



Full wwPDB EM Validation Report ⓘ

Dec 15, 2022 – 05:44 pm GMT

PDB ID : 6XU6
EMDB ID : EMD-10622
Title : Drosophila melanogaster Testis 80S ribosome
Authors : Hopes, T.; Agapiou, M.; Norris, K.; McCarthy, C.G.P.; OConnell, M.J.;
Fontana, J.; Aspden, J.L.
Deposited on : 2020-01-17
Resolution : 3.50 Å (reported)
Based on initial model : 4V6W

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

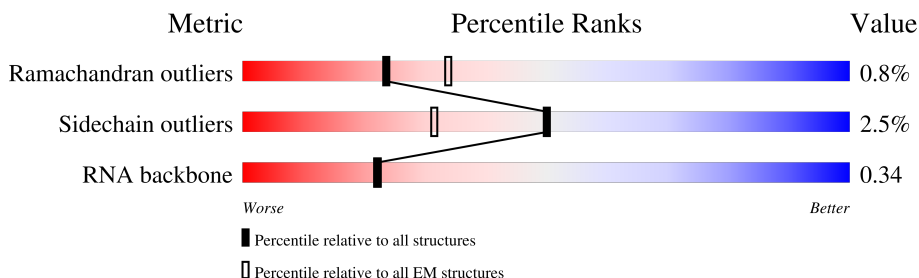
EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.3

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 3.50 Å.

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



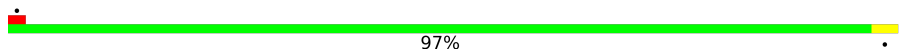
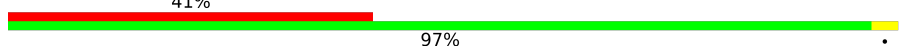
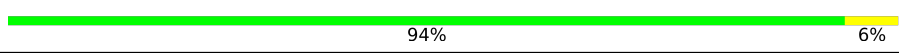
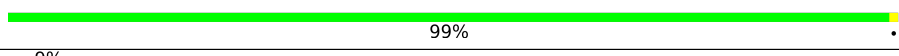
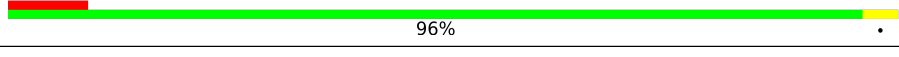
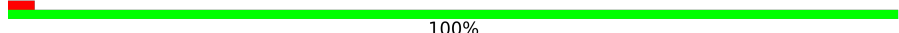
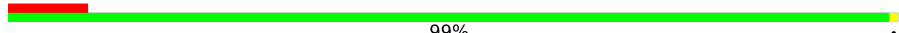
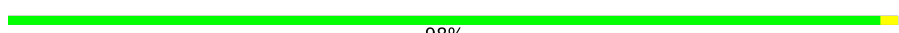
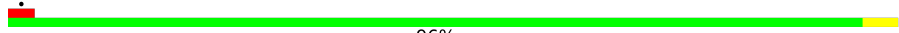


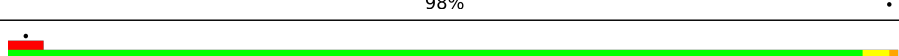



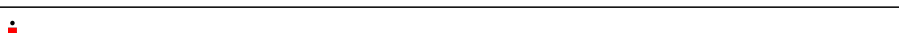

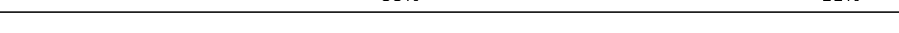

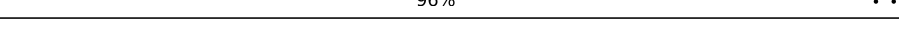
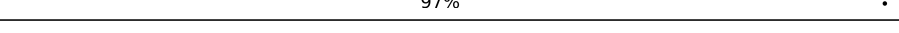

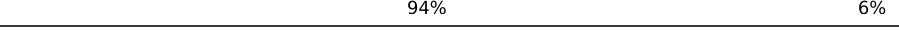


Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

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

Mol	Chain	Length	Quality of chain
1	AA	218	
2	CA	253	
3	AB	220	
4	CB	414	
5	AC	227	
6	CC	392	
7	Ag	318	
8	AU	102	

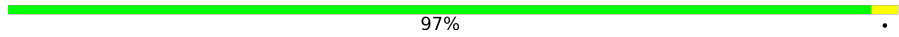
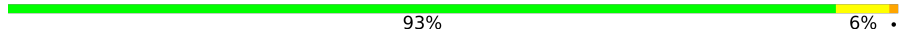
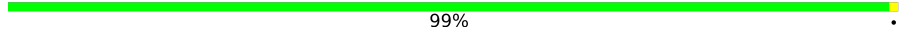

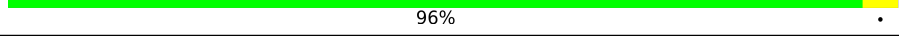

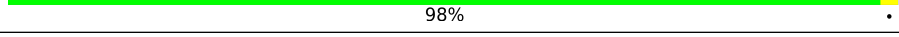

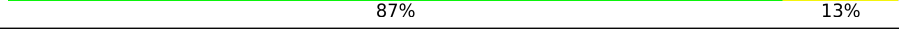

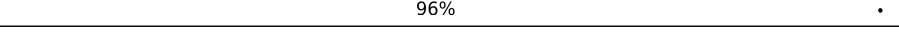
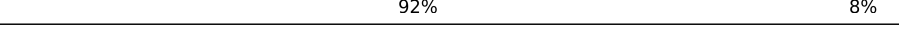
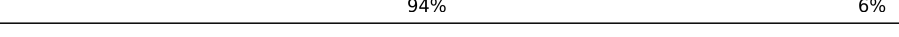
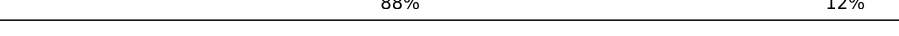

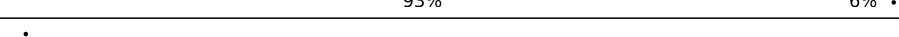
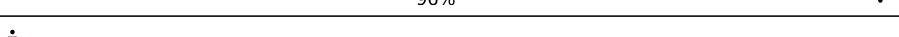
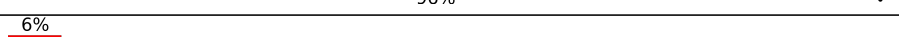
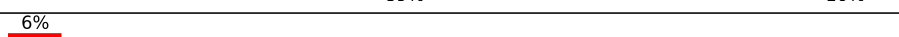




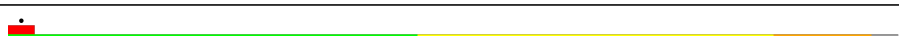

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	AX	143	 97%
10	AM	119	 41% 97%
11	Ad	52	 94% 6%
12	AN	150	 99%
13	AL	155	 9% 96%
14	AR	120	 100%
15	AP	124	 9% 99%
16	AV	82	 98%
17	AY	126	 96%
18	AZ	74	 7% 93% 7%
19	Aa	107	 8% 92% 8%
20	Ab	84	 6% 98%
21	AD	227	 96%
22	Ae	58	 90% 10%
23	Af	80	 39% 99%
24	AJ	181	 95% 5%
25	Ca	149	 88% 11%
26	CN	203	 82% 16%
27	CI	217	 96%
28	CD	290	 97%
29	CQ	187	 89% 10%
30	CR	203	 9% 94% 6%
31	CS	173	 87% 11%
32	CT	158	 88% 11%
33	CP	185	 10% 87% 12%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
34	CX	120	 97%
35	CY	131	 93% 6%
36	CZ	134	 99%
37	Cr	134	 74% 22%
38	Ch	123	 96%
39	Cb	75	 87% 12%
40	Cc	100	 98%
41	Ce	132	 83% 15%
42	Cf	157	 87% 13%
43	Ci	113	 89% 11%
44	Ck	70	 96%
45	Cl	50	 92% 8%
46	Cm	52	 94% 6%
47	Cn	25	 88% 12%
48	Cp	91	 85% 14%
49	Co	104	 93% 6%
50	CJ	182	 96%
51	CH	190	 96%
52	CE	228	 6% 89% 10%
53	CG	241	 6% 97%
54	A9	30	 43% 47% 10%
55	A7	120	 42% 48% 10%
56	A8	123	 14% 57% 29%
57	Cz	217	 76% 98%
58	B2	1995	 46% 40% 11%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
59	A5	3974	22% 48% 24% 7%
60	AE	261	98%
61	AG	231	98%
62	AH	194	96%
63	AI	207	96%
64	AQ	148	95% 5%
65	CO	205	89% 10%
66	CL	210	5% 84% 12%
67	CV	134	94% 6%
68	CM	159	93% 7%
69	DA	370	7% 92% 5%
70	AK	90	94% 6%
71	AT	143	80% 12% 8%
72	AF	189	98%
73	AO	127	91% 7%
74	Ac	62	92% 8%
75	AW	129	99%
76	CW	58	90% 9%
77	Cg	103	89% 10%
78	CU	96	96%
79	Cj	87	82% 18%
80	CF	223	94% 5%
81	Cd	108	92% 8%
82	AS	134	99%

2 Entry composition [i](#)

There are 82 unique types of molecules in this entry. The entry contains 219765 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 40S ribosomal protein SA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	AA	218	1737	1113	298	321	5	0	0

- Molecule 2 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	CA	253	1935	1206	395	326	8	0	0

- Molecule 3 is a protein called 40S ribosomal protein S3a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AB	220	1798	1138	328	324	8	0	0

- Molecule 4 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	CB	414	3287	2083	621	565	18	0	0

- Molecule 5 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AC	227	1746	1126	302	311	7	0	0

- Molecule 6 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	CC	392	3109	1959	622	522	6	0	0

- Molecule 7 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	Ag	318	2511	1577	444	480	10	0	0

- Molecule 8 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AU	102	815	505	161	145	4	0	0

- Molecule 9 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	AX	143	1131	712	226	191	2	0	0

- Molecule 10 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	AM	119	924	582	165	171	6	0	0

- Molecule 11 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	Ad	52	433	269	87	72	5	0	0

- Molecule 12 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	AN	150	1202	767	229	203	3	0	0

- Molecule 13 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	AL	155	1274	803	254	211	6	0	0

- Molecule 14 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AR	120	Total	C	N	O	S	0	0
			981	618	183	176	4		

- Molecule 15 is a protein called GEO07301p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AP	124	Total	C	N	O	S	0	0
			1016	652	189	169	6		

- Molecule 16 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AV	82	Total	C	N	O	S	0	0
			617	373	114	125	5		

There are 13 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AV	2	GLN	GLU	conflict	UNP O76927
AV	8	PHE	ASN	conflict	UNP O76927
AV	25	GLY	HIS	conflict	UNP O76927
AV	32	ILE	VAL	conflict	UNP O76927
AV	34	MET	LEU	conflict	UNP O76927
AV	35	ASN	SER	conflict	UNP O76927
AV	36	VAL	ILE	conflict	UNP O76927
AV	58	ALA	GLU	conflict	UNP O76927
AV	68	SER	CYS	conflict	UNP O76927
AV	70	LEU	VAL	conflict	UNP O76927
AV	75	ALA	LYS	conflict	UNP O76927
AV	79	VAL	ILE	conflict	UNP O76927
AV	80	SER	THR	conflict	UNP O76927

- Molecule 17 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AY	126	Total	C	N	O	S	0	0
			1016	644	196	171	5		

- Molecule 18 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	AZ	74	Total	C	N	O	0	0
			608	390	112	106		

- Molecule 19 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Aa	107	Total	C	N	O	S	0	0
			867	539	182	140	6		

- Molecule 20 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	Ab	84	Total	C	N	O	S	0	0
			653	412	123	110	8		

- Molecule 21 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AD	227	Total	C	N	O	S	0	0
			1782	1127	319	326	10		

- Molecule 22 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms				AltConf	Trace
22	Ae	58	Total	C	N	O	0	0
			469	289	105	75		

- Molecule 23 is a protein called Ubiquitin-40S ribosomal protein S27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	Af	80	Total	C	N	O	S	0	0
			659	417	128	109	5		

- Molecule 24 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AJ	181	Total	C	N	O	S	0	0
			1503	957	298	247	1		

- Molecule 25 is a protein called 60S ribosomal protein L27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Ca	149	Total	C	N	O	S	0	0
			1204	769	242	189	4		

- Molecule 26 is a protein called 60S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	CN	203	Total	C	N	O	S	0	0
			1710	1072	362	271	5		

- Molecule 27 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	CI	217	Total	C	N	O	S	0	0
			1785	1125	343	304	13		

- Molecule 28 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	CD	290	Total	C	N	O	S	0	0
			2334	1471	434	423	6		

- Molecule 29 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	CQ	187	Total	C	N	O	S	0	0
			1518	957	306	251	4		

- Molecule 30 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	CR	203	Total	C	N	O	S	0	0
			1683	1047	350	277	9		

- Molecule 31 is a protein called 60S ribosomal protein L18a.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	CS	173	Total	C	N	O	S	0	0
			1454	935	275	240	4		

- Molecule 32 is a protein called RE62581p.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	CT	158	1297	829	253	212	3	0	0

- Molecule 33 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	CP	185	1505	928	305	263	9	0	0

- Molecule 34 is a protein called IP17216p.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
34	CX	120	984	625	192	165	2	0	0

- Molecule 35 is a protein called GEO07453p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	CY	131	1078	676	224	176	2	0	0

- Molecule 36 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
36	CZ	134	1115	723	209	180	3	0	0

- Molecule 37 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
37	Cr	134	1051	670	205	176	0	0

- Molecule 38 is a protein called FI02809p.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
38	Ch	123	1015	646	202	164	3	0	0

- Molecule 39 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Cb	75	Total	C	N	O	S	0	0
			619	378	133	107	1		

- Molecule 40 is a protein called RE25263p.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	Cc	100	Total	C	N	O	S	0	0
			770	486	132	147	5		

- Molecule 41 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Ce	132	Total	C	N	O	S	0	0
			1110	698	230	177	5		

- Molecule 42 is a protein called GEO07455p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Cf	157	Total	C	N	O	S	0	0
			1244	781	255	203	5		

- Molecule 43 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Ci	113	Total	C	N	O	S	0	0
			934	585	193	153	3		

- Molecule 44 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Ck	70	Total	C	N	O	S	0	0
			576	366	108	100	2		

- Molecule 45 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				AltConf	Trace
45	Cl	50	Total	C	N	O	0	0
			437	276	98	63		

- Molecule 46 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	Cm	52	Total	C	N	O	S	0	0
			429	267	89	67	6		

- Molecule 47 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Cn	25	Total	C	N	O	S	0	0
			236	143	63	27	3		

- Molecule 48 is a protein called 60S ribosomal protein L37a.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Cp	91	Total	C	N	O	S	0	0
			710	441	140	122	7		

- Molecule 49 is a protein called TA01007p.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Co	104	Total	C	N	O	S	0	0
			874	548	180	138	8		

- Molecule 50 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	CJ	182	Total	C	N	O	S	0	0
			1468	926	278	258	6		

- Molecule 51 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	CH	190	Total	C	N	O	S	0	0
			1499	947	265	278	9		

- Molecule 52 is a protein called Ribosomal protein L6, isoform A.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	CE	228	Total	C	N	O	S	0	0
			1845	1185	351	305	4		

- Molecule 53 is a protein called 60S ribosomal protein L7a.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	CG	241	Total	C	N	O	S	0	0
			1936	1237	368	327	4		

- Molecule 54 is a RNA chain called 2S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	A9	30	Total	C	N	O	P	0	0
			639	286	111	213	29		

- Molecule 55 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	A7	120	Total	C	N	O	P	0	0
			2554	1141	456	838	119		

- Molecule 56 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	A8	123	Total	C	N	O	P	0	0
			2621	1173	474	852	122		

- Molecule 57 is a protein called 60S ribosomal protein L10a-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	Cz	217	Total	C	N	O	S	0	0
			1702	1084	303	305	10		

- Molecule 58 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	B2	1936	Total	C	N	O	P	0	0
			39355	17526	6780	13114	1935		

- Molecule 59 is a RNA chain called 28S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	A5	3707	Total	C	N	O	P	0	0
			77175	34473	13566	25431	3705		

There are 10 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A5	1301	A	U	conflict	GB NR_133562.1

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A5	1319	A	U	conflict	GB NR_133562.1
A5	1320	U	G	conflict	GB NR_133562.1
A5	1321	G	U	conflict	GB NR_133562.1
A5	1322	U	G	conflict	GB NR_133562.1
A5	1686	A	-	insertion	GB NR_133562.1
A5	1710	G	-	insertion	GB NR_133562.1
A5	2158A	C	-	insertion	GB NR_133562.1
A5	2279	C	G	conflict	GB NR_133562.1
A5	3569	C	-	insertion	GB NR_133562.1

- Molecule 60 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
60	AE	261	2054	1314	380	353	7	0	0

- Molecule 61 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
61	AG	231	1866	1172	372	315	7	0	0

- Molecule 62 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
62	AH	194	1566	1006	278	281	1	0	0

- Molecule 63 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
63	AI	207	1665	1037	329	296	3	0	0

- Molecule 64 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
64	AQ	148	1183	753	223	204	3	0	0

- Molecule 65 is a protein called 60S ribosomal protein L13a.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	CO	205	Total	C	N	O	S	0	0
			1668	1063	331	268	6		

- Molecule 66 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	CL	210	Total	C	N	O	S	0	0
			1695	1066	342	284	3		

- Molecule 67 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	CV	134	Total	C	N	O	S	0	0
			998	629	190	173	6		

- Molecule 68 is a protein called 60S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	CM	159	Total	C	N	O	S	0	0
			1302	826	256	218	2		

- Molecule 69 is a protein called LP04564p.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	DA	350	Total	C	N	O	S	0	0
			2756	1730	483	525	18		

- Molecule 70 is a protein called 40S ribosomal protein S10b.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	AK	90	Total	C	N	O	S	0	0
			760	500	130	127	3		

- Molecule 71 is a protein called 40S ribosomal protein S19a.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	AT	132	Total	C	N	O	S	0	0
			1041	659	200	179	3		

- Molecule 72 is a protein called 40S ribosomal protein S5a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
72	AF	189	1490	929	284	268	9	0	0

- Molecule 73 is a protein called 40S ribosomal protein S14a.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
73	AO	127	953	587	185	177	4	0	0

- Molecule 74 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
74	Ac	62	498	307	100	89	2	0	0

- Molecule 75 is a protein called 40S ribosomal protein S15Aa.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
75	AW	129	1028	656	189	176	7	0	0

- Molecule 76 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
76	CW	58	483	314	89	76	4	0	0

- Molecule 77 is a protein called RH48056p.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
77	Cg	103	844	525	176	138	5	0	0

- Molecule 78 is a protein called Ribosomal protein L22-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
78	CU	96	811	531	137	139	4	0	0

- Molecule 79 is a protein called Probable 60S ribosomal protein L37-B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
79	Cj	87	696	422	154	115	5	0	0

- Molecule 80 is a protein called 60S ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
80	CF	223	1869	1199	363	304	3	0	0

- Molecule 81 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
81	Cd	108	899	559	177	161	2	0	0

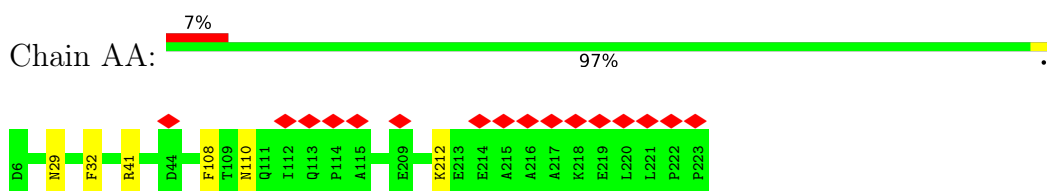
- Molecule 82 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
82	AS	134	1101	691	214	193	3	0	0

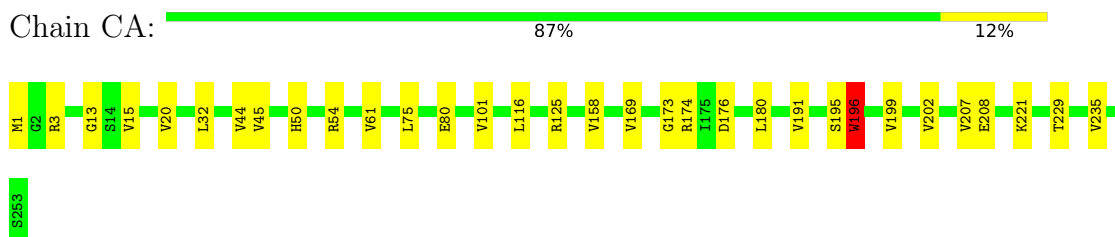
3 Residue-property plots

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

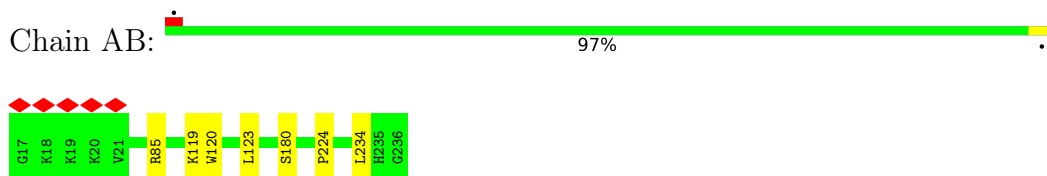
- Molecule 1: 40S ribosomal protein SA



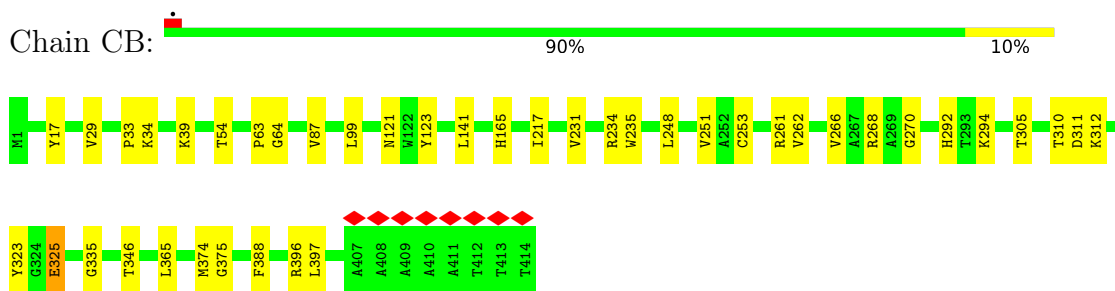
- Molecule 2: 60S ribosomal protein L8



- Molecule 3: 40S ribosomal protein S3a

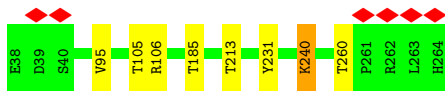


- Molecule 4: 60S ribosomal protein L3




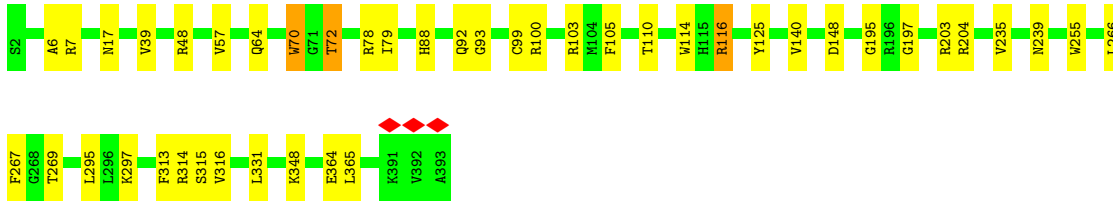
- Molecule 5: 40S ribosomal protein S2

Chain AC:  96%



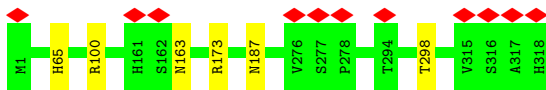
- Molecule 6: 60S ribosomal protein L4

Chain CC:  89%



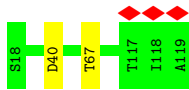
- Molecule 7: Guanine nucleotide-binding protein subunit beta-like protein

Chain Ag:  98%



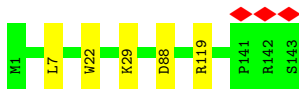
- Molecule 8: 40S ribosomal protein S20

Chain AU:  98%

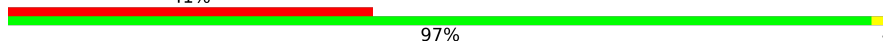


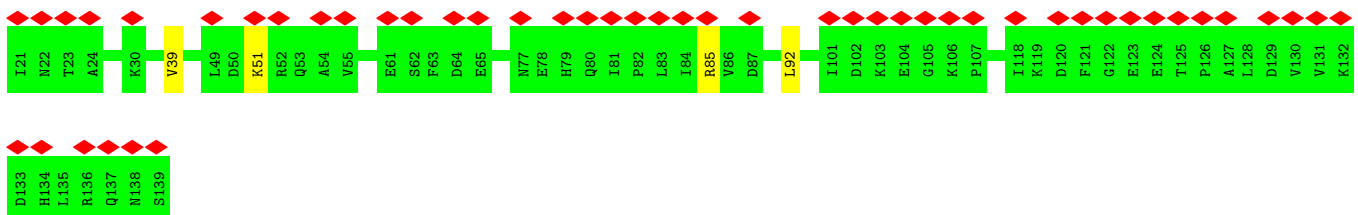
- Molecule 9: 40S ribosomal protein S23

Chain AX:  97%



- Molecule 10: 40S ribosomal protein S12

Chain AM:  41%



- Molecule 11: 40S ribosomal protein S29

Chain Ad:  94% 6%



- Molecule 12: 40S ribosomal protein S13

Chain AN:  99%



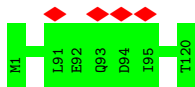
- Molecule 13: 40S ribosomal protein S11

Chain AL:  9% 96%



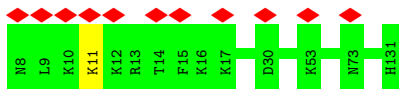
- Molecule 14: 40S ribosomal protein S17

Chain AR:  100%



- Molecule 15: GEO07301p1

Chain AP:  9% 99%



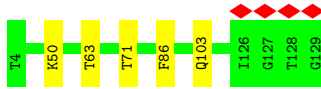
- Molecule 16: 40S ribosomal protein S21

Chain AV:  98%

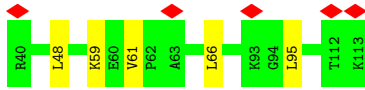


- Molecule 17: 40S ribosomal protein S24

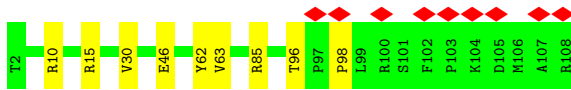
Chain AY:  96%



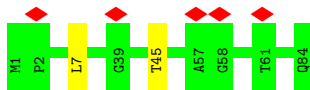
- Molecule 18: 40S ribosomal protein S25



- Molecule 19: 40S ribosomal protein S26



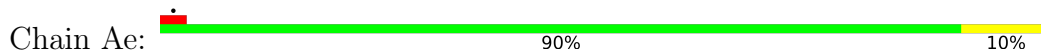
- Molecule 20: 40S ribosomal protein S27



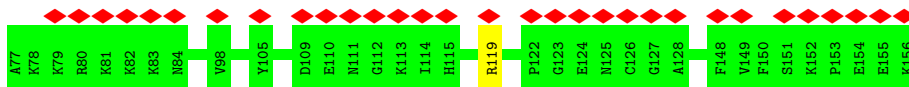
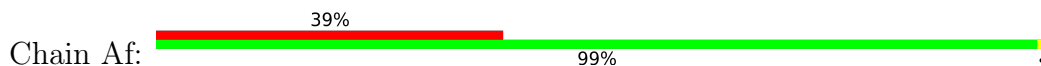
- Molecule 21: 40S ribosomal protein S3



- Molecule 22: 40S ribosomal protein S30



- Molecule 23: Ubiquitin-40S ribosomal protein S27a




- Molecule 24: 40S ribosomal protein S9

Chain AJ:  95% 5%




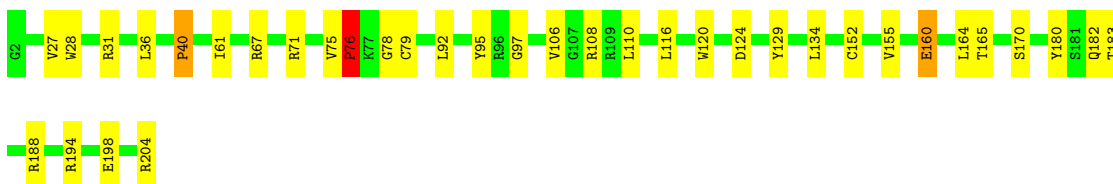
- Molecule 25: 60S ribosomal protein L27a

Chain Ca:  88% 11%



- Molecule 26: 60S ribosomal protein L15

Chain CN:  82% 16%



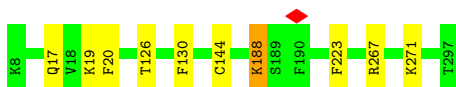
- Molecule 27: 60S ribosomal protein L10

Chain CI:  96%



- Molecule 28: 60S ribosomal protein L5

Chain CD:  97%



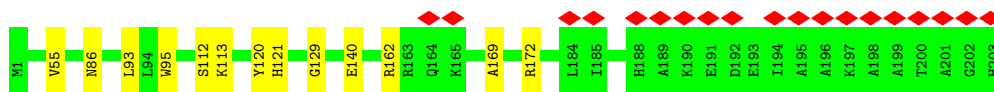
- Molecule 29: 60S ribosomal protein L18

Chain CQ:  89% 10%

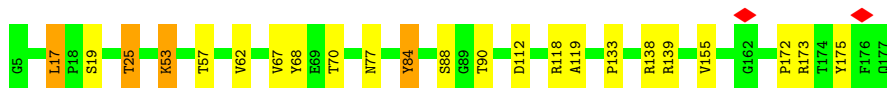
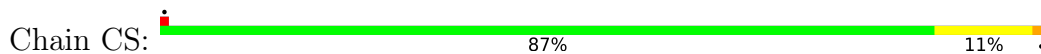


- Molecule 30: 60S ribosomal protein L19

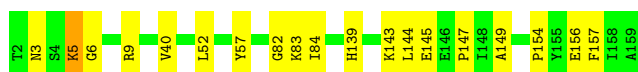
Chain CR:  94% 6% 9%



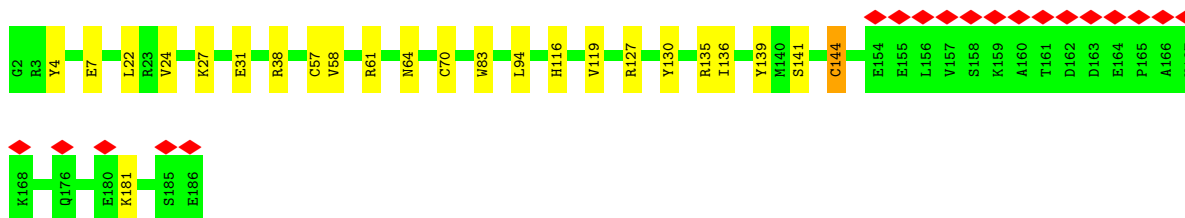
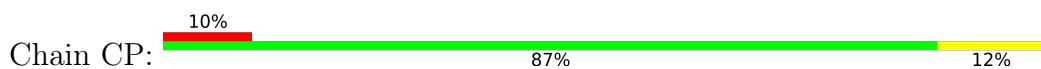
- Molecule 31: 60S ribosomal protein L18a



- Molecule 32: RE62581p



- Molecule 33: 60S ribosomal protein L17



- Molecule 34: IP17216p



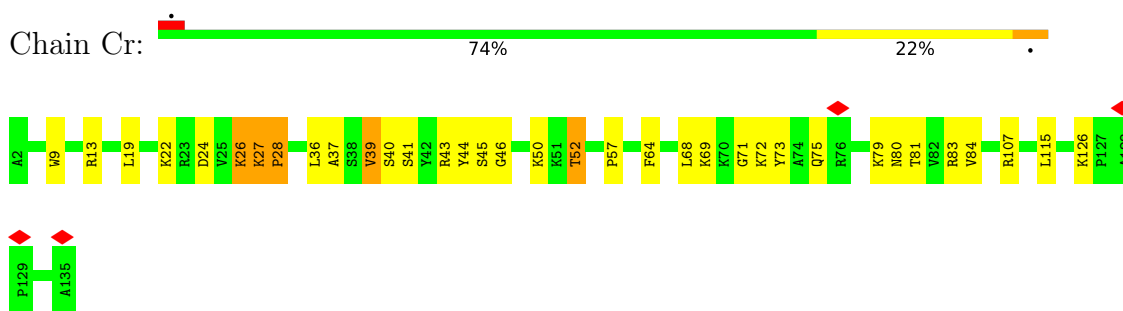
- Molecule 35: GEO07453p1



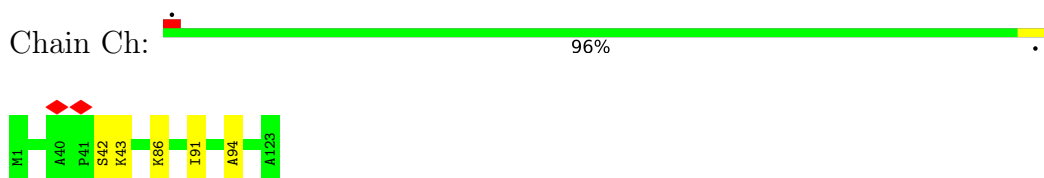
- Molecule 36: 60S ribosomal protein L27



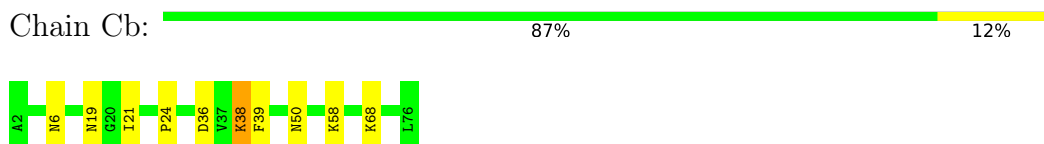
- Molecule 37: 60S ribosomal protein L28



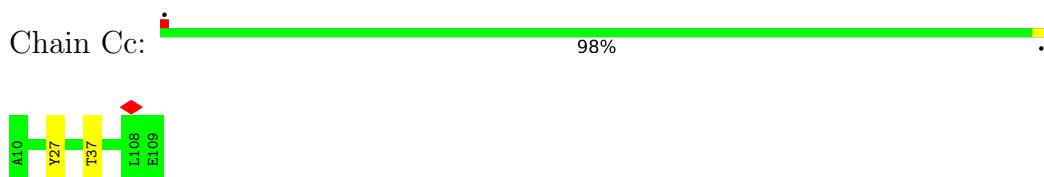
- Molecule 38: FI02809p



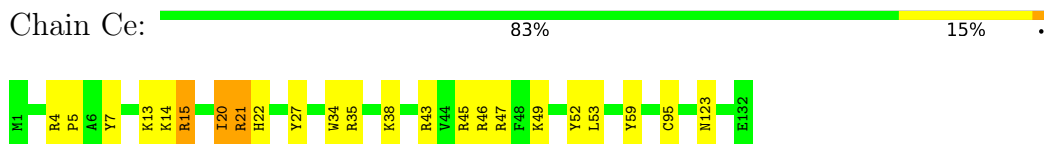
- Molecule 39: 60S ribosomal protein L29



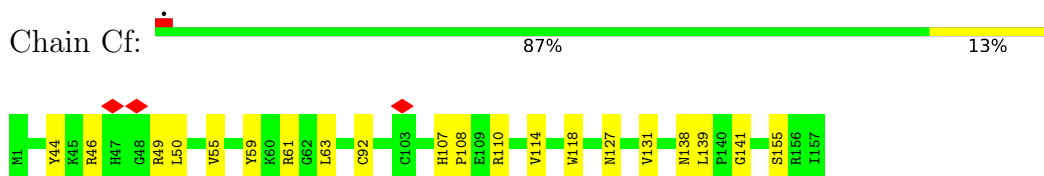
- Molecule 40: RE25263p



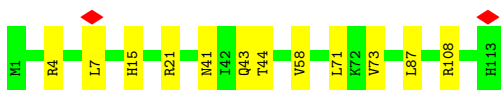
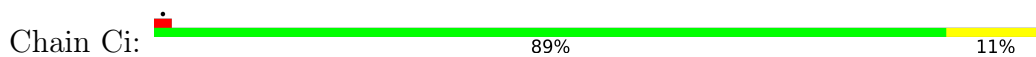
- Molecule 41: 60S ribosomal protein L32



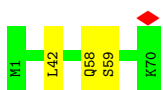
- Molecule 42: GEO07455p1



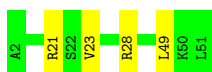
- Molecule 43: 60S ribosomal protein L36



- Molecule 44: 60S ribosomal protein L38



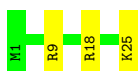
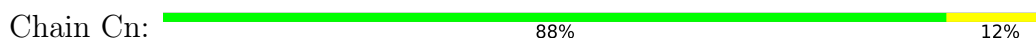
- Molecule 45: 60S ribosomal protein L39



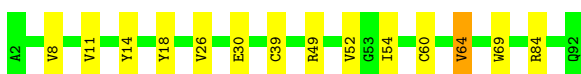
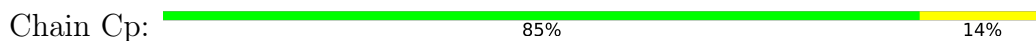
- Molecule 46: Ubiquitin-60S ribosomal protein L40



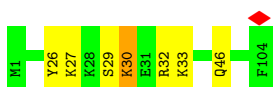
- Molecule 47: 60S ribosomal protein L41



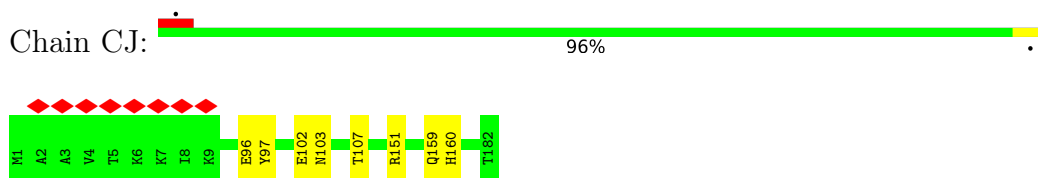
- Molecule 48: 60S ribosomal protein L37a



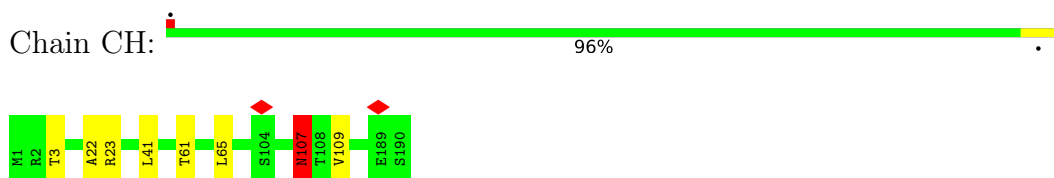
- Molecule 49: TA01007p



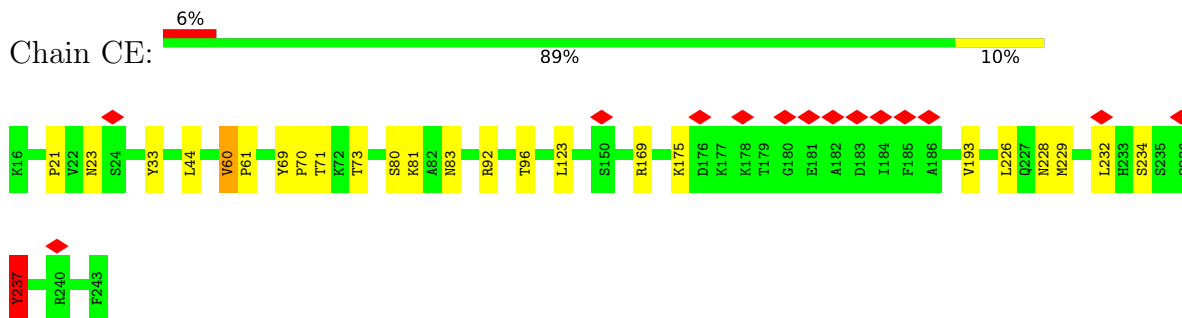
- Molecule 50: 60S ribosomal protein L11



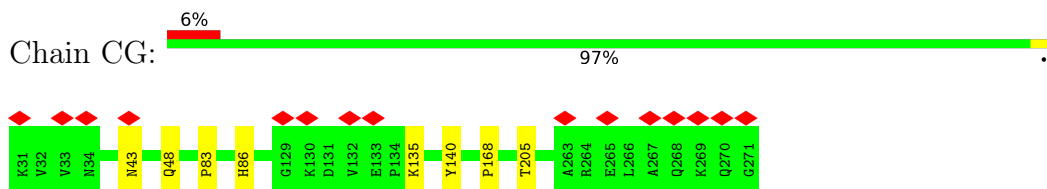
- Molecule 51: 60S ribosomal protein L9



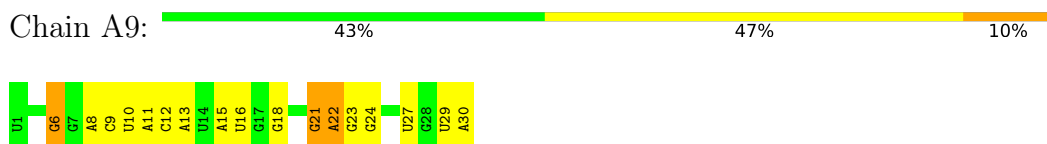
- Molecule 52: Ribosomal protein L6, isoform A



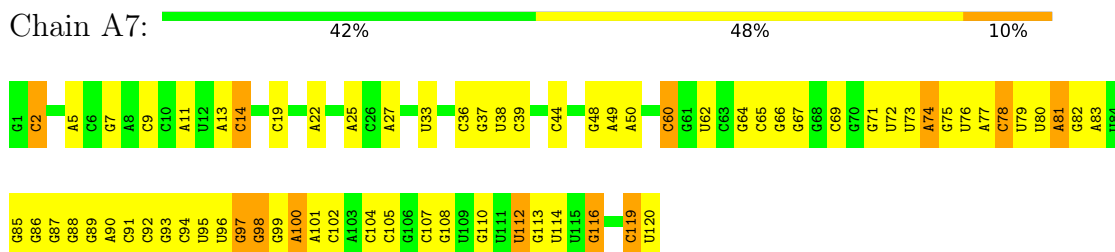
- Molecule 53: 60S ribosomal protein L7a




- Molecule 54: 2S ribosomal RNA

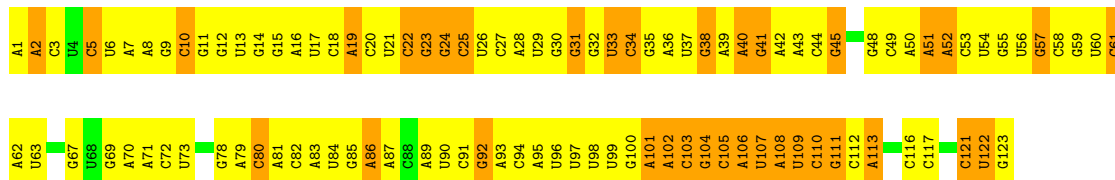


- Molecule 55: 5S ribosomal RNA

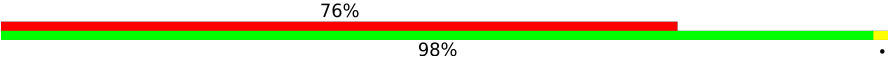


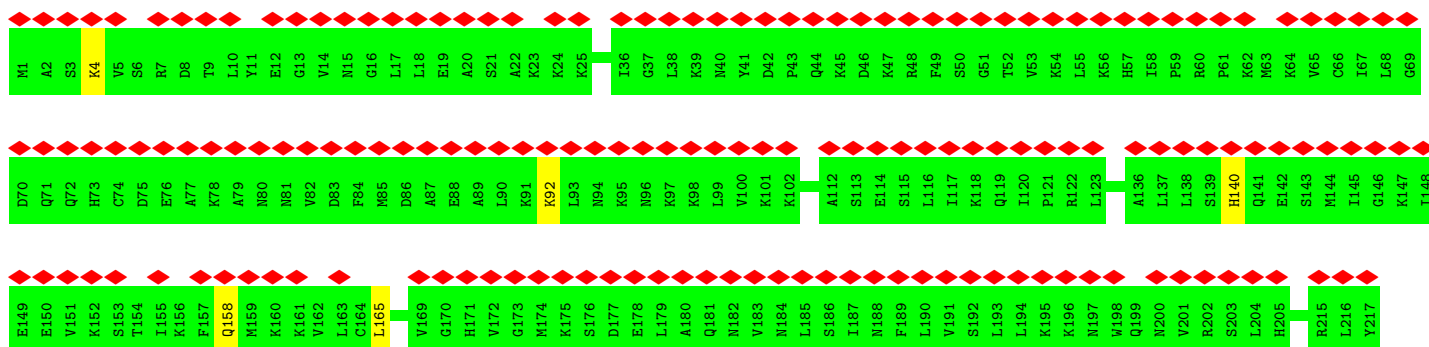
• Molecule 56: 5.8S ribosomal RNA

Chain A8: 



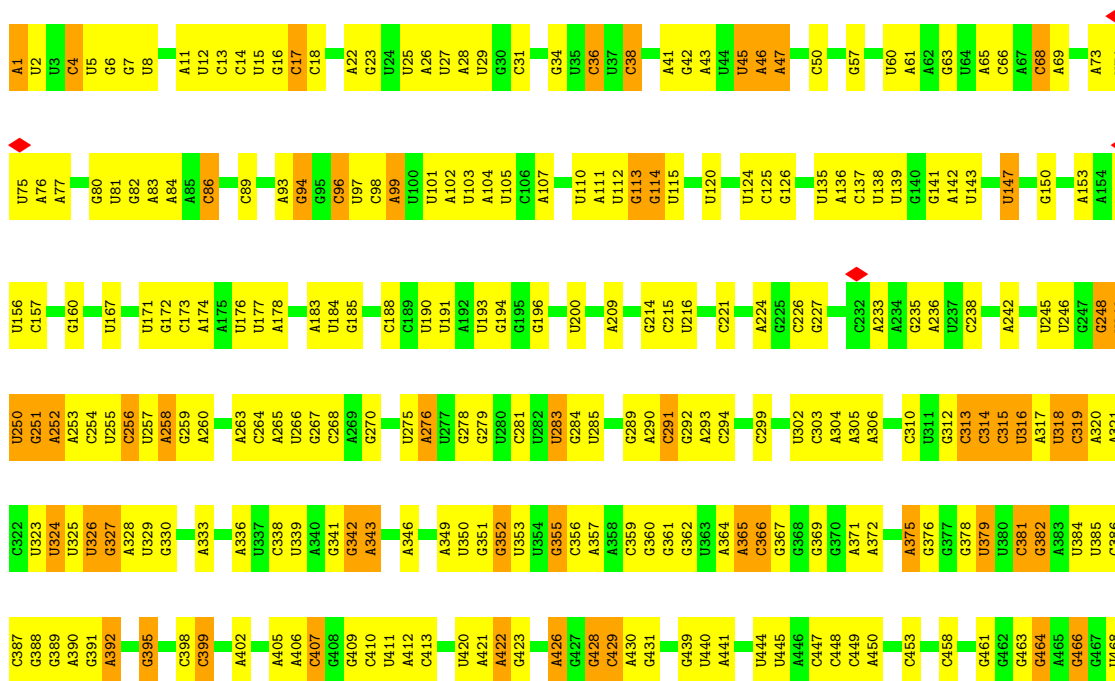
• Molecule 57: 60S ribosomal protein L10a-2

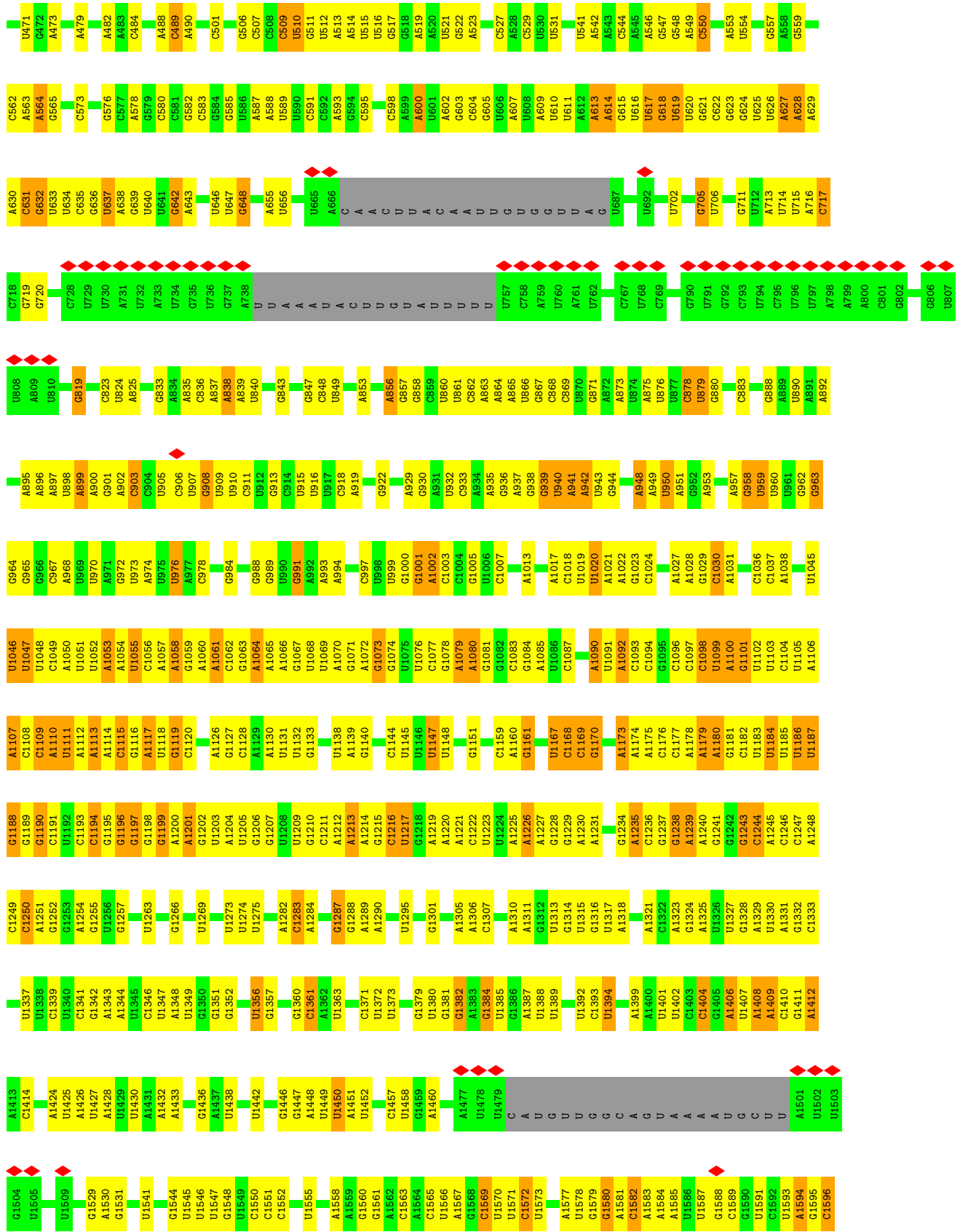
Chain Cz: 

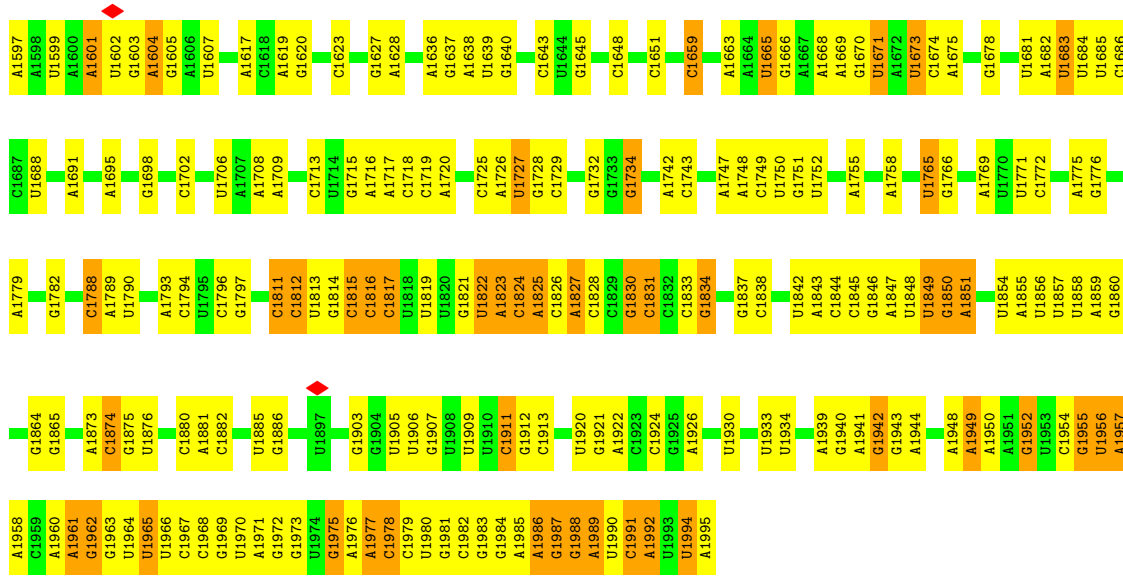


• Molecule 58: 18S ribosomal RNA

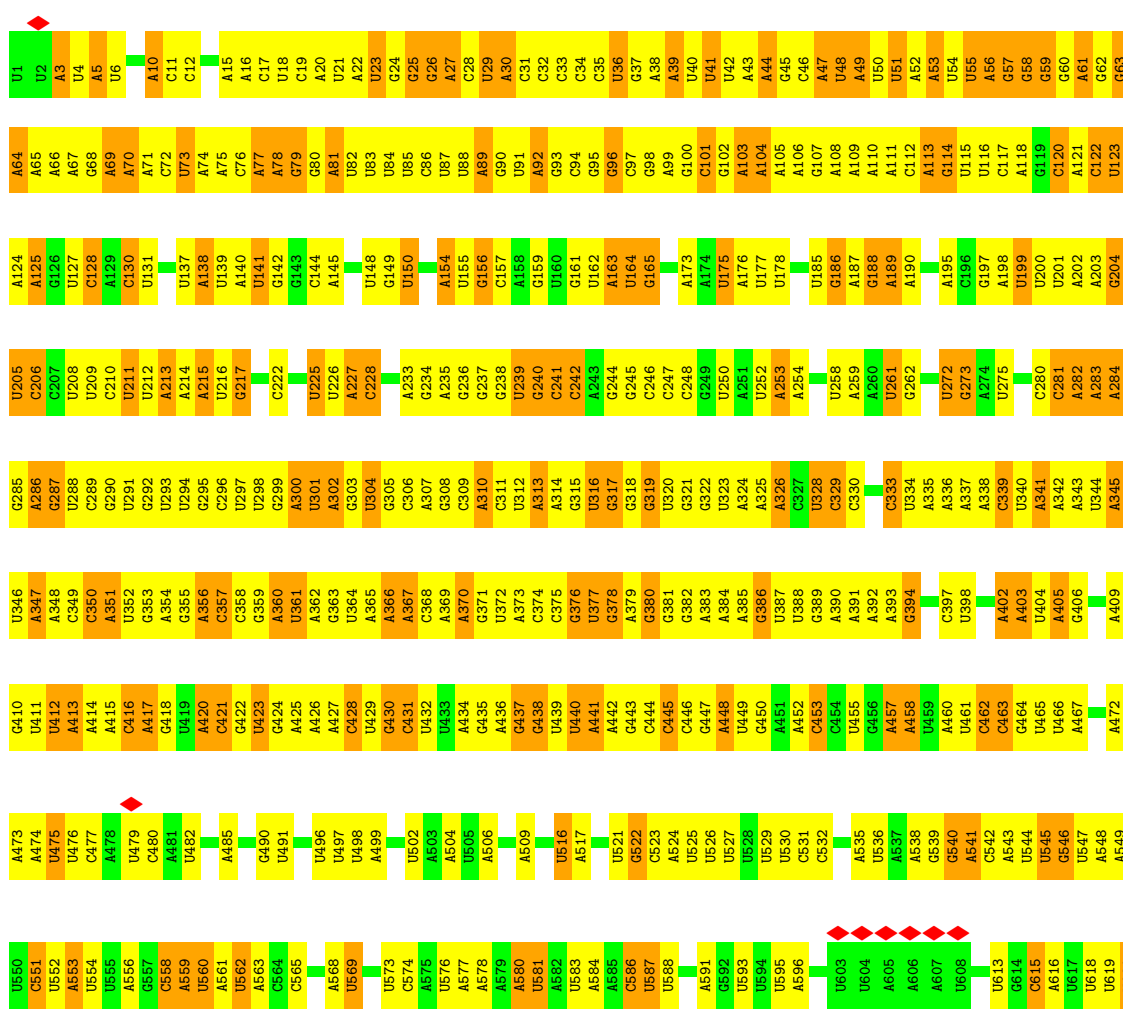
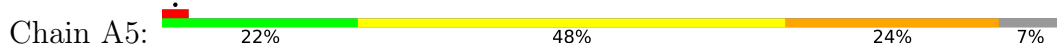
Chain B2: 

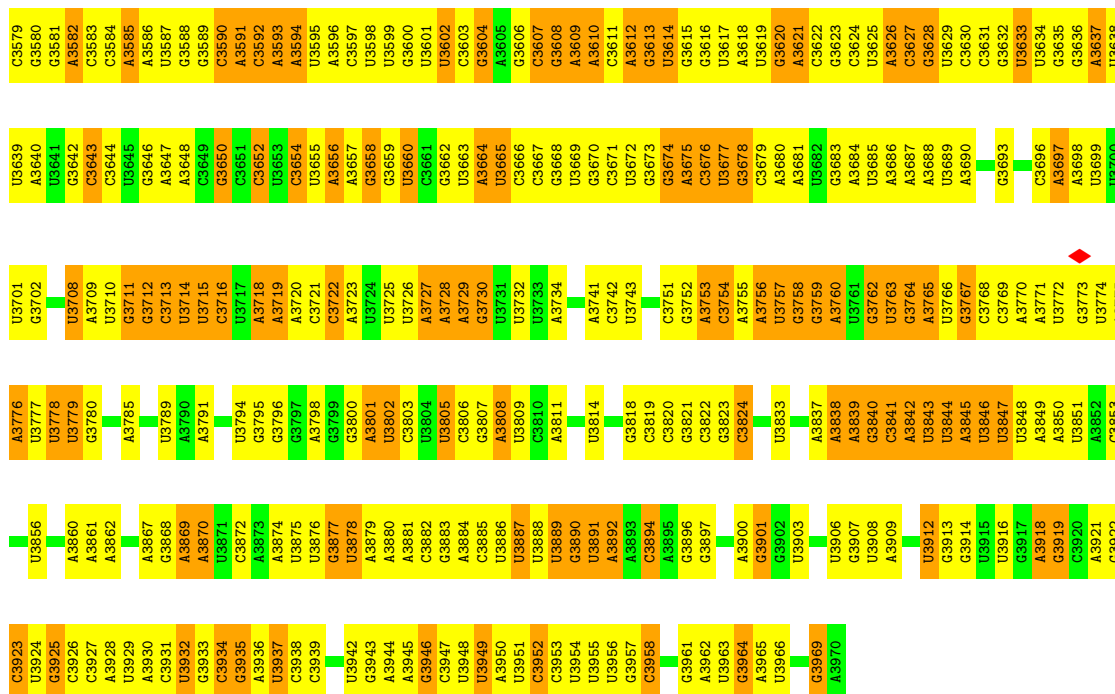






● Molecule 59: 28S ribosomal RNA





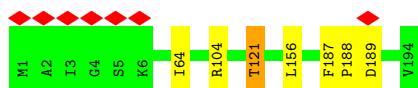
• Molecule 60: 40S ribosomal protein S4



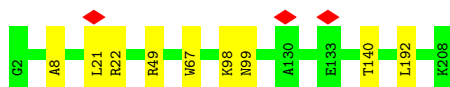
• Molecule 61: 40S ribosomal protein S6



• Molecule 62: 40S ribosomal protein S7



• Molecule 63: 40S ribosomal protein S8



- Molecule 64: 40S ribosomal protein S16

Chain AQ:  95% 5%




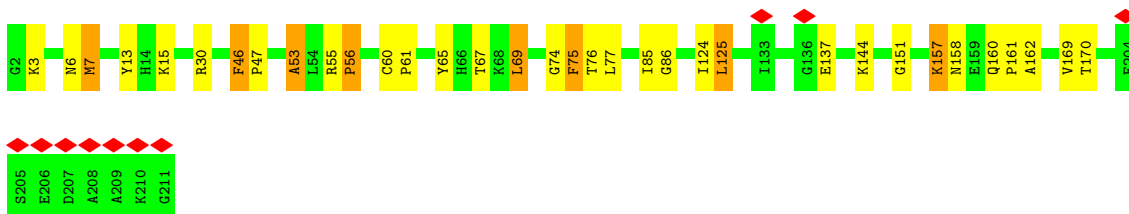
- Molecule 65: 60S ribosomal protein L13a

Chain CO:  89% 10%



- Molecule 66: 60S ribosomal protein L13

Chain CL:  84% 12% 5%



- Molecule 67: 60S ribosomal protein L23

Chain CV:  94% 6%



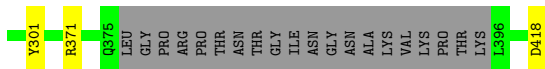
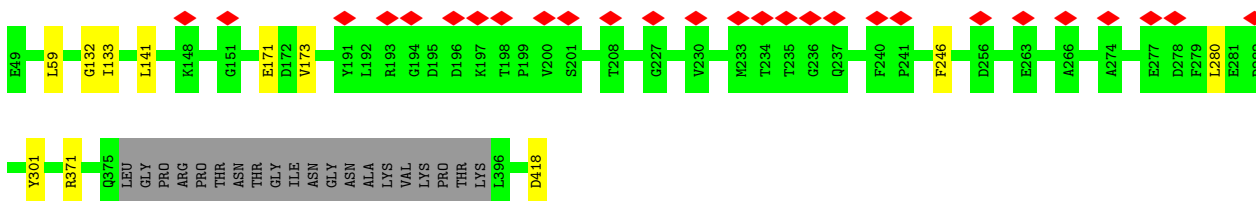
- Molecule 68: 60S ribosomal protein L14

Chain CM:  93% 7%



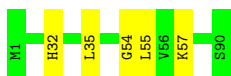
- Molecule 69: LP04564p

Chain DA:  92% 5% 7%




- Molecule 70: 40S ribosomal protein S10b

Chain AK:  94% 6%



- Molecule 71: 40S ribosomal protein S19a

Chain AT:  80% 12% 8%



- Molecule 72: 40S ribosomal protein S5a

Chain AF:  98%



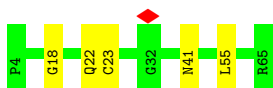
- Molecule 73: 40S ribosomal protein S14a

Chain AO:  91% 7%



- Molecule 74: 40S ribosomal protein S28

Chain Ac:  92% 8%



- Molecule 75: 40S ribosomal protein S15Aa

Chain AW:  99%




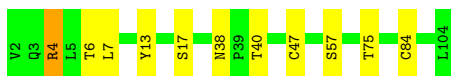
- Molecule 76: 60S ribosomal protein L24

Chain CW:  90% 9%



- Molecule 77: RH48056p

Chain Cg:  89% 10%




- Molecule 78: Ribosomal protein L22-like protein

Chain CU:  96%



- Molecule 79: Probable 60S ribosomal protein L37-B

Chain Cj:  82% 18%



- Molecule 80: 60S ribosomal protein L7

Chain CF:  94% 5%



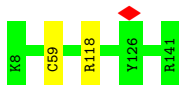
- Molecule 81: 60S ribosomal protein L31

Chain Cd:  92% 8%



- Molecule 82: 40S ribosomal protein S18

Chain AS:  99%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	46878	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	80	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.459	Depositor
Minimum map value	-0.223	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.014	Depositor
Recommended contour level	0.025	Depositor
Map size (\AA)	426.00003, 426.00003, 426.00003	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.065, 1.065, 1.065	Depositor

5 Model quality i

5.1 Standard geometry i

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	AA	0.50	0/1777	0.68	0/2422
2	CA	1.34	14/1970 (0.7%)	1.09	13/2635 (0.5%)
3	AB	0.55	0/1825	0.70	2/2448 (0.1%)
4	CB	1.22	14/3356 (0.4%)	1.00	8/4494 (0.2%)
5	AC	0.65	0/1785	0.74	0/2415
6	CC	1.21	11/3163 (0.3%)	1.02	13/4253 (0.3%)
7	Ag	0.34	0/2574	0.59	0/3506
8	AU	0.39	0/825	0.59	0/1111
9	AX	0.80	1/1152 (0.1%)	0.83	1/1540 (0.1%)
10	AM	0.33	0/937	0.70	2/1260 (0.2%)
11	Ad	0.53	0/443	0.74	0/589
12	AN	0.75	0/1225	0.76	1/1641 (0.1%)
13	AL	0.84	2/1296 (0.2%)	0.77	0/1725
14	AR	0.36	0/993	0.64	0/1333
15	AP	0.35	0/1036	0.66	0/1383
16	AV	0.54	0/622	0.64	0/835
17	AY	0.43	0/1032	0.71	0/1373
18	AZ	0.35	0/616	0.77	3/826 (0.4%)
19	Aa	0.75	0/883	0.87	0/1184
20	Ab	0.51	0/668	0.70	1/898 (0.1%)
21	AD	0.40	0/1808	0.68	1/2427 (0.0%)
22	Ae	0.47	0/475	0.73	1/625 (0.2%)
23	Af	0.35	0/672	0.67	0/887
24	AJ	0.53	0/1526	0.76	2/2037 (0.1%)
25	Ca	1.38	9/1235 (0.7%)	1.11	8/1640 (0.5%)
26	CN	1.56	16/1750 (0.9%)	1.16	13/2335 (0.6%)
27	CI	0.68	0/1827	0.76	2/2447 (0.1%)
28	CD	0.74	0/2379	0.73	1/3196 (0.0%)
29	CQ	1.22	1/1544 (0.1%)	1.08	5/2069 (0.2%)
30	CR	0.99	3/1703 (0.2%)	0.83	1/2255 (0.0%)
31	CS	1.12	3/1491 (0.2%)	0.98	1/1998 (0.1%)
32	CT	1.07	2/1326 (0.2%)	1.04	5/1773 (0.3%)
33	CP	1.42	22/1529 (1.4%)	1.03	6/2042 (0.3%)
34	CX	0.93	1/1001 (0.1%)	0.85	4/1348 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
35	CY	0.99	1/1094 (0.1%)	0.81	0/1456
36	CZ	0.76	0/1141	0.69	0/1517
37	Cr	1.10	6/1069 (0.6%)	1.15	3/1432 (0.2%)
38	Ch	0.82	0/1024	0.81	0/1353
39	Cb	0.86	0/628	0.92	2/832 (0.2%)
40	Cc	0.95	1/779 (0.1%)	0.79	0/1048
41	Ce	1.61	15/1132 (1.3%)	1.22	13/1508 (0.9%)
42	Cf	1.21	5/1270 (0.4%)	1.06	5/1696 (0.3%)
43	Ci	0.77	0/944	0.91	0/1250
44	Ck	0.68	0/583	0.76	2/774 (0.3%)
45	Cl	1.21	2/445 (0.4%)	1.16	1/589 (0.2%)
46	Cm	0.71	0/435	0.73	0/575
47	Cn	1.30	0/237	1.26	1/300 (0.3%)
48	Cp	1.46	12/719 (1.7%)	0.90	0/954
49	Co	0.93	0/887	0.94	0/1162
50	CJ	0.56	0/1494	0.75	2/2001 (0.1%)
51	CH	0.80	0/1519	0.80	1/2042 (0.0%)
52	CE	0.74	2/1883 (0.1%)	0.92	4/2514 (0.2%)
53	CG	0.72	0/1968	0.75	0/2637
54	A9	2.12	20/714 (2.8%)	1.55	18/1112 (1.6%)
55	A7	2.11	91/2854 (3.2%)	1.61	71/4447 (1.6%)
56	A8	2.76	242/2932 (8.3%)	2.29	204/4568 (4.5%)
57	Cz	0.32	0/1727	0.68	1/2308 (0.0%)
58	B2	1.55	558/43887 (1.3%)	1.52	870/68161 (1.3%)
59	A5	2.76	7417/86239 (8.6%)	2.22	6100/134149 (4.5%)
60	AE	0.55	0/2096	0.70	0/2819
61	AG	0.41	0/1891	0.63	0/2519
62	AH	0.46	0/1593	0.69	0/2145
63	AI	0.69	0/1689	0.78	1/2250 (0.0%)
64	AQ	0.40	0/1202	0.72	2/1608 (0.1%)
65	CO	1.26	6/1700 (0.4%)	0.95	4/2277 (0.2%)
66	CL	1.02	4/1726 (0.2%)	1.11	7/2308 (0.3%)
67	CV	1.28	6/1014 (0.6%)	0.91	1/1362 (0.1%)
68	CM	0.82	0/1326	0.87	1/1780 (0.1%)
69	DA	0.45	0/2800	0.69	3/3765 (0.1%)
70	AK	0.37	0/786	0.69	3/1064 (0.3%)
71	AT	0.36	0/1060	0.88	15/1421 (1.1%)
72	AF	0.42	0/1510	0.68	1/2026 (0.0%)
73	AO	0.67	1/965 (0.1%)	0.82	1/1295 (0.1%)
74	Ac	0.46	0/502	0.77	1/670 (0.1%)
75	AW	0.81	0/1046	0.75	0/1402
76	CW	1.16	1/495 (0.2%)	0.88	0/658
77	Cg	1.26	3/855 (0.4%)	0.95	1/1142 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
78	CU	0.58	0/828	0.77	1/1110 (0.1%)
79	Cj	0.57	0/706	0.79	0/929
80	CF	1.26	6/1905 (0.3%)	0.93	2/2553 (0.1%)
81	Cd	0.44	0/914	0.48	0/1229
82	AS	0.26	0/1118	0.61	1/1498 (0.1%)
All	All	1.93	8498/235775 (3.6%)	1.66	7437/345165 (2.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	0	2
2	CA	0	3
3	AB	0	2
4	CB	0	11
5	AC	0	1
6	CC	0	11
9	AX	0	1
11	Ad	0	1
13	AL	0	2
17	AY	0	1
19	Aa	0	5
21	AD	0	2
22	Ae	0	3
24	AJ	0	2
25	Ca	0	4
26	CN	0	8
27	CI	0	4
28	CD	0	4
29	CQ	0	8
30	CR	0	5
31	CS	0	10
32	CT	0	11
33	CP	0	2
35	CY	0	3
36	CZ	0	1
37	Cr	0	20
38	Ch	0	4
39	Cb	0	4
40	Cc	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
41	Ce	0	5
42	Cf	0	5
43	Ci	0	6
44	Ck	0	1
46	Cm	0	2
48	Cp	0	2
49	Co	0	3
50	CJ	0	3
51	CH	0	2
52	CE	0	13
53	CG	0	4
59	A5	0	1
60	AE	0	3
61	AG	0	1
62	AH	0	4
63	AI	0	5
64	AQ	0	2
65	CO	0	6
66	CL	0	15
67	CV	0	1
68	CM	0	6
69	DA	0	2
71	AT	0	2
73	AO	0	6
74	Ac	0	1
75	AW	0	1
76	CW	0	2
77	Cg	0	1
78	CU	0	1
80	CF	0	2
81	Cd	0	1
All	All	0	245

All (8498) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1126	A	N7-C5	-17.07	1.29	1.39
59	A5	3403	G	C5-C4	-15.78	1.27	1.38
59	A5	1006	A	N9-C4	-15.52	1.28	1.37
59	A5	445	C	N1-C6	-14.71	1.28	1.37
59	A5	815	A	N9-C4	-14.62	1.29	1.37
59	A5	811	G	C2-N3	-14.58	1.21	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2749	G	N7-C5	-14.41	1.30	1.39
59	A5	105	A	N9-C4	-14.32	1.29	1.37
59	A5	35	C	N1-C6	-14.21	1.28	1.37
59	A5	1389	C	N3-C4	-14.19	1.24	1.33
59	A5	1126	A	N9-C4	-14.07	1.29	1.37
59	A5	2731	G	N7-C5	-14.04	1.30	1.39
59	A5	2715	C	N3-C4	-13.96	1.24	1.33
59	A5	2110	A	N9-C4	-13.88	1.29	1.37
59	A5	2777	A	N9-C4	-13.82	1.29	1.37
59	A5	1686	A	N9-C4	-13.71	1.29	1.37
59	A5	2226	A	N9-C4	-13.71	1.29	1.37
59	A5	1675	G	N7-C5	-13.69	1.31	1.39
59	A5	2196	U	C2-N3	-13.57	1.28	1.37
59	A5	2657	A	N9-C4	-13.49	1.29	1.37
59	A5	798	C	N3-C4	-13.41	1.24	1.33
59	A5	2767	U	C2-N3	-13.35	1.28	1.37
59	A5	794	G	C8-N7	-13.34	1.23	1.30
59	A5	2755	G	N7-C5	-13.32	1.31	1.39
59	A5	3518	A	N9-C4	-13.31	1.29	1.37
59	A5	808	G	C5-C4	-13.22	1.29	1.38
59	A5	1140	G	N9-C8	-13.21	1.28	1.37
59	A5	2716	C	N1-C6	-13.20	1.29	1.37
59	A5	1357	C	N1-C6	-13.18	1.29	1.37
59	A5	102	G	C8-N7	-13.11	1.23	1.30
59	A5	1328	U	C2-N3	-13.10	1.28	1.37
59	A5	1073	C	N3-C4	-13.04	1.24	1.33
59	A5	1696	A	N9-C4	-13.03	1.30	1.37
59	A5	1332	C	N1-C6	-12.99	1.29	1.37
59	A5	1329	G	C8-N7	-12.94	1.23	1.30
59	A5	1392	A	N9-C4	-12.87	1.30	1.37
59	A5	1134	G	N7-C5	-12.84	1.31	1.39
59	A5	796	A	C5-C4	-12.79	1.29	1.38
59	A5	104	A	N3-C4	-12.78	1.27	1.34
59	A5	808	G	N9-C8	-12.69	1.28	1.37
59	A5	3728	A	C5-C6	-12.65	1.29	1.41
59	A5	1313	A	N9-C4	-12.64	1.30	1.37
59	A5	810	A	N9-C4	-12.61	1.30	1.37
59	A5	2649	A	N9-C4	-12.56	1.30	1.37
59	A5	787	C	N1-C6	-12.55	1.29	1.37
59	A5	2720	U	C2-N3	-12.55	1.28	1.37
59	A5	794	G	N7-C5	-12.55	1.31	1.39
59	A5	2731	G	C5-C4	-12.55	1.29	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1676	A	N9-C8	-12.53	1.27	1.37
59	A5	3346	G	C8-N7	-12.51	1.23	1.30
59	A5	1110	G	C6-N1	-12.48	1.30	1.39
59	A5	1110	G	N1-C2	-12.46	1.27	1.37
59	A5	1676	A	C5-C4	-12.45	1.30	1.38
59	A5	2784	C	N1-C6	-12.45	1.29	1.37
59	A5	1164	G	N7-C5	-12.42	1.31	1.39
59	A5	374	C	N1-C6	-12.40	1.29	1.37
59	A5	347	A	N9-C4	-12.39	1.30	1.37
59	A5	3519	C	N3-C4	-12.38	1.25	1.33
59	A5	1127	C	N3-C4	-12.38	1.25	1.33
59	A5	362	A	C5-C4	-12.38	1.30	1.38
59	A5	1626	A	N9-C4	-12.37	1.30	1.37
59	A5	1015	G	C5-C4	-12.35	1.29	1.38
59	A5	3593	A	C6-N1	-12.32	1.26	1.35
59	A5	1731	G	C2-N3	-12.31	1.23	1.32
59	A5	108	A	N9-C4	-12.23	1.30	1.37
59	A5	2736	A	N9-C4	-12.23	1.30	1.37
59	A5	3481	G	C2-N3	-12.21	1.23	1.32
59	A5	362	A	C5-C6	-12.21	1.30	1.41
59	A5	3412	U	C2-N3	-12.14	1.29	1.37
59	A5	2777	A	N3-C4	-12.13	1.27	1.34
59	A5	811	G	N9-C4	-12.12	1.28	1.38
59	A5	1689	G	C6-N1	-12.12	1.31	1.39
59	A5	381	G	C2-N3	-12.11	1.23	1.32
41	Ce	52	TYR	CD2-CE2	-12.11	1.21	1.39
59	A5	3260	G	C2-N3	-12.09	1.23	1.32
59	A5	1016	A	N3-C4	-12.08	1.27	1.34
59	A5	1075	G	N7-C5	-12.03	1.32	1.39
59	A5	1689	G	C5-C4	-12.01	1.29	1.38
59	A5	376	G	C5-C4	-12.00	1.29	1.38
59	A5	424	G	C5-C4	-12.00	1.29	1.38
59	A5	2736	A	C5-C4	-11.99	1.30	1.38
59	A5	2746	A	C5-C4	-11.99	1.30	1.38
59	A5	367	A	N9-C4	-11.96	1.30	1.37
59	A5	2516	U	N3-C4	-11.95	1.27	1.38
59	A5	2712	U	C2-N3	-11.95	1.29	1.37
59	A5	2792	G	N1-C2	-11.95	1.28	1.37
59	A5	791	C	N3-C4	-11.94	1.25	1.33
59	A5	1114	A	N7-C5	-11.92	1.32	1.39
59	A5	789	G	C5-C4	-11.92	1.30	1.38
59	A5	787	C	N3-C4	-11.90	1.25	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2750	A	N7-C5	-11.89	1.32	1.39
59	A5	1105	U	C2-N3	-11.87	1.29	1.37
59	A5	1001	A	N7-C5	-11.84	1.32	1.39
59	A5	2770	C	N3-C4	-11.79	1.25	1.33
59	A5	797	A	N3-C4	-11.75	1.27	1.34
59	A5	1329	G	C5-C4	-11.74	1.30	1.38
59	A5	3345	A	N9-C4	-11.74	1.30	1.37
59	A5	1126	A	N9-C8	-11.73	1.28	1.37
59	A5	1138	C	C4-C5	-11.70	1.33	1.43
59	A5	1369	C	C4-C5	-11.66	1.33	1.43
59	A5	1003	C	N1-C6	-11.64	1.30	1.37
59	A5	105	A	N7-C5	-11.63	1.32	1.39
59	A5	299	G	C5-C4	-11.62	1.30	1.38
59	A5	805	C	N1-C2	-11.60	1.28	1.40
59	A5	3477	A	N9-C4	-11.60	1.30	1.37
59	A5	1004	C	N3-C4	-11.55	1.25	1.33
59	A5	805	C	N1-C6	-11.55	1.30	1.37
59	A5	3138	G	C5-C4	-11.54	1.30	1.38
59	A5	1120	A	N9-C4	-11.53	1.30	1.37
59	A5	3165	U	C2-N3	-11.53	1.29	1.37
59	A5	370	A	N7-C5	-11.52	1.32	1.39
59	A5	2716	C	N3-C4	-11.51	1.25	1.33
59	A5	796	A	N9-C4	-11.49	1.30	1.37
59	A5	3403	G	N1-C2	-11.46	1.28	1.37
55	A7	83	A	N9-C4	-11.44	1.30	1.37
59	A5	2223	C	C4-C5	-11.44	1.33	1.43
59	A5	3481	G	N1-C2	-11.43	1.28	1.37
59	A5	95	G	C5-C4	-11.43	1.30	1.38
59	A5	370	A	C5-C4	-11.43	1.30	1.38
59	A5	1005	G	C5-C4	-11.43	1.30	1.38
59	A5	2772	G	C5-C4	-11.43	1.30	1.38
59	A5	2769	G	N7-C5	-11.41	1.32	1.39
59	A5	1116	G	C2-N3	-11.40	1.23	1.32
59	A5	1176	A	N9-C4	-11.38	1.31	1.37
59	A5	1124	G	C5-C4	-11.36	1.30	1.38
59	A5	2517	A	N7-C5	-11.31	1.32	1.39
59	A5	3877	G	C5-C4	-11.30	1.30	1.38
59	A5	2750	A	C5-C4	-11.30	1.30	1.38
59	A5	800	C	C4-C5	-11.30	1.33	1.43
59	A5	2770	C	N1-C6	-11.29	1.30	1.37
59	A5	1525	G	C6-N1	-11.29	1.31	1.39
59	A5	380	G	N9-C8	-11.27	1.29	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	358	C	N1-C6	-11.26	1.30	1.37
59	A5	987	G	N9-C8	-11.26	1.29	1.37
59	A5	1157	C	N3-C4	-11.26	1.26	1.33
59	A5	2734	A	C5-C6	-11.25	1.30	1.41
59	A5	1115	A	N9-C4	-11.21	1.31	1.37
59	A5	1318	A	N9-C4	-11.20	1.31	1.37
59	A5	1735	G	C5-C4	-11.20	1.30	1.38
59	A5	381	G	N1-C2	-11.20	1.28	1.37
59	A5	380	G	C8-N7	-11.19	1.24	1.30
59	A5	789	G	N9-C8	-11.19	1.30	1.37
59	A5	1778	A	C6-N1	-11.18	1.27	1.35
59	A5	1369	C	N1-C6	-11.18	1.30	1.37
59	A5	1872	A	N7-C5	-11.18	1.32	1.39
59	A5	2218	G	C8-N7	-11.18	1.24	1.30
59	A5	1018	C	N3-C4	-11.14	1.26	1.33
59	A5	2530	C	N1-C6	-11.13	1.30	1.37
59	A5	1140	G	N7-C5	-11.13	1.32	1.39
59	A5	1001	A	N9-C4	-11.12	1.31	1.37
59	A5	1029	C	C4-C5	-11.10	1.34	1.43
59	A5	3341	C	C2-N3	-11.08	1.26	1.35
59	A5	1112	G	C8-N7	-11.06	1.24	1.30
59	A5	1087	G	C8-N7	-11.06	1.24	1.30
59	A5	3478	G	N9-C8	-11.06	1.30	1.37
59	A5	2792	G	C6-N1	-11.05	1.31	1.39
59	A5	3513	A	N9-C4	-11.03	1.31	1.37
59	A5	445	C	C4-C5	-11.03	1.34	1.43
59	A5	1163	G	N7-C5	-11.02	1.32	1.39
59	A5	1084	A	N7-C5	-11.01	1.32	1.39
59	A5	1366	G	C5-C6	-11.01	1.31	1.42
59	A5	1002	C	N1-C6	-11.00	1.30	1.37
59	A5	3346	G	N7-C5	-11.00	1.32	1.39
59	A5	370	A	C5-C6	-10.98	1.31	1.41
26	CN	40	PRO	C-N	-10.92	1.08	1.34
59	A5	1111	C	N3-C4	-10.92	1.26	1.33
59	A5	1124	G	N9-C4	-10.92	1.29	1.38
59	A5	3594	A	N9-C4	-10.92	1.31	1.37
59	A5	2754	G	N7-C5	-10.92	1.32	1.39
59	A5	2512	U	N3-C4	-10.89	1.28	1.38
54	A9	15	A	N9-C4	-10.88	1.31	1.37
59	A5	789	G	N1-C2	-10.88	1.29	1.37
59	A5	1410	A	N9-C4	-10.87	1.31	1.37
59	A5	1086	C	C2-N3	-10.86	1.27	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2220	C	N3-C4	-10.86	1.26	1.33
59	A5	2789	U	C2-N3	-10.85	1.30	1.37
59	A5	1169	C	N3-C4	-10.85	1.26	1.33
59	A5	1017	A	N7-C5	-10.84	1.32	1.39
59	A5	809	G	C8-N7	-10.83	1.24	1.30
59	A5	3480	U	C2-N3	-10.83	1.30	1.37
59	A5	1126	A	C5-C4	-10.82	1.31	1.38
59	A5	1112	G	N9-C8	-10.82	1.30	1.37
59	A5	2744	C	C4-C5	-10.80	1.34	1.43
59	A5	1003	C	N3-C4	-10.80	1.26	1.33
59	A5	2541	C	C4-C5	-10.80	1.34	1.43
59	A5	3500	A	N9-C4	-10.79	1.31	1.37
59	A5	371	G	C5-C4	-10.79	1.30	1.38
59	A5	1124	G	C2-N3	-10.77	1.24	1.32
59	A5	1315	A	N9-C4	-10.77	1.31	1.37
59	A5	2770	C	C2-N3	-10.76	1.27	1.35
59	A5	3403	G	C6-N1	-10.76	1.32	1.39
59	A5	660	A	N9-C4	-10.75	1.31	1.37
59	A5	2721	C	N3-C4	-10.75	1.26	1.33
59	A5	322	G	N7-C5	-10.73	1.32	1.39
59	A5	1075	G	C5-C4	-10.73	1.30	1.38
59	A5	987	G	N7-C5	-10.72	1.32	1.39
59	A5	2732	C	N1-C6	-10.72	1.30	1.37
59	A5	1366	G	N7-C5	-10.71	1.32	1.39
59	A5	1075	G	N9-C8	-10.71	1.30	1.37
59	A5	1110	G	C5-C4	-10.70	1.30	1.38
59	A5	427	A	N7-C5	-10.69	1.32	1.39
59	A5	2155	A	N7-C5	-10.69	1.32	1.39
59	A5	1685	G	C5-C4	-10.68	1.30	1.38
59	A5	1163	G	C5-C4	-10.67	1.30	1.38
59	A5	2522	A	C5-C4	-10.67	1.31	1.38
59	A5	2740	C	C4-C5	-10.66	1.34	1.43
59	A5	793	U	C2-N3	-10.65	1.30	1.37
59	A5	2722	U	C2-N3	-10.65	1.30	1.37
59	A5	1738	U	N3-C4	-10.65	1.28	1.38
59	A5	362	A	N7-C5	-10.64	1.32	1.39
59	A5	1692	G	N9-C8	-10.63	1.30	1.37
59	A5	3479	C	C4-C5	-10.63	1.34	1.43
59	A5	26	G	N9-C4	10.63	1.46	1.38
59	A5	1102	G	C8-N7	-10.62	1.24	1.30
59	A5	2726	A	N7-C5	-10.61	1.32	1.39
59	A5	1696	A	N3-C4	-10.61	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3138	G	N7-C5	-10.61	1.32	1.39
59	A5	1735	G	C6-N1	-10.60	1.32	1.39
59	A5	1138	C	N3-C4	-10.59	1.26	1.33
59	A5	1127	C	N1-C6	-10.58	1.30	1.37
59	A5	1689	G	N1-C2	-10.58	1.29	1.37
59	A5	1167	A	C5-C4	-10.57	1.31	1.38
59	A5	2781	G	N7-C5	-10.57	1.32	1.39
59	A5	379	A	C5-C4	-10.56	1.31	1.38
59	A5	1141	G	C6-N1	-10.55	1.32	1.39
59	A5	3412	U	N3-C4	-10.54	1.28	1.38
59	A5	995	G	C2-N3	-10.54	1.24	1.32
59	A5	1756	G	N9-C8	-10.53	1.30	1.37
59	A5	2785	C	N1-C6	-10.54	1.30	1.37
59	A5	2210	U	C2-N3	-10.51	1.30	1.37
59	A5	2698	A	C5-C4	-10.51	1.31	1.38
59	A5	806	A	N7-C5	-10.51	1.32	1.39
59	A5	379	A	N7-C5	-10.51	1.32	1.39
59	A5	1066	A	C5-C4	-10.51	1.31	1.38
59	A5	2649	A	N7-C5	-10.51	1.32	1.39
59	A5	3416	C	N3-C4	-10.48	1.26	1.33
59	A5	2755	G	C8-N7	-10.47	1.24	1.30
59	A5	1683	U	C4-C5	-10.46	1.34	1.43
59	A5	1088	A	N7-C5	-10.46	1.32	1.39
59	A5	1675	G	C5-C4	-10.45	1.31	1.38
59	A5	1118	C	C4-C5	-10.44	1.34	1.43
59	A5	34	C	N3-C4	-10.43	1.26	1.33
59	A5	2771	G	N9-C4	-10.43	1.29	1.38
59	A5	2778	G	C6-N1	-10.43	1.32	1.39
59	A5	1128	C	N3-C4	-10.42	1.26	1.33
59	A5	1013	G	C8-N7	-10.41	1.24	1.30
59	A5	1366	G	N9-C4	-10.40	1.29	1.38
59	A5	2165	C	C4-C5	-10.39	1.34	1.43
59	A5	1128	C	C4-C5	-10.38	1.34	1.43
59	A5	1676	A	N9-C4	-10.37	1.31	1.37
59	A5	1084	A	C5-C6	-10.36	1.31	1.41
59	A5	2778	G	N9-C8	-10.36	1.30	1.37
59	A5	2723	A	C5-C4	-10.34	1.31	1.38
59	A5	2537	A	N9-C4	-10.34	1.31	1.37
59	A5	1611	G	C2-N3	-10.34	1.24	1.32
59	A5	3326	G	N7-C5	-10.33	1.33	1.39
59	A5	1318	A	C5-C6	-10.32	1.31	1.41
59	A5	1377	A	N9-C4	-10.32	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3346	G	N9-C8	-10.32	1.30	1.37
59	A5	2783	C	N3-C4	-10.31	1.26	1.33
59	A5	1076	A	C5-C4	-10.31	1.31	1.38
59	A5	1140	G	C5-C4	-10.30	1.31	1.38
59	A5	359	G	C6-N1	-10.29	1.32	1.39
59	A5	2747	G	N9-C8	-10.29	1.30	1.37
59	A5	995	G	C5-C4	-10.29	1.31	1.38
59	A5	1063	C	N1-C6	-10.28	1.30	1.37
59	A5	3341	C	N3-C4	-10.28	1.26	1.33
59	A5	1731	G	C5-C4	-10.28	1.31	1.38
59	A5	1624	G	C5-C4	-10.27	1.31	1.38
59	A5	1734	G	N7-C5	-10.27	1.33	1.39
59	A5	2749	G	C8-N7	-10.27	1.24	1.30
59	A5	1120	A	C5-C4	-10.26	1.31	1.38
59	A5	1684	G	C5-C4	-10.25	1.31	1.38
59	A5	1005	G	N7-C5	-10.25	1.33	1.39
59	A5	3140	G	N1-C2	-10.25	1.29	1.37
59	A5	1127	C	C4-C5	-10.23	1.34	1.43
59	A5	2768	A	N7-C5	-10.23	1.33	1.39
59	A5	3482	G	N1-C2	-10.23	1.29	1.37
59	A5	2723	A	N7-C5	-10.22	1.33	1.39
59	A5	2678	G	C5-C4	-10.22	1.31	1.38
59	A5	99	A	C6-N1	-10.22	1.28	1.35
59	A5	1134	G	C5-C4	-10.21	1.31	1.38
59	A5	1689	G	N3-C4	-10.21	1.28	1.35
59	A5	1128	C	N1-C6	-10.21	1.31	1.37
59	A5	2566	A	N9-C4	-10.21	1.31	1.37
59	A5	3478	G	N7-C5	-10.20	1.33	1.39
59	A5	817	C	N1-C6	-10.20	1.31	1.37
59	A5	365	A	C5-C4	-10.19	1.31	1.38
59	A5	3482	G	C5-C4	-10.19	1.31	1.38
59	A5	380	G	C5-C4	-10.18	1.31	1.38
59	A5	1375	G	C8-N7	-10.18	1.24	1.30
59	A5	3478	G	C5-C4	-10.18	1.31	1.38
59	A5	1696	A	C5-C4	-10.18	1.31	1.38
59	A5	2789	U	N3-C4	-10.17	1.29	1.38
59	A5	2671	C	N1-C6	-10.17	1.31	1.37
59	A5	2740	C	N1-C2	-10.17	1.29	1.40
59	A5	1756	G	C5-C4	-10.16	1.31	1.38
59	A5	1671	U	C2-N3	-10.16	1.30	1.37
59	A5	1613	A	C6-N1	-10.16	1.28	1.35
59	A5	813	C	C4-C5	-10.14	1.34	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1983	G	C5-C4	-10.13	1.31	1.38
59	A5	100	G	N1-C2	-10.13	1.29	1.37
59	A5	426	A	C5-C4	-10.13	1.31	1.38
59	A5	1371	A	N7-C5	-10.13	1.33	1.39
59	A5	2518	A	C5-C4	-10.12	1.31	1.38
59	A5	1784	A	N3-C4	-10.12	1.28	1.34
59	A5	1610	A	N7-C5	-10.12	1.33	1.39
59	A5	818	A	N9-C4	-10.11	1.31	1.37
59	A5	2716	C	C2-N3	-10.11	1.27	1.35
59	A5	2727	U	C4-C5	-10.11	1.34	1.43
59	A5	805	C	C2-N3	-10.11	1.27	1.35
59	A5	2167	G	N1-C2	-10.10	1.29	1.37
59	A5	1795	A	C6-N1	-10.10	1.28	1.35
59	A5	2224	A	N9-C4	-10.10	1.31	1.37
59	A5	1126	A	C5-C6	-10.10	1.31	1.41
59	A5	3520	U	C4-C5	-10.10	1.34	1.43
59	A5	2771	G	C5-C4	-10.09	1.31	1.38
56	A8	15	G	N9-C8	-10.09	1.30	1.37
59	A5	1695	A	C8-N7	-10.09	1.24	1.31
59	A5	1372	A	N7-C5	-10.08	1.33	1.39
59	A5	853	G	C5-C4	-10.08	1.31	1.38
59	A5	1120	A	N7-C5	-10.07	1.33	1.39
59	A5	2747	G	C5-C4	-10.07	1.31	1.38
59	A5	1013	G	N9-C8	-10.06	1.30	1.37
59	A5	3513	A	N3-C4	-10.06	1.28	1.34
2	CA	196	TRP	CB-CG	-10.05	1.32	1.50
59	A5	50	U	C2-N3	-10.05	1.30	1.37
59	A5	1015	G	C6-N1	-10.05	1.32	1.39
59	A5	853	G	N7-C5	-10.04	1.33	1.39
59	A5	806	A	N9-C8	-10.03	1.29	1.37
59	A5	1521	G	N3-C4	-10.02	1.28	1.35
59	A5	1784	A	C5-C6	-10.02	1.32	1.41
59	A5	1104	A	C5-C4	-10.02	1.31	1.38
59	A5	1116	G	C5-C4	-10.02	1.31	1.38
59	A5	1734	G	C5-C6	-10.01	1.32	1.42
59	A5	2521	A	C8-N7	-10.01	1.24	1.31
59	A5	1164	G	C5-C4	-10.01	1.31	1.38
59	A5	3481	G	C6-N1	-10.00	1.32	1.39
59	A5	438	G	N9-C4	-10.00	1.29	1.38
59	A5	2737	C	N1-C6	-9.99	1.31	1.37
59	A5	3472	A	N3-C4	-9.99	1.28	1.34
59	A5	991	A	N9-C4	-9.98	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1109	G	C2-N3	-9.98	1.24	1.32
59	A5	1613	A	N3-C4	-9.97	1.28	1.34
59	A5	1694	A	N9-C4	-9.96	1.31	1.37
59	A5	2096	C	C4-C5	-9.97	1.34	1.43
59	A5	2520	U	C2-N3	-9.96	1.30	1.37
59	A5	3587	U	C2-N3	-9.96	1.30	1.37
59	A5	815	A	N3-C4	-9.94	1.28	1.34
59	A5	2700	C	C4-C5	-9.94	1.35	1.43
59	A5	3339	U	N3-C4	-9.94	1.29	1.38
59	A5	2181	A	N9-C4	-9.93	1.31	1.37
59	A5	2518	A	N7-C5	-9.93	1.33	1.39
59	A5	295	G	C5-C4	-9.93	1.31	1.38
59	A5	370	A	N9-C4	-9.93	1.31	1.37
59	A5	425	A	N7-C5	-9.93	1.33	1.39
59	A5	2755	G	C5-C4	-9.93	1.31	1.38
59	A5	2668	C	C4-C5	-9.92	1.35	1.43
59	A5	2731	G	C5-C6	-9.92	1.32	1.42
56	A8	41	G	C5-C4	-9.92	1.31	1.38
59	A5	3625	U	C2-N3	-9.91	1.30	1.37
59	A5	2735	A	N7-C5	-9.89	1.33	1.39
59	A5	3519	C	C4-C5	-9.89	1.35	1.43
59	A5	379	A	N3-C4	-9.89	1.28	1.34
59	A5	102	G	C6-N1	-9.88	1.32	1.39
59	A5	1691	A	C6-N1	-9.88	1.28	1.35
59	A5	3413	C	N1-C6	-9.88	1.31	1.37
59	A5	992	U	C2-N3	-9.87	1.30	1.37
59	A5	2218	G	C5-C4	-9.87	1.31	1.38
59	A5	1681	G	C8-N7	-9.86	1.25	1.30
59	A5	1369	C	N3-C4	-9.86	1.27	1.33
59	A5	817	C	N3-C4	-9.85	1.27	1.33
59	A5	1142	U	C2-N3	-9.85	1.30	1.37
59	A5	1101	A	N9-C4	-9.85	1.31	1.37
59	A5	1786	G	N1-C2	-9.85	1.29	1.37
59	A5	2226	A	N3-C4	-9.84	1.28	1.34
59	A5	1610	A	C5-C4	-9.84	1.31	1.38
59	A5	2533	U	C4-C5	-9.84	1.34	1.43
59	A5	2694	G	N1-C2	-9.84	1.29	1.37
59	A5	809	G	N9-C8	-9.84	1.30	1.37
59	A5	359	G	C5-C4	-9.83	1.31	1.38
59	A5	2712	U	N3-C4	-9.83	1.29	1.38
59	A5	781	C	N1-C6	-9.82	1.31	1.37
59	A5	808	G	C2-N3	-9.82	1.24	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	987	G	C8-N7	-9.82	1.25	1.30
59	A5	995	G	C6-N1	-9.81	1.32	1.39
59	A5	1020	A	C6-N1	-9.81	1.28	1.35
59	A5	1053	G	N7-C5	-9.81	1.33	1.39
59	A5	3620	G	C2-N3	-9.80	1.25	1.32
59	A5	2559	C	C4-C5	-9.79	1.35	1.43
59	A5	3235	A	N7-C5	-9.79	1.33	1.39
59	A5	1019	U	C2-N3	-9.78	1.30	1.37
59	A5	1686	A	N7-C5	-9.79	1.33	1.39
59	A5	3149	U	C2-N3	-9.78	1.30	1.37
59	A5	2185	U	C2-N3	-9.77	1.30	1.37
59	A5	2512	U	C2-N3	-9.77	1.30	1.37
59	A5	2205	G	C5-C4	-9.76	1.31	1.38
59	A5	784	G	C2-N3	-9.76	1.25	1.32
59	A5	3348	G	C8-N7	-9.76	1.25	1.30
59	A5	808	G	N1-C2	-9.76	1.29	1.37
59	A5	424	G	N9-C8	-9.75	1.31	1.37
59	A5	1113	A	N3-C4	-9.75	1.29	1.34
59	A5	1684	G	N1-C2	-9.75	1.29	1.37
59	A5	3142	G	C6-N1	-9.75	1.32	1.39
56	A8	24	G	C5-C4	-9.74	1.31	1.38
59	A5	1107	G	N9-C4	-9.74	1.30	1.38
59	A5	3478	G	C8-N7	-9.74	1.25	1.30
59	A5	86	C	N1-C6	-9.73	1.31	1.37
59	A5	2160	C	C2-N3	-9.73	1.27	1.35
59	A5	378	G	N7-C5	-9.73	1.33	1.39
59	A5	1077	C	N1-C6	-9.73	1.31	1.37
59	A5	1157	C	C2-N3	-9.72	1.27	1.35
56	A8	17	U	C2-N3	-9.71	1.30	1.37
59	A5	298	U	N1-C2	-9.71	1.29	1.38
59	A5	805	C	N3-C4	-9.71	1.27	1.33
59	A5	2523	A	N3-C4	-9.71	1.29	1.34
59	A5	1770	C	N3-C4	-9.70	1.27	1.33
59	A5	1022	A	N7-C5	-9.70	1.33	1.39
59	A5	354	A	N3-C4	-9.70	1.29	1.34
59	A5	818	A	N3-C4	-9.70	1.29	1.34
59	A5	1784	A	N9-C4	-9.69	1.32	1.37
59	A5	2735	A	C8-N7	-9.69	1.24	1.31
59	A5	801	G	C6-N1	-9.69	1.32	1.39
59	A5	1114	A	C5-C6	-9.68	1.32	1.41
59	A5	34	C	C4-C5	-9.68	1.35	1.43
59	A5	1332	C	N3-C4	-9.68	1.27	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2500	G	C5-C4	-9.68	1.31	1.38
59	A5	2158	U	C4-C5	-9.68	1.34	1.43
59	A5	1644	C	N1-C6	-9.67	1.31	1.37
59	A5	1152	A	C6-N1	-9.66	1.28	1.35
59	A5	2154	A	N9-C4	-9.66	1.32	1.37
59	A5	429	U	C2-N3	-9.65	1.30	1.37
59	A5	3616	G	C6-N1	-9.65	1.32	1.39
59	A5	1382	U	O3'-P	9.65	1.72	1.61
59	A5	1392	A	C5-C4	-9.65	1.31	1.38
59	A5	1106	A	C5-C4	-9.64	1.31	1.38
59	A5	1328	U	N3-C4	-9.63	1.29	1.38
59	A5	1368	A	N3-C4	-9.63	1.29	1.34
59	A5	3477	A	N7-C5	-9.63	1.33	1.39
59	A5	1715	G	C2-N3	-9.62	1.25	1.32
59	A5	2733	G	C5-C4	-9.62	1.31	1.38
59	A5	553	A	N9-C4	-9.62	1.32	1.37
59	A5	95	G	N9-C8	-9.62	1.31	1.37
59	A5	1687	U	C2-N3	-9.62	1.31	1.37
59	A5	2516	U	N1-C6	-9.62	1.29	1.38
59	A5	3728	A	N7-C5	-9.62	1.33	1.39
59	A5	3166	C	C4-C5	-9.61	1.35	1.43
59	A5	1174	G	C5-C4	-9.60	1.31	1.38
59	A5	1529	C	N1-C6	-9.60	1.31	1.37
59	A5	1612	G	C6-N1	-9.59	1.32	1.39
59	A5	2542	C	N3-C4	-9.59	1.27	1.33
59	A5	3406	G	N9-C4	-9.58	1.30	1.38
59	A5	798	C	C2-N3	-9.58	1.28	1.35
59	A5	1016	A	N7-C5	-9.58	1.33	1.39
59	A5	2799	U	C2-N3	-9.58	1.31	1.37
59	A5	1108	G	N7-C5	-9.58	1.33	1.39
59	A5	1015	G	C8-N7	-9.57	1.25	1.30
59	A5	1102	G	C5-C4	-9.57	1.31	1.38
59	A5	2657	A	N3-C4	-9.57	1.29	1.34
59	A5	3495	G	C5-C4	-9.57	1.31	1.38
59	A5	1156	U	C2-N3	-9.57	1.31	1.37
59	A5	3141	A	N9-C4	-9.56	1.32	1.37
59	A5	1675	G	N9-C8	-9.56	1.31	1.37
59	A5	3524	G	C5-C4	-9.56	1.31	1.38
59	A5	1351	C	C4-C5	-9.55	1.35	1.43
59	A5	1326	A	C6-N1	-9.55	1.28	1.35
59	A5	1112	G	N7-C5	-9.54	1.33	1.39
59	A5	2549	G	C5-C4	-9.54	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2754	G	N9-C8	-9.54	1.31	1.37
59	A5	998	G	C8-N7	-9.53	1.25	1.30
59	A5	1097	A	C5-C4	-9.53	1.32	1.38
59	A5	1681	G	N1-C2	-9.53	1.30	1.37
59	A5	1614	A	C5-C6	-9.52	1.32	1.41
59	A5	382	G	C6-N1	-9.52	1.32	1.39
59	A5	1015	G	N9-C8	-9.52	1.31	1.37
59	A5	1160	U	N1-C6	-9.52	1.29	1.38
59	A5	2787	U	N1-C2	-9.52	1.29	1.38
59	A5	788	C	N1-C6	-9.52	1.31	1.37
59	A5	3609	A	N9-C4	-9.51	1.32	1.37
59	A5	1162	A	C5-C6	-9.51	1.32	1.41
59	A5	2529	G	C5-C4	-9.51	1.31	1.38
59	A5	1555	G	C5-C4	-9.50	1.31	1.38
59	A5	995	G	N1-C2	-9.50	1.30	1.37
59	A5	1778	A	N9-C4	-9.50	1.32	1.37
59	A5	1721	C	C4-C5	-9.49	1.35	1.43
59	A5	3246	G	N9-C4	-9.49	1.30	1.38
59	A5	794	G	C6-N1	-9.49	1.32	1.39
59	A5	2772	G	N9-C8	-9.49	1.31	1.37
59	A5	1151	A	N9-C4	-9.48	1.32	1.37
59	A5	1356	G	C2-N3	-9.48	1.25	1.32
59	A5	1002	C	N3-C4	-9.48	1.27	1.33
59	A5	1351	C	N3-C4	-9.48	1.27	1.33
59	A5	3155	G	C5-C4	-9.48	1.31	1.38
59	A5	989	A	C5-C4	-9.48	1.32	1.38
59	A5	1140	G	C5-C6	-9.47	1.32	1.42
59	A5	804	C	N3-C4	-9.47	1.27	1.33
59	A5	2565	G	N7-C5	-9.46	1.33	1.39
56	A8	20	C	N3-C4	-9.46	1.27	1.33
59	A5	33	C	C4-C5	-9.46	1.35	1.43
59	A5	382	G	N1-C2	-9.46	1.30	1.37
59	A5	2701	G	C5-C4	-9.46	1.31	1.38
59	A5	1001	A	N3-C4	-9.45	1.29	1.34
59	A5	1163	G	C8-N7	-9.45	1.25	1.30
59	A5	3728	A	C6-N6	-9.45	1.26	1.33
59	A5	839	A	N9-C4	-9.45	1.32	1.37
59	A5	3410	G	N9-C8	-9.44	1.31	1.37
56	A8	36	A	C5-C4	-9.44	1.32	1.38
59	A5	3400	U	C2-N3	-9.44	1.31	1.37
59	A5	3406	G	N7-C5	-9.44	1.33	1.39
59	A5	3338	U	N3-C4	-9.44	1.29	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3474	G	C6-N1	-9.44	1.32	1.39
59	A5	1619	C	N1-C6	-9.44	1.31	1.37
59	A5	2779	A	N3-C4	-9.43	1.29	1.34
59	A5	363	G	N7-C5	-9.43	1.33	1.39
59	A5	1672	A	N3-C4	-9.43	1.29	1.34
59	A5	1133	A	N9-C8	-9.42	1.30	1.37
59	A5	1152	A	C5-C4	-9.42	1.32	1.38
59	A5	811	G	N3-C4	-9.42	1.28	1.35
59	A5	2503	G	C2-N3	-9.42	1.25	1.32
59	A5	1013	G	N1-C2	-9.41	1.30	1.37
33	CP	130	TYR	CD2-CE2	-9.41	1.25	1.39
59	A5	2801	U	C2-N3	-9.41	1.31	1.37
59	A5	3476	G	C2-N3	-9.40	1.25	1.32
59	A5	367	A	N3-C4	-9.40	1.29	1.34
59	A5	1007	A	N7-C5	-9.40	1.33	1.39
59	A5	377	U	C2-N3	-9.40	1.31	1.37
59	A5	796	A	N9-C8	-9.40	1.30	1.37
59	A5	1086	C	N3-C4	-9.39	1.27	1.33
59	A5	1368	A	N9-C4	-9.39	1.32	1.37
59	A5	429	U	N3-C4	-9.39	1.29	1.38
59	A5	1016	A	C5-C4	-9.39	1.32	1.38
59	A5	1102	G	N9-C8	-9.38	1.31	1.37
59	A5	3404	A	C2-N3	-9.38	1.25	1.33
59	A5	1676	A	N3-C4	-9.38	1.29	1.34
59	A5	3166	C	N1-C6	-9.38	1.31	1.37
59	A5	2196	U	N3-C4	-9.38	1.30	1.38
59	A5	1533	A	N9-C4	-9.37	1.32	1.37
59	A5	3878	U	C2-N3	-9.37	1.31	1.37
59	A5	2216	A	N3-C4	-9.36	1.29	1.34
59	A5	3482	G	C6-N1	-9.36	1.32	1.39
59	A5	1110	G	C8-N7	-9.36	1.25	1.30
59	A5	1757	A	C5-C4	-9.36	1.32	1.38
59	A5	3326	G	C5-C4	-9.36	1.31	1.38
59	A5	382	G	C5-C4	-9.35	1.31	1.38
59	A5	794	G	C5-C4	-9.35	1.31	1.38
59	A5	2526	A	N7-C5	-9.35	1.33	1.39
59	A5	2549	G	C2-N3	-9.35	1.25	1.32
59	A5	803	A	C5-C4	-9.35	1.32	1.38
59	A5	821	U	C2-N3	-9.35	1.31	1.37
59	A5	799	A	C8-N7	-9.34	1.25	1.31
59	A5	3347	G	N7-C5	-9.34	1.33	1.39
59	A5	1329	G	N9-C8	-9.34	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	378	G	C5-C4	-9.33	1.31	1.38
59	A5	3507	A	C5-C4	-9.33	1.32	1.38
59	A5	874	G	C8-N7	-9.32	1.25	1.30
59	A5	104	A	N9-C4	-9.32	1.32	1.37
59	A5	448	A	C5-C4	-9.32	1.32	1.38
59	A5	1321	G	N9-C8	-9.32	1.31	1.37
59	A5	809	G	C5-C4	-9.32	1.31	1.38
56	A8	24	G	N3-C4	-9.31	1.28	1.35
59	A5	789	G	C2-N3	-9.31	1.25	1.32
59	A5	1149	C	N3-C4	-9.31	1.27	1.33
59	A5	1103	U	C4-C5	-9.31	1.35	1.43
59	A5	1196	A	N9-C4	-9.30	1.32	1.37
59	A5	3138	G	C2-N3	-9.29	1.25	1.32
59	A5	1788	G	C5-C4	-9.29	1.31	1.38
59	A5	3351	A	C5-C4	-9.29	1.32	1.38
59	A5	793	U	N1-C2	-9.28	1.30	1.38
59	A5	3877	G	N9-C8	-9.28	1.31	1.37
59	A5	2562	U	C2-N3	-9.28	1.31	1.37
59	A5	807	A	N9-C4	-9.27	1.32	1.37
59	A5	3596	A	N9-C4	-9.27	1.32	1.37
59	A5	374	C	N3-C4	-9.27	1.27	1.33
59	A5	3601	U	N1-C2	-9.27	1.30	1.38
55	A7	99	G	C5-C4	-9.27	1.31	1.38
59	A5	1795	A	N3-C4	-9.26	1.29	1.34
59	A5	2160	C	N3-C4	-9.26	1.27	1.33
59	A5	2203	A	C5-C4	-9.26	1.32	1.38
59	A5	2797	A	C5-C4	-9.25	1.32	1.38
59	A5	1128	C	C2-N3	-9.25	1.28	1.35
59	A5	382	G	C8-N7	-9.24	1.25	1.30
59	A5	1087	G	C5-C4	-9.24	1.31	1.38
59	A5	815	A	C5-C4	-9.24	1.32	1.38
59	A5	3348	G	C5-C4	-9.23	1.31	1.38
59	A5	807	A	C8-N7	-9.23	1.25	1.31
59	A5	1015	G	N1-C2	-9.23	1.30	1.37
59	A5	1112	G	C5-C4	-9.23	1.31	1.38
59	A5	788	C	C4-C5	-9.23	1.35	1.43
59	A5	1006	A	N3-C4	-9.23	1.29	1.34
59	A5	1076	A	C5-C6	-9.23	1.32	1.41
59	A5	1647	A	N7-C5	-9.23	1.33	1.39
59	A5	2525	C	N3-C4	-9.22	1.27	1.33
58	B2	1071	G	C5-C4	-9.22	1.31	1.38
59	A5	1678	C	N3-C4	-9.22	1.27	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2701	G	N9-C8	-9.22	1.31	1.37
59	A5	2214	G	N1-C2	-9.22	1.30	1.37
59	A5	2768	A	N9-C4	-9.22	1.32	1.37
59	A5	1612	G	C5-C6	-9.21	1.33	1.42
59	A5	1732	A	N7-C5	-9.21	1.33	1.39
59	A5	1726	G	C5-C4	-9.21	1.31	1.38
59	A5	1009	G	C8-N7	-9.20	1.25	1.30
59	A5	1357	C	N3-C4	-9.20	1.27	1.33
59	A5	2689	G	C8-N7	-9.20	1.25	1.30
58	B2	1174	A	N9-C4	-9.20	1.32	1.37
59	A5	1685	G	N9-C8	-9.20	1.31	1.37
59	A5	2492	A	N9-C8	9.19	1.45	1.37
59	A5	995	G	N9-C8	-9.19	1.31	1.37
59	A5	2623	C	N3-C4	-9.19	1.27	1.33
59	A5	3140	G	C5-C4	-9.19	1.31	1.38
59	A5	27	A	C5-C6	-9.19	1.32	1.41
59	A5	2780	A	C5-C4	-9.19	1.32	1.38
59	A5	1734	G	C2-N3	-9.19	1.25	1.32
56	A8	21	U	C4-C5	-9.19	1.35	1.43
56	A8	16	A	C6-N6	-9.18	1.26	1.33
33	CP	130	TYR	CD1-CE1	-9.18	1.25	1.39
59	A5	1129	A	N3-C4	-9.18	1.29	1.34
59	A5	1080	G	C6-N1	-9.18	1.33	1.39
59	A5	1002	C	C4-C5	-9.17	1.35	1.43
59	A5	1667	U	N3-C4	-9.17	1.30	1.38
59	A5	1005	G	C2-N3	-9.17	1.25	1.32
59	A5	2747	G	C8-N7	-9.17	1.25	1.30
59	A5	1323	C	C4-C5	-9.16	1.35	1.43
41	Ce	27	TYR	CD1-CE1	-9.16	1.25	1.39
59	A5	1163	G	C5-C6	-9.15	1.33	1.42
59	A5	1313	A	N3-C4	-9.15	1.29	1.34
59	A5	365	A	N3-C4	-9.15	1.29	1.34
59	A5	1797	A	C5-C4	-9.15	1.32	1.38
59	A5	1782	C	C4-C5	-9.14	1.35	1.43
59	A5	3138	G	N1-C2	-9.14	1.30	1.37
56	A8	23	G	C2-N3	-9.14	1.25	1.32
59	A5	2159	C	C4-C5	-9.14	1.35	1.43
59	A5	3507	A	N1-C2	-9.13	1.26	1.34
59	A5	1647	A	C5-C4	-9.13	1.32	1.38
59	A5	101	C	N3-C4	-9.13	1.27	1.33
59	A5	1413	C	C4-C5	-9.13	1.35	1.43
59	A5	2172	C	C4-C5	-9.13	1.35	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2793	C	C4-C5	-9.13	1.35	1.43
59	A5	2755	G	N9-C4	-9.13	1.30	1.38
59	A5	1121	A	C5-C4	-9.13	1.32	1.38
59	A5	103	A	N3-C4	-9.12	1.29	1.34
59	A5	1346	C	N3-C4	-9.12	1.27	1.33
59	A5	2035	C	N1-C6	-9.12	1.31	1.37
59	A5	2151	A	N7-C5	-9.12	1.33	1.39
59	A5	1531	U	C4-O4	-9.12	1.16	1.23
59	A5	3335	A	N7-C5	-9.12	1.33	1.39
59	A5	2159	C	N3-C4	-9.12	1.27	1.33
59	A5	1735	G	N1-C2	-9.11	1.30	1.37
59	A5	2773	G	C2-N3	-9.11	1.25	1.32
59	A5	1005	G	N1-C2	-9.11	1.30	1.37
59	A5	1124	G	C5-C6	-9.11	1.33	1.42
59	A5	2798	C	N3-C4	-9.11	1.27	1.33
59	A5	789	G	N3-C4	-9.11	1.29	1.35
59	A5	371	G	N1-C2	-9.11	1.30	1.37
59	A5	353	G	N7-C5	-9.10	1.33	1.39
59	A5	801	G	C5-C4	-9.10	1.31	1.38
59	A5	3490	C	N1-C2	-9.10	1.31	1.40
59	A5	998	G	C5-C4	-9.10	1.31	1.38
59	A5	1010	A	C6-N1	-9.10	1.29	1.35
59	A5	2205	G	N7-C5	-9.09	1.33	1.39
59	A5	2781	G	N9-C8	-9.09	1.31	1.37
59	A5	3877	G	N1-C2	-9.09	1.30	1.37
56	A8	23	G	C6-N1	-9.08	1.33	1.39
59	A5	64	A	C5-C4	-9.08	1.32	1.38
58	B2	1115	C	N1-C6	-9.08	1.31	1.37
59	A5	1546	U	C2-N3	-9.07	1.31	1.37
59	A5	1153	G	N9-C4	-9.07	1.30	1.38
59	A5	1364	A	N7-C5	-9.07	1.33	1.39
59	A5	1607	A	C6-N1	-9.07	1.29	1.35
59	A5	1141	G	C5-C4	-9.07	1.32	1.38
59	A5	802	G	C6-N1	-9.06	1.33	1.39
59	A5	1752	G	C5-C4	-9.06	1.32	1.38
59	A5	1015	G	C2-N3	-9.06	1.25	1.32
59	A5	1340	G	C5-C4	-9.05	1.32	1.38
59	A5	1344	A	N7-C5	-9.05	1.33	1.39
59	A5	1595	G	N3-C4	-9.05	1.29	1.35
59	A5	997	U	C2-N3	-9.04	1.31	1.37
59	A5	2715	C	N1-C6	-9.04	1.31	1.37
59	A5	2771	G	N3-C4	-9.04	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1355	C	N3-C4	-9.04	1.27	1.33
59	A5	387	U	C2-N3	-9.04	1.31	1.37
59	A5	1666	A	C5-C4	-9.04	1.32	1.38
59	A5	1082	A	C5-C4	-9.03	1.32	1.38
59	A5	2508	C	N3-C4	-9.03	1.27	1.33
56	A8	15	G	N7-C5	-9.03	1.33	1.39
59	A5	3514	C	N3-C4	-9.03	1.27	1.33
41	Ce	52	TYR	CB-CG	-9.03	1.38	1.51
59	A5	3610	A	N9-C8	-9.03	1.30	1.37
59	A5	1126	A	C8-N7	-9.02	1.25	1.31
59	A5	1684	G	C8-N7	-9.02	1.25	1.30
59	A5	3174	A	N7-C5	-9.02	1.33	1.39
59	A5	2507	C	N3-C4	-9.02	1.27	1.33
59	A5	3337	G	C8-N7	-9.02	1.25	1.30
59	A5	1144	C	N3-C4	-9.02	1.27	1.33
59	A5	2570	C	N1-C6	-9.02	1.31	1.37
59	A5	1015	G	N9-C4	-9.01	1.30	1.38
59	A5	2674	A	C5-C6	-9.01	1.32	1.41
59	A5	3519	C	C2-N3	-9.01	1.28	1.35
59	A5	438	G	C5-C4	-9.01	1.32	1.38
59	A5	819	U	C2-N3	-9.01	1.31	1.37
59	A5	1013	G	C6-N1	-9.01	1.33	1.39
59	A5	3610	A	N9-C4	-9.01	1.32	1.37
59	A5	373	A	C6-N1	-9.00	1.29	1.35
59	A5	1610	A	N9-C8	-9.00	1.30	1.37
59	A5	1702	G	N9-C4	-9.00	1.30	1.38
59	A5	2207	A	C6-N1	-9.00	1.29	1.35
59	A5	795	A	N3-C4	-9.00	1.29	1.34
59	A5	2785	C	N3-C4	-9.00	1.27	1.33
56	A8	23	G	C5-C4	-9.00	1.32	1.38
59	A5	3591	A	N9-C4	-8.99	1.32	1.37
59	A5	794	G	N9-C8	-8.99	1.31	1.37
59	A5	3869	A	N9-C4	-8.98	1.32	1.37
59	A5	377	U	N1-C6	-8.98	1.29	1.38
59	A5	2715	C	C2-N3	-8.98	1.28	1.35
59	A5	3411	C	N1-C6	-8.98	1.31	1.37
59	A5	60	G	C5-C4	-8.97	1.32	1.38
59	A5	1115	A	C8-N7	-8.97	1.25	1.31
59	A5	1383	A	P-O5'	8.97	1.68	1.59
59	A5	2570	C	N3-C4	-8.97	1.27	1.33
59	A5	3514	C	C2-O2	-8.97	1.16	1.24
59	A5	1616	G	C6-N1	-8.97	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2513	G	C2-N3	-8.97	1.25	1.32
59	A5	1667	U	C2-N3	-8.97	1.31	1.37
59	A5	797	A	N7-C5	-8.96	1.33	1.39
59	A5	3628	G	N7-C5	-8.96	1.33	1.39
59	A5	2738	C	N3-C4	-8.96	1.27	1.33
59	A5	1649	G	N7-C5	-8.96	1.33	1.39
59	A5	1696	A	C5-C6	-8.96	1.32	1.41
59	A5	3487	A	N9-C4	-8.96	1.32	1.37
59	A5	103	A	N7-C5	-8.95	1.33	1.39
59	A5	796	A	N7-C5	-8.95	1.33	1.39
59	A5	1057	G	C5-C4	-8.95	1.32	1.38
59	A5	1363	G	C5-C4	-8.95	1.32	1.38
59	A5	3754	C	N1-C6	-8.95	1.31	1.37
58	B2	1970	U	C2-N3	-8.95	1.31	1.37
58	B2	111	A	N9-C4	-8.95	1.32	1.37
59	A5	3538	G	C5-C4	-8.95	1.32	1.38
59	A5	2739	A	N9-C4	-8.94	1.32	1.37
59	A5	1083	A	N9-C4	-8.94	1.32	1.37
59	A5	3260	G	N3-C4	-8.93	1.29	1.35
59	A5	2241	U	C2-N3	-8.93	1.31	1.37
59	A5	2158	U	N1-C2	-8.92	1.30	1.38
59	A5	2529	G	C2-N3	-8.92	1.25	1.32
59	A5	2774	G	N7-C5	-8.92	1.33	1.39
59	A5	3403	G	N9-C8	-8.92	1.31	1.37
59	A5	1680	U	C2-N3	-8.91	1.31	1.37
59	A5	2755	G	N9-C8	-8.91	1.31	1.37
59	A5	3544	G	N9-C8	-8.91	1.31	1.37
59	A5	3474	G	C2-N3	-8.91	1.25	1.32
59	A5	807	A	N7-C5	-8.91	1.33	1.39
59	A5	1755	U	N1-C2	-8.91	1.30	1.38
59	A5	3583	C	N1-C6	-8.91	1.31	1.37
59	A5	378	G	C8-N7	-8.90	1.25	1.30
59	A5	1129	A	C5-C4	-8.90	1.32	1.38
59	A5	2805	C	N1-C6	-8.90	1.31	1.37
59	A5	3446	G	C5-C4	-8.90	1.32	1.38
59	A5	1795	A	C5-C6	-8.90	1.33	1.41
59	A5	2526	A	C5-C6	-8.90	1.33	1.41
59	A5	1070	G	N9-C8	-8.89	1.31	1.37
59	A5	1525	G	N1-C2	-8.89	1.30	1.37
59	A5	2564	U	C2-N3	-8.89	1.31	1.37
59	A5	3544	G	C5-C4	-8.89	1.32	1.38
58	B2	319	C	N1-C6	-8.89	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	N7-C5	-8.89	1.33	1.39
59	A5	3630	C	C4-C5	-8.89	1.35	1.43
56	A8	101	A	N9-C4	-8.88	1.32	1.37
59	A5	786	C	N3-C4	-8.88	1.27	1.33
59	A5	1029	C	N3-C4	-8.88	1.27	1.33
59	A5	2734	A	N7-C5	-8.88	1.33	1.39
59	A5	1872	A	N9-C4	-8.88	1.32	1.37
59	A5	2167	G	C8-N7	-8.88	1.25	1.30
59	A5	3628	G	N9-C8	-8.88	1.31	1.37
59	A5	308	G	N9-C8	-8.88	1.31	1.37
59	A5	49	A	N9-C4	-8.87	1.32	1.37
59	A5	3349	A	C6-N1	-8.87	1.29	1.35
59	A5	1036	A	N3-C4	-8.87	1.29	1.34
59	A5	2172	C	N1-C2	-8.86	1.31	1.40
59	A5	549	A	N9-C4	-8.86	1.32	1.37
59	A5	1353	G	C8-N7	-8.86	1.25	1.30
59	A5	807	A	C5-C4	-8.86	1.32	1.38
59	A5	3262	A	N9-C4	-8.86	1.32	1.37
59	A5	803	A	C6-N1	-8.85	1.29	1.35
59	A5	1643	G	C8-N7	-8.85	1.25	1.30
58	B2	632	G	N7-C5	-8.84	1.33	1.39
59	A5	92	A	C6-N1	-8.84	1.29	1.35
59	A5	1614	A	C5-C4	-8.84	1.32	1.38
59	A5	3480	U	N3-C4	-8.84	1.30	1.38
59	A5	1753	G	N7-C5	-8.84	1.33	1.39
59	A5	304	U	C4-C5	-8.84	1.35	1.43
59	A5	1666	A	N7-C5	-8.84	1.33	1.39
59	A5	3445	C	N3-C4	-8.84	1.27	1.33
59	A5	2243	G	C6-N1	-8.84	1.33	1.39
55	A7	93	G	C2-N3	-8.83	1.25	1.32
59	A5	1365	U	C2-N3	-8.83	1.31	1.37
58	B2	1847	A	N9-C4	-8.83	1.32	1.37
59	A5	1171	G	C8-N7	-8.83	1.25	1.30
59	A5	1356	G	C5-C4	-8.83	1.32	1.38
56	A8	36	A	C5-C6	-8.83	1.33	1.41
59	A5	1020	A	C5-C4	-8.83	1.32	1.38
56	A8	24	G	C6-N1	-8.82	1.33	1.39
59	A5	3402	C	N3-C4	-8.82	1.27	1.33
59	A5	1106	A	N3-C4	-8.82	1.29	1.34
59	A5	2516	U	C2-N3	-8.82	1.31	1.37
59	A5	3409	G	N9-C8	-8.82	1.31	1.37
59	A5	74	A	N9-C4	-8.81	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	N1-C2	-8.81	1.30	1.37
59	A5	1692	G	N7-C5	-8.81	1.33	1.39
59	A5	1790	A	N9-C4	-8.81	1.32	1.37
59	A5	1110	G	N7-C5	-8.81	1.33	1.39
59	A5	1009	G	N1-C2	-8.81	1.30	1.37
59	A5	2737	C	N3-C4	-8.81	1.27	1.33
56	A8	22	C	N1-C6	-8.81	1.31	1.37
59	A5	1699	A	C5-C6	8.81	1.49	1.41
59	A5	1622	U	C2-N3	-8.80	1.31	1.37
59	A5	1711	C	N1-C6	-8.80	1.31	1.37
59	A5	2557	C	N3-C4	-8.80	1.27	1.33
59	A5	2736	A	N3-C4	-8.80	1.29	1.34
59	A5	2208	G	C2-N3	-8.79	1.25	1.32
59	A5	1140	G	C8-N7	-8.79	1.25	1.30
59	A5	2760	G	C2-N3	-8.79	1.25	1.32
59	A5	3884	A	C5-C4	-8.79	1.32	1.38
59	A5	2206	U	C4-C5	-8.79	1.35	1.43
59	A5	380	G	N7-C5	-8.79	1.33	1.39
59	A5	1521	G	N9-C4	-8.79	1.30	1.38
59	A5	1134	G	C5-C6	-8.78	1.33	1.42
59	A5	3173	U	N3-C4	-8.78	1.30	1.38
59	A5	3520	U	C2-N3	-8.78	1.31	1.37
59	A5	365	A	N7-C5	-8.78	1.33	1.39
59	A5	457	A	N9-C4	8.78	1.43	1.37
59	A5	1036	A	N7-C5	-8.78	1.33	1.39
59	A5	67	A	C5-C6	-8.77	1.33	1.41
59	A5	1021	U	C2-N3	-8.77	1.31	1.37
59	A5	1736	G	N1-C2	-8.77	1.30	1.37
59	A5	3600	G	N7-C5	-8.77	1.33	1.39
59	A5	283	A	N9-C4	8.76	1.43	1.37
59	A5	1390	C	N1-C6	-8.76	1.31	1.37
59	A5	2548	G	C5-C4	-8.76	1.32	1.38
59	A5	2683	G	N7-C5	-8.76	1.33	1.39
59	A5	2790	G	C6-N1	-8.76	1.33	1.39
59	A5	989	A	C6-N1	-8.76	1.29	1.35
59	A5	546	G	N7-C5	-8.76	1.33	1.39
59	A5	1057	G	N7-C5	-8.76	1.33	1.39
59	A5	1670	G	C8-N7	-8.76	1.25	1.30
59	A5	1715	G	N9-C4	-8.76	1.30	1.38
59	A5	1722	U	C2-N3	-8.76	1.31	1.37
4	CB	253	CYS	CB-SG	-8.75	1.67	1.82
59	A5	1023	C	C4-C5	-8.75	1.35	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3342	C	N1-C6	-8.75	1.31	1.37
59	A5	1374	C	N3-C4	-8.75	1.27	1.33
59	A5	2173	C	N1-C6	-8.75	1.31	1.37
59	A5	3521	A	C5-C4	-8.75	1.32	1.38
59	A5	543	A	N7-C5	-8.74	1.34	1.39
59	A5	3318	A	N9-C4	-8.74	1.32	1.37
59	A5	3516	C	N3-C4	-8.74	1.27	1.33
59	A5	3597	C	C4-C5	-8.74	1.35	1.43
59	A5	818	A	C5-C4	-8.73	1.32	1.38
59	A5	1632	A	N9-C4	-8.73	1.32	1.37
59	A5	3176	C	N1-C6	-8.73	1.31	1.37
59	A5	363	G	N9-C8	-8.73	1.31	1.37
59	A5	3475	U	C2-N3	-8.73	1.31	1.37
59	A5	3234	A	N9-C4	-8.73	1.32	1.37
59	A5	102	G	C5-C4	-8.72	1.32	1.38
59	A5	2520	U	N3-C4	-8.72	1.30	1.38
59	A5	3155	G	C6-N1	-8.72	1.33	1.39
59	A5	3406	G	N3-C4	-8.72	1.29	1.35
59	A5	1271	G	C5-C4	-8.72	1.32	1.38
59	A5	1694	A	N7-C5	-8.72	1.34	1.39
59	A5	2185	U	N3-C4	-8.72	1.30	1.38
59	A5	2700	C	N1-C2	-8.72	1.31	1.40
58	B2	1971	A	N9-C4	-8.71	1.32	1.37
59	A5	2167	G	N7-C5	-8.71	1.34	1.39
59	A5	3616	G	N1-C2	-8.71	1.30	1.37
59	A5	784	G	C5-C4	-8.71	1.32	1.38
59	A5	446	C	N3-C4	-8.71	1.27	1.33
59	A5	794	G	C5-C6	-8.71	1.33	1.42
59	A5	1087	G	C2-N3	-8.71	1.25	1.32
59	A5	2199	A	C5-C4	-8.71	1.32	1.38
59	A5	1543	C	N3-C4	-8.70	1.27	1.33
59	A5	2563	G	C8-N7	-8.70	1.25	1.30
59	A5	1106	A	C6-N1	-8.70	1.29	1.35
59	A5	2214	G	C5-C4	-8.70	1.32	1.38
59	A5	3877	G	C6-N1	-8.70	1.33	1.39
59	A5	442	A	C5-C6	-8.70	1.33	1.41
59	A5	2218	G	N7-C5	-8.70	1.34	1.39
59	A5	2234	C	C4-C5	-8.70	1.35	1.43
59	A5	1141	G	C2-N3	-8.69	1.25	1.32
59	A5	1748	C	N3-C4	-8.69	1.27	1.33
59	A5	3482	G	C5-C6	-8.69	1.33	1.42
59	A5	1385	G	N7-C5	-8.69	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	24	G	N7-C5	-8.69	1.34	1.39
59	A5	789	G	C8-N7	-8.69	1.25	1.30
59	A5	1110	G	N9-C8	-8.69	1.31	1.37
59	A5	1123	C	N1-C2	-8.69	1.31	1.40
59	A5	3521	A	C6-N1	-8.69	1.29	1.35
59	A5	1071	U	N3-C4	-8.68	1.30	1.38
59	A5	379	A	N9-C4	-8.68	1.32	1.37
59	A5	1141	G	N3-C4	-8.68	1.29	1.35
59	A5	3409	G	C5-C4	-8.68	1.32	1.38
59	A5	415	A	C5-C4	-8.67	1.32	1.38
59	A5	1159	C	N1-C6	-8.67	1.31	1.37
59	A5	823	U	C2-N3	-8.67	1.31	1.37
59	A5	1060	G	N7-C5	-8.67	1.34	1.39
59	A5	1387	G	C8-N7	-8.67	1.25	1.30
59	A5	3632	G	N7-C5	-8.67	1.34	1.39
59	A5	1682	G	C5-C4	-8.67	1.32	1.38
59	A5	3619	U	C2-N3	-8.66	1.31	1.37
59	A5	1618	A	C8-N7	-8.66	1.25	1.31
59	A5	1624	G	N1-C2	-8.66	1.30	1.37
59	A5	3477	A	C5-C4	-8.66	1.32	1.38
59	A5	816	A	N9-C4	-8.66	1.32	1.37
59	A5	1174	G	N9-C8	-8.66	1.31	1.37
59	A5	2513	G	C5-C4	-8.66	1.32	1.38
59	A5	3402	C	C2-N3	-8.66	1.28	1.35
59	A5	3479	C	N1-C6	-8.66	1.31	1.37
59	A5	3591	A	C5-C6	-8.66	1.33	1.41
59	A5	3412	U	N1-C6	-8.66	1.30	1.38
59	A5	51	U	N1-C2	-8.65	1.30	1.38
59	A5	2733	G	C8-N7	-8.65	1.25	1.30
59	A5	93	G	C8-N7	-8.65	1.25	1.30
59	A5	1013	G	C5-C4	-8.65	1.32	1.38
59	A5	1075	G	C2-N3	-8.65	1.25	1.32
59	A5	1598	A	N9-C4	-8.65	1.32	1.37
59	A5	1320	U	C4-C5	-8.64	1.35	1.43
59	A5	1374	C	N1-C2	-8.64	1.31	1.40
59	A5	1733	A	N3-C4	-8.64	1.29	1.34
59	A5	3142	G	C8-N7	-8.64	1.25	1.30
59	A5	2736	A	C8-N7	-8.64	1.25	1.31
59	A5	1109	G	C5-C4	-8.64	1.32	1.38
59	A5	1774	C	N1-C6	-8.64	1.31	1.37
59	A5	3487	A	C5-C6	-8.64	1.33	1.41
59	A5	2530	C	C2-N3	-8.63	1.28	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1789	A	N9-C4	-8.63	1.32	1.37
56	A8	12	G	C5-C4	-8.63	1.32	1.38
56	A8	108	A	N7-C5	-8.63	1.34	1.39
59	A5	441	A	C5-C6	-8.62	1.33	1.41
59	A5	2655	C	C4-C5	-8.62	1.36	1.43
59	A5	2744	C	N3-C4	-8.62	1.27	1.33
59	A5	3330	C	N1-C6	-8.62	1.31	1.37
59	A5	1020	A	C6-N6	-8.62	1.27	1.33
59	A5	1368	A	C5-C4	-8.62	1.32	1.38
59	A5	1639	U	C2-N3	-8.62	1.31	1.37
59	A5	2214	G	C6-N1	-8.62	1.33	1.39
55	A7	91	C	N3-C4	-8.61	1.27	1.33
59	A5	1017	A	C6-N1	-8.61	1.29	1.35
59	A5	1068	C	C4-C5	-8.61	1.36	1.43
59	A5	2751	A	N3-C4	-8.61	1.29	1.34
59	A5	1093	C	C4-C5	-8.61	1.36	1.43
59	A5	1157	C	C4-C5	-8.61	1.36	1.43
59	A5	374	C	C4-C5	-8.61	1.36	1.43
59	A5	806	A	C5-C4	-8.61	1.32	1.38
59	A5	2111	A	N9-C4	-8.61	1.32	1.37
59	A5	3347	G	N1-C2	-8.61	1.30	1.37
59	A5	355	G	N9-C8	-8.60	1.31	1.37
58	B2	1190	G	C5-C4	-8.60	1.32	1.38
59	A5	63	G	N7-C5	-8.60	1.34	1.39
59	A5	1007	A	N9-C8	-8.60	1.30	1.37
59	A5	793	U	N1-C6	-8.60	1.30	1.38
59	A5	1691	A	N9-C4	-8.60	1.32	1.37
59	A5	2569	U	N1-C2	-8.60	1.30	1.38
41	Ce	27	TYR	CD2-CE2	-8.59	1.26	1.39
59	A5	1087	G	C6-N1	-8.59	1.33	1.39
59	A5	2785	C	C4-C5	-8.59	1.36	1.43
59	A5	22	A	N9-C4	-8.59	1.32	1.37
59	A5	39	A	C6-N1	-8.59	1.29	1.35
59	A5	2769	G	C5-C4	-8.59	1.32	1.38
25	Ca	57	VAL	CB-CG1	-8.58	1.34	1.52
59	A5	2698	A	C6-N1	-8.58	1.29	1.35
59	A5	2537	A	C5-C4	-8.58	1.32	1.38
59	A5	322	G	C8-N7	-8.58	1.25	1.30
59	A5	801	G	C8-N7	-8.58	1.25	1.30
59	A5	3499	G	C2-N3	-8.58	1.25	1.32
59	A5	2212	A	N7-C5	-8.58	1.34	1.39
59	A5	1548	C	C4-C5	-8.57	1.36	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2776	A	C8-N7	-8.57	1.25	1.31
59	A5	1614	A	N7-C5	-8.57	1.34	1.39
59	A5	2151	A	C6-N1	-8.57	1.29	1.35
59	A5	1368	A	N7-C5	-8.57	1.34	1.39
59	A5	2248	A	C5-C4	-8.57	1.32	1.38
59	A5	792	U	C4-C5	-8.57	1.35	1.43
59	A5	2687	A	C5-C4	-8.57	1.32	1.38
59	A5	1409	G	N7-C5	-8.56	1.34	1.39
59	A5	1700	U	N1-C2	-8.56	1.30	1.38
59	A5	3414	U	C2-N3	-8.56	1.31	1.37
59	A5	986	A	N9-C4	-8.56	1.32	1.37
59	A5	3413	C	C4-C5	-8.56	1.36	1.43
56	A8	23	G	N9-C8	-8.56	1.31	1.37
59	A5	1695	A	N7-C5	-8.56	1.34	1.39
59	A5	299	G	C8-N7	-8.56	1.25	1.30
59	A5	363	G	C8-N7	-8.55	1.25	1.30
59	A5	1676	A	N7-C5	-8.55	1.34	1.39
59	A5	2106	C	N3-C4	-8.55	1.27	1.33
59	A5	1353	G	C5-C4	-8.55	1.32	1.38
59	A5	2110	A	C5-C4	-8.55	1.32	1.38
59	A5	1384	C	N3-C4	-8.55	1.27	1.33
59	A5	1391	A	N9-C4	-8.55	1.32	1.37
59	A5	799	A	N7-C5	-8.54	1.34	1.39
59	A5	1082	A	N7-C5	-8.54	1.34	1.39
59	A5	1871	A	C5-C4	-8.54	1.32	1.38
59	A5	2513	G	C8-N7	-8.54	1.25	1.30
59	A5	1366	G	N3-C4	-8.54	1.29	1.35
56	A8	29	U	C4-C5	-8.54	1.35	1.43
59	A5	1718	G	N9-C4	8.54	1.44	1.38
59	A5	1788	G	N9-C8	-8.54	1.31	1.37
59	A5	322	G	C2-N3	-8.53	1.25	1.32
59	A5	2529	G	C6-N1	-8.53	1.33	1.39
59	A5	1083	A	C5-C4	-8.53	1.32	1.38
56	A8	100	G	N1-C2	-8.52	1.30	1.37
59	A5	1367	A	N9-C4	-8.52	1.32	1.37
59	A5	104	A	C6-N1	-8.52	1.29	1.35
59	A5	2567	U	C4-C5	-8.52	1.35	1.43
59	A5	1347	A	N9-C4	-8.52	1.32	1.37
59	A5	2167	G	N9-C8	-8.52	1.31	1.37
59	A5	2674	A	C5-C4	-8.51	1.32	1.38
59	A5	1361	G	C6-N1	-8.51	1.33	1.39
59	A5	3410	G	C6-N1	-8.51	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2769	G	C6-N1	-8.51	1.33	1.39
59	A5	1036	A	N9-C4	-8.50	1.32	1.37
59	A5	1548	C	C5-C6	-8.50	1.27	1.34
59	A5	1612	G	C5-C4	-8.50	1.32	1.38
56	A8	8	A	N9-C4	-8.50	1.32	1.37
59	A5	355	G	C6-N1	-8.50	1.33	1.39
59	A5	2717	C	C4-C5	-8.50	1.36	1.43
59	A5	1170	U	C2-N3	-8.50	1.31	1.37
59	A5	1392	A	N3-C4	-8.50	1.29	1.34
59	A5	1614	A	C6-N1	-8.49	1.29	1.35
59	A5	794	G	N1-C2	-8.49	1.30	1.37
59	A5	1393	A	C5-C4	-8.49	1.32	1.38
59	A5	107	G	N7-C5	-8.49	1.34	1.39
59	A5	1070	G	C8-N7	-8.49	1.25	1.30
33	CP	57	CYS	CB-SG	-8.48	1.67	1.82
59	A5	2216	A	C6-N1	-8.48	1.29	1.35
59	A5	1153	G	N1-C2	-8.48	1.30	1.37
59	A5	1149	C	C4-C5	-8.48	1.36	1.43
59	A5	1108	G	N9-C8	-8.47	1.31	1.37
59	A5	1738	U	C2-N3	-8.47	1.31	1.37
59	A5	3345	A	N7-C5	-8.47	1.34	1.39
59	A5	2524	A	N7-C5	-8.47	1.34	1.39
59	A5	3728	A	C5-C4	-8.47	1.32	1.38
59	A5	2792	G	C8-N7	-8.47	1.25	1.30
59	A5	1992	G	N7-C5	-8.47	1.34	1.39
59	A5	2208	G	N1-C2	-8.46	1.30	1.37
59	A5	59	G	C8-N7	-8.46	1.25	1.30
59	A5	805	C	C4-C5	-8.46	1.36	1.43
59	A5	2716	C	N1-C2	-8.46	1.31	1.40
26	CN	106	VAL	CB-CG2	-8.46	1.35	1.52
59	A5	299	G	N9-C8	-8.46	1.31	1.37
30	CR	120	TYR	CB-CG	-8.46	1.39	1.51
59	A5	839	A	C5-C4	-8.46	1.32	1.38
59	A5	3714	U	C4-C5	-8.45	1.35	1.43
56	A8	107	U	C4-C5	-8.45	1.35	1.43
59	A5	2781	G	C6-N1	-8.45	1.33	1.39
59	A5	1331	G	C2-N3	-8.45	1.25	1.32
59	A5	1082	A	N9-C4	-8.45	1.32	1.37
59	A5	2622	A	N7-C5	-8.45	1.34	1.39
59	A5	1735	G	C2-N3	-8.45	1.25	1.32
59	A5	3581	G	C2-N3	-8.45	1.25	1.32
58	B2	1983	G	C8-N7	-8.44	1.25	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2703	G	C5-C4	-8.44	1.32	1.38
59	A5	988	C	C4-C5	-8.44	1.36	1.43
59	A5	1150	G	N9-C8	-8.44	1.31	1.37
59	A5	2557	C	C4-C5	-8.44	1.36	1.43
59	A5	2713	G	N7-C5	-8.44	1.34	1.39
59	A5	3236	A	C5-C6	-8.44	1.33	1.41
59	A5	363	G	C2-N3	-8.44	1.26	1.32
59	A5	1027	A	C5-C6	-8.44	1.33	1.41
59	A5	1372	A	N9-C4	-8.44	1.32	1.37
59	A5	2218	G	N9-C8	-8.44	1.31	1.37
59	A5	3321	A	N9-C4	-8.44	1.32	1.37
59	A5	546	G	N9-C4	-8.43	1.31	1.38
59	A5	998	G	N1-C2	-8.43	1.31	1.37
59	A5	2800	C	N3-C4	-8.43	1.28	1.33
59	A5	3615	G	C8-N7	-8.43	1.25	1.30
59	A5	1726	G	C5-C6	-8.43	1.33	1.42
2	CA	207	VAL	CB-CG2	-8.42	1.35	1.52
59	A5	1685	G	C8-N7	-8.42	1.25	1.30
59	A5	1747	A	C6-N1	-8.42	1.29	1.35
59	A5	2731	G	C8-N7	-8.42	1.25	1.30
59	A5	2791	A	N7-C5	-8.42	1.34	1.39
59	A5	1006	A	N7-C5	-8.42	1.34	1.39
59	A5	1700	U	C4-C5	-8.42	1.35	1.43
59	A5	2767	U	N3-C4	-8.42	1.30	1.38
56	A8	26	U	C2-N3	-8.41	1.31	1.37
59	A5	363	G	N1-C2	-8.41	1.31	1.37
59	A5	300	A	N7-C5	-8.41	1.34	1.39
59	A5	1329	G	N3-C4	-8.41	1.29	1.35
59	A5	2726	A	C6-N1	-8.41	1.29	1.35
59	A5	2731	G	N9-C8	-8.41	1.31	1.37
59	A5	2744	C	C5-C6	-8.41	1.27	1.34
59	A5	3497	G	C6-N1	-8.41	1.33	1.39
59	A5	1694	A	C5-C4	-8.41	1.32	1.38
59	A5	791	C	C2-N3	-8.41	1.29	1.35
59	A5	3167	A	C8-N7	-8.41	1.25	1.31
59	A5	1142	U	C4-C5	-8.41	1.35	1.43
59	A5	3155	G	N9-C8	-8.41	1.31	1.37
59	A5	367	A	C6-N1	-8.40	1.29	1.35
59	A5	1145	C	N1-C2	-8.40	1.31	1.40
59	A5	1729	G	C5-C4	-8.40	1.32	1.38
26	CN	129	TYR	CB-CG	-8.40	1.39	1.51
59	A5	366	A	N9-C8	-8.40	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1066	A	N9-C8	-8.40	1.31	1.37
59	A5	3160	A	N9-C4	-8.40	1.32	1.37
59	A5	3347	G	C5-C6	-8.40	1.33	1.42
59	A5	2773	G	C5-C4	-8.40	1.32	1.38
59	A5	1679	U	C5-C6	-8.40	1.26	1.34
59	A5	46	C	C4-C5	-8.40	1.36	1.43
59	A5	97	C	N1-C6	-8.40	1.32	1.37
59	A5	1134	G	N1-C2	-8.40	1.31	1.37
59	A5	1138	C	N1-C6	-8.40	1.32	1.37
59	A5	1694	A	N3-C4	-8.40	1.29	1.34
59	A5	94	C	N3-C4	-8.39	1.28	1.33
59	A5	154	A	N9-C4	-8.39	1.32	1.37
59	A5	1410	A	N3-C4	-8.39	1.29	1.34
59	A5	2559	C	C5-C6	-8.39	1.27	1.34
59	A5	2739	A	C5-C6	-8.39	1.33	1.41
59	A5	1611	G	C5-C4	-8.39	1.32	1.38
59	A5	2753	G	N9-C8	-8.39	1.31	1.37
56	A8	15	G	C8-N7	-8.38	1.25	1.30
59	A5	1334	A	C5-C4	-8.38	1.32	1.38
59	A5	2698	A	N9-C4	-8.38	1.32	1.37
59	A5	1014	U	C2-N3	-8.38	1.31	1.37
56	A8	35	G	C6-N1	-8.38	1.33	1.39
59	A5	1326	A	C6-N6	-8.38	1.27	1.33
59	A5	2794	U	C2-N3	-8.38	1.31	1.37
59	A5	100	G	C6-N1	-8.38	1.33	1.39
59	A5	3166	C	N3-C4	-8.38	1.28	1.33
59	A5	3506	U	C4-C5	-8.38	1.36	1.43
59	A5	95	G	C6-N1	-8.38	1.33	1.39
59	A5	376	G	C5-C6	-8.37	1.33	1.42
59	A5	1736	G	N7-C5	-8.37	1.34	1.39
59	A5	1091	G	C5-C4	-8.37	1.32	1.38
59	A5	2213	G	N1-C2	-8.37	1.31	1.37
59	A5	352	U	C2-N3	-8.37	1.31	1.37
59	A5	1323	C	C5-C6	-8.36	1.27	1.34
59	A5	1120	A	C8-N7	-8.36	1.25	1.31
59	A5	1536	U	C4-C5	-8.36	1.36	1.43
59	A5	36	U	C2-N3	-8.35	1.31	1.37
59	A5	1164	G	C5-C6	-8.35	1.33	1.42
59	A5	3497	G	C8-N7	-8.35	1.25	1.30
59	A5	253	A	N9-C4	-8.35	1.32	1.37
59	A5	1669	G	C5-C4	-8.35	1.32	1.38
59	A5	1779	G	C5-C4	-8.35	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2528	A	N7-C5	-8.35	1.34	1.39
59	A5	1597	A	N9-C4	-8.35	1.32	1.37
59	A5	3147	A	N7-C5	-8.35	1.34	1.39
59	A5	108	A	N3-C4	-8.34	1.29	1.34
59	A5	1022	A	C8-N7	-8.34	1.25	1.31
59	A5	1674	A	N7-C5	-8.34	1.34	1.39
59	A5	3173	U	C4-O4	-8.34	1.17	1.23
59	A5	3476	G	C2-N2	-8.34	1.26	1.34
59	A5	3542	C	C4-C5	-8.34	1.36	1.43
59	A5	339	C	N1-C6	-8.34	1.32	1.37
59	A5	804	C	C2-N3	-8.34	1.29	1.35
59	A5	3510	U	C4-O4	-8.34	1.17	1.23
59	A5	1350	A	N9-C4	-8.34	1.32	1.37
59	A5	385	A	C5-C6	-8.33	1.33	1.41
59	A5	1162	A	C5-C4	-8.33	1.32	1.38
59	A5	3236	A	N3-C4	-8.33	1.29	1.34
59	A5	1092	U	C2-N3	-8.33	1.31	1.37
59	A5	108	A	N7-C5	-8.33	1.34	1.39
59	A5	3416	C	N1-C6	-8.33	1.32	1.37
59	A5	1103	U	C2-N3	-8.33	1.31	1.37
59	A5	116	U	C2-N3	-8.32	1.31	1.37
59	A5	808	G	C8-N7	-8.32	1.25	1.30
59	A5	2225	A	C5-C4	-8.32	1.32	1.38
59	A5	2711	C	N3-C4	-8.32	1.28	1.33
59	A5	3729	A	N9-C4	-8.32	1.32	1.37
59	A5	3628	G	C5-C4	-8.32	1.32	1.38
55	A7	82	G	C6-N1	-8.32	1.33	1.39
59	A5	1137	G	C5-C4	-8.32	1.32	1.38
59	A5	1603	A	N9-C4	-8.32	1.32	1.37
59	A5	35	C	N3-C4	-8.32	1.28	1.33
59	A5	2759	G	C5-C6	-8.32	1.34	1.42
59	A5	3150	G	N7-C5	-8.31	1.34	1.39
59	A5	796	A	N3-C4	-8.31	1.29	1.34
59	A5	1726	G	C2-N3	-8.31	1.26	1.32
59	A5	2730	A	N7-C5	-8.31	1.34	1.39
59	A5	1152	A	N9-C4	-8.31	1.32	1.37
59	A5	1387	G	N9-C8	-8.31	1.32	1.37
59	A5	1542	C	N1-C6	-8.31	1.32	1.37
59	A5	2098	C	N1-C6	-8.31	1.32	1.37
59	A5	2243	G	N1-C2	-8.31	1.31	1.37
59	A5	1115	A	N7-C5	-8.30	1.34	1.39
59	A5	2207	A	N7-C5	-8.30	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2531	A	N9-C4	-8.30	1.32	1.37
59	A5	828	G	C8-N7	-8.30	1.25	1.30
59	A5	1670	G	C5-C4	-8.30	1.32	1.38
59	A5	3335	A	N9-C4	-8.30	1.32	1.37
59	A5	445	C	N3-C4	-8.30	1.28	1.33
59	A5	1114	A	N3-C4	-8.30	1.29	1.34
59	A5	2161	G	C2-N3	-8.30	1.26	1.32
59	A5	2798	C	C4-C5	-8.29	1.36	1.43
59	A5	3348	G	N9-C8	-8.29	1.32	1.37
2	CA	169	VAL	CB-CG1	-8.29	1.35	1.52
56	A8	40	A	N7-C5	-8.29	1.34	1.39
59	A5	2575	C	N3-C4	-8.29	1.28	1.33
59	A5	357	C	N3-C4	-8.29	1.28	1.33
59	A5	2747	G	N9-C4	-8.29	1.31	1.38
59	A5	2700	C	N3-C4	-8.29	1.28	1.33
59	A5	3417	C	C4-C5	-8.29	1.36	1.43
59	A5	3631	C	N3-C4	-8.29	1.28	1.33
59	A5	1327	G	C2-N3	-8.28	1.26	1.32
56	A8	43	A	N7-C5	-8.28	1.34	1.39
59	A5	820	A	C8-N7	-8.28	1.25	1.31
59	A5	1672	A	C6-N1	-8.28	1.29	1.35
59	A5	1347	A	N9-C8	-8.28	1.31	1.37
58	B2	1187	U	C2-N3	-8.28	1.31	1.37
59	A5	1389	C	C2-N3	-8.28	1.29	1.35
59	A5	2214	G	C2-N3	-8.28	1.26	1.32
2	CA	199	VAL	CB-CG2	-8.27	1.35	1.52
59	A5	95	G	N1-C2	-8.27	1.31	1.37
59	A5	1136	A	C5-C4	-8.27	1.32	1.38
59	A5	3524	G	C6-N1	-8.27	1.33	1.39
59	A5	1121	A	C6-N1	-8.27	1.29	1.35
59	A5	1017	A	C5-C4	-8.27	1.32	1.38
59	A5	2777	A	C6-N1	-8.27	1.29	1.35
59	A5	799	A	C5-C6	-8.27	1.33	1.41
59	A5	2211	A	N9-C4	-8.27	1.32	1.37
59	A5	1027	A	C5-C4	-8.26	1.32	1.38
59	A5	3499	G	C5-C4	-8.26	1.32	1.38
59	A5	1094	A	C5-C4	-8.26	1.32	1.38
59	A5	2539	G	N7-C5	-8.25	1.34	1.39
56	A8	23	G	N3-C4	-8.25	1.29	1.35
59	A5	70	A	C5-C4	-8.25	1.32	1.38
59	A5	1731	G	N3-C4	-8.25	1.29	1.35
59	A5	1753	G	C8-N7	-8.25	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1155	U	C2-N3	-8.24	1.31	1.37
59	A5	2168	G	C2-N3	-8.24	1.26	1.32
59	A5	2525	C	C2-N3	-8.24	1.29	1.35
59	A5	553	A	N7-C5	-8.24	1.34	1.39
59	A5	1081	C	N3-C4	-8.24	1.28	1.33
59	A5	2723	A	C5-C6	-8.24	1.33	1.41
59	A5	3344	U	C4-O4	-8.23	1.17	1.23
59	A5	3498	A	N9-C8	-8.23	1.31	1.37
59	A5	820	A	C5-C4	-8.23	1.32	1.38
59	A5	987	G	C5-C4	-8.23	1.32	1.38
59	A5	1128	C	C5-C6	-8.23	1.27	1.34
59	A5	2514	U	C2-N3	-8.23	1.31	1.37
59	A5	442	A	N7-C5	-8.23	1.34	1.39
59	A5	2242	C	N1-C6	-8.23	1.32	1.37
59	A5	793	U	N3-C4	-8.23	1.31	1.38
59	A5	1872	A	C5-C6	-8.23	1.33	1.41
59	A5	353	G	C5-C4	-8.22	1.32	1.38
59	A5	1085	U	C4-C5	-8.22	1.36	1.43
59	A5	2687	A	N7-C5	-8.22	1.34	1.39
59	A5	784	G	N9-C8	-8.22	1.32	1.37
59	A5	295	G	C8-N7	-8.22	1.26	1.30
59	A5	1007	A	C8-N7	-8.22	1.25	1.31
59	A5	1715	G	N3-C4	-8.22	1.29	1.35
59	A5	1726	G	C6-N1	-8.22	1.33	1.39
59	A5	3615	G	N7-C5	-8.22	1.34	1.39
59	A5	1660	G	C5-C4	-8.22	1.32	1.38
59	A5	1266	A	N3-C4	-8.21	1.29	1.34
59	A5	2523	A	C6-N1	-8.21	1.29	1.35
59	A5	2786	U	C4-C5	-8.21	1.36	1.43
59	A5	3140	G	C6-N1	-8.21	1.33	1.39
59	A5	1675	G	C8-N7	-8.21	1.26	1.30
59	A5	1799	U	C4-C5	-8.21	1.36	1.43
59	A5	100	G	C5-C4	-8.20	1.32	1.38
59	A5	812	U	C4-C5	-8.20	1.36	1.43
59	A5	2711	C	N1-C6	-8.20	1.32	1.37
59	A5	3479	C	N3-C4	-8.20	1.28	1.33
59	A5	2207	A	N9-C4	-8.20	1.32	1.37
59	A5	2778	G	C8-N7	-8.20	1.26	1.30
59	A5	3477	A	N3-C4	-8.20	1.29	1.34
59	A5	106	A	C6-N1	-8.20	1.29	1.35
59	A5	1082	A	C6-N1	-8.20	1.29	1.35
59	A5	3594	A	N7-C5	-8.20	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1086	C	N1-C2	-8.19	1.31	1.40
59	A5	386	G	C5-C4	-8.19	1.32	1.38
59	A5	827	A	N7-C5	-8.19	1.34	1.39
59	A5	3446	G	N9-C8	-8.19	1.32	1.37
59	A5	1393	A	N7-C5	-8.19	1.34	1.39
59	A5	2496	A	C5-C4	-8.19	1.33	1.38
59	A5	3341	C	N1-C6	-8.19	1.32	1.37
56	A8	21	U	C2-N3	-8.19	1.32	1.37
59	A5	426	A	N7-C5	-8.19	1.34	1.39
59	A5	3141	A	C6-N1	-8.18	1.29	1.35
59	A5	1018	C	N1-C6	-8.18	1.32	1.37
59	A5	3518	A	C8-N7	-8.18	1.25	1.31
59	A5	1871	A	N9-C4	-8.17	1.32	1.37
59	A5	1875	G	C5-C4	-8.17	1.32	1.38
59	A5	1561	G	C5-C4	-8.17	1.32	1.38
59	A5	1619	C	N3-C4	-8.17	1.28	1.33
59	A5	1795	A	C6-N6	-8.17	1.27	1.33
59	A5	2220	C	N1-C6	-8.17	1.32	1.37
59	A5	2735	A	C5-C4	-8.17	1.33	1.38
59	A5	2755	G	C2-N3	-8.17	1.26	1.32
59	A5	1362	G	C2-N3	-8.16	1.26	1.32
59	A5	1623	G	C5-C4	-8.16	1.32	1.38
59	A5	2481	U	N1-C6	-8.16	1.30	1.38
59	A5	2689	G	N1-C2	-8.16	1.31	1.37
59	A5	2794	U	C4-C5	-8.16	1.36	1.43
59	A5	1608	G	C6-N1	-8.16	1.33	1.39
59	A5	2546	G	C8-N7	-8.16	1.26	1.30
59	A5	3488	G	C5-C4	-8.15	1.32	1.38
59	A5	1784	A	C5-C4	-8.15	1.33	1.38
59	A5	2201	U	N1-C2	-8.15	1.31	1.38
59	A5	2624	G	C5-C6	-8.15	1.34	1.42
59	A5	2797	A	C5-C6	-8.15	1.33	1.41
59	A5	27	A	N7-C5	-8.15	1.34	1.39
59	A5	852	C	N3-C4	-8.15	1.28	1.33
59	A5	1027	A	N7-C5	-8.15	1.34	1.39
59	A5	2254	U	C2-N3	-8.15	1.32	1.37
59	A5	2550	G	C2-N3	-8.15	1.26	1.32
56	A8	21	U	C4-O4	-8.14	1.17	1.23
56	A8	41	G	N9-C8	-8.14	1.32	1.37
59	A5	2513	G	N9-C8	-8.14	1.32	1.37
58	B2	1174	A	N3-C4	-8.14	1.29	1.34
58	B2	1211	C	N1-C6	-8.14	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1009	G	C5-C4	-8.14	1.32	1.38
59	A5	2731	G	N9-C4	-8.14	1.31	1.38
59	A5	1671	U	N1-C2	-8.14	1.31	1.38
59	A5	381	G	C5-C4	-8.14	1.32	1.38
59	A5	2703	G	N1-C2	-8.14	1.31	1.37
59	A5	2704	A	C5-C6	-8.14	1.33	1.41
59	A5	3637	A	N9-C4	-8.14	1.32	1.37
56	A8	100	G	C6-N1	-8.13	1.33	1.39
59	A5	1643	G	N7-C5	-8.13	1.34	1.39
59	A5	806	A	C8-N7	-8.13	1.25	1.31
59	A5	3519	C	N1-C2	-8.13	1.32	1.40
59	A5	1690	U	C4-O4	-8.13	1.17	1.23
59	A5	2735	A	N9-C8	-8.12	1.31	1.37
59	A5	53	A	N7-C5	-8.12	1.34	1.39
59	A5	2202	A	N7-C5	-8.12	1.34	1.39
59	A5	415	A	N3-C4	-8.12	1.29	1.34
59	A5	3476	G	N1-C2	-8.12	1.31	1.37
59	A5	99	A	N9-C4	-8.11	1.32	1.37
59	A5	2726	A	C8-N7	-8.12	1.25	1.31
59	A5	3945	A	N9-C4	-8.12	1.32	1.37
59	A5	1325	C	C5-C6	-8.11	1.27	1.34
59	A5	2695	A	N9-C4	-8.11	1.32	1.37
59	A5	2769	G	N1-C2	-8.11	1.31	1.37
59	A5	2772	G	N7-C5	-8.11	1.34	1.39
59	A5	376	G	N1-C2	-8.11	1.31	1.37
59	A5	2732	C	C2-N3	-8.11	1.29	1.35
59	A5	359	G	N1-C2	-8.10	1.31	1.37
59	A5	980	A	C6-N1	-8.10	1.29	1.35
59	A5	1259	A	N9-C4	-8.10	1.32	1.37
59	A5	1326	A	N7-C5	-8.10	1.34	1.39
59	A5	3411	C	C4-C5	-8.10	1.36	1.43
56	A8	16	A	C5-C4	-8.10	1.33	1.38
56	A8	39	A	N9-C4	-8.10	1.32	1.37
59	A5	62	G	C5-C4	-8.10	1.32	1.38
59	A5	427	A	C8-N7	-8.10	1.25	1.31
59	A5	2774	G	C5-C4	-8.10	1.32	1.38
59	A5	2784	C	C2-N3	-8.10	1.29	1.35
59	A5	1694	A	N9-C8	-8.10	1.31	1.37
59	A5	2719	A	N7-C5	-8.09	1.34	1.39
59	A5	2728	C	N3-C4	-8.09	1.28	1.33
59	A5	2775	A	C8-N7	-8.09	1.25	1.31
59	A5	360	A	N7-C5	-8.09	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1094	A	N3-C4	-8.09	1.29	1.34
59	A5	2734	A	C8-N7	-8.09	1.25	1.31
59	A5	829	U	N1-C2	-8.09	1.31	1.38
59	A5	448	A	N9-C4	-8.09	1.32	1.37
59	A5	1009	G	N7-C5	-8.09	1.34	1.39
59	A5	111	A	N9-C4	-8.08	1.33	1.37
59	A5	2160	C	N1-C6	-8.08	1.32	1.37
59	A5	2723	A	N9-C4	-8.08	1.32	1.37
59	A5	385	A	N9-C4	-8.08	1.33	1.37
59	A5	2548	G	N9-C8	-8.08	1.32	1.37
59	A5	3167	A	N9-C4	-8.08	1.33	1.37
59	A5	1684	G	C6-N1	-8.08	1.33	1.39
59	A5	2777	A	C5-C4	-8.08	1.33	1.38
59	A5	1736	G	N9-C4	-8.07	1.31	1.38
59	A5	2237	A	N9-C4	-8.07	1.33	1.37
59	A5	2717	C	N1-C6	-8.07	1.32	1.37
59	A5	3168	A	N7-C5	-8.07	1.34	1.39
59	A5	301	U	C4-O4	-8.07	1.17	1.23
59	A5	1665	C	C4-C5	-8.07	1.36	1.43
59	A5	2225	A	N7-C5	-8.07	1.34	1.39
59	A5	2500	G	N7-C5	-8.07	1.34	1.39
59	A5	3405	U	C2-N3	-8.07	1.32	1.37
59	A5	1612	G	N1-C2	-8.07	1.31	1.37
55	A7	82	G	C5-C4	-8.06	1.32	1.38
59	A5	2509	G	C8-N7	-8.06	1.26	1.30
59	A5	2621	A	N9-C4	-8.06	1.33	1.37
59	A5	425	A	N9-C8	-8.06	1.31	1.37
59	A5	1711	C	C4-C5	-8.06	1.36	1.43
59	A5	2776	A	C6-N1	-8.06	1.29	1.35
59	A5	1010	A	C5-C4	-8.06	1.33	1.38
59	A5	1066	A	C6-N1	-8.05	1.29	1.35
59	A5	1113	A	N9-C4	-8.05	1.33	1.37
59	A5	2198	G	N7-C5	-8.06	1.34	1.39
59	A5	3518	A	C6-N1	-8.06	1.29	1.35
59	A5	381	G	C6-N1	-8.05	1.33	1.39
59	A5	1162	A	C6-N1	-8.05	1.29	1.35
59	A5	1412	A	C8-N7	-8.05	1.25	1.31
59	A5	2759	G	C5-C4	-8.05	1.32	1.38
59	A5	3132	C	N1-C6	-8.05	1.32	1.37
59	A5	49	A	C8-N7	-8.05	1.25	1.31
59	A5	1116	G	N3-C4	-8.05	1.29	1.35
59	A5	3236	A	N9-C4	-8.04	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3579	C	N3-C4	-8.05	1.28	1.33
59	A5	3491	C	C4-C5	-8.04	1.36	1.43
59	A5	3883	G	C8-N7	-8.04	1.26	1.30
59	A5	1133	A	N7-C5	-8.04	1.34	1.39
59	A5	43	A	N9-C4	-8.04	1.33	1.37
59	A5	1009	G	C6-N1	-8.04	1.33	1.39
59	A5	2733	G	C6-N1	-8.04	1.33	1.39
80	CF	108	VAL	CB-CG1	-8.03	1.35	1.52
59	A5	787	C	C4-C5	-8.03	1.36	1.43
59	A5	3681	A	N9-C4	-8.03	1.33	1.37
59	A5	3403	G	N3-C4	-8.03	1.29	1.35
59	A5	3762	G	N9-C4	-8.03	1.31	1.38
59	A5	447	G	C5-C4	-8.02	1.32	1.38
59	A5	2555	G	N9-C8	-8.02	1.32	1.37
59	A5	2756	C	C4-C5	-8.02	1.36	1.43
59	A5	1000	G	C2-N3	-8.02	1.26	1.32
59	A5	1142	U	N3-C4	-8.02	1.31	1.38
59	A5	2173	C	C4-C5	-8.02	1.36	1.43
56	A8	16	A	C6-N1	-8.02	1.29	1.35
59	A5	237	G	N7-C5	-8.02	1.34	1.39
59	A5	1141	G	C8-N7	-8.02	1.26	1.30
59	A5	1644	C	C4-C5	-8.02	1.36	1.43
59	A5	986	A	N3-C4	-8.01	1.30	1.34
59	A5	2245	G	C5-C4	-8.01	1.32	1.38
59	A5	2695	A	C5-C4	-8.01	1.33	1.38
59	A5	59	G	C5-C4	-8.01	1.32	1.38
59	A5	1073	C	C2-N3	-8.01	1.29	1.35
59	A5	1330	G	C6-N1	-8.01	1.33	1.39
59	A5	1528	G	C5-C4	-8.01	1.32	1.38
59	A5	1608	G	C5-C4	-8.01	1.32	1.38
59	A5	27	A	C6-N1	-8.01	1.29	1.35
59	A5	1542	C	N3-C4	-8.01	1.28	1.33
59	A5	1414	C	C5-C6	-8.00	1.27	1.34
59	A5	1374	C	C2-N3	-8.00	1.29	1.35
59	A5	2511	C	N1-C6	-8.00	1.32	1.37
59	A5	1134	G	C8-N7	-8.00	1.26	1.30
59	A5	2560	A	C5-C4	-8.00	1.33	1.38
59	A5	3150	G	C5-C4	-8.00	1.32	1.38
59	A5	1093	C	N1-C6	-8.00	1.32	1.37
59	A5	1387	G	C5-C4	-8.00	1.32	1.38
59	A5	3474	G	N7-C5	-8.00	1.34	1.39
59	A5	803	A	N9-C4	-8.00	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3410	G	N1-C2	-8.00	1.31	1.37
59	A5	3507	A	C6-N1	-8.00	1.29	1.35
59	A5	781	C	N3-C4	-7.99	1.28	1.33
59	A5	1112	G	N1-C2	-7.99	1.31	1.37
59	A5	1154	U	C2-N3	-7.99	1.32	1.37
59	A5	1378	A	C5-C4	-7.99	1.33	1.38
59	A5	443	G	C2-N3	-7.99	1.26	1.32
59	A5	1666	A	C8-N7	-7.99	1.25	1.31
59	A5	286	A	N9-C4	-7.99	1.33	1.37
58	B2	1982	C	N3-C4	-7.99	1.28	1.33
59	A5	3628	G	C5-C6	-7.99	1.34	1.42
59	A5	1332	C	C4-C5	-7.98	1.36	1.43
56	A8	39	A	C6-N1	-7.98	1.29	1.35
59	A5	2712	U	C4-O4	-7.98	1.17	1.23
59	A5	2756	C	N3-C4	-7.98	1.28	1.33
59	A5	3338	U	C2-N3	-7.98	1.32	1.37
59	A5	2212	A	C5-C4	-7.98	1.33	1.38
59	A5	796	A	N1-C2	-7.97	1.27	1.34
59	A5	1015	G	N7-C5	-7.97	1.34	1.39
59	A5	2096	C	N3-C4	-7.97	1.28	1.33
59	A5	2202	A	N9-C4	-7.97	1.33	1.37
59	A5	2211	A	C5-C4	-7.97	1.33	1.38
59	A5	2750	A	N9-C8	-7.97	1.31	1.37
59	A5	3581	G	N3-C4	-7.97	1.29	1.35
59	A5	426	A	C5-C6	-7.97	1.33	1.41
59	A5	1695	A	N9-C8	-7.97	1.31	1.37
59	A5	2174	A	C6-N1	-7.97	1.29	1.35
59	A5	1620	A	C5-C4	-7.97	1.33	1.38
59	A5	2803	A	C5-C4	-7.96	1.33	1.38
59	A5	2674	A	C6-N1	-7.96	1.29	1.35
59	A5	2757	U	C2-N3	-7.96	1.32	1.37
59	A5	1076	A	C8-N7	-7.96	1.25	1.31
59	A5	3346	G	C5-C4	-7.96	1.32	1.38
59	A5	3506	U	N3-C4	-7.96	1.31	1.38
58	B2	1986	A	N7-C5	-7.95	1.34	1.39
59	A5	1055	U	C2-N3	-7.95	1.32	1.37
59	A5	3349	A	C5-C4	-7.95	1.33	1.38
59	A5	1658	G	N9-C4	-7.95	1.31	1.38
59	A5	820	A	N7-C5	-7.95	1.34	1.39
59	A5	98	G	N9-C8	-7.95	1.32	1.37
59	A5	3138	G	C5-C6	-7.95	1.34	1.42
59	A5	2213	G	C6-N1	-7.95	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	57	G	C5-C4	-7.94	1.32	1.38
59	A5	1675	G	N3-C4	-7.94	1.29	1.35
56	A8	111	G	C5-C4	-7.94	1.32	1.38
59	A5	3266	A	N9-C4	-7.94	1.33	1.37
59	A5	2204	U	C2-N3	-7.94	1.32	1.37
59	A5	3173	U	N1-C6	-7.94	1.30	1.38
59	A5	1164	G	C8-N7	-7.94	1.26	1.30
58	B2	1239	A	N7-C5	-7.93	1.34	1.39
59	A5	2693	G	N7-C5	-7.93	1.34	1.39
59	A5	1129	A	C8-N7	-7.93	1.25	1.31
59	A5	1386	U	N1-C2	-7.93	1.31	1.38
59	A5	2706	U	C2-N3	-7.93	1.32	1.37
59	A5	1676	A	C8-N7	-7.93	1.25	1.31
59	A5	2545	A	N3-C4	-7.93	1.30	1.34
59	A5	3470	G	N1-C2	-7.93	1.31	1.37
59	A5	369	A	N9-C4	-7.93	1.33	1.37
59	A5	1106	A	N9-C8	-7.93	1.31	1.37
59	A5	3140	G	C8-N7	-7.93	1.26	1.30
58	B2	1178	A	N9-C4	-7.93	1.33	1.37
59	A5	86	C	N3-C4	-7.93	1.28	1.33
59	A5	2173	C	C2-N3	-7.93	1.29	1.35
59	A5	3179	A	N9-C4	-7.93	1.33	1.37
59	A5	374	C	C5-C6	-7.92	1.28	1.34
59	A5	2209	G	N9-C8	-7.92	1.32	1.37
59	A5	1146	U	C2-N3	-7.92	1.32	1.37
59	A5	3587	U	N1-C2	-7.92	1.31	1.38
59	A5	62	G	N7-C5	-7.92	1.34	1.39
59	A5	2721	C	N1-C6	-7.92	1.32	1.37
59	A5	2751	A	C6-N1	-7.92	1.30	1.35
59	A5	2791	A	N9-C8	-7.92	1.31	1.37
59	A5	36	U	N1-C6	-7.92	1.30	1.38
59	A5	51	U	C2-N3	-7.91	1.32	1.37
59	A5	363	G	N3-C4	-7.91	1.29	1.35
59	A5	2183	A	N7-C5	-7.91	1.34	1.39
59	A5	2246	A	C5-C4	-7.91	1.33	1.38
59	A5	3522	A	N9-C4	-7.91	1.33	1.37
59	A5	1367	A	C8-N7	-7.91	1.26	1.31
59	A5	424	G	N9-C4	-7.91	1.31	1.38
59	A5	2529	G	N9-C8	-7.91	1.32	1.37
59	A5	3498	A	N9-C4	-7.91	1.33	1.37
59	A5	3882	C	N1-C2	-7.91	1.32	1.40
59	A5	299	G	N1-C2	-7.91	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1172	G	C8-N7	-7.91	1.26	1.30
59	A5	1973	G	C5-C4	-7.91	1.32	1.38
59	A5	2150	U	C2-N3	-7.91	1.32	1.37
59	A5	413	A	N9-C4	-7.91	1.33	1.37
59	A5	1612	G	N7-C5	-7.91	1.34	1.39
59	A5	3594	A	C5-C6	-7.91	1.33	1.41
58	B2	1107	A	C5-C6	-7.91	1.33	1.41
59	A5	2502	G	C5-C4	-7.91	1.32	1.38
59	A5	2736	A	C6-N1	-7.91	1.30	1.35
59	A5	2778	G	C5-C4	-7.90	1.32	1.38
59	A5	2173	C	N3-C4	-7.90	1.28	1.33
59	A5	853	G	C5-C6	-7.90	1.34	1.42
59	A5	1094	A	C5-C6	-7.90	1.33	1.41
59	A5	1005	G	C6-N1	-7.90	1.34	1.39
59	A5	1690	U	N1-C2	-7.90	1.31	1.38
59	A5	2154	A	N3-C4	-7.90	1.30	1.34
59	A5	3326	G	C5-C6	-7.90	1.34	1.42
59	A5	3409	G	N7-C5	-7.90	1.34	1.39
59	A5	37	G	N3-C4	-7.89	1.29	1.35
59	A5	799	A	C5-C4	-7.89	1.33	1.38
59	A5	816	A	C5-C4	-7.89	1.33	1.38
59	A5	1741	G	N1-C2	-7.89	1.31	1.37
59	A5	1748	C	C2-N3	-7.89	1.29	1.35
59	A5	2573	C	C4-C5	-7.89	1.36	1.43
59	A5	26	G	C6-O6	-7.89	1.17	1.24
59	A5	2774	G	C8-N7	-7.89	1.26	1.30
59	A5	448	A	N7-C5	-7.89	1.34	1.39
59	A5	1082	A	N3-C4	-7.89	1.30	1.34
59	A5	1121	A	N7-C5	-7.89	1.34	1.39
59	A5	1094	A	N9-C4	-7.88	1.33	1.37
59	A5	1671	U	C4-O4	-7.88	1.17	1.23
59	A5	1116	G	C8-N7	-7.88	1.26	1.30
59	A5	1645	G	N9-C8	-7.88	1.32	1.37
59	A5	1737	U	C2-N3	-7.88	1.32	1.37
59	A5	3489	A	N9-C8	-7.88	1.31	1.37
59	A5	1096	A	C5-C4	-7.88	1.33	1.38
59	A5	1697	U	C2-N3	-7.88	1.32	1.37
59	A5	3355	G	C5-C4	-7.88	1.32	1.38
59	A5	1127	C	C2-N3	-7.87	1.29	1.35
59	A5	36	U	C4-C5	-7.87	1.36	1.43
59	A5	295	G	N9-C8	-7.87	1.32	1.37
59	A5	2229	A	C5-C4	-7.86	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	297	U	C2-N3	-7.86	1.32	1.37
59	A5	2768	A	C5-C4	-7.86	1.33	1.38
59	A5	3296	C	N1-C6	-7.86	1.32	1.37
59	A5	358	C	N3-C4	-7.86	1.28	1.33
59	A5	1012	G	C2-N3	-7.86	1.26	1.32
59	A5	3522	A	N3-C4	-7.86	1.30	1.34
59	A5	1137	G	N7-C5	-7.85	1.34	1.39
59	A5	1109	G	C8-N7	-7.85	1.26	1.30
59	A5	2740	C	N3-C4	-7.85	1.28	1.33
59	A5	2785	C	C2-N3	-7.85	1.29	1.35
26	CN	198	GLU	CG-CD	-7.85	1.40	1.51
59	A5	1019	U	N3-C4	-7.85	1.31	1.38
59	A5	2568	U	C2-N3	-7.85	1.32	1.37
58	B2	1110	A	N9-C4	-7.84	1.33	1.37
59	A5	298	U	C2-N3	-7.84	1.32	1.37
59	A5	1315	A	N7-C5	-7.84	1.34	1.39
59	A5	1623	G	C2-N3	-7.84	1.26	1.32
59	A5	3142	G	N1-C2	-7.84	1.31	1.37
59	A5	1134	G	C6-N1	-7.84	1.34	1.39
59	A5	2759	G	C6-N1	-7.84	1.34	1.39
59	A5	2787	U	C2-N3	-7.84	1.32	1.37
59	A5	2789	U	N1-C6	-7.84	1.30	1.38
59	A5	3620	G	N9-C8	-7.84	1.32	1.37
59	A5	1022	A	C6-N1	-7.84	1.30	1.35
59	A5	1792	G	C5-C4	-7.84	1.32	1.38
59	A5	3760	A	N9-C4	-7.84	1.33	1.37
59	A5	1413	C	N1-C6	-7.83	1.32	1.37
59	A5	3544	G	C8-N7	-7.83	1.26	1.30
59	A5	3131	C	N1-C6	-7.83	1.32	1.37
58	B2	343	A	N7-C5	-7.83	1.34	1.39
59	A5	3139	G	C6-O6	-7.83	1.17	1.24
59	A5	2734	A	C5-C4	-7.83	1.33	1.38
59	A5	1261	A	N7-C5	-7.83	1.34	1.39
59	A5	813	C	N1-C6	-7.83	1.32	1.37
59	A5	3503	G	C8-N7	-7.83	1.26	1.30
59	A5	1313	A	C5-C6	-7.82	1.34	1.41
59	A5	2513	G	N1-C2	-7.82	1.31	1.37
59	A5	2555	G	C5-C4	-7.82	1.32	1.38
59	A5	3235	A	C5-C6	-7.82	1.34	1.41
59	A5	2683	G	N9-C8	-7.82	1.32	1.37
59	A5	1797	A	N9-C8	-7.82	1.31	1.37
58	B2	1983	G	N9-C8	-7.82	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1322	U	C4-C5	-7.82	1.36	1.43
59	A5	1358	U	N1-C6	-7.82	1.30	1.38
59	A5	2165	C	C4-N4	-7.82	1.26	1.33
59	A5	2685	G	N7-C5	-7.81	1.34	1.39
59	A5	353	G	C5-C6	-7.81	1.34	1.42
59	A5	379	A	N9-C8	-7.81	1.31	1.37
59	A5	1370	C	N3-C4	-7.81	1.28	1.33
59	A5	1885	U	C2-N3	-7.81	1.32	1.37
59	A5	2800	C	C2-N3	-7.81	1.29	1.35
59	A5	3337	G	N7-C5	-7.81	1.34	1.39
59	A5	809	G	N7-C5	-7.81	1.34	1.39
59	A5	3316	U	C2-N3	-7.81	1.32	1.37
59	A5	3524	G	N1-C2	-7.81	1.31	1.37
59	A5	3500	A	N3-C4	-7.80	1.30	1.34
59	A5	2161	G	C5-C4	-7.80	1.32	1.38
59	A5	3293	G	C5-C4	-7.80	1.32	1.38
59	A5	810	A	C6-N1	-7.80	1.30	1.35
58	B2	1201	A	N9-C4	-7.80	1.33	1.37
59	A5	1138	C	C5-C6	-7.80	1.28	1.34
59	A5	3594	A	C6-N1	-7.80	1.30	1.35
59	A5	2557	C	N1-C6	-7.80	1.32	1.37
59	A5	2769	G	C8-N7	-7.80	1.26	1.30
59	A5	376	G	C2-N3	-7.79	1.26	1.32
59	A5	805	C	C2-O2	-7.79	1.17	1.24
59	A5	3952	C	C4-C5	-7.79	1.36	1.43
59	A5	874	G	N7-C5	-7.79	1.34	1.39
59	A5	1025	U	C4-C5	-7.79	1.36	1.43
59	A5	3518	A	N3-C4	-7.79	1.30	1.34
59	A5	1141	G	N1-C2	-7.79	1.31	1.37
59	A5	1354	G	C5-C6	-7.79	1.34	1.42
59	A5	2152	C	C4-C5	-7.79	1.36	1.43
59	A5	2229	A	N7-C5	-7.78	1.34	1.39
59	A5	2734	A	C6-N1	-7.78	1.30	1.35
59	A5	2551	U	C4-C5	-7.78	1.36	1.43
59	A5	1700	U	C2-N3	-7.78	1.32	1.37
59	A5	3470	G	C5-C4	-7.78	1.32	1.38
59	A5	2739	A	N1-C2	-7.78	1.27	1.34
59	A5	36	U	N3-C4	-7.78	1.31	1.38
59	A5	95	G	N3-C4	-7.78	1.30	1.35
59	A5	1636	G	N1-C2	-7.78	1.31	1.37
4	CB	251	VAL	CB-CG2	-7.77	1.36	1.52
59	A5	1014	U	N3-C4	-7.77	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1786	G	C6-N1	-7.77	1.34	1.39
59	A5	1003	C	C5-C6	-7.77	1.28	1.34
59	A5	425	A	N9-C4	-7.77	1.33	1.37
59	A5	2036	G	C5-C4	-7.77	1.32	1.38
59	A5	2786	U	C5-C6	-7.77	1.27	1.34
54	A9	13	A	N7-C5	-7.76	1.34	1.39
59	A5	1511	C	C4-C5	-7.76	1.36	1.43
59	A5	1620	A	C6-N1	-7.76	1.30	1.35
59	A5	1359	G	N9-C8	-7.76	1.32	1.37
59	A5	1871	A	C6-N1	-7.76	1.30	1.35
59	A5	2736	A	C2-N3	-7.76	1.26	1.33
59	A5	1549	A	N9-C4	-7.76	1.33	1.37
59	A5	1129	A	N9-C8	-7.75	1.31	1.37
59	A5	3474	G	N1-C2	-7.75	1.31	1.37
59	A5	2162	C	N3-C4	-7.75	1.28	1.33
59	A5	2197	A	N3-C4	-7.75	1.30	1.34
59	A5	2716	C	C4-C5	-7.75	1.36	1.43
59	A5	2727	U	N1-C6	-7.75	1.30	1.38
59	A5	1068	C	N1-C2	-7.75	1.32	1.40
59	A5	2544	U	C4-C5	-7.75	1.36	1.43
59	A5	1196	A	N7-C5	-7.75	1.34	1.39
59	A5	3338	U	N1-C2	-7.75	1.31	1.38
55	A7	93	G	C5-C4	-7.75	1.32	1.38
59	A5	51	U	C4-C5	-7.75	1.36	1.43
59	A5	1173	U	N3-C4	-7.75	1.31	1.38
59	A5	354	A	C6-N1	-7.75	1.30	1.35
56	A8	24	G	C2-N3	-7.74	1.26	1.32
56	A8	39	A	N7-C5	-7.74	1.34	1.39
59	A5	2159	C	C2-N3	-7.74	1.29	1.35
59	A5	2536	G	N7-C5	-7.74	1.34	1.39
59	A5	2543	C	C2-N3	-7.74	1.29	1.35
59	A5	2683	G	N1-C2	-7.74	1.31	1.37
59	A5	1114	A	C5-C4	-7.74	1.33	1.38
59	A5	2708	C	N1-C2	-7.74	1.32	1.40
59	A5	3413	C	N1-C2	-7.74	1.32	1.40
59	A5	1144	C	C2-N3	-7.74	1.29	1.35
59	A5	2220	C	C2-N3	-7.74	1.29	1.35
59	A5	1792	G	C2-N3	-7.74	1.26	1.32
59	A5	2761	A	N9-C4	-7.74	1.33	1.37
59	A5	376	G	N7-C5	-7.74	1.34	1.39
59	A5	2495	G	C2-N3	-7.74	1.26	1.32
59	A5	3297	C	N3-C4	-7.74	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3844	U	C2-N3	-7.74	1.32	1.37
56	A8	13	U	N1-C6	-7.73	1.30	1.38
56	A8	42	A	C5-C4	-7.73	1.33	1.38
59	A5	1669	G	C8-N7	-7.73	1.26	1.30
59	A5	299	G	C2-N3	-7.73	1.26	1.32
59	A5	2223	C	N3-C4	-7.73	1.28	1.33
59	A5	2164	G	C5-C4	-7.73	1.32	1.38
59	A5	2542	C	C2-N3	-7.73	1.29	1.35
30	CR	120	TYR	CD2-CE2	-7.73	1.27	1.39
59	A5	2680	G	C5-C4	-7.73	1.32	1.38
59	A5	3345	A	N3-C4	-7.73	1.30	1.34
59	A5	3598	U	C2-N3	-7.73	1.32	1.37
59	A5	62	G	C5-C6	-7.73	1.34	1.42
33	CP	4	TYR	CD2-CE2	-7.72	1.27	1.39
59	A5	376	G	C6-N1	-7.72	1.34	1.39
59	A5	912	A	N7-C5	-7.72	1.34	1.39
59	A5	1391	A	N3-C4	-7.72	1.30	1.34
59	A5	1595	G	N7-C5	-7.72	1.34	1.39
59	A5	1080	G	C5-C4	-7.72	1.32	1.38
59	A5	1777	A	N9-C4	-7.72	1.33	1.37
59	A5	2624	G	N7-C5	-7.72	1.34	1.39
59	A5	46	C	N1-C6	-7.72	1.32	1.37
59	A5	2689	G	C5-C4	-7.72	1.32	1.38
59	A5	543	A	N9-C4	-7.72	1.33	1.37
59	A5	1547	A	C8-N7	-7.72	1.26	1.31
59	A5	423	U	C2-N3	-7.72	1.32	1.37
59	A5	1266	A	N9-C4	-7.72	1.33	1.37
59	A5	2549	G	N9-C8	-7.72	1.32	1.37
59	A5	389	G	C5-C4	-7.71	1.32	1.38
59	A5	1610	A	C6-N1	-7.71	1.30	1.35
59	A5	801	G	C5-C6	-7.71	1.34	1.42
59	A5	3869	A	N3-C4	-7.71	1.30	1.34
59	A5	97	C	N3-C4	-7.71	1.28	1.33
59	A5	1692	G	N9-C4	-7.71	1.31	1.38
59	A5	2720	U	N1-C2	-7.71	1.31	1.38
59	A5	71	A	C5-C4	-7.71	1.33	1.38
59	A5	334	U	N1-C2	-7.71	1.31	1.38
59	A5	2777	A	N9-C8	-7.70	1.31	1.37
59	A5	1733	A	C6-N1	-7.70	1.30	1.35
59	A5	2246	A	N7-C5	-7.70	1.34	1.39
59	A5	3510	U	N3-C4	-7.70	1.31	1.38
59	A5	1066	A	N9-C4	-7.70	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2690	A	N9-C8	-7.70	1.31	1.37
58	B2	1119	G	N7-C5	-7.70	1.34	1.39
59	A5	90	G	N1-C2	-7.70	1.31	1.37
59	A5	1072	U	C4-C5	-7.70	1.36	1.43
59	A5	2713	G	N9-C4	-7.70	1.31	1.38
59	A5	2773	G	C8-N7	-7.70	1.26	1.30
59	A5	2495	G	N1-C2	-7.69	1.31	1.37
59	A5	3356	G	N9-C8	-7.69	1.32	1.37
59	A5	3498	A	N7-C5	-7.69	1.34	1.39
59	A5	1165	A	N7-C5	-7.69	1.34	1.39
59	A5	296	C	C2-N3	-7.68	1.29	1.35
59	A5	1553	C	N1-C6	-7.68	1.32	1.37
59	A5	2754	G	C8-N7	-7.68	1.26	1.30
59	A5	286	A	N9-C8	-7.68	1.31	1.37
59	A5	3670	G	N7-C5	-7.68	1.34	1.39
59	A5	1365	U	N1-C6	-7.68	1.31	1.38
59	A5	1519	A	N3-C4	-7.68	1.30	1.34
59	A5	342	A	C5-C6	-7.67	1.34	1.41
59	A5	1726	G	N3-C4	-7.67	1.30	1.35
59	A5	3308	A	N7-C5	-7.67	1.34	1.39
33	CP	139	TYR	CD2-CE2	-7.67	1.27	1.39
59	A5	38	A	C5-C6	-7.67	1.34	1.41
59	A5	786	C	C4-C5	-7.67	1.36	1.43
59	A5	1315	A	N3-C4	-7.67	1.30	1.34
59	A5	1666	A	N9-C4	-7.66	1.33	1.37
59	A5	1710	G	N7-C5	-7.66	1.34	1.39
59	A5	2202	A	C5-C4	-7.66	1.33	1.38
59	A5	3167	A	C5-C4	-7.66	1.33	1.38
59	A5	3584	C	N1-C2	-7.66	1.32	1.40
59	A5	1321	G	N7-C5	-7.66	1.34	1.39
56	A8	39	A	N3-C4	-7.66	1.30	1.34
59	A5	375	C	N3-C4	-7.66	1.28	1.33
59	A5	2763	U	C2-N3	-7.66	1.32	1.37
59	A5	3227	A	N9-C4	-7.66	1.33	1.37
59	A5	3451	A	N9-C4	-7.66	1.33	1.37
59	A5	1000	G	N7-C5	-7.66	1.34	1.39
59	A5	346	U	C4-C5	-7.66	1.36	1.43
59	A5	424	G	C6-N1	-7.66	1.34	1.39
59	A5	1083	A	C6-N1	-7.66	1.30	1.35
59	A5	1192	A	N9-C4	-7.66	1.33	1.37
59	A5	1764	G	N7-C5	-7.65	1.34	1.39
59	A5	3588	G	N7-C5	-7.65	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	852	C	C4-C5	-7.65	1.36	1.43
59	A5	1055	U	N1-C6	-7.65	1.31	1.38
59	A5	2168	G	N1-C2	-7.65	1.31	1.37
59	A5	1100	G	N9-C8	-7.65	1.32	1.37
59	A5	2176	G	N9-C8	-7.65	1.32	1.37
59	A5	101	C	N1-C2	-7.65	1.32	1.40
59	A5	1027	A	N3-C4	-7.65	1.30	1.34
59	A5	2203	A	N9-C4	-7.65	1.33	1.37
59	A5	3145	U	N3-C4	-7.65	1.31	1.38
59	A5	1545	A	N7-C5	-7.65	1.34	1.39
59	A5	2728	C	N1-C6	-7.65	1.32	1.37
59	A5	1176	A	C6-N1	-7.64	1.30	1.35
59	A5	3288	C	N1-C6	-7.64	1.32	1.37
59	A5	1552	A	N7-C5	-7.64	1.34	1.39
59	A5	1555	G	N7-C5	-7.64	1.34	1.39
59	A5	3349	A	C8-N7	-7.64	1.26	1.31
59	A5	1389	C	C4-C5	-7.64	1.36	1.43
59	A5	1620	A	N3-C4	-7.64	1.30	1.34
59	A5	2203	A	C2-N3	-7.64	1.26	1.33
59	A5	3477	A	C8-N7	-7.64	1.26	1.31
33	CP	70	CYS	CB-SG	-7.64	1.69	1.82
6	CC	99	CYS	CB-SG	-7.64	1.69	1.82
59	A5	806	A	N9-C4	-7.64	1.33	1.37
59	A5	3139	G	C6-N1	-7.64	1.34	1.39
59	A5	3355	G	N9-C8	-7.64	1.32	1.37
59	A5	3618	A	N9-C4	-7.64	1.33	1.37
59	A5	426	A	C8-N7	-7.63	1.26	1.31
58	B2	1193	C	C4-C5	-7.63	1.36	1.43
59	A5	61	A	C5-C4	-7.63	1.33	1.38
59	A5	788	C	N3-C4	-7.63	1.28	1.33
59	A5	788	C	N1-C2	-7.63	1.32	1.40
59	A5	860	A	N9-C4	-7.63	1.33	1.37
56	A8	41	G	C2-N3	-7.63	1.26	1.32
59	A5	81	A	C5-C4	-7.63	1.33	1.38
59	A5	1726	G	N7-C5	-7.63	1.34	1.39
59	A5	2786	U	C2-N3	-7.63	1.32	1.37
59	A5	1532	A	C6-N1	-7.62	1.30	1.35
59	A5	1000	G	N1-C2	-7.62	1.31	1.37
59	A5	1134	G	N9-C8	-7.62	1.32	1.37
59	A5	1790	A	C5-C6	-7.62	1.34	1.41
59	A5	2510	A	C6-N1	-7.62	1.30	1.35
58	B2	1984	G	C8-N7	-7.62	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	426	A	N9-C8	-7.62	1.31	1.37
59	A5	818	A	C5-C6	-7.62	1.34	1.41
59	A5	94	C	C4-C5	-7.62	1.36	1.43
59	A5	1086	C	C2-O2	-7.62	1.17	1.24
59	A5	1172	G	N1-C2	-7.62	1.31	1.37
59	A5	2245	G	N1-C2	-7.62	1.31	1.37
59	A5	2798	C	N1-C6	-7.62	1.32	1.37
59	A5	1140	G	C2-N3	-7.62	1.26	1.32
59	A5	3178	G	N1-C2	-7.62	1.31	1.37
59	A5	3339	U	C4-C5	-7.62	1.36	1.43
59	A5	3500	A	C5-C4	-7.62	1.33	1.38
59	A5	443	G	C5-C4	-7.61	1.33	1.38
59	A5	1157	C	N1-C6	-7.61	1.32	1.37
59	A5	1330	G	N3-C4	-7.61	1.30	1.35
56	A8	7	A	N9-C4	-7.61	1.33	1.37
59	A5	41	U	C4-C5	-7.61	1.36	1.43
59	A5	108	A	C5-C6	-7.61	1.34	1.41
59	A5	346	U	N1-C2	-7.61	1.31	1.38
59	A5	443	G	C5-C6	-7.61	1.34	1.42
59	A5	1383	A	C5-C6	-7.61	1.34	1.41
59	A5	2747	G	N7-C5	-7.61	1.34	1.39
59	A5	3488	G	C5-C6	-7.61	1.34	1.42
59	A5	3525	A	N7-C5	-7.61	1.34	1.39
59	A5	3543	A	N9-C4	-7.61	1.33	1.37
59	A5	56	A	N7-C5	-7.61	1.34	1.39
59	A5	67	A	N7-C5	-7.61	1.34	1.39
59	A5	3468	G	C6-N1	-7.61	1.34	1.39
58	B2	1982	C	C2-N3	-7.60	1.29	1.35
59	A5	1677	U	N3-C4	-7.60	1.31	1.38
59	A5	52	A	C8-N7	-7.60	1.26	1.31
59	A5	1012	G	N1-C2	-7.60	1.31	1.37
59	A5	2159	C	N1-C6	-7.60	1.32	1.37
59	A5	2203	A	N7-C5	-7.60	1.34	1.39
59	A5	2205	G	N9-C8	-7.60	1.32	1.37
59	A5	2209	G	C5-C4	-7.60	1.33	1.38
59	A5	1326	A	C5-C6	-7.59	1.34	1.41
59	A5	2552	G	N1-C2	-7.59	1.31	1.37
59	A5	2653	A	C5-C4	-7.59	1.33	1.38
59	A5	3150	G	C2-N3	-7.59	1.26	1.32
59	A5	1104	A	C5-C6	-7.59	1.34	1.41
59	A5	1358	U	N3-C4	-7.59	1.31	1.38
59	A5	2529	G	N1-C2	-7.59	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2737	C	C2-N3	-7.59	1.29	1.35
56	A8	99	U	C2-N3	-7.59	1.32	1.37
59	A5	1146	U	N3-C4	-7.59	1.31	1.38
59	A5	2569	U	C2-O2	-7.59	1.15	1.22
59	A5	436	A	N7-C5	-7.59	1.34	1.39
59	A5	1787	C	N1-C6	-7.59	1.32	1.37
59	A5	2494	G	C5-C4	-7.59	1.33	1.38
59	A5	357	C	N1-C6	-7.58	1.32	1.37
59	A5	1624	G	C6-N1	-7.58	1.34	1.39
59	A5	2238	A	C5-C4	-7.58	1.33	1.38
59	A5	797	A	N9-C4	-7.58	1.33	1.37
59	A5	1736	G	C2-N3	-7.58	1.26	1.32
59	A5	2649	A	N3-C4	-7.58	1.30	1.34
59	A5	3134	G	C2-N3	-7.58	1.26	1.32
59	A5	779	U	C2-N3	-7.58	1.32	1.37
59	A5	2698	A	N9-C8	-7.58	1.31	1.37
59	A5	3298	U	C2-N3	-7.58	1.32	1.37
59	A5	84	U	N1-C2	-7.58	1.31	1.38
59	A5	1171	G	C5-C4	-7.58	1.33	1.38
59	A5	1397	A	N7-C5	-7.58	1.34	1.39
59	A5	3355	G	C8-N7	-7.58	1.26	1.30
59	A5	3409	G	C8-N7	-7.58	1.26	1.30
59	A5	1168	G	C8-N7	-7.58	1.26	1.30
59	A5	1147	U	C2-N3	-7.57	1.32	1.37
59	A5	1765	U	C2-N3	-7.57	1.32	1.37
59	A5	3503	G	C6-N1	-7.57	1.34	1.39
59	A5	3589	G	N9-C8	-7.57	1.32	1.37
59	A5	63	G	C5-C4	-7.57	1.33	1.38
59	A5	1103	U	C5-C6	-7.57	1.27	1.34
59	A5	1370	C	N1-C6	-7.57	1.32	1.37
59	A5	2746	A	N9-C4	-7.57	1.33	1.37
59	A5	1131	C	C5-C6	-7.57	1.28	1.34
59	A5	1892	C	C4-C5	-7.57	1.36	1.43
59	A5	3594	A	N3-C4	-7.57	1.30	1.34
58	B2	1109	C	N3-C4	-7.56	1.28	1.33
59	A5	306	C	C2-N3	-7.56	1.29	1.35
59	A5	3351	A	C5-C6	-7.56	1.34	1.41
56	A8	100	G	C5-C4	-7.56	1.33	1.38
59	A5	1006	A	C5-C6	-7.56	1.34	1.41
59	A5	2518	A	N9-C4	-7.56	1.33	1.37
59	A5	3411	C	C5-C6	-7.55	1.28	1.34
56	A8	100	G	N7-C5	-7.55	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	237	G	C5-C4	-7.55	1.33	1.38
59	A5	2205	G	C5-C6	-7.55	1.34	1.42
59	A5	2500	G	C6-N1	-7.55	1.34	1.39
59	A5	3411	C	N3-C4	-7.55	1.28	1.33
59	A5	363	G	C6-N1	-7.55	1.34	1.39
59	A5	1005	G	C8-N7	-7.55	1.26	1.30
58	B2	632	G	N9-C8	-7.55	1.32	1.37
59	A5	1266	A	C6-N1	-7.55	1.30	1.35
59	A5	3356	G	N7-C5	-7.55	1.34	1.39
59	A5	808	G	C6-N1	-7.55	1.34	1.39
59	A5	1330	G	C6-O6	-7.55	1.17	1.24
59	A5	3168	A	C5-C6	-7.55	1.34	1.41
59	A5	3542	C	N1-C6	-7.55	1.32	1.37
59	A5	3156	G	C6-N1	-7.54	1.34	1.39
59	A5	1101	A	N9-C8	-7.54	1.31	1.37
59	A5	1129	A	C6-N1	-7.54	1.30	1.35
59	A5	3492	G	N7-C5	-7.54	1.34	1.39
59	A5	3599	U	C2-N3	-7.54	1.32	1.37
59	A5	39	A	C2'-C1'	-7.54	1.45	1.53
59	A5	2689	G	C6-N1	-7.54	1.34	1.39
59	A5	2171	U	C4-C5	-7.54	1.36	1.43
59	A5	853	G	N9-C8	-7.54	1.32	1.37
59	A5	2202	A	N9-C8	-7.54	1.31	1.37
59	A5	2733	G	N7-C5	-7.54	1.34	1.39
59	A5	2702	A	C8-N7	-7.53	1.26	1.31
59	A5	2168	G	C6-N1	-7.53	1.34	1.39
59	A5	286	A	N7-C5	-7.53	1.34	1.39
59	A5	1089	U	C2-N3	-7.53	1.32	1.37
59	A5	2159	C	C5-C6	-7.53	1.28	1.34
59	A5	2207	A	C5-C4	-7.53	1.33	1.38
59	A5	3316	U	N1-C2	-7.53	1.31	1.38
59	A5	3540	G	C5-C4	-7.53	1.33	1.38
4	CB	262	VAL	CB-CG2	-7.53	1.37	1.52
59	A5	2694	G	C8-N7	-7.53	1.26	1.30
59	A5	1717	A	C6-N1	-7.52	1.30	1.35
59	A5	2230	G	C5-C4	-7.52	1.33	1.38
59	A5	2523	A	N9-C4	-7.52	1.33	1.37
59	A5	1165	A	C5-C4	-7.52	1.33	1.38
59	A5	1548	C	N1-C6	-7.52	1.32	1.37
59	A5	1610	A	N3-C4	-7.52	1.30	1.34
59	A5	1611	G	N1-C2	-7.52	1.31	1.37
59	A5	2180	A	C6-N1	-7.52	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2534	G	N9-C8	-7.52	1.32	1.37
59	A5	2802	A	N7-C5	-7.52	1.34	1.39
59	A5	1325	C	N1-C6	-7.52	1.32	1.37
59	A5	1529	C	C4-C5	-7.52	1.36	1.43
59	A5	1702	G	N7-C5	-7.52	1.34	1.39
59	A5	2535	U	C5-C6	-7.52	1.27	1.34
59	A5	2181	A	N7-C5	-7.52	1.34	1.39
59	A5	1166	U	C2-N3	-7.51	1.32	1.37
59	A5	2221	G	C6-N1	-7.51	1.34	1.39
59	A5	3341	C	C4-C5	-7.51	1.36	1.43
58	B2	1215	G	C5-C4	-7.51	1.33	1.38
59	A5	1757	A	C5-C6	-7.51	1.34	1.41
59	A5	2197	A	N7-C5	-7.51	1.34	1.39
59	A5	2755	G	C2-N2	-7.51	1.27	1.34
59	A5	3600	G	C5-C6	-7.51	1.34	1.42
59	A5	415	A	N9-C4	-7.51	1.33	1.37
59	A5	1009	G	C2-N3	-7.51	1.26	1.32
59	A5	1690	U	C4-C5	-7.51	1.36	1.43
59	A5	59	G	N7-C5	-7.51	1.34	1.39
33	CP	38	ARG	C-N	-7.50	1.16	1.34
59	A5	305	G	C5-C4	-7.50	1.33	1.38
56	A8	38	G	N7-C5	-7.50	1.34	1.39
59	A5	51	U	N1-C6	-7.50	1.31	1.38
59	A5	1617	U	C2-N3	-7.50	1.32	1.37
59	A5	1975	C	C4-C5	-7.50	1.36	1.43
59	A5	3331	A	N3-C4	-7.50	1.30	1.34
59	A5	3525	A	N9-C4	-7.50	1.33	1.37
58	B2	617	U	C2-N3	-7.50	1.32	1.37
58	B2	1191	C	N3-C4	-7.50	1.28	1.33
59	A5	1778	A	C6-N6	-7.50	1.27	1.33
59	A5	50	U	N3-C4	-7.50	1.31	1.38
59	A5	1682	G	N7-C5	-7.50	1.34	1.39
59	A5	2170	C	C2-N3	-7.50	1.29	1.35
59	A5	820	A	N9-C8	-7.49	1.31	1.37
59	A5	2560	A	N9-C4	-7.49	1.33	1.37
59	A5	2746	A	N3-C4	-7.49	1.30	1.34
59	A5	2769	G	N9-C8	-7.49	1.32	1.37
59	A5	2163	A	N9-C4	-7.49	1.33	1.37
59	A5	3680	A	N9-C4	-7.49	1.33	1.37
59	A5	1204	C	C4-C5	-7.49	1.36	1.43
59	A5	3292	C	C4-C5	-7.49	1.36	1.43
59	A5	2747	G	N3-C4	-7.48	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3470	G	C2-N3	-7.48	1.26	1.32
59	A5	340	U	N3-C4	-7.48	1.31	1.38
59	A5	1521	G	C2-N3	-7.48	1.26	1.32
59	A5	1605	U	N3-C4	-7.48	1.31	1.38
59	A5	3481	G	C5-C4	-7.48	1.33	1.38
59	A5	2219	U	N1-C6	-7.48	1.31	1.38
59	A5	2166	U	C2-N3	-7.48	1.32	1.37
59	A5	3335	A	C5-C4	-7.48	1.33	1.38
59	A5	2758	U	C2-N3	-7.48	1.32	1.37
59	A5	842	A	N7-C5	-7.47	1.34	1.39
59	A5	1348	G	N9-C8	-7.47	1.32	1.37
59	A5	548	A	N3-C4	-7.47	1.30	1.34
59	A5	841	A	N7-C5	-7.47	1.34	1.39
59	A5	3141	A	C5-C4	-7.47	1.33	1.38
48	Cp	26	VAL	CB-CG2	-7.47	1.37	1.52
59	A5	986	A	C5-C4	-7.47	1.33	1.38
59	A5	1054	A	N9-C4	-7.47	1.33	1.37
59	A5	337	A	N7-C5	-7.47	1.34	1.39
59	A5	834	G	C5-C4	-7.47	1.33	1.38
59	A5	1795	A	N9-C4	-7.47	1.33	1.37
59	A5	2709	U	C4-C5	-7.47	1.36	1.43
59	A5	1728	G	N7-C5	-7.47	1.34	1.39
59	A5	3357	C	C4-C5	-7.46	1.36	1.43
59	A5	3420	U	C2-N3	-7.46	1.32	1.37
58	B2	1971	A	C5-C4	-7.46	1.33	1.38
59	A5	111	A	C5-C6	-7.46	1.34	1.41
59	A5	2508	C	C2-N3	-7.46	1.29	1.35
59	A5	548	A	N9-C4	-7.46	1.33	1.37
58	B2	1060	A	N9-C4	-7.46	1.33	1.37
58	B2	1107	A	N3-C4	-7.46	1.30	1.34
59	A5	105	A	C5-C6	-7.46	1.34	1.41
59	A5	2550	G	N9-C8	-7.46	1.32	1.37
59	A5	3137	A	C6-N1	-7.46	1.30	1.35
56	A8	16	A	N7-C5	-7.46	1.34	1.39
59	A5	1060	G	C8-N7	-7.46	1.26	1.30
59	A5	1128	C	N1-C2	-7.46	1.32	1.40
59	A5	1330	G	N9-C4	-7.46	1.31	1.38
59	A5	1511	C	N1-C6	-7.46	1.32	1.37
59	A5	1979	A	N9-C4	-7.46	1.33	1.37
59	A5	2713	G	C8-N7	-7.46	1.26	1.30
59	A5	1071	U	C2-N3	-7.45	1.32	1.37
59	A5	1709	A	N9-C4	-7.45	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2203	A	N9-C8	-7.45	1.31	1.37
59	A5	2749	G	N9-C8	-7.45	1.32	1.37
59	A5	22	A	C5-C4	-7.45	1.33	1.38
59	A5	438	G	C2-N3	-7.45	1.26	1.32
59	A5	3482	G	N7-C5	-7.45	1.34	1.39
59	A5	66	A	N9-C4	-7.45	1.33	1.37
59	A5	1334	A	N3-C4	-7.45	1.30	1.34
59	A5	2711	C	C4-C5	-7.45	1.36	1.43
59	A5	2770	C	C4-C5	-7.45	1.36	1.43
59	A5	1023	C	C5-C6	-7.45	1.28	1.34
59	A5	1127	C	N1-C2	-7.45	1.32	1.40
59	A5	1345	G	C5-C4	-7.45	1.33	1.38
59	A5	1734	G	C6-N1	-7.45	1.34	1.39
59	A5	3400	U	C4-C5	-7.45	1.36	1.43
59	A5	3951	U	C2-N3	-7.45	1.32	1.37
55	A7	100	A	N7-C5	-7.44	1.34	1.39
59	A5	1692	G	C5-C4	-7.44	1.33	1.38
59	A5	2726	A	C5-C4	-7.44	1.33	1.38
59	A5	1786	G	N9-C8	-7.44	1.32	1.37
59	A5	990	U	C2-N3	-7.44	1.32	1.37
59	A5	1031	G	C5-C6	-7.44	1.34	1.42
59	A5	1666	A	N9-C8	-7.44	1.31	1.37
59	A5	2746	A	C8-N7	-7.44	1.26	1.31
59	A5	1075	G	N1-C2	-7.43	1.31	1.37
59	A5	1176	A	N3-C4	-7.43	1.30	1.34
59	A5	1634	A	N9-C4	-7.43	1.33	1.37
59	A5	2771	G	C8-N7	-7.43	1.26	1.30
59	A5	1075	G	C8-N7	-7.43	1.26	1.30
59	A5	3145	U	C2-N3	-7.43	1.32	1.37
59	A5	3470	G	C6-N1	-7.43	1.34	1.39
59	A5	2224	A	N3-C4	-7.43	1.30	1.34
59	A5	101	C	C4-C5	-7.43	1.37	1.43
59	A5	1633	G	C5-C4	-7.43	1.33	1.38
58	B2	627	A	N9-C4	-7.43	1.33	1.37
59	A5	1660	G	C6-N1	-7.43	1.34	1.39
59	A5	2027	A	N3-C4	-7.43	1.30	1.34
59	A5	1408	A	N9-C4	-7.43	1.33	1.37
59	A5	2761	A	N7-C5	-7.43	1.34	1.39
58	B2	1180	A	N9-C4	-7.42	1.33	1.37
59	A5	1150	G	C5-C4	-7.42	1.33	1.38
55	A7	82	G	N1-C2	-7.42	1.31	1.37
59	A5	1351	C	C2-N3	-7.42	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2164	G	N7-C5	-7.42	1.34	1.39
59	A5	1770	C	C2-N3	-7.42	1.29	1.35
59	A5	1031	G	N7-C5	-7.41	1.34	1.39
59	A5	2735	A	N9-C4	-7.41	1.33	1.37
59	A5	97	C	C5-C6	-7.41	1.28	1.34
59	A5	1004	C	C4-N4	-7.41	1.27	1.33
59	A5	3576	G	N7-C5	-7.41	1.34	1.39
59	A5	3580	G	C6-N1	-7.41	1.34	1.39
59	A5	2182	G	N3-C4	-7.41	1.30	1.35
59	A5	2510	A	C5-C4	-7.41	1.33	1.38
59	A5	2791	A	C5-C6	-7.41	1.34	1.41
59	A5	3482	G	C2-N3	-7.41	1.26	1.32
59	A5	796	A	C6-N1	-7.41	1.30	1.35
59	A5	1270	G	C5-C4	-7.41	1.33	1.38
42	Cf	118	TRP	CB-CG	-7.41	1.36	1.50
59	A5	801	G	C6-O6	-7.40	1.17	1.24
59	A5	1388	C	N1-C2	-7.40	1.32	1.40
59	A5	1100	G	N1-C2	-7.40	1.31	1.37
59	A5	1153	G	C8-N7	-7.40	1.26	1.30
59	A5	2699	A	N7-C5	-7.40	1.34	1.39
59	A5	52	A	N9-C4	-7.40	1.33	1.37
59	A5	1684	G	C2-N3	-7.40	1.26	1.32
59	A5	1795	A	C5-C4	-7.40	1.33	1.38
59	A5	2518	A	N9-C8	-7.40	1.31	1.37
59	A5	37	G	N9-C8	-7.39	1.32	1.37
59	A5	427	A	C5-C4	-7.39	1.33	1.38
59	A5	1016	A	C6-N1	-7.39	1.30	1.35
59	A5	1075	G	C6-N1	-7.39	1.34	1.39
59	A5	422	G	C2-N3	-7.39	1.26	1.32
59	A5	1120	A	N9-C8	-7.39	1.31	1.37
59	A5	1356	G	N9-C4	-7.39	1.32	1.38
59	A5	1357	C	C4-C5	-7.39	1.37	1.43
59	A5	1344	A	N9-C8	-7.39	1.31	1.37
59	A5	1685	G	N1-C2	-7.39	1.31	1.37
59	A5	1547	A	N7-C5	-7.39	1.34	1.39
59	A5	1024	U	C2-N3	-7.39	1.32	1.37
59	A5	3515	C	N3-C4	-7.39	1.28	1.33
58	B2	1847	A	C5-C4	-7.39	1.33	1.38
59	A5	803	A	N9-C8	-7.39	1.31	1.37
59	A5	1355	C	C5-C6	-7.39	1.28	1.34
59	A5	1775	C	N1-C6	-7.39	1.32	1.37
59	A5	2739	A	C6-N1	-7.38	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1152	A	C8-N7	-7.38	1.26	1.31
59	A5	1162	A	N3-C4	-7.38	1.30	1.34
59	A5	2758	U	N1-C2	-7.38	1.31	1.38
58	B2	1111	U	C2-N3	-7.38	1.32	1.37
59	A5	380	G	C5-C6	-7.38	1.34	1.42
59	A5	2222	G	C5-C4	-7.38	1.33	1.38
59	A5	2552	G	N9-C8	-7.38	1.32	1.37
59	A5	1360	U	C4-C5	-7.38	1.36	1.43
59	A5	2737	C	C5-C6	-7.38	1.28	1.34
59	A5	59	G	N9-C8	-7.38	1.32	1.37
59	A5	798	C	N1-C6	-7.38	1.32	1.37
59	A5	1158	C	C2-O2	-7.38	1.17	1.24
59	A5	2753	G	N7-C5	-7.37	1.34	1.39
58	B2	1173	A	C5-C4	-7.37	1.33	1.38
59	A5	1130	U	C2-N3	-7.37	1.32	1.37
59	A5	914	C	N1-C6	-7.37	1.32	1.37
59	A5	1112	G	C6-N1	-7.37	1.34	1.39
59	A5	3488	G	C2-N3	-7.37	1.26	1.32
59	A5	3585	A	N7-C5	-7.37	1.34	1.39
33	CP	83	TRP	CG-CD1	-7.37	1.26	1.36
59	A5	2225	A	C5-C6	-7.37	1.34	1.41
59	A5	3623	G	C6-N1	-7.37	1.34	1.39
59	A5	1374	C	N1-C6	-7.37	1.32	1.37
58	B2	1189	G	C5-C4	-7.37	1.33	1.38
59	A5	51	U	N3-C4	-7.37	1.31	1.38
59	A5	355	G	N7-C5	-7.37	1.34	1.39
59	A5	389	G	C6-N1	-7.37	1.34	1.39
59	A5	2715	C	C4-C5	-7.37	1.37	1.43
59	A5	1157	C	C5-C6	-7.36	1.28	1.34
59	A5	1175	C	N1-C2	-7.36	1.32	1.40
59	A5	1521	G	C6-N1	-7.36	1.34	1.39
59	A5	3406	G	C5-C4	-7.36	1.33	1.38
59	A5	3524	G	N9-C8	-7.36	1.32	1.37
56	A8	100	G	N9-C8	-7.36	1.32	1.37
59	A5	1149	C	C5-C6	-7.36	1.28	1.34
59	A5	1545	A	N9-C4	-7.36	1.33	1.37
59	A5	1974	U	C2-N3	-7.36	1.32	1.37
59	A5	48	U	C2-N3	-7.36	1.32	1.37
59	A5	2185	U	C4-C5	-7.36	1.36	1.43
59	A5	1371	A	N9-C8	-7.36	1.31	1.37
59	A5	2811	G	N3-C4	-7.36	1.30	1.35
59	A5	808	G	C5-C6	-7.36	1.34	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2204	U	N1-C2	-7.36	1.31	1.38
59	A5	2182	G	N9-C4	-7.36	1.32	1.38
59	A5	1018	C	C2-N3	-7.35	1.29	1.35
59	A5	3439	A	N9-C4	-7.35	1.33	1.37
58	B2	315	C	C4-C5	-7.35	1.37	1.43
59	A5	308	G	N7-C5	-7.35	1.34	1.39
59	A5	1060	G	C6-N1	-7.35	1.34	1.39
59	A5	823	U	C4-C5	-7.35	1.36	1.43
59	A5	1017	A	C8-N7	-7.35	1.26	1.31
59	A5	46	C	C5-C6	-7.35	1.28	1.34
59	A5	1736	G	N3-C4	-7.35	1.30	1.35
59	A5	2166	U	N3-C4	-7.35	1.31	1.38
59	A5	2702	A	N7-C5	-7.35	1.34	1.39
59	A5	3475	U	C2-O2	-7.35	1.15	1.22
59	A5	1159	C	N3-C4	-7.35	1.28	1.33
59	A5	1343	A	N7-C5	-7.35	1.34	1.39
59	A5	1365	U	C2-O2	-7.35	1.15	1.22
59	A5	2736	A	C5-C6	-7.35	1.34	1.41
59	A5	2733	G	N1-C2	-7.35	1.31	1.37
59	A5	767	A	N9-C4	-7.34	1.33	1.37
59	A5	1392	A	C6-N1	-7.34	1.30	1.35
59	A5	2110	A	N9-C8	-7.34	1.31	1.37
59	A5	2563	G	N9-C8	-7.34	1.32	1.37
59	A5	1162	A	N1-C2	-7.34	1.27	1.34
59	A5	1171	G	N7-C5	-7.34	1.34	1.39
59	A5	1543	C	N1-C6	-7.34	1.32	1.37
59	A5	2165	C	C5-C6	-7.34	1.28	1.34
59	A5	1154	U	C5-C6	-7.34	1.27	1.34
59	A5	2151	A	C5-C6	-7.34	1.34	1.41
59	A5	1622	U	C4-C5	-7.34	1.36	1.43
59	A5	2528	A	C5-C6	-7.34	1.34	1.41
59	A5	3337	G	N9-C8	-7.34	1.32	1.37
59	A5	3344	U	C4-C5	-7.34	1.36	1.43
59	A5	3598	U	N1-C2	-7.34	1.31	1.38
59	A5	1556	C	N1-C6	-7.33	1.32	1.37
59	A5	1748	C	N1-C6	-7.33	1.32	1.37
59	A5	1130	U	N3-C4	-7.33	1.31	1.38
59	A5	2230	G	N7-C5	-7.33	1.34	1.39
59	A5	2626	C	N1-C6	-7.33	1.32	1.37
59	A5	73	U	C2-N3	-7.33	1.32	1.37
59	A5	100	G	C8-N7	-7.33	1.26	1.30
59	A5	1554	C	N3-C4	-7.33	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	41	U	C5-C6	-7.33	1.27	1.34
58	B2	1107	A	N7-C5	-7.33	1.34	1.39
59	A5	49	A	N3-C4	-7.33	1.30	1.34
59	A5	359	G	C8-N7	-7.33	1.26	1.30
59	A5	429	U	N1-C6	-7.33	1.31	1.38
59	A5	1002	C	C5-C6	-7.33	1.28	1.34
59	A5	1066	A	N3-C4	-7.33	1.30	1.34
59	A5	3451	A	C5-C4	-7.33	1.33	1.38
59	A5	3611	C	C4-C5	-7.33	1.37	1.43
58	B2	1210	G	N9-C8	-7.33	1.32	1.37
59	A5	99	A	C5-C4	-7.33	1.33	1.38
59	A5	1106	A	N7-C5	-7.33	1.34	1.39
59	A5	2197	A	C6-N1	-7.33	1.30	1.35
59	A5	36	U	C5-C6	-7.32	1.27	1.34
59	A5	438	G	N3-C4	-7.32	1.30	1.35
59	A5	1697	U	C2-O2	-7.32	1.15	1.22
59	A5	2719	A	N3-C4	-7.32	1.30	1.34
59	A5	1000	G	C6-N1	-7.32	1.34	1.39
59	A5	1539	A	N7-C5	-7.32	1.34	1.39
58	B2	359	C	N3-C4	-7.32	1.28	1.33
59	A5	66	A	N3-C4	-7.32	1.30	1.34
59	A5	1532	A	N7-C5	-7.32	1.34	1.39
59	A5	2110	A	N7-C5	-7.32	1.34	1.39
59	A5	2509	G	N9-C4	-7.32	1.32	1.38
59	A5	91	U	C2-N3	-7.31	1.32	1.37
59	A5	1624	G	C8-N7	-7.31	1.26	1.30
59	A5	2745	A	C5-C6	-7.31	1.34	1.41
59	A5	3337	G	N1-C2	-7.31	1.31	1.37
59	A5	92	A	N9-C4	-7.31	1.33	1.37
59	A5	2027	A	C6-N1	-7.31	1.30	1.35
33	CP	83	TRP	CB-CG	-7.31	1.37	1.50
59	A5	343	A	C5-C4	-7.31	1.33	1.38
59	A5	504	A	N9-C4	-7.31	1.33	1.37
59	A5	793	U	C5-C6	-7.31	1.27	1.34
59	A5	991	A	N7-C5	-7.31	1.34	1.39
59	A5	2060	A	N9-C4	-7.31	1.33	1.37
59	A5	377	U	C5-C6	-7.30	1.27	1.34
59	A5	2221	G	C5-C4	-7.30	1.33	1.38
59	A5	2542	C	C4-C5	-7.30	1.37	1.43
59	A5	2702	A	C5-C4	-7.30	1.33	1.38
59	A5	3134	G	C5-C4	-7.30	1.33	1.38
59	A5	3870	A	N9-C4	-7.30	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	68	G	N9-C8	-7.30	1.32	1.37
59	A5	1022	A	N9-C8	-7.30	1.31	1.37
59	A5	1690	U	N3-C4	-7.30	1.31	1.38
59	A5	107	G	C5-C6	-7.30	1.35	1.42
59	A5	1616	G	C2-N3	-7.30	1.26	1.32
59	A5	2740	C	C2-O2	-7.30	1.17	1.24
59	A5	3179	A	C5-C4	-7.30	1.33	1.38
59	A5	3616	G	C5-C4	-7.30	1.33	1.38
59	A5	3874	A	N9-C4	-7.30	1.33	1.37
59	A5	823	U	N3-C4	-7.30	1.31	1.38
59	A5	1009	G	C5-C6	-7.30	1.35	1.42
59	A5	3589	G	C5-C4	-7.30	1.33	1.38
59	A5	2216	A	N9-C4	-7.30	1.33	1.37
59	A5	2566	A	C6-N1	-7.30	1.30	1.35
59	A5	1354	G	N7-C5	-7.29	1.34	1.39
59	A5	322	G	N3-C4	-7.29	1.30	1.35
59	A5	1061	A	C6-N1	-7.29	1.30	1.35
59	A5	1134	G	C2-N3	-7.29	1.26	1.32
59	A5	1769	U	N1-C2	-7.29	1.31	1.38
59	A5	1129	A	N9-C4	-7.29	1.33	1.37
59	A5	1318	A	N3-C4	-7.29	1.30	1.34
59	A5	2208	G	C5-C4	-7.29	1.33	1.38
59	A5	3141	A	C5-C6	-7.29	1.34	1.41
59	A5	354	A	C5-C4	-7.29	1.33	1.38
58	B2	1115	C	C4-C5	-7.29	1.37	1.43
59	A5	787	C	C2-N3	-7.29	1.29	1.35
59	A5	1123	C	N1-C6	-7.29	1.32	1.37
59	A5	2730	A	N9-C4	-7.29	1.33	1.37
59	A5	825	C	C2-N3	-7.28	1.29	1.35
59	A5	1527	C	N1-C6	-7.28	1.32	1.37
59	A5	1719	G	N9-C8	-7.28	1.32	1.37
59	A5	2166	U	N1-C2	-7.28	1.31	1.38
59	A5	823	U	N1-C2	-7.28	1.31	1.38
59	A5	1109	G	N9-C8	-7.28	1.32	1.37
59	A5	1004	C	C4-C5	-7.28	1.37	1.43
59	A5	2501	G	C8-N7	-7.28	1.26	1.30
59	A5	2526	A	C5-C4	-7.28	1.33	1.38
59	A5	3335	A	N9-C8	-7.28	1.31	1.37
59	A5	3521	A	N1-C2	-7.28	1.27	1.34
59	A5	818	A	C6-N1	-7.28	1.30	1.35
59	A5	3472	A	C6-N1	-7.28	1.30	1.35
59	A5	1095	G	C6-N1	-7.28	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1367	A	N7-C5	-7.28	1.34	1.39
59	A5	1661	C	N1-C6	-7.28	1.32	1.37
59	A5	1359	G	C2-N3	-7.27	1.26	1.32
59	A5	295	G	C6-N1	-7.27	1.34	1.39
59	A5	810	A	N7-C5	-7.27	1.34	1.39
59	A5	3944	A	N9-C8	-7.27	1.31	1.37
59	A5	1075	G	C5-C6	-7.27	1.35	1.42
59	A5	3150	G	N1-C2	-7.27	1.31	1.37
59	A5	3616	G	N9-C8	-7.27	1.32	1.37
59	A5	3621	A	N7-C5	-7.27	1.34	1.39
55	A7	99	G	N7-C5	-7.27	1.34	1.39
59	A5	245	G	N9-C4	-7.27	1.32	1.38
59	A5	1111	C	C4-C5	-7.27	1.37	1.43
59	A5	2730	A	C5-C4	-7.27	1.33	1.38
59	A5	425	A	C5-C4	-7.27	1.33	1.38
59	A5	425	A	C8-N7	-7.27	1.26	1.31
59	A5	2701	G	N7-C5	-7.27	1.34	1.39
56	A8	101	A	C5-C6	-7.26	1.34	1.41
59	A5	1541	A	N7-C5	-7.26	1.34	1.39
59	A5	337	A	N3-C4	-7.26	1.30	1.34
59	A5	3620	G	N3-C4	-7.26	1.30	1.35
58	B2	1104	C	C4-C5	-7.26	1.37	1.43
59	A5	98	G	N1-C2	-7.26	1.31	1.37
59	A5	1211	A	N9-C4	-7.26	1.33	1.37
59	A5	1015	G	N3-C4	-7.26	1.30	1.35
59	A5	3518	A	C5-C4	-7.26	1.33	1.38
59	A5	2773	G	N7-C5	-7.26	1.34	1.39
59	A5	3477	A	C5-C6	-7.26	1.34	1.41
59	A5	2769	G	C5-C6	-7.26	1.35	1.42
59	A5	427	A	C5-C6	-7.25	1.34	1.41
59	A5	3290	A	N7-C5	-7.25	1.34	1.39
59	A5	1691	A	C6-N6	-7.25	1.28	1.33
59	A5	3488	G	N7-C5	-7.25	1.34	1.39
55	A7	75	G	C5-C4	-7.25	1.33	1.38
56	A8	42	A	N9-C8	-7.25	1.31	1.37
59	A5	3156	G	N1-C2	-7.25	1.31	1.37
59	A5	3514	C	C2-N3	-7.25	1.29	1.35
59	A5	1723	G	C6-N1	-7.25	1.34	1.39
59	A5	3180	G	C5-C4	-7.25	1.33	1.38
59	A5	3454	G	N9-C8	-7.25	1.32	1.37
58	B2	1112	A	N9-C8	-7.25	1.31	1.37
58	B2	1119	G	N9-C8	-7.25	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1083	A	N3-C4	-7.25	1.30	1.34
59	A5	1168	G	N7-C5	-7.25	1.34	1.39
59	A5	1384	C	N1-C6	-7.25	1.32	1.37
59	A5	2778	G	N7-C5	-7.25	1.34	1.39
59	A5	2198	G	N9-C8	-7.25	1.32	1.37
59	A5	3253	G	N7-C5	-7.25	1.34	1.39
59	A5	804	C	N1-C6	-7.24	1.32	1.37
59	A5	2803	A	N3-C4	-7.24	1.30	1.34
59	A5	3519	C	C5-C6	-7.24	1.28	1.34
59	A5	1360	U	C2-N3	-7.24	1.32	1.37
59	A5	2784	C	C2-O2	-7.24	1.18	1.24
59	A5	3594	A	C5-C4	-7.24	1.33	1.38
58	B2	1980	U	C4-C5	-7.24	1.37	1.43
59	A5	322	G	N9-C4	-7.24	1.32	1.38
59	A5	810	A	C5-C6	-7.24	1.34	1.41
59	A5	376	G	N9-C8	-7.24	1.32	1.37
59	A5	2226	A	C5-C4	-7.24	1.33	1.38
59	A5	2500	G	N1-C2	-7.24	1.31	1.37
59	A5	2704	A	N7-C5	-7.24	1.34	1.39
58	B2	1940	G	C5-C4	-7.24	1.33	1.38
59	A5	1359	G	C5-C4	-7.24	1.33	1.38
59	A5	1519	A	N9-C4	-7.24	1.33	1.37
59	A5	2723	A	C8-N7	-7.24	1.26	1.31
59	A5	3499	G	N9-C8	-7.24	1.32	1.37
59	A5	3620	G	C5-C4	-7.24	1.33	1.38
59	A5	214	A	C5-C4	-7.23	1.33	1.38
59	A5	2249	A	N9-C4	-7.23	1.33	1.37
59	A5	2658	A	N9-C4	-7.23	1.33	1.37
59	A5	48	U	C4-C5	-7.23	1.37	1.43
59	A5	85	U	N1-C2	-7.23	1.32	1.38
59	A5	827	A	N3-C4	-7.23	1.30	1.34
59	A5	1114	A	C6-N1	-7.23	1.30	1.35
59	A5	1737	U	C4-C5	-7.23	1.37	1.43
59	A5	448	A	C5-C6	-7.23	1.34	1.41
59	A5	1756	G	C6-N1	-7.23	1.34	1.39
59	A5	2545	A	N9-C4	-7.23	1.33	1.37
59	A5	3546	A	N3-C4	-7.23	1.30	1.34
58	B2	1230	A	N9-C4	-7.23	1.33	1.37
59	A5	1127	C	C4-N4	-7.23	1.27	1.33
59	A5	304	U	N1-C2	-7.23	1.32	1.38
59	A5	371	G	N9-C8	-7.23	1.32	1.37
59	A5	1143	U	C2-O2	-7.23	1.15	1.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1137	G	C2-N3	-7.23	1.26	1.32
59	A5	803	A	C8-N7	-7.22	1.26	1.31
59	A5	1169	C	C4-C5	-7.22	1.37	1.43
59	A5	22	A	N7-C5	-7.22	1.34	1.39
59	A5	60	G	N1-C2	-7.22	1.31	1.37
59	A5	108	A	C5-C4	-7.22	1.33	1.38
59	A5	865	A	N9-C4	-7.22	1.33	1.37
59	A5	1698	A	N9-C8	-7.22	1.31	1.37
59	A5	353	G	C6-N1	-7.22	1.34	1.39
59	A5	1173	U	N1-C2	-7.22	1.32	1.38
59	A5	3135	G	N9-C8	-7.22	1.32	1.37
55	A7	85	G	N9-C8	-7.21	1.32	1.37
59	A5	1759	C	N1-C6	-7.21	1.32	1.37
59	A5	2104	A	N9-C8	-7.21	1.31	1.37
59	A5	2514	U	N1-C2	-7.21	1.32	1.38
59	A5	2149	G	N9-C8	-7.21	1.32	1.37
59	A5	1741	G	C8-N7	-7.21	1.26	1.30
59	A5	2257	C	N3-C4	-7.21	1.28	1.33
59	A5	2563	G	N9-C4	-7.21	1.32	1.38
59	A5	424	G	N3-C4	-7.21	1.30	1.35
59	A5	782	G	C5-C4	-7.21	1.33	1.38
59	A5	3405	U	N3-C4	-7.21	1.31	1.38
56	A8	19	A	N7-C5	-7.20	1.34	1.39
59	A5	1369	C	C2-N3	-7.20	1.29	1.35
59	A5	1660	G	N9-C8	-7.20	1.32	1.37
59	A5	96	G	N7-C5	-7.20	1.34	1.39
59	A5	674	A	C5-C6	-7.20	1.34	1.41
59	A5	1391	A	N7-C5	-7.20	1.34	1.39
59	A5	3593	A	N3-C4	-7.20	1.30	1.34
59	A5	1677	U	C4-O4	-7.20	1.17	1.23
59	A5	1681	G	C6-N1	-7.20	1.34	1.39
59	A5	2714	U	N1-C2	-7.20	1.32	1.38
59	A5	3512	U	C2-N3	-7.20	1.32	1.37
59	A5	3620	G	N9-C4	-7.20	1.32	1.38
58	B2	1080	A	N9-C4	-7.20	1.33	1.37
59	A5	111	A	N3-C4	-7.20	1.30	1.34
59	A5	1360	U	N1-C6	-7.20	1.31	1.38
59	A5	1729	G	C8-N7	-7.20	1.26	1.30
59	A5	2776	A	N9-C8	-7.20	1.31	1.37
59	A5	3316	U	N3-C4	-7.20	1.31	1.38
59	A5	2760	G	C5-C4	-7.19	1.33	1.38
59	A5	1169	C	C2-N3	-7.19	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2809	C	N1-C6	-7.19	1.32	1.37
59	A5	3131	C	N3-C4	-7.19	1.28	1.33
59	A5	100	G	N9-C8	-7.19	1.32	1.37
59	A5	2550	G	C6-N1	-7.19	1.34	1.39
59	A5	843	A	C5-C4	-7.19	1.33	1.38
59	A5	1133	A	C5-C4	-7.19	1.33	1.38
59	A5	1549	A	C5-C4	-7.19	1.33	1.38
59	A5	1612	G	C6-O6	-7.19	1.17	1.24
59	A5	2149	G	C5-C4	-7.19	1.33	1.38
59	A5	1383	A	N7-C5	-7.18	1.34	1.39
58	B2	632	G	N9-C4	-7.18	1.32	1.38
58	B2	1984	G	N7-C5	-7.18	1.34	1.39
59	A5	1208	U	C2-N3	-7.18	1.32	1.37
56	A8	13	U	C2-N3	-7.18	1.32	1.37
56	A8	25	C	N3-C4	-7.18	1.28	1.33
59	A5	1150	G	C8-N7	-7.18	1.26	1.30
59	A5	3521	A	C8-N7	-7.18	1.26	1.31
58	B2	1214	A	C6-N1	-7.18	1.30	1.35
59	A5	2215	G	N1-C2	-7.18	1.32	1.37
59	A5	1273	U	C2-N3	-7.18	1.32	1.37
59	A5	1414	C	N1-C6	-7.18	1.32	1.37
59	A5	1767	A	C5-C4	-7.18	1.33	1.38
59	A5	2151	A	C5-C4	-7.18	1.33	1.38
59	A5	1029	C	C2-N3	-7.17	1.30	1.35
59	A5	3610	A	N7-C5	-7.17	1.34	1.39
59	A5	422	G	C6-N1	-7.17	1.34	1.39
59	A5	1372	A	N3-C4	-7.17	1.30	1.34
59	A5	1655	A	N9-C4	-7.17	1.33	1.37
4	CB	39	LYS	C-N	7.17	1.47	1.34
58	B2	1194	C	N3-C4	-7.17	1.28	1.33
59	A5	1124	G	N1-C2	-7.17	1.32	1.37
59	A5	2148	C	N3-C4	-7.17	1.28	1.33
59	A5	3628	G	C6-N1	-7.17	1.34	1.39
59	A5	3765	A	N7-C5	-7.17	1.34	1.39
59	A5	2186	C	N1-C6	-7.17	1.32	1.37
59	A5	3601	U	C4-C5	-7.17	1.37	1.43
59	A5	1031	G	N1-C2	-7.17	1.32	1.37
59	A5	2204	U	N3-C4	-7.17	1.31	1.38
59	A5	988	C	N3-C4	-7.17	1.28	1.33
59	A5	1006	A	C5-C4	-7.17	1.33	1.38
59	A5	2163	A	N3-C4	-7.17	1.30	1.34
59	A5	793	U	C4-C5	-7.17	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1173	U	C4-O4	-7.17	1.18	1.23
59	A5	1375	G	N1-C2	-7.16	1.32	1.37
59	A5	1660	G	N1-C2	-7.16	1.32	1.37
59	A5	2085	G	N9-C4	-7.16	1.32	1.38
59	A5	427	A	N9-C8	-7.16	1.32	1.37
59	A5	1198	U	C2-N3	-7.16	1.32	1.37
59	A5	2802	A	C5-C4	-7.16	1.33	1.38
59	A5	3263	C	C4-C5	-7.16	1.37	1.43
59	A5	1076	A	N7-C5	-7.16	1.34	1.39
59	A5	2009	A	N7-C5	-7.16	1.34	1.39
59	A5	1779	G	N9-C8	-7.16	1.32	1.37
59	A5	3584	C	C4-C5	-7.16	1.37	1.43
59	A5	1003	C	C4-C5	-7.16	1.37	1.43
59	A5	1040	C	N3-C4	-7.16	1.28	1.33
59	A5	1663	G	N7-C5	-7.16	1.34	1.39
59	A5	3416	C	C2-N3	-7.16	1.30	1.35
59	A5	1056	G	N1-C2	-7.15	1.32	1.37
59	A5	1750	G	C2-N3	-7.15	1.27	1.32
59	A5	2540	G	C5-C4	-7.15	1.33	1.38
59	A5	2570	C	C2-N3	-7.15	1.30	1.35
59	A5	69	A	C5-C4	-7.15	1.33	1.38
59	A5	443	G	N3-C4	-7.15	1.30	1.35
59	A5	1610	A	N9-C4	-7.15	1.33	1.37
59	A5	1679	U	C2-N3	-7.15	1.32	1.37
56	A8	20	C	N1-C6	-7.15	1.32	1.37
59	A5	1068	C	N3-C4	-7.15	1.28	1.33
59	A5	3139	G	N9-C8	-7.15	1.32	1.37
59	A5	3356	G	C8-N7	-7.15	1.26	1.30
59	A5	1790	A	N7-C5	-7.14	1.34	1.39
59	A5	2195	A	C5-C4	-7.14	1.33	1.38
59	A5	2611	A	N9-C4	-7.14	1.33	1.37
59	A5	2673	A	N9-C4	-7.14	1.33	1.37
59	A5	3404	A	C6-N1	-7.14	1.30	1.35
59	A5	3520	U	N3-C4	-7.14	1.32	1.38
59	A5	1320	U	C2-N3	-7.14	1.32	1.37
59	A5	1679	U	N1-C6	-7.14	1.31	1.38
58	B2	632	G	C5-C4	-7.14	1.33	1.38
59	A5	2726	A	N9-C4	-7.14	1.33	1.37
59	A5	97	C	C2-N3	-7.14	1.30	1.35
59	A5	1084	A	N9-C8	-7.14	1.32	1.37
59	A5	1951	C	N3-C4	-7.14	1.28	1.33
59	A5	3403	G	C2-N3	-7.14	1.27	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	67	A	N9-C4	-7.13	1.33	1.37
59	A5	1017	A	N3-C4	-7.13	1.30	1.34
59	A5	1132	U	N1-C2	-7.13	1.32	1.38
59	A5	1636	G	C6-N1	-7.13	1.34	1.39
59	A5	2749	G	C5-C6	-7.13	1.35	1.42
59	A5	3948	U	C2-N3	-7.13	1.32	1.37
54	A9	11	A	N7-C5	-7.13	1.34	1.39
59	A5	1735	G	C8-N7	-7.13	1.26	1.30
59	A5	49	A	N7-C5	-7.13	1.34	1.39
59	A5	1167	A	C8-N7	-7.13	1.26	1.31
59	A5	1377	A	C5-C4	-7.13	1.33	1.38
59	A5	1379	U	C4-C5	-7.13	1.37	1.43
59	A5	3624	C	N3-C4	-7.13	1.28	1.33
59	A5	807	A	N9-C8	-7.13	1.32	1.37
59	A5	1127	C	C5-C6	-7.13	1.28	1.34
59	A5	2113	A	N9-C4	-7.13	1.33	1.37
59	A5	2228	U	C2-N3	-7.12	1.32	1.37
59	A5	2560	A	N7-C5	-7.12	1.34	1.39
59	A5	2701	G	C8-N7	-7.12	1.26	1.30
59	A5	3758	G	C8-N7	-7.12	1.26	1.30
59	A5	1397	A	N9-C4	-7.12	1.33	1.37
59	A5	2237	A	C5-C6	-7.12	1.34	1.41
59	A5	3267	C	C4-C5	-7.12	1.37	1.43
59	A5	44	A	C6-N1	-7.12	1.30	1.35
59	A5	1560	A	C5-C6	-7.12	1.34	1.41
59	A5	1207	G	N3-C4	-7.12	1.30	1.35
59	A5	802	G	N1-C2	-7.12	1.32	1.37
59	A5	1124	G	N3-C4	-7.12	1.30	1.35
59	A5	1347	A	N7-C5	-7.12	1.34	1.39
59	A5	235	A	C5-C4	-7.11	1.33	1.38
59	A5	289	C	N3-C4	-7.11	1.28	1.33
59	A5	802	G	C6-O6	-7.11	1.17	1.24
59	A5	1081	C	C4-C5	-7.11	1.37	1.43
55	A7	81	A	C5-C4	-7.11	1.33	1.38
59	A5	45	G	C6-N1	-7.11	1.34	1.39
59	A5	1345	G	N9-C8	-7.11	1.32	1.37
59	A5	3450	G	C6-N1	-7.11	1.34	1.39
59	A5	3539	C	N1-C6	-7.11	1.32	1.37
56	A8	57	G	N1-C2	-7.11	1.32	1.37
59	A5	1131	C	N1-C6	-7.11	1.32	1.37
59	A5	1341	G	C5-C4	-7.11	1.33	1.38
58	B2	1961	A	N9-C4	-7.10	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1520	U	C2-N3	-7.10	1.32	1.37
59	A5	3328	G	N9-C8	-7.10	1.32	1.37
59	A5	1657	G	C5-C4	-7.10	1.33	1.38
59	A5	1657	G	N9-C8	-7.10	1.32	1.37
59	A5	3546	A	N9-C4	-7.10	1.33	1.37
4	CB	266	VAL	CB-CG2	-7.10	1.38	1.52
59	A5	74	A	C5-C4	-7.10	1.33	1.38
59	A5	1325	C	C4-C5	-7.10	1.37	1.43
59	A5	1687	U	C2-O2	-7.10	1.16	1.22
59	A5	2749	G	C5-C4	-7.10	1.33	1.38
59	A5	3350	U	C2-N3	-7.10	1.32	1.37
59	A5	2726	A	N3-C4	-7.10	1.30	1.34
59	A5	2168	G	N9-C8	-7.09	1.32	1.37
59	A5	2481	U	C4-C5	-7.09	1.37	1.43
59	A5	2521	A	C5-C6	-7.09	1.34	1.41
48	Cp	18	TYR	CE2-CZ	-7.09	1.29	1.38
58	B2	7	G	C5-C4	-7.09	1.33	1.38
59	A5	1315	A	C5-C6	-7.09	1.34	1.41
59	A5	2110	A	N3-C4	-7.09	1.30	1.34
59	A5	2205	G	C8-N7	-7.09	1.26	1.30
59	A5	2678	G	N9-C8	-7.09	1.32	1.37
26	CN	110	LEU	CA-CB	-7.09	1.37	1.53
59	A5	1064	G	C8-N7	-7.09	1.26	1.30
59	A5	3488	G	C8-N7	-7.09	1.26	1.30
59	A5	816	A	N7-C5	-7.08	1.34	1.39
59	A5	1618	A	N9-C8	-7.08	1.32	1.37
59	A5	1167	A	N9-C8	-7.08	1.32	1.37
59	A5	2745	A	C6-N1	-7.08	1.30	1.35
59	A5	1022	A	C6-N6	-7.08	1.28	1.33
59	A5	3339	U	C2-N3	-7.08	1.32	1.37
59	A5	1413	C	C5-C6	-7.08	1.28	1.34
59	A5	3418	U	C2-N3	-7.08	1.32	1.37
59	A5	2036	G	C2-N3	-7.08	1.27	1.32
59	A5	2505	A	N9-C8	-7.08	1.32	1.37
59	A5	93	G	C5-C4	-7.08	1.33	1.38
59	A5	1197	A	O3'-P	7.08	1.69	1.61
59	A5	3346	G	C6-N1	-7.08	1.34	1.39
59	A5	1106	A	N9-C4	-7.07	1.33	1.37
59	A5	42	U	C4-C5	-7.07	1.37	1.43
59	A5	1609	U	C5-C6	-7.07	1.27	1.34
59	A5	2733	G	C2-N3	-7.07	1.27	1.32
59	A5	3132	C	N3-C4	-7.07	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3611	C	N3-C4	-7.07	1.29	1.33
59	A5	2725	U	C2-N3	-7.07	1.32	1.37
59	A5	2222	G	N7-C5	-7.07	1.35	1.39
59	A5	2571	U	C2-N3	-7.07	1.32	1.37
59	A5	3179	A	N7-C5	-7.07	1.35	1.39
59	A5	298	U	C2-O2	-7.06	1.16	1.22
59	A5	448	A	N3-C4	-7.06	1.30	1.34
59	A5	1071	U	C5-C6	-7.06	1.27	1.34
59	A5	1074	U	C4-C5	-7.06	1.37	1.43
59	A5	3141	A	N3-C4	-7.06	1.30	1.34
56	A8	21	U	N3-C4	-7.06	1.32	1.38
59	A5	87	U	N1-C2	-7.06	1.32	1.38
59	A5	1628	G	N7-C5	-7.06	1.35	1.39
59	A5	3583	C	N3-C4	-7.06	1.29	1.33
59	A5	3631	C	N1-C2	-7.06	1.33	1.40
80	CF	96	VAL	CB-CG1	-7.06	1.38	1.52
59	A5	27	A	N9-C4	-7.06	1.33	1.37
59	A5	355	G	C8-N7	-7.06	1.26	1.30
59	A5	826	A	N3-C4	-7.06	1.30	1.34
59	A5	2536	G	N1-C2	-7.06	1.32	1.37
59	A5	2809	C	N3-C4	-7.06	1.29	1.33
59	A5	3262	A	C8-N7	-7.06	1.26	1.31
59	A5	3351	A	N1-C2	-7.06	1.27	1.34
59	A5	3526	C	N3-C4	-7.06	1.29	1.33
59	A5	1696	A	C6-N1	-7.06	1.30	1.35
59	A5	2196	U	N1-C2	-7.06	1.32	1.38
59	A5	3428	A	N9-C4	-7.06	1.33	1.37
59	A5	3543	A	C6-N1	-7.06	1.30	1.35
59	A5	2672	U	C2-N3	-7.06	1.32	1.37
59	A5	1165	A	C2-N3	-7.05	1.27	1.33
59	A5	1784	A	C8-N7	-7.05	1.26	1.31
59	A5	986	A	C6-N1	-7.05	1.30	1.35
59	A5	3714	U	C5-C6	-7.05	1.27	1.34
33	CP	139	TYR	CG-CD1	-7.05	1.29	1.39
59	A5	1126	A	C6-N1	-7.05	1.30	1.35
59	A5	2177	G	N7-C5	-7.05	1.35	1.39
59	A5	2779	A	N9-C4	-7.05	1.33	1.37
59	A5	3153	G	N7-C5	-7.05	1.35	1.39
59	A5	3495	G	N3-C4	-7.05	1.30	1.35
59	A5	3624	C	N1-C6	-7.05	1.32	1.37
59	A5	1734	G	C5-C4	-7.05	1.33	1.38
59	A5	3906	U	C2-N3	-7.05	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	65	A	C6-N1	-7.05	1.30	1.35
59	A5	785	A	N3-C4	-7.05	1.30	1.34
59	A5	1027	A	C6-N1	-7.05	1.30	1.35
59	A5	1149	C	C2-N3	-7.05	1.30	1.35
59	A5	1757	A	C6-N1	-7.05	1.30	1.35
59	A5	1004	C	C2-N3	-7.04	1.30	1.35
59	A5	2148	C	C2-N3	-7.04	1.30	1.35
56	A8	31	G	C6-N1	-7.04	1.34	1.39
59	A5	1529	C	N3-C4	-7.04	1.29	1.33
59	A5	2104	A	C5-C4	-7.04	1.33	1.38
59	A5	103	A	N9-C4	-7.04	1.33	1.37
59	A5	295	G	N1-C2	-7.04	1.32	1.37
59	A5	1345	G	C6-N1	-7.04	1.34	1.39
55	A7	89	G	C5-C4	-7.04	1.33	1.38
59	A5	1373	A	C5-C4	-7.04	1.33	1.38
59	A5	3236	A	N7-C5	-7.04	1.35	1.39
41	Ce	35	ARG	CG-CD	-7.04	1.34	1.51
59	A5	61	A	N9-C4	-7.04	1.33	1.37
59	A5	93	G	N7-C5	-7.04	1.35	1.39
59	A5	363	G	C5-C4	-7.04	1.33	1.38
59	A5	1795	A	N9-C8	-7.04	1.32	1.37
59	A5	2545	A	C6-N1	-7.04	1.30	1.35
33	CP	139	TYR	CD1-CE1	-7.04	1.28	1.39
59	A5	357	C	C2-N3	-7.04	1.30	1.35
59	A5	2246	A	C6-N1	-7.04	1.30	1.35
59	A5	3193	C	N1-C6	-7.04	1.32	1.37
66	CL	60	CYS	CB-SG	-7.04	1.70	1.82
56	A8	8	A	N3-C4	-7.03	1.30	1.34
58	B2	360	G	N7-C5	-7.03	1.35	1.39
59	A5	2515	C	N3-C4	-7.03	1.29	1.33
59	A5	3173	U	C2-N3	-7.03	1.32	1.37
58	B2	1408	A	N9-C4	-7.03	1.33	1.37
59	A5	771	A	N7-C5	-7.03	1.35	1.39
59	A5	1775	C	N3-C4	-7.03	1.29	1.33
59	A5	2677	A	C5-C4	-7.03	1.33	1.38
59	A5	1097	A	N7-C5	-7.03	1.35	1.39
59	A5	1558	A	N9-C4	-7.03	1.33	1.37
59	A5	365	A	N9-C8	-7.03	1.32	1.37
59	A5	1012	G	C6-N1	-7.03	1.34	1.39
59	A5	1111	C	N1-C2	-7.03	1.33	1.40
59	A5	1606	G	N1-C2	-7.03	1.32	1.37
59	A5	1646	U	C2-N3	-7.03	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2785	C	C5-C6	-7.03	1.28	1.34
59	A5	814	U	C2-N3	-7.03	1.32	1.37
59	A5	1010	A	C8-N7	-7.03	1.26	1.31
59	A5	3506	U	C5-C6	-7.03	1.27	1.34
59	A5	992	U	N3-C4	-7.02	1.32	1.38
59	A5	99	A	C8-N7	-7.02	1.26	1.31
59	A5	387	U	N3-C4	-7.02	1.32	1.38
59	A5	1067	A	C5-C6	-7.02	1.34	1.41
59	A5	1392	A	N9-C8	-7.02	1.32	1.37
59	A5	3679	C	C4-C5	-7.02	1.37	1.43
59	A5	1391	A	C5-C4	-7.02	1.33	1.38
56	A8	40	A	C5-C4	-7.02	1.33	1.38
59	A5	1005	G	N9-C4	-7.02	1.32	1.38
59	A5	2164	G	C5-C6	-7.01	1.35	1.42
59	A5	2657	A	C2-N3	-7.01	1.27	1.33
59	A5	3177	G	C5-C4	-7.01	1.33	1.38
59	A5	1166	U	N1-C2	-7.01	1.32	1.38
59	A5	2525	C	N1-C2	-7.01	1.33	1.40
59	A5	2713	G	C5-C4	-7.01	1.33	1.38
59	A5	325	A	N9-C4	-7.01	1.33	1.37
59	A5	3321	A	C5-C4	-7.01	1.33	1.38
59	A5	1687	U	N3-C4	-7.01	1.32	1.38
59	A5	3260	G	N7-C5	-7.01	1.35	1.39
59	A5	2518	A	C8-N7	-7.01	1.26	1.31
59	A5	2771	G	N1-C2	-7.01	1.32	1.37
59	A5	1672	A	C5-C4	-7.01	1.33	1.38
59	A5	1793	C	N1-C2	-7.01	1.33	1.40
59	A5	978	G	N7-C5	-7.00	1.35	1.39
59	A5	1677	U	C2-N3	-7.00	1.32	1.37
59	A5	2513	G	N9-C4	-7.00	1.32	1.38
59	A5	1160	U	N3-C4	-7.00	1.32	1.38
59	A5	2533	U	C2-N3	-7.00	1.32	1.37
59	A5	1172	G	C6-N1	-7.00	1.34	1.39
59	A5	1647	A	N9-C8	-7.00	1.32	1.37
59	A5	111	A	C5-C4	-7.00	1.33	1.38
59	A5	1600	U	C4-C5	-7.00	1.37	1.43
59	A5	2089	A	N9-C4	-7.00	1.33	1.37
59	A5	2693	G	N9-C8	-7.00	1.32	1.37
58	B2	1962	G	N9-C8	-7.00	1.32	1.37
59	A5	1601	U	C4-C5	-7.00	1.37	1.43
59	A5	1692	G	C8-N7	-7.00	1.26	1.30
59	A5	1763	A	N9-C4	-7.00	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	94	C	N1-C6	-6.99	1.32	1.37
59	A5	1972	C	N3-C4	-6.99	1.29	1.33
56	A8	21	U	C5-C6	-6.99	1.27	1.34
59	A5	1020	A	N3-C4	-6.99	1.30	1.34
59	A5	1037	A	N7-C5	-6.99	1.35	1.39
59	A5	2810	A	N9-C4	-6.99	1.33	1.37
59	A5	1173	U	C4-C5	-6.99	1.37	1.43
59	A5	1356	G	N1-C2	-6.99	1.32	1.37
59	A5	1729	G	N9-C8	-6.99	1.32	1.37
59	A5	2557	C	N1-C2	-6.99	1.33	1.40
9	AX	22	TRP	CB-CG	-6.99	1.37	1.50
59	A5	38	A	C6-N1	-6.99	1.30	1.35
59	A5	2709	U	C2-N3	-6.99	1.32	1.37
59	A5	3507	A	N9-C8	-6.99	1.32	1.37
58	B2	1079	A	N3-C4	-6.99	1.30	1.34
59	A5	1693	C	C4-C5	-6.99	1.37	1.43
59	A5	1711	C	N3-C4	-6.99	1.29	1.33
59	A5	43	A	C6-N1	-6.98	1.30	1.35
59	A5	2541	C	N3-C4	-6.98	1.29	1.33
59	A5	3149	U	N3-C4	-6.98	1.32	1.38
58	B2	1110	A	C5-C4	-6.98	1.33	1.38
59	A5	447	G	N1-C2	-6.98	1.32	1.37
59	A5	1597	A	N7-C5	-6.98	1.35	1.39
59	A5	1343	A	N9-C4	-6.98	1.33	1.37
59	A5	2207	A	C5-C6	-6.98	1.34	1.41
59	A5	2208	G	N9-C8	-6.98	1.32	1.37
59	A5	2675	U	C2-N3	-6.98	1.32	1.37
59	A5	3354	U	N3-C4	-6.98	1.32	1.38
59	A5	337	A	C5-C4	-6.98	1.33	1.38
59	A5	1053	G	N9-C8	-6.98	1.32	1.37
58	B2	635	C	N1-C6	-6.97	1.32	1.37
59	A5	107	G	C5-C4	-6.97	1.33	1.38
59	A5	1779	G	C2-N3	-6.97	1.27	1.32
59	A5	2237	A	N7-C5	-6.97	1.35	1.39
59	A5	3175	A	C5-C4	-6.97	1.33	1.38
59	A5	3357	C	N3-C4	-6.97	1.29	1.33
55	A7	67	G	N9-C4	-6.97	1.32	1.38
56	A8	18	C	C2-N3	-6.97	1.30	1.35
56	A8	42	A	N9-C4	-6.97	1.33	1.37
59	A5	26	G	N3-C4	6.97	1.40	1.35
59	A5	1097	A	C8-N7	-6.97	1.26	1.31
59	A5	1144	C	C4-C5	-6.97	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1314	U	C2-N3	-6.97	1.32	1.37
59	A5	1361	G	N1-C2	-6.97	1.32	1.37
59	A5	2230	G	C8-N7	-6.97	1.26	1.30
59	A5	3152	G	N1-C2	-6.97	1.32	1.37
59	A5	1382	U	C3'-O3'	6.97	1.51	1.42
59	A5	1410	A	N7-C5	-6.97	1.35	1.39
59	A5	1867	A	N9-C4	-6.97	1.33	1.37
59	A5	2678	G	N7-C5	-6.97	1.35	1.39
59	A5	353	G	C8-N7	-6.96	1.26	1.30
59	A5	1065	A	C6-N1	-6.96	1.30	1.35
59	A5	1619	C	C4-C5	-6.96	1.37	1.43
59	A5	1732	A	C8-N7	-6.96	1.26	1.31
59	A5	2748	G	N7-C5	-6.96	1.35	1.39
59	A5	3952	C	N3-C4	-6.96	1.29	1.33
59	A5	25	G	C5-C4	-6.96	1.33	1.38
59	A5	67	A	N3-C4	-6.96	1.30	1.34
59	A5	323	U	N1-C2	-6.96	1.32	1.38
59	A5	352	U	N1-C2	-6.96	1.32	1.38
59	A5	2713	G	N1-C2	-6.96	1.32	1.37
59	A5	39	A	C6-N6	-6.96	1.28	1.33
59	A5	3336	A	N9-C8	-6.96	1.32	1.37
59	A5	3343	A	C2-N3	-6.96	1.27	1.33
58	B2	1847	A	N3-C4	-6.96	1.30	1.34
59	A5	78	A	N3-C4	-6.96	1.30	1.34
59	A5	1523	A	N9-C8	-6.96	1.32	1.37
59	A5	2714	U	C2-O2	-6.96	1.16	1.22
59	A5	3472	A	C5-C4	-6.96	1.33	1.38
59	A5	1176	A	N7-C5	-6.96	1.35	1.39
59	A5	2552	G	C5-C4	-6.96	1.33	1.38
59	A5	1527	C	C2-N3	-6.96	1.30	1.35
59	A5	837	A	N9-C4	-6.95	1.33	1.37
59	A5	2034	U	C2-N3	-6.95	1.32	1.37
59	A5	2226	A	C8-N7	-6.95	1.26	1.31
59	A5	3289	U	C2-N3	-6.95	1.32	1.37
59	A5	3341	C	C5-C6	-6.95	1.28	1.34
59	A5	3541	A	C6-N1	-6.95	1.30	1.35
59	A5	3845	A	N9-C4	-6.95	1.33	1.37
59	A5	3321	A	C5-C6	-6.95	1.34	1.41
59	A5	2244	G	C5-C6	-6.95	1.35	1.42
59	A5	1010	A	N9-C4	-6.95	1.33	1.37
56	A8	41	G	C8-N7	-6.95	1.26	1.30
59	A5	306	C	N3-C4	-6.95	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1779	G	N1-C2	-6.95	1.32	1.37
59	A5	3603	C	N3-C4	-6.95	1.29	1.33
59	A5	3335	A	N3-C4	-6.94	1.30	1.34
59	A5	3398	C	N3-C4	-6.94	1.29	1.33
59	A5	1142	U	C4'-C3'	-6.94	1.45	1.53
59	A5	3145	U	N1-C6	-6.94	1.31	1.38
59	A5	3152	G	C5-C4	-6.94	1.33	1.38
65	CO	138	CYS	CB-SG	-6.94	1.70	1.82
59	A5	341	A	C5-C4	-6.94	1.33	1.38
59	A5	3296	C	C2-N3	-6.94	1.30	1.35
41	Ce	46	ARG	CB-CG	-6.94	1.33	1.52
59	A5	846	U	C2-N3	-6.94	1.32	1.37
59	A5	1120	A	N3-C4	-6.94	1.30	1.34
59	A5	3486	U	C2-N3	-6.94	1.32	1.37
59	A5	354	A	N9-C4	-6.94	1.33	1.37
59	A5	1378	A	N7-C5	-6.94	1.35	1.39
59	A5	1680	U	N1-C2	-6.94	1.32	1.38
59	A5	1733	A	C5-C4	-6.93	1.33	1.38
59	A5	311	C	N1-C6	-6.93	1.32	1.37
59	A5	2494	G	N7-C5	-6.93	1.35	1.39
59	A5	2164	G	C8-N7	-6.93	1.26	1.30
59	A5	2801	U	N1-C2	-6.93	1.32	1.38
59	A5	3584	C	N1-C6	-6.93	1.32	1.37
56	A8	14	G	N7-C5	-6.92	1.35	1.39
59	A5	812	U	C2-N3	-6.92	1.32	1.37
59	A5	2163	A	C5-C4	-6.92	1.33	1.38
59	A5	2190	A	C6-N1	-6.92	1.30	1.35
59	A5	3490	C	C4-C5	-6.92	1.37	1.43
59	A5	3730	G	N7-C5	-6.92	1.35	1.39
59	A5	1063	C	C2-N3	-6.92	1.30	1.35
59	A5	1111	C	N1-C6	-6.92	1.32	1.37
59	A5	2036	G	N9-C8	-6.92	1.33	1.37
59	A5	3348	G	N7-C5	-6.92	1.35	1.39
59	A5	3591	A	C6-N6	-6.92	1.28	1.33
41	Ce	52	TYR	CD1-CE1	-6.92	1.28	1.39
59	A5	2245	G	N7-C5	-6.92	1.35	1.39
59	A5	2528	A	C5-C4	-6.92	1.33	1.38
59	A5	2724	C	N1-C6	-6.92	1.32	1.37
59	A5	2753	G	N1-C2	-6.92	1.32	1.37
59	A5	3251	C	C4-C5	-6.92	1.37	1.43
58	B2	1206	G	C8-N7	-6.92	1.26	1.30
59	A5	3681	A	C5-C4	-6.92	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1646	U	N1-C6	-6.91	1.31	1.38
59	A5	3398	C	N1-C6	-6.91	1.33	1.37
59	A5	1028	U	N1-C2	-6.91	1.32	1.38
59	A5	3327	U	C2-N3	-6.91	1.32	1.37
59	A5	3511	U	C4-C5	-6.91	1.37	1.43
59	A5	1630	G	C5-C4	-6.91	1.33	1.38
59	A5	2146	G	N7-C5	-6.91	1.35	1.39
59	A5	3666	C	N3-C4	-6.91	1.29	1.33
59	A5	1533	A	N7-C5	-6.91	1.35	1.39
59	A5	1608	G	N3-C4	-6.91	1.30	1.35
59	A5	2181	A	C8-N7	-6.91	1.26	1.31
59	A5	3440	C	C4-C5	-6.91	1.37	1.43
59	A5	1070	G	C2-N3	-6.91	1.27	1.32
59	A5	2180	A	C5-C6	-6.91	1.34	1.41
56	A8	27	C	N3-C4	-6.91	1.29	1.33
59	A5	105	A	C8-N7	-6.91	1.26	1.31
59	A5	1053	G	C5-C6	-6.90	1.35	1.42
59	A5	2688	U	C2-N3	-6.90	1.32	1.37
59	A5	920	G	N9-C8	-6.90	1.33	1.37
59	A5	1136	A	N9-C8	-6.90	1.32	1.37
59	A5	1327	G	C6-N1	-6.90	1.34	1.39
59	A5	2540	G	N9-C8	-6.90	1.33	1.37
59	A5	3447	U	C2-N3	-6.90	1.32	1.37
55	A7	83	A	N7-C5	-6.90	1.35	1.39
56	A8	43	A	C5-C6	-6.90	1.34	1.41
59	A5	2194	G	C2-N3	-6.90	1.27	1.32
59	A5	3497	G	N9-C8	-6.90	1.33	1.37
59	A5	1370	C	C2-N3	-6.90	1.30	1.35
59	A5	3133	A	C5-C4	-6.90	1.33	1.38
59	A5	2774	G	N3-C4	-6.90	1.30	1.35
59	A5	1116	G	N9-C8	-6.90	1.33	1.37
59	A5	317	G	N9-C8	-6.89	1.33	1.37
59	A5	3538	G	N3-C4	-6.89	1.30	1.35
59	A5	2703	G	C2-N3	-6.89	1.27	1.32
59	A5	3601	U	C2-N3	-6.89	1.32	1.37
56	A8	15	G	N9-C4	-6.89	1.32	1.38
59	A5	345	A	N7-C5	-6.89	1.35	1.39
59	A5	2206	U	C5-C6	-6.89	1.27	1.34
59	A5	3490	C	C2-N3	-6.89	1.30	1.35
59	A5	60	G	C6-N1	-6.89	1.34	1.39
59	A5	1348	G	C5-C4	-6.89	1.33	1.38
59	A5	2754	G	N1-C2	-6.89	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	825	C	C4-C5	-6.88	1.37	1.43
59	A5	1004	C	N1-C6	-6.88	1.33	1.37
59	A5	1675	G	C5-C6	-6.88	1.35	1.42
59	A5	2717	C	N3-C4	-6.88	1.29	1.33
56	A8	42	A	C8-N7	-6.88	1.26	1.31
58	B2	1850	G	N7-C5	-6.88	1.35	1.39
59	A5	1372	A	C5-C4	-6.88	1.33	1.38
59	A5	1795	A	N7-C5	-6.88	1.35	1.39
59	A5	2742	G	N9-C4	-6.88	1.32	1.38
59	A5	3601	U	N1-C6	-6.88	1.31	1.38
59	A5	308	G	C5-C4	-6.88	1.33	1.38
59	A5	309	C	N3-C4	-6.88	1.29	1.33
59	A5	812	U	N1-C2	-6.88	1.32	1.38
59	A5	1063	C	N3-C4	-6.88	1.29	1.33
59	A5	2569	U	C2-N3	-6.88	1.32	1.37
59	A5	3525	A	C5-C4	-6.88	1.33	1.38
59	A5	3588	G	C5-C4	-6.88	1.33	1.38
58	B2	635	C	N3-C4	-6.88	1.29	1.33
59	A5	1552	A	N9-C4	-6.88	1.33	1.37
59	A5	1793	C	C4-C5	-6.88	1.37	1.43
59	A5	2516	U	C5-C6	-6.88	1.27	1.34
59	A5	804	C	N1-C2	-6.88	1.33	1.40
59	A5	2153	C	N3-C4	-6.88	1.29	1.33
59	A5	1206	G	C2-N3	-6.87	1.27	1.32
59	A5	1703	A	C6-N1	-6.87	1.30	1.35
59	A5	2218	G	N9-C4	-6.87	1.32	1.38
59	A5	2775	A	N9-C8	-6.87	1.32	1.37
59	A5	3165	U	N3-C4	-6.87	1.32	1.38
59	A5	2198	G	C5-C4	-6.87	1.33	1.38
59	A5	2699	A	N9-C4	-6.87	1.33	1.37
59	A5	3440	C	N1-C6	-6.87	1.33	1.37
59	A5	1870	G	C6-N1	-6.87	1.34	1.39
59	A5	1270	G	N7-C5	-6.87	1.35	1.39
59	A5	1606	G	C2-N3	-6.87	1.27	1.32
59	A5	3530	A	N9-C4	6.87	1.42	1.37
59	A5	2203	A	N3-C4	-6.87	1.30	1.34
55	A7	96	U	C2-N3	-6.86	1.32	1.37
59	A5	1132	U	C4-C5	-6.86	1.37	1.43
59	A5	1320	U	C5-C6	-6.86	1.27	1.34
59	A5	2671	C	N3-C4	-6.86	1.29	1.33
59	A5	1344	A	N9-C4	-6.86	1.33	1.37
56	A8	15	G	C5-C4	-6.86	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1144	C	N1-C6	-6.86	1.33	1.37
59	A5	1734	G	N1-C2	-6.86	1.32	1.37
59	A5	3288	C	C4-C5	-6.86	1.37	1.43
59	A5	3621	A	C5-C6	-6.86	1.34	1.41
59	A5	2740	C	N1-C6	-6.86	1.33	1.37
59	A5	2798	C	N1-C2	-6.86	1.33	1.40
59	A5	3336	A	C8-N7	-6.86	1.26	1.31
59	A5	1645	G	C2-N3	-6.86	1.27	1.32
59	A5	3263	C	N1-C6	-6.86	1.33	1.37
59	A5	38	A	C5-C4	-6.86	1.33	1.38
59	A5	88	U	N1-C2	-6.86	1.32	1.38
59	A5	821	U	N3-C4	-6.86	1.32	1.38
59	A5	848	A	N9-C4	-6.86	1.33	1.37
59	A5	1313	A	C6-N1	-6.86	1.30	1.35
59	A5	1522	G	C8-N7	-6.86	1.26	1.30
59	A5	1891	U	N1-C2	-6.86	1.32	1.38
59	A5	2618	G	C6-N1	-6.86	1.34	1.39
59	A5	3293	G	N1-C2	-6.85	1.32	1.37
59	A5	1104	A	C6-N1	-6.85	1.30	1.35
59	A5	1681	G	N9-C8	-6.85	1.33	1.37
59	A5	1869	C	C2-N3	-6.85	1.30	1.35
59	A5	2519	U	C4-C5	-6.85	1.37	1.43
59	A5	3487	A	N3-C4	-6.85	1.30	1.34
59	A5	3673	G	C5-C4	-6.85	1.33	1.38
59	A5	445	C	C5-C6	-6.85	1.28	1.34
59	A5	1355	C	C2-N3	-6.85	1.30	1.35
59	A5	2732	C	C5-C6	-6.85	1.28	1.34
55	A7	11	A	N9-C4	-6.85	1.33	1.37
55	A7	95	U	C2-N3	-6.85	1.32	1.37
55	A7	97	G	C5-C4	-6.85	1.33	1.38
59	A5	241	C	N3-C4	-6.85	1.29	1.33
59	A5	392	A	C5-C4	-6.85	1.33	1.38
59	A5	559	A	N9-C4	-6.85	1.33	1.37
58	B2	365	A	N9-C4	-6.85	1.33	1.37
59	A5	3630	C	N1-C2	-6.85	1.33	1.40
58	B2	632	G	C8-N7	-6.85	1.26	1.30
59	A5	2251	G	N3-C4	-6.84	1.30	1.35
59	A5	3267	C	N3-C4	-6.84	1.29	1.33
59	A5	3400	U	C5-C6	-6.84	1.27	1.34
59	A5	1080	G	C5-C6	-6.84	1.35	1.42
59	A5	2517	A	C6-N1	-6.84	1.30	1.35
59	A5	3178	G	N3-C4	-6.84	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	34	C	C5-C6	-6.84	1.28	1.34
59	A5	824	G	C5-C4	-6.84	1.33	1.38
59	A5	846	U	N1-C2	-6.84	1.32	1.38
59	A5	1551	U	C4-C5	-6.84	1.37	1.43
59	A5	1552	A	C5-C4	-6.84	1.33	1.38
59	A5	1791	A	N7-C5	-6.84	1.35	1.39
59	A5	2158	U	N1-C6	-6.84	1.31	1.38
59	A5	1078	G	C5-C4	-6.84	1.33	1.38
59	A5	2104	A	N7-C5	-6.84	1.35	1.39
59	A5	2221	G	N1-C2	-6.84	1.32	1.37
59	A5	3658	G	C5-C4	-6.84	1.33	1.38
59	A5	349	C	N1-C6	-6.84	1.33	1.37
59	A5	2654	G	C5-C4	-6.84	1.33	1.38
59	A5	1414	C	N3-C4	-6.83	1.29	1.33
55	A7	78	C	C4-C5	-6.83	1.37	1.43
59	A5	1163	G	N9-C8	-6.83	1.33	1.37
59	A5	1607	A	N1-C2	-6.83	1.28	1.34
59	A5	1657	G	N9-C4	-6.83	1.32	1.38
59	A5	3520	U	C5-C6	-6.83	1.27	1.34
59	A5	853	G	N9-C4	-6.83	1.32	1.38
59	A5	1132	U	N3-C4	-6.83	1.32	1.38
59	A5	1360	U	C5-C6	-6.83	1.28	1.34
59	A5	2168	G	C5-C4	-6.83	1.33	1.38
59	A5	2559	C	C2-N3	-6.83	1.30	1.35
59	A5	2688	U	N3-C4	-6.83	1.32	1.38
59	A5	3445	C	C4-C5	-6.83	1.37	1.43
55	A7	86	G	N9-C8	-6.83	1.33	1.37
59	A5	350	C	C4-C5	-6.83	1.37	1.43
59	A5	1770	C	C4-C5	-6.83	1.37	1.43
59	A5	297	U	N1-C2	-6.83	1.32	1.38
59	A5	1178	U	C2-N3	-6.83	1.32	1.37
59	A5	1389	C	N1-C6	-6.83	1.33	1.37
59	A5	3489	A	C6-N1	-6.83	1.30	1.35
59	A5	358	C	C2-N3	-6.83	1.30	1.35
59	A5	1543	C	C2-N3	-6.83	1.30	1.35
59	A5	2246	A	N9-C8	-6.83	1.32	1.37
59	A5	3449	G	N9-C8	-6.83	1.33	1.37
58	B2	1972	G	N1-C2	-6.82	1.32	1.37
59	A5	1413	C	C2-N3	-6.82	1.30	1.35
26	CN	160	GLU	CG-CD	-6.82	1.41	1.51
59	A5	313	A	N7-C5	-6.82	1.35	1.39
59	A5	360	A	N3-C4	-6.82	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1142	U	C5-C6	-6.82	1.28	1.34
59	A5	3600	G	C8-N7	-6.82	1.26	1.30
59	A5	340	U	C2-N3	-6.82	1.32	1.37
59	A5	1685	G	C6-N1	-6.82	1.34	1.39
59	A5	2792	G	C5-C4	-6.82	1.33	1.38
59	A5	790	U	C4-C5	-6.82	1.37	1.43
59	A5	2231	A	N9-C4	-6.82	1.33	1.37
59	A5	3884	A	C6-N1	-6.82	1.30	1.35
59	A5	3884	A	N3-C4	-6.82	1.30	1.34
59	A5	1126	A	N3-C4	-6.82	1.30	1.34
59	A5	3257	U	C2-N3	-6.82	1.32	1.37
58	B2	1110	A	N3-C4	-6.81	1.30	1.34
59	A5	3845	A	N7-C5	-6.81	1.35	1.39
59	A5	31	C	N1-C6	-6.81	1.33	1.37
59	A5	2725	U	C4-C5	-6.81	1.37	1.43
59	A5	1106	A	C6-N6	-6.81	1.28	1.33
59	A5	1755	U	C4-C5	-6.81	1.37	1.43
59	A5	2174	A	C5-C6	-6.81	1.34	1.41
58	B2	1844	C	C4-C5	-6.81	1.37	1.43
59	A5	2549	G	N7-C5	-6.81	1.35	1.39
59	A5	2653	A	C6-N1	-6.81	1.30	1.35
59	A5	2734	A	N9-C4	-6.81	1.33	1.37
59	A5	3490	C	N3-C4	-6.81	1.29	1.33
58	B2	1225	A	C5-C4	-6.81	1.33	1.38
59	A5	362	A	C6-N1	-6.81	1.30	1.35
59	A5	1677	U	C4-C5	-6.81	1.37	1.43
59	A5	2105	C	C2-N3	-6.81	1.30	1.35
56	A8	14	G	N1-C2	-6.81	1.32	1.37
56	A8	41	G	N1-C2	-6.81	1.32	1.37
59	A5	1071	U	N1-C6	-6.81	1.31	1.38
59	A5	1133	A	C8-N7	-6.81	1.26	1.31
59	A5	1329	G	N7-C5	-6.81	1.35	1.39
59	A5	1663	G	C8-N7	-6.81	1.26	1.30
59	A5	2103	G	C5-C4	-6.81	1.33	1.38
59	A5	2753	G	C8-N7	-6.81	1.26	1.30
56	A8	55	G	N1-C2	-6.80	1.32	1.37
59	A5	2626	C	N3-C4	-6.80	1.29	1.33
59	A5	3406	G	N9-C8	-6.80	1.33	1.37
59	A5	2914	A	N9-C4	-6.80	1.33	1.37
59	A5	3415	U	N1-C2	-6.80	1.32	1.38
59	A5	26	G	N7-C5	-6.80	1.35	1.39
59	A5	1058	A	N9-C4	-6.80	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2154	A	C6-N1	-6.80	1.30	1.35
59	A5	3500	A	N7-C5	-6.80	1.35	1.39
56	A8	30	G	C5-C4	-6.80	1.33	1.38
59	A5	1043	G	C5-C4	-6.80	1.33	1.38
59	A5	1125	A	N9-C4	-6.80	1.33	1.37
59	A5	2748	G	N9-C8	-6.80	1.33	1.37
58	B2	47	A	N9-C4	-6.80	1.33	1.37
58	B2	609	A	N9-C4	-6.80	1.33	1.37
59	A5	1410	A	C5-C4	-6.80	1.33	1.38
59	A5	1537	G	C5-C4	-6.80	1.33	1.38
59	A5	2200	A	N9-C8	-6.80	1.32	1.37
59	A5	2212	A	C5-C6	-6.80	1.34	1.41
59	A5	3887	U	C4-C5	-6.80	1.37	1.43
59	A5	3947	C	C4-C5	-6.80	1.37	1.43
59	A5	1971	C	N1-C6	-6.79	1.33	1.37
59	A5	26	G	C5-C6	-6.79	1.35	1.42
59	A5	1019	U	N1-C2	-6.79	1.32	1.38
59	A5	1097	A	C5-C6	-6.79	1.34	1.41
59	A5	1678	C	C4-N4	-6.79	1.27	1.33
59	A5	2566	A	C5-C4	-6.79	1.33	1.38
59	A5	2573	C	N1-C6	-6.79	1.33	1.37
59	A5	2685	G	C5-C4	-6.79	1.33	1.38
59	A5	3450	G	C5-C4	-6.79	1.33	1.38
59	A5	1211	A	N7-C5	-6.79	1.35	1.39
59	A5	1655	A	N7-C5	-6.79	1.35	1.39
59	A5	1721	C	N3-C4	-6.79	1.29	1.33
59	A5	2625	G	C8-N7	-6.79	1.26	1.30
59	A5	3467	A	N9-C4	-6.79	1.33	1.37
58	B2	1210	G	C5-C4	-6.79	1.33	1.38
59	A5	375	C	N1-C6	-6.79	1.33	1.37
59	A5	2066	G	N3-C4	-6.79	1.30	1.35
59	A5	3519	C	N1-C6	-6.79	1.33	1.37
59	A5	312	U	N1-C2	-6.79	1.32	1.38
59	A5	1762	G	N7-C5	-6.79	1.35	1.39
59	A5	3261	U	C4-C5	-6.79	1.37	1.43
59	A5	549	A	N7-C5	-6.79	1.35	1.39
59	A5	1066	A	N1-C2	-6.79	1.28	1.34
59	A5	1361	G	C5-C4	-6.79	1.33	1.38
59	A5	1422	G	C5-C4	-6.79	1.33	1.38
59	A5	2566	A	N3-C4	-6.79	1.30	1.34
59	A5	1124	G	C2-N2	-6.78	1.27	1.34
59	A5	1741	G	C5-C4	-6.78	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2247	U	C2-N3	-6.78	1.33	1.37
59	A5	1069	A	N9-C8	-6.78	1.32	1.37
59	A5	1539	A	N9-C8	-6.78	1.32	1.37
59	A5	2707	C	N1-C6	-6.78	1.33	1.37
59	A5	3513	A	C5-C6	-6.78	1.34	1.41
59	A5	2170	C	C4-C5	-6.78	1.37	1.43
59	A5	2527	A	C5-C4	-6.78	1.34	1.38
59	A5	414	A	N9-C4	-6.78	1.33	1.37
59	A5	2544	U	C2-N3	-6.78	1.33	1.37
58	B2	1111	U	N3-C4	-6.78	1.32	1.38
59	A5	34	C	N1-C2	-6.78	1.33	1.40
59	A5	66	A	C6-N1	-6.78	1.30	1.35
59	A5	353	G	N9-C8	-6.78	1.33	1.37
59	A5	384	A	C8-N7	-6.78	1.26	1.31
59	A5	2249	A	C6-N6	-6.78	1.28	1.33
59	A5	1534	G	N7-C5	-6.78	1.35	1.39
59	A5	2729	U	C4-C5	-6.78	1.37	1.43
59	A5	2687	A	N9-C4	-6.77	1.33	1.37
59	A5	10	A	N9-C4	-6.77	1.33	1.37
59	A5	825	C	C5-C6	-6.77	1.28	1.34
59	A5	1056	G	C6-N1	-6.77	1.34	1.39
59	A5	1608	G	N1-C2	-6.77	1.32	1.37
59	A5	1702	G	C5-C4	-6.77	1.33	1.38
59	A5	2533	U	N1-C2	-6.77	1.32	1.38
59	A5	3520	U	N1-C6	-6.77	1.31	1.38
58	B2	1110	A	C6-N1	-6.77	1.30	1.35
59	A5	1136	A	N7-C5	-6.77	1.35	1.39
59	A5	1172	G	N9-C8	-6.77	1.33	1.37
59	A5	1347	A	C5-C4	-6.77	1.34	1.38
59	A5	2207	A	N3-C4	-6.77	1.30	1.34
59	A5	2732	C	N3-C4	-6.77	1.29	1.33
59	A5	1031	G	C5-C4	-6.77	1.33	1.38
59	A5	1362	G	C5-C4	-6.77	1.33	1.38
59	A5	1539	A	N9-C4	-6.77	1.33	1.37
59	A5	1617	U	C5-C6	-6.77	1.28	1.34
59	A5	1647	A	C8-N7	-6.77	1.26	1.31
59	A5	3594	A	N9-C8	-6.77	1.32	1.37
58	B2	355	G	N9-C4	-6.77	1.32	1.38
59	A5	99	A	N9-C8	-6.77	1.32	1.37
59	A5	2648	A	N9-C4	-6.77	1.33	1.37
59	A5	2752	C	N1-C6	-6.77	1.33	1.37
59	A5	3544	G	N1-C2	-6.77	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	Ca	53	TYR	CD1-CE1	-6.76	1.29	1.39
59	A5	1623	G	N9-C8	-6.76	1.33	1.37
59	A5	3486	U	N3-C4	-6.76	1.32	1.38
59	A5	2668	C	C5-C6	-6.76	1.28	1.34
58	B2	1944	A	N9-C4	-6.76	1.33	1.37
59	A5	1056	G	N9-C8	-6.76	1.33	1.37
59	A5	1695	A	C5-C4	-6.76	1.34	1.38
59	A5	1702	G	N3-C4	-6.76	1.30	1.35
59	A5	2105	C	N3-C4	-6.76	1.29	1.33
59	A5	3336	A	C6-N1	-6.76	1.30	1.35
59	A5	23	U	N3-C4	-6.76	1.32	1.38
59	A5	1071	U	C4-O4	-6.76	1.18	1.23
59	A5	1318	A	N7-C5	-6.76	1.35	1.39
59	A5	3673	G	C5-C6	-6.76	1.35	1.42
59	A5	2207	A	N9-C8	-6.76	1.32	1.37
59	A5	2262	A	N9-C4	-6.76	1.33	1.37
59	A5	364	U	N3-C4	-6.76	1.32	1.38
59	A5	2241	U	N3-C4	-6.76	1.32	1.38
59	A5	2712	U	C5-C6	-6.76	1.28	1.34
58	B2	1174	A	N7-C5	-6.75	1.35	1.39
59	A5	2151	A	C8-N7	-6.75	1.26	1.31
59	A5	2042	A	N7-C5	-6.75	1.35	1.39
59	A5	2150	U	N1-C2	-6.75	1.32	1.38
59	A5	2213	G	C2-N3	-6.75	1.27	1.32
59	A5	3298	U	C4-C5	-6.75	1.37	1.43
59	A5	424	G	N1-C2	-6.75	1.32	1.37
56	A8	11	G	N9-C8	-6.75	1.33	1.37
59	A5	1022	A	N9-C4	-6.75	1.33	1.37
59	A5	1421	G	C5-C6	-6.75	1.35	1.42
59	A5	1624	G	N7-C5	-6.75	1.35	1.39
59	A5	3349	A	N9-C4	-6.75	1.33	1.37
59	A5	3494	C	C4-C5	-6.75	1.37	1.43
48	Cp	8	VAL	CB-CG1	-6.75	1.38	1.52
59	A5	1046	A	C5-C6	-6.75	1.34	1.41
59	A5	2687	A	N3-C4	-6.75	1.30	1.34
59	A5	2718	U	C4-C5	-6.75	1.37	1.43
58	B2	1063	G	C2-N3	-6.75	1.27	1.32
59	A5	366	A	C5-C4	-6.75	1.34	1.38
59	A5	3471	A	C5-C4	-6.74	1.34	1.38
59	A5	285	G	N7-C5	-6.74	1.35	1.39
59	A5	3422	A	C5-C4	-6.74	1.34	1.38
56	A8	38	G	C5-C4	-6.74	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	52	A	N7-C5	-6.74	1.35	1.39
59	A5	1536	U	N1-C6	-6.74	1.31	1.38
59	A5	2678	G	C8-N7	-6.74	1.26	1.30
59	A5	3444	G	N7-C5	-6.74	1.35	1.39
59	A5	856	A	C5-C4	-6.74	1.34	1.38
59	A5	1197	A	N1-C2	-6.74	1.28	1.34
59	A5	37	G	N7-C5	-6.74	1.35	1.39
59	A5	796	A	C8-N7	-6.74	1.26	1.31
59	A5	2742	G	N7-C5	-6.74	1.35	1.39
59	A5	2801	U	N3-C4	-6.74	1.32	1.38
58	B2	1196	G	N1-C2	-6.73	1.32	1.37
59	A5	993	A	P-O5'	-6.73	1.53	1.59
59	A5	1020	A	N9-C4	-6.73	1.33	1.37
59	A5	3616	G	C8-N7	-6.73	1.26	1.30
59	A5	72	C	N3-C4	-6.73	1.29	1.33
59	A5	306	C	C2-O2	-6.73	1.18	1.24
59	A5	338	A	N9-C4	-6.73	1.33	1.37
59	A5	2502	G	N1-C2	-6.73	1.32	1.37
59	A5	2601	A	N9-C4	-6.73	1.33	1.37
59	A5	2775	A	C5-C4	-6.73	1.34	1.38
59	A5	820	A	C6-N1	-6.73	1.30	1.35
59	A5	2225	A	N9-C8	-6.73	1.32	1.37
59	A5	2788	U	N1-C2	-6.73	1.32	1.38
59	A5	3336	A	C5-C4	-6.73	1.34	1.38
59	A5	338	A	C5-C4	-6.73	1.34	1.38
59	A5	1367	A	N9-C8	-6.73	1.32	1.37
59	A5	1558	A	C6-N1	-6.73	1.30	1.35
59	A5	1741	G	C6-N1	-6.73	1.34	1.39
59	A5	2207	A	C6-N6	-6.73	1.28	1.33
59	A5	2738	C	C2-N3	-6.73	1.30	1.35
59	A5	1152	A	N3-C4	-6.73	1.30	1.34
59	A5	2732	C	N1-C2	-6.73	1.33	1.40
59	A5	3503	G	N1-C2	-6.73	1.32	1.37
59	A5	3631	C	C2-N3	-6.73	1.30	1.35
59	A5	1349	A	C6-N1	-6.72	1.30	1.35
59	A5	1771	G	N7-C5	-6.72	1.35	1.39
59	A5	3446	G	C6-N1	-6.72	1.34	1.39
59	A5	3481	G	C2-N2	-6.72	1.27	1.34
59	A5	3511	U	C2-N3	-6.72	1.33	1.37
59	A5	360	A	C8-N7	-6.72	1.26	1.31
59	A5	1118	C	C5-C6	-6.72	1.28	1.34
59	A5	3178	G	C2-N3	-6.72	1.27	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3681	A	N7-C5	-6.72	1.35	1.39
41	Ce	27	TYR	CE2-CZ	-6.72	1.29	1.38
59	A5	1087	G	N1-C2	-6.72	1.32	1.37
59	A5	1620	A	N9-C4	-6.72	1.33	1.37
59	A5	1667	U	N1-C2	-6.72	1.32	1.38
59	A5	2571	U	N3-C4	-6.72	1.32	1.38
56	A8	18	C	N3-C4	-6.72	1.29	1.33
56	A8	42	A	N7-C5	-6.72	1.35	1.39
59	A5	69	A	N7-C5	-6.72	1.35	1.39
59	A5	914	C	C2-N3	-6.72	1.30	1.35
59	A5	1067	A	N9-C4	-6.72	1.33	1.37
59	A5	1162	A	N7-C5	-6.72	1.35	1.39
59	A5	2774	G	N9-C8	-6.72	1.33	1.37
59	A5	1136	A	C8-N7	-6.71	1.26	1.31
59	A5	2039	G	N7-C5	-6.71	1.35	1.39
48	Cp	18	TYR	CD2-CE2	-6.71	1.29	1.39
59	A5	1018	C	C4-N4	-6.71	1.27	1.33
59	A5	1694	A	C8-N7	-6.71	1.26	1.31
59	A5	1301	A	N7-C5	-6.71	1.35	1.39
59	A5	1776	U	C4-C5	-6.71	1.37	1.43
59	A5	2556	A	N3-C4	-6.71	1.30	1.34
59	A5	2558	A	N7-C5	-6.71	1.35	1.39
59	A5	3167	A	C6-N1	-6.71	1.30	1.35
59	A5	3619	U	C2-O2	-6.71	1.16	1.22
59	A5	3758	G	N7-C5	-6.71	1.35	1.39
59	A5	3965	A	C5-C4	-6.71	1.34	1.38
59	A5	2168	G	N3-C4	-6.71	1.30	1.35
59	A5	2211	A	C5-C6	-6.71	1.35	1.41
59	A5	2027	A	C5-C4	-6.71	1.34	1.38
59	A5	2623	C	C4-C5	-6.70	1.37	1.43
59	A5	2781	G	N1-C2	-6.70	1.32	1.37
59	A5	3477	A	N9-C8	-6.70	1.32	1.37
59	A5	2209	G	N7-C5	-6.70	1.35	1.39
59	A5	2687	A	C5-C6	-6.70	1.35	1.41
56	A8	32	G	C5-C6	-6.70	1.35	1.42
56	A8	61	C	N3-C4	-6.70	1.29	1.33
59	A5	389	G	C8-N7	-6.70	1.26	1.30
59	A5	1011	U	N1-C6	-6.70	1.31	1.38
59	A5	2244	G	N1-C2	-6.70	1.32	1.37
59	A5	2564	U	N1-C2	-6.70	1.32	1.38
56	A8	5	C	C4-C5	-6.70	1.37	1.43
58	B2	1987	G	C5-C4	-6.70	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	62	G	C8-N7	-6.70	1.26	1.30
59	A5	360	A	N9-C4	-6.70	1.33	1.37
59	A5	1363	G	C8-N7	-6.70	1.26	1.30
59	A5	1533	A	C6-N1	-6.70	1.30	1.35
59	A5	2234	C	C5-C6	-6.70	1.28	1.34
59	A5	3512	U	N3-C4	-6.70	1.32	1.38
59	A5	3678	G	C8-N7	-6.70	1.26	1.30
59	A5	29	U	C2-N3	-6.70	1.33	1.37
59	A5	1017	A	N9-C8	-6.70	1.32	1.37
59	A5	1171	G	N9-C8	-6.70	1.33	1.37
59	A5	2511	C	C4-C5	-6.70	1.37	1.43
59	A5	3136	U	C4-C5	-6.70	1.37	1.43
59	A5	3401	U	N3-C4	-6.70	1.32	1.38
59	A5	3600	G	C5-C4	-6.70	1.33	1.38
59	A5	93	G	C2-N3	-6.69	1.27	1.32
59	A5	378	G	N9-C4	-6.69	1.32	1.38
59	A5	2242	C	C4-C5	-6.69	1.37	1.43
59	A5	2698	A	N7-C5	-6.69	1.35	1.39
59	A5	341	A	N3-C4	-6.69	1.30	1.34
59	A5	871	A	N7-C5	-6.69	1.35	1.39
59	A5	2218	G	N1-C2	-6.69	1.32	1.37
59	A5	1374	C	C2-O2	-6.69	1.18	1.24
59	A5	1752	G	N9-C8	-6.69	1.33	1.37
59	A5	2162	C	C2-N3	-6.69	1.30	1.35
59	A5	307	A	N9-C4	-6.69	1.33	1.37
59	A5	1107	G	N7-C5	-6.69	1.35	1.39
59	A5	2172	C	N1-C6	-6.69	1.33	1.37
59	A5	2541	C	C5-C6	-6.69	1.29	1.34
66	CL	65	TYR	CD1-CE1	-6.69	1.29	1.39
59	A5	1643	G	C5-C4	-6.69	1.33	1.38
59	A5	3938	C	N1-C6	-6.69	1.33	1.37
56	A8	5	C	C5-C6	-6.68	1.29	1.34
58	B2	1119	G	C8-N7	-6.68	1.26	1.30
59	A5	3252	G	N7-C5	-6.68	1.35	1.39
59	A5	3586	A	N9-C4	-6.68	1.33	1.37
59	A5	34	C	N1-C6	-6.68	1.33	1.37
59	A5	1545	A	C6-N1	-6.68	1.30	1.35
59	A5	1949	A	N9-C4	-6.68	1.33	1.37
59	A5	2171	U	N1-C6	-6.68	1.31	1.38
59	A5	3497	G	N1-C2	-6.68	1.32	1.37
55	A7	79	U	N3-C4	-6.68	1.32	1.38
59	A5	86	C	C4-C5	-6.68	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1174	G	N7-C5	-6.68	1.35	1.39
59	A5	2505	A	N7-C5	-6.68	1.35	1.39
59	A5	2562	U	N3-C4	-6.68	1.32	1.38
59	A5	3147	A	N9-C8	-6.68	1.32	1.37
58	B2	1824	C	N3-C4	-6.68	1.29	1.33
59	A5	370	A	N9-C8	-6.68	1.32	1.37
59	A5	427	A	C6-N1	-6.68	1.30	1.35
59	A5	912	A	C5-C4	-6.68	1.34	1.38
59	A5	1630	G	N7-C5	-6.68	1.35	1.39
59	A5	1674	A	N9-C4	-6.67	1.33	1.37
59	A5	3460	C	N1-C6	-6.67	1.33	1.37
58	B2	1983	G	N3-C4	-6.67	1.30	1.35
59	A5	1019	U	C5-C6	-6.67	1.28	1.34
59	A5	1070	G	N7-C5	-6.67	1.35	1.39
59	A5	1735	G	C5-C6	-6.67	1.35	1.42
59	A5	3262	A	C5-C4	-6.67	1.34	1.38
59	A5	1031	G	C6-N1	-6.67	1.34	1.39
59	A5	1070	G	C5-C4	-6.67	1.33	1.38
59	A5	1678	C	C4-C5	-6.67	1.37	1.43
59	A5	758	A	N9-C4	-6.67	1.33	1.37
59	A5	1006	A	C8-N7	-6.67	1.26	1.31
59	A5	1038	G	C5-C4	-6.67	1.33	1.38
59	A5	1698	A	N7-C5	-6.67	1.35	1.39
59	A5	2202	A	C5-C6	-6.67	1.35	1.41
59	A5	2515	C	C4-C5	-6.67	1.37	1.43
56	A8	86	A	N7-C5	-6.67	1.35	1.39
59	A5	2209	G	C5-C6	-6.67	1.35	1.42
59	A5	3585	A	C8-N7	-6.67	1.26	1.31
59	A5	1665	C	N1-C2	-6.66	1.33	1.40
59	A5	2155	A	N3-C4	-6.66	1.30	1.34
59	A5	3541	A	N3-C4	-6.66	1.30	1.34
59	A5	3402	C	N1-C2	-6.66	1.33	1.40
59	A5	97	C	C4-C5	-6.66	1.37	1.43
59	A5	305	G	C6-N1	-6.66	1.34	1.39
59	A5	827	A	C5-C4	-6.66	1.34	1.38
59	A5	1105	U	N3-C4	-6.66	1.32	1.38
59	A5	1176	A	N1-C2	-6.66	1.28	1.34
59	A5	2799	U	N3-C4	-6.66	1.32	1.38
59	A5	3401	U	N1-C2	-6.66	1.32	1.38
58	B2	1968	C	N1-C6	-6.66	1.33	1.37
59	A5	67	A	C6-N1	-6.66	1.30	1.35
59	A5	1165	A	N9-C8	-6.66	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2066	G	N7-C5	-6.66	1.35	1.39
59	A5	2113	A	C6-N1	-6.66	1.30	1.35
59	A5	3319	A	C5-C4	-6.66	1.34	1.38
55	A7	90	A	N7-C5	-6.66	1.35	1.39
59	A5	2088	G	C2-N3	-6.66	1.27	1.32
59	A5	2501	G	C5-C4	-6.66	1.33	1.38
59	A5	2755	G	N1-C2	-6.66	1.32	1.37
59	A5	1616	G	N1-C2	-6.66	1.32	1.37
59	A5	1728	G	C5-C4	-6.66	1.33	1.38
59	A5	2234	C	N1-C6	-6.66	1.33	1.37
59	A5	3174	A	N9-C8	-6.66	1.32	1.37
59	A5	285	G	N1-C2	-6.65	1.32	1.37
59	A5	386	G	N1-C2	-6.65	1.32	1.37
59	A5	284	A	N9-C4	-6.65	1.33	1.37
59	A5	386	G	C5-C6	-6.65	1.35	1.42
56	A8	22	C	N3-C4	-6.65	1.29	1.33
59	A5	1104	A	C8-N7	-6.65	1.26	1.31
59	A5	2199	A	C8-N7	-6.65	1.26	1.31
59	A5	2722	U	N3-C4	-6.65	1.32	1.38
58	B2	1988	G	N9-C8	-6.65	1.33	1.37
59	A5	1271	G	C8-N7	-6.65	1.26	1.30
59	A5	3417	C	N1-C2	-6.65	1.33	1.40
59	A5	3495	G	C2-N3	-6.65	1.27	1.32
55	A7	93	G	N1-C2	-6.64	1.32	1.37
58	B2	1942	G	N1-C2	-6.64	1.32	1.37
59	A5	234	G	N9-C8	-6.64	1.33	1.37
59	A5	1374	C	C4-C5	-6.64	1.37	1.43
59	A5	1527	C	C5-C6	-6.64	1.29	1.34
59	A5	2108	U	N1-C2	-6.64	1.32	1.38
59	A5	99	A	N1-C2	-6.64	1.28	1.34
59	A5	356	A	C5-C6	-6.64	1.35	1.41
59	A5	989	A	N7-C5	-6.64	1.35	1.39
59	A5	2192	U	N1-C2	-6.64	1.32	1.38
59	A5	2248	A	N7-C5	-6.64	1.35	1.39
59	A5	2755	G	N3-C4	-6.64	1.30	1.35
59	A5	3197	U	C2-N3	-6.64	1.33	1.37
58	B2	1068	U	N3-C4	-6.64	1.32	1.38
59	A5	234	G	C5-C4	-6.64	1.33	1.38
59	A5	782	G	N9-C8	-6.64	1.33	1.37
59	A5	1176	A	C5-C4	-6.64	1.34	1.38
59	A5	1341	G	N3-C4	-6.64	1.30	1.35
59	A5	3950	A	N3-C4	-6.64	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1359	G	C6-O6	-6.63	1.18	1.24
59	A5	1747	A	C5-C4	-6.63	1.34	1.38
59	A5	1758	U	C2-N3	-6.63	1.33	1.37
59	A5	2740	C	C2-N3	-6.63	1.30	1.35
59	A5	3164	C	C4-C5	-6.63	1.37	1.43
59	A5	3540	G	N1-C2	-6.63	1.32	1.37
58	B2	1079	A	N7-C5	-6.63	1.35	1.39
59	A5	365	A	C6-N1	-6.63	1.30	1.35
59	A5	1073	C	N1-C6	-6.63	1.33	1.37
59	A5	1330	G	N7-C5	-6.63	1.35	1.39
58	B2	1210	G	C8-N7	-6.63	1.26	1.30
59	A5	1087	G	C5-C6	-6.63	1.35	1.42
59	A5	1330	G	C5-C6	-6.63	1.35	1.42
59	A5	1559	A	N7-C5	-6.63	1.35	1.39
59	A5	1654	C	N3-C4	-6.63	1.29	1.33
59	A5	1655	A	C5-C4	-6.63	1.34	1.38
59	A5	2062	A	C5-C6	-6.63	1.35	1.41
59	A5	1102	G	N1-C2	-6.63	1.32	1.37
59	A5	3347	G	C6-N1	-6.63	1.34	1.39
59	A5	43	A	N3-C4	-6.63	1.30	1.34
59	A5	322	G	C5-C4	-6.63	1.33	1.38
59	A5	429	U	C4-C5	-6.63	1.37	1.43
59	A5	797	A	C5-C6	-6.63	1.35	1.41
59	A5	1603	A	C5-C4	-6.63	1.34	1.38
59	A5	2551	U	C5-C6	-6.62	1.28	1.34
59	A5	2573	C	N3-C4	-6.62	1.29	1.33
59	A5	3580	G	C2-N3	-6.62	1.27	1.32
59	A5	350	C	N1-C6	-6.62	1.33	1.37
59	A5	1313	A	N7-C5	-6.62	1.35	1.39
59	A5	1708	G	N7-C5	-6.62	1.35	1.39
59	A5	1062	C	C4-C5	-6.62	1.37	1.43
59	A5	3172	A	N9-C4	-6.62	1.33	1.37
58	B2	1847	A	N7-C5	-6.62	1.35	1.39
59	A5	245	G	N3-C4	-6.62	1.30	1.35
59	A5	1051	C	N3-C4	-6.62	1.29	1.33
59	A5	1691	A	C5-C4	-6.62	1.34	1.38
59	A5	1962	A	N9-C4	-6.62	1.33	1.37
59	A5	2502	G	C2-N3	-6.62	1.27	1.32
59	A5	26	G	C6-N1	-6.62	1.34	1.39
59	A5	1270	G	C8-N7	-6.62	1.26	1.30
59	A5	1552	A	C5-C6	-6.62	1.35	1.41
59	A5	2198	G	C6-N1	-6.62	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	CA	15	VAL	CB-CG2	-6.61	1.39	1.52
59	A5	1112	G	C2-N3	-6.61	1.27	1.32
59	A5	1138	C	N1-C2	-6.61	1.33	1.40
59	A5	1867	A	C5-C4	-6.61	1.34	1.38
59	A5	48	U	N3-C4	-6.61	1.32	1.38
59	A5	387	U	N1-C6	-6.61	1.31	1.38
59	A5	1399	A	N3-C4	-6.61	1.30	1.34
59	A5	1985	C	N3-C4	-6.61	1.29	1.33
2	CA	80	GLU	CG-CD	-6.61	1.42	1.51
59	A5	292	G	N9-C8	-6.61	1.33	1.37
59	A5	3137	A	C5-C4	-6.61	1.34	1.38
59	A5	44	A	C2-N3	-6.61	1.27	1.33
59	A5	355	G	C5-C4	-6.61	1.33	1.38
59	A5	1603	A	C5-C6	-6.61	1.35	1.41
59	A5	2739	A	C5-C4	-6.61	1.34	1.38
59	A5	3542	C	N3-C4	-6.61	1.29	1.33
59	A5	1349	A	N7-C5	-6.61	1.35	1.39
59	A5	1359	G	C5-C6	-6.61	1.35	1.42
59	A5	861	C	N1-C2	-6.60	1.33	1.40
59	A5	1069	A	C5-C4	-6.60	1.34	1.38
59	A5	2776	A	C2-N3	-6.60	1.27	1.33
59	A5	434	A	C5-C4	-6.60	1.34	1.38
59	A5	1043	G	C2-N3	-6.60	1.27	1.32
59	A5	1389	C	C4-N4	-6.60	1.28	1.33
59	A5	1634	A	N3-C4	-6.60	1.30	1.34
59	A5	2497	C	N1-C6	-6.60	1.33	1.37
59	A5	2563	G	C5-C4	-6.60	1.33	1.38
59	A5	3354	U	C2-N3	-6.60	1.33	1.37
59	A5	3472	A	N9-C8	-6.60	1.32	1.37
59	A5	1343	A	C5-C4	-6.60	1.34	1.38
59	A5	1790	A	C5-C4	-6.60	1.34	1.38
59	A5	2530	C	C4-C5	-6.60	1.37	1.43
42	Cf	92	CYS	CB-SG	-6.60	1.71	1.82
59	A5	1141	G	N9-C8	-6.60	1.33	1.37
59	A5	2768	A	N3-C4	-6.60	1.30	1.34
59	A5	3487	A	N7-C5	-6.60	1.35	1.39
59	A5	3511	U	N3-C4	-6.60	1.32	1.38
59	A5	3885	C	C4-C5	-6.60	1.37	1.43
59	A5	659	U	C2-N3	-6.60	1.33	1.37
59	A5	58	G	C2-N3	-6.59	1.27	1.32
59	A5	1521	G	C5-C4	-6.59	1.33	1.38
59	A5	2759	G	N7-C5	-6.59	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	80	G	N7-C5	-6.59	1.35	1.39
59	A5	860	A	C5-C4	-6.59	1.34	1.38
59	A5	2552	G	C6-N1	-6.59	1.34	1.39
59	A5	2721	C	C5-C6	-6.59	1.29	1.34
59	A5	546	G	N3-C4	-6.59	1.30	1.35
59	A5	1385	G	C5-C6	-6.59	1.35	1.42
56	A8	22	C	C4-C5	-6.59	1.37	1.43
59	A5	363	G	N9-C4	-6.59	1.32	1.38
59	A5	778	C	C4-C5	-6.59	1.37	1.43
59	A5	1551	U	C2-N3	-6.59	1.33	1.37
59	A5	1717	A	N3-C4	-6.59	1.30	1.34
59	A5	1875	G	N3-C4	-6.59	1.30	1.35
59	A5	3122	A	N9-C4	-6.59	1.33	1.37
59	A5	2702	A	C5-C6	-6.59	1.35	1.41
59	A5	72	C	C4-C5	-6.59	1.37	1.43
59	A5	349	C	N1-C2	-6.59	1.33	1.40
59	A5	1356	G	C8-N7	-6.59	1.26	1.30
59	A5	2702	A	N9-C8	-6.59	1.32	1.37
59	A5	3264	A	C5-C6	-6.59	1.35	1.41
59	A5	3578	A	N9-C4	-6.59	1.33	1.37
59	A5	3844	U	N3-C4	-6.59	1.32	1.38
41	Ce	34	TRP	CB-CG	-6.58	1.38	1.50
58	B2	1100	A	N7-C5	-6.58	1.35	1.39
59	A5	389	G	N9-C8	-6.58	1.33	1.37
59	A5	2548	G	N1-C2	-6.58	1.32	1.37
59	A5	301	U	N3-C4	-6.58	1.32	1.38
59	A5	790	U	C2-O2	-6.58	1.16	1.22
59	A5	2751	A	N1-C2	-6.58	1.28	1.34
59	A5	3516	C	N1-C2	-6.58	1.33	1.40
59	A5	3580	G	N9-C8	-6.58	1.33	1.37
58	B2	13	C	N3-C4	-6.58	1.29	1.33
59	A5	81	A	C6-N1	-6.58	1.30	1.35
59	A5	302	A	C5-C4	-6.58	1.34	1.38
59	A5	1089	U	N1-C2	-6.58	1.32	1.38
59	A5	1638	G	C5-C4	-6.58	1.33	1.38
59	A5	2152	C	N1-C6	-6.58	1.33	1.37
59	A5	3495	G	N1-C2	-6.58	1.32	1.37
56	A8	40	A	C5-C6	-6.58	1.35	1.41
58	B2	1207	G	C6-N1	-6.58	1.34	1.39
59	A5	1691	A	N3-C4	-6.58	1.30	1.34
59	A5	2668	C	N3-C4	-6.58	1.29	1.33
59	A5	770	C	C4-C5	-6.58	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	101	A	C2-N3	-6.58	1.27	1.33
58	B2	1195	G	C5-C4	-6.58	1.33	1.38
59	A5	548	A	N7-C5	-6.58	1.35	1.39
59	A5	1194	A	N9-C4	6.58	1.41	1.37
59	A5	1334	A	C6-N1	-6.58	1.30	1.35
59	A5	1369	C	N1-C2	-6.58	1.33	1.40
59	A5	1633	G	N9-C8	-6.58	1.33	1.37
59	A5	3171	A	N9-C8	-6.58	1.32	1.37
59	A5	3279	A	N9-C4	-6.58	1.33	1.37
59	A5	3671	C	C4-C5	-6.58	1.37	1.43
59	A5	3728	A	C8-N7	-6.58	1.26	1.31
58	B2	1966	U	C4-C5	-6.57	1.37	1.43
59	A5	362	A	N9-C8	-6.57	1.32	1.37
59	A5	995	G	N3-C4	-6.57	1.30	1.35
59	A5	1057	G	N9-C4	-6.57	1.32	1.38
59	A5	1131	C	N3-C4	-6.57	1.29	1.33
59	A5	1615	G	N9-C4	-6.57	1.32	1.38
59	A5	25	G	N1-C2	-6.57	1.32	1.37
59	A5	2805	C	N3-C4	-6.57	1.29	1.33
59	A5	354	A	N7-C5	-6.57	1.35	1.39
59	A5	1329	G	C2-N3	-6.57	1.27	1.32
59	A5	2545	A	N7-C5	-6.57	1.35	1.39
59	A5	2768	A	C8-N7	-6.57	1.26	1.31
59	A5	3332	G	C5-C4	-6.57	1.33	1.38
58	B2	1196	G	C6-N1	-6.57	1.34	1.39
59	A5	1157	C	N1-C2	-6.57	1.33	1.40
59	A5	556	A	N7-C5	-6.57	1.35	1.39
59	A5	2174	A	N9-C4	-6.57	1.33	1.37
59	A5	2746	A	C6-N1	-6.57	1.30	1.35
58	B2	1112	A	C6-N1	-6.57	1.30	1.35
59	A5	422	G	N1-C2	-6.57	1.32	1.37
59	A5	812	U	C2-O2	-6.57	1.16	1.22
59	A5	1056	G	N9-C4	-6.57	1.32	1.38
59	A5	1087	G	N9-C4	-6.57	1.32	1.38
59	A5	1377	A	N3-C4	-6.57	1.30	1.34
59	A5	2559	C	N3-C4	-6.57	1.29	1.33
58	B2	1922	A	N7-C5	-6.56	1.35	1.39
59	A5	2522	A	N3-C4	-6.56	1.30	1.34
59	A5	2527	A	N9-C4	-6.56	1.33	1.37
59	A5	1544	U	N1-C2	-6.56	1.32	1.38
59	A5	1756	G	C8-N7	-6.56	1.27	1.30
59	A5	3145	U	C4-C5	-6.56	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	98	G	N7-C5	-6.56	1.35	1.39
59	A5	107	G	C8-N7	-6.56	1.27	1.30
59	A5	547	U	C2-N3	-6.56	1.33	1.37
59	A5	2482	C	N1-C6	-6.56	1.33	1.37
59	A5	96	G	C8-N7	-6.56	1.27	1.30
59	A5	2654	G	N9-C8	-6.56	1.33	1.37
55	A7	97	G	N9-C4	-6.56	1.32	1.38
59	A5	3399	C	C4-C5	-6.56	1.37	1.43
59	A5	36	U	N1-C2	-6.56	1.32	1.38
59	A5	89	A	C5-C4	-6.56	1.34	1.38
59	A5	816	A	C5-C6	-6.56	1.35	1.41
59	A5	818	A	N9-C8	-6.56	1.32	1.37
59	A5	1301	A	N9-C4	-6.56	1.33	1.37
59	A5	372	U	N1-C6	-6.55	1.32	1.38
59	A5	379	A	C5-C6	-6.55	1.35	1.41
59	A5	382	G	C2-N2	-6.55	1.27	1.34
59	A5	804	C	C4-C5	-6.55	1.37	1.43
59	A5	1083	A	C2-N3	-6.55	1.27	1.33
59	A5	2509	G	C5-C4	-6.55	1.33	1.38
59	A5	3413	C	C2-N3	-6.55	1.30	1.35
59	A5	1648	A	C8-N7	-6.55	1.26	1.31
59	A5	2802	A	N3-C4	-6.55	1.30	1.34
59	A5	3140	G	C2-N3	-6.55	1.27	1.32
58	B2	1981	G	N9-C8	-6.55	1.33	1.37
59	A5	3757	U	C2-N3	-6.55	1.33	1.37
59	A5	2178	U	C2-N3	-6.55	1.33	1.37
59	A5	782	G	N1-C2	-6.55	1.32	1.37
59	A5	1082	A	C2-N3	-6.55	1.27	1.33
59	A5	1385	G	C8-N7	-6.55	1.27	1.30
59	A5	1618	A	N9-C4	-6.55	1.33	1.37
59	A5	2680	G	N9-C8	-6.55	1.33	1.37
59	A5	203	A	N9-C4	-6.55	1.33	1.37
59	A5	999	U	C2-N3	-6.55	1.33	1.37
59	A5	1174	G	C8-N7	-6.55	1.27	1.30
59	A5	1208	U	C5-C6	-6.55	1.28	1.34
59	A5	1964	A	N9-C4	-6.55	1.33	1.37
59	A5	2778	G	N1-C2	-6.55	1.32	1.37
59	A5	3331	A	C5-C4	-6.55	1.34	1.38
59	A5	3496	U	C2-O2	-6.55	1.16	1.22
56	A8	36	A	N7-C5	-6.54	1.35	1.39
58	B2	627	A	N3-C4	-6.54	1.30	1.34
58	B2	1113	A	N3-C4	-6.54	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1190	G	N9-C8	-6.54	1.33	1.37
59	A5	1509	A	C5-C4	-6.54	1.34	1.38
59	A5	3234	A	C5-C4	-6.54	1.34	1.38
59	A5	3883	G	C5-C4	-6.54	1.33	1.38
56	A8	32	G	C5-C4	-6.54	1.33	1.38
59	A5	1056	G	C5-C4	-6.54	1.33	1.38
59	A5	63	G	N9-C8	-6.54	1.33	1.37
59	A5	357	C	N1-C2	-6.54	1.33	1.40
59	A5	359	G	N9-C8	-6.54	1.33	1.37
59	A5	850	A	C5-C4	-6.54	1.34	1.38
59	A5	1722	U	N1-C6	-6.54	1.32	1.38
59	A5	2199	A	C6-N1	-6.54	1.30	1.35
59	A5	3337	G	C6-N1	-6.54	1.34	1.39
59	A5	748	A	N9-C4	-6.54	1.33	1.37
59	A5	1019	U	N1-C6	-6.54	1.32	1.38
59	A5	3918	A	N9-C4	-6.54	1.33	1.37
59	A5	816	A	C6-N1	-6.54	1.30	1.35
59	A5	1059	A	N7-C5	-6.54	1.35	1.39
59	A5	1736	G	C5-C4	-6.54	1.33	1.38
59	A5	2546	G	N9-C4	-6.54	1.32	1.38
59	A5	3165	U	N1-C2	-6.54	1.32	1.38
59	A5	3192	C	N3-C4	-6.54	1.29	1.33
59	A5	1064	G	C5-C4	-6.53	1.33	1.38
59	A5	1622	U	C5-C6	-6.53	1.28	1.34
59	A5	1732	A	N9-C8	-6.53	1.32	1.37
59	A5	2167	G	C5-C6	-6.53	1.35	1.42
59	A5	847	A	N9-C4	-6.53	1.33	1.37
59	A5	1026	G	C2-N3	-6.53	1.27	1.32
59	A5	3146	G	C6-N1	-6.53	1.34	1.39
59	A5	90	G	C5-C4	-6.53	1.33	1.38
59	A5	298	U	C4-C5	-6.53	1.37	1.43
59	A5	337	A	C6-N1	-6.53	1.30	1.35
59	A5	1977	A	C5-C4	-6.53	1.34	1.38
59	A5	2733	G	N9-C8	-6.53	1.33	1.37
59	A5	3318	A	N7-C5	-6.53	1.35	1.39
59	A5	3683	G	C5-C4	-6.53	1.33	1.38
59	A5	103	A	C5-C4	-6.53	1.34	1.38
59	A5	1740	C	N1-C6	-6.53	1.33	1.37
59	A5	2095	U	N1-C2	-6.53	1.32	1.38
59	A5	2679	U	N1-C2	-6.53	1.32	1.38
59	A5	3647	A	N9-C4	-6.53	1.33	1.37
59	A5	810	A	C6-N6	-6.53	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1876	G	C5-C4	-6.53	1.33	1.38
59	A5	2526	A	C8-N7	-6.53	1.26	1.31
59	A5	3412	U	C5-C6	-6.53	1.28	1.34
59	A5	3625	U	N3-C4	-6.53	1.32	1.38
59	A5	1169	C	N1-C6	-6.53	1.33	1.37
59	A5	1562	U	N1-C2	-6.53	1.32	1.38
59	A5	2734	A	C6-N6	-6.53	1.28	1.33
59	A5	2764	A	C8-N7	-6.53	1.26	1.31
59	A5	3136	U	N3-C4	-6.53	1.32	1.38
59	A5	3341	C	N1-C2	-6.53	1.33	1.40
59	A5	3508	G	N9-C8	-6.53	1.33	1.37
59	A5	3265	C	N1-C6	-6.52	1.33	1.37
59	A5	30	A	N7-C5	-6.52	1.35	1.39
59	A5	1063	C	C5-C6	-6.52	1.29	1.34
59	A5	2524	A	C5-C6	-6.52	1.35	1.41
59	A5	2663	C	C4-C5	-6.52	1.37	1.43
59	A5	382	G	C6-O6	-6.52	1.18	1.24
59	A5	1082	A	N9-C8	-6.52	1.32	1.37
59	A5	1609	U	N1-C6	-6.52	1.32	1.38
59	A5	1661	C	C4-C5	-6.52	1.37	1.43
59	A5	1870	G	C5-C4	-6.52	1.33	1.38
59	A5	2486	A	C5-C4	-6.52	1.34	1.38
59	A5	2655	C	N3-C4	-6.52	1.29	1.33
59	A5	836	G	N7-C5	-6.52	1.35	1.39
59	A5	1777	A	C5-C6	-6.52	1.35	1.41
59	A5	3294	A	N3-C4	-6.52	1.30	1.34
59	A5	3504	G	C6-N1	-6.52	1.34	1.39
59	A5	3130	G	N7-C5	-6.52	1.35	1.39
59	A5	357	C	C4-C5	-6.51	1.37	1.43
59	A5	385	A	C6-N6	-6.51	1.28	1.33
59	A5	1107	G	N9-C8	-6.51	1.33	1.37
59	A5	1315	A	C5-C4	-6.51	1.34	1.38
59	A5	1356	G	N3-C4	-6.51	1.30	1.35
59	A5	2500	G	C5-C6	-6.51	1.35	1.42
59	A5	2788	U	C2-N3	-6.51	1.33	1.37
54	A9	16	U	N1-C2	-6.51	1.32	1.38
59	A5	364	U	C2-N3	-6.51	1.33	1.37
59	A5	1350	A	N9-C8	-6.51	1.32	1.37
59	A5	3508	G	N7-C5	-6.51	1.35	1.39
56	A8	23	G	C8-N7	-6.51	1.27	1.30
59	A5	447	G	C2-N3	-6.51	1.27	1.32
59	A5	998	G	N9-C8	-6.51	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1402	U	N1-C6	-6.51	1.32	1.38
59	A5	2515	C	C5-C6	-6.51	1.29	1.34
59	A5	2745	A	C6-N6	-6.51	1.28	1.33
59	A5	3446	G	C5-C6	-6.51	1.35	1.42
59	A5	3472	A	C2'-C1'	6.51	1.60	1.53
56	A8	32	G	N1-C2	-6.51	1.32	1.37
59	A5	2206	U	P-O5'	-6.51	1.53	1.59
59	A5	296	C	N3-C4	-6.51	1.29	1.33
59	A5	2222	G	C2-N3	-6.51	1.27	1.32
59	A5	3451	A	N9-C8	-6.51	1.32	1.37
59	A5	784	G	N1-C2	-6.50	1.32	1.37
59	A5	1417	G	N9-C8	-6.50	1.33	1.37
58	B2	1988	G	C5-C4	-6.50	1.33	1.38
59	A5	1155	U	N3-C4	-6.50	1.32	1.38
59	A5	1339	U	C2-N3	-6.50	1.33	1.37
59	A5	3483	G	N7-C5	-6.50	1.35	1.39
59	A5	841	A	C5-C4	-6.50	1.34	1.38
59	A5	1207	G	N1-C2	-6.50	1.32	1.37
59	A5	1706	G	C5-C4	-6.50	1.33	1.38
59	A5	1774	C	C4-C5	-6.50	1.37	1.43
59	A5	3136	U	C2-N3	-6.50	1.33	1.37
59	A5	35	C	C4-C5	-6.50	1.37	1.43
59	A5	989	A	N1-C2	-6.50	1.28	1.34
59	A5	1110	G	C2-N3	-6.50	1.27	1.32
59	A5	3399	C	N3-C4	-6.50	1.29	1.33
56	A8	35	G	N1-C2	-6.50	1.32	1.37
59	A5	309	C	C4-C5	-6.50	1.37	1.43
59	A5	828	G	C5-C4	-6.50	1.33	1.38
59	A5	1786	G	C5-C4	-6.50	1.33	1.38
59	A5	2223	C	N1-C6	-6.50	1.33	1.37
59	A5	2802	A	C8-N7	-6.50	1.27	1.31
59	A5	3451	A	N3-C4	-6.50	1.30	1.34
59	A5	1562	U	C2-N3	-6.50	1.33	1.37
56	A8	8	A	C5-C4	-6.49	1.34	1.38
59	A5	107	G	C6-N1	-6.49	1.35	1.39
59	A5	306	C	N1-C6	-6.49	1.33	1.37
59	A5	999	U	N1-C2	-6.49	1.32	1.38
59	A5	1629	C	N3-C4	-6.49	1.29	1.33
59	A5	2541	C	C2-N3	-6.49	1.30	1.35
59	A5	1379	U	C2-N3	-6.49	1.33	1.37
56	A8	98	U	N1-C2	-6.49	1.32	1.38
59	A5	86	C	N1-C2	-6.49	1.33	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1756	G	N1-C2	-6.49	1.32	1.37
59	A5	2794	U	C4-O4	-6.49	1.18	1.23
55	A7	96	U	N1-C6	-6.49	1.32	1.38
59	A5	1359	G	N1-C2	-6.49	1.32	1.37
59	A5	2502	G	N9-C8	-6.49	1.33	1.37
58	B2	1056	C	N3-C4	-6.49	1.29	1.33
59	A5	1201	U	C2-N3	-6.49	1.33	1.37
59	A5	2207	A	C8-N7	-6.49	1.27	1.31
59	A5	2613	C	N3-C4	-6.49	1.29	1.33
59	A5	787	C	C5-C6	-6.49	1.29	1.34
59	A5	1000	G	N9-C8	-6.49	1.33	1.37
59	A5	2180	A	N7-C5	-6.49	1.35	1.39
59	A5	2710	A	C5-C4	-6.49	1.34	1.38
59	A5	2733	G	N3-C4	-6.49	1.30	1.35
59	A5	1060	G	C5-C4	-6.48	1.33	1.38
59	A5	1950	A	C5-C4	-6.48	1.34	1.38
59	A5	3672	U	N1-C2	-6.48	1.32	1.38
2	CA	208	GLU	CB-CG	-6.48	1.39	1.52
59	A5	246	C	N3-C4	-6.48	1.29	1.33
59	A5	1788	G	C8-N7	-6.48	1.27	1.30
59	A5	3285	G	C6-N1	-6.48	1.35	1.39
59	A5	93	G	N1-C2	-6.48	1.32	1.37
59	A5	214	A	C5-C6	-6.48	1.35	1.41
59	A5	1611	G	C8-N7	-6.48	1.27	1.30
59	A5	2622	A	C5-C4	-6.48	1.34	1.38
59	A5	297	U	C2-O2	-6.48	1.16	1.22
59	A5	880	A	N7-C5	-6.48	1.35	1.39
59	A5	1011	U	C4-C5	-6.48	1.37	1.43
59	A5	1352	U	C4-C5	-6.48	1.37	1.43
59	A5	1676	A	C6-N1	-6.48	1.31	1.35
59	A5	826	A	C5-C4	-6.48	1.34	1.38
59	A5	2518	A	C6-N1	-6.48	1.31	1.35
55	A7	11	A	N7-C5	-6.47	1.35	1.39
56	A8	28	A	N7-C5	-6.47	1.35	1.39
56	A8	30	G	C6-N1	-6.47	1.35	1.39
59	A5	95	G	C2-N3	-6.47	1.27	1.32
59	A5	1129	A	N7-C5	-6.47	1.35	1.39
59	A5	1154	U	C4-C5	-6.47	1.37	1.43
59	A5	2241	U	C4-C5	-6.47	1.37	1.43
59	A5	2248	A	N9-C4	-6.47	1.33	1.37
59	A5	3618	A	C5-C4	-6.47	1.34	1.38
33	CP	144	CYS	CB-SG	-6.47	1.71	1.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	342	A	N7-C5	-6.47	1.35	1.39
59	A5	1118	C	N1-C6	-6.47	1.33	1.37
59	A5	1348	G	N7-C5	-6.47	1.35	1.39
59	A5	1613	A	C2-N3	-6.47	1.27	1.33
59	A5	2707	C	C4-C5	-6.47	1.37	1.43
59	A5	3148	C	N1-C6	-6.47	1.33	1.37
59	A5	3495	G	N9-C8	-6.47	1.33	1.37
59	A5	48	U	N1-C2	-6.47	1.32	1.38
59	A5	3906	U	N3-C4	-6.47	1.32	1.38
59	A5	1412	A	N9-C8	-6.47	1.32	1.37
59	A5	2736	A	N9-C8	-6.47	1.32	1.37
59	A5	2811	G	C2-N3	-6.47	1.27	1.32
58	B2	1228	G	N7-C5	-6.47	1.35	1.39
59	A5	1793	C	N3-C4	-6.46	1.29	1.33
59	A5	1873	A	N3-C4	-6.46	1.30	1.34
59	A5	2761	A	C5-C6	-6.46	1.35	1.41
59	A5	3493	U	C2-N3	-6.46	1.33	1.37
56	A8	98	U	C2-N3	-6.46	1.33	1.37
59	A5	1526	G	N9-C8	-6.46	1.33	1.37
58	B2	350	U	N1-C6	-6.46	1.32	1.38
59	A5	349	C	C4-C5	-6.46	1.37	1.43
59	A5	1170	U	N3-C4	-6.46	1.32	1.38
59	A5	1686	A	C8-N7	-6.46	1.27	1.31
59	A5	2633	A	N9-C4	-6.46	1.33	1.37
59	A5	2729	U	C2-N3	-6.46	1.33	1.37
59	A5	2771	G	C6-N1	-6.46	1.35	1.39
59	A5	3642	G	C5-C4	-6.46	1.33	1.38
58	B2	359	C	N1-C6	-6.46	1.33	1.37
58	B2	1078	G	N7-C5	-6.46	1.35	1.39
59	A5	1622	U	N3-C4	-6.46	1.32	1.38
59	A5	1693	C	C5-C6	-6.46	1.29	1.34
59	A5	2797	A	C2-N3	-6.46	1.27	1.33
59	A5	3233	C	N3-C4	-6.46	1.29	1.33
58	B2	988	G	N7-C5	-6.46	1.35	1.39
58	B2	1210	G	N7-C5	-6.46	1.35	1.39
59	A5	330	C	N3-C4	-6.46	1.29	1.33
59	A5	339	C	C4-C5	-6.46	1.37	1.43
59	A5	1409	G	C8-N7	-6.46	1.27	1.30
59	A5	1619	C	C2-N3	-6.46	1.30	1.35
59	A5	1660	G	N7-C5	-6.46	1.35	1.39
59	A5	1778	A	N3-C4	-6.46	1.30	1.34
59	A5	2176	G	C8-N7	-6.46	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2761	A	C8-N7	-6.46	1.27	1.31
59	A5	356	A	N9-C4	-6.46	1.33	1.37
59	A5	2156	U	N1-C2	-6.46	1.32	1.38
59	A5	2740	C	C4-N4	-6.46	1.28	1.33
59	A5	2759	G	C6-O6	-6.46	1.18	1.24
59	A5	371	G	C5-C6	-6.45	1.35	1.42
59	A5	1344	A	C5-C4	-6.45	1.34	1.38
59	A5	2503	G	N1-C2	-6.45	1.32	1.37
59	A5	1604	G	N7-C5	-6.45	1.35	1.39
59	A5	2800	C	N1-C6	-6.45	1.33	1.37
59	A5	1336	U	C2-N3	-6.45	1.33	1.37
59	A5	1717	A	C5-C4	-6.45	1.34	1.38
59	A5	2677	A	N9-C4	-6.45	1.33	1.37
59	A5	386	G	N9-C8	-6.45	1.33	1.37
59	A5	2250	G	C5-C4	-6.45	1.33	1.38
59	A5	2519	U	N3-C4	-6.45	1.32	1.38
56	A8	12	G	N1-C2	-6.44	1.32	1.37
59	A5	2738	C	C2-O2	-6.44	1.18	1.24
59	A5	3620	G	N7-C5	-6.44	1.35	1.39
56	A8	28	A	N9-C8	-6.44	1.32	1.37
59	A5	383	A	N3-C4	-6.44	1.30	1.34
59	A5	1376	U	C2-N3	-6.44	1.33	1.37
59	A5	1540	U	C2-N3	-6.44	1.33	1.37
59	A5	1590	A	N9-C4	-6.44	1.33	1.37
59	A5	1673	C	C2-N3	-6.44	1.30	1.35
59	A5	1882	G	C6-N1	-6.44	1.35	1.39
59	A5	3545	C	C4-C5	-6.44	1.37	1.43
59	A5	3618	A	N9-C8	-6.44	1.32	1.37
55	A7	92	C	C4-C5	-6.44	1.37	1.43
59	A5	1158	C	N1-C6	-6.44	1.33	1.37
59	A5	2113	A	N3-C4	-6.44	1.30	1.34
59	A5	3552	G	C5-C4	-6.44	1.33	1.38
59	A5	60	G	N9-C8	-6.44	1.33	1.37
59	A5	345	A	C5-C4	-6.44	1.34	1.38
59	A5	370	A	C6-N1	-6.44	1.31	1.35
59	A5	847	A	N3-C4	-6.44	1.30	1.34
59	A5	1078	G	C6-N1	-6.44	1.35	1.39
59	A5	1690	U	C2-O2	-6.44	1.16	1.22
59	A5	2193	C	N1-C6	-6.44	1.33	1.37
59	A5	3410	G	C8-N7	-6.44	1.27	1.30
59	A5	3461	C	N1-C6	-6.44	1.33	1.37
59	A5	1377	A	C5-C6	-6.44	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1008	A	C6-N1	-6.43	1.31	1.35
59	A5	811	G	N7-C5	-6.43	1.35	1.39
59	A5	994	U	N1-C2	-6.43	1.32	1.38
59	A5	2514	U	C4-C5	-6.43	1.37	1.43
59	A5	3612	A	C5-C4	-6.43	1.34	1.38
59	A5	3623	G	C5-C4	-6.43	1.33	1.38
58	B2	1027	A	N7-C5	-6.43	1.35	1.39
59	A5	1644	C	C5-C6	-6.43	1.29	1.34
58	B2	1957	A	N7-C5	-6.43	1.35	1.39
59	A5	1362	G	N7-C5	-6.43	1.35	1.39
59	A5	1894	G	C5-C4	-6.43	1.33	1.38
59	A5	2546	G	N1-C2	-6.43	1.32	1.37
59	A5	3367	C	N1-C6	-6.43	1.33	1.37
59	A5	1533	A	N3-C4	-6.43	1.30	1.34
59	A5	2737	C	C4-N4	-6.43	1.28	1.33
59	A5	3506	U	N1-C6	-6.43	1.32	1.38
59	A5	1684	G	N9-C8	-6.42	1.33	1.37
59	A5	3587	U	C2-O2	-6.42	1.16	1.22
59	A5	106	A	C5-C4	-6.42	1.34	1.38
59	A5	1346	C	C4-C5	-6.42	1.37	1.43
59	A5	1687	U	C4-O4	-6.42	1.18	1.23
59	A5	769	U	C2-N3	-6.42	1.33	1.37
59	A5	1035	G	N9-C4	-6.42	1.32	1.38
59	A5	1177	U	C2-N3	-6.42	1.33	1.37
59	A5	2808	G	C5-C4	-6.42	1.33	1.38
59	A5	60	G	C8-N7	-6.42	1.27	1.30
59	A5	2720	U	C2-O2	-6.42	1.16	1.22
59	A5	2732	C	C4-C5	-6.42	1.37	1.43
58	B2	1056	C	N1-C6	-6.42	1.33	1.37
58	B2	1207	G	N9-C8	-6.42	1.33	1.37
58	B2	1215	G	N1-C2	-6.42	1.32	1.37
59	A5	2651	G	N3-C4	-6.42	1.30	1.35
59	A5	3657	A	C5-C4	-6.42	1.34	1.38
59	A5	1658	G	N7-C5	-6.42	1.35	1.39
59	A5	2235	G	C2-N3	-6.42	1.27	1.32
59	A5	2736	A	N1-C2	-6.42	1.28	1.34
59	A5	1005	G	N3-C4	-6.41	1.30	1.35
59	A5	1321	G	C8-N7	-6.41	1.27	1.30
59	A5	2196	U	C2-O2	-6.41	1.16	1.22
59	A5	71	A	N7-C5	-6.41	1.35	1.39
59	A5	356	A	C6-N1	-6.41	1.31	1.35
59	A5	1028	U	C4-C5	-6.41	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3603	C	N1-C6	-6.41	1.33	1.37
59	A5	1362	G	C8-N7	-6.41	1.27	1.30
59	A5	2741	A	C6-N6	-6.41	1.28	1.33
59	A5	3167	A	N7-C5	-6.41	1.35	1.39
59	A5	3262	A	N7-C5	-6.41	1.35	1.39
59	A5	3449	G	C5-C4	-6.41	1.33	1.38
56	A8	101	A	C8-N7	-6.41	1.27	1.31
59	A5	80	G	N9-C8	-6.41	1.33	1.37
59	A5	771	A	C5-C6	-6.41	1.35	1.41
59	A5	1274	A	N9-C4	-6.41	1.34	1.37
59	A5	1649	G	C2-N3	-6.41	1.27	1.32
59	A5	993	A	N9-C4	-6.41	1.34	1.37
59	A5	2716	C	C5-C6	-6.41	1.29	1.34
59	A5	809	G	C2-N2	-6.41	1.28	1.34
59	A5	997	U	N3-C4	-6.41	1.32	1.38
59	A5	2103	G	C2-N3	-6.41	1.27	1.32
59	A5	3549	C	N1-C6	-6.41	1.33	1.37
58	B2	1961	A	C5-C4	-6.40	1.34	1.38
59	A5	372	U	C4-C5	-6.40	1.37	1.43
59	A5	1272	G	N9-C8	-6.40	1.33	1.37
55	A7	94	C	N3-C4	-6.40	1.29	1.33
56	A8	35	G	N9-C8	-6.40	1.33	1.37
56	A8	55	G	C5-C4	-6.40	1.33	1.38
58	B2	1078	G	C6-N1	-6.40	1.35	1.39
58	B2	1969	G	C5-C4	-6.40	1.33	1.38
59	A5	1053	G	C5-C4	-6.40	1.33	1.38
59	A5	1368	A	N9-C8	-6.40	1.32	1.37
59	A5	1652	U	C4-C5	-6.40	1.37	1.43
59	A5	3883	G	C2-N3	-6.40	1.27	1.32
59	A5	381	G	N3-C4	-6.40	1.30	1.35
59	A5	2726	A	C5-C6	-6.40	1.35	1.41
56	A8	23	G	N9-C4	-6.40	1.32	1.38
59	A5	813	C	N3-C4	-6.40	1.29	1.33
59	A5	1376	U	N3-C4	-6.40	1.32	1.38
59	A5	1563	A	C6-N1	6.40	1.40	1.35
59	A5	3131	C	C2-N3	-6.40	1.30	1.35
59	A5	3541	A	N9-C8	-6.40	1.32	1.37
59	A5	3657	A	N9-C4	-6.40	1.34	1.37
59	A5	81	A	N7-C5	-6.39	1.35	1.39
59	A5	783	G	C5-C4	-6.39	1.33	1.38
59	A5	812	U	N1-C6	-6.39	1.32	1.38
59	A5	3146	G	N1-C2	-6.39	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3614	U	N1-C6	-6.39	1.32	1.38
6	CC	39	VAL	CB-CG1	-6.39	1.39	1.52
59	A5	1356	G	C5-C6	-6.39	1.35	1.42
59	A5	1664	C	N3-C4	-6.39	1.29	1.33
59	A5	2774	G	C6-N1	-6.39	1.35	1.39
59	A5	1167	A	N9-C4	-6.39	1.34	1.37
59	A5	1692	G	C2-N3	-6.39	1.27	1.32
58	B2	1216	C	N3-C4	-6.39	1.29	1.33
59	A5	299	G	C6-N1	-6.39	1.35	1.39
58	B2	1970	U	N1-C2	-6.39	1.32	1.38
59	A5	1052	U	C2-N3	-6.39	1.33	1.37
59	A5	1749	A	N9-C8	-6.39	1.32	1.37
59	A5	1772	G	C5-C6	-6.39	1.35	1.42
59	A5	1894	G	N7-C5	-6.39	1.35	1.39
59	A5	2653	A	N9-C8	-6.39	1.32	1.37
59	A5	2521	A	N7-C5	-6.39	1.35	1.39
59	A5	26	G	N1-C2	-6.38	1.32	1.37
59	A5	2208	G	C2-N2	-6.38	1.28	1.34
59	A5	3337	G	C5-C4	-6.38	1.33	1.38
59	A5	92	A	N7-C5	-6.38	1.35	1.39
59	A5	381	G	C5-C6	-6.38	1.35	1.42
59	A5	1117	A	C5-C4	-6.38	1.34	1.38
59	A5	3510	U	N1-C2	-6.38	1.32	1.38
59	A5	3579	C	N1-C6	-6.38	1.33	1.37
59	A5	418	G	N7-C5	-6.38	1.35	1.39
59	A5	1025	U	C4-O4	-6.38	1.18	1.23
59	A5	1671	U	C4-C5	-6.38	1.37	1.43
59	A5	3445	C	N1-C6	-6.38	1.33	1.37
59	A5	326	A	N9-C4	-6.38	1.34	1.37
59	A5	1596	A	N9-C4	6.38	1.41	1.37
59	A5	3163	U	C2-N3	-6.38	1.33	1.37
59	A5	29	U	N3-C4	-6.38	1.32	1.38
59	A5	800	C	C5-C6	-6.38	1.29	1.34
59	A5	1661	C	N3-C4	-6.38	1.29	1.33
59	A5	3673	G	C8-N7	-6.38	1.27	1.30
59	A5	386	G	C6-N1	-6.38	1.35	1.39
59	A5	826	A	N7-C5	-6.38	1.35	1.39
59	A5	2564	U	C5-C6	-6.37	1.28	1.34
59	A5	1007	A	C5-C4	-6.37	1.34	1.38
59	A5	1533	A	C5-C6	-6.37	1.35	1.41
59	A5	1607	A	N7-C5	-6.37	1.35	1.39
59	A5	3279	A	N7-C5	-6.37	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2201	U	C2-N3	-6.37	1.33	1.37
58	B2	1857	U	C2-N3	-6.37	1.33	1.37
59	A5	1746	A	N3-C4	-6.37	1.31	1.34
59	A5	2526	A	C2'-C1'	-6.37	1.46	1.53
59	A5	3474	G	N9-C8	-6.37	1.33	1.37
59	A5	92	A	N9-C8	-6.37	1.32	1.37
59	A5	110	A	N7-C5	-6.37	1.35	1.39
59	A5	1019	U	C4-C5	-6.37	1.37	1.43
59	A5	1145	C	C2-N3	-6.37	1.30	1.35
59	A5	1152	A	N7-C5	-6.37	1.35	1.39
59	A5	2760	G	N3-C4	-6.37	1.30	1.35
59	A5	3611	C	N1-C6	-6.37	1.33	1.37
59	A5	1080	G	N1-C2	-6.36	1.32	1.37
59	A5	2714	U	C2-N3	-6.36	1.33	1.37
59	A5	3497	G	C5-C4	-6.36	1.33	1.38
58	B2	1063	G	N3-C4	-6.36	1.30	1.35
59	A5	1321	G	C5-C4	-6.36	1.33	1.38
59	A5	1675	G	C6-N1	-6.36	1.35	1.39
59	A5	1756	G	N7-C5	-6.36	1.35	1.39
59	A5	1764	G	C5-C6	-6.36	1.35	1.42
58	B2	1228	G	C5-C6	-6.36	1.35	1.42
59	A5	2500	G	N3-C4	-6.36	1.31	1.35
59	A5	2504	A	C5-C4	-6.36	1.34	1.38
59	A5	3449	G	N9-C4	-6.36	1.32	1.38
59	A5	67	A	C5-C4	-6.36	1.34	1.38
59	A5	292	G	C5-C4	-6.36	1.33	1.38
59	A5	1131	C	C4-C5	-6.36	1.37	1.43
59	A5	2239	C	C4-C5	-6.36	1.37	1.43
59	A5	3678	G	C6-N1	-6.36	1.35	1.39
56	A8	10	C	N3-C4	-6.35	1.29	1.33
59	A5	240	G	N3-C4	-6.35	1.31	1.35
59	A5	438	G	C5-C6	-6.35	1.35	1.42
59	A5	1642	G	N7-C5	-6.35	1.35	1.39
59	A5	3874	A	N7-C5	-6.35	1.35	1.39
59	A5	114	G	C6-N1	-6.35	1.35	1.39
59	A5	1094	A	C2-N3	-6.35	1.27	1.33
59	A5	2742	G	C2-N3	-6.35	1.27	1.32
59	A5	3350	U	C5-C6	-6.35	1.28	1.34
59	A5	3498	A	N3-C4	-6.35	1.31	1.34
59	A5	1658	G	C5-C4	-6.35	1.33	1.38
59	A5	2779	A	C5-C4	-6.35	1.34	1.38
59	A5	2234	C	N3-C4	-6.35	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2244	G	C6-N1	-6.35	1.35	1.39
59	A5	2722	U	N1-C2	-6.35	1.32	1.38
59	A5	794	G	C2-N3	-6.35	1.27	1.32
59	A5	1088	A	C5-C6	-6.35	1.35	1.41
59	A5	1549	A	C5-C6	-6.35	1.35	1.41
59	A5	2173	C	C5-C6	-6.35	1.29	1.34
59	A5	2239	C	N3-C4	-6.35	1.29	1.33
59	A5	3233	C	N1-C6	-6.35	1.33	1.37
59	A5	3318	A	N3-C4	-6.35	1.31	1.34
59	A5	3581	G	N1-C2	-6.35	1.32	1.37
56	A8	32	G	N7-C5	-6.35	1.35	1.39
59	A5	362	A	N1-C2	-6.35	1.28	1.34
59	A5	831	A	C5-C6	-6.35	1.35	1.41
59	A5	1109	G	N1-C2	-6.35	1.32	1.37
59	A5	1266	A	C5-C4	-6.35	1.34	1.38
58	B2	1986	A	N9-C4	-6.34	1.34	1.37
59	A5	94	C	C2-N3	-6.34	1.30	1.35
59	A5	1182	A	C5-C4	-6.34	1.34	1.38
59	A5	2711	C	C4-N4	-6.34	1.28	1.33
59	A5	2800	C	C4-C5	-6.34	1.37	1.43
56	A8	52	A	N9-C8	-6.34	1.32	1.37
58	B2	98	C	N1-C6	-6.34	1.33	1.37
58	B2	355	G	N3-C4	-6.34	1.31	1.35
58	B2	1114	A	N7-C5	-6.34	1.35	1.39
59	A5	1747	A	N3-C4	-6.34	1.31	1.34
59	A5	373	A	C5-C4	-6.34	1.34	1.38
59	A5	1081	C	C5-C6	-6.34	1.29	1.34
59	A5	1207	G	C2-N3	-6.34	1.27	1.32
59	A5	1360	U	N3-C4	-6.34	1.32	1.38
59	A5	1749	A	C5-C4	-6.34	1.34	1.38
59	A5	2707	C	C5-C6	-6.34	1.29	1.34
59	A5	2726	A	N9-C8	-6.34	1.32	1.37
59	A5	3258	C	N3-C4	-6.34	1.29	1.33
59	A5	3524	G	N3-C4	-6.34	1.31	1.35
59	A5	2509	G	N9-C8	-6.34	1.33	1.37
59	A5	1561	G	N9-C8	-6.34	1.33	1.37
59	A5	2570	C	C5-C6	-6.34	1.29	1.34
59	A5	2659	A	N9-C8	-6.34	1.32	1.37
59	A5	3623	G	N9-C8	-6.34	1.33	1.37
59	A5	2531	A	C5-C4	-6.33	1.34	1.38
59	A5	3171	A	N7-C5	-6.33	1.35	1.39
59	A5	1349	A	N3-C4	-6.33	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1734	G	N3-C4	-6.33	1.31	1.35
59	A5	2529	G	N3-C4	-6.33	1.31	1.35
59	A5	2550	G	N1-C2	-6.33	1.32	1.37
59	A5	2622	A	N9-C8	-6.33	1.32	1.37
58	B2	1187	U	N3-C4	-6.33	1.32	1.38
59	A5	1322	U	N1-C2	-6.33	1.32	1.38
59	A5	1548	C	N3-C4	-6.33	1.29	1.33
59	A5	2096	C	C5-C6	-6.33	1.29	1.34
55	A7	89	G	C5-C6	-6.33	1.36	1.42
59	A5	61	A	N7-C5	-6.33	1.35	1.39
59	A5	87	U	C2-N3	-6.33	1.33	1.37
59	A5	386	G	N7-C5	-6.33	1.35	1.39
59	A5	1003	C	C2-N3	-6.33	1.30	1.35
59	A5	1779	G	C6-N1	-6.33	1.35	1.39
59	A5	1980	G	N1-C2	-6.33	1.32	1.37
59	A5	2178	U	C4-C5	-6.33	1.37	1.43
59	A5	2200	A	C5-C4	-6.33	1.34	1.38
59	A5	2524	A	C8-N7	-6.33	1.27	1.31
59	A5	3461	C	C4-C5	-6.33	1.37	1.43
59	A5	3574	A	N9-C4	-6.33	1.34	1.37
58	B2	318	U	C2-N3	-6.33	1.33	1.37
58	B2	1191	C	C2-N3	-6.33	1.30	1.35
58	B2	1973	G	C5-C4	-6.33	1.33	1.38
59	A5	999	U	C2-O2	-6.33	1.16	1.22
59	A5	1732	A	C6-N1	-6.33	1.31	1.35
59	A5	2548	G	C6-N1	-6.33	1.35	1.39
59	A5	2685	G	C5-C6	-6.33	1.36	1.42
59	A5	3885	C	N3-C4	-6.33	1.29	1.33
59	A5	1153	G	N9-C8	-6.33	1.33	1.37
59	A5	3515	C	C2-N3	-6.33	1.30	1.35
59	A5	748	A	C6-N1	-6.32	1.31	1.35
59	A5	1414	C	C2-N3	-6.32	1.30	1.35
59	A5	1681	G	C5-C4	-6.32	1.33	1.38
59	A5	2051	A	N9-C4	-6.32	1.34	1.37
59	A5	2484	G	C8-N7	-6.32	1.27	1.30
59	A5	1643	G	C5-C6	-6.32	1.36	1.42
59	A5	3474	G	N9-C4	-6.32	1.32	1.38
58	B2	1976	A	C6-N1	-6.32	1.31	1.35
59	A5	28	C	N1-C6	-6.32	1.33	1.37
59	A5	3671	C	N1-C6	-6.32	1.33	1.37
59	A5	380	G	C6-N1	-6.32	1.35	1.39
59	A5	775	U	C2-N3	-6.32	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1060	G	C2-N3	-6.32	1.27	1.32
59	A5	1105	U	N1-C2	-6.32	1.32	1.38
59	A5	3350	U	C4-C5	-6.32	1.37	1.43
59	A5	816	A	C8-N7	-6.32	1.27	1.31
59	A5	1154	U	N3-C4	-6.32	1.32	1.38
59	A5	1534	G	N9-C8	-6.32	1.33	1.37
59	A5	2148	C	C4-C5	-6.32	1.37	1.43
59	A5	2669	A	N9-C4	-6.32	1.34	1.37
59	A5	3408	C	N3-C4	-6.32	1.29	1.33
59	A5	3946	G	C2-N3	-6.32	1.27	1.32
59	A5	156	G	C6-N1	-6.32	1.35	1.39
59	A5	389	G	N1-C2	-6.32	1.32	1.37
59	A5	1038	G	N1-C2	-6.32	1.32	1.37
59	A5	1610	A	C6-N6	-6.32	1.28	1.33
59	A5	2232	U	C4-C5	-6.32	1.37	1.43
59	A5	2581	U	N1-C2	-6.32	1.32	1.38
59	A5	2208	G	C8-N7	-6.31	1.27	1.30
59	A5	2063	A	N9-C4	-6.31	1.34	1.37
59	A5	2198	G	C5-C6	-6.31	1.36	1.42
59	A5	2714	U	C4-C5	-6.31	1.37	1.43
59	A5	3590	C	C4-C5	-6.31	1.37	1.43
59	A5	1346	C	C4-N4	-6.31	1.28	1.33
59	A5	2624	G	C5-C4	-6.31	1.33	1.38
59	A5	3335	A	C8-N7	-6.31	1.27	1.31
59	A5	984	U	C2-N3	-6.31	1.33	1.37
59	A5	1673	C	N3-C4	-6.31	1.29	1.33
59	A5	3132	C	C2-N3	-6.31	1.30	1.35
59	A5	3405	U	C2-O2	-6.31	1.16	1.22
59	A5	3666	C	C4-C5	-6.31	1.38	1.43
59	A5	3760	A	N7-C5	-6.31	1.35	1.39
56	A8	100	G	C5-C6	-6.31	1.36	1.42
59	A5	1349	A	C5-C4	-6.31	1.34	1.38
59	A5	1747	A	N9-C4	-6.31	1.34	1.37
59	A5	2251	G	N9-C4	-6.31	1.32	1.38
59	A5	3225	C	N3-C4	-6.31	1.29	1.33
59	A5	807	A	C6-N6	-6.31	1.28	1.33
59	A5	916	C	N1-C6	-6.31	1.33	1.37
59	A5	1404	A	C8-N7	-6.31	1.27	1.31
59	A5	1624	G	N9-C8	-6.31	1.33	1.37
76	CW	49	VAL	CB-CG2	-6.31	1.39	1.52
59	A5	66	A	C5-C4	-6.30	1.34	1.38
59	A5	3253	G	C8-N7	-6.30	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3881	A	N3-C4	-6.30	1.31	1.34
59	A5	3252	G	C5-C4	-6.30	1.33	1.38
58	B2	361	G	N3-C4	-6.30	1.31	1.35
59	A5	845	C	N1-C6	-6.30	1.33	1.37
59	A5	1730	A	C6-N1	-6.30	1.31	1.35
59	A5	2092	U	C4-C5	-6.30	1.37	1.43
59	A5	3451	A	N7-C5	-6.30	1.35	1.39
59	A5	1752	G	N1-C2	-6.30	1.32	1.37
58	B2	1387	A	N9-C4	-6.30	1.34	1.37
59	A5	1130	U	N1-C2	-6.30	1.32	1.38
59	A5	1312	G	N9-C8	-6.30	1.33	1.37
59	A5	2690	A	N7-C5	-6.30	1.35	1.39
59	A5	2694	G	C5-C4	-6.30	1.33	1.38
58	B2	395	G	N7-C5	-6.30	1.35	1.39
59	A5	335	A	C6-N1	-6.30	1.31	1.35
59	A5	2096	C	N1-C6	-6.30	1.33	1.37
59	A5	3518	A	N7-C5	-6.30	1.35	1.39
59	A5	1391	A	N9-C8	-6.29	1.32	1.37
59	A5	3140	G	N9-C8	-6.29	1.33	1.37
55	A7	99	G	C6-N1	-6.29	1.35	1.39
58	B2	1184	U	C4-C5	-6.29	1.37	1.43
59	A5	64	A	C2-N3	-6.29	1.27	1.33
59	A5	789	G	C4'-C3'	-6.29	1.46	1.53
59	A5	815	A	C5-C6	-6.29	1.35	1.41
59	A5	1086	C	N1-C6	-6.29	1.33	1.37
59	A5	1511	C	N3-C4	-6.29	1.29	1.33
59	A5	2206	U	N3-C4	-6.29	1.32	1.38
59	A5	3526	C	C2-N3	-6.29	1.30	1.35
2	CA	202	VAL	CB-CG2	-6.29	1.39	1.52
59	A5	450	G	C5-C4	-6.29	1.33	1.38
59	A5	859	A	C5-C4	-6.29	1.34	1.38
59	A5	444	C	N1-C6	-6.29	1.33	1.37
59	A5	1731	G	N9-C8	-6.29	1.33	1.37
56	A8	26	U	C4-C5	-6.29	1.37	1.43
58	B2	413	C	N3-C4	-6.29	1.29	1.33
59	A5	808	G	N9-C4	-6.29	1.32	1.38
59	A5	1105	U	C5-C6	-6.29	1.28	1.34
59	A5	2743	C	C4-C5	-6.29	1.38	1.43
59	A5	2770	C	C5-C6	-6.29	1.29	1.34
59	A5	1683	U	C5-C6	-6.29	1.28	1.34
55	A7	78	C	C5-C6	-6.28	1.29	1.34
59	A5	351	A	N9-C4	-6.28	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	403	A	N3-C4	-6.28	1.31	1.34
59	A5	3499	G	N7-C5	-6.28	1.35	1.39
58	B2	1215	G	N9-C8	-6.28	1.33	1.37
59	A5	1076	A	N1-C2	-6.28	1.28	1.34
59	A5	1894	G	C8-N7	-6.28	1.27	1.30
59	A5	2218	G	P-O5'	-6.28	1.53	1.59
59	A5	2223	C	C4-N4	-6.28	1.28	1.33
58	B2	1067	G	C2-N3	-6.28	1.27	1.32
58	B2	1833	C	N1-C6	-6.28	1.33	1.37
59	A5	22	A	N3-C4	-6.28	1.31	1.34
59	A5	65	A	C5-C4	-6.28	1.34	1.38
59	A5	68	G	C8-N7	-6.28	1.27	1.30
59	A5	792	U	C2-N3	-6.28	1.33	1.37
59	A5	819	U	C4-C5	-6.28	1.37	1.43
59	A5	1121	A	N3-C4	-6.28	1.31	1.34
59	A5	3139	G	C5-C6	-6.28	1.36	1.42
55	A7	94	C	N1-C6	-6.28	1.33	1.37
58	B2	1189	G	N9-C4	-6.28	1.32	1.38
59	A5	549	A	C5-C6	-6.28	1.35	1.41
59	A5	837	A	N7-C5	-6.28	1.35	1.39
59	A5	1424	G	N7-C5	-6.28	1.35	1.39
59	A5	2712	U	C4-C5	-6.28	1.38	1.43
59	A5	2781	G	C5-C4	-6.28	1.33	1.38
59	A5	3137	A	N9-C4	-6.28	1.34	1.37
59	A5	1402	U	N3-C4	-6.27	1.32	1.38
59	A5	1553	C	C5-C6	-6.27	1.29	1.34
59	A5	2211	A	N3-C4	-6.27	1.31	1.34
59	A5	3293	G	N9-C8	-6.27	1.33	1.37
59	A5	3423	U	C4-C5	-6.27	1.38	1.43
56	A8	23	G	N1-C2	-6.27	1.32	1.37
59	A5	815	A	C8-N7	-6.27	1.27	1.31
59	A5	1982	U	N1-C2	-6.27	1.32	1.38
59	A5	2530	C	C5-C6	-6.27	1.29	1.34
59	A5	2754	G	C2-N2	-6.27	1.28	1.34
59	A5	1606	G	N3-C4	-6.27	1.31	1.35
59	A5	1621	A	N7-C5	-6.27	1.35	1.39
59	A5	161	G	C6-N1	-6.27	1.35	1.39
59	A5	815	A	N7-C5	-6.27	1.35	1.39
59	A5	1513	C	N1-C2	-6.27	1.33	1.40
59	A5	2164	G	N9-C8	-6.27	1.33	1.37
59	A5	2650	G	C2-N3	-6.27	1.27	1.32
59	A5	3623	G	N3-C4	-6.27	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1193	C	N1-C2	-6.26	1.33	1.40
59	A5	1085	U	N1-C6	-6.26	1.32	1.38
59	A5	1362	G	N9-C4	-6.26	1.32	1.38
59	A5	2178	U	C5-C6	-6.26	1.28	1.34
59	A5	3588	G	C2-N3	-6.26	1.27	1.32
59	A5	1697	U	N1-C2	-6.26	1.32	1.38
59	A5	2521	A	N9-C4	-6.26	1.34	1.37
59	A5	33	C	N1-C6	-6.26	1.33	1.37
59	A5	371	G	C8-N7	-6.26	1.27	1.30
59	A5	1623	G	N3-C4	-6.26	1.31	1.35
59	A5	1698	A	C5-C4	-6.26	1.34	1.38
59	A5	3525	A	N9-C8	-6.26	1.32	1.37
59	A5	2183	A	N9-C4	-6.26	1.34	1.37
59	A5	3422	A	C6-N1	-6.26	1.31	1.35
59	A5	3478	G	C6-N1	-6.26	1.35	1.39
58	B2	1924	C	C4-C5	-6.26	1.38	1.43
59	A5	359	G	C2-N3	-6.26	1.27	1.32
59	A5	1522	G	N7-C5	-6.26	1.35	1.39
59	A5	2227	U	N1-C2	-6.26	1.32	1.38
59	A5	2756	C	N1-C6	-6.25	1.33	1.37
56	A8	8	A	C6-N1	-6.25	1.31	1.35
59	A5	2671	C	C2-O2	-6.25	1.18	1.24
59	A5	3264	A	C5-C4	-6.25	1.34	1.38
59	A5	3870	A	N7-C5	-6.25	1.35	1.39
59	A5	808	G	C2-N2	-6.25	1.28	1.34
59	A5	1036	A	C5-C4	-6.25	1.34	1.38
59	A5	1611	G	N9-C8	-6.25	1.33	1.37
59	A5	2493	C	C4-C5	-6.25	1.38	1.43
59	A5	3523	U	C2-N3	-6.25	1.33	1.37
59	A5	998	G	C6-N1	-6.25	1.35	1.39
59	A5	2579	G	N7-C5	-6.25	1.35	1.39
59	A5	3170	U	C2-N3	-6.25	1.33	1.37
56	A8	7	A	N7-C5	-6.25	1.35	1.39
58	B2	1198	G	C5-C4	-6.25	1.33	1.38
59	A5	346	U	P-O5'	-6.25	1.53	1.59
59	A5	1164	G	N1-C2	-6.25	1.32	1.37
59	A5	1312	G	N7-C5	-6.25	1.35	1.39
59	A5	2530	C	N3-C4	-6.25	1.29	1.33
58	B2	613	A	N9-C4	-6.25	1.34	1.37
59	A5	2174	A	C5-C4	-6.25	1.34	1.38
59	A5	2244	G	N7-C5	-6.25	1.35	1.39
59	A5	3190	G	C5-C4	-6.25	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3351	A	C6-N1	-6.25	1.31	1.35
59	A5	3491	C	N1-C6	-6.25	1.33	1.37
58	B2	618	G	N7-C5	-6.25	1.35	1.39
59	A5	1516	A	N9-C4	-6.25	1.34	1.37
59	A5	37	G	C6-N1	-6.24	1.35	1.39
59	A5	235	A	C5-C6	-6.24	1.35	1.41
59	A5	2243	G	C5-C4	-6.24	1.33	1.38
59	A5	3325	G	C5-C4	-6.24	1.33	1.38
40	Cc	27	TYR	CB-CG	-6.24	1.42	1.51
56	A8	24	G	N9-C8	-6.24	1.33	1.37
59	A5	859	A	N9-C8	-6.24	1.32	1.37
59	A5	2232	U	N1-C2	-6.24	1.32	1.38
59	A5	3156	G	C5-C4	-6.24	1.33	1.38
55	A7	13	A	C5-C6	-6.24	1.35	1.41
59	A5	80	G	C5-C4	-6.24	1.33	1.38
59	A5	1168	G	C6-N1	-6.24	1.35	1.39
59	A5	1677	U	N1-C2	-6.24	1.32	1.38
59	A5	2683	G	C5-C4	-6.24	1.33	1.38
59	A5	1683	U	N1-C2	-6.24	1.32	1.38
59	A5	2181	A	C5-C4	-6.24	1.34	1.38
56	A8	95	A	N9-C4	-6.24	1.34	1.37
59	A5	1316	U	N1-C6	-6.24	1.32	1.38
59	A5	1728	G	N1-C2	-6.24	1.32	1.37
59	A5	68	G	N9-C4	-6.23	1.32	1.38
59	A5	2062	A	C5-C4	-6.23	1.34	1.38
58	B2	1087	C	N3-C4	-6.23	1.29	1.33
58	B2	1967	C	C4-C5	-6.23	1.38	1.43
59	A5	1012	G	C5-C4	-6.23	1.33	1.38
59	A5	1039	U	C4-C5	-6.23	1.38	1.43
59	A5	1787	C	C2-N3	-6.23	1.30	1.35
59	A5	2690	A	C5-C4	-6.23	1.34	1.38
59	A5	98	G	C5-C4	-6.23	1.33	1.38
59	A5	290	G	C5-C4	-6.23	1.33	1.38
59	A5	1349	A	C5-C6	-6.23	1.35	1.41
59	A5	2177	G	C5-C4	-6.23	1.33	1.38
59	A5	2484	G	N7-C5	-6.23	1.35	1.39
58	B2	1409	A	N9-C4	-6.22	1.34	1.37
59	A5	98	G	C6-N1	-6.22	1.35	1.39
59	A5	791	C	N1-C6	-6.22	1.33	1.37
59	A5	920	G	N7-C5	-6.22	1.35	1.39
59	A5	2027	A	N9-C4	-6.22	1.34	1.37
59	A5	3426	U	C2-N3	-6.22	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	31	G	N1-C2	-6.22	1.32	1.37
58	B2	306	A	N7-C5	-6.22	1.35	1.39
58	B2	1971	A	N7-C5	-6.22	1.35	1.39
59	A5	89	A	C8-N7	-6.22	1.27	1.31
59	A5	1788	G	C2-N3	-6.22	1.27	1.32
59	A5	2098	C	C5-C6	-6.22	1.29	1.34
59	A5	2651	G	C5-C4	-6.22	1.33	1.38
59	A5	2674	A	C6-N6	-6.22	1.28	1.33
59	A5	863	U	C2-N3	-6.22	1.33	1.37
59	A5	982	C	N3-C4	-6.22	1.29	1.33
59	A5	3285	G	N1-C2	-6.22	1.32	1.37
59	A5	1138	C	C2-N3	-6.22	1.30	1.35
59	A5	1512	C	N3-C4	-6.22	1.29	1.33
59	A5	1558	A	N7-C5	-6.22	1.35	1.39
59	A5	1871	A	N3-C4	-6.22	1.31	1.34
59	A5	2551	U	N1-C2	-6.22	1.32	1.38
59	A5	2728	C	C4-C5	-6.22	1.38	1.43
59	A5	2789	U	N1-C2	-6.22	1.32	1.38
59	A5	1353	G	C2-N3	-6.21	1.27	1.32
59	A5	1693	C	N1-C2	-6.21	1.33	1.40
59	A5	2167	G	C5-C4	-6.21	1.33	1.38
59	A5	2730	A	C8-N7	-6.21	1.27	1.31
59	A5	3759	G	C5-C4	-6.21	1.33	1.38
59	A5	1672	A	N9-C4	-6.21	1.34	1.37
59	A5	2704	A	C5-C4	-6.21	1.34	1.38
59	A5	2741	A	N7-C5	-6.21	1.35	1.39
59	A5	385	A	N3-C4	-6.21	1.31	1.34
59	A5	1109	G	N7-C5	-6.21	1.35	1.39
59	A5	1981	A	C5-C6	-6.21	1.35	1.41
59	A5	3223	A	C5-C4	-6.21	1.34	1.38
59	A5	1528	G	N9-C8	-6.21	1.33	1.37
59	A5	3664	A	N3-C4	-6.21	1.31	1.34
59	A5	315	G	C6-N1	-6.21	1.35	1.39
59	A5	1636	G	N7-C5	-6.21	1.35	1.39
59	A5	3178	G	C6-N1	-6.21	1.35	1.39
59	A5	3269	G	C5-C4	-6.21	1.34	1.38
59	A5	3874	A	C6-N1	-6.21	1.31	1.35
58	B2	1197	G	N7-C5	-6.21	1.35	1.39
59	A5	781	C	C4-C5	-6.21	1.38	1.43
59	A5	1084	A	C8-N7	-6.21	1.27	1.31
59	A5	1103	U	N1-C2	-6.21	1.32	1.38
59	A5	1730	A	N3-C4	-6.21	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2516	U	C4-C5	-6.21	1.38	1.43
59	A5	3488	G	C6-O6	-6.21	1.18	1.24
59	A5	3624	C	C4-C5	-6.21	1.38	1.43
59	A5	227	A	C6-N6	-6.21	1.28	1.33
59	A5	373	A	C6-N6	-6.21	1.28	1.33
59	A5	1409	G	C5-C4	-6.21	1.34	1.38
58	B2	1990	U	N1-C2	-6.20	1.32	1.38
59	A5	1010	A	N3-C4	-6.20	1.31	1.34
59	A5	1276	G	N9-C4	-6.20	1.32	1.38
59	A5	2051	A	N7-C5	-6.20	1.35	1.39
59	A5	2683	G	C8-N7	-6.20	1.27	1.30
59	A5	318	G	N3-C4	-6.20	1.31	1.35
59	A5	1029	C	N1-C2	-6.20	1.33	1.40
59	A5	1674	A	C6-N1	-6.20	1.31	1.35
59	A5	2524	A	N3-C4	-6.20	1.31	1.34
59	A5	3293	G	C6-N1	-6.20	1.35	1.39
58	B2	1245	A	N9-C4	-6.20	1.34	1.37
59	A5	443	G	N9-C4	-6.20	1.32	1.38
59	A5	1057	G	C5-C6	-6.20	1.36	1.42
59	A5	1717	A	N7-C5	-6.20	1.35	1.39
59	A5	3259	A	N7-C5	-6.20	1.35	1.39
56	A8	9	G	N9-C8	-6.20	1.33	1.37
59	A5	415	A	N7-C5	-6.20	1.35	1.39
59	A5	1644	C	N3-C4	-6.20	1.29	1.33
59	A5	2510	A	N9-C4	-6.20	1.34	1.37
59	A5	2543	C	N3-C4	-6.20	1.29	1.33
59	A5	3588	G	N9-C8	-6.20	1.33	1.37
66	CL	13	TYR	CE1-CZ	-6.20	1.30	1.38
59	A5	881	G	N7-C5	-6.20	1.35	1.39
59	A5	994	U	C2-N3	-6.20	1.33	1.37
59	A5	1983	A	N7-C5	-6.20	1.35	1.39
58	B2	1017	A	N3-C4	-6.20	1.31	1.34
59	A5	51	U	C5-C6	-6.20	1.28	1.34
59	A5	445	C	C2-N3	-6.20	1.30	1.35
59	A5	1000	G	C5-C6	-6.20	1.36	1.42
59	A5	3900	A	N9-C4	-6.20	1.34	1.37
59	A5	2188	C	C4-C5	-6.19	1.38	1.43
59	A5	241	C	N1-C6	-6.19	1.33	1.37
59	A5	1608	G	C2-N3	-6.19	1.27	1.32
59	A5	2560	A	C5-C6	-6.19	1.35	1.41
59	A5	3340	A	N9-C4	-6.19	1.34	1.37
59	A5	3635	G	N7-C5	-6.19	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	99	G	C5-C6	-6.19	1.36	1.42
59	A5	1021	U	N1-C6	-6.19	1.32	1.38
59	A5	1152	A	N9-C8	-6.19	1.32	1.37
59	A5	1365	U	C5-C6	-6.19	1.28	1.34
59	A5	1710	G	N9-C4	-6.19	1.32	1.38
59	A5	1712	C	C5-C6	-6.19	1.29	1.34
59	A5	1560	A	C6-N1	-6.19	1.31	1.35
59	A5	1639	U	N3-C4	-6.19	1.32	1.38
59	A5	3161	U	C2-N3	-6.19	1.33	1.37
59	A5	3160	A	N3-C4	-6.19	1.31	1.34
59	A5	2549	G	N1-C2	-6.19	1.32	1.37
59	A5	1116	G	N7-C5	-6.18	1.35	1.39
59	A5	1272	G	C5-C4	-6.18	1.34	1.38
59	A5	1795	A	N1-C2	-6.18	1.28	1.34
59	A5	318	G	C2-N3	-6.18	1.27	1.32
59	A5	809	G	C2-N3	-6.18	1.27	1.32
59	A5	987	G	C5-C6	-6.18	1.36	1.42
59	A5	1001	A	C8-N7	-6.18	1.27	1.31
59	A5	1123	C	C4-C5	-6.18	1.38	1.43
59	A5	3611	C	C2-N3	-6.18	1.30	1.35
58	B2	1206	G	C5-C4	-6.18	1.34	1.38
59	A5	3471	A	N9-C8	-6.18	1.32	1.37
42	Cf	55	VAL	CB-CG1	-6.18	1.39	1.52
58	B2	1991	C	C4-C5	-6.18	1.38	1.43
59	A5	655	C	N1-C6	-6.18	1.33	1.37
59	A5	1087	G	N9-C8	-6.18	1.33	1.37
59	A5	1162	A	C6-N6	-6.18	1.29	1.33
59	A5	2699	A	C5-C6	-6.18	1.35	1.41
59	A5	3155	G	N7-C5	-6.18	1.35	1.39
59	A5	3579	C	C4-C5	-6.18	1.38	1.43
59	A5	2656	C	N1-C6	-6.18	1.33	1.37
58	B2	1219	A	C5-C4	-6.18	1.34	1.38
59	A5	3454	G	N9-C4	-6.18	1.33	1.38
59	A5	3483	G	C5-C6	-6.18	1.36	1.42
59	A5	3522	A	N9-C8	-6.18	1.32	1.37
59	A5	3547	U	N3-C4	-6.18	1.32	1.38
59	A5	287	G	C6-N1	-6.17	1.35	1.39
59	A5	2661	G	N7-C5	-6.17	1.35	1.39
55	A7	75	G	N7-C5	-6.17	1.35	1.39
55	A7	99	G	N3-C4	-6.17	1.31	1.35
59	A5	214	A	N7-C5	-6.17	1.35	1.39
59	A5	1044	G	C5-C4	-6.17	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1161	C	C2-N3	-6.17	1.30	1.35
59	A5	2035	C	N3-C4	-6.17	1.29	1.33
59	A5	1792	G	C8-N7	-6.17	1.27	1.30
56	A8	36	A	C2-N3	-6.17	1.27	1.33
59	A5	661	G	N9-C8	-6.17	1.33	1.37
59	A5	2559	C	N1-C6	-6.17	1.33	1.37
56	A8	95	A	N7-C5	-6.17	1.35	1.39
59	A5	309	C	C2-N3	-6.17	1.30	1.35
59	A5	1117	A	C6-N1	-6.17	1.31	1.35
59	A5	1752	G	C6-N1	-6.17	1.35	1.39
59	A5	3193	C	N3-C4	-6.17	1.29	1.33
59	A5	3538	G	C8-N7	-6.17	1.27	1.30
56	A8	105	C	N1-C6	-6.17	1.33	1.37
59	A5	107	G	N9-C8	-6.17	1.33	1.37
59	A5	3468	G	N3-C4	-6.17	1.31	1.35
55	A7	85	G	C6-N1	-6.17	1.35	1.39
59	A5	989	A	C5-C6	-6.17	1.35	1.41
59	A5	1671	U	C2-O2	-6.17	1.16	1.22
59	A5	1696	A	C6-N6	-6.17	1.29	1.33
59	A5	2200	A	N7-C5	-6.17	1.35	1.39
59	A5	2222	G	C8-N7	-6.17	1.27	1.30
59	A5	2740	C	C5-C6	-6.17	1.29	1.34
59	A5	1100	G	C2-N3	-6.16	1.27	1.32
59	A5	1681	G	N7-C5	-6.16	1.35	1.39
59	A5	2490	G	C2-N3	-6.16	1.27	1.32
59	A5	374	C	C2-N3	-6.16	1.30	1.35
59	A5	1025	U	N1-C2	-6.16	1.33	1.38
59	A5	1157	C	C2-O2	-6.16	1.19	1.24
59	A5	1595	G	N9-C4	-6.16	1.33	1.38
58	B2	1987	G	N1-C2	-6.16	1.32	1.37
59	A5	1262	C	N1-C6	-6.16	1.33	1.37
59	A5	2195	A	C5-C6	-6.16	1.35	1.41
59	A5	2228	U	N1-C2	-6.16	1.33	1.38
59	A5	2572	G	C2-N3	-6.16	1.27	1.32
45	C1	23	VAL	CB-CG1	-6.16	1.40	1.52
58	B2	622	C	C4-C5	-6.16	1.38	1.43
59	A5	311	C	C4-C5	-6.16	1.38	1.43
59	A5	351	A	C5-C4	-6.16	1.34	1.38
59	A5	1029	C	N1-C6	-6.16	1.33	1.37
59	A5	1733	A	C8-N7	-6.16	1.27	1.31
59	A5	1867	A	C6-N1	-6.16	1.31	1.35
59	A5	2529	G	N7-C5	-6.16	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	43	A	C8-N7	-6.16	1.27	1.31
59	A5	3414	U	C2-O2	-6.16	1.16	1.22
59	A5	3656	A	C6-N1	-6.16	1.31	1.35
59	A5	105	A	N3-C4	-6.16	1.31	1.34
59	A5	1555	G	C6-N1	-6.16	1.35	1.39
59	A5	2167	G	C2-N3	-6.16	1.27	1.32
59	A5	2764	A	N9-C8	-6.16	1.32	1.37
56	A8	28	A	N9-C4	-6.15	1.34	1.37
59	A5	1104	A	N1-C2	-6.15	1.28	1.34
59	A5	1111	C	C2-N3	-6.15	1.30	1.35
59	A5	3234	A	N3-C4	-6.15	1.31	1.34
59	A5	3729	A	N3-C4	-6.15	1.31	1.34
59	A5	1210	A	N7-C5	-6.15	1.35	1.39
59	A5	2598	A	N9-C4	-6.15	1.34	1.37
59	A5	2772	G	C8-N7	-6.15	1.27	1.30
59	A5	3343	A	N9-C4	-6.15	1.34	1.37
59	A5	3401	U	C4-O4	-6.15	1.18	1.23
59	A5	3576	G	N9-C8	-6.15	1.33	1.37
58	B2	634	U	N1-C2	-6.15	1.33	1.38
58	B2	1054	A	C6-N1	-6.15	1.31	1.35
59	A5	378	G	C2-N3	-6.15	1.27	1.32
59	A5	756	C	N3-C4	-6.15	1.29	1.33
59	A5	851	G	N1-C2	-6.15	1.32	1.37
59	A5	1868	A	C5-C4	-6.15	1.34	1.38
59	A5	2573	C	C5-C6	-6.15	1.29	1.34
59	A5	1119	C	C5-C6	-6.15	1.29	1.34
59	A5	2659	A	C8-N7	-6.15	1.27	1.31
59	A5	2773	G	N9-C4	-6.15	1.33	1.38
59	A5	417	A	C5-C4	-6.15	1.34	1.38
59	A5	1358	U	C5-C6	-6.15	1.28	1.34
59	A5	1991	A	N7-C5	-6.15	1.35	1.39
59	A5	2760	G	N1-C2	-6.15	1.32	1.37
59	A5	1259	A	N3-C4	-6.15	1.31	1.34
59	A5	1334	A	N1-C2	-6.15	1.28	1.34
59	A5	2167	G	C2-N2	-6.15	1.28	1.34
59	A5	3169	A	N7-C5	-6.15	1.35	1.39
59	A5	457	A	N3-C4	6.14	1.38	1.34
59	A5	2558	A	C5-C4	-6.14	1.34	1.38
59	A5	2733	G	C5-C6	-6.14	1.36	1.42
59	A5	3363	G	N7-C5	-6.14	1.35	1.39
59	A5	807	A	C5-C6	-6.14	1.35	1.41
59	A5	1340	G	N1-C2	-6.14	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1379	U	N3-C4	-6.14	1.32	1.38
59	A5	1393	A	N9-C4	-6.14	1.34	1.37
59	A5	2226	A	C6-N1	-6.14	1.31	1.35
59	A5	3410	G	C6-O6	-6.14	1.18	1.24
66	CL	65	TYR	CD2-CE2	-6.14	1.30	1.39
26	CN	95	TYR	CD2-CE2	-6.14	1.30	1.39
58	B2	1064	A	C6-N1	-6.14	1.31	1.35
59	A5	1413	C	N3-C4	-6.14	1.29	1.33
59	A5	825	C	N3-C4	-6.14	1.29	1.33
59	A5	2501	G	N1-C2	-6.14	1.32	1.37
59	A5	3620	G	N1-C2	-6.14	1.32	1.37
4	CB	251	VAL	CB-CG1	-6.14	1.40	1.52
58	B2	114	G	N9-C8	-6.14	1.33	1.37
59	A5	65	A	N1-C2	-6.14	1.28	1.34
59	A5	380	G	N1-C2	-6.14	1.32	1.37
59	A5	429	U	N1-C2	-6.14	1.33	1.38
59	A5	3521	A	N3-C4	-6.14	1.31	1.34
59	A5	2495	G	C6-N1	-6.14	1.35	1.39
59	A5	3167	A	N9-C8	-6.14	1.32	1.37
56	A8	19	A	C6-N1	-6.13	1.31	1.35
56	A8	101	A	N7-C5	-6.13	1.35	1.39
58	B2	1846	G	C5-C4	-6.13	1.34	1.38
59	A5	1012	G	N3-C4	-6.13	1.31	1.35
59	A5	1612	G	C2-N3	-6.13	1.27	1.32
59	A5	3230	G	C5-C4	-6.13	1.34	1.38
59	A5	356	A	C6-N6	-6.13	1.29	1.33
59	A5	1696	A	C8-N7	-6.13	1.27	1.31
59	A5	3538	G	N9-C8	-6.13	1.33	1.37
56	A8	98	U	C2-O2	-6.13	1.16	1.22
58	B2	330	G	C5-C4	-6.13	1.34	1.38
59	A5	799	A	C6-N1	-6.13	1.31	1.35
59	A5	1689	G	N9-C4	-6.13	1.33	1.38
59	A5	3155	G	C8-N7	-6.13	1.27	1.30
59	A5	2803	A	C8-N7	-6.13	1.27	1.31
59	A5	1117	A	C8-N7	-6.13	1.27	1.31
59	A5	2524	A	C6-N1	-6.13	1.31	1.35
59	A5	2533	U	C5-C6	-6.13	1.28	1.34
59	A5	3352	A	N7-C5	-6.13	1.35	1.39
41	Ce	34	TRP	CE3-CZ3	-6.13	1.28	1.38
56	A8	25	C	C4-C5	-6.13	1.38	1.43
59	A5	302	A	N3-C4	-6.13	1.31	1.34
59	A5	1062	C	N1-C6	-6.13	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1113	A	C6-N1	-6.13	1.31	1.35
59	A5	1378	A	C6-N1	-6.13	1.31	1.35
59	A5	2255	G	C5-C6	-6.13	1.36	1.42
59	A5	3259	A	C8-N7	-6.13	1.27	1.31
59	A5	3470	G	C8-N7	-6.13	1.27	1.30
59	A5	3524	G	C8-N7	-6.13	1.27	1.30
59	A5	3758	G	N1-C2	-6.13	1.32	1.37
59	A5	1871	A	N9-C8	-6.12	1.32	1.37
59	A5	2494	G	N9-C8	-6.12	1.33	1.37
58	B2	1828	C	N1-C6	-6.12	1.33	1.37
59	A5	818	A	N7-C5	-6.12	1.35	1.39
59	A5	998	G	N7-C5	-6.12	1.35	1.39
59	A5	1096	A	N7-C5	-6.12	1.35	1.39
59	A5	1378	A	N9-C4	-6.12	1.34	1.37
59	A5	2137	U	N1-C2	-6.12	1.33	1.38
59	A5	2747	G	C2-N3	-6.12	1.27	1.32
59	A5	1008	A	N7-C5	-6.12	1.35	1.39
59	A5	1130	U	C4-O4	-6.12	1.18	1.23
59	A5	1164	G	N9-C8	-6.12	1.33	1.37
59	A5	1369	C	C5-C6	-6.12	1.29	1.34
59	A5	2248	A	N9-C8	-6.12	1.32	1.37
59	A5	2511	C	N1-C2	-6.12	1.34	1.40
59	A5	2686	C	C4-C5	-6.12	1.38	1.43
59	A5	1096	A	C6-N1	-6.12	1.31	1.35
58	B2	1942	G	C5-C4	-6.12	1.34	1.38
59	A5	1153	G	C2-N3	-6.12	1.27	1.32
59	A5	3640	A	N3-C4	-6.12	1.31	1.34
59	A5	1060	G	N1-C2	-6.12	1.32	1.37
59	A5	3512	U	C4-O4	-6.12	1.18	1.23
59	A5	3588	G	N9-C4	-6.12	1.33	1.38
59	A5	3623	G	N1-C2	-6.12	1.32	1.37
58	B2	1070	A	N7-C5	-6.11	1.35	1.39
58	B2	1173	A	N9-C4	-6.11	1.34	1.37
59	A5	305	G	N1-C2	-6.11	1.32	1.37
59	A5	312	U	C2-N3	-6.11	1.33	1.37
59	A5	824	G	C8-N7	-6.11	1.27	1.30
59	A5	1608	G	C8-N7	-6.11	1.27	1.30
59	A5	1624	G	C5-C6	-6.11	1.36	1.42
59	A5	3487	A	C5-C4	-6.11	1.34	1.38
59	A5	783	G	C2-N3	-6.11	1.27	1.32
59	A5	1556	C	C4-C5	-6.11	1.38	1.43
59	A5	3628	G	C8-N7	-6.11	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	CA	174	ARG	CB-CG	-6.11	1.36	1.52
58	B2	1173	A	N7-C5	-6.11	1.35	1.39
59	A5	1053	G	C8-N7	-6.11	1.27	1.30
59	A5	1121	A	N9-C8	-6.11	1.32	1.37
59	A5	1149	C	N1-C6	-6.11	1.33	1.37
59	A5	1526	G	N3-C4	-6.11	1.31	1.35
59	A5	1658	G	N9-C8	-6.11	1.33	1.37
59	A5	1784	A	N7-C5	-6.11	1.35	1.39
59	A5	3501	C	C4-C5	-6.11	1.38	1.43
59	A5	3504	G	N1-C2	-6.11	1.32	1.37
59	A5	3513	A	C6-N1	-6.11	1.31	1.35
59	A5	1553	C	C4-C5	-6.11	1.38	1.43
59	A5	1962	A	N3-C4	-6.11	1.31	1.34
59	A5	3410	G	C5-C4	-6.11	1.34	1.38
58	B2	1115	C	N1-C2	-6.11	1.34	1.40
58	B2	1190	G	N7-C5	-6.11	1.35	1.39
59	A5	785	A	C6-N1	-6.11	1.31	1.35
59	A5	3170	U	C4-C5	-6.11	1.38	1.43
59	A5	3174	A	C6-N1	-6.11	1.31	1.35
59	A5	3620	G	C8-N7	-6.11	1.27	1.30
59	A5	73	U	N3-C4	-6.11	1.32	1.38
59	A5	837	A	C6-N1	-6.11	1.31	1.35
59	A5	1038	G	C6-N1	-6.11	1.35	1.39
59	A5	2226	A	N7-C5	-6.11	1.35	1.39
58	B2	1084	G	C5-C4	-6.10	1.34	1.38
59	A5	294	U	N1-C2	-6.10	1.33	1.38
59	A5	854	U	N1-C2	-6.10	1.33	1.38
59	A5	1089	U	N3-C4	-6.10	1.32	1.38
59	A5	2516	U	C4-O4	-6.10	1.18	1.23
4	CB	231	VAL	CB-CG2	-6.10	1.40	1.52
41	Ce	59	TYR	CD1-CE1	-6.10	1.30	1.39
54	A9	13	A	N9-C4	-6.10	1.34	1.37
55	A7	97	G	N9-C8	-6.10	1.33	1.37
56	A8	20	C	C2-N3	-6.10	1.30	1.35
56	A8	36	A	N1-C2	-6.10	1.28	1.34
59	A5	922	G	N9-C4	-6.10	1.33	1.38
59	A5	1090	U	C2-N3	-6.10	1.33	1.37
59	A5	2169	U	C2-O2	-6.10	1.16	1.22
59	A5	2189	U	C2-N3	-6.10	1.33	1.37
25	Ca	54	PHE	CD1-CE1	-6.10	1.27	1.39
59	A5	1544	U	C4-C5	-6.10	1.38	1.43
59	A5	2157	A	N7-C5	-6.10	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2254	U	N3-C4	-6.10	1.32	1.38
59	A5	3414	U	N3-C4	-6.10	1.32	1.38
59	A5	1691	A	C5-C6	-6.10	1.35	1.41
59	A5	1722	U	C5-C6	-6.10	1.28	1.34
59	A5	2214	G	N3-C4	-6.10	1.31	1.35
59	A5	2249	A	N3-C4	-6.10	1.31	1.34
6	CC	125	TYR	CD1-CE1	-6.10	1.30	1.39
59	A5	96	G	N9-C8	-6.10	1.33	1.37
59	A5	1370	C	C4-C5	-6.10	1.38	1.43
59	A5	1648	A	N7-C5	-6.10	1.35	1.39
59	A5	2110	A	C8-N7	-6.10	1.27	1.31
59	A5	1271	G	N9-C8	-6.10	1.33	1.37
59	A5	118	A	C6-N1	-6.09	1.31	1.35
59	A5	382	G	N9-C8	-6.09	1.33	1.37
59	A5	783	G	N9-C4	-6.09	1.33	1.38
59	A5	1323	C	N1-C2	-6.09	1.34	1.40
59	A5	1696	A	N7-C5	-6.09	1.35	1.39
59	A5	2614	G	N7-C5	-6.09	1.35	1.39
59	A5	783	G	C5-C6	-6.09	1.36	1.42
59	A5	1020	A	N1-C2	-6.09	1.28	1.34
59	A5	1384	C	C2-N3	-6.09	1.30	1.35
58	B2	1241	G	C2-N3	-6.09	1.27	1.32
59	A5	1768	G	N3-C4	-6.09	1.31	1.35
58	B2	320	A	N7-C5	-6.09	1.35	1.39
59	A5	1352	U	C4-O4	-6.09	1.18	1.23
59	A5	3335	A	C6-N1	-6.09	1.31	1.35
59	A5	1123	C	C2-O2	-6.09	1.19	1.24
59	A5	2225	A	N1-C2	-6.09	1.28	1.34
59	A5	3357	C	C5-C6	-6.09	1.29	1.34
59	A5	54	U	C4-C5	-6.09	1.38	1.43
59	A5	1091	G	N7-C5	-6.09	1.35	1.39
59	A5	1897	A	C5-C4	-6.09	1.34	1.38
59	A5	2174	A	C6-N6	-6.09	1.29	1.33
59	A5	379	A	C2-N3	-6.08	1.28	1.33
59	A5	39	A	N1-C2	-6.08	1.28	1.34
59	A5	39	A	N3-C4	-6.08	1.31	1.34
59	A5	790	U	N1-C2	-6.08	1.33	1.38
59	A5	2097	U	N1-C2	-6.08	1.33	1.38
59	A5	2245	G	C6-N1	-6.08	1.35	1.39
59	A5	3668	G	N9-C8	-6.08	1.33	1.37
35	CY	79	VAL	CB-CG2	-6.08	1.40	1.52
52	CE	237	TYR	CD1-CE1	-6.08	1.30	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	11	G	C8-N7	-6.08	1.27	1.30
58	B2	1078	G	N1-C2	-6.08	1.32	1.37
59	A5	99	A	N3-C4	-6.08	1.31	1.34
59	A5	288	U	C2-N3	-6.08	1.33	1.37
59	A5	324	A	C5-C6	-6.08	1.35	1.41
59	A5	841	A	N9-C4	-6.08	1.34	1.37
59	A5	1353	G	N9-C4	-6.08	1.33	1.38
59	A5	42	U	P-O5'	-6.08	1.53	1.59
59	A5	1382	U	N3-C4	-6.08	1.32	1.38
59	A5	1663	G	C5-C4	-6.08	1.34	1.38
59	A5	2230	G	N9-C8	-6.08	1.33	1.37
59	A5	2263	A	N9-C4	-6.08	1.34	1.37
59	A5	1013	G	C6-O6	-6.08	1.18	1.24
59	A5	1140	G	C6-O6	-6.08	1.18	1.24
59	A5	2255	G	N7-C5	-6.08	1.35	1.39
59	A5	1101	A	C5-C4	-6.08	1.34	1.38
59	A5	1526	G	N9-C4	-6.08	1.33	1.38
59	A5	1665	C	C2-N3	-6.08	1.30	1.35
59	A5	1699	A	N7-C5	6.08	1.42	1.39
59	A5	1875	G	N1-C2	-6.08	1.32	1.37
59	A5	87	U	N3-C4	-6.07	1.32	1.38
59	A5	754	A	N9-C4	6.07	1.41	1.37
59	A5	1551	U	N1-C2	-6.07	1.33	1.38
59	A5	3627	C	N3-C4	-6.07	1.29	1.33
59	A5	1321	G	N9-C4	-6.07	1.33	1.38
59	A5	3546	A	N7-C5	-6.07	1.35	1.39
59	A5	1621	A	C8-N7	-6.07	1.27	1.31
59	A5	1747	A	N7-C5	-6.07	1.35	1.39
59	A5	2699	A	N3-C4	-6.07	1.31	1.34
59	A5	3600	G	N9-C8	-6.07	1.33	1.37
59	A5	3870	A	N3-C4	-6.07	1.31	1.34
58	B2	1962	G	N7-C5	-6.07	1.35	1.39
59	A5	2653	A	C8-N7	-6.07	1.27	1.31
59	A5	3150	G	C5-C6	-6.07	1.36	1.42
56	A8	24	G	N1-C2	-6.07	1.32	1.37
58	B2	1924	C	N1-C6	-6.07	1.33	1.37
59	A5	1110	G	C6-O6	-6.07	1.18	1.24
59	A5	1410	A	C6-N1	-6.07	1.31	1.35
59	A5	3265	C	C2-N3	-6.07	1.30	1.35
59	A5	3547	U	C2-N3	-6.07	1.33	1.37
59	A5	2752	C	N3-C4	-6.07	1.29	1.33
59	A5	988	C	N1-C2	-6.06	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1338	U	C2-N3	-6.06	1.33	1.37
58	B2	1078	G	N3-C4	-6.06	1.31	1.35
59	A5	1981	A	C6-N6	-6.06	1.29	1.33
59	A5	3589	G	C8-N7	-6.06	1.27	1.30
56	A8	7	A	C5-C4	-6.06	1.34	1.38
59	A5	294	U	C2-N3	-6.06	1.33	1.37
59	A5	1362	G	N9-C8	-6.06	1.33	1.37
59	A5	1533	A	C5-C4	-6.06	1.34	1.38
59	A5	1667	U	N1-C6	-6.06	1.32	1.38
59	A5	2784	C	N3-C4	-6.06	1.29	1.33
67	CV	38	TYR	CD2-CE2	-6.06	1.30	1.39
59	A5	1312	G	C5-C4	-6.06	1.34	1.38
59	A5	2088	G	N9-C4	-6.06	1.33	1.38
59	A5	2165	C	N3-C4	-6.06	1.29	1.33
59	A5	3265	C	N3-C4	-6.06	1.29	1.33
59	A5	3482	G	N9-C8	-6.06	1.33	1.37
59	A5	3576	G	C8-N7	-6.06	1.27	1.30
59	A5	97	C	N1-C2	-6.06	1.34	1.40
59	A5	666	A	N9-C4	6.06	1.41	1.37
59	A5	1111	C	C2-O2	-6.06	1.19	1.24
59	A5	3355	G	N7-C5	-6.06	1.35	1.39
58	B2	1053	A	C5-C6	-6.05	1.35	1.41
58	B2	1847	A	C5-C6	-6.05	1.35	1.41
59	A5	306	C	N1-C2	-6.05	1.34	1.40
59	A5	817	C	C2-N3	-6.05	1.30	1.35
59	A5	3387	C	N1-C6	-6.05	1.33	1.37
59	A5	3631	C	C4-C5	-6.05	1.38	1.43
48	Cp	39	CYS	CB-SG	-6.05	1.72	1.82
58	B2	1846	G	C6-N1	-6.05	1.35	1.39
59	A5	820	A	C5-C6	-6.05	1.35	1.41
59	A5	1746	A	C6-N1	-6.05	1.31	1.35
59	A5	1778	A	C5-C4	-6.05	1.34	1.38
59	A5	3253	G	N9-C8	-6.05	1.33	1.37
56	A8	16	A	C5-C6	-6.05	1.35	1.41
58	B2	964	G	C2-N3	-6.05	1.27	1.32
59	A5	782	G	N9-C4	-6.05	1.33	1.38
59	A5	1754	U	N1-C2	-6.05	1.33	1.38
59	A5	2700	C	C2-O2	-6.05	1.19	1.24
59	A5	789	G	C6-N1	-6.05	1.35	1.39
59	A5	806	A	C6-N1	-6.05	1.31	1.35
59	A5	2151	A	N3-C4	-6.05	1.31	1.34
59	A5	3349	A	N7-C5	-6.05	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3845	A	C5-C6	-6.05	1.35	1.41
59	A5	1668	U	C4-O4	-6.05	1.18	1.23
59	A5	82	U	N1-C2	-6.05	1.33	1.38
59	A5	864	G	N3-C4	-6.05	1.31	1.35
59	A5	2198	G	N1-C2	-6.05	1.32	1.37
59	A5	985	G	C2-N3	-6.04	1.27	1.32
58	B2	355	G	N7-C5	-6.04	1.35	1.39
59	A5	654	G	N7-C5	-6.04	1.35	1.39
59	A5	1718	G	C4'-C3'	-6.04	1.46	1.53
59	A5	65	A	N7-C5	-6.04	1.35	1.39
59	A5	376	G	C6-O6	-6.04	1.18	1.24
59	A5	914	C	N3-C4	-6.04	1.29	1.33
59	A5	1764	G	N3-C4	-6.04	1.31	1.35
59	A5	2245	G	N9-C8	-6.04	1.33	1.37
59	A5	85	U	C2-N3	-6.04	1.33	1.37
59	A5	1560	A	C5-C4	-6.04	1.34	1.38
59	A5	2520	U	N1-C6	-6.04	1.32	1.38
59	A5	3167	A	C6-N6	-6.04	1.29	1.33
59	A5	70	A	N9-C8	-6.04	1.32	1.37
59	A5	304	U	N1-C6	-6.04	1.32	1.38
59	A5	354	A	N9-C8	-6.04	1.32	1.37
59	A5	373	A	C8-N7	-6.04	1.27	1.31
59	A5	776	A	C5-C4	-6.04	1.34	1.38
59	A5	1899	C	N1-C6	-6.04	1.33	1.37
59	A5	2197	A	C5-C4	-6.04	1.34	1.38
59	A5	1617	U	C4-O4	-6.04	1.18	1.23
59	A5	2757	U	N1-C6	-6.04	1.32	1.38
59	A5	23	U	C2-N3	-6.04	1.33	1.37
59	A5	1054	A	N3-C4	-6.04	1.31	1.34
59	A5	1628	G	N9-C8	-6.04	1.33	1.37
59	A5	3133	A	N9-C4	-6.04	1.34	1.37
58	B2	1229	G	C5-C4	-6.03	1.34	1.38
59	A5	2679	U	C2-N3	-6.03	1.33	1.37
59	A5	802	G	C5-C4	-6.03	1.34	1.38
59	A5	834	G	C8-N7	-6.03	1.27	1.30
59	A5	3507	A	C8-N7	-6.03	1.27	1.31
56	A8	11	G	C5-C4	-6.03	1.34	1.38
58	B2	1827	A	N9-C4	-6.03	1.34	1.37
59	A5	286	A	C5-C4	-6.03	1.34	1.38
59	A5	772	G	N3-C4	-6.03	1.31	1.35
59	A5	812	U	C5-C6	-6.03	1.28	1.34
59	A5	855	A	C5-C4	-6.03	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1059	A	C5-C4	-6.03	1.34	1.38
59	A5	1096	A	N9-C8	-6.03	1.32	1.37
59	A5	1623	G	N1-C2	-6.03	1.32	1.37
59	A5	2542	C	N1-C2	-6.03	1.34	1.40
59	A5	3134	G	N7-C5	-6.03	1.35	1.39
59	A5	2522	A	N9-C8	-6.03	1.32	1.37
59	A5	2772	G	C2-N3	-6.03	1.27	1.32
59	A5	3575	G	C2-N3	-6.03	1.27	1.32
59	A5	805	C	C5-C6	-6.03	1.29	1.34
59	A5	1116	G	N9-C4	-6.03	1.33	1.38
59	A5	1403	C	C2-N3	-6.03	1.30	1.35
59	A5	1972	C	N1-C2	-6.03	1.34	1.40
59	A5	3122	A	C5-C4	-6.03	1.34	1.38
59	A5	3150	G	C8-N7	-6.03	1.27	1.30
59	A5	3883	G	N7-C5	-6.03	1.35	1.39
59	A5	318	G	C5-C4	-6.03	1.34	1.38
59	A5	324	A	N7-C5	-6.03	1.35	1.39
59	A5	651	A	N9-C4	-6.03	1.34	1.37
59	A5	1143	U	C2-N3	-6.03	1.33	1.37
59	A5	2560	A	N3-C4	-6.03	1.31	1.34
59	A5	3405	U	C4-O4	-6.03	1.18	1.23
59	A5	846	U	N3-C4	-6.02	1.33	1.38
59	A5	1636	G	C8-N7	-6.02	1.27	1.30
59	A5	1765	U	C4-O4	-6.02	1.18	1.23
59	A5	2111	A	C8-N7	-6.02	1.27	1.31
59	A5	2177	G	N9-C8	-6.02	1.33	1.37
58	B2	1066	A	N7-C5	-6.02	1.35	1.39
59	A5	238	G	N7-C5	-6.02	1.35	1.39
59	A5	1340	G	C8-N7	-6.02	1.27	1.30
59	A5	1876	G	N7-C5	-6.02	1.35	1.39
59	A5	3655	U	N1-C6	-6.02	1.32	1.38
59	A5	1368	A	C6-N1	-6.02	1.31	1.35
59	A5	3153	G	N9-C8	-6.02	1.33	1.37
59	A5	3483	G	C6-N1	-6.02	1.35	1.39
59	A5	3487	A	C6-N1	-6.02	1.31	1.35
55	A7	95	U	N1-C2	-6.02	1.33	1.38
59	A5	1383	A	N9-C4	-6.02	1.34	1.37
59	A5	1674	A	C8-N7	-6.02	1.27	1.31
67	CV	62	VAL	CB-CG1	-6.02	1.40	1.52
59	A5	337	A	N9-C4	-6.02	1.34	1.37
59	A5	796	A	C5-C6	-6.02	1.35	1.41
59	A5	1270	G	C6-N1	-6.02	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1747	A	N9-C8	-6.02	1.32	1.37
59	A5	1750	G	C8-N7	-6.02	1.27	1.30
59	A5	432	U	C2-N3	-6.01	1.33	1.37
59	A5	817	C	N1-C2	-6.01	1.34	1.40
59	A5	3620	G	C6-N1	-6.01	1.35	1.39
59	A5	3355	G	N1-C2	-6.01	1.32	1.37
59	A5	3728	A	C6-N1	-6.01	1.31	1.35
58	B2	314	C	N1-C6	-6.01	1.33	1.37
59	A5	434	A	N9-C4	-6.01	1.34	1.37
59	A5	1040	C	C4-C5	-6.01	1.38	1.43
59	A5	2627	G	C5-C4	-6.01	1.34	1.38
59	A5	2741	A	C6-N1	-6.01	1.31	1.35
59	A5	3174	A	N9-C4	-6.01	1.34	1.37
59	A5	3630	C	N3-C4	-6.01	1.29	1.33
59	A5	3876	U	N1-C2	-6.01	1.33	1.38
59	A5	2060	A	C5-C4	-6.01	1.34	1.38
59	A5	2496	A	N3-C4	-6.01	1.31	1.34
59	A5	3298	U	N3-C4	-6.01	1.33	1.38
59	A5	3754	C	N3-C4	-6.01	1.29	1.33
59	A5	1618	A	N7-C5	-6.01	1.35	1.39
59	A5	3629	U	N1-C2	-6.01	1.33	1.38
56	A8	13	U	C4-C5	-6.01	1.38	1.43
59	A5	2685	G	C2-N3	-6.01	1.27	1.32
59	A5	3543	A	N3-C4	-6.01	1.31	1.34
59	A5	1319	A	C5-C4	-6.00	1.34	1.38
59	A5	2034	U	N3-C4	-6.00	1.33	1.38
59	A5	3571	C	N1-C6	-6.00	1.33	1.37
59	A5	90	G	C6-N1	-6.00	1.35	1.39
59	A5	1026	G	C5-C4	-6.00	1.34	1.38
59	A5	3324	A	C5-C4	-6.00	1.34	1.38
59	A5	3492	G	C2-N3	-6.00	1.27	1.32
26	CN	129	TYR	CD2-CE2	-6.00	1.30	1.39
59	A5	1085	U	N3-C4	-6.00	1.33	1.38
59	A5	1973	G	C2-N3	-6.00	1.27	1.32
59	A5	3221	A	N7-C5	-6.00	1.35	1.39
58	B2	1387	A	N7-C5	-6.00	1.35	1.39
59	A5	1318	A	C2-N3	-6.00	1.28	1.33
59	A5	1630	G	N9-C8	-6.00	1.33	1.37
59	A5	1207	G	C5-C4	-6.00	1.34	1.38
59	A5	1762	G	N9-C8	-6.00	1.33	1.37
59	A5	3878	U	N1-C6	-6.00	1.32	1.38
58	B2	1973	G	N9-C8	-6.00	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2103	G	N9-C8	-6.00	1.33	1.37
59	A5	2165	C	C2-N3	-6.00	1.30	1.35
58	B2	407	C	N1-C6	-5.99	1.33	1.37
59	A5	70	A	N9-C4	-5.99	1.34	1.37
59	A5	1758	U	P-O5'	-5.99	1.53	1.59
59	A5	2225	A	C8-N7	-5.99	1.27	1.31
59	A5	1010	A	C6-N6	-5.99	1.29	1.33
59	A5	1051	C	C4-C5	-5.99	1.38	1.43
59	A5	1769	U	C2-N3	-5.99	1.33	1.37
59	A5	2111	A	N7-C5	-5.99	1.35	1.39
59	A5	2214	G	C5-C6	-5.99	1.36	1.42
59	A5	3489	A	N9-C4	-5.99	1.34	1.37
59	A5	3491	C	N3-C4	-5.99	1.29	1.33
26	CN	152	CYS	CB-SG	-5.99	1.72	1.81
56	A8	14	G	C8-N7	-5.99	1.27	1.30
59	A5	37	G	N1-C2	-5.99	1.32	1.37
59	A5	1380	G	N9-C8	-5.99	1.33	1.37
59	A5	1740	C	C4-C5	-5.99	1.38	1.43
59	A5	1764	G	N9-C4	-5.99	1.33	1.38
55	A7	89	G	N7-C5	-5.99	1.35	1.39
58	B2	430	A	C5-C6	-5.99	1.35	1.41
58	B2	948	A	N9-C4	-5.99	1.34	1.37
59	A5	246	C	N1-C6	-5.99	1.33	1.37
59	A5	653	U	C2-N3	-5.99	1.33	1.37
59	A5	661	G	C2-N3	-5.99	1.27	1.32
59	A5	784	G	C6-N1	-5.99	1.35	1.39
59	A5	2697	U	C2-N3	-5.99	1.33	1.37
59	A5	3135	G	C8-N7	-5.99	1.27	1.30
58	B2	1213	A	N7-C5	-5.99	1.35	1.39
59	A5	1870	G	C8-N7	-5.99	1.27	1.30
4	CB	262	VAL	CB-CG1	-5.99	1.40	1.52
59	A5	56	A	C6-N1	-5.99	1.31	1.35
59	A5	237	G	C5-C6	-5.99	1.36	1.42
59	A5	301	U	C2-N3	-5.99	1.33	1.37
59	A5	426	A	C6-N6	-5.99	1.29	1.33
59	A5	824	G	N7-C5	-5.99	1.35	1.39
59	A5	919	G	C5-C4	-5.99	1.34	1.38
59	A5	1207	G	C6-N1	-5.99	1.35	1.39
59	A5	1334	A	N9-C4	-5.99	1.34	1.37
59	A5	1674	A	C5-C6	-5.99	1.35	1.41
59	A5	2655	C	N1-C2	-5.99	1.34	1.40
59	A5	2790	G	C8-N7	-5.99	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1545	A	N3-C4	-5.98	1.31	1.34
59	A5	337	A	N9-C8	-5.98	1.32	1.37
59	A5	2774	G	C2-N3	-5.98	1.27	1.32
59	A5	3445	C	C2-N3	-5.98	1.30	1.35
59	A5	990	U	C5-C6	-5.98	1.28	1.34
59	A5	1391	A	C5-C6	-5.98	1.35	1.41
59	A5	1563	A	N3-C4	5.98	1.38	1.34
59	A5	3335	A	C5-C6	-5.98	1.35	1.41
67	CV	28	CYS	CB-SG	-5.98	1.72	1.81
59	A5	3585	A	C5-C4	-5.98	1.34	1.38
59	A5	910	C	C4-C5	-5.98	1.38	1.43
59	A5	997	U	C5-C6	-5.98	1.28	1.34
59	A5	1651	C	C4-C5	-5.98	1.38	1.43
59	A5	2251	G	C6-N1	-5.98	1.35	1.39
59	A5	2746	A	N9-C8	-5.98	1.32	1.37
59	A5	3278	A	N9-C4	-5.98	1.34	1.37
59	A5	3479	C	N1-C2	-5.98	1.34	1.40
59	A5	1053	G	N9-C4	-5.98	1.33	1.38
59	A5	1763	A	N3-C4	-5.98	1.31	1.34
59	A5	234	G	N1-C2	-5.97	1.32	1.37
59	A5	989	A	N9-C8	-5.97	1.32	1.37
59	A5	1153	G	N3-C4	-5.97	1.31	1.35
59	A5	2759	G	C8-N7	-5.97	1.27	1.30
59	A5	2774	G	N1-C2	-5.97	1.32	1.37
59	A5	3619	U	N1-C2	-5.97	1.33	1.38
58	B2	1971	A	N9-C8	-5.97	1.32	1.37
59	A5	1004	C	P-O5'	-5.97	1.53	1.59
59	A5	2189	U	C5-C6	-5.97	1.28	1.34
59	A5	3489	A	C8-N7	-5.97	1.27	1.31
59	A5	3491	C	N1-C2	-5.97	1.34	1.40
59	A5	3673	G	C2-N3	-5.97	1.27	1.32
56	A8	67	G	N7-C5	-5.97	1.35	1.39
59	A5	410	G	N7-C5	-5.97	1.35	1.39
59	A5	554	U	N1-C2	-5.97	1.33	1.38
59	A5	1526	G	C8-N7	-5.97	1.27	1.30
59	A5	1561	G	N9-C4	-5.97	1.33	1.38
58	B2	360	G	C6-N1	-5.97	1.35	1.39
58	B2	1073	G	C6-N1	-5.97	1.35	1.39
58	B2	1113	A	C5-C4	-5.97	1.34	1.38
59	A5	62	G	C6-N1	-5.97	1.35	1.39
59	A5	979	U	N3-C4	-5.97	1.33	1.38
59	A5	1680	U	P-OP1	-5.97	1.38	1.49

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1962	A	N9-C8	-5.97	1.32	1.37
59	A5	2221	G	N9-C8	-5.97	1.33	1.37
59	A5	3582	A	C5-C4	-5.97	1.34	1.38
59	A5	342	A	C5-C4	-5.97	1.34	1.38
59	A5	2581	U	C4-C5	-5.97	1.38	1.43
55	A7	91	C	C2-N3	-5.97	1.30	1.35
59	A5	1261	A	C8-N7	-5.97	1.27	1.31
59	A5	2692	U	N3-C4	-5.97	1.33	1.38
59	A5	2754	G	C5-C4	-5.97	1.34	1.38
59	A5	3578	A	N7-C5	-5.97	1.35	1.39
59	A5	1372	A	N9-C8	-5.96	1.32	1.37
59	A5	1612	G	C8-N7	-5.96	1.27	1.30
59	A5	2504	A	C5-C6	-5.96	1.35	1.41
59	A5	2665	C	N1-C6	-5.96	1.33	1.37
59	A5	3156	G	C8-N7	-5.96	1.27	1.30
56	A8	26	U	C2-O2	-5.96	1.17	1.22
56	A8	112	C	N3-C4	-5.96	1.29	1.33
59	A5	439	U	C2-N3	-5.96	1.33	1.37
59	A5	428	C	C2-N3	-5.96	1.30	1.35
59	A5	1401	C	N3-C4	-5.96	1.29	1.33
59	A5	2539	G	C5-C6	-5.96	1.36	1.42
59	A5	2574	C	N1-C6	-5.96	1.33	1.37
59	A5	3435	A	N9-C4	-5.96	1.34	1.37
59	A5	443	G	C8-N7	-5.96	1.27	1.30
59	A5	1326	A	C5-C4	-5.96	1.34	1.38
59	A5	2062	A	N7-C5	-5.96	1.35	1.39
59	A5	2185	U	C5-C6	-5.96	1.28	1.34
58	B2	1100	A	C5-C6	-5.96	1.35	1.41
59	A5	809	G	N1-C2	-5.96	1.32	1.37
59	A5	1331	G	C6-N1	-5.96	1.35	1.39
59	A5	2802	A	N9-C8	-5.96	1.32	1.37
59	A5	3163	U	N1-C2	-5.96	1.33	1.38
59	A5	3907	G	C6-N1	-5.96	1.35	1.39
56	A8	55	G	C6-N1	-5.96	1.35	1.39
58	B2	390	A	N9-C4	-5.96	1.34	1.37
59	A5	1113	A	C6-N6	-5.96	1.29	1.33
59	A5	1351	C	C5-C6	-5.96	1.29	1.34
59	A5	2497	C	C4-C5	-5.96	1.38	1.43
59	A5	3297	C	N1-C6	-5.96	1.33	1.37
59	A5	3966	U	C4-C5	-5.96	1.38	1.43
59	A5	294	U	N1-C6	-5.96	1.32	1.38
59	A5	2176	G	C5-C4	-5.96	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2658	A	C6-N1	-5.96	1.31	1.35
59	A5	2698	A	C8-N7	-5.96	1.27	1.31
59	A5	548	A	C6-N1	-5.95	1.31	1.35
59	A5	819	U	N3-C4	-5.95	1.33	1.38
59	A5	1065	A	C5-C4	-5.95	1.34	1.38
59	A5	1707	A	C5-C6	-5.95	1.35	1.41
59	A5	213	A	N9-C8	-5.95	1.32	1.37
59	A5	3593	A	N1-C2	-5.95	1.28	1.34
58	B2	607	A	N7-C5	-5.95	1.35	1.39
59	A5	834	G	N9-C8	-5.95	1.33	1.37
59	A5	1012	G	N7-C5	-5.95	1.35	1.39
59	A5	1168	G	N1-C2	-5.95	1.32	1.37
59	A5	1873	A	C5-C4	-5.95	1.34	1.38
59	A5	2741	A	C8-N7	-5.95	1.27	1.31
58	B2	1198	G	N1-C2	-5.95	1.32	1.37
59	A5	1033	U	N3-C4	-5.95	1.33	1.38
59	A5	3259	A	C5-C4	-5.95	1.34	1.38
55	A7	93	G	N3-C4	-5.95	1.31	1.35
56	A8	43	A	N9-C4	-5.95	1.34	1.37
59	A5	1539	A	C5-C4	-5.95	1.34	1.38
59	A5	2246	A	C5-C6	-5.95	1.35	1.41
59	A5	2252	A	N9-C4	-5.95	1.34	1.37
59	A5	2780	A	N9-C8	-5.95	1.32	1.37
59	A5	3446	G	N1-C2	-5.94	1.32	1.37
59	A5	863	U	N3-C4	-5.94	1.33	1.38
59	A5	2510	A	N7-C5	-5.94	1.35	1.39
59	A5	2566	A	C5-C6	-5.94	1.35	1.41
59	A5	2668	C	C2-N3	-5.94	1.30	1.35
59	A5	3334	A	C5-C6	-5.94	1.35	1.41
59	A5	3580	G	N1-C2	-5.94	1.32	1.37
58	B2	1972	G	N7-C5	-5.94	1.35	1.39
59	A5	50	U	C4-C5	-5.94	1.38	1.43
59	A5	1408	A	C5-C4	-5.94	1.34	1.38
59	A5	1686	A	N3-C4	-5.94	1.31	1.34
59	A5	3349	A	C2-N3	-5.94	1.28	1.33
59	A5	3728	A	N9-C4	-5.94	1.34	1.37
59	A5	414	A	C5-C6	-5.94	1.35	1.41
59	A5	561	A	N3-C4	-5.94	1.31	1.34
2	CA	61	VAL	CB-CG1	-5.94	1.40	1.52
59	A5	317	G	C5-C4	-5.94	1.34	1.38
59	A5	443	G	N7-C5	-5.94	1.35	1.39
59	A5	1527	C	N3-C4	-5.94	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1981	A	N9-C4	-5.94	1.34	1.37
59	A5	2235	G	N3-C4	-5.94	1.31	1.35
59	A5	2262	A	N7-C5	-5.94	1.35	1.39
59	A5	2706	U	N3-C4	-5.94	1.33	1.38
59	A5	3516	C	C2-N3	-5.94	1.31	1.35
48	Cp	52	VAL	CB-CG2	-5.93	1.40	1.52
54	A9	13	A	N9-C8	-5.93	1.33	1.37
59	A5	25	G	C6-N1	-5.93	1.35	1.39
59	A5	45	G	P-OP2	-5.93	1.38	1.49
59	A5	2168	G	N9-C4	-5.93	1.33	1.38
59	A5	2611	A	N3-C4	-5.93	1.31	1.34
59	A5	2702	A	C6-N1	-5.93	1.31	1.35
59	A5	3308	A	C5-C4	-5.93	1.34	1.38
55	A7	98	G	N1-C2	-5.93	1.33	1.37
58	B2	1058	A	C5-C4	-5.93	1.34	1.38
59	A5	1016	A	C5-C6	-5.93	1.35	1.41
59	A5	1080	G	N7-C5	-5.93	1.35	1.39
59	A5	2169	U	C2-N3	-5.93	1.33	1.37
59	A5	3363	G	N9-C8	-5.93	1.33	1.37
59	A5	300	A	N3-C4	-5.93	1.31	1.34
59	A5	856	A	N9-C4	-5.93	1.34	1.37
59	A5	3581	G	C2-N2	-5.93	1.28	1.34
58	B2	1238	G	N9-C4	5.93	1.42	1.38
59	A5	92	A	C8-N7	-5.93	1.27	1.31
59	A5	2784	C	C4-C5	-5.93	1.38	1.43
59	A5	1617	U	C4-C5	-5.93	1.38	1.43
58	B2	635	C	C4-C5	-5.93	1.38	1.43
58	B2	1983	G	C2-N3	-5.93	1.28	1.32
59	A5	1716	G	C5-C4	-5.93	1.34	1.38
59	A5	2158	U	C2-N3	-5.93	1.33	1.37
59	A5	2170	C	C5-C6	-5.93	1.29	1.34
56	A8	101	A	C5-C4	-5.92	1.34	1.38
59	A5	1116	G	P-O5'	-5.92	1.53	1.59
59	A5	1422	G	C2-N3	-5.92	1.28	1.32
59	A5	2240	U	N1-C2	-5.92	1.33	1.38
59	A5	2793	C	C5-C6	-5.92	1.29	1.34
59	A5	3881	A	C5-C4	-5.92	1.34	1.38
54	A9	22	A	N9-C4	-5.92	1.34	1.37
55	A7	97	G	C2-N3	-5.92	1.28	1.32
59	A5	157	C	N1-C6	-5.92	1.33	1.37
59	A5	447	G	C6-N1	-5.92	1.35	1.39
59	A5	3339	U	C4-O4	-5.92	1.19	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3843	U	C2-N3	-5.92	1.33	1.37
65	CO	35	VAL	CB-CG2	-5.92	1.40	1.52
58	B2	1982	C	N1-C6	-5.92	1.33	1.37
59	A5	1012	G	C2-N2	-5.92	1.28	1.34
59	A5	1521	G	N9-C8	-5.92	1.33	1.37
59	A5	1636	G	C5-C4	-5.92	1.34	1.38
56	A8	105	C	N3-C4	-5.92	1.29	1.33
59	A5	343	A	N7-C5	-5.92	1.35	1.39
59	A5	1777	A	C5-C4	-5.92	1.34	1.38
59	A5	2148	C	N1-C6	-5.92	1.33	1.37
59	A5	2661	G	N9-C4	-5.92	1.33	1.38
59	A5	3320	C	N1-C6	-5.92	1.33	1.37
58	B2	1055	U	N1-C2	-5.92	1.33	1.38
58	B2	1978	C	C4-C5	-5.92	1.38	1.43
59	A5	100	G	C2-N3	-5.92	1.28	1.32
59	A5	824	G	N9-C4	-5.92	1.33	1.38
59	A5	1080	G	C8-N7	-5.92	1.27	1.30
59	A5	1702	G	C5-C6	-5.92	1.36	1.42
59	A5	1869	C	N3-C4	-5.92	1.29	1.33
59	A5	2574	C	N3-C4	-5.92	1.29	1.33
59	A5	1071	U	C4-C5	-5.92	1.38	1.43
59	A5	1560	A	N3-C4	-5.92	1.31	1.34
59	A5	1331	G	C5-C6	-5.91	1.36	1.42
59	A5	1652	U	C2-N3	-5.91	1.33	1.37
59	A5	3591	A	N7-C5	-5.91	1.35	1.39
56	A8	36	A	N9-C4	-5.91	1.34	1.37
59	A5	1544	U	C5-C6	-5.91	1.28	1.34
55	A7	88	G	C8-N7	-5.91	1.27	1.30
58	B2	97	U	N1-C2	-5.91	1.33	1.38
59	A5	34	C	C2-N3	-5.91	1.31	1.35
59	A5	1137	G	N9-C4	-5.91	1.33	1.38
59	A5	1720	A	C5-C4	-5.91	1.34	1.38
59	A5	2735	A	N3-C4	-5.91	1.31	1.34
56	A8	19	A	C6-N6	-5.91	1.29	1.33
59	A5	1710	G	C8-N7	-5.91	1.27	1.30
59	A5	2219	U	N1-C2	-5.91	1.33	1.38
59	A5	2561	A	C5-C4	-5.91	1.34	1.38
59	A5	2773	G	N9-C8	-5.91	1.33	1.37
59	A5	3884	A	N9-C8	-5.91	1.33	1.37
59	A5	3308	A	N9-C4	-5.91	1.34	1.37
55	A7	88	G	C5-C4	-5.91	1.34	1.38
58	B2	1190	G	C8-N7	-5.91	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	450	G	N1-C2	-5.91	1.33	1.37
59	A5	922	G	N7-C5	-5.91	1.35	1.39
59	A5	1605	U	N1-C2	-5.91	1.33	1.38
59	A5	2677	A	N7-C5	-5.91	1.35	1.39
59	A5	291	U	C4-C5	-5.90	1.38	1.43
59	A5	1114	A	N9-C8	-5.90	1.33	1.37
59	A5	1402	U	C2-N3	-5.90	1.33	1.37
59	A5	1683	U	N1-C6	-5.90	1.32	1.38
59	A5	2175	A	N9-C4	-5.90	1.34	1.37
59	A5	2228	U	C4-O4	-5.90	1.19	1.23
58	B2	564	A	N9-C4	-5.90	1.34	1.37
59	A5	2803	A	N9-C4	-5.90	1.34	1.37
59	A5	3474	G	N3-C4	-5.90	1.31	1.35
48	Cp	11	VAL	CB-CG1	-5.90	1.40	1.52
58	B2	1079	A	C6-N1	-5.90	1.31	1.35
59	A5	864	G	N7-C5	-5.90	1.35	1.39
59	A5	2653	A	N3-C4	-5.90	1.31	1.34
58	B2	1217	U	N3-C4	-5.90	1.33	1.38
59	A5	53	A	C5-C4	-5.90	1.34	1.38
59	A5	1545	A	N9-C8	-5.90	1.33	1.37
59	A5	1647	A	N9-C4	-5.90	1.34	1.37
59	A5	3412	U	C2-O2	-5.90	1.17	1.22
59	A5	1211	A	N3-C4	-5.90	1.31	1.34
59	A5	2238	A	N9-C4	-5.90	1.34	1.37
59	A5	2504	A	C6-N1	-5.90	1.31	1.35
59	A5	2546	G	N9-C8	-5.90	1.33	1.37
59	A5	3493	U	C4-C5	-5.90	1.38	1.43
59	A5	3964	G	N3-C4	-5.90	1.31	1.35
59	A5	341	A	C6-N1	-5.90	1.31	1.35
59	A5	1553	C	N3-C4	-5.89	1.29	1.33
59	A5	1775	C	C4-C5	-5.89	1.38	1.43
59	A5	3588	G	C8-N7	-5.89	1.27	1.30
59	A5	1081	C	C4-N4	-5.89	1.28	1.33
59	A5	1112	G	N9-C4	-5.89	1.33	1.38
59	A5	1766	U	N1-C6	-5.89	1.32	1.38
59	A5	3333	A	N9-C8	-5.89	1.33	1.37
59	A5	3487	A	P-O5'	-5.89	1.53	1.59
59	A5	804	C	C5-C6	-5.89	1.29	1.34
59	A5	1014	U	C2'-C1'	-5.89	1.46	1.53
59	A5	15	A	N7-C5	-5.89	1.35	1.39
59	A5	213	A	N9-C4	-5.89	1.34	1.37
59	A5	1669	G	N9-C8	-5.89	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1685	G	C2-N3	-5.89	1.28	1.32
59	A5	2710	A	N1-C2	-5.89	1.29	1.34
56	A8	15	G	C2-N3	-5.89	1.28	1.32
58	B2	1193	C	N3-C4	-5.89	1.29	1.33
59	A5	851	G	N7-C5	-5.89	1.35	1.39
59	A5	2750	A	C6-N1	-5.89	1.31	1.35
59	A5	3886	U	C2-N3	-5.89	1.33	1.37
56	A8	53	C	N1-C6	-5.88	1.33	1.37
58	B2	305	A	N9-C4	-5.88	1.34	1.37
58	B2	1827	A	N7-C5	-5.88	1.35	1.39
59	A5	287	G	C5-C4	-5.88	1.34	1.38
59	A5	822	G	N9-C4	-5.88	1.33	1.38
59	A5	1528	G	N7-C5	-5.88	1.35	1.39
59	A5	1534	G	C6-N1	-5.88	1.35	1.39
59	A5	1543	C	C4-C5	-5.88	1.38	1.43
59	A5	2209	G	N9-C4	-5.88	1.33	1.38
59	A5	2721	C	C4-C5	-5.88	1.38	1.43
59	A5	3626	A	C8-N7	-5.88	1.27	1.31
59	A5	3636	G	N3-C4	-5.88	1.31	1.35
59	A5	3758	G	C6-N1	-5.88	1.35	1.39
59	A5	2544	U	N1-C2	-5.88	1.33	1.38
59	A5	3486	U	C4-C5	-5.88	1.38	1.43
30	CR	120	TYR	CD1-CE1	-5.88	1.30	1.39
59	A5	58	G	C5-C4	-5.88	1.34	1.38
59	A5	118	A	N3-C4	-5.88	1.31	1.34
59	A5	323	U	C4-C5	-5.88	1.38	1.43
59	A5	1386	U	C4-C5	-5.88	1.38	1.43
59	A5	410	G	C5-C4	-5.88	1.34	1.38
59	A5	1028	U	N1-C6	-5.88	1.32	1.38
59	A5	1595	G	C8-N7	-5.88	1.27	1.30
59	A5	1610	A	C5-C6	-5.88	1.35	1.41
59	A5	3170	U	N1-C2	-5.88	1.33	1.38
58	B2	46	A	N3-C4	-5.88	1.31	1.34
59	A5	821	U	N1-C2	-5.88	1.33	1.38
59	A5	1070	G	C5-C6	-5.88	1.36	1.42
59	A5	1668	U	N1-C6	-5.88	1.32	1.38
59	A5	2171	U	N1-C2	-5.88	1.33	1.38
59	A5	3340	A	C8-N7	-5.88	1.27	1.31
59	A5	3869	A	N7-C5	-5.88	1.35	1.39
4	CB	235	TRP	CE3-CZ3	-5.88	1.28	1.38
59	A5	2228	U	N3-C4	-5.88	1.33	1.38
59	A5	2245	G	C2-N3	-5.88	1.28	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2776	A	N3-C4	-5.88	1.31	1.34
59	A5	3145	U	C5-C6	-5.88	1.28	1.34
59	A5	50	U	C4-O4	-5.88	1.19	1.23
59	A5	1024	U	C4-O4	-5.88	1.19	1.23
59	A5	1206	G	N9-C4	-5.88	1.33	1.38
59	A5	3288	C	N3-C4	-5.88	1.29	1.33
59	A5	3851	U	C4-C5	-5.88	1.38	1.43
58	B2	1970	U	N3-C4	-5.87	1.33	1.38
59	A5	353	G	N1-C2	-5.87	1.33	1.37
59	A5	1168	G	C6-O6	-5.87	1.18	1.24
59	A5	2552	G	N3-C4	-5.87	1.31	1.35
59	A5	299	G	N7-C5	-5.87	1.35	1.39
59	A5	360	A	N9-C8	-5.87	1.33	1.37
59	A5	848	A	N7-C5	-5.87	1.35	1.39
59	A5	1112	G	C5-C6	-5.87	1.36	1.42
59	A5	1675	G	N9-C4	-5.87	1.33	1.38
59	A5	1704	A	N9-C4	-5.87	1.34	1.37
59	A5	1793	C	N1-C6	-5.87	1.33	1.37
59	A5	2203	A	N1-C2	-5.87	1.29	1.34
59	A5	2533	U	N1-C6	-5.87	1.32	1.38
59	A5	2754	G	C6-N1	-5.87	1.35	1.39
59	A5	1428	G	N7-C5	-5.87	1.35	1.39
59	A5	1614	A	N1-C2	-5.87	1.29	1.34
59	A5	3446	G	N7-C5	-5.87	1.35	1.39
59	A5	3626	A	N9-C4	-5.87	1.34	1.37
58	B2	99	A	N9-C4	-5.87	1.34	1.37
58	B2	1200	A	C5-C4	-5.87	1.34	1.38
59	A5	771	A	N3-C4	-5.87	1.31	1.34
59	A5	2209	G	C2-N3	-5.87	1.28	1.32
59	A5	2618	G	N1-C2	-5.87	1.33	1.37
59	A5	3546	A	C5-C4	-5.87	1.34	1.38
59	A5	1145	C	C4-C5	-5.87	1.38	1.43
59	A5	3508	G	N1-C2	-5.87	1.33	1.37
56	A8	32	G	C2-N3	-5.87	1.28	1.32
56	A8	72	C	N1-C6	-5.87	1.33	1.37
59	A5	1401	C	C4-C5	-5.87	1.38	1.43
59	A5	1870	G	N1-C2	-5.87	1.33	1.37
59	A5	2112	A	N9-C4	-5.87	1.34	1.37
59	A5	808	G	N7-C5	-5.86	1.35	1.39
59	A5	1388	C	C4-C5	-5.86	1.38	1.43
59	A5	2245	G	C8-N7	-5.86	1.27	1.30
59	A5	2504	A	N7-C5	-5.86	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3175	A	N9-C8	-5.86	1.33	1.37
59	A5	2768	A	C5-C6	-5.86	1.35	1.41
59	A5	2776	A	P-OP1	-5.86	1.39	1.49
59	A5	3133	A	C6-N1	-5.86	1.31	1.35
59	A5	297	U	C4-C5	-5.86	1.38	1.43
59	A5	778	C	N1-C2	-5.86	1.34	1.40
59	A5	992	U	C5-C6	-5.86	1.28	1.34
59	A5	1803	C	C2-N3	-5.86	1.31	1.35
59	A5	2715	C	N1-C2	-5.86	1.34	1.40
59	A5	3454	G	N7-C5	-5.86	1.35	1.39
59	A5	1197	A	C6-N1	-5.86	1.31	1.35
59	A5	1417	G	C6-N1	-5.86	1.35	1.39
59	A5	1614	A	N3-C4	-5.86	1.31	1.34
59	A5	3611	C	N1-C2	-5.86	1.34	1.40
59	A5	3635	G	C2-N3	-5.86	1.28	1.32
59	A5	66	A	N1-C2	-5.86	1.29	1.34
59	A5	1105	U	C2-O2	-5.86	1.17	1.22
59	A5	3476	G	C8-N7	-5.86	1.27	1.30
59	A5	3522	A	C5-C4	-5.86	1.34	1.38
59	A5	3760	A	C5-C4	-5.86	1.34	1.38
59	A5	1085	U	C4-O4	-5.85	1.19	1.23
59	A5	1544	U	C2-N3	-5.85	1.33	1.37
59	A5	1613	A	N9-C4	-5.85	1.34	1.37
59	A5	1778	A	C5-C6	-5.85	1.35	1.41
59	A5	2199	A	N9-C4	-5.85	1.34	1.37
59	A5	322	G	C6-N1	-5.85	1.35	1.39
59	A5	1021	U	C5-C6	-5.85	1.28	1.34
59	A5	1124	G	C8-N7	-5.85	1.27	1.30
59	A5	1626	A	C5-C6	-5.85	1.35	1.41
59	A5	1628	G	C5-C4	-5.85	1.34	1.38
59	A5	2723	A	N1-C2	-5.85	1.29	1.34
59	A5	2909	A	N9-C4	-5.85	1.34	1.37
59	A5	3628	G	N1-C2	-5.85	1.33	1.37
67	CV	97	TYR	CD1-CE1	-5.85	1.30	1.39
59	A5	367	A	C6-N6	-5.85	1.29	1.33
59	A5	1613	A	C5-C4	-5.85	1.34	1.38
58	B2	359	C	C2-N3	-5.85	1.31	1.35
58	B2	1071	G	C2-N3	-5.85	1.28	1.32
58	B2	1943	G	C5-C4	-5.85	1.34	1.38
59	A5	1161	C	N1-C2	-5.85	1.34	1.40
59	A5	1325	C	N3-C4	-5.85	1.29	1.33
59	A5	1769	U	C4-C5	-5.85	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1870	G	N7-C5	-5.85	1.35	1.39
59	A5	2170	C	N3-C4	-5.85	1.29	1.33
59	A5	2808	G	C8-N7	-5.85	1.27	1.30
41	Ce	46	ARG	CG-CD	-5.85	1.37	1.51
59	A5	814	U	N3-C4	-5.85	1.33	1.38
59	A5	1209	A	C5-C4	-5.85	1.34	1.38
59	A5	1689	G	C8-N7	-5.85	1.27	1.30
59	A5	2654	G	C8-N7	-5.85	1.27	1.30
33	CP	119	VAL	CB-CG2	-5.85	1.40	1.52
58	B2	1942	G	C2-N3	-5.85	1.28	1.32
59	A5	1317	A	C6-N6	-5.85	1.29	1.33
59	A5	1724	A	N7-C5	-5.85	1.35	1.39
56	A8	87	A	N9-C4	-5.84	1.34	1.37
58	B2	1066	A	C5-C4	-5.84	1.34	1.38
59	A5	305	G	N9-C8	-5.84	1.33	1.37
59	A5	1166	U	C2-O2	-5.84	1.17	1.22
59	A5	1635	A	C8-N7	-5.84	1.27	1.31
59	A5	1780	U	C4-C5	-5.84	1.38	1.43
59	A5	2788	U	N3-C4	-5.84	1.33	1.38
59	A5	1366	G	C8-N7	-5.84	1.27	1.30
59	A5	3506	U	C2-N3	-5.84	1.33	1.37
59	A5	3884	A	N1-C2	-5.84	1.29	1.34
59	A5	1170	U	C4-C5	-5.84	1.38	1.43
59	A5	2507	C	N1-C6	-5.84	1.33	1.37
59	A5	2552	G	N9-C4	-5.84	1.33	1.38
59	A5	3161	U	N1-C6	-5.84	1.32	1.38
55	A7	79	U	N1-C2	-5.84	1.33	1.38
58	B2	1229	G	N9-C8	-5.84	1.33	1.37
59	A5	806	A	N3-C4	-5.84	1.31	1.34
59	A5	1003	C	P-OP1	-5.84	1.39	1.49
59	A5	1047	A	N7-C5	-5.84	1.35	1.39
59	A5	1118	C	N1-C2	-5.84	1.34	1.40
59	A5	2562	U	C4-C5	-5.84	1.38	1.43
59	A5	3423	U	N3-C4	-5.84	1.33	1.38
58	B2	1058	A	C6-N1	-5.84	1.31	1.35
59	A5	64	A	C5-C6	-5.84	1.35	1.41
59	A5	367	A	C5-C4	-5.84	1.34	1.38
59	A5	2703	G	C5-C6	-5.84	1.36	1.42
59	A5	3450	G	N1-C2	-5.84	1.33	1.37
58	B2	1239	A	C5-C6	-5.84	1.35	1.41
59	A5	432	U	N3-C4	-5.84	1.33	1.38
59	A5	796	A	C2-N3	-5.84	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	819	U	C4-O4	-5.84	1.19	1.23
59	A5	1765	U	N3-C4	-5.84	1.33	1.38
59	A5	3541	A	C5-C4	-5.84	1.34	1.38
59	A5	3880	A	N3-C4	-5.84	1.31	1.34
59	A5	1534	G	C5-C4	-5.83	1.34	1.38
59	A5	3521	A	C2-N3	-5.83	1.28	1.33
55	A7	13	A	N7-C5	-5.83	1.35	1.39
59	A5	32	C	N1-C6	-5.83	1.33	1.37
59	A5	828	G	N1-C2	-5.83	1.33	1.37
59	A5	837	A	C5-C6	-5.83	1.35	1.41
59	A5	1172	G	C2-N2	-5.83	1.28	1.34
59	A5	1617	U	N1-C6	-5.83	1.32	1.38
59	A5	1776	U	N1-C6	-5.83	1.32	1.38
59	A5	2704	A	C8-N7	-5.83	1.27	1.31
59	A5	3331	A	C8-N7	-5.83	1.27	1.31
59	A5	2532	U	N1-C2	-5.83	1.33	1.38
59	A5	3264	A	N7-C5	-5.83	1.35	1.39
59	A5	3351	A	N7-C5	-5.83	1.35	1.39
56	A8	43	A	C5-C4	-5.83	1.34	1.38
59	A5	114	G	N1-C2	-5.83	1.33	1.37
56	A8	17	U	N1-C6	-5.83	1.32	1.38
59	A5	426	A	C6-N1	-5.83	1.31	1.35
59	A5	791	C	C5-C6	-5.83	1.29	1.34
59	A5	1097	A	N9-C4	-5.83	1.34	1.37
59	A5	1151	A	N9-C8	-5.83	1.33	1.37
59	A5	1163	G	P-O5'	-5.83	1.53	1.59
59	A5	1393	A	C5-C6	-5.83	1.35	1.41
59	A5	1715	G	N7-C5	-5.83	1.35	1.39
59	A5	1716	G	N7-C5	-5.83	1.35	1.39
59	A5	2111	A	N9-C8	-5.83	1.33	1.37
59	A5	2203	A	C5-C6	-5.83	1.35	1.41
59	A5	2206	U	N1-C6	-5.83	1.32	1.38
59	A5	24	G	C5-C4	-5.83	1.34	1.38
59	A5	299	G	N3-C4	-5.83	1.31	1.35
59	A5	1642	G	C6-N1	-5.83	1.35	1.39
59	A5	2486	A	C6-N1	-5.83	1.31	1.35
59	A5	57	G	N7-C5	-5.83	1.35	1.39
59	A5	1327	G	N9-C8	-5.83	1.33	1.37
59	A5	1617	U	N3-C4	-5.83	1.33	1.38
59	A5	1876	G	N9-C8	-5.83	1.33	1.37
59	A5	2693	G	C8-N7	-5.83	1.27	1.30
59	A5	1645	G	C8-N7	-5.82	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3132	C	C4-C5	-5.82	1.38	1.43
54	A9	10	U	N1-C2	-5.82	1.33	1.38
59	A5	772	G	C5-C4	-5.82	1.34	1.38
59	A5	1046	A	N7-C5	-5.82	1.35	1.39
59	A5	1746	A	N9-C4	-5.82	1.34	1.37
59	A5	3875	U	C2-N3	-5.82	1.33	1.37
56	A8	19	A	C5-C4	-5.82	1.34	1.38
58	B2	1062	C	N3-C4	-5.82	1.29	1.33
59	A5	790	U	C5-C6	-5.82	1.28	1.34
59	A5	2032	U	C2-N3	-5.82	1.33	1.37
59	A5	2783	C	N1-C6	-5.82	1.33	1.37
59	A5	3934	C	C4-C5	-5.82	1.38	1.43
59	A5	3966	U	C2-N3	-5.82	1.33	1.37
59	A5	1310	A	N9-C4	-5.82	1.34	1.37
59	A5	3176	C	N3-C4	-5.82	1.29	1.33
59	A5	3406	G	C2-N3	-5.82	1.28	1.32
59	A5	1153	G	C6-N1	-5.82	1.35	1.39
59	A5	2191	G	N9-C4	-5.82	1.33	1.38
59	A5	2707	C	N1-C2	-5.82	1.34	1.40
59	A5	3881	A	C6-N1	-5.82	1.31	1.35
58	B2	1975	G	N7-C5	-5.82	1.35	1.39
59	A5	365	A	C5-C6	-5.82	1.35	1.41
59	A5	988	C	C2-N3	-5.82	1.31	1.35
59	A5	1170	U	C2-O2	-5.82	1.17	1.22
59	A5	1734	G	C8-N7	-5.82	1.27	1.30
59	A5	1780	U	N1-C2	-5.82	1.33	1.38
59	A5	3134	G	N1-C2	-5.82	1.33	1.37
59	A5	3246	G	N3-C4	-5.82	1.31	1.35
59	A5	3307	A	N9-C4	-5.82	1.34	1.37
59	A5	92	A	C6-N6	-5.81	1.29	1.33
59	A5	832	U	C5-C6	-5.81	1.28	1.34
59	A5	1509	A	C6-N1	-5.81	1.31	1.35
59	A5	1679	U	C4-C5	-5.81	1.38	1.43
59	A5	1100	G	C8-N7	-5.81	1.27	1.30
59	A5	1626	A	C5-C4	-5.81	1.34	1.38
59	A5	3357	C	N1-C6	-5.81	1.33	1.37
58	B2	392	A	N7-C5	-5.81	1.35	1.39
59	A5	63	G	C8-N7	-5.81	1.27	1.30
59	A5	340	U	C4-C5	-5.81	1.38	1.43
58	B2	1079	A	C2-N3	-5.81	1.28	1.33
59	A5	2211	A	C6-N1	-5.81	1.31	1.35
59	A5	3133	A	N3-C4	-5.81	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3146	G	C5-C4	-5.81	1.34	1.38
59	A5	3326	G	N9-C8	-5.81	1.33	1.37
59	A5	3549	C	N3-C4	-5.81	1.29	1.33
58	B2	1027	A	C5-C6	-5.81	1.35	1.41
59	A5	1660	G	C8-N7	-5.81	1.27	1.30
59	A5	2205	G	N1-C2	-5.81	1.33	1.37
58	B2	1112	A	N7-C5	-5.81	1.35	1.39
59	A5	662	A	C5-C4	-5.81	1.34	1.38
59	A5	1079	U	N3-C4	-5.81	1.33	1.38
59	A5	1635	A	N9-C4	-5.81	1.34	1.37
59	A5	2799	U	N1-C6	-5.81	1.32	1.38
59	A5	92	A	N3-C4	-5.80	1.31	1.34
59	A5	409	A	C6-N1	-5.80	1.31	1.35
59	A5	1064	G	N3-C4	-5.80	1.31	1.35
59	A5	1716	G	C8-N7	-5.80	1.27	1.30
59	A5	2104	A	N9-C4	-5.80	1.34	1.37
59	A5	2183	A	N9-C8	-5.80	1.33	1.37
59	A5	3578	A	C5-C4	-5.80	1.34	1.38
59	A5	841	A	N3-C4	-5.80	1.31	1.34
59	A5	1632	A	C5-C4	-5.80	1.34	1.38
59	A5	3180	G	N7-C5	-5.80	1.35	1.39
59	A5	980	A	N9-C8	-5.80	1.33	1.37
59	A5	1146	U	C2-O2	-5.80	1.17	1.22
59	A5	1608	G	N9-C8	-5.80	1.33	1.37
59	A5	2161	G	N7-C5	-5.80	1.35	1.39
59	A5	3541	A	N7-C5	-5.80	1.35	1.39
58	B2	312	G	C5-C4	-5.80	1.34	1.38
58	B2	627	A	C5-C4	-5.80	1.34	1.38
59	A5	1717	A	N9-C4	-5.80	1.34	1.37
59	A5	2175	A	C5-C4	-5.80	1.34	1.38
59	A5	3597	C	C5-C6	-5.80	1.29	1.34
59	A5	3678	G	N7-C5	-5.80	1.35	1.39
59	A5	810	A	C2-N3	-5.80	1.28	1.33
59	A5	810	A	C5-C4	-5.80	1.34	1.38
59	A5	1328	U	N1-C2	-5.80	1.33	1.38
59	A5	1978	G	N7-C5	-5.80	1.35	1.39
59	A5	2144	A	N9-C4	-5.80	1.34	1.37
59	A5	1111	C	C5-C6	-5.79	1.29	1.34
58	B2	1228	G	N3-C4	-5.79	1.31	1.35
59	A5	1075	G	C2-N2	-5.79	1.28	1.34
59	A5	1076	A	C2-N3	-5.79	1.28	1.33
59	A5	1866	G	N7-C5	-5.79	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2160	C	C5-C6	-5.79	1.29	1.34
59	A5	2623	C	N1-C6	-5.79	1.33	1.37
59	A5	3328	G	C5-C4	-5.79	1.34	1.38
59	A5	1343	A	C8-N7	-5.79	1.27	1.31
59	A5	2718	U	C2-N3	-5.79	1.33	1.37
59	A5	2912	U	C2-N3	-5.79	1.33	1.37
59	A5	3521	A	N7-C5	-5.79	1.35	1.39
59	A5	3934	C	C5-C6	-5.79	1.29	1.34
59	A5	1789	A	N3-C4	-5.79	1.31	1.34
56	A8	39	A	C5-C4	-5.79	1.34	1.38
59	A5	993	A	C8-N7	-5.79	1.27	1.31
59	A5	1020	A	N9-C8	-5.79	1.33	1.37
59	A5	1081	C	N1-C6	-5.79	1.33	1.37
59	A5	2222	G	N9-C8	-5.79	1.33	1.37
59	A5	2748	G	C5-C4	-5.79	1.34	1.38
58	B2	1068	U	C2-N3	-5.79	1.33	1.37
59	A5	1006	A	C6-N6	-5.79	1.29	1.33
59	A5	1605	U	C2-N3	-5.79	1.33	1.37
59	A5	2562	U	C5-C6	-5.79	1.28	1.34
59	A5	2689	G	N9-C8	-5.79	1.33	1.37
58	B2	630	A	C5-C4	-5.79	1.34	1.38
59	A5	363	G	C4'-C3'	-5.79	1.46	1.52
59	A5	1888	A	N7-C5	-5.79	1.35	1.39
59	A5	2112	A	N3-C4	-5.79	1.31	1.34
59	A5	2698	A	N3-C4	-5.79	1.31	1.34
59	A5	2728	C	C2-N3	-5.79	1.31	1.35
59	A5	3414	U	N1-C2	-5.79	1.33	1.38
59	A5	59	G	C2-N3	-5.78	1.28	1.32
59	A5	344	U	C4-C5	-5.78	1.38	1.43
59	A5	1726	G	N1-C2	-5.78	1.33	1.37
59	A5	1801	U	N3-C4	-5.78	1.33	1.38
59	A5	1883	G	C5-C6	-5.78	1.36	1.42
59	A5	3140	G	N3-C4	-5.78	1.31	1.35
59	A5	3159	C	N1-C6	-5.78	1.33	1.37
59	A5	24	G	N9-C4	-5.78	1.33	1.38
59	A5	1034	U	N1-C2	-5.78	1.33	1.38
59	A5	3522	A	C6-N1	-5.78	1.31	1.35
59	A5	3674	G	N9-C4	-5.78	1.33	1.38
56	A8	12	G	C6-N1	-5.78	1.35	1.39
59	A5	1032	G	C5-C4	-5.78	1.34	1.38
59	A5	1372	A	C5-C6	-5.78	1.35	1.41
59	A5	2222	G	C5-C6	-5.78	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2649	A	C5-C6	-5.78	1.35	1.41
59	A5	3139	G	C5-C4	-5.78	1.34	1.38
59	A5	3312	G	C5-C4	-5.78	1.34	1.38
59	A5	3403	G	P-O5'	-5.78	1.53	1.59
59	A5	3444	G	N9-C8	-5.78	1.33	1.37
59	A5	3510	U	C4-C5	-5.78	1.38	1.43
59	A5	3950	A	C5-C4	-5.78	1.34	1.38
59	A5	1163	G	N1-C2	-5.78	1.33	1.37
59	A5	1761	C	C4-C5	-5.78	1.38	1.43
59	A5	2765	A	C6-N1	-5.78	1.31	1.35
58	B2	632	G	C5-C6	-5.78	1.36	1.42
58	B2	1074	G	C8-N7	-5.78	1.27	1.30
59	A5	74	A	C6-N1	-5.78	1.31	1.35
59	A5	1065	A	N1-C2	-5.78	1.29	1.34
59	A5	1393	A	N9-C8	-5.78	1.33	1.37
59	A5	1730	A	N7-C5	-5.78	1.35	1.39
59	A5	2564	U	N3-C4	-5.78	1.33	1.38
58	B2	97	U	C2-N3	-5.78	1.33	1.37
59	A5	211	U	C2-N3	-5.78	1.33	1.37
59	A5	441	A	N9-C4	-5.78	1.34	1.37
59	A5	1265	U	C2-N3	-5.78	1.33	1.37
59	A5	1364	A	C5-C4	-5.78	1.34	1.38
59	A5	1525	G	C5-C4	-5.78	1.34	1.38
59	A5	2155	A	C6-N1	-5.78	1.31	1.35
59	A5	2729	U	C5-C6	-5.78	1.28	1.34
56	A8	13	U	N3-C4	-5.77	1.33	1.38
56	A8	15	G	N3-C4	-5.77	1.31	1.35
59	A5	1041	A	C5-C6	-5.77	1.35	1.41
59	A5	1558	A	C5-C4	-5.77	1.34	1.38
59	A5	2187	U	C2-N3	-5.77	1.33	1.37
59	A5	2768	A	C6-N1	-5.77	1.31	1.35
58	B2	351	G	C2-N3	-5.77	1.28	1.32
59	A5	392	A	N9-C8	-5.77	1.33	1.37
56	A8	14	G	C5-C4	-5.77	1.34	1.38
58	B2	45	U	C2-N3	-5.77	1.33	1.37
59	A5	1882	G	N1-C2	-5.77	1.33	1.37
59	A5	2152	C	N3-C4	-5.77	1.29	1.33
58	B2	1051	U	C2-N3	-5.77	1.33	1.37
59	A5	343	A	N9-C8	-5.77	1.33	1.37
59	A5	792	U	P-OP1	-5.77	1.39	1.49
59	A5	1391	A	C8-N7	-5.77	1.27	1.31
59	A5	1752	G	N3-C4	-5.77	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2566	A	N7-C5	-5.77	1.35	1.39
59	A5	1026	G	N1-C2	-5.77	1.33	1.37
59	A5	1182	A	N9-C4	-5.77	1.34	1.37
59	A5	2490	G	N9-C4	5.77	1.42	1.38
59	A5	2622	A	C8-N7	-5.77	1.27	1.31
59	A5	3180	G	C5-C6	-5.77	1.36	1.42
59	A5	3540	G	C6-N1	-5.77	1.35	1.39
58	B2	361	G	N9-C8	-5.76	1.33	1.37
59	A5	290	G	C6-N1	-5.76	1.35	1.39
59	A5	990	U	N1-C6	-5.76	1.32	1.38
59	A5	2248	A	N3-C4	-5.76	1.31	1.34
59	A5	3269	G	C2-N3	-5.76	1.28	1.32
59	A5	3345	A	C8-N7	-5.76	1.27	1.31
59	A5	111	A	N7-C5	-5.76	1.35	1.39
59	A5	815	A	N9-C8	-5.76	1.33	1.37
56	A8	28	A	C8-N7	-5.76	1.27	1.31
56	A8	51	A	N7-C5	-5.76	1.35	1.39
59	A5	771	A	C5-C4	-5.76	1.34	1.38
59	A5	807	A	C6-N1	-5.76	1.31	1.35
59	A5	1137	G	C5-C6	-5.76	1.36	1.42
59	A5	30	A	C5-C6	-5.76	1.35	1.41
59	A5	3168	A	C5-C4	-5.76	1.34	1.38
56	A8	67	G	N9-C8	-5.76	1.33	1.37
59	A5	113	A	N9-C4	-5.76	1.34	1.37
59	A5	1014	U	C5-C6	-5.76	1.28	1.34
59	A5	1177	U	N1-C2	-5.76	1.33	1.38
59	A5	1523	A	N7-C5	-5.76	1.35	1.39
59	A5	1762	G	C8-N7	-5.76	1.27	1.30
59	A5	1766	U	N1-C2	-5.76	1.33	1.38
59	A5	2707	C	C2-N3	-5.76	1.31	1.35
59	A5	2753	G	C6-N1	-5.76	1.35	1.39
59	A5	1035	G	N3-C4	-5.75	1.31	1.35
59	A5	1198	U	N3-C4	-5.75	1.33	1.38
59	A5	1955	A	N9-C4	-5.75	1.34	1.37
59	A5	2023	A	N7-C5	-5.75	1.35	1.39
58	B2	1079	A	C5-C6	-5.75	1.35	1.41
59	A5	37	G	C5-C4	-5.75	1.34	1.38
59	A5	342	A	N9-C4	-5.75	1.34	1.37
59	A5	1006	A	N9-C8	-5.75	1.33	1.37
59	A5	1009	G	C6-O6	-5.75	1.19	1.24
59	A5	1520	U	N3-C4	-5.75	1.33	1.38
59	A5	1534	G	N1-C2	-5.75	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2197	A	N9-C4	-5.75	1.34	1.37
59	A5	3322	A	N9-C8	-5.75	1.33	1.37
59	A5	3339	U	N1-C2	-5.75	1.33	1.38
59	A5	3481	G	N3-C4	-5.75	1.31	1.35
56	A8	13	U	N1-C2	-5.75	1.33	1.38
58	B2	634	U	C2-N3	-5.75	1.33	1.37
58	B2	1090	A	N7-C5	-5.75	1.35	1.39
59	A5	915	C	C4-C5	-5.75	1.38	1.43
59	A5	992	U	C4-C5	-5.75	1.38	1.43
59	A5	1085	U	C5-C6	-5.75	1.28	1.34
59	A5	1510	G	N7-C5	-5.75	1.35	1.39
59	A5	1736	G	C6-N1	-5.75	1.35	1.39
59	A5	1633	G	C6-N1	-5.75	1.35	1.39
59	A5	2517	A	N9-C8	-5.75	1.33	1.37
59	A5	2734	A	N9-C8	-5.75	1.33	1.37
59	A5	2797	A	N3-C4	-5.75	1.31	1.34
56	A8	100	G	C2-N3	-5.75	1.28	1.32
59	A5	799	A	N9-C8	-5.75	1.33	1.37
59	A5	827	A	N9-C4	-5.75	1.34	1.37
59	A5	846	U	C4-C5	-5.75	1.38	1.43
59	A5	1002	C	C4-N4	-5.75	1.28	1.33
59	A5	1150	G	N1-C2	-5.75	1.33	1.37
59	A5	1380	G	C8-N7	-5.75	1.27	1.30
59	A5	1389	C	C5-C6	-5.75	1.29	1.34
59	A5	1395	U	N1-C2	-5.75	1.33	1.38
59	A5	2522	A	C8-N7	-5.75	1.27	1.31
59	A5	3505	U	N3-C4	-5.75	1.33	1.38
58	B2	1189	G	N3-C4	-5.75	1.31	1.35
59	A5	823	U	C5-C6	-5.75	1.28	1.34
32	CT	57	TYR	CD1-CE1	-5.74	1.30	1.39
48	Cp	64	VAL	CB-CG1	-5.74	1.40	1.52
59	A5	30	A	C6-N6	-5.74	1.29	1.33
59	A5	95	G	C8-N7	-5.74	1.27	1.30
59	A5	98	G	N3-C4	-5.74	1.31	1.35
59	A5	803	A	C6-N6	-5.74	1.29	1.33
59	A5	1356	G	C6-N1	-5.74	1.35	1.39
59	A5	1686	A	C5-C4	-5.74	1.34	1.38
59	A5	1690	U	C2-N3	-5.74	1.33	1.37
59	A5	2785	C	C2-O2	-5.74	1.19	1.24
59	A5	3544	G	C6-N1	-5.74	1.35	1.39
59	A5	771	A	N9-C4	-5.74	1.34	1.37
59	A5	1360	U	N1-C2	-5.74	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1562	U	N3-C4	-5.74	1.33	1.38
59	A5	2546	G	N7-C5	-5.74	1.35	1.39
59	A5	3128	U	C4-C5	-5.74	1.38	1.43
59	A5	3403	G	C8-N7	-5.74	1.27	1.30
59	A5	3662	G	N7-C5	-5.74	1.35	1.39
59	A5	3842	A	N9-C4	5.74	1.41	1.37
58	B2	1940	G	N1-C2	-5.74	1.33	1.37
59	A5	48	U	C4-O4	-5.74	1.19	1.23
59	A5	1078	G	N7-C5	-5.74	1.35	1.39
59	A5	1367	A	C5-C4	-5.74	1.34	1.38
59	A5	2661	G	C5-C4	-5.74	1.34	1.38
59	A5	3878	U	N3-C4	-5.74	1.33	1.38
59	A5	2767	U	C4-C5	-5.74	1.38	1.43
59	A5	3640	A	C5-C4	-5.74	1.34	1.38
56	A8	25	C	N1-C6	-5.74	1.33	1.37
59	A5	784	G	N3-C4	-5.74	1.31	1.35
59	A5	786	C	C4-N4	-5.74	1.28	1.33
59	A5	787	C	N1-C2	-5.74	1.34	1.40
59	A5	1408	A	N3-C4	-5.74	1.31	1.34
59	A5	2240	U	N3-C4	-5.74	1.33	1.38
59	A5	2492	A	C6-N6	-5.74	1.29	1.33
59	A5	2495	G	C5-C4	-5.74	1.34	1.38
59	A5	68	G	C5-C4	-5.73	1.34	1.38
59	A5	1327	G	C8-N7	-5.73	1.27	1.30
59	A5	1637	U	C2-N3	-5.73	1.33	1.37
59	A5	3444	G	C5-C4	-5.73	1.34	1.38
56	A8	14	G	C6-N1	-5.73	1.35	1.39
58	B2	1940	G	N9-C8	-5.73	1.33	1.37
59	A5	314	A	N7-C5	-5.73	1.35	1.39
59	A5	2531	A	N9-C8	-5.73	1.33	1.37
59	A5	2565	G	C5-C4	-5.73	1.34	1.38
55	A7	83	A	C5-C4	-5.73	1.34	1.38
59	A5	1022	A	N1-C2	-5.73	1.29	1.34
59	A5	1979	A	N3-C4	-5.73	1.31	1.34
59	A5	2181	A	N3-C4	-5.73	1.31	1.34
59	A5	2521	A	C5-C4	-5.73	1.34	1.38
59	A5	2800	C	C2-O2	-5.73	1.19	1.24
59	A5	3141	A	C6-N6	-5.73	1.29	1.33
58	B2	15	U	C2-N3	-5.73	1.33	1.37
59	A5	83	U	C2-N3	-5.73	1.33	1.37
59	A5	372	U	N1-C2	-5.73	1.33	1.38
59	A5	1027	A	N9-C4	-5.73	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2775	A	N7-C5	-5.73	1.35	1.39
59	A5	3901	G	C5-C4	-5.73	1.34	1.38
58	B2	1027	A	N9-C4	-5.73	1.34	1.37
59	A5	818	A	C8-N7	-5.73	1.27	1.31
59	A5	1537	G	N7-C5	-5.73	1.35	1.39
59	A5	2105	C	N1-C2	-5.72	1.34	1.40
54	A9	12	C	C4-C5	-5.72	1.38	1.43
56	A8	11	G	N1-C2	-5.72	1.33	1.37
58	B2	46	A	N9-C4	-5.72	1.34	1.37
58	B2	316	U	C2-N3	-5.72	1.33	1.37
58	B2	1200	A	N3-C4	-5.72	1.31	1.34
59	A5	544	U	C2-N3	-5.72	1.33	1.37
59	A5	1528	G	N1-C2	-5.72	1.33	1.37
59	A5	1615	G	C6-N1	-5.72	1.35	1.39
59	A5	1645	G	C2-N2	-5.72	1.28	1.34
59	A5	1747	A	C5-C6	-5.72	1.35	1.41
59	A5	1756	G	N9-C4	-5.72	1.33	1.38
59	A5	2474	A	N9-C4	-5.72	1.34	1.37
59	A5	2657	A	C6-N1	-5.72	1.31	1.35
59	A5	3588	G	N3-C4	-5.72	1.31	1.35
56	A8	39	A	N9-C8	-5.72	1.33	1.37
58	B2	623	G	C6-N1	-5.72	1.35	1.39
58	B2	1828	C	N1-C2	-5.72	1.34	1.40
55	A7	79	U	N1-C6	-5.72	1.32	1.38
59	A5	116	U	N3-C4	-5.72	1.33	1.38
59	A5	1375	G	C6-N1	-5.72	1.35	1.39
59	A5	2661	G	C2-N3	-5.72	1.28	1.32
59	A5	3516	C	C4-C5	-5.72	1.38	1.43
59	A5	1531	U	C4-C5	-5.72	1.38	1.43
58	B2	388	G	C5-C4	-5.72	1.34	1.38
58	B2	1821	G	C5-C4	-5.72	1.34	1.38
59	A5	1353	G	N9-C8	-5.72	1.33	1.37
59	A5	1594	U	N1-C2	-5.72	1.33	1.38
59	A5	1689	G	O4'-C1'	-5.72	1.34	1.41
59	A5	2503	G	N3-C4	-5.72	1.31	1.35
59	A5	2716	C	P-O5'	-5.72	1.54	1.59
59	A5	2747	G	N1-C2	-5.72	1.33	1.37
56	A8	90	U	C4-C5	-5.71	1.38	1.43
59	A5	864	G	C2-N3	-5.71	1.28	1.32
59	A5	922	G	C5-C4	-5.71	1.34	1.38
59	A5	1032	G	C2-N3	-5.71	1.28	1.32
59	A5	1549	A	N9-C8	-5.71	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1689	G	C2-N3	-5.71	1.28	1.32
59	A5	3296	C	N3-C4	-5.71	1.29	1.33
59	A5	3439	A	N7-C5	-5.71	1.35	1.39
59	A5	3588	G	N1-C2	-5.71	1.33	1.37
59	A5	864	G	N9-C8	-5.71	1.33	1.37
59	A5	1091	G	N1-C2	-5.71	1.33	1.37
56	A8	18	C	N1-C2	-5.71	1.34	1.40
58	B2	1850	G	C8-N7	-5.71	1.27	1.30
59	A5	435	G	N7-C5	-5.71	1.35	1.39
59	A5	3302	G	C6-N1	-5.71	1.35	1.39
59	A5	3318	A	C5-C4	-5.71	1.34	1.38
59	A5	1051	C	C2-N3	-5.71	1.31	1.35
59	A5	1340	G	N9-C8	-5.71	1.33	1.37
59	A5	995	G	C8-N7	-5.71	1.27	1.30
59	A5	1151	A	C6-N1	-5.71	1.31	1.35
59	A5	1327	G	C5-C4	-5.71	1.34	1.38
59	A5	2041	G	C5-C4	-5.71	1.34	1.38
59	A5	2731	G	C6-O6	-5.71	1.19	1.24
59	A5	674	A	N7-C5	-5.71	1.35	1.39
59	A5	2153	C	N1-C6	-5.71	1.33	1.37
59	A5	2599	G	C5-C4	-5.71	1.34	1.38
59	A5	3166	C	C5-C6	-5.71	1.29	1.34
59	A5	3522	A	N7-C5	-5.71	1.35	1.39
59	A5	3882	C	C4-C5	-5.71	1.38	1.43
55	A7	75	G	N9-C8	-5.70	1.33	1.37
55	A7	81	A	N7-C5	-5.70	1.35	1.39
56	A8	101	A	C6-N1	-5.70	1.31	1.35
59	A5	22	A	C5-C6	-5.70	1.35	1.41
59	A5	364	U	C4-C5	-5.70	1.38	1.43
59	A5	1510	G	C5-C4	-5.70	1.34	1.38
59	A5	1774	C	N3-C4	-5.70	1.29	1.33
59	A5	2661	G	N1-C2	-5.70	1.33	1.37
59	A5	3264	A	C6-N1	-5.70	1.31	1.35
59	A5	3759	G	C6-N1	-5.70	1.35	1.39
59	A5	3896	G	C6-N1	-5.70	1.35	1.39
65	CO	28	TYR	CD2-CE2	-5.70	1.30	1.39
59	A5	993	A	N7-C5	-5.70	1.35	1.39
59	A5	351	A	N7-C5	-5.70	1.35	1.39
59	A5	1030	A	C6-N1	-5.70	1.31	1.35
59	A5	1723	G	C5-C4	-5.70	1.34	1.38
59	A5	2158	U	C4-O4	-5.70	1.19	1.23
59	A5	2618	G	C5-C4	-5.70	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3165	U	C2-O2	-5.70	1.17	1.22
59	A5	3662	G	C8-N7	-5.70	1.27	1.30
59	A5	1005	G	C5-C6	-5.70	1.36	1.42
59	A5	1707	A	N9-C8	-5.70	1.33	1.37
59	A5	1981	A	C5-C4	-5.70	1.34	1.38
59	A5	2167	G	N9-C4	-5.70	1.33	1.38
59	A5	3632	G	N9-C8	-5.70	1.33	1.37
58	B2	1206	G	N7-C5	-5.70	1.35	1.39
59	A5	50	U	N1-C2	-5.70	1.33	1.38
59	A5	860	A	N3-C4	-5.70	1.31	1.34
59	A5	1104	A	N9-C4	-5.70	1.34	1.37
59	A5	2742	G	C6-N1	-5.70	1.35	1.39
6	CC	140	VAL	CB-CG1	-5.70	1.40	1.52
56	A8	37	U	C2-N3	-5.70	1.33	1.37
59	A5	415	A	C8-N7	-5.70	1.27	1.31
59	A5	776	A	C6-N1	-5.70	1.31	1.35
59	A5	2535	U	N1-C6	-5.70	1.32	1.38
59	A5	3416	C	C4-C5	-5.70	1.38	1.43
4	CB	231	VAL	CB-CG1	-5.69	1.40	1.52
58	B2	1117	A	N7-C5	-5.69	1.35	1.39
59	A5	810	A	N9-C8	-5.69	1.33	1.37
59	A5	2176	G	N9-C4	-5.69	1.33	1.38
59	A5	2626	C	C2-N3	-5.69	1.31	1.35
58	B2	319	C	N3-C4	-5.69	1.29	1.33
58	B2	1943	G	C6-N1	-5.69	1.35	1.39
59	A5	24	G	C2-N3	-5.69	1.28	1.32
59	A5	1100	G	C2-N2	-5.69	1.28	1.34
59	A5	1382	U	C4'-C3'	5.69	1.59	1.53
59	A5	1730	A	C5-C4	-5.69	1.34	1.38
59	A5	2768	A	N9-C8	-5.69	1.33	1.37
59	A5	2724	C	P-O5'	-5.69	1.54	1.59
59	A5	200	U	C2-N3	-5.69	1.33	1.37
59	A5	839	A	N3-C4	-5.69	1.31	1.34
59	A5	1656	U	C2-N3	-5.69	1.33	1.37
59	A5	2658	A	C5-C4	-5.69	1.34	1.38
59	A5	3294	A	N7-C5	-5.69	1.35	1.39
59	A5	3639	U	C2-N3	-5.69	1.33	1.37
59	A5	3763	U	C4-C5	-5.69	1.38	1.43
59	A5	381	G	C2-N2	-5.69	1.28	1.34
59	A5	409	A	C5-C4	-5.69	1.34	1.38
59	A5	1177	U	C4-C5	-5.69	1.38	1.43
59	A5	1968	A	N9-C8	-5.69	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2161	G	N9-C4	-5.69	1.33	1.38
59	A5	2655	C	N1-C6	-5.69	1.33	1.37
59	A5	3727	A	C6-N1	-5.69	1.31	1.35
59	A5	370	A	C2-N3	-5.68	1.28	1.33
59	A5	442	A	C6-N6	-5.68	1.29	1.33
59	A5	1649	G	C5-C4	-5.68	1.34	1.38
59	A5	1651	C	N1-C6	-5.68	1.33	1.37
59	A5	1725	A	C5-C6	-5.68	1.35	1.41
59	A5	2104	A	C8-N7	-5.68	1.27	1.31
59	A5	2194	G	C6-N1	-5.68	1.35	1.39
59	A5	989	A	N3-C4	-5.68	1.31	1.34
59	A5	1024	U	C4-C5	-5.68	1.38	1.43
59	A5	1108	G	C8-N7	-5.68	1.27	1.30
59	A5	1874	G	C2-N3	-5.68	1.28	1.32
59	A5	2168	G	C2-N2	-5.68	1.28	1.34
59	A5	375	C	C4-C5	-5.68	1.38	1.43
59	A5	3493	U	N3-C4	-5.68	1.33	1.38
59	A5	1268	A	C5-C4	-5.68	1.34	1.38
59	A5	1970	G	C5-C4	-5.68	1.34	1.38
59	A5	2167	G	C6-N1	-5.68	1.35	1.39
59	A5	2699	A	C6-N1	-5.68	1.31	1.35
41	Ce	52	TYR	CE2-CZ	-5.68	1.31	1.38
59	A5	1611	G	N3-C4	-5.68	1.31	1.35
59	A5	2085	G	N3-C4	-5.68	1.31	1.35
58	B2	1023	G	C5-C4	-5.68	1.34	1.38
59	A5	803	A	C2'-C1'	-5.68	1.47	1.53
59	A5	977	C	C4-C5	-5.68	1.38	1.43
59	A5	1319	A	N9-C4	-5.68	1.34	1.37
59	A5	3139	G	N7-C5	-5.68	1.35	1.39
59	A5	3180	G	N1-C2	-5.68	1.33	1.37
55	A7	101	A	N7-C5	-5.67	1.35	1.39
59	A5	1271	G	C5-C6	-5.67	1.36	1.42
59	A5	1272	G	C8-N7	-5.67	1.27	1.30
59	A5	1364	A	N9-C8	-5.67	1.33	1.37
59	A5	1950	A	N7-C5	-5.67	1.35	1.39
59	A5	2496	A	C6-N1	-5.67	1.31	1.35
59	A5	2593	A	N9-C4	-5.67	1.34	1.37
59	A5	2595	U	C4-C5	-5.67	1.38	1.43
59	A5	3261	U	C2-N3	-5.67	1.33	1.37
59	A5	92	A	C5-C4	-5.67	1.34	1.38
59	A5	1033	U	N1-C2	-5.67	1.33	1.38
59	A5	1658	G	N3-C4	-5.67	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2771	G	C2-N3	-5.67	1.28	1.32
59	A5	3949	U	C4-O4	-5.67	1.19	1.23
55	A7	81	A	C6-N1	-5.67	1.31	1.35
59	A5	1095	G	C5-C6	-5.67	1.36	1.42
59	A5	1675	G	N1-C2	-5.67	1.33	1.37
59	A5	2247	U	N1-C2	-5.67	1.33	1.38
59	A5	2653	A	N7-C5	-5.67	1.35	1.39
59	A5	3166	C	N1-C2	-5.67	1.34	1.40
59	A5	3523	U	N3-C4	-5.67	1.33	1.38
80	CF	96	VAL	CB-CG2	-5.67	1.41	1.52
58	B2	1970	U	N1-C6	-5.67	1.32	1.38
59	A5	106	A	N3-C4	-5.67	1.31	1.34
59	A5	213	A	C5-C4	-5.67	1.34	1.38
59	A5	753	U	C2-N3	-5.67	1.33	1.37
59	A5	1172	G	C2-N3	-5.67	1.28	1.32
59	A5	2088	G	N3-C4	-5.67	1.31	1.35
59	A5	2250	G	N1-C2	-5.67	1.33	1.37
59	A5	3228	A	C5-C4	-5.67	1.34	1.38
59	A5	3493	U	C4-O4	-5.67	1.19	1.23
59	A5	3549	C	C4-C5	-5.67	1.38	1.43
48	Cp	18	TYR	CD1-CE1	-5.67	1.30	1.39
58	B2	1846	G	N1-C2	-5.67	1.33	1.37
58	B2	1939	A	N9-C4	-5.67	1.34	1.37
59	A5	348	A	C5-C4	-5.67	1.34	1.38
59	A5	1707	A	C5-C4	-5.67	1.34	1.38
59	A5	1873	A	C6-N1	-5.67	1.31	1.35
59	A5	2039	G	N9-C4	-5.67	1.33	1.38
59	A5	3147	A	C5-C6	-5.67	1.35	1.41
59	A5	286	A	N3-C4	-5.67	1.31	1.34
59	A5	428	C	N3-C4	-5.67	1.29	1.33
59	A5	1117	A	N9-C4	-5.67	1.34	1.37
59	A5	1176	A	N9-C8	-5.67	1.33	1.37
59	A5	2811	G	C5-C4	-5.67	1.34	1.38
59	A5	3627	C	N1-C6	-5.67	1.33	1.37
58	B2	1196	G	C5-C4	-5.66	1.34	1.38
59	A5	1094	A	C6-N1	-5.66	1.31	1.35
59	A5	1555	G	C2-N3	-5.66	1.28	1.32
59	A5	1636	G	N9-C8	-5.66	1.33	1.37
59	A5	31	C	C2-N3	-5.66	1.31	1.35
59	A5	310	A	N7-C5	-5.66	1.35	1.39
59	A5	2048	G	C5-C4	-5.66	1.34	1.38
59	A5	2681	A	N7-C5	-5.66	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	434	A	N7-C5	-5.66	1.35	1.39
59	A5	1730	A	N9-C4	-5.66	1.34	1.37
59	A5	2200	A	C8-N7	-5.66	1.27	1.31
59	A5	2780	A	N1-C2	-5.66	1.29	1.34
29	CQ	3	ILE	CB-CG2	-5.66	1.35	1.52
34	CX	258	TYR	CD1-CE1	-5.66	1.30	1.39
59	A5	27	A	C5-C4	-5.66	1.34	1.38
59	A5	1025	U	N1-C6	-5.66	1.32	1.38
59	A5	1724	A	C5-C4	-5.66	1.34	1.38
59	A5	2191	G	C2-N3	-5.66	1.28	1.32
59	A5	2777	A	C8-N7	-5.66	1.27	1.31
59	A5	3347	G	C8-N7	-5.66	1.27	1.30
59	A5	3512	U	N1-C6	-5.66	1.32	1.38
59	A5	1708	G	C6-N1	-5.66	1.35	1.39
59	A5	1967	G	N9-C4	-5.66	1.33	1.38
59	A5	2539	G	C5-C4	-5.66	1.34	1.38
55	A7	5	A	N9-C4	-5.66	1.34	1.37
58	B2	635	C	C5-C6	-5.66	1.29	1.34
59	A5	1268	A	N9-C8	-5.66	1.33	1.37
59	A5	1728	G	C5-C6	-5.66	1.36	1.42
59	A5	2654	G	N7-C5	-5.66	1.35	1.39
59	A5	2698	A	C5-C6	-5.66	1.35	1.41
59	A5	2711	C	N1-C2	-5.66	1.34	1.40
59	A5	3474	G	C5-C4	-5.66	1.34	1.38
56	A8	20	C	C4-C5	-5.65	1.38	1.43
58	B2	1942	G	N7-C5	-5.65	1.35	1.39
59	A5	1268	A	C6-N1	-5.65	1.31	1.35
59	A5	1785	G	N9-C8	-5.65	1.33	1.37
59	A5	235	A	N7-C5	-5.65	1.35	1.39
59	A5	1356	G	N9-C8	-5.65	1.33	1.37
59	A5	1897	A	C6-N1	-5.65	1.31	1.35
59	A5	3509	U	N1-C2	-5.65	1.33	1.38
59	A5	3629	U	C2-N3	-5.65	1.33	1.37
58	B2	1227	A	C6-N1	-5.65	1.31	1.35
59	A5	88	U	C4-C5	-5.65	1.38	1.43
59	A5	1613	A	C8-N7	-5.65	1.27	1.31
59	A5	1665	C	N3-C4	-5.65	1.29	1.33
59	A5	2161	G	C8-N7	-5.65	1.27	1.30
59	A5	2195	A	N7-C5	-5.65	1.35	1.39
59	A5	2611	A	C6-N1	-5.65	1.31	1.35
58	B2	1969	G	C5-C6	-5.65	1.36	1.42
59	A5	813	C	N1-C2	-5.65	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2495	G	N7-C5	-5.65	1.35	1.39
55	A7	11	A	N9-C8	-5.65	1.33	1.37
59	A5	26	G	P-O5'	5.65	1.65	1.59
59	A5	42	U	N1-C2	-5.65	1.33	1.38
59	A5	1327	G	N1-C2	-5.65	1.33	1.37
59	A5	2526	A	C2-N3	-5.65	1.28	1.33
59	A5	2789	U	C4-C5	-5.65	1.38	1.43
59	A5	1003	C	P-O5'	-5.65	1.54	1.59
59	A5	2168	G	N7-C5	-5.65	1.35	1.39
59	A5	3673	G	N7-C5	-5.65	1.35	1.39
59	A5	3879	A	C5-C4	-5.65	1.34	1.38
59	A5	800	C	N1-C2	-5.64	1.34	1.40
59	A5	1078	G	N1-C2	-5.64	1.33	1.37
59	A5	1733	A	N9-C8	-5.64	1.33	1.37
59	A5	3290	A	C5-C6	-5.64	1.35	1.41
59	A5	3877	G	C8-N7	-5.64	1.27	1.30
6	CC	70	TRP	CB-CG	-5.64	1.40	1.50
56	A8	57	G	C6-N1	-5.64	1.35	1.39
59	A5	45	G	P-O5'	-5.64	1.54	1.59
59	A5	1671	U	N3-C4	-5.64	1.33	1.38
59	A5	1776	U	C2-N3	-5.64	1.33	1.37
59	A5	3348	G	C5-C6	-5.64	1.36	1.42
59	A5	3614	U	N3-C4	-5.64	1.33	1.38
59	A5	116	U	N1-C2	-5.64	1.33	1.38
59	A5	371	G	C6-O6	-5.64	1.19	1.24
59	A5	851	G	N9-C8	-5.64	1.33	1.37
59	A5	1611	G	N9-C4	-5.64	1.33	1.38
59	A5	3635	G	C5-C4	-5.64	1.34	1.38
55	A7	81	A	C5-C6	-5.64	1.35	1.41
59	A5	33	C	C5-C6	-5.64	1.29	1.34
59	A5	366	A	C6-N1	-5.64	1.31	1.35
59	A5	1550	U	C4-C5	-5.64	1.38	1.43
59	A5	1886	C	N3-C4	-5.64	1.30	1.33
59	A5	3234	A	N9-C8	-5.64	1.33	1.37
59	A5	3279	A	C5-C6	-5.64	1.35	1.41
59	A5	421	C	N1-C6	-5.64	1.33	1.37
59	A5	3164	C	C2-N3	-5.64	1.31	1.35
59	A5	1264	U	C4-C5	-5.64	1.38	1.43
59	A5	2233	C	C4-C5	-5.64	1.38	1.43
59	A5	3295	U	C2-N3	-5.64	1.33	1.37
59	A5	3617	U	C4-C5	-5.64	1.38	1.43
55	A7	85	G	C5-C4	-5.63	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	250	U	N1-C2	-5.63	1.33	1.38
59	A5	369	A	C5-C4	-5.63	1.34	1.38
59	A5	431	C	C4-C5	-5.63	1.38	1.43
59	A5	2797	A	N1-C2	-5.63	1.29	1.34
58	B2	1109	C	C2-N3	-5.63	1.31	1.35
59	A5	2687	A	C8-N7	-5.63	1.27	1.31
56	A8	16	A	N9-C8	-5.63	1.33	1.37
56	A8	42	A	N3-C4	-5.63	1.31	1.34
59	A5	368	C	N1-C6	-5.63	1.33	1.37
59	A5	1074	U	N1-C6	-5.63	1.32	1.38
59	A5	1086	C	C4-C5	-5.63	1.38	1.43
59	A5	1096	A	N1-C2	-5.63	1.29	1.34
59	A5	1121	A	C8-N7	-5.63	1.27	1.31
59	A5	1343	A	C5-C6	-5.63	1.35	1.41
59	A5	3151	G	N1-C2	-5.63	1.33	1.37
59	A5	3472	A	N1-C2	-5.63	1.29	1.34
59	A5	1621	A	C5-C6	-5.63	1.35	1.41
58	B2	1096	C	C4-C5	-5.63	1.38	1.43
59	A5	237	G	C8-N7	-5.63	1.27	1.30
59	A5	1674	A	N9-C8	-5.63	1.33	1.37
59	A5	2199	A	N3-C4	-5.63	1.31	1.34
59	A5	2203	A	C8-N7	-5.63	1.27	1.31
59	A5	2668	C	N1-C6	-5.63	1.33	1.37
59	A5	2776	A	N9-C4	-5.63	1.34	1.37
59	A5	3180	G	N9-C8	-5.63	1.33	1.37
59	A5	3332	G	N9-C8	-5.63	1.33	1.37
59	A5	3494	C	N3-C4	-5.63	1.30	1.33
59	A5	3586	A	C5-C4	-5.63	1.34	1.38
37	Cr	44	TYR	CD1-CE1	-5.63	1.30	1.39
56	A8	14	G	N9-C4	-5.63	1.33	1.38
59	A5	908	C	N3-C4	-5.63	1.30	1.33
59	A5	2542	C	N1-C6	-5.63	1.33	1.37
56	A8	42	A	C5-C6	-5.62	1.35	1.41
59	A5	1789	A	N7-C5	-5.62	1.35	1.39
59	A5	2555	G	N7-C5	-5.62	1.35	1.39
59	A5	3259	A	N9-C4	-5.62	1.34	1.37
6	CC	255	TRP	CB-CG	-5.62	1.40	1.50
59	A5	1313	A	C2-N3	-5.62	1.28	1.33
59	A5	1526	G	C5-C4	-5.62	1.34	1.38
59	A5	2106	C	N1-C6	-5.62	1.33	1.37
59	A5	3685	U	N1-C6	-5.62	1.32	1.38
59	A5	50	U	C4'-C3'	-5.62	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1206	G	C5-C4	-5.62	1.34	1.38
59	A5	3513	A	N7-C5	-5.62	1.35	1.39
59	A5	3540	G	C2-N3	-5.62	1.28	1.32
58	B2	1254	A	N9-C4	-5.62	1.34	1.37
59	A5	1000	G	C5-C4	-5.62	1.34	1.38
59	A5	1412	A	C5-C4	-5.62	1.34	1.38
59	A5	2244	G	C5-C4	-5.62	1.34	1.38
59	A5	3163	U	N3-C4	-5.62	1.33	1.38
59	A5	3507	A	N3-C4	-5.62	1.31	1.34
59	A5	998	G	C5-C6	-5.62	1.36	1.42
59	A5	1357	C	N1-C2	-5.62	1.34	1.40
59	A5	1365	U	N1-C2	-5.62	1.33	1.38
59	A5	2523	A	C6-N6	-5.62	1.29	1.33
59	A5	2524	A	C6-N6	-5.62	1.29	1.33
56	A8	12	G	N9-C8	-5.62	1.33	1.37
58	B2	1851	A	N9-C4	-5.62	1.34	1.37
58	B2	1979	C	N3-C4	-5.62	1.30	1.33
59	A5	1771	G	C5-C4	-5.62	1.34	1.38
59	A5	2519	U	C4-O4	-5.62	1.19	1.23
59	A5	3349	A	C6-N6	-5.62	1.29	1.33
48	Cp	69	TRP	CE3-CZ3	-5.62	1.28	1.38
58	B2	618	G	C6-N1	-5.62	1.35	1.39
58	B2	1827	A	C5-C6	-5.62	1.35	1.41
59	A5	439	U	N1-C2	-5.62	1.33	1.38
59	A5	1158	C	N3-C4	-5.62	1.30	1.33
59	A5	1312	G	N9-C4	-5.62	1.33	1.38
59	A5	1976	G	C2-N3	-5.62	1.28	1.32
59	A5	2163	A	C8-N7	-5.62	1.27	1.31
59	A5	2505	A	N9-C4	-5.62	1.34	1.37
59	A5	61	A	C5-C6	-5.61	1.35	1.41
59	A5	1778	A	N7-C5	-5.61	1.35	1.39
59	A5	3492	G	N9-C8	-5.61	1.33	1.37
59	A5	3583	C	C4-C5	-5.61	1.38	1.43
59	A5	3887	U	N1-C2	-5.61	1.33	1.38
56	A8	24	G	C5-C6	-5.61	1.36	1.42
58	B2	1018	C	N1-C6	-5.61	1.33	1.37
59	A5	437	G	C8-N7	-5.61	1.27	1.30
59	A5	1028	U	C2-N3	-5.61	1.33	1.37
59	A5	1324	C	P-OP1	-5.61	1.39	1.49
59	A5	2548	G	C2-N3	-5.61	1.28	1.32
59	A5	362	A	N3-C4	-5.61	1.31	1.34
59	A5	875	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)
59	A5	1083	A	C8-N7	-5.61	1.27	1.31
59	A5	1104	A	N9-C8	-5.61	1.33	1.37
59	A5	1800	U	C4-C5	-5.61	1.38	1.43
59	A5	2109	G	C5-C4	-5.61	1.34	1.38
59	A5	2174	A	N3-C4	-5.61	1.31	1.34
59	A5	2730	A	P-O5'	-5.61	1.54	1.59
56	A8	7	A	C5-C6	-5.61	1.36	1.41
59	A5	52	A	N9-C8	-5.61	1.33	1.37
59	A5	2163	A	C6-N1	-5.61	1.31	1.35
59	A5	3228	A	C6-N1	-5.61	1.31	1.35
59	A5	1402	U	C4-C5	-5.61	1.38	1.43
59	A5	2221	G	C6-O6	-5.61	1.19	1.24
59	A5	2621	A	C5-C4	-5.61	1.34	1.38
59	A5	3447	U	N1-C2	-5.61	1.33	1.38
26	CN	95	TYR	CD1-CE1	-5.61	1.30	1.39
59	A5	64	A	N3-C4	-5.61	1.31	1.34
59	A5	305	G	C2-N3	-5.61	1.28	1.32
59	A5	837	A	C5-C4	-5.61	1.34	1.38
59	A5	1000	G	C8-N7	-5.61	1.27	1.30
59	A5	1117	A	N9-C8	-5.61	1.33	1.37
59	A5	2738	C	C4-N4	-5.61	1.28	1.33
59	A5	3368	C	N1-C6	-5.61	1.33	1.37
59	A5	3626	A	C5-C4	-5.61	1.34	1.38
59	A5	3730	G	N9-C8	-5.61	1.33	1.37
80	CF	108	VAL	CB-CG2	-5.61	1.41	1.52
58	B2	1181	G	N1-C2	-5.60	1.33	1.37
59	A5	426	A	N9-C4	-5.60	1.34	1.37
59	A5	914	C	N1-C2	-5.60	1.34	1.40
59	A5	1593	U	C2-N3	-5.60	1.33	1.37
59	A5	1682	G	N1-C2	-5.60	1.33	1.37
58	B2	1989	A	N7-C5	-5.60	1.35	1.39
59	A5	1062	C	C2-O2	-5.60	1.19	1.24
59	A5	1962	A	C5-C4	-5.60	1.34	1.38
59	A5	2742	G	C5-C4	-5.60	1.34	1.38
59	A5	2787	U	N1-C6	-5.60	1.32	1.38
59	A5	3174	A	C6-N6	-5.60	1.29	1.33
58	B2	361	G	C5-C4	-5.60	1.34	1.38
59	A5	88	U	N3-C4	-5.60	1.33	1.38
59	A5	3945	A	N7-C5	-5.60	1.35	1.39
59	A5	996	C	C2-O2	-5.60	1.19	1.24
59	A5	2192	U	N3-C4	-5.60	1.33	1.38
59	A5	2236	U	N1-C2	-5.60	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2680	G	N7-C5	-5.60	1.35	1.39
37	Cr	84	VAL	CB-CG1	-5.60	1.41	1.52
56	A8	105	C	N1-C2	-5.60	1.34	1.40
59	A5	1267	A	C2-N3	-5.60	1.28	1.33
59	A5	1603	A	C6-N1	-5.60	1.31	1.35
59	A5	1748	C	C4-C5	-5.60	1.38	1.43
59	A5	2530	C	N1-C2	-5.60	1.34	1.40
59	A5	2565	G	C8-N7	-5.60	1.27	1.30
59	A5	3474	G	C2-N2	-5.60	1.28	1.34
59	A5	2250	G	C2-N3	-5.60	1.28	1.32
59	A5	3410	G	N7-C5	-5.60	1.35	1.39
56	A8	23	G	N7-C5	-5.59	1.35	1.39
59	A5	39	A	N9-C4	-5.59	1.34	1.37
59	A5	91	U	N1-C6	-5.59	1.32	1.38
59	A5	369	A	C5-C6	-5.59	1.36	1.41
59	A5	552	U	C2-N3	-5.59	1.33	1.37
59	A5	801	G	N3-C4	-5.59	1.31	1.35
59	A5	1117	A	N7-C5	-5.59	1.35	1.39
59	A5	2709	U	N1-C2	-5.59	1.33	1.38
59	A5	3237	U	C2-N3	-5.59	1.33	1.37
59	A5	792	U	C5-C6	-5.59	1.29	1.34
59	A5	802	G	N9-C4	-5.59	1.33	1.38
59	A5	1601	U	C2-N3	-5.59	1.33	1.37
59	A5	3615	G	C5-C4	-5.59	1.34	1.38
59	A5	3711	G	N9-C4	5.59	1.42	1.38
58	B2	1823	A	N7-C5	-5.59	1.35	1.39
59	A5	376	G	C8-N7	-5.59	1.27	1.30
59	A5	391	A	N9-C4	-5.59	1.34	1.37
59	A5	1368	A	N1-C2	-5.59	1.29	1.34
59	A5	1377	A	N7-C5	-5.59	1.35	1.39
59	A5	1378	A	N9-C8	-5.59	1.33	1.37
59	A5	1383	A	O3'-P	5.59	1.67	1.61
59	A5	1395	U	N1-C6	-5.59	1.32	1.38
59	A5	1636	G	C2-N3	-5.59	1.28	1.32
59	A5	1768	G	C5-C4	-5.59	1.34	1.38
59	A5	1976	G	N9-C4	-5.59	1.33	1.38
59	A5	2746	A	N1-C2	-5.59	1.29	1.34
59	A5	3345	A	N9-C8	-5.59	1.33	1.37
33	CP	24	VAL	CB-CG2	-5.59	1.41	1.52
59	A5	1648	A	N3-C4	-5.59	1.31	1.34
59	A5	2620	C	N3-C4	-5.59	1.30	1.33
59	A5	3664	A	N7-C5	-5.59	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	41	G	N7-C5	-5.59	1.35	1.39
58	B2	1963	G	C5-C4	-5.59	1.34	1.38
59	A5	3513	A	C6-N6	-5.59	1.29	1.33
58	B2	1973	G	N9-C4	-5.59	1.33	1.38
59	A5	1371	A	C5-C4	-5.59	1.34	1.38
59	A5	1535	U	N1-C2	-5.59	1.33	1.38
59	A5	2548	G	N7-C5	-5.59	1.35	1.39
59	A5	3463	U	N1-C2	-5.59	1.33	1.38
59	A5	3623	G	C2-N3	-5.59	1.28	1.32
56	A8	34	C	N3-C4	-5.58	1.30	1.33
59	A5	157	C	C4-C5	-5.58	1.38	1.43
59	A5	801	G	N9-C4	-5.58	1.33	1.38
59	A5	1556	C	N3-C4	-5.58	1.30	1.33
59	A5	3468	G	C8-N7	-5.58	1.27	1.30
59	A5	3950	A	C6-N1	-5.58	1.31	1.35
58	B2	1958	A	N7-C5	-5.58	1.35	1.39
59	A5	27	A	C6-N6	-5.58	1.29	1.33
59	A5	102	G	N3-C4	-5.58	1.31	1.35
59	A5	1014	U	N1-C6	-5.58	1.32	1.38
59	A5	1178	U	C4-C5	-5.58	1.38	1.43
59	A5	1536	U	N1-C2	-5.58	1.33	1.38
59	A5	2240	U	C2-N3	-5.58	1.33	1.37
56	A8	2	A	C6-N1	-5.58	1.31	1.35
58	B2	964	G	C5-C4	-5.58	1.34	1.38
59	A5	834	G	N1-C2	-5.58	1.33	1.37
59	A5	1094	A	N7-C5	-5.58	1.35	1.39
59	A5	1682	G	C2-N3	-5.58	1.28	1.32
59	A5	2520	U	N1-C2	-5.58	1.33	1.38
59	A5	2753	G	C2-N3	-5.58	1.28	1.32
59	A5	2768	A	C2-N3	-5.58	1.28	1.33
59	A5	3506	U	C4-O4	-5.58	1.19	1.23
59	A5	3524	G	C2-N3	-5.58	1.28	1.32
59	A5	3618	A	C6-N1	-5.58	1.31	1.35
59	A5	3903	U	C2-N3	-5.58	1.33	1.37
58	B2	1845	C	N1-C2	-5.58	1.34	1.40
59	A5	1119	C	N1-C6	-5.58	1.33	1.37
59	A5	1171	G	C2-N3	-5.58	1.28	1.32
59	A5	2108	U	C2-N3	-5.58	1.33	1.37
56	A8	33	U	N1-C2	-5.58	1.33	1.38
58	B2	1943	G	N1-C2	-5.58	1.33	1.37
58	B2	1979	C	C4-C5	-5.58	1.38	1.43
59	A5	1051	C	N1-C2	-5.58	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1065	A	N3-C4	-5.58	1.31	1.34
59	A5	1088	A	C8-N7	-5.58	1.27	1.31
59	A5	1146	U	C4-C5	-5.58	1.38	1.43
59	A5	1175	C	N1-C6	-5.58	1.33	1.37
59	A5	1767	A	C6-N1	-5.58	1.31	1.35
59	A5	2757	U	C4-C5	-5.58	1.38	1.43
59	A5	3507	A	N9-C4	-5.58	1.34	1.37
32	CT	57	TYR	CD2-CE2	-5.58	1.30	1.39
59	A5	799	A	C2-N3	-5.58	1.28	1.33
59	A5	3625	U	N1-C2	-5.58	1.33	1.38
59	A5	1022	A	C5-C6	-5.58	1.36	1.41
59	A5	1095	G	N3-C4	-5.58	1.31	1.35
59	A5	2525	C	N1-C6	-5.58	1.33	1.37
59	A5	3255	G	N7-C5	-5.58	1.35	1.39
58	B2	1231	A	N3-C4	-5.57	1.31	1.34
59	A5	423	U	C2-O2	-5.57	1.17	1.22
59	A5	810	A	N3-C4	-5.57	1.31	1.34
59	A5	1061	A	C5-C4	-5.57	1.34	1.38
59	A5	1375	G	C2-N3	-5.57	1.28	1.32
59	A5	1523	A	C5-C4	-5.57	1.34	1.38
59	A5	2171	U	N3-C4	-5.57	1.33	1.38
59	A5	2745	A	N7-C5	-5.57	1.35	1.39
58	B2	1107	A	N9-C4	-5.57	1.34	1.37
58	B2	1211	C	C4-C5	-5.57	1.38	1.43
59	A5	1511	C	N1-C2	-5.57	1.34	1.40
59	A5	3326	G	C8-N7	-5.57	1.27	1.30
56	A8	30	G	N9-C8	-5.57	1.33	1.37
59	A5	1146	U	N1-C2	-5.57	1.33	1.38
59	A5	1181	A	N3-C4	-5.57	1.31	1.34
59	A5	1528	G	C8-N7	-5.57	1.27	1.30
59	A5	1554	C	N1-C6	-5.57	1.33	1.37
59	A5	3175	A	N7-C5	-5.57	1.35	1.39
59	A5	3420	U	N1-C6	-5.57	1.32	1.38
59	A5	3874	A	N3-C4	-5.57	1.31	1.34
59	A5	290	G	N9-C8	-5.57	1.33	1.37
59	A5	2149	G	N1-C2	-5.57	1.33	1.37
59	A5	3538	G	C2-N3	-5.57	1.28	1.32
58	B2	15	U	N1-C2	-5.57	1.33	1.38
58	B2	624	G	C2-N3	-5.57	1.28	1.32
58	B2	1228	G	N1-C2	-5.57	1.33	1.37
58	B2	1943	G	N3-C4	-5.57	1.31	1.35
59	A5	63	G	C5-C6	-5.57	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1363	G	N9-C8	-5.57	1.33	1.37
59	A5	1790	A	N9-C8	-5.57	1.33	1.37
59	A5	2257	C	N1-C6	-5.57	1.33	1.37
59	A5	3538	G	N1-C2	-5.57	1.33	1.37
59	A5	3625	U	C4-C5	-5.57	1.38	1.43
58	B2	1859	A	N9-C4	-5.57	1.34	1.37
59	A5	348	A	N9-C8	-5.57	1.33	1.37
59	A5	397	C	N3-C4	-5.57	1.30	1.33
59	A5	1091	G	N9-C8	-5.57	1.33	1.37
59	A5	1409	G	C6-N1	-5.57	1.35	1.39
59	A5	1554	C	C2-N3	-5.57	1.31	1.35
59	A5	2218	G	C2-N3	-5.57	1.28	1.32
59	A5	2560	A	N9-C8	-5.57	1.33	1.37
59	A5	3148	C	N3-C4	-5.57	1.30	1.33
59	A5	3309	A	N7-C5	-5.57	1.35	1.39
59	A5	405	A	N3-C4	-5.56	1.31	1.34
58	B2	111	A	C5-C6	-5.56	1.36	1.41
58	B2	1196	G	C8-N7	-5.56	1.27	1.30
59	A5	241	C	C4-C5	-5.56	1.38	1.43
59	A5	1362	G	C5-C6	-5.56	1.36	1.42
59	A5	1383	A	C4'-C3'	5.56	1.59	1.53
59	A5	1521	G	N1-C2	-5.56	1.33	1.37
59	A5	2787	U	C5-C6	-5.56	1.29	1.34
59	A5	3262	A	N9-C8	-5.56	1.33	1.37
59	A5	3657	A	N3-C4	-5.56	1.31	1.34
58	B2	1214	A	C5-C4	-5.56	1.34	1.38
59	A5	561	A	N9-C4	-5.56	1.34	1.37
59	A5	1633	G	N7-C5	-5.56	1.35	1.39
59	A5	2253	U	C2-N3	-5.56	1.33	1.37
59	A5	3190	G	C6-N1	-5.56	1.35	1.39
56	A8	40	A	N9-C4	-5.56	1.34	1.37
58	B2	1823	A	C5-C6	-5.56	1.36	1.41
58	B2	1844	C	N3-C4	-5.56	1.30	1.33
59	A5	296	C	C2-O2	-5.56	1.19	1.24
59	A5	1603	A	N7-C5	-5.56	1.35	1.39
59	A5	2501	G	N3-C4	-5.56	1.31	1.35
59	A5	2757	U	C2-O2	-5.56	1.17	1.22
59	A5	3478	G	C6-O6	-5.56	1.19	1.24
55	A7	88	G	C2-N3	-5.56	1.28	1.32
59	A5	35	C	C5-C6	-5.56	1.29	1.34
59	A5	1537	G	N1-C2	-5.56	1.33	1.37
59	A5	3230	G	N9-C4	-5.56	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3296	C	N1-C2	-5.56	1.34	1.40
59	A5	3332	G	N7-C5	-5.56	1.35	1.39
59	A5	3598	U	N1-C6	-5.56	1.32	1.38
58	B2	1200	A	N7-C5	-5.55	1.35	1.39
59	A5	34	C	C4-N4	-5.55	1.28	1.33
59	A5	61	A	C8-N7	-5.55	1.27	1.31
59	A5	1012	G	N9-C4	-5.55	1.33	1.38
59	A5	2528	A	C6-N1	-5.55	1.31	1.35
59	A5	3534	U	C2-N3	-5.55	1.33	1.37
59	A5	3587	U	N3-C4	-5.55	1.33	1.38
59	A5	1174	G	C5-C6	-5.55	1.36	1.42
59	A5	2512	U	N1-C6	-5.55	1.32	1.38
59	A5	2710	A	N3-C4	-5.55	1.31	1.34
58	B2	1115	C	C5-C6	-5.55	1.29	1.34
59	A5	240	G	C2-N3	-5.55	1.28	1.32
59	A5	333	C	N3-C4	-5.55	1.30	1.33
59	A5	361	U	N1-C2	-5.55	1.33	1.38
59	A5	455	U	C4-C5	-5.55	1.38	1.43
59	A5	794	G	O3'-P	-5.55	1.54	1.61
59	A5	797	A	C6-N1	-5.55	1.31	1.35
59	A5	1093	C	C5-C6	-5.55	1.29	1.34
59	A5	1153	G	C5-C4	-5.55	1.34	1.38
59	A5	1789	A	C8-N7	-5.55	1.27	1.31
59	A5	2499	U	C4-C5	-5.55	1.38	1.43
58	B2	1062	C	N1-C6	-5.55	1.33	1.37
59	A5	118	A	C5-C6	-5.55	1.36	1.41
59	A5	205	U	N1-C6	-5.55	1.32	1.38
59	A5	305	G	N9-C4	-5.55	1.33	1.38
59	A5	371	G	C6-N1	-5.55	1.35	1.39
59	A5	794	G	P-O5'	-5.55	1.54	1.59
59	A5	1114	A	C2-N3	-5.55	1.28	1.33
59	A5	3147	A	N9-C4	-5.55	1.34	1.37
59	A5	3330	C	C5-C6	-5.55	1.29	1.34
59	A5	3356	G	C5-C4	-5.55	1.34	1.38
55	A7	13	A	C5-C4	-5.55	1.34	1.38
59	A5	345	A	N9-C4	-5.55	1.34	1.37
59	A5	548	A	C5-C4	-5.55	1.34	1.38
59	A5	1657	G	C6-N1	-5.55	1.35	1.39
59	A5	3520	U	C4-O4	-5.55	1.19	1.23
59	A5	118	A	C5-C4	-5.55	1.34	1.38
59	A5	237	G	N9-C8	-5.55	1.33	1.37
59	A5	1597	A	C5-C4	-5.55	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2674	A	N1-C2	-5.55	1.29	1.34
59	A5	2694	G	N3-C4	-5.55	1.31	1.35
59	A5	2757	U	N1-C2	-5.55	1.33	1.38
59	A5	3255	G	N9-C8	-5.55	1.33	1.37
59	A5	3267	C	N1-C6	-5.55	1.33	1.37
59	A5	3528	A	N3-C4	-5.55	1.31	1.34
59	A5	1555	G	N1-C2	-5.54	1.33	1.37
59	A5	1756	G	C2-N3	-5.54	1.28	1.32
59	A5	2204	U	C4-C5	-5.54	1.38	1.43
59	A5	3658	G	C5-C6	-5.54	1.36	1.42
58	B2	1054	A	N9-C4	-5.54	1.34	1.37
59	A5	322	G	C5-C6	-5.54	1.36	1.42
59	A5	1619	C	C5-C6	-5.54	1.29	1.34
59	A5	1731	G	N7-C5	-5.54	1.35	1.39
59	A5	1731	G	N9-C4	-5.54	1.33	1.38
59	A5	2209	G	C8-N7	-5.54	1.27	1.30
59	A5	2539	G	C8-N7	-5.54	1.27	1.30
59	A5	2800	C	N1-C2	-5.54	1.34	1.40
59	A5	3259	A	C6-N1	-5.54	1.31	1.35
6	CC	125	TYR	CD2-CE2	-5.54	1.31	1.39
41	Ce	49	LYS	CB-CG	-5.54	1.37	1.52
59	A5	244	G	C5-C4	-5.54	1.34	1.38
59	A5	1329	G	C6-N1	-5.54	1.35	1.39
59	A5	1380	G	C5-C4	-5.54	1.34	1.38
59	A5	1787	C	N3-C4	-5.54	1.30	1.33
59	A5	3138	G	C8-N7	-5.54	1.27	1.30
59	A5	3499	G	C8-N7	-5.54	1.27	1.30
59	A5	3681	A	N3-C4	-5.54	1.31	1.34
59	A5	3886	U	N1-C2	-5.54	1.33	1.38
59	A5	1520	U	N1-C2	-5.54	1.33	1.38
58	B2	623	G	C5-C6	-5.54	1.36	1.42
59	A5	824	G	N9-C8	-5.54	1.33	1.37
59	A5	1010	A	C2-N3	-5.54	1.28	1.33
59	A5	1023	C	C2-N3	-5.54	1.31	1.35
59	A5	1080	G	C6-O6	-5.54	1.19	1.24
59	A5	1373	A	C2-N3	-5.54	1.28	1.33
59	A5	1536	U	N3-C4	-5.54	1.33	1.38
59	A5	3187	C	N1-C6	-5.54	1.33	1.37
59	A5	374	C	N1-C2	-5.54	1.34	1.40
56	A8	98	U	N3-C4	-5.54	1.33	1.38
59	A5	994	U	N1-C6	-5.54	1.32	1.38
59	A5	3354	U	C4-C5	-5.54	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3420	U	N3-C4	-5.54	1.33	1.38
59	A5	3666	C	C2-N3	-5.54	1.31	1.35
33	CP	58	VAL	CB-CG1	-5.53	1.41	1.52
59	A5	1964	A	N7-C5	-5.53	1.35	1.39
59	A5	2248	A	C5-C6	-5.53	1.36	1.41
59	A5	2694	G	C2-N3	-5.53	1.28	1.32
59	A5	3294	A	N9-C4	-5.53	1.34	1.37
13	AL	108	VAL	CB-CG1	-5.53	1.41	1.52
59	A5	1008	A	C5-C6	-5.53	1.36	1.41
59	A5	1208	U	N1-C6	-5.53	1.32	1.38
59	A5	1635	A	C5-C4	-5.53	1.34	1.38
59	A5	2506	U	N3-C4	-5.53	1.33	1.38
59	A5	2534	G	C6-N1	-5.53	1.35	1.39
59	A5	3534	U	N3-C4	-5.53	1.33	1.38
59	A5	3539	C	C2-N3	-5.53	1.31	1.35
59	A5	3602	U	N1-C2	-5.53	1.33	1.38
58	B2	1830	G	N7-C5	-5.53	1.35	1.39
59	A5	415	A	C6-N1	-5.53	1.31	1.35
59	A5	1174	G	C6-N1	-5.53	1.35	1.39
59	A5	1262	C	C4-C5	-5.53	1.38	1.43
59	A5	2764	A	N7-C5	-5.53	1.35	1.39
59	A5	2791	A	C6-N6	-5.53	1.29	1.33
59	A5	3471	A	C5-C6	-5.53	1.36	1.41
59	A5	298	U	N1-C6	-5.53	1.32	1.38
59	A5	1728	G	C2-N3	-5.53	1.28	1.32
59	A5	2494	G	C6-N1	-5.53	1.35	1.39
59	A5	3289	U	C4-C5	-5.53	1.38	1.43
59	A5	75	A	C5-C4	-5.53	1.34	1.38
59	A5	125	A	C5-C4	-5.53	1.34	1.38
59	A5	309	C	N1-C2	-5.53	1.34	1.40
59	A5	359	G	C5-C6	-5.53	1.36	1.42
59	A5	1692	G	N1-C2	-5.53	1.33	1.37
59	A5	1703	A	C5-C4	-5.53	1.34	1.38
59	A5	2566	A	N1-C2	-5.53	1.29	1.34
59	A5	3662	G	N3-C4	-5.53	1.31	1.35
25	Ca	54	PHE	CD2-CE2	-5.52	1.28	1.39
58	B2	1114	A	N9-C8	-5.52	1.33	1.37
59	A5	1771	G	N9-C8	-5.52	1.33	1.37
59	A5	2498	U	C4-C5	-5.52	1.38	1.43
56	A8	38	G	N9-C8	-5.52	1.33	1.37
59	A5	654	G	C8-N7	-5.52	1.27	1.30
59	A5	757	A	N9-C4	-5.52	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1669	G	C2-N3	-5.52	1.28	1.32
59	A5	3402	C	C2-O2	-5.52	1.19	1.24
59	A5	1386	U	C2-N3	-5.52	1.33	1.37
59	A5	2723	A	C6-N6	-5.52	1.29	1.33
59	A5	3954	U	C2-N3	-5.52	1.33	1.37
58	B2	343	A	N3-C4	-5.52	1.31	1.34
58	B2	1053	A	N7-C5	-5.52	1.35	1.39
59	A5	59	G	P-OP1	-5.52	1.39	1.49
59	A5	2202	A	C8-N7	-5.52	1.27	1.31
59	A5	2549	G	N3-C4	-5.52	1.31	1.35
59	A5	2720	U	C5-C6	-5.52	1.29	1.34
59	A5	3483	G	C6-O6	-5.52	1.19	1.24
59	A5	3901	G	N7-C5	-5.52	1.35	1.39
59	A5	1318	A	C6-N1	-5.52	1.31	1.35
59	A5	1341	G	N7-C5	-5.52	1.35	1.39
59	A5	1409	G	N1-C2	-5.52	1.33	1.37
59	A5	1663	G	C5-C6	-5.52	1.36	1.42
59	A5	3146	G	C8-N7	-5.52	1.27	1.30
59	A5	1132	U	C4-O4	-5.52	1.19	1.23
59	A5	1767	A	N9-C4	-5.52	1.34	1.37
56	A8	112	C	N1-C6	-5.51	1.33	1.37
58	B2	617	U	N1-C6	-5.51	1.32	1.38
59	A5	40	U	C4-C5	-5.51	1.38	1.43
59	A5	852	C	N1-C6	-5.51	1.33	1.37
59	A5	1314	U	C5-C6	-5.51	1.29	1.34
59	A5	2195	A	C6-N1	-5.51	1.31	1.35
59	A5	2657	A	C5-C6	-5.51	1.36	1.41
59	A5	2735	A	C6-N6	-5.51	1.29	1.33
59	A5	3180	G	C2-N3	-5.51	1.28	1.32
55	A7	81	A	C2-N3	-5.51	1.28	1.33
59	A5	1899	C	N3-C4	-5.51	1.30	1.33
59	A5	2541	C	N1-C6	-5.51	1.33	1.37
58	B2	620	U	C2-N3	-5.51	1.33	1.37
58	B2	1054	A	N3-C4	-5.51	1.31	1.34
58	B2	1112	A	C5-C4	-5.51	1.34	1.38
59	A5	1095	G	N1-C2	-5.51	1.33	1.37
59	A5	1660	G	N3-C4	-5.51	1.31	1.35
59	A5	1693	C	N1-C6	-5.51	1.33	1.37
59	A5	2253	U	N1-C2	-5.51	1.33	1.38
59	A5	3147	A	C5-C4	-5.51	1.34	1.38
59	A5	3248	U	C2-N3	-5.51	1.33	1.37
59	A5	3365	G	C2-N3	-5.51	1.28	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	238	G	C5-C6	-5.51	1.36	1.42
59	A5	769	U	N3-C4	-5.51	1.33	1.38
59	A5	803	A	N3-C4	-5.51	1.31	1.34
59	A5	2753	G	C2-N2	-5.51	1.29	1.34
59	A5	2767	U	C5-C6	-5.51	1.29	1.34
59	A5	386	G	C2-N3	-5.51	1.28	1.32
59	A5	490	G	N9-C4	-5.51	1.33	1.38
59	A5	1319	A	C5-C6	-5.51	1.36	1.41
59	A5	1363	G	C6-N1	-5.51	1.35	1.39
59	A5	3674	G	C5-C4	-5.51	1.34	1.38
58	B2	1207	G	N1-C2	-5.51	1.33	1.37
59	A5	386	G	C8-N7	-5.51	1.27	1.30
59	A5	1030	A	C6-N6	-5.51	1.29	1.33
59	A5	1130	U	C2-O2	-5.51	1.17	1.22
59	A5	1691	A	C8-N7	-5.51	1.27	1.31
59	A5	2156	U	C2-N3	-5.51	1.33	1.37
59	A5	2527	A	N7-C5	-5.51	1.35	1.39
59	A5	2693	G	N3-C4	-5.51	1.31	1.35
59	A5	2750	A	C6-N6	-5.51	1.29	1.33
59	A5	2795	U	N1-C6	-5.51	1.32	1.38
59	A5	3234	A	C5-C6	-5.51	1.36	1.41
59	A5	3535	G	C6-N1	-5.51	1.35	1.39
59	A5	318	G	C6-N1	-5.50	1.35	1.39
59	A5	1001	A	N9-C8	-5.50	1.33	1.37
59	A5	1339	U	N1-C2	-5.50	1.33	1.38
58	B2	1221	A	N7-C5	-5.50	1.35	1.39
58	B2	1344	A	N9-C4	5.50	1.41	1.37
59	A5	506	A	N9-C4	-5.50	1.34	1.37
59	A5	1616	G	C2-N2	-5.50	1.29	1.34
59	A5	3179	A	N3-C4	-5.50	1.31	1.34
59	A5	3880	A	N9-C4	-5.50	1.34	1.37
56	A8	97	U	C4-C5	-5.50	1.38	1.43
59	A5	63	G	N1-C2	-5.50	1.33	1.37
59	A5	811	G	C6-N1	-5.50	1.35	1.39
59	A5	1354	G	C2-N3	-5.50	1.28	1.32
59	A5	1790	A	C8-N7	-5.50	1.27	1.31
59	A5	2178	U	N1-C2	-5.50	1.33	1.38
59	A5	2745	A	C4'-C3'	-5.50	1.47	1.52
59	A5	3135	G	N1-C2	-5.50	1.33	1.37
59	A5	3255	G	C8-N7	-5.50	1.27	1.30
58	B2	1983	G	N7-C5	-5.50	1.35	1.39
59	A5	3127	A	N7-C5	-5.50	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3543	A	C5-C4	-5.50	1.34	1.38
58	B2	339	U	C2-N3	-5.50	1.33	1.37
58	B2	1847	A	N9-C8	-5.50	1.33	1.37
59	A5	361	U	N1-C6	-5.50	1.33	1.38
59	A5	450	G	N9-C8	-5.50	1.34	1.37
59	A5	1638	G	N7-C5	-5.50	1.35	1.39
59	A5	1970	G	C5-C6	-5.50	1.36	1.42
59	A5	2693	G	N9-C4	-5.50	1.33	1.38
59	A5	2764	A	N3-C4	5.50	1.38	1.34
59	A5	3441	C	N3-C4	-5.50	1.30	1.33
56	A8	40	A	C8-N7	-5.50	1.27	1.31
58	B2	1049	C	N1-C6	-5.50	1.33	1.37
59	A5	1253	A	N9-C4	-5.50	1.34	1.37
59	A5	2695	A	N9-C8	-5.50	1.33	1.37
59	A5	3525	A	C5-C6	-5.50	1.36	1.41
59	A5	3629	U	C4-C5	-5.50	1.38	1.43
59	A5	20	A	N9-C4	-5.50	1.34	1.37
59	A5	1023	C	N1-C6	-5.50	1.33	1.37
59	A5	1780	U	C2-N3	-5.50	1.33	1.37
59	A5	2260	U	C2-N3	-5.50	1.33	1.37
58	B2	1948	A	N9-C4	-5.49	1.34	1.37
59	A5	442	A	C6-N1	-5.49	1.31	1.35
59	A5	1144	C	C2-O2	-5.49	1.19	1.24
59	A5	1354	G	N1-C2	-5.49	1.33	1.37
59	A5	1733	A	N1-C2	-5.49	1.29	1.34
59	A5	2620	C	C4-C5	-5.49	1.38	1.43
59	A5	2705	U	C2-N3	-5.49	1.33	1.37
59	A5	3137	A	N9-C8	-5.49	1.33	1.37
58	B2	1204	A	N3-C4	-5.49	1.31	1.34
59	A5	1400	A	C6-N1	-5.49	1.31	1.35
59	A5	2487	C	N3-C4	-5.49	1.30	1.33
59	A5	2549	G	C5-C6	-5.49	1.36	1.42
59	A5	3884	A	N9-C4	-5.49	1.34	1.37
59	A5	205	U	C2-N3	-5.49	1.33	1.37
59	A5	772	G	N7-C5	-5.49	1.35	1.39
59	A5	1634	A	C5-C4	-5.49	1.34	1.38
59	A5	1725	A	N7-C5	-5.49	1.35	1.39
59	A5	1733	A	C2-N3	-5.49	1.28	1.33
59	A5	2769	G	C2-N3	-5.49	1.28	1.32
59	A5	3179	A	N9-C8	-5.49	1.33	1.37
59	A5	3180	G	C8-N7	-5.49	1.27	1.30
59	A5	3272	A	N9-C4	-5.49	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	CP	4	TYR	CD1-CE1	-5.49	1.31	1.39
56	A8	24	G	N9-C4	-5.49	1.33	1.38
58	B2	1225	A	C5-C6	-5.49	1.36	1.41
58	B2	1241	G	N3-C4	-5.49	1.31	1.35
59	A5	1872	A	C8-N7	-5.49	1.27	1.31
59	A5	3759	G	N1-C2	-5.49	1.33	1.37
59	A5	2004	G	C8-N7	-5.49	1.27	1.30
59	A5	2251	G	C5-C4	-5.49	1.34	1.38
59	A5	783	G	N7-C5	-5.49	1.35	1.39
59	A5	1620	A	N9-C8	-5.49	1.33	1.37
59	A5	2616	G	N7-C5	-5.49	1.35	1.39
59	A5	2717	C	C5-C6	-5.49	1.29	1.34
59	A5	3401	U	C4-C5	-5.49	1.38	1.43
59	A5	3514	C	N1-C6	-5.49	1.33	1.37
59	A5	3576	G	C5-C4	-5.49	1.34	1.38
56	A8	17	U	C5-C6	-5.48	1.29	1.34
58	B2	1231	A	C5-C6	-5.48	1.36	1.41
59	A5	319	G	N7-C5	-5.48	1.35	1.39
59	A5	3908	U	C2-N3	-5.48	1.33	1.37
55	A7	99	G	N1-C2	-5.48	1.33	1.37
59	A5	548	A	N9-C8	-5.48	1.33	1.37
59	A5	1537	G	N3-C4	-5.48	1.31	1.35
59	A5	2719	A	N9-C4	-5.48	1.34	1.37
59	A5	3130	G	C5-C6	-5.48	1.36	1.42
59	A5	3447	U	C5-C6	-5.48	1.29	1.34
58	B2	258	A	N7-C5	-5.48	1.35	1.39
58	B2	578	A	N9-C4	-5.48	1.34	1.37
58	B2	1226	A	N9-C4	-5.48	1.34	1.37
59	A5	991	A	C8-N7	-5.48	1.27	1.31
59	A5	1022	A	C5-C4	-5.48	1.34	1.38
59	A5	1662	U	C2-N3	-5.48	1.33	1.37
59	A5	1755	U	C2-N3	-5.48	1.33	1.37
59	A5	3427	G	C5-C4	-5.48	1.34	1.38
59	A5	3453	U	C2-N3	-5.48	1.33	1.37
59	A5	3614	U	C4-O4	-5.48	1.19	1.23
59	A5	3615	G	N9-C8	-5.48	1.34	1.37
58	B2	1061	A	C6-N1	-5.48	1.31	1.35
58	B2	1061	A	N3-C4	-5.48	1.31	1.34
58	B2	1104	C	C5-C6	-5.48	1.29	1.34
58	B2	361	G	C6-N1	-5.48	1.35	1.39
58	B2	1111	U	C4-C5	-5.48	1.38	1.43
59	A5	348	A	N3-C4	-5.48	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	441	A	P-O5'	-5.48	1.54	1.59
59	A5	822	G	C5-C4	-5.48	1.34	1.38
59	A5	2210	U	C2-O2	-5.48	1.17	1.22
59	A5	2776	A	C5-C4	-5.48	1.34	1.38
59	A5	851	G	C6-N1	-5.48	1.35	1.39
59	A5	1757	A	N3-C4	-5.48	1.31	1.34
59	A5	2651	G	C2-N3	-5.48	1.28	1.32
59	A5	3493	U	N1-C2	-5.48	1.33	1.38
59	A5	3889	U	C4-C5	-5.48	1.38	1.43
59	A5	378	G	C5-C6	-5.47	1.36	1.42
59	A5	1962	A	N7-C5	-5.47	1.35	1.39
59	A5	3306	U	C4-C5	-5.47	1.38	1.43
59	A5	417	A	N9-C4	-5.47	1.34	1.37
59	A5	837	A	N3-C4	-5.47	1.31	1.34
59	A5	864	G	N1-C2	-5.47	1.33	1.37
59	A5	1061	A	N3-C4	-5.47	1.31	1.34
59	A5	1618	A	C5-C4	-5.47	1.34	1.38
59	A5	1690	U	N1-C6	-5.47	1.33	1.38
59	A5	2164	G	N9-C4	-5.47	1.33	1.38
59	A5	3290	A	C5-C4	-5.47	1.34	1.38
59	A5	3679	C	N3-C4	-5.47	1.30	1.33
59	A5	78	A	C6-N1	-5.47	1.31	1.35
59	A5	313	A	C8-N7	-5.47	1.27	1.31
59	A5	1669	G	N7-C5	-5.47	1.35	1.39
59	A5	1700	U	C5-C6	-5.47	1.29	1.34
59	A5	1969	A	N7-C5	-5.47	1.35	1.39
59	A5	2009	A	C5-C4	-5.47	1.34	1.38
59	A5	3236	A	C2-N3	-5.47	1.28	1.33
59	A5	3319	A	N7-C5	-5.47	1.35	1.39
26	CN	27	VAL	CB-CG1	-5.47	1.41	1.52
59	A5	1728	G	C8-N7	-5.47	1.27	1.30
59	A5	2041	G	C5-C6	-5.47	1.36	1.42
59	A5	2489	G	N9-C4	-5.47	1.33	1.38
59	A5	2810	A	N3-C4	-5.47	1.31	1.34
59	A5	3261	U	C5-C6	-5.47	1.29	1.34
59	A5	3939	C	N1-C6	-5.47	1.33	1.37
59	A5	50	U	C2-O2	-5.47	1.17	1.22
59	A5	1635	A	N7-C5	-5.47	1.35	1.39
59	A5	234	G	N7-C5	-5.47	1.35	1.39
59	A5	1150	G	N9-C4	-5.47	1.33	1.38
59	A5	1164	G	N3-C4	-5.47	1.31	1.35
59	A5	2235	G	N9-C4	-5.47	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2561	A	C8-N7	-5.47	1.27	1.31
59	A5	326	A	N7-C5	-5.46	1.35	1.39
59	A5	796	A	O3'-P	-5.46	1.54	1.61
59	A5	1171	G	N3-C4	-5.46	1.31	1.35
59	A5	1757	A	N1-C2	-5.46	1.29	1.34
59	A5	2525	C	C2-O2	-5.46	1.19	1.24
59	A5	3131	C	C5-C6	-5.46	1.29	1.34
59	A5	3448	U	C2-N3	-5.46	1.33	1.37
58	B2	615	G	C5-C6	-5.46	1.36	1.42
59	A5	1966	A	C6-N1	-5.46	1.31	1.35
59	A5	2007	U	N1-C2	-5.46	1.33	1.38
59	A5	2224	A	N7-C5	-5.46	1.35	1.39
59	A5	361	U	C2-N3	-5.46	1.33	1.37
59	A5	1780	U	N1-C6	-5.46	1.33	1.38
59	A5	2539	G	N9-C8	-5.46	1.34	1.37
59	A5	290	G	N1-C2	-5.46	1.33	1.37
59	A5	794	G	P-OP1	-5.46	1.39	1.49
59	A5	860	A	C6-N1	-5.46	1.31	1.35
59	A5	1613	A	N7-C5	-5.46	1.35	1.39
59	A5	3387	C	N3-C4	-5.46	1.30	1.33
59	A5	3944	A	N7-C5	-5.46	1.35	1.39
58	B2	1213	A	C5-C6	-5.46	1.36	1.41
59	A5	2528	A	N9-C8	-5.46	1.33	1.37
55	A7	11	A	N3-C4	-5.46	1.31	1.34
58	B2	1978	C	N3-C4	-5.46	1.30	1.33
59	A5	1114	A	C8-N7	-5.46	1.27	1.31
59	A5	1621	A	N9-C4	-5.46	1.34	1.37
59	A5	1748	C	C5-C6	-5.46	1.29	1.34
59	A5	1966	A	C5-C4	-5.46	1.34	1.38
59	A5	2775	A	P-O5'	-5.46	1.54	1.59
59	A5	3727	A	N9-C4	5.46	1.41	1.37
58	B2	45	U	N1-C6	-5.46	1.33	1.38
59	A5	1042	G	C6-N1	-5.46	1.35	1.39
59	A5	1555	G	C5-C6	-5.46	1.36	1.42
59	A5	1769	U	N1-C6	-5.46	1.33	1.38
59	A5	2659	A	C5-C4	-5.46	1.34	1.38
58	B2	1231	A	C5-C4	-5.45	1.34	1.38
59	A5	1098	U	N1-C6	-5.45	1.33	1.38
59	A5	1199	C	N1-C6	-5.45	1.33	1.37
59	A5	1796	A	C6-N1	-5.45	1.31	1.35
59	A5	1889	A	N7-C5	-5.45	1.35	1.39
59	A5	1973	G	N1-C2	-5.45	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2544	U	N3-C4	-5.45	1.33	1.38
59	A5	3598	U	C2-O2	-5.45	1.17	1.22
59	A5	3666	C	N1-C6	-5.45	1.33	1.37
59	A5	3888	U	N1-C2	-5.45	1.33	1.38
56	A8	15	G	C6-N1	-5.45	1.35	1.39
58	B2	1834	G	N7-C5	-5.45	1.35	1.39
59	A5	405	A	N9-C4	-5.45	1.34	1.37
59	A5	3410	G	N9-C4	-5.45	1.33	1.38
59	A5	3590	C	N3-C4	-5.45	1.30	1.33
58	B2	1977	A	C6-N1	-5.45	1.31	1.35
59	A5	240	G	C5-C6	-5.45	1.36	1.42
59	A5	1874	G	N1-C2	-5.45	1.33	1.37
59	A5	2249	A	C6-N1	-5.45	1.31	1.35
59	A5	3423	U	C4-O4	-5.45	1.19	1.23
56	A8	10	C	N1-C6	-5.45	1.33	1.37
59	A5	108	A	N9-C8	-5.45	1.33	1.37
59	A5	443	G	P-O5'	-5.45	1.54	1.59
59	A5	1322	U	C2-N3	-5.45	1.33	1.37
59	A5	1387	G	N9-C4	-5.45	1.33	1.38
59	A5	1508	U	C2-N3	-5.45	1.33	1.37
59	A5	1649	G	N1-C2	-5.45	1.33	1.37
59	A5	3518	A	C5-C6	-5.45	1.36	1.41
59	A5	3637	A	N7-C5	-5.45	1.35	1.39
59	A5	1680	U	C4-C5	-5.45	1.38	1.43
58	B2	1071	G	N3-C4	-5.45	1.31	1.35
59	A5	1182	A	N7-C5	-5.45	1.35	1.39
59	A5	1628	G	C6-N1	-5.45	1.35	1.39
59	A5	1704	A	N9-C8	-5.45	1.33	1.37
59	A5	2667	U	C2-N3	-5.45	1.33	1.37
59	A5	2706	U	C2-O2	-5.45	1.17	1.22
59	A5	2745	A	C8-N7	-5.45	1.27	1.31
59	A5	3331	A	N7-C5	-5.45	1.35	1.39
59	A5	3364	C	N1-C6	-5.45	1.33	1.37
59	A5	1983	A	C5-C6	-5.44	1.36	1.41
59	A5	2804	U	C2-N3	-5.44	1.33	1.37
59	A5	988	C	N1-C6	-5.44	1.33	1.37
59	A5	3173	U	C4-C5	-5.44	1.38	1.43
59	A5	3500	A	C5-C6	-5.44	1.36	1.41
59	A5	3657	A	C5-C6	-5.44	1.36	1.41
59	A5	3944	A	C5-C4	-5.44	1.34	1.38
59	A5	3947	C	N1-C2	-5.44	1.34	1.40
77	Cg	57	SER	C-N	-5.44	1.21	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	327	G	C5-C4	-5.44	1.34	1.38
59	A5	1054	A	N7-C5	-5.44	1.35	1.39
59	A5	1060	G	C6-O6	-5.44	1.19	1.24
59	A5	1412	A	N7-C5	-5.44	1.35	1.39
59	A5	1783	A	C6-N1	5.44	1.39	1.35
59	A5	1975	C	C5-C6	-5.44	1.29	1.34
59	A5	2150	U	C2-O2	-5.44	1.17	1.22
59	A5	2787	U	N3-C4	-5.44	1.33	1.38
59	A5	3488	G	N9-C8	-5.44	1.34	1.37
59	A5	384	A	N9-C4	-5.44	1.34	1.37
59	A5	998	G	N9-C4	-5.44	1.33	1.38
59	A5	1692	G	C6-N1	-5.44	1.35	1.39
59	A5	1716	G	N1-C2	-5.44	1.33	1.37
59	A5	2188	C	C5-C6	-5.44	1.29	1.34
59	A5	2254	U	C4-C5	-5.44	1.38	1.43
59	A5	2677	A	C5-C6	-5.44	1.36	1.41
58	B2	1181	G	C6-N1	-5.44	1.35	1.39
59	A5	814	U	P-OP1	-5.44	1.39	1.49
59	A5	828	G	N7-C5	-5.44	1.35	1.39
59	A5	1686	A	C2-N3	-5.44	1.28	1.33
59	A5	2508	C	C2-O2	-5.44	1.19	1.24
59	A5	2690	A	C6-N1	-5.44	1.31	1.35
59	A5	3286	G	C5-C4	-5.44	1.34	1.38
59	A5	3546	A	C8-N7	-5.44	1.27	1.31
59	A5	3669	U	C2-N3	-5.44	1.33	1.37
58	B2	968	A	C5-C6	-5.44	1.36	1.41
58	B2	1241	G	C5-C6	-5.44	1.36	1.42
59	A5	1606	G	C5-C4	-5.44	1.34	1.38
59	A5	2206	U	C4-O4	-5.44	1.19	1.23
59	A5	2698	A	N1-C2	-5.44	1.29	1.34
59	A5	2790	G	C5-C4	-5.44	1.34	1.38
48	Cp	11	VAL	CB-CG2	-5.43	1.41	1.52
56	A8	22	C	N1-C2	-5.43	1.34	1.40
58	B2	389	G	C5-C4	-5.43	1.34	1.38
58	B2	1174	A	C5-C4	-5.43	1.34	1.38
59	A5	296	C	N1-C2	-5.43	1.34	1.40
59	A5	912	A	C5-C6	-5.43	1.36	1.41
59	A5	1335	C	N3-C4	-5.43	1.30	1.33
59	A5	1337	U	N1-C6	-5.43	1.33	1.38
59	A5	2231	A	C5-C6	-5.43	1.36	1.41
59	A5	2591	A	C5-C4	-5.43	1.34	1.38
59	A5	563	A	N9-C4	-5.43	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	38	G	C5-C6	-5.43	1.36	1.42
58	B2	1066	A	C5-C6	-5.43	1.36	1.41
58	B2	1984	G	C5-C6	-5.43	1.36	1.42
59	A5	104	A	C5-C6	-5.43	1.36	1.41
59	A5	394	G	C5-C4	-5.43	1.34	1.38
59	A5	1270	G	C2-N3	-5.43	1.28	1.32
59	A5	2517	A	C5-C4	-5.43	1.34	1.38
59	A5	2565	G	N9-C8	-5.43	1.34	1.37
59	A5	2757	U	N3-C4	-5.43	1.33	1.38
59	A5	3480	U	C5-C6	-5.43	1.29	1.34
58	B2	349	A	N7-C5	-5.43	1.35	1.39
58	B2	1101	G	C5-C6	-5.43	1.36	1.42
59	A5	1009	G	N9-C8	-5.43	1.34	1.37
59	A5	1332	C	C5-C6	-5.43	1.30	1.34
59	A5	1866	G	C8-N7	-5.43	1.27	1.30
37	Cr	13	ARG	CB-CG	-5.43	1.37	1.52
56	A8	28	A	P-O5'	-5.43	1.54	1.59
58	B2	1220	A	N7-C5	-5.43	1.35	1.39
59	A5	1016	A	N9-C4	-5.43	1.34	1.37
59	A5	1061	A	C5-C6	-5.43	1.36	1.41
59	A5	1085	U	N1-C2	-5.43	1.33	1.38
59	A5	1421	G	N7-C5	-5.43	1.35	1.39
59	A5	1533	A	C6-N6	-5.43	1.29	1.33
59	A5	2772	G	N3-C4	-5.43	1.31	1.35
59	A5	3164	C	N1-C2	-5.43	1.34	1.40
59	A5	3487	A	C6-N6	-5.43	1.29	1.33
58	B2	1845	C	N1-C6	-5.42	1.33	1.37
59	A5	46	C	C2-N3	-5.42	1.31	1.35
59	A5	379	A	C8-N7	-5.42	1.27	1.31
59	A5	2165	C	N1-C6	-5.42	1.33	1.37
59	A5	2184	G	C6-N1	-5.42	1.35	1.39
59	A5	3406	G	C8-N7	-5.42	1.27	1.30
59	A5	3600	G	C6-N1	-5.42	1.35	1.39
59	A5	3907	G	N1-C2	-5.42	1.33	1.37
56	A8	29	U	C5-C6	-5.42	1.29	1.34
59	A5	2043	G	N9-C8	-5.42	1.34	1.37
59	A5	2149	G	C6-N1	-5.42	1.35	1.39
59	A5	2680	G	C8-N7	-5.42	1.27	1.30
59	A5	3487	A	C2-N3	-5.42	1.28	1.33
55	A7	88	G	N9-C4	-5.42	1.33	1.38
59	A5	663	U	C5-C6	-5.42	1.29	1.34
59	A5	1120	A	C2-N3	-5.42	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1606	G	C6-N1	-5.42	1.35	1.39
59	A5	2249	A	C2-N3	-5.42	1.28	1.33
59	A5	2707	C	N3-C4	-5.42	1.30	1.33
59	A5	3883	G	N1-C2	-5.42	1.33	1.37
58	B2	1960	A	N7-C5	-5.42	1.35	1.39
59	A5	990	U	N1-C2	-5.42	1.33	1.38
59	A5	1774	C	C5-C6	-5.42	1.30	1.34
59	A5	2101	C	N3-C4	-5.42	1.30	1.33
59	A5	429	U	C2-O2	-5.42	1.17	1.22
59	A5	1163	G	P-OP2	-5.42	1.39	1.49
59	A5	2705	U	C4-C5	-5.42	1.38	1.43
59	A5	3159	C	C4-C5	-5.42	1.38	1.43
59	A5	3518	A	N9-C8	-5.42	1.33	1.37
58	B2	636	G	N9-C8	-5.42	1.34	1.37
59	A5	203	A	C5-C4	-5.42	1.34	1.38
59	A5	1136	A	C6-N6	-5.42	1.29	1.33
59	A5	1698	A	C6-N1	-5.42	1.31	1.35
59	A5	1711	C	C2-N3	-5.42	1.31	1.35
59	A5	2201	U	N3-C4	-5.42	1.33	1.38
59	A5	2506	U	C4-C5	-5.42	1.38	1.43
59	A5	3483	G	C5-C4	-5.42	1.34	1.38
58	B2	360	G	C5-C4	-5.42	1.34	1.38
59	A5	430	G	N1-C2	-5.42	1.33	1.37
59	A5	815	A	N1-C2	-5.42	1.29	1.34
59	A5	1345	G	N1-C2	-5.42	1.33	1.37
59	A5	1650	C	C5-C6	-5.42	1.30	1.34
59	A5	3482	G	C6-O6	-5.42	1.19	1.24
59	A5	118	A	N7-C5	-5.41	1.36	1.39
59	A5	827	A	C5-C6	-5.41	1.36	1.41
59	A5	1372	A	C8-N7	-5.41	1.27	1.31
59	A5	1772	G	N7-C5	-5.41	1.36	1.39
59	A5	2159	C	N1-C2	-5.41	1.34	1.40
59	A5	3595	U	C4-C5	-5.41	1.38	1.43
59	A5	2552	G	C2-N3	-5.41	1.28	1.32
59	A5	2678	G	C5-C6	-5.41	1.36	1.42
59	A5	366	A	N9-C4	-5.41	1.34	1.37
59	A5	1424	G	C5-C6	-5.41	1.36	1.42
59	A5	1725	A	C8-N7	-5.41	1.27	1.31
58	B2	349	A	N9-C4	-5.41	1.34	1.37
59	A5	216	U	N1-C2	-5.41	1.33	1.38
59	A5	1150	G	C2-N3	-5.41	1.28	1.32
59	A5	1548	C	N1-C2	-5.41	1.34	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1672	A	C2-N3	-5.41	1.28	1.33
59	A5	2555	G	N1-C2	-5.41	1.33	1.37
59	A5	3513	A	C2-N3	-5.41	1.28	1.33
59	A5	3580	G	C5-C6	-5.41	1.36	1.42
59	A5	217	G	C5-C4	-5.41	1.34	1.38
59	A5	1024	U	N3-C4	-5.41	1.33	1.38
59	A5	1072	U	N1-C6	-5.41	1.33	1.38
59	A5	1080	G	C2-N3	-5.41	1.28	1.32
59	A5	1366	G	C6-O6	-5.41	1.19	1.24
59	A5	1558	A	N9-C8	-5.41	1.33	1.37
59	A5	2149	G	N3-C4	-5.41	1.31	1.35
59	A5	3140	G	C2'-C1'	-5.41	1.47	1.53
59	A5	3448	U	C4-C5	-5.41	1.38	1.43
59	A5	3491	C	C5-C6	-5.41	1.30	1.34
59	A5	801	G	N7-C5	-5.41	1.36	1.39
59	A5	1165	A	C5-C6	-5.41	1.36	1.41
59	A5	1531	U	C2-N3	-5.41	1.33	1.37
59	A5	1531	U	C5-C6	-5.41	1.29	1.34
59	A5	1548	C	C2-N3	-5.41	1.31	1.35
59	A5	2760	G	N9-C4	-5.41	1.33	1.38
59	A5	3470	G	N9-C8	-5.41	1.34	1.37
58	B2	369	G	N9-C8	-5.40	1.34	1.37
59	A5	1036	A	C5-C6	-5.40	1.36	1.41
59	A5	1539	A	C5-C6	-5.40	1.36	1.41
59	A5	3525	A	C6-N1	-5.40	1.31	1.35
56	A8	30	G	C2-N3	-5.40	1.28	1.32
58	B2	1200	A	N9-C4	-5.40	1.34	1.37
59	A5	359	G	N3-C4	-5.40	1.31	1.35
59	A5	1085	U	C2'-C1'	-5.40	1.47	1.53
59	A5	1110	G	C5-C6	-5.40	1.36	1.42
59	A5	1259	A	C5-C4	-5.40	1.34	1.38
59	A5	2218	G	C6-N1	-5.40	1.35	1.39
59	A5	2691	A	N7-C5	-5.40	1.36	1.39
59	A5	3636	G	C5-C4	-5.40	1.34	1.38
58	B2	1097	C	N3-C4	-5.40	1.30	1.33
58	B2	1204	A	N9-C4	-5.40	1.34	1.37
59	A5	382	G	N7-C5	-5.40	1.36	1.39
59	A5	660	A	N7-C5	-5.40	1.36	1.39
59	A5	3350	U	N1-C6	-5.40	1.33	1.38
59	A5	3423	U	C5-C6	-5.40	1.29	1.34
80	CF	232	VAL	CB-CG2	-5.40	1.41	1.52
31	CS	155	VAL	CB-CG1	-5.40	1.41	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	252	A	N7-C5	-5.40	1.36	1.39
58	B2	638	A	C5-C4	-5.40	1.34	1.38
59	A5	2735	A	C4'-C3'	-5.40	1.47	1.52
59	A5	3355	G	C6-N1	-5.40	1.35	1.39
55	A7	90	A	N9-C8	-5.40	1.33	1.37
58	B2	1217	U	C2-N3	-5.40	1.33	1.37
59	A5	799	A	C6-N6	-5.40	1.29	1.33
59	A5	1683	U	C4-O4	-5.40	1.19	1.23
59	A5	3885	C	C5-C6	-5.40	1.30	1.34
59	A5	375	C	C4'-C3'	-5.40	1.47	1.52
59	A5	1696	A	C2-N3	-5.40	1.28	1.33
59	A5	1752	G	N7-C5	-5.40	1.36	1.39
59	A5	1883	G	N7-C5	-5.40	1.36	1.39
59	A5	2749	G	N1-C2	-5.40	1.33	1.37
59	A5	3144	U	C2-N3	-5.40	1.33	1.37
59	A5	3875	U	N3-C4	-5.40	1.33	1.38
56	A8	72	C	N3-C4	-5.39	1.30	1.33
58	B2	360	G	C5-C6	-5.39	1.36	1.42
58	B2	1084	G	C5-C6	-5.39	1.36	1.42
58	B2	1111	U	N1-C6	-5.39	1.33	1.38
59	A5	99	A	C6-N6	-5.39	1.29	1.33
59	A5	1639	U	N1-C6	-5.39	1.33	1.38
59	A5	1779	G	N7-C5	-5.39	1.36	1.39
59	A5	2714	U	N3-C4	-5.39	1.33	1.38
59	A5	3147	A	C6-N1	-5.39	1.31	1.35
6	CC	70	TRP	CG-CD1	-5.39	1.29	1.36
59	A5	412	U	N1-C2	-5.39	1.33	1.38
59	A5	450	G	N7-C5	-5.39	1.36	1.39
59	A5	792	U	N3-C4	-5.39	1.33	1.38
59	A5	1394	U	C4-O4	-5.39	1.19	1.23
59	A5	1509	A	N3-C4	-5.39	1.31	1.34
59	A5	1552	A	C8-N7	-5.39	1.27	1.31
59	A5	1559	A	C5-C6	-5.39	1.36	1.41
59	A5	1598	A	N3-C4	-5.39	1.31	1.34
59	A5	1793	C	C2-O2	-5.39	1.19	1.24
59	A5	2026	G	N9-C4	-5.39	1.33	1.38
59	A5	2779	A	C2-N3	-5.39	1.28	1.33
59	A5	3492	G	C8-N7	-5.39	1.27	1.30
25	Ca	22	ARG	CB-CG	-5.39	1.38	1.52
54	A9	12	C	N3-C4	-5.39	1.30	1.33
54	A9	15	A	C5-C4	-5.39	1.34	1.38
58	B2	610	U	C2-N3	-5.39	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	838	A	C5-C4	-5.39	1.34	1.38
59	A5	43	A	C8-N7	-5.39	1.27	1.31
59	A5	287	G	N1-C2	-5.39	1.33	1.37
59	A5	1017	A	C5-C6	-5.39	1.36	1.41
59	A5	1093	C	N3-C4	-5.39	1.30	1.33
59	A5	1632	A	N7-C5	-5.39	1.36	1.39
59	A5	1710	G	N9-C8	-5.39	1.34	1.37
59	A5	1711	C	C5-C6	-5.39	1.30	1.34
59	A5	1975	C	C2-N3	-5.39	1.31	1.35
59	A5	3685	U	C2-N3	-5.39	1.33	1.37
59	A5	3882	C	C5-C6	-5.39	1.30	1.34
58	B2	479	A	N9-C4	-5.39	1.34	1.37
59	A5	59	G	N1-C2	-5.39	1.33	1.37
59	A5	1159	C	C4-C5	-5.39	1.38	1.43
55	A7	99	G	N9-C8	-5.39	1.34	1.37
59	A5	2623	C	C2-N3	-5.39	1.31	1.35
59	A5	3615	G	C2-N2	-5.39	1.29	1.34
58	B2	1855	A	C5-C6	-5.38	1.36	1.41
59	A5	1542	C	N1-C2	-5.38	1.34	1.40
59	A5	2052	G	N3-C4	-5.38	1.31	1.35
59	A5	2483	A	N7-C5	-5.38	1.36	1.39
59	A5	2514	U	C2-O2	-5.38	1.17	1.22
59	A5	2787	U	C4-C5	-5.38	1.38	1.43
59	A5	3451	A	C8-N7	-5.38	1.27	1.31
59	A5	3591	A	C2-N3	-5.38	1.28	1.33
59	A5	3612	A	C6-N1	-5.38	1.31	1.35
56	A8	108	A	C8-N7	-5.38	1.27	1.31
55	A7	94	C	C4-C5	-5.38	1.38	1.43
58	B2	1234	G	N7-C5	-5.38	1.36	1.39
59	A5	1037	A	N9-C8	-5.38	1.33	1.37
59	A5	1321	G	N3-C4	-5.38	1.31	1.35
59	A5	1709	A	N3-C4	-5.38	1.31	1.34
59	A5	2776	A	P-OP2	-5.38	1.39	1.49
59	A5	3259	A	C5-C6	-5.38	1.36	1.41
59	A5	3600	G	C6-O6	-5.38	1.19	1.24
58	B2	1238	G	C2-N3	-5.38	1.28	1.32
59	A5	307	A	N3-C4	-5.38	1.31	1.34
59	A5	978	G	N9-C8	-5.38	1.34	1.37
59	A5	2650	G	C5-C4	-5.38	1.34	1.38
59	A5	861	C	N1-C6	-5.38	1.33	1.37
59	A5	1074	U	N1-C2	-5.38	1.33	1.38
59	A5	1626	A	N7-C5	-5.38	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2550	G	C8-N7	-5.38	1.27	1.30
59	A5	2909	A	N9-C8	-5.38	1.33	1.37
59	A5	3965	A	N7-C5	-5.38	1.36	1.39
42	Cf	59	TYR	CB-CG	-5.38	1.43	1.51
58	B2	1187	U	C2-O2	-5.38	1.17	1.22
59	A5	367	A	C5-C6	-5.38	1.36	1.41
59	A5	981	C	N3-C4	-5.38	1.30	1.33
59	A5	1011	U	C5-C6	-5.38	1.29	1.34
59	A5	1338	U	N3-C4	-5.38	1.33	1.38
59	A5	3235	A	C8-N7	-5.38	1.27	1.31
59	A5	3554	G	C5-C4	-5.38	1.34	1.38
59	A5	2245	G	N9-C4	-5.38	1.33	1.38
59	A5	3610	A	C5-C4	-5.38	1.34	1.38
56	A8	44	C	N3-C4	-5.37	1.30	1.33
58	B2	1989	A	C5-C4	-5.37	1.34	1.38
59	A5	33	C	C2-N3	-5.37	1.31	1.35
59	A5	1698	A	C8-N7	-5.37	1.27	1.31
59	A5	2800	C	C4-N4	-5.37	1.29	1.33
59	A5	3145	U	C4-O4	-5.37	1.19	1.23
59	A5	3325	G	C2-N3	-5.37	1.28	1.32
59	A5	3901	G	C8-N7	-5.37	1.27	1.30
56	A8	112	C	C4-C5	-5.37	1.38	1.43
59	A5	303	G	C6-N1	-5.37	1.35	1.39
59	A5	352	U	N1-C6	-5.37	1.33	1.38
59	A5	809	G	C6-O6	-5.37	1.19	1.24
59	A5	1000	G	C2-N2	-5.37	1.29	1.34
59	A5	1752	G	C2-N3	-5.37	1.28	1.32
59	A5	2034	U	N1-C6	-5.37	1.33	1.38
59	A5	2208	G	C5-C6	-5.37	1.36	1.42
59	A5	2510	A	N9-C8	-5.37	1.33	1.37
59	A5	2532	U	C4-C5	-5.37	1.38	1.43
59	A5	2793	C	N3-C4	-5.37	1.30	1.33
59	A5	3342	C	C2-O2	-5.37	1.19	1.24
59	A5	1522	G	N1-C2	-5.37	1.33	1.37
58	B2	330	G	N9-C8	-5.37	1.34	1.37
59	A5	339	C	N1-C2	-5.37	1.34	1.40
59	A5	389	G	N9-C4	-5.37	1.33	1.38
59	A5	1174	G	N3-C4	-5.37	1.31	1.35
59	A5	2748	G	C8-N7	-5.37	1.27	1.30
59	A5	3141	A	N7-C5	-5.37	1.36	1.39
58	B2	1064	A	N3-C4	-5.37	1.31	1.34
59	A5	1424	G	C5-C4	-5.37	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3496	U	C4-C5	-5.37	1.38	1.43
59	A5	3590	C	N1-C6	-5.37	1.33	1.37
59	A5	3680	A	N3-C4	-5.37	1.31	1.34
58	B2	1074	G	N9-C8	-5.37	1.34	1.37
59	A5	2748	G	C2-N3	-5.37	1.28	1.32
59	A5	3411	C	N1-C2	-5.37	1.34	1.40
59	A5	49	A	N9-C8	-5.36	1.33	1.37
59	A5	68	G	N7-C5	-5.36	1.36	1.39
59	A5	1173	U	N1-C6	-5.36	1.33	1.38
59	A5	1737	U	C5-C6	-5.36	1.29	1.34
59	A5	2026	G	C5-C4	-5.36	1.34	1.38
59	A5	2758	U	C4-C5	-5.36	1.38	1.43
59	A5	3321	A	N9-C8	-5.36	1.33	1.37
59	A5	1602	U	C4-C5	-5.36	1.38	1.43
59	A5	2223	C	C4'-C3'	-5.36	1.47	1.52
59	A5	2772	G	C5-C6	-5.36	1.36	1.42
59	A5	64	A	N1-C2	-5.36	1.29	1.34
59	A5	95	G	N7-C5	-5.36	1.36	1.39
59	A5	1208	U	N3-C4	-5.36	1.33	1.38
59	A5	1799	U	C5-C6	-5.36	1.29	1.34
59	A5	2205	G	C6-N1	-5.36	1.35	1.39
59	A5	2503	G	C5-C4	-5.36	1.34	1.38
59	A5	2549	G	N9-C4	-5.36	1.33	1.38
59	A5	3261	U	N1-C2	-5.36	1.33	1.38
59	A5	3469	G	C5-C4	-5.36	1.34	1.38
59	A5	3501	C	N1-C2	-5.36	1.34	1.40
59	A5	3646	G	C5-C4	-5.36	1.34	1.38
59	A5	985	G	N3-C4	-5.36	1.31	1.35
58	B2	1074	G	C5-C4	-5.36	1.34	1.38
58	B2	1198	G	C6-N1	-5.36	1.35	1.39
59	A5	2095	U	C4-C5	-5.36	1.38	1.43
59	A5	2213	G	C5-C4	-5.36	1.34	1.38
55	A7	82	G	C8-N7	-5.36	1.27	1.30
58	B2	361	G	N7-C5	-5.36	1.36	1.39
58	B2	1023	G	N7-C5	-5.36	1.36	1.39
59	A5	1163	G	C2-N3	-5.36	1.28	1.32
59	A5	2715	C	C5-C6	-5.36	1.30	1.34
59	A5	3417	C	N1-C6	-5.36	1.33	1.37
59	A5	3635	G	N9-C4	-5.36	1.33	1.38
45	C1	21	ARG	CB-CG	-5.35	1.38	1.52
59	A5	2493	C	C2-N3	-5.35	1.31	1.35
59	A5	3638	U	C2-N3	-5.35	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3727	A	C5-C4	-5.35	1.35	1.38
56	A8	52	A	N7-C5	-5.35	1.36	1.39
59	A5	320	U	N1-C2	-5.35	1.33	1.38
59	A5	1024	U	N1-C2	-5.35	1.33	1.38
59	A5	1665	C	C5-C6	-5.35	1.30	1.34
59	A5	1715	G	C5-C6	-5.35	1.36	1.42
59	A5	1889	A	C5-C4	-5.35	1.35	1.38
59	A5	2115	U	N1-C6	-5.35	1.33	1.38
59	A5	2505	A	C6-N1	-5.35	1.31	1.35
59	A5	3159	C	C2-N3	-5.35	1.31	1.35
59	A5	3306	U	N3-C4	-5.35	1.33	1.38
59	A5	3308	A	N3-C4	-5.35	1.31	1.34
58	B2	1220	A	N9-C4	-5.35	1.34	1.37
59	A5	308	G	C8-N7	-5.35	1.27	1.30
59	A5	881	G	C5-C4	-5.35	1.34	1.38
59	A5	1890	U	N3-C4	-5.35	1.33	1.38
59	A5	1898	C	N1-C6	-5.35	1.33	1.37
59	A5	3444	G	C8-N7	-5.35	1.27	1.30
59	A5	3492	G	N9-C4	-5.35	1.33	1.38
59	A5	3951	U	N3-C4	-5.35	1.33	1.38
59	A5	352	U	C4-C5	-5.35	1.38	1.43
59	A5	832	U	N3-C4	-5.35	1.33	1.38
59	A5	853	G	C2-N3	-5.35	1.28	1.32
59	A5	877	A	C5-C6	-5.35	1.36	1.41
59	A5	1137	G	C6-O6	-5.35	1.19	1.24
59	A5	1170	U	C4-O4	-5.35	1.19	1.23
59	A5	1211	A	N9-C8	-5.35	1.33	1.37
59	A5	1394	U	C2-N3	-5.35	1.34	1.37
59	A5	1735	G	N3-C4	-5.35	1.31	1.35
59	A5	1780	U	N3-C4	-5.35	1.33	1.38
59	A5	2245	G	C5-C6	-5.35	1.37	1.42
59	A5	3174	A	C5-C4	-5.35	1.35	1.38
59	A5	3583	C	C2-N3	-5.35	1.31	1.35
59	A5	3654	C	N3-C4	-5.35	1.30	1.33
54	A9	13	A	C5-C4	-5.35	1.35	1.38
56	A8	9	G	C5-C4	-5.35	1.34	1.38
58	B2	1717	A	N9-C4	-5.35	1.34	1.37
59	A5	552	U	N3-C4	-5.35	1.33	1.38
59	A5	1137	G	N3-C4	-5.35	1.31	1.35
59	A5	1791	A	C5-C6	-5.35	1.36	1.41
59	A5	2219	U	C5-C6	-5.35	1.29	1.34
59	A5	3347	G	C5-C4	-5.35	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3578	A	N3-C4	-5.35	1.31	1.34
59	A5	1623	G	N7-C5	-5.35	1.36	1.39
59	A5	2735	A	P-O5'	-5.35	1.54	1.59
59	A5	3921	A	C5-C6	-5.35	1.36	1.41
56	A8	111	G	C6-N1	-5.34	1.35	1.39
59	A5	352	U	C5-C6	-5.34	1.29	1.34
59	A5	355	G	N1-C2	-5.34	1.33	1.37
59	A5	365	A	N1-C2	-5.34	1.29	1.34
59	A5	1322	U	C5-C6	-5.34	1.29	1.34
59	A5	1364	A	N9-C4	-5.34	1.34	1.37
59	A5	2483	A	C5-C4	-5.34	1.35	1.38
59	A5	3913	G	N7-C5	-5.34	1.36	1.39
2	CA	20	VAL	CB-CG2	-5.34	1.41	1.52
59	A5	21	U	C2-N3	-5.34	1.34	1.37
59	A5	443	G	C6-N1	-5.34	1.35	1.39
59	A5	782	G	C2-N3	-5.34	1.28	1.32
59	A5	1119	C	N3-C4	-5.34	1.30	1.33
59	A5	2023	A	C5-C6	-5.34	1.36	1.41
59	A5	2178	U	P-O5'	-5.34	1.54	1.59
59	A5	2795	U	C2-N3	-5.34	1.34	1.37
59	A5	3368	C	C4-C5	-5.34	1.38	1.43
58	B2	1828	C	C4-C5	-5.34	1.38	1.43
59	A5	806	A	C5-C6	-5.34	1.36	1.41
59	A5	1684	G	N7-C5	-5.34	1.36	1.39
59	A5	1721	C	C4-N4	-5.34	1.29	1.33
59	A5	2204	U	C2-O2	-5.34	1.17	1.22
59	A5	2561	A	C2-N3	-5.34	1.28	1.33
59	A5	2625	G	C6-N1	-5.34	1.35	1.39
59	A5	2791	A	C5-C4	-5.34	1.35	1.38
59	A5	3499	G	N1-C2	-5.34	1.33	1.37
59	A5	3667	C	N3-C4	-5.34	1.30	1.33
6	CC	48	ARG	CG-CD	-5.34	1.38	1.51
58	B2	1987	G	C6-N1	-5.34	1.35	1.39
59	A5	754	A	N1-C2	-5.34	1.29	1.34
59	A5	1175	C	C2-N3	-5.34	1.31	1.35
59	A5	1768	G	C6-N1	-5.34	1.35	1.39
59	A5	2051	A	C5-C4	-5.34	1.35	1.38
59	A5	2257	C	C2-N3	-5.34	1.31	1.35
59	A5	2510	A	N1-C2	-5.34	1.29	1.34
59	A5	2535	U	C2-N3	-5.34	1.34	1.37
59	A5	2726	A	C6-N6	-5.34	1.29	1.33
59	A5	3965	A	N3-C4	-5.34	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1101	G	C2-N3	-5.34	1.28	1.32
55	A7	92	C	C5-C6	-5.34	1.30	1.34
58	B2	1071	G	N9-C8	-5.34	1.34	1.37
59	A5	83	U	N3-C4	-5.34	1.33	1.38
59	A5	2110	A	C5-C6	-5.34	1.36	1.41
59	A5	2694	G	N9-C4	-5.34	1.33	1.38
59	A5	234	G	C8-N7	-5.33	1.27	1.30
59	A5	2189	U	N3-C4	-5.33	1.33	1.38
59	A5	2212	A	N3-C4	-5.33	1.31	1.34
59	A5	3505	U	C2-N3	-5.33	1.34	1.37
59	A5	322	G	N9-C8	-5.33	1.34	1.37
59	A5	822	G	N9-C8	-5.33	1.34	1.37
59	A5	864	G	C5-C4	-5.33	1.34	1.38
59	A5	2019	U	C2-N3	-5.33	1.34	1.37
59	A5	2184	G	N1-C2	-5.33	1.33	1.37
59	A5	2246	A	C8-N7	-5.33	1.27	1.31
59	A5	3311	A	C5-C4	-5.33	1.35	1.38
58	B2	1081	G	C5-C4	-5.33	1.34	1.38
58	B2	1220	A	C5-C6	-5.33	1.36	1.41
59	A5	991	A	C6-N6	-5.33	1.29	1.33
59	A5	1328	U	N1-C6	-5.33	1.33	1.38
59	A5	2044	A	N9-C4	-5.33	1.34	1.37
59	A5	2502	G	N7-C5	-5.33	1.36	1.39
59	A5	2720	U	N3-C4	-5.33	1.33	1.38
59	A5	3179	A	C5-C6	-5.33	1.36	1.41
59	A5	3461	C	N3-C4	-5.33	1.30	1.33
59	A5	3508	G	C2-N2	-5.33	1.29	1.34
67	CV	38	TYR	CE2-CZ	-5.33	1.31	1.38
25	Ca	53	TYR	CE1-CZ	-5.33	1.31	1.38
55	A7	98	G	C8-N7	-5.33	1.27	1.30
58	B2	13	C	C2-N3	-5.33	1.31	1.35
59	A5	417	A	N3-C4	-5.33	1.31	1.34
59	A5	1409	G	C5-C6	-5.33	1.37	1.42
59	A5	2191	G	C5-C4	-5.33	1.34	1.38
59	A5	2744	C	N1-C6	-5.33	1.33	1.37
59	A5	3616	G	C5-C6	-5.33	1.37	1.42
59	A5	3658	G	N7-C5	-5.33	1.36	1.39
59	A5	853	G	C6-N1	-5.33	1.35	1.39
59	A5	1601	U	N1-C6	-5.33	1.33	1.38
59	A5	2625	G	N9-C8	-5.33	1.34	1.37
59	A5	2686	C	N1-C6	-5.33	1.33	1.37
58	B2	951	A	N7-C5	-5.33	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	108	A	C8-N7	-5.33	1.27	1.31
59	A5	650	A	C5-C6	-5.33	1.36	1.41
59	A5	1016	A	P-O5'	-5.33	1.54	1.59
59	A5	1722	U	C4-C5	-5.33	1.38	1.43
59	A5	1757	A	N7-C5	-5.33	1.36	1.39
59	A5	1778	A	N1-C2	-5.33	1.29	1.34
59	A5	2180	A	C5-C4	-5.33	1.35	1.38
59	A5	2564	U	N1-C6	-5.33	1.33	1.38
59	A5	2682	C	N1-C2	-5.33	1.34	1.40
59	A5	3270	G	C5-C4	-5.33	1.34	1.38
58	B2	8	U	C2-N3	-5.32	1.34	1.37
58	B2	964	G	N1-C2	-5.32	1.33	1.37
59	A5	42	U	C4-O4	-5.32	1.19	1.23
59	A5	1027	A	C8-N7	-5.32	1.27	1.31
59	A5	1144	C	N1-C2	-5.32	1.34	1.40
59	A5	1173	U	C5-C6	-5.32	1.29	1.34
59	A5	1341	G	N9-C4	-5.32	1.33	1.38
59	A5	1595	G	C5-C4	-5.32	1.34	1.38
59	A5	2175	A	N3-C4	-5.32	1.31	1.34
59	A5	3166	C	C2-N3	-5.32	1.31	1.35
59	A5	3474	G	C5-C6	-5.32	1.37	1.42
59	A5	3606	G	C2-N3	-5.32	1.28	1.32
56	A8	38	G	C8-N7	-5.32	1.27	1.30
59	A5	76	C	N1-C2	-5.32	1.34	1.40
59	A5	1416	U	C4-O4	-5.32	1.19	1.23
59	A5	1609	U	C4-C5	-5.32	1.38	1.43
59	A5	388	U	C4-C5	-5.32	1.38	1.43
59	A5	1175	C	C4-C5	-5.32	1.38	1.43
59	A5	1732	A	C5-C4	-5.32	1.35	1.38
59	A5	2154	A	C5-C4	-5.32	1.35	1.38
59	A5	2265	A	N9-C4	-5.32	1.34	1.37
59	A5	2773	G	N3-C4	-5.32	1.31	1.35
59	A5	3168	A	C6-N1	-5.32	1.31	1.35
55	A7	75	G	N3-C4	-5.32	1.31	1.35
59	A5	388	U	C2-N3	-5.32	1.34	1.37
59	A5	1595	G	C5-C6	-5.32	1.37	1.42
59	A5	1873	A	C8-N7	-5.32	1.27	1.31
59	A5	3126	C	N1-C6	-5.32	1.33	1.37
59	A5	82	U	C2-N3	-5.32	1.34	1.37
59	A5	1001	A	C5-C6	-5.32	1.36	1.41
59	A5	1376	U	C5-C6	-5.32	1.29	1.34
59	A5	1752	G	N9-C4	-5.32	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3159	C	N3-C4	-5.32	1.30	1.33
59	A5	3257	U	N1-C6	-5.32	1.33	1.38
58	B2	962	G	N3-C4	-5.32	1.31	1.35
58	B2	1228	G	C6-N1	-5.32	1.35	1.39
58	B2	1231	A	N9-C4	-5.32	1.34	1.37
59	A5	1028	U	C5-C6	-5.32	1.29	1.34
59	A5	1032	G	N7-C5	-5.32	1.36	1.39
59	A5	1177	U	C5-C6	-5.32	1.29	1.34
59	A5	2228	U	C4-C5	-5.32	1.38	1.43
59	A5	2233	C	N1-C2	-5.32	1.34	1.40
59	A5	2501	G	N7-C5	-5.32	1.36	1.39
59	A5	3156	G	N9-C8	-5.31	1.34	1.37
59	A5	65	A	C6-N6	-5.31	1.29	1.33
59	A5	842	A	C5-C6	-5.31	1.36	1.41
59	A5	1152	A	C5-C6	-5.31	1.36	1.41
59	A5	1662	U	C4-C5	-5.31	1.38	1.43
59	A5	1709	A	N7-C5	-5.31	1.36	1.39
59	A5	2163	A	C5-C6	-5.31	1.36	1.41
58	B2	967	C	C4-C5	-5.31	1.38	1.43
58	B2	1230	A	N3-C4	-5.31	1.31	1.34
59	A5	442	A	N3-C4	-5.31	1.31	1.34
58	B2	28	A	N7-C5	-5.31	1.36	1.39
59	A5	785	A	C5-C4	-5.31	1.35	1.38
59	A5	1044	G	N1-C2	-5.31	1.33	1.37
59	A5	2687	A	N9-C8	-5.31	1.33	1.37
59	A5	3143	U	C4'-C3'	-5.31	1.47	1.52
59	A5	3417	C	N3-C4	-5.31	1.30	1.33
41	Ce	95	CYS	CB-SG	-5.31	1.73	1.81
59	A5	104	A	C5-C4	-5.31	1.35	1.38
59	A5	909	A	C5-C4	-5.31	1.35	1.38
59	A5	1615	G	C8-N7	-5.31	1.27	1.30
59	A5	2149	G	N7-C5	-5.31	1.36	1.39
59	A5	3462	A	N9-C4	-5.31	1.34	1.37
58	B2	963	G	C5-C4	-5.30	1.34	1.38
59	A5	773	G	C2-N3	-5.30	1.28	1.32
59	A5	1512	C	C4-C5	-5.30	1.38	1.43
59	A5	3397	U	C4-C5	-5.30	1.38	1.43
59	A5	3640	A	N7-C5	-5.30	1.36	1.39
58	B2	1969	G	N7-C5	-5.30	1.36	1.39
59	A5	102	G	N9-C8	-5.30	1.34	1.37
59	A5	238	G	N9-C8	-5.30	1.34	1.37
59	A5	1723	G	N9-C8	-5.30	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2012	G	C5-C4	-5.30	1.34	1.38
59	A5	3140	G	C2-N2	-5.30	1.29	1.34
59	A5	664	U	C4-C5	-5.30	1.38	1.43
59	A5	1508	U	N1-C2	-5.30	1.33	1.38
59	A5	2545	A	N9-C8	-5.30	1.33	1.37
59	A5	2566	A	C2-N3	-5.30	1.28	1.33
59	A5	3427	G	N3-C4	-5.30	1.31	1.35
58	B2	315	C	N3-C4	-5.30	1.30	1.33
59	A5	355	G	N3-C4	-5.30	1.31	1.35
59	A5	989	A	C6-N6	-5.30	1.29	1.33
59	A5	1387	G	N7-C5	-5.30	1.36	1.39
59	A5	3411	C	C2-N3	-5.30	1.31	1.35
59	A5	3918	A	N3-C4	-5.30	1.31	1.34
58	B2	1038	A	N9-C4	-5.30	1.34	1.37
58	B2	1202	G	N3-C4	-5.30	1.31	1.35
59	A5	826	A	N9-C8	-5.30	1.33	1.37
59	A5	1535	U	C2-N3	-5.30	1.34	1.37
59	A5	2579	G	C8-N7	-5.30	1.27	1.30
59	A5	2747	G	C6-N1	-5.30	1.35	1.39
59	A5	2762	A	N3-C4	-5.30	1.31	1.34
59	A5	816	A	C6-N6	-5.30	1.29	1.33
59	A5	1555	G	N9-C8	-5.30	1.34	1.37
59	A5	1875	G	C6-N1	-5.30	1.35	1.39
59	A5	2180	A	N9-C4	-5.30	1.34	1.37
59	A5	2241	U	C5-C6	-5.30	1.29	1.34
59	A5	2256	G	N1-C2	-5.30	1.33	1.37
59	A5	2505	A	C6-N6	-5.30	1.29	1.33
59	A5	3401	U	P-OP2	-5.30	1.40	1.49
59	A5	3550	C	N1-C6	-5.30	1.33	1.37
31	CS	62	VAL	CB-CG2	-5.29	1.41	1.52
59	A5	1536	U	C2-N3	-5.29	1.34	1.37
59	A5	2041	G	C8-N7	-5.29	1.27	1.30
59	A5	3141	A	P-OP1	-5.29	1.40	1.49
59	A5	3525	A	N3-C4	-5.29	1.31	1.34
59	A5	3881	A	C8-N7	-5.29	1.27	1.31
58	B2	1215	G	C6-N1	-5.29	1.35	1.39
59	A5	315	G	C5-C4	-5.29	1.34	1.38
59	A5	820	A	C4'-C3'	-5.29	1.47	1.52
59	A5	1056	G	C8-N7	-5.29	1.27	1.30
59	A5	1354	G	C2-N2	-5.29	1.29	1.34
59	A5	1724	A	C5-C6	-5.29	1.36	1.41
59	A5	1736	G	C5-C6	-5.29	1.37	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2202	A	N3-C4	-5.29	1.31	1.34
59	A5	975	A	C5-C4	-5.29	1.35	1.38
59	A5	1782	C	C2-N3	-5.29	1.31	1.35
58	B2	1073	G	C5-C4	-5.29	1.34	1.38
59	A5	845	C	C4-C5	-5.29	1.38	1.43
59	A5	3872	C	C2-N3	-5.29	1.31	1.35
55	A7	77	A	N7-C5	-5.29	1.36	1.39
59	A5	3444	G	N1-C2	-5.29	1.33	1.37
59	A5	3632	G	C8-N7	-5.29	1.27	1.30
59	A5	3954	U	N1-C2	-5.29	1.33	1.38
59	A5	64	A	N7-C5	-5.29	1.36	1.39
59	A5	3443	A	C5-C4	-5.29	1.35	1.38
56	A8	100	G	C8-N7	-5.29	1.27	1.30
59	A5	553	A	C8-N7	-5.29	1.27	1.31
59	A5	2146	G	C5-C4	-5.29	1.34	1.38
59	A5	2584	G	N7-C5	-5.29	1.36	1.39
59	A5	3298	U	N1-C6	-5.29	1.33	1.38
59	A5	852	C	C2-N3	-5.28	1.31	1.35
59	A5	1694	A	C6-N1	-5.28	1.31	1.35
59	A5	1722	U	N3-C4	-5.28	1.33	1.38
59	A5	2115	U	N3-C4	-5.28	1.33	1.38
59	A5	3408	C	C2-N3	-5.28	1.31	1.35
58	B2	1051	U	N3-C4	-5.28	1.33	1.38
59	A5	1623	G	C8-N7	-5.28	1.27	1.30
59	A5	1634	A	C6-N1	-5.28	1.31	1.35
59	A5	2144	A	C5-C4	-5.28	1.35	1.38
59	A5	2621	A	N3-C4	-5.28	1.31	1.34
59	A5	3577	U	C4-C5	-5.28	1.38	1.43
59	A5	3637	A	C5-C4	-5.28	1.35	1.38
59	A5	71	A	N9-C8	-5.28	1.33	1.37
59	A5	1628	G	C8-N7	-5.28	1.27	1.30
59	A5	2060	A	N3-C4	-5.28	1.31	1.34
59	A5	2809	C	C2-N3	-5.28	1.31	1.35
58	B2	1216	C	C5-C6	-5.28	1.30	1.34
59	A5	295	G	C2-N3	-5.28	1.28	1.32
59	A5	1167	A	N3-C4	-5.28	1.31	1.34
59	A5	2737	C	C4-C5	-5.28	1.38	1.43
59	A5	2781	G	N3-C4	-5.28	1.31	1.35
59	A5	3144	U	N3-C4	-5.28	1.33	1.38
59	A5	3510	U	C2-N3	-5.28	1.34	1.37
59	A5	307	A	C6-N6	-5.28	1.29	1.33
59	A5	363	G	C5-C6	-5.28	1.37	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3429	A	C5-C4	-5.28	1.35	1.38
58	B2	1067	G	N1-C2	-5.28	1.33	1.37
59	A5	287	G	N9-C8	-5.28	1.34	1.37
59	A5	1361	G	C8-N7	-5.28	1.27	1.30
59	A5	1735	G	N7-C5	-5.28	1.36	1.39
59	A5	2251	G	N7-C5	-5.28	1.36	1.39
59	A5	2533	U	N3-C4	-5.28	1.33	1.38
59	A5	2558	A	C6-N6	-5.28	1.29	1.33
59	A5	3331	A	C6-N1	-5.28	1.31	1.35
59	A5	3495	G	N7-C5	-5.28	1.36	1.39
59	A5	3640	A	C6-N1	-5.28	1.31	1.35
58	B2	1195	G	C2-N3	-5.27	1.28	1.32
59	A5	54	U	C5-C6	-5.27	1.29	1.34
59	A5	1032	G	N1-C2	-5.27	1.33	1.37
59	A5	1399	A	C6-N1	-5.27	1.31	1.35
59	A5	2522	A	C6-N1	-5.27	1.31	1.35
59	A5	3363	G	C8-N7	-5.27	1.27	1.30
59	A5	3622	C	C2-N3	-5.27	1.31	1.35
56	A8	17	U	C4-C5	-5.27	1.38	1.43
58	B2	329	U	C2-N3	-5.27	1.34	1.37
59	A5	390	A	C6-N1	-5.27	1.31	1.35
59	A5	1331	G	N1-C2	-5.27	1.33	1.37
59	A5	1645	G	N1-C2	-5.27	1.33	1.37
59	A5	2510	A	C8-N7	-5.27	1.27	1.31
59	A5	2761	A	C5-C4	-5.27	1.35	1.38
59	A5	3342	C	C4-C5	-5.27	1.38	1.43
59	A5	3758	G	C5-C4	-5.27	1.34	1.38
59	A5	3889	U	N1-C6	-5.27	1.33	1.38
58	B2	1965	U	C2-N3	-5.27	1.34	1.37
59	A5	778	C	N3-C4	-5.27	1.30	1.33
59	A5	817	C	C4-C5	-5.27	1.38	1.43
59	A5	1642	G	N9-C8	-5.27	1.34	1.37
59	A5	2180	A	C8-N7	-5.27	1.27	1.31
59	A5	2198	G	C8-N7	-5.27	1.27	1.30
59	A5	2786	U	N1-C2	-5.27	1.33	1.38
54	A9	15	A	N3-C4	-5.27	1.31	1.34
59	A5	1039	U	C2-N3	-5.27	1.34	1.37
59	A5	1112	G	C2-N2	-5.27	1.29	1.34
59	A5	1737	U	N3-C4	-5.27	1.33	1.38
59	A5	2704	A	C6-N6	-5.27	1.29	1.33
59	A5	3487	A	C8-N7	-5.27	1.27	1.31
58	B2	623	G	N7-C5	-5.27	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	37	G	C8-N7	-5.27	1.27	1.30
59	A5	52	A	C2'-C1'	-5.27	1.47	1.53
59	A5	323	U	N3-C4	-5.27	1.33	1.38
59	A5	1040	C	N1-C6	-5.27	1.33	1.37
59	A5	1527	C	C2-O2	-5.27	1.19	1.24
59	A5	1545	A	C5-C4	-5.27	1.35	1.38
59	A5	2114	U	C4-C5	-5.27	1.38	1.43
59	A5	3510	U	C2'-C1'	-5.27	1.47	1.53
59	A5	3575	G	N1-C2	-5.27	1.33	1.37
59	A5	3595	U	C2-N3	-5.27	1.34	1.37
59	A5	3888	U	C4-C5	-5.27	1.38	1.43
58	B2	1133	G	N7-C5	-5.27	1.36	1.39
58	B2	1196	G	C2-N3	-5.27	1.28	1.32
58	B2	1207	G	C8-N7	-5.27	1.27	1.30
58	B2	615	G	C5-C4	-5.26	1.34	1.38
59	A5	106	A	N9-C4	-5.26	1.34	1.37
59	A5	653	U	N3-C4	-5.26	1.33	1.38
59	A5	919	G	N7-C5	-5.26	1.36	1.39
59	A5	1218	G	N9-C4	-5.26	1.33	1.38
59	A5	1753	G	C5-C6	-5.26	1.37	1.42
59	A5	3879	A	C8-N7	-5.26	1.27	1.31
59	A5	76	C	C5-C6	-5.26	1.30	1.34
59	A5	832	U	C4-C5	-5.26	1.38	1.43
59	A5	1766	U	C2-N3	-5.26	1.34	1.37
59	A5	3298	U	C5-C6	-5.26	1.29	1.34
58	B2	22	A	N9-C4	-5.26	1.34	1.37
59	A5	33	C	N1-C2	-5.26	1.34	1.40
59	A5	69	A	N3-C4	-5.26	1.31	1.34
59	A5	429	U	C4-O4	-5.26	1.19	1.23
59	A5	755	A	C5-C6	5.26	1.45	1.41
59	A5	836	G	N1-C2	-5.26	1.33	1.37
59	A5	1146	U	C4-O4	-5.26	1.19	1.23
59	A5	1172	G	C5-C4	-5.26	1.34	1.38
59	A5	1393	A	C8-N7	-5.26	1.27	1.31
59	A5	1762	G	C6-N1	-5.26	1.35	1.39
59	A5	2092	U	N1-C2	-5.26	1.33	1.38
59	A5	2112	A	C5-C6	-5.26	1.36	1.41
59	A5	3507	A	N7-C5	-5.26	1.36	1.39
33	CP	139	TYR	CE1-CZ	-5.26	1.31	1.38
42	Cf	127	ASN	CB-CG	-5.26	1.39	1.51
58	B2	617	U	N3-C4	-5.26	1.33	1.38
59	A5	56	A	C5-C6	-5.26	1.36	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1155	U	N1-C2	-5.26	1.33	1.38
59	A5	1520	U	C5-C6	-5.26	1.29	1.34
59	A5	1614	A	N9-C8	-5.26	1.33	1.37
59	A5	2025	G	C5-C4	-5.26	1.34	1.38
59	A5	2708	C	N3-C4	-5.26	1.30	1.33
80	CF	111	VAL	CB-CG1	-5.26	1.41	1.52
58	B2	1060	A	N7-C5	-5.26	1.36	1.39
59	A5	312	U	C4-C5	-5.26	1.38	1.43
59	A5	1604	G	C8-N7	-5.26	1.27	1.30
59	A5	2215	G	C6-N1	-5.26	1.35	1.39
59	A5	24	G	N3-C4	-5.26	1.31	1.35
59	A5	323	U	C2-N3	-5.26	1.34	1.37
59	A5	403	A	N9-C4	-5.26	1.34	1.37
59	A5	1340	G	C2-N3	-5.26	1.28	1.32
59	A5	1347	A	C6-N1	-5.26	1.31	1.35
59	A5	2520	U	C2-O2	-5.26	1.17	1.22
59	A5	3267	C	C2-N3	-5.26	1.31	1.35
59	A5	3444	G	C5-C6	-5.26	1.37	1.42
59	A5	1373	A	N1-C2	-5.25	1.29	1.34
54	A9	12	C	N1-C2	-5.25	1.34	1.40
59	A5	826	A	C5-C6	-5.25	1.36	1.41
59	A5	1301	A	N9-C8	-5.25	1.33	1.37
59	A5	1385	G	C6-N1	-5.25	1.35	1.39
59	A5	1675	G	C2-N3	-5.25	1.28	1.32
59	A5	1695	A	C6-N1	-5.25	1.31	1.35
59	A5	3220	U	C4-C5	-5.25	1.38	1.43
59	A5	3554	G	C6-N1	-5.25	1.35	1.39
59	A5	103	A	N9-C8	-5.25	1.33	1.37
59	A5	370	A	C6-N6	-5.25	1.29	1.33
59	A5	827	A	C6-N1	-5.25	1.31	1.35
59	A5	1026	G	C6-N1	-5.25	1.35	1.39
59	A5	1165	A	C8-N7	-5.25	1.27	1.31
59	A5	2090	U	C2-N3	-5.25	1.34	1.37
59	A5	3683	G	C5-C6	-5.25	1.37	1.42
59	A5	798	C	C4-N4	-5.25	1.29	1.33
59	A5	1326	A	N9-C4	-5.25	1.34	1.37
59	A5	2701	G	C6-N1	-5.25	1.35	1.39
59	A5	2719	A	C5-C6	-5.25	1.36	1.41
59	A5	3139	G	C8-N7	-5.25	1.27	1.30
58	B2	1213	A	C6-N1	-5.25	1.31	1.35
58	B2	1921	G	N9-C4	-5.25	1.33	1.38
59	A5	27	A	N3-C4	-5.25	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	360	A	C5-C4	-5.25	1.35	1.38
59	A5	1402	U	N1-C2	-5.25	1.33	1.38
59	A5	1753	G	C6-N1	-5.25	1.35	1.39
59	A5	1870	G	C6-O6	-5.25	1.19	1.24
59	A5	1875	G	N9-C8	-5.25	1.34	1.37
59	A5	2049	G	C2-N3	-5.25	1.28	1.32
59	A5	2190	A	N3-C4	-5.25	1.31	1.34
59	A5	2243	G	N9-C8	-5.25	1.34	1.37
59	A5	2524	A	C5-C4	-5.25	1.35	1.38
59	A5	2775	A	N1-C2	-5.25	1.29	1.34
58	B2	1021	A	N7-C5	-5.25	1.36	1.39
58	B2	1952	G	N7-C5	-5.25	1.36	1.39
59	A5	809	G	P-O5'	-5.25	1.54	1.59
59	A5	1048	A	N7-C5	-5.25	1.36	1.39
59	A5	2229	A	N3-C4	-5.25	1.31	1.34
59	A5	2494	G	C8-N7	-5.25	1.27	1.30
59	A5	3145	U	C2-O2	-5.25	1.17	1.22
59	A5	3231	G	C2-N3	-5.25	1.28	1.32
59	A5	3949	U	N3-C4	-5.25	1.33	1.38
58	B2	1976	A	N3-C4	-5.25	1.31	1.34
59	A5	338	A	C6-N1	-5.25	1.31	1.35
59	A5	982	C	C4-C5	-5.25	1.38	1.43
59	A5	1049	C	N3-C4	-5.25	1.30	1.33
65	CO	9	VAL	CB-CG1	-5.25	1.41	1.52
58	B2	1940	G	C8-N7	-5.24	1.27	1.30
59	A5	366	A	C6-N6	-5.24	1.29	1.33
59	A5	852	C	C5-C6	-5.24	1.30	1.34
59	A5	1614	A	C8-N7	-5.24	1.27	1.31
59	A5	1777	A	C8-N7	-5.24	1.27	1.31
59	A5	2564	U	C2-O2	-5.24	1.17	1.22
59	A5	3149	U	N1-C6	-5.24	1.33	1.38
59	A5	1067	A	N7-C5	-5.24	1.36	1.39
59	A5	3230	G	N1-C2	-5.24	1.33	1.37
59	A5	783	G	C8-N7	-5.24	1.27	1.30
59	A5	1338	U	C4-O4	-5.24	1.19	1.23
59	A5	1373	A	C6-N1	-5.24	1.31	1.35
59	A5	2208	G	N7-C5	-5.24	1.36	1.39
59	A5	2535	U	C4-C5	-5.24	1.38	1.43
59	A5	3151	G	C5-C4	-5.24	1.34	1.38
59	A5	3869	A	C5-C4	-5.24	1.35	1.38
55	A7	82	G	N9-C8	-5.24	1.34	1.37
58	B2	617	U	C4-C5	-5.24	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	393	A	N9-C4	-5.24	1.34	1.37
59	A5	1108	G	P-O5'	-5.24	1.54	1.59
59	A5	2699	A	C5-C4	-5.24	1.35	1.38
59	A5	79	G	N9-C8	-5.24	1.34	1.37
59	A5	1981	A	N7-C5	-5.24	1.36	1.39
59	A5	2231	A	C6-N1	-5.24	1.31	1.35
58	B2	352	G	N7-C5	-5.24	1.36	1.39
59	A5	815	A	C6-N1	-5.24	1.31	1.35
59	A5	856	A	N3-C4	-5.24	1.31	1.34
59	A5	1546	U	C2-O2	-5.24	1.17	1.22
59	A5	1633	G	N3-C4	-5.24	1.31	1.35
59	A5	2558	A	C8-N7	-5.24	1.27	1.31
58	B2	1053	A	N9-C4	-5.23	1.34	1.37
59	A5	314	A	C5-C4	-5.23	1.35	1.38
59	A5	1671	U	C5-C6	-5.23	1.29	1.34
59	A5	1871	A	C5-C6	-5.23	1.36	1.41
59	A5	2649	A	C8-N7	-5.23	1.27	1.31
59	A5	3152	G	C6-N1	-5.23	1.35	1.39
59	A5	3885	C	N1-C6	-5.23	1.34	1.37
56	A8	104	G	N9-C8	-5.23	1.34	1.37
58	B2	1231	A	C6-N1	-5.23	1.31	1.35
59	A5	52	A	C6-N1	-5.23	1.31	1.35
59	A5	248	C	C4-C5	-5.23	1.38	1.43
59	A5	790	U	C2-N3	-5.23	1.34	1.37
59	A5	1389	C	C2-O2	-5.23	1.19	1.24
59	A5	1390	C	C2-N3	-5.23	1.31	1.35
59	A5	2197	A	N1-C2	-5.23	1.29	1.34
59	A5	2535	U	N3-C4	-5.23	1.33	1.38
59	A5	2548	G	N3-C4	-5.23	1.31	1.35
26	CN	155	VAL	CB-CG2	-5.23	1.41	1.52
56	A8	113	A	N9-C4	-5.23	1.34	1.37
58	B2	1059	G	C5-C4	-5.23	1.34	1.38
58	B2	1939	A	C5-C6	-5.23	1.36	1.41
59	A5	244	G	N3-C4	-5.23	1.31	1.35
59	A5	780	U	N1-C2	-5.23	1.33	1.38
59	A5	1202	A	N9-C4	-5.23	1.34	1.37
59	A5	3333	A	C6-N1	-5.23	1.31	1.35
59	A5	3449	G	N7-C5	-5.23	1.36	1.39
58	B2	14	C	N1-C6	-5.23	1.34	1.37
59	A5	32	C	N1-C2	-5.23	1.34	1.40
59	A5	1630	G	C8-N7	-5.23	1.27	1.30
58	B2	1229	G	N7-C5	-5.23	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1940	G	N7-C5	-5.23	1.36	1.39
59	A5	802	G	N9-C8	-5.23	1.34	1.37
59	A5	1033	U	N1-C6	-5.23	1.33	1.38
59	A5	1109	G	C6-N1	-5.23	1.35	1.39
59	A5	1114	A	N9-C4	-5.23	1.34	1.37
59	A5	1347	A	C2-N3	-5.23	1.28	1.33
56	A8	104	G	C5-C4	-5.23	1.34	1.38
59	A5	1967	G	C2-N3	-5.23	1.28	1.32
59	A5	1972	C	C4-C5	-5.23	1.38	1.43
59	A5	3149	U	C5-C6	-5.23	1.29	1.34
59	A5	3443	A	C6-N6	-5.23	1.29	1.33
59	A5	3637	A	N3-C4	-5.23	1.31	1.34
58	B2	1045	U	C2-N3	-5.22	1.34	1.37
58	B2	1206	G	N9-C8	-5.22	1.34	1.37
59	A5	248	C	N3-C4	-5.22	1.30	1.33
59	A5	861	C	C4-C5	-5.22	1.38	1.43
59	A5	1012	G	C8-N7	-5.22	1.27	1.30
59	A5	1374	C	C5-C6	-5.22	1.30	1.34
59	A5	1547	A	N9-C8	-5.22	1.33	1.37
59	A5	1984	U	C4-C5	-5.22	1.38	1.43
59	A5	2661	G	C6-N1	-5.22	1.35	1.39
59	A5	2730	A	N9-C8	-5.22	1.33	1.37
59	A5	2909	A	C5-C4	-5.22	1.35	1.38
59	A5	3658	G	C2-N3	-5.22	1.28	1.32
59	A5	2208	G	C6-N1	-5.22	1.35	1.39
59	A5	3504	G	C5-C4	-5.22	1.34	1.38
58	B2	391	G	N9-C8	-5.22	1.34	1.37
58	B2	1018	C	C2-N3	-5.22	1.31	1.35
59	A5	661	G	C6-N1	-5.22	1.35	1.39
59	A5	2261	G	N3-C4	-5.22	1.31	1.35
59	A5	3297	C	C5-C6	-5.22	1.30	1.34
59	A5	161	G	N3-C4	-5.22	1.31	1.35
59	A5	2036	G	N7-C5	-5.22	1.36	1.39
59	A5	2708	C	C2-O2	-5.22	1.19	1.24
59	A5	3626	A	N7-C5	-5.22	1.36	1.39
59	A5	865	A	N7-C5	-5.22	1.36	1.39
59	A5	1104	A	N7-C5	-5.22	1.36	1.39
59	A5	1119	C	C4-C5	-5.22	1.38	1.43
59	A5	1630	G	C2-N3	-5.22	1.28	1.32
59	A5	1737	U	N1-C2	-5.22	1.33	1.38
59	A5	415	A	C5-C6	-5.22	1.36	1.41
59	A5	792	U	C4-O4	-5.22	1.19	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1341	G	C2-N3	-5.22	1.28	1.32
59	A5	2775	A	N3-C4	-5.22	1.31	1.34
58	B2	625	U	C2-N3	-5.21	1.34	1.37
58	B2	1191	C	N1-C6	-5.21	1.34	1.37
58	B2	1972	G	C6-N1	-5.21	1.35	1.39
59	A5	341	A	N9-C4	-5.21	1.34	1.37
59	A5	740	G	N7-C5	-5.21	1.36	1.39
59	A5	1270	G	N9-C8	-5.21	1.34	1.37
59	A5	2025	G	C6-N1	-5.21	1.35	1.39
59	A5	2673	A	N3-C4	-5.21	1.31	1.34
59	A5	2804	U	N1-C2	-5.21	1.33	1.38
37	Cr	9	TRP	CB-CG	-5.21	1.40	1.50
59	A5	128	C	C4-C5	-5.21	1.38	1.43
59	A5	285	G	C5-C4	-5.21	1.34	1.38
59	A5	1196	A	N9-C8	-5.21	1.33	1.37
26	CN	129	TYR	CD1-CE1	-5.21	1.31	1.39
56	A8	37	U	N3-C4	-5.21	1.33	1.38
58	B2	638	A	N9-C8	-5.21	1.33	1.37
59	A5	440	U	C2-N3	-5.21	1.34	1.37
59	A5	1149	C	C4-N4	-5.21	1.29	1.33
59	A5	1371	A	C5-C6	-5.21	1.36	1.41
59	A5	2247	U	C4-C5	-5.21	1.38	1.43
59	A5	1078	G	N9-C4	-5.21	1.33	1.38
59	A5	1355	C	C2'-C1'	-5.21	1.47	1.53
59	A5	3283	U	N1-C2	-5.21	1.33	1.38
56	A8	36	A	C6-N1	-5.21	1.31	1.35
58	B2	1099	U	C2-N3	-5.21	1.34	1.37
59	A5	1319	A	C8-N7	-5.21	1.27	1.31
59	A5	2501	G	C2-N3	-5.21	1.28	1.32
59	A5	3400	U	N3-C4	-5.21	1.33	1.38
59	A5	3472	A	C4'-C3'	5.21	1.58	1.53
59	A5	3543	A	C8-N7	-5.21	1.27	1.31
59	A5	3644	C	C4-C5	-5.21	1.38	1.43
58	B2	1179	A	N7-C5	-5.21	1.36	1.39
59	A5	334	U	C2-N3	-5.21	1.34	1.37
59	A5	1373	A	N7-C5	-5.21	1.36	1.39
59	A5	1554	C	C5-C6	-5.21	1.30	1.34
59	A5	3523	U	C4-O4	-5.21	1.19	1.23
59	A5	88	U	C4-O4	-5.21	1.19	1.23
59	A5	406	G	C5-C4	-5.21	1.34	1.38
59	A5	546	G	C5-C4	-5.21	1.34	1.38
59	A5	851	G	C8-N7	-5.21	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1393	A	C6-N1	-5.21	1.31	1.35
59	A5	2563	G	C2-N3	-5.21	1.28	1.32
6	CC	235	VAL	CB-CG2	-5.20	1.42	1.52
59	A5	1335	C	C2-N3	-5.20	1.31	1.35
59	A5	1604	G	C6-N1	-5.20	1.35	1.39
59	A5	1708	G	N9-C8	-5.20	1.34	1.37
59	A5	2177	G	N1-C2	-5.20	1.33	1.37
59	A5	853	G	C8-N7	-5.20	1.27	1.30
2	CA	61	VAL	CB-CG2	-5.20	1.42	1.52
2	CA	191	VAL	CB-CG1	-5.20	1.42	1.52
33	CP	139	TYR	CB-CG	-5.20	1.43	1.51
58	B2	974	A	N9-C4	-5.20	1.34	1.37
58	B2	1197	G	C5-C4	-5.20	1.34	1.38
58	B2	1990	U	C2-N3	-5.20	1.34	1.37
59	A5	833	U	C5-C6	-5.20	1.29	1.34
59	A5	2016	U	C4-O4	-5.20	1.19	1.23
56	A8	61	C	N1-C6	-5.20	1.34	1.37
58	B2	607	A	N9-C8	-5.20	1.33	1.37
58	B2	1064	A	N7-C5	-5.20	1.36	1.39
58	B2	1975	G	C5-C4	-5.20	1.34	1.38
59	A5	546	G	C8-N7	-5.20	1.27	1.30
59	A5	1033	U	C2-N3	-5.20	1.34	1.37
59	A5	1366	G	C6-N1	-5.20	1.35	1.39
59	A5	1703	A	N3-C4	-5.20	1.31	1.34
59	A5	2492	A	C5-C6	-5.20	1.36	1.41
59	A5	2567	U	C5-C6	-5.20	1.29	1.34
59	A5	3125	A	C5-C4	-5.20	1.35	1.38
59	A5	3454	G	C8-N7	-5.20	1.27	1.30
59	A5	3587	U	N1-C6	-5.20	1.33	1.38
48	Cp	30	GLU	CG-CD	-5.20	1.44	1.51
59	A5	247	C	C4-C5	-5.20	1.38	1.43
59	A5	1663	G	N9-C8	-5.20	1.34	1.37
59	A5	2519	U	N1-C6	-5.20	1.33	1.38
56	A8	104	G	N7-C5	-5.20	1.36	1.39
58	B2	328	A	N3-C4	-5.20	1.31	1.34
58	B2	349	A	C5-C4	-5.20	1.35	1.38
58	B2	629	A	C5-C4	-5.20	1.35	1.38
59	A5	52	A	C6-N6	-5.20	1.29	1.33
59	A5	84	U	C4-C5	-5.20	1.38	1.43
59	A5	291	U	N1-C2	-5.20	1.33	1.38
59	A5	1209	A	N9-C8	-5.20	1.33	1.37
59	A5	2004	G	N7-C5	-5.20	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2060	A	N7-C5	-5.20	1.36	1.39
59	A5	3901	G	C6-N1	-5.20	1.35	1.39
73	AO	150	ARG	CG-CD	-5.20	1.39	1.51
59	A5	1062	C	N1-C2	-5.19	1.34	1.40
59	A5	1674	A	C5-C4	-5.19	1.35	1.38
59	A5	2544	U	C5-C6	-5.19	1.29	1.34
59	A5	3539	C	N3-C4	-5.19	1.30	1.33
58	B2	1175	A	C6-N1	-5.19	1.31	1.35
59	A5	823	U	N1-C6	-5.19	1.33	1.38
59	A5	1041	A	N9-C4	-5.19	1.34	1.37
59	A5	1045	G	N3-C4	-5.19	1.31	1.35
59	A5	1164	G	C6-N1	-5.19	1.35	1.39
59	A5	1519	A	C5-C4	-5.19	1.35	1.38
59	A5	2808	G	N1-C2	-5.19	1.33	1.37
59	A5	3321	A	N7-C5	-5.19	1.36	1.39
59	A5	3548	U	C2-N3	-5.19	1.34	1.37
2	CA	44	VAL	CB-CG1	-5.19	1.42	1.52
58	B2	1062	C	N1-C2	-5.19	1.34	1.40
58	B2	1072	A	N9-C8	-5.19	1.33	1.37
59	A5	68	G	N1-C2	-5.19	1.33	1.37
59	A5	836	G	C2-N3	-5.19	1.28	1.32
59	A5	851	G	C2-N2	-5.19	1.29	1.34
59	A5	2715	C	C2-O2	-5.19	1.19	1.24
59	A5	3410	G	C2-N3	-5.19	1.28	1.32
59	A5	3673	G	N1-C2	-5.19	1.33	1.37
58	B2	1078	G	C8-N7	-5.19	1.27	1.30
58	B2	1241	G	C5-C4	-5.19	1.34	1.38
59	A5	305	G	N7-C5	-5.19	1.36	1.39
59	A5	307	A	C5-C4	-5.19	1.35	1.38
59	A5	2497	C	C2-N3	-5.19	1.31	1.35
59	A5	2801	U	C2-O2	-5.19	1.17	1.22
56	A8	13	U	C5-C6	-5.19	1.29	1.34
59	A5	317	G	C8-N7	-5.19	1.27	1.30
59	A5	363	G	C2-N2	-5.19	1.29	1.34
59	A5	1528	G	N9-C4	-5.19	1.33	1.38
59	A5	1691	A	C2-N3	-5.19	1.28	1.33
59	A5	1764	G	C8-N7	-5.19	1.27	1.30
59	A5	2245	G	N3-C4	-5.19	1.31	1.35
59	A5	3298	U	N1-C2	-5.19	1.33	1.38
59	A5	3524	G	N7-C5	-5.19	1.36	1.39
59	A5	3888	U	C5-C6	-5.19	1.29	1.34
59	A5	3906	U	N1-C6	-5.19	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	95	U	N1-C6	-5.19	1.33	1.38
59	A5	341	A	C2-N3	-5.19	1.28	1.33
59	A5	1198	U	P-O5'	5.19	1.65	1.59
59	A5	3133	A	C4'-C3'	-5.19	1.47	1.52
59	A5	3182	U	C2-N3	-5.19	1.34	1.37
6	CC	100	ARG	CB-CG	-5.18	1.38	1.52
59	A5	1525	G	C6-O6	-5.18	1.19	1.24
59	A5	1753	G	C5-C4	-5.18	1.34	1.38
59	A5	2714	U	N1-C6	-5.18	1.33	1.38
56	A8	12	G	C2-N3	-5.18	1.28	1.32
58	B2	624	G	N3-C4	-5.18	1.31	1.35
59	A5	69	A	N9-C4	-5.18	1.34	1.37
59	A5	359	G	N9-C4	-5.18	1.33	1.38
59	A5	994	U	C2-O2	-5.18	1.17	1.22
59	A5	1051	C	N1-C6	-5.18	1.34	1.37
59	A5	1725	A	C6-N6	-5.18	1.29	1.33
59	A5	1788	G	N9-C4	-5.18	1.33	1.38
59	A5	2012	G	N7-C5	-5.18	1.36	1.39
59	A5	2591	A	C5-C6	-5.18	1.36	1.41
59	A5	2656	C	C4-C5	-5.18	1.38	1.43
59	A5	3194	A	N7-C5	-5.18	1.36	1.39
59	A5	305	G	C8-N7	-5.18	1.27	1.30
59	A5	2160	C	C4-C5	-5.18	1.38	1.43
59	A5	2260	U	N3-C4	-5.18	1.33	1.38
59	A5	79	G	C8-N7	-5.18	1.27	1.30
59	A5	321	G	N9-C8	-5.18	1.34	1.37
59	A5	839	A	C5-C6	-5.18	1.36	1.41
59	A5	1757	A	C2-N3	-5.18	1.28	1.33
59	A5	2995	U	C2-N3	-5.18	1.34	1.37
59	A5	3400	U	P-OP2	-5.18	1.40	1.49
59	A5	3580	G	C5-C4	-5.18	1.34	1.38
59	A5	3647	A	C5-C4	-5.18	1.35	1.38
59	A5	3674	G	C2-N3	-5.18	1.28	1.32
65	CO	151	TYR	CB-CG	-5.18	1.43	1.51
58	B2	351	G	N1-C2	-5.18	1.33	1.37
59	A5	2186	C	N3-C4	-5.18	1.30	1.33
58	B2	406	A	C5-C6	-5.18	1.36	1.41
59	A5	1161	C	N3-C4	-5.18	1.30	1.33
59	A5	1206	G	N3-C4	-5.18	1.31	1.35
59	A5	1413	C	N1-C2	-5.18	1.34	1.40
59	A5	1625	U	C2-N3	-5.18	1.34	1.37
59	A5	3139	G	P-O5'	-5.18	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3488	G	N9-C4	-5.18	1.33	1.38
56	A8	61	C	C2-N3	-5.17	1.31	1.35
58	B2	1222	C	C4-C5	-5.17	1.38	1.43
58	B2	1846	G	N9-C8	-5.17	1.34	1.37
59	A5	328	U	C4-C5	-5.17	1.38	1.43
59	A5	829	U	C2-N3	-5.17	1.34	1.37
59	A5	1388	C	N3-C4	-5.17	1.30	1.33
59	A5	1649	G	C5-C6	-5.17	1.37	1.42
59	A5	1977	A	N9-C4	-5.17	1.34	1.37
59	A5	1992	G	C8-N7	-5.17	1.27	1.30
59	A5	2518	A	N3-C4	-5.17	1.31	1.34
59	A5	2677	A	N9-C8	-5.17	1.33	1.37
59	A5	3270	G	N9-C8	-5.17	1.34	1.37
59	A5	3327	U	C2-O2	-5.17	1.17	1.22
59	A5	3535	G	N7-C5	-5.17	1.36	1.39
59	A5	3593	A	C6-N6	-5.17	1.29	1.33
59	A5	3618	A	C8-N7	-5.17	1.27	1.31
59	A5	3878	U	C2-O2	-5.17	1.17	1.22
56	A8	87	A	C5-C6	-5.17	1.36	1.41
58	B2	1194	C	N1-C6	-5.17	1.34	1.37
59	A5	1419	A	C5-C4	-5.17	1.35	1.38
59	A5	3127	A	N9-C4	-5.17	1.34	1.37
58	B2	1779	A	N9-C4	-5.17	1.34	1.37
59	A5	770	C	N1-C2	-5.17	1.34	1.40
59	A5	1404	A	N7-C5	-5.17	1.36	1.39
59	A5	1419	A	C6-N1	-5.17	1.31	1.35
59	A5	3346	G	C4'-C3'	-5.17	1.47	1.52
59	A5	3503	G	C5-C4	-5.17	1.34	1.38
58	B2	327	G	C6-N1	-5.17	1.35	1.39
58	B2	441	A	N3-C4	-5.17	1.31	1.34
59	A5	44	A	C5-C6	-5.17	1.36	1.41
59	A5	914	C	C5-C6	-5.17	1.30	1.34
59	A5	999	U	C5-C6	-5.17	1.29	1.34
59	A5	1318	A	C6-N6	-5.17	1.29	1.33
59	A5	1558	A	N3-C4	-5.17	1.31	1.34
59	A5	2115	U	C2-N3	-5.17	1.34	1.37
58	B2	965	G	C2-N3	-5.17	1.28	1.32
59	A5	350	C	N1-C2	-5.17	1.34	1.40
59	A5	856	A	N7-C5	-5.17	1.36	1.39
59	A5	2738	C	C5-C6	-5.17	1.30	1.34
58	B2	629	A	N3-C4	-5.17	1.31	1.34
58	B2	1070	A	C5-C6	-5.17	1.36	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	C4'-C3'	-5.17	1.47	1.52
59	A5	228	C	N1-C6	-5.17	1.34	1.37
59	A5	373	A	C2-N3	-5.17	1.28	1.33
59	A5	1348	G	N9-C4	-5.17	1.33	1.38
59	A5	1876	G	C8-N7	-5.17	1.27	1.30
59	A5	2529	G	C8-N7	-5.17	1.27	1.30
59	A5	2666	G	C8-N7	-5.17	1.27	1.30
58	B2	1113	A	C6-N1	-5.17	1.31	1.35
59	A5	843	A	C5-C6	-5.17	1.36	1.41
59	A5	1218	G	N3-C4	-5.17	1.31	1.35
59	A5	2618	G	N3-C4	-5.17	1.31	1.35
56	A8	92	G	N9-C8	-5.16	1.34	1.37
58	B2	107	A	C5-C4	-5.16	1.35	1.38
59	A5	27	A	C2'-C1'	-5.16	1.47	1.53
59	A5	828	G	C5-C6	-5.16	1.37	1.42
59	A5	1005	G	C6-O6	-5.16	1.19	1.24
59	A5	2561	A	C5-C6	-5.16	1.36	1.41
59	A5	2662	C	N3-C4	-5.16	1.30	1.33
59	A5	2765	A	C5-C4	-5.16	1.35	1.38
59	A5	3257	U	N3-C4	-5.16	1.33	1.38
59	A5	413	A	N7-C5	-5.16	1.36	1.39
59	A5	794	G	N3-C4	-5.16	1.31	1.35
59	A5	1635	A	N3-C4	-5.16	1.31	1.34
59	A5	1749	A	C6-N1	-5.16	1.31	1.35
59	A5	2601	A	N7-C5	-5.16	1.36	1.39
59	A5	2749	G	N9-C4	-5.16	1.33	1.38
59	A5	3679	C	N1-C6	-5.16	1.34	1.37
56	A8	19	A	N9-C8	-5.16	1.33	1.37
59	A5	989	A	C8-N7	-5.16	1.27	1.31
59	A5	1537	G	C8-N7	-5.16	1.27	1.30
59	A5	1666	A	N3-C4	-5.16	1.31	1.34
59	A5	1952	A	N9-C4	-5.16	1.34	1.37
59	A5	2581	U	N1-C6	-5.16	1.33	1.38
59	A5	3540	G	N3-C4	-5.16	1.31	1.35
54	A9	23	G	C5-C4	-5.16	1.34	1.38
59	A5	845	C	N3-C4	-5.16	1.30	1.33
59	A5	1363	G	N1-C2	-5.16	1.33	1.37
59	A5	1654	C	C2-N3	-5.16	1.31	1.35
59	A5	2158	U	C2-O2	-5.16	1.17	1.22
59	A5	2496	A	N1-C2	-5.16	1.29	1.34
59	A5	2500	G	C2-N3	-5.16	1.28	1.32
59	A5	2510	A	N3-C4	-5.16	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3131	C	C4-C5	-5.16	1.38	1.43
59	A5	3870	A	C5-C4	-5.16	1.35	1.38
59	A5	203	A	N3-C4	-5.16	1.31	1.34
59	A5	986	A	N7-C5	-5.16	1.36	1.39
59	A5	2566	A	C8-N7	-5.16	1.27	1.31
59	A5	3254	U	C2-N3	-5.16	1.34	1.37
59	A5	3466	A	N9-C4	5.16	1.41	1.37
59	A5	3672	U	C2-N3	-5.16	1.34	1.37
55	A7	98	G	C5-C4	-5.16	1.34	1.38
59	A5	297	U	C5-C6	-5.16	1.29	1.34
59	A5	1068	C	N1-C6	-5.16	1.34	1.37
59	A5	1171	G	N9-C4	-5.16	1.33	1.38
59	A5	1670	G	C6-N1	-5.16	1.35	1.39
59	A5	2237	A	C8-N7	-5.16	1.27	1.31
59	A5	2254	U	N1-C2	-5.16	1.33	1.38
59	A5	2681	A	C5-C6	-5.16	1.36	1.41
59	A5	2682	C	N3-C4	-5.16	1.30	1.33
59	A5	2151	A	N1-C2	-5.15	1.29	1.34
59	A5	3892	A	N9-C4	5.15	1.41	1.37
58	B2	1217	U	C4-C5	-5.15	1.39	1.43
59	A5	56	A	C6-N6	-5.15	1.29	1.33
59	A5	111	A	C2-N3	-5.15	1.28	1.33
59	A5	1177	U	N3-C4	-5.15	1.33	1.38
59	A5	1534	G	N3-C4	-5.15	1.31	1.35
59	A5	1946	G	C6-N1	-5.15	1.35	1.39
59	A5	3164	C	N1-C6	-5.15	1.34	1.37
59	A5	3311	A	N9-C4	-5.15	1.34	1.37
59	A5	3441	C	N1-C6	-5.15	1.34	1.37
13	AL	135	VAL	CB-CG1	-5.15	1.42	1.52
58	B2	7	G	N1-C2	-5.15	1.33	1.37
59	A5	1171	G	N1-C2	-5.15	1.33	1.37
59	A5	1594	U	C5-C6	-5.15	1.29	1.34
59	A5	1711	C	N1-C2	-5.15	1.34	1.40
59	A5	2579	G	N9-C8	-5.15	1.34	1.37
59	A5	2757	U	C5-C6	-5.15	1.29	1.34
58	B2	1228	G	N9-C4	-5.15	1.33	1.38
59	A5	1027	A	C6-N6	-5.15	1.29	1.33
59	A5	1111	C	C4-N4	-5.15	1.29	1.33
59	A5	3319	A	C5-C6	-5.15	1.36	1.41
59	A5	3658	G	N9-C4	-5.15	1.33	1.38
59	A5	2218	G	N3-C4	-5.15	1.31	1.35
59	A5	2226	A	N1-C2	-5.15	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2513	G	C6-N1	-5.15	1.35	1.39
59	A5	2561	A	N9-C4	-5.15	1.34	1.37
59	A5	2580	C	C4-C5	-5.15	1.38	1.43
59	A5	2784	C	N1-C2	-5.15	1.35	1.40
59	A5	3138	G	C6-N1	-5.15	1.35	1.39
59	A5	3252	G	C2-N3	-5.15	1.28	1.32
59	A5	3501	C	N3-C4	-5.15	1.30	1.33
59	A5	1882	G	C5-C4	-5.15	1.34	1.38
59	A5	2039	G	N9-C8	-5.15	1.34	1.37
55	A7	104	C	N3-C4	-5.14	1.30	1.33
58	B2	1446	G	N7-C5	-5.14	1.36	1.39
59	A5	38	A	C8-N7	-5.14	1.27	1.31
59	A5	291	U	C2-N3	-5.14	1.34	1.37
59	A5	1102	G	N7-C5	-5.14	1.36	1.39
59	A5	1383	A	N3-C4	-5.14	1.31	1.34
59	A5	2519	U	C5-C6	-5.14	1.29	1.34
59	A5	2550	G	C5-C4	-5.14	1.34	1.38
59	A5	2570	C	N1-C2	-5.14	1.35	1.40
59	A5	3418	U	C4-C5	-5.14	1.39	1.43
56	A8	9	G	N1-C2	-5.14	1.33	1.37
59	A5	81	A	C5-C6	-5.14	1.36	1.41
59	A5	206	C	N1-C6	-5.14	1.34	1.37
59	A5	1096	A	C5-C6	-5.14	1.36	1.41
59	A5	1178	U	N3-C4	-5.14	1.33	1.38
59	A5	1632	A	N3-C4	-5.14	1.31	1.34
59	A5	2184	G	C2-N2	-5.14	1.29	1.34
59	A5	2238	A	N7-C5	-5.14	1.36	1.39
54	A9	22	A	C5-C4	-5.14	1.35	1.38
56	A8	56	U	N1-C6	-5.14	1.33	1.38
58	B2	600	A	N9-C4	-5.14	1.34	1.37
59	A5	310	A	N9-C8	-5.14	1.33	1.37
59	A5	522	G	N7-C5	-5.14	1.36	1.39
59	A5	1170	U	C5-C6	-5.14	1.29	1.34
59	A5	1658	G	C2-N3	-5.14	1.28	1.32
59	A5	3602	U	C2-N3	-5.14	1.34	1.37
59	A5	245	G	N7-C5	-5.14	1.36	1.39
59	A5	987	G	N1-C2	-5.14	1.33	1.37
59	A5	1126	A	P-O5'	-5.14	1.54	1.59
59	A5	2536	G	C6-N1	-5.14	1.35	1.39
59	A5	2700	C	C2-N3	-5.14	1.31	1.35
59	A5	2786	U	N1-C6	-5.14	1.33	1.38
59	A5	3365	G	C5-C4	-5.14	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3460	C	C4-C5	-5.14	1.38	1.43
59	A5	1026	G	N9-C4	-5.14	1.33	1.38
59	A5	1271	G	N7-C5	-5.14	1.36	1.39
26	CN	180	TYR	CG-CD2	-5.14	1.32	1.39
59	A5	843	A	C8-N7	-5.14	1.27	1.31
59	A5	865	A	N3-C4	-5.14	1.31	1.34
59	A5	1122	U	N1-C6	-5.14	1.33	1.38
59	A5	2210	U	N3-C4	-5.14	1.33	1.38
59	A5	2239	C	N1-C6	-5.14	1.34	1.37
59	A5	3302	G	N7-C5	-5.14	1.36	1.39
59	A5	854	U	C2-N3	-5.13	1.34	1.37
59	A5	995	G	C2-N2	-5.13	1.29	1.34
59	A5	1271	G	N1-C2	-5.13	1.33	1.37
59	A5	1387	G	N3-C4	-5.13	1.31	1.35
59	A5	2049	G	C5-C4	-5.13	1.34	1.38
59	A5	2193	C	C2-N3	-5.13	1.31	1.35
59	A5	2686	C	N1-C2	-5.13	1.35	1.40
59	A5	2717	C	C2-N3	-5.13	1.31	1.35
59	A5	3334	A	C5-C4	-5.13	1.35	1.38
59	A5	3519	C	P-OP1	-5.13	1.40	1.49
59	A5	2241	U	N1-C6	-5.13	1.33	1.38
59	A5	2560	A	C6-N6	-5.13	1.29	1.33
59	A5	3404	A	C8-N7	-5.13	1.27	1.31
56	A8	30	G	N1-C2	-5.13	1.33	1.37
58	B2	1819	U	C2-N3	-5.13	1.34	1.37
58	B2	1982	C	C5-C6	-5.13	1.30	1.34
59	A5	551	C	C2-N3	-5.13	1.31	1.35
59	A5	856	A	N9-C8	-5.13	1.33	1.37
59	A5	1145	C	N1-C6	-5.13	1.34	1.37
59	A5	1347	A	C8-N7	-5.13	1.27	1.31
59	A5	1377	A	C2-N3	-5.13	1.28	1.33
59	A5	1724	A	N3-C4	-5.13	1.31	1.34
59	A5	2489	G	N7-C5	-5.13	1.36	1.39
59	A5	368	C	N3-C4	-5.13	1.30	1.33
59	A5	1765	U	C4-C5	-5.13	1.39	1.43
59	A5	2580	C	N3-C4	-5.13	1.30	1.33
58	B2	1065	A	C5-C4	-5.13	1.35	1.38
59	A5	1109	G	N9-C4	-5.13	1.33	1.38
59	A5	1382	U	P-O5'	5.13	1.64	1.59
59	A5	1397	A	N3-C4	-5.13	1.31	1.34
59	A5	1599	C	C4-C5	-5.13	1.38	1.43
59	A5	1675	G	P-O5'	-5.13	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2494	G	C6-O6	-5.13	1.19	1.24
59	A5	3138	G	N3-C4	-5.13	1.31	1.35
59	A5	3328	G	N1-C2	-5.13	1.33	1.37
59	A5	3502	A	N9-C4	5.13	1.41	1.37
59	A5	300	A	N9-C8	-5.13	1.33	1.37
59	A5	790	U	N1-C6	-5.13	1.33	1.38
59	A5	1410	A	N9-C8	-5.13	1.33	1.37
59	A5	1514	U	N1-C2	-5.13	1.33	1.38
59	A5	2142	A	N7-C5	-5.13	1.36	1.39
59	A5	2184	G	C2-N3	-5.13	1.28	1.32
59	A5	2482	C	N3-C4	-5.13	1.30	1.33
59	A5	3642	G	N7-C5	-5.13	1.36	1.39
77	Cg	13	TYR	CD1-CE1	-5.13	1.31	1.39
54	A9	18	G	N7-C5	-5.12	1.36	1.39
58	B2	1160	A	N9-C4	-5.12	1.34	1.37
59	A5	354	A	C8-N7	-5.12	1.27	1.31
59	A5	1155	U	P-OP1	-5.12	1.40	1.49
59	A5	2237	A	C6-N1	-5.12	1.31	1.35
59	A5	2612	G	N7-C5	-5.12	1.36	1.39
59	A5	3468	G	C5-C6	-5.12	1.37	1.42
59	A5	46	C	N3-C4	-5.12	1.30	1.33
59	A5	59	G	N9-C4	-5.12	1.33	1.38
59	A5	286	A	C6-N1	-5.12	1.31	1.35
59	A5	425	A	C5-C6	-5.12	1.36	1.41
59	A5	810	A	C4'-C3'	-5.12	1.47	1.52
59	A5	1335	C	C4-C5	-5.12	1.38	1.43
59	A5	1655	A	C8-N7	-5.12	1.27	1.31
59	A5	2523	A	C5-C4	-5.12	1.35	1.38
59	A5	3126	C	N3-C4	-5.12	1.30	1.33
59	A5	3291	U	N1-C2	-5.12	1.33	1.38
59	A5	3801	A	C5-C4	-5.12	1.35	1.38
58	B2	1106	A	C5-C4	-5.12	1.35	1.38
58	B2	1175	A	C5-C4	-5.12	1.35	1.38
59	A5	771	A	C6-N1	-5.12	1.31	1.35
59	A5	1036	A	N9-C8	-5.12	1.33	1.37
59	A5	1046	A	N3-C4	-5.12	1.31	1.34
59	A5	1510	G	P-O5'	-5.12	1.54	1.59
59	A5	1542	C	C2-N3	-5.12	1.31	1.35
59	A5	1736	G	P-OP1	-5.12	1.40	1.49
59	A5	2021	C	C4-C5	-5.12	1.38	1.43
59	A5	2211	A	C8-N7	-5.12	1.27	1.31
59	A5	3293	G	N7-C5	-5.12	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3594	A	C6-N6	-5.12	1.29	1.33
59	A5	3628	G	N9-C4	-5.12	1.33	1.38
37	Cr	9	TRP	CE3-CZ3	-5.12	1.29	1.38
59	A5	1115	A	C5-C6	-5.12	1.36	1.41
59	A5	1320	U	N1-C6	-5.12	1.33	1.38
59	A5	3233	C	N1-C2	-5.12	1.35	1.40
55	A7	83	A	C6-N1	-5.12	1.31	1.35
58	B2	1202	G	C2-N3	-5.12	1.28	1.32
59	A5	448	A	C8-N7	-5.12	1.27	1.31
59	A5	811	G	C5-C4	-5.12	1.34	1.38
59	A5	1197	A	C3'-O3'	5.12	1.49	1.42
59	A5	1706	G	N7-C5	-5.12	1.36	1.39
59	A5	3161	U	C5-C6	-5.12	1.29	1.34
59	A5	3604	G	C2-N3	-5.12	1.28	1.32
59	A5	289	C	C4-C5	-5.12	1.38	1.43
59	A5	1698	A	N3-C4	-5.12	1.31	1.34
59	A5	2148	C	C5-C6	-5.12	1.30	1.34
59	A5	2190	A	N9-C4	-5.12	1.34	1.37
59	A5	2621	A	C2-N3	-5.12	1.28	1.33
59	A5	2672	U	N1-C2	-5.12	1.33	1.38
59	A5	3228	A	N9-C8	-5.12	1.33	1.37
59	A5	3291	U	C2-N3	-5.12	1.34	1.37
59	A5	3325	G	N1-C2	-5.12	1.33	1.37
59	A5	289	C	N1-C6	-5.12	1.34	1.37
59	A5	1729	G	N7-C5	-5.12	1.36	1.39
59	A5	2195	A	C8-N7	-5.12	1.27	1.31
59	A5	2530	C	C2-O2	-5.12	1.19	1.24
58	B2	209	A	N9-C4	-5.11	1.34	1.37
58	B2	1980	U	N1-C2	-5.11	1.33	1.38
59	A5	125	A	N9-C4	-5.11	1.34	1.37
59	A5	980	A	C6-N6	-5.11	1.29	1.33
59	A5	1010	A	P-O5'	-5.11	1.54	1.59
59	A5	1026	G	C8-N7	-5.11	1.27	1.30
59	A5	1348	G	P-OP1	-5.11	1.40	1.49
59	A5	1543	C	C2-O2	-5.11	1.19	1.24
59	A5	1721	C	C5-C6	-5.11	1.30	1.34
59	A5	1725	A	C5-C4	-5.11	1.35	1.38
59	A5	2723	A	C6-N1	-5.11	1.31	1.35
59	A5	2813	G	C5-C4	-5.11	1.34	1.38
59	A5	1560	A	N7-C5	-5.11	1.36	1.39
59	A5	1761	C	N1-C2	-5.11	1.35	1.40
59	A5	2739	A	N7-C5	-5.11	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2793	C	C4'-C3'	-5.11	1.47	1.52
59	A5	3716	C	C4-C5	-5.11	1.38	1.43
58	B2	888	G	N9-C4	-5.11	1.33	1.38
59	A5	80	G	N9-C4	-5.11	1.33	1.38
59	A5	793	U	C2-O2	-5.11	1.17	1.22
59	A5	1163	G	C6-N1	-5.11	1.35	1.39
59	A5	1165	A	C6-N1	-5.11	1.31	1.35
59	A5	2683	G	C2-N2	-5.11	1.29	1.34
59	A5	3346	G	C2-N2	-5.11	1.29	1.34
59	A5	3534	U	C4-C5	-5.11	1.39	1.43
59	A5	1390	C	C5-C6	-5.11	1.30	1.34
59	A5	2042	A	C5-C4	-5.11	1.35	1.38
59	A5	3276	C	N3-C4	-5.11	1.30	1.33
59	A5	2183	A	C5-C4	-5.11	1.35	1.38
59	A5	2598	A	C5-C6	-5.11	1.36	1.41
59	A5	2795	U	C2-O2	-5.11	1.17	1.22
59	A5	2914	A	N7-C5	-5.11	1.36	1.39
59	A5	3233	C	C2-N3	-5.11	1.31	1.35
59	A5	3323	G	N9-C8	-5.11	1.34	1.37
59	A5	52	A	C5-C6	-5.11	1.36	1.41
59	A5	985	G	C5-C4	-5.11	1.34	1.38
59	A5	1068	C	C2-N3	-5.11	1.31	1.35
59	A5	1106	A	C2-N3	-5.11	1.28	1.33
59	A5	1275	A	N7-C5	-5.11	1.36	1.39
59	A5	2534	G	N7-C5	-5.11	1.36	1.39
59	A5	2558	A	C5-C6	-5.11	1.36	1.41
59	A5	2682	C	N1-C6	-5.11	1.34	1.37
59	A5	2724	C	N3-C4	-5.11	1.30	1.33
59	A5	3322	A	N7-C5	-5.11	1.36	1.39
59	A5	3512	U	C4-C5	-5.11	1.39	1.43
59	A5	3878	U	C5-C6	-5.11	1.29	1.34
59	A5	29	U	C2-O2	-5.10	1.17	1.22
59	A5	1403	C	N3-C4	-5.10	1.30	1.33
59	A5	2637	A	N9-C4	-5.10	1.34	1.37
67	CV	38	TYR	CG-CD1	-5.10	1.32	1.39
56	A8	10	C	C4-C5	-5.10	1.38	1.43
56	A8	45	G	C5-C4	-5.10	1.34	1.38
58	B2	1219	A	N3-C4	-5.10	1.31	1.34
59	A5	60	G	N7-C5	-5.10	1.36	1.39
59	A5	785	A	N9-C4	-5.10	1.34	1.37
59	A5	1122	U	N3-C4	-5.10	1.33	1.38
59	A5	2250	G	C6-N1	-5.10	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3513	A	C5-C4	-5.10	1.35	1.38
59	A5	377	U	C2-O2	-5.10	1.17	1.22
59	A5	358	C	C5-C6	-5.10	1.30	1.34
59	A5	1659	A	N7-C5	-5.10	1.36	1.39
59	A5	1879	U	C2-N3	-5.10	1.34	1.37
59	A5	2112	A	N7-C5	-5.10	1.36	1.39
59	A5	2217	A	C2-N3	-5.10	1.28	1.33
59	A5	3481	G	P-O5'	-5.10	1.54	1.59
52	CE	237	TYR	CD2-CE2	-5.10	1.31	1.39
56	A8	31	G	C2-N3	-5.10	1.28	1.32
58	B2	395	G	C5-C4	-5.10	1.34	1.38
59	A5	228	C	N3-C4	-5.10	1.30	1.33
59	A5	800	C	N1-C6	-5.10	1.34	1.37
59	A5	874	G	C5-C6	-5.10	1.37	1.42
59	A5	1147	U	C4-C5	-5.10	1.39	1.43
59	A5	1953	G	C6-N1	-5.10	1.35	1.39
59	A5	2715	C	C4-N4	-5.10	1.29	1.33
59	A5	3241	G	C6-N1	-5.10	1.35	1.39
59	A5	3488	G	P-O5'	-5.10	1.54	1.59
59	A5	161	G	C5-C4	-5.10	1.34	1.38
59	A5	309	C	C5-C6	-5.10	1.30	1.34
59	A5	2531	A	N7-C5	-5.10	1.36	1.39
55	A7	11	A	C5-C4	-5.09	1.35	1.38
58	B2	1113	A	N1-C2	-5.09	1.29	1.34
59	A5	285	G	N9-C4	-5.09	1.33	1.38
59	A5	1422	G	C6-N1	-5.09	1.35	1.39
59	A5	1766	U	N3-C4	-5.09	1.33	1.38
59	A5	2159	C	C2-O2	-5.09	1.19	1.24
59	A5	2258	U	N1-C2	-5.09	1.33	1.38
59	A5	2502	G	C8-N7	-5.09	1.27	1.30
59	A5	2653	A	C2-N3	-5.09	1.28	1.33
59	A5	3281	G	N3-C4	-5.09	1.31	1.35
59	A5	3655	U	N1-C2	-5.09	1.33	1.38
59	A5	3921	A	C5-C4	-5.09	1.35	1.38
33	CP	83	TRP	CD2-CE2	-5.09	1.35	1.41
55	A7	87	G	N9-C8	-5.09	1.34	1.37
58	B2	1216	C	C4-C5	-5.09	1.38	1.43
58	B2	1843	A	N9-C4	-5.09	1.34	1.37
59	A5	82	U	C5-C6	-5.09	1.29	1.34
25	Ca	96	SER	CA-CB	-5.09	1.45	1.52
55	A7	102	C	N3-C4	-5.09	1.30	1.33
58	B2	1080	A	C5-C4	-5.09	1.35	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	390	A	C5-C6	-5.09	1.36	1.41
59	A5	853	G	N3-C4	-5.09	1.31	1.35
59	A5	978	G	C5-C4	-5.09	1.34	1.38
59	A5	1025	U	N3-C4	-5.09	1.33	1.38
59	A5	1139	U	N1-C2	-5.09	1.33	1.38
59	A5	1301	A	C8-N7	-5.09	1.27	1.31
59	A5	1311	U	C2-N3	-5.09	1.34	1.37
59	A5	1383	A	C5-C4	-5.09	1.35	1.38
59	A5	2098	C	C4-C5	-5.09	1.38	1.43
59	A5	2203	A	C6-N1	-5.09	1.31	1.35
59	A5	2786	U	C4'-C3'	-5.09	1.47	1.52
59	A5	3421	C	N1-C2	-5.09	1.35	1.40
56	A8	14	G	C5-C6	-5.09	1.37	1.42
59	A5	919	G	C8-N7	-5.09	1.27	1.30
59	A5	1215	A	C5-C6	-5.09	1.36	1.41
59	A5	1612	G	N9-C8	-5.09	1.34	1.37
33	CP	130	TYR	CE1-CZ	-5.09	1.31	1.38
58	B2	642	G	N9-C4	-5.09	1.33	1.38
58	B2	1193	C	C5-C6	-5.09	1.30	1.34
59	A5	43	A	N9-C8	-5.09	1.33	1.37
59	A5	1206	G	N1-C2	-5.09	1.33	1.37
58	B2	1988	G	N7-C5	-5.09	1.36	1.39
59	A5	846	U	C4-O4	-5.09	1.19	1.23
59	A5	1047	A	N9-C4	-5.09	1.34	1.37
59	A5	1349	A	N9-C8	-5.09	1.33	1.37
59	A5	1599	C	C5-C6	-5.09	1.30	1.34
59	A5	2799	U	C5-C6	-5.09	1.29	1.34
59	A5	3189	A	C5-C4	-5.09	1.35	1.38
59	A5	3418	U	N3-C4	-5.09	1.33	1.38
59	A5	3618	A	C4'-C3'	-5.09	1.47	1.52
59	A5	3619	U	C5-C6	-5.09	1.29	1.34
55	A7	83	A	C5-C6	-5.08	1.36	1.41
59	A5	881	G	C6-N1	-5.08	1.35	1.39
59	A5	1085	U	C2-N3	-5.08	1.34	1.37
59	A5	1775	C	C2-N3	-5.08	1.31	1.35
58	B2	263	A	N9-C4	-5.08	1.34	1.37
59	A5	89	A	N9-C8	-5.08	1.33	1.37
59	A5	1009	G	C2-N2	-5.08	1.29	1.34
59	A5	1016	A	C2'-C1'	-5.08	1.47	1.53
59	A5	1871	A	C8-N7	-5.08	1.27	1.31
59	A5	2710	A	C8-N7	-5.08	1.27	1.31
59	A5	2711	C	C5-C6	-5.08	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2783	C	C4-C5	-5.08	1.38	1.43
59	A5	3451	A	C6-N1	-5.08	1.31	1.35
59	A5	3603	C	C2-N3	-5.08	1.31	1.35
4	CB	268	ARG	CG-CD	-5.08	1.39	1.51
55	A7	13	A	N9-C4	-5.08	1.34	1.37
58	B2	1833	C	C2-N3	-5.08	1.31	1.35
59	A5	10	A	N7-C5	-5.08	1.36	1.39
59	A5	239	U	N1-C2	-5.08	1.33	1.38
59	A5	540	G	N1-C2	-5.08	1.33	1.37
59	A5	1411	U	P-O5'	-5.08	1.54	1.59
59	A5	1967	G	N3-C4	-5.08	1.31	1.35
59	A5	3264	A	C6-N6	-5.08	1.29	1.33
59	A5	3268	A	N9-C4	-5.08	1.34	1.37
58	B2	1216	C	N1-C6	-5.08	1.34	1.37
59	A5	993	A	C5-C6	-5.08	1.36	1.41
59	A5	1039	U	N1-C6	-5.08	1.33	1.38
31	CS	84	TYR	CD2-CE2	-5.08	1.31	1.39
58	B2	839	A	N9-C4	-5.08	1.34	1.37
59	A5	2052	G	C5-C4	-5.08	1.34	1.38
59	A5	2060	A	C5-C6	-5.08	1.36	1.41
59	A5	2806	U	C2-N3	-5.08	1.34	1.37
59	A5	3183	G	N1-C2	-5.08	1.33	1.37
56	A8	23	G	C5-C6	-5.08	1.37	1.42
59	A5	242	C	N3-C4	-5.08	1.30	1.33
59	A5	300	A	C4'-C3'	-5.08	1.47	1.52
59	A5	1623	G	C5-C6	-5.08	1.37	1.42
59	A5	2794	U	N3-C4	-5.08	1.33	1.38
59	A5	3219	A	N9-C4	-5.08	1.34	1.37
59	A5	3532	G	C6-N1	-5.08	1.35	1.39
58	B2	365	A	C5-C6	-5.08	1.36	1.41
58	B2	1837	G	N7-C5	-5.08	1.36	1.39
59	A5	1029	C	C5-C6	-5.08	1.30	1.34
59	A5	1131	C	P-O5'	-5.08	1.54	1.59
59	A5	1204	C	N3-C4	-5.08	1.30	1.33
59	A5	1340	G	N9-C4	-5.08	1.33	1.38
59	A5	1770	C	N1-C2	-5.08	1.35	1.40
59	A5	2243	G	C2-N3	-5.08	1.28	1.32
59	A5	2526	A	N9-C4	-5.08	1.34	1.37
59	A5	2682	C	C2-N3	-5.08	1.31	1.35
59	A5	3252	G	N1-C2	-5.08	1.33	1.37
59	A5	3310	G	C8-N7	-5.08	1.27	1.30
59	A5	3328	G	C8-N7	-5.08	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	Cg	84	CYS	CB-SG	-5.08	1.73	1.81
58	B2	323	U	N1-C2	-5.07	1.33	1.38
59	A5	919	G	C6-N1	-5.07	1.35	1.39
59	A5	1763	A	N7-C5	-5.07	1.36	1.39
59	A5	1868	A	N9-C4	-5.07	1.34	1.37
59	A5	2696	U	N3-C4	-5.07	1.33	1.38
59	A5	2773	G	P-O5'	-5.07	1.54	1.59
59	A5	413	A	C5-C4	-5.07	1.35	1.38
59	A5	1056	G	N3-C4	-5.07	1.31	1.35
59	A5	1613	A	N1-C2	-5.07	1.29	1.34
59	A5	1680	U	N1-C6	-5.07	1.33	1.38
59	A5	2148	C	N1-C2	-5.07	1.35	1.40
59	A5	3411	C	C4-N4	-5.07	1.29	1.33
55	A7	67	G	N7-C5	-5.07	1.36	1.39
59	A5	239	U	C2-N3	-5.07	1.34	1.37
59	A5	308	G	N1-C2	-5.07	1.33	1.37
59	A5	996	C	N1-C6	-5.07	1.34	1.37
59	A5	1267	A	N3-C4	-5.07	1.31	1.34
59	A5	1526	G	N7-C5	-5.07	1.36	1.39
59	A5	1726	G	C5'-C4'	-5.07	1.45	1.51
59	A5	3133	A	C6-N6	-5.07	1.29	1.33
58	B2	11	A	N9-C4	-5.07	1.34	1.37
59	A5	781	C	C2-N3	-5.07	1.31	1.35
59	A5	1385	G	N3-C4	-5.07	1.31	1.35
59	A5	47	A	N9-C8	-5.07	1.33	1.37
59	A5	81	A	N1-C2	-5.07	1.29	1.34
59	A5	244	G	N7-C5	-5.07	1.36	1.39
59	A5	348	A	N7-C5	-5.07	1.36	1.39
59	A5	370	A	C8-N7	-5.07	1.28	1.31
59	A5	1362	G	C6-O6	-5.07	1.19	1.24
59	A5	2713	G	C2-N2	-5.07	1.29	1.34
59	A5	3181	G	C5-C4	-5.07	1.34	1.38
59	A5	3269	G	N7-C5	-5.07	1.36	1.39
59	A5	3310	G	N7-C5	-5.07	1.36	1.39
33	CP	31	GLU	CD-OE1	-5.07	1.20	1.25
59	A5	64	A	C8-N7	-5.07	1.28	1.31
59	A5	779	U	N3-C4	-5.07	1.33	1.38
59	A5	1082	A	C5-C6	-5.07	1.36	1.41
59	A5	1593	U	N1-C6	-5.07	1.33	1.38
59	A5	1765	U	N1-C2	-5.07	1.33	1.38
59	A5	2191	G	N9-C8	-5.07	1.34	1.37
59	A5	2732	C	C2'-C1'	-5.07	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2721	C	C4-N4	-5.06	1.29	1.33
59	A5	3654	C	N1-C6	-5.06	1.34	1.37
59	A5	3851	U	C5-C6	-5.06	1.29	1.34
58	B2	330	G	C6-N1	-5.06	1.36	1.39
59	A5	1014	U	C4-C5	-5.06	1.39	1.43
59	A5	1701	C	N1-C6	-5.06	1.34	1.37
59	A5	1870	G	C5-C6	-5.06	1.37	1.42
59	A5	2727	U	C5-C6	-5.06	1.29	1.34
59	A5	3169	A	N9-C8	-5.06	1.33	1.37
59	A5	3312	G	N9-C8	-5.06	1.34	1.37
59	A5	11	C	N3-C4	-5.06	1.30	1.33
59	A5	302	A	N7-C5	-5.06	1.36	1.39
59	A5	317	G	N1-C2	-5.06	1.33	1.37
59	A5	654	G	N9-C8	-5.06	1.34	1.37
59	A5	1400	A	C8-N7	-5.06	1.28	1.31
59	A5	1895	U	N1-C2	-5.06	1.33	1.38
59	A5	2154	A	C8-N7	-5.06	1.28	1.31
59	A5	2703	G	C2-N2	-5.06	1.29	1.34
37	Cr	52	THR	CA-CB	-5.06	1.40	1.53
56	A8	18	C	C4-C5	-5.06	1.39	1.43
56	A8	52	A	N9-C4	-5.06	1.34	1.37
58	B2	356	C	N3-C4	-5.06	1.30	1.33
59	A5	1077	C	C2-O2	-5.06	1.19	1.24
59	A5	1553	C	N1-C2	-5.06	1.35	1.40
59	A5	1732	A	C6-N6	-5.06	1.29	1.33
59	A5	2741	A	N3-C4	-5.06	1.31	1.34
59	A5	3445	C	C5-C6	-5.06	1.30	1.34
55	A7	100	A	N9-C8	-5.06	1.33	1.37
56	A8	71	A	N9-C4	-5.06	1.34	1.37
58	B2	426	A	N7-C5	-5.06	1.36	1.39
59	A5	108	A	C2-N3	-5.06	1.28	1.33
59	A5	294	U	C4-C5	-5.06	1.39	1.43
59	A5	647	A	N7-C5	-5.06	1.36	1.39
59	A5	1343	A	C6-N1	-5.06	1.32	1.35
59	A5	2566	A	N9-C8	-5.06	1.33	1.37
59	A5	3508	G	C6-N1	-5.06	1.36	1.39
59	A5	3517	U	C4'-C3'	-5.06	1.47	1.52
58	B2	346	A	N9-C4	-5.06	1.34	1.37
59	A5	783	G	N1-C2	-5.06	1.33	1.37
59	A5	2568	U	C5-C6	-5.06	1.29	1.34
59	A5	3412	U	C4'-C3'	-5.06	1.47	1.52
59	A5	3413	C	C5-C6	-5.06	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3840	G	C2-N3	-5.06	1.28	1.32
58	B2	360	G	N3-C4	-5.05	1.31	1.35
58	B2	1069	U	C4-C5	-5.05	1.39	1.43
58	B2	1202	G	N1-C2	-5.05	1.33	1.37
59	A5	38	A	N9-C8	-5.05	1.33	1.37
59	A5	824	G	N1-C2	-5.05	1.33	1.37
59	A5	1896	A	N3-C4	-5.05	1.31	1.34
59	A5	2002	C	N3-C4	-5.05	1.30	1.33
59	A5	2730	A	N3-C4	-5.05	1.31	1.34
59	A5	3516	C	N1-C6	-5.05	1.34	1.37
59	A5	3583	C	N1-C2	-5.05	1.35	1.40
26	CN	120	TRP	CE3-CZ3	-5.05	1.29	1.38
58	B2	102	A	C5-C4	-5.05	1.35	1.38
59	A5	1208	U	C4-C5	-5.05	1.39	1.43
59	A5	1385	G	N9-C4	-5.05	1.33	1.38
59	A5	2108	U	N1-C6	-5.05	1.33	1.38
55	A7	89	G	N9-C4	-5.05	1.33	1.38
58	B2	1225	A	N9-C4	-5.05	1.34	1.37
58	B2	1980	U	N3-C4	-5.05	1.33	1.38
59	A5	42	U	P-OP2	-5.05	1.40	1.49
59	A5	383	A	N9-C4	-5.05	1.34	1.37
59	A5	384	A	C6-N6	-5.05	1.29	1.33
59	A5	789	G	C2-N2	-5.05	1.29	1.34
59	A5	997	U	C4-C5	-5.05	1.39	1.43
59	A5	2591	A	N9-C4	-5.05	1.34	1.37
54	A9	6	G	C8-N7	-5.05	1.27	1.30
58	B2	582	G	C5-C4	-5.05	1.34	1.38
59	A5	206	C	N3-C4	-5.05	1.30	1.33
59	A5	828	G	C6-N1	-5.05	1.36	1.39
59	A5	1090	U	N3-C4	-5.05	1.33	1.38
59	A5	2722	U	C2-O2	-5.05	1.17	1.22
59	A5	3495	G	C6-N1	-5.05	1.36	1.39
59	A5	3672	U	C4-C5	-5.05	1.39	1.43
59	A5	382	G	C2-N3	-5.05	1.28	1.32
59	A5	752	U	C4-C5	-5.05	1.39	1.43
59	A5	3289	U	N3-C4	-5.05	1.33	1.38
59	A5	3655	U	C2-N3	-5.05	1.34	1.37
59	A5	335	A	N3-C4	-5.05	1.31	1.34
59	A5	1086	C	C5-C6	-5.05	1.30	1.34
59	A5	1653	G	C5-C4	-5.05	1.34	1.38
59	A5	2678	G	N1-C2	-5.05	1.33	1.37
58	B2	1827	A	N3-C4	-5.04	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	244	G	C6-N1	-5.04	1.36	1.39
59	A5	452	A	C5-C4	-5.04	1.35	1.38
59	A5	1626	A	C6-N6	-5.04	1.29	1.33
4	CB	29	VAL	CB-CG2	-5.04	1.42	1.52
54	A9	6	G	N7-C5	-5.04	1.36	1.39
59	A5	1031	G	C8-N7	-5.04	1.27	1.30
59	A5	1610	A	C8-N7	-5.04	1.28	1.31
59	A5	1611	G	C2-N2	-5.04	1.29	1.34
59	A5	2612	G	C8-N7	-5.04	1.27	1.30
59	A5	2805	C	C4-C5	-5.04	1.39	1.43
59	A5	3581	G	C5-C4	-5.04	1.34	1.38
59	A5	3610	A	C8-N7	-5.04	1.28	1.31
4	CB	123	TYR	CE1-CZ	-5.04	1.31	1.38
33	CP	136	ILE	CB-CG2	-5.04	1.37	1.52
56	A8	86	A	N3-C4	-5.04	1.31	1.34
59	A5	1215	A	N9-C4	-5.04	1.34	1.37
59	A5	1354	G	C5-C4	-5.04	1.34	1.38
59	A5	1770	C	C5-C6	-5.04	1.30	1.34
59	A5	2708	C	N1-C6	-5.04	1.34	1.37
59	A5	70	A	N3-C4	-5.04	1.31	1.34
59	A5	2658	A	C5-C6	-5.04	1.36	1.41
59	A5	3164	C	C2-O2	-5.04	1.20	1.24
59	A5	44	A	C5-C4	-5.04	1.35	1.38
59	A5	293	U	C4-C5	-5.04	1.39	1.43
59	A5	1109	G	C5-C6	-5.04	1.37	1.42
59	A5	1200	U	C4-C5	-5.04	1.39	1.43
59	A5	1296	U	C2-N3	-5.04	1.34	1.37
59	A5	2514	U	C4'-C3'	-5.04	1.47	1.52
59	A5	2760	G	C6-N1	-5.04	1.36	1.39
59	A5	3335	A	C6-N6	-5.04	1.29	1.33
58	B2	1067	G	C2-N2	-5.04	1.29	1.34
59	A5	922	G	C8-N7	-5.04	1.27	1.30
59	A5	1001	A	C5-C4	-5.04	1.35	1.38
59	A5	1140	G	N9-C4	-5.04	1.33	1.38
59	A5	2677	A	N3-C4	-5.04	1.31	1.34
58	B2	333	A	N9-C4	-5.03	1.34	1.37
58	B2	371	A	N9-C4	-5.03	1.34	1.37
58	B2	1940	G	C6-N1	-5.03	1.36	1.39
59	A5	294	U	N3-C4	-5.03	1.33	1.38
59	A5	310	A	C8-N7	-5.03	1.28	1.31
59	A5	427	A	N9-C4	-5.03	1.34	1.37
59	A5	1791	A	C6-N6	-5.03	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2779	A	C5-C6	-5.03	1.36	1.41
25	Ca	49	TYR	CD1-CE1	-5.03	1.31	1.39
56	A8	28	A	C5-C4	-5.03	1.35	1.38
59	A5	2532	U	C2-N3	-5.03	1.34	1.37
59	A5	2556	A	C6-N1	-5.03	1.32	1.35
59	A5	2671	C	C2-N3	-5.03	1.31	1.35
56	A8	11	G	N3-C4	-5.03	1.31	1.35
58	B2	988	G	C5-C6	-5.03	1.37	1.42
59	A5	302	A	C6-N1	-5.03	1.32	1.35
59	A5	792	U	P-OP2	-5.03	1.40	1.49
59	A5	986	A	N1-C2	-5.03	1.29	1.34
59	A5	1045	G	C5-C4	-5.03	1.34	1.38
59	A5	2195	A	N9-C8	-5.03	1.33	1.37
59	A5	3346	G	N1-C2	-5.03	1.33	1.37
59	A5	3626	A	C6-N1	-5.03	1.32	1.35
4	CB	123	TYR	CD1-CE1	-5.03	1.31	1.39
59	A5	545	U	N3-C4	-5.03	1.33	1.38
59	A5	2508	C	N1-C2	-5.03	1.35	1.40
58	B2	1107	A	C6-N1	-5.03	1.32	1.35
58	B2	1851	A	C5-C6	-5.03	1.36	1.41
59	A5	238	G	C5-C4	-5.03	1.34	1.38
59	A5	1173	U	C2-N3	-5.03	1.34	1.37
59	A5	1392	A	N7-C5	-5.03	1.36	1.39
59	A5	2120	G	C5-C4	-5.03	1.34	1.38
59	A5	2224	A	P-O5'	-5.03	1.54	1.59
59	A5	3463	U	C4-C5	-5.03	1.39	1.43
65	CO	151	TYR	CD2-CE2	-5.03	1.31	1.39
58	B2	1204	A	C5-C4	-5.03	1.35	1.38
59	A5	453	C	C2-N3	-5.03	1.31	1.35
59	A5	554	U	C2-N3	-5.03	1.34	1.37
59	A5	989	A	N9-C4	-5.03	1.34	1.37
59	A5	3263	C	N3-C4	-5.03	1.30	1.33
59	A5	3479	C	C4-N4	-5.03	1.29	1.33
59	A5	3601	U	C2-O2	-5.03	1.17	1.22
59	A5	3877	G	C2-N3	-5.03	1.28	1.32
58	B2	343	A	N9-C4	-5.02	1.34	1.37
59	A5	1117	A	N1-C2	-5.02	1.29	1.34
59	A5	1151	A	C6-N6	-5.02	1.29	1.33
59	A5	1363	G	C2-N3	-5.02	1.28	1.32
59	A5	2192	U	C4-C5	-5.02	1.39	1.43
59	A5	2486	A	N3-C4	-5.02	1.31	1.34
59	A5	3187	C	N1-C2	-5.02	1.35	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3897	G	C5-C4	-5.02	1.34	1.38
59	A5	318	G	N1-C2	-5.02	1.33	1.37
59	A5	856	A	C5-C6	-5.02	1.36	1.41
59	A5	1680	U	C2-O2	-5.02	1.17	1.22
59	A5	1949	A	N7-C5	-5.02	1.36	1.39
59	A5	2149	G	C8-N7	-5.02	1.27	1.30
59	A5	3841	C	N3-C4	-5.02	1.30	1.33
58	B2	1992	A	N9-C4	-5.02	1.34	1.37
59	A5	1010	A	N9-C8	-5.02	1.33	1.37
59	A5	1523	A	C8-N7	-5.02	1.28	1.31
59	A5	1875	G	N9-C4	-5.02	1.33	1.38
59	A5	2670	U	C4-C5	-5.02	1.39	1.43
59	A5	2705	U	N1-C2	-5.02	1.34	1.38
59	A5	3881	A	N7-C5	-5.02	1.36	1.39
55	A7	79	U	C4-C5	-5.02	1.39	1.43
59	A5	50	U	C5-C6	-5.02	1.29	1.34
59	A5	385	A	C6-N1	-5.02	1.32	1.35
59	A5	786	C	C2-N3	-5.02	1.31	1.35
59	A5	1345	G	C6-O6	-5.02	1.19	1.24
59	A5	2591	A	N7-C5	-5.02	1.36	1.39
59	A5	3173	U	N1-C2	-5.02	1.34	1.38
25	Ca	53	TYR	CD2-CE2	-5.02	1.31	1.39
58	B2	1175	A	N3-C4	-5.02	1.31	1.34
58	B2	1216	C	C2-N3	-5.02	1.31	1.35
59	A5	236	G	N9-C4	-5.02	1.33	1.38
59	A5	1761	C	C5-C6	-5.02	1.30	1.34
59	A5	1771	G	C2-N3	-5.02	1.28	1.32
59	A5	2028	A	N9-C4	-5.02	1.34	1.37
59	A5	2557	C	C2-N3	-5.02	1.31	1.35
59	A5	2688	U	C5-C6	-5.02	1.29	1.34
59	A5	3155	G	C6-O6	-5.02	1.19	1.24
59	A5	205	U	N1-C2	-5.02	1.34	1.38
59	A5	413	A	N3-C4	-5.02	1.31	1.34
59	A5	3463	U	N1-C6	-5.02	1.33	1.38
55	A7	95	U	C4-C5	-5.01	1.39	1.43
58	B2	626	U	C2-N3	-5.01	1.34	1.37
59	A5	91	U	C2-O2	-5.01	1.17	1.22
59	A5	432	U	C5-C6	-5.01	1.29	1.34
59	A5	2679	U	C2-O2	-5.01	1.17	1.22
59	A5	2734	A	N1-C2	-5.01	1.29	1.34
59	A5	3647	A	N3-C4	-5.01	1.31	1.34
58	B2	5	U	C2-N3	-5.01	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1231	A	N7-C5	-5.01	1.36	1.39
58	B2	1985	A	N9-C4	-5.01	1.34	1.37
59	A5	288	U	N3-C4	-5.01	1.33	1.38
59	A5	659	U	N3-C4	-5.01	1.33	1.38
59	A5	977	C	N3-C4	-5.01	1.30	1.33
59	A5	1275	A	N9-C4	-5.01	1.34	1.37
59	A5	1590	A	N7-C5	-5.01	1.36	1.39
59	A5	2535	U	N1-C2	-5.01	1.34	1.38
59	A5	2674	A	N7-C5	-5.01	1.36	1.39
59	A5	2680	G	N9-C4	-5.01	1.33	1.38
59	A5	2762	A	N1-C2	-5.01	1.29	1.34
59	A5	3333	A	C5-C4	-5.01	1.35	1.38
59	A5	3679	C	C5-C6	-5.01	1.30	1.34
26	CN	71	ARG	CB-CG	-5.01	1.39	1.52
58	B2	388	G	N9-C8	-5.01	1.34	1.37
58	B2	1050	A	N9-C4	-5.01	1.34	1.37
58	B2	1063	G	C5-C4	-5.01	1.34	1.38
59	A5	118	A	N9-C4	-5.01	1.34	1.37
59	A5	1034	U	C2-N3	-5.01	1.34	1.37
59	A5	2506	U	C4-O4	-5.01	1.19	1.23
59	A5	2625	G	N1-C2	-5.01	1.33	1.37
59	A5	3410	G	C2-N2	-5.01	1.29	1.34
54	A9	8	A	N9-C4	-5.01	1.34	1.37
58	B2	1986	A	N9-C8	-5.01	1.33	1.37
59	A5	2202	A	N1-C2	-5.01	1.29	1.34
59	A5	3639	U	N3-C4	-5.01	1.33	1.38
59	A5	159	G	N7-C5	-5.01	1.36	1.39
59	A5	1066	A	C8-N7	-5.01	1.28	1.31
59	A5	1089	U	C4-C5	-5.01	1.39	1.43
59	A5	1973	G	N9-C8	-5.01	1.34	1.37
59	A5	2254	U	C5-C6	-5.01	1.29	1.34
59	A5	3711	G	N3-C4	5.01	1.39	1.35
59	A5	1777	A	N7-C5	-5.00	1.36	1.39
59	A5	2215	G	N9-C8	-5.00	1.34	1.37
59	A5	3354	U	C4-O4	-5.00	1.19	1.23
59	A5	3402	C	N1-C6	-5.00	1.34	1.37
56	A8	104	G	C6-N1	-5.00	1.36	1.39
59	A5	31	C	N3-C4	-5.00	1.30	1.33
59	A5	411	U	C2-N3	-5.00	1.34	1.37
59	A5	2216	A	C6-N6	-5.00	1.29	1.33
59	A5	2675	U	C4-C5	-5.00	1.39	1.43
55	A7	87	G	C5-C4	-5.00	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1056	C	C2-N3	-5.00	1.31	1.35
58	B2	1983	G	N1-C2	-5.00	1.33	1.37
59	A5	203	A	C6-N1	-5.00	1.32	1.35
59	A5	1074	U	C2-N3	-5.00	1.34	1.37
59	A5	1134	G	C2-N2	-5.00	1.29	1.34
59	A5	2036	G	N3-C4	-5.00	1.31	1.35
59	A5	2067	C	N1-C6	-5.00	1.34	1.37
59	A5	3415	U	C4-C5	-5.00	1.39	1.43

All (7437) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3593	A	N1-C6-N6	-25.27	103.44	118.60
56	A8	34	C	C6-N1-C2	-24.08	110.67	120.30
59	A5	1718	G	C8-N9-C4	-23.61	96.96	106.40
59	A5	2783	C	C6-N1-C2	-20.66	112.04	120.30
59	A5	1718	G	N3-C4-C5	-20.41	118.39	128.60
59	A5	811	G	N3-C4-N9	-19.54	114.28	126.00
59	A5	445	C	C6-N1-C2	-19.48	112.51	120.30
59	A5	26	G	N3-C4-N9	19.12	137.47	126.00
59	A5	3351	A	O5'-P-OP2	-18.87	88.06	110.70
56	A8	101	A	O5'-P-OP2	18.53	132.93	110.70
59	A5	1797	A	C8-N9-C4	18.53	113.21	105.80
59	A5	1366	G	C4-C5-N7	18.36	118.14	110.80
59	A5	1738	U	N3-C2-O2	-18.30	109.39	122.20
59	A5	811	G	N3-C4-C5	17.95	137.57	128.60
59	A5	1784	A	N1-C6-N6	17.91	129.35	118.60
59	A5	3594	A	O5'-P-OP1	-17.88	89.24	110.70
59	A5	3728	A	C5-N7-C8	-17.88	94.96	103.90
59	A5	2155	A	C8-N9-C4	-17.86	98.66	105.80
59	A5	1108	G	N3-C4-C5	-17.82	119.69	128.60
59	A5	440	U	N3-C2-O2	-17.79	109.75	122.20
59	A5	1366	G	C5-N7-C8	-17.78	95.41	104.30
59	A5	1332	C	O5'-P-OP2	-17.75	89.40	110.70
56	A8	102	A	O5'-P-OP2	-17.70	89.46	110.70
59	A5	1699	A	N1-C6-N6	-17.59	108.05	118.60
56	A8	100	G	OP2-P-O3'	-17.55	66.58	105.20
59	A5	2521	A	N9-C4-C5	-17.52	98.79	105.80
59	A5	1689	G	N1-C6-O6	-17.33	109.50	119.90
56	A8	103	C	C6-N1-C2	-17.31	113.38	120.30
59	A5	1784	A	C5-C6-N6	-17.17	109.97	123.70
59	A5	1115	A	N7-C8-N9	17.04	122.32	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1683	U	C5-C4-O4	-17.03	115.68	125.90
59	A5	1144	C	N1-C2-O2	16.90	129.04	118.90
59	A5	3260	G	C8-N9-C4	-16.79	99.69	106.40
59	A5	1687	U	N3-C2-O2	-16.76	110.47	122.20
59	A5	788	C	C6-N1-C2	-16.63	113.65	120.30
59	A5	798	C	N3-C2-O2	-16.63	110.26	121.90
59	A5	800	C	C5-C6-N1	16.57	129.29	121.00
59	A5	3676	C	C6-N1-C2	-16.30	113.78	120.30
59	A5	26	G	N3-C4-C5	-16.22	120.49	128.60
59	A5	1718	G	N7-C8-N9	16.16	121.18	113.10
59	A5	3593	A	N9-C4-C5	16.04	112.22	105.80
59	A5	2700	C	C6-N1-C2	-15.98	113.91	120.30
59	A5	2492	A	C8-N9-C4	-15.91	99.44	105.80
59	A5	3728	A	C4-C5-N7	15.91	118.65	110.70
59	A5	1108	G	C8-N9-C4	-15.90	100.04	106.40
59	A5	3593	A	C8-N9-C4	-15.75	99.50	105.80
59	A5	1084	A	N1-C6-N6	15.75	128.05	118.60
59	A5	800	C	C6-N1-C2	-15.69	114.03	120.30
59	A5	1113	A	O5'-P-OP1	-15.66	91.61	105.70
59	A5	802	G	N1-C6-O6	-15.64	110.51	119.90
59	A5	1144	C	N3-C2-O2	-15.62	110.97	121.90
59	A5	1325	C	N1-C2-O2	15.58	128.25	118.90
59	A5	1115	A	C5-N7-C8	-15.44	96.18	103.90
59	A5	813	C	C6-N1-C2	-15.41	114.14	120.30
59	A5	3354	U	N1-C2-O2	15.32	133.53	122.80
59	A5	53	A	O5'-P-OP1	-15.32	91.92	105.70
59	A5	3728	A	N7-C8-N9	15.28	121.44	113.80
59	A5	2205	G	O5'-P-OP2	-15.22	92.00	105.70
59	A5	1108	G	C4-N9-C1'	15.19	146.25	126.50
59	A5	296	C	O5'-P-OP1	-15.19	92.03	105.70
59	A5	2700	C	C5-C6-N1	15.09	128.55	121.00
59	A5	371	G	C8-N9-C4	15.08	112.43	106.40
59	A5	2684	C	N1-C2-O2	15.08	127.95	118.90
59	A5	2481	U	C5-C6-N1	15.06	130.23	122.70
59	A5	3514	C	N3-C2-O2	-15.04	111.38	121.90
59	A5	3412	U	N3-C2-O2	-14.89	111.77	122.20
59	A5	1803	C	N1-C2-O2	14.89	127.83	118.90
56	A8	101	A	C4-C5-N7	14.88	118.14	110.70
59	A5	754	A	C2-N3-C4	14.81	118.00	110.60
59	A5	3479	C	C6-N1-C2	-14.67	114.43	120.30
56	A8	20	C	N1-C2-O2	14.64	127.68	118.90
59	A5	1366	G	C6-C5-N7	-14.64	121.62	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3519	C	C6-N1-C2	-14.64	114.45	120.30
59	A5	3728	A	C5-C6-N6	-14.55	112.06	123.70
59	A5	811	G	N3-C2-N2	-14.51	109.74	119.90
59	A5	2649	A	N7-C8-N9	14.49	121.05	113.80
59	A5	3591	A	C2-N3-C4	-14.43	103.39	110.60
59	A5	3499	G	O5'-P-OP2	-14.42	92.73	105.70
59	A5	3354	U	N3-C2-O2	-14.38	112.13	122.20
56	A8	107	U	O5'-P-OP2	-14.34	92.80	105.70
59	A5	798	C	N1-C2-O2	14.32	127.49	118.90
59	A5	2790	G	N1-C6-O6	-14.30	111.32	119.90
58	B2	313	C	N1-C2-O2	14.28	127.47	118.90
59	A5	3511	U	N1-C2-O2	14.26	132.78	122.80
56	A8	101	A	C5-N7-C8	-14.25	96.77	103.90
59	A5	1784	A	N9-C4-C5	-14.25	100.10	105.80
59	A5	2155	A	N7-C8-N9	14.24	120.92	113.80
59	A5	2684	C	N3-C2-O2	-14.21	111.95	121.90
59	A5	3260	G	N3-C2-N2	-14.21	109.95	119.90
59	A5	2763	U	N1-C2-O2	14.20	132.74	122.80
59	A5	1086	C	C6-N1-C2	-14.17	114.63	120.30
59	A5	1683	U	N3-C4-O4	14.12	129.28	119.40
58	B2	1968	C	C6-N1-C2	-14.11	114.66	120.30
59	A5	2521	A	C8-N9-C4	14.07	111.43	105.80
59	A5	3481	G	N1-C6-O6	-14.07	111.46	119.90
59	A5	2206	U	O5'-P-OP1	-14.07	93.04	105.70
59	A5	1084	A	N9-C4-C5	-14.06	100.18	105.80
59	A5	3481	G	C5-C6-O6	14.06	137.04	128.60
59	A5	445	C	N3-C2-O2	-14.03	112.08	121.90
59	A5	1018	C	N3-C4-C5	14.02	127.51	121.90
59	A5	440	U	N1-C2-O2	13.98	132.59	122.80
59	A5	3714	U	C5-C6-N1	13.98	129.69	122.70
59	A5	2521	A	N1-C6-N6	13.93	126.96	118.60
56	A8	103	C	C5-C6-N1	13.92	127.96	121.00
59	A5	1797	A	N7-C8-N9	-13.89	106.85	113.80
59	A5	2567	U	C5-C6-N1	13.89	129.65	122.70
59	A5	1785	G	C5-N7-C8	13.85	111.22	104.30
59	A5	2511	C	C6-N1-C2	-13.84	114.76	120.30
59	A5	2671	C	C6-N1-C2	-13.83	114.77	120.30
59	A5	33	C	C5-C6-N1	13.76	127.88	121.00
59	A5	3405	U	O5'-P-OP1	-13.70	93.37	105.70
59	A5	1784	A	C4-C5-N7	13.69	117.55	110.70
59	A5	2492	A	N7-C8-N9	13.63	120.61	113.80
59	A5	2004	G	C6-C5-N7	-13.62	122.23	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3671	C	C5-C6-N1	13.62	127.81	121.00
59	A5	1366	G	N7-C8-N9	13.61	119.91	113.10
59	A5	866	C	N1-C2-O2	13.61	127.07	118.90
59	A5	2764	A	C2-N3-C4	13.59	117.39	110.60
59	A5	3714	U	C2-N1-C1'	13.58	134.00	117.70
59	A5	1734	G	C4-C5-N7	13.57	116.23	110.80
59	A5	1801	U	O4'-C1'-N1	13.50	119.00	108.20
59	A5	621	A	O5'-P-OP2	-13.49	93.56	105.70
59	A5	2727	U	C5-C6-N1	13.47	129.43	122.70
59	A5	3349	A	N1-C6-N6	-13.43	110.54	118.60
59	A5	3711	G	N3-C4-N9	13.40	134.04	126.00
59	A5	1062	C	C6-N1-C2	-13.39	114.94	120.30
59	A5	1803	C	N3-C2-O2	-13.37	112.54	121.90
59	A5	3473	C	OP1-P-OP2	-13.37	99.54	119.60
59	A5	3593	A	C5-C6-N6	13.36	134.39	123.70
59	A5	813	C	C5-C6-N1	13.36	127.68	121.00
59	A5	3472	A	C2-N3-C4	13.34	117.27	110.60
59	A5	485	A	N1-C6-N6	-13.34	110.60	118.60
59	A5	2165	C	N1-C2-O2	13.32	126.89	118.90
58	B2	313	C	C2-N1-C1'	13.31	133.45	118.80
59	A5	803	A	N1-C6-N6	-13.22	110.67	118.60
59	A5	1799	U	C5-C6-N1	13.18	129.29	122.70
56	A8	103	C	O4'-C1'-N1	13.16	118.73	108.20
59	A5	2649	A	C5-N7-C8	-13.15	97.33	103.90
59	A5	26	G	C5-C6-O6	-13.14	120.71	128.60
59	A5	1785	G	N7-C8-N9	-13.14	106.53	113.10
59	A5	2793	C	C5-C6-N1	13.13	127.57	121.00
59	A5	1782	C	C2-N1-C1'	13.11	133.22	118.80
59	A5	755	A	O4'-C1'-N9	13.06	118.65	108.20
59	A5	1382	U	N3-C2-O2	-13.06	113.06	122.20
59	A5	761	C	C6-N1-C2	-13.06	115.08	120.30
59	A5	654	G	C8-N9-C4	-13.05	101.18	106.40
59	A5	3631	C	C6-N1-C2	-13.05	115.08	120.30
59	A5	3676	C	C5-C6-N1	13.04	127.52	121.00
59	A5	3490	C	C4-C5-C6	-13.04	110.88	117.40
59	A5	2512	U	N3-C2-O2	-13.00	113.10	122.20
59	A5	2542	C	C6-N1-C2	-12.98	115.11	120.30
59	A5	1195	U	N3-C2-O2	-12.97	113.12	122.20
59	A5	1322	U	C5-C6-N1	12.97	129.18	122.70
59	A5	3343	A	N1-C2-N3	-12.95	122.83	129.30
59	A5	1738	U	C5-C4-O4	12.89	133.64	125.90
59	A5	3569	C	C6-N1-C2	-12.89	115.14	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1115	A	C8-N9-C4	-12.89	100.64	105.80
59	A5	811	G	C2-N3-C4	-12.89	105.45	111.90
56	A8	34	C	C5-C6-N1	12.87	127.44	121.00
59	A5	1678	C	O5'-P-OP2	-12.87	94.12	105.70
59	A5	1796	A	N1-C6-N6	-12.87	110.88	118.60
59	A5	1718	G	C2-N3-C4	12.85	118.32	111.90
59	A5	2165	C	N3-C4-C5	12.83	127.03	121.90
59	A5	1384	C	O5'-P-OP1	-12.83	94.15	105.70
59	A5	1143	U	C6-N1-C2	-12.79	113.32	121.00
59	A5	2763	U	N3-C2-O2	-12.78	113.25	122.20
59	A5	3497	G	O5'-P-OP1	-12.76	94.22	105.70
59	A5	457	A	C2-N3-C4	12.76	116.98	110.60
59	A5	440	U	C2-N1-C1'	12.74	132.99	117.70
59	A5	1671	U	C4-C5-C6	-12.71	112.07	119.70
59	A5	2684	C	C2-N1-C1'	12.69	132.76	118.80
59	A5	789	G	C4-C5-N7	-12.67	105.73	110.80
59	A5	3403	G	N1-C6-O6	-12.66	112.31	119.90
59	A5	1595	G	O5'-P-OP1	-12.63	94.33	105.70
59	A5	445	C	N1-C2-O2	12.63	126.48	118.90
59	A5	565	C	C6-N1-C2	-12.63	115.25	120.30
59	A5	1139	U	O5'-P-OP1	-12.63	94.33	105.70
59	A5	2209	G	C5-C6-O6	-12.63	121.02	128.60
59	A5	1095	G	C6-C5-N7	-12.62	122.83	130.40
59	A5	791	C	N3-C2-O2	-12.60	113.08	121.90
59	A5	1687	U	C5-C6-N1	-12.60	116.40	122.70
58	B2	1211	C	N1-C2-O2	12.59	126.45	118.90
59	A5	1358	U	C4-C5-C6	12.58	127.25	119.70
59	A5	1778	A	N1-C6-N6	-12.58	111.05	118.60
59	A5	798	C	N3-C4-N4	-12.57	109.20	118.00
59	A5	1688	A	C8-N9-C4	-12.55	100.78	105.80
59	A5	3932	U	N3-C2-O2	-12.54	113.42	122.20
59	A5	3487	A	O5'-P-OP1	-12.54	94.42	105.70
59	A5	3472	A	N1-C6-N6	-12.52	111.09	118.60
59	A5	2550	G	O5'-P-OP1	-12.51	94.44	105.70
59	A5	3246	G	N3-C4-C5	12.51	134.85	128.60
59	A5	1158	C	C6-N1-C2	-12.51	115.30	120.30
59	A5	3545	C	C5-C6-N1	12.50	127.25	121.00
59	A5	380	G	N3-C4-N9	12.49	133.49	126.00
59	A5	371	G	N9-C4-C5	-12.48	100.41	105.40
59	A5	1687	U	N1-C2-N3	12.47	122.38	114.90
58	B2	1108	C	N1-C2-O2	12.43	126.36	118.90
59	A5	1149	C	O5'-P-OP1	-12.42	94.52	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	105	A	C5-N7-C8	-12.41	97.69	103.90
59	A5	2170	C	C4-C5-C6	-12.41	111.19	117.40
59	A5	800	C	O5'-P-OP1	-12.39	94.55	105.70
59	A5	1332	C	C6-N1-C2	-12.37	115.35	120.30
59	A5	3490	C	C5-C6-N1	12.36	127.18	121.00
59	A5	1352	U	C5-C6-N1	12.35	128.88	122.70
59	A5	2797	A	O5'-P-OP1	-12.34	94.59	105.70
59	A5	3260	G	N7-C8-N9	12.34	119.27	113.10
59	A5	1355	C	N1-C2-O2	12.34	126.30	118.90
59	A5	1689	G	N9-C4-C5	12.34	110.33	105.40
59	A5	2770	C	N1-C2-O2	12.33	126.30	118.90
56	A8	16	A	O5'-P-OP1	-12.32	94.61	105.70
59	A5	1316	U	N3-C2-O2	-12.31	113.58	122.20
58	B2	1111	U	N3-C2-O2	-12.30	113.59	122.20
59	A5	2184	G	O5'-P-OP1	-12.30	94.63	105.70
59	A5	1108	G	C4-C5-C6	12.29	126.17	118.80
59	A5	3841	C	C6-N1-C2	-12.29	115.38	120.30
59	A5	1872	A	C5-N7-C8	-12.29	97.76	103.90
59	A5	1975	C	C5-C6-N1	12.28	127.14	121.00
59	A5	1352	U	C4-C5-C6	-12.28	112.33	119.70
59	A5	3728	A	C5-C6-N1	12.26	123.83	117.70
58	B2	1182	C	N1-C2-O2	12.24	126.25	118.90
58	B2	1824	C	N3-C2-O2	-12.24	113.33	121.90
59	A5	3401	U	O5'-P-OP1	-12.23	94.69	105.70
59	A5	1738	U	N1-C2-N3	12.23	122.24	114.90
59	A5	101	C	C5-C6-N1	12.21	127.10	121.00
59	A5	2764	A	N1-C2-N3	-12.21	123.20	129.30
59	A5	1664	C	O5'-P-OP1	-12.20	94.72	105.70
59	A5	2091	A	N1-C6-N6	-12.20	111.28	118.60
59	A5	1689	G	O5'-P-OP1	-12.19	94.73	105.70
59	A5	2786	U	C5-C6-N1	12.18	128.79	122.70
59	A5	301	U	N3-C2-O2	-12.16	113.69	122.20
59	A5	371	G	C5-C6-N1	12.15	117.58	111.50
59	A5	2220	C	N1-C2-O2	12.15	126.19	118.90
59	A5	3507	A	C5-C6-N1	12.15	123.77	117.70
59	A5	3591	A	C5-N7-C8	-12.14	97.83	103.90
59	A5	1785	G	C4-C5-N7	-12.14	105.94	110.80
59	A5	3292	C	C5-C6-N1	12.14	127.07	121.00
59	A5	380	G	C5-C6-O6	-12.10	121.34	128.60
59	A5	1085	U	O5'-P-OP2	-12.10	94.81	105.70
59	A5	2724	C	O5'-P-OP1	-12.10	94.81	105.70
59	A5	1062	C	C5-C6-N1	12.08	127.04	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	370	A	N1-C2-N3	-12.07	123.26	129.30
59	A5	445	C	C5-C6-N1	12.07	127.03	121.00
59	A5	2663	C	C5-C6-N1	12.06	127.03	121.00
59	A5	3511	U	N3-C2-O2	-12.06	113.76	122.20
58	B2	1211	C	N3-C2-O2	-12.03	113.48	121.90
59	A5	761	C	C5-C6-N1	12.01	127.01	121.00
59	A5	2731	G	C5-C6-O6	-12.01	121.39	128.60
59	A5	55	U	C5-C6-N1	12.00	128.70	122.70
59	A5	2160	C	N3-C2-O2	-11.99	113.50	121.90
59	A5	3246	G	N3-C4-N9	-11.99	118.81	126.00
59	A5	2088	G	N3-C4-N9	-11.98	118.81	126.00
59	A5	776	A	N1-C6-N6	-11.98	111.41	118.60
59	A5	1960	C	N1-C2-O2	11.98	126.09	118.90
59	A5	1175	C	C5-C6-N1	11.97	126.99	121.00
59	A5	2727	U	C6-N1-C2	-11.97	113.82	121.00
59	A5	2066	G	C8-N9-C4	-11.96	101.61	106.40
59	A5	2492	A	C5-N7-C8	-11.96	97.92	103.90
59	A5	1144	C	C6-N1-C2	-11.95	115.52	120.30
59	A5	3142	G	N1-C6-O6	-11.95	112.73	119.90
59	A5	2170	C	C5-C6-N1	11.94	126.97	121.00
59	A5	1782	C	N1-C2-O2	11.94	126.06	118.90
56	A8	22	C	C6-N1-C2	-11.93	115.53	120.30
58	B2	1108	C	N3-C2-O2	-11.92	113.56	121.90
59	A5	3671	C	C6-N1-C2	-11.92	115.53	120.30
59	A5	72	C	C6-N1-C2	-11.90	115.54	120.30
59	A5	2193	C	C6-N1-C2	-11.89	115.54	120.30
59	A5	41	U	C5-C6-N1	11.88	128.64	122.70
59	A5	1801	U	C5-C4-O4	11.88	133.03	125.90
58	B2	1182	C	N3-C2-O2	-11.87	113.59	121.90
59	A5	2511	C	C5-C6-N1	11.87	126.94	121.00
58	B2	1109	C	N3-C4-N4	-11.86	109.70	118.00
59	A5	2620	C	C6-N1-C2	-11.84	115.56	120.30
56	A8	20	C	N3-C2-O2	-11.83	113.62	121.90
59	A5	2782	A	O4'-C1'-N9	11.80	117.64	108.20
59	A5	2054	U	N3-C2-O2	-11.79	113.94	122.20
59	A5	2659	A	C2-N3-C4	11.78	116.49	110.60
59	A5	1719	G	O5'-P-OP1	-11.77	95.11	105.70
59	A5	2196	U	N3-C4-O4	-11.76	111.17	119.40
59	A5	1108	G	C2-N3-C4	11.76	117.78	111.90
59	A5	2135	C	N1-C2-O2	11.75	125.95	118.90
59	A5	1566	U	C2-N1-C1'	11.74	131.79	117.70
59	A5	300	A	C8-N9-C4	-11.74	101.10	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1872	A	N7-C8-N9	11.74	119.67	113.80
59	A5	2517	A	C8-N9-C4	-11.74	101.11	105.80
59	A5	755	A	N1-C6-N6	-11.72	111.57	118.60
59	A5	2798	C	C6-N1-C2	-11.70	115.62	120.30
59	A5	788	C	C5-C6-N1	11.69	126.84	121.00
59	A5	1715	G	N3-C4-N9	-11.69	118.99	126.00
59	A5	2223	C	C6-N1-C2	-11.68	115.63	120.30
59	A5	59	G	O5'-P-OP1	-11.68	95.19	105.70
59	A5	2220	C	N3-C2-O2	-11.68	113.73	121.90
59	A5	1521	G	O5'-P-OP1	-11.65	95.22	105.70
59	A5	58	G	C4-N9-C1'	-11.64	111.36	126.50
59	A5	3569	C	C5-C6-N1	11.64	126.82	121.00
59	A5	1366	G	C2-N3-C4	-11.63	106.08	111.90
59	A5	1357	C	O5'-P-OP2	-11.62	95.24	105.70
59	A5	1197	A	N1-C6-N6	-11.61	111.63	118.60
59	A5	2655	C	C5-C6-N1	11.60	126.80	121.00
59	A5	1183	U	C5-C6-N1	11.57	128.49	122.70
58	B2	1238	G	C8-N9-C4	-11.56	101.78	106.40
59	A5	2763	U	C2-N1-C1'	11.55	131.56	117.70
59	A5	301	U	N1-C2-O2	11.55	130.88	122.80
59	A5	2744	C	C5-C6-N1	11.54	126.77	121.00
59	A5	654	G	N7-C8-N9	11.54	118.87	113.10
59	A5	1790	A	C5-N7-C8	-11.54	98.13	103.90
59	A5	1689	G	C8-N9-C4	-11.53	101.79	106.40
59	A5	3153	G	O5'-P-OP2	-11.52	95.33	105.70
59	A5	1108	G	N7-C8-N9	11.51	118.86	113.10
58	B2	1083	C	C5-C6-N1	11.51	126.75	121.00
59	A5	1699	A	C2-N3-C4	11.51	116.36	110.60
59	A5	806	A	O5'-P-OP1	-11.50	95.35	105.70
59	A5	1013	G	N3-C2-N2	11.50	127.95	119.90
59	A5	747	U	O5'-P-OP1	11.49	124.49	110.70
59	A5	3480	U	N3-C2-O2	-11.49	114.16	122.20
59	A5	3479	C	C5-C6-N1	11.48	126.74	121.00
59	A5	1651	C	N1-C2-O2	11.48	125.78	118.90
59	A5	2778	G	N1-C6-O6	-11.47	113.02	119.90
59	A5	3728	A	C8-N9-C4	-11.47	101.21	105.80
59	A5	1892	C	C5-C6-N1	11.45	126.73	121.00
59	A5	808	G	C8-N9-C4	11.45	110.98	106.40
59	A5	1782	C	C6-N1-C2	-11.42	115.73	120.30
59	A5	350	C	C5-C6-N1	11.42	126.71	121.00
59	A5	3763	U	C5-C6-N1	11.42	128.41	122.70
59	A5	2750	A	N1-C6-N6	-11.40	111.76	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3727	A	C2-N3-C4	11.39	116.30	110.60
59	A5	3534	U	N1-C2-O2	11.39	130.77	122.80
59	A5	431	C	C6-N1-C2	-11.37	115.75	120.30
59	A5	440	U	C6-N1-C2	-11.37	114.18	121.00
58	B2	1817	C	C5-C6-N1	11.37	126.69	121.00
59	A5	802	G	C5-C6-N1	11.37	117.18	111.50
59	A5	2172	C	C5-C6-N1	11.36	126.68	121.00
59	A5	1086	C	C5-C6-N1	11.35	126.68	121.00
59	A5	3348	G	C8-N9-C4	11.35	110.94	106.40
59	A5	1143	U	C5-C6-N1	11.34	128.37	122.70
56	A8	34	C	N3-C2-O2	-11.34	113.96	121.90
59	A5	1644	C	C6-N1-C2	-11.33	115.77	120.30
59	A5	1782	C	C5-C6-N1	11.33	126.67	121.00
59	A5	52	A	O5'-P-OP1	-11.32	95.51	105.70
59	A5	438	G	N3-C4-C5	11.32	134.26	128.60
59	A5	839	A	P-O3'-C3'	11.31	133.27	119.70
59	A5	1172	G	O5'-P-OP2	-11.31	95.53	105.70
59	A5	1180	U	C6-N1-C2	-11.30	114.22	121.00
59	A5	446	C	O5'-P-OP1	-11.30	95.53	105.70
59	A5	663	U	C5-C4-O4	-11.30	119.12	125.90
59	A5	1137	G	C5-C6-O6	-11.29	121.83	128.60
59	A5	1111	C	C6-N1-C2	-11.28	115.79	120.30
59	A5	26	G	N3-C2-N2	11.28	127.79	119.90
59	A5	2096	C	O5'-P-OP1	-11.28	95.55	105.70
59	A5	1296	U	N3-C2-O2	-11.27	114.31	122.20
59	A5	2127	C	N1-C2-O2	11.27	125.66	118.90
59	A5	3138	G	C4-C5-N7	11.26	115.30	110.80
59	A5	3519	C	C5-C6-N1	11.26	126.63	121.00
59	A5	866	C	N3-C2-O2	-11.25	114.02	121.90
59	A5	839	A	C8-N9-C4	11.22	110.29	105.80
59	A5	2551	U	C5-C4-O4	-11.22	119.17	125.90
59	A5	1355	C	N3-C2-O2	-11.22	114.05	121.90
59	A5	2657	A	C5-N7-C8	-11.21	98.30	103.90
59	A5	1330	G	C8-N9-C4	-11.21	101.92	106.40
59	A5	1793	C	C6-N1-C2	-11.19	115.83	120.30
59	A5	57	G	C8-N9-C4	-11.18	101.93	106.40
59	A5	1736	G	C8-N9-C4	-11.18	101.93	106.40
59	A5	45	G	N1-C6-O6	-11.18	113.19	119.90
59	A5	825	C	N1-C2-O2	11.18	125.61	118.90
58	B2	1382	G	C4-N9-C1'	-11.17	111.97	126.50
59	A5	3934	C	C6-N1-C2	-11.14	115.84	120.30
59	A5	2514	U	C5-C6-N1	11.14	128.27	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2099	C	C6-N1-C2	-11.13	115.85	120.30
59	A5	1728	G	C4-C5-N7	11.12	115.25	110.80
59	A5	1318	A	C2-N3-C4	-11.12	105.04	110.60
59	A5	2096	C	C6-N1-C2	-11.12	115.85	120.30
59	A5	2641	C	C5-C6-N1	11.12	126.56	121.00
59	A5	2734	A	N9-C4-C5	-11.12	101.35	105.80
59	A5	1799	U	C2-N1-C1'	11.12	131.04	117.70
59	A5	1325	C	C2-N1-C1'	11.10	131.01	118.80
59	A5	1701	C	C6-N1-C2	-11.09	115.86	120.30
58	B2	1228	G	C4-C5-N7	11.08	115.23	110.80
59	A5	2153	C	N1-C2-O2	11.08	125.55	118.90
58	B2	313	C	C6-N1-C1'	-11.07	107.51	120.80
59	A5	26	G	C6-C5-N7	-11.07	123.76	130.40
59	A5	1153	G	C8-N9-C4	11.06	110.83	106.40
59	A5	1671	U	N3-C4-O4	-11.06	111.66	119.40
59	A5	2004	G	N7-C8-N9	11.06	118.63	113.10
59	A5	3597	C	C5-C6-N1	11.06	126.53	121.00
59	A5	445	C	N3-C4-C5	-11.05	117.48	121.90
59	A5	3417	C	C5-C6-N1	11.05	126.52	121.00
59	A5	2649	A	C8-N9-C4	-11.04	101.38	105.80
59	A5	2697	U	N3-C2-O2	-11.04	114.47	122.20
59	A5	3614	U	N3-C2-O2	-11.05	114.47	122.20
59	A5	1136	A	C5-C6-N1	11.02	123.21	117.70
59	A5	1595	G	C5-N7-C8	-11.02	98.79	104.30
59	A5	1690	U	N3-C2-O2	-11.01	114.49	122.20
59	A5	794	G	O5'-P-OP1	-11.01	95.79	105.70
58	B2	328	A	O5'-P-OP2	-11.01	95.80	105.70
59	A5	995	G	N1-C6-O6	-11.01	113.30	119.90
59	A5	868	A	C5-C6-N1	11.00	123.20	117.70
59	A5	90	G	N1-C6-O6	-11.00	113.30	119.90
59	A5	105	A	C4-C5-N7	11.00	116.20	110.70
59	A5	2785	C	C6-N1-C2	-10.98	115.91	120.30
59	A5	2541	C	C4-C5-C6	-10.97	111.92	117.40
59	A5	3135	G	N3-C4-N9	10.95	132.57	126.00
59	A5	3480	U	N3-C4-O4	-10.95	111.74	119.40
59	A5	3453	U	O5'-P-OP1	-10.94	95.86	105.70
59	A5	1388	C	C5-C6-N1	10.93	126.46	121.00
59	A5	2160	C	N1-C2-O2	10.93	125.46	118.90
56	A8	80	C	O5'-P-OP2	-10.92	95.87	105.70
59	A5	58	G	O4'-C1'-N9	10.92	116.94	108.20
59	A5	2569	U	C5-C6-N1	10.92	128.16	122.70
56	A8	45	G	O5'-P-OP2	-10.91	95.88	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	754	A	C5-C6-N1	10.88	123.14	117.70
56	A8	116	C	N1-C2-O2	10.86	125.42	118.90
59	A5	3591	A	N3-C4-C5	10.85	134.40	126.80
59	A5	2744	C	C6-N1-C2	-10.85	115.96	120.30
59	A5	3727	A	C5-C6-N1	10.84	123.12	117.70
59	A5	1799	U	N1-C2-O2	10.84	130.39	122.80
59	A5	2723	A	N1-C2-N3	-10.84	123.88	129.30
59	A5	2098	C	N1-C2-O2	10.83	125.40	118.90
59	A5	1076	A	C4-C5-N7	10.83	116.11	110.70
59	A5	2205	G	O5'-P-OP1	10.82	123.69	110.70
59	A5	3515	C	N3-C4-N4	-10.82	110.42	118.00
59	A5	1180	U	C5-C6-N1	10.82	128.11	122.70
59	A5	2096	C	N1-C2-O2	10.82	125.39	118.90
59	A5	46	C	N1-C2-O2	10.82	125.39	118.90
59	A5	3844	U	O4'-C1'-N1	10.82	116.85	108.20
59	A5	120	C	O4'-C1'-N1	10.81	116.85	108.20
59	A5	1690	U	C6-N1-C2	-10.81	114.51	121.00
59	A5	1699	A	C4-C5-N7	-10.81	105.29	110.70
59	A5	1960	C	N3-C2-O2	-10.79	114.35	121.90
59	A5	3591	A	P-O3'-C3'	10.79	132.65	119.70
59	A5	1687	U	C2-N3-C4	-10.79	120.53	127.00
58	B2	313	C	N3-C2-O2	-10.79	114.35	121.90
59	A5	1084	A	C4-C5-N7	10.79	116.09	110.70
59	A5	2532	U	C5-C6-N1	10.78	128.09	122.70
59	A5	45	G	C5-C6-O6	10.78	135.07	128.60
59	A5	1318	A	C4-C5-N7	10.76	116.08	110.70
59	A5	1204	C	C5-C6-N1	10.76	126.38	121.00
59	A5	1084	A	C5-C6-N6	-10.74	115.11	123.70
59	A5	3676	C	C2-N1-C1'	10.73	130.60	118.80
59	A5	2196	U	N3-C2-O2	-10.70	114.71	122.20
59	A5	1097	A	O5'-P-OP1	-10.70	96.07	105.70
59	A5	2708	C	C6-N1-C2	-10.69	116.02	120.30
59	A5	3149	U	N3-C2-O2	-10.70	114.71	122.20
59	A5	1384	C	C2-N3-C4	-10.69	114.56	119.90
59	A5	2734	A	N1-C6-N6	10.69	125.01	118.60
59	A5	3478	G	N3-C4-C5	-10.68	123.26	128.60
59	A5	1318	A	C5-N7-C8	-10.67	98.56	103.90
59	A5	1031	G	C4-C5-N7	10.67	115.07	110.80
59	A5	26	G	O4'-C1'-N9	10.66	116.73	108.20
58	B2	1169	C	C6-N1-C2	-10.66	116.04	120.30
58	B2	1083	C	C6-N1-C2	-10.65	116.04	120.30
59	A5	1125	A	C8-N9-C4	10.65	110.06	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1988	A	N1-C6-N6	-10.64	112.22	118.60
58	B2	1966	U	C5-C6-N1	10.63	128.02	122.70
59	A5	3729	A	C8-N9-C4	-10.63	101.55	105.80
59	A5	1311	U	N3-C2-O2	-10.63	114.76	122.20
59	A5	3350	U	C5-C6-N1	10.62	128.01	122.70
58	B2	988	G	C6-C5-N7	-10.60	124.04	130.40
59	A5	1018	C	O5'-P-OP1	-10.59	96.17	105.70
59	A5	1803	C	N3-C4-C5	10.59	126.14	121.90
59	A5	58	G	C8-N9-C1'	10.58	140.75	127.00
59	A5	120	C	C5-C4-N4	-10.57	112.80	120.20
59	A5	1010	A	O5'-P-OP1	-10.57	96.19	105.70
59	A5	2657	A	C2-N3-C4	-10.57	105.32	110.60
59	A5	809	G	OP2-P-O3'	10.56	128.43	105.20
59	A5	2217	A	N1-C6-N6	-10.56	112.26	118.60
59	A5	2749	G	C4-C5-N7	10.56	115.02	110.80
59	A5	817	C	N1-C2-O2	10.56	125.23	118.90
59	A5	1354	G	C4-C5-N7	10.54	115.02	110.80
59	A5	117	C	N1-C2-O2	10.54	125.22	118.90
59	A5	1715	G	N3-C4-C5	10.54	133.87	128.60
59	A5	1688	A	N7-C8-N9	10.53	119.06	113.80
59	A5	1755	U	C5-C6-N1	10.52	127.96	122.70
59	A5	1147	U	N1-C2-O2	10.51	130.16	122.80
59	A5	1374	C	O5'-P-OP1	-10.50	96.25	105.70
59	A5	3472	A	N3-C4-C5	-10.50	119.45	126.80
59	A5	3729	A	N7-C8-N9	10.50	119.05	113.80
59	A5	921	C	C6-N1-C2	-10.50	116.10	120.30
59	A5	791	C	N1-C2-O2	10.49	125.20	118.90
56	A8	107	U	OP1-P-OP2	10.49	135.33	119.60
59	A5	445	C	C2-N1-C1'	10.48	130.33	118.80
59	A5	1359	G	C5-C6-O6	-10.47	122.32	128.60
58	B2	86	C	N1-C2-O2	10.45	125.17	118.90
58	B2	1228	G	C6-C5-N7	-10.45	124.13	130.40
59	A5	362	A	C5-C6-N6	-10.45	115.34	123.70
59	A5	1731	G	N3-C2-N2	-10.45	112.59	119.90
59	A5	475	U	N1-C2-O2	10.44	130.11	122.80
59	A5	3347	G	N7-C8-N9	10.44	118.32	113.10
59	A5	3753	A	O4'-C1'-N9	10.44	116.55	108.20
59	A5	1018	C	N3-C4-N4	-10.44	110.69	118.00
59	A5	2789	U	N3-C2-O2	-10.43	114.90	122.20
59	A5	1869	C	N3-C2-O2	-10.43	114.60	121.90
59	A5	3877	G	C8-N9-C4	10.43	110.57	106.40
56	A8	36	A	N1-C2-N3	-10.42	124.09	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1824	C	N1-C2-O2	10.42	125.15	118.90
59	A5	1318	A	N1-C6-N6	10.41	124.85	118.60
56	A8	107	U	N3-C4-O4	10.41	126.69	119.40
59	A5	1076	A	C5-C6-N6	-10.40	115.38	123.70
59	A5	2518	A	N1-C6-N6	-10.39	112.37	118.60
59	A5	33	C	N1-C2-O2	10.39	125.13	118.90
59	A5	2508	C	N3-C4-N4	-10.38	110.73	118.00
59	A5	2801	U	N3-C2-O2	-10.38	114.93	122.20
59	A5	1718	G	N9-C4-C5	10.37	109.55	105.40
59	A5	1325	C	N3-C2-O2	-10.37	114.64	121.90
59	A5	3354	U	C2-N1-C1'	10.37	130.14	117.70
59	A5	1721	C	C5-C6-N1	10.36	126.18	121.00
59	A5	995	G	C5-C6-O6	10.36	134.81	128.60
59	A5	3260	G	N1-C2-N2	10.36	125.52	116.20
59	A5	3607	C	C6-N1-C2	-10.35	116.16	120.30
59	A5	3592	C	C6-N1-C2	-10.35	116.16	120.30
59	A5	1777	A	N9-C4-C5	-10.35	101.66	105.80
59	A5	1784	A	C6-C5-N7	-10.34	125.06	132.30
59	A5	2481	U	C2-N1-C1'	10.34	130.11	117.70
59	A5	3347	G	C5-N7-C8	-10.34	99.13	104.30
59	A5	1068	C	O5'-P-OP2	-10.33	96.40	105.70
59	A5	3515	C	N1-C2-O2	10.33	125.10	118.90
59	A5	1785	G	C8-N9-C4	10.33	110.53	106.40
59	A5	3347	G	C4-C5-N7	10.33	114.93	110.80
59	A5	1798	A	O4'-C1'-N9	10.33	116.46	108.20
59	A5	1995	U	C2-N1-C1'	10.32	130.09	117.70
59	A5	1175	C	C4-C5-C6	-10.32	112.24	117.40
59	A5	1607	A	C8-N9-C4	-10.32	101.67	105.80
59	A5	1366	G	N1-C6-O6	10.31	126.09	119.90
58	B2	1831	C	C6-N1-C2	-10.31	116.18	120.30
59	A5	2016	U	C5-C4-O4	-10.31	119.72	125.90
59	A5	1124	G	N3-C4-C5	10.30	133.75	128.60
59	A5	2016	U	O4'-C1'-N1	10.30	116.44	108.20
59	A5	1370	C	N1-C2-O2	10.30	125.08	118.90
59	A5	1687	U	C4-C5-C6	10.29	125.88	119.70
59	A5	2492	A	C4-C5-N7	10.29	115.85	110.70
59	A5	2694	G	C4-C5-N7	10.28	114.91	110.80
59	A5	1077	C	N3-C2-O2	-10.27	114.71	121.90
59	A5	2533	U	C6-N1-C2	-10.27	114.83	121.00
59	A5	797	A	C8-N9-C4	-10.27	101.69	105.80
59	A5	1066	A	N1-C6-N6	-10.25	112.45	118.60
59	A5	2197	A	C8-N9-C4	-10.24	101.70	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2781	G	C8-N9-C4	-10.24	102.31	106.40
59	A5	3623	G	N9-C4-C5	10.23	109.49	105.40
59	A5	2196	U	C5-C4-O4	10.23	132.04	125.90
59	A5	1108	G	C8-N9-C1'	-10.22	113.71	127.00
59	A5	2541	C	N1-C2-O2	10.22	125.03	118.90
59	A5	1384	C	C5-C6-N1	-10.22	115.89	121.00
59	A5	2554	U	N1-C2-O2	10.22	129.95	122.80
59	A5	1168	G	N3-C4-N9	10.22	132.13	126.00
59	A5	1124	G	C4-C5-N7	10.21	114.88	110.80
59	A5	2777	A	N1-C6-N6	-10.21	112.47	118.60
59	A5	122	C	N1-C2-O2	10.20	125.02	118.90
59	A5	1013	G	C5-C6-N1	10.21	116.60	111.50
59	A5	1089	U	C6-N1-C2	-10.21	114.88	121.00
59	A5	371	G	C5-C6-O6	-10.20	122.48	128.60
58	B2	622	C	C6-N1-C2	-10.19	116.22	120.30
59	A5	3471	A	N1-C2-N3	-10.19	124.20	129.30
55	A7	92	C	C5-C6-N1	10.19	126.09	121.00
59	A5	2744	C	N1-C2-O2	10.18	125.01	118.90
59	A5	1022	A	N7-C8-N9	10.17	118.89	113.80
59	A5	281	C	C5-C6-N1	10.17	126.08	121.00
59	A5	755	A	C8-N9-C4	-10.16	101.73	105.80
59	A5	2004	G	N3-C4-N9	10.16	132.10	126.00
59	A5	2783	C	N3-C2-O2	-10.16	114.79	121.90
59	A5	2557	C	C2-N3-C4	10.15	124.98	119.90
59	A5	2712	U	N3-C4-O4	-10.15	112.29	119.40
59	A5	1108	G	N3-C4-N9	10.15	132.09	126.00
58	B2	1109	C	N1-C2-O2	10.15	124.99	118.90
59	A5	2085	G	N3-C4-N9	-10.15	119.91	126.00
59	A5	3593	A	C2-N3-C4	10.14	115.67	110.60
59	A5	2758	U	O5'-P-OP1	-10.14	96.57	105.70
59	A5	1700	U	C5-C6-N1	10.14	127.77	122.70
59	A5	3947	C	C5-C6-N1	10.14	126.07	121.00
59	A5	1144	C	C2-N3-C4	10.13	124.97	119.90
59	A5	801	G	C5-C6-N1	10.13	116.57	111.50
59	A5	1316	U	C4-C5-C6	10.13	125.78	119.70
58	B2	988	G	C4-C5-N7	10.13	114.85	110.80
59	A5	350	C	C4-C5-C6	-10.13	112.34	117.40
59	A5	3614	U	C2-N1-C1'	10.13	129.85	117.70
59	A5	1970	G	C4-C5-N7	10.12	114.85	110.80
59	A5	1180	U	N3-C2-O2	-10.12	115.12	122.20
59	A5	1104	A	N1-C2-N3	-10.12	124.24	129.30
59	A5	3485	U	O5'-P-OP1	-10.11	96.60	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1643	G	C4-C5-N7	10.11	114.84	110.80
59	A5	3729	A	C5-N7-C8	-10.10	98.85	103.90
56	A8	5	C	C5-C6-N1	10.10	126.05	121.00
59	A5	1181	A	O4'-C1'-N9	10.10	116.28	108.20
56	A8	109	U	O5'-P-OP1	-10.09	96.61	105.70
59	A5	2096	C	C5-C6-N1	10.09	126.05	121.00
59	A5	777	C	N1-C2-O2	10.09	124.95	118.90
59	A5	2797	A	N1-C2-N3	-10.09	124.26	129.30
59	A5	289	C	N3-C2-O2	-10.08	114.84	121.90
59	A5	811	G	C8-N9-C1'	10.08	140.10	127.00
59	A5	3727	A	O5'-P-OP1	-10.07	96.64	105.70
59	A5	2764	A	O5'-P-OP1	-10.07	96.64	105.70
59	A5	3418	U	N3-C2-O2	-10.07	115.15	122.20
59	A5	2700	C	C4-C5-C6	-10.07	112.37	117.40
59	A5	3545	C	C4-C5-C6	-10.06	112.37	117.40
59	A5	1083	A	O5'-P-OP2	-10.06	96.65	105.70
59	A5	2559	C	C5-C6-N1	10.05	126.03	121.00
59	A5	868	A	C2-N3-C4	10.05	115.62	110.60
59	A5	1197	A	C4-C5-C6	-10.04	111.98	117.00
59	A5	1684	G	N1-C6-O6	-10.04	113.88	119.90
59	A5	1718	G	N3-C4-N9	10.03	132.02	126.00
59	A5	3592	C	N3-C2-O2	-10.03	114.88	121.90
59	A5	1031	G	O5'-P-OP2	-10.03	96.68	105.70
59	A5	1099	U	N3-C2-O2	-10.03	115.18	122.20
59	A5	1731	G	N1-C2-N2	10.03	125.22	116.20
59	A5	3363	G	N7-C8-N9	10.03	118.11	113.10
59	A5	3503	G	N1-C6-O6	-10.03	113.89	119.90
59	A5	1084	A	C6-C5-N7	-10.02	125.29	132.30
59	A5	1143	U	N3-C2-O2	-10.02	115.19	122.20
58	B2	1984	G	C6-C5-N7	-10.01	124.39	130.40
59	A5	1358	U	C5-C6-N1	-10.00	117.70	122.70
59	A5	26	G	C5-C6-N1	10.00	116.50	111.50
59	A5	1390	C	C2-N1-C1'	10.00	129.80	118.80
59	A5	289	C	N1-C2-O2	9.99	124.90	118.90
59	A5	2753	G	O5'-P-OP1	-9.99	96.70	105.70
59	A5	1204	C	C6-N1-C2	-9.99	116.30	120.30
4	CB	234	ARG	NE-CZ-NH2	9.99	125.30	120.30
59	A5	1296	U	N1-C2-O2	9.98	129.79	122.80
59	A5	863	U	N3-C2-O2	-9.98	115.22	122.20
59	A5	3714	U	C5-C4-O4	-9.98	119.91	125.90
59	A5	1083	A	N1-C6-N6	-9.97	112.62	118.60
56	A8	16	A	C5-C6-N1	9.97	122.68	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	97	U	C5-C6-N1	9.97	127.68	122.70
59	A5	2749	G	C6-C5-N7	-9.96	124.42	130.40
59	A5	3630	C	C5-C6-N1	9.96	125.98	121.00
59	A5	3727	A	N1-C6-N6	-9.96	112.62	118.60
59	A5	1313	A	C5-N7-C8	-9.96	98.92	103.90
59	A5	790	U	O5'-P-OP1	-9.94	96.75	105.70
59	A5	1337	U	O5'-P-OP2	-9.95	96.75	105.70
59	A5	1180	U	C2-N1-C1'	9.93	129.62	117.70
59	A5	2543	C	N1-C2-O2	9.93	124.86	118.90
59	A5	1644	C	C5-C6-N1	9.91	125.96	121.00
59	A5	2734	A	C5-C6-N6	-9.91	115.77	123.70
59	A5	1314	U	N3-C2-O2	-9.91	115.26	122.20
59	A5	1715	G	N3-C2-N2	-9.90	112.97	119.90
59	A5	3412	U	C5-C4-O4	9.90	131.84	125.90
59	A5	1699	A	C6-C5-N7	9.90	139.23	132.30
59	A5	3591	A	C4-C5-N7	9.90	115.65	110.70
59	A5	1995	U	C6-N1-C2	-9.89	115.06	121.00
59	A5	794	G	N7-C8-N9	9.88	118.04	113.10
59	A5	3542	C	C6-N1-C2	-9.88	116.35	120.30
59	A5	816	A	O5'-P-OP1	-9.87	96.81	105.70
59	A5	1758	U	O5'-P-OP2	-9.87	96.82	105.70
59	A5	3473	C	N1-C2-O2	9.87	124.82	118.90
59	A5	2770	C	N3-C2-O2	-9.86	115.00	121.90
59	A5	3480	U	N1-C2-O2	9.86	129.70	122.80
59	A5	3510	U	O5'-P-OP1	-9.85	96.83	105.70
59	A5	1736	G	N7-C8-N9	9.85	118.03	113.10
59	A5	2737	C	N3-C4-C5	9.84	125.84	121.90
56	A8	116	C	N3-C2-O2	-9.84	115.01	121.90
59	A5	362	A	O5'-P-OP1	-9.83	96.85	105.70
59	A5	3309	A	N7-C8-N9	9.83	118.72	113.80
59	A5	1753	G	C6-C5-N7	-9.83	124.50	130.40
59	A5	101	C	C4-C5-C6	-9.82	112.49	117.40
59	A5	420	A	O4'-C1'-N9	9.82	116.06	108.20
59	A5	425	A	O5'-P-OP2	-9.82	96.86	105.70
59	A5	1180	U	N1-C2-O2	9.82	129.67	122.80
59	A5	1738	U	C5-C6-N1	-9.81	117.79	122.70
59	A5	2756	C	N1-C2-O2	9.81	124.79	118.90
59	A5	1013	G	N3-C4-N9	9.81	131.89	126.00
59	A5	1093	C	O5'-P-OP2	-9.81	96.87	105.70
59	A5	3343	A	C4-C5-C6	-9.80	112.10	117.00
59	A5	776	A	C2-N3-C4	9.79	115.50	110.60
59	A5	3477	A	C5-N7-C8	-9.79	99.01	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2688	U	N3-C2-O2	-9.78	115.35	122.20
59	A5	3418	U	O4'-C1'-N1	9.78	116.02	108.20
59	A5	1123	C	C6-N1-C2	-9.78	116.39	120.30
59	A5	2127	C	N3-C2-O2	-9.77	115.06	121.90
58	B2	1211	C	C6-N1-C2	-9.76	116.39	120.30
59	A5	1595	G	N7-C8-N9	9.76	117.98	113.10
59	A5	2663	C	C4-C5-C6	-9.76	112.52	117.40
59	A5	2709	U	C5-C6-N1	9.76	127.58	122.70
59	A5	443	G	C4-C5-N7	9.75	114.70	110.80
58	B2	1176	C	N3-C2-O2	-9.75	115.08	121.90
59	A5	1867	A	N1-C6-N6	-9.74	112.75	118.60
59	A5	2516	U	C5-C6-N1	-9.74	117.83	122.70
59	A5	1095	G	C8-N9-C1'	-9.74	114.34	127.00
59	A5	1115	A	C4-C5-N7	9.74	115.57	110.70
59	A5	1595	G	C4-C5-N7	9.74	114.70	110.80
59	A5	1385	G	C6-C5-N7	-9.74	124.56	130.40
59	A5	3623	G	C5-C6-O6	9.73	134.44	128.60
59	A5	1675	G	C8-N9-C4	-9.73	102.51	106.40
59	A5	794	G	C8-N9-C4	-9.73	102.51	106.40
59	A5	1108	G	C6-C5-N7	-9.73	124.56	130.40
59	A5	777	C	O5'-P-OP1	9.72	122.37	110.70
59	A5	2170	C	C6-N1-C2	-9.72	116.41	120.30
59	A5	3676	C	O4'-C1'-N1	9.72	115.98	108.20
59	A5	1063	C	N3-C2-O2	-9.72	115.10	121.90
59	A5	1266	A	N1-C6-N6	-9.71	112.77	118.60
59	A5	1510	G	O5'-P-OP2	-9.72	96.95	105.70
59	A5	1163	G	C5-C6-O6	-9.71	122.77	128.60
59	A5	1872	A	C4-C5-N7	9.71	115.56	110.70
59	A5	1951	C	N1-C2-O2	9.71	124.73	118.90
59	A5	2097	U	C5-C6-N1	9.71	127.56	122.70
59	A5	3498	A	N7-C8-N9	9.71	118.66	113.80
59	A5	1975	C	C4-C5-C6	-9.70	112.55	117.40
59	A5	58	G	O5'-P-OP1	9.69	122.33	110.70
59	A5	431	C	C5-C6-N1	9.69	125.85	121.00
59	A5	2041	G	C4-C5-N7	9.69	114.68	110.80
59	A5	3877	G	N7-C8-N9	-9.69	108.25	113.10
59	A5	798	C	N3-C4-C5	9.69	125.77	121.90
59	A5	1689	G	C5-C6-O6	9.69	134.41	128.60
59	A5	2731	G	C4-C5-N7	9.68	114.67	110.80
59	A5	3351	A	C5-C6-N1	9.68	122.54	117.70
59	A5	41	U	C5-C4-O4	-9.67	120.10	125.90
59	A5	3221	A	N7-C8-N9	9.66	118.63	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1975	C	N1-C2-O2	9.66	124.70	118.90
59	A5	382	G	O5'-P-OP2	-9.66	97.01	105.70
59	A5	785	A	N1-C6-N6	-9.65	112.81	118.60
59	A5	1192	A	C8-N9-C4	9.65	109.66	105.80
59	A5	3882	C	C4-C5-C6	-9.65	112.58	117.40
56	A8	110	C	O5'-P-OP1	-9.65	97.02	105.70
59	A5	1073	C	C5-C4-N4	9.64	126.95	120.20
59	A5	2739	A	O5'-P-OP2	-9.63	97.03	105.70
59	A5	1020	A	C5-C6-N1	9.63	122.52	117.70
59	A5	3292	C	C4-C5-C6	-9.62	112.59	117.40
59	A5	1782	C	C5-C4-N4	-9.62	113.47	120.20
59	A5	33	C	C2-N3-C4	9.61	124.70	119.90
59	A5	1003	C	N1-C2-O2	9.61	124.66	118.90
59	A5	1079	U	O5'-P-OP2	-9.61	97.05	105.70
59	A5	2767	U	N3-C2-O2	-9.61	115.48	122.20
59	A5	225	U	N1-C2-O2	9.60	129.52	122.80
59	A5	1367	A	P-O3'-C3'	9.60	131.22	119.70
59	A5	1566	U	O5'-P-OP2	-9.60	97.06	105.70
59	A5	2521	A	C4-C5-N7	9.60	115.50	110.70
59	A5	3496	U	C5-C4-O4	-9.59	120.15	125.90
59	A5	441	A	N1-C6-N6	9.59	124.35	118.60
59	A5	866	C	C6-N1-C2	-9.59	116.47	120.30
59	A5	2734	A	C4-C5-N7	9.59	115.49	110.70
59	A5	2740	C	C5-C6-N1	9.59	125.79	121.00
59	A5	1040	C	C6-N1-C2	-9.58	116.47	120.30
59	A5	2792	G	N1-C6-O6	-9.58	114.15	119.90
59	A5	1103	U	C5-C6-N1	9.58	127.49	122.70
59	A5	2541	C	C5-C6-N1	9.58	125.79	121.00
59	A5	3138	G	C2-N3-C4	9.57	116.69	111.90
59	A5	2542	C	N3-C2-O2	-9.57	115.20	121.90
59	A5	375	C	N1-C2-O2	9.57	124.64	118.90
59	A5	552	U	N3-C2-O2	-9.57	115.50	122.20
59	A5	854	U	C5-C6-N1	9.56	127.48	122.70
59	A5	774	A	OP2-P-O3'	9.56	126.24	105.20
59	A5	1095	G	N3-C4-N9	9.56	131.74	126.00
59	A5	1886	C	N1-C2-O2	9.56	124.64	118.90
59	A5	28	C	C6-N1-C2	-9.56	116.48	120.30
59	A5	1643	G	C6-C5-N7	-9.56	124.66	130.40
59	A5	3491	C	C5-C6-N1	9.56	125.78	121.00
59	A5	1135	U	C5-C6-N1	9.56	127.48	122.70
59	A5	1023	C	C5-C6-N1	9.55	125.78	121.00
59	A5	1665	C	C5-C6-N1	9.55	125.77	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2657	A	N3-C4-C5	9.54	133.48	126.80
58	B2	1087	C	N1-C2-O2	9.54	124.63	118.90
59	A5	2784	C	N3-C2-O2	-9.54	115.22	121.90
59	A5	1330	G	N7-C8-N9	9.54	117.87	113.10
59	A5	2783	C	N3-C4-C5	-9.54	118.08	121.90
59	A5	3403	G	C5-C6-N1	9.54	116.27	111.50
56	A8	21	U	C5-C4-O4	-9.54	120.18	125.90
58	B2	1109	C	C5-C4-N4	9.53	126.87	120.20
59	A5	784	G	N3-C2-N2	-9.53	113.23	119.90
59	A5	2515	C	C4-C5-C6	-9.53	112.64	117.40
58	B2	1967	C	C5-C6-N1	9.53	125.76	121.00
59	A5	1531	U	N3-C4-C5	9.53	120.31	114.60
59	A5	1554	C	N1-C2-O2	9.53	124.62	118.90
59	A5	1736	G	C5-N7-C8	-9.53	99.54	104.30
59	A5	2526	A	N1-C2-N3	-9.53	124.54	129.30
59	A5	3591	A	N7-C8-N9	9.53	118.56	113.80
59	A5	3934	C	C5-C6-N1	9.53	125.76	121.00
59	A5	3614	U	N1-C2-O2	9.52	129.47	122.80
59	A5	2515	C	N3-C4-C5	9.51	125.70	121.90
59	A5	2790	G	C6-C5-N7	9.51	136.10	130.40
59	A5	3591	A	O4'-C1'-N9	9.50	115.80	108.20
59	A5	2234	C	C5-C6-N1	9.50	125.75	121.00
59	A5	1116	G	O5'-P-OP2	-9.50	97.15	105.70
59	A5	1158	C	N1-C2-N3	9.49	125.84	119.20
59	A5	1089	U	C2-N3-C4	9.49	132.69	127.00
59	A5	2727	U	C2-N1-C1'	9.49	129.08	117.70
59	A5	3403	G	C2-N3-C4	9.48	116.64	111.90
58	B2	1831	C	C5-C6-N1	9.47	125.73	121.00
59	A5	1595	G	C6-C5-N7	-9.47	124.72	130.40
59	A5	2781	G	N9-C4-C5	9.47	109.19	105.40
59	A5	3478	G	OP1-P-OP2	-9.46	105.40	119.60
59	A5	1330	G	C5-N7-C8	-9.46	99.57	104.30
59	A5	2216	A	N1-C6-N6	-9.46	112.92	118.60
59	A5	2164	G	C5-C6-O6	-9.46	122.92	128.60
59	A5	2232	U	O5'-P-OP1	-9.46	97.19	105.70
59	A5	3611	C	C6-N1-C2	-9.46	116.52	120.30
59	A5	3514	C	C2-N1-C1'	9.45	129.20	118.80
58	B2	1193	C	C6-N1-C2	-9.45	116.52	120.30
59	A5	1801	U	C6-N1-C2	-9.45	115.33	121.00
59	A5	3473	C	N3-C2-O2	-9.45	115.29	121.90
59	A5	866	C	C2-N1-C1'	9.44	129.19	118.80
59	A5	789	G	C2-N3-C4	9.44	116.62	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1063	C	N3-C4-C5	-9.44	118.12	121.90
59	A5	1313	A	C2-N3-C4	-9.44	105.88	110.60
59	A5	462	C	N1-C2-O2	9.43	124.56	118.90
59	A5	1671	U	C5-C6-N1	9.43	127.42	122.70
59	A5	1358	U	C5-C4-O4	9.43	131.56	125.90
59	A5	1753	G	C4-C5-N7	9.43	114.57	110.80
59	A5	3342	C	N3-C4-C5	-9.43	118.13	121.90
59	A5	1776	U	O5'-P-OP2	-9.42	97.22	105.70
59	A5	2183	A	N1-C2-N3	-9.42	124.59	129.30
59	A5	1516	A	O4'-C1'-N9	-9.41	100.67	108.20
59	A5	2218	G	O5'-P-OP1	-9.41	97.23	105.70
59	A5	1099	U	N1-C2-O2	9.41	129.39	122.80
59	A5	3400	U	O5'-P-OP2	-9.41	97.23	105.70
59	A5	2002	C	C6-N1-C2	-9.40	116.54	120.30
59	A5	1136	A	C5-N7-C8	9.40	108.60	103.90
59	A5	3413	C	C4-C5-C6	-9.40	112.70	117.40
59	A5	3418	U	N1-C2-O2	9.40	129.38	122.80
59	A5	2790	G	C5-C6-O6	9.40	134.24	128.60
59	A5	2153	C	N3-C2-O2	-9.39	115.33	121.90
59	A5	2529	G	N3-C4-C5	-9.39	123.90	128.60
59	A5	2691	A	C8-N9-C4	-9.38	102.05	105.80
59	A5	2706	U	N3-C2-O2	-9.38	115.63	122.20
59	A5	2738	C	N3-C2-O2	-9.38	115.33	121.90
59	A5	2641	C	C6-N1-C2	-9.37	116.55	120.30
59	A5	3164	C	C5-C6-N1	9.37	125.69	121.00
59	A5	1013	G	N9-C4-C5	-9.37	101.65	105.40
59	A5	1176	A	C6-N1-C2	9.37	124.22	118.60
59	A5	1389	C	N3-C2-O2	-9.37	115.34	121.90
59	A5	3512	U	N3-C2-O2	-9.37	115.64	122.20
58	B2	883	C	C6-N1-C2	-9.37	116.55	120.30
59	A5	1157	C	C6-N1-C2	-9.36	116.56	120.30
59	A5	2728	C	N1-C2-O2	9.36	124.52	118.90
58	B2	1176	C	N1-C2-O2	9.36	124.52	118.90
58	B2	1066	A	N1-C2-N3	-9.35	124.62	129.30
59	A5	2135	C	N3-C2-O2	-9.35	115.36	121.90
59	A5	2518	A	O5'-P-OP1	-9.35	97.29	105.70
59	A5	375	C	N3-C2-O2	-9.34	115.36	121.90
59	A5	788	C	N3-C4-C5	-9.33	118.17	121.90
59	A5	347	A	O5'-P-OP2	-9.33	97.31	105.70
59	A5	3142	G	N3-C4-C5	-9.32	123.94	128.60
58	B2	1825	A	C8-N9-C4	-9.32	102.07	105.80
59	A5	2649	A	C2-N3-C4	-9.32	105.94	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3413	C	C5-C6-N1	9.32	125.66	121.00
58	B2	1037	C	C6-N1-C2	-9.32	116.57	120.30
59	A5	817	C	C2-N3-C4	9.32	124.56	119.90
59	A5	2568	U	C4-C5-C6	-9.32	114.11	119.70
59	A5	3722	C	C6-N1-C2	-9.32	116.57	120.30
59	A5	1316	U	N1-C2-O2	9.31	129.32	122.80
59	A5	1715	G	C5-N7-C8	-9.31	99.64	104.30
59	A5	2243	G	N1-C6-O6	-9.31	114.31	119.90
59	A5	3261	U	C5-C6-N1	9.31	127.36	122.70
59	A5	2657	A	N3-C4-N9	-9.31	119.95	127.40
59	A5	549	A	C5-N7-C8	-9.31	99.25	103.90
59	A5	1118	C	C5-C6-N1	9.31	125.65	121.00
59	A5	1162	A	C4-C5-N7	9.30	115.35	110.70
59	A5	1319	A	N9-C4-C5	-9.30	102.08	105.80
59	A5	2155	A	C5-N7-C8	-9.30	99.25	103.90
59	A5	3882	C	C5-C6-N1	9.29	125.65	121.00
59	A5	3759	G	N1-C6-O6	-9.29	114.33	119.90
59	A5	458	A	C5-C6-N1	9.28	122.34	117.70
59	A5	1168	G	N3-C4-C5	-9.28	123.96	128.60
59	A5	3514	C	N1-C2-O2	9.28	124.47	118.90
59	A5	2098	C	N3-C2-O2	-9.28	115.41	121.90
59	A5	53	A	C8-N9-C4	-9.27	102.09	105.80
59	A5	1388	C	C4-C5-C6	-9.27	112.77	117.40
59	A5	3716	C	C5-C6-N1	9.27	125.64	121.00
59	A5	3393	U	C2-N1-C1'	9.27	128.82	117.70
59	A5	546	G	C5-N7-C8	-9.27	99.67	104.30
59	A5	1083	A	N1-C2-N3	-9.27	124.67	129.30
59	A5	825	C	C5-C6-N1	9.26	125.63	121.00
59	A5	2004	G	C4-C5-N7	9.26	114.50	110.80
59	A5	2543	C	N3-C2-O2	-9.26	115.42	121.90
59	A5	657	G	C5-C6-O6	9.25	134.15	128.60
56	A8	58	C	N1-C2-O2	9.25	124.45	118.90
59	A5	3675	A	C8-N9-C4	-9.24	102.10	105.80
59	A5	2581	U	O5'-P-OP1	-9.24	97.38	105.70
58	B2	38	C	N1-C2-O2	9.24	124.44	118.90
59	A5	2223	C	C5-C6-N1	9.24	125.62	121.00
59	A5	3756	A	C5-N7-C8	9.23	108.52	103.90
59	A5	3932	U	N1-C2-O2	9.23	129.26	122.80
59	A5	3347	G	C8-N9-C4	-9.23	102.71	106.40
59	A5	1156	U	N1-C2-O2	9.22	129.25	122.80
59	A5	380	G	N3-C4-C5	-9.21	123.99	128.60
59	A5	760	G	N3-C4-N9	9.21	131.53	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1886	C	C6-N1-C2	-9.21	116.62	120.30
59	A5	2794	U	N1-C2-O2	9.21	129.25	122.80
59	A5	2743	C	C5-C6-N1	9.21	125.61	121.00
59	A5	3499	G	O5'-P-OP1	9.20	121.74	110.70
58	B2	1382	G	C8-N9-C4	9.20	110.08	106.40
56	A8	27	C	N1-C2-O2	9.20	124.42	118.90
59	A5	2508	C	N3-C2-O2	-9.20	115.46	121.90
58	B2	550	C	C2-N1-C1'	9.19	128.91	118.80
59	A5	2763	U	C6-N1-C1'	-9.19	108.33	121.20
59	A5	1156	U	N3-C2-O2	-9.19	115.77	122.20
59	A5	1181	A	C2-N3-C4	9.19	115.19	110.60
59	A5	2507	C	N3-C2-O2	-9.19	115.47	121.90
59	A5	1775	C	N1-C2-O2	9.19	124.41	118.90
59	A5	2185	U	N3-C2-O2	-9.19	115.77	122.20
59	A5	2773	G	O5'-P-OP1	-9.19	97.43	105.70
56	A8	101	A	C4-C5-C6	-9.19	112.41	117.00
37	Cr	36	LEU	CA-CB-CG	9.18	136.42	115.30
59	A5	787	C	C6-N1-C2	-9.18	116.63	120.30
59	A5	1023	C	C4-C5-C6	-9.18	112.81	117.40
59	A5	2684	C	C6-N1-C1'	-9.18	109.78	120.80
59	A5	2160	C	C6-N1-C2	-9.17	116.63	120.30
59	A5	2795	U	O5'-P-OP1	-9.16	97.45	105.70
59	A5	2798	C	O5'-P-OP1	-9.16	97.45	105.70
58	B2	1111	U	N1-C2-O2	9.16	129.21	122.80
58	B2	1214	A	N1-C6-N6	-9.16	113.11	118.60
59	A5	2778	G	N3-C2-N2	9.15	126.31	119.90
59	A5	3629	U	C5-C6-N1	9.15	127.27	122.70
59	A5	1689	G	C5-C6-N1	9.15	116.07	111.50
59	A5	1790	A	C4-C5-N7	9.14	115.27	110.70
59	A5	1799	U	C6-N1-C2	-9.14	115.51	121.00
59	A5	2655	C	C6-N1-C2	-9.14	116.64	120.30
59	A5	2790	G	O5'-P-OP2	-9.14	97.47	105.70
59	A5	3728	A	N1-C6-N6	9.14	124.08	118.60
59	A5	1095	G	C4-C5-N7	9.14	114.45	110.80
59	A5	2771	G	C5-N7-C8	-9.14	99.73	104.30
59	A5	2533	U	C5-C6-N1	9.13	127.27	122.70
59	A5	984	U	N3-C2-O2	-9.13	115.81	122.20
58	B2	1991	C	C6-N1-C2	-9.13	116.65	120.30
59	A5	1951	C	N3-C2-O2	-9.12	115.51	121.90
59	A5	3730	G	N3-C4-C5	-9.12	124.04	128.60
59	A5	1089	U	N3-C2-O2	-9.12	115.82	122.20
59	A5	3411	C	C6-N1-C2	-9.12	116.65	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1205	U	C5-C6-N1	9.11	127.26	122.70
59	A5	1699	A	N9-C4-C5	9.11	109.44	105.80
56	A8	58	C	N3-C2-O2	-9.11	115.52	121.90
59	A5	59	G	OP1-P-OP2	-9.11	105.94	119.60
59	A5	809	G	C5-C6-N1	9.11	116.05	111.50
59	A5	2750	A	N1-C2-N3	-9.11	124.75	129.30
59	A5	3472	A	C6-N1-C2	-9.11	113.14	118.60
67	CV	68	GLY	C-N-CA	9.11	144.47	121.70
59	A5	3487	A	C5-N7-C8	-9.10	99.35	103.90
59	A5	3711	G	N3-C2-N2	9.10	126.27	119.90
59	A5	1799	U	C5-C4-O4	-9.10	120.44	125.90
59	A5	2715	C	C6-N1-C2	-9.09	116.66	120.30
59	A5	26	G	C4-N9-C1'	9.09	138.31	126.50
59	A5	801	G	O5'-P-OP1	-9.09	97.52	105.70
59	A5	549	A	N1-C6-N6	9.09	124.05	118.60
59	A5	64	A	N1-C2-N3	-9.08	124.76	129.30
59	A5	1621	A	C4-C5-N7	9.08	115.24	110.70
56	A8	5	C	C6-N1-C2	-9.08	116.67	120.30
55	A7	78	C	C5-C6-N1	9.07	125.53	121.00
59	A5	3670	G	N7-C8-N9	9.06	117.63	113.10
59	A5	2170	C	O5'-P-OP1	-9.06	97.55	105.70
58	B2	1984	G	C4-C5-N7	9.06	114.42	110.80
59	A5	2205	G	C5-C6-O6	-9.06	123.17	128.60
59	A5	1110	G	C5-C6-N1	9.06	116.03	111.50
59	A5	3677	U	C6-N1-C1'	-9.06	108.52	121.20
59	A5	1076	A	N1-C6-N6	9.06	124.03	118.60
59	A5	1095	G	N9-C4-C5	-9.05	101.78	105.40
59	A5	1072	U	C5-C6-N1	9.05	127.23	122.70
59	A5	3756	A	O5'-P-OP1	9.05	121.56	110.70
59	A5	1083	A	C4-C5-C6	-9.05	112.47	117.00
59	A5	1375	G	C4-C5-N7	9.05	114.42	110.80
59	A5	1013	G	N1-C2-N2	-9.04	108.06	116.20
59	A5	1563	A	N9-C4-C5	-9.04	102.18	105.80
59	A5	774	A	OP1-P-O3'	-9.04	85.32	105.20
56	A8	112	C	C6-N1-C2	-9.04	116.69	120.30
59	A5	2512	U	N1-C2-O2	9.04	129.13	122.80
59	A5	93	G	C4-C5-N7	9.03	114.41	110.80
58	B2	1228	G	C5-N7-C8	-9.03	99.79	104.30
58	B2	632	G	C5-C6-O6	-9.02	123.19	128.60
59	A5	2219	U	N3-C4-C5	-9.02	109.19	114.60
59	A5	2491	C	N1-C2-O2	9.02	124.31	118.90
59	A5	3348	G	N9-C4-C5	-9.02	101.79	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1335	C	C6-N1-C2	-9.02	116.69	120.30
58	B2	1408	A	C8-N9-C4	9.01	109.41	105.80
59	A5	2054	U	C2-N1-C1'	9.01	128.51	117.70
59	A5	2671	C	N1-C2-N3	9.01	125.50	119.20
59	A5	3843	U	N1-C2-O2	9.00	129.10	122.80
59	A5	3351	A	N1-C2-N3	-9.00	124.80	129.30
59	A5	1326	A	C5-C6-N1	8.99	122.20	117.70
59	A5	2516	U	C4-C5-C6	8.99	125.10	119.70
59	A5	1786	G	N1-C6-O6	-8.99	114.51	119.90
59	A5	831	A	C5-C6-N6	-8.99	116.51	123.70
58	B2	355	G	C5-N7-C8	-8.99	99.81	104.30
58	B2	932	U	C2-N1-C1'	8.99	128.48	117.70
58	B2	1077	C	C6-N1-C2	-8.98	116.71	120.30
59	A5	1008	A	O5'-P-OP2	-8.98	97.61	105.70
59	A5	2002	C	N3-C2-O2	-8.98	115.61	121.90
59	A5	1197	A	C6-C5-N7	8.98	138.59	132.30
59	A5	1702	G	N3-C4-N9	-8.98	120.61	126.00
59	A5	3672	U	C5-C6-N1	8.98	127.19	122.70
59	A5	3198	C	N3-C2-O2	-8.97	115.62	121.90
71	AT	47	PRO	CA-N-CD	-8.97	98.94	111.50
58	B2	959	U	N3-C2-O2	-8.97	115.92	122.20
59	A5	2041	G	N9-C4-C5	-8.97	101.81	105.40
59	A5	2995	U	N3-C2-O2	-8.97	115.92	122.20
59	A5	2127	C	C6-N1-C2	-8.97	116.71	120.30
59	A5	1611	G	N3-C2-N2	-8.96	113.63	119.90
58	B2	1193	C	C5-C6-N1	8.96	125.48	121.00
59	A5	3711	G	N3-C4-C5	-8.96	124.12	128.60
59	A5	1095	G	C4-N9-C1'	8.95	138.14	126.50
59	A5	1131	C	N3-C4-C5	8.95	125.48	121.90
59	A5	3711	G	C6-C5-N7	-8.95	125.03	130.40
59	A5	3714	U	C6-N1-C1'	-8.95	108.67	121.20
59	A5	1185	U	C5'-C4'-C3'	8.95	130.32	116.00
59	A5	2780	A	C5-C6-N1	8.95	122.17	117.70
59	A5	3176	C	C6-N1-C2	-8.95	116.72	120.30
59	A5	1127	C	N1-C2-O2	8.94	124.27	118.90
59	A5	1160	U	O4'-C1'-N1	8.94	115.35	108.20
59	A5	1804	A	N1-C6-N6	-8.94	113.24	118.60
59	A5	3393	U	C5-C6-N1	8.94	127.17	122.70
59	A5	1383	A	C4-C5-N7	8.93	115.17	110.70
59	A5	1801	U	N1-C2-N3	8.93	120.26	114.90
59	A5	3472	A	C4-C5-N7	-8.93	106.23	110.70
59	A5	3515	C	C5-C4-N4	8.93	126.45	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	107	U	C6-N1-C2	-8.92	115.64	121.00
58	B2	1924	C	N1-C2-O2	8.92	124.25	118.90
56	A8	101	A	C5-C6-N1	8.91	122.16	117.70
58	B2	1076	U	C5-C6-N1	8.91	127.16	122.70
59	A5	3711	G	N9-C4-C5	-8.91	101.83	105.40
59	A5	999	U	C5-C6-N1	8.91	127.16	122.70
59	A5	2717	C	C6-N1-C2	-8.91	116.74	120.30
59	A5	1149	C	C6-N1-C2	-8.91	116.74	120.30
59	A5	3616	G	N3-C4-N9	8.91	131.34	126.00
59	A5	2573	C	C5-C4-N4	-8.91	113.97	120.20
59	A5	789	G	N9-C4-C5	8.90	108.96	105.40
59	A5	3592	C	C2-N1-C1'	8.90	128.59	118.80
59	A5	3714	U	N1-C2-O2	8.90	129.03	122.80
59	A5	1002	C	N1-C2-O2	8.90	124.24	118.90
59	A5	1401	C	C5-C6-N1	8.90	125.45	121.00
59	A5	97	C	N3-C4-C5	8.89	125.46	121.90
59	A5	1555	G	C5-C6-N1	8.89	115.95	111.50
59	A5	296	C	C4-C5-C6	-8.89	112.95	117.40
59	A5	1738	U	C4-C5-C6	8.88	125.03	119.70
59	A5	3364	C	C5-C6-N1	8.88	125.44	121.00
59	A5	2568	U	O5'-P-OP1	-8.88	97.71	105.70
59	A5	1995	U	N3-C2-O2	-8.88	115.99	122.20
59	A5	752	U	OP1-P-O3'	8.88	124.73	105.20
59	A5	1782	C	N3-C4-N4	8.87	124.21	118.00
59	A5	3133	A	C5-C6-N1	8.87	122.14	117.70
59	A5	3497	G	N9-C4-C5	-8.87	101.85	105.40
59	A5	812	U	O5'-P-OP1	-8.87	97.72	105.70
59	A5	1738	U	N3-C4-O4	-8.86	113.20	119.40
59	A5	1382	U	OP1-P-O3'	8.86	124.69	105.20
59	A5	2749	G	N7-C8-N9	8.86	117.53	113.10
58	B2	1788	C	N1-C2-O2	8.86	124.21	118.90
59	A5	1678	C	C5-C6-N1	8.86	125.43	121.00
59	A5	1358	U	N1-C2-O2	8.85	129.00	122.80
59	A5	1070	G	N9-C4-C5	-8.85	101.86	105.40
56	A8	33	U	C5-C4-O4	-8.85	120.59	125.90
59	A5	3673	G	C4-C5-N7	8.85	114.34	110.80
59	A5	475	U	N3-C2-O2	-8.85	116.01	122.20
59	A5	997	U	O5'-P-OP2	-8.84	97.74	105.70
59	A5	3496	U	N3-C4-O4	8.84	125.59	119.40
59	A5	3193	C	N3-C2-O2	-8.84	115.71	121.90
58	B2	550	C	N1-C2-O2	8.84	124.20	118.90
59	A5	3515	C	N3-C2-O2	-8.84	115.72	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	225	U	C2-N1-C1'	8.83	128.30	117.70
59	A5	2164	G	C4-C5-N7	8.83	114.33	110.80
56	A8	101	A	N9-C4-C5	-8.83	102.27	105.80
59	A5	1093	C	C5-C6-N1	8.83	125.41	121.00
59	A5	3162	C	N1-C2-O2	8.82	124.19	118.90
59	A5	2701	G	C5-N7-C8	8.82	108.71	104.30
59	A5	3504	G	N1-C6-O6	-8.82	114.61	119.90
59	A5	747	U	O5'-P-OP2	-8.82	97.76	105.70
59	A5	1076	A	N9-C4-C5	-8.81	102.28	105.80
59	A5	2641	C	N1-C2-O2	8.81	124.19	118.90
59	A5	2624	G	C4-C5-N7	8.81	114.32	110.80
58	B2	1184	U	C6-N1-C2	-8.80	115.72	121.00
59	A5	84	U	C5-C6-N1	8.80	127.10	122.70
59	A5	1063	C	C6-N1-C2	-8.80	116.78	120.30
59	A5	839	A	N7-C8-N9	-8.80	109.40	113.80
59	A5	3606	G	N3-C4-C5	-8.80	124.20	128.60
59	A5	2537	A	N1-C6-N6	-8.79	113.33	118.60
59	A5	2572	G	O5'-P-OP1	-8.79	97.79	105.70
59	A5	103	A	C8-N9-C4	-8.79	102.28	105.80
58	B2	355	G	C2-N3-C4	-8.79	107.51	111.90
59	A5	1069	A	C2-N3-C4	8.79	114.99	110.60
59	A5	1784	A	C8-N9-C4	8.79	109.31	105.80
59	A5	1398	C	C6-N1-C2	-8.78	116.79	120.30
59	A5	3843	U	C4-C5-C6	-8.78	114.43	119.70
59	A5	29	U	N3-C2-O2	-8.78	116.06	122.20
59	A5	910	C	C5-C6-N1	8.77	125.39	121.00
59	A5	1413	C	C5-C6-N1	8.77	125.38	121.00
59	A5	1995	U	C5-C6-N1	8.77	127.08	122.70
59	A5	3606	G	C2-N3-C4	8.76	116.28	111.90
59	A5	3412	U	O5'-P-OP1	-8.76	97.82	105.70
59	A5	3937	U	N1-C2-O2	8.76	128.93	122.80
59	A5	2720	U	N3-C2-O2	-8.76	116.07	122.20
59	A5	3198	C	N1-C2-O2	8.76	124.15	118.90
58	B2	1184	U	C5-C6-N1	8.75	127.08	122.70
59	A5	817	C	C5-C4-N4	8.75	126.32	120.20
59	A5	1154	U	N3-C4-O4	-8.75	113.28	119.40
59	A5	2750	A	P-O3'-C3'	8.75	130.20	119.70
59	A5	3402	C	N3-C4-N4	-8.75	111.88	118.00
59	A5	2753	G	N9-C4-C5	-8.75	101.90	105.40
59	A5	3593	A	C5-C6-N1	8.74	122.07	117.70
59	A5	3918	A	O4'-C1'-N9	8.74	115.19	108.20
59	A5	330	C	C6-N1-C2	-8.74	116.80	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1207	G	N3-C4-C5	-8.74	124.23	128.60
59	A5	1070	G	C8-N9-C4	8.74	109.89	106.40
59	A5	1777	A	C5-C6-N6	-8.73	116.71	123.70
59	A5	283	A	N3-C4-C5	-8.73	120.69	126.80
59	A5	2728	C	N3-C2-O2	-8.73	115.79	121.90
58	B2	1030	C	O5'-P-OP1	-8.73	97.84	105.70
59	A5	545	U	N3-C2-O2	-8.73	116.09	122.20
59	A5	1750	G	O5'-P-OP2	-8.73	97.85	105.70
59	A5	1130	U	N3-C4-O4	-8.72	113.29	119.40
59	A5	546	G	C4-C5-N7	8.72	114.29	110.80
59	A5	2189	U	O5'-P-OP1	-8.72	97.85	105.70
59	A5	3934	C	N1-C2-O2	8.72	124.13	118.90
33	CP	136	ILE	CG1-CB-CG2	-8.72	92.22	111.40
59	A5	1013	G	C8-N9-C4	8.72	109.89	106.40
59	A5	3114	C	N1-C2-O2	8.72	124.13	118.90
59	A5	3623	G	N1-C6-O6	-8.72	114.67	119.90
59	A5	285	G	N3-C2-N2	8.72	126.00	119.90
59	A5	2751	A	N1-C6-N6	-8.72	113.37	118.60
59	A5	1886	C	N3-C2-O2	-8.71	115.80	121.90
59	A5	128	C	C6-N1-C2	-8.71	116.81	120.30
59	A5	1784	A	C5-N7-C8	-8.71	99.54	103.90
58	B2	366	C	C6-N1-C2	-8.71	116.82	120.30
59	A5	1316	U	C2-N1-C1'	8.71	128.15	117.70
59	A5	296	C	N1-C2-O2	8.71	124.12	118.90
59	A5	3348	G	N7-C8-N9	-8.71	108.75	113.10
59	A5	2537	A	C4-C5-C6	-8.70	112.65	117.00
59	A5	163	A	C4-C5-C6	-8.70	112.65	117.00
59	A5	1268	A	N1-C6-N6	-8.70	113.38	118.60
59	A5	3152	G	O5'-P-OP2	-8.70	97.87	105.70
59	A5	3338	U	C6-N1-C2	-8.70	115.78	121.00
59	A5	1323	C	C5-C6-N1	8.70	125.35	121.00
59	A5	2783	C	C5-C6-N1	8.70	125.35	121.00
59	A5	2754	G	C4-N9-C1'	8.69	137.80	126.50
59	A5	3851	U	C5-C6-N1	8.69	127.05	122.70
59	A5	2643	C	C6-N1-C2	-8.69	116.82	120.30
59	A5	999	U	C4-C5-C6	-8.69	114.49	119.70
59	A5	3450	G	N1-C6-O6	-8.69	114.69	119.90
56	A8	39	A	N1-C6-N6	-8.69	113.39	118.60
58	B2	1024	C	N1-C2-O2	8.69	124.11	118.90
59	A5	3472	A	N9-C4-C5	8.69	109.27	105.80
59	A5	3851	U	N3-C4-O4	8.68	125.47	119.40
59	A5	984	U	N1-C2-O2	8.67	128.87	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1605	U	N3-C4-O4	-8.67	113.33	119.40
59	A5	1417	G	N3-C4-C5	-8.67	124.26	128.60
59	A5	1699	A	C5-C6-N6	8.67	130.64	123.70
59	A5	659	U	N3-C2-O2	-8.67	116.13	122.20
58	B2	615	G	C4-C5-N7	8.67	114.27	110.80
59	A5	475	U	C2-N1-C1'	8.67	128.10	117.70
59	A5	1777	A	O5'-P-OP1	-8.67	97.90	105.70
59	A5	2212	A	C8-N9-C4	-8.67	102.33	105.80
59	A5	1055	U	N3-C2-O2	-8.66	116.14	122.20
59	A5	1798	A	O5'-P-OP1	8.66	121.09	110.70
59	A5	2717	C	C2-N1-C1'	8.66	128.32	118.80
58	B2	1822	U	C5-C6-N1	8.66	127.03	122.70
59	A5	2209	G	N1-C6-O6	8.66	125.09	119.90
58	B2	14	C	C6-N1-C2	-8.66	116.84	120.30
59	A5	1091	G	O5'-P-OP2	-8.66	97.91	105.70
59	A5	301	U	N3-C4-O4	-8.65	113.34	119.40
59	A5	1330	G	N9-C4-C5	8.65	108.86	105.40
59	A5	1354	G	O5'-P-OP2	-8.65	97.91	105.70
59	A5	1566	U	C6-N1-C1'	-8.65	109.09	121.20
59	A5	2481	U	C6-N1-C2	-8.65	115.81	121.00
59	A5	371	G	N7-C8-N9	-8.65	108.78	113.10
59	A5	2793	C	C2-N3-C4	8.65	124.22	119.90
59	A5	3339	U	N3-C4-O4	-8.65	113.35	119.40
59	A5	300	A	C6-N1-C2	-8.65	113.41	118.60
59	A5	1060	G	C2-N3-C4	8.65	116.22	111.90
58	B2	324	U	N1-C2-O2	8.64	128.85	122.80
58	B2	1572	C	N1-C2-O2	8.64	124.08	118.90
59	A5	53	A	C5-C6-N1	8.64	122.02	117.70
59	A5	2037	C	C2-N3-C4	8.64	124.22	119.90
59	A5	3221	A	C8-N9-C4	-8.64	102.34	105.80
59	A5	3590	C	C5-C6-N1	8.64	125.32	121.00
59	A5	3338	U	C5-C4-O4	8.63	131.08	125.90
59	A5	813	C	C2-N3-C4	8.63	124.22	119.90
59	A5	1260	A	N1-C6-N6	-8.63	113.42	118.60
59	A5	2775	A	N9-C4-C5	-8.63	102.35	105.80
59	A5	1095	G	N1-C2-N3	8.62	129.07	123.90
59	A5	1366	G	N3-C4-C5	8.62	132.91	128.60
59	A5	2691	A	N7-C8-N9	8.62	118.11	113.80
59	A5	3478	G	C4-C5-N7	-8.62	107.35	110.80
59	A5	306	C	C6-N1-C2	-8.62	116.85	120.30
59	A5	443	G	C5-N7-C8	-8.62	99.99	104.30
59	A5	1352	U	N3-C4-C5	8.62	119.77	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1060	G	C5-C6-N1	8.62	115.81	111.50
59	A5	3490	C	O5'-P-OP1	-8.62	97.94	105.70
59	A5	1123	C	C5-C6-N1	8.62	125.31	121.00
59	A5	1673	C	N3-C4-N4	-8.62	111.97	118.00
59	A5	3880	A	C5-N7-C8	-8.61	99.59	103.90
59	A5	3675	A	O5'-P-OP1	-8.61	97.95	105.70
59	A5	1888	A	N9-C4-C5	-8.61	102.36	105.80
59	A5	57	G	C5-N7-C8	-8.60	100.00	104.30
59	A5	57	G	N7-C8-N9	8.60	117.40	113.10
59	A5	1960	C	C2-N1-C1'	8.60	128.26	118.80
59	A5	485	A	C5-C6-N6	8.60	130.58	123.70
59	A5	1102	G	C5-C6-N1	8.60	115.80	111.50
59	A5	1777	A	C8-N9-C4	8.60	109.24	105.80
59	A5	2015	G	C8-N9-C4	-8.60	102.96	106.40
58	B2	86	C	N3-C2-O2	-8.59	115.88	121.90
58	B2	1404	C	N1-C2-O2	8.59	124.06	118.90
59	A5	26	G	N9-C4-C5	-8.59	101.96	105.40
59	A5	1088	A	C8-N9-C4	-8.59	102.36	105.80
59	A5	674	A	C4-C5-N7	8.59	114.99	110.70
59	A5	1616	G	N7-C8-N9	8.59	117.39	113.10
59	A5	1869	C	N1-C2-O2	8.59	124.05	118.90
59	A5	76	C	C5-C6-N1	8.58	125.29	121.00
59	A5	1642	G	C5-C6-O6	8.58	133.75	128.60
59	A5	1334	A	C5-C6-N1	8.58	121.99	117.70
59	A5	3631	C	C5-C6-N1	8.58	125.29	121.00
59	A5	1787	C	N1-C2-O2	8.58	124.05	118.90
59	A5	1176	A	N1-C2-N3	-8.58	125.01	129.30
59	A5	3545	C	C6-N1-C2	-8.58	116.87	120.30
58	B2	1238	G	N3-C4-C5	-8.57	124.31	128.60
59	A5	2004	G	N1-C2-N2	-8.57	108.48	116.20
59	A5	812	U	C5-C6-N1	8.57	126.99	122.70
59	A5	1197	A	N1-C2-N3	-8.57	125.02	129.30
58	B2	355	G	N7-C8-N9	8.56	117.38	113.10
58	B2	1109	C	N3-C2-O2	-8.56	115.91	121.90
59	A5	347	A	N3-C4-C5	8.56	132.79	126.80
59	A5	1149	C	N3-C4-C5	8.56	125.32	121.90
59	A5	1675	G	C6-C5-N7	-8.56	125.27	130.40
59	A5	1796	A	C5-C6-N6	8.56	130.54	123.70
59	A5	2267	U	N3-C2-O2	-8.56	116.21	122.20
59	A5	1958	G	C4-N9-C1'	8.55	137.62	126.50
59	A5	3168	A	C8-N9-C4	-8.55	102.38	105.80
59	A5	3393	U	N1-C2-O2	8.55	128.79	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1311	U	N1-C2-O2	8.55	128.78	122.80
59	A5	344	U	C5-C6-N1	8.55	126.97	122.70
59	A5	1607	A	N1-C6-N6	-8.55	113.47	118.60
59	A5	3591	A	N3-C4-N9	-8.54	120.56	127.40
59	A5	1566	U	C5-C6-N1	8.54	126.97	122.70
59	A5	874	G	C6-C5-N7	-8.54	125.28	130.40
71	AT	31	PRO	CA-N-CD	-8.54	99.55	111.50
59	A5	1023	C	N3-C4-C5	8.54	125.31	121.90
59	A5	657	G	N1-C6-O6	-8.53	114.78	119.90
59	A5	1746	A	N7-C8-N9	8.53	118.06	113.80
59	A5	791	C	N3-C4-N4	-8.52	112.03	118.00
59	A5	1002	C	N3-C2-O2	-8.52	115.94	121.90
71	AT	69	PRO	CA-N-CD	-8.52	99.57	111.50
59	A5	1162	A	C5-N7-C8	-8.52	99.64	103.90
59	A5	2581	U	C5-C6-N1	8.52	126.96	122.70
59	A5	1358	U	N3-C2-O2	-8.52	116.24	122.20
59	A5	2686	C	C6-N1-C2	-8.52	116.89	120.30
59	A5	3297	C	C6-N1-C2	-8.52	116.89	120.30
58	B2	1811	C	N1-C2-O2	8.52	124.01	118.90
59	A5	2726	A	C8-N9-C4	-8.52	102.39	105.80
59	A5	1525	G	N1-C6-O6	-8.51	114.79	119.90
59	A5	371	G	N3-C4-N9	8.51	131.11	126.00
59	A5	3608	G	C5-C6-N1	-8.51	107.25	111.50
59	A5	1511	C	C5-C6-N1	8.51	125.25	121.00
71	AT	50	PRO	CA-N-CD	-8.51	99.59	111.50
59	A5	2167	G	N9-C4-C5	-8.50	102.00	105.40
59	A5	2533	U	C5-C4-O4	-8.50	120.80	125.90
59	A5	1168	G	N1-C2-N2	-8.50	108.55	116.20
59	A5	1323	C	C5-C4-N4	-8.50	114.25	120.20
59	A5	1619	C	N1-C2-O2	8.50	124.00	118.90
56	A8	10	C	C6-N1-C2	-8.49	116.90	120.30
59	A5	2729	U	N1-C2-O2	8.49	128.74	122.80
59	A5	3457	C	C5-C6-N1	8.49	125.25	121.00
59	A5	1133	A	O5'-P-OP2	-8.49	98.06	105.70
59	A5	3894	C	C6-N1-C2	-8.48	116.91	120.30
58	B2	324	U	N3-C2-O2	-8.48	116.26	122.20
59	A5	1734	G	C6-C5-N7	-8.48	125.31	130.40
59	A5	1115	A	C2-N3-C4	-8.48	106.36	110.60
59	A5	1379	U	N1-C2-O2	8.48	128.73	122.80
59	A5	1163	G	C4-C5-N7	8.47	114.19	110.80
59	A5	2529	G	C8-N9-C4	-8.47	103.01	106.40
59	A5	1715	G	C8-N9-C1'	8.47	138.01	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	96	U	C5-C6-N1	8.46	126.93	122.70
59	A5	2234	C	C6-N1-C2	-8.47	116.91	120.30
59	A5	3593	A	OP1-P-O3'	8.46	123.82	105.20
59	A5	3595	U	N1-C2-O2	8.47	128.73	122.80
59	A5	3718	A	O5'-P-OP2	-8.46	98.08	105.70
58	B2	1191	C	N3-C4-N4	-8.46	112.08	118.00
59	A5	72	C	C5-C6-N1	8.46	125.23	121.00
59	A5	2567	U	C5-C4-O4	-8.46	120.82	125.90
59	A5	3446	G	C8-N9-C4	8.46	109.78	106.40
58	B2	1217	U	N3-C2-O2	-8.46	116.28	122.20
59	A5	1712	C	C6-N1-C2	-8.46	116.92	120.30
59	A5	2740	C	C4-C5-C6	-8.45	113.17	117.40
59	A5	3236	A	C5-N7-C8	-8.45	99.67	103.90
2	CA	3	ARG	NE-CZ-NH1	8.45	124.53	120.30
59	A5	428	C	N3-C2-O2	-8.45	115.99	121.90
59	A5	1813	A	C8-N9-C4	-8.45	102.42	105.80
59	A5	1549	A	C8-N9-C4	8.45	109.18	105.80
59	A5	1799	U	N3-C2-O2	-8.45	116.29	122.20
59	A5	3448	U	N1-C2-O2	8.45	128.71	122.80
59	A5	73	U	N3-C2-O2	-8.44	116.29	122.20
59	A5	1621	A	N9-C4-C5	-8.44	102.42	105.80
59	A5	3448	U	C5-C6-N1	8.44	126.92	122.70
56	A8	107	U	C5-C6-N1	8.44	126.92	122.70
59	A5	2671	C	N3-C2-O2	-8.44	115.99	121.90
59	A5	2738	C	C6-N1-C2	-8.44	116.92	120.30
59	A5	754	A	N3-C4-C5	-8.44	120.89	126.80
59	A5	1086	C	N3-C2-O2	-8.43	116.00	121.90
59	A5	1091	G	C2-N3-C4	8.43	116.12	111.90
59	A5	2209	G	N3-C2-N2	-8.43	114.00	119.90
59	A5	2756	C	C5-C6-N1	8.43	125.22	121.00
59	A5	1613	A	N1-C6-N6	-8.43	113.54	118.60
59	A5	120	C	N3-C4-N4	8.42	123.89	118.00
56	A8	20	C	C5-C4-N4	8.42	126.09	120.20
59	A5	227	A	C5-C6-N1	8.42	121.91	117.70
59	A5	3507	A	C6-N1-C2	-8.42	113.55	118.60
59	A5	3665	U	C2-N1-C1'	8.42	127.80	117.70
58	B2	1087	C	N3-C2-O2	-8.42	116.01	121.90
59	A5	1364	A	C8-N9-C4	-8.42	102.43	105.80
32	CT	144	LEU	CA-CB-CG	8.41	134.65	115.30
59	A5	1151	A	C5-N7-C8	-8.41	99.70	103.90
59	A5	1511	C	C6-N1-C2	-8.41	116.94	120.30
59	A5	1690	U	C2-N1-C1'	8.41	127.79	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2267	U	N1-C2-O2	8.41	128.69	122.80
59	A5	2559	C	N1-C2-O2	8.40	123.94	118.90
59	A5	2568	U	N3-C4-C5	8.40	119.64	114.60
58	B2	1976	A	O5'-P-OP2	-8.40	98.14	105.70
59	A5	1667	U	C5-C4-O4	8.40	130.94	125.90
58	B2	1079	A	C8-N9-C4	-8.40	102.44	105.80
59	A5	305	G	O5'-P-OP1	-8.40	98.14	105.70
59	A5	2088	G	N9-C4-C5	8.39	108.76	105.40
59	A5	1144	C	N3-C4-C5	-8.39	118.55	121.90
59	A5	1154	U	O5'-P-OP2	-8.39	98.15	105.70
59	A5	2489	G	O4'-C1'-N9	8.39	114.91	108.20
58	B2	1382	G	C8-N9-C1'	8.38	137.90	127.00
59	A5	1543	C	C6-N1-C2	-8.38	116.95	120.30
59	A5	2212	A	N1-C2-N3	-8.38	125.11	129.30
59	A5	3843	U	N3-C4-C5	8.38	119.63	114.60
59	A5	3236	A	C2-N3-C4	-8.38	106.41	110.60
59	A5	26	G	N1-C2-N2	-8.38	108.66	116.20
59	A5	322	G	N7-C8-N9	8.38	117.29	113.10
58	B2	856	A	C5-C6-N6	-8.38	117.00	123.70
59	A5	1370	C	C4-C5-C6	-8.38	113.21	117.40
59	A5	1554	C	N3-C2-O2	-8.38	116.03	121.90
59	A5	1678	C	C2-N3-C4	8.38	124.09	119.90
2	CA	195	SER	C-N-CA	8.37	142.63	121.70
59	A5	33	C	C6-N1-C2	-8.37	116.95	120.30
59	A5	1146	U	N3-C2-O2	-8.36	116.35	122.20
59	A5	1619	C	N3-C2-O2	-8.36	116.05	121.90
59	A5	3590	C	C6-N1-C2	-8.36	116.96	120.30
59	A5	1707	A	C8-N9-C4	8.35	109.14	105.80
56	A8	41	G	O5'-P-OP1	-8.35	98.19	105.70
59	A5	857	U	C5-C6-N1	8.35	126.88	122.70
59	A5	1114	A	N1-C6-N6	8.35	123.61	118.60
59	A5	1790	A	N7-C8-N9	8.35	117.97	113.80
59	A5	2085	G	N3-C4-C5	8.35	132.77	128.60
59	A5	3497	G	C8-N9-C4	8.35	109.74	106.40
59	A5	3762	G	N3-C4-N9	-8.35	120.99	126.00
59	A5	1068	C	C5-C6-N1	8.34	125.17	121.00
58	B2	1846	G	N1-C6-O6	-8.34	114.89	119.90
59	A5	874	G	N3-C4-N9	8.34	131.00	126.00
58	B2	1128	C	C6-N1-C2	-8.34	116.97	120.30
59	A5	1643	G	N9-C4-C5	-8.34	102.07	105.40
59	A5	1801	U	N3-C2-O2	-8.34	116.37	122.20
59	A5	26	G	C4-C5-N7	8.33	114.13	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3677	U	C2-N1-C1'	8.33	127.70	117.70
59	A5	1682	G	C8-N9-C4	-8.33	103.07	106.40
59	A5	2731	G	C5-C6-N1	8.33	115.67	111.50
59	A5	3173	U	C5-C6-N1	-8.33	118.53	122.70
56	A8	101	A	N7-C8-N9	8.32	117.96	113.80
59	A5	120	C	C6-N1-C2	-8.32	116.97	120.30
59	A5	1389	C	C6-N1-C2	-8.32	116.97	120.30
59	A5	2516	U	N1-C2-N3	8.32	119.89	114.90
56	A8	32	G	C4-C5-N7	8.32	114.13	110.80
59	A5	1098	U	O5'-P-OP2	-8.31	98.22	105.70
59	A5	2004	G	C5-N7-C8	-8.31	100.14	104.30
59	A5	1136	A	C2-N3-C4	8.31	114.75	110.60
59	A5	2722	U	N3-C2-O2	-8.31	116.38	122.20
59	A5	2812	U	N1-C2-O2	8.31	128.62	122.80
59	A5	3464	G	C4-C5-N7	8.30	114.12	110.80
59	A5	2782	A	N1-C6-N6	-8.30	113.62	118.60
59	A5	428	C	N3-C4-N4	-8.30	112.19	118.00
59	A5	3137	A	N1-C6-N6	-8.30	113.62	118.60
59	A5	1004	C	O5'-P-OP1	-8.29	98.23	105.70
59	A5	104	A	C5-N7-C8	-8.29	99.75	103.90
59	A5	373	A	N1-C6-N6	-8.29	113.63	118.60
59	A5	1907	U	C5-C6-N1	8.29	126.84	122.70
59	A5	1089	U	O5'-P-OP1	8.29	120.64	110.70
59	A5	3448	U	N3-C2-O2	-8.29	116.40	122.20
59	A5	2697	U	N1-C2-O2	8.28	128.60	122.80
59	A5	343	A	C5-C6-N1	8.28	121.84	117.70
59	A5	346	U	C5-C6-N1	8.28	126.84	122.70
59	A5	3606	G	C8-N9-C4	-8.28	103.09	106.40
59	A5	3363	G	C5-N7-C8	-8.28	100.16	104.30
59	A5	2517	A	N1-C6-N6	-8.27	113.64	118.60
59	A5	1721	C	C4-C5-C6	-8.27	113.26	117.40
59	A5	3414	U	O5'-P-OP1	-8.27	98.26	105.70
59	A5	838	U	N1-C2-O2	8.27	128.59	122.80
59	A5	3711	G	N1-C2-N2	-8.27	108.76	116.20
58	B2	1404	C	C2-N1-C1'	8.26	127.89	118.80
59	A5	449	U	C5-C6-N1	8.26	126.83	122.70
58	B2	1854	U	N3-C2-O2	-8.26	116.42	122.20
59	A5	322	G	C8-N9-C4	-8.26	103.09	106.40
59	A5	1414	C	N3-C4-C5	8.26	125.20	121.90
59	A5	1884	U	N3-C2-O2	-8.26	116.42	122.20
59	A5	2668	C	C4-C5-C6	-8.25	113.28	117.40
59	A5	2623	C	C6-N1-C2	-8.25	117.00	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	14	G	N3-C2-N2	8.24	125.67	119.90
59	A5	1607	A	OP2-P-O3'	8.24	123.34	105.20
56	A8	22	C	C5-C6-N1	8.24	125.12	121.00
59	A5	1651	C	N3-C2-O2	-8.24	116.13	121.90
59	A5	1753	G	N7-C8-N9	8.24	117.22	113.10
59	A5	34	C	N3-C4-C5	8.24	125.20	121.90
59	A5	3351	A	C2-N3-C4	8.24	114.72	110.60
59	A5	38	A	N9-C4-C5	-8.24	102.50	105.80
59	A5	1322	U	C5-C4-O4	-8.23	120.96	125.90
59	A5	1707	A	N9-C4-C5	-8.23	102.51	105.80
59	A5	2537	A	C8-N9-C4	8.23	109.09	105.80
71	AT	89	PRO	CA-N-CD	-8.23	99.97	111.50
59	A5	3607	C	C5-C6-N1	8.23	125.11	121.00
59	A5	58	G	N3-C4-C5	8.23	132.71	128.60
59	A5	977	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	1366	G	C8-N9-C4	-8.23	103.11	106.40
59	A5	1715	G	C8-N9-C4	-8.23	103.11	106.40
59	A5	1960	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	1975	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	2756	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	3534	U	N3-C2-O2	-8.23	116.44	122.20
59	A5	3877	G	N1-C6-O6	-8.23	114.96	119.90
59	A5	815	A	C5-N7-C8	-8.22	99.79	103.90
59	A5	1899	C	C6-N1-C2	-8.22	117.01	120.30
59	A5	2529	G	C2-N3-C4	8.22	116.01	111.90
59	A5	2655	C	C4-C5-C6	-8.22	113.29	117.40
58	B2	1834	G	C8-N9-C4	-8.22	103.11	106.40
59	A5	458	A	C2-N3-C4	8.22	114.71	110.60
58	B2	1968	C	N3-C4-C5	-8.22	118.61	121.90
59	A5	458	A	N1-C2-N3	-8.22	125.19	129.30
59	A5	3260	G	C5-N7-C8	-8.22	100.19	104.30
56	A8	107	U	N3-C4-C5	-8.21	109.67	114.60
58	B2	1110	A	N1-C6-N6	-8.21	113.67	118.60
59	A5	795	A	N1-C2-N3	8.21	133.41	129.30
59	A5	2243	G	C5-C6-O6	8.21	133.53	128.60
58	B2	458	C	C6-N1-C2	-8.21	117.02	120.30
59	A5	1168	G	C6-C5-N7	-8.21	125.48	130.40
59	A5	3342	C	C2-N1-C1'	8.20	127.82	118.80
59	A5	458	A	C4-C5-N7	8.20	114.80	110.70
59	A5	58	G	N3-C4-N9	-8.20	121.08	126.00
59	A5	378	G	C4-C5-N7	8.20	114.08	110.80
59	A5	101	C	C6-N1-C2	-8.19	117.02	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	863	U	N1-C2-O2	8.19	128.53	122.80
59	A5	1203	U	C5-C6-N1	8.19	126.80	122.70
58	B2	1054	A	N1-C6-N6	-8.19	113.69	118.60
59	A5	1109	G	C2-N3-C4	8.19	115.99	111.90
59	A5	1563	A	N1-C6-N6	8.19	123.51	118.60
59	A5	2769	G	N3-C2-N2	8.19	125.63	119.90
59	A5	811	G	N1-C2-N2	8.18	123.56	116.20
59	A5	3490	C	C6-N1-C2	-8.18	117.03	120.30
59	A5	1163	G	N1-C6-O6	8.18	124.81	119.90
59	A5	1731	G	C2-N3-C4	8.18	115.99	111.90
59	A5	2513	G	O5'-P-OP2	-8.18	98.34	105.70
59	A5	2812	U	C2-N1-C1'	8.18	127.51	117.70
59	A5	3342	C	C6-N1-C2	-8.18	117.03	120.30
59	A5	362	A	C5-C6-N1	8.17	121.79	117.70
59	A5	3514	C	C4-C5-C6	8.17	121.49	117.40
59	A5	1168	G	N3-C2-N2	8.17	125.62	119.90
59	A5	1390	C	N3-C2-O2	-8.17	116.18	121.90
59	A5	3333	A	N1-C6-N6	-8.17	113.70	118.60
70	AK	55	LEU	CA-CB-CG	8.17	134.09	115.30
58	B2	86	C	C2-N1-C1'	8.17	127.78	118.80
59	A5	1013	G	N1-C6-O6	-8.17	115.00	119.90
59	A5	349	C	C5-C6-N1	8.17	125.08	121.00
59	A5	1782	C	N3-C2-O2	-8.17	116.18	121.90
59	A5	235	A	C5-C6-N6	-8.16	117.17	123.70
59	A5	652	G	N1-C2-N3	8.16	128.80	123.90
59	A5	2520	U	N1-C2-N3	8.16	119.80	114.90
59	A5	3617	U	C6-N1-C2	-8.16	116.10	121.00
59	A5	1616	G	C5-N7-C8	-8.16	100.22	104.30
59	A5	2794	U	N3-C2-O2	-8.16	116.49	122.20
59	A5	3593	A	N7-C8-N9	8.16	117.88	113.80
59	A5	2066	G	N9-C4-C5	8.16	108.66	105.40
59	A5	1797	A	N9-C4-C5	-8.15	102.54	105.80
58	B2	615	G	C5-C6-O6	-8.15	123.71	128.60
59	A5	1351	C	C4-C5-C6	-8.15	113.32	117.40
59	A5	3542	C	C5-C6-N1	8.15	125.08	121.00
59	A5	2743	C	C6-N1-C2	-8.15	117.04	120.30
59	A5	3344	U	O5'-P-OP1	-8.15	98.37	105.70
58	B2	1949	A	P-O3'-C3'	8.14	129.47	119.70
59	A5	1782	C	C6-N1-C1'	-8.14	111.03	120.80
59	A5	3168	A	C5-N7-C8	-8.14	99.83	103.90
59	A5	1340	G	C5-C6-N1	8.14	115.57	111.50
59	A5	752	U	N1-C2-O2	8.14	128.50	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	808	G	N3-C2-N2	-8.14	114.20	119.90
59	A5	1014	U	N3-C2-O2	-8.14	116.50	122.20
59	A5	1328	U	N3-C4-O4	-8.14	113.70	119.40
59	A5	1563	A	C5-C6-N6	-8.14	117.19	123.70
56	A8	53	C	C5-C6-N1	8.13	125.07	121.00
59	A5	1089	U	C5-C6-N1	8.13	126.77	122.70
59	A5	3521	A	N1-C6-N6	-8.13	113.72	118.60
59	A5	441	A	C2-N3-C4	-8.13	106.53	110.60
59	A5	2770	C	O5'-P-OP2	-8.13	98.38	105.70
59	A5	1154	U	N1-C2-O2	8.13	128.49	122.80
58	B2	1234	G	N3-C4-N9	8.13	130.88	126.00
59	A5	1959	A	C4-C5-N7	8.12	114.76	110.70
58	B2	1382	G	N3-C4-C5	8.12	132.66	128.60
59	A5	1764	G	C4-C5-N7	8.12	114.05	110.80
59	A5	1329	G	C2-N3-C4	8.11	115.96	111.90
59	A5	1682	G	C2-N3-C4	8.12	115.96	111.90
59	A5	2473	C	C5-C6-N1	8.12	125.06	121.00
59	A5	679	G	N3-C4-C5	-8.11	124.54	128.60
59	A5	3260	G	O5'-P-OP1	-8.11	98.40	105.70
58	B2	1968	C	C5-C6-N1	8.11	125.05	121.00
58	B2	1978	C	C6-N1-C2	-8.11	117.06	120.30
59	A5	1351	C	N1-C2-O2	8.11	123.76	118.90
59	A5	3164	C	C6-N1-C2	-8.11	117.06	120.30
59	A5	2167	G	C4-C5-N7	8.10	114.04	110.80
59	A5	2238	A	N1-C6-N6	-8.10	113.74	118.60
59	A5	28	C	C2-N1-C1'	8.10	127.71	118.80
59	A5	330	C	N3-C2-O2	-8.10	116.23	121.90
59	A5	377	U	N3-C4-C5	-8.10	109.74	114.60
59	A5	831	A	C4-C5-N7	8.10	114.75	110.70
59	A5	1777	A	N1-C6-N6	8.10	123.46	118.60
59	A5	2532	U	C6-N1-C2	-8.10	116.14	121.00
59	A5	1060	G	O5'-P-OP1	-8.10	98.41	105.70
59	A5	1089	U	N3-C4-C5	-8.10	109.74	114.60
59	A5	3756	A	N7-C8-N9	-8.10	109.75	113.80
58	B2	1381	G	C8-N9-C4	-8.09	103.16	106.40
59	A5	1089	U	C5-C4-O4	8.09	130.75	125.90
59	A5	3346	G	N3-C4-C5	-8.09	124.55	128.60
59	A5	105	A	N7-C8-N9	8.09	117.84	113.80
59	A5	1596	A	O4'-C1'-N9	8.09	114.67	108.20
59	A5	1898	C	C6-N1-C2	-8.09	117.06	120.30
59	A5	2135	C	C2-N1-C1'	8.09	127.69	118.80
59	A5	1723	G	N1-C6-O6	-8.09	115.05	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1419	A	N1-C6-N6	-8.08	113.75	118.60
59	A5	3412	U	N1-C2-O2	8.08	128.46	122.80
58	B2	1967	C	N1-C2-O2	8.08	123.75	118.90
59	A5	105	A	C6-C5-N7	-8.08	126.64	132.30
59	A5	3473	C	C6-N1-C2	-8.08	117.07	120.30
59	A5	3263	C	N1-C2-O2	8.08	123.75	118.90
59	A5	3484	U	N3-C2-O2	-8.08	116.55	122.20
59	A5	3945	A	C5-N7-C8	-8.08	99.86	103.90
59	A5	1605	U	C5-C4-O4	8.07	130.75	125.90
59	A5	2569	U	C6-N1-C2	-8.07	116.16	121.00
58	B2	1167	U	C5-C6-N1	8.07	126.74	122.70
59	A5	3236	A	C4-C5-N7	8.07	114.73	110.70
59	A5	3730	G	C8-N9-C4	-8.07	103.17	106.40
56	A8	34	C	N1-C2-O2	8.07	123.74	118.90
59	A5	1166	U	C5-C6-N1	8.07	126.73	122.70
59	A5	120	C	C2-N1-C1'	8.06	127.67	118.80
59	A5	1022	A	C8-N9-C4	-8.06	102.57	105.80
59	A5	2712	U	N3-C4-C5	8.06	119.44	114.60
59	A5	549	A	C4-C5-N7	8.06	114.73	110.70
58	B2	1404	C	C5-C6-N1	8.05	125.03	121.00
59	A5	1202	A	N1-C6-N6	-8.05	113.77	118.60
59	A5	2104	A	N1-C2-N3	-8.05	125.27	129.30
59	A5	3400	U	C4-C5-C6	-8.05	114.87	119.70
59	A5	3405	U	N3-C2-O2	-8.05	116.56	122.20
59	A5	3483	G	O5'-P-OP1	-8.05	98.45	105.70
59	A5	3763	U	C2-N1-C1'	8.05	127.36	117.70
59	A5	2792	G	C5-C6-N1	8.05	115.52	111.50
59	A5	3514	C	C6-N1-C2	-8.05	117.08	120.30
58	B2	1979	C	C6-N1-C2	-8.05	117.08	120.30
59	A5	522	G	C8-N9-C4	-8.04	103.18	106.40
59	A5	1355	C	N3-C4-N4	-8.04	112.37	118.00
58	B2	489	C	C6-N1-C2	-8.04	117.08	120.30
59	A5	1326	A	C5-N7-C8	-8.04	99.88	103.90
59	A5	2135	C	C6-N1-C2	-8.04	117.08	120.30
59	A5	3711	G	C4-N9-C1'	8.04	136.95	126.50
59	A5	3892	A	C5-C6-N1	8.04	121.72	117.70
59	A5	3135	G	N9-C4-C5	-8.04	102.19	105.40
58	B2	1673	U	C5-C6-N1	8.03	126.72	122.70
59	A5	387	U	N3-C2-O2	-8.03	116.58	122.20
59	A5	522	G	C6-C5-N7	-8.03	125.58	130.40
59	A5	1289	C	C6-N1-C2	-8.03	117.09	120.30
59	A5	2220	C	N3-C4-N4	-8.03	112.38	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	264	C	C6-N1-C2	-8.03	117.09	120.30
59	A5	3412	U	N1-C2-N3	8.03	119.72	114.90
59	A5	1531	U	C6-N1-C2	8.03	125.82	121.00
59	A5	3309	A	C8-N9-C4	-8.03	102.59	105.80
58	B2	1111	U	O4'-C1'-N1	8.03	114.62	108.20
59	A5	1162	A	C5-C6-N1	8.02	121.71	117.70
59	A5	2764	A	C5-C6-N1	8.02	121.71	117.70
59	A5	2709	U	N3-C2-O2	-8.02	116.58	122.20
59	A5	380	G	C5-C6-N1	8.02	115.51	111.50
59	A5	1351	C	N3-C4-C5	8.02	125.11	121.90
59	A5	2092	U	C5-C6-N1	8.01	126.71	122.70
59	A5	423	U	C2-N1-C1'	8.01	127.31	117.70
59	A5	789	G	C5-C6-O6	8.01	133.41	128.60
59	A5	105	A	O5'-P-OP1	-8.01	98.49	105.70
59	A5	385	A	N1-C6-N6	8.01	123.41	118.60
59	A5	2541	C	N3-C4-C5	8.01	125.10	121.90
59	A5	3511	U	C2-N3-C4	8.01	131.81	127.00
59	A5	225	U	N3-C2-O2	-8.01	116.59	122.20
59	A5	3656	A	N1-C6-N6	-8.00	113.80	118.60
59	A5	1517	A	C8-N9-C4	-8.00	102.60	105.80
59	A5	1751	U	N3-C4-C5	-8.00	109.80	114.60
59	A5	2668	C	N3-C4-C5	8.00	125.10	121.90
59	A5	3166	C	C6-N1-C2	-8.00	117.10	120.30
55	A7	69	C	N1-C2-O2	8.00	123.70	118.90
59	A5	1524	U	O5'-P-OP2	-8.00	98.50	105.70
59	A5	3309	A	C5-N7-C8	-8.00	99.90	103.90
59	A5	3844	U	C5-C6-N1	-8.00	118.70	122.70
59	A5	1522	G	O4'-C1'-N9	8.00	114.60	108.20
59	A5	1675	G	N7-C8-N9	8.00	117.10	113.10
59	A5	2190	A	N1-C6-N6	-8.00	113.80	118.60
59	A5	811	G	C5-N7-C8	-7.99	100.30	104.30
59	A5	1723	G	O4'-C1'-N9	7.99	114.59	108.20
59	A5	3622	C	N3-C4-N4	-7.99	112.41	118.00
59	A5	101	C	C2-N3-C4	7.99	123.90	119.90
59	A5	1136	A	N1-C6-N6	-7.99	113.81	118.60
59	A5	1375	G	N9-C4-C5	-7.99	102.20	105.40
59	A5	2753	G	C4-C5-N7	7.99	114.00	110.80
59	A5	1684	G	C5-C6-N1	7.99	115.49	111.50
59	A5	1091	G	C5-C6-N1	7.99	115.49	111.50
59	A5	1332	C	C5-C6-N1	7.99	124.99	121.00
59	A5	1370	C	N3-C4-N4	-7.99	112.41	118.00
59	A5	2529	G	N9-C4-C5	7.99	108.59	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1131	C	O5'-P-OP2	-7.98	98.51	105.70
59	A5	1144	C	C5-C6-N1	7.98	124.99	121.00
58	B2	880	G	N1-C6-O6	-7.98	115.11	119.90
59	A5	2564	U	N3-C2-O2	-7.98	116.61	122.20
59	A5	2656	C	C5-C6-N1	7.98	124.99	121.00
59	A5	777	C	OP1-P-OP2	-7.98	107.63	119.60
58	B2	1002	A	N1-C6-N6	-7.98	113.81	118.60
58	B2	1752	U	C2-N1-C1'	7.98	127.27	117.70
56	A8	35	G	N1-C6-O6	-7.98	115.11	119.90
59	A5	423	U	N3-C2-O2	-7.98	116.62	122.20
59	A5	1338	U	O5'-P-OP1	-7.98	98.52	105.70
58	B2	1788	C	C2-N1-C1'	7.97	127.57	118.80
59	A5	1016	A	O5'-P-OP2	-7.97	98.52	105.70
59	A5	3343	A	C6-N1-C2	7.97	123.38	118.60
59	A5	3472	A	P-O3'-C3'	7.97	129.27	119.70
58	B2	631	C	N1-C2-O2	7.97	123.68	118.90
59	A5	825	C	C4-C5-C6	-7.97	113.42	117.40
58	B2	1077	C	C5-C6-N1	7.96	124.98	121.00
58	B2	1090	A	O4'-C1'-N9	7.96	114.57	108.20
59	A5	3145	U	N3-C2-O2	-7.96	116.62	122.20
59	A5	2088	G	C8-N9-C1'	7.96	137.35	127.00
59	A5	808	G	C5-C6-N1	7.96	115.48	111.50
59	A5	1738	U	N1-C2-O2	7.96	128.37	122.80
59	A5	2793	C	C6-N1-C2	-7.96	117.12	120.30
58	B2	1090	A	N7-C8-N9	7.96	117.78	113.80
59	A5	2750	A	C2-N3-C4	7.96	114.58	110.60
59	A5	3507	A	O5'-P-OP1	-7.96	98.54	105.70
59	A5	385	A	C4-C5-N7	7.96	114.68	110.70
59	A5	3623	G	C4-C5-N7	-7.96	107.62	110.80
59	A5	2749	G	C5-N7-C8	-7.96	100.32	104.30
58	B2	1073	G	C6-N1-C2	-7.95	120.33	125.10
59	A5	828	G	C4-C5-N7	7.95	113.98	110.80
59	A5	1681	G	N3-C4-N9	7.95	130.77	126.00
59	A5	2792	G	N3-C2-N2	7.95	125.47	119.90
59	A5	2473	C	N1-C2-O2	7.95	123.67	118.90
59	A5	3392	U	N3-C2-O2	-7.95	116.63	122.20
59	A5	1641	U	O5'-P-OP2	-7.95	98.55	105.70
59	A5	1785	G	C5-C6-O6	7.95	133.37	128.60
59	A5	558	C	N1-C2-O2	7.94	123.67	118.90
59	A5	3477	A	C4-C5-N7	7.94	114.67	110.70
59	A5	3509	U	O5'-P-OP2	-7.94	98.55	105.70
59	A5	3591	A	C8-N9-C1'	7.94	142.00	127.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2554	U	C2-N1-C1'	7.94	127.22	117.70
59	A5	2728	C	C6-N1-C2	-7.94	117.12	120.30
59	A5	3150	G	C8-N9-C4	-7.94	103.22	106.40
58	B2	258	A	N7-C8-N9	7.93	117.77	113.80
59	A5	1183	U	C6-N1-C2	-7.93	116.24	121.00
59	A5	2822	C	C6-N1-C2	-7.93	117.13	120.30
55	A7	92	C	C4-C5-C6	-7.93	113.44	117.40
59	A5	2737	C	N3-C2-O2	-7.93	116.35	121.90
59	A5	1552	A	N1-C2-N3	-7.92	125.34	129.30
59	A5	3518	A	N1-C6-N6	-7.92	113.84	118.60
59	A5	992	U	OP2-P-O3'	7.92	122.63	105.20
58	B2	1991	C	C5-C6-N1	7.92	124.96	121.00
59	A5	1785	G	N1-C6-O6	-7.92	115.15	119.90
59	A5	2095	U	C5-C6-N1	7.92	126.66	122.70
59	A5	1167	A	O5'-P-OP1	-7.91	98.58	105.70
59	A5	699	U	N1-C2-O2	7.91	128.34	122.80
59	A5	1018	C	N3-C2-O2	-7.91	116.36	121.90
59	A5	1783	A	C5-C6-N1	-7.91	113.75	117.70
59	A5	1770	C	N3-C4-N4	-7.91	112.46	118.00
59	A5	94	C	C5-C6-N1	7.91	124.95	121.00
59	A5	1005	G	C8-N9-C4	-7.91	103.24	106.40
59	A5	1686	A	C5-N7-C8	-7.91	99.95	103.90
58	B2	1382	G	C6-C5-N7	7.90	135.14	130.40
59	A5	93	G	C5-N7-C8	-7.90	100.35	104.30
59	A5	3341	C	N3-C2-O2	-7.90	116.37	121.90
59	A5	426	A	N9-C4-C5	-7.90	102.64	105.80
59	A5	813	C	N3-C4-C5	-7.90	118.74	121.90
58	B2	1211	C	C5-C6-N1	7.90	124.95	121.00
59	A5	3464	G	C5-N7-C8	-7.90	100.35	104.30
59	A5	1325	C	C6-N1-C1'	-7.90	111.32	120.80
59	A5	1692	G	O5'-P-OP2	-7.90	98.59	105.70
59	A5	1521	G	N3-C4-N9	-7.89	121.26	126.00
59	A5	1690	U	C5-C6-N1	7.89	126.65	122.70
59	A5	1018	C	N1-C2-O2	7.89	123.64	118.90
59	A5	1718	G	C4-N9-C1'	7.89	136.76	126.50
59	A5	3498	A	C5-N7-C8	-7.89	99.95	103.90
59	A5	1123	C	N3-C4-C5	-7.89	118.74	121.90
55	A7	80	U	N1-C2-O2	7.89	128.32	122.80
56	A8	107	U	O5'-P-OP1	-7.89	98.60	105.70
59	A5	760	G	N3-C4-C5	-7.89	124.66	128.60
58	B2	634	U	O5'-P-OP2	-7.89	98.60	105.70
59	A5	2224	A	C5-N7-C8	-7.89	99.96	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2694	G	N9-C4-C5	-7.89	102.25	105.40
59	A5	2799	U	N3-C2-O2	-7.89	116.68	122.20
59	A5	3139	G	C5-C6-N1	7.89	115.44	111.50
59	A5	2521	A	C5-C6-N6	-7.88	117.39	123.70
59	A5	3519	C	C2-N3-C4	7.88	123.84	119.90
55	A7	74	A	N1-C6-N6	-7.88	113.87	118.60
59	A5	2170	C	N3-C4-C5	7.88	125.05	121.90
59	A5	2729	U	C5-C6-N1	7.88	126.64	122.70
55	A7	2	C	N3-C2-O2	-7.88	116.39	121.90
58	B2	1817	C	C6-N1-C2	-7.88	117.15	120.30
58	B2	249	U	C6-N1-C2	-7.88	116.28	121.00
59	A5	3338	U	N3-C2-O2	-7.88	116.69	122.20
59	A5	2754	G	N1-C2-N2	-7.87	109.11	116.20
59	A5	3679	C	C5-C6-N1	7.87	124.94	121.00
59	A5	1018	C	C2-N3-C4	-7.87	115.96	119.90
58	B2	1087	C	C2-N1-C1'	7.87	127.46	118.80
59	A5	2165	C	N3-C2-O2	-7.87	116.39	121.90
59	A5	281	C	C6-N1-C2	-7.87	117.15	120.30
58	B2	12	U	N1-C2-O2	7.86	128.30	122.80
59	A5	428	C	N1-C2-O2	7.86	123.62	118.90
59	A5	1174	G	C8-N9-C1'	-7.86	116.78	127.00
59	A5	1419	A	O5'-P-OP1	-7.86	98.62	105.70
59	A5	2004	G	N3-C4-C5	-7.86	124.67	128.60
58	B2	1978	C	C5-C6-N1	7.86	124.93	121.00
59	A5	2694	G	C5-N7-C8	-7.86	100.37	104.30
59	A5	341	A	O5'-P-OP1	-7.86	98.63	105.70
59	A5	2739	A	C4-C5-C6	-7.86	113.07	117.00
59	A5	1020	A	N1-C6-N6	-7.86	113.89	118.60
59	A5	93	G	N7-C8-N9	7.86	117.03	113.10
59	A5	1783	A	C6-N1-C2	7.85	123.31	118.60
58	B2	849	U	C2-N1-C1'	7.85	127.12	117.70
59	A5	3627	C	N3-C4-C5	7.85	125.04	121.90
59	A5	1607	A	O5'-P-OP1	-7.85	98.63	105.70
59	A5	3221	A	C5-N7-C8	-7.85	99.97	103.90
59	A5	62	G	C4-C5-N7	7.85	113.94	110.80
59	A5	2172	C	C4-C5-C6	-7.85	113.47	117.40
59	A5	2093	U	C2-N1-C1'	-7.85	108.28	117.70
55	A7	2	C	N1-C2-O2	7.85	123.61	118.90
59	A5	1174	G	N7-C8-N9	-7.85	109.18	113.10
58	B2	856	A	N1-C6-N6	7.84	123.31	118.60
59	A5	1532	A	N1-C6-N6	-7.84	113.89	118.60
59	A5	365	A	C6-N1-C2	-7.84	113.89	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3321	A	C8-N9-C4	7.84	108.94	105.80
59	A5	359	G	N1-C6-O6	-7.84	115.20	119.90
59	A5	1082	A	N1-C6-N6	-7.84	113.90	118.60
59	A5	3934	C	C2-N1-C1'	7.84	127.42	118.80
59	A5	42	U	C6-N1-C2	-7.83	116.30	121.00
59	A5	443	G	O5'-P-OP1	-7.83	98.65	105.70
59	A5	3845	A	C4-C5-N7	7.83	114.62	110.70
59	A5	811	G	C4-N9-C1'	-7.83	116.32	126.50
59	A5	3499	G	C2-N3-C4	7.83	115.82	111.90
59	A5	424	G	C8-N9-C4	7.83	109.53	106.40
59	A5	2514	U	C6-N1-C2	-7.83	116.30	121.00
59	A5	1566	U	N1-C2-O2	7.83	128.28	122.80
59	A5	2695	A	N1-C2-N3	-7.83	125.39	129.30
59	A5	2096	C	N3-C2-O2	-7.83	116.42	121.90
59	A5	3711	G	C8-N9-C1'	-7.82	116.83	127.00
59	A5	2187	U	N3-C2-O2	-7.82	116.73	122.20
59	A5	3808	A	P-O3'-C3'	7.82	129.08	119.70
59	A5	46	C	C5-C6-N1	7.81	124.91	121.00
59	A5	3418	U	C2-N1-C1'	7.81	127.07	117.70
59	A5	3472	A	OP1-P-O3'	7.81	122.39	105.20
59	A5	343	A	C2-N3-C4	7.81	114.50	110.60
59	A5	1147	U	N3-C2-O2	-7.81	116.73	122.20
59	A5	1384	C	N3-C2-O2	-7.81	116.43	121.90
59	A5	1370	C	O5'-P-OP2	-7.81	98.67	105.70
56	A8	18	C	C6-N1-C2	-7.80	117.18	120.30
59	A5	1015	G	N1-C6-O6	-7.80	115.22	119.90
59	A5	1061	A	O5'-P-OP1	-7.80	98.68	105.70
59	A5	2668	C	C5-C6-N1	7.80	124.90	121.00
59	A5	3603	C	N3-C2-O2	-7.80	116.44	121.90
55	A7	83	A	N3-C4-N9	-7.80	121.16	127.40
56	A8	97	U	C6-N1-C2	-7.80	116.32	121.00
58	B2	1984	G	N9-C4-C5	-7.80	102.28	105.40
59	A5	99	A	O5'-P-OP1	-7.80	98.68	105.70
59	A5	2172	C	C6-N1-C2	-7.80	117.18	120.30
59	A5	3135	G	C8-N9-C1'	-7.80	116.86	127.00
59	A5	3670	G	C8-N9-C4	-7.80	103.28	106.40
59	A5	442	A	C4-C5-N7	7.80	114.60	110.70
59	A5	806	A	N7-C8-N9	7.80	117.70	113.80
59	A5	1144	C	C2-N1-C1'	7.80	127.38	118.80
59	A5	2737	C	N1-C2-O2	7.79	123.58	118.90
59	A5	3633	U	N3-C2-O2	-7.79	116.74	122.20
59	A5	3168	A	N7-C8-N9	7.79	117.70	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1118	C	N3-C4-N4	7.79	123.45	118.00
59	A5	1383	A	C5-N7-C8	-7.79	100.00	103.90
59	A5	866	C	C5-C6-N1	7.79	124.89	121.00
59	A5	2217	A	C5-C6-N6	7.79	129.93	123.70
59	A5	996	C	N1-C2-N3	7.79	124.65	119.20
59	A5	1276	G	N3-C4-C5	7.79	132.49	128.60
59	A5	1387	G	C8-N9-C1'	-7.79	116.88	127.00
59	A5	797	A	C5-N7-C8	-7.78	100.01	103.90
59	A5	1017	A	C8-N9-C4	-7.78	102.69	105.80
59	A5	833	U	C5-C6-N1	7.78	126.59	122.70
58	B2	618	G	C4-N9-C1'	7.78	136.62	126.50
59	A5	1073	C	N3-C2-O2	-7.78	116.45	121.90
2	CA	180	LEU	CA-CB-CG	7.78	133.19	115.30
58	B2	1414	C	C6-N1-C2	-7.78	117.19	120.30
59	A5	1068	C	O5'-P-OP1	7.78	120.03	110.70
59	A5	812	U	C5-C4-O4	-7.77	121.24	125.90
59	A5	1629	C	C6-N1-C2	-7.77	117.19	120.30
59	A5	1156	U	N3-C4-O4	-7.77	113.96	119.40
59	A5	1401	C	C4-C5-C6	-7.77	113.51	117.40
59	A5	1534	G	C6-N1-C2	-7.77	120.44	125.10
59	A5	2041	G	N3-C4-N9	7.77	130.66	126.00
59	A5	2088	G	C4-N9-C1'	-7.77	116.40	126.50
59	A5	385	A	C5-N7-C8	-7.77	100.02	103.90
59	A5	1053	G	C4-C5-N7	7.77	113.91	110.80
59	A5	3132	C	N3-C2-O2	-7.77	116.46	121.90
59	A5	871	A	C8-N9-C4	-7.77	102.69	105.80
59	A5	34	C	C4-C5-C6	-7.76	113.52	117.40
58	B2	622	C	C5-C6-N1	7.76	124.88	121.00
59	A5	2128	A	N7-C8-N9	7.76	117.68	113.80
59	A5	3593	A	C6-C5-N7	7.76	137.73	132.30
59	A5	1025	U	O5'-P-OP1	7.76	120.01	110.70
59	A5	56	A	O5'-P-OP2	-7.75	98.72	105.70
59	A5	967	C	N3-C4-C5	7.75	125.00	121.90
59	A5	1329	G	C4-N9-C1'	7.75	136.58	126.50
59	A5	3728	A	C6-C5-N7	-7.75	126.87	132.30
59	A5	3448	U	C2-N1-C1'	7.75	127.00	117.70
59	A5	3885	C	C5-C6-N1	7.75	124.88	121.00
58	B2	299	C	C6-N1-C2	-7.75	117.20	120.30
59	A5	797	A	N7-C8-N9	7.75	117.67	113.80
59	A5	1984	U	C5-C6-N1	7.75	126.57	122.70
59	A5	1679	U	N3-C2-O2	-7.74	116.78	122.20
59	A5	552	U	N1-C2-N3	7.74	119.55	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1000	G	C4-C5-N7	7.74	113.90	110.80
56	A8	103	C	O5'-P-OP2	-7.74	98.73	105.70
59	A5	1621	A	C5-N7-C8	-7.74	100.03	103.90
59	A5	1678	C	C6-N1-C2	-7.74	117.20	120.30
59	A5	2486	A	N1-C6-N6	-7.73	113.96	118.60
59	A5	1025	U	O5'-P-OP2	-7.73	98.74	105.70
59	A5	3715	U	N3-C2-O2	-7.73	116.79	122.20
59	A5	1086	C	C4-C5-C6	-7.73	113.53	117.40
59	A5	2221	G	O5'-P-OP1	-7.73	98.74	105.70
59	A5	76	C	C4-C5-C6	-7.73	113.54	117.40
59	A5	1778	A	C4-C5-C6	-7.73	113.14	117.00
59	A5	2493	C	C4-C5-C6	-7.73	113.54	117.40
59	A5	1390	C	C6-N1-C1'	-7.72	111.53	120.80
59	A5	1631	U	N3-C2-O2	-7.72	116.79	122.20
59	A5	1753	G	C5-N7-C8	-7.72	100.44	104.30
59	A5	2210	U	N3-C2-O2	-7.72	116.80	122.20
59	A5	3678	G	C4-N9-C1'	7.72	136.53	126.50
59	A5	1764	G	C6-C5-N7	-7.71	125.77	130.40
59	A5	1091	G	N9-C4-C5	7.71	108.48	105.40
59	A5	382	G	C5-C6-N1	7.71	115.36	111.50
59	A5	1157	C	N3-C2-O2	-7.71	116.50	121.90
59	A5	1524	U	N3-C2-O2	-7.70	116.81	122.20
58	B2	381	C	N3-C2-O2	-7.70	116.51	121.90
59	A5	1409	G	C8-N9-C4	-7.70	103.32	106.40
59	A5	1724	A	O5'-P-OP2	7.70	119.94	110.70
56	A8	102	A	O5'-P-OP1	7.70	119.94	110.70
59	A5	789	G	N3-C4-C5	-7.70	124.75	128.60
59	A5	755	A	C5-C6-N6	7.70	129.86	123.70
59	A5	1314	U	N1-C2-O2	7.70	128.19	122.80
59	A5	28	C	C5-C6-N1	7.69	124.85	121.00
59	A5	300	A	N7-C8-N9	7.69	117.65	113.80
56	A8	98	U	N1-C2-N3	7.69	119.51	114.90
59	A5	1643	G	C5-C6-O6	-7.69	123.99	128.60
59	A5	3677	U	N1-C1'-C2'	7.69	124.00	114.00
59	A5	3335	A	O5'-P-OP1	-7.69	98.78	105.70
59	A5	1540	U	N1-C2-O2	7.69	128.18	122.80
6	CC	365	LEU	CA-CB-CG	7.68	132.97	115.30
59	A5	41	U	C4-C5-C6	-7.68	115.09	119.70
59	A5	2096	C	C2-N1-C1'	7.68	127.25	118.80
59	A5	3349	A	C5-C6-N6	7.68	129.85	123.70
58	B2	1021	A	N7-C8-N9	7.68	117.64	113.80
59	A5	777	C	C5-C6-N1	7.68	124.84	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	986	A	N1-C6-N6	-7.68	113.99	118.60
59	A5	2151	A	C8-N9-C4	-7.68	102.73	105.80
59	A5	1031	G	N3-C2-N2	7.68	125.28	119.90
56	A8	27	C	N3-C2-O2	-7.67	116.53	121.90
58	B2	632	G	O5'-P-OP2	-7.67	98.80	105.70
59	A5	1347	A	N1-C2-N3	-7.67	125.46	129.30
59	A5	2723	A	C5-C6-N1	7.67	121.53	117.70
59	A5	3487	A	C4-C5-N7	7.67	114.53	110.70
59	A5	3339	U	C5-C4-O4	7.67	130.50	125.90
59	A5	2578	U	C5-C6-N1	7.66	126.53	122.70
59	A5	2659	A	N3-C4-C5	-7.66	121.44	126.80
59	A5	1163	G	C6-C5-N7	-7.66	125.80	130.40
59	A5	2710	A	C2-N3-C4	7.66	114.43	110.60
59	A5	1596	A	N1-C6-N6	-7.66	114.00	118.60
59	A5	3936	A	C5-N7-C8	-7.66	100.07	103.90
59	A5	1078	G	OP1-P-O3'	7.66	122.05	105.20
59	A5	921	C	C5-C6-N1	7.66	124.83	121.00
58	B2	1067	G	O5'-P-OP2	-7.66	98.81	105.70
59	A5	1031	G	C6-C5-N7	-7.66	125.81	130.40
59	A5	2702	A	C5-C6-N6	-7.66	117.58	123.70
58	B2	632	G	C4-C5-N7	7.65	113.86	110.80
59	A5	770	C	C5-C6-N1	7.65	124.83	121.00
59	A5	2088	G	N3-C4-C5	7.65	132.43	128.60
56	A8	97	U	N3-C4-O4	7.65	124.76	119.40
59	A5	53	A	N7-C8-N9	7.65	117.62	113.80
59	A5	26	G	C8-N9-C1'	-7.65	117.06	127.00
59	A5	1195	U	N1-C2-N3	7.64	119.49	114.90
59	A5	3727	A	C5-N7-C8	7.64	107.72	103.90
58	B2	1238	G	C4-N9-C1'	7.64	136.43	126.50
59	A5	102	G	N3-C4-C5	-7.64	124.78	128.60
59	A5	1073	C	N1-C2-O2	7.64	123.48	118.90
59	A5	434	A	C5-C6-N1	7.64	121.52	117.70
56	A8	53	C	C6-N1-C2	-7.63	117.25	120.30
59	A5	358	C	O5'-P-OP2	-7.63	98.83	105.70
59	A5	790	U	C5-C6-N1	7.63	126.52	122.70
59	A5	2773	G	N3-C2-N2	-7.63	114.56	119.90
59	A5	3464	G	N7-C8-N9	7.63	116.92	113.10
58	B2	1053	A	N1-C6-N6	7.63	123.18	118.60
59	A5	2241	U	OP2-P-O3'	7.63	121.98	105.20
59	A5	3350	U	C6-N1-C2	-7.63	116.42	121.00
59	A5	3833	U	N1-C2-O2	7.62	128.14	122.80
59	A5	1372	A	C4-C5-N7	7.62	114.51	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1401	C	C6-N1-C2	-7.62	117.25	120.30
59	A5	2652	U	N3-C2-O2	-7.62	116.87	122.20
59	A5	3762	G	C4-N9-C1'	-7.62	116.60	126.50
59	A5	587	U	N1-C2-O2	7.62	128.13	122.80
59	A5	1777	A	C4-C5-N7	7.61	114.51	110.70
59	A5	789	G	C5-N7-C8	7.61	108.11	104.30
59	A5	3400	U	C5-C6-N1	7.61	126.51	122.70
56	A8	107	U	C2-N3-C4	7.61	131.57	127.00
59	A5	3258	C	C2-N1-C1'	7.61	127.17	118.80
59	A5	385	A	C5-C6-N6	-7.61	117.61	123.70
58	B2	1167	U	C6-N1-C2	-7.61	116.44	121.00
59	A5	808	G	N9-C4-C5	-7.61	102.36	105.40
59	A5	1009	G	C8-N9-C4	-7.61	103.36	106.40
59	A5	1128	C	O5'-P-OP1	-7.61	98.85	105.70
59	A5	2754	G	C8-N9-C1'	-7.61	117.11	127.00
59	A5	3130	G	C4-C5-N7	7.61	113.84	110.80
59	A5	2736	A	N1-C2-N3	-7.60	125.50	129.30
58	B2	1104	C	C4-C5-C6	-7.60	113.60	117.40
59	A5	1095	G	N1-C2-N2	-7.60	109.36	116.20
59	A5	3138	G	C5-C6-N1	7.60	115.30	111.50
59	A5	3776	A	N1-C2-N3	-7.60	125.50	129.30
59	A5	3417	C	C4-C5-C6	-7.60	113.60	117.40
59	A5	3880	A	N7-C8-N9	7.60	117.60	113.80
59	A5	1346	C	N1-C2-O2	7.60	123.46	118.90
59	A5	1775	C	N3-C2-O2	-7.60	116.58	121.90
59	A5	457	A	N3-C4-N9	7.59	133.48	127.40
59	A5	1352	U	N1-C2-O2	7.59	128.12	122.80
59	A5	3344	U	N1-C2-O2	7.59	128.12	122.80
59	A5	1081	C	N1-C2-O2	7.59	123.45	118.90
59	A5	1115	A	OP1-P-O3'	7.59	121.90	105.20
59	A5	1626	A	C4-C5-C6	-7.59	113.20	117.00
59	A5	3167	A	N1-C6-N6	-7.59	114.05	118.60
59	A5	811	G	C8-N9-C4	-7.59	103.36	106.40
59	A5	1124	G	C5-C6-O6	-7.59	124.05	128.60
59	A5	1354	G	C5-C6-O6	-7.59	124.05	128.60
59	A5	3620	G	C6-N1-C2	7.59	129.65	125.10
59	A5	1296	U	C2-N1-C1'	7.58	126.80	117.70
59	A5	3630	C	C6-N1-C2	-7.58	117.27	120.30
59	A5	90	G	C5-C6-N1	7.58	115.29	111.50
59	A5	1332	C	N3-C2-O2	-7.58	116.59	121.90
59	A5	2492	A	C5-C6-N6	-7.58	117.63	123.70
59	A5	2589	U	N3-C2-O2	-7.58	116.89	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3296	C	C6-N1-C2	-7.58	117.27	120.30
59	A5	1358	U	O5'-P-OP1	-7.58	98.88	105.70
59	A5	1728	G	N9-C4-C5	-7.58	102.37	105.40
59	A5	2702	A	N9-C4-C5	-7.58	102.77	105.80
59	A5	449	U	C6-N1-C2	-7.58	116.45	121.00
59	A5	3348	G	O5'-P-OP2	-7.58	98.88	105.70
59	A5	2484	G	C6-C5-N7	-7.57	125.86	130.40
59	A5	3168	A	C4-C5-N7	7.57	114.49	110.70
59	A5	128	C	C5-C6-N1	7.57	124.78	121.00
59	A5	977	C	C5-C6-N1	7.57	124.79	121.00
59	A5	2516	U	C2-N3-C4	-7.57	122.46	127.00
59	A5	1515	U	O5'-P-OP1	-7.57	98.89	105.70
59	A5	2165	C	C2-N1-C1'	7.57	127.12	118.80
59	A5	333	C	C6-N1-C2	-7.57	117.27	120.30
59	A5	1087	G	C6-N1-C2	7.57	129.64	125.10
59	A5	1734	G	C2-N3-C4	-7.57	108.12	111.90
59	A5	3625	U	N1-C2-O2	7.57	128.10	122.80
59	A5	3722	C	N1-C2-O2	7.57	123.44	118.90
59	A5	81	A	C5-C6-N1	7.56	121.48	117.70
59	A5	2221	G	C5-C6-N1	7.56	115.28	111.50
59	A5	3363	G	N1-C6-O6	7.56	124.44	119.90
59	A5	2567	U	C6-N1-C2	-7.56	116.46	121.00
59	A5	3466	A	C8-N9-C4	-7.56	102.78	105.80
59	A5	1069	A	C8-N9-C4	7.56	108.82	105.80
59	A5	586	C	N1-C2-O2	7.55	123.43	118.90
58	B2	1844	C	C5-C6-N1	7.55	124.78	121.00
59	A5	3417	C	C2-N3-C4	7.55	123.67	119.90
59	A5	346	U	C6-N1-C2	-7.55	116.47	121.00
59	A5	776	A	N9-C4-C5	7.55	108.82	105.80
59	A5	799	A	N9-C4-C5	-7.55	102.78	105.80
59	A5	2754	G	C6-C5-N7	-7.55	125.87	130.40
59	A5	309	C	C4-C5-C6	-7.55	113.63	117.40
59	A5	3257	U	N3-C2-O2	-7.55	116.92	122.20
59	A5	371	G	C4-C5-N7	7.55	113.82	110.80
59	A5	1370	C	C5-C6-N1	7.55	124.77	121.00
59	A5	2708	C	C5-C6-N1	7.55	124.77	121.00
59	A5	1382	U	N1-C2-O2	7.54	128.08	122.80
59	A5	3519	C	N3-C2-O2	-7.54	116.62	121.90
59	A5	1689	G	N3-C4-N9	-7.54	121.48	126.00
59	A5	1398	C	C5-C6-N1	7.54	124.77	121.00
56	A8	36	A	C2-N3-C4	7.54	114.37	110.60
59	A5	92	A	N1-C6-N6	-7.54	114.08	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1174	G	C8-N9-C4	7.54	109.42	106.40
59	A5	1194	A	C4-N9-C1'	7.54	139.87	126.30
59	A5	188	G	N3-C4-C5	-7.54	124.83	128.60
59	A5	1689	G	C6-N1-C2	-7.54	120.58	125.10
59	A5	2676	U	O4'-C1'-N1	7.54	114.23	108.20
59	A5	2688	U	N1-C2-O2	7.54	128.07	122.80
59	A5	1068	C	C6-N1-C2	-7.53	117.29	120.30
59	A5	2193	C	C5-C6-N1	7.53	124.77	121.00
59	A5	2194	G	C2-N3-C4	7.53	115.67	111.90
59	A5	1074	U	C5-C6-N1	7.53	126.47	122.70
59	A5	3149	U	C2-N1-C1'	7.53	126.74	117.70
59	A5	3511	U	C2-N1-C1'	7.53	126.74	117.70
58	B2	627	A	N1-C6-N6	-7.53	114.08	118.60
59	A5	1671	U	N3-C4-C5	7.53	119.12	114.60
59	A5	74	A	C4-C5-C6	-7.53	113.24	117.00
59	A5	1797	A	C4-N9-C1'	-7.53	112.75	126.30
59	A5	3947	C	C4-C5-C6	-7.53	113.64	117.40
59	A5	285	G	N1-C2-N2	-7.53	109.43	116.20
59	A5	2783	C	N1-C2-N3	7.53	124.47	119.20
59	A5	1077	C	C2-N3-C4	-7.52	116.14	119.90
26	CN	31	ARG	NE-CZ-NH2	-7.52	116.54	120.30
59	A5	242	C	C2-N1-C1'	7.52	127.07	118.80
59	A5	1892	C	C5-C4-N4	-7.52	114.93	120.20
59	A5	35	C	N1-C2-O2	7.52	123.41	118.90
59	A5	1087	G	N1-C2-N3	-7.52	119.39	123.90
59	A5	3636	G	N9-C4-C5	7.52	108.41	105.40
59	A5	2658	A	C4-C5-C6	-7.52	113.24	117.00
59	A5	1689	G	C8-N9-C1'	7.52	136.77	127.00
58	B2	878	C	N1-C2-O2	7.51	123.41	118.90
59	A5	100	G	N3-C2-N2	7.51	125.16	119.90
59	A5	2181	A	C5-N7-C8	-7.51	100.14	103.90
59	A5	3716	C	C6-N1-C2	-7.51	117.30	120.30
58	B2	1404	C	C6-N1-C2	-7.51	117.30	120.30
59	A5	296	C	N3-C2-O2	-7.51	116.64	121.90
59	A5	1652	U	C5-C6-N1	7.51	126.45	122.70
59	A5	2562	U	N3-C2-O2	-7.51	116.94	122.20
54	A9	12	C	C5-C6-N1	7.51	124.75	121.00
59	A5	2520	U	C5-C4-O4	7.51	130.41	125.90
59	A5	188	G	C4-N9-C1'	7.51	136.26	126.50
59	A5	1095	G	N1-C6-O6	7.50	124.40	119.90
59	A5	1727	U	N1-C2-O2	7.50	128.05	122.80
59	A5	1886	C	C2-N1-C1'	7.50	127.05	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1899	C	N3-C2-O2	-7.50	116.65	121.90
59	A5	94	C	N1-C2-O2	7.50	123.40	118.90
59	A5	301	U	C2-N1-C1'	7.50	126.70	117.70
59	A5	3266	A	C8-N9-C4	7.50	108.80	105.80
56	A8	1	A	C8-N9-C4	7.50	108.80	105.80
59	A5	832	U	OP2-P-O3'	7.50	121.69	105.20
59	A5	2501	G	O5'-P-OP1	-7.50	98.95	105.70
59	A5	2736	A	O5'-P-OP1	-7.50	98.95	105.70
59	A5	2169	U	O5'-P-OP1	-7.49	98.96	105.70
59	A5	2676	U	C6-N1-C1'	-7.49	110.71	121.20
59	A5	2551	U	N3-C4-O4	7.49	124.64	119.40
59	A5	3331	A	OP1-P-O3'	7.49	121.68	105.20
59	A5	3526	C	N3-C4-C5	7.49	124.90	121.90
59	A5	1087	G	N9-C4-C5	-7.49	102.41	105.40
59	A5	1784	A	O4'-C1'-N9	-7.49	102.21	108.20
59	A5	2002	C	N1-C2-O2	7.48	123.39	118.90
58	B2	315	C	C6-N1-C2	-7.48	117.31	120.30
59	A5	1195	U	C2-N1-C1'	7.48	126.68	117.70
59	A5	1995	U	N1-C2-O2	7.48	128.04	122.80
59	A5	2567	U	N3-C4-O4	7.48	124.64	119.40
59	A5	95	G	N7-C8-N9	-7.48	109.36	113.10
59	A5	2775	A	C6-N1-C2	-7.48	114.11	118.60
59	A5	984	U	C2-N1-C1'	7.48	126.67	117.70
59	A5	2099	C	C5-C6-N1	7.47	124.74	121.00
59	A5	3611	C	C5-C6-N1	7.47	124.74	121.00
59	A5	1334	A	C4-C5-C6	-7.47	113.27	117.00
59	A5	3495	G	O5'-P-OP1	-7.47	98.98	105.70
55	A7	119	C	C5-C6-N1	7.47	124.73	121.00
59	A5	1548	C	C5-C6-N1	7.47	124.73	121.00
59	A5	2569	U	O5'-P-OP1	-7.47	98.98	105.70
59	A5	3228	A	N1-C6-N6	-7.47	114.12	118.60
59	A5	3349	A	C4-C5-C6	-7.47	113.27	117.00
58	B2	988	G	C4-N9-C1'	7.46	136.20	126.50
59	A5	380	G	C6-C5-N7	-7.46	125.92	130.40
59	A5	1021	U	N3-C2-O2	-7.46	116.97	122.20
47	Cn	9	ARG	NE-CZ-NH2	7.46	124.03	120.30
59	A5	58	G	C5'-C4'-O4'	-7.46	100.15	109.10
59	A5	3337	G	N1-C6-O6	-7.46	115.42	119.90
59	A5	2161	G	O5'-P-OP2	-7.46	98.99	105.70
59	A5	1958	G	C8-N9-C1'	-7.46	117.30	127.00
59	A5	993	A	O5'-P-OP1	-7.46	98.99	105.70
58	B2	988	G	C5-N7-C8	-7.45	100.57	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	610	U	N1-C2-O2	7.45	128.01	122.80
59	A5	1385	G	C4-C5-N7	7.45	113.78	110.80
59	A5	2778	G	N1-C2-N2	-7.45	109.49	116.20
58	B2	631	C	N3-C2-O2	-7.45	116.69	121.90
59	A5	1143	U	N1-C2-N3	7.45	119.37	114.90
59	A5	2004	G	C4-C5-C6	7.45	123.27	118.80
59	A5	3887	U	C5-C4-O4	-7.45	121.43	125.90
59	A5	1009	G	C5-C6-N1	7.45	115.22	111.50
59	A5	3415	U	C4-C5-C6	-7.45	115.23	119.70
59	A5	1022	A	O5'-P-OP1	-7.44	99.00	105.70
59	A5	1699	A	C5-N7-C8	7.44	107.62	103.90
59	A5	2249	A	O5'-P-OP1	-7.44	99.00	105.70
59	A5	3282	C	C5-C6-N1	7.44	124.72	121.00
59	A5	283	A	C6-N1-C2	-7.44	114.14	118.60
59	A5	587	U	OP1-P-O3'	7.44	121.57	105.20
59	A5	1149	C	C5-C6-N1	7.44	124.72	121.00
59	A5	2004	G	C8-N9-C4	-7.44	103.42	106.40
59	A5	2657	A	C4-C5-N7	7.44	114.42	110.70
59	A5	1364	A	N7-C8-N9	7.44	117.52	113.80
44	Ck	42	LEU	CB-CG-CD2	7.44	123.64	111.00
59	A5	2702	A	N1-C6-N6	7.44	123.06	118.60
59	A5	1135	U	C4-C5-C6	-7.44	115.24	119.70
59	A5	1003	C	N3-C4-C5	-7.43	118.93	121.90
59	A5	1322	U	C4-C5-C6	-7.43	115.24	119.70
59	A5	3679	C	C6-N1-C2	-7.43	117.33	120.30
59	A5	3592	C	OP1-P-OP2	-7.43	108.45	119.60
59	A5	1181	A	C8-N9-C4	-7.43	102.83	105.80
59	A5	1546	U	O5'-P-OP2	-7.42	99.02	105.70
58	B2	849	U	N1-C2-O2	7.42	128.00	122.80
59	A5	322	G	C5-N7-C8	-7.42	100.59	104.30
59	A5	1110	G	N1-C6-O6	-7.42	115.45	119.90
59	A5	1532	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	1696	A	C4-C5-N7	7.42	114.41	110.70
59	A5	1888	A	C6-C5-N7	-7.42	127.11	132.30
59	A5	3624	C	C6-N1-C2	-7.42	117.33	120.30
58	B2	356	C	C6-N1-C2	-7.42	117.33	120.30
59	A5	2164	G	C5-N7-C8	-7.42	100.59	104.30
59	A5	2793	C	C4-C5-C6	-7.42	113.69	117.40
59	A5	1648	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	2744	C	O5'-P-OP2	-7.42	99.03	105.70
56	A8	86	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	1313	A	N3-C4-C5	7.42	131.99	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	819	U	N1-C2-O2	7.41	127.99	122.80
59	A5	1137	G	C5-C6-N1	7.41	115.21	111.50
59	A5	1057	G	C4-C5-N7	7.41	113.76	110.80
59	A5	3478	G	C5-N7-C8	7.41	108.00	104.30
59	A5	1801	U	N3-C4-O4	-7.41	114.21	119.40
59	A5	1875	G	C8-N9-C4	7.41	109.36	106.40
59	A5	2008	U	N1-C2-O2	7.41	127.99	122.80
59	A5	2495	G	N1-C6-O6	-7.41	115.45	119.90
59	A5	996	C	N3-C2-O2	-7.41	116.72	121.90
59	A5	1073	C	C6-N1-C2	-7.40	117.34	120.30
59	A5	283	A	C2-N3-C4	7.40	114.30	110.60
59	A5	3246	G	C2-N3-C4	-7.40	108.20	111.90
59	A5	79	G	N9-C4-C5	-7.39	102.44	105.40
59	A5	322	G	C6-C5-N7	-7.39	125.96	130.40
59	A5	3762	G	N3-C4-C5	7.39	132.30	128.60
59	A5	522	G	N7-C8-N9	7.39	116.80	113.10
59	A5	100	G	N1-C6-O6	-7.39	115.47	119.90
58	B2	1849	U	P-O3'-C3'	7.39	128.57	119.70
59	A5	1793	C	N3-C4-C5	-7.39	118.94	121.90
59	A5	3623	G	C8-N9-C4	-7.39	103.44	106.40
58	B2	1913	C	N1-C2-O2	7.39	123.33	118.90
59	A5	2632	U	C5-C6-N1	7.39	126.39	122.70
56	A8	13	U	O5'-P-OP1	-7.39	99.05	105.70
58	B2	448	C	C6-N1-C2	-7.39	117.35	120.30
59	A5	2215	G	O5'-P-OP1	-7.39	99.05	105.70
58	B2	1104	C	C5-C6-N1	7.38	124.69	121.00
59	A5	1106	A	N1-C6-N6	-7.38	114.17	118.60
59	A5	1164	G	C4-C5-N7	7.38	113.75	110.80
59	A5	1333	C	N1-C2-O2	7.38	123.33	118.90
59	A5	2037	C	N3-C4-C5	-7.38	118.95	121.90
59	A5	295	G	C8-N9-C4	7.38	109.35	106.40
59	A5	298	U	C5-C6-N1	7.38	126.39	122.70
59	A5	1907	U	C6-N1-C2	-7.38	116.57	121.00
59	A5	3339	U	O5'-P-OP2	-7.38	99.06	105.70
58	B2	1090	A	C5-N7-C8	-7.38	100.21	103.90
59	A5	1138	C	O5'-P-OP2	7.38	119.55	110.70
59	A5	546	G	C6-C5-N7	-7.38	125.97	130.40
59	A5	989	A	C5-C6-N1	7.38	121.39	117.70
59	A5	1105	U	C5-C4-O4	7.38	130.33	125.90
59	A5	1110	G	N3-C4-C5	-7.38	124.91	128.60
59	A5	2624	G	C2-N3-C4	-7.38	108.21	111.90
59	A5	2090	U	C5-C6-N1	7.38	126.39	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3000	G	C5-N7-C8	-7.38	100.61	104.30
59	A5	3880	A	O4'-C1'-N9	7.38	114.10	108.20
55	A7	67	G	C5-N7-C8	-7.37	100.61	104.30
59	A5	1115	A	N3-C4-C5	7.37	131.96	126.80
59	A5	2773	G	N1-C2-N2	7.37	122.83	116.20
59	A5	3166	C	C5-C6-N1	7.37	124.69	121.00
59	A5	52	A	N9-C4-C5	-7.37	102.85	105.80
59	A5	77	A	N1-C2-N3	-7.37	125.61	129.30
59	A5	3151	G	N1-C6-O6	-7.37	115.48	119.90
59	A5	3260	G	N9-C4-C5	7.37	108.35	105.40
59	A5	1081	C	N3-C4-N4	-7.37	112.84	118.00
59	A5	3235	A	C6-C5-N7	-7.37	127.14	132.30
59	A5	1665	C	C4-C5-C6	-7.37	113.72	117.40
59	A5	3932	U	C2-N1-C1'	7.37	126.54	117.70
59	A5	1016	A	C8-N9-C4	-7.37	102.85	105.80
59	A5	1721	C	N3-C4-C5	7.36	124.84	121.90
59	A5	1721	C	C6-N1-C2	-7.36	117.36	120.30
59	A5	1116	G	N3-C2-N2	-7.36	114.75	119.90
59	A5	2197	A	N7-C8-N9	7.36	117.48	113.80
58	B2	38	C	N3-C2-O2	-7.36	116.75	121.90
59	A5	1932	C	C5-C6-N1	7.36	124.68	121.00
59	A5	2781	G	O4'-C1'-N9	7.36	114.09	108.20
59	A5	3762	G	C8-N9-C1'	7.36	136.56	127.00
59	A5	1147	U	C5-C6-N1	7.36	126.38	122.70
59	A5	2739	A	N1-C2-N3	-7.36	125.62	129.30
59	A5	754	A	N1-C2-N3	-7.35	125.62	129.30
59	A5	831	A	N1-C6-N6	7.35	123.01	118.60
59	A5	1793	C	C5-C6-N1	7.35	124.67	121.00
59	A5	91	U	O5'-P-OP1	-7.35	99.09	105.70
59	A5	3632	G	N7-C8-N9	7.35	116.77	113.10
59	A5	3934	C	N3-C2-O2	-7.34	116.76	121.90
32	CT	144	LEU	C-N-CA	7.34	140.05	121.70
59	A5	857	U	O5'-P-OP1	-7.34	99.09	105.70
59	A5	1365	U	N3-C2-O2	-7.34	117.06	122.20
59	A5	1372	A	C5-N7-C8	-7.34	100.23	103.90
59	A5	1985	C	C6-N1-C1'	7.34	129.61	120.80
59	A5	3000	G	C4-C5-N7	7.34	113.74	110.80
59	A5	1094	A	O5'-P-OP1	-7.34	99.09	105.70
58	B2	1188	G	O5'-P-OP1	-7.34	99.10	105.70
59	A5	558	C	N3-C2-O2	-7.34	116.77	121.90
59	A5	1140	G	N9-C4-C5	-7.34	102.47	105.40
59	A5	2749	G	N3-C2-N2	7.34	125.03	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2260	U	C5-C4-O4	7.33	130.30	125.90
59	A5	2620	C	C5-C6-N1	7.33	124.67	121.00
59	A5	3486	U	OP1-P-O3'	7.33	121.33	105.20
58	B2	1683	U	C2-N1-C1'	7.33	126.50	117.70
58	B2	1844	C	C6-N1-C2	-7.33	117.37	120.30
59	A5	1959	A	N9-C4-C5	-7.33	102.87	105.80
59	A5	3491	C	C6-N1-C2	-7.33	117.37	120.30
59	A5	357	C	N1-C2-O2	7.33	123.30	118.90
59	A5	796	A	C2-N3-C4	7.33	114.26	110.60
59	A5	1631	U	C2-N1-C1'	7.33	126.49	117.70
59	A5	1959	A	N1-C2-N3	-7.33	125.64	129.30
59	A5	2517	A	N9-C4-C5	7.33	108.73	105.80
56	A8	5	C	C2-N3-C4	7.32	123.56	119.90
59	A5	1689	G	OP2-P-O3'	7.32	121.31	105.20
59	A5	2771	G	C4-C5-N7	7.32	113.73	110.80
58	B2	1159	C	C6-N1-C2	-7.32	117.37	120.30
59	A5	3488	G	C5-C6-O6	-7.32	124.21	128.60
59	A5	1007	A	O5'-P-OP1	-7.32	99.11	105.70
59	A5	2128	A	C5-N7-C8	-7.32	100.24	103.90
59	A5	1101	A	N1-C6-N6	-7.32	114.21	118.60
59	A5	1319	A	N1-C6-N6	7.32	122.99	118.60
56	A8	14	G	N1-C6-O6	-7.31	115.51	119.90
59	A5	3337	G	N3-C2-N2	7.31	125.02	119.90
65	CO	131	LEU	CB-CG-CD1	-7.31	98.57	111.00
59	A5	790	U	N3-C2-O2	-7.31	117.08	122.20
59	A5	2780	A	C4-C5-C6	-7.31	113.34	117.00
59	A5	838	U	C5-C6-N1	7.31	126.35	122.70
59	A5	2008	U	C5-C6-N1	7.31	126.35	122.70
59	A5	2188	C	N1-C2-O2	7.31	123.28	118.90
59	A5	3132	C	C6-N1-C2	-7.31	117.38	120.30
59	A5	457	A	N3-C4-C5	-7.30	121.69	126.80
59	A5	1090	U	N3-C2-O2	-7.30	117.09	122.20
59	A5	1615	G	C5-C6-O6	7.30	132.98	128.60
58	B2	12	U	N3-C2-O2	-7.30	117.09	122.20
59	A5	2212	A	C2-N3-C4	7.30	114.25	110.60
59	A5	227	A	C2-N3-C4	7.30	114.25	110.60
59	A5	346	U	O5'-P-OP2	-7.30	99.13	105.70
59	A5	1514	U	C5-C4-O4	7.30	130.28	125.90
59	A5	1670	G	C5-C6-N1	7.30	115.15	111.50
59	A5	2054	U	N1-C2-O2	7.30	127.91	122.80
59	A5	3363	G	C8-N9-C4	-7.30	103.48	106.40
59	A5	3399	C	N1-C2-O2	7.30	123.28	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	293	U	C5-C6-N1	7.29	126.35	122.70
59	A5	1559	A	C8-N9-C4	-7.29	102.88	105.80
59	A5	2725	U	O5'-P-OP1	-7.29	99.14	105.70
59	A5	767	A	C5-N7-C8	-7.29	100.25	103.90
59	A5	998	G	N3-C2-N2	7.29	125.00	119.90
59	A5	1888	A	C4-C5-N7	7.29	114.35	110.70
59	A5	2796	G	O4'-C1'-N9	-7.29	102.37	108.20
59	A5	3673	G	N9-C4-C5	-7.29	102.48	105.40
58	B2	1194	C	C6-N1-C2	-7.29	117.38	120.30
59	A5	3932	U	C6-N1-C2	-7.29	116.63	121.00
59	A5	2255	G	C6-C5-N7	-7.29	126.03	130.40
59	A5	3523	U	N3-C2-O2	-7.29	117.10	122.20
58	B2	113	G	C5-C6-O6	-7.29	124.23	128.60
59	A5	754	A	C8-N9-C4	-7.29	102.89	105.80
59	A5	1372	A	N1-C6-N6	7.29	122.97	118.60
59	A5	347	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	429	U	N3-C2-O2	-7.28	117.10	122.20
59	A5	2215	G	N7-C8-N9	7.28	116.74	113.10
59	A5	2233	C	C5-C6-N1	7.28	124.64	121.00
59	A5	2533	U	N3-C4-O4	7.28	124.50	119.40
58	B2	1980	U	C5-C6-N1	7.28	126.34	122.70
59	A5	1548	C	C6-N1-C2	-7.28	117.39	120.30
59	A5	3154	C	C2-N3-C4	-7.28	116.26	119.90
59	A5	810	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	1368	A	O5'-P-OP1	-7.28	99.15	105.70
59	A5	2110	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	2729	U	C4-C5-C6	-7.28	115.33	119.70
59	A5	2777	A	C5-C6-N6	7.28	129.52	123.70
58	B2	1344	A	C2-N3-C4	7.28	114.24	110.60
59	A5	805	C	C5-C6-N1	7.28	124.64	121.00
59	A5	300	A	N9-C4-C5	7.27	108.71	105.80
59	A5	2727	U	N3-C4-O4	7.27	124.49	119.40
59	A5	1607	A	C5-C6-N1	7.27	121.34	117.70
59	A5	2186	C	N3-C2-O2	-7.27	116.81	121.90
59	A5	2759	G	C4-C5-N7	7.27	113.71	110.80
59	A5	58	G	N1-C2-N3	-7.27	119.54	123.90
59	A5	1648	A	N7-C8-N9	7.27	117.44	113.80
58	B2	1159	C	C5-C6-N1	7.27	124.63	121.00
59	A5	2767	U	N1-C2-O2	7.27	127.89	122.80
59	A5	3945	A	N7-C8-N9	7.27	117.43	113.80
59	A5	1595	G	C8-N9-C4	-7.26	103.49	106.40
59	A5	1757	A	N1-C2-N3	-7.26	125.67	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3503	G	C5-C6-O6	7.26	132.96	128.60
55	A7	14	C	C6-N1-C2	-7.26	117.39	120.30
59	A5	2169	U	C6-N1-C2	-7.26	116.64	121.00
59	A5	377	U	N3-C4-O4	7.26	124.48	119.40
59	A5	775	U	OP1-P-O3'	7.26	121.17	105.20
59	A5	2191	G	C6-C5-N7	7.26	134.76	130.40
59	A5	2678	G	C2-N3-C4	7.26	115.53	111.90
59	A5	2796	G	C4-N9-C1'	7.26	135.94	126.50
59	A5	3541	A	N9-C4-C5	7.26	108.70	105.80
59	A5	828	G	N9-C4-C5	-7.26	102.50	105.40
59	A5	1781	U	O4'-C1'-N1	7.26	114.01	108.20
59	A5	2753	G	OP1-P-OP2	7.26	130.49	119.60
59	A5	549	A	C5-C6-N6	-7.26	117.90	123.70
59	A5	2676	U	C2-N1-C1'	7.26	126.41	117.70
59	A5	1605	U	O5'-P-OP1	-7.25	99.17	105.70
58	B2	1980	U	C6-N1-C2	-7.25	116.65	121.00
59	A5	58	G	C6-C5-N7	7.25	134.75	130.40
59	A5	808	G	N1-C2-N2	7.25	122.73	116.20
55	A7	105	C	N3-C2-O2	-7.25	116.83	121.90
59	A5	1681	G	N3-C2-N2	7.25	124.97	119.90
59	A5	3608	G	C8-N9-C4	-7.25	103.50	106.40
59	A5	2015	G	N7-C8-N9	7.24	116.72	113.10
59	A5	2762	A	C5-C6-N1	7.24	121.32	117.70
59	A5	444	C	N3-C2-O2	-7.24	116.83	121.90
59	A5	2641	C	C2-N1-C1'	7.24	126.77	118.80
59	A5	3296	C	O5'-P-OP1	-7.24	99.18	105.70
59	A5	3403	G	N7-C8-N9	-7.24	109.48	113.10
59	A5	235	A	C5-C6-N1	7.24	121.32	117.70
59	A5	815	A	C4-C5-C6	-7.24	113.38	117.00
59	A5	1646	U	N3-C2-O2	-7.24	117.13	122.20
59	A5	57	G	OP2-P-O3'	7.24	121.12	105.20
59	A5	1081	C	N3-C2-O2	-7.24	116.83	121.90
59	A5	1647	A	N1-C2-N3	-7.23	125.68	129.30
59	A5	2723	A	C2-N3-C4	7.23	114.22	110.60
58	B2	111	A	O5'-P-OP2	-7.23	99.19	105.70
58	B2	1223	U	N3-C2-O2	-7.23	117.14	122.20
59	A5	562	U	N1-C2-O2	7.23	127.86	122.80
59	A5	1008	A	C2-N3-C4	-7.23	106.98	110.60
59	A5	2661	G	C5-N7-C8	-7.23	100.69	104.30
59	A5	3570	C	C6-N1-C2	-7.23	117.41	120.30
59	A5	2766	U	C2-N3-C4	7.23	131.34	127.00
59	A5	1148	C	N1-C2-O2	7.22	123.23	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3591	A	C8-N9-C4	-7.22	102.91	105.80
59	A5	3477	A	C5-C6-N6	-7.22	117.92	123.70
59	A5	3670	G	C6-C5-N7	-7.22	126.07	130.40
55	A7	67	G	N3-C4-C5	7.22	132.21	128.60
58	B2	883	C	C5-C6-N1	7.22	124.61	121.00
59	A5	95	G	C8-N9-C4	7.22	109.29	106.40
59	A5	1751	U	C2-N1-C1'	7.22	126.36	117.70
59	A5	3176	C	C2-N1-C1'	7.22	126.74	118.80
59	A5	1981	A	C4-C5-C6	-7.22	113.39	117.00
59	A5	380	G	N9-C4-C5	-7.22	102.51	105.40
59	A5	295	G	N7-C8-N9	-7.21	109.49	113.10
59	A5	1073	C	N3-C4-N4	-7.21	112.95	118.00
59	A5	3341	C	N1-C2-O2	7.21	123.23	118.90
59	A5	186	G	P-O3'-C3'	7.21	128.36	119.70
59	A5	1388	C	C6-N1-C2	-7.21	117.42	120.30
56	A8	21	U	N3-C4-C5	7.21	118.93	114.60
59	A5	1121	A	C5-C6-N1	7.21	121.31	117.70
59	A5	2723	A	C5-N7-C8	-7.21	100.30	103.90
59	A5	2798	C	C5-C6-N1	7.21	124.61	121.00
58	B2	1858	U	N3-C2-O2	-7.21	117.15	122.20
59	A5	3414	U	N3-C2-O2	-7.21	117.15	122.20
59	A5	1276	G	N3-C4-N9	-7.21	121.68	126.00
59	A5	1421	G	C8-N9-C4	-7.21	103.52	106.40
59	A5	3464	G	C2-N3-C4	-7.21	108.30	111.90
59	A5	3519	C	N1-C2-O2	7.21	123.22	118.90
59	A5	1097	A	N1-C2-N3	-7.21	125.70	129.30
59	A5	1317	A	C8-N9-C4	-7.20	102.92	105.80
58	B2	249	U	C5-C6-N1	7.20	126.30	122.70
58	B2	317	A	C2-N3-C4	7.20	114.20	110.60
59	A5	1384	C	C4-C5-C6	7.20	121.00	117.40
59	A5	384	A	C5-C6-N1	7.20	121.30	117.70
59	A5	438	G	C4-C5-N7	7.20	113.68	110.80
59	A5	74	A	C5-C6-N1	7.20	121.30	117.70
59	A5	1114	A	C6-C5-N7	-7.20	127.26	132.30
59	A5	1003	C	C6-N1-C2	-7.19	117.42	120.30
59	A5	1160	U	C4-C5-C6	7.19	124.02	119.70
59	A5	1624	G	C5-C6-N1	7.19	115.10	111.50
59	A5	2626	C	N1-C2-O2	7.19	123.22	118.90
59	A5	3420	U	C5-C6-N1	-7.19	119.10	122.70
58	B2	1227	A	N1-C6-N6	-7.19	114.28	118.60
59	A5	1794	G	O4'-C1'-N9	7.19	113.95	108.20
58	B2	1596	C	N1-C2-O2	7.19	123.21	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	442	A	O5'-P-OP2	-7.19	99.23	105.70
59	A5	448	A	C4-C5-N7	7.19	114.29	110.70
59	A5	1409	G	N7-C8-N9	7.19	116.69	113.10
59	A5	1137	G	N3-C2-N2	-7.18	114.87	119.90
59	A5	1319	A	N1-C2-N3	-7.18	125.71	129.30
59	A5	1404	A	C4-C5-N7	7.18	114.29	110.70
59	A5	3282	C	C6-N1-C2	-7.18	117.43	120.30
56	A8	26	U	N1-C2-O2	7.18	127.83	122.80
59	A5	112	C	N3-C2-O2	-7.18	116.87	121.90
59	A5	1369	C	C6-N1-C2	-7.18	117.43	120.30
58	B2	381	C	C6-N1-C2	-7.18	117.43	120.30
59	A5	258	U	N3-C2-O2	-7.18	117.17	122.20
59	A5	2721	C	N3-C4-N4	-7.18	112.98	118.00
59	A5	1003	C	C2-N3-C4	7.18	123.49	119.90
58	B2	1080	A	O5'-P-OP1	-7.17	99.24	105.70
59	A5	2554	U	C5-C6-N1	7.17	126.29	122.70
59	A5	2183	A	N1-C6-N6	-7.17	114.30	118.60
59	A5	2550	G	C5-C6-O6	7.17	132.90	128.60
26	CN	116	LEU	CB-CG-CD2	-7.17	98.81	111.00
59	A5	3165	U	N3-C2-O2	-7.17	117.18	122.20
59	A5	3541	A	N1-C6-N6	-7.17	114.30	118.60
59	A5	2205	G	C6-C5-N7	-7.17	126.10	130.40
59	A5	1892	C	N3-C4-N4	7.17	123.02	118.00
74	Ac	55	LEU	CA-CB-CG	7.17	131.79	115.30
58	B2	1167	U	N3-C2-O2	-7.17	117.18	122.20
56	A8	20	C	N3-C4-N4	-7.17	112.98	118.00
56	A8	102	A	C8-N9-C4	-7.17	102.93	105.80
59	A5	3490	C	C6-N1-C1'	7.17	129.40	120.80
59	A5	3943	G	C6-C5-N7	-7.17	126.10	130.40
59	A5	320	U	C5-C6-N1	7.16	126.28	122.70
59	A5	1004	C	C6-N1-C2	-7.16	117.43	120.30
59	A5	1078	G	O5'-P-OP1	-7.16	99.25	105.70
59	A5	1146	U	C6-N1-C2	-7.16	116.70	121.00
59	A5	1169	C	N3-C2-O2	-7.16	116.89	121.90
59	A5	1389	C	N1-C2-O2	7.16	123.20	118.90
59	A5	1751	U	C6-N1-C2	-7.16	116.70	121.00
59	A5	3675	A	N1-C6-N6	-7.16	114.30	118.60
59	A5	1699	A	C5-C6-N1	7.16	121.28	117.70
59	A5	2778	G	C5-C6-O6	7.16	132.90	128.60
59	A5	794	G	C5-C6-O6	-7.16	124.31	128.60
59	A5	1192	A	N9-C4-C5	-7.16	102.94	105.80
59	A5	3519	C	O5'-P-OP1	-7.16	99.26	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3579	C	C6-N1-C2	-7.16	117.44	120.30
59	A5	2066	G	N3-C4-N9	-7.16	121.71	126.00
59	A5	258	U	N1-C2-O2	7.16	127.81	122.80
59	A5	755	A	N9-C4-C5	7.16	108.66	105.80
59	A5	438	G	N3-C4-N9	-7.15	121.71	126.00
59	A5	920	G	C6-C5-N7	-7.15	126.11	130.40
59	A5	2799	U	N3-C4-O4	-7.15	114.39	119.40
56	A8	42	A	N9-C4-C5	-7.15	102.94	105.80
59	A5	65	A	C2-N3-C4	7.15	114.18	110.60
59	A5	2701	G	N7-C8-N9	-7.15	109.52	113.10
59	A5	1168	G	N7-C8-N9	7.15	116.67	113.10
59	A5	2744	C	C2-N3-C4	7.15	123.47	119.90
59	A5	2790	G	N9-C4-C5	7.15	108.26	105.40
59	A5	1898	C	N3-C2-O2	-7.14	116.90	121.90
59	A5	1866	G	C6-C5-N7	-7.14	126.11	130.40
59	A5	2021	C	C6-N1-C2	-7.14	117.44	120.30
59	A5	1340	G	C2-N3-C4	7.14	115.47	111.90
59	A5	3235	A	C4-C5-N7	7.14	114.27	110.70
59	A5	1563	A	C8-N9-C4	7.14	108.66	105.80
59	A5	1701	C	C5-C6-N1	7.14	124.57	121.00
59	A5	3510	U	O4'-C1'-N1	7.14	113.91	108.20
59	A5	413	A	O5'-P-OP2	-7.14	99.28	105.70
59	A5	800	C	C2-N3-C4	7.14	123.47	119.90
59	A5	2782	A	C2-N3-C4	7.14	114.17	110.60
59	A5	3285	G	N1-C2-N2	-7.14	109.78	116.20
59	A5	1319	A	C4-C5-N7	7.13	114.27	110.70
59	A5	3663	U	O5'-P-OP1	-7.13	99.28	105.70
59	A5	2131	C	C4-C5-C6	7.13	120.97	117.40
59	A5	3666	C	O5'-P-OP2	-7.13	99.28	105.70
59	A5	2195	A	N1-C2-N3	-7.13	125.73	129.30
59	A5	2753	G	N3-C4-N9	7.13	130.28	126.00
59	A5	858	U	C5-C6-N1	7.13	126.27	122.70
59	A5	1289	C	C6-N1-C1'	7.13	129.35	120.80
59	A5	1617	U	N3-C4-C5	7.13	118.88	114.60
59	A5	1131	C	C5-C4-N4	-7.13	115.21	120.20
59	A5	1318	A	C6-C5-N7	-7.13	127.31	132.30
59	A5	1347	A	N1-C6-N6	-7.13	114.32	118.60
59	A5	2766	U	N3-C4-C5	-7.13	110.32	114.60
59	A5	2260	U	N3-C2-O2	-7.12	117.21	122.20
59	A5	2684	C	C6-N1-C2	-7.12	117.45	120.30
59	A5	3132	C	N1-C2-O2	7.12	123.17	118.90
59	A5	440	U	C5-C6-N1	7.12	126.26	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1271	G	N9-C4-C5	-7.12	102.55	105.40
59	A5	1710	G	N7-C8-N9	7.12	116.66	113.10
58	B2	1073	G	C5-C6-N1	7.12	115.06	111.50
59	A5	1169	C	C6-N1-C2	-7.12	117.45	120.30
59	A5	3841	C	N3-C2-O2	-7.12	116.92	121.90
59	A5	679	G	N3-C4-N9	7.12	130.27	126.00
59	A5	1143	U	C5-C4-O4	7.12	130.17	125.90
59	A5	2689	G	N1-C6-O6	-7.12	115.63	119.90
59	A5	3678	G	C8-N9-C1'	-7.12	117.75	127.00
59	A5	783	G	C4-C5-N7	7.11	113.65	110.80
59	A5	3634	U	C5-C6-N1	7.11	126.26	122.70
59	A5	371	G	C4-C5-C6	-7.11	114.53	118.80
59	A5	437	G	C5-N7-C8	-7.11	100.75	104.30
59	A5	3544	G	C8-N9-C4	7.11	109.24	106.40
59	A5	3730	G	N7-C8-N9	7.11	116.66	113.10
41	Ce	43	ARG	NE-CZ-NH2	-7.11	116.75	120.30
59	A5	439	U	C2-N1-C1'	-7.11	109.17	117.70
59	A5	2185	U	C6-N1-C2	-7.11	116.74	121.00
59	A5	2761	A	N1-C2-N3	-7.11	125.75	129.30
58	B2	1133	G	C5-C6-O6	-7.10	124.34	128.60
59	A5	1318	A	C5-C6-N6	-7.10	118.02	123.70
58	B2	621	G	O4'-C1'-N9	-7.10	102.52	108.20
59	A5	3193	C	C2-N1-C1'	7.10	126.61	118.80
59	A5	3548	U	C5-C6-N1	7.10	126.25	122.70
59	A5	1095	G	C2-N3-C4	-7.10	108.35	111.90
58	B2	640	U	C5-C6-N1	7.10	126.25	122.70
59	A5	825	C	N3-C2-O2	-7.10	116.93	121.90
59	A5	1366	G	C5-C6-O6	-7.10	124.34	128.60
59	A5	2750	A	O5'-P-OP2	-7.10	99.31	105.70
58	B2	251	G	O5'-P-OP2	-7.10	99.31	105.70
59	A5	2781	G	C5-C6-O6	7.10	132.86	128.60
59	A5	2158	U	C5-C4-O4	-7.09	121.64	125.90
59	A5	1003	C	N3-C2-O2	-7.09	116.94	121.90
59	A5	3415	U	C5-C6-N1	7.09	126.25	122.70
59	A5	1718	G	C4-C5-C6	7.09	123.06	118.80
59	A5	2761	A	N9-C4-C5	-7.09	102.96	105.80
59	A5	1081	C	O5'-P-OP2	-7.09	99.32	105.70
59	A5	2704	A	N1-C6-N6	7.09	122.85	118.60
59	A5	3943	G	C8-N9-C1'	-7.09	117.78	127.00
59	A5	3330	C	C6-N1-C2	7.09	123.14	120.30
59	A5	3593	A	C4-C5-N7	-7.09	107.16	110.70
56	A8	38	G	C4-C5-N7	7.09	113.64	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1421	G	C4-C5-N7	7.09	113.63	110.80
59	A5	350	C	N1-C2-O2	7.08	123.15	118.90
59	A5	3509	U	C5-C4-O4	-7.08	121.65	125.90
59	A5	28	C	N3-C2-O2	-7.08	116.94	121.90
59	A5	1557	U	OP1-P-OP2	-7.08	108.97	119.60
59	A5	787	C	OP2-P-O3'	7.08	120.78	105.20
59	A5	1607	A	N7-C8-N9	7.08	117.34	113.80
59	A5	1060	G	N1-C6-O6	-7.08	115.66	119.90
59	A5	3304	U	C2-N1-C1'	7.08	126.19	117.70
55	A7	80	U	N3-C2-O2	-7.07	117.25	122.20
59	A5	350	C	C2-N1-C1'	7.07	126.58	118.80
59	A5	1611	G	C5-C6-N1	7.07	115.04	111.50
59	A5	874	G	N9-C4-C5	-7.07	102.57	105.40
59	A5	1792	G	C8-N9-C4	7.07	109.23	106.40
59	A5	2624	G	C6-C5-N7	-7.07	126.16	130.40
59	A5	3479	C	C2-N3-C4	7.07	123.44	119.90
59	A5	3408	C	N3-C2-O2	-7.07	116.95	121.90
55	A7	67	G	C2-N3-C4	-7.07	108.37	111.90
58	B2	838	A	C5-C6-N1	7.07	121.23	117.70
58	B2	1234	G	C5-C6-O6	-7.07	124.36	128.60
59	A5	679	G	C2-N3-C4	7.07	115.43	111.90
59	A5	1301	A	N7-C8-N9	7.07	117.33	113.80
59	A5	2520	U	C6-N1-C1'	7.07	131.09	121.20
59	A5	3616	G	N9-C4-C5	-7.07	102.57	105.40
59	A5	3722	C	N3-C2-O2	-7.07	116.95	121.90
59	A5	437	G	N7-C8-N9	7.07	116.63	113.10
59	A5	3265	C	N3-C2-O2	-7.07	116.95	121.90
58	B2	1029	G	N1-C6-O6	-7.06	115.66	119.90
59	A5	1036	A	C5-N7-C8	-7.06	100.37	103.90
59	A5	1375	G	C5-N7-C8	-7.06	100.77	104.30
59	A5	1516	A	C8-N9-C4	7.06	108.62	105.80
58	B2	1683	U	N1-C2-O2	7.06	127.74	122.80
59	A5	1121	A	C6-N1-C2	-7.06	114.37	118.60
59	A5	2687	A	C5-C6-N6	-7.06	118.05	123.70
59	A5	1391	A	O5'-P-OP2	-7.06	99.35	105.70
59	A5	1974	U	N3-C2-O2	-7.06	117.26	122.20
59	A5	2769	G	N1-C2-N2	-7.06	109.85	116.20
59	A5	3251	C	C5-C6-N1	7.05	124.53	121.00
59	A5	799	A	OP1-P-OP2	-7.05	109.02	119.60
59	A5	872	A	C2-N3-C4	7.05	114.13	110.60
59	A5	1006	A	N1-C2-N3	-7.05	125.77	129.30
59	A5	1522	G	N1-C2-N3	7.05	128.13	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2920	U	C2-N1-C1'	7.05	126.16	117.70
59	A5	2990	C	C6-N1-C2	-7.05	117.48	120.30
59	A5	1313	A	C4-C5-N7	7.05	114.23	110.70
59	A5	1872	A	C6-C5-N7	-7.05	127.36	132.30
59	A5	3212	A	O4'-C1'-N9	7.05	113.84	108.20
64	AQ	118	ASP	CB-CG-OD1	7.05	124.65	118.30
59	A5	1522	G	O5'-P-OP2	-7.05	99.36	105.70
59	A5	1549	A	N1-C2-N3	-7.05	125.78	129.30
59	A5	73	U	N1-C2-O2	7.05	127.73	122.80
59	A5	2686	C	C5-C6-N1	7.05	124.52	121.00
59	A5	1181	A	O5'-P-OP1	-7.04	99.36	105.70
59	A5	2557	C	C5-C6-N1	7.04	124.52	121.00
59	A5	440	U	OP1-P-O3'	7.04	120.69	105.20
59	A5	1066	A	C2-N3-C4	7.04	114.12	110.60
59	A5	1108	G	N9-C4-C5	7.04	108.22	105.40
59	A5	2641	C	C4-C5-C6	-7.04	113.88	117.40
59	A5	65	A	C5-C6-N1	7.04	121.22	117.70
59	A5	821	U	O5'-P-OP1	-7.04	99.36	105.70
59	A5	1872	A	C8-N9-C4	-7.04	102.98	105.80
58	B2	355	G	C5-C6-N1	-7.04	107.98	111.50
59	A5	1116	G	N3-C4-N9	-7.04	121.78	126.00
59	A5	839	A	C4-C5-C6	-7.04	113.48	117.00
59	A5	1727	U	N3-C2-O2	-7.04	117.28	122.20
59	A5	1969	A	N7-C8-N9	7.04	117.32	113.80
59	A5	2493	C	N3-C4-C5	7.04	124.71	121.90
58	B2	36	C	C6-N1-C2	-7.03	117.49	120.30
59	A5	120	C	N1-C2-O2	7.03	123.12	118.90
59	A5	812	U	N3-C4-O4	7.03	124.32	119.40
59	A5	1631	U	N1-C2-O2	7.03	127.72	122.80
59	A5	796	A	N1-C2-N3	-7.03	125.78	129.30
59	A5	1545	A	OP1-P-OP2	7.03	130.15	119.60
59	A5	3404	A	C4-C5-C6	-7.03	113.48	117.00
59	A5	3763	U	C5-C4-O4	-7.03	121.68	125.90
56	A8	2	A	N1-C6-N6	-7.03	114.38	118.60
59	A5	285	G	N1-C6-O6	-7.03	115.68	119.90
59	A5	1323	C	N3-C4-N4	7.03	122.92	118.00
59	A5	1383	A	OP1-P-O3'	7.03	120.67	105.20
59	A5	1715	G	C4-C5-N7	7.03	113.61	110.80
58	B2	1169	C	C5-C6-N1	7.03	124.51	121.00
59	A5	338	A	O5'-P-OP1	-7.03	99.38	105.70
59	A5	2520	U	N3-C4-O4	-7.03	114.48	119.40
59	A5	3592	C	N1-C2-O2	7.03	123.12	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3936	A	C4-C5-N7	7.03	114.21	110.70
58	B2	1182	C	C6-N1-C2	-7.03	117.49	120.30
59	A5	3265	C	C6-N1-C2	-7.03	117.49	120.30
58	B2	275	U	N1-C2-O2	7.02	127.72	122.80
59	A5	1961	C	C6-N1-C2	-7.02	117.49	120.30
56	A8	98	U	C6-N1-C2	-7.02	116.79	121.00
59	A5	1679	U	N1-C2-O2	7.02	127.72	122.80
59	A5	1411	U	C5-C6-N1	7.02	126.21	122.70
59	A5	1795	A	C5-C6-N1	7.02	121.21	117.70
58	B2	1984	G	N3-C4-N9	7.02	130.21	126.00
59	A5	2146	G	C8-N9-C4	-7.02	103.59	106.40
59	A5	1162	A	C5-C6-N6	-7.02	118.09	123.70
59	A5	3805	U	C5-C6-N1	7.02	126.21	122.70
58	B2	1238	G	C2-N3-C4	7.02	115.41	111.90
58	B2	1090	A	C4-C5-N7	7.01	114.21	110.70
58	B2	1167	U	N1-C2-O2	7.01	127.71	122.80
59	A5	1642	G	O5'-P-OP1	-7.01	99.39	105.70
59	A5	998	G	C4-C5-N7	7.01	113.61	110.80
59	A5	2555	G	N1-C6-O6	-7.01	115.69	119.90
59	A5	58	G	OP2-P-O3'	7.01	120.62	105.20
59	A5	805	C	C6-N1-C2	-7.01	117.50	120.30
55	A7	14	C	C5-C6-N1	7.01	124.50	121.00
59	A5	322	G	N3-C2-N2	-7.01	115.00	119.90
59	A5	1734	G	N9-C4-C5	-7.01	102.60	105.40
59	A5	1428	G	C4-C5-N7	7.01	113.60	110.80
59	A5	1724	A	C8-N9-C4	-7.01	103.00	105.80
59	A5	2736	A	C8-N9-C4	7.01	108.60	105.80
26	CN	134	LEU	CB-CG-CD1	-7.00	99.09	111.00
59	A5	801	G	C6-N1-C2	-7.00	120.90	125.10
59	A5	3600	G	C5-C6-O6	-7.00	124.40	128.60
59	A5	754	A	N3-C4-N9	7.00	133.00	127.40
59	A5	2496	A	O5'-P-OP2	-7.00	99.40	105.70
58	B2	1069	U	C5-C6-N1	7.00	126.20	122.70
58	B2	1681	U	C2-N1-C1'	7.00	126.10	117.70
59	A5	769	U	C5-C6-N1	-7.00	119.20	122.70
59	A5	868	A	N1-C6-N6	-7.00	114.40	118.60
59	A5	2135	C	C5-C6-N1	7.00	124.50	121.00
59	A5	2194	G	N3-C4-C5	-7.00	125.10	128.60
59	A5	3261	U	C4-C5-C6	-7.00	115.50	119.70
58	B2	468	U	N3-C2-O2	-6.99	117.31	122.20
59	A5	674	A	C5-N7-C8	-6.99	100.40	103.90
59	A5	1105	U	N3-C4-O4	-6.99	114.50	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2539	G	C4-C5-N7	6.99	113.60	110.80
58	B2	375	A	N1-C2-N3	-6.99	125.81	129.30
58	B2	381	C	N1-C2-O2	6.99	123.09	118.90
59	A5	509	A	N1-C2-N3	-6.99	125.81	129.30
59	A5	666	A	C2-N3-C4	6.98	114.09	110.60
59	A5	1404	A	N9-C4-C5	-6.98	103.01	105.80
59	A5	1011	U	C5-C6-N1	6.98	126.19	122.70
59	A5	748	A	C6-N1-C2	6.98	122.79	118.60
59	A5	1370	C	N3-C2-O2	-6.98	117.02	121.90
59	A5	424	G	N3-C2-N2	6.98	124.78	119.90
59	A5	436	A	C8-N9-C4	-6.98	103.01	105.80
56	A8	27	C	N3-C4-N4	-6.97	113.12	118.00
58	B2	631	C	C2-N1-C1'	6.97	126.47	118.80
59	A5	1356	G	C5-N7-C8	-6.97	100.81	104.30
59	A5	1563	A	N1-C2-N3	-6.97	125.81	129.30
2	CA	180	LEU	CB-CG-CD1	-6.97	99.15	111.00
59	A5	1124	G	C4-N9-C1'	-6.97	117.44	126.50
59	A5	1543	C	N3-C2-O2	-6.97	117.02	121.90
59	A5	1680	U	C5-C6-N1	6.97	126.19	122.70
58	B2	355	G	C6-C5-N7	-6.97	126.22	130.40
59	A5	377	U	O5'-P-OP2	-6.97	99.43	105.70
59	A5	652	G	C2-N3-C4	-6.97	108.41	111.90
59	A5	1124	G	C5-N7-C8	-6.97	100.81	104.30
59	A5	2008	U	C2-N1-C1'	6.97	126.06	117.70
59	A5	53	A	OP1-P-OP2	6.97	130.06	119.60
59	A5	1172	G	N1-C6-O6	-6.97	115.72	119.90
59	A5	1180	U	C2-N3-C4	6.97	131.18	127.00
59	A5	1787	C	N3-C2-O2	-6.97	117.02	121.90
59	A5	3633	U	N1-C2-O2	6.97	127.68	122.80
59	A5	1369	C	C5-C6-N1	6.97	124.48	121.00
56	A8	11	G	O5'-P-OP1	-6.97	99.43	105.70
59	A5	375	C	C5-C4-N4	6.97	125.08	120.20
58	B2	1394	U	C2-N1-C1'	6.96	126.06	117.70
59	A5	1000	G	N3-C4-N9	6.96	130.18	126.00
59	A5	3921	A	C5-C6-N6	-6.96	118.13	123.70
58	B2	823	C	C2-N1-C1'	6.96	126.46	118.80
59	A5	1290	U	C5-C6-N1	-6.96	119.22	122.70
59	A5	1952	A	O5'-P-OP1	-6.96	99.43	105.70
59	A5	108	A	C5-N7-C8	-6.96	100.42	103.90
59	A5	1027	A	C8-N9-C4	-6.96	103.02	105.80
59	A5	2173	C	N1-C2-O2	6.96	123.08	118.90
59	A5	3244	U	N1-C2-O2	6.96	127.67	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3597	C	C6-N1-C2	-6.96	117.52	120.30
59	A5	94	C	C6-N1-C2	-6.96	117.52	120.30
59	A5	1335	C	OP2-P-O3'	6.96	120.51	105.20
59	A5	2230	G	O5'-P-OP1	-6.96	99.44	105.70
58	B2	306	A	C8-N9-C4	-6.96	103.02	105.80
58	B2	1119	G	C4-N9-C1'	6.96	135.54	126.50
59	A5	90	G	O5'-P-OP1	6.96	119.05	110.70
59	A5	920	G	N3-C4-N9	6.96	130.17	126.00
59	A5	1080	G	O4'-C1'-N9	6.96	113.77	108.20
59	A5	3364	C	N1-C2-O2	6.96	123.07	118.90
59	A5	1066	A	C5-C6-N1	6.96	121.18	117.70
58	B2	1182	C	C2-N1-C1'	6.95	126.45	118.80
59	A5	1063	C	N1-C2-O2	6.95	123.07	118.90
59	A5	1668	U	O5'-P-OP2	-6.95	99.44	105.70
59	A5	1688	A	P-O3'-C3'	6.95	128.04	119.70
59	A5	2749	G	C8-N9-C4	-6.95	103.62	106.40
59	A5	3947	C	C6-N1-C2	-6.95	117.52	120.30
59	A5	3	A	O4'-C1'-N9	6.95	113.76	108.20
59	A5	1023	C	N1-C2-O2	6.95	123.07	118.90
59	A5	1148	C	N3-C2-O2	-6.95	117.03	121.90
59	A5	1974	U	N1-C2-O2	6.95	127.67	122.80
59	A5	542	C	C6-N1-C2	-6.95	117.52	120.30
59	A5	1724	A	C2-N3-C4	6.95	114.07	110.60
59	A5	1887	C	N3-C4-C5	6.95	124.68	121.90
59	A5	3757	U	C4-C5-C6	-6.95	115.53	119.70
59	A5	2754	G	N7-C8-N9	6.95	116.57	113.10
59	A5	1888	A	N1-C6-N6	6.95	122.77	118.60
59	A5	3143	U	N3-C2-O2	-6.95	117.34	122.20
59	A5	441	A	N9-C4-C5	-6.94	103.02	105.80
59	A5	90	G	C6-C5-N7	6.94	134.56	130.40
59	A5	778	C	O5'-P-OP1	-6.94	99.45	105.70
59	A5	1073	C	C2-N3-C4	6.94	123.37	119.90
59	A5	429	U	N1-C2-N3	6.94	119.06	114.90
59	A5	1084	A	OP1-P-OP2	-6.94	109.19	119.60
59	A5	2180	A	C4-C5-N7	6.94	114.17	110.70
59	A5	3142	G	C5-C6-N1	6.94	114.97	111.50
59	A5	3488	G	C8-N9-C4	6.94	109.18	106.40
58	B2	1217	U	N1-C2-O2	6.94	127.66	122.80
59	A5	1326	A	N7-C8-N9	6.94	117.27	113.80
59	A5	1690	U	N1-C2-N3	6.94	119.06	114.90
59	A5	2796	G	OP1-P-O3'	6.94	120.47	105.20
59	A5	362	A	N1-C6-N6	6.94	122.76	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	383	A	C5-C6-N1	6.94	121.17	117.70
59	A5	1024	U	N1-C2-O2	6.94	127.66	122.80
59	A5	1088	A	N7-C8-N9	6.94	117.27	113.80
59	A5	3457	C	N1-C2-O2	6.94	123.06	118.90
59	A5	3591	A	OP1-P-O3'	6.94	120.46	105.20
56	A8	18	C	C5-C6-N1	6.93	124.47	121.00
56	A8	37	U	N3-C2-O2	-6.93	117.35	122.20
59	A5	2484	G	C4-N9-C1'	6.93	135.51	126.50
59	A5	33	C	C4-C5-C6	-6.93	113.93	117.40
59	A5	53	A	C2-N3-C4	6.93	114.07	110.60
59	A5	1084	A	O5'-P-OP1	-6.93	99.46	105.70
59	A5	3762	G	OP2-P-O3'	6.93	120.45	105.20
59	A5	3413	C	O5'-P-OP1	-6.93	99.46	105.70
59	A5	3463	U	C5-C6-N1	6.93	126.17	122.70
59	A5	831	A	C5-N7-C8	-6.93	100.44	103.90
56	A8	44	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	79	G	C4-C5-N7	6.92	113.57	110.80
59	A5	2775	A	N1-C2-N3	6.92	132.76	129.30
59	A5	3299	U	N1-C2-O2	6.92	127.65	122.80
58	B2	1969	G	N1-C2-N3	-6.92	119.75	123.90
59	A5	46	C	N3-C2-O2	-6.92	117.06	121.90
59	A5	426	A	C8-N9-C4	6.92	108.57	105.80
59	A5	3120	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	3879	A	C5-C6-N1	6.92	121.16	117.70
59	A5	2659	A	N3-C4-N9	6.92	132.93	127.40
59	A5	3438	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	1313	A	N3-C4-N9	-6.92	121.87	127.40
59	A5	1329	G	C8-N9-C1'	-6.91	118.01	127.00
59	A5	2231	A	C8-N9-C4	6.91	108.56	105.80
59	A5	3595	U	C5-C6-N1	6.91	126.16	122.70
59	A5	1000	G	C4-N9-C1'	6.91	135.48	126.50
59	A5	1354	G	N9-C4-C5	-6.91	102.64	105.40
59	A5	1643	G	N3-C4-N9	6.91	130.15	126.00
59	A5	35	C	N3-C2-O2	-6.91	117.06	121.90
59	A5	640	U	N3-C2-O2	-6.91	117.37	122.20
59	A5	1774	C	C6-N1-C2	-6.91	117.54	120.30
59	A5	3160	A	C5-N7-C8	-6.91	100.45	103.90
59	A5	1644	C	C2-N1-C1'	6.90	126.39	118.80
59	A5	3185	C	C5-C6-N1	6.90	124.45	121.00
59	A5	3730	G	C4-N9-C1'	6.90	135.47	126.50
59	A5	2205	G	N1-C6-O6	6.90	124.04	119.90
59	A5	1382	U	C5'-C4'-O4'	-6.90	100.82	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2786	U	C4-C5-C6	-6.90	115.56	119.70
59	A5	258	U	C2-N1-C1'	6.90	125.98	117.70
59	A5	2034	U	N3-C2-O2	-6.90	117.37	122.20
59	A5	2182	G	N3-C4-C5	6.90	132.05	128.60
59	A5	2551	U	C5-C6-N1	6.90	126.15	122.70
59	A5	3631	C	C6-N1-C1'	6.90	129.07	120.80
58	B2	1120	C	C5-C6-N1	6.89	124.45	121.00
59	A5	353	G	C6-C5-N7	-6.89	126.26	130.40
66	CL	7	MET	CG-SD-CE	-6.89	89.17	100.20
59	A5	1712	C	N3-C2-O2	-6.89	117.08	121.90
59	A5	2756	C	N3-C2-O2	-6.89	117.08	121.90
58	B2	1752	U	N3-C2-O2	-6.89	117.38	122.20
59	A5	424	G	N7-C8-N9	-6.89	109.66	113.10
59	A5	587	U	N3-C2-O2	-6.89	117.38	122.20
59	A5	2769	G	N3-C4-N9	6.89	130.13	126.00
58	B2	1582	C	C2-N1-C1'	6.88	126.37	118.80
59	A5	662	A	C2-N3-C4	6.88	114.04	110.60
59	A5	2021	C	C5-C6-N1	6.88	124.44	121.00
59	A5	3127	A	C5-N7-C8	-6.88	100.46	103.90
59	A5	1046	A	C4-C5-N7	6.88	114.14	110.70
59	A5	2554	U	N3-C2-O2	-6.88	117.38	122.20
59	A5	1610	A	C5-C6-N1	6.88	121.14	117.70
59	A5	1688	A	N1-C6-N6	-6.88	114.47	118.60
59	A5	1736	G	N9-C4-C5	6.88	108.15	105.40
59	A5	2041	G	C6-C5-N7	-6.88	126.27	130.40
59	A5	3155	G	N3-C4-C5	-6.88	125.16	128.60
59	A5	3608	G	N3-C2-N2	-6.88	115.08	119.90
59	A5	3753	A	C8-N9-C4	-6.88	103.05	105.80
59	A5	3880	A	C4-C5-N7	6.88	114.14	110.70
59	A5	3608	G	C2-N3-C4	-6.88	108.46	111.90
59	A5	798	C	C5-C4-N4	6.88	125.01	120.20
59	A5	1260	A	C5-C6-N6	6.88	129.20	123.70
59	A5	1892	C	C4-C5-C6	-6.88	113.96	117.40
55	A7	92	C	N1-C2-O2	6.87	123.02	118.90
59	A5	1089	U	N1-C2-O2	6.87	127.61	122.80
59	A5	3586	A	N1-C6-N6	-6.87	114.48	118.60
2	CA	196	TRP	CA-CB-CG	6.87	126.75	113.70
58	B2	1681	U	N1-C2-O2	6.87	127.61	122.80
59	A5	1143	U	O5'-P-OP1	-6.87	99.52	105.70
59	A5	3258	C	O5'-P-OP1	-6.87	99.52	105.70
59	A5	344	U	C6-N1-C2	-6.87	116.88	121.00
59	A5	1138	C	O5'-P-OP1	-6.87	99.52	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2566	A	C5-N7-C8	-6.87	100.47	103.90
59	A5	2569	U	C4-C5-C6	-6.87	115.58	119.70
59	A5	36	U	OP1-P-O3'	6.86	120.30	105.20
42	Cf	63	LEU	CB-CG-CD2	6.86	122.67	111.00
59	A5	667	U	N1-C2-N3	-6.86	110.78	114.90
59	A5	1105	U	N3-C2-O2	-6.86	117.40	122.20
59	A5	1799	U	N3-C4-O4	6.86	124.20	119.40
59	A5	3634	U	N3-C2-O2	-6.86	117.40	122.20
58	B2	468	U	N1-C2-O2	6.86	127.60	122.80
59	A5	3318	A	O5'-P-OP1	-6.86	99.53	105.70
59	A5	1985	C	C5-C4-N4	6.86	125.00	120.20
59	A5	2171	U	O5'-P-OP2	-6.86	99.53	105.70
59	A5	1140	G	C8-N9-C4	6.86	109.14	106.40
78	CU	226	LEU	CA-CB-CG	6.86	131.07	115.30
58	B2	1187	U	N3-C4-O4	-6.86	114.60	119.40
59	A5	1093	C	C2-N1-C1'	6.86	126.34	118.80
58	B2	1967	C	C6-N1-C2	-6.85	117.56	120.30
58	B2	624	G	N3-C2-N2	-6.85	115.10	119.90
59	A5	1985	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	3808	A	C8-N9-C4	-6.85	103.06	105.80
59	A5	996	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	2545	A	C8-N9-C4	-6.85	103.06	105.80
59	A5	2569	U	N1-C2-N3	6.85	119.01	114.90
58	B2	631	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	429	U	C6-N1-C2	-6.85	116.89	121.00
59	A5	3417	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	3514	C	N1-C2-N3	6.85	124.00	119.20
58	B2	1111	U	C6-N1-C2	-6.85	116.89	121.00
59	A5	58	G	N1-C2-N2	6.85	122.36	116.20
59	A5	1786	G	C5-C6-N1	6.85	114.92	111.50
59	A5	3764	G	C4-N9-C1'	6.85	135.40	126.50
59	A5	3391	U	C5-C6-N1	6.85	126.12	122.70
59	A5	3922	G	C4-C5-N7	6.84	113.54	110.80
56	A8	99	U	O5'-P-OP1	-6.84	99.54	105.70
59	A5	300	A	P-O3'-C3'	6.84	127.91	119.70
59	A5	414	A	N1-C2-N3	-6.84	125.88	129.30
59	A5	2226	A	C5-N7-C8	-6.84	100.48	103.90
59	A5	1784	A	N3-C4-N9	6.84	132.87	127.40
59	A5	3149	U	N1-C2-O2	6.84	127.59	122.80
59	A5	39	A	N1-C6-N6	-6.84	114.50	118.60
59	A5	1780	U	O5'-P-OP1	-6.84	99.55	105.70
58	B2	1108	C	C2-N1-C1'	6.84	126.32	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	105	A	N1-C6-N6	6.84	122.70	118.60
56	A8	3	C	N3-C4-C5	6.83	124.63	121.90
59	A5	1335	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	3402	C	C4-C5-C6	-6.83	113.98	117.40
58	B2	1404	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	282	A	N3-C4-N9	6.83	132.87	127.40
59	A5	1103	U	N1-C2-O2	6.83	127.58	122.80
59	A5	1159	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	2498	U	C5-C6-N1	6.83	126.12	122.70
55	A7	94	C	C6-N1-C2	-6.83	117.57	120.30
58	B2	1207	G	N3-C4-N9	6.83	130.10	126.00
59	A5	2795	U	N3-C2-O2	-6.83	117.42	122.20
59	A5	3406	G	C5-N7-C8	-6.83	100.89	104.30
55	A7	83	A	C4-C5-C6	-6.83	113.59	117.00
59	A5	3403	G	C6-C5-N7	6.83	134.50	130.40
58	B2	1382	G	C4-C5-C6	-6.83	114.70	118.80
59	A5	2753	G	N3-C2-N2	6.83	124.68	119.90
59	A5	3493	U	C5-C6-N1	6.82	126.11	122.70
59	A5	2733	G	C6-N1-C2	-6.82	121.01	125.10
59	A5	442	A	C5-C6-N6	-6.82	118.24	123.70
59	A5	752	U	N3-C2-O2	-6.82	117.43	122.20
59	A5	3600	G	C4-C5-N7	6.82	113.53	110.80
59	A5	1168	G	C4-N9-C1'	6.82	135.37	126.50
59	A5	99	A	N1-C6-N6	-6.82	114.51	118.60
59	A5	3590	C	N1-C2-O2	6.82	122.99	118.90
59	A5	3665	U	N1-C2-O2	6.82	127.57	122.80
59	A5	1626	A	N3-C4-C5	6.82	131.57	126.80
59	A5	3482	G	C5-C6-N1	6.82	114.91	111.50
59	A5	3524	G	N1-C6-O6	-6.82	115.81	119.90
59	A5	1370	C	N3-C4-C5	6.81	124.63	121.90
59	A5	2182	G	N3-C4-N9	-6.81	121.91	126.00
59	A5	872	A	C5-C6-N1	6.81	121.11	117.70
59	A5	2219	U	C5-C4-O4	6.81	129.99	125.90
59	A5	2473	C	C6-N1-C2	-6.81	117.58	120.30
59	A5	3472	A	C5-C6-N1	6.81	121.11	117.70
55	A7	83	A	N3-C4-C5	6.81	131.57	126.80
58	B2	1648	C	N3-C2-O2	-6.81	117.13	121.90
59	A5	1681	G	N7-C8-N9	6.81	116.50	113.10
59	A5	2115	U	N3-C2-O2	-6.81	117.43	122.20
59	A5	2776	A	N9-C4-C5	-6.81	103.08	105.80
58	B2	1966	U	N3-C4-O4	6.81	124.17	119.40
59	A5	438	G	C8-N9-C4	6.81	109.12	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1596	A	C8-N9-C4	-6.81	103.08	105.80
59	A5	2796	G	C8-N9-C1'	-6.81	118.15	127.00
59	A5	2492	A	C5-C6-N1	6.81	121.10	117.70
58	B2	1572	C	N3-C2-O2	-6.80	117.14	121.90
59	A5	811	G	N9-C4-C5	6.80	108.12	105.40
59	A5	3446	G	N9-C4-C5	-6.80	102.68	105.40
59	A5	1365	U	N1-C2-N3	6.80	118.98	114.90
59	A5	358	C	OP2-P-O3'	6.80	120.16	105.20
59	A5	3632	G	C8-N9-C4	-6.80	103.68	106.40
58	B2	550	C	C6-N1-C1'	-6.80	112.64	120.80
58	B2	591	C	N1-C2-O2	6.80	122.98	118.90
58	B2	1228	G	N9-C4-C5	-6.80	102.68	105.40
59	A5	3400	U	N3-C4-C5	6.80	118.68	114.60
58	B2	1096	C	C5-C6-N1	6.80	124.40	121.00
55	A7	69	C	N3-C2-O2	-6.79	117.14	121.90
59	A5	2066	G	N7-C8-N9	6.79	116.50	113.10
59	A5	3354	U	C6-N1-C1'	-6.79	111.69	121.20
59	A5	3727	A	N3-C4-C5	-6.79	122.04	126.80
58	B2	258	A	C5-N7-C8	-6.79	100.50	103.90
58	B2	589	U	N3-C2-O2	-6.79	117.44	122.20
59	A5	99	A	C5-C6-N1	6.79	121.10	117.70
59	A5	397	C	N1-C2-O2	6.79	122.98	118.90
59	A5	546	G	N7-C8-N9	6.79	116.50	113.10
59	A5	3570	C	N1-C2-O2	6.79	122.98	118.90
59	A5	2709	U	N1-C2-O2	6.79	127.55	122.80
58	B2	384	U	C5-C6-N1	6.79	126.09	122.70
58	B2	1333	C	C2-N1-C1'	6.79	126.27	118.80
59	A5	2027	A	N1-C6-N6	-6.79	114.53	118.60
59	A5	2727	U	N3-C2-O2	-6.79	117.45	122.20
59	A5	3410	G	N1-C2-N2	-6.79	110.09	116.20
59	A5	1596	A	C2-N3-C4	6.79	113.99	110.60
59	A5	383	A	OP2-P-O3'	6.78	120.12	105.20
59	A5	3521	A	C5-C6-N1	6.78	121.09	117.70
58	B2	856	A	N9-C4-C5	-6.78	103.09	105.80
51	CH	65	LEU	CB-CG-CD2	-6.78	99.47	111.00
58	B2	1228	G	C4-N9-C1'	6.78	135.31	126.50
58	B2	1572	C	C2-N1-C1'	6.78	126.26	118.80
59	A5	458	A	C5-C6-N6	-6.78	118.28	123.70
59	A5	2533	U	N1-C2-N3	6.78	118.97	114.90
59	A5	3293	G	N3-C2-N2	6.78	124.65	119.90
56	A8	36	A	C4-C5-N7	6.78	114.09	110.70
59	A5	1883	G	C4-C5-N7	6.78	113.51	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	670	G	C8-N9-C1'	6.78	135.81	127.00
59	A5	1642	G	N1-C6-O6	-6.78	115.83	119.90
59	A5	53	A	C6-N1-C2	-6.78	114.53	118.60
59	A5	1022	A	C5-N7-C8	-6.78	100.51	103.90
59	A5	1315	A	N3-C4-C5	6.78	131.54	126.80
59	A5	1524	U	N1-C2-O2	6.78	127.54	122.80
59	A5	1531	U	N3-C4-O4	-6.78	114.66	119.40
58	B2	38	C	C6-N1-C2	-6.77	117.59	120.30
58	B2	1199	G	C4-C5-N7	6.77	113.51	110.80
59	A5	3504	G	C5-C6-O6	6.77	132.66	128.60
59	A5	3912	U	N3-C2-O2	-6.77	117.46	122.20
59	A5	85	U	C2-N3-C4	6.77	131.06	127.00
59	A5	2715	C	N3-C4-N4	-6.77	113.26	118.00
59	A5	380	G	C4-C5-N7	6.77	113.51	110.80
59	A5	874	G	C4-N9-C1'	6.77	135.30	126.50
59	A5	1384	C	N3-C4-C5	6.77	124.61	121.90
59	A5	1715	G	N7-C8-N9	6.77	116.48	113.10
59	A5	2204	U	C6-N1-C2	-6.77	116.94	121.00
58	B2	1053	A	C4-C5-N7	6.77	114.08	110.70
58	B2	1596	C	C2-N1-C1'	6.77	126.24	118.80
59	A5	746	G	C4-C5-N7	6.77	113.51	110.80
59	A5	2537	A	N7-C8-N9	-6.76	110.42	113.80
59	A5	2772	G	C2-N3-C4	6.76	115.28	111.90
59	A5	3477	A	N7-C8-N9	6.76	117.18	113.80
59	A5	3482	G	N3-C4-N9	6.76	130.06	126.00
58	B2	1228	G	C8-N9-C1'	-6.76	118.21	127.00
59	A5	779	U	N3-C2-O2	-6.76	117.47	122.20
59	A5	1731	G	N9-C4-C5	6.76	108.11	105.40
59	A5	432	U	N3-C2-O2	-6.76	117.47	122.20
59	A5	540	G	C5-C6-N1	6.76	114.88	111.50
59	A5	811	G	C4-C5-C6	-6.76	114.74	118.80
59	A5	2559	C	C4-C5-C6	-6.76	114.02	117.40
59	A5	2760	G	C6-C5-N7	6.76	134.46	130.40
59	A5	3408	C	N1-C2-O2	6.76	122.96	118.90
59	A5	3570	C	N3-C2-O2	-6.76	117.17	121.90
59	A5	3888	U	C4-C5-C6	-6.76	115.64	119.70
59	A5	123	U	O4'-C1'-N1	-6.76	102.79	108.20
59	A5	1959	A	C2-N3-C4	6.76	113.98	110.60
59	A5	2491	C	O5'-P-OP2	6.76	118.81	110.70
59	A5	2126	A	O5'-P-OP2	-6.76	99.62	105.70
59	A5	3149	U	C6-N1-C1'	-6.76	111.74	121.20
59	A5	3403	G	C6-N1-C2	-6.76	121.05	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3480	U	C5-C4-O4	6.76	129.95	125.90
59	A5	804	C	N3-C4-N4	-6.75	113.27	118.00
59	A5	910	C	C4-C5-C6	-6.75	114.02	117.40
59	A5	1413	C	C4-C5-C6	-6.75	114.02	117.40
59	A5	103	A	N7-C8-N9	6.75	117.18	113.80
59	A5	1526	G	O5'-P-OP2	-6.75	99.62	105.70
42	Cf	110	ARG	NE-CZ-NH1	6.75	123.68	120.30
59	A5	1622	U	O5'-P-OP1	-6.75	99.62	105.70
59	A5	2995	U	N1-C2-O2	6.75	127.53	122.80
59	A5	103	A	C2-N3-C4	6.75	113.97	110.60
59	A5	2183	A	C2-N3-C4	6.75	113.97	110.60
59	A5	2748	G	OP2-P-O3'	6.75	120.05	105.20
59	A5	3274	A	N1-C6-N6	-6.75	114.55	118.60
59	A5	144	C	N1-C2-O2	6.75	122.95	118.90
59	A5	1127	C	C4-C5-C6	-6.75	114.03	117.40
59	A5	1774	C	C2-N1-C1'	6.75	126.22	118.80
59	A5	2484	G	C8-N9-C1'	-6.75	118.23	127.00
59	A5	2801	U	N1-C2-O2	6.75	127.52	122.80
59	A5	2235	G	C5-C6-O6	6.75	132.65	128.60
59	A5	841	A	C8-N9-C4	-6.74	103.10	105.80
59	A5	1785	G	O5'-P-OP2	-6.74	99.63	105.70
55	A7	91	C	N1-C2-O2	6.74	122.94	118.90
59	A5	289	C	C6-N1-C2	-6.74	117.60	120.30
56	A8	24	G	N9-C4-C5	6.74	108.10	105.40
56	A8	105	C	O5'-P-OP1	-6.74	99.64	105.70
58	B2	360	G	C6-C5-N7	-6.74	126.36	130.40
59	A5	1715	G	C2-N3-C4	-6.74	108.53	111.90
59	A5	2762	A	C5-N7-C8	-6.74	100.53	103.90
59	A5	3589	G	C5-N7-C8	6.74	107.67	104.30
59	A5	3609	A	C4-C5-C6	-6.74	113.63	117.00
59	A5	2512	U	C5-C4-O4	6.74	129.94	125.90
59	A5	2751	A	C5-C6-N6	6.74	129.09	123.70
59	A5	3135	G	N3-C4-C5	-6.74	125.23	128.60
42	Cf	50	LEU	CA-CB-CG	6.74	130.79	115.30
58	B2	1949	A	N1-C6-N6	-6.74	114.56	118.60
59	A5	2508	C	C5-C4-N4	6.74	124.92	120.20
59	A5	2651	G	O4'-C1'-N9	6.74	113.59	108.20
59	A5	2712	U	N1-C2-O2	6.74	127.52	122.80
59	A5	3938	C	N1-C2-O2	6.74	122.94	118.90
56	A8	43	A	C4-C5-N7	6.73	114.07	110.70
59	A5	1009	G	O5'-P-OP2	6.73	118.78	110.70
59	A5	1367	A	OP2-P-O3'	6.73	120.01	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2004	G	N3-C2-N2	6.73	124.61	119.90
59	A5	2155	A	N1-C6-N6	-6.73	114.56	118.60
59	A5	3757	U	N3-C4-O4	-6.73	114.69	119.40
59	A5	3921	A	N1-C2-N3	-6.73	125.93	129.30
59	A5	839	A	C4-N9-C1'	-6.73	114.19	126.30
59	A5	2198	G	C6-C5-N7	-6.73	126.36	130.40
59	A5	3368	C	C2-N1-C1'	6.73	126.20	118.80
59	A5	371	G	C2-N3-C4	6.73	115.26	111.90
59	A5	1318	A	N3-C4-C5	6.73	131.51	126.80
56	A8	35	G	C5-C6-O6	6.72	132.63	128.60
59	A5	802	G	C4-C5-C6	-6.72	114.77	118.80
59	A5	1747	A	OP2-P-O3'	6.72	119.99	105.20
59	A5	3246	G	C5-N7-C8	-6.72	100.94	104.30
59	A5	3912	U	N1-C2-O2	6.72	127.50	122.80
59	A5	122	C	C5-C6-N1	6.72	124.36	121.00
59	A5	540	G	C2-N3-C4	6.72	115.26	111.90
59	A5	1557	U	O5'-P-OP1	6.72	118.77	110.70
59	A5	3715	U	N1-C2-O2	6.72	127.50	122.80
59	A5	1076	A	C5-N7-C8	-6.72	100.54	103.90
59	A5	1595	G	C4-N9-C1'	6.72	135.24	126.50
59	A5	2065	A	C8-N9-C4	6.72	108.49	105.80
56	A8	71	A	C5-N7-C8	-6.71	100.54	103.90
59	A5	1690	U	O5'-P-OP1	-6.71	99.66	105.70
58	B2	879	U	C5-C6-N1	6.71	126.06	122.70
58	B2	1683	U	N3-C2-O2	-6.71	117.50	122.20
59	A5	1892	C	C6-N1-C2	-6.71	117.62	120.30
59	A5	806	A	C8-N9-C4	-6.71	103.12	105.80
59	A5	1870	G	O5'-P-OP2	-6.71	99.66	105.70
59	A5	3302	G	C8-N9-C4	-6.71	103.72	106.40
59	A5	58	G	C4-C5-C6	-6.70	114.78	118.80
59	A5	1643	G	N1-C6-O6	6.70	123.92	119.90
58	B2	836	C	C5-C6-N1	6.70	124.35	121.00
59	A5	1647	A	C2-N3-C4	6.70	113.95	110.60
58	B2	1087	C	C6-N1-C1'	-6.70	112.76	120.80
59	A5	1618	A	N9-C4-C5	-6.70	103.12	105.80
59	A5	3937	U	N3-C2-O2	-6.70	117.51	122.20
59	A5	285	G	C4-C5-N7	6.70	113.48	110.80
59	A5	562	U	N3-C2-O2	-6.70	117.51	122.20
59	A5	839	A	OP1-P-O3'	6.70	119.93	105.20
59	A5	1363	G	N1-C6-O6	-6.70	115.88	119.90
59	A5	3629	U	C6-N1-C2	-6.70	116.98	121.00
58	B2	615	G	N9-C4-C5	-6.70	102.72	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	402	A	C5-C6-N1	6.70	121.05	117.70
59	A5	2723	A	C4-C5-N7	6.70	114.05	110.70
59	A5	3921	A	C4-C5-N7	6.70	114.05	110.70
59	A5	1265	U	N3-C2-O2	-6.69	117.51	122.20
58	B2	1068	U	N3-C2-O2	-6.69	117.52	122.20
59	A5	1178	U	O4'-C1'-N1	6.69	113.55	108.20
59	A5	303	G	N1-C6-O6	-6.69	115.89	119.90
59	A5	543	A	C5-N7-C8	-6.69	100.56	103.90
59	A5	2187	U	N1-C2-O2	6.69	127.48	122.80
59	A5	2726	A	N7-C8-N9	6.69	117.14	113.80
56	A8	43	A	C5-C6-N6	-6.69	118.35	123.70
58	B2	303	C	C6-N1-C2	-6.68	117.63	120.30
59	A5	1063	C	C5-C4-N4	6.68	124.88	120.20
59	A5	1317	A	C5-C6-N1	6.68	121.04	117.70
59	A5	1319	A	C8-N9-C4	6.68	108.47	105.80
59	A5	2155	A	N9-C4-C5	6.68	108.47	105.80
59	A5	796	A	C5-C6-N1	6.68	121.04	117.70
59	A5	2267	U	C2-N1-C1'	6.68	125.72	117.70
59	A5	3446	G	N3-C4-N9	6.68	130.01	126.00
59	A5	3603	C	N1-C2-O2	6.68	122.91	118.90
32	CT	82	GLY	N-CA-C	-6.68	96.40	113.10
59	A5	2205	G	C4-N9-C1'	6.68	135.19	126.50
29	CQ	152	PHE	C-N-CA	6.68	136.33	122.30
58	B2	1665	U	C2-N1-C1'	6.68	125.72	117.70
59	A5	2181	A	O5'-P-OP1	-6.68	99.69	105.70
59	A5	2779	A	O4'-C1'-N9	6.68	113.54	108.20
58	B2	1648	C	C2-N1-C1'	6.68	126.14	118.80
59	A5	1158	C	C2-N3-C4	-6.68	116.56	119.90
59	A5	1599	C	N3-C4-C5	6.68	124.57	121.90
59	A5	1969	A	C8-N9-C4	-6.68	103.13	105.80
59	A5	3697	A	P-O3'-C3'	6.68	127.71	119.70
58	B2	1582	C	N1-C2-O2	6.68	122.91	118.90
59	A5	214	A	N1-C2-N3	-6.68	125.96	129.30
59	A5	761	C	N1-C2-O2	6.68	122.91	118.90
59	A5	2004	G	C4-N9-C1'	6.68	135.18	126.50
59	A5	2567	U	C2-N1-C1'	6.68	125.71	117.70
58	B2	458	C	C2-N1-C1'	6.67	126.14	118.80
58	B2	458	C	N3-C2-O2	-6.67	117.23	121.90
59	A5	439	U	N3-C4-O4	-6.67	114.73	119.40
59	A5	2058	C	N1-C2-O2	6.67	122.91	118.90
59	A5	1137	G	N1-C2-N2	6.67	122.20	116.20
59	A5	1326	A	C4-C5-N7	6.67	114.04	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1071	U	OP2-P-O3'	6.67	119.88	105.20
55	A7	65	C	N3-C2-O2	-6.67	117.23	121.90
59	A5	804	C	C4-C5-C6	-6.67	114.06	117.40
59	A5	1746	A	C8-N9-C4	-6.67	103.13	105.80
59	A5	3000	G	O4'-C1'-N9	6.67	113.53	108.20
59	A5	38	A	C4-C5-N7	6.67	114.03	110.70
59	A5	3266	A	N9-C4-C5	-6.67	103.13	105.80
59	A5	3485	U	N1-C1'-C2'	6.67	122.67	114.00
59	A5	3654	C	N1-C2-O2	6.67	122.90	118.90
59	A5	1007	A	N9-C4-C5	-6.67	103.13	105.80
59	A5	994	U	O5'-P-OP1	-6.66	99.70	105.70
59	A5	1409	G	C6-C5-N7	-6.66	126.40	130.40
59	A5	2589	U	C2-N1-C1'	6.66	125.69	117.70
59	A5	872	A	P-O3'-C3'	6.66	127.69	119.70
59	A5	1384	C	O5'-P-OP2	-6.66	99.71	105.70
32	CT	52	LEU	CB-CG-CD1	-6.66	99.68	111.00
58	B2	471	U	C5-C6-N1	6.66	126.03	122.70
58	B2	1234	G	C2-N3-C4	6.66	115.23	111.90
59	A5	382	G	N1-C6-O6	-6.66	115.91	119.90
59	A5	1170	U	N3-C2-O2	-6.66	117.54	122.20
59	A5	789	G	C6-C5-N7	6.66	134.39	130.40
59	A5	1796	A	C8-N9-C4	-6.66	103.14	105.80
59	A5	2731	G	C6-N1-C2	-6.66	121.11	125.10
59	A5	2767	U	N3-C4-C5	6.66	118.59	114.60
58	B2	967	C	C6-N1-C2	-6.65	117.64	120.30
58	B2	1078	G	N7-C8-N9	6.65	116.43	113.10
59	A5	438	G	C4-N9-C1'	-6.65	117.85	126.50
59	A5	2107	U	N3-C4-O4	-6.65	114.74	119.40
59	A5	3258	C	C6-N1-C2	-6.65	117.64	120.30
59	A5	1069	A	N1-C2-N3	-6.65	125.97	129.30
59	A5	2632	U	N1-C2-O2	6.65	127.45	122.80
59	A5	3609	A	N1-C6-N6	-6.65	114.61	118.60
59	A5	3931	C	C5-C6-N1	6.65	124.33	121.00
58	B2	96	C	N1-C2-O2	6.65	122.89	118.90
59	A5	2546	G	C5-N7-C8	-6.65	100.97	104.30
59	A5	2789	U	N1-C2-O2	6.65	127.45	122.80
58	B2	291	C	C2-N3-C4	6.65	123.22	119.90
58	B2	1681	U	N3-C2-O2	-6.65	117.55	122.20
59	A5	1619	C	C6-N1-C2	-6.65	117.64	120.30
58	B2	448	C	N1-C2-O2	6.65	122.89	118.90
59	A5	2215	G	C8-N9-C4	-6.65	103.74	106.40
59	A5	1354	G	C5-N7-C8	-6.64	100.98	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1751	U	O5'-P-OP1	-6.64	99.72	105.70
59	A5	1972	C	C6-N1-C1'	6.64	128.77	120.80
59	A5	2147	C	C6-N1-C2	-6.64	117.64	120.30
59	A5	3236	A	N1-C6-N6	6.64	122.59	118.60
59	A5	3309	A	C4-C5-N7	6.64	114.02	110.70
59	A5	1612	G	C5-C6-N1	6.64	114.82	111.50
59	A5	1614	A	C5-C6-N1	6.64	121.02	117.70
37	Cr	68	LEU	CA-CB-CG	6.64	130.57	115.30
58	B2	1361	C	N1-C2-O2	6.64	122.88	118.90
59	A5	1516	A	N1-C2-N3	-6.64	125.98	129.30
59	A5	1803	C	C2-N3-C4	-6.64	116.58	119.90
59	A5	2016	U	N3-C4-O4	6.64	124.05	119.40
59	A5	3581	G	N3-C2-N2	-6.64	115.25	119.90
58	B2	1979	C	C5-C6-N1	6.64	124.32	121.00
59	A5	2781	G	C4-C5-N7	-6.64	108.14	110.80
59	A5	311	C	C5-C6-N1	6.63	124.32	121.00
59	A5	860	A	C8-N9-C4	6.63	108.45	105.80
59	A5	1000	G	C8-N9-C1'	-6.63	118.38	127.00
59	A5	1711	C	C5-C6-N1	6.63	124.32	121.00
56	A8	24	G	C8-N9-C4	-6.63	103.75	106.40
58	B2	1381	G	N7-C8-N9	6.63	116.42	113.10
59	A5	1077	C	C6-N1-C2	-6.63	117.65	120.30
39	Cb	39	PHE	N-CA-C	6.63	128.91	111.00
58	B2	399	C	C4-C5-C6	-6.63	114.08	117.40
58	B2	1382	G	N7-C8-N9	-6.63	109.78	113.10
59	A5	2160	C	N3-C4-N4	-6.63	113.36	118.00
59	A5	2621	A	O5'-P-OP1	-6.63	99.73	105.70
59	A5	3678	G	C6-C5-N7	-6.63	126.42	130.40
59	A5	1174	G	C5-C6-O6	-6.63	124.62	128.60
59	A5	457	A	N1-C2-N3	-6.63	125.99	129.30
59	A5	540	G	N1-C6-O6	-6.63	115.92	119.90
59	A5	1130	U	N3-C2-O2	-6.63	117.56	122.20
58	B2	1211	C	C2-N1-C1'	6.62	126.09	118.80
58	B2	1816	C	N3-C4-C5	6.62	124.55	121.90
59	A5	1016	A	N3-C4-N9	-6.62	122.10	127.40
58	B2	458	C	N1-C2-O2	6.62	122.87	118.90
59	A5	2676	U	N1-C2-O2	6.62	127.43	122.80
59	A5	1346	C	N3-C4-N4	-6.62	113.37	118.00
59	A5	1712	C	C4'-C3'-O3'	6.62	126.23	113.00
59	A5	1776	U	N1-C2-O2	6.62	127.43	122.80
56	A8	122	U	N3-C2-O2	-6.62	117.57	122.20
58	B2	1191	C	C2-N1-C1'	-6.62	111.52	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1409	A	C4-C5-C6	-6.62	113.69	117.00
58	B2	1572	C	C6-N1-C2	-6.62	117.65	120.30
58	B2	1788	C	N3-C2-O2	-6.62	117.27	121.90
59	A5	297	U	C5-C6-N1	6.62	126.01	122.70
59	A5	1124	G	O4'-C1'-N9	-6.62	102.91	108.20
59	A5	3477	A	OP2-P-O3'	6.62	119.75	105.20
59	A5	3714	U	N3-C4-O4	6.62	124.03	119.40
58	B2	1190	G	C5-C6-O6	-6.61	124.63	128.60
59	A5	2255	G	C4-C5-N7	6.61	113.44	110.80
59	A5	1130	U	C5-C4-O4	6.61	129.87	125.90
55	A7	91	C	N3-C2-O2	-6.61	117.27	121.90
59	A5	2166	U	C5-C4-O4	6.61	129.87	125.90
59	A5	3475	U	N3-C2-O2	-6.61	117.57	122.20
59	A5	3495	G	O5'-P-OP2	-6.61	99.75	105.70
59	A5	3757	U	C2-N1-C1'	-6.61	109.77	117.70
56	A8	99	U	N3-C2-O2	-6.61	117.57	122.20
58	B2	1083	C	C2-N3-C4	6.61	123.20	119.90
59	A5	1549	A	N9-C4-C5	-6.61	103.16	105.80
59	A5	3496	U	C5-C6-N1	6.61	126.00	122.70
58	B2	988	G	C8-N9-C1'	-6.61	118.41	127.00
59	A5	367	A	C5-N7-C8	-6.61	100.60	103.90
59	A5	2088	G	C6-C5-N7	6.61	134.36	130.40
59	A5	3339	U	O5'-P-OP1	6.61	118.63	110.70
59	A5	3878	U	N3-C2-O2	-6.61	117.58	122.20
59	A5	322	G	C5-C6-N1	-6.61	108.20	111.50
59	A5	359	G	OP2-P-O3'	6.61	119.73	105.20
59	A5	1782	C	C2-N3-C4	6.61	123.20	119.90
59	A5	2775	A	C8-N9-C4	6.61	108.44	105.80
59	A5	165	G	C6-C5-N7	-6.60	126.44	130.40
59	A5	991	A	N7-C8-N9	6.60	117.10	113.80
59	A5	1149	C	C4-C5-C6	-6.60	114.10	117.40
59	A5	2781	G	N3-C4-C5	-6.60	125.30	128.60
59	A5	2784	C	OP1-P-O3'	6.60	119.73	105.20
59	A5	3607	C	C2-N3-C4	6.60	123.20	119.90
59	A5	377	U	C4-C5-C6	6.60	123.66	119.70
59	A5	821	U	C5-C4-O4	6.60	129.86	125.90
59	A5	3136	U	C5-C6-N1	6.60	126.00	122.70
59	A5	3292	C	C6-N1-C2	-6.60	117.66	120.30
58	B2	880	G	C5-C6-O6	6.60	132.56	128.60
59	A5	328	U	C6-N1-C2	-6.60	117.04	121.00
59	A5	353	G	C4-C5-N7	6.60	113.44	110.80
59	A5	1385	G	C8-N9-C1'	-6.60	118.42	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2595	U	C5-C6-N1	6.60	126.00	122.70
59	A5	3150	G	C4-C5-N7	6.60	113.44	110.80
59	A5	805	C	C4-C5-C6	-6.59	114.10	117.40
59	A5	1005	G	N1-C6-O6	-6.59	115.94	119.90
59	A5	1735	G	N1-C6-O6	-6.59	115.94	119.90
59	A5	3925	G	N3-C4-N9	6.59	129.96	126.00
59	A5	670	G	C5-C6-N1	6.59	114.80	111.50
58	B2	484	C	N1-C2-O2	6.59	122.86	118.90
59	A5	3616	G	N3-C2-N2	6.59	124.52	119.90
58	B2	1234	G	C4-C5-N7	6.59	113.44	110.80
59	A5	699	U	N3-C2-O2	-6.59	117.59	122.20
59	A5	964	C	N1-C2-O2	6.59	122.85	118.90
59	A5	1382	U	N1-C2-N3	6.59	118.85	114.90
59	A5	1734	G	C5-N7-C8	-6.59	101.01	104.30
59	A5	2100	U	N3-C2-O2	-6.59	117.59	122.20
58	B2	1594	A	C2-N3-C4	6.59	113.89	110.60
59	A5	1320	U	C5-C6-N1	6.59	125.99	122.70
59	A5	1325	C	C6-N1-C2	-6.59	117.67	120.30
59	A5	3133	A	N1-C6-N6	-6.59	114.65	118.60
59	A5	2688	U	C2-N1-C1'	6.58	125.60	117.70
59	A5	2783	C	C5-C4-N4	6.58	124.81	120.20
59	A5	339	C	C5-C6-N1	6.58	124.29	121.00
59	A5	1106	A	C2-N3-C4	6.58	113.89	110.60
59	A5	1421	G	C5-C6-O6	-6.58	124.65	128.60
59	A5	2782	A	C8-N9-C4	-6.58	103.17	105.80
58	B2	366	C	C5-C6-N1	6.58	124.29	121.00
58	B2	1752	U	N1-C2-O2	6.58	127.41	122.80
59	A5	436	A	N7-C8-N9	6.58	117.09	113.80
59	A5	852	C	N1-C2-O2	6.58	122.85	118.90
59	A5	1036	A	C8-N9-C4	-6.58	103.17	105.80
59	A5	1730	A	N1-C6-N6	-6.58	114.65	118.60
59	A5	2613	C	O5'-P-OP1	-6.58	99.78	105.70
59	A5	3625	U	N3-C2-O2	-6.58	117.59	122.20
58	B2	836	C	C6-N1-C2	-6.58	117.67	120.30
59	A5	1093	C	C6-N1-C2	-6.58	117.67	120.30
59	A5	1317	A	O4'-C1'-N9	6.58	113.46	108.20
59	A5	3949	U	C2-N1-C1'	-6.58	109.80	117.70
66	CL	74	GLY	N-CA-C	6.58	129.55	113.10
59	A5	1697	U	N1-C2-N3	6.58	118.85	114.90
59	A5	397	C	N3-C4-C5	6.58	124.53	121.90
59	A5	1608	G	OP2-P-O3'	6.58	119.67	105.20
59	A5	770	C	C4-C5-C6	-6.57	114.11	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2789	U	C5-C4-O4	6.57	129.84	125.90
59	A5	2792	G	N1-C2-N2	-6.57	110.28	116.20
59	A5	2599	G	C5-C6-N1	6.57	114.79	111.50
59	A5	3730	G	N3-C4-N9	6.57	129.94	126.00
59	A5	1576	U	N1-C2-O2	6.57	127.40	122.80
59	A5	2129	C	P-O3'-C3'	6.57	127.58	119.70
59	A5	3590	C	C2-N3-C4	6.57	123.18	119.90
58	B2	1824	C	C6-N1-C2	-6.57	117.67	120.30
59	A5	2785	C	O5'-P-OP1	-6.57	99.79	105.70
59	A5	3589	G	C5-C6-O6	6.57	132.54	128.60
59	A5	778	C	C5-C6-N1	6.56	124.28	121.00
59	A5	2234	C	C2-N1-C1'	6.56	126.02	118.80
58	B2	1388	U	C5-C6-N1	6.56	125.98	122.70
59	A5	1024	U	C4-C5-C6	-6.56	115.77	119.70
59	A5	1417	G	N3-C4-N9	6.56	129.94	126.00
59	A5	3149	U	C2-N3-C4	-6.56	123.06	127.00
59	A5	3583	C	N1-C2-O2	6.56	122.84	118.90
59	A5	108	A	C4-C5-N7	6.56	113.98	110.70
59	A5	1114	A	C4-C5-N7	6.56	113.98	110.70
59	A5	1365	U	OP2-P-O3'	6.56	119.63	105.20
59	A5	3851	U	C6-N1-C2	-6.56	117.06	121.00
59	A5	2760	G	N9-C4-C5	6.56	108.02	105.40
59	A5	3329	U	N3-C2-O2	-6.56	117.61	122.20
58	B2	315	C	C5-C6-N1	6.55	124.28	121.00
59	A5	383	A	N7-C8-N9	6.55	117.08	113.80
59	A5	386	G	N3-C2-N2	6.55	124.49	119.90
59	A5	1101	A	C4-C5-C6	-6.55	113.72	117.00
41	Ce	21	ARG	NE-CZ-NH2	6.55	123.58	120.30
59	A5	1195	U	N1-C2-O2	6.55	127.39	122.80
59	A5	1693	C	C5-C6-N1	6.55	124.28	121.00
58	B2	317	A	N1-C6-N6	-6.55	114.67	118.60
59	A5	383	A	C5-N7-C8	-6.55	100.62	103.90
59	A5	1051	C	C5-C6-N1	6.55	124.28	121.00
59	A5	1197	A	C5-C6-N6	6.55	128.94	123.70
59	A5	1398	C	N3-C2-O2	-6.55	117.31	121.90
59	A5	3627	C	P-O3'-C3'	6.55	127.56	119.70
59	A5	3918	A	C5-N7-C8	-6.55	100.62	103.90
58	B2	448	C	C5-C6-N1	6.55	124.27	121.00
59	A5	372	U	N1-C2-O2	6.55	127.38	122.80
59	A5	2486	A	C5-C6-N1	6.55	120.97	117.70
66	CL	69	LEU	CB-CG-CD2	-6.55	99.87	111.00
58	B2	399	C	N3-C4-C5	6.55	124.52	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1037	C	C5-C6-N1	6.55	124.27	121.00
59	A5	3540	G	O5'-P-OP1	-6.55	99.81	105.70
55	A7	94	C	C5-C6-N1	6.55	124.27	121.00
59	A5	1093	C	OP1-P-O3'	6.55	119.60	105.20
59	A5	1529	C	N3-C2-O2	-6.55	117.32	121.90
59	A5	3767	G	C4-C5-N7	6.54	113.42	110.80
58	B2	18	C	C6-N1-C2	-6.54	117.68	120.30
58	B2	312	G	O5'-P-OP2	-6.54	99.81	105.70
58	B2	1967	C	C2-N3-C4	6.54	123.17	119.90
59	A5	370	A	C4-C5-N7	6.54	113.97	110.70
59	A5	1681	G	N3-C4-C5	-6.54	125.33	128.60
59	A5	2718	U	O5'-P-OP2	-6.54	99.81	105.70
59	A5	2753	G	N1-C2-N2	-6.54	110.31	116.20
58	B2	604	C	C5-C6-N1	6.54	124.27	121.00
58	B2	962	G	O5'-P-OP1	-6.54	99.81	105.70
59	A5	272	U	OP2-P-O3'	6.54	119.59	105.20
59	A5	874	G	C8-N9-C1'	-6.54	118.50	127.00
59	A5	2160	C	C5-C6-N1	6.54	124.27	121.00
59	A5	3378	U	C2-N1-C1'	6.54	125.55	117.70
59	A5	3526	C	N3-C4-N4	-6.54	113.42	118.00
59	A5	3595	U	N3-C2-O2	-6.54	117.62	122.20
59	A5	3918	A	N7-C8-N9	6.54	117.07	113.80
56	A8	101	A	OP1-P-O3'	6.54	119.58	105.20
56	A8	106	A	O3'-P-O5'	6.54	116.42	104.00
59	A5	102	G	N3-C4-N9	6.54	129.92	126.00
59	A5	228	C	N3-C2-O2	-6.54	117.32	121.90
59	A5	398	U	N1-C2-O2	6.54	127.38	122.80
59	A5	1209	A	N1-C6-N6	-6.54	114.68	118.60
59	A5	1325	C	C5-C6-N1	6.54	124.27	121.00
59	A5	3334	A	C5-C6-N1	6.54	120.97	117.70
59	A5	3478	G	C2-N3-C4	6.54	115.17	111.90
59	A5	3671	C	C2-N3-C4	6.54	123.17	119.90
59	A5	872	A	N3-C4-N9	6.54	132.63	127.40
59	A5	1411	U	C4-C5-C6	-6.54	115.78	119.70
58	B2	355	G	C8-N9-C4	-6.54	103.79	106.40
58	B2	550	C	N3-C2-O2	-6.54	117.33	121.90
59	A5	2920	U	N3-C2-O2	-6.54	117.62	122.20
59	A5	3128	U	C5-C6-N1	6.54	125.97	122.70
59	A5	3154	C	O5'-P-OP1	-6.54	99.82	105.70
4	CB	248	LEU	CA-CB-CG	6.53	130.33	115.30
54	A9	12	C	C2-N3-C4	6.53	123.17	119.90
59	A5	1071	U	C2-N3-C4	-6.53	123.08	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2754	G	N3-C4-N9	6.53	129.92	126.00
59	A5	2799	U	C5-C4-O4	6.53	129.82	125.90
59	A5	3498	A	C8-N9-C4	-6.53	103.19	105.80
59	A5	2211	A	C8-N9-C4	6.53	108.41	105.80
59	A5	2822	C	N1-C2-O2	6.53	122.82	118.90
59	A5	890	C	C6-N1-C2	-6.53	117.69	120.30
59	A5	2723	A	C8-N9-C4	-6.53	103.19	105.80
59	A5	3234	A	C8-N9-C4	6.53	108.41	105.80
59	A5	3908	U	O5'-P-OP1	-6.53	99.82	105.70
58	B2	1825	A	C2-N3-C4	6.53	113.86	110.60
69	DA	301	TYR	CA-CB-CG	6.53	125.80	113.40
59	A5	105	A	N9-C4-C5	-6.53	103.19	105.80
59	A5	1095	G	C4-C5-C6	6.53	122.72	118.80
59	A5	2205	G	N3-C4-N9	6.53	129.92	126.00
59	A5	3411	C	C5-C6-N1	6.53	124.26	121.00
59	A5	811	G	C5-C6-N1	-6.52	108.24	111.50
59	A5	1206	G	O5'-P-OP1	-6.52	99.83	105.70
59	A5	2217	A	OP1-P-O3'	6.52	119.55	105.20
59	A5	3921	A	C5-C6-N1	6.52	120.96	117.70
59	A5	2499	U	N1-C2-O2	6.52	127.36	122.80
59	A5	3341	C	N3-C4-C5	6.52	124.51	121.90
59	A5	442	A	C5-N7-C8	-6.52	100.64	103.90
59	A5	1110	G	N3-C4-N9	6.52	129.91	126.00
59	A5	2108	U	O5'-P-OP1	-6.52	99.83	105.70
59	A5	2559	C	C6-N1-C2	-6.52	117.69	120.30
59	A5	3003	C	N1-C2-O2	6.52	122.81	118.90
59	A5	1155	U	N3-C4-O4	-6.52	114.84	119.40
59	A5	2096	C	C2-N3-C4	6.52	123.16	119.90
59	A5	3438	C	C5-C6-N1	6.52	124.26	121.00
58	B2	1333	C	C6-N1-C2	-6.52	117.69	120.30
59	A5	1016	A	OP1-P-OP2	6.52	129.38	119.60
59	A5	1886	C	C5-C6-N1	6.52	124.26	121.00
58	B2	250	U	N1-C2-O2	6.51	127.36	122.80
59	A5	776	A	OP2-P-O3'	-6.51	90.87	105.20
59	A5	1131	C	OP1-P-OP2	6.51	129.37	119.60
59	A5	1158	C	N1-C2-O2	-6.51	114.99	118.90
59	A5	1392	A	N1-C6-N6	-6.51	114.69	118.60
59	A5	2089	A	C2-N3-C4	-6.51	107.34	110.60
59	A5	3257	U	N1-C2-O2	6.51	127.36	122.80
59	A5	824	G	C5-C6-N1	6.51	114.76	111.50
56	A8	109	U	C2-N1-C1'	6.51	125.51	117.70
58	B2	849	U	C6-N1-C1'	-6.51	112.09	121.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1184	U	N1-C2-O2	-6.51	118.24	122.80
58	B2	1217	U	C6-N1-C2	-6.51	117.09	121.00
58	B2	1648	C	N1-C2-O2	6.51	122.81	118.90
59	A5	3476	G	N1-C2-N2	-6.51	110.34	116.20
59	A5	2812	U	C6-N1-C1'	-6.51	112.09	121.20
59	A5	60	G	C5-C6-N1	6.51	114.75	111.50
59	A5	640	U	N1-C2-O2	6.51	127.35	122.80
59	A5	3464	G	C8-N9-C4	-6.51	103.80	106.40
59	A5	3722	C	C5-C6-N1	6.51	124.25	121.00
58	B2	1207	G	C4-N9-C1'	6.50	134.96	126.50
58	B2	1854	U	C5-C4-O4	6.50	129.80	125.90
59	A5	675	C	C6-N1-C2	-6.50	117.70	120.30
59	A5	1114	A	C5-N7-C8	-6.50	100.65	103.90
59	A5	2169	U	C5-C6-N1	6.50	125.95	122.70
59	A5	2742	G	C5-N7-C8	-6.50	101.05	104.30
59	A5	3614	U	C6-N1-C1'	-6.50	112.10	121.20
59	A5	235	A	C4-C5-N7	6.50	113.95	110.70
59	A5	318	G	N3-C4-N9	-6.50	122.10	126.00
59	A5	1118	C	C2-N3-C4	6.50	123.15	119.90
59	A5	1689	G	N9-C1'-C2'	6.50	122.45	114.00
59	A5	1970	G	C5-N7-C8	-6.50	101.05	104.30
59	A5	446	C	N3-C4-N4	-6.50	113.45	118.00
59	A5	1594	U	C5-C6-N1	6.50	125.95	122.70
59	A5	2229	A	C8-N9-C4	-6.50	103.20	105.80
58	B2	1107	A	C4-C5-N7	6.50	113.95	110.70
59	A5	1699	A	N3-C4-C5	-6.50	122.25	126.80
59	A5	3454	G	N3-C2-N2	-6.50	115.35	119.90
59	A5	3472	A	C4-N9-C1'	6.50	138.00	126.30
59	A5	3877	G	C5-C6-N1	6.50	114.75	111.50
59	A5	2242	C	O5'-P-OP2	-6.50	99.85	105.70
59	A5	3844	U	C1'-O4'-C4'	-6.50	104.70	109.90
59	A5	778	C	C6-N1-C2	-6.49	117.70	120.30
59	A5	1759	C	O5'-P-OP1	-6.49	99.86	105.70
59	A5	3763	U	N3-C4-O4	6.49	123.95	119.40
59	A5	3808	A	N7-C8-N9	6.49	117.05	113.80
59	A5	1141	G	N1-C6-O6	-6.49	116.00	119.90
59	A5	2173	C	N3-C2-O2	-6.49	117.36	121.90
59	A5	28	C	N1-C2-O2	6.49	122.80	118.90
59	A5	188	G	N3-C4-N9	6.49	129.89	126.00
59	A5	1003	C	C5-C6-N1	6.49	124.25	121.00
59	A5	3969	G	N3-C4-C5	6.49	131.85	128.60
59	A5	165	G	C4-C5-N7	6.49	113.39	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3931	C	C5-C4-N4	-6.49	115.66	120.20
59	A5	2186	C	N1-C2-O2	6.49	122.79	118.90
59	A5	3478	G	C6-N1-C2	-6.49	121.21	125.10
59	A5	3517	U	C5-C6-N1	6.49	125.94	122.70
59	A5	1271	G	C4-C5-N7	6.48	113.39	110.80
59	A5	1674	A	O4'-C1'-N9	-6.48	103.02	108.20
59	A5	1320	U	N1-C2-O2	6.48	127.33	122.80
59	A5	2560	A	C5-C6-N6	-6.48	118.52	123.70
59	A5	3297	C	N3-C4-C5	-6.48	119.31	121.90
58	B2	883	C	N3-C2-O2	-6.48	117.37	121.90
59	A5	1145	C	C5-C6-N1	6.47	124.24	121.00
59	A5	3463	U	N3-C4-O4	6.47	123.93	119.40
59	A5	3620	G	C5-C6-N1	-6.47	108.26	111.50
59	A5	247	C	C5-C6-N1	6.47	124.24	121.00
59	A5	1016	A	N9-C4-C5	6.47	108.39	105.80
59	A5	2165	C	C6-N1-C1'	-6.47	113.03	120.80
59	A5	2580	C	C6-N1-C2	-6.47	117.71	120.30
59	A5	2793	C	OP1-P-O3'	6.47	119.44	105.20
59	A5	3370	A	C8-N9-C4	6.47	108.39	105.80
59	A5	3512	U	N1-C2-O2	6.47	127.33	122.80
59	A5	3634	U	C6-N1-C2	-6.47	117.12	121.00
59	A5	899	G	N3-C2-N2	-6.47	115.37	119.90
59	A5	3839	A	C8-N9-C4	-6.47	103.21	105.80
58	B2	1956	U	P-O3'-C3'	6.47	127.46	119.70
59	A5	64	A	C2-N3-C4	6.47	113.83	110.60
59	A5	3301	U	C6-N1-C2	-6.47	117.12	121.00
59	A5	3638	U	C4-C5-C6	-6.47	115.82	119.70
59	A5	3754	C	C5-C6-N1	-6.47	117.77	121.00
59	A5	1723	G	OP2-P-O3'	-6.47	90.97	105.20
59	A5	2205	G	C8-N9-C1'	-6.47	118.59	127.00
58	B2	878	C	N3-C2-O2	-6.47	117.37	121.90
59	A5	69	A	N1-C2-N3	-6.47	126.07	129.30
59	A5	1122	U	N3-C2-O2	-6.47	117.67	122.20
58	B2	1066	A	C2-N3-C4	6.46	113.83	110.60
59	A5	47	A	O5'-P-OP1	-6.46	99.88	105.70
59	A5	1387	G	N9-C4-C5	-6.46	102.81	105.40
59	A5	1970	G	C5-C6-O6	-6.46	124.72	128.60
59	A5	2058	C	C5-C6-N1	6.46	124.23	121.00
59	A5	2190	A	C5-C6-N6	6.46	128.87	123.70
59	A5	2230	G	N3-C4-N9	6.46	129.88	126.00
59	A5	3846	U	O4'-C1'-N1	6.46	113.37	108.20
59	A5	227	A	C4-C5-N7	6.46	113.93	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	988	G	N1-C6-O6	6.46	123.78	119.90
59	A5	90	G	C6-N1-C2	-6.46	121.22	125.10
59	A5	561	A	N1-C2-N3	6.46	132.53	129.30
59	A5	1159	C	N1-C2-O2	6.46	122.78	118.90
59	A5	2197	A	N9-C4-C5	6.46	108.39	105.80
58	B2	627	A	N9-C4-C5	6.46	108.38	105.80
59	A5	306	C	N3-C2-O2	-6.46	117.38	121.90
59	A5	1702	G	N9-C4-C5	6.46	107.98	105.40
59	A5	2901	C	C5-C6-N1	6.46	124.23	121.00
58	B2	1187	U	N1-C2-N3	6.46	118.77	114.90
59	A5	1698	A	O5'-P-OP2	-6.46	99.89	105.70
59	A5	496	U	N3-C2-O2	-6.46	117.68	122.20
59	A5	821	U	N3-C2-O2	-6.46	117.68	122.20
59	A5	1015	G	C5-C6-O6	6.45	132.47	128.60
59	A5	1316	U	N3-C4-C5	-6.45	110.73	114.60
59	A5	3621	A	C4-C5-N7	6.45	113.93	110.70
58	B2	1090	A	N9-C1'-C2'	6.45	122.39	114.00
59	A5	1358	U	N3-C4-C5	-6.45	110.73	114.60
59	A5	1735	G	N7-C8-N9	-6.45	109.87	113.10
59	A5	2493	C	C5-C6-N1	6.45	124.23	121.00
58	B2	1361	C	C2-N1-C1'	6.45	125.90	118.80
59	A5	3620	G	C5-C6-O6	6.45	132.47	128.60
59	A5	3755	A	C2-N3-C4	-6.45	107.38	110.60
59	A5	498	U	C5-C6-N1	6.45	125.92	122.70
59	A5	2562	U	N1-C2-O2	6.45	127.31	122.80
59	A5	3470	G	O5'-P-OP1	-6.45	99.90	105.70
59	A5	57	G	OP1-P-OP2	6.45	129.27	119.60
59	A5	1009	G	N7-C8-N9	6.45	116.32	113.10
59	A5	1012	G	O5'-P-OP1	-6.45	99.90	105.70
59	A5	1137	G	C2-N3-C4	6.45	115.12	111.90
59	A5	25	G	N1-C6-O6	-6.44	116.03	119.90
59	A5	2147	C	C5-C6-N1	6.44	124.22	121.00
26	CN	92	LEU	CA-CB-CG	6.44	130.12	115.30
55	A7	102	C	N1-C2-O2	6.44	122.77	118.90
59	A5	2172	C	C5-C4-N4	-6.44	115.69	120.20
59	A5	915	C	N1-C2-O2	6.44	122.76	118.90
59	A5	995	G	C6-C5-N7	6.44	134.26	130.40
59	A5	1194	A	N7-C8-N9	6.44	117.02	113.80
59	A5	2230	G	OP2-P-O3'	6.44	119.37	105.20
59	A5	3520	U	C5-C4-O4	-6.44	122.04	125.90
58	B2	1090	A	C8-N9-C4	-6.44	103.22	105.80
59	A5	12	C	C5-C6-N1	6.44	124.22	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1725	A	N9-C4-C5	-6.44	103.22	105.80
59	A5	3755	A	C8-N9-C4	6.43	108.37	105.80
59	A5	398	U	N3-C2-O2	-6.43	117.70	122.20
59	A5	1006	A	C5-N7-C8	-6.43	100.68	103.90
59	A5	1036	A	N7-C8-N9	6.43	117.02	113.80
59	A5	2543	C	N3-C4-N4	-6.43	113.50	118.00
59	A5	2658	A	N3-C4-N9	-6.43	122.26	127.40
59	A5	63	G	C5-C6-O6	-6.43	124.74	128.60
59	A5	92	A	O5'-P-OP1	-6.43	99.92	105.70
59	A5	1129	A	N1-C6-N6	-6.43	114.74	118.60
58	B2	420	U	N3-C2-O2	-6.43	117.70	122.20
59	A5	1421	G	C4-N9-C1'	6.43	134.85	126.50
59	A5	1803	C	C6-N1-C1'	-6.43	113.09	120.80
59	A5	339	C	C6-N1-C2	-6.42	117.73	120.30
59	A5	3501	C	C5-C6-N1	6.42	124.21	121.00
59	A5	924	U	O5'-P-OP1	-6.42	99.92	105.70
59	A5	1382	U	P-O3'-C3'	6.42	127.41	119.70
59	A5	2717	C	N3-C2-O2	-6.42	117.40	121.90
59	A5	2734	A	C6-C5-N7	-6.42	127.81	132.30
59	A5	3593	A	N3-C4-C5	-6.42	122.31	126.80
59	A5	1027	A	C5-N7-C8	-6.42	100.69	103.90
58	B2	1105	U	N1-C2-O2	6.42	127.29	122.80
59	A5	3540	G	N1-C6-O6	-6.42	116.05	119.90
59	A5	1118	C	C5-C4-N4	-6.42	115.71	120.20
59	A5	2712	U	N3-C2-O2	-6.42	117.71	122.20
59	A5	3239	C	N3-C2-O2	-6.42	117.41	121.90
59	A5	3516	C	N1-C2-O2	6.42	122.75	118.90
59	A5	1024	U	C5-C6-N1	6.42	125.91	122.70
18	AZ	48	LEU	CA-CB-CG	6.41	130.05	115.30
58	B2	1090	A	C4-N9-C1'	6.41	137.84	126.30
59	A5	102	G	N1-C2-N2	-6.41	110.43	116.20
59	A5	800	C	C4-C5-C6	-6.41	114.19	117.40
59	A5	1578	C	C6-N1-C2	-6.41	117.73	120.30
59	A5	1764	G	C5-N7-C8	-6.41	101.09	104.30
59	A5	1960	C	C5-C6-N1	6.41	124.21	121.00
59	A5	2769	G	C4-C5-N7	6.41	113.36	110.80
59	A5	2759	G	C5-C6-N1	6.41	114.71	111.50
59	A5	32	C	N3-C4-C5	-6.41	119.34	121.90
59	A5	658	A	N1-C2-N3	-6.41	126.09	129.30
59	A5	2537	A	C6-C5-N7	6.41	136.79	132.30
30	CR	129	GLY	N-CA-C	-6.41	97.08	113.10
56	A8	14	G	C4-C5-N7	6.41	113.36	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	638	A	N1-C6-N6	-6.41	114.75	118.60
59	A5	2783	C	O5'-P-OP1	-6.41	99.93	105.70
59	A5	739	U	N1-C2-O2	6.41	127.28	122.80
59	A5	988	C	C5-C6-N1	6.41	124.20	121.00
59	A5	1336	U	OP1-P-O3'	6.41	119.29	105.20
59	A5	3172	A	O5'-P-OP2	-6.41	99.94	105.70
58	B2	1203	U	N1-C2-O2	6.40	127.28	122.80
59	A5	2217	A	C2-N3-C4	6.40	113.80	110.60
59	A5	349	C	C4-C5-C6	-6.40	114.20	117.40
59	A5	662	A	C5-C6-N1	6.40	120.90	117.70
59	A5	2194	G	N3-C2-N2	-6.40	115.42	119.90
59	A5	3138	G	N3-C4-N9	6.40	129.84	126.00
59	A5	803	A	C5-C6-N6	6.40	128.82	123.70
59	A5	1651	C	O5'-P-OP1	-6.40	99.94	105.70
58	B2	1765	U	P-O3'-C3'	6.40	127.38	119.70
59	A5	2066	G	C8-N9-C1'	6.40	135.32	127.00
59	A5	3457	C	C4-C5-C6	-6.40	114.20	117.40
59	A5	2799	U	N1-C2-O2	6.40	127.28	122.80
58	B2	111	A	C2-N3-C4	-6.39	107.40	110.60
59	A5	2035	C	N1-C2-O2	6.39	122.74	118.90
59	A5	2652	U	C2-N1-C1'	6.39	125.37	117.70
59	A5	1020	A	C6-N1-C2	-6.39	114.76	118.60
59	A5	1328	U	O5'-P-OP1	-6.39	99.95	105.70
59	A5	3155	G	C5-C6-N1	6.39	114.70	111.50
59	A5	3943	G	C4-N9-C1'	6.39	134.81	126.50
59	A5	2679	U	C6-N1-C2	-6.39	117.17	121.00
59	A5	2692	U	N1-C2-O2	6.39	127.27	122.80
58	B2	1356	U	N3-C2-O2	-6.39	117.73	122.20
59	A5	2704	A	O5'-P-OP1	-6.39	99.95	105.70
56	A8	94	C	C6-N1-C2	-6.39	117.75	120.30
59	A5	3678	G	O5'-P-OP1	-6.39	99.95	105.70
59	A5	3966	U	C5-C6-N1	6.39	125.89	122.70
58	B2	372	A	N9-C4-C5	-6.39	103.25	105.80
59	A5	37	G	OP1-P-O3'	6.39	119.25	105.20
59	A5	227	A	C8-N9-C4	-6.39	103.25	105.80
59	A5	1767	A	N1-C6-N6	-6.39	114.77	118.60
59	A5	2249	A	C4-C5-C6	-6.39	113.81	117.00
59	A5	2801	U	C5-C4-O4	6.39	129.73	125.90
59	A5	281	C	C4-C5-C6	-6.38	114.21	117.40
59	A5	372	U	C5-C6-N1	6.38	125.89	122.70
59	A5	920	G	C8-N9-C1'	-6.38	118.70	127.00
59	A5	1559	A	N7-C8-N9	6.38	116.99	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2516	U	N3-C2-O2	-6.38	117.73	122.20
59	A5	2536	G	C4-C5-N7	6.38	113.35	110.80
59	A5	1066	A	C6-C5-N7	6.38	136.77	132.30
59	A5	1182	A	C2-N3-C4	6.38	113.79	110.60
59	A5	3628	G	O5'-P-OP2	-6.38	99.95	105.70
59	A5	163	A	O4'-C1'-N9	6.38	113.31	108.20
59	A5	245	G	N3-C2-N2	-6.38	115.43	119.90
59	A5	1540	U	N3-C2-O2	-6.38	117.73	122.20
59	A5	2541	C	N1-C2-N3	-6.38	114.73	119.20
59	A5	2760	G	C5-C6-O6	6.38	132.43	128.60
59	A5	337	A	N1-C6-N6	-6.38	114.77	118.60
59	A5	1194	A	C8-N9-C4	-6.38	103.25	105.80
59	A5	3938	C	N3-C2-O2	-6.38	117.44	121.90
59	A5	2701	G	C4-C5-N7	-6.38	108.25	110.80
59	A5	3139	G	C5-C6-O6	-6.38	124.77	128.60
58	B2	604	C	N1-C2-O2	6.37	122.72	118.90
59	A5	117	C	N3-C2-O2	-6.37	117.44	121.90
59	A5	485	A	C4-C5-C6	-6.37	113.81	117.00
59	A5	2155	A	N1-C2-N3	6.37	132.49	129.30
59	A5	2769	G	C6-C5-N7	-6.37	126.58	130.40
59	A5	1023	C	C5-C4-N4	-6.37	115.74	120.20
59	A5	2771	G	OP1-P-O3'	6.37	119.21	105.20
59	A5	2788	U	O5'-P-OP1	6.37	118.34	110.70
59	A5	3624	C	C5-C6-N1	6.37	124.19	121.00
59	A5	3624	C	N1-C2-O2	6.37	122.72	118.90
59	A5	789	G	N1-C6-O6	-6.37	116.08	119.90
59	A5	1280	C	N1-C2-O2	6.37	122.72	118.90
59	A5	1684	G	C2-N3-C4	6.37	115.08	111.90
59	A5	1192	A	OP1-P-OP2	-6.37	110.05	119.60
59	A5	1554	C	N3-C4-N4	-6.37	113.54	118.00
59	A5	2625	G	N9-C4-C5	-6.37	102.85	105.40
56	A8	34	C	C5-C4-N4	6.36	124.65	120.20
58	B2	291	C	N1-C2-O2	6.36	122.72	118.90
58	B2	1913	C	N3-C2-O2	-6.36	117.44	121.90
59	A5	367	A	OP2-P-O3'	6.36	119.20	105.20
59	A5	1089	U	O5'-P-OP2	-6.36	99.97	105.70
59	A5	1342	U	N3-C2-O2	-6.36	117.75	122.20
59	A5	2721	C	N1-C2-O2	6.36	122.72	118.90
56	A8	1	A	N7-C8-N9	-6.36	110.62	113.80
58	B2	978	C	C6-N1-C2	-6.36	117.76	120.30
59	A5	1381	U	N3-C2-O2	-6.36	117.75	122.20
59	A5	2754	G	N3-C4-C5	-6.36	125.42	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2779	A	C4-C5-C6	-6.36	113.82	117.00
59	A5	373	A	C5-C6-N1	6.36	120.88	117.70
59	A5	3344	U	C2-N1-C1'	6.36	125.33	117.70
58	B2	1076	U	C6-N1-C2	-6.36	117.19	121.00
59	A5	2035	C	N3-C2-O2	-6.36	117.45	121.90
59	A5	3601	U	O5'-P-OP1	-6.36	99.98	105.70
59	A5	804	C	OP1-P-O3'	-6.35	91.22	105.20
58	B2	908	G	N3-C4-C5	-6.35	125.42	128.60
59	A5	1197	A	C6-N1-C2	6.35	122.41	118.60
59	A5	1790	A	N1-C2-N3	-6.35	126.12	129.30
59	A5	2678	G	N1-C2-N3	-6.35	120.09	123.90
59	A5	2733	G	C5-C6-O6	-6.35	124.79	128.60
59	A5	3943	G	N9-C4-C5	-6.35	102.86	105.40
58	B2	1811	C	C2-N1-C1'	6.35	125.78	118.80
58	B2	1827	A	O4'-C1'-N9	6.35	113.28	108.20
59	A5	777	C	N3-C2-O2	-6.35	117.46	121.90
59	A5	816	A	C5-C6-N1	6.35	120.87	117.70
59	A5	1387	G	C4-N9-C1'	6.35	134.75	126.50
59	A5	2599	G	N1-C6-O6	-6.35	116.09	119.90
59	A5	3491	C	C2-N3-C4	6.35	123.08	119.90
59	A5	3758	G	N3-C4-N9	6.35	129.81	126.00
58	B2	509	C	P-O3'-C3'	6.35	127.32	119.70
59	A5	299	G	OP1-P-O3'	6.35	119.17	105.20
59	A5	1644	C	C5-C4-N4	-6.35	115.76	120.20
59	A5	247	C	C6-N1-C2	-6.35	117.76	120.30
59	A5	1002	C	OP1-P-O3'	6.35	119.16	105.20
59	A5	1616	G	OP1-P-OP2	6.35	129.12	119.60
58	B2	1603	G	C4-N9-C1'	6.34	134.75	126.50
59	A5	2233	C	C6-N1-C2	-6.34	117.76	120.30
59	A5	2760	G	N1-C6-O6	-6.34	116.09	119.90
59	A5	3445	C	C6-N1-C2	-6.34	117.76	120.30
59	A5	1339	U	C5-C6-N1	6.34	125.87	122.70
59	A5	3471	A	C8-N9-C4	6.34	108.34	105.80
59	A5	3514	C	C5-C4-N4	6.34	124.64	120.20
59	A5	3670	G	C5-N7-C8	-6.34	101.13	104.30
59	A5	2529	G	N1-C6-O6	-6.34	116.09	119.90
59	A5	3120	C	C6-N1-C1'	6.34	128.41	120.80
59	A5	3258	C	N3-C2-O2	-6.34	117.46	121.90
59	A5	3362	G	N1-C6-O6	-6.34	116.10	119.90
59	A5	3505	U	N3-C2-O2	-6.34	117.76	122.20
59	A5	1797	A	C5-N7-C8	6.34	107.07	103.90
59	A5	2812	U	N3-C2-O2	-6.34	117.76	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	94	C	C2-N3-C4	6.34	123.07	119.90
59	A5	795	A	C6-N1-C2	-6.34	114.80	118.60
59	A5	798	C	C2-N3-C4	-6.34	116.73	119.90
59	A5	112	C	N1-C2-O2	6.34	122.70	118.90
59	A5	543	A	N7-C8-N9	6.34	116.97	113.80
59	A5	1784	A	O5'-P-OP2	-6.34	100.00	105.70
59	A5	2525	C	C6-N1-C2	-6.34	117.77	120.30
59	A5	273	G	N3-C4-C5	6.33	131.77	128.60
59	A5	999	U	N3-C4-C5	6.33	118.40	114.60
58	B2	878	C	C6-N1-C2	-6.33	117.77	120.30
58	B2	1177	C	C5-C6-N1	6.33	124.17	121.00
58	B2	1856	U	C5-C6-N1	6.33	125.87	122.70
59	A5	2194	G	C8-N9-C4	-6.33	103.87	106.40
65	CO	112	SER	C-N-CD	-6.33	106.67	120.60
59	A5	287	G	O4'-C1'-N9	6.33	113.27	108.20
59	A5	1055	U	N1-C2-O2	6.33	127.23	122.80
59	A5	2513	G	C8-N9-C1'	-6.33	118.77	127.00
59	A5	2787	U	OP2-P-O3'	6.33	119.13	105.20
59	A5	3316	U	C6-N1-C2	-6.33	117.20	121.00
59	A5	3589	G	N1-C6-O6	-6.33	116.10	119.90
41	Ce	20	ILE	CG1-CB-CG2	-6.33	97.47	111.40
59	A5	1555	G	C4-C5-N7	6.33	113.33	110.80
59	A5	1751	U	N3-C2-O2	-6.33	117.77	122.20
58	B2	932	U	C6-N1-C1'	-6.33	112.34	121.20
59	A5	1315	A	C4-C5-N7	6.33	113.86	110.70
59	A5	1605	U	C2-N1-C1'	-6.33	110.11	117.70
59	A5	1678	C	C5-C4-N4	6.33	124.63	120.20
59	A5	388	U	C6-N1-C2	-6.33	117.20	121.00
59	A5	664	U	C5-C6-N1	6.33	125.86	122.70
59	A5	2778	G	N3-C4-N9	6.33	129.79	126.00
59	A5	3763	U	N1-C2-N3	-6.33	111.11	114.90
59	A5	1086	C	C5-C4-N4	6.32	124.63	120.20
59	A5	2800	C	N3-C2-O2	-6.32	117.47	121.90
58	B2	618	G	C8-N9-C1'	-6.32	118.78	127.00
59	A5	347	A	C2-N3-C4	-6.32	107.44	110.60
59	A5	1718	G	C6-N1-C2	-6.32	121.31	125.10
59	A5	2151	A	O5'-P-OP1	-6.32	100.01	105.70
59	A5	3185	C	C6-N1-C2	-6.32	117.77	120.30
59	A5	3251	C	C4-C5-C6	-6.32	114.24	117.40
59	A5	1428	G	C6-C5-N7	-6.32	126.61	130.40
58	B2	1447	G	C8-N9-C4	-6.32	103.87	106.40
59	A5	1529	C	C2-N1-C1'	6.32	125.75	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2166	U	C2-N1-C1'	-6.32	110.12	117.70
59	A5	751	A	O5'-P-OP2	-6.32	100.02	105.70
59	A5	1276	G	C4-N9-C1'	-6.32	118.29	126.50
59	A5	2674	A	C5-C6-N1	6.32	120.86	117.70
59	A5	2753	G	C6-C5-N7	-6.32	126.61	130.40
59	A5	3401	U	C5-C6-N1	6.32	125.86	122.70
59	A5	3235	A	N1-C6-N6	6.32	122.39	118.60
56	A8	86	A	N7-C8-N9	6.31	116.96	113.80
59	A5	1100	G	O5'-P-OP2	6.31	118.28	110.70
55	A7	105	C	N1-C2-O2	6.31	122.69	118.90
58	B2	1796	C	C6-N1-C2	-6.31	117.78	120.30
59	A5	1385	G	N1-C6-O6	6.31	123.69	119.90
59	A5	3479	C	N3-C4-C5	-6.31	119.38	121.90
59	A5	1114	A	N7-C8-N9	6.31	116.96	113.80
59	A5	1616	G	C4-C5-N7	6.31	113.33	110.80
59	A5	1945	U	C5-C6-N1	6.31	125.86	122.70
58	B2	1186	U	C5-C4-O4	-6.31	122.11	125.90
58	B2	1238	G	N7-C8-N9	6.31	116.25	113.10
59	A5	458	A	C4-C5-C6	-6.31	113.84	117.00
59	A5	541	A	N1-C6-N6	-6.31	114.81	118.60
59	A5	3258	C	O4'-C1'-N1	6.31	113.25	108.20
59	A5	3497	G	N3-C4-N9	6.31	129.79	126.00
59	A5	366	A	C8-N9-C4	6.31	108.32	105.80
59	A5	1077	C	C2-N1-C1'	6.31	125.74	118.80
59	A5	1101	A	N1-C2-N3	-6.31	126.15	129.30
59	A5	1710	G	C6-C5-N7	-6.31	126.61	130.40
59	A5	1746	A	C5-N7-C8	-6.31	100.75	103.90
59	A5	1781	U	OP2-P-O3'	6.31	119.08	105.20
59	A5	1981	A	C5-C6-N1	6.31	120.85	117.70
59	A5	2180	A	N9-C4-C5	-6.31	103.28	105.80
59	A5	2508	C	N1-C2-O2	6.31	122.69	118.90
56	A8	96	U	C6-N1-C2	-6.31	117.22	121.00
59	A5	39	A	C5-C6-N1	6.31	120.85	117.70
59	A5	1346	C	N3-C4-C5	6.31	124.42	121.90
59	A5	1688	A	O4'-C1'-N9	6.31	113.25	108.20
59	A5	2520	U	C2-N1-C1'	-6.31	110.13	117.70
59	A5	3708	U	OP1-P-O3'	6.31	119.07	105.20
55	A7	90	A	N7-C8-N9	6.30	116.95	113.80
58	B2	583	C	N3-C2-O2	-6.30	117.49	121.90
59	A5	1087	G	C4-C5-N7	6.30	113.32	110.80
59	A5	2514	U	N3-C2-O2	-6.30	117.79	122.20
59	A5	3516	C	C4-C5-C6	-6.30	114.25	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1001	A	C8-N9-C4	-6.30	103.28	105.80
59	A5	1073	C	P-O3'-C3'	6.30	127.26	119.70
59	A5	1124	G	N3-C4-N9	-6.30	122.22	126.00
58	B2	1207	G	N1-C6-O6	-6.30	116.12	119.90
59	A5	90	G	N9-C4-C5	6.30	107.92	105.40
59	A5	3630	C	C4-C5-C6	-6.30	114.25	117.40
59	A5	1684	G	C4-C5-C6	-6.30	115.02	118.80
59	A5	2688	U	C6-N1-C2	-6.30	117.22	121.00
58	B2	1817	C	C4-C5-C6	-6.30	114.25	117.40
59	A5	2657	A	C4-C5-C6	-6.30	113.85	117.00
59	A5	3472	A	C5-N7-C8	6.30	107.05	103.90
58	B2	1225	A	C5-C6-N6	-6.30	118.66	123.70
59	A5	301	U	C4-C5-C6	-6.30	115.92	119.70
59	A5	1084	A	O5'-P-OP2	6.30	118.25	110.70
59	A5	2088	G	C4-C5-N7	-6.30	108.28	110.80
59	A5	3399	C	OP1-P-O3'	6.30	119.05	105.20
59	A5	3887	U	C5-C6-N1	6.30	125.85	122.70
59	A5	1380	G	C5-C6-N1	6.29	114.65	111.50
56	A8	15	G	N3-C2-N2	-6.29	115.50	119.90
59	A5	1046	A	N1-C6-N6	6.29	122.38	118.60
59	A5	1332	C	N3-C4-C5	-6.29	119.38	121.90
59	A5	2822	C	C2-N1-C1'	6.29	125.72	118.80
59	A5	3293	G	N1-C6-O6	-6.29	116.12	119.90
59	A5	3633	U	C6-N1-C2	-6.29	117.22	121.00
58	B2	101	U	O5'-P-OP2	-6.29	100.04	105.70
59	A5	1000	G	C6-C5-N7	-6.29	126.63	130.40
59	A5	377	U	N3-C2-O2	-6.29	117.80	122.20
59	A5	569	U	N3-C2-O2	-6.29	117.80	122.20
59	A5	3530	A	C2-N3-C4	6.29	113.74	110.60
59	A5	822	G	O5'-P-OP2	-6.28	100.05	105.70
59	A5	1138	C	N3-C4-N4	6.28	122.40	118.00
59	A5	1144	C	C5-C4-N4	6.28	124.60	120.20
55	A7	92	C	C6-N1-C2	-6.28	117.79	120.30
59	A5	1622	U	N1-C2-O2	6.28	127.20	122.80
59	A5	2090	U	N1-C2-O2	6.28	127.20	122.80
59	A5	2649	A	C4-C5-N7	6.28	113.84	110.70
59	A5	3263	C	C5-C6-N1	6.28	124.14	121.00
59	A5	2750	A	OP2-P-O3'	6.28	119.01	105.20
59	A5	51	U	OP2-P-O3'	6.28	119.01	105.20
59	A5	1382	U	OP2-P-O3'	-6.28	91.39	105.20
59	A5	3346	G	C4-N9-C1'	6.28	134.66	126.50
59	A5	3346	G	N3-C4-N9	6.28	129.77	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3935	G	OP2-P-O3'	6.28	119.01	105.20
59	A5	123	U	P-O3'-C3'	6.28	127.23	119.70
59	A5	1778	A	C6-C5-N7	6.28	136.69	132.30
59	A5	2164	G	C6-C5-N7	-6.28	126.64	130.40
59	A5	3617	U	C5-C6-N1	6.28	125.84	122.70
59	A5	309	C	C5-C6-N1	6.27	124.14	121.00
59	A5	1873	A	OP2-P-O3'	6.27	119.00	105.20
59	A5	3342	C	N3-C4-N4	6.27	122.39	118.00
59	A5	3755	A	N3-C4-C5	6.27	131.19	126.80
55	A7	67	G	C4-C5-N7	6.27	113.31	110.80
58	B2	903	C	N1-C2-O2	6.27	122.66	118.90
59	A5	1513	C	C5-C6-N1	6.27	124.14	121.00
59	A5	2067	C	C5-C4-N4	-6.27	115.81	120.20
59	A5	3150	G	N7-C8-N9	6.27	116.23	113.10
59	A5	3412	U	N3-C4-O4	-6.27	115.01	119.40
69	DA	280	LEU	CA-CB-CG	6.27	129.72	115.30
58	B2	86	C	C6-N1-C1'	-6.27	113.28	120.80
59	A5	994	U	N3-C4-C5	-6.27	110.84	114.60
59	A5	1774	C	N3-C2-O2	-6.27	117.51	121.90
59	A5	2255	G	N3-C4-N9	6.27	129.76	126.00
59	A5	3466	A	N7-C8-N9	6.27	116.93	113.80
59	A5	1788	G	O5'-P-OP1	-6.27	100.06	105.70
56	A8	105	C	C6-N1-C1'	6.26	128.32	120.80
59	A5	792	U	O5'-P-OP1	-6.26	100.06	105.70
56	A8	43	A	C5-N7-C8	-6.26	100.77	103.90
58	B2	509	C	OP1-P-O3'	6.26	118.98	105.20
58	B2	1078	G	C8-N9-C4	-6.26	103.90	106.40
59	A5	1151	A	N7-C8-N9	6.26	116.93	113.80
59	A5	1192	A	N1-C6-N6	6.26	122.36	118.60
59	A5	1379	U	N3-C2-O2	-6.26	117.82	122.20
59	A5	1599	C	C4-C5-C6	-6.26	114.27	117.40
59	A5	2196	U	C2-N1-C1'	-6.26	110.19	117.70
59	A5	2657	A	N7-C8-N9	6.26	116.93	113.80
59	A5	2786	U	C6-N1-C2	-6.26	117.24	121.00
59	A5	3457	C	C6-N1-C2	-6.26	117.80	120.30
58	B2	589	U	C2-N1-C1'	6.26	125.21	117.70
59	A5	920	G	N9-C4-C5	-6.26	102.90	105.40
59	A5	2197	A	N1-C6-N6	-6.26	114.84	118.60
56	A8	34	C	N3-C4-C5	-6.26	119.40	121.90
59	A5	383	A	C6-N1-C2	-6.26	114.84	118.60
59	A5	1712	C	C6-N1-C1'	6.26	128.31	120.80
59	A5	2643	C	N3-C2-O2	-6.26	117.52	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3446	G	N7-C8-N9	-6.26	109.97	113.10
18	AZ	95	LEU	CA-CB-CG	6.26	129.69	115.30
59	A5	1114	A	C8-N9-C4	-6.26	103.30	105.80
59	A5	1945	U	C2-N1-C1'	6.26	125.21	117.70
59	A5	1084	A	N3-C4-N9	6.25	132.40	127.40
59	A5	1195	U	C4-C5-C6	6.25	123.45	119.70
59	A5	3630	C	C2-N3-C4	6.25	123.03	119.90
59	A5	83	U	O5'-P-OP2	-6.25	100.07	105.70
59	A5	1053	G	C5-C6-O6	-6.25	124.85	128.60
59	A5	1167	A	N1-C2-N3	-6.25	126.17	129.30
59	A5	2625	G	N3-C2-N2	6.25	124.28	119.90
59	A5	2707	C	N3-C4-C5	6.25	124.40	121.90
59	A5	3619	U	N3-C2-O2	-6.25	117.82	122.20
56	A8	10	C	N3-C4-C5	-6.25	119.40	121.90
59	A5	383	A	C2-N3-C4	6.25	113.72	110.60
59	A5	1152	A	N1-C6-N6	-6.25	114.85	118.60
59	A5	1801	U	C6-N1-C1'	6.25	129.95	121.20
59	A5	2720	U	N1-C2-O2	6.25	127.17	122.80
54	A9	29	U	N3-C4-O4	-6.25	115.03	119.40
58	B2	1360	G	C8-N9-C4	6.25	108.90	106.40
59	A5	998	G	N3-C4-N9	6.25	129.75	126.00
59	A5	2701	G	N3-C4-C5	-6.25	125.48	128.60
59	A5	1733	A	C8-N9-C4	6.25	108.30	105.80
59	A5	2768	A	N1-C2-N3	-6.25	126.18	129.30
59	A5	3711	G	C4-C5-N7	6.25	113.30	110.80
56	A8	72	C	N3-C2-O2	-6.24	117.53	121.90
58	B2	838	A	C2-N3-C4	6.24	113.72	110.60
59	A5	427	A	C6-C5-N7	-6.24	127.93	132.30
59	A5	445	C	N3-C4-N4	6.24	122.37	118.00
59	A5	1166	U	OP1-P-O3'	6.24	118.94	105.20
59	A5	3176	C	N3-C2-O2	-6.24	117.53	121.90
59	A5	1593	U	O5'-P-OP2	-6.24	100.08	105.70
59	A5	3576	G	O5'-P-OP1	-6.24	100.08	105.70
59	A5	3541	A	C8-N9-C4	-6.24	103.30	105.80
59	A5	3486	U	C6-N1-C2	-6.24	117.26	121.00
59	A5	342	A	C4-C5-N7	6.24	113.82	110.70
59	A5	752	U	C2-N1-C1'	6.24	125.18	117.70
25	Ca	47	ASP	C-N-CA	6.24	137.29	121.70
59	A5	1084	A	C5-N7-C8	-6.24	100.78	103.90
59	A5	1366	G	OP1-P-OP2	-6.24	110.25	119.60
59	A5	1721	C	O5'-P-OP1	-6.24	100.09	105.70
56	A8	29	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(°)
59	A5	1197	A	O5'-P-OP2	6.23	118.18	110.70
59	A5	1681	G	N1-C2-N2	-6.23	110.59	116.20
59	A5	2255	G	C4-N9-C1'	6.23	134.60	126.50
59	A5	2767	U	N3-C4-O4	-6.23	115.04	119.40
59	A5	874	G	C4-C5-N7	6.23	113.29	110.80
59	A5	1156	U	N3-C4-C5	6.23	118.34	114.60
59	A5	3299	U	N3-C2-O2	-6.23	117.84	122.20
59	A5	2761	A	C4-C5-N7	6.23	113.81	110.70
59	A5	2920	U	N1-C2-O2	6.23	127.16	122.80
59	A5	3591	A	C4-N9-C1'	-6.23	115.09	126.30
58	B2	1966	U	C5-C4-O4	-6.23	122.16	125.90
59	A5	851	G	N7-C8-N9	6.23	116.21	113.10
59	A5	1156	U	O5'-P-OP2	-6.23	100.09	105.70
59	A5	3948	U	N3-C2-O2	-6.23	117.84	122.20
59	A5	1290	U	O4'-C1'-N1	6.23	113.18	108.20
59	A5	1611	G	C6-N1-C2	-6.23	121.36	125.10
6	CC	295	LEU	CA-CB-CG	6.22	129.62	115.30
54	A9	11	A	C8-N9-C4	-6.22	103.31	105.80
58	B2	1191	C	C6-N1-C1'	6.22	128.27	120.80
59	A5	206	C	N1-C2-O2	6.22	122.63	118.90
59	A5	3890	G	P-O3'-C3'	6.22	127.17	119.70
59	A5	1162	A	O5'-P-OP2	-6.22	100.10	105.70
59	A5	1710	G	C5-N7-C8	-6.22	101.19	104.30
59	A5	3594	A	C5-N7-C8	-6.22	100.79	103.90
59	A5	1414	C	C2-N3-C4	-6.22	116.79	119.90
59	A5	2515	C	N1-C2-N3	-6.22	114.85	119.20
58	B2	1161	G	O5'-P-OP2	-6.22	100.10	105.70
58	B2	1170	G	C4-C5-N7	6.22	113.29	110.80
58	B2	1854	U	N1-C2-O2	6.22	127.15	122.80
59	A5	2737	C	C2-N3-C4	-6.22	116.79	119.90
59	A5	890	C	C5-C6-N1	6.22	124.11	121.00
59	A5	1083	A	C6-C5-N7	6.22	136.65	132.30
59	A5	1170	U	N3-C4-C5	6.22	118.33	114.60
59	A5	1682	G	N1-C2-N3	-6.22	120.17	123.90
59	A5	1774	C	N1-C2-O2	6.22	122.63	118.90
59	A5	2067	C	N3-C2-O2	-6.22	117.55	121.90
59	A5	2173	C	OP2-P-O3'	6.22	118.88	105.20
59	A5	2209	G	N9-C4-C5	-6.22	102.91	105.40
59	A5	3851	U	C2-N1-C1'	6.22	125.16	117.70
58	B2	1083	C	N1-C2-O2	6.21	122.63	118.90
59	A5	62	G	C5-C6-O6	-6.21	124.87	128.60
59	A5	858	U	C6-N1-C2	-6.21	117.27	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3506	U	N1-C2-O2	6.21	127.15	122.80
59	A5	2671	C	N3-C4-C5	-6.21	119.42	121.90
59	A5	3872	C	C6-N1-C2	-6.21	117.81	120.30
59	A5	2525	C	OP1-P-O3'	6.21	118.87	105.20
59	A5	2658	A	N1-C6-N6	-6.21	114.87	118.60
59	A5	2720	U	N3-C4-O4	-6.21	115.05	119.40
59	A5	3303	G	P-O3'-C3'	6.21	127.15	119.70
58	B2	1788	C	C6-N1-C1'	-6.21	113.35	120.80
59	A5	1861	A	N1-C6-N6	-6.21	114.87	118.60
59	A5	3221	A	C6-C5-N7	-6.21	127.95	132.30
59	A5	981	C	C6-N1-C2	-6.21	117.82	120.30
59	A5	2787	U	C5-C4-O4	-6.21	122.17	125.90
59	A5	1030	A	C5-C6-N1	6.21	120.80	117.70
59	A5	1688	A	N9-C4-C5	6.21	108.28	105.80
59	A5	1868	A	N1-C6-N6	-6.21	114.88	118.60
59	A5	2191	G	N3-C4-N9	-6.21	122.28	126.00
52	CE	44	LEU	CA-CB-CG	6.21	129.57	115.30
55	A7	67	G	N3-C4-N9	-6.21	122.28	126.00
58	B2	258	A	C8-N9-C4	-6.21	103.32	105.80
58	B2	355	G	C4-C5-N7	6.21	113.28	110.80
59	A5	2209	G	O5'-P-OP1	-6.21	100.12	105.70
59	A5	2223	C	N1-C2-O2	6.21	122.62	118.90
59	A5	2229	A	N1-C2-N3	-6.21	126.20	129.30
58	B2	1858	U	N1-C2-O2	6.20	127.14	122.80
59	A5	1945	U	N1-C2-O2	6.20	127.14	122.80
58	B2	932	U	N1-C2-O2	6.20	127.14	122.80
59	A5	3616	G	C8-N9-C1'	-6.20	118.94	127.00
55	A7	100	A	O5'-P-OP1	-6.20	100.12	105.70
58	B2	1333	C	C5-C6-N1	6.20	124.10	121.00
59	A5	463	C	C5-C6-N1	6.20	124.10	121.00
59	A5	2570	C	N3-C2-O2	-6.20	117.56	121.90
59	A5	2731	G	C6-C5-N7	-6.20	126.68	130.40
59	A5	3173	U	C2-N3-C4	-6.20	123.28	127.00
59	A5	3613	G	C4-C5-N7	6.20	113.28	110.80
58	B2	1822	U	C6-N1-C2	-6.20	117.28	121.00
59	A5	1514	U	OP2-P-O3'	6.20	118.83	105.20
59	A5	1765	U	N3-C4-C5	6.20	118.32	114.60
59	A5	3135	G	C8-N9-C4	6.20	108.88	106.40
59	A5	3260	G	C4-N9-C1'	6.20	134.55	126.50
59	A5	3648	A	N7-C8-N9	6.20	116.90	113.80
59	A5	3755	A	N9-C4-C5	-6.20	103.32	105.80
59	A5	1019	U	N1-C2-N3	6.19	118.62	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3334	A	O4'-C1'-N9	6.19	113.16	108.20
59	A5	3894	C	C5-C6-N1	6.19	124.10	121.00
59	A5	2760	G	N3-C4-N9	-6.19	122.28	126.00
59	A5	3341	C	O5'-P-OP1	-6.19	100.13	105.70
59	A5	3620	G	N3-C4-C5	6.19	131.70	128.60
12	AN	135	LEU	CA-CB-CG	6.19	129.54	115.30
59	A5	833	U	N1-C2-O2	6.19	127.13	122.80
59	A5	3353	C	N1-C2-O2	6.19	122.61	118.90
59	A5	1136	A	N7-C8-N9	-6.19	110.71	113.80
59	A5	1682	G	C5-C6-O6	-6.19	124.89	128.60
59	A5	2521	A	C6-C5-N7	-6.19	127.97	132.30
55	A7	78	C	C4-C5-C6	-6.19	114.31	117.40
59	A5	910	C	C6-N1-C2	-6.19	117.83	120.30
59	A5	2041	G	C8-N9-C1'	-6.19	118.96	127.00
59	A5	2209	G	OP1-P-OP2	6.19	128.88	119.60
59	A5	2781	G	N1-C6-O6	-6.19	116.19	119.90
58	B2	939	G	N3-C4-C5	-6.18	125.51	128.60
59	A5	813	C	N1-C2-O2	6.18	122.61	118.90
59	A5	2518	A	C5-N7-C8	6.18	106.99	103.90
56	A8	111	G	C5-C6-N1	6.18	114.59	111.50
58	B2	120	U	N3-C2-O2	-6.18	117.87	122.20
59	A5	306	C	C5-C6-N1	6.18	124.09	121.00
59	A5	3491	C	N1-C2-O2	6.18	122.61	118.90
59	A5	3842	A	O5'-P-OP2	-6.18	100.14	105.70
66	CL	86	GLY	N-CA-C	-6.18	97.64	113.10
59	A5	3800	G	N3-C4-N9	6.18	129.71	126.00
59	A5	41	U	N1-C2-O2	6.18	127.13	122.80
59	A5	1534	G	C5-C6-N1	6.18	114.59	111.50
59	A5	1959	A	C4-C5-C6	-6.18	113.91	117.00
59	A5	2695	A	C4-C5-C6	-6.18	113.91	117.00
59	A5	3474	G	OP2-P-O3'	6.18	118.79	105.20
59	A5	3665	U	N3-C2-O2	-6.18	117.88	122.20
59	A5	43	A	N7-C8-N9	6.18	116.89	113.80
59	A5	1385	G	N9-C4-C5	-6.18	102.93	105.40
33	CP	27	LYS	CD-CE-NZ	-6.17	97.50	111.70
58	B2	89	C	N3-C2-O2	-6.17	117.58	121.90
58	B2	1671	U	N1-C2-O2	6.17	127.12	122.80
59	A5	283	A	C5-C6-N1	6.17	120.79	117.70
59	A5	1685	G	N9-C4-C5	-6.17	102.93	105.40
59	A5	1785	G	C6-C5-N7	6.17	134.10	130.40
59	A5	2805	C	OP1-P-OP2	6.17	128.86	119.60
59	A5	3127	A	N7-C8-N9	6.17	116.89	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3309	A	C6-C5-N7	-6.17	127.98	132.30
58	B2	632	G	N1-C6-O6	6.17	123.60	119.90
59	A5	587	U	C2-N1-C1'	6.17	125.11	117.70
59	A5	1722	U	N1-C2-O2	6.17	127.12	122.80
59	A5	3892	A	C5-C6-N6	-6.17	118.76	123.70
59	A5	2756	C	C2-N3-C4	6.17	122.98	119.90
59	A5	3471	A	C2-N3-C4	6.17	113.69	110.60
59	A5	3770	A	C2-N3-C4	6.17	113.69	110.60
58	B2	1968	C	N3-C4-N4	6.17	122.32	118.00
58	B2	1954	C	C6-N1-C2	-6.17	117.83	120.30
59	A5	2165	C	C4-C5-C6	-6.17	114.32	117.40
59	A5	3149	U	OP1-P-OP2	6.17	128.85	119.60
59	A5	3487	A	N7-C8-N9	6.17	116.89	113.80
56	A8	111	G	N1-C6-O6	-6.17	116.20	119.90
59	A5	1355	C	C5-C4-N4	6.17	124.52	120.20
59	A5	1880	A	N1-C6-N6	-6.17	114.90	118.60
59	A5	29	U	N1-C2-O2	6.17	127.11	122.80
59	A5	2098	C	C2-N1-C1'	6.17	125.58	118.80
59	A5	3130	G	C5-C6-O6	-6.17	124.90	128.60
59	A5	3142	G	C5-C6-O6	6.17	132.30	128.60
58	B2	250	U	OP1-P-O3'	6.16	118.76	105.20
59	A5	1273	U	O5'-P-OP2	-6.16	100.15	105.70
59	A5	2507	C	N1-C2-O2	6.16	122.60	118.90
59	A5	1517	A	N7-C8-N9	6.16	116.88	113.80
59	A5	3144	U	N1-C2-O2	6.16	127.11	122.80
59	A5	3447	U	C5-C6-N1	6.16	125.78	122.70
52	CE	237	TYR	N-CA-C	6.16	127.63	111.00
59	A5	804	C	N1-C2-O2	6.16	122.60	118.90
59	A5	2124	G	C6-C5-N7	-6.16	126.70	130.40
59	A5	3142	G	C8-N9-C4	-6.16	103.94	106.40
59	A5	3670	G	N1-C6-O6	6.16	123.60	119.90
34	CX	186	VAL	C-N-CD	-6.16	107.05	120.60
59	A5	934	U	N1-C2-O2	6.16	127.11	122.80
59	A5	3402	C	C5-C4-N4	6.16	124.51	120.20
58	B2	1825	A	N7-C8-N9	6.16	116.88	113.80
59	A5	2130	G	N1-C6-O6	-6.16	116.21	119.90
59	A5	2728	C	C5-C6-N1	6.16	124.08	121.00
59	A5	802	G	C5-C6-O6	6.16	132.29	128.60
56	A8	35	G	N1-C2-N2	-6.15	110.66	116.20
58	B2	908	G	C4-N9-C1'	6.15	134.50	126.50
58	B2	1344	A	N3-C4-N9	6.15	132.32	127.40
59	A5	1166	U	N3-C2-O2	-6.15	117.89	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1593	U	N1-C2-O2	6.15	127.11	122.80
59	A5	2491	C	N3-C2-O2	-6.15	117.59	121.90
58	B2	111	A	N3-C4-C5	6.15	131.11	126.80
58	B2	1671	U	N3-C2-O2	-6.15	117.89	122.20
59	A5	423	U	N1-C2-O2	6.15	127.11	122.80
59	A5	1782	C	C4-C5-C6	-6.15	114.32	117.40
59	A5	2775	A	C5-C6-N1	6.15	120.78	117.70
59	A5	163	A	P-O3'-C3'	6.15	127.08	119.70
59	A5	2196	U	C6-N1-C1'	6.15	129.81	121.20
59	A5	3143	U	O5'-P-OP2	-6.15	100.16	105.70
59	A5	3418	U	C6-N1-C1'	-6.15	112.59	121.20
59	A5	1204	C	C4-C5-C6	-6.15	114.33	117.40
59	A5	2704	A	C4-C5-N7	6.15	113.78	110.70
58	B2	823	C	N1-C2-O2	6.15	122.59	118.90
59	A5	1644	C	N3-C2-O2	-6.15	117.60	121.90
59	A5	2053	A	C2-N3-C4	6.15	113.67	110.60
59	A5	2174	A	O4'-C1'-N9	6.15	113.12	108.20
59	A5	761	C	N3-C2-O2	-6.15	117.60	121.90
59	A5	3376	C	C5-C6-N1	6.15	124.07	121.00
58	B2	330	G	O5'-P-OP1	-6.14	100.17	105.70
59	A5	485	A	C6-C5-N7	6.14	136.60	132.30
59	A5	991	A	C5-N7-C8	-6.14	100.83	103.90
59	A5	1322	U	N3-C4-O4	6.14	123.70	119.40
59	A5	1538	U	C5-C4-O4	6.14	129.59	125.90
59	A5	2226	A	O5'-P-OP1	-6.14	100.17	105.70
59	A5	2694	G	N3-C4-N9	6.14	129.69	126.00
59	A5	3363	G	N3-C2-N2	-6.14	115.60	119.90
59	A5	744	U	N3-C2-O2	-6.14	117.90	122.20
59	A5	2219	U	C6-N1-C2	-6.14	117.31	121.00
59	A5	3758	G	N3-C2-N2	6.14	124.20	119.90
59	A5	1350	A	O5'-P-OP2	-6.14	100.17	105.70
59	A5	1512	C	OP1-P-OP2	6.14	128.81	119.60
59	A5	2641	C	N3-C2-O2	-6.14	117.60	121.90
59	A5	691	C	C6-N1-C2	-6.14	117.84	120.30
59	A5	1093	C	N1-C2-O2	6.14	122.58	118.90
59	A5	1696	A	C8-N9-C4	6.14	108.25	105.80
59	A5	2704	A	N9-C4-C5	-6.14	103.34	105.80
56	A8	51	A	N1-C6-N6	6.14	122.28	118.60
59	A5	1403	C	N3-C4-N4	-6.14	113.70	118.00
59	A5	1793	C	N1-C1'-C2'	-6.14	105.25	112.00
59	A5	3272	A	C8-N9-C4	6.14	108.25	105.80
58	B2	314	C	N3-C2-O2	-6.13	117.61	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1616	G	O5'-P-OP1	-6.13	100.18	105.70
59	A5	2091	A	C5-C6-N6	6.13	128.61	123.70
59	A5	2507	C	O5'-P-OP2	-6.13	100.18	105.70
59	A5	3299	U	C5-C6-N1	6.13	125.77	122.70
59	A5	3488	G	C4-N9-C1'	-6.13	118.53	126.50
59	A5	3758	G	C6-C5-N7	-6.13	126.72	130.40
55	A7	49	A	N1-C2-N3	-6.13	126.23	129.30
59	A5	85	U	C5-C6-N1	6.13	125.77	122.70
59	A5	261	U	N3-C2-O2	-6.13	117.91	122.20
59	A5	2715	C	N1-C2-N3	6.13	123.49	119.20
59	A5	3000	G	C6-C5-N7	-6.13	126.72	130.40
59	A5	1403	C	C6-N1-C2	6.13	122.75	120.30
59	A5	2212	A	N7-C8-N9	6.13	116.86	113.80
25	Ca	98	LYS	C-N-CA	6.13	137.02	121.70
58	B2	1078	G	C6-C5-N7	-6.13	126.72	130.40
59	A5	104	A	N7-C8-N9	6.13	116.86	113.80
59	A5	1665	C	C6-N1-C2	-6.13	117.85	120.30
59	A5	2088	G	N3-C2-N2	-6.13	115.61	119.90
59	A5	3396	A	N1-C2-N3	-6.13	126.24	129.30
59	A5	3943	G	C4-C5-N7	6.13	113.25	110.80
58	B2	1107	A	C5-N7-C8	-6.13	100.84	103.90
58	B2	1982	C	C6-N1-C2	-6.13	117.85	120.30
59	A5	3514	C	N3-C4-C5	-6.13	119.45	121.90
59	A5	416	C	N3-C4-C5	6.12	124.35	121.90
59	A5	3548	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	3626	A	N1-C6-N6	-6.12	114.93	118.60
59	A5	1162	A	C2-N3-C4	6.12	113.66	110.60
59	A5	3148	C	N1-C2-O2	6.12	122.57	118.90
59	A5	552	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	1546	U	C4-C5-C6	-6.12	116.03	119.70
59	A5	2516	U	C5-C4-O4	6.12	129.57	125.90
59	A5	290	G	C8-N9-C4	6.12	108.85	106.40
59	A5	1009	G	O5'-P-OP1	-6.12	100.19	105.70
59	A5	2194	G	C4-N9-C1'	6.12	134.45	126.50
59	A5	3507	A	C2-N3-C4	6.12	113.66	110.60
59	A5	3599	U	N1-C2-O2	6.12	127.08	122.80
59	A5	3727	A	N7-C8-N9	-6.12	110.74	113.80
59	A5	83	U	N3-C2-O2	-6.12	117.92	122.20
59	A5	1059	A	C8-N9-C4	-6.12	103.35	105.80
59	A5	3714	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	3842	A	C8-N9-C4	-6.12	103.35	105.80
59	A5	532	C	N1-C2-O2	6.12	122.57	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1174	G	C5-N7-C8	6.12	107.36	104.30
59	A5	1728	G	C6-C5-N7	-6.12	126.73	130.40
59	A5	3170	U	C5-C6-N1	6.12	125.76	122.70
59	A5	667	U	OP2-P-O3'	6.11	118.65	105.20
59	A5	1106	A	N1-C2-N3	-6.11	126.24	129.30
59	A5	1404	A	C5-N7-C8	-6.11	100.84	103.90
59	A5	2170	C	C6-N1-C1'	6.11	128.13	120.80
58	B2	410	C	C5-C6-N1	6.11	124.06	121.00
59	A5	1014	U	N1-C2-O2	6.11	127.08	122.80
59	A5	1665	C	C2-N3-C4	6.11	122.95	119.90
59	A5	2224	A	N7-C8-N9	6.11	116.86	113.80
59	A5	3472	A	C8-N9-C1'	-6.11	116.70	127.70
59	A5	1029	C	C6-N1-C2	-6.11	117.86	120.30
59	A5	1961	C	C5-C6-N1	6.11	124.05	121.00
59	A5	2625	G	C8-N9-C1'	-6.11	119.06	127.00
59	A5	1115	A	N1-C6-N6	6.11	122.26	118.60
59	A5	2495	G	C2-N3-C4	6.11	114.95	111.90
59	A5	2501	G	N3-C2-N2	6.11	124.17	119.90
59	A5	2539	G	C6-C5-N7	-6.11	126.74	130.40
59	A5	1723	G	OP1-P-O3'	6.10	118.63	105.20
59	A5	3615	G	C4-C5-N7	6.10	113.24	110.80
55	A7	76	U	C5-C6-N1	6.10	125.75	122.70
58	B2	1170	G	C6-C5-N7	-6.10	126.74	130.40
59	A5	920	G	N1-C2-N2	-6.10	110.71	116.20
59	A5	3405	U	C2-N1-C1'	6.10	125.02	117.70
59	A5	2625	G	N1-C2-N2	-6.10	110.71	116.20
59	A5	3167	A	C4-C5-C6	-6.10	113.95	117.00
59	A5	3842	A	N1-C6-N6	-6.10	114.94	118.60
26	CN	183	THR	N-CA-C	6.10	127.47	111.00
58	B2	711	G	C8-N9-C4	-6.10	103.96	106.40
58	B2	1812	C	OP2-P-O3'	6.10	118.62	105.20
59	A5	2709	U	C4-C5-C6	-6.10	116.04	119.70
59	A5	3390	U	C5-C6-N1	6.10	125.75	122.70
58	B2	445	U	N3-C2-O2	-6.10	117.93	122.20
58	B2	589	U	N1-C2-O2	6.10	127.07	122.80
59	A5	1208	U	N3-C2-O2	-6.10	117.93	122.20
59	A5	1938	C	N3-C2-O2	-6.10	117.63	121.90
58	B2	1727	U	C5-C4-O4	-6.10	122.24	125.90
59	A5	2127	C	C2-N1-C1'	6.10	125.51	118.80
59	A5	426	A	N1-C2-N3	-6.09	126.25	129.30
59	A5	2180	A	C5-N7-C8	-6.09	100.85	103.90
58	B2	372	A	C4-C5-N7	6.09	113.75	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1173	A	C5-C6-N1	6.09	120.75	117.70
59	A5	1088	A	O5'-P-OP2	6.09	118.01	110.70
59	A5	1147	U	C4-C5-C6	-6.09	116.05	119.70
59	A5	1786	G	N3-C4-N9	6.09	129.66	126.00
59	A5	2581	U	C6-N1-C2	-6.09	117.34	121.00
20	Ab	7	LEU	CA-CB-CG	6.09	129.30	115.30
58	B2	616	U	N1-C2-O2	6.09	127.06	122.80
59	A5	1675	G	C5-N7-C8	-6.09	101.25	104.30
59	A5	1863	U	C6-N1-C2	-6.09	117.35	121.00
59	A5	2093	U	C6-N1-C1'	6.09	129.72	121.20
59	A5	3352	A	C8-N9-C4	-6.09	103.36	105.80
59	A5	3416	C	N3-C2-O2	-6.09	117.64	121.90
59	A5	3516	C	C5-C6-N1	6.09	124.05	121.00
59	A5	703	A	N9-C4-C5	-6.09	103.36	105.80
59	A5	1408	A	O5'-P-OP2	-6.09	100.22	105.70
59	A5	2183	A	C8-N9-C4	-6.09	103.36	105.80
59	A5	3474	G	C2-N3-C4	-6.09	108.86	111.90
59	A5	868	A	C4-C5-C6	-6.09	113.96	117.00
59	A5	921	C	N3-C4-C5	-6.09	119.47	121.90
59	A5	3637	A	C5-N7-C8	-6.09	100.86	103.90
24	AJ	6	ILE	CG1-CB-CG2	-6.08	98.02	111.40
59	A5	1417	G	N1-C6-O6	-6.08	116.25	119.90
59	A5	2234	C	N1-C2-O2	6.08	122.55	118.90
59	A5	3754	C	C2-N3-C4	-6.08	116.86	119.90
58	B2	908	G	N3-C4-N9	6.08	129.65	126.00
59	A5	826	A	C8-N9-C1'	-6.08	116.75	127.70
59	A5	1414	C	C6-N1-C2	6.08	122.73	120.30
59	A5	2158	U	N3-C4-O4	6.08	123.66	119.40
59	A5	3292	C	C5-C4-N4	-6.08	115.94	120.20
59	A5	1931	C	N1-C2-O2	6.08	122.55	118.90
59	A5	2510	A	OP1-P-O3'	6.08	118.57	105.20
59	A5	3763	U	C6-N1-C1'	-6.08	112.69	121.20
58	B2	1406	A	N7-C8-N9	6.08	116.84	113.80
59	A5	439	U	C4-C5-C6	-6.08	116.05	119.70
59	A5	838	U	N3-C2-O2	-6.08	117.95	122.20
58	B2	883	C	N1-C2-O2	6.08	122.55	118.90
58	B2	1215	G	N7-C8-N9	-6.08	110.06	113.10
59	A5	1687	U	N1-C2-O2	6.08	127.05	122.80
59	A5	3407	U	C6-N1-C1'	6.08	129.71	121.20
58	B2	1177	C	C4-C5-C6	-6.07	114.36	117.40
59	A5	551	C	N1-C2-O2	6.07	122.55	118.90
59	A5	1712	C	C5-C6-N1	6.07	124.04	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2995	U	C2-N1-C1'	6.07	124.99	117.70
58	B2	940	U	N3-C2-O2	-6.07	117.95	122.20
59	A5	1419	A	C8-N9-C4	-6.07	103.37	105.80
56	A8	106	A	N3-C4-N9	6.07	132.26	127.40
59	A5	108	A	N1-C6-N6	6.07	122.24	118.60
59	A5	206	C	N3-C2-O2	-6.07	117.65	121.90
59	A5	811	G	O5'-P-OP1	-6.07	100.24	105.70
59	A5	1086	C	C2-N3-C4	6.07	122.94	119.90
59	A5	2990	C	N3-C2-O2	-6.07	117.65	121.90
59	A5	3843	U	N3-C4-O4	-6.07	115.15	119.40
59	A5	1689	G	C6-C5-N7	6.07	134.04	130.40
59	A5	2209	G	C4-C5-N7	6.07	113.23	110.80
58	B2	1225	A	C5-C6-N1	6.07	120.73	117.70
59	A5	57	G	C4-C5-N7	6.07	113.23	110.80
59	A5	1104	A	C5-C6-N1	6.07	120.73	117.70
59	A5	1331	G	OP2-P-O3'	6.07	118.55	105.20
58	B2	633	U	C5-C6-N1	6.06	125.73	122.70
59	A5	299	G	N7-C8-N9	-6.06	110.07	113.10
59	A5	857	U	N1-C2-O2	6.06	127.04	122.80
59	A5	1126	A	C5-N7-C8	-6.06	100.87	103.90
59	A5	1166	U	C6-N1-C2	-6.06	117.36	121.00
59	A5	3114	C	N3-C2-O2	-6.06	117.66	121.90
55	A7	91	C	N3-C4-C5	6.06	124.32	121.90
59	A5	808	G	N7-C8-N9	-6.06	110.07	113.10
55	A7	82	G	N3-C2-N2	6.06	124.14	119.90
56	A8	36	A	C5-C6-N1	6.06	120.73	117.70
59	A5	2191	G	N1-C6-O6	-6.06	116.27	119.90
59	A5	3544	G	N9-C4-C5	-6.06	102.98	105.40
58	B2	932	U	N3-C2-O2	-6.06	117.96	122.20
58	B2	1198	G	C5-C6-N1	6.06	114.53	111.50
59	A5	2512	U	N3-C4-O4	-6.06	115.16	119.40
59	A5	3408	C	C6-N1-C2	-6.06	117.88	120.30
59	A5	3632	G	C5-N7-C8	-6.06	101.27	104.30
58	B2	1823	A	N1-C6-N6	6.06	122.23	118.60
59	A5	995	G	C4-C5-N7	-6.06	108.38	110.80
2	CA	174	ARG	CG-CD-NE	-6.05	99.09	111.80
58	B2	15	U	N1-C2-N3	6.05	118.53	114.90
59	A5	63	G	OP1-P-O3'	6.05	118.52	105.20
59	A5	102	G	N3-C2-N2	6.05	124.14	119.90
59	A5	440	U	C6-N1-C1'	-6.05	112.72	121.20
59	A5	1170	U	C6-N1-C2	-6.05	117.37	121.00
59	A5	2196	U	N1-C2-O2	6.05	127.04	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3755	A	C6-N1-C2	6.05	122.23	118.60
56	A8	55	G	N1-C6-O6	-6.05	116.27	119.90
59	A5	375	C	C6-N1-C2	-6.05	117.88	120.30
58	B2	1090	A	C6-C5-N7	-6.05	128.06	132.30
59	A5	163	A	C4-N9-C1'	-6.05	115.41	126.30
59	A5	225	U	C5-C6-N1	6.05	125.73	122.70
59	A5	981	C	N3-C2-O2	-6.05	117.66	121.90
58	B2	489	C	C5-C6-N1	6.05	124.03	121.00
58	B2	604	C	C6-N1-C2	-6.05	117.88	120.30
59	A5	2241	U	C4-C5-C6	-6.05	116.07	119.70
59	A5	1726	G	C2-N3-C4	-6.05	108.88	111.90
59	A5	3851	U	C5-C4-O4	-6.05	122.27	125.90
59	A5	3943	G	N1-C6-O6	6.05	123.53	119.90
59	A5	1087	G	C8-N9-C4	6.04	108.82	106.40
59	A5	2185	U	N1-C2-O2	6.04	127.03	122.80
59	A5	246	C	N3-C2-O2	-6.04	117.67	121.90
59	A5	1331	G	C4-C5-N7	6.04	113.22	110.80
59	A5	2501	G	N1-C6-O6	-6.04	116.27	119.90
59	A5	3460	C	C5-C6-N1	6.04	124.02	121.00
59	A5	3728	A	O5'-P-OP1	6.04	117.95	110.70
59	A5	3847	U	OP2-P-O3'	6.04	118.50	105.20
58	B2	1811	C	N3-C2-O2	-6.04	117.67	121.90
59	A5	304	U	N3-C4-O4	6.04	123.63	119.40
59	A5	739	U	C2-N1-C1'	6.04	124.95	117.70
59	A5	1764	G	C2-N3-C4	-6.04	108.88	111.90
59	A5	2790	G	C8-N9-C4	-6.04	103.98	106.40
59	A5	3844	U	C2-N1-C1'	-6.04	110.45	117.70
59	A5	227	A	N1-C2-N3	-6.04	126.28	129.30
59	A5	2920	U	C5-C6-N1	6.04	125.72	122.70
59	A5	3461	C	C5-C6-N1	6.04	124.02	121.00
58	B2	942	A	O4'-C1'-N9	6.04	113.03	108.20
59	A5	3486	U	C5-C6-N1	6.04	125.72	122.70
59	A5	6	U	N3-C2-O2	-6.04	117.98	122.20
59	A5	367	A	C4-C5-C6	-6.04	113.98	117.00
59	A5	2701	G	N1-C6-O6	-6.04	116.28	119.90
59	A5	2780	A	C2-N3-C4	6.04	113.62	110.60
59	A5	3316	U	N1-C2-N3	6.04	118.52	114.90
59	A5	3919	G	C4-C5-N7	6.04	113.21	110.80
59	A5	330	C	N1-C2-O2	6.03	122.52	118.90
59	A5	2085	G	N3-C2-N2	-6.03	115.68	119.90
59	A5	2668	C	N1-C2-O2	6.03	122.52	118.90
59	A5	3364	C	C4-C5-C6	-6.03	114.38	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	979	U	P-O3'-C3'	6.03	126.94	119.70
59	A5	1142	U	O5'-P-OP1	-6.03	100.27	105.70
59	A5	2260	U	N3-C4-O4	-6.03	115.18	119.40
59	A5	2573	C	N3-C4-C5	6.03	124.31	121.90
59	A5	3480	U	N3-C4-C5	6.03	118.22	114.60
58	B2	1176	C	C6-N1-C2	-6.03	117.89	120.30
59	A5	674	A	C5-C6-N6	-6.03	118.88	123.70
59	A5	1175	C	C2-N3-C4	6.03	122.92	119.90
59	A5	2210	U	N1-C2-N3	6.03	118.52	114.90
58	B2	1132	U	C5-C6-N1	6.03	125.71	122.70
59	A5	1328	U	O5'-P-OP2	6.03	117.94	110.70
58	B2	1920	U	N1-C2-O2	6.03	127.02	122.80
59	A5	424	G	O4'-C1'-N9	6.03	113.02	108.20
59	A5	1005	G	C5-C6-N1	6.03	114.51	111.50
59	A5	1099	U	C5-C4-O4	6.03	129.52	125.90
59	A5	1124	G	C4-C5-C6	-6.03	115.18	118.80
59	A5	830	U	C2-N1-C1'	-6.02	110.47	117.70
59	A5	3525	A	C5-N7-C8	-6.02	100.89	103.90
33	CP	127	ARG	NE-CZ-NH1	-6.02	117.29	120.30
59	A5	23	U	N3-C2-O2	-6.02	117.98	122.20
59	A5	33	C	OP1-P-O3'	6.02	118.45	105.20
59	A5	1544	U	C5-C6-N1	6.02	125.71	122.70
59	A5	1656	U	N3-C2-O2	-6.02	117.98	122.20
59	A5	1661	C	C6-N1-C2	-6.02	117.89	120.30
59	A5	1715	G	N1-C2-N2	6.02	121.62	116.20
59	A5	3148	C	N3-C2-O2	-6.02	117.68	121.90
59	A5	3496	U	C2-N1-C1'	6.02	124.93	117.70
59	A5	105	A	O4'-C1'-N9	6.02	113.02	108.20
59	A5	927	A	C8-N9-C4	6.02	108.21	105.80
59	A5	1295	A	O5'-P-OP1	-6.02	100.28	105.70
59	A5	1512	C	C6-N1-C2	-6.02	117.89	120.30
59	A5	2792	G	C4-C5-C6	-6.02	115.19	118.80
33	CP	27	LYS	CA-CB-CG	6.02	126.64	113.40
58	B2	448	C	N3-C2-O2	-6.02	117.69	121.90
58	B2	1582	C	C6-N1-C1'	-6.02	113.58	120.80
59	A5	358	C	N3-C4-C5	-6.02	119.49	121.90
59	A5	1117	A	N1-C2-N3	-6.02	126.29	129.30
59	A5	1559	A	C5-N7-C8	-6.02	100.89	103.90
59	A5	1624	G	O5'-P-OP2	-6.02	100.28	105.70
59	A5	3708	U	C5-C6-N1	-6.02	119.69	122.70
59	A5	3721	C	O4'-C1'-N1	6.02	113.01	108.20
26	CN	164	LEU	CA-CB-CG	6.02	129.14	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	940	U	N1-C2-O2	6.02	127.01	122.80
59	A5	791	C	N3-C4-C5	6.02	124.31	121.90
58	B2	1053	A	N9-C4-C5	-6.01	103.39	105.80
59	A5	305	G	N1-C6-O6	-6.01	116.29	119.90
59	A5	2508	C	N3-C4-C5	6.01	124.31	121.90
59	A5	1958	G	C6-C5-N7	-6.01	126.79	130.40
59	A5	775	U	C5-C4-O4	6.01	129.51	125.90
59	A5	2521	A	N7-C8-N9	-6.01	110.79	113.80
59	A5	3845	A	N9-C4-C5	-6.01	103.39	105.80
2	CA	169	VAL	CG1-CB-CG2	-6.01	101.28	110.90
58	B2	958	G	C4-N9-C1'	6.01	134.31	126.50
58	B2	1096	C	C6-N1-C2	-6.01	117.90	120.30
59	A5	362	A	C4-C5-N7	6.01	113.70	110.70
59	A5	1194	A	C8-N9-C1'	-6.01	116.88	127.70
59	A5	2571	U	N3-C2-O2	-6.01	117.99	122.20
59	A5	2649	A	O4'-C1'-N9	6.01	113.01	108.20
59	A5	3133	A	C6-N1-C2	-6.01	114.99	118.60
59	A5	3378	U	N3-C2-O2	-6.01	117.99	122.20
56	A8	109	U	C6-N1-C1'	-6.01	112.79	121.20
58	B2	1053	A	C5-C6-N6	-6.01	118.89	123.70
58	B2	1133	G	C4-C5-N7	6.01	113.20	110.80
58	B2	1228	G	N1-C6-O6	6.01	123.50	119.90
58	B2	1834	G	N7-C8-N9	6.01	116.10	113.10
59	A5	1032	G	C8-N9-C4	-6.01	104.00	106.40
59	A5	1320	U	O5'-P-OP1	-6.01	100.29	105.70
59	A5	1323	C	OP1-P-O3'	-6.01	91.98	105.20
59	A5	1350	A	OP1-P-OP2	6.01	128.61	119.60
59	A5	1689	G	P-O3'-C3'	6.01	126.91	119.70
59	A5	2065	A	P-O3'-C3'	6.01	126.91	119.70
59	A5	2178	U	C4-C5-C6	-6.01	116.10	119.70
58	B2	1215	G	N1-C6-O6	-6.00	116.30	119.90
59	A5	57	G	C6-C5-N7	-6.00	126.80	130.40
59	A5	1139	U	O5'-P-OP2	6.00	117.91	110.70
59	A5	1344	A	N1-C2-N3	-6.00	126.30	129.30
59	A5	1544	U	C4-C5-C6	-6.00	116.10	119.70
59	A5	2225	A	C5-C6-N6	-6.00	118.90	123.70
59	A5	2498	U	C5-C4-O4	-6.00	122.30	125.90
58	B2	1850	G	C4-N9-C1'	6.00	134.30	126.50
59	A5	663	U	C2-N3-C4	-6.00	123.40	127.00
59	A5	999	U	C6-N1-C2	-6.00	117.40	121.00
59	A5	1022	A	C5-C6-N1	6.00	120.70	117.70
59	A5	2233	C	O5'-P-OP2	-6.00	100.30	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2723	A	C4-C5-C6	-6.00	114.00	117.00
59	A5	3883	G	C2-N3-C4	6.00	114.90	111.90
59	A5	1076	A	N1-C2-N3	-6.00	126.30	129.30
59	A5	1290	U	C2-N1-C1'	-6.00	110.50	117.70
59	A5	1707	A	C5-C6-N6	-6.00	118.90	123.70
59	A5	3407	U	C2-N1-C1'	-6.00	110.50	117.70
59	A5	3410	G	N3-C2-N2	6.00	124.10	119.90
58	B2	967	C	C5-C6-N1	6.00	124.00	121.00
58	B2	1850	G	C6-C5-N7	-6.00	126.80	130.40
59	A5	289	C	C2-N1-C1'	6.00	125.40	118.80
59	A5	2707	C	C4-C5-C6	-6.00	114.40	117.40
22	Ae	116	ASN	C-N-CA	6.00	136.69	121.70
59	A5	2209	G	N1-C2-N2	6.00	121.59	116.20
59	A5	3398	C	N3-C2-O2	-5.99	117.70	121.90
59	A5	272	U	P-O3'-C3'	5.99	126.89	119.70
56	A8	39	A	C8-N9-C4	-5.99	103.40	105.80
58	B2	856	A	C4-C5-N7	5.99	113.70	110.70
59	A5	810	A	C2-N3-C4	-5.99	107.60	110.60
59	A5	1126	A	N7-C8-N9	5.99	116.80	113.80
59	A5	1140	G	C5-C6-O6	-5.99	125.00	128.60
59	A5	1390	C	N1-C2-O2	5.99	122.49	118.90
59	A5	1720	A	C2-N3-C4	5.99	113.59	110.60
59	A5	3337	G	N3-C4-N9	5.99	129.59	126.00
2	CA	32	LEU	CA-CB-CG	5.99	129.07	115.30
58	B2	1237	G	C5-C6-O6	5.99	132.19	128.60
59	A5	819	U	N3-C2-O2	-5.99	118.01	122.20
59	A5	1642	G	C8-N9-C4	-5.99	104.00	106.40
59	A5	1677	U	O5'-P-OP1	5.99	117.89	110.70
59	A5	2530	C	O5'-P-OP1	-5.99	100.31	105.70
59	A5	2786	U	N3-C2-O2	-5.99	118.01	122.20
59	A5	3148	C	O5'-P-OP1	-5.99	100.31	105.70
59	A5	813	C	N3-C2-O2	-5.99	117.71	121.90
59	A5	3824	C	O5'-P-OP1	5.99	117.89	110.70
56	A8	17	U	N3-C4-C5	5.99	118.19	114.60
59	A5	522	G	N1-C6-O6	5.99	123.49	119.90
59	A5	1734	G	N3-C4-C5	5.99	131.59	128.60
59	A5	3309	A	C2-N3-C4	5.99	113.59	110.60
59	A5	3398	C	O5'-P-OP2	-5.99	100.31	105.70
58	B2	1823	A	C4-C5-N7	5.98	113.69	110.70
59	A5	1092	U	N1-C2-O2	5.98	126.99	122.80
59	A5	457	A	C5-C6-N1	5.98	120.69	117.70
59	A5	1402	U	N3-C2-O2	-5.98	118.01	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1614	A	C5-C6-N6	-5.98	118.91	123.70
59	A5	1884	U	N1-C2-O2	5.98	126.99	122.80
59	A5	1980	G	N1-C6-O6	-5.98	116.31	119.90
55	A7	119	C	C4-C5-C6	-5.98	114.41	117.40
58	B2	1073	G	N3-C4-C5	-5.98	125.61	128.60
59	A5	1127	C	N3-C4-N4	-5.98	113.81	118.00
59	A5	1154	U	C5-C4-O4	5.98	129.49	125.90
59	A5	2656	C	OP1-P-O3'	5.98	118.36	105.20
66	CL	125	LEU	C-N-CA	-5.98	106.75	121.70
70	AK	54	GLY	C-N-CA	5.98	136.65	121.70
59	A5	26	G	C8-N9-C4	-5.98	104.01	106.40
59	A5	783	G	C5-N7-C8	-5.98	101.31	104.30
59	A5	1667	U	N3-C2-O2	-5.98	118.01	122.20
59	A5	1686	A	C2-N3-C4	-5.98	107.61	110.60
56	A8	71	A	C4-C5-N7	5.98	113.69	110.70
59	A5	2545	A	N7-C8-N9	5.98	116.79	113.80
59	A5	2549	G	N1-C2-N2	5.98	121.58	116.20
59	A5	3478	G	C4-C5-C6	5.98	122.39	118.80
59	A5	3922	G	N9-C4-C5	-5.98	103.01	105.40
59	A5	3936	A	O4'-C1'-N9	5.98	112.98	108.20
59	A5	1023	C	C2-N1-C1'	5.98	125.37	118.80
59	A5	2161	G	N1-C2-N2	5.98	121.58	116.20
56	A8	24	G	N3-C2-N2	-5.97	115.72	119.90
59	A5	1412	A	O5'-P-OP1	-5.97	100.32	105.70
59	A5	3162	C	N3-C2-O2	-5.97	117.72	121.90
59	A5	861	C	C5-C6-N1	5.97	123.99	121.00
59	A5	982	C	N1-C2-O2	5.97	122.48	118.90
59	A5	1005	G	N9-C4-C5	5.97	107.79	105.40
59	A5	2012	G	C4-C5-N7	5.97	113.19	110.80
59	A5	2161	G	C2-N3-C4	5.97	114.89	111.90
59	A5	2622	A	N1-C2-N3	-5.97	126.31	129.30
59	A5	3267	C	N1-C2-O2	5.97	122.48	118.90
54	A9	11	A	N7-C8-N9	5.97	116.79	113.80
56	A8	27	C	C5-C4-N4	5.97	124.38	120.20
59	A5	1530	U	O5'-P-OP1	-5.97	100.33	105.70
59	A5	105	A	N3-C4-C5	5.97	130.98	126.80
59	A5	355	G	N1-C2-N3	5.97	127.48	123.90
59	A5	2738	C	C2-N1-C1'	5.97	125.36	118.80
59	A5	2775	A	OP1-P-OP2	-5.97	110.65	119.60
59	A5	3000	G	C4-N9-C1'	5.97	134.26	126.50
59	A5	2687	A	C5-C6-N1	5.97	120.68	117.70
59	A5	3497	G	N3-C2-N2	5.97	124.08	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3652	C	N1-C2-O2	5.97	122.48	118.90
59	A5	347	A	C4-C5-C6	-5.97	114.02	117.00
59	A5	1413	C	C5-C4-N4	-5.97	116.02	120.20
59	A5	1534	G	C5-C6-O6	-5.97	125.02	128.60
59	A5	1556	C	C5-C6-N1	5.96	123.98	121.00
59	A5	1790	A	C5-C6-N6	-5.96	118.93	123.70
58	B2	1594	A	N3-C4-N9	5.96	132.17	127.40
59	A5	43	A	C5-N7-C8	-5.96	100.92	103.90
59	A5	2153	C	N3-C4-N4	-5.96	113.83	118.00
58	B2	988	G	N7-C8-N9	5.96	116.08	113.10
58	B2	1024	C	N3-C2-O2	-5.96	117.73	121.90
58	B2	1394	U	N1-C2-O2	5.96	126.97	122.80
59	A5	285	G	C5-N7-C8	-5.96	101.32	104.30
59	A5	320	U	C6-N1-C2	-5.96	117.42	121.00
59	A5	565	C	C5-C6-N1	5.96	123.98	121.00
59	A5	1873	A	C6-N1-C2	-5.96	115.02	118.60
59	A5	2750	A	C5-N7-C8	5.96	106.88	103.90
58	B2	1217	U	C5-C6-N1	5.96	125.68	122.70
58	B2	314	C	C2-N1-C1'	5.96	125.35	118.80
59	A5	1031	G	C5-N7-C8	-5.96	101.32	104.30
59	A5	1143	U	C4-C5-C6	-5.96	116.12	119.70
59	A5	3779	U	C5-C6-N1	5.96	125.68	122.70
58	B2	989	G	C4-C5-N7	5.96	113.18	110.80
59	A5	58	G	P-O3'-C3'	5.96	126.85	119.70
59	A5	1116	G	N9-C4-C5	5.96	107.78	105.40
59	A5	1751	U	N3-C4-O4	5.96	123.57	119.40
59	A5	1741	G	N3-C4-N9	5.96	129.57	126.00
59	A5	1786	G	N3-C2-N2	5.95	124.07	119.90
59	A5	2733	G	O5'-P-OP2	5.95	117.84	110.70
59	A5	2790	G	C4-C5-N7	-5.95	108.42	110.80
59	A5	3599	U	N3-C2-O2	-5.95	118.03	122.20
59	A5	543	A	N1-C6-N6	5.95	122.17	118.60
59	A5	2670	U	C5-C6-N1	5.95	125.68	122.70
59	A5	122	C	C4-C5-C6	-5.95	114.42	117.40
59	A5	283	A	N3-C4-N9	5.95	132.16	127.40
59	A5	1164	G	N1-C2-N3	-5.95	120.33	123.90
59	A5	1874	G	C4-C5-N7	5.95	113.18	110.80
59	A5	2267	U	C5-C6-N1	5.95	125.68	122.70
59	A5	2689	G	N3-C2-N2	5.95	124.07	119.90
55	A7	90	A	C8-N9-C4	-5.95	103.42	105.80
59	A5	1784	A	C5-C6-N1	5.95	120.67	117.70
59	A5	2625	G	N3-C4-N9	5.95	129.57	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	CX	223	LEU	CB-CG-CD2	-5.95	100.89	111.00
58	B2	94	G	O5'-P-OP2	-5.95	100.35	105.70
59	A5	1650	C	N3-C4-N4	5.95	122.16	118.00
59	A5	3450	G	C5-C6-O6	5.95	132.17	128.60
56	A8	54	U	C5-C6-N1	5.95	125.67	122.70
59	A5	436	A	C5-N7-C8	-5.95	100.93	103.90
59	A5	776	A	C4-C5-N7	-5.95	107.73	110.70
59	A5	810	A	N3-C4-N9	-5.95	122.64	127.40
59	A5	2054	U	C6-N1-C2	-5.95	117.43	121.00
59	A5	3853	C	N3-C2-O2	-5.95	117.74	121.90
59	A5	3187	C	C6-N1-C2	5.94	122.68	120.30
59	A5	3301	U	C5-C6-N1	5.94	125.67	122.70
58	B2	583	C	C6-N1-C2	-5.94	117.92	120.30
59	A5	154	A	C2-N3-C4	-5.94	107.63	110.60
59	A5	380	G	C2-N3-C4	5.94	114.87	111.90
59	A5	1728	G	C5-N7-C8	-5.94	101.33	104.30
59	A5	2691	A	N1-C2-N3	-5.94	126.33	129.30
59	A5	3489	A	C6-N1-C2	5.94	122.17	118.60
58	B2	1111	U	C2-N1-C1'	5.94	124.83	117.70
59	A5	39	A	OP1-P-O3'	5.94	118.27	105.20
59	A5	825	C	C6-N1-C2	-5.94	117.92	120.30
59	A5	1021	U	N1-C2-O2	5.94	126.96	122.80
59	A5	1705	U	C5-C6-N1	5.94	125.67	122.70
59	A5	2168	G	C5-N7-C8	-5.94	101.33	104.30
59	A5	1082	A	OP2-P-O3'	5.94	118.27	105.20
59	A5	3499	G	OP2-P-O3'	5.94	118.27	105.20
59	A5	3648	A	C8-N9-C4	-5.94	103.42	105.80
58	B2	888	G	N3-C4-C5	5.94	131.57	128.60
59	A5	802	G	C6-N1-C2	-5.94	121.54	125.10
59	A5	1512	C	C5-C6-N1	5.94	123.97	121.00
56	A8	26	U	N3-C2-O2	-5.93	118.05	122.20
59	A5	1888	A	C8-N9-C1'	-5.93	117.02	127.70
59	A5	1883	G	C6-C5-N7	-5.93	126.84	130.40
59	A5	2786	U	N1-C2-O2	5.93	126.95	122.80
59	A5	3480	U	C5-C6-N1	-5.93	119.73	122.70
59	A5	3519	C	O5'-P-OP2	5.93	117.82	110.70
58	B2	61	A	O4'-C1'-N9	5.93	112.94	108.20
59	A5	100	G	C5-C6-O6	5.93	132.16	128.60
59	A5	49	A	N9-C4-C5	-5.93	103.43	105.80
59	A5	1727	U	C2-N1-C1'	5.93	124.82	117.70
59	A5	3000	G	N7-C8-N9	5.93	116.06	113.10
59	A5	3405	U	N1-C2-N3	5.93	118.46	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1394	U	C5-C6-N1	5.93	125.66	122.70
59	A5	1094	A	N3-C4-C5	5.93	130.95	126.80
59	A5	1145	C	C4-C5-C6	-5.93	114.44	117.40
59	A5	2511	C	N3-C4-C5	-5.93	119.53	121.90
59	A5	3155	G	N1-C6-O6	-5.93	116.34	119.90
59	A5	3759	G	C4-C5-N7	-5.93	108.43	110.80
54	A9	12	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	93	G	C5-C6-N1	5.92	114.46	111.50
59	A5	1333	C	C5-C4-N4	5.92	124.35	120.20
59	A5	1672	A	OP1-P-OP2	-5.92	110.71	119.60
59	A5	1127	C	N3-C4-C5	5.92	124.27	121.90
59	A5	3882	C	C2-N3-C4	5.92	122.86	119.90
59	A5	1175	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	1570	U	C5-C6-N1	5.92	125.66	122.70
59	A5	2503	G	OP1-P-O3'	5.92	118.22	105.20
59	A5	50	U	N3-C4-O4	-5.92	115.26	119.40
59	A5	1385	G	C4-N9-C1'	5.92	134.19	126.50
59	A5	1421	G	C6-C5-N7	-5.92	126.85	130.40
59	A5	1803	C	C2-N1-C1'	5.92	125.31	118.80
59	A5	2085	G	C8-N9-C1'	5.92	134.69	127.00
58	B2	4	C	C5-C6-N1	5.92	123.96	121.00
58	B2	1250	C	P-O3'-C3'	5.92	126.80	119.70
59	A5	1404	A	OP2-P-O3'	5.92	118.22	105.20
59	A5	1543	C	O5'-P-OP1	-5.92	100.38	105.70
59	A5	1556	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	1712	C	P-O3'-C3'	-5.92	112.60	119.70
59	A5	3393	U	C6-N1-C1'	-5.92	112.92	121.20
59	A5	3569	C	C4-C5-C6	-5.92	114.44	117.40
59	A5	3877	G	C5-N7-C8	5.92	107.26	104.30
59	A5	3885	C	C6-N1-C2	-5.92	117.93	120.30
26	CN	31	ARG	NE-CZ-NH1	5.92	123.26	120.30
59	A5	58	G	OP1-P-O3'	5.92	118.21	105.20
59	A5	3135	G	C4-N9-C1'	5.92	134.19	126.50
59	A5	3872	C	C5-C6-N1	5.92	123.96	121.00
29	CQ	46	ILE	CG1-CB-CG2	-5.91	98.39	111.40
59	A5	1729	G	C5-C6-N1	5.91	114.46	111.50
59	A5	2219	U	C5-C6-N1	5.91	125.66	122.70
59	A5	2515	C	OP1-P-O3'	5.91	118.21	105.20
59	A5	1652	U	N1-C2-O2	5.91	126.94	122.80
59	A5	2255	G	C8-N9-C1'	-5.91	119.31	127.00
59	A5	3342	C	C5-C6-N1	5.91	123.96	121.00
59	A5	1981	A	N1-C2-N3	-5.91	126.34	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2172	C	N3-C4-N4	5.91	122.14	118.00
59	A5	3514	C	C6-N1-C1'	-5.91	113.71	120.80
59	A5	3619	U	C5-C6-N1	5.91	125.66	122.70
59	A5	99	A	C4-C5-C6	-5.91	114.05	117.00
59	A5	281	C	C5-C4-N4	-5.91	116.06	120.20
59	A5	670	G	N1-C6-O6	-5.91	116.36	119.90
59	A5	2793	C	N1-C2-O2	5.91	122.44	118.90
59	A5	322	G	C4-C5-N7	5.91	113.16	110.80
59	A5	3650	G	C4-N9-C1'	5.91	134.18	126.50
66	CL	60	CYS	CA-CB-SG	-5.91	103.37	114.00
59	A5	2679	U	N3-C4-C5	-5.90	111.06	114.60
59	A5	665	U	C5-C4-O4	5.90	129.44	125.90
59	A5	2621	A	C4-C5-C6	-5.90	114.05	117.00
59	A5	41	U	C2-N1-C1'	5.90	124.78	117.70
59	A5	777	C	C2-N3-C4	5.90	122.85	119.90
59	A5	1741	G	N3-C2-N2	5.90	124.03	119.90
59	A5	2706	U	C6-N1-C2	-5.90	117.46	121.00
59	A5	755	A	C4-C5-N7	-5.90	107.75	110.70
59	A5	2239	C	N3-C4-C5	5.90	124.26	121.90
59	A5	3293	G	C5-C6-N1	5.90	114.45	111.50
59	A5	3764	G	N3-C4-N9	5.90	129.54	126.00
59	A5	347	A	N3-C4-N9	-5.90	122.68	127.40
59	A5	2546	G	C4-C5-N7	5.90	113.16	110.80
59	A5	2683	G	N3-C4-C5	-5.90	125.65	128.60
59	A5	3630	C	C6-N1-C1'	5.90	127.88	120.80
58	B2	355	G	N3-C4-C5	5.90	131.55	128.60
58	B2	1187	U	O5'-P-OP2	-5.90	100.39	105.70
58	B2	1940	G	C5-C6-N1	5.90	114.45	111.50
59	A5	1680	U	C4-C5-C6	-5.90	116.16	119.70
59	A5	2808	G	C5-C6-N1	5.90	114.45	111.50
59	A5	3155	G	C5-N7-C8	5.90	107.25	104.30
56	A8	98	U	N3-C2-O2	-5.89	118.07	122.20
59	A5	836	G	C8-N9-C4	-5.89	104.04	106.40
59	A5	1714	U	C5-C6-N1	5.89	125.65	122.70
59	A5	2699	A	C5-N7-C8	-5.89	100.95	103.90
59	A5	3758	G	N1-C2-N2	-5.89	110.89	116.20
58	B2	1241	G	N3-C4-N9	-5.89	122.46	126.00
59	A5	225	U	P-O3'-C3'	5.89	126.77	119.70
59	A5	1060	G	N3-C4-C5	-5.89	125.65	128.60
59	A5	1113	A	C8-N9-C4	-5.89	103.44	105.80
59	A5	1369	C	C2-N1-C1'	5.89	125.28	118.80
59	A5	1538	U	C5-C6-N1	5.89	125.65	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2143	C	N3-C2-O2	-5.89	117.78	121.90
59	A5	2155	A	O5'-P-OP2	-5.89	100.40	105.70
59	A5	868	A	O4'-C1'-N9	5.89	112.91	108.20
59	A5	3615	G	C6-C5-N7	-5.89	126.87	130.40
58	B2	1054	A	C5-C6-N6	5.89	128.41	123.70
59	A5	355	G	C8-N9-C4	-5.89	104.04	106.40
59	A5	475	U	C5-C6-N1	5.89	125.64	122.70
59	A5	1007	A	N1-C2-N3	-5.89	126.36	129.30
59	A5	1958	G	N3-C4-N9	5.89	129.53	126.00
59	A5	1593	U	O4'-C1'-N1	-5.89	103.49	108.20
58	B2	4	C	C6-N1-C2	-5.89	117.94	120.30
59	A5	84	U	C6-N1-C2	-5.89	117.47	121.00
59	A5	586	C	N3-C2-O2	-5.89	117.78	121.90
59	A5	924	U	N3-C2-O2	-5.89	118.08	122.20
59	A5	1150	G	N1-C6-O6	-5.88	116.37	119.90
59	A5	2058	C	C6-N1-C2	-5.88	117.95	120.30
59	A5	2661	G	N7-C8-N9	5.88	116.04	113.10
58	B2	36	C	C5-C6-N1	5.88	123.94	121.00
59	A5	138	A	C2-N3-C4	5.88	113.54	110.60
59	A5	3764	G	C8-N9-C1'	-5.88	119.35	127.00
59	A5	296	C	N3-C4-N4	-5.88	113.88	118.00
59	A5	979	U	OP1-P-O3'	5.88	118.14	105.20
59	A5	1163	G	C8-N9-C4	-5.88	104.05	106.40
59	A5	1718	G	C2'-C3'-O3'	5.88	123.11	113.70
59	A5	2822	C	N3-C2-O2	-5.88	117.78	121.90
82	AS	59	CYS	CA-CB-SG	5.88	124.59	114.00
59	A5	1104	A	C4-C5-C6	-5.88	114.06	117.00
59	A5	1107	G	N3-C4-N9	-5.88	122.47	126.00
59	A5	1218	G	N3-C4-N9	-5.88	122.47	126.00
59	A5	1342	U	N1-C2-O2	5.88	126.92	122.80
59	A5	1792	G	N7-C8-N9	-5.88	110.16	113.10
77	Cg	47	CYS	CA-CB-SG	5.88	124.58	114.00
59	A5	120	C	N3-C2-O2	-5.88	117.78	121.90
59	A5	851	G	C4-N9-C1'	5.88	134.14	126.50
59	A5	851	G	N3-C4-C5	-5.88	125.66	128.60
59	A5	2520	U	N3-C2-O2	-5.88	118.08	122.20
58	B2	1392	U	N3-C2-O2	-5.88	118.09	122.20
59	A5	561	A	C2-N3-C4	-5.88	107.66	110.60
59	A5	581	U	O5'-P-OP2	-5.88	100.41	105.70
59	A5	993	A	C6-N1-C2	5.88	122.13	118.60
59	A5	1863	U	N3-C2-O2	-5.88	118.09	122.20
59	A5	2263	A	O5'-P-OP1	-5.88	100.41	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2788	U	C2-N1-C1'	-5.88	110.65	117.70
58	B2	637	U	C6-N1-C2	-5.88	117.47	121.00
59	A5	109	A	N7-C8-N9	5.87	116.74	113.80
59	A5	373	A	C4-C5-C6	-5.87	114.06	117.00
59	A5	914	C	N3-C4-C5	5.87	124.25	121.90
59	A5	1380	G	N1-C6-O6	-5.87	116.38	119.90
59	A5	1694	A	N1-C6-N6	-5.87	115.08	118.60
59	A5	2161	G	N1-C2-N3	-5.87	120.38	123.90
59	A5	2166	U	C5-C6-N1	-5.87	119.76	122.70
59	A5	3922	G	C6-C5-N7	-5.87	126.88	130.40
80	CF	174	ASP	CB-CG-OD1	5.87	123.59	118.30
33	CP	94	LEU	CB-CG-CD1	-5.87	101.02	111.00
58	B2	1382	G	N3-C4-N9	-5.87	122.48	126.00
59	A5	301	U	N3-C4-C5	5.87	118.12	114.60
59	A5	1174	G	N1-C6-O6	5.87	123.42	119.90
59	A5	2790	G	C5-C6-N1	5.87	114.44	111.50
59	A5	3151	G	C2-N3-C4	5.87	114.83	111.90
59	A5	3471	A	C4-C5-C6	-5.87	114.06	117.00
56	A8	109	U	O4'-C1'-N1	5.87	112.89	108.20
58	B2	1104	C	N3-C4-C5	5.87	124.25	121.90
58	B2	1169	C	N3-C2-O2	-5.87	117.79	121.90
59	A5	1051	C	C6-N1-C2	-5.87	117.95	120.30
59	A5	1164	G	C4-N9-C1'	5.87	134.13	126.50
59	A5	3402	C	C6-N1-C1'	5.87	127.84	120.80
55	A7	60	C	N1-C2-O2	5.87	122.42	118.90
56	A8	106	A	C2-N3-C4	5.87	113.53	110.60
59	A5	1404	A	C4-N9-C1'	5.87	136.86	126.30
59	A5	2513	G	C8-N9-C4	5.87	108.75	106.40
59	A5	2621	A	N3-C4-C5	5.87	130.91	126.80
59	A5	2701	G	C2-N3-C4	5.87	114.83	111.90
59	A5	1185	U	P-O5'-C5'	5.86	130.28	120.90
59	A5	1292	G	C8-N9-C4	5.86	108.75	106.40
59	A5	1715	G	C4-N9-C1'	-5.86	118.88	126.50
59	A5	1734	G	N3-C2-N2	5.86	124.00	119.90
59	A5	2664	U	C6-N1-C2	-5.86	117.48	121.00
59	A5	1383	A	P-O5'-C5'	5.86	130.28	120.90
59	A5	1667	U	N3-C4-O4	-5.86	115.30	119.40
59	A5	3833	U	N3-C2-O2	-5.86	118.10	122.20
58	B2	342	G	C8-N9-C4	5.86	108.74	106.40
59	A5	446	C	C5-C4-N4	5.86	124.30	120.20
59	A5	1749	A	C5-C6-N1	5.86	120.63	117.70
59	A5	2066	G	N3-C2-N2	-5.86	115.80	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2777	A	N9-C4-C5	5.86	108.14	105.80
59	A5	3618	A	C8-N9-C4	5.86	108.14	105.80
59	A5	62	G	C6-C5-N7	-5.86	126.89	130.40
59	A5	1060	G	N3-C4-N9	5.86	129.51	126.00
59	A5	1806	G	N3-C2-N2	-5.86	115.80	119.90
59	A5	2720	U	C4-C5-C6	-5.86	116.19	119.70
59	A5	3448	U	C6-N1-C2	-5.86	117.48	121.00
58	B2	1215	G	C8-N9-C4	5.86	108.74	106.40
59	A5	199	U	C5-C6-N1	5.86	125.63	122.70
59	A5	1970	G	N9-C4-C5	-5.86	103.06	105.40
59	A5	2718	U	C5-C6-N1	5.86	125.63	122.70
59	A5	304	U	C5-C6-N1	5.86	125.63	122.70
59	A5	1078	G	C5-C6-N1	5.86	114.43	111.50
59	A5	1105	U	N1-C2-O2	5.86	126.90	122.80
59	A5	1611	G	C4-C5-C6	-5.86	115.29	118.80
59	A5	2762	A	C4-C5-N7	5.86	113.63	110.70
59	A5	3841	C	O5'-P-OP2	-5.86	100.43	105.70
58	B2	1067	G	N3-C2-N2	-5.85	115.80	119.90
59	A5	1618	A	N1-C2-N3	-5.85	126.37	129.30
59	A5	1734	G	N1-C2-N2	-5.85	110.93	116.20
59	A5	1803	C	OP2-P-O3'	5.85	118.08	105.20
59	A5	3444	G	O5'-P-OP1	-5.85	100.43	105.70
59	A5	1313	A	O5'-P-OP2	-5.85	100.43	105.70
59	A5	123	U	OP1-P-O3'	5.85	118.07	105.20
59	A5	1195	U	C6-N1-C2	-5.85	117.49	121.00
59	A5	1992	G	C6-C5-N7	-5.85	126.89	130.40
59	A5	2550	G	C6-C5-N7	5.85	133.91	130.40
59	A5	46	C	C4-C5-C6	-5.85	114.48	117.40
59	A5	809	G	P-O3'-C3'	5.85	126.72	119.70
59	A5	1060	G	C4-N9-C1'	5.85	134.10	126.50
59	A5	2525	C	C4-C5-C6	-5.85	114.47	117.40
59	A5	3318	A	C5-N7-C8	-5.85	100.97	103.90
59	A5	3484	U	N1-C2-O2	5.85	126.89	122.80
24	AJ	5	ARG	C-N-CA	5.85	136.32	121.70
59	A5	1088	A	O5'-P-OP1	-5.85	100.44	105.70
59	A5	1090	U	N1-C2-O2	5.85	126.89	122.80
59	A5	1120	A	C2-N3-C4	5.85	113.52	110.60
59	A5	2231	A	N3-C4-C5	5.85	130.89	126.80
59	A5	52	A	C4-C5-N7	5.84	113.62	110.70
59	A5	1162	A	N7-C8-N9	5.84	116.72	113.80
59	A5	3264	A	OP2-P-O3'	5.84	118.06	105.20
59	A5	3344	U	N3-C2-O2	-5.84	118.11	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1988	A	C5-C6-N6	5.84	128.37	123.70
59	A5	3616	G	N1-C2-N2	-5.84	110.94	116.20
59	A5	40	U	N3-C2-O2	-5.84	118.11	122.20
59	A5	427	A	C5-C6-N6	-5.84	119.03	123.70
59	A5	3582	A	C5-C6-N1	5.84	120.62	117.70
59	A5	3759	G	C5-N7-C8	5.84	107.22	104.30
58	B2	899	A	C2-N3-C4	5.84	113.52	110.60
58	B2	1227	A	C6-C5-N7	5.84	136.39	132.30
59	A5	365	A	C5-C6-N1	5.84	120.62	117.70
59	A5	2622	A	N1-C6-N6	-5.84	115.10	118.60
58	B2	1205	U	C4-C5-C6	-5.84	116.20	119.70
58	B2	1827	A	C5-N7-C8	-5.84	100.98	103.90
59	A5	1006	A	C4-C5-N7	5.84	113.62	110.70
59	A5	2495	G	C8-N9-C4	-5.84	104.06	106.40
58	B2	1066	A	C5-C6-N1	5.83	120.62	117.70
59	A5	1036	A	OP1-P-O3'	5.83	118.04	105.20
58	B2	1020	U	N1-C2-O2	5.83	126.88	122.80
59	A5	109	A	C5-N7-C8	-5.83	100.98	103.90
59	A5	1038	G	N1-C6-O6	-5.83	116.40	119.90
59	A5	1387	G	C5-C6-O6	-5.83	125.10	128.60
59	A5	1696	A	C5-N7-C8	-5.83	100.98	103.90
2	CA	116	LEU	CA-CB-CG	5.83	128.71	115.30
58	B2	342	G	N9-C4-C5	-5.83	103.07	105.40
58	B2	1180	A	C5-N7-C8	-5.83	100.98	103.90
58	B2	1954	C	C5-C6-N1	5.83	123.92	121.00
59	A5	1364	A	C5-N7-C8	-5.83	100.98	103.90
59	A5	1730	A	N9-C4-C5	5.83	108.13	105.80
59	A5	282	A	N9-C4-C5	-5.83	103.47	105.80
59	A5	794	G	C5-N7-C8	-5.83	101.39	104.30
59	A5	1529	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	1641	U	N3-C4-C5	5.83	118.10	114.60
59	A5	2267	U	C6-N1-C2	-5.83	117.50	121.00
59	A5	2571	U	OP1-P-O3'	5.83	118.03	105.20
58	B2	959	U	N1-C2-O2	5.83	126.88	122.80
59	A5	1931	C	N3-C2-O2	-5.83	117.82	121.90
59	A5	2181	A	C4-C5-N7	5.83	113.61	110.70
59	A5	3525	A	N7-C8-N9	5.83	116.72	113.80
59	A5	2078	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	2584	G	N3-C2-N2	-5.83	115.82	119.90
55	A7	107	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	2738	C	OP2-P-O3'	5.83	118.02	105.20
59	A5	3936	A	N7-C8-N9	5.83	116.71	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1603	G	C8-N9-C1'	-5.82	119.43	127.00
59	A5	1356	G	C4-C5-N7	5.82	113.13	110.80
59	A5	1996	U	C5-C6-N1	5.82	125.61	122.70
59	A5	3339	U	C6-N1-C1'	5.82	129.35	121.20
59	A5	3721	C	C6-N1-C2	-5.82	117.97	120.30
59	A5	163	A	N1-C6-N6	-5.82	115.11	118.60
59	A5	615	C	C5-C6-N1	5.82	123.91	121.00
59	A5	2796	G	N9-C1'-C2'	5.82	121.57	114.00
54	A9	15	A	N3-C4-C5	5.82	130.88	126.80
59	A5	357	C	N3-C2-O2	-5.82	117.83	121.90
59	A5	1170	U	C4-C5-C6	-5.82	116.21	119.70
59	A5	2584	G	N7-C8-N9	5.82	116.01	113.10
59	A5	2522	A	C2-N3-C4	5.82	113.51	110.60
59	A5	2546	G	N1-C2-N2	-5.82	110.96	116.20
59	A5	3149	U	N3-C4-O4	-5.82	115.33	119.40
56	A8	43	A	C6-C5-N7	-5.82	128.23	132.30
58	B2	1115	C	C4-C5-C6	-5.82	114.49	117.40
59	A5	762	G	N7-C8-N9	5.82	116.01	113.10
59	A5	1365	U	C4-C5-C6	5.82	123.19	119.70
59	A5	1616	G	C8-N9-C4	-5.82	104.07	106.40
59	A5	3578	A	C8-N9-C4	-5.82	103.47	105.80
9	AX	7	LEU	CA-CB-CG	5.82	128.67	115.30
56	A8	34	C	C2-N3-C4	5.82	122.81	119.90
59	A5	971	C	O4'-C1'-N1	5.82	112.85	108.20
59	A5	1271	G	C8-N9-C4	5.82	108.73	106.40
59	A5	1388	C	C6-N1-C1'	5.82	127.78	120.80
59	A5	1402	U	C6-N1-C2	-5.82	117.51	121.00
59	A5	1601	U	N1-C2-O2	5.82	126.87	122.80
59	A5	2093	U	C5-C4-O4	5.82	129.39	125.90
59	A5	3542	C	N1-C2-O2	5.82	122.39	118.90
59	A5	1779	G	N1-C6-O6	-5.81	116.41	119.90
59	A5	3256	U	C6-N1-C2	5.81	124.49	121.00
59	A5	3802	U	N1-C2-N3	5.81	118.39	114.90
58	B2	823	C	C5-C6-N1	5.81	123.91	121.00
59	A5	225	U	C6-N1-C1'	-5.81	113.06	121.20
59	A5	2755	G	C5-N7-C8	-5.81	101.39	104.30
2	CA	3	ARG	NE-CZ-NH2	-5.81	117.39	120.30
59	A5	769	U	N3-C4-O4	-5.81	115.33	119.40
58	B2	458	C	C5-C6-N1	5.81	123.91	121.00
59	A5	2550	G	N1-C6-O6	-5.81	116.42	119.90
59	A5	3875	U	N3-C2-O2	-5.81	118.13	122.20
56	A8	19	A	O4'-C1'-N9	5.81	112.85	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1030	C	OP1-P-O3'	5.81	117.98	105.20
59	A5	1484	U	C2-N1-C1'	5.81	124.67	117.70
59	A5	1686	A	N7-C8-N9	5.81	116.70	113.80
59	A5	3762	G	N9-C1'-C2'	5.81	121.55	114.00
59	A5	397	C	N3-C2-O2	-5.81	117.83	121.90
58	B2	1203	U	N3-C2-O2	-5.80	118.14	122.20
59	A5	296	C	N3-C4-C5	5.80	124.22	121.90
59	A5	998	G	C2-N3-C4	5.80	114.80	111.90
59	A5	3589	G	C4-C5-N7	-5.80	108.48	110.80
59	A5	3894	C	N3-C2-O2	-5.80	117.84	121.90
59	A5	665	U	C2-N1-C1'	-5.80	110.74	117.70
59	A5	2689	G	N1-C2-N2	-5.80	110.98	116.20
26	CN	61	ILE	CG1-CB-CG2	-5.80	98.64	111.40
59	A5	1686	A	N3-C4-C5	5.80	130.86	126.80
59	A5	2660	U	OP1-P-OP2	-5.80	110.90	119.60
59	A5	3426	U	N3-C2-O2	-5.80	118.14	122.20
56	A8	43	A	N1-C6-N6	5.80	122.08	118.60
56	A8	103	C	N1-C1'-C2'	5.80	121.54	114.00
59	A5	79	G	C8-N9-C1'	-5.80	119.47	127.00
59	A5	93	G	C8-N9-C4	-5.80	104.08	106.40
59	A5	301	U	C6-N1-C1'	-5.80	113.08	121.20
59	A5	2709	U	C6-N1-C2	-5.80	117.52	121.00
59	A5	3309	A	N1-C2-N3	-5.80	126.40	129.30
59	A5	3600	G	C6-C5-N7	-5.80	126.92	130.40
59	A5	1035	G	O5'-P-OP1	-5.79	100.48	105.70
59	A5	382	G	N3-C4-N9	5.79	129.48	126.00
59	A5	448	A	C5-C6-N1	5.79	120.60	117.70
59	A5	2791	A	C5-C6-N6	-5.79	119.06	123.70
59	A5	1071	U	N3-C4-C5	5.79	118.08	114.60
59	A5	1077	C	N1-C2-O2	5.79	122.38	118.90
59	A5	1260	A	C6-C5-N7	5.79	136.35	132.30
59	A5	1671	U	N1-C2-O2	5.79	126.85	122.80
59	A5	2027	A	C5-C6-N1	5.79	120.60	117.70
59	A5	2778	G	C8-N9-C4	5.79	108.72	106.40
59	A5	3503	G	N1-C2-N2	-5.79	110.99	116.20
56	A8	26	U	C4-C5-C6	-5.79	116.23	119.70
59	A5	27	A	C5-N7-C8	-5.79	101.00	103.90
59	A5	615	C	P-O3'-C3'	5.79	126.65	119.70
59	A5	1631	U	C6-N1-C1'	-5.79	113.09	121.20
55	A7	93	G	C4-C5-C6	-5.79	115.33	118.80
58	B2	1003	C	C5-C6-N1	5.79	123.89	121.00
59	A5	315	G	C5-C6-N1	5.79	114.39	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	316	U	N3-C2-O2	-5.79	118.15	122.20
59	A5	387	U	N1-C2-O2	5.79	126.85	122.80
59	A5	1159	C	O5'-P-OP2	-5.79	100.49	105.70
59	A5	2191	G	C4-N9-C1'	-5.79	118.98	126.50
59	A5	2701	G	C5-C6-N1	5.79	114.39	111.50
58	B2	1752	U	O4'-C1'-N1	5.79	112.83	108.20
59	A5	32	C	C6-N1-C2	-5.79	117.98	120.30
59	A5	2212	A	C5-C6-N1	5.79	120.59	117.70
58	B2	1001	G	O4'-C1'-N9	5.79	112.83	108.20
59	A5	346	U	C6-N1-C1'	5.79	129.30	121.20
59	A5	984	U	C6-N1-C1'	-5.79	113.10	121.20
59	A5	1685	G	N3-C4-N9	5.79	129.47	126.00
59	A5	2554	U	C6-N1-C1'	-5.79	113.10	121.20
59	A5	3304	U	N1-C2-O2	5.79	126.85	122.80
59	A5	3800	G	N3-C4-C5	-5.79	125.71	128.60
59	A5	3842	A	N9-C4-C5	5.79	108.11	105.80
58	B2	1238	G	OP1-P-OP2	-5.78	110.92	119.60
59	A5	1696	A	N9-C4-C5	-5.78	103.49	105.80
59	A5	1702	G	C8-N9-C1'	5.78	134.52	127.00
59	A5	2605	C	C5-C6-N1	5.78	123.89	121.00
59	A5	3440	C	C5-C6-N1	5.78	123.89	121.00
59	A5	2668	C	C5-C4-N4	-5.78	116.15	120.20
59	A5	1384	C	N1-C2-N3	5.78	123.25	119.20
59	A5	2059	U	C4-C5-C6	-5.78	116.23	119.70
59	A5	2519	U	C6-N1-C2	-5.78	117.53	121.00
59	A5	2764	A	N7-C8-N9	5.78	116.69	113.80
59	A5	3906	U	N3-C2-O2	-5.78	118.15	122.20
59	A5	3476	G	C4-C5-N7	5.78	113.11	110.80
59	A5	3481	G	C6-C5-N7	5.78	133.87	130.40
59	A5	3484	U	OP1-P-O3'	5.78	117.91	105.20
6	CC	116	ARG	CG-CD-NE	5.78	123.93	111.80
59	A5	795	A	OP1-P-OP2	5.78	128.27	119.60
59	A5	1778	A	C5-C6-N1	5.78	120.59	117.70
59	A5	2740	C	C6-N1-C2	-5.78	117.99	120.30
59	A5	2769	G	C4-N9-C1'	5.78	134.01	126.50
59	A5	3883	G	C4-N9-C1'	5.78	134.01	126.50
58	B2	939	G	N3-C4-N9	5.78	129.47	126.00
59	A5	67	A	OP2-P-O3'	5.78	117.90	105.20
59	A5	587	U	P-O3'-C3'	5.78	126.63	119.70
59	A5	1117	A	C2-N3-C4	5.78	113.49	110.60
59	A5	3499	G	N1-C2-N2	5.78	121.40	116.20
59	A5	1404	A	C8-N9-C1'	-5.77	117.31	127.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1749	A	OP2-P-O3'	5.77	117.90	105.20
59	A5	2714	U	N3-C2-O2	-5.77	118.16	122.20
59	A5	3759	G	C5-C6-O6	5.77	132.06	128.60
58	B2	428	G	N3-C4-N9	-5.77	122.54	126.00
58	B2	1073	G	C8-N9-C4	-5.77	104.09	106.40
58	B2	1982	C	N3-C2-O2	-5.77	117.86	121.90
59	A5	40	U	OP1-P-O3'	5.77	117.90	105.20
59	A5	1091	G	C6-C5-N7	5.77	133.86	130.40
59	A5	1174	G	N3-C4-N9	5.77	129.46	126.00
59	A5	1611	G	C5-C6-O6	-5.77	125.14	128.60
59	A5	2015	G	C5-N7-C8	-5.77	101.41	104.30
58	B2	489	C	C6-N1-C1'	5.77	127.72	120.80
58	B2	360	G	C8-N9-C4	-5.77	104.09	106.40
59	A5	1359	G	N1-C6-O6	5.77	123.36	119.90
59	A5	2517	A	N7-C8-N9	5.77	116.69	113.80
59	A5	1778	A	C5-C6-N6	5.77	128.31	123.70
59	A5	1076	A	C5-C6-N1	5.77	120.58	117.70
59	A5	1150	G	OP1-P-O3'	5.77	117.88	105.20
59	A5	2613	C	N3-C2-O2	-5.77	117.86	121.90
59	A5	3606	G	C4-N9-C1'	5.77	134.00	126.50
42	Cf	61	ARG	NE-CZ-NH1	-5.76	117.42	120.30
55	A7	98	G	C4-C5-N7	5.76	113.11	110.80
59	A5	1159	C	C2-N1-C1'	5.76	125.14	118.80
59	A5	2518	A	N9-C4-C5	5.76	108.11	105.80
59	A5	2529	G	N3-C2-N2	-5.76	115.86	119.90
59	A5	755	A	N7-C8-N9	5.76	116.68	113.80
59	A5	1177	U	O4'-C1'-N1	5.76	112.81	108.20
59	A5	1594	U	C5-C4-O4	-5.76	122.44	125.90
59	A5	3677	U	O5'-C5'-C4'	5.76	122.65	111.70
58	B2	1182	C	O5'-P-OP2	-5.76	100.52	105.70
58	B2	1940	G	O5'-P-OP1	-5.76	100.51	105.70
59	A5	380	G	C4-N9-C1'	5.76	133.99	126.50
59	A5	678	U	N1-C2-O2	5.76	126.83	122.80
59	A5	750	G	N3-C2-N2	-5.76	115.87	119.90
59	A5	2092	U	N3-C4-O4	5.76	123.43	119.40
59	A5	2510	A	C2-N3-C4	5.76	113.48	110.60
58	B2	1821	G	C2-N3-C4	5.76	114.78	111.90
59	A5	50	U	N3-C4-C5	5.76	118.06	114.60
59	A5	1415	A	C5-C6-N1	5.76	120.58	117.70
59	A5	1622	U	C5-C4-O4	-5.76	122.44	125.90
59	A5	3193	C	C6-N1-C1'	-5.76	113.89	120.80
59	A5	3338	U	C5-C6-N1	5.76	125.58	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1130	U	N1-C2-N3	5.76	118.35	114.90
59	A5	1170	U	C5-C6-N1	5.76	125.58	122.70
59	A5	2721	C	C5-C4-N4	5.76	124.23	120.20
59	A5	3330	C	N3-C4-C5	5.76	124.20	121.90
58	B2	1244	C	N3-C4-N4	-5.75	113.97	118.00
59	A5	441	A	C5-C6-N6	-5.75	119.10	123.70
59	A5	2547	C	O5'-P-OP2	-5.75	100.52	105.70
58	B2	38	C	C5-C6-N1	5.75	123.88	121.00
59	A5	670	G	C4-N9-C1'	-5.75	119.02	126.50
59	A5	1133	A	N1-C2-N3	-5.75	126.42	129.30
59	A5	1365	U	N3-C4-C5	-5.75	111.15	114.60
59	A5	1607	A	N9-C4-C5	5.75	108.10	105.80
59	A5	1654	C	N3-C4-N4	-5.75	113.97	118.00
59	A5	1681	G	C5-N7-C8	-5.75	101.42	104.30
59	A5	1784	A	OP1-P-O3'	5.75	117.86	105.20
59	A5	2109	G	C4-C5-N7	5.75	113.10	110.80
59	A5	3193	C	N1-C2-O2	5.75	122.35	118.90
59	A5	458	A	C5-N7-C8	-5.75	101.02	103.90
59	A5	1042	G	C5-C6-N1	5.75	114.38	111.50
59	A5	1154	U	OP1-P-OP2	5.75	128.23	119.60
59	A5	1340	G	C4-C5-C6	-5.75	115.35	118.80
59	A5	1621	A	N1-C6-N6	5.75	122.05	118.60
59	A5	2097	U	C6-N1-C2	-5.75	117.55	121.00
59	A5	1141	G	C8-N9-C1'	-5.75	119.53	127.00
59	A5	2541	C	C2-N3-C4	5.75	122.78	119.90
59	A5	99	A	C5-N7-C8	-5.75	101.03	103.90
59	A5	188	G	C8-N9-C1'	-5.75	119.53	127.00
59	A5	540	G	N3-C4-C5	-5.75	125.72	128.60
59	A5	1011	U	C6-N1-C2	-5.75	117.55	121.00
59	A5	1550	U	C5-C6-N1	5.75	125.57	122.70
59	A5	1696	A	N3-C4-C5	5.75	130.82	126.80
59	A5	2510	A	C5-C6-N1	5.75	120.57	117.70
59	A5	3901	G	C4-C5-N7	5.75	113.10	110.80
59	A5	666	A	C4-N9-C1'	5.75	136.64	126.30
59	A5	817	C	N3-C4-N4	-5.75	113.98	118.00
59	A5	2202	A	N1-C2-N3	-5.75	126.43	129.30
59	A5	2771	G	OP2-P-O3'	-5.75	92.56	105.20
59	A5	3326	G	C5-C6-O6	-5.75	125.15	128.60
58	B2	1734	G	C2-N3-C4	-5.75	109.03	111.90
59	A5	1529	C	N1-C2-O2	5.75	122.35	118.90
59	A5	1608	G	N1-C6-O6	-5.75	116.45	119.90
59	A5	1797	A	C4-C5-C6	-5.75	114.13	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	423	U	C5-C4-O4	-5.74	122.45	125.90
59	A5	549	A	N7-C8-N9	5.74	116.67	113.80
59	A5	2161	G	C8-N9-C1'	5.74	134.47	127.00
59	A5	2197	A	O5'-P-OP1	-5.74	100.53	105.70
59	A5	423	U	C6-N1-C1'	-5.74	113.16	121.20
59	A5	1010	A	C4-C5-C6	-5.74	114.13	117.00
59	A5	1387	G	C4-C5-N7	5.74	113.10	110.80
59	A5	3126	C	N1-C2-O2	5.74	122.34	118.90
59	A5	3488	G	N7-C8-N9	-5.74	110.23	113.10
56	A8	116	C	C6-N1-C2	-5.74	118.00	120.30
59	A5	34	C	C5-C6-N1	5.74	123.87	121.00
59	A5	57	G	C5'-C4'-O4'	-5.74	102.22	109.10
59	A5	678	U	N3-C2-O2	-5.74	118.19	122.20
59	A5	767	A	C4-C5-N7	5.74	113.57	110.70
59	A5	1084	A	C8-N9-C1'	-5.74	117.38	127.70
59	A5	1770	C	C6-N1-C2	-5.74	118.01	120.30
59	A5	1868	A	N1-C2-N3	-5.74	126.43	129.30
55	A7	76	U	C6-N1-C2	-5.73	117.56	121.00
59	A5	357	C	C5-C6-N1	5.73	123.87	121.00
58	B2	316	U	N3-C2-O2	-5.73	118.19	122.20
58	B2	1094	C	C5-C6-N1	5.73	123.87	121.00
58	B2	1849	U	C2-N1-C1'	-5.73	110.82	117.70
59	A5	42	U	C5-C6-N1	5.73	125.57	122.70
59	A5	1347	A	C4-C5-C6	-5.73	114.13	117.00
59	A5	2568	U	C5-C6-N1	5.73	125.57	122.70
59	A5	2611	A	N1-C6-N6	-5.73	115.16	118.60
59	A5	3596	A	N3-C4-C5	5.73	130.81	126.80
58	B2	1604	A	C2-N3-C4	5.73	113.47	110.60
59	A5	2231	A	C2-N3-C4	-5.73	107.73	110.60
59	A5	2811	G	N3-C4-N9	-5.73	122.56	126.00
55	A7	89	G	C4-C5-N7	5.73	113.09	110.80
59	A5	774	A	N9-C1'-C2'	5.73	121.45	114.00
59	A5	790	U	C6-N1-C2	-5.73	117.56	121.00
59	A5	3129	U	O5'-P-OP1	-5.73	100.54	105.70
33	CP	135	ARG	NE-CZ-NH1	-5.73	117.44	120.30
58	B2	1237	G	N1-C6-O6	-5.73	116.46	119.90
59	A5	97	C	O5'-P-OP2	-5.73	100.55	105.70
59	A5	258	U	C5-C6-N1	5.73	125.56	122.70
58	B2	1234	G	N3-C2-N2	5.73	123.91	119.90
59	A5	1783	A	O5'-P-OP1	-5.73	100.55	105.70
59	A5	2518	A	C4-C5-N7	-5.73	107.84	110.70
59	A5	3805	U	N1-C2-O2	5.73	126.81	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	367	G	N3-C4-C5	-5.72	125.74	128.60
59	A5	1670	G	O4'-C1'-N9	-5.72	103.62	108.20
59	A5	2223	C	C2-N1-C1'	5.72	125.10	118.80
59	A5	3347	G	C6-C5-N7	-5.72	126.97	130.40
55	A7	114	U	C6-N1-C2	-5.72	117.57	121.00
59	A5	1206	G	N3-C4-N9	-5.72	122.57	126.00
59	A5	3455	U	C5-C4-O4	5.72	129.33	125.90
59	A5	3473	C	C2-N1-C1'	5.72	125.09	118.80
59	A5	3881	A	N7-C8-N9	5.72	116.66	113.80
59	A5	2494	G	C5-C6-N1	5.72	114.36	111.50
59	A5	1328	U	C5-C6-N1	-5.72	119.84	122.70
59	A5	1757	A	C5-C6-N1	5.72	120.56	117.70
59	A5	2161	G	N9-C4-C5	5.72	107.69	105.40
59	A5	2822	C	C5-C6-N1	5.72	123.86	121.00
59	A5	3378	U	N1-C2-O2	5.72	126.80	122.80
59	A5	3650	G	N3-C4-N9	5.72	129.43	126.00
59	A5	2194	G	OP1-P-O3'	5.72	117.78	105.20
59	A5	3665	U	C6-N1-C1'	-5.72	113.19	121.20
59	A5	776	A	C5-C6-N1	5.72	120.56	117.70
59	A5	988	C	C4-C5-C6	-5.72	114.54	117.40
59	A5	1168	G	C4-C5-N7	5.72	113.09	110.80
59	A5	1639	U	O5'-P-OP2	-5.72	100.56	105.70
59	A5	3142	G	C6-N1-C2	-5.72	121.67	125.10
59	A5	808	G	N3-C4-N9	5.71	129.43	126.00
59	A5	998	G	N9-C4-C5	-5.71	103.11	105.40
59	A5	1266	A	O5'-P-OP1	-5.71	100.56	105.70
59	A5	3488	G	N9-C4-C5	-5.71	103.11	105.40
59	A5	3516	C	N3-C2-O2	-5.71	117.90	121.90
56	A8	12	G	N1-C6-O6	-5.71	116.47	119.90
58	B2	315	C	N1-C2-O2	5.71	122.33	118.90
59	A5	1007	A	OP2-P-O3'	5.71	117.77	105.20
59	A5	3017	U	P-O3'-C3'	5.71	126.56	119.70
59	A5	1010	A	OP1-P-O3'	5.71	117.76	105.20
59	A5	2788	U	C6-N1-C1'	5.71	129.20	121.20
59	A5	3151	G	C5-C6-N1	5.71	114.36	111.50
59	A5	3399	C	C2-N3-C4	5.71	122.76	119.90
59	A5	3549	C	C6-N1-C2	-5.71	118.02	120.30
58	B2	1356	U	C2-N1-C1'	5.71	124.55	117.70
58	B2	1603	G	N3-C4-N9	5.71	129.43	126.00
59	A5	61	A	C4-C5-N7	5.71	113.56	110.70
59	A5	1025	U	C5-C6-N1	5.71	125.56	122.70
59	A5	1595	G	N1-C6-O6	5.71	123.33	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	39	A	N7-C8-N9	5.71	116.65	113.80
58	B2	1408	A	C4-N9-C1'	-5.71	116.03	126.30
59	A5	1101	A	C8-N9-C4	5.71	108.08	105.80
59	A5	1322	U	C6-N1-C2	-5.71	117.58	121.00
59	A5	3336	A	N1-C6-N6	-5.71	115.17	118.60
58	B2	988	G	N9-C4-C5	-5.71	103.12	105.40
58	B2	1234	G	N3-C4-C5	-5.71	125.75	128.60
59	A5	295	G	C5-N7-C8	5.71	107.15	104.30
59	A5	1725	A	N1-C2-N3	-5.71	126.45	129.30
59	A5	1758	U	OP2-P-O3'	5.71	117.76	105.20
59	A5	2257	C	C6-N1-C2	-5.71	118.02	120.30
25	Ca	37	GLY	N-CA-C	-5.70	98.84	113.10
55	A7	78	C	C5-C4-N4	-5.70	116.21	120.20
59	A5	1145	C	C6-N1-C1'	5.70	127.64	120.80
59	A5	3136	U	N1-C2-O2	5.70	126.79	122.80
59	A5	1959	A	C5-N7-C8	-5.70	101.05	103.90
56	A8	122	U	N1-C2-O2	5.70	126.79	122.80
58	B2	1827	A	C4-C5-N7	5.70	113.55	110.70
59	A5	1128	C	C5-C6-N1	5.70	123.85	121.00
59	A5	1357	C	O4'-C1'-N1	-5.70	103.64	108.20
59	A5	1380	G	O5'-P-OP2	-5.70	100.57	105.70
59	A5	2622	A	C2-N3-C4	5.70	113.45	110.60
59	A5	2698	A	C4-C5-C6	-5.70	114.15	117.00
59	A5	3172	A	O5'-P-OP1	-5.70	100.57	105.70
59	A5	120	C	C5-C6-N1	5.70	123.85	121.00
59	A5	209	U	N3-C2-O2	-5.70	118.21	122.20
50	CJ	160	HIS	N-CA-C	5.70	126.38	111.00
59	A5	109	A	OP1-P-O3'	5.70	117.73	105.20
58	B2	1860	G	C8-N9-C4	5.69	108.68	106.40
59	A5	2523	A	N1-C6-N6	-5.69	115.18	118.60
58	B2	1880	C	C5-C6-N1	5.69	123.85	121.00
59	A5	1071	U	N3-C2-O2	-5.69	118.22	122.20
59	A5	1972	C	C2-N3-C4	5.69	122.75	119.90
59	A5	2160	C	C5-C4-N4	5.69	124.19	120.20
59	A5	2756	C	C2-N1-C1'	5.69	125.06	118.80
59	A5	3399	C	OP1-P-OP2	5.69	128.14	119.60
58	B2	1665	U	N1-C2-O2	5.69	126.78	122.80
58	B2	1979	C	C2-N3-C4	5.69	122.75	119.90
59	A5	378	G	C6-C5-N7	-5.69	126.99	130.40
59	A5	387	U	C2-N1-C1'	5.69	124.53	117.70
59	A5	3356	G	C4-N9-C1'	5.69	133.90	126.50
59	A5	242	C	C6-N1-C1'	-5.69	113.97	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	785	A	C5-C6-N6	5.69	128.25	123.70
59	A5	1793	C	C2-N3-C4	5.69	122.75	119.90
59	A5	2721	C	O5'-P-OP1	-5.69	100.58	105.70
56	A8	57	G	C5-C6-N1	5.69	114.34	111.50
59	A5	1522	G	N7-C8-N9	5.69	115.94	113.10
59	A5	1680	U	N3-C2-O2	-5.69	118.22	122.20
59	A5	2750	A	C5-C6-N6	5.69	128.25	123.70
59	A5	3840	G	N1-C2-N2	5.69	121.32	116.20
59	A5	1377	A	N1-C2-N3	-5.68	126.46	129.30
59	A5	2724	C	N3-C4-N4	-5.68	114.02	118.00
59	A5	3443	A	O5'-P-OP1	-5.68	100.58	105.70
59	A5	300	A	C5-C6-N1	5.68	120.54	117.70
59	A5	1377	A	OP2-P-O3'	5.68	117.70	105.20
58	B2	997	C	N1-C2-O2	5.68	122.31	118.90
58	B2	1596	C	C6-N1-C1'	-5.68	113.98	120.80
58	B2	1843	A	C5-N7-C8	-5.68	101.06	103.90
54	A9	12	C	C4-C5-C6	-5.68	114.56	117.40
54	A9	16	U	C2-N1-C1'	-5.68	110.89	117.70
59	A5	1027	A	N7-C8-N9	5.68	116.64	113.80
59	A5	1682	G	C5-C6-N1	5.68	114.34	111.50
58	B2	111	A	C4-C5-N7	5.68	113.54	110.70
59	A5	380	G	C8-N9-C1'	-5.68	119.62	127.00
59	A5	2749	G	N9-C1'-C2'	-5.68	105.75	112.00
59	A5	3150	G	C5-N7-C8	-5.68	101.46	104.30
58	B2	1099	U	C2-N3-C4	5.68	130.41	127.00
59	A5	1967	G	N3-C4-N9	-5.68	122.59	126.00
59	A5	2990	C	P-O3'-C3'	5.68	126.51	119.70
56	A8	21	U	C4-C5-C6	-5.67	116.30	119.70
58	B2	1107	A	C6-C5-N7	-5.67	128.33	132.30
59	A5	1009	G	N3-C4-C5	-5.67	125.76	128.60
59	A5	2589	U	N1-C2-O2	5.67	126.77	122.80
59	A5	2620	C	OP1-P-O3'	5.67	117.68	105.20
59	A5	26	G	N7-C8-N9	5.67	115.94	113.10
59	A5	356	A	C4-C5-C6	-5.67	114.16	117.00
58	B2	375	A	C6-N1-C2	5.67	122.00	118.60
59	A5	25	G	C5-C6-N1	5.67	114.33	111.50
59	A5	754	A	N7-C8-N9	5.67	116.64	113.80
59	A5	1316	U	C6-N1-C1'	-5.67	113.26	121.20
59	A5	345	A	N1-C6-N6	-5.67	115.20	118.60
59	A5	720	G	N3-C4-N9	-5.67	122.60	126.00
59	A5	106	A	N1-C6-N6	-5.67	115.20	118.60
59	A5	843	A	OP1-P-OP2	-5.67	111.10	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1674	A	OP1-P-O3'	5.67	117.67	105.20
59	A5	2194	G	C5-C6-N1	5.67	114.33	111.50
59	A5	2725	U	C5-C4-O4	-5.67	122.50	125.90
59	A5	2729	U	N1-C2-N3	-5.67	111.50	114.90
59	A5	3714	U	C4-C5-C6	-5.67	116.30	119.70
56	A8	7	A	O5'-P-OP1	-5.67	100.60	105.70
57	Cz	165	LEU	CA-CB-CG	5.67	128.33	115.30
58	B2	45	U	C5-C6-N1	-5.67	119.87	122.70
58	B2	840	U	C5-C6-N1	5.67	125.53	122.70
59	A5	189	A	O5'-P-OP1	-5.67	100.60	105.70
59	A5	776	A	N3-C4-C5	-5.67	122.83	126.80
59	A5	2056	G	C4-C5-N7	5.67	113.07	110.80
59	A5	2150	U	N1-C2-N3	5.67	118.30	114.90
59	A5	2193	C	O5'-P-OP2	-5.67	100.60	105.70
59	A5	2775	A	P-O3'-C3'	5.67	126.50	119.70
59	A5	3404	A	C6-N1-C2	5.67	122.00	118.60
59	A5	3654	C	N3-C2-O2	-5.67	117.93	121.90
6	CC	78	ARG	CB-CG-CD	-5.67	96.87	111.60
59	A5	345	A	OP2-P-O3'	5.67	117.66	105.20
59	A5	362	A	N1-C2-N3	-5.67	126.47	129.30
59	A5	1009	G	N3-C4-N9	5.67	129.40	126.00
59	A5	1753	G	OP2-P-O3'	5.67	117.66	105.20
59	A5	2492	A	C8-N9-C1'	5.67	137.90	127.70
58	B2	7	G	C5-C6-N1	5.66	114.33	111.50
59	A5	412	U	C5-C6-N1	5.66	125.53	122.70
59	A5	428	C	N3-C4-C5	5.66	124.17	121.90
59	A5	769	U	C5-C4-O4	5.66	129.30	125.90
59	A5	799	A	N1-C2-N3	-5.66	126.47	129.30
59	A5	1137	G	O5'-P-OP1	-5.66	100.60	105.70
59	A5	1325	C	N3-C4-C5	-5.66	119.63	121.90
59	A5	1409	G	C5-N7-C8	-5.66	101.47	104.30
59	A5	1763	A	N1-C6-N6	-5.66	115.20	118.60
59	A5	1806	G	C2-N3-C4	5.66	114.73	111.90
59	A5	2546	G	N7-C8-N9	5.66	115.93	113.10
59	A5	3650	G	C6-C5-N7	-5.66	127.00	130.40
55	A7	102	C	N3-C2-O2	-5.66	117.94	121.90
59	A5	777	C	C6-N1-C2	-5.66	118.03	120.30
59	A5	1204	C	N1-C2-O2	5.66	122.30	118.90
59	A5	2492	A	C2'-C3'-O3'	5.66	122.76	113.70
59	A5	1593	U	N3-C2-O2	-5.66	118.24	122.20
59	A5	3159	C	N1-C2-O2	5.66	122.30	118.90
59	A5	1260	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(°)
59	A5	2703	G	C5-C6-N1	5.66	114.33	111.50
29	CQ	173	LYS	CA-CB-CG	5.66	125.84	113.40
58	B2	1084	G	C5-C6-O6	-5.66	125.21	128.60
59	A5	867	U	OP1-P-O3'	5.66	117.64	105.20
59	A5	1332	C	N1-C2-O2	5.65	122.29	118.90
59	A5	3321	A	N9-C4-C5	-5.65	103.54	105.80
59	A5	3633	U	C5-C6-N1	5.65	125.53	122.70
58	B2	387	C	N1-C2-O2	5.65	122.29	118.90
58	B2	1580	G	C8-N9-C4	5.65	108.66	106.40
58	B2	1966	U	C6-N1-C2	-5.65	117.61	121.00
59	A5	117	C	O5'-P-OP1	-5.65	100.61	105.70
59	A5	668	A	O5'-P-OP1	-5.65	100.61	105.70
59	A5	1004	C	N3-C2-O2	-5.65	117.94	121.90
59	A5	2156	U	O5'-P-OP2	-5.65	100.61	105.70
59	A5	3503	G	N3-C2-N2	5.65	123.86	119.90
59	A5	3620	G	O5'-P-OP1	-5.65	100.61	105.70
3	AB	123	LEU	CA-CB-CG	5.65	128.30	115.30
4	CB	397	LEU	CA-CB-CG	5.65	128.29	115.30
58	B2	328	A	O5'-P-OP1	5.65	117.48	110.70
58	B2	1572	C	C5-C6-N1	5.65	123.83	121.00
58	B2	1665	U	C5-C6-N1	5.65	125.53	122.70
59	A5	199	U	C6-N1-C1'	5.65	129.11	121.20
59	A5	2092	U	C5-C4-O4	-5.65	122.51	125.90
59	A5	2511	C	N3-C2-O2	-5.65	117.94	121.90
59	A5	2586	A	O4'-C1'-N9	5.65	112.72	108.20
59	A5	234	G	O5'-P-OP1	-5.65	100.61	105.70
59	A5	854	U	C4-C5-C6	-5.65	116.31	119.70
59	A5	1138	C	C5-C4-N4	-5.65	116.25	120.20
59	A5	1545	A	O5'-P-OP1	-5.65	100.62	105.70
58	B2	610	U	N3-C2-O2	-5.65	118.25	122.20
59	A5	403	A	N1-C6-N6	-5.65	115.21	118.60
59	A5	3334	A	C5-C6-N6	-5.65	119.18	123.70
59	A5	3395	G	C5-C6-O6	5.65	131.99	128.60
59	A5	1115	A	N3-C4-N9	-5.65	122.88	127.40
59	A5	1152	A	N1-C2-N3	-5.65	126.48	129.30
59	A5	1301	A	C5-N7-C8	-5.64	101.08	103.90
59	A5	2780	A	C5-C6-N6	-5.64	119.19	123.70
59	A5	3333	A	C5-C6-N6	5.64	128.22	123.70
59	A5	3457	C	C2-N3-C4	5.64	122.72	119.90
59	A5	3585	A	C5-C6-N6	-5.64	119.18	123.70
58	B2	639	G	N1-C6-O6	-5.64	116.51	119.90
59	A5	1012	G	C8-N9-C4	-5.64	104.14	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1522	G	C8-N9-C4	-5.64	104.14	106.40
59	A5	1678	C	N3-C4-N4	-5.64	114.05	118.00
59	A5	1813	A	N1-C6-N6	-5.64	115.21	118.60
59	A5	2507	C	C6-N1-C2	-5.64	118.04	120.30
59	A5	3398	C	N1-C2-O2	5.64	122.28	118.90
59	A5	3418	U	N1-C1'-C2'	5.64	121.34	114.00
59	A5	199	U	C6-N1-C2	-5.64	117.61	121.00
59	A5	1396	A	C5-C6-N1	5.64	120.52	117.70
59	A5	2745	A	N9-C4-C5	-5.64	103.54	105.80
58	B2	1885	U	C5-C6-N1	5.64	125.52	122.70
59	A5	27	A	C4-C5-N7	5.64	113.52	110.70
59	A5	1011	U	N3-C2-O2	-5.64	118.25	122.20
59	A5	1678	C	C4-C5-C6	-5.64	114.58	117.40
59	A5	2481	U	N3-C4-O4	5.64	123.35	119.40
59	A5	2755	G	C4-C5-N7	5.64	113.06	110.80
59	A5	3517	U	C2-N3-C4	5.64	130.38	127.00
59	A5	3597	C	C4-C5-C6	-5.64	114.58	117.40
29	CQ	9	TYR	N-CA-C	-5.64	95.78	111.00
59	A5	1992	G	N3-C4-C5	-5.64	125.78	128.60
59	A5	2008	U	N3-C2-O2	-5.64	118.25	122.20
59	A5	2204	U	C5-C6-N1	5.64	125.52	122.70
56	A8	106	A	C5-C6-N1	5.64	120.52	117.70
59	A5	329	C	C5-C6-N1	5.64	123.82	121.00
59	A5	2224	A	C4-C5-C6	-5.64	114.18	117.00
58	B2	958	G	N3-C4-N9	5.63	129.38	126.00
59	A5	428	C	O4'-C1'-N1	5.63	112.71	108.20
59	A5	1092	U	C5-C6-N1	5.63	125.52	122.70
59	A5	1167	A	C2-N3-C4	5.63	113.42	110.60
59	A5	1409	G	C4-C5-N7	5.63	113.05	110.80
58	B2	1083	C	C4-C5-C6	-5.63	114.58	117.40
59	A5	883	U	C5-C6-N1	5.63	125.52	122.70
59	A5	1091	G	N1-C6-O6	-5.63	116.52	119.90
59	A5	1863	U	N3-C4-C5	-5.63	111.22	114.60
59	A5	2543	C	C5-C4-N4	5.63	124.14	120.20
59	A5	2723	A	N7-C8-N9	5.63	116.62	113.80
59	A5	1192	A	C5-C6-N6	-5.63	119.19	123.70
59	A5	2001	U	O5'-P-OP1	-5.63	100.63	105.70
59	A5	2215	G	C5-N7-C8	-5.63	101.48	104.30
58	B2	310	C	C2-N3-C4	-5.63	117.08	119.90
59	A5	1730	A	C8-N9-C4	-5.63	103.55	105.80
59	A5	2511	C	O5'-P-OP2	-5.63	100.63	105.70
58	B2	1098	C	C5-C4-N4	5.63	124.14	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1105	U	C5-C6-N1	5.63	125.51	122.70
58	B2	1409	A	N1-C2-N3	-5.63	126.49	129.30
59	A5	1359	G	C5-C6-N1	5.63	114.31	111.50
59	A5	3767	G	C6-C5-N7	-5.63	127.02	130.40
80	CF	99	ARG	NE-CZ-NH1	-5.63	117.49	120.30
59	A5	49	A	C5-N7-C8	-5.63	101.09	103.90
59	A5	485	A	N1-C2-N3	-5.63	126.49	129.30
59	A5	920	G	C4-N9-C1'	5.63	133.81	126.50
59	A5	1681	G	C4-C5-N7	5.63	113.05	110.80
59	A5	1981	A	C4-C5-N7	5.63	113.51	110.70
59	A5	3403	G	N3-C4-C5	-5.63	125.79	128.60
59	A5	3583	C	C5-C6-N1	5.63	123.81	121.00
59	A5	3600	G	N9-C4-C5	-5.63	103.15	105.40
59	A5	3675	A	N9-C4-C5	5.63	108.05	105.80
59	A5	1050	C	C5-C6-N1	5.62	123.81	121.00
59	A5	2784	C	N1-C2-N3	5.62	123.14	119.20
59	A5	3327	U	N3-C2-O2	-5.62	118.26	122.20
59	A5	3412	U	C6-N1-C2	-5.62	117.62	121.00
58	B2	1659	C	C6-N1-C2	-5.62	118.05	120.30
59	A5	1000	G	N9-C4-C5	-5.62	103.15	105.40
59	A5	1087	G	N3-C4-C5	5.62	131.41	128.60
59	A5	1101	A	C6-C5-N7	5.62	136.24	132.30
59	A5	1382	U	C2-N1-C1'	5.62	124.45	117.70
59	A5	3362	G	N3-C4-C5	-5.62	125.79	128.60
59	A5	3474	G	N1-C2-N3	5.62	127.27	123.90
59	A5	3583	C	C4-C5-C6	-5.62	114.59	117.40
41	Ce	52	TYR	OH-CZ-CE2	-5.62	104.92	120.10
59	A5	164	U	C6-N1-C2	-5.62	117.63	121.00
59	A5	1313	A	N7-C8-N9	5.62	116.61	113.80
59	A5	2089	A	C5-N7-C8	-5.62	101.09	103.90
59	A5	12	C	C6-N1-C2	-5.62	118.05	120.30
59	A5	1418	A	C5-C6-N1	5.62	120.51	117.70
59	A5	2626	C	N3-C2-O2	-5.62	117.97	121.90
59	A5	3894	C	N1-C2-O2	5.62	122.27	118.90
59	A5	998	G	C5-C6-N1	5.62	114.31	111.50
59	A5	1014	U	O5'-P-OP2	-5.62	100.64	105.70
59	A5	1699	A	C6-N1-C2	-5.62	115.23	118.60
59	A5	1700	U	C6-N1-C2	-5.62	117.63	121.00
59	A5	1894	G	C6-C5-N7	-5.62	127.03	130.40
59	A5	2716	C	O5'-P-OP1	-5.62	100.64	105.70
59	A5	3610	A	O5'-P-OP2	-5.62	100.64	105.70
58	B2	849	U	N3-C2-O2	-5.62	118.27	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1324	C	OP1-P-OP2	-5.62	111.18	119.60
59	A5	1421	G	N7-C8-N9	5.62	115.91	113.10
59	A5	3949	U	C6-N1-C1'	5.62	129.06	121.20
58	B2	1115	C	C5-C6-N1	5.61	123.81	121.00
59	A5	814	U	N3-C2-O2	-5.61	118.27	122.20
59	A5	1022	A	C4-C5-C6	-5.61	114.19	117.00
59	A5	1145	C	C2-N3-C4	5.61	122.71	119.90
59	A5	1682	G	N1-C2-N2	5.61	121.25	116.20
58	B2	160	G	C4-N9-C1'	5.61	133.80	126.50
59	A5	285	G	C5-C6-N1	5.61	114.31	111.50
59	A5	744	U	C2-N1-C1'	5.61	124.44	117.70
59	A5	1628	G	C8-N9-C1'	-5.61	119.70	127.00
59	A5	1682	G	C4-C5-N7	5.61	113.05	110.80
59	A5	1992	G	N3-C4-N9	5.61	129.37	126.00
25	Ca	99	ALA	N-CA-C	5.61	126.15	111.00
58	B2	1394	U	O4'-C1'-N1	5.61	112.69	108.20
59	A5	1156	U	C4-C5-C6	-5.61	116.33	119.70
59	A5	1168	G	C8-N9-C4	-5.61	104.16	106.40
59	A5	3343	A	C2-N3-C4	5.61	113.41	110.60
59	A5	3487	A	C5-C6-N6	-5.61	119.21	123.70
59	A5	1985	C	N3-C4-N4	-5.61	114.07	118.00
59	A5	3730	G	C6-C5-N7	-5.61	127.03	130.40
59	A5	1116	G	N1-C2-N2	5.61	121.25	116.20
59	A5	1721	C	N1-C2-O2	5.61	122.27	118.90
59	A5	3762	G	N1-C6-O6	-5.61	116.53	119.90
59	A5	3776	A	C4-C5-N7	5.61	113.50	110.70
58	B2	648	G	C6-C5-N7	-5.61	127.04	130.40
58	B2	976	U	N1-C2-O2	5.61	126.72	122.80
59	A5	925	C	N1-C2-O2	5.61	122.26	118.90
59	A5	1613	A	C5-C6-N1	5.61	120.50	117.70
59	A5	2733	G	N1-C2-N3	5.61	127.26	123.90
56	A8	30	G	O5'-P-OP1	-5.60	100.66	105.70
59	A5	913	U	C6-N1-C2	-5.60	117.64	121.00
59	A5	1672	A	O5'-P-OP2	5.60	117.42	110.70
59	A5	3404	A	C5-N7-C8	-5.60	101.10	103.90
59	A5	380	G	C6-N1-C2	-5.60	121.74	125.10
59	A5	424	G	N1-C6-O6	-5.60	116.54	119.90
59	A5	786	C	N3-C4-C5	5.60	124.14	121.90
59	A5	2578	U	C6-N1-C2	-5.60	117.64	121.00
59	A5	3368	C	C5-C6-N1	5.60	123.80	121.00
59	A5	562	U	C2-N1-C1'	5.60	124.42	117.70
59	A5	1315	A	C5-N7-C8	-5.60	101.10	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1133	G	N1-C6-O6	5.60	123.26	119.90
59	A5	1388	C	C2-N3-C4	5.60	122.70	119.90
59	A5	1998	U	N3-C2-O2	-5.60	118.28	122.20
59	A5	3413	C	C2-N3-C4	5.60	122.70	119.90
73	AO	99	ALA	C-N-CA	5.60	135.70	121.70
59	A5	1122	U	C4-C5-C6	5.60	123.06	119.70
59	A5	1883	G	C5-C6-O6	-5.60	125.24	128.60
59	A5	3464	G	N1-C2-N3	5.60	127.26	123.90
59	A5	3574	A	N1-C6-N6	-5.60	115.24	118.60
58	B2	580	C	C6-N1-C2	-5.60	118.06	120.30
59	A5	760	G	C4-N9-C1'	5.60	133.78	126.50
59	A5	1907	U	N3-C2-O2	-5.60	118.28	122.20
59	A5	3650	G	C8-N9-C1'	-5.60	119.72	127.00
58	B2	1167	U	C2-N3-C4	5.59	130.36	127.00
59	A5	781	C	N3-C2-O2	-5.59	117.98	121.90
59	A5	803	A	C5-C6-N1	5.59	120.50	117.70
59	A5	2661	G	C4-C5-N7	5.59	113.04	110.80
59	A5	3246	G	O4'-C1'-N9	-5.59	103.72	108.20
59	A5	66	A	C2-N3-C4	5.59	113.40	110.60
59	A5	66	A	N1-C6-N6	-5.59	115.24	118.60
58	B2	1333	C	N1-C2-O2	5.59	122.25	118.90
59	A5	2181	A	N7-C8-N9	5.59	116.60	113.80
59	A5	2706	U	N1-C2-O2	5.59	126.72	122.80
59	A5	3296	C	N3-C2-O2	-5.59	117.99	121.90
58	B2	632	G	C5-N7-C8	-5.59	101.50	104.30
59	A5	1425	U	C6-N1-C2	-5.59	117.65	121.00
59	A5	1702	G	N3-C4-C5	5.59	131.40	128.60
59	A5	3764	G	N3-C4-C5	-5.59	125.81	128.60
58	B2	447	C	N1-C2-O2	5.59	122.25	118.90
59	A5	1975	C	N3-C2-O2	-5.59	117.99	121.90
54	A9	12	C	O5'-P-OP1	-5.59	100.67	105.70
58	B2	583	C	N1-C2-O2	5.59	122.25	118.90
58	B2	1069	U	O5'-P-OP1	-5.59	100.67	105.70
59	A5	378	G	C5-N7-C8	-5.59	101.51	104.30
59	A5	1266	A	C5-C6-N6	5.59	128.17	123.70
59	A5	2540	G	C5-C6-N1	5.59	114.29	111.50
56	A8	72	C	N1-C2-O2	5.58	122.25	118.90
59	A5	1629	C	C5-C6-N1	5.58	123.79	121.00
59	A5	2811	G	N9-C4-C5	5.58	107.63	105.40
59	A5	3340	A	C5-N7-C8	-5.58	101.11	103.90
59	A5	3351	A	C4-C5-C6	-5.58	114.21	117.00
58	B2	1830	G	C8-N9-C4	-5.58	104.17	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	238	G	N1-C6-O6	5.58	123.25	119.90
59	A5	1863	U	C4-C5-C6	5.58	123.05	119.70
59	A5	2809	C	N3-C2-O2	-5.58	117.99	121.90
58	B2	1103	U	N1-C2-O2	5.58	126.71	122.80
59	A5	1521	G	N3-C4-C5	5.58	131.39	128.60
59	A5	2095	U	O5'-P-OP1	5.58	117.40	110.70
59	A5	3402	C	C2-N1-C1'	-5.58	112.66	118.80
59	A5	3931	C	C2-N1-C1'	5.58	124.94	118.80
58	B2	1957	A	O5'-P-OP1	-5.58	100.68	105.70
50	CJ	103	ASN	N-CA-C	5.58	126.06	111.00
58	B2	1217	U	C2-N1-C1'	5.58	124.39	117.70
59	A5	350	C	C6-N1-C2	-5.58	118.07	120.30
59	A5	760	G	C5-C6-N1	5.58	114.29	111.50
59	A5	781	C	C6-N1-C2	-5.58	118.07	120.30
59	A5	996	C	C2-N3-C4	-5.58	117.11	119.90
59	A5	1522	G	C6-N1-C2	-5.58	121.75	125.10
59	A5	2697	U	OP2-P-O3'	5.58	117.47	105.20
59	A5	3351	A	C5-C6-N6	-5.58	119.24	123.70
59	A5	3477	A	C5-C6-N1	5.58	120.49	117.70
59	A5	3883	G	N3-C4-N9	5.58	129.34	126.00
58	B2	1021	A	C5-N7-C8	-5.57	101.11	103.90
59	A5	984	U	O5'-P-OP2	-5.57	100.68	105.70
59	A5	1181	A	N9-C1'-C2'	5.57	121.25	114.00
59	A5	1932	C	C6-N1-C2	-5.57	118.07	120.30
59	A5	2687	A	C4-C5-N7	5.57	113.49	110.70
59	A5	2790	G	N3-C4-N9	-5.57	122.66	126.00
59	A5	3509	U	N3-C2-O2	5.57	126.10	122.20
59	A5	3511	U	N3-C4-C5	-5.57	111.26	114.60
6	CC	195	GLY	C-N-CA	5.57	135.63	121.70
58	B2	353	U	C5-C6-N1	5.57	125.49	122.70
59	A5	2225	A	N1-C2-N3	-5.57	126.51	129.30
59	A5	2735	A	N1-C6-N6	-5.57	115.26	118.60
58	B2	38	C	C2-N1-C1'	5.57	124.93	118.80
59	A5	502	U	N3-C2-O2	-5.57	118.30	122.20
59	A5	1096	A	C2-N3-C4	5.57	113.39	110.60
59	A5	2082	U	N1-C2-O2	5.57	126.70	122.80
59	A5	2536	G	C6-C5-N7	-5.57	127.06	130.40
59	A5	188	G	C8-N9-C4	-5.57	104.17	106.40
59	A5	1555	G	C6-N1-C2	-5.57	121.76	125.10
59	A5	1796	A	N9-C4-C5	5.57	108.03	105.80
59	A5	2110	A	C5-C6-N1	5.57	120.48	117.70
59	A5	3521	A	C4-C5-C6	-5.57	114.22	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1108	C	C6-N1-C2	-5.57	118.07	120.30
59	A5	52	A	C5-N7-C8	-5.57	101.12	103.90
59	A5	2492	A	C4-C5-C6	-5.57	114.22	117.00
59	A5	2529	G	C4-C5-N7	-5.57	108.57	110.80
59	A5	2774	G	O5'-P-OP2	-5.57	100.69	105.70
59	A5	665	U	C6-N1-C1'	5.56	128.99	121.20
59	A5	817	C	N3-C4-C5	-5.56	119.67	121.90
59	A5	2501	G	C5-C6-O6	5.56	131.94	128.60
59	A5	2540	G	C4-C5-N7	-5.56	108.57	110.80
59	A5	3598	U	N3-C2-O2	-5.56	118.31	122.20
2	CA	173	GLY	N-CA-C	-5.56	99.19	113.10
56	A8	8	A	O5'-P-OP2	5.56	117.37	110.70
58	B2	326	U	P-O3'-C3'	5.56	126.37	119.70
58	B2	627	A	N3-C4-N9	-5.56	122.95	127.40
59	A5	856	A	N1-C2-N3	-5.56	126.52	129.30
59	A5	1020	A	OP1-P-OP2	5.56	127.94	119.60
59	A5	2653	A	O5'-P-OP1	-5.56	100.69	105.70
52	CE	232	LEU	CA-CB-CG	5.56	128.09	115.30
59	A5	358	C	N3-C2-O2	-5.56	118.01	121.90
59	A5	1060	G	C8-N9-C4	-5.56	104.18	106.40
59	A5	2794	U	C2-N1-C1'	5.56	124.37	117.70
58	B2	463	G	N9-C4-C5	5.56	107.62	105.40
59	A5	475	U	C6-N1-C1'	-5.56	113.42	121.20
59	A5	1330	G	N1-C6-O6	-5.56	116.56	119.90
59	A5	3392	U	C6-N1-C2	-5.56	117.67	121.00
59	A5	3638	U	N3-C4-C5	5.56	117.94	114.60
59	A5	3931	C	N3-C4-N4	5.56	121.89	118.00
58	B2	7	G	C5-C6-O6	-5.56	125.27	128.60
59	A5	2214	G	C4-C5-C6	-5.56	115.47	118.80
59	A5	3757	U	N3-C4-C5	5.56	117.94	114.60
56	A8	103	C	C2-N3-C4	5.56	122.68	119.90
58	B2	948	A	C4-C5-N7	5.55	113.48	110.70
58	B2	1225	A	C8-N9-C4	5.55	108.02	105.80
59	A5	580	A	P-O3'-C3'	5.55	126.36	119.70
59	A5	2526	A	C8-N9-C4	-5.55	103.58	105.80
59	A5	3420	U	C6-N1-C2	5.55	124.33	121.00
59	A5	3504	G	OP1-P-O3'	5.55	117.42	105.20
58	B2	939	G	C2-N3-C4	5.55	114.68	111.90
59	A5	373	A	C6-C5-N7	5.55	136.19	132.30
59	A5	833	U	N3-C2-O2	-5.55	118.31	122.20
58	B2	632	G	N9-C4-C5	-5.55	103.18	105.40
59	A5	2196	U	N1-C2-N3	5.55	118.23	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1311	U	C5-C6-N1	-5.55	119.93	122.70
59	A5	1542	C	OP1-P-O3'	5.55	117.41	105.20
59	A5	2194	G	O5'-P-OP1	-5.55	100.71	105.70
59	A5	2663	C	O5'-P-OP1	-5.55	100.71	105.70
59	A5	3800	G	C8-N9-C1'	-5.55	119.79	127.00
59	A5	391	A	O5'-P-OP1	-5.55	100.71	105.70
59	A5	1140	G	N1-C2-N3	-5.55	120.57	123.90
59	A5	3525	A	N1-C2-N3	-5.55	126.53	129.30
56	A8	3	C	C5-C4-N4	-5.55	116.32	120.20
58	B2	1084	G	C4-C5-N7	5.55	113.02	110.80
58	B2	1190	G	C6-N1-C2	-5.55	121.77	125.10
58	B2	1828	C	N1-C2-O2	-5.55	115.57	118.90
59	A5	94	C	OP1-P-O3'	5.55	117.40	105.20
59	A5	227	A	N7-C8-N9	5.55	116.57	113.80
59	A5	356	A	O4'-C1'-N9	-5.55	103.76	108.20
59	A5	1367	A	N7-C8-N9	5.55	116.57	113.80
59	A5	2536	G	N1-C2-N2	-5.55	111.21	116.20
59	A5	2674	A	C5-C6-N6	-5.55	119.26	123.70
59	A5	3478	G	O4'-C1'-N9	5.54	112.64	108.20
10	AM	92	LEU	CA-CB-CG	5.54	128.05	115.30
58	B2	1	A	P-O3'-C3'	5.54	126.35	119.70
58	B2	1961	A	N1-C6-N6	-5.54	115.27	118.60
59	A5	385	A	N9-C4-C5	-5.54	103.58	105.80
59	A5	1144	C	O5'-P-OP2	-5.54	100.71	105.70
59	A5	2790	G	C4-C5-C6	-5.54	115.47	118.80
45	C1	49	LEU	CB-CG-CD1	5.54	120.42	111.00
58	B2	1356	U	N1-C2-O2	5.54	126.68	122.80
59	A5	777	C	C4-C5-C6	-5.54	114.63	117.40
59	A5	1018	C	C5-C6-N1	-5.54	118.23	121.00
59	A5	1799	U	C6-N1-C1'	-5.54	113.44	121.20
59	A5	2698	A	C5-C6-N1	5.54	120.47	117.70
59	A5	3608	G	N1-C2-N3	5.54	127.22	123.90
31	CS	17	LEU	CA-CB-CG	5.54	128.04	115.30
58	B2	1119	G	C8-N9-C1'	-5.54	119.80	127.00
59	A5	65	A	C8-N9-C4	-5.54	103.58	105.80
59	A5	300	A	C2'-C3'-O3'	5.54	122.56	113.70
59	A5	2754	G	N1-C2-N3	5.54	127.22	123.90
59	A5	2766	U	C5-C6-N1	5.54	125.47	122.70
4	CB	323	TYR	CA-CB-CG	5.54	123.92	113.40
58	B2	1849	U	C5-C4-O4	5.54	129.22	125.90
59	A5	385	A	OP1-P-OP2	5.54	127.91	119.60
59	A5	965	C	C6-N1-C2	-5.54	118.08	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1359	G	N3-C4-N9	5.54	129.32	126.00
59	A5	1404	A	N3-C4-N9	5.54	131.83	127.40
59	A5	2672	U	N1-C2-N3	5.54	118.22	114.90
59	A5	3510	U	C5-C6-N1	-5.54	119.93	122.70
56	A8	121	C	C6-N1-C2	-5.54	118.08	120.30
59	A5	3236	A	N3-C4-C5	5.54	130.68	126.80
59	A5	831	A	C5-C6-N1	5.54	120.47	117.70
59	A5	1628	G	C4-N9-C1'	5.54	133.70	126.50
59	A5	1657	G	C8-N9-C4	5.54	108.61	106.40
59	A5	1671	U	C5-C4-O4	5.54	129.22	125.90
56	A8	49	C	O5'-P-OP1	-5.53	100.72	105.70
59	A5	227	A	C5-N7-C8	-5.53	101.13	103.90
59	A5	823	U	O5'-P-OP1	-5.53	100.72	105.70
59	A5	1959	A	C5-C6-N1	5.53	120.47	117.70
59	A5	3631	C	C4-C5-C6	-5.53	114.63	117.40
59	A5	851	G	C8-N9-C4	-5.53	104.19	106.40
59	A5	1333	C	N3-C4-N4	-5.53	114.13	118.00
59	A5	1375	G	N7-C8-N9	5.53	115.87	113.10
59	A5	2736	A	N9-C4-C5	-5.53	103.59	105.80
56	A8	18	C	O4'-C1'-N1	5.53	112.62	108.20
59	A5	125	A	C5-C6-N1	5.53	120.47	117.70
59	A5	1753	G	C8-N9-C4	-5.53	104.19	106.40
59	A5	2085	G	N1-C2-N2	5.53	121.18	116.20
59	A5	3728	A	C6-N1-C2	-5.53	115.28	118.60
59	A5	3800	G	C4-N9-C1'	5.53	133.69	126.50
59	A5	64	A	C4-C5-C6	-5.53	114.23	117.00
58	B2	367	G	N3-C4-N9	5.53	129.32	126.00
59	A5	24	G	C8-N9-C4	5.53	108.61	106.40
59	A5	679	G	C4-N9-C1'	5.53	133.69	126.50
59	A5	1027	A	C4-C5-N7	5.53	113.46	110.70
59	A5	1383	A	C4'-C3'-O3'	5.53	124.05	113.00
59	A5	1647	A	C5-C6-N1	5.53	120.46	117.70
59	A5	1813	A	N7-C8-N9	5.53	116.56	113.80
59	A5	3423	U	N3-C4-C5	5.53	117.92	114.60
41	Ce	45	ARG	NE-CZ-NH1	5.53	123.06	120.30
55	A7	82	G	N1-C2-N2	-5.53	111.23	116.20
58	B2	1030	C	P-O3'-C3'	5.53	126.33	119.70
58	B2	1977	A	O5'-P-OP1	-5.53	100.73	105.70
59	A5	1338	U	N1-C2-O2	5.53	126.67	122.80
59	A5	1612	G	C4-C5-N7	5.52	113.01	110.80
59	A5	2779	A	N3-C4-N9	-5.52	122.98	127.40
59	A5	3171	A	N1-C6-N6	-5.52	115.29	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3712	G	C2-N3-C4	-5.52	109.14	111.90
59	A5	1011	U	C2-N1-C1'	5.52	124.33	117.70
59	A5	1338	U	N3-C4-C5	5.52	117.91	114.60
59	A5	2605	C	C4-C5-C6	-5.52	114.64	117.40
59	A5	3221	A	C4-C5-N7	5.52	113.46	110.70
59	A5	3730	G	C6-N1-C2	-5.52	121.79	125.10
59	A5	2755	G	N3-C2-N2	-5.52	116.03	119.90
59	A5	3404	A	N7-C8-N9	5.52	116.56	113.80
58	B2	880	G	N9-C4-C5	5.52	107.61	105.40
58	B2	1104	C	C6-N1-C1'	5.52	127.42	120.80
58	B2	1200	A	C5-C6-N1	5.52	120.46	117.70
58	B2	1975	G	C4-C5-N7	5.52	113.01	110.80
59	A5	509	A	C4-C5-C6	-5.52	114.24	117.00
59	A5	1383	A	O5'-P-OP1	-5.52	100.73	105.70
59	A5	1795	A	C5-N7-C8	-5.52	101.14	103.90
59	A5	2484	G	N3-C4-N9	5.52	129.31	126.00
59	A5	3149	U	C5-C6-N1	-5.52	119.94	122.70
59	A5	3256	U	N3-C4-C5	5.52	117.91	114.60
59	A5	3452	U	C4-C5-C6	-5.52	116.39	119.70
59	A5	3844	U	C5'-C4'-O4'	5.52	115.72	109.10
58	B2	1408	A	N7-C8-N9	-5.52	111.04	113.80
59	A5	1106	A	N9-C4-C5	5.52	108.01	105.80
59	A5	1152	A	N9-C4-C5	5.52	108.01	105.80
59	A5	1417	G	C8-N9-C1'	-5.52	119.83	127.00
59	A5	1985	C	C2-N1-C1'	-5.52	112.73	118.80
59	A5	2649	A	N3-C4-N9	-5.52	122.99	127.40
59	A5	3678	G	OP1-P-OP2	5.52	127.88	119.60
59	A5	1111	C	C5-C6-N1	5.52	123.76	121.00
59	A5	1615	G	C6-N1-C2	5.52	128.41	125.10
59	A5	1626	A	C8-N9-C4	5.52	108.01	105.80
55	A7	97	G	C8-N9-C4	5.51	108.61	106.40
58	B2	275	U	N3-C2-O2	-5.51	118.34	122.20
59	A5	283	A	C8-N9-C4	-5.51	103.59	105.80
59	A5	293	U	C6-N1-C2	-5.51	117.69	121.00
59	A5	1053	G	C6-C5-N7	-5.51	127.09	130.40
59	A5	1161	C	O5'-P-OP2	5.51	117.32	110.70
59	A5	2072	C	N1-C2-O2	5.51	122.21	118.90
59	A5	2268	G	C4-N9-C1'	5.51	133.67	126.50
59	A5	2673	A	O5'-P-OP2	-5.51	100.74	105.70
59	A5	1333	C	C2-N3-C4	5.51	122.66	119.90
59	A5	1552	A	N1-C6-N6	5.51	121.91	118.60
55	A7	48	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(°)
56	A8	107	U	C5'-C4'-O4'	5.51	115.71	109.10
59	A5	3713	C	C5-C6-N1	5.51	123.76	121.00
58	B2	1028	A	OP1-P-O3'	5.51	117.32	105.20
58	B2	1344	A	N3-C4-C5	-5.51	122.94	126.80
59	A5	144	C	N3-C2-O2	-5.51	118.04	121.90
59	A5	664	U	C2-N1-C1'	5.51	124.31	117.70
59	A5	1367	A	O5'-P-OP1	-5.51	100.74	105.70
59	A5	2151	A	N7-C8-N9	5.51	116.56	113.80
59	A5	2201	U	O5'-P-OP1	-5.51	100.74	105.70
58	B2	591	C	N3-C2-O2	-5.51	118.04	121.90
58	B2	1046	U	C2-N1-C1'	5.51	124.31	117.70
58	B2	1962	G	O5'-P-OP1	-5.51	100.74	105.70
59	A5	2061	G	O5'-P-OP2	-5.51	100.74	105.70
59	A5	3591	A	C6-N1-C2	5.51	121.91	118.60
55	A7	93	G	O5'-P-OP1	-5.51	100.74	105.70
59	A5	90	G	C4-C5-N7	-5.51	108.60	110.80
59	A5	435	G	C8-N9-C4	-5.51	104.20	106.40
59	A5	988	C	C6-N1-C2	-5.51	118.10	120.30
59	A5	1103	U	C6-N1-C2	-5.51	117.70	121.00
59	A5	1217	U	N3-C2-O2	-5.51	118.35	122.20
59	A5	2608	G	C4-C5-N7	5.51	113.00	110.80
59	A5	2686	C	N3-C4-C5	-5.51	119.70	121.90
59	A5	3181	G	C8-N9-C4	-5.51	104.20	106.40
55	A7	114	U	C5-C6-N1	5.50	125.45	122.70
58	B2	1191	C	N3-C2-O2	-5.50	118.05	121.90
59	A5	2191	G	C8-N9-C1'	5.50	134.16	127.00
59	A5	53	A	C5-C6-N6	-5.50	119.30	123.70
59	A5	448	A	C5-C6-N6	-5.50	119.30	123.70
59	A5	645	U	N1-C2-O2	5.50	126.65	122.80
59	A5	2161	G	C6-C5-N7	5.50	133.70	130.40
59	A5	2166	U	N3-C4-O4	-5.50	115.55	119.40
59	A5	2239	C	C4-C5-C6	-5.50	114.65	117.40
26	CN	188	ARG	NE-CZ-NH2	5.50	123.05	120.30
58	B2	111	A	C5-N7-C8	-5.50	101.15	103.90
59	A5	1328	U	N3-C2-O2	-5.50	118.35	122.20
59	A5	3408	C	OP1-P-O3'	5.50	117.30	105.20
59	A5	752	U	N3-C4-O4	5.50	123.25	119.40
59	A5	2161	G	N1-C6-O6	-5.50	116.60	119.90
59	A5	3143	U	N1-C2-O2	5.50	126.65	122.80
59	A5	3671	C	O5'-P-OP1	-5.50	100.75	105.70
59	A5	41	U	O5'-P-OP1	5.50	117.30	110.70
59	A5	784	G	C5-C6-O6	-5.50	125.30	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1096	A	C5-C6-N1	5.50	120.45	117.70
59	A5	2719	A	C8-N9-C4	-5.50	103.60	105.80
59	A5	283	A	N1-C6-N6	-5.50	115.30	118.60
59	A5	2041	G	C5-C6-O6	-5.50	125.30	128.60
59	A5	2055	G	C5-C6-N1	5.50	114.25	111.50
59	A5	2542	C	N1-C2-O2	5.50	122.20	118.90
59	A5	2700	C	C2-N3-C4	5.50	122.65	119.90
59	A5	2734	A	C5-N7-C8	-5.50	101.15	103.90
59	A5	3142	G	N1-C2-N2	-5.50	111.25	116.20
59	A5	3757	U	C6-N1-C1'	5.50	128.89	121.20
58	B2	355	G	N3-C4-N9	-5.50	122.70	126.00
59	A5	2757	U	OP1-P-O3'	5.50	117.29	105.20
59	A5	3165	U	C5-C4-O4	5.50	129.20	125.90
59	A5	3341	C	N3-C4-N4	-5.50	114.15	118.00
58	B2	611	U	C6-N1-C2	-5.49	117.70	121.00
59	A5	839	A	C5-C6-N1	5.49	120.45	117.70
59	A5	2481	U	N3-C2-O2	-5.49	118.35	122.20
59	A5	2713	G	OP1-P-O3'	5.49	117.29	105.20
58	B2	160	G	C8-N9-C1'	-5.49	119.86	127.00
59	A5	104	A	C2-N3-C4	-5.49	107.85	110.60
59	A5	375	C	C2-N1-C1'	5.49	124.84	118.80
59	A5	1997	C	C6-N1-C2	-5.49	118.10	120.30
2	CA	1	MET	CB-CG-SD	5.49	128.87	112.40
56	A8	105	C	C2-N1-C1'	-5.49	112.76	118.80
58	B2	29	U	C5-C6-N1	5.49	125.44	122.70
58	B2	1412	A	C4-C5-N7	5.49	113.44	110.70
59	A5	1319	A	C5-C6-N6	-5.49	119.31	123.70
59	A5	2769	G	C8-N9-C1'	-5.49	119.86	127.00
59	A5	3134	G	C4-C5-N7	5.49	113.00	110.80
59	A5	3501	C	C4-C5-C6	-5.49	114.65	117.40
59	A5	3845	A	C5-N7-C8	-5.49	101.16	103.90
59	A5	1204	C	C2-N3-C4	5.49	122.64	119.90
59	A5	2127	C	C5-C6-N1	5.49	123.75	121.00
56	A8	39	A	C5-C6-N6	5.49	128.09	123.70
59	A5	1162	A	N1-C2-N3	-5.49	126.56	129.30
59	A5	1566	U	N3-C2-O2	-5.49	118.36	122.20
58	B2	1408	A	N3-C4-C5	5.49	130.64	126.80
59	A5	1143	U	N3-C4-O4	-5.49	115.56	119.40
59	A5	2521	A	O4'-C1'-N9	-5.49	103.81	108.20
59	A5	3220	U	C5-C6-N1	5.49	125.44	122.70
59	A5	3471	A	C5-C6-N1	5.49	120.44	117.70
58	B2	950	U	N3-C2-O2	-5.48	118.36	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	109	A	C8-N9-C4	-5.48	103.61	105.80
59	A5	1154	U	OP2-P-O3'	5.48	117.26	105.20
59	A5	2769	G	N9-C4-C5	-5.48	103.21	105.40
58	B2	1048	U	C5-C6-N1	5.48	125.44	122.70
58	B2	1228	G	N7-C8-N9	5.48	115.84	113.10
59	A5	1081	C	N3-C4-C5	5.48	124.09	121.90
59	A5	1424	G	C5-C6-O6	-5.48	125.31	128.60
58	B2	856	A	N3-C4-N9	5.48	131.78	127.40
58	B2	1934	U	N3-C2-O2	-5.48	118.36	122.20
59	A5	787	C	C5-C6-N1	5.48	123.74	121.00
59	A5	992	U	N3-C2-O2	-5.48	118.36	122.20
59	A5	2215	G	C5-C6-N1	5.48	114.24	111.50
56	A8	21	U	O4'-C1'-N1	5.48	112.58	108.20
59	A5	2614	G	C6-C5-N7	-5.48	127.11	130.40
58	B2	1013	A	C8-N9-C4	5.48	107.99	105.80
59	A5	991	A	C8-N9-C4	-5.48	103.61	105.80
59	A5	1085	U	C5-C6-N1	5.48	125.44	122.70
59	A5	2993	G	P-O3'-C3'	5.48	126.27	119.70
59	A5	3349	A	C6-C5-N7	5.48	136.13	132.30
59	A5	3727	A	C6-C5-N7	5.48	136.13	132.30
54	A9	6	G	C4-C5-N7	5.48	112.99	110.80
58	B2	988	G	O4'-C1'-N9	5.48	112.58	108.20
59	A5	441	A	C8-N9-C4	5.48	107.99	105.80
59	A5	821	U	N1-C2-O2	5.48	126.63	122.80
59	A5	1528	G	C4-C5-N7	5.48	112.99	110.80
18	AZ	66	LEU	CA-CB-CG	5.47	127.89	115.30
59	A5	26	G	C2-N3-C4	5.47	114.64	111.90
59	A5	154	A	N3-C4-C5	5.47	130.63	126.80
59	A5	1276	G	C8-N9-C1'	5.47	134.12	127.00
58	B2	1241	G	N3-C4-C5	5.47	131.34	128.60
59	A5	214	A	C5-C6-N6	-5.47	119.32	123.70
59	A5	441	A	C4-C5-N7	5.47	113.44	110.70
59	A5	1367	A	C5-N7-C8	-5.47	101.16	103.90
59	A5	1796	A	C2-N3-C4	5.47	113.34	110.60
59	A5	2183	A	N7-C8-N9	5.47	116.54	113.80
59	A5	2257	C	N1-C2-N3	5.47	123.03	119.20
59	A5	2659	A	C4-N9-C1'	5.47	136.15	126.30
59	A5	3262	A	O5'-P-OP1	-5.47	100.78	105.70
59	A5	3607	C	N3-C4-C5	-5.47	119.71	121.90
59	A5	3714	U	N3-C2-O2	-5.47	118.37	122.20
56	A8	79	A	O4'-C1'-N9	5.47	112.58	108.20
59	A5	1739	U	C5-C4-O4	5.47	129.18	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2574	C	N3-C2-O2	-5.47	118.07	121.90
26	CN	108	ARG	NE-CZ-NH2	-5.47	117.56	120.30
58	B2	1409	A	C6-N1-C2	5.47	121.88	118.60
59	A5	991	A	N3-C4-N9	-5.47	123.02	127.40
59	A5	1614	A	C4-C5-N7	5.47	113.44	110.70
59	A5	2126	A	O5'-P-OP1	5.47	117.26	110.70
59	A5	2699	A	O5'-P-OP1	-5.47	100.78	105.70
59	A5	1169	C	N3-C4-N4	-5.47	114.17	118.00
6	CC	266	LEU	CB-CG-CD2	-5.47	101.71	111.00
58	B2	1199	G	N3-C4-N9	5.47	129.28	126.00
59	A5	58	G	OP1-P-OP2	-5.47	111.40	119.60
59	A5	1127	C	N3-C2-O2	-5.47	118.07	121.90
59	A5	1172	G	N3-C4-C5	-5.47	125.87	128.60
59	A5	1336	U	O5'-P-OP2	-5.47	100.78	105.70
59	A5	2058	C	N3-C2-O2	-5.47	118.07	121.90
59	A5	2798	C	C6-N1-C1'	5.47	127.36	120.80
59	A5	3516	C	N3-C4-N4	-5.47	114.17	118.00
59	A5	3776	A	C2-N3-C4	5.47	113.33	110.60
55	A7	2	C	C2-N1-C1'	5.46	124.81	118.80
59	A5	800	C	N3-C4-N4	5.46	121.83	118.00
59	A5	1155	U	OP2-P-O3'	5.46	117.22	105.20
59	A5	1387	G	C6-C5-N7	-5.46	127.12	130.40
59	A5	1711	C	C6-N1-C2	-5.46	118.11	120.30
59	A5	2152	C	N1-C2-O2	5.46	122.18	118.90
59	A5	2158	U	C5-C6-N1	5.46	125.43	122.70
59	A5	3471	A	N9-C4-C5	-5.46	103.61	105.80
58	B2	463	G	C4-C5-N7	-5.46	108.61	110.80
59	A5	839	A	N1-C2-N3	-5.46	126.57	129.30
59	A5	1596	A	N3-C4-C5	-5.46	122.98	126.80
58	B2	420	U	N1-C2-O2	5.46	126.62	122.80
59	A5	228	C	N1-C2-O2	5.46	122.18	118.90
59	A5	1700	U	C4-C5-C6	-5.46	116.42	119.70
59	A5	3315	U	N3-C2-O2	-5.46	118.38	122.20
59	A5	1198	U	N3-C2-O2	-5.46	118.38	122.20
59	A5	3921	A	C4-C5-C6	-5.46	114.27	117.00
59	A5	389	G	N1-C6-O6	-5.46	116.62	119.90
59	A5	996	C	O4'-C1'-N1	5.46	112.57	108.20
59	A5	1894	G	C4-C5-N7	5.46	112.98	110.80
59	A5	2744	C	N3-C2-O2	-5.46	118.08	121.90
59	A5	3376	C	C5-C4-N4	-5.46	116.38	120.20
59	A5	3741	A	N7-C8-N9	5.46	116.53	113.80
58	B2	1053	A	C6-C5-N7	-5.46	128.48	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	444	C	N1-C2-O2	5.46	122.17	118.90
59	A5	1113	A	N9-C4-C5	5.46	107.98	105.80
59	A5	1180	U	O4'-C1'-N1	-5.46	103.83	108.20
59	A5	1417	G	C4-N9-C1'	5.46	133.59	126.50
59	A5	1621	A	C6-C5-N7	-5.46	128.48	132.30
59	A5	1791	A	N7-C8-N9	5.46	116.53	113.80
59	A5	3763	U	C4-C5-C6	-5.46	116.43	119.70
32	CT	149	ALA	C-N-CA	5.46	135.34	121.70
59	A5	247	C	C4-C5-C6	-5.46	114.67	117.40
56	A8	20	C	C2-N3-C4	5.45	122.63	119.90
59	A5	55	U	C6-N1-C2	-5.45	117.73	121.00
59	A5	1984	U	C6-N1-C2	-5.45	117.73	121.00
59	A5	2649	A	N3-C4-C5	5.45	130.62	126.80
59	A5	3356	G	N3-C4-N9	5.45	129.27	126.00
21	AD	206	LEU	CA-CB-CG	5.45	127.84	115.30
27	CI	91	LEU	C-N-CA	5.45	135.33	121.70
41	Ce	46	ARG	NE-CZ-NH2	5.45	123.03	120.30
59	A5	1613	A	C6-N1-C2	-5.45	115.33	118.60
59	A5	1684	G	OP1-P-O3'	5.45	117.19	105.20
59	A5	2099	C	N3-C2-O2	-5.45	118.08	121.90
59	A5	3525	A	C8-N9-C4	-5.45	103.62	105.80
59	A5	3644	C	C6-N1-C2	-5.45	118.12	120.30
59	A5	3728	A	N9-C4-C5	-5.45	103.62	105.80
59	A5	463	C	C6-N1-C2	-5.45	118.12	120.30
59	A5	799	A	OP2-P-O3'	5.45	117.19	105.20
59	A5	1057	G	C5-C6-O6	-5.45	125.33	128.60
59	A5	1778	A	N3-C4-N9	-5.45	123.04	127.40
59	A5	2251	G	O5'-P-OP2	-5.45	100.80	105.70
59	A5	3619	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	3629	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	3673	G	C5-C6-O6	-5.45	125.33	128.60
59	A5	3776	A	O4'-C1'-N9	-5.45	103.84	108.20
56	A8	49	C	N3-C2-O2	-5.45	118.09	121.90
58	B2	68	C	N1-C2-O2	5.45	122.17	118.90
59	A5	739	U	C6-N1-C1'	-5.45	113.57	121.20
59	A5	1105	U	O5'-P-OP1	-5.45	100.80	105.70
59	A5	1979	A	N1-C6-N6	-5.45	115.33	118.60
59	A5	2220	C	C5-C4-N4	5.45	124.01	120.20
59	A5	2500	G	C8-N9-C4	-5.45	104.22	106.40
59	A5	2561	A	C8-N9-C4	5.45	107.98	105.80
59	A5	2755	G	C6-C5-N7	-5.45	127.13	130.40
59	A5	905	U	N3-C2-O2	-5.45	118.39	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1875	G	N9-C4-C5	-5.45	103.22	105.40
59	A5	2494	G	C2-N3-C4	5.45	114.62	111.90
59	A5	2736	A	C4-C5-C6	-5.45	114.28	117.00
58	B2	1409	A	C8-N9-C4	5.45	107.98	105.80
59	A5	100	G	O5'-P-OP1	-5.45	100.80	105.70
59	A5	240	G	C5-N7-C8	-5.45	101.58	104.30
59	A5	819	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	1208	U	N1-C2-O2	5.45	126.61	122.80
59	A5	1795	A	N1-C6-N6	-5.45	115.33	118.60
59	A5	2042	A	O5'-P-OP2	-5.45	100.80	105.70
59	A5	3294	A	C5-N7-C8	-5.45	101.18	103.90
56	A8	69	G	N1-C6-O6	5.44	123.17	119.90
59	A5	1035	G	O4'-C1'-N9	5.44	112.55	108.20
59	A5	1755	U	C4-C5-C6	-5.44	116.44	119.70
59	A5	2205	G	C4-C5-N7	5.44	112.98	110.80
59	A5	3343	A	C8-N9-C4	5.44	107.98	105.80
59	A5	655	C	N3-C2-O2	-5.44	118.09	121.90
59	A5	790	U	N1-C2-O2	5.44	126.61	122.80
59	A5	1079	U	C2-N1-C1'	-5.44	111.17	117.70
59	A5	1739	U	N1-C2-O2	5.44	126.61	122.80
59	A5	2481	U	N1-C2-O2	5.44	126.61	122.80
59	A5	3239	C	N1-C2-O2	5.44	122.17	118.90
59	A5	3765	A	C6-C5-N7	-5.44	128.49	132.30
25	Ca	116	GLY	N-CA-C	5.44	126.70	113.10
59	A5	105	A	N1-C2-N3	-5.44	126.58	129.30
59	A5	2755	G	N7-C8-N9	5.44	115.82	113.10
59	A5	3244	U	C2-N1-C1'	5.44	124.23	117.70
58	B2	1216	C	N1-C2-O2	5.44	122.16	118.90
58	B2	1344	A	C4-N9-C1'	5.44	136.09	126.30
59	A5	427	A	C5-C6-N1	5.44	120.42	117.70
59	A5	1087	G	C4-C5-C6	-5.44	115.54	118.80
59	A5	1181	A	N1-C2-N3	-5.44	126.58	129.30
59	A5	1326	A	C8-N9-C4	-5.44	103.62	105.80
59	A5	1516	A	C4-C5-C6	-5.44	114.28	117.00
59	A5	1555	G	O5'-P-OP2	-5.44	100.81	105.70
59	A5	1577	A	N1-C6-N6	5.44	121.86	118.60
59	A5	3594	A	C4-C5-N7	5.44	113.42	110.70
59	A5	1163	G	N7-C8-N9	5.44	115.82	113.10
59	A5	2222	G	N7-C8-N9	5.44	115.82	113.10
59	A5	2704	A	C6-C5-N7	-5.44	128.50	132.30
59	A5	3840	G	N3-C2-N2	-5.44	116.09	119.90
58	B2	372	A	C8-N9-C4	5.43	107.97	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1842	U	N1-C2-O2	5.43	126.60	122.80
58	B2	1957	A	C8-N9-C4	-5.43	103.63	105.80
59	A5	448	A	C5-N7-C8	-5.43	101.18	103.90
59	A5	1174	G	C4-N9-C1'	5.43	133.56	126.50
59	A5	1525	G	O5'-P-OP2	-5.43	100.81	105.70
59	A5	2666	G	C4-C5-N7	5.43	112.97	110.80
59	A5	3150	G	C2-N3-C4	5.43	114.62	111.90
56	A8	33	U	N3-C4-O4	5.43	123.20	119.40
58	B2	105	U	N1-C2-O2	5.43	126.60	122.80
59	A5	776	A	C8-N9-C4	-5.43	103.63	105.80
59	A5	1685	G	C4-C5-N7	5.43	112.97	110.80
59	A5	1988	A	C2-N3-C4	5.43	113.32	110.60
59	A5	2037	C	OP2-P-O3'	5.43	117.15	105.20
59	A5	3824	C	O5'-P-OP2	-5.43	100.81	105.70
56	A8	18	C	C4-C5-C6	-5.43	114.68	117.40
59	A5	1075	G	O5'-P-OP2	-5.43	100.81	105.70
59	A5	1604	G	C4-C5-N7	5.43	112.97	110.80
59	A5	2072	C	C5-C6-N1	5.43	123.72	121.00
59	A5	81	A	N1-C6-N6	-5.43	115.34	118.60
59	A5	664	U	C6-N1-C2	-5.43	117.74	121.00
59	A5	1146	U	N1-C2-N3	5.43	118.16	114.90
59	A5	1271	G	C6-C5-N7	-5.43	127.14	130.40
59	A5	1739	U	N3-C2-O2	-5.43	118.40	122.20
59	A5	1804	A	N9-C4-C5	5.43	107.97	105.80
59	A5	3263	C	C2-N1-C1'	5.43	124.77	118.80
59	A5	3303	G	OP1-P-O3'	5.43	117.15	105.20
59	A5	755	A	C4-N9-C1'	5.43	136.07	126.30
55	A7	9	C	C5-C6-N1	5.43	123.71	121.00
59	A5	2195	A	N9-C4-C5	-5.43	103.63	105.80
59	A5	2925	C	N1-C2-O2	5.43	122.16	118.90
59	A5	3721	C	N3-C4-C5	5.43	124.07	121.90
59	A5	620	U	OP2-P-O3'	5.42	117.13	105.20
58	B2	306	A	N7-C8-N9	5.42	116.51	113.80
58	B2	1053	A	C5-N7-C8	-5.42	101.19	103.90
59	A5	992	U	P-O3'-C3'	5.42	126.21	119.70
56	A8	36	A	C4-C5-C6	-5.42	114.29	117.00
56	A8	91	C	C5-C6-N1	5.42	123.71	121.00
58	B2	1921	G	N3-C4-C5	5.42	131.31	128.60
59	A5	375	C	N3-C4-N4	-5.42	114.20	118.00
59	A5	653	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	1031	G	N1-C2-N2	-5.42	111.32	116.20
59	A5	1698	A	OP2-P-O3'	5.42	117.13	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2069	U	N3-C2-O2	-5.42	118.40	122.20
59	A5	2517	A	C5-C6-N6	5.42	128.04	123.70
59	A5	2537	A	N3-C4-C5	5.42	130.59	126.80
59	A5	3802	U	N1-C2-O2	-5.42	119.00	122.80
58	B2	1384	G	N3-C4-N9	-5.42	122.75	126.00
59	A5	462	C	C2-N1-C1'	5.42	124.76	118.80
59	A5	2222	G	C8-N9-C4	-5.42	104.23	106.40
59	A5	3519	C	C4-C5-C6	-5.42	114.69	117.40
58	B2	112	U	O4'-C1'-N1	5.42	112.53	108.20
59	A5	997	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	1009	G	C2-N3-C4	5.42	114.61	111.90
59	A5	1111	C	N1-C2-N3	5.42	122.99	119.20
59	A5	2209	G	C8-N9-C4	5.42	108.57	106.40
59	A5	2497	C	C5-C6-N1	5.42	123.71	121.00
59	A5	2782	A	N9-C4-C5	5.42	107.97	105.80
59	A5	3322	A	C5-C6-N1	5.42	120.41	117.70
59	A5	3512	U	OP2-P-O3'	5.42	117.12	105.20
55	A7	67	G	N7-C8-N9	5.42	115.81	113.10
56	A8	5	C	N3-C4-C5	-5.42	119.73	121.90
58	B2	1167	U	C2-N1-C1'	5.42	124.20	117.70
58	B2	1222	C	C5-C6-N1	5.42	123.71	121.00
58	B2	1361	C	C6-N1-C1'	-5.42	114.30	120.80
59	A5	116	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	235	A	C5-N7-C8	-5.42	101.19	103.90
59	A5	1058	A	O5'-P-OP1	-5.42	100.83	105.70
59	A5	1528	G	N9-C4-C5	-5.42	103.23	105.40
59	A5	1752	G	C2-N3-C4	5.42	114.61	111.90
59	A5	2168	G	N1-C2-N3	5.42	127.15	123.90
59	A5	2531	A	O5'-P-OP1	-5.42	100.83	105.70
59	A5	3353	C	N3-C2-O2	-5.42	118.11	121.90
59	A5	1343	A	N9-C4-C5	-5.42	103.63	105.80
59	A5	3393	U	C2-N3-C4	5.42	130.25	127.00
56	A8	42	A	C8-N9-C4	5.41	107.97	105.80
59	A5	355	G	N3-C4-C5	-5.41	125.89	128.60
59	A5	776	A	C5-C6-N6	5.41	128.03	123.70
59	A5	818	A	OP2-P-O3'	5.41	117.11	105.20
59	A5	1145	C	C2-N1-C1'	-5.41	112.84	118.80
59	A5	1867	A	C6-C5-N7	5.41	136.09	132.30
58	B2	1921	G	N3-C4-N9	-5.41	122.75	126.00
59	A5	1323	C	C4-C5-C6	-5.41	114.69	117.40
59	A5	2004	G	N9-C4-C5	-5.41	103.23	105.40
58	B2	1225	A	N9-C4-C5	-5.41	103.64	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1600	U	C5-C4-O4	-5.41	122.65	125.90
59	A5	1671	U	OP1-P-OP2	-5.41	111.48	119.60
59	A5	3770	A	C4-N9-C1'	5.41	136.04	126.30
59	A5	3958	C	C6-N1-C2	-5.41	118.14	120.30
56	A8	67	G	C5-C6-O6	5.41	131.84	128.60
59	A5	54	U	N1-C2-O2	5.41	126.59	122.80
59	A5	1032	G	C5-C6-N1	5.41	114.20	111.50
59	A5	1320	U	C4-C5-C6	-5.41	116.45	119.70
59	A5	1730	A	C5-C6-N1	5.41	120.40	117.70
59	A5	2154	A	C2-N3-C4	-5.41	107.90	110.60
59	A5	3596	A	C2-N3-C4	-5.41	107.90	110.60
59	A5	2149	G	N3-C4-C5	-5.41	125.90	128.60
59	A5	2241	U	C5-C6-N1	5.41	125.40	122.70
59	A5	3730	G	C4-C5-C6	5.41	122.04	118.80
59	A5	3872	C	N3-C2-O2	-5.41	118.11	121.90
56	A8	57	G	C2-N3-C4	5.41	114.60	111.90
58	B2	991	G	O5'-P-OP2	-5.41	100.83	105.70
58	B2	1686	C	N1-C2-O2	5.41	122.14	118.90
58	B2	1924	C	N3-C2-O2	-5.41	118.12	121.90
59	A5	359	G	C5-C6-O6	5.41	131.84	128.60
59	A5	817	C	N3-C2-O2	-5.41	118.12	121.90
59	A5	1615	G	N3-C4-C5	5.41	131.30	128.60
58	B2	1191	C	C5-C4-N4	5.40	123.98	120.20
59	A5	1024	U	N3-C2-O2	-5.40	118.42	122.20
59	A5	2054	U	N1-C2-N3	5.40	118.14	114.90
59	A5	3473	C	C5-C6-N1	5.40	123.70	121.00
58	B2	939	G	C4-N9-C1'	5.40	133.52	126.50
58	B2	1024	C	O5'-P-OP1	-5.40	100.84	105.70
58	B2	1234	G	C5-C6-N1	5.40	114.20	111.50
59	A5	1068	C	C4-C5-C6	-5.40	114.70	117.40
59	A5	1268	A	C5-C6-N6	5.40	128.02	123.70
59	A5	2723	A	C5-C6-N6	-5.40	119.38	123.70
59	A5	3519	C	OP1-P-OP2	-5.40	111.50	119.60
56	A8	20	C	C6-N1-C2	-5.40	118.14	120.30
58	B2	1406	A	C8-N9-C4	-5.40	103.64	105.80
59	A5	664	U	O5'-P-OP2	-5.40	100.84	105.70
59	A5	1076	A	C6-C5-N7	-5.40	128.52	132.30
59	A5	1137	G	C6-N1-C2	-5.40	121.86	125.10
59	A5	2161	G	N3-C4-N9	-5.40	122.76	126.00
59	A5	2558	A	C5-C6-N6	-5.40	119.38	123.70
59	A5	3567	A	P-O3'-C3'	5.40	126.18	119.70
59	A5	3894	C	C2-N1-C1'	5.40	124.74	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	948	A	P-O3'-C3'	5.40	126.18	119.70
59	A5	866	C	C6-N1-C1'	-5.40	114.32	120.80
59	A5	1865	U	C5-C6-N1	5.40	125.40	122.70
59	A5	2248	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3493	U	C4-C5-C6	-5.40	116.46	119.70
59	A5	3593	A	P-O3'-C3'	5.40	126.18	119.70
56	A8	92	G	N3-C4-N9	5.40	129.24	126.00
58	B2	1414	C	N3-C2-O2	-5.40	118.12	121.90
59	A5	130	C	P-O3'-C3'	5.40	126.18	119.70
59	A5	322	G	N1-C2-N2	5.40	121.06	116.20
59	A5	2521	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	2669	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3489	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3142	G	N3-C4-N9	5.40	129.24	126.00
59	A5	3348	G	C5-N7-C8	5.40	107.00	104.30
27	CI	107	GLY	N-CA-C	5.39	126.59	113.10
58	B2	314	C	N1-C2-O2	5.39	122.14	118.90
58	B2	1450	U	N1-C2-O2	5.39	126.58	122.80
59	A5	53	A	C5-N7-C8	-5.39	101.20	103.90
59	A5	851	G	N3-C4-N9	5.39	129.24	126.00
59	A5	1748	C	N3-C2-O2	-5.39	118.12	121.90
59	A5	2754	G	C8-N9-C4	-5.39	104.24	106.40
59	A5	3214	C	N1-C2-O2	5.39	122.14	118.90
59	A5	3606	G	C5-C6-N1	5.39	114.20	111.50
58	B2	994	A	N1-C6-N6	-5.39	115.36	118.60
59	A5	26	G	C4-C5-C6	5.39	122.04	118.80
59	A5	404	U	N3-C2-O2	-5.39	118.43	122.20
59	A5	1160	U	C1'-O4'-C4'	-5.39	105.59	109.90
59	A5	2164	G	N1-C6-O6	5.39	123.14	119.90
59	A5	2515	C	N3-C4-N4	-5.39	114.23	118.00
58	B2	1198	G	N1-C6-O6	-5.39	116.67	119.90
59	A5	105	A	C6-N1-C2	5.39	121.83	118.60
59	A5	388	U	N3-C2-O2	-5.39	118.43	122.20
59	A5	1064	G	O5'-P-OP2	5.39	117.17	110.70
59	A5	1199	C	O5'-P-OP1	-5.39	100.85	105.70
59	A5	2723	A	O5'-P-OP1	5.39	117.17	110.70
59	A5	1334	A	C6-N1-C2	-5.39	115.37	118.60
59	A5	2658	A	C6-C5-N7	5.39	136.07	132.30
59	A5	3164	C	OP1-P-O3'	5.39	117.05	105.20
59	A5	3316	U	N3-C2-O2	-5.39	118.43	122.20
3	AB	234	LEU	CA-CB-CG	5.39	127.69	115.30
59	A5	675	C	C5-C6-N1	5.39	123.69	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1121	A	N1-C6-N6	-5.39	115.37	118.60
59	A5	1972	C	C2-N1-C1'	-5.39	112.88	118.80
59	A5	2237	A	C4-C5-N7	5.39	113.39	110.70
59	A5	3164	C	C2-N3-C4	5.39	122.59	119.90
41	Ce	15	ARG	CG-CD-NE	5.38	123.11	111.80
58	B2	1199	G	C5-C6-N1	5.38	114.19	111.50
58	B2	1933	U	C5-C6-N1	5.38	125.39	122.70
59	A5	120	C	C6-N1-C1'	-5.38	114.34	120.80
59	A5	810	A	N3-C4-C5	5.38	130.57	126.80
59	A5	826	A	C4-N9-C1'	5.38	135.99	126.30
59	A5	1113	A	N7-C8-N9	5.38	116.49	113.80
59	A5	1660	G	OP1-P-O3'	5.38	117.05	105.20
59	A5	1660	G	N1-C6-O6	-5.38	116.67	119.90
59	A5	3347	G	N3-C2-N2	5.38	123.67	119.90
59	A5	3912	U	C2-N1-C1'	5.38	124.16	117.70
26	CN	164	LEU	CB-CG-CD1	-5.38	101.85	111.00
59	A5	108	A	N3-C4-C5	5.38	130.57	126.80
59	A5	3253	G	N7-C8-N9	5.38	115.79	113.10
59	A5	3404	A	OP2-P-O3'	5.38	117.04	105.20
58	B2	717	C	N1-C2-O2	5.38	122.13	118.90
58	B2	1036	C	C6-N1-C2	-5.38	118.15	120.30
58	B2	1227	A	C4-C5-C6	-5.38	114.31	117.00
59	A5	980	A	N1-C6-N6	-5.38	115.37	118.60
59	A5	1797	A	N9-C1'-C2'	5.38	121.00	114.00
59	A5	3406	G	N7-C8-N9	5.38	115.79	113.10
59	A5	369	A	N3-C4-C5	5.38	130.57	126.80
59	A5	1094	A	C8-N9-C4	5.38	107.95	105.80
59	A5	1527	C	N3-C4-C5	5.38	124.05	121.90
59	A5	1616	G	C2-N3-C4	-5.38	109.21	111.90
59	A5	3478	G	N3-C4-N9	5.38	129.23	126.00
58	B2	1024	C	C5-C6-N1	5.38	123.69	121.00
58	B2	1752	U	C6-N1-C1'	-5.38	113.67	121.20
59	A5	1611	G	C6-C5-N7	5.38	133.63	130.40
59	A5	2148	C	C4-C5-C6	-5.38	114.71	117.40
59	A5	3322	A	N1-C6-N6	-5.38	115.37	118.60
55	A7	91	C	N3-C4-N4	-5.38	114.24	118.00
59	A5	1150	G	O5'-P-OP1	-5.38	100.86	105.70
59	A5	2150	U	C6-N1-C2	-5.38	117.78	121.00
59	A5	2159	C	N1-C2-O2	5.38	122.13	118.90
59	A5	2735	A	O5'-P-OP1	-5.38	100.86	105.70
59	A5	2785	C	N3-C2-O2	-5.38	118.14	121.90
59	A5	3343	A	C5-N7-C8	-5.38	101.21	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	836	G	N7-C8-N9	5.38	115.79	113.10
59	A5	1163	G	C5-N7-C8	-5.38	101.61	104.30
59	A5	2584	G	C8-N9-C4	-5.38	104.25	106.40
59	A5	2652	U	N1-C2-O2	5.38	126.56	122.80
59	A5	3520	U	N1-C2-O2	5.38	126.56	122.80
58	B2	950	U	N1-C2-O2	5.37	126.56	122.80
59	A5	233	A	C5-C6-N1	5.37	120.39	117.70
59	A5	245	G	N1-C6-O6	5.37	123.12	119.90
59	A5	1641	U	C2-N3-C4	-5.37	123.78	127.00
59	A5	2715	C	C5-C4-N4	5.37	123.96	120.20
59	A5	3145	U	C2-N1-C1'	5.37	124.15	117.70
59	A5	3152	G	C5-C6-N1	5.37	114.19	111.50
59	A5	3326	G	C6-C5-N7	-5.37	127.18	130.40
59	A5	3597	C	N1-C2-O2	5.37	122.12	118.90
58	B2	448	C	C2-N1-C1'	5.37	124.71	118.80
58	B2	632	G	C6-C5-N7	-5.37	127.18	130.40
59	A5	435	G	N1-C2-N2	-5.37	111.36	116.20
59	A5	1536	U	O5'-P-OP2	-5.37	100.86	105.70
59	A5	3288	C	C6-N1-C2	-5.37	118.15	120.30
59	A5	1675	G	C2-N3-C4	5.37	114.58	111.90
59	A5	1872	A	C2-N3-C4	-5.37	107.92	110.60
59	A5	83	U	C6-N1-C2	-5.37	117.78	121.00
59	A5	1068	C	C2-N3-C4	5.37	122.58	119.90
59	A5	1351	C	C5-C6-N1	5.37	123.68	121.00
58	B2	1607	U	N3-C2-O2	-5.37	118.44	122.20
59	A5	3517	U	O5'-P-OP1	-5.37	100.87	105.70
59	A5	542	C	C6-N1-C1'	5.37	127.24	120.80
59	A5	1052	U	N3-C2-O2	-5.37	118.44	122.20
59	A5	2260	U	N1-C2-O2	5.37	126.56	122.80
59	A5	2516	U	N3-C4-O4	-5.37	115.64	119.40
59	A5	2760	G	C8-N9-C1'	5.37	133.97	127.00
59	A5	3938	C	N3-C4-C5	-5.37	119.75	121.90
58	B2	1079	A	N7-C8-N9	5.36	116.48	113.80
58	B2	1874	C	N3-C4-C5	5.36	124.05	121.90
59	A5	38	A	C8-N9-C4	5.36	107.94	105.80
59	A5	1086	C	N1-C2-O2	5.36	122.12	118.90
59	A5	2741	A	N1-C6-N6	-5.36	115.38	118.60
59	A5	2762	A	C4-C5-C6	-5.36	114.32	117.00
59	A5	3139	G	C8-N9-C4	5.36	108.55	106.40
59	A5	3488	G	N1-C6-O6	5.36	123.12	119.90
59	A5	3759	G	C6-C5-N7	5.36	133.62	130.40
59	A5	240	G	C4-C5-N7	5.36	112.94	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2506	U	N1-C2-O2	5.36	126.55	122.80
59	A5	3887	U	C4-C5-C6	-5.36	116.48	119.70
58	B2	1283	C	N1-C2-O2	5.36	122.12	118.90
59	A5	316	U	N1-C2-O2	5.36	126.55	122.80
59	A5	1017	A	N7-C8-N9	5.36	116.48	113.80
59	A5	1062	C	N3-C2-O2	-5.36	118.15	121.90
59	A5	1111	C	N3-C2-O2	-5.36	118.15	121.90
59	A5	3131	C	N3-C2-O2	-5.36	118.15	121.90
58	B2	1976	A	N1-C6-N6	-5.36	115.39	118.60
59	A5	108	A	C2-N3-C4	-5.36	107.92	110.60
59	A5	855	A	C6-C5-N7	5.36	136.05	132.30
59	A5	1285	C	C6-N1-C2	-5.36	118.16	120.30
59	A5	2211	A	C5-C6-N6	-5.36	119.41	123.70
59	A5	2692	U	C2-N1-C1'	5.36	124.13	117.70
59	A5	3410	G	N1-C6-O6	-5.36	116.69	119.90
64	AQ	129	CYS	C-N-CA	5.36	135.09	121.70
58	B2	1257	G	C6-C5-N7	-5.36	127.19	130.40
59	A5	1137	G	N9-C4-C5	5.36	107.54	105.40
59	A5	1167	A	N1-C6-N6	-5.36	115.39	118.60
59	A5	1790	A	O5'-P-OP2	-5.36	100.88	105.70
59	A5	2658	A	N3-C4-C5	5.36	130.55	126.80
59	A5	3892	A	C2-N3-C4	5.36	113.28	110.60
59	A5	780	U	C5-C6-N1	5.35	125.38	122.70
59	A5	1335	C	N3-C4-C5	5.35	124.04	121.90
59	A5	2759	G	C5-C6-O6	-5.35	125.39	128.60
59	A5	3729	A	N3-C4-N9	-5.35	123.12	127.40
4	CB	325	GLU	CA-CB-CG	5.35	125.18	113.40
59	A5	560	U	N3-C2-O2	-5.35	118.45	122.20
59	A5	855	A	C4-C5-C6	-5.35	114.32	117.00
59	A5	1099	U	N3-C4-O4	-5.35	115.65	119.40
59	A5	1126	A	C8-N9-C4	-5.35	103.66	105.80
59	A5	1160	U	N3-C2-O2	-5.35	118.45	122.20
59	A5	2085	G	C4-N9-C1'	-5.35	119.54	126.50
59	A5	2599	G	C6-C5-N7	5.35	133.61	130.40
58	B2	299	C	C5-C6-N1	5.35	123.68	121.00
59	A5	3881	A	C5-N7-C8	-5.35	101.22	103.90
59	A5	1182	A	C5-C6-N1	5.35	120.38	117.70
59	A5	1892	C	C2-N1-C1'	5.35	124.68	118.80
59	A5	2772	G	N1-C2-N2	5.35	121.01	116.20
59	A5	3326	G	C4-C5-N7	5.35	112.94	110.80
55	A7	79	U	N1-C2-N3	5.35	118.11	114.90
59	A5	125	A	C5-C6-N6	-5.35	119.42	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	920	G	C4-C5-N7	5.35	112.94	110.80
59	A5	1012	G	N7-C8-N9	5.35	115.77	113.10
59	A5	2137	U	N1-C2-O2	-5.35	119.06	122.80
59	A5	2514	U	C4-C5-C6	-5.35	116.49	119.70
59	A5	2785	C	N1-C2-N3	5.35	122.94	119.20
59	A5	3257	U	OP2-P-O3'	5.35	116.96	105.20
41	Ce	53	LEU	C-N-CA	5.35	135.06	121.70
55	A7	119	C	C6-N1-C2	-5.35	118.16	120.30
59	A5	654	G	O4'-C1'-N9	5.35	112.48	108.20
59	A5	825	C	C2-N3-C4	5.35	122.57	119.90
59	A5	2038	A	N1-C2-N3	-5.35	126.63	129.30
59	A5	3891	U	P-O3'-C3'	5.35	126.11	119.70
58	B2	422	A	P-O3'-C3'	5.34	126.11	119.70
59	A5	1053	G	N9-C4-C5	-5.34	103.26	105.40
59	A5	1217	U	N1-C2-O2	5.34	126.54	122.80
59	A5	2574	C	O5'-P-OP1	-5.34	100.89	105.70
59	A5	2646	U	C5-C6-N1	5.34	125.37	122.70
59	A5	3883	G	OP1-P-O3'	5.34	116.96	105.20
59	A5	44	A	N7-C8-N9	-5.34	111.13	113.80
59	A5	1484	U	N1-C2-O2	5.34	126.54	122.80
59	A5	1603	A	C4-C5-N7	5.34	113.37	110.70
59	A5	1790	A	C4-C5-C6	-5.34	114.33	117.00
58	B2	336	A	N1-C6-N6	-5.34	115.39	118.60
58	B2	958	G	C8-N9-C1'	-5.34	120.06	127.00
58	B2	1207	G	OP1-P-O3'	5.34	116.95	105.20
58	B2	1223	U	C2-N1-C1'	5.34	124.11	117.70
59	A5	1125	A	N9-C4-C5	-5.34	103.66	105.80
59	A5	2479	A	C2-N3-C4	5.34	113.27	110.60
59	A5	2661	G	C8-N9-C4	-5.34	104.26	106.40
59	A5	3376	C	C6-N1-C2	-5.34	118.16	120.30
6	CC	78	ARG	CG-CD-NE	5.34	123.01	111.80
58	B2	638	A	C2-N3-C4	5.34	113.27	110.60
59	A5	204	G	C6-C5-N7	-5.34	127.20	130.40
59	A5	859	A	OP1-P-O3'	5.34	116.95	105.20
59	A5	1129	A	C2-N3-C4	5.34	113.27	110.60
59	A5	1325	C	C2-N3-C4	5.34	122.57	119.90
59	A5	1400	A	N9-C4-C5	-5.34	103.66	105.80
59	A5	1607	A	N3-C4-C5	-5.34	123.06	126.80
59	A5	2178	U	N3-C4-C5	5.34	117.80	114.60
59	A5	3660	U	C5-C6-N1	5.34	125.37	122.70
59	A5	3877	G	C6-C5-N7	5.34	133.60	130.40
58	B2	819	G	C5-C6-O6	-5.34	125.40	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	828	G	N3-C4-N9	5.34	129.20	126.00
59	A5	1083	A	OP1-P-O3'	5.34	116.94	105.20
59	A5	1124	G	C2-N3-C4	-5.34	109.23	111.90
59	A5	1359	G	N3-C2-N2	-5.34	116.17	119.90
59	A5	1795	A	P-O3'-C3'	5.34	126.10	119.70
59	A5	2244	G	C4-C5-N7	5.34	112.93	110.80
59	A5	3167	A	N1-C2-N3	-5.34	126.63	129.30
59	A5	3518	A	C5-C6-N6	5.34	127.97	123.70
59	A5	3655	U	N1-C2-N3	5.34	118.10	114.90
59	A5	3723	A	C2-N3-C4	5.34	113.27	110.60
59	A5	102	G	C8-N9-C4	-5.33	104.27	106.40
59	A5	810	A	N7-C8-N9	5.33	116.47	113.80
59	A5	3346	G	C6-N1-C2	-5.33	121.90	125.10
58	B2	1247	C	C6-N1-C2	-5.33	118.17	120.30
58	B2	1954	C	N1-C2-O2	5.33	122.10	118.90
59	A5	357	C	C4-C5-C6	-5.33	114.73	117.40
59	A5	1141	G	C4-N9-C1'	5.33	133.43	126.50
59	A5	2546	G	C5-C6-N1	5.33	114.17	111.50
59	A5	2780	A	N1-C2-N3	-5.33	126.63	129.30
58	B2	1245	A	N1-C6-N6	-5.33	115.40	118.60
59	A5	1009	G	C4-C5-N7	5.33	112.93	110.80
59	A5	1317	A	N7-C8-N9	5.33	116.47	113.80
59	A5	1410	A	N1-C6-N6	-5.33	115.40	118.60
59	A5	1603	A	O5'-P-OP1	-5.33	100.90	105.70
59	A5	2785	C	C5-C6-N1	5.33	123.67	121.00
56	A8	30	G	OP1-P-OP2	5.33	127.59	119.60
59	A5	23	U	C5-C4-O4	5.33	129.10	125.90
59	A5	2239	C	C5-C6-N1	5.33	123.67	121.00
59	A5	2513	G	C5-C6-O6	5.33	131.80	128.60
59	A5	3363	G	C6-C5-N7	-5.33	127.20	130.40
59	A5	3608	G	C4-C5-C6	5.33	122.00	118.80
59	A5	3758	G	N9-C4-C5	-5.33	103.27	105.40
41	Ce	46	ARG	NE-CZ-NH1	-5.33	117.64	120.30
59	A5	1054	A	C2-N3-C4	-5.33	107.94	110.60
59	A5	1329	G	N1-C2-N2	5.33	121.00	116.20
59	A5	1382	U	C5'-C4'-C3'	5.33	124.53	116.00
59	A5	2567	U	OP1-P-OP2	-5.33	111.61	119.60
59	A5	3547	U	C5-C4-O4	5.33	129.10	125.90
59	A5	448	A	N1-C2-N3	-5.33	126.64	129.30
59	A5	2041	G	C8-N9-C4	5.33	108.53	106.40
58	B2	249	U	O4'-C1'-N1	5.33	112.46	108.20
59	A5	767	A	C2-N3-C4	-5.33	107.94	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	864	G	C8-N9-C4	-5.33	104.27	106.40
59	A5	1534	G	N3-C4-C5	-5.33	125.94	128.60
59	A5	1967	G	N3-C4-C5	5.33	131.26	128.60
59	A5	2162	C	N3-C4-N4	-5.33	114.27	118.00
59	A5	2198	G	C8-N9-C1'	-5.33	120.08	127.00
59	A5	2521	A	N3-C4-C5	5.33	130.53	126.80
59	A5	2620	C	N3-C2-O2	-5.33	118.17	121.90
59	A5	3000	G	C8-N9-C1'	-5.33	120.08	127.00
59	A5	311	C	C4-C5-C6	-5.32	114.74	117.40
59	A5	1169	C	N1-C2-O2	5.32	122.09	118.90
59	A5	1736	G	N1-C6-O6	-5.32	116.71	119.90
59	A5	3349	A	OP2-P-O3'	5.32	116.91	105.20
59	A5	3919	G	N9-C4-C5	-5.32	103.27	105.40
59	A5	2155	A	C4-N9-C1'	5.32	135.88	126.30
58	B2	591	C	C2-N1-C1'	5.32	124.65	118.80
59	A5	103	A	C5-N7-C8	-5.32	101.24	103.90
59	A5	130	C	C5-C6-N1	5.32	123.66	121.00
59	A5	1295	A	O5'-P-OP2	5.32	117.08	110.70
59	A5	1386	U	C5-C6-N1	5.32	125.36	122.70
59	A5	1616	G	N1-C2-N2	-5.32	111.41	116.20
59	A5	2194	G	N1-C2-N2	5.32	120.99	116.20
59	A5	2550	G	OP1-P-OP2	5.32	127.58	119.60
59	A5	3675	A	N7-C8-N9	5.32	116.46	113.80
59	A5	3677	U	C3'-C2'-C1'	-5.32	97.24	101.50
54	A9	6	G	C6-C5-N7	-5.32	127.21	130.40
59	A5	1288	U	O4'-C1'-N1	-5.32	103.94	108.20
58	B2	31	C	N3-C2-O2	-5.32	118.18	121.90
59	A5	2009	A	C5-C6-N1	5.32	120.36	117.70
59	A5	2525	C	N3-C2-O2	-5.32	118.18	121.90
59	A5	2573	C	C5-C6-N1	5.32	123.66	121.00
59	A5	3327	U	C6-N1-C2	-5.32	117.81	121.00
59	A5	3616	G	C4-C5-N7	5.32	112.93	110.80
41	Ce	47	ARG	NE-CZ-NH1	5.32	122.96	120.30
56	A8	103	C	P-O5'-C5'	5.32	129.40	120.90
59	A5	915	C	C5-C6-N1	5.32	123.66	121.00
59	A5	1131	C	OP1-P-O3'	5.32	116.89	105.20
59	A5	1888	A	C4-N9-C1'	5.32	135.87	126.30
59	A5	3143	U	C5-C4-O4	-5.32	122.71	125.90
59	A5	3883	G	C8-N9-C1'	-5.31	120.09	127.00
58	B2	1199	G	N9-C4-C5	-5.31	103.28	105.40
59	A5	32	C	C2-N3-C4	5.31	122.56	119.90
59	A5	819	U	C5-C6-N1	5.31	125.36	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1543	C	N1-C2-N3	5.31	122.92	119.20
59	A5	2586	A	C8-N9-C4	-5.31	103.67	105.80
59	A5	3293	G	N3-C4-N9	5.31	129.19	126.00
59	A5	103	A	N1-C2-N3	-5.31	126.64	129.30
59	A5	3602	U	N3-C2-O2	-5.31	118.48	122.20
41	Ce	45	ARG	CG-CD-NE	5.31	122.95	111.80
58	B2	1147	U	C2-N1-C1'	5.31	124.07	117.70
58	B2	1864	G	C8-N9-C4	-5.31	104.28	106.40
59	A5	342	A	C5-N7-C8	-5.31	101.25	103.90
59	A5	1607	A	C2-N3-C4	5.31	113.25	110.60
59	A5	282	A	C2-N3-C4	5.31	113.25	110.60
59	A5	1620	A	N1-C6-N6	-5.31	115.42	118.60
59	A5	1675	G	O5'-P-OP2	-5.31	100.92	105.70
59	A5	1884	U	C6-N1-C2	-5.31	117.81	121.00
59	A5	1890	U	C5-C6-N1	-5.31	120.05	122.70
59	A5	2084	U	N1-C2-O2	5.31	126.52	122.80
59	A5	2520	U	OP2-P-O3'	5.31	116.88	105.20
59	A5	3446	G	C8-N9-C1'	-5.31	120.10	127.00
59	A5	3466	A	C2-N3-C4	5.31	113.25	110.60
58	B2	398	C	C6-N1-C2	-5.31	118.18	120.30
58	B2	464	G	C8-N9-C4	5.31	108.52	106.40
59	A5	3838	A	N1-C6-N6	5.31	121.78	118.60
59	A5	318	G	N9-C4-C5	5.30	107.52	105.40
59	A5	621	A	C8-N9-C4	-5.30	103.68	105.80
59	A5	760	G	C8-N9-C1'	-5.30	120.10	127.00
59	A5	1122	U	O4'-C1'-N1	5.30	112.44	108.20
59	A5	1140	G	N1-C6-O6	5.30	123.08	119.90
59	A5	1976	G	N3-C4-C5	5.30	131.25	128.60
59	A5	2550	G	C8-N9-C4	5.30	108.52	106.40
59	A5	2573	C	N3-C4-N4	5.30	121.71	118.00
59	A5	3413	C	OP1-P-OP2	5.30	127.56	119.60
59	A5	3617	U	N3-C2-O2	-5.30	118.49	122.20
59	A5	2779	A	N3-C4-C5	5.30	130.51	126.80
55	A7	13	A	C4-C5-N7	5.30	113.35	110.70
59	A5	823	U	C5-C6-N1	5.30	125.35	122.70
59	A5	3517	U	N1-C2-O2	5.30	126.51	122.80
2	CA	75	LEU	CB-CG-CD2	-5.30	101.99	111.00
56	A8	108	A	OP1-P-O3'	5.30	116.86	105.20
58	B2	1594	A	C4-N9-C1'	5.30	135.84	126.30
59	A5	63	G	C5-C6-N1	5.30	114.15	111.50
59	A5	747	U	C5-C6-N1	5.30	125.35	122.70
59	A5	1348	G	N9-C4-C5	5.30	107.52	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1713	U	O4'-C1'-N1	5.30	112.44	108.20
59	A5	3930	A	C6-C5-N7	5.30	136.01	132.30
41	Ce	7	TYR	CA-CB-CG	5.30	123.47	113.40
58	B2	1361	C	N3-C2-O2	-5.30	118.19	121.90
59	A5	150	U	C5-C6-N1	5.30	125.35	122.70
59	A5	1049	C	C5-C6-N1	5.30	123.65	121.00
59	A5	1971	C	C5-C6-N1	5.30	123.65	121.00
41	Ce	38	LYS	CD-CE-NZ	-5.30	99.52	111.70
59	A5	783	G	C5-C6-O6	-5.30	125.42	128.60
59	A5	1797	A	N1-C2-N3	-5.30	126.65	129.30
59	A5	237	G	C4-C5-N7	5.29	112.92	110.80
59	A5	300	A	N3-C4-C5	-5.29	123.09	126.80
59	A5	779	U	N1-C2-O2	5.29	126.50	122.80
59	A5	2540	G	N1-C6-O6	-5.29	116.72	119.90
59	A5	2743	C	OP2-P-O3'	5.29	116.85	105.20
59	A5	3171	A	C5-C6-N6	5.29	127.94	123.70
59	A5	3447	U	C4-C5-C6	-5.29	116.52	119.70
6	CC	72	THR	C-N-CA	5.29	133.41	122.30
59	A5	1003	C	C5-C4-N4	5.29	123.90	120.20
59	A5	1065	A	N1-C6-N6	-5.29	115.42	118.60
59	A5	1738	U	C6-N1-C2	-5.29	117.83	121.00
59	A5	1975	C	C2-N3-C4	5.29	122.55	119.90
59	A5	3343	A	N9-C4-C5	-5.29	103.68	105.80
59	A5	3758	G	C8-N9-C1'	-5.29	120.12	127.00
58	B2	413	C	C6-N1-C2	-5.29	118.18	120.30
59	A5	981	C	N1-C2-O2	5.29	122.07	118.90
58	B2	1985	A	C4-C5-N7	5.29	113.34	110.70
59	A5	871	A	O5'-P-OP2	5.29	117.05	110.70
59	A5	1323	C	OP2-P-O3'	5.29	116.83	105.20
59	A5	1722	U	N3-C2-O2	-5.29	118.50	122.20
59	A5	2225	A	O5'-P-OP2	-5.29	100.94	105.70
59	A5	3285	G	N3-C2-N2	5.29	123.60	119.90
58	B2	1414	C	C5-C6-N1	5.29	123.64	121.00
59	A5	1077	C	N1-C2-N3	5.29	122.90	119.20
59	A5	1872	A	P-O3'-C3'	5.29	126.04	119.70
59	A5	2116	U	N3-C2-O2	-5.29	118.50	122.20
59	A5	2170	C	N3-C4-N4	-5.29	114.30	118.00
59	A5	2743	C	C4-C5-C6	-5.29	114.76	117.40
59	A5	2754	G	N3-C2-N2	5.29	123.60	119.90
59	A5	2787	U	N3-C4-O4	5.29	123.10	119.40
59	A5	3453	U	OP2-P-O3'	5.29	116.83	105.20
28	CD	188	LYS	C-N-CA	5.28	134.91	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	26	U	C5-C4-O4	-5.28	122.73	125.90
58	B2	1815	C	C6-N1-C2	-5.28	118.19	120.30
59	A5	1026	G	O5'-P-OP2	-5.28	100.94	105.70
59	A5	1260	A	N9-C4-C5	5.28	107.91	105.80
59	A5	1338	U	N3-C2-O2	-5.28	118.50	122.20
59	A5	2097	U	N3-C4-O4	5.28	123.10	119.40
59	A5	2760	G	C4-C5-N7	-5.28	108.69	110.80
59	A5	3297	C	N3-C2-O2	-5.28	118.20	121.90
59	A5	830	U	C6-N1-C1'	5.28	128.59	121.20
59	A5	1413	C	C6-N1-C2	-5.28	118.19	120.30
59	A5	1675	G	C4-C5-C6	5.28	121.97	118.80
59	A5	1715	G	N1-C6-O6	5.28	123.07	119.90
59	A5	423	U	C5-C6-N1	5.28	125.34	122.70
59	A5	435	G	N1-C6-O6	-5.28	116.73	119.90
59	A5	1120	A	N1-C2-N3	-5.28	126.66	129.30
59	A5	1331	G	C5-N7-C8	-5.28	101.66	104.30
59	A5	3763	U	C2-N3-C4	5.28	130.17	127.00
58	B2	362	G	C4-C5-N7	5.28	112.91	110.80
58	B2	461	G	C4-C5-N7	5.28	112.91	110.80
59	A5	808	G	C8-N9-C1'	-5.28	120.14	127.00
59	A5	1318	A	N9-C4-C5	-5.28	103.69	105.80
55	A7	36	C	C6-N1-C2	-5.28	118.19	120.30
58	B2	381	C	C5-C6-N1	5.28	123.64	121.00
59	A5	93	G	C2-N3-C4	5.28	114.54	111.90
59	A5	462	C	N3-C2-O2	-5.28	118.21	121.90
59	A5	921	C	O5'-P-OP2	-5.28	100.95	105.70
59	A5	1102	G	C6-N1-C2	-5.28	121.93	125.10
59	A5	1609	U	OP2-P-O3'	5.28	116.81	105.20
59	A5	1695	A	N9-C4-C5	-5.28	103.69	105.80
59	A5	2549	G	N3-C2-N2	-5.28	116.20	119.90
59	A5	2702	A	O5'-P-OP2	-5.28	100.95	105.70
59	A5	3236	A	C6-C5-N7	-5.28	128.61	132.30
59	A5	3404	A	C4-C5-N7	5.28	113.34	110.70
34	CX	223	LEU	CA-CB-CG	5.28	127.43	115.30
54	A9	21	G	P-O3'-C3'	5.28	126.03	119.70
56	A8	32	G	N9-C4-C5	-5.28	103.29	105.40
58	B2	1128	C	O4'-C1'-N1	5.28	112.42	108.20
59	A5	1352	U	N1-C2-N3	-5.28	111.73	114.90
59	A5	1702	G	N1-C2-N2	5.28	120.95	116.20
59	A5	3478	G	N9-C4-C5	5.28	107.51	105.40
59	A5	3488	G	N3-C2-N2	-5.28	116.21	119.90
58	B2	1201	A	C2-N3-C4	-5.27	107.96	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2110	A	C4-C5-N7	5.27	113.34	110.70
58	B2	171	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	163	A	C6-C5-N7	5.27	135.99	132.30
58	B2	1978	C	C2-N1-C1'	5.27	124.60	118.80
59	A5	820	A	N9-C4-C5	-5.27	103.69	105.80
59	A5	1101	A	OP1-P-O3'	5.27	116.80	105.20
59	A5	2082	U	C2-N1-C1'	5.27	124.03	117.70
59	A5	2210	U	C6-N1-C2	-5.27	117.84	121.00
58	B2	1161	G	C4-C5-N7	5.27	112.91	110.80
59	A5	333	C	C5-C6-N1	5.27	123.63	121.00
59	A5	815	A	C4-C5-N7	5.27	113.33	110.70
59	A5	1382	U	C4'-C3'-O3'	5.27	123.54	113.00
59	A5	1759	C	N3-C2-O2	-5.27	118.21	121.90
59	A5	2221	G	C6-N1-C2	-5.27	121.94	125.10
59	A5	3305	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	3758	G	C4-N9-C1'	5.27	133.35	126.50
59	A5	3853	C	N1-C2-O2	5.27	122.06	118.90
56	A8	60	U	O5'-P-OP1	-5.27	100.96	105.70
58	B2	360	G	C4-C5-N7	5.27	112.91	110.80
58	B2	1047	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	863	U	C6-N1-C2	-5.27	117.84	121.00
59	A5	3221	A	C4-N9-C1'	5.27	135.78	126.30
59	A5	3921	A	N9-C4-C5	-5.27	103.69	105.80
59	A5	796	A	C4-C5-C6	-5.27	114.37	117.00
59	A5	1703	A	C5-C6-N1	5.27	120.33	117.70
59	A5	3918	A	C8-N9-C4	-5.27	103.69	105.80
58	B2	1024	C	C6-N1-C2	-5.26	118.19	120.30
58	B2	1188	G	C8-N9-C4	5.26	108.51	106.40
58	B2	1811	C	C5-C6-N1	5.26	123.63	121.00
59	A5	370	A	C5-N7-C8	-5.26	101.27	103.90
59	A5	810	A	N1-C6-N6	-5.26	115.44	118.60
59	A5	1055	U	C2-N1-C1'	5.26	124.02	117.70
59	A5	1884	U	C2-N1-C1'	5.26	124.02	117.70
59	A5	2205	G	N3-C4-C5	-5.26	125.97	128.60
59	A5	2494	G	OP1-P-OP2	-5.26	111.70	119.60
59	A5	3507	A	C4-C5-C6	-5.26	114.37	117.00
58	B2	1092	A	N1-C2-N3	-5.26	126.67	129.30
58	B2	1194	C	N3-C2-O2	-5.26	118.22	121.90
59	A5	300	A	OP2-P-O3'	5.26	116.78	105.20
59	A5	1190	U	P-O5'-C5'	5.26	129.32	120.90
59	A5	2703	G	OP1-P-OP2	5.26	127.50	119.60
59	A5	2793	C	C2-N1-C1'	5.26	124.59	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3716	C	C4-C5-C6	-5.26	114.77	117.40
58	B2	1772	C	C6-N1-C2	-5.26	118.19	120.30
59	A5	384	A	C6-N1-C2	-5.26	115.44	118.60
59	A5	663	U	N3-C4-O4	5.26	123.08	119.40
59	A5	872	A	OP2-P-O3'	5.26	116.77	105.20
59	A5	886	U	C2-N1-C1'	-5.26	111.39	117.70
59	A5	1109	G	N1-C2-N2	5.26	120.94	116.20
59	A5	1164	G	C6-C5-N7	-5.26	127.24	130.40
56	A8	94	C	C5-C6-N1	5.26	123.63	121.00
58	B2	976	U	C5-C6-N1	5.26	125.33	122.70
59	A5	37	G	C8-N9-C4	-5.26	104.30	106.40
59	A5	49	A	C4-C5-N7	5.26	113.33	110.70
59	A5	383	A	C4-N9-C1'	5.26	135.77	126.30
59	A5	427	A	C4-C5-N7	5.26	113.33	110.70
59	A5	1091	G	OP1-P-OP2	5.26	127.49	119.60
59	A5	2230	G	N3-C4-C5	-5.26	125.97	128.60
59	A5	2717	C	C5-C4-N4	-5.26	116.52	120.20
58	B2	23	G	C8-N9-C4	5.26	108.50	106.40
59	A5	496	U	C6-N1-C2	-5.26	117.84	121.00
59	A5	1644	C	N3-C4-N4	5.26	121.68	118.00
56	A8	73	U	C5-C4-O4	-5.26	122.75	125.90
56	A8	95	A	N7-C8-N9	5.26	116.43	113.80
58	B2	484	C	N3-C2-O2	-5.26	118.22	121.90
58	B2	1028	A	N1-C6-N6	-5.26	115.45	118.60
58	B2	1924	C	C2-N1-C1'	5.26	124.58	118.80
59	A5	438	G	C4-C5-C6	-5.26	115.65	118.80
59	A5	1346	C	C4-C5-C6	-5.26	114.77	117.40
59	A5	1615	G	N3-C2-N2	5.26	123.58	119.90
59	A5	1726	G	N3-C4-C5	5.26	131.23	128.60
59	A5	2257	C	C6-N1-C1'	5.26	127.11	120.80
58	B2	1205	U	C6-N1-C2	-5.25	117.85	121.00
56	A8	116	C	C2-N1-C1'	5.25	124.58	118.80
59	A5	1104	A	C2-N3-C4	5.25	113.23	110.60
59	A5	1347	A	O5'-P-OP1	-5.25	100.97	105.70
59	A5	2516	U	O4'-C1'-N1	5.25	112.40	108.20
59	A5	3504	G	N3-C4-C5	-5.25	125.97	128.60
58	B2	1961	A	C4-C5-C6	-5.25	114.37	117.00
59	A5	285	G	O4'-C1'-N9	-5.25	104.00	108.20
59	A5	443	G	N7-C8-N9	5.25	115.72	113.10
59	A5	1410	A	N9-C4-C5	5.25	107.90	105.80
59	A5	3252	G	OP1-P-O3'	5.25	116.75	105.20
58	B2	314	C	C6-N1-C2	-5.25	118.20	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1222	C	C6-N1-C2	-5.25	118.20	120.30
59	A5	1012	G	C5-N7-C8	-5.25	101.67	104.30
59	A5	1611	G	C8-N9-C4	5.25	108.50	106.40
59	A5	2758	U	C5-C6-N1	5.25	125.33	122.70
59	A5	3309	A	C4-N9-C1'	5.25	135.75	126.30
59	A5	3397	U	OP1-P-O3'	5.25	116.75	105.20
59	A5	3414	U	C5-C4-O4	5.25	129.05	125.90
59	A5	3888	U	C5-C6-N1	5.25	125.33	122.70
58	B2	1823	A	N9-C4-C5	-5.25	103.70	105.80
59	A5	634	U	C5-C4-O4	-5.25	122.75	125.90
59	A5	831	A	N7-C8-N9	5.25	116.42	113.80
59	A5	874	G	OP1-P-OP2	-5.25	111.73	119.60
59	A5	1576	U	N3-C2-O2	-5.25	118.53	122.20
59	A5	1944	C	N1-C2-O2	5.25	122.05	118.90
59	A5	3199	A	C8-N9-C4	5.25	107.90	105.80
59	A5	94	C	C4-C5-C6	-5.25	114.78	117.40
59	A5	322	G	N1-C6-O6	5.25	123.05	119.90
59	A5	652	G	C8-N9-C4	5.25	108.50	106.40
59	A5	1536	U	C5-C6-N1	5.25	125.32	122.70
59	A5	2511	C	O5'-P-OP1	5.25	117.00	110.70
59	A5	2782	A	C5-C6-N6	5.25	127.90	123.70
26	CN	36	LEU	CB-CG-CD1	-5.25	102.08	111.00
59	A5	1090	U	C2-N1-C1'	5.25	123.99	117.70
59	A5	1784	A	C6-N1-C2	-5.25	115.45	118.60
58	B2	622	C	C2-N1-C1'	5.24	124.57	118.80
59	A5	104	A	C8-N9-C4	-5.24	103.70	105.80
59	A5	380	G	N1-C6-O6	5.24	123.05	119.90
59	A5	788	C	C2-N3-C4	5.24	122.52	119.90
59	A5	993	A	C4-C5-C6	-5.24	114.38	117.00
59	A5	1393	A	OP2-P-O3'	5.24	116.74	105.20
59	A5	1536	U	C6-N1-C2	-5.24	117.85	121.00
59	A5	2198	G	C4-N9-C1'	5.24	133.32	126.50
59	A5	2513	G	N9-C4-C5	-5.24	103.30	105.40
59	A5	3127	A	O4'-C1'-N9	5.24	112.39	108.20
59	A5	3393	U	N3-C2-O2	-5.24	118.53	122.20
59	A5	375	C	OP1-P-OP2	5.24	127.46	119.60
59	A5	775	U	O5'-P-OP1	-5.24	100.98	105.70
59	A5	3805	U	C6-N1-C2	-5.24	117.86	121.00
58	B2	903	C	C2-N3-C4	5.24	122.52	119.90
59	A5	32	C	C5-C6-N1	5.24	123.62	121.00
59	A5	1046	A	C5-C6-N6	-5.24	119.51	123.70
59	A5	1398	C	O5'-P-OP2	-5.24	100.98	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1616	G	N1-C2-N3	5.24	127.05	123.90
58	B2	598	C	N1-C2-O2	5.24	122.04	118.90
58	B2	941	A	N1-C6-N6	-5.24	115.46	118.60
58	B2	1842	U	N3-C2-O2	-5.24	118.53	122.20
58	B2	1845	C	N3-C4-C5	-5.24	119.80	121.90
59	A5	1565	A	C2-N3-C4	5.24	113.22	110.60
59	A5	2521	A	C6-N1-C2	5.24	121.74	118.60
58	B2	7	G	C4-C5-N7	5.24	112.89	110.80
58	B2	1991	C	C2-N1-C1'	5.24	124.56	118.80
59	A5	1178	U	C5'-C4'-O4'	5.24	115.38	109.10
59	A5	1713	U	OP1-P-OP2	-5.24	111.75	119.60
59	A5	2153	C	C5-C4-N4	5.24	123.86	120.20
59	A5	2473	C	N3-C2-O2	-5.24	118.23	121.90
72	AF	126	LEU	CA-CB-CG	5.24	127.34	115.30
59	A5	2517	A	OP1-P-O3'	5.23	116.72	105.20
59	A5	3294	A	N7-C8-N9	5.23	116.42	113.80
58	B2	1941	A	N1-C6-N6	-5.23	115.46	118.60
59	A5	658	A	N9-C4-C5	-5.23	103.71	105.80
59	A5	817	C	C5-C6-N1	5.23	123.62	121.00
59	A5	2230	G	C6-C5-N7	-5.23	127.26	130.40
59	A5	2625	G	C4-N9-C1'	5.23	133.30	126.50
59	A5	2667	U	N1-C2-O2	5.23	126.46	122.80
59	A5	3306	U	C6-N1-C2	-5.23	117.86	121.00
56	A8	29	U	C5-C4-O4	-5.23	122.76	125.90
58	B2	595	C	N1-C2-O2	5.23	122.04	118.90
58	B2	1205	U	C5-C4-O4	-5.23	122.76	125.90
58	B2	1955	G	C4-C5-N7	5.23	112.89	110.80
59	A5	453	C	C4-C5-C6	-5.23	114.78	117.40
59	A5	1112	G	C4-N9-C1'	5.23	133.30	126.50
59	A5	3172	A	C4-C5-C6	-5.23	114.39	117.00
59	A5	3622	C	C4-C5-C6	-5.23	114.78	117.40
58	B2	248	G	OP1-P-O3'	5.23	116.70	105.20
58	B2	880	G	C8-N9-C4	-5.23	104.31	106.40
59	A5	2205	G	OP2-P-O3'	5.23	116.70	105.20
59	A5	3306	U	N3-C2-O2	-5.23	118.54	122.20
59	A5	3637	A	C4-C5-N7	5.23	113.31	110.70
58	B2	1924	C	C5-C6-N1	5.23	123.61	121.00
59	A5	242	C	N3-C2-O2	-5.23	118.24	121.90
59	A5	625	C	C6-N1-C2	-5.23	118.21	120.30
59	A5	2678	G	C5-C6-N1	5.23	114.11	111.50
59	A5	3246	G	C8-N9-C1'	5.23	133.79	127.00
59	A5	3969	G	C4-C5-N7	5.23	112.89	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	12	U	C2-N1-C1'	5.23	123.97	117.70
58	B2	1223	U	N1-C2-O2	5.23	126.46	122.80
59	A5	372	U	C2-N1-C1'	5.23	123.97	117.70
59	A5	687	U	N1-C2-O2	5.23	126.46	122.80
59	A5	3486	U	N3-C2-O2	-5.23	118.54	122.20
58	B2	1066	A	O5'-P-OP1	-5.22	101.00	105.70
59	A5	241	C	C2-N1-C1'	5.22	124.55	118.80
59	A5	261	U	N1-C2-O2	5.22	126.46	122.80
59	A5	1383	A	C5'-C4'-C3'	5.22	124.36	116.00
59	A5	1723	G	N9-C4-C5	5.22	107.49	105.40
59	A5	1951	C	N3-C4-N4	-5.22	114.34	118.00
59	A5	2687	A	C6-N1-C2	-5.22	115.47	118.60
59	A5	3912	U	C5-C6-N1	5.22	125.31	122.70
71	AT	51	ASP	CB-CG-OD2	5.22	123.00	118.30
58	B2	1228	G	C5-C6-O6	-5.22	125.47	128.60
59	A5	770	C	C6-N1-C2	-5.22	118.21	120.30
59	A5	3329	U	C6-N1-C2	-5.22	117.87	121.00
59	A5	3407	U	C5-C6-N1	5.22	125.31	122.70
59	A5	1962	A	N1-C6-N6	-5.22	115.47	118.60
55	A7	98	G	N3-C4-N9	5.22	129.13	126.00
56	A8	109	U	P-O3'-C3'	5.22	125.96	119.70
58	B2	429	C	C5-C6-N1	5.22	123.61	121.00
59	A5	1411	U	N1-C2-N3	-5.22	111.77	114.90
59	A5	2255	G	N9-C4-C5	-5.22	103.31	105.40
59	A5	2679	U	C6-N1-C1'	5.22	128.51	121.20
59	A5	3197	U	O4'-C1'-N1	-5.22	104.02	108.20
59	A5	3667	C	OP2-P-O3'	5.22	116.68	105.20
56	A8	39	A	OP2-P-O3'	5.22	116.68	105.20
59	A5	993	A	N1-C2-N3	-5.22	126.69	129.30
59	A5	1277	A	P-O3'-C3'	5.22	125.96	119.70
59	A5	3624	C	C2-N3-C4	5.22	122.51	119.90
70	AK	35	LEU	CA-CB-CG	5.22	127.30	115.30
55	A7	19	C	N3-C4-C5	5.22	123.99	121.90
58	B2	959	U	O4'-C1'-N1	5.22	112.37	108.20
58	B2	1104	C	C2-N1-C1'	-5.22	113.06	118.80
59	A5	663	U	N3-C4-C5	5.22	117.73	114.60
59	A5	1132	U	C6-N1-C1'	5.22	128.50	121.20
59	A5	1673	C	N3-C4-C5	5.22	123.99	121.90
59	A5	3650	G	O5'-P-OP2	-5.22	101.00	105.70
71	AT	130	ASP	CB-CG-OD2	5.22	123.00	118.30
26	CN	76	PRO	C-N-CA	5.21	134.74	121.70
59	A5	79	G	C6-C5-N7	-5.21	127.27	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	93	G	C5-C6-O6	-5.21	125.47	128.60
59	A5	3567	A	C3'-C2'-C1'	-5.21	97.33	101.50
59	A5	3570	C	C2-N1-C1'	5.21	124.53	118.80
59	A5	3625	U	O5'-P-OP1	-5.21	101.01	105.70
56	A8	86	A	C5-N7-C8	-5.21	101.29	103.90
58	B2	1147	U	N3-C2-O2	-5.21	118.55	122.20
58	B2	1234	G	C6-C5-N7	-5.21	127.27	130.40
59	A5	349	C	C5-C4-N4	-5.21	116.55	120.20
59	A5	427	A	N3-C4-N9	5.21	131.57	127.40
59	A5	986	A	N9-C4-C5	5.21	107.89	105.80
59	A5	2742	G	N7-C8-N9	5.21	115.71	113.10
59	A5	3930	A	N1-C6-N6	-5.21	115.47	118.60
58	B2	379	U	C4-C5-C6	-5.21	116.57	119.70
59	A5	757	A	C8-N9-C4	-5.21	103.72	105.80
59	A5	1046	A	C5-N7-C8	-5.21	101.29	103.90
59	A5	1969	A	C5-N7-C8	-5.21	101.29	103.90
59	A5	1975	C	O5'-P-OP1	-5.21	101.01	105.70
59	A5	2000	U	C2-N1-C1'	-5.21	111.45	117.70
59	A5	2693	G	N1-C2-N3	5.21	127.03	123.90
59	A5	3243	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	3403	G	C8-N9-C4	5.21	108.48	106.40
71	AT	132	ASP	CB-CG-OD2	5.21	122.99	118.30
59	A5	1690	U	OP2-P-O3'	5.21	116.66	105.20
59	A5	2703	G	C2-N3-C4	5.21	114.50	111.90
59	A5	3581	G	N1-C2-N3	5.21	127.03	123.90
25	Ca	12	LEU	CB-CG-CD1	-5.21	102.14	111.00
58	B2	17	C	N3-C4-N4	5.21	121.64	118.00
59	A5	522	G	C4-C5-C6	5.21	121.93	118.80
59	A5	549	A	C6-C5-N7	-5.21	128.65	132.30
59	A5	1735	G	C8-N9-C4	5.21	108.48	106.40
59	A5	1775	C	C2-N1-C1'	5.21	124.53	118.80
59	A5	1882	G	N1-C6-O6	-5.21	116.78	119.90
59	A5	2218	G	OP1-P-OP2	-5.21	111.79	119.60
59	A5	2724	C	OP2-P-O3'	5.21	116.66	105.20
59	A5	3153	G	O5'-P-OP1	5.21	116.95	110.70
59	A5	3198	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	3808	A	C4-N9-C1'	5.21	135.68	126.30
56	A8	94	C	N3-C2-O2	-5.21	118.25	121.90
59	A5	329	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	425	A	N1-C6-N6	5.21	121.72	118.60
59	A5	1259	A	O5'-P-OP1	-5.21	101.02	105.70
59	A5	1326	A	C5-C6-N6	-5.21	119.53	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2115	U	N1-C2-O2	5.21	126.44	122.80
59	A5	2665	C	O5'-P-OP2	-5.21	101.01	105.70
59	A5	1751	U	C4-C5-C6	5.21	122.82	119.70
58	B2	81	U	C5-C6-N1	5.20	125.30	122.70
58	B2	988	G	C5-C6-O6	-5.20	125.48	128.60
58	B2	1601	A	C8-N9-C4	5.20	107.88	105.80
59	A5	2201	U	OP1-P-OP2	5.20	127.41	119.60
69	DA	141	LEU	CA-CB-CG	5.20	127.27	115.30
71	AT	32	ASP	CB-CG-OD2	5.20	122.98	118.30
59	A5	753	U	N1-C2-O2	5.20	126.44	122.80
59	A5	791	C	C6-N1-C2	-5.20	118.22	120.30
59	A5	796	A	C8-N9-C4	5.20	107.88	105.80
59	A5	994	U	C6-N1-C2	-5.20	117.88	121.00
59	A5	2481	U	C6-N1-C1'	-5.20	113.92	121.20
55	A7	112	U	N1-C2-O2	5.20	126.44	122.80
59	A5	56	A	C8-N9-C4	-5.20	103.72	105.80
59	A5	371	G	N1-C2-N3	-5.20	120.78	123.90
59	A5	1040	C	C5-C6-N1	5.20	123.60	121.00
59	A5	2565	G	C8-N9-C4	-5.20	104.32	106.40
59	A5	3170	U	OP2-P-O3'	5.20	116.64	105.20
59	A5	3678	G	O5'-P-OP2	-5.20	101.02	105.70
59	A5	307	A	C5-C6-N1	5.20	120.30	117.70
59	A5	1280	C	N3-C2-O2	-5.20	118.26	121.90
59	A5	3345	A	OP1-P-OP2	-5.20	111.80	119.60
56	A8	38	G	N9-C4-C5	-5.20	103.32	105.40
58	B2	1131	U	N3-C2-O2	-5.20	118.56	122.20
59	A5	1323	C	C6-N1-C2	-5.20	118.22	120.30
59	A5	1339	U	C5-C4-O4	5.20	129.02	125.90
59	A5	1387	G	N1-C6-O6	5.20	123.02	119.90
59	A5	1629	C	C5-C4-N4	5.20	123.84	120.20
59	A5	1909	U	C5-C6-N1	5.20	125.30	122.70
58	B2	890	U	N3-C2-O2	-5.19	118.56	122.20
71	AT	49	ASP	CB-CG-OD2	5.19	122.97	118.30
59	A5	764	A	P-O3'-C3'	5.19	125.93	119.70
59	A5	1373	A	O4'-C1'-N9	5.19	112.35	108.20
59	A5	1686	A	C4-C5-N7	5.19	113.30	110.70
59	A5	3613	G	C5-C6-O6	-5.19	125.48	128.60
58	B2	1110	A	C6-C5-N7	5.19	135.93	132.30
59	A5	414	A	N3-C4-C5	5.19	130.43	126.80
59	A5	1146	U	C5-C4-O4	5.19	129.01	125.90
59	A5	2563	G	C5-N7-C8	-5.19	101.70	104.30
59	A5	3890	G	OP1-P-O3'	5.19	116.62	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	871	A	N7-C8-N9	5.19	116.39	113.80
59	A5	1001	A	N7-C8-N9	5.19	116.39	113.80
59	A5	1589	A	OP1-P-O3'	5.19	116.61	105.20
59	A5	2564	U	N1-C2-O2	5.19	126.43	122.80
59	A5	3280	A	C8-N9-C4	5.19	107.88	105.80
59	A5	3387	C	N3-C2-O2	-5.19	118.27	121.90
56	A8	91	C	C4-C5-C6	-5.19	114.81	117.40
58	B2	1563	C	C5-C6-N1	5.19	123.59	121.00
59	A5	328	U	C5-C6-N1	5.19	125.29	122.70
59	A5	1664	C	N3-C4-N4	-5.19	114.37	118.00
59	A5	1689	G	C5'-C4'-O4'	-5.19	102.88	109.10
59	A5	1782	C	C5'-C4'-O4'	5.19	115.33	109.10
59	A5	995	G	N7-C8-N9	-5.19	110.51	113.10
59	A5	1115	A	C6-C5-N7	-5.19	128.67	132.30
59	A5	1598	A	C5-N7-C8	-5.19	101.31	103.90
59	A5	2705	U	C4-C5-C6	-5.19	116.59	119.70
59	A5	2775	A	C5-C6-N6	-5.19	119.55	123.70
59	A5	3130	G	C6-C5-N7	-5.19	127.29	130.40
4	CB	335	GLY	N-CA-C	5.18	126.06	113.10
58	B2	619	U	C5-C6-N1	5.18	125.29	122.70
59	A5	1183	U	C2-N3-C4	5.18	130.11	127.00
59	A5	1619	C	C5-C6-N1	5.18	123.59	121.00
59	A5	1661	C	C5-C6-N1	5.18	123.59	121.00
59	A5	1757	A	C2-N3-C4	5.18	113.19	110.60
59	A5	2167	G	N3-C4-N9	5.18	129.11	126.00
59	A5	3411	C	C2-N3-C4	-5.18	117.31	119.90
59	A5	3770	A	C8-N9-C1'	-5.18	118.37	127.70
59	A5	3923	C	C6-N1-C2	-5.18	118.23	120.30
59	A5	303	G	C6-C5-N7	5.18	133.51	130.40
59	A5	640	U	P-O3'-C3'	5.18	125.92	119.70
59	A5	2165	C	OP2-P-O3'	5.18	116.60	105.20
59	A5	3726	U	P-O3'-C3'	5.18	125.92	119.70
71	AT	8	ASP	CB-CG-OD2	5.18	122.96	118.30
71	AT	144	ASP	CB-CG-OD2	5.18	122.97	118.30
58	B2	1078	G	C5-N7-C8	-5.18	101.71	104.30
59	A5	1405	U	O4'-C1'-N1	5.18	112.34	108.20
59	A5	2155	A	C3'-C2'-C1'	5.18	105.64	101.50
58	B2	1911	C	O4'-C1'-N1	5.18	112.34	108.20
59	A5	546	G	O5'-P-OP1	-5.18	101.04	105.70
59	A5	3518	A	C4-C5-C6	-5.18	114.41	117.00
37	Cr	26	LYS	N-CA-C	5.18	124.98	111.00
59	A5	1783	A	N1-C2-N3	-5.18	126.71	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2194	G	N7-C8-N9	5.18	115.69	113.10
59	A5	2489	G	N9-C1'-C2'	-5.18	106.31	112.00
58	B2	1214	A	C5-C6-N6	5.17	127.84	123.70
58	B2	1243	G	C5-C6-O6	-5.17	125.50	128.60
59	A5	283	A	C5-N7-C8	5.17	106.49	103.90
59	A5	713	U	C5-C6-N1	5.17	125.29	122.70
59	A5	776	A	O4'-C1'-N9	5.17	112.34	108.20
59	A5	859	A	N1-C6-N6	-5.17	115.50	118.60
59	A5	1610	A	OP1-P-OP2	-5.17	111.84	119.60
59	A5	3279	A	C4-C5-N7	5.17	113.29	110.70
58	B2	1587	U	N3-C2-O2	-5.17	118.58	122.20
59	A5	828	G	C6-C5-N7	-5.17	127.30	130.40
59	A5	1760	A	C5-C6-N1	5.17	120.29	117.70
59	A5	3708	U	O4'-C1'-N1	5.17	112.34	108.20
25	Ca	57	VAL	C-N-CA	-5.17	111.44	122.30
58	B2	18	C	C5-C6-N1	5.17	123.58	121.00
59	A5	1348	G	OP1-P-O3'	5.17	116.58	105.20
59	A5	1545	A	C8-N9-C4	-5.17	103.73	105.80
59	A5	1724	A	C5-C6-N1	5.17	120.28	117.70
59	A5	1897	A	C5-C6-N1	5.17	120.29	117.70
59	A5	2230	G	C4-N9-C1'	5.17	133.22	126.50
59	A5	2778	G	C5-C6-N1	5.17	114.09	111.50
59	A5	2784	C	C2-N1-C1'	5.17	124.49	118.80
59	A5	3346	G	C4-C5-C6	5.17	121.90	118.80
59	A5	3476	G	N3-C2-N2	5.17	123.52	119.90
58	B2	1073	G	N1-C6-O6	-5.17	116.80	119.90
59	A5	2248	A	OP1-P-O3'	5.17	116.57	105.20
59	A5	3526	C	N3-C2-O2	-5.17	118.28	121.90
59	A5	3643	C	N1-C2-O2	5.17	122.00	118.90
58	B2	375	A	N9-C4-C5	-5.17	103.73	105.80
58	B2	1994	U	C6-N1-C2	-5.17	117.90	121.00
59	A5	1650	C	C5-C4-N4	-5.17	116.58	120.20
59	A5	1770	C	C6-N1-C1'	5.17	127.00	120.80
59	A5	2001	U	N3-C4-O4	-5.17	115.78	119.40
59	A5	2493	C	O5'-P-OP2	-5.17	101.05	105.70
58	B2	315	C	N3-C2-O2	-5.17	118.28	121.90
58	B2	399	C	C5-C6-N1	5.17	123.58	121.00
58	B2	835	A	N1-C2-N3	-5.17	126.72	129.30
59	A5	303	G	O5'-P-OP1	-5.17	101.05	105.70
59	A5	1972	C	C5-C4-N4	5.17	123.82	120.20
59	A5	2797	A	C4-C5-C6	-5.17	114.42	117.00
59	A5	3509	U	O4'-C1'-N1	5.17	112.33	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	426	A	N1-C6-N6	5.17	121.70	118.60
58	B2	636	G	C2-N3-C4	-5.17	109.32	111.90
59	A5	163	A	C8-N9-C1'	5.17	137.00	127.70
59	A5	2227	U	C5-C6-N1	5.17	125.28	122.70
59	A5	2571	U	C6-N1-C2	-5.17	117.90	121.00
59	A5	2805	C	N3-C4-C5	-5.17	119.83	121.90
71	AT	35	ASP	CB-CG-OD2	5.17	122.95	118.30
58	B2	430	A	C4-C5-N7	5.16	113.28	110.70
58	B2	1560	G	N1-C6-O6	-5.16	116.80	119.90
59	A5	367	A	O4'-C1'-N9	-5.16	104.07	108.20
59	A5	811	G	C5-C6-O6	5.16	131.70	128.60
59	A5	1673	C	C2-N3-C4	-5.16	117.32	119.90
59	A5	1738	U	C2-N3-C4	-5.16	123.90	127.00
59	A5	3296	C	N3-C4-C5	-5.16	119.83	121.90
59	A5	3342	C	N3-C2-O2	-5.16	118.28	121.90
59	A5	2604	U	C5-C6-N1	5.16	125.28	122.70
59	A5	3623	G	C6-C5-N7	5.16	133.50	130.40
56	A8	6	U	C5-C6-N1	5.16	125.28	122.70
56	A8	31	G	N1-C6-O6	-5.16	116.80	119.90
59	A5	1071	U	OP1-P-O3'	-5.16	93.85	105.20
59	A5	1675	G	N3-C4-C5	-5.16	126.02	128.60
59	A5	1753	G	P-O3'-C3'	5.16	125.89	119.70
59	A5	1973	G	C5-C6-N1	5.16	114.08	111.50
59	A5	2901	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	3235	A	C5-C6-N6	-5.16	119.57	123.70
59	A5	3764	G	C6-C5-N7	-5.16	127.30	130.40
71	AT	10	ASP	CB-CG-OD2	5.16	122.94	118.30
6	CC	79	ILE	CG1-CB-CG2	-5.16	100.05	111.40
59	A5	96	G	O4'-C1'-N9	5.16	112.33	108.20
59	A5	402	A	N1-C6-N6	-5.16	115.50	118.60
59	A5	522	G	C5-C6-O6	-5.16	125.50	128.60
59	A5	595	U	C5-C6-N1	5.16	125.28	122.70
59	A5	1425	U	O5'-P-OP2	-5.16	101.06	105.70
59	A5	2222	G	C5-N7-C8	-5.16	101.72	104.30
59	A5	2247	U	C5-C4-O4	-5.16	122.81	125.90
59	A5	2542	C	C5-C6-N1	5.16	123.58	121.00
59	A5	2564	U	OP1-P-O3'	5.16	116.55	105.20
59	A5	2663	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	2749	G	N1-C2-N2	-5.16	111.56	116.20
59	A5	3628	G	N9-C4-C5	-5.16	103.34	105.40
71	AT	97	ASP	CB-CG-OD2	5.16	122.94	118.30
59	A5	1107	G	N1-C2-N2	5.16	120.84	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1677	U	C4-C5-C6	-5.16	116.61	119.70
59	A5	1869	C	N3-C4-N4	-5.16	114.39	118.00
59	A5	3526	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	3953	C	C5-C6-N1	5.16	123.58	121.00
56	A8	69	G	C4-C5-N7	5.16	112.86	110.80
56	A8	80	C	C2-N1-C1'	5.16	124.47	118.80
58	B2	4	C	N1-C2-O2	5.16	121.99	118.90
58	B2	316	U	N1-C2-O2	5.16	126.41	122.80
59	A5	99	A	N7-C8-N9	5.16	116.38	113.80
59	A5	545	U	N1-C2-N3	5.16	117.99	114.90
59	A5	1210	A	O5'-P-OP1	-5.16	101.06	105.70
59	A5	1292	G	C4-N9-C1'	-5.16	119.80	126.50
59	A5	1545	A	N7-C8-N9	5.16	116.38	113.80
59	A5	1694	A	C6-N1-C2	-5.16	115.51	118.60
59	A5	3340	A	C5-C6-N6	-5.16	119.58	123.70
59	A5	3401	U	C4-C5-C6	-5.16	116.61	119.70
59	A5	3540	G	O4'-C1'-N9	5.16	112.33	108.20
59	A5	3638	U	N1-C2-O2	5.16	126.41	122.80
59	A5	441	A	N3-C4-C5	5.15	130.41	126.80
59	A5	2670	U	C4-C5-C6	-5.15	116.61	119.70
59	A5	2771	G	O4'-C1'-N9	5.15	112.32	108.20
29	CQ	35	LEU	CB-CG-CD1	-5.15	102.24	111.00
58	B2	1207	G	C8-N9-C1'	-5.15	120.30	127.00
58	B2	1409	A	N3-C4-C5	5.15	130.41	126.80
59	A5	516	U	N3-C2-O2	-5.15	118.59	122.20
59	A5	673	U	C6-N1-C1'	5.15	128.41	121.20
59	A5	1624	G	C4-C5-N7	5.15	112.86	110.80
59	A5	1749	A	O5'-P-OP2	-5.15	101.06	105.70
59	A5	3347	G	OP2-P-O3'	5.15	116.53	105.20
59	A5	3517	U	N1-C2-N3	-5.15	111.81	114.90
59	A5	3708	U	P-O3'-C3'	5.15	125.88	119.70
34	CX	186	VAL	C-N-CA	5.15	143.63	122.00
59	A5	367	A	N3-C4-N9	-5.15	123.28	127.40
59	A5	1259	A	C8-N9-C4	5.15	107.86	105.80
59	A5	1349	A	OP1-P-OP2	-5.15	111.88	119.60
59	A5	1798	A	OP1-P-OP2	-5.15	111.87	119.60
59	A5	2659	A	C8-N9-C1'	-5.15	118.43	127.70
54	A9	15	A	N3-C4-N9	-5.15	123.28	127.40
58	B2	1107	A	N1-C6-N6	5.15	121.69	118.60
59	A5	2167	G	C5-N7-C8	-5.15	101.73	104.30
56	A8	109	U	N1-C2-O2	5.15	126.40	122.80
58	B2	1843	A	C4-C5-N7	5.15	113.27	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	104	A	C4-C5-N7	5.15	113.27	110.70
59	A5	238	G	C5-C6-O6	-5.15	125.51	128.60
59	A5	412	U	OP2-P-O3'	5.15	116.53	105.20
59	A5	1675	G	P-O3'-C3'	5.15	125.88	119.70
59	A5	2125	G	C4-N9-C1'	5.15	133.19	126.50
59	A5	2659	A	N1-C2-N3	-5.15	126.73	129.30
59	A5	3468	G	C5-N7-C8	-5.15	101.73	104.30
25	Ca	4	ILE	CG1-CB-CG2	-5.15	100.08	111.40
58	B2	1187	U	C5-C4-O4	5.14	128.99	125.90
58	B2	1851	A	C4-C5-N7	5.14	113.27	110.70
59	A5	37	G	N7-C8-N9	5.14	115.67	113.10
59	A5	105	A	C5-C6-N1	-5.14	115.13	117.70
59	A5	305	G	C5-C6-O6	5.14	131.69	128.60
59	A5	442	A	C6-C5-N7	-5.14	128.70	132.30
59	A5	490	G	N3-C4-C5	5.14	131.17	128.60
59	A5	2228	U	OP2-P-O3'	5.14	116.52	105.20
59	A5	2700	C	C6-N1-C1'	5.14	126.97	120.80
59	A5	3841	C	O4'-C1'-N1	5.14	112.31	108.20
59	A5	33	C	N3-C2-O2	-5.14	118.30	121.90
59	A5	104	A	N3-C4-N9	-5.14	123.28	127.40
59	A5	1716	G	C6-C5-N7	-5.14	127.31	130.40
59	A5	1872	A	C4-N9-C1'	5.14	135.56	126.30
59	A5	2702	A	OP1-P-OP2	5.14	127.31	119.60
59	A5	3392	U	C5-C4-O4	5.14	128.99	125.90
59	A5	3543	A	C5-C6-N1	5.14	120.27	117.70
59	A5	3646	G	C4-C5-N7	5.14	112.86	110.80
58	B2	1098	C	N3-C2-O2	-5.14	118.30	121.90
59	A5	615	C	C6-N1-C2	-5.14	118.24	120.30
59	A5	96	G	N9-C4-C5	-5.14	103.34	105.40
59	A5	1265	U	N3-C4-O4	-5.14	115.80	119.40
59	A5	1294	U	OP2-P-O3'	5.14	116.51	105.20
59	A5	1692	G	O5'-P-OP1	5.14	116.87	110.70
59	A5	1871	A	OP2-P-O3'	5.14	116.51	105.20
59	A5	3316	U	C5-C4-O4	5.14	128.98	125.90
58	B2	1169	C	N1-C2-O2	5.14	121.98	118.90
59	A5	1361	G	C5-C6-N1	5.14	114.07	111.50
59	A5	2685	G	OP2-P-O3'	5.14	116.50	105.20
59	A5	3621	A	N9-C4-C5	-5.14	103.75	105.80
54	A9	16	U	C6-N1-C1'	5.14	128.39	121.20
56	A8	43	A	N9-C4-C5	-5.14	103.75	105.80
59	A5	574	C	N1-C2-O2	5.14	121.98	118.90
59	A5	811	G	N7-C8-N9	5.14	115.67	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1528	G	C8-N9-C4	5.14	108.45	106.40
59	A5	2610	A	C4-C5-C6	-5.14	114.43	117.00
59	A5	2738	C	N1-C2-N3	5.14	122.80	119.20
59	A5	3285	G	C4-N9-C1'	5.14	133.18	126.50
59	A5	3357	C	C5-C6-N1	5.14	123.57	121.00
59	A5	3372	C	C6-N1-C2	-5.14	118.25	120.30
56	A8	100	G	OP1-P-O3'	-5.13	93.91	105.20
59	A5	1155	U	C5-C4-O4	5.13	128.98	125.90
59	A5	3628	G	C4-C5-N7	5.13	112.85	110.80
59	A5	64	A	C4-C5-N7	5.13	113.27	110.70
59	A5	74	A	N1-C6-N6	-5.13	115.52	118.60
59	A5	372	U	N3-C2-O2	-5.13	118.61	122.20
59	A5	665	U	N1-C2-N3	5.13	117.98	114.90
59	A5	756	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	1868	A	C4-C5-C6	-5.13	114.43	117.00
59	A5	2560	A	C5-C6-N1	5.13	120.27	117.70
59	A5	2771	G	C5-C6-N1	5.13	114.07	111.50
56	A8	19	A	C8-N9-C4	-5.13	103.75	105.80
59	A5	72	C	C6-N1-C1'	5.13	126.96	120.80
59	A5	1755	U	C6-N1-C2	-5.13	117.92	121.00
59	A5	2682	C	C6-N1-C2	-5.13	118.25	120.30
59	A5	3263	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	3354	U	C6-N1-C2	-5.13	117.92	121.00
56	A8	93	A	N1-C6-N6	-5.13	115.52	118.60
59	A5	991	A	C4-C5-C6	-5.13	114.44	117.00
59	A5	2223	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	2760	G	O5'-P-OP2	-5.13	101.08	105.70
56	A8	112	C	O5'-P-OP2	-5.13	101.08	105.70
59	A5	253	A	N3-C4-C5	5.13	130.39	126.80
59	A5	1797	A	C5-C6-N1	5.13	120.26	117.70
59	A5	2736	A	C4-C5-N7	5.13	113.26	110.70
59	A5	2801	U	C6-N1-C2	-5.13	117.92	121.00
59	A5	3623	G	N3-C4-N9	-5.13	122.92	126.00
59	A5	442	A	N1-C6-N6	5.13	121.68	118.60
59	A5	760	G	C2-N3-C4	5.13	114.46	111.90
59	A5	1311	U	O5'-P-OP2	5.13	116.85	110.70
59	A5	2062	A	C4-C5-N7	5.13	113.26	110.70
59	A5	2720	U	C5-C4-O4	5.13	128.98	125.90
59	A5	3346	G	C8-N9-C1'	-5.13	120.34	127.00
65	CO	43	LEU	CA-CB-CG	5.13	127.09	115.30
58	B2	1126	A	O4'-C1'-N9	5.12	112.30	108.20
59	A5	1136	A	N3-C4-C5	-5.12	123.21	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1387	G	N3-C4-N9	5.12	129.07	126.00
59	A5	2761	A	N1-C6-N6	5.12	121.67	118.60
59	A5	3564	A	C5-N7-C8	-5.12	101.34	103.90
6	CC	364	GLU	C-N-CA	5.12	134.50	121.70
55	A7	116	G	C6-C5-N7	-5.12	127.33	130.40
58	B2	147	U	N3-C2-O2	-5.12	118.61	122.20
58	B2	1092	A	C2-N3-C4	5.12	113.16	110.60
59	A5	5	A	C2-N3-C4	5.12	113.16	110.60
59	A5	1658	G	N3-C2-N2	-5.12	116.31	119.90
59	A5	2789	U	C6-N1-C2	-5.12	117.93	121.00
59	A5	3276	C	N3-C4-C5	5.12	123.95	121.90
59	A5	3801	A	N7-C8-N9	-5.12	111.24	113.80
58	B2	614	A	O5'-P-OP2	-5.12	101.09	105.70
59	A5	1140	G	N1-C2-N2	5.12	120.81	116.20
59	A5	1710	G	C5-C6-N1	-5.12	108.94	111.50
59	A5	2138	C	N3-C2-O2	-5.12	118.32	121.90
59	A5	2214	G	C4-N9-C1'	-5.12	119.84	126.50
58	B2	640	U	C6-N1-C2	-5.12	117.93	121.00
59	A5	79	G	C8-N9-C4	5.12	108.45	106.40
59	A5	242	C	O5'-P-OP2	-5.12	101.09	105.70
59	A5	696	U	N3-C2-O2	-5.12	118.62	122.20
59	A5	816	A	C4-C5-C6	-5.12	114.44	117.00
59	A5	1005	G	C8-N9-C1'	5.12	133.65	127.00
59	A5	1563	A	O5'-P-OP2	-5.12	101.09	105.70
59	A5	2626	C	C5-C4-N4	5.12	123.78	120.20
59	A5	2702	A	N3-C4-N9	5.12	131.50	127.40
59	A5	2745	A	O5'-P-OP1	-5.12	101.09	105.70
59	A5	2764	A	N3-C4-N9	5.12	131.49	127.40
59	A5	3004	A	N9-C4-C5	-5.12	103.75	105.80
59	A5	1118	C	C6-N1-C2	-5.12	118.25	120.30
59	A5	1421	G	C5-N7-C8	-5.12	101.74	104.30
59	A5	2499	U	C5-C6-N1	5.12	125.26	122.70
59	A5	3222	G	C4-N9-C1'	5.12	133.15	126.50
58	B2	1090	A	C8-N9-C1'	-5.12	118.49	127.70
59	A5	47	A	C4-C5-C6	-5.12	114.44	117.00
59	A5	54	U	O5'-P-OP2	-5.12	101.10	105.70
59	A5	2058	C	C4-C5-C6	-5.12	114.84	117.40
59	A5	2165	C	P-O3'-C3'	5.12	125.84	119.70
59	A5	2770	C	N3-C4-N4	-5.12	114.42	118.00
59	A5	3420	U	C2-N3-C4	-5.12	123.93	127.00
59	A5	3516	C	O5'-P-OP2	-5.12	101.10	105.70
59	A5	3945	A	C8-N9-C4	-5.12	103.75	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	26	G	N9-C1'-C2'	5.11	120.65	114.00
59	A5	1007	A	N1-C6-N6	5.11	121.67	118.60
59	A5	1686	A	N3-C4-N9	-5.11	123.31	127.40
59	A5	458	A	N9-C4-C5	-5.11	103.75	105.80
59	A5	2790	G	OP2-P-O3'	5.11	116.45	105.20
59	A5	2795	U	C2-N1-C1'	5.11	123.83	117.70
58	B2	411	U	C5-C6-N1	5.11	125.25	122.70
58	B2	1061	A	C5-C6-N1	5.11	120.25	117.70
58	B2	1954	C	C2-N3-C4	5.11	122.45	119.90
59	A5	210	C	C4-C5-C6	-5.11	114.84	117.40
59	A5	295	G	OP1-P-O3'	5.11	116.44	105.20
59	A5	443	G	C6-C5-N7	-5.11	127.33	130.40
59	A5	831	A	C6-C5-N7	-5.11	128.72	132.30
59	A5	1380	G	C6-N1-C2	-5.11	122.03	125.10
59	A5	2530	C	C5-C4-N4	-5.11	116.62	120.20
58	B2	1234	G	N1-C2-N3	-5.11	120.83	123.90
59	A5	2675	U	C2-N3-C4	-5.11	123.94	127.00
6	CC	331	LEU	CB-CG-CD1	-5.11	102.32	111.00
55	A7	104	C	C6-N1-C2	-5.11	118.26	120.30
56	A8	35	G	N3-C2-N2	5.11	123.48	119.90
58	B2	1191	C	O4'-C1'-N1	5.11	112.29	108.20
58	B2	1408	A	C4-C5-C6	-5.11	114.45	117.00
59	A5	248	C	C6-N1-C2	-5.11	118.26	120.30
59	A5	1422	G	N3-C4-C5	5.11	131.15	128.60
59	A5	1685	G	C8-N9-C1'	-5.11	120.36	127.00
59	A5	1795	A	C8-N9-C4	-5.11	103.76	105.80
59	A5	1873	A	C5-C6-N1	5.11	120.25	117.70
59	A5	2208	G	N9-C4-C5	-5.11	103.36	105.40
59	A5	2666	G	OP2-P-O3'	5.11	116.44	105.20
59	A5	2696	U	N3-C2-O2	-5.11	118.62	122.20
59	A5	3530	A	N3-C4-N9	5.11	131.49	127.40
65	CO	63	ARG	CG-CD-NE	5.11	122.53	111.80
58	B2	1824	C	C2-N1-C1'	5.11	124.42	118.80
59	A5	103	A	N9-C4-C5	5.11	107.84	105.80
59	A5	386	G	C4-C5-N7	5.11	112.84	110.80
59	A5	1382	U	C6-N1-C2	-5.11	117.94	121.00
59	A5	2107	U	C5-C4-O4	5.11	128.96	125.90
59	A5	2131	C	N3-C4-C5	-5.11	119.86	121.90
59	A5	2510	A	N1-C6-N6	-5.11	115.54	118.60
59	A5	3608	G	N9-C4-C5	5.11	107.44	105.40
56	A8	51	A	N9-C4-C5	-5.10	103.76	105.80
59	A5	752	U	C2-N3-C4	5.10	130.06	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2714	U	C6-N1-C2	-5.10	117.94	121.00
59	A5	2752	C	C5-C4-N4	5.10	123.77	120.20
59	A5	3352	A	N7-C8-N9	5.10	116.35	113.80
58	B2	268	C	C6-N1-C2	-5.10	118.26	120.30
58	B2	283	U	N1-C2-O2	5.10	126.37	122.80
58	B2	445	U	N1-C2-O2	5.10	126.37	122.80
58	B2	1007	C	C5-C6-N1	5.10	123.55	121.00
58	B2	1583	A	O5'-P-OP2	-5.10	101.11	105.70
59	A5	1258	C	C2-N1-C1'	5.10	124.41	118.80
59	A5	2054	U	C6-N1-C1'	-5.10	114.06	121.20
59	A5	2161	G	C8-N9-C4	-5.10	104.36	106.40
59	A5	2730	A	N1-C2-N3	-5.10	126.75	129.30
59	A5	3472	A	C5-C6-N6	5.10	127.78	123.70
59	A5	3648	A	C5-N7-C8	-5.10	101.35	103.90
58	B2	31	C	N1-C2-O2	5.10	121.96	118.90
58	B2	68	C	N3-C2-O2	-5.10	118.33	121.90
58	B2	1934	U	N1-C2-O2	5.10	126.37	122.80
59	A5	991	A	N3-C4-C5	5.10	130.37	126.80
59	A5	1594	U	C4-C5-C6	-5.10	116.64	119.70
59	A5	1780	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	3145	U	N1-C2-O2	5.10	126.37	122.80
59	A5	3675	A	C2-N3-C4	5.10	113.15	110.60
58	B2	1068	U	N1-C2-N3	5.10	117.96	114.90
58	B2	1563	C	N1-C2-O2	5.10	121.96	118.90
59	A5	175	U	P-O3'-C3'	5.10	125.82	119.70
59	A5	662	A	N1-C2-N3	-5.10	126.75	129.30
59	A5	934	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	1382	U	O3'-P-O5'	5.10	113.68	104.00
59	A5	1521	G	N1-C6-O6	-5.10	116.84	119.90
59	A5	2124	G	C8-N9-C1'	-5.10	120.37	127.00
59	A5	3304	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	3716	C	C5-C4-N4	-5.10	116.63	120.20
58	B2	1085	A	N9-C4-C5	-5.10	103.76	105.80
59	A5	210	C	C5-C6-N1	5.10	123.55	121.00
59	A5	431	C	C4-C5-C6	-5.10	114.85	117.40
59	A5	2072	C	C2-N1-C1'	5.10	124.41	118.80
59	A5	2757	U	C2-N1-C1'	5.10	123.81	117.70
42	Cf	110	ARG	NE-CZ-NH2	-5.09	117.75	120.30
59	A5	111	A	N1-C2-N3	-5.09	126.75	129.30
59	A5	1011	U	N3-C4-O4	5.09	122.97	119.40
59	A5	1754	U	C4-C5-C6	-5.09	116.64	119.70
59	A5	2571	U	O5'-P-OP1	-5.09	101.11	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3309	A	C3'-C2'-C1'	5.09	105.58	101.50
59	A5	3714	U	P-O3'-C3'	5.09	125.81	119.70
59	A5	2704	A	C5-C6-N6	-5.09	119.62	123.70
59	A5	543	A	C5-C6-N6	-5.09	119.63	123.70
59	A5	1711	C	C4-C5-C6	-5.09	114.85	117.40
59	A5	1877	A	C5-C6-N1	5.09	120.25	117.70
59	A5	3452	U	C5-C6-N1	5.09	125.25	122.70
59	A5	3765	A	C4-C5-N7	5.09	113.25	110.70
58	B2	1975	G	N9-C4-C5	-5.09	103.36	105.40
59	A5	2155	A	C6-C5-N7	-5.09	128.74	132.30
59	A5	2721	C	C2-N1-C1'	-5.09	113.20	118.80
56	A8	17	U	N1-C2-O2	5.09	126.36	122.80
59	A5	141	U	OP2-P-O3'	5.09	116.39	105.20
59	A5	3524	G	N9-C4-C5	5.09	107.44	105.40
58	B2	6	G	C8-N9-C4	-5.09	104.37	106.40
58	B2	1191	C	N3-C4-C5	5.09	123.93	121.90
59	A5	402	A	C2-N3-C4	5.09	113.14	110.60
59	A5	558	C	C2-N1-C1'	5.09	124.39	118.80
59	A5	1676	A	OP2-P-O3'	-5.09	94.01	105.20
59	A5	1688	A	C4-N9-C1'	5.09	135.45	126.30
59	A5	3279	A	N1-C6-N6	5.09	121.65	118.60
59	A5	3778	U	N3-C2-O2	-5.09	118.64	122.20
58	B2	276	A	N7-C8-N9	5.08	116.34	113.80
59	A5	347	A	C4-C5-N7	5.08	113.24	110.70
59	A5	432	U	N1-C2-O2	5.08	126.36	122.80
58	B2	1170	G	C5-N7-C8	-5.08	101.76	104.30
59	A5	70	A	C5-C6-N1	5.08	120.24	117.70
59	A5	423	U	C4-C5-C6	-5.08	116.65	119.70
59	A5	1021	U	O5'-P-OP1	-5.08	101.12	105.70
59	A5	1329	G	N3-C2-N2	-5.08	116.34	119.90
59	A5	2187	U	N3-C4-O4	-5.08	115.84	119.40
59	A5	2800	C	N1-C2-O2	5.08	121.95	118.90
59	A5	3728	A	C4-C5-C6	-5.08	114.46	117.00
59	A5	3762	G	C5-C6-O6	5.08	131.65	128.60
59	A5	406	G	C8-N9-C4	5.08	108.43	106.40
59	A5	1316	U	C6-N1-C2	-5.08	117.95	121.00
59	A5	1534	G	N1-C2-N3	5.08	126.95	123.90
59	A5	1777	A	O5'-P-OP2	5.08	116.80	110.70
59	A5	2623	C	OP2-P-O3'	5.08	116.38	105.20
59	A5	3155	G	N3-C4-N9	5.08	129.05	126.00
4	CB	217	ILE	CG1-CB-CG2	-5.08	100.22	111.40
58	B2	1967	C	C4-C5-C6	-5.08	114.86	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1324	C	C2-N1-C1'	5.08	124.39	118.80
59	A5	1344	A	N1-C6-N6	5.08	121.65	118.60
59	A5	1345	G	C5-C6-N1	5.08	114.04	111.50
59	A5	1609	U	N3-C4-O4	5.08	122.96	119.40
59	A5	89	A	O5'-P-OP2	-5.08	101.13	105.70
59	A5	299	G	C5-N7-C8	5.08	106.84	104.30
59	A5	300	A	N1-C2-N3	5.08	131.84	129.30
59	A5	438	G	C5-C6-O6	-5.08	125.55	128.60
59	A5	748	A	P-O3'-C3'	5.08	125.79	119.70
59	A5	1422	G	N7-C8-N9	-5.08	110.56	113.10
59	A5	1690	U	N1-C2-O2	5.08	126.36	122.80
59	A5	3419	A	OP2-P-O3'	5.08	116.37	105.20
59	A5	3616	G	C8-N9-C4	5.08	108.43	106.40
59	A5	3622	C	N3-C4-C5	5.08	123.93	121.90
59	A5	3676	C	O3'-P-O5'	5.08	113.65	104.00
59	A5	666	A	N3-C4-C5	-5.08	123.25	126.80
59	A5	1193	A	C2-N3-C4	-5.08	108.06	110.60
59	A5	1639	U	N3-C2-O2	-5.08	118.65	122.20
59	A5	1770	C	C5-C4-N4	5.08	123.75	120.20
59	A5	2218	G	C4-C5-N7	5.08	112.83	110.80
59	A5	3512	U	C6-N1-C2	-5.08	117.95	121.00
56	A8	14	G	C5-C6-O6	5.08	131.65	128.60
58	B2	250	U	N3-C2-O2	-5.08	118.65	122.20
59	A5	214	A	C4-C5-N7	5.08	113.24	110.70
59	A5	654	G	N9-C4-C5	5.08	107.43	105.40
59	A5	857	U	C4-C5-C6	-5.08	116.65	119.70
59	A5	1635	A	N1-C2-N3	-5.08	126.76	129.30
59	A5	2214	G	C5-C6-N1	5.08	114.04	111.50
59	A5	3444	G	C5-C6-O6	-5.08	125.55	128.60
59	A5	3518	A	OP2-P-O3'	5.08	116.37	105.20
59	A5	1897	A	N1-C6-N6	-5.07	115.56	118.60
59	A5	1956	A	N7-C8-N9	5.07	116.34	113.80
59	A5	2760	G	C4-N9-C1'	-5.07	119.90	126.50
59	A5	3354	U	C2-N3-C4	5.07	130.04	127.00
59	A5	3482	G	N3-C4-C5	-5.07	126.06	128.60
59	A5	2166	U	O5'-P-OP1	-5.07	101.14	105.70
59	A5	2662	C	N1-C2-O2	5.07	121.94	118.90
59	A5	3640	A	C8-N9-C4	-5.07	103.77	105.80
59	A5	3754	C	C6-N1-C2	5.07	122.33	120.30
59	A5	36	U	OP2-P-O3'	-5.07	94.05	105.20
59	A5	1006	A	N3-C4-C5	5.07	130.35	126.80
59	A5	1960	C	C6-N1-C1'	-5.07	114.72	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2518	A	C6-C5-N7	5.07	135.85	132.30
59	A5	2522	A	N7-C8-N9	-5.07	111.27	113.80
59	A5	3142	G	N1-C2-N3	5.07	126.94	123.90
59	A5	3341	C	C4-C5-C6	-5.07	114.86	117.40
59	A5	3485	U	OP2-P-O3'	-5.07	94.05	105.20
59	A5	3558	U	C5-C6-N1	5.07	125.23	122.70
66	CL	15	LYS	CD-CE-NZ	-5.07	100.04	111.70
58	B2	1601	A	C4-C5-C6	-5.07	114.47	117.00
59	A5	1713	U	C6-N1-C2	-5.07	117.96	121.00
59	A5	2691	A	C5-N7-C8	-5.07	101.36	103.90
59	A5	3949	U	N3-C4-O4	-5.07	115.85	119.40
55	A7	75	G	O4'-C1'-N9	5.07	112.25	108.20
58	B2	948	A	C5-N7-C8	-5.07	101.37	103.90
58	B2	1333	C	N3-C2-O2	-5.07	118.35	121.90
58	B2	1392	U	N1-C2-O2	5.07	126.35	122.80
59	A5	794	G	C4-C5-N7	5.07	112.83	110.80
59	A5	843	A	N9-C4-C5	-5.07	103.77	105.80
59	A5	1335	C	C2-N1-C1'	5.07	124.37	118.80
59	A5	1645	G	O5'-P-OP2	-5.07	101.14	105.70
59	A5	2203	A	N1-C2-N3	-5.07	126.77	129.30
59	A5	2510	A	O5'-P-OP2	-5.07	101.14	105.70
59	A5	2731	G	N1-C6-O6	5.07	122.94	119.90
59	A5	3674	G	N3-C4-N9	-5.07	122.96	126.00
58	B2	1214	A	O5'-P-OP1	-5.07	101.14	105.70
59	A5	1577	A	C5-C6-N6	-5.07	119.65	123.70
59	A5	1716	G	C4-C5-N7	5.07	112.83	110.80
59	A5	2155	A	C5-C6-N6	5.07	127.75	123.70
59	A5	2650	G	O5'-P-OP1	-5.07	101.14	105.70
59	A5	3156	G	C8-N9-C4	5.07	108.43	106.40
59	A5	3264	A	C5-C6-N1	5.07	120.23	117.70
59	A5	3674	G	N3-C4-C5	5.07	131.13	128.60
59	A5	157	C	N3-C4-N4	5.06	121.55	118.00
59	A5	2674	A	C4-C5-C6	-5.06	114.47	117.00
59	A5	3256	U	C5-C6-N1	-5.06	120.17	122.70
10	AM	39	VAL	C-N-CA	5.06	134.36	121.70
58	B2	1029	G	C5-C6-N1	5.06	114.03	111.50
58	B2	1229	G	OP2-P-O3'	5.06	116.34	105.20
59	A5	846	U	C6-N1-C2	5.06	124.04	121.00
59	A5	1570	U	N1-C2-O2	5.06	126.34	122.80
59	A5	3713	C	C2-N3-C4	5.06	122.43	119.90
59	A5	811	G	OP1-P-O3'	5.06	116.33	105.20
59	A5	2080	G	C5-C6-O6	-5.06	125.56	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	215	A	N9-C4-C5	-5.06	103.78	105.80
59	A5	2497	C	C6-N1-C2	-5.06	118.28	120.30
59	A5	2526	A	C6-N1-C2	5.06	121.64	118.60
58	B2	705	G	N3-C4-N9	5.06	129.03	126.00
58	B2	1234	G	N9-C4-C5	-5.06	103.38	105.40
58	B2	1404	C	C6-N1-C1'	-5.06	114.73	120.80
58	B2	1854	U	N3-C4-O4	-5.06	115.86	119.40
59	A5	2733	G	C5-C6-N1	5.06	114.03	111.50
59	A5	2796	G	N3-C4-N9	5.06	129.03	126.00
59	A5	3255	G	N7-C8-N9	5.06	115.63	113.10
59	A5	987	G	N1-C2-N3	-5.06	120.87	123.90
59	A5	1693	C	OP1-P-O3'	5.06	116.32	105.20
59	A5	2000	U	C6-N1-C1'	5.06	128.28	121.20
59	A5	3508	G	C5-C6-N1	5.06	114.03	111.50
55	A7	108	G	C6-N1-C2	5.05	128.13	125.10
59	A5	363	G	N7-C8-N9	5.05	115.63	113.10
59	A5	855	A	N1-C6-N6	-5.05	115.57	118.60
59	A5	1383	A	N1-C2-N3	-5.05	126.77	129.30
59	A5	2734	A	O4'-C1'-N9	-5.05	104.16	108.20
59	A5	3930	A	C5-C6-N6	5.05	127.74	123.70
63	AI	192	LEU	CA-CB-CG	5.05	126.93	115.30
58	B2	953	A	O5'-P-OP1	-5.05	101.15	105.70
59	A5	421	C	C5-C6-N1	-5.05	118.47	121.00
59	A5	1046	A	N9-C4-C5	-5.05	103.78	105.80
58	B2	628	A	OP2-P-O3'	5.05	116.31	105.20
59	A5	283	A	N1-C2-N3	5.05	131.83	129.30
59	A5	443	G	N3-C4-C5	5.05	131.12	128.60
59	A5	994	U	N1-C2-N3	5.05	117.93	114.90
59	A5	1127	C	O5'-P-OP1	-5.05	101.15	105.70
59	A5	1634	A	C5-N7-C8	-5.05	101.37	103.90
59	A5	2676	U	N3-C4-C5	5.05	117.63	114.60
59	A5	2904	U	P-O3'-C3'	5.05	125.76	119.70
59	A5	3729	A	C2-N3-C4	-5.05	108.07	110.60
58	B2	1093	C	N1-C2-O2	5.05	121.93	118.90
58	B2	1239	A	N1-C6-N6	5.05	121.63	118.60
58	B2	1849	U	N3-C4-O4	-5.05	115.86	119.40
59	A5	365	A	O5'-P-OP2	-5.05	101.16	105.70
59	A5	462	C	N3-C4-N4	-5.05	114.47	118.00
59	A5	1137	G	N1-C6-O6	5.05	122.93	119.90
59	A5	1289	C	O4'-C1'-N1	5.05	112.24	108.20
59	A5	1791	A	C5-N7-C8	-5.05	101.38	103.90
59	A5	2150	U	N3-C4-C5	-5.05	111.57	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2184	G	N1-C6-O6	-5.05	116.87	119.90
59	A5	3330	C	C2-N3-C4	-5.05	117.38	119.90
59	A5	3476	G	C5-N7-C8	-5.05	101.78	104.30
59	A5	1521	G	C5-C6-O6	5.05	131.63	128.60
59	A5	2760	G	O4'-C1'-N9	5.05	112.24	108.20
59	A5	3327	U	N1-C2-N3	5.05	117.93	114.90
59	A5	3679	C	C4-C5-C6	-5.05	114.88	117.40
4	CB	99	LEU	CA-CB-CG	5.05	126.91	115.30
39	Cb	38	LYS	C-N-CA	5.05	134.32	121.70
58	B2	413	C	C6-N1-C1'	5.05	126.86	120.80
59	A5	291	U	C4-C5-C6	-5.05	116.67	119.70
59	A5	1373	A	C2-N3-C4	5.05	113.12	110.60
59	A5	1674	A	C2-N3-C4	-5.05	108.08	110.60
59	A5	2509	G	O5'-P-OP1	-5.05	101.16	105.70
59	A5	3149	U	N3-C4-C5	5.05	117.63	114.60
59	A5	3254	U	C5-C6-N1	5.05	125.22	122.70
59	A5	3340	A	N7-C8-N9	5.05	116.32	113.80
6	CC	48	ARG	NE-CZ-NH1	-5.04	117.78	120.30
59	A5	215	A	N1-C6-N6	5.04	121.63	118.60
59	A5	491	U	N1-C2-O2	5.04	126.33	122.80
59	A5	1081	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	1883	G	N9-C4-C5	-5.04	103.38	105.40
59	A5	2103	G	N1-C2-N2	5.04	120.74	116.20
59	A5	3350	U	OP2-P-O3'	5.04	116.30	105.20
59	A5	3596	A	N3-C4-N9	-5.04	123.36	127.40
59	A5	3671	C	N3-C4-C5	-5.04	119.88	121.90
59	A5	3780	G	N9-C4-C5	-5.04	103.38	105.40
6	CC	197	GLY	N-CA-C	-5.04	100.49	113.10
54	A9	29	U	C5-C4-O4	5.04	128.93	125.90
58	B2	365	A	C5-N7-C8	-5.04	101.38	103.90
58	B2	598	C	N3-C2-O2	-5.04	118.37	121.90
58	B2	1074	G	C2-N3-C4	5.04	114.42	111.90
58	B2	1977	A	C8-N9-C4	5.04	107.82	105.80
59	A5	1198	U	C5'-C4'-C3'	5.04	124.07	116.00
59	A5	3138	G	N1-C2-N3	-5.04	120.87	123.90
59	A5	3719	A	P-O3'-C3'	5.04	125.75	119.70
68	CM	135	LYS	N-CA-C	5.04	124.62	111.00
59	A5	1112	G	C8-N9-C1'	-5.04	120.45	127.00
59	A5	1770	C	C4-C5-C6	-5.04	114.88	117.40
59	A5	2525	C	C5-C6-N1	5.04	123.52	121.00
59	A5	1742	U	C5-C6-N1	5.04	125.22	122.70
59	A5	1875	G	O5'-P-OP2	5.04	116.75	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2036	G	N3-C2-N2	-5.04	116.37	119.90
59	A5	2242	C	O4'-C1'-N1	5.04	112.23	108.20
59	A5	3468	G	C4-C5-N7	5.04	112.82	110.80
59	A5	3616	G	N3-C4-C5	-5.04	126.08	128.60
56	A8	105	C	C5-C6-N1	5.04	123.52	121.00
58	B2	591	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	130	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	1053	G	C5-N7-C8	-5.04	101.78	104.30
59	A5	1153	G	N9-C4-C5	-5.04	103.39	105.40
59	A5	2736	A	C6-N1-C2	5.04	121.62	118.60
59	A5	3498	A	N1-C6-N6	5.04	121.62	118.60
55	A7	65	C	N1-C2-O2	5.04	121.92	118.90
58	B2	1569	C	N1-C2-O2	5.04	121.92	118.90
59	A5	346	U	OP1-P-O3'	5.04	116.28	105.20
59	A5	1687	U	OP1-P-O3'	5.04	116.28	105.20
59	A5	1761	C	C4-C5-C6	-5.04	114.88	117.40
59	A5	2664	U	N1-C2-N3	5.04	117.92	114.90
58	B2	365	A	C4-C5-N7	5.03	113.22	110.70
59	A5	233	A	C2-N3-C4	5.03	113.12	110.60
59	A5	356	A	C5-C6-N1	5.03	120.22	117.70
59	A5	1168	G	C8-N9-C1'	-5.03	120.46	127.00
59	A5	2136	U	N3-C2-O2	5.03	125.72	122.20
59	A5	2796	G	N7-C8-N9	5.03	115.62	113.10
59	A5	1959	A	O5'-P-OP1	-5.03	101.17	105.70
59	A5	2737	C	C2-N1-C1'	5.03	124.33	118.80
59	A5	3349	A	N3-C4-N9	-5.03	123.37	127.40
59	A5	3515	C	O5'-P-OP1	-5.03	101.17	105.70
59	A5	3591	A	C4-C5-C6	-5.03	114.48	117.00
59	A5	55	U	C4-C5-C6	-5.03	116.68	119.70
59	A5	64	A	O5'-P-OP1	-5.03	101.17	105.70
59	A5	1083	A	C2-N3-C4	5.03	113.11	110.60
59	A5	1428	G	C4-N9-C1'	5.03	133.04	126.50
59	A5	1530	U	C4-C5-C6	-5.03	116.68	119.70
59	A5	2558	A	C5-C6-N1	5.03	120.22	117.70
59	A5	2796	G	N3-C4-C5	-5.03	126.08	128.60
59	A5	3199	A	N9-C4-C5	-5.03	103.79	105.80
59	A5	3630	C	O5'-P-OP1	-5.03	101.17	105.70
59	A5	767	A	N3-C4-C5	5.03	130.32	126.80
59	A5	1702	G	N3-C2-N2	-5.03	116.38	119.90
59	A5	2194	G	N3-C4-N9	5.03	129.02	126.00
59	A5	3168	A	N1-C2-N3	-5.03	126.79	129.30
54	A9	27	U	N1-C2-O2	5.03	126.32	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	464	G	N3-C4-C5	5.03	131.11	128.60
58	B2	604	C	N3-C2-O2	-5.03	118.38	121.90
58	B2	1213	A	OP2-P-O3'	5.03	116.26	105.20
58	B2	1725	C	N1-C2-O2	5.03	121.92	118.90
59	A5	428	C	C6-N1-C2	-5.03	118.29	120.30
59	A5	3625	U	C4-C5-C6	-5.03	116.68	119.70
58	B2	1197	G	C4-C5-N7	5.03	112.81	110.80
59	A5	439	U	N3-C4-C5	5.03	117.62	114.60
59	A5	1373	A	OP1-P-O3'	5.03	116.26	105.20
59	A5	1562	U	C5-C4-O4	5.03	128.91	125.90
59	A5	2109	G	C6-C5-N7	-5.03	127.39	130.40
59	A5	2216	A	C5-C6-N6	5.03	127.72	123.70
59	A5	3285	G	N3-C4-N9	5.03	129.01	126.00
58	B2	1838	C	C5-C6-N1	5.02	123.51	121.00
59	A5	1278	A	O5'-P-OP1	-5.02	101.18	105.70
59	A5	2206	U	C5-C6-N1	5.02	125.21	122.70
58	B2	1984	G	N1-C2-N2	-5.02	111.68	116.20
59	A5	104	A	N3-C4-C5	5.02	130.32	126.80
59	A5	802	G	C6-C5-N7	5.02	133.41	130.40
59	A5	1011	U	C5-C4-O4	-5.02	122.89	125.90
59	A5	1051	C	C4-C5-C6	-5.02	114.89	117.40
59	A5	1289	C	N1-C2-O2	-5.02	115.89	118.90
59	A5	1357	C	N3-C4-C5	-5.02	119.89	121.90
59	A5	1688	A	OP1-P-OP2	5.02	127.13	119.60
59	A5	2640	A	OP1-P-O3'	5.02	116.25	105.20
56	A8	95	A	C8-N9-C4	-5.02	103.79	105.80
54	A9	27	U	N3-C2-O2	-5.02	118.69	122.20
58	B2	1550	C	C6-N1-C2	-5.02	118.29	120.30
59	A5	414	A	C4-C5-C6	-5.02	114.49	117.00
59	A5	2693	G	C6-C5-N7	-5.02	127.39	130.40
59	A5	3677	U	C5-C4-O4	-5.02	122.89	125.90
59	A5	3760	A	C5-C6-N1	5.02	120.21	117.70
59	A5	3763	U	N1-C2-O2	5.02	126.31	122.80
59	A5	3765	A	N1-C6-N6	5.02	121.61	118.60
56	A8	19	A	N1-C6-N6	-5.02	115.59	118.60
59	A5	245	G	N3-C4-N9	-5.02	122.99	126.00
59	A5	1124	G	C8-N9-C1'	5.02	133.52	127.00
59	A5	2678	G	OP1-P-OP2	5.02	127.13	119.60
59	A5	3168	A	C5-C6-N1	5.02	120.21	117.70
59	A5	3539	C	C6-N1-C2	-5.02	118.29	120.30
58	B2	466	G	C6-C5-N7	-5.02	127.39	130.40
59	A5	375	C	O5'-P-OP2	-5.02	101.19	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1263	U	O5'-P-OP2	-5.02	101.19	105.70
59	A5	1385	G	C2-N3-C4	-5.02	109.39	111.90
59	A5	3887	U	OP1-P-O3'	5.02	116.23	105.20
56	A8	43	A	OP1-P-O3'	5.01	116.23	105.20
58	B2	510	U	O5'-P-OP2	-5.01	101.19	105.70
59	A5	986	A	C8-N9-C4	-5.01	103.79	105.80
59	A5	1077	C	C5-C6-N1	5.01	123.51	121.00
59	A5	1351	C	OP1-P-O3'	5.01	116.23	105.20
59	A5	1552	A	C4-C5-N7	5.01	113.21	110.70
59	A5	2212	A	C5-N7-C8	-5.01	101.39	103.90
59	A5	2237	A	C5-N7-C8	-5.01	101.39	103.90
59	A5	2717	C	C6-N1-C1'	-5.01	114.78	120.80
59	A5	3511	U	OP1-P-OP2	5.01	127.12	119.60
58	B2	624	G	N9-C4-C5	5.01	107.41	105.40
59	A5	1658	G	N3-C4-N9	-5.01	122.99	126.00
59	A5	2491	C	OP1-P-OP2	-5.01	112.08	119.60
59	A5	3144	U	C5-C6-N1	5.01	125.20	122.70
59	A5	3585	A	C5-C6-N1	5.01	120.21	117.70
58	B2	382	G	N3-C4-N9	-5.01	122.99	126.00
59	A5	93	G	N3-C4-N9	5.01	129.01	126.00
59	A5	364	U	C6-N1-C1'	5.01	128.21	121.20
59	A5	2067	C	N1-C2-O2	5.01	121.91	118.90
59	A5	3505	U	N1-C2-O2	5.01	126.31	122.80
59	A5	3617	U	N3-C4-O4	5.01	122.91	119.40
59	A5	3729	A	P-O3'-C3'	-5.01	113.69	119.70
59	A5	3759	G	N9-C4-C5	5.01	107.40	105.40
59	A5	3878	U	C2-N1-C1'	5.01	123.71	117.70
58	B2	372	A	C4-C5-C6	-5.01	114.50	117.00
52	CE	123	LEU	CB-CG-CD2	-5.01	102.49	111.00
55	A7	98	G	C5-C6-N1	5.01	114.00	111.50
58	B2	275	U	C2-N1-C1'	5.01	123.71	117.70
58	B2	1287	G	N3-C2-N2	-5.01	116.39	119.90
59	A5	1888	A	C5-N7-C8	-5.01	101.40	103.90
59	A5	2162	C	N3-C2-O2	-5.01	118.39	121.90
59	A5	3013	C	C6-N1-C2	-5.01	118.30	120.30
59	A5	3196	C	C6-N1-C2	-5.01	118.30	120.30
59	A5	3636	G	C8-N9-C4	-5.01	104.40	106.40
44	Ck	59	SER	N-CA-C	5.00	124.51	111.00
58	B2	256	C	N1-C2-O2	5.00	121.90	118.90
58	B2	326	U	OP2-P-O3'	5.00	116.21	105.20
58	B2	1209	U	C5-C6-N1	5.00	125.20	122.70
58	B2	1970	U	N1-C2-O2	5.00	126.30	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1062	C	C2-N3-C4	5.00	122.40	119.90
56	A8	106	A	N3-C4-C5	-5.00	123.30	126.80
58	B2	258	A	C6-C5-N7	-5.00	128.80	132.30
58	B2	1235	A	O4'-C1'-N9	5.00	112.20	108.20
59	A5	309	C	N3-C4-C5	5.00	123.90	121.90
59	A5	462	C	C4-C5-C6	-5.00	114.90	117.40
59	A5	2724	C	N1-C2-O2	5.00	121.90	118.90
58	B2	413	C	N3-C4-N4	-5.00	114.50	118.00
58	B2	989	G	C5-N7-C8	-5.00	101.80	104.30
58	B2	1168	C	O4'-C1'-N1	5.00	112.20	108.20
59	A5	633	A	C4-C5-N7	5.00	113.20	110.70
59	A5	783	G	OP2-P-O3'	5.00	116.20	105.20
59	A5	1295	A	OP1-P-OP2	-5.00	112.10	119.60
59	A5	2643	C	C5-C6-N1	5.00	123.50	121.00
59	A5	2656	C	N3-C4-N4	5.00	121.50	118.00

There are no chirality outliers.

All (245) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
59	A5	2489	G	Sidechain
1	AA	108	PHE	Peptide
1	AA	29	ASN	Peptide
3	AB	119	LYS	Peptide
3	AB	180	SER	Peptide
5	AC	240	LYS	Peptide
21	AD	181	GLN	Peptide
21	AD	196	PRO	Peptide
60	AE	133	ALA	Peptide
60	AE	240	LYS	Peptide
60	AE	241	GLY	Peptide
61	AG	99	GLY	Peptide
62	AH	121	THR	Peptide
62	AH	156	LEU	Peptide
62	AH	187	PHE	Peptide
62	AH	64	ILE	Peptide
63	AI	21	LEU	Peptide
63	AI	22	ARG	Peptide
63	AI	49	ARG	Peptide
63	AI	8	ALA	Peptide
63	AI	98	LYS	Peptide
24	AJ	148	PHE	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
24	AJ	9	VAL	Peptide
13	AL	116	ASP	Peptide
13	AL	152	PHE	Peptide
73	AO	102	GLY	Peptide
73	AO	127	GLY	Peptide
73	AO	140	THR	Peptide
73	AO	147	ARG	Peptide
73	AO	98	ARG	Peptide
73	AO	99	ALA	Peptide
64	AQ	19	LYS	Peptide
64	AQ	9	VAL	Peptide
71	AT	86	GLY	Peptide
71	AT	88	HIS	Peptide
75	AW	9	ASP	Peptide
9	AX	29	LYS	Peptide
17	AY	86	PHE	Peptide
19	Aa	10	ARG	Peptide
19	Aa	46	GLU	Peptide
19	Aa	62	TYR	Peptide
19	Aa	85	ARG	Peptide
19	Aa	98	PRO	Peptide
74	Ac	18	GLY	Peptide
11	Ad	33	LYS	Peptide
22	Ae	101	THR	Peptide
22	Ae	113	ARG	Peptide
22	Ae	96	LYS	Peptide
2	CA	13	GLY	Peptide
2	CA	196	TRP	Peptide
2	CA	229	THR	Peptide
4	CB	165	HIS	Peptide
4	CB	17	TYR	Peptide
4	CB	270	GLY	Peptide
4	CB	292	HIS	Peptide
4	CB	294	LYS	Peptide
4	CB	310	THR	Peptide
4	CB	311	ASP	Peptide
4	CB	325	GLU	Peptide
4	CB	33	PRO	Peptide
4	CB	374	MET	Peptide
4	CB	54	THR	Peptide
6	CC	105	PHE	Peptide
6	CC	17	ASN	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
6	CC	203	ARG	Peptide
6	CC	204	ARG	Peptide
6	CC	267	PHE	Peptide
6	CC	297	LYS	Peptide
6	CC	315	SER	Peptide
6	CC	316	VAL	Peptide
6	CC	64	GLN	Peptide
6	CC	88	HIS	Peptide
6	CC	92	GLN	Peptide
28	CD	188	LYS	Peptide
28	CD	19	LYS	Peptide
28	CD	223	PHE	Peptide
28	CD	271	LYS	Peptide
52	CE	175	LYS	Peptide
52	CE	226	LEU	Peptide
52	CE	228	ASN	Peptide
52	CE	23	ASN	Peptide
52	CE	237	TYR	Peptide
52	CE	60	VAL	Peptide
52	CE	69	TYR	Peptide
52	CE	70	PRO	Peptide
52	CE	71	THR	Peptide
52	CE	73	THR	Peptide
52	CE	80	SER	Peptide
52	CE	81	LYS	Peptide
52	CE	83	ASN	Peptide
80	CF	235	GLY	Peptide
80	CF	99	ARG	Peptide
53	CG	43	ASN	Peptide
53	CG	48	GLN	Peptide
53	CG	83	PRO	Peptide
53	CG	86	HIS	Peptide
51	CH	107	ASN	Peptide
51	CH	22	ALA	Peptide
27	CI	111	LEU	Peptide
27	CI	114	GLY	Peptide
27	CI	15	LYS	Peptide
27	CI	74	LYS	Peptide
50	CJ	102	GLU	Peptide
50	CJ	159	GLN	Peptide
50	CJ	96	GLU	Peptide
66	CL	124	ILE	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
66	CL	151	GLY	Peptide
66	CL	157	LYS	Peptide
66	CL	158	ASN	Peptide
66	CL	160	GLN	Peptide
66	CL	162	ALA	Peptide
66	CL	169	VAL	Peptide
66	CL	170	THR	Peptide
66	CL	46	PHE	Peptide
66	CL	53	ALA	Peptide
66	CL	56	PRO	Peptide
66	CL	6	ASN	Peptide
66	CL	69	LEU	Peptide
66	CL	75	PHE	Peptide
66	CL	85	ILE	Peptide
68	CM	103	SER	Peptide
68	CM	106	ASP	Peptide
68	CM	127	PHE	Peptide
68	CM	134	THR	Peptide
68	CM	16	SER	Peptide
68	CM	96	GLN	Peptide
26	CN	124	ASP	Peptide
26	CN	182	GLN	Peptide
26	CN	28	TRP	Peptide
26	CN	75	VAL	Peptide
26	CN	76	PRO	Peptide
26	CN	78	GLY	Peptide
26	CN	79	CYS	Peptide
26	CN	97	GLY	Peptide
65	CO	111	PRO	Peptide
65	CO	112	SER	Peptide
65	CO	192	GLU	Peptide
65	CO	32	GLY	Peptide
65	CO	4	LEU	Peptide
65	CO	59	TYR	Peptide
33	CP	141	SER	Peptide
33	CP	7	GLU	Peptide
29	CQ	12	LYS	Peptide
29	CQ	153	GLY	Peptide
29	CQ	163	THR	Peptide
29	CQ	5	ILE	Peptide
29	CQ	55	LYS	Peptide
29	CQ	72	ALA	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
29	CQ	8	LYS	Peptide
29	CQ	9	TYR	Peptide
30	CR	112	SER	Peptide
30	CR	121	HIS	Peptide
30	CR	140	GLU	Peptide
30	CR	162	ARG	Peptide
30	CR	169	ALA	Peptide
31	CS	118	ARG	Peptide
31	CS	138	ARG	Peptide
31	CS	17	LEU	Peptide
31	CS	172	PRO	Peptide
31	CS	19	SER	Peptide
31	CS	25	THR	Peptide
31	CS	53	LYS	Peptide
31	CS	57	THR	Peptide
31	CS	67	VAL	Peptide
31	CS	88	SER	Peptide
32	CT	139	HIS	Peptide
32	CT	143	LYS	Peptide
32	CT	145	GLU	Peptide
32	CT	147	PRO	Peptide
32	CT	154	PRO	Peptide
32	CT	156	GLU	Peptide
32	CT	157	PHE	Peptide
32	CT	3	ASN	Peptide
32	CT	5	LYS	Peptide
32	CT	6	GLY	Peptide
32	CT	83	LYS	Peptide
78	CU	226	LEU	Peptide
67	CV	44	GLY	Peptide
76	CW	16	GLY	Peptide
76	CW	25	ASP	Peptide
35	CY	2	LYS	Peptide
35	CY	64	GLY	Peptide
35	CY	83	GLU	Peptide
36	CZ	31	ASP	Peptide
25	Ca	115	ARG	Peptide
25	Ca	14	GLY	Peptide
25	Ca	58	GLY	Peptide
25	Ca	98	LYS	Peptide
39	Cb	19	ASN	Peptide
39	Cb	21	ILE	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
39	Cb	38	LYS	Peptide
39	Cb	50	ASN	Peptide
40	Cc	37	THR	Peptide
81	Cd	39	ALA	Peptide
41	Ce	123	ASN	Peptide
41	Ce	13	LYS	Peptide
41	Ce	14	LYS	Peptide
41	Ce	20	ILE	Peptide
41	Ce	5	PRO	Peptide
42	Cf	107	HIS	Peptide
42	Cf	108	PRO	Peptide
42	Cf	141	GLY	Peptide
42	Cf	155	SER	Peptide
42	Cf	49	ARG	Peptide
77	Cg	4	ARG	Peptide
38	Ch	42	SER	Peptide
38	Ch	43	LYS	Peptide
38	Ch	86	LYS	Peptide
38	Ch	94	ALA	Peptide
43	Ci	15	HIS	Peptide
43	Ci	21	ARG	Peptide
43	Ci	4	ARG	Peptide
43	Ci	7	LEU	Peptide
43	Ci	73	VAL	Peptide
43	Ci	87	LEU	Peptide
44	Ck	58	GLN	Peptide
46	Cm	114	LYS	Peptide
46	Cm	125	LYS	Peptide
49	Co	26	TYR	Peptide
49	Co	30	LYS	Peptide
49	Co	46	GLN	Peptide
48	Cp	14	TYR	Peptide
48	Cp	60	CYS	Peptide
37	Cr	107	ARG	Peptide
37	Cr	126	LYS	Peptide
37	Cr	22	LYS	Peptide
37	Cr	24	ASP	Peptide
37	Cr	26	LYS	Peptide
37	Cr	27	LYS	Peptide
37	Cr	28	PRO	Peptide
37	Cr	37	ALA	Peptide
37	Cr	41	SER	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
37	Cr	43	ARG	Peptide
37	Cr	45	SER	Peptide
37	Cr	46	GLY	Peptide
37	Cr	50	LYS	Peptide
37	Cr	57	PRO	Peptide
37	Cr	64	PHE	Peptide
37	Cr	69	LYS	Peptide
37	Cr	71	GLY	Peptide
37	Cr	79	LYS	Peptide
37	Cr	81	THR	Peptide
37	Cr	83	ARG	Peptide
69	DA	132	GLY	Peptide
69	DA	171	GLU	Peptide

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AA	216/218 (99%)	187 (87%)	28 (13%)	1 (0%)	29	68
2	CA	251/253 (99%)	214 (85%)	36 (14%)	1 (0%)	34	72
3	AB	218/220 (99%)	178 (82%)	38 (17%)	2 (1%)	17	56
4	CB	412/414 (100%)	339 (82%)	68 (16%)	5 (1%)	13	50
5	AC	225/227 (99%)	198 (88%)	27 (12%)	0	100	100
6	CC	390/392 (100%)	323 (83%)	65 (17%)	2 (0%)	29	68
7	Ag	316/318 (99%)	276 (87%)	40 (13%)	0	100	100
8	AU	100/102 (98%)	92 (92%)	8 (8%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	AX	141/143 (99%)	117 (83%)	23 (16%)	1 (1%)	22	61
10	AM	117/119 (98%)	93 (80%)	24 (20%)	0	100	100
11	Ad	50/52 (96%)	28 (56%)	21 (42%)	1 (2%)	7	39
12	AN	148/150 (99%)	138 (93%)	10 (7%)	0	100	100
13	AL	153/155 (99%)	125 (82%)	28 (18%)	0	100	100
14	AR	118/120 (98%)	105 (89%)	13 (11%)	0	100	100
15	AP	122/124 (98%)	102 (84%)	20 (16%)	0	100	100
16	AV	80/82 (98%)	65 (81%)	15 (19%)	0	100	100
17	AY	124/126 (98%)	102 (82%)	22 (18%)	0	100	100
18	AZ	72/74 (97%)	65 (90%)	7 (10%)	0	100	100
19	Aa	105/107 (98%)	78 (74%)	26 (25%)	1 (1%)	15	54
20	Ab	82/84 (98%)	63 (77%)	19 (23%)	0	100	100
21	AD	225/227 (99%)	191 (85%)	30 (13%)	4 (2%)	8	41
22	Ae	56/58 (97%)	38 (68%)	18 (32%)	0	100	100
23	Af	78/80 (98%)	62 (80%)	16 (20%)	0	100	100
24	AJ	179/181 (99%)	148 (83%)	28 (16%)	3 (2%)	9	42
25	Ca	147/149 (99%)	118 (80%)	27 (18%)	2 (1%)	11	46
26	CN	201/203 (99%)	159 (79%)	40 (20%)	2 (1%)	15	54
27	CI	215/217 (99%)	182 (85%)	32 (15%)	1 (0%)	29	68
28	CD	288/290 (99%)	244 (85%)	43 (15%)	1 (0%)	41	75
29	CQ	185/187 (99%)	164 (89%)	21 (11%)	0	100	100
30	CR	201/203 (99%)	179 (89%)	22 (11%)	0	100	100
31	CS	171/173 (99%)	121 (71%)	43 (25%)	7 (4%)	3	23
32	CT	156/158 (99%)	128 (82%)	26 (17%)	2 (1%)	12	48
33	CP	183/185 (99%)	153 (84%)	30 (16%)	0	100	100
34	CX	118/120 (98%)	95 (80%)	22 (19%)	1 (1%)	19	58
35	CY	129/131 (98%)	115 (89%)	14 (11%)	0	100	100
36	CZ	132/134 (98%)	113 (86%)	18 (14%)	1 (1%)	19	58
37	Cr	132/134 (98%)	95 (72%)	31 (24%)	6 (4%)	2	21
38	Ch	121/123 (98%)	108 (89%)	13 (11%)	0	100	100
39	Cb	73/75 (97%)	57 (78%)	15 (20%)	1 (1%)	11	46

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	Cc	98/100 (98%)	92 (94%)	6 (6%)	0	100	100
41	Ce	130/132 (98%)	112 (86%)	15 (12%)	3 (2%)	6	36
42	Cf	155/157 (99%)	121 (78%)	32 (21%)	2 (1%)	12	48
43	Ci	111/113 (98%)	82 (74%)	27 (24%)	2 (2%)	8	41
44	Ck	68/70 (97%)	61 (90%)	7 (10%)	0	100	100
45	Cl	48/50 (96%)	37 (77%)	11 (23%)	0	100	100
46	Cm	50/52 (96%)	38 (76%)	12 (24%)	0	100	100
47	Cn	23/25 (92%)	23 (100%)	0	0	100	100
48	Cp	89/91 (98%)	78 (88%)	11 (12%)	0	100	100
49	Co	102/104 (98%)	77 (76%)	22 (22%)	3 (3%)	4	31
50	CJ	180/182 (99%)	148 (82%)	31 (17%)	1 (1%)	25	64
51	CH	188/190 (99%)	162 (86%)	23 (12%)	3 (2%)	9	43
52	CE	226/228 (99%)	167 (74%)	55 (24%)	4 (2%)	8	41
53	CG	239/241 (99%)	207 (87%)	31 (13%)	1 (0%)	34	72
57	Cz	215/217 (99%)	196 (91%)	19 (9%)	0	100	100
60	AE	259/261 (99%)	217 (84%)	40 (15%)	2 (1%)	19	58
61	AG	229/231 (99%)	207 (90%)	22 (10%)	0	100	100
62	AH	192/194 (99%)	156 (81%)	35 (18%)	1 (0%)	29	68
63	AI	205/207 (99%)	157 (77%)	47 (23%)	1 (0%)	29	68
64	AQ	146/148 (99%)	123 (84%)	23 (16%)	0	100	100
65	CO	203/205 (99%)	172 (85%)	27 (13%)	4 (2%)	7	39
66	CL	208/210 (99%)	147 (71%)	49 (24%)	12 (6%)	1	16
67	CV	132/134 (98%)	120 (91%)	12 (9%)	0	100	100
68	CM	157/159 (99%)	130 (83%)	26 (17%)	1 (1%)	25	64
69	DA	346/370 (94%)	308 (89%)	37 (11%)	1 (0%)	41	75
70	AK	88/90 (98%)	72 (82%)	16 (18%)	0	100	100
71	AT	128/143 (90%)	100 (78%)	26 (20%)	2 (2%)	9	43
72	AF	187/189 (99%)	145 (78%)	41 (22%)	1 (0%)	29	68
73	AO	125/127 (98%)	100 (80%)	25 (20%)	0	100	100
74	Ac	60/62 (97%)	51 (85%)	9 (15%)	0	100	100
75	AW	127/129 (98%)	116 (91%)	11 (9%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
76	CW	56/58 (97%)	47 (84%)	7 (12%)	2 (4%)	3	26
77	Cg	101/103 (98%)	88 (87%)	13 (13%)	0	100	100
78	CU	94/96 (98%)	71 (76%)	23 (24%)	0	100	100
79	Cj	83/87 (95%)	67 (81%)	14 (17%)	2 (2%)	6	35
80	CF	221/223 (99%)	191 (86%)	26 (12%)	4 (2%)	8	41
81	Cd	106/108 (98%)	92 (87%)	14 (13%)	0	100	100
82	AS	132/134 (98%)	116 (88%)	16 (12%)	0	100	100
All	All	11937/12128 (98%)	9952 (83%)	1888 (16%)	97 (1%)	24	58

All (97) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	CA	196	TRP
3	AB	120	TRP
25	Ca	79	LEU
63	AI	99	ASN
65	CO	112	SER
65	CO	113	PRO
66	CL	3	LYS
66	CL	77	LEU
71	AT	40	ALA
1	AA	32	PHE
4	CB	34	LYS
4	CB	312	LYS
6	CC	6	ALA
6	CC	93	GLY
28	CD	20	PHE
32	CT	5	LYS
32	CT	84	ILE
37	Cr	28	PRO
37	Cr	73	TYR
41	Ce	21	ARG
43	Ci	44	THR
49	Co	27	LYS
49	Co	30	LYS
50	CJ	97	TYR
60	AE	241	GLY
66	CL	53	ALA
66	CL	76	THR
79	Cj	5	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
80	CF	171	PRO
80	CF	236	ASP
9	AX	88	ASP
21	AD	202	PRO
31	CS	119	ALA
31	CS	139	ARG
31	CS	175	TYR
37	Cr	27	LYS
66	CL	7	MET
66	CL	161	PRO
68	CM	104	LEU
79	Cj	25	SER
19	Aa	63	VAL
25	Ca	25	LYS
26	CN	165	THR
31	CS	53	LYS
31	CS	173	ARG
37	Cr	40	SER
37	Cr	72	LYS
39	Cb	24	PRO
41	Ce	15	ARG
41	Ce	22	HIS
49	Co	29	SER
51	CH	23	ARG
52	CE	21	PRO
52	CE	229	MET
53	CG	168	PRO
65	CO	202	GLY
66	CL	125	LEU
80	CF	173	THR
80	CF	237	PHE
4	CB	375	GLY
11	Ad	40	ARG
21	AD	181	GLN
21	AD	182	GLY
24	AJ	7	PRO
26	CN	40	PRO
31	CS	68	TYR
31	CS	133	PRO
43	Ci	43	GLN
51	CH	107	ASN
52	CE	60	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
69	DA	133	ILE
76	CW	25	ASP
4	CB	64	GLY
24	AJ	10	PHE
37	Cr	39	VAL
42	Cf	138	ASN
60	AE	195	VAL
65	CO	193	PRO
66	CL	61	PRO
24	AJ	149	VAL
36	CZ	97	PRO
72	AF	129	GLY
21	AD	207	PRO
42	Cf	139	LEU
51	CH	109	VAL
52	CE	61	PRO
71	AT	49	ASP
3	AB	224	PRO
34	CX	165	VAL
66	CL	47	PRO
66	CL	56	PRO
4	CB	63	PRO
66	CL	46	PHE
66	CL	55	ARG
76	CW	26	GLY
62	AH	188	PRO
27	CI	205	PRO

5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	AA	190/190 (100%)	187 (98%)	3 (2%)	62 83
2	CA	195/195 (100%)	186 (95%)	9 (5%)	27 61
3	AB	199/199 (100%)	198 (100%)	1 (0%)	88 94

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	CB	349/349 (100%)	340 (97%)	9 (3%)	46	74
5	AC	188/188 (100%)	180 (96%)	8 (4%)	29	62
6	CC	323/323 (100%)	309 (96%)	14 (4%)	29	62
7	Ag	280/280 (100%)	274 (98%)	6 (2%)	53	79
8	AU	95/95 (100%)	93 (98%)	2 (2%)	53	79
9	AX	116/116 (100%)	115 (99%)	1 (1%)	78	90
10	AM	104/104 (100%)	102 (98%)	2 (2%)	57	80
11	Ad	45/45 (100%)	44 (98%)	1 (2%)	52	78
12	AN	130/130 (100%)	130 (100%)	0	100	100
13	AL	138/138 (100%)	136 (99%)	2 (1%)	67	85
14	AR	108/108 (100%)	108 (100%)	0	100	100
15	AP	111/111 (100%)	110 (99%)	1 (1%)	78	90
16	AV	67/67 (100%)	65 (97%)	2 (3%)	41	71
17	AY	105/106 (99%)	101 (96%)	4 (4%)	33	65
18	AZ	67/67 (100%)	65 (97%)	2 (3%)	41	71
19	Aa	94/94 (100%)	91 (97%)	3 (3%)	39	69
20	Ab	72/72 (100%)	71 (99%)	1 (1%)	67	85
21	AD	192/192 (100%)	188 (98%)	4 (2%)	53	79
22	Ae	47/47 (100%)	45 (96%)	2 (4%)	29	62
23	Af	70/70 (100%)	69 (99%)	1 (1%)	67	85
24	AJ	161/161 (100%)	159 (99%)	2 (1%)	71	87
25	Ca	122/122 (100%)	122 (100%)	0	100	100
26	CN	174/174 (100%)	168 (97%)	6 (3%)	37	68
27	CI	187/187 (100%)	183 (98%)	4 (2%)	53	79
28	CD	241/241 (100%)	236 (98%)	5 (2%)	53	79
29	CQ	164/164 (100%)	154 (94%)	10 (6%)	18	51
30	CR	176/176 (100%)	170 (97%)	6 (3%)	37	68
31	CS	156/156 (100%)	150 (96%)	6 (4%)	33	65
32	CT	137/137 (100%)	135 (98%)	2 (2%)	65	84
33	CP	160/160 (100%)	154 (96%)	6 (4%)	33	65
34	CX	106/106 (100%)	106 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	CY	116/116 (100%)	110 (95%)	6 (5%)	23	56
36	CZ	121/121 (100%)	121 (100%)	0	100	100
37	Cr	112/112 (100%)	106 (95%)	6 (5%)	22	55
38	Ch	112/112 (100%)	111 (99%)	1 (1%)	78	90
39	Cb	67/67 (100%)	63 (94%)	4 (6%)	19	52
40	Cc	84/84 (100%)	84 (100%)	0	100	100
41	Ce	120/120 (100%)	119 (99%)	1 (1%)	81	91
42	Cf	123/123 (100%)	119 (97%)	4 (3%)	38	68
43	Ci	100/100 (100%)	96 (96%)	4 (4%)	31	64
44	Ck	65/65 (100%)	65 (100%)	0	100	100
45	Cl	45/45 (100%)	44 (98%)	1 (2%)	52	78
46	Cm	48/48 (100%)	47 (98%)	1 (2%)	53	79
47	Cn	23/23 (100%)	21 (91%)	2 (9%)	10	38
48	Cp	74/74 (100%)	70 (95%)	4 (5%)	22	55
49	Co	94/94 (100%)	92 (98%)	2 (2%)	53	79
50	CJ	155/155 (100%)	153 (99%)	2 (1%)	69	86
51	CH	169/169 (100%)	165 (98%)	4 (2%)	49	76
52	CE	197/197 (100%)	190 (96%)	7 (4%)	35	66
53	CG	210/210 (100%)	207 (99%)	3 (1%)	67	85
57	Cz	190/190 (100%)	186 (98%)	4 (2%)	53	79
60	AE	220/220 (100%)	219 (100%)	1 (0%)	88	94
61	AG	200/200 (100%)	197 (98%)	3 (2%)	65	84
62	AH	175/175 (100%)	172 (98%)	3 (2%)	60	82
63	AI	175/175 (100%)	173 (99%)	2 (1%)	73	88
64	AQ	122/122 (100%)	119 (98%)	3 (2%)	47	75
65	CO	175/175 (100%)	169 (97%)	6 (3%)	37	68
66	CL	173/173 (100%)	167 (96%)	6 (4%)	36	67
67	CV	101/101 (100%)	99 (98%)	2 (2%)	55	79
68	CM	138/138 (100%)	135 (98%)	3 (2%)	52	78
69	DA	294/310 (95%)	289 (98%)	5 (2%)	60	82
70	AK	81/81 (100%)	79 (98%)	2 (2%)	47	75

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
71	AT	107/116 (92%)	107 (100%)	0	100	100
72	AF	160/160 (100%)	158 (99%)	2 (1%)	69	86
73	AO	98/98 (100%)	93 (95%)	5 (5%)	24	57
74	Ac	54/54 (100%)	51 (94%)	3 (6%)	21	54
75	AW	113/113 (100%)	113 (100%)	0	100	100
76	CW	52/52 (100%)	50 (96%)	2 (4%)	33	65
77	Cg	95/95 (100%)	88 (93%)	7 (7%)	13	44
78	CU	90/90 (100%)	87 (97%)	3 (3%)	38	68
79	Cj	71/71 (100%)	57 (80%)	14 (20%)	1	7
80	CF	197/197 (100%)	195 (99%)	2 (1%)	76	88
81	Cd	100/100 (100%)	92 (92%)	8 (8%)	12	41
82	AS	120/120 (100%)	119 (99%)	1 (1%)	81	91
All	All	10405/10431 (100%)	10141 (98%)	264 (2%)	50	75

All (264) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AA	41	ARG
1	AA	110	ASN
1	AA	212	LYS
2	CA	45	VAL
2	CA	50	HIS
2	CA	54	ARG
2	CA	101	VAL
2	CA	125	ARG
2	CA	158	VAL
2	CA	176	ASP
2	CA	221	LYS
2	CA	235	VAL
3	AB	85	ARG
4	CB	87	VAL
4	CB	121	ASN
4	CB	141	LEU
4	CB	261	ARG
4	CB	305	THR
4	CB	346	THR
4	CB	365	LEU
4	CB	388	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CB	396	ARG
5	AC	95	VAL
5	AC	105	THR
5	AC	106	ARG
5	AC	185	THR
5	AC	213	THR
5	AC	231	TYR
5	AC	240	LYS
5	AC	260	THR
6	CC	7	ARG
6	CC	57	VAL
6	CC	70	TRP
6	CC	72	THR
6	CC	103	ARG
6	CC	110	THR
6	CC	114	TRP
6	CC	116	ARG
6	CC	148	ASP
6	CC	239	ASN
6	CC	269	THR
6	CC	313	PHE
6	CC	314	ARG
6	CC	348	LYS
7	Ag	65	HIS
7	Ag	100	ARG
7	Ag	163	ASN
7	Ag	173	ARG
7	Ag	187	ASN
7	Ag	298	THR
8	AU	40	ASP
8	AU	67	THR
9	AX	119	ARG
10	AM	51	LYS
10	AM	85	ARG
11	Ad	16	GLN
13	AL	42	LYS
13	AL	43	THR
15	AP	11	LYS
16	AV	9	VAL
16	AV	32	ILE
17	AY	50	LYS
17	AY	63	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	AY	71	THR
17	AY	103	GLN
18	AZ	59	LYS
18	AZ	61	VAL
19	Aa	15	ARG
19	Aa	30	VAL
19	Aa	96	THR
20	Ab	45	THR
21	AD	64	LYS
21	AD	180	ARG
21	AD	197	LYS
21	AD	206	LEU
22	Ae	112	ARG
22	Ae	130	ASN
23	Af	119	ARG
24	AJ	40	ASN
24	AJ	122	LYS
26	CN	67	ARG
26	CN	76	PRO
26	CN	160	GLU
26	CN	170	SER
26	CN	194	ARG
26	CN	204	ARG
27	CI	82	LYS
27	CI	91	LEU
27	CI	111	LEU
27	CI	126	VAL
28	CD	17	GLN
28	CD	126	THR
28	CD	130	PHE
28	CD	144	CYS
28	CD	267	ARG
29	CQ	4	ASP
29	CQ	8	LYS
29	CQ	13	VAL
29	CQ	65	ARG
29	CQ	99	THR
29	CQ	115	LYS
29	CQ	161	SER
29	CQ	163	THR
29	CQ	172	ARG
29	CQ	176	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	CR	55	VAL
30	CR	86	ASN
30	CR	93	LEU
30	CR	95	TRP
30	CR	113	LYS
30	CR	172	ARG
31	CS	25	THR
31	CS	70	THR
31	CS	77	ASN
31	CS	84	TYR
31	CS	90	THR
31	CS	112	ASP
32	CT	9	ARG
32	CT	40	VAL
33	CP	22	LEU
33	CP	61	ARG
33	CP	64	ASN
33	CP	116	HIS
33	CP	144	CYS
33	CP	181	LYS
35	CY	49	ILE
35	CY	50	ARG
35	CY	55	VAL
35	CY	61	HIS
35	CY	79	VAL
35	CY	80	VAL
37	Cr	19	LEU
37	Cr	39	VAL
37	Cr	52	THR
37	Cr	75	GLN
37	Cr	80	ASN
37	Cr	115	LEU
38	Ch	91	ILE
39	Cb	6	ASN
39	Cb	36	ASP
39	Cb	58	LYS
39	Cb	68	LYS
41	Ce	4	ARG
42	Cf	44	TYR
42	Cf	46	ARG
42	Cf	114	VAL
42	Cf	131	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	Ci	41	ASN
43	Ci	58	VAL
43	Ci	71	LEU
43	Ci	108	ARG
45	Cl	28	ARG
46	Cm	118	THR
47	Cn	18	ARG
47	Cn	25	LYS
48	Cp	49	ARG
48	Cp	54	ILE
48	Cp	64	VAL
48	Cp	84	ARG
49	Co	32	ARG
49	Co	33	LYS
50	CJ	107	THR
50	CJ	151	ARG
51	CH	3	THR
51	CH	41	LEU
51	CH	61	THR
51	CH	107	ASN
52	CE	33	TYR
52	CE	92	ARG
52	CE	96	THR
52	CE	169	ARG
52	CE	193	VAL
52	CE	234	SER
52	CE	237	TYR
53	CG	135	LYS
53	CG	140	TYR
53	CG	205	THR
57	Cz	4	LYS
57	Cz	92	LYS
57	Cz	140	HIS
57	Cz	158	GLN
60	AE	8	HIS
61	AG	65	GLN
61	AG	77	LEU
61	AG	182	THR
62	AH	104	ARG
62	AH	121	THR
62	AH	189	ASP
63	AI	67	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
63	AI	140	THR
64	AQ	20	THR
64	AQ	39	ARG
64	AQ	119	ARG
65	CO	25	VAL
65	CO	76	ARG
65	CO	119	ARG
65	CO	131	LEU
65	CO	134	ASP
65	CO	174	ARG
66	CL	30	ARG
66	CL	67	THR
66	CL	75	PHE
66	CL	137	GLU
66	CL	144	LYS
66	CL	157	LYS
67	CV	48	ARG
67	CV	101	ASN
68	CM	50	TYR
68	CM	64	PHE
68	CM	109	ARG
69	DA	59	LEU
69	DA	173	VAL
69	DA	246	PHE
69	DA	371	ARG
69	DA	418	ASP
70	AK	32	HIS
70	AK	57	LYS
72	AF	154	ARG
72	AF	217	LYS
73	AO	55	ARG
73	AO	105	THR
73	AO	133	THR
73	AO	142	ARG
73	AO	150	ARG
74	Ac	22	GLN
74	Ac	23	CYS
74	Ac	41	ASN
76	CW	20	THR
76	CW	30	THR
77	Cg	4	ARG
77	Cg	6	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
77	Cg	7	LEU
77	Cg	17	SER
77	Cg	38	ASN
77	Cg	40	THR
77	Cg	75	THR
78	CU	239	LYS
78	CU	251	PHE
78	CU	285	MET
79	Cj	18	ILE
79	Cj	20	ARG
79	Cj	21	ARG
79	Cj	27	TYR
79	Cj	32	SER
79	Cj	33	LYS
79	Cj	35	SER
79	Cj	45	ARG
79	Cj	50	SER
79	Cj	51	ARG
79	Cj	63	ARG
79	Cj	65	ARG
79	Cj	66	TYR
79	Cj	69	ASN
80	CF	166	ASN
80	CF	194	LEU
81	Cd	15	ASN
81	Cd	25	HIS
81	Cd	28	LYS
81	Cd	31	HIS
81	Cd	62	ASP
81	Cd	85	LEU
81	Cd	116	THR
81	Cd	117	GLU
82	AS	118	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (11) such sidechains are listed below:

Mol	Chain	Res	Type
18	AZ	46	GLN
31	CS	159	HIS
33	CP	64	ASN
33	CP	80	GLN
57	Cz	205	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
71	AT	63	HIS
71	AT	85	ASN
79	Cj	16	HIS
82	AS	10	GLN
82	AS	102	ASN
82	AS	135	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
54	A9	29/30 (96%)	6 (20%)	1 (3%)
55	A7	119/120 (99%)	30 (25%)	1 (0%)
56	A8	122/123 (99%)	51 (41%)	5 (4%)
58	B2	1793/1995 (89%)	674 (37%)	37 (2%)
59	A5	3566/3974 (89%)	1380 (38%)	108 (3%)
All	All	5629/6242 (90%)	2141 (38%)	152 (2%)

All (2141) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
54	A9	6	G
54	A9	9	C
54	A9	21	G
54	A9	22	A
54	A9	24	G
54	A9	30	A
55	A7	2	C
55	A7	7	G
55	A7	14	C
55	A7	22	A
55	A7	25	A
55	A7	27	A
55	A7	33	U
55	A7	37	G
55	A7	38	U
55	A7	39	C
55	A7	44	C
55	A7	50	A
55	A7	60	C
55	A7	62	U
55	A7	64	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	A7	66	G
55	A7	71	G
55	A7	72	U
55	A7	73	U
55	A7	74	A
55	A7	78	C
55	A7	81	A
55	A7	97	G
55	A7	98	G
55	A7	100	A
55	A7	110	G
55	A7	112	U
55	A7	113	G
55	A7	116	G
55	A7	120	U
56	A8	2	A
56	A8	5	C
56	A8	10	C
56	A8	19	A
56	A8	22	C
56	A8	23	G
56	A8	24	G
56	A8	25	C
56	A8	31	G
56	A8	33	U
56	A8	34	C
56	A8	38	G
56	A8	40	A
56	A8	41	G
56	A8	45	G
56	A8	48	G
56	A8	50	A
56	A8	51	A
56	A8	52	A
56	A8	57	G
56	A8	59	G
56	A8	61	C
56	A8	62	A
56	A8	63	U
56	A8	70	A
56	A8	78	G
56	A8	80	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	A8	81	A
56	A8	82	C
56	A8	83	A
56	A8	84	U
56	A8	85	G
56	A8	86	A
56	A8	89	A
56	A8	92	G
56	A8	101	A
56	A8	102	A
56	A8	103	C
56	A8	104	G
56	A8	105	C
56	A8	106	A
56	A8	107	U
56	A8	108	A
56	A8	109	U
56	A8	110	C
56	A8	111	G
56	A8	113	A
56	A8	117	C
56	A8	121	C
56	A8	122	U
56	A8	123	G
58	B2	2	U
58	B2	4	C
58	B2	16	G
58	B2	17	C
58	B2	25	U
58	B2	26	A
58	B2	27	U
58	B2	34	G
58	B2	36	C
58	B2	38	C
58	B2	41	A
58	B2	42	G
58	B2	43	A
58	B2	45	U
58	B2	46	A
58	B2	47	A
58	B2	50	C
58	B2	57	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	60	U
58	B2	63	G
58	B2	65	A
58	B2	66	C
58	B2	68	C
58	B2	69	A
58	B2	73	A
58	B2	74	U
58	B2	75	U
58	B2	76	A
58	B2	77	A
58	B2	80	G
58	B2	82	G
58	B2	83	A
58	B2	84	A
58	B2	86	C
58	B2	93	A
58	B2	94	G
58	B2	96	C
58	B2	99	A
58	B2	103	U
58	B2	104	A
58	B2	110	U
58	B2	113	G
58	B2	114	G
58	B2	115	U
58	B2	124	U
58	B2	125	C
58	B2	126	G
58	B2	135	U
58	B2	136	A
58	B2	137	C
58	B2	138	U
58	B2	139	U
58	B2	141	G
58	B2	142	A
58	B2	143	U
58	B2	147	U
58	B2	150	G
58	B2	153	A
58	B2	155	U
58	B2	156	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	157	C
58	B2	167	U
58	B2	172	G
58	B2	173	C
58	B2	174	A
58	B2	176	U
58	B2	177	U
58	B2	178	A
58	B2	183	A
58	B2	184	U
58	B2	185	G
58	B2	188	C
58	B2	190	U
58	B2	191	U
58	B2	193	U
58	B2	194	G
58	B2	196	G
58	B2	200	U
58	B2	214	G
58	B2	215	C
58	B2	216	U
58	B2	221	C
58	B2	224	A
58	B2	226	C
58	B2	227	G
58	B2	233	A
58	B2	235	G
58	B2	236	A
58	B2	238	C
58	B2	242	A
58	B2	245	U
58	B2	246	U
58	B2	249	U
58	B2	250	U
58	B2	251	G
58	B2	252	A
58	B2	253	A
58	B2	254	C
58	B2	255	U
58	B2	257	U
58	B2	258	A
58	B2	259	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	260	A
58	B2	265	A
58	B2	266	U
58	B2	267	G
58	B2	270	G
58	B2	276	A
58	B2	279	G
58	B2	281	C
58	B2	283	U
58	B2	284	G
58	B2	285	U
58	B2	289	G
58	B2	290	A
58	B2	291	C
58	B2	292	G
58	B2	293	A
58	B2	294	C
58	B2	302	U
58	B2	304	A
58	B2	313	C
58	B2	314	C
58	B2	315	C
58	B2	316	U
58	B2	318	U
58	B2	319	C
58	B2	321	A
58	B2	324	U
58	B2	325	U
58	B2	326	U
58	B2	327	G
58	B2	338	C
58	B2	341	G
58	B2	342	G
58	B2	343	A
58	B2	352	G
58	B2	355	G
58	B2	357	A
58	B2	364	A
58	B2	365	A
58	B2	366	C
58	B2	375	A
58	B2	376	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	379	U
58	B2	382	G
58	B2	385	U
58	B2	386	C
58	B2	392	A
58	B2	395	G
58	B2	399	C
58	B2	402	A
58	B2	405	A
58	B2	407	C
58	B2	409	G
58	B2	412	A
58	B2	421	A
58	B2	422	A
58	B2	423	G
58	B2	426	A
58	B2	428	G
58	B2	429	C
58	B2	431	G
58	B2	439	G
58	B2	440	U
58	B2	444	U
58	B2	449	C
58	B2	450	A
58	B2	453	C
58	B2	464	G
58	B2	466	G
58	B2	473	A
58	B2	482	A
58	B2	489	C
58	B2	490	A
58	B2	501	C
58	B2	506	G
58	B2	507	C
58	B2	509	C
58	B2	510	U
58	B2	511	G
58	B2	512	U
58	B2	513	A
58	B2	514	A
58	B2	515	U
58	B2	516	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	517	G
58	B2	519	A
58	B2	521	U
58	B2	522	G
58	B2	523	A
58	B2	527	C
58	B2	529	C
58	B2	531	U
58	B2	541	U
58	B2	542	A
58	B2	544	C
58	B2	546	A
58	B2	547	G
58	B2	548	G
58	B2	549	A
58	B2	550	C
58	B2	553	A
58	B2	554	U
58	B2	557	G
58	B2	559	G
58	B2	562	C
58	B2	564	A
58	B2	565	G
58	B2	573	C
58	B2	576	G
58	B2	585	G
58	B2	587	A
58	B2	588	A
58	B2	593	A
58	B2	600	A
58	B2	602	A
58	B2	603	G
58	B2	605	G
58	B2	613	A
58	B2	614	A
58	B2	617	U
58	B2	618	G
58	B2	619	U
58	B2	627	A
58	B2	628	A
58	B2	631	C
58	B2	632	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	637	U
58	B2	642	G
58	B2	643	A
58	B2	646	U
58	B2	647	U
58	B2	648	G
58	B2	655	A
58	B2	656	U
58	B2	702	U
58	B2	705	G
58	B2	706	U
58	B2	713	A
58	B2	714	U
58	B2	715	U
58	B2	716	A
58	B2	717	C
58	B2	719	G
58	B2	720	G
58	B2	819	G
58	B2	824	U
58	B2	825	A
58	B2	833	G
58	B2	837	A
58	B2	838	A
58	B2	843	G
58	B2	847	G
58	B2	848	C
58	B2	853	A
58	B2	856	A
58	B2	857	G
58	B2	858	G
58	B2	860	U
58	B2	861	U
58	B2	862	C
58	B2	863	A
58	B2	864	A
58	B2	865	A
58	B2	866	U
58	B2	867	G
58	B2	868	C
58	B2	869	C
58	B2	871	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	873	A
58	B2	875	A
58	B2	876	U
58	B2	878	C
58	B2	879	U
58	B2	892	A
58	B2	895	A
58	B2	896	A
58	B2	897	A
58	B2	898	U
58	B2	899	A
58	B2	900	A
58	B2	901	G
58	B2	902	A
58	B2	903	C
58	B2	905	U
58	B2	906	C
58	B2	907	U
58	B2	908	G
58	B2	909	U
58	B2	910	U
58	B2	911	C
58	B2	913	G
58	B2	915	U
58	B2	916	U
58	B2	918	C
58	B2	919	A
58	B2	922	G
58	B2	929	A
58	B2	930	G
58	B2	933	C
58	B2	935	A
58	B2	936	G
58	B2	937	A
58	B2	938	G
58	B2	939	G
58	B2	940	U
58	B2	941	A
58	B2	942	A
58	B2	943	U
58	B2	944	G
58	B2	949	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	950	U
58	B2	957	A
58	B2	958	G
58	B2	959	U
58	B2	960	U
58	B2	963	G
58	B2	970	U
58	B2	972	G
58	B2	973	U
58	B2	976	U
58	B2	984	G
58	B2	991	G
58	B2	993	A
58	B2	999	U
58	B2	1000	G
58	B2	1001	G
58	B2	1002	A
58	B2	1005	G
58	B2	1019	U
58	B2	1020	U
58	B2	1022	A
58	B2	1031	A
58	B2	1047	U
58	B2	1052	U
58	B2	1053	A
58	B2	1055	U
58	B2	1057	A
58	B2	1058	A
58	B2	1061	A
58	B2	1064	A
58	B2	1073	G
58	B2	1079	A
58	B2	1080	A
58	B2	1090	A
58	B2	1091	U
58	B2	1092	A
58	B2	1098	C
58	B2	1099	U
58	B2	1100	A
58	B2	1101	G
58	B2	1102	U
58	B2	1107	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1109	C
58	B2	1110	A
58	B2	1111	U
58	B2	1113	A
58	B2	1115	C
58	B2	1116	G
58	B2	1117	A
58	B2	1118	U
58	B2	1119	G
58	B2	1127	G
58	B2	1130	A
58	B2	1138	U
58	B2	1139	A
58	B2	1140	G
58	B2	1144	C
58	B2	1145	U
58	B2	1147	U
58	B2	1148	U
58	B2	1151	G
58	B2	1161	G
58	B2	1167	U
58	B2	1168	C
58	B2	1169	C
58	B2	1170	G
58	B2	1173	A
58	B2	1179	A
58	B2	1180	A
58	B2	1183	U
58	B2	1184	U
58	B2	1185	U
58	B2	1186	U
58	B2	1187	U
58	B2	1188	G
58	B2	1190	G
58	B2	1194	C
58	B2	1196	G
58	B2	1197	G
58	B2	1199	G
58	B2	1201	A
58	B2	1212	A
58	B2	1213	A
58	B2	1216	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1217	U
58	B2	1226	A
58	B2	1235	A
58	B2	1236	C
58	B2	1238	G
58	B2	1240	A
58	B2	1243	G
58	B2	1244	C
58	B2	1246	C
58	B2	1248	A
58	B2	1249	C
58	B2	1251	A
58	B2	1252	G
58	B2	1255	G
58	B2	1263	U
58	B2	1266	G
58	B2	1269	U
58	B2	1273	U
58	B2	1274	U
58	B2	1275	U
58	B2	1282	A
58	B2	1283	C
58	B2	1284	A
58	B2	1287	G
58	B2	1288	G
58	B2	1289	A
58	B2	1290	A
58	B2	1295	U
58	B2	1301	G
58	B2	1305	A
58	B2	1306	A
58	B2	1307	C
58	B2	1310	A
58	B2	1311	A
58	B2	1313	U
58	B2	1314	G
58	B2	1315	U
58	B2	1316	G
58	B2	1317	U
58	B2	1318	A
58	B2	1321	A
58	B2	1323	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1324	G
58	B2	1325	A
58	B2	1327	U
58	B2	1328	G
58	B2	1329	A
58	B2	1330	U
58	B2	1332	G
58	B2	1337	U
58	B2	1339	C
58	B2	1341	C
58	B2	1342	G
58	B2	1343	A
58	B2	1346	C
58	B2	1347	U
58	B2	1348	A
58	B2	1349	U
58	B2	1351	G
58	B2	1352	G
58	B2	1356	U
58	B2	1357	G
58	B2	1361	C
58	B2	1363	U
58	B2	1371	C
58	B2	1372	U
58	B2	1373	U
58	B2	1379	G
58	B2	1380	U
58	B2	1382	G
58	B2	1384	G
58	B2	1385	U
58	B2	1389	U
58	B2	1393	C
58	B2	1394	U
58	B2	1399	A
58	B2	1401	U
58	B2	1402	U
58	B2	1404	C
58	B2	1406	A
58	B2	1407	U
58	B2	1408	A
58	B2	1409	A
58	B2	1410	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1411	G
58	B2	1412	A
58	B2	1424	A
58	B2	1425	U
58	B2	1426	A
58	B2	1427	U
58	B2	1428	A
58	B2	1430	U
58	B2	1432	A
58	B2	1433	A
58	B2	1436	G
58	B2	1438	U
58	B2	1442	U
58	B2	1448	A
58	B2	1449	U
58	B2	1450	U
58	B2	1451	A
58	B2	1452	U
58	B2	1457	C
58	B2	1458	U
58	B2	1460	A
58	B2	1529	G
58	B2	1530	A
58	B2	1531	G
58	B2	1541	U
58	B2	1544	G
58	B2	1545	U
58	B2	1546	U
58	B2	1547	U
58	B2	1548	G
58	B2	1551	C
58	B2	1552	C
58	B2	1555	U
58	B2	1558	A
58	B2	1561	G
58	B2	1565	C
58	B2	1566	U
58	B2	1567	A
58	B2	1569	C
58	B2	1570	U
58	B2	1571	U
58	B2	1572	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1573	U
58	B2	1577	A
58	B2	1578	U
58	B2	1579	G
58	B2	1580	G
58	B2	1581	A
58	B2	1582	C
58	B2	1584	A
58	B2	1585	A
58	B2	1588	G
58	B2	1589	C
58	B2	1591	U
58	B2	1593	U
58	B2	1594	A
58	B2	1595	G
58	B2	1596	C
58	B2	1597	A
58	B2	1599	U
58	B2	1601	A
58	B2	1602	U
58	B2	1604	A
58	B2	1605	G
58	B2	1617	A
58	B2	1619	A
58	B2	1620	G
58	B2	1623	C
58	B2	1627	G
58	B2	1628	A
58	B2	1636	A
58	B2	1637	G
58	B2	1638	A
58	B2	1639	U
58	B2	1640	G
58	B2	1643	C
58	B2	1645	G
58	B2	1651	C
58	B2	1659	C
58	B2	1663	A
58	B2	1665	U
58	B2	1666	G
58	B2	1668	A
58	B2	1669	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1670	G
58	B2	1671	U
58	B2	1673	U
58	B2	1674	C
58	B2	1675	A
58	B2	1678	G
58	B2	1682	A
58	B2	1683	U
58	B2	1684	U
58	B2	1685	U
58	B2	1688	U
58	B2	1691	A
58	B2	1695	A
58	B2	1698	G
58	B2	1702	C
58	B2	1706	U
58	B2	1708	A
58	B2	1709	A
58	B2	1713	C
58	B2	1715	G
58	B2	1716	A
58	B2	1718	C
58	B2	1719	C
58	B2	1720	A
58	B2	1726	A
58	B2	1727	U
58	B2	1728	G
58	B2	1729	C
58	B2	1732	G
58	B2	1734	G
58	B2	1742	A
58	B2	1743	C
58	B2	1747	A
58	B2	1748	A
58	B2	1749	C
58	B2	1750	U
58	B2	1751	G
58	B2	1755	A
58	B2	1758	A
58	B2	1765	U
58	B2	1766	G
58	B2	1769	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1771	U
58	B2	1775	A
58	B2	1776	G
58	B2	1782	G
58	B2	1788	C
58	B2	1789	A
58	B2	1790	U
58	B2	1793	A
58	B2	1794	C
58	B2	1797	G
58	B2	1811	C
58	B2	1812	C
58	B2	1813	U
58	B2	1814	G
58	B2	1815	C
58	B2	1816	C
58	B2	1817	C
58	B2	1822	U
58	B2	1823	A
58	B2	1824	C
58	B2	1825	A
58	B2	1826	C
58	B2	1827	A
58	B2	1830	G
58	B2	1831	C
58	B2	1834	G
58	B2	1848	U
58	B2	1849	U
58	B2	1850	G
58	B2	1851	A
58	B2	1865	G
58	B2	1873	A
58	B2	1874	C
58	B2	1875	G
58	B2	1876	U
58	B2	1882	C
58	B2	1886	G
58	B2	1903	G
58	B2	1905	U
58	B2	1906	U
58	B2	1907	G
58	B2	1909	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	1911	C
58	B2	1912	G
58	B2	1926	A
58	B2	1930	U
58	B2	1942	G
58	B2	1949	A
58	B2	1950	A
58	B2	1952	G
58	B2	1955	G
58	B2	1956	U
58	B2	1957	A
58	B2	1961	A
58	B2	1962	G
58	B2	1964	U
58	B2	1965	U
58	B2	1975	G
58	B2	1977	A
58	B2	1978	C
58	B2	1986	A
58	B2	1987	G
58	B2	1988	G
58	B2	1989	A
58	B2	1991	C
58	B2	1992	A
58	B2	1994	U
58	B2	1995	A
59	A5	3	A
59	A5	4	U
59	A5	5	A
59	A5	10	A
59	A5	16	A
59	A5	17	C
59	A5	18	U
59	A5	19	C
59	A5	23	U
59	A5	25	G
59	A5	26	G
59	A5	27	A
59	A5	30	A
59	A5	36	U
59	A5	39	A
59	A5	41	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	44	A
59	A5	47	A
59	A5	48	U
59	A5	49	A
59	A5	51	U
59	A5	53	A
59	A5	55	U
59	A5	56	A
59	A5	57	G
59	A5	58	G
59	A5	59	G
59	A5	61	A
59	A5	63	G
59	A5	64	A
59	A5	69	A
59	A5	70	A
59	A5	73	U
59	A5	77	A
59	A5	78	A
59	A5	79	G
59	A5	81	A
59	A5	89	A
59	A5	92	A
59	A5	96	G
59	A5	101	C
59	A5	103	A
59	A5	104	A
59	A5	113	A
59	A5	114	G
59	A5	115	U
59	A5	120	C
59	A5	121	A
59	A5	122	C
59	A5	123	U
59	A5	124	A
59	A5	125	A
59	A5	127	U
59	A5	128	C
59	A5	130	C
59	A5	131	U
59	A5	137	U
59	A5	138	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	139	U
59	A5	140	A
59	A5	141	U
59	A5	142	G
59	A5	145	A
59	A5	148	U
59	A5	149	G
59	A5	150	U
59	A5	154	A
59	A5	155	U
59	A5	156	G
59	A5	162	U
59	A5	163	A
59	A5	164	U
59	A5	165	G
59	A5	173	A
59	A5	176	A
59	A5	177	U
59	A5	178	U
59	A5	185	U
59	A5	186	G
59	A5	187	A
59	A5	188	G
59	A5	189	A
59	A5	190	A
59	A5	195	A
59	A5	197	G
59	A5	198	A
59	A5	199	U
59	A5	201	U
59	A5	202	A
59	A5	204	G
59	A5	205	U
59	A5	206	C
59	A5	208	U
59	A5	211	U
59	A5	212	U
59	A5	213	A
59	A5	215	A
59	A5	217	G
59	A5	222	C
59	A5	225	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	226	U
59	A5	227	A
59	A5	228	C
59	A5	239	U
59	A5	240	G
59	A5	241	C
59	A5	242	C
59	A5	252	U
59	A5	253	A
59	A5	254	A
59	A5	259	A
59	A5	261	U
59	A5	262	G
59	A5	273	G
59	A5	275	U
59	A5	280	C
59	A5	281	C
59	A5	282	A
59	A5	283	A
59	A5	284	A
59	A5	286	A
59	A5	287	G
59	A5	301	U
59	A5	302	A
59	A5	304	U
59	A5	310	A
59	A5	313	A
59	A5	317	G
59	A5	319	G
59	A5	326	A
59	A5	328	U
59	A5	329	C
59	A5	333	C
59	A5	336	A
59	A5	339	C
59	A5	341	A
59	A5	345	A
59	A5	347	A
59	A5	350	C
59	A5	351	A
59	A5	356	A
59	A5	357	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	360	A
59	A5	361	U
59	A5	366	A
59	A5	367	A
59	A5	370	A
59	A5	376	G
59	A5	377	U
59	A5	378	G
59	A5	380	G
59	A5	386	G
59	A5	394	G
59	A5	402	A
59	A5	403	A
59	A5	405	A
59	A5	412	U
59	A5	413	A
59	A5	416	C
59	A5	417	A
59	A5	420	A
59	A5	421	C
59	A5	423	U
59	A5	428	C
59	A5	430	G
59	A5	431	C
59	A5	437	G
59	A5	438	G
59	A5	440	U
59	A5	441	A
59	A5	445	C
59	A5	448	A
59	A5	453	C
59	A5	457	A
59	A5	458	A
59	A5	460	A
59	A5	461	U
59	A5	462	C
59	A5	464	G
59	A5	465	U
59	A5	466	U
59	A5	467	A
59	A5	472	A
59	A5	473	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	474	A
59	A5	475	U
59	A5	476	U
59	A5	477	C
59	A5	479	U
59	A5	480	C
59	A5	482	U
59	A5	497	U
59	A5	499	A
59	A5	516	U
59	A5	517	A
59	A5	521	U
59	A5	522	G
59	A5	523	C
59	A5	524	A
59	A5	525	U
59	A5	526	U
59	A5	527	U
59	A5	529	U
59	A5	530	U
59	A5	531	C
59	A5	535	A
59	A5	536	U
59	A5	538	A
59	A5	539	G
59	A5	540	G
59	A5	541	A
59	A5	545	U
59	A5	546	G
59	A5	551	C
59	A5	553	A
59	A5	558	C
59	A5	559	A
59	A5	560	U
59	A5	562	U
59	A5	568	A
59	A5	569	U
59	A5	573	U
59	A5	576	U
59	A5	577	A
59	A5	578	A
59	A5	580	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	581	U
59	A5	583	U
59	A5	584	A
59	A5	586	C
59	A5	587	U
59	A5	588	U
59	A5	591	A
59	A5	593	U
59	A5	596	A
59	A5	613	U
59	A5	616	A
59	A5	618	U
59	A5	619	U
59	A5	620	U
59	A5	621	A
59	A5	622	A
59	A5	623	C
59	A5	625	C
59	A5	626	A
59	A5	632	A
59	A5	640	U
59	A5	641	A
59	A5	642	A
59	A5	643	U
59	A5	644	U
59	A5	646	G
59	A5	649	A
59	A5	652	G
59	A5	653	U
59	A5	654	G
59	A5	655	C
59	A5	657	G
59	A5	658	A
59	A5	665	U
59	A5	666	A
59	A5	667	U
59	A5	668	A
59	A5	669	U
59	A5	670	G
59	A5	671	A
59	A5	672	U
59	A5	673	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	675	C
59	A5	676	A
59	A5	678	U
59	A5	679	G
59	A5	680	C
59	A5	681	G
59	A5	682	U
59	A5	685	A
59	A5	690	U
59	A5	691	C
59	A5	692	G
59	A5	695	A
59	A5	696	U
59	A5	697	U
59	A5	698	A
59	A5	699	U
59	A5	700	A
59	A5	701	U
59	A5	702	A
59	A5	703	A
59	A5	704	U
59	A5	705	G
59	A5	715	U
59	A5	718	U
59	A5	719	U
59	A5	720	G
59	A5	726	U
59	A5	733	A
59	A5	740	G
59	A5	742	A
59	A5	745	U
59	A5	746	G
59	A5	747	U
59	A5	749	U
59	A5	750	G
59	A5	751	A
59	A5	752	U
59	A5	753	U
59	A5	754	A
59	A5	755	A
59	A5	756	C
59	A5	761	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	762	G
59	A5	763	A
59	A5	765	A
59	A5	766	G
59	A5	768	U
59	A5	774	A
59	A5	775	U
59	A5	776	A
59	A5	778	C
59	A5	785	A
59	A5	787	C
59	A5	789	G
59	A5	795	A
59	A5	797	A
59	A5	798	C
59	A5	799	A
59	A5	803	A
59	A5	804	C
59	A5	805	C
59	A5	807	A
59	A5	810	A
59	A5	812	U
59	A5	813	C
59	A5	815	A
59	A5	818	A
59	A5	820	A
59	A5	827	A
59	A5	830	U
59	A5	831	A
59	A5	832	U
59	A5	833	U
59	A5	834	G
59	A5	838	U
59	A5	839	A
59	A5	840	U
59	A5	841	A
59	A5	842	A
59	A5	848	A
59	A5	849	U
59	A5	858	U
59	A5	859	A
59	A5	860	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	861	C
59	A5	862	U
59	A5	866	C
59	A5	868	A
59	A5	869	A
59	A5	870	U
59	A5	871	A
59	A5	872	A
59	A5	873	U
59	A5	877	A
59	A5	879	U
59	A5	882	U
59	A5	888	A
59	A5	892	A
59	A5	894	U
59	A5	895	U
59	A5	896	A
59	A5	897	U
59	A5	899	G
59	A5	901	U
59	A5	902	A
59	A5	909	A
59	A5	912	A
59	A5	917	G
59	A5	928	U
59	A5	929	A
59	A5	930	U
59	A5	931	A
59	A5	966	U
59	A5	967	C
59	A5	968	U
59	A5	969	A
59	A5	979	U
59	A5	980	A
59	A5	985	G
59	A5	986	A
59	A5	999	U
59	A5	1001	A
59	A5	1005	G
59	A5	1006	A
59	A5	1007	A
59	A5	1008	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1012	G
59	A5	1013	G
59	A5	1016	A
59	A5	1017	A
59	A5	1022	A
59	A5	1024	U
59	A5	1031	G
59	A5	1032	G
59	A5	1034	U
59	A5	1037	A
59	A5	1049	C
59	A5	1052	U
59	A5	1061	A
59	A5	1064	G
59	A5	1067	A
59	A5	1074	U
59	A5	1079	U
59	A5	1080	G
59	A5	1081	C
59	A5	1084	A
59	A5	1087	G
59	A5	1089	U
59	A5	1090	U
59	A5	1094	A
59	A5	1095	G
59	A5	1096	A
59	A5	1097	A
59	A5	1099	U
59	A5	1100	G
59	A5	1103	U
59	A5	1106	A
59	A5	1107	G
59	A5	1108	G
59	A5	1111	C
59	A5	1114	A
59	A5	1115	A
59	A5	1116	G
59	A5	1120	A
59	A5	1121	A
59	A5	1122	U
59	A5	1123	C
59	A5	1124	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1125	A
59	A5	1126	A
59	A5	1132	U
59	A5	1133	A
59	A5	1135	U
59	A5	1137	G
59	A5	1141	G
59	A5	1144	C
59	A5	1145	C
59	A5	1146	U
59	A5	1153	G
59	A5	1155	U
59	A5	1159	C
59	A5	1160	U
59	A5	1162	A
59	A5	1167	A
59	A5	1178	U
59	A5	1179	U
59	A5	1180	U
59	A5	1181	A
59	A5	1182	A
59	A5	1183	U
59	A5	1192	A
59	A5	1193	A
59	A5	1194	A
59	A5	1197	A
59	A5	1198	U
59	A5	1199	C
59	A5	1202	A
59	A5	1207	G
59	A5	1215	A
59	A5	1223	G
59	A5	1226	G
59	A5	1227	C
59	A5	1228	C
59	A5	1229	U
59	A5	1230	U
59	A5	1231	A
59	A5	1232	G
59	A5	1233	G
59	A5	1234	G
59	A5	1240	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1242	G
59	A5	1245	C
59	A5	1247	U
59	A5	1248	A
59	A5	1249	A
59	A5	1254	U
59	A5	1258	C
59	A5	1260	A
59	A5	1262	C
59	A5	1263	U
59	A5	1268	A
59	A5	1270	G
59	A5	1271	G
59	A5	1276	G
59	A5	1277	A
59	A5	1278	A
59	A5	1279	C
59	A5	1281	U
59	A5	1284	A
59	A5	1288	U
59	A5	1289	C
59	A5	1290	U
59	A5	1291	U
59	A5	1293	A
59	A5	1294	U
59	A5	1295	A
59	A5	1296	U
59	A5	1297	G
59	A5	1300	G
59	A5	1301	A
59	A5	1307	G
59	A5	1308	U
59	A5	1309	U
59	A5	1310	A
59	A5	1311	U
59	A5	1316	U
59	A5	1317	A
59	A5	1321	G
59	A5	1324	C
59	A5	1326	A
59	A5	1330	G
59	A5	1331	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1332	C
59	A5	1335	C
59	A5	1342	U
59	A5	1343	A
59	A5	1345	G
59	A5	1348	G
59	A5	1353	G
59	A5	1357	C
59	A5	1358	U
59	A5	1359	G
59	A5	1360	U
59	A5	1367	A
59	A5	1368	A
59	A5	1369	C
59	A5	1370	C
59	A5	1373	A
59	A5	1374	C
59	A5	1375	G
59	A5	1376	U
59	A5	1383	A
59	A5	1384	C
59	A5	1385	G
59	A5	1387	G
59	A5	1390	C
59	A5	1391	A
59	A5	1393	A
59	A5	1394	U
59	A5	1395	U
59	A5	1396	A
59	A5	1397	A
59	A5	1398	C
59	A5	1400	A
59	A5	1405	U
59	A5	1407	C
59	A5	1411	U
59	A5	1413	C
59	A5	1415	A
59	A5	1416	U
59	A5	1420	A
59	A5	1424	G
59	A5	1427	G
59	A5	1428	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1432	C
59	A5	1435	A
59	A5	1436	A
59	A5	1437	A
59	A5	1438	A
59	A5	1442	C
59	A5	1443	A
59	A5	1447	C
59	A5	1449	G
59	A5	1451	G
59	A5	1452	A
59	A5	1453	U
59	A5	1454	C
59	A5	1458	G
59	A5	1459	A
59	A5	1460	A
59	A5	1461	G
59	A5	1463	C
59	A5	1465	A
59	A5	1468	U
59	A5	1470	C
59	A5	1477	G
59	A5	1478	A
59	A5	1480	U
59	A5	1481	G
59	A5	1482	U
59	A5	1483	G
59	A5	1484	U
59	A5	1485	A
59	A5	1486	A
59	A5	1492	C
59	A5	1500	G
59	A5	1502	A
59	A5	1510	G
59	A5	1514	U
59	A5	1516	A
59	A5	1517	A
59	A5	1520	U
59	A5	1522	G
59	A5	1523	A
59	A5	1524	U
59	A5	1531	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1532	A
59	A5	1540	U
59	A5	1541	A
59	A5	1546	U
59	A5	1547	A
59	A5	1555	G
59	A5	1558	A
59	A5	1559	A
59	A5	1564	G
59	A5	1565	A
59	A5	1566	U
59	A5	1567	G
59	A5	1570	U
59	A5	1572	A
59	A5	1575	U
59	A5	1576	U
59	A5	1578	C
59	A5	1580	U
59	A5	1581	G
59	A5	1591	U
59	A5	1592	U
59	A5	1593	U
59	A5	1594	U
59	A5	1595	G
59	A5	1596	A
59	A5	1597	A
59	A5	1598	A
59	A5	1607	A
59	A5	1609	U
59	A5	1613	A
59	A5	1614	A
59	A5	1620	A
59	A5	1621	A
59	A5	1627	U
59	A5	1628	G
59	A5	1633	G
59	A5	1640	U
59	A5	1641	U
59	A5	1658	G
59	A5	1662	U
59	A5	1667	U
59	A5	1668	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1671	U
59	A5	1672	A
59	A5	1675	G
59	A5	1678	C
59	A5	1679	U
59	A5	1680	U
59	A5	1687	U
59	A5	1688	A
59	A5	1689	G
59	A5	1690	U
59	A5	1692	G
59	A5	1693	C
59	A5	1695	A
59	A5	1696	A
59	A5	1697	U
59	A5	1705	U
59	A5	1706	G
59	A5	1709	A
59	A5	1711	C
59	A5	1712	C
59	A5	1713	U
59	A5	1714	U
59	A5	1716	G
59	A5	1723	G
59	A5	1724	A
59	A5	1725	A
59	A5	1726	G
59	A5	1728	G
59	A5	1731	G
59	A5	1736	G
59	A5	1737	U
59	A5	1738	U
59	A5	1740	C
59	A5	1741	G
59	A5	1743	G
59	A5	1745	G
59	A5	1746	A
59	A5	1751	U
59	A5	1754	U
59	A5	1763	A
59	A5	1770	C
59	A5	1772	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1774	C
59	A5	1779	G
59	A5	1781	U
59	A5	1782	C
59	A5	1783	A
59	A5	1784	A
59	A5	1785	G
59	A5	1786	G
59	A5	1787	C
59	A5	1789	A
59	A5	1794	G
59	A5	1795	A
59	A5	1796	A
59	A5	1797	A
59	A5	1798	A
59	A5	1799	U
59	A5	1800	U
59	A5	1801	U
59	A5	1802	U
59	A5	1803	C
59	A5	1804	A
59	A5	1805	A
59	A5	1806	G
59	A5	1807	U
59	A5	1808	A
59	A5	1809	A
59	A5	1810	A
59	A5	1812	C
59	A5	1813	A
59	A5	1861	A
59	A5	1862	U
59	A5	1863	U
59	A5	1865	U
59	A5	1866	G
59	A5	1867	A
59	A5	1871	A
59	A5	1872	A
59	A5	1873	A
59	A5	1877	A
59	A5	1879	U
59	A5	1880	A
59	A5	1881	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1887	C
59	A5	1889	A
59	A5	1907	U
59	A5	1908	A
59	A5	1909	U
59	A5	1910	C
59	A5	1911	C
59	A5	1912	G
59	A5	1913	U
59	A5	1914	U
59	A5	1921	U
59	A5	1922	A
59	A5	1925	U
59	A5	1927	U
59	A5	1928	G
59	A5	1930	G
59	A5	1933	U
59	A5	1934	C
59	A5	1935	G
59	A5	1936	U
59	A5	1937	G
59	A5	1941	A
59	A5	1943	C
59	A5	1944	C
59	A5	1945	U
59	A5	1954	G
59	A5	1955	A
59	A5	1956	A
59	A5	1957	C
59	A5	1958	G
59	A5	1959	A
59	A5	1960	C
59	A5	1961	C
59	A5	1968	A
59	A5	1969	A
59	A5	1970	G
59	A5	1975	C
59	A5	1976	G
59	A5	1981	A
59	A5	1984	U
59	A5	1987	G
59	A5	1988	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1989	A
59	A5	1994	U
59	A5	1995	U
59	A5	1996	U
59	A5	2000	U
59	A5	2001	U
59	A5	2003	U
59	A5	2005	U
59	A5	2009	A
59	A5	2010	U
59	A5	2011	A
59	A5	2016	U
59	A5	2018	C
59	A5	2019	U
59	A5	2020	A
59	A5	2027	A
59	A5	2029	G
59	A5	2030	U
59	A5	2031	C
59	A5	2032	U
59	A5	2033	U
59	A5	2037	C
59	A5	2038	A
59	A5	2044	A
59	A5	2049	G
59	A5	2054	U
59	A5	2055	G
59	A5	2056	G
59	A5	2059	U
59	A5	2061	G
59	A5	2062	A
59	A5	2063	A
59	A5	2064	G
59	A5	2065	A
59	A5	2066	G
59	A5	2071	A
59	A5	2072	C
59	A5	2075	A
59	A5	2076	U
59	A5	2078	C
59	A5	2079	U
59	A5	2082	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2086	U
59	A5	2088	G
59	A5	2089	A
59	A5	2092	U
59	A5	2093	U
59	A5	2094	U
59	A5	2095	U
59	A5	2101	C
59	A5	2102	G
59	A5	2106	C
59	A5	2110	A
59	A5	2113	A
59	A5	2114	U
59	A5	2122	G
59	A5	2125	G
59	A5	2126	A
59	A5	2127	C
59	A5	2128	A
59	A5	2129	C
59	A5	2130	G
59	A5	2131	C
59	A5	2132	A
59	A5	2134	A
59	A5	2135	C
59	A5	2136	U
59	A5	2137	U
59	A5	2142	A
59	A5	2150	U
59	A5	2155	A
59	A5	2156	U
59	A5	2158	U
59	A5	2159	C
59	A5	2162	C
59	A5	2163	A
59	A5	2166	U
59	A5	2167	G
59	A5	2171	U
59	A5	2173	C
59	A5	2174	A
59	A5	2182	G
59	A5	2183	A
59	A5	2185	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2187	U
59	A5	2194	G
59	A5	2195	A
59	A5	2196	U
59	A5	2197	A
59	A5	2200	A
59	A5	2201	U
59	A5	2202	A
59	A5	2205	G
59	A5	2216	A
59	A5	2217	A
59	A5	2219	U
59	A5	2220	C
59	A5	2222	G
59	A5	2223	C
59	A5	2238	A
59	A5	2239	C
59	A5	2249	A
59	A5	2251	G
59	A5	2255	G
59	A5	2264	G
59	A5	2268	G
59	A5	2269	A
59	A5	2273	A
59	A5	2466	C
59	A5	2467	A
59	A5	2468	A
59	A5	2469	U
59	A5	2470	U
59	A5	2471	A
59	A5	2472	A
59	A5	2473	C
59	A5	2474	A
59	A5	2476	U
59	A5	2480	U
59	A5	2490	G
59	A5	2491	C
59	A5	2492	A
59	A5	2493	C
59	A5	2494	G
59	A5	2496	A
59	A5	2500	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2501	G
59	A5	2504	A
59	A5	2505	A
59	A5	2510	A
59	A5	2513	G
59	A5	2518	A
59	A5	2519	U
59	A5	2521	A
59	A5	2523	A
59	A5	2524	A
59	A5	2527	A
59	A5	2537	A
59	A5	2539	G
59	A5	2542	C
59	A5	2545	A
59	A5	2548	G
59	A5	2549	G
59	A5	2552	G
59	A5	2553	U
59	A5	2554	U
59	A5	2556	A
59	A5	2562	U
59	A5	2570	C
59	A5	2573	C
59	A5	2583	U
59	A5	2585	A
59	A5	2586	A
59	A5	2587	U
59	A5	2588	G
59	A5	2591	A
59	A5	2603	U
59	A5	2619	U
59	A5	2622	A
59	A5	2623	C
59	A5	2624	G
59	A5	2627	G
59	A5	2628	G
59	A5	2633	A
59	A5	2634	A
59	A5	2636	U
59	A5	2641	C
59	A5	2646	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2650	G
59	A5	2651	G
59	A5	2654	G
59	A5	2655	C
59	A5	2657	A
59	A5	2659	A
59	A5	2660	U
59	A5	2663	C
59	A5	2664	U
59	A5	2673	A
59	A5	2674	A
59	A5	2676	U
59	A5	2677	A
59	A5	2684	C
59	A5	2685	G
59	A5	2686	C
59	A5	2687	A
59	A5	2688	U
59	A5	2691	A
59	A5	2693	G
59	A5	2694	G
59	A5	2696	U
59	A5	2702	A
59	A5	2703	G
59	A5	2705	U
59	A5	2709	U
59	A5	2712	U
59	A5	2714	U
59	A5	2717	C
59	A5	2723	A
59	A5	2726	A
59	A5	2733	G
59	A5	2742	G
59	A5	2749	G
59	A5	2750	A
59	A5	2751	A
59	A5	2752	C
59	A5	2753	G
59	A5	2754	G
59	A5	2757	U
59	A5	2759	G
59	A5	2763	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2766	U
59	A5	2769	G
59	A5	2771	G
59	A5	2775	A
59	A5	2779	A
59	A5	2780	A
59	A5	2781	G
59	A5	2782	A
59	A5	2783	C
59	A5	2784	C
59	A5	2789	U
59	A5	2790	G
59	A5	2793	C
59	A5	2794	U
59	A5	2796	G
59	A5	2797	A
59	A5	2800	C
59	A5	2801	U
59	A5	2807	G
59	A5	2812	U
59	A5	2813	G
59	A5	2815	A
59	A5	2821	A
59	A5	2824	U
59	A5	2825	A
59	A5	2828	A
59	A5	2831	U
59	A5	2832	G
59	A5	2833	U
59	A5	2834	A
59	A5	2836	A
59	A5	2837	A
59	A5	2838	U
59	A5	2839	A
59	A5	2840	A
59	A5	2842	U
59	A5	2843	G
59	A5	2847	G
59	A5	2869	U
59	A5	2870	C
59	A5	2876	U
59	A5	2877	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	2880	A
59	A5	2881	U
59	A5	2888	A
59	A5	2891	C
59	A5	2899	U
59	A5	2900	U
59	A5	2901	C
59	A5	2905	A
59	A5	2908	U
59	A5	2909	A
59	A5	2915	U
59	A5	2917	A
59	A5	2919	A
59	A5	2920	U
59	A5	2925	C
59	A5	2927	U
59	A5	2989	G
59	A5	2991	A
59	A5	2992	A
59	A5	2994	C
59	A5	2995	U
59	A5	2996	U
59	A5	2997	C
59	A5	2998	U
59	A5	2999	U
59	A5	3000	G
59	A5	3002	U
59	A5	3003	C
59	A5	3004	A
59	A5	3005	A
59	A5	3011	C
59	A5	3013	C
59	A5	3101	A
59	A5	3103	U
59	A5	3109	A
59	A5	3112	A
59	A5	3115	C
59	A5	3117	A
59	A5	3118	U
59	A5	3123	G
59	A5	3125	A
59	A5	3134	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3135	G
59	A5	3137	A
59	A5	3138	G
59	A5	3144	U
59	A5	3151	G
59	A5	3158	A
59	A5	3164	C
59	A5	3166	C
59	A5	3167	A
59	A5	3168	A
59	A5	3169	A
59	A5	3170	U
59	A5	3174	A
59	A5	3177	G
59	A5	3183	G
59	A5	3184	U
59	A5	3188	A
59	A5	3189	A
59	A5	3190	G
59	A5	3204	G
59	A5	3206	A
59	A5	3208	A
59	A5	3209	G
59	A5	3210	A
59	A5	3211	A
59	A5	3212	A
59	A5	3213	C
59	A5	3220	U
59	A5	3221	A
59	A5	3223	A
59	A5	3226	A
59	A5	3228	A
59	A5	3231	G
59	A5	3234	A
59	A5	3235	A
59	A5	3236	A
59	A5	3237	U
59	A5	3239	C
59	A5	3241	G
59	A5	3246	G
59	A5	3252	G
59	A5	3259	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3260	G
59	A5	3261	U
59	A5	3274	A
59	A5	3279	A
59	A5	3285	G
59	A5	3287	C
59	A5	3288	C
59	A5	3294	A
59	A5	3301	U
59	A5	3303	G
59	A5	3304	U
59	A5	3305	U
59	A5	3309	A
59	A5	3310	G
59	A5	3311	A
59	A5	3312	G
59	A5	3328	G
59	A5	3331	A
59	A5	3332	G
59	A5	3333	A
59	A5	3334	A
59	A5	3337	G
59	A5	3341	C
59	A5	3342	C
59	A5	3346	G
59	A5	3348	G
59	A5	3349	A
59	A5	3350	U
59	A5	3354	U
59	A5	3368	C
59	A5	3374	U
59	A5	3377	A
59	A5	3385	G
59	A5	3390	U
59	A5	3391	U
59	A5	3392	U
59	A5	3393	U
59	A5	3394	U
59	A5	3395	G
59	A5	3396	A
59	A5	3400	U
59	A5	3403	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3404	A
59	A5	3405	U
59	A5	3408	C
59	A5	3418	U
59	A5	3419	A
59	A5	3421	C
59	A5	3430	G
59	A5	3431	C
59	A5	3443	A
59	A5	3444	G
59	A5	3455	U
59	A5	3456	U
59	A5	3458	A
59	A5	3465	C
59	A5	3466	A
59	A5	3467	A
59	A5	3468	G
59	A5	3469	G
59	A5	3473	C
59	A5	3474	G
59	A5	3477	A
59	A5	3478	G
59	A5	3482	G
59	A5	3486	U
59	A5	3489	A
59	A5	3491	C
59	A5	3497	G
59	A5	3499	G
59	A5	3502	A
59	A5	3511	U
59	A5	3514	C
59	A5	3516	C
59	A5	3520	U
59	A5	3521	A
59	A5	3527	A
59	A5	3530	A
59	A5	3531	C
59	A5	3532	G
59	A5	3535	G
59	A5	3546	A
59	A5	3547	U
59	A5	3554	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3556	A
59	A5	3558	U
59	A5	3563	G
59	A5	3568	A
59	A5	3569	C
59	A5	3582	A
59	A5	3585	A
59	A5	3590	C
59	A5	3591	A
59	A5	3592	C
59	A5	3593	A
59	A5	3594	A
59	A5	3602	U
59	A5	3604	G
59	A5	3607	C
59	A5	3608	G
59	A5	3609	A
59	A5	3610	A
59	A5	3612	A
59	A5	3613	G
59	A5	3614	U
59	A5	3620	G
59	A5	3621	A
59	A5	3626	A
59	A5	3627	C
59	A5	3628	G
59	A5	3633	U
59	A5	3637	A
59	A5	3643	C
59	A5	3650	G
59	A5	3652	C
59	A5	3654	C
59	A5	3656	A
59	A5	3658	G
59	A5	3659	G
59	A5	3660	U
59	A5	3664	A
59	A5	3665	U
59	A5	3674	G
59	A5	3675	A
59	A5	3676	C
59	A5	3677	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3678	G
59	A5	3684	A
59	A5	3686	A
59	A5	3687	A
59	A5	3688	A
59	A5	3689	U
59	A5	3690	A
59	A5	3693	G
59	A5	3696	C
59	A5	3697	A
59	A5	3698	A
59	A5	3699	U
59	A5	3701	U
59	A5	3702	G
59	A5	3709	A
59	A5	3710	U
59	A5	3711	G
59	A5	3712	G
59	A5	3713	C
59	A5	3715	U
59	A5	3716	C
59	A5	3718	A
59	A5	3719	A
59	A5	3720	A
59	A5	3722	C
59	A5	3725	U
59	A5	3727	A
59	A5	3728	A
59	A5	3729	A
59	A5	3730	G
59	A5	3732	U
59	A5	3734	A
59	A5	3742	C
59	A5	3743	U
59	A5	3751	C
59	A5	3752	G
59	A5	3753	A
59	A5	3754	C
59	A5	3756	A
59	A5	3757	U
59	A5	3758	G
59	A5	3759	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3760	A
59	A5	3762	G
59	A5	3763	U
59	A5	3764	G
59	A5	3765	A
59	A5	3766	U
59	A5	3767	G
59	A5	3768	C
59	A5	3769	C
59	A5	3771	A
59	A5	3772	U
59	A5	3773	G
59	A5	3774	U
59	A5	3775	A
59	A5	3776	A
59	A5	3777	U
59	A5	3778	U
59	A5	3779	U
59	A5	3785	A
59	A5	3789	U
59	A5	3791	A
59	A5	3794	U
59	A5	3795	G
59	A5	3796	G
59	A5	3798	A
59	A5	3801	A
59	A5	3802	U
59	A5	3803	C
59	A5	3805	U
59	A5	3806	C
59	A5	3807	G
59	A5	3808	A
59	A5	3809	U
59	A5	3811	A
59	A5	3814	U
59	A5	3818	G
59	A5	3819	C
59	A5	3820	C
59	A5	3821	G
59	A5	3822	C
59	A5	3823	G
59	A5	3824	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3837	A
59	A5	3838	A
59	A5	3839	A
59	A5	3840	G
59	A5	3841	C
59	A5	3842	A
59	A5	3843	U
59	A5	3844	U
59	A5	3845	A
59	A5	3846	U
59	A5	3847	U
59	A5	3848	U
59	A5	3849	A
59	A5	3850	A
59	A5	3856	U
59	A5	3860	A
59	A5	3861	A
59	A5	3862	A
59	A5	3867	A
59	A5	3868	G
59	A5	3869	A
59	A5	3870	A
59	A5	3877	G
59	A5	3878	U
59	A5	3887	U
59	A5	3889	U
59	A5	3890	G
59	A5	3891	U
59	A5	3892	A
59	A5	3894	C
59	A5	3901	G
59	A5	3909	A
59	A5	3912	U
59	A5	3914	G
59	A5	3916	U
59	A5	3918	A
59	A5	3919	G
59	A5	3923	C
59	A5	3924	U
59	A5	3925	G
59	A5	3926	C
59	A5	3927	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3928	A
59	A5	3929	U
59	A5	3932	U
59	A5	3933	G
59	A5	3934	C
59	A5	3935	G
59	A5	3937	U
59	A5	3942	U
59	A5	3946	G
59	A5	3949	U
59	A5	3952	C
59	A5	3955	U
59	A5	3956	U
59	A5	3957	G
59	A5	3958	C
59	A5	3961	G
59	A5	3962	A
59	A5	3963	U
59	A5	3964	G
59	A5	3969	G

All (152) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
54	A9	21	G
55	A7	119	C
56	A8	33	U
56	A8	38	G
56	A8	59	G
56	A8	106	A
56	A8	109	U
58	B2	1	A
58	B2	2	U
58	B2	172	G
58	B2	248	G
58	B2	250	U
58	B2	251	G
58	B2	256	C
58	B2	278	G
58	B2	378	G
58	B2	381	C
58	B2	422	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	B2	488	A
58	B2	511	G
58	B2	563	A
58	B2	878	C
58	B2	899	A
58	B2	948	A
58	B2	959	U
58	B2	1030	C
58	B2	1046	U
58	B2	1091	U
58	B2	1138	U
58	B2	1186	U
58	B2	1239	A
58	B2	1250	C
58	B2	1310	A
58	B2	1331	A
58	B2	1448	A
58	B2	1547	U
58	B2	1591	U
58	B2	1594	A
58	B2	1673	U
58	B2	1765	U
58	B2	1849	U
58	B2	1881	A
58	B2	1949	A
58	B2	1956	U
59	A5	17	C
59	A5	26	G
59	A5	29	U
59	A5	44	A
59	A5	57	G
59	A5	58	G
59	A5	69	A
59	A5	120	C
59	A5	123	U
59	A5	130	C
59	A5	163	A
59	A5	175	U
59	A5	186	G
59	A5	188	G
59	A5	225	U
59	A5	272	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	286	A
59	A5	300	A
59	A5	316	U
59	A5	360	A
59	A5	457	A
59	A5	463	C
59	A5	580	A
59	A5	615	C
59	A5	620	U
59	A5	640	U
59	A5	641	A
59	A5	667	U
59	A5	671	A
59	A5	752	U
59	A5	795	A
59	A5	839	A
59	A5	872	A
59	A5	979	U
59	A5	1095	G
59	A5	1096	A
59	A5	1137	G
59	A5	1160	U
59	A5	1178	U
59	A5	1179	U
59	A5	1182	A
59	A5	1231	A
59	A5	1277	A
59	A5	1306	G
59	A5	1310	A
59	A5	1324	C
59	A5	1368	A
59	A5	1374	C
59	A5	1382	U
59	A5	1394	U
59	A5	1546	U
59	A5	1594	U
59	A5	1596	A
59	A5	1608	G
59	A5	1627	U
59	A5	1640	U
59	A5	1689	G
59	A5	1713	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	1736	G
59	A5	1784	A
59	A5	1793	C
59	A5	1794	G
59	A5	1798	A
59	A5	1801	U
59	A5	1879	U
59	A5	1956	A
59	A5	1958	G
59	A5	1960	C
59	A5	2001	U
59	A5	2002	C
59	A5	2037	C
59	A5	2126	A
59	A5	2129	C
59	A5	2155	A
59	A5	2162	C
59	A5	2166	U
59	A5	2750	A
59	A5	2752	C
59	A5	2781	G
59	A5	2796	G
59	A5	2868	A
59	A5	2904	U
59	A5	2919	A
59	A5	2990	C
59	A5	2993	G
59	A5	3017	U
59	A5	3235	A
59	A5	3236	A
59	A5	3309	A
59	A5	3362	G
59	A5	3514	C
59	A5	3567	A
59	A5	3568	A
59	A5	3591	A
59	A5	3593	A
59	A5	3627	C
59	A5	3675	A
59	A5	3677	U
59	A5	3697	A
59	A5	3708	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	A5	3714	U
59	A5	3719	A
59	A5	3759	G
59	A5	3808	A
59	A5	3844	U
59	A5	3890	G
59	A5	3891	U
59	A5	3961	G

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
59	A5	2
58	B2	2
79	Cj	1
33	CP	1
26	CN	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	A5	2896:U	O3'	2897:G	P	6.34
1	B2	1236:C	O3'	1237:G	P	6.15
1	B2	1817:C	O3'	1818:U	P	4.73
1	Cj	29:LEU	C	30:GLN	N	4.63
1	A5	2819:A	O3'	2820:G	P	3.28
1	CP	38:ARG	C	39:MET	N	1.16
1	CN	40:PRO	C	41:ARG	N	1.08

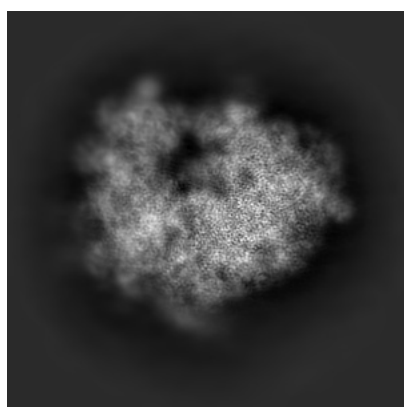
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-10622. These allow visual inspection of the internal detail of the map and identification of artifacts.

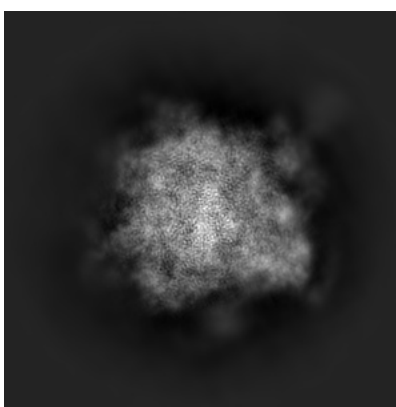
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

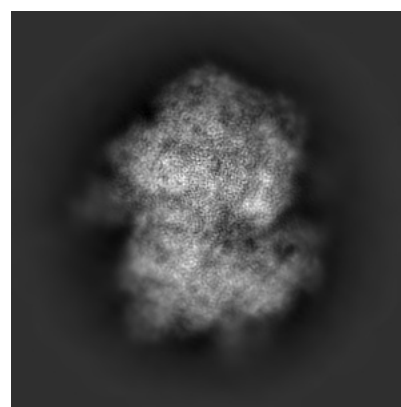
6.1.1 Primary map



X



Y

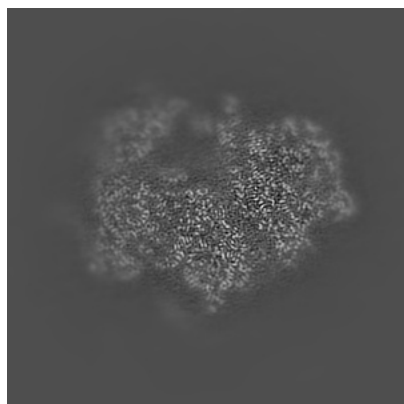


Z

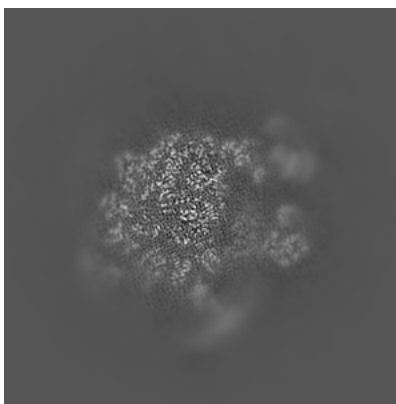
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

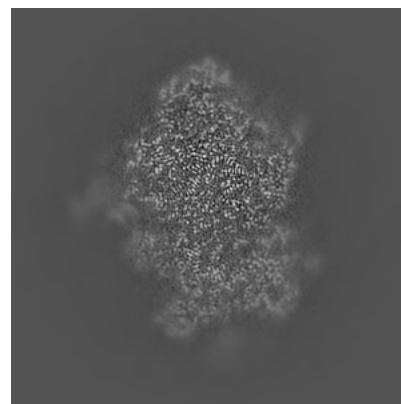
6.2.1 Primary map



X Index: 200



Y Index: 200

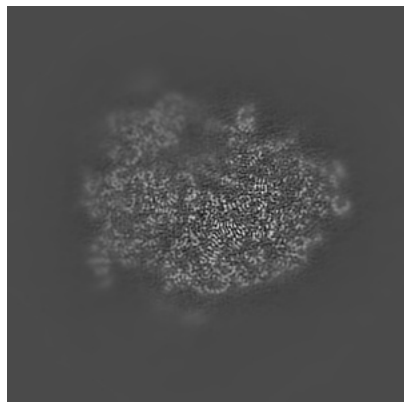


Z Index: 200

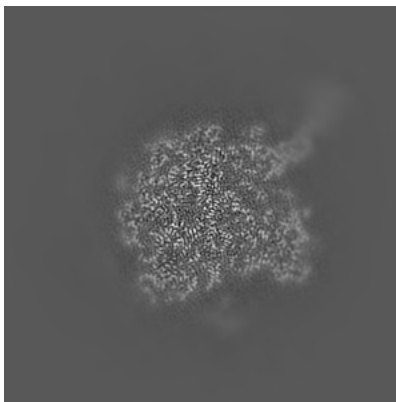
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

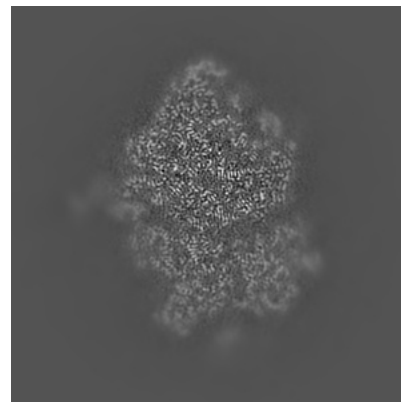
6.3.1 Primary map



X Index: 182



Y Index: 233

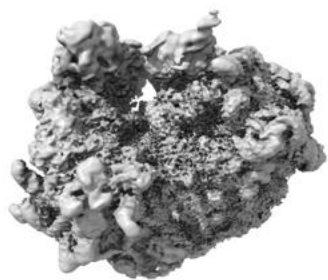


Z Index: 195

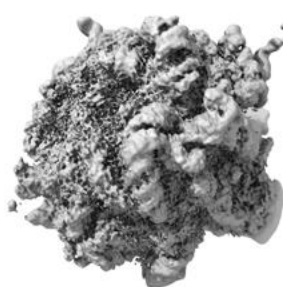
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

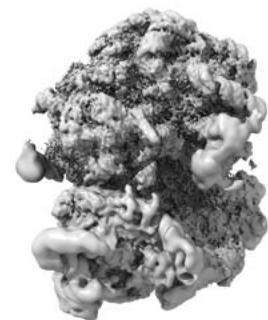
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.025. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

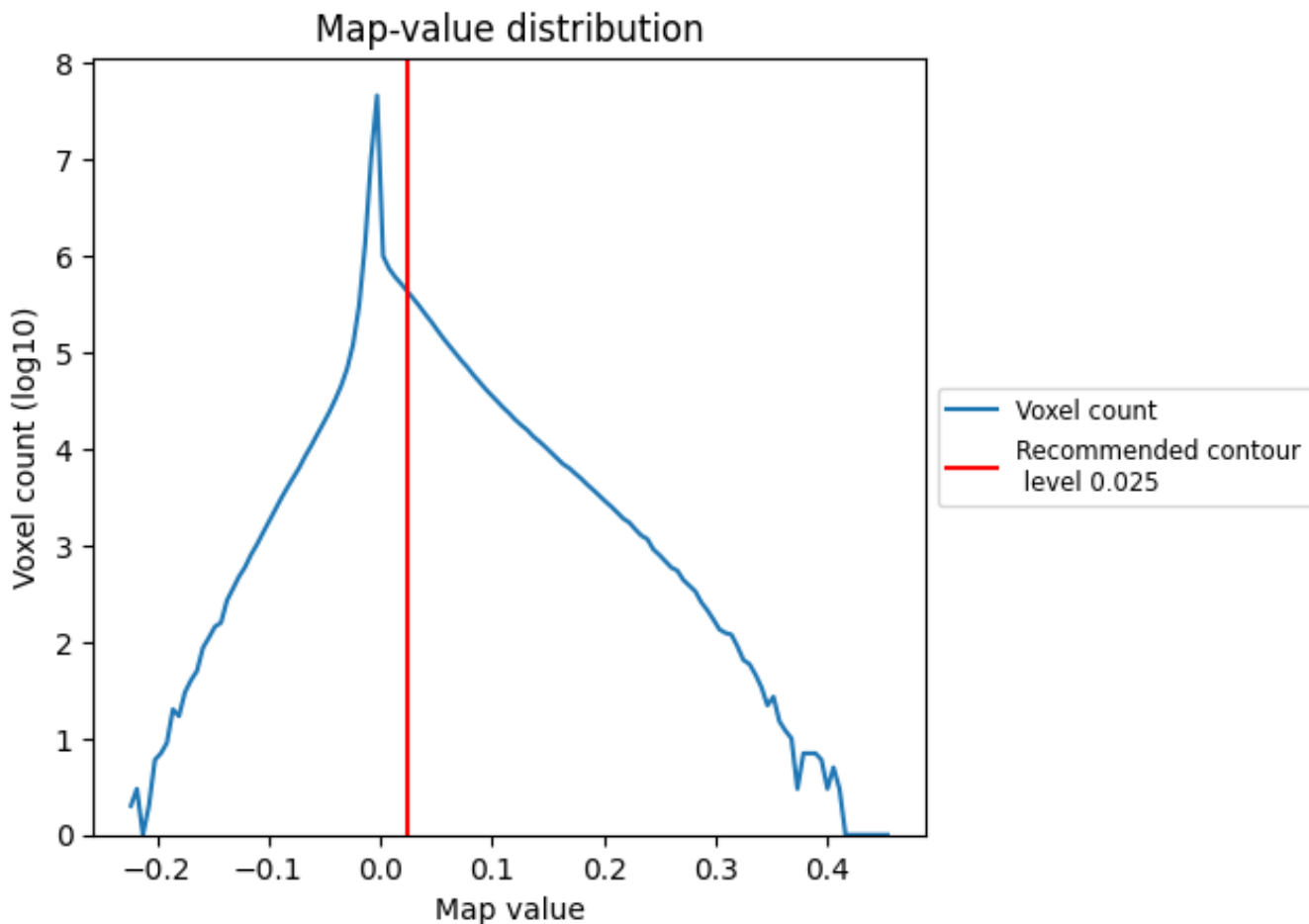
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

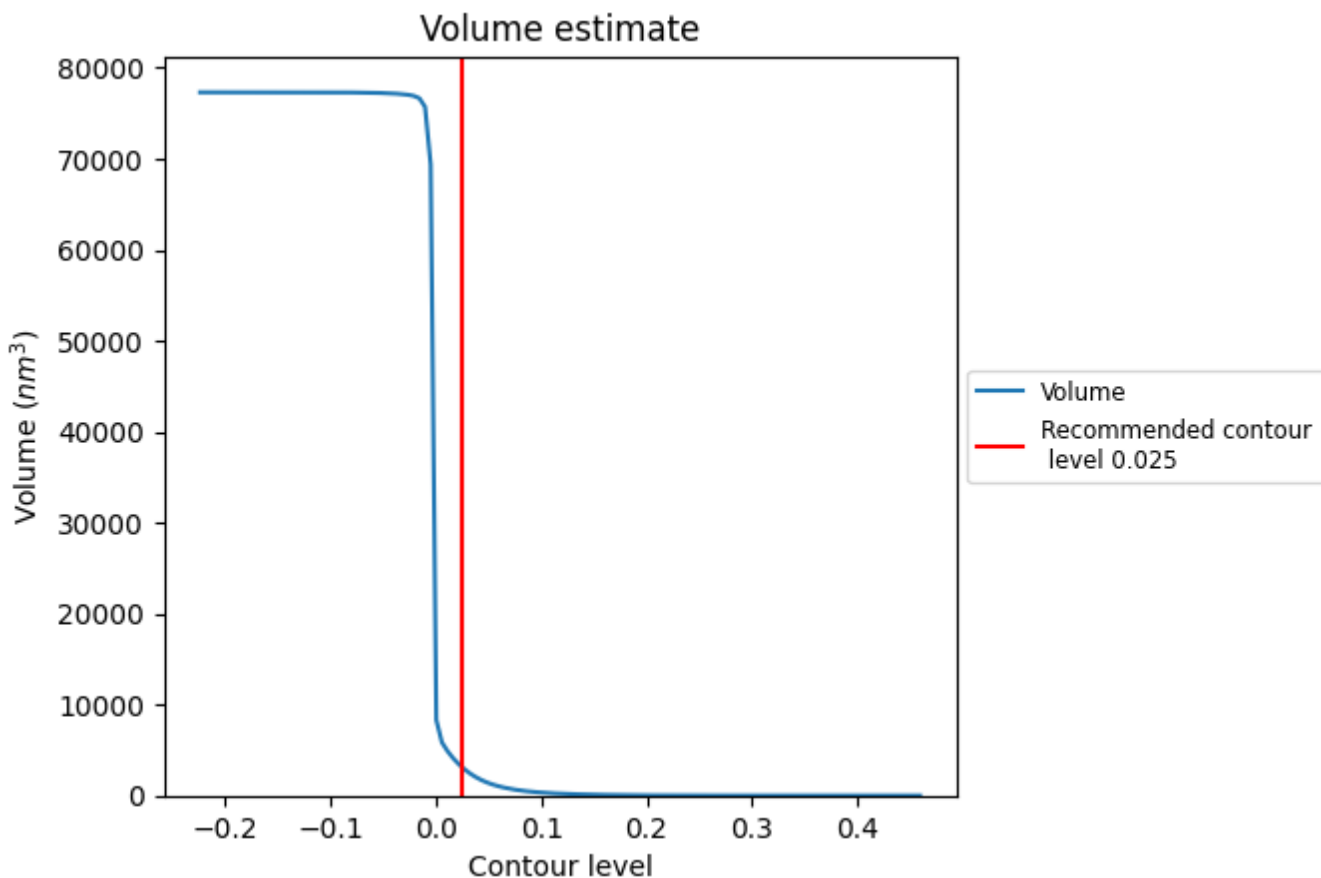
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

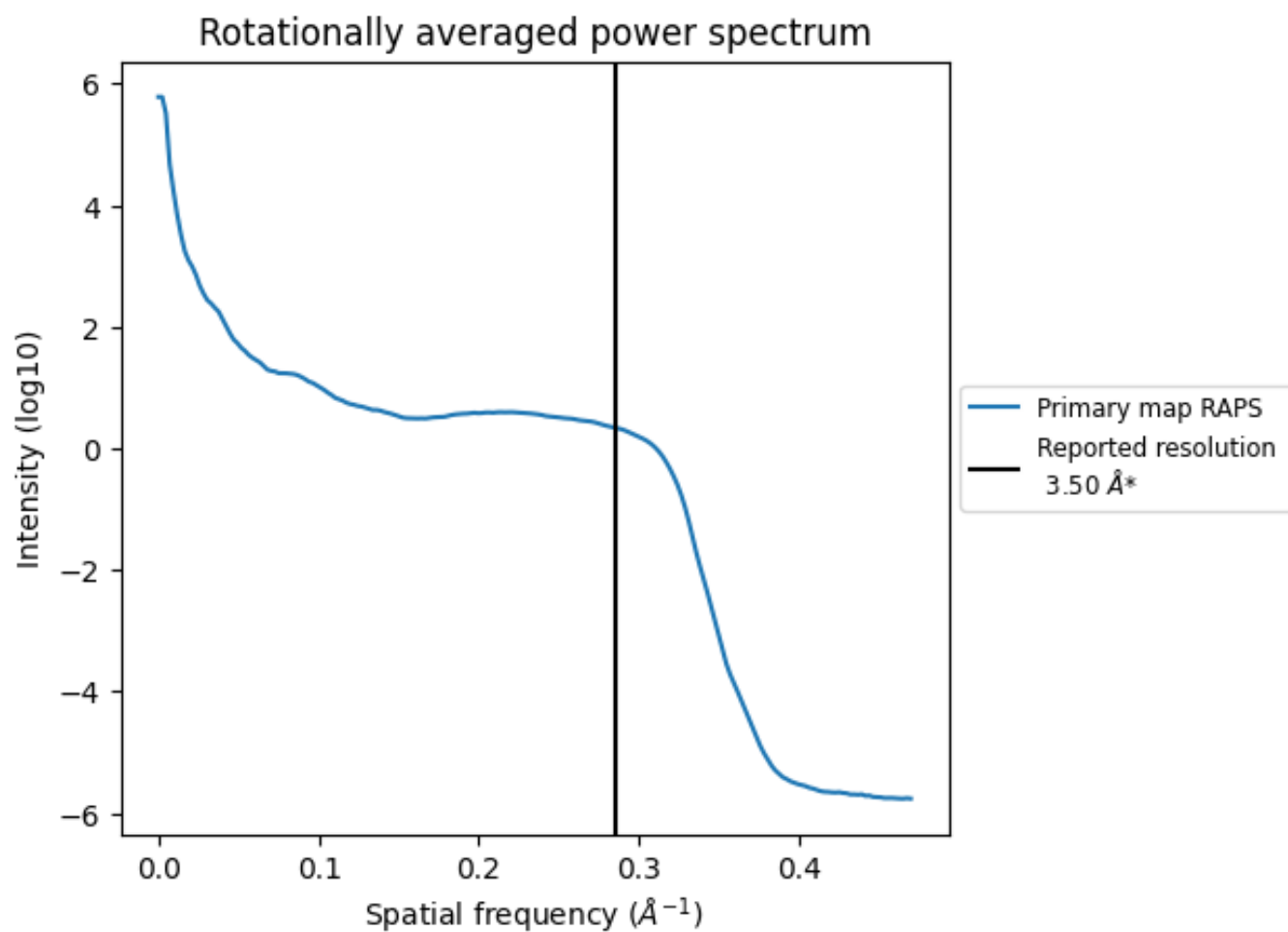
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 3140 nm³; this corresponds to an approximate mass of 2836 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum i

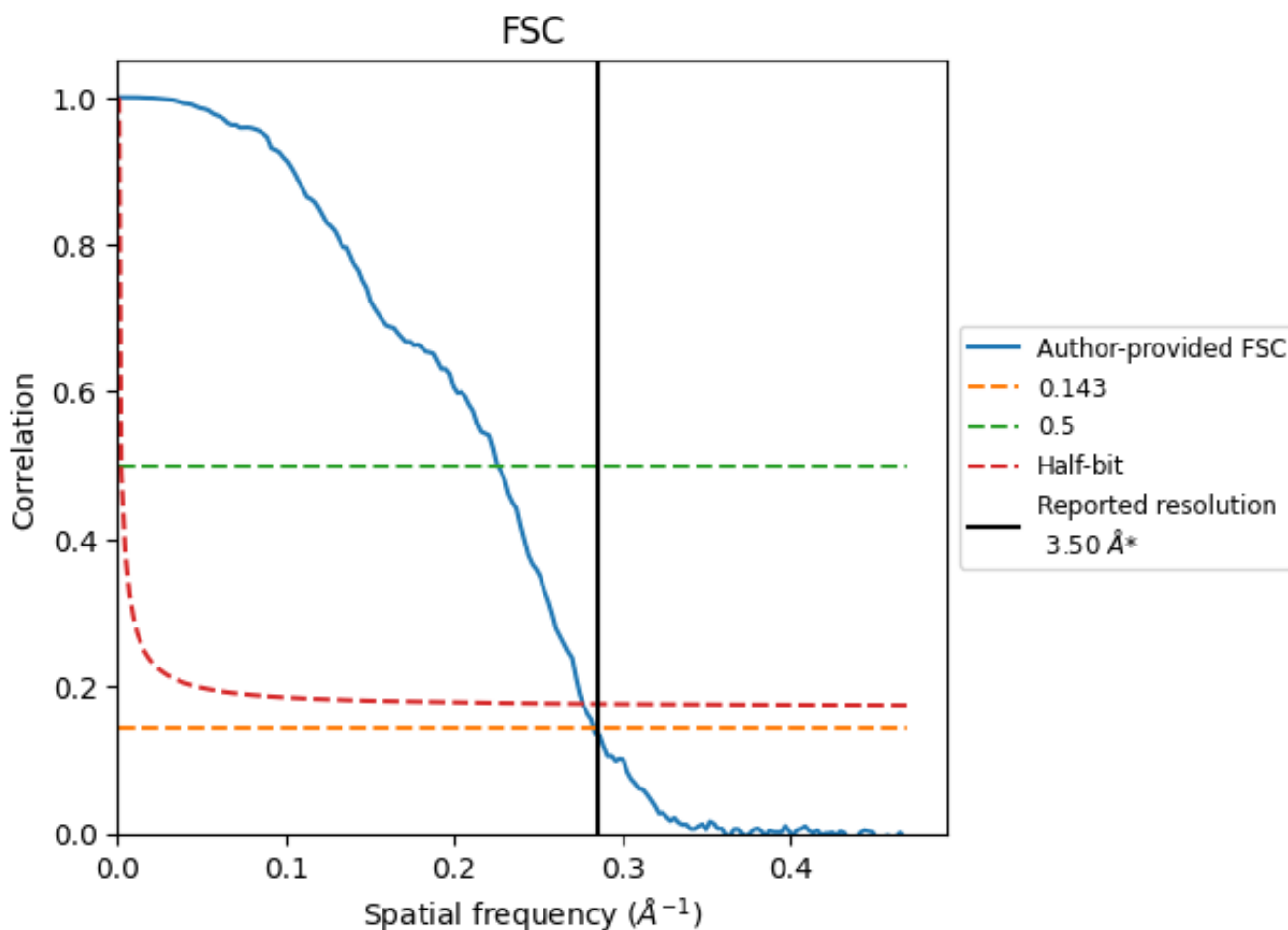


*Reported resolution corresponds to spatial frequency of 0.286 Å⁻¹

8 Fourier-Shell correlation [\(i\)](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [\(i\)](#)



*Reported resolution corresponds to spatial frequency of 0.286 Å⁻¹

8.2 Resolution estimates [i](#)

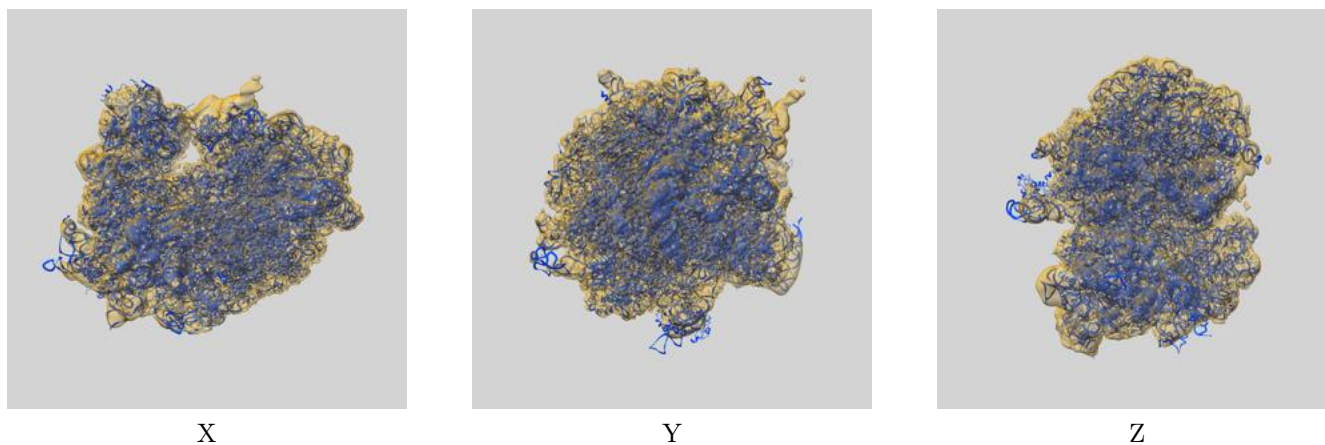
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.50	-	-
Author-provided FSC curve	3.53	4.43	3.62
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

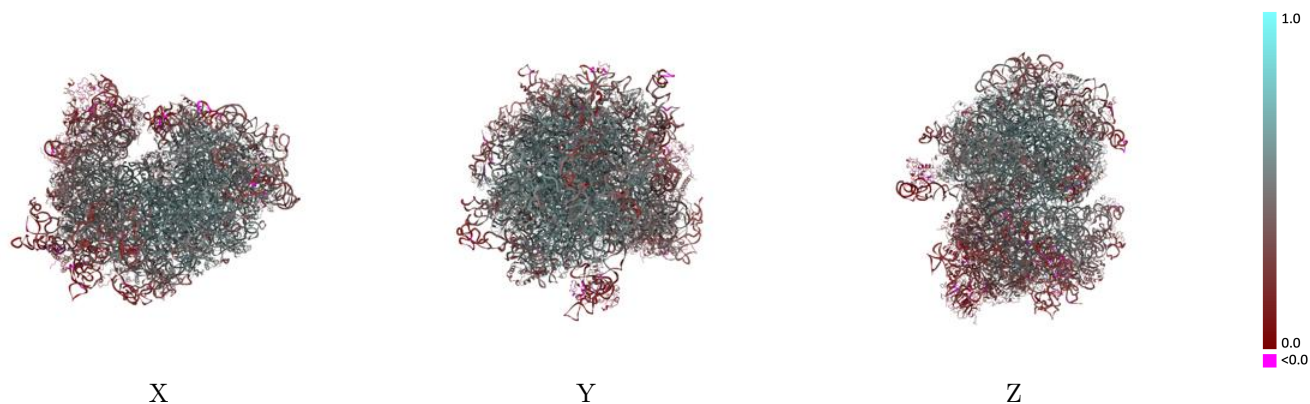
This section contains information regarding the fit between EMDB map EMD-10622 and PDB model 6XU6. Per-residue inclusion information can be found in section 3 on page 19.

9.1 Map-model overlay [i](#)



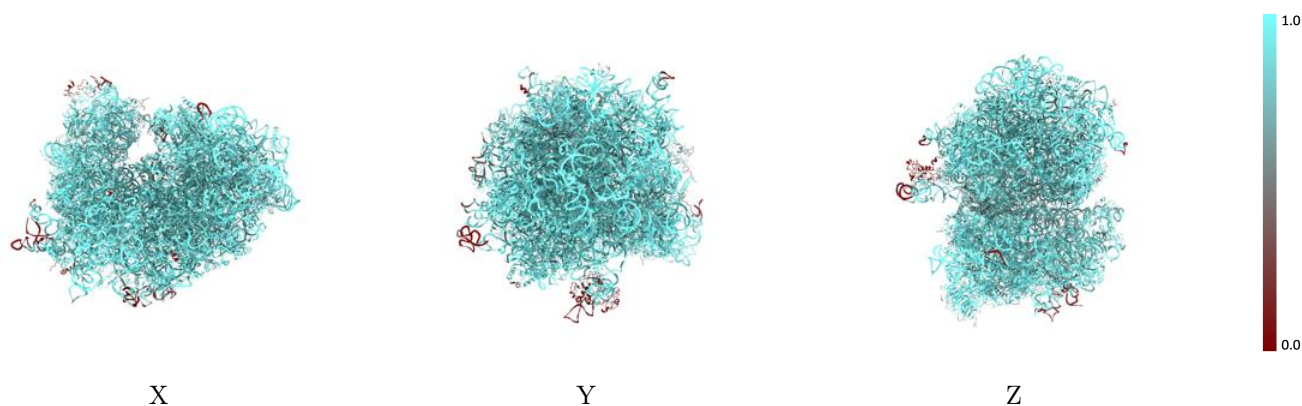
The images above show the 3D surface view of the map at the recommended contour level 0.025 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



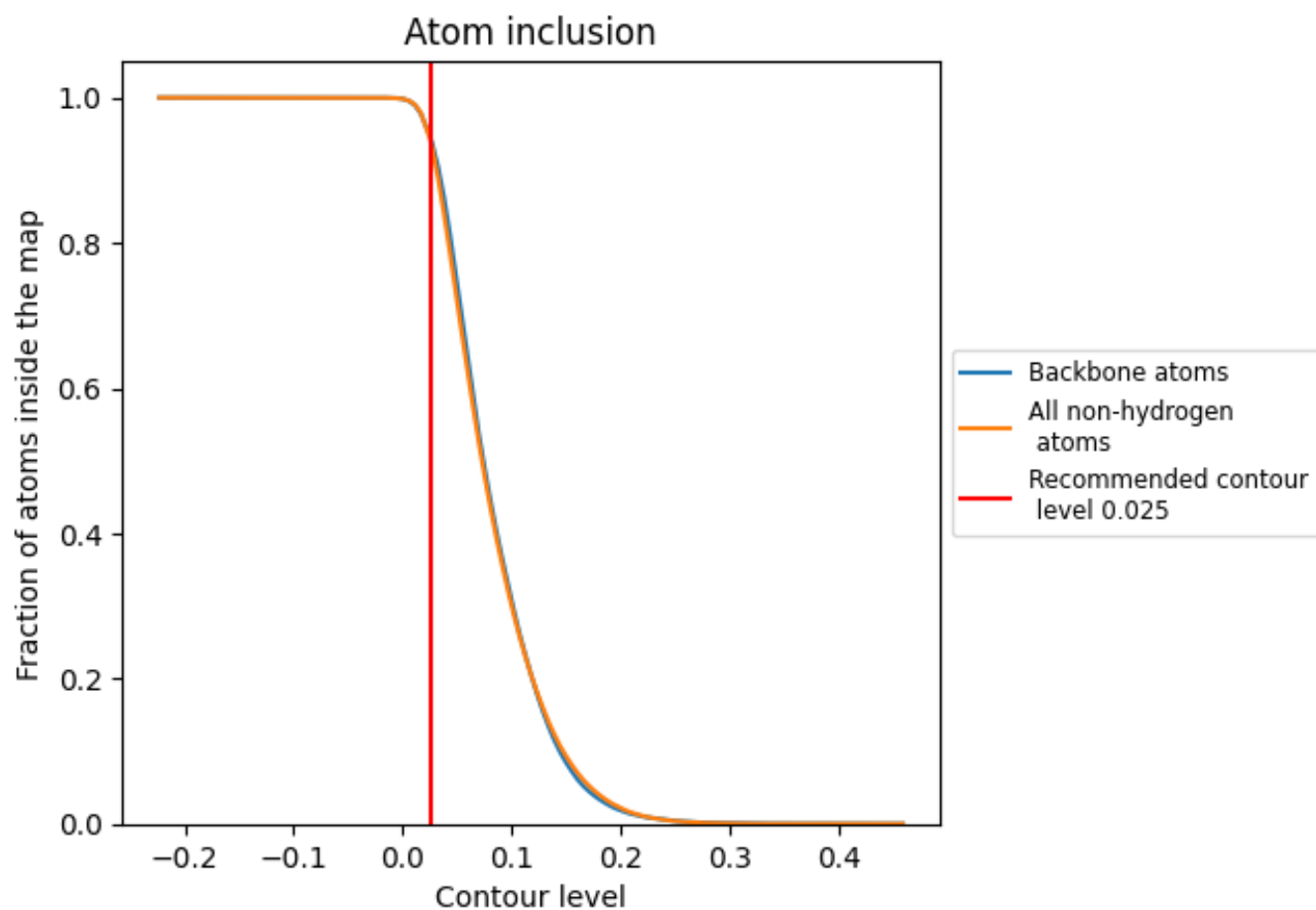
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.025).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 95% of all backbone atoms, 94% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary





















































































The table lists the average atom inclusion at the recommended contour level (0.025) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9442	 0.4410
A5	 0.9643	 0.4840
A7	 0.9988	 0.4850
A8	 0.9870	 0.5210
A9	 0.9937	 0.4940
AA	 0.8870	 0.3470
AB	 0.9190	 0.4380
AC	 0.9363	 0.4480
AD	 0.8883	 0.2990
AE	 0.9631	 0.4490
AF	 0.9156	 0.2840
AG	 0.9540	 0.3220
AH	 0.9029	 0.3240
AI	 0.9391	 0.4290
AJ	 0.9447	 0.3940
AK	 0.9341	 0.2060
AL	 0.8609	 0.4770
AM	 0.5284	 0.1170
AN	 0.9615	 0.5010
AO	 0.9665	 0.4680
AP	 0.8306	 0.2200
AQ	 0.9468	 0.2530
AR	 0.9108	 0.2830
AS	 0.9315	 0.2540
AT	 0.9132	 0.2040
AU	 0.9266	 0.2790
AV	 0.9519	 0.4260
AW	 0.9771	 0.5070
AX	 0.9353	 0.5100
AY	 0.9360	 0.3400
AZ	 0.8784	 0.2170
Aa	 0.8893	 0.4820
Ab	 0.9077	 0.3750
Ac	 0.9081	 0.3330
Ad	 0.9686	 0.3290















Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
Ae	 0.9311	 0.3510
Af	 0.5692	 0.1060
Ag	 0.9313	 0.1580
B2	 0.9695	 0.3840
CA	 0.9706	 0.5730
CB	 0.9558	 0.5360
CC	 0.9657	 0.5180
CD	 0.9704	 0.4290
CE	 0.8893	 0.3810
CF	 0.9917	 0.5550
CG	 0.9069	 0.4440
CH	 0.9579	 0.4830
CI	 0.8789	 0.4360
CJ	 0.9263	 0.3830
CL	 0.9140	 0.4660
CM	 0.9267	 0.4120
CN	 0.9827	 0.5740
CO	 0.9608	 0.5380
CP	 0.8777	 0.5160
CQ	 0.9788	 0.5650
CR	 0.8835	 0.4670
CS	 0.9552	 0.5180
CT	 0.9643	 0.5210
CU	 0.9421	 0.3730
CV	 0.9774	 0.5750
CW	 0.9808	 0.5660
CX	 0.9632	 0.5110
CY	 0.9827	 0.5240
CZ	 0.9642	 0.4670
Ca	 0.9787	 0.5580
Cb	 0.9666	 0.4480
Cc	 0.9642	 0.4970
Cd	 0.9179	 0.4220
Ce	 0.9737	 0.5700
Cf	 0.9476	 0.4770
Cg	 0.9826	 0.5590
Ch	 0.9695	 0.5100
Ci	 0.9356	 0.4540
Cj	 0.9129	 0.4700
Ck	 0.9503	 0.4440
Cl	 0.9760	 0.5700
Cm	 0.9639	 0.4880

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
Cn	 0.9674	 0.5820
Co	 0.9469	 0.5330
Cp	 0.9693	 0.5670
Cr	 0.9062	 0.4720
Cz	 0.2311	 0.0950
DA	 0.7687	 0.4250