C2-N1-C1'	5.51	124.86	118.80
57	BB	797	G	C6-C5-N7	-5.51	127.09	130.40
57	BB	1009	A	C3'-C2'-C1'	-5.51	97.09	101.50
57	BB	2038	G	N9-C4-C5	-5.51	103.20	105.40
57	BB	2328	A	P-O3'-C3'	-5.51	113.09	119.70
57	BB	2525	G	N1-C2-N3	-5.51	120.59	123.90
58	BA	56	G	C5-C6-N1	-5.51	108.75	111.50
21	AA	142	G	O4'-C1'-N9	5.51	112.61	108.20
21	AA	300	A	C1'-O4'-C4'	5.51	114.31	109.90
21	AA	1297	G	C6-C5-N7	-5.51	127.09	130.40
23	AW	33	U	O5'-P-OP1	5.51	117.31	110.70
27	B5	28	ALA	O-C-N	5.51	131.51	122.70
57	BB	738	G	N1-C2-N3	-5.51	120.59	123.90
57	BB	2115	G	N9-C1'-C2'	-5.51	105.94	112.00
11	AT	45	ALA	N-CA-CB	5.51	117.81	110.10
21	AA	540	G	N7-C8-N9	5.51	115.85	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	656	G	N3-C4-C5	-5.51	125.85	128.60
21	AA	818	G	C4-N9-C1'	5.51	133.66	126.50
21	AA	1005	A	C5-N7-C8	5.51	106.65	103.90
21	AA	1343	G	C6-C5-N7	-5.51	127.10	130.40
22	AY	9	A	O4'-C1'-N9	5.51	112.61	108.20
36	BQ	26	ALA	CB-CA-C	-5.51	101.84	110.10
45	BC	247	TRP	CH2-CZ2-CE2	5.51	122.91	117.40
57	BB	161	A	C3'-C2'-C1'	-5.51	97.09	101.50
57	BB	1568	G	C8-N9-C4	5.51	108.60	106.40
57	BB	1726	C	C2-N1-C1'	5.51	124.86	118.80
57	BB	1903	G	C5-N7-C8	5.51	107.05	104.30
57	BB	1913	A	N1-C6-N6	5.51	121.90	118.60
57	BB	1935	G	C4-C5-N7	5.51	113.00	110.80
57	BB	2555	U	C2-N1-C1'	-5.51	111.09	117.70
57	BB	2750	A	C5'-C4'-C3'	-5.51	107.19	116.00
57	BB	2765	A	O4'-C4'-C3'	-5.51	98.49	104.00
9	AR	42	ARG	NE-CZ-NH1	5.50	123.05	120.30
21	AA	96	U	C5'-C4'-O4'	5.50	115.71	109.10
21	AA	332	G	N1-C2-N3	-5.50	120.60	123.90
21	AA	526	C	C1'-O4'-C4'	5.50	114.30	109.90
57	BB	1984	G	C4'-C3'-C2'	-5.50	97.09	102.60
21	AA	102	G	C5-C6-O6	-5.50	125.30	128.60
21	AA	791	G	C8-N9-C4	-5.50	104.20	106.40
21	AA	1016	A	OP1-P-OP2	-5.50	111.34	119.60
21	AA	1305	G	C4-N9-C1'	-5.50	119.34	126.50
22	AY	55	U	N3-C4-C5	-5.50	111.30	114.60
23	AW	35	A	C6-C5-N7	-5.50	128.45	132.30
28	BI	92	PRO	N-CD-CG	5.50	111.46	103.20
38	BS	87	PRO	N-CA-CB	-5.50	96.55	102.60
41	BV	79	ARG	NE-CZ-NH1	-5.50	117.55	120.30
57	BB	205	G	C4'-C3'-C2'	-5.50	97.10	102.60
57	BB	241	A	C5-N7-C8	5.50	106.65	103.90
57	BB	364	C	C2-N3-C4	5.50	122.65	119.90
57	BB	661	A	C6-N1-C2	5.50	121.90	118.60
57	BB	1828	G	N9-C4-C5	5.50	107.60	105.40
57	BB	1855	U	C5'-C4'-C3'	-5.50	107.19	116.00
57	BB	2007	U	C2-N3-C4	5.50	130.30	127.00
57	BB	2070	A	N1-C2-N3	5.50	132.05	129.30
57	BB	2367	G	N7-C8-N9	-5.50	110.35	113.10
57	BB	2619	C	N1-C2-N3	-5.50	115.35	119.20
21	AA	377	G	C5-C6-N1	5.50	114.25	111.50
23	AW	56	C	N3-C4-N4	5.50	121.85	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BR	92	TRP	CD1-CG-CD2	5.50	110.70	106.30
57	BB	1174	U	C6-N1-C2	-5.50	117.70	121.00
57	BB	1624	U	C5-C6-N1	-5.50	119.95	122.70
57	BB	2377	A	C6-N1-C2	5.50	121.90	118.60
21	AA	520	A	C4-C5-C6	5.50	119.75	117.00
21	AA	1035	A	C5-N7-C8	5.50	106.65	103.90
57	BB	265	A	N3-C4-N9	-5.50	123.00	127.40
57	BB	435	C	C2-N1-C1'	5.50	124.85	118.80
57	BB	849	A	C8-N9-C4	-5.50	103.60	105.80
57	BB	1143	A	N9-C4-C5	5.50	108.00	105.80
57	BB	1845	G	OP1-P-OP2	-5.50	111.35	119.60
57	BB	1861	G	C5-C6-N1	-5.50	108.75	111.50
57	BB	2335	A	O5'-P-OP1	-5.50	100.75	105.70
57	BB	2872	A	C5-C6-N1	-5.50	114.95	117.70
21	AA	254	G	N7-C8-N9	5.50	115.85	113.10
21	AA	257	G	C2-N3-C4	5.50	114.65	111.90
21	AA	600	A	C8-N9-C4	-5.50	103.60	105.80
21	AA	605	U	C5-C6-N1	5.50	125.45	122.70
21	AA	955	U	P-O5'-C5'	5.50	129.70	120.90
21	AA	969	A	C4-C5-C6	5.50	119.75	117.00
22	AY	11	C	O4'-C1'-N1	5.50	112.60	108.20
45	BC	270	ARG	NH1-CZ-NH2	-5.50	113.35	119.40
57	BB	71	A	N3-C4-C5	-5.50	122.95	126.80
57	BB	334	C	P-O3'-C3'	-5.50	113.10	119.70
57	BB	473	G	O4'-C4'-C3'	-5.50	98.50	104.00
57	BB	1021	A	O4'-C1'-N9	5.50	112.60	108.20
57	BB	1341	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	1418	G	P-O3'-C3'	-5.50	113.10	119.70
57	BB	1482	G	C5-N7-C8	5.50	107.05	104.30
57	BB	1790	C	C4-C5-C6	5.50	120.15	117.40
57	BB	2012	G	C4-N9-C1'	5.50	133.65	126.50
57	BB	2034	U	P-O3'-C3'	5.50	126.30	119.70
57	BB	2166	U	C5'-C4'-C3'	-5.50	107.20	116.00
57	BB	2511	U	C5-C6-N1	5.50	125.45	122.70
57	BB	2525	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	2883	A	OP1-P-OP2	-5.50	111.35	119.60
21	AA	124	C	N3-C2-O2	-5.50	118.05	121.90
21	AA	246	A	C5-C6-N6	-5.50	119.30	123.70
21	AA	1258	G	N7-C8-N9	5.50	115.85	113.10
57	BB	24	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	221	A	N9-C4-C5	-5.50	103.60	105.80
57	BB	389	G	N3-C2-N2	5.50	123.75	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	448	U	C5-C6-N1	5.50	125.45	122.70
57	BB	1278	C	C1'-O4'-C4'	-5.50	105.50	109.90
57	BB	1456	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	1622	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	1635	A	C6-N1-C2	-5.50	115.30	118.60
57	BB	1983	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	2326	C	C5-C6-N1	5.50	123.75	121.00
57	BB	2404	U	C5-C6-N1	5.50	125.45	122.70
57	BB	2748	A	C5'-C4'-O4'	5.50	115.70	109.10
57	BB	2862	G	N1-C2-N3	-5.50	120.60	123.90
21	AA	310	G	C8-N9-C4	-5.50	104.20	106.40
21	AA	1045	C	N3-C4-C5	-5.50	119.70	121.90
41	BV	74	ALA	CB-CA-C	-5.50	101.86	110.10
54	BF	7	TYR	CB-CG-CD1	-5.50	117.70	121.00
57	BB	1091	G	C5-N7-C8	-5.50	101.55	104.30
57	BB	1696	G	C8-N9-C4	-5.50	104.20	106.40
57	BB	1823	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	2114	A	C4-C5-C6	5.50	119.75	117.00
57	BB	2152	G	C5-C6-O6	5.50	131.90	128.60
57	BB	2215	C	C1'-O4'-C4'	5.50	114.30	109.90
57	BB	2508	G	N7-C8-N9	-5.50	110.35	113.10
57	BB	2734	A	P-O3'-C3'	-5.50	113.11	119.70
58	BA	10	G	N1-C6-O6	5.50	123.20	119.90
21	AA	618	C	C6-N1-C2	-5.49	118.10	120.30
21	AA	1061	G	O4'-C4'-C3'	-5.49	98.51	104.00
53	BE	101	TYR	CB-CG-CD2	-5.49	117.70	121.00
57	BB	848	C	N3-C2-O2	-5.49	118.05	121.90
57	BB	1129	A	C6-C5-N7	-5.49	128.46	132.30
57	BB	1456	G	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	1895	C	C5-C4-N4	-5.49	116.35	120.20
57	BB	2174	C	C6-N1-C2	-5.49	118.10	120.30
57	BB	2630	G	C5-C6-N1	-5.49	108.75	111.50
57	BB	2780	G	N3-C2-N2	5.49	123.75	119.90
21	AA	232	G	C5'-C4'-O4'	5.49	115.69	109.10
32	BM	11	LYS	N-CA-CB	5.49	120.48	110.60
57	BB	404	A	C5'-C4'-C3'	-5.49	107.21	116.00
57	BB	944	C	C5-C4-N4	-5.49	116.36	120.20
57	BB	1500	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1510	G	C5'-C4'-O4'	5.49	115.69	109.10
57	BB	2378	A	C5'-C4'-C3'	-5.49	107.21	116.00
1	AJ	45	ARG	NE-CZ-NH2	-5.49	117.56	120.30
21	AA	66	A	C4-C5-N7	-5.49	107.95	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	396	C	OP1-P-OP2	-5.49	111.37	119.60
21	AA	408	A	P-O3'-C3'	5.49	126.29	119.70
21	AA	540	G	C5-N7-C8	-5.49	101.56	104.30
21	AA	1105	A	N3-C4-C5	-5.49	122.96	126.80
21	AA	1385	G	C2-N3-C4	5.49	114.65	111.90
24	AX	20	U	C4-C5-C6	-5.49	116.41	119.70
57	BB	110	G	C3'-C2'-C1'	-5.49	97.11	101.50
57	BB	700	G	C5-N7-C8	5.49	107.05	104.30
57	BB	1197	G	C3'-C2'-C1'	-5.49	97.11	101.50
57	BB	1622	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1664	A	N9-C4-C5	-5.49	103.60	105.80
57	BB	2585	U	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	2720	U	N3-C4-C5	-5.49	111.31	114.60
57	BB	2734	A	C6-C5-N7	-5.49	128.46	132.30
21	AA	557	G	C5-C6-O6	-5.49	125.31	128.60
21	AA	597	G	P-O3'-C3'	-5.49	113.11	119.70
21	AA	746	A	C3'-C2'-C1'	-5.49	97.11	101.50
21	AA	801	U	O4'-C4'-C3'	-5.49	98.51	104.00
21	AA	919	A	C5'-C4'-C3'	5.49	124.78	116.00
21	AA	1172	C	C5-C4-N4	-5.49	116.36	120.20
27	B5	93	GLU	CA-CB-CG	5.49	125.47	113.40
31	BL	66	PHE	CB-CG-CD2	-5.49	116.96	120.80
50	B3	7	ARG	NE-CZ-NH2	-5.49	117.56	120.30
57	BB	126	A	OP1-P-OP2	-5.49	111.37	119.60
57	BB	486	C	C4-C5-C6	-5.49	114.66	117.40
57	BB	1407	G	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	1490	A	N1-C2-N3	5.49	132.04	129.30
57	BB	1610	A	C5-C6-N1	-5.49	114.95	117.70
57	BB	1641	A	C6-C5-N7	-5.49	128.46	132.30
57	BB	2671	G	C8-N9-C4	-5.49	104.20	106.40
57	BB	2676	C	C2-N3-C4	5.49	122.64	119.90
57	BB	2884	U	OP2-P-O3'	5.49	117.28	105.20
58	BA	44	G	N3-C2-N2	5.49	123.74	119.90
21	AA	1080	A	C5-C6-N6	-5.49	119.31	123.70
57	BB	966	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1458	U	C2-N3-C4	-5.49	123.71	127.00
21	AA	158	G	O4'-C1'-N9	5.49	112.59	108.20
21	AA	469	C	N3-C4-N4	5.49	121.84	118.00
21	AA	517	G	O4'-C1'-N9	5.49	112.59	108.20
21	AA	855	U	C4-C5-C6	-5.49	116.41	119.70
21	AA	1003	G	C3'-C2'-C1'	-5.49	97.11	101.50
21	AA	1377	A	C4-C5-N7	5.49	113.44	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1409	C	N3-C2-O2	-5.49	118.06	121.90
26	AV	11	A	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	259	G	N3-C2-N2	5.49	123.74	119.90
57	BB	518	G	C3'-C2'-C1'	5.49	105.89	101.50
57	BB	826	U	N3-C4-C5	-5.49	111.31	114.60
57	BB	1343	G	C6-N1-C2	5.49	128.39	125.10
57	BB	2024	G	N3-C2-N2	5.49	123.74	119.90
57	BB	2396	G	C2-N3-C4	5.49	114.64	111.90
57	BB	2435	A	N3-C4-C5	-5.49	122.96	126.80
21	AA	649	A	C2-N3-C4	5.48	113.34	110.60
57	BB	28	A	C5-N7-C8	5.48	106.64	103.90
57	BB	1029	A	N3-C4-N9	5.48	131.79	127.40
57	BB	1200	C	N3-C2-O2	5.48	125.74	121.90
57	BB	1295	C	N3-C2-O2	-5.48	118.06	121.90
57	BB	1572	A	C2-N3-C4	-5.48	107.86	110.60
57	BB	1601	G	C2-N3-C4	-5.48	109.16	111.90
57	BB	1645	G	C4-C5-C6	5.48	122.09	118.80
57	BB	2819	G	N3-C2-N2	5.48	123.74	119.90
21	AA	350	G	C5-N7-C8	-5.48	101.56	104.30
21	AA	418	C	N1-C2-O2	-5.48	115.61	118.90
21	AA	656	G	N3-C2-N2	5.48	123.74	119.90
22	AY	45	G	OP1-P-OP2	-5.48	111.38	119.60
26	AV	39	C	O5'-C5'-C4'	-5.48	101.28	111.70
45	BC	61	TYR	CB-CG-CD1	-5.48	117.71	121.00
45	BC	79	ARG	CD-NE-CZ	-5.48	115.93	123.60
57	BB	297	G	C2-N3-C4	5.48	114.64	111.90
57	BB	499	U	C6-N1-C2	5.48	124.29	121.00
21	AA	40	C	N3-C2-O2	5.48	125.74	121.90
21	AA	53	A	N9-C4-C5	-5.48	103.61	105.80
21	AA	622	A	C2-N3-C4	-5.48	107.86	110.60
21	AA	1308	U	N3-C2-O2	-5.48	118.36	122.20
57	BB	239	C	N3-C4-C5	-5.48	119.71	121.90
57	BB	554	U	C2-N1-C1'	5.48	124.28	117.70
57	BB	1120	G	N1-C2-N3	5.48	127.19	123.90
57	BB	1717	A	C6-C5-N7	-5.48	128.46	132.30
57	BB	1849	G	C2-N3-C4	-5.48	109.16	111.90
57	BB	2203	U	N1-C1'-C2'	5.48	121.12	114.00
57	BB	2264	C	C4-C5-C6	5.48	120.14	117.40
57	BB	2443	C	N1-C2-N3	-5.48	115.36	119.20
57	BB	2508	G	O4'-C4'-C3'	-5.48	98.52	104.00
58	BA	31	C	C4-C5-C6	-5.48	114.66	117.40
58	BA	37	C	C5-C6-N1	-5.48	118.26	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	118	C	C6-N1-C2	-5.48	118.11	120.30
2	AK	92	ARG	NE-CZ-NH2	5.48	123.04	120.30
7	AP	58	ALA	N-CA-CB	5.48	117.77	110.10
8	AQ	74	LEU	CB-CG-CD1	5.48	120.31	111.00
21	AA	426	U	C4'-C3'-C2'	-5.48	97.12	102.60
21	AA	428	G	C5-N7-C8	5.48	107.04	104.30
23	AW	69	G	C5-N7-C8	5.48	107.04	104.30
57	BB	515	A	N3-C4-N9	5.48	131.78	127.40
57	BB	692	C	C5-C6-N1	5.48	123.74	121.00
57	BB	701	G	C4'-C3'-C2'	-5.48	97.12	102.60
57	BB	2364	C	N1-C2-O2	-5.48	115.61	118.90
58	BA	41	G	C6-N1-C2	5.48	128.39	125.10
21	AA	12	U	N3-C2-O2	5.48	126.03	122.20
21	AA	106	C	C1'-O4'-C4'	5.48	114.28	109.90
21	AA	293	G	C4-C5-C6	5.48	122.09	118.80
21	AA	884	U	C5-C6-N1	-5.48	119.96	122.70
21	AA	1461	G	C8-N9-C1'	5.48	134.12	127.00
34	BO	31	THR	N-CA-C	-5.48	96.21	111.00
36	BQ	48	ASP	CB-CG-OD1	-5.48	113.37	118.30
44	BY	33	ALA	CB-CA-C	-5.48	101.88	110.10
57	BB	906	U	N3-C4-O4	-5.48	115.57	119.40
57	BB	1237	A	O5'-C5'-C4'	-5.48	101.29	111.70
58	BA	43	C	C5-C4-N4	-5.48	116.36	120.20
18	AG	150	PHE	CB-CG-CD1	-5.48	116.97	120.80
21	AA	509	A	C5-C6-N6	-5.48	119.32	123.70
21	AA	950	U	C4-C5-C6	5.48	122.99	119.70
57	BB	38	A	C6-N1-C2	-5.48	115.31	118.60
57	BB	756	A	C5-C6-N1	-5.48	114.96	117.70
57	BB	1247	A	C4-C5-N7	-5.48	107.96	110.70
57	BB	1589	U	C5'-C4'-O4'	-5.48	102.53	109.10
57	BB	2120	G	N9-C4-C5	-5.48	103.21	105.40
57	BB	2894	G	C6-C5-N7	-5.48	127.11	130.40
21	AA	366	A	N7-C8-N9	5.47	116.54	113.80
21	AA	534	U	OP2-P-O3'	5.47	117.24	105.20
21	AA	922	G	C4-C5-N7	-5.47	108.61	110.80
21	AA	1128	C	C4-C5-C6	-5.47	114.66	117.40
24	AX	16	A	C6-N1-C2	-5.47	115.31	118.60
57	BB	84	A	N1-C6-N6	5.47	121.89	118.60
57	BB	944	C	P-O5'-C5'	-5.47	112.14	120.90
57	BB	1011	G	C8-N9-C4	-5.47	104.21	106.40
57	BB	1126	A	C1'-O4'-C4'	5.47	114.28	109.90
57	BB	1402	U	N1-C2-O2	-5.47	118.97	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1432	G	N9-C4-C5	5.47	107.59	105.40
57	BB	2783	U	C1'-O4'-C4'	5.47	114.28	109.90
57	BB	2797	U	C5-C4-O4	-5.47	122.61	125.90
21	AA	287	U	C2-N1-C1'	-5.47	111.13	117.70
21	AA	328	C	N3-C4-N4	5.47	121.83	118.00
21	AA	593	U	C5-C6-N1	5.47	125.44	122.70
21	AA	688	G	O4'-C1'-C2'	-5.47	100.33	105.80
21	AA	758	C	N3-C4-C5	-5.47	119.71	121.90
21	AA	942	G	C5'-C4'-O4'	5.47	115.67	109.10
21	AA	1096	C	P-O3'-C3'	-5.47	113.13	119.70
21	AA	1294	G	C4'-C3'-C2'	-5.47	97.13	102.60
21	AA	1370	G	C6-N1-C2	-5.47	121.82	125.10
33	BN	67	PHE	CB-CG-CD2	-5.47	116.97	120.80
57	BB	203	A	C8-N9-C4	-5.47	103.61	105.80
57	BB	671	C	C5'-C4'-C3'	-5.47	107.24	116.00
57	BB	702	U	N3-C4-O4	5.47	123.23	119.40
57	BB	861	A	O4'-C1'-N9	5.47	112.58	108.20
57	BB	1142	A	C8-N9-C1'	5.47	137.55	127.70
57	BB	1310	G	C5-C6-O6	-5.47	125.32	128.60
57	BB	1402	U	P-O3'-C3'	-5.47	113.13	119.70
57	BB	1964	G	C5-C6-O6	-5.47	125.32	128.60
57	BB	2062	A	C6-N1-C2	5.47	121.88	118.60
57	BB	2555	U	O4'-C1'-N1	5.47	112.58	108.20
57	BB	2571	U	C2'-C3'-O3'	5.47	122.45	113.70
4	AM	83	GLY	C-N-CA	5.47	135.38	121.70
21	AA	111	G	C4-C5-C6	5.47	122.08	118.80
21	AA	140	U	P-O3'-C3'	-5.47	113.14	119.70
21	AA	339	C	C5'-C4'-O4'	5.47	115.67	109.10
23	AW	15	G	C2-N3-C4	-5.47	109.16	111.90
26	AV	26	G	N3-C4-C5	5.47	131.34	128.60
57	BB	181	A	C5-C6-N1	-5.47	114.96	117.70
57	BB	1958	C	N1-C2-O2	5.47	122.18	118.90
57	BB	2284	A	O4'-C1'-N9	5.47	112.58	108.20
58	BA	84	G	C4-N9-C1'	-5.47	119.39	126.50
21	AA	1141	C	C4-C5-C6	5.47	120.14	117.40
54	BF	69	ALA	O-C-N	5.47	131.45	122.70
57	BB	65	U	C4-C5-C6	-5.47	116.42	119.70
57	BB	368	A	N1-C6-N6	5.47	121.88	118.60
57	BB	491	G	N7-C8-N9	-5.47	110.36	113.10
57	BB	496	G	C5'-C4'-C3'	-5.47	107.25	116.00
57	BB	1271	G	C5-C6-N1	5.47	114.23	111.50
57	BB	1350	C	C2-N1-C1'	5.47	124.82	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1360	G	C2-N3-C4	5.47	114.64	111.90
57	BB	1421	G	C6-C5-N7	-5.47	127.12	130.40
57	BB	1672	A	C5-C6-N6	-5.47	119.33	123.70
57	BB	1938	A	C3'-C2'-C1'	5.47	105.88	101.50
57	BB	2347	C	C6-N1-C2	5.47	122.49	120.30
57	BB	2382	G	N3-C4-C5	5.47	131.34	128.60
57	BB	2408	U	P-O3'-C3'	-5.47	113.14	119.70
57	BB	2428	G	O5'-P-OP1	5.47	117.26	110.70
57	BB	2494	G	P-O3'-C3'	-5.47	113.14	119.70
57	BB	2674	G	N1-C6-O6	5.47	123.18	119.90
57	BB	2854	G	C8-N9-C4	-5.47	104.21	106.40
21	AA	425	G	N9-C4-C5	-5.47	103.21	105.40
23	AW	10	G	N1-C6-O6	5.47	123.18	119.90
25	AZ	106	ALA	N-CA-CB	5.47	117.75	110.10
57	BB	799	G	C6-N1-C2	-5.47	121.82	125.10
57	BB	1072	C	C5-C4-N4	-5.47	116.37	120.20
57	BB	1146	C	N3-C4-C5	-5.47	119.71	121.90
57	BB	1393	A	C3'-C2'-C1'	5.47	105.88	101.50
57	BB	1514	G	C5'-C4'-O4'	5.47	115.66	109.10
57	BB	2759	G	O4'-C1'-N9	5.47	112.58	108.20
58	BA	55	U	O4'-C1'-N1	5.47	112.57	108.20
58	BA	72	G	C4-C5-N7	-5.47	108.61	110.80
21	AA	28	A	N3-C4-C5	-5.47	122.97	126.80
21	AA	247	G	N1-C6-O6	5.47	123.18	119.90
21	AA	373	A	C4-C5-C6	5.47	119.73	117.00
21	AA	1089	G	C2-N3-C4	5.47	114.63	111.90
21	AA	1307	U	N3-C4-O4	5.47	123.23	119.40
23	AW	47	U	C2-N3-C4	5.47	130.28	127.00
30	BK	62	VAL	CB-CA-C	-5.47	101.01	111.40
57	BB	34	U	C1'-O4'-C4'	5.47	114.27	109.90
57	BB	134	G	C5-C6-N1	-5.47	108.77	111.50
57	BB	702	U	C5'-C4'-O4'	5.47	115.66	109.10
57	BB	1175	A	O4'-C1'-N9	5.47	112.57	108.20
57	BB	1512	C	C5-C6-N1	5.47	123.73	121.00
57	BB	1660	G	OP1-P-OP2	-5.47	111.40	119.60
57	BB	2113	U	O5'-C5'-C4'	-5.47	101.31	111.70
57	BB	2707	U	N1-C2-O2	5.47	126.63	122.80
57	BB	2708	G	N7-C8-N9	-5.47	110.37	113.10
57	BB	2710	C	N1-C2-O2	-5.47	115.62	118.90
57	BB	2808	G	N7-C8-N9	-5.47	110.37	113.10
57	BB	2822	G	O4'-C1'-N9	5.47	112.57	108.20
13	AB	22	TRP	CB-CG-CD2	-5.46	119.50	126.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	109	A	C5'-C4'-O4'	5.46	115.66	109.10
21	AA	797	C	N3-C4-N4	5.46	121.82	118.00
21	AA	933	G	C6-N1-C2	-5.46	121.82	125.10
21	AA	1112	C	P-O3'-C3'	-5.46	113.14	119.70
21	AA	1193	G	O5'-C5'-C4'	-5.46	101.32	111.70
26	AV	76	A	C5-C6-N6	-5.46	119.33	123.70
57	BB	1227	G	N1-C2-N2	-5.46	111.28	116.20
57	BB	1292	G	C4'-C3'-C2'	-5.46	97.14	102.60
57	BB	1401	G	C5-C6-O6	-5.46	125.32	128.60
57	BB	1614	A	N3-C4-C5	-5.46	122.97	126.80
57	BB	1915	U	C3'-C2'-C1'	5.46	105.87	101.50
57	BB	2043	C	P-O3'-C3'	-5.46	113.14	119.70
57	BB	2125	G	C4-C5-C6	5.46	122.08	118.80
57	BB	2409	G	O4'-C1'-N9	5.46	112.57	108.20
57	BB	2603	G	P-O5'-C5'	-5.46	112.16	120.90
57	BB	2607	G	N3-C2-N2	5.46	123.72	119.90
19	AH	57	GLU	N-CA-CB	5.46	120.43	110.60
21	AA	719	C	N3-C4-C5	-5.46	119.72	121.90
29	BJ	37	ARG	NE-CZ-NH2	5.46	123.03	120.30
43	BX	49	ARG	NH1-CZ-NH2	-5.46	113.39	119.40
57	BB	1322	A	C3'-C2'-C1'	-5.46	97.13	101.50
57	BB	1387	A	C8-N9-C4	-5.46	103.61	105.80
57	BB	1777	U	C5-C4-O4	-5.46	122.62	125.90
57	BB	1830	C	O4'-C1'-N1	5.46	112.57	108.20
57	BB	2032	G	N1-C6-O6	5.46	123.18	119.90
57	BB	2180	U	P-O3'-C3'	5.46	126.25	119.70
57	BB	2627	G	O4'-C1'-N9	5.46	112.57	108.20
57	BB	2670	A	C5-N7-C8	5.46	106.63	103.90
21	AA	49	U	C4-C5-C6	5.46	122.98	119.70
21	AA	336	A	C4-C5-C6	5.46	119.73	117.00
21	AA	566	G	C6-N1-C2	5.46	128.38	125.10
21	AA	697	U	C6-N1-C2	-5.46	117.72	121.00
21	AA	741	G	N7-C8-N9	5.46	115.83	113.10
21	AA	1346	A	N1-C6-N6	5.46	121.88	118.60
48	B1	46	VAL	CG1-CB-CG2	5.46	119.64	110.90
57	BB	121	G	C5-N7-C8	-5.46	101.57	104.30
57	BB	433	C	C5-C4-N4	-5.46	116.38	120.20
57	BB	761	A	N1-C6-N6	5.46	121.88	118.60
57	BB	963	U	C4-C5-C6	5.46	122.98	119.70
57	BB	973	A	O5'-C5'-C4'	5.46	122.08	111.70
57	BB	1289	C	C4-C5-C6	5.46	120.13	117.40
57	BB	1296	G	C2-N3-C4	5.46	114.63	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2203	U	C5-C4-O4	-5.46	122.62	125.90
57	BB	2563	U	N1-C2-O2	-5.46	118.98	122.80
57	BB	2773	C	C4-C5-C6	-5.46	114.67	117.40
57	BB	2882	A	C6-N1-C2	5.46	121.88	118.60
21	AA	1122	U	C5-C4-O4	5.46	129.18	125.90
57	BB	1168	G	C6-N1-C2	5.46	128.38	125.10
57	BB	1830	C	C2-N1-C1'	5.46	124.81	118.80
57	BB	1896	G	N1-C2-N2	5.46	121.11	116.20
57	BB	2563	U	C5-C6-N1	5.46	125.43	122.70
21	AA	59	A	C6-N1-C2	-5.46	115.33	118.60
21	AA	665	A	O4'-C1'-N9	5.46	112.57	108.20
21	AA	798	U	N3-C4-O4	5.46	123.22	119.40
21	AA	848	C	C4-C5-C6	-5.46	114.67	117.40
22	AY	44	A	N1-C2-N3	5.46	132.03	129.30
23	AW	30	G	C2-N3-C4	5.46	114.63	111.90
57	BB	331	C	C5'-C4'-O4'	5.46	115.65	109.10
57	BB	540	C	OP2-P-O3'	5.46	117.21	105.20
57	BB	728	G	N3-C4-N9	5.46	129.28	126.00
57	BB	1298	C	C5-C6-N1	5.46	123.73	121.00
57	BB	1847	A	C4-C5-C6	5.46	119.73	117.00
57	BB	1909	C	N3-C2-O2	-5.46	118.08	121.90
57	BB	2075	U	C3'-C2'-C1'	-5.46	97.13	101.50
57	BB	2760	C	C5-C4-N4	-5.46	116.38	120.20
57	BB	2786	U	C1'-O4'-C4'	5.46	114.27	109.90
57	BB	2869	G	C8-N9-C1'	5.46	134.09	127.00
58	BA	41	G	N3-C2-N2	5.46	123.72	119.90
21	AA	83	C	C4'-C3'-C2'	5.46	108.06	102.60
21	AA	581	G	C8-N9-C4	5.46	108.58	106.40
21	AA	1203	C	C1'-O4'-C4'	5.46	114.27	109.90
23	AW	39	U	N1-C2-O2	5.46	126.62	122.80
57	BB	459	U	C4-C5-C6	-5.46	116.43	119.70
57	BB	784	G	N1-C6-O6	5.46	123.17	119.90
57	BB	1094	U	C6-N1-C2	-5.46	117.73	121.00
57	BB	1368	G	P-O3'-C3'	5.46	126.25	119.70
57	BB	1502	A	C4'-C3'-C2'	-5.46	97.14	102.60
57	BB	1911	U	C5-C6-N1	5.46	125.43	122.70
57	BB	2633	G	OP1-P-OP2	-5.46	111.42	119.60
21	AA	987	G	O4'-C1'-N9	5.46	112.56	108.20
21	AA	1015	G	C5-C6-N1	-5.46	108.77	111.50
57	BB	1173	U	C5'-C4'-O4'	5.46	115.65	109.10
57	BB	2513	A	N7-C8-N9	-5.46	111.07	113.80
21	AA	171	A	P-O5'-C5'	-5.45	112.17	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1057	G	N7-C8-N9	5.45	115.83	113.10
21	AA	1323	G	N1-C2-N3	-5.45	120.63	123.90
28	BI	62	ALA	C-N-CA	5.45	135.33	121.70
57	BB	613	A	C6-C5-N7	-5.45	128.48	132.30
57	BB	653	U	N3-C4-O4	5.45	123.22	119.40
57	BB	805	G	P-O3'-C3'	5.45	126.24	119.70
57	BB	1212	G	C5-N7-C8	5.45	107.03	104.30
57	BB	1339	G	C8-N9-C4	5.45	108.58	106.40
57	BB	2251	G	N1-C2-N3	-5.45	120.63	123.90
57	BB	2299	U	N3-C4-C5	-5.45	111.33	114.60
57	BB	2516	A	O4'-C1'-N9	5.45	112.56	108.20
58	BA	22	U	N3-C2-O2	-5.45	118.38	122.20
57	BB	189	G	N1-C2-N2	-5.45	111.29	116.20
57	BB	692	C	C5-C4-N4	-5.45	116.38	120.20
57	BB	1138	G	O4'-C1'-N9	5.45	112.56	108.20
57	BB	1280	G	N1-C2-N2	-5.45	111.29	116.20
57	BB	2289	G	C5-C6-N1	-5.45	108.77	111.50
7	AP	21	VAL	N-CA-C	-5.45	96.28	111.00
21	AA	1130	A	C2-N3-C4	-5.45	107.87	110.60
21	AA	1465	A	C5-C6-N1	-5.45	114.97	117.70
42	BW	14	ASP	CB-CG-OD1	-5.45	113.39	118.30
57	BB	121	G	C6-C5-N7	-5.45	127.13	130.40
57	BB	305	C	N3-C4-N4	5.45	121.81	118.00
57	BB	497	A	C5-C6-N6	-5.45	119.34	123.70
57	BB	529	A	C4-C5-N7	-5.45	107.97	110.70
57	BB	668	A	O4'-C4'-C3'	5.45	110.46	106.10
57	BB	678	C	P-O3'-C3'	-5.45	113.16	119.70
57	BB	925	A	N9-C1'-C2'	-5.45	106.00	112.00
57	BB	1356	G	C3'-C2'-C1'	5.45	105.86	101.50
57	BB	1417	C	C4-C5-C6	5.45	120.12	117.40
57	BB	2282	G	C5-C6-N1	-5.45	108.78	111.50
57	BB	2386	A	C1'-O4'-C4'	-5.45	105.54	109.90
57	BB	2471	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2776	A	P-O3'-C3'	5.45	126.24	119.70
57	BB	2820	A	C6-C5-N7	-5.45	128.49	132.30
21	AA	461	A	C5-C6-N6	-5.45	119.34	123.70
21	AA	645	G	O4'-C1'-C2'	-5.45	100.35	105.80
21	AA	785	G	C5-N7-C8	5.45	107.02	104.30
21	AA	1456	A	C5-N7-C8	-5.45	101.18	103.90
39	BT	41	ALA	CB-CA-C	-5.45	101.93	110.10
57	BB	491	G	C2-N3-C4	5.45	114.62	111.90
57	BB	494	G	C4-N9-C1'	-5.45	119.42	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	602	A	C2-N3-C4	-5.45	107.88	110.60
57	BB	946	C	N1-C2-N3	-5.45	115.39	119.20
57	BB	1384	A	C4-C5-N7	-5.45	107.98	110.70
57	BB	1721	G	N1-C2-N3	-5.45	120.63	123.90
57	BB	2015	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2135	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2655	G	C3'-C2'-C1'	-5.45	97.14	101.50
57	BB	2793	C	C5-C4-N4	-5.45	116.39	120.20
57	BB	2902	C	C5-C4-N4	-5.45	116.39	120.20
58	BA	20	G	C5-N7-C8	-5.45	101.58	104.30
21	AA	438	U	N3-C4-O4	5.45	123.21	119.40
21	AA	441	A	C4'-C3'-C2'	-5.45	97.15	102.60
22	AY	74	C	C4-C5-C6	5.45	120.12	117.40
28	BI	63	ASP	CB-CG-OD2	5.45	123.20	118.30
41	BV	34	LYS	N-CA-CB	5.45	120.41	110.60
57	BB	236	C	N1-C2-O2	5.45	122.17	118.90
57	BB	271	G	N3-C2-N2	5.45	123.71	119.90
57	BB	498	G	N1-C6-O6	5.45	123.17	119.90
57	BB	730	A	C8-N9-C4	-5.45	103.62	105.80
57	BB	1557	C	C6-N1-C1'	-5.45	114.26	120.80
57	BB	1949	G	C4-C5-N7	5.45	112.98	110.80
57	BB	2171	A	C5-N7-C8	5.45	106.62	103.90
57	BB	2448	A	C5-C6-N1	-5.45	114.98	117.70
21	AA	320	A	C2-N3-C4	-5.45	107.88	110.60
21	AA	506	G	O4'-C1'-N9	5.45	112.56	108.20
21	AA	547	A	N9-C4-C5	5.45	107.98	105.80
21	AA	583	A	C5-N7-C8	5.45	106.62	103.90
21	AA	723	U	C5-C4-O4	-5.45	122.63	125.90
21	AA	753	A	C4-C5-N7	-5.45	107.98	110.70
21	AA	1462	C	N3-C2-O2	-5.45	118.09	121.90
31	BL	89	VAL	N-CA-C	-5.45	96.30	111.00
54	BF	82	TYR	N-CA-CB	5.45	120.40	110.60
57	BB	298	G	O5'-P-OP2	-5.45	100.80	105.70
57	BB	1470	A	OP1-P-OP2	-5.45	111.43	119.60
57	BB	1544	A	C5'-C4'-O4'	5.45	115.64	109.10
57	BB	2311	A	O5'-C5'-C4'	-5.45	101.35	111.70
57	BB	2757	A	P-O5'-C5'	-5.45	112.19	120.90
21	AA	240	G	C6-C5-N7	-5.44	127.13	130.40
21	AA	918	A	C4-C5-N7	-5.44	107.98	110.70
21	AA	1190	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	68	G	C2-N3-C4	-5.44	109.18	111.90
57	BB	204	A	C5-C6-N1	-5.44	114.98	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	262	A	C6-N1-C2	5.44	121.87	118.60
57	BB	896	A	O4'-C4'-C3'	-5.44	98.56	104.00
57	BB	1036	G	N7-C8-N9	-5.44	110.38	113.10
57	BB	2250	G	N1-C2-N3	-5.44	120.63	123.90
11	AT	76	ALA	CB-CA-C	-5.44	101.94	110.10
21	AA	311	C	N3-C4-C5	-5.44	119.72	121.90
21	AA	326	G	C8-N9-C1'	-5.44	119.92	127.00
21	AA	493	A	C4-C5-C6	5.44	119.72	117.00
21	AA	1269	A	C6-N1-C2	-5.44	115.33	118.60
23	AW	23	A	C6-N1-C2	-5.44	115.33	118.60
43	BX	45	PHE	N-CA-CB	5.44	120.40	110.60
57	BB	88	G	O4'-C1'-N9	5.44	112.55	108.20
57	BB	145	C	C6-N1-C1'	5.44	127.33	120.80
57	BB	285	G	O4'-C1'-N9	5.44	112.55	108.20
57	BB	333	G	N1-C2-N2	5.44	121.10	116.20
57	BB	714	U	C4-C5-C6	5.44	122.97	119.70
57	BB	735	A	C8-N9-C4	-5.44	103.62	105.80
57	BB	919	U	N3-C4-C5	-5.44	111.33	114.60
57	BB	944	C	C3'-C2'-C1'	5.44	105.85	101.50
57	BB	1539	U	C5-C4-O4	-5.44	122.63	125.90
57	BB	1670	C	N3-C4-N4	5.44	121.81	118.00
57	BB	2225	A	C5-C6-N1	-5.44	114.98	117.70
57	BB	2570	G	C6-C5-N7	-5.44	127.13	130.40
21	AA	662	U	N1-C2-O2	-5.44	118.99	122.80
21	AA	1140	C	C3'-C2'-C1'	-5.44	97.15	101.50
26	AV	41	C	C1'-O4'-C4'	-5.44	105.55	109.90
32	BM	16	ARG	N-CA-C	-5.44	96.31	111.00
36	BQ	63	ARG	NE-CZ-NH1	-5.44	117.58	120.30
45	BC	247	TRP	CG-CD2-CE3	-5.44	129.00	133.90
57	BB	200	U	N3-C4-O4	5.44	123.21	119.40
57	BB	205	G	C4-N9-C1'	-5.44	119.43	126.50
57	BB	504	A	C6-C5-N7	-5.44	128.49	132.30
57	BB	950	G	C8-N9-C4	-5.44	104.22	106.40
57	BB	1008	A	C5-C6-N1	-5.44	114.98	117.70
57	BB	1048	A	N7-C8-N9	5.44	116.52	113.80
57	BB	1417	C	N3-C4-C5	-5.44	119.72	121.90
57	BB	1824	G	N3-C2-N2	-5.44	116.09	119.90
57	BB	1887	C	C5-C6-N1	5.44	123.72	121.00
57	BB	1990	C	C5-C6-N1	5.44	123.72	121.00
57	BB	2290	G	N7-C8-N9	-5.44	110.38	113.10
57	BB	2491	U	C4'-C3'-C2'	5.44	108.04	102.60
57	BB	2592	G	C3'-C2'-C1'	-5.44	97.15	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2831	G	N3-C2-N2	5.44	123.71	119.90
21	AA	1280	A	C8-N9-C1'	-5.44	117.91	127.70
57	BB	306	U	N3-C4-C5	-5.44	111.34	114.60
57	BB	1081	U	C4-C5-C6	-5.44	116.44	119.70
57	BB	1558	C	C5'-C4'-O4'	5.44	115.63	109.10
57	BB	2879	A	C4-N9-C1'	5.44	136.09	126.30
21	AA	454	G	C5-C6-N1	-5.44	108.78	111.50
21	AA	475	C	C5'-C4'-C3'	5.44	124.70	116.00
21	AA	509	A	C4-C5-N7	-5.44	107.98	110.70
21	AA	1299	A	C6-C5-N7	-5.44	128.49	132.30
21	AA	1340	A	C5'-C4'-C3'	-5.44	107.30	116.00
22	AY	66	A	N3-C4-C5	-5.44	122.99	126.80
23	AW	2	C	C6-N1-C1'	-5.44	114.27	120.80
26	AV	12	G	N7-C8-N9	5.44	115.82	113.10
42	BW	11	ASN	N-CA-CB	5.44	120.39	110.60
57	BB	651	G	C4-C5-C6	5.44	122.06	118.80
57	BB	784	G	C6-N1-C2	5.44	128.36	125.10
57	BB	786	C	C6-N1-C2	-5.44	118.12	120.30
57	BB	787	C	C6-N1-C1'	-5.44	114.28	120.80
57	BB	790	U	O4'-C4'-C3'	-5.44	98.56	104.00
57	BB	810	U	N1-C2-N3	-5.44	111.64	114.90
57	BB	1006	C	N1-C2-O2	5.44	122.16	118.90
57	BB	1069	A	N1-C6-N6	5.44	121.86	118.60
57	BB	1176	U	O4'-C1'-N1	5.44	112.55	108.20
57	BB	1177	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	1197	G	N7-C8-N9	5.44	115.82	113.10
57	BB	1385	A	C1'-O4'-C4'	-5.44	105.55	109.90
57	BB	2176	A	C4-C5-C6	5.44	119.72	117.00
57	BB	2211	A	O4'-C1'-N9	5.44	112.55	108.20
57	BB	2238	G	C5-C6-N1	5.44	114.22	111.50
57	BB	2354	C	O4'-C1'-N1	5.44	112.55	108.20
57	BB	2892	G	C5'-C4'-C3'	5.44	124.70	116.00
16	AE	53	ARG	NE-CZ-NH1	-5.44	117.58	120.30
21	AA	903	G	C6-N1-C2	5.44	128.36	125.10
21	AA	1031	C	N3-C4-N4	5.44	121.81	118.00
21	AA	1134	G	C2-N3-C4	-5.44	109.18	111.90
40	BU	97	SER	N-CA-CB	5.44	118.65	110.50
46	BZ	49	ALA	CB-CA-C	-5.44	101.94	110.10
49	B2	41	ARG	NE-CZ-NH1	-5.44	117.58	120.30
53	BE	101	TYR	CG-CD2-CE2	-5.44	116.95	121.30
57	BB	555	G	N1-C2-N2	-5.44	111.31	116.20
57	BB	1008	A	N9-C1'-C2'	-5.44	106.02	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1426	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	1904	G	N3-C2-N2	5.44	123.70	119.90
21	AA	691	G	C1'-O4'-C4'	-5.43	105.55	109.90
21	AA	1370	G	O4'-C1'-N9	5.43	112.55	108.20
21	AA	1381	U	N1-C2-O2	-5.43	119.00	122.80
21	AA	1391	U	O4'-C4'-C3'	-5.43	98.56	104.00
57	BB	83	A	P-O5'-C5'	5.43	129.59	120.90
57	BB	924	G	C5-C6-O6	-5.43	125.34	128.60
57	BB	1281	G	C6-N1-C2	5.43	128.36	125.10
57	BB	1485	U	O4'-C1'-C2'	-5.43	100.36	105.80
57	BB	1611	C	O4'-C1'-N1	5.43	112.55	108.20
57	BB	1981	A	C3'-C2'-C1'	5.43	105.85	101.50
57	BB	2497	A	C6-C5-N7	-5.43	128.50	132.30
57	BB	2536	G	C4-N9-C1'	-5.43	119.44	126.50
58	BA	85	G	C5-C6-O6	-5.43	125.34	128.60
21	AA	46	G	C8-N9-C1'	5.43	134.06	127.00
21	AA	55	A	C5-C6-N6	-5.43	119.35	123.70
21	AA	415	A	C4-C5-N7	-5.43	107.98	110.70
21	AA	745	G	C6-N1-C2	-5.43	121.84	125.10
21	AA	901	A	C5-C6-N6	-5.43	119.36	123.70
21	AA	1113	C	N3-C4-C5	-5.43	119.73	121.90
21	AA	1494	G	C2-N3-C4	5.43	114.62	111.90
57	BB	262	A	OP1-P-OP2	-5.43	111.45	119.60
57	BB	370	G	C1'-O4'-C4'	5.43	114.25	109.90
57	BB	466	A	N1-C2-N3	-5.43	126.58	129.30
57	BB	650	C	C2-N1-C1'	-5.43	112.82	118.80
57	BB	2145	C	N3-C4-N4	5.43	121.80	118.00
58	BA	96	G	O4'-C4'-C3'	-5.43	98.57	104.00
21	AA	212	G	N7-C8-N9	-5.43	110.39	113.10
21	AA	906	A	C4-C5-N7	-5.43	107.98	110.70
22	AY	30	G	N3-C4-N9	5.43	129.26	126.00
23	AW	31	A	C5-C6-N6	-5.43	119.36	123.70
57	BB	219	A	C6-N1-C2	5.43	121.86	118.60
57	BB	377	G	C6-C5-N7	-5.43	127.14	130.40
57	BB	1057	A	N9-C4-C5	-5.43	103.63	105.80
57	BB	1352	U	OP2-P-O3'	5.43	117.15	105.20
57	BB	2391	G	N3-C4-C5	-5.43	125.88	128.60
57	BB	2848	G	C6-C5-N7	-5.43	127.14	130.40
21	AA	655	A	C3'-C2'-C1'	-5.43	97.16	101.50
21	AA	912	C	C6-N1-C2	5.43	122.47	120.30
21	AA	1531	A	N1-C2-N3	5.43	132.01	129.30
26	AV	68	C	C5-C6-N1	-5.43	118.28	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	BD	31	ALA	N-CA-CB	5.43	117.70	110.10
57	BB	361	G	N3-C2-N2	5.43	123.70	119.90
57	BB	487	C	N1-C2-O2	-5.43	115.64	118.90
57	BB	1745	A	N1-C2-N3	5.43	132.01	129.30
57	BB	1835	G	C4-C5-N7	5.43	112.97	110.80
57	BB	2084	C	N1-C2-N3	5.43	123.00	119.20
57	BB	2559	C	P-O3'-C3'	-5.43	113.19	119.70
57	BB	2726	A	C5-N7-C8	5.43	106.61	103.90
57	BB	2775	G	C6-C5-N7	-5.43	127.14	130.40
57	BB	2794	C	N1-C2-N3	-5.43	115.40	119.20
58	BA	28	C	C2-N3-C4	5.43	122.61	119.90
21	AA	230	G	C4-C5-C6	5.43	122.06	118.80
21	AA	638	U	P-O5'-C5'	-5.43	112.22	120.90
21	AA	928	G	C2-N3-C4	5.43	114.61	111.90
31	BL	7	SER	CB-CA-C	5.43	120.41	110.10
57	BB	207	A	N1-C2-N3	5.43	132.01	129.30
57	BB	402	A	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	710	U	C2-N3-C4	5.43	130.26	127.00
57	BB	1196	C	O4'-C4'-C3'	-5.43	98.57	104.00
57	BB	1272	A	N3-C4-N9	-5.43	123.06	127.40
57	BB	1359	A	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	1663	G	N9-C4-C5	-5.43	103.23	105.40
57	BB	2410	G	C6-N1-C2	5.43	128.36	125.10
21	AA	235	C	O4'-C1'-N1	5.43	112.54	108.20
21	AA	547	A	N1-C6-N6	5.43	121.86	118.60
21	AA	1040	U	O4'-C4'-C3'	-5.43	98.57	104.00
21	AA	1098	C	N1-C2-O2	5.43	122.16	118.90
21	AA	1232	U	C5-C6-N1	5.43	125.41	122.70
23	AW	7	A	C4-C5-N7	-5.43	107.99	110.70
24	AX	21	C	P-O3'-C3'	-5.43	113.19	119.70
39	BT	73	ARG	N-CA-C	-5.43	96.35	111.00
54	BF	155	ILE	CA-CB-CG2	-5.43	100.05	110.90
57	BB	62	U	C2-N3-C4	5.43	130.26	127.00
57	BB	840	C	O4'-C1'-N1	5.43	112.54	108.20
57	BB	973	A	P-O5'-C5'	5.43	129.58	120.90
57	BB	1155	A	C4-C5-C6	5.43	119.71	117.00
57	BB	1179	G	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	1797	G	C6-N1-C2	-5.43	121.84	125.10
57	BB	1835	G	C6-N1-C2	5.43	128.36	125.10
57	BB	1869	G	C5-C6-N1	-5.43	108.79	111.50
58	BA	47	C	C4-C5-C6	-5.43	114.69	117.40
8	AQ	5	ARG	NE-CZ-NH2	-5.42	117.59	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	535	A	P-O3'-C3'	-5.42	113.19	119.70
21	AA	938	A	O4'-C1'-N9	5.42	112.54	108.20
21	AA	1073	U	C3'-C2'-C1'	5.42	105.84	101.50
21	AA	1250	A	C5'-C4'-O4'	5.42	115.61	109.10
31	BL	58	TYR	CG-CD2-CE2	5.42	125.64	121.30
47	B0	53	VAL	CG1-CB-CG2	5.42	119.58	110.90
57	BB	10	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	75	G	C4-C5-N7	5.42	112.97	110.80
57	BB	239	C	N3-C2-O2	5.42	125.70	121.90
57	BB	247	G	C5-C6-O6	-5.42	125.34	128.60
57	BB	247	G	N9-C4-C5	5.42	107.57	105.40
57	BB	488	G	N3-C2-N2	5.42	123.70	119.90
57	BB	505	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	871	U	C5'-C4'-O4'	-5.42	102.59	109.10
57	BB	1019	U	N1-C2-N3	-5.42	111.64	114.90
57	BB	1299	G	N3-C2-N2	5.42	123.70	119.90
57	BB	1896	G	N3-C2-N2	-5.42	116.10	119.90
57	BB	2500	U	C2-N3-C4	5.42	130.25	127.00
57	BB	2886	A	C6-C5-N7	-5.42	128.50	132.30
58	BA	77	U	C5-C6-N1	5.42	125.41	122.70
21	AA	151	A	C5-N7-C8	5.42	106.61	103.90
42	BW	13	ARG	NE-CZ-NH2	-5.42	117.59	120.30
57	BB	307	G	N3-C2-N2	5.42	123.70	119.90
57	BB	531	C	C5-C4-N4	-5.42	116.40	120.20
57	BB	538	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	663	G	C8-N9-C4	-5.42	104.23	106.40
57	BB	1309	G	C6-N1-C2	5.42	128.35	125.10
57	BB	1436	G	C4'-C3'-C2'	-5.42	97.18	102.60
57	BB	1659	G	C4-C5-C6	5.42	122.05	118.80
57	BB	1833	C	C5-C4-N4	5.42	124.00	120.20
57	BB	1842	G	N3-C2-N2	5.42	123.70	119.90
57	BB	2294	G	C5-C6-N1	-5.42	108.79	111.50
57	BB	2657	A	C8-N9-C4	5.42	107.97	105.80
21	AA	183	C	C2-N1-C1'	5.42	124.76	118.80
27	B5	1	MET	CG-SD-CE	-5.42	91.52	100.20
39	BT	32	LEU	N-CA-CB	5.42	121.24	110.40
57	BB	22	C	P-O3'-C3'	5.42	126.20	119.70
57	BB	251	A	C8-N9-C4	-5.42	103.63	105.80
57	BB	347	A	N9-C4-C5	5.42	107.97	105.80
57	BB	442	G	N1-C2-N3	-5.42	120.65	123.90
57	BB	659	G	N9-C4-C5	5.42	107.57	105.40
57	BB	872	U	C4-C5-C6	5.42	122.95	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1715	G	C6-C5-N7	-5.42	127.15	130.40
57	BB	1801	A	OP1-P-O3'	5.42	117.13	105.20
57	BB	2581	G	C6-C5-N7	-5.42	127.15	130.40
21	AA	627	G	N9-C4-C5	-5.42	103.23	105.40
21	AA	932	C	P-O3'-C3'	5.42	126.20	119.70
21	AA	1253	G	N1-C6-O6	5.42	123.15	119.90
41	BV	45	ASP	CB-CG-OD2	5.42	123.18	118.30
57	BB	34	U	O4'-C4'-C3'	-5.42	98.58	104.00
57	BB	103	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	309	A	C6-C5-N7	-5.42	128.51	132.30
57	BB	1011	G	O5'-C5'-C4'	-5.42	101.40	111.70
57	BB	2726	A	C6-C5-N7	-5.42	128.51	132.30
21	AA	293	G	N3-C4-N9	5.42	129.25	126.00
21	AA	337	G	N1-C2-N3	-5.42	120.65	123.90
21	AA	443	C	O4'-C1'-C2'	5.42	112.48	107.60
21	AA	763	G	C8-N9-C1'	5.42	134.04	127.00
21	AA	1344	C	N3-C4-N4	5.42	121.79	118.00
57	BB	12	U	P-O3'-C3'	5.42	126.20	119.70
57	BB	470	A	P-O3'-C3'	-5.42	113.20	119.70
57	BB	516	C	P-O3'-C3'	-5.42	113.20	119.70
57	BB	750	A	C3'-C2'-C1'	5.42	105.83	101.50
57	BB	798	G	C4'-C3'-C2'	-5.42	97.18	102.60
57	BB	843	G	C5-C6-O6	-5.42	125.35	128.60
57	BB	989	G	N1-C2-N3	-5.42	120.65	123.90
57	BB	1613	G	OP1-P-OP2	-5.42	111.47	119.60
57	BB	2060	A	OP1-P-OP2	-5.42	111.47	119.60
58	BA	92	C	C2-N3-C4	5.42	122.61	119.90
21	AA	305	G	N1-C2-N3	-5.42	120.65	123.90
21	AA	365	U	C4'-C3'-C2'	5.42	108.02	102.60
21	AA	643	C	C6-N1-C1'	5.42	127.30	120.80
21	AA	746	A	O4'-C1'-N9	5.42	112.53	108.20
21	AA	1176	A	C4-C5-N7	-5.42	107.99	110.70
21	AA	1281	C	N3-C4-C5	5.42	124.07	121.90
21	AA	1410	A	C4'-C3'-C2'	-5.42	97.18	102.60
21	AA	1447	A	C5-C6-N6	-5.42	119.37	123.70
22	AY	8	U	N1-C1'-C2'	-5.42	106.04	112.00
22	AY	24	G	C5-C6-N1	-5.42	108.79	111.50
23	AW	50	U	N1-C2-N3	5.42	118.15	114.90
25	AZ	21	ASP	N-CA-CB	5.42	120.35	110.60
47	B0	26	SER	N-CA-CB	5.42	118.62	110.50
55	BG	105	SER	N-CA-CB	5.42	118.62	110.50
57	BB	159	G	N7-C8-N9	5.42	115.81	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	337	C	C5'-C4'-O4'	-5.42	102.60	109.10
57	BB	411	G	C3'-C2'-C1'	-5.42	97.17	101.50
57	BB	570	G	C5-C6-N1	-5.42	108.79	111.50
57	BB	928	A	C2-N3-C4	-5.42	107.89	110.60
57	BB	1147	A	N1-C2-N3	5.42	132.01	129.30
57	BB	1157	G	P-O3'-C3'	-5.42	113.20	119.70
57	BB	1962	C	N3-C4-N4	5.42	121.79	118.00
57	BB	2451	A	C5-N7-C8	5.42	106.61	103.90
21	AA	142	G	C6-C5-N7	-5.42	127.15	130.40
21	AA	676	A	C1'-O4'-C4'	5.42	114.23	109.90
21	AA	1098	C	O4'-C4'-C3'	-5.42	98.58	104.00
21	AA	1402	C	O4'-C1'-N1	5.42	112.53	108.20
37	BR	26	ASP	CB-CG-OD2	5.42	123.17	118.30
57	BB	112	U	N3-C4-C5	5.42	117.85	114.60
57	BB	743	A	N1-C2-N3	5.42	132.01	129.30
57	BB	1202	G	C8-N9-C4	5.42	108.57	106.40
57	BB	2427	C	N3-C4-N4	5.42	121.79	118.00
21	AA	349	A	O4'-C1'-N9	5.41	112.53	108.20
21	AA	704	A	C4-C5-N7	-5.41	107.99	110.70
21	AA	876	C	O4'-C1'-N1	5.41	112.53	108.20
21	AA	1190	G	N1-C2-N3	-5.41	120.65	123.90
21	AA	1419	G	C1'-O4'-C4'	-5.41	105.57	109.90
22	AY	20	G	C5-N7-C8	-5.41	101.59	104.30
29	BJ	118	MET	CA-CB-CG	-5.41	104.10	113.30
57	BB	145	C	C4-C5-C6	5.41	120.11	117.40
57	BB	569	U	C2-N3-C4	-5.41	123.75	127.00
57	BB	841	G	C8-N9-C4	-5.41	104.23	106.40
57	BB	1010	A	C2-N3-C4	-5.41	107.89	110.60
57	BB	1252	G	C5'-C4'-O4'	5.41	115.60	109.10
57	BB	1526	C	O4'-C1'-N1	5.41	112.53	108.20
57	BB	2342	C	C5-C4-N4	-5.41	116.41	120.20
21	AA	90	C	N1-C2-O2	5.41	122.15	118.90
21	AA	1197	A	N1-C2-N3	5.41	132.01	129.30
22	AY	58	A	P-O3'-C3'	5.41	126.19	119.70
23	AW	48	C	N1-C2-N3	5.41	122.99	119.20
44	BY	29	ARG	NE-CZ-NH2	5.41	123.01	120.30
53	BE	167	VAL	CA-CB-CG1	5.41	119.02	110.90
57	BB	446	G	N7-C8-N9	-5.41	110.39	113.10
57	BB	1019	U	N3-C4-O4	5.41	123.19	119.40
57	BB	1407	G	C6-C5-N7	-5.41	127.15	130.40
57	BB	1684	G	C1'-O4'-C4'	-5.41	105.57	109.90
57	BB	2541	A	N9-C4-C5	5.41	107.97	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2687	U	C5-C6-N1	5.41	125.41	122.70
10	AS	35	ARG	N-CA-CB	5.41	120.34	110.60
21	AA	117	G	N3-C2-N2	5.41	123.69	119.90
21	AA	725	G	C5-C6-N1	-5.41	108.80	111.50
21	AA	998	C	P-O5'-C5'	-5.41	112.24	120.90
28	BI	44	LYS	CB-CA-C	-5.41	99.58	110.40
57	BB	27	G	C8-N9-C4	5.41	108.56	106.40
57	BB	312	G	N1-C2-N3	-5.41	120.65	123.90
57	BB	585	G	C3'-C2'-C1'	5.41	105.83	101.50
57	BB	691	C	O5'-P-OP1	-5.41	100.83	105.70
57	BB	2171	A	C1'-O4'-C4'	-5.41	105.57	109.90
57	BB	2225	A	N7-C8-N9	-5.41	111.09	113.80
57	BB	2870	C	C5-C6-N1	5.41	123.71	121.00
13	AB	196	ASP	CB-CG-OD1	-5.41	113.43	118.30
19	AH	15	ASN	N-CA-CB	5.41	120.33	110.60
21	AA	92	U	O5'-C5'-C4'	-5.41	101.42	111.70
21	AA	296	U	N1-C2-O2	-5.41	119.02	122.80
21	AA	676	A	N3-C4-C5	-5.41	123.01	126.80
21	AA	689	C	N1-C2-O2	-5.41	115.66	118.90
21	AA	864	A	C4-C5-C6	5.41	119.70	117.00
21	AA	1368	A	C5-C6-N6	-5.41	119.37	123.70
27	B5	58	ASN	N-CA-CB	5.41	120.33	110.60
56	BH	129	GLU	C-N-CA	5.41	135.22	121.70
57	BB	2	G	C4-C5-N7	5.41	112.96	110.80
57	BB	85	G	C5-C6-O6	-5.41	125.35	128.60
57	BB	287	G	C8-N9-C4	5.41	108.56	106.40
57	BB	410	G	N9-C4-C5	5.41	107.56	105.40
57	BB	545	U	P-O5'-C5'	-5.41	112.25	120.90
57	BB	597	G	N9-C4-C5	-5.41	103.24	105.40
57	BB	1425	G	C6-C5-N7	-5.41	127.16	130.40
57	BB	1700	A	C4-C5-N7	5.41	113.40	110.70
57	BB	1731	G	C5-N7-C8	-5.41	101.60	104.30
57	BB	2223	G	N3-C4-N9	-5.41	122.75	126.00
57	BB	2301	C	C5-C6-N1	-5.41	118.30	121.00
57	BB	2451	A	C5-C6-N1	-5.41	115.00	117.70
57	BB	2599	G	C5-N7-C8	5.41	107.00	104.30
57	BB	2713	U	C5-C6-N1	5.41	125.41	122.70
58	BA	49	C	C2-N1-C1'	5.41	124.75	118.80
21	AA	1032	G	C6-N1-C2	5.41	128.34	125.10
57	BB	127	A	C5-C6-N1	-5.41	115.00	117.70
57	BB	1327	A	C8-N9-C4	-5.41	103.64	105.80
57	BB	1884	G	C4'-C3'-C2'	-5.41	97.19	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2548	U	N3-C4-C5	-5.41	111.36	114.60
57	BB	2575	C	O4'-C1'-N1	5.41	112.53	108.20
21	AA	657	U	N3-C4-C5	5.41	117.84	114.60
21	AA	916	U	C5-C6-N1	5.41	125.40	122.70
21	AA	977	A	C2-N3-C4	-5.41	107.90	110.60
23	AW	10	G	C4'-C3'-C2'	-5.41	97.19	102.60
57	BB	34	U	O4'-C1'-N1	5.41	112.53	108.20
57	BB	182	A	C4-C5-C6	5.41	119.70	117.00
57	BB	703	U	C4'-C3'-C2'	-5.41	97.19	102.60
57	BB	1316	U	N1-C2-O2	5.41	126.58	122.80
57	BB	1433	A	N9-C1'-C2'	-5.41	106.05	112.00
57	BB	1824	G	C8-N9-C1'	5.41	134.03	127.00
57	BB	2083	G	C8-N9-C4	-5.41	104.24	106.40
21	AA	357	G	C6-C5-N7	-5.40	127.16	130.40
21	AA	780	A	C3'-C2'-C1'	5.40	105.82	101.50
21	AA	840	C	N1-C2-N3	5.40	122.98	119.20
21	AA	928	G	O4'-C4'-C3'	-5.40	98.60	104.00
31	BL	12	SER	N-CA-CB	5.40	118.61	110.50
57	BB	74	A	N7-C8-N9	-5.40	111.10	113.80
57	BB	322	A	C6-C5-N7	-5.40	128.52	132.30
57	BB	954	G	C2-N3-C4	-5.40	109.20	111.90
57	BB	1378	A	N1-C2-N3	5.40	132.00	129.30
57	BB	1673	G	C8-N9-C4	5.40	108.56	106.40
57	BB	2069	G	C4-C5-C6	5.40	122.04	118.80
57	BB	2269	G	C2-N3-C4	5.40	114.60	111.90
57	BB	2519	U	C1'-O4'-C4'	5.40	114.22	109.90
57	BB	2585	U	N3-C4-C5	-5.40	111.36	114.60
57	BB	2707	U	P-O3'-C3'	-5.40	113.22	119.70
57	BB	2799	A	P-O3'-C3'	5.40	126.18	119.70
21	AA	174	A	C6-N1-C2	-5.40	115.36	118.60
21	AA	302	G	C1'-O4'-C4'	5.40	114.22	109.90
21	AA	550	G	C2-N3-C4	5.40	114.60	111.90
21	AA	690	G	C4-C5-N7	-5.40	108.64	110.80
21	AA	750	C	C5'-C4'-C3'	5.40	124.64	116.00
21	AA	756	C	C2-N3-C4	-5.40	117.20	119.90
21	AA	1052	U	C5'-C4'-O4'	5.40	115.58	109.10
21	AA	1363	A	C5-C6-N1	-5.40	115.00	117.70
21	AA	1399	C	C5'-C4'-C3'	-5.40	107.36	116.00
21	AA	1408	A	O4'-C1'-C2'	5.40	112.46	107.60
21	AA	1430	A	N1-C6-N6	5.40	121.84	118.60
36	BQ	31	TYR	CG-CD1-CE1	5.40	125.62	121.30
57	BB	87	U	N1-C2-O2	5.40	126.58	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	241	A	C2-N3-C4	-5.40	107.90	110.60
57	BB	407	G	N3-C4-N9	-5.40	122.76	126.00
57	BB	1106	G	N3-C2-N2	5.40	123.68	119.90
57	BB	1365	A	O4'-C1'-N9	5.40	112.52	108.20
57	BB	1498	C	C4'-C3'-C2'	-5.40	97.20	102.60
57	BB	1642	G	C2-N3-C4	-5.40	109.20	111.90
57	BB	1684	G	O4'-C1'-N9	5.40	112.52	108.20
57	BB	2416	C	C2-N1-C1'	5.40	124.74	118.80
21	AA	290	C	C4'-C3'-C2'	-5.40	97.20	102.60
21	AA	351	G	OP1-P-OP2	-5.40	111.50	119.60
21	AA	585	G	N3-C4-C5	-5.40	125.90	128.60
21	AA	1319	A	C5'-C4'-O4'	5.40	115.58	109.10
21	AA	1487	G	N3-C4-C5	5.40	131.30	128.60
21	AA	1505	G	C4-C5-N7	-5.40	108.64	110.80
21	AA	1517	G	C6-C5-N7	-5.40	127.16	130.40
26	AV	10	G	C4-C5-C6	5.40	122.04	118.80
57	BB	2686	G	N7-C8-N9	-5.40	110.40	113.10
57	BB	2877	G	N3-C2-N2	5.40	123.68	119.90
21	AA	426	U	N3-C2-O2	5.40	125.98	122.20
23	AW	29	G	C5-N7-C8	-5.40	101.60	104.30
29	BJ	28	LEU	CB-CG-CD2	-5.40	101.82	111.00
30	BK	98	ILE	N-CA-C	-5.40	96.42	111.00
43	BX	28	PHE	CB-CG-CD1	5.40	124.58	120.80
57	BB	458	G	C4'-C3'-C2'	-5.40	97.20	102.60
57	BB	1590	A	C6-C5-N7	-5.40	128.52	132.30
57	BB	1634	A	P-O5'-C5'	-5.40	112.26	120.90
57	BB	1789	A	O5'-P-OP2	-5.40	100.84	105.70
57	BB	2447	G	P-O3'-C3'	5.40	126.18	119.70
57	BB	2782	G	C6-C5-N7	-5.40	127.16	130.40
21	AA	274	A	C5'-C4'-C3'	-5.40	107.36	116.00
21	AA	841	C	N1-C2-O2	-5.40	115.66	118.90
21	AA	1362	A	N1-C2-N3	5.40	132.00	129.30
21	AA	1465	A	P-O3'-C3'	5.40	126.18	119.70
22	AY	46	G	C5'-C4'-C3'	-5.40	107.36	116.00
25	AZ	350	VAL	O-C-N	5.40	131.34	122.70
26	AV	69	C	O5'-C5'-C4'	-5.40	101.45	111.70
45	BC	161	VAL	CG1-CB-CG2	-5.40	102.26	110.90
57	BB	258	G	N3-C2-N2	5.40	123.68	119.90
57	BB	479	A	C5-C6-N6	-5.40	119.38	123.70
57	BB	699	A	P-O3'-C3'	-5.40	113.22	119.70
57	BB	1169	A	O4'-C4'-C3'	-5.40	98.60	104.00
57	BB	1217	U	P-O3'-C3'	5.40	126.18	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1248	G	O4'-C1'-N9	5.40	112.52	108.20
57	BB	1509	A	C4-C5-N7	-5.40	108.00	110.70
57	BB	1556	C	N3-C4-N4	5.40	121.78	118.00
57	BB	1701	A	P-O3'-C3'	-5.40	113.22	119.70
57	BB	1802	A	C3'-C2'-C1'	5.40	105.82	101.50
57	BB	2176	A	N3-C4-C5	-5.40	123.02	126.80
57	BB	2211	A	N9-C4-C5	5.40	107.96	105.80
57	BB	2424	C	N3-C4-N4	5.40	121.78	118.00
57	BB	2795	C	N3-C4-N4	5.40	121.78	118.00
21	AA	1060	U	C4-C5-C6	5.40	122.94	119.70
21	AA	1083	U	O4'-C1'-N1	5.40	112.52	108.20
21	AA	1159	U	C5-C4-O4	-5.40	122.66	125.90
21	AA	1290	G	C6-N1-C2	5.40	128.34	125.10
22	AY	7	U	C5'-C4'-O4'	5.40	115.58	109.10
57	BB	20	C	P-O3'-C3'	-5.40	113.22	119.70
21	AA	119	A	P-O5'-C5'	-5.39	112.27	120.90
21	AA	237	G	N3-C4-N9	5.39	129.24	126.00
21	AA	660	C	C5-C4-N4	-5.39	116.42	120.20
21	AA	1463	U	N3-C2-O2	5.39	125.98	122.20
21	AA	1477	U	C3'-C2'-C1'	5.39	105.81	101.50
23	AW	62	C	C5-C4-N4	-5.39	116.42	120.20
38	BS	8	ARG	N-CA-CB	5.39	120.31	110.60
52	BD	98	VAL	CA-CB-CG2	5.39	118.99	110.90
57	BB	125	A	N7-C8-N9	-5.39	111.10	113.80
57	BB	175	G	C4'-C3'-C2'	-5.39	97.20	102.60
57	BB	381	G	C8-N9-C4	-5.39	104.24	106.40
57	BB	759	G	C5-C6-N1	-5.39	108.80	111.50
57	BB	1103	A	C5-C6-N1	-5.39	115.00	117.70
57	BB	1277	G	C4'-C3'-C2'	-5.39	97.20	102.60
57	BB	1501	G	C8-N9-C4	-5.39	104.24	106.40
57	BB	1855	U	C5'-C4'-O4'	5.39	115.57	109.10
57	BB	1996	C	N1-C2-N3	5.39	122.98	119.20
57	BB	2371	G	C8-N9-C4	-5.39	104.24	106.40
2	AK	54	SER	N-CA-CB	5.39	118.59	110.50
16	AE	110	MET	CG-SD-CE	-5.39	91.57	100.20
17	AF	99	ALA	N-CA-CB	5.39	117.65	110.10
21	AA	88	U	N3-C4-O4	5.39	123.17	119.40
21	AA	807	A	OP1-P-OP2	-5.39	111.51	119.60
21	AA	851	G	N7-C8-N9	5.39	115.80	113.10
21	AA	876	C	N3-C4-C5	-5.39	119.74	121.90
21	AA	988	G	C2-N3-C4	-5.39	109.20	111.90
21	AA	1390	U	C2-N3-C4	5.39	130.24	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	4	C	O4'-C1'-C2'	-5.39	100.41	105.80
57	BB	921	C	C6-N1-C1'	5.39	127.27	120.80
57	BB	1472	C	O4'-C1'-N1	5.39	112.51	108.20
57	BB	1555	G	N3-C2-N2	5.39	123.67	119.90
57	BB	1713	A	C8-N9-C4	-5.39	103.64	105.80
57	BB	1732	C	C5'-C4'-C3'	-5.39	107.37	116.00
57	BB	1869	G	C4'-C3'-C2'	-5.39	97.21	102.60
57	BB	2421	G	O4'-C1'-N9	5.39	112.52	108.20
21	AA	108	G	C2-N3-C4	5.39	114.59	111.90
21	AA	1201	A	C5'-C4'-C3'	-5.39	107.37	116.00
21	AA	1239	A	C5-N7-C8	5.39	106.60	103.90
57	BB	274	C	C5-C4-N4	-5.39	116.43	120.20
57	BB	940	G	C4-C5-N7	5.39	112.96	110.80
57	BB	1757	A	N9-C4-C5	5.39	107.96	105.80
57	BB	1977	A	C4-C5-N7	5.39	113.40	110.70
57	BB	2610	C	C4-C5-C6	5.39	120.10	117.40
21	AA	418	C	P-O5'-C5'	-5.39	112.28	120.90
23	AW	73	A	C6-C5-N7	-5.39	128.53	132.30
26	AV	17(A)	U	C6-N1-C2	5.39	124.23	121.00
27	B5	112	ASP	CB-CG-OD1	5.39	123.15	118.30
57	BB	148	U	C4-C5-C6	-5.39	116.47	119.70
57	BB	232	G	N1-C2-N3	-5.39	120.67	123.90
57	BB	261	G	N3-C2-N2	5.39	123.67	119.90
57	BB	289	G	C4-C5-N7	-5.39	108.64	110.80
57	BB	312	G	O4'-C1'-N9	5.39	112.51	108.20
57	BB	884	U	C5-C6-N1	5.39	125.39	122.70
57	BB	1030	C	N1-C2-O2	-5.39	115.67	118.90
57	BB	2061	G	N3-C2-N2	5.39	123.67	119.90
57	BB	2579	C	N1-C2-N3	5.39	122.97	119.20
57	BB	2651	C	C4-C5-C6	-5.39	114.71	117.40
21	AA	682	G	N9-C1'-C2'	-5.39	106.07	112.00
41	BV	60	VAL	CG1-CB-CG2	5.39	119.52	110.90
57	BB	304	U	C5'-C4'-C3'	-5.39	107.38	116.00
57	BB	981	A	N3-C4-C5	-5.39	123.03	126.80
57	BB	1063	G	P-O5'-C5'	-5.39	112.28	120.90
57	BB	1236	G	C6-N1-C2	5.39	128.33	125.10
57	BB	1374	G	P-O5'-C5'	5.39	129.52	120.90
57	BB	1513	U	N1-C2-N3	-5.39	111.67	114.90
57	BB	1658	C	C5-C4-N4	-5.39	116.43	120.20
21	AA	45	G	C5-C6-N1	-5.39	108.81	111.50
21	AA	232	G	N3-C2-N2	5.39	123.67	119.90
21	AA	539	A	C2-N3-C4	-5.39	107.91	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	753	A	C5'-C4'-O4'	5.39	115.56	109.10
22	AY	36	A	P-O5'-C5'	-5.39	112.28	120.90
22	AY	53	G	O4'-C4'-C3'	-5.39	98.61	104.00
25	AZ	70	ASP	O-C-N	5.39	131.32	122.70
57	BB	365	U	C5-C4-O4	-5.39	122.67	125.90
57	BB	442	G	N3-C2-N2	5.39	123.67	119.90
57	BB	572	A	C1'-O4'-C4'	5.39	114.21	109.90
57	BB	1165	A	N1-C2-N3	-5.39	126.61	129.30
57	BB	1532	A	P-O5'-C5'	5.39	129.52	120.90
57	BB	1668	A	N7-C8-N9	-5.39	111.11	113.80
57	BB	1807	G	N3-C2-N2	5.39	123.67	119.90
57	BB	2631	G	N1-C2-N2	-5.39	111.35	116.20
57	BB	2723	C	O4'-C1'-N1	5.39	112.51	108.20
57	BB	2814	A	C5-C6-N6	-5.39	119.39	123.70
58	BA	90	C	O4'-C1'-N1	5.39	112.51	108.20
21	AA	536	C	C6-N1-C1'	-5.38	114.34	120.80
57	BB	351	C	N1-C2-O2	-5.38	115.67	118.90
57	BB	698	C	C4-C5-C6	5.38	120.09	117.40
57	BB	951	C	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	1312	U	C1'-O4'-C4'	-5.38	105.59	109.90
57	BB	1348	C	C1'-O4'-C4'	-5.38	105.59	109.90
57	BB	1491	G	C5-N7-C8	-5.38	101.61	104.30
57	BB	1555	G	N1-C6-O6	5.38	123.13	119.90
57	BB	1609	A	C8-N9-C4	-5.38	103.65	105.80
57	BB	1661	G	N3-C2-N2	5.38	123.67	119.90
57	BB	1795	C	N1-C1'-C2'	-5.38	106.08	112.00
57	BB	1878	G	N1-C2-N2	-5.38	111.35	116.20
57	BB	2017	U	OP1-P-OP2	-5.38	111.53	119.60
57	BB	2094	A	OP1-P-OP2	-5.38	111.52	119.60
57	BB	2140	G	N1-C6-O6	5.38	123.13	119.90
21	AA	577	G	C3'-C2'-C1'	-5.38	97.19	101.50
57	BB	35	G	C5-N7-C8	5.38	106.99	104.30
57	BB	517	C	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	2125	G	C6-C5-N7	-5.38	127.17	130.40
57	BB	2497	A	C5-C6-N6	-5.38	119.39	123.70
7	AP	25	ARG	NE-CZ-NH2	-5.38	117.61	120.30
21	AA	205	A	C4-C5-C6	5.38	119.69	117.00
21	AA	304	U	O4'-C1'-N1	5.38	112.50	108.20
21	AA	455	G	C5-C6-N1	-5.38	108.81	111.50
21	AA	470	C	C1'-O4'-C4'	5.38	114.21	109.90
21	AA	499	A	C5'-C4'-O4'	5.38	115.56	109.10
21	AA	880	C	C4'-C3'-C2'	-5.38	97.22	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1185	G	O4'-C1'-N9	5.38	112.50	108.20
21	AA	1447	A	N1-C2-N3	5.38	131.99	129.30
57	BB	321	U	O4'-C1'-N1	5.38	112.50	108.20
57	BB	778	G	O4'-C1'-N9	5.38	112.50	108.20
57	BB	1134	A	C5-C6-N6	-5.38	119.39	123.70
57	BB	1574	C	C6-N1-C2	-5.38	118.15	120.30
57	BB	1948	G	N3-C4-N9	5.38	129.23	126.00
57	BB	1983	G	C6-C5-N7	-5.38	127.17	130.40
57	BB	2070	A	C4-C5-C6	5.38	119.69	117.00
57	BB	2095	A	N1-C2-N3	5.38	131.99	129.30
57	BB	2511	U	N3-C4-O4	5.38	123.17	119.40
57	BB	2724	U	OP1-P-OP2	-5.38	111.53	119.60
57	BB	2897	U	O4'-C1'-N1	5.38	112.51	108.20
57	BB	2900	A	C2-N3-C4	5.38	113.29	110.60
21	AA	51	A	C6-C5-N7	-5.38	128.53	132.30
21	AA	261	U	C1'-O4'-C4'	5.38	114.20	109.90
21	AA	694	A	N3-C4-C5	-5.38	123.03	126.80
26	AV	30	G	C4-C5-N7	5.38	112.95	110.80
31	BL	131	ALA	CB-CA-C	-5.38	102.03	110.10
57	BB	1882	U	C2-N3-C4	5.38	130.23	127.00
21	AA	66	A	O4'-C4'-C3'	-5.38	98.62	104.00
21	AA	436	C	C3'-C2'-C1'	-5.38	97.20	101.50
21	AA	604	G	O5'-C5'-C4'	-5.38	101.48	111.70
21	AA	723	U	N3-C4-O4	5.38	123.17	119.40
21	AA	845	A	C4'-C3'-C2'	-5.38	97.22	102.60
21	AA	1525	G	C3'-C2'-C1'	-5.38	97.20	101.50
26	AV	24	U	C6-N1-C2	-5.38	117.77	121.00
26	AV	39	C	N1-C2-O2	-5.38	115.67	118.90
39	BT	84	TYR	CG-CD1-CE1	-5.38	117.00	121.30
46	BZ	48	ASN	C-N-CA	5.38	135.15	121.70
57	BB	227	A	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	292	U	N1-C2-O2	-5.38	119.03	122.80
57	BB	541	A	O4'-C1'-N9	5.38	112.50	108.20
57	BB	558	U	N3-C4-O4	5.38	123.17	119.40
57	BB	805	G	C5-C6-N1	-5.38	108.81	111.50
57	BB	1020	A	N7-C8-N9	5.38	116.49	113.80
57	BB	1714	U	P-O5'-C5'	5.38	129.50	120.90
57	BB	1762	A	C5'-C4'-O4'	-5.38	102.64	109.10
57	BB	2141	G	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	2145	C	C6-N1-C2	5.38	122.45	120.30
57	BB	2332	C	N1-C2-O2	-5.38	115.67	118.90
57	BB	2427	C	N3-C4-C5	-5.38	119.75	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2627	G	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	2826	A	O4'-C1'-N9	5.38	112.50	108.20
21	AA	35	G	C5-C6-O6	-5.38	125.37	128.60
21	AA	71	A	C3'-C2'-C1'	-5.38	97.20	101.50
21	AA	72	A	C5-C6-N1	-5.38	115.01	117.70
21	AA	555	U	N1-C2-O2	-5.38	119.04	122.80
21	AA	637	C	O4'-C4'-C3'	-5.38	98.62	104.00
21	AA	655	A	N7-C8-N9	5.38	116.49	113.80
21	AA	818	G	C6-C5-N7	-5.38	127.17	130.40
21	AA	1058	G	N9-C4-C5	-5.38	103.25	105.40
25	AZ	283	ARG	NE-CZ-NH2	-5.38	117.61	120.30
26	AV	22	G	N3-C4-C5	-5.38	125.91	128.60
57	BB	514	A	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	706	A	C5-C6-N1	-5.38	115.01	117.70
57	BB	1202	G	C5-C6-N1	-5.38	108.81	111.50
57	BB	1573	G	N9-C1'-C2'	-5.38	106.08	112.00
57	BB	2066	C	O4'-C1'-N1	5.38	112.50	108.20
57	BB	2147	A	C2-N3-C4	-5.38	107.91	110.60
57	BB	2219	U	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	2224	G	N1-C2-N3	-5.38	120.67	123.90
57	BB	2342	C	C4-C5-C6	5.38	120.09	117.40
21	AA	972	C	C4-C5-C6	5.38	120.09	117.40
23	AW	33	U	N3-C4-C5	5.38	117.83	114.60
55	BG	23	ILE	CA-CB-CG1	5.38	121.21	111.00
57	BB	172	A	C2-N3-C4	-5.38	107.91	110.60
57	BB	968	C	P-O3'-C3'	-5.38	113.25	119.70
57	BB	977	G	N9-C1'-C2'	-5.38	106.09	112.00
57	BB	2700	A	C5-C6-N6	-5.38	119.40	123.70
57	BB	2786	U	N3-C4-C5	-5.38	111.38	114.60
21	AA	734	G	C6-N1-C2	5.37	128.32	125.10
21	AA	1172	C	N1-C2-O2	5.37	122.12	118.90
21	AA	1283	U	N3-C4-C5	-5.37	111.38	114.60
23	AW	34	G	C5-N7-C8	5.37	106.99	104.30
26	AV	34	C	C3'-C2'-C1'	-5.37	97.20	101.50
26	AV	53	G	C3'-C2'-C1'	-5.37	97.20	101.50
57	BB	92	U	O4'-C4'-C3'	-5.37	98.63	104.00
57	BB	197	A	OP1-P-OP2	-5.37	111.54	119.60
57	BB	625	G	O4'-C1'-N9	5.37	112.50	108.20
57	BB	732	C	N3-C2-O2	5.37	125.66	121.90
57	BB	1231	U	C6-N1-C1'	5.37	128.72	121.20
57	BB	1796	U	N1-C2-N3	5.37	118.12	114.90
57	BB	2218	G	C2-N3-C4	5.37	114.59	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2390	U	N3-C4-C5	-5.37	111.38	114.60
21	AA	265	G	N1-C2-N2	-5.37	111.37	116.20
21	AA	331	G	C2-N3-C4	5.37	114.59	111.90
21	AA	528	C	C6-N1-C1'	5.37	127.25	120.80
21	AA	533	A	N1-C2-N3	5.37	131.99	129.30
21	AA	963	G	C4-C5-C6	5.37	122.02	118.80
21	AA	1132	C	C6-N1-C2	-5.37	118.15	120.30
21	AA	1304	G	C5-C6-N1	-5.37	108.81	111.50
57	BB	48	G	C5-C6-N1	-5.37	108.81	111.50
57	BB	298	G	C5-C6-O6	-5.37	125.38	128.60
57	BB	685	A	N9-C4-C5	5.37	107.95	105.80
57	BB	706	A	C4-C5-C6	5.37	119.69	117.00
57	BB	1123	C	N3-C4-C5	5.37	124.05	121.90
57	BB	1151	A	P-O3'-C3'	-5.37	113.25	119.70
57	BB	1344	U	C4-C5-C6	5.37	122.92	119.70
57	BB	1701	A	N3-C4-N9	5.37	131.70	127.40
57	BB	2213	U	N1-C2-N3	-5.37	111.68	114.90
57	BB	2289	G	N1-C2-N2	-5.37	111.37	116.20
57	BB	2398	U	O5'-P-OP1	-5.37	100.86	105.70
57	BB	2725	A	P-O5'-C5'	-5.37	112.30	120.90
58	BA	104	A	C4-C5-C6	5.37	119.69	117.00
19	AH	53	ASP	CB-CG-OD1	-5.37	113.47	118.30
21	AA	494	G	C6-C5-N7	-5.37	127.18	130.40
21	AA	1339	A	N9-C4-C5	5.37	107.95	105.80
21	AA	1376	U	N3-C2-O2	5.37	125.96	122.20
21	AA	1394	A	N9-C4-C5	-5.37	103.65	105.80
25	AZ	332	PHE	CB-CA-C	-5.37	99.66	110.40
26	AV	3	C	N3-C4-C5	-5.37	119.75	121.90
26	AV	36	U	C5'-C4'-C3'	-5.37	107.41	116.00
57	BB	144	A	C5-C6-N6	-5.37	119.40	123.70
57	BB	223	A	C4-C5-N7	-5.37	108.02	110.70
57	BB	825	A	C2-N3-C4	5.37	113.28	110.60
57	BB	1352	U	C4'-C3'-C2'	-5.37	97.23	102.60
57	BB	1840	G	N1-C6-O6	5.37	123.12	119.90
57	BB	1982	U	C2-N1-C1'	-5.37	111.26	117.70
57	BB	2211	A	C6-C5-N7	-5.37	128.54	132.30
57	BB	2270	A	C5'-C4'-O4'	5.37	115.54	109.10
57	BB	2823	A	OP1-P-O3'	5.37	117.01	105.20
21	AA	243	A	N9-C4-C5	5.37	107.95	105.80
21	AA	632	U	C3'-C2'-C1'	5.37	105.80	101.50
21	AA	1253	G	P-O3'-C3'	-5.37	113.26	119.70
21	AA	1274	A	N1-C2-N3	5.37	131.98	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	BK	2	GLN	N-CA-CB	5.37	120.26	110.60
57	BB	166	U	OP1-P-OP2	-5.37	111.55	119.60
57	BB	497	A	O4'-C1'-N9	5.37	112.49	108.20
57	BB	774	G	O4'-C1'-N9	5.37	112.50	108.20
57	BB	862	G	C6-C5-N7	-5.37	127.18	130.40
57	BB	1269	A	N3-C4-C5	-5.37	123.04	126.80
57	BB	1538	G	C5-C6-O6	-5.37	125.38	128.60
21	AA	243	A	C5'-C4'-O4'	5.37	115.54	109.10
21	AA	271	C	C4-C5-C6	5.37	120.08	117.40
21	AA	1344	C	C5-C4-N4	-5.37	116.44	120.20
57	BB	512	G	N3-C2-N2	5.37	123.66	119.90
57	BB	698	C	N3-C4-N4	5.37	121.76	118.00
57	BB	732	C	N3-C4-N4	5.37	121.76	118.00
57	BB	993	G	N3-C4-N9	-5.37	122.78	126.00
4	AM	22	TYR	CB-CG-CD2	-5.37	117.78	121.00
6	AO	14	PHE	CB-CG-CD2	5.37	124.56	120.80
21	AA	139	A	C6-N1-C2	-5.37	115.38	118.60
21	AA	404	G	N7-C8-N9	-5.37	110.42	113.10
21	AA	907	A	O4'-C1'-N9	5.37	112.49	108.20
21	AA	928	G	P-O3'-C3'	-5.37	113.26	119.70
26	AV	48	C	C2-N3-C4	5.37	122.58	119.90
57	BB	233	A	C4-C5-C6	5.37	119.68	117.00
57	BB	1174	U	N3-C4-O4	5.37	123.16	119.40
57	BB	1614	A	C5'-C4'-O4'	5.37	115.54	109.10
57	BB	2058	A	C5-N7-C8	5.37	106.58	103.90
57	BB	2470	G	C5-C6-O6	-5.37	125.38	128.60
57	BB	2529	G	C5-N7-C8	5.37	106.98	104.30
14	AC	116	ALA	O-C-N	-5.36	114.12	122.70
21	AA	488	C	C5-C4-N4	5.36	123.95	120.20
21	AA	492	C	N1-C2-N3	-5.36	115.44	119.20
21	AA	575	G	N3-C4-C5	5.36	131.28	128.60
21	AA	1117	A	N3-C4-C5	-5.36	123.05	126.80
21	AA	1176	A	C5-C6-N6	-5.36	119.41	123.70
21	AA	1200	C	C6-N1-C2	-5.36	118.15	120.30
21	AA	1494	G	C8-N9-C4	-5.36	104.25	106.40
27	B5	37	LYS	CB-CA-C	5.36	121.13	110.40
57	BB	103	A	C5'-C4'-C3'	-5.36	107.42	116.00
57	BB	477	A	O4'-C1'-N9	5.36	112.49	108.20
57	BB	899	A	C8-N9-C4	-5.36	103.65	105.80
57	BB	1252	G	C2-N3-C4	-5.36	109.22	111.90
57	BB	1273	U	C5-C4-O4	5.36	129.12	125.90
57	BB	1608	A	N1-C2-N3	-5.36	126.62	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2094	A	C4-C5-C6	5.36	119.68	117.00
57	BB	2126	A	C6-C5-N7	-5.36	128.54	132.30
57	BB	2444	G	N3-C4-N9	-5.36	122.78	126.00
57	BB	2495	G	C4'-C3'-C2'	-5.36	97.24	102.60
21	AA	320	A	N9-C4-C5	-5.36	103.66	105.80
21	AA	413	G	N1-C2-N2	-5.36	111.37	116.20
21	AA	889	A	N9-C4-C5	5.36	107.94	105.80
21	AA	1332	A	N3-C4-N9	5.36	131.69	127.40
21	AA	1447	A	C4'-C3'-C2'	-5.36	97.24	102.60
21	AA	1527	U	C4-C5-C6	5.36	122.92	119.70
31	BL	28	GLY	CA-C-O	5.36	130.25	120.60
57	BB	2830	C	C5-C4-N4	-5.36	116.45	120.20
21	AA	39	G	C4-C5-N7	-5.36	108.66	110.80
21	AA	692	U	OP1-P-OP2	-5.36	111.56	119.60
21	AA	811	C	OP1-P-OP2	-5.36	111.56	119.60
21	AA	1052	U	C6-N1-C2	5.36	124.22	121.00
21	AA	1154	G	O4'-C4'-C3'	-5.36	98.64	104.00
21	AA	1254	A	N3-C4-N9	5.36	131.69	127.40
21	AA	1484	C	N1-C2-O2	5.36	122.12	118.90
42	BW	24	ARG	NH1-CZ-NH2	5.36	125.30	119.40
57	BB	471	A	C6-C5-N7	-5.36	128.55	132.30
57	BB	1308	A	C5-N7-C8	5.36	106.58	103.90
57	BB	1517	G	C5-C6-O6	-5.36	125.38	128.60
57	BB	1597	A	N1-C6-N6	5.36	121.82	118.60
22	AY	7	U	P-O5'-C5'	-5.36	112.33	120.90
57	BB	720	U	C4'-C3'-C2'	-5.36	97.24	102.60
57	BB	1460	U	C5-C4-O4	-5.36	122.69	125.90
8	AQ	33	TYR	CD1-CE1-CZ	-5.36	114.98	119.80
21	AA	473	U	C4-C5-C6	-5.36	116.49	119.70
21	AA	719	C	C5-C6-N1	5.36	123.68	121.00
21	AA	805	C	N1-C2-O2	5.36	122.11	118.90
21	AA	972	C	N3-C4-C5	-5.36	119.76	121.90
21	AA	1244	G	P-O3'-C3'	-5.36	113.27	119.70
21	AA	1455	G	N3-C2-N2	5.36	123.65	119.90
23	AW	34	G	C8-N9-C4	-5.36	104.26	106.40
26	AV	64	G	C4-N9-C1'	-5.36	119.53	126.50
57	BB	694	U	C5-C4-O4	-5.36	122.69	125.90
57	BB	901	C	N1-C2-O2	5.36	122.11	118.90
57	BB	1040	A	C8-N9-C4	-5.36	103.66	105.80
57	BB	1469	A	C4-C5-C6	5.36	119.68	117.00
57	BB	1681	G	C4-C5-N7	5.36	112.94	110.80
57	BB	2381	A	C6-C5-N7	-5.36	128.55	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2512	C	N1-C1'-C2'	-5.36	106.11	112.00
57	BB	2719	G	P-O3'-C3'	-5.36	113.27	119.70
57	BB	2745	C	C5'-C4'-O4'	5.36	115.53	109.10
57	BB	2859	G	C6-N1-C2	5.36	128.31	125.10
15	AD	6	PRO	O-C-N	5.36	131.27	122.70
21	AA	458	U	N3-C4-C5	5.36	117.81	114.60
21	AA	668	G	N1-C2-N3	-5.36	120.69	123.90
21	AA	685	G	C4-C5-C6	5.36	122.01	118.80
21	AA	718	A	N7-C8-N9	-5.36	111.12	113.80
21	AA	804	U	P-O3'-C3'	-5.36	113.27	119.70
21	AA	862	C	C6-N1-C2	-5.36	118.16	120.30
21	AA	920	U	C5-C6-N1	5.36	125.38	122.70
28	BI	75	ALA	N-CA-C	-5.36	96.54	111.00
52	BD	124	ARG	NE-CZ-NH1	5.36	122.98	120.30
57	BB	195	A	C3'-C2'-C1'	-5.36	97.22	101.50
57	BB	298	G	C5-C6-N1	-5.36	108.82	111.50
57	BB	329	G	C2-N3-C4	5.36	114.58	111.90
57	BB	555	G	O4'-C4'-C3'	-5.36	98.64	104.00
57	BB	656	G	C2-N3-C4	5.36	114.58	111.90
57	BB	1041	G	N1-C2-N3	-5.36	120.69	123.90
57	BB	1075	C	C5-C4-N4	-5.36	116.45	120.20
57	BB	1162	G	C4-C5-N7	-5.36	108.66	110.80
57	BB	1180	U	N3-C4-C5	-5.36	111.39	114.60
57	BB	1243	C	C6-N1-C2	-5.36	118.16	120.30
57	BB	1918	A	P-O3'-C3'	5.36	126.13	119.70
57	BB	2461	A	C5'-C4'-C3'	-5.36	107.43	116.00
21	AA	874	G	O4'-C1'-N9	5.35	112.48	108.20
21	AA	923	A	C4-C5-N7	-5.35	108.02	110.70
21	AA	1396	A	C5-C6-N1	5.35	120.38	117.70
57	BB	449	A	C6-N1-C2	5.35	121.81	118.60
57	BB	1295	C	P-O3'-C3'	-5.35	113.28	119.70
57	BB	2238	G	N7-C8-N9	5.35	115.78	113.10
57	BB	2330	G	N3-C4-N9	5.35	129.21	126.00
57	BB	2692	G	C2-N3-C4	-5.35	109.22	111.90
57	BB	2732	G	N3-C2-N2	5.35	123.65	119.90
5	AN	74	ARG	NE-CZ-NH2	5.35	122.98	120.30
21	AA	222	C	N3-C4-C5	-5.35	119.76	121.90
21	AA	461	A	C4-N9-C1'	5.35	135.94	126.30
21	AA	630	A	C4-C5-N7	5.35	113.38	110.70
21	AA	752	G	O4'-C1'-N9	5.35	112.48	108.20
21	AA	1030	U	C4'-C3'-C2'	-5.35	97.25	102.60
21	AA	1068	G	N1-C2-N2	-5.35	111.38	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1331	G	C6-N1-C2	5.35	128.31	125.10
29	BJ	37	ARG	NE-CZ-NH1	-5.35	117.62	120.30
57	BB	56	A	P-O5'-C5'	5.35	129.46	120.90
57	BB	96	C	O5'-C5'-C4'	-5.35	101.53	111.70
57	BB	250	G	OP1-P-OP2	-5.35	111.57	119.60
57	BB	307	G	C2-N3-C4	5.35	114.58	111.90
57	BB	674	G	C2-N3-C4	5.35	114.58	111.90
57	BB	945	A	C4-C5-C6	5.35	119.68	117.00
57	BB	1366	A	P-O5'-C5'	-5.35	112.34	120.90
57	BB	1821	A	C5'-C4'-O4'	5.35	115.52	109.10
57	BB	1860	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	1885	A	N1-C6-N6	5.35	121.81	118.60
57	BB	1895	C	C2-N3-C4	-5.35	117.22	119.90
57	BB	2060	A	N1-C2-N3	5.35	131.98	129.30
57	BB	2090	A	C8-N9-C4	5.35	107.94	105.80
57	BB	2107	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	2222	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	2308	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	2360	G	C2-N3-C4	5.35	114.58	111.90
57	BB	2764	A	N9-C4-C5	5.35	107.94	105.80
21	AA	705	G	C5-C6-N1	5.35	114.17	111.50
57	BB	45	G	C5-C6-N1	5.35	114.17	111.50
57	BB	191	A	C5-C6-N1	-5.35	115.03	117.70
57	BB	211	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	876	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	993	G	P-O3'-C3'	-5.35	113.28	119.70
57	BB	1573	G	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1789	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	2405	G	C4-C5-C6	5.35	122.01	118.80
57	BB	2461	A	C1'-O4'-C4'	5.35	114.18	109.90
21	AA	845	A	C5-C6-N1	-5.35	115.03	117.70
54	BF	149	ARG	NH1-CZ-NH2	5.35	125.28	119.40
57	BB	293	U	C6-N1-C2	5.35	124.21	121.00
57	BB	763	G	C6-C5-N7	-5.35	127.19	130.40
57	BB	1230	A	N9-C4-C5	-5.35	103.66	105.80
57	BB	1308	A	C8-N9-C4	-5.35	103.66	105.80
57	BB	1476	U	N1-C2-O2	-5.35	119.06	122.80
57	BB	1575	C	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1637	A	N3-C4-C5	-5.35	123.06	126.80
57	BB	1712	U	C4-C5-C6	-5.35	116.49	119.70
57	BB	1800	C	C3'-C2'-C1'	5.35	105.78	101.50
57	BB	2176	A	C4'-C3'-C2'	5.35	107.95	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2409	G	P-O5'-C5'	-5.35	112.34	120.90
57	BB	2607	G	OP1-P-OP2	-5.35	111.58	119.60
57	BB	2798	U	O3'-P-O5'	-5.35	93.84	104.00
57	BB	2846	G	C3'-C2'-C1'	5.35	105.78	101.50
58	BA	116	G	C3'-C2'-C1'	5.35	105.78	101.50
21	AA	43	C	C1'-O4'-C4'	-5.35	105.62	109.90
21	AA	129	A	C5-C6-N6	-5.35	119.42	123.70
21	AA	423	G	C4'-C3'-C2'	-5.35	97.25	102.60
21	AA	716	A	C6-C5-N7	-5.35	128.56	132.30
21	AA	983	A	OP1-P-OP2	-5.35	111.58	119.60
21	AA	1238	A	O5'-P-OP1	5.35	117.12	110.70
21	AA	1329	A	C8-N9-C4	-5.35	103.66	105.80
21	AA	1475	G	C4-C5-C6	5.35	122.01	118.80
57	BB	386	G	P-O3'-C3'	5.35	126.12	119.70
57	BB	535	G	N3-C2-N2	5.35	123.64	119.90
57	BB	626	A	C4-C5-N7	-5.35	108.03	110.70
57	BB	654	A	C5-C6-N1	5.35	120.37	117.70
57	BB	706	A	N3-C4-N9	5.35	131.68	127.40
57	BB	970	U	C2-N3-C4	5.35	130.21	127.00
57	BB	994	C	O4'-C1'-N1	5.35	112.48	108.20
57	BB	1021	A	N3-C4-C5	-5.35	123.06	126.80
57	BB	1120	G	C4-C5-N7	-5.35	108.66	110.80
57	BB	2002	G	C6-N1-C2	5.35	128.31	125.10
58	BA	19	C	C6-N1-C2	-5.35	118.16	120.30
58	BA	63	C	N3-C4-N4	5.35	121.74	118.00
21	AA	1415	G	C2-N3-C4	5.35	114.57	111.90
23	AW	31	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1284	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1728	C	P-O5'-C5'	5.35	129.45	120.90
57	BB	1857	G	N3-C2-N2	5.35	123.64	119.90
57	BB	2324	U	N3-C4-C5	-5.35	111.39	114.60
57	BB	2425	A	O4'-C1'-N9	5.35	112.48	108.20
14	AC	129	PHE	CB-CG-CD1	5.34	124.54	120.80
21	AA	646	G	C2-N3-C4	5.34	114.57	111.90
21	AA	1074	G	N9-C4-C5	5.34	107.54	105.40
21	AA	1149	C	C5-C4-N4	-5.34	116.46	120.20
21	AA	1229	A	C4-C5-C6	5.34	119.67	117.00
22	AY	12	U	C5'-C4'-C3'	-5.34	107.45	116.00
23	AW	23	A	N1-C6-N6	5.34	121.81	118.60
57	BB	31	C	C3'-C2'-C1'	5.34	105.78	101.50
57	BB	42	A	C4-C5-C6	5.34	119.67	117.00
57	BB	76	C	C4'-C3'-C2'	-5.34	97.25	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	478	A	C4'-C3'-C2'	5.34	107.94	102.60
57	BB	512	G	C4-C5-C6	5.34	122.01	118.80
57	BB	546	U	P-O3'-C3'	5.34	126.11	119.70
57	BB	937	C	P-O5'-C5'	5.34	129.45	120.90
57	BB	996	A	C8-N9-C4	5.34	107.94	105.80
57	BB	1331	G	O4'-C1'-N9	5.34	112.47	108.20
57	BB	1482	G	N1-C2-N3	-5.34	120.69	123.90
57	BB	2205	A	N7-C8-N9	5.34	116.47	113.80
57	BB	2224	G	C4-C5-C6	5.34	122.01	118.80
57	BB	2259	U	C5-C6-N1	5.34	125.37	122.70
57	BB	2274	A	C4-C5-N7	-5.34	108.03	110.70
57	BB	2617	U	C3'-C2'-C1'	5.34	105.78	101.50
58	BA	39	A	C1'-O4'-C4'	5.34	114.18	109.90
21	AA	640	A	C5-N7-C8	-5.34	101.23	103.90
21	AA	1034	G	C4-N9-C1'	5.34	133.44	126.50
21	AA	1343	G	C5'-C4'-C3'	5.34	124.55	116.00
21	AA	1430	A	C5-N7-C8	5.34	106.57	103.90
21	AA	1480	A	C8-N9-C1'	5.34	137.32	127.70
57	BB	259	G	P-O5'-C5'	-5.34	112.35	120.90
57	BB	457	A	C5'-C4'-O4'	5.34	115.51	109.10
57	BB	2322	A	C5-C6-N1	-5.34	115.03	117.70
58	BA	99	A	N3-C4-C5	-5.34	123.06	126.80
21	AA	197	A	C5'-C4'-C3'	5.34	124.55	116.00
21	AA	407	U	N3-C4-C5	-5.34	111.39	114.60
21	AA	561	U	N1-C2-O2	-5.34	119.06	122.80
21	AA	787	A	O4'-C1'-N9	5.34	112.47	108.20
21	AA	1298	U	P-O3'-C3'	5.34	126.11	119.70
21	AA	1436	U	C5-C6-N1	5.34	125.37	122.70
23	AW	24	G	O4'-C1'-C2'	-5.34	100.46	105.80
48	B1	11	VAL	CA-C-N	-5.34	105.45	117.20
57	BB	80	G	C1'-O4'-C4'	5.34	114.17	109.90
57	BB	125	A	C4'-C3'-C2'	-5.34	97.26	102.60
57	BB	370	G	O4'-C4'-C3'	-5.34	98.66	104.00
57	BB	527	C	P-O3'-C3'	-5.34	113.29	119.70
57	BB	630	G	C5'-C4'-C3'	5.34	124.55	116.00
57	BB	738	G	C8-N9-C4	-5.34	104.26	106.40
57	BB	871	U	N3-C4-O4	-5.34	115.66	119.40
57	BB	1204	A	P-O3'-C3'	5.34	126.11	119.70
57	BB	1473	G	C4-N9-C1'	-5.34	119.56	126.50
57	BB	1570	A	C4-C5-N7	-5.34	108.03	110.70
57	BB	1747	U	O4'-C1'-N1	5.34	112.47	108.20
57	BB	1803	A	C6-N1-C2	-5.34	115.39	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2160	C	C5-C4-N4	-5.34	116.46	120.20
57	BB	2160	C	C6-N1-C1'	-5.34	114.39	120.80
57	BB	2330	G	N1-C2-N2	5.34	121.01	116.20
57	BB	2400	G	C5-C6-O6	-5.34	125.39	128.60
57	BB	2499	C	C5'-C4'-C3'	-5.34	107.45	116.00
57	BB	2800	A	N1-C2-N3	5.34	131.97	129.30
19	AH	12	ARG	CG-CD-NE	-5.34	100.59	111.80
21	AA	11	G	C6-N1-C2	-5.34	121.90	125.10
21	AA	36	C	N3-C4-N4	5.34	121.74	118.00
21	AA	823	C	C5-C6-N1	-5.34	118.33	121.00
21	AA	993	G	N1-C2-N3	-5.34	120.70	123.90
23	AW	6	G	N3-C2-N2	5.34	123.64	119.90
25	AZ	373	ARG	NE-CZ-NH2	5.34	122.97	120.30
32	BM	117	PHE	CG-CD2-CE2	5.34	126.67	120.80
57	BB	60	G	C5-C6-O6	-5.34	125.40	128.60
57	BB	1478	G	N9-C4-C5	5.34	107.54	105.40
57	BB	1516	G	C5'-C4'-O4'	5.34	115.51	109.10
57	BB	1613	G	C4-C5-N7	5.34	112.94	110.80
57	BB	1819	A	N1-C2-N3	5.34	131.97	129.30
57	BB	1857	G	C2-N3-C4	-5.34	109.23	111.90
57	BB	2113	U	N3-C4-C5	-5.34	111.40	114.60
57	BB	2286	G	C8-N9-C1'	5.34	133.94	127.00
57	BB	2441	U	N1-C2-N3	-5.34	111.70	114.90
57	BB	2452	C	C2-N3-C4	5.34	122.57	119.90
57	BB	2494	G	O5'-C5'-C4'	-5.34	101.56	111.70
57	BB	2632	A	OP1-P-OP2	-5.34	111.59	119.60
57	BB	2708	G	C5-C6-O6	-5.34	125.40	128.60
15	AD	25	ARG	CD-NE-CZ	-5.34	116.13	123.60
21	AA	95	C	O4'-C1'-N1	5.34	112.47	108.20
21	AA	467	U	C5'-C4'-O4'	5.34	115.50	109.10
21	AA	1488	G	N3-C2-N2	5.34	123.64	119.90
21	AA	1508	A	O4'-C1'-C2'	-5.34	100.46	105.80
57	BB	100	U	C6-N1-C2	-5.34	117.80	121.00
57	BB	571	U	C5-C4-O4	-5.34	122.70	125.90
57	BB	1024	G	N3-C4-N9	5.34	129.20	126.00
57	BB	1379	U	N1-C2-O2	-5.34	119.06	122.80
57	BB	1452	G	N3-C4-C5	-5.34	125.93	128.60
57	BB	1602	U	C4'-C3'-C2'	5.34	107.94	102.60
57	BB	1704	C	C5-C6-N1	5.34	123.67	121.00
57	BB	1813	G	C3'-C2'-C1'	-5.34	97.23	101.50
57	BB	2160	C	C1'-O4'-C4'	-5.34	105.63	109.90
57	BB	2900	A	N3-C4-C5	-5.34	123.06	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	33	A	N1-C2-N3	5.34	131.97	129.30
21	AA	371	A	C4'-C3'-C2'	-5.34	97.26	102.60
21	AA	457	G	C5-C6-O6	-5.34	125.40	128.60
21	AA	574	A	P-O3'-C3'	5.34	126.10	119.70
21	AA	784	A	C6-N1-C2	-5.34	115.40	118.60
21	AA	940	C	C2-N3-C4	5.34	122.57	119.90
21	AA	1302	C	C5-C6-N1	5.34	123.67	121.00
23	AW	11	C	C6-N1-C2	-5.34	118.17	120.30
45	BC	95	TYR	CB-CG-CD2	-5.34	117.80	121.00
55	BG	150	TYR	CG-CD1-CE1	5.34	125.57	121.30
57	BB	87	U	C6-N1-C2	-5.34	117.80	121.00
57	BB	127	A	N1-C6-N6	5.34	121.80	118.60
57	BB	1900	A	O4'-C1'-C2'	-5.34	100.46	105.80
57	BB	1952	A	C2-N3-C4	5.34	113.27	110.60
57	BB	2018	G	N3-C4-N9	-5.34	122.80	126.00
57	BB	2148	G	N9-C4-C5	5.34	107.53	105.40
57	BB	2533	U	N3-C4-C5	-5.34	111.40	114.60
57	BB	2661	G	C5-C6-N1	-5.34	108.83	111.50
21	AA	785	G	C2-N3-C4	-5.33	109.23	111.90
21	AA	1515	G	N3-C2-N2	5.33	123.63	119.90
22	AY	56	C	O4'-C4'-C3'	-5.33	98.67	104.00
23	AW	59	U	P-O3'-C3'	5.33	126.10	119.70
35	BP	92	ARG	NE-CZ-NH1	5.33	122.97	120.30
57	BB	1016	G	N1-C6-O6	5.33	123.10	119.90
57	BB	1215	G	N7-C8-N9	5.33	115.77	113.10
57	BB	2412	A	N9-C4-C5	5.33	107.93	105.80
57	BB	2666	C	O5'-P-OP2	-5.33	100.90	105.70
21	AA	1007	U	C2-N1-C1'	-5.33	111.30	117.70
21	AA	1100	C	N3-C4-N4	5.33	121.73	118.00
21	AA	1180	A	C5-C6-N1	-5.33	115.03	117.70
21	AA	1481	U	O4'-C1'-N1	5.33	112.47	108.20
22	AY	65	G	C6-C5-N7	-5.33	127.20	130.40
23	AW	14	A	C8-N9-C1'	-5.33	118.10	127.70
26	AV	55	U	C5-C4-O4	5.33	129.10	125.90
35	BP	70	GLU	CB-CA-C	-5.33	99.73	110.40
57	BB	322	A	N1-C2-N3	-5.33	126.63	129.30
57	BB	564	C	C2-N3-C4	5.33	122.57	119.90
57	BB	789	A	N9-C4-C5	-5.33	103.67	105.80
57	BB	835	C	O4'-C4'-C3'	-5.33	98.67	104.00
57	BB	1271	G	N3-C4-C5	-5.33	125.93	128.60
57	BB	2459	A	P-O5'-C5'	5.33	129.43	120.90
57	BB	2741	A	C5'-C4'-O4'	5.33	115.50	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BA	10	G	C4-C5-N7	-5.33	108.67	110.80
21	AA	194	C	N3-C4-C5	-5.33	119.77	121.90
21	AA	542	G	N9-C1'-C2'	-5.33	106.13	112.00
21	AA	784	A	C4-C5-C6	5.33	119.67	117.00
21	AA	796	C	N1-C2-O2	-5.33	115.70	118.90
21	AA	800	G	C2-N3-C4	-5.33	109.23	111.90
22	AY	65	G	C4'-C3'-C2'	-5.33	97.27	102.60
23	AW	40	C	C5-C6-N1	5.33	123.67	121.00
57	BB	336	C	N3-C4-C5	-5.33	119.77	121.90
57	BB	406	G	C5-C6-O6	-5.33	125.40	128.60
57	BB	947	A	P-O5'-C5'	5.33	129.43	120.90
57	BB	1358	G	N3-C4-N9	5.33	129.20	126.00
57	BB	2049	G	C2-N3-C4	-5.33	109.23	111.90
57	BB	2201	G	C4-N9-C1'	-5.33	119.57	126.50
57	BB	2386	A	O4'-C1'-C2'	5.33	112.40	107.60
21	AA	1230	C	C2-N3-C4	5.33	122.56	119.90
21	AA	1433	A	N1-C2-N3	5.33	131.97	129.30
22	AY	22	G	O5'-P-OP2	-5.33	100.90	105.70
57	BB	90	U	N3-C2-O2	5.33	125.93	122.20
57	BB	1982	U	C6-N1-C1'	5.33	128.66	121.20
4	AM	2	ARG	NH1-CZ-NH2	5.33	125.26	119.40
21	AA	175	C	C5'-C4'-C3'	-5.33	107.47	116.00
21	AA	278	G	OP1-P-OP2	-5.33	111.61	119.60
21	AA	729	A	OP2-P-O3'	5.33	116.92	105.20
21	AA	1106	G	N7-C8-N9	-5.33	110.44	113.10
21	AA	1162	C	N3-C2-O2	5.33	125.63	121.90
21	AA	1501	C	C5-C6-N1	-5.33	118.34	121.00
22	AY	56	C	C5-C4-N4	-5.33	116.47	120.20
57	BB	85	G	C8-N9-C1'	5.33	133.93	127.00
57	BB	774	G	P-O5'-C5'	5.33	129.42	120.90
57	BB	1151	A	P-O5'-C5'	-5.33	112.37	120.90
57	BB	1202	G	N1-C2-N2	-5.33	111.40	116.20
57	BB	1412	U	P-O3'-C3'	5.33	126.09	119.70
57	BB	1581	G	N1-C2-N3	-5.33	120.70	123.90
57	BB	2442	C	C4'-C3'-C2'	-5.33	97.27	102.60
57	BB	2468	A	N9-C4-C5	5.33	107.93	105.80
57	BB	2640	G	N1-C2-N3	-5.33	120.70	123.90
57	BB	2689	U	N3-C2-O2	5.33	125.93	122.20
57	BB	2759	G	O3'-P-O5'	-5.33	93.88	104.00
57	BB	2798	U	P-O3'-C3'	-5.33	113.31	119.70
4	AM	41	ASP	CB-CG-OD2	5.33	123.09	118.30
21	AA	9	G	C5'-C4'-C3'	5.33	124.52	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	501	C	N1-C2-N3	-5.33	115.47	119.20
21	AA	628	G	P-O3'-C3'	-5.33	113.31	119.70
21	AA	721	G	N3-C2-N2	5.33	123.63	119.90
21	AA	1497	G	C5'-C4'-C3'	-5.33	107.48	116.00
57	BB	1786	A	C4-C5-C6	5.33	119.66	117.00
23	AW	52	G	C5-C6-O6	-5.33	125.41	128.60
41	BV	26	PHE	N-CA-CB	5.33	120.19	110.60
57	BB	309	A	N9-C4-C5	-5.33	103.67	105.80
57	BB	437	U	C3'-C2'-C1'	-5.33	97.24	101.50
57	BB	768	G	C2-N3-C4	-5.33	109.24	111.90
57	BB	1197	G	N1-C2-N3	5.33	127.09	123.90
57	BB	1367	A	O4'-C1'-N9	5.33	112.46	108.20
57	BB	1459	G	C4-N9-C1'	5.33	133.42	126.50
57	BB	1637	A	O4'-C1'-N9	5.33	112.46	108.20
57	BB	1984	G	N3-C4-N9	-5.33	122.81	126.00
57	BB	2370	G	N9-C1'-C2'	-5.33	106.14	112.00
57	BB	2599	G	N3-C4-N9	-5.33	122.81	126.00
3	AL	3	VAL	CA-CB-CG2	-5.32	102.92	110.90
21	AA	149	A	N3-C4-N9	5.32	131.66	127.40
21	AA	188	C	C5-C4-N4	-5.32	116.47	120.20
21	AA	528	C	C5-C6-N1	5.32	123.66	121.00
21	AA	1128	C	N1-C2-O2	-5.32	115.70	118.90
21	AA	1222	G	C5-C6-N1	5.32	114.16	111.50
43	BX	31	ASN	CB-CA-C	-5.32	99.75	110.40
46	BZ	12	ALA	N-CA-CB	5.32	117.55	110.10
57	BB	1	G	O4'-C1'-N9	5.32	112.46	108.20
57	BB	93	G	N3-C2-N2	5.32	123.63	119.90
57	BB	119	A	C5-C6-N6	-5.32	119.44	123.70
57	BB	258	G	C4-N9-C1'	-5.32	119.58	126.50
57	BB	1032	A	C4-C5-N7	-5.32	108.04	110.70
57	BB	1104	C	C4'-C3'-C2'	-5.32	97.28	102.60
57	BB	1182	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	1271	G	C6-N1-C2	-5.32	121.91	125.10
57	BB	1330	C	O4'-C1'-N1	5.32	112.46	108.20
57	BB	2083	G	C5-C6-O6	-5.32	125.41	128.60
57	BB	2610	C	N3-C4-C5	-5.32	119.77	121.90
2	AK	43	TRP	CH2-CZ2-CE2	5.32	122.72	117.40
21	AA	96	U	C5'-C4'-C3'	-5.32	107.48	116.00
21	AA	430	A	C3'-C2'-C1'	-5.32	97.24	101.50
22	AY	75	C	C4-C5-C6	5.32	120.06	117.40
57	BB	9	G	N9-C1'-C2'	-5.32	106.14	112.00
57	BB	283	G	C3'-C2'-C1'	5.32	105.76	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	704	G	N7-C8-N9	5.32	115.76	113.10
57	BB	859	G	C4-C5-N7	-5.32	108.67	110.80
57	BB	1163	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	1656	C	OP1-P-OP2	-5.32	111.62	119.60
57	BB	2242	G	C5-C6-N1	-5.32	108.84	111.50
57	BB	2276	G	N3-C4-N9	5.32	129.19	126.00
21	AA	111	G	N9-C1'-C2'	-5.32	106.15	112.00
21	AA	369	G	C4-C5-N7	-5.32	108.67	110.80
21	AA	852	G	C4-C5-C6	5.32	121.99	118.80
54	BF	62	GLN	N-CA-CB	5.32	120.18	110.60
56	BH	28	ASN	CB-CA-C	-5.32	99.76	110.40
57	BB	27	G	N1-C2-N2	5.32	120.99	116.20
57	BB	1311	G	C3'-C2'-C1'	5.32	105.76	101.50
57	BB	1338	G	N3-C2-N2	5.32	123.62	119.90
57	BB	1340	U	C5-C4-O4	-5.32	122.71	125.90
57	BB	1761	C	N3-C2-O2	5.32	125.62	121.90
57	BB	1801	A	C5'-C4'-C3'	-5.32	107.49	116.00
57	BB	2206	C	C4-C5-C6	-5.32	114.74	117.40
57	BB	2268	A	N3-C4-C5	-5.32	123.08	126.80
57	BB	2309	A	C4'-C3'-C2'	-5.32	97.28	102.60
57	BB	2645	G	C2-N3-C4	5.32	114.56	111.90
57	BB	2874	C	P-O5'-C5'	-5.32	112.39	120.90
58	BA	85	G	N1-C2-N3	-5.32	120.71	123.90
21	AA	196	A	C2-N3-C4	-5.32	107.94	110.60
57	BB	1930	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	2660	A	C2-N3-C4	-5.32	107.94	110.60
13	AB	125	PHE	CB-CG-CD2	-5.32	117.08	120.80
21	AA	43	C	C2-N1-C1'	5.32	124.65	118.80
21	AA	412	A	C5'-C4'-O4'	-5.32	102.72	109.10
21	AA	509	A	C4-C5-C6	5.32	119.66	117.00
21	AA	681	A	O4'-C1'-N9	5.32	112.45	108.20
21	AA	1037	C	C4-C5-C6	5.32	120.06	117.40
21	AA	1194	U	C5-C6-N1	5.32	125.36	122.70
21	AA	1270	G	O4'-C1'-N9	5.32	112.45	108.20
39	BT	22	THR	N-CA-CB	5.32	120.40	110.30
57	BB	315	G	P-O5'-C5'	-5.32	112.39	120.90
57	BB	508	A	C4-C5-C6	5.32	119.66	117.00
57	BB	555	G	C5-N7-C8	5.32	106.96	104.30
57	BB	1207	C	C6-N1-C2	-5.32	118.17	120.30
57	BB	1403	A	N1-C2-N3	5.32	131.96	129.30
57	BB	1798	U	N3-C4-C5	5.32	117.79	114.60
57	BB	2054	A	N3-C4-C5	-5.32	123.08	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2172	U	C6-N1-C2	5.32	124.19	121.00
57	BB	2401	U	C6-N1-C2	-5.32	117.81	121.00
57	BB	2469	A	C4-C5-N7	-5.32	108.04	110.70
57	BB	2658	C	C5-C4-N4	-5.32	116.48	120.20
57	BB	2701	U	N3-C4-C5	-5.32	111.41	114.60
1	AJ	26	VAL	O-C-N	-5.32	114.19	122.70
1	AJ	45	ARG	NE-CZ-NH1	5.32	122.96	120.30
21	AA	36	C	O4'-C4'-C3'	-5.32	98.68	104.00
21	AA	45	G	N1-C2-N2	5.32	120.98	116.20
21	AA	591	U	N1-C2-N3	5.32	118.09	114.90
21	AA	762	U	C5-C4-O4	-5.32	122.71	125.90
21	AA	907	A	N7-C8-N9	5.32	116.46	113.80
21	AA	951	G	OP1-P-OP2	-5.32	111.63	119.60
21	AA	1232	U	O4'-C1'-N1	5.32	112.45	108.20
25	AZ	259	GLU	OE1-CD-OE2	5.32	129.68	123.30
29	BJ	8	PRO	N-CA-CB	5.32	109.68	103.30
57	BB	9	G	N9-C4-C5	-5.32	103.27	105.40
57	BB	650	C	C2-N3-C4	-5.32	117.24	119.90
57	BB	799	G	C5-N7-C8	5.32	106.96	104.30
57	BB	1419	A	C6-C5-N7	-5.32	128.58	132.30
57	BB	1660	G	N1-C2-N3	-5.32	120.71	123.90
57	BB	1997	C	N3-C4-N4	5.32	121.72	118.00
57	BB	2198	A	N1-C2-N3	5.32	131.96	129.30
57	BB	2851	A	O5'-P-OP1	5.32	117.08	110.70
58	BA	61	G	C4-C5-N7	-5.32	108.67	110.80
21	AA	373	A	C2-N3-C4	5.31	113.26	110.60
21	AA	455	G	C4-N9-C1'	-5.31	119.59	126.50
21	AA	1108	G	C6-C5-N7	-5.31	127.21	130.40
57	BB	1649	G	N1-C2-N2	5.31	120.98	116.20
57	BB	1912	A	C4-C5-C6	5.31	119.66	117.00
57	BB	2156	G	N3-C2-N2	5.31	123.62	119.90
57	BB	2516	A	C4-C5-C6	5.31	119.66	117.00
20	AI	87	MET	CG-SD-CE	-5.31	91.70	100.20
21	AA	9	G	N9-C4-C5	5.31	107.53	105.40
21	AA	615	G	C4'-C3'-C2'	-5.31	97.29	102.60
21	AA	976	G	C6-N1-C2	5.31	128.29	125.10
21	AA	1073	U	C5-C4-O4	-5.31	122.71	125.90
22	AY	70	C	C6-N1-C1'	-5.31	114.42	120.80
23	AW	1	G	C5-C6-O6	-5.31	125.41	128.60
25	AZ	260	MET	N-CA-CB	5.31	120.16	110.60
57	BB	528	A	C4'-C3'-C2'	-5.31	97.29	102.60
57	BB	646	U	N1-C2-O2	5.31	126.52	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	805	G	C5-C6-O6	-5.31	125.41	128.60
57	BB	1530	G	C6-C5-N7	-5.31	127.21	130.40
57	BB	1878	G	C8-N9-C1'	5.31	133.91	127.00
57	BB	2104	C	N3-C4-N4	5.31	121.72	118.00
21	AA	497	G	C5-C6-N1	-5.31	108.84	111.50
34	BO	62	LEU	CB-CG-CD1	5.31	120.03	111.00
57	BB	1564	C	P-O5'-C5'	5.31	129.40	120.90
57	BB	2579	C	C5'-C4'-C3'	-5.31	107.50	116.00
6	AO	21	THR	CA-CB-CG2	-5.31	104.97	112.40
21	AA	40	C	C2-N3-C4	5.31	122.56	119.90
21	AA	161	A	C4-C5-C6	5.31	119.66	117.00
21	AA	771	G	O4'-C1'-N9	5.31	112.45	108.20
21	AA	1131	G	N9-C1'-C2'	-5.31	106.16	112.00
21	AA	1278	G	C4'-C3'-C2'	-5.31	97.29	102.60
22	AY	76	A	C2-N3-C4	-5.31	107.94	110.60
38	BS	7	HIS	O-C-N	5.31	131.19	122.70
57	BB	250	G	N1-C2-N2	-5.31	111.42	116.20
57	BB	259	G	C4-C5-C6	5.31	121.99	118.80
57	BB	570	G	C2-N3-C4	-5.31	109.25	111.90
57	BB	762	U	C5-C6-N1	5.31	125.36	122.70
57	BB	877	A	P-O5'-C5'	5.31	129.40	120.90
57	BB	935	C	C6-N1-C2	-5.31	118.18	120.30
57	BB	1420	A	C1'-O4'-C4'	-5.31	105.65	109.90
57	BB	1423	G	O4'-C1'-N9	5.31	112.45	108.20
57	BB	2286	G	C2-N3-C4	-5.31	109.25	111.90
57	BB	2495	G	C8-N9-C4	-5.31	104.28	106.40
57	BB	2880	C	C4-C5-C6	5.31	120.05	117.40
21	AA	196	A	C6-C5-N7	-5.31	128.58	132.30
21	AA	251	G	N3-C2-N2	-5.31	116.19	119.90
21	AA	703	G	O4'-C1'-N9	5.31	112.45	108.20
21	AA	898	G	C2-N3-C4	-5.31	109.25	111.90
42	BW	68	PHE	CB-CG-CD2	5.31	124.52	120.80
45	BC	102	TYR	CB-CG-CD1	5.31	124.18	121.00
57	BB	37	C	C2-N3-C4	5.31	122.55	119.90
57	BB	152	A	N3-C4-C5	-5.31	123.08	126.80
57	BB	367	G	C6-N1-C2	-5.31	121.92	125.10
57	BB	450	G	C5-C6-N1	-5.31	108.85	111.50
57	BB	940	G	C8-N9-C1'	5.31	133.90	127.00
57	BB	1061	U	N3-C2-O2	5.31	125.92	122.20
57	BB	1446	C	O4'-C1'-N1	5.31	112.45	108.20
57	BB	2069	G	N3-C2-N2	5.31	123.61	119.90
57	BB	2129	C	C6-N1-C1'	-5.31	114.43	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2138	G	O4'-C1'-N9	5.31	112.44	108.20
58	BA	34	A	P-O3'-C3'	5.31	126.07	119.70
21	AA	432	A	N7-C8-N9	5.31	116.45	113.80
21	AA	1250	A	C4-C5-C6	5.31	119.65	117.00
21	AA	1258	G	N3-C4-C5	-5.31	125.95	128.60
21	AA	1321	U	O5'-C5'-C4'	-5.31	101.62	111.70
46	BZ	3	THR	CA-CB-CG2	-5.31	104.97	112.40
57	BB	1577	C	N3-C4-N4	5.31	121.71	118.00
57	BB	1818	U	N1-C2-O2	5.31	126.51	122.80
57	BB	2875	C	N3-C4-N4	5.31	121.71	118.00
1	AJ	50	THR	CA-CB-CG2	-5.30	104.97	112.40
2	AK	104	PHE	CB-CG-CD1	5.30	124.51	120.80
14	AC	186	SER	O-C-N	-5.30	114.21	122.70
21	AA	37	U	C2-N1-C1'	5.30	124.07	117.70
21	AA	227	G	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	279	A	C4-C5-N7	-5.30	108.05	110.70
21	AA	468	A	C5-C6-N6	-5.30	119.46	123.70
21	AA	490	C	N3-C4-C5	-5.30	119.78	121.90
21	AA	1251	A	OP1-P-OP2	-5.30	111.64	119.60
21	AA	1345	U	N3-C4-C5	-5.30	111.42	114.60
25	AZ	213	PRO	N-CD-CG	5.30	111.16	103.20
57	BB	105	C	N3-C4-N4	5.30	121.71	118.00
57	BB	212	G	C6-N1-C2	-5.30	121.92	125.10
57	BB	1137	G	C4-C5-N7	5.30	112.92	110.80
57	BB	1173	U	P-O5'-C5'	5.30	129.39	120.90
57	BB	1938	A	N3-C4-C5	-5.30	123.09	126.80
57	BB	1960	A	N3-C4-N9	-5.30	123.16	127.40
57	BB	2370	G	P-O5'-C5'	-5.30	112.41	120.90
57	BB	2688	G	C6-N1-C2	5.30	128.28	125.10
57	BB	2689	U	C6-N1-C2	5.30	124.18	121.00
57	BB	2692	G	N9-C4-C5	-5.30	103.28	105.40
57	BB	2852	G	C8-N9-C4	5.30	108.52	106.40
57	BB	2886	A	C5-C6-N6	-5.30	119.46	123.70
21	AA	195	A	OP1-P-OP2	-5.30	111.65	119.60
21	AA	393	A	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	869	G	N7-C8-N9	-5.30	110.45	113.10
21	AA	1316	G	C8-N9-C4	5.30	108.52	106.40
57	BB	480	A	N3-C4-N9	5.30	131.64	127.40
57	BB	548	G	C5'-C4'-C3'	5.30	124.48	116.00
57	BB	556	A	N7-C8-N9	5.30	116.45	113.80
57	BB	1088	A	C5-C6-N6	-5.30	119.46	123.70
57	BB	2323	G	C4-C5-C6	5.30	121.98	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2655	G	C1'-O4'-C4'	-5.30	105.66	109.90
3	AL	98	ARG	CD-NE-CZ	5.30	131.02	123.60
21	AA	38	G	N7-C8-N9	5.30	115.75	113.10
21	AA	88	U	C5-C4-O4	-5.30	122.72	125.90
21	AA	479	U	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	563	A	N7-C8-N9	-5.30	111.15	113.80
21	AA	671	G	N1-C6-O6	5.30	123.08	119.90
21	AA	1453	G	N3-C2-N2	5.30	123.61	119.90
22	AY	50	U	C6-N1-C2	-5.30	117.82	121.00
25	AZ	147	GLU	CA-CB-CG	5.30	125.06	113.40
57	BB	182	A	N3-C4-N9	-5.30	123.16	127.40
57	BB	338	G	C4-C5-C6	5.30	121.98	118.80
57	BB	1071	G	C5-C6-O6	-5.30	125.42	128.60
57	BB	1107	G	N7-C8-N9	5.30	115.75	113.10
57	BB	1129	A	N1-C2-N3	5.30	131.95	129.30
57	BB	1243	C	N1-C2-O2	-5.30	115.72	118.90
57	BB	1277	G	C4-C5-N7	-5.30	108.68	110.80
57	BB	1753	G	N3-C2-N2	5.30	123.61	119.90
57	BB	2026	U	C2-N3-C4	-5.30	123.82	127.00
57	BB	2085	U	O4'-C4'-C3'	-5.30	98.70	104.00
57	BB	2104	C	C6-N1-C2	-5.30	118.18	120.30
57	BB	2216	G	C2-N3-C4	-5.30	109.25	111.90
57	BB	2806	C	N1-C1'-C2'	-5.30	106.17	112.00
21	AA	892	A	P-O3'-C3'	-5.30	113.34	119.70
21	AA	938	A	C6-C5-N7	-5.30	128.59	132.30
21	AA	944	G	N9-C1'-C2'	-5.30	106.17	112.00
21	AA	1040	U	C4-C5-C6	5.30	122.88	119.70
22	AY	39	U	OP1-P-OP2	-5.30	111.65	119.60
22	AY	54	U	P-O5'-C5'	-5.30	112.42	120.90
22	AY	62	A	C4-C5-N7	5.30	113.35	110.70
23	AW	57	G	C2-N3-C4	5.30	114.55	111.90
57	BB	230	G	N1-C6-O6	5.30	123.08	119.90
57	BB	649	G	N1-C2-N2	5.30	120.97	116.20
57	BB	813	U	N3-C4-O4	5.30	123.11	119.40
57	BB	919	U	C4-C5-C6	5.30	122.88	119.70
57	BB	1235	G	N3-C4-N9	-5.30	122.82	126.00
57	BB	1708	C	N3-C4-N4	5.30	121.71	118.00
57	BB	2015	A	C5-C6-N6	-5.30	119.46	123.70
57	BB	2079	U	P-O3'-C3'	5.30	126.06	119.70
57	BB	2376	A	N7-C8-N9	-5.30	111.15	113.80
57	BB	2672	U	N3-C2-O2	5.30	125.91	122.20
57	BB	2732	G	C5-C6-N1	-5.30	108.85	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2767	C	C5-C4-N4	-5.30	116.49	120.20
58	BA	81	G	N1-C2-N2	-5.30	111.43	116.20
21	AA	45	G	C2-N3-C4	5.30	114.55	111.90
21	AA	166	U	N3-C4-O4	5.30	123.11	119.40
21	AA	245	U	C5'-C4'-O4'	-5.30	102.74	109.10
21	AA	852	G	N3-C2-N2	5.30	123.61	119.90
57	BB	37	C	N3-C4-N4	5.30	121.71	118.00
57	BB	1281	G	C8-N9-C4	-5.30	104.28	106.40
21	AA	262	A	C4-N9-C1'	5.30	135.84	126.30
21	AA	270	A	C6-N1-C2	-5.30	115.42	118.60
21	AA	763	G	C3'-C2'-C1'	-5.30	97.26	101.50
21	AA	1136	C	N1-C2-N3	-5.30	115.49	119.20
21	AA	1163	A	N1-C6-N6	5.30	121.78	118.60
22	AY	39	U	O4'-C4'-C3'	-5.30	98.70	104.00
54	BF	153	ILE	N-CA-C	-5.30	96.70	111.00
57	BB	489	G	C2-N3-C4	5.30	114.55	111.90
57	BB	534	U	N1-C2-O2	-5.30	119.09	122.80
57	BB	789	A	N7-C8-N9	5.30	116.45	113.80
57	BB	1125	G	N3-C2-N2	5.30	123.61	119.90
57	BB	1843	C	C6-N1-C2	-5.30	118.18	120.30
57	BB	1910	G	N1-C6-O6	5.30	123.08	119.90
57	BB	1985	C	P-O3'-C3'	-5.30	113.34	119.70
57	BB	2136	G	C4-C5-C6	5.30	121.98	118.80
57	BB	2651	C	N3-C2-O2	-5.30	118.19	121.90
58	BA	24	G	C5-C6-N1	5.30	114.15	111.50
21	AA	390	U	O4'-C1'-N1	5.29	112.44	108.20
21	AA	425	G	C5-C6-N1	-5.29	108.85	111.50
21	AA	873	A	C4-C5-C6	5.29	119.65	117.00
23	AW	49	C	C1'-O4'-C4'	-5.29	105.66	109.90
25	AZ	331	TYR	CA-CB-CG	-5.29	103.34	113.40
57	BB	390	U	C4-C5-C6	-5.29	116.52	119.70
57	BB	1153	C	C3'-C2'-C1'	5.29	105.74	101.50
57	BB	1346	G	N1-C2-N2	5.29	120.97	116.20
57	BB	1387	A	C5-N7-C8	5.29	106.55	103.90
57	BB	2779	U	N3-C4-C5	-5.29	111.42	114.60
1	AJ	68	ARG	NE-CZ-NH1	-5.29	117.65	120.30
21	AA	358	U	C2-N3-C4	-5.29	123.82	127.00
21	AA	602	A	N9-C4-C5	5.29	107.92	105.80
21	AA	904	U	N3-C4-C5	-5.29	111.42	114.60
21	AA	961	U	N1-C2-O2	-5.29	119.09	122.80
21	AA	999	C	C2-N3-C4	5.29	122.55	119.90
21	AA	1061	G	N3-C4-C5	5.29	131.25	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1072	G	N1-C2-N3	-5.29	120.72	123.90
21	AA	1088	G	C6-C5-N7	-5.29	127.22	130.40
21	AA	1153	G	N9-C4-C5	5.29	107.52	105.40
57	BB	194	G	N3-C2-N2	5.29	123.61	119.90
57	BB	399	U	C5-C6-N1	5.29	125.35	122.70
57	BB	534	U	C4-C5-C6	5.29	122.88	119.70
57	BB	559	G	N1-C2-N2	-5.29	111.44	116.20
57	BB	996	A	C4-C5-N7	-5.29	108.05	110.70
57	BB	1100	C	C4'-C3'-C2'	-5.29	97.31	102.60
57	BB	1302	A	C5-C6-N1	-5.29	115.05	117.70
57	BB	1411	U	C5-C6-N1	5.29	125.35	122.70
57	BB	1552	A	N3-C4-C5	-5.29	123.09	126.80
57	BB	2007	U	C6-N1-C2	5.29	124.18	121.00
57	BB	2065	C	C2-N3-C4	5.29	122.55	119.90
57	BB	2257	U	C5'-C4'-C3'	5.29	124.47	116.00
57	BB	2343	U	C5'-C4'-C3'	-5.29	107.53	116.00
57	BB	2644	G	N7-C8-N9	-5.29	110.45	113.10
21	AA	68	G	N9-C4-C5	-5.29	103.28	105.40
21	AA	557	G	C4-C5-C6	5.29	121.97	118.80
21	AA	641	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	783	C	N3-C4-N4	5.29	121.70	118.00
21	AA	1277	C	C4'-C3'-C2'	-5.29	97.31	102.60
21	AA	1331	G	C4-C5-C6	5.29	121.97	118.80
22	AY	10	G	N7-C8-N9	5.29	115.75	113.10
26	AV	7	G	C4-C5-C6	5.29	121.97	118.80
34	BO	57	ALA	CB-CA-C	-5.29	102.16	110.10
57	BB	83	A	O4'-C1'-N9	5.29	112.43	108.20
57	BB	277	G	C8-N9-C1'	5.29	133.88	127.00
57	BB	645	C	C2-N3-C4	5.29	122.55	119.90
57	BB	1558	C	N1-C2-O2	-5.29	115.72	118.90
57	BB	2145	C	N3-C4-C5	-5.29	119.78	121.90
18	AG	48	THR	CA-CB-CG2	-5.29	105.00	112.40
21	AA	711	G	C4-C5-C6	5.29	121.97	118.80
21	AA	954	G	C4-C5-N7	5.29	112.92	110.80
21	AA	977	A	P-O5'-C5'	5.29	129.36	120.90
21	AA	1052	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	1151	A	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	1242	G	C5-C6-N1	-5.29	108.86	111.50
22	AY	31	A	C5-C6-N1	-5.29	115.06	117.70
57	BB	176	A	N3-C4-C5	-5.29	123.10	126.80
57	BB	311	A	C8-N9-C4	5.29	107.92	105.80
57	BB	2796	U	N3-C4-O4	-5.29	115.70	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2864	G	C5-C6-O6	-5.29	125.43	128.60
22	AY	29	A	C5-N7-C8	5.29	106.54	103.90
27	B5	38	PHE	N-CA-CB	5.29	120.12	110.60
57	BB	458	G	C1'-O4'-C4'	-5.29	105.67	109.90
57	BB	787	C	OP2-P-O3'	5.29	116.83	105.20
57	BB	1114	C	C5'-C4'-C3'	-5.29	107.54	116.00
57	BB	1325	U	N3-C2-O2	5.29	125.90	122.20
57	BB	1556	C	C4-C5-C6	5.29	120.05	117.40
57	BB	2053	G	C8-N9-C4	-5.29	104.28	106.40
57	BB	2265	U	N3-C4-O4	5.29	123.10	119.40
57	BB	2735	G	C5-C6-N1	-5.29	108.86	111.50
21	AA	20	U	P-O3'-C3'	5.29	126.05	119.70
21	AA	41	G	C2-N3-C4	-5.29	109.26	111.90
21	AA	365	U	N3-C4-O4	5.29	123.10	119.40
21	AA	873	A	C5-C6-N6	-5.29	119.47	123.70
21	AA	931	C	O4'-C4'-C3'	-5.29	98.71	104.00
57	BB	1057	A	C5-C6-N1	-5.29	115.06	117.70
57	BB	1270	C	C2-N1-C1'	-5.29	112.98	118.80
57	BB	2341	G	N3-C2-N2	5.29	123.60	119.90
57	BB	2747	G	C8-N9-C4	5.29	108.52	106.40
15	AD	134	TYR	CB-CG-CD2	-5.29	117.83	121.00
21	AA	490	C	C5-C6-N1	5.29	123.64	121.00
21	AA	645	G	P-O3'-C3'	-5.29	113.36	119.70
21	AA	965	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	1090	U	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	1331	G	C4'-C3'-C2'	-5.29	97.31	102.60
37	BR	54	VAL	N-CA-C	-5.29	96.73	111.00
57	BB	71	A	P-O3'-C3'	-5.29	113.36	119.70
57	BB	599	A	N9-C4-C5	-5.29	103.69	105.80
57	BB	1059	G	C6-N1-C2	-5.29	121.93	125.10
57	BB	1471	G	N1-C2-N2	5.29	120.96	116.20
57	BB	1553	A	P-O5'-C5'	-5.29	112.44	120.90
57	BB	1895	C	C4-C5-C6	5.29	120.04	117.40
57	BB	2235	G	C6-C5-N7	-5.29	127.23	130.40
57	BB	2392	A	C2-N3-C4	-5.29	107.96	110.60
57	BB	2762	C	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	299	G	C4-C5-N7	5.28	112.91	110.80
21	AA	422	C	C6-N1-C1'	-5.28	114.46	120.80
21	AA	601	G	C3'-C2'-C1'	-5.28	97.27	101.50
21	AA	621	A	C8-N9-C4	-5.28	103.69	105.80
21	AA	977	A	C4-N9-C1'	5.28	135.81	126.30
21	AA	1161	C	N1-C2-O2	5.28	122.07	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	31	C	C2-N1-C1'	5.28	124.61	118.80
57	BB	82	U	N1-C1'-C2'	-5.28	106.19	112.00
57	BB	530	G	C2-N3-C4	5.28	114.54	111.90
57	BB	546	U	N1-C2-O2	-5.28	119.10	122.80
57	BB	959	A	N7-C8-N9	5.28	116.44	113.80
57	BB	1060	U	C2-N1-C1'	5.28	124.04	117.70
57	BB	1549	A	C5-C6-N1	-5.28	115.06	117.70
57	BB	2433	A	C4'-C3'-C2'	5.28	107.88	102.60
58	BA	62	C	N1-C2-N3	-5.28	115.50	119.20
21	AA	954	G	C2-N3-C4	5.28	114.54	111.90
45	BC	101	ARG	N-CA-C	-5.28	96.74	111.00
57	BB	75	G	N3-C4-N9	-5.28	122.83	126.00
57	BB	275	C	C6-N1-C1'	-5.28	114.46	120.80
57	BB	2692	G	O4'-C1'-N9	5.28	112.43	108.20
57	BB	2820	A	C4'-C3'-C2'	-5.28	97.32	102.60
58	BA	71	C	C4-C5-C6	-5.28	114.76	117.40
21	AA	34	C	OP1-P-OP2	-5.28	111.68	119.60
21	AA	135	C	OP1-P-OP2	-5.28	111.68	119.60
21	AA	509	A	O4'-C1'-C2'	5.28	112.35	107.60
21	AA	940	C	N3-C4-N4	5.28	121.70	118.00
26	AV	36	U	P-O3'-C3'	-5.28	113.36	119.70
42	BW	63	ASP	CB-CG-OD2	5.28	123.05	118.30
57	BB	57	C	O4'-C4'-C3'	-5.28	98.72	104.00
57	BB	248	G	C2-N3-C4	5.28	114.54	111.90
57	BB	496	G	C5-C6-N1	5.28	114.14	111.50
57	BB	983	A	N7-C8-N9	-5.28	111.16	113.80
57	BB	1325	U	C2-N3-C4	5.28	130.17	127.00
57	BB	1417	C	C5-C6-N1	-5.28	118.36	121.00
57	BB	1733	G	C5-C6-N1	5.28	114.14	111.50
57	BB	1800	C	C5-C4-N4	-5.28	116.50	120.20
57	BB	1910	G	C4'-C3'-C2'	-5.28	97.32	102.60
57	BB	2069	G	C5-C6-N1	-5.28	108.86	111.50
57	BB	2338	C	C5-C4-N4	-5.28	116.50	120.20
57	BB	2758	A	C8-N9-C4	5.28	107.91	105.80
57	BB	2829	A	C5-N7-C8	5.28	106.54	103.90
21	AA	103	U	N3-C4-O4	5.28	123.09	119.40
21	AA	1248	A	C3'-C2'-C1'	-5.28	97.28	101.50
21	AA	1308	U	O5'-P-OP1	-5.28	100.95	105.70
21	AA	1526	G	N9-C4-C5	-5.28	103.29	105.40
22	AY	32	C	C4'-C3'-C2'	5.28	107.88	102.60
40	BU	59	GLU	OE1-CD-OE2	-5.28	116.97	123.30
57	BB	858	G	N3-C4-C5	5.28	131.24	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1740	G	C8-N9-C4	-5.28	104.29	106.40
58	BA	42	C	C3'-C2'-C1'	5.28	105.72	101.50
21	AA	495	A	P-O5'-C5'	-5.28	112.46	120.90
21	AA	606	G	C8-N9-C4	-5.28	104.29	106.40
21	AA	694	A	C4'-C3'-C2'	-5.28	97.32	102.60
21	AA	1145	A	C5'-C4'-O4'	5.28	115.43	109.10
21	AA	1403	C	C1'-O4'-C4'	5.28	114.12	109.90
30	BK	23	VAL	CA-CB-CG2	5.28	118.81	110.90
53	BE	52	VAL	CG1-CB-CG2	5.28	119.34	110.90
54	BF	29	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
55	BG	38	ASP	CA-CB-CG	-5.28	101.79	113.40
57	BB	681	G	C5-C6-N1	-5.28	108.86	111.50
57	BB	744	U	N1-C2-O2	5.28	126.49	122.80
57	BB	764	A	C5-N7-C8	5.28	106.54	103.90
57	BB	780	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1384	A	C5'-C4'-C3'	-5.28	107.56	116.00
57	BB	1645	G	C4-C5-N7	-5.28	108.69	110.80
57	BB	1714	U	O4'-C1'-C2'	-5.28	100.52	105.80
21	AA	1432	G	P-O5'-C5'	5.28	129.34	120.90
21	AA	1501	C	C5-C4-N4	-5.28	116.51	120.20
21	AA	1502	A	C5-N7-C8	5.28	106.54	103.90
22	AY	15	G	OP2-P-O3'	5.28	116.81	105.20
22	AY	34	G	OP1-P-OP2	-5.28	111.69	119.60
57	BB	207	A	C5-C6-N6	-5.28	119.48	123.70
57	BB	272	A	N3-C4-C5	-5.28	123.11	126.80
57	BB	347	A	C5-N7-C8	5.28	106.54	103.90
57	BB	418	C	C6-N1-C2	-5.28	118.19	120.30
57	BB	560	C	C1'-O4'-C4'	5.28	114.12	109.90
57	BB	950	G	N3-C4-N9	-5.28	122.83	126.00
57	BB	1182	G	C6-N1-C2	-5.28	121.94	125.10
57	BB	1310	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1422	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1555	G	C8-N9-C4	-5.28	104.29	106.40
57	BB	2025	C	C5-C4-N4	-5.28	116.51	120.20
57	BB	2198	A	C4-C5-C6	5.28	119.64	117.00
57	BB	2247	A	P-O3'-C3'	-5.28	113.37	119.70
57	BB	2412	A	C8-N9-C1'	-5.28	118.20	127.70
58	BA	37	C	N3-C4-N4	5.28	121.69	118.00
58	BA	45	A	P-O5'-C5'	-5.28	112.46	120.90
21	AA	336	A	P-O3'-C3'	-5.27	113.37	119.70
21	AA	917	G	OP1-P-OP2	-5.27	111.69	119.60
57	BB	159	G	P-O3'-C3'	5.27	126.03	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	295	G	C5-N7-C8	5.27	106.94	104.30
57	BB	726	G	C8-N9-C1'	5.27	133.86	127.00
57	BB	1394	U	N3-C4-O4	5.27	123.09	119.40
57	BB	1779	U	C5-C6-N1	-5.27	120.06	122.70
57	BB	2216	G	O4'-C1'-N9	5.27	112.42	108.20
21	AA	469	C	C2-N3-C4	5.27	122.54	119.90
21	AA	835	U	N1-C2-N3	5.27	118.06	114.90
21	AA	885	G	N9-C4-C5	-5.27	103.29	105.40
21	AA	1352	C	C5-C4-N4	-5.27	116.51	120.20
38	BS	77	ASP	CB-CG-OD2	-5.27	113.56	118.30
57	BB	21	A	C4-N9-C1'	-5.27	116.81	126.30
57	BB	95	A	C4'-C3'-C2'	-5.27	97.33	102.60
57	BB	377	G	C5-C6-N1	-5.27	108.86	111.50
57	BB	480	A	C2-N3-C4	-5.27	107.96	110.60
57	BB	541	A	C4'-C3'-C2'	-5.27	97.33	102.60
57	BB	571	U	C4-C5-C6	5.27	122.86	119.70
57	BB	625	G	P-O5'-C5'	-5.27	112.46	120.90
57	BB	934	U	C4-C5-C6	5.27	122.86	119.70
57	BB	1683	U	N3-C2-O2	5.27	125.89	122.20
57	BB	1961	C	C5-C6-N1	5.27	123.64	121.00
57	BB	2029	G	N3-C4-N9	5.27	129.16	126.00
57	BB	2240	U	N3-C4-O4	5.27	123.09	119.40
21	AA	86	G	C5-C6-O6	5.27	131.76	128.60
21	AA	137	U	C1'-O4'-C4'	5.27	114.12	109.90
21	AA	832	G	C5-C6-N1	-5.27	108.86	111.50
57	BB	409	G	O5'-P-OP1	-5.27	100.96	105.70
57	BB	1032	A	C5-C6-N6	-5.27	119.48	123.70
57	BB	1334	G	C8-N9-C4	5.27	108.51	106.40
57	BB	1579	A	O4'-C1'-C2'	5.27	112.34	107.60
21	AA	77	A	N1-C2-N3	-5.27	126.67	129.30
21	AA	683	G	C6-N1-C2	5.27	128.26	125.10
21	AA	727	G	N1-C2-N2	-5.27	111.46	116.20
21	AA	770	C	N1-C2-O2	-5.27	115.74	118.90
21	AA	1196	A	P-O5'-C5'	5.27	129.33	120.90
22	AY	25	C	N1-C2-N3	5.27	122.89	119.20
57	BB	496	G	C3'-C2'-C1'	-5.27	97.28	101.50
57	BB	611	C	C4-C5-C6	5.27	120.03	117.40
57	BB	727	A	P-O5'-C5'	5.27	129.33	120.90
57	BB	785	G	O4'-C1'-N9	5.27	112.42	108.20
57	BB	851	C	C5-C6-N1	5.27	123.64	121.00
57	BB	1240	U	O4'-C1'-N1	5.27	112.42	108.20
57	BB	1432	G	C8-N9-C4	-5.27	104.29	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1536	C	N3-C2-O2	-5.27	118.21	121.90
57	BB	1815	A	C3'-C2'-C1'	5.27	105.72	101.50
57	BB	1835	G	N7-C8-N9	5.27	115.73	113.10
57	BB	2579	C	C2-N3-C4	-5.27	117.27	119.90
57	BB	2639	A	N9-C4-C5	-5.27	103.69	105.80
57	BB	2665	A	P-O3'-C3'	-5.27	113.38	119.70
57	BB	2757	A	C8-N9-C4	-5.27	103.69	105.80
57	BB	2779	U	O4'-C1'-N1	5.27	112.42	108.20
57	BB	2867	G	N9-C4-C5	-5.27	103.29	105.40
57	BB	2882	A	C5-C6-N6	-5.27	119.48	123.70
21	AA	246	A	O4'-C1'-N9	5.27	112.41	108.20
21	AA	342	C	C2-N3-C4	5.27	122.53	119.90
21	AA	437	U	C2-N3-C4	5.27	130.16	127.00
21	AA	497	G	C5-N7-C8	5.27	106.93	104.30
21	AA	616	G	C6-N1-C2	5.27	128.26	125.10
21	AA	637	C	C1'-O4'-C4'	5.27	114.11	109.90
21	AA	790	A	C2-N3-C4	-5.27	107.97	110.60
21	AA	1062	U	C1'-O4'-C4'	5.27	114.11	109.90
21	AA	1072	G	N3-C2-N2	5.27	123.59	119.90
22	AY	27	C	P-O5'-C5'	5.27	129.33	120.90
26	AV	15	G	C4'-C3'-C2'	5.27	107.87	102.60
39	BT	32	LEU	C-N-CA	5.27	134.87	121.70
57	BB	1221	C	N1-C1'-C2'	-5.27	106.21	112.00
57	BB	1505	A	N9-C4-C5	5.27	107.91	105.80
57	BB	1591	A	C4-C5-C6	5.27	119.63	117.00
57	BB	1723	G	N3-C2-N2	5.27	123.59	119.90
57	BB	1932	A	C8-N9-C4	-5.27	103.69	105.80
57	BB	2237	G	C6-N1-C2	-5.27	121.94	125.10
57	BB	2385	C	C6-N1-C2	-5.27	118.19	120.30
58	BA	9	G	N3-C2-N2	5.27	123.59	119.90
21	AA	10	A	N1-C2-N3	5.27	131.93	129.30
21	AA	596	A	C5-N7-C8	5.27	106.53	103.90
21	AA	1429	A	N3-C4-C5	-5.27	123.11	126.80
25	AZ	97	GLN	N-CA-CB	5.27	120.08	110.60
57	BB	1330	C	N3-C4-N4	5.27	121.69	118.00
57	BB	1835	G	C5-N7-C8	-5.27	101.67	104.30
57	BB	2281	A	N3-C4-N9	-5.27	123.19	127.40
57	BB	2632	A	N3-C4-C5	-5.27	123.11	126.80
21	AA	74	A	P-O3'-C3'	5.26	126.02	119.70
21	AA	275	G	C2-N3-C4	5.26	114.53	111.90
21	AA	367	U	C6-N1-C2	-5.26	117.84	121.00
21	AA	698	G	C6-N1-C2	5.26	128.26	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	931	C	C2-N3-C4	5.26	122.53	119.90
21	AA	964	A	C6-C5-N7	-5.26	128.62	132.30
21	AA	970	C	OP2-P-O3'	5.26	116.78	105.20
21	AA	992	U	C4-C5-C6	5.26	122.86	119.70
21	AA	1154	G	C8-N9-C4	-5.26	104.29	106.40
21	AA	1423	G	C4-C5-N7	5.26	112.91	110.80
21	AA	1513	A	P-O3'-C3'	-5.26	113.38	119.70
23	AW	38	A	N3-C4-N9	5.26	131.61	127.40
30	BK	31	TYR	CB-CG-CD1	-5.26	117.84	121.00
57	BB	14	A	C5-C6-N1	-5.26	115.07	117.70
57	BB	141	G	N9-C4-C5	5.26	107.51	105.40
57	BB	422	A	C5-C6-N6	-5.26	119.49	123.70
57	BB	472	A	C4'-C3'-C2'	-5.26	97.33	102.60
57	BB	719	C	C4-C5-C6	5.26	120.03	117.40
57	BB	916	G	C4-C5-N7	5.26	112.91	110.80
57	BB	1441	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	2122	U	C4-C5-C6	5.26	122.86	119.70
57	BB	2246	G	N9-C4-C5	-5.26	103.29	105.40
57	BB	2359	C	N3-C4-N4	5.26	121.69	118.00
57	BB	2518	A	N3-C4-C5	-5.26	123.11	126.80
57	BB	2871	U	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	32	A	C8-N9-C4	-5.26	103.69	105.80
21	AA	142	G	OP2-P-O3'	5.26	116.78	105.20
21	AA	223	A	C6-C5-N7	-5.26	128.62	132.30
21	AA	1307	U	C1'-O4'-C4'	-5.26	105.69	109.90
21	AA	1358	U	C2-N1-C1'	-5.26	111.38	117.70
22	AY	29	A	O4'-C1'-N9	5.26	112.41	108.20
57	BB	71	A	C6-N1-C2	5.26	121.76	118.60
57	BB	186	G	C5-C6-O6	-5.26	125.44	128.60
57	BB	1788	C	N1-C2-N3	-5.26	115.52	119.20
57	BB	2113	U	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	222	C	C4-C5-C6	5.26	120.03	117.40
21	AA	535	A	C6-N1-C2	5.26	121.76	118.60
21	AA	1073	U	O4'-C1'-N1	5.26	112.41	108.20
21	AA	1209	C	N1-C2-O2	5.26	122.06	118.90
21	AA	1507	A	C5'-C4'-C3'	-5.26	107.58	116.00
57	BB	300	A	C4-C5-N7	-5.26	108.07	110.70
57	BB	689	A	O4'-C1'-N9	5.26	112.41	108.20
57	BB	2417	C	C3'-C2'-C1'	-5.26	97.29	101.50
57	BB	2425	A	OP1-P-OP2	-5.26	111.71	119.60
21	AA	465	A	C8-N9-C1'	5.26	137.17	127.70
21	AA	611	C	C2-N3-C4	5.26	122.53	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	667	G	C6-C5-N7	-5.26	127.25	130.40
21	AA	716	A	O4'-C1'-N9	5.26	112.41	108.20
21	AA	743	A	O4'-C1'-N9	5.26	112.41	108.20
21	AA	818	G	C8-N9-C1'	-5.26	120.16	127.00
21	AA	1005	A	C4-C5-C6	5.26	119.63	117.00
21	AA	1480	A	O4'-C1'-N9	5.26	112.41	108.20
22	AY	3	G	C4-C5-C6	5.26	121.95	118.80
57	BB	171	U	N1-C2-O2	-5.26	119.12	122.80
57	BB	250	G	N3-C2-N2	5.26	123.58	119.90
57	BB	463	G	C4-C5-C6	5.26	121.96	118.80
57	BB	833	A	N3-C4-C5	-5.26	123.12	126.80
57	BB	1734	G	N9-C1'-C2'	-5.26	106.21	112.00
57	BB	2072	C	C4-C5-C6	-5.26	114.77	117.40
57	BB	2348	U	N3-C2-O2	-5.26	118.52	122.20
57	BB	2488	G	C6-C5-N7	-5.26	127.25	130.40
57	BB	2658	C	N1-C2-O2	-5.26	115.74	118.90
57	BB	2839	G	N1-C6-O6	5.26	123.06	119.90
21	AA	82	G	N9-C4-C5	5.26	107.50	105.40
21	AA	462	G	N1-C2-N3	-5.26	120.75	123.90
57	BB	16	C	C2-N3-C4	-5.26	117.27	119.90
57	BB	493	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	1069	A	N9-C4-C5	-5.26	103.70	105.80
57	BB	1643	G	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	370	C	N3-C4-N4	5.26	121.68	118.00
22	AY	31	A	OP2-P-O3'	5.26	116.77	105.20
25	AZ	137	CYS	O-C-N	5.26	131.11	122.70
57	BB	246	C	C5-C4-N4	-5.26	116.52	120.20
57	BB	319	G	N9-C4-C5	-5.26	103.30	105.40
57	BB	826	U	C3'-C2'-C1'	5.26	105.70	101.50
57	BB	866	A	C2-N3-C4	-5.26	107.97	110.60
57	BB	879	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	920	A	N3-C4-N9	5.26	131.60	127.40
57	BB	993	G	C6-C5-N7	-5.26	127.25	130.40
57	BB	1884	G	C4-C5-N7	5.26	112.90	110.80
57	BB	2114	A	C3'-C2'-C1'	-5.26	97.29	101.50
57	BB	2138	G	N3-C4-C5	-5.26	125.97	128.60
57	BB	2408	U	O4'-C1'-N1	5.26	112.41	108.20
57	BB	2659	G	C5-C6-N1	5.26	114.13	111.50
21	AA	1258	G	C6-C5-N7	-5.25	127.25	130.40
57	BB	95	A	N1-C2-N3	5.25	131.93	129.30
57	BB	200	U	N1-C2-N3	-5.25	111.75	114.90
57	BB	411	G	C6-N1-C2	5.25	128.25	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	904	G	N3-C4-N9	5.25	129.15	126.00
57	BB	2448	A	C6-C5-N7	-5.25	128.62	132.30
21	AA	246	A	C5-N7-C8	5.25	106.53	103.90
21	AA	386	C	N1-C2-N3	5.25	122.88	119.20
21	AA	742	G	C6-C5-N7	-5.25	127.25	130.40
21	AA	1266	G	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	1491	G	C4-C5-C6	5.25	121.95	118.80
23	AW	59	U	C2-N1-C1'	-5.25	111.39	117.70
25	AZ	99	ASP	CB-CG-OD2	-5.25	113.57	118.30
33	BN	80	PHE	CB-CG-CD2	-5.25	117.12	120.80
34	BO	117	PHE	CB-CG-CD1	-5.25	117.12	120.80
57	BB	428	A	N7-C8-N9	-5.25	111.17	113.80
57	BB	922	C	P-O3'-C3'	-5.25	113.40	119.70
57	BB	1136	G	C4-C5-C6	5.25	121.95	118.80
57	BB	1280	G	N1-C2-N3	5.25	127.05	123.90
57	BB	1408	G	C6-N1-C2	5.25	128.25	125.10
57	BB	1460	U	P-O5'-C5'	5.25	129.30	120.90
57	BB	1569	A	C5-N7-C8	5.25	106.53	103.90
57	BB	1858	A	O4'-C4'-C3'	5.25	110.30	106.10
57	BB	2295	C	C5-C6-N1	-5.25	118.37	121.00
57	BB	2664	G	C5-C6-N1	5.25	114.13	111.50
57	BB	2735	G	C8-N9-C4	-5.25	104.30	106.40
58	BA	73	A	C5-C6-N6	-5.25	119.50	123.70
3	AL	95	HIS	O-C-N	-5.25	114.30	122.70
21	AA	147	G	C8-N9-C4	-5.25	104.30	106.40
21	AA	527	G	P-O5'-C5'	5.25	129.30	120.90
21	AA	719	C	C5'-C4'-O4'	-5.25	102.80	109.10
21	AA	1322	C	P-O5'-C5'	-5.25	112.50	120.90
26	AV	65	C	C5'-C4'-C3'	-5.25	107.60	116.00
31	BL	84	LYS	N-CA-CB	5.25	120.05	110.60
34	BO	99	TYR	O-C-N	-5.25	114.30	122.70
57	BB	828	U	C2-N1-C1'	5.25	124.00	117.70
57	BB	1006	C	C4-C5-C6	5.25	120.03	117.40
57	BB	1085	A	OP1-P-OP2	-5.25	111.72	119.60
57	BB	1147	A	O4'-C1'-N9	5.25	112.40	108.20
57	BB	1164	C	N3-C4-N4	5.25	121.68	118.00
57	BB	1465	G	C6-N1-C2	5.25	128.25	125.10
57	BB	2346	A	C5-C6-N6	-5.25	119.50	123.70
57	BB	2423	U	O4'-C1'-C2'	-5.25	100.55	105.80
21	AA	481	G	C6-N1-C2	5.25	128.25	125.10
21	AA	1045	C	N1-C2-N3	-5.25	115.53	119.20
57	BB	296	U	N1-C2-O2	-5.25	119.12	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	765	C	N1-C2-O2	-5.25	115.75	118.90
57	BB	1133	A	O4'-C1'-N9	5.25	112.40	108.20
57	BB	1151	A	C4-C5-C6	5.25	119.62	117.00
57	BB	1288	G	C6-N1-C2	5.25	128.25	125.10
57	BB	1678	A	C5-N7-C8	5.25	106.53	103.90
57	BB	1778	U	O4'-C1'-N1	5.25	112.40	108.20
57	BB	1781	U	C5'-C4'-O4'	5.25	115.40	109.10
57	BB	2064	C	C5-C6-N1	5.25	123.62	121.00
58	BA	21	G	N3-C4-N9	-5.25	122.85	126.00
58	BA	82	U	N1-C2-O2	5.25	126.47	122.80
21	AA	47	C	O4'-C1'-N1	5.25	112.40	108.20
21	AA	348	G	N1-C6-O6	5.25	123.05	119.90
21	AA	587	G	O4'-C1'-N9	5.25	112.40	108.20
21	AA	844	G	C4-N9-C1'	5.25	133.32	126.50
21	AA	908	A	N9-C4-C5	-5.25	103.70	105.80
23	AW	61	C	O4'-C1'-N1	5.25	112.40	108.20
29	BJ	20	ALA	N-CA-CB	5.25	117.45	110.10
57	BB	652	U	C5-C4-O4	-5.25	122.75	125.90
57	BB	785	G	C2-N3-C4	-5.25	109.28	111.90
57	BB	823	C	O4'-C1'-N1	5.25	112.40	108.20
57	BB	1377	G	C4'-C3'-C2'	5.25	107.85	102.60
57	BB	1679	A	P-O5'-C5'	-5.25	112.50	120.90
57	BB	1830	C	C4-C5-C6	-5.25	114.78	117.40
57	BB	1914	C	P-O3'-C3'	-5.25	113.40	119.70
57	BB	1996	C	C2-N3-C4	-5.25	117.28	119.90
57	BB	2277	G	N3-C4-C5	5.25	131.22	128.60
57	BB	2467	C	N3-C4-N4	5.25	121.67	118.00
57	BB	2523	G	N3-C4-C5	-5.25	125.98	128.60
57	BB	2591	C	N3-C2-O2	-5.25	118.23	121.90
58	BA	83	G	C5-C6-N1	5.25	114.12	111.50
21	AA	676	A	C2-N3-C4	5.25	113.22	110.60
21	AA	871	U	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	962	C	C4-C5-C6	5.25	120.02	117.40
21	AA	1022	A	N9-C1'-C2'	-5.25	106.23	112.00
21	AA	1102	A	N1-C6-N6	5.25	121.75	118.60
21	AA	1209	C	C6-N1-C2	-5.25	118.20	120.30
21	AA	1524	C	O4'-C1'-N1	5.25	112.40	108.20
23	AW	4	C	C1'-O4'-C4'	5.25	114.10	109.90
43	BX	15	ASN	CB-CG-OD1	5.25	132.09	121.60
57	BB	721	A	C4-C5-C6	5.25	119.62	117.00
57	BB	734	A	C4-C5-N7	-5.25	108.08	110.70
57	BB	1235	G	C5'-C4'-C3'	-5.25	107.61	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1241	A	N3-C4-C5	-5.25	123.13	126.80
57	BB	1559	U	C2-N3-C4	5.25	130.15	127.00
57	BB	1630	A	C2-N3-C4	5.25	113.22	110.60
57	BB	1832	C	P-O3'-C3'	5.25	126.00	119.70
57	BB	1910	G	N3-C4-N9	5.25	129.15	126.00
57	BB	2097	A	C2-N3-C4	-5.25	107.98	110.60
57	BB	2472	G	O4'-C4'-C3'	-5.25	98.75	104.00
57	BB	2645	G	O4'-C1'-N9	5.25	112.40	108.20
58	BA	36	C	O4'-C1'-C2'	-5.25	100.55	105.80
58	BA	64	G	C5-C6-N1	-5.25	108.88	111.50
21	AA	644	U	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	867	G	C6-N1-C2	5.25	128.25	125.10
21	AA	1495	U	C2-N3-C4	-5.25	123.85	127.00
23	AW	69	G	P-O3'-C3'	5.25	126.00	119.70
57	BB	52	A	C4-C5-N7	-5.25	108.08	110.70
57	BB	274	C	P-O3'-C3'	-5.25	113.41	119.70
57	BB	2294	G	C4'-C3'-C2'	-5.25	97.36	102.60
21	AA	179	A	O4'-C4'-C3'	-5.24	98.76	104.00
21	AA	244	U	N1-C2-N3	-5.24	111.75	114.90
21	AA	405	U	N1-C2-O2	-5.24	119.13	122.80
21	AA	410	G	OP1-P-OP2	-5.24	111.73	119.60
21	AA	459	A	C4'-C3'-C2'	-5.24	97.36	102.60
27	B5	202	THR	CA-CB-CG2	-5.24	105.06	112.40
41	BV	62	THR	N-CA-C	-5.24	96.84	111.00
57	BB	44	A	N9-C1'-C2'	-5.24	106.23	112.00
57	BB	996	A	C2-N3-C4	5.24	113.22	110.60
57	BB	1036	G	N1-C6-O6	5.24	123.05	119.90
57	BB	1173	U	C6-N1-C1'	5.24	128.54	121.20
57	BB	1952	A	C6-C5-N7	-5.24	128.63	132.30
57	BB	2423	U	N3-C4-C5	-5.24	111.45	114.60
57	BB	2740	A	C5-C6-N1	-5.24	115.08	117.70
21	AA	191	G	C3'-C2'-C1'	-5.24	97.31	101.50
21	AA	340	U	N3-C4-C5	-5.24	111.45	114.60
21	AA	1102	A	C5-C6-N6	-5.24	119.51	123.70
21	AA	1490	U	N3-C4-O4	5.24	123.07	119.40
57	BB	132	G	C5-C6-N1	-5.24	108.88	111.50
57	BB	1329	U	O4'-C1'-N1	5.24	112.39	108.20
57	BB	1519	G	C6-C5-N7	-5.24	127.25	130.40
57	BB	1620	G	N1-C2-N3	-5.24	120.75	123.90
57	BB	2169	A	N3-C4-C5	-5.24	123.13	126.80
57	BB	2189	U	N1-C2-O2	-5.24	119.13	122.80
57	BB	2741	A	C5'-C4'-C3'	-5.24	107.61	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2803	G	C6-N1-C2	5.24	128.25	125.10
13	AB	34	ARG	NE-CZ-NH2	-5.24	117.68	120.30
21	AA	312	C	O4'-C1'-N1	5.24	112.39	108.20
21	AA	775	G	C5'-C4'-O4'	5.24	115.39	109.10
21	AA	804	U	C5-C6-N1	-5.24	120.08	122.70
21	AA	844	G	C8-N9-C1'	-5.24	120.19	127.00
21	AA	954	G	C4-C5-C6	5.24	121.94	118.80
21	AA	1019	A	C5-C6-N1	-5.24	115.08	117.70
21	AA	1356	G	O4'-C1'-N9	5.24	112.39	108.20
24	AX	14	A	C6-C5-N7	-5.24	128.63	132.30
44	BY	10	SER	N-CA-CB	5.24	118.36	110.50
57	BB	251	A	C5-C6-N1	-5.24	115.08	117.70
57	BB	607	U	C6-N1-C2	-5.24	117.86	121.00
57	BB	1367	A	C8-N9-C4	-5.24	103.70	105.80
57	BB	1477	A	C8-N9-C4	-5.24	103.70	105.80
57	BB	1773	A	C4-C5-N7	-5.24	108.08	110.70
57	BB	2297	A	C3'-C2'-C1'	-5.24	97.31	101.50
13	AB	20	ARG	NE-CZ-NH2	5.24	122.92	120.30
21	AA	546	A	C3'-C2'-C1'	5.24	105.69	101.50
21	AA	862	C	C5-C6-N1	5.24	123.62	121.00
21	AA	1259	C	O4'-C1'-N1	5.24	112.39	108.20
21	AA	1306	A	C4'-C3'-C2'	-5.24	97.36	102.60
26	AV	59	A	C5'-C4'-O4'	5.24	115.39	109.10
34	BO	78	VAL	CG1-CB-CG2	5.24	119.28	110.90
41	BV	57	TYR	CD1-CG-CD2	5.24	123.66	117.90
56	BH	146	VAL	N-CA-CB	5.24	123.03	111.50
57	BB	34	U	C4-C5-C6	5.24	122.84	119.70
57	BB	384	A	N3-C4-C5	5.24	130.47	126.80
57	BB	455	C	O4'-C1'-N1	5.24	112.39	108.20
57	BB	940	G	C2-N3-C4	5.24	114.52	111.90
57	BB	1071	G	O4'-C1'-N9	5.24	112.39	108.20
57	BB	1120	G	C6-N1-C2	-5.24	121.96	125.10
57	BB	1828	G	C8-N9-C4	-5.24	104.31	106.40
57	BB	2255	G	C8-N9-C4	-5.24	104.31	106.40
57	BB	2801	G	C1'-O4'-C4'	5.24	114.09	109.90
21	AA	717	U	O4'-C1'-N1	5.24	112.39	108.20
21	AA	1332	A	N7-C8-N9	5.24	116.42	113.80
22	AY	41	U	P-O3'-C3'	5.24	125.98	119.70
57	BB	298	G	O4'-C4'-C3'	-5.24	98.76	104.00
57	BB	1666	G	N1-C2-N3	-5.24	120.76	123.90
21	AA	5	U	C2-N1-C1'	5.24	123.98	117.70
21	AA	564	C	C5'-C4'-C3'	-5.24	107.62	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	566	G	C5-N7-C8	5.24	106.92	104.30
21	AA	761	G	C5-C6-N1	-5.24	108.88	111.50
21	AA	1012	A	C4'-C3'-C2'	-5.24	97.36	102.60
21	AA	1177	G	N1-C2-N3	-5.24	120.76	123.90
21	AA	1257	A	P-O3'-C3'	5.24	125.98	119.70
21	AA	1298	U	C5-C6-N1	5.24	125.32	122.70
21	AA	1486	G	N3-C2-N2	5.24	123.56	119.90
50	B3	56	LEU	CB-CA-C	-5.24	100.25	110.20
54	BF	135	ILE	CB-CA-C	5.24	122.07	111.60
57	BB	258	G	C5-N7-C8	5.24	106.92	104.30
57	BB	481	G	C5-C6-N1	-5.24	108.88	111.50
57	BB	676	A	C5-C6-N1	-5.24	115.08	117.70
57	BB	916	G	C4-N9-C1'	5.24	133.31	126.50
57	BB	939	G	N1-C6-O6	5.24	123.04	119.90
57	BB	2538	C	N1-C2-N3	5.24	122.86	119.20
58	BA	80	U	O4'-C1'-N1	5.24	112.39	108.20
21	AA	230	G	C5-C6-N1	-5.23	108.88	111.50
21	AA	283	U	C2-N3-C4	5.23	130.14	127.00
57	BB	188	G	C8-N9-C1'	5.23	133.80	127.00
57	BB	1524	G	C5-C6-N1	-5.23	108.88	111.50
57	BB	1534	U	N1-C2-N3	-5.23	111.76	114.90
57	BB	2067	G	C4-C5-N7	-5.23	108.71	110.80
21	AA	280	C	C5'-C4'-C3'	5.23	124.37	116.00
21	AA	328	C	C5-C6-N1	5.23	123.62	121.00
21	AA	471	U	C1'-O4'-C4'	5.23	114.09	109.90
21	AA	1333	A	C5'-C4'-O4'	5.23	115.38	109.10
21	AA	1352	C	O4'-C1'-N1	5.23	112.39	108.20
26	AV	24	U	N3-C4-C5	-5.23	111.46	114.60
31	BL	43	GLY	N-CA-C	-5.23	100.02	113.10
57	BB	401	A	C1'-O4'-C4'	-5.23	105.71	109.90
57	BB	900	A	C4-C5-C6	5.23	119.62	117.00
57	BB	1017	G	C4-C5-C6	5.23	121.94	118.80
57	BB	1131	G	C2-N3-C4	-5.23	109.28	111.90
57	BB	1409	U	N1-C2-O2	5.23	126.46	122.80
57	BB	1503	A	C4-C5-N7	-5.23	108.08	110.70
57	BB	1625	C	C6-N1-C2	-5.23	118.21	120.30
57	BB	1945	G	C6-C5-N7	-5.23	127.26	130.40
57	BB	2527	C	C6-N1-C2	-5.23	118.21	120.30
57	BB	2848	G	C5'-C4'-O4'	5.23	115.38	109.10
57	BB	2848	G	N1-C2-N3	-5.23	120.76	123.90
58	BA	24	G	C4-C5-N7	-5.23	108.71	110.80
21	AA	408	A	C5'-C4'-C3'	-5.23	107.63	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	523	A	C6-N1-C2	-5.23	115.46	118.60
21	AA	541	G	C5-N7-C8	-5.23	101.69	104.30
21	AA	776	G	N9-C4-C5	5.23	107.49	105.40
21	AA	1405	G	O5'-C5'-C4'	-5.23	101.76	111.70
22	AY	36	A	N9-C1'-C2'	-5.23	106.25	112.00
22	AY	53	G	N3-C4-N9	5.23	129.14	126.00
43	BX	57	VAL	CG1-CB-CG2	5.23	119.27	110.90
57	BB	678	C	O4'-C1'-N1	5.23	112.38	108.20
57	BB	808	G	N7-C8-N9	5.23	115.72	113.10
57	BB	1226	A	O4'-C1'-C2'	5.23	112.31	107.60
57	BB	1482	G	O4'-C1'-N9	5.23	112.38	108.20
57	BB	1635	A	N3-C4-N9	5.23	131.58	127.40
57	BB	1647	U	C6-N1-C2	-5.23	117.86	121.00
57	BB	1785	A	C6-C5-N7	-5.23	128.64	132.30
57	BB	2012	G	C6-C5-N7	-5.23	127.26	130.40
57	BB	2206	C	C6-N1-C2	5.23	122.39	120.30
57	BB	2570	G	N1-C6-O6	5.23	123.04	119.90
21	AA	36	C	C1'-O4'-C4'	5.23	114.08	109.90
21	AA	129	A	N9-C4-C5	5.23	107.89	105.80
21	AA	1224	U	N3-C2-O2	5.23	125.86	122.20
27	B5	204	ALA	CB-CA-C	5.23	117.94	110.10
41	BV	54	ALA	CB-CA-C	-5.23	102.26	110.10
57	BB	162	U	N1-C2-O2	5.23	126.46	122.80
57	BB	675	A	C6-N1-C2	-5.23	115.46	118.60
57	BB	1184	U	N3-C2-O2	-5.23	118.54	122.20
57	BB	2367	G	O4'-C1'-N9	5.23	112.38	108.20
57	BB	2616	C	C1'-O4'-C4'	5.23	114.08	109.90
21	AA	130	A	N7-C8-N9	-5.23	111.19	113.80
21	AA	335	C	C6-N1-C2	-5.23	118.21	120.30
21	AA	1147	C	C2-N3-C4	5.23	122.51	119.90
23	AW	43	C	N3-C4-N4	5.23	121.66	118.00
25	AZ	79	VAL	CG1-CB-CG2	-5.23	102.54	110.90
52	BD	42	ASN	C-N-CA	5.23	134.77	121.70
55	BG	94	ARG	NE-CZ-NH1	-5.23	117.69	120.30
57	BB	142	A	OP2-P-O3'	5.23	116.70	105.20
57	BB	479	A	P-O3'-C3'	5.23	125.97	119.70
57	BB	554	U	C4'-C3'-C2'	-5.23	97.37	102.60
57	BB	617	G	C5-C6-N1	-5.23	108.89	111.50
57	BB	1611	C	N1-C2-O2	5.23	122.04	118.90
57	BB	1612	C	C4-C5-C6	-5.23	114.79	117.40
57	BB	2125	G	C1'-O4'-C4'	-5.23	105.72	109.90
57	BB	2616	C	C6-N1-C2	-5.23	118.21	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2724	U	N1-C2-N3	5.23	118.04	114.90
21	AA	406	G	C5-C6-O6	-5.23	125.46	128.60
21	AA	830	G	O4'-C1'-N9	5.23	112.38	108.20
21	AA	945	G	C5-C6-O6	-5.23	125.46	128.60
23	AW	7	A	OP1-P-OP2	-5.23	111.76	119.60
23	AW	18	G	N9-C1'-C2'	5.23	120.79	114.00
57	BB	494	G	N1-C6-O6	5.23	123.03	119.90
57	BB	610	C	O4'-C1'-N1	5.23	112.38	108.20
57	BB	894	U	O4'-C1'-C2'	-5.23	100.57	105.80
57	BB	2454	G	C3'-C2'-C1'	5.23	105.68	101.50
57	BB	2547	A	N3-C4-C5	-5.23	123.14	126.80
21	AA	366	A	N1-C2-N3	5.22	131.91	129.30
21	AA	477	C	C6-N1-C2	-5.22	118.21	120.30
21	AA	634	C	O4'-C1'-N1	5.22	112.38	108.20
21	AA	973	G	P-O3'-C3'	5.22	125.97	119.70
21	AA	1225	A	P-O5'-C5'	5.22	129.26	120.90
21	AA	1298	U	C6-N1-C2	-5.22	117.86	121.00
48	B1	23	THR	CA-CB-OG1	5.22	119.97	109.00
57	BB	246	C	C5-C6-N1	5.22	123.61	121.00
57	BB	1290	C	N3-C4-N4	5.22	121.66	118.00
57	BB	1634	A	N3-C4-N9	5.22	131.58	127.40
57	BB	1690	A	N1-C6-N6	5.22	121.73	118.60
57	BB	1869	G	C5'-C4'-C3'	-5.22	107.64	116.00
57	BB	2338	C	N3-C2-O2	-5.22	118.24	121.90
57	BB	2872	A	C5-C6-N6	-5.22	119.52	123.70
2	AK	79	LYS	CB-CA-C	-5.22	99.96	110.40
4	AM	40	GLU	CB-CA-C	-5.22	99.95	110.40
6	AO	71	ARG	NE-CZ-NH1	5.22	122.91	120.30
18	AG	139	ASP	CB-CG-OD2	5.22	123.00	118.30
21	AA	831	A	C2-N3-C4	-5.22	107.99	110.60
21	AA	991	U	C5-C6-N1	5.22	125.31	122.70
21	AA	1019	A	C6-N1-C2	-5.22	115.47	118.60
21	AA	1021	A	N9-C4-C5	-5.22	103.71	105.80
21	AA	1342	C	N1-C2-O2	5.22	122.03	118.90
23	AW	29	G	C4-C5-N7	5.22	112.89	110.80
51	B4	11	CYS	N-CA-CB	5.22	120.00	110.60
57	BB	75	G	N1-C6-O6	5.22	123.03	119.90
57	BB	195	A	C5-N7-C8	5.22	106.51	103.90
57	BB	310	A	C4-C5-C6	5.22	119.61	117.00
57	BB	414	C	C3'-C2'-C1'	-5.22	97.32	101.50
57	BB	1089	A	O4'-C1'-N9	5.22	112.38	108.20
57	BB	1392	A	N9-C4-C5	-5.22	103.71	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1443	U	N3-C4-O4	5.22	123.06	119.40
57	BB	1492	G	P-O5'-C5'	-5.22	112.55	120.90
57	BB	1813	G	N1-C6-O6	5.22	123.03	119.90
57	BB	1890	A	C8-N9-C4	-5.22	103.71	105.80
57	BB	2097	A	N3-C4-N9	-5.22	123.22	127.40
57	BB	2336	A	N1-C6-N6	5.22	121.73	118.60
57	BB	2635	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2848	G	O4'-C1'-N9	5.22	112.38	108.20
57	BB	2857	G	C4-C5-N7	5.22	112.89	110.80
57	BB	2898	U	N3-C4-O4	5.22	123.06	119.40
21	AA	31	G	N3-C2-N2	5.22	123.55	119.90
21	AA	493	A	C5-N7-C8	5.22	106.51	103.90
21	AA	583	A	C6-N1-C2	-5.22	115.47	118.60
21	AA	1533	C	N1-C2-O2	5.22	122.03	118.90
57	BB	653	U	C5-C6-N1	5.22	125.31	122.70
57	BB	881	G	C1'-O4'-C4'	-5.22	105.72	109.90
57	BB	1243	C	C5-C4-N4	-5.22	116.55	120.20
57	BB	1711	A	C6-C5-N7	-5.22	128.65	132.30
57	BB	2199	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2407	A	C5-C6-N1	-5.22	115.09	117.70
57	BB	2873	A	C5-C6-N6	-5.22	119.52	123.70
21	AA	320	A	C4-C5-C6	5.22	119.61	117.00
21	AA	567	G	C2-N3-C4	5.22	114.51	111.90
21	AA	752	G	OP1-P-OP2	-5.22	111.77	119.60
21	AA	940	C	C5-C6-N1	5.22	123.61	121.00
21	AA	1314	C	N1-C2-O2	-5.22	115.77	118.90
21	AA	1397	C	N3-C2-O2	-5.22	118.25	121.90
23	AW	31	A	C4'-C3'-C2'	-5.22	97.38	102.60
53	BE	138	LEU	N-CA-CB	5.22	120.84	110.40
57	BB	132	G	C4-C5-C6	5.22	121.93	118.80
57	BB	558	U	P-O3'-C3'	-5.22	113.44	119.70
57	BB	603	A	C5-N7-C8	5.22	106.51	103.90
57	BB	945	A	C5-C6-N1	-5.22	115.09	117.70
57	BB	1414	C	C2-N3-C4	5.22	122.51	119.90
57	BB	1415	U	N3-C4-C5	-5.22	111.47	114.60
57	BB	2006	C	C4-C5-C6	5.22	120.01	117.40
57	BB	2058	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2463	C	C6-N1-C1'	-5.22	114.54	120.80
58	BA	33	G	O4'-C1'-N9	5.22	112.38	108.20
21	AA	329	A	C1'-O4'-C4'	5.22	114.07	109.90
21	AA	772	U	C1'-O4'-C4'	-5.22	105.73	109.90
21	AA	1267	C	C5-C4-N4	-5.22	116.55	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	2	G	N3-C4-N9	-5.22	122.87	126.00
57	BB	1112	G	N1-C2-N3	-5.22	120.77	123.90
57	BB	1199	U	C5'-C4'-C3'	-5.22	107.65	116.00
57	BB	1236	G	O4'-C1'-N9	5.22	112.37	108.20
57	BB	1618	A	N9-C4-C5	5.22	107.89	105.80
57	BB	2167	U	O4'-C4'-C3'	-5.22	98.78	104.00
58	BA	39	A	C4-C5-C6	5.22	119.61	117.00
21	AA	76	G	O4'-C1'-N9	5.22	112.37	108.20
21	AA	120	A	C8-N9-C4	-5.22	103.71	105.80
21	AA	136	C	C3'-C2'-C1'	5.22	105.67	101.50
21	AA	236	A	C5-C6-N1	-5.22	115.09	117.70
21	AA	288	A	O4'-C1'-C2'	-5.22	100.58	105.80
21	AA	1186	G	C8-N9-C1'	5.22	133.78	127.00
21	AA	1227	A	C8-N9-C1'	5.22	137.09	127.70
34	BO	45	SER	C-N-CA	5.22	134.74	121.70
56	BH	91	PHE	CB-CG-CD1	-5.22	117.15	120.80
57	BB	166	U	N1-C2-N3	5.22	118.03	114.90
57	BB	233	A	C6-N1-C2	-5.22	115.47	118.60
57	BB	1156	A	P-O3'-C3'	-5.22	113.44	119.70
57	BB	1580	A	C4-C5-C6	5.22	119.61	117.00
57	BB	1830	C	C5-C4-N4	-5.22	116.55	120.20
57	BB	1848	A	C4'-C3'-C2'	-5.22	97.38	102.60
57	BB	1907	G	N3-C4-N9	-5.22	122.87	126.00
57	BB	1926	U	N3-C2-O2	5.22	125.85	122.20
57	BB	2373	G	N1-C6-O6	5.22	123.03	119.90
57	BB	2450	A	P-O3'-C3'	-5.22	113.44	119.70
57	BB	2453	A	C5-N7-C8	5.22	106.51	103.90
57	BB	2587	A	C5-C6-N1	5.22	120.31	117.70
57	BB	2768	U	N3-C4-O4	5.22	123.05	119.40
57	BB	2777	G	C2-N3-C4	5.22	114.51	111.90
21	AA	639	G	C4-C5-C6	5.21	121.93	118.80
21	AA	699	C	N3-C4-N4	5.21	121.65	118.00
21	AA	791	G	N7-C8-N9	-5.21	110.49	113.10
21	AA	854	U	N3-C2-O2	5.21	125.85	122.20
21	AA	1345	U	C5-C6-N1	-5.21	120.09	122.70
57	BB	373	U	N3-C4-C5	-5.21	111.47	114.60
57	BB	410	G	C5-C6-N1	5.21	114.11	111.50
57	BB	605	G	C4-C5-N7	-5.21	108.71	110.80
57	BB	1292	G	N1-C2-N3	-5.21	120.77	123.90
57	BB	1411	U	C2-N3-C4	5.21	130.13	127.00
57	BB	1486	U	N1-C1'-C2'	-5.21	106.26	112.00
58	BA	40	U	C3'-C2'-C1'	5.21	105.67	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	244	U	C5'-C4'-O4'	5.21	115.36	109.10
21	AA	328	C	C6-N1-C2	5.21	122.39	120.30
21	AA	639	G	C4-C5-N7	-5.21	108.72	110.80
21	AA	1147	C	P-O5'-C5'	5.21	129.24	120.90
22	AY	58	A	O4'-C1'-C2'	-5.21	100.59	105.80
42	BW	56	HIS	N-CA-CB	5.21	119.98	110.60
57	BB	301	G	C4-N9-C1'	-5.21	119.72	126.50
57	BB	1069	A	C5-C6-N6	-5.21	119.53	123.70
57	BB	1979	U	N1-C2-O2	5.21	126.45	122.80
57	BB	2517	C	N3-C4-N4	5.21	121.65	118.00
57	BB	2767	C	N3-C4-C5	-5.21	119.81	121.90
12	AU	17	ARG	NE-CZ-NH1	5.21	122.91	120.30
21	AA	6	G	N3-C4-N9	5.21	129.13	126.00
21	AA	114	U	N1-C2-N3	5.21	118.03	114.90
21	AA	133	U	C6-N1-C2	-5.21	117.87	121.00
21	AA	170	U	N1-C2-N3	-5.21	111.77	114.90
21	AA	213	G	C6-N1-C2	5.21	128.23	125.10
21	AA	397	A	C6-N1-C2	5.21	121.73	118.60
21	AA	679	C	N3-C4-C5	-5.21	119.81	121.90
21	AA	692	U	C2-N1-C1'	5.21	123.95	117.70
21	AA	870	U	N3-C4-O4	5.21	123.05	119.40
21	AA	1307	U	C5-C6-N1	5.21	125.31	122.70
21	AA	1525	G	C4-N9-C1'	-5.21	119.72	126.50
26	AV	10	G	C5-C6-O6	-5.21	125.47	128.60
30	BK	63	ARG	CB-CA-C	-5.21	99.98	110.40
53	BE	108	ILE	C-N-CA	5.21	134.73	121.70
57	BB	66	C	C6-N1-C1'	-5.21	114.55	120.80
57	BB	89	A	C5-N7-C8	5.21	106.51	103.90
57	BB	135	U	N3-C4-O4	5.21	123.05	119.40
57	BB	222	A	N9-C1'-C2'	-5.21	106.27	112.00
57	BB	254	G	OP1-P-OP2	-5.21	111.78	119.60
57	BB	1037	G	C6-C5-N7	-5.21	127.27	130.40
57	BB	1207	C	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2316	G	N9-C4-C5	-5.21	103.32	105.40
57	BB	2576	G	C4-N9-C1'	5.21	133.28	126.50
57	BB	2883	A	P-O3'-C3'	-5.21	113.45	119.70
21	AA	906	A	C3'-C2'-C1'	5.21	105.67	101.50
22	AY	21	A	C5'-C4'-O4'	5.21	115.35	109.10
36	BQ	31	TYR	CB-CG-CD1	-5.21	117.87	121.00
55	BG	148	ARG	NE-CZ-NH2	5.21	122.91	120.30
57	BB	34	U	C2-N1-C1'	5.21	123.95	117.70
57	BB	650	C	C1'-O4'-C4'	5.21	114.07	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	925	A	P-O5'-C5'	5.21	129.24	120.90
57	BB	1321	A	C2-N3-C4	5.21	113.20	110.60
57	BB	1365	A	C4-C5-N7	-5.21	108.09	110.70
57	BB	1373	A	C2-N3-C4	5.21	113.20	110.60
57	BB	2095	A	C1'-O4'-C4'	-5.21	105.73	109.90
57	BB	2434	A	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2588	G	N1-C2-N3	-5.21	120.77	123.90
57	BB	2894	G	O4'-C1'-N9	5.21	112.37	108.20
14	AC	160	GLU	OE1-CD-OE2	-5.21	117.05	123.30
21	AA	53	A	C8-N9-C4	5.21	107.88	105.80
21	AA	86	G	O4'-C4'-C3'	-5.21	98.79	104.00
21	AA	862	C	C4-C5-C6	5.21	120.00	117.40
21	AA	1013	G	N1-C2-N2	-5.21	111.51	116.20
21	AA	1143	G	C6-C5-N7	-5.21	127.28	130.40
21	AA	1188	A	C8-N9-C4	5.21	107.88	105.80
21	AA	1211	U	C1'-O4'-C4'	5.21	114.07	109.90
23	AW	65	G	C5-N7-C8	5.21	106.90	104.30
24	AX	18	G	O4'-C1'-N9	5.21	112.37	108.20
38	BS	88	ARG	C-N-CA	5.21	134.72	121.70
57	BB	250	G	P-O5'-C5'	-5.21	112.57	120.90
57	BB	261	G	C5-N7-C8	5.21	106.90	104.30
57	BB	669	G	C5'-C4'-O4'	5.21	115.35	109.10
57	BB	1543	G	OP1-P-OP2	-5.21	111.79	119.60
57	BB	1656	C	N3-C2-O2	5.21	125.55	121.90
57	BB	1999	C	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2317	A	C1'-O4'-C4'	-5.21	105.73	109.90
57	BB	2550	G	N1-C6-O6	5.21	123.03	119.90
57	BB	2569	G	N1-C6-O6	5.21	123.03	119.90
57	BB	2580	U	C5'-C4'-C3'	-5.21	107.67	116.00
57	BB	2705	A	O4'-C4'-C3'	-5.21	98.79	104.00
57	BB	2842	G	C8-N9-C4	-5.21	104.32	106.40
19	AH	115	ALA	CB-CA-C	-5.21	102.29	110.10
21	AA	126	G	C8-N9-C1'	5.21	133.77	127.00
21	AA	238	A	C8-N9-C4	-5.21	103.72	105.80
21	AA	474	G	C6-N1-C2	-5.21	121.98	125.10
21	AA	512	U	C6-N1-C2	-5.21	117.88	121.00
21	AA	872	A	N9-C4-C5	5.21	107.88	105.80
21	AA	983	A	C8-N9-C4	-5.21	103.72	105.80
21	AA	1003	G	N3-C4-C5	-5.21	126.00	128.60
21	AA	1207	G	C5-N7-C8	5.21	106.90	104.30
21	AA	1271	A	C5-N7-C8	5.21	106.50	103.90
23	AW	65	G	N1-C2-N3	-5.21	120.78	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	83	A	C2-N3-C4	5.21	113.20	110.60
57	BB	728	G	N7-C8-N9	-5.21	110.50	113.10
57	BB	1244	A	O4'-C4'-C3'	-5.21	98.79	104.00
57	BB	1838	C	N1-C2-O2	-5.21	115.78	118.90
57	BB	1891	G	P-O5'-C5'	5.21	129.23	120.90
57	BB	1954	G	C6-C5-N7	-5.21	127.28	130.40
57	BB	2476	A	C4-C5-C6	5.21	119.60	117.00
57	BB	2574	G	C6-N1-C2	-5.21	121.98	125.10
21	AA	150	U	N3-C4-C5	-5.21	111.48	114.60
21	AA	505	G	C6-C5-N7	-5.21	127.28	130.40
21	AA	1152	A	C2-N3-C4	-5.21	108.00	110.60
22	AY	46	G	C6-N1-C2	5.21	128.22	125.10
57	BB	675	A	C8-N9-C4	-5.21	103.72	105.80
57	BB	1111	A	N7-C8-N9	-5.21	111.20	113.80
57	BB	1666	G	C6-C5-N7	-5.21	127.28	130.40
57	BB	2054	A	N9-C4-C5	5.21	107.88	105.80
57	BB	2076	U	C5'-C4'-C3'	5.21	124.33	116.00
57	BB	2173	A	C5-N7-C8	5.21	106.50	103.90
58	BA	75	G	C4-C5-N7	-5.21	108.72	110.80
10	AS	66	VAL	CA-CB-CG1	-5.20	103.10	110.90
21	AA	517	G	C8-N9-C4	-5.20	104.32	106.40
21	AA	938	A	C5-C6-N1	-5.20	115.10	117.70
21	AA	1451	U	C5-C6-N1	5.20	125.30	122.70
21	AA	1520	C	C5'-C4'-O4'	5.20	115.34	109.10
22	AY	34	G	C4-N9-C1'	5.20	133.27	126.50
57	BB	244	A	N9-C1'-C2'	-5.20	106.28	112.00
57	BB	278	A	C5-N7-C8	5.20	106.50	103.90
57	BB	311	A	C5-C6-N6	-5.20	119.54	123.70
57	BB	316	C	C6-N1-C2	-5.20	118.22	120.30
57	BB	398	C	P-O5'-C5'	-5.20	112.57	120.90
57	BB	518	G	C1'-O4'-C4'	5.20	114.06	109.90
57	BB	697	G	C5-C6-N1	5.20	114.10	111.50
57	BB	1051	G	C5'-C4'-C3'	-5.20	107.67	116.00
57	BB	1385	A	C3'-C2'-C1'	-5.20	97.34	101.50
57	BB	1442	U	O4'-C1'-N1	5.20	112.36	108.20
57	BB	1465	G	C4-C5-N7	-5.20	108.72	110.80
57	BB	1595	C	N3-C4-N4	5.20	121.64	118.00
57	BB	1595	C	C4-C5-C6	5.20	120.00	117.40
57	BB	1613	G	C4'-C3'-C2'	-5.20	97.40	102.60
57	BB	1790	C	OP1-P-O3'	5.20	116.65	105.20
57	BB	2033	A	O4'-C1'-N9	5.20	112.36	108.20
57	BB	2093	G	C2-N3-C4	5.20	114.50	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2120	G	N1-C2-N3	-5.20	120.78	123.90
57	BB	2540	C	N1-C2-O2	5.20	122.02	118.90
57	BB	2785	C	P-O3'-C3'	-5.20	113.46	119.70
3	AL	53	ARG	NE-CZ-NH2	-5.20	117.70	120.30
57	BB	146	A	N3-C4-C5	-5.20	123.16	126.80
57	BB	916	G	N3-C4-N9	5.20	129.12	126.00
57	BB	2097	A	O4'-C4'-C3'	-5.20	98.80	104.00
57	BB	2184	A	C4-C5-N7	-5.20	108.10	110.70
57	BB	2188	U	P-O5'-C5'	5.20	129.22	120.90
21	AA	846	G	N1-C2-N3	-5.20	120.78	123.90
21	AA	933	G	C4-C5-C6	5.20	121.92	118.80
23	AW	46	G	C8-N9-C4	5.20	108.48	106.40
57	BB	267	C	N3-C4-N4	5.20	121.64	118.00
57	BB	317	G	C3'-C2'-C1'	5.20	105.66	101.50
57	BB	784	G	OP1-P-OP2	-5.20	111.80	119.60
57	BB	873	C	N3-C4-C5	-5.20	119.82	121.90
57	BB	921	C	N3-C4-N4	5.20	121.64	118.00
57	BB	1020	A	N1-C2-N3	5.20	131.90	129.30
57	BB	1117	C	C5-C4-N4	-5.20	116.56	120.20
57	BB	1194	A	C4'-C3'-C2'	5.20	107.80	102.60
57	BB	1325	U	C2-N1-C1'	5.20	123.94	117.70
57	BB	1575	C	C2-N3-C4	5.20	122.50	119.90
57	BB	1577	C	P-O3'-C3'	5.20	125.94	119.70
57	BB	1660	G	N3-C2-N2	5.20	123.54	119.90
57	BB	1811	G	C4-C5-C6	5.20	121.92	118.80
57	BB	1847	A	O4'-C1'-C2'	5.20	112.28	107.60
57	BB	2104	C	N1-C2-O2	5.20	122.02	118.90
57	BB	2694	G	N1-C2-N3	-5.20	120.78	123.90
58	BA	21	G	C4-C5-N7	5.20	112.88	110.80
7	AP	37	GLY	CA-C-N	-5.20	105.76	117.20
21	AA	726	C	N1-C1'-C2'	-5.20	106.28	112.00
21	AA	903	G	N1-C2-N3	-5.20	120.78	123.90
21	AA	1142	G	C4-C5-C6	5.20	121.92	118.80
21	AA	1506	U	C5-C6-N1	5.20	125.30	122.70
26	AV	10	G	N9-C4-C5	5.20	107.48	105.40
37	BR	64	VAL	CB-CA-C	-5.20	101.52	111.40
57	BB	172	A	C6-C5-N7	-5.20	128.66	132.30
57	BB	429	A	N9-C4-C5	-5.20	103.72	105.80
57	BB	906	U	N1-C1'-C2'	-5.20	106.28	112.00
57	BB	1013	C	O4'-C4'-C3'	-5.20	98.80	104.00
57	BB	1157	G	C2-N3-C4	5.20	114.50	111.90
57	BB	1428	C	C3'-C2'-C1'	-5.20	97.34	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1790	C	N1-C2-N3	-5.20	115.56	119.20
57	BB	2038	G	O4'-C1'-N9	5.20	112.36	108.20
57	BB	2471	A	C5'-C4'-O4'	-5.20	102.86	109.10
57	BB	2748	A	N7-C8-N9	5.20	116.40	113.80
21	AA	85	U	P-O3'-C3'	5.20	125.94	119.70
21	AA	332	G	N9-C4-C5	-5.20	103.32	105.40
21	AA	988	G	P-O3'-C3'	-5.20	113.46	119.70
21	AA	1281	C	C5-C4-N4	-5.20	116.56	120.20
23	AW	40	C	C2-N3-C4	5.20	122.50	119.90
57	BB	676	A	C8-N9-C4	5.20	107.88	105.80
57	BB	961	C	C1'-O4'-C4'	5.20	114.06	109.90
57	BB	1025	G	C5'-C4'-O4'	5.20	115.34	109.10
57	BB	1646	C	C2-N3-C4	-5.20	117.30	119.90
57	BB	2616	C	C4-C5-C6	5.20	120.00	117.40
58	BA	94	A	C8-N9-C4	5.20	107.88	105.80
21	AA	80	A	N7-C8-N9	-5.20	111.20	113.80
21	AA	427	U	N1-C2-O2	-5.20	119.16	122.80
21	AA	504	C	C5-C6-N1	5.20	123.60	121.00
21	AA	676	A	N7-C8-N9	5.20	116.40	113.80
21	AA	794	A	C6-C5-N7	-5.20	128.66	132.30
21	AA	968	A	C4-C5-C6	5.20	119.60	117.00
21	AA	1077	G	C5-N7-C8	-5.20	101.70	104.30
21	AA	1128	C	C5-C6-N1	5.20	123.60	121.00
22	AY	36	A	C6-C5-N7	-5.20	128.66	132.30
37	BR	21	ARG	NH1-CZ-NH2	5.20	125.11	119.40
57	BB	923	G	N3-C4-N9	5.20	129.12	126.00
57	BB	1493	C	C5-C6-N1	-5.20	118.40	121.00
57	BB	2589	A	C2-N3-C4	-5.20	108.00	110.60
57	BB	2699	C	P-O5'-C5'	5.20	129.21	120.90
21	AA	812	G	N1-C2-N3	-5.19	120.78	123.90
21	AA	1425	U	P-O5'-C5'	5.19	129.21	120.90
21	AA	1531	A	C5-N7-C8	5.19	106.50	103.90
57	BB	1916	A	C4'-C3'-C2'	-5.19	97.41	102.60
57	BB	2080	A	N9-C4-C5	5.19	107.88	105.80
57	BB	2216	G	N1-C2-N3	5.19	127.02	123.90
57	BB	2871	U	C5'-C4'-O4'	5.19	115.33	109.10
58	BA	80	U	O5'-C5'-C4'	-5.19	101.83	111.70
16	AE	88	HIS	N-CA-C	-5.19	96.98	111.00
16	AE	92	ARG	CD-NE-CZ	-5.19	116.33	123.60
21	AA	116	A	C1'-O4'-C4'	-5.19	105.75	109.90
21	AA	182	A	C5-C6-N1	-5.19	115.10	117.70
21	AA	539	A	C5-C6-N1	-5.19	115.10	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	890	G	C2-N3-C4	-5.19	109.30	111.90
21	AA	971	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1239	A	P-O3'-C3'	5.19	125.93	119.70
21	AA	1268	G	C3'-C2'-C1'	-5.19	97.35	101.50
21	AA	1360	A	C4-C5-C6	5.19	119.60	117.00
22	AY	73	A	O4'-C1'-N9	5.19	112.36	108.20
57	BB	221	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	781	A	C8-N9-C4	-5.19	103.72	105.80
57	BB	860	U	C1'-O4'-C4'	5.19	114.05	109.90
57	BB	1568	G	N9-C4-C5	-5.19	103.32	105.40
57	BB	1581	G	N3-C2-N2	5.19	123.53	119.90
57	BB	1718	G	C1'-O4'-C4'	-5.19	105.75	109.90
57	BB	1874	C	N1-C2-N3	5.19	122.83	119.20
57	BB	2040	G	N3-C4-C5	5.19	131.20	128.60
57	BB	2433	A	C1'-O4'-C4'	5.19	114.05	109.90
57	BB	2522	U	N3-C4-O4	5.19	123.03	119.40
57	BB	2626	C	N3-C4-C5	-5.19	119.82	121.90
57	BB	2855	C	C5-C4-N4	-5.19	116.56	120.20
20	AI	71	ILE	CG1-CB-CG2	5.19	122.82	111.40
21	AA	98	A	O4'-C1'-N9	5.19	112.35	108.20
21	AA	811	C	C5-C6-N1	-5.19	118.41	121.00
21	AA	1181	G	C5'-C4'-C3'	-5.19	107.69	116.00
21	AA	1352	C	N1-C2-O2	5.19	122.01	118.90
23	AW	14	A	C3'-C2'-C1'	5.19	105.65	101.50
26	AV	47	U	O4'-C1'-N1	5.19	112.35	108.20
27	B5	87	ALA	N-CA-CB	5.19	117.37	110.10
32	BM	47	GLU	OE1-CD-OE2	-5.19	117.07	123.30
57	BB	7	G	N9-C4-C5	-5.19	103.32	105.40
57	BB	55	G	N1-C6-O6	5.19	123.01	119.90
57	BB	177	G	C4-C5-N7	-5.19	108.72	110.80
57	BB	277	G	C6-N1-C2	5.19	128.21	125.10
57	BB	340	A	O4'-C1'-N9	5.19	112.35	108.20
57	BB	715	A	O4'-C1'-N9	5.19	112.35	108.20
57	BB	1120	G	P-O3'-C3'	-5.19	113.47	119.70
57	BB	1292	G	C5-C6-O6	-5.19	125.49	128.60
57	BB	1336	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	1389	G	O5'-C5'-C4'	-5.19	101.84	111.70
57	BB	1535	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	1814	G	O4'-C4'-C3'	-5.19	98.81	104.00
57	BB	1909	C	C2-N3-C4	5.19	122.50	119.90
57	BB	1935	G	C5'-C4'-O4'	5.19	115.33	109.10
57	BB	2053	G	C6-C5-N7	-5.19	127.29	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2195	U	N3-C2-O2	5.19	125.83	122.20
57	BB	2260	C	N3-C2-O2	5.19	125.53	121.90
57	BB	2306	C	P-O5'-C5'	-5.19	112.59	120.90
57	BB	2590	A	C5-C6-N1	-5.19	115.10	117.70
57	BB	2618	G	C6-N1-C2	5.19	128.22	125.10
57	BB	2700	A	C8-N9-C4	-5.19	103.72	105.80
57	BB	2746	U	C4-C5-C6	5.19	122.81	119.70
57	BB	2843	G	C4-N9-C1'	-5.19	119.75	126.50
57	BB	2857	G	O4'-C4'-C3'	-5.19	98.81	104.00
58	BA	53	A	C3'-C2'-C1'	-5.19	97.35	101.50
4	AM	97	ARG	NE-CZ-NH1	5.19	122.89	120.30
21	AA	220	G	C4'-C3'-C2'	-5.19	97.41	102.60
21	AA	426	U	C2-N3-C4	5.19	130.11	127.00
21	AA	1047	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1378	C	C5-C4-N4	-5.19	116.57	120.20
21	AA	1425	U	N1-C2-O2	-5.19	119.17	122.80
22	AY	71	G	N7-C8-N9	-5.19	110.50	113.10
57	BB	269	C	N1-C2-O2	5.19	122.01	118.90
57	BB	386	G	N1-C2-N3	-5.19	120.79	123.90
57	BB	696	G	N9-C4-C5	5.19	107.48	105.40
57	BB	1109	C	C2-N3-C4	5.19	122.49	119.90
57	BB	1992	G	N1-C2-N2	-5.19	111.53	116.20
57	BB	2008	C	C4'-C3'-C2'	-5.19	97.41	102.60
57	BB	2702	G	N9-C4-C5	5.19	107.48	105.40
5	AN	60	ARG	NE-CZ-NH2	-5.19	117.71	120.30
21	AA	412	A	OP1-P-OP2	-5.19	111.82	119.60
21	AA	777	A	N3-C4-C5	-5.19	123.17	126.80
21	AA	799	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1423	G	N1-C2-N2	5.19	120.87	116.20
21	AA	1454	G	N9-C1'-C2'	-5.19	106.29	112.00
26	AV	60	U	P-O5'-C5'	-5.19	112.60	120.90
26	AV	69	C	N3-C4-C5	-5.19	119.83	121.90
36	BQ	101	ASP	CB-CG-OD2	-5.19	113.63	118.30
38	BS	60	HIS	N-CA-C	-5.19	97.00	111.00
57	BB	1048	A	C4-C5-C6	5.19	119.59	117.00
57	BB	1182	G	N3-C4-N9	5.19	129.11	126.00
57	BB	2148	G	P-O3'-C3'	5.19	125.92	119.70
57	BB	2730	C	C2-N3-C4	-5.19	117.31	119.90
57	BB	2764	A	N3-C4-C5	-5.19	123.17	126.80
57	BB	2876	G	C5-C6-N1	-5.19	108.91	111.50
5	AN	100	TRP	CE3-CZ3-CH2	-5.19	115.50	121.20
21	AA	666	G	N3-C2-N2	5.19	123.53	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1072	G	C6-N1-C2	5.19	128.21	125.10
21	AA	1251	A	C3'-C2'-C1'	-5.19	97.35	101.50
21	AA	1357	A	P-O3'-C3'	5.19	125.92	119.70
57	BB	568	U	N1-C2-O2	5.19	126.43	122.80
57	BB	597	G	C4-C5-C6	5.19	121.91	118.80
57	BB	1033	U	O3'-P-O5'	-5.19	94.15	104.00
57	BB	1035	U	C2-N3-C4	5.19	130.11	127.00
57	BB	1118	C	O4'-C1'-N1	5.19	112.35	108.20
57	BB	1232	G	C5-C6-N1	-5.19	108.91	111.50
57	BB	1441	G	C5-N7-C8	5.19	106.89	104.30
57	BB	1822	C	N1-C1'-C2'	-5.19	106.30	112.00
57	BB	2525	G	N3-C2-N2	5.19	123.53	119.90
58	BA	27	C	C5'-C4'-C3'	-5.19	107.70	116.00
21	AA	1143	G	C2-N3-C4	-5.18	109.31	111.90
23	AW	68	C	C3'-C2'-C1'	-5.18	97.35	101.50
32	BM	103	TYR	CB-CG-CD1	5.18	124.11	121.00
33	BN	75	ILE	CG1-CB-CG2	5.18	122.81	111.40
40	BU	8	ASP	CB-CG-OD1	-5.18	113.63	118.30
57	BB	549	G	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	835	C	OP2-P-O3'	5.18	116.61	105.20
57	BB	915	C	C5-C4-N4	-5.18	116.57	120.20
57	BB	1238	G	C1'-O4'-C4'	5.18	114.05	109.90
57	BB	1394	U	O4'-C4'-C3'	-5.18	98.81	104.00
57	BB	1507	C	O4'-C1'-N1	5.18	112.35	108.20
57	BB	2233	U	C6-N1-C2	-5.18	117.89	121.00
57	BB	2269	G	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	2419	U	C2-N1-C1'	-5.18	111.48	117.70
57	BB	2451	A	N7-C8-N9	-5.18	111.21	113.80
57	BB	2648	G	C4-C5-C6	5.18	121.91	118.80
58	BA	40	U	N3-C4-C5	-5.18	111.49	114.60
21	AA	472	U	O5'-P-OP2	-5.18	101.03	105.70
21	AA	900	A	C2-N3-C4	-5.18	108.01	110.60
21	AA	909	A	N3-C4-C5	-5.18	123.17	126.80
21	AA	943	U	N1-C2-O2	5.18	126.43	122.80
21	AA	1145	A	C8-N9-C4	-5.18	103.73	105.80
21	AA	1461	G	N1-C6-O6	5.18	123.01	119.90
21	AA	1474	U	C6-N1-C2	5.18	124.11	121.00
23	AW	30	G	C3'-C2'-C1'	-5.18	97.35	101.50
26	AV	3	C	C3'-C2'-C1'	5.18	105.65	101.50
30	BK	78	PHE	N-CA-CB	5.18	119.93	110.60
57	BB	165	A	C5-C6-N1	-5.18	115.11	117.70
57	BB	269	C	C6-N1-C2	5.18	122.37	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	328	U	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	688	U	N3-C4-O4	5.18	123.03	119.40
57	BB	757	G	N3-C4-C5	-5.18	126.01	128.60
57	BB	932	U	OP1-P-OP2	-5.18	111.83	119.60
57	BB	1454	C	C5'-C4'-C3'	5.18	124.29	116.00
57	BB	1499	C	N1-C2-O2	-5.18	115.79	118.90
57	BB	1698	A	C4-C5-N7	-5.18	108.11	110.70
57	BB	1722	A	C8-N9-C4	-5.18	103.73	105.80
57	BB	2061	G	C5-C6-N1	-5.18	108.91	111.50
57	BB	2385	C	C4-C5-C6	5.18	119.99	117.40
57	BB	2444	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	514	C	C4-C5-C6	5.18	119.99	117.40
21	AA	886	G	N9-C1'-C2'	-5.18	106.30	112.00
21	AA	1490	U	N1-C2-O2	-5.18	119.17	122.80
22	AY	15	G	C6-N1-C2	5.18	128.21	125.10
22	AY	42	G	N3-C4-N9	-5.18	122.89	126.00
57	BB	974	G	N1-C6-O6	5.18	123.01	119.90
57	BB	1113	U	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	1575	C	O4'-C1'-N1	5.18	112.34	108.20
14	AC	28	PHE	CB-CG-CD1	5.18	124.42	120.80
21	AA	281	G	N7-C8-N9	-5.18	110.51	113.10
21	AA	364	A	P-O3'-C3'	5.18	125.92	119.70
21	AA	633	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	956	U	P-O3'-C3'	-5.18	113.48	119.70
21	AA	1061	G	C5-N7-C8	-5.18	101.71	104.30
21	AA	1374	A	C6-N1-C2	-5.18	115.49	118.60
23	AW	27	G	C5-C6-N1	-5.18	108.91	111.50
39	BT	51	PHE	CB-CG-CD2	-5.18	117.17	120.80
57	BB	301	G	C6-N1-C2	5.18	128.21	125.10
57	BB	543	G	N1-C2-N3	-5.18	120.79	123.90
57	BB	622	G	C4-C5-C6	5.18	121.91	118.80
57	BB	808	G	C2-N3-C4	-5.18	109.31	111.90
57	BB	1143	A	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	1333	G	N9-C4-C5	-5.18	103.33	105.40
57	BB	1826	G	N1-C6-O6	5.18	123.01	119.90
57	BB	1860	G	C8-N9-C1'	5.18	133.73	127.00
57	BB	2537	U	C5-C6-N1	5.18	125.29	122.70
57	BB	2648	G	N3-C4-C5	-5.18	126.01	128.60
21	AA	376	G	O4'-C4'-C3'	-5.18	98.82	104.00
21	AA	682	G	C5-C6-O6	-5.18	125.49	128.60
21	AA	696	A	C6-N1-C2	5.18	121.71	118.60
21	AA	1103	C	O4'-C1'-N1	5.18	112.34	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1182	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	1280	A	C6-N1-C2	-5.18	115.49	118.60
21	AA	1481	U	C5-C4-O4	-5.18	122.79	125.90
26	AV	22	G	N7-C8-N9	5.18	115.69	113.10
57	BB	304	U	C1'-O4'-C4'	-5.18	105.76	109.90
57	BB	696	G	N1-C2-N2	-5.18	111.54	116.20
57	BB	1356	G	N3-C2-N2	5.18	123.53	119.90
16	AE	92	ARG	NE-CZ-NH1	5.18	122.89	120.30
21	AA	104	G	C8-N9-C4	-5.18	104.33	106.40
21	AA	497	G	N9-C4-C5	5.18	107.47	105.40
21	AA	1277	C	P-O3'-C3'	-5.18	113.49	119.70
22	AY	49	C	O4'-C1'-C2'	-5.18	100.62	105.80
26	AV	29	G	O4'-C1'-N9	5.18	112.34	108.20
39	BT	4	GLU	CA-C-O	5.18	130.97	120.10
57	BB	69	C	O5'-P-OP1	-5.18	101.04	105.70
57	BB	164	C	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	174	U	N1-C2-N3	5.18	118.01	114.90
57	BB	513	A	C4-C5-N7	5.18	113.29	110.70
57	BB	941	A	N1-C2-N3	-5.18	126.71	129.30
57	BB	951	C	N1-C2-N3	-5.18	115.58	119.20
57	BB	1654	A	C5-N7-C8	5.18	106.49	103.90
57	BB	2533	U	P-O3'-C3'	5.18	125.91	119.70
57	BB	2631	G	O4'-C1'-N9	5.18	112.34	108.20
58	BA	9	G	C8-N9-C4	5.18	108.47	106.40
3	AL	73	LEU	CB-CG-CD2	5.17	119.80	111.00
21	AA	78	A	C8-N9-C4	-5.17	103.73	105.80
21	AA	111	G	N3-C2-N2	5.17	123.52	119.90
21	AA	764	C	C6-N1-C2	-5.17	118.23	120.30
21	AA	1004	A	N9-C1'-C2'	5.17	120.73	114.00
21	AA	1085	U	C4-C5-C6	-5.17	116.60	119.70
57	BB	700	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	1034	G	N3-C2-N2	5.17	123.52	119.90
57	BB	1072	C	C4'-C3'-C2'	-5.17	97.43	102.60
57	BB	1320	C	C2-N3-C4	5.17	122.49	119.90
57	BB	1368	G	C8-N9-C1'	5.17	133.73	127.00
57	BB	2770	G	C5-N7-C8	5.17	106.89	104.30
21	AA	130	A	C6-N1-C2	-5.17	115.50	118.60
21	AA	502	A	C8-N9-C4	-5.17	103.73	105.80
21	AA	958	A	C5-C6-N1	-5.17	115.11	117.70
23	AW	58	A	C4-C5-C6	5.17	119.59	117.00
57	BB	695	G	C5-N7-C8	-5.17	101.71	104.30
57	BB	1667	G	N9-C4-C5	5.17	107.47	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1906	G	C6-N1-C2	5.17	128.20	125.10
58	BA	88	C	C2-N1-C1'	5.17	124.49	118.80
3	AL	28	GLN	CG-CD-OE1	-5.17	111.25	121.60
21	AA	211	G	C4-N9-C1'	5.17	133.22	126.50
21	AA	562	U	C5-C6-N1	-5.17	120.11	122.70
21	AA	782	A	N7-C8-N9	-5.17	111.21	113.80
21	AA	1226	C	O4'-C1'-N1	5.17	112.34	108.20
21	AA	1463	U	C6-N1-C2	-5.17	117.90	121.00
21	AA	1490	U	C5'-C4'-C3'	-5.17	107.73	116.00
22	AY	23	A	C2-N3-C4	5.17	113.19	110.60
26	AV	37	A	N3-C4-C5	-5.17	123.18	126.80
32	BM	88	ASN	O-C-N	5.17	130.97	122.70
33	BN	94	TYR	CB-CG-CD1	5.17	124.10	121.00
50	B3	45	PRO	N-CA-CB	5.17	109.51	103.30
57	BB	423	A	C4'-C3'-C2'	-5.17	97.43	102.60
57	BB	776	G	N3-C2-N2	5.17	123.52	119.90
57	BB	876	C	C2-N3-C4	5.17	122.48	119.90
57	BB	1421	G	C5-C6-O6	-5.17	125.50	128.60
57	BB	1623	G	C5-C6-N1	-5.17	108.92	111.50
57	BB	1898	U	N3-C4-C5	-5.17	111.50	114.60
57	BB	2125	G	O4'-C1'-N9	5.17	112.34	108.20
57	BB	2222	C	C6-N1-C2	5.17	122.37	120.30
57	BB	2360	G	O4'-C1'-N9	5.17	112.34	108.20
57	BB	2598	A	C6-N1-C2	5.17	121.70	118.60
57	BB	2659	G	N1-C6-O6	5.17	123.00	119.90
57	BB	2880	C	C6-N1-C2	5.17	122.37	120.30
58	BA	75	G	O4'-C1'-N9	5.17	112.34	108.20
21	AA	661	G	C5-C6-N1	-5.17	108.92	111.50
21	AA	764	C	N1-C2-N3	-5.17	115.58	119.20
21	AA	1398	A	P-O3'-C3'	-5.17	113.50	119.70
21	AA	1470	U	C4'-C3'-C2'	5.17	107.77	102.60
22	AY	9	A	C5'-C4'-C3'	-5.17	107.73	116.00
26	AV	64	G	O4'-C1'-N9	5.17	112.34	108.20
38	BS	99	ARG	NH1-CZ-NH2	-5.17	113.71	119.40
57	BB	373	U	O4'-C4'-C3'	-5.17	98.83	104.00
57	BB	495	G	N7-C8-N9	5.17	115.69	113.10
57	BB	724	U	N1-C2-N3	-5.17	111.80	114.90
57	BB	1047	G	C4-C5-C6	5.17	121.90	118.80
57	BB	1262	A	C6-C5-N7	-5.17	128.68	132.30
57	BB	1687	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	2005	A	C2-N3-C4	-5.17	108.02	110.60
57	BB	2302	U	C3'-C2'-C1'	-5.17	97.36	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2815	C	C4'-C3'-C2'	-5.17	97.43	102.60
21	AA	48	C	O5'-C5'-C4'	-5.17	101.88	111.70
21	AA	116	A	C5-C6-N1	-5.17	115.12	117.70
21	AA	167	A	OP1-P-OP2	-5.17	111.85	119.60
21	AA	649	A	O4'-C4'-C3'	-5.17	98.83	104.00
21	AA	658	C	N3-C2-O2	5.17	125.52	121.90
21	AA	741	G	O4'-C4'-C3'	-5.17	98.83	104.00
21	AA	765	G	C2-N3-C4	5.17	114.48	111.90
21	AA	1446	A	N3-C4-N9	5.17	131.53	127.40
57	BB	17	G	N1-C2-N3	-5.17	120.80	123.90
57	BB	60	G	C2-N3-C4	5.17	114.48	111.90
57	BB	89	A	C4-C5-C6	5.17	119.58	117.00
57	BB	130	C	O5'-C5'-C4'	-5.17	101.88	111.70
57	BB	141	G	C1'-O4'-C4'	5.17	114.03	109.90
57	BB	1759	A	O4'-C1'-N9	5.17	112.33	108.20
57	BB	1761	C	P-O3'-C3'	5.17	125.90	119.70
57	BB	2858	C	O4'-C1'-N1	5.17	112.33	108.20
58	BA	33	G	P-O5'-C5'	-5.17	112.63	120.90
58	BA	41	G	P-O3'-C3'	-5.17	113.50	119.70
58	BA	80	U	C1'-O4'-C4'	5.17	114.03	109.90
21	AA	607	A	C2-N3-C4	5.17	113.18	110.60
21	AA	1070	U	C6-N1-C2	-5.17	117.90	121.00
21	AA	1166	G	C6-N1-C2	5.17	128.20	125.10
21	AA	1519	A	OP1-P-OP2	-5.17	111.85	119.60
22	AY	22	G	C5'-C4'-O4'	5.17	115.30	109.10
24	AX	13	A	C8-N9-C4	-5.17	103.73	105.80
26	AV	64	G	C6-N1-C2	5.17	128.20	125.10
27	B5	7	ARG	NE-CZ-NH1	5.17	122.88	120.30
36	BQ	30	VAL	CG1-CB-CG2	5.17	119.17	110.90
57	BB	23	G	C2-N3-C4	5.17	114.48	111.90
57	BB	135	U	C5-C4-O4	-5.17	122.80	125.90
57	BB	151	C	P-O5'-C5'	5.17	129.17	120.90
57	BB	268	C	C5'-C4'-O4'	5.17	115.30	109.10
57	BB	340	A	N7-C8-N9	-5.17	111.22	113.80
57	BB	466	A	P-O5'-C5'	-5.17	112.63	120.90
57	BB	1061	U	C3'-C2'-C1'	-5.17	97.37	101.50
57	BB	1063	G	N1-C2-N2	5.17	120.85	116.20
57	BB	1195	G	C5-N7-C8	5.17	106.88	104.30
57	BB	1358	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	1809	A	C4-C5-C6	5.17	119.58	117.00
57	BB	1889	A	N7-C8-N9	-5.17	111.22	113.80
57	BB	2040	G	O4'-C4'-C3'	-5.17	98.83	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2152	G	C5-C6-N1	-5.17	108.92	111.50
57	BB	2225	A	C5-N7-C8	5.17	106.48	103.90
57	BB	2323	G	P-O5'-C5'	-5.17	112.63	120.90
57	BB	2581	G	C4-C5-C6	5.17	121.90	118.80
57	BB	2753	A	N7-C8-N9	5.17	116.38	113.80
57	BB	2846	G	C5-N7-C8	5.17	106.88	104.30
21	AA	365	U	C4-C5-C6	5.17	122.80	119.70
21	AA	933	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	56	A	C6-N1-C2	-5.17	115.50	118.60
57	BB	268	C	C6-N1-C2	-5.17	118.23	120.30
57	BB	476	G	N3-C4-N9	-5.17	122.90	126.00
57	BB	529	A	N1-C6-N6	5.17	121.70	118.60
57	BB	2220	U	N1-C2-O2	-5.17	119.18	122.80
57	BB	2398	U	OP1-P-OP2	-5.17	111.85	119.60
13	AB	203	ASP	CB-CG-OD1	-5.16	113.65	118.30
21	AA	317	U	O3'-P-O5'	-5.16	94.19	104.00
21	AA	1172	C	OP1-P-OP2	-5.16	111.86	119.60
21	AA	1235	U	C5-C6-N1	-5.16	120.12	122.70
21	AA	1263	C	C2-N3-C4	-5.16	117.32	119.90
25	AZ	369	ASP	CB-CG-OD1	-5.16	113.65	118.30
57	BB	1035	U	P-O3'-C3'	-5.16	113.50	119.70
57	BB	1346	G	C4-C5-C6	-5.16	115.70	118.80
57	BB	1405	U	C5-C4-O4	5.16	129.00	125.90
57	BB	1854	A	C1'-O4'-C4'	5.16	114.03	109.90
57	BB	2014	A	C6-C5-N7	-5.16	128.69	132.30
57	BB	2104	C	O5'-P-OP1	5.16	116.90	110.70
57	BB	2396	G	C4-C5-C6	5.16	121.90	118.80
57	BB	2463	C	C4-C5-C6	-5.16	114.82	117.40
57	BB	2615	U	N1-C2-N3	-5.16	111.80	114.90
13	AB	125	PHE	CB-CG-CD1	5.16	124.41	120.80
21	AA	360	G	N3-C4-C5	-5.16	126.02	128.60
21	AA	702	A	N1-C2-N3	5.16	131.88	129.30
21	AA	746	A	N7-C8-N9	-5.16	111.22	113.80
21	AA	1180	A	C5-N7-C8	5.16	106.48	103.90
33	BN	34	ILE	O-C-N	5.16	130.96	122.70
36	BQ	19	GLN	CB-CA-C	-5.16	100.08	110.40
57	BB	424	G	P-O3'-C3'	-5.16	113.50	119.70
57	BB	893	C	C5-C4-N4	-5.16	116.59	120.20
57	BB	1004	U	C6-N1-C2	-5.16	117.90	121.00
57	BB	1163	G	C4-N9-C1'	-5.16	119.79	126.50
57	BB	2383	G	P-O3'-C3'	-5.16	113.50	119.70
21	AA	141	G	N9-C1'-C2'	-5.16	106.32	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	426	U	N3-C4-C5	-5.16	111.50	114.60
21	AA	776	G	OP2-P-O3'	5.16	116.55	105.20
21	AA	817	C	P-O3'-C3'	-5.16	113.51	119.70
21	AA	994	A	C8-N9-C4	-5.16	103.74	105.80
21	AA	1203	C	OP1-P-OP2	-5.16	111.86	119.60
53	BE	6	LYS	N-CA-CB	5.16	119.89	110.60
57	BB	409	G	C5-C6-N1	5.16	114.08	111.50
57	BB	610	C	C5-C4-N4	-5.16	116.59	120.20
57	BB	645	C	O5'-P-OP1	-5.16	101.06	105.70
57	BB	1176	U	C4'-C3'-C2'	-5.16	97.44	102.60
57	BB	1377	G	N1-C6-O6	5.16	123.00	119.90
57	BB	1420	A	C4-C5-C6	5.16	119.58	117.00
57	BB	1437	C	N1-C2-O2	5.16	122.00	118.90
57	BB	2071	A	C5-C6-N1	-5.16	115.12	117.70
57	BB	2108	A	N7-C8-N9	-5.16	111.22	113.80
57	BB	2284	A	C4'-C3'-C2'	-5.16	97.44	102.60
57	BB	2773	C	N3-C2-O2	-5.16	118.29	121.90
58	BA	6	G	C8-N9-C4	-5.16	104.34	106.40
13	AB	191	ASP	N-CA-C	-5.16	97.07	111.00
16	AE	84	VAL	O-C-N	5.16	130.96	122.70
21	AA	24	U	C5-C4-O4	5.16	129.00	125.90
21	AA	41	G	C6-C5-N7	-5.16	127.31	130.40
21	AA	1010	U	OP1-P-OP2	-5.16	111.86	119.60
21	AA	1190	G	N9-C1'-C2'	-5.16	106.33	112.00
21	AA	1224	U	C5-C6-N1	5.16	125.28	122.70
21	AA	1231	G	N3-C4-N9	-5.16	122.91	126.00
25	AZ	68	GLU	N-CA-C	-5.16	97.07	111.00
57	BB	507	A	N3-C4-N9	5.16	131.53	127.40
57	BB	512	G	C5-C6-O6	5.16	131.69	128.60
57	BB	723	C	N3-C4-N4	5.16	121.61	118.00
57	BB	757	G	C4-C5-N7	-5.16	108.74	110.80
57	BB	957	C	N1-C2-N3	-5.16	115.59	119.20
57	BB	2654	A	C6-C5-N7	-5.16	128.69	132.30
57	BB	2719	G	O4'-C1'-N9	5.16	112.33	108.20
58	BA	32	U	N3-C4-C5	-5.16	111.50	114.60
58	BA	87	U	P-O3'-C3'	5.16	125.89	119.70
19	AH	9	MET	C-N-CA	5.16	134.59	121.70
32	BM	136	MET	CG-SD-CE	-5.16	91.95	100.20
53	BE	161	ALA	CB-CA-C	5.16	117.84	110.10
57	BB	740	C	N3-C4-C5	-5.16	119.84	121.90
21	AA	555	U	N3-C2-O2	5.16	125.81	122.20
21	AA	606	G	C4-C5-C6	5.16	121.89	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	712	A	P-O5'-C5'	5.16	129.15	120.90
21	AA	774	G	C4-C5-N7	5.16	112.86	110.80
21	AA	1105	A	N3-C4-N9	5.16	131.52	127.40
21	AA	1310	G	C5-C6-N1	-5.16	108.92	111.50
21	AA	1420	U	C5'-C4'-O4'	5.16	115.29	109.10
22	AY	29	A	P-O5'-C5'	-5.16	112.65	120.90
34	BO	65	THR	CA-CB-CG2	-5.16	105.18	112.40
39	BT	86	THR	CA-C-O	5.16	130.93	120.10
43	BX	28	PHE	CB-CG-CD2	-5.16	117.19	120.80
46	BZ	47	ILE	CB-CA-C	-5.16	101.29	111.60
57	BB	64	A	C2-N3-C4	5.16	113.18	110.60
57	BB	191	A	N3-C4-C5	-5.16	123.19	126.80
57	BB	659	G	C4-C5-N7	-5.16	108.74	110.80
57	BB	1158	C	C5-C6-N1	-5.16	118.42	121.00
57	BB	1526	C	N3-C4-N4	5.16	121.61	118.00
57	BB	1565	C	N1-C2-N3	-5.16	115.59	119.20
57	BB	1596	A	C2-N3-C4	5.16	113.18	110.60
57	BB	2036	C	C2-N3-C4	5.16	122.48	119.90
57	BB	2657	A	C6-C5-N7	-5.16	128.69	132.30
20	AI	10	ARG	N-CA-CB	5.15	119.88	110.60
21	AA	166	U	P-O3'-C3'	-5.15	113.52	119.70
22	AY	24	G	N3-C4-N9	-5.15	122.91	126.00
57	BB	1475	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	1860	G	C3'-C2'-C1'	-5.15	97.38	101.50
57	BB	1895	C	N3-C4-N4	5.15	121.61	118.00
57	BB	1927	A	C5-C6-N6	-5.15	119.58	123.70
57	BB	2317	A	N1-C6-N6	5.15	121.69	118.60
21	AA	778	G	C5-C6-N1	-5.15	108.92	111.50
21	AA	1145	A	O3'-P-O5'	-5.15	94.21	104.00
21	AA	1270	G	P-O5'-C5'	5.15	129.14	120.90
21	AA	1393	U	O3'-P-O5'	-5.15	94.21	104.00
21	AA	1443	C	C5-C4-N4	-5.15	116.59	120.20
57	BB	71	A	OP1-P-O3'	5.15	116.53	105.20
57	BB	186	G	C6-N1-C2	5.15	128.19	125.10
57	BB	498	G	P-O3'-C3'	-5.15	113.52	119.70
57	BB	701	G	N7-C8-N9	-5.15	110.52	113.10
57	BB	865	C	O3'-P-O5'	-5.15	94.21	104.00
57	BB	1030	C	N3-C2-O2	5.15	125.51	121.90
57	BB	1169	A	C3'-C2'-C1'	-5.15	97.38	101.50
57	BB	1380	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	1890	A	C6-N1-C2	5.15	121.69	118.60
57	BB	2078	C	C5-C6-N1	-5.15	118.42	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2547	A	C6-N1-C2	5.15	121.69	118.60
57	BB	2707	U	C4'-C3'-C2'	5.15	107.75	102.60
57	BB	2770	G	C5-C6-N1	-5.15	108.92	111.50
21	AA	9	G	P-O5'-C5'	5.15	129.14	120.90
21	AA	69	G	N3-C2-N2	-5.15	116.29	119.90
21	AA	169	C	P-O5'-C5'	-5.15	112.66	120.90
21	AA	430	A	O5'-P-OP2	5.15	116.88	110.70
21	AA	1255	G	N3-C2-N2	5.15	123.51	119.90
21	AA	1393	U	N1-C1'-C2'	-5.15	106.33	112.00
23	AW	59	U	N3-C4-C5	-5.15	111.51	114.60
57	BB	32	C	C4'-C3'-C2'	5.15	107.75	102.60
57	BB	214	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	435	C	P-O3'-C3'	-5.15	113.52	119.70
57	BB	454	A	O4'-C1'-N9	5.15	112.32	108.20
57	BB	587	C	C5-C4-N4	5.15	123.81	120.20
57	BB	931	U	C6-N1-C2	5.15	124.09	121.00
57	BB	1148	U	N3-C4-O4	5.15	123.01	119.40
57	BB	1734	G	C4'-C3'-C2'	-5.15	97.45	102.60
57	BB	1735	A	C5-N7-C8	-5.15	101.33	103.90
57	BB	1763	G	O4'-C4'-C3'	-5.15	98.85	104.00
57	BB	2324	U	C5'-C4'-C3'	-5.15	107.76	116.00
21	AA	89	U	C5-C4-O4	5.15	128.99	125.90
21	AA	181	A	C4-C5-N7	-5.15	108.12	110.70
21	AA	214	C	C2-N3-C4	5.15	122.47	119.90
21	AA	223	A	C4-C5-N7	-5.15	108.13	110.70
21	AA	976	G	N3-C4-C5	-5.15	126.03	128.60
21	AA	1470	U	P-O3'-C3'	-5.15	113.52	119.70
23	AW	7	A	C4-C5-C6	5.15	119.58	117.00
30	BK	111	PHE	CB-CG-CD2	5.15	124.40	120.80
57	BB	977	G	C5-C6-O6	-5.15	125.51	128.60
57	BB	1024	G	O4'-C1'-C2'	5.15	112.23	107.60
57	BB	1085	A	N3-C4-C5	-5.15	123.20	126.80
57	BB	1391	U	N3-C4-O4	5.15	123.00	119.40
57	BB	1892	C	N3-C4-C5	-5.15	119.84	121.90
57	BB	2418	A	P-O3'-C3'	-5.15	113.52	119.70
57	BB	2523	G	C4'-C3'-C2'	-5.15	97.45	102.60
21	AA	105	G	N1-C6-O6	5.15	122.99	119.90
21	AA	310	G	C6-C5-N7	-5.15	127.31	130.40
21	AA	434	U	C5-C4-O4	-5.15	122.81	125.90
21	AA	953	G	N1-C2-N2	-5.15	111.57	116.20
21	AA	1481	U	N3-C2-O2	5.15	125.80	122.20
22	AY	54	U	C4-C5-C6	-5.15	116.61	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AY	64	A	C8-N9-C4	-5.15	103.74	105.80
53	BE	158	PHE	CB-CG-CD2	-5.15	117.20	120.80
54	BF	70	ARG	NE-CZ-NH2	5.15	122.87	120.30
55	BG	121	THR	N-CA-CB	5.15	120.08	110.30
57	BB	117	G	C5-C6-O6	-5.15	125.51	128.60
57	BB	151	C	C5-C6-N1	5.15	123.57	121.00
57	BB	171	U	C4'-C3'-C2'	-5.15	97.45	102.60
57	BB	250	G	O5'-C5'-C4'	-5.15	101.92	111.70
57	BB	277	G	N1-C2-N3	-5.15	120.81	123.90
57	BB	1278	C	O4'-C4'-C3'	5.15	110.22	106.10
57	BB	1284	A	C6-C5-N7	-5.15	128.70	132.30
57	BB	1334	G	N7-C8-N9	-5.15	110.53	113.10
57	BB	1445	G	C8-N9-C4	5.15	108.46	106.40
57	BB	1674	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	2251	G	N3-C4-N9	5.15	129.09	126.00
57	BB	2505	G	N3-C2-N2	5.15	123.50	119.90
57	BB	2557	G	P-O3'-C3'	-5.15	113.52	119.70
7	AP	16	PHE	CB-CG-CD2	5.15	124.40	120.80
21	AA	768	A	C5-C6-N1	-5.15	115.13	117.70
21	AA	851	G	C5-C6-O6	-5.15	125.51	128.60
21	AA	1079	G	P-O3'-C3'	5.15	125.88	119.70
21	AA	1260	G	C8-N9-C4	5.15	108.46	106.40
23	AW	2	C	C2-N1-C1'	5.15	124.46	118.80
34	BO	31	THR	CA-CB-OG1	5.15	119.81	109.00
50	B3	57	VAL	CG1-CB-CG2	-5.15	102.67	110.90
57	BB	1009	A	C6-N1-C2	-5.15	115.51	118.60
57	BB	1120	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	1342	A	OP2-P-O3'	5.15	116.52	105.20
57	BB	2535	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	2748	A	C6-C5-N7	-5.15	128.70	132.30
21	AA	43	C	N1-C2-O2	-5.14	115.81	118.90
21	AA	236	A	O4'-C1'-N9	5.14	112.32	108.20
21	AA	261	U	C4-C5-C6	-5.14	116.61	119.70
21	AA	495	A	N1-C6-N6	5.14	121.69	118.60
21	AA	534	U	N3-C2-O2	5.14	125.80	122.20
21	AA	771	G	C4-C5-N7	5.14	112.86	110.80
21	AA	831	A	C6-C5-N7	-5.14	128.70	132.30
21	AA	970	C	C4-C5-C6	5.14	119.97	117.40
25	AZ	210	PHE	CZ-CE2-CD2	-5.14	113.93	120.10
26	AV	9	G	C1'-O4'-C4'	-5.14	105.78	109.90
33	BN	15	SER	N-CA-CB	5.14	118.22	110.50
49	B2	12	ARG	NE-CZ-NH1	5.14	122.87	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	BG	167	VAL	N-CA-CB	5.14	122.82	111.50
57	BB	245	G	C5-C6-O6	-5.14	125.51	128.60
57	BB	460	A	O5'-C5'-C4'	-5.14	101.93	111.70
57	BB	560	C	C5'-C4'-O4'	5.14	115.27	109.10
57	BB	1152	C	N3-C4-N4	5.14	121.60	118.00
57	BB	1656	C	C5-C4-N4	-5.14	116.60	120.20
57	BB	2250	G	N3-C4-N9	5.14	129.09	126.00
57	BB	2407	A	P-O5'-C5'	5.14	129.13	120.90
57	BB	2573	C	C6-N1-C2	-5.14	118.24	120.30
57	BB	2648	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2743	U	C2-N3-C4	5.14	130.09	127.00
57	BB	2825	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2890	G	N1-C2-N3	-5.14	120.81	123.90
57	BB	2892	G	C6-C5-N7	-5.14	127.31	130.40
16	AE	144	GLU	O-C-N	-5.14	114.47	122.70
21	AA	235	C	N3-C4-C5	-5.14	119.84	121.90
21	AA	392	C	C5'-C4'-C3'	-5.14	107.77	116.00
21	AA	693	G	C4'-C3'-C2'	5.14	107.74	102.60
21	AA	829	G	N3-C2-N2	5.14	123.50	119.90
21	AA	1181	G	N9-C4-C5	-5.14	103.34	105.40
21	AA	1375	A	C6-N1-C2	5.14	121.69	118.60
21	AA	1406	U	P-O5'-C5'	-5.14	112.67	120.90
21	AA	1442	G	C1'-O4'-C4'	5.14	114.02	109.90
23	AW	30	G	O4'-C1'-N9	5.14	112.31	108.20
31	BL	91	ASP	CB-CG-OD2	-5.14	113.67	118.30
42	BW	46	ALA	N-CA-CB	5.14	117.30	110.10
57	BB	417	C	C3'-C2'-C1'	5.14	105.61	101.50
57	BB	895	U	N3-C4-C5	5.14	117.69	114.60
57	BB	1175	A	P-O3'-C3'	5.14	125.87	119.70
57	BB	1377	G	C4-C5-N7	5.14	112.86	110.80
57	BB	2138	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2323	G	O4'-C1'-N9	5.14	112.31	108.20
21	AA	676	A	C6-C5-N7	-5.14	128.70	132.30
21	AA	965	U	N1-C2-N3	-5.14	111.82	114.90
21	AA	1489	G	C2-N3-C4	-5.14	109.33	111.90
22	AY	45	G	O4'-C1'-C2'	5.14	112.23	107.60
57	BB	188	G	N3-C4-C5	-5.14	126.03	128.60
57	BB	815	C	N3-C4-C5	-5.14	119.84	121.90
57	BB	1051	G	N3-C4-N9	-5.14	122.92	126.00
57	BB	1710	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	1980	G	N1-C2-N3	-5.14	120.81	123.90
16	AE	145	ASN	CB-CG-OD1	-5.14	111.32	121.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	39	G	C4-C5-C6	5.14	121.88	118.80
21	AA	419	C	O4'-C1'-N1	5.14	112.31	108.20
21	AA	577	G	O4'-C1'-N9	5.14	112.31	108.20
21	AA	647	C	C6-N1-C2	-5.14	118.24	120.30
21	AA	815	A	O4'-C1'-N9	5.14	112.31	108.20
21	AA	858	G	C4-C5-C6	5.14	121.88	118.80
21	AA	1064	G	C2-N3-C4	5.14	114.47	111.90
21	AA	1319	A	C5-N7-C8	5.14	106.47	103.90
21	AA	1357	A	O4'-C1'-N9	5.14	112.31	108.20
22	AY	23	A	OP1-P-OP2	-5.14	111.89	119.60
23	AW	40	C	N1-C2-O2	-5.14	115.82	118.90
26	AV	35	A	C5'-C4'-C3'	-5.14	107.78	116.00
54	BF	169	LEU	CB-CG-CD1	5.14	119.74	111.00
57	BB	317	G	O4'-C1'-N9	5.14	112.31	108.20
57	BB	399	U	C4-C5-C6	-5.14	116.62	119.70
57	BB	927	A	C2-N3-C4	5.14	113.17	110.60
57	BB	1528	A	C4'-C3'-C2'	-5.14	97.46	102.60
57	BB	1542	U	N3-C2-O2	5.14	125.80	122.20
57	BB	2187	U	O5'-C5'-C4'	5.14	121.47	111.70
57	BB	2316	G	N3-C4-N9	5.14	129.08	126.00
57	BB	2432	A	N3-C4-C5	-5.14	123.20	126.80
15	AD	96	ARG	NE-CZ-NH2	-5.14	117.73	120.30
21	AA	248	C	N1-C2-O2	5.14	121.98	118.90
21	AA	300	A	C5-C6-N6	-5.14	119.59	123.70
21	AA	701	U	C1'-O4'-C4'	-5.14	105.79	109.90
21	AA	863	U	N3-C4-C5	-5.14	111.52	114.60
21	AA	1125	U	O5'-P-OP2	-5.14	101.08	105.70
25	AZ	344	PRO	C-N-CA	5.14	134.55	121.70
31	BL	121	THR	CA-CB-OG1	5.14	119.79	109.00
57	BB	1583	A	C4-C5-C6	5.14	119.57	117.00
57	BB	1652	A	N1-C2-N3	-5.14	126.73	129.30
57	BB	2783	U	N3-C4-C5	5.14	117.68	114.60
58	BA	112	G	N3-C2-N2	5.14	123.50	119.90
21	AA	372	C	C4'-C3'-C2'	5.14	107.74	102.60
21	AA	480	U	N3-C2-O2	5.14	125.80	122.20
21	AA	994	A	N9-C4-C5	5.14	107.86	105.80
21	AA	1043	G	C1'-O4'-C4'	5.14	114.01	109.90
21	AA	1451	U	P-O5'-C5'	-5.14	112.68	120.90
23	AW	69	G	C6-N1-C2	5.14	128.18	125.10
57	BB	220	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	294	A	C2-N3-C4	5.14	113.17	110.60
57	BB	481	G	N1-C6-O6	5.14	122.98	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	538	A	C8-N9-C4	5.14	107.86	105.80
57	BB	794	A	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	799	G	C3'-C2'-C1'	5.14	105.61	101.50
57	BB	1301	A	C6-C5-N7	-5.14	128.70	132.30
57	BB	1549	A	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	1556	C	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	1661	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	1749	A	C2-N3-C4	-5.14	108.03	110.60
57	BB	1849	G	O5'-P-OP2	-5.14	101.08	105.70
57	BB	2087	G	C4-C5-C6	5.14	121.88	118.80
57	BB	2115	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	2431	U	C4-C5-C6	-5.14	116.62	119.70
57	BB	2838	G	N9-C1'-C2'	-5.14	106.35	112.00
58	BA	69	G	C8-N9-C4	-5.14	104.34	106.40
21	AA	1534	A	N3-C4-C5	-5.13	123.21	126.80
22	AY	5	A	P-O3'-C3'	-5.13	113.54	119.70
57	BB	295	G	C4-C5-N7	-5.13	108.75	110.80
57	BB	402	A	C5-C6-N6	-5.13	119.59	123.70
57	BB	414	C	N3-C4-N4	-5.13	114.41	118.00
57	BB	505	A	C5'-C4'-O4'	5.13	115.26	109.10
57	BB	785	G	C5-C6-N1	-5.13	108.93	111.50
57	BB	978	G	O4'-C1'-N9	5.13	112.31	108.20
57	BB	1208	C	N3-C4-N4	5.13	121.59	118.00
57	BB	1246	A	P-O3'-C3'	-5.13	113.54	119.70
57	BB	1412	U	C6-N1-C2	-5.13	117.92	121.00
57	BB	1508	A	C5-N7-C8	-5.13	101.33	103.90
57	BB	1609	A	C6-N1-C2	-5.13	115.52	118.60
57	BB	1654	A	N9-C4-C5	-5.13	103.75	105.80
57	BB	1851	U	C4'-C3'-C2'	-5.13	97.47	102.60
57	BB	2294	G	N9-C1'-C2'	-5.13	106.35	112.00
57	BB	2440	C	N1-C2-O2	5.13	121.98	118.90
13	AB	37	VAL	CA-CB-CG1	5.13	118.60	110.90
24	AX	15	A	N1-C2-N3	-5.13	126.73	129.30
26	AV	11	A	C5-C6-N6	-5.13	119.59	123.70
57	BB	487	C	N3-C4-N4	5.13	121.59	118.00
57	BB	1559	U	C6-N1-C2	5.13	124.08	121.00
57	BB	1890	A	C3'-C2'-C1'	-5.13	97.39	101.50
57	BB	2169	A	N1-C6-N6	5.13	121.68	118.60
21	AA	447	G	C6-N1-C2	-5.13	122.02	125.10
21	AA	705	G	C1'-O4'-C4'	5.13	114.00	109.90
21	AA	728	A	C8-N9-C4	5.13	107.85	105.80
21	AA	857	C	C2-N3-C4	5.13	122.47	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	906	A	N1-C2-N3	5.13	131.87	129.30
21	AA	1349	A	C8-N9-C4	-5.13	103.75	105.80
57	BB	78	U	O4'-C1'-N1	5.13	112.31	108.20
57	BB	272	A	C6-C5-N7	-5.13	128.71	132.30
57	BB	673	C	C2-N3-C4	5.13	122.47	119.90
57	BB	1309	G	C5-C6-N1	-5.13	108.93	111.50
57	BB	1384	A	O4'-C1'-N9	5.13	112.31	108.20
57	BB	1572	A	P-O5'-C5'	5.13	129.11	120.90
57	BB	2034	U	C5-C6-N1	5.13	125.27	122.70
57	BB	2047	C	P-O3'-C3'	-5.13	113.54	119.70
57	BB	2386	A	C5-N7-C8	5.13	106.47	103.90
57	BB	2524	G	N1-C2-N3	-5.13	120.82	123.90
57	BB	2702	G	C4-N9-C1'	5.13	133.17	126.50
57	BB	2887	A	C1'-O4'-C4'	5.13	114.01	109.90
58	BA	90	C	N1-C2-N3	5.13	122.79	119.20
4	AM	39	ALA	N-CA-CB	5.13	117.28	110.10
21	AA	1201	A	N7-C8-N9	5.13	116.36	113.80
22	AY	53	G	OP1-P-OP2	-5.13	111.91	119.60
26	AV	42	G	C5-C6-N1	5.13	114.06	111.50
57	BB	446	G	C5'-C4'-O4'	5.13	115.26	109.10
57	BB	492	A	C3'-C2'-C1'	-5.13	97.40	101.50
57	BB	1081	U	C2-N3-C4	-5.13	123.92	127.00
57	BB	2257	U	C6-N1-C2	-5.13	117.92	121.00
57	BB	2442	C	C2-N3-C4	5.13	122.47	119.90
21	AA	55	A	C2-N3-C4	-5.13	108.03	110.60
21	AA	293	G	C8-N9-C4	5.13	108.45	106.40
21	AA	641	U	N1-C2-N3	5.13	117.98	114.90
21	AA	978	A	OP2-P-O3'	5.13	116.48	105.20
21	AA	1069	C	O4'-C1'-C2'	5.13	112.22	107.60
21	AA	1239	A	OP1-P-OP2	-5.13	111.91	119.60
21	AA	1460	C	C4-C5-C6	-5.13	114.84	117.40
57	BB	709	U	OP1-P-OP2	-5.13	111.91	119.60
57	BB	828	U	N3-C4-C5	-5.13	111.52	114.60
57	BB	1130	U	N3-C4-C5	-5.13	111.52	114.60
57	BB	1319	C	C3'-C2'-C1'	-5.13	97.40	101.50
57	BB	1931	U	P-O5'-C5'	-5.13	112.69	120.90
57	BB	2101	A	N3-C4-C5	-5.13	123.21	126.80
57	BB	2620	C	C1'-O4'-C4'	5.13	114.00	109.90
57	BB	2629	U	C5-C4-O4	5.13	128.98	125.90
57	BB	2688	G	C6-C5-N7	-5.13	127.32	130.40
57	BB	2852	G	C4-C5-C6	5.13	121.88	118.80
58	BA	74	U	C5-C6-N1	5.13	125.26	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	187	G	N3-C4-C5	5.13	131.16	128.60
21	AA	324	G	N1-C2-N3	-5.13	120.83	123.90
21	AA	326	G	N7-C8-N9	-5.13	110.54	113.10
21	AA	514	C	OP1-P-OP2	-5.13	111.91	119.60
21	AA	915	A	O4'-C4'-C3'	-5.13	98.87	104.00
21	AA	936	C	C5-C6-N1	-5.13	118.44	121.00
21	AA	1164	G	C4-C5-N7	5.13	112.85	110.80
21	AA	1450	U	C3'-C2'-C1'	5.13	105.60	101.50
30	BK	30	ARG	NH1-CZ-NH2	5.13	125.04	119.40
37	BR	52	PRO	N-CA-C	5.13	125.43	112.10
39	BT	51	PHE	CB-CG-CD1	5.13	124.39	120.80
57	BB	153	U	N1-C2-O2	5.13	126.39	122.80
57	BB	248	G	C5'-C4'-C3'	5.13	124.20	116.00
57	BB	700	G	N9-C1'-C2'	-5.13	106.36	112.00
57	BB	802	A	C6-N1-C2	5.13	121.67	118.60
57	BB	1567	G	C2-N3-C4	-5.13	109.34	111.90
57	BB	1571	A	C5'-C4'-O4'	-5.13	102.95	109.10
57	BB	1611	C	N3-C2-O2	-5.13	118.31	121.90
57	BB	2649	C	N3-C4-N4	5.13	121.59	118.00
58	BA	20	G	N3-C4-N9	5.13	129.07	126.00
2	AK	51	PHE	CB-CG-CD1	5.12	124.39	120.80
21	AA	404	G	C6-N1-C2	-5.12	122.03	125.10
21	AA	521	G	C8-N9-C4	-5.12	104.35	106.40
22	AY	45	G	N3-C4-C5	-5.12	126.04	128.60
26	AV	64	G	C2-N3-C4	-5.12	109.34	111.90
57	BB	441	U	C5-C4-O4	-5.12	122.83	125.90
57	BB	1055	G	N3-C4-C5	-5.12	126.04	128.60
57	BB	1204	A	C5'-C4'-O4'	5.12	115.25	109.10
57	BB	1216	G	C5-N7-C8	5.12	106.86	104.30
57	BB	2364	C	N3-C4-C5	-5.12	119.85	121.90
21	AA	48	C	C6-N1-C2	5.12	122.35	120.30
21	AA	710	G	P-O3'-C3'	-5.12	113.55	119.70
21	AA	1049	U	C1'-O4'-C4'	-5.12	105.80	109.90
21	AA	1436	U	C6-N1-C2	-5.12	117.93	121.00
30	BK	59	ALA	CB-CA-C	-5.12	102.42	110.10
33	BN	29	VAL	CA-CB-CG1	-5.12	103.22	110.90
35	BP	97	TYR	CB-CG-CD2	-5.12	117.93	121.00
57	BB	384	A	C5-N7-C8	-5.12	101.34	103.90
57	BB	805	G	N3-C4-N9	-5.12	122.93	126.00
57	BB	1343	G	C8-N9-C4	5.12	108.45	106.40
57	BB	1416	G	C5-C6-N1	-5.12	108.94	111.50
57	BB	1531	C	C4'-C3'-C2'	5.12	107.72	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1666	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	1739	A	N1-C6-N6	5.12	121.67	118.60
57	BB	1905	C	OP2-P-O3'	5.12	116.47	105.20
57	BB	2448	A	C5'-C4'-C3'	-5.12	107.80	116.00
57	BB	2618	G	P-O3'-C3'	5.12	125.85	119.70
57	BB	2837	A	C4-C5-C6	5.12	119.56	117.00
58	BA	16	G	O4'-C1'-N9	5.12	112.30	108.20
7	AP	7	ALA	N-CA-CB	5.12	117.27	110.10
21	AA	587	G	C8-N9-C4	5.12	108.45	106.40
21	AA	1147	C	C5-C4-N4	5.12	123.78	120.20
22	AY	62	A	C6-C5-N7	-5.12	128.72	132.30
26	AV	6	G	C8-N9-C1'	5.12	133.66	127.00
57	BB	97	C	N3-C2-O2	5.12	125.48	121.90
57	BB	156	A	O4'-C1'-N9	5.12	112.30	108.20
57	BB	599	A	C4-C5-C6	5.12	119.56	117.00
57	BB	652	U	N1-C2-N3	-5.12	111.83	114.90
57	BB	916	G	C8-N9-C4	-5.12	104.35	106.40
57	BB	1909	C	C4-C5-C6	5.12	119.96	117.40
57	BB	2123	G	C3'-C2'-C1'	-5.12	97.40	101.50
57	BB	2255	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	2705	A	N7-C8-N9	5.12	116.36	113.80
57	BB	2854	G	P-O3'-C3'	-5.12	113.56	119.70
58	BA	62	C	C5-C6-N1	5.12	123.56	121.00
21	AA	357	G	P-O5'-C5'	-5.12	112.71	120.90
21	AA	1055	A	C2-N3-C4	-5.12	108.04	110.60
23	AW	18	G	C5'-C4'-O4'	5.12	115.25	109.10
26	AV	76	A	C4-C5-N7	-5.12	108.14	110.70
57	BB	19	A	N9-C4-C5	5.12	107.85	105.80
57	BB	378	C	C5-C6-N1	-5.12	118.44	121.00
57	BB	1164	C	O4'-C4'-C3'	-5.12	98.88	104.00
57	BB	1206	G	N1-C2-N2	-5.12	111.59	116.20
57	BB	2095	A	N3-C4-N9	5.12	131.50	127.40
57	BB	2235	G	O5'-P-OP2	-5.12	101.09	105.70
58	BA	54	G	N1-C2-N3	-5.12	120.83	123.90
21	AA	889	A	C1'-O4'-C4'	-5.12	105.81	109.90
21	AA	945	G	N9-C1'-C2'	5.12	120.65	114.00
21	AA	1074	G	C5-C6-N1	5.12	114.06	111.50
21	AA	1183	U	O5'-C5'-C4'	5.12	121.42	111.70
26	AV	3	C	P-O5'-C5'	-5.12	112.71	120.90
30	BK	79	ASP	CB-CA-C	-5.12	100.16	110.40
57	BB	66	C	P-O3'-C3'	-5.12	113.56	119.70
57	BB	91	A	N3-C4-N9	5.12	131.50	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	343	C	C5-C4-N4	-5.12	116.62	120.20
57	BB	636	G	C6-N1-C2	5.12	128.17	125.10
57	BB	638	G	P-O5'-C5'	5.12	129.09	120.90
57	BB	654	A	C5-N7-C8	-5.12	101.34	103.90
57	BB	693	A	N7-C8-N9	5.12	116.36	113.80
57	BB	924	G	C2-N3-C4	5.12	114.46	111.90
57	BB	1291	C	C6-N1-C2	-5.12	118.25	120.30
57	BB	1306	C	C5-C6-N1	5.12	123.56	121.00
57	BB	1382	G	N9-C4-C5	5.12	107.45	105.40
57	BB	1385	A	P-O5'-C5'	-5.12	112.71	120.90
57	BB	1482	G	C2-N3-C4	5.12	114.46	111.90
57	BB	1516	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	1809	A	N1-C2-N3	-5.12	126.74	129.30
57	BB	2389	G	C8-N9-C4	-5.12	104.35	106.40
57	BB	2453	A	O4'-C1'-N9	5.12	112.30	108.20
57	BB	2482	A	C4'-C3'-C2'	-5.12	97.48	102.60
21	AA	955	U	N3-C2-O2	-5.12	118.62	122.20
21	AA	1507	A	C3'-C2'-C1'	-5.12	97.41	101.50
26	AV	73	A	C3'-C2'-C1'	5.12	105.59	101.50
57	BB	1089	A	C6-N1-C2	5.12	121.67	118.60
57	BB	1254	A	C5-N7-C8	5.12	106.46	103.90
57	BB	1355	G	C8-N9-C1'	5.12	133.65	127.00
57	BB	1628	G	C5'-C4'-C3'	-5.12	107.81	116.00
57	BB	1754	A	C6-C5-N7	-5.12	128.72	132.30
57	BB	2103	C	C6-N1-C2	5.12	122.35	120.30
57	BB	2183	A	C5'-C4'-O4'	5.12	115.24	109.10
57	BB	2278	A	N7-C8-N9	-5.12	111.24	113.80
57	BB	2337	G	O4'-C1'-N9	5.12	112.29	108.20
57	BB	2523	G	C6-C5-N7	-5.12	127.33	130.40
1	AJ	14	ASP	CB-CG-OD1	-5.12	113.70	118.30
21	AA	234	C	C2-N1-C1'	5.12	124.43	118.80
21	AA	318	G	N3-C4-N9	-5.12	122.93	126.00
21	AA	830	G	N1-C2-N3	-5.12	120.83	123.90
21	AA	856	C	N3-C2-O2	5.12	125.48	121.90
21	AA	945	G	C4-C5-N7	5.12	112.85	110.80
23	AW	21	A	C5'-C4'-O4'	-5.12	102.96	109.10
23	AW	74	C	C6-N1-C1'	-5.12	114.66	120.80
57	BB	656	G	N1-C2-N3	-5.12	120.83	123.90
57	BB	769	U	C5-C6-N1	5.12	125.26	122.70
57	BB	1297	C	N1-C2-O2	-5.12	115.83	118.90
57	BB	1692	U	P-O5'-C5'	-5.12	112.71	120.90
57	BB	1880	U	C2'-C3'-O3'	5.12	121.89	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1958	C	C5-C4-N4	-5.12	116.62	120.20
57	BB	2481	G	C4-C5-C6	5.12	121.87	118.80
57	BB	2484	G	O4'-C1'-N9	5.12	112.29	108.20
57	BB	2726	A	N1-C2-N3	5.12	131.86	129.30
20	AI	108	ARG	NE-CZ-NH2	-5.11	117.74	120.30
21	AA	157	U	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	295	C	P-O5'-C5'	-5.11	112.72	120.90
21	AA	399	G	C1'-O4'-C4'	5.11	113.99	109.90
21	AA	728	A	C5-C6-N1	5.11	120.26	117.70
21	AA	1024	G	C6-N1-C2	5.11	128.17	125.10
21	AA	1399	C	O4'-C1'-N1	5.11	112.29	108.20
57	BB	256	A	C4-C5-C6	5.11	119.56	117.00
57	BB	342	A	C4-C5-C6	5.11	119.56	117.00
57	BB	781	A	C6-N1-C2	5.11	121.67	118.60
57	BB	948	C	OP1-P-OP2	-5.11	111.93	119.60
57	BB	1102	C	C5'-C4'-O4'	5.11	115.24	109.10
57	BB	2009	A	C5'-C4'-O4'	-5.11	102.96	109.10
57	BB	2461	A	N1-C2-N3	5.11	131.86	129.30
57	BB	2825	G	C4'-C3'-C2'	-5.11	97.49	102.60
58	BA	42	C	C2-N3-C4	5.11	122.46	119.90
16	AE	37	VAL	CB-CA-C	-5.11	101.69	111.40
21	AA	355	C	C6-N1-C2	5.11	122.34	120.30
21	AA	473	U	N1-C2-O2	-5.11	119.22	122.80
21	AA	1145	A	C5-N7-C8	5.11	106.46	103.90
21	AA	1480	A	C5-C6-N6	-5.11	119.61	123.70
21	AA	1512	U	C2-N1-C1'	-5.11	111.57	117.70
57	BB	96	C	O4'-C1'-N1	5.11	112.29	108.20
57	BB	1723	G	O4'-C1'-N9	5.11	112.29	108.20
57	BB	2331	G	N3-C2-N2	5.11	123.48	119.90
57	BB	2345	G	O4'-C4'-C3'	5.11	110.19	106.10
58	BA	103	U	P-O3'-C3'	-5.11	113.56	119.70
3	AL	49	ARG	NE-CZ-NH1	5.11	122.86	120.30
9	AR	57	ALA	O-C-N	5.11	130.88	122.70
21	AA	387	U	OP1-P-OP2	-5.11	111.94	119.60
21	AA	459	A	C4-C5-N7	-5.11	108.14	110.70
21	AA	861	G	C3'-C2'-C1'	5.11	105.59	101.50
21	AA	1144	G	C4-C5-C6	5.11	121.87	118.80
21	AA	1390	U	C1'-O4'-C4'	5.11	113.99	109.90
21	AA	1396	A	C6-C5-N7	-5.11	128.72	132.30
21	AA	1417	G	N1-C2-N3	5.11	126.97	123.90
23	AW	22	G	O5'-C5'-C4'	-5.11	101.99	111.70
57	BB	148	U	C5-C6-N1	5.11	125.25	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	247	G	C8-N9-C4	-5.11	104.36	106.40
57	BB	247	G	N1-C2-N3	-5.11	120.83	123.90
57	BB	570	G	N3-C4-C5	5.11	131.16	128.60
57	BB	779	U	N3-C4-O4	5.11	122.98	119.40
57	BB	1415	U	C2-N3-C4	5.11	130.07	127.00
57	BB	1873	G	O4'-C4'-C3'	-5.11	98.89	104.00
57	BB	1932	A	C6-C5-N7	-5.11	128.72	132.30
57	BB	1983	G	C4-C5-C6	5.11	121.87	118.80
57	BB	2751	G	O4'-C1'-N9	5.11	112.29	108.20
58	BA	89	U	N3-C2-O2	5.11	125.78	122.20
21	AA	720	C	C6-N1-C1'	-5.11	114.67	120.80
21	AA	722	G	C5'-C4'-C3'	-5.11	107.83	116.00
22	AY	18	G	C5-C6-N1	5.11	114.05	111.50
57	BB	428	A	C4-C5-C6	5.11	119.56	117.00
57	BB	1349	C	N3-C4-C5	-5.11	119.86	121.90
57	BB	1750	G	C8-N9-C1'	5.11	133.64	127.00
57	BB	1878	G	N1-C6-O6	5.11	122.97	119.90
57	BB	2852	G	N9-C4-C5	-5.11	103.36	105.40
4	AM	62	PHE	CB-CA-C	-5.11	100.18	110.40
21	AA	254	G	C5-C6-N1	-5.11	108.95	111.50
21	AA	259	G	N3-C2-N2	5.11	123.47	119.90
21	AA	571	U	O5'-C5'-C4'	-5.11	102.00	111.70
21	AA	856	C	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	1522	U	C6-N1-C2	5.11	124.06	121.00
24	AX	15	A	C4-C5-C6	5.11	119.55	117.00
31	BL	128	THR	CA-CB-OG1	5.11	119.72	109.00
39	BT	39	THR	CA-CB-OG1	5.11	119.72	109.00
41	BV	18	ARG	NE-CZ-NH1	5.11	122.85	120.30
57	BB	665	U	N3-C4-C5	-5.11	111.53	114.60
57	BB	717	C	C3'-C2'-C1'	5.11	105.58	101.50
57	BB	954	G	C5-C6-O6	-5.11	125.53	128.60
57	BB	1524	G	C4-C5-C6	5.11	121.86	118.80
57	BB	1953	A	N1-C2-N3	-5.11	126.75	129.30
57	BB	2634	A	N7-C8-N9	5.11	116.35	113.80
57	BB	2711	A	C5-C6-N1	-5.11	115.15	117.70
58	BA	88	C	C6-N1-C1'	-5.11	114.67	120.80
4	AM	109	LYS	C-N-CA	5.11	133.02	122.30
21	AA	46	G	C4-N9-C1'	-5.11	119.86	126.50
21	AA	176	C	N3-C4-C5	5.11	123.94	121.90
21	AA	337	G	N9-C4-C5	-5.11	103.36	105.40
21	AA	436	C	C4'-C3'-C2'	-5.11	97.50	102.60
21	AA	590	U	N1-C2-N3	-5.11	111.84	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	861	G	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	863	U	C6-N1-C2	5.11	124.06	121.00
21	AA	1480	A	C4-C5-C6	5.11	119.55	117.00
27	B5	110	ASN	N-CA-CB	5.11	119.79	110.60
45	BC	206	LYS	N-CA-C	-5.11	97.22	111.00
53	BE	146	VAL	CA-CB-CG1	-5.11	103.24	110.90
57	BB	396	G	C8-N9-C4	5.11	108.44	106.40
57	BB	402	A	N9-C4-C5	5.11	107.84	105.80
57	BB	471	A	N3-C4-C5	-5.11	123.23	126.80
57	BB	686	U	C6-N1-C1'	-5.11	114.05	121.20
57	BB	1275	A	C5-C6-N6	-5.11	119.62	123.70
57	BB	1928	A	O4'-C1'-N9	5.11	112.28	108.20
57	BB	2280	G	P-O3'-C3'	-5.11	113.57	119.70
57	BB	2429	G	N7-C8-N9	5.11	115.65	113.10
4	AM	70	ARG	C-N-CA	5.10	134.46	121.70
21	AA	411	A	C5-C6-N6	5.10	127.78	123.70
21	AA	575	G	C6-C5-N7	-5.10	127.34	130.40
57	BB	351	C	C5-C6-N1	5.10	123.55	121.00
57	BB	759	G	C6-N1-C2	5.10	128.16	125.10
57	BB	2010	G	O4'-C1'-N9	5.10	112.28	108.20
57	BB	2441	U	N1-C1'-C2'	-5.10	106.39	112.00
57	BB	2640	G	C5-C6-O6	-5.10	125.54	128.60
15	AD	93	LEU	CB-CA-C	-5.10	100.50	110.20
20	AI	4	GLN	N-CA-CB	5.10	119.79	110.60
21	AA	389	A	O4'-C1'-N9	5.10	112.28	108.20
21	AA	744	C	N3-C4-C5	-5.10	119.86	121.90
21	AA	754	C	C6-N1-C1'	-5.10	114.68	120.80
21	AA	1337	G	N1-C6-O6	5.10	122.96	119.90
23	AW	61	C	C2-N3-C4	5.10	122.45	119.90
27	B5	35	THR	N-CA-CB	5.10	120.00	110.30
57	BB	72	U	P-O5'-C5'	5.10	129.06	120.90
57	BB	108	G	N3-C2-N2	5.10	123.47	119.90
57	BB	518	G	N3-C4-C5	5.10	131.15	128.60
57	BB	836	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	954	G	C4-N9-C1'	5.10	133.13	126.50
57	BB	1080	A	N3-C4-C5	-5.10	123.23	126.80
57	BB	1190	G	C6-N1-C2	-5.10	122.04	125.10
57	BB	1253	A	C3'-C2'-C1'	5.10	105.58	101.50
57	BB	1400	U	C2-N1-C1'	-5.10	111.58	117.70
57	BB	1457	U	C5'-C4'-O4'	5.10	115.22	109.10
57	BB	1631	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	1731	G	C5-C6-O6	-5.10	125.54	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1915	U	P-O3'-C3'	5.10	125.82	119.70
57	BB	2099	U	N3-C4-C5	-5.10	111.54	114.60
57	BB	2153	C	C6-N1-C1'	5.10	126.92	120.80
57	BB	2458	G	N9-C4-C5	-5.10	103.36	105.40
57	BB	2549	G	N3-C4-N9	5.10	129.06	126.00
57	BB	2729	G	C6-N1-C2	5.10	128.16	125.10
57	BB	2811	G	N3-C2-N2	5.10	123.47	119.90
4	AM	112	ARG	NE-CZ-NH1	-5.10	117.75	120.30
21	AA	150	U	N3-C2-O2	5.10	125.77	122.20
21	AA	606	G	N3-C4-N9	-5.10	122.94	126.00
21	AA	740	U	OP1-P-OP2	-5.10	111.95	119.60
21	AA	895	G	N3-C4-C5	-5.10	126.05	128.60
57	BB	127	A	P-O5'-C5'	5.10	129.06	120.90
57	BB	168	G	N9-C1'-C2'	-5.10	106.39	112.00
57	BB	695	G	N3-C4-C5	5.10	131.15	128.60
57	BB	1797	G	N1-C2-N2	5.10	120.79	116.20
57	BB	2834	G	C5-C6-N1	-5.10	108.95	111.50
21	AA	243	A	C4-C5-N7	-5.10	108.15	110.70
21	AA	451	A	O4'-C1'-N9	5.10	112.28	108.20
21	AA	1040	U	C5'-C4'-O4'	5.10	115.22	109.10
21	AA	1254	A	C6-C5-N7	-5.10	128.73	132.30
21	AA	1263	C	N3-C4-N4	5.10	121.57	118.00
52	BD	51	THR	N-CA-CB	5.10	119.99	110.30
57	BB	333	G	C4-C5-C6	5.10	121.86	118.80
57	BB	458	G	C5-C6-N1	-5.10	108.95	111.50
57	BB	1031	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	1121	C	OP1-P-OP2	-5.10	111.95	119.60
57	BB	1629	U	N1-C2-N3	5.10	117.96	114.90
57	BB	2029	G	C5-N7-C8	5.10	106.85	104.30
57	BB	2419	U	C5-C4-O4	-5.10	122.84	125.90
57	BB	2554	U	C5-C6-N1	5.10	125.25	122.70
58	BA	74	U	P-O3'-C3'	-5.10	113.58	119.70
15	AD	198	LEU	CB-CG-CD2	5.10	119.67	111.00
21	AA	511	C	C5-C4-N4	-5.10	116.63	120.20
21	AA	1457	G	P-O3'-C3'	-5.10	113.58	119.70
25	AZ	71	THR	N-CA-C	-5.10	97.24	111.00
52	BD	131	ASP	CB-CG-OD1	5.10	122.89	118.30
57	BB	313	G	C5-C6-O6	-5.10	125.54	128.60
57	BB	681	G	C1'-O4'-C4'	5.10	113.98	109.90
57	BB	1051	G	C4'-C3'-C2'	-5.10	97.50	102.60
57	BB	1236	G	N3-C2-N2	5.10	123.47	119.90
57	BB	1489	C	C6-N1-C1'	-5.10	114.68	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1531	C	C5'-C4'-O4'	5.10	115.22	109.10
57	BB	1677	A	C5-C6-N6	-5.10	119.62	123.70
57	BB	1912	A	C6-C5-N7	-5.10	128.73	132.30
57	BB	2041	U	OP2-P-O3'	5.10	116.41	105.20
57	BB	2172	U	P-O5'-C5'	5.10	129.06	120.90
57	BB	2763	G	OP2-P-O3'	5.10	116.41	105.20
21	AA	1051	C	C6-N1-C1'	-5.10	114.69	120.80
21	AA	1258	G	C4-N9-C1'	5.10	133.12	126.50
23	AW	30	G	N3-C4-C5	-5.10	126.05	128.60
57	BB	776	G	C5-N7-C8	-5.10	101.75	104.30
57	BB	982	C	N1-C2-O2	5.10	121.96	118.90
57	BB	1125	G	O5'-P-OP2	-5.10	101.11	105.70
57	BB	1150	C	C6-N1-C2	-5.10	118.26	120.30
57	BB	1239	G	C8-N9-C1'	5.10	133.62	127.00
57	BB	2641	G	C5'-C4'-C3'	5.10	124.15	116.00
58	BA	27	C	C5'-C4'-O4'	5.10	115.22	109.10
21	AA	81	A	C4-C5-N7	-5.09	108.15	110.70
21	AA	650	G	C6-N1-C2	5.09	128.16	125.10
21	AA	1350	A	C1'-O4'-C4'	-5.09	105.83	109.90
57	BB	113	U	C2-N1-C1'	-5.09	111.59	117.70
57	BB	339	U	N3-C2-O2	5.09	125.77	122.20
57	BB	496	G	N1-C6-O6	5.09	122.96	119.90
57	BB	605	G	N7-C8-N9	-5.09	110.55	113.10
57	BB	710	U	C5'-C4'-O4'	5.09	115.21	109.10
57	BB	878	A	C5-C6-N1	-5.09	115.15	117.70
57	BB	1030	C	C5-C4-N4	-5.09	116.63	120.20
57	BB	1082	U	C5'-C4'-O4'	-5.09	102.99	109.10
57	BB	1208	C	C6-N1-C1'	5.09	126.91	120.80
57	BB	1453	A	C8-N9-C4	-5.09	103.76	105.80
57	BB	1510	G	C5-C6-O6	-5.09	125.54	128.60
57	BB	1571	A	C6-N1-C2	5.09	121.66	118.60
57	BB	1599	U	N3-C4-C5	-5.09	111.54	114.60
57	BB	1728	C	C4-C5-C6	-5.09	114.85	117.40
57	BB	1750	G	C4-N9-C1'	-5.09	119.88	126.50
57	BB	1807	G	C5-N7-C8	5.09	106.85	104.30
57	BB	2135	A	C5'-C4'-O4'	5.09	115.21	109.10
57	BB	2153	C	C2-N3-C4	-5.09	117.35	119.90
57	BB	2518	A	C6-N1-C2	-5.09	115.54	118.60
57	BB	2692	G	N1-C2-N2	-5.09	111.61	116.20
57	BB	2696	U	C5-C4-O4	-5.09	122.84	125.90
57	BB	2725	A	P-O3'-C3'	5.09	125.81	119.70
58	BA	61	G	N9-C4-C5	5.09	107.44	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	265	G	C2-N3-C4	-5.09	109.35	111.90
21	AA	454	G	N9-C4-C5	-5.09	103.36	105.40
21	AA	992	U	C5-C4-O4	5.09	128.96	125.90
21	AA	1317	C	C5-C6-N1	5.09	123.55	121.00
21	AA	1435	G	C8-N9-C1'	5.09	133.62	127.00
57	BB	121	G	C5-C6-N1	5.09	114.05	111.50
57	BB	677	A	C6-N1-C2	5.09	121.66	118.60
57	BB	1299	G	C8-N9-C1'	5.09	133.62	127.00
57	BB	1328	A	C5-C6-N1	-5.09	115.15	117.70
57	BB	2567	G	C4-C5-N7	-5.09	108.76	110.80
57	BB	2782	G	C4-N9-C1'	5.09	133.12	126.50
57	BB	2795	C	C2-N3-C4	5.09	122.45	119.90
21	AA	39	G	N1-C2-N2	-5.09	111.62	116.20
21	AA	122	G	N1-C2-N3	-5.09	120.84	123.90
21	AA	160	A	C8-N9-C1'	5.09	136.86	127.70
21	AA	210	C	C6-N1-C2	-5.09	118.26	120.30
21	AA	611	C	P-O3'-C3'	5.09	125.81	119.70
21	AA	895	G	N1-C2-N3	-5.09	120.85	123.90
21	AA	1212	U	C6-N1-C1'	-5.09	114.07	121.20
21	AA	1384	C	N3-C4-N4	5.09	121.56	118.00
21	AA	1438	G	C4'-C3'-C2'	-5.09	97.51	102.60
45	BC	183	VAL	CA-CB-CG1	-5.09	103.26	110.90
57	BB	160	A	C5-C6-N6	-5.09	119.63	123.70
57	BB	364	C	C5-C4-N4	-5.09	116.64	120.20
57	BB	715	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	822	G	N3-C2-N2	5.09	123.46	119.90
57	BB	1042	G	O5'-C5'-C4'	-5.09	102.02	111.70
57	BB	1246	A	N9-C4-C5	5.09	107.84	105.80
57	BB	1487	U	C5-C4-O4	5.09	128.96	125.90
57	BB	1692	U	N3-C2-O2	-5.09	118.64	122.20
57	BB	2123	G	C6-C5-N7	-5.09	127.34	130.40
57	BB	2260	C	N3-C4-C5	-5.09	119.86	121.90
57	BB	2363	G	C8-N9-C4	-5.09	104.36	106.40
57	BB	2532	G	C4'-C3'-C2'	-5.09	97.51	102.60
58	BA	39	A	C2'-C3'-O3'	5.09	121.84	113.70
7	AP	22	ALA	N-CA-CB	5.09	117.22	110.10
21	AA	270	A	C8-N9-C4	5.09	107.84	105.80
21	AA	1306	A	C6-C5-N7	-5.09	128.74	132.30
22	AY	25	C	C4'-C3'-C2'	-5.09	97.51	102.60
22	AY	26	G	O3'-P-O5'	-5.09	94.33	104.00
26	AV	62	C	C6-N1-C2	-5.09	118.26	120.30
37	BR	29	THR	N-CA-CB	-5.09	100.63	110.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
42	BW	14	ASP	N-CA-CB	5.09	119.76	110.60
53	BE	69	ARG	NE-CZ-NH1	5.09	122.84	120.30
57	BB	191	A	C5-N7-C8	-5.09	101.36	103.90
57	BB	769	U	C6-N1-C2	-5.09	117.95	121.00
57	BB	843	G	N1-C2-N3	-5.09	120.85	123.90
57	BB	1035	U	N3-C4-O4	5.09	122.96	119.40
57	BB	1154	G	C5-N7-C8	5.09	106.84	104.30
57	BB	1214	A	C4-C5-C6	5.09	119.54	117.00
57	BB	1958	C	C4-C5-C6	5.09	119.94	117.40
57	BB	2154	A	C8-N9-C4	-5.09	103.76	105.80
57	BB	2253	G	C5-N7-C8	-5.09	101.75	104.30
57	BB	2406	A	P-O3'-C3'	-5.09	113.59	119.70
57	BB	2548	U	C2-N3-C4	5.09	130.05	127.00
57	BB	2621	G	P-O3'-C3'	-5.09	113.59	119.70
57	BB	2795	C	O5'-C5'-C4'	-5.09	102.03	111.70
57	BB	2890	G	C4-C5-C6	5.09	121.85	118.80
21	AA	199	A	C5-C6-N1	-5.09	115.16	117.70
21	AA	997	U	C2-N3-C4	-5.09	123.95	127.00
23	AW	41	C	P-O3'-C3'	5.09	125.81	119.70
57	BB	1334	G	C6-C5-N7	-5.09	127.35	130.40
57	BB	1409	U	O4'-C1'-C2'	-5.09	100.71	105.80
57	BB	2504	U	N3-C4-O4	5.09	122.96	119.40
5	AN	31	SER	O-C-N	-5.09	114.56	122.70
21	AA	324	G	C6-C5-N7	5.09	133.45	130.40
21	AA	476	U	C2'-C3'-O3'	5.09	121.84	113.70
21	AA	1030	U	C2-N1-C1'	5.09	123.80	117.70
21	AA	1338	G	C8-N9-C4	-5.09	104.37	106.40
23	AW	58	A	C6-N1-C2	-5.09	115.55	118.60
57	BB	49	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	397	U	N3-C2-O2	5.09	125.76	122.20
57	BB	456	C	N1-C2-O2	5.09	121.95	118.90
57	BB	757	G	P-O3'-C3'	-5.09	113.59	119.70
57	BB	915	C	C5'-C4'-O4'	-5.09	103.00	109.10
57	BB	929	U	P-O5'-C5'	-5.09	112.76	120.90
57	BB	933	A	N1-C2-N3	5.09	131.84	129.30
57	BB	1246	A	C8-N9-C4	-5.09	103.77	105.80
57	BB	1387	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	1401	G	C4-C5-C6	5.09	121.85	118.80
57	BB	1511	G	O4'-C1'-N9	5.09	112.27	108.20
57	BB	1713	A	C5-C6-N6	-5.09	119.63	123.70
57	BB	1934	C	C4-C5-C6	5.09	119.94	117.40
57	BB	2152	G	C4-C5-C6	5.09	121.85	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2670	A	C8-N9-C4	-5.09	103.77	105.80
58	BA	17	C	C4-C5-C6	5.09	119.94	117.40
58	BA	69	G	C4-C5-N7	-5.09	108.77	110.80
11	AT	58	ASP	CB-CG-OD2	-5.08	113.72	118.30
22	AY	37	G	C8-N9-C1'	5.08	133.61	127.00
22	AY	56	C	C1'-O4'-C4'	5.08	113.97	109.90
57	BB	273	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	854	C	O4'-C4'-C3'	-5.08	98.92	104.00
57	BB	2361	G	N7-C8-N9	5.08	115.64	113.10
57	BB	2748	A	C4-C5-C6	5.08	119.54	117.00
57	BB	2885	G	OP1-P-OP2	-5.08	111.97	119.60
21	AA	25	C	C1'-O4'-C4'	-5.08	105.83	109.90
21	AA	391	G	C1'-O4'-C4'	5.08	113.97	109.90
21	AA	396	C	C5-C6-N1	5.08	123.54	121.00
21	AA	421	U	O4'-C4'-C3'	-5.08	98.92	104.00
21	AA	574	A	C4-C5-C6	5.08	119.54	117.00
21	AA	1075	U	C1'-O4'-C4'	-5.08	105.83	109.90
21	AA	1249	C	N1-C2-N3	-5.08	115.64	119.20
21	AA	1355	G	N3-C4-N9	-5.08	122.95	126.00
21	AA	1449	C	C2-N3-C4	-5.08	117.36	119.90
21	AA	1522	U	P-O3'-C3'	-5.08	113.60	119.70
23	AW	1	G	C2-N3-C4	5.08	114.44	111.90
23	AW	16	U	C3'-C2'-C1'	5.08	105.57	101.50
54	BF	140	ILE	CA-CB-CG1	5.08	120.66	111.00
57	BB	1037	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	1204	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	1215	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	1395	A	O4'-C4'-C3'	5.08	110.17	106.10
57	BB	1426	G	C5'-C4'-C3'	-5.08	107.86	116.00
57	BB	1514	G	C1'-O4'-C4'	-5.08	105.83	109.90
57	BB	1902	C	C2-N3-C4	-5.08	117.36	119.90
57	BB	1907	G	C5-N7-C8	5.08	106.84	104.30
57	BB	2021	C	P-O3'-C3'	5.08	125.80	119.70
57	BB	2073	C	C5-C6-N1	5.08	123.54	121.00
57	BB	2253	G	N1-C6-O6	5.08	122.95	119.90
17	AF	24	ARG	CD-NE-CZ	-5.08	116.48	123.60
21	AA	126	G	P-O5'-C5'	5.08	129.03	120.90
21	AA	552	U	P-O3'-C3'	-5.08	113.60	119.70
21	AA	606	G	N1-C6-O6	5.08	122.95	119.90
21	AA	879	C	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	1031	C	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	1081	A	C6-N1-C2	5.08	121.65	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1295	U	C2-N3-C4	-5.08	123.95	127.00
21	AA	1499	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	420	C	N3-C4-N4	5.08	121.56	118.00
57	BB	492	A	N9-C4-C5	5.08	107.83	105.80
57	BB	545	U	P-O3'-C3'	-5.08	113.60	119.70
57	BB	977	G	N1-C2-N3	-5.08	120.85	123.90
57	BB	1666	G	C4-C5-C6	5.08	121.85	118.80
57	BB	1744	A	C5-C6-N1	-5.08	115.16	117.70
57	BB	1766	G	C5'-C4'-O4'	5.08	115.20	109.10
57	BB	1964	G	C5-C6-N1	-5.08	108.96	111.50
57	BB	2282	G	N3-C2-N2	5.08	123.46	119.90
57	BB	2282	G	O5'-C5'-C4'	-5.08	102.05	111.70
57	BB	2454	G	P-O5'-C5'	-5.08	112.77	120.90
57	BB	2673	G	N3-C2-N2	-5.08	116.34	119.90
57	BB	2893	A	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	90	C	N3-C2-O2	-5.08	118.34	121.90
22	AY	67	A	N7-C8-N9	-5.08	111.26	113.80
36	BQ	54	ARG	NE-CZ-NH2	5.08	122.84	120.30
57	BB	719	C	O4'-C4'-C3'	-5.08	98.92	104.00
57	BB	1373	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	1553	A	N7-C8-N9	-5.08	111.26	113.80
57	BB	2237	G	N3-C4-N9	5.08	129.05	126.00
57	BB	2625	G	P-O5'-C5'	-5.08	112.77	120.90
57	BB	2767	C	C2-N1-C1'	-5.08	113.21	118.80
13	AB	87	ASP	CB-CG-OD1	-5.08	113.73	118.30
21	AA	258	G	C6-N1-C2	5.08	128.15	125.10
21	AA	733	G	C4-C5-N7	-5.08	108.77	110.80
22	AY	19	G	N1-C6-O6	5.08	122.95	119.90
26	AV	24	U	OP1-P-OP2	-5.08	111.98	119.60
26	AV	44	A	C8-N9-C4	5.08	107.83	105.80
45	BC	257	ARG	NE-CZ-NH1	5.08	122.84	120.30
53	BE	50	ALA	N-CA-CB	-5.08	102.99	110.10
57	BB	185	G	C5'-C4'-C3'	-5.08	107.87	116.00
57	BB	767	U	C6-N1-C2	-5.08	117.95	121.00
57	BB	1173	U	C4-C5-C6	-5.08	116.65	119.70
57	BB	1228	G	N9-C4-C5	-5.08	103.37	105.40
57	BB	1278	C	P-O3'-C3'	-5.08	113.61	119.70
57	BB	1460	U	O4'-C1'-N1	5.08	112.26	108.20
57	BB	1771	C	C2-N3-C4	5.08	122.44	119.90
57	BB	2015	A	N7-C8-N9	-5.08	111.26	113.80
57	BB	2442	C	N1-C2-O2	-5.08	115.85	118.90
21	AA	1409	C	C2-N3-C4	-5.08	117.36	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1313	U	N3-C2-O2	-5.08	118.65	122.20
57	BB	1507	C	C2-N3-C4	5.08	122.44	119.90
57	BB	2730	C	OP2-P-O3'	5.08	116.37	105.20
57	BB	2833	U	N1-C1'-C2'	-5.08	106.42	112.00
1	AJ	23	ALA	CB-CA-C	-5.08	102.49	110.10
13	AB	98	GLY	O-C-N	5.08	130.82	122.70
21	AA	577	G	N3-C4-C5	5.08	131.14	128.60
21	AA	692	U	N1-C2-O2	-5.08	119.25	122.80
21	AA	791	G	OP2-P-O3'	5.08	116.37	105.20
21	AA	895	G	O4'-C1'-N9	5.08	112.26	108.20
21	AA	1135	U	N3-C4-C5	-5.08	111.56	114.60
21	AA	1279	G	C1'-O4'-C4'	-5.08	105.84	109.90
21	AA	1473	G	O4'-C1'-N9	5.08	112.26	108.20
26	AV	14	A	N3-C4-N9	5.08	131.46	127.40
32	BM	13	HIS	C-N-CA	5.08	134.39	121.70
36	BQ	23	TYR	CA-CB-CG	5.08	123.04	113.40
57	BB	500	G	N3-C4-C5	-5.08	126.06	128.60
57	BB	995	C	N3-C4-C5	-5.08	119.87	121.90
57	BB	1342	A	C5'-C4'-O4'	5.08	115.19	109.10
57	BB	1365	A	N3-C4-C5	-5.08	123.25	126.80
57	BB	1367	A	C5-C6-N6	-5.08	119.64	123.70
57	BB	2113	U	C3'-C2'-C1'	5.08	105.56	101.50
57	BB	2205	A	P-O5'-C5'	-5.08	112.78	120.90
57	BB	2437	G	O4'-C1'-N9	5.08	112.26	108.20
57	BB	2440	C	C4'-C3'-C2'	-5.08	97.52	102.60
57	BB	2533	U	OP1-P-OP2	-5.08	111.99	119.60
57	BB	2570	G	O4'-C1'-N9	5.08	112.26	108.20
57	BB	2680	U	C4'-C3'-C2'	-5.08	97.52	102.60
58	BA	99	A	C6-C5-N7	-5.08	128.75	132.30
58	BA	106	G	C4-C5-N7	-5.08	108.77	110.80
15	AD	72	ARG	CG-CD-NE	-5.07	101.15	111.80
21	AA	182	A	C2-N3-C4	-5.07	108.06	110.60
21	AA	227	G	C4-N9-C1'	5.07	133.10	126.50
21	AA	389	A	C2-N3-C4	-5.07	108.06	110.60
21	AA	938	A	C4-C5-C6	5.07	119.54	117.00
21	AA	1025	U	C4'-C3'-C2'	-5.07	97.53	102.60
21	AA	1090	U	N1-C2-O2	-5.07	119.25	122.80
21	AA	1156	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	1206	G	P-O5'-C5'	5.07	129.02	120.90
21	AA	1496	C	N1-C2-O2	-5.07	115.86	118.90
57	BB	164	C	C5'-C4'-O4'	5.07	115.19	109.10
57	BB	525	U	C5-C6-N1	5.07	125.24	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	567	U	O4'-C1'-N1	5.07	112.26	108.20
57	BB	1267	U	C2-N1-C1'	-5.07	111.61	117.70
57	BB	1931	U	C3'-C2'-C1'	-5.07	97.44	101.50
57	BB	1975	G	C5-N7-C8	5.07	106.84	104.30
57	BB	2004	G	N9-C4-C5	-5.07	103.37	105.40
57	BB	2209	G	C6-C5-N7	-5.07	127.36	130.40
57	BB	2316	G	C4-N9-C1'	-5.07	119.90	126.50
57	BB	2367	G	P-O5'-C5'	5.07	129.02	120.90
57	BB	2607	G	C5-C6-N1	5.07	114.04	111.50
20	AI	123	ARG	NE-CZ-NH1	-5.07	117.76	120.30
57	BB	1786	A	C6-N1-C2	5.07	121.64	118.60
57	BB	1802	A	O4'-C4'-C3'	-5.07	98.93	104.00
4	AM	81	ASP	CB-CG-OD2	-5.07	113.74	118.30
21	AA	190	A	C4'-C3'-C2'	-5.07	97.53	102.60
21	AA	207	C	C5-C6-N1	5.07	123.53	121.00
21	AA	343	U	C5'-C4'-O4'	-5.07	103.02	109.10
21	AA	787	A	C8-N9-C4	-5.07	103.77	105.80
21	AA	815	A	P-O3'-C3'	-5.07	113.62	119.70
21	AA	1394	A	N3-C4-C5	5.07	130.35	126.80
23	AW	22	G	N3-C4-C5	-5.07	126.06	128.60
23	AW	34	G	C1'-O4'-C4'	-5.07	105.84	109.90
26	AV	60	U	C2-N1-C1'	5.07	123.79	117.70
57	BB	218	A	O3'-P-O5'	-5.07	94.37	104.00
57	BB	345	A	P-O3'-C3'	5.07	125.78	119.70
57	BB	520	G	P-O3'-C3'	-5.07	113.61	119.70
57	BB	1008	A	C5-N7-C8	5.07	106.44	103.90
57	BB	1671	U	OP1-P-O3'	5.07	116.36	105.20
57	BB	1797	G	N3-C4-N9	-5.07	122.96	126.00
57	BB	2002	G	C4-C5-N7	5.07	112.83	110.80
57	BB	2310	C	C3'-C2'-C1'	5.07	105.56	101.50
57	BB	2474	U	N1-C2-O2	-5.07	119.25	122.80
57	BB	2596	U	C5-C4-O4	5.07	128.94	125.90
57	BB	2625	G	C5-C6-N1	-5.07	108.96	111.50
15	AD	30	LYS	CB-CA-C	-5.07	100.26	110.40
21	AA	226	G	C5-N7-C8	5.07	106.83	104.30
21	AA	664	G	C5-N7-C8	5.07	106.83	104.30
21	AA	911	U	C1'-O4'-C4'	5.07	113.95	109.90
25	AZ	77	ALA	N-CA-C	-5.07	97.31	111.00
57	BB	391	A	OP1-P-OP2	-5.07	112.00	119.60
57	BB	1248	G	N7-C8-N9	5.07	115.64	113.10
57	BB	1423	G	C5-C6-N1	-5.07	108.97	111.50
57	BB	2736	A	C5'-C4'-C3'	-5.07	107.89	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	275	G	C5'-C4'-C3'	-5.07	107.89	116.00
21	AA	300	A	N3-C4-C5	-5.07	123.25	126.80
21	AA	363	A	N9-C4-C5	-5.07	103.77	105.80
21	AA	727	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	1165	U	O4'-C4'-C3'	-5.07	98.93	104.00
40	BU	93	ARG	NE-CZ-NH2	5.07	122.83	120.30
57	BB	95	A	N3-C4-N9	5.07	131.45	127.40
57	BB	287	G	N3-C2-N2	5.07	123.45	119.90
57	BB	614	A	C4'-C3'-C2'	5.07	107.67	102.60
57	BB	810	U	C6-N1-C2	5.07	124.04	121.00
57	BB	1031	G	C6-C5-N7	-5.07	127.36	130.40
57	BB	1498	C	C5'-C4'-C3'	5.07	124.11	116.00
57	BB	1659	G	N3-C4-C5	-5.07	126.07	128.60
57	BB	1664	A	C4-C5-N7	5.07	113.23	110.70
57	BB	1844	C	O4'-C4'-C3'	-5.07	98.93	104.00
57	BB	1904	G	P-O5'-C5'	5.07	129.01	120.90
57	BB	2256	G	N3-C2-N2	-5.07	116.35	119.90
57	BB	2281	A	C4'-C3'-C2'	-5.07	97.53	102.60
57	BB	2441	U	C4-C5-C6	-5.07	116.66	119.70
57	BB	2576	G	N3-C4-N9	5.07	129.04	126.00
57	BB	2702	G	N3-C4-C5	-5.07	126.07	128.60
57	BB	2812	G	C5-C6-N1	5.07	114.03	111.50
58	BA	96	G	C5-C6-N1	-5.07	108.97	111.50
58	BA	111	U	N3-C4-O4	5.07	122.95	119.40
14	AC	161	ILE	N-CA-CB	5.07	122.45	110.80
15	AD	203	TYR	CG-CD1-CE1	-5.07	117.25	121.30
16	AE	49	TYR	CB-CG-CD1	5.07	124.04	121.00
21	AA	97	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	708	C	C5-C4-N4	-5.07	116.65	120.20
21	AA	926	G	P-O3'-C3'	5.07	125.78	119.70
21	AA	1085	U	C1'-O4'-C4'	5.07	113.95	109.90
21	AA	1183	U	P-O3'-C3'	5.07	125.78	119.70
33	BN	63	ARG	NE-CZ-NH1	-5.07	117.77	120.30
57	BB	362	A	C6-C5-N7	-5.07	128.75	132.30
57	BB	458	G	C5-C6-O6	-5.07	125.56	128.60
57	BB	1144	A	N9-C4-C5	5.07	107.83	105.80
57	BB	1523	U	N1-C2-N3	-5.07	111.86	114.90
57	BB	2294	G	O5'-P-OP2	-5.07	101.14	105.70
57	BB	2426	A	N1-C6-N6	5.07	121.64	118.60
57	BB	2474	U	P-O5'-C5'	-5.07	112.79	120.90
57	BB	2496	C	C1'-O4'-C4'	5.07	113.95	109.90
57	BB	2709	G	C4-N9-C1'	-5.07	119.92	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2761	A	P-O5'-C5'	5.07	129.01	120.90
57	BB	2814	A	O4'-C1'-C2'	-5.07	100.73	105.80
57	BB	2833	U	C6-N1-C1'	-5.07	114.11	121.20
21	AA	531	U	C5'-C4'-C3'	5.06	124.10	116.00
46	BZ	27	GLY	C-N-CA	5.06	134.36	121.70
57	BB	437	U	C1'-O4'-C4'	-5.06	105.85	109.90
57	BB	957	C	N1-C2-O2	5.06	121.94	118.90
57	BB	1149	G	C5-C6-N1	5.06	114.03	111.50
57	BB	2463	C	N3-C4-N4	5.06	121.55	118.00
57	BB	2850	A	OP1-P-OP2	-5.06	112.00	119.60
1	AJ	62	ARG	NE-CZ-NH1	-5.06	117.77	120.30
21	AA	293	G	C5-C6-O6	-5.06	125.56	128.60
21	AA	708	C	C4-C5-C6	-5.06	114.87	117.40
21	AA	914	A	C6-N1-C2	5.06	121.64	118.60
21	AA	1136	C	OP1-P-OP2	-5.06	112.00	119.60
21	AA	1235	U	O4'-C1'-N1	5.06	112.25	108.20
21	AA	1403	C	C5-C4-N4	-5.06	116.66	120.20
22	AY	68	U	C6-N1-C2	5.06	124.04	121.00
33	BN	69	ARG	N-CA-C	-5.06	97.33	111.00
57	BB	619	G	N3-C4-C5	-5.06	126.07	128.60
57	BB	760	G	C4-C5-N7	5.06	112.83	110.80
57	BB	901	C	C5'-C4'-O4'	5.06	115.18	109.10
57	BB	977	G	N3-C2-N2	5.06	123.44	119.90
57	BB	1811	G	O4'-C1'-N9	5.06	112.25	108.20
57	BB	2090	A	N7-C8-N9	-5.06	111.27	113.80
57	BB	2206	C	N3-C4-N4	5.06	121.54	118.00
57	BB	2238	G	N3-C4-N9	5.06	129.04	126.00
57	BB	2725	A	C5-C6-N6	-5.06	119.65	123.70
57	BB	2777	G	C4-C5-N7	5.06	112.83	110.80
57	BB	2867	G	C6-N1-C2	5.06	128.14	125.10
58	BA	89	U	C4'-C3'-C2'	-5.06	97.54	102.60
21	AA	537	G	N7-C8-N9	-5.06	110.57	113.10
21	AA	628	G	C5'-C4'-O4'	5.06	115.17	109.10
21	AA	1113	C	N3-C2-O2	5.06	125.44	121.90
21	AA	1186	G	C6-C5-N7	-5.06	127.36	130.40
28	BI	119	ALA	CB-CA-C	-5.06	102.51	110.10
57	BB	822	G	N7-C8-N9	5.06	115.63	113.10
57	BB	1157	G	N7-C8-N9	-5.06	110.57	113.10
57	BB	1772	A	P-O5'-C5'	-5.06	112.80	120.90
21	AA	399	G	O4'-C4'-C3'	-5.06	98.94	104.00
21	AA	887	G	C6-N1-C2	5.06	128.13	125.10
21	AA	1058	G	N3-C4-C5	5.06	131.13	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1068	G	N9-C4-C5	-5.06	103.38	105.40
21	AA	1525	G	C8-N9-C1'	5.06	133.58	127.00
57	BB	79	C	C2-N3-C4	5.06	122.43	119.90
57	BB	606	U	C4-C5-C6	5.06	122.74	119.70
57	BB	1377	G	OP1-P-OP2	-5.06	112.01	119.60
57	BB	1456	G	C4-C5-C6	5.06	121.84	118.80
57	BB	1588	G	C1'-O4'-C4'	-5.06	105.85	109.90
57	BB	2040	G	N3-C2-N2	5.06	123.44	119.90
57	BB	2080	A	C3'-C2'-C1'	5.06	105.55	101.50
57	BB	2278	A	C6-C5-N7	5.06	135.84	132.30
57	BB	2515	C	O4'-C1'-N1	5.06	112.25	108.20
57	BB	2887	A	C5-N7-C8	5.06	106.43	103.90
13	AB	62	ARG	NE-CZ-NH1	-5.06	117.77	120.30
21	AA	258	G	C3'-C2'-C1'	-5.06	97.45	101.50
21	AA	1524	C	C4-C5-C6	5.06	119.93	117.40
52	BD	15	PHE	CG-CD2-CE2	-5.06	115.24	120.80
57	BB	513	A	C5'-C4'-O4'	5.06	115.17	109.10
57	BB	781	A	N1-C2-N3	-5.06	126.77	129.30
57	BB	791	C	P-O5'-C5'	-5.06	112.81	120.90
57	BB	1111	A	C8-N9-C4	5.06	107.82	105.80
57	BB	1189	A	N9-C4-C5	-5.06	103.78	105.80
57	BB	1730	C	N3-C2-O2	-5.06	118.36	121.90
57	BB	1805	A	C6-N1-C2	-5.06	115.56	118.60
57	BB	1945	G	C4-C5-N7	5.06	112.82	110.80
57	BB	2058	A	N1-C2-N3	-5.06	126.77	129.30
57	BB	2069	G	N1-C2-N2	-5.06	111.65	116.20
57	BB	2225	A	P-O3'-C3'	5.06	125.77	119.70
57	BB	2354	C	C1'-O4'-C4'	5.06	113.95	109.90
57	BB	2392	A	C5-C6-N1	-5.06	115.17	117.70
57	BB	2636	C	C4-C5-C6	5.06	119.93	117.40
21	AA	196	A	C4-C5-C6	5.06	119.53	117.00
21	AA	989	U	N1-C2-O2	-5.06	119.26	122.80
21	AA	1075	U	C6-N1-C1'	5.06	128.28	121.20
57	BB	1203	U	C5-C6-N1	5.06	125.23	122.70
57	BB	2855	C	C5'-C4'-C3'	-5.06	107.91	116.00
21	AA	37	U	C5-C4-O4	5.05	128.93	125.90
21	AA	170	U	C5-C6-N1	5.05	125.23	122.70
21	AA	328	C	C3'-C2'-C1'	5.05	105.54	101.50
21	AA	387	U	C6-N1-C2	-5.05	117.97	121.00
21	AA	1165	U	C6-N1-C2	-5.05	117.97	121.00
21	AA	1225	A	O4'-C4'-C3'	-5.05	98.95	104.00
21	AA	1315	U	C5-C6-N1	5.05	125.23	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	B4	22	VAL	N-CA-C	-5.05	97.35	111.00
57	BB	438	G	O4'-C1'-N9	5.05	112.24	108.20
57	BB	562	U	N3-C4-O4	5.05	122.94	119.40
57	BB	741	U	C5-C4-O4	-5.05	122.87	125.90
57	BB	998	C	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	1155	A	C5-N7-C8	5.05	106.43	103.90
57	BB	1398	C	C6-N1-C2	5.05	122.32	120.30
57	BB	1446	C	N3-C2-O2	-5.05	118.36	121.90
57	BB	1680	U	N3-C4-C5	-5.05	111.57	114.60
57	BB	1770	G	P-O3'-C3'	-5.05	113.64	119.70
57	BB	1840	G	N7-C8-N9	5.05	115.63	113.10
57	BB	2056	G	C6-C5-N7	-5.05	127.37	130.40
57	BB	2077	A	C4-C5-C6	5.05	119.53	117.00
57	BB	2296	U	N1-C2-O2	-5.05	119.26	122.80
21	AA	462	G	C5-N7-C8	5.05	106.83	104.30
21	AA	990	C	C3'-C2'-C1'	-5.05	97.46	101.50
26	AV	67	C	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	670	A	C2'-C3'-O3'	5.05	121.78	113.70
57	BB	1285	A	C5'-C4'-O4'	5.05	115.16	109.10
57	BB	2428	G	N3-C4-N9	5.05	129.03	126.00
21	AA	663	A	N7-C8-N9	-5.05	111.27	113.80
21	AA	708	C	P-O5'-C5'	-5.05	112.82	120.90
21	AA	976	G	P-O3'-C3'	-5.05	113.64	119.70
57	BB	243	U	C2-N3-C4	5.05	130.03	127.00
57	BB	668	A	C5'-C4'-C3'	-5.05	107.92	116.00
57	BB	830	G	N3-C2-N2	-5.05	116.36	119.90
57	BB	2316	G	C8-N9-C4	5.05	108.42	106.40
57	BB	2666	C	N1-C2-O2	5.05	121.93	118.90
3	AL	88	ASP	CB-CG-OD1	-5.05	113.76	118.30
21	AA	641	U	C5-C6-N1	5.05	125.22	122.70
21	AA	676	A	C5-N7-C8	-5.05	101.38	103.90
21	AA	841	C	C6-N1-C2	-5.05	118.28	120.30
21	AA	1216	A	C5-C6-N1	-5.05	115.17	117.70
21	AA	1230	C	C6-N1-C1'	5.05	126.86	120.80
57	BB	982	C	C6-N1-C2	5.05	122.32	120.30
57	BB	998	C	N1-C2-N3	5.05	122.73	119.20
57	BB	1039	A	O5'-C5'-C4'	-5.05	102.11	111.70
57	BB	1192	G	C2-N3-C4	5.05	114.42	111.90
57	BB	1238	G	N1-C2-N3	-5.05	120.87	123.90
57	BB	1466	U	C6-N1-C2	-5.05	117.97	121.00
57	BB	1546	G	N3-C4-C5	5.05	131.12	128.60
57	BB	1797	G	C5-C6-N1	5.05	114.03	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2126	A	O4'-C1'-C2'	-5.05	100.75	105.80
57	BB	2720	U	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	2723	C	C4-C5-C6	-5.05	114.88	117.40
58	BA	42	C	C6-N1-C2	-5.05	118.28	120.30
20	AI	106	ASP	CB-CG-OD2	-5.05	113.76	118.30
21	AA	1054	C	N1-C1'-C2'	5.05	120.56	114.00
26	AV	44	A	O4'-C1'-N9	5.05	112.24	108.20
57	BB	305	C	N1-C2-O2	-5.05	115.87	118.90
57	BB	338	G	C6-N1-C2	-5.05	122.07	125.10
57	BB	868	U	C4-C5-C6	5.05	122.73	119.70
57	BB	1448	G	N3-C4-N9	-5.05	122.97	126.00
57	BB	1522	A	C5-C6-N6	-5.05	119.66	123.70
57	BB	2116	G	P-O3'-C3'	5.05	125.76	119.70
57	BB	2170	A	O5'-P-OP2	-5.05	101.16	105.70
57	BB	2326	C	P-O5'-C5'	-5.05	112.82	120.90
21	AA	680	C	P-O3'-C3'	-5.05	113.64	119.70
26	AV	70	G	N3-C4-C5	-5.05	126.08	128.60
27	B5	37	LYS	CA-CB-CG	5.05	124.50	113.40
40	BU	23	LYS	N-CA-CB	5.05	119.68	110.60
57	BB	210	C	C5-C6-N1	5.05	123.52	121.00
57	BB	627	A	C5-C6-N1	-5.05	115.18	117.70
57	BB	628	G	C2-N3-C4	5.05	114.42	111.90
57	BB	1041	G	C4-C5-C6	5.05	121.83	118.80
57	BB	1294	U	C5-C4-O4	-5.05	122.87	125.90
57	BB	1531	C	C1'-O4'-C4'	5.05	113.94	109.90
57	BB	2044	C	P-O5'-C5'	-5.05	112.83	120.90
21	AA	839	C	P-O3'-C3'	-5.04	113.64	119.70
57	BB	466	A	N9-C4-C5	5.04	107.82	105.80
57	BB	1024	G	C5-C6-O6	5.04	131.63	128.60
57	BB	1232	G	C4-N9-C1'	5.04	133.06	126.50
57	BB	2666	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	28	A	C5'-C4'-C3'	-5.04	107.93	116.00
21	AA	69	G	C5-C6-N1	-5.04	108.98	111.50
21	AA	328	C	O4'-C1'-C2'	-5.04	100.76	105.80
21	AA	450	G	C4-C5-C6	5.04	121.83	118.80
21	AA	647	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	839	C	O4'-C1'-N1	5.04	112.23	108.20
21	AA	1018	G	C4'-C3'-C2'	-5.04	97.56	102.60
21	AA	1109	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	1206	G	O5'-P-OP2	-5.04	101.16	105.70
21	AA	1225	A	C2-N3-C4	5.04	113.12	110.60
21	AA	1443	C	N3-C4-C5	-5.04	119.88	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AW	43	C	C4-C5-C6	5.04	119.92	117.40
23	AW	75	C	C4-C5-C6	5.04	119.92	117.40
26	AV	35	A	C6-N1-C2	5.04	121.63	118.60
26	AV	63	G	N1-C2-N3	-5.04	120.87	123.90
32	BM	117	PHE	CD1-CG-CD2	-5.04	111.74	118.30
57	BB	405	U	C5'-C4'-O4'	5.04	115.15	109.10
57	BB	831	G	N9-C4-C5	5.04	107.42	105.40
57	BB	832	U	N3-C2-O2	5.04	125.73	122.20
57	BB	1278	C	O3'-P-O5'	-5.04	94.42	104.00
57	BB	1929	G	C5-N7-C8	-5.04	101.78	104.30
57	BB	2778	A	C6-N1-C2	-5.04	115.57	118.60
12	AU	44	ARG	NE-CZ-NH1	5.04	122.82	120.30
21	AA	252	U	O4'-C1'-N1	5.04	112.23	108.20
21	AA	505	G	N1-C6-O6	5.04	122.92	119.90
21	AA	1112	C	N1-C2-O2	5.04	121.92	118.90
21	AA	1152	A	C4-C5-N7	5.04	113.22	110.70
21	AA	1164	G	P-O3'-C3'	-5.04	113.65	119.70
21	AA	1328	C	N1-C2-O2	-5.04	115.88	118.90
26	AV	61	C	O4'-C1'-N1	5.04	112.23	108.20
26	AV	72	A	C6-C5-N7	-5.04	128.77	132.30
29	BJ	27	ARG	NE-CZ-NH2	-5.04	117.78	120.30
38	BS	8	ARG	CB-CA-C	-5.04	100.32	110.40
57	BB	35	G	C6-N1-C2	5.04	128.12	125.10
57	BB	60	G	P-O3'-C3'	5.04	125.75	119.70
57	BB	135	U	OP1-P-OP2	-5.04	112.04	119.60
57	BB	291	G	O4'-C4'-C3'	-5.04	98.96	104.00
57	BB	552	U	OP1-P-O3'	5.04	116.29	105.20
57	BB	716	A	C4'-C3'-C2'	-5.04	97.56	102.60
57	BB	987	C	O4'-C1'-N1	5.04	112.23	108.20
57	BB	1177	G	P-O5'-C5'	5.04	128.97	120.90
57	BB	1408	G	C5-C6-N1	-5.04	108.98	111.50
57	BB	1440	U	N1-C2-O2	-5.04	119.27	122.80
57	BB	1443	U	O4'-C4'-C3'	-5.04	98.96	104.00
57	BB	1523	U	N3-C2-O2	5.04	125.73	122.20
57	BB	1857	G	N1-C2-N2	-5.04	111.66	116.20
57	BB	1967	C	C4'-C3'-C2'	-5.04	97.56	102.60
57	BB	2231	U	OP1-P-O3'	5.04	116.29	105.20
57	BB	2641	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	2673	G	O4'-C1'-N9	5.04	112.23	108.20
57	BB	2745	C	C5'-C4'-C3'	-5.04	107.94	116.00
21	AA	493	A	C1'-O4'-C4'	-5.04	105.87	109.90
21	AA	574	A	C6-C5-N7	-5.04	128.77	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	1136	C	C5-C6-N1	5.04	123.52	121.00
21	AA	1203	C	O4'-C1'-C2'	-5.04	100.76	105.80
55	BG	43	LYS	N-CA-CB	5.04	119.67	110.60
57	BB	26	G	C5-N7-C8	5.04	106.82	104.30
57	BB	424	G	N3-C2-N2	5.04	123.43	119.90
57	BB	599	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	859	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	1011	G	C1'-O4'-C4'	5.04	113.93	109.90
57	BB	1156	A	OP1-P-OP2	-5.04	112.04	119.60
57	BB	1367	A	C6-N1-C2	-5.04	115.58	118.60
57	BB	1456	G	N1-C2-N3	-5.04	120.88	123.90
57	BB	1490	A	N3-C4-N9	5.04	131.43	127.40
57	BB	1804	C	N1-C2-O2	5.04	121.92	118.90
57	BB	1875	G	C4-C5-C6	5.04	121.82	118.80
57	BB	2542	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	2841	C	C2-N3-C4	5.04	122.42	119.90
21	AA	356	A	C5-N7-C8	5.04	106.42	103.90
21	AA	1048	G	C6-N1-C2	5.04	128.12	125.10
22	AY	43	G	C5-N7-C8	-5.04	101.78	104.30
53	BE	19	PHE	CA-C-O	5.04	130.68	120.10
57	BB	186	G	N3-C4-C5	-5.04	126.08	128.60
57	BB	293	U	C2-N1-C1'	-5.04	111.65	117.70
57	BB	484	C	N3-C4-C5	-5.04	119.89	121.90
57	BB	913	U	O4'-C1'-N1	5.04	112.23	108.20
57	BB	942	G	N7-C8-N9	5.04	115.62	113.10
57	BB	1357	C	N3-C4-N4	5.04	121.53	118.00
57	BB	1696	G	N3-C4-N9	-5.04	122.98	126.00
57	BB	2036	C	C6-N1-C2	-5.04	118.28	120.30
57	BB	2377	A	C4-C5-N7	-5.04	108.18	110.70
57	BB	2529	G	N9-C4-C5	-5.04	103.39	105.40
57	BB	2613	U	O4'-C1'-N1	5.04	112.23	108.20
57	BB	2644	G	C1'-O4'-C4'	5.04	113.93	109.90
57	BB	2749	A	N7-C8-N9	-5.04	111.28	113.80
57	BB	2749	A	OP1-P-OP2	-5.04	112.04	119.60
21	AA	7	A	C4-C5-N7	5.04	113.22	110.70
21	AA	53	A	C5-C6-N6	-5.04	119.67	123.70
21	AA	82	G	N1-C2-N2	5.04	120.73	116.20
21	AA	431	A	C3'-C2'-C1'	-5.04	97.47	101.50
21	AA	1271	A	N9-C1'-C2'	-5.04	106.46	112.00
21	AA	1485	U	C3'-C2'-C1'	-5.04	97.47	101.50
22	AY	63	C	C5-C4-N4	5.04	123.73	120.20
33	BN	108	ALA	N-CA-CB	5.04	117.15	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	162	U	C6-N1-C2	5.04	124.02	121.00
57	BB	354	A	N9-C4-C5	5.04	107.81	105.80
57	BB	1641	A	C5-N7-C8	5.04	106.42	103.90
57	BB	2693	G	C4-N9-C1'	-5.04	119.95	126.50
5	AN	32	ASP	CB-CG-OD2	-5.04	113.77	118.30
21	AA	76	G	C6-C5-N7	-5.04	127.38	130.40
21	AA	243	A	C1'-O4'-C4'	5.04	113.93	109.90
21	AA	297	G	N9-C4-C5	5.04	107.41	105.40
21	AA	799	G	C5-N7-C8	5.04	106.82	104.30
21	AA	1517	G	C5-C6-O6	-5.04	125.58	128.60
26	AV	2	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	26	G	N3-C4-C5	-5.04	126.08	128.60
57	BB	548	G	C5-N7-C8	-5.04	101.78	104.30
57	BB	892	A	C5'-C4'-O4'	5.04	115.14	109.10
57	BB	1020	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	1039	A	C6-C5-N7	-5.04	128.78	132.30
57	BB	1166	G	N7-C8-N9	-5.04	110.58	113.10
57	BB	1493	C	OP1-P-OP2	-5.04	112.05	119.60
57	BB	1551	A	P-O3'-C3'	5.04	125.74	119.70
57	BB	2086	U	C6-N1-C1'	-5.04	114.15	121.20
57	BB	2436	G	C8-N9-C4	-5.04	104.39	106.40
57	BB	2711	A	C5-N7-C8	5.04	106.42	103.90
57	BB	2740	A	C5'-C4'-O4'	5.04	115.14	109.10
57	BB	2807	U	C5'-C4'-O4'	5.04	115.14	109.10
58	BA	48	U	N1-C1'-C2'	-5.04	106.46	112.00
4	AM	103	THR	N-CA-CB	5.03	119.86	110.30
6	AO	16	ARG	NE-CZ-NH2	-5.03	117.78	120.30
8	AQ	10	ARG	CB-CA-C	-5.03	100.33	110.40
21	AA	469	C	C5-C6-N1	5.03	123.52	121.00
21	AA	691	G	N1-C2-N3	-5.03	120.88	123.90
21	AA	701	U	C2-N3-C4	-5.03	123.98	127.00
21	AA	807	A	C4-C5-C6	5.03	119.52	117.00
21	AA	866	C	O4'-C4'-C3'	-5.03	98.97	104.00
21	AA	867	G	C5-C6-O6	-5.03	125.58	128.60
21	AA	1517	G	O4'-C1'-N9	5.03	112.23	108.20
26	AV	51	C	C2-N1-C1'	5.03	124.34	118.80
57	BB	649	G	C6-N1-C2	5.03	128.12	125.10
57	BB	1189	A	C4'-C3'-C2'	-5.03	97.57	102.60
57	BB	1271	G	C4-C5-C6	5.03	121.82	118.80
57	BB	1381	G	C2-N3-C4	5.03	114.42	111.90
57	BB	1597	A	O4'-C1'-N9	5.03	112.23	108.20
57	BB	1656	C	N3-C4-C5	-5.03	119.89	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1681	G	P-O3'-C3'	-5.03	113.66	119.70
57	BB	2056	G	C8-N9-C4	5.03	108.41	106.40
57	BB	2509	G	N7-C8-N9	-5.03	110.58	113.10
57	BB	2800	A	P-O3'-C3'	-5.03	113.66	119.70
58	BA	40	U	O4'-C4'-C3'	5.03	110.13	106.10
21	AA	717	U	C5-C6-N1	5.03	125.22	122.70
21	AA	1134	G	N3-C4-N9	-5.03	122.98	126.00
21	AA	1231	G	C4-C5-C6	5.03	121.82	118.80
21	AA	1313	U	O4'-C4'-C3'	-5.03	98.97	104.00
21	AA	1362	A	O4'-C1'-C2'	-5.03	100.77	105.80
57	BB	43	G	O4'-C1'-N9	5.03	112.23	108.20
57	BB	200	U	C5-C6-N1	5.03	125.22	122.70
57	BB	535	G	O4'-C1'-N9	5.03	112.23	108.20
57	BB	1108	U	C4-C5-C6	-5.03	116.68	119.70
57	BB	1677	A	C4-C5-N7	-5.03	108.18	110.70
57	BB	1767	G	O4'-C4'-C3'	-5.03	98.97	104.00
57	BB	2447	G	C3'-C2'-C1'	-5.03	97.47	101.50
21	AA	44	A	N1-C6-N6	5.03	121.62	118.60
21	AA	534	U	C5-C4-O4	-5.03	122.88	125.90
21	AA	731	G	N1-C2-N3	-5.03	120.88	123.90
21	AA	887	G	N1-C2-N3	-5.03	120.88	123.90
35	BP	38	ARG	NH1-CZ-NH2	5.03	124.93	119.40
57	BB	3	U	O4'-C1'-C2'	5.03	112.13	107.60
57	BB	17	G	N3-C2-N2	5.03	123.42	119.90
57	BB	102	U	C2-N3-C4	5.03	130.02	127.00
57	BB	145	C	N3-C4-N4	5.03	121.52	118.00
57	BB	310	A	C4-C5-N7	-5.03	108.19	110.70
57	BB	2070	A	C3'-C2'-C1'	-5.03	97.48	101.50
57	BB	2793	C	C5-C6-N1	5.03	123.52	121.00
57	BB	2881	U	C5-C4-O4	5.03	128.92	125.90
21	AA	647	C	C2-N3-C4	5.03	122.41	119.90
21	AA	721	G	C5-N7-C8	5.03	106.81	104.30
22	AY	73	A	O5'-P-OP1	5.03	116.73	110.70
36	BQ	83	LYS	CA-CB-CG	5.03	124.46	113.40
53	BE	41	GLN	N-CA-CB	5.03	119.65	110.60
57	BB	1050	A	C6-C5-N7	-5.03	128.78	132.30
57	BB	1107	G	N9-C4-C5	5.03	107.41	105.40
57	BB	2733	A	C5'-C4'-O4'	5.03	115.13	109.10
10	AS	60	PHE	CB-CG-CD2	5.03	124.32	120.80
21	AA	232	G	C5'-C4'-C3'	-5.03	107.96	116.00
21	AA	246	A	N1-C2-N3	5.03	131.81	129.30
21	AA	271	C	N3-C4-C5	-5.03	119.89	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	730	G	O4'-C1'-N9	5.03	112.22	108.20
21	AA	1034	G	C5-C6-N1	-5.03	108.99	111.50
21	AA	1317	C	N3-C4-C5	-5.03	119.89	121.90
23	AW	73	A	C6-N1-C2	5.03	121.62	118.60
54	BF	29	ARG	NE-CZ-NH2	5.03	122.81	120.30
57	BB	967	U	N1-C1'-C2'	-5.03	106.47	112.00
57	BB	1137	G	C5-N7-C8	-5.03	101.79	104.30
57	BB	1416	G	N3-C4-C5	5.03	131.11	128.60
57	BB	1623	G	C2-N3-C4	5.03	114.41	111.90
57	BB	2677	G	C2-N3-C4	-5.03	109.39	111.90
21	AA	502	A	N1-C2-N3	5.03	131.81	129.30
21	AA	770	C	N3-C4-N4	5.03	121.52	118.00
21	AA	841	C	C6-N1-C1'	-5.03	114.77	120.80
21	AA	1033	G	P-O5'-C5'	5.03	128.94	120.90
21	AA	1181	G	N3-C4-N9	5.03	129.01	126.00
52	BD	15	PHE	CB-CG-CD2	5.03	124.32	120.80
57	BB	57	C	C2-N3-C4	5.03	122.41	119.90
57	BB	80	G	N3-C4-C5	5.03	131.11	128.60
57	BB	87	U	C2-N3-C4	-5.03	123.98	127.00
57	BB	118	A	O4'-C1'-N9	5.03	112.22	108.20
57	BB	143	C	P-O5'-C5'	5.03	128.94	120.90
57	BB	421	C	O3'-P-O5'	-5.03	94.45	104.00
57	BB	749	A	P-O3'-C3'	5.03	125.73	119.70
57	BB	924	G	C3'-C2'-C1'	-5.03	97.48	101.50
57	BB	1136	G	C6-C5-N7	-5.03	127.39	130.40
57	BB	1317	G	C5'-C4'-C3'	5.03	124.04	116.00
57	BB	1365	A	C5-C6-N6	-5.03	119.68	123.70
57	BB	1756	G	C4-C5-N7	-5.03	108.79	110.80
57	BB	1902	C	OP1-P-OP2	-5.03	112.06	119.60
57	BB	1914	C	C6-N1-C1'	5.03	126.83	120.80
57	BB	1918	A	N1-C6-N6	5.03	121.62	118.60
57	BB	2061	G	C6-C5-N7	-5.03	127.39	130.40
57	BB	2200	C	C4-C5-C6	5.03	119.91	117.40
57	BB	2246	G	O4'-C1'-N9	5.03	112.22	108.20
57	BB	2343	U	C6-N1-C2	5.03	124.02	121.00
57	BB	2487	G	N3-C4-C5	-5.03	126.09	128.60
57	BB	2625	G	C6-N1-C2	5.03	128.12	125.10
57	BB	2780	G	C5-C6-O6	-5.03	125.58	128.60
58	BA	111	U	OP1-P-OP2	-5.03	112.06	119.60
10	AS	59	VAL	CA-CB-CG2	-5.02	103.36	110.90
21	AA	594	U	O4'-C1'-N1	5.02	112.22	108.20
21	AA	1328	C	C5-C6-N1	-5.02	118.49	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BY	29	ARG	CG-CD-NE	-5.02	101.25	111.80
57	BB	82	U	N3-C4-O4	5.02	122.92	119.40
57	BB	937	C	C5-C4-N4	-5.02	116.68	120.20
57	BB	2126	A	C5'-C4'-O4'	5.02	115.13	109.10
57	BB	2312	U	O5'-C5'-C4'	-5.02	102.16	111.70
57	BB	2366	A	N1-C6-N6	5.02	121.61	118.60
21	AA	228	A	C5-N7-C8	5.02	106.41	103.90
21	AA	462	G	C8-N9-C4	5.02	108.41	106.40
21	AA	784	A	C4'-C3'-C2'	-5.02	97.58	102.60
21	AA	842	U	OP1-P-OP2	-5.02	112.07	119.60
21	AA	1054	C	C2-N3-C4	5.02	122.41	119.90
21	AA	1292	G	N1-C6-O6	5.02	122.91	119.90
21	AA	1311	A	O4'-C1'-N9	5.02	112.22	108.20
21	AA	1458	G	C6-N1-C2	5.02	128.11	125.10
22	AY	24	G	C4'-C3'-C2'	-5.02	97.58	102.60
23	AW	3	C	P-O3'-C3'	-5.02	113.67	119.70
23	AW	9	A	N7-C8-N9	5.02	116.31	113.80
57	BB	2	G	C8-N9-C1'	5.02	133.53	127.00
57	BB	278	A	OP2-P-O3'	5.02	116.25	105.20
57	BB	517	C	N1-C2-N3	-5.02	115.68	119.20
57	BB	658	U	O4'-C4'-C3'	-5.02	98.98	104.00
57	BB	1347	A	C4-C5-C6	5.02	119.51	117.00
57	BB	1492	G	N1-C6-O6	5.02	122.91	119.90
57	BB	1650	A	N9-C4-C5	5.02	107.81	105.80
57	BB	1863	G	C4-C5-C6	5.02	121.81	118.80
57	BB	1950	G	N1-C2-N3	-5.02	120.89	123.90
57	BB	2410	G	N3-C4-N9	5.02	129.01	126.00
57	BB	2516	A	C4'-C3'-C2'	-5.02	97.58	102.60
58	BA	24	G	C5-C6-O6	-5.02	125.59	128.60
21	AA	807	A	N3-C4-C5	5.02	130.31	126.80
21	AA	1248	A	O4'-C1'-C2'	5.02	112.12	107.60
25	AZ	344	PRO	N-CA-CB	5.02	109.33	103.30
57	BB	113	U	C3'-C2'-C1'	-5.02	97.48	101.50
57	BB	609	A	O4'-C1'-N9	5.02	112.22	108.20
57	BB	843	G	C6-N1-C2	5.02	128.11	125.10
57	BB	1182	G	OP1-P-OP2	-5.02	112.07	119.60
57	BB	1198	U	C4-C5-C6	-5.02	116.69	119.70
57	BB	2328	A	C5-C6-N1	-5.02	115.19	117.70
57	BB	2639	A	N1-C2-N3	-5.02	126.79	129.30
57	BB	2861	U	C5-C4-O4	-5.02	122.89	125.90
2	AK	101	ALA	N-CA-CB	5.02	117.13	110.10
16	AE	55	VAL	CA-C-O	-5.02	109.56	120.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	518	C	P-O3'-C3'	5.02	125.72	119.70
21	AA	730	G	N3-C2-N2	5.02	123.41	119.90
21	AA	813	U	C6-N1-C2	5.02	124.01	121.00
21	AA	961	U	C5-C4-O4	-5.02	122.89	125.90
21	AA	1007	U	C4-C5-C6	-5.02	116.69	119.70
26	AV	50	U	N3-C2-O2	5.02	125.71	122.20
33	BN	37	THR	CA-CB-CG2	-5.02	105.37	112.40
40	BU	30	SER	N-CA-CB	5.02	118.03	110.50
57	BB	65	U	C4'-C3'-C2'	-5.02	97.58	102.60
57	BB	190	A	C6-N1-C2	-5.02	115.59	118.60
57	BB	905	A	C3'-C2'-C1'	-5.02	97.48	101.50
57	BB	1088	A	C4-C5-N7	-5.02	108.19	110.70
57	BB	1292	G	N1-C6-O6	5.02	122.91	119.90
57	BB	1294	U	N1-C2-N3	-5.02	111.89	114.90
57	BB	1532	A	C5-C6-N6	-5.02	119.69	123.70
57	BB	1662	U	C5-C6-N1	5.02	125.21	122.70
57	BB	2843	G	C4-C5-N7	5.02	112.81	110.80
21	AA	749	A	N7-C8-N9	-5.02	111.29	113.80
21	AA	828	U	P-O3'-C3'	5.02	125.72	119.70
21	AA	967	C	N3-C4-C5	-5.02	119.89	121.90
21	AA	1247	U	N1-C1'-C2'	-5.02	106.48	112.00
21	AA	1449	C	O4'-C1'-C2'	5.02	112.12	107.60
21	AA	1510	C	N1-C2-N3	-5.02	115.69	119.20
57	BB	179	C	P-O5'-C5'	-5.02	112.87	120.90
57	BB	263	G	C8-N9-C1'	5.02	133.52	127.00
57	BB	438	G	N1-C6-O6	5.02	122.91	119.90
57	BB	927	A	C5-N7-C8	5.02	106.41	103.90
57	BB	1332	G	N7-C8-N9	-5.02	110.59	113.10
57	BB	1343	G	C5-C6-N1	-5.02	108.99	111.50
57	BB	1637	A	P-O5'-C5'	-5.02	112.87	120.90
57	BB	1954	G	C1'-O4'-C4'	-5.02	105.89	109.90
57	BB	2391	G	C4-C5-C6	5.02	121.81	118.80
57	BB	2634	A	N9-C1'-C2'	-5.02	106.48	112.00
57	BB	2738	A	C5-C6-N1	-5.02	115.19	117.70
58	BA	107	G	C6-C5-N7	-5.02	127.39	130.40
21	AA	432	A	N3-C4-C5	-5.02	123.29	126.80
21	AA	1462	C	N1-C2-O2	5.02	121.91	118.90
26	AV	38	A	P-O5'-C5'	5.02	128.93	120.90
39	BT	39	THR	CA-CB-CG2	-5.02	105.38	112.40
57	BB	978	G	C4-N9-C1'	-5.02	119.98	126.50
57	BB	1575	C	P-O3'-C3'	-5.02	113.68	119.70
57	BB	1615	C	N1-C2-O2	-5.02	115.89	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2797	U	N3-C4-C5	-5.02	111.59	114.60
57	BB	2874	C	C4-C5-C6	5.02	119.91	117.40
58	BA	30	C	C2-N1-C1'	5.02	124.32	118.80
58	BA	98	G	C4-C5-N7	-5.02	108.79	110.80
21	AA	11	G	O4'-C1'-N9	5.01	112.21	108.20
21	AA	95	C	C1'-O4'-C4'	5.01	113.91	109.90
21	AA	364	A	C8-N9-C1'	5.01	136.72	127.70
21	AA	415	A	C5-N7-C8	5.01	106.41	103.90
21	AA	541	G	C4-C5-N7	5.01	112.81	110.80
21	AA	574	A	O4'-C1'-N9	5.01	112.21	108.20
21	AA	676	A	N1-C2-N3	-5.01	126.79	129.30
21	AA	1273	C	P-O5'-C5'	5.01	128.93	120.90
21	AA	1448	C	N3-C4-C5	-5.01	119.89	121.90
22	AY	50	U	O5'-P-OP2	5.01	116.72	110.70
23	AW	52	G	C2-N3-C4	5.01	114.41	111.90
57	BB	507	A	O4'-C1'-C2'	5.01	112.11	107.60
57	BB	656	G	N3-C4-C5	-5.01	126.09	128.60
57	BB	710	U	O4'-C1'-C2'	-5.01	100.79	105.80
57	BB	988	A	C5-C6-N1	-5.01	115.19	117.70
57	BB	1374	G	C4-C5-C6	5.01	121.81	118.80
57	BB	1904	G	N1-C6-O6	5.01	122.91	119.90
57	BB	2450	A	N1-C6-N6	5.01	121.61	118.60
57	BB	2535	G	C4-C5-N7	-5.01	108.79	110.80
57	BB	2733	A	N1-C2-N3	-5.01	126.79	129.30
21	AA	1240	U	O4'-C1'-C2'	-5.01	100.79	105.80
57	BB	805	G	C4-C5-N7	5.01	112.81	110.80
57	BB	1600	C	C3'-C2'-C1'	-5.01	97.49	101.50
57	BB	2739	U	O4'-C1'-N1	5.01	112.21	108.20
57	BB	2828	G	C8-N9-C4	5.01	108.41	106.40
58	BA	13	G	P-O3'-C3'	-5.01	113.68	119.70
21	AA	195	A	C2-N3-C4	-5.01	108.09	110.60
21	AA	769	G	C5-C6-N1	-5.01	109.00	111.50
21	AA	773	G	N3-C4-C5	-5.01	126.09	128.60
21	AA	877	G	N7-C8-N9	5.01	115.61	113.10
21	AA	1458	G	C1'-O4'-C4'	5.01	113.91	109.90
26	AV	42	G	C5-C6-O6	-5.01	125.59	128.60
28	BI	37	PHE	CB-CG-CD1	-5.01	117.29	120.80
53	BE	143	LEU	N-CA-CB	5.01	120.42	110.40
56	BH	80	ILE	CA-CB-CG2	-5.01	100.88	110.90
57	BB	203	A	C5-C6-N1	-5.01	115.19	117.70
57	BB	243	U	C6-N1-C2	-5.01	117.99	121.00
57	BB	1100	C	O4'-C1'-N1	5.01	112.21	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	1238	G	P-O3'-C3'	-5.01	113.69	119.70
21	AA	125	U	C5-C4-O4	5.01	128.91	125.90
21	AA	172	A	C3'-C2'-C1'	5.01	105.51	101.50
21	AA	401	C	O4'-C4'-C3'	-5.01	98.99	104.00
21	AA	406	G	N3-C2-N2	5.01	123.41	119.90
21	AA	597	G	O5'-C5'-C4'	-5.01	102.18	111.70
21	AA	668	G	C8-N9-C4	-5.01	104.40	106.40
21	AA	751	U	P-O3'-C3'	5.01	125.71	119.70
21	AA	1091	U	C1'-O4'-C4'	5.01	113.91	109.90
21	AA	1263	C	C3'-C2'-C1'	5.01	105.51	101.50
21	AA	1305	G	C4-C5-N7	5.01	112.80	110.80
52	BD	126	ASN	N-CA-CB	5.01	119.61	110.60
57	BB	86	G	P-O3'-C3'	-5.01	113.69	119.70
57	BB	507	A	OP1-P-O3'	5.01	116.22	105.20
57	BB	564	C	N1-C2-N3	5.01	122.71	119.20
57	BB	629	G	C8-N9-C1'	5.01	133.51	127.00
57	BB	765	C	C5-C6-N1	5.01	123.50	121.00
57	BB	1125	G	C5-N7-C8	5.01	106.81	104.30
57	BB	1212	G	C5-C6-N1	-5.01	109.00	111.50
57	BB	1566	A	O4'-C1'-C2'	5.01	112.11	107.60
57	BB	1580	A	N1-C2-N3	5.01	131.81	129.30
57	BB	1737	G	OP1-P-OP2	-5.01	112.09	119.60
57	BB	2010	G	N3-C4-C5	-5.01	126.09	128.60
57	BB	2276	G	N1-C2-N3	-5.01	120.89	123.90
57	BB	2686	G	C4-C5-N7	5.01	112.80	110.80
57	BB	2876	G	C8-N9-C1'	5.01	133.51	127.00
21	AA	196	A	C5-C6-N6	-5.01	119.69	123.70
21	AA	1527	U	N1-C2-O2	-5.01	119.29	122.80
32	BM	28	PHE	CB-CG-CD1	5.01	124.31	120.80
57	BB	111	A	C5-N7-C8	5.01	106.40	103.90
57	BB	350	G	C4-C5-C6	5.01	121.81	118.80
57	BB	423	A	C4-C5-C6	5.01	119.50	117.00
57	BB	616	A	N1-C2-N3	5.01	131.80	129.30
57	BB	1104	C	C6-N1-C2	-5.01	118.30	120.30
57	BB	1265	A	N1-C2-N3	5.01	131.80	129.30
57	BB	1527	G	C5-C6-N1	-5.01	109.00	111.50
57	BB	1598	A	N3-C4-C5	-5.01	123.29	126.80
57	BB	1905	C	C1'-O4'-C4'	5.01	113.91	109.90
57	BB	2013	A	P-O3'-C3'	-5.01	113.69	119.70
57	BB	2277	G	N9-C4-C5	-5.01	103.40	105.40
21	AA	29	U	OP2-P-O3'	5.01	116.22	105.20
21	AA	325	A	N9-C4-C5	5.01	107.80	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	577	G	N1-C6-O6	5.01	122.90	119.90
21	AA	1230	C	O4'-C4'-C3'	-5.01	98.99	104.00
21	AA	1381	U	C6-N1-C2	-5.01	118.00	121.00
21	AA	1446	A	O4'-C1'-C2'	5.01	112.11	107.60
23	AW	22	G	C4-N9-C1'	5.01	133.01	126.50
23	AW	49	C	OP1-P-OP2	-5.01	112.09	119.60
45	BC	51	ARG	NE-CZ-NH2	-5.01	117.80	120.30
56	BH	104	THR	CB-CA-C	-5.01	98.08	111.60
57	BB	1078	U	OP1-P-O3'	5.01	116.22	105.20
57	BB	1151	A	C4'-C3'-C2'	-5.01	97.59	102.60
57	BB	1271	G	C5-N7-C8	-5.01	101.80	104.30
57	BB	1618	A	N3-C4-C5	-5.01	123.30	126.80
57	BB	2008	C	C2-N3-C4	5.01	122.40	119.90
57	BB	2327	A	OP2-P-O3'	5.01	116.21	105.20
57	BB	2592	G	N3-C4-C5	5.01	131.10	128.60
57	BB	2825	G	C4-N9-C1'	5.01	133.01	126.50
14	AC	166	TRP	CG-CD2-CE3	-5.00	129.40	133.90
21	AA	504	C	C3'-C2'-C1'	5.00	105.50	101.50
21	AA	686	U	C2-N1-C1'	-5.00	111.69	117.70
57	BB	115	C	C4-C5-C6	-5.00	114.90	117.40
57	BB	187	G	C8-N9-C4	-5.00	104.40	106.40
57	BB	408	G	N1-C2-N3	-5.00	120.90	123.90
57	BB	964	C	N1-C2-O2	5.00	121.90	118.90
57	BB	1055	G	C6-N1-C2	-5.00	122.10	125.10
57	BB	1441	G	C5-C6-O6	-5.00	125.60	128.60
57	BB	1619	G	C5-C6-N1	5.00	114.00	111.50
7	AP	50	THR	N-CA-CB	5.00	119.81	110.30
21	AA	293	G	N7-C8-N9	-5.00	110.60	113.10
21	AA	494	G	C4'-C3'-C2'	-5.00	97.60	102.60
21	AA	907	A	C2-N3-C4	-5.00	108.10	110.60
21	AA	1034	G	N1-C2-N3	-5.00	120.90	123.90
21	AA	1049	U	C6-N1-C2	5.00	124.00	121.00
21	AA	1180	A	O4'-C1'-N9	5.00	112.20	108.20
21	AA	1462	C	N3-C4-C5	-5.00	119.90	121.90
48	B1	25	ASN	N-CA-CB	-5.00	101.59	110.60
57	BB	278	A	C5-C6-N6	-5.00	119.70	123.70
57	BB	325	G	OP1-P-OP2	-5.00	112.09	119.60
57	BB	653	U	C2-N3-C4	5.00	130.00	127.00
57	BB	1127	A	C4-C5-C6	5.00	119.50	117.00
57	BB	1908	C	C5-C6-N1	5.00	123.50	121.00
57	BB	2040	G	C5-C6-O6	-5.00	125.60	128.60
57	BB	2215	C	C2-N1-C1'	5.00	124.30	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	BB	2647	U	N1-C2-O2	-5.00	119.30	122.80
57	BB	2668	G	C5-N7-C8	5.00	106.80	104.30
57	BB	2768	U	C6-N1-C1'	5.00	128.21	121.20
18	AG	82	SER	N-CA-C	-5.00	97.49	111.00
21	AA	77	A	C2-N3-C4	5.00	113.10	110.60
21	AA	172	A	P-O5'-C5'	5.00	128.90	120.90
21	AA	263	A	O4'-C1'-N9	5.00	112.20	108.20
21	AA	705	G	O4'-C4'-C3'	-5.00	99.00	104.00
21	AA	983	A	C6-N1-C2	5.00	121.60	118.60
21	AA	1184	G	P-O3'-C3'	-5.00	113.70	119.70
21	AA	1296	C	C2-N1-C1'	-5.00	113.30	118.80
22	AY	29	A	O5'-P-OP1	5.00	116.70	110.70
22	AY	51	G	C5-N7-C8	5.00	106.80	104.30
26	AV	6	G	C8-N9-C4	-5.00	104.40	106.40
27	B5	133	PRO	O-C-N	5.00	130.70	122.70
55	BG	82	PHE	CA-CB-CG	-5.00	101.90	113.90
57	BB	338	G	N9-C4-C5	5.00	107.40	105.40
57	BB	598	U	C6-N1-C1'	5.00	128.20	121.20
57	BB	817	C	C4-C5-C6	-5.00	114.90	117.40
57	BB	836	G	N1-C2-N2	5.00	120.70	116.20
57	BB	1083	U	N1-C2-O2	-5.00	119.30	122.80
57	BB	1596	A	N1-C2-N3	-5.00	126.80	129.30
57	BB	1609	A	C5'-C4'-O4'	5.00	115.10	109.10
57	BB	1724	G	N3-C4-N9	5.00	129.00	126.00
57	BB	2349	G	N1-C6-O6	-5.00	116.90	119.90
57	BB	2425	A	P-O5'-C5'	-5.00	112.90	120.90
57	BB	2716	C	N3-C4-C5	-5.00	119.90	121.90

All (4) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	AW	17	C	C1'
23	AW	47	U	C1'
23	AW	70	G	C3'
27	B5	37	LYS	CA

All (2445) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
21	AA	100	G	Sidechain
21	AA	1002	G	Sidechain
21	AA	1004	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	1005	A	Sidechain
21	AA	1007	U	Sidechain
21	AA	101	A	Sidechain
21	AA	1010	U	Sidechain
21	AA	1013	G	Sidechain
21	AA	1014	A	Sidechain
21	AA	1017	U	Sidechain
21	AA	1022	A	Sidechain
21	AA	1024	G	Sidechain
21	AA	1026	G	Sidechain
21	AA	1027	C	Sidechain
21	AA	1028	C	Sidechain
21	AA	103	U	Sidechain
21	AA	1031	C	Sidechain
21	AA	1032	G	Sidechain
21	AA	1033	G	Sidechain
21	AA	1034	G	Sidechain
21	AA	1035	A	Sidechain
21	AA	1040	U	Sidechain
21	AA	1043	G	Sidechain
21	AA	1046	A	Sidechain
21	AA	1047	G	Sidechain
21	AA	1048	G	Sidechain
21	AA	105	G	Sidechain
21	AA	1050	G	Sidechain
21	AA	1051	C	Sidechain
21	AA	1054	C	Sidechain
21	AA	1056	U	Sidechain
21	AA	1057	G	Sidechain
21	AA	1058	G	Sidechain
21	AA	1059	C	Sidechain
21	AA	1060	U	Sidechain
21	AA	1064	G	Sidechain
21	AA	1068	G	Sidechain
21	AA	107	G	Sidechain
21	AA	1071	C	Sidechain
21	AA	1072	G	Sidechain
21	AA	1074	G	Sidechain
21	AA	1076	U	Sidechain
21	AA	1077	G	Sidechain
21	AA	1078	U	Sidechain
21	AA	1079	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	108	G	Sidechain
21	AA	1081	A	Sidechain
21	AA	1082	A	Sidechain
21	AA	1083	U	Sidechain
21	AA	1086	U	Sidechain
21	AA	1088	G	Sidechain
21	AA	1089	G	Sidechain
21	AA	109	A	Sidechain
21	AA	1090	U	Sidechain
21	AA	1091	U	Sidechain
21	AA	1093	A	Sidechain
21	AA	1094	G	Sidechain
21	AA	1097	C	Sidechain
21	AA	1098	C	Sidechain
21	AA	1099	G	Sidechain
21	AA	110	C	Sidechain
21	AA	1101	A	Sidechain
21	AA	1103	C	Sidechain
21	AA	1104	G	Sidechain
21	AA	1105	A	Sidechain
21	AA	1106	G	Sidechain
21	AA	111	G	Sidechain
21	AA	1110	A	Sidechain
21	AA	1116	U	Sidechain
21	AA	1118	U	Sidechain
21	AA	1123	U	Sidechain
21	AA	1126	U	Sidechain
21	AA	1127	G	Sidechain
21	AA	113	G	Sidechain
21	AA	1133	G	Sidechain
21	AA	1134	G	Sidechain
21	AA	1139	G	Sidechain
21	AA	1140	C	Sidechain
21	AA	1142	G	Sidechain
21	AA	1143	G	Sidechain
21	AA	1144	G	Sidechain
21	AA	1146	A	Sidechain
21	AA	1148	U	Sidechain
21	AA	1150	A	Sidechain
21	AA	1151	A	Sidechain
21	AA	1154	G	Sidechain
21	AA	1155	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	1156	G	Sidechain
21	AA	1162	C	Sidechain
21	AA	1166	G	Sidechain
21	AA	1168	U	Sidechain
21	AA	1169	A	Sidechain
21	AA	117	G	Sidechain
21	AA	1170	A	Sidechain
21	AA	1173	U	Sidechain
21	AA	1174	G	Sidechain
21	AA	1178	G	Sidechain
21	AA	1179	A	Sidechain
21	AA	118	U	Sidechain
21	AA	1184	G	Sidechain
21	AA	1185	G	Sidechain
21	AA	1186	G	Sidechain
21	AA	1189	U	Sidechain
21	AA	1190	G	Sidechain
21	AA	1192	C	Sidechain
21	AA	1195	C	Sidechain
21	AA	1199	U	Sidechain
21	AA	12	U	Sidechain
21	AA	120	A	Sidechain
21	AA	1201	A	Sidechain
21	AA	1204	A	Sidechain
21	AA	1205	U	Sidechain
21	AA	1206	G	Sidechain
21	AA	1207	G	Sidechain
21	AA	121	U	Sidechain
21	AA	1210	C	Sidechain
21	AA	1211	U	Sidechain
21	AA	1213	A	Sidechain
21	AA	1214	C	Sidechain
21	AA	1215	G	Sidechain
21	AA	1217	C	Sidechain
21	AA	122	G	Sidechain
21	AA	1220	G	Sidechain
21	AA	1221	G	Sidechain
21	AA	1223	C	Sidechain
21	AA	1224	U	Sidechain
21	AA	1225	A	Sidechain
21	AA	1226	C	Sidechain
21	AA	1227	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	1228	C	Sidechain
21	AA	123	U	Sidechain
21	AA	124	C	Sidechain
21	AA	1241	G	Sidechain
21	AA	1242	G	Sidechain
21	AA	1246	A	Sidechain
21	AA	1247	U	Sidechain
21	AA	125	U	Sidechain
21	AA	1250	A	Sidechain
21	AA	1251	A	Sidechain
21	AA	1253	G	Sidechain
21	AA	1254	A	Sidechain
21	AA	1259	C	Sidechain
21	AA	1260	G	Sidechain
21	AA	1262	C	Sidechain
21	AA	1263	C	Sidechain
21	AA	1264	U	Sidechain
21	AA	1266	G	Sidechain
21	AA	1268	G	Sidechain
21	AA	1272	G	Sidechain
21	AA	1279	G	Sidechain
21	AA	128	G	Sidechain
21	AA	1280	A	Sidechain
21	AA	1282	C	Sidechain
21	AA	1284	C	Sidechain
21	AA	1285	A	Sidechain
21	AA	1286	U	Sidechain
21	AA	1287	A	Sidechain
21	AA	1288	A	Sidechain
21	AA	1290	G	Sidechain
21	AA	1291	U	Sidechain
21	AA	1292	G	Sidechain
21	AA	1297	G	Sidechain
21	AA	1298	U	Sidechain
21	AA	1299	A	Sidechain
21	AA	130	A	Sidechain
21	AA	1302	C	Sidechain
21	AA	1304	G	Sidechain
21	AA	1305	G	Sidechain
21	AA	1306	A	Sidechain
21	AA	1308	U	Sidechain
21	AA	1309	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	131	A	Sidechain
21	AA	1311	A	Sidechain
21	AA	1313	U	Sidechain
21	AA	1316	G	Sidechain
21	AA	1317	C	Sidechain
21	AA	1318	A	Sidechain
21	AA	132	C	Sidechain
21	AA	1323	G	Sidechain
21	AA	1326	U	Sidechain
21	AA	1329	A	Sidechain
21	AA	1331	G	Sidechain
21	AA	1332	A	Sidechain
21	AA	1338	G	Sidechain
21	AA	1339	A	Sidechain
21	AA	1340	A	Sidechain
21	AA	1341	U	Sidechain
21	AA	1342	C	Sidechain
21	AA	1343	G	Sidechain
21	AA	1345	U	Sidechain
21	AA	1346	A	Sidechain
21	AA	1347	G	Sidechain
21	AA	1349	A	Sidechain
21	AA	1351	U	Sidechain
21	AA	1354	U	Sidechain
21	AA	1355	G	Sidechain
21	AA	1356	G	Sidechain
21	AA	1357	A	Sidechain
21	AA	1359	C	Sidechain
21	AA	136	C	Sidechain
21	AA	1361	G	Sidechain
21	AA	1363	A	Sidechain
21	AA	1364	U	Sidechain
21	AA	1365	G	Sidechain
21	AA	1366	C	Sidechain
21	AA	1368	A	Sidechain
21	AA	1371	G	Sidechain
21	AA	1374	A	Sidechain
21	AA	1376	U	Sidechain
21	AA	1377	A	Sidechain
21	AA	138	G	Sidechain
21	AA	1380	U	Sidechain
21	AA	1381	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	1382	C	Sidechain
21	AA	1383	C	Sidechain
21	AA	1384	C	Sidechain
21	AA	1385	G	Sidechain
21	AA	1388	C	Sidechain
21	AA	1391	U	Sidechain
21	AA	1392	G	Sidechain
21	AA	1393	U	Sidechain
21	AA	1395	C	Sidechain
21	AA	1397	C	Sidechain
21	AA	1399	C	Sidechain
21	AA	140	U	Sidechain
21	AA	1400	C	Sidechain
21	AA	1401	G	Sidechain
21	AA	1402	C	Sidechain
21	AA	1403	C	Sidechain
21	AA	1404	C	Sidechain
21	AA	1405	G	Sidechain
21	AA	1407	C	Sidechain
21	AA	1409	C	Sidechain
21	AA	1410	A	Sidechain
21	AA	1411	C	Sidechain
21	AA	1412	C	Sidechain
21	AA	1413	A	Sidechain
21	AA	1414	U	Sidechain
21	AA	1415	G	Sidechain
21	AA	1416	G	Sidechain
21	AA	1417	G	Sidechain
21	AA	1418	A	Sidechain
21	AA	142	G	Sidechain
21	AA	1421	G	Sidechain
21	AA	1422	G	Sidechain
21	AA	1426	G	Sidechain
21	AA	1427	C	Sidechain
21	AA	1428	A	Sidechain
21	AA	1429	A	Sidechain
21	AA	1431	A	Sidechain
21	AA	1433	A	Sidechain
21	AA	1434	A	Sidechain
21	AA	1435	G	Sidechain
21	AA	1437	A	Sidechain
21	AA	1438	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	1440	U	Sidechain
21	AA	1442	G	Sidechain
21	AA	1446	A	Sidechain
21	AA	1447	A	Sidechain
21	AA	1449	C	Sidechain
21	AA	1453	G	Sidechain
21	AA	1456	A	Sidechain
21	AA	1457	G	Sidechain
21	AA	1459	G	Sidechain
21	AA	1461	G	Sidechain
21	AA	1463	U	Sidechain
21	AA	1469	C	Sidechain
21	AA	147	G	Sidechain
21	AA	1472	U	Sidechain
21	AA	1482	G	Sidechain
21	AA	1483	A	Sidechain
21	AA	1486	G	Sidechain
21	AA	1489	G	Sidechain
21	AA	1490	U	Sidechain
21	AA	1492	A	Sidechain
21	AA	1497	G	Sidechain
21	AA	1502	A	Sidechain
21	AA	1507	A	Sidechain
21	AA	1508	A	Sidechain
21	AA	1509	C	Sidechain
21	AA	151	A	Sidechain
21	AA	1511	G	Sidechain
21	AA	1516	G	Sidechain
21	AA	1517	G	Sidechain
21	AA	1518	A	Sidechain
21	AA	152	A	Sidechain
21	AA	1521	C	Sidechain
21	AA	1522	U	Sidechain
21	AA	1525	G	Sidechain
21	AA	1526	G	Sidechain
21	AA	1527	U	Sidechain
21	AA	1529	G	Sidechain
21	AA	1530	G	Sidechain
21	AA	1532	U	Sidechain
21	AA	1533	C	Sidechain
21	AA	154	U	Sidechain
21	AA	158	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	159	G	Sidechain
21	AA	16	A	Sidechain
21	AA	161	A	Sidechain
21	AA	164	G	Sidechain
21	AA	17	U	Sidechain
21	AA	170	U	Sidechain
21	AA	172	A	Sidechain
21	AA	173	U	Sidechain
21	AA	176	C	Sidechain
21	AA	181	A	Sidechain
21	AA	183	C	Sidechain
21	AA	190	A	Sidechain
21	AA	191	G	Sidechain
21	AA	193	C	Sidechain
21	AA	195	A	Sidechain
21	AA	20	U	Sidechain
21	AA	200	G	Sidechain
21	AA	201	G	Sidechain
21	AA	202	G	Sidechain
21	AA	203	G	Sidechain
21	AA	204	G	Sidechain
21	AA	205	A	Sidechain
21	AA	206	C	Sidechain
21	AA	208	U	Sidechain
21	AA	209	U	Sidechain
21	AA	21	G	Sidechain
21	AA	213	G	Sidechain
21	AA	214	C	Sidechain
21	AA	218	U	Sidechain
21	AA	219	U	Sidechain
21	AA	22	G	Sidechain
21	AA	221	C	Sidechain
21	AA	222	C	Sidechain
21	AA	225	C	Sidechain
21	AA	226	G	Sidechain
21	AA	23	C	Sidechain
21	AA	230	G	Sidechain
21	AA	231	U	Sidechain
21	AA	232	G	Sidechain
21	AA	233	C	Sidechain
21	AA	234	C	Sidechain
21	AA	236	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	237	G	Sidechain
21	AA	239	U	Sidechain
21	AA	24	U	Sidechain
21	AA	241	G	Sidechain
21	AA	244	U	Sidechain
21	AA	246	A	Sidechain
21	AA	248	C	Sidechain
21	AA	249	U	Sidechain
21	AA	25	C	Sidechain
21	AA	251	G	Sidechain
21	AA	253	A	Sidechain
21	AA	254	G	Sidechain
21	AA	257	G	Sidechain
21	AA	258	G	Sidechain
21	AA	259	G	Sidechain
21	AA	260	G	Sidechain
21	AA	261	U	Sidechain
21	AA	262	A	Sidechain
21	AA	263	A	Sidechain
21	AA	264	C	Sidechain
21	AA	265	G	Sidechain
21	AA	267	C	Sidechain
21	AA	269	C	Sidechain
21	AA	270	A	Sidechain
21	AA	274	A	Sidechain
21	AA	276	G	Sidechain
21	AA	280	C	Sidechain
21	AA	281	G	Sidechain
21	AA	282	A	Sidechain
21	AA	283	U	Sidechain
21	AA	287	U	Sidechain
21	AA	288	A	Sidechain
21	AA	29	U	Sidechain
21	AA	292	G	Sidechain
21	AA	293	G	Sidechain
21	AA	294	U	Sidechain
21	AA	296	U	Sidechain
21	AA	301	G	Sidechain
21	AA	302	G	Sidechain
21	AA	304	U	Sidechain
21	AA	306	A	Sidechain
21	AA	315	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	316	C	Sidechain
21	AA	317	U	Sidechain
21	AA	320	A	Sidechain
21	AA	322	C	Sidechain
21	AA	323	U	Sidechain
21	AA	324	G	Sidechain
21	AA	325	A	Sidechain
21	AA	327	A	Sidechain
21	AA	329	A	Sidechain
21	AA	334	C	Sidechain
21	AA	336	A	Sidechain
21	AA	338	A	Sidechain
21	AA	34	C	Sidechain
21	AA	340	U	Sidechain
21	AA	342	C	Sidechain
21	AA	343	U	Sidechain
21	AA	345	C	Sidechain
21	AA	346	G	Sidechain
21	AA	347	G	Sidechain
21	AA	348	G	Sidechain
21	AA	35	G	Sidechain
21	AA	350	G	Sidechain
21	AA	351	G	Sidechain
21	AA	353	A	Sidechain
21	AA	354	G	Sidechain
21	AA	355	C	Sidechain
21	AA	359	G	Sidechain
21	AA	362	G	Sidechain
21	AA	363	A	Sidechain
21	AA	366	A	Sidechain
21	AA	367	U	Sidechain
21	AA	368	U	Sidechain
21	AA	369	G	Sidechain
21	AA	372	C	Sidechain
21	AA	374	A	Sidechain
21	AA	376	G	Sidechain
21	AA	378	G	Sidechain
21	AA	380	G	Sidechain
21	AA	383	A	Sidechain
21	AA	384	G	Sidechain
21	AA	389	A	Sidechain
21	AA	390	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	391	G	Sidechain
21	AA	396	C	Sidechain
21	AA	404	G	Sidechain
21	AA	405	U	Sidechain
21	AA	412	A	Sidechain
21	AA	42	G	Sidechain
21	AA	421	U	Sidechain
21	AA	422	C	Sidechain
21	AA	423	G	Sidechain
21	AA	424	G	Sidechain
21	AA	427	U	Sidechain
21	AA	429	U	Sidechain
21	AA	43	C	Sidechain
21	AA	431	A	Sidechain
21	AA	432	A	Sidechain
21	AA	433	G	Sidechain
21	AA	435	A	Sidechain
21	AA	438	U	Sidechain
21	AA	439	U	Sidechain
21	AA	442	G	Sidechain
21	AA	444	G	Sidechain
21	AA	445	G	Sidechain
21	AA	447	G	Sidechain
21	AA	448	A	Sidechain
21	AA	449	G	Sidechain
21	AA	452	A	Sidechain
21	AA	453	G	Sidechain
21	AA	455	G	Sidechain
21	AA	46	G	Sidechain
21	AA	463	U	Sidechain
21	AA	464	U	Sidechain
21	AA	466	A	Sidechain
21	AA	467	U	Sidechain
21	AA	468	A	Sidechain
21	AA	472	U	Sidechain
21	AA	473	U	Sidechain
21	AA	474	G	Sidechain
21	AA	480	U	Sidechain
21	AA	483	C	Sidechain
21	AA	484	G	Sidechain
21	AA	486	U	Sidechain
21	AA	487	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	49	U	Sidechain
21	AA	491	G	Sidechain
21	AA	493	A	Sidechain
21	AA	494	G	Sidechain
21	AA	496	A	Sidechain
21	AA	5	U	Sidechain
21	AA	500	G	Sidechain
21	AA	501	C	Sidechain
21	AA	503	C	Sidechain
21	AA	504	C	Sidechain
21	AA	506	G	Sidechain
21	AA	509	A	Sidechain
21	AA	51	A	Sidechain
21	AA	512	U	Sidechain
21	AA	513	C	Sidechain
21	AA	521	G	Sidechain
21	AA	524	G	Sidechain
21	AA	526	C	Sidechain
21	AA	528	C	Sidechain
21	AA	530	G	Sidechain
21	AA	531	U	Sidechain
21	AA	532	A	Sidechain
21	AA	533	A	Sidechain
21	AA	538	G	Sidechain
21	AA	544	G	Sidechain
21	AA	548	G	Sidechain
21	AA	55	A	Sidechain
21	AA	550	G	Sidechain
21	AA	553	A	Sidechain
21	AA	554	A	Sidechain
21	AA	555	U	Sidechain
21	AA	556	C	Sidechain
21	AA	557	G	Sidechain
21	AA	56	U	Sidechain
21	AA	560	A	Sidechain
21	AA	561	U	Sidechain
21	AA	563	A	Sidechain
21	AA	565	U	Sidechain
21	AA	566	G	Sidechain
21	AA	567	G	Sidechain
21	AA	57	G	Sidechain
21	AA	572	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	573	A	Sidechain
21	AA	574	A	Sidechain
21	AA	575	G	Sidechain
21	AA	577	G	Sidechain
21	AA	58	C	Sidechain
21	AA	580	C	Sidechain
21	AA	581	G	Sidechain
21	AA	584	G	Sidechain
21	AA	585	G	Sidechain
21	AA	588	G	Sidechain
21	AA	589	U	Sidechain
21	AA	598	U	Sidechain
21	AA	6	G	Sidechain
21	AA	60	A	Sidechain
21	AA	600	A	Sidechain
21	AA	602	A	Sidechain
21	AA	603	U	Sidechain
21	AA	605	U	Sidechain
21	AA	608	A	Sidechain
21	AA	61	G	Sidechain
21	AA	611	C	Sidechain
21	AA	612	C	Sidechain
21	AA	613	C	Sidechain
21	AA	622	A	Sidechain
21	AA	624	C	Sidechain
21	AA	626	G	Sidechain
21	AA	627	G	Sidechain
21	AA	631	C	Sidechain
21	AA	632	U	Sidechain
21	AA	633	G	Sidechain
21	AA	637	C	Sidechain
21	AA	638	U	Sidechain
21	AA	640	A	Sidechain
21	AA	646	G	Sidechain
21	AA	648	A	Sidechain
21	AA	652	U	Sidechain
21	AA	655	A	Sidechain
21	AA	656	G	Sidechain
21	AA	657	U	Sidechain
21	AA	662	U	Sidechain
21	AA	663	A	Sidechain
21	AA	664	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	666	G	Sidechain
21	AA	667	G	Sidechain
21	AA	668	G	Sidechain
21	AA	669	G	Sidechain
21	AA	67	C	Sidechain
21	AA	671	G	Sidechain
21	AA	673	A	Sidechain
21	AA	674	G	Sidechain
21	AA	677	U	Sidechain
21	AA	682	G	Sidechain
21	AA	683	G	Sidechain
21	AA	685	G	Sidechain
21	AA	688	G	Sidechain
21	AA	69	G	Sidechain
21	AA	690	G	Sidechain
21	AA	691	G	Sidechain
21	AA	695	A	Sidechain
21	AA	700	G	Sidechain
21	AA	701	U	Sidechain
21	AA	703	G	Sidechain
21	AA	704	A	Sidechain
21	AA	705	G	Sidechain
21	AA	707	U	Sidechain
21	AA	709	U	Sidechain
21	AA	716	A	Sidechain
21	AA	717	U	Sidechain
21	AA	719	C	Sidechain
21	AA	722	G	Sidechain
21	AA	723	U	Sidechain
21	AA	726	C	Sidechain
21	AA	727	G	Sidechain
21	AA	728	A	Sidechain
21	AA	729	A	Sidechain
21	AA	730	G	Sidechain
21	AA	731	G	Sidechain
21	AA	738	C	Sidechain
21	AA	739	C	Sidechain
21	AA	74	A	Sidechain
21	AA	740	U	Sidechain
21	AA	742	G	Sidechain
21	AA	751	U	Sidechain
21	AA	752	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	754	C	Sidechain
21	AA	761	G	Sidechain
21	AA	763	G	Sidechain
21	AA	765	G	Sidechain
21	AA	768	A	Sidechain
21	AA	773	G	Sidechain
21	AA	776	G	Sidechain
21	AA	779	C	Sidechain
21	AA	780	A	Sidechain
21	AA	781	A	Sidechain
21	AA	782	A	Sidechain
21	AA	785	G	Sidechain
21	AA	786	G	Sidechain
21	AA	789	U	Sidechain
21	AA	79	G	Sidechain
21	AA	791	G	Sidechain
21	AA	792	A	Sidechain
21	AA	793	U	Sidechain
21	AA	795	C	Sidechain
21	AA	796	C	Sidechain
21	AA	799	G	Sidechain
21	AA	802	A	Sidechain
21	AA	805	C	Sidechain
21	AA	81	A	Sidechain
21	AA	810	C	Sidechain
21	AA	811	C	Sidechain
21	AA	814	A	Sidechain
21	AA	815	A	Sidechain
21	AA	817	C	Sidechain
21	AA	818	G	Sidechain
21	AA	821	G	Sidechain
21	AA	828	U	Sidechain
21	AA	83	C	Sidechain
21	AA	831	A	Sidechain
21	AA	833	G	Sidechain
21	AA	834	U	Sidechain
21	AA	838	G	Sidechain
21	AA	842	U	Sidechain
21	AA	843	U	Sidechain
21	AA	844	G	Sidechain
21	AA	846	G	Sidechain
21	AA	847	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	851	G	Sidechain
21	AA	854	U	Sidechain
21	AA	859	G	Sidechain
21	AA	86	G	Sidechain
21	AA	864	A	Sidechain
21	AA	865	A	Sidechain
21	AA	869	G	Sidechain
21	AA	87	C	Sidechain
21	AA	870	U	Sidechain
21	AA	871	U	Sidechain
21	AA	873	A	Sidechain
21	AA	874	G	Sidechain
21	AA	877	G	Sidechain
21	AA	878	A	Sidechain
21	AA	879	C	Sidechain
21	AA	881	G	Sidechain
21	AA	883	C	Sidechain
21	AA	886	G	Sidechain
21	AA	887	G	Sidechain
21	AA	889	A	Sidechain
21	AA	890	G	Sidechain
21	AA	895	G	Sidechain
21	AA	898	G	Sidechain
21	AA	899	C	Sidechain
21	AA	9	G	Sidechain
21	AA	90	C	Sidechain
21	AA	900	A	Sidechain
21	AA	901	A	Sidechain
21	AA	902	G	Sidechain
21	AA	903	G	Sidechain
21	AA	909	A	Sidechain
21	AA	91	U	Sidechain
21	AA	911	U	Sidechain
21	AA	914	A	Sidechain
21	AA	916	U	Sidechain
21	AA	919	A	Sidechain
21	AA	920	U	Sidechain
21	AA	921	U	Sidechain
21	AA	922	G	Sidechain
21	AA	923	A	Sidechain
21	AA	924	C	Sidechain
21	AA	925	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	AA	926	G	Sidechain
21	AA	927	G	Sidechain
21	AA	932	C	Sidechain
21	AA	933	G	Sidechain
21	AA	936	C	Sidechain
21	AA	937	A	Sidechain
21	AA	938	A	Sidechain
21	AA	939	G	Sidechain
21	AA	942	G	Sidechain
21	AA	944	G	Sidechain
21	AA	946	A	Sidechain
21	AA	948	C	Sidechain
21	AA	951	G	Sidechain
21	AA	953	G	Sidechain
21	AA	954	G	Sidechain
21	AA	957	U	Sidechain
21	AA	958	A	Sidechain
21	AA	959	A	Sidechain
21	AA	961	U	Sidechain
21	AA	962	C	Sidechain
21	AA	964	A	Sidechain
21	AA	966	G	Sidechain
21	AA	968	A	Sidechain
21	AA	971	G	Sidechain
21	AA	972	C	Sidechain
21	AA	973	G	Sidechain
21	AA	974	A	Sidechain
21	AA	975	A	Sidechain
21	AA	977	A	Sidechain
21	AA	978	A	Sidechain
21	AA	979	C	Sidechain
21	AA	981	U	Sidechain
21	AA	991	U	Sidechain
21	AA	992	U	Sidechain
21	AA	994	A	Sidechain
21	AA	995	C	Sidechain
21	AA	996	A	Sidechain
21	AA	999	C	Sidechain
13	AB	107	ARG	Sidechain
13	AB	29	PHE	Sidechain
13	AB	68	PHE	Peptide
13	AB	89	PHE	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
14	AC	155	ARG	Sidechain
14	AC	163	ARG	Sidechain
14	AC	167	TYR	Peptide
14	AC	53	ARG	Sidechain
14	AC	71	ARG	Sidechain
15	AD	103	ARG	Sidechain
15	AD	127	ARG	Sidechain
15	AD	134	TYR	Sidechain
15	AD	145	ARG	Sidechain
15	AD	19	PHE	Sidechain
15	AD	203	TYR	Sidechain
15	AD	50	TYR	Sidechain
15	AD	64	TYR	Sidechain
15	AD	75	TYR	Sidechain
16	AE	94	PHE	Sidechain
17	AF	8	PHE	Sidechain
17	AF	86	ARG	Sidechain
18	AG	110	ARG	Sidechain
18	AG	14	ASP	Peptide
18	AG	78	ARG	Sidechain
18	AG	95	ARG	Sidechain
19	AH	113	ARG	Sidechain
19	AH	125	ILE	Peptide
19	AH	64	TYR	Sidechain
19	AH	85	TYR	Sidechain
20	AI	11	ARG	Sidechain
20	AI	121	ARG	Sidechain
20	AI	126	PHE	Sidechain
20	AI	37	TYR	Sidechain
20	AI	48	ARG	Sidechain
20	AI	6	TYR	Sidechain
1	AJ	16	ARG	Sidechain
1	AJ	68	ARG	Sidechain
1	AJ	9	ARG	Sidechain
2	AK	26	PHE	Sidechain
2	AK	55	ARG	Sidechain
2	AK	89	GLY	Peptide
2	AK	97	ARG	Sidechain
3	AL	13	ARG	Sidechain
3	AL	20	VAL	Peptide
3	AL	30	ARG	Sidechain
3	AL	49	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
3	AL	53	ARG	Sidechain
3	AL	65	TYR	Sidechain
3	AL	93	ARG	Sidechain
4	AM	100	ARG	Sidechain
4	AM	104	ASN	Peptide
4	AM	108	ARG	Mainchain
4	AM	2	ARG	Sidechain
4	AM	22	TYR	Sidechain
5	AN	12	ARG	Sidechain
5	AN	52	ARG	Sidechain
5	AN	62	ARG	Sidechain
5	AN	68	ARG	Sidechain
5	AN	84	ARG	Sidechain
6	AO	16	ARG	Sidechain
6	AO	20	ASP	Peptide
6	AO	57	ARG	Sidechain
6	AO	62	ARG	Sidechain
6	AO	79	ARG	Sidechain
7	AP	17	TYR	Sidechain
7	AP	25	ARG	Sidechain
7	AP	9	HIS	Sidechain
8	AQ	30	HIS	Sidechain
9	AR	22	TYR	Sidechain
9	AR	31	TYR	Sidechain
9	AR	47	ARG	Sidechain
9	AR	69	TYR	Sidechain
10	AS	79	TYR	Sidechain
11	AT	17	ARG	Sidechain
11	AT	24	ARG	Sidechain
11	AT	9	ARG	Sidechain
12	AU	20	ARG	Sidechain
12	AU	37	TYR	Sidechain
12	AU	44	ARG	Sidechain
12	AU	46	ARG	Sidechain
12	AU	6	ARG	Sidechain
26	AV	1	C	Sidechain
26	AV	11	A	Sidechain
26	AV	17	C	Sidechain
26	AV	18	G	Sidechain
26	AV	19	G	Sidechain
26	AV	20	U	Sidechain
26	AV	21	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	AV	22	G	Sidechain
26	AV	23	C	Sidechain
26	AV	24	U	Sidechain
26	AV	27	U	Sidechain
26	AV	28	C	Sidechain
26	AV	29	G	Sidechain
26	AV	32	C	Sidechain
26	AV	35	A	Sidechain
26	AV	38	A	Sidechain
26	AV	39	C	Sidechain
26	AV	4	G	Sidechain
26	AV	40	C	Sidechain
26	AV	41	C	Sidechain
26	AV	42	G	Sidechain
26	AV	47	U	Sidechain
26	AV	48	C	Sidechain
26	AV	5	G	Sidechain
26	AV	51	C	Sidechain
26	AV	52	G	Sidechain
26	AV	53	G	Sidechain
26	AV	57	A	Sidechain
26	AV	59	A	Sidechain
26	AV	60	U	Sidechain
26	AV	61	C	Sidechain
26	AV	62	C	Sidechain
26	AV	64	G	Sidechain
26	AV	7	G	Sidechain
26	AV	70	G	Sidechain
26	AV	73	A	Sidechain
26	AV	9	G	Sidechain
23	AW	10	G	Sidechain
23	AW	11	C	Sidechain
23	AW	12	U	Sidechain
23	AW	13	C	Sidechain
23	AW	16	U	Sidechain
23	AW	17	C	Sidechain
23	AW	18	G	Sidechain
23	AW	19	G	Sidechain
23	AW	21	A	Sidechain
23	AW	22	G	Sidechain
23	AW	24	G	Sidechain
23	AW	25	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
23	AW	28	G	Sidechain
23	AW	30	G	Sidechain
23	AW	31	A	Sidechain
23	AW	32	U	Sidechain
23	AW	34	G	Sidechain
23	AW	35	A	Sidechain
23	AW	38	A	Sidechain
23	AW	4	C	Sidechain
23	AW	40	C	Sidechain
23	AW	44	G	Sidechain
23	AW	45	U	Sidechain
23	AW	47	U	Sidechain
23	AW	5	G	Sidechain
23	AW	50	U	Sidechain
23	AW	51	U	Sidechain
23	AW	53	G	Sidechain
23	AW	57	G	Sidechain
23	AW	58	A	Sidechain
23	AW	59	U	Sidechain
23	AW	6	G	Sidechain
23	AW	60	U	Sidechain
23	AW	64	A	Sidechain
23	AW	65	G	Sidechain
23	AW	69	G	Sidechain
23	AW	7	A	Sidechain
23	AW	73	A	Sidechain
23	AW	74	C	Sidechain
24	AX	13	A	Sidechain
24	AX	14	A	Sidechain
24	AX	18	G	Sidechain
22	AY	1	G	Sidechain
22	AY	10	G	Sidechain
22	AY	13	C	Sidechain
22	AY	18	G	Sidechain
22	AY	2	C	Sidechain
22	AY	20	G	Sidechain
22	AY	23	A	Sidechain
22	AY	24	G	Sidechain
22	AY	26	G	Sidechain
22	AY	27	C	Sidechain
22	AY	28	C	Sidechain
22	AY	30	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
22	AY	32	C	Sidechain
22	AY	33	U	Sidechain
22	AY	36	A	Sidechain
22	AY	37	G	Sidechain
22	AY	39	U	Sidechain
22	AY	4	G	Sidechain
22	AY	40	C	Sidechain
22	AY	42	G	Sidechain
22	AY	43	G	Sidechain
22	AY	44	A	Sidechain
22	AY	45	G	Sidechain
22	AY	46	G	Sidechain
22	AY	47	U	Sidechain
22	AY	50	U	Sidechain
22	AY	51	G	Sidechain
22	AY	53	G	Sidechain
22	AY	55	U	Sidechain
22	AY	59	U	Sidechain
22	AY	60	C	Sidechain
22	AY	61	C	Sidechain
22	AY	65	G	Sidechain
22	AY	66	A	Sidechain
22	AY	7	U	Sidechain
22	AY	71	G	Sidechain
22	AY	73	A	Sidechain
22	AY	74	C	Sidechain
22	AY	8	U	Sidechain
22	AY	9	A	Sidechain
25	AZ	123	ARG	Sidechain
25	AZ	133	PHE	Sidechain
25	AZ	160	TYR	Peptide
25	AZ	208	LYS	Peptide
25	AZ	354	ASP	Peptide
25	AZ	46	PHE	Sidechain
25	AZ	51	ASN	Peptide
25	AZ	76	TYR	Sidechain
47	B0	15	ARG	Sidechain
47	B0	37	HIS	Sidechain
47	B0	49	ARG	Sidechain
47	B0	9	ARG	Sidechain
48	B1	20	TYR	Sidechain
48	B1	38	PHE	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
49	B2	5	PHE	Sidechain
50	B3	41	ARG	Sidechain
50	B3	44	ARG	Sidechain
51	B4	36	ARG	Sidechain
27	B5	12	ARG	Sidechain
27	B5	124	VAL	Peptide
27	B5	18	THR	Peptide
27	B5	35	THR	Peptide
27	B5	53	ARG	Sidechain
27	B5	60	ARG	Sidechain
27	B5	78	PHE	Sidechain
58	BA	100	G	Sidechain
58	BA	101	A	Sidechain
58	BA	102	G	Sidechain
58	BA	105	G	Sidechain
58	BA	107	G	Sidechain
58	BA	108	A	Sidechain
58	BA	109	A	Sidechain
58	BA	112	G	Sidechain
58	BA	113	C	Sidechain
58	BA	115	A	Sidechain
58	BA	117	G	Sidechain
58	BA	118	C	Sidechain
58	BA	12	C	Sidechain
58	BA	13	G	Sidechain
58	BA	14	U	Sidechain
58	BA	16	G	Sidechain
58	BA	2	G	Sidechain
58	BA	22	U	Sidechain
58	BA	24	G	Sidechain
58	BA	25	U	Sidechain
58	BA	26	C	Sidechain
58	BA	27	C	Sidechain
58	BA	3	C	Sidechain
58	BA	31	C	Sidechain
58	BA	32	U	Sidechain
58	BA	33	G	Sidechain
58	BA	34	A	Sidechain
58	BA	36	C	Sidechain
58	BA	43	C	Sidechain
58	BA	44	G	Sidechain
58	BA	45	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
58	BA	48	U	Sidechain
58	BA	49	C	Sidechain
58	BA	5	U	Sidechain
58	BA	54	G	Sidechain
58	BA	55	U	Sidechain
58	BA	58	A	Sidechain
58	BA	60	C	Sidechain
58	BA	65	U	Sidechain
58	BA	66	A	Sidechain
58	BA	67	G	Sidechain
58	BA	68	C	Sidechain
58	BA	7	G	Sidechain
58	BA	73	A	Sidechain
58	BA	74	U	Sidechain
58	BA	78	A	Sidechain
58	BA	79	G	Sidechain
58	BA	8	C	Sidechain
58	BA	81	G	Sidechain
58	BA	82	U	Sidechain
58	BA	86	G	Sidechain
58	BA	87	U	Sidechain
58	BA	88	C	Sidechain
58	BA	93	C	Sidechain
58	BA	94	A	Sidechain
58	BA	98	G	Sidechain
57	BB	1	G	Sidechain
57	BB	100	U	Sidechain
57	BB	1000	A	Sidechain
57	BB	1002	G	Sidechain
57	BB	1003	G	Sidechain
57	BB	1005	C	Sidechain
57	BB	1007	C	Sidechain
57	BB	1008	A	Sidechain
57	BB	1009	A	Sidechain
57	BB	101	A	Sidechain
57	BB	1010	A	Sidechain
57	BB	1015	U	Sidechain
57	BB	1016	G	Sidechain
57	BB	1017	G	Sidechain
57	BB	1019	U	Sidechain
57	BB	102	U	Sidechain
57	BB	1024	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1025	G	Sidechain
57	BB	1027	A	Sidechain
57	BB	1028	A	Sidechain
57	BB	103	A	Sidechain
57	BB	1030	C	Sidechain
57	BB	1031	G	Sidechain
57	BB	1033	U	Sidechain
57	BB	1035	U	Sidechain
57	BB	1036	G	Sidechain
57	BB	1037	G	Sidechain
57	BB	104	A	Sidechain
57	BB	1050	A	Sidechain
57	BB	1054	A	Sidechain
57	BB	1055	G	Sidechain
57	BB	106	C	Sidechain
57	BB	1062	G	Sidechain
57	BB	1063	G	Sidechain
57	BB	1068	G	Sidechain
57	BB	107	G	Sidechain
57	BB	1070	A	Sidechain
57	BB	1074	G	Sidechain
57	BB	1078	U	Sidechain
57	BB	1079	C	Sidechain
57	BB	108	G	Sidechain
57	BB	1081	U	Sidechain
57	BB	1083	U	Sidechain
57	BB	1084	A	Sidechain
57	BB	1088	A	Sidechain
57	BB	1089	A	Sidechain
57	BB	109	C	Sidechain
57	BB	1091	G	Sidechain
57	BB	1092	C	Sidechain
57	BB	1094	U	Sidechain
57	BB	1095	A	Sidechain
57	BB	1098	A	Sidechain
57	BB	1099	G	Sidechain
57	BB	11	C	Sidechain
57	BB	110	G	Sidechain
57	BB	1102	C	Sidechain
57	BB	1103	A	Sidechain
57	BB	1104	C	Sidechain
57	BB	1106	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1108	U	Sidechain
57	BB	111	A	Sidechain
57	BB	1110	G	Sidechain
57	BB	1111	A	Sidechain
57	BB	1113	U	Sidechain
57	BB	1115	G	Sidechain
57	BB	1117	C	Sidechain
57	BB	1121	C	Sidechain
57	BB	1122	G	Sidechain
57	BB	1125	G	Sidechain
57	BB	1129	A	Sidechain
57	BB	1131	G	Sidechain
57	BB	1133	A	Sidechain
57	BB	1134	A	Sidechain
57	BB	1138	G	Sidechain
57	BB	1141	U	Sidechain
57	BB	1142	A	Sidechain
57	BB	1143	A	Sidechain
57	BB	1145	C	Sidechain
57	BB	1147	A	Sidechain
57	BB	1149	G	Sidechain
57	BB	1150	C	Sidechain
57	BB	1153	C	Sidechain
57	BB	1154	G	Sidechain
57	BB	1155	A	Sidechain
57	BB	1156	A	Sidechain
57	BB	1160	G	Sidechain
57	BB	1162	G	Sidechain
57	BB	1168	G	Sidechain
57	BB	1169	A	Sidechain
57	BB	117	G	Sidechain
57	BB	1174	U	Sidechain
57	BB	1175	A	Sidechain
57	BB	1176	U	Sidechain
57	BB	1178	C	Sidechain
57	BB	1179	G	Sidechain
57	BB	118	A	Sidechain
57	BB	1181	U	Sidechain
57	BB	1182	G	Sidechain
57	BB	1184	U	Sidechain
57	BB	1185	G	Sidechain
57	BB	1187	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1188	U	Sidechain
57	BB	1189	A	Sidechain
57	BB	119	A	Sidechain
57	BB	1190	G	Sidechain
57	BB	1192	G	Sidechain
57	BB	1195	G	Sidechain
57	BB	1199	U	Sidechain
57	BB	12	U	Sidechain
57	BB	120	U	Sidechain
57	BB	1200	C	Sidechain
57	BB	1202	G	Sidechain
57	BB	1203	U	Sidechain
57	BB	1204	A	Sidechain
57	BB	1206	G	Sidechain
57	BB	1208	C	Sidechain
57	BB	1209	U	Sidechain
57	BB	121	G	Sidechain
57	BB	1210	G	Sidechain
57	BB	1216	G	Sidechain
57	BB	1217	U	Sidechain
57	BB	1218	G	Sidechain
57	BB	122	G	Sidechain
57	BB	1223	G	Sidechain
57	BB	1224	U	Sidechain
57	BB	1226	A	Sidechain
57	BB	1228	G	Sidechain
57	BB	1231	U	Sidechain
57	BB	1234	U	Sidechain
57	BB	1238	G	Sidechain
57	BB	1241	A	Sidechain
57	BB	1248	G	Sidechain
57	BB	1250	G	Sidechain
57	BB	1252	G	Sidechain
57	BB	1253	A	Sidechain
57	BB	1255	U	Sidechain
57	BB	1258	U	Sidechain
57	BB	1266	G	Sidechain
57	BB	1267	U	Sidechain
57	BB	1268	A	Sidechain
57	BB	1269	A	Sidechain
57	BB	127	A	Sidechain
57	BB	1271	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1272	A	Sidechain
57	BB	1273	U	Sidechain
57	BB	1275	A	Sidechain
57	BB	1277	G	Sidechain
57	BB	128	C	Sidechain
57	BB	1280	G	Sidechain
57	BB	1281	G	Sidechain
57	BB	1282	U	Sidechain
57	BB	1283	G	Sidechain
57	BB	1288	G	Sidechain
57	BB	1294	U	Sidechain
57	BB	1299	G	Sidechain
57	BB	1300	G	Sidechain
57	BB	1311	G	Sidechain
57	BB	1313	U	Sidechain
57	BB	1315	C	Sidechain
57	BB	1317	G	Sidechain
57	BB	1322	A	Sidechain
57	BB	1323	C	Sidechain
57	BB	1326	U	Sidechain
57	BB	1327	A	Sidechain
57	BB	1331	G	Sidechain
57	BB	1332	G	Sidechain
57	BB	1333	G	Sidechain
57	BB	1334	G	Sidechain
57	BB	1335	C	Sidechain
57	BB	1336	A	Sidechain
57	BB	1337	G	Sidechain
57	BB	1338	G	Sidechain
57	BB	1339	G	Sidechain
57	BB	1340	U	Sidechain
57	BB	1342	A	Sidechain
57	BB	1343	G	Sidechain
57	BB	1346	G	Sidechain
57	BB	1348	C	Sidechain
57	BB	1349	C	Sidechain
57	BB	135	U	Sidechain
57	BB	1351	C	Sidechain
57	BB	1356	G	Sidechain
57	BB	1359	A	Sidechain
57	BB	136	G	Sidechain
57	BB	1362	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1364	G	Sidechain
57	BB	1366	A	Sidechain
57	BB	1367	A	Sidechain
57	BB	1369	G	Sidechain
57	BB	1370	C	Sidechain
57	BB	1375	U	Sidechain
57	BB	1376	C	Sidechain
57	BB	1378	A	Sidechain
57	BB	1379	U	Sidechain
57	BB	1381	G	Sidechain
57	BB	1382	G	Sidechain
57	BB	1383	A	Sidechain
57	BB	1386	C	Sidechain
57	BB	1389	G	Sidechain
57	BB	1393	A	Sidechain
57	BB	1394	U	Sidechain
57	BB	1397	U	Sidechain
57	BB	140	C	Sidechain
57	BB	1401	G	Sidechain
57	BB	1403	A	Sidechain
57	BB	1406	U	Sidechain
57	BB	141	G	Sidechain
57	BB	1410	G	Sidechain
57	BB	1412	U	Sidechain
57	BB	1417	C	Sidechain
57	BB	1420	A	Sidechain
57	BB	1421	G	Sidechain
57	BB	1424	G	Sidechain
57	BB	1426	G	Sidechain
57	BB	1427	A	Sidechain
57	BB	1429	G	Sidechain
57	BB	1431	A	Sidechain
57	BB	1432	G	Sidechain
57	BB	1434	A	Sidechain
57	BB	1435	G	Sidechain
57	BB	1436	G	Sidechain
57	BB	1437	C	Sidechain
57	BB	1439	A	Sidechain
57	BB	1441	G	Sidechain
57	BB	1442	U	Sidechain
57	BB	1444	G	Sidechain
57	BB	1446	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	145	C	Sidechain
57	BB	1451	C	Sidechain
57	BB	1452	G	Sidechain
57	BB	1453	A	Sidechain
57	BB	1454	C	Sidechain
57	BB	1455	G	Sidechain
57	BB	1456	G	Sidechain
57	BB	1458	U	Sidechain
57	BB	146	A	Sidechain
57	BB	1460	U	Sidechain
57	BB	1461	C	Sidechain
57	BB	1465	G	Sidechain
57	BB	1469	A	Sidechain
57	BB	1470	A	Sidechain
57	BB	1471	G	Sidechain
57	BB	1473	G	Sidechain
57	BB	1474	U	Sidechain
57	BB	1475	G	Sidechain
57	BB	148	U	Sidechain
57	BB	1481	U	Sidechain
57	BB	1482	G	Sidechain
57	BB	1485	U	Sidechain
57	BB	1487	U	Sidechain
57	BB	1490	A	Sidechain
57	BB	1493	C	Sidechain
57	BB	1494	A	Sidechain
57	BB	1495	A	Sidechain
57	BB	1496	A	Sidechain
57	BB	15	G	Sidechain
57	BB	150	U	Sidechain
57	BB	1505	A	Sidechain
57	BB	1506	U	Sidechain
57	BB	1508	A	Sidechain
57	BB	151	C	Sidechain
57	BB	1510	G	Sidechain
57	BB	1512	C	Sidechain
57	BB	1514	G	Sidechain
57	BB	1517	G	Sidechain
57	BB	1520	U	Sidechain
57	BB	1521	G	Sidechain
57	BB	1522	A	Sidechain
57	BB	1524	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1527	G	Sidechain
57	BB	1535	A	Sidechain
57	BB	1536	C	Sidechain
57	BB	1539	U	Sidechain
57	BB	154	U	Sidechain
57	BB	1542	U	Sidechain
57	BB	1545	A	Sidechain
57	BB	1546	G	Sidechain
57	BB	1549	A	Sidechain
57	BB	1551	A	Sidechain
57	BB	1552	A	Sidechain
57	BB	1557	C	Sidechain
57	BB	1560	G	Sidechain
57	BB	1563	U	Sidechain
57	BB	1567	G	Sidechain
57	BB	1568	G	Sidechain
57	BB	157	C	Sidechain
57	BB	1571	A	Sidechain
57	BB	1573	G	Sidechain
57	BB	1574	C	Sidechain
57	BB	1576	U	Sidechain
57	BB	1578	U	Sidechain
57	BB	1582	C	Sidechain
57	BB	1583	A	Sidechain
57	BB	1584	U	Sidechain
57	BB	1586	A	Sidechain
57	BB	1587	G	Sidechain
57	BB	1588	G	Sidechain
57	BB	1589	U	Sidechain
57	BB	159	G	Sidechain
57	BB	1593	A	Sidechain
57	BB	1598	A	Sidechain
57	BB	1599	U	Sidechain
57	BB	160	A	Sidechain
57	BB	1601	G	Sidechain
57	BB	1606	C	Sidechain
57	BB	1609	A	Sidechain
57	BB	161	A	Sidechain
57	BB	1611	C	Sidechain
57	BB	1613	G	Sidechain
57	BB	1619	G	Sidechain
57	BB	162	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1622	G	Sidechain
57	BB	1623	G	Sidechain
57	BB	1625	C	Sidechain
57	BB	1627	G	Sidechain
57	BB	1628	G	Sidechain
57	BB	1629	U	Sidechain
57	BB	163	C	Sidechain
57	BB	1630	A	Sidechain
57	BB	1631	G	Sidechain
57	BB	1632	A	Sidechain
57	BB	1637	A	Sidechain
57	BB	1641	A	Sidechain
57	BB	1642	G	Sidechain
57	BB	1643	G	Sidechain
57	BB	1645	G	Sidechain
57	BB	165	A	Sidechain
57	BB	1652	A	Sidechain
57	BB	1653	G	Sidechain
57	BB	1654	A	Sidechain
57	BB	1656	C	Sidechain
57	BB	1657	U	Sidechain
57	BB	1658	C	Sidechain
57	BB	1660	G	Sidechain
57	BB	1665	A	Sidechain
57	BB	1666	G	Sidechain
57	BB	1668	A	Sidechain
57	BB	1670	C	Sidechain
57	BB	1672	A	Sidechain
57	BB	1678	A	Sidechain
57	BB	1679	A	Sidechain
57	BB	1680	U	Sidechain
57	BB	1681	G	Sidechain
57	BB	1683	U	Sidechain
57	BB	1684	G	Sidechain
57	BB	1689	A	Sidechain
57	BB	169	G	Sidechain
57	BB	1692	U	Sidechain
57	BB	1693	U	Sidechain
57	BB	1694	C	Sidechain
57	BB	1697	G	Sidechain
57	BB	1698	A	Sidechain
57	BB	170	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1700	A	Sidechain
57	BB	1705	A	Sidechain
57	BB	1706	C	Sidechain
57	BB	1707	G	Sidechain
57	BB	1709	U	Sidechain
57	BB	1710	G	Sidechain
57	BB	1713	A	Sidechain
57	BB	1714	U	Sidechain
57	BB	1717	A	Sidechain
57	BB	172	A	Sidechain
57	BB	1720	U	Sidechain
57	BB	1721	G	Sidechain
57	BB	1722	A	Sidechain
57	BB	1733	G	Sidechain
57	BB	1737	G	Sidechain
57	BB	1738	G	Sidechain
57	BB	1739	A	Sidechain
57	BB	1740	G	Sidechain
57	BB	1743	G	Sidechain
57	BB	1744	A	Sidechain
57	BB	1747	U	Sidechain
57	BB	1750	G	Sidechain
57	BB	1754	A	Sidechain
57	BB	1756	G	Sidechain
57	BB	1759	A	Sidechain
57	BB	176	A	Sidechain
57	BB	1762	A	Sidechain
57	BB	1763	G	Sidechain
57	BB	1769	U	Sidechain
57	BB	177	G	Sidechain
57	BB	1772	A	Sidechain
57	BB	1773	A	Sidechain
57	BB	1775	U	Sidechain
57	BB	1776	G	Sidechain
57	BB	1777	U	Sidechain
57	BB	1778	U	Sidechain
57	BB	1779	U	Sidechain
57	BB	178	G	Sidechain
57	BB	1784	A	Sidechain
57	BB	1785	A	Sidechain
57	BB	1786	A	Sidechain
57	BB	179	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1791	A	Sidechain
57	BB	1792	G	Sidechain
57	BB	1793	C	Sidechain
57	BB	1795	C	Sidechain
57	BB	1797	G	Sidechain
57	BB	1799	G	Sidechain
57	BB	18	U	Sidechain
57	BB	1800	C	Sidechain
57	BB	1803	A	Sidechain
57	BB	1804	C	Sidechain
57	BB	1805	A	Sidechain
57	BB	1807	G	Sidechain
57	BB	1809	A	Sidechain
57	BB	1810	A	Sidechain
57	BB	1811	G	Sidechain
57	BB	1814	G	Sidechain
57	BB	1817	G	Sidechain
57	BB	1818	U	Sidechain
57	BB	1820	U	Sidechain
57	BB	1822	C	Sidechain
57	BB	1823	G	Sidechain
57	BB	1831	G	Sidechain
57	BB	1832	C	Sidechain
57	BB	1834	U	Sidechain
57	BB	1836	C	Sidechain
57	BB	1839	G	Sidechain
57	BB	1840	G	Sidechain
57	BB	1841	U	Sidechain
57	BB	1844	C	Sidechain
57	BB	1846	G	Sidechain
57	BB	1848	A	Sidechain
57	BB	1849	G	Sidechain
57	BB	185	G	Sidechain
57	BB	1850	G	Sidechain
57	BB	1852	U	Sidechain
57	BB	1853	A	Sidechain
57	BB	1854	A	Sidechain
57	BB	1857	G	Sidechain
57	BB	1858	A	Sidechain
57	BB	1859	U	Sidechain
57	BB	1861	G	Sidechain
57	BB	1863	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1866	A	Sidechain
57	BB	1873	G	Sidechain
57	BB	1877	A	Sidechain
57	BB	1878	G	Sidechain
57	BB	1879	C	Sidechain
57	BB	188	G	Sidechain
57	BB	1880	U	Sidechain
57	BB	1883	U	Sidechain
57	BB	1884	G	Sidechain
57	BB	1885	A	Sidechain
57	BB	1888	G	Sidechain
57	BB	189	G	Sidechain
57	BB	1890	A	Sidechain
57	BB	1891	G	Sidechain
57	BB	1894	C	Sidechain
57	BB	1898	U	Sidechain
57	BB	190	A	Sidechain
57	BB	1904	G	Sidechain
57	BB	1907	G	Sidechain
57	BB	1908	C	Sidechain
57	BB	191	A	Sidechain
57	BB	1910	G	Sidechain
57	BB	1911	U	Sidechain
57	BB	1912	A	Sidechain
57	BB	1914	C	Sidechain
57	BB	1918	A	Sidechain
57	BB	1919	A	Sidechain
57	BB	192	C	Sidechain
57	BB	1920	C	Sidechain
57	BB	1922	G	Sidechain
57	BB	1923	U	Sidechain
57	BB	1925	C	Sidechain
57	BB	1926	U	Sidechain
57	BB	1927	A	Sidechain
57	BB	1929	G	Sidechain
57	BB	193	U	Sidechain
57	BB	1930	G	Sidechain
57	BB	1933	G	Sidechain
57	BB	1938	A	Sidechain
57	BB	194	G	Sidechain
57	BB	1943	U	Sidechain
57	BB	1944	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	1945	G	Sidechain
57	BB	1946	U	Sidechain
57	BB	1949	G	Sidechain
57	BB	195	A	Sidechain
57	BB	1950	G	Sidechain
57	BB	1952	A	Sidechain
57	BB	1953	A	Sidechain
57	BB	1954	G	Sidechain
57	BB	1955	U	Sidechain
57	BB	1956	U	Sidechain
57	BB	1957	C	Sidechain
57	BB	196	A	Sidechain
57	BB	1960	A	Sidechain
57	BB	1966	A	Sidechain
57	BB	1969	A	Sidechain
57	BB	1970	A	Sidechain
57	BB	1971	U	Sidechain
57	BB	1972	G	Sidechain
57	BB	1974	C	Sidechain
57	BB	1976	U	Sidechain
57	BB	1978	A	Sidechain
57	BB	198	C	Sidechain
57	BB	1980	G	Sidechain
57	BB	1983	G	Sidechain
57	BB	1984	G	Sidechain
57	BB	1987	A	Sidechain
57	BB	1988	G	Sidechain
57	BB	1989	G	Sidechain
57	BB	1991	U	Sidechain
57	BB	1992	G	Sidechain
57	BB	1993	U	Sidechain
57	BB	1995	U	Sidechain
57	BB	1998	A	Sidechain
57	BB	2	G	Sidechain
57	BB	200	U	Sidechain
57	BB	2000	C	Sidechain
57	BB	2002	G	Sidechain
57	BB	2004	G	Sidechain
57	BB	2006	C	Sidechain
57	BB	2007	U	Sidechain
57	BB	2010	G	Sidechain
57	BB	2013	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2018	G	Sidechain
57	BB	202	U	Sidechain
57	BB	2020	A	Sidechain
57	BB	2024	G	Sidechain
57	BB	2026	U	Sidechain
57	BB	2028	U	Sidechain
57	BB	2029	G	Sidechain
57	BB	203	A	Sidechain
57	BB	2030	A	Sidechain
57	BB	2032	G	Sidechain
57	BB	2033	A	Sidechain
57	BB	2034	U	Sidechain
57	BB	2035	G	Sidechain
57	BB	2038	G	Sidechain
57	BB	2039	U	Sidechain
57	BB	2042	A	Sidechain
57	BB	2043	C	Sidechain
57	BB	2048	G	Sidechain
57	BB	205	G	Sidechain
57	BB	2053	G	Sidechain
57	BB	2057	G	Sidechain
57	BB	2058	A	Sidechain
57	BB	206	U	Sidechain
57	BB	2061	G	Sidechain
57	BB	2068	U	Sidechain
57	BB	2069	G	Sidechain
57	BB	207	A	Sidechain
57	BB	2070	A	Sidechain
57	BB	2072	C	Sidechain
57	BB	2073	C	Sidechain
57	BB	2074	U	Sidechain
57	BB	2075	U	Sidechain
57	BB	2076	U	Sidechain
57	BB	2077	A	Sidechain
57	BB	2079	U	Sidechain
57	BB	208	C	Sidechain
57	BB	2080	A	Sidechain
57	BB	2090	A	Sidechain
57	BB	2092	U	Sidechain
57	BB	2094	A	Sidechain
57	BB	2097	A	Sidechain
57	BB	21	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2101	A	Sidechain
57	BB	2102	G	Sidechain
57	BB	2103	C	Sidechain
57	BB	2105	U	Sidechain
57	BB	2106	U	Sidechain
57	BB	2107	G	Sidechain
57	BB	211	C	Sidechain
57	BB	2112	G	Sidechain
57	BB	2113	U	Sidechain
57	BB	2115	G	Sidechain
57	BB	2116	G	Sidechain
57	BB	2119	A	Sidechain
57	BB	2127	G	Sidechain
57	BB	2130	U	Sidechain
57	BB	2132	U	Sidechain
57	BB	2134	A	Sidechain
57	BB	2138	G	Sidechain
57	BB	214	G	Sidechain
57	BB	2141	G	Sidechain
57	BB	2145	C	Sidechain
57	BB	2146	C	Sidechain
57	BB	2148	G	Sidechain
57	BB	2149	U	Sidechain
57	BB	215	G	Sidechain
57	BB	2152	G	Sidechain
57	BB	2154	A	Sidechain
57	BB	2158	A	Sidechain
57	BB	2159	G	Sidechain
57	BB	2161	C	Sidechain
57	BB	2162	G	Sidechain
57	BB	2163	A	Sidechain
57	BB	2164	C	Sidechain
57	BB	2166	U	Sidechain
57	BB	2167	U	Sidechain
57	BB	2168	G	Sidechain
57	BB	2170	A	Sidechain
57	BB	2171	A	Sidechain
57	BB	2173	A	Sidechain
57	BB	2177	C	Sidechain
57	BB	2178	C	Sidechain
57	BB	2179	C	Sidechain
57	BB	2180	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2184	A	Sidechain
57	BB	2186	G	Sidechain
57	BB	2187	U	Sidechain
57	BB	2188	U	Sidechain
57	BB	2189	U	Sidechain
57	BB	219	A	Sidechain
57	BB	2190	G	Sidechain
57	BB	2191	A	Sidechain
57	BB	2195	U	Sidechain
57	BB	2196	C	Sidechain
57	BB	2197	U	Sidechain
57	BB	2198	A	Sidechain
57	BB	2199	A	Sidechain
57	BB	22	C	Sidechain
57	BB	2200	C	Sidechain
57	BB	2202	U	Sidechain
57	BB	2207	C	Sidechain
57	BB	2209	G	Sidechain
57	BB	2210	U	Sidechain
57	BB	2211	A	Sidechain
57	BB	2212	A	Sidechain
57	BB	2213	U	Sidechain
57	BB	2215	C	Sidechain
57	BB	2216	G	Sidechain
57	BB	2217	G	Sidechain
57	BB	2220	U	Sidechain
57	BB	2221	G	Sidechain
57	BB	2222	C	Sidechain
57	BB	2224	G	Sidechain
57	BB	2225	A	Sidechain
57	BB	2226	C	Sidechain
57	BB	2228	G	Sidechain
57	BB	2229	U	Sidechain
57	BB	2230	G	Sidechain
57	BB	2231	U	Sidechain
57	BB	2233	U	Sidechain
57	BB	2234	G	Sidechain
57	BB	2238	G	Sidechain
57	BB	224	U	Sidechain
57	BB	2240	U	Sidechain
57	BB	2242	G	Sidechain
57	BB	2244	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2245	U	Sidechain
57	BB	2246	G	Sidechain
57	BB	2248	C	Sidechain
57	BB	225	C	Sidechain
57	BB	2250	G	Sidechain
57	BB	2251	G	Sidechain
57	BB	2252	G	Sidechain
57	BB	2253	G	Sidechain
57	BB	2254	C	Sidechain
57	BB	2256	G	Sidechain
57	BB	2257	U	Sidechain
57	BB	2258	C	Sidechain
57	BB	2261	C	Sidechain
57	BB	2266	A	Sidechain
57	BB	2267	A	Sidechain
57	BB	2269	G	Sidechain
57	BB	227	A	Sidechain
57	BB	2270	A	Sidechain
57	BB	2272	U	Sidechain
57	BB	2274	A	Sidechain
57	BB	2275	C	Sidechain
57	BB	2277	G	Sidechain
57	BB	2278	A	Sidechain
57	BB	228	C	Sidechain
57	BB	2280	G	Sidechain
57	BB	2283	C	Sidechain
57	BB	2285	C	Sidechain
57	BB	2286	G	Sidechain
57	BB	2287	A	Sidechain
57	BB	2289	G	Sidechain
57	BB	2291	U	Sidechain
57	BB	2292	U	Sidechain
57	BB	2295	C	Sidechain
57	BB	2296	U	Sidechain
57	BB	2297	A	Sidechain
57	BB	2298	A	Sidechain
57	BB	2299	U	Sidechain
57	BB	23	G	Sidechain
57	BB	2300	C	Sidechain
57	BB	2303	G	Sidechain
57	BB	2304	G	Sidechain
57	BB	2308	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	231	A	Sidechain
57	BB	2310	C	Sidechain
57	BB	2311	A	Sidechain
57	BB	2312	U	Sidechain
57	BB	2315	G	Sidechain
57	BB	2317	A	Sidechain
57	BB	2319	G	Sidechain
57	BB	2320	U	Sidechain
57	BB	2321	U	Sidechain
57	BB	2324	U	Sidechain
57	BB	2327	A	Sidechain
57	BB	233	A	Sidechain
57	BB	2333	A	Sidechain
57	BB	2337	G	Sidechain
57	BB	2339	C	Sidechain
57	BB	234	U	Sidechain
57	BB	2345	G	Sidechain
57	BB	2348	U	Sidechain
57	BB	235	U	Sidechain
57	BB	2352	A	Sidechain
57	BB	2353	G	Sidechain
57	BB	2356	U	Sidechain
57	BB	2357	G	Sidechain
57	BB	2359	C	Sidechain
57	BB	2361	G	Sidechain
57	BB	2365	G	Sidechain
57	BB	2366	A	Sidechain
57	BB	2367	G	Sidechain
57	BB	2372	U	Sidechain
57	BB	2375	G	Sidechain
57	BB	2380	C	Sidechain
57	BB	2381	A	Sidechain
57	BB	2382	G	Sidechain
57	BB	2383	G	Sidechain
57	BB	2387	U	Sidechain
57	BB	2394	C	Sidechain
57	BB	2395	C	Sidechain
57	BB	24	G	Sidechain
57	BB	2400	G	Sidechain
57	BB	2401	U	Sidechain
57	BB	2406	A	Sidechain
57	BB	2407	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2409	G	Sidechain
57	BB	2410	G	Sidechain
57	BB	2411	A	Sidechain
57	BB	2412	A	Sidechain
57	BB	2413	G	Sidechain
57	BB	2414	G	Sidechain
57	BB	2417	C	Sidechain
57	BB	242	G	Sidechain
57	BB	2422	C	Sidechain
57	BB	2423	U	Sidechain
57	BB	2428	G	Sidechain
57	BB	2429	G	Sidechain
57	BB	2431	U	Sidechain
57	BB	2434	A	Sidechain
57	BB	2435	A	Sidechain
57	BB	2437	G	Sidechain
57	BB	2440	C	Sidechain
57	BB	2442	C	Sidechain
57	BB	2444	G	Sidechain
57	BB	245	G	Sidechain
57	BB	2451	A	Sidechain
57	BB	2452	C	Sidechain
57	BB	2454	G	Sidechain
57	BB	2458	G	Sidechain
57	BB	246	C	Sidechain
57	BB	2461	A	Sidechain
57	BB	2464	G	Sidechain
57	BB	2466	C	Sidechain
57	BB	2467	C	Sidechain
57	BB	2468	A	Sidechain
57	BB	247	G	Sidechain
57	BB	2470	G	Sidechain
57	BB	2471	A	Sidechain
57	BB	2472	G	Sidechain
57	BB	2473	U	Sidechain
57	BB	2478	A	Sidechain
57	BB	248	G	Sidechain
57	BB	2481	G	Sidechain
57	BB	2482	A	Sidechain
57	BB	2483	C	Sidechain
57	BB	2484	G	Sidechain
57	BB	2486	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2487	G	Sidechain
57	BB	2488	G	Sidechain
57	BB	2489	U	Sidechain
57	BB	249	C	Sidechain
57	BB	2490	G	Sidechain
57	BB	2491	U	Sidechain
57	BB	2498	C	Sidechain
57	BB	25	U	Sidechain
57	BB	250	G	Sidechain
57	BB	2500	U	Sidechain
57	BB	2501	C	Sidechain
57	BB	2502	G	Sidechain
57	BB	2504	U	Sidechain
57	BB	2505	G	Sidechain
57	BB	2506	U	Sidechain
57	BB	251	A	Sidechain
57	BB	2513	A	Sidechain
57	BB	2514	U	Sidechain
57	BB	2516	A	Sidechain
57	BB	2519	U	Sidechain
57	BB	2520	C	Sidechain
57	BB	2521	C	Sidechain
57	BB	2522	U	Sidechain
57	BB	2523	G	Sidechain
57	BB	2524	G	Sidechain
57	BB	2526	G	Sidechain
57	BB	2527	C	Sidechain
57	BB	2528	U	Sidechain
57	BB	2529	G	Sidechain
57	BB	2530	A	Sidechain
57	BB	2531	A	Sidechain
57	BB	2532	G	Sidechain
57	BB	2534	A	Sidechain
57	BB	2535	G	Sidechain
57	BB	2540	C	Sidechain
57	BB	2541	A	Sidechain
57	BB	2543	G	Sidechain
57	BB	2549	G	Sidechain
57	BB	2550	G	Sidechain
57	BB	2555	U	Sidechain
57	BB	2556	C	Sidechain
57	BB	2557	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2558	C	Sidechain
57	BB	2559	C	Sidechain
57	BB	2560	A	Sidechain
57	BB	2564	A	Sidechain
57	BB	2565	A	Sidechain
57	BB	2567	G	Sidechain
57	BB	2569	G	Sidechain
57	BB	2575	C	Sidechain
57	BB	2576	G	Sidechain
57	BB	2577	A	Sidechain
57	BB	2583	G	Sidechain
57	BB	2584	U	Sidechain
57	BB	2585	U	Sidechain
57	BB	2587	A	Sidechain
57	BB	2593	U	Sidechain
57	BB	2596	U	Sidechain
57	BB	2597	G	Sidechain
57	BB	2598	A	Sidechain
57	BB	2599	G	Sidechain
57	BB	26	G	Sidechain
57	BB	2602	A	Sidechain
57	BB	2605	U	Sidechain
57	BB	2610	C	Sidechain
57	BB	2611	C	Sidechain
57	BB	2612	C	Sidechain
57	BB	2618	G	Sidechain
57	BB	262	A	Sidechain
57	BB	2621	G	Sidechain
57	BB	2623	G	Sidechain
57	BB	2626	C	Sidechain
57	BB	2627	G	Sidechain
57	BB	2629	U	Sidechain
57	BB	2632	A	Sidechain
57	BB	2635	A	Sidechain
57	BB	2637	U	Sidechain
57	BB	2638	G	Sidechain
57	BB	264	C	Sidechain
57	BB	2640	G	Sidechain
57	BB	2641	G	Sidechain
57	BB	2644	G	Sidechain
57	BB	265	A	Sidechain
57	BB	2650	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2651	C	Sidechain
57	BB	2652	C	Sidechain
57	BB	2653	U	Sidechain
57	BB	2655	G	Sidechain
57	BB	2660	A	Sidechain
57	BB	2661	G	Sidechain
57	BB	2667	C	Sidechain
57	BB	2669	G	Sidechain
57	BB	2671	G	Sidechain
57	BB	2672	U	Sidechain
57	BB	2673	G	Sidechain
57	BB	2674	G	Sidechain
57	BB	268	C	Sidechain
57	BB	2684	U	Sidechain
57	BB	2685	G	Sidechain
57	BB	2687	U	Sidechain
57	BB	2688	G	Sidechain
57	BB	2689	U	Sidechain
57	BB	269	C	Sidechain
57	BB	2690	U	Sidechain
57	BB	2692	G	Sidechain
57	BB	2695	U	Sidechain
57	BB	27	G	Sidechain
57	BB	270	A	Sidechain
57	BB	2701	U	Sidechain
57	BB	2702	G	Sidechain
57	BB	2704	C	Sidechain
57	BB	2707	U	Sidechain
57	BB	2709	G	Sidechain
57	BB	2713	U	Sidechain
57	BB	2714	G	Sidechain
57	BB	2715	C	Sidechain
57	BB	2717	C	Sidechain
57	BB	2718	G	Sidechain
57	BB	2719	G	Sidechain
57	BB	272	A	Sidechain
57	BB	2721	A	Sidechain
57	BB	2726	A	Sidechain
57	BB	2729	G	Sidechain
57	BB	2730	C	Sidechain
57	BB	2732	G	Sidechain
57	BB	2734	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2735	G	Sidechain
57	BB	2736	A	Sidechain
57	BB	2739	U	Sidechain
57	BB	2741	A	Sidechain
57	BB	2747	G	Sidechain
57	BB	2748	A	Sidechain
57	BB	275	C	Sidechain
57	BB	2752	C	Sidechain
57	BB	2753	A	Sidechain
57	BB	2754	U	Sidechain
57	BB	2756	U	Sidechain
57	BB	2757	A	Sidechain
57	BB	2758	A	Sidechain
57	BB	2759	G	Sidechain
57	BB	2766	A	Sidechain
57	BB	2767	C	Sidechain
57	BB	2768	U	Sidechain
57	BB	2770	G	Sidechain
57	BB	2771	C	Sidechain
57	BB	2778	A	Sidechain
57	BB	2780	G	Sidechain
57	BB	2781	A	Sidechain
57	BB	2782	G	Sidechain
57	BB	2788	C	Sidechain
57	BB	279	A	Sidechain
57	BB	2790	U	Sidechain
57	BB	2795	C	Sidechain
57	BB	2797	U	Sidechain
57	BB	2798	U	Sidechain
57	BB	28	A	Sidechain
57	BB	2800	A	Sidechain
57	BB	2811	G	Sidechain
57	BB	2812	G	Sidechain
57	BB	2813	A	Sidechain
57	BB	2816	G	Sidechain
57	BB	2818	U	Sidechain
57	BB	2819	G	Sidechain
57	BB	2820	A	Sidechain
57	BB	2821	A	Sidechain
57	BB	2829	A	Sidechain
57	BB	283	G	Sidechain
57	BB	2830	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	2831	G	Sidechain
57	BB	2834	G	Sidechain
57	BB	2835	A	Sidechain
57	BB	2836	U	Sidechain
57	BB	2839	G	Sidechain
57	BB	2840	C	Sidechain
57	BB	2842	G	Sidechain
57	BB	2843	G	Sidechain
57	BB	2845	U	Sidechain
57	BB	2848	G	Sidechain
57	BB	2849	U	Sidechain
57	BB	2851	A	Sidechain
57	BB	2852	G	Sidechain
57	BB	2857	G	Sidechain
57	BB	2858	C	Sidechain
57	BB	2859	G	Sidechain
57	BB	2860	A	Sidechain
57	BB	2864	G	Sidechain
57	BB	2866	U	Sidechain
57	BB	287	G	Sidechain
57	BB	2873	A	Sidechain
57	BB	2876	G	Sidechain
57	BB	2877	G	Sidechain
57	BB	2878	U	Sidechain
57	BB	288	U	Sidechain
57	BB	2884	U	Sidechain
57	BB	2885	G	Sidechain
57	BB	2886	A	Sidechain
57	BB	2888	C	Sidechain
57	BB	2889	C	Sidechain
57	BB	289	G	Sidechain
57	BB	2890	G	Sidechain
57	BB	2891	U	Sidechain
57	BB	2893	A	Sidechain
57	BB	2894	G	Sidechain
57	BB	2900	A	Sidechain
57	BB	2901	C	Sidechain
57	BB	2903	U	Sidechain
57	BB	291	G	Sidechain
57	BB	292	U	Sidechain
57	BB	298	G	Sidechain
57	BB	30	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	307	G	Sidechain
57	BB	308	G	Sidechain
57	BB	316	C	Sidechain
57	BB	320	A	Sidechain
57	BB	321	U	Sidechain
57	BB	322	A	Sidechain
57	BB	324	A	Sidechain
57	BB	325	G	Sidechain
57	BB	328	U	Sidechain
57	BB	329	G	Sidechain
57	BB	330	A	Sidechain
57	BB	331	C	Sidechain
57	BB	333	G	Sidechain
57	BB	334	C	Sidechain
57	BB	335	C	Sidechain
57	BB	336	C	Sidechain
57	BB	337	C	Sidechain
57	BB	339	U	Sidechain
57	BB	342	A	Sidechain
57	BB	343	C	Sidechain
57	BB	345	A	Sidechain
57	BB	347	A	Sidechain
57	BB	350	G	Sidechain
57	BB	352	A	Sidechain
57	BB	353	C	Sidechain
57	BB	356	G	Sidechain
57	BB	359	G	Sidechain
57	BB	360	U	Sidechain
57	BB	361	G	Sidechain
57	BB	362	A	Sidechain
57	BB	363	G	Sidechain
57	BB	365	U	Sidechain
57	BB	366	C	Sidechain
57	BB	367	G	Sidechain
57	BB	369	U	Sidechain
57	BB	370	G	Sidechain
57	BB	372	G	Sidechain
57	BB	375	G	Sidechain
57	BB	376	G	Sidechain
57	BB	377	G	Sidechain
57	BB	380	G	Sidechain
57	BB	381	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	384	A	Sidechain
57	BB	385	C	Sidechain
57	BB	386	G	Sidechain
57	BB	388	G	Sidechain
57	BB	39	G	Sidechain
57	BB	390	U	Sidechain
57	BB	394	C	Sidechain
57	BB	395	U	Sidechain
57	BB	397	U	Sidechain
57	BB	400	G	Sidechain
57	BB	402	A	Sidechain
57	BB	405	U	Sidechain
57	BB	406	G	Sidechain
57	BB	407	G	Sidechain
57	BB	419	U	Sidechain
57	BB	421	C	Sidechain
57	BB	422	A	Sidechain
57	BB	423	A	Sidechain
57	BB	424	G	Sidechain
57	BB	428	A	Sidechain
57	BB	429	A	Sidechain
57	BB	43	G	Sidechain
57	BB	431	U	Sidechain
57	BB	435	C	Sidechain
57	BB	436	C	Sidechain
57	BB	437	U	Sidechain
57	BB	438	G	Sidechain
57	BB	443	A	Sidechain
57	BB	446	G	Sidechain
57	BB	449	A	Sidechain
57	BB	453	A	Sidechain
57	BB	454	A	Sidechain
57	BB	457	A	Sidechain
57	BB	458	G	Sidechain
57	BB	460	A	Sidechain
57	BB	464	U	Sidechain
57	BB	465	G	Sidechain
57	BB	466	A	Sidechain
57	BB	467	G	Sidechain
57	BB	469	G	Sidechain
57	BB	47	C	Sidechain
57	BB	470	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	472	A	Sidechain
57	BB	475	C	Sidechain
57	BB	476	G	Sidechain
57	BB	477	A	Sidechain
57	BB	478	A	Sidechain
57	BB	479	A	Sidechain
57	BB	480	A	Sidechain
57	BB	481	G	Sidechain
57	BB	489	G	Sidechain
57	BB	490	C	Sidechain
57	BB	491	G	Sidechain
57	BB	492	A	Sidechain
57	BB	493	G	Sidechain
57	BB	494	G	Sidechain
57	BB	496	G	Sidechain
57	BB	498	G	Sidechain
57	BB	499	U	Sidechain
57	BB	50	U	Sidechain
57	BB	503	A	Sidechain
57	BB	504	A	Sidechain
57	BB	506	G	Sidechain
57	BB	51	G	Sidechain
57	BB	512	G	Sidechain
57	BB	514	A	Sidechain
57	BB	52	A	Sidechain
57	BB	526	A	Sidechain
57	BB	527	C	Sidechain
57	BB	529	A	Sidechain
57	BB	53	A	Sidechain
57	BB	530	G	Sidechain
57	BB	532	A	Sidechain
57	BB	537	G	Sidechain
57	BB	538	A	Sidechain
57	BB	54	G	Sidechain
57	BB	542	C	Sidechain
57	BB	543	G	Sidechain
57	BB	545	U	Sidechain
57	BB	547	A	Sidechain
57	BB	548	G	Sidechain
57	BB	549	G	Sidechain
57	BB	55	G	Sidechain
57	BB	552	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	555	G	Sidechain
57	BB	556	A	Sidechain
57	BB	56	A	Sidechain
57	BB	561	G	Sidechain
57	BB	563	A	Sidechain
57	BB	566	U	Sidechain
57	BB	570	G	Sidechain
57	BB	571	U	Sidechain
57	BB	574	A	Sidechain
57	BB	575	A	Sidechain
57	BB	577	G	Sidechain
57	BB	578	G	Sidechain
57	BB	579	G	Sidechain
57	BB	581	C	Sidechain
57	BB	585	G	Sidechain
57	BB	588	U	Sidechain
57	BB	59	U	Sidechain
57	BB	593	U	Sidechain
57	BB	595	C	Sidechain
57	BB	597	G	Sidechain
57	BB	598	U	Sidechain
57	BB	604	G	Sidechain
57	BB	606	U	Sidechain
57	BB	608	A	Sidechain
57	BB	612	G	Sidechain
57	BB	613	A	Sidechain
57	BB	615	U	Sidechain
57	BB	617	G	Sidechain
57	BB	618	G	Sidechain
57	BB	619	G	Sidechain
57	BB	628	G	Sidechain
57	BB	629	G	Sidechain
57	BB	630	G	Sidechain
57	BB	631	A	Sidechain
57	BB	632	A	Sidechain
57	BB	633	A	Sidechain
57	BB	636	G	Sidechain
57	BB	637	A	Sidechain
57	BB	638	G	Sidechain
57	BB	64	A	Sidechain
57	BB	641	U	Sidechain
57	BB	644	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	645	C	Sidechain
57	BB	647	G	Sidechain
57	BB	648	G	Sidechain
57	BB	656	G	Sidechain
57	BB	659	G	Sidechain
57	BB	660	C	Sidechain
57	BB	663	G	Sidechain
57	BB	666	A	Sidechain
57	BB	667	U	Sidechain
57	BB	669	G	Sidechain
57	BB	671	C	Sidechain
57	BB	673	C	Sidechain
57	BB	674	G	Sidechain
57	BB	675	A	Sidechain
57	BB	676	A	Sidechain
57	BB	677	A	Sidechain
57	BB	679	C	Sidechain
57	BB	68	G	Sidechain
57	BB	680	C	Sidechain
57	BB	681	G	Sidechain
57	BB	682	G	Sidechain
57	BB	683	U	Sidechain
57	BB	684	G	Sidechain
57	BB	685	A	Sidechain
57	BB	686	U	Sidechain
57	BB	687	C	Sidechain
57	BB	688	U	Sidechain
57	BB	690	G	Sidechain
57	BB	693	A	Sidechain
57	BB	695	G	Sidechain
57	BB	696	G	Sidechain
57	BB	697	G	Sidechain
57	BB	7	G	Sidechain
57	BB	70	G	Sidechain
57	BB	700	G	Sidechain
57	BB	703	U	Sidechain
57	BB	704	G	Sidechain
57	BB	705	A	Sidechain
57	BB	706	A	Sidechain
57	BB	708	G	Sidechain
57	BB	711	G	Sidechain
57	BB	712	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	715	A	Sidechain
57	BB	716	A	Sidechain
57	BB	72	U	Sidechain
57	BB	723	C	Sidechain
57	BB	725	G	Sidechain
57	BB	726	G	Sidechain
57	BB	727	A	Sidechain
57	BB	728	G	Sidechain
57	BB	730	A	Sidechain
57	BB	731	C	Sidechain
57	BB	733	G	Sidechain
57	BB	734	A	Sidechain
57	BB	735	A	Sidechain
57	BB	737	C	Sidechain
57	BB	738	G	Sidechain
57	BB	739	A	Sidechain
57	BB	740	C	Sidechain
57	BB	741	U	Sidechain
57	BB	742	A	Sidechain
57	BB	744	U	Sidechain
57	BB	746	U	Sidechain
57	BB	75	G	Sidechain
57	BB	750	A	Sidechain
57	BB	752	A	Sidechain
57	BB	754	U	Sidechain
57	BB	756	A	Sidechain
57	BB	759	G	Sidechain
57	BB	76	C	Sidechain
57	BB	760	G	Sidechain
57	BB	761	A	Sidechain
57	BB	762	U	Sidechain
57	BB	763	G	Sidechain
57	BB	764	A	Sidechain
57	BB	766	U	Sidechain
57	BB	767	U	Sidechain
57	BB	768	G	Sidechain
57	BB	773	U	Sidechain
57	BB	776	G	Sidechain
57	BB	777	G	Sidechain
57	BB	778	G	Sidechain
57	BB	780	G	Sidechain
57	BB	782	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	784	G	Sidechain
57	BB	79	C	Sidechain
57	BB	792	A	Sidechain
57	BB	793	A	Sidechain
57	BB	794	A	Sidechain
57	BB	799	G	Sidechain
57	BB	8	C	Sidechain
57	BB	80	G	Sidechain
57	BB	802	A	Sidechain
57	BB	803	U	Sidechain
57	BB	804	A	Sidechain
57	BB	807	U	Sidechain
57	BB	809	G	Sidechain
57	BB	81	G	Sidechain
57	BB	810	U	Sidechain
57	BB	813	U	Sidechain
57	BB	814	C	Sidechain
57	BB	817	C	Sidechain
57	BB	821	A	Sidechain
57	BB	822	G	Sidechain
57	BB	826	U	Sidechain
57	BB	827	U	Sidechain
57	BB	829	A	Sidechain
57	BB	830	G	Sidechain
57	BB	833	A	Sidechain
57	BB	835	C	Sidechain
57	BB	836	G	Sidechain
57	BB	838	C	Sidechain
57	BB	841	G	Sidechain
57	BB	842	U	Sidechain
57	BB	844	A	Sidechain
57	BB	845	A	Sidechain
57	BB	847	U	Sidechain
57	BB	849	A	Sidechain
57	BB	85	G	Sidechain
57	BB	853	C	Sidechain
57	BB	854	C	Sidechain
57	BB	857	G	Sidechain
57	BB	858	G	Sidechain
57	BB	859	G	Sidechain
57	BB	860	U	Sidechain
57	BB	866	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	87	U	Sidechain
57	BB	870	U	Sidechain
57	BB	877	A	Sidechain
57	BB	88	G	Sidechain
57	BB	880	G	Sidechain
57	BB	881	G	Sidechain
57	BB	882	G	Sidechain
57	BB	883	G	Sidechain
57	BB	884	U	Sidechain
57	BB	885	C	Sidechain
57	BB	886	A	Sidechain
57	BB	89	A	Sidechain
57	BB	891	G	Sidechain
57	BB	892	A	Sidechain
57	BB	895	U	Sidechain
57	BB	896	A	Sidechain
57	BB	898	C	Sidechain
57	BB	90	U	Sidechain
57	BB	900	A	Sidechain
57	BB	91	A	Sidechain
57	BB	910	A	Sidechain
57	BB	911	A	Sidechain
57	BB	912	C	Sidechain
57	BB	913	U	Sidechain
57	BB	916	G	Sidechain
57	BB	917	A	Sidechain
57	BB	919	U	Sidechain
57	BB	924	G	Sidechain
57	BB	925	A	Sidechain
57	BB	926	G	Sidechain
57	BB	928	A	Sidechain
57	BB	929	U	Sidechain
57	BB	932	U	Sidechain
57	BB	933	A	Sidechain
57	BB	934	U	Sidechain
57	BB	935	C	Sidechain
57	BB	936	A	Sidechain
57	BB	938	G	Sidechain
57	BB	939	G	Sidechain
57	BB	940	G	Sidechain
57	BB	942	G	Sidechain
57	BB	944	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
57	BB	945	A	Sidechain
57	BB	946	C	Sidechain
57	BB	948	C	Sidechain
57	BB	949	G	Sidechain
57	BB	95	A	Sidechain
57	BB	953	G	Sidechain
57	BB	954	G	Sidechain
57	BB	955	U	Sidechain
57	BB	956	G	Sidechain
57	BB	958	U	Sidechain
57	BB	959	A	Sidechain
57	BB	96	C	Sidechain
57	BB	961	C	Sidechain
57	BB	962	G	Sidechain
57	BB	963	U	Sidechain
57	BB	965	C	Sidechain
57	BB	967	U	Sidechain
57	BB	972	A	Sidechain
57	BB	974	G	Sidechain
57	BB	977	G	Sidechain
57	BB	981	A	Sidechain
57	BB	984	A	Sidechain
57	BB	986	C	Sidechain
57	BB	988	A	Sidechain
57	BB	989	G	Sidechain
57	BB	995	C	Sidechain
57	BB	996	A	Sidechain
57	BB	997	G	Sidechain
57	BB	998	C	Sidechain
57	BB	999	U	Sidechain
45	BC	102	TYR	Sidechain
45	BC	12	ARG	Sidechain
45	BC	176	ARG	Sidechain
45	BC	213	ARG	Sidechain
45	BC	231	HIS	Sidechain
45	BC	27	LYS	Peptide
45	BC	57	HIS	Sidechain
45	BC	82	TYR	Sidechain
45	BC	95	TYR	Sidechain
52	BD	141	ARG	Sidechain
52	BD	153	GLY	Peptide
52	BD	179	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
52	BD	33	ARG	Sidechain
52	BD	68	PHE	Sidechain
53	BE	114	ARG	Sidechain
53	BE	136	GLN	Peptide
53	BE	162	ARG	Sidechain
53	BE	19	PHE	Sidechain
53	BE	21	ARG	Sidechain
53	BE	35	TYR	Sidechain
53	BE	5	LEU	Peptide
54	BF	130	GLY	Peptide
54	BF	132	ARG	Sidechain
54	BF	142	TYR	Sidechain
54	BF	147	ARG	Sidechain
54	BF	176	PHE	Sidechain
54	BF	21	TYR	Sidechain
54	BF	6	TYR	Sidechain
54	BF	7	TYR	Sidechain
54	BF	91	ARG	Sidechain
55	BG	110	HIS	Peptide
55	BG	114	HIS	Sidechain
55	BG	151	ARG	Peptide
55	BG	34	ARG	Sidechain
55	BG	57	TYR	Sidechain
56	BH	139	PHE	Sidechain
56	BH	25	TYR	Sidechain
56	BH	97	ARG	Sidechain
28	BI	10	LEU	Peptide
28	BI	3	LYS	Peptide
28	BI	7	TYR	Sidechain
29	BJ	116	ARG	Sidechain
29	BJ	125	TYR	Sidechain
29	BJ	16	TYR	Sidechain
29	BJ	37	ARG	Sidechain
29	BJ	44	TYR	Sidechain
29	BJ	53	TYR	Sidechain
29	BJ	74	TYR	Sidechain
29	BJ	77	HIS	Sidechain
29	BJ	99	ARG	Sidechain
30	BK	77	ARG	Sidechain
31	BL	123	ARG	Sidechain
31	BL	33	ARG	Sidechain
31	BL	41	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
31	BL	59	ARG	Sidechain
31	BL	60	ARG	Sidechain
31	BL	64	PHE	Sidechain
31	BL	66	PHE	Sidechain
31	BL	7	SER	Peptide
32	BM	38	ARG	Sidechain
32	BM	44	ARG	Sidechain
32	BM	66	ARG	Sidechain
32	BM	91	TYR	Sidechain
33	BN	4	ARG	Sidechain
33	BN	69	ARG	Sidechain
33	BN	71	ARG	Sidechain
34	BO	33	ARG	Sidechain
34	BO	36	TYR	Sidechain
34	BO	55	GLU	Peptide
34	BO	64	TYR	Sidechain
35	BP	108	ARG	Sidechain
35	BP	19	PHE	Peptide
36	BQ	10	ARG	Sidechain
36	BQ	27	ARG	Sidechain
36	BQ	46	TYR	Sidechain
36	BQ	47	ARG	Sidechain
37	BR	54	VAL	Peptide
37	BR	77	PHE	Sidechain
37	BR	78	ARG	Sidechain
37	BR	82	HIS	Sidechain
37	BR	83	TYR	Sidechain
37	BR	93	PHE	Sidechain
38	BS	6	LYS	Peptide
39	BT	3	ARG	Peptide
39	BT	77	ARG	Sidechain
40	BU	21	ARG	Sidechain
40	BU	81	ARG	Sidechain
41	BV	19	ARG	Sidechain
41	BV	31	TYR	Sidechain
41	BV	72	VAL	Peptide
41	BV	82	TYR	Sidechain
42	BW	10	ARG	Sidechain
42	BW	19	ARG	Sidechain
42	BW	44	PHE	Sidechain
43	BX	36	ARG	Sidechain
43	BX	44	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
43	BX	77	TYR	Sidechain
44	BY	47	ARG	Sidechain
44	BY	7	ARG	Sidechain
46	BZ	10	ARG	Sidechain
46	BZ	44	ARG	Sidechain
46	BZ	52	PHE	Sidechain

5.2 Too-close contacts

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	AJ	787	0	828	4	0
2	AK	877	0	887	1	0
3	AL	955	0	1019	9	0
4	AM	877	0	937	8	0
5	AN	774	0	828	9	0
6	AO	716	0	742	8	0
7	AP	639	0	656	2	0
8	AQ	649	0	691	3	0
9	AR	456	0	478	4	0
10	AS	638	0	665	7	0
11	AT	665	0	714	1	0
12	AU	426	0	449	0	0
13	AB	1705	0	1732	9	0
14	AC	1625	0	1699	7	0
15	AD	1643	0	1710	17	0
16	AE	1106	0	1148	6	0
17	AF	818	0	808	6	0
18	AG	1175	0	1230	10	0
19	AH	979	0	1034	4	0
20	AI	1022	0	1070	4	0
21	AA	32832	0	16503	179	0
22	AY	1622	0	812	11	0
23	AW	1619	0	822	22	0
24	AX	232	0	120	2	0
25	AZ	3035	0	3049	17	0
26	AV	1645	0	834	6	0
27	B5	1733	0	1823	10	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	BI	1032	0	1088	4	0
29	BJ	1129	0	1162	8	0
30	BK	931	0	1003	5	0
31	BL	1045	0	1117	6	0
32	BM	1074	0	1157	1	0
33	BN	961	0	1000	5	0
34	BO	892	0	923	2	0
35	BP	917	0	965	5	0
36	BQ	947	0	1022	4	0
37	BR	816	0	839	3	0
38	BS	857	0	922	3	0
39	BT	739	0	807	4	0
40	BU	780	0	834	5	0
41	BV	753	0	780	3	0
42	BW	596	0	610	5	0
43	BX	625	0	655	3	0
44	BY	509	0	543	1	0
45	BC	2083	0	2157	16	0
46	BZ	449	0	491	0	0
47	B0	444	0	461	6	0
48	B1	410	0	440	4	0
49	B2	377	0	418	3	0
50	B3	504	0	574	3	0
51	B4	302	0	343	0	0
52	BD	1565	0	1616	16	0
53	BE	1552	0	1619	7	0
54	BF	1420	0	1460	10	0
55	BG	1323	0	1374	7	0
56	BH	1111	0	1148	4	0
57	BB	62321	0	31298	323	0
58	BA	2508	0	1268	8	0
59	AZ	28	0	12	0	0
All	All	152250	0	103394	772	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 3.

All (772) 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)
23:AW:63:G:C4	23:AW:63:G:C5	1.87	1.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:63:G:C8	23:AW:63:G:N7	1.67	1.56
23:AW:63:G:N7	23:AW:63:G:C5	1.86	1.43
23:AW:63:G:C4	23:AW:63:G:N9	1.90	1.40
23:AW:63:G:C8	23:AW:63:G:N9	1.97	1.31
21:AA:842:U:H3'	21:AA:843:U:H4'	1.63	0.80
57:BB:877:A:C2	57:BB:901:C:C2	2.70	0.79
21:AA:664:G:H22	21:AA:741:G:H1	1.31	0.77
21:AA:199:A:H61	21:AA:218:U:H3	1.34	0.75
45:BC:261:ARG:HH22	57:BB:2223:G:H21	1.36	0.74
21:AA:1131:G:H1	21:AA:1143:G:H21	1.38	0.71
16:AE:38:VAL:HG22	16:AE:44:ARG:HB2	1.73	0.71
21:AA:55:A:C4	25:AZ:222:GLY:HA3	2.26	0.70
41:BV:79:ARG:HE	41:BV:84:PRO:HA	1.56	0.69
23:AW:62:C:H2'	23:AW:63:G:C8	2.29	0.68
57:BB:2792:A:H3'	57:BB:2793:C:H5''	1.76	0.67
21:AA:781:A:H2'	21:AA:782:A:H5'	1.76	0.67
35:BP:7:LEU:HD11	52:BD:179:ARG:HH12	1.58	0.67
21:AA:1239:A:H62	21:AA:1299:A:H62	1.43	0.66
15:AD:99:ASN:HD22	15:AD:103:ARG:HH21	1.43	0.65
45:BC:190:THR:HG22	45:BC:191:LEU:H	1.61	0.65
21:AA:1305:G:H22	21:AA:1331:G:H2'	1.61	0.65
26:AV:6:G:H1	26:AV:67:C:H42	1.44	0.64
5:AN:29:ILE:HG13	5:AN:30:ILE:H	1.62	0.63
15:AD:12:ARG:HA	15:AD:34:GLU:H	1.63	0.63
57:BB:1283:G:H22	57:BB:1286:A:H5'	1.64	0.62
6:AO:24:THR:HA	6:AO:27:GLN:HE21	1.65	0.62
29:BJ:77:HIS:CD2	29:BJ:79:GLY:H	2.18	0.62
23:AW:63:G:C8	23:AW:63:G:C5	2.87	0.62
47:B0:49:ARG:HD3	47:B0:49:ARG:H	1.64	0.62
1:AJ:32:THR:HG21	1:AJ:86:ALA:HB3	1.82	0.61
57:BB:962:G:H21	57:BB:2250:G:H1	1.49	0.61
48:B1:16:THR:HG23	48:B1:18:HIS:H	1.65	0.61
29:BJ:20:ALA:H	29:BJ:58:ASN:HD21	1.47	0.61
48:B1:8:ILE:HD12	48:B1:51:ALA:HB1	1.83	0.60
21:AA:1305:G:H21	21:AA:1332:A:H8	1.50	0.60
7:AP:52:LEU:HD11	7:AP:78:VAL:HG21	1.84	0.60
45:BC:179:GLU:HA	45:BC:268:ARG:HE	1.67	0.60
1:AJ:31:ARG:H	1:AJ:31:ARG:HE	1.50	0.59
21:AA:1409:C:H4'	57:BB:1914:C:H42	1.68	0.59
21:AA:1005:A:C5	21:AA:1006:G:H1'	2.38	0.58
40:BU:86:PHE:HB2	40:BU:92:VAL:HG12	1.83	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AD:66:VAL:HG22	15:AD:70:GLN:HB2	1.85	0.58
57:BB:548:G:H4'	57:BB:549:G:C4	2.39	0.58
57:BB:2547:A:H2'	57:BB:2548:U:C6	2.38	0.58
52:BD:55:LYS:HG2	52:BD:56:LYS:H	1.68	0.58
21:AA:496:A:H2'	21:AA:497:G:C8	2.39	0.57
13:AB:217:ALA:HA	13:AB:221:ARG:HH22	1.69	0.57
57:BB:1079:C:C4	57:BB:1088:A:C2	2.92	0.57
57:BB:2233:U:H2'	57:BB:2234:G:C8	2.38	0.57
21:AA:243:A:H4'	21:AA:244:U:H5'	1.87	0.57
21:AA:507:C:H3'	21:AA:508:U:H5''	1.87	0.56
21:AA:858:G:H1	21:AA:869:G:H3'	1.70	0.56
15:AD:146:GLU:CD	15:AD:146:GLU:H	2.09	0.56
6:AO:52:ARG:HA	6:AO:55:LEU:HD12	1.88	0.56
21:AA:1127:G:H22	21:AA:1145:A:H2	1.53	0.56
39:BT:69:ARG:HH22	57:BB:91:A:H61	1.54	0.56
57:BB:632:A:C6	57:BB:633:A:C2	2.94	0.56
13:AB:125:PHE:CE2	13:AB:136:ARG:HB3	2.41	0.55
53:BE:146:VAL:HG23	53:BE:167:VAL:HG23	1.87	0.55
4:AM:26:LYS:HD3	4:AM:26:LYS:H	1.71	0.55
54:BF:142:TYR:HA	54:BF:149:ARG:HH12	1.71	0.55
19:AH:11:THR:HA	19:AH:14:ARG:HH21	1.71	0.55
57:BB:1533:C:C4	57:BB:1534:U:C4	2.95	0.55
18:AG:52:ARG:HH11	18:AG:124:SER:HB3	1.70	0.55
42:BW:49:ASN:HD22	42:BW:60:ALA:HA	1.71	0.55
57:BB:2091:C:H3'	57:BB:2092:U:H5''	1.87	0.55
21:AA:1395:C:H5'	21:AA:1401:G:H21	1.72	0.55
57:BB:1024:G:H3'	57:BB:1025:G:H5''	1.88	0.55
57:BB:1533:C:C5	57:BB:1534:U:C5	2.95	0.54
21:AA:1300:G:C5	21:AA:1334:G:C6	2.95	0.54
21:AA:1062:U:H2'	21:AA:1063:C:C6	2.43	0.54
21:AA:697:U:C5	21:AA:698:G:C8	2.95	0.54
55:BG:101:VAL:HG22	55:BG:115:GLN:HE22	1.72	0.54
30:BK:50:LYS:HD3	30:BK:50:LYS:H	1.72	0.54
57:BB:1791:A:C8	57:BB:1792:G:C8	2.96	0.54
21:AA:1333:A:H3'	21:AA:1334:G:H8	1.72	0.54
45:BC:152:GLN:HG3	45:BC:153:LEU:HD12	1.90	0.54
55:BG:86:LEU:CD2	55:BG:147:LEU:HD13	2.38	0.54
9:AR:38:ILE:HD11	21:AA:720:C:H4'	1.89	0.54
57:BB:63:A:H2'	57:BB:64:A:C8	2.43	0.54
52:BD:13:ARG:HE	57:BB:2683:C:H4'	1.73	0.53
54:BF:107:VAL:H	54:BF:108:PRO:CD	2.21	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AA:687:A:C2	21:AA:704:A:C5	2.96	0.53
21:AA:499:A:H61	21:AA:547:A:H5''	1.72	0.53
21:AA:842:U:C3'	21:AA:843:U:H4'	2.36	0.53
57:BB:480:A:H3'	57:BB:481:G:H5''	1.90	0.53
23:AW:39:U:H2'	23:AW:40:C:H5''	1.89	0.53
7:AP:60:TRP:HA	7:AP:60:TRP:CE3	2.44	0.53
57:BB:172:A:C2	57:BB:173:A:C4	2.96	0.53
52:BD:6:GLY:HA2	52:BD:29:VAL:HG22	1.91	0.53
21:AA:181:A:H1'	21:AA:182:A:C2	2.44	0.53
21:AA:973:G:H3'	21:AA:974:A:H5''	1.90	0.53
20:AI:44:ARG:HB2	20:AI:48:ARG:HH21	1.74	0.53
3:AL:89:LEU:HB2	3:AL:92:VAL:HG21	1.90	0.53
57:BB:308:G:C2	57:BB:309:A:C2	2.97	0.53
29:BJ:20:ALA:H	29:BJ:58:ASN:ND2	2.07	0.53
10:AS:70:LEU:H	10:AS:70:LEU:HD12	1.73	0.53
27:B5:198:LYS:HA	27:B5:198:LYS:HE2	1.91	0.53
19:AH:2:MET:HG3	21:AA:588:G:H4'	1.89	0.53
23:AW:18:G:H1	23:AW:55:U:H1'	1.74	0.53
57:BB:2357:G:H22	57:BB:2359:C:H3'	1.74	0.53
21:AA:860:A:H3'	21:AA:861:G:H8	1.73	0.53
19:AH:106:SER:HA	21:AA:642:A:C4	2.43	0.52
45:BC:154:ALA:HB2	45:BC:161:VAL:HG23	1.89	0.52
53:BE:52:VAL:HG21	53:BE:82:GLY:H	1.74	0.52
38:BS:15:GLN:HA	38:BS:18:ARG:HE	1.74	0.52
21:AA:979:C:C5	21:AA:980:C:C4	2.97	0.52
57:BB:1684:G:C5	57:BB:1685:C:C5	2.97	0.52
57:BB:2453:A:H61	57:BB:2499:C:H42	1.55	0.52
55:BG:145:ALA:HA	55:BG:148:ARG:HE	1.74	0.52
21:AA:408:A:C2	21:AA:435:A:C2	2.98	0.52
21:AA:464:U:H2'	21:AA:465:A:H3'	1.92	0.52
57:BB:1082:U:C4	57:BB:1086:A:C2	2.98	0.52
21:AA:1305:G:N2	21:AA:1332:A:H8	2.08	0.52
3:AL:32:VAL:HG12	3:AL:33:CYS:H	1.74	0.52
3:AL:49:ARG:HH22	21:AA:521:G:H5''	1.75	0.52
57:BB:1120:G:C5	57:BB:1121:C:C5	2.98	0.52
57:BB:1949:G:C6	57:BB:1950:G:C6	2.97	0.52
32:BM:69:PRO:HB3	32:BM:94:ALA:HB2	1.91	0.52
21:AA:71:A:H61	21:AA:99:C:H1'	1.75	0.52
9:AR:42:ARG:HH21	21:AA:720:C:H5''	1.75	0.52
57:BB:1450:G:C5	57:BB:1451:C:C5	2.97	0.52
57:BB:962:G:N2	57:BB:2250:G:H1	2.07	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:96:LEU:HA	35:BP:99:LEU:HD12	1.91	0.52
22:AY:16:U:C5	22:AY:17:U:C4	2.98	0.51
57:BB:2555:U:H5	57:BB:2556:C:C2	2.27	0.51
57:BB:419:U:H2'	57:BB:420:C:C6	2.44	0.51
21:AA:699:C:H2'	21:AA:700:G:H5''	1.92	0.51
22:AY:18:G:H1'	22:AY:57:G:H22	1.76	0.51
57:BB:945:A:C4	57:BB:2448:A:C2	2.98	0.51
21:AA:1236:A:H2'	21:AA:1237:C:C6	2.46	0.51
55:BG:86:LEU:HD22	55:BG:147:LEU:HD13	1.93	0.51
43:BX:3:VAL:HG22	43:BX:10:ARG:HE	1.75	0.51
57:BB:2064:C:H1'	57:BB:2450:A:C6	2.45	0.51
57:BB:447:A:C2	57:BB:454:A:C8	2.99	0.51
16:AE:75:LEU:HD13	16:AE:78:GLY:H	1.75	0.51
26:AV:67:C:C5	26:AV:68:C:C5	2.99	0.51
52:BD:124:ARG:HH11	52:BD:124:ARG:HB2	1.76	0.51
25:AZ:19:HIS:HD2	25:AZ:114:GLN:H	1.57	0.51
57:BB:619:G:H3'	57:BB:620:G:H21	1.76	0.51
57:BB:711:G:C6	57:BB:712:G:C5	2.99	0.51
45:BC:140:VAL:HG12	45:BC:142:ASN:H	1.76	0.51
21:AA:1484:C:C4	21:AA:1485:U:C4	2.99	0.51
6:AO:54:GLY:HA2	6:AO:57:ARG:HH21	1.76	0.51
57:BB:1933:G:C5	57:BB:1934:C:C5	2.99	0.51
54:BF:177:ARG:HE	54:BF:178:LYS:H	1.56	0.51
33:BN:34:ILE:HG23	33:BN:113:ILE:HG23	1.92	0.51
4:AM:11:HIS:H	4:AM:44:ILE:HB	1.76	0.51
57:BB:1176:U:C5	57:BB:1177:G:C4	3.00	0.51
52:BD:121:THR:HG22	52:BD:122:VAL:HG23	1.93	0.51
21:AA:1417:G:C6	21:AA:1482:G:C6	2.99	0.50
21:AA:483:C:H2'	21:AA:484:G:C8	2.46	0.50
5:AN:16:ALA:HB2	5:AN:59:GLN:HE22	1.75	0.50
36:BQ:60:TRP:CZ2	36:BQ:93:ILE:HD12	2.46	0.50
21:AA:801:U:H2'	21:AA:802:A:C8	2.46	0.50
5:AN:74:ARG:HH21	21:AA:1359:C:H3'	1.76	0.50
21:AA:1239:A:H62	21:AA:1299:A:N6	2.06	0.50
25:AZ:69:TYR:CE1	25:AZ:76:TYR:HB2	2.46	0.50
29:BJ:35:ARG:HA	29:BJ:40:HIS:CE1	2.46	0.50
15:AD:169:TRP:CD2	15:AD:185:PRO:HA	2.46	0.50
48:B1:45:HIS:CE1	57:BB:2371:G:H21	2.29	0.50
53:BE:138:LEU:HD13	53:BE:167:VAL:HG21	1.92	0.50
57:BB:1093:G:H21	57:BB:1098:A:H62	1.59	0.50
57:BB:900:A:H2'	57:BB:901:C:H5'	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AA:780:A:C8	21:AA:800:G:C6	3.00	0.50
57:BB:890:C:H3'	57:BB:891:G:H4'	1.93	0.50
21:AA:1044:A:C5	21:AA:1045:C:H1'	2.46	0.50
13:AB:176:ASN:HD21	13:AB:182:VAL:HG21	1.77	0.50
57:BB:1803:A:C8	57:BB:1804:C:C6	3.00	0.50
57:BB:2314:A:H2'	57:BB:2315:G:C8	2.47	0.50
21:AA:332:G:C5	21:AA:333:U:C5	2.99	0.50
21:AA:55:A:C2	21:AA:56:U:H1'	2.46	0.50
8:AQ:18:LYS:HB3	8:AQ:46:HIS:CE1	2.46	0.50
57:BB:609:A:C8	57:BB:610:C:C5	3.00	0.50
25:AZ:134:LEU:HD22	25:AZ:171:ARG:HE	1.77	0.49
29:BJ:20:ALA:N	29:BJ:58:ASN:HD21	2.10	0.49
21:AA:201:G:H21	21:AA:469:C:H1'	1.76	0.49
21:AA:692:U:H5'	21:AA:797:C:H4'	1.94	0.49
13:AB:52:ALA:HB2	13:AB:197:PHE:CE1	2.47	0.49
10:AS:67:GLY:H	10:AS:68:HIS:CD2	2.30	0.49
58:BA:42:C:C5	58:BA:43:C:C5	3.00	0.49
57:BB:1181:U:H2'	57:BB:1182:G:H8	1.77	0.49
57:BB:1862:G:C2	57:BB:1881:C:C2	2.99	0.49
57:BB:263:G:C6	57:BB:264:C:C5	3.01	0.49
57:BB:877:A:N1	57:BB:901:C:C2	2.80	0.49
21:AA:1333:A:H3'	21:AA:1334:G:C8	2.47	0.49
57:BB:1837:C:H2'	57:BB:1838:C:H5'	1.94	0.49
57:BB:581:C:H2'	57:BB:582:A:C8	2.47	0.49
15:AD:2:ARG:HD2	15:AD:114:ARG:HH22	1.78	0.49
57:BB:2425:A:H4'	57:BB:2426:A:H5''	1.94	0.49
57:BB:510:C:H2'	57:BB:511:U:C6	2.47	0.49
52:BD:122:VAL:HG12	52:BD:122:VAL:O	2.13	0.49
17:AF:86:ARG:HH22	21:AA:673:A:H4'	1.77	0.49
15:AD:66:VAL:CG2	15:AD:70:GLN:HB2	2.41	0.49
57:BB:1061:U:H3	57:BB:1097:U:H4'	1.77	0.49
57:BB:374:A:C2	57:BB:401:A:C4	3.01	0.49
54:BF:65:LEU:HD23	54:BF:87:LYS:HB2	1.93	0.49
21:AA:1144:G:N2	21:AA:1146:A:H62	2.11	0.49
57:BB:35:G:H2'	57:BB:36:G:O4'	2.13	0.49
21:AA:1068:G:C6	21:AA:1069:C:C5	3.01	0.49
26:AV:67:C:C4	26:AV:68:C:C5	3.01	0.49
23:AW:1:G:C5	23:AW:2:C:C5	3.01	0.49
57:BB:977:G:C2	57:BB:987:C:C2	3.00	0.49
35:BP:32:VAL:HG12	35:BP:34:GLY:H	1.77	0.49
26:AV:12:G:H21	57:BB:1924:C:H5'	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:422:A:C2	57:BB:423:A:C4	3.00	0.49
42:BW:45:HIS:CE1	42:BW:49:ASN:ND2	2.81	0.49
21:AA:901:A:C5	21:AA:902:G:H1'	2.48	0.48
18:AG:108:ARG:H	18:AG:118:ARG:HD3	1.77	0.48
23:AW:62:C:H2'	23:AW:63:G:H8	1.78	0.48
57:BB:645:C:H6	57:BB:645:C:H5'	1.78	0.48
16:AE:38:VAL:HG22	16:AE:44:ARG:CB	2.42	0.48
57:BB:871:U:H3	57:BB:906:U:H3	1.59	0.48
57:BB:1821:A:C6	57:BB:1822:C:C4	3.01	0.48
25:AZ:11:HIS:CE1	25:AZ:272:GLU:OE1	2.67	0.48
33:BN:44:LEU:O	33:BN:48:VAL:HG23	2.13	0.48
21:AA:1071:C:H2'	21:AA:1072:G:C8	2.49	0.48
3:AL:110:LYS:H	3:AL:110:LYS:HD3	1.78	0.48
47:B0:40:HIS:CG	57:BB:2816:G:H4'	2.47	0.48
49:B2:16:HIS:CE1	57:BB:686:U:H3	2.31	0.48
21:AA:1347:G:C4	21:AA:1373:G:C6	3.01	0.48
57:BB:627:A:C4	57:BB:637:A:C2	3.01	0.48
21:AA:860:A:H3'	21:AA:861:G:C8	2.49	0.48
57:BB:1358:G:C2	57:BB:1372:U:C5	3.01	0.48
57:BB:2686:G:H2'	57:BB:2687:U:C6	2.48	0.48
57:BB:880:G:H2'	57:BB:881:G:C8	2.49	0.48
52:BD:33:ARG:HA	52:BD:95:SER:H	1.78	0.48
55:BG:10:VAL:HG22	55:BG:47:ASN:O	2.14	0.48
21:AA:1167:A:H2'	21:AA:1169:A:C8	2.49	0.48
5:AN:29:ILE:HG13	5:AN:30:ILE:N	2.26	0.48
57:BB:1203:U:H3'	57:BB:1204:A:H5''	1.95	0.48
57:BB:221:A:C2	57:BB:266:G:OP2	2.67	0.48
17:AF:29:ILE:HG23	17:AF:70:VAL:HG11	1.96	0.48
20:AI:41:GLU:HB2	20:AI:44:ARG:HG2	1.95	0.48
57:BB:1225:G:C2	57:BB:1226:A:C2	3.02	0.48
57:BB:1853:A:C6	57:BB:1854:A:C2	3.02	0.48
21:AA:1142:G:C2	21:AA:1143:G:H1'	2.48	0.47
23:AW:20:U:H2'	23:AW:21:A:H4'	1.95	0.47
16:AE:147:ASN:HD22	19:AH:96:ALA:HB2	1.79	0.47
26:AV:72:A:H3'	26:AV:73:A:H5''	1.95	0.47
57:BB:1829:A:C8	57:BB:1830:C:C5	3.02	0.47
57:BB:2243:U:H2'	57:BB:2244:U:C6	2.50	0.47
20:AI:62:LEU:HD12	20:AI:64:ILE:HD11	1.96	0.47
25:AZ:15:GLY:HA2	25:AZ:78:HIS:CD2	2.49	0.47
48:B1:39:ASP:HB3	48:B1:42:VAL:HG22	1.96	0.47
57:BB:1770:G:C6	57:BB:1771:C:C4	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1770:G:C5	57:BB:1771:C:C5	3.02	0.47
57:BB:2071:A:H2'	57:BB:2072:C:C6	2.49	0.47
57:BB:2140:G:C5	57:BB:2152:G:C6	3.02	0.47
31:BL:116:VAL:HG22	31:BL:118:THR:H	1.80	0.47
17:AF:3:HIS:CD2	17:AF:4:TYR:H	2.32	0.47
18:AG:136:LYS:O	18:AG:140:VAL:HG23	2.14	0.47
57:BB:5:A:H2'	57:BB:6:A:C8	2.49	0.47
21:AA:995:C:H2'	21:AA:996:A:H5''	1.95	0.47
57:BB:562:U:C4	57:BB:572:A:C8	3.02	0.47
27:B5:134:ARG:HG2	57:BB:2125:G:H1	1.80	0.47
57:BB:956:G:H2'	57:BB:957:C:H2'	1.97	0.47
13:AB:10:LYS:HA	13:AB:207:ARG:HH21	1.79	0.47
26:AV:18:G:C5	26:AV:57:A:C6	3.03	0.47
57:BB:1165:A:N3	57:BB:1185:G:C2	2.82	0.47
21:AA:408:A:H3'	21:AA:409:U:H6	1.79	0.47
57:BB:1448:G:C6	57:BB:1449:G:C5	3.03	0.47
57:BB:184:C:H2'	57:BB:185:G:C8	2.50	0.47
57:BB:2485:G:C2	57:BB:2486:C:C6	3.03	0.47
52:BD:14:ILE:HG22	52:BD:22:ILE:O	2.15	0.47
36:BQ:10:ARG:HH21	57:BB:1216:G:H5''	1.79	0.47
21:AA:1118:U:H3'	21:AA:1119:C:C6	2.49	0.47
23:AW:12:U:H3	23:AW:23:A:H61	1.63	0.47
57:BB:1432:G:H2'	57:BB:1433:A:C8	2.50	0.47
21:AA:66:A:H3'	21:AA:67:C:H5''	1.97	0.47
21:AA:79:G:C2	21:AA:80:A:H1'	2.50	0.47
31:BL:78:ARG:HH22	57:BB:627:A:H2'	1.78	0.47
42:BW:19:ARG:HA	42:BW:35:ILE:HG22	1.97	0.47
43:BX:48:LEU:HD23	43:BX:76:LYS:HD3	1.97	0.47
21:AA:1057:G:C5	21:AA:1204:A:C2	3.02	0.47
21:AA:109:A:C6	21:AA:326:G:C6	3.03	0.47
57:BB:1450:G:C6	57:BB:1451:C:C4	3.03	0.47
57:BB:150:U:H2'	57:BB:151:C:C6	2.50	0.47
56:BH:135:HIS:CD2	57:BB:2221:G:OP2	2.68	0.47
57:BB:2352:A:H2'	57:BB:2353:G:H5'	1.97	0.47
57:BB:609:A:C8	57:BB:610:C:C6	3.03	0.47
21:AA:444:G:C2	21:AA:491:G:C2	3.03	0.46
21:AA:825:A:C2	21:AA:876:C:C2	3.03	0.46
3:AL:47:ALA:HB2	21:AA:529:G:H22	1.80	0.46
6:AO:87:ARG:HH22	57:BB:715:A:H5''	1.79	0.46
57:BB:2345:G:C6	57:BB:2381:A:C6	3.03	0.46
57:BB:645:C:C6	57:BB:645:C:H5'	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:776:G:H1'	57:BB:793:A:C2	2.50	0.46
57:BB:880:G:H1	57:BB:897:C:H42	1.64	0.46
15:AD:44:LYS:HA	15:AD:45:PRO:HD3	1.81	0.46
49:B2:44:VAL:O	49:B2:44:VAL:HG12	2.14	0.46
58:BA:11:C:H3'	58:BA:12:C:C6	2.51	0.46
57:BB:1573:G:H2'	57:BB:1574:C:H5'	1.97	0.46
30:BK:28:HIS:CE1	57:BB:2547:A:H4'	2.50	0.46
21:AA:761:G:C6	21:AA:762:U:C4	3.03	0.46
21:AA:992:U:H1'	21:AA:993:G:C2	2.50	0.46
57:BB:1024:G:C6	57:BB:1025:G:C6	3.03	0.46
57:BB:2714:G:C5	57:BB:2715:C:C5	3.04	0.46
31:BL:93:ASN:HD22	31:BL:97:ALA:HB2	1.79	0.46
21:AA:581:G:C6	21:AA:758:C:C5	3.04	0.46
21:AA:81:A:C2	21:AA:89:U:C2	3.02	0.46
15:AD:58:GLN:HA	15:AD:61:ARG:HB3	1.97	0.46
47:B0:9:ARG:HH22	57:BB:1263:U:H5''	1.81	0.46
52:BD:56:LYS:O	52:BD:57:ALA:HB3	2.15	0.46
14:AC:132:ALA:HA	14:AC:135:ARG:HH21	1.81	0.46
57:BB:1082:U:N3	57:BB:1086:A:C2	2.84	0.46
57:BB:46:G:C5	57:BB:180:G:C6	3.04	0.46
57:BB:943:A:C6	57:BB:944:C:C5	3.03	0.46
30:BK:5:THR:HG22	30:BK:6:MET:N	2.29	0.46
6:AO:80:LEU:HD12	6:AO:83:ARG:HH12	1.81	0.46
29:BJ:37:ARG:HH21	57:BB:1007:C:H5''	1.81	0.46
57:BB:1615:C:H2'	57:BB:1617:C:C6	2.50	0.46
31:BL:56:PRO:HB2	31:BL:59:ARG:H	1.81	0.46
21:AA:1121:U:C2	21:AA:1153:G:C2	3.04	0.46
21:AA:143:A:H4'	21:AA:196:A:C6	2.50	0.46
6:AO:80:LEU:HG	6:AO:83:ARG:HH22	1.80	0.46
23:AW:63:G:C8	23:AW:63:G:C4	3.04	0.46
57:BB:1128:G:N7	57:BB:2490:G:H5'	2.31	0.46
56:BH:116:ARG:HE	56:BH:122:LEU:HD22	1.81	0.46
36:BQ:67:ALA:HA	36:BQ:70:GLN:HE21	1.81	0.46
57:BB:1576:U:C2	57:BB:1577:C:C5	3.04	0.46
50:B3:30:HIS:CE1	57:BB:2421:G:OP2	2.69	0.46
45:BC:219:VAL:HG11	57:BB:782:A:H2'	1.97	0.46
45:BC:106:PRO:HG2	45:BC:109:LEU:H	1.81	0.46
21:AA:1273:C:H2'	21:AA:1274:A:O4'	2.15	0.46
21:AA:82:G:H3'	21:AA:83:C:H4'	1.98	0.46
15:AD:197:HIS:HB3	16:AE:104:ILE:HG22	1.97	0.46
57:BB:1751:U:H5'	57:BB:2860:A:H2	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:284:GLU:CD	25:AZ:284:GLU:H	2.20	0.45
57:BB:2471:A:O2'	57:BB:2472:G:C8	2.64	0.45
57:BB:475:C:C4	57:BB:476:G:C5	3.04	0.45
45:BC:190:THR:HG22	45:BC:192:GLY:H	1.81	0.45
29:BJ:101:ILE:HD13	29:BJ:101:ILE:H	1.81	0.45
21:AA:697:U:H3	21:AA:798:U:C1'	2.29	0.45
18:AG:4:ARG:HE	18:AG:5:VAL:H	1.62	0.45
23:AW:39:U:C2'	23:AW:40:C:H5''	2.46	0.45
23:AW:56:C:H42	27:B5:130:VAL:HG23	1.80	0.45
57:BB:1223:G:C6	57:BB:1227:G:C6	3.04	0.45
57:BB:1486:U:C2	57:BB:1504:A:C2	3.04	0.45
21:AA:1226:C:H4'	21:AA:1227:A:OP1	2.17	0.45
14:AC:176:THR:HG22	14:AC:178:ARG:H	1.81	0.45
57:BB:1003:G:C2	57:BB:1153:C:C2	3.05	0.45
57:BB:2154:A:C5	57:BB:2155:U:C4	3.05	0.45
57:BB:30:G:C5	57:BB:31:C:C4	3.04	0.45
57:BB:874:G:C6	57:BB:875:G:C5	3.04	0.45
21:AA:202:G:N2	21:AA:216:U:C2	2.85	0.45
18:AG:145:GLU:H	18:AG:148:LYS:HB3	1.82	0.45
27:B5:76:ALA:HB3	27:B5:100:LEU:HD11	1.99	0.45
57:BB:2167:U:H2'	57:BB:2168:G:O4'	2.16	0.45
57:BB:2:G:C6	57:BB:3:U:C4	3.05	0.45
57:BB:641:U:C4	57:BB:642:U:C4	3.05	0.45
41:BV:11:GLU:HB3	41:BV:16:ALA:HB1	1.98	0.45
21:AA:956:U:H1'	21:AA:1227:A:H61	1.81	0.45
21:AA:1525:G:C6	21:AA:1526:G:C5	3.05	0.45
57:BB:1642:G:C6	57:BB:1643:G:C5	3.04	0.45
54:BF:49:LEU:HD12	54:BF:49:LEU:H	1.81	0.45
55:BG:61:TRP:H	55:BG:64:ALA:HB3	1.81	0.45
57:BB:2030:A:H4'	57:BB:2031:A:C8	2.52	0.45
57:BB:945:A:C5	57:BB:2448:A:C2	3.04	0.45
15:AD:36:ALA:HB3	15:AD:43:ARG:HH21	1.82	0.45
18:AG:129:ASN:HB3	18:AG:131:GLY:H	1.81	0.45
21:AA:1071:C:H2'	21:AA:1072:G:H8	1.82	0.45
18:AG:55:LYS:H	18:AG:55:LYS:HD3	1.81	0.45
45:BC:107:LYS:HE2	45:BC:125:PRO:HG3	1.98	0.45
56:BH:5:LEU:HD13	56:BH:14:SER:H	1.82	0.45
25:AZ:95:ALA:HA	25:AZ:98:MET:HE2	1.99	0.45
57:BB:1099:G:C5	57:BB:1100:C:C4	3.04	0.45
39:BT:6:ARG:HH12	57:BB:144:A:H4'	1.81	0.45
57:BB:2267:A:C8	57:BB:2267:A:H3'	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:2345:G:C5	57:BB:2347:C:C5	3.04	0.45
5:AN:88:MET:HB3	14:AC:5:HIS:CD2	2.51	0.45
4:AM:104:ASN:H	4:AM:106:ARG:HH12	1.65	0.45
23:AW:38:A:H3'	23:AW:39:U:H5''	1.98	0.45
57:BB:1021:A:C2	57:BB:1023:U:C2	3.05	0.45
57:BB:1166:G:C5	57:BB:1167:C:C5	3.04	0.45
57:BB:2330:G:C6	57:BB:2331:G:C5	3.05	0.45
57:BB:1783:A:C2	57:BB:2587:A:C5	3.05	0.45
54:BF:102:LEU:HD22	54:BF:137:PHE:HA	1.99	0.45
21:AA:1338:G:H2'	21:AA:1339:A:C8	2.52	0.44
57:BB:1210:G:H3'	57:BB:1211:C:C5	2.52	0.44
57:BB:1839:G:H2'	57:BB:1840:G:C8	2.52	0.44
53:BE:36:ALA:HB1	57:BB:443:A:H61	1.82	0.44
54:BF:132:ARG:H	54:BF:150:GLY:HA3	1.82	0.44
54:BF:24:VAL:O	54:BF:24:VAL:HG22	2.18	0.44
10:AS:26:ASP:HB3	10:AS:46:LEU:HD22	1.97	0.44
25:AZ:92:ILE:HD11	25:AZ:377:ARG:CZ	2.47	0.44
57:BB:1224:U:C4	57:BB:1225:G:C6	3.05	0.44
57:BB:2070:A:C2	57:BB:2071:A:C4	3.05	0.44
27:B5:172:HIS:HB3	57:BB:2123:G:H1'	1.99	0.44
57:BB:2447:G:C5	57:BB:2501:C:C2	3.05	0.44
36:BQ:40:LYS:O	36:BQ:44:TYR:CG	2.70	0.44
38:BS:76:VAL:CG2	38:BS:101:SER:HB3	2.47	0.44
57:BB:863:A:H61	57:BB:912:C:H42	1.64	0.44
35:BP:99:LEU:HD23	35:BP:102:ARG:HH21	1.82	0.44
40:BU:45:GLN:O	57:BB:483:A:H4'	2.16	0.44
21:AA:109:A:C8	21:AA:326:G:H2'	2.53	0.44
21:AA:1234:C:H1'	21:AA:1364:U:H6	1.81	0.44
25:AZ:19:HIS:CD2	25:AZ:114:GLN:H	2.33	0.44
47:B0:11:LYS:HE3	57:BB:2021:C:OP2	2.17	0.44
57:BB:2397:G:C6	57:BB:2398:U:C4	3.05	0.44
40:BU:4:ILE:H	40:BU:4:ILE:HD13	1.81	0.44
21:AA:1130:A:H3'	21:AA:1131:G:C8	2.53	0.44
21:AA:1130:A:H1'	21:AA:1146:A:C2	2.53	0.44
21:AA:238:A:H3'	21:AA:239:U:H5''	1.98	0.44
21:AA:310:G:C6	21:AA:311:C:C4	3.06	0.44
21:AA:769:G:H4'	21:AA:1513:A:H4'	1.99	0.44
21:AA:830:G:H2'	21:AA:831:A:C8	2.52	0.44
57:BB:1722:A:C4	57:BB:1739:A:C4	3.05	0.44
57:BB:2243:U:O2	57:BB:2434:A:C2	2.71	0.44
57:BB:2245:U:O2	57:BB:2435:A:C8	2.70	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AB:14:HIS:HE1	13:AB:202:ASN:H	1.65	0.44
57:BB:2216:G:H2'	57:BB:2217:G:C8	2.53	0.44
57:BB:308:G:C5	57:BB:309:A:C6	3.06	0.44
21:AA:1003:G:N2	21:AA:1005:A:H5'	2.33	0.44
21:AA:594:U:C4	21:AA:595:A:C6	3.05	0.44
5:AN:27:LYS:HA	5:AN:48:GLN:HE22	1.82	0.44
47:B0:47:TYR:CD2	47:B0:51:ARG:O	2.71	0.44
57:BB:1717:A:C2	57:BB:1744:A:C4	3.06	0.44
57:BB:682:G:C6	57:BB:683:U:C4	3.05	0.44
52:BD:148:GLN:HE21	52:BD:152:PRO:HD3	1.83	0.44
21:AA:468:A:H3'	21:AA:469:C:C6	2.53	0.44
52:BD:134:HIS:CD2	57:BB:1675:C:C6	3.06	0.44
21:AA:257:G:H2'	21:AA:258:G:H5''	1.99	0.44
18:AG:129:ASN:HB2	18:AG:134:VAL:HG13	2.00	0.44
57:BB:188:G:C6	57:BB:189:G:C4	3.06	0.44
57:BB:2123:G:H22	57:BB:2176:A:H1'	1.82	0.44
57:BB:563:A:C6	57:BB:564:C:C4	3.06	0.44
45:BC:219:VAL:HG13	57:BB:781:A:H4'	2.00	0.44
53:BE:23:PHE:CD1	53:BE:111:GLU:HG3	2.53	0.44
25:AZ:21:ASP:CG	25:AZ:22:HIS:H	2.22	0.43
25:AZ:306:SER:HA	25:AZ:389:ALA:H	1.82	0.43
57:BB:1285:A:H2'	57:BB:1286:A:H5''	1.99	0.43
57:BB:1528:A:C4	57:BB:1544:A:C5	3.06	0.43
57:BB:1916:A:C2	57:BB:1917:U:C2	3.06	0.43
57:BB:2886:A:H3'	57:BB:2887:A:H5'	1.99	0.43
44:BY:38:GLN:HA	57:BB:95:A:H4'	2.00	0.43
52:BD:24:VAL:HG23	52:BD:189:VAL:H	1.83	0.43
1:AJ:15:HIS:HB3	21:AA:1152:A:H5'	2.00	0.43
21:AA:185:U:H2'	21:AA:186:C:C6	2.53	0.43
21:AA:278:G:N2	21:AA:279:A:H62	2.17	0.43
21:AA:540:G:C6	21:AA:541:G:C5	3.06	0.43
21:AA:635:A:C6	21:AA:636:U:C4	3.06	0.43
21:AA:685:G:C2	21:AA:686:U:C4	3.06	0.43
57:BB:2297:A:H2'	57:BB:2298:A:H5'	2.00	0.43
57:BB:2799:A:C5	57:BB:2896:C:H5''	2.53	0.43
57:BB:2809:A:H2'	57:BB:2810:A:C8	2.53	0.43
28:BI:30:GLN:HE22	28:BI:58:ILE:HG22	1.83	0.43
29:BJ:77:HIS:CE1	57:BB:1131:G:C4	3.05	0.43
39:BT:77:ARG:HH21	39:BT:79:ASP:HA	1.82	0.43
9:AR:25:ILE:HG23	9:AR:26:ALA:N	2.34	0.43
23:AW:63:G:C8	23:AW:63:G:C1'	2.92	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1074:G:C5	57:BB:1075:C:C5	3.06	0.43
57:BB:1360:G:C6	57:BB:1372:U:C2	3.06	0.43
57:BB:2553:G:H3'	57:BB:2554:U:H5''	1.99	0.43
21:AA:359:G:C6	21:AA:360:G:C5	3.07	0.43
21:AA:764:C:C2'	21:AA:765:G:H5'	2.48	0.43
21:AA:764:C:H2'	21:AA:765:G:H5'	2.00	0.43
15:AD:187:ARG:C	15:AD:189:ASP:H	2.21	0.43
3:AL:56:LEU:HG	3:AL:58:ASN:H	1.83	0.43
58:BA:100:G:C6	58:BA:101:A:C5	3.06	0.43
57:BB:1070:A:H3'	57:BB:1071:G:H5''	2.00	0.43
57:BB:1912:A:C8	57:BB:1918:A:C2	3.07	0.43
57:BB:2104:C:H2'	57:BB:2105:U:C6	2.54	0.43
57:BB:532:A:H4'	57:BB:533:G:C8	2.53	0.43
57:BB:877:A:C6	57:BB:901:C:C4	3.07	0.43
53:BE:159:LEU:HA	53:BE:159:LEU:HD23	1.82	0.43
10:AS:36:ARG:HH12	21:AA:1319:A:H4'	1.83	0.43
21:AA:1300:G:C6	21:AA:1334:G:C5	3.07	0.43
21:AA:192:A:C6	21:AA:193:C:C4	3.07	0.43
21:AA:515:G:C5	21:AA:516:U:C5	3.07	0.43
21:AA:773:G:N3	21:AA:807:A:C2	2.87	0.43
21:AA:979:C:H3'	21:AA:980:C:H6	1.83	0.43
47:B0:9:ARG:HH22	57:BB:1263:U:C5'	2.30	0.43
50:B3:30:HIS:CG	50:B3:31:ILE:N	2.86	0.43
58:BA:75:G:H2'	58:BA:76:G:C8	2.53	0.43
57:BB:1838:C:C5	57:BB:1899:A:C5	3.07	0.43
52:BD:150:GLN:HE21	57:BB:2572:A:N6	2.17	0.43
57:BB:2688:G:C2	57:BB:2720:U:C5	3.07	0.43
21:AA:1434:A:C6	21:AA:1435:G:C6	3.06	0.43
6:AO:49:HIS:CE1	21:AA:764:C:O2'	2.71	0.43
18:AG:26:VAL:HG12	18:AG:42:VAL:HG21	2.01	0.43
3:AL:37:TYR:HB2	3:AL:51:VAL:HG23	1.99	0.43
22:AY:38:A:N6	22:AY:39:U:C5	2.87	0.43
25:AZ:140:VAL:HG11	25:AZ:146:LEU:HG	1.99	0.43
57:BB:1063:G:C6	57:BB:1064:C:C4	3.06	0.43
57:BB:1092:C:H2'	57:BB:1093:G:H5'	1.99	0.43
57:BB:150:U:O5'	57:BB:150:U:H6	2.01	0.43
57:BB:2097:A:H2'	57:BB:2098:U:C6	2.54	0.43
57:BB:2392:A:C6	57:BB:2393:U:C4	3.07	0.43
21:AA:697:U:H3	21:AA:798:U:H1'	1.84	0.43
21:AA:858:G:N1	21:AA:869:G:H2'	2.33	0.43
57:BB:1203:U:H3'	57:BB:1204:A:C5'	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:2046:G:C4	57:BB:2623:G:C2	3.07	0.43
33:BN:12:ARG:HA	33:BN:12:ARG:HE	1.84	0.43
38:BS:47:VAL:HA	38:BS:50:VAL:HG22	1.99	0.43
21:AA:1244:G:C6	21:AA:1294:G:C6	3.06	0.43
21:AA:53:A:C2	21:AA:54:C:H1'	2.53	0.43
8:AQ:32:ILE:HD12	8:AQ:32:ILE:HA	1.96	0.43
11:AT:60:GLN:HG2	11:AT:65:LEU:HB3	2.01	0.43
27:B5:60:ARG:HG3	27:B5:165:ASN:HD22	1.84	0.43
57:BB:1936:A:H2	57:BB:1943:U:C5	2.36	0.43
57:BB:2181:U:H3'	57:BB:2181:U:C6	2.53	0.43
57:BB:2352:A:C2'	57:BB:2353:G:H5'	2.49	0.43
30:BK:5:THR:HG22	30:BK:6:MET:H	1.84	0.43
21:AA:688:G:C6	21:AA:700:G:C6	3.06	0.43
15:AD:122:ILE:HG13	15:AD:123:MET:N	2.32	0.43
17:AF:3:HIS:CG	17:AF:4:TYR:H	2.37	0.43
22:AY:37:G:N2	24:AX:19:U:C6	2.87	0.43
52:BD:59:ARG:NH1	57:BB:2830:C:C5	2.87	0.43
28:BI:7:TYR:CD1	28:BI:59:THR:HA	2.54	0.43
37:BR:61:ALA:HA	37:BR:99:THR:H	1.84	0.43
21:AA:544:G:C5	21:AA:545:C:C5	3.07	0.43
21:AA:833:G:C6	21:AA:834:U:C4	3.07	0.43
21:AA:966:G:H2'	21:AA:967:C:C6	2.54	0.43
3:AL:98:ARG:HH21	3:AL:104:SER:H	1.65	0.43
3:AL:6:LEU:HB3	8:AQ:33:TYR:CZ	2.54	0.43
57:BB:2150:C:C5	57:BB:2151:U:C5	3.06	0.43
37:BR:49:ILE:HG22	37:BR:51:VAL:HG22	2.01	0.43
21:AA:1485:U:H2'	21:AA:1486:G:H8	1.84	0.42
14:AC:112:ALA:H	14:AC:201:ILE:HD13	1.84	0.42
4:AM:84:CYS:HB2	4:AM:87:GLY:H	1.84	0.42
57:BB:1444:G:C4	57:BB:1445:G:C8	3.07	0.42
57:BB:1487:U:H2'	57:BB:1488:C:H6	1.84	0.42
57:BB:2493:U:C4	57:BB:2494:G:C8	3.07	0.42
57:BB:2637:U:C5	57:BB:2638:G:C6	3.06	0.42
57:BB:877:A:C6	57:BB:878:A:C4	3.07	0.42
21:AA:967:C:H2'	21:AA:968:A:C2	2.54	0.42
13:AB:183:PHE:HB3	13:AB:197:PHE:HB3	2.01	0.42
14:AC:109:GLU:OE1	14:AC:143:LEU:HD23	2.19	0.42
15:AD:123:MET:HG3	15:AD:143:SER:O	2.19	0.42
4:AM:102:LYS:HA	21:AA:1226:C:C5	2.53	0.42
4:AM:21:ILE:HG13	4:AM:24:VAL:HG13	2.00	0.42
57:BB:1667:G:H1	57:BB:1991:U:H3'	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:291:G:C6	57:BB:350:G:C6	3.06	0.42
57:BB:410:G:C2	57:BB:2407:A:C5	3.07	0.42
57:BB:581:C:H2'	57:BB:582:A:H8	1.83	0.42
57:BB:919:U:H2'	57:BB:920:A:C8	2.54	0.42
57:BB:932:U:H4'	57:BB:933:A:C4	2.53	0.42
53:BE:6:LYS:HG3	53:BE:8:ALA:H	1.85	0.42
55:BG:169:ARG:HH22	55:BG:173:ALA:HA	1.84	0.42
34:BO:90:VAL:HG22	34:BO:115:LEU:HD11	2.00	0.42
21:AA:66:A:H4'	21:AA:199:A:H4'	2.01	0.42
21:AA:688:G:H21	21:AA:704:A:H2	1.67	0.42
21:AA:860:A:H2'	21:AA:861:G:O4'	2.19	0.42
13:AB:186:VAL:HG22	13:AB:201:GLY:H	1.84	0.42
5:AN:63:CYS:HB3	5:AN:67:GLY:H	1.85	0.42
22:AY:67:A:H2'	22:AY:68:U:C6	2.54	0.42
22:AY:71:G:C6	22:AY:72:C:C5	3.08	0.42
57:BB:1634:A:H3'	57:BB:1635:A:C5'	2.49	0.42
57:BB:1848:A:H2'	57:BB:1849:G:O4'	2.19	0.42
57:BB:2357:G:N2	57:BB:2359:C:H3'	2.35	0.42
57:BB:2869:G:H2'	57:BB:2870:C:O4'	2.19	0.42
57:BB:873:C:C2	57:BB:905:A:C2	3.07	0.42
21:AA:1108:G:C6	21:AA:1109:C:C4	3.07	0.42
21:AA:246:A:C5	21:AA:279:A:C5	3.07	0.42
21:AA:728:A:H2'	21:AA:729:A:C8	2.55	0.42
21:AA:941:G:C5	21:AA:942:G:C8	3.07	0.42
23:AW:18:G:C2	23:AW:58:A:N7	2.86	0.42
22:AY:1:G:C5	22:AY:73:A:C2	3.07	0.42
57:BB:1365:A:C2	57:BB:1366:A:H1'	2.55	0.42
57:BB:1426:G:C2'	57:BB:1572:A:H61	2.32	0.42
57:BB:1916:A:H2'	57:BB:1917:U:C6	2.54	0.42
57:BB:2075:U:C4	57:BB:2238:G:C6	3.08	0.42
57:BB:2630:G:C4	57:BB:2894:G:C2	3.08	0.42
57:BB:2835:A:H61	57:BB:2878:U:H2'	1.82	0.42
57:BB:826:U:C2	57:BB:828:U:H1'	2.55	0.42
28:BI:3:LYS:O	28:BI:4:VAL:HG23	2.19	0.42
41:BV:89:ILE:HG21	41:BV:91:PHE:CZ	2.55	0.42
21:AA:1315:U:H2'	21:AA:1316:G:O4'	2.19	0.42
21:AA:1380:U:H1'	21:AA:1381:U:C5	2.55	0.42
1:AJ:39:PRO:HA	1:AJ:74:VAL:HA	2.00	0.42
9:AR:53:GLN:N	9:AR:56:ARG:HH21	2.17	0.42
22:AY:16:U:H5	22:AY:17:U:C4	2.38	0.42
25:AZ:92:ILE:HG13	25:AZ:92:ILE:H	1.76	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BI:29:GLN:NE2	57:BB:1097:U:H3	2.18	0.42
57:BB:1402:U:H2'	57:BB:1403:A:O5'	2.20	0.42
57:BB:564:C:C2	57:BB:565:C:C6	3.07	0.42
45:BC:175:LEU:HD12	45:BC:179:GLU:HB2	2.00	0.42
21:AA:1012:A:C2	21:AA:1018:G:C2	3.08	0.42
21:AA:858:G:N1	21:AA:869:G:H3'	2.35	0.42
17:AF:38:ARG:HB3	17:AF:63:ASN:HD22	1.85	0.42
57:BB:2373:G:H2'	57:BB:2374:C:C6	2.55	0.42
57:BB:268:C:O2	57:BB:268:C:H2'	2.20	0.42
57:BB:766:U:H2'	57:BB:767:U:C6	2.54	0.42
57:BB:921:C:H4'	57:BB:2269:G:C5	2.54	0.42
45:BC:130:PRO:HB3	45:BC:186:ASP:HA	2.01	0.42
33:BN:54:LEU:O	33:BN:54:LEU:HD13	2.18	0.42
21:AA:1043:G:H2'	21:AA:1044:A:C8	2.55	0.42
21:AA:174:A:C5	21:AA:175:C:C5	3.08	0.42
2:AK:39:ASN:HD22	21:AA:683:G:H21	1.68	0.42
16:AE:17:VAL:HA	16:AE:34:ALA:HB2	2.02	0.42
27:B5:212:VAL:HG11	27:B5:227:ALA:HB3	2.02	0.42
57:BB:2758:A:C2	57:BB:2759:G:H1'	2.55	0.42
57:BB:861:A:H2'	57:BB:862:G:O4'	2.20	0.42
42:BW:24:ARG:HH11	57:BB:924:G:H1'	1.84	0.42
21:AA:981:U:H2'	21:AA:982:U:C6	2.55	0.42
14:AC:155:ARG:HD3	21:AA:1056:U:H4'	2.01	0.42
57:BB:1722:A:H1'	57:BB:1739:A:C2	2.54	0.42
57:BB:2102:G:H2'	57:BB:2103:C:O4'	2.20	0.42
57:BB:2865:U:C4	57:BB:2866:U:C4	3.07	0.42
57:BB:5:A:H2'	57:BB:6:A:H8	1.83	0.42
57:BB:727:A:H2'	57:BB:728:G:C8	2.55	0.42
21:AA:1206:G:C6	21:AA:1207:G:C5	3.08	0.42
21:AA:1436:U:H2'	21:AA:1437:A:C8	2.55	0.42
10:AS:18:VAL:O	10:AS:22:VAL:HG22	2.20	0.42
57:BB:547:A:C8	57:BB:548:G:N2	2.88	0.42
21:AA:1118:U:H3'	21:AA:1119:C:H6	1.85	0.42
21:AA:1133:G:C6	21:AA:1134:G:N7	2.88	0.42
21:AA:859:G:H2'	21:AA:860:A:C8	2.55	0.42
13:AB:50:ASN:HA	13:AB:53:LEU:HD12	2.01	0.42
4:AM:88:LEU:H	4:AM:88:LEU:HG	1.64	0.42
57:BB:2252:G:H3'	57:BB:2253:G:H5'	2.01	0.42
57:BB:2583:G:C6	57:BB:2584:U:C2	3.08	0.42
57:BB:1783:A:C2	57:BB:2587:A:C4	3.08	0.42
57:BB:30:G:H2'	57:BB:31:C:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AA:1117:A:C2	21:AA:1180:A:H1'	2.54	0.41
6:AO:80:LEU:HA	6:AO:83:ARG:NH1	2.35	0.41
57:BB:1024:G:C5	57:BB:1025:G:C5	3.08	0.41
57:BB:2727:A:H2'	57:BB:2728:U:C6	2.55	0.41
57:BB:515:A:C8	57:BB:516:C:C6	3.08	0.41
21:AA:1121:U:C2	21:AA:1153:G:N2	2.88	0.41
21:AA:81:A:C2	21:AA:89:U:O2	2.73	0.41
21:AA:958:A:C6	21:AA:959:A:N1	2.89	0.41
23:AW:56:C:H41	57:BB:2169:A:H61	1.67	0.41
57:BB:1360:G:C8	57:BB:1361:G:C8	3.07	0.41
57:BB:1699:G:O6	57:BB:1763:G:C8	2.73	0.41
57:BB:1770:G:C5	57:BB:1983:G:C6	3.08	0.41
57:BB:2071:A:H2'	57:BB:2072:C:H6	1.84	0.41
57:BB:299:A:C8	57:BB:322:A:C2	3.09	0.41
57:BB:520:G:C6	57:BB:521:U:C4	3.08	0.41
57:BB:775:G:C4	57:BB:794:A:C8	3.08	0.41
31:BL:54:GLN:HE22	57:BB:834:G:H1'	1.85	0.41
42:BW:22:VAL:HG11	57:BB:856:G:N3	2.35	0.41
57:BB:870:U:H2'	57:BB:871:U:H5''	2.01	0.41
39:BT:14:PRO:HB2	39:BT:16:VAL:HG22	2.01	0.41
21:AA:1130:A:H3'	21:AA:1131:G:H8	1.85	0.41
21:AA:1361:G:C2'	21:AA:1362:A:H5''	2.50	0.41
21:AA:1379:G:H2'	21:AA:1380:U:C6	2.56	0.41
21:AA:844:G:C8	21:AA:846:G:H1'	2.55	0.41
21:AA:93:U:H2'	21:AA:94:G:H5'	2.01	0.41
25:AZ:85:ALA:HA	25:AZ:88:VAL:HG13	2.02	0.41
50:B3:63:TYR:CZ	57:BB:242:G:H5''	2.55	0.41
58:BA:11:C:H3'	58:BA:12:C:H6	1.84	0.41
57:BB:111:A:H2'	57:BB:112:U:O4'	2.20	0.41
57:BB:1817:G:C5	57:BB:1818:U:C5	3.08	0.41
57:BB:2126:A:C2	57:BB:2162:G:N1	2.88	0.41
57:BB:2188:U:C4	57:BB:2189:U:C4	3.08	0.41
57:BB:24:G:C2	57:BB:25:U:C2	3.08	0.41
57:BB:489:G:C5	57:BB:491:G:C5	3.08	0.41
57:BB:649:G:H2'	57:BB:650:C:O4'	2.20	0.41
21:AA:228:A:H2'	21:AA:229:U:O4'	2.20	0.41
21:AA:707:U:H2'	21:AA:708:C:C6	2.55	0.41
22:AY:67:A:H2'	22:AY:68:U:H6	1.85	0.41
57:BB:152:A:C4	57:BB:175:G:N2	2.89	0.41
57:BB:607:U:C4	57:BB:608:A:N7	2.88	0.41
57:BB:963:U:H2'	57:BB:964:C:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BK:10:ALA:HB2	30:BK:82:ALA:HB1	2.03	0.41
21:AA:1207:G:C6	21:AA:1208:C:C4	3.08	0.41
21:AA:1225:A:H2'	21:AA:1226:C:C6	2.56	0.41
21:AA:1396:A:H4'	21:AA:1397:C:H5''	2.02	0.41
21:AA:34:C:H2'	21:AA:35:G:C8	2.55	0.41
23:AW:51:U:C2	23:AW:64:A:C2	3.09	0.41
27:B5:26:ALA:HB1	27:B5:214:ILE:HG21	2.02	0.41
57:BB:2112:G:C8	57:BB:2112:G:H3'	2.55	0.41
57:BB:2710:C:H2'	57:BB:2711:A:C8	2.56	0.41
21:AA:1206:G:C6	21:AA:1207:G:C6	3.08	0.41
22:AY:41:U:C2	22:AY:42:G:C8	3.09	0.41
49:B2:24:THR:HG23	49:B2:26:ASN:H	1.85	0.41
57:BB:1428:C:C5	57:BB:1569:A:H5''	2.56	0.41
57:BB:2343:U:H4'	57:BB:2374:C:H5'	2.03	0.41
57:BB:2734:A:H2'	57:BB:2735:G:H5'	2.03	0.41
21:AA:1300:G:C5	21:AA:1334:G:C5	3.09	0.41
21:AA:36:C:C4	21:AA:37:U:C4	3.09	0.41
21:AA:46:G:C6	21:AA:366:A:C2	3.09	0.41
57:BB:2645:G:H3'	57:BB:2646:C:H5'	2.02	0.41
57:BB:2740:A:C6	57:BB:2741:A:C6	3.09	0.41
57:BB:402:A:N7	57:BB:403:U:C4	2.89	0.41
35:BP:77:SER:O	35:BP:80:VAL:HG12	2.21	0.41
15:AD:4:LEU:HD11	21:AA:405:U:C5	2.55	0.41
27:B5:167:LYS:HB2	57:BB:2120:G:H21	1.84	0.41
58:BA:85:G:C2	58:BA:92:C:C2	3.09	0.41
57:BB:1135:C:C6	57:BB:1137:G:OP2	2.74	0.41
57:BB:2091:C:H3'	57:BB:2092:U:C5'	2.50	0.41
57:BB:2379:G:H2'	57:BB:2380:C:C6	2.55	0.41
57:BB:2537:U:H2'	57:BB:2538:C:C6	2.56	0.41
57:BB:2596:U:C4	57:BB:2597:G:C6	3.09	0.41
57:BB:545:U:H3'	57:BB:547:A:OP2	2.20	0.41
34:BO:117:PHE:CE1	57:BB:2377:A:N3	2.89	0.41
21:AA:836:G:C5	21:AA:851:G:C6	3.08	0.41
58:BA:79:G:C6	58:BA:80:U:C4	3.08	0.41
57:BB:1669:A:H2'	57:BB:1670:C:H5'	2.03	0.41
57:BB:2119:A:C2	57:BB:2170:A:C2	3.09	0.41
57:BB:250:G:C5	57:BB:251:A:C5	3.09	0.41
40:BU:5:ARG:HH11	40:BU:92:VAL:HG22	1.85	0.41
21:AA:1231:G:C6	21:AA:1232:U:C4	3.09	0.41
21:AA:59:A:H3'	21:AA:60:A:C5'	2.50	0.41
5:AN:2:LYS:HD2	21:AA:1049:U:H3'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1202:G:C6	57:BB:1244:A:N1	2.89	0.41
57:BB:1878:G:C6	57:BB:1879:C:C4	3.09	0.41
57:BB:1961:C:C2'	57:BB:1962:C:H5'	2.50	0.41
57:BB:2027:G:N3	57:BB:2037:A:C2	2.88	0.41
57:BB:245:G:C6	57:BB:246:C:C4	3.09	0.41
57:BB:2468:A:C2	57:BB:2481:G:N3	2.89	0.41
57:BB:2645:G:H3'	57:BB:2646:C:C5'	2.51	0.41
57:BB:2790:U:O4'	57:BB:2893:A:C8	2.74	0.41
57:BB:346:A:C2	57:BB:347:A:C5	3.09	0.41
40:BU:44:HIS:HB2	57:BB:482:A:H4'	2.02	0.41
57:BB:663:G:C6	57:BB:664:G:C5	3.09	0.41
21:AA:925:G:H1'	21:AA:1502:A:C4	2.56	0.41
10:AS:26:ASP:OD2	10:AS:30:LEU:HD21	2.21	0.41
10:AS:35:ARG:HH22	10:AS:76:THR:HG22	1.86	0.41
25:AZ:107:ALA:HB2	25:AZ:134:LEU:HB3	2.02	0.41
57:BB:670:A:H4'	57:BB:671:C:H5'	2.02	0.41
57:BB:735:A:H3'	57:BB:736:C:H6	1.86	0.41
57:BB:796:C:H2'	57:BB:797:G:C8	2.56	0.41
4:AM:70:ARG:NE	54:BF:114:ARG:HE	2.19	0.41
56:BH:77:THR:HB	56:BH:78:VAL:H	1.77	0.41
21:AA:678:U:H2'	21:AA:679:C:C6	2.57	0.40
58:BA:81:G:C5	58:BA:82:U:C5	3.09	0.40
57:BB:2014:A:C2	57:BB:2015:A:N1	2.89	0.40
57:BB:373:U:O2	57:BB:373:U:H2'	2.21	0.40
57:BB:648:G:H5''	57:BB:2352:A:C5'	2.51	0.40
57:BB:738:G:C6	57:BB:759:G:C6	3.09	0.40
33:BN:32:GLU:HB2	33:BN:118:ARG:HH21	1.86	0.40
21:AA:1084:G:H2'	21:AA:1085:U:C6	2.56	0.40
21:AA:748:G:C6	21:AA:749:A:C5	3.09	0.40
5:AN:89:ARG:HA	14:AC:5:HIS:CE1	2.56	0.40
17:AF:39:LEU:HD12	17:AF:61:LEU:O	2.20	0.40
18:AG:98:LEU:HD23	18:AG:98:LEU:HA	1.94	0.40
23:AW:76:A:C2	57:BB:2421:G:C6	3.09	0.40
25:AZ:27:LEU:HD23	25:AZ:27:LEU:HA	2.02	0.40
57:BB:1296:G:C2	57:BB:1645:G:C4	3.08	0.40
57:BB:1344:U:H4'	57:BB:1384:A:C5	2.56	0.40
57:BB:1423:G:C6	57:BB:1424:G:C5	3.10	0.40
57:BB:1751:U:H5'	57:BB:2860:A:C2	2.56	0.40
57:BB:2126:A:C2	57:BB:2173:A:C4	3.08	0.40
57:BB:548:G:H5'	57:BB:549:G:N3	2.37	0.40
57:BB:754:U:H2'	57:BB:755:U:H6	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:776:G:C4	57:BB:793:A:C5	3.10	0.40
52:BD:3:GLY:HA2	52:BD:204:LYS:HA	2.03	0.40
21:AA:881:G:C5	21:AA:882:C:C5	3.10	0.40
45:BC:57:HIS:HE1	57:BB:1568:G:H1'	1.86	0.40
57:BB:2043:C:C2	57:BB:2044:C:C5	3.09	0.40
57:BB:2298:A:C8	57:BB:2299:U:C5	3.08	0.40
57:BB:2662:A:H2'	57:BB:2663:G:O4'	2.21	0.40
57:BB:2686:G:C5	57:BB:2687:U:C4	3.10	0.40
57:BB:57:C:H2'	57:BB:58:G:O4'	2.21	0.40
54:BF:124:ARG:HA	54:BF:124:ARG:NE	2.36	0.40
15:AD:146:GLU:HB2	15:AD:147:LYS:H	1.68	0.40
27:B5:78:PHE:CD2	27:B5:120:ALA:HB1	2.57	0.40
57:BB:46:G:C6	57:BB:180:G:C5	3.10	0.40
57:BB:1831:G:C5	57:BB:1832:C:C5	3.10	0.40
57:BB:1839:G:H2'	57:BB:1840:G:H8	1.87	0.40
57:BB:644:A:H4'	57:BB:645:C:C5	2.56	0.40
57:BB:895:U:H4'	57:BB:896:A:C4	2.57	0.40
45:BC:2:VAL:HG13	45:BC:16:VAL:HG13	2.04	0.40
31:BL:116:VAL:HG13	31:BL:138:ALA:HB2	2.02	0.40
37:BR:59:ILE:HA	37:BR:101:ILE:H	1.87	0.40
21:AA:1008:U:C5	21:AA:1009:U:C5	3.09	0.40
21:AA:1343:G:H2'	21:AA:1344:C:C6	2.57	0.40
21:AA:1395:C:C4'	21:AA:1401:G:H21	2.34	0.40
15:AD:141:VAL:HG22	15:AD:180:THR:HG22	2.03	0.40
20:AI:33:SER:H	20:AI:36:GLN:HB2	1.87	0.40
22:AY:37:G:N2	24:AX:19:U:C5	2.90	0.40
57:BB:1091:G:C6	57:BB:1092:C:N4	2.90	0.40
57:BB:112:U:C5	57:BB:113:U:C4	3.10	0.40
57:BB:1831:G:C6	57:BB:1975:G:C6	3.10	0.40
57:BB:2714:G:C6	57:BB:2715:C:C4	3.10	0.40
57:BB:648:G:H5''	57:BB:2352:A:H5''	2.03	0.40
45:BC:75:ALA:HA	45:BC:95:TYR:HA	2.03	0.40
43:BX:51:SER:HB2	43:BX:54:GLY:H	1.87	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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	AJ	96/98 (98%)	77 (80%)	11 (12%)	8 (8%)	1	16
2	AK	115/117 (98%)	90 (78%)	18 (16%)	7 (6%)	2	22
3	AL	121/123 (98%)	107 (88%)	11 (9%)	3 (2%)	6	41
4	AM	111/113 (98%)	81 (73%)	20 (18%)	10 (9%)	1	15
5	AN	94/96 (98%)	67 (71%)	18 (19%)	9 (10%)	1	13
6	AO	86/88 (98%)	73 (85%)	8 (9%)	5 (6%)	2	24
7	AP	78/80 (98%)	61 (78%)	14 (18%)	3 (4%)	4	32
8	AQ	78/80 (98%)	62 (80%)	13 (17%)	3 (4%)	4	32
9	AR	53/55 (96%)	43 (81%)	10 (19%)	0	100	100
10	AS	77/79 (98%)	55 (71%)	17 (22%)	5 (6%)	1	22
11	AT	83/85 (98%)	73 (88%)	8 (10%)	2 (2%)	7	42
12	AU	49/51 (96%)	35 (71%)	10 (20%)	4 (8%)	1	16
13	AB	216/218 (99%)	166 (77%)	37 (17%)	13 (6%)	2	23
14	AC	204/206 (99%)	168 (82%)	26 (13%)	10 (5%)	2	27
15	AD	203/205 (99%)	161 (79%)	28 (14%)	14 (7%)	1	20
16	AE	148/150 (99%)	118 (80%)	21 (14%)	9 (6%)	2	22
17	AF	98/100 (98%)	79 (81%)	15 (15%)	4 (4%)	3	30
18	AG	148/150 (99%)	122 (82%)	18 (12%)	8 (5%)	2	25
19	AH	127/129 (98%)	96 (76%)	26 (20%)	5 (4%)	3	31
20	AI	125/127 (98%)	102 (82%)	21 (17%)	2 (2%)	11	51
25	AZ	391/393 (100%)	319 (82%)	52 (13%)	20 (5%)	2	26
27	B5	232/234 (99%)	195 (84%)	31 (13%)	6 (3%)	6	40
28	BI	139/141 (99%)	121 (87%)	11 (8%)	7 (5%)	2	27
29	BJ	140/142 (99%)	116 (83%)	11 (8%)	13 (9%)	1	14
30	BK	119/121 (98%)	96 (81%)	18 (15%)	5 (4%)	3	30

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
31	BL	141/143 (99%)	118 (84%)	16 (11%)	7 (5%)	2	27
32	BM	134/136 (98%)	101 (75%)	26 (19%)	7 (5%)	2	26
33	BN	118/120 (98%)	97 (82%)	17 (14%)	4 (3%)	4	35
34	BO	114/116 (98%)	100 (88%)	8 (7%)	6 (5%)	2	26
35	BP	112/114 (98%)	87 (78%)	15 (13%)	10 (9%)	1	15
36	BQ	115/117 (98%)	99 (86%)	14 (12%)	2 (2%)	11	50
37	BR	101/103 (98%)	83 (82%)	13 (13%)	5 (5%)	2	27
38	BS	108/110 (98%)	85 (79%)	15 (14%)	8 (7%)	1	18
39	BT	91/93 (98%)	64 (70%)	19 (21%)	8 (9%)	1	15
40	BU	100/102 (98%)	79 (79%)	13 (13%)	8 (8%)	1	17
41	BV	92/94 (98%)	76 (83%)	14 (15%)	2 (2%)	8	44
42	BW	77/79 (98%)	56 (73%)	10 (13%)	11 (14%)	0	5
43	BX	75/77 (97%)	60 (80%)	10 (13%)	5 (7%)	1	21
44	BY	61/63 (97%)	47 (77%)	11 (18%)	3 (5%)	2	27
45	BC	269/271 (99%)	201 (75%)	43 (16%)	25 (9%)	1	14
46	BZ	56/58 (97%)	49 (88%)	7 (12%)	0	100	100
47	B0	54/56 (96%)	43 (80%)	9 (17%)	2 (4%)	4	33
48	B1	48/50 (96%)	44 (92%)	2 (4%)	2 (4%)	3	30
49	B2	44/46 (96%)	32 (73%)	11 (25%)	1 (2%)	7	43
50	B3	62/64 (97%)	54 (87%)	5 (8%)	3 (5%)	2	28
51	B4	36/38 (95%)	31 (86%)	4 (11%)	1 (3%)	6	39
52	BD	207/209 (99%)	152 (73%)	39 (19%)	16 (8%)	1	18
53	BE	199/201 (99%)	157 (79%)	29 (15%)	13 (6%)	1	22
54	BF	176/178 (99%)	129 (73%)	28 (16%)	19 (11%)	0	10
55	BG	174/176 (99%)	137 (79%)	23 (13%)	14 (8%)	1	17
56	BH	147/149 (99%)	107 (73%)	23 (16%)	17 (12%)	0	8
All	All	6242/6344 (98%)	4971 (80%)	897 (14%)	374 (6%)	3	23

All (374) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	AJ	67	ILE
3	AL	24	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AM	3	ILE
4	AM	29	SER
4	AM	99	GLN
5	AN	26	LEU
5	AN	80	ARG
7	AP	65	ALA
8	AQ	71	SER
10	AS	27	LYS
10	AS	37	SER
13	AB	20	ARG
13	AB	205	ALA
14	AC	21	TRP
14	AC	63	ILE
15	AD	3	TYR
15	AD	45	PRO
16	AE	17	VAL
16	AE	106	ALA
17	AF	85	ILE
18	AG	127	ALA
19	AH	66	GLN
25	AZ	22	HIS
25	AZ	24	LYS
27	B5	36	ALA
27	B5	92	ALA
27	B5	134	ARG
28	BI	3	LYS
29	BJ	40	HIS
30	BK	72	ASP
31	BL	111	ILE
32	BM	43	ALA
37	BR	82	HIS
38	BS	76	VAL
38	BS	96	ILE
39	BT	21	SER
40	BU	75	ALA
42	BW	23	LYS
42	BW	35	ILE
42	BW	48	ALA
43	BX	41	SER
45	BC	35	LYS
45	BC	117	SER
45	BC	142	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BC	170	TYR
47	B0	44	ALA
50	B3	29	ARG
52	BD	31	ALA
53	BE	46	GLN
54	BF	13	LYS
54	BF	60	SER
54	BF	82	TYR
54	BF	84	ILE
55	BG	2	ARG
55	BG	62	ALA
56	BH	93	SER
56	BH	102	ALA
56	BH	116	ARG
56	BH	122	LEU
56	BH	130	VAL
1	AJ	17	LEU
1	AJ	57	VAL
1	AJ	74	VAL
1	AJ	75	ASP
2	AK	35	ASP
2	AK	101	ALA
2	AK	118	ASN
3	AL	62	VAL
4	AM	87	GLY
5	AN	21	ALA
5	AN	30	ILE
5	AN	43	ALA
8	AQ	12	VAL
10	AS	31	ARG
12	AU	9	GLU
14	AC	162	ALA
15	AD	7	LYS
15	AD	34	GLU
15	AD	42	ALA
15	AD	146	GLU
16	AE	121	ASN
17	AF	94	HIS
18	AG	109	LYS
18	AG	118	ARG
25	AZ	21	ASP
25	AZ	61	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	AZ	82	PRO
25	AZ	125	VAL
25	AZ	143	GLU
25	AZ	220	ILE
25	AZ	239	GLY
27	B5	159	GLY
28	BI	6	ALA
29	BJ	81	ILE
29	BJ	99	ARG
29	BJ	110	PRO
29	BJ	112	GLY
29	BJ	125	TYR
30	BK	34	VAL
31	BL	60	ARG
31	BL	85	VAL
32	BM	72	PRO
32	BM	73	ILE
33	BN	113	ILE
34	BO	95	SER
35	BP	48	ALA
35	BP	54	LEU
35	BP	103	THR
38	BS	11	ARG
38	BS	61	ASN
39	BT	16	VAL
40	BU	97	SER
41	BV	60	VAL
42	BW	30	VAL
42	BW	71	LYS
43	BX	40	GLU
43	BX	42	GLU
44	BY	10	SER
45	BC	22	GLU
45	BC	57	HIS
45	BC	116	GLN
50	B3	5	THR
51	B4	8	LYS
52	BD	102	ALA
52	BD	109	VAL
52	BD	122	VAL
52	BD	127	PHE
52	BD	175	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	BE	9	GLN
53	BE	48	THR
54	BF	39	VAL
54	BF	88	VAL
54	BF	133	GLU
55	BG	83	THR
55	BG	150	TYR
56	BH	115	VAL
56	BH	142	VAL
1	AJ	85	ASP
2	AK	120	CYS
6	AO	22	GLY
6	AO	45	HIS
12	AU	26	GLY
13	AB	12	GLY
13	AB	77	GLU
13	AB	98	GLY
13	AB	99	MET
14	AC	116	ALA
17	AF	33	GLU
19	AH	106	SER
19	AH	116	ARG
25	AZ	180	GLY
25	AZ	281	ILE
25	AZ	345	GLU
27	B5	218	MET
28	BI	20	SER
29	BJ	26	GLY
29	BJ	60	ASP
29	BJ	67	ASN
30	BK	90	SER
31	BL	70	LYS
31	BL	82	LEU
35	BP	97	TYR
35	BP	98	TYR
36	BQ	88	GLU
37	BR	54	VAL
38	BS	64	ALA
38	BS	65	ASP
39	BT	73	ARG
40	BU	12	VAL
42	BW	17	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BX	27	ARG
45	BC	7	PRO
45	BC	29	PHE
45	BC	54	GLY
45	BC	184	GLU
45	BC	189	ALA
45	BC	197	ALA
48	B1	24	LYS
48	B1	50	GLU
52	BD	162	ALA
52	BD	192	ALA
53	BE	23	PHE
53	BE	71	GLY
53	BE	96	VAL
54	BF	2	LYS
54	BF	74	ALA
54	BF	107	VAL
54	BF	119	LYS
55	BG	36	LEU
55	BG	47	ASN
55	BG	154	GLU
56	BH	8	LYS
56	BH	14	SER
56	BH	33	GLN
56	BH	67	ALA
56	BH	113	SER
56	BH	126	GLY
2	AK	52	ARG
4	AM	6	ILE
4	AM	16	ILE
4	AM	65	GLU
5	AN	28	ALA
5	AN	62	ARG
6	AO	19	ASN
7	AP	36	VAL
10	AS	24	SER
12	AU	28	LEU
13	AB	78	ALA
13	AB	167	HIS
14	AC	167	TYR
15	AD	6	PRO
15	AD	26	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	AE	25	LYS
16	AE	40	ASP
16	AE	110	MET
25	AZ	63	ASN
25	AZ	209	PRO
25	AZ	222	GLY
28	BI	76	ALA
30	BK	5	THR
31	BL	68	SER
32	BM	51	ARG
32	BM	122	ALA
33	BN	70	THR
34	BO	58	ILE
35	BP	81	ASP
35	BP	105	LYS
35	BP	107	ALA
36	BQ	24	TYR
39	BT	18	GLU
39	BT	41	ALA
40	BU	47	PRO
40	BU	62	ALA
40	BU	63	ALA
40	BU	74	ALA
40	BU	98	ASN
42	BW	14	ASP
42	BW	56	HIS
43	BX	34	SER
44	BY	9	LYS
45	BC	28	PRO
45	BC	68	ARG
45	BC	122	ALA
45	BC	229	HIS
45	BC	239	PHE
47	B0	33	SER
50	B3	53	ASP
52	BD	135	GLY
52	BD	144	GLY
53	BE	6	LYS
53	BE	10	SER
53	BE	11	ALA
53	BE	45	ALA
53	BE	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	BF	35	LEU
54	BF	69	ALA
54	BF	132	ARG
54	BF	149	ARG
55	BG	58	ALA
55	BG	135	ALA
56	BH	29	PHE
56	BH	109	GLU
56	BH	123	ARG
3	AL	100	ALA
4	AM	21	ILE
5	AN	45	LEU
5	AN	99	SER
6	AO	18	ALA
6	AO	87	ARG
7	AP	53	ASP
11	AT	67	HIS
12	AU	21	SER
13	AB	18	GLN
13	AB	219	THR
14	AC	42	LEU
14	AC	65	VAL
14	AC	163	ARG
15	AD	40	HIS
15	AD	121	ALA
16	AE	26	GLY
17	AF	56	LYS
18	AG	40	SER
18	AG	129	ASN
20	AI	128	LYS
25	AZ	30	ALA
25	AZ	247	ILE
28	BI	37	PHE
28	BI	69	VAL
29	BJ	65	THR
29	BJ	69	ARG
30	BK	92	GLN
32	BM	69	PRO
33	BN	59	SER
34	BO	51	ALA
34	BO	112	GLU
37	BR	43	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BR	98	ILE
38	BS	90	LYS
39	BT	43	ILE
39	BT	55	VAL
39	BT	64	LYS
41	BV	71	LYS
42	BW	24	ARG
42	BW	75	ASN
45	BC	21	PRO
45	BC	52	HIS
45	BC	77	VAL
45	BC	97	ASP
45	BC	205	GLY
45	BC	254	LYS
49	B2	41	ARG
52	BD	149	ASN
53	BE	83	VAL
54	BF	136	ILE
54	BF	176	PHE
55	BG	9	VAL
55	BG	80	GLU
55	BG	157	LYS
2	AK	125	LYS
4	AM	19	THR
13	AB	40	ILE
15	AD	23	GLY
16	AE	29	ILE
18	AG	146	ALA
19	AH	82	LEU
25	AZ	258	VAL
33	BN	98	LEU
34	BO	73	ALA
35	BP	113	LEU
42	BW	40	ARG
45	BC	171	VAL
55	BG	152	ARG
56	BH	31	VAL
1	AJ	41	PRO
4	AM	24	VAL
14	AC	14	VAL
14	AC	108	PRO
15	AD	185	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	AZ	298	ILE
28	BI	22	PRO
29	BJ	124	VAL
53	BE	167	VAL
54	BF	12	VAL
54	BF	110	ILE
8	AQ	31	PRO
15	AD	24	VAL
16	AE	15	ILE
18	AG	15	PRO
18	AG	79	VAL
27	B5	209	ILE
32	BM	125	PRO
44	BY	46	VAL
52	BD	166	GLY
52	BD	203	VAL
2	AK	96	ILE
37	BR	101	ILE
38	BS	45	VAL
52	BD	24	VAL
52	BD	93	GLY
52	BD	146	ILE
11	AT	56	ILE
13	AB	47	PRO
15	AD	166	LYS
19	AH	5	PRO
25	AZ	83	GLY
35	BP	45	VAL
55	BG	8	VAL
1	AJ	39	PRO
10	AS	29	PRO
13	AB	79	VAL
20	AI	124	PRO
29	BJ	46	PRO
31	BL	24	GLY
34	BO	41	ALA

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	AJ	86/86 (100%)	82 (95%)	4 (5%)	30	62
2	AK	90/90 (100%)	87 (97%)	3 (3%)	43	70
3	AL	103/103 (100%)	98 (95%)	5 (5%)	29	61
4	AM	91/91 (100%)	85 (93%)	6 (7%)	19	52
5	AN	79/79 (100%)	78 (99%)	1 (1%)	73	87
6	AO	76/76 (100%)	74 (97%)	2 (3%)	51	75
7	AP	65/65 (100%)	63 (97%)	2 (3%)	45	71
8	AQ	74/74 (100%)	67 (90%)	7 (10%)	10	36
9	AR	48/48 (100%)	47 (98%)	1 (2%)	59	80
10	AS	70/70 (100%)	67 (96%)	3 (4%)	33	64
11	AT	65/65 (100%)	65 (100%)	0	100	100
12	AU	44/44 (100%)	42 (96%)	2 (4%)	32	63
13	AB	180/180 (100%)	172 (96%)	8 (4%)	33	63
14	AC	170/170 (100%)	158 (93%)	12 (7%)	17	49
15	AD	172/172 (100%)	163 (95%)	9 (5%)	27	59
16	AE	113/113 (100%)	106 (94%)	7 (6%)	21	54
17	AF	87/87 (100%)	81 (93%)	6 (7%)	18	51
18	AG	123/123 (100%)	115 (94%)	8 (6%)	20	52
19	AH	104/104 (100%)	95 (91%)	9 (9%)	12	40
20	AI	105/105 (100%)	97 (92%)	8 (8%)	15	47
25	AZ	325/326 (100%)	303 (93%)	22 (7%)	18	51
27	B5	181/181 (100%)	170 (94%)	11 (6%)	22	55
28	BI	109/109 (100%)	100 (92%)	9 (8%)	13	43
29	BJ	116/116 (100%)	107 (92%)	9 (8%)	15	46
30	BK	102/102 (100%)	94 (92%)	8 (8%)	15	46
31	BL	102/102 (100%)	100 (98%)	2 (2%)	60	82
32	BM	109/109 (100%)	100 (92%)	9 (8%)	13	43
33	BN	100/100 (100%)	97 (97%)	3 (3%)	46	72
34	BO	86/86 (100%)	83 (96%)	3 (4%)	41	69
35	BP	99/99 (100%)	92 (93%)	7 (7%)	17	49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
36	BQ	89/89 (100%)	86 (97%)	3 (3%)	42	69
37	BR	84/84 (100%)	78 (93%)	6 (7%)	17	49
38	BS	93/93 (100%)	89 (96%)	4 (4%)	33	64
39	BT	80/80 (100%)	72 (90%)	8 (10%)	9	33
40	BU	83/83 (100%)	72 (87%)	11 (13%)	4	24
41	BV	78/78 (100%)	75 (96%)	3 (4%)	38	67
42	BW	59/59 (100%)	53 (90%)	6 (10%)	8	33
43	BX	67/67 (100%)	60 (90%)	7 (10%)	8	32
44	BY	55/55 (100%)	53 (96%)	2 (4%)	40	68
45	BC	216/216 (100%)	205 (95%)	11 (5%)	28	60
46	BZ	48/48 (100%)	44 (92%)	4 (8%)	13	43
47	B0	47/47 (100%)	42 (89%)	5 (11%)	8	31
48	B1	45/45 (100%)	42 (93%)	3 (7%)	19	51
49	B2	38/38 (100%)	37 (97%)	1 (3%)	51	75
50	B3	51/51 (100%)	49 (96%)	2 (4%)	37	66
51	B4	34/34 (100%)	34 (100%)	0	100	100
52	BD	164/164 (100%)	150 (92%)	14 (8%)	12	42
53	BE	165/165 (100%)	157 (95%)	8 (5%)	30	61
54	BF	149/149 (100%)	139 (93%)	10 (7%)	19	51
55	BG	137/137 (100%)	126 (92%)	11 (8%)	14	45
56	BH	114/114 (100%)	107 (94%)	7 (6%)	22	55
All	All	5170/5171 (100%)	4858 (94%)	312 (6%)	27	55

All (312) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AJ	15	HIS
1	AJ	31	ARG
1	AJ	60	ASP
1	AJ	85	ASP
2	AK	55	ARG
2	AK	75	GLU
2	AK	126	ARG
3	AL	29	LYS
3	AL	43	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AL	72	ASN
3	AL	74	GLN
3	AL	110	LYS
4	AM	12	LYS
4	AM	26	LYS
4	AM	30	LYS
4	AM	52	ILE
4	AM	89	ARG
4	AM	102	LYS
5	AN	23	ARG
6	AO	9	LYS
6	AO	88	ARG
7	AP	3	THR
7	AP	52	LEU
8	AQ	5	ARG
8	AQ	10	ARG
8	AQ	16	MET
8	AQ	17	GLU
8	AQ	26	ARG
8	AQ	32	ILE
8	AQ	79	GLU
9	AR	23	LYS
10	AS	27	LYS
10	AS	42	ASN
10	AS	50	VAL
12	AU	34	ARG
12	AU	35	GLU
13	AB	18	GLN
13	AB	62	ARG
13	AB	99	MET
13	AB	110	ILE
13	AB	141	GLU
13	AB	156	LEU
13	AB	199	ILE
13	AB	219	THR
14	AC	27	GLU
14	AC	28	PHE
14	AC	38	VAL
14	AC	106	ARG
14	AC	110	LEU
14	AC	111	ASP
14	AC	115	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AC	122	GLN
14	AC	126	ARG
14	AC	129	PHE
14	AC	163	ARG
14	AC	184	ASN
15	AD	2	ARG
15	AD	39	GLN
15	AD	43	ARG
15	AD	69	ARG
15	AD	71	PHE
15	AD	152	SER
15	AD	170	LEU
15	AD	184	LYS
15	AD	201	GLU
16	AE	13	LYS
16	AE	45	VAL
16	AE	64	GLU
16	AE	123	LEU
16	AE	125	LYS
16	AE	146	MET
16	AE	151	MET
17	AF	7	VAL
17	AF	8	PHE
17	AF	16	GLU
17	AF	49	TYR
17	AF	89	VAL
17	AF	91	ARG
18	AG	9	ARG
18	AG	12	LEU
18	AG	26	VAL
18	AG	51	GLN
18	AG	55	LYS
18	AG	73	GLU
18	AG	100	MET
18	AG	143	MET
19	AH	9	MET
19	AH	41	GLU
19	AH	49	LYS
19	AH	51	GLU
19	AH	63	LYS
19	AH	88	LYS
19	AH	105	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AH	117	GLN
19	AH	127	TYR
20	AI	31	GLN
20	AI	40	ARG
20	AI	56	MET
20	AI	58	GLU
20	AI	67	LYS
20	AI	86	LEU
20	AI	89	TYR
20	AI	98	ARG
25	AZ	6	GLU
25	AZ	7	ARG
25	AZ	37	LYS
25	AZ	51	ASN
25	AZ	79	VAL
25	AZ	84	HIS
25	AZ	91	MET
25	AZ	114	GLN
25	AZ	139	MET
25	AZ	159	GLN
25	AZ	204	ARG
25	AZ	212	LEU
25	AZ	235	ILE
25	AZ	237	LYS
25	AZ	248	LYS
25	AZ	262	ARG
25	AZ	284	GLU
25	AZ	288	ARG
25	AZ	313	LYS
25	AZ	349	MET
25	AZ	373	ARG
25	AZ	381	ARG
27	B5	7	ARG
27	B5	39	VAL
27	B5	54	LYS
27	B5	59	VAL
27	B5	78	PHE
27	B5	98	GLU
27	B5	105	LYS
27	B5	162	ARG
27	B5	173	THR
27	B5	174	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	B5	207	VAL
28	BI	12	VAL
28	BI	22	PRO
28	BI	39	LYS
28	BI	49	GLU
28	BI	66	PHE
28	BI	73	PRO
28	BI	95	ASP
28	BI	100	ILE
28	BI	140	GLU
29	BJ	18	VAL
29	BJ	43	GLU
29	BJ	49	ASP
29	BJ	60	ASP
29	BJ	69	ARG
29	BJ	76	HIS
29	BJ	101	ILE
29	BJ	125	TYR
29	BJ	129	GLU
30	BK	2	GLN
30	BK	19	MET
30	BK	30	ARG
30	BK	50	LYS
30	BK	68	VAL
30	BK	86	LEU
30	BK	110	LYS
30	BK	115	ILE
31	BL	46	VAL
31	BL	84	LYS
32	BM	10	ARG
32	BM	33	LEU
32	BM	45	GLN
32	BM	51	ARG
32	BM	59	ARG
32	BM	71	LYS
32	BM	90	GLU
32	BM	91	TYR
32	BM	111	GLU
33	BN	9	GLN
33	BN	29	VAL
33	BN	112	TYR
34	BO	4	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BO	112	GLU
34	BO	117	PHE
35	BP	6	GLN
35	BP	26	GLU
35	BP	42	PHE
35	BP	74	GLN
35	BP	87	ARG
35	BP	92	ARG
35	BP	108	ARG
36	BQ	24	TYR
36	BQ	63	ARG
36	BQ	94	LEU
37	BR	39	LEU
37	BR	40	MET
37	BR	63	VAL
37	BR	64	VAL
37	BR	82	HIS
37	BR	95	ASP
38	BS	4	ILE
38	BS	48	LYS
38	BS	86	MET
38	BS	104	THR
39	BT	1	MET
39	BT	5	GLU
39	BT	12	ARG
39	BT	16	VAL
39	BT	58	VAL
39	BT	61	LEU
39	BT	70	HIS
39	BT	76	ARG
40	BU	4	ILE
40	BU	18	LYS
40	BU	26	ASN
40	BU	27	VAL
40	BU	33	VAL
40	BU	41	VAL
40	BU	71	ILE
40	BU	81	ARG
40	BU	87	GLU
40	BU	92	VAL
40	BU	94	PHE
41	BV	18	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	BV	29	ILE
41	BV	66	ASP
42	BW	39	GLN
42	BW	40	ARG
42	BW	45	HIS
42	BW	69	GLU
42	BW	74	LYS
42	BW	82	GLU
43	BX	3	VAL
43	BX	11	PRO
43	BX	15	ASN
43	BX	16	ASN
43	BX	26	ARG
43	BX	32	LEU
43	BX	42	GLU
44	BY	7	ARG
44	BY	53	VAL
45	BC	6	LYS
45	BC	34	GLU
45	BC	36	ASN
45	BC	64	VAL
45	BC	167	ASP
45	BC	183	VAL
45	BC	198	GLU
45	BC	200	MET
45	BC	212	TRP
45	BC	224	MET
45	BC	257	ARG
46	BZ	5	LYS
46	BZ	6	ILE
46	BZ	15	ARG
46	BZ	50	VAL
47	B0	8	THR
47	B0	9	ARG
47	B0	30	ASP
47	B0	47	TYR
47	B0	49	ARG
48	B1	32	LYS
48	B1	36	LYS
48	B1	49	LYS
49	B2	28	ARG
50	B3	29	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	B3	56	LEU
52	BD	2	ILE
52	BD	12	THR
52	BD	18	ASP
52	BD	38	LYS
52	BD	79	LEU
52	BD	84	LEU
52	BD	124	ARG
52	BD	128	ARG
52	BD	131	ASP
52	BD	159	LYS
52	BD	160	LYS
52	BD	161	MET
52	BD	168	GLU
52	BD	205	PRO
53	BE	1	MET
53	BE	62	GLN
53	BE	78	TRP
53	BE	79	ARG
53	BE	124	PHE
53	BE	141	MET
53	BE	155	GLU
53	BE	194	LYS
54	BF	16	MET
54	BF	49	LEU
54	BF	59	ILE
54	BF	77	LYS
54	BF	91	ARG
54	BF	100	GLU
54	BF	124	ARG
54	BF	129	MET
54	BF	140	ILE
54	BF	175	PRO
55	BG	7	PRO
55	BG	36	LEU
55	BG	50	THR
55	BG	85	LYS
55	BG	91	VAL
55	BG	104	LEU
55	BG	113	ASP
55	BG	120	ILE
55	BG	121	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	BG	150	TYR
55	BG	166	GLU
56	BH	1	MET
56	BH	11	ASN
56	BH	25	TYR
56	BH	29	PHE
56	BH	86	ASP
56	BH	89	LYS
56	BH	123	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (80) such sidechains are listed below:

Mol	Chain	Res	Type
1	AJ	15	HIS
2	AK	39	ASN
2	AK	63	GLN
2	AK	117	HIS
3	AL	71	HIS
3	AL	72	ASN
3	AL	74	GLN
3	AL	76	HIS
3	AL	95	HIS
5	AN	3	GLN
5	AN	48	GLN
5	AN	59	GLN
5	AN	70	HIS
6	AO	27	GLN
6	AO	49	HIS
7	AP	18	GLN
8	AQ	46	HIS
9	AR	53	GLN
10	AS	51	HIS
10	AS	68	HIS
11	AT	60	GLN
13	AB	14	HIS
13	AB	17	HIS
13	AB	145	ASN
13	AB	176	ASN
14	AC	5	HIS
15	AD	58	GLN
15	AD	99	ASN
16	AE	147	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	AF	14	GLN
17	AF	52	ASN
17	AF	63	ASN
17	AF	81	ASN
18	AG	27	ASN
18	AG	96	ASN
19	AH	20	ASN
25	AZ	11	HIS
25	AZ	19	HIS
25	AZ	51	ASN
25	AZ	75	HIS
25	AZ	78	HIS
25	AZ	114	GLN
25	AZ	118	HIS
25	AZ	159	GLN
25	AZ	329	GLN
28	BI	29	GLN
29	BJ	58	ASN
29	BJ	77	HIS
29	BJ	132	HIS
30	BK	2	GLN
30	BK	28	HIS
31	BL	54	GLN
31	BL	93	ASN
33	BN	16	HIS
34	BO	100	HIS
36	BQ	58	GLN
36	BQ	70	GLN
39	BT	28	ASN
39	BT	91	GLN
41	BV	75	GLN
41	BV	88	HIS
42	BW	45	HIS
42	BW	49	ASN
45	BC	43	ASN
45	BC	44	ASN
45	BC	57	HIS
45	BC	89	ASN
45	BC	116	GLN
45	BC	199	HIS
45	BC	231	HIS
48	B1	18	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	B1	45	HIS
49	B2	16	HIS
52	BD	148	GLN
53	BE	41	GLN
53	BE	97	ASN
55	BG	44	HIS
55	BG	115	GLN
55	BG	138	GLN
56	BH	135	HIS

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
21	AA	1529/1530 (99%)	281 (18%)	0
22	AY	75/76 (98%)	20 (26%)	0
23	AW	75/76 (98%)	24 (32%)	0
24	AX	10/11 (90%)	3 (30%)	0
26	AV	76/77 (98%)	14 (18%)	0
57	BB	2902/2903 (99%)	491 (16%)	0
58	BA	116/117 (99%)	19 (16%)	0
All	All	4783/4790 (99%)	852 (17%)	0

All (852) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
21	AA	6	G
21	AA	7	A
21	AA	8	A
21	AA	9	G
21	AA	14	U
21	AA	15	G
21	AA	31	G
21	AA	32	A
21	AA	39	G
21	AA	47	C
21	AA	48	C
21	AA	50	A
21	AA	51	A
21	AA	52	C
21	AA	55	A
21	AA	61	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	67	C
21	AA	70	U
21	AA	71	A
21	AA	75	G
21	AA	79	G
21	AA	80	A
21	AA	81	A
21	AA	83	C
21	AA	84	U
21	AA	85	U
21	AA	86	G
21	AA	88	U
21	AA	91	U
21	AA	101	A
21	AA	118	U
21	AA	119	A
21	AA	131	A
21	AA	144	G
21	AA	149	A
21	AA	155	A
21	AA	182	A
21	AA	197	A
21	AA	204	G
21	AA	205	A
21	AA	209	U
21	AA	210	C
21	AA	211	G
21	AA	239	U
21	AA	240	G
21	AA	243	A
21	AA	244	U
21	AA	245	U
21	AA	247	G
21	AA	251	G
21	AA	252	U
21	AA	257	G
21	AA	258	G
21	AA	266	G
21	AA	267	C
21	AA	280	C
21	AA	281	G
21	AA	288	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	289	G
21	AA	306	A
21	AA	308	C
21	AA	316	C
21	AA	328	C
21	AA	329	A
21	AA	330	C
21	AA	332	G
21	AA	352	C
21	AA	354	G
21	AA	367	U
21	AA	373	A
21	AA	374	A
21	AA	382	A
21	AA	388	G
21	AA	397	A
21	AA	398	U
21	AA	406	G
21	AA	408	A
21	AA	409	U
21	AA	411	A
21	AA	412	A
21	AA	413	G
21	AA	414	A
21	AA	416	G
21	AA	421	U
21	AA	422	C
21	AA	424	G
21	AA	429	U
21	AA	430	A
21	AA	435	A
21	AA	451	A
21	AA	456	A
21	AA	459	A
21	AA	461	A
21	AA	462	G
21	AA	463	U
21	AA	465	A
21	AA	466	A
21	AA	467	U
21	AA	468	A
21	AA	484	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	485	U
21	AA	486	U
21	AA	493	A
21	AA	499	A
21	AA	508	U
21	AA	511	C
21	AA	512	U
21	AA	518	C
21	AA	524	G
21	AA	527	G
21	AA	530	G
21	AA	531	U
21	AA	532	A
21	AA	533	A
21	AA	547	A
21	AA	560	A
21	AA	562	U
21	AA	563	A
21	AA	572	A
21	AA	573	A
21	AA	576	C
21	AA	577	G
21	AA	596	A
21	AA	631	C
21	AA	633	G
21	AA	653	U
21	AA	665	A
21	AA	666	G
21	AA	700	G
21	AA	720	C
21	AA	724	G
21	AA	731	G
21	AA	747	A
21	AA	748	G
21	AA	752	G
21	AA	755	G
21	AA	781	A
21	AA	782	A
21	AA	793	U
21	AA	794	A
21	AA	812	G
21	AA	815	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	817	C
21	AA	818	G
21	AA	819	A
21	AA	821	G
21	AA	828	U
21	AA	841	C
21	AA	842	U
21	AA	843	U
21	AA	844	G
21	AA	846	G
21	AA	847	G
21	AA	849	G
21	AA	873	A
21	AA	914	A
21	AA	926	G
21	AA	927	G
21	AA	934	C
21	AA	935	A
21	AA	945	G
21	AA	960	U
21	AA	961	U
21	AA	966	G
21	AA	968	A
21	AA	969	A
21	AA	971	G
21	AA	974	A
21	AA	975	A
21	AA	976	G
21	AA	977	A
21	AA	978	A
21	AA	981	U
21	AA	993	G
21	AA	994	A
21	AA	996	A
21	AA	1004	A
21	AA	1018	G
21	AA	1020	G
21	AA	1028	C
21	AA	1030	U
21	AA	1031	C
21	AA	1032	G
21	AA	1034	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	1036	A
21	AA	1043	G
21	AA	1050	G
21	AA	1053	G
21	AA	1064	G
21	AA	1065	U
21	AA	1066	C
21	AA	1070	U
21	AA	1085	U
21	AA	1086	U
21	AA	1094	G
21	AA	1095	U
21	AA	1101	A
21	AA	1110	A
21	AA	1112	C
21	AA	1118	U
21	AA	1119	C
21	AA	1124	G
21	AA	1125	U
21	AA	1130	A
21	AA	1133	G
21	AA	1134	G
21	AA	1135	U
21	AA	1136	C
21	AA	1139	G
21	AA	1140	C
21	AA	1145	A
21	AA	1146	A
21	AA	1154	G
21	AA	1159	U
21	AA	1160	G
21	AA	1168	U
21	AA	1181	G
21	AA	1183	U
21	AA	1184	G
21	AA	1196	A
21	AA	1197	A
21	AA	1202	U
21	AA	1212	U
21	AA	1213	A
21	AA	1214	C
21	AA	1215	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	1225	A
21	AA	1226	C
21	AA	1227	A
21	AA	1238	A
21	AA	1249	C
21	AA	1250	A
21	AA	1256	A
21	AA	1257	A
21	AA	1258	G
21	AA	1261	A
21	AA	1270	G
21	AA	1278	G
21	AA	1279	G
21	AA	1280	A
21	AA	1285	A
21	AA	1286	U
21	AA	1287	A
21	AA	1297	G
21	AA	1300	G
21	AA	1301	U
21	AA	1303	C
21	AA	1305	G
21	AA	1316	G
21	AA	1317	C
21	AA	1319	A
21	AA	1320	C
21	AA	1322	C
21	AA	1323	G
21	AA	1331	G
21	AA	1336	C
21	AA	1346	A
21	AA	1353	G
21	AA	1363	A
21	AA	1364	U
21	AA	1380	U
21	AA	1399	C
21	AA	1419	G
21	AA	1432	G
21	AA	1446	A
21	AA	1448	C
21	AA	1452	C
21	AA	1454	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AA	1493	A
21	AA	1494	G
21	AA	1497	G
21	AA	1499	A
21	AA	1503	A
21	AA	1506	U
21	AA	1517	G
21	AA	1520	C
21	AA	1529	G
21	AA	1530	G
21	AA	1531	A
21	AA	1533	C
21	AA	1534	A
22	AY	4	G
22	AY	8	U
22	AY	9	A
22	AY	12	U
22	AY	17	U
22	AY	18	G
22	AY	19	G
22	AY	20	G
22	AY	21	A
22	AY	31	A
22	AY	33	U
22	AY	35	A
22	AY	37	G
22	AY	43	G
22	AY	46	G
22	AY	48	C
22	AY	69	U
22	AY	72	C
22	AY	74	C
22	AY	75	C
23	AW	15	G
23	AW	16	U
23	AW	17	C
23	AW	18	G
23	AW	19	G
23	AW	20	U
23	AW	21	A
23	AW	33	U
23	AW	34	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	AW	37	A
23	AW	39	U
23	AW	40	C
23	AW	43	C
23	AW	47	U
23	AW	52	G
23	AW	56	C
23	AW	57	G
23	AW	59	U
23	AW	60	U
23	AW	61	C
23	AW	70	G
23	AW	71	G
23	AW	75	C
23	AW	76	A
24	AX	13	A
24	AX	17	U
24	AX	18	G
26	AV	5	G
26	AV	8	U
26	AV	17(A)	U
26	AV	18	G
26	AV	19	G
26	AV	21	A
26	AV	47	U
26	AV	48	C
26	AV	49	G
26	AV	53	G
26	AV	67	C
26	AV	71	C
26	AV	73	A
26	AV	75	C
57	BB	34	U
57	BB	35	G
57	BB	46	G
57	BB	50	U
57	BB	51	G
57	BB	71	A
57	BB	74	A
57	BB	75	G
57	BB	84	A
57	BB	91	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	95	A
57	BB	99	U
57	BB	100	U
57	BB	101	A
57	BB	102	U
57	BB	103	A
57	BB	118	A
57	BB	119	A
57	BB	120	U
57	BB	125	A
57	BB	136	G
57	BB	137	U
57	BB	139	U
57	BB	140	C
57	BB	141	G
57	BB	143	C
57	BB	144	A
57	BB	160	A
57	BB	180	G
57	BB	181	A
57	BB	196	A
57	BB	199	A
57	BB	216	A
57	BB	221	A
57	BB	222	A
57	BB	233	A
57	BB	241	A
57	BB	248	G
57	BB	249	C
57	BB	255	A
57	BB	265	A
57	BB	266	G
57	BB	268	C
57	BB	271	G
57	BB	273	G
57	BB	276	U
57	BB	277	G
57	BB	281	C
57	BB	283	G
57	BB	286	U
57	BB	294	A
57	BB	299	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	311	A
57	BB	312	G
57	BB	321	U
57	BB	323	C
57	BB	329	G
57	BB	330	A
57	BB	333	G
57	BB	346	A
57	BB	352	A
57	BB	353	C
57	BB	362	A
57	BB	363	G
57	BB	364	C
57	BB	369	U
57	BB	371	A
57	BB	372	G
57	BB	386	G
57	BB	387	U
57	BB	404	A
57	BB	405	U
57	BB	406	G
57	BB	411	G
57	BB	412	A
57	BB	424	G
57	BB	457	A
57	BB	479	A
57	BB	481	G
57	BB	490	C
57	BB	491	G
57	BB	504	A
57	BB	505	A
57	BB	508	A
57	BB	509	C
57	BB	512	G
57	BB	527	C
57	BB	528	A
57	BB	531	C
57	BB	532	A
57	BB	533	G
57	BB	544	C
57	BB	546	U
57	BB	547	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	548	G
57	BB	549	G
57	BB	550	C
57	BB	555	G
57	BB	563	A
57	BB	568	U
57	BB	573	U
57	BB	575	A
57	BB	586	A
57	BB	588	U
57	BB	603	A
57	BB	613	A
57	BB	614	A
57	BB	615	U
57	BB	627	A
57	BB	637	A
57	BB	638	G
57	BB	646	U
57	BB	647	G
57	BB	652	U
57	BB	656	G
57	BB	668	A
57	BB	670	A
57	BB	671	C
57	BB	686	U
57	BB	730	A
57	BB	747	U
57	BB	757	G
57	BB	764	A
57	BB	775	G
57	BB	776	G
57	BB	782	A
57	BB	784	G
57	BB	785	G
57	BB	788	A
57	BB	789	A
57	BB	793	A
57	BB	805	G
57	BB	812	C
57	BB	819	A
57	BB	827	U
57	BB	846	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	847	U
57	BB	858	G
57	BB	859	G
57	BB	871	U
57	BB	875	G
57	BB	881	G
57	BB	886	A
57	BB	889	C
57	BB	891	G
57	BB	896	A
57	BB	897	C
57	BB	900	A
57	BB	901	C
57	BB	910	A
57	BB	912	C
57	BB	919	U
57	BB	931	U
57	BB	932	U
57	BB	933	A
57	BB	941	A
57	BB	945	A
57	BB	946	C
57	BB	961	C
57	BB	973	A
57	BB	974	G
57	BB	980	A
57	BB	983	A
57	BB	985	C
57	BB	991	C
57	BB	996	A
57	BB	1005	C
57	BB	1012	U
57	BB	1013	C
57	BB	1022	G
57	BB	1023	U
57	BB	1025	G
57	BB	1033	U
57	BB	1046	A
57	BB	1054	A
57	BB	1056	G
57	BB	1057	A
57	BB	1067	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	1068	G
57	BB	1069	A
57	BB	1070	A
57	BB	1071	G
57	BB	1073	A
57	BB	1085	A
57	BB	1088	A
57	BB	1090	A
57	BB	1095	A
57	BB	1096	A
57	BB	1104	C
57	BB	1112	G
57	BB	1116	G
57	BB	1130	U
57	BB	1132	U
57	BB	1133	A
57	BB	1134	A
57	BB	1135	C
57	BB	1136	G
57	BB	1139	G
57	BB	1142	A
57	BB	1156	A
57	BB	1174	U
57	BB	1176	U
57	BB	1195	G
57	BB	1205	A
57	BB	1211	C
57	BB	1212	G
57	BB	1238	G
57	BB	1241	A
57	BB	1242	U
57	BB	1248	G
57	BB	1250	G
57	BB	1253	A
57	BB	1256	G
57	BB	1266	G
57	BB	1271	G
57	BB	1272	A
57	BB	1273	U
57	BB	1275	A
57	BB	1276	A
57	BB	1300	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	1301	A
57	BB	1321	A
57	BB	1325	U
57	BB	1326	U
57	BB	1332	G
57	BB	1337	G
57	BB	1340	U
57	BB	1341	G
57	BB	1352	U
57	BB	1365	A
57	BB	1368	G
57	BB	1374	G
57	BB	1379	U
57	BB	1394	U
57	BB	1396	U
57	BB	1416	G
57	BB	1417	C
57	BB	1419	A
57	BB	1420	A
57	BB	1421	G
57	BB	1427	A
57	BB	1428	C
57	BB	1451	C
57	BB	1453	A
57	BB	1454	C
57	BB	1458	U
57	BB	1459	G
57	BB	1461	C
57	BB	1469	A
57	BB	1475	G
57	BB	1476	U
57	BB	1477	A
57	BB	1478	G
57	BB	1482	G
57	BB	1490	A
57	BB	1493	C
57	BB	1497	U
57	BB	1504	A
57	BB	1505	A
57	BB	1507	C
57	BB	1508	A
57	BB	1509	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	1510	G
57	BB	1523	U
57	BB	1524	G
57	BB	1532	A
57	BB	1535	A
57	BB	1538	G
57	BB	1552	A
57	BB	1566	A
57	BB	1569	A
57	BB	1578	U
57	BB	1585	C
57	BB	1608	A
57	BB	1609	A
57	BB	1610	A
57	BB	1634	A
57	BB	1635	A
57	BB	1640	A
57	BB	1647	U
57	BB	1648	U
57	BB	1653	G
57	BB	1654	A
57	BB	1674	G
57	BB	1699	G
57	BB	1700	A
57	BB	1714	U
57	BB	1715	G
57	BB	1729	U
57	BB	1731	G
57	BB	1733	G
57	BB	1738	G
57	BB	1756	G
57	BB	1758	U
57	BB	1759	A
57	BB	1761	C
57	BB	1764	C
57	BB	1773	A
57	BB	1776	G
57	BB	1781	U
57	BB	1784	A
57	BB	1800	C
57	BB	1801	A
57	BB	1808	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	1816	C
57	BB	1829	A
57	BB	1839	G
57	BB	1870	C
57	BB	1884	G
57	BB	1896	G
57	BB	1906	G
57	BB	1913	A
57	BB	1915	U
57	BB	1929	G
57	BB	1930	G
57	BB	1937	A
57	BB	1938	A
57	BB	1940	U
57	BB	1944	U
57	BB	1945	G
57	BB	1952	A
57	BB	1954	G
57	BB	1955	U
57	BB	1965	C
57	BB	1967	C
57	BB	1970	A
57	BB	1971	U
57	BB	1972	G
57	BB	1991	U
57	BB	1993	U
57	BB	1997	C
57	BB	2020	A
57	BB	2022	U
57	BB	2023	C
57	BB	2031	A
57	BB	2032	G
57	BB	2033	A
57	BB	2043	C
57	BB	2055	C
57	BB	2056	G
57	BB	2060	A
57	BB	2061	G
57	BB	2062	A
57	BB	2065	C
57	BB	2069	G
57	BB	2076	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	2077	A
57	BB	2096	C
57	BB	2102	G
57	BB	2104	C
57	BB	2111	U
57	BB	2112	G
57	BB	2113	U
57	BB	2117	A
57	BB	2119	A
57	BB	2127	G
57	BB	2129	C
57	BB	2130	U
57	BB	2131	U
57	BB	2133	G
57	BB	2134	A
57	BB	2135	A
57	BB	2136	G
57	BB	2137	U
57	BB	2140	G
57	BB	2144	G
57	BB	2145	C
57	BB	2146	C
57	BB	2147	A
57	BB	2148	G
57	BB	2149	U
57	BB	2152	G
57	BB	2153	C
57	BB	2155	U
57	BB	2158	A
57	BB	2159	G
57	BB	2164	C
57	BB	2166	U
57	BB	2167	U
57	BB	2176	A
57	BB	2179	C
57	BB	2181	U
57	BB	2183	A
57	BB	2187	U
57	BB	2192	U
57	BB	2198	A
57	BB	2199	A
57	BB	2203	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	2204	G
57	BB	2212	A
57	BB	2213	U
57	BB	2214	C
57	BB	2225	A
57	BB	2238	G
57	BB	2239	G
57	BB	2251	G
57	BB	2252	G
57	BB	2253	G
57	BB	2254	C
57	BB	2266	A
57	BB	2279	G
57	BB	2283	C
57	BB	2286	G
57	BB	2287	A
57	BB	2297	A
57	BB	2305	U
57	BB	2307	G
57	BB	2308	G
57	BB	2309	A
57	BB	2310	C
57	BB	2321	U
57	BB	2322	A
57	BB	2324	U
57	BB	2325	G
57	BB	2333	A
57	BB	2334	U
57	BB	2335	A
57	BB	2336	A
57	BB	2337	G
57	BB	2347	C
57	BB	2383	G
57	BB	2385	C
57	BB	2396	G
57	BB	2402	U
57	BB	2406	A
57	BB	2423	U
57	BB	2425	A
57	BB	2426	A
57	BB	2429	G
57	BB	2430	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	2434	A
57	BB	2441	U
57	BB	2448	A
57	BB	2467	C
57	BB	2472	G
57	BB	2476	A
57	BB	2478	A
57	BB	2491	U
57	BB	2498	C
57	BB	2502	G
57	BB	2503	A
57	BB	2505	G
57	BB	2506	U
57	BB	2518	A
57	BB	2529	G
57	BB	2533	U
57	BB	2535	G
57	BB	2554	U
57	BB	2566	A
57	BB	2567	G
57	BB	2572	A
57	BB	2573	C
57	BB	2586	U
57	BB	2609	U
57	BB	2613	U
57	BB	2629	U
57	BB	2646	C
57	BB	2682	A
57	BB	2689	U
57	BB	2690	U
57	BB	2691	C
57	BB	2714	G
57	BB	2744	G
57	BB	2748	A
57	BB	2751	G
57	BB	2757	A
57	BB	2765	A
57	BB	2778	A
57	BB	2780	G
57	BB	2791	G
57	BB	2793	C
57	BB	2797	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BB	2798	U
57	BB	2799	A
57	BB	2800	A
57	BB	2809	A
57	BB	2820	A
57	BB	2821	A
57	BB	2832	U
57	BB	2834	G
57	BB	2836	U
57	BB	2849	U
57	BB	2850	A
57	BB	2867	G
57	BB	2872	A
57	BB	2873	A
57	BB	2883	A
57	BB	2884	U
57	BB	2885	G
57	BB	2886	A
57	BB	2887	A
58	BA	9	G
58	BA	15	A
58	BA	16	G
58	BA	25	U
58	BA	26	C
58	BA	27	C
58	BA	29	A
58	BA	30	C
58	BA	41	G
58	BA	43	C
58	BA	45	A
58	BA	52	A
58	BA	53	A
58	BA	66	A
58	BA	67	G
58	BA	88	C
58	BA	90	C
58	BA	99	A
58	BA	109	A

There are no RNA pucker outliers to report.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

1 non-standard protein/DNA/RNA residue is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
26	5MU	AV	54	26	14,22,23	2.08	4 (28%)	16,32,35	4.23	3 (18%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	5MU	AV	54	26	-	0/3/25/26	0/2/2/2

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	54	5MU	O2'-C2'	-2.50	1.37	1.43
26	AV	54	5MU	C2'-C1'	-2.14	1.50	1.53
26	AV	54	5MU	O4'-C1'	4.46	1.47	1.41
26	AV	54	5MU	C4-N3	4.47	1.41	1.33

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AV	54	5MU	C5-C4-N3	-9.12	115.18	125.24
26	AV	54	5MU	O4'-C1'-N1	3.31	114.70	108.08
26	AV	54	5MU	C4-N3-C2	13.53	127.00	115.16

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
59	GDP	AZ	401	-	25,30,30	2.60	7 (28%)	26,47,47	2.60	7 (26%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	GDP	AZ	401	-	-	0/12/32/32	0/3/3/3

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	AZ	401	GDP	O3'-C3'	-2.19	1.37	1.43
59	AZ	401	GDP	C2'-C1'	-2.01	1.50	1.53
59	AZ	401	GDP	C4-N3	2.24	1.39	1.35
59	AZ	401	GDP	C2-N1	2.67	1.40	1.35
59	AZ	401	GDP	C6-N1	3.63	1.39	1.33
59	AZ	401	GDP	O4'-C1'	5.56	1.48	1.41
59	AZ	401	GDP	PB-O3A	9.09	1.74	1.60

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	AZ	401	GDP	C5-C6-N1	-8.34	111.61	123.48
59	AZ	401	GDP	N3-C2-N1	-5.04	120.10	127.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	AZ	401	GDP	O3'-C3'-C2'	2.27	119.11	111.83
59	AZ	401	GDP	C4-C5-N7	2.49	111.81	109.41
59	AZ	401	GDP	C1'-N9-C4	3.07	131.94	126.64
59	AZ	401	GDP	N2-C2-N3	3.10	123.47	117.75
59	AZ	401	GDP	C6-N1-C2	5.49	123.95	116.06

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.